FROEHLING & ROBERTSON, INC.

Report of Inundation Study
Lovills Creek Lake Dam
Inventory Number 03507
Carroll County, Virginia
F&R Record No. 62S-0102

Prepared for:

Carroll County, Virginia

605-2 Pine Street
Hillsville, VA 24343
(276) 733-4309

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Lovills Creek Dam

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Prepared For:
Carroll County
605 Pine Street
Hillsville, VA 24343
(276) 728-3331

Prepared By:
FROEHLING & ROBERTSON, INC.
1734 Seibel Drive, NE
Roanoke, Virginia 24012
Phone: (540) 344-7939
Fax: (540) 344-3657

20 January 2015

Prepared by:

Samuel A Barnes

Samuel A. Barnes, EIT
Staff Engineer

COMMONWEALTH OF VIRGINIA
DAVID A. KRISNITSKI
Lic. No. 36465
1/20/15
PROFESSIONAL ENGINEER

David Krisnitski, P.E.
Water Resources Engineer

Reviewed by:

Donald J Sipher

Donald J. Sipher, P.E.
President

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1.0 INTRODUCTION

1.1 Project Information

We understand that Carroll County is required to perform an inundation study on Lovills Creek Dam (Inventory No. 03507) located in Carroll County, Virginia. To meet this requirement Froehling & Robertson, Inc. (F&R) performed the below described inundation study in accordance with the Virginia Soil and Water Conservation Board regulation 4VAC50-20-54. Figure 1 in Appendix A (Study Area Map) illustrates the Lovills Creek Dam watershed and the contributing downstream sub-watersheds utilized in our study. The project study area was defined as the drainage area encompassing Lovills Creek Dam extending down Lovills Creek to a termination point in the Yadkin River approximately 65.7 river miles from Lovills Creek Dam.

Lovills Creek Dam is situated on Lovills Creek approximately 3.4 miles upstream of the Mount Airy city limits. The dam impounds Lovills Creek Lake, an approximate 50 acre reservoir at normal pool. The drainage area to Lovills Creek Dam was calculated to be 20.81 square miles (13,318 acres). The drainage area predominately consists of forested areas (See Figure 2 in Appendix A - Lovills Creek Dam Drainage Area).

Lovills Creek Dam was constructed as a flood control dam. The dam is 88 feet tall with a crest elevation of 1234.5 feet and a normal pool elevation of 1188 feet. The North American Vertical Datum of 1988 was used as the vertical reference and the North American Datum of 1983 was used as the horizontal reference. The lake is controlled by a grassed auxiliary spillway on the left side of the dam. The grassed auxiliary spillway discharges directly into the natural creek channel. The spillway is reported to have a design capacity equal to a full probable maximum flood (PMF) event. The dam is currently classified as a High Hazard structure.

1.2 Scope of Services

The purpose of our involvement on the project was to perform a flood inundation study resulting in a hazard classification statement and flood inundation mapping. In order to accomplish these objectives the following services were performed.

1) Performed visits to the site and surrounding region to observe existing conditions and obtain verifying field measurements of downstream areas for development of critical cross-sections used in our computer models.

2) Reviewed readily available Spatial Data relative to the impoundment and study area. F&R reviewed appropriate information sources to identify data depicting overall site conditions.

3) Subcontracted a licensed surveyor to perform a current survey of the existing dam and surrounding area. The physical survey was supplemented by VGIN 2011 digital orthophotography Triangular Irregular Network (TIN) files for contours outside of the surveyed area.

4) Obtained terrain data from the Virginia Geographic Information Network (VGIN) and the North Carolina Floodplain Mapping Program.

5) Derived river reach information from breaklines derived from the Virginia Base Mapping Program (VBMP) Digital Terrain Model (DTM) and North Carolina Floodplain Mapping Program LIDAR data.

6) Identified the locations of buildings, bridges, and roadway structures from a combination of review of aerial photography and information available from Carroll, Surry and Yadkin counties. The outlines of structures were digitized from the most recently available aerial photography and supplemented with field reconnaissance.

7) Used the ESRI ArcMap extensions Arc Hydro and HEC GEO-RAS to "post-process" GIS vector data, aerial photography, field inventories, and terrain data.

8) Performed HEC-HMS computer modeling to develop both runoff hydrographs for the Lovills Creek Dam watershed and downstream sub-watersheds.

9) Performed HEC-RAS stream modeling for a "sunny day" dam break, a probable maximum flood event with and without a dam break, and a Spillway Design Flood (SDF) with and without a dam break.

10) Exported RAS model results to ArcMap and HEC GEO-RAS which were used to perform floodplain extent delineation using the DTM and RAS bounding polygons.

11) Reviewed HEC-RAS output to determine readily identifiable structures affected by a dam breach.

12) Performed an incremental damage assessment to determine the required emergency spillway flood capacity and provided an analysis of the spillway's current flood capacity.

13) Prepared this written report summarizing our work on the inundation study, documenting our procedures and references, confirming the dam's hazard classification, and providing cross-section and inundation mapping information.

We note that an Emergency Action Plan (EAP) is not part of this document.

2.0 INFORMATION REVIEW

2.1 General

F&R reviewed appropriate information sources to identify Spatial Data depicting overall site conditions and to identify watershed characteristics. Spatial Data briefly described in this section was further utilized as input information for the hydrologic and hydraulic (H&H) models. Maps reviewed included some of the following: United States Geological Survey (USGS) 1:24,000-scale topographic maps, Natural Resource Conservation Service (NRCS) soil survey maps, Federal Emergency Management Authority (FEMA) Flood Insurance Rate Map (FIRM) maps, Digital Terrain Model (DTM) maps, Southeast Geospatial Analysis Project (SEGAP) maps and other relevant remote sensing data that could be freely obtained with coverage of the extent of the project site.

2.1.1 Field Data Collection

Field visits were performed to observe existing conditions along the downstream reach of the study area. Culvert and bridge profiles were surveyed to-verify information obtained from information available from Carroll, Surry, and Yadkin counties. These dimensions were then used in the subsequent hydraulic computer models to complete the described inundation study.

After field verification we determined that the information found in the *Data Sheet – Operation and Maintenance Certificate*, relating to the Lovills Creek Dam was adequate for the application of this study. It is our professional opinion that reliance on the above described field measurements combined with the use of available GIS DTM information (see Section 3.1) does not limit the precision of our described inundation study.

2.1.2 USGS Topographic Maps

The USGS 1:24,000-scale topographic map depicts steep valley and ridge terrain within the project area watershed. The Lovills Creek Dam is depicted on the Cana topographic map. The study area is depicted on this map as well as the Woodlawn, Fancy Gap, Laurel Fork, Meadows of Dan, Lambsburg, Mount Airy North, Claudville, Dobson, Mount Airy South, Pilot Mountain, Copeland, Siloam, and Pinnacle topographic maps. These maps were utilized to develop Figures 1 and 2 in Appendix A.

2.1.3 NRCS Soil Survey Maps

Soil map unit (SMU) polygon boundaries in ESRI shapefile format were obtained from the NRCS Spatial Data Gateway along with soils tabular data containing the equivalent of soils characteristics published in the printed soil survey. All data was imported into the spatial geodatabase schema supplied by the NRCS. The NRCS Soil Data Viewer, an ArcGIS extension for the analysis and reporting of soils information, was used to produce hydrologic soil group information.

2.1.4 Aerial Photography

Several years of aerial photography were reviewed to identify possible significant land use changes over time. The United States Geological Survey (USGS) 1994 Color Infrared (CIR), the Virginia Information Network (VGIN) Virginia Base Mapping Program (VBMP) 2011 Color, the NRCS National Aerial Imagery Program (NAIP) 2012 all depict the dam watershed as primarily forested followed by open field areas. Figure 3 (Lovills Creek Dam Aerial Photo) in Appendix A shows NRCS National Aerial Imagery Program (NAIP) 2012 the aerial photos of the dam drainage area.

Horizontal accuracy is not provided for the 2011 VGIN aerial photography and digital terrain model (DTM) used to develop cross-section information for Virginia. Use constraints given by metadata as "Any person not licensed as a land surveyor preparing documentation pursuant to subsection C of 54.1-402 of the Code of Virginia shall note the following on such documentation: any determination of topography or contours, or any depiction of physical improvements, property lines or boundaries is for general information only and shall not be used for the design, modification, or construction of improvements to real property or for flood plain determination."

The VBMP data was developed using procedures designed to produce data to National Standard for Spatial Data Accuracy (NSSDA) and is intended for use at 1" = 100' or 1" = 200' scale. It is requested that the Commonwealth of Virginia be cited for any use of the ortho-photography as follows: "Imagery Courtesy of the Commonwealth of Virginia."

The following disclaimer statement is found on the NC OneMap website where we obtained some of the North Carolina data used in this study. "The NC Center for Geographic Information and Analysis (CGIA) is charged with the development and maintenance of NC OneMap and, in cooperation with other mapping organizations, is committed to offering its users accurate, useful, and current information. Although every effort has been made to ensure the accuracy of information, errors and conditions originating from physical sources used to develop the resources may be reflected in the information supplied. The user must be aware of possible conditions and bear responsibility for the appropriate use of the information with respect to possible errors, original map scale, collection methodology, currency, and other conditions specific to certain data and/or services. CGIA does not support secondary distribution of this downloadable data without its current, compliant metadata record. The use of trade names or commercial products does not constitute their endorsement by CGIA or North Carolina State Government."

In general, features shown on the 2011 VGIN and NC OneMap 2010 aerial photography used in the preparation of inundation maps are assumed by F&R to represent true locations.

2.1.5 Land Use/Land Cover

Data obtained from the Southeast Geospatial Analysis Project (SEGAP) depicts most of the watershed area as forested areas. Tables 1a and 1b (see Section 3.3.1) summarize Land

Use/Land Cover (LULC) by acreage for the Lovills Creek Dam watershed (see Figure 5) as well as the composite of the entire study area depicted by the SEGAP LULC database and reclassified into coarser classifications matching cover types provided in the NRCS Technical Release Manual TR-55.

3.0 INPUT DATA PREPARATION

3.1 Terrain Data

Terrain data from VGIN 2011 full color, leaf-off, digital orthophotography-derived Digital Terrain Model (DTM) files was obtained from the Commonwealth of Virginia with coverage of Carroll County, Virginia. 2003 LIDAR terrain data was obtained from the North Carolina Floodplain Mapping Program of the NC Division of Emergency Management with coverage of Surry, Yadkin, and Forsyth Counties in North Carolina. These data, originally created for the purpose of orthorectifying the VBMP aerial photography, were converted to raster (grid) format at a 5-foot and 20-foot horizontal cell resolution using ArcGIS 3D and Spatial Analyst for Virginia respectively. A Digital Terrain Model drawing of the Lovills Creek Dam watershed (Figure 4) is provided in Appendix A. The raster dataset extent (x-min, y-min, x-max, y-max) was reduced to encompass the minimum spatial extent necessary to cover the Lovills Creek Dam study area.

Virginia Geographic Information Network (VGIN) metadata for the VBMP and USDA/NRCS TIN files used to generate the ten-foot resolution gridded DTM that served as the source for elevation data (NAVD 88) contains the following vertical accuracy statement: "Vertical Positional Accuracy Report: Vertical accuracy is untested. The data sources provided by VITA/VGIN and USDA/NRCS were used "as-is," and were not tested for accuracy. The VBMP and USDA/NRCS acceptance criteria require terrain data to be sufficiently accurate to produce orthoimagery meeting certain specifications." The elevation data depicted by the TIN data is referenced to the North American Vertical Datum of 1988 (NAVD 88) as its vertical reference and the North American Datum of 1983 (NAD83 HARN) Horizontal Datum and the Geodetic Reference System 80 (GRS80) Ellipsoid model as its horizontal reference.

In accordance with use constraints contained in the VGIN metadata, any determination of topography or contours, or any depiction of physical improvements, property lines or boundaries is for general information only and shall not be used for the design, modification, or construction of improvements to real property or for flood plain determination.

3.2 Watershed Processing

The ArcGIS hydrology extension (Arc Hydro) was used to generate digital watershed data. Watershed boundaries, artificial drainage lines, terrain derivatives, and flow path attributes for the Lovills Creek Dam watershed and sub-watersheds were automatically generated in a consistent format in this manner. Data were then output for use in HEC-HMS analyses of watershed response to different rainfall events. Upon completion of input data generation for HEC-HMS, the same GIS data was utilized for generation of terrain and geometry data for input into HEC-RAS.

In addition to the dam watershed (drainage area at outflow of Lovills Creek Dam), contributing sub-watersheds were characterized with regard to their contributory input to flow emanating from Lovills Creek Dam during model rainfall events. We note that twenty-nine sub-watersheds were accounted for in our evaluation as illustrated on Figure 1 in Appendix A.

3.3 HEC-HMS Input Preparation

The ArcGIS hydrology extension, Arc Hydro was used to generate input data for analysis by HEC-HMS. Utilizing output from Arc Hydro, watershed response variables were automatically generated in a consistent manner for Lovills Creek Dam watershed and sub-watersheds.

3.3.1 Land Use/Land Cover Data

Land Use/Land Cover (LULC) classifications and percentages were determined for each respective watershed based on mapping values depicted by the SEGAP raster data. These SEGAP classifications (210 in number) were reclassified into coarser classifications that more resembled those used in the NRCS TR-55 manual. The coarser LULC classifications were visually checked using 2011 VGIN and 2012 NRCS NAIP aerial photography.

Table 1a (NRCS Land Use/Land Cover Data) provided below lists NRCS designations and the corresponding acreage for the Lovills Creek Dam watershed used in our hydrological modeling. Table 1b lists the NRCS designations and the corresponding acreage for the entire Lovills Creek Dam study area.

Table 1a: NRCS Land Use/Land Cover Data for Lovills Creek Dam Watershed

NRCS Landuse	Acreage of Study Area
Forested Hardwood	5,790.6
Pine	3,602.1
Pasture/Hay	2,011.4
Developed	1,046.0
Clear Cut	525.7
Grass	187.2
Wetland	94.6
Water	46.6
Bare Earth	5.8
Row Crops	5.3
Total	13,315

Table 1b: NRCS Land Use/Land Cover Data for the Entire Lovills Creek Dam Study Area

NRCS Landuse	Acreage of Study Area
Pine	66,115.4
Forested Hardwood	45,199.5
Pasture/Hay	42,300.3
Developed	24,882.5

Clear Cut	9,371.0
Grass	6,565.5
Row Crops	2,761.6
Wetland	1,779.1
Bare Earth	827.1
Water	459.5
Rock Cliffs	5.3
Total	200,266

3.3.2 Curve Number Generation

The design curve numbers used in our study were based on the Runoff Curve Number tables provided in the NRCS TR-55 manual (Tables 2-2a through 2-2d) using a combination of the most recent NRCS soil survey data depicting hydrologic soil groups (A, B, C, and D) and the land use classifications shown in Tables 1a and 1b (Section 3.3.1). The NRCS soil survey data provided the hydrologic soil group designations and the percentage of each soil group within the respective components of each watershed. Soils mapped within the study area primarily consist of complexes which constitute a single mapping unit but contain two or more components that may belong to taxonomic classes other than that of the series. Hydrologic soil group information was taken to be the weighted average given by the NRCS for each component within each complex. We note that the primary NRCS land covers in the Lovills Creek Dam study area is designated as Pine, followed by Forested Hardwood. In addition, we note that we generally assumed the hydrologic condition to range between "fair" and "good" when using the TR-55 tables to estimate curve numbers for the individual ground cover types.

Utilizing the ground cover classifications with corresponding curve number recommendations provided in the TR-55 tables and the land use/land cover and hydrologic soil group breakdown, a weighted design curve number value based on the percentage of acreage for each Land Use/Soil Group combination was established. The resulting output was converted to a continuous grid with a 40-foot pixel resolution (each pixel representing a discrete curve number value). Potential storage and Initial Abstraction (IA) were derived from the curve number grid, also at 40-foot pixel resolution. Soil Moisture Deficit Value (S), Initial Abstraction (IA), and Lag Time (TL) for each pixel were computed using the equations shown below. The design curve numbers and initial abstraction values for each watershed were derived by computing the zonal mean of each grid data set using the watershed boundary as the zone definition within the ArcGIS Zonal Statistics tool. The resulting design curve numbers utilized in the HEC-HMS modeling of the Lovills Creek Dam watershed and the sub-watersheds are provided in Table 2.

$$\text{Soil Moisture Deficit Value (S)} = (1000/CN)-10$$

$$\text{Initial Abstraction (IA)} = 0.2S$$

$$\text{Lag Time (TL)} = L^{0.8}*(S+1)^{0.7}/1900*Y^{0.5}$$

3.3.3 Watershed Characteristics

Stream/river centerlines, longest flowpath parameters, and watershed characteristics were derived from the watershed characterization tools provided by ArcHydro. The watershed values used in our modeling included drainage basin areas (in square miles), hydraulic flow lengths (longest flow path), an average of watershed side slopes, current land use (noted in Tables 1a and 1b), and hydrologic soil groups (A, B, C or D soils). The watershed characteristics assumed in our modeling are provided in Table 2.

Table 2: Watershed Hydrology Characteristics

Watershed	Drainage Area (sq. mi)	Longest Flow Path (ft.)	Average Watershed Slope (%)	Initial Abstraction (in.)	Hydrologic Curve Number (CN)	Lag Time (hr.)
Dam Watershed	20.81	53,667	26	1.1	65	2.3
W1550	8.40	32060.87	16.70	1.12	65.21	1.89
W1420	6.84	33077.44	10.76	1.19	63.54	2.52
J488	71.30**	122,824	19*	1.0	66**	5.0
W940	3.39	28,293	12	1.2	64	2.0
W960	0.28	7,824	11	1.2	64	0.8
J475	73.85**	139,314	18*	1.1	65**	5.9
W1000	5.96	33,465	12	1.1	66	2.3
W990	1.67	13,123	20	1.1	67	0.8
W930	8.37	56,865	19	1.3	63	3.0
W1020	2.69	25,995	19	1.2	65	1.5
W1040	3.87	26,276	19	1.0	68	1.4
W1050	2.81	26,007	24	1.2	63	1.4
W1030	6.48	43,328	14	1.1	67	2.5
W1060	4.80	25,567	16	1.1	67	1.6
W1070	8.87	49,703	14	1.0	69	2.6
W1120	3.56	19,550	16	0.9	70	1.2
J379	29.57**	102,744	14*	1.1	65**	5.3
W1470	7.95	45,676	14	0.9	70	2.4
W1160	0.17	4,816	18	1.1	68	0.4
J434	11.07**	53,966	12*	0.8	72**	2.9
W1150	2.86	26,589	15	0.8	73	1.4
W1170	2.36	19,396	17	0.9	70	1.1
W1180	7.41	32,693	18	1.0	69	1.7
W1190	4.36	29,201	19	1.0	69	1.5
W1200	2.85	22,641	17	1.0	68	1.3
W1210	2.67	18,966	15	1.0	68	1.2
W1220	2.97	26,976	15	1.0	70	1.5
W1230	4.83	24,113	16	1.0	69	1.4

*Values shown are an average of the watersheds that make up the junction
**Values shown are the sum of the watersheds that make up the junction

3.3.4 Precipitation

Rainfall amounts representing Probable Maximum Precipitation (PMP) events for a 6-hour, a 12-hour, and a 24-hour duration storm over the Lovills Creek Dam drainage basin area were obtained from Hydrometeorological Report (HMR) 51, developed by the National Weather Service (NWS). Contributing sub-watersheds were evaluated based on 100-year rainfall data that was obtained from the NOAA (National Oceanic and Atmospheric Administration) Atlas 14 database. The distribution of each rainfall event modeled was developed based on consideration of the 24-hr distribution of rainfall reported in the Atlas 14 database for the 100 to 1000 year precipitation events and is provided in Appendix C. The rainfall depths used to simulate precipitation runoff in our modeling are provided below.

- 100-year Event = 8.1 inches
- PMP 6-Hour Event = 29 inches
- PMP 12-hour Event = 34.5 inches
- PMP 24-hour Event = 38.5 inches

3.4 HEC-RAS Input Preparation

The HEC-RAS (Hydrologic Engineering Center River Analysis System) computer model output requires the accumulation of a significant amount of data. This includes the following:

- pre-calculated stream/river hydrograph and flow data (cubic feet per second),
- topographic information of the below dam stream/river systems,
- horizontal cross-sections from the dam to the downstream end of study area,
- stream/river crossing bridge and bridge dimension data,
- Manning's roughness factors for the stream/river bed and side channel cover (also known as "n" values),
- stream bed slope as well as other boundary conditions.

The ArcGIS hydrology extension, HEC-GeoRAS was used to generate input data for analysis by HEC-RAS. Utilizing output from Arc Hydro, terrain and geometry data were generated in a format allowing for direct import into HEC-RAS. HEC-GeoRAS automates the production of cross-section geometry, channel and overbanks, and bank stations.

3.4.1 Stream/River Centerline

The stream/river centerline was taken to be the stream/centerline of the drainage path generated by the extraction tool in Arc Hydro. The "start" of the river was taken to be the point at which flow emanates from Lovills Creek Dam and the study area was terminated approximately 65.7 miles downstream of Lovills Creek Dam in the Yadkin River.

3.4.2 Stream/River Banks

Left and right stream banks distinguish the main channel from the overbank floodplain, and based on field observations, were taken initially from either the VGIN 2011 and LIDAR 2003 of North Carolina breaklines depicting "top of bank" or field observations of select cross-sections. Stream bank stations were later manually adjusted in HEC-RAS based upon field observations due to the inconsistency of the remotely-sensed terrain data to depict stream bank location.

3.4.3 Flowpaths

Left and right flowpaths, side channel, and overbank flow locations were digitized by hand using a combination of aerial photography and 1-foot interval contour lines (generated using the DTM and ArcGIS Spatial Analysis Contour Tool) to guide in determining appropriate placement. Channel flowpaths were taken to be the same geometry as the stream/river centerline.

3.4.4 Cross Sections

Cross sections were drawn (from river left to right) using the cross section editor tool in HEC-GeoRAS. Aerial photography, planimetric GIS data, 1 foot contour lines, and shaded-relief terrain rendering were used to aid the appropriate placement of GIS cross sections. The locations of the cross sections are shown on Cross Section Maps (1 through 17) provided in Appendix B.

3.4.5 Manning's "n" Value

HEC-RAS attributes some of the energy losses in a particular system to friction. The amount of friction that exists in any given geometry is associated with a specific Manning's frictional coefficient. The Manning's n-values chosen were taken from Table 3-1 of the HEC-RAS user manual. These values are placed along each cross-section to represent the frictional resistance in both the stream and the floodplain. The value is changed when the topography or land cover changes.

3.4.6 Dam Storage

The available storage above the reported normal pool elevation for the dam was calculated using elevation information provided in the VGIN 2011 DTM data. The reported normal pond elevation, emergency crest elevation, dam crest elevation, and resulting available storage volume for the dam is provided in Table 3. The calculated stage / storage curve is provided Appendix C.

Table 3: Dam Available Storage

Description	Normal Pond Elevation (ft.)	Auxiliary Spillway Crest Elevation (ft.)	Dam Crest Elevation (ft.)	Available Storage At Dam Crest (acre-ft.)
Lovills Creek Dam	1188	1217.5	1234.5	7316.2

3.4.7 Bridges and Structures

The culvert and bridge locations were digitized using the bridge editor tool in HEC-GeoRAS. As GIS is unable to capture the necessary data to represent culvert and bridge profiles in HEC-RAS, the structures were field-checked to measure, document, and photograph structure openings and other pertinent data. Main reach bridge information was obtained from survey when available. This information was manually entered into HEC-RAS using the HEC-RAS Bridge Deck Editor. GIS bridge information only served as a guide as to where (stationing) to enter bridge data in HEC-RAS.

Structure outlines (houses, barns, sheds, garages, etc.) that are directly impacted by the flood boundaries were obtained from Carroll County, Surry County, NC, Yadkin County NC, and Forsyth County, NC. Otherwise structures were digitized using the most recent aerial photography. Property boundaries and ownership of land and buildings were not synthesized.

3.4.8 HEC-RAS Geometry

Upon completion of the planimetric data generation using the HEC-GeoRAS editing tools, River/Reach names, Topology, Lengths/Stations, Elevations, and Downstream Reach Lengths were all automatically calculated by HEC-GeoRAS. An export file was created by HEC-GeoRAS for direct import into HEC-RAS.

4.0 HEC-HMS AND HEC-RAS ANALYSES AND RESULTS

4.1 HEC-HMS Analyses and Results

The USCOE engineering computer program HEC-HMS (Hydrologic Modeling System) was used to simulate the precipitation-runoff processes for the Lovills Creek Dam watershed and the previously described contributing sub-watersheds for various rainfall events. The precipitation-runoff model was developed utilizing the SCS Curve Number and SCS unit hydrograph methods and the data discussed in Section 3.3 for determining runoff.

HEC-HMS was used for simulating the storage, overtopping, and breaching of Lovills Creek Dam. The resulting breach hydrographs (Appendix C) were routed approximately 44.2 miles downstream using HEC-RAS as described in section 4.2.

A dam breach section was developed for “sunny day,” and the PMF failure scenarios. The breach sections are shown in Table 4. The breach bottom widths were estimated using the following input parameters: selected failure depth, calculated impoundment storage volume, and the dam dimensions. The “sunny day” scenario was initiated as a piping failure through the earthen dam with the water level at the normal pool elevation of 1188 feet. The PMF breach event was initiated at its maximum water surface elevation of 1235.5 feet as an overtopping failure. The SDF (0.9 PMF) breach event was initiated at its maximum water surface elevation of 1234.3 feet as a piping failure. All of the modeled breach events resulted in the near emptying of the pool and used the breach parameters shown in Table 4.

Table 4: Breach Parameters

Description	Breach Bottom Width (ft)	Breach Bottom Elevation (ft.)	Side Slopes (H:V)	Failure Time (hours)
PMF Breach	134.1	1146.5	1:1	0.63
SDF Breach	131.7	1146.5	0.7:1	0.62
Sunny Day Breach	61.7	1146.5	0.7:1	0.38

Per the Virginia Soil and Water Conservation Board's Impounding Structure Regulations (Chapter 20), a Probable Maximum Flood (PMF) outflow for the Lovills Creek Dam watershed was determined based on the peak flow resulting from a 6-hour, 12-hour, and 24-hour PMP events. Flows in downstream sub-watersheds were estimated based on a percentage of the 100-year peak flow. The peak flows determined during our HEC-HMS evaluation for each watershed are provided in Table 5. The HEC-HMS outputs for Lovills Creek Dam (6-hour, 12-hour, and 24-hour) and the sub-watersheds are provided in Appendix C.

Table 5: Peak Runoff Flows (cubic-feet per second)

Dam Watershed	6-hour	12-hour	24-hour
PMF – Inflow	87808	84218	60835
PMF - Outflow	78278	76853	60055

Table 5 (Continued): Peak Runoff Flows (cubic-feet per second)

Sub-Watersheds	6-hour	12-hour	24-hour
W1550	-	-	4260
W1420	-	-	2682
J488	-	-	36962
W940	-	-	1556
W960	-	-	245
J475	-	-	33797
W1000	-	-	2754
W990	-	-	1531
W930	-	-	2794
W1020	-	-	1561
W1040	-	-	2531
W1050	-	-	1635
W1030	-	-	2821
W1060	-	-	2918
W1070	-	-	4038

W1120	-	-	2811
J379	-	-	13238
W1470	-	-	4005
W1160	-	-	228
J434	-	-	7143
W1150	-	-	2216
W1170	-	-	1968
W1180	-	-	4514
W1190	-	-	2865
W1200	-	-	2008
W1210	-	-	1931
W1220	-	-	1978
W1230	-	-	3331
Yadkin River	-	-	70000

*Values include multiple watersheds that converged together

4.2 HEC-RAS Analyses

The computer program HEC-RAS is used to evaluate stream network and flood surface elevations and calculate water surface profiles for varied flow in natural or man-made channels. The HEC-RAS model output includes storm water runoff totals for the different storm events, stream/river bottom elevations, water surface elevations for each event, water flow velocities, water travel times, stream flow areas and top widths of the various storm events.

Several different storm events were included in our analysis for the Lovills Creek Dam watershed: a "sunny day" breach scenario at the auxiliary spillway, a PMF routed through the dam with dam failure, the SDF routed through the dam with failure, and the SDF routed through the dam without failure. The PMF used in our HEC-RAS evaluation was based on a 6-hour PMP event (29 inches of rain) which produced the maximum outflow runoff from the Lovills Creek Dam impoundment.

To account for contributing flow into downstream reaches of Lovills Creek and Ararat River resulting from the downstream sub-watersheds, a uniform flow based on a percentage of the 100-year rain event peak flows shown in Table 5 were used. For our "sunny-day" model we assumed an approximate percentage of 8 percent of the 100-year peak flow to simulate a creek that is running at top of bank. For the PMF with break and SDF with and without a dam break events an approximate percentage of 75 percent of the 100-year peak flow was used to simulate the flood event that would likely surround the dam watershed storm event.

The 100 year rain event peak flow for the Yadkin River was determined by the max flow present (at the junction of Yadkin River and Ararat River) in the 100 year floodplain HEC-RAS model provided by the North Carolina Flood Risk Information System

4.3 HEC-RAS Results

A tabulated report of the HEC-RAS outputs ("sunny day" dam failure, PMF with dam failure, SDF with dam failure, SDF without dam failure) listing water surface elevations, stream velocities, discharge amounts, top widths, and other information is provided in Appendix D for the different storm events. The results of the HEC-RAS analyses were used to determine what structures, if any, below the dam would be endangered by flood waters. We note that a convergence of one foot between the 0.9 PMF with and without dam failure occurs in the Yadkin River (approximately 44.2 miles downstream of Lovills Creek Dam).

We note that no consideration was given to the effect of debris dams at the culverts and bridges or other locations. The potentially inundated roads were indicated as inundated without this consideration.

4.4 Hazard Classification

Virginia Soil and Water Conservation Board's Impounding Structure regulations (Chapter 20) state that if the failure of the impounding structure causes a probable loss of life or serious economic damage to downstream areas, the impounding structure shall be classified as a High Hazard Potential dam. The term "probable loss of life" means that impacts that are likely to cause a loss of human life, including but not limited to impacts to residences, businesses, other occupied structures, major roadways, interstates, and primary roadways.

Based on our study of the Lovills Creek Dam, there are numerous occupied dwellings and primary roadways inundated as a result of a dam breach. Therefore, Lovills Creek Dam should be classified as a High Hazard potential dam. A summary table (developed based on readily available information) of inundated bridges and dwellings resulting from the four modeled events ("Sunny Day" dam failure, PMF with dam failure, SDF with dam failure, SDF without dam failure) is provided in Appendix G. Structures were determined to be impacted based on their structural elevation, flood depth, and flow velocities. The term structural elevation refers to the bridge deck or the lowest adjacent corner of an occupied dwelling.

4.5 Incremental Damage Assessment

Current dam safety regulations require that High Hazard impoundments have an auxiliary spillway capacity equal to at least a 0.9 PMF, unless it can be shown by an incremental damage assessment that increasing the auxiliary spillway to that size provides no additional protection to downstream facilities or roads. The minimum spillway design designated in the regulations for a High Hazard structure is a 100 year storm event.

We found several structures that are incrementally impacted by a 0.9 PMF dam breach. Therefore, based on our evaluation and the current regulations, the dam will need to have a spillway capacity equal to at least a 0.9 PMF event. As previously noted, Lovills Creek Dam passes the 0.9 PMF event without overtopping. No further incremental damage assessment is warranted nor required. We note that the current spillway was used in the analysis of the "Sunny Day" with dam break, PMF with dam break, and SDF with and without dam break events.

5.0 INUNDATION MAPS AND PROFILES

Flood events modeled with HEC-RAS were imported into the ArcMap interface using the HEC-GeoRAS extension. Bounding polygons, water surface elevation rasters, and floodplain boundary were all generated in GIS-format based upon the HEC-RAS geometry data output from the HEC-RAS interface.

Following inundation boundary delineation mapping tasks using HEC-GeoRAS, planimetric maps were produced depicting the location of structures, roads, and other property that would be endangered should the impounding structure fail. The resulting Inundation Maps that graphically display downstream inhabited areas and structures, roads, and other pertinent structures within the identified inundation areas are provided in Appendix E. The ten foot topographic maps generated using the Digital Terrain Model (DTM) and the ArcGIS Spatial Analysis Contour Tool are also located in Appendix E.

A general profile plot illustrating the water surface elevations of the Sunny Day breach, PMF with breach, SDF with breach, and SDF without breach for the Lovills Creek Dam study area is provided in Appendix F (General Profile Plots). Individual cross-section profiles providing a more detailed look at the water surface elevations determined from the Sunny Day and PMF with breach, SDF with breach, and SDF without breach events at selected cross-sections are also provided in Appendix F (Cross-Section Profiles).

6.0 EMERGENCY ACTION PLAN CONSIDERATIONS

As previously noted, an Emergency Action Plan (EAP) and corresponding field reconnaissance are not included in this report. Concerning our study and the resulting inundation maps provided, we note the following items that should be considered in subsequent EAP.

Our study found several occupied structures that will have portions inundated by water (see Appendices E, F, and G). The structural elevation was used to determine if the dwelling lies within the specified inundation zone. These structures should be noted in the subsequent EAP.

Our study indicates that the road bridges provided in Appendix G will have portions inundated by water due to a dam failure. These bridges should be addressed accordingly in the subsequent EAP. A significant Yadkin Valley railroad line crosses Lovills Creek and Ararat River in multiple locations so they will also need to be notified in the EAP.

7.0 LIMITATIONS

This report has been prepared for the exclusive use of the Carroll County or their agent, for specific application to the Lovills Creek Dam (Carroll County, Virginia) Inundation Study, in accordance with generally accepted engineering practices. No other warranty, express or implied, is made. Our conclusions and recommendations are based on information made available to us, the data obtained during the previously described study, and generally accepted engineering practice.

F&R obtained GIS data in vector and raster format from numerous sources. F&R did not perform consistency or accuracy analysis of the data. F&R assumes that the logical consistency and vertical and horizontal accuracy of GIS data used in the preparation of maps and figures conform to GIS production "best practices."

If this inundation study is copied or transmitted to a third party, it must be copied or transmitted in its entirety, including text, attachments, and enclosures. Interpretations based on only a part of this report may not be valid.

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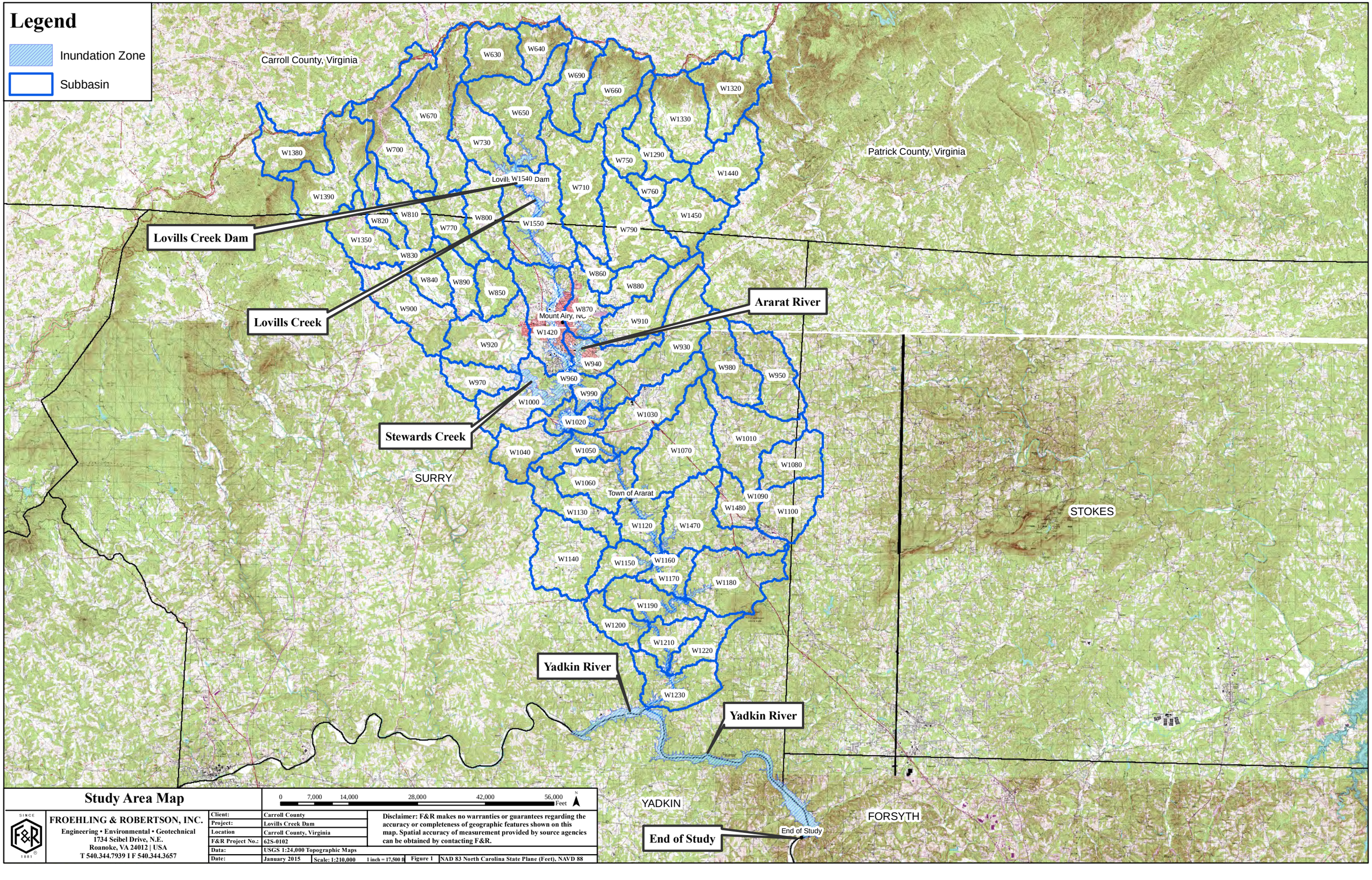
APPENDIX A

Reference Maps



Study Area Map

0 7,000 14,000 28,000 42,000 56,000 Feet

N

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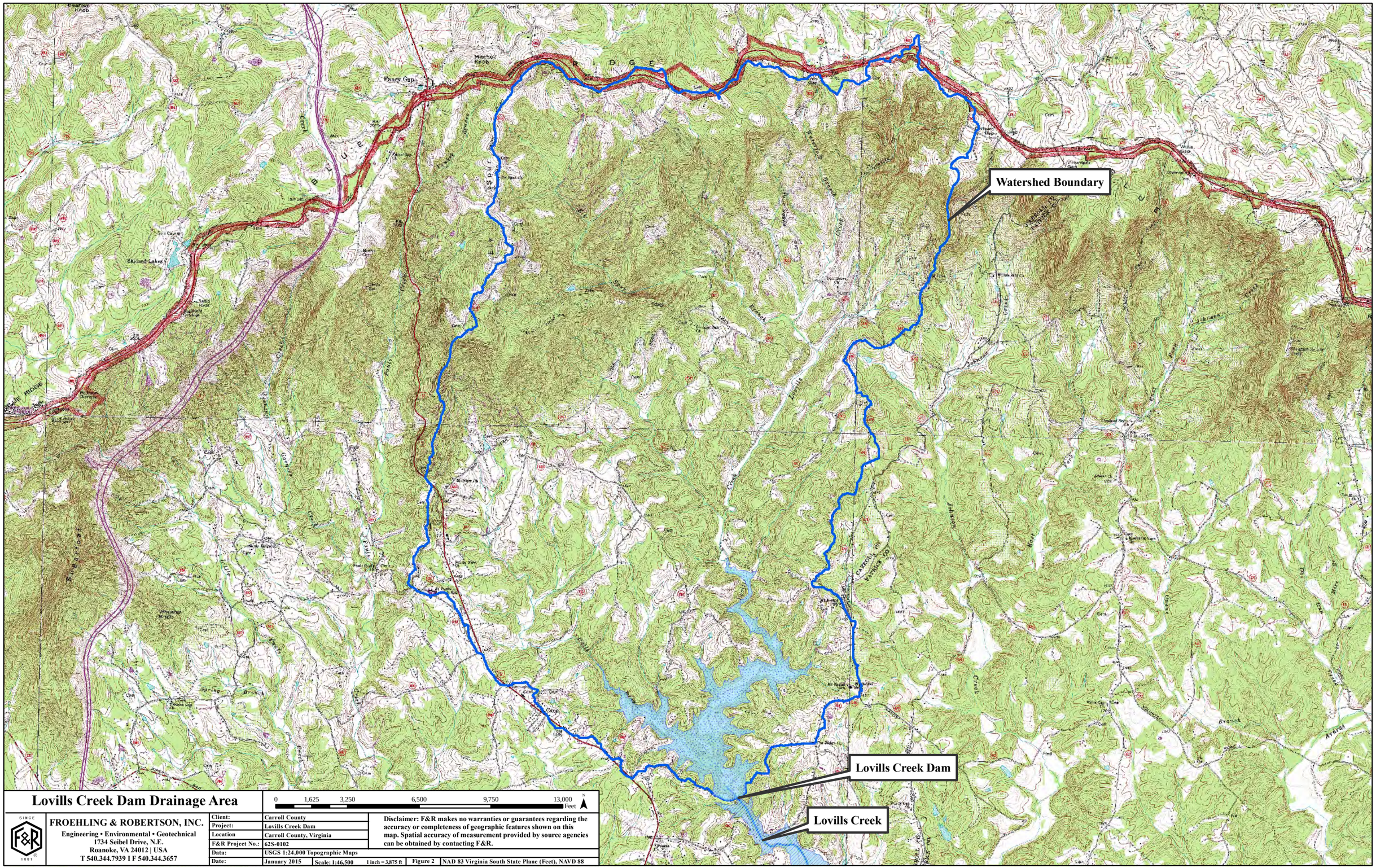
FROEHLING & ROBERTSON, INC.
Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	USGS 1:24,000 Topographic Maps
Date:	January 2015

Scale: 1:210,000 1 inch = 17,500 ft Figure 1 NAD 83 North Carolina State Plane (Feet), NAVD 88

Disclaimer: F&R makes no warranties or guarantees regarding the accuracy or completeness of geographic features shown on this map. Spatial accuracy of measurement provided by source agencies can be obtained by contacting F&R.



Lovills Creek Dam Drainage Area

0 1,625 3,250 6,500 9,750 13,000 Feet

N

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

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Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	USGS 1:24,000 Topographic Maps
Date:	January 2015

Scale: 1:46,500 1 inch = 3,875 ft | Figure 2 | NAD 83 Virginia South State Plane (Feet), NAVD 88

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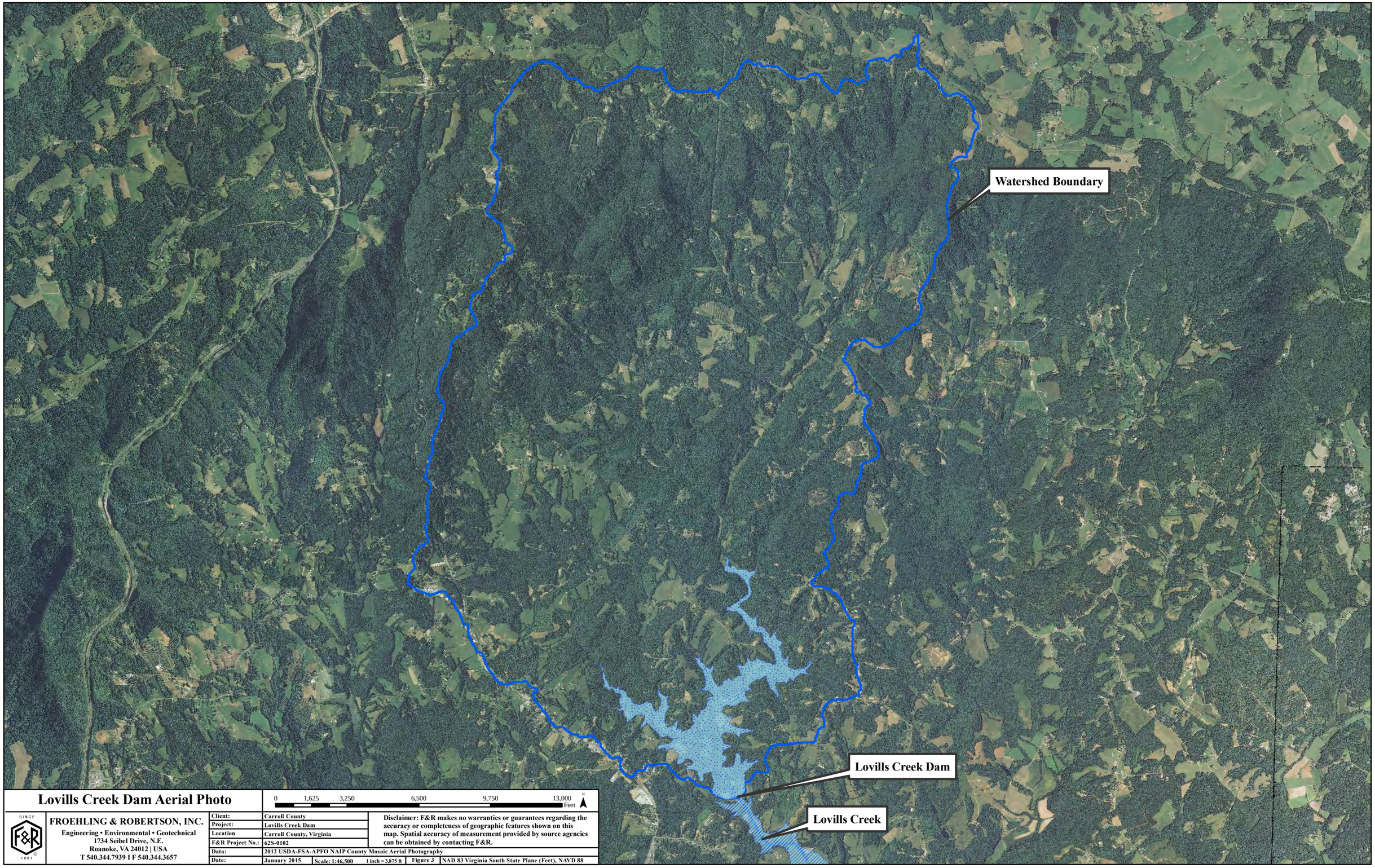

Lovills Creek Dam Aerial Photo

0 1,625 3,250 6,500 9,750 13,000 Feet

N

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Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	2012 USDA-FSA-APFO NAIP County Mosaic Aerial Photography
Date:	January 2015

Scale: 1:46,500 1 inch = 3,875 ft | Figure 3 | NAD 83 Virginia South State Plane (Feet), NAVD 88

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

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Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	USGS 1:24,000 Topographic Maps; 2011 VGIN Terrain Data
Date:	January 2015

Scale: 1:46,500 1 inch = 3,875 ft | Figure 4 | NAD 83 Virginia South State Plane (Feet), NAVD 88

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Legend

- Bare Earth
- Clear Cut
- Developed
- Forested Hardwood
- Grass
- Pasture/Hay
- Pine
- Row Crops
- Water
- Wetland

Watershed Boundary

Lovills Creek Dam

Lovills Creek

Land Use / Land Cover

0 1,625 3,250 6,500 9,750 13,000 Feet

N

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T 540.344.7939 I F 540.344.3657

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Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	USDA-FSA-APFO NAIP County Mosaic Aerial Photography; National Land Cover Data Set
Date:	January 2015 — Scale: 1:46,500 — 1 inch = 3,875 ft — Figure 5 — NAD 83 Virginia South State Plane (Feet), NAVD 88

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Legend

Hydrologic Group

- A
- B
- B/D
- C
- D
- W

Watershed Boundary

Lovills Creek Dam

Lovills Creek

Soils Data

0 1,625 3,250 6,500 9,750 13,000 Feet

N

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	USDA-FSA-APFO NAIP County Mosaic Aerial Photography; Soil Survey Spatial and Tabular Data (SSURGO 2.2)
Date:	January 2015

Scale: 1:46,500 1 inch = 3,875 ft Figure 6 NAD 83 Virginia South State Plane (Feet), NAVD 88

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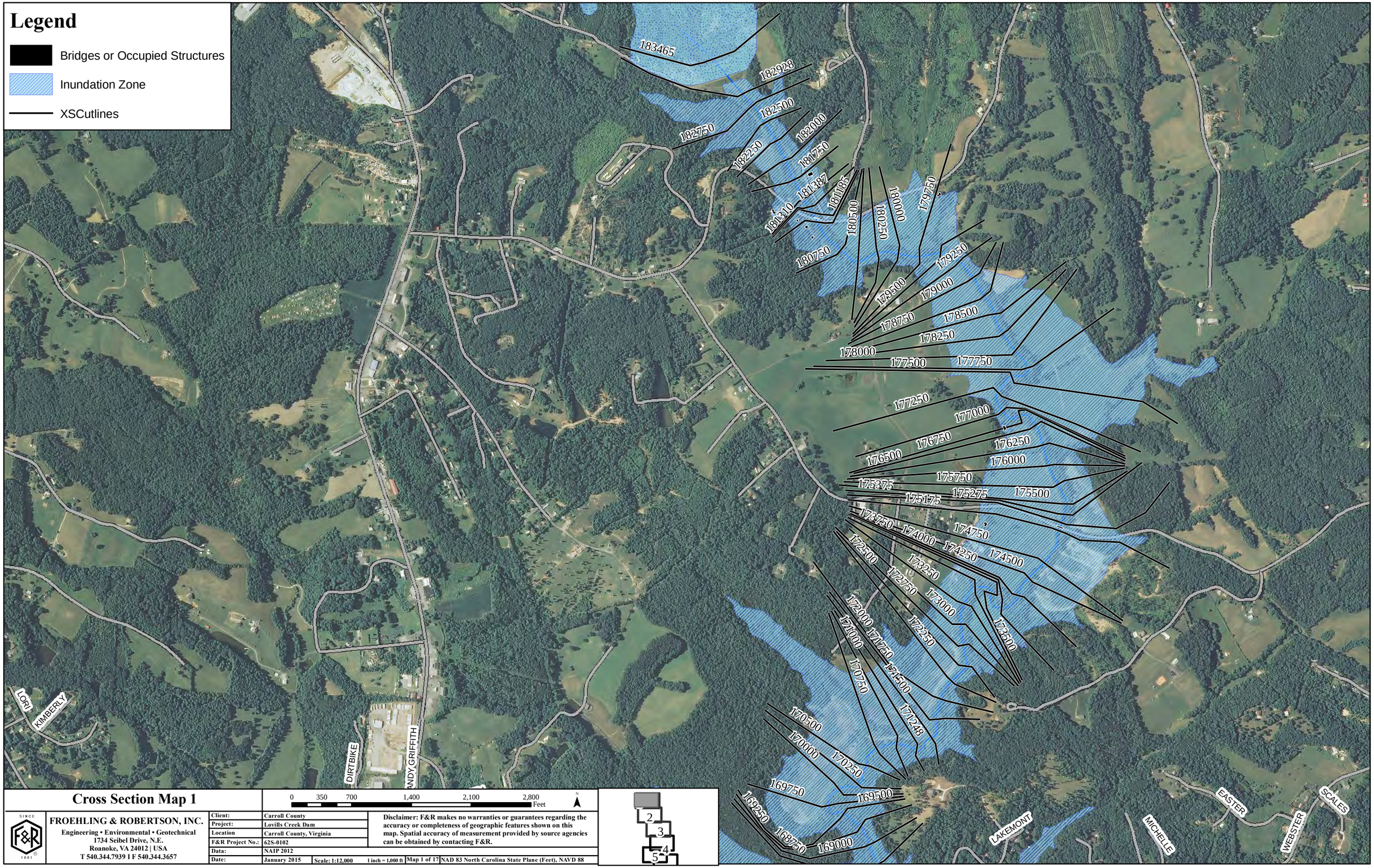
APPENDIX B

Cross-Section Maps



Cross Section Map 1

0 350 700 1,400 2,100 2,800 Feet

N

2 3 4 5

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
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Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NAIP 2012
Date:	January 2015

Scale: 1:12,000 1 inch = 1,000 ft | Map 1 of 17 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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Legend

- Bridges or Occupied Structures
- Inundation Zone
- XSCutlines

168750 168500 168250 168000 167750 167500 167250 167000 166750 166500 166250 166000 165750 165500 165250 165000 164750 164500 164250 164000 163750 163622 163555 163418 163000 162750 162500 162250 162000 161750 161500 161250 161000 160750 160500 160250 160000 159750 159500 159250 159000 158750 158500 158250 158000 157750 157500 157250 157000 156750 156500 156250

WEBSTER
OAKVIEW
SKYVIEW
CORNELIUS
CLEMENT
LAWRELYN
DAY LIGHT
ROWE
SPLASH
WHITE PINES
LOGAN
BARKER
YELLOW PINES
WILSON
STARR MEMORY
TRELLIS
GOLDFINCH
SEIVERS
CARTER
SUMMIT
ESSEX
PARKER
CEASAR
NELLIE
WYNCREST
TURNING LEAF
SCALES STONE
STONEBROOK
PINE KNOLL
RIDGECREST
CROSS CREEK
HILLHAVEN
FOXCROFT
QUAIL RUN
SADDLE CREEK
GREEN BRIDGE
LAKEMONT
PLANTATION PLACE
ANDY GRIFFITH
AVONDALE
WORTHINGTON
GUINESS
RIDGEVIEW
GREEN BROOK
HAZELNUT
DAIQUIRI
JW BRANSON
MILLER
LELAND
WINDWARD
ALPINE
MOUNT CARMEL CHURCH
GREENHILL
BRENTWOOD
PIONEER
HEARTHSIDE
QUAIL
MEADOWLARK
KIZER
PAR HILL
MONTCLAIRE
FERNBROOK
OAKMONT
BARBERRY
OLD MONTCLAIRE
CHAPPELL
ANDY GRIFFITH
VALLEYVIEW
CAMELIA
LAUREL
BOSTON
FOX LEDGE
PEARSON POND
GREENHILL
OLD GREENHILL
HUNTING HILL
GRANDVIEW
BEECHTREE
HEATHERSTONE
RIDGEWAY
KNOLLWOOD
PINE CREEK
LAUREL CREEK
KENNESAW
OLD GOLD
BLUVUE
NINJA
BOGGS
TOWER
SCOOBY DOO
FRANKLIN
RICKY
JESSICA
BECKY
PLEASANT
MORGAN
TANGLEWOOD
NORMAN
BOXWOOD
BLOSSOM
FANCY GAP
WILLIS
CHAMPAGNE
LEE
OLIVE
CHATHAM
PATROL STATION
HADLEY
SHORTTOWNE
WESTLAKE

Cross Section Map 2

0 350 700 1,400 2,100 2,800 Feet

N

1 3 4 5

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T 540.344.7939 I F 540.344.3657

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Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC Onemap 2010 Aerial Photography				
Date:	January 2015	Scale: 1:12,000	1 inch = 1,000 ft	Map 2 of 17	NAD 83 North Carolina State Plane (Feet), NAVD 88

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Legend

- Bridges or Occupied Structures
- Inundation Zone
- XSCutlines

Cross Section Map 3

0 350 700 1,400 2,100 2,800 Feet

N

1 2 5 4

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T 540.344.7939 I F 540.344.3657

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Date:	January 2015	Scale: 1:12,000	1 inch = 1,000 ft	Map 3 of 17	NAD 83 North Carolina State Plane (Feet), NAVD 88

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Legend

- Bridges or Occupied Structures
- Inundation Zone
- XSCutlines

Cross Section Map 4

0 350 700 1,400 2,100 2,800 Feet

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

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Date:	January 2015

Scale: 1:12,000 1 inch = 1,000 ft Map 4 of 17 NAD 83 North Carolina State Plane (Feet), NAVD 88

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1 2 3 5

Legend

- Bridges or Occupied Structures
- Inundation Zone
- XSCutlines

GARDNER
ELVUE
THOMAS
FRANKLIN
WELCH
MAIN
FAIRLANE
FORREST
STATE
EMS
STEWART
PARK
GROVE
REEVES
NORTHRIDGE
BROOKLEN
ANDY GRIFFITH
ARLINGTON
WASTEWATER TREATMENT
CARTER
ASHTON
BRIDGEPORT
BARRINGTON
FARMBROOK
WILLIAMSON
GLENN
BROOK
VALLEYDALE
PINEVIEW
APOLLO
EDGEWOOD
CAROLINA
EDGEWOOD PLACE
WOLTZ
LOST CORNER
ROSECREST
JOHNA
SHEFFIELD
KENSINGTON
HOLLYVIEW FARM
RIDGEWOOD
GLEN ECHO
WOOD COVE
FOREST VIEW
PIEDMONT TRIAD WEST
JOYNER
SCOTT BUNKER
WATERS EDGE
TEMPLE
LYNNHAVEN
CYPRESS
BAYMEADOW
MUSTANG
STEDMAN
BEGONIA
ROCKFORD
BRACKYS CABIN
MCKINNEY
EXIT11 I 74 WB HWY 601
EXIT11 I 74EB HWY 601
EXIT11 I 74WB HWY 601
I 74
TRYON
JOHNSON
SPRINGDALE
OLD HWY 601
DOSS
BUDS
QUARRY
CRUSHER
JUNIPER

134750 134500 134250 134000 133750 133500 133250 133140 133061 132750 132500 132250 131750 131500 131000 130750 130500 130250 129750 129500 129250 129000 128778 128500 128250 128000 127750 127500 127250 127000 126750 126500 126000 125750 125500 125000 124750 124000 123750 106750 106500

Cross Section Map 5

0 350 700 1,400 2,100 2,800 Feet

N

1 2 3 4

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
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Date:	January 2015

Scale: 1:12,000 1 inch = 1,000 ft Map 5 of 17 NAD 83 North Carolina State Plane (Feet), NAVD 88

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Legend

- Bridges or Occupied Structures
- Inundation Zone
- XSCutlines

DOSS
BUDS
QUARRY
CRUSHER
OLD BUCK SHOALS
CHARLIE NORMAN
LOWRIDER
MCGEE
I 74
CONNECTOR
EXIT13 I 74 WB PARK DR
EXIT13 I 74 EB PARK DR
PARK
NAVIGATOR
SHEEP FARM
BEDROCK
WINDRUSH
HIATT
GODS
FOXGLOVE
GREAT DANE
LANDFILL
TERRELL
PERU
SIMBA
SIDDEN

125000 124750 124500 124250 124000 123750 123500 123250 123000 122750 122500 122250 122000 121728 121500 121250 121000 120750 120500 120250 120000 119500 119250 119000 118750 118500 118250 117750 117500 117250 116750 116500 116250 116000 115750 115500 115000 114750 114500 114250 114000 113750 113250 113000 112750 112500 111500 111250 111000 110750 110250 110000 109750 109500 109250 109000 108750 108500 108250 108000 107750 107500 107250 107000 106750 106500 106250 106000 105750 105515 105000 104750 104500 104250 104000 103664 103500 103250 103000 102891 102791 102432 102000 101750 101500 101250 100250 100000 99750 99500 99250 99000 98750

Cross Section Map 6

0 350 700 1,400 2,100 2,800 Feet

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T 540.344.7939 I F 540.344.3657

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Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:12,000 1 inch = 1,000 ft | Map 6 of 17 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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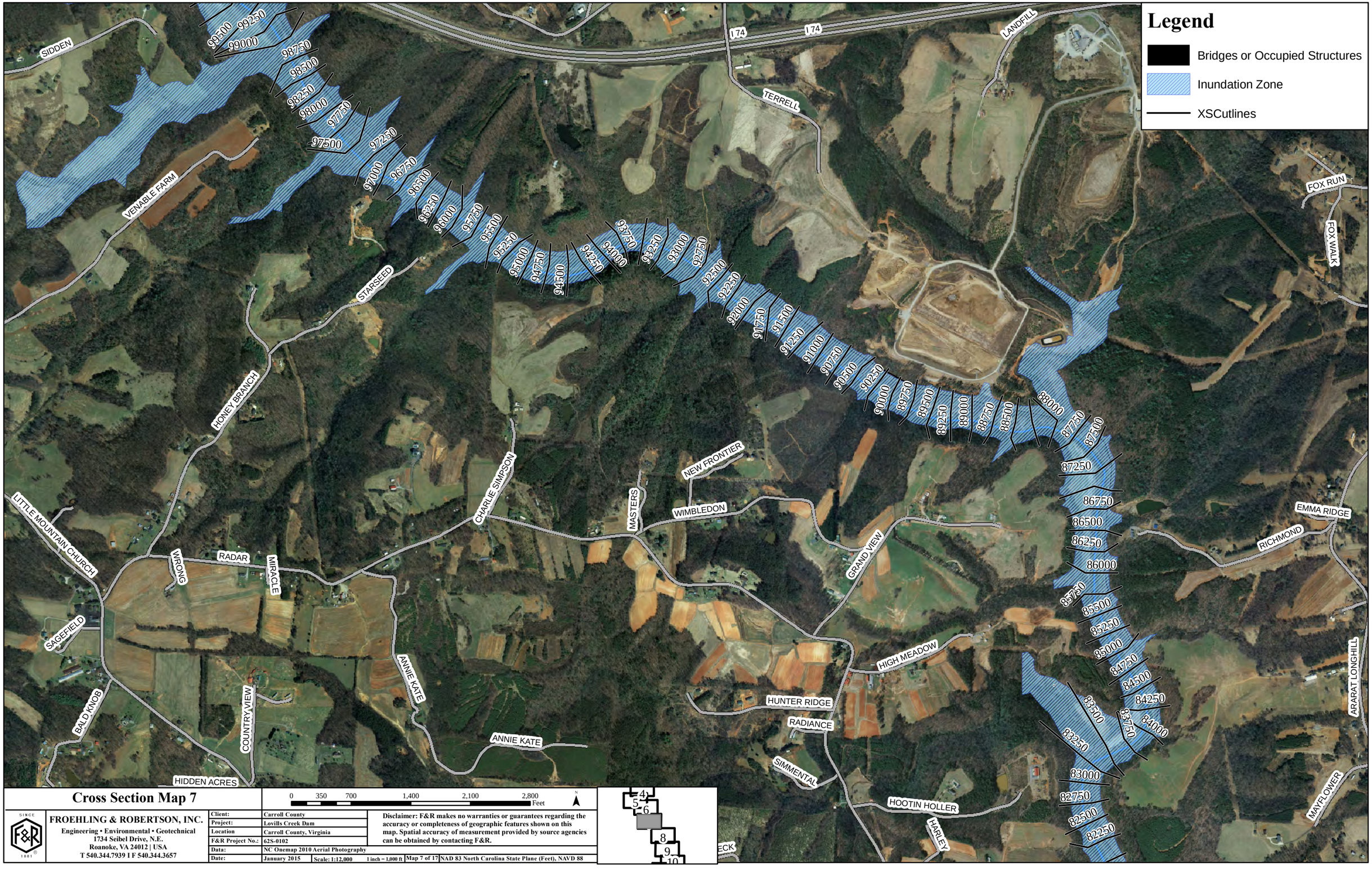
4 7 8 9 10



Cross Section Map 7

0 350 700 1,400 2,100 2,800 Feet

N

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Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:12,000 1 inch = 1,000 ft | Map 7 of 17 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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4 5 6 8 9 10

Legend

- Bridges or Occupied Structures
- Inundation Zone
- XSCutlines

82500 82250 82000 81750 81500 81250 81000 80750 80500 80250 80000 79750 79500 79250 79000 78750 78500 78250 78000 77750 77558 77372 77000 76750 76500 76250 76000 75750 75500 75250 75000 74750 74500 74250 74000 73750 73500 73250 73000 72750 72500 72250 72000 71750 71500 71250 71000 70750

ASH HILL
GNOME
CASEY
TREE HAVEN
CALICO
DANLEY
MORNINGVIEW
MARSH
ARARAT
HOPE
FAITH
BULLARD
ARARAT LONGHILL
WHITTINGTON
POSEY KEY
SCOOTER
TALL OAKS
COMMUNITY BUILDING
MONET
BULL RUN
LITTLE MOUNTAIN CHURCH
BOWMAN
INSPIRATION
OLD PLACE
GRANTS HOME
BRIDLE PATH
FIDDLERS
TOMS CREEK
SAM FULK

Cross Section Map 8

0 350 700 1,400 2,100 2,800 Feet

N

4 5 6 7 9 10

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Scale: 1:12,000 1 inch = 1,000 ft | Map 8 of 17 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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Legend

- Bridges or Occupied Structures
- Inundation Zone
- XSCutlines

HALLELUIAH
WINNIE
BOGGY CREEK
CHILTON
DEER POND
BRYANT MILL
ELDORA
PRIDE ROCK
COX FORD
MISTY CREEK
HAZY GROVE
NC 268
SAM FULK
WARTHOG
TOMS CREEK
HICKORY RIDGE
BROOKLYN
BLUEGRASS
SANDY CREEK
ORIOLE
GULFSTREAM
RICH WOODS
JOLO WINERY
JOLO
PILOT POWER DAM
POWER

71000 70750 70500 70250 70000 69750 69500 69250 69750 69000 68500 68250 68000 67750 67500 67250 67000 66750 66500 66250 66000 65750 65500 65250 65000 64750 64500 64210 64000 63750 63500 63250 63000 62750 62500 62250 62000 61750 61500 61250 61130 61028 60784 60250 60000 59750 59250 58750

Cross Section Map 9

0 350 700 1,400 2,100 2,800 Feet

N

4 5 6 7 8 10

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Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:12,000 | 1 inch = 1,000 ft | Map 9 of 17 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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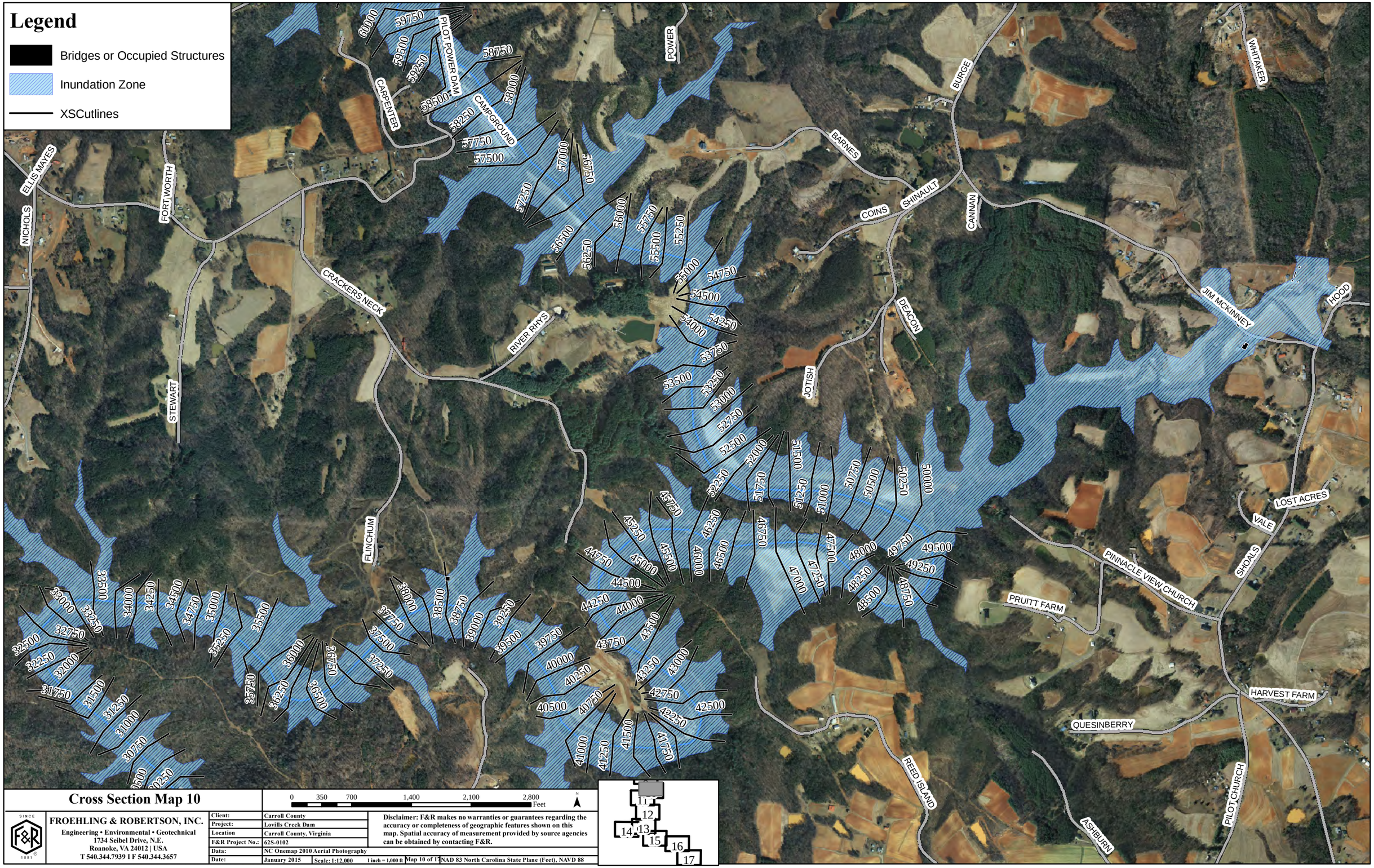
Legend

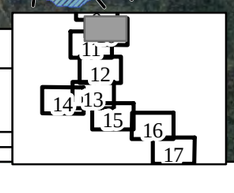
- Bridges or Occupied Structures
- Inundation Zone
- XSCutlines



Cross Section Map 10

0 350 700 1,400 2,100 2,800 Feet

N



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F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:12,000 | 1 inch = 1,000 ft | Map 10 of 17 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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Legend

- Bridges or Occupied Structures
- Inundation Zone
- XSCutlines

ALLEN
BILLY PRATT
OLD SCHOOLHOUSE
LOWER PLACE
STANFORD CHURCH
FLINCHUM
CRACKERS NECK
REED ISLAND
BULLINGTON
PORK
FAWLING
CORNER
CHELSEA
EQUIPMENT
TUCKER FARM

33500 33000 32750 32500 32250 32000 31750 31500 31250 31000 30750 30500 30250 30000 29750 29500 29250 29000 28750 28500 28250 28000 27750 27500 27250 27000 26750 26500 26250 26000 25750 25500 25250 25000 24750 24500 24250 24000 23750 23500 23250 23000 22750 22500 22250

34000 34250 34500 34750 35000 35250 35500 35750 36250 36000 36500 36750 37250 37500 37750 38000 38500 38750 39000 39250 39500 39750 40000 40250 40500 40750 41000 41250 41500 41750 42250 42500 42750 43000 43250 43500 43750 44000 44250 44500 44750 45000 45250 45500 45750 46000 46250 46500 46750 47000 47250 47500 48250 50500 50750 51000 51250 51500 51750 52000

Cross Section Map 11

0 350 700 1,400 2,100 2,800 Feet

N

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Location	Carroll County, Virginia
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Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:12,000 1 inch = 1,000 ft

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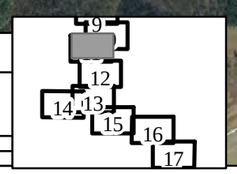
NAD 83 North Carolina State Plane (Feet), NAVD 88



Legend

- Bridges or Occupied Structures
- Inundation Zone
- XSCutlines

MATTHEWS MILL
REEVES
QUAKER CHURCH
FULK MEMORIAL CHURCH
MOORELAND
WALTER ONEAL
CAROWIND
PILOT CHURCH
SAM MARION
EARNHARDT
PAUL MARION
BUD MARION
RIVERS EDGE
SAWTOOTH
HARDY
MINT
CHEYENNE
FIREBUG
TWIN CEDARS
WILLIE BAKER
BOO BOOS
JOHN SCOTT
ELLIS HARDY
PIONEER CAMP

22250 22000 21750 21500 21250 21000 20750 20500 20250 20000 19750 19500 19250 19000 18750 18500 18250 18000 17750 17500 17250 17000 16750 16500 16250 15750 15500 15250 15000 14750 14500 14327 14158 13750 13500 13250 13000 12750 12500 12250 12000 11750

Cross Section Map 12

0 350 700 1,400 2,100 2,800 Feet

N

9 10 11 14 13 15 16 17

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Scale: 1:12,000 1 inch = 1,000 ft Map 12 of 17 NAD 83 North Carolina State Plane (Feet), NAVD 88

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Legend

- Bridges or Occupied Structures
- Inundation Zone
- XSCutlines

KENT
HOLTS
DIXIE
ATKINSON
CHEYENNE
SAM SCOTT
ARABIAN HORSE
NUNN
DOODLE
HARDY
RIVER SILOAM
SILOAM ACADEMY
OLD TOWN
SILOAM
ROBERT OWENS
JOHN MICKLES
ALL SEASONS
BUTNER

11750 11500 11000 10750 10500 10250 10000 9750 9500 9250 9000 8750 8500 8250 8000 7750 7500 7250 7000 6750 6500 6250 6000 5750 5500 5250 5000 4750 4500 4358 4221 3823 3500 3250 3000 2750 2500 2250 2000 1750 1500 1250 1000 750 500 249.99995

884894 883242 883014 882889 881889 880904 879975 878977 878117 876743 875789 874889 873889 872888 871889 870889 869107

Cross Section Map 13

0 350 700 1,400 2,100 2,800 Feet

N

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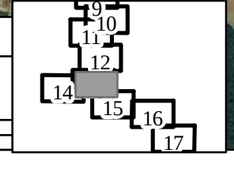

Legend

- Bridges or Occupied Structures
- Inundation Zone
- XSCutlines

LAMP POST
LONG DUSTY
COTTONWOOD
RIVER SILOAM
OLD TOWN
ATKINSON
SILOAM
SILOAM ACADEMY
HARDY

898964
897909
896827
895914
894922
893955
892858
891845
891030
890064
888979
887878
886905
886107
884894
883889
883242
883014
881889

-Structures upstream are not affected by breach events
-End of backwater area

Cross Section Map 14

0 350 700 1,400 2,100 2,800 Feet

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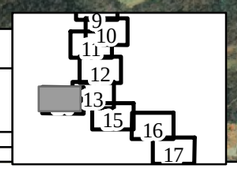
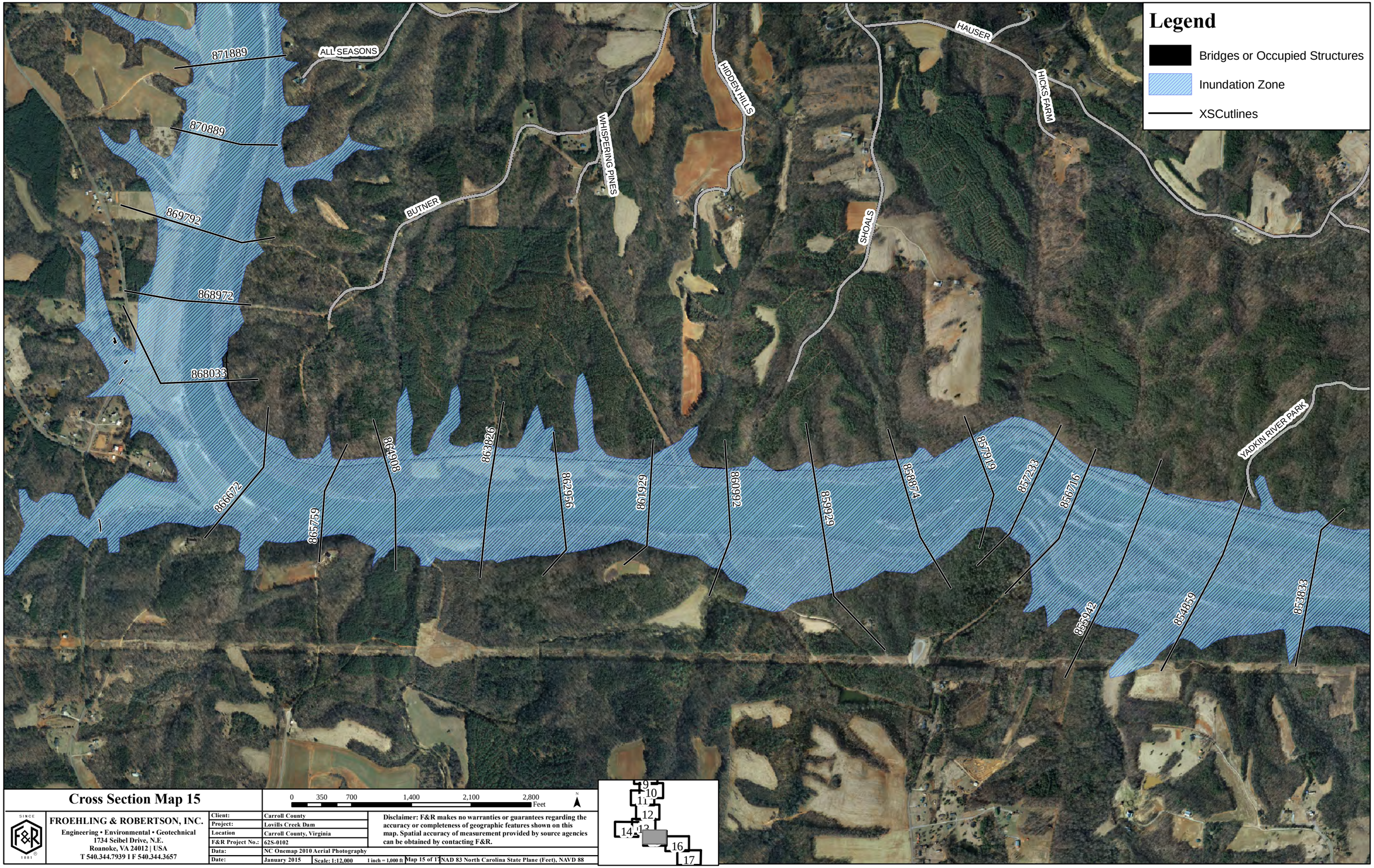
NAD 83 North Carolina State Plane (Feet), NAVD 88





Cross Section Map 15

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Location	Carroll County, Virginia
F&R Project No.:	62S-0102
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Date:	January 2015

Scale: 1:12,000 1 inch = 1,000 ft Map 15 of 17 NAD 83 North Carolina State Plane (Feet), NAVD 88

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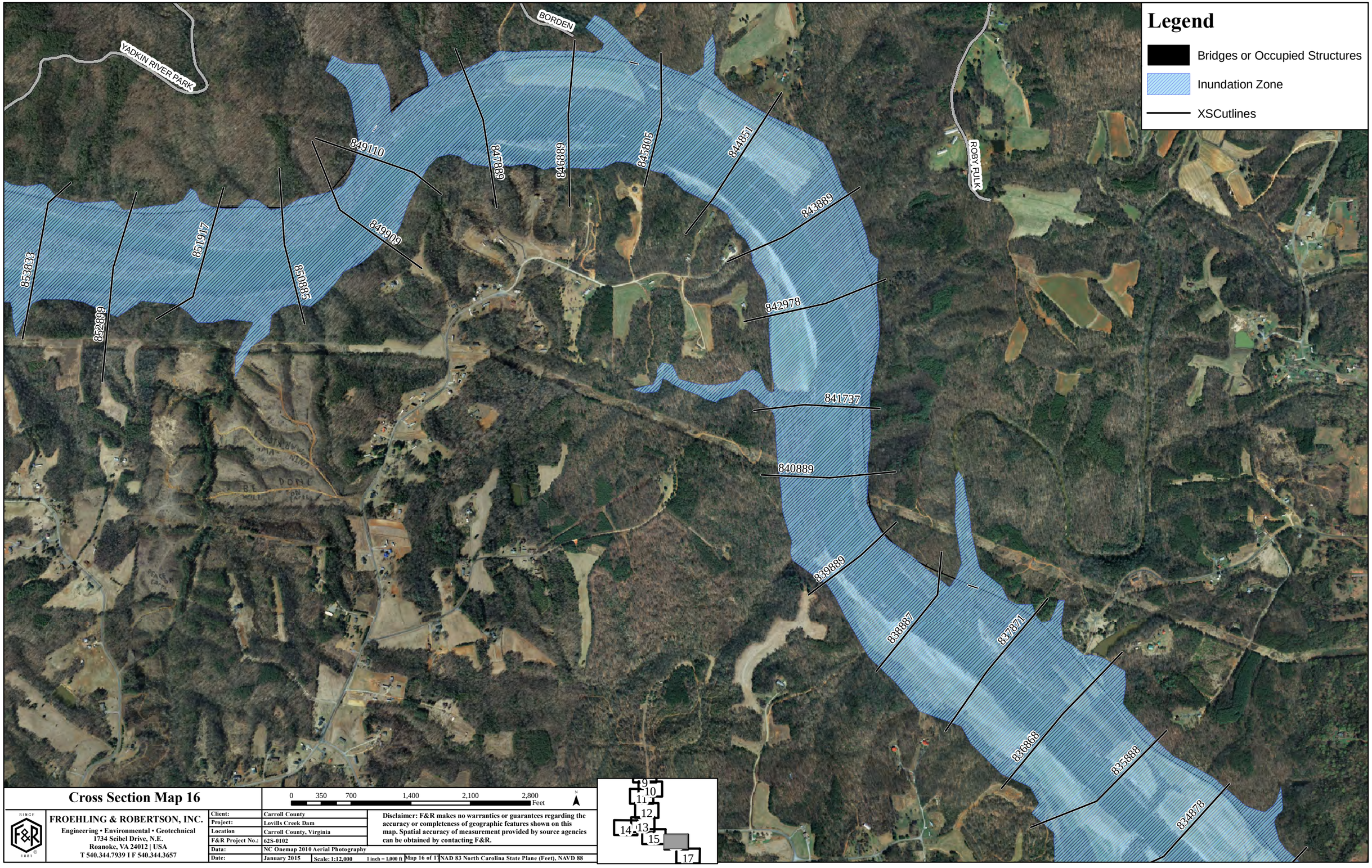

Cross Section Map 16

0 350 700 1,400 2,100 2,800 Feet

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Date:	January 2015

Scale: 1:12,000 1 inch = 1,000 ft Map 16 of 17 NAD 83 North Carolina State Plane (Feet), NAVD 88

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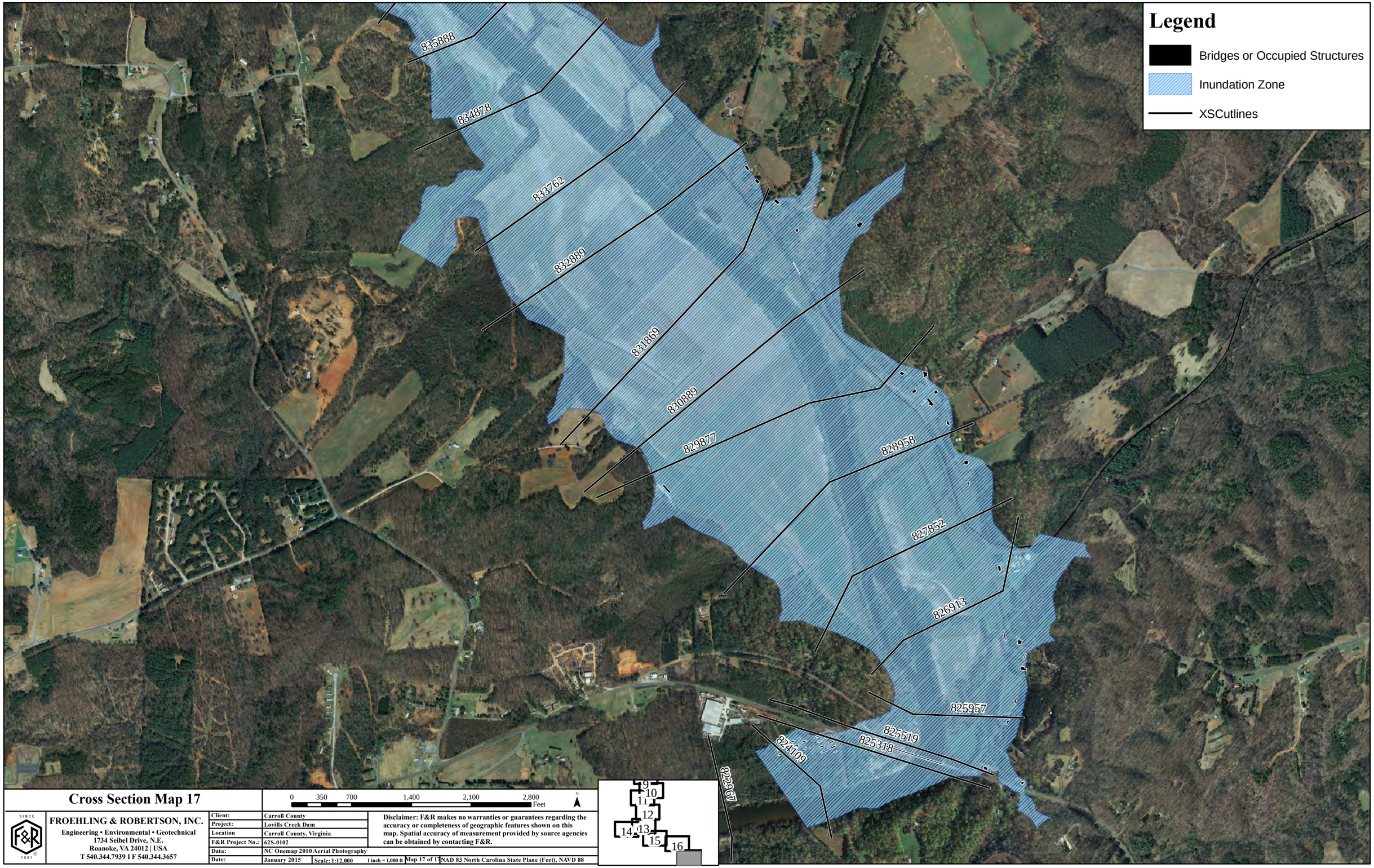

Cross Section Map 17

0 350 700 1,400 2,100 2,800 Feet

N

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APPENDIX C

HEC-HMS

Rainfall Distribution

PMP and rainfall Distribution Estimates
Lovills Creek Dam Watershed
F&R Project No.: 62S-0102

Estimate 100-year, 6-hour, 12-hour, and 24-hour PMP

Reference

Precipitation Estimates, United States East of the 105th Meridian, June 1978

100-year		=	**8.09** inches	Reference NOAA Atlas 14
PMP	6-hour	=	**29** inches	Reference HRM No. 51 Figure 18 for a 10 mi^2 area
PMP	12-hour	=	**34.5** inches	Reference HRM No. 51 Figure 19 for a 10 mi^2 area
PMP	24-hour	=	**38.5** inches	Reference HRM No. 51 Figure 20 for a 10 mi^2 area

Estimate PMP Distribution

Reference

National Oceanic and Atmospheric Administration (NOAA) Precipitation-Frequency Atlas of the United States, NOAA Atlas 14, Volume 2, Version 3, 2004 for Virginia Cordinate 36°34'46.15"N 80°38'30.38"W 1234.5 Feet Elev.

Duration	1000-Year Precipitation Estimate (inches)	Percent of 6-hr Estimate (%)	Percent of 12-hr Estimate (%)	Percent of 24-hr Estimate (%)	Estimated 6-hr PMP Distribution (inches)	Estimated 12-hr PMP Distribution (inches)	Estimated 24-hr PMP Distribution (inches)	100-Year Precipitation Estimate (inches)	Percent of 100-year Estimate (%)	Estimated 100-year Distribution (inches)
5 min	0.895	11.9%	9.6%	7.5%	3.4	3.3	2.9	0.726	9.0%	0.7
15 min	1.77	23.5%	19.0%	14.8%	6.8	6.5	5.7	1.46	18.0%	1.5
1 hr	4.18	55.5%	44.8%	34.8%	16.1	15.4	13.4	3.08	38.1%	3.1
2 hr	5.47	72.6%	58.6%	45.6%	21.1	20.2	17.5	3.88	48.0%	3.9
3 hr	5.99	79.5%	64.1%	49.9%	23.1	22.1	19.2	4.22	52.2%	4.2
6 hr	7.53	100.0%	80.6%	62.8%	29.0	27.8	24.2	5.25	64.9%	5.3
12 hr	9.34	-	100.0%	77.8%	-	34.5	30.0	6.46	79.9%	6.5
24 hr	12	-	-	100.0%	-	-	38.5	8.09	100.0%	8.1

NOAA Atlas 14, Volume 2, Version 3
Location name: Cana, Virginia, US*
Latitude: 36.5812°, Longitude: -80.6433°
Elevation: 1168 ft*
* source: Google Maps

POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M.Yekta, and D. Riley

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.343 (0.316–0.374)	0.410 (0.377–0.448)	0.488 (0.448–0.534)	0.546 (0.499–0.596)	0.619 (0.561–0.677)	0.673 (0.603–0.738)	0.726 (0.644–0.801)	0.777 (0.681–0.863)	0.843 (0.724–0.948)	0.895 (0.756–1.02)
10-min	0.548 (0.505–0.598)	0.656 (0.602–0.716)	0.782 (0.717–0.855)	0.873 (0.797–0.953)	0.986 (0.894–1.08)	1.07 (0.961–1.18)	1.15 (1.02–1.27)	1.23 (1.08–1.37)	1.33 (1.15–1.50)	1.41 (1.19–1.60)
15-min	0.684 (0.631–0.748)	0.825 (0.757–0.901)	0.989 (0.907–1.08)	1.10 (1.01–1.21)	1.25 (1.13–1.37)	1.36 (1.22–1.49)	1.46 (1.29–1.61)	1.55 (1.36–1.73)	1.68 (1.44–1.89)	1.77 (1.49–2.01)
30-min	0.938 (0.865–1.03)	1.14 (1.05–1.24)	1.41 (1.29–1.54)	1.60 (1.46–1.75)	1.85 (1.68–2.03)	2.04 (1.83–2.24)	2.23 (1.98–2.46)	2.42 (2.12–2.69)	2.67 (2.30–3.00)	2.87 (2.42–3.26)
60-min	1.17 (1.08–1.28)	1.43 (1.31–1.56)	1.80 (1.65–1.97)	2.08 (1.90–2.28)	2.47 (2.23–2.70)	2.77 (2.48–3.04)	3.08 (2.73–3.39)	3.39 (2.97–3.77)	3.83 (3.29–4.31)	4.18 (3.53–4.75)
2-hr	1.40 (1.28–1.53)	1.71 (1.57–1.87)	2.18 (1.99–2.38)	2.54 (2.31–2.77)	3.05 (2.74–3.34)	3.45 (3.08–3.79)	3.88 (3.42–4.28)	4.32 (3.76–4.81)	4.95 (4.21–5.58)	5.47 (4.56–6.22)
3-hr	1.52 (1.39–1.66)	1.85 (1.70–2.03)	2.36 (2.16–2.58)	2.75 (2.51–3.01)	3.30 (2.98–3.62)	3.75 (3.35–4.12)	4.22 (3.72–4.66)	4.71 (4.09–5.25)	5.41 (4.59–6.11)	5.99 (4.99–6.83)
6-hr	1.90 (1.75–2.07)	2.31 (2.13–2.53)	2.93 (2.69–3.20)	3.41 (3.12–3.73)	4.10 (3.71–4.48)	4.66 (4.18–5.11)	5.25 (4.65–5.79)	5.88 (5.12–6.52)	6.78 (5.77–7.60)	7.53 (6.29–8.53)
12-hr	2.36 (2.18–2.56)	2.87 (2.64–3.12)	3.61 (3.33–3.93)	4.20 (3.85–4.57)	5.04 (4.58–5.48)	5.73 (5.15–6.23)	6.46 (5.74–7.06)	7.24 (6.33–7.95)	8.38 (7.17–9.29)	9.34 (7.84–10.4)
24-hr	2.83 (2.62–3.07)	3.43 (3.17–3.72)	4.36 (4.03–4.73)	5.12 (4.72–5.54)	6.21 (5.69–6.71)	7.12 (6.49–7.69)	8.09 (7.32–8.74)	9.15 (8.20–9.89)	10.7 (9.45–11.6)	12.0 (10.5–13.0)
2-day	3.37 (3.12–3.65)	4.08 (3.78–4.42)	5.15 (4.77–5.59)	6.02 (5.54–6.51)	7.24 (6.64–7.83)	8.24 (7.52–8.92)	9.31 (8.44–10.1)	10.4 (9.40–11.3)	12.1 (10.7–13.2)	13.4 (11.8–14.7)
3-day	3.58 (3.33–3.86)	4.33 (4.03–4.67)	5.45 (5.07–5.88)	6.36 (5.89–6.85)	7.63 (7.03–8.22)	8.68 (7.95–9.34)	9.78 (8.91–10.5)	11.0 (9.92–11.8)	12.6 (11.3–13.7)	14.0 (12.4–15.3)
4-day	3.79 (3.54–4.06)	4.58 (4.27–4.91)	5.76 (5.37–6.17)	6.70 (6.23–7.18)	8.03 (7.43–8.60)	9.12 (8.39–9.77)	10.3 (9.39–11.0)	11.5 (10.4–12.3)	13.2 (11.9–14.2)	14.6 (13.1–15.8)
7-day	4.34 (4.07–4.63)	5.21 (4.89–5.57)	6.44 (6.04–6.87)	7.42 (6.94–7.91)	8.79 (8.18–9.36)	9.89 (9.17–10.5)	11.0 (10.2–11.8)	12.3 (11.2–13.1)	14.0 (12.7–15.0)	15.4 (13.8–16.5)
10-day	4.97 (4.68–5.29)	5.95 (5.59–6.33)	7.25 (6.82–7.72)	8.28 (7.77–8.81)	9.69 (9.05–10.3)	10.8 (10.1–11.5)	12.0 (11.1–12.7)	13.2 (12.1–14.0)	14.8 (13.6–15.8)	16.1 (14.7–17.3)
20-day	6.69 (6.32–7.08)	7.94 (7.50–8.42)	9.50 (8.97–10.1)	10.7 (10.1–11.3)	12.3 (11.6–13.1)	13.6 (12.8–14.4)	14.9 (13.9–15.8)	16.2 (15.0–17.2)	17.9 (16.6–19.1)	19.3 (17.7–20.6)
30-day	8.28 (7.84–8.74)	9.78 (9.26–10.3)	11.4 (10.8–12.1)	12.7 (12.0–13.4)	14.3 (13.5–15.1)	15.5 (14.6–16.3)	16.7 (15.6–17.6)	17.8 (16.7–18.8)	19.3 (18.0–20.5)	20.4 (19.0–21.7)
45-day	10.5 (9.94–11.0)	12.3 (11.7–12.9)	14.2 (13.5–14.9)	15.5 (14.8–16.4)	17.3 (16.4–18.2)	18.6 (17.7–19.6)	19.9 (18.8–20.9)	21.1 (19.9–22.2)	22.6 (21.3–23.9)	23.8 (22.3–25.2)
60-day	12.5 (11.9–13.1)	14.6 (13.9–15.3)	16.6 (15.8–17.4)	18.2 (17.3–19.0)	20.1 (19.1–21.1)	21.5 (20.4–22.6)	22.9 (21.7–24.0)	24.1 (22.8–25.4)	25.8 (24.3–27.1)	26.9 (25.3–28.4)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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PF graphical

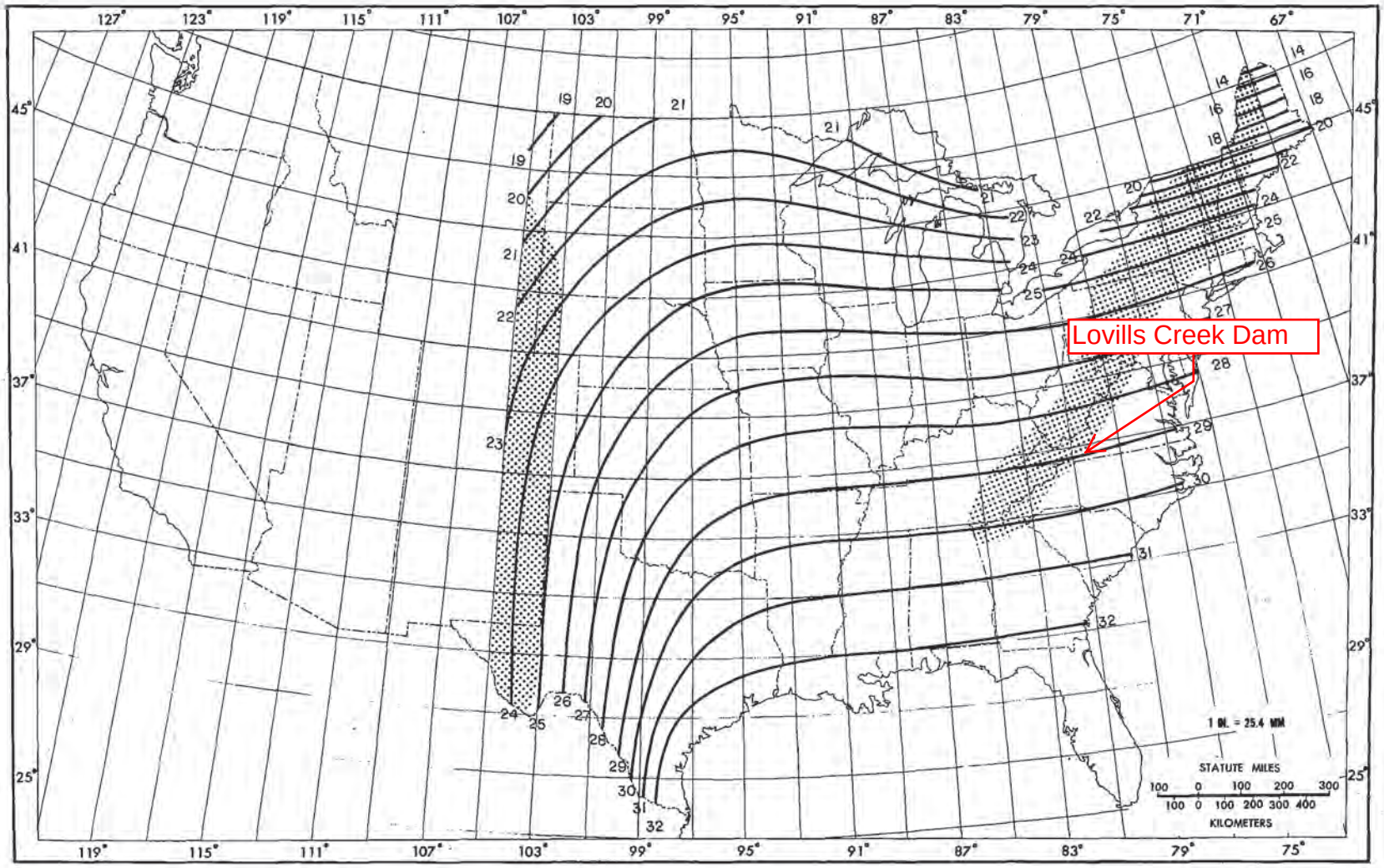


Figure 18.--All-season PMP (in.) for 6 hr 10 mi^2 (26 km^2).

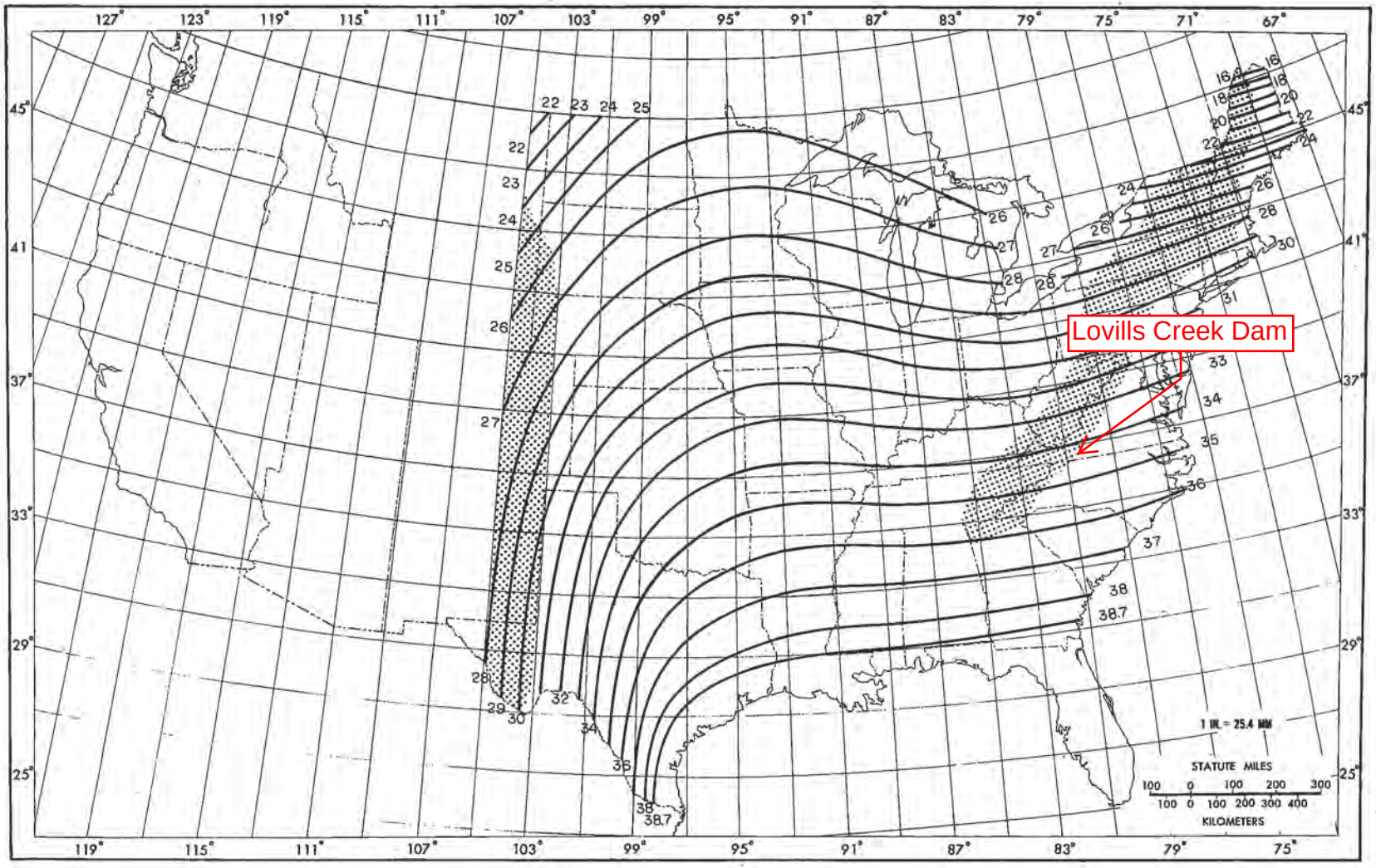


Figure 19.--All-season PMP (in.) for 12 hr 10 mi^2 (26 km^2).

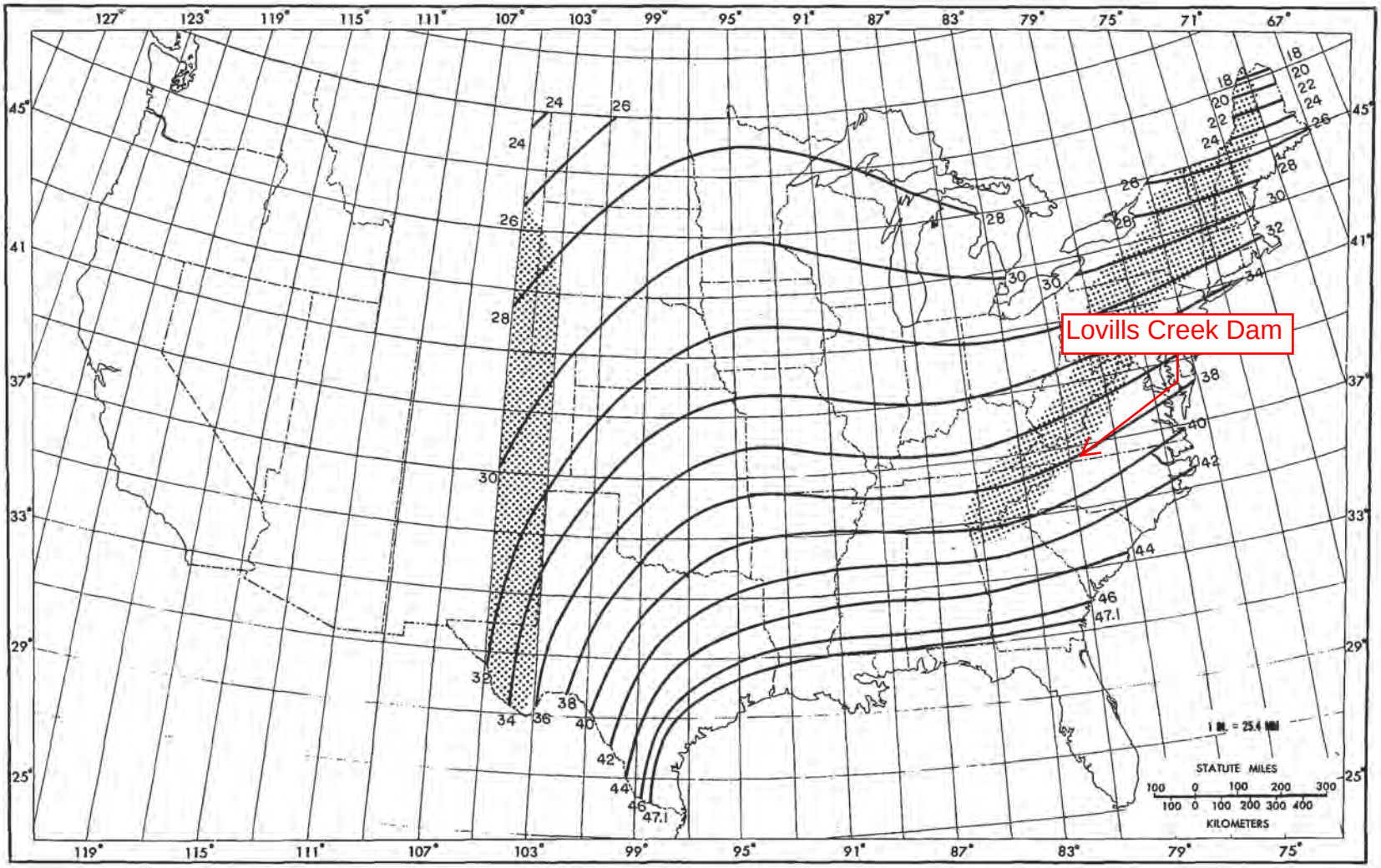


Figure 20.--All-season PMP (in.) for 24 hr 10 mi^2 (26 km^2).

Stage / Storage Curve

Lovills Creek Lake
Lake Storage Volumes
1/14/2015
Project No.: 62S-0102
By: Samuel Barnes

Lovills Creek Lake Project Information			
Normal Pool	=	1188.0	FT
Top of Dam	=	1234.5	FT
Calculated Normal Storage	=	661.8	AC-FT
Calculated Max Storage	=	7316.2	AC-FT
Reported Normal Storage	=	664.0	AC-FT
Reported Max Storage	=	7415.0	AC-FT

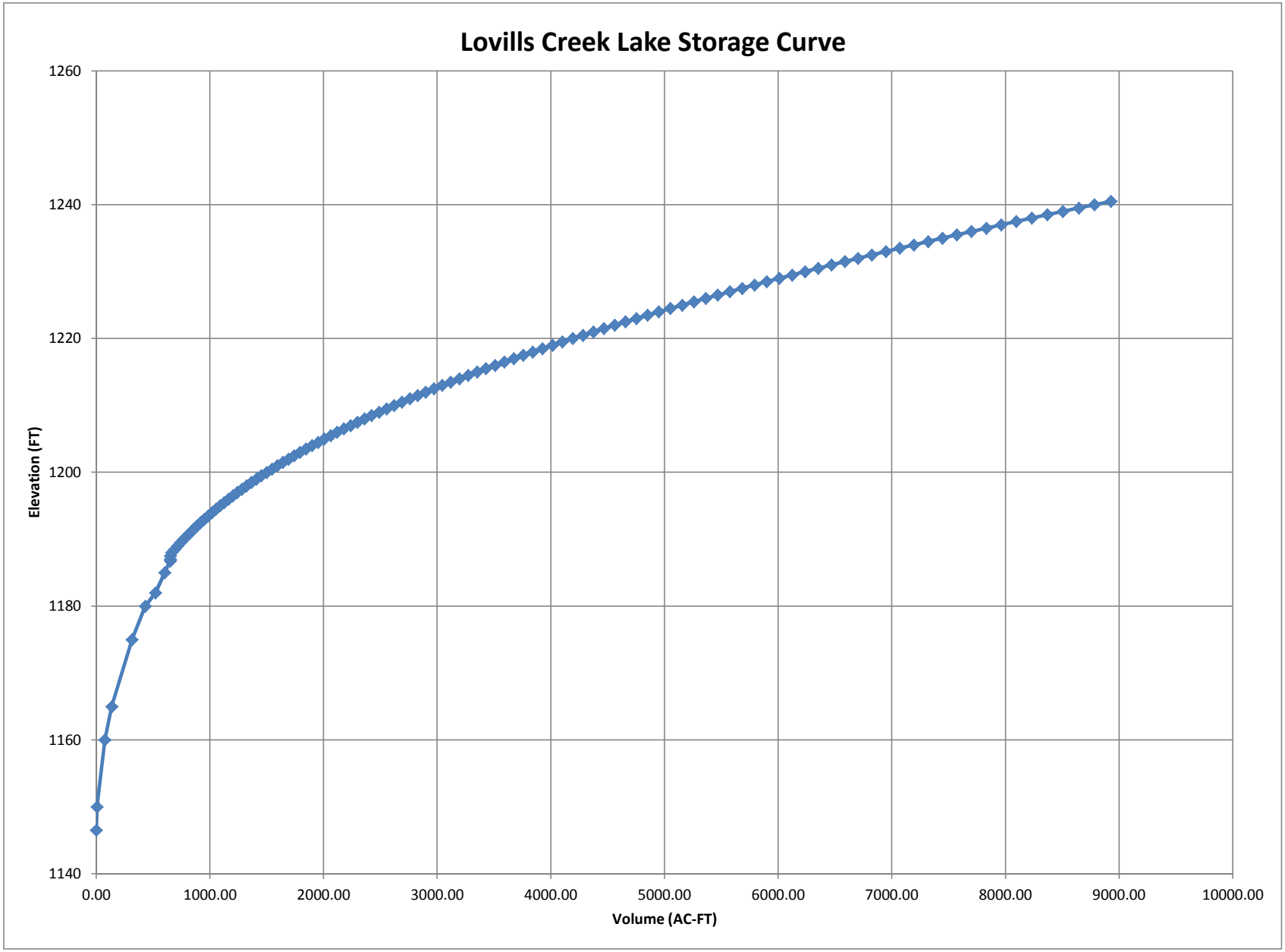
Lovills Creek Lake								
Notes	**Bottom Elevation**	**Top Elevation**	**Slice Elevation**	**Cumulative Area**	**Cumulative Volume**	**Cumulative Volume**	**Incremental Volume**	**Actual Storage**
	(FT)	**(FT)**	**(FT)**	**(SQ-FT)**	**(CU-Ft)**	**(AC-FT)**	**(AC-FT)**	**(AC-FT)**
Bottom of Lake			1146.5					0.00
			1150	200000				6.43
			1160	600000				74.38
			1165	800000				135.90
			1175	1200000				314.05
			1180	1400000				430.67
			1182	1600000				521.58
			1185	1700000				601.01
	1186.3	1186.8	1186.5	1770000	35000.0	0.8	0.8	650.14
	1186.8	1187.3	1187.0	1900000	70000.0	2.5	1.7	651.84
	1187.3	1187.8	1187.5	2000000	50000.0	3.6	1.1	652.94
Normal Pool	1187.8	1188.3	1188.0	2106725.0	542622.8	12.5	8.9	661.79
	1188.3	1188.8	1188.5	2197900.0	1617816.2	37.1	24.7	686.48
	1188.8	1189.3	1189.0	2274275.0	2736064.1	62.8	25.7	712.15
	1189.3	1189.8	1189.5	2353775.0	3888958.6	89.3	26.5	738.62

Lovills Creek Lake								
Notes	Bottom Elevation	Top Elevation	Slice Elevation	Cumulative Area	Cumulative Volume	Cumulative Volume	Incremental Volume	Actual Storage
	(FT)	(FT)	(FT)	(SQ-FT)	(CU-Ft)	(AC-FT)	(AC-FT)	(AC-FT)
	1189.8	1190.3	1190.0	2425900.0	5089314.7	116.8	27.6	766.17
	1190.3	1190.8	1190.5	2495475.0	6318252.9	145.0	28.2	794.38
	1190.8	1191.3	1191.0	2568475.0	7581168.8	174.0	29.0	823.38
	1191.3	1191.8	1191.5	2644875.0	8893024.6	204.2	30.1	853.49
	1191.8	1192.3	1192.0	2714025.0	10234296.3	234.9	30.8	884.28
	1192.3	1192.8	1192.5	2784875.0	11612573.6	266.6	31.6	915.93
	1192.8	1193.3	1193.0	2860725.0	13015361.1	298.8	32.2	948.13
	1193.3	1193.8	1193.5	2942325.0	14470631.9	332.2	33.4	981.54
	1193.8	1194.3	1194.0	3020675.0	15954641.4	366.3	34.1	1015.61
	1194.3	1194.8	1194.5	3092250.0	17501658.1	401.8	35.5	1051.12
	1194.8	1195.3	1195.0	3158600.0	19067499.5	437.7	35.9	1087.07
	1195.3	1195.8	1195.5	3221600.0	20642721.5	473.9	36.2	1123.23
	1195.8	1196.3	1196.0	3292150.0	22271367.4	511.3	37.4	1160.62
	1196.3	1196.8	1196.5	3374775.0	23939171.0	549.6	38.3	1198.91
	1196.8	1197.3	1197.0	3463450.0	25638027.8	588.6	39.0	1237.91
	1197.3	1197.8	1197.5	3565550.0	27401132.4	629.0	40.5	1278.38
	1197.8	1198.3	1198.0	3660950.0	29196043.0	670.2	41.2	1319.59
	1198.3	1198.8	1198.5	3753500.0	31052984.1	712.9	42.6	1362.22
	1198.8	1199.3	1199.0	3841600.0	32964489.1	756.8	43.9	1406.10
	1199.3	1199.8	1199.5	3933275.0	34895025.8	801.1	44.3	1450.42
	1199.8	1200.3	1200.0	4014550.0	36900063.0	847.1	46.0	1496.45
	1200.3	1200.8	1200.5	4090750.0	38916455.4	893.4	46.3	1542.74
	1200.8	1201.3	1201.0	4174375.0	41005059.9	941.3	47.9	1590.68
	1201.3	1201.8	1201.5	4256725.0	43092085.0	989.3	47.9	1638.60
	1201.8	1202.3	1202.0	4335450.0	45268255.7	1039.2	50.0	1688.55
	1202.3	1202.8	1202.5	4421700.0	47433860.5	1088.9	49.7	1738.27
	1202.8	1203.3	1203.0	4504725.0	49649865.4	1139.8	50.9	1789.14
	1203.3	1203.8	1203.5	4587350.0	51974755.4	1193.2	53.4	1842.51
	1203.8	1204.3	1204.0	4673675.0	54260814.8	1245.7	52.5	1894.99

Lovills Creek Lake								
Notes	Bottom Elevation	Top Elevation	Slice Elevation	Cumulative Area	Cumulative Volume	Cumulative Volume	Incremental Volume	Actual Storage
	(FT)	(FT)	(FT)	(SQ-FT)	(CU-Ft)	(AC-FT)	(AC-FT)	(AC-FT)
	1204.3	1204.8	1204.5	4756875.0	56649888.8	1300.5	54.8	1949.84
	1204.8	1205.3	1205.0	4842300.0	58998498.3	1354.4	53.9	2003.76
	1205.3	1205.8	1205.5	4938550.0	61470137.7	1411.2	56.7	2060.50
	1205.8	1206.3	1206.0	5034550.0	63927915.0	1467.6	56.4	2116.92
	1206.3	1206.8	1206.5	5129125.0	66487689.4	1526.3	58.8	2175.69
	1206.8	1207.3	1207.0	5224100.0	69053286.8	1585.2	58.9	2234.58
	1207.3	1207.8	1207.5	5341300.0	71700026.8	1646.0	60.8	2295.34
	1207.8	1208.3	1208.0	5463825.0	74400152.7	1708.0	62.0	2357.33
	1208.3	1208.8	1208.5	5564500.0	77133215.0	1770.7	62.7	2420.07
	1208.8	1209.3	1209.0	5660075.0	79978238.5	1836.0	65.3	2485.39
	1209.3	1209.8	1209.5	5755875.0	82875484.9	1902.6	66.5	2551.90
	1209.8	1210.3	1210.0	5850575.0	85760746.3	1968.8	66.2	2618.13
	1210.3	1210.8	1210.5	5944725.0	88759448.6	2037.6	68.8	2686.97
	1210.8	1211.3	1211.0	6039000.0	91765535.0	2106.6	69.0	2755.98
	1211.3	1211.8	1211.5	6139250.0	94770557.1	2175.6	69.0	2824.97
	1211.8	1212.3	1212.0	6237075.0	97835590.7	2246.0	70.4	2895.33
	1212.3	1212.8	1212.5	6360025.0	100986885.3	2318.3	72.3	2967.68
	1212.8	1213.3	1213.0	6468650.0	104150787.6	2391.0	72.6	3040.31
	1213.3	1213.8	1213.5	6566800.0	107431835.7	2466.3	75.3	3115.63
	1213.8	1214.3	1214.0	6665075.0	110748703.3	2542.4	76.1	3191.78
	1214.3	1214.8	1214.5	6756225.0	114074648.4	2618.8	76.4	3268.13
	1214.8	1215.3	1215.0	6846725.0	117525222.8	2698.0	79.2	3347.35
	1215.3	1215.8	1215.5	6935050.0	120906734.7	2775.6	77.6	3424.97
	1215.8	1216.3	1216.0	7020125.0	124423230.2	2856.4	80.7	3505.70
	1216.3	1216.8	1216.5	7106550.0	127970092.3	2937.8	81.4	3587.13
	1216.8	1217.3	1217.0	7195075.0	131577631.1	3020.6	82.8	3669.94
Auxiliary Spillway	1217.3	1217.8	1217.5	7288025.0	135273386.4	3105.4	84.8	3754.79
	1217.8	1218.3	1218.0	7391000.0	138863055.6	3187.9	82.4	3837.19
	1218.3	1218.8	1218.5	7515575.0	142617120.5	3274.0	86.2	3923.38

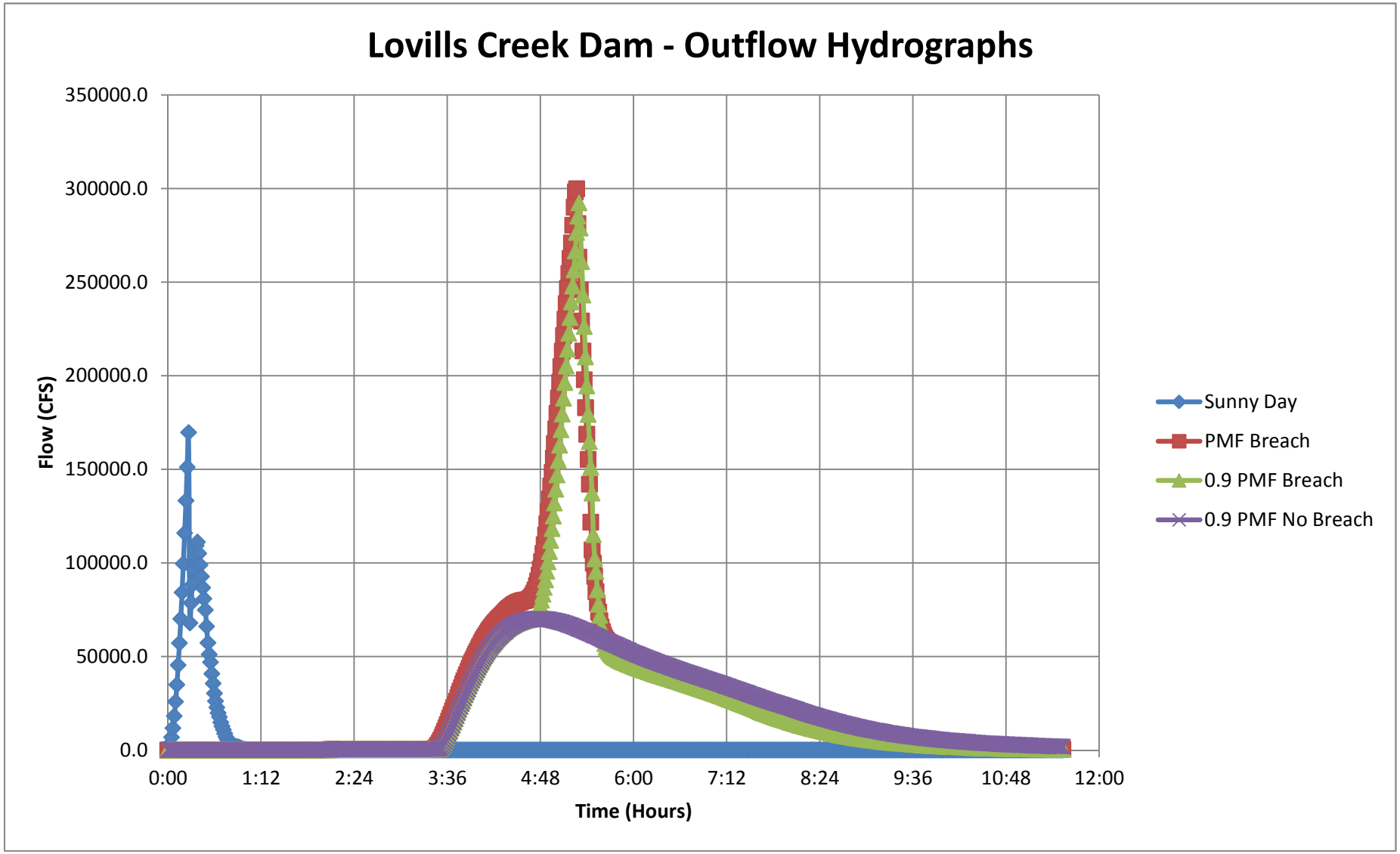
Lovills Creek Lake								
Notes	Bottom Elevation	Top Elevation	Slice Elevation	Cumulative Area	Cumulative Volume	Cumulative Volume	Incremental Volume	Actual Storage
	(FT)	(FT)	(FT)	(SQ-FT)	(CU-Ft)	(AC-FT)	(AC-FT)	(AC-FT)
	1218.8	1219.3	1219.0	7648875.0	146450760.5	3362.0	88.0	4011.38
	1219.3	1219.8	1219.5	7779825.0	150258181.1	3449.5	87.4	4098.79
	1219.8	1220.3	1220.0	7880975.0	154194593.6	3539.8	90.4	4189.16
	1220.3	1220.8	1220.5	7978750.0	158132785.9	3630.2	90.4	4279.57
	1220.8	1221.3	1221.0	8084350.0	162119415.4	3721.7	91.5	4371.09
	1221.3	1221.8	1221.5	8193825.0	166162355.0	3814.6	92.8	4463.90
	1221.8	1222.3	1222.0	8293000.0	170338918.8	3910.4	95.9	4559.78
	1222.3	1222.8	1222.5	8388600.0	174402190.3	4003.7	93.3	4653.06
	1222.8	1223.3	1223.0	8484000.0	178596209.7	4100.0	96.3	4749.34
	1223.3	1223.8	1223.5	8586200.0	182903295.6	4198.9	98.9	4848.22
	1223.8	1224.3	1224.0	8686725.0	187190924.9	4297.3	98.4	4946.65
	1224.3	1224.8	1224.5	8789500.0	191593004.0	4398.4	101.1	5047.71
	1224.8	1225.3	1225.0	8896800.0	196169559.5	4503.4	105.1	5152.77
	1225.3	1225.8	1225.5	9001650.0	200641601.8	4606.1	102.7	5255.44
	1225.8	1226.3	1226.0	9105825.0	205233977.5	4711.5	105.4	5360.86
	1226.3	1226.8	1226.5	9208800.0	209774049.8	4815.7	104.2	5465.09
	1226.8	1227.3	1227.0	9314850.0	214429873.3	4922.6	106.9	5571.97
	1227.3	1227.8	1227.5	9417550.0	219121848.1	5030.3	107.7	5679.68
	1227.8	1228.3	1228.0	9520275.0	223876518.3	5139.5	109.2	5788.84
	1228.3	1228.8	1228.5	9624375.0	228511795.7	5245.9	106.4	5895.25
	1228.8	1229.3	1229.0	9729150.0	233406845.4	5358.3	112.4	6007.62
	1229.3	1229.8	1229.5	9835425.0	238298227.3	5470.6	112.3	6119.91
	1229.8	1230.3	1230.0	9944500.0	243248409.9	5584.2	113.6	6233.55
	1230.3	1230.8	1230.5	10055550.0	248254879.2	5699.1	114.9	6348.49
	1230.8	1231.3	1231.0	10165600.0	253376647.3	5816.7	117.6	6466.07
	1231.3	1231.8	1231.5	10277750.0	258528106.3	5935.0	118.3	6584.33
	1231.8	1232.3	1232.0	10391250.0	263550406.4	6050.3	115.3	6699.62
	1232.3	1232.8	1232.5	10511400.0	268866909.1	6172.3	122.1	6821.67
	1232.8	1233.3	1233.0	10624725.0	274207821.9	6294.9	122.6	6944.28

Lovills Creek Lake								
Notes	Bottom Elevation	Top Elevation	Slice Elevation	Cumulative Area	Cumulative Volume	Cumulative Volume	Incremental Volume	Actual Storage
	(FT)	(FT)	(FT)	(SQ-FT)	(CU-Ft)	(AC-FT)	(AC-FT)	(AC-FT)
	1233.3	1233.8	1233.5	10740500.0	279514104.1	6416.8	121.8	7066.10
	1233.8	1234.3	1234.0	10851125.0	284884302.2	6540.0	123.3	7189.38
Top of Dam	1234.3	1234.8	1234.5	10961225.0	290406538.3	6666.8	126.8	7316.15
	1234.8	1235.3	1235.0	11074300.0	295937416.9	6793.8	127.0	7443.13
	1235.3	1235.8	1235.5	11192475.0	301370716.5	6918.5	124.7	7567.86
	1235.8	1236.3	1236.0	11313150.0	306995033.4	7047.6	129.1	7696.97
	1236.3	1236.8	1236.5	11431025.0	312696735.3	7178.5	130.9	7827.87
	1236.8	1237.3	1237.0	11552800.0	318446118.0	7310.5	132.0	7959.85
	1237.3	1237.8	1237.5	11669750.0	324225043.8	7443.2	132.7	8092.52
	1237.8	1238.3	1238.0	11787450.0	330144502.7	7579.1	135.9	8228.41
	1238.3	1238.8	1238.5	11909675.0	336050640.2	7714.7	135.6	8364.00
	1238.8	1239.3	1239.0	12029925.0	342078261.0	7853.0	138.4	8502.37
	1239.3	1239.8	1239.5	12147550.0	348173827.8	7993.0	139.9	8642.31
	1239.8	1240.3	1240.0	12263725.0	354182362.0	8130.9	137.9	8780.25


Lovills Creek Lake Storage Curve
Elevation (FT)
1260
1240
1220
1200
1180
1160
1140
0.00
1000.00
2000.00
3000.00
4000.00
5000.00
6000.00
7000.00
8000.00
9000.00
10000.00
Volume (AC-FT)

HEC-HMS Computer Outputs

Dam Outflow Hydrographs


Lovills Creek Dam - Outflow Hydrographs
350000.0
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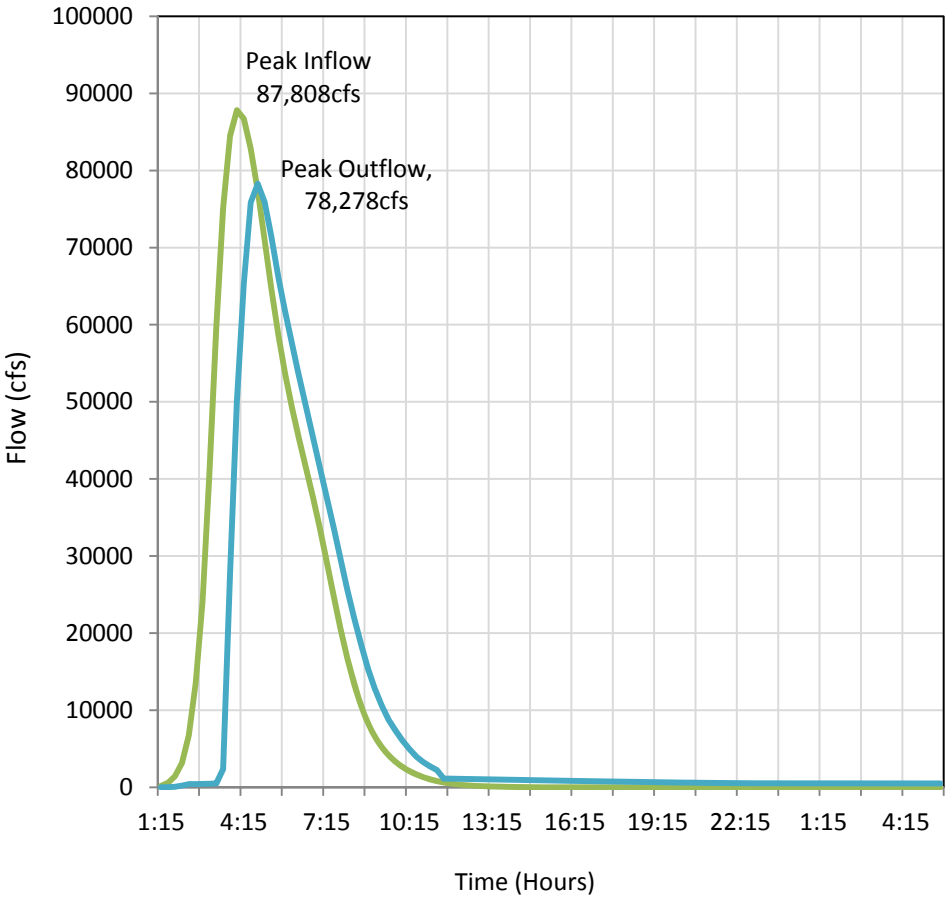
200000.0
150000.0
100000.0
50000.0
0.0
Flow (CFS)
0:00
1:12
2:24
3:36
4:48
6:00
7:12
8:24
9:36
10:48
12:00
Time (Hours)
Sunny Day
PMF Breach
0.9 PMF Breach
0.9 PMF No Breach

6-Hour

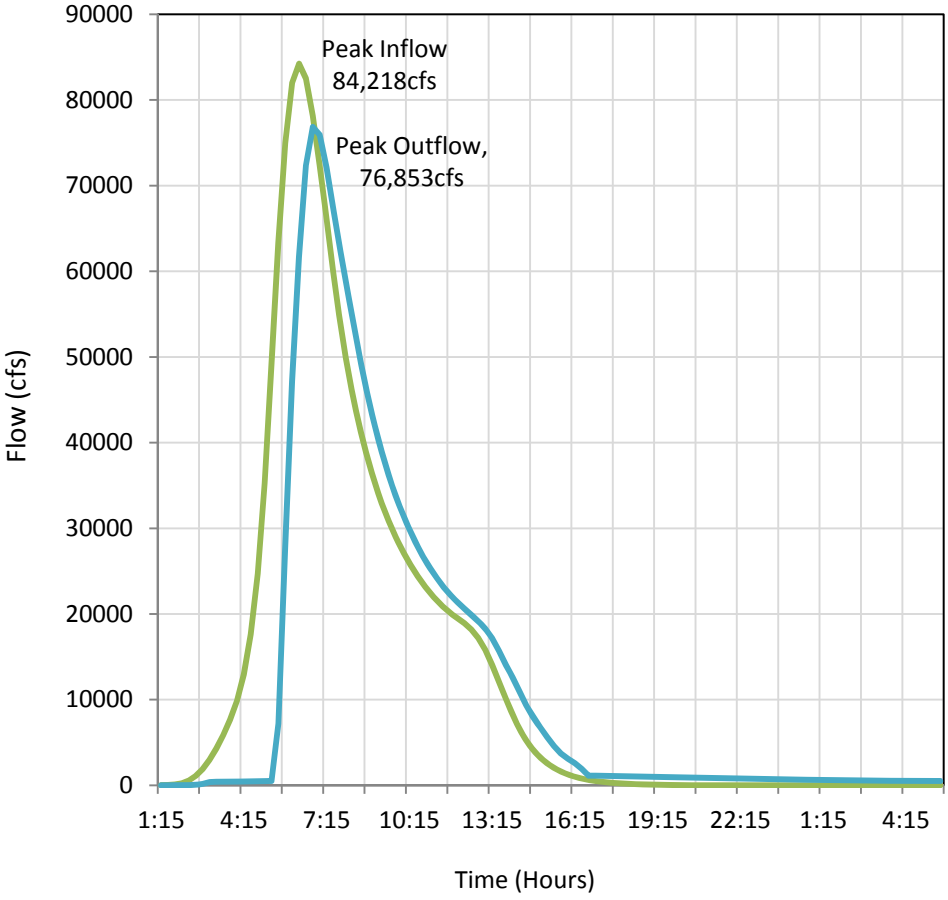
HEC_HMS 3.4
Sub-Watersheds
PMF (6 hour)



Drainage Area:	20.8	sq. mi.
Curve Number:	65	

12-Hour

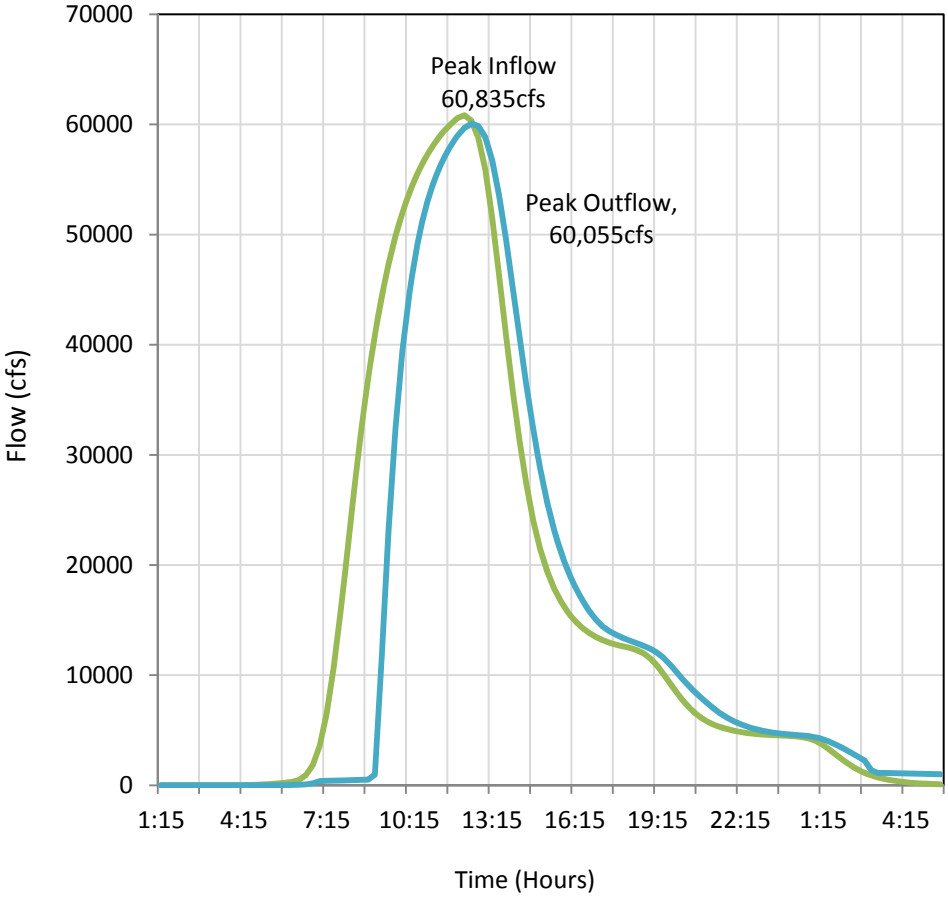
HEC_HMS 3.4
Sub-Watersheds
PMF (12 hour)



Drainage Area:	20.8	sq. mi.
Curve Number:	65	

24-Hour

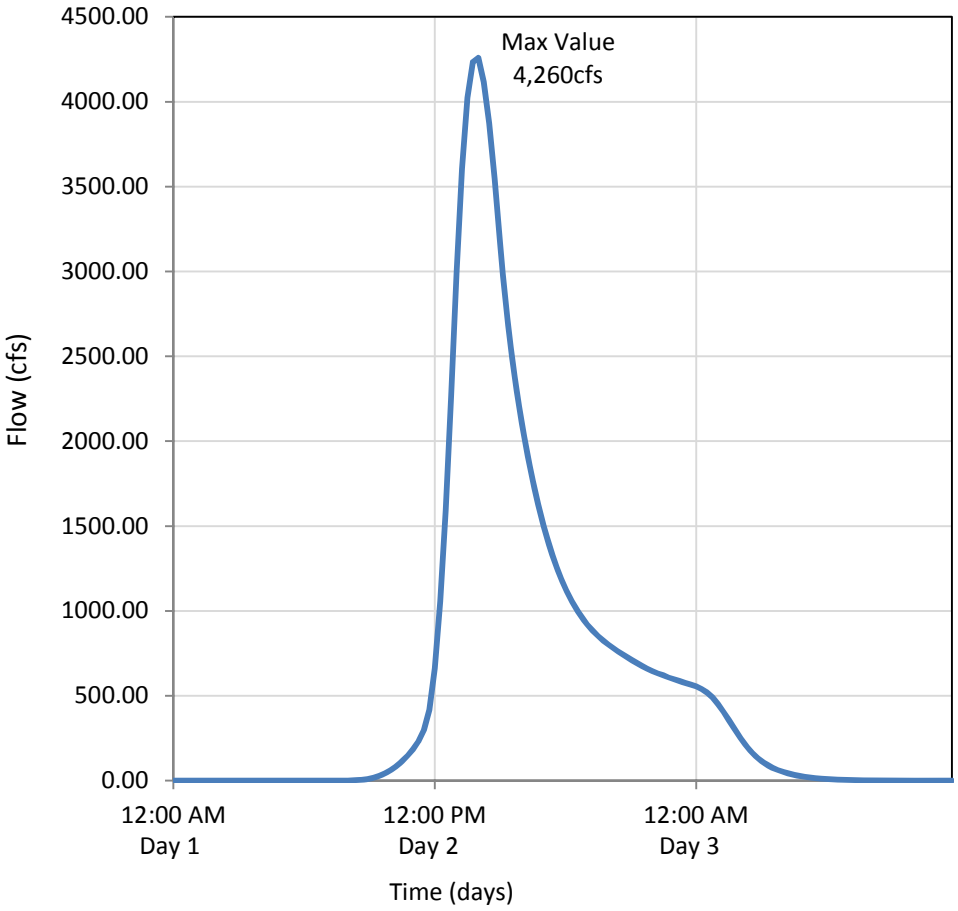
HEC_HMS 3.4
Sub-Watersheds
PMF (24 hour)



Drainage Area:	20.8	sq. mi.
Curve Number:	65	

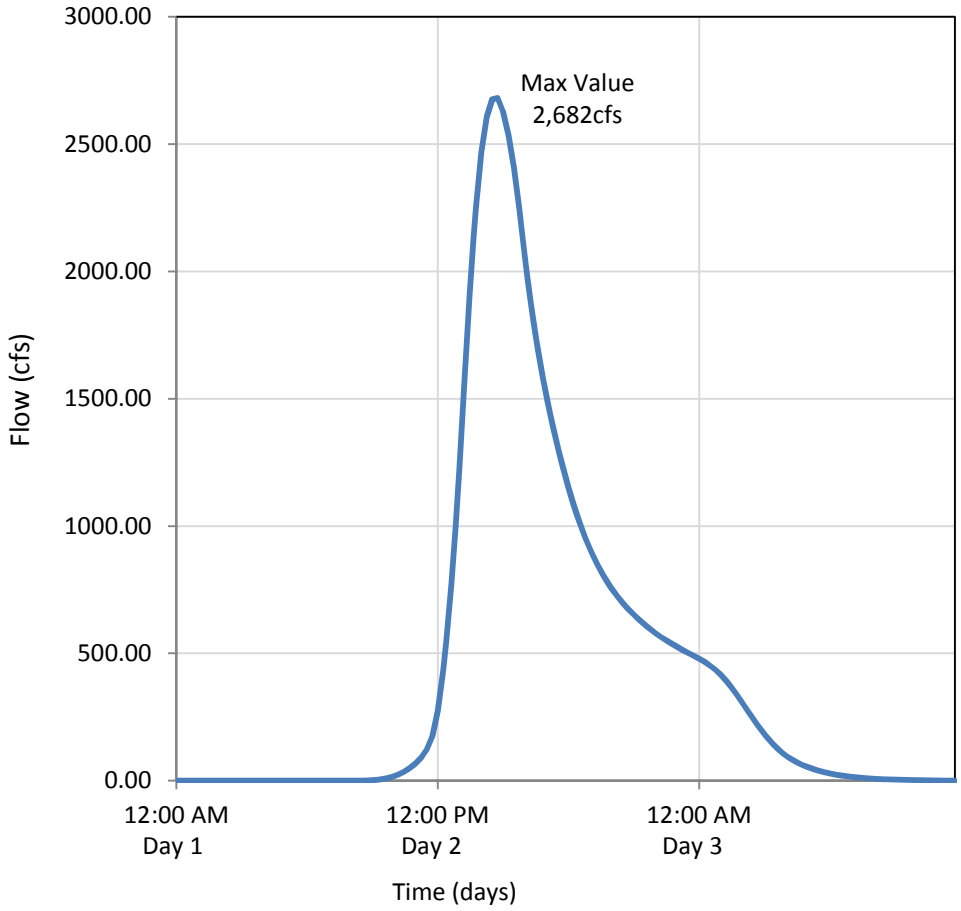
Sub-Watersheds

HEC_HMS 3.4
Sub-Watersheds
W1550 (100-Year)



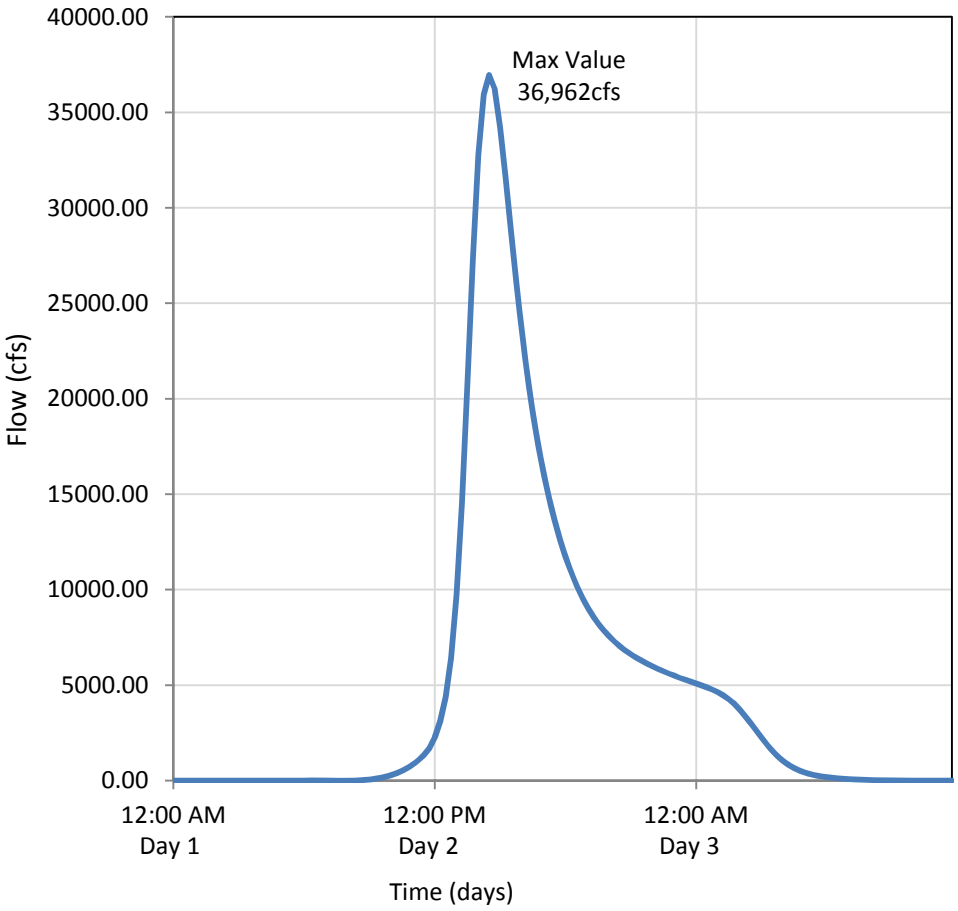
Drainage Area:	8.4	sq. mi.
Curve Number:	65	

HEC_HMS 3.4
Sub-Watersheds
W1420 (100-Year)



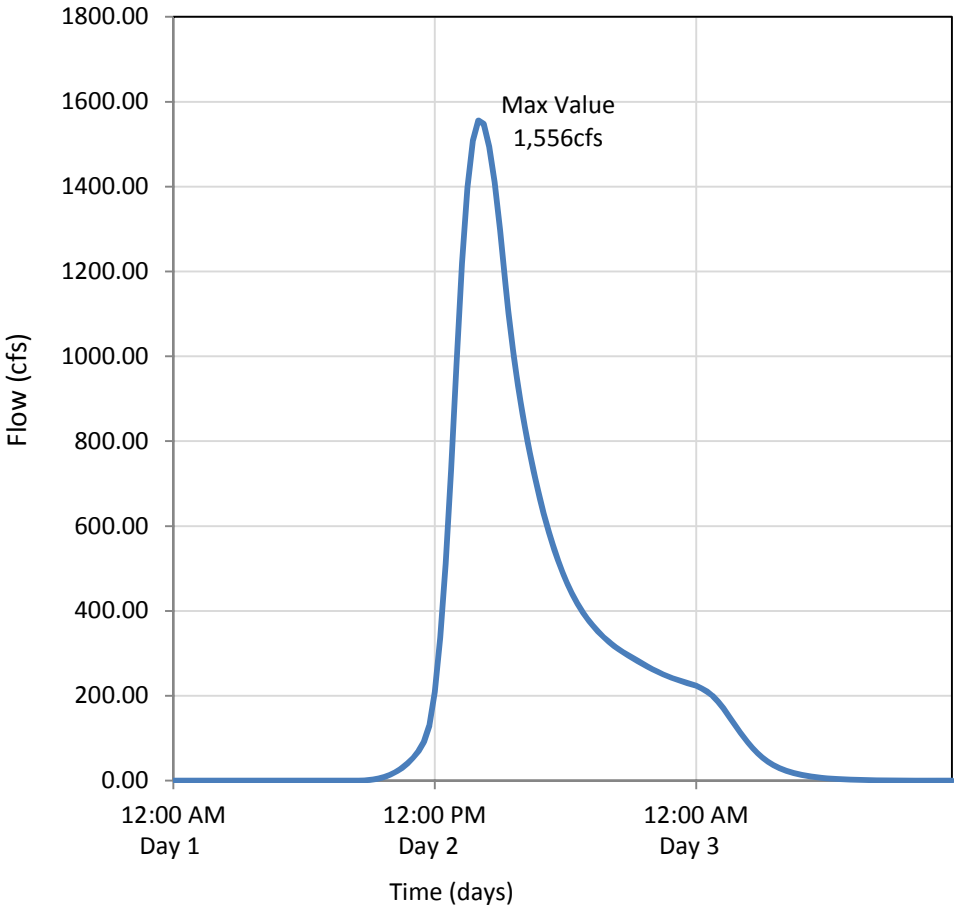
Drainage Area:	6.8	sq. mi.
Curve Number:	64	

HEC_HMS 3.4
Sub-Watersheds
J488 (100-Year)



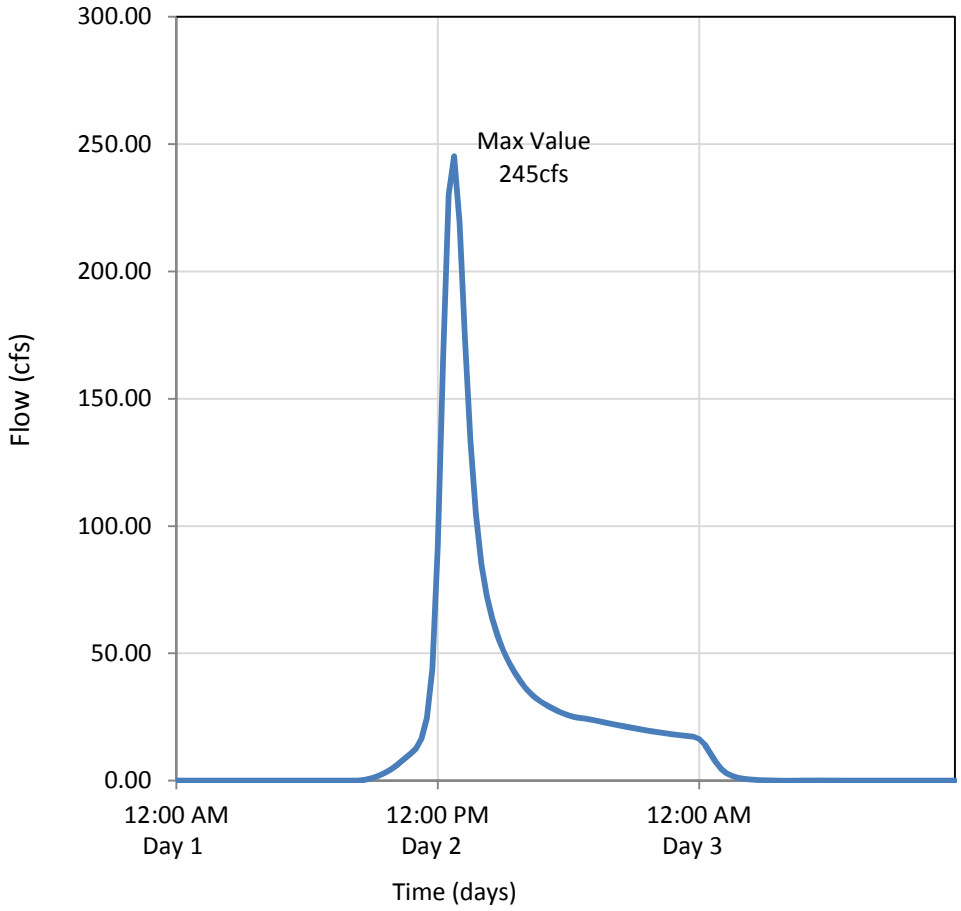
Drainage Area:	71.3	sq. mi.
Curve Number:	66	

HEC_HMS 3.4
Sub-Watersheds
W940 (100-Year)



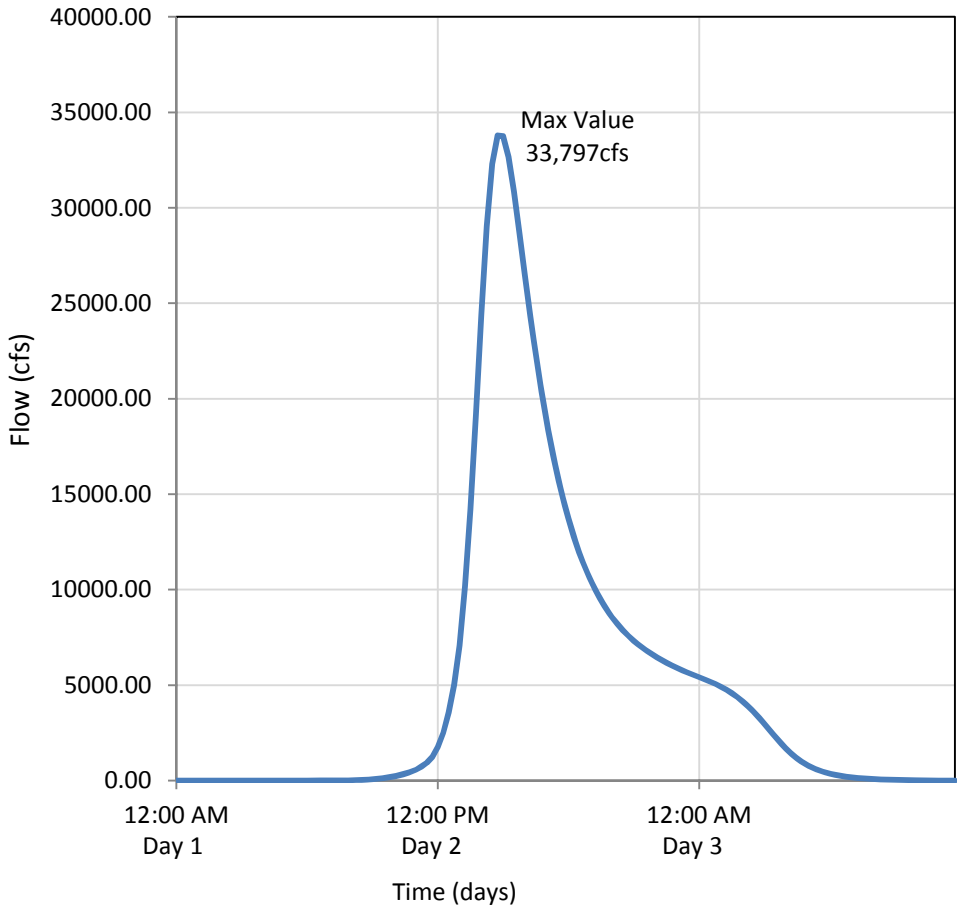
Drainage Area:	3.4	sq. mi.
Curve Number:	64	

HEC_HMS 3.4
Sub-Watersheds
W960 (100-Year)



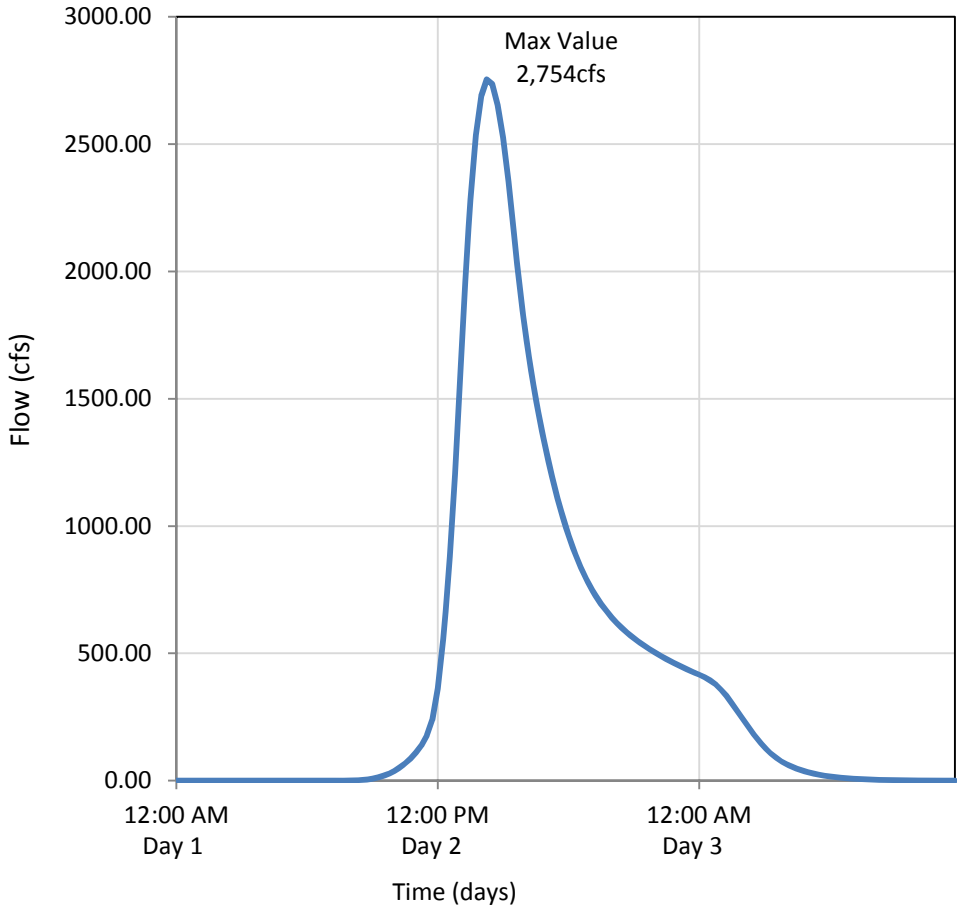
Drainage Area:	0.3	sq. mi.
Curve Number:	64	

HEC_HMS 3.4
Sub-Watersheds
J475 (100-Year)



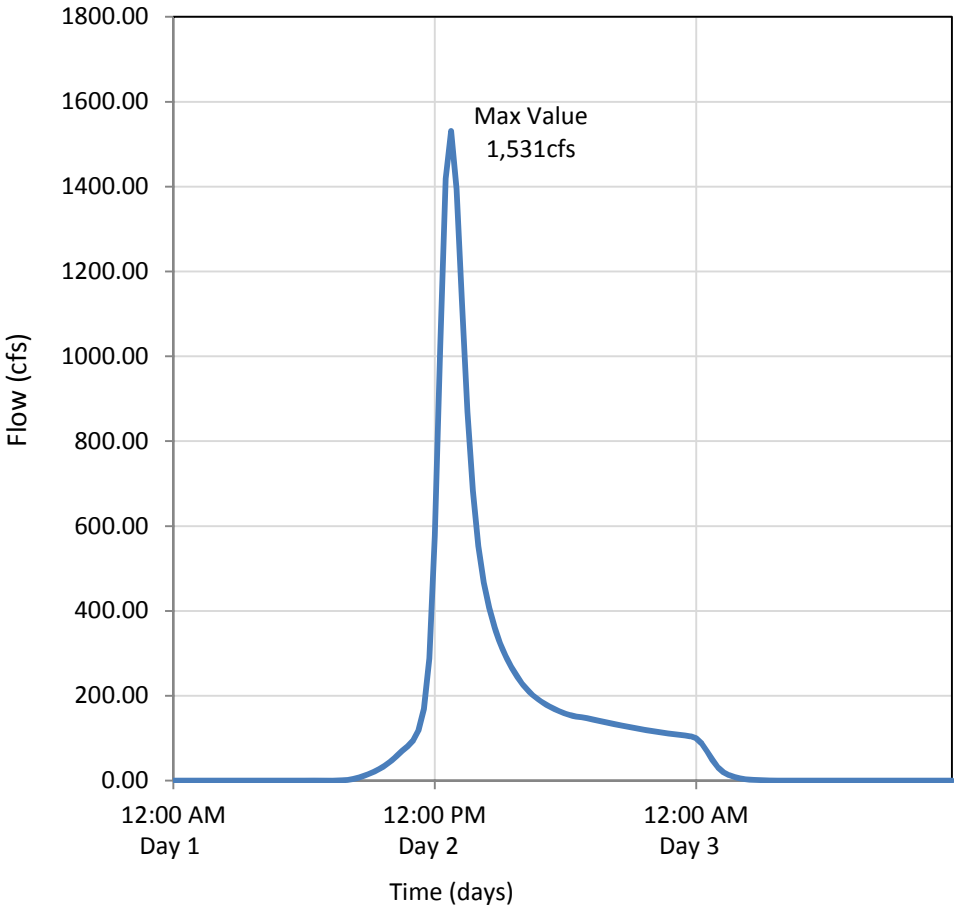
Drainage Area:	73.9	sq. mi.
Curve Number:	65	

HEC_HMS 3.4
Sub-Watersheds
W1000 (100-Year)



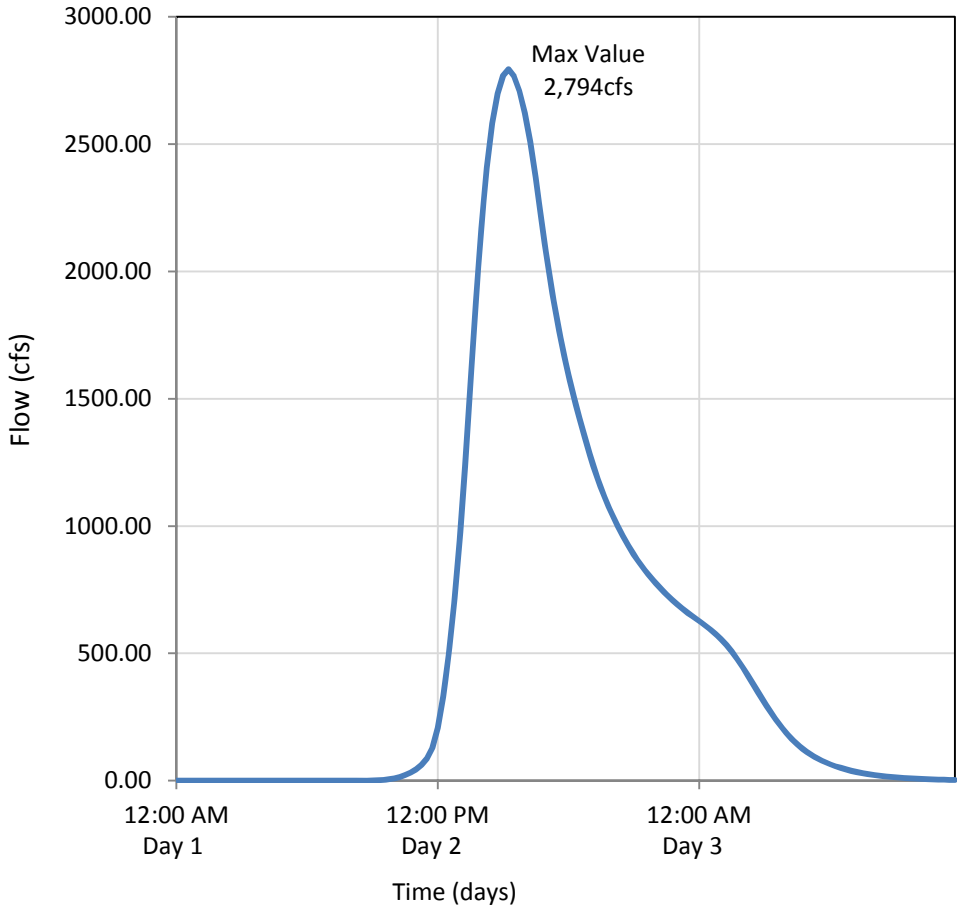
Drainage Area:	6.0	sq. mi.
Curve Number:	66	

HEC_HMS 3.4
Sub-Watersheds
W990 (100-Year)



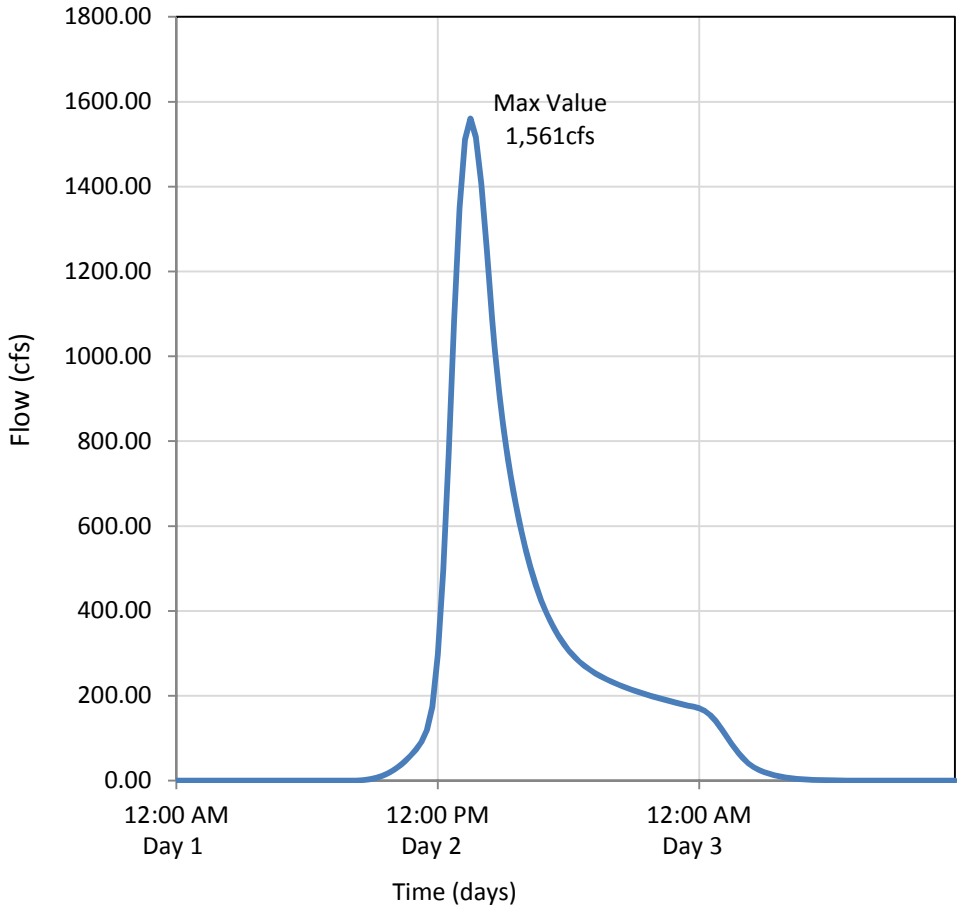
Drainage Area:	1.7	sq. mi.
Curve Number:	67	

HEC_HMS 3.4
Sub-Watersheds
W930 (100-Year)



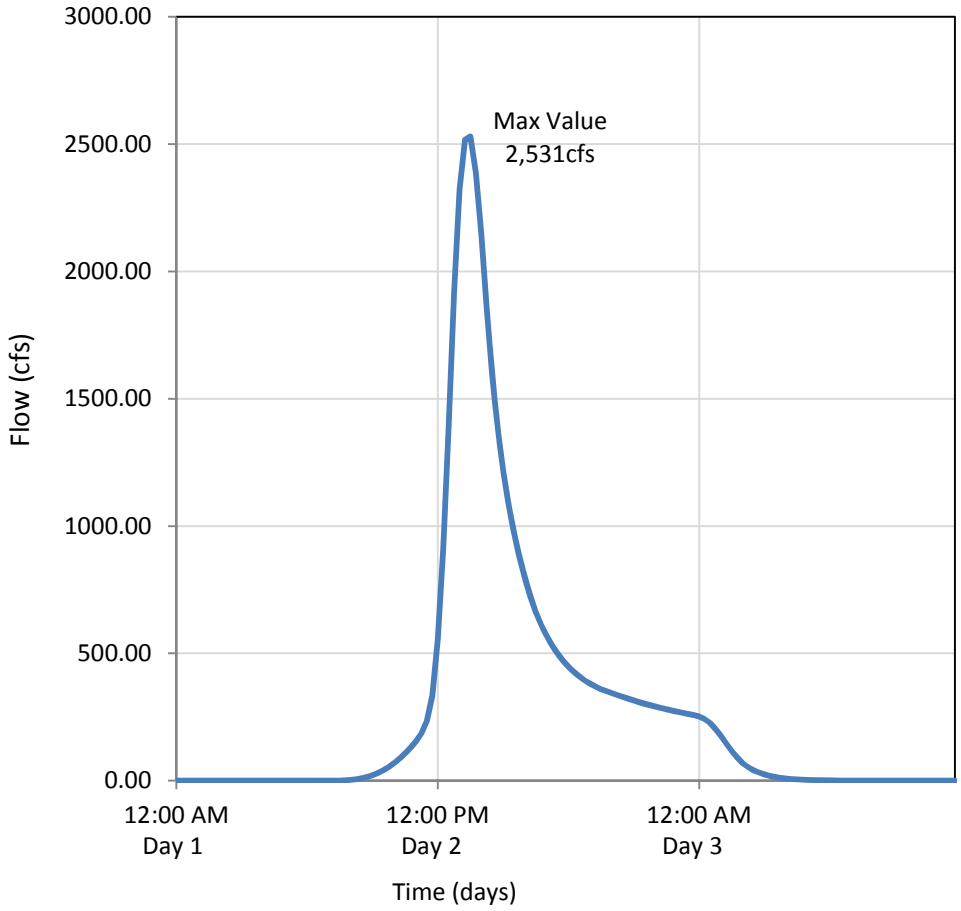
Drainage Area:	8.4	sq. mi.
Curve Number:	63	

HEC_HMS 3.4
Sub-Watersheds
W1020 (100-Year)



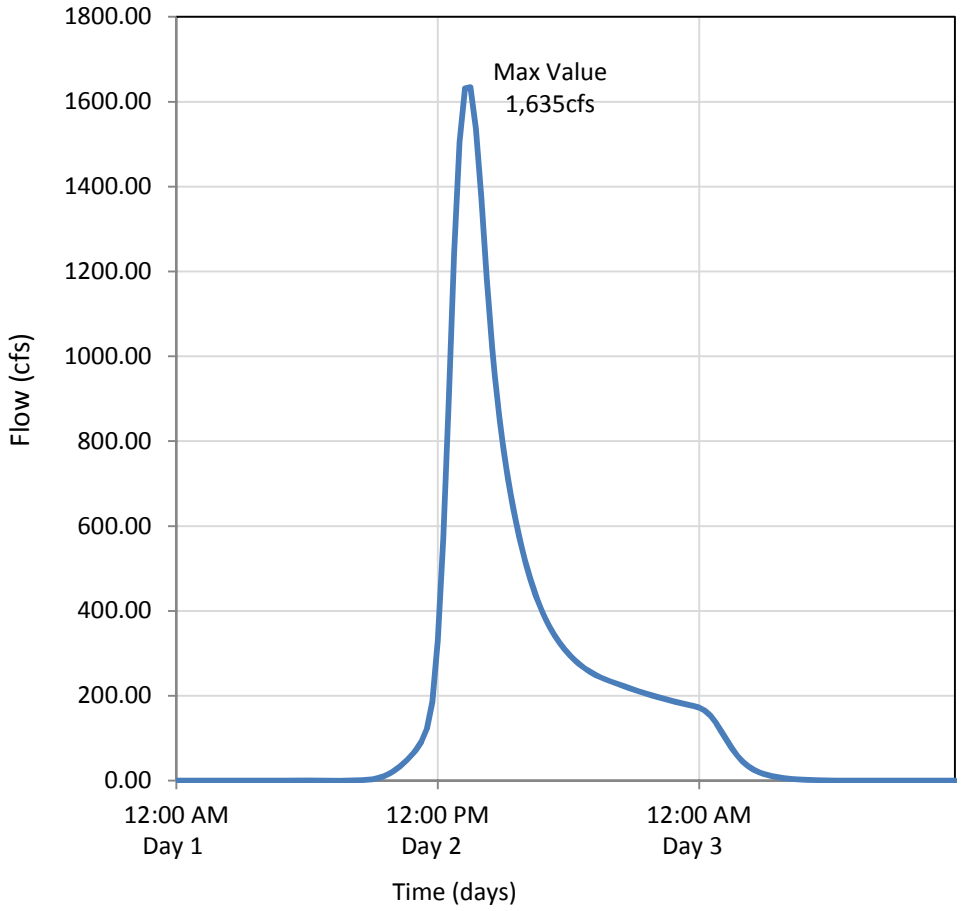
Drainage Area:	2.7	sq. mi.
Curve Number:	65	

HEC_HMS 3.4
Sub-Watersheds
W1040 (100-Year)



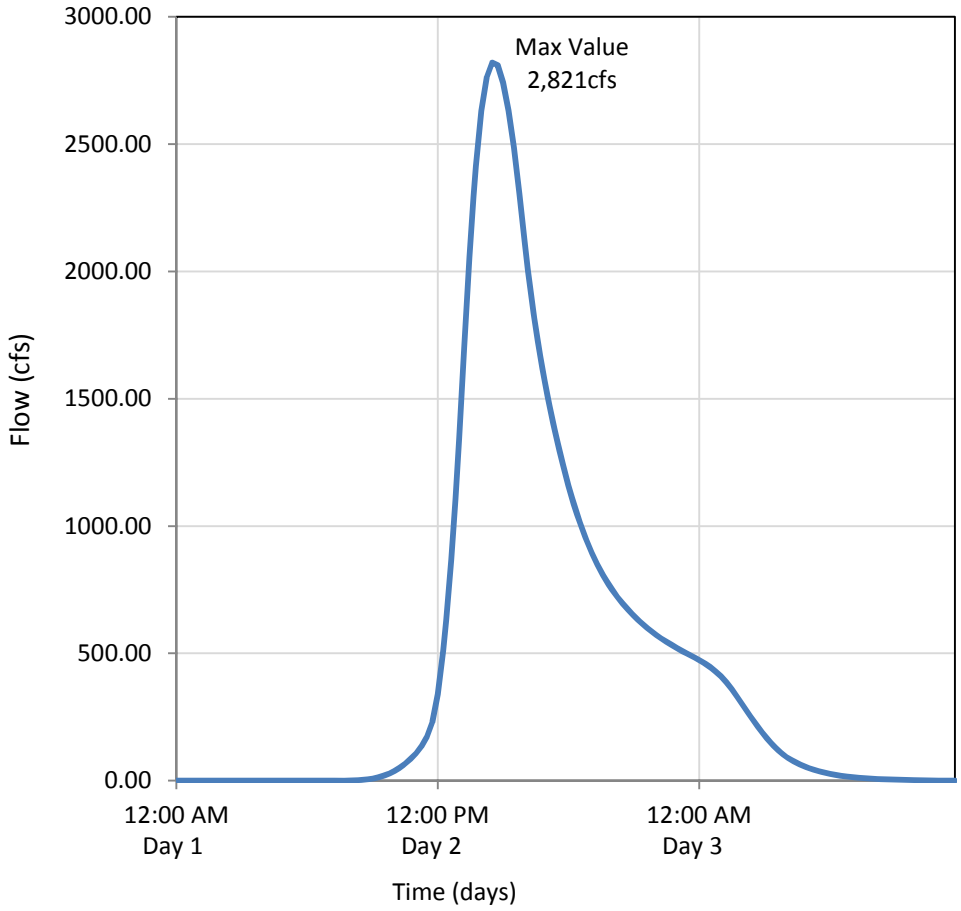
Drainage Area:	3.9	sq. mi.
Curve Number:	68	

HEC_HMS 3.4
Sub-Watersheds
W1050 (100-Year)



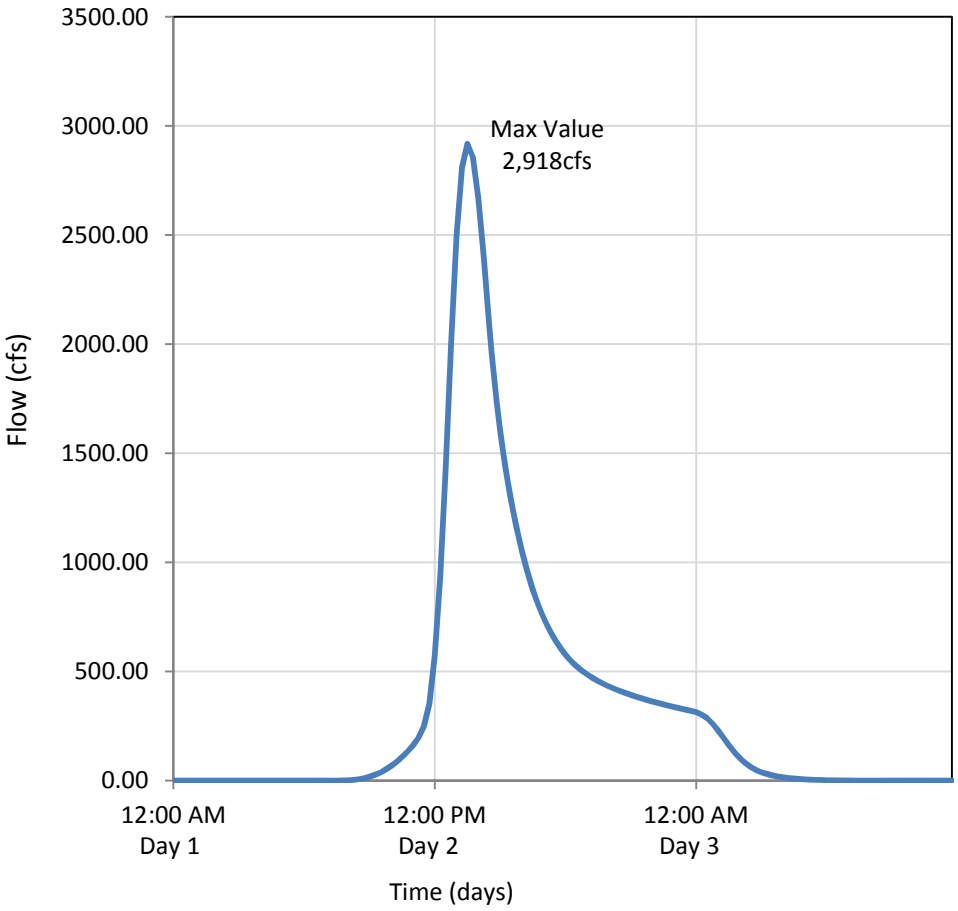
Drainage Area:	2.8	sq. mi.
Curve Number:	63	

HEC_HMS 3.4
Sub-Watersheds
W1030 (100-Year)



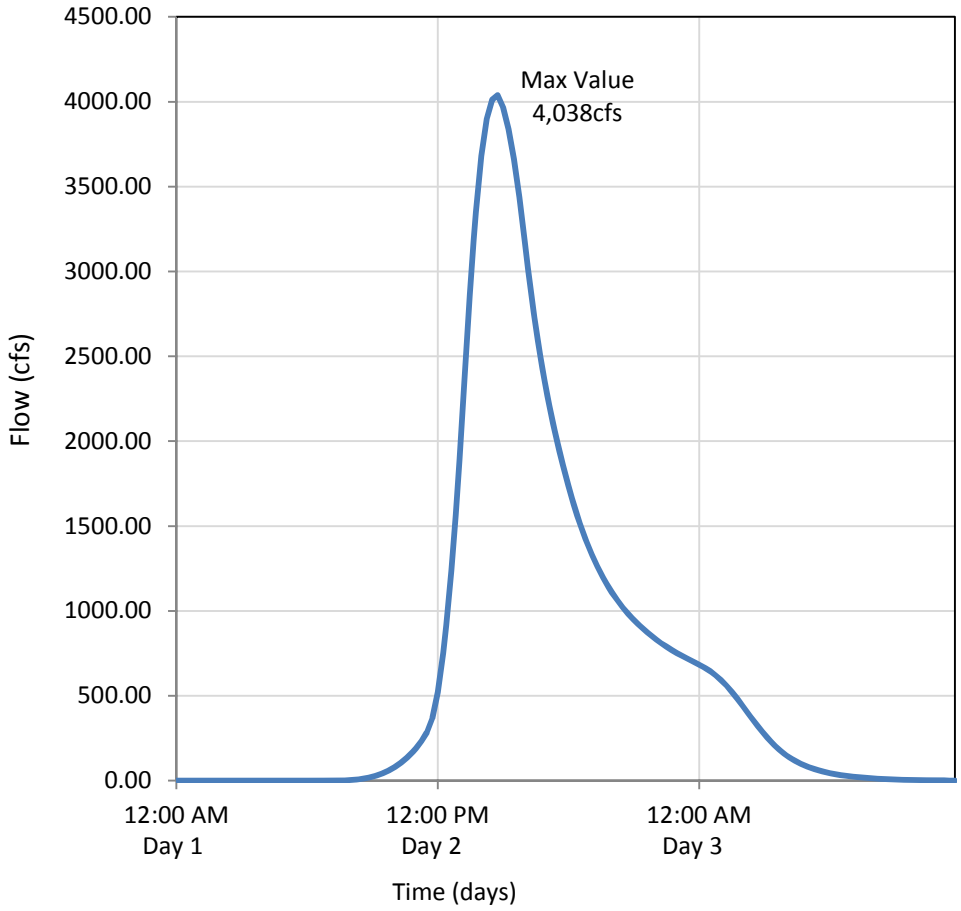
Drainage Area:	6.5	sq. mi.
Curve Number:	67	

HEC_HMS 3.4
Sub-Watersheds
W1060 (100-Year)



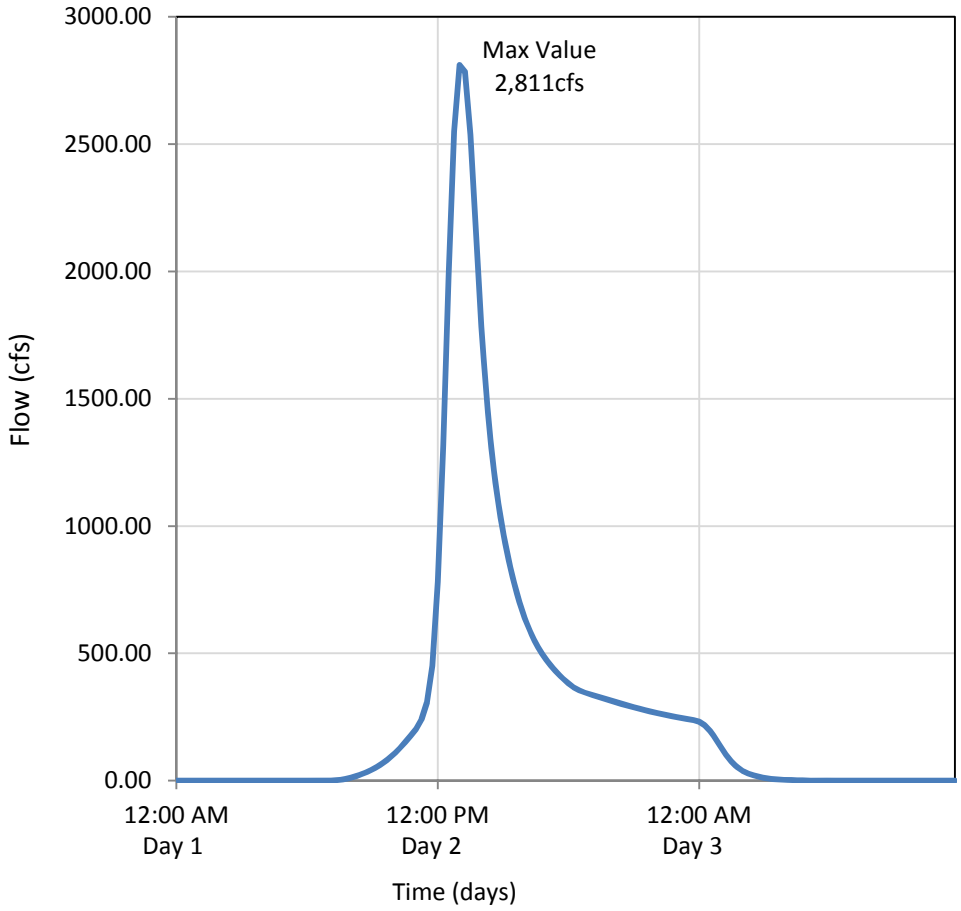
Drainage Area:	4.8	sq. mi.
Curve Number:	67	

HEC_HMS 3.4
Sub-Watersheds
W1070 (100-Year)



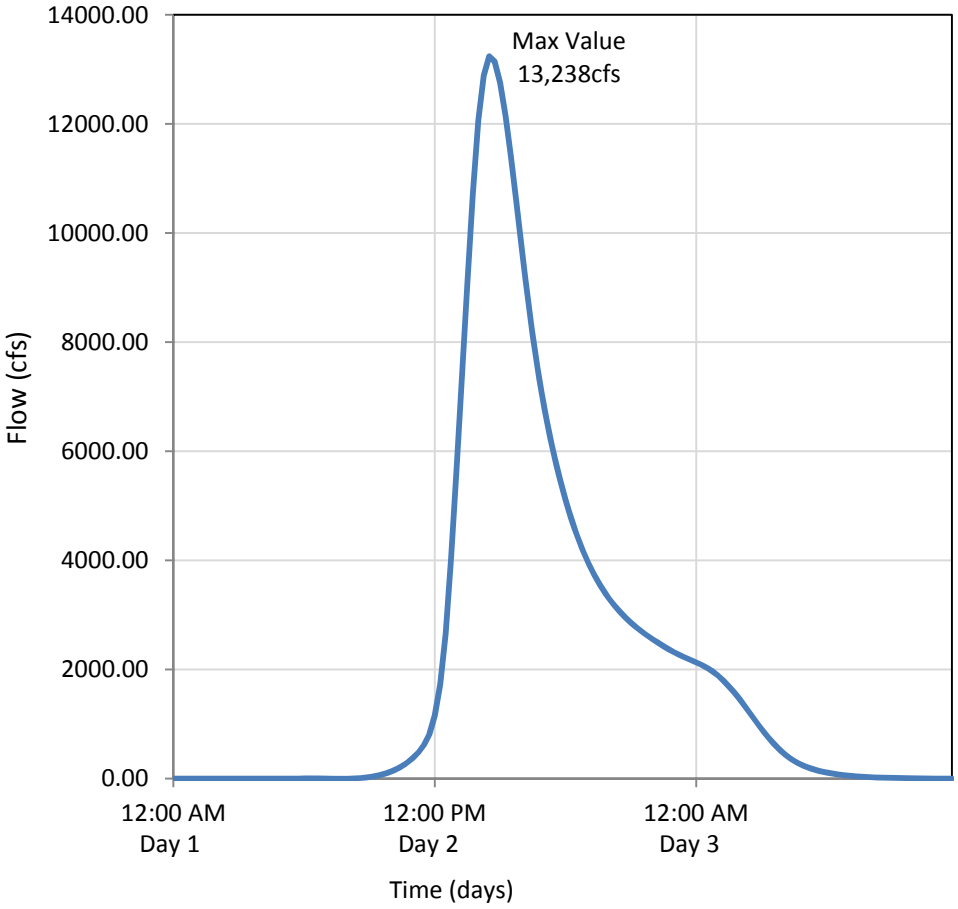
Drainage Area:	8.9	sq. mi.
Curve Number:	69	

HEC_HMS 3.4
Sub-Watersheds
W1120 (100-Year)



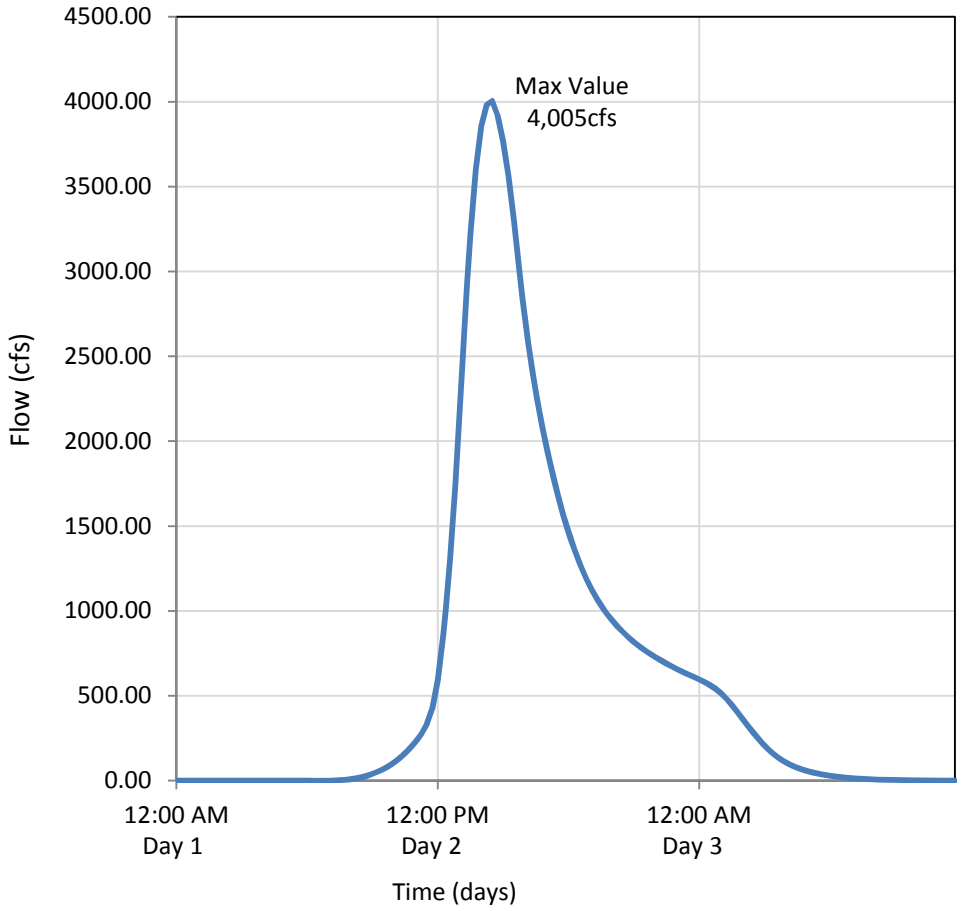
Drainage Area:	3.6	sq. mi.
Curve Number:	70	

HEC_HMS 3.4
Sub-Watersheds
J379 (100-Year)



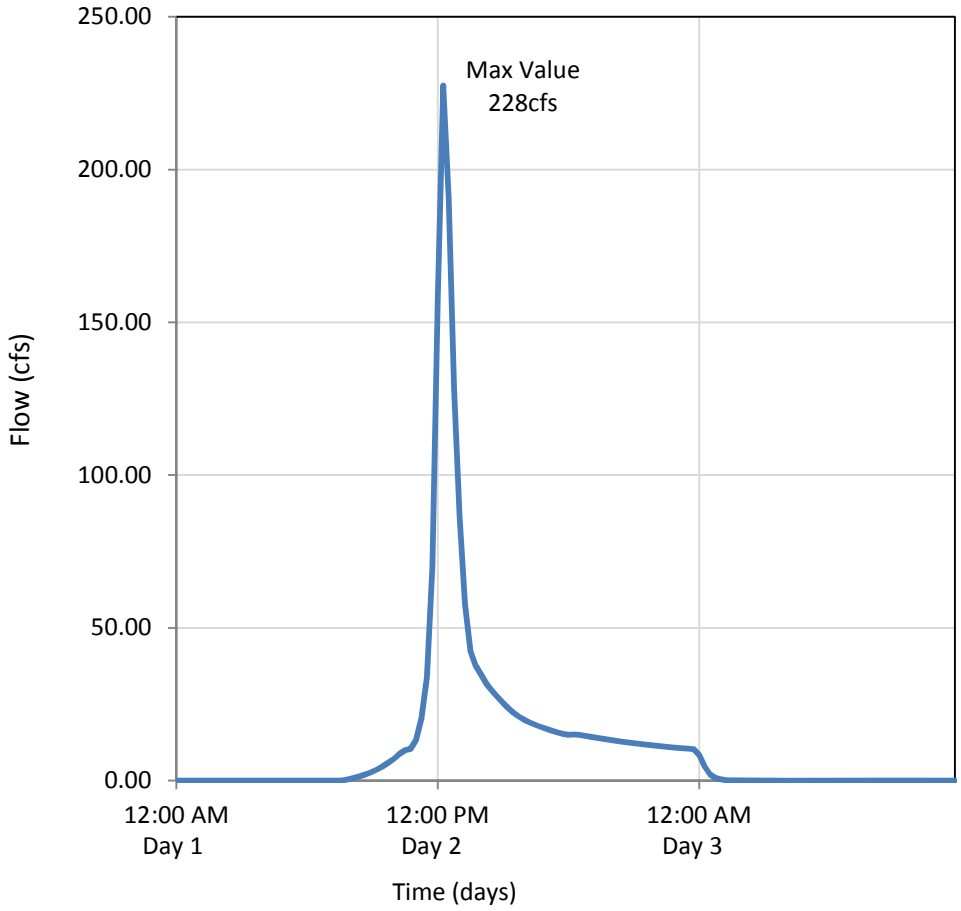
Drainage Area:	29.6	sq. mi.
Curve Number:	65	

HEC_HMS 3.4
Sub-Watersheds
W1470 (100-Year)



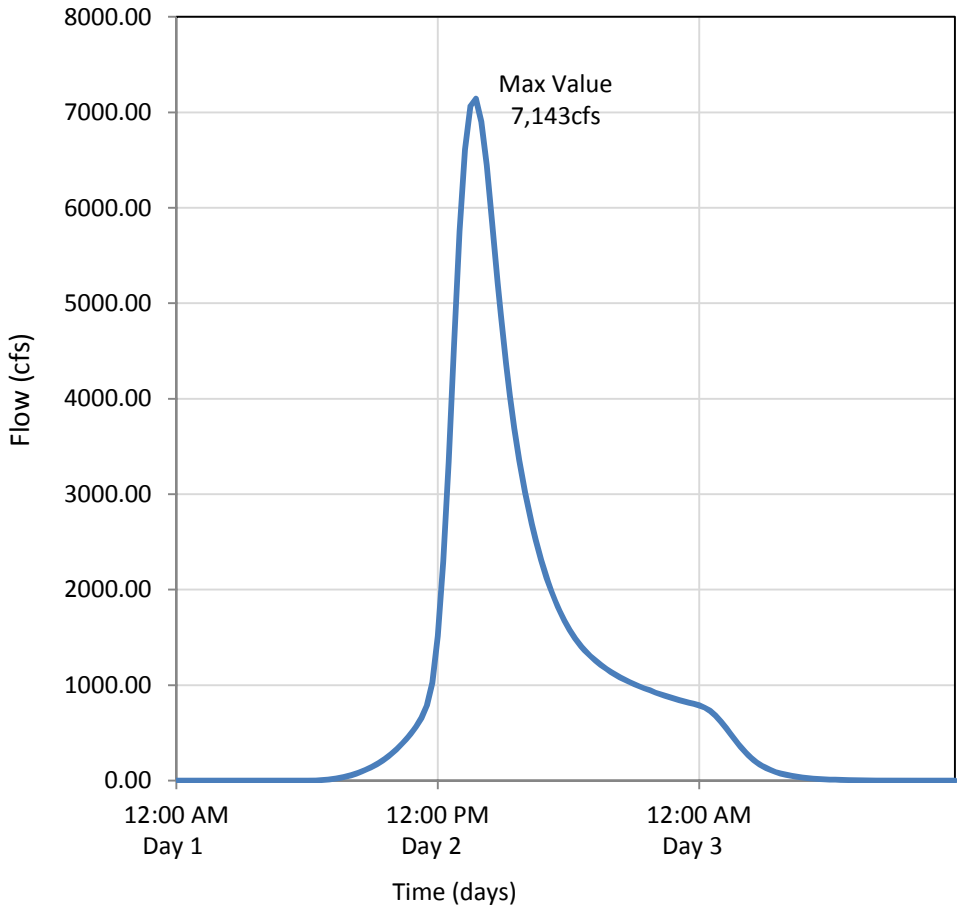
Drainage Area:	7.9	sq. mi.
Curve Number:	70	

HEC_HMS 3.4
Sub-Watersheds
W1160 (100-Year)



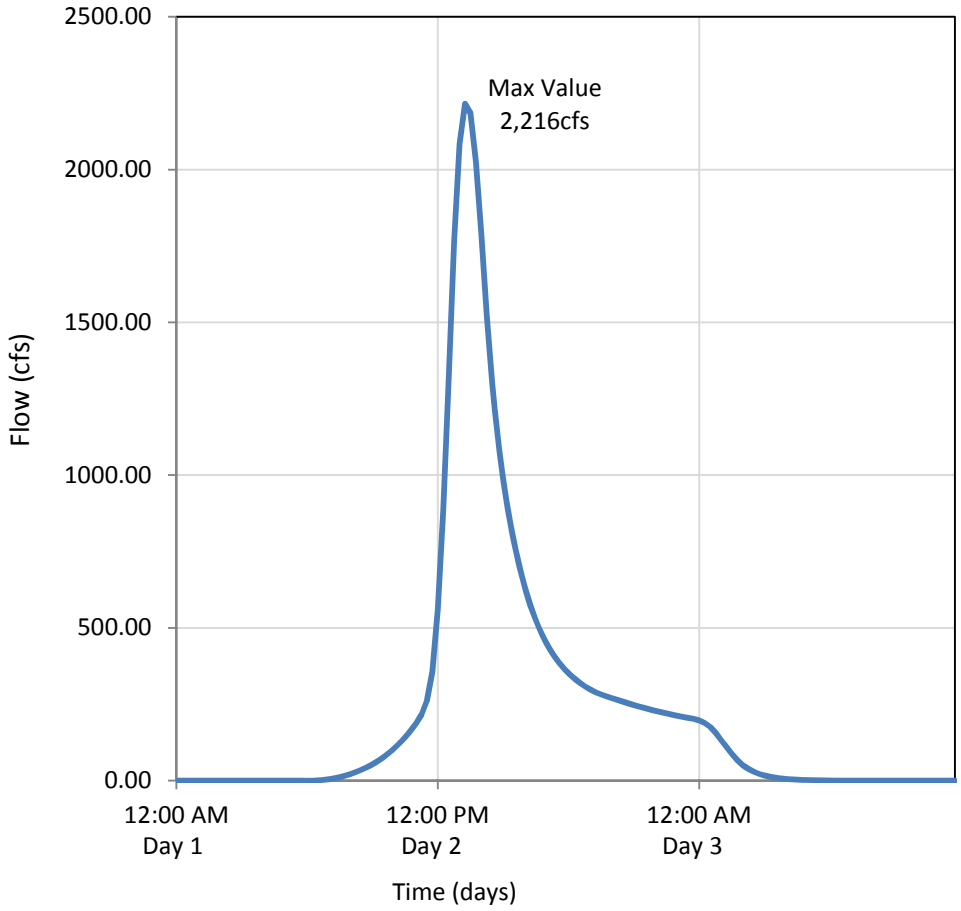
Drainage Area:	0.2	sq. mi.
Curve Number:	68	

HEC_HMS 3.4
Sub-Watersheds
J434 (100-Year)



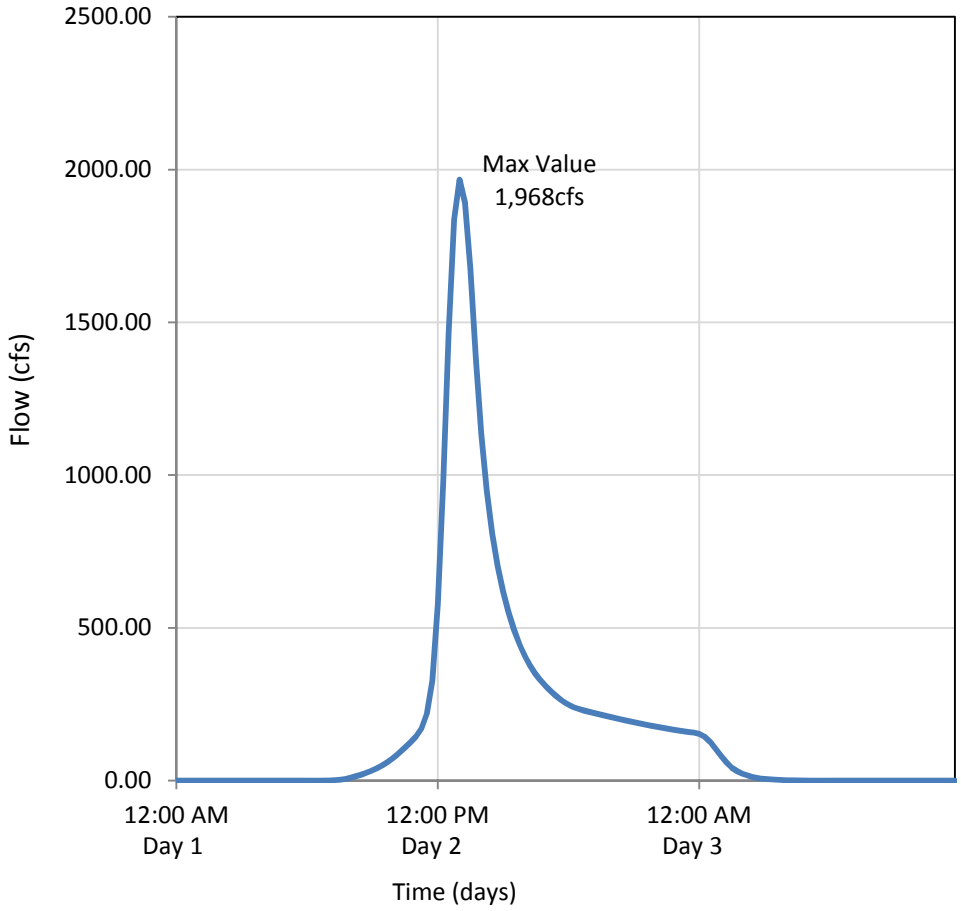
Drainage Area:	11.1	sq. mi.
Curve Number:	72	

HEC_HMS 3.4
Sub-Watersheds
W1150 (100-Year)



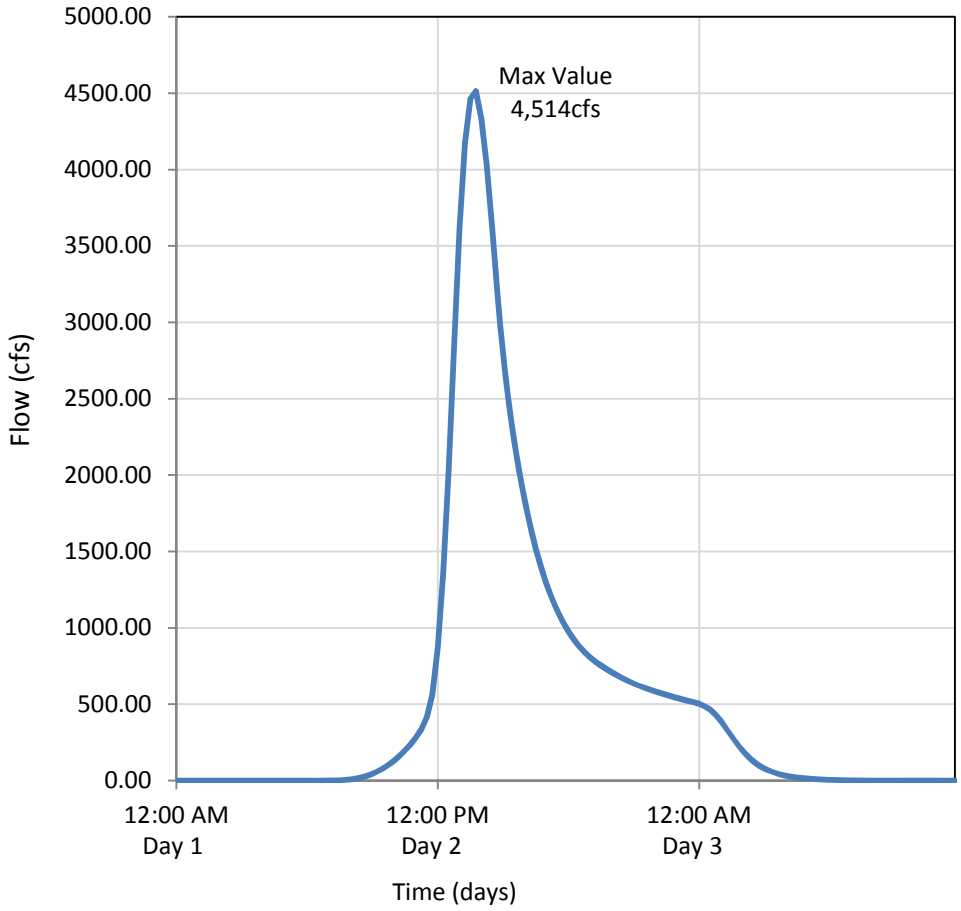
Drainage Area:	2.9	sq. mi.
Curve Number:	73	

HEC_HMS 3.4
Sub-Watersheds
W1170 (100-Year)



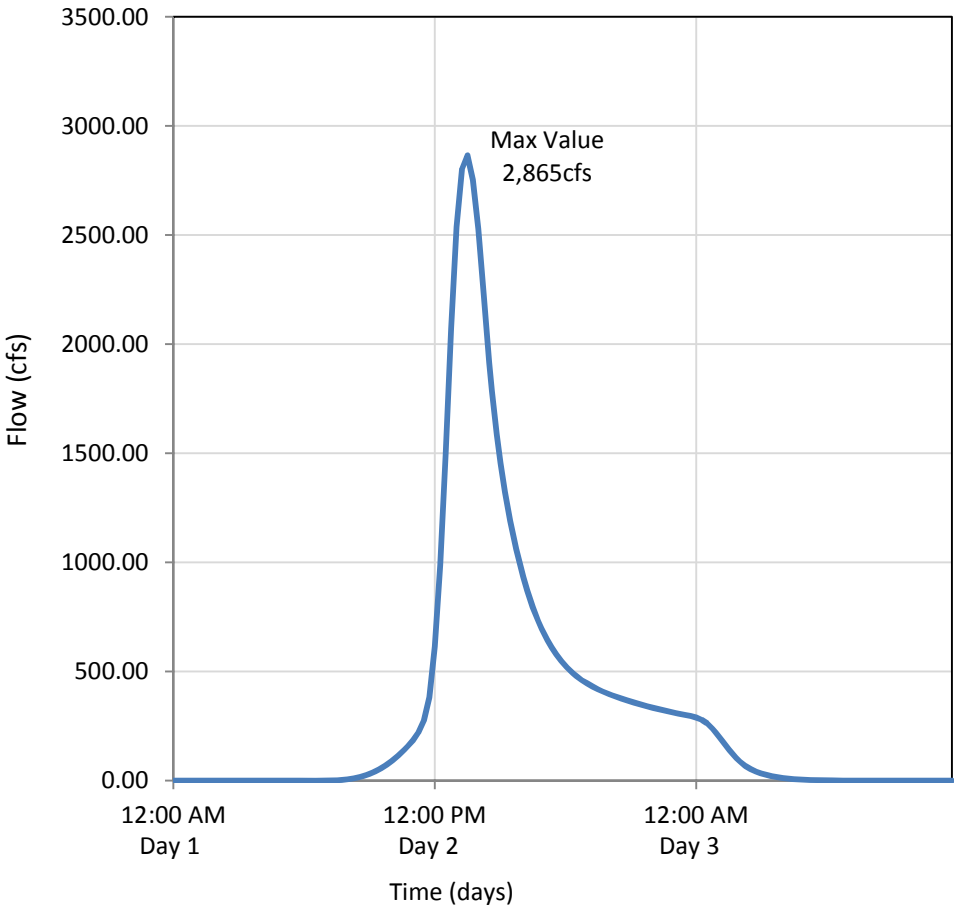
Drainage Area:	2.4	sq. mi.
Curve Number:	70	

HEC_HMS 3.4
Sub-Watersheds
W1180 (100-Year)



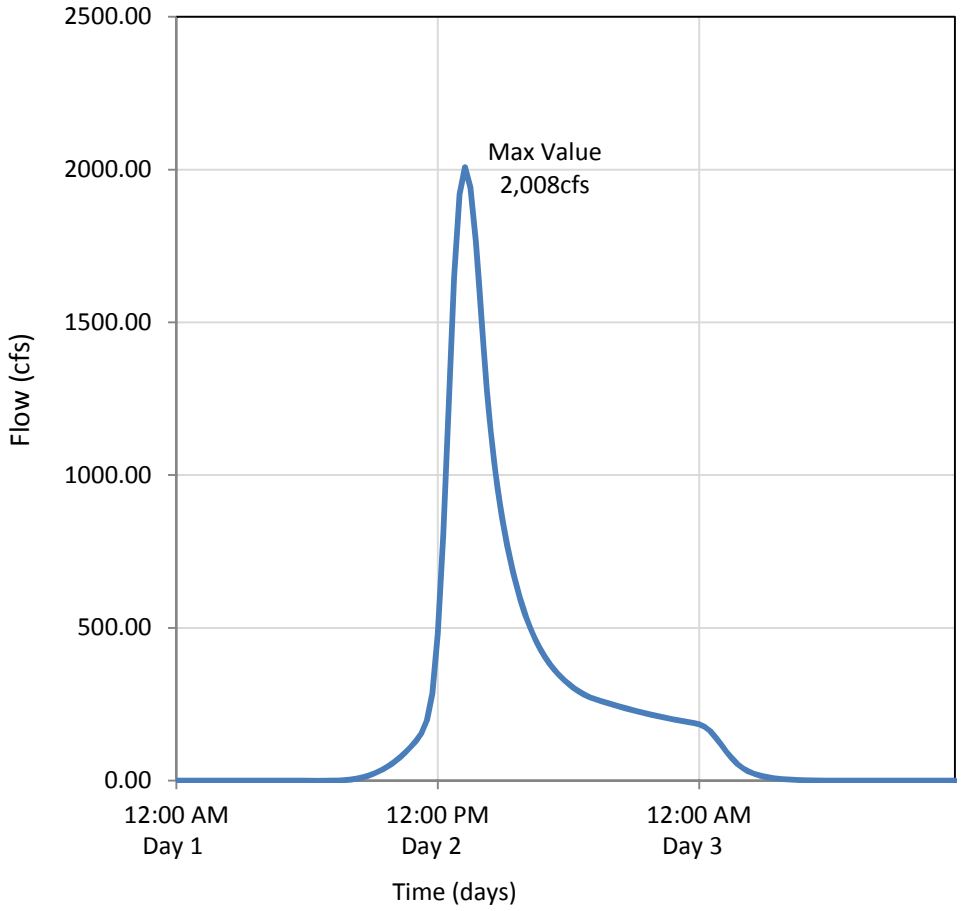
Drainage Area:	7.4	sq. mi.
Curve Number:	69	

HEC_HMS 3.4
Sub-Watersheds
W1190 (100-Year)



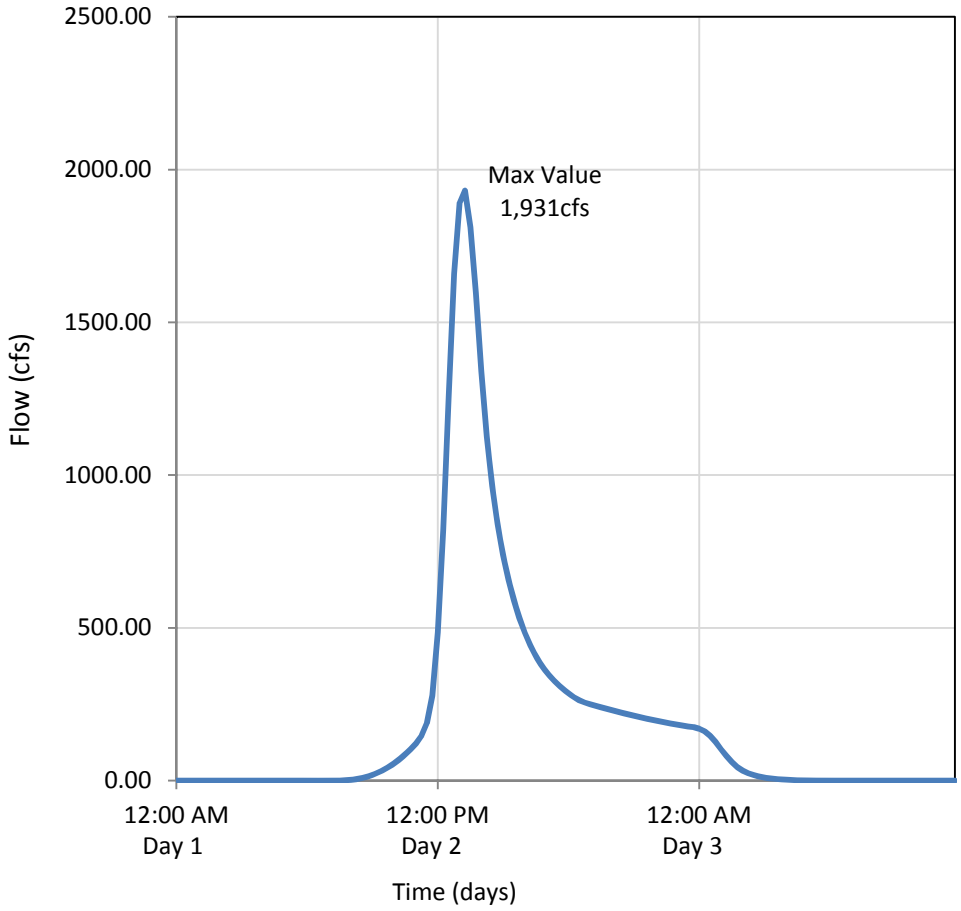
Drainage Area:	4.4	sq. mi.
Curve Number:	69	

HEC_HMS 3.4
Sub-Watersheds
W1200 (100-Year)



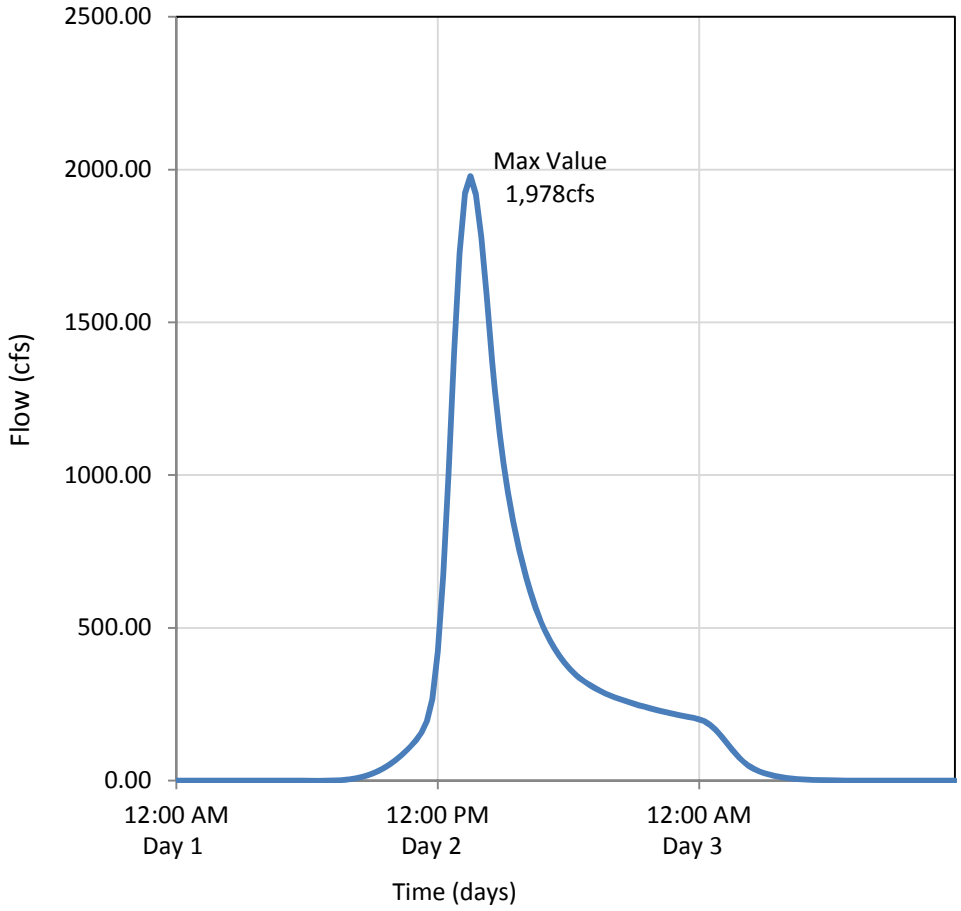
Drainage Area:	2.8	sq. mi.
Curve Number:	68	

HEC_HMS 3.4
Sub-Watersheds
W1210 (100-Year)



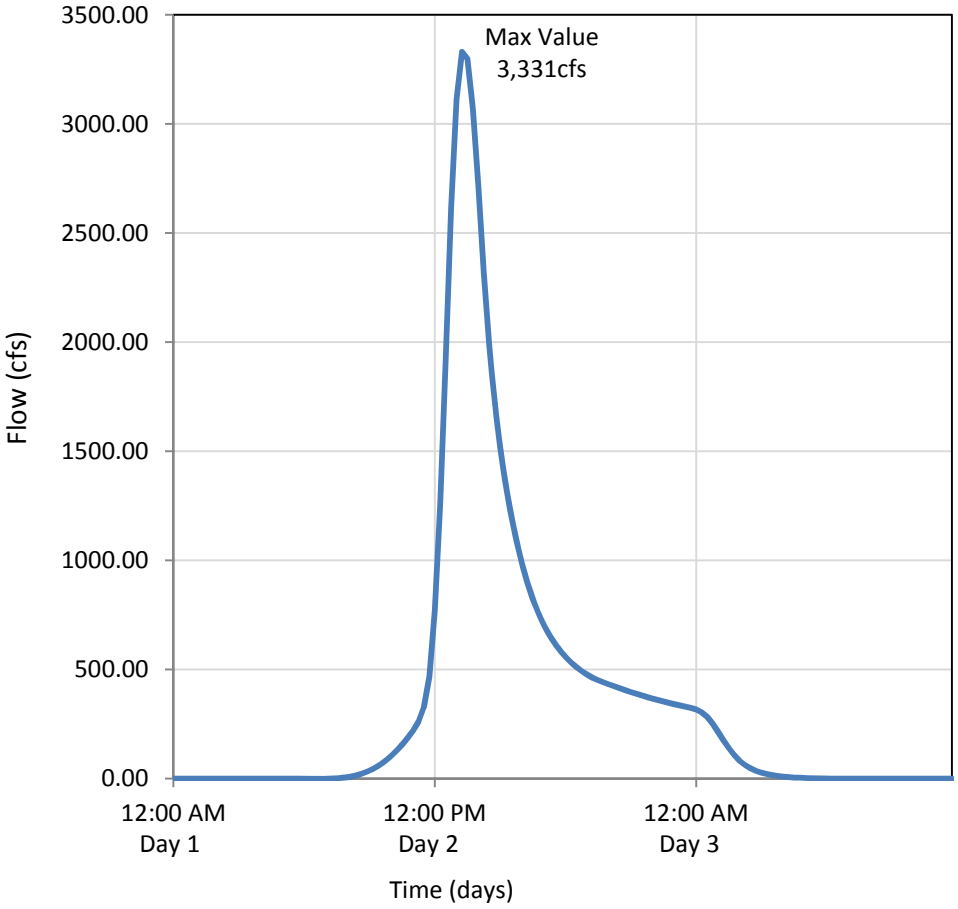
Drainage Area:	2.7	sq. mi.
Curve Number:	68	

HEC_HMS 3.4
Sub-Watersheds
W1220 (100-Year)



Drainage Area:	3.0	sq. mi.
Curve Number:	70	

HEC_HMS 3.4
Sub-Watersheds
W1230 (100-Year)



Drainage Area:	4.8	sq. mi.
Curve Number:	69	

APPENDIX D

HEC-RAS Computer Outputs

Sunny Day Dam Failure

HEC-RAS Plan: Sunny Day Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	182928.0		73278.7	1146.99	1182.33	1187.51	17.87	4038.3	213.86	0	0
Reach	182750.0		168128.6	1146.44	1191.87	1194.74	11.29	12564.4	522.63	0	0
Reach	182500.0		164161	1145.69	1190.62	1194.1	11.28	11492.87	466.39	0.6	0.6
Reach	182250.0		160741.9	1144.43	1189.95	1193.25	14.31	11601.26	475.87	0.6	0.6
Reach	182000.0		157578.2	1143.09	1187.2	1191.81	16.59	9504.16	424.17	1.2	1.2
Reach	181750.0		154765.2	1141.7	1182.85	1189.19	23.26	8469.6	457.24	1.2	1.2
Reach	181310.0		148331.3	1139.29	1181.35	1183.81	14.85	12892.48	623.16	1.8	1.8
Reach	181244.0	Epworth Road (Route 686)	Bridge								
Reach	181185.0		149776.9	1138.8	1174.36	1179.35	22.85	9825.07	584.99	1.8	1.8
Reach	180750.0		147781.9	1136.56	1166.93	1173.47	17.88	7364.64	576.17	1.8	2.4
Reach	180500.0		144641.1	1135.29	1168.8	1170.99	9.27	13641.01	788.66	2.4	2.4
Reach	180250.0		142245.9	1133.99	1164.1	1169.35	15.07	7891.02	577.08	3	2.4
Reach	180000.0		139489.8	1132.69	1162.12	1166.54	15.48	8321.06	689.99	3	3
Reach	179750.0		137572.3	1131.39	1162.99	1164.95	9.52	12902.74	862.5	3.6	3
Reach	179500.0		135812.2	1129.89	1159.82	1163.69	14.3	8716.49	626.22	3.6	3.6
Reach	179250.0		132503.6	1128.81	1157.8	1162.08	13.54	8389.86	588.05	4.2	3.6
Reach	179000.0		132650.5	1127.71	1153.02	1159.15	19.1	6917.64	644.27	4.2	3.6
Reach	178750.0		132550.2	1126.59	1150.05	1155.03	16.51	7458.82	817.81	4.2	4.2
Reach	178500.0		131644.1	1125.79	1148.67	1151.65	12.49	9539.59	997.52	4.8	4.2
Reach	178250.0		130644.1	1124.89	1145.6	1149.42	14.53	8343.42	1042.22	4.8	4.8
Reach	178000.0		129769.1	1124.09	1145.08	1147.4	10.7	10722.61	1210.1	5.4	4.8
Reach	177750.0		101412.1	1123.09	1143.79	1144.92	6.68	12359.68	1332.94	6	5.4
Reach	177500.0		101153.1	1122.59	1143.84	1144.12	3.04	24643.46	2004.82	6.6	6.6
Reach	177250.0		100882	1122.31	1143.63	1143.98	2.65	21843.79	1465.12	8.4	7.8
Reach	177000.0		100700.3	1121.69	1143.49	1143.88	3.05	20541.41	1255.22	9.6	8.4
Reach	176750.0		100594.4	1120.21	1143.32	1143.8	4.15	18636.69	1326.89	10.8	8.4
Reach	176500.0		100024.7	1119.49	1142.8	1143.66	6.38	13688.09	1036.06	11.4	8.4
Reach	176250.0		100442	1117.31	1135.05	1141.58	18.96	4943.22	547.88	12	9
Reach	176000.0		100368.2	1115.07	1135.8	1136.94	5.78	11943	1038.74	12	9
Reach	175750.0		100241.3	1113.99	1135.21	1136.42	6.52	11502.69	1152.25	13.2	9.6
Reach	175500.0		100119	1113.2	1134.72	1135.86	6.51	11934.04	1180.66	13.8	9.6
Reach	175375.0		100085.6	1113.09	1134.46	1135.68	6.69	11574.09	1192.87	13.8	10.2
Reach	175275.0		100027.6	1112.99	1133.96	1135.25	7.07	11321.07	1184.66	14.4	10.2
Reach	175230.0	Fishlake Road (Route 687)	Bridge								
Reach	175175.0		88197.79	1112.92	1130.58	1132.28	9.17	9438.77	1321.08	14.4	10.2
Reach	174750.0		78064.12	1111.99	1129.43	1129.98	3.37	13898.17	1188.69	15.6	11.4
Reach	174500.0		75877.63	1111.53	1129.21	1129.78	3.46	12948.28	994.05	16.8	11.4
Reach	174250.0		73777.25	1109.9	1128.92	1129.54	3.62	11994.25	940.9	18	12.6
Reach	174000.0		73720.94	1108.3	1128.87	1129.48	4.04	13610.74	910.72	19.2	12.6
Reach	173750.0		73695.27	1107.38	1129.02	1129.25	2.19	19539.94	1219.34	20.4	13.2

HEC-RAS Plan: Sunny Day Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	173500.0		71888.85	1105.86	1128.76	1129.22	2.95	13861.09	919.11	22.2	13.8
Reach	173250.0		71862.7	1104.92	1128.6	1129.1	3.5	13148.42	789.2	23.4	13.8
Reach	173000.0		70148.85	1104.25	1128.43	1128.96	3.71	12551.44	772.91	24.6	14.4
Reach	172750.0		70139.57	1103.74	1128.43	1128.85	3.95	13674.67	880.37	25.2	14.4
Reach	172500.0		70109.65	1102.21	1128.21	1128.78	3.34	12349.96	713.73	26.4	15
Reach	172250.0		68539.95	1101.38	1128.15	1128.64	2.87	12718.53	651.42	28.2	15.6
Reach	172000.0		69934.6	1099.16	1128.2	1128.6	2.74	15297.96	774.91	29.4	16.8
Reach	171750.0		69879.68	1098.73	1128.32	1128.53	2.15	20565.31	951.74	31.2	17.4
Reach	171500.0		69787.64	1098.34	1128.3	1128.5	2.04	22009.4	1033.29	33	18.6
Reach	171248.0		68633.29	1097.31	1127.99	1128.39	4.17	13800.56	925.47	34.8	19.8
Reach	171000.0		67571.73	1096.51	1127.6	1128.26	5.53	10825.7	745.65	35.4	19.8
Reach	170750.0		68505.46	1095.25	1127.78	1128.06	3.38	16443.35	1007.79	36.6	21
Reach	170500.0		68403.91	1093.89	1127.55	1127.94	3.9	14133.14	727	37.2	21.6
Reach	170250.0		68318.39	1092.82	1127.51	1127.84	3.8	15542.46	752.28	38.4	22.8
Reach	170000.0		68250.99	1092.25	1127.51	1127.78	2.79	17351.27	911.12	39.6	23.4
Reach	169750.0		68116.44	1091.99	1127.58	1127.71	2.14	24999.81	1140.55	41.4	25.2
Reach	169500.0		67650.65	1091.44	1126.25	1127.21	9.62	9424.92	473.93	42	25.8
Reach	169250.0		67326.42	1088.89	1124.72	1126.56	10.85	6513.87	308.57	42.6	26.4
Reach	169000.0		66131.63	1088.36	1122.13	1125.35	13.67	4899.97	260.31	43.2	27
Reach	168750.0		66112.75	1087.78	1121.34	1123.32	13.18	6603.98	343.58	43.2	27
Reach	168500.0		65662.46	1087.21	1121.11	1121.83	8.4	10219.06	447.03	43.8	27.6
Reach	168250.0		65237.55	1085.51	1119.68	1121.67	8.99	6681.62	303.91	44.4	28.2
Reach	168000.0		65215.23	1085.36	1118.97	1120.36	11.54	7657.46	391.68	44.4	28.8
Reach	167750.0		65149.06	1084.84	1119	1119.39	4.37	13988.3	640.59	45	29.4
Reach	167500.0		64835.05	1083.64	1118.39	1119	7.88	10998.94	475.03	45.6	30.6
Reach	167250.0		64831.25	1083.05	1118.03	1118.71	6.52	10773.04	511.03	46.2	31.2
Reach	167000.0		64822.68	1082.46	1117.8	1118.35	5.23	11591.92	489.97	46.8	31.8
Reach	166750.0		64813.48	1080.88	1116.77	1117.84	10.36	8424.02	362.78	47.4	32.4
Reach	166500.0		64802.3	1080.54	1115.38	1117.29	9.73	6327.36	301.64	48	33
Reach	166250.0		64796.32	1079.13	1107.45	1114.01	21.98	3391.63	207.11	48	33
Reach	166000.0		64752.12	1076.09	1105.12	1108.55	17.11	4868.61	354.58	48.6	33.6
Reach	165750.0		64762.41	1074.66	1099.95	1104.57	13.94	3880.84	322.06	48.6	33.6
Reach	165500.0		64750.96	1074.59	1098.68	1101.48	12.92	5002.18	420	49.2	33.6
Reach	165250.0		64737.05	1074.49	1096.39	1099.13	10.58	5002.62	447.42	49.2	34.2
Reach	165000.0		64709.68	1073.4	1094.56	1096.86	9.08	5502.2	542.31	49.8	34.8
Reach	164750.0		64174.24	1073.36	1091.75	1094.62	12.01	4784.06	545.48	50.4	34.8
Reach	164500.0		64161.04	1072.38	1091.43	1092.7	6.9	7260.44	810.2	50.4	35.4
Reach	164250.0		64123.73	1071.33	1091.35	1091.98	5.2	10267.35	1152.33	51.6	36
Reach	164000.0		63942.01	1070.14	1091.14	1091.61	4.64	11801.89	1276.38	52.2	36.6
Reach	163750.0		63942.57	1069.13	1091.13	1091.4	3.51	15512.32	1418.09	53.4	37.2

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	163622.0		63981.8	1068.53	1091.11	1091.32	4.05	17297.24	1515.76	54	37.8
Reach	163555.0		63946.82	1068.31	1090.85	1091.25	7.09	14094.89	1347.72	54	38.4
Reach	163515.0	Greenhill Road (Route 1700)	Bridge								
Reach	163418.0		63419.69	1067.65	1085.58	1086.93	13.59	10253.07	1358.44	54	38.4
Reach	163000.0		62330.14	1066.48	1083.97	1084.66	9.94	11285.86	1237.62	54.6	39.6
Reach	162750.0		62022.99	1065.76	1083.56	1084.07	8.84	12796.66	1207.84	55.2	40.2
Reach	162500.0		61707.3	1065.01	1083.05	1083.64	10.36	13150.6	1423.72	55.8	40.8
Reach	162250.0		60723.2	1064.24	1081.58	1082.09	9.85	14487.74	1592.22	55.8	42.6
Reach	162000.0		60078.95	1063.65	1080.4	1080.9	9.54	14540.94	1646	56.4	44.4
Reach	161750.0		59791.46	1063.02	1080.11	1080.42	7.71	17039.04	1659.28	57	45
Reach	161500.0		59755.63	1061.98	1079.67	1079.99	6.66	17300.91	1593.6	57.6	45.6
Reach	161250.0		59348.16	1061.66	1078.52	1079.34	11.39	11323.3	1171.33	58.2	46.8
Reach	161000.0		59325.26	1060.66	1078.16	1078.52	7.35	14564.16	1500.82	58.2	47.4
Reach	160750.0		59154.18	1059.67	1077.84	1078.27	8.63	14010.85	1369.72	58.8	48
Reach	160500.0		59139.3	1059.46	1077.31	1077.79	8.43	13069.9	1090.31	59.4	48.6
Reach	160250.0		50393.25	1056.82	1075.15	1076.66	13.7	6664.26	633.4	60	49.2
Reach	160000.0		48371.87	1056.2	1074.51	1075.31	9.98	8117.2	827.81	60	49.8
Reach	159750.0		48835.32	1055.94	1074.59	1074.84	5.29	12648.07	1149.43	60.6	50.4
Reach	159500.0		48370.69	1054.88	1074.55	1074.75	4.67	13832.21	1160.16	61.8	51
Reach	159250.0		48372	1054.05	1074.54	1074.67	3.41	17544.27	1436.32	62.4	52.2
Reach	159000.0		48000	1052.55	1074.22	1074.55	4.62	10414.46	740.82	63.6	53.4
Reach	158750.0		47994.75	1051.8	1074.03	1074.44	5.1	9459.77	631.03	64.2	54
Reach	158500.0		47660.68	1050.44	1073.85	1074.27	6.66	9665.27	666.01	65.4	54.6
Reach	158250.0		47954.16	1049.38	1073.92	1074.11	4.3	14107.7	977.73	66	55.8
Reach	158000.0		47925.04	1048.79	1073.93	1074.04	3.47	19190.69	1297.25	67.2	57
Reach	157750.0		47894.51	1048.72	1073.91	1074	3.06	20835.93	1363.16	68.4	58.8
Reach	157500.0		47858.77	1048.67	1073.78	1073.96	4.95	18156.71	1153.12	69.6	60
Reach	157250.0		47696.51	1048.61	1073.68	1073.81	3.73	18398.81	1117.06	70.2	63
Reach	157000.0		47695.83	1047.53	1073.38	1073.79	5.89	12512.18	860.49	71.4	64.2
Reach	156750.0		47691.2	1045.68	1072.06	1073.85	11.36	4707.51	266.17	71.4	64.8
Reach	156500.0		47459.02	1045.01	1070.01	1073.2	15.26	3955.85	243.61	72	64.8
Reach	156250.0		47244.69	1044.68	1068.74	1071.96	15.15	3863.54	256.27	72	65.4
Reach	156000.0		47347.14	1044.5	1069.48	1070.84	10.04	5754.54	338.38	72.6	66
Reach	155750.0		46744.9	1041.17	1066.95	1070.19	15.88	3979.77	253.6	72.6	66
Reach	155500.0		46120.29	1040.01	1064.99	1068.8	16.73	3671.42	260.26	73.2	66.6
Reach	155250.0		45953.03	1038.84	1063.67	1067.19	15.23	3331.16	230.92	73.2	67.2
Reach	155000.0		45816.52	1037.64	1053.4	1062.79	24.96	2093.45	277.88	73.8	67.2
Reach	154750.0		46911.01	1036.63	1051.53	1057.4	20.87	2939.5	487.87	73.8	67.2
Reach	154500.0		47076.67	1036.4	1051.78	1053.35	12.2	5542.94	935.81	73.8	67.8
Reach	154250.0		46730.87	1035.14	1050.69	1051.62	10.18	7182.58	1223.9	74.4	68.4

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	154000.0		46420.62	1033.86	1049.86	1050.6	9.29	8290.9	1254.85	75	69
Reach	153750.0		45951.79	1033.23	1048.98	1049.85	10.5	9380.64	1309.08	75	69.6
Reach	153500.0		45566	1032.7	1048.12	1048.59	8.18	11606.61	1612.17	75.6	70.8
Reach	153250.0		45208.39	1032.1	1047.49	1047.75	5.56	14739.49	1965.13	76.2	72.6
Reach	153000.0		45205.21	1031.41	1047.34	1047.56	5.41	15800.3	1958.56	76.8	73.8
Reach	152750.0		45196.27	1030.67	1047.21	1047.37	5.16	18152	2072.37	78	75
Reach	152500.0		45118.63	1029.85	1047.1	1047.24	5.07	20480.62	2114.99	78.6	76.2
Reach	152250.0		45108.66	1029.02	1046.58	1046.81	5.93	16832.77	1676.35	79.2	78.6
Reach	152000.0		45100.38	1027.83	1046.36	1046.61	5.95	14547.59	1575.92	80.4	79.8
Reach	151750.0		45092.1	1027.54	1046.02	1046.46	7.47	13360.23	1460.5	81	80.4
Reach	151567.0		45085.97	1027.34	1045.5	1046.24	9.51	10212.72	1432.96	81	81
Reach	151537.0	West Lebanon Street (Bus 52)	Bridge								
Reach	151444.0		45050.08	1027.18	1042.08	1043.13	11.1	8340.23	1282.92	81.6	81
Reach	151000.0		44983.26	1025.66	1040.41	1041.5	11.34	8382.66	1156.96	82.2	82.2
Reach	150750.0		44947.14	1024.21	1038.82	1040.03	11.6	7887.02	1234.83	82.2	83.4
Reach	150500.0		44877.62	1024.02	1037.41	1038.77	12.8	7559.15	1146.95	82.8	84
Reach	150250.0		44834.32	1022.66	1036.57	1037.69	11.59	8128.25	1217.71	82.8	84.6
Reach	150000.0		44738.05	1022.21	1035.84	1036.66	10.37	9334.55	1316.55	83.4	85.2
Reach	149750.0		44686.72	1021.26	1035.32	1035.76	7.89	10947.74	1277.42	84	85.8
Reach	149500.0		44636.06	1019.98	1034.72	1035.05	6.97	12231.57	1491.25	84.6	87
Reach	149250.0		44385.56	1019.97	1033.71	1034.72	10.85	9110.04	1593.41	84.6	87.6
Reach	149000.0		42858.59	1019.95	1031.88	1032.64	9.97	8923.44	1644.53	85.2	89.4
Reach	148750.0		42565.62	1019.94	1031.5	1031.89	7.66	11369.52	1617.06	85.8	90
Reach	148500.0		41954.43	1016.41	1030.95	1031.46	8.32	10954.76	1510.97	86.4	90.6
Reach	148250.0		41439.28	1015.85	1030.62	1030.86	6.18	14747.67	1666.86	87	91.8
Reach	148000.0		41276.44	1015.41	1030.43	1030.6	5.29	16599.47	1838.17	87.6	92.4
Reach	147750.0		41265.95	1013.94	1030.14	1030.35	5.62	14453.68	1461.96	88.2	93.6
Reach	147500.0		41145.38	1013.17	1029.93	1030.13	5.33	14946.37	1428.16	89.4	94.8
Reach	147250.0		41142.63	1012.72	1029.78	1030.03	6.24	13784.91	1287.31	90	95.4
Reach	147000.0		41136.3	1011.95	1029.54	1029.87	6.43	12576.06	1183.78	90.6	96
Reach	146750.0		41125.22	1011.99	1029.2	1029.66	7.58	11140.99	1190.51	91.2	97.2
Reach	146500.0		41107.47	1011.48	1028.83	1029.2	7.25	11838.64	1202.32	91.8	98.4
Reach	146250.0		41098.89	1010.81	1028.66	1028.94	6.38	13200.34	1140.45	92.4	99
Reach	146000.0		41083.79	1009.93	1028.45	1028.7	5.49	13918.17	1111.78	93	100.2
Reach	145750.0		41005.5	1009.23	1027.99	1028.38	6.2	12195.17	1341.4	93.6	102
Reach	145500.0		41001.75	1008.49	1027.82	1028.17	6.6	12916.44	1235.44	94.2	103.2
Reach	145250.0		40956.65	1006.29	1027.49	1027.98	7.6	10900.61	1159.38	94.8	104.4
Reach	145000.0		40953.18	1005.25	1027.25	1027.68	6.69	11084.42	1118.05	95.4	105
Reach	144849.0		39546.24	1004.55	1027.12	1027.52	6.44	10978.93	1118.31	96	105.6
Reach	144741.0		39356.06	1003.97	1026.97	1027.3	5.57	11675.79	1026.75	96	106.2

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	144710.0	West Independence Blvd (Route 89)	Bridge								
Reach	144526.0		40762.87	1002.9	1025.08	1025.48	6.34	12186.82	1166.95	96.6	106.8
Reach	144250.0		40761.46	1002.18	1024.96	1025.27	6.28	14184.61	1247.98	97.2	108
Reach	144000.0		40761.26	1002.1	1024.89	1025.09	5.43	16556.61	1356.38	97.8	109.2
Reach	143750.0		40729.85	1002.01	1024.81	1024.96	4.69	19242.24	1589.09	99	109.8
Reach	143500.0		40710.99	1001.94	1024.73	1024.9	5.04	18693.62	1610.16	99.6	111
Reach	143311.0		40701.18	1001.87	1024.65	1024.87	5.25	17319.72	1580.56	100.2	112.2
Reach	143251.0	West Pine Street	Bridge								
Reach	143126.0		49704.1	1001.46	1016.07	1017.14	11.42	8699.41	1209.57	100.8	112.8
Reach	142750.0		54257.25	997.86	1015.43	1016.07	8.71	12490.97	1287.59	101.4	113.4
Reach	142500.0		53851.38	997.44	1015.07	1015.69	9.12	12454.25	1361.62	102	114.6
Reach	142250.0		50019.86	996.89	1014.47	1015.08	9.25	11381.35	1233.98	102	115.2
Reach	142000.0		48485.92	996.34	1014.06	1014.64	8.43	11704.59	1235.27	102.6	115.8
Reach	141750.0		43627.2	995.83	1013.32	1013.73	6.64	12620.82	1493.39	103.2	117.6
Reach	141500.0		43574.91	995.7	1013.14	1013.42	6.32	14329.7	1417.22	103.8	118.8
Reach	141250.0		42541.29	995.54	1012.92	1013.19	6.24	14375.34	1432.11	104.4	120
Reach	141000.0		42519.21	995.21	1012.81	1012.98	5.33	16837.98	1396.04	105	121.2
Reach	140750.0		42452.75	991.86	1012.67	1012.87	5.4	16617.24	1442.45	106.2	122.4
Reach	140500.0		41700.18	991.5	1012.39	1012.78	7.07	13202.97	1375.86	106.8	123.6
Reach	140250.0		41632.98	991.1	1011.84	1012.5	8.75	9380.27	887.49	107.4	124.8
Reach	140000.0		40990.95	990.71	1011.36	1011.94	8.27	10405.57	977.91	108	126
Reach	139750.0		40917.69	990.3	1011.1	1011.67	7.88	10358.76	1062.47	108	126.6
Reach	139500.0		40463.27	989.89	1010.88	1011.41	7.61	10808.57	1073.79	108.6	127.8
Reach	139250.0		40421.96	989.16	1010.75	1011.1	6.15	12036.14	1041.66	109.2	129
Reach	139113.0		40355.87	988.37	1010.28	1010.91	7.92	9932.12	958.5	109.8	130.2
Reach	139070.0	Worth Street (Route 1371)	Bridge								
Reach	138986.0		38507.1	987.23	1008.89	1009.81	8.86	7626.02	1196.62	109.8	130.2
Reach	138750.0		38029.8	986.64	1008.5	1009.34	9.27	7699.48	796.83	110.4	131.4
Reach	138500.0		37583.19	986.32	1008.25	1008.46	5.58	14277.19	1325.15	111	133.2
Reach	138250.0		37547.75	986.01	1008.14	1008.27	4.53	17383.23	1479.13	111.6	134.4
Reach	138000.0		37505.11	984.59	1008.03	1008.19	4.74	17399.43	1531.13	112.8	135.6
Reach	137750.0		37466.35	982.58	1007.96	1008.12	4.75	18198.05	1618.9	113.4	136.8
Reach	137500.0		37333.2	981.68	1007.34	1007.81	7.34	10623.53	1028.77	114.6	141
Reach	137285.0	Yadkin Valley Railroad #1	Bridge								
Reach	137250.0		37335.77	980.27	1006.46	1007.04	7.49	8914.81	799.5	115.2	141.6
Reach	137152.0		37329.61	979.89	1006.38	1006.91	7.06	9722.12	887.52	115.2	142.2
Reach	137130.0	Rockford Street (Hwy 601)	Bridge								
Reach	137027.0		36141.36	979.42	998.42	1002.32	16.88	3187.78	510.94	115.2	142.2
Reach	136750.0		36181.98	978.39	998.47	999.59	9.99	6506.43	729.55	115.8	142.8
Reach	136500.0		36141.35	977.87	997.98	998.81	9.27	8049.51	969.49	116.4	144

HEC-RAS Plan: Sunny Day Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	136250.0		36137.98	977.29	998.01	998.21	4.88	12873.95	1253.6	117	145.2
Reach	136000.0		36134.37	976.98	997.86	998.08	5.22	12574.74	1266.69	117.6	146.4
Reach	135750.0		36114.52	974.74	997.63	997.97	6.27	11209.37	1137.86	118.2	147.6
Reach	135645.0		36125.79	974.28	997.66	997.82	4.57	15278.8	1470.74	118.8	148.2
Reach	135439.0		36116.61	974.2	996.78	997.94	8.96	4504.79	1392.64	118.8	148.8
Reach	135368.0	US Route 52 NB and SB	Bridge								
Reach	135112.0		36092.96	973.93	995.53	996.69	8.75	4230.98	1309.28	119.4	149.4
Reach	134750.0		36093.59	973.28	995.8	995.89	3.14	14993.47	1228.65	120.6	150.6
Reach	134500.0		36080.81	972.45	995.76	995.85	2.79	15444.84	1390.02	122.4	152.4
Reach	134250.0		36082.38	970.69	995.69	995.79	3.43	14731.75	1483.11	123.6	154.2
Reach	134000.0		36082.84	970.09	995.66	995.74	3.3	17799.67	1696.21	124.8	156
Reach	133750.0		36078.01	968.78	995.57	995.67	3.49	15378.39	2209.02	126	158.4
Reach	133500.0		39028.64	968.6	995.53	995.62	3.47	19763.28	2356.05	127.2	159.6
Reach	133250.0		39152.52	968.3	995.49	995.6	3.76	20733.96	2185.75	128.4	160.8
Reach	133140.0		33649.24	968.15	995.02	995.43	6.56	11457.16	2077.34	128.4	162.6
Reach	133110.0	Carter Street (Route 2116)	Bridge								
Reach	133061.0		35600.98	968.15	989.08	995.25	19.97	1796.34	1387.35	129	163.2
Reach	132750.0		37384.08	967.17	989.98	990.84	8.01	6357.75	715.93	129	163.8
Reach	132500.0		35895.64	965.93	989.32	990.43	9.13	5514.87	611.87	129.6	164.4
Reach	132250.0		36702.91	965.63	989.59	989.86	5.3	11818.03	894.97	130.2	165
Reach	132000.0		35823.98	965.39	989.23	989.62	5.98	9373.85	671.43	130.8	166.2
Reach	131750.0		35395.99	965.34	988.64	989.47	8.15	6000.58	498.03	131.4	167.4
Reach	131500.0		34918.6	965.28	988.17	989	8.07	5089.04	480.74	132	168
Reach	131250.0		34722.63	965.21	987.91	988.58	7.41	6514.74	738.79	132.6	168.6
Reach	131000.0		34816.42	964.94	988	988.29	5	8424.65	871.29	133.2	169.2
Reach	130750.0		34815	964.67	987.97	988.17	3.74	9860.53	849.59	134.4	170.4
Reach	130500.0		34813.2	964.35	987.97	988.11	3.29	12269.17	996.01	135.6	171
Reach	130250.0		34728.38	963.55	987.84	988.03	4.13	10270.84	862.57	136.8	172.2
Reach	130000.0		34646.76	962.58	987.74	987.94	4.19	9825.04	782.43	137.4	172.8
Reach	129750.0		34566.57	961.87	987.58	987.9	5.54	9264.87	740.06	138.6	173.4
Reach	129500.0		34486.49	961.8	987.44	987.86	6.39	9192.78	698.99	139.2	174
Reach	129250.0		34406.87	961.73	987.37	987.7	5.78	10379.19	887.99	139.8	175.2
Reach	129000.0		34481.16	961.47	987.39	987.55	3.92	13583.36	1033.57	140.4	176.4
Reach	128778.0		34475.79	961.13	987.38	987.49	3.27	16750.25	1352.91	141.6	177.6
Reach	128500.0		34405.22	961.01	987.26	987.38	2.97	12855.38	1001.18	143.4	180.6
Reach	128250.0		37052.19	961.01	987.08	987.3	4.12	10269.11	823.1	144.6	181.8
Reach	128000.0		37271.77	961	987.09	987.22	3.33	13243.52	1031.84	145.2	183
Reach	127750.0		37273.98	961	987.09	987.19	2.9	15502.85	1022	147	184.2
Reach	127500.0		37313.48	961	987.08	987.17	2.89	18364.66	1223.01	148.2	186
Reach	127250.0		37279.68	960.99	987.05	987.15	2.99	18795.35	1224.67	149.4	187.2

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	127000.0		37280.61	960.99	986.9	987.13	5.1	13786	978.99	150.6	188.4
Reach	126750.0		37257.64	960.99	986.4	986.99	6.61	6882.08	433.86	151.2	189.6
Reach	126500.0		37235.13	960.98	986.02	986.78	7.49	6488.88	401.82	151.8	190.8
Reach	126250.0		37212.82	960.98	985.58	986.5	8.35	5786.86	387.4	152.4	191.4
Reach	126000.0		37215.66	960.97	985.29	986.14	8.02	5765.4	392.89	153	192
Reach	125750.0		37194.86	960.96	984.64	985.78	8.95	5132.73	355.85	153.6	192.6
Reach	125500.0		37147.8	960.94	983.96	985.35	9.84	4549.39	289.57	154.2	193.2
Reach	125250.0		37094.71	960.91	982.97	984.79	10.93	3706	245.91	154.2	193.8
Reach	125000.0		37097.65	960.89	983.2	984.27	8.46	4695.71	303.51	154.8	193.8
Reach	124750.0		37100.46	960.88	982.88	983.86	8.29	5061.29	326.62	155.4	194.4
Reach	124500.0		37048.34	960.68	982.29	983.44	9.2	5008.69	320.11	156	195
Reach	124250.0		36935.92	960.47	981.5	982.9	9.67	4153.2	248.56	156	195.6
Reach	124000.0		36746.03	960.24	980.44	982.24	11.11	3748.37	248.2	156.6	196.2
Reach	123750.0		36662.72	960.03	979.84	981.4	10.42	4038.85	276.94	157.2	196.8
Reach	123500.0		36695.55	959.78	980.13	980.68	6.72	6531.92	482.45	157.8	197.4
Reach	123250.0		36699.79	959.19	980.05	980.4	5.1	7877.97	555.58	158.4	198
Reach	123100.0	Flow into mine	Lat Struct								
Reach	123000.0		36677.06	956.66	979.71	980.22	6.56	6617.81	446.91	159	198.6
Reach	122750.0		36602.49	955.91	978.83	979.96	9.17	4975.11	332.55	159.6	199.2
Reach	122500.0		36551.63	954.48	978.3	979.44	9.25	4665.9	295.17	160.2	199.8
Reach	122250.0		36554.42	953.93	978.38	978.98	7.06	7196.32	447.73	160.2	200.4
Reach	122000.0		36557.8	952.46	978.22	978.71	5.96	7453.67	448.07	160.8	201.6
Reach	121728.0		36513.1	952.35	977.85	978.5	7.27	6834.79	439.03	162	202.2
Reach	121500.0		36491.77	951.82	977.49	978.24	7.38	5678.19	344.36	162	202.8
Reach	121250.0		36470.64	950.5	977.15	978	8	6096.59	370.59	162.6	203.4
Reach	121000.0		36473.97	950.17	977.05	977.71	7.04	6756.29	388.42	163.2	204.6
Reach	120750.0		36454.49	949.87	976.73	977.51	7.75	6639.05	405.72	163.8	205.2
Reach	120500.0		36457.15	949.51	976.49	977.24	7.59	6655.57	426.8	164.4	205.8
Reach	120250.0		36438.84	948.87	976.42	976.95	6.5	7083.31	460.28	165	206.4
Reach	120000.0		36441.79	948.73	976.22	976.74	6.54	7030.64	465.03	165.6	207.6
Reach	119750.0		36444.31	948.31	976.21	976.54	4.78	8945.14	535.81	166.2	208.2
Reach	119500.0		36389.42	947.94	975.21	976.41	9.36	4518.82	286.59	166.8	208.8
Reach	119250.0		36593.22	947.51	974.56	975.94	9.9	4511.68	293.6	167.4	209.4
Reach	119000.0		36612.23	947.11	974.84	975.4	6.49	7237.81	452.74	168	210
Reach	118750.0		36612.5	946.71	974.84	975.21	5.41	8946.54	507.04	168.6	211.2
Reach	118500.0		36598.33	946.35	974.62	975.1	6.31	8495.55	502.73	169.2	211.8
Reach	118250.0		36599.53	945.94	974.36	974.93	6.81	7065.4	377.02	169.8	213
Reach	118000.0		36587.41	945.62	973.73	974.74	8.46	5335.84	288.53	170.4	213.6
Reach	117750.0		36575.09	945.11	973.2	974.41	9.17	4742.44	261.04	171	214.2
Reach	117500.0		36547.46	944.64	972.32	973.99	10.98	4208.91	270.64	171.6	214.8

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	117250.0		36533.27	944.62	972.02	973.37	9.68	4324.99	277.16	171.6	215.4
Reach	117000.0		36518.95	944.59	971.8	972.92	8.8	4462.6	288.42	172.2	215.4
Reach	116750.0		36504.54	944.56	971.43	972.53	8.9	4570.16	290.74	172.8	216
Reach	116500.0		36489.62	944.54	970.91	972.17	9.52	4984.55	337.52	173.4	216.6
Reach	116250.0		36490.77	944.52	970.72	971.7	8.28	5369.48	344.81	173.4	217.2
Reach	116000.0		36476.35	944.47	970.37	971.35	8.23	5153.83	340.89	174	217.8
Reach	115750.0		36462	944.47	970.06	971.02	8.26	5541.51	357.36	174.6	218.4
Reach	115500.0		36447.51	944.45	969.66	970.66	8.58	5475.3	358.24	175.2	219
Reach	115250.0		36433.22	944.42	969.43	970.3	7.99	5699.33	358.8	175.8	219.6
Reach	115000.0		36434.47	944.39	969.26	969.97	7.23	6408.26	446.3	176.4	220.2
Reach	114750.0		36404.53	944.23	968.43	969.66	9.51	4897.19	347.64	177	220.8
Reach	114500.0		36371.8	944.07	967.86	969.16	9.81	4987.06	349.04	177	221.4
Reach	114250.0		36336.46	943.87	967.34	968.64	9.64	4763.28	347.52	177.6	222
Reach	114000.0		36276.83	943.62	966.59	968.13	10.51	4515.27	364.7	178.2	222.6
Reach	113750.0		36256.55	941.53	966.45	967.53	8.85	5375.27	427.93	178.2	223.2
Reach	113500.0		36235.91	939.85	965.98	967.11	9.19	5123.12	418.08	178.8	223.8
Reach	113250.0		36192.62	939.35	965.66	966.61	8.57	5015.33	382.87	179.4	224.4
Reach	113000.0		36097.51	939.22	964.91	966.21	9.66	4760.03	354.33	180	225
Reach	112750.0		36123.65	939.07	964.94	965.68	7.03	5689.54	335.42	180.6	225.6
Reach	112500.0		35938.8	938.93	963.81	965.4	10.69	4171.05	416.41	180.6	226.2
Reach	112250.0		35939.91	938.53	963.73	964.8	9.39	5236.18	542.88	181.2	226.8
Reach	112000.0		35855.31	938.41	963.13	964.37	9.57	4521.22	415.85	181.8	227.4
Reach	111750.0		35911.35	938.11	963.37	963.94	6.59	6486.89	373.39	182.4	227.4
Reach	111500.0		35858.72	937.04	962.98	963.74	7.23	5790.93	334	183	228.6
Reach	111250.0		35805	937	962.5	963.48	8.22	5186.44	335.13	183.6	229.2
Reach	111000.0		35750.41	936.99	962.1	963.09	8.53	5117.73	336.94	183.6	229.8
Reach	110750.0		35695.42	936.99	961.61	962.62	8.65	4697.59	318.92	184.2	230.4
Reach	110500.0		35640.17	936.98	961.18	962.21	8.86	4856.15	339.34	184.8	231
Reach	110250.0		35641.56	936.81	961.07	961.81	7.64	5661.69	407.19	185.4	231.6
Reach	110000.0		35616.39	936.57	960.74	961.54	8.2	6760.53	487	186	232.2
Reach	109750.0		35641.1	936.29	960.77	961.17	6.47	9680.04	739.34	186.6	232.8
Reach	109500.0		35619.28	936.06	960.65	960.92	5.03	10055.56	900.74	187.2	234
Reach	109250.0		35620.17	935.98	960.54	960.79	4.98	10759.18	992.71	187.8	235.2
Reach	109000.0		35621.34	935.9	960.42	960.64	4.54	10710.44	858.6	189	236.4
Reach	108750.0		35622.14	935.81	960.26	960.52	4.52	9020.72	697.53	189.6	237.6
Reach	108500.0		35622.73	935.63	960.11	960.41	4.78	8244.35	661.41	190.8	238.2
Reach	108250.0		35623.56	935.23	960.02	960.3	4.9	8654.34	667.37	191.4	239.4
Reach	108000.0		35624.73	934.85	959.98	960.2	4.72	11177.78	821.82	192.6	240
Reach	107750.0		35621.93	934.57	959.87	960.07	4.06	10340.44	897.63	193.2	241.8
Reach	107500.0		35619.75	934.43	959.83	959.99	3.5	11471.63	987.47	194.4	243

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	107250.0		35592.66	934.29	958.47	960.09	10.22	3493.72	1050.95	195	243.6
Reach	107118.0	Yadkin Valley Railroad #2	Bridge								
Reach	107000.0		35592.66	934.12	958.43	959.45	8.28	4441.63	474.12	195.6	244.2
Reach	106750.0		35591.01	933.95	958.58	959.18	6.64	6358.94	870.39	196.2	244.8
Reach	106500.0		35567.11	933.76	957.92	958.9	8.59	5278.72	997.2	196.8	245.4
Reach	106250.0		35475.73	933.61	957.05	958.34	9.64	4374.13	695.33	196.8	246
Reach	106000.0		35363.85	933.46	955.72	957.53	11.01	3393.22	302.96	197.4	246.6
Reach	105750.0		31821.19	932.49	949.2	952.8	15.3	2108.53	198.51	198	246.6
Reach	105664.0		34327.49	931.63	950.8	952.43	10.26	3362.44	262.37	198	246.6
Reach	105643.0	Sheep Farm Road (Route 2119)	Bridge								
Reach	105515.0		34615.4	931.1	951.3	952.3	8.1	4327.0	753.1	198.0	247.2
Reach	105250.0		34950.4	930.5	951.7	951.8	3.9	12243.4	1446.4	198.6	247.8
Reach	105000.0		34951.3	929.7	951.7	951.8	2.6	18339.0	2344.3	200.4	249.6
Reach	104750.0		34952.1	929.5	951.7	951.7	2.0	19563.2	2256.1	202.2	250.2
Reach	104500.0		34951.9	929.3	951.7	951.7	2.2	21486.5	2428.8	204.0	250.8
Reach	104250.0		34951.2	929.0	951.6	951.7	2.2	19924.8	2190.7	205.8	252.0
Reach	104000.0		34950.1	928.9	951.6	951.7	2.5	18695.9	1866.1	207.6	253.2
Reach	103750.0		34949.0	928.7	951.6	951.6	2.5	18186.1	1803.4	209.4	254.4
Reach	103500.0		34917.7	928.5	951.5	951.6	2.4	17001.2	1704.6	211.2	255.6
Reach	103250.0		34918.2	928.3	951.5	951.6	2.6	16686.6	1598.6	212.4	256.8
Reach	103000.0		34918.8	928.1	951.5	951.5	2.6	16616.1	1519.4	214.2	258.6
Reach	102891.0		34918.8	928.0	951.5	951.5	2.5	16698.1	1491.6	214.8	259.2
Reach	102791.0		34849.5	927.9	950.8	951.6	7.8	5166.0	1397.9	215.4	259.8
Reach	102700.0	Interstate 74 EB and WB	Bridge								
Reach	102432.0		34666.0	927.7	950.1	950.7	7.1	6337.5	1596.0	216.0	261.0
Reach	102000.0		34665.1	927.7	950.1	950.1	3.3	17080.1	1550.5	217.2	262.8
Reach	101750.0		34664.2	927.5	950.0	950.1	2.5	19603.3	1640.2	219.0	264.6
Reach	101500.0		34662.5	927.3	949.9	950.0	3.6	16946.6	1364.9	220.2	266.4
Reach	101250.0		34648.0	927.1	949.8	950.0	5.0	13073.3	1012.0	221.4	267.0
Reach	101000.0		34635.0	926.9	949.5	949.9	6.7	9180.2	710.5	222.0	267.6
Reach	100750.0		34622.1	926.3	949.0	949.8	7.9	6591.6	538.3	222.6	268.2
Reach	100500.0		34595.4	925.7	948.4	949.4	8.8	5060.3	391.6	223.2	268.8
Reach	100250.0		34567.5	925.6	948.0	949.0	8.5	5344.9	381.3	223.2	269.4
Reach	100000.0		34582.7	925.4	948.1	948.6	6.4	6271.2	461.2	223.8	270.0
Reach	99750.0		34583.1	925.2	948.0	948.4	6.0	7546.4	602.8	225.0	271.2
Reach	99500.0		34572.3	925.1	947.9	948.2	4.5	9786.7	765.4	225.6	272.4
Reach	99250.0		34573.3	924.8	947.8	948.0	4.7	8688.6	675.4	226.2	273.0
Reach	99000.0		34573.9	924.6	947.6	947.9	5.1	7818.8	539.4	227.4	274.2
Reach	98750.0		34564.8	924.3	947.2	947.7	6.4	6873.9	463.3	228.0	274.8
Reach	98500.0		34758.7	924.0	946.7	947.5	7.6	5893.4	378.0	228.6	276.0

HEC-RAS Plan: Sunny Day Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	98250.0		34753.3	923.7	946.2	947.2	8.6	5118.9	355.4	229.2	276.6
Reach	98000.0		34755.9	923.5	945.9	946.8	7.9	5230.7	394.7	229.8	277.2
Reach	97750.0		34750.8	923.2	945.5	946.4	8.0	5126.2	388.8	230.4	277.8
Reach	97500.0		34752.6	922.7	945.3	946.0	7.9	6711.3	558.7	230.4	278.4
Reach	97250.0		34749.6	922.1	944.7	945.5	8.3	6027.7	483.2	231.0	279.0
Reach	97000.0		34745.9	921.8	944.0	945.1	9.4	4956.6	373.5	231.6	279.6
Reach	96750.0		34742.9	921.5	943.5	944.6	9.0	4965.8	354.5	232.2	280.2
Reach	96500.0		34739.7	921.2	942.9	944.1	9.3	4660.6	332.1	232.8	280.8
Reach	96250.0		34736.5	921.0	942.0	943.5	10.4	4103.9	280.3	232.8	281.4
Reach	96000.0		34739.1	920.7	941.8	942.8	8.8	4995.9	360.7	233.4	282.0
Reach	95750.0		34736.2	920.6	941.2	942.3	9.0	4787.6	375.3	234.0	282.6
Reach	95500.0		34739.3	920.3	941.0	941.8	7.7	5526.0	371.4	234.6	283.2
Reach	95250.0		34741.6	919.5	940.5	941.4	7.5	4820.3	316.3	235.2	283.8
Reach	95000.0		34739.7	919.1	939.9	941.0	8.7	4719.4	322.9	235.2	284.4
Reach	94750.0		34737.7	918.9	939.0	940.5	10.7	4215.6	310.0	235.8	285.0
Reach	94500.0		34730.4	918.8	938.2	939.7	10.7	4199.1	315.4	236.4	285.6
Reach	94250.0		34733.1	918.5	937.6	939.0	10.1	4274.7	321.8	236.4	285.6
Reach	94000.0		34730.6	918.2	936.7	938.3	10.2	3518.1	258.6	237.0	286.2
Reach	93750.0		34715.1	917.9	935.4	937.4	11.5	3199.2	245.6	237.6	286.8
Reach	93500.0		34694.7	916.2	934.4	936.4	11.5	3391.9	255.2	237.6	287.4
Reach	93250.0		34705.6	913.5	934.8	935.5	7.2	5409.5	364.0	238.2	287.4
Reach	93000.0		34701.0	912.8	934.4	935.2	7.8	5393.9	421.5	238.8	288.0
Reach	92750.0		34703.6	912.3	934.2	934.9	7.6	5848.9	411.1	239.4	289.2
Reach	92500.0		34706.7	911.9	933.6	934.5	8.3	5214.6	352.6	240.0	289.8
Reach	92250.0		34703.0	911.5	933.1	934.1	8.7	4528.0	302.8	240.6	290.4
Reach	92000.0		34699.8	911.1	932.6	933.7	8.6	4788.0	340.3	240.6	291.0
Reach	91750.0		34696.4	910.7	932.3	933.2	7.9	5139.2	319.7	241.2	291.6
Reach	91500.0		34699.1	910.3	931.9	932.8	8.1	4647.9	297.3	241.8	292.2
Reach	91250.0		34696.4	909.9	931.4	932.5	8.5	5088.9	359.4	242.4	292.8
Reach	91000.0		34699.0	909.5	931.0	932.1	8.9	4962.3	316.2	243.0	293.4
Reach	90750.0		34696.5	909.1	930.5	931.6	9.0	4581.1	296.2	243.6	293.4
Reach	90500.0		34694.0	908.8	929.9	931.1	9.2	4334.9	324.4	243.6	294.0
Reach	90250.0		34691.4	908.3	929.3	930.6	9.5	4434.7	314.2	244.2	294.6
Reach	90000.0		34688.3	907.5	928.4	930.0	11.0	4148.0	291.0	244.8	295.2
Reach	89750.0		34684.8	906.8	928.3	929.3	8.3	4484.0	313.0	244.8	295.8
Reach	89500.0		34681.9	906.7	927.9	928.9	8.2	4573.3	336.6	245.4	296.4
Reach	89250.0		34684.6	906.6	927.4	928.4	9.1	4550.3	335.4	246.0	297.0
Reach	89000.0		34675.3	905.9	926.7	927.9	9.4	4018.5	308.5	246.6	297.6
Reach	88750.0		34678.4	904.3	926.3	927.4	9.0	4691.3	329.9	247.2	297.6
Reach	88500.0		34675.3	903.4	926.1	927.0	8.1	5478.2	376.0	247.2	298.2

HEC-RAS Plan: Sunny Day Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	88250.0		34671.9	903.1	925.3	926.5	9.5	3944.2	295.6	247.8	298.8
Reach	88000.0		34652.9	902.9	924.2	926.0	11.5	3909.6	371.3	248.4	299.4
Reach	87750.0		34636.2	902.7	923.1	925.0	11.9	3974.7	363.6	248.4	300.0
Reach	87500.0		34869.0	902.3	923.5	924.1	7.1	5522.1	467.2	249.0	300.6
Reach	87250.0		34874.3	901.9	923.4	923.9	5.6	6759.0	531.9	249.6	301.2
Reach	87000.0		34874.9	901.5	923.2	923.6	6.0	6329.2	510.8	250.2	301.8
Reach	86750.0		34880.2	901.0	922.9	923.4	6.4	5891.6	394.5	251.4	302.4
Reach	86500.0		34881.1	900.5	922.2	923.1	8.1	4646.2	313.2	252.0	303.0
Reach	86250.0		34881.7	899.1	921.7	922.8	8.9	4710.2	298.0	252.0	303.6
Reach	86000.0		34887.7	898.8	921.4	922.4	8.5	5058.7	331.4	252.6	304.2
Reach	85750.0		34890.0	898.5	920.6	921.9	9.5	4252.2	286.5	253.2	304.8
Reach	85500.0		34890.8	898.3	919.8	921.3	10.2	3883.9	274.5	253.8	305.4
Reach	85250.0		34891.8	898.2	919.1	920.7	10.4	3807.8	273.3	253.8	306.0
Reach	85000.0		34892.0	898.0	918.7	920.0	9.9	4223.4	312.4	254.4	306.0
Reach	84750.0		34892.5	897.9	917.7	919.3	10.3	3751.6	272.4	255.0	306.6
Reach	84500.0		34892.5	897.8	917.6	918.7	9.0	4156.0	292.7	255.0	307.2
Reach	84250.0		34892.3	897.7	917.0	918.2	9.1	4124.7	297.9	255.6	307.8
Reach	84000.0		34898.0	897.6	916.7	917.6	8.0	4511.6	340.2	256.2	307.8
Reach	83750.0		34891.3	897.2	916.1	917.2	9.0	4201.1	315.2	256.8	308.4
Reach	83500.0		34903.5	897.2	916.5	916.7	3.4	10819.6	884.7	257.4	309.0
Reach	83250.0		34905.5	894.5	915.6	916.6	8.3	4652.6	312.7	258.0	310.2
Reach	83000.0		34907.0	894.3	914.9	916.2	9.1	4296.9	300.3	258.6	310.8
Reach	82750.0		34903.0	894.1	913.8	915.5	10.9	3725.8	271.2	259.2	311.4
Reach	82500.0		34903.4	893.6	913.1	914.7	10.5	3831.1	278.1	259.2	311.4
Reach	82250.0		34889.6	893.1	912.1	913.9	10.9	3590.1	288.5	259.8	312.0
Reach	82000.0		34902.9	892.3	912.0	913.1	9.0	4760.9	336.2	260.4	312.6
Reach	81750.0		34879.3	892.0	910.8	912.5	10.6	3663.4	274.4	260.4	313.2
Reach	81500.0		34857.9	891.8	909.9	911.6	10.8	3523.9	273.3	261.0	313.2
Reach	81250.0		34854.3	891.0	909.6	910.8	8.9	4112.5	278.5	261.6	313.8
Reach	81000.0		34860.3	889.7	909.3	910.3	8.2	4625.8	307.8	261.6	314.4
Reach	80750.0		34846.4	888.5	908.8	909.8	8.4	4577.8	311.2	262.2	315.0
Reach	80500.0		34831.0	888.5	908.2	909.4	9.0	4481.9	336.5	262.8	315.6
Reach	80250.0		34837.1	887.8	907.9	908.9	8.4	4659.3	340.7	263.4	316.2
Reach	80000.0		34821.0	887.6	907.3	908.4	8.9	4438.2	350.7	264.0	316.8
Reach	79750.0		34827.6	886.1	907.4	907.9	6.3	6864.6	440.0	264.6	317.4
Reach	79500.0		34823.0	885.7	907.0	907.7	6.9	5706.8	342.2	265.2	318.0
Reach	79250.0		34818.5	885.2	906.7	907.4	7.3	5719.6	357.1	265.8	318.6
Reach	79000.0		34825.0	883.4	906.6	907.1	6.2	6376.3	359.0	266.4	319.2
Reach	78750.0		34821.2	882.8	906.0	906.9	8.3	5104.4	343.5	267.0	319.8
Reach	78500.0		34807.3	882.5	905.6	906.6	8.5	4715.1	359.8	267.0	320.4

HEC-RAS Plan: Sunny Day Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	78250.0		34822.2	882.0	905.4	906.2	7.4	5400.2	409.0	267.6	321.0
Reach	78000.0		34812.9	881.4	905.3	905.9	6.4	6039.7	478.9	268.2	322.2
Reach	77750.0		35127.4	880.9	904.9	905.7	7.6	6477.4	528.4	268.8	322.8
Reach	77558.0		35138.4	880.6	904.8	905.4	6.7	6194.3	897.7	269.4	323.4
Reach	77492.0	Ararat Road (Route 2019)	Bridge								
Reach	77372.0		35009.2	880.1	902.4	903.7	9.1	3885.3	797.7	270.0	323.4
Reach	77000.0		35038.7	879.1	902.6	903.1	6.5	6615.0	710.4	270.6	324.6
Reach	76750.0		35030.6	878.8	902.4	902.9	6.1	6795.0	672.9	271.2	325.2
Reach	76500.0		35033.5	878.7	902.4	902.7	5.2	8597.3	788.0	271.8	325.8
Reach	76250.0		35027.3	878.7	902.3	902.6	4.1	9297.5	690.1	273.0	327.0
Reach	76000.0		35022.5	878.7	901.8	902.4	6.8	5740.4	462.8	273.6	327.6
Reach	75750.0		35016.8	878.7	901.7	902.2	6.2	7381.6	547.4	274.2	328.8
Reach	75500.0		35003.1	878.3	901.0	901.9	8.3	5096.7	350.1	274.8	329.4
Reach	75250.0		34986.6	877.8	900.4	901.5	8.8	4773.9	324.9	275.4	330.0
Reach	75000.0		34969.6	877.2	900.0	901.1	9.0	4990.2	348.7	276.0	330.6
Reach	74750.0		34984.0	876.8	900.2	900.6	5.1	7059.9	473.3	276.6	331.2
Reach	74500.0		34987.5	876.6	900.2	900.5	5.0	9481.0	789.8	277.2	331.8
Reach	74250.0		34985.8	876.6	900.0	900.3	5.1	9902.8	959.1	277.8	333.6
Reach	74000.0		34995.8	876.6	899.9	900.2	5.3	9127.1	857.4	279.0	334.8
Reach	73750.0		34992.4	876.6	899.4	900.0	6.6	6064.2	465.9	279.6	335.4
Reach	73500.0		34989.1	876.6	899.2	899.8	6.6	5755.4	420.3	280.2	336.0
Reach	73250.0		34993.4	876.6	899.2	899.6	4.8	8030.2	569.8	280.8	336.6
Reach	73000.0		34992.0	875.9	898.6	899.3	7.4	5300.9	518.9	281.4	337.2
Reach	72750.0		34990.2	875.3	898.2	899.0	7.8	5009.6	373.4	282.0	337.8
Reach	72500.0		34988.9	874.6	897.8	898.7	8.0	5158.4	398.3	282.6	338.4
Reach	72250.0		34988.5	874.1	897.3	898.3	8.5	4791.9	360.7	283.2	339.0
Reach	72000.0		34986.8	874.0	896.4	897.7	9.7	4258.4	328.6	283.8	339.6
Reach	71750.0		34985.4	873.9	895.8	897.1	9.3	4613.0	374.8	283.8	340.2
Reach	71500.0		34976.6	873.8	895.2	896.5	9.9	4552.5	373.1	284.4	340.8
Reach	71250.0		34973.8	873.6	895.0	895.9	8.3	5665.8	467.9	285.0	341.4
Reach	71000.0		34956.5	873.5	893.9	895.4	10.5	4509.0	382.0	285.6	342.0
Reach	70750.0		34961.6	873.3	894.0	894.6	6.0	6581.6	453.9	286.2	342.6
Reach	70500.0		34942.7	871.5	892.9	894.3	9.9	4157.0	306.6	286.2	343.2
Reach	70250.0		34929.3	870.5	892.4	893.7	9.3	4419.5	329.1	286.8	343.8
Reach	70000.0		34914.8	869.6	891.9	893.1	9.3	4819.6	376.4	287.4	344.4
Reach	69750.0		34899.1	868.7	891.6	892.6	9.0	5310.6	376.9	288.0	345.0
Reach	69500.0		34881.2	868.4	891.0	892.2	9.4	4907.6	409.0	288.0	345.6
Reach	69250.0		34861.7	868.1	890.7	891.7	8.8	5202.6	518.3	288.6	346.2
Reach	69000.0		34856.7	867.8	890.6	891.2	6.8	7089.0	739.0	289.2	346.8
Reach	68750.0		34859.7	867.7	890.4	890.9	6.6	7618.7	795.4	289.8	348.0

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	68500.0		34862.0	867.6	890.3	890.7	6.0	8785.4	904.2	290.4	348.6
Reach	68250.0		34856.8	867.4	890.2	890.5	5.3	9159.5	903.0	291.0	349.8
Reach	68000.0		34860.0	866.6	890.1	890.3	4.9	8526.8	866.5	292.2	350.4
Reach	67750.0		34855.6	866.5	889.8	890.2	5.7	7223.1	730.2	292.8	351.0
Reach	67500.0		34858.6	866.1	889.6	890.0	6.1	6912.6	605.5	293.4	351.6
Reach	67250.0		34856.4	865.5	888.9	889.7	7.6	5013.1	377.4	294.0	352.2
Reach	67000.0		34860.8	865.0	888.9	889.4	6.1	6286.1	363.4	294.6	352.8
Reach	66750.0		34851.8	864.9	888.4	889.2	7.4	5557.4	372.5	295.2	353.4
Reach	66500.0		34848.6	864.9	888.0	888.9	8.2	5437.0	376.1	295.8	354.0
Reach	66250.0		34838.3	864.5	887.4	888.6	9.4	4802.9	338.2	296.4	354.6
Reach	66000.0		34834.3	864.4	887.1	888.1	8.6	5196.6	380.5	297.0	355.2
Reach	65750.0		34831.1	864.2	886.7	887.6	8.3	5383.9	415.9	297.6	356.4
Reach	65500.0		34819.1	864.2	886.1	887.2	8.8	4866.7	333.2	297.6	357.0
Reach	65250.0		34795.5	864.1	885.6	886.7	8.9	4813.2	402.4	298.2	357.0
Reach	65000.0		34789.6	860.3	885.2	886.2	8.5	4940.7	432.9	298.8	357.6
Reach	64750.0		34783.1	860.0	885.1	885.8	7.2	6152.2	583.5	299.4	358.2
Reach	64500.0		34782.7	859.6	885.2	885.5	5.5	9462.7	967.8	300.0	359.4
Reach	64210.0		35841.1	859.2	885.0	885.3	4.5	10643.3	910.3	301.2	361.2
Reach	64000.0		35973.8	858.9	884.3	885.2	7.7	5000.5	356.6	301.8	361.8
Reach	63750.0		36139.4	858.6	884.0	884.8	7.6	5345.1	400.6	301.8	362.4
Reach	63500.0		36131.6	858.2	883.6	884.5	8.1	5463.8	433.3	302.4	363.0
Reach	63250.0		36117.6	857.9	882.9	884.1	9.3	4346.3	329.0	303.0	363.6
Reach	63000.0		36102.4	857.5	882.4	883.5	9.0	4376.1	343.7	303.6	363.6
Reach	62750.0		36085.6	857.2	882.0	883.1	8.6	4555.6	349.0	304.2	364.2
Reach	62500.0		36078.1	856.8	881.6	882.6	8.2	5054.3	371.6	304.2	364.8
Reach	62250.0		36059.6	856.5	881.2	882.2	8.3	4870.1	370.7	304.8	365.4
Reach	62000.0		36050.6	856.1	880.9	881.9	8.0	5173.7	449.6	305.4	366.0
Reach	61750.0		36030.3	855.8	880.5	881.5	8.5	5049.6	536.8	306.0	366.6
Reach	61500.0		36042.6	855.4	880.8	881.0	4.4	9704.6	824.4	306.6	367.2
Reach	61250.0		36012.7	855.1	880.0	880.9	8.2	5375.7	512.3	307.2	368.4
Reach	61130.0		36573.6	854.9	879.8	880.7	8.0	5334.4	447.4	307.8	368.4
Reach	61028.0		36750.7	854.7	879.6	880.5	7.7	5326.2	508.3	307.8	369.0
Reach	60943.0	Route 268	Bridge								
Reach	60784.0		36740.2	854.4	879.7	880.2	6.5	6682.4	836.1	308.4	369.6
Reach	60250.0		36672.9	853.7	878.1	879.5	9.6	4205.7	323.8	309.6	370.8
Reach	60000.0		36665.0	853.3	877.9	879.0	8.6	5572.9	563.7	310.2	371.4
Reach	59750.0		36630.0	853.0	877.4	878.4	8.6	5378.6	565.0	310.2	372.0
Reach	59500.0		36620.3	852.6	877.0	877.9	8.1	5556.7	518.2	310.8	372.6
Reach	59250.0		36610.4	852.3	876.9	877.5	6.4	5850.9	355.8	311.4	373.2
Reach	59145.0		36625.2	852.1	877.1	877.4	4.6	8040.4	417.3	312.0	373.2

HEC-RAS Plan: Sunny Day Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	59115.0	Pilot Power Dam Road	Bridge								
Reach	59052.0		36625.2	852.0	877.1	877.3	4.4	8492.3	463.8	312.0	373.8
Reach	58750.0		36604.1	851.4	876.7	877.2	6.1	6598.7	446.5	313.2	374.4
Reach	58500.0		36568.2	850.4	876.2	877.0	7.7	5340.2	388.9	313.8	375.0
Reach	58250.0		36572.2	849.8	876.1	876.6	6.0	6347.1	436.0	314.4	376.2
Reach	58000.0		36562.0	849.7	875.8	876.4	6.9	6800.8	511.1	315.0	376.8
Reach	57750.0		36565.0	849.4	875.8	876.2	5.7	8196.2	633.5	315.6	377.4
Reach	57500.0		36568.4	849.3	875.7	876.1	5.3	8327.9	541.5	316.2	378.6
Reach	57250.0		36561.5	848.8	875.5	875.9	5.8	7497.2	548.5	317.4	379.8
Reach	57000.0		36553.4	848.3	875.3	875.8	5.9	7489.9	496.5	318.0	380.4
Reach	56750.0		36556.6	847.8	875.3	875.6	5.1	8901.1	507.4	318.6	381.0
Reach	56500.0		36560.6	847.5	875.2	875.5	4.6	8999.4	569.3	319.2	382.2
Reach	56250.0		36545.3	847.2	874.9	875.3	5.7	6948.7	415.7	320.4	383.4
Reach	56000.0		36548.5	847.0	874.6	875.1	6.1	6252.6	374.5	321.0	384.0
Reach	55750.0		36533.6	846.7	874.1	874.9	7.5	5885.5	363.2	321.6	384.6
Reach	55500.0		36537.0	846.4	874.0	874.6	6.3	6163.7	378.8	322.2	385.2
Reach	55250.0		36531.4	846.2	873.7	874.3	6.8	5620.3	358.9	322.8	385.8
Reach	55000.0		36506.2	846.0	873.0	873.9	8.0	4881.0	304.8	323.4	386.4
Reach	54750.0		36499.6	845.7	872.7	873.4	6.5	5681.5	362.2	324.0	387.0
Reach	54500.0		36482.1	845.5	872.1	873.0	8.0	5184.8	342.1	324.6	387.6
Reach	54250.0		36474.5	845.2	871.8	872.7	7.7	5378.4	323.5	325.2	388.2
Reach	54000.0		36466.7	844.3	871.6	872.3	6.8	5701.7	348.6	325.8	388.8
Reach	53750.0		36449.0	843.6	871.2	871.9	7.0	5925.3	385.3	326.4	389.4
Reach	53500.0		36417.5	843.5	870.7	871.5	7.8	6037.0	387.6	327.0	390.6
Reach	53250.0		36408.1	843.5	870.5	871.1	6.9	6319.6	433.1	327.6	391.2
Reach	53000.0		36399.7	843.5	870.2	870.8	6.7	6787.3	477.1	328.2	391.8
Reach	52750.0		36414.5	843.2	870.2	870.6	5.4	8006.1	581.5	328.8	392.4
Reach	52500.0		36395.7	842.8	869.9	870.4	6.0	7464.8	491.4	329.4	393.6
Reach	52250.0		36399.1	842.5	869.7	870.2	5.8	6978.4	474.7	330.0	394.2
Reach	52000.0		36391.7	842.1	869.5	870.0	5.7	7229.2	525.2	330.6	394.8
Reach	51750.0		36362.3	841.8	868.9	869.8	8.2	5959.7	383.6	331.2	395.4
Reach	51500.0		36342.6	841.4	868.4	869.4	8.3	5499.5	365.0	331.8	396.0
Reach	51250.0		36334.5	841.1	868.1	869.0	7.8	5718.1	368.5	332.4	396.6
Reach	51000.0		36348.8	840.7	868.3	868.7	5.1	7308.1	463.6	333.0	397.8
Reach	50750.0		36319.3	840.4	867.9	868.4	5.8	7077.2	494.6	333.6	398.4
Reach	50500.0		36323.0	840.0	867.8	868.2	5.7	8362.7	583.8	334.8	399.6
Reach	50250.0		36325.8	839.7	867.8	868.0	4.7	9840.0	704.0	335.4	400.2
Reach	50000.0		36329.8	839.3	867.8	867.9	3.3	15186.6	882.2	336.6	402.0
Reach	49750.0		36321.0	839.0	867.3	867.9	6.6	6377.0	390.1	337.2	403.2
Reach	49500.0		36673.3	838.6	866.9	867.6	7.2	5924.9	317.2	337.8	403.8

HEC-RAS Plan: Sunny Day Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	49250.0		36658.4	838.3	866.4	867.2	7.3	5051.0	269.8	338.4	404.4
Reach	49000.0		36632.6	837.9	865.5	866.7	9.3	4674.0	289.5	339.0	405.0
Reach	48750.0		36614.9	837.6	865.2	866.2	8.3	4634.9	282.9	339.6	405.6
Reach	48500.0		36596.3	836.8	864.8	865.8	8.0	5076.1	309.8	340.2	405.6
Reach	48250.0		36587.7	836.6	864.3	865.2	7.6	4788.3	288.4	340.2	406.2
Reach	48000.0		36567.5	836.5	864.0	864.7	6.9	5342.0	299.8	340.8	406.8
Reach	47750.0		36558.5	836.1	864.0	864.4	4.6	7510.7	502.9	342.0	407.4
Reach	47500.0		36560.7	835.8	863.9	864.2	4.7	8238.3	595.8	342.6	408.6
Reach	47250.0		36572.7	835.5	863.9	864.1	4.4	9630.6	716.0	343.8	409.2
Reach	47000.0		36565.6	835.1	863.9	864.0	3.4	11589.0	865.7	344.4	410.4
Reach	46750.0		36568.4	834.8	863.6	863.9	5.0	8068.8	452.0	345.6	411.6
Reach	46500.0		36554.3	834.4	863.2	863.8	6.6	7187.0	377.8	346.2	412.8
Reach	46250.0		36556.8	834.1	863.0	863.5	5.4	6796.1	349.7	346.8	413.4
Reach	46000.0		36551.3	833.3	862.6	863.3	6.8	6617.5	399.1	348.0	414.0
Reach	45750.0		36545.9	833.2	862.3	863.1	7.2	5950.9	352.9	348.6	414.6
Reach	45500.0		36548.1	833.0	862.1	862.8	6.9	6173.0	351.1	349.2	415.8
Reach	45250.0		36527.0	832.7	861.5	862.4	8.2	5194.3	313.6	349.2	416.4
Reach	45000.0		36529.4	832.3	861.4	862.0	6.7	5689.4	328.8	349.8	417.0
Reach	44750.0		36515.9	832.0	860.9	861.7	7.7	5574.2	311.5	350.4	417.6
Reach	44500.0		36510.0	831.6	860.5	861.4	8.1	5294.5	318.2	351.0	418.2
Reach	44250.0		36504.2	831.3	860.2	861.1	7.7	5390.8	323.3	351.6	418.8
Reach	44000.0		36498.1	830.9	859.9	860.8	7.7	5346.4	334.0	352.2	419.4
Reach	43750.0		36483.4	830.6	859.5	860.5	8.0	5337.0	346.9	352.8	420.0
Reach	43500.0		36494.3	830.2	859.5	860.1	6.3	5927.3	399.7	353.4	420.6
Reach	43250.0		36480.5	829.9	859.0	859.7	7.1	5464.8	334.9	354.0	421.2
Reach	43000.0		36474.0	829.5	858.8	859.4	6.7	7170.2	471.8	354.6	421.8
Reach	42750.0		36476.6	829.2	858.8	859.1	5.1	9152.8	628.2	355.2	422.4
Reach	42500.0		36479.0	828.8	858.6	858.9	4.8	8769.4	619.0	356.4	423.6
Reach	42250.0		36474.8	828.5	858.2	858.7	5.8	6455.0	365.8	357.0	424.2
Reach	42000.0		36455.7	828.1	857.3	858.4	8.5	4638.0	290.5	357.6	424.8
Reach	41750.0		36450.4	827.8	856.9	857.8	7.7	4799.3	288.8	358.2	425.4
Reach	41500.0		36444.8	827.4	856.7	857.4	7.5	6600.3	397.0	358.8	426.0
Reach	41250.0		36440.1	827.1	856.5	857.0	5.9	6661.5	445.2	359.4	427.2
Reach	41000.0		36435.0	826.7	855.9	856.7	7.4	6964.9	489.1	360.0	427.8
Reach	40750.0		36429.6	826.4	855.8	856.4	6.9	8275.3	604.3	360.6	428.4
Reach	40500.0		36432.9	826.0	855.4	856.2	7.3	6836.0	474.7	361.2	429.6
Reach	40250.0		36428.7	825.7	854.9	855.9	8.1	5260.7	289.4	361.8	430.2
Reach	40000.0		36417.4	825.3	854.4	855.6	8.8	4900.2	305.9	361.8	430.8
Reach	39750.0		36419.8	825.0	854.3	855.2	7.9	5568.6	385.1	362.4	431.4
Reach	39500.0		36416.2	824.6	854.3	854.9	6.7	6338.4	411.5	363.0	432.0

HEC-RAS Plan: Sunny Day Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	39250.0		36418.7	824.3	853.8	854.7	7.6	5662.3	321.5	363.6	432.6
Reach	39000.0		36415.0	823.9	853.7	854.4	7.1	6091.8	346.4	364.2	433.2
Reach	38750.0		36417.4	823.6	853.5	854.2	7.0	6150.6	391.2	364.8	433.8
Reach	38500.0		36414.2	823.2	853.3	854.0	7.3	6354.7	477.0	365.4	435.0
Reach	38250.0		36417.0	822.9	852.9	853.7	7.6	5600.4	371.9	366.0	435.6
Reach	38000.0		36414.4	822.5	852.5	853.3	7.3	5024.5	294.8	366.6	436.2
Reach	37750.0		36411.8	822.2	851.8	852.8	8.3	4815.5	287.9	367.2	436.8
Reach	37500.0		36414.0	821.8	851.8	852.5	7.1	5901.9	326.3	367.8	437.4
Reach	37250.0		36406.5	821.5	851.1	852.2	8.9	4821.8	308.3	368.4	438.0
Reach	37000.0		36408.9	821.1	851.0	851.8	7.2	5086.5	259.1	368.4	438.6
Reach	36750.0		36406.4	820.8	850.6	851.3	6.8	5442.3	311.7	369.0	439.2
Reach	36500.0		36408.6	820.4	850.3	850.9	6.3	6163.9	407.9	369.6	439.8
Reach	36250.0		36401.3	820.1	849.5	850.6	8.7	5148.8	353.1	370.2	440.4
Reach	36000.0		36398.4	819.7	848.9	850.2	9.3	4396.8	298.1	370.8	441.0
Reach	35750.0		36405.1	819.4	849.3	849.8	5.8	6787.0	320.9	371.4	441.6
Reach	35500.0		36398.6	819.0	848.6	849.6	8.2	5240.0	381.8	372.0	442.2
Reach	35250.0		36396.7	818.7	848.2	849.3	8.6	5132.8	349.5	372.6	442.8
Reach	35000.0		36399.0	818.3	847.8	848.9	8.7	5137.5	324.0	373.2	443.4
Reach	34750.0		36397.0	818.0	847.4	848.5	8.7	4863.8	313.2	373.2	444.0
Reach	34500.0		36399.1	817.6	847.1	848.2	8.5	4929.0	282.8	373.8	444.6
Reach	34250.0		36397.3	817.3	846.6	847.8	8.9	4505.9	274.8	374.4	444.6
Reach	34000.0		36390.9	816.9	846.0	847.4	9.7	4481.4	273.0	375.0	445.2
Reach	33750.0		36388.4	816.6	845.8	846.9	8.6	4623.2	307.9	375.6	445.8
Reach	33500.0		36391.2	816.2	845.4	846.5	8.5	4919.2	332.3	375.6	446.4
Reach	33250.0		36389.0	815.9	845.0	846.1	8.9	4656.6	306.4	376.2	447.0
Reach	33000.0		36391.3	815.5	844.7	845.7	8.4	4903.2	300.6	376.8	447.6
Reach	32750.0		36389.3	815.2	844.6	845.4	7.5	6172.4	393.4	377.4	448.2
Reach	32500.0		36391.6	814.8	844.1	845.1	8.2	5104.6	306.2	378.0	448.8
Reach	32250.0		36385.5	814.5	843.5	844.7	9.0	4566.1	279.9	378.6	449.4
Reach	32000.0		36383.4	814.1	843.1	844.3	9.2	4333.1	249.7	378.6	450.0
Reach	31750.0		36385.9	813.8	842.6	843.9	9.1	4300.1	261.0	379.2	450.6
Reach	31500.0		36379.3	813.4	842.2	843.5	9.2	4285.3	253.4	379.8	450.6
Reach	31250.0		36377.1	813.1	841.8	843.1	9.1	4298.4	289.2	380.4	451.2
Reach	31000.0		36379.6	812.7	841.7	842.6	8.0	4678.2	282.2	380.4	451.8
Reach	30750.0		36382.1	812.4	841.5	842.3	7.7	5472.6	336.6	381.0	452.4
Reach	30500.0		36380.1	812.0	841.0	842.0	8.2	4959.5	331.5	381.6	453.0
Reach	30250.0		36378.0	811.7	840.8	841.7	7.6	5272.0	319.5	382.2	453.6
Reach	30000.0		36371.2	811.3	840.2	841.4	9.0	4605.7	292.0	382.8	454.2
Reach	29750.0		36373.5	811.0	839.9	841.0	8.5	4533.4	277.1	383.4	454.8
Reach	29500.0		36375.9	810.6	839.6	840.6	8.5	4680.0	300.7	384.0	455.4

HEC-RAS Plan: Sunny Day Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	29250.0		36373.7	810.3	839.4	840.3	7.8	5625.3	358.5	384.0	456.0
Reach	29000.0		36371.8	809.9	839.2	839.9	7.3	6548.4	458.2	384.6	456.6
Reach	28750.0		36374.2	809.6	838.8	839.6	7.6	6052.4	497.1	385.2	457.2
Reach	28500.0		36371.8	809.2	838.4	839.4	8.5	5456.7	552.8	385.8	457.8
Reach	28250.0		36370.2	808.9	838.0	839.0	8.3	5133.7	437.0	386.4	458.4
Reach	28000.0		36369.3	808.5	837.3	838.6	9.4	4567.1	274.4	387.0	459.0
Reach	27750.0		36369.0	808.2	837.0	838.1	8.8	4641.8	315.8	387.0	459.6
Reach	27500.0		36521.6	807.8	836.2	837.6	9.6	4058.1	270.7	387.6	460.2
Reach	27250.0		36520.4	807.5	835.9	837.1	9.1	4401.1	300.1	388.2	460.8
Reach	27000.0		36518.8	807.1	835.3	836.6	9.4	3956.9	241.1	388.8	460.8
Reach	26750.0		36512.9	806.8	834.7	836.1	9.5	3921.4	270.7	388.8	461.4
Reach	26500.0		36515.4	806.4	834.7	835.6	7.9	5135.4	434.1	389.4	462.0
Reach	26250.0		36513.4	806.1	834.1	835.3	9.1	4773.4	416.8	390.0	462.6
Reach	26000.0		36511.5	805.7	833.6	834.8	9.2	4761.3	375.9	390.6	463.2
Reach	25750.0		36510.4	805.4	833.5	834.3	7.7	5822.3	412.6	391.2	463.8
Reach	25500.0		36513.4	805.0	833.1	833.9	7.7	5503.7	407.0	391.8	464.4
Reach	25250.0		36507.5	804.7	832.6	833.5	8.1	5573.7	446.4	391.8	465.0
Reach	25000.0		36510.1	804.3	832.2	833.2	8.3	5412.9	390.4	392.4	465.6
Reach	24750.0		36505.2	804.0	831.6	832.8	8.9	5076.8	403.2	393.0	466.2
Reach	24500.0		36503.5	803.6	831.3	832.3	8.0	4652.1	272.2	393.6	466.8
Reach	24250.0		36506.5	803.3	831.0	832.0	8.0	4858.7	296.8	394.2	467.4
Reach	24000.0		36509.5	802.9	830.8	831.7	7.4	5342.3	324.7	394.8	468.0
Reach	23750.0		36503.6	802.6	830.5	831.4	7.5	5407.2	351.4	395.4	468.6
Reach	23500.0		36511.8	802.2	830.2	831.1	7.4	5169.8	335.1	396.0	469.2
Reach	23250.0		36506.5	801.9	829.9	830.8	7.8	5047.9	332.4	396.0	469.8
Reach	23000.0		36505.3	801.5	829.3	830.4	8.6	4956.9	349.9	396.6	470.4
Reach	22750.0		36504.2	801.2	828.9	830.0	8.7	4893.4	328.7	397.2	471.0
Reach	22500.0		36502.8	800.8	828.4	829.6	8.7	4392.5	294.1	397.8	471.6
Reach	22250.0		36496.3	800.5	827.9	829.1	8.6	4311.9	274.1	398.4	471.6
Reach	22000.0		36489.3	800.1	827.2	828.6	9.5	4175.0	279.7	398.4	472.2
Reach	21750.0		36492.5	799.8	827.1	828.1	8.0	4737.6	322.8	399.0	472.8
Reach	21500.0		36478.8	799.4	826.2	827.6	9.7	3956.4	263.5	399.6	473.4
Reach	21250.0		36487.5	799.1	826.4	827.1	7.3	5561.0	444.9	400.2	474.0
Reach	21000.0		36485.2	798.7	826.2	826.9	7.0	5907.8	434.1	400.8	474.6
Reach	20750.0		36482.4	798.4	825.7	826.5	7.8	5060.1	342.7	401.4	475.2
Reach	20500.0		36473.8	798.0	825.3	826.2	7.9	4937.8	328.5	402.0	475.8
Reach	20250.0		36465.7	797.7	824.7	825.8	8.4	4466.3	273.6	402.0	476.4
Reach	20000.0		36469.1	797.3	824.8	825.5	6.7	5562.8	307.5	402.6	477.0
Reach	19750.0		36459.8	797.0	824.3	825.2	7.8	5037.1	295.1	403.2	477.6
Reach	19500.0		36456.5	796.6	824.0	824.9	7.7	4917.9	307.2	403.8	478.2

HEC-RAS Plan: Sunny Day Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	19250.0		36452.8	796.3	823.6	824.5	8.0	4869.4	327.6	404.4	478.2
Reach	19000.0		36442.1	795.9	823.2	824.2	8.3	5009.2	366.3	405.0	478.8
Reach	18750.0		36430.5	795.6	822.7	823.8	8.9	4897.7	369.1	405.6	479.4
Reach	18500.0		36426.0	795.2	822.4	823.4	8.5	5092.9	357.9	406.2	480.0
Reach	18250.0		36413.7	794.9	821.9	823.0	8.5	4820.2	306.8	406.2	480.6
Reach	18000.0		36391.5	794.5	821.5	822.6	8.7	4723.4	303.3	406.8	481.2
Reach	17750.0		36385.5	794.2	821.2	822.3	8.5	5142.2	374.5	407.4	481.8
Reach	17500.0		36380.1	793.8	821.1	821.9	7.5	5550.7	407.7	408.0	482.4
Reach	17250.0		36364.7	793.5	820.9	821.6	7.1	5739.3	405.9	408.6	483.0
Reach	17000.0		36348.6	793.2	820.4	821.3	7.9	5088.8	378.0	409.2	483.6
Reach	16750.0		36331.5	792.8	820.1	821.0	7.9	5301.3	419.1	409.8	484.2
Reach	16500.0		36324.9	792.5	819.9	820.6	7.3	6442.2	565.9	410.4	484.8
Reach	16250.0		36307.6	792.2	819.8	820.3	6.5	7256.4	649.0	411.0	486.0
Reach	16000.0		36300.3	791.9	819.5	820.1	6.9	6407.0	667.2	411.6	486.6
Reach	15750.0		36304.3	791.5	819.5	819.8	4.6	9592.1	792.9	412.2	487.8
Reach	15500.0		36312.5	791.2	819.6	819.7	2.9	13275.4	943.2	413.4	489.0
Reach	15250.0		36469.9	790.9	819.5	819.7	3.3	11778.7	950.4	414.6	490.2
Reach	15000.0		36467.7	790.6	819.3	819.6	4.1	8559.8	854.1	415.8	491.4
Reach	14750.0		36471.2	790.2	819.3	819.5	3.4	9210.5	889.7	417.0	492.0
Reach	14500.0		36478.6	789.9	819.2	819.4	3.8	9756.0	1045.6	418.2	493.8
Reach	14327.0		36479.7	789.7	818.6	819.4	7.2	5298.4	1044.4	418.2	494.4
Reach	14257.0	Quaker Church Road (Route 2080)	Bridge								
Reach	14158.0		36453.7	789.5	817.6	818.9	6.6	5008.5	785.9	418.8	494.4
Reach	13750.0		36473.9	788.9	817.8	818.2	5.5	7798.4	614.7	420.0	495.6
Reach	13500.0		36479.1	788.6	817.7	818.1	5.8	8812.7	594.2	420.6	496.8
Reach	13250.0		36478.1	788.3	817.1	817.9	7.5	6010.2	404.7	421.2	497.4
Reach	13000.0		36479.3	788.0	816.6	817.6	8.0	5266.0	359.8	421.8	498.0
Reach	12750.0		36475.8	787.6	816.0	817.2	9.4	4915.6	352.2	422.4	498.6
Reach	12500.0		36483.8	787.3	816.0	816.7	7.3	5744.2	398.5	423.0	499.8
Reach	12250.0		36479.7	787.0	815.3	816.4	8.8	4959.4	366.3	423.6	500.4
Reach	12000.0		36489.1	786.7	815.1	816.0	8.0	5553.7	405.0	423.6	500.4
Reach	11750.0		36487.0	786.3	815.0	815.7	7.2	6195.9	401.7	424.2	501.6
Reach	11500.0		36493.8	786.0	814.7	815.5	7.4	5579.7	334.5	424.8	502.2
Reach	11250.0		36495.6	785.7	814.2	815.2	8.4	5017.7	327.7	425.4	502.8
Reach	11000.0		36497.8	785.4	814.1	814.9	7.3	5630.1	364.9	426.0	503.4
Reach	10750.0		36503.3	785.0	813.9	814.6	7.2	5638.3	351.4	426.6	504.0
Reach	10500.0		36505.1	784.7	813.7	814.4	7.2	5833.0	433.3	427.2	504.6
Reach	10250.0		36512.0	784.4	813.3	814.1	7.8	5267.4	351.2	427.8	505.2
Reach	10000.0		36513.9	784.1	812.9	813.8	8.1	5341.4	327.0	428.4	505.8
Reach	9750.0		36516.9	783.7	812.4	813.5	8.6	4645.8	290.4	429.0	506.4

HEC-RAS Plan: Sunny Day Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	9500.0		36514.4	783.4	811.7	813.1	9.8	4279.5	290.9	429.0	507.0
Reach	9250.0		36515.6	783.1	811.4	812.6	8.8	4454.7	281.7	429.6	507.6
Reach	9000.0		36511.9	782.8	810.8	812.2	9.7	4585.8	364.9	430.2	507.6
Reach	8750.0		36518.1	782.4	811.3	811.7	5.5	7624.6	501.4	430.8	508.2
Reach	8500.0		36516.9	782.1	810.4	811.5	8.7	4657.4	314.0	431.4	509.4
Reach	8250.0		36512.6	781.8	809.8	811.1	9.3	4503.2	270.9	431.4	509.4
Reach	8000.0		36512.6	781.5	809.6	810.6	8.6	4837.3	319.0	432.0	510.0
Reach	7750.0		36512.3	781.1	809.3	810.3	8.4	4843.0	390.4	432.6	510.6
Reach	7500.0		36507.8	780.8	808.9	809.9	8.4	5015.0	453.5	433.2	511.2
Reach	7250.0		36501.9	780.5	808.5	809.5	8.5	5195.3	496.5	433.8	511.8
Reach	7000.0		36495.2	780.2	808.1	809.1	8.6	5182.7	498.3	434.4	512.4
Reach	6750.0		36487.0	779.8	807.8	808.7	8.4	5466.8	539.5	434.4	513.0
Reach	6500.0		36493.2	779.5	807.5	808.3	8.0	5857.5	559.2	435.0	513.6
Reach	6250.0		36479.4	779.2	807.0	807.9	8.2	5667.7	587.2	435.6	514.2
Reach	6000.0		36477.4	778.9	806.9	807.6	7.3	6500.9	620.1	436.2	514.8
Reach	5750.0		36478.4	778.5	806.5	807.3	8.0	5705.0	576.2	436.8	516.0
Reach	5500.0		36469.7	778.2	806.1	806.9	8.1	5534.1	557.9	437.4	516.6
Reach	5250.0		36462.4	777.9	805.8	806.5	7.6	5636.2	533.9	438.0	517.2
Reach	5000.0		36460.4	777.6	805.4	806.2	7.7	5349.0	468.0	438.6	517.8
Reach	4750.0		36460.4	777.2	805.2	805.9	7.4	5725.2	527.1	438.6	518.4
Reach	4500.0		36458.1	776.9	804.9	805.6	7.5	5889.9	641.6	439.2	519.0
Reach	4358.0		36428.7	776.7	803.9	805.3	9.7	3755.9	827.6	439.8	519.0
Reach	4310.0	Yadkin Valley Railroad #3	Bridge								
Reach	4221.0		32795.6	776.5	803.2	804.3	8.5	3878.4	907.9	439.8	519.6
Reach	3823.0	Similar to 878117 of Yadkin Reach-1	36393.5	776.0	803.5	803.8	4.5	10170.2	813.7	441.0	520.8
Reach	3500.0		41985.4	775.7	803.3	803.7	5.1	9657.6	689.0	442.2	522.0
Reach	3250.0		41985.0	775.4	803.2	803.6	5.4	8947.0	644.0	442.8	522.6
Reach	3000.0		41984.1	775.2	803.1	803.5	5.2	10293.8	1073.9	443.4	523.8
Reach	2750.0		41977.4	774.9	803.1	803.4	4.7	11401.7	1024.6	444.6	525.0
Reach	2500.0	Similar to 876743 of Yadkin Reach-1	41976.7	774.7	802.9	803.3	5.1	9751.4	812.1	445.2	526.2
Reach	2250.0		41976.0	774.4	802.8	803.2	5.6	8850.1	896.2	446.4	526.8
Reach	2000.0		41970.4	774.2	802.7	803.1	5.3	9743.4	1137.1	447.0	528.0
Reach	1750.0		41969.5	773.9	802.7	803.0	4.7	11615.7	1447.4	447.6	529.2
Reach	1500.0	Similar to 875789 of Yadkin Reach-1	41972.4	773.7	802.7	802.9	4.4	12344.2	1270.4	448.8	530.4
Reach	1250.0		41971.0	773.4	802.6	802.9	4.6	12048.0	1200.2	449.4	531.0
Reach	1000.0		41968.6	773.2	802.5	802.8	4.6	11744.9	1026.5	450.6	532.2
Reach	750.0		41969.5	772.9	802.4	802.7	5.3	11009.7	931.0	451.2	533.4
Reach	500.0	Similar to 874889 of Yadkin Reach-1	41968.0	772.7	802.3	802.6	5.1	11085.5	939.0	452.4	534.6
Reach	250.0		41967.5	772.4	802.2	802.5	4.9	12604.2	1221.7	453.0	535.8
Reach-1	878977.0	Yadkin River Before Ararat Inflow	6710.8	776.9	803.1	803.2	1.3	7623.0	699.4	N/A	N/A

HEC-RAS Plan: Sunny Day Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach-1	878117.0	Similar to 3823 of previous reach	6655.4	776.1	803.1	803.1	1.0	9099.6	746.2	441.0	520.8
Reach-1	876743.0	Similar to 2500 of previous reach	40429.1	775.0	801.8	802.4	6.5	8156.4	765.0	445.2	526.2
Reach-1	875789.0	Similar to 1500 of previous reach	40416.0	774.2	801.3	801.8	6.0	9316.4	1276.0	448.8	530.4
Reach-1	874889.0	Similar to 500 of previous reach	40403.2	773.4	800.7	801.3	6.4	9066.0	806.5	452.4	534.6
Reach-1	873889.0		40365.7	772.5	799.4	800.1	6.7	7663.1	695.5	454.8	538.2
Reach-1	872888.0		40329.7	771.7	798.2	798.8	6.6	8273.2	791.6	457.2	541.8
Reach-1	871889.0		40299.6	770.8	797.4	798.0	6.6	8321.3	877.3	459.6	544.8
Reach-1	870889.0		40283.4	770.0	796.5	797.2	6.6	8253.5	862.7	462.6	548.4
Reach-1	869792.0		40262.9	769.1	795.7	796.3	6.4	8022.8	840.5	465.0	552.0
Reach-1	868972.0		40250.4	768.4	795.0	795.6	6.4	7869.1	886.6	468.0	555.6
Reach-1	868033.0		40236.9	767.6	794.3	794.9	6.5	8111.7	1171.0	469.8	558.0
Reach-1	866672.0		40228.0	766.4	793.1	793.7	6.6	9488.8	1053.3	472.2	561.6
Reach-1	865759.0		40221.5	765.6	791.7	792.2	5.9	7719.3	840.1	475.8	566.4
Reach-1	864908.0		40216.9	764.9	790.0	790.7	6.8	6727.5	792.9	478.2	569.4
Reach-1	863826.0		40213.2	764.0	788.6	789.3	7.0	6099.6	940.0	480.6	571.8
Reach-1	862956.0		40211.4	763.2	787.1	788.0	7.6	5559.6	994.9	483.0	574.8
Reach-1	861929.0		40210.0	762.4	785.7	786.4	6.8	6014.9	862.0	484.8	577.2
Reach-1	860992.0		40211.2	761.6	779.4	781.5	11.9	3452.8	612.9	487.2	579.6
Reach-1	859929.0		40208.4	759.1	774.6	775.4	7.1	5645.7	669.7	489.0	581.4
Reach-1	858874.0		40203.3	757.4	771.9	772.8	8.0	5364.2	728.7	490.8	583.2
Reach-1	857919.0		40186.9	755.9	769.2	770.1	7.4	5436.3	731.4	493.2	585.6
Reach-1	857233.0		40173.9	754.0	768.0	768.5	5.9	6797.9	915.3	495.6	587.4
Reach-1	856716.0		40164.2	750.0	767.2	767.8	6.6	7210.6	878.3	496.8	589.2
Reach-1	855942.0		40357.2	747.8	766.4	766.9	6.2	7152.1	666.7	498.6	591.0
Reach-1	854859.0		40347.0	745.4	765.3	765.9	6.4	6850.8	562.5	500.4	593.4
Reach-1	853833.0		40335.6	743.9	764.2	764.9	7.2	6124.2	481.6	503.4	596.4
Reach-1	852899.0		40328.0	742.7	763.3	763.9	7.0	6277.7	496.9	505.8	598.8
Reach-1	851917.0		40320.8	741.6	762.5	763.0	6.3	7118.9	574.4	508.2	601.2
Reach-1	850885.0		40309.3	740.9	761.4	762.1	7.1	6196.0	489.0	510.6	604.2
Reach-1	849909.0		40288.0	740.0	760.0	760.9	7.8	5574.2	487.6	513.0	607.2
Reach-1	849110.0		40212.1	739.5	758.2	759.3	8.7	4808.6	489.5	515.4	609.6
Reach-1	847889.0		40139.7	737.9	757.0	757.3	4.8	8801.1	781.6	516.6	610.8
Reach-1	846889.0		40126.0	736.0	756.5	756.8	4.5	9632.2	836.5	519.6	614.4
Reach-1	845805.0		40068.6	734.9	755.6	756.2	5.9	7651.9	748.5	523.2	618.0
Reach-1	844851.0		39972.7	734.1	754.6	755.3	6.9	6351.8	617.7	526.8	621.6
Reach-1	843889.0		39881.7	731.8	753.9	754.5	6.2	6839.0	608.8	529.2	624.6
Reach-1	842978.0		39978.2	731.7	753.1	753.8	6.5	6772.1	883.0	531.6	627.0
Reach-1	841737.0		39884.9	729.1	752.7	753.0	4.6	8791.8	546.9	534.0	630.0
Reach-1	840889.0		39863.6	728.4	752.4	752.7	4.4	9379.6	611.9	538.2	633.6
Reach-1	839889.0		39809.7	727.0	752.1	752.4	4.4	9570.7	693.9	541.2	637.2

HEC-RAS Plan: Sunny Day Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach-1	**838887.0**		39757.1	723.9	751.8	752.1	4.9	10023.3	968.1	544.8	640.8
Reach-1	**837871.0**		39653.6	723.6	751.3	751.8	6.0	8353.7	1115.9	548.4	645.0
Reach-1	**836868.0**		41186.4	722.6	751.0	751.4	5.0	9774.6	926.1	551.4	649.2
Reach-1	**835888.0**		41123.9	722.6	750.7	751.1	5.6	9679.1	1147.7	554.4	652.8
Reach-1	**834878.0**		41055.4	721.8	750.1	750.7	6.4	8476.3	1444.3	557.4	656.4
Reach-1	**833762.0**		40945.7	721.8	749.4	750.1	7.3	7511.3	1485.4	560.4	660.0
Reach-1	**832889.0**		40879.7	721.5	748.9	749.6	7.0	8042.4	1103.9	563.4	663.6
Reach-1	**831869.0**		40787.7	721.3	748.3	749.0	7.0	8127.1	1446.5	565.2	666.6
Reach-1	**830889.0**		40733.6	721.2	747.9	748.4	6.3	8854.8	1416.3	567.6	670.2
Reach-1	**829877.0**		40683.3	721.0	747.4	748.0	6.4	9019.6	1358.4	570.0	673.2
Reach-1	**828958.0**		40641.8	720.9	746.9	747.5	6.4	10580.2	1626.1	573.0	676.8
Reach-1	**827852.0**		40624.1	719.9	746.5	747.0	5.5	11632.3	1769.3	575.4	681.0
Reach-1	**826913.0**		40597.1	719.5	746.1	746.6	6.5	8690.3	1184.3	578.4	685.8
Reach-1	**825957.0**		40581.4	718.8	745.6	746.1	6.0	9121.6	1018.2	580.8	689.4
Reach-1	**825519.0**		40564.5	719.4	745.4	745.9	6.1	9363.8	1101.3	583.2	693.0
Reach-1	**825429.0**	Reynolda Road (NC Route 67)	Bridge								
Reach-1	**825318.0**	Convergence	40561.4	719.2	744.5	745.0	5.9	8713.3	1029.1	584.4	694.8

PMF with Dam Failure

HEC-RAS Plan: PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	182928.0		298757.6	1146.99	1203.76	1217.55	28.11	10072.84	350.63	0	0
Reach	182750.0		299398.8	1146.44	1202.74	1205.88	12.12	21367.04	834.73	0	0.6
Reach	182500.0		298620.3	1145.69	1199.76	1205.48	14.62	16106.99	536.89	0	0.6
Reach	182250.0		298040.6	1144.43	1198.69	1204.78	19.3	16032.77	538.32	0.6	0.6
Reach	182000.0		297428.2	1143.09	1195.94	1203.04	21.6	14040.14	728.08	0.6	1.2
Reach	181750.0		293686.9	1141.7	1191.97	1201.15	28.37	12939.79	527.85	1.2	1.2
Reach	181310.0		282427.3	1139.29	1188.91	1193.39	20.4	17890.01	699.31	1.2	1.8
Reach	181244.0	Epworth Road (Route 686)	Bridge								
Reach	181185.0		297460.9	1138.8	1182.02	1190.3	30.16	14557.17	650.79	1.2	1.8
Reach	180750.0		296954	1136.56	1175.74	1184.72	19.4	13012.07	697.38	1.8	1.8
Reach	180500.0		296448.1	1135.29	1174.67	1179.94	13.49	18365.6	815.96	1.8	2.4
Reach	180250.0		296185.3	1133.99	1171.55	1181.04	18.77	12308.9	609.27	2.4	2.4
Reach	180000.0		295831.6	1132.69	1169.53	1176.92	17.89	13770.73	772.34	2.4	2.4
Reach	179750.0		294940.9	1131.39	1168.93	1173.56	13.38	18283.35	944.6	2.4	3
Reach	179500.0		294846.8	1129.89	1166.16	1174.65	19.47	12932.67	704.41	3	3
Reach	179250.0		294695.7	1128.81	1163.54	1174.46	19.92	11869.34	625.85	3	3
Reach	179000.0		294466.5	1127.71	1160.11	1171.13	22.2	11712.71	710.31	3	3
Reach	178750.0		294109	1126.59	1157.12	1164.22	17.3	13926.43	968.71	3.6	3.6
Reach	178500.0		292549.2	1125.79	1154.33	1159.6	15.89	15973.11	1267.98	3.6	3.6
Reach	178250.0		288662.2	1124.89	1152.75	1157.21	14.18	17118.15	1374.11	4.2	3.6
Reach	178000.0		269987.1	1124.09	1152.23	1154.97	10.74	20434.65	1503.98	4.2	4.2
Reach	177750.0		266466.2	1123.09	1151.96	1153.83	7.84	24751.71	1663.28	4.8	4.2
Reach	177500.0		276143.9	1122.59	1152.53	1153.2	4.45	43692.57	2351.68	5.4	5.4
Reach	177250.0		272784.2	1122.31	1151.99	1153.02	4.46	35002.26	1680.94	6.6	6.6
Reach	177000.0		267405.2	1121.69	1151.56	1152.8	5.34	30821.95	1289.78	7.2	6.6
Reach	176750.0		264391.6	1120.21	1151.34	1152.67	6.66	29650.06	1400.85	7.8	6.6
Reach	176500.0		258061.8	1119.49	1150.08	1152.39	9.79	21483.3	1104.72	8.4	6.6
Reach	176250.0		188543.8	1117.31	1148.16	1150.36	10.12	15998.18	970.33	9	7.2
Reach	176000.0		204726.7	1115.07	1149.07	1150.05	4.86	26420.25	1142.75	9.6	7.2
Reach	175750.0		204735.2	1113.99	1149.11	1149.95	4.63	28391.54	1269.74	10.2	7.8
Reach	175500.0		204752.2	1113.2	1149.12	1149.88	4.5	30143.82	1369.86	11.4	8.4
Reach	175375.0		208436	1113.09	1149.13	1149.89	4.5	30772.87	1405.5	12	8.4
Reach	175275.0		208358.2	1112.99	1149.15	1149.84	4.48	32605.4	1612.85	12	8.4
Reach	175230.0	Fishlake Road (Route 687)	Bridge								
Reach	175175.0		208358.2	1112.92	1149.33	1149.93	4.53	40050.74	1862.95	12.6	8.4
Reach	174750.0		208346.8	1111.99	1149.22	1149.63	3.09	41791.99	1579.73	14.4	10.2
Reach	174500.0		208324.3	1111.53	1149.12	1149.6	3.53	38041.59	1470.95	15.6	10.8
Reach	174250.0		208247.9	1109.9	1148.97	1149.56	3.68	34820.21	1337.69	16.8	11.4
Reach	174000.0		208177.1	1108.3	1148.95	1149.58	4.61	35917.15	1293.54	18	12
Reach	173750.0		208161.4	1107.38	1149.14	1149.45	2.62	47592.25	1551.58	19.2	12.6

HEC-RAS Plan: PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	173500.0		208146.5	1105.86	1148.86	1149.49	3.5	34692.61	1153.19	20.4	12.6
Reach	173250.0		205255.8	1104.92	1148.74	1149.43	4.15	32630.38	1112.13	21.6	12.6
Reach	173000.0		205262.7	1104.25	1148.64	1149.36	4.43	31538.5	1074.04	22.2	13.2
Reach	172750.0		205271.5	1103.74	1148.69	1149.3	4.4	33678.01	1072.61	23.4	13.8
Reach	172500.0		205277.8	1102.21	1148.44	1149.34	4.2	29368.56	952.7	24.6	13.8
Reach	172250.0		205265.8	1101.38	1148.21	1149.23	4.06	26842.71	773.18	25.2	14.4
Reach	172000.0		207460.7	1099.16	1148.46	1149.21	3.96	32910.45	1023.56	26.4	15
Reach	171750.0		207409	1098.73	1148.66	1149.13	3.14	41834.59	1200.4	27.6	15.6
Reach	171500.0		207387.5	1098.34	1148.69	1149.09	2.95	45323.44	1282.13	28.8	16.2
Reach	171248.0		207363.3	1097.31	1148.47	1149.02	4.31	35936.09	1222.16	30	17.4
Reach	171000.0		207318.2	1096.51	1148.3	1148.95	5.24	32428.8	1213.95	31.2	17.4
Reach	170750.0		207274	1095.25	1148.44	1148.87	3.85	40074.55	1284.31	31.8	18
Reach	170500.0		207232.3	1093.89	1148.11	1148.8	5.09	32042.83	1011.72	33	19.2
Reach	170250.0		207191.4	1092.82	1148.11	1148.78	5.19	34423.62	1082.36	33.6	19.8
Reach	170000.0		207169.7	1092.25	1148.18	1148.69	3.64	38929.3	1148.85	34.8	20.4
Reach	169750.0		207159.6	1091.99	1148.33	1148.63	3.08	50948.1	1348.23	36	21.6
Reach	169500.0		206496.5	1091.44	1146.54	1148.26	13.57	22236.7	771.33	36.6	22.2
Reach	169250.0		205913	1088.89	1143.7	1147.78	17.28	13628.9	458.18	36.6	22.8
Reach	169000.0		203953.7	1088.36	1139.84	1146.72	21.11	10332.04	360.31	36.6	22.8
Reach	168750.0		203958.8	1087.78	1140.46	1143.7	18.56	16815.88	931.72	37.2	23.4
Reach	168500.0		204496.1	1087.21	1140.01	1141.84	14.56	21275.55	738.6	37.2	23.4
Reach	168250.0		203473.8	1085.51	1136.81	1142.61	14.94	12447.01	370.97	37.8	24
Reach	168000.0		203466.9	1085.36	1136.83	1139.91	17.36	15506.07	488.83	37.8	24
Reach	167750.0		203471.1	1084.84	1137.59	1138.65	6.93	26652.63	723.92	38.4	24.6
Reach	167500.0		203476.3	1083.64	1136.21	1138.04	13.71	19969.95	533.81	38.4	25.2
Reach	167250.0		203462.3	1083.05	1136.17	1137.72	10.81	24023.93	903.7	39	25.8
Reach	167000.0		203447.3	1082.46	1135.45	1137.06	8.98	21353.72	593.18	39.6	25.8
Reach	166750.0		203445.5	1080.88	1132.69	1136.19	19.21	14689.48	422.72	39.6	26.4
Reach	166500.0		203376.3	1080.54	1129.22	1135.5	17.78	10870.1	352.03	39.6	26.4
Reach	166250.0		203454.1	1079.13	1123.3	1137.78	34.11	7265.66	280.81	40.2	27
Reach	166000.0		203445.1	1076.09	1117.38	1125.72	27.78	9635.47	426.7	40.2	27
Reach	165750.0		203463.7	1074.66	1111.86	1122.44	20.46	8061.07	377.7	40.2	27
Reach	165500.0		203426.3	1074.59	1108.57	1116.26	19.9	9645.42	521.04	40.8	27.6
Reach	165250.0		203438.3	1074.49	1105.43	1113.08	15.88	9564.42	530.62	40.8	27.6
Reach	165000.0		203375.1	1073.4	1102.72	1109.56	13.94	10162.94	607.36	40.8	27.6
Reach	164750.0		203282.4	1073.36	1100.05	1107.4	16.86	9643.6	624.36	41.4	28.2
Reach	164500.0		199782	1072.38	1098.7	1102.15	10.26	13732.15	942.07	41.4	28.2
Reach	164250.0		199745.8	1071.33	1099.27	1100.92	7.32	19754.62	1235.29	42	28.8
Reach	164000.0		199099.7	1070.14	1099.21	1100.47	6.56	22504.14	1387.78	42.6	28.8
Reach	163750.0		199687.8	1069.13	1099.37	1100.21	5.62	27535.32	1501.48	43.2	29.4

HEC-RAS Plan: PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	163622.0		199678	1068.53	1099.38	1100.09	6.5	30142.5	1581.31	43.8	30
Reach	163555.0		198603	1068.31	1098.71	1099.95	12.72	24296.1	1449.91	43.8	30
Reach	163515.0	Greenhill Road (Route 1700)	Bridge								
Reach	163418.0		177667.5	1067.65	1096.96	1098.23	14.45	25775.39	1520.76	43.8	30.6
Reach	163000.0		169689.6	1066.48	1096.28	1097.07	10.05	26838.54	1289.29	44.4	31.2
Reach	162750.0		167158.5	1065.76	1096.06	1096.76	10.46	28424.39	1321.58	45	31.8
Reach	162500.0		167161.4	1065.01	1095.93	1096.5	10.35	32120.65	1546.8	45.6	32.4
Reach	162250.0		163603.3	1064.24	1095.46	1095.87	9.29	39331.95	1938.2	45.6	34.2
Reach	162000.0		161566.5	1063.65	1095.07	1095.45	8.64	39671.86	1780.66	46.2	35.4
Reach	161750.0		161582.5	1063.02	1094.99	1095.29	7.79	43051.09	1863.03	46.8	36
Reach	161500.0		161575.6	1061.98	1094.79	1095.14	7.23	43897.28	1935.74	47.4	37.2
Reach	161250.0		159895.9	1061.66	1094.38	1094.93	10.1	34712.65	1743.78	48	37.8
Reach	161000.0		159905.3	1060.66	1094.35	1094.66	6.83	41542.29	1854.32	48.6	39
Reach	160750.0		159905.6	1059.67	1094.23	1094.57	7.84	38798.94	1650.6	49.2	39.6
Reach	160500.0		159225.6	1059.46	1093.94	1094.43	8.82	33704.76	1353.22	49.2	40.2
Reach	160250.0		157282.4	1056.82	1092.95	1094.28	13.51	20391.17	868.51	49.8	40.8
Reach	160000.0		157921.4	1056.2	1093.08	1093.78	9.32	25190.97	1019.87	50.4	40.8
Reach	159750.0		157931.6	1055.94	1093.3	1093.63	5.64	35161.21	1260.43	51	41.4
Reach	159500.0		157944.1	1054.88	1093.3	1093.59	5.05	36599.88	1262.26	51.6	42
Reach	159250.0		158491.8	1054.05	1093.37	1093.56	3.94	46123.37	1574.61	52.2	43.2
Reach	159000.0		158028.9	1052.55	1093.01	1093.52	6.14	28270.24	1142.32	53.4	44.4
Reach	158750.0		157624.6	1051.8	1092.61	1093.46	7.13	21992.26	730.44	54	44.4
Reach	158500.0		157656.4	1050.44	1092.52	1093.3	8.77	23032.59	768.28	54.6	45
Reach	158250.0		158022.9	1049.38	1092.82	1093.17	5.52	33873.22	1101.58	55.2	45.6
Reach	158000.0		158027.9	1048.79	1092.92	1093.12	4.41	45187.46	1421.95	55.8	46.8
Reach	157750.0		158036	1048.72	1092.91	1093.08	3.98	48449.93	1519.8	57	48
Reach	157500.0		158045.6	1048.67	1092.77	1093.07	6.72	42251.42	1346.81	57.6	49.2
Reach	157250.0		158059.9	1048.61	1092.67	1092.94	5.53	41076.76	1255.09	58.2	51
Reach	157000.0		158067.1	1047.53	1092.21	1093	8.9	30491.32	1043.94	58.8	51.6
Reach	156750.0		158073.8	1045.68	1089.82	1093.81	18.49	11726.96	569.14	59.4	52.2
Reach	156500.0		158038.1	1045.01	1085.03	1094.5	27.34	8145.07	311.31	59.4	52.2
Reach	156250.0		158052.1	1044.68	1082.92	1092.63	27.31	7937.38	320.67	59.4	52.8
Reach	156000.0		158064.7	1044.5	1085.51	1089.32	17	11683.5	401.38	59.4	52.8
Reach	155750.0		158076.7	1041.17	1079.48	1090.71	30.72	7499.28	308.55	60	53.4
Reach	155500.0		158083.3	1040.01	1075.25	1090.59	35.1	6662.08	326.08	60	53.4
Reach	155250.0		158096.9	1038.84	1070.63	1091.13	37.53	5149.12	292.6	60	53.4
Reach	155000.0		158018.5	1037.64	1065.06	1083.74	38.01	5984.57	375.3	60	53.4
Reach	154750.0		154049.6	1036.63	1061.05	1068.03	25.01	8564.5	700.11	60.6	54
Reach	154500.0		156823.6	1036.4	1059.72	1062.11	15.59	13670.06	1063.22	60.6	54
Reach	154250.0		156274.9	1035.14	1059.17	1060.51	12.63	18119.6	1341.43	60.6	54.6

HEC-RAS Plan: PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	154000.0		156261.9	1033.86	1058.41	1059.67	12.85	19849.77	1447.45	61.2	55.2
Reach	153750.0		155378.9	1033.23	1057.35	1058.98	15.66	20756.82	1427.64	61.2	55.8
Reach	153500.0		155160.2	1032.7	1056.67	1057.49	11.66	27507.01	1963.9	61.8	56.4
Reach	153250.0		154963.4	1032.1	1056.02	1056.58	8.4	31771.75	2027.86	62.4	57.6
Reach	153000.0		154958.8	1031.41	1055.86	1056.38	8.18	33327.96	2145.49	62.4	58.2
Reach	152750.0		154803.5	1030.67	1055.72	1056.12	8.22	36256.03	2219.92	63	58.8
Reach	152500.0		154808.4	1029.85	1055.54	1055.93	8.72	39334.11	2327.08	63.6	59.4
Reach	152250.0		154722	1029.02	1054.49	1055.17	10.82	30503.08	1773.63	64.2	61.2
Reach	152000.0		154724.7	1027.83	1054.06	1054.78	10.57	27449.16	1755.28	64.2	61.2
Reach	151750.0		154663.6	1027.54	1053.28	1054.54	13.75	24265.87	1548.21	64.8	61.8
Reach	151567.0		154665.5	1027.34	1052.38	1054.09	15.94	20679.96	1589.94	64.8	62.4
Reach	151537.0	West Lebanon Street (Bus 52)	Bridge								
Reach	151444.0		154303.4	1027.18	1050.99	1052.65	15.61	21051.86	1550.42	65.4	62.4
Reach	151000.0		153748.4	1025.66	1048.99	1051.05	17.21	19175.36	1392.24	65.4	63
Reach	150750.0		153237.2	1024.21	1047.51	1049.38	16.1	19728.18	1461.03	66	63.6
Reach	150500.0		152430.1	1024.02	1046.3	1048.24	17.29	19461.77	1460.42	66	64.2
Reach	150250.0		151968.8	1022.66	1045.63	1047.31	15.88	20543.23	1499.44	66.6	64.8
Reach	150000.0		151721.9	1022.21	1045.05	1046.37	14.37	22133.14	1459.97	66.6	64.8
Reach	149750.0		151230.8	1021.26	1044.5	1045.5	12.42	23322.31	1426.54	67.2	65.4
Reach	149500.0		151002	1019.98	1043.96	1044.63	10.45	27035.1	1741.58	67.2	66
Reach	149250.0		150545.5	1019.97	1043.33	1044.32	12.57	26377.52	1977.93	67.8	66.6
Reach	149000.0		150123.3	1019.95	1042.38	1043.12	11.01	27777.87	1905.34	67.8	67.8
Reach	148750.0		149930.4	1019.94	1042.14	1042.74	9.92	29383.6	1747.99	68.4	68.4
Reach	148500.0		149749	1016.41	1041.69	1042.46	11.05	27585.53	1590.72	69	69
Reach	148250.0		149761	1015.85	1041.47	1041.96	9.34	33685.27	1814.56	69	69.6
Reach	148000.0		149763.9	1015.41	1041.32	1041.68	7.96	37189.25	1922.61	69.6	70.2
Reach	147750.0		149633.2	1013.94	1040.89	1041.43	9.19	30840.57	1581.08	70.2	70.8
Reach	147500.0		149641.1	1013.17	1040.6	1041.18	9.1	30738.2	1543.48	70.8	71.4
Reach	147250.0		149641.1	1012.72	1040.31	1041.03	10.96	27679.5	1368.64	71.4	72
Reach	147000.0		149532.6	1011.95	1039.87	1040.82	11.41	24991.96	1220.64	71.4	72
Reach	146750.0		149430.7	1011.99	1039.39	1040.51	12.75	24444.02	1403.38	72	72.6
Reach	146500.0		149446.1	1011.48	1038.8	1039.79	12.68	24408.39	1306.78	72	73.2
Reach	146250.0		149370.1	1010.81	1038.45	1039.38	12.08	25097.21	1257.75	72.6	73.8
Reach	146000.0		149387	1009.93	1037.96	1038.9	11.1	24706.21	1161.69	72.6	74.4
Reach	145750.0		149403.2	1009.23	1037.16	1038.21	11.22	25841	1562.71	73.2	75.6
Reach	145500.0		149370	1008.49	1036.76	1037.86	12.59	24921.04	1399.04	73.8	76.2
Reach	145250.0		149381.8	1006.29	1036.01	1037.5	14.2	21089.24	1220.46	73.8	76.8
Reach	145000.0		149391.8	1005.25	1035.42	1036.94	13.5	20917.3	1233.56	74.4	76.8
Reach	144849.0		149396	1004.55	1035.05	1036.65	13.75	20711.11	1302.56	74.4	77.4
Reach	144741.0		149410.9	1003.97	1034.31	1036.05	13.46	20278.43	1306.02	74.4	77.4

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	144710.0	West Independence Blvd (Route 89)	Bridge								
Reach	144526.0		145423.4	1002.9	1030.78	1032.83	15.03	19254.7	1347	75	78
Reach	144250.0		144843.4	1002.18	1030.3	1031.93	15.34	21484.85	1505.94	75	78.6
Reach	144000.0		144263.4	1002.1	1029.98	1031.14	13.39	23885.72	1504.38	75.6	79.2
Reach	143750.0		144269.3	1002.01	1029.65	1030.5	11.61	27132.68	1665.41	75.6	79.2
Reach	143500.0		143997.8	1001.94	1029.28	1030.24	12.61	26356.25	1753.61	76.2	79.8
Reach	143311.0		143742.9	1001.87	1028.88	1030.16	13.28	24201.78	1684.02	76.2	79.8
Reach	143251.0	West Pine Street	Bridge								
Reach	143126.0		143271.4	1001.46	1027.97	1028.92	11.93	25380.64	1622.69	76.8	80.4
Reach	142750.0		143235.2	997.86	1027.56	1028.25	9.83	29721.07	1531.87	77.4	81.6
Reach	142500.0		143218	997.44	1027.42	1027.97	9.45	31489.4	1675.77	77.4	82.2
Reach	142250.0		143206.9	996.89	1027.06	1027.7	10.34	29570	1567.33	78	82.8
Reach	142000.0		143209.7	996.34	1026.83	1027.46	9.81	31020.91	1635.36	78.6	83.4
Reach	141750.0		143086.4	995.83	1026.37	1026.87	8.11	34290.57	1762.25	78.6	85.2
Reach	141500.0		142798.8	995.7	1026.19	1026.65	8.61	33713.66	1576.62	79.2	85.8
Reach	141250.0		142758.4	995.54	1026.01	1026.46	8.63	34112.64	1585.33	79.8	87
Reach	141000.0		142748.5	995.21	1025.88	1026.26	8.3	36013.63	1566.44	80.4	87.6
Reach	140750.0		142272.7	991.86	1025.71	1026.12	8.21	36259.46	1587.43	81	88.2
Reach	140500.0		142249.6	991.5	1025.44	1026.01	9.59	32421.73	1559.35	81.6	89.4
Reach	140250.0		141112.3	991.1	1024.56	1025.81	13.17	21115.41	958.52	81.6	90
Reach	140000.0		140473	990.71	1024.04	1025.11	12.49	23581.78	1087.85	82.2	90.6
Reach	139750.0		140412.5	990.3	1023.82	1024.77	11.46	24653.78	1167.52	82.2	91.2
Reach	139500.0		139689.6	989.89	1023.57	1024.5	11.24	25010.39	1155.34	82.8	91.8
Reach	139250.0		139538.8	989.16	1023.42	1024.17	9.6	26740.69	1223.89	83.4	92.4
Reach	139113.0		138395.1	988.37	1022.78	1023.91	11.99	23801.11	1200.07	83.4	93.6
Reach	139070.0	Worth Street (Route 1371)	Bridge								
Reach	138986.0		142694.3	987.23	1022.13	1023.12	11.35	27830.89	1586.91	83.4	93.6
Reach	138750.0		142210.3	986.64	1021.21	1022.92	14.55	18611.02	920.45	84	94.2
Reach	138500.0		142403.3	986.32	1021.22	1021.7	8.89	31892.56	1400.48	84	95.4
Reach	138250.0		142410.8	986.01	1021.11	1021.47	7.7	37081.39	1585.25	84.6	96.6
Reach	138000.0		142415.2	984.59	1020.97	1021.34	7.85	37830.28	1615.6	85.2	97.2
Reach	137750.0		142417	982.58	1020.88	1021.25	7.8	39434.2	1670.09	85.8	97.8
Reach	137500.0		142436.5	981.68	1019.77	1020.82	12.16	23968.55	1105.84	86.4	100.2
Reach	137285.0	Yadkin Valley Railroad #1	Bridge								
Reach	137250.0		142379	980.27	1017.65	1019.47	14.58	20168.25	1191.66	86.4	100.8
Reach	137152.0		142385.4	979.89	1017.52	1019.16	13.81	22033.32	1327.75	87	101.4
Reach	137130.0	Rockford Street (Hwy 601)	Bridge								
Reach	137027.0		104854	979.42	1013.68	1015.5	14.31	16101.27	1189.64	87	101.4
Reach	136750.0		104875.1	978.39	1013.67	1014.57	10.4	20701.37	1109.05	87.6	102
Reach	136500.0		104514.5	977.87	1013.59	1014.13	8.81	25033.49	1188.02	87.6	103.2

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	136250.0		104910	977.29	1013.67	1013.89	5.35	33787.29	1390.64	88.2	104.4
Reach	136000.0		104922	976.98	1013.61	1013.82	5.36	34017.33	1450.46	89.4	105
Reach	135750.0		104202.3	974.74	1013.52	1013.77	6.02	32072.75	1434.34	90	106.2
Reach	135645.0		104571.7	974.28	1013.58	1013.71	4.38	41843.14	1797.9	90	106.8
Reach	135439.0		104583	974.2	1013.54	1013.67	3.84	41386.36	1674.51	91.2	108
Reach	135368.0	US Route 52 NB and SB	Bridge								
Reach	135112.0		102786.9	973.93	1013.27	1013.36	2.95	43239.04	1726.31	92.4	109.2
Reach	134750.0		102459	973.28	1013.21	1013.32	3.35	37765.55	1408.71	94.2	112.8
Reach	134500.0		102475.1	972.45	1013.21	1013.31	2.67	40808.76	1538.25	96	114
Reach	134250.0		102495	970.69	1013.21	1013.29	2.89	46300.42	1982.73	97.2	115.8
Reach	134000.0		102509	970.09	1013.21	1013.28	3.1	51926.47	2002.98	98.4	117.6
Reach	133750.0		102491.7	968.78	1013.2	1013.25	2.8	58050.22	2692.83	100.2	121.2
Reach	133500.0		129906.9	968.6	1013.14	1013.21	3.19	65804.48	2700.77	101.4	122.4
Reach	133250.0		131359.2	968.3	1013.13	1013.21	3.56	67086.05	2785.99	102.6	123.6
Reach	133140.0		131067.7	968.15	1013.04	1013.17	4.64	57166.24	2665.11	103.2	125.4
Reach	133110.0	Carter Street (Route 2116)	Bridge								
Reach	133061.0		130794.4	968.15	1013.02	1013.14	4.21	56981.89	2676.39	103.8	126
Reach	132750.0		130037.7	967.17	1012.65	1013.18	7.66	33069.86	1406.63	104.4	127.8
Reach	132500.0		130044.9	965.93	1012.54	1013.1	8.23	33230.3	1459.92	105	128.4
Reach	132250.0		130052	965.63	1012.59	1012.9	6.35	40754.86	1597.11	105.6	129.6
Reach	132000.0		129622.7	965.39	1012.3	1012.8	7.38	27916.93	931.53	106.2	130.8
Reach	131750.0		128750.8	965.34	1011.84	1012.8	9.83	21312.04	830.34	106.8	132
Reach	131500.0		128980.2	965.28	1011.94	1012.52	7.59	22916.24	1020.81	107.4	132.6
Reach	131250.0		129206.5	965.21	1012.03	1012.41	5.93	28805.78	1001.16	108	133.2
Reach	131000.0		129216.7	964.94	1012.06	1012.33	4.81	31479.92	1045.26	108.6	134.4
Reach	130750.0		129228.6	964.67	1012.05	1012.31	3.89	32871.64	1090.12	109.2	135
Reach	130500.0		129433.3	964.35	1012.09	1012.28	3.63	38139.28	1150.34	110.4	135.6
Reach	130250.0		129253.8	963.55	1012	1012.25	4.28	32830.77	1002.16	111.6	136.2
Reach	130000.0		129264.4	962.58	1011.98	1012.23	4.26	33355.56	1222.37	112.8	136.8
Reach	129750.0		129268.9	961.87	1011.89	1012.24	6.14	31808.45	1224.48	113.4	137.4
Reach	129500.0		129092.7	961.8	1011.76	1012.25	7.77	30213.02	1167.95	114	138
Reach	129250.0		129101.3	961.73	1011.85	1012.12	5.98	38867.23	1524.03	114.6	138.6
Reach	129000.0		129274.8	961.47	1011.87	1012.07	4.53	41961.45	1411.45	115.2	139.8
Reach	128778.0		129267.9	961.13	1011.91	1012.04	3.55	53866.55	1824.21	116.4	141
Reach	128500.0		129252.1	961.01	1011.83	1011.97	3.34	42405.98	1455.46	117.6	143.4
Reach	128250.0		154465.2	961.01	1011.58	1011.89	4.85	35630.64	1422.78	118.8	144
Reach	128000.0		156527.3	961	1011.62	1011.83	3.85	42714.21	1332.96	119.4	145.2
Reach	127750.0		156550.1	961	1011.6	1011.82	4.13	42552.96	1184.57	120.6	145.8
Reach	127500.0		156688.2	961	1011.62	1011.81	4.4	50401.31	1418.96	121.8	147.6
Reach	127250.0		156609.8	960.99	1011.6	1011.8	4.51	51781.05	1455.39	122.4	148.2

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	127000.0		156628.6	960.99	1011.41	1011.8	7.26	40935.37	1252.97	123.6	148.8
Reach	126750.0		156514.2	960.99	1010.42	1011.93	11.14	18741.59	549.76	123.6	150
Reach	126500.0		156467.8	960.98	1009.71	1011.81	13.17	17293.9	511.37	124.2	150.6
Reach	126250.0		156423.5	960.98	1009.26	1011.51	13.88	16187.78	488.14	124.2	150.6
Reach	126000.0		156455.2	960.97	1009.14	1011.11	12.93	16479.45	503.52	124.8	151.2
Reach	125750.0		156347.1	960.96	1008.11	1010.91	14.98	15155.56	492.89	124.8	151.8
Reach	125500.0		156153.3	960.94	1006.67	1010.68	17.62	12321.51	387.61	125.4	151.8
Reach	125250.0		155675.7	960.91	1004.67	1010.24	20.01	9932.59	321.63	125.4	152.4
Reach	125000.0		156131.6	960.89	1006.4	1009.33	14.22	12466.72	369.18	126	152.4
Reach	124750.0		156089.5	960.88	1006.3	1008.8	13.74	13833.84	421.41	126	153
Reach	124500.0		156046.3	960.68	1005.51	1008.43	15.33	13752.91	448.64	126.6	153
Reach	124250.0		155661.7	960.47	1003.82	1008.01	17.25	10666.35	339.04	126.6	153.6
Reach	124000.0		155325	960.24	1002.75	1007.39	18.44	10537.23	385.08	126.6	153.6
Reach	123750.0		155360.2	960.03	1002.71	1006.59	16.95	12355.62	563.69	127.2	154.2
Reach	123500.0		155826.9	959.78	1004.28	1005.37	9.78	20033.37	1033.07	127.2	154.8
Reach	123250.0		155866.5	959.19	1004.42	1005.16	7.25	23322.89	1299.64	127.8	155.4
Reach	123100.0	Flow into mine	Lat Struct								
Reach	123000.0		155826.7	956.66	1003.83	1005.07	9.99	18275.87	850.16	128.4	156
Reach	122750.0		155651.9	955.91	1002.43	1005.07	14.55	13958.11	638.59	128.4	156
Reach	122500.0		155614.8	954.48	1001.67	1004.66	15.72	13506.41	458.34	129	156.6
Reach	122250.0		155777.9	953.93	1002.51	1003.92	11.4	20200.89	764.63	129	157.2
Reach	122000.0		155816.1	952.46	1002.38	1003.62	10.1	20179.77	879.51	129.6	157.8
Reach	121728.0		155804.7	952.35	1001.97	1003.41	11.59	19230.61	599.39	130.2	158.4
Reach	121500.0		155778.4	951.82	1001.16	1003.24	12.88	15200.21	469.58	130.2	158.4
Reach	121250.0		155755.6	950.5	1000.58	1003.09	14.59	16245.49	492.13	130.8	159
Reach	121000.0		155789.2	950.17	1000.53	1002.61	13.23	17072.84	489.39	130.8	159.6
Reach	120750.0		155772.3	949.87	1000.13	1002.38	14.12	17373.26	508.11	131.4	159.6
Reach	120500.0		155806.2	949.51	999.91	1001.98	13.41	17801.2	531.63	131.4	160.2
Reach	120250.0		155883.5	948.87	1000.18	1001.5	10.78	19332.6	575.03	132	160.8
Reach	120000.0		155913.4	948.73	1000.03	1001.28	10.55	19452.27	603.9	132.6	161.4
Reach	119750.0		155942.7	948.31	1000.05	1001.04	8.64	23701.46	752.33	132.6	162
Reach	119500.0		155824.4	947.94	998.03	1001.23	16.25	12333.84	411.5	133.2	162
Reach	119250.0		157877.8	947.51	997.3	1000.65	16.61	12413.77	404.28	133.2	162.6
Reach	119000.0		157970.9	947.11	998.3	999.84	11.54	19313.25	571.07	133.8	163.2
Reach	118750.0		157986.1	946.71	998.45	999.54	9.67	22137.99	607.28	133.8	163.8
Reach	118500.0		157998.4	946.35	998.03	999.46	11.54	21287.14	585.85	134.4	164.4
Reach	118250.0		157986.6	945.94	997.23	999.33	13.7	16426.52	438.48	135	164.4
Reach	118000.0		157942.6	945.62	995.22	999.3	17.67	12206.9	350.21	135	165
Reach	117750.0		157890.3	945.11	994.08	998.66	18.57	10882.98	329.44	135	165
Reach	117500.0		157827.9	944.64	992.68	998.04	20.8	10602.82	356.52	135.6	165.6

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	117250.0		157881.3	944.62	993.09	996.78	17.13	11389.74	401.26	135.6	165.6
Reach	117000.0		157859.5	944.59	993.01	996.14	14.98	11580.58	381.99	136.2	166.2
Reach	116750.0		157874.3	944.56	992.36	995.69	15.78	11365.86	358.23	136.2	166.2
Reach	116500.0		157852	944.54	991.78	995.34	17.32	13137.25	447.28	136.2	166.8
Reach	116250.0		157831.2	944.52	991.21	994.65	16.28	13299.31	429.56	136.8	167.4
Reach	116000.0		157808.2	944.47	990.97	994.08	15.43	13485.54	460.05	136.8	167.4
Reach	115750.0		157823.5	944.47	990.32	993.61	16.17	13859.21	462.17	137.4	168
Reach	115500.0		157801.8	944.45	989.67	993.08	16.67	13655.35	456.62	137.4	168
Reach	115250.0		157816.1	944.42	989.7	992.38	15.01	14630.54	534.35	138	168.6
Reach	115000.0		157829.3	944.39	989.65	991.85	13.33	16951.93	588.03	138	169.2
Reach	114750.0		157734.5	944.23	987.93	991.79	17.73	12907.45	471.51	138.6	169.2
Reach	114500.0		157668.1	944.07	986.94	991.2	19.02	12728.02	461.63	138.6	169.8
Reach	114250.0		157594.6	943.87	986.04	990.39	18.64	12134.79	442.53	138.6	169.8
Reach	114000.0		157563.3	943.62	985.45	989.59	18.76	12354.41	465.24	139.2	170.4
Reach	113750.0		157621.6	941.53	985.86	988.59	15.3	14848.36	542.62	139.2	170.4
Reach	113500.0		157634.4	939.85	985.55	987.96	14.81	14715.24	586.44	139.8	171
Reach	113250.0		157607.5	939.35	984.98	987.4	14.18	13365.54	542.94	139.8	171
Reach	113000.0		157488.2	939.22	983.72	987.26	17.38	13744.17	614.28	139.8	171.6
Reach	112750.0		157505.7	939.07	983.5	986.31	14.57	13598.13	591.11	140.4	172.2
Reach	112500.0		157561.9	938.93	984.07	985.69	12.04	16229.66	700.17	140.4	172.2
Reach	112250.0		157577.5	938.53	984.09	985.37	10.94	18170.21	723.29	141	172.8
Reach	112000.0		157551.5	938.41	983.19	985.19	13.17	14741.04	607.54	141.6	172.8
Reach	111750.0		157562.1	938.11	982.91	984.88	12.74	15021.01	517.69	141.6	173.4
Reach	111500.0		157465.1	937.04	981.34	984.77	15.96	12816.51	431.32	142.2	173.4
Reach	111250.0		148943.7	937	980.36	983.89	16.41	11963.09	421.76	142.2	174
Reach	111000.0		148961.7	936.99	979.86	983.17	16.2	11633.98	410.28	142.2	174.6
Reach	110750.0		148973.6	936.99	979.26	982.4	15.63	10948.68	393.04	142.8	174.6
Reach	110500.0		148973.5	936.98	978.56	981.91	16.7	11394.63	416.55	142.8	175.2
Reach	110250.0		148959.4	936.81	979.09	981.2	13.46	14041.73	517.15	143.4	175.2
Reach	110000.0		148863.3	936.57	978.58	980.92	15.15	16303.6	581.56	143.4	175.8
Reach	109750.0		148842.4	936.29	979.12	980.16	11.07	23931.84	818.5	144	176.4
Reach	109500.0		148838	936.06	979.24	979.78	6.99	27821.3	1017.02	144.6	177
Reach	109250.0		148465.4	935.98	979.21	979.65	6.89	30729.33	1144.07	145.2	177.6
Reach	109000.0		148374.3	935.9	979.03	979.56	6.6	28283.56	1008.63	145.8	178.8
Reach	108750.0		148344.5	935.81	978.71	979.41	6.84	22687.92	779.9	146.4	179.4
Reach	108500.0		147632.7	935.63	978.5	979.27	6.8	21030.84	721.34	147	180
Reach	108250.0		147567.2	935.23	978.46	979.16	7.67	22516.38	794.22	147.6	180
Reach	108000.0		147478.3	934.85	978.49	979.05	7.84	27781.95	964.62	147.6	180.6
Reach	107750.0		147357.1	934.57	978.46	978.89	5.56	28797.68	1259.65	148.8	181.8
Reach	107500.0		147249.2	934.43	978.51	978.81	4.63	34856.01	1564.86	149.4	182.4

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	107250.0		150188.9	934.29	978.58	978.78	3.67	45408.1	2193.9	150.6	183.6
Reach	107118.0	Yadkin Valley Railroad #2	Bridge								
Reach	107000.0		143337.8	934.12	973.89	974.7	8.91	22371.03	2067.95	150.6	184.2
Reach	106750.0		143757.2	933.95	974.11	974.58	6.9	28121.55	1962.53	151.2	184.8
Reach	106500.0		143759	933.76	974.12	974.39	5.44	37111.99	2861.93	151.8	185.4
Reach	106250.0		143766.8	933.61	974	974.32	6.03	34035.21	2439.73	152.4	186
Reach	106000.0		143670.8	933.46	973.88	974.22	6.18	33334.77	2320.93	153.6	186.6
Reach	105750.0		143686.5	932.49	973.9	974.1	5.1	43079.53	2876.41	154.2	187.8
Reach	105664.0		143691.4	931.63	973.9	974.08	4.63	46614.79	2918.55	154.2	188.4
Reach	105643.0	Sheep Farm Road (Route 2119)	Bridge								
Reach	105515.0		143691.4	931.1	974.0	974.1	3.7	54654.7	2920.3	155.4	189.0
Reach	105250.0		143700.8	930.5	974.0	974.1	3.0	65728.5	2907.6	156.6	190.8
Reach	105000.0		143715.9	929.7	974.0	974.0	2.2	75590.0	2797.7	158.4	192.6
Reach	104750.0		143806.7	929.5	974.0	974.0	1.9	73802.9	2674.4	160.2	193.2
Reach	104500.0		143738.4	929.3	974.0	974.0	2.0	78869.9	2764.3	162.6	193.8
Reach	104250.0		143746.8	929.0	974.0	974.0	2.0	73480.2	2590.2	164.4	195.0
Reach	104000.0		143756.5	928.9	973.9	974.0	2.4	64016.2	2300.8	166.2	195.6
Reach	103750.0		143764.0	928.7	973.9	974.0	2.6	61542.2	2260.7	168.0	196.2
Reach	103500.0		143771.3	928.5	973.9	974.0	2.4	58700.5	2041.6	169.8	197.4
Reach	103250.0		143778.7	928.3	973.9	974.0	2.8	56355.4	1935.5	171.0	198.6
Reach	103000.0		143790.8	928.1	973.9	974.0	2.7	59044.4	2085.4	172.8	199.8
Reach	102891.0		143798.4	928.0	973.9	974.0	2.7	59954.8	2214.2	173.4	200.4
Reach	102791.0		143705.7	927.9	973.3	974.1	8.9	23052.6	1832.2	174.0	201.0
Reach	102700.0	Interstate 74 EB and WB	Bridge								
Reach	102432.0		143215.2	927.7	971.7	972.4	8.8	23734.1	2059.3	174.0	202.2
Reach	102000.0		143287.9	927.7	971.9	972.0	3.3	61013.0	2229.0	175.2	203.4
Reach	101750.0		143257.1	927.5	971.9	972.0	3.1	60121.1	2049.4	177.0	205.2
Reach	101500.0		143279.7	927.3	971.8	972.0	4.9	48961.8	1589.3	177.6	206.4
Reach	101250.0		143286.9	927.1	971.6	972.0	7.3	36718.8	1190.0	178.8	207.0
Reach	101000.0		143260.9	926.9	971.2	972.0	9.8	26110.1	862.4	178.8	207.6
Reach	100750.0		143234.8	926.3	970.5	972.0	12.0	19892.0	691.7	179.4	207.6
Reach	100500.0		143142.9	925.7	969.4	971.9	14.4	14702.3	513.4	179.4	208.2
Reach	100250.0		143120.2	925.6	969.0	971.5	14.7	14344.5	473.1	180.0	208.8
Reach	100000.0		143202.1	925.4	969.7	971.0	9.7	17234.4	556.4	180.6	208.8
Reach	99750.0		143216.4	925.2	969.9	970.7	8.4	21786.9	691.9	180.6	209.4
Reach	99500.0		143261.5	925.1	970.0	970.5	6.5	28029.2	886.3	181.2	210.6
Reach	99250.0		143248.6	924.8	969.9	970.4	6.7	25514.0	817.7	181.8	211.2
Reach	99000.0		143261.6	924.6	969.6	970.3	7.7	21353.2	724.2	182.4	211.8
Reach	98750.0		143236.5	924.3	968.9	970.2	10.7	17606.1	525.7	183.0	212.4
Reach	98500.0		145086.0	924.0	967.7	970.1	13.9	14729.1	464.5	183.6	212.4

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	98250.0		145088.1	923.7	966.8	969.8	15.4	13320.8	431.9	183.6	213.0
Reach	98000.0		145117.5	923.5	967.2	969.3	12.8	14674.5	487.0	184.2	213.6
Reach	97750.0		145143.8	923.2	966.8	968.8	12.7	14627.9	499.1	184.2	213.6
Reach	97500.0		145166.7	922.7	967.2	968.4	11.2	21877.5	796.0	184.8	214.2
Reach	97250.0		145187.0	922.1	966.3	968.2	12.9	17852.2	602.5	184.8	214.8
Reach	97000.0		145192.7	921.8	965.3	967.9	15.0	13915.5	463.9	185.4	215.4
Reach	96750.0		145204.3	921.5	964.8	967.4	14.7	13717.7	462.1	185.4	216.0
Reach	96500.0		145212.1	921.2	964.1	967.0	15.3	12599.4	411.2	186.0	216.0
Reach	96250.0		145176.9	921.0	962.3	966.6	18.2	10472.1	345.1	186.0	216.6
Reach	96000.0		145225.5	920.7	962.8	965.7	15.2	13421.0	444.3	186.0	216.6
Reach	95750.0		145255.6	920.6	962.5	965.1	14.4	13482.8	440.4	186.6	217.2
Reach	95500.0		145289.0	920.3	962.3	964.5	13.3	14069.3	427.7	186.6	217.8
Reach	95250.0		145297.5	919.5	961.8	964.2	13.1	12644.9	418.9	187.2	217.8
Reach	95000.0		145306.7	919.1	961.0	963.9	14.9	12379.7	399.5	187.2	218.4
Reach	94750.0		145295.5	918.9	959.7	963.5	17.7	11420.0	383.3	187.8	218.4
Reach	94500.0		145303.9	918.8	958.8	962.8	18.0	11381.8	381.8	187.8	219.0
Reach	94250.0		145309.5	918.5	958.4	962.0	16.9	11631.8	384.0	188.4	219.6
Reach	94000.0		145317.0	918.2	957.6	961.1	15.6	9672.4	328.9	188.4	219.6
Reach	93750.0		145228.2	917.9	955.5	960.7	19.0	8948.1	322.0	189.0	219.6
Reach	93500.0		145233.3	916.2	954.7	959.7	19.1	9374.7	334.7	189.0	220.2
Reach	93250.0		145311.9	913.5	956.1	958.4	12.9	14366.5	469.8	189.0	220.2
Reach	93000.0		145340.2	912.8	956.3	958.1	12.1	15985.9	538.1	189.6	220.8
Reach	92750.0		145367.2	912.3	955.9	957.8	12.7	15976.8	518.8	189.6	221.4
Reach	92500.0		145360.0	911.9	954.8	957.5	14.7	13829.6	452.0	190.2	222.0
Reach	92250.0		145386.7	911.5	954.3	957.0	14.5	11872.0	385.0	190.2	222.0
Reach	92000.0		145396.5	911.1	953.9	956.6	14.5	13245.4	446.6	190.8	222.6
Reach	91750.0		145423.7	910.7	953.5	956.1	14.0	12894.7	418.1	190.8	222.6
Reach	91500.0		145409.1	910.3	952.6	955.7	14.7	11724.4	384.1	191.4	223.2
Reach	91250.0		145439.5	909.9	952.4	955.2	14.9	13639.1	453.8	191.4	223.8
Reach	91000.0		145424.9	909.5	951.4	954.9	16.6	12256.2	395.2	192.0	223.8
Reach	90750.0		145432.1	909.1	950.6	954.3	16.8	11314.8	371.1	192.0	224.4
Reach	90500.0		145461.1	908.8	950.5	953.6	15.5	12251.2	431.7	192.6	224.4
Reach	90250.0		145446.5	908.3	949.4	953.1	17.0	11460.8	384.3	192.6	225.0
Reach	90000.0		145401.9	907.5	948.1	952.6	19.4	10707.7	372.9	192.6	225.0
Reach	89750.0		145476.1	906.8	949.0	951.4	13.0	11979.8	410.4	193.2	225.6
Reach	89500.0		145506.4	906.7	948.9	951.0	12.2	12878.5	442.0	193.2	226.2
Reach	89250.0		145489.7	906.6	948.2	950.7	14.8	12465.2	422.0	193.8	226.2
Reach	89000.0		145495.6	905.9	947.5	950.3	14.3	11553.7	409.8	193.8	226.8
Reach	88750.0		145503.9	904.3	947.0	949.8	15.3	12554.7	436.6	194.4	226.8
Reach	88500.0		145554.5	903.4	947.0	949.2	14.0	14274.7	473.9	194.4	227.4

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	88250.0		145515.1	903.1	945.7	948.7	15.2	10707.4	369.9	195.0	227.4
Reach	88000.0		145558.7	902.9	945.8	948.4	15.4	13031.0	476.1	195.0	228.0
Reach	87750.0		145513.6	902.7	944.6	947.9	17.5	12825.3	457.9	195.6	228.6
Reach	87500.0		147649.8	902.3	945.6	947.0	9.6	17055.0	562.7	195.6	228.6
Reach	87250.0		147707.0	901.9	945.8	946.7	7.7	19662.7	619.8	196.2	229.2
Reach	87000.0		147790.4	901.5	945.5	946.5	7.9	18600.6	582.6	196.8	229.8
Reach	86750.0		147825.7	901.0	944.9	946.5	10.4	15370.5	466.0	197.4	230.4
Reach	86500.0		147849.7	900.5	943.7	946.1	13.6	12246.9	387.4	197.4	230.4
Reach	86250.0		147867.3	899.1	942.3	946.0	16.8	11809.7	388.0	198.0	231.0
Reach	86000.0		147924.8	898.8	942.4	945.3	15.3	13208.8	439.1	198.0	231.0
Reach	85750.0		147934.0	898.5	940.7	944.9	17.7	10970.3	379.3	198.6	231.6
Reach	85500.0		147947.9	898.3	939.4	944.3	18.9	9975.2	348.4	198.6	231.6
Reach	85250.0		147936.6	898.2	938.4	943.5	19.3	9930.0	356.1	198.6	232.2
Reach	85000.0		148016.2	898.0	938.7	942.5	17.2	11263.5	393.1	199.2	232.2
Reach	84750.0		147950.0	897.9	936.7	941.9	19.4	9700.5	355.1	199.2	232.8
Reach	84500.0		148061.5	897.8	937.5	940.8	15.8	10842.7	374.1	199.2	232.8
Reach	84250.0		148118.9	897.7	937.4	940.1	14.3	11496.0	413.1	199.8	233.4
Reach	84000.0		148176.1	897.6	937.5	939.8	12.1	12836.8	461.0	199.8	233.4
Reach	83750.0		148183.5	897.2	936.7	939.4	14.8	12258.9	463.2	200.4	234.0
Reach	83500.0		148312.7	897.2	938.1	938.4	4.9	30930.1	986.2	201.0	234.6
Reach	83250.0		148292.2	894.5	936.1	939.0	14.6	13139.6	573.7	201.0	235.2
Reach	83000.0		148280.7	894.3	934.5	938.5	17.0	10764.6	362.6	201.6	235.2
Reach	82750.0		148202.3	894.1	932.7	938.0	19.8	9640.9	350.2	201.6	235.8
Reach	82500.0		148199.9	893.6	932.1	936.9	18.9	9837.6	361.0	202.2	235.8
Reach	82250.0		148090.8	893.1	931.1	936.0	19.0	10140.6	399.4	202.2	236.4
Reach	82000.0		148188.2	892.3	931.4	934.9	16.4	12517.3	465.0	202.2	236.4
Reach	81750.0		147907.7	892.0	929.1	934.4	19.3	9307.4	341.6	202.8	237.0
Reach	81500.0		147837.9	891.8	928.7	933.3	18.4	9604.7	379.1	202.8	237.0
Reach	81250.0		147810.3	891.0	928.4	932.3	16.4	10188.5	363.5	202.8	237.0
Reach	81000.0		147779.3	889.7	928.1	931.6	15.8	11174.4	385.1	203.4	237.6
Reach	80750.0		147698.8	888.5	927.6	931.0	15.7	11373.1	396.3	203.4	238.2
Reach	80500.0		147707.5	888.5	927.3	930.5	15.7	12009.3	456.8	204.0	238.2
Reach	80250.0		147768.1	887.8	927.2	930.0	14.5	12414.7	463.2	204.0	238.8
Reach	80000.0		147677.5	887.6	926.6	929.5	14.5	12797.4	508.6	204.6	238.8
Reach	79750.0		147840.4	886.1	927.1	928.8	11.7	16635.9	558.3	204.6	239.4
Reach	79500.0		147554.2	885.7	925.8	928.5	14.0	12969.8	431.9	205.2	240.0
Reach	79250.0		147453.1	885.2	925.2	928.1	14.7	13161.7	446.3	205.2	240.0
Reach	79000.0		147463.0	883.4	925.1	927.5	13.3	13781.3	440.0	205.8	240.6
Reach	78750.0		146957.5	882.8	923.7	927.3	16.7	11875.4	416.6	205.8	240.6
Reach	78500.0		147246.3	882.5	924.3	926.7	13.7	13131.0	520.4	206.4	241.2

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	78250.0		147358.0	882.0	924.4	926.3	11.8	15373.1	629.9	206.4	241.8
Reach	78000.0		147410.2	881.4	924.5	925.9	9.9	16794.7	639.1	207.0	241.8
Reach	77750.0		150332.7	880.9	924.0	925.6	12.4	19235.1	752.4	207.6	242.4
Reach	77558.0		150478.9	880.6	924.5	925.1	7.8	30301.8	1227.6	207.6	243.0
Reach	77492.0	Ararat Road (Route 2019)	Bridge								
Reach	77372.0		150429.0	880.1	924.4	924.8	6.0	29673.0	1165.9	208.2	243.6
Reach	77000.0		150434.1	879.1	924.1	924.7	6.7	24893.8	1088.0	209.4	244.2
Reach	76750.0		150469.5	878.8	924.1	924.6	6.5	25324.0	1073.3	210.0	244.8
Reach	76500.0		150505.4	878.7	924.1	924.6	6.3	30481.1	1282.5	210.6	245.4
Reach	76250.0		150543.3	878.7	924.0	924.5	5.7	29594.8	1067.5	211.2	246.6
Reach	76000.0		150416.9	878.7	923.1	924.4	9.7	16539.0	554.0	211.8	247.2
Reach	75750.0		150496.4	878.7	923.3	924.3	9.3	20682.0	702.5	212.4	247.8
Reach	75500.0		150227.8	878.3	921.8	924.4	14.3	13802.8	480.3	212.4	247.8
Reach	75250.0		149904.5	877.8	920.5	923.9	16.0	12332.7	421.1	213.0	248.4
Reach	75000.0		149728.6	877.2	920.0	923.3	16.3	13140.5	487.9	213.0	249.0
Reach	74750.0		150189.8	876.8	921.3	922.3	8.4	19330.4	687.3	213.6	249.0
Reach	74500.0		150274.3	876.6	921.7	922.2	6.7	28358.7	965.4	213.6	249.6
Reach	74250.0		150343.9	876.6	921.7	922.1	5.6	33039.5	1161.5	214.8	250.8
Reach	74000.0		150377.5	876.6	921.6	922.0	6.1	29488.0	1017.0	215.4	252.0
Reach	73750.0		150327.9	876.6	921.1	921.9	8.0	21955.3	835.2	216.0	252.6
Reach	73500.0		150317.6	876.6	920.7	921.8	9.2	18692.3	750.3	216.6	252.6
Reach	73250.0		150402.2	876.6	921.0	921.7	7.0	25066.2	926.2	216.6	253.2
Reach	73000.0		150404.0	875.9	920.7	921.5	7.7	20679.6	824.0	217.2	253.8
Reach	72750.0		150360.9	875.3	920.0	921.4	10.9	16618.3	675.1	217.8	254.4
Reach	72500.0		150320.5	874.6	919.6	921.2	11.7	16290.1	641.8	218.4	255.0
Reach	72250.0		150202.6	874.1	918.7	921.1	13.6	13905.0	487.7	218.4	255.0
Reach	72000.0		149870.2	874.0	917.0	920.7	16.6	12245.3	451.6	219.0	255.6
Reach	71750.0		149915.5	873.9	917.0	919.9	15.2	14795.2	598.2	219.0	256.2
Reach	71500.0		149804.8	873.8	916.5	919.4	15.7	14982.9	602.3	219.6	256.2
Reach	71250.0		149939.8	873.6	916.8	918.6	13.1	18267.9	703.5	219.6	256.8
Reach	71000.0		149682.1	873.5	915.7	918.4	15.3	14661.5	545.6	220.2	257.4
Reach	70750.0		149832.6	873.3	916.2	917.6	10.0	18254.0	596.1	220.2	257.4
Reach	70500.0		149056.2	871.5	913.8	917.7	17.3	11507.6	400.2	220.8	258.0
Reach	70250.0		149035.8	870.5	913.5	917.0	16.3	12327.2	418.3	220.8	258.6
Reach	70000.0		149079.5	869.6	913.5	916.4	15.5	14244.7	496.1	221.4	258.6
Reach	69750.0		148880.7	868.7	913.0	915.9	15.9	14605.4	485.4	221.4	259.2
Reach	69500.0		148794.3	868.4	912.7	915.3	15.0	15506.2	555.1	221.4	259.8
Reach	69250.0		149128.6	868.1	913.4	914.7	10.3	19814.6	746.4	222.0	259.8
Reach	69000.0		149302.3	867.8	913.7	914.3	7.2	27501.1	995.8	222.6	261.0
Reach	68750.0		149277.4	867.7	913.7	914.2	7.1	28417.8	989.1	223.2	261.6

HEC-RAS Plan: PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	68500.0		149355.4	867.6	913.7	914.1	6.3	31983.0	1068.4	223.8	262.2
Reach	68250.0		149395.3	867.4	913.6	914.0	5.6	32541.5	1085.7	224.4	262.8
Reach	68000.0		149379.2	866.6	913.6	914.0	4.9	31361.9	1084.3	225.0	263.4
Reach	67750.0		149364.5	866.5	913.4	913.9	5.5	26154.9	878.3	226.2	264.0
Reach	67500.0		149395.3	866.1	913.2	913.9	6.9	23351.7	795.8	226.8	264.0
Reach	67250.0		149143.8	865.5	912.3	913.7	9.9	15799.7	563.9	227.4	264.6
Reach	67000.0		149140.0	865.0	911.9	913.5	11.1	16032.4	498.4	227.4	265.2
Reach	66750.0		148866.8	864.9	911.1	913.4	13.2	15438.8	500.2	228.0	265.8
Reach	66500.0		148740.4	864.9	910.7	913.1	14.2	15334.4	499.6	228.0	266.4
Reach	66250.0		148384.8	864.5	909.8	912.8	15.9	13839.9	484.8	228.6	266.4
Reach	66000.0		148422.2	864.4	909.7	912.2	14.3	15240.3	503.1	228.6	267.0
Reach	65750.0		148412.2	864.2	909.6	911.7	13.3	16281.9	540.6	229.2	267.6
Reach	65500.0		147920.2	864.2	908.6	911.4	14.9	13468.9	441.3	229.2	267.6
Reach	65250.0		148016.8	864.1	908.6	910.9	13.6	16029.7	575.6	229.8	268.2
Reach	65000.0		148291.2	860.3	909.1	910.4	10.2	18476.6	688.9	229.8	268.8
Reach	64750.0		148437.8	860.0	909.3	910.2	8.2	23369.8	845.8	230.4	269.4
Reach	64500.0		148544.5	859.6	909.7	909.9	4.9	42067.5	1486.1	231.0	270.0
Reach	64210.0		158420.6	859.2	909.5	909.8	5.4	38233.1	1235.1	232.2	271.8
Reach	64000.0		159383.7	858.9	908.2	910.1	11.4	15569.4	568.2	232.2	271.8
Reach	63750.0		161060.5	858.6	908.3	909.8	10.9	18103.8	685.0	232.8	272.4
Reach	63500.0		160901.6	858.2	907.7	909.5	12.3	17776.3	585.1	233.4	273.0
Reach	63250.0		160652.0	857.9	907.0	909.3	13.7	14927.2	610.9	233.4	273.6
Reach	63000.0		160675.2	857.5	907.0	908.8	11.6	15683.3	588.0	234.0	273.6
Reach	62750.0		160694.9	857.2	907.0	908.5	10.0	16749.0	656.4	234.0	274.2
Reach	62500.0		160502.9	856.8	906.4	908.2	11.8	16550.9	563.5	234.6	274.8
Reach	62250.0		160136.2	856.5	905.5	908.1	13.9	16207.2	579.9	234.6	274.8
Reach	62000.0		160482.9	856.1	906.2	907.6	9.9	18499.9	633.5	235.2	275.4
Reach	61750.0		160655.3	855.8	906.6	907.3	7.4	25349.1	998.1	235.8	276.0
Reach	61500.0		160729.6	855.4	906.9	907.2	4.9	36642.1	1248.8	236.4	276.6
Reach	61250.0		160583.9	855.1	906.4	907.2	9.1	25465.7	1084.7	237.0	277.8
Reach	61130.0		165844.1	854.9	906.0	907.2	10.3	24408.2	1058.6	237.0	277.8
Reach	61028.0		167601.3	854.7	906.1	907.0	9.1	27147.2	1006.4	237.6	277.8
Reach	60943.0	Route 268	Bridge								
Reach	60784.0		167408.8	854.4	905.8	906.3	7.9	36865.3	1055.9	237.6	278.4
Reach	60250.0		166804.6	853.7	903.6	906.7	15.4	15396.0	563.0	238.8	279.6
Reach	60000.0		167103.0	853.3	904.5	905.7	10.5	24790.5	853.4	238.8	280.2
Reach	59750.0		167083.1	853.0	904.4	905.4	9.3	22853.0	755.0	239.4	280.8
Reach	59500.0		167116.6	852.6	904.2	905.1	8.7	23099.2	793.0	240.0	281.4
Reach	59250.0		166958.0	852.3	903.7	904.8	9.0	19549.9	632.1	240.0	282.0
Reach	59145.0		167121.8	852.1	904.0	904.8	7.7	26426.6	871.6	240.6	282.0

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	59115.0	Pilot Power Dam Road	Bridge								
Reach	59052.0		167075.1	852.0	903.9	904.6	7.3	27718.7	889.5	240.6	282.0
Reach	58750.0		166975.4	851.4	903.5	904.6	8.8	22893.3	814.5	241.2	282.6
Reach	58500.0		166954.7	850.4	903.3	904.3	8.8	20951.9	808.3	241.8	283.2
Reach	58250.0		166949.4	849.8	903.1	904.1	7.0	20848.0	638.6	242.4	283.8
Reach	58000.0		167023.3	849.7	903.2	904.1	8.7	25794.5	857.6	243.0	284.4
Reach	57750.0		167101.5	849.4	903.3	903.9	6.9	28686.1	879.1	243.0	285.0
Reach	57500.0		167098.0	849.3	903.2	903.8	7.6	28363.7	1031.6	243.6	285.6
Reach	57250.0		167102.5	848.8	903.0	903.7	7.4	25309.7	787.8	244.2	286.8
Reach	57000.0		167093.3	848.3	902.8	903.7	8.3	24277.9	726.5	244.8	286.8
Reach	56750.0		167128.1	847.8	902.7	903.6	8.1	25632.1	736.6	245.4	287.4
Reach	56500.0		167173.0	847.5	902.7	903.4	7.3	27509.1	766.4	246.0	288.6
Reach	56250.0		167131.5	847.2	902.1	903.2	8.2	20321.3	568.0	246.6	289.2
Reach	56000.0		167087.5	847.0	901.8	903.0	8.3	19215.9	574.9	247.2	289.2
Reach	55750.0		167087.6	846.7	901.4	902.8	10.4	19354.1	618.6	247.2	289.8
Reach	55500.0		167121.9	846.4	901.4	902.5	8.3	19881.4	618.0	247.8	290.4
Reach	55250.0		167121.4	846.2	901.1	902.4	8.9	18777.0	615.5	248.4	291.0
Reach	55000.0		166968.2	846.0	900.1	901.9	11.3	15393.3	489.7	249.0	291.6
Reach	54750.0		166964.5	845.7	899.9	901.4	8.6	17821.3	526.7	249.0	291.6
Reach	54500.0		166921.8	845.5	899.3	901.1	11.4	17255.4	547.2	249.6	292.2
Reach	54250.0		166836.1	845.2	898.9	900.7	11.8	16595.9	511.3	250.2	292.2
Reach	54000.0		166907.7	844.3	899.0	900.3	9.8	18085.0	569.4	250.2	292.8
Reach	53750.0		166875.8	843.6	898.5	899.9	10.2	19223.3	588.9	250.8	293.4
Reach	53500.0		166674.2	843.5	897.5	899.7	13.6	18565.3	548.2	251.4	294.0
Reach	53250.0		166820.8	843.5	897.9	899.1	9.8	20134.6	580.2	251.4	294.6
Reach	53000.0		166857.1	843.5	897.8	898.8	8.7	22277.8	644.5	252.0	294.6
Reach	52750.0		166929.6	843.2	898.0	898.6	6.4	27824.5	831.9	252.6	295.2
Reach	52500.0		166929.8	842.8	897.8	898.5	7.9	25747.0	826.2	253.2	296.4
Reach	52250.0		166930.6	842.5	897.6	898.3	7.1	25339.7	807.0	253.8	296.4
Reach	52000.0		166964.1	842.1	897.5	898.2	7.3	25213.4	777.8	254.4	297.0
Reach	51750.0		166856.4	841.8	896.6	898.2	11.6	19836.7	634.6	254.4	297.6
Reach	51500.0		166817.0	841.4	896.1	897.8	11.9	18940.4	642.9	255.0	298.2
Reach	51250.0		166783.0	841.1	895.8	897.5	11.3	19383.9	617.9	255.6	298.8
Reach	51000.0		166922.8	840.7	896.2	897.1	6.9	22642.3	641.3	255.6	299.4
Reach	50750.0		166892.1	840.4	895.9	896.9	8.5	23411.1	722.6	256.2	300.0
Reach	50500.0		166928.8	840.0	895.9	896.7	8.7	27269.4	797.4	256.8	300.6
Reach	50250.0		166990.4	839.7	896.1	896.5	6.4	32096.6	881.5	257.4	301.2
Reach	50000.0		167061.4	839.3	896.2	896.5	5.8	43409.0	1144.3	258.0	301.8
Reach	49750.0		166971.8	839.0	895.3	896.7	10.9	22825.0	750.0	258.6	303.0
Reach	49500.0		170267.4	838.6	894.5	896.4	12.0	17611.9	537.6	259.2	303.6

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	49250.0		170199.3	838.3	893.8	895.8	11.4	14914.5	457.9	259.2	303.6
Reach	49000.0		170062.8	837.9	892.8	895.3	13.9	14886.6	464.7	259.8	304.2
Reach	48750.0		170089.0	837.6	892.7	894.7	12.1	15034.9	478.6	259.8	304.2
Reach	48500.0		170112.7	836.8	892.3	894.4	12.4	16475.7	517.2	260.4	304.8
Reach	48250.0		170039.4	836.6	891.8	893.8	11.3	15106.0	466.5	260.4	305.4
Reach	48000.0		170029.8	836.5	891.4	893.2	10.7	15884.9	479.2	261.0	305.4
Reach	47750.0		170115.9	836.1	891.9	892.8	5.8	23532.6	650.2	261.6	306.0
Reach	47500.0		170136.5	835.8	892.1	892.7	5.3	27871.0	805.5	262.2	306.6
Reach	47250.0		170187.1	835.5	892.2	892.6	4.7	33397.4	958.0	263.4	307.2
Reach	47000.0		170212.8	835.1	892.3	892.6	3.6	39125.0	1065.2	264.0	307.8
Reach	46750.0		170190.5	834.8	891.6	892.5	7.2	23519.2	669.2	265.2	309.0
Reach	46500.0		170131.5	834.4	890.8	892.5	12.1	20089.6	606.2	265.2	309.6
Reach	46250.0		170183.5	834.1	890.9	892.0	8.5	20115.3	614.8	265.8	309.6
Reach	46000.0		170155.3	833.3	890.3	892.0	12.1	22326.0	715.9	266.4	310.2
Reach	45750.0		170179.8	833.2	890.2	891.6	10.5	20900.8	709.2	266.4	310.8
Reach	45500.0		170203.5	833.0	890.0	891.2	9.6	19584.7	649.4	267.0	311.4
Reach	45250.0		170125.9	832.7	889.0	891.0	12.6	16738.5	538.2	267.6	312.0
Reach	45000.0		170175.6	832.3	888.9	890.5	10.5	16876.9	489.8	267.6	312.0
Reach	44750.0		170123.2	832.0	888.1	890.3	12.7	16439.0	502.3	268.2	312.6
Reach	44500.0		170068.0	831.6	887.7	889.9	12.9	16864.0	565.1	268.2	313.2
Reach	44250.0		170118.9	831.3	887.4	889.5	12.2	17698.0	602.1	268.8	313.2
Reach	44000.0		170142.5	830.9	887.6	889.0	10.6	18771.8	658.0	268.8	313.8
Reach	43750.0		170141.7	830.6	887.1	888.8	11.4	18431.7	605.0	269.4	314.4
Reach	43500.0		170165.6	830.2	887.2	888.4	8.7	19332.2	580.2	270.0	314.4
Reach	43250.0		170168.8	829.9	886.5	888.0	10.2	17070.7	526.7	270.6	315.0
Reach	43000.0		170165.6	829.5	886.4	887.8	11.3	22033.2	605.0	270.6	315.6
Reach	42750.0		170213.4	829.2	886.7	887.5	7.6	28192.2	731.6	271.2	316.2
Reach	42500.0		170237.4	828.8	886.7	887.2	6.2	28163.1	761.4	271.8	316.8
Reach	42250.0		170243.7	828.5	886.0	887.0	9.1	21068.6	689.5	272.4	317.4
Reach	42000.0		170183.0	828.1	884.6	886.9	13.0	16499.7	597.4	272.4	318.0
Reach	41750.0		170206.1	827.8	884.2	886.2	11.8	16469.7	565.9	273.0	318.0
Reach	41500.0		170206.3	827.4	884.1	885.9	13.2	20103.2	590.4	273.6	318.6
Reach	41250.0		170254.4	827.1	884.1	885.3	9.2	20340.0	544.7	273.6	319.2
Reach	41000.0		170238.8	826.7	883.5	885.2	12.5	22091.4	627.7	274.2	319.8
Reach	40750.0		170277.2	826.4	883.7	884.9	10.9	26880.8	738.6	274.2	320.4
Reach	40500.0		170271.1	826.0	883.0	884.7	12.3	21498.3	592.3	274.8	321.0
Reach	40250.0		170215.8	825.7	881.5	884.7	15.6	14829.4	450.1	275.4	321.0
Reach	40000.0		170238.5	825.3	881.2	884.3	15.5	15455.1	485.0	275.4	321.6
Reach	39750.0		170281.9	825.0	881.8	883.7	12.4	18570.2	551.5	275.4	322.2
Reach	39500.0		170329.3	824.6	881.9	883.3	11.1	20726.6	608.8	276.0	322.2

HEC-RAS Plan: PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	39250.0		170278.7	824.3	880.4	883.4	15.0	15517.9	419.2	276.6	322.8
Reach	39000.0		170302.2	823.9	880.4	883.0	13.9	17182.2	473.1	276.6	323.4
Reach	38750.0		170326.5	823.6	880.8	882.5	12.0	18984.6	549.6	277.2	323.4
Reach	38500.0		170367.1	823.2	880.7	882.3	11.9	23442.0	743.4	277.2	324.0
Reach	38250.0		170394.0	822.9	880.4	881.9	10.9	18101.0	546.5	277.8	324.6
Reach	38000.0		170368.1	822.5	879.5	881.4	11.1	15329.9	469.9	277.8	325.2
Reach	37750.0		170357.9	822.2	878.6	881.0	13.3	15204.9	484.3	278.4	325.2
Reach	37500.0		170399.5	821.8	878.8	880.5	11.6	17233.6	521.9	279.0	325.8
Reach	37250.0		170373.6	821.5	877.2	880.6	16.5	15246.4	478.0	279.0	326.4
Reach	37000.0		170414.4	821.1	877.5	879.7	11.7	14692.5	481.2	279.6	326.4
Reach	36750.0		170438.5	820.8	877.4	879.2	10.2	16306.6	512.2	279.6	327.0
Reach	36500.0		170445.7	820.4	877.5	878.7	9.3	19568.8	601.6	280.2	327.6
Reach	36250.0		170437.1	820.1	876.1	878.7	14.7	17069.4	556.8	280.2	327.6
Reach	36000.0		170407.3	819.7	874.7	878.4	16.8	13871.1	445.3	280.8	328.2
Reach	35750.0		170464.0	819.4	875.6	877.6	11.8	18401.5	561.6	280.8	328.8
Reach	35500.0		170490.7	819.0	875.8	877.3	11.7	22976.2	811.0	281.4	328.8
Reach	35250.0		170472.1	818.7	874.4	877.3	15.3	16214.5	494.2	282.0	329.4
Reach	35000.0		170495.5	818.3	874.3	876.9	14.7	16837.1	556.6	282.0	330.0
Reach	34750.0		170488.6	818.0	873.3	876.6	16.1	15011.8	467.1	282.0	330.6
Reach	34500.0		170494.8	817.6	872.7	876.2	16.5	14937.3	523.2	282.6	330.6
Reach	34250.0		170503.0	817.3	872.3	875.6	16.1	13575.5	439.2	282.6	331.2
Reach	34000.0		170459.1	816.9	871.0	875.2	18.1	12448.6	373.5	283.2	331.2
Reach	33750.0		170517.3	816.6	871.6	874.4	14.9	14548.4	475.3	283.2	331.8
Reach	33500.0		170544.5	816.2	871.3	874.1	14.8	16436.7	590.6	283.8	331.8
Reach	33250.0		170551.9	815.9	871.0	873.5	14.0	14176.1	453.3	283.8	332.4
Reach	33000.0		170542.9	815.5	870.0	873.3	15.9	14156.6	437.0	284.4	332.4
Reach	32750.0		170598.8	815.2	870.7	872.7	12.9	19287.9	617.8	284.4	333.0
Reach	32500.0		170576.4	814.8	869.4	872.5	15.4	14537.0	455.1	285.0	333.6
Reach	32250.0		170565.3	814.5	868.6	872.2	16.8	13705.3	452.3	285.0	333.6
Reach	32000.0		170570.6	814.1	868.1	871.5	16.2	12519.2	407.4	285.0	334.2
Reach	31750.0		170523.5	813.8	866.8	871.2	17.9	12298.0	397.8	285.6	334.2
Reach	31500.0		170566.5	813.4	866.8	870.5	16.7	12935.7	448.8	285.6	334.8
Reach	31250.0		170573.8	813.1	866.7	870.0	16.1	14319.4	506.3	286.2	334.8
Reach	31000.0		170615.7	812.7	866.8	869.3	13.6	14209.8	486.2	286.2	335.4
Reach	30750.0		170624.9	812.4	866.5	869.0	14.0	15806.1	489.5	286.8	336.0
Reach	30500.0		170633.1	812.0	866.2	868.7	13.9	15226.4	485.3	286.8	336.0
Reach	30250.0		170623.4	811.7	865.3	868.4	15.0	14828.2	461.7	287.4	336.6
Reach	30000.0		170612.2	811.3	864.4	868.1	17.0	13710.4	430.8	287.4	336.6
Reach	29750.0		170617.0	811.0	864.2	867.5	15.4	12911.8	407.3	287.4	337.2
Reach	29500.0		170641.8	810.6	864.3	867.1	14.5	14118.2	465.4	288.0	337.8

HEC-RAS Plan: PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	29250.0		170682.8	810.3	864.4	866.6	12.8	16535.1	527.5	288.0	337.8
Reach	29000.0		170693.8	809.9	864.5	866.2	12.4	19691.9	581.2	288.6	338.4
Reach	28750.0		170735.7	809.6	864.2	865.9	12.2	20843.6	653.8	288.6	339.0
Reach	28500.0		170738.5	809.2	864.3	865.7	11.1	22216.0	721.2	289.2	339.6
Reach	28250.0		170748.8	808.9	863.4	865.5	13.2	18132.0	571.2	289.8	339.6
Reach	28000.0		170728.9	808.5	862.0	865.3	16.6	13688.0	471.6	289.8	340.2
Reach	27750.0		170694.6	808.2	861.1	864.8	16.7	13952.7	440.3	290.4	340.8
Reach	27500.0		172165.2	807.8	860.4	864.2	16.9	12985.5	494.0	290.4	340.8
Reach	27250.0		172177.1	807.5	860.3	863.6	15.9	13791.1	475.0	290.4	341.4
Reach	27000.0		172148.4	807.1	859.1	863.1	16.8	11325.4	375.5	291.0	341.4
Reach	26750.0		172182.3	806.8	859.3	862.5	15.4	12739.7	421.5	291.0	342.0
Reach	26500.0		172262.4	806.4	860.3	862.1	11.4	18293.0	565.5	291.6	342.0
Reach	26250.0		172255.9	806.1	859.3	861.9	14.8	16786.4	530.0	291.6	342.6
Reach	26000.0		172249.9	805.7	858.4	861.6	16.1	15566.3	497.0	292.2	343.2
Reach	25750.0		172302.5	805.4	859.0	860.8	11.8	18458.6	583.6	292.2	343.2
Reach	25500.0		172351.0	805.0	858.7	860.4	11.3	18979.6	652.1	292.8	343.8
Reach	25250.0		172365.1	804.7	858.5	860.1	11.2	20746.4	696.9	292.8	344.4
Reach	25000.0		172361.1	804.3	857.9	859.9	13.0	18790.1	590.0	293.4	345.0
Reach	24750.0		172382.9	804.0	857.1	859.6	14.5	18010.0	586.3	294.0	345.0
Reach	24500.0		172361.2	803.6	855.9	859.2	15.1	12674.9	391.1	294.0	345.6
Reach	24250.0		172374.3	803.3	855.3	858.8	15.8	13391.8	399.7	294.0	345.6
Reach	24000.0		172404.4	802.9	855.5	858.3	14.2	14601.2	423.7	294.6	346.2
Reach	23750.0		172430.5	802.6	855.3	857.9	13.8	16346.5	529.0	294.6	346.8
Reach	23500.0		172453.8	802.2	854.9	857.5	13.5	15099.0	455.1	295.2	346.8
Reach	23250.0		172448.4	801.9	854.3	857.2	14.4	14401.1	424.9	295.2	347.4
Reach	23000.0		172461.5	801.5	853.7	856.9	15.7	15217.7	489.8	295.8	347.4
Reach	22750.0		172458.0	801.2	852.9	856.5	16.4	14009.7	434.2	295.8	348.0
Reach	22500.0		172433.1	800.8	852.1	855.9	16.3	12859.1	412.0	296.4	348.6
Reach	22250.0		172441.8	800.5	851.7	855.3	15.9	12049.9	369.6	296.4	348.6
Reach	22000.0		172371.1	800.1	850.3	854.9	18.2	11729.0	371.0	297.0	349.2
Reach	21750.0		172483.7	799.8	851.4	854.0	13.7	13802.1	436.9	297.0	349.2
Reach	21500.0		172414.4	799.4	849.7	853.5	15.9	11139.2	342.7	297.0	349.8
Reach	21250.0		172544.4	799.1	851.5	852.9	10.6	19165.1	608.9	297.6	349.8
Reach	21000.0		172557.3	798.7	851.1	852.8	10.9	18096.9	533.8	298.2	350.4
Reach	20750.0		172547.4	798.4	850.2	852.4	12.9	14785.0	443.4	298.2	350.4
Reach	20500.0		172554.0	798.0	850.0	852.1	12.3	14759.1	469.2	298.8	351.0
Reach	20250.0		172468.9	797.7	848.1	851.9	16.0	12055.6	373.4	298.8	351.6
Reach	20000.0		172501.0	797.3	848.4	851.3	14.0	13773.9	381.1	299.4	351.6
Reach	19750.0		172487.0	797.0	847.5	851.0	15.8	12916.0	378.2	299.4	352.2
Reach	19500.0		172495.2	796.6	847.6	850.4	14.2	13335.5	402.2	300.0	352.2

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	19250.0		172567.6	796.3	847.7	850.1	13.1	14456.9	457.1	300.0	352.8
Reach	19000.0		172575.9	795.9	847.5	849.7	13.4	15595.7	503.4	300.6	352.8
Reach	18750.0		172494.8	795.6	846.3	849.7	16.4	15199.5	497.1	300.6	353.4
Reach	18500.0		172479.5	795.2	845.8	849.1	16.2	15486.8	523.5	301.2	354.0
Reach	18250.0		172439.2	794.9	844.8	848.6	16.8	13560.2	460.6	301.2	354.0
Reach	18000.0		172310.5	794.5	843.9	848.2	17.8	12822.4	418.0	301.2	354.6
Reach	17750.0		172392.9	794.2	844.1	847.4	16.2	15384.9	515.4	301.8	354.6
Reach	17500.0		172528.8	793.8	844.9	846.7	11.7	18196.7	644.8	301.8	355.2
Reach	17250.0		172532.1	793.5	844.7	846.3	11.2	17406.4	564.0	302.4	355.8
Reach	17000.0		172486.9	793.2	844.1	846.2	12.5	16103.5	544.0	303.0	355.8
Reach	16750.0		172536.4	792.8	844.2	845.8	11.5	17498.6	605.4	303.0	356.4
Reach	16500.0		172593.9	792.5	844.3	845.6	10.8	22712.8	750.2	303.6	357.0
Reach	16250.0		172623.4	792.2	844.4	845.3	8.8	25676.3	841.1	303.6	357.6
Reach	16000.0		172627.6	791.9	844.4	845.1	7.1	26302.9	909.2	304.2	358.2
Reach	15750.0		172689.8	791.5	844.6	845.0	5.7	32181.3	967.7	304.8	358.8
Reach	15500.0		172707.6	791.2	844.7	845.1	4.2	39158.3	1132.4	306.0	360.0
Reach	15250.0		174189.7	790.9	844.6	845.0	3.9	38227.8	1152.5	307.2	360.6
Reach	15000.0		174222.1	790.6	844.5	845.0	4.8	32320.6	1010.6	307.8	361.8
Reach	14750.0		174259.2	790.2	844.4	844.9	3.6	33110.2	1008.9	309.0	361.8
Reach	14500.0		174336.6	789.9	844.5	844.9	3.1	39123.7	1259.0	310.2	363.6
Reach	14327.0		174401.1	789.7	844.6	844.8	3.9	45717.7	1464.1	310.8	364.8
Reach	14257.0	Quaker Church Road (Route 2080)	Bridge								
Reach	14158.0		174360.9	789.5	843.5	844.1	3.5	31628.3	941.0	311.4	365.4
Reach	13750.0		174473.6	788.9	843.3	844.0	7.5	26714.1	969.7	312.6	366.0
Reach	13500.0		174516.0	788.6	842.9	844.0	10.0	25502.8	772.0	313.2	366.6
Reach	13250.0		174563.5	788.3	841.6	844.0	13.9	17471.6	539.5	313.8	367.2
Reach	13000.0		174602.7	788.0	841.0	843.6	14.3	15688.0	489.8	313.8	367.8
Reach	12750.0		174641.3	787.6	840.5	843.3	15.6	15423.5	520.9	314.4	368.4
Reach	12500.0		174718.8	787.3	840.8	842.7	12.4	17831.5	575.5	314.4	368.4
Reach	12250.0		174740.9	787.0	839.5	842.6	15.9	16050.1	544.4	315.0	369.0
Reach	12000.0		174778.8	786.7	839.3	842.1	15.0	17900.9	628.2	315.0	369.6
Reach	11750.0		174828.0	786.3	839.1	841.6	14.2	18079.2	594.2	315.6	369.6
Reach	11500.0		174879.9	786.0	838.1	841.3	15.4	15177.0	485.2	315.6	370.2
Reach	11250.0		174923.8	785.7	837.7	841.0	16.1	15276.5	524.0	316.2	370.8
Reach	11000.0		174984.4	785.4	838.1	840.3	13.2	16364.7	512.0	316.2	370.8
Reach	10750.0		175025.4	785.0	837.7	839.9	13.3	15233.1	454.9	316.8	371.4
Reach	10500.0		175091.8	784.7	837.9	839.7	12.4	18502.1	616.1	316.8	371.4
Reach	10250.0		175134.2	784.4	837.0	839.6	13.6	15265.3	495.2	317.4	372.0
Reach	10000.0		175148.5	784.1	835.6	839.3	16.8	14708.4	511.4	317.4	372.6
Reach	9750.0		175170.8	783.7	834.1	838.8	18.5	12178.2	408.3	317.4	372.6

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	9500.0		175086.1	783.4	832.7	838.4	20.8	11584.3	407.2	318.0	373.2
Reach	9250.0		175099.9	783.1	832.3	837.3	18.9	11706.5	409.8	318.0	373.2
Reach	9000.0		175154.7	782.8	832.3	836.6	18.6	14084.5	511.8	318.6	373.8
Reach	8750.0		175321.6	782.4	833.9	835.3	10.6	21240.2	708.0	318.6	373.8
Reach	8500.0		175252.4	782.1	831.7	835.4	16.6	12672.0	453.7	319.2	374.4
Reach	8250.0		174896.2	781.8	829.1	834.9	20.9	10825.9	386.7	319.2	374.4
Reach	8000.0		175082.8	781.5	829.8	833.7	17.5	12109.5	400.7	319.2	375.0
Reach	7750.0		175231.8	781.1	830.6	833.1	13.9	15371.3	585.6	319.8	375.0
Reach	7500.0		175300.5	780.8	830.5	832.8	13.4	16786.8	636.9	319.8	375.6
Reach	7250.0		175336.3	780.5	830.4	832.1	12.2	18369.3	693.2	320.4	376.2
Reach	7000.0		175395.6	780.2	830.4	831.8	11.2	19879.8	775.8	320.4	376.8
Reach	6750.0		175445.3	779.8	830.3	831.7	10.9	20912.9	826.0	321.0	376.8
Reach	6500.0		175506.6	779.5	830.3	831.4	10.2	23357.5	1049.5	321.6	377.4
Reach	6250.0		175548.5	779.2	830.0	831.1	10.1	22914.9	889.9	321.6	378.0
Reach	6000.0		175595.4	778.9	830.1	830.9	8.7	25364.3	953.9	322.2	378.6
Reach	5750.0		175629.9	778.5	829.6	830.7	10.1	22193.2	837.2	322.8	379.2
Reach	5500.0		175657.5	778.2	829.4	830.6	10.2	21284.5	813.0	322.8	379.8
Reach	5250.0		175701.1	777.9	829.1	830.3	10.3	20893.1	755.0	323.4	380.4
Reach	5000.0		175727.6	777.6	828.8	830.1	10.0	19630.0	722.4	324.0	380.4
Reach	4750.0		175754.4	777.2	828.7	829.9	9.6	19925.4	665.3	324.6	381.0
Reach	4500.0		175863.0	776.9	828.9	829.7	8.3	23658.1	806.3	324.6	381.6
Reach	4358.0		175862.1	776.7	829.2	829.6	6.1	32208.9	1159.4	325.2	382.2
Reach	4310.0	Yadkin Valley Railroad #3	Bridge								
Reach	4221.0		175844.1	776.5	829.0	829.4	6.7	40679.4	1432.3	325.2	382.8
Reach	3823.0	Similar to 878117 of Yadkin Reach-1	175840.3	776.0	828.9	829.3	6.2	42060.7	1493.4	326.4	385.2
Reach	3500.0		245788.0	775.7	828.2	829.0	8.5	39215.7	1362.8	327.0	386.4
Reach	3250.0		245804.7	775.4	828.0	828.9	9.2	36385.1	1386.4	327.6	386.4
Reach	3000.0		245818.2	775.2	828.2	828.8	7.4	44844.2	1565.8	328.2	387.6
Reach	2750.0		245817.2	774.9	828.3	828.7	6.4	51491.2	1759.7	328.8	388.2
Reach	2500.0	Similar to 876743 of Yadkin Reach-1	245802.6	774.7	828.1	828.6	7.5	47828.5	1916.6	329.4	389.4
Reach	2250.0		245812.7	774.4	828.1	828.6	7.1	49977.8	2050.1	330.0	390.0
Reach	2000.0		245801.3	774.2	828.1	828.5	6.3	53891.4	2135.3	330.6	391.2
Reach	1750.0		245800.3	773.9	828.1	828.4	5.5	58586.2	2055.0	331.2	392.4
Reach	1500.0	Similar to 875789 of Yadkin Reach-1	245806.1	773.7	828.1	828.4	5.9	58418.0	2047.5	331.8	393.0
Reach	1250.0		245804.3	773.4	827.9	828.4	7.0	56260.6	2011.5	333.0	394.2
Reach	1000.0		245802.8	773.2	827.8	828.4	7.4	48307.2	1615.5	333.0	394.8
Reach	750.0		245801.3	772.9	827.6	828.3	8.5	44008.2	1462.8	333.6	395.4
Reach	500.0	Similar to 874889 of Yadkin Reach-1	245800.1	772.7	827.5	828.3	8.5	43585.5	1404.8	334.2	396.0
Reach	250.0		245798.5	772.4	827.5	828.1	8.2	47305.9	1564.4	334.8	397.2
Reach-1	878977.0	Yadkin River Before Ararat Inflow	69930.4	776.9	827.9	828.0	3.8	36095.3	1532.3	N/A	N/A

HEC-RAS Plan: PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach-1	878117.0	Similar to 3823 of previous reach	69802.7	776.1	827.8	828.0	3.2	37593.4	1414.0	326.4	385.2
Reach-1	876743.0	Similar to 2500 of previous reach	239797.7	775.0	826.5	827.3	9.7	50468.7	2175.4	329.4	389.4
Reach-1	875789.0	Similar to 1500 of previous reach	239789.9	774.2	825.9	826.9	10.3	53557.2	2009.2	331.8	393.0
Reach-1	874889.0	Similar to 500 of previous reach	239762.2	773.4	824.6	826.6	13.2	30966.5	1356.7	334.2	396.0
Reach-1	873889.0		239730.1	772.5	822.8	824.4	11.7	27055.5	923.8	335.4	397.8
Reach-1	872888.0		239687.7	771.7	820.0	822.5	14.6	27548.8	951.0	337.2	399.6
Reach-1	871889.0		239647.1	770.8	818.7	821.1	14.3	28420.9	990.6	338.4	401.4
Reach-1	870889.0		239629.1	770.0	817.3	819.8	14.4	29122.7	1070.5	339.0	403.8
Reach-1	869792.0		239612.9	769.1	816.2	818.2	13.2	28554.4	1188.2	340.8	405.6
Reach-1	868972.0		239609.0	768.4	815.2	817.2	13.2	27785.2	1056.9	341.4	407.4
Reach-1	868033.0		239604.6	767.6	815.0	816.0	10.3	35110.6	1411.8	343.2	409.2
Reach-1	866672.0		239597.0	766.4	812.9	815.0	13.9	33033.3	1263.6	345.0	412.8
Reach-1	865759.0		239588.8	765.6	810.6	812.5	12.0	24699.7	929.5	346.2	414.6
Reach-1	864908.0		239581.0	764.9	807.3	810.5	15.7	23073.7	1009.5	346.8	415.8
Reach-1	863826.0		239579.5	764.0	806.3	808.2	12.8	29107.5	1315.7	348.6	417.6
Reach-1	862956.0		239577.5	763.2	804.5	806.9	14.1	25082.4	1121.2	349.2	419.4
Reach-1	861929.0		239567.6	762.4	798.1	804.0	19.6	12566.5	983.4	350.4	420.6
Reach-1	860992.0		238858.0	761.6	793.2	799.0	19.8	14108.9	1214.0	351.0	421.8
Reach-1	859929.0		238563.8	759.1	791.6	794.2	13.3	21081.3	1454.3	352.2	423.0
Reach-1	858874.0		238428.9	757.4	790.8	792.6	11.7	22924.5	1242.1	353.4	424.2
Reach-1	857919.0		238189.0	755.9	789.6	791.4	10.9	23019.3	961.1	355.2	426.0
Reach-1	857233.0		238219.4	754.0	789.8	790.8	8.0	30809.4	1173.6	356.4	427.2
Reach-1	856716.0		238227.8	750.0	789.7	790.6	9.2	34651.0	1434.9	357.6	428.4
Reach-1	855942.0		238330.0	747.8	789.2	790.2	10.0	38593.0	1684.5	358.8	430.2
Reach-1	854859.0		238231.2	745.4	788.5	789.5	10.7	38650.8	1670.3	360.6	433.2
Reach-1	853833.0		238007.5	743.9	787.2	788.8	13.2	29087.7	1204.3	361.8	435.6
Reach-1	852899.0		237867.2	742.7	786.3	787.9	12.6	30311.8	1243.0	363.0	437.4
Reach-1	851917.0		237756.1	741.6	785.8	787.1	11.4	33283.3	1351.3	364.2	439.8
Reach-1	850885.0		237196.6	740.9	783.7	786.4	14.4	26979.2	1093.0	366.0	442.2
Reach-1	849909.0		236450.5	740.0	782.0	785.1	15.3	23235.6	913.7	366.6	443.4
Reach-1	849110.0		235085.5	739.5	779.9	783.7	16.5	19310.1	779.9	367.8	444.6
Reach-1	847889.0		235103.7	737.9	780.0	781.2	9.2	33184.5	1163.5	369.0	447.0
Reach-1	846889.0		235067.4	736.0	779.8	780.6	8.3	37532.6	1331.1	371.4	449.4
Reach-1	845805.0		234332.1	734.9	778.5	780.3	11.3	31174.0	1111.6	373.2	451.8
Reach-1	844851.0		234228.2	734.1	778.2	779.5	10.6	32411.2	1230.2	374.4	454.2
Reach-1	843889.0		233557.5	731.8	777.3	779.0	11.7	34612.7	1310.7	375.6	456.6
Reach-1	842978.0		233019.2	731.7	776.6	778.3	11.6	35687.9	1333.8	377.4	459.0
Reach-1	841737.0		231869.3	729.1	775.8	777.3	10.3	30912.7	1051.4	379.2	462.0
Reach-1	840889.0		231479.0	728.4	775.3	776.8	10.4	29846.4	1019.9	380.4	463.8
Reach-1	839889.0		231154.1	727.0	774.9	776.3	10.0	29145.4	914.3	382.2	465.6

HEC-RAS Plan: PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach-1	**838887.0**		230810.3	723.9	774.3	775.9	11.2	37769.6	1325.0	383.4	468.0
Reach-1	**837871.0**		230071.2	723.6	773.2	775.4	13.4	31875.9	1411.1	385.2	470.4
Reach-1	**836868.0**		231806.4	722.6	773.4	774.2	9.1	44979.4	1718.7	386.4	473.4
Reach-1	**835888.0**		231628.7	722.6	773.0	773.9	9.5	43578.2	1611.6	388.2	476.4
Reach-1	**834878.0**		231639.7	721.8	772.9	773.4	7.7	55386.0	2196.7	390.0	480.0
Reach-1	**833762.0**		231487.9	721.8	772.5	773.1	9.0	66074.0	2743.2	392.4	484.8
Reach-1	**832889.0**		231369.8	721.5	772.2	772.9	9.5	72342.8	3135.9	394.2	489.0
Reach-1	**831869.0**		231301.8	721.3	771.8	772.4	8.6	73565.7	3116.7	396.0	494.4
Reach-1	**830889.0**		231211.1	721.2	771.4	772.1	8.9	71244.4	2926.1	397.8	499.8
Reach-1	**829877.0**		231182.3	721.0	771.2	771.7	8.3	79772.3	3350.7	399.6	505.2
Reach-1	**828958.0**		231147.0	720.9	770.9	771.4	7.9	74103.5	2873.8	401.4	510.0
Reach-1	**827852.0**		231108.8	719.9	770.6	771.1	7.5	67100.8	2472.0	403.8	516.0
Reach-1	**826913.0**		231055.0	719.5	770.0	770.9	10.9	44851.5	2151.9	405.6	519.6
Reach-1	**825957.0**		231039.2	718.8	769.4	770.4	10.4	39710.7	1460.6	407.4	522.6
Reach-1	**825519.0**		231028.5	719.4	769.2	770.2	10.2	41361.8	1622.1	408.0	523.8
Reach-1	**825429.0**	Reynolda Road (NC Route 67)	Bridge								
Reach-1	**825318.0**	Convergence	230615.4	719.2	767.2	769.1	12.6	32652.9	1713.2	408.0	524.4

0.90 PMF with Dam Failure

HEC-RAS Plan: 0.9 PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	182928.0		287902.7	1146.99	1203.28	1216.52	27.58	9903.85	347.65	0	0
Reach	182750.0		291180.2	1146.44	1201.92	1205.1	12.17	20687.54	822.43	0	0
Reach	182500.0		289352.7	1145.69	1198.97	1204.64	14.55	15680.5	530.57	0.6	0
Reach	182250.0		285485.9	1144.43	1197.89	1203.78	18.98	15604.38	532.6	0.6	0.6
Reach	182000.0		285443.1	1143.09	1195.11	1202.27	21.55	13446.94	703.96	1.2	0.6
Reach	181750.0		286805.1	1141.7	1191.22	1200.57	28.61	12548.91	521.49	1.2	0.6
Reach	181310.0		261215.5	1139.29	1188.57	1192.51	19.12	17649.29	695.83	1.8	1.2
Reach	181244.0	Epworth Road (Route 686)	Bridge								
Reach	181185.0		285582.8	1138.8	1181.49	1189.53	29.7	14210.93	646.14	1.8	1.2
Reach	180750.0		284706	1136.56	1175.23	1183.94	19.15	12655.32	693.29	1.8	1.8
Reach	180500.0		284660.8	1135.29	1174.28	1179.31	13.22	18046.06	814.47	2.4	1.8
Reach	180250.0		284531.7	1133.99	1171.07	1180.25	18.53	12016.97	607.13	2.4	1.8
Reach	180000.0		284324	1132.69	1169.1	1176.26	17.69	13437.94	768.38	2.4	2.4
Reach	179750.0		283618.2	1131.39	1168.59	1173.02	13.14	17965.66	940.54	3	2.4
Reach	179500.0		283466.9	1129.89	1165.76	1173.95	19.19	12652.67	699.37	3	2.4
Reach	179250.0		283394.6	1128.81	1163.14	1173.65	19.63	11620.26	622.9	3.6	3
Reach	179000.0		283291.4	1127.71	1159.74	1170.39	21.94	11451.38	706.5	3.6	3
Reach	178750.0		282826.2	1126.59	1156.77	1163.67	17.16	13584.05	965.62	3.6	3
Reach	178500.0		282539.1	1125.79	1153.95	1159.17	15.93	15494.19	1259.1	4.2	3
Reach	178250.0		280957.1	1124.89	1152.22	1156.82	14.52	16398.58	1356.83	4.2	3.6
Reach	178000.0		269915.2	1124.09	1151.53	1154.58	11.39	19401.61	1479.47	4.8	3.6
Reach	177750.0		260678.6	1123.09	1151.11	1153.13	8.2	23351.6	1643.52	5.4	4.2
Reach	177500.0		264857.4	1122.59	1151.7	1152.37	4.48	41732.78	2330.99	6	4.8
Reach	177250.0		264433.3	1122.31	1151.14	1152.19	4.51	33566.04	1670.59	6.6	6
Reach	177000.0		261580.2	1121.69	1150.7	1151.97	5.42	29710.56	1286.09	7.8	6
Reach	176750.0		261509.4	1120.21	1150.44	1151.86	6.89	28390.45	1395.2	8.4	6
Reach	176500.0		241161.6	1119.49	1149.1	1151.33	9.7	20396.43	1095.35	9	6.6
Reach	176250.0		182438.5	1117.31	1146.92	1149.33	10.71	14802.31	956.98	9	6.6
Reach	176000.0		194476.3	1115.07	1147.83	1148.81	4.89	25007.15	1132.81	9.6	7.2
Reach	175750.0		194484.4	1113.99	1147.85	1148.71	4.69	26806.54	1260.08	10.8	7.2
Reach	175500.0		198248.5	1113.2	1147.86	1148.66	4.64	28461.45	1327.94	11.4	7.8
Reach	175375.0		198211.7	1113.09	1147.86	1148.64	4.56	29006.94	1388.87	12	7.8
Reach	175275.0		198126.6	1112.99	1147.88	1148.59	4.57	30573.59	1574.55	12	7.8
Reach	175230.0	Fishlake Road (Route 687)	Bridge								
Reach	175175.0		198126.6	1112.92	1148.07	1148.68	4.58	37704	1844.4	12.6	8.4
Reach	174750.0		197951.1	1111.99	1147.96	1148.36	3.09	39797.99	1565.22	14.4	9.6
Reach	174500.0		194772.6	1111.53	1147.84	1148.31	3.48	36179.84	1458.55	16.2	10.2
Reach	174250.0		194781.5	1109.9	1147.7	1148.27	3.64	33119.16	1330.73	16.8	10.8
Reach	174000.0		194772.6	1108.3	1147.68	1148.28	4.56	34271.93	1285.11	18	11.4
Reach	173750.0		197449.9	1107.38	1147.85	1148.17	2.59	45619.69	1530.56	19.2	12

HEC-RAS Plan: 0.9 PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	173500.0		194786.8	1105.86	1147.58	1148.18	3.42	33227.76	1146.84	20.4	12
Reach	173250.0		194762.5	1104.92	1147.46	1148.14	4.12	31213.87	1102.81	21.6	12.6
Reach	173000.0		194726.9	1104.25	1147.36	1148.07	4.4	30171.78	1059.99	22.8	12.6
Reach	172750.0		194699.8	1103.74	1147.41	1148	4.36	32309.2	1062.86	23.4	13.2
Reach	172500.0		194664.7	1102.21	1147.16	1148.03	4.14	28154.61	942.61	24.6	13.8
Reach	172250.0		192532.1	1101.38	1146.95	1147.91	3.94	25869.1	763.56	25.8	13.8
Reach	172000.0		194541.3	1099.16	1147.17	1147.89	3.84	31606.02	998.71	27	15
Reach	171750.0		194536.7	1098.73	1147.37	1147.81	3.04	40297.93	1158.71	28.2	15.6
Reach	171500.0		196192.8	1098.34	1147.39	1147.77	2.89	43670.5	1257.92	29.4	16.2
Reach	171248.0		194611.1	1097.31	1147.16	1147.69	4.25	34351.51	1204.22	30.6	16.8
Reach	171000.0		194618.6	1096.51	1146.98	1147.62	5.19	30850.92	1192	31.2	17.4
Reach	170750.0		195853.8	1095.25	1147.13	1147.54	3.8	38395.79	1266.43	32.4	18
Reach	170500.0		194670.3	1093.89	1146.81	1147.46	5	30727.6	998.08	33.6	19.2
Reach	170250.0		194688.7	1092.82	1146.8	1147.43	5.09	33024.58	1052.08	34.2	19.8
Reach	170000.0		195545.6	1092.25	1146.87	1147.35	3.58	37424.21	1136.93	34.8	19.8
Reach	169750.0		195442.1	1091.99	1147	1147.29	3.01	49172.91	1337.32	36.6	21
Reach	169500.0		194787.6	1091.44	1145.25	1146.92	13.33	21254.35	753.15	36.6	22.2
Reach	169250.0		193828.6	1088.89	1142.52	1146.41	16.8	13094.88	443.16	37.2	22.2
Reach	169000.0		192683.4	1088.36	1138.77	1145.4	20.61	9950.95	352.05	37.2	22.8
Reach	168750.0		192661.1	1087.78	1139.18	1142.47	18.51	15632.04	901.54	37.8	22.8
Reach	168500.0		192613.8	1087.21	1138.78	1140.56	14.36	20367.37	730.85	37.8	23.4
Reach	168250.0		191691.9	1085.51	1135.72	1141.22	14.52	12046.57	365.88	38.4	23.4
Reach	168000.0		191707.3	1085.36	1135.67	1138.62	17	14943.06	482.66	38.4	24
Reach	167750.0		192082.9	1084.84	1136.37	1137.38	6.77	25774.95	718.55	39	24.6
Reach	167500.0		191776.5	1083.64	1135.06	1136.78	13.31	19356.5	528.34	39	25.2
Reach	167250.0		191784.5	1083.05	1134.96	1136.48	10.63	22937.45	893.99	39.6	25.2
Reach	167000.0		191795.7	1082.46	1134.28	1135.81	8.75	20665.6	589.09	40.2	25.8
Reach	166750.0		191808.3	1080.88	1131.66	1134.96	18.63	14255.09	419.13	40.2	26.4
Reach	166500.0		191817.3	1080.54	1128.34	1134.27	17.25	10561.37	349.62	40.2	26.4
Reach	166250.0		191834	1079.13	1122.3	1136.22	33.37	6988.47	277.45	40.8	27
Reach	166000.0		191819.4	1076.09	1116.6	1124.56	27.08	9304.81	421.25	40.8	27
Reach	165750.0		191846.9	1074.66	1111.08	1121.21	20.03	7769.3	374.29	40.8	27
Reach	165500.0		191865.6	1074.59	1107.93	1115.25	19.51	9314	516.22	41.4	27
Reach	165250.0		191707.4	1074.49	1104.82	1112.08	15.55	9242.74	527.71	41.4	27.6
Reach	165000.0		191336.8	1073.4	1102.13	1108.62	13.7	9804.38	601.88	41.4	27.6
Reach	164750.0		191303.7	1073.36	1099.43	1106.49	16.57	9262.48	617.03	42	28.2
Reach	164500.0		189415.3	1072.38	1098.14	1101.49	10.16	13207.49	937.97	42	28.2
Reach	164250.0		189413.8	1071.33	1098.64	1100.25	7.27	18986.03	1232.39	42.6	28.8
Reach	164000.0		189428.6	1070.14	1098.56	1099.79	6.55	21604.25	1376.85	43.2	28.8
Reach	163750.0		189707.8	1069.13	1098.7	1099.52	5.56	26542.09	1494.82	43.8	29.4

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	163622.0		189678.2	1068.53	1098.71	1099.4	6.44	29084.44	1576.83	44.4	29.4
Reach	163555.0		189659.2	1068.31	1098.03	1099.27	12.68	23316.56	1443.86	44.4	30
Reach	163515.0	Greenhill Road (Route 1700)	Bridge								
Reach	163418.0		168967.3	1067.65	1095.82	1097.17	14.86	24035.61	1513.24	44.4	30
Reach	163000.0		159939.6	1066.48	1095.05	1095.85	10.13	25255.91	1284.14	45	31.2
Reach	162750.0		157476.7	1065.76	1094.81	1095.51	10.41	26790.03	1296.94	45.6	31.8
Reach	162500.0		156302.9	1065.01	1094.66	1095.24	10.39	30158.73	1540.41	46.2	32.4
Reach	162250.0		152998.1	1064.24	1094.14	1094.55	9.36	36770.84	1927.42	46.2	34.2
Reach	162000.0		151981.8	1063.65	1093.72	1094.1	8.67	37277.54	1766.75	46.8	35.4
Reach	161750.0		151028.6	1063.02	1093.64	1093.93	7.76	40528.98	1854.25	47.4	36
Reach	161500.0		150165.5	1061.98	1093.42	1093.77	7.15	41258.73	1922.26	48	37.2
Reach	161250.0		149380.1	1061.66	1092.98	1093.55	10.11	32323.76	1701.87	48.6	37.8
Reach	161000.0		149381.4	1060.66	1092.96	1093.26	6.78	38978.42	1818.85	49.2	39
Reach	160750.0		149376.8	1059.67	1092.83	1093.17	7.79	36504.18	1626	49.8	39
Reach	160500.0		148711.3	1059.46	1092.54	1093.02	8.72	31816.58	1341.12	49.8	40.2
Reach	160250.0		146838.1	1056.82	1091.54	1092.86	13.48	19165.5	859.33	50.4	40.8
Reach	160000.0		146850.9	1056.2	1091.64	1092.33	9.23	23739.06	1005.17	51	40.8
Reach	159750.0		147432.8	1055.94	1091.86	1092.18	5.57	33350.75	1254.19	51.6	41.4
Reach	159500.0		147433.7	1054.88	1091.86	1092.14	4.99	34786.88	1255.69	52.2	42
Reach	159250.0		147443.3	1054.05	1091.92	1092.11	3.87	43853.16	1567.66	52.8	42.6
Reach	159000.0		147021	1052.55	1091.56	1092.06	6.02	26632.97	1128.48	54	44.4
Reach	158750.0		147045.5	1051.8	1091.19	1092	6.97	20964.37	719.44	54.6	44.4
Reach	158500.0		147060.4	1050.44	1091.1	1091.85	8.59	21947.25	758.24	55.2	45
Reach	158250.0		147049	1049.38	1091.38	1091.71	5.4	32294.57	1092.38	55.8	45.6
Reach	158000.0		147067	1048.79	1091.47	1091.66	4.32	43136.46	1414.98	56.4	46.8
Reach	157750.0		147331	1048.72	1091.47	1091.63	3.9	46257.82	1510.77	57.6	48
Reach	157500.0		147110.5	1048.67	1091.32	1091.61	6.57	40314.12	1336.49	58.2	49.2
Reach	157250.0		147142.7	1048.61	1091.23	1091.48	5.38	39272.14	1246.13	58.8	51
Reach	157000.0		147161.6	1047.53	1090.78	1091.54	8.67	29006.7	1033.83	59.4	52.2
Reach	156750.0		147176.6	1045.68	1088.47	1092.32	18.04	10985.67	531.72	60	52.2
Reach	156500.0		147145.1	1045.01	1083.89	1092.79	26.43	7794.12	306.58	60	52.8
Reach	156250.0		147165.2	1044.68	1081.88	1090.95	26.33	7608.02	314.05	60	52.8
Reach	156000.0		147186.9	1044.5	1084.32	1087.9	16.49	11206.69	396.68	60.6	53.4
Reach	155750.0		147205.5	1041.17	1078.5	1089.03	29.66	7199.31	304.86	60.6	53.4
Reach	155500.0		147216.4	1040.01	1074.29	1088.78	33.99	6350.98	319.36	60.6	53.4
Reach	155250.0		147204.8	1038.84	1069.79	1089.02	36.25	4905.4	284.8	61.2	54
Reach	155000.0		147046.2	1037.64	1064.39	1081.88	36.65	5735.8	370.63	61.2	54
Reach	154750.0		146063.5	1036.63	1060.45	1067.41	24.93	8153.2	682.85	61.2	54
Reach	154500.0		148007.9	1036.4	1059.11	1061.48	15.5	13029.02	1059.85	61.2	54.6
Reach	154250.0		146397.9	1035.14	1058.49	1059.8	12.51	17209.16	1336.61	61.8	55.2

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	154000.0		145709.5	1033.86	1057.72	1058.94	12.58	18853.6	1430.3	61.8	55.2
Reach	153750.0		144596.1	1033.23	1056.67	1058.24	15.29	19790.2	1415.14	62.4	55.8
Reach	153500.0		144363.2	1032.7	1055.96	1056.75	11.45	26116.56	1953.09	62.4	57
Reach	153250.0		144147.7	1032.1	1055.31	1055.84	8.21	30324.46	2020.67	63	58.2
Reach	153000.0		143963.6	1031.41	1055.15	1055.64	7.99	31796.37	2126.41	63.6	58.8
Reach	152750.0		143970.6	1030.67	1055	1055.38	8.01	34670.16	2203.68	64.2	59.4
Reach	152500.0		143971	1029.85	1054.82	1055.19	8.5	37672.38	2320.06	64.8	60
Reach	152250.0		143876	1029.02	1053.8	1054.44	10.51	29285.11	1767.1	64.8	61.2
Reach	152000.0		143876.5	1027.83	1053.38	1054.06	10.29	26256.34	1747.71	65.4	61.8
Reach	151750.0		143824.7	1027.54	1052.63	1053.82	13.36	23251.7	1538.54	66	62.4
Reach	151567.0		143828.2	1027.34	1051.71	1053.38	15.65	19629.09	1580.41	66	62.4
Reach	151537.0	West Lebanon Street (Bus 52)	Bridge								
Reach	151444.0		143428.5	1027.18	1050.29	1051.9	15.29	19970.63	1538.78	66	63
Reach	151000.0		142930.7	1025.66	1048.3	1050.29	16.85	18212.66	1378.17	66.6	63.6
Reach	150750.0		142450.3	1024.21	1046.79	1048.61	15.83	18680.11	1450.24	66.6	64.2
Reach	150500.0		141691.2	1024.02	1045.55	1047.46	17.01	18383.71	1441.34	67.2	64.8
Reach	150250.0		141260.5	1022.66	1044.87	1046.51	15.58	19419.45	1473.42	67.2	64.8
Reach	150000.0		141041.4	1022.21	1044.29	1045.57	14.1	21016.52	1451.81	67.8	65.4
Reach	149750.0		140590.4	1021.26	1043.73	1044.69	12.09	22238.32	1411.04	67.8	66
Reach	149500.0		140376.4	1019.98	1043.18	1043.83	10.16	25701	1697.99	68.4	66.6
Reach	149250.0		139942.2	1019.97	1042.54	1043.52	12.45	24814.31	1943.36	69	67.2
Reach	149000.0		139534.6	1019.95	1041.55	1042.28	10.88	26209.09	1896.04	69	68.4
Reach	148750.0		139349.9	1019.94	1041.32	1041.89	9.71	27943.63	1738.9	69.6	69
Reach	148500.0		139177.1	1016.41	1040.87	1041.61	10.81	26278.72	1584.52	70.2	69.6
Reach	148250.0		139184.5	1015.85	1040.64	1041.1	9.11	32181.84	1807.81	70.2	70.2
Reach	148000.0		139182.7	1015.41	1040.49	1040.83	7.76	35591.05	1919.04	70.8	70.8
Reach	147750.0		139052.6	1013.94	1040.07	1040.58	8.91	29548.35	1571.19	71.4	71.4
Reach	147500.0		138946.1	1013.17	1039.78	1040.33	8.81	29486.06	1532.76	72	72
Reach	147250.0		138952.1	1012.72	1039.51	1040.18	10.59	26585.88	1358.57	72	72.6
Reach	147000.0		138957.6	1011.95	1039.08	1039.97	11.04	24034.84	1217.78	72.6	73.2
Reach	146750.0		138867.2	1011.99	1038.6	1039.67	12.39	23352.41	1388.66	73.2	73.2
Reach	146500.0		138793.4	1011.48	1038.03	1038.97	12.3	23407.98	1301.56	73.2	74.4
Reach	146250.0		138803.7	1010.81	1037.69	1038.57	11.69	24146.37	1254.55	73.8	74.4
Reach	146000.0		138814.6	1009.93	1037.23	1038.1	10.68	23856.63	1156.67	73.8	75.6
Reach	145750.0		138780.1	1009.23	1036.44	1037.44	10.9	24712.44	1554.72	74.4	76.2
Reach	145500.0		138789	1008.49	1036.05	1037.08	12.17	23935.75	1388.06	75	76.8
Reach	145250.0		138795.6	1006.29	1035.34	1036.74	13.75	20261.72	1216.72	75	77.4
Reach	145000.0		138781.2	1005.25	1034.76	1036.19	13.04	20107.69	1231.08	75.6	78
Reach	144849.0		138802.7	1004.55	1034.41	1035.92	13.29	19869.83	1298.09	75.6	78
Reach	144741.0		138811.8	1003.97	1033.71	1035.32	12.89	19508.58	1275.55	75.6	78.6

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	144710.0	West Independence Blvd (Route 89)	Bridge								
Reach	144526.0		135319.7	1002.9	1029.91	1031.93	14.82	18092.17	1325.49	76.2	78.6
Reach	144250.0		134775.3	1002.18	1029.4	1031.01	15.13	20143.83	1466.22	76.2	79.2
Reach	144000.0		134217.7	1002.1	1029.06	1030.21	13.22	22516.34	1482.3	76.8	79.8
Reach	143750.0		133664.7	1002.01	1028.72	1029.56	11.44	25585.63	1652.21	76.8	80.4
Reach	143500.0		133400	1001.94	1028.33	1029.29	12.47	24708.85	1726.41	77.4	80.4
Reach	143311.0		132851.5	1001.87	1027.92	1029.2	13.15	22596.25	1660.54	77.4	81
Reach	143251.0	West Pine Street	Bridge								
Reach	143126.0		130698.9	1001.46	1026.9	1027.81	11.58	23680.54	1573.58	78	81.6
Reach	142750.0		130068.1	997.86	1026.51	1027.14	9.43	28117.08	1512.36	78.6	82.2
Reach	142500.0		130071.2	997.44	1026.36	1026.88	9.11	29733.62	1650.54	78.6	82.8
Reach	142250.0		129495.6	996.89	1026.02	1026.62	9.91	27948.53	1553.87	79.2	84
Reach	142000.0		129500.1	996.34	1025.8	1026.39	9.41	29338.34	1628.29	79.8	84.6
Reach	141750.0		129010.9	995.83	1025.36	1025.82	7.72	32523.21	1751.45	80.4	86.4
Reach	141500.0		129021.3	995.7	1025.2	1025.61	8.15	32160.77	1563.67	81	87
Reach	141250.0		129024.3	995.54	1025.03	1025.44	8.18	32570.96	1576.78	81	88.2
Reach	141000.0		128839.6	995.21	1024.91	1025.26	7.82	34513.71	1554.82	81.6	88.8
Reach	140750.0		128849.8	991.86	1024.76	1025.13	7.76	34766.59	1576.17	82.2	89.4
Reach	140500.0		128853.2	991.5	1024.51	1025.03	9.11	30988.26	1549.75	82.8	90.6
Reach	140250.0		128567.8	991.1	1023.73	1024.85	12.47	20317.09	953.46	83.4	91.2
Reach	140000.0		128449.4	990.71	1023.25	1024.22	11.87	22723.23	1083.09	83.4	92.4
Reach	139750.0		128458.9	990.3	1023.04	1023.91	10.89	23751.89	1162.98	84	93
Reach	139500.0		128464.2	989.89	1022.82	1023.67	10.72	24145.61	1150.86	84	93
Reach	139250.0		128366.9	989.16	1022.68	1023.37	9.15	25838.29	1218.3	84.6	94.2
Reach	139113.0		128388.4	988.37	1022.08	1023.14	11.53	22968.4	1192.83	84.6	94.8
Reach	139070.0	Worth Street (Route 1371)	Bridge								
Reach	138986.0		127962.9	987.23	1020.35	1022.06	13.52	17810.27	1550.85	85.2	95.4
Reach	138750.0		127973.1	986.64	1019.89	1021.48	13.99	17403.45	908.09	85.2	96
Reach	138500.0		127988.4	986.32	1019.87	1020.31	8.52	30004.12	1390.96	85.8	97.2
Reach	138250.0		127991.3	986.01	1019.75	1020.09	7.35	34942.8	1571.24	86.4	97.8
Reach	138000.0		127936.8	984.59	1019.61	1019.96	7.51	35650.77	1608.56	87	98.4
Reach	137750.0		127947.6	982.58	1019.53	1019.87	7.47	37183.51	1664.18	87.6	99.6
Reach	137500.0		128002.6	981.68	1018.47	1019.45	11.65	22540.93	1098.9	87.6	102
Reach	137285.0	Yadkin Valley Railroad #1	Bridge								
Reach	137250.0		127994.6	980.27	1016.36	1018.12	14.16	18632.86	1177.73	88.2	102.6
Reach	137152.0		128003.5	979.89	1016.21	1017.81	13.45	20302.68	1314.46	88.2	102.6
Reach	137130.0	Rockford Street (Hwy 601)	Bridge								
Reach	137027.0		97358.64	979.42	1012.41	1014.29	14.34	14621.68	1125.89	88.8	103.2
Reach	136750.0		97380.45	978.39	1012.41	1013.31	10.29	19317.46	1083.1	88.8	103.8
Reach	136500.0		96999.55	977.87	1012.32	1012.86	8.71	23532.38	1177.84	89.4	105

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	136250.0		97816.2	977.29	1012.4	1012.61	5.27	32022.33	1384.38	90	106.2
Reach	136000.0		97430.23	976.98	1012.34	1012.54	5.28	32176.14	1442.19	90.6	106.8
Reach	135750.0		96667.92	974.74	1012.24	1012.49	5.92	30260.2	1408.72	91.8	108
Reach	135645.0		97057.16	974.28	1012.3	1012.43	4.33	39560.12	1777.45	91.8	108.6
Reach	135439.0		96696.51	974.2	1012.26	1012.39	3.76	39253.03	1666.73	93	109.8
Reach	135368.0	US Route 52 NB and SB	Bridge								
Reach	135112.0		94484.7	973.93	1011.95	1012.04	2.86	40984.92	1699.46	94.2	111
Reach	134750.0		94161.55	973.28	1011.89	1012	3.24	35927.31	1391.46	96	114.6
Reach	134500.0		94178.2	972.45	1011.89	1011.99	2.59	38797.16	1523.7	97.8	115.8
Reach	134250.0		94200.46	970.69	1011.89	1011.97	2.81	43699.26	1970.47	99	118.2
Reach	134000.0		94218.84	970.09	1011.89	1011.96	3.01	49297.52	1992.44	100.8	120
Reach	133750.0		94212.05	968.78	1011.88	1011.93	2.75	54507.3	2687.39	102	123
Reach	133500.0		121927.5	968.6	1011.82	1011.89	3.19	62245.8	2691.14	103.2	124.8
Reach	133250.0		123090.1	968.3	1011.81	1011.89	3.56	63415.65	2773.76	104.4	126
Reach	133140.0		122807.1	968.15	1011.72	1011.85	4.68	53635.89	2659.75	105	127.8
Reach	133110.0	Carter Street (Route 2116)	Bridge								
Reach	133061.0		122551.2	968.15	1011.69	1011.81	4.23	53433.58	2671.61	105.6	128.4
Reach	132750.0		121817.8	967.17	1011.31	1011.85	7.59	31201.45	1400.9	106.2	130.2
Reach	132500.0		121593.2	965.93	1011.2	1011.76	8.17	31284.3	1450.99	106.8	130.8
Reach	132250.0		121831	965.63	1011.26	1011.56	6.26	38635.34	1580.97	107.4	132
Reach	132000.0		121418	965.39	1010.97	1011.46	7.22	26689.88	918.97	108	133.2
Reach	131750.0		120795.8	965.34	1010.52	1011.46	9.66	20225.23	815.04	108.6	134.4
Reach	131500.0		120807.7	965.28	1010.6	1011.18	7.5	21572.8	991.14	109.2	135
Reach	131250.0		121025.3	965.21	1010.7	1011.07	5.84	27481.24	988.37	109.8	135.6
Reach	131000.0		121227.5	964.94	1010.72	1010.99	4.72	30090.12	1036.91	110.4	136.8
Reach	130750.0		121235.1	964.67	1010.72	1010.96	3.81	31425	1075.92	111.6	137.4
Reach	130500.0		121242.8	964.35	1010.75	1010.94	3.54	36608.95	1140.59	112.8	138
Reach	130250.0		121076.5	963.55	1010.67	1010.91	4.18	31498.3	995.57	113.4	138.6
Reach	130000.0		121088.5	962.58	1010.64	1010.89	4.19	31734.54	1200.66	114.6	139.2
Reach	129750.0		121093.9	961.87	1010.55	1010.89	6.04	30189.06	1196.56	115.2	139.8
Reach	129500.0		120930.3	961.8	1010.43	1010.9	7.64	28670.68	1139.22	115.8	140.4
Reach	129250.0		121097.9	961.73	1010.51	1010.77	5.91	36852.63	1464.44	116.4	141
Reach	129000.0		121103.9	961.47	1010.53	1010.72	4.43	40101.27	1362.71	117.6	142.2
Reach	128778.0		121099.7	961.13	1010.57	1010.7	3.48	51455.13	1766.11	118.2	143.4
Reach	128500.0		121087.7	961.01	1010.48	1010.62	3.27	40468.53	1434.83	120	145.8
Reach	128250.0		146309.3	961.01	1010.23	1010.54	4.84	33743.1	1346.51	120.6	147
Reach	128000.0		148372.2	961	1010.27	1010.48	3.82	40926.07	1320.72	121.8	147.6
Reach	127750.0		148395.3	961	1010.25	1010.46	4.07	40964.61	1175.52	123	148.8
Reach	127500.0		148435.8	961	1010.27	1010.46	4.33	48511.71	1389.21	123.6	150
Reach	127250.0		148454.4	960.99	1010.25	1010.45	4.44	49831.48	1438.73	124.8	150.6

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	127000.0		148472.9	960.99	1010.07	1010.45	7.18	39255.87	1239.53	125.4	151.8
Reach	126750.0		148251.6	960.99	1009.1	1010.56	10.93	18019.29	543.77	126	152.4
Reach	126500.0		148090.9	960.98	1008.4	1010.43	12.91	16629.32	506.28	126.6	153
Reach	126250.0		148025.5	960.98	1007.96	1010.13	13.61	15554.41	482.51	126.6	153.6
Reach	126000.0		148054.8	960.97	1007.83	1009.74	12.69	15821.81	497.49	127.2	153.6
Reach	125750.0		147821.5	960.96	1006.81	1009.53	14.7	14519.93	486.37	127.2	154.2
Reach	125500.0		147589.8	960.94	1005.42	1009.27	17.23	11839.42	382.51	127.8	154.8
Reach	125250.0		147067.7	960.91	1003.47	1008.81	19.54	9550.42	317.99	127.8	154.8
Reach	125000.0		147558.1	960.89	1005.12	1007.93	13.92	11995.43	364.93	127.8	155.4
Reach	124750.0		147593.5	960.88	1005.01	1007.41	13.47	13290.27	416.12	128.4	155.4
Reach	124500.0		147458.7	960.68	1004.2	1007.03	15.07	13170.01	442.62	128.4	156
Reach	124250.0		147144.7	960.47	1002.57	1006.61	16.9	10244.62	333.6	129	156
Reach	124000.0		146910	960.24	1001.47	1005.99	18.16	10049.02	375.95	129	156.6
Reach	123750.0		147032.5	960.03	1001.69	1005.06	15.97	11832.61	467.74	129.6	156.6
Reach	123500.0		147321	959.78	1003.05	1004.11	9.59	19232.14	812.47	129.6	157.2
Reach	123250.0		147436.1	959.19	1003.19	1003.9	7.12	22408.04	1183.29	130.2	157.8
Reach	123100.0	Flow into mine	Lat Struct								
Reach	123000.0		147395	956.66	1002.62	1003.81	9.77	17652.71	841.88	130.8	158.4
Reach	122750.0		147221.5	955.91	1001.26	1003.8	14.24	13458.06	613.11	130.8	159
Reach	122500.0		147116.2	954.48	1000.52	1003.38	15.35	12985.22	448.88	131.4	159
Reach	122250.0		147282.3	953.93	1001.31	1002.67	11.17	19452.24	712.12	131.4	159.6
Reach	122000.0		147323.8	952.46	1001.18	1002.38	9.88	19458.44	850.2	132	160.2
Reach	121728.0		147367.1	952.35	1000.77	1002.16	11.37	18519.24	591.18	132.6	160.8
Reach	121500.0		147287.3	951.82	999.99	1001.99	12.58	14659.11	462.17	132.6	161.4
Reach	121250.0		147318.2	950.5	999.44	1001.84	14.23	15685.48	487.42	133.2	162
Reach	121000.0		147350.8	950.17	999.39	1001.37	12.88	16516.94	484.51	133.2	162
Reach	120750.0		147334.8	949.87	998.99	1001.14	13.76	16799.76	502.85	133.8	162.6
Reach	120500.0		147368	949.51	998.78	1000.75	13.08	17199.59	527.07	133.8	163.2
Reach	120250.0		147399.7	948.87	999.02	1000.28	10.53	18671.81	567.33	134.4	163.8
Reach	120000.0		147431.8	948.73	998.87	1000.06	10.31	18757.69	594.38	135	163.8
Reach	119750.0		147463.5	948.31	998.89	999.84	8.43	22837.76	733.78	135	164.4
Reach	119500.0		147388.6	947.94	996.93	1000.01	15.89	11885.72	402.58	135.6	165
Reach	119250.0		149445.3	947.51	996.2	999.43	16.26	11974.87	396.86	135.6	165.6
Reach	119000.0		149531.3	947.11	997.16	998.63	11.27	18666.68	565.98	136.2	165.6
Reach	118750.0		149546	946.71	997.31	998.35	9.44	21444.05	602.82	136.2	166.2
Reach	118500.0		149532.2	946.35	996.89	998.27	11.26	20625.05	582.32	136.8	166.8
Reach	118250.0		149549.5	945.94	996.13	998.13	13.32	15948.67	435.63	137.4	167.4
Reach	118000.0		149514.1	945.62	994.23	998.08	17.15	11859.61	347.4	137.4	168
Reach	117750.0		149501.9	945.11	993.11	997.47	18.08	10564.57	325.92	138	168
Reach	117500.0		149455.6	944.64	991.74	996.85	20.25	10270.69	353	138	168.6

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	117250.0		149501.5	944.62	992.08	995.64	16.78	10987.43	395.22	138	168.6
Reach	117000.0		149516.1	944.59	992.01	995	14.65	11198.98	378.06	138.6	169.2
Reach	116750.0		149504.2	944.56	991.38	994.56	15.39	11017.56	355.12	138.6	169.2
Reach	116500.0		149491.7	944.54	990.8	994.21	16.92	12700.2	440.42	139.2	169.8
Reach	116250.0		149509.4	944.52	990.27	993.53	15.84	12894.42	425.42	139.2	169.8
Reach	116000.0		143698	944.47	990.03	992.77	14.46	13053.45	454.96	139.8	170.4
Reach	115750.0		143609.8	944.47	989.47	992.34	15.08	13465.45	457.62	139.8	171
Reach	115500.0		143426.2	944.45	988.9	991.85	15.5	13304.19	453.09	139.8	171
Reach	115250.0		143441.1	944.42	988.9	991.25	13.98	14208.93	529.17	140.4	171.6
Reach	115000.0		143548.1	944.39	988.86	990.78	12.42	16492.26	582.68	140.4	172.2
Reach	114750.0		143006.4	944.23	987.4	990.69	16.34	12657.84	468.08	141	172.2
Reach	114500.0		142654.3	944.07	986.58	990.16	17.4	12562.76	459.6	141	172.8
Reach	114250.0		142397.6	943.87	985.86	989.45	16.94	12055.43	441.64	141.6	172.8
Reach	114000.0		142233	943.62	985.4	988.79	16.97	12329.49	464.94	141.6	173.4
Reach	113750.0		142422	941.53	985.73	987.98	13.89	14777.1	541.89	142.2	174
Reach	113500.0		142348.8	939.85	985.48	987.46	13.41	14674.96	585.96	142.2	174
Reach	113250.0		142193.2	939.35	985.03	986.99	12.77	13395.5	545.05	142.8	174.6
Reach	113000.0		141684.1	939.22	984.08	986.87	15.43	13966.6	621.91	142.8	175.2
Reach	112750.0		141613.2	939.07	983.93	986.12	12.89	13853.08	598.52	143.4	175.2
Reach	112500.0		141886.4	938.93	984.37	985.64	10.69	16439.47	704.6	143.4	175.8
Reach	112250.0		141902.2	938.53	984.38	985.4	9.73	18386.05	725.71	144	176.4
Reach	112000.0		141579.4	938.41	983.71	985.25	11.58	15056.55	612.39	144.6	176.4
Reach	111750.0		141418.8	938.11	983.5	985.02	11.2	15323.79	522.66	144.6	177
Reach	111500.0		140896.3	937.04	982.34	984.92	13.87	13251.55	436.99	145.2	177
Reach	111250.0		140904.3	937	981.67	984.57	14.9	12520.11	427.62	145.2	177.6
Reach	111000.0		140908.4	936.99	981.31	984	14.62	12236.67	419.37	145.8	178.2
Reach	110750.0		140910.5	936.99	980.89	983.39	13.97	11595.47	399.88	145.8	178.2
Reach	110500.0		140909.7	936.98	980.39	983.03	14.88	12165.11	424.39	146.4	178.8
Reach	110250.0		140912.8	936.81	980.83	982.5	12.01	14951.74	527.67	146.4	178.8
Reach	110000.0		140973.5	936.57	980.46	982.3	13.5	17405.69	591.61	147	179.4
Reach	109750.0		140960.1	936.29	980.9	981.72	9.91	25391.72	827.52	147	180
Reach	109500.0		140939.8	936.06	981.01	981.44	6.2	29630.62	1031.2	147.6	181.2
Reach	109250.0		140919.7	935.98	980.99	981.34	6.13	32784.48	1160.46	148.2	181.8
Reach	109000.0		140898.8	935.9	980.86	981.28	5.87	30140.91	1020.3	148.8	183
Reach	108750.0		140890.9	935.81	980.62	981.18	6.08	24183.55	787.67	150	183.6
Reach	108500.0		140889.4	935.63	980.47	981.09	6.05	22454.56	726.99	150.6	184.2
Reach	108250.0		140893.3	935.23	980.46	981.01	6.84	24106.66	801.13	151.2	184.8
Reach	108000.0		140904.3	934.85	980.5	980.94	7	29729.38	978.13	151.8	185.4
Reach	107750.0		140880.8	934.57	980.5	980.84	4.9	31419.75	1312.43	152.4	186.6
Reach	107500.0		140815.1	934.43	980.55	980.78	4.06	38123.05	1633.76	153.6	187.2

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	107250.0		140798.1	934.29	980.61	980.75	3.12	49893.88	2227.07	154.2	188.4
Reach	107118.0	Yadkin Valley Railroad #2	Bridge								
Reach	107000.0		138137.9	934.12	973.19	974.04	9.04	21233.18	2030.91	154.8	189
Reach	106750.0		154468.1	933.95	973.37	973.97	7.84	26666.73	1944.21	155.4	189.6
Reach	106500.0		153664.9	933.76	973.42	973.86	6.74	30269.54	2211.06	156	190.2
Reach	106250.0		152594.9	933.61	973.35	973.75	6.74	32445.37	2434.07	156.6	190.8
Reach	106000.0		152015.1	933.46	973.21	973.62	6.87	31777.28	2303.5	157.2	191.4
Reach	105750.0		149813	932.49	973.24	973.48	5.6	41192.59	2867.31	157.8	192.6
Reach	105664.0		149733	931.63	973.25	973.46	5.06	44717.38	2910.29	158.4	192.6
Reach	105643.0	Sheep Farm Road (Route 2119)	Bridge								
Reach	105515.0		149733.0	931.1	973.3	973.4	4.0	52771.9	2916.4	159.0	193.8
Reach	105250.0		149385.3	930.5	973.3	973.4	3.2	63885.0	2901.4	160.2	195.0
Reach	105000.0		147069.8	929.7	973.3	973.4	2.3	73837.0	2786.7	161.4	196.8
Reach	104750.0		147013.3	929.5	973.3	973.4	2.0	72143.1	2667.8	163.8	197.4
Reach	104500.0		146906.8	929.3	973.3	973.4	2.1	77165.3	2758.8	165.6	198.0
Reach	104250.0		146760.1	929.0	973.3	973.4	2.1	71888.1	2585.1	167.4	198.6
Reach	104000.0		146581.2	928.9	973.3	973.4	2.5	62605.4	2290.9	169.2	199.8
Reach	103750.0		146421.6	928.7	973.3	973.4	2.7	60169.4	2195.9	171.0	200.4
Reach	103500.0		146255.5	928.5	973.3	973.4	2.5	57451.1	2037.2	172.8	201.0
Reach	103250.0		145217.8	928.3	973.3	973.4	2.9	55173.5	1930.8	174.0	202.2
Reach	103000.0		145193.7	928.1	973.3	973.4	2.8	57779.0	2081.3	175.8	203.4
Reach	102891.0		145156.4	928.0	973.3	973.4	2.8	58615.0	2206.5	176.4	204.6
Reach	102791.0		145086.1	927.9	972.7	973.5	9.4	22161.3	1828.3	176.4	205.2
Reach	102700.0	Interstate 74 EB and WB	Bridge								
Reach	102432.0		137125.7	927.7	970.7	971.5	8.9	22408.8	2046.7	177.0	205.8
Reach	102000.0		137207.1	927.7	970.9	971.0	3.3	58849.1	2220.5	178.2	207.6
Reach	101750.0		137169.9	927.5	970.9	971.0	3.1	58139.8	2028.5	179.4	208.8
Reach	101500.0		137190.9	927.3	970.8	971.0	4.9	47430.8	1563.4	180.6	210.0
Reach	101250.0		137197.3	927.1	970.6	971.0	7.3	35568.7	1184.0	181.2	210.6
Reach	101000.0		137166.3	926.9	970.3	971.0	9.6	25280.7	857.9	181.8	211.2
Reach	100750.0		137135.0	926.3	969.6	971.0	11.9	19230.9	687.0	182.4	211.8
Reach	100500.0		137062.5	925.7	968.5	970.9	14.2	14222.5	508.9	182.4	211.8
Reach	100250.0		136982.0	925.6	968.0	970.5	14.5	13905.9	469.5	183.0	212.4
Reach	100000.0		137087.0	925.4	968.7	970.0	9.6	16702.2	551.9	183.0	213.0
Reach	99750.0		137101.5	925.2	968.9	969.7	8.3	21116.9	688.1	183.6	213.6
Reach	99500.0		137153.5	925.1	969.1	969.5	6.4	27165.0	881.0	184.2	214.2
Reach	99250.0		137133.8	924.8	968.9	969.4	6.6	24717.6	812.2	184.8	214.8
Reach	99000.0		137146.4	924.6	968.6	969.3	7.6	20652.7	713.2	185.4	215.4
Reach	98750.0		137114.5	924.3	967.9	969.2	10.5	17104.9	523.0	186.0	216.0
Reach	98500.0		138948.8	924.0	966.8	969.1	13.7	14298.0	461.0	186.0	216.6

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	98250.0		138906.6	923.7	965.9	968.8	15.2	12923.9	428.9	186.6	217.2
Reach	98000.0		138971.0	923.5	966.2	968.3	12.6	14213.8	483.3	186.6	217.2
Reach	97750.0		138964.5	923.2	965.9	967.8	12.6	14154.7	494.3	187.2	217.8
Reach	97500.0		139018.6	922.7	966.2	967.4	11.1	21099.9	789.2	187.8	218.4
Reach	97250.0		139028.8	922.1	965.4	967.2	12.8	17272.3	597.6	187.8	219.0
Reach	97000.0		138995.3	921.8	964.4	966.9	14.8	13475.0	460.4	188.4	219.0
Reach	96750.0		139025.6	921.5	963.9	966.4	14.5	13278.0	457.8	188.4	219.6
Reach	96500.0		138992.7	921.2	963.2	966.0	15.0	12211.7	408.0	189.0	220.2
Reach	96250.0		138925.2	921.0	961.4	965.6	17.9	10159.9	342.2	189.0	220.2
Reach	96000.0		138983.2	920.7	961.9	964.6	14.9	13006.8	439.4	189.0	220.8
Reach	95750.0		139012.2	920.6	961.6	964.1	14.2	13066.4	437.4	189.6	221.4
Reach	95500.0		139016.1	920.3	961.4	963.5	13.0	13667.2	424.7	189.6	221.4
Reach	95250.0		139015.1	919.5	960.8	963.2	12.9	12247.9	414.8	190.2	222.0
Reach	95000.0		139015.1	919.1	960.0	962.8	14.7	12004.3	396.7	190.2	222.0
Reach	94750.0		138986.0	918.9	958.8	962.5	17.5	11064.9	380.2	190.8	222.6
Reach	94500.0		138985.3	918.8	957.9	961.7	17.7	11030.7	378.6	190.8	223.2
Reach	94250.0		138982.1	918.5	957.5	961.0	16.6	11274.8	381.3	191.4	223.2
Reach	94000.0		138951.2	918.2	956.6	960.1	15.4	9366.3	325.9	191.4	223.8
Reach	93750.0		138817.6	917.9	954.6	959.6	18.7	8661.0	318.2	191.4	223.8
Reach	93500.0		138777.7	916.2	953.8	958.7	18.8	9077.3	331.3	192.0	223.8
Reach	93250.0		138908.9	913.5	955.2	957.4	12.7	13921.1	466.0	192.0	224.4
Reach	93000.0		138966.6	912.8	955.3	957.0	12.0	15464.8	533.5	192.6	225.0
Reach	92750.0		138964.0	912.3	955.0	956.8	12.5	15478.0	513.4	192.6	225.6
Reach	92500.0		138941.7	911.9	953.8	956.5	14.5	13406.1	448.1	193.2	225.6
Reach	92250.0		138939.2	911.5	953.3	956.0	14.3	11511.7	380.9	193.2	226.2
Reach	92000.0		138970.3	911.1	953.0	955.6	14.3	12822.8	442.1	193.8	226.8
Reach	91750.0		138969.7	910.7	952.5	955.1	13.8	12500.6	413.4	193.8	226.8
Reach	91500.0		138968.9	910.3	951.7	954.6	14.5	11371.0	379.3	194.4	227.4
Reach	91250.0		138998.8	909.9	951.5	954.2	14.7	13216.6	449.5	194.4	227.4
Reach	91000.0		138971.0	909.5	950.5	953.8	16.3	11898.1	392.0	195.0	228.0
Reach	90750.0		138942.5	909.1	949.7	953.2	16.4	10983.3	368.0	195.0	228.6
Reach	90500.0		138972.2	908.8	949.6	952.6	15.2	11851.5	427.8	195.6	228.6
Reach	90250.0		138943.9	908.3	948.5	952.1	16.7	11119.1	380.3	195.6	229.2
Reach	90000.0		138910.6	907.5	947.2	951.5	19.0	10379.2	370.0	196.2	229.2
Reach	89750.0		138995.6	906.8	948.0	950.4	12.8	11596.6	406.1	196.2	229.8
Reach	89500.0		139025.4	906.7	948.0	950.0	12.1	12461.3	437.3	196.8	229.8
Reach	89250.0		138997.9	906.6	947.2	949.7	14.5	12072.5	418.3	196.8	230.4
Reach	89000.0		138998.6	905.9	946.6	949.3	14.1	11170.7	405.7	197.4	230.4
Reach	88750.0		139001.6	904.3	946.0	948.8	15.1	12147.7	431.3	197.4	231.0
Reach	88500.0		139030.7	903.4	946.0	948.2	13.8	13831.1	468.8	197.4	231.6

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	88250.0		139002.7	903.1	944.8	947.7	15.0	10367.6	365.9	198.0	231.6
Reach	88000.0		139024.2	902.9	944.8	947.4	15.2	12579.3	470.5	198.0	232.2
Reach	87750.0		138968.5	902.7	943.6	946.9	17.2	12397.0	454.0	198.6	232.2
Reach	87500.0		141135.3	902.3	944.6	946.0	9.5	16506.8	559.5	198.6	232.8
Reach	87250.0		141191.8	901.9	944.8	945.7	7.6	19055.1	615.8	199.2	233.4
Reach	87000.0		141258.0	901.5	944.5	945.5	7.8	18030.7	579.7	199.8	234.0
Reach	86750.0		141289.5	901.0	943.9	945.4	10.3	14923.3	462.4	200.4	234.0
Reach	86500.0		141326.5	900.5	942.8	945.1	13.3	11884.8	384.4	200.4	234.6
Reach	86250.0		141337.3	899.1	941.4	944.9	16.4	11463.0	384.6	201.0	235.2
Reach	86000.0		141394.3	898.8	941.4	944.3	15.1	12807.7	434.5	201.0	235.2
Reach	85750.0		141393.1	898.5	939.8	943.9	17.4	10639.7	375.5	201.6	235.8
Reach	85500.0		141399.8	898.3	938.5	943.3	18.6	9681.3	344.9	201.6	235.8
Reach	85250.0		141377.9	898.2	937.6	942.4	18.9	9631.4	352.5	202.2	236.4
Reach	85000.0		141460.7	898.0	937.8	941.5	16.9	10922.3	388.7	202.2	236.4
Reach	84750.0		141376.8	897.9	935.8	940.9	19.0	9407.3	352.0	202.2	237.0
Reach	84500.0		141466.3	897.8	936.6	939.9	15.5	10515.5	371.0	202.8	237.0
Reach	84250.0		141524.5	897.7	936.5	939.2	14.1	11123.4	409.6	202.8	237.6
Reach	84000.0		141609.5	897.6	936.6	938.8	11.9	12411.1	455.7	203.4	237.6
Reach	83750.0		141610.3	897.2	935.8	938.4	14.6	11835.9	456.7	203.4	238.2
Reach	83500.0		141747.6	897.2	937.1	937.5	4.8	29986.1	980.7	204.0	238.8
Reach	83250.0		141717.0	894.5	935.2	938.0	14.4	12605.3	563.3	204.6	239.4
Reach	83000.0		141697.0	894.3	933.7	937.5	16.6	10455.5	359.8	204.6	239.4
Reach	82750.0		141604.5	894.1	931.9	937.0	19.5	9352.7	347.1	204.6	240.0
Reach	82500.0		141561.4	893.6	931.3	935.9	18.5	9536.7	356.9	205.2	240.0
Reach	82250.0		141471.7	893.1	930.2	935.0	18.6	9805.5	394.5	205.2	240.6
Reach	82000.0		141572.2	892.3	930.6	933.9	16.1	12117.8	458.4	205.8	240.6
Reach	81750.0		141260.8	892.0	928.3	933.4	19.0	9033.7	338.3	205.8	241.2
Reach	81500.0		141181.1	891.8	927.8	932.3	18.1	9286.0	373.8	205.8	241.2
Reach	81250.0		141146.1	891.0	927.5	931.3	16.2	9880.5	359.9	206.4	241.2
Reach	81000.0		141156.9	889.7	927.3	930.7	15.5	10851.8	381.5	206.4	241.8
Reach	80750.0		141067.8	888.5	926.8	930.1	15.4	11034.8	393.9	207.0	242.4
Reach	80500.0		141023.0	888.5	926.4	929.6	15.4	11609.2	452.8	207.0	242.4
Reach	80250.0		141033.0	887.8	926.3	929.1	14.3	12004.0	460.0	207.6	243.0
Reach	80000.0		140933.2	887.6	925.7	928.5	14.3	12341.2	501.7	207.6	243.0
Reach	79750.0		141103.1	886.1	926.2	927.9	11.5	16130.5	553.5	208.2	243.6
Reach	79500.0		140847.8	885.7	924.9	927.5	13.7	12598.1	428.7	208.2	244.2
Reach	79250.0		140738.2	885.2	924.4	927.1	14.4	12781.3	441.9	208.8	244.2
Reach	79000.0		140745.4	883.4	924.2	926.6	13.0	13407.6	436.2	208.8	244.8
Reach	78750.0		140216.3	882.8	922.9	926.4	16.3	11533.6	413.2	209.4	245.4
Reach	78500.0		140511.4	882.5	923.4	925.8	13.5	12668.7	515.4	209.4	245.4

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	78250.0		140625.7	882.0	923.5	925.3	11.7	14803.1	621.9	210.0	246.0
Reach	78000.0		140681.1	881.4	923.6	924.9	9.7	16216.1	630.9	210.0	246.6
Reach	77750.0		143543.5	880.9	923.1	924.7	12.3	18546.8	745.2	210.6	246.6
Reach	77558.0		143750.5	880.6	923.6	924.1	7.7	29157.9	1215.5	211.2	247.2
Reach	77492.0	Ararat Road (Route 2019)	Bridge								
Reach	77372.0		143698.8	880.1	923.4	923.8	5.9	28566.8	1156.4	211.2	247.8
Reach	77000.0		143701.0	879.1	923.2	923.7	6.7	23862.4	1067.2	212.4	249.0
Reach	76750.0		143736.8	878.8	923.1	923.7	6.5	24315.0	1038.9	213.0	249.0
Reach	76500.0		143772.8	878.7	923.2	923.6	6.2	29255.9	1268.9	213.6	250.2
Reach	76250.0		143811.0	878.7	923.1	923.5	5.6	28577.1	1060.2	214.2	250.8
Reach	76000.0		143678.5	878.7	922.2	923.4	9.6	16024.9	548.6	214.8	251.4
Reach	75750.0		143714.8	878.7	922.3	923.3	9.2	20021.6	693.8	215.4	252.0
Reach	75500.0		143438.4	878.3	920.8	923.4	14.1	13367.9	473.5	216.0	252.6
Reach	75250.0		143174.6	877.8	919.7	922.9	15.7	11964.6	417.5	216.0	252.6
Reach	75000.0		142959.7	877.2	919.1	922.3	16.0	12711.2	481.0	216.6	253.2
Reach	74750.0		143402.8	876.8	920.4	921.3	8.2	18692.3	677.0	216.6	253.2
Reach	74500.0		143533.0	876.6	920.8	921.3	6.6	27447.0	958.2	217.2	253.8
Reach	74250.0		143601.8	876.6	920.7	921.1	5.6	31935.9	1154.2	217.8	255.6
Reach	74000.0		143635.0	876.6	920.6	921.1	6.0	28523.3	1010.7	218.4	256.2
Reach	73750.0		143586.8	876.6	920.2	921.0	8.0	21165.1	828.3	219.0	256.8
Reach	73500.0		143536.2	876.6	919.8	920.8	9.2	17980.4	742.2	219.6	257.4
Reach	73250.0		143659.5	876.6	920.1	920.7	7.0	24182.8	916.3	220.2	258.0
Reach	73000.0		143623.5	875.9	919.7	920.6	7.6	19893.2	814.4	220.8	258.0
Reach	72750.0		143543.1	875.3	919.0	920.4	10.9	15969.5	668.2	221.4	258.6
Reach	72500.0		143543.9	874.6	918.7	920.2	11.5	15687.6	625.3	221.4	259.2
Reach	72250.0		143391.3	874.1	917.7	920.1	13.4	13456.5	482.3	222.0	259.8
Reach	72000.0		143036.2	874.0	916.2	919.7	16.3	11846.8	446.3	222.0	259.8
Reach	71750.0		143081.9	873.9	916.1	918.9	15.0	14248.3	589.2	222.6	260.4
Reach	71500.0		142983.4	873.8	915.6	918.4	15.5	14430.0	593.4	222.6	261.0
Reach	71250.0		143110.3	873.6	915.8	917.6	12.9	17613.3	692.5	223.2	261.0
Reach	71000.0		142832.6	873.5	914.8	917.4	15.1	14161.6	537.3	223.2	261.6
Reach	70750.0		143018.9	873.3	915.3	916.6	9.8	17698.9	590.1	223.8	262.2
Reach	70500.0		142191.5	871.5	912.9	916.7	16.9	11167.8	395.1	223.8	262.8
Reach	70250.0		142179.5	870.5	912.7	916.0	15.9	11966.6	414.7	224.4	262.8
Reach	70000.0		142223.0	869.6	912.6	915.4	15.2	13807.4	491.6	224.4	263.4
Reach	69750.0		142007.4	868.7	912.1	914.9	15.5	14182.8	481.3	225.0	263.4
Reach	69500.0		141939.8	868.4	911.8	914.3	14.7	15016.4	549.8	225.0	264.0
Reach	69250.0		142280.4	868.1	912.5	913.7	10.2	19127.3	738.1	225.6	264.6
Reach	69000.0		142390.6	867.8	912.8	913.4	7.2	26570.8	987.5	226.2	265.2
Reach	68750.0		142419.6	867.7	912.7	913.3	7.0	27493.5	981.7	226.2	265.8

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	68500.0		142444.6	867.6	912.7	913.2	6.3	30980.9	1062.4	227.4	267.0
Reach	68250.0		142529.6	867.4	912.7	913.1	5.5	31523.0	1078.0	228.0	267.6
Reach	68000.0		142519.3	866.6	912.6	913.0	4.9	30346.5	1072.7	228.6	267.6
Reach	67750.0		142510.1	866.5	912.4	912.9	5.4	25335.4	871.9	229.2	268.2
Reach	67500.0		142498.4	866.1	912.2	912.9	6.8	22612.8	787.6	230.4	268.8
Reach	67250.0		142286.5	865.5	911.4	912.7	9.7	15289.0	554.4	230.4	269.4
Reach	67000.0		142246.2	865.0	911.0	912.6	10.8	15594.8	490.7	231.0	270.0
Reach	66750.0		142018.5	864.9	910.3	912.4	12.9	15008.7	495.4	231.6	270.0
Reach	66500.0		141917.1	864.9	909.8	912.2	13.8	14908.8	494.8	231.6	270.6
Reach	66250.0		141624.5	864.5	909.0	911.9	15.6	13439.0	477.1	232.2	271.2
Reach	66000.0		141613.0	864.4	908.9	911.3	14.0	14819.6	498.8	232.2	271.8
Reach	65750.0		141612.4	864.2	908.7	910.8	13.0	15830.8	534.6	232.8	271.8
Reach	65500.0		141257.6	864.2	907.8	910.5	14.5	13115.5	436.8	232.8	272.4
Reach	65250.0		141293.4	864.1	907.8	910.0	13.3	15557.4	568.8	233.4	273.0
Reach	65000.0		141530.2	860.3	908.2	909.5	10.1	17886.8	678.2	233.4	273.0
Reach	64750.0		141658.5	860.0	908.5	909.3	8.1	22636.0	836.1	234.0	273.6
Reach	64500.0		141749.1	859.6	908.8	909.0	4.9	40755.2	1480.3	234.6	274.8
Reach	64210.0		151632.9	859.2	908.6	908.9	5.3	37145.8	1228.5	235.8	276.0
Reach	64000.0		152706.9	858.9	907.4	909.2	11.2	15089.5	550.9	235.8	276.6
Reach	63750.0		154330.1	858.6	907.4	908.9	10.8	17526.9	656.1	236.4	277.2
Reach	63500.0		154196.1	858.2	906.9	908.6	12.1	17283.6	579.7	237.0	277.8
Reach	63250.0		153942.7	857.9	906.2	908.4	13.4	14413.3	595.8	237.0	277.8
Reach	63000.0		154012.1	857.5	906.2	907.9	11.5	15180.4	580.3	237.6	278.4
Reach	62750.0		154031.6	857.2	906.1	907.6	10.0	16182.1	643.7	237.6	279.0
Reach	62500.0		153872.4	856.8	905.6	907.3	11.7	16074.5	556.8	238.2	279.0
Reach	62250.0		153560.9	856.5	904.7	907.1	13.7	15736.0	563.6	238.8	279.6
Reach	62000.0		153815.0	856.1	905.4	906.7	9.8	17963.2	620.0	238.8	280.2
Reach	61750.0		153965.9	855.8	905.8	906.4	7.4	24477.7	986.9	239.4	280.8
Reach	61500.0		154033.8	855.4	906.0	906.3	4.9	35546.3	1240.1	240.0	281.4
Reach	61250.0		153950.5	855.1	905.5	906.3	9.0	24526.2	1064.2	240.6	282.0
Reach	61130.0		159225.3	854.9	905.1	906.3	10.2	23482.9	1039.9	240.6	282.6
Reach	61028.0		160887.0	854.7	905.2	906.1	9.0	26262.1	1001.7	241.2	282.6
Reach	60943.0	Route 268	Bridge								
Reach	60784.0		160762.9	854.4	904.9	905.4	7.7	35899.3	1050.5	241.2	283.2
Reach	60250.0		160188.7	853.7	902.7	905.7	15.2	14901.7	554.5	242.4	284.4
Reach	60000.0		160503.3	853.3	903.6	904.8	10.4	24013.9	847.2	242.4	285.0
Reach	59750.0		160490.1	853.0	903.4	904.4	9.2	22162.4	748.8	243.0	285.6
Reach	59500.0		160482.6	852.6	903.2	904.1	8.6	22368.9	786.9	243.6	286.2
Reach	59250.0		160431.0	852.3	902.8	903.9	8.9	18974.4	626.7	243.6	286.2
Reach	59145.0		160535.4	852.1	903.1	903.8	7.6	25627.3	864.2	244.2	286.8

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	59115.0	Pilot Power Dam Road	Bridge								
Reach	59052.0		160453.7	852.0	903.0	903.7	7.2	26889.3	883.5	244.2	286.8
Reach	58750.0		160411.4	851.4	902.6	903.6	8.7	22135.1	802.1	244.8	287.4
Reach	58500.0		160396.0	850.4	902.4	903.4	8.7	20193.0	799.6	245.4	288.0
Reach	58250.0		160396.4	849.8	902.1	903.2	6.9	20258.1	631.3	246.0	288.6
Reach	58000.0		160465.2	849.7	902.3	903.2	8.6	24992.8	845.9	246.6	289.2
Reach	57750.0		160538.2	849.4	902.4	903.0	6.9	27863.0	869.0	247.2	289.8
Reach	57500.0		160540.1	849.3	902.2	902.9	7.5	27394.8	1015.0	247.8	290.4
Reach	57250.0		160549.9	848.8	902.0	902.7	7.3	24576.0	773.9	248.4	291.6
Reach	57000.0		160580.8	848.3	901.8	902.7	8.2	23601.2	718.1	248.4	291.6
Reach	56750.0		160579.8	847.8	901.8	902.6	8.0	24948.5	725.0	249.0	292.2
Reach	56500.0		160658.3	847.5	901.8	902.5	7.2	26793.4	760.9	249.6	293.4
Reach	56250.0		160592.1	847.2	901.2	902.2	8.1	19799.0	561.8	250.2	294.0
Reach	56000.0		160557.8	847.0	900.9	902.0	8.2	18687.9	568.4	250.8	294.0
Reach	55750.0		160561.9	846.7	900.5	901.9	10.3	18781.3	610.2	251.4	294.6
Reach	55500.0		160596.3	846.4	900.5	901.6	8.2	19310.3	609.2	252.0	295.2
Reach	55250.0		160600.7	846.2	900.2	901.4	8.8	18207.4	606.1	252.0	295.8
Reach	55000.0		160501.8	846.0	899.1	901.0	11.1	14946.6	483.8	252.6	296.4
Reach	54750.0		160468.1	845.7	899.0	900.4	8.5	17341.4	520.7	253.2	296.4
Reach	54500.0		160433.9	845.5	898.4	900.1	11.3	16756.7	540.3	253.2	297.0
Reach	54250.0		160396.3	845.2	897.9	899.8	11.7	16133.0	503.6	253.8	297.6
Reach	54000.0		160428.6	844.3	898.0	899.4	9.7	17564.1	560.0	254.4	297.6
Reach	53750.0		160404.8	843.6	897.6	898.9	10.0	18686.0	581.0	254.4	298.2
Reach	53500.0		160297.7	843.5	896.6	898.8	13.4	18080.0	541.5	255.0	298.8
Reach	53250.0		160396.1	843.5	897.0	898.2	9.7	19607.3	574.7	255.6	299.4
Reach	53000.0		160397.9	843.5	896.9	897.8	8.6	21687.5	638.8	255.6	300.0
Reach	52750.0		160500.9	843.2	897.1	897.7	6.4	27055.7	823.6	256.2	300.6
Reach	52500.0		160471.7	842.8	896.8	897.6	7.8	24983.2	817.8	256.8	301.2
Reach	52250.0		160508.3	842.5	896.7	897.4	7.1	24595.5	795.7	257.4	301.8
Reach	52000.0		160541.7	842.1	896.6	897.3	7.2	24496.1	769.1	258.0	301.8
Reach	51750.0		160415.3	841.8	895.7	897.2	11.4	19264.1	626.3	258.6	302.4
Reach	51500.0		160381.6	841.4	895.2	896.9	11.7	18357.6	630.6	259.2	303.0
Reach	51250.0		160419.1	841.1	894.9	896.5	11.2	18821.9	610.0	259.2	303.6
Reach	51000.0		160486.7	840.7	895.3	896.1	6.8	22055.8	634.5	259.8	304.2
Reach	50750.0		160523.2	840.4	895.0	896.0	8.4	22767.9	690.9	260.4	304.8
Reach	50500.0		160529.6	840.0	895.0	895.8	8.6	26538.7	790.6	261.0	305.4
Reach	50250.0		160588.0	839.7	895.2	895.6	6.3	31285.0	873.4	261.6	306.0
Reach	50000.0		160629.1	839.3	895.2	895.6	5.7	42352.9	1133.0	262.2	307.2
Reach	49750.0		160575.1	839.0	894.4	895.7	10.8	22144.0	741.0	262.8	307.8
Reach	49500.0		163878.1	838.6	893.6	895.4	11.8	17130.4	529.7	262.8	308.4

HEC-RAS Plan: 0.9 PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	49250.0		163817.5	838.3	892.9	894.8	11.3	14505.8	450.7	263.4	309.0
Reach	49000.0		163753.5	837.9	891.9	894.4	13.8	14474.3	458.7	263.4	309.0
Reach	48750.0		163778.4	837.6	891.8	893.8	12.0	14606.7	470.9	264.0	309.6
Reach	48500.0		163742.5	836.8	891.4	893.4	12.3	16012.4	510.8	264.0	309.6
Reach	48250.0		163705.6	836.6	890.9	892.8	11.1	14688.8	459.3	264.6	310.2
Reach	48000.0		163667.3	836.5	890.5	892.2	10.6	15454.9	472.0	265.2	310.8
Reach	47750.0		163749.9	836.1	891.0	891.9	5.7	22938.7	645.0	265.8	310.8
Reach	47500.0		163800.3	835.8	891.2	891.7	5.3	27127.7	797.6	266.4	311.4
Reach	47250.0		163821.7	835.5	891.3	891.7	4.7	32508.4	951.0	267.0	312.0
Reach	47000.0		163847.0	835.1	891.3	891.6	3.6	38134.1	1058.9	268.2	313.2
Reach	46750.0		163827.7	834.8	890.7	891.5	7.1	22904.8	662.4	268.8	313.8
Reach	46500.0		163825.8	834.4	889.9	891.5	11.9	19539.8	597.1	269.4	314.4
Reach	46250.0		163825.3	834.1	890.0	891.1	8.4	19553.1	607.2	270.0	315.0
Reach	46000.0		163825.6	833.3	889.4	891.0	11.9	21674.0	705.7	270.0	315.6
Reach	45750.0		163825.9	833.2	889.3	890.7	10.4	20245.1	699.7	270.6	316.2
Reach	45500.0		163850.1	833.0	889.1	890.3	9.6	18989.2	636.1	271.2	316.2
Reach	45250.0		163802.7	832.7	888.0	890.1	12.5	16252.2	530.1	271.2	316.8
Reach	45000.0		163826.8	832.3	888.0	889.6	10.3	16434.4	484.2	271.8	317.4
Reach	44750.0		163802.2	832.0	887.2	889.3	12.5	15989.8	495.2	271.8	317.4
Reach	44500.0		163776.7	831.6	886.8	888.9	12.7	16361.2	554.6	272.4	318.0
Reach	44250.0		163800.5	831.3	886.5	888.5	12.1	17157.8	588.1	273.0	318.6
Reach	44000.0		163823.9	830.9	886.6	888.1	10.6	18162.8	645.2	273.0	318.6
Reach	43750.0		163800.4	830.6	886.2	887.8	11.3	17876.0	596.4	273.6	319.2
Reach	43500.0		163847.8	830.2	886.2	887.4	8.6	18801.1	572.7	273.6	319.8
Reach	43250.0		163828.4	829.9	885.5	887.1	10.1	16591.6	517.3	274.2	320.4
Reach	43000.0		163848.6	829.5	885.5	886.9	11.1	21482.0	599.5	274.8	321.0
Reach	42750.0		163895.3	829.2	885.8	886.5	7.5	27515.0	728.0	275.4	321.0
Reach	42500.0		163898.6	828.8	885.7	886.3	6.1	27457.7	756.1	276.0	322.2
Reach	42250.0		163905.4	828.5	885.0	886.1	9.0	20433.8	680.1	276.6	322.2
Reach	42000.0		163867.5	828.1	883.7	885.9	12.9	15952.5	587.4	276.6	322.8
Reach	41750.0		163848.1	827.8	883.3	885.3	11.7	15949.8	557.7	277.2	323.4
Reach	41500.0		163870.1	827.4	883.2	885.0	13.0	19567.7	581.9	277.2	324.0
Reach	41250.0		163898.7	827.1	883.2	884.4	9.1	19841.4	540.6	277.8	324.0
Reach	41000.0		163903.8	826.7	882.6	884.2	12.3	21524.9	619.6	278.4	324.6
Reach	40750.0		163922.8	826.4	882.8	883.9	10.7	26204.9	732.7	278.4	325.2
Reach	40500.0		163937.1	826.0	882.1	883.8	12.1	20964.1	587.8	279.0	325.8
Reach	40250.0		163903.4	825.7	880.7	883.7	15.3	14442.7	440.9	279.0	326.4
Reach	40000.0		163906.1	825.3	880.3	883.3	15.2	15036.5	476.8	279.6	326.4
Reach	39750.0		163949.5	825.0	880.9	882.8	12.2	18075.6	546.0	279.6	327.0
Reach	39500.0		163996.3	824.6	881.0	882.4	10.9	20179.2	602.6	280.2	327.6

HEC-RAS Plan: 0.9 PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	39250.0		163947.8	824.3	879.6	882.4	14.7	15160.0	415.7	280.2	328.2
Reach	39000.0		163989.8	823.9	879.6	882.0	13.7	16773.1	469.6	280.8	328.2
Reach	38750.0		164013.5	823.6	879.9	881.6	11.8	18498.5	544.2	280.8	328.8
Reach	38500.0		164052.4	823.2	879.8	881.4	11.8	22777.6	735.5	281.4	329.4
Reach	38250.0		164063.7	822.9	879.5	881.0	10.8	17614.9	540.3	282.0	330.0
Reach	38000.0		164055.8	822.5	878.6	880.5	11.0	14916.8	462.8	282.0	330.0
Reach	37750.0		164048.1	822.2	877.7	880.1	13.2	14781.5	478.2	282.6	330.6
Reach	37500.0		164087.9	821.8	877.9	879.6	11.5	16774.5	514.3	282.6	331.2
Reach	37250.0		164048.8	821.5	876.3	879.7	16.3	14842.0	473.1	283.2	331.2
Reach	37000.0		164089.2	821.1	876.7	878.7	11.6	14275.5	470.0	283.2	331.8
Reach	36750.0		164113.7	820.8	876.5	878.2	10.1	15855.0	505.1	283.8	332.4
Reach	36500.0		164152.0	820.4	876.6	877.8	9.2	19036.3	591.5	284.4	332.4
Reach	36250.0		164115.9	820.1	875.2	877.7	14.5	16586.7	548.7	284.4	333.0
Reach	36000.0		164105.7	819.7	873.9	877.5	16.5	13501.5	438.3	285.0	333.6
Reach	35750.0		164160.0	819.4	874.8	876.7	11.6	17919.2	555.0	285.0	333.6
Reach	35500.0		164187.1	819.0	874.9	876.4	11.5	22256.8	802.0	285.6	334.2
Reach	35250.0		164186.6	818.7	873.6	876.4	15.1	15796.0	489.4	285.6	334.8
Reach	35000.0		164209.8	818.3	873.5	876.0	14.5	16349.4	551.4	286.2	335.4
Reach	34750.0		164207.3	818.0	872.4	875.7	15.8	14623.9	460.9	286.2	335.4
Reach	34500.0		164215.6	817.6	871.8	875.3	16.2	14499.0	517.2	286.8	336.0
Reach	34250.0		164225.8	817.3	871.4	874.7	15.8	13210.8	430.4	286.8	336.0
Reach	34000.0		164206.2	816.9	870.2	874.3	17.8	12152.9	369.7	287.4	336.6
Reach	33750.0		164259.2	816.6	870.8	873.5	14.7	14149.6	468.7	287.4	337.2
Reach	33500.0		164286.0	816.2	870.4	873.1	14.6	15936.4	579.4	288.0	337.2
Reach	33250.0		164295.8	815.9	870.1	872.6	13.8	13796.8	444.3	288.0	337.8
Reach	33000.0		164291.4	815.5	869.2	872.4	15.6	13805.6	430.8	288.6	337.8
Reach	32750.0		164329.3	815.2	869.9	871.8	12.8	18761.9	610.0	288.6	338.4
Reach	32500.0		164327.1	814.8	868.6	871.6	15.2	14165.7	448.1	289.2	339.0
Reach	32250.0		164305.3	814.5	867.8	871.3	16.5	13336.1	445.8	289.2	339.0
Reach	32000.0		164312.8	814.1	867.3	870.6	16.0	12183.4	403.1	289.2	339.6
Reach	31750.0		164289.1	813.8	866.0	870.3	17.6	11988.8	393.3	289.8	339.6
Reach	31500.0		164330.5	813.4	866.0	869.7	16.5	12567.6	445.1	289.8	340.2
Reach	31250.0		164355.9	813.1	865.9	869.1	15.9	13906.4	500.1	290.4	340.2
Reach	31000.0		164380.0	812.7	865.9	868.4	13.5	13809.1	478.4	290.4	340.8
Reach	30750.0		164406.2	812.4	865.7	868.2	13.8	15404.4	484.2	291.0	340.8
Reach	30500.0		164416.5	812.0	865.3	867.8	13.7	14827.0	480.1	291.0	341.4
Reach	30250.0		164395.9	811.7	864.5	867.5	14.7	14464.0	456.2	291.6	342.0
Reach	30000.0		164387.9	811.3	863.6	867.2	16.7	13373.0	427.4	291.6	342.0
Reach	29750.0		164411.2	811.0	863.4	866.7	15.2	12587.5	402.5	291.6	342.6
Reach	29500.0		164435.8	810.6	863.5	866.2	14.3	13741.7	458.8	292.2	342.6

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	29250.0		164474.9	810.3	863.6	865.7	12.6	16106.2	520.7	292.2	343.2
Reach	29000.0		164487.6	809.9	863.6	865.3	12.2	19212.4	577.1	292.8	343.8
Reach	28750.0		164513.5	809.6	863.4	865.0	12.1	20299.9	648.5	293.4	344.4
Reach	28500.0		164544.6	809.2	863.5	864.8	11.0	21607.8	716.6	293.4	344.4
Reach	28250.0		164544.1	808.9	862.6	864.6	13.0	17661.8	566.4	294.0	345.0
Reach	28000.0		164516.0	808.5	861.1	864.4	16.4	13304.2	464.8	294.0	345.6
Reach	27750.0		164500.5	808.2	860.4	863.9	16.4	13610.3	437.1	294.6	346.2
Reach	27500.0		165974.9	807.8	859.6	863.3	16.8	12581.8	487.2	294.6	346.2
Reach	27250.0		166004.4	807.5	859.5	862.7	15.8	13404.7	469.5	295.2	346.8
Reach	27000.0		165982.9	807.1	858.3	862.2	16.6	11031.3	370.0	295.2	346.8
Reach	26750.0		165999.8	806.8	858.4	861.6	15.2	12397.4	417.3	295.2	347.4
Reach	26500.0		166088.2	806.4	859.5	861.2	11.3	17818.9	562.5	295.8	347.4
Reach	26250.0		166071.0	806.1	858.5	861.0	14.6	16352.4	526.1	295.8	348.0
Reach	26000.0		166068.9	805.7	857.6	860.8	15.9	15167.3	492.2	296.4	348.0
Reach	25750.0		166119.8	805.4	858.1	859.9	11.7	17974.4	577.1	296.4	348.6
Reach	25500.0		166152.5	805.0	857.9	859.5	11.2	18432.8	643.9	297.0	349.2
Reach	25250.0		166168.1	804.7	857.7	859.2	11.1	20158.5	689.8	297.6	349.8
Reach	25000.0		166181.5	804.3	857.1	859.0	12.9	18299.6	585.9	297.6	350.4
Reach	24750.0		166204.8	804.0	856.3	858.7	14.4	17526.6	581.1	298.2	350.4
Reach	24500.0		166188.1	803.6	855.1	858.3	14.9	12366.8	385.9	298.2	351.0
Reach	24250.0		166203.1	803.3	854.5	857.9	15.5	13082.9	396.7	298.8	351.0
Reach	24000.0		166247.9	802.9	854.7	857.4	14.0	14267.0	420.7	298.8	351.6
Reach	23750.0		166244.8	802.6	854.5	857.1	13.6	15924.4	523.6	299.4	352.2
Reach	23500.0		166284.2	802.2	854.1	856.6	13.3	14739.3	451.8	299.4	352.2
Reach	23250.0		166297.3	801.9	853.5	856.3	14.2	14069.9	422.2	300.0	352.8
Reach	23000.0		166297.1	801.5	852.9	856.0	15.5	14837.3	484.7	300.0	353.4
Reach	22750.0		166297.5	801.2	852.1	855.6	16.2	13681.3	430.0	300.6	353.4
Reach	22500.0		166278.2	800.8	851.3	855.0	16.0	12549.9	408.8	300.6	354.0
Reach	22250.0		166289.0	800.5	851.0	854.5	15.6	11773.1	367.0	300.6	354.0
Reach	22000.0		166229.1	800.1	849.6	854.0	17.9	11461.9	368.8	301.2	354.6
Reach	21750.0		166333.0	799.8	850.6	853.2	13.5	13468.3	430.9	301.2	354.6
Reach	21500.0		166254.8	799.4	849.0	852.7	15.7	10887.9	340.4	301.8	355.2
Reach	21250.0		166377.1	799.1	850.7	852.1	10.4	18681.1	605.5	301.8	355.2
Reach	21000.0		166391.8	798.7	850.3	851.9	10.8	17677.5	531.1	302.4	355.8
Reach	20750.0		166385.1	798.4	849.4	851.6	12.7	14445.4	440.6	303.0	356.4
Reach	20500.0		166393.1	798.0	849.2	851.3	12.1	14396.6	464.6	303.0	356.4
Reach	20250.0		166298.7	797.7	847.4	851.0	15.7	11787.8	370.4	303.6	357.0
Reach	20000.0		166370.0	797.3	847.6	850.5	13.8	13499.9	379.2	303.6	357.0
Reach	19750.0		166340.9	797.0	846.8	850.2	15.5	12647.2	375.9	304.2	357.6
Reach	19500.0		166371.3	796.6	846.9	849.6	14.0	13041.7	399.3	304.2	357.6

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	19250.0		166400.5	796.3	846.9	849.3	12.9	14113.0	453.8	304.8	358.2
Reach	19000.0		166410.7	795.9	846.8	848.9	13.2	15215.5	497.4	304.8	358.8
Reach	18750.0		166359.8	795.6	845.6	848.9	16.2	14834.2	493.3	305.4	358.8
Reach	18500.0		166327.7	795.2	845.1	848.3	15.9	15115.6	515.2	305.4	359.4
Reach	18250.0		166294.7	794.9	844.1	847.8	16.6	13233.7	456.6	305.4	359.4
Reach	18000.0		166207.4	794.5	843.2	847.3	17.5	12540.9	414.5	306.0	360.0
Reach	17750.0		166282.9	794.2	843.4	846.6	15.9	15024.4	511.4	306.0	360.0
Reach	17500.0		166385.1	793.8	844.2	845.9	11.6	17721.3	637.8	306.6	360.6
Reach	17250.0		166391.3	793.5	844.0	845.5	11.0	16994.1	559.7	306.6	361.2
Reach	17000.0		166375.6	793.2	843.4	845.4	12.3	15709.5	539.1	307.2	361.8
Reach	16750.0		166401.2	792.8	843.4	845.1	11.3	17055.7	595.3	307.8	361.8
Reach	16500.0		166456.5	792.5	843.6	844.8	10.6	22157.4	744.5	307.8	362.4
Reach	16250.0		166486.2	792.2	843.7	844.5	8.7	25046.4	836.0	308.4	363.0
Reach	16000.0		166530.0	791.9	843.7	844.4	7.1	25618.4	902.8	309.0	363.6
Reach	15750.0		166570.8	791.5	843.8	844.3	5.6	31450.1	963.5	309.6	364.8
Reach	15500.0		166569.7	791.2	843.9	844.3	4.1	38299.9	1125.2	310.2	365.4
Reach	15250.0		168052.3	790.9	843.9	844.2	3.9	37353.3	1147.0	311.4	366.6
Reach	15000.0		168100.6	790.6	843.7	844.2	4.7	31555.6	1006.8	312.6	367.2
Reach	14750.0		168137.5	790.2	843.7	844.2	3.6	32347.1	1005.4	313.2	367.8
Reach	14500.0		168214.5	789.9	843.8	844.1	3.1	38166.3	1253.8	314.4	369.0
Reach	14327.0		168288.8	789.7	843.8	844.1	3.9	44600.5	1458.0	315.6	370.2
Reach	14257.0	Quaker Church Road (Route 2080)	Bridge								
Reach	14158.0		168243.3	789.5	842.8	843.3	3.4	30919.2	936.1	316.2	370.8
Reach	13750.0		168331.0	788.9	842.5	843.3	7.5	25985.3	952.4	317.4	372.0
Reach	13500.0		168385.4	788.6	842.2	843.2	9.9	24933.7	757.4	318.0	372.6
Reach	13250.0		168435.4	788.3	840.9	843.2	13.6	17090.7	531.8	318.0	373.2
Reach	13000.0		168475.9	788.0	840.3	842.8	14.1	15343.1	486.0	318.6	373.2
Reach	12750.0		168504.0	787.6	839.8	842.5	15.3	15058.5	513.6	318.6	373.8
Reach	12500.0		168593.1	787.3	840.1	841.9	12.3	17420.3	571.1	319.2	374.4
Reach	12250.0		168605.5	787.0	838.8	841.9	15.6	15679.3	538.7	319.2	374.4
Reach	12000.0		168667.3	786.7	838.6	841.4	14.8	17467.6	621.9	319.8	375.0
Reach	11750.0		168706.3	786.3	838.4	840.9	13.9	17674.6	588.3	319.8	375.6
Reach	11500.0		168760.2	786.0	837.5	840.6	15.1	14862.2	480.5	320.4	375.6
Reach	11250.0		168805.9	785.7	837.0	840.2	15.9	14928.3	520.4	320.4	376.2
Reach	11000.0		168877.1	785.4	837.4	839.5	13.0	16018.5	508.8	321.0	376.8
Reach	10750.0		168920.2	785.0	837.0	839.2	13.1	14932.8	451.6	321.0	376.8
Reach	10500.0		168993.8	784.7	837.2	839.0	12.2	18083.1	611.5	321.6	377.4
Reach	10250.0		169019.2	784.4	836.4	838.8	13.3	14939.3	489.9	321.6	378.0
Reach	10000.0		169037.5	784.1	835.0	838.6	16.5	14394.8	505.8	322.2	378.0
Reach	9750.0		169038.4	783.7	833.5	838.1	18.1	11950.8	404.3	322.2	378.6

HEC-RAS Plan: 0.9 PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	9500.0		168984.0	783.4	832.1	837.6	20.3	11371.7	404.3	322.8	378.6
Reach	9250.0		169000.9	783.1	831.7	836.6	18.6	11496.7	407.0	322.8	379.2
Reach	9000.0		169074.0	782.8	831.7	835.9	18.3	13809.4	508.4	322.8	379.2
Reach	8750.0		169210.9	782.4	833.3	834.6	10.4	20822.4	699.6	323.4	379.8
Reach	8500.0		169140.2	782.1	831.1	834.8	16.3	12433.5	448.5	323.4	380.4
Reach	8250.0		168865.8	781.8	828.6	834.3	20.4	10666.1	383.5	324.0	380.4
Reach	8000.0		169007.3	781.5	829.4	833.1	17.2	11928.1	398.9	324.0	380.4
Reach	7750.0		169162.1	781.1	830.1	832.5	13.7	15074.0	581.7	324.0	381.0
Reach	7500.0		169230.7	780.8	830.0	832.2	13.2	16462.1	632.5	324.6	381.6
Reach	7250.0		169288.9	780.5	829.9	831.6	12.0	18012.1	687.7	325.2	381.6
Reach	7000.0		169329.0	780.2	829.9	831.3	11.1	19472.8	770.5	325.2	382.2
Reach	6750.0		169340.3	779.8	829.8	831.1	10.7	20479.3	820.4	325.8	382.8
Reach	6500.0		169421.3	779.5	829.7	830.9	10.1	22816.6	971.0	325.8	383.4
Reach	6250.0		169447.8	779.2	829.5	830.5	9.9	22447.0	885.5	326.4	384.0
Reach	6000.0		169530.8	778.9	829.6	830.4	8.6	24861.1	945.0	327.0	384.6
Reach	5750.0		169554.6	778.5	829.1	830.2	10.0	21761.0	830.3	327.6	385.2
Reach	5500.0		169585.3	778.2	828.9	830.0	10.0	20868.4	807.5	327.6	385.2
Reach	5250.0		169632.3	777.9	828.6	829.8	10.2	20513.1	751.2	328.2	385.8
Reach	5000.0		169662.7	777.6	828.3	829.6	9.9	19271.0	717.8	328.8	386.4
Reach	4750.0		169714.0	777.2	828.2	829.4	9.4	19598.5	662.7	328.8	387.0
Reach	4500.0		169778.9	776.9	828.4	829.2	8.2	23252.8	803.9	329.4	387.6
Reach	4358.0		169811.0	776.7	828.6	829.1	6.1	31610.6	1156.3	330.0	388.2
Reach	4310.0	Yadkin Valley Railroad #3	Bridge								
Reach	4221.0		169795.8	776.5	828.5	828.9	6.6	39930.3	1428.4	330.0	388.2
Reach	3823.0	Similar to 878117 of Yadkin Reach-1	169791.8	776.0	828.3	828.7	6.1	41283.1	1490.0	331.2	391.2
Reach	3500.0		239761.8	775.7	827.6	828.4	8.5	38498.8	1359.9	331.8	392.4
Reach	3250.0		239761.1	775.4	827.4	828.4	9.2	35652.5	1382.1	332.4	392.4
Reach	3000.0		239747.3	775.2	827.6	828.2	7.3	44017.6	1559.1	333.0	393.6
Reach	2750.0		239770.4	774.9	827.7	828.2	6.4	50558.7	1754.7	333.6	394.2
Reach	2500.0	Similar to 876743 of Yadkin Reach-1	239757.6	774.7	827.5	828.1	7.5	46805.2	1911.6	334.2	395.4
Reach	2250.0		239765.6	774.4	827.5	828.0	7.1	48880.5	2046.1	334.8	396.0
Reach	2000.0		239747.2	774.2	827.6	828.0	6.3	52749.2	2129.2	335.4	396.6
Reach	1750.0		239754.1	773.9	827.6	827.9	5.5	57487.6	2051.6	336.0	398.4
Reach	1500.0	Similar to 875789 of Yadkin Reach-1	239757.6	773.7	827.5	827.9	5.8	57323.0	2042.9	336.6	399.0
Reach	1250.0		239747.7	773.4	827.4	827.9	7.0	55185.5	1999.8	337.2	400.2
Reach	1000.0		239750.4	773.2	827.2	827.8	7.3	47445.7	1612.4	337.8	400.8
Reach	750.0		239752.1	772.9	827.1	827.8	8.5	43230.1	1459.2	338.4	401.4
Reach	500.0	Similar to 874889 of Yadkin Reach-1	239750.7	772.7	827.0	827.7	8.4	42839.1	1401.6	339.0	402.0
Reach	250.0		239748.4	772.4	826.9	827.6	8.1	46474.5	1558.7	339.6	403.2
Reach-1	878977.0	Yadkin River Before Ararat Inflow	67666.1	776.9	827.7	827.9	3.7	35840.2	1529.4	N/A	N/A

HEC-RAS Plan: 0.9 PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach-1	878117.0	Similar to 3823 of previous reach	67520.6	776.1	827.7	827.8	3.1	37359.7	1412.9	331.2	391.2
Reach-1	876743.0	Similar to 2500 of previous reach	234217.3	775.0	826.4	827.2	9.5	50190.1	2174.7	334.2	395.4
Reach-1	875789.0	Similar to 1500 of previous reach	236417.8	774.2	825.5	826.5	10.3	52804.9	2006.1	336.6	399.0
Reach-1	874889.0	Similar to 500 of previous reach	236340.3	773.4	824.3	826.2	13.1	30668.5	1354.5	339.0	402.0
Reach-1	873889.0		236189.4	772.5	822.5	824.0	11.6	26764.2	921.8	340.2	403.8
Reach-1	872888.0		235875.1	771.7	819.7	822.2	14.5	27265.4	948.9	341.4	406.2
Reach-1	871889.0		235771.1	770.8	818.4	820.8	14.2	28129.9	989.1	342.6	408.0
Reach-1	870889.0		235714.3	770.0	817.0	819.4	14.3	28812.4	1068.8	343.8	409.8
Reach-1	869792.0		235683.8	769.1	815.9	817.9	13.1	28207.8	1179.4	345.0	412.2
Reach-1	868972.0		235672.5	768.4	814.9	816.9	13.2	27480.9	1054.7	346.2	414.0
Reach-1	868033.0		235666.5	767.6	814.7	815.7	10.2	34691.7	1409.1	347.4	415.8
Reach-1	866672.0		235651.8	766.4	812.6	814.7	13.8	32672.1	1261.7	349.2	418.8
Reach-1	865759.0		235637.3	765.6	810.4	812.2	11.9	24442.3	928.4	350.4	420.6
Reach-1	864908.0		235621.9	764.9	807.0	810.2	15.6	22824.1	1006.8	351.6	422.4
Reach-1	863826.0		235622.7	764.0	806.0	807.9	12.7	28760.6	1314.4	352.8	424.2
Reach-1	862956.0		235620.0	763.2	804.2	806.6	14.0	24789.9	1120.6	354.0	426.0
Reach-1	861929.0		235606.7	762.4	797.9	803.7	19.4	12481.2	982.9	355.2	427.2
Reach-1	860992.0		234913.2	761.6	793.0	798.7	19.7	13901.6	1213.5	355.8	427.8
Reach-1	859929.0		234626.7	759.1	791.3	793.9	13.2	20761.5	1452.2	357.0	429.0
Reach-1	858874.0		234494.0	757.4	790.5	792.2	11.7	22604.8	1240.2	358.2	430.8
Reach-1	857919.0		234269.5	755.9	789.3	791.1	10.9	22710.3	960.1	360.0	432.6
Reach-1	857233.0		234312.8	754.0	789.5	790.5	8.0	30421.8	1172.1	361.2	433.8
Reach-1	856716.0		234280.2	750.0	789.4	790.3	9.2	34169.3	1432.3	361.8	435.0
Reach-1	855942.0		234405.3	747.8	788.9	789.8	9.9	38022.1	1683.3	363.0	436.8
Reach-1	854859.0		234301.4	745.4	788.1	789.2	10.6	38079.0	1669.3	364.8	439.8
Reach-1	853833.0		234127.1	743.9	786.8	788.5	13.2	28675.9	1203.4	366.6	442.2
Reach-1	852899.0		233996.1	742.7	786.0	787.5	12.6	29882.5	1241.9	367.8	444.0
Reach-1	851917.0		233918.6	741.6	785.4	786.7	11.4	32810.6	1350.2	369.0	446.4
Reach-1	850885.0		233530.5	740.9	783.4	786.0	14.3	26596.9	1091.5	370.2	448.2
Reach-1	849909.0		233094.8	740.0	781.7	784.8	15.3	22907.3	912.7	371.4	450.0
Reach-1	849110.0		230514.6	739.5	779.6	783.3	16.3	19023.2	778.5	372.6	451.2
Reach-1	847889.0		230569.3	737.9	779.6	780.8	9.2	32735.1	1161.8	373.8	453.6
Reach-1	846889.0		230540.5	736.0	779.4	780.2	8.2	37009.6	1329.9	375.6	456.0
Reach-1	845805.0		229693.6	734.9	778.2	779.8	11.2	30747.7	1111.0	378.0	458.4
Reach-1	844851.0		229465.1	734.1	777.8	779.1	10.5	31926.1	1228.5	379.2	460.8
Reach-1	843889.0		228914.0	731.8	776.9	778.6	11.6	34104.0	1309.1	380.4	463.2
Reach-1	842978.0		228760.3	731.7	776.2	777.8	11.5	35167.8	1332.0	382.2	465.6
Reach-1	841737.0		228322.2	729.1	775.4	776.9	10.2	30503.9	1050.1	384.0	468.6
Reach-1	840889.0		228085.5	728.4	774.9	776.4	10.3	29472.4	1018.2	385.2	470.4
Reach-1	839889.0		227855.5	727.0	774.5	775.9	10.0	28783.8	913.5	387.0	472.2

HEC-RAS Plan: 0.9 PMF Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach-1	838887.0		227628.8	723.9	773.9	775.4	11.2	37235.0	1323.1	388.2	474.6
Reach-1	837871.0		227118.8	723.6	772.8	775.0	13.4	31414.0	1408.3	390.0	477.0
Reach-1	836868.0		228732.6	722.6	773.0	773.8	9.1	44252.6	1716.6	391.2	480.0
Reach-1	835888.0		228532.8	722.6	772.6	773.5	9.5	42888.0	1609.1	393.0	483.0
Reach-1	834878.0		228480.9	721.8	772.5	773.0	7.8	54431.6	2194.4	394.8	486.6
Reach-1	833762.0		228349.9	721.8	772.1	772.7	9.0	64853.4	2739.7	397.2	491.4
Reach-1	832889.0		228182.3	721.5	771.7	772.4	9.6	70916.0	3130.6	399.0	495.6
Reach-1	831869.0		228052.5	721.3	771.4	771.9	8.7	72127.0	3105.3	400.8	501.0
Reach-1	830889.0		228009.1	721.2	771.0	771.6	8.9	69864.7	2922.5	402.6	506.4
Reach-1	829877.0		227934.3	721.0	770.7	771.2	8.3	78164.8	3343.2	404.4	511.8
Reach-1	828958.0		227892.4	720.9	770.4	770.9	7.9	72706.2	2869.4	406.2	516.6
Reach-1	827852.0		227864.2	719.9	770.1	770.6	7.6	65881.3	2467.7	408.6	522.0
Reach-1	826913.0		227819.6	719.5	769.5	770.4	10.9	43985.0	2150.9	410.4	525.6
Reach-1	825957.0		227799.7	718.8	768.8	769.9	10.4	38956.7	1455.5	412.2	528.6
Reach-1	825519.0		227793.5	719.4	768.6	769.7	10.2	40478.4	1599.4	412.8	529.8
Reach-1	825429.0	Reynolda Road (NC Route 67)	Bridge								
Reach-1	825318.0	Convergence	227533.2	719.2	767.0	768.8	12.5	32368.0	1705.3	412.8	530.4

0.90 PMF without Dam Failure

HEC-RAS Plan: 0.9 PMF No Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	182928.0		70174.54	1146.99	1180.17	1186.19	19.34	3589.92	201.3	0	0
Reach	182750.0		70166.52	1146.44	1181.09	1182.51	8.58	7394.64	433.02	0	0
Reach	182500.0		70204.14	1145.69	1180.37	1182	7.88	7202.1	373.77	0.6	0.6
Reach	182250.0		70238.28	1144.43	1179.67	1181.32	10.41	7078.86	405.2	1.2	1.2
Reach	182000.0		70273.54	1143.09	1177.81	1180.22	12.57	5832.3	350.66	1.2	1.2
Reach	181750.0		70306.85	1141.7	1174.74	1178.39	17	5113.81	347.96	1.8	1.8
Reach	181310.0		70368.16	1139.29	1172.67	1174.26	11.54	7856.66	537.26	2.4	2.4
Reach	181244.0	Epworth Road (Route 686)	Bridge								
Reach	181185.0		70373.04	1138.8	1167.2	1170.68	18.05	5854.44	523.42	2.4	2.4
Reach	180750.0		70419.69	1136.56	1162.56	1165.6	13.03	5092.97	471.19	3	3
Reach	180500.0		70461.3	1135.29	1162.33	1163.53	7.6	8687.37	731.05	3.6	3
Reach	180250.0		70497.44	1133.99	1159.88	1162.49	11.38	5508.16	543.88	3.6	3.6
Reach	180000.0		70531.6	1132.69	1157.84	1160.41	13.22	5492.73	631.36	4.2	4.2
Reach	179750.0		70566.6	1131.39	1157.19	1158.42	8.38	8213.73	744.26	4.2	4.2
Reach	179500.0		70594.31	1129.89	1154.91	1157.27	12.52	5779.38	572.38	4.8	4.8
Reach	179250.0		70623.52	1128.81	1153	1155.58	11.9	5638.21	556.8	5.4	4.8
Reach	179000.0		70653.56	1127.71	1150.02	1153.28	15.12	5030.43	606.23	5.4	5.4
Reach	178750.0		70680.29	1126.59	1147.37	1150.09	13.05	5374.69	727.4	6	5.4
Reach	178500.0		70719.7	1125.79	1145.04	1147.02	10.51	6267.1	804.53	6	6
Reach	178250.0		70745.13	1124.89	1143	1145.27	11.34	5875.03	855.54	6.6	6
Reach	178000.0		70769.3	1124.09	1141.75	1143.38	9.09	7025.84	974.03	7.2	6.6
Reach	177750.0		70806.17	1123.09	1140.07	1141.48	8.05	7756.22	1154.16	7.2	7.2
Reach	177500.0		70853.45	1122.59	1139.5	1139.82	3.57	16057.99	1937.65	8.4	7.8
Reach	177250.0		70895.85	1122.31	1139.19	1139.54	2.69	15466.72	1417.08	9.6	9.6
Reach	177000.0		70923.61	1121.69	1139.02	1139.38	2.99	14980.34	1233.3	10.8	9.6
Reach	176750.0		70937.34	1120.21	1138.74	1139.24	4.47	12712.09	1257.93	12	10.2
Reach	176500.0		70930.11	1119.49	1137.97	1138.99	7.5	8894.43	942.66	12.6	10.2
Reach	176250.0		70965.56	1117.31	1134.74	1138.23	13.93	4774.8	542.36	13.2	10.2
Reach	176000.0		70673.82	1115.07	1133.7	1134.54	5.17	9779.86	1022.38	13.8	10.8
Reach	175750.0		70082.07	1113.99	1133.04	1133.99	6.16	9027.56	1129.16	14.4	11.4
Reach	175500.0		69476.79	1113.2	1132.48	1133.36	6.12	9344.95	1133.18	15	11.4
Reach	175375.0		69090.88	1113.09	1132.2	1133.16	6.31	8944.03	1135.28	15.6	11.4
Reach	175275.0		68428.63	1112.99	1131.67	1132.68	6.69	8679.57	1120.71	15.6	12
Reach	175230.0	Fishlake Road (Route 687)	Bridge								
Reach	175175.0		68863.57	1112.92	1130.69	1131.69	7.03	9576.24	1322.6	16.2	12
Reach	174750.0		68666.47	1111.99	1129.91	1130.3	2.84	14463.46	1196.51	17.4	13.2
Reach	174500.0		68627.44	1111.53	1129.73	1130.16	3.01	13465.57	999.68	18.6	13.8
Reach	174250.0		68539.98	1109.9	1129.48	1129.97	3.21	12529.46	946.91	20.4	14.4
Reach	174000.0		68566.13	1108.3	1129.42	1129.91	3.62	14110.98	915.07	21.6	15

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	173750.0		68636.88	1107.38	1129.52	1129.71	1.97	20152.77	1222.44	22.8	15.6
Reach	173500.0		68592.78	1105.86	1129.31	1129.7	2.72	14370.06	925.42	24.6	15.6
Reach	173250.0		68567.2	1104.92	1129.15	1129.58	3.23	13590.68	802.34	25.8	16.2
Reach	173000.0		68540.16	1104.25	1128.99	1129.47	3.53	12993.93	801.3	27	16.2
Reach	172750.0		68558.63	1103.74	1128.97	1129.35	3.73	14158.81	889.76	28.2	16.8
Reach	172500.0		68532.66	1102.21	1128.77	1129.28	3.16	12747.69	722.24	29.4	17.4
Reach	172250.0		68562.46	1101.38	1128.68	1129.15	2.79	13065	653.58	31.2	18
Reach	172000.0		68564.89	1099.16	1128.7	1129.06	2.62	15680.5	777.26	32.4	19.2
Reach	171750.0		68629.05	1098.73	1128.79	1128.99	2.07	21012.29	954.35	34.2	19.8
Reach	171500.0		68672.55	1098.34	1128.76	1128.94	1.96	22477.95	1035.3	36.6	21
Reach	171248.0		68674.68	1097.31	1128.46	1128.84	4.03	14236.97	934.64	37.8	22.2
Reach	171000.0		68696.9	1096.51	1128.09	1128.73	5.45	11193.49	766.77	38.4	22.8
Reach	170750.0		68724.43	1095.25	1128.23	1128.5	3.29	16901.77	1015.92	39.6	23.4
Reach	170500.0		68740.98	1093.89	1128	1128.38	3.83	14458.72	732.85	40.8	24.6
Reach	170250.0		68790.95	1092.82	1127.94	1128.27	3.75	15870.95	757.84	42	25.2
Reach	170000.0		68806.4	1092.25	1127.93	1128.2	2.75	17743.58	917.84	43.2	25.8
Reach	169750.0		68840.54	1091.99	1128	1128.13	2.12	25478.25	1147.88	45	27.6
Reach	169500.0		68896.73	1091.44	1126.68	1127.64	9.6	9631.71	481	45.6	28.8
Reach	169250.0		68917.74	1088.89	1125.17	1127.01	10.9	6651.83	311.56	46.2	29.4
Reach	169000.0		68934.8	1088.36	1122.67	1125.97	13.87	5040.51	263.13	46.2	29.4
Reach	168750.0		68949.51	1087.78	1121.78	1123.85	13.46	6757.37	347.24	46.8	30
Reach	168500.0		68990.24	1087.21	1121.51	1122.29	8.67	10401.38	448.94	46.8	30.6
Reach	168250.0		69001.58	1085.51	1119.98	1122.15	9.37	6773.87	305.06	47.4	30.6
Reach	168000.0		69021.48	1085.36	1119.2	1120.71	12.07	7745.74	392.67	48	31.2
Reach	167750.0		69073.83	1084.84	1119.21	1119.63	4.58	14122.89	641.42	48.6	31.8
Reach	167500.0		69105.95	1083.64	1118.52	1119.21	8.35	11061.71	475.44	49.2	33
Reach	167250.0		69134.14	1083.05	1118.11	1118.88	6.93	10813.44	512.06	49.8	33.6
Reach	167000.0		69171.47	1082.46	1117.84	1118.47	5.57	11612.02	490.1	50.4	34.2
Reach	166750.0		69201.77	1080.88	1116.64	1117.88	11.12	8377.95	362.28	51	34.8
Reach	166500.0		69232.8	1080.54	1114.97	1117.24	10.61	6204.34	299.85	51	34.8
Reach	166250.0		69271.02	1079.13	1108.82	1115.2	21.75	3678.7	211.05	51.6	35.4
Reach	166000.0		69303.37	1076.09	1105.44	1109.19	17.91	4982.77	356.45	51.6	35.4
Reach	165750.0		69336.4	1074.66	1101.07	1105.49	13.57	4245.01	330.73	51.6	36
Reach	165500.0		69369.66	1074.59	1099.16	1102.14	13.22	5205.82	421.5	52.2	36
Reach	165250.0		69402.27	1074.49	1096.85	1099.77	10.8	5207.44	448.9	52.8	36.6
Reach	165000.0		69447.1	1073.4	1094.86	1097.36	9.42	5663.09	544.67	52.8	37.2
Reach	164750.0		69471.28	1073.36	1092.58	1095.4	11.67	5237.63	555.51	53.4	37.2
Reach	164500.0		69492.87	1072.38	1091.95	1093.28	6.97	7684.52	820.8	54	37.8
Reach	164250.0		69519.88	1071.33	1091.88	1092.54	5.25	10879.47	1157.44	54.6	38.4

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	164000.0		69550.16	1070.14	1091.68	1092.17	4.7	12488.31	1283.89	55.2	39
Reach	163750.0		69576.87	1069.13	1091.67	1091.96	3.61	16279.73	1424.28	56.4	39.6
Reach	163622.0		69597.83	1068.53	1091.65	1091.88	4.17	18117.23	1521.04	57	40.2
Reach	163555.0		69617.22	1068.31	1091.37	1091.81	7.36	14713.81	1351.91	57	40.8
Reach	163515.0	Greenhill Road (Route 1700)	Bridge								
Reach	163418.0		69180.53	1067.65	1086.46	1087.69	13.19	11417.74	1371.79	57	40.8
Reach	163000.0		68862.28	1066.48	1085.09	1085.74	9.58	12675.98	1242.45	57.6	42
Reach	162750.0		68711.33	1065.76	1084.74	1085.24	8.75	14218.52	1214.36	58.2	42.6
Reach	162500.0		68636.27	1065.01	1084.32	1084.86	9.91	14971.15	1431.44	58.8	43.2
Reach	162250.0		68144.08	1064.24	1083.17	1083.61	9.27	17031.93	1626.52	59.4	45
Reach	162000.0		67850.02	1063.65	1082.31	1082.71	8.65	17705.8	1662.25	59.4	46.8
Reach	161750.0		67724.54	1063.02	1082.11	1082.38	7.16	20377.31	1677.34	60	47.4
Reach	161500.0		67669.65	1061.98	1081.78	1082.06	6.26	20678.66	1616.75	60.6	48.6
Reach	161250.0		67487.51	1061.66	1080.99	1081.62	10.12	14249.05	1195.53	61.2	49.2
Reach	161000.0		67428.35	1060.66	1080.81	1081.09	6.43	18604.89	1544.93	61.8	49.8
Reach	160750.0		67402.38	1059.67	1080.61	1080.93	7.53	17879.1	1419.96	62.4	50.4
Reach	160500.0		67393.66	1059.46	1080.25	1080.64	7.66	16349.66	1148.29	63	51.6
Reach	160250.0		67051.05	1056.82	1078.87	1080.26	13.37	9118.78	699.95	63.6	52.2
Reach	160000.0		67035.95	1056.2	1078.62	1079.3	9.21	11607.34	868.77	63.6	52.2
Reach	159750.0		67096.15	1055.94	1078.75	1079	5.06	17478.39	1170.06	64.2	52.8
Reach	159500.0		67070.59	1054.88	1078.73	1078.94	4.53	18732.33	1185.35	65.4	53.4
Reach	159250.0		67138.69	1054.05	1078.73	1078.87	3.4	23661.63	1482.69	66	54.6
Reach	159000.0		67150.86	1052.55	1078.4	1078.79	4.95	13577.77	777.07	67.2	56.4
Reach	158750.0		67152.94	1051.8	1078.18	1078.68	5.51	12111.65	644.84	67.8	57
Reach	158500.0		67156.08	1050.44	1078.03	1078.52	7.08	12503.22	689.47	68.4	57.6
Reach	158250.0		67181.82	1049.38	1078.15	1078.37	4.54	18331.4	1019.87	69.6	58.2
Reach	158000.0		67201.55	1048.79	1078.18	1078.31	3.66	24788.46	1336.31	70.2	59.4
Reach	157750.0		67220.16	1048.72	1078.16	1078.26	3.24	26741.5	1412.08	71.4	60.6
Reach	157500.0		67240.73	1048.67	1078.03	1078.23	5.39	23206.96	1222.33	72.6	62.4
Reach	157250.0		67272.34	1048.61	1077.93	1078.09	4.16	23246.57	1160.22	73.2	64.8
Reach	157000.0		67292.77	1047.53	1077.59	1078.08	6.65	16193.97	888.12	74.4	66
Reach	156750.0		67313.05	1045.68	1075.92	1078.34	13.38	5797.45	303.42	74.4	66.6
Reach	156500.0		67333.09	1045.01	1073.28	1077.82	18.41	4777.34	259.89	75	66.6
Reach	156250.0		67354.95	1044.68	1071.67	1076.36	18.46	4634.49	269.9	75	67.2
Reach	156000.0		67379.89	1044.5	1072.69	1074.66	12.1	6861.84	350.89	75.6	67.2
Reach	155750.0		67401.41	1041.17	1068.97	1074.3	20.52	4499.61	261.34	75.6	67.8
Reach	155500.0		67423.34	1040.01	1065.33	1073.13	23.98	3760.78	262.24	75.6	67.8
Reach	155250.0		67445.84	1038.84	1061.95	1071.19	24.59	2946.41	213.67	76.2	68.4
Reach	155000.0		67467.3	1037.64	1058.06	1066.83	24.98	3534.34	326.27	76.2	68.4

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	154750.0		67481.97	1036.63	1054.81	1059.65	19.91	4657.35	561.88	76.2	68.4
Reach	154500.0		67476.63	1036.4	1053.76	1055.42	12.84	7454.6	1009.95	76.8	69
Reach	154250.0		67473.45	1035.14	1052.83	1053.78	10.57	9817.18	1252.31	76.8	69.6
Reach	154000.0		67478.96	1033.86	1052.04	1052.87	10.08	11091.57	1324.97	77.4	70.2
Reach	153750.0		67453.13	1033.23	1051.16	1052.16	11.67	12262.62	1331.18	78	70.8
Reach	153500.0		67456.65	1032.7	1050.31	1050.88	9.29	15432.89	1835.01	78	72
Reach	153250.0		67469.38	1032.1	1049.65	1049.98	6.34	19002.9	1980.84	78.6	73.8
Reach	153000.0		67473.88	1031.41	1049.49	1049.78	6.23	20058.74	2007.45	79.2	74.4
Reach	152750.0		67478.09	1030.67	1049.35	1049.56	5.99	22603.39	2091.81	79.8	75.6
Reach	152500.0		67496.49	1029.85	1049.21	1049.41	6.13	25005.12	2174.29	81	76.2
Reach	152250.0		67535.38	1029.02	1048.54	1048.87	7.33	20126.62	1700.54	81.6	78.6
Reach	152000.0		67553.73	1027.83	1048.24	1048.6	7.33	17524.25	1601.68	82.2	79.2
Reach	151750.0		67567.45	1027.54	1047.77	1048.41	9.32	15932.06	1479.81	82.2	79.8
Reach	151567.0		67580.07	1027.34	1047.08	1048.12	11.64	12514.55	1481.25	82.8	80.4
Reach	151537.0	West Lebanon Street (Bus 52)	Bridge								
Reach	151444.0		67566.91	1027.18	1044.43	1045.63	12.34	11468.54	1374.79	82.8	80.4
Reach	151000.0		67558.13	1025.66	1042.71	1044.01	12.86	11107.57	1204.4	83.4	81.6
Reach	150750.0		67517.56	1024.21	1041.16	1042.52	12.85	10882.96	1321.95	84	82.2
Reach	150500.0		67399.39	1024.02	1039.78	1041.33	14.27	10505.95	1304.48	84	82.8
Reach	150250.0		67251.02	1022.66	1039.03	1040.26	12.71	11232.41	1314.22	84.6	83.4
Reach	150000.0		67158.59	1022.21	1038.4	1039.29	11.23	12740.91	1344.98	84.6	84
Reach	149750.0		67029.92	1021.26	1037.9	1038.45	9.01	14283.33	1319.76	85.2	84.6
Reach	149500.0		66902.08	1019.98	1037.33	1037.73	7.83	16209.59	1559.99	85.8	85.8
Reach	149250.0		66644.17	1019.97	1036.54	1037.42	10.89	13816.06	1723.24	86.4	86.4
Reach	149000.0		66349.56	1019.95	1035.38	1035.96	9.27	14852.92	1747.98	86.4	87.6
Reach	148750.0		66287.72	1019.94	1035.14	1035.51	7.64	17372.1	1681.88	87	88.2
Reach	148500.0		66228.01	1016.41	1034.76	1035.22	8.3	16757.82	1534.09	87.6	88.8
Reach	148250.0		66175.38	1015.85	1034.53	1034.79	6.65	21347.31	1720.62	88.2	90
Reach	148000.0		66189.44	1015.41	1034.39	1034.57	5.7	23979	1886.78	88.8	91.2
Reach	147750.0		66147.41	1013.94	1034.12	1034.37	6.18	20379.37	1515.33	89.4	91.8
Reach	147500.0		66136.54	1013.17	1033.92	1034.18	6.04	20715.58	1462.66	90	92.4
Reach	147250.0		66143.05	1012.72	1033.77	1034.08	7.13	18948.65	1303.66	90.6	93
Reach	147000.0		66103.66	1011.95	1033.52	1033.94	7.39	17315.43	1197.64	91.2	94.2
Reach	146750.0		66094.32	1011.99	1033.2	1033.74	8.52	16104.18	1291.26	91.8	94.8
Reach	146500.0		66116.19	1011.48	1032.85	1033.3	8.22	16783.22	1253.2	92.4	96
Reach	146250.0		66108.56	1010.81	1032.67	1033.06	7.63	17892.24	1232.79	93	96.6
Reach	146000.0		66109.96	1009.93	1032.44	1032.78	6.63	18386.7	1130.23	93.6	97.8
Reach	145750.0		66132.82	1009.23	1031.99	1032.45	7.09	17917.5	1492.57	94.2	99
Reach	145500.0		66146.76	1008.49	1031.81	1032.24	7.68	18147.72	1338.21	94.8	100.2

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	145250.0		66159.93	1006.29	1031.48	1032.06	8.57	15615.81	1195.53	95.4	100.8
Reach	145000.0		66173.2	1005.25	1031.24	1031.78	7.84	15810.92	1208.43	95.4	102
Reach	144849.0		66177.31	1004.55	1031.09	1031.66	7.93	15601.54	1263.36	96	102
Reach	144741.0		66202.95	1003.97	1030.86	1031.39	7.26	15995.44	1190.3	96	102.6
Reach	144710.0	West Independence Blvd (Route 89)	Bridge								
Reach	144526.0		66202.02	1002.9	1024.86	1025.98	10.5	11931.64	1163.55	96.6	103.2
Reach	144250.0		66217.63	1002.18	1024.49	1025.38	10.64	13601.04	1240	97.2	103.8
Reach	144000.0		66232.93	1002.1	1024.25	1024.86	9.26	15707.23	1323.91	97.2	104.4
Reach	143750.0		66251.1	1002.01	1023.99	1024.46	8.19	17950.31	1573.46	97.8	105
Reach	143500.0		66261.63	1001.94	1023.72	1024.26	8.99	17082.81	1580.03	98.4	105.6
Reach	143311.0		66267.02	1001.87	1023.43	1024.2	9.57	15409.23	1547.77	98.4	106.2
Reach	143251.0	West Pine Street	Bridge								
Reach	143126.0		65441.72	1001.46	1019.46	1020.25	10.21	12974.91	1313.25	99	106.2
Reach	142750.0		65334.14	997.86	1018.97	1019.44	7.7	17194.08	1371.93	99.6	107.4
Reach	142500.0		65316.2	997.44	1018.75	1019.18	7.85	17694	1480.06	100.2	108.6
Reach	142250.0		65271.57	996.89	1018.38	1018.85	8.41	16451.34	1357.77	100.8	109.2
Reach	142000.0		65224.18	996.34	1018.1	1018.59	8.11	17116.92	1469.32	101.4	110.4
Reach	141750.0		65212.95	995.83	1017.58	1017.96	6.69	19203	1670.36	102	112.2
Reach	141500.0		65205.32	995.7	1017.43	1017.71	6.49	20524.16	1461.46	102.6	113.4
Reach	141250.0		65219.32	995.54	1017.26	1017.54	6.56	20692.06	1480.44	103.2	114
Reach	141000.0		65213.81	995.21	1017.15	1017.36	5.88	22956.99	1423.56	103.8	115.2
Reach	140750.0		65211.1	991.86	1017.02	1017.25	5.94	22952.7	1472.54	104.4	116.4
Reach	140500.0		65226.77	991.5	1016.77	1017.16	7.49	19374.88	1443.95	105	117.6
Reach	140250.0		65234.3	991.1	1016.19	1016.94	9.71	13297.11	911.16	105.6	118.8
Reach	140000.0		65250.3	990.71	1015.73	1016.39	9.29	14782.29	1017.31	106.2	120
Reach	139750.0		65251.68	990.3	1015.5	1016.12	8.72	15176.11	1113.77	106.2	120.6
Reach	139500.0		65263.86	989.89	1015.3	1015.89	8.52	15638.14	1109.92	106.8	121.2
Reach	139250.0		65284.2	989.16	1015.15	1015.6	7.2	16884.04	1155.83	107.4	122.4
Reach	139113.0		65309.74	988.37	1014.61	1015.42	9.41	14316.39	1132.95	107.4	123
Reach	139070.0	Worth Street (Route 1371)	Bridge								
Reach	138986.0		65292.37	987.23	1013.37	1014.51	10.45	11451.37	1345.03	108	123.6
Reach	138750.0		65309.55	986.64	1012.98	1014.02	10.87	11357.27	838.84	108.6	124.2
Reach	138500.0		65344.93	986.32	1012.79	1013.07	6.59	20341.98	1344.11	108.6	126
Reach	138250.0		65363.61	986.01	1012.68	1012.87	5.53	24150.15	1501.32	109.2	127.2
Reach	138000.0		65378.53	984.59	1012.56	1012.77	5.76	24431.97	1569.72	110.4	127.8
Reach	137750.0		65389.35	982.58	1012.48	1012.7	5.74	25556.2	1635.89	111	129
Reach	137500.0		65420.73	981.68	1011.7	1012.34	8.98	15214.77	1066.78	111.6	132.6
Reach	137285.0	Yadkin Valley Railroad #1	Bridge								
Reach	137250.0		65318.85	980.27	1010.45	1011.39	9.91	12248.11	881.5	112.2	133.2

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	137152.0		65327.82	979.89	1010.35	1011.19	9.31	13407.33	973.36	112.2	133.2
Reach	137130.0	Rockford Street (Hwy 601)	Bridge								
Reach	137027.0		58124.96	979.42	1007.08	1008.66	12.32	9277.35	911.36	112.2	133.8
Reach	136750.0		58215.45	978.39	1007.11	1007.74	8.28	13895.01	954.36	112.8	134.4
Reach	136500.0		58045.14	977.87	1007	1007.38	7.05	17414.54	1110.3	113.4	135.6
Reach	136250.0		58258.95	977.29	1007.04	1007.17	4.1	24678.58	1358.81	114	137.4
Reach	136000.0		58145.29	976.98	1006.99	1007.12	4.18	24568.18	1403.52	115.2	138.6
Reach	135750.0		58035.95	974.74	1006.91	1007.08	4.75	22964.43	1307.78	116.4	139.8
Reach	135645.0		58046.15	974.28	1006.94	1007.03	3.49	30243.82	1685.07	116.4	141
Reach	135439.0		58063.56	974.2	1006.92	1006.99	2.94	30497.25	1590.28	117.6	142.2
Reach	135368.0	US Route 52 NB and SB	Bridge								
Reach	135112.0		57129.56	973.93	1006.41	1006.46	2.16	31922.37	1512.63	118.8	143.4
Reach	134750.0		57112.42	973.28	1006.37	1006.43	2.5	28440.46	1320.36	121.8	148.2
Reach	134500.0		57185.66	972.45	1006.36	1006.42	2.04	30541.63	1462.17	123.6	150
Reach	134250.0		57155.35	970.69	1006.35	1006.4	2.28	33070.44	1866.71	125.4	152.4
Reach	134000.0		57175.1	970.09	1006.35	1006.39	2.4	38329.71	1966.73	127.2	154.8
Reach	133750.0		57171.84	968.78	1006.33	1006.37	2.31	39666.62	2662.71	129	159
Reach	133500.0		84846.29	968.6	1006.26	1006.32	3.01	47436.84	2634.05	130.2	160.8
Reach	133250.0		86012.52	968.3	1006.25	1006.31	3.37	48237.97	2701.23	132	162
Reach	133140.0		85966.29	968.15	1006.13	1006.27	4.75	38846.71	2636.07	132	163.8
Reach	133110.0	Carter Street (Route 2116)	Bridge								
Reach	133061.0		85925.09	968.15	1006.1	1006.22	4.24	38547.51	2651.48	132.6	164.4
Reach	132750.0		85804.08	967.17	1005.73	1006.22	6.98	23446.35	1376.43	133.8	166.2
Reach	132500.0		85734.52	965.93	1005.59	1006.14	7.66	23253.28	1410.34	133.8	167.4
Reach	132250.0		85784.34	965.63	1005.66	1005.91	5.58	29972.17	1498.74	135	168.6
Reach	132000.0		85771.34	965.39	1005.43	1005.8	6.26	21748.16	864.28	135.6	169.8
Reach	131750.0		85670.05	965.34	1005.05	1005.79	8.38	16038.16	721.13	136.2	171
Reach	131500.0		85683.2	965.28	1005.06	1005.56	6.78	16596.07	826.76	136.8	171.6
Reach	131250.0		85735.75	965.21	1005.14	1005.43	5.23	22090.26	953.11	137.4	172.8
Reach	131000.0		85711.3	964.94	1005.16	1005.36	4.12	24432.6	995.68	138	173.4
Reach	130750.0		85723.74	964.67	1005.15	1005.33	3.29	25646.12	999.09	139.2	174.6
Reach	130500.0		85735.14	964.35	1005.18	1005.31	3.04	30352.06	1103.27	140.4	175.2
Reach	130250.0		85747.66	963.55	1005.11	1005.28	3.61	26056.89	961.6	141.6	176.4
Reach	130000.0		85759.42	962.58	1005.07	1005.26	3.7	25319.43	1102.78	142.8	177
Reach	129750.0		85735.98	961.87	1004.99	1005.26	5.32	23852.12	1079.96	144	177.6
Reach	129500.0		85706.39	961.8	1004.88	1005.26	6.64	22848.17	941.12	144.6	178.2
Reach	129250.0		85746.41	961.73	1004.94	1005.15	5.27	29304.09	1259.26	145.2	178.8
Reach	129000.0		85755.92	961.47	1004.96	1005.1	3.79	32974.1	1211.8	146.4	180
Reach	128778.0		85754.19	961.13	1004.98	1005.08	2.98	42225.86	1552.87	147	181.2

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	128500.0		85750.11	961.01	1004.91	1005.02	2.8	32818.1	1281.83	148.8	184.2
Reach	128250.0		111073.6	961.01	1004.63	1004.93	4.68	26544.78	1242.31	150	185.4
Reach	128000.0		113137.2	961	1004.68	1004.86	3.59	33673.71	1269.95	151.2	186.6
Reach	127750.0		113160.2	961	1004.67	1004.84	3.71	34502.2	1138.25	152.4	187.2
Reach	127500.0		113200.1	961	1004.67	1004.83	3.91	40875.16	1341.73	153	189
Reach	127250.0		113202.5	960.99	1004.66	1004.82	4.04	41905.66	1393.39	154.2	189.6
Reach	127000.0		113222.5	960.99	1004.48	1004.82	6.62	32583.8	1160.95	154.8	190.8
Reach	126750.0		113257.5	960.99	1003.67	1004.86	9.77	15134.35	519.29	155.4	191.4
Reach	126500.0		113259	960.98	1003.07	1004.71	11.5	13995.43	481.44	156	192
Reach	126250.0		113276.1	960.98	1002.64	1004.43	12.2	13049.19	460.96	156.6	192.6
Reach	126000.0		113308.2	960.97	1002.49	1004.06	11.41	13230.25	472.2	156.6	193.2
Reach	125750.0		113315.5	960.96	1001.57	1003.82	13.22	12047.71	458.17	157.2	193.2
Reach	125500.0		113298	960.94	1000.41	1003.52	15.33	9971.42	363.98	157.2	193.8
Reach	125250.0		113250.9	960.91	998.78	1003.04	17.33	8091.27	303.83	157.8	194.4
Reach	125000.0		113345.2	960.89	1000.02	1002.29	12.43	10176.72	348.61	157.8	194.4
Reach	124750.0		113381	960.88	999.86	1001.82	12.08	11201.24	395.22	158.4	195
Reach	124500.0		113379.9	960.68	999.08	1001.45	13.67	10997.8	401.12	158.4	195.6
Reach	124250.0		113331.6	960.47	997.73	1001	15.12	8679.34	312.53	159	195.6
Reach	124000.0		113278.2	960.24	996.67	1000.39	16.35	8408.69	325.26	159	196.2
Reach	123750.0		113336.3	960.03	996.72	999.57	14.55	9787.56	392.03	159.6	196.2
Reach	123500.0		113438.8	959.78	997.83	998.72	8.72	16000.5	595.07	159.6	196.8
Reach	123250.0		113482.1	959.19	997.93	998.52	6.48	18784.32	660.87	160.2	197.4
Reach	123100.0	Flow into mine	Lat Struct								
Reach	123000.0		113494.4	956.66	997.46	998.42	8.81	15025.1	701.78	160.8	198
Reach	122750.0		113489.7	955.91	996.27	998.36	12.88	11408.32	438.01	161.4	198.6
Reach	122500.0		113486.8	954.48	995.62	997.95	13.71	10881.55	411.37	161.4	199.2
Reach	122250.0		113537.9	953.93	996.2	997.34	10.16	16365.12	587.08	162	199.2
Reach	122000.0		113580.6	952.46	996.08	997.06	8.89	16489.86	564.24	162	199.8
Reach	121728.0		113611.1	952.35	995.68	996.86	10.36	15606.32	552.74	162.6	201
Reach	121500.0		113624	951.82	995.05	996.67	11.25	12450.32	430.44	163.2	201
Reach	121250.0		113655.7	950.5	994.57	996.5	12.61	13368.24	463.35	163.2	201.6
Reach	121000.0		113690.2	950.17	994.52	996.08	11.34	14212.32	463.06	163.8	202.2
Reach	120750.0		113711.1	949.87	994.16	995.87	12.17	14415.33	482.68	164.4	202.8
Reach	120500.0		113745.3	949.51	993.94	995.52	11.61	14703.17	503.03	164.4	203.4
Reach	120250.0		113777.6	948.87	994.09	995.13	9.44	15947.82	541.47	165	204
Reach	120000.0		113809.6	948.73	993.95	994.91	9.23	15932.89	551.54	165.6	204
Reach	119750.0		113841.5	948.31	993.95	994.71	7.47	19417	660.91	165.6	205.2
Reach	119500.0		113821.2	947.94	992.28	994.8	14.25	10093.95	369.82	166.2	205.2
Reach	119250.0		115906	947.51	991.56	994.26	14.69	10195.17	371.58	166.8	205.8

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	119000.0		115933.1	947.11	992.35	993.54	10.05	15990.88	544.39	166.8	206.4
Reach	118750.0		115957.6	946.71	992.45	993.28	8.41	18561.31	583.34	167.4	207
Reach	118500.0		115964.6	946.35	992.09	993.2	10.02	17865.11	566.98	168	207.6
Reach	118250.0		115981.8	945.94	991.49	993.05	11.65	13956.41	423.68	168	208.2
Reach	118000.0		115985.1	945.62	989.99	992.94	14.9	10414.3	335.46	168.6	208.2
Reach	117750.0		115994.4	945.11	989.04	992.41	15.8	9268.33	310.97	168.6	208.8
Reach	117500.0		116001.9	944.64	987.83	991.83	17.78	8923.03	336.6	169.2	209.4
Reach	117250.0		116018.1	944.62	987.92	990.83	15.02	9415.87	365	169.2	209.4
Reach	117000.0		116026.5	944.59	987.85	990.25	13.11	9663.61	360.44	169.8	210
Reach	116750.0		116048.5	944.56	987.35	989.85	13.64	9609.96	342.42	169.8	210
Reach	116500.0		116057.3	944.54	986.77	989.53	15.03	10975.87	417.37	170.4	210.6
Reach	116250.0		116068.3	944.52	986.38	988.9	13.83	11271.75	409.87	170.4	211.2
Reach	116000.0		116083.6	944.47	986.09	988.44	13.28	11294.73	435.84	171	211.2
Reach	115750.0		116099.3	944.47	985.59	988.01	13.74	11731.09	437.93	171	211.8
Reach	115500.0		116110	944.45	985.05	987.56	14.16	11593.6	435.48	171.6	212.4
Reach	115250.0		116130.3	944.42	984.96	987.01	12.89	12196.64	492.17	171.6	212.4
Reach	115000.0		116140.4	944.39	984.91	986.55	11.41	14243.51	554.93	172.2	213
Reach	114750.0		116149.6	944.23	983.57	986.42	15.09	10910.43	444.93	172.2	213.6
Reach	114500.0		116160.5	944.07	982.79	985.9	16.07	10859.33	437.56	172.8	213.6
Reach	114250.0		116170.5	943.87	982.09	985.22	15.67	10426.08	422.24	172.8	214.2
Reach	114000.0		116190.1	943.62	981.53	984.59	15.93	10573.81	443.47	172.8	214.2
Reach	113750.0		116200.1	941.53	981.75	983.8	13.12	12661.55	520.98	173.4	214.8
Reach	113500.0		116214	939.85	981.42	983.29	12.85	12354.9	557.58	174	215.4
Reach	113250.0		116229.3	939.35	981.01	982.79	12.1	11394.18	452.75	174	215.4
Reach	113000.0		116237.9	939.22	979.98	982.63	14.78	11518.77	579.45	174.6	216
Reach	112750.0		116253.3	939.07	979.78	981.89	12.4	11467.58	541.12	174.6	216.6
Reach	112500.0		116272.8	938.93	980.11	981.41	10.84	13549.92	658.85	175.2	217.2
Reach	112250.0		116289	938.53	980.12	981.11	9.7	15362.59	691.29	175.2	217.2
Reach	112000.0		116299.3	938.41	979.41	980.95	11.5	12520.63	565.9	175.8	217.8
Reach	111750.0		116311	938.11	979.26	980.68	10.74	13191.36	486.69	176.4	218.4
Reach	111500.0		116325.2	937.04	978.24	980.53	12.97	11504.69	414.53	176.4	218.4
Reach	111250.0		116340.1	937	977.55	980.17	14.04	10796.4	409.04	177	219
Reach	111000.0		116356.3	936.99	977.14	979.59	13.86	10541.98	393.19	177	219.6
Reach	110750.0		116371	936.99	976.64	978.97	13.43	9935.27	381.74	177.6	219.6
Reach	110500.0		116384.5	936.98	976.11	978.56	14.2	10387.65	405.68	177.6	220.2
Reach	110250.0		116394.1	936.81	976.44	978.01	11.55	12693.62	502.22	178.2	220.2
Reach	110000.0		116410	936.57	976.05	977.77	12.92	14847.02	568.31	178.2	220.8
Reach	109750.0		116422.5	936.29	976.43	977.2	9.5	21741.27	804.84	178.8	221.4
Reach	109500.0		116442.9	936.06	976.49	976.9	6.11	25057.93	994.02	179.4	222.6

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			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	109250.0		116453.6	935.98	976.46	976.8	6.03	27619.19	1118.81	180	223.2
Reach	109000.0		116476.2	935.9	976.33	976.72	5.76	25576.91	990.57	180.6	224.4
Reach	108750.0		116490.4	935.81	976.09	976.61	5.93	20656.47	769.09	181.2	225
Reach	108500.0		116502	935.63	975.94	976.51	5.93	19188.34	713.97	182.4	225.6
Reach	108250.0		116514.8	935.23	975.9	976.43	6.66	20493.66	785.28	183	226.2
Reach	108000.0		116528.8	934.85	975.92	976.34	6.78	25326.44	947.72	183.6	226.8
Reach	107750.0		116546.9	934.57	975.89	976.22	4.9	25699.64	1109.51	184.2	228
Reach	107500.0		116563.2	934.43	975.93	976.17	4.14	30883.21	1521.54	184.8	228.6
Reach	107250.0		116578.2	934.29	975.99	976.14	3.25	39778.14	2143.54	186	230.4
Reach	107118.0	Yadkin Valley Railroad #2	Bridge								
Reach	107000.0		111071.2	934.12	967.16	971.83	17.9	6565.34	1332.27	186.6	230.4
Reach	106750.0		111940.9	933.95	969.39	970.03	7.82	19159.83	1821.23	186.6	231
Reach	106500.0		111949.2	933.76	969.38	969.85	6.9	21585.13	2086.11	187.2	231.6
Reach	106250.0		111916.7	933.61	969.27	969.7	6.89	22770.44	2255.68	187.8	231.6
Reach	106000.0		111887.6	933.46	969.06	969.55	7.32	22283.4	2278.46	188.4	232.2
Reach	105750.0		111902.4	932.49	969.04	969.34	6.15	29322.41	2785.92	189	233.4
Reach	105664.0		111871.6	931.63	969.05	969.3	5.38	32632.52	2849.19	189.6	234
Reach	105643.0	Sheep Farm Road (Route 2119)	Bridge								
Reach	105515.0		111906.9	931.1	969.1	969.3	4.0	40674.9	2887.7	190.2	234.6
Reach	105250.0		111917.6	930.5	969.2	969.2	3.0	52133.4	2747.5	191.4	236.4
Reach	105000.0		111964.3	929.7	969.2	969.2	2.1	62337.7	2728.0	193.2	238.2
Reach	104750.0		111948.1	929.5	969.2	969.2	1.8	61167.4	2577.2	195.0	238.8
Reach	104500.0		111956.6	929.3	969.2	969.2	1.9	65691.3	2714.4	197.4	239.4
Reach	104250.0		111965.4	929.0	969.2	969.2	1.9	61128.6	2554.1	199.8	240.6
Reach	104000.0		111975.0	928.9	969.1	969.2	2.3	53283.8	2158.5	201.6	241.2
Reach	103750.0		112003.4	928.7	969.1	969.2	2.4	51325.6	2065.6	203.4	242.4
Reach	103500.0		111990.8	928.5	969.1	969.2	2.3	48984.2	2007.0	205.2	243.0
Reach	103250.0		111979.7	928.3	969.1	969.2	2.6	47160.9	1893.3	207.0	244.2
Reach	103000.0		112012.2	928.1	969.1	969.2	2.6	49114.4	2045.8	208.8	246.0
Reach	102891.0		112019.9	928.0	969.1	969.1	2.6	49459.1	2162.8	209.4	246.6
Reach	102791.0		112014.0	927.9	968.4	969.4	9.7	16465.8	1801.4	209.4	247.2
Reach	102700.0	Interstate 74 EB and WB	Bridge								
Reach	102432.0		111874.0	927.7	966.6	967.6	9.5	16883.3	1968.2	210.0	247.8
Reach	102000.0		111914.3	927.7	966.9	967.0	3.3	49912.0	2188.8	211.2	249.6
Reach	101750.0		111928.9	927.5	966.9	967.0	2.9	50012.8	1982.5	212.4	251.4
Reach	101500.0		111939.8	927.3	966.8	966.9	4.6	41262.8	1501.9	213.6	252.6
Reach	101250.0		111947.1	927.1	966.6	966.9	6.7	30885.0	1125.9	214.2	253.2
Reach	101000.0		111936.6	926.9	966.2	966.9	9.0	21883.5	834.2	214.8	253.8
Reach	100750.0		111944.8	926.3	965.6	966.9	11.2	16540.2	667.4	215.4	253.8

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	100500.0		111918.5	925.7	964.6	966.8	13.2	12296.4	489.2	215.4	254.4
Reach	100250.0		111922.1	925.6	964.2	966.4	13.3	12140.2	454.2	216.0	255.0
Reach	100000.0		111956.3	925.4	964.8	965.9	9.0	14552.3	533.5	216.6	255.6
Reach	99750.0		111979.8	925.2	964.9	965.6	7.7	18386.7	672.8	216.6	256.2
Reach	99500.0		111989.2	925.1	965.0	965.4	6.0	23645.5	859.1	217.2	256.8
Reach	99250.0		112011.8	924.8	964.9	965.3	6.2	21480.9	791.7	218.4	257.4
Reach	99000.0		112018.2	924.6	964.6	965.2	7.1	17870.2	671.9	219.0	258.0
Reach	98750.0		112011.3	924.3	964.0	965.1	9.7	15067.5	511.8	219.0	258.6
Reach	98500.0		113896.2	924.0	963.0	965.0	12.6	12571.8	444.8	219.6	259.2
Reach	98250.0		113917.0	923.7	962.2	964.6	14.0	11333.7	416.8	220.2	259.8
Reach	98000.0		113947.3	923.5	962.4	964.2	11.8	12369.2	468.0	220.2	260.4
Reach	97750.0		113974.2	923.2	962.0	963.7	11.7	12272.2	475.1	220.8	260.4
Reach	97500.0		113991.8	922.7	962.2	963.3	10.6	17992.3	759.2	220.8	261.0
Reach	97250.0		114032.3	922.1	961.4	963.0	11.9	14958.7	577.6	221.4	261.6
Reach	97000.0		114047.1	921.8	960.5	962.8	13.8	11724.0	445.3	221.4	262.2
Reach	96750.0		114078.6	921.5	960.0	962.3	13.6	11538.1	441.3	222.0	262.8
Reach	96500.0		114105.7	921.2	959.4	961.8	14.0	10676.7	395.1	222.6	262.8
Reach	96250.0		114112.0	921.0	957.8	961.4	16.6	8936.9	330.8	222.6	263.4
Reach	96000.0		114144.9	920.7	958.1	960.5	13.8	11389.2	422.1	222.6	264.0
Reach	95750.0		114169.8	920.6	957.8	959.9	13.2	11422.9	425.6	223.2	264.0
Reach	95500.0		114208.8	920.3	957.6	959.4	12.0	12074.0	415.0	223.2	264.6
Reach	95250.0		114231.5	919.5	957.0	959.1	11.9	10698.7	398.2	223.8	265.2
Reach	95000.0		114254.9	919.1	956.3	958.7	13.6	10530.1	386.1	224.4	265.2
Reach	94750.0		114278.0	918.9	955.1	958.3	16.3	9684.1	367.8	224.4	265.8
Reach	94500.0		114296.6	918.8	954.3	957.6	16.4	9670.9	365.9	224.4	265.8
Reach	94250.0		114318.0	918.5	953.8	956.8	15.4	9888.8	370.4	225.0	266.4
Reach	94000.0		114341.3	918.2	952.9	956.0	14.4	8189.2	314.1	225.0	267.0
Reach	93750.0		114346.1	917.9	951.1	955.5	17.4	7567.6	305.3	225.6	267.0
Reach	93500.0		114363.5	916.2	950.3	954.5	17.4	7946.2	317.9	225.6	267.6
Reach	93250.0		114405.9	913.5	951.5	953.4	11.7	12216.5	450.2	226.2	267.6
Reach	93000.0		114428.0	912.8	951.5	953.0	11.2	13466.5	516.5	226.2	268.2
Reach	92750.0		114460.9	912.3	951.2	952.7	11.6	13573.4	494.9	226.8	268.8
Reach	92500.0		114479.0	911.9	950.2	952.5	13.4	11789.5	433.3	226.8	268.8
Reach	92250.0		114506.1	911.5	949.6	952.0	13.3	10140.7	367.7	227.4	269.4
Reach	92000.0		114537.4	911.1	949.3	951.5	13.3	11220.0	425.5	228.0	270.0
Reach	91750.0		114559.5	910.7	948.9	951.1	12.8	11016.5	395.9	228.0	270.0
Reach	91500.0		114575.4	910.3	948.1	950.6	13.3	10042.5	363.8	228.6	270.6
Reach	91250.0		114606.2	909.9	947.9	950.2	13.5	11620.8	433.0	228.6	271.2
Reach	91000.0		114628.8	909.5	947.0	949.8	14.9	10543.1	380.1	229.2	271.2

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	90750.0		114646.2	909.1	946.2	949.3	15.1	9733.9	356.3	229.2	271.8
Reach	90500.0		114675.9	908.8	946.0	948.7	14.2	10347.5	414.0	229.8	272.4
Reach	90250.0		114693.6	908.3	945.0	948.2	15.4	9836.8	368.8	229.8	272.4
Reach	90000.0		114701.3	907.5	943.8	947.6	17.6	9149.1	359.2	229.8	273.0
Reach	89750.0		114735.5	906.8	944.5	946.6	12.0	10171.7	389.9	230.4	273.0
Reach	89500.0		114772.8	906.7	944.4	946.2	11.3	10909.2	420.2	230.4	273.6
Reach	89250.0		114794.2	906.6	943.7	945.8	13.5	10605.5	404.9	231.0	274.2
Reach	89000.0		114810.3	905.9	943.0	945.4	13.2	9751.4	389.0	231.6	274.2
Reach	88750.0		114835.4	904.3	942.5	944.9	14.1	10655.6	411.2	231.6	274.8
Reach	88500.0		114864.7	903.4	942.5	944.4	12.8	12193.9	449.3	232.2	275.4
Reach	88250.0		114878.7	903.1	941.3	943.9	13.9	9120.2	350.7	232.2	275.4
Reach	88000.0		114894.1	902.9	941.2	943.5	14.4	10922.2	450.3	232.8	276.0
Reach	87750.0		114887.3	902.7	940.1	943.0	16.1	10816.3	439.9	232.8	276.0
Reach	87500.0		117008.9	902.3	940.9	942.1	9.0	14463.0	547.4	233.4	276.6
Reach	87250.0		117071.6	901.9	941.1	941.9	7.2	16792.1	601.7	233.4	277.2
Reach	87000.0		117138.0	901.5	940.8	941.7	7.4	15900.6	569.0	234.0	277.8
Reach	86750.0		117185.3	901.0	940.3	941.6	9.5	13266.1	450.0	234.6	278.4
Reach	86500.0		117233.6	900.5	939.2	941.3	12.4	10547.9	373.4	235.2	278.4
Reach	86250.0		117282.9	899.1	938.1	941.1	15.1	10193.9	371.3	235.2	279.0
Reach	86000.0		117340.6	898.8	938.0	940.5	13.9	11343.3	418.0	235.8	279.0
Reach	85750.0		117391.7	898.5	936.5	940.0	16.0	9441.9	361.5	235.8	279.6
Reach	85500.0		117436.6	898.3	935.4	939.4	17.0	8624.1	332.3	236.4	280.2
Reach	85250.0		117483.4	898.2	934.5	938.7	17.4	8564.9	339.9	236.4	280.2
Reach	85000.0		117532.7	898.0	934.6	937.8	15.6	9698.4	375.2	237.0	280.8
Reach	84750.0		117564.8	897.9	932.8	937.1	17.5	8374.3	339.1	237.0	280.8
Reach	84500.0		117638.7	897.8	933.4	936.2	14.3	9352.0	359.9	237.0	281.4
Reach	84250.0		117682.5	897.7	933.2	935.6	13.2	9798.8	398.4	237.6	281.4
Reach	84000.0		117747.4	897.6	933.2	935.1	11.3	10912.1	436.5	238.2	282.0
Reach	83750.0		117796.1	897.2	932.5	934.8	13.6	10361.3	435.1	238.2	282.0
Reach	83500.0		117871.1	897.2	933.6	933.9	4.5	26604.6	962.0	238.8	282.6
Reach	83250.0		117917.1	894.5	931.9	934.3	13.3	10912.8	451.2	239.4	283.2
Reach	83000.0		117956.3	894.3	930.6	933.9	15.3	9360.5	349.6	239.4	283.8
Reach	82750.0		117976.5	894.1	928.9	933.3	17.9	8350.5	335.9	240.0	283.8
Reach	82500.0		118018.0	893.6	928.3	932.3	17.1	8505.9	342.1	240.0	284.4
Reach	82250.0		118027.2	893.1	927.3	931.4	17.3	8668.8	378.7	240.0	284.4
Reach	82000.0		118100.6	892.3	927.5	930.4	14.9	10764.8	437.3	240.6	285.0
Reach	81750.0		118081.5	892.0	925.6	929.9	17.4	8117.8	327.8	240.6	285.0
Reach	81500.0		118089.4	891.8	925.0	928.9	16.8	8241.7	356.8	241.2	285.6
Reach	81250.0		118123.8	891.0	924.7	927.9	14.9	8868.0	348.2	241.2	285.6

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	81000.0		118156.2	889.7	924.4	927.3	14.2	9787.5	370.6	241.8	286.2
Reach	80750.0		118174.0	888.5	923.9	926.8	14.2	9921.1	385.8	241.8	286.8
Reach	80500.0		118173.5	888.5	923.5	926.3	14.4	10306.6	439.6	241.8	286.8
Reach	80250.0		118235.1	887.8	923.3	925.8	13.3	10662.4	449.3	242.4	287.4
Reach	80000.0		118232.3	887.6	922.8	925.2	13.4	10883.3	478.3	243.0	287.4
Reach	79750.0		118357.3	886.1	923.2	924.6	10.6	14496.0	534.4	243.0	288.0
Reach	79500.0		118281.6	885.7	922.1	924.3	12.6	11400.1	417.7	243.6	288.6
Reach	79250.0		118306.6	885.2	921.6	923.9	13.2	11568.6	427.5	243.6	289.2
Reach	79000.0		118339.7	883.4	921.4	923.4	11.8	12211.3	425.2	244.2	289.2
Reach	78750.0		118241.7	882.8	920.2	923.2	15.0	10456.2	402.4	244.2	289.8
Reach	78500.0		118344.7	882.5	920.5	922.6	12.8	11212.6	499.5	244.8	289.8
Reach	78250.0		118401.6	882.0	920.6	922.2	11.1	13034.3	588.9	244.8	290.4
Reach	78000.0		118401.3	881.4	920.6	921.8	9.2	14400.4	607.8	245.4	291.0
Reach	77750.0		121414.9	880.9	920.1	921.6	11.6	16378.3	722.9	246.0	291.6
Reach	77558.0		121488.4	880.6	920.5	921.1	7.4	25549.7	1170.0	246.0	292.2
Reach	77492.0	Ararat Road (Route 2019)	Bridge								
Reach	77372.0		121460.2	880.1	920.4	920.7	5.7	25058.1	1120.9	246.6	292.8
Reach	77000.0		121501.4	879.1	920.1	920.6	6.5	20755.6	963.7	247.8	293.4
Reach	76750.0		121537.8	878.8	920.0	920.5	6.3	21189.7	987.1	248.4	294.0
Reach	76500.0		121561.7	878.7	920.1	920.5	5.9	25397.3	1220.5	249.0	294.6
Reach	76250.0		121613.6	878.7	920.0	920.4	5.4	25344.1	1034.1	249.6	295.8
Reach	76000.0		121598.7	878.7	919.2	920.3	9.0	14408.7	533.9	250.2	296.4
Reach	75750.0		121647.4	878.7	919.3	920.2	8.7	17955.8	667.3	250.8	297.0
Reach	75500.0		121596.2	878.3	917.9	920.2	13.2	12011.1	460.9	251.4	297.0
Reach	75250.0		121525.3	877.8	916.9	919.7	14.6	10826.1	406.2	251.4	297.6
Reach	75000.0		121502.1	877.2	916.3	919.2	15.0	11411.1	459.2	252.0	298.2
Reach	74750.0		121635.8	876.8	917.5	918.3	7.8	16736.8	647.2	252.0	298.2
Reach	74500.0		121711.6	876.6	917.8	918.2	6.3	24604.1	936.7	252.6	299.4
Reach	74250.0		121780.9	876.6	917.7	918.1	5.4	28485.9	1132.1	253.2	300.6
Reach	74000.0		121826.4	876.6	917.6	918.0	5.8	25509.2	990.9	254.4	301.2
Reach	73750.0		121815.3	876.6	917.2	917.9	7.7	18713.1	807.0	255.0	301.8
Reach	73500.0		121813.2	876.6	916.8	917.8	9.1	15786.8	718.8	255.6	302.4
Reach	73250.0		121880.6	876.6	917.0	917.6	6.7	21454.0	889.2	255.6	303.0
Reach	73000.0		121900.7	875.9	916.7	917.5	7.4	17475.1	787.3	256.2	303.6
Reach	72750.0		121915.5	875.3	916.0	917.4	10.7	13978.3	647.1	256.8	303.6
Reach	72500.0		121922.7	874.6	915.7	917.1	11.0	13874.4	589.2	257.4	304.2
Reach	72250.0		121926.2	874.1	914.9	916.9	12.5	12093.7	465.6	257.4	304.8
Reach	72000.0		121843.3	874.0	913.4	916.5	15.2	10659.4	428.1	258.0	305.4
Reach	71750.0		121851.1	873.9	913.3	915.8	14.1	12638.0	558.1	258.0	305.4

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	71500.0		121863.7	873.8	912.8	915.3	14.6	12799.8	565.7	258.6	306.0
Reach	71250.0		121888.9	873.6	913.0	914.6	12.1	15691.8	655.5	258.6	306.6
Reach	71000.0		121851.0	873.5	912.0	914.3	14.2	12692.9	513.2	259.2	307.2
Reach	70750.0		121952.8	873.3	912.4	913.6	9.1	16046.7	571.7	259.8	307.8
Reach	70500.0		121750.1	871.5	910.3	913.7	15.7	10174.7	380.9	259.8	307.8
Reach	70250.0		121746.1	870.5	910.1	913.0	14.8	10906.4	404.1	260.4	308.4
Reach	70000.0		121790.3	869.6	909.9	912.4	14.1	12524.2	478.6	260.4	308.4
Reach	69750.0		121744.8	868.7	909.5	911.9	14.4	12944.1	469.6	261.0	309.0
Reach	69500.0		121751.9	868.4	909.2	911.4	13.8	13588.0	534.8	261.0	309.6
Reach	69250.0		121875.2	868.1	909.8	910.9	9.7	17126.1	713.5	261.6	310.2
Reach	69000.0		121951.4	867.8	910.0	910.5	6.9	23841.4	962.8	261.6	310.8
Reach	68750.0		121980.7	867.7	909.9	910.4	6.7	24780.3	958.2	262.2	311.4
Reach	68500.0		122019.0	867.6	909.9	910.3	6.0	28025.1	1044.3	263.4	312.6
Reach	68250.0		122047.1	867.4	909.9	910.2	5.2	28529.4	1054.5	264.0	313.2
Reach	68000.0		122093.4	866.6	909.8	910.2	4.7	27376.8	1043.6	264.6	313.8
Reach	67750.0		122091.0	866.5	909.6	910.1	5.2	22932.0	850.2	265.8	313.8
Reach	67500.0		122110.3	866.1	909.5	910.1	6.5	20458.0	763.3	266.4	314.4
Reach	67250.0		122081.3	865.5	908.7	909.9	9.2	13827.0	526.7	267.0	315.0
Reach	67000.0		122116.7	865.0	908.4	909.7	10.0	14330.1	473.2	267.0	315.6
Reach	66750.0		122095.7	864.9	907.7	909.6	11.9	13761.0	481.4	267.6	316.2
Reach	66500.0		122094.2	864.9	907.3	909.3	12.8	13678.3	479.7	268.2	316.8
Reach	66250.0		122027.8	864.5	906.5	909.1	14.5	12301.0	454.2	268.2	316.8
Reach	66000.0		122051.5	864.4	906.4	908.5	13.0	13606.4	485.8	268.8	317.4
Reach	65750.0		122071.7	864.2	906.3	908.1	12.1	14531.8	519.6	268.8	318.0
Reach	65500.0		122015.0	864.2	905.4	907.7	13.5	12103.3	423.5	269.4	318.6
Reach	65250.0		122036.7	864.1	905.4	907.3	12.4	14210.1	549.7	269.4	318.6
Reach	65000.0		122146.8	860.3	905.7	906.9	9.6	16216.4	648.2	270.0	319.2
Reach	64750.0		122180.8	860.0	905.9	906.7	7.6	20545.3	805.1	270.6	319.8
Reach	64500.0		122207.2	859.6	906.2	906.4	4.7	36949.2	1463.5	271.2	321.0
Reach	64210.0		132123.3	859.2	906.0	906.3	5.1	34000.2	1210.9	271.8	322.2
Reach	64000.0		133414.3	858.9	904.9	906.5	10.7	13788.9	507.2	272.4	322.8
Reach	63750.0		135050.9	858.6	904.9	906.3	10.3	15907.7	629.7	273.0	323.4
Reach	63500.0		134999.6	858.2	904.4	906.0	11.4	15873.2	564.1	273.6	324.0
Reach	63250.0		134941.5	857.9	903.7	905.7	12.8	12988.4	559.0	273.6	324.6
Reach	63000.0		134951.9	857.5	903.7	905.3	11.1	13762.3	554.6	274.2	324.6
Reach	62750.0		134985.4	857.2	903.6	905.0	9.7	14598.3	609.5	274.2	325.2
Reach	62500.0		134968.7	856.8	903.1	904.7	11.1	14733.2	533.8	274.8	325.8
Reach	62250.0		134919.8	856.5	902.3	904.5	12.8	14444.8	533.7	275.4	325.8
Reach	62000.0		134979.4	856.1	902.9	904.1	9.4	16465.2	594.2	275.4	326.4

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	61750.0		135022.8	855.8	903.2	903.9	7.2	22012.9	952.5	276.0	327.0
Reach	61500.0		135085.4	855.4	903.5	903.7	4.7	32415.3	1213.4	276.6	327.6
Reach	61250.0		135049.1	855.1	902.9	903.8	8.6	21875.1	1025.9	277.2	328.8
Reach	61130.0		140393.9	854.9	902.6	903.7	9.9	20896.8	989.1	277.8	328.8
Reach	61028.0		142055.6	854.7	902.7	903.5	8.7	23722.5	987.8	277.8	329.4
Reach	60943.0	Route 268	Bridge								
Reach	60784.0		141982.7	854.4	902.2	902.7	7.4	33130.9	1033.7	278.4	330.0
Reach	60250.0		141845.9	853.7	900.2	903.0	14.6	13518.3	529.9	279.0	331.2
Reach	60000.0		141948.8	853.3	901.0	902.1	10.1	21799.7	829.1	279.6	331.8
Reach	59750.0		141977.4	853.0	900.8	901.7	9.0	20195.4	732.2	279.6	331.8
Reach	59500.0		141999.0	852.6	900.6	901.4	8.5	20287.5	769.2	280.2	332.4
Reach	59250.0		142004.5	852.3	900.1	901.2	8.6	17339.0	611.1	280.8	333.0
Reach	59145.0		142039.7	852.1	900.4	901.1	7.3	23356.1	843.2	280.8	333.0
Reach	59115.0	Pilot Power Dam Road	Bridge								
Reach	59052.0		142014.3	852.0	900.3	900.9	6.9	24520.1	867.3	281.4	333.6
Reach	58750.0		142041.5	851.4	899.9	900.8	8.5	20032.5	758.0	282.0	334.2
Reach	58500.0		142041.5	850.4	899.6	900.6	8.6	18042.7	774.5	282.0	334.8
Reach	58250.0		142069.4	849.8	899.4	900.4	6.7	18590.8	610.2	282.6	335.4
Reach	58000.0		142110.8	849.7	899.5	900.4	8.3	22739.6	809.5	283.2	336.0
Reach	57750.0		142158.3	849.4	899.6	900.2	6.6	25534.8	840.2	283.8	336.6
Reach	57500.0		142174.0	849.3	899.5	900.1	7.2	24723.8	867.2	284.4	337.2
Reach	57250.0		142220.4	848.8	899.3	899.9	7.1	22535.6	731.4	285.0	337.8
Reach	57000.0		142240.6	848.3	899.1	899.9	7.9	21688.9	693.8	285.6	338.4
Reach	56750.0		142286.2	847.8	899.1	899.8	7.6	23029.0	695.2	286.2	339.0
Reach	56500.0		142320.3	847.5	899.1	899.7	6.9	24751.8	745.2	286.8	340.2
Reach	56250.0		142334.4	847.2	898.5	899.5	7.8	18321.9	543.8	287.4	340.8
Reach	56000.0		142356.9	847.0	898.2	899.3	8.0	17195.9	549.6	288.0	340.8
Reach	55750.0		142384.4	846.7	897.8	899.1	10.0	17171.4	585.7	288.6	341.4
Reach	55500.0		142419.1	846.4	897.8	898.8	8.0	17702.6	587.1	288.6	342.0
Reach	55250.0		142435.1	846.2	897.5	898.6	8.6	16613.4	577.7	289.2	342.6
Reach	55000.0		142428.2	846.0	896.5	898.2	10.9	13695.8	460.5	289.8	343.2
Reach	54750.0		142452.2	845.7	896.4	897.7	8.2	15997.8	503.7	290.4	343.2
Reach	54500.0		142476.1	845.5	895.8	897.4	10.9	15365.4	520.4	290.4	343.8
Reach	54250.0		142485.4	845.2	895.4	897.1	11.3	14855.1	482.6	291.0	344.4
Reach	54000.0		142518.1	844.3	895.4	896.6	9.4	16123.9	535.9	291.6	344.4
Reach	53750.0		142540.4	843.6	895.0	896.2	9.7	17191.1	559.6	291.6	345.0
Reach	53500.0		142540.8	843.5	894.1	896.0	12.7	16728.8	522.6	292.2	345.6
Reach	53250.0		142579.9	843.5	894.4	895.5	9.3	18129.4	559.6	292.8	346.2
Reach	53000.0		142604.9	843.5	894.3	895.2	8.4	20032.0	622.8	292.8	346.8

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	52750.0		142652.3	843.2	894.5	895.0	6.2	24904.2	800.9	293.4	347.4
Reach	52500.0		142678.6	842.8	894.2	894.9	7.6	22844.8	796.2	294.0	348.0
Reach	52250.0		142715.1	842.5	894.1	894.7	6.9	22529.6	765.8	294.6	348.6
Reach	52000.0		142738.9	842.1	893.9	894.6	7.0	22495.2	743.6	295.2	349.2
Reach	51750.0		142739.1	841.8	893.1	894.5	11.0	17674.6	598.6	295.8	349.8
Reach	51500.0		142749.0	841.4	892.6	894.2	11.4	16765.4	595.1	296.4	350.4
Reach	51250.0		142764.1	841.1	892.3	893.8	10.9	17264.5	587.4	296.4	350.4
Reach	51000.0		142833.1	840.7	892.7	893.4	6.6	20422.0	615.2	297.0	351.0
Reach	50750.0		142859.7	840.4	892.4	893.3	8.0	21020.5	653.4	297.6	351.6
Reach	50500.0		142886.1	840.0	892.4	893.1	8.2	24510.7	755.5	298.2	352.2
Reach	50250.0		142925.8	839.7	892.5	892.9	6.1	29015.5	853.1	298.8	353.4
Reach	50000.0		142976.7	839.3	892.6	892.9	5.4	39407.2	1103.7	299.4	354.0
Reach	49750.0		142949.1	839.0	891.8	893.1	10.3	20255.1	715.8	300.0	355.2
Reach	49500.0		146316.3	838.6	891.0	892.8	11.4	15804.4	507.4	300.6	355.8
Reach	49250.0		146311.5	838.3	890.3	892.2	10.9	13384.2	430.3	300.6	355.8
Reach	49000.0		146294.7	837.9	889.3	891.7	13.3	13337.2	441.7	301.2	356.4
Reach	48750.0		146320.7	837.6	889.2	891.1	11.6	13430.4	451.1	301.2	357.0
Reach	48500.0		146334.7	836.8	888.8	890.8	11.9	14733.4	492.7	301.8	357.0
Reach	48250.0		146337.4	836.6	888.4	890.2	10.8	13543.2	442.2	302.4	357.6
Reach	48000.0		146339.8	836.5	888.0	889.6	10.3	14281.8	452.1	302.4	358.2
Reach	47750.0		146373.2	836.1	888.4	889.2	5.5	21296.7	630.2	303.0	358.2
Reach	47500.0		146404.4	835.8	888.6	889.1	5.1	25078.9	776.5	303.6	358.8
Reach	47250.0		146435.5	835.5	888.7	889.0	4.6	30047.1	930.2	304.8	359.4
Reach	47000.0		146453.1	835.1	888.7	889.0	3.5	35381.4	1041.5	306.0	360.6
Reach	46750.0		146476.3	834.8	888.1	888.9	6.9	21212.8	640.0	306.6	361.2
Reach	46500.0		146481.9	834.4	887.3	888.9	11.4	18052.9	568.6	307.2	361.8
Reach	46250.0		146498.7	834.1	887.4	888.4	8.2	18016.0	584.7	307.2	362.4
Reach	46000.0		146515.3	833.3	886.8	888.4	11.5	19903.5	674.0	307.8	363.0
Reach	45750.0		146548.2	833.2	886.7	888.0	10.2	18462.1	670.3	308.4	363.6
Reach	45500.0		146556.6	833.0	886.5	887.7	9.3	17391.3	597.8	308.4	364.2
Reach	45250.0		146564.9	832.7	885.5	887.4	12.1	14932.9	507.7	309.0	364.2
Reach	45000.0		146572.9	832.3	885.5	886.9	10.0	15224.7	468.6	309.6	364.8
Reach	44750.0		146589.3	832.0	884.7	886.7	12.1	14771.3	475.3	309.6	365.4
Reach	44500.0		146605.1	831.6	884.3	886.3	12.2	15030.7	515.2	310.2	365.4
Reach	44250.0		146620.9	831.3	884.0	885.9	11.7	15718.5	553.1	310.8	366.0
Reach	44000.0		146644.8	830.9	884.0	885.4	10.5	16529.9	607.8	310.8	366.6
Reach	43750.0		146660.9	830.6	883.6	885.2	11.1	16370.9	571.6	311.4	367.2
Reach	43500.0		146692.5	830.2	883.7	884.8	8.3	17357.4	552.5	312.0	367.2
Reach	43250.0		146696.1	829.9	883.0	884.4	9.9	15304.5	491.2	312.0	367.8

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	43000.0		146708.8	829.5	882.9	884.2	10.6	19971.9	585.8	312.6	368.4
Reach	42750.0		146749.3	829.2	883.2	883.9	7.2	25645.3	718.1	313.2	369.0
Reach	42500.0		146773.3	828.8	883.2	883.7	5.9	25519.3	740.4	313.8	369.6
Reach	42250.0		146786.7	828.5	882.4	883.5	8.7	18710.3	654.4	314.4	370.2
Reach	42000.0		146775.4	828.1	881.1	883.3	12.6	14503.8	551.0	314.4	370.8
Reach	41750.0		146806.7	827.8	880.7	882.6	11.4	14546.0	535.5	315.0	370.8
Reach	41500.0		146821.4	827.4	880.6	882.3	12.5	18115.4	562.7	315.6	371.4
Reach	41250.0		146843.1	827.1	880.6	881.7	8.8	18471.8	530.7	315.6	372.0
Reach	41000.0		146854.1	826.7	880.1	881.6	11.7	19978.6	602.7	316.2	372.6
Reach	40750.0		146887.4	826.4	880.2	881.3	10.3	24351.5	717.0	316.8	373.2
Reach	40500.0		146914.2	826.0	879.6	881.1	11.6	19497.6	576.2	316.8	373.8
Reach	40250.0		146918.8	825.7	878.3	881.1	14.6	13408.0	418.6	317.4	374.4
Reach	40000.0		146921.2	825.3	877.9	880.6	14.6	13901.6	458.5	317.4	374.4
Reach	39750.0		146959.3	825.0	878.4	880.1	11.8	16724.8	530.9	318.0	375.0
Reach	39500.0		146994.8	824.6	878.4	879.8	10.5	18683.8	586.2	318.0	375.6
Reach	39250.0		147000.0	824.3	877.2	879.8	13.9	14176.2	406.9	318.6	376.2
Reach	39000.0		147010.7	823.9	877.2	879.4	13.0	15649.9	459.9	318.6	376.2
Reach	38750.0		147041.7	823.6	877.4	879.0	11.3	17168.4	530.2	319.2	376.8
Reach	38500.0		147070.6	823.2	877.3	878.8	11.3	20965.0	713.8	319.8	377.4
Reach	38250.0		147098.2	822.9	877.0	878.4	10.5	16291.7	523.0	319.8	378.0
Reach	38000.0		147111.4	822.5	876.2	877.9	10.7	13801.7	445.2	320.4	378.0
Reach	37750.0		147119.0	822.2	875.2	877.5	12.8	13633.8	461.8	321.0	378.6
Reach	37500.0		147149.0	821.8	875.4	877.0	11.1	15536.8	493.4	321.0	379.2
Reach	37250.0		147145.9	821.5	874.0	877.1	15.6	13742.6	459.5	321.6	379.8
Reach	37000.0		147187.9	821.1	874.2	876.2	11.2	13162.5	446.9	321.6	379.8
Reach	36750.0		147201.1	820.8	874.1	875.7	9.8	14636.6	485.0	322.2	380.4
Reach	36500.0		147224.8	820.4	874.1	875.2	8.9	17598.1	569.7	322.8	381.0
Reach	36250.0		147232.4	820.1	872.8	875.2	14.0	15286.2	526.4	322.8	381.0
Reach	36000.0		147236.6	819.7	871.6	874.9	15.8	12504.1	420.9	323.4	381.6
Reach	35750.0		147277.6	819.4	872.4	874.1	11.1	16615.6	534.6	323.4	381.6
Reach	35500.0		147304.7	819.0	872.5	873.9	11.2	20303.0	775.5	324.0	382.2
Reach	35250.0		147316.3	818.7	871.2	873.8	14.4	14656.2	476.2	324.0	382.8
Reach	35000.0		147334.3	818.3	871.0	873.4	14.1	15021.7	537.0	324.6	383.4
Reach	34750.0		147354.5	818.0	870.1	873.1	15.1	13574.3	445.0	324.6	384.0
Reach	34500.0		147366.1	817.6	869.5	872.7	15.6	13312.4	500.6	325.2	384.0
Reach	34250.0		147379.5	817.3	869.1	872.2	15.2	12236.0	410.6	325.2	384.6
Reach	34000.0		147399.8	816.9	868.0	871.7	17.0	11349.2	359.3	325.8	384.6
Reach	33750.0		147428.3	816.6	868.4	871.0	14.1	13085.7	445.5	325.8	385.2
Reach	33500.0		147450.0	816.2	868.1	870.6	14.1	14604.3	549.5	326.4	385.8

HEC-RAS Plan: 0.9 PMF No Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	33250.0		147468.2	815.9	867.8	870.1	13.3	12787.1	422.9	326.4	385.8
Reach	33000.0		147475.1	815.5	866.9	869.9	14.8	12858.4	415.7	327.0	386.4
Reach	32750.0		147510.8	815.2	867.5	869.3	12.3	17344.0	587.9	327.0	386.4
Reach	32500.0		147530.5	814.8	866.3	869.1	14.5	13171.1	429.1	327.6	387.0
Reach	32250.0		147542.2	814.5	865.5	868.8	15.9	12348.4	428.0	327.6	387.6
Reach	32000.0		147547.6	814.1	865.0	868.2	15.5	11276.6	391.1	327.6	387.6
Reach	31750.0		147561.1	813.8	863.9	867.8	16.8	11154.4	381.6	328.2	388.2
Reach	31500.0		147585.8	813.4	863.8	867.2	16.0	11570.2	435.1	328.2	388.2
Reach	31250.0		147605.7	813.1	863.6	866.6	15.3	12797.6	483.1	328.8	388.8
Reach	31000.0		147630.2	812.7	863.7	866.0	13.0	12742.2	457.5	328.8	388.8
Reach	30750.0		147662.5	812.4	863.4	865.7	13.2	14324.6	469.3	329.4	389.4
Reach	30500.0		147682.2	812.0	863.1	865.4	13.2	13756.1	464.7	329.4	390.0
Reach	30250.0		147685.0	811.7	862.3	865.1	14.0	13491.3	439.8	330.0	390.0
Reach	30000.0		147709.7	811.3	861.5	864.8	15.9	12462.5	418.2	330.0	390.6
Reach	29750.0		147721.4	811.0	861.3	864.2	14.6	11720.5	389.5	330.6	391.2
Reach	29500.0		147752.3	810.6	861.3	863.8	13.8	12742.1	441.1	330.6	391.2
Reach	29250.0		147776.4	810.3	861.3	863.3	12.1	14973.0	492.7	331.2	391.8
Reach	29000.0		147798.8	809.9	861.4	862.9	11.7	17917.4	566.1	331.2	392.4
Reach	28750.0		147830.1	809.6	861.1	862.7	11.6	18835.9	635.1	331.8	392.4
Reach	28500.0		147848.3	809.2	861.1	862.4	10.7	19965.6	703.5	332.4	393.0
Reach	28250.0		147869.8	808.9	860.4	862.2	12.5	16396.8	554.8	332.4	393.6
Reach	28000.0		147879.4	808.5	858.9	862.0	15.9	12291.4	446.5	333.0	394.2
Reach	27750.0		147884.1	808.2	858.2	861.5	15.7	12693.0	428.2	333.0	394.2
Reach	27500.0		149380.1	807.8	857.4	861.0	16.3	11519.2	469.8	333.6	394.8
Reach	27250.0		149404.9	807.5	857.3	860.3	15.2	12387.2	452.5	333.6	394.8
Reach	27000.0		149422.4	807.1	856.2	859.8	16.0	10258.8	357.3	333.6	395.4
Reach	26750.0		149461.1	806.8	856.2	859.2	14.7	11491.8	406.7	334.2	396.0
Reach	26500.0		149496.4	806.4	857.2	858.8	10.9	16548.3	554.5	334.2	396.0
Reach	26250.0		149515.0	806.1	856.3	858.7	14.0	15194.0	516.9	334.8	396.6
Reach	26000.0		149540.2	805.7	855.4	858.3	15.2	14112.8	479.2	334.8	396.6
Reach	25750.0		149579.3	805.4	855.9	857.6	11.4	16692.6	561.5	335.4	397.2
Reach	25500.0		149604.6	805.0	855.6	857.2	10.9	16999.2	618.6	336.0	397.8
Reach	25250.0		149638.3	804.7	855.4	856.8	10.8	18606.6	670.7	336.0	398.4
Reach	25000.0		149665.4	804.3	854.8	856.6	12.4	16998.3	574.9	336.6	399.0
Reach	24750.0		149696.5	804.0	854.1	856.4	13.8	16251.5	567.2	336.6	399.0
Reach	24500.0		149720.4	803.6	853.0	856.0	14.2	11564.0	372.2	337.2	399.6
Reach	24250.0		149750.8	803.3	852.4	855.6	14.8	12269.9	388.9	337.2	400.2
Reach	24000.0		149781.1	802.9	852.6	855.1	13.3	13386.5	412.7	337.8	400.2
Reach	23750.0		149807.3	802.6	852.4	854.7	13.0	14817.2	511.0	337.8	400.8

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	23500.0		149844.2	802.2	852.0	854.3	12.7	13794.2	442.9	338.4	401.4
Reach	23250.0		149874.5	801.9	851.4	854.0	13.6	13199.7	415.1	338.4	401.4
Reach	23000.0		149899.5	801.5	850.8	853.7	14.8	13849.9	471.0	339.0	402.0
Reach	22750.0		149931.1	801.2	850.1	853.3	15.4	12826.4	420.2	339.0	402.0
Reach	22500.0		149956.3	800.8	849.4	852.7	15.3	11748.0	400.5	339.6	402.6
Reach	22250.0		149984.3	800.5	849.0	852.2	14.9	11054.8	360.4	339.6	402.6
Reach	22000.0		150018.3	800.1	847.7	851.8	17.1	10772.3	362.7	340.2	403.2
Reach	21750.0		150049.4	799.8	848.6	851.0	12.9	12617.3	415.2	340.2	403.8
Reach	21500.0		150074.5	799.4	847.1	850.5	15.0	10242.2	334.4	340.8	403.8
Reach	21250.0		150110.3	799.1	848.6	849.9	10.1	17428.5	596.6	340.8	404.4
Reach	21000.0		150139.8	798.7	848.3	849.7	10.4	16592.4	523.9	341.4	404.4
Reach	20750.0		150168.7	798.4	847.4	849.4	12.2	13571.8	433.6	342.0	405.0
Reach	20500.0		150194.3	798.0	847.2	849.2	11.7	13473.1	452.5	342.0	405.6
Reach	20250.0		150230.0	797.7	845.5	848.9	15.0	11109.0	362.7	342.6	405.6
Reach	20000.0		150259.2	797.3	845.8	848.3	13.0	12798.7	374.4	342.6	406.2
Reach	19750.0		150289.1	797.0	845.0	848.0	14.7	11965.7	370.1	343.2	406.2
Reach	19500.0		150321.3	796.6	845.0	847.5	13.4	12297.8	392.2	343.2	406.8
Reach	19250.0		150350.7	796.3	845.0	847.2	12.5	13243.1	445.2	343.8	406.8
Reach	19000.0		150380.3	795.9	844.8	846.8	12.7	14263.0	483.7	343.8	407.4
Reach	18750.0		150409.7	795.6	843.7	846.7	15.5	13919.3	483.5	344.4	408.0
Reach	18500.0		150440.5	795.2	843.3	846.2	15.2	14179.6	503.0	344.4	408.0
Reach	18250.0		150471.2	794.9	842.3	845.7	15.8	12424.4	445.7	345.0	408.6
Reach	18000.0		150499.0	794.5	841.5	845.3	16.6	11845.3	406.0	345.0	409.2
Reach	17750.0		150529.2	794.2	841.7	844.6	15.2	14131.6	501.2	345.0	409.2
Reach	17500.0		150565.7	793.8	842.3	843.9	11.1	16545.3	622.0	345.6	409.8
Reach	17250.0		150594.0	793.5	842.1	843.6	10.6	15970.2	548.9	346.2	410.4
Reach	17000.0		150619.3	793.2	841.6	843.5	11.8	14737.4	526.8	346.2	410.4
Reach	16750.0		150645.8	792.8	841.6	843.1	10.9	15972.2	577.8	346.8	411.0
Reach	16500.0		150677.7	792.5	841.7	842.8	10.2	20780.1	731.6	347.4	411.6
Reach	16250.0		150709.4	792.2	841.8	842.6	8.4	23479.6	823.2	347.4	412.2
Reach	16000.0		150734.7	791.9	841.8	842.4	6.9	23921.4	884.7	348.0	412.8
Reach	15750.0		150776.8	791.5	841.9	842.3	5.5	29624.2	953.1	348.6	413.4
Reach	15500.0		150775.3	791.2	842.0	842.4	4.0	36163.7	1107.1	349.8	414.6
Reach	15250.0		152259.2	790.9	841.9	842.3	3.8	35171.0	1133.4	351.0	415.8
Reach	15000.0		152307.9	790.6	841.8	842.3	4.6	29644.6	997.4	351.6	416.4
Reach	14750.0		152345.0	790.2	841.8	842.2	3.5	30440.2	996.5	352.8	417.0
Reach	14500.0		152422.4	789.9	841.8	842.2	3.0	35776.0	1239.2	354.0	418.2
Reach	14327.0		152486.7	789.7	841.9	842.1	3.8	41810.4	1442.3	355.2	420.0
Reach	14257.0	Quaker Church Road (Route 2080)	Bridge								

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	14158.0		152407.3	789.5	840.8	841.3	3.3	29038.6	925.2	355.8	420.0
Reach	13750.0		152500.6	788.9	840.5	841.2	7.2	24093.1	915.3	357.0	421.2
Reach	13500.0		152555.2	788.6	840.2	841.1	9.5	23464.1	721.7	357.6	421.8
Reach	13250.0		152609.2	788.3	839.0	841.1	13.0	16094.8	517.3	357.6	422.4
Reach	13000.0		152655.4	788.0	838.5	840.8	13.5	14434.5	476.0	358.2	423.0
Reach	12750.0		152700.8	787.6	837.9	840.4	14.7	14110.1	494.6	358.2	423.0
Reach	12500.0		152778.6	787.3	838.2	839.8	11.8	16337.5	559.3	358.8	423.6
Reach	12250.0		152813.3	787.0	836.9	839.8	14.9	14708.5	523.5	358.8	424.2
Reach	12000.0		152857.6	786.7	836.8	839.3	14.1	16336.8	602.8	359.4	424.8
Reach	11750.0		152913.4	786.3	836.6	838.8	13.3	16618.4	570.9	359.4	424.8
Reach	11500.0		152972.2	786.0	835.7	838.6	14.4	14036.8	468.0	360.0	425.4
Reach	11250.0		153016.7	785.7	835.2	838.2	15.2	14014.9	509.8	360.0	426.0
Reach	11000.0		153089.5	785.4	835.6	837.6	12.5	15110.4	498.0	360.6	426.0
Reach	10750.0		153137.1	785.0	835.2	837.2	12.5	14143.9	442.6	360.6	426.6
Reach	10500.0		153185.5	784.7	835.4	837.1	11.7	16983.9	599.4	361.2	427.2
Reach	10250.0		153246.1	784.4	834.6	836.9	12.8	14083.6	481.5	361.2	427.2
Reach	10000.0		153274.6	784.1	833.3	836.6	15.7	13579.4	490.7	361.8	427.8
Reach	9750.0		153306.0	783.7	832.0	836.1	17.1	11356.5	393.8	361.8	428.4
Reach	9500.0		153303.5	783.4	830.7	835.7	19.2	10812.7	396.4	362.4	428.4
Reach	9250.0		153339.3	783.1	830.4	834.7	17.5	10942.9	399.8	362.4	429.0
Reach	9000.0		153385.2	782.8	830.3	834.1	17.3	13088.1	499.2	362.4	429.0
Reach	8750.0		153494.2	782.4	831.7	832.9	9.9	19737.6	678.0	363.0	429.6
Reach	8500.0		153511.8	782.1	829.7	833.0	15.5	11811.8	434.9	363.6	430.2
Reach	8250.0		153381.3	781.8	827.5	832.5	19.2	10246.2	374.9	363.6	430.2
Reach	8000.0		153500.3	781.5	828.1	831.5	16.2	11445.2	394.1	363.6	430.2
Reach	7750.0		153592.5	781.1	828.8	830.9	13.0	14292.8	571.4	364.2	430.8
Reach	7500.0		153651.5	780.8	828.6	830.6	12.6	15610.8	621.0	364.2	431.4
Reach	7250.0		153710.1	780.5	828.6	830.1	11.5	17078.4	673.3	364.8	431.4
Reach	7000.0		153769.3	780.2	828.5	829.8	10.7	18406.6	757.2	365.4	432.0
Reach	6750.0		153809.9	779.8	828.4	829.6	10.3	19345.4	804.8	365.4	432.6
Reach	6500.0		153871.5	779.5	828.3	829.4	9.7	21508.5	910.6	366.0	433.2
Reach	6250.0		153916.4	779.2	828.1	829.1	9.6	21219.3	875.0	366.6	433.8
Reach	6000.0		153981.6	778.9	828.1	828.9	8.2	23551.8	924.5	366.6	434.4
Reach	5750.0		154040.1	778.5	827.7	828.7	9.6	20634.6	812.0	367.2	435.0
Reach	5500.0		154079.9	778.2	827.5	828.6	9.6	19785.2	787.8	367.8	435.6
Reach	5250.0		154127.1	777.9	827.3	828.4	9.7	19516.3	741.0	368.4	436.2
Reach	5000.0		154166.1	777.6	827.0	828.1	9.4	18332.0	705.6	368.4	436.2
Reach	4750.0		154226.3	777.2	826.9	827.9	9.0	18738.8	655.6	369.0	436.8
Reach	4500.0		154290.9	776.9	827.0	827.8	7.8	22186.1	797.6	369.6	437.4

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Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach	**4358.0**		154297.9	776.7	827.3	827.7	5.8	30036.9	1147.9	370.2	438.0
Reach	**4310.0**	Yadkin Valley Railroad #3	Bridge								
Reach	**4221.0**		154290.6	776.5	827.1	827.5	6.3	37970.0	1418.3	370.2	438.6
Reach	**3823.0**	Similar to 878117 of Yadkin Reach-1	154265.3	776.0	827.0	827.3	5.9	39246.6	1481.2	371.4	441.6
Reach	**3500.0**		224264.8	775.7	826.2	827.0	8.4	36619.3	1352.4	372.0	442.2
Reach	**3250.0**		224257.7	775.4	826.0	827.0	9.1	33735.8	1369.9	372.6	442.8
Reach	**3000.0**		224269.6	775.2	826.3	826.8	7.2	41857.4	1543.6	373.2	444.0
Reach	**2750.0**		224263.6	774.9	826.3	826.7	6.3	48117.4	1741.3	373.8	444.6
Reach	**2500.0**	Similar to 876743 of Yadkin Reach-1	224257.0	774.7	826.1	826.7	7.5	44123.4	1898.8	374.4	445.8
Reach	**2250.0**		224261.7	774.4	826.1	826.6	7.1	46000.5	2035.7	375.0	446.4
Reach	**2000.0**		224260.8	774.2	826.2	826.5	6.2	49760.7	2107.6	375.6	447.0
Reach	**1750.0**		224263.9	773.9	826.2	826.5	5.5	54603.7	2042.8	376.2	448.2
Reach	**1500.0**	Similar to 875789 of Yadkin Reach-1	224262.3	773.7	826.1	826.4	5.8	54452.5	2030.5	376.8	449.4
Reach	**1250.0**		224258.9	773.4	826.0	826.5	6.9	52378.9	1981.9	377.4	450.6
Reach	**1000.0**		224259.2	773.2	825.8	826.4	7.2	45185.1	1603.7	378.0	451.2
Reach	**750.0**		224258.3	772.9	825.7	826.4	8.4	41188.8	1450.5	378.6	451.8
Reach	**500.0**	Similar to 874889 of Yadkin Reach-1	224257.7	772.7	825.6	826.3	8.3	40880.2	1393.1	379.2	452.4
Reach	**250.0**		224256.5	772.4	825.5	826.2	7.9	44313.1	1522.3	379.8	453.6
Reach-1	**878977.0**	Yadkin River Before Ararat Inflow	70939.2	776.9	827.5	827.6	4.0	35488.2	1525.6	N/A	N/A
Reach-1	**878117.0**	Similar to 3823 of previous reach	70899.7	776.1	827.4	827.6	3.3	37028.7	1411.2	371.4	441.6
Reach-1	**876743.0**	Similar to 2500 of previous reach	228460.2	775.0	825.8	826.6	9.5	48888.1	2170.2	374.4	445.8
Reach-1	**875789.0**	Similar to 1500 of previous reach	227956.0	774.2	824.2	826.4	13.3	26926.4	1994.4	376.8	449.4
Reach-1	**874889.0**	Similar to 500 of previous reach	228053.3	773.4	823.5	825.4	13.0	29917.3	1349.0	379.2	452.4
Reach-1	**873889.0**		227527.6	772.5	821.7	823.2	11.5	26028.0	916.8	381.0	454.8
Reach-1	**872888.0**		226719.4	771.7	818.9	821.4	14.2	26541.1	943.5	382.2	456.6
Reach-1	**871889.0**		226426.1	770.8	817.6	820.0	14.0	27382.5	985.7	383.4	458.4
Reach-1	**870889.0**		226091.3	770.0	816.3	818.6	14.1	28012.5	1065.3	384.6	460.8
Reach-1	**869792.0**		225897.4	769.1	815.1	817.1	12.9	27325.6	1156.9	385.8	462.6
Reach-1	**868972.0**		225781.8	768.4	814.2	816.1	12.9	26698.4	1048.9	387.0	464.4
Reach-1	**868033.0**		225798.6	767.6	813.9	815.0	10.1	33615.8	1402.7	388.2	466.8
Reach-1	**866672.0**		225670.8	766.4	811.9	813.9	13.6	31742.4	1256.8	390.0	469.8
Reach-1	**865759.0**		225604.3	765.6	809.6	811.4	11.7	23778.4	925.7	391.2	471.6
Reach-1	**864908.0**		225516.8	764.9	806.4	809.4	15.2	22180.2	995.2	392.4	472.8
Reach-1	**863826.0**		225490.7	764.0	805.4	807.2	12.5	27863.6	1311.3	393.6	475.2
Reach-1	**862956.0**		225481.5	763.2	803.5	805.9	13.8	24036.1	1119.1	394.8	477.0
Reach-1	**861929.0**		225478.8	762.4	797.5	803.0	18.9	12262.4	981.5	396.0	478.2
Reach-1	**860992.0**		224756.3	761.6	792.3	798.0	19.6	13387.6	1212.2	396.6	478.8
Reach-1	**859929.0**		224430.3	759.1	790.6	793.1	13.1	19965.6	1447.0	397.8	480.0
Reach-1	**858874.0**		224273.8	757.4	789.7	791.4	11.5	21812.8	1235.7	399.0	481.8

HEC-RAS Plan: 0.9 PMF No Breach Project No.: 62S-0102 River: Lovills Creek, Ararat River, and Yadkin River Profile: Max WS

Reach	River Sta	Structures	Q Total	Min Ch El	W.S. Elev	E.G. Elev	Vel Chnl	Flow Area	Top Width	Trvl Tme Initial	Trvl Tme Peak
			(cfs)	(ft)	(ft)	(ft)	(ft/s)	(sq ft)	(ft)	(min)	(min)
Reach-1	857919.0		224042.1	755.9	788.5	790.3	10.7	21951.4	957.8	400.8	483.0
Reach-1	857233.0		224075.8	754.0	788.7	789.6	7.9	29469.1	1168.5	402.0	484.8
Reach-1	856716.0		224040.1	750.0	788.5	789.4	9.1	32988.3	1426.2	402.6	486.0
Reach-1	855942.0		224155.1	747.8	788.0	789.0	9.8	36624.2	1680.6	404.4	487.8
Reach-1	854859.0		224107.7	745.4	787.3	788.3	10.5	36688.1	1666.8	406.2	490.8
Reach-1	853833.0		223985.8	743.9	786.0	787.6	13.0	27687.4	1201.1	407.4	493.2
Reach-1	852899.0		223906.8	742.7	785.2	786.7	12.4	28861.7	1239.4	408.6	495.0
Reach-1	851917.0		223857.6	741.6	784.6	785.9	11.2	31694.4	1347.4	409.8	497.4
Reach-1	850885.0		223704.8	740.9	782.6	785.2	14.1	25724.0	1088.3	411.6	499.2
Reach-1	849909.0		223477.4	740.0	780.9	783.9	15.0	22190.2	910.4	412.2	501.0
Reach-1	849110.0		222989.7	739.5	778.8	782.5	16.3	18399.7	775.5	413.4	502.2
Reach-1	847889.0		222945.9	737.9	778.8	779.9	9.1	31761.4	1158.2	415.2	504.6
Reach-1	846889.0		222884.8	736.0	778.6	779.4	8.2	35872.6	1327.3	417.0	507.0
Reach-1	845805.0		222539.3	734.9	777.3	779.0	11.2	29783.4	1109.6	418.8	509.4
Reach-1	844851.0		222447.1	734.1	776.9	778.2	10.6	30816.7	1225.0	420.0	511.8
Reach-1	843889.0		222226.4	731.8	775.9	777.6	11.6	32892.7	1305.3	421.8	514.2
Reach-1	842978.0		222187.1	731.7	775.3	776.9	11.5	33900.1	1327.4	423.0	516.6
Reach-1	841737.0		221616.6	729.1	774.5	775.9	10.2	29485.7	1047.7	424.8	519.6
Reach-1	840889.0		220808.2	728.4	773.9	775.4	10.3	28534.8	1014.8	426.0	521.4
Reach-1	839889.0		220026.2	727.0	773.5	774.9	10.0	27876.0	911.5	427.8	523.2
Reach-1	838887.0		219177.8	723.9	772.9	774.4	11.2	35895.6	1318.2	429.6	525.6
Reach-1	837871.0		218275.3	723.6	771.8	773.9	13.3	30268.2	1401.0	430.8	528.0
Reach-1	836868.0		219969.1	722.6	771.9	772.8	9.1	42441.4	1711.5	432.6	531.0
Reach-1	835888.0		219669.2	722.6	771.5	772.4	9.5	41173.0	1602.9	434.4	534.0
Reach-1	834878.0		219679.8	721.8	771.4	771.9	7.8	52055.1	2188.7	436.2	537.6
Reach-1	833762.0		219548.1	721.8	771.0	771.6	9.1	61817.7	2731.4	438.0	542.4
Reach-1	832889.0		219389.0	721.5	770.6	771.3	9.7	67371.9	3117.7	439.8	546.6
Reach-1	831869.0		219309.7	721.3	770.2	770.8	8.8	68557.9	3088.5	441.6	552.0
Reach-1	830889.0		219212.9	721.2	769.8	770.5	9.0	66434.9	2912.8	443.4	556.8
Reach-1	829877.0		219152.7	721.0	769.5	770.0	8.4	74174.5	3324.4	445.2	562.2
Reach-1	828958.0		219107.5	720.9	769.2	769.7	8.0	69239.4	2854.7	447.0	567.6
Reach-1	827852.0		219060.7	719.9	768.9	769.4	7.6	62856.1	2454.4	449.4	573.0
Reach-1	826913.0		219016.3	719.5	768.2	769.2	11.0	41833.9	2148.4	451.2	576.6
Reach-1	825957.0		218963.7	718.8	767.6	768.7	10.5	37099.5	1441.9	453.0	579.6
Reach-1	825519.0		218923.7	719.4	767.2	768.4	10.7	34724.5	1518.2	453.6	580.8
Reach-1	825429.0	Reynolda Road (NC Route 67)	Bridge								
Reach-1	825318.0	Convergence	218621.1	719.2	766.3	768.1	12.3	31607.0	1646.7	453.6	580.8

APPENDIX E

Inundation Map Information:

Sunny Day

PMF with Breach

0.90 PMF (SDF) with Breach

0.90 PMF (SDF) without Breach

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Approximate Hazard Boundary for Probable Maximum Flood (PMF) with Breach

Approximate Hazard Boundary for 0.9 Probable Maximum Flood (Spillway Design Flood (SDF)) without Breach

Approximate Hazard Boundary for 0.9 Probable Maximum Flood (Spillway Design Flood (SDF)) with Breach

Approximate Hazard Boundary for Sunny Day with Breach

Impacted Structures (Map Number - Structure Number)
-Only known occupied structures and unknown occupancy structures within inundation boundaries are detailed
-Identification numbers correspond to the structure number identified in the report appendix table

Lovills Creek

NCDOT Bridge (West Independence Blvd (Route 89)) (Property Owner(s) and Address(es))
Stn: 144741.0 Elev: 1020 feet (Cross Section Station Number(s) and Deck Elevation)

SD WS.	Elv: 1027.0	FD: 7.0	(Sunny Day Flood Water Surface Elevation and Depth at Structure)
PMF Breach WS.	Elv: 1034.3	FD: 14.3	(Probable Maximum Flood With Breach Water Surface Elevation and Depth(s) at Structure)
0.9 PMF Breach WS.	Elv: 1033.7	FD: 13.7	(0.9 Probable Maximum Flood Event With Breach Water Surface Elevation and Depth at Structure(s))
0.9 PMF No Breach WS.	Elv: 1030.9	FD: 10.9	(0.9 Probable Maximum Flood Event Without Breach Water Surface Elevation and Depth at Structure(s))
TT SD:	Ini: 96.0	Peak: 106.2	(Sunny Day Flood Travel Time from Dam Initial and Peak Flows, minutes)
TT PMF Breach:	Ini: 74.4	Peak: 77.4	(Probable Maximum Flood With Breach Travel Time from Dam Initial and Peak Flows, minutes)
TT 0.9 PMF Breach:	Ini: 75.6	Peak: 78.6	(0.9 Probable Maximum Flood With Breach Travel Time from Dam Initial and Peak Flows, minutes)
TT 0.9 PMF No Breach:	Ini: 96.0	Peak: 102.6	(0.9 Probable Maximum Flood Without Breach Travel Time from Dam Initial and Peak Flows, minutes)
Dist. From Dam:	7.23 mi		(Approximate Distance(s) from Dam)

Greyed Block Shows Position in Series

How To Use This Map

0 150 300 600 900 1,200 Feet

N

Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC Onemap 2010 Aerial Photography				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	How To Use	NAD 83 North Carolina State Plane (Feet), NAVD 88

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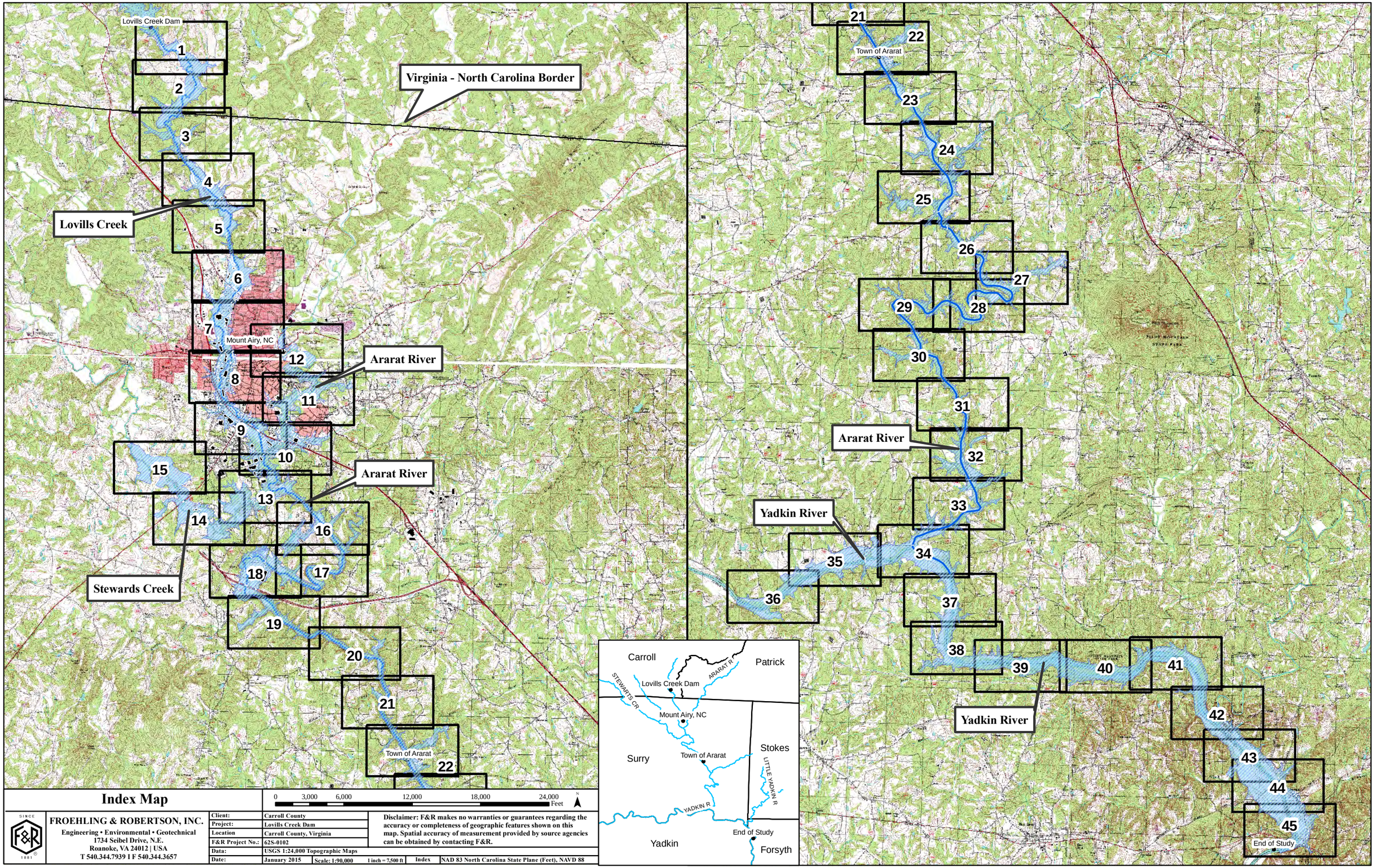
David A. Krisnitski
No. 36465
PROFESSIONAL ENGINEER



Index Map

0 3,000 6,000 12,000 18,000 24,000 Feet

N

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	USGS 1:24,000 Topographic Maps
Date:	January 2015

Scale: 1:90,000 1 inch = 7,500 ft

Index NAD 83 North Carolina State Plane (Feet), NAVD 88

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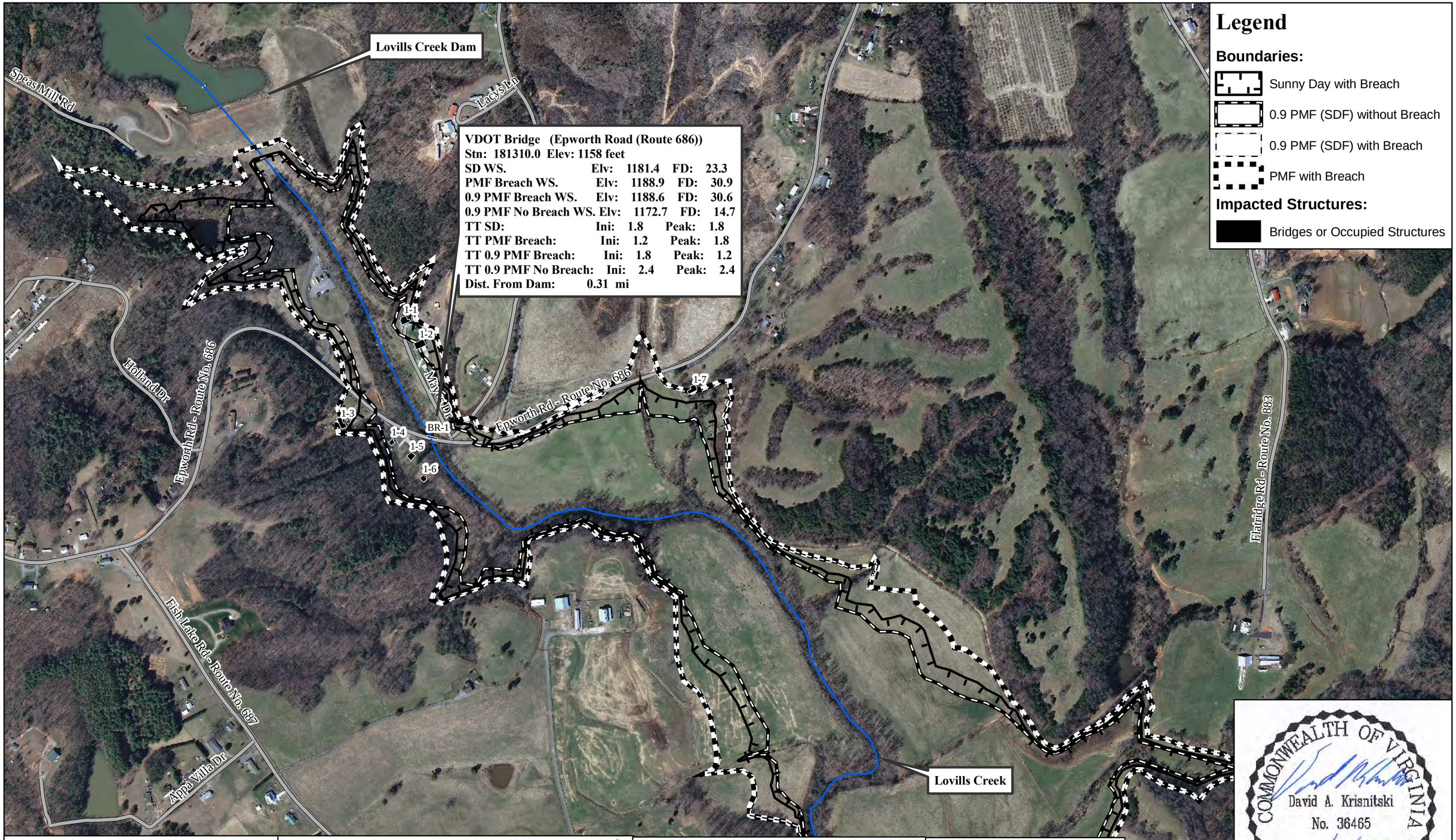

Inundation Map 1

0 155 310 620 930 1,240 Feet

N

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	VGIN 2011
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map 1 of 45 | NAD 83 Virginia South State Plane (Feet), NAVD 88

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Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.

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David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

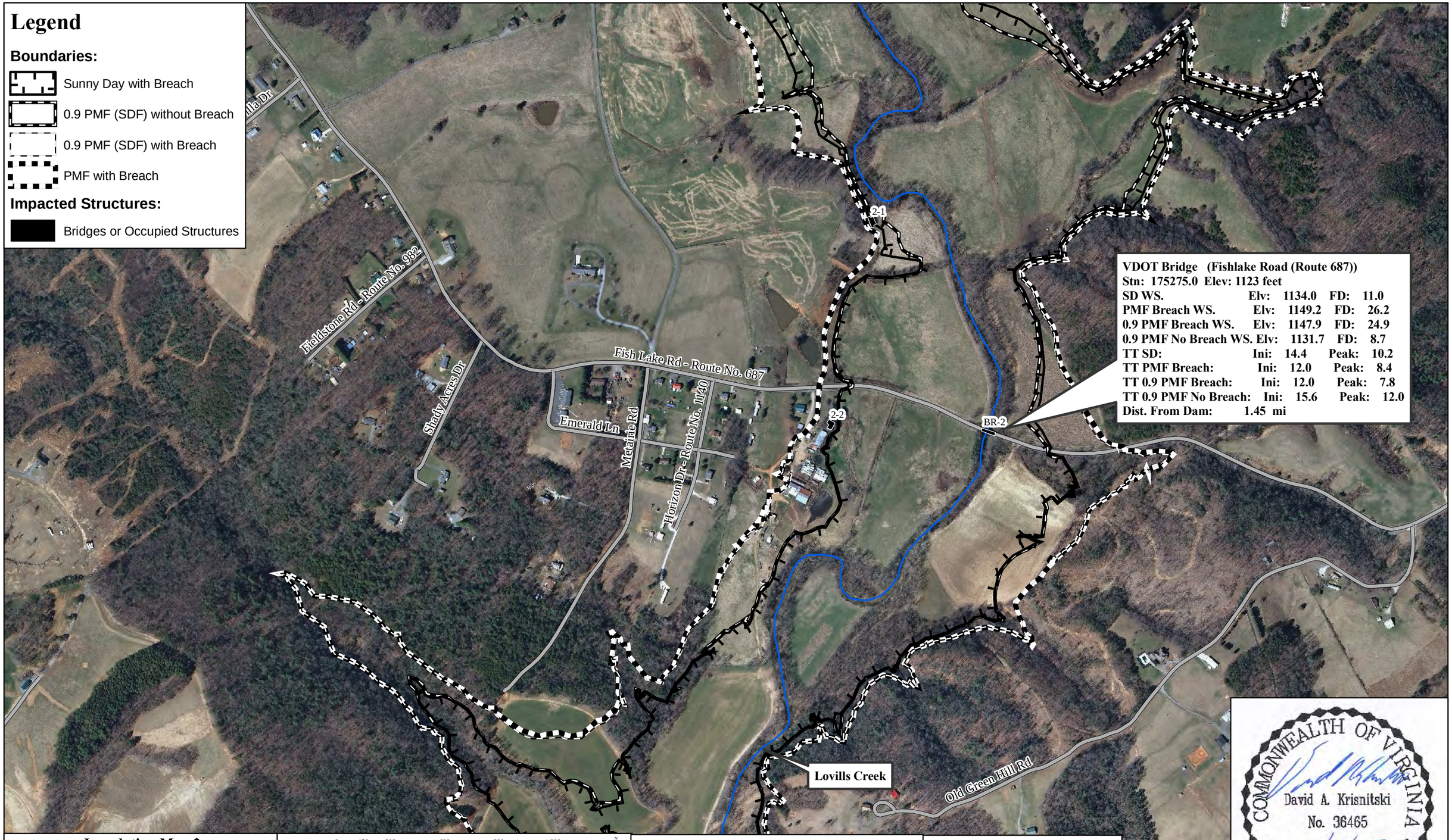
Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures



VDOT Bridge (Fishlake Road (Route 687))
Stn: 175275.0 Elev: 1123 feet

SD WS.	Elv:	1134.0	FD:	11.0
PMF Breach WS.	Elv:	1149.2	FD:	26.2
0.9 PMF Breach WS.	Elv:	1147.9	FD:	24.9
0.9 PMF No Breach WS.	Elv:	1131.7	FD:	8.7
TT SD:	Ini:	14.4	Peak:	10.2
TT PMF Breach:	Ini:	12.0	Peak:	8.4
TT 0.9 PMF Breach:	Ini:	12.0	Peak:	7.8
TT 0.9 PMF No Breach:	Ini:	15.6	Peak:	12.0
Dist. From Dam:	1.45 mi			

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David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Inundation Map 2

0 150 300 600 900 1,200 Feet

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	VGIN 2011
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map 2 of 45 | NAD 83 Virginia South State Plane (Feet), NAVD 88

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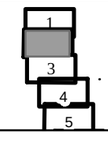

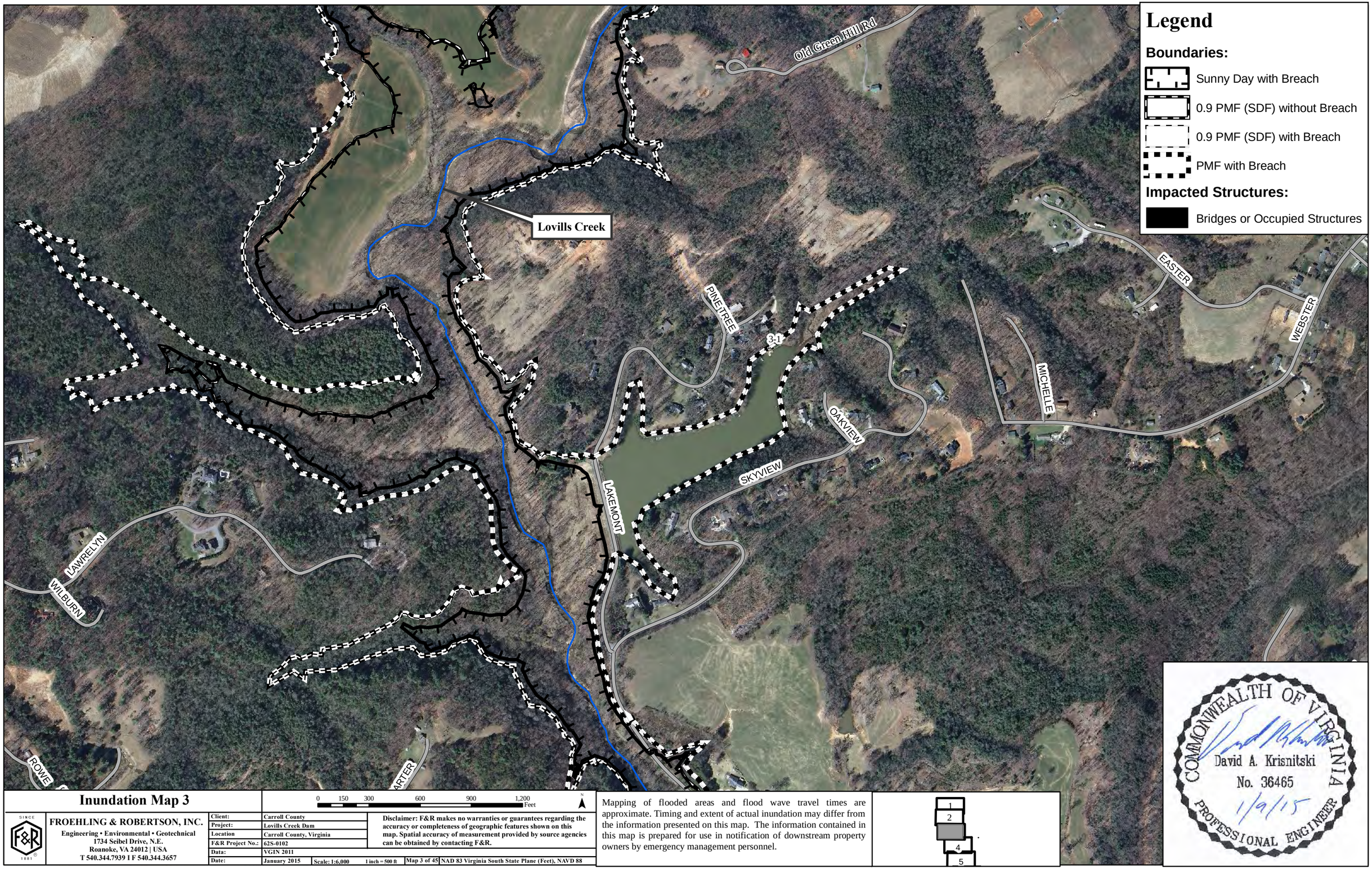

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Inundation Map 3

0 150 300 600 900 1,200 Feet

N

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	VGIN 2011
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft

Map 3 of 45

NAD 83 Virginia South State Plane (Feet), NAVD 88

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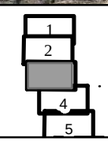

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David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

NCDOT Bridge (Greenhill Road (Route 1700))
Stn: 163555.0 Elev: 1081 feet

SD WS.	Elv:	1090.9	FD:	9.8
PMF Breach WS.	Elv:	1098.7	FD:	17.7
0.9 PMF Breach WS.	Elv:	1098.0	FD:	17.0
0.9 PMF No Breach WS.	Elv:	1091.4	FD:	10.4
TT SD:	Ini:	54.0	Peak:	38.4
TT PMF Breach:	Ini:	43.8	Peak:	30.0
TT 0.9 PMF Breach:	Ini:	44.4	Peak:	30.0
TT 0.9 PMF No Breach:	Ini:	57.0	Peak:	40.8
Dist. From Dam:	3.67 mi			

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Inundation Map 4

0 150 300 600 900 1,200 Feet

N

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map 4 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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COMMONWEALTH OF VIRGINIA
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No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Inundation Map 5

0 150 300 600 900 1,200 Feet

N

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map 5 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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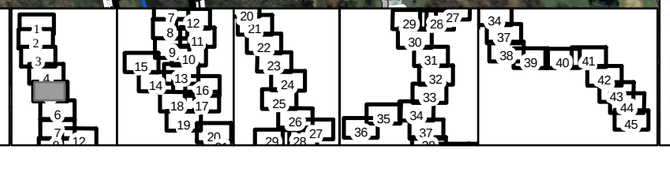
Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.



COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (West Lebanon Street (Bus 52))
Stn: 151567.0 Elev: 1042.5 feet

SD WS.	Elv:	1045.5	FD:	3.0
PMF Breach WS.	Elv:	1052.4	FD:	9.9
0.9 PMF Breach WS.	Elv:	1051.7	FD:	9.2
0.9 PMF No Breach WS.	Elv:	1047.1	FD:	4.6
TT SD:	Ini:	81.0	Peak:	81.0
TT PMF Breach:	Ini:	64.8	Peak:	62.4
TT 0.9 PMF Breach:	Ini:	66.0	Peak:	62.4
TT 0.9 PMF No Breach:	Ini:	82.8	Peak:	80.4
Dist. From Dam:	5.94 mi			

0 150 300 600 900 1,200 Feet

N

Inundation Map 6

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 | 1 inch = 500 ft | Map 6 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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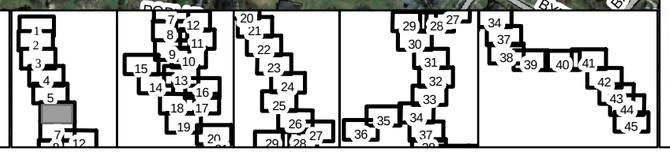

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (West Independence Blvd (Route 89))
Stn: 144741.0 Elev: 1020 feet

SD WS.	Elv:	1027.0	FD:	7.0
PMF Breach WS.	Elv:	1034.3	FD:	14.3
0.9 PMF Breach WS.	Elv:	1033.7	FD:	13.7
0.9 PMF No Breach WS.	Elv:	1030.9	FD:	10.9
TT SD:	Ini:	96.0	Peak:	106.2
TT PMF Breach:	Ini:	74.4	Peak:	77.4
TT 0.9 PMF Breach:	Ini:	75.6	Peak:	78.6
TT 0.9 PMF No Breach:	Ini:	96.0	Peak:	102.6
Dist. From Dam:	7.23 mi			

Inundation Map 7

0 150 300 600 900 1,200 Feet

N

FROEHLING & ROBERTSON, INC.
Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County			
Project:	Lovills Creek Dam			
Location	Carroll County, Virginia			
F&R Project No.:	62S-0102			
Data:	NC Onemap 2010 Aerial Photography			
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map 7 of 45

NAD 83 North Carolina State Plane (Feet), NAVD 88

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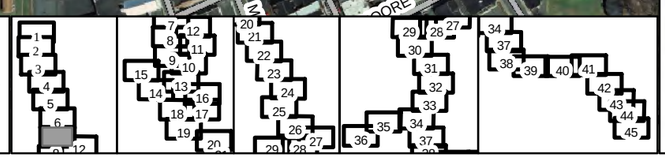
Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.



COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (West Pine Street)
Stn: 143311.0 Elev: 1015.3 feet

SD WS.	Elv: 1024.7	FD: 9.4	
PMF Breach WS.	Elv: 1028.9	FD: 13.6	
0.9 PMF Breach WS.	Elv: 1027.9	FD: 12.6	
0.9 PMF No Breach WS.	Elv: 1023.4	FD: 8.1	
TT SD:	Ini: 100.2	Peak: 112.2	
TT PMF Breach:	Ini: 76.2	Peak: 79.8	
TT 0.9 PMF Breach:	Ini: 77.4	Peak: 81.0	
TT 0.9 PMF No Breach:	Ini: 98.4	Peak: 106.2	
Dist. From Dam:	7.50 mi		

Inundation Map 8

0 150 300 600 900 1,200 Feet

N

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC Onemap 2010 Aerial Photography				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map 8 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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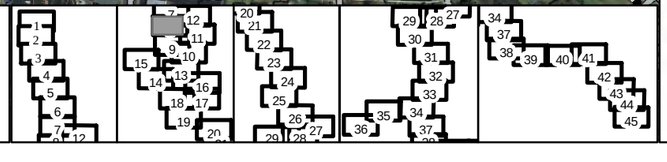
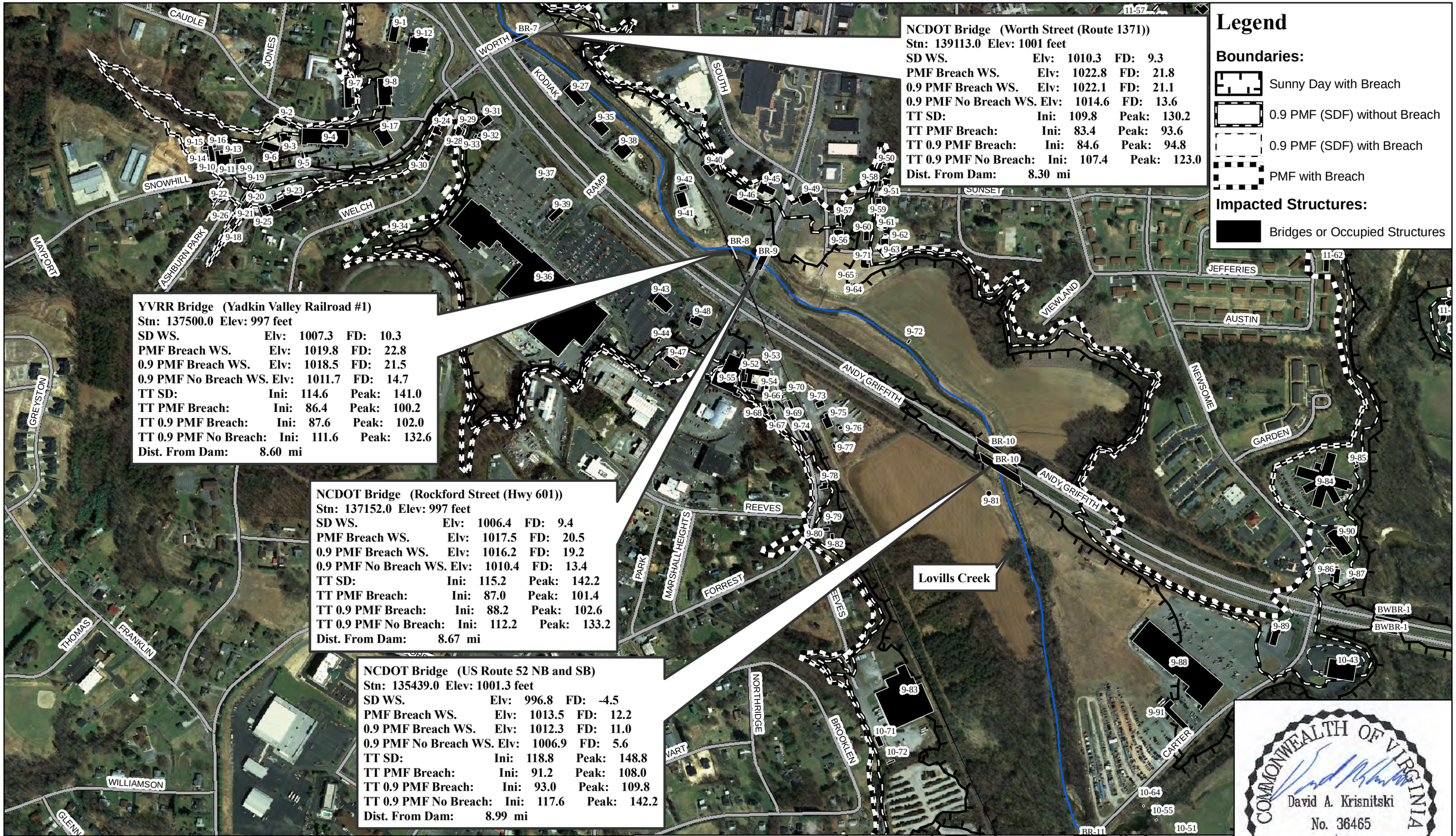
Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.



COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER



NCDOT Bridge (Worth Street (Route 1371))
Stn: 139113.0 Elev: 1001 feet

SD WS.	Elv:	1010.3	FD:	9.3
PMF Breach WS.	Elv:	1022.8	FD:	21.8
0.9 PMF Breach WS.	Elv:	1022.1	FD:	21.1
0.9 PMF No Breach WS.	Elv:	1014.6	FD:	13.6
TT SD:	Ini:	109.8	Peak:	130.2
TT PMF Breach:	Ini:	83.4	Peak:	93.6
TT 0.9 PMF Breach:	Ini:	84.6	Peak:	94.8
TT 0.9 PMF No Breach:	Ini:	107.4	Peak:	123.0
Dist. From Dam:		8.30 mi		

YVRR Bridge (Yadkin Valley Railroad #1)
Stn: 137500.0 Elev: 997 feet

SD WS.	Elv:	1007.3	FD:	10.3
PMF Breach WS.	Elv:	1019.8	FD:	22.8
0.9 PMF Breach WS.	Elv:	1018.5	FD:	21.5
0.9 PMF No Breach WS.	Elv:	1011.7	FD:	14.7
TT SD:	Ini:	114.6	Peak:	141.0
TT PMF Breach:	Ini:	86.4	Peak:	100.2
TT 0.9 PMF Breach:	Ini:	87.6	Peak:	102.0
TT 0.9 PMF No Breach:	Ini:	111.6	Peak:	132.6
Dist. From Dam:		8.60 mi		

NCDOT Bridge (Rockford Street (Hwy 601))
Stn: 137152.0 Elev: 997 feet

SD WS.	Elv:	1006.4	FD:	9.4
PMF Breach WS.	Elv:	1017.5	FD:	20.5
0.9 PMF Breach WS.	Elv:	1016.2	FD:	19.2
0.9 PMF No Breach WS.	Elv:	1010.4	FD:	13.4
TT SD:	Ini:	115.2	Peak:	142.2
TT PMF Breach:	Ini:	87.0	Peak:	101.4
TT 0.9 PMF Breach:	Ini:	88.2	Peak:	102.6
TT 0.9 PMF No Breach:	Ini:	112.2	Peak:	133.2
Dist. From Dam:		8.67 mi		

NCDOT Bridge (US Route 52 NB and SB)
Stn: 135439.0 Elev: 1001.3 feet

SD WS.	Elv:	996.8	FD:	-4.5
PMF Breach WS.	Elv:	1013.5	FD:	12.2
0.9 PMF Breach WS.	Elv:	1012.3	FD:	11.0
0.9 PMF No Breach WS.	Elv:	1006.9	FD:	5.6
TT SD:	Ini:	118.8	Peak:	148.8
TT PMF Breach:	Ini:	91.2	Peak:	108.0
TT 0.9 PMF Breach:	Ini:	93.0	Peak:	109.8
TT 0.9 PMF No Breach:	Ini:	117.6	Peak:	142.2
Dist. From Dam:		8.99 mi		

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Inundation Map 9

0 150 300 600 900 1,200 Feet

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FROEHLING & ROBERTSON, INC.
Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map 9 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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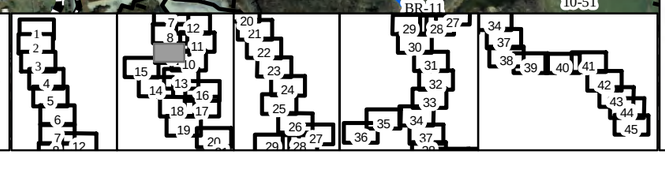

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (ANDY GRIFFITH PKWY (US 52 #2))
Stn: 134000.0 Elev: 1000 feet (BACKWATER)

SD WS.	Elv:	995.7	FD: 0.0
PMF Breach WS.	Elv:	1013.2	FD: 13.2
0.9 PMF Breach WS.	Elv:	1011.9	FD: 11.9
0.9 PMF No Breach WS.	Elv:	1006.4	FD: 6.4
TT SD:	Ini:	124.8	Peak: 156.0
TT PMF Breach:	Ini:	98.4	Peak: 117.6
TT 0.9 PMF Breach:	Ini:	100.8	Peak: 120.0
TT 0.9 PMF No Breach:	Ini:	127.2	Peak: 154.8
Dist. From Dam:	9.68 mi		

Lovills Creek

BWBR-1

BWCUL-2

Ararat River

Ararat River

Inundation Map 9

-Structures upstream are not affected by breach events
-End of backwater area

-Structures upstream are not affected by breach events
-End of backwater area

NCDOT Bridge (ANDY GRIFFITH PKWY (US 52 #3))
Stn: 134000.0 Elev: 1000 feet (BACKWATER)

SD WS.	Elv:	995.7	FD: 0.0
PMF Breach WS.	Elv:	1013.2	FD: 13.2
0.9 PMF Breach WS.	Elv:	1011.9	FD: 11.9
0.9 PMF No Breach WS.	Elv:	1006.4	FD: 6.4
TT SD:	Ini:	124.8	Peak: 156.0
TT PMF Breach:	Ini:	98.4	Peak: 117.6
TT 0.9 PMF Breach:	Ini:	100.8	Peak: 120.0
TT 0.9 PMF No Breach:	Ini:	127.2	Peak: 154.8
Dist. From Dam:	9.83 mi		

NCDOT Bridge (Carter Street (Route 2116))
Stn: 133140.0 Elev: 991.3 feet

SD WS.	Elv:	995.0	FD: 3.7
PMF Breach WS.	Elv:	1013.0	FD: 21.7
0.9 PMF Breach WS.	Elv:	1011.7	FD: 20.4
0.9 PMF No Breach WS.	Elv:	1006.1	FD: 14.8
TT SD:	Ini:	128.4	Peak: 162.6
TT PMF Breach:	Ini:	103.2	Peak: 125.4
TT 0.9 PMF Breach:	Ini:	105.0	Peak: 127.8
TT 0.9 PMF No Breach:	Ini:	132.0	Peak: 163.8
Dist. From Dam:	9.43 mi		

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Inundation Map 10

0 150 300 600 900 1,200 Feet

FROEHLING & ROBERTSON, INC.
Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map10 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (HAMBURG ST)
Stn: 134000.0 Elev: 1002 feet (BACKWATER)

SD WS.	Elv: 995.7	FD: 0.0	
PMF Breach WS.	Elv: 1013.2	FD: 11.2	
0.9 PMF Breach WS.	Elv: 1011.9	FD: 9.9	
0.9 PMF No Breach WS.	Elv: 1006.4	FD: 4.4	
TT SD:	Ini: 124.8	Peak: 156.0	
TT PMF Breach:	Ini: 98.4	Peak: 117.6	
TT 0.9 PMF Breach:	Ini: 100.8	Peak: 120.0	
TT 0.9 PMF No Breach:	Ini: 127.2	Peak: 154.8	
Dist. From Dam:	11.39 mi		

Culverts already impacted by local flooding not by breach events

Bridge not impacted by breach events

NCDOT Bridge (SOUTH MAIN ST)
Stn: 134000.0 Elev: 1001 feet (BACKWATER)

SD WS.	Elv: 995.7	FD: 0.0	
PMF Breach WS.	Elv: 1013.2	FD: 12.2	
0.9 PMF Breach WS.	Elv: 1011.9	FD: 10.9	
0.9 PMF No Breach WS.	Elv: 1006.4	FD: 5.4	
TT SD:	Ini: 124.8	Peak: 156.0	
TT PMF Breach:	Ini: 98.4	Peak: 117.6	
TT 0.9 PMF Breach:	Ini: 100.8	Peak: 120.0	
TT 0.9 PMF No Breach:	Ini: 127.2	Peak: 154.8	
Dist. From Dam:	10.78 mi		

Ararat River

BWBR-4 BWBR-3

11-1 11-2 11-3 11-4 11-5 11-6 11-7 11-8 11-9 11-10 11-11 11-12 11-13 11-14 11-15 11-16 11-17 11-18 11-19 11-20 11-21 11-22 11-23 11-24 11-25 11-26 11-27 11-28 11-29 11-30 11-31 11-32 11-33 11-34 11-35 11-36 11-37 11-38 11-39 11-40 11-41 11-42 11-43 11-44 11-45 11-46 11-47 11-48 11-49 11-50 11-51 11-52 11-53 11-54 11-55 11-56 11-57 11-58 11-59 11-60 11-61 11-62

HAMBURG FIRST SMITH BIRCHWOOD SAMURAI WELCOME BAPTIST CHURCH TRIPLE CROSS LONDON WILLIAM PENN ANGEL BARBER BLUFF HALE ANDOVER CULBERT DURHAM FAIRVIEW MEADOW STONE MONARCH MIDWAY BARNETT FARM WESTFIELD MULBERRY MAIN BROADWAY GILLWALT OAK HALL VINE NEWSOME SUNSET BANNER JEFFERIES AUSTIN FAIRFIELD WENSLEY VERNON BURNLEY FAIRFAX RAMP NEW TRAM DIAMOND

0 150 300 600 900 1,200 Feet

N

Inundation Map 11

SINCE F&R 1881

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map11 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

-Structures upstream are not affected by breach events
-End of backwater area

Bridge not impacted by breach events

12-1, 12-2, 12-3, 12-4, 12-5, 12-6, 12-7, 12-8, 12-9

GALLOWAY, BRUNSWICK, JUNCTION, HINES, INDEPENDENCE, NATIONS, TRINITY, VIRGINIA, OAK, CITY HALL, MOORE, WILLOW, MARKET, FRANKLIN, CANTEEN, GRAVES, RENFRO, CHERRY, CHURCH, MAIN, WILSON, KORNER, SPRING, SPAUGH, RIVERSIDE, BOTTOM, CIRCLE, BITTING, TESH, OLD E PINE, GRANITE QUARRY, LUTHER RIDGE, KNOB, PINE, HIDDEN HILL, HARDING, RADIO HILL, CITY VIEW, GIN BLOSSOM, SHERMAN, HOME, WELCOME BAPTIS, HAMBURG, FIRST

Inundation Map 12

0 150 300 600 900 1,200 Feet

N

FROEHLING & ROBERTSON, INC.
Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC Onemap 2010 Aerial Photography				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map12 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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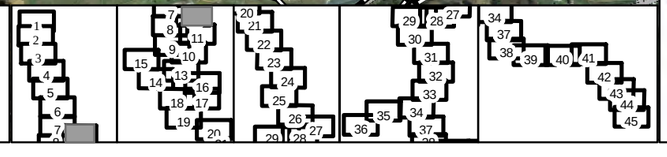
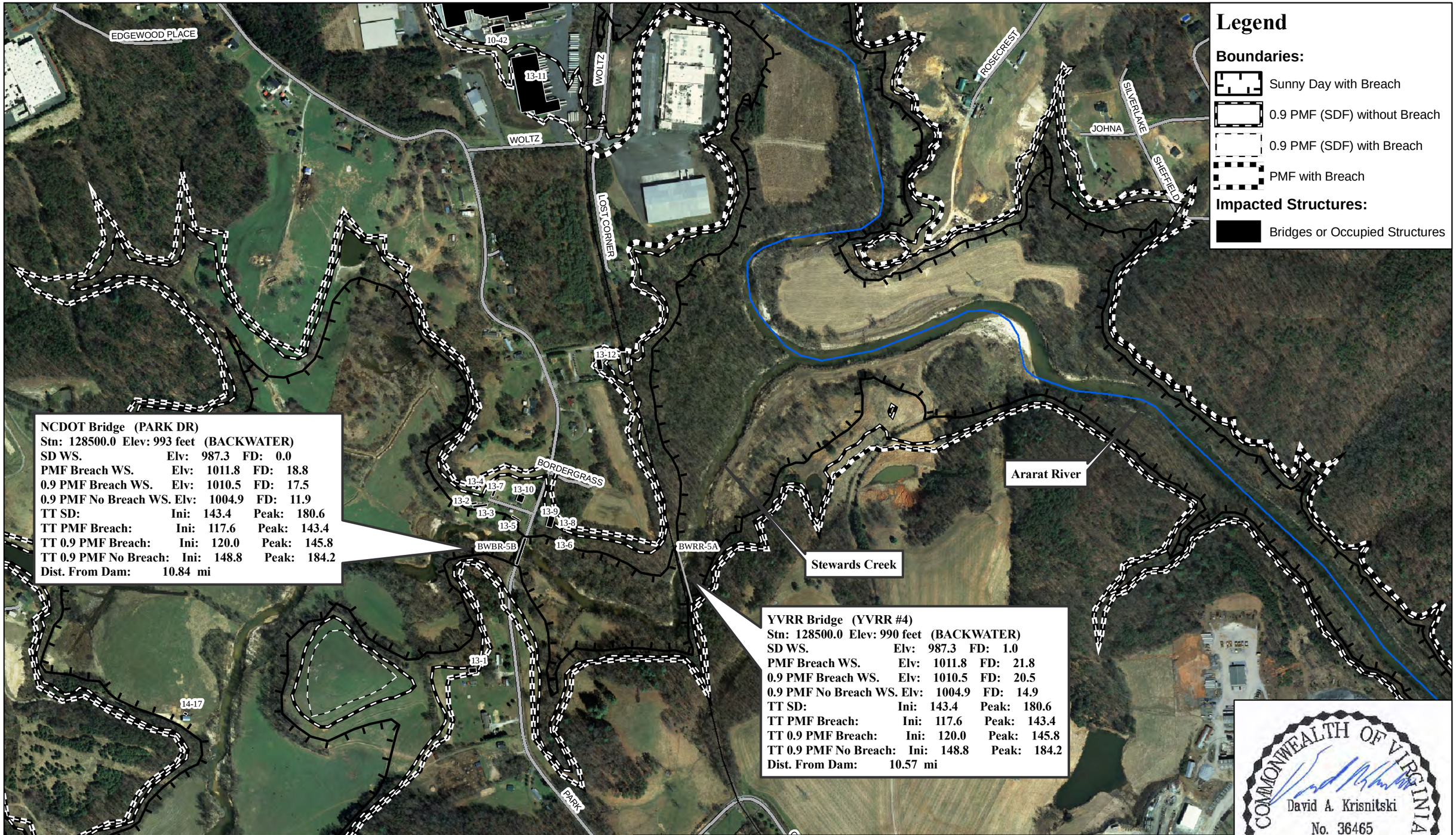


COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER



NCDOT Bridge (PARK DR)
Stn: 128500.0 Elev: 993 feet (BACKWATER)

SD WS.	Elv:	987.3	FD: 0.0
PMF Breach WS.	Elv:	1011.8	FD: 18.8
0.9 PMF Breach WS.	Elv:	1010.5	FD: 17.5
0.9 PMF No Breach WS.	Elv:	1004.9	FD: 11.9
TT SD:	Ini:	143.4	Peak: 180.6
TT PMF Breach:	Ini:	117.6	Peak: 143.4
TT 0.9 PMF Breach:	Ini:	120.0	Peak: 145.8
TT 0.9 PMF No Breach:	Ini:	148.8	Peak: 184.2

Dist. From Dam: 10.84 mi

YVRR Bridge (YVRR #4)
Stn: 128500.0 Elev: 990 feet (BACKWATER)

SD WS.	Elv:	987.3	FD: 1.0
PMF Breach WS.	Elv:	1011.8	FD: 21.8
0.9 PMF Breach WS.	Elv:	1010.5	FD: 20.5
0.9 PMF No Breach WS.	Elv:	1004.9	FD: 14.9
TT SD:	Ini:	143.4	Peak: 180.6
TT PMF Breach:	Ini:	117.6	Peak: 143.4
TT 0.9 PMF Breach:	Ini:	120.0	Peak: 145.8
TT 0.9 PMF No Breach:	Ini:	148.8	Peak: 184.2

Dist. From Dam: 10.57 mi

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Inundation Map 13

0 150 300 600 900 1,200 Feet

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map13 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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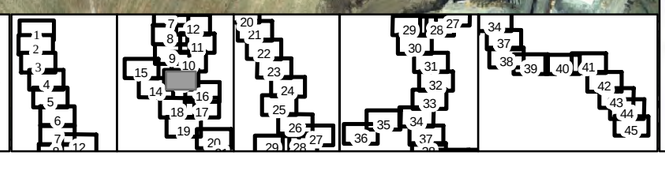
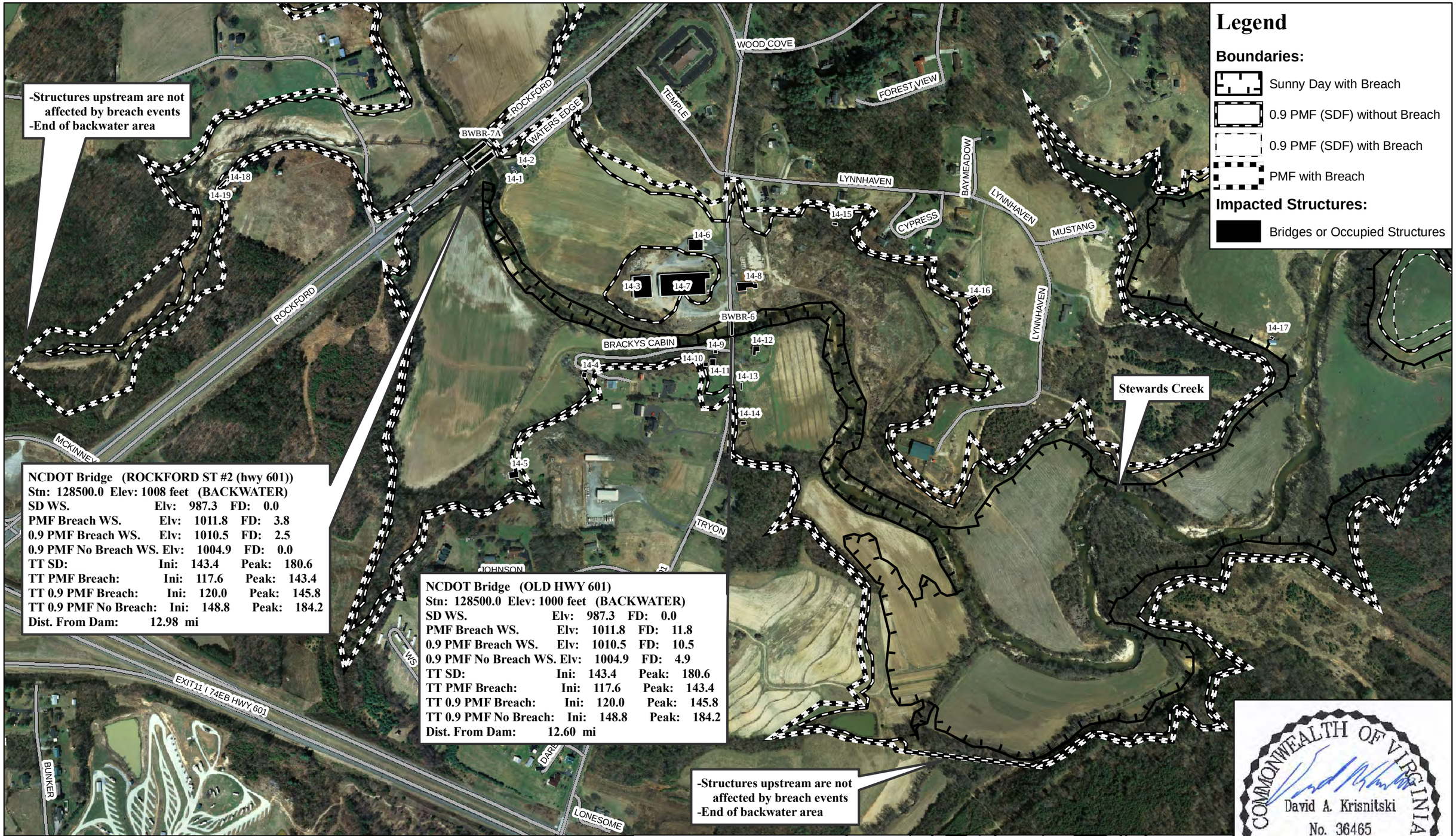


COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER



Inundation Map 14

0 150 300 600 900 1,200 Feet

N

FROEHLING & ROBERTSON, INC.
Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map14 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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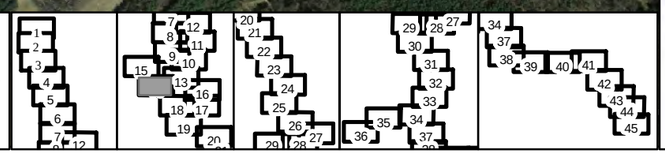
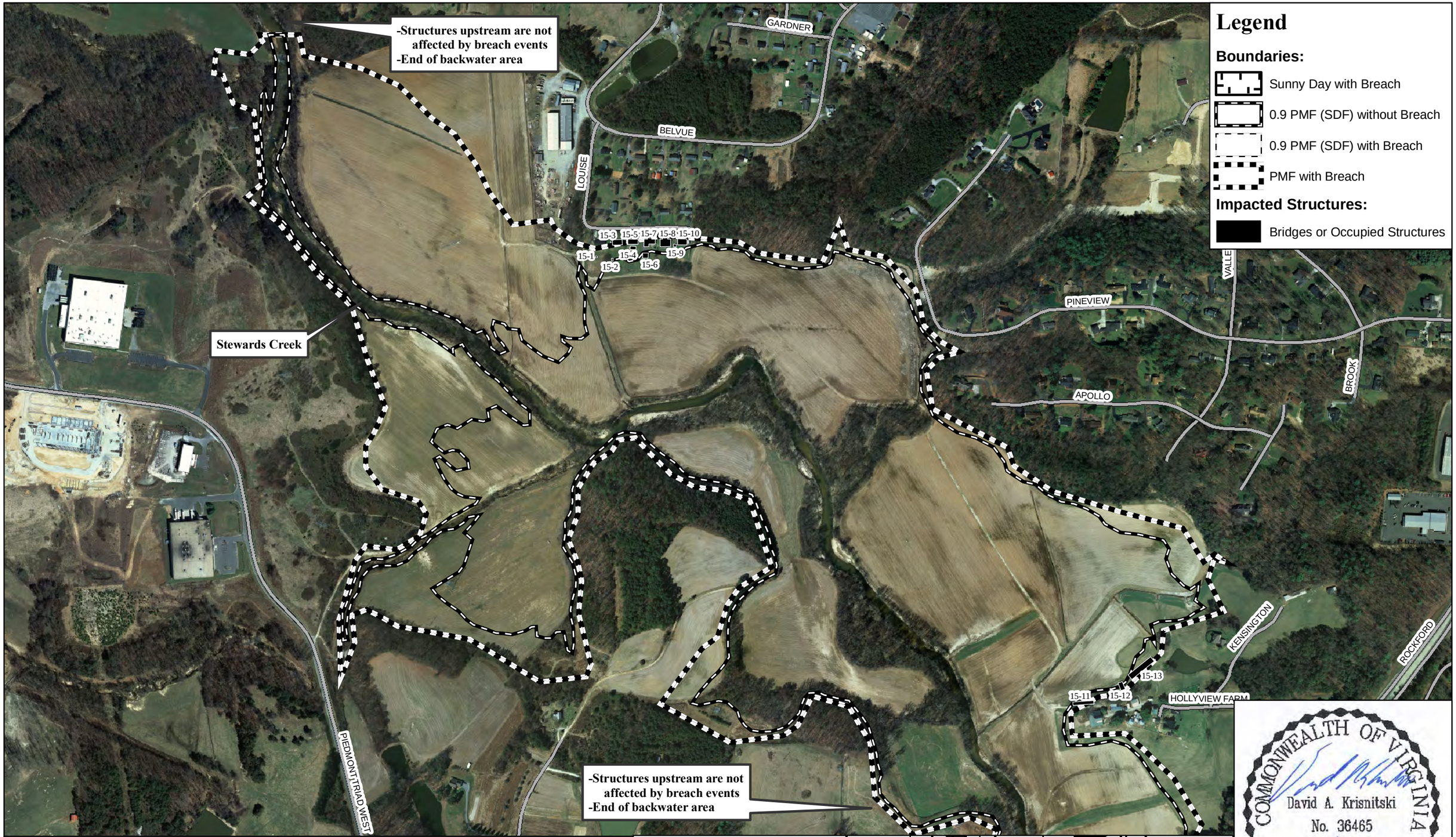


COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER



Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Inundation Map 15

0 150 300 600 900 1,200 Feet

N

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map15 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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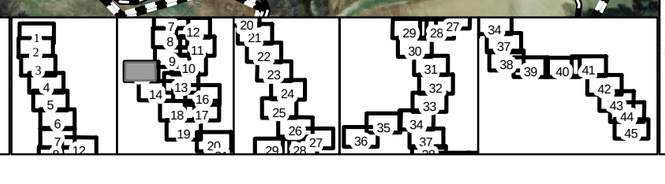
Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.



COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

QUARRY

OLD BUCK SHOALS

CHARLIE NORMAN

Quarry Inundated

Ararat River

Inundation Map 16

0 150 300 600 900 1,200 Feet

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

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Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map16 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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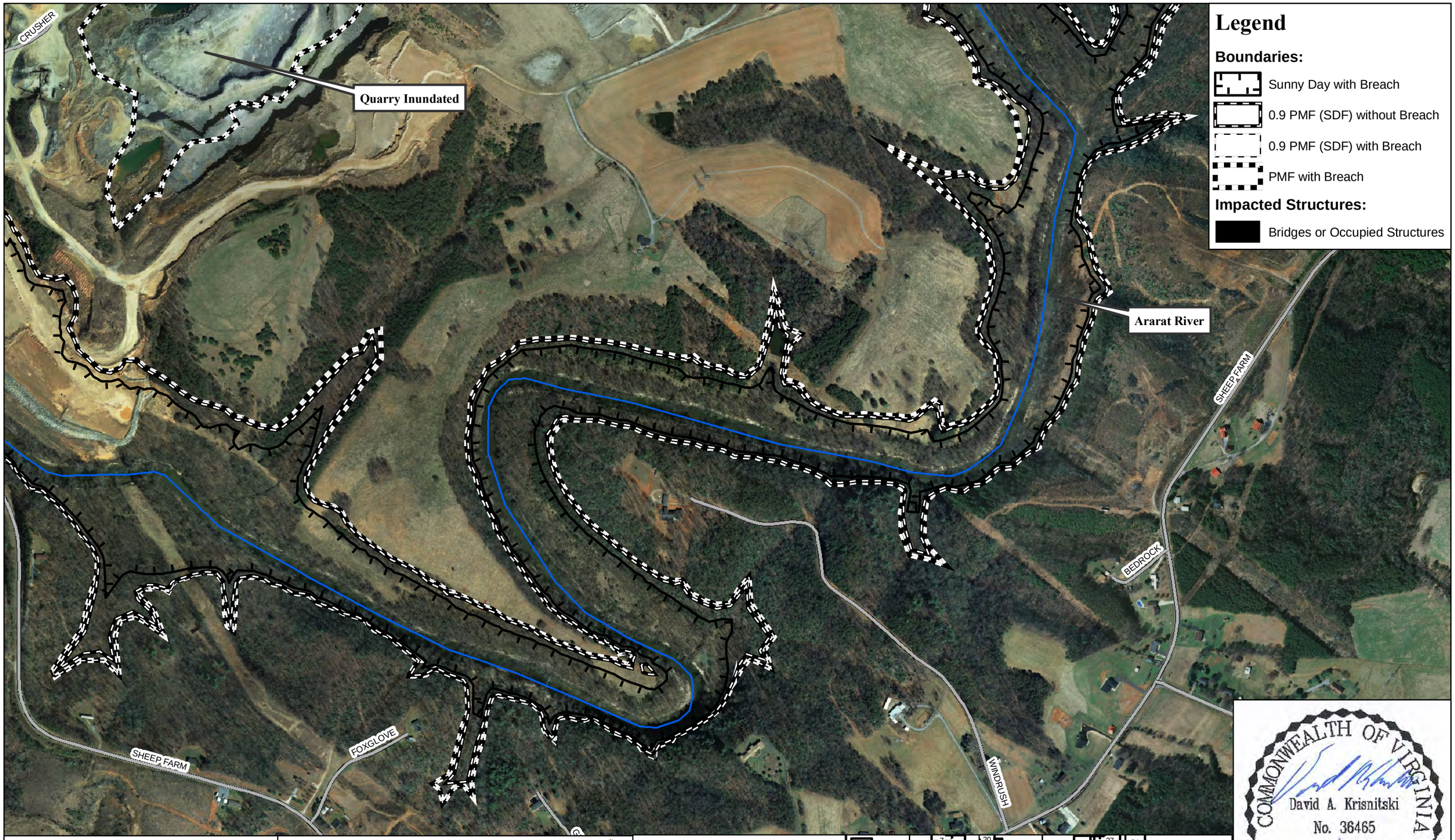
COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER



Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Inundation Map 17

0 150 300 600 900 1,200 Feet

N

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map17 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

NCDOT Bridge (Sheep Farm Road (Route 2119))
Stn: 105664.0 Elev: 957 feet

SD WS.	Elv:	950.8	FD:	0.0
PMF Breach WS.	Elv:	973.9	FD:	16.9
0.9 PMF Breach WS.	Elv:	973.3	FD:	16.3
0.9 PMF No Breach WS.	Elv:	969.1	FD:	12.1
TT SD:	Ini:	198.0	Peak:	246.6
TT PMF Breach:	Ini:	154.2	Peak:	188.4
TT 0.9 PMF Breach:	Ini:	158.4	Peak:	192.6
TT 0.9 PMF No Breach:	Ini:	189.6	Peak:	234.0
Dist. From Dam:		14.63 mi		

NCDOT Bridge (Interstate 74 EB and WB)
Stn: 102791.0 Elevation of Main Bridge: 968 feet

SD WS.	Elv:	950.8	FD:	0.0
PMF Breach WS.	Elv:	973.3	FD:	5.3
0.9 PMF Breach WS.	Elv:	972.7	FD:	4.7
0.9 PMF No Breach WS.	Elv:	968.4	FD:	0.4
TT SD:	Ini:	215.4	Peak:	259.8
TT PMF Breach:	Ini:	174.0	Peak:	201.0
TT 0.9 PMF Breach:	Ini:	176.4	Peak:	205.2
TT 0.9 PMF No Breach:	Ini:	209.4	Peak:	247.2
Dist. From Dam:		15.18 mi		

NCDOT Bridge (Interstate 74 EB and WB)
Stn: 102791.0 Elev: 972 feet (Bridge over Park Drive)

SD WS.	Elv:	950.8	FD:	0.0
PMF Breach WS.	Elv:	973.3	FD:	1.3
0.9 PMF Breach WS.	Elv:	972.7	FD:	0.7
0.9 PMF No Breach WS.	Elv:	968.4	FD:	0.0

YVRR Bridge (Yadkin Valley Railroad #2)
Stn: 107250.0 Elev: 970 feet

SD WS.	Elv:	958.5	FD:	0.0
PMF Breach WS.	Elv:	978.6	FD:	8.6
0.9 PMF Breach WS.	Elv:	980.6	FD:	10.6
0.9 PMF No Breach WS.	Elv:	976.0	FD:	6.0
TT SD:	Ini:	195.0	Peak:	243.6
TT PMF Breach:	Ini:	150.6	Peak:	183.6
TT 0.9 PMF Breach:	Ini:	154.2	Peak:	188.4
TT 0.9 PMF No Breach:	Ini:	186.0	Peak:	230.4
Dist. From Dam:		14.33 mi		

NCDOT Bridge (Interstate 74 EB and WB)
Stn: 102791.0 Elev: 978 feet
(Bridge over Yadkin Valley RR) (NOT IMPACTED)

Inundation Map 17

Ararat River

-Structures upstream are not affected by breach events
-End of backwater area

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

CRUSHER PARK
BR-13
BR-12
SHEEP FARM
NAVIGATOR
EXIT13 I 74 WB PARK DR
EXIT13 I 74 WB PARK D
CONNECTOR
I74
PARK
BWBR-7B
CONNECTOR
EXIT13 I 74 EB PARK DR
BR-14
PARK
PERU
SPECIAL K
18-1
18-2
18-3
18-4
18-5
18-6
18-7
18-8
18-9
18-10
18-11
18-12
18-13

Inundation Map 18

0 150 300 600 900 1,200 Feet

N

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FROEHLING & ROBERTSON, INC.
Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015 Scale: 1:6,000 1 inch = 500 ft Map18 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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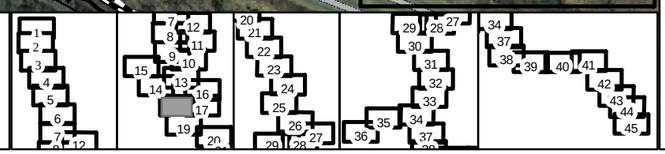

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Inundation Map 19

0 150 300 600 900 1,200 Feet

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC Onemap 2010 Aerial Photography				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map19 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Inundation Map 20

0 150 300 600 900 1,200 Feet

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map20 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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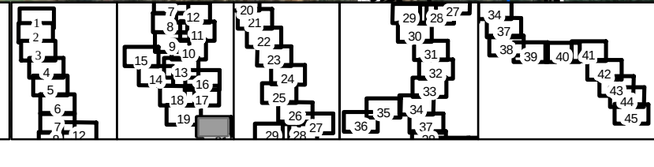

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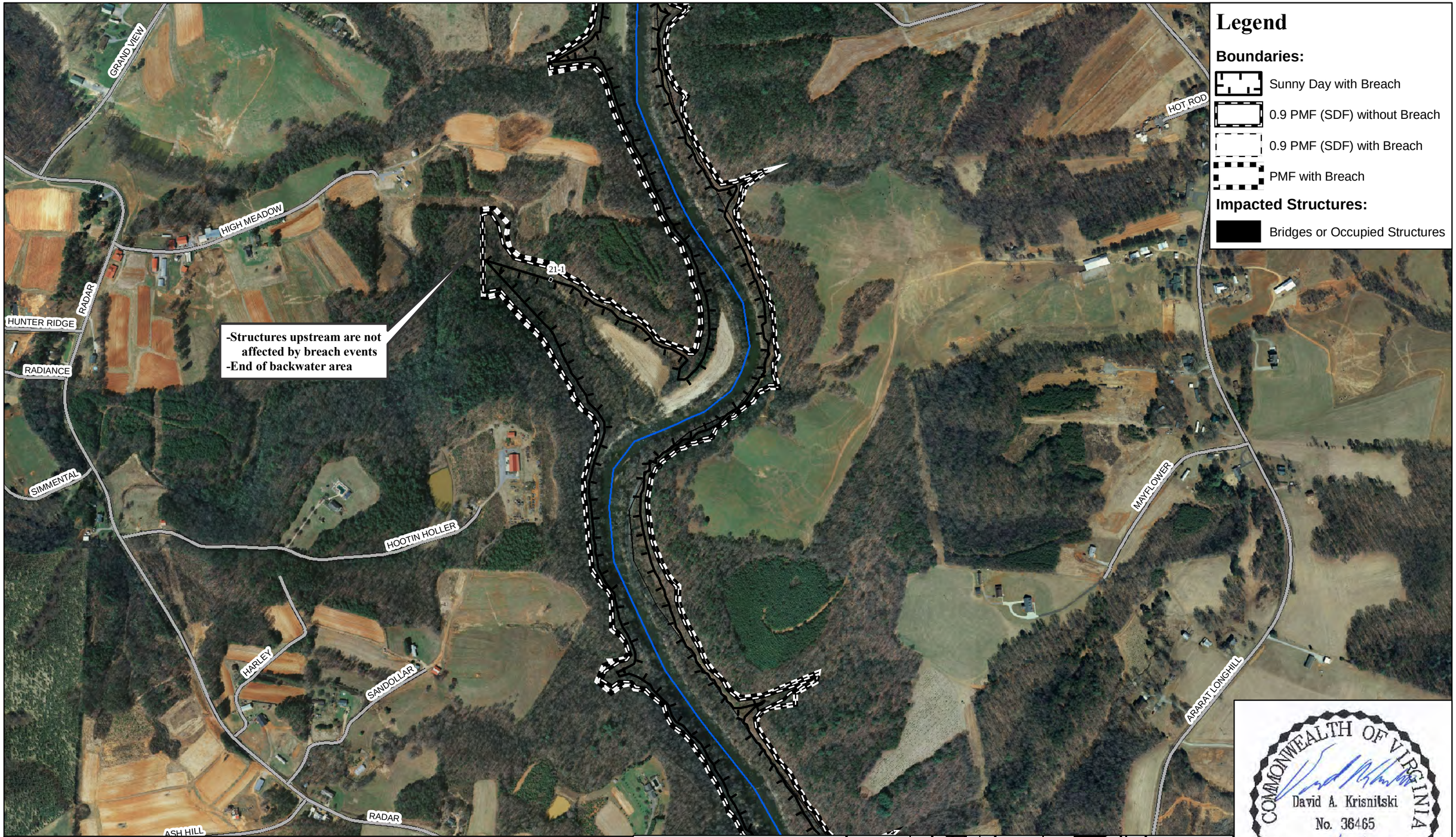

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Inundation Map 21

0 150 300 600 900 1,200 Feet

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC Onemap 2010 Aerial Photography				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map21 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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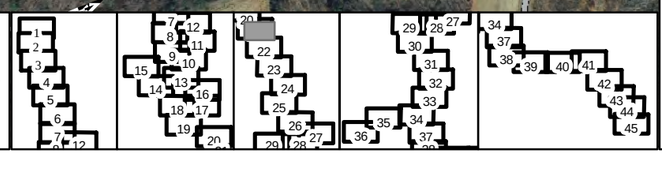

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (ARARAT LONGHILL RD)
Stn: 78250.0 Elev: 909 feet (BACKWATER)

SD WS.	Elv:	905.4	FD:	0.0
PMF Breach WS.	Elv:	924.4	FD:	15.4
0.9 PMF Breach WS.	Elv:	923.5	FD:	14.5
0.9 PMF No Breach WS.	Elv:	920.6	FD:	11.6
TT SD:	Ini:	267.6	Peak:	321.0
TT PMF Breach:	Ini:	206.4	Peak:	241.8
TT 0.9 PMF Breach:	Ini:	210.0	Peak:	246.0
TT 0.9 PMF No Breach:	Ini:	244.8	Peak:	290.4
Dist. From Dam:	19.83 mi			

-Structures upstream are not affected by breach events
-End of backwater area

-Structures upstream are not affected by breach events
-End of backwater area

NCDOT Bridge (Ararat Road (Route 2019))
Stn: 77558.0 Elev: 906 feet

SD WS.	Elv:	904.8	FD:	0.0
PMF Breach WS.	Elv:	924.5	FD:	18.5
0.9 PMF Breach WS.	Elv:	923.6	FD:	17.6
0.9 PMF No Breach WS.	Elv:	920.5	FD:	14.5
TT SD:	Ini:	269.4	Peak:	323.4
TT PMF Breach:	Ini:	207.6	Peak:	243.0
TT 0.9 PMF Breach:	Ini:	211.2	Peak:	247.2
TT 0.9 PMF No Breach:	Ini:	246.0	Peak:	292.2
Dist. From Dam:	19.96 mi			

YVRR Bridge (YVRR #5)
Stn: 78250.0 Elev: 893 feet (BACKWATER)

SD WS.	Elv:	905.4	FD:	12.4
PMF Breach WS.	Elv:	924.4	FD:	31.4
0.9 PMF Breach WS.	Elv:	923.5	FD:	30.5
0.9 PMF No Breach WS.	Elv:	920.6	FD:	27.6
TT SD:	Ini:	267.6	Peak:	321.0
TT PMF Breach:	Ini:	206.4	Peak:	241.8
TT 0.9 PMF Breach:	Ini:	210.0	Peak:	246.0
TT 0.9 PMF No Breach:	Ini:	244.8	Peak:	290.4
Dist. From Dam:	19.83 mi			

CASEY
TREE HAVEN
MARS
RADA
BWBR-9
BWRR-8
BOB
HOPE
22-4
22-5
ARARAT
BR-15
22-3
22-6
FAITH
22-14
22-18
22-10
22-7
22-13
22-12
22-15
22-17
22-8
22-9
22-11
22-16
22-1
22-2
MONET

Inundation Map 22

0 150 300 600 900 1,200 Feet

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FROEHLING & ROBERTSON, INC.
Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map22 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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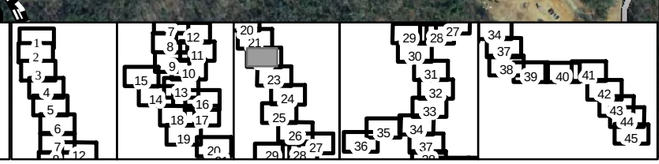

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Inundation Map 23

0 150 300 600 900 1,200 Feet

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map23 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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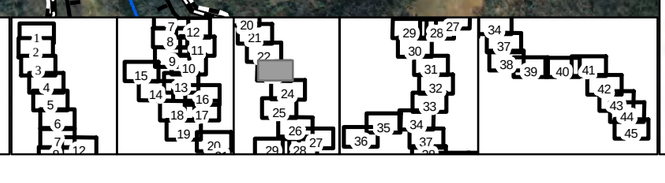

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

SAM FULK

WARTHOG

TOMS CREEK

NCDOT Bridge (TOMS CREEK RD)
Stn: 64750.0 Elev: 897 feet (BACKWATER)

SD WS.	Elv: 885.1	FD: 0.0	
PMF Breach WS.	Elv: 909.3	FD: 12.3	
0.9 PMF Breach WS.	Elv: 908.5	FD: 11.5	
0.9 PMF No Breach WS.	Elv: 905.9	FD: 8.9	
TT SD:	Ini: 299.4	Peak: 358.2	
TT PMF Breach:	Ini: 230.4	Peak: 269.4	
TT 0.9 PMF Breach:	Ini: 234.0	Peak: 273.6	
TT 0.9 PMF No Breach:	Ini: 270.6	Peak: 319.8	
Dist. From Dam:	23.90 mi		

-Structures upstream are not affected by breach events
-End of backwater area

BWBR-10

24-1

COX FORD

Inundation Map 24

0 150 300 600 900 1,200 Feet

N

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC Onemap 2010 Aerial Photography				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map24 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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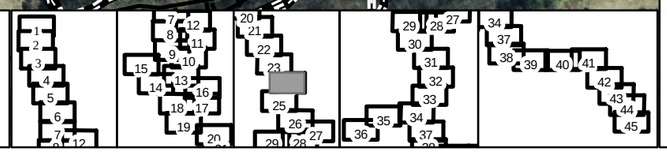

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
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1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (Route 268)
Stn: 61028.0 Elev: 891 feet

SD WS.	Elv:	879.6	FD:	0.0
PMF Breach WS.	Elv:	906.1	FD:	15.1
0.9 PMF Breach WS.	Elv:	905.2	FD:	14.2
0.9 PMF No Breach WS.	Elv:	902.7	FD:	11.7
TT SD:	Ini:	307.8	Peak:	369.0
TT PMF Breach:	Ini:	237.6	Peak:	277.8
TT 0.9 PMF Breach:	Ini:	241.2	Peak:	282.6
TT 0.9 PMF No Breach:	Ini:	277.8	Peak:	329.4
Dist. From Dam:	23.09 mi			

This Bridge is NOT IMPACTED by breach events

PRIDE ROCK
BRYANT MILL
MISTY CREEK
NC 268
BR-16
25-1
25-2
25-3
25-4
25-5
25-6
25-7
25-8
25-9
25-10

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Inundation Map 25

0 150 300 600 900 1,200 Feet

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FROEHLING & ROBERTSON, INC.
Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC Onemap 2010 Aerial Photography				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map25 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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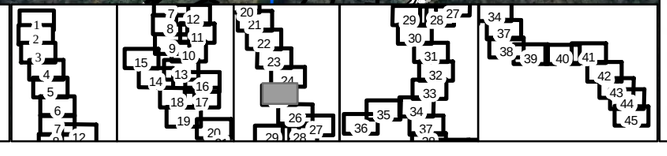
Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.



Inundation Map 26

0 150 300 600 900 1,200 Feet

N

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map26 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

Disclaimer: F&R makes no warranties or guarantees regarding the accuracy or completeness of geographic features shown on this map. Spatial accuracy of measurement provided by source agencies can be obtained by contacting F&R.

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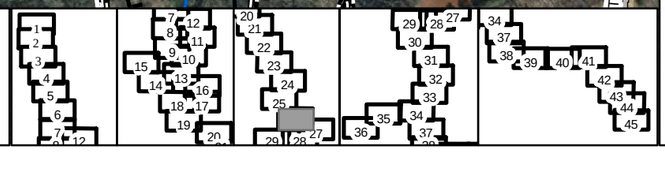

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (JIM MCKINNEY RD)
Stn: 49750.0 Elev: 876 feet (BACKWATER)

SD WS.	Elv:	867.3	FD:	0.0
PMF Breach WS.	Elv:	895.3	FD:	19.3
0.9 PMF Breach WS.	Elv:	894.4	FD:	18.4
0.9 PMF No Breach WS.	Elv:	891.8	FD:	15.8
TT SD:	Ini:	337.2	Peak:	403.2
TT PMF Breach:	Ini:	258.6	Peak:	303.0
TT 0.9 PMF Breach:	Ini:	262.8	Peak:	307.8
TT 0.9 PMF No Breach:	Ini:	300.0	Peak:	355.2
Dist. From Dam:	26.28 mi			

-Structures upstream are not affected by breach events
-End of backwater area

-Structures upstream are not affected by breach events
-End of backwater area

-Structures upstream are not affected by breach events
-End of backwater area

CO/NS
SHINAULT
DEACON
JOTISH
JIM MCKINNEY
BWBR-11
27-1
27-2
27-3
27-4
27-5
27-6
PINNACLE VIEW CHURCH
SINGLE OAK
RUITT FARM
LOST ACRES
VALE

Inundation Map 27

0 150 300 600 900 1,200 Feet

N

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map27 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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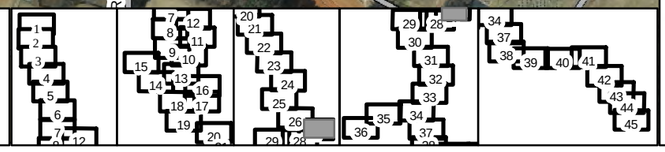

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Inundation Map 29

CRACKERS NECK

29-1

REED

Inundation Map 28

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map28 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NICHOLS

FLINCHUM

29-1

Ararat River

BILLY PRATT

LOWER PLACE

BULLINGTO

Inundation Map 29

0 150 300 600 900 1,200 Feet

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map29 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

Disclaimer: F&R makes no warranties or guarantees regarding the accuracy or completeness of geographic features shown on this map. Spatial accuracy of measurement provided by source agencies can be obtained by contacting F&R.

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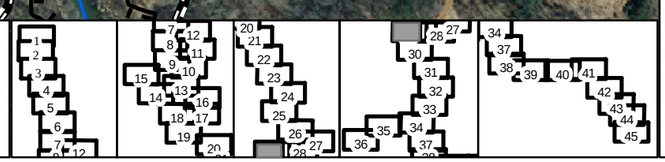

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

BULLINGTON

PORK

SLOPING PINE

FAWLING

EQUIPMENT

CORN

Ararat River

Inundation Map 30

0 150 300 600 900 1,200 Feet

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Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map30 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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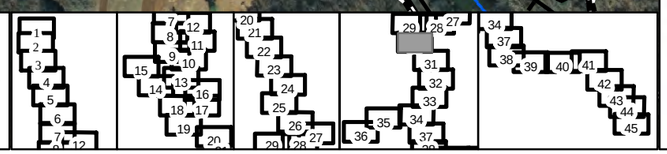

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

CORNER

TUCKER FARM

WALTER ONEAL

MATTHEWS MILL

Ararat River

REEVES

CAROWIND

PILOT CHURCH

Inundation Map 31

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
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Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC Onemap 2010 Aerial Photography				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map31 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

Disclaimer: F&R makes no warranties or guarantees regarding the accuracy or completeness of geographic features shown on this map. Spatial accuracy of measurement provided by source agencies can be obtained by contacting F&R.

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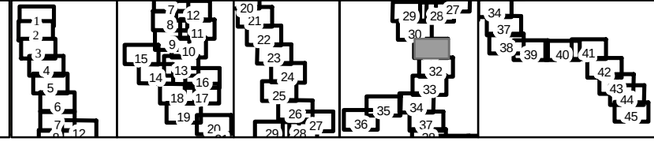

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

MOORELAND
REEVES
Ararat River
PILOT CHURCH
RIVERS EDGE
PAUL MARION
QUAKER CHURCH
32-1
32-2
32-3
32-4
32-5
32-6
32-7
WILLIE BAKER
BOO BOOS
MINT
TWIN CEDARS
REBUG
BR-18
Inundation Map 33

Inundation Map 32

0 150 300 600 900 1,200 Feet

N

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T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015
Scale: 1:6,000	1 inch = 500 ft
Map32 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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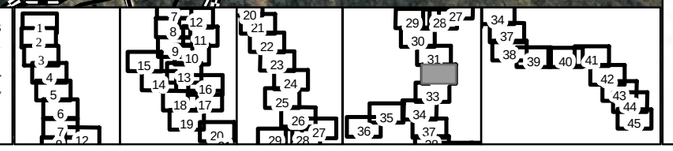

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (Quaker Church Road (Route 2080))
Stn: 14327.0 Elev: 826 feet

SD WS.	Elv:	818.6	FD:	0.0
PMF Breach WS.	Elv:	844.6	FD:	18.6
0.9 PMF Breach WS.	Elv:	843.8	FD:	17.8
0.9 PMF No Breach WS.	Elv:	841.9	FD:	15.9
TT SD:	Ini:	418.2	Peak:	494.4
TT PMF Breach:	Ini:	310.8	Peak:	364.8
TT 0.9 PMF Breach:	Ini:	315.6	Peak:	370.2
TT 0.9 PMF No Breach:	Ini:	355.2	Peak:	420.0
Dist. From Dam:		31.93 mi		

NCDOT Bridge (JOHN SCOTT ROAD)
Stn: 13500.0 Elev: 819 feet (BACKWATER)

SD WS.	Elv:	817.7	FD:	0.0
PMF Breach WS.	Elv:	842.9	FD:	23.9
0.9 PMF Breach WS.	Elv:	842.2	FD:	23.2
0.9 PMF No Breach WS.	Elv:	840.2	FD:	21.2
TT SD:	Ini:	420.6	Peak:	496.8
TT PMF Breach:	Ini:	313.2	Peak:	366.6
TT 0.9 PMF Breach:	Ini:	318.0	Peak:	372.6
TT 0.9 PMF No Breach:	Ini:	357.6	Peak:	421.8
Dist. From Dam:		32.33 mi		

MINT
TWIN CEDARS
FIREBUG
REEVES
BR-18
QUAKER CHURCH
BOO BOOS
BWBR-11B
JOHN SCOTT
Ararat River
33-1
KENT
DIXIE

Inundation Map 33

0 150 300 600 900 1,200 Feet

N

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map33 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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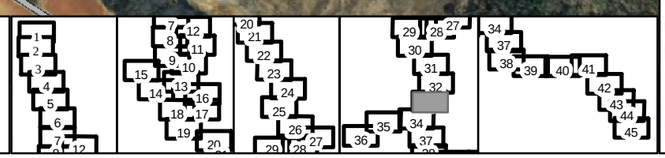

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

-Structures upstream are not affected by breach events
-End of backwater area

Ararat River

SAM SCOTT

JOHN MICKLES

ARABIAN HORSE

DOODLE

HARDY

BR-19

YVRR Bridge (Yadkin Valley Railroad #3)
Stn: 4358.0 Elev: 808 feet

SD WS.	Elv:	803.9	FD:	0.0
PMF Breach WS.	Elv:	829.2	FD:	21.2
0.9 PMF Breach WS.	Elv:	828.6	FD:	20.6
0.9 PMF No Breach WS.	Elv:	827.3	FD:	19.3
TT SD:	Ini:	439.8	Peak:	519.0
TT PMF Breach:	Ini:	325.2	Peak:	382.2
TT 0.9 PMF Breach:	Ini:	330.0	Peak:	388.2
TT 0.9 PMF No Breach:	Ini:	370.2	Peak:	438.0
Dist. From Dam:	33.82 mi			

YVRR Bridge (YVRR #12)
Stn: 874889.0 Elev: 793 feet (BACKWATER)

SD WS.	Elv:	800.7	FD:	7.7
PMF Breach WS.	Elv:	824.6	FD:	31.6
0.9 PMF Breach WS.	Elv:	824.3	FD:	31.3
0.9 PMF No Breach WS.	Elv:	823.5	FD:	30.5
TT SD:	Ini:	452.4	Peak:	534.6
TT PMF Breach:	Ini:	334.2	Peak:	396.0
TT 0.9 PMF Breach:	Ini:	339.0	Peak:	402.0
TT 0.9 PMF No Breach:	Ini:	379.2	Peak:	452.4
Dist. From Dam:	34.66 mi			

34-2

34-1

Yadkin River

Yadkin River

BWRR-20

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Inundation Map 34

0 150 300 600 900 1,200 Feet

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
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Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015 | Scale: 1:6,000 | 1 inch = 500 ft | Map34 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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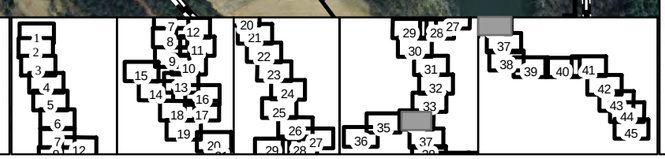
Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.



Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (SILOAM ROAD (NC 1003))
Stn: 4221.0 Elev: 815 feet (BACKWATER)

SD WS.	Elv:	803.2	FD:	0.0
PMF Breach WS.	Elv:	829.0	FD:	14.0
0.9 PMF Breach WS.	Elv:	828.5	FD:	13.5
0.9 PMF No Breach WS.	Elv:	827.1	FD:	12.1
TT SD:	Ini:	439.8	Peak:	519.6
TT PMF Breach:	Ini:	325.2	Peak:	382.8
TT 0.9 PMF Breach:	Ini:	330.0	Peak:	388.2
TT 0.9 PMF No Breach:	Ini:	370.2	Peak:	438.6

Dist. From Dam: 34.68 mi

YVRR Bridge (YVRR #6)
Stn: 4221.0 Elev: 801 feet (BACKWATER)

SD WS.	Elv:	803.2	FD:	2.2
PMF Breach WS.	Elv:	829.0	FD:	28.0
0.9 PMF Breach WS.	Elv:	828.5	FD:	27.5
0.9 PMF No Breach WS.	Elv:	827.1	FD:	26.1
TT SD:	Ini:	439.8	Peak:	519.6
TT PMF Breach:	Ini:	325.2	Peak:	382.8
TT 0.9 PMF Breach:	Ini:	330.0	Peak:	388.2
TT 0.9 PMF No Breach:	Ini:	370.2	Peak:	438.6

Dist. From Dam: 34.74 mi

NCDOT Bridge (HARDY RD)
Stn: 4221.0 Elev: 801 feet (BACKWATER)

SD WS.	Elv:	803.2	FD:	2.2
PMF Breach WS.	Elv:	829.0	FD:	28.0
0.9 PMF Breach WS.	Elv:	828.5	FD:	27.5
0.9 PMF No Breach WS.	Elv:	827.1	FD:	26.1
TT SD:	Ini:	439.8	Peak:	519.6
TT PMF Breach:	Ini:	325.2	Peak:	382.8
TT 0.9 PMF Breach:	Ini:	330.0	Peak:	388.2
TT 0.9 PMF No Breach:	Ini:	370.2	Peak:	438.6

Dist. From Dam: 34.76 mi

-Structures upstream are not affected by breach events
-End of backwater area

YVRR Bridge (YVRR #7)
Stn: 4221.0 Elev: 802 feet (BACKWATER)

SD WS.	Elv:	803.2	FD:	1.2
PMF Breach WS.	Elv:	829.0	FD:	27.0
0.9 PMF Breach WS.	Elv:	828.5	FD:	26.5
0.9 PMF No Breach WS.	Elv:	827.1	FD:	25.1
TT SD:	Ini:	439.8	Peak:	519.6
TT PMF Breach:	Ini:	325.2	Peak:	382.8
TT 0.9 PMF Breach:	Ini:	330.0	Peak:	388.2
TT 0.9 PMF No Breach:	Ini:	370.2	Peak:	438.6

Dist. From Dam: 35.25 mi

-Structures upstream are not affected by breach events
-End of backwater area

YVRR Bridge (YVRR #8)
Stn: 4221.0 Elev: 809 feet (BACKWATER)

SD WS.	Elv:	803.2	FD:	0.0
PMF Breach WS.	Elv:	829.0	FD:	20.0
0.9 PMF Breach WS.	Elv:	828.5	FD:	19.5
0.9 PMF No Breach WS.	Elv:	827.1	FD:	18.1
TT SD:	Ini:	439.8	Peak:	519.6
TT PMF Breach:	Ini:	325.2	Peak:	382.8
TT 0.9 PMF Breach:	Ini:	330.0	Peak:	388.2
TT 0.9 PMF No Breach:	Ini:	370.2	Peak:	438.6

Dist. From Dam: 35.55 mi

BWRR-12 BWRR-13 BWRR-14 BWRR-15 BWRR-16 BWRR-17 BWRR-18
35-1 35-2 35-3 35-4 35-5 35-6 35-7 35-8 35-9 35-10 35-11 35-12
36-1
Siloam Siloam Academy Hardy
Yadkin River

Inundation Map 36

-Structures upstream are not affected by breach events
-End of backwater area

Inundation Map 35

0 150 300 600 900 1,200 Feet

N

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map35 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

Disclaimer: F&R makes no warranties or guarantees regarding the accuracy or completeness of geographic features shown on this map. Spatial accuracy of measurement provided by source agencies can be obtained by contacting F&R.

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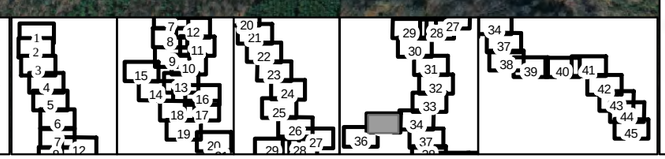

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

-Structures upstream are not affected by breach events
-End of backwater area

YVRR Bridge (YVRR #10)
Stn: 4221.0 Elev: 807 feet (BACKWATER)

SD WS.	Elv:	803.2	FD:	0.0
PMF Breach WS.	Elv:	829.0	FD:	22.0
0.9 PMF Breach WS.	Elv:	828.5	FD:	21.5
0.9 PMF No Breach WS.	Elv:	827.1	FD:	20.1
TT SD:	Ini:	439.8	Peak:	519.6
TT PMF Breach:	Ini:	325.2	Peak:	382.8
TT 0.9 PMF Breach:	Ini:	330.0	Peak:	388.2
TT 0.9 PMF No Breach:	Ini:	370.2	Peak:	438.6
Dist. From Dam:		35.97 mi		

BWRR-17
36-1
BWRR-18
Yadkin River

-Structures upstream are not affected by breach events
-End of study area

BWRR-19
Old Limerock Quarry

YVRR Bridge (YVRR #9)
Stn: 4221.0 Elev: 801 feet (BACKWATER)

SD WS.	Elv:	803.2	FD:	2.2
PMF Breach WS.	Elv:	829.0	FD:	28.0
0.9 PMF Breach WS.	Elv:	828.5	FD:	27.5
0.9 PMF No Breach WS.	Elv:	827.1	FD:	26.1
TT SD:	Ini:	439.8	Peak:	519.6
TT PMF Breach:	Ini:	325.2	Peak:	382.8
TT 0.9 PMF Breach:	Ini:	330.0	Peak:	388.2
TT 0.9 PMF No Breach:	Ini:	370.2	Peak:	438.6
Dist. From Dam:		35.82 mi		

YVRR Bridge (YVRR #11)
Stn: 4221.0 Elev: 808 feet (BACKWATER)

SD WS.	Elv:	803.2	FD:	0.0
PMF Breach WS.	Elv:	829.0	FD:	21.0
0.9 PMF Breach WS.	Elv:	828.5	FD:	20.5
0.9 PMF No Breach WS.	Elv:	827.1	FD:	19.1
TT SD:	Ini:	439.8	Peak:	519.6
TT PMF Breach:	Ini:	325.2	Peak:	382.8
TT 0.9 PMF Breach:	Ini:	330.0	Peak:	388.2
TT 0.9 PMF No Breach:	Ini:	370.2	Peak:	438.6
Dist. From Dam:		37.03 mi		

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Inundation Map 36

0 150 300 600 900 1,200 Feet

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map36 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Yadkin River

Robert Owens

John Mickles

JOHN MICKLES

ALL SEASONS

All Seasons

Friendship

Butner

BUTNER

Inundation Map 37

0 150 300 600 900 1,200 Feet

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

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Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map37 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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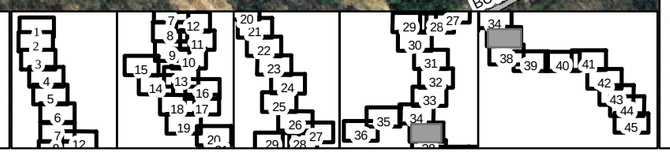

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (FRIENDSHIP ROAD #2)
Stn: 866672.0 Elev: 801 feet (BACKWATER)

SD WS.	Elv:	793.1	FD:	0.0
PMF Breach WS.	Elv:	812.9	FD:	11.9
0.9 PMF Breach WS.	Elv:	812.6	FD:	11.6
0.9 PMF No Breach WS.	Elv:	811.9	FD:	10.9
TT SD:	Ini:	472.2	Peak:	561.6
TT PMF Breach:	Ini:	345.0	Peak:	412.8
TT 0.9 PMF Breach:	Ini:	349.2	Peak:	418.8
TT 0.9 PMF No Breach:	Ini:	390.0	Peak:	469.8
Dist. From Dam:	36.54 mi			

NCDOT Bridge (FRIENDSHIP ROAD #1)
Stn: 868033.0 Elev: 795 feet (BACKWATER)

SD WS.	Elv:	794.3	FD:	0.0
PMF Breach WS.	Elv:	815.0	FD:	20.0
0.9 PMF Breach WS.	Elv:	814.7	FD:	19.7
0.9 PMF No Breach WS.	Elv:	813.9	FD:	18.9
TT SD:	Ini:	469.8	Peak:	558.0
TT PMF Breach:	Ini:	343.2	Peak:	409.2
TT 0.9 PMF Breach:	Ini:	347.4	Peak:	415.8
TT 0.9 PMF No Breach:	Ini:	388.2	Peak:	466.8
Dist. From Dam:	36.26 mi			

Yadkin River
BUTNER
Butner
38-2
38-1
BWBR-21
Walnut Grove
BWBR-22
River Ridge

Inundation Map 38

0 150 300 600 900 1,200 Feet

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

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Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC Onemap 2010 Aerial Photography				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map38 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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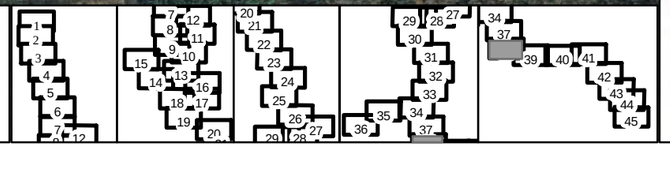

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Inundation Map 39

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
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Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map39 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

-Structures upstream are not affected by breach events
-End of backwater area

YADKIN RIVER PARK

YVRR Bridge (YVRR #13)
Stn: 849110.0 Elev: 760 feet (BACKWATER)

SD WS.	Elv:	758.2	FD:	0.0
PMF Breach WS.	Elv:	779.9	FD:	19.9
0.9 PMF Breach WS.	Elv:	779.6	FD:	19.6
0.9 PMF No Breach WS.	Elv:	778.8	FD:	18.8
TT SD:	Ini:	515.4	Peak:	609.6
TT PMF Breach:	Ini:	367.8	Peak:	444.6
TT 0.9 PMF Breach:	Ini:	372.6	Peak:	451.2
TT 0.9 PMF No Breach:	Ini:	413.4	Peak:	502.2
Dist. From Dam:	39.49 mi			

BWRR-23

Yadkin River

Inundation Map 40

0 150 300 600 900 1,200 Feet

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1734 Seibel Drive, N.E.
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T 540.344.7939 I F 540.344.3657

Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC Onemap 2010 Aerial Photography				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map40 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

-Structures upstream are not affected by breach events
-End of backwater area

-Structures upstream are not affected by breach events
-End of backwater area

Borden

BWRR-24

BWRR-23

Roby Fulk

YVRR Bridge (YVRR #14)
Stn: 846889.0 Elev: 757 feet (BACKWATER)
SD WS. Elv: 756.5 FD: 0.0
PMF Breach WS. Elv: 779.8 FD: 22.8
0.9 PMF Breach WS. Elv: 779.4 FD: 22.4
0.9 PMF No Breach WS. Elv: 778.6 FD: 21.6
TT SD: Ini: 519.6 Peak: 614.4
TT PMF Breach: Ini: 371.4 Peak: 449.4
TT 0.9 PMF Breach: Ini: 375.6 Peak: 456.0
TT 0.9 PMF No Breach: Ini: 417.0 Peak: 507.0
Dist. From Dam: 40.02 mi

Bottom

Union Hill

Squirrel Valley

Yadkin River

Inundation Map 40

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Inundation Map 41

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
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Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map41 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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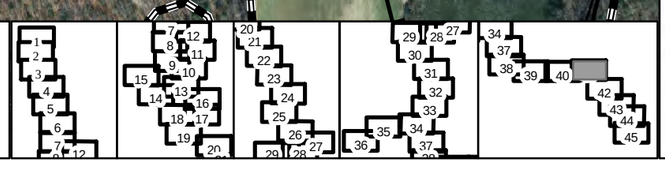

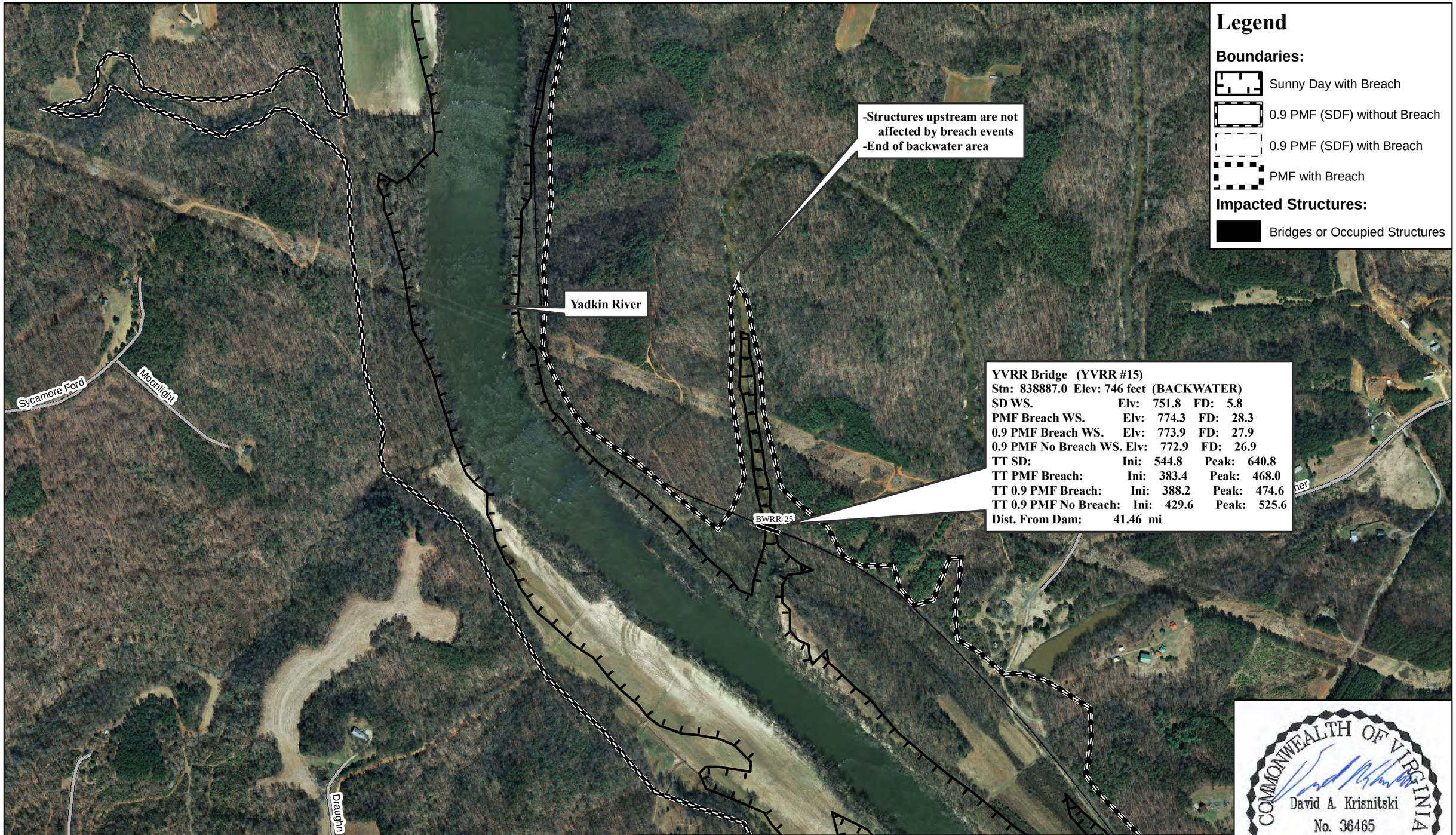

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

YVRR Bridge (YVRR #15)
Stn: 838887.0 Elev: 746 feet (BACKWATER)

SD WS.	Elv:	751.8	FD:	5.8
PMF Breach WS.	Elv:	774.3	FD:	28.3
0.9 PMF Breach WS.	Elv:	773.9	FD:	27.9
0.9 PMF No Breach WS.	Elv:	772.9	FD:	26.9

TT SD:	Ini:	544.8	Peak:	640.8
TT PMF Breach:	Ini:	383.4	Peak:	468.0
TT 0.9 PMF Breach:	Ini:	388.2	Peak:	474.6
TT 0.9 PMF No Breach:	Ini:	429.6	Peak:	525.6

Dist. From Dam: 41.46 mi

Inundation Map 42

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
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Location	Carroll County, Virginia
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Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map42 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Inundation Map 43

0 150 300 600 900 1,200 Feet

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
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Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
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Scale: 1:6,000 | 1 inch = 500 ft | Map43 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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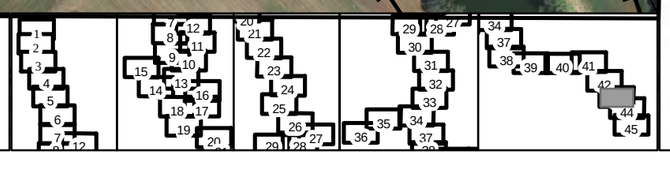
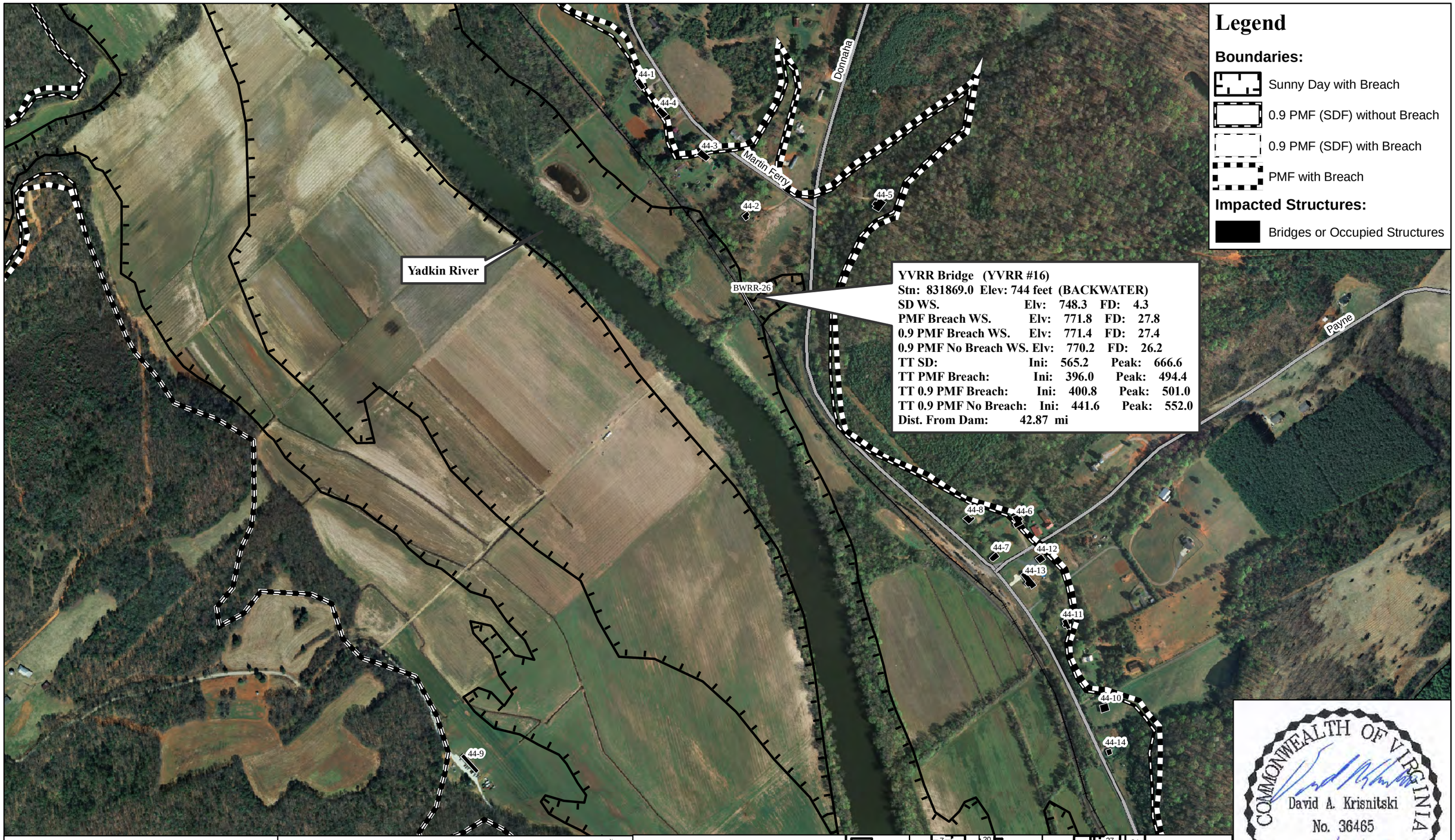


COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER



Inundation Map 44

0 150 300 600 900 1,200 Feet

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Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC Onemap 2010 Aerial Photography
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map44 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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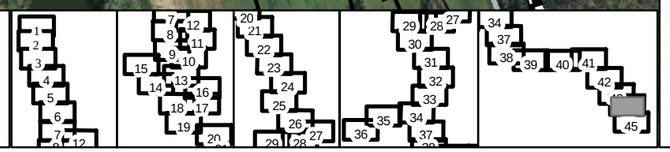

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Inundation Map 44

NCDOT Bridge (NC Route 67)
Stn: 825519.0 Elev: 768.5 feet

SD WS.	Elv:	745.4	FD:	0.0
PMF Breach WS.	Elv:	769.2	FD:	0.7
0.9 PMF Breach WS.	Elv:	768.6	FD:	0.1
0.9 PMF No Breach WS.	Elv:	767.2	FD:	0.0
TT SD:	Ini:	583.2	Peak:	693.0
TT PMF Breach:	Ini:	408.0	Peak:	523.8
TT 0.9 PMF Breach:	Ini:	412.8	Peak:	529.8
TT 0.9 PMF No Breach:	Ini:	453.6	Peak:	580.8

Dist. From Dam: 43.90 mi

-Structures upstream are not affected by breach events
-End of backwater area

NCDOT Bridge (DONNAHA ROAD)
Stn: 825957.0 Elev: 740 feet (BACKWATER)

SD WS.	Elv:	745.6	FD:	5.6
PMF Breach WS.	Elv:	769.4	FD:	29.4
0.9 PMF Breach WS.	Elv:	768.8	FD:	28.8
0.9 PMF No Breach WS.	Elv:	767.6	FD:	27.6
TT SD:	Ini:	580.8	Peak:	689.4
TT PMF Breach:	Ini:	407.4	Peak:	522.6
TT 0.9 PMF Breach:	Ini:	412.2	Peak:	528.6
TT 0.9 PMF No Breach:	Ini:	453.0	Peak:	579.6

Dist. From Dam: 43.82 mi

Station 824,100 (Approximate)
-Convergence of SDF Breach events water surface elevation (<1' difference)
-End of study area
-Approximately 44.17 miles downstream of Lovills Creek Dam

Yadkin River

NC-67
Unknown
BR-20
Reynolda
Littlefield
Donnaha
BWBR-27

44-9 44-14 45-1 45-2 45-3 45-4 45-5 45-6 45-7 45-8 45-9 45-10 45-11 45-12 45-13 45-14 45-15 45-16 45-17 45-18 45-19 45-20 45-21 45-22 45-23 45-24 45-25

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

COMMONWEALTH OF VIRGINIA
David A. Krisnitski
No. 36465
1/9/15
PROFESSIONAL ENGINEER

Inundation Map 45

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

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Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map45 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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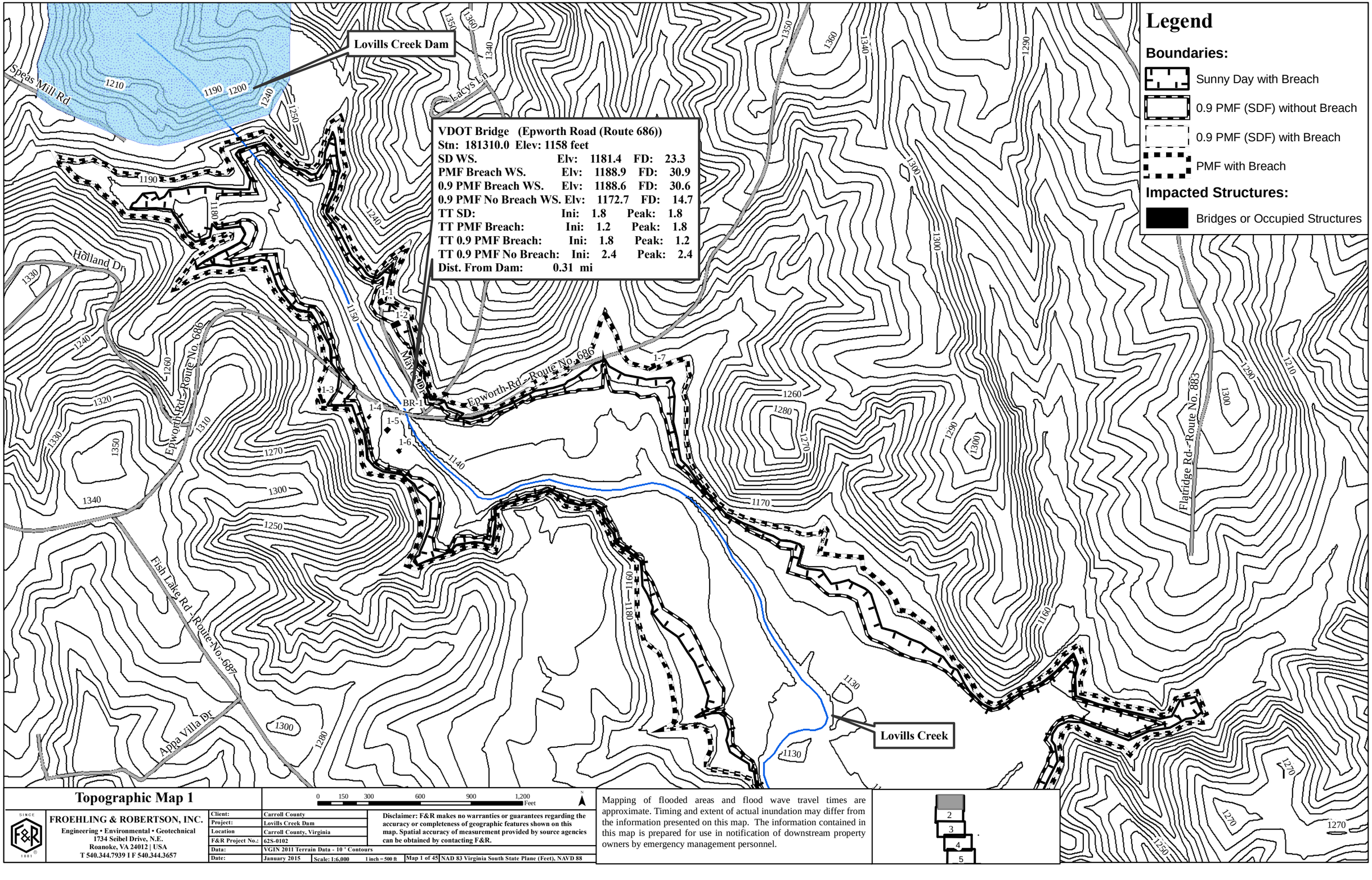

Topographic Map 1

FROEHLING & ROBERTSON, INC.
Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	VGIN 2011 Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map 1 of 45 NAD 83 Virginia South State Plane (Feet), NAVD 88

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2
3
4
5

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

VDOT Bridge (Fishlake Road (Route 687))
Stn: 175275.0 Elev: 1123 feet

SD WS.	Elv:	1134.0	FD:	11.0
PMF Breach WS.	Elv:	1149.2	FD:	26.2
0.9 PMF Breach WS.	Elv:	1147.9	FD:	24.9
0.9 PMF No Breach WS.	Elv:	1131.7	FD:	8.7
TT SD:	Ini:	14.4	Peak:	10.2
TT PMF Breach:	Ini:	12.0	Peak:	8.4
TT 0.9 PMF Breach:	Ini:	12.0	Peak:	7.8
TT 0.9 PMF No Breach:	Ini:	15.6	Peak:	12.0
Dist. From Dam:	1.45 mi			

Fish Lake Rd. - Route No. 687
Emerald Ln
Metairie Rd
Horizon Dr - Route No. 1140
Shady Acres Dr
Old Green Hill Rd
Lovills Creek
BR-2
2-1
2-2

Topographic Map 2

0 150 300 600 900 1,200 Feet

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	VGIN 2011 Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map 2 of 45 | NAD 83 Virginia South State Plane (Feet), NAVD 88

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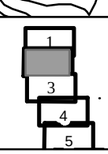

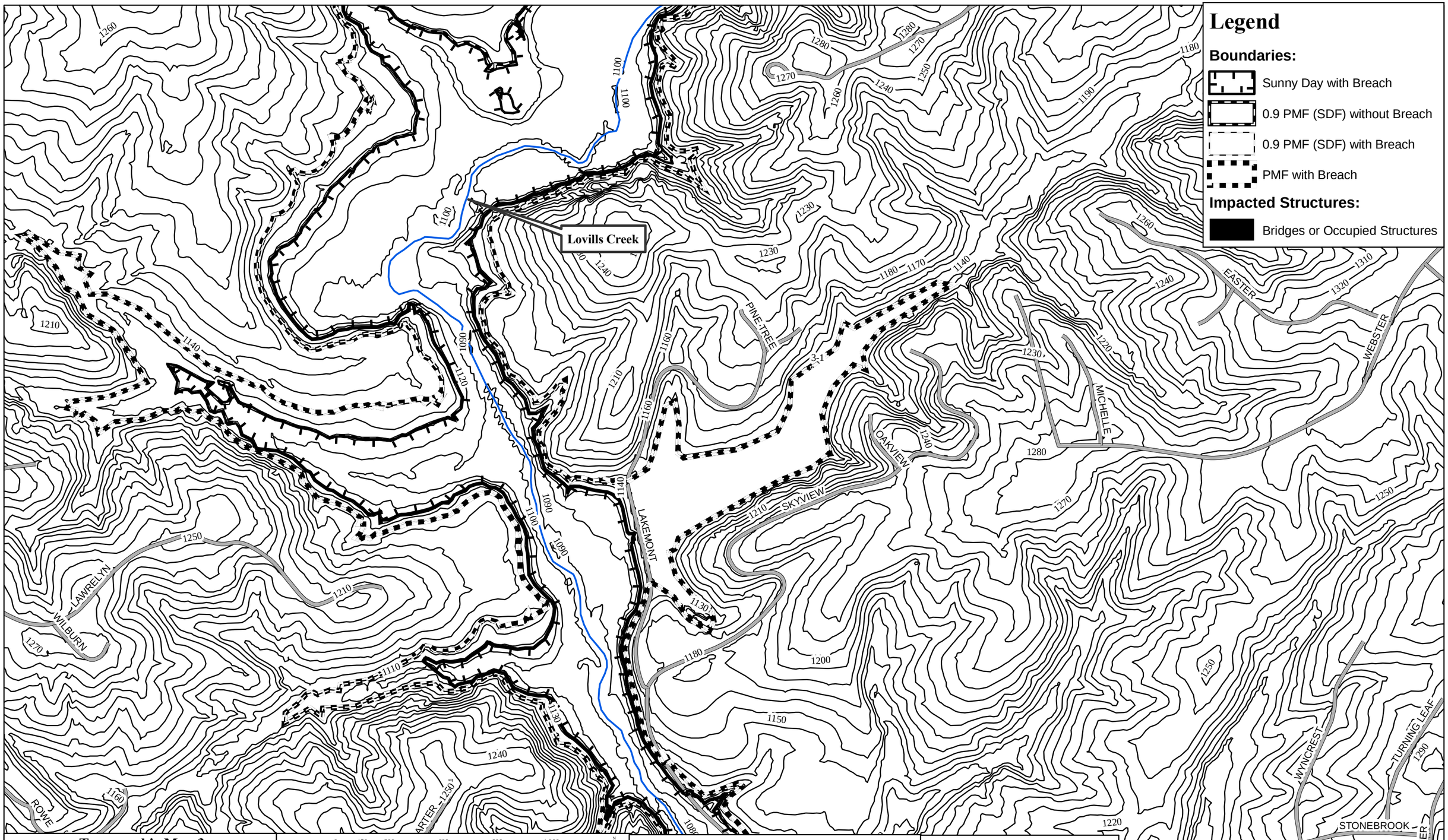

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Topographic Map 3

0 150 300 600 900 1,200 Feet

N

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1734 Seibel Drive, N.E.
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T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	VGIN 2011 Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map 3 of 45 NAD 83 Virginia South State Plane (Feet), NAVD 88

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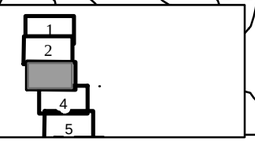

NCDOT Bridge (Greenhill Road (Route 1700))
Stn: 163555.0 Elev: 1081 feet

SD WS.	Elv:	1090.9	FD:	9.8
PMF Breach WS.	Elv:	1098.7	FD:	17.7
0.9 PMF Breach WS.	Elv:	1098.0	FD:	17.0
0.9 PMF No Breach WS.	Elv:	1091.4	FD:	10.4
TT SD:	Ini:	54.0	Peak:	38.4
TT PMF Breach:	Ini:	43.8	Peak:	30.0
TT 0.9 PMF Breach:	Ini:	44.4	Peak:	30.0
TT 0.9 PMF No Breach:	Ini:	57.0	Peak:	40.8
Dist. From Dam:	3.67 mi			

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Topographic Map 4

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map 4 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Topographic Map 5

0 150 300 600 900 1,200 Feet

N

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015
Scale: 1:6,000	1 inch = 500 ft
Map 5 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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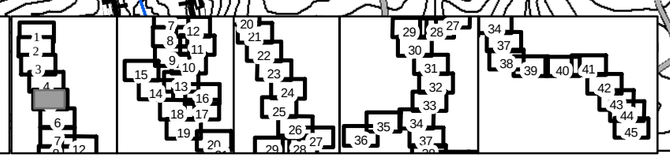

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (West Lebanon Street (Bus 52))
Stn: 151567.0 Elev: 1042.5 feet

SD WS.	Elv:	1045.5	FD:	3.0
PMF Breach WS.	Elv:	1052.4	FD:	9.9
0.9 PMF Breach WS.	Elv:	1051.7	FD:	9.2
0.9 PMF No Breach WS.	Elv:	1047.1	FD:	4.6
TT SD:	Ini:	81.0	Peak:	81.0
TT PMF Breach:	Ini:	64.8	Peak:	62.4
TT 0.9 PMF Breach:	Ini:	66.0	Peak:	62.4
TT 0.9 PMF No Breach:	Ini:	82.8	Peak:	80.4
Dist. From Dam:	5.94 mi			

Topographic Map 6

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC LIDAR Terrain Data - 10 ' Contours				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map 6 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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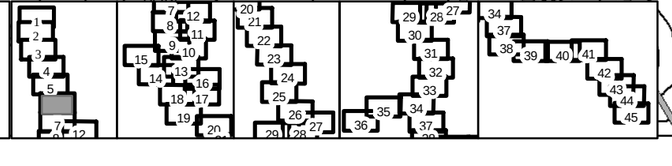

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (West Independence Blvd (Route 89))
Stn: 144741.0 Elev: 1020 feet

SD WS.	**Elv:**	**1027.0**	**FD:**	**7.0**
PMF Breach WS.	**Elv:**	**1034.3**	**FD:**	**14.3**
0.9 PMF Breach WS.	**Elv:**	**1033.7**	**FD:**	**13.7**
0.9 PMF No Breach WS.	**Elv:**	**1030.9**	**FD:**	**10.9**
TT SD:	**Ini:**	**96.0**	**Peak:**	**106.2**
TT PMF Breach:	**Ini:**	**74.4**	**Peak:**	**77.4**
TT 0.9 PMF Breach:	**Ini:**	**75.6**	**Peak:**	**78.6**
TT 0.9 PMF No Breach:	**Ini:**	**96.0**	**Peak:**	**102.6**
Dist. From Dam:	**7.23 mi**			

Topographic Map 7

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 | 1 inch = 500 ft | Map 7 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (West Pine Street)
Stn: 143311.0 Elev: 1015.3 feet

SD WS.	Elv:	1024.7	FD:	9.4
PMF Breach WS.	Elv:	1028.9	FD:	13.6
0.9 PMF Breach WS.	Elv:	1027.9	FD:	12.6
0.9 PMF No Breach WS.	Elv:	1023.4	FD:	8.1
TT SD:	Ini:	100.2	Peak:	112.2
TT PMF Breach:	Ini:	76.2	Peak:	79.8
TT 0.9 PMF Breach:	Ini:	77.4	Peak:	81.0
TT 0.9 PMF No Breach:	Ini:	98.4	Peak:	106.2
Dist. From Dam:	7.50 mi			

Topographic Map 8

0 150 300 600 900 1,200 Feet

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T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 | 1 inch = 500 ft | Map 8 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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NCDOT Bridge (Worth Street (Route 1371))
Stn: 139113.0 Elev: 1001 feet

SD WS.	**Elv:**	**1010.3**	**FD:**	**9.3**
PMF Breach WS.	**Elv:**	**1022.8**	**FD:**	**21.8**
0.9 PMF Breach WS.	**Elv:**	**1022.1**	**FD:**	**21.1**
0.9 PMF No Breach WS.	**Elv:**	**1014.6**	**FD:**	**13.6**
TT SD:	**Ini:**	**109.8**	**Peak:**	**130.2**
TT PMF Breach:	**Ini:**	**83.4**	**Peak:**	**93.6**
TT 0.9 PMF Breach:	**Ini:**	**84.6**	**Peak:**	**94.8**
TT 0.9 PMF No Breach:	**Ini:**	**107.4**	**Peak:**	**123.0**
Dist. From Dam:	**8.30 mi**			

YVRR Bridge (Yadkin Valley Railroad #1)
Stn: 137500.0 Elev: 997 feet

SD WS.	**Elv:**	**1007.3**	**FD:**	**10.3**
PMF Breach WS.	**Elv:**	**1019.8**	**FD:**	**22.8**
0.9 PMF Breach WS.	**Elv:**	**1018.5**	**FD:**	**21.5**
0.9 PMF No Breach WS.	**Elv:**	**1011.7**	**FD:**	**14.7**
TT SD:	**Ini:**	**114.6**	**Peak:**	**141.0**
TT PMF Breach:	**Ini:**	**86.4**	**Peak:**	**100.2**
TT 0.9 PMF Breach:	**Ini:**	**87.6**	**Peak:**	**102.0**
TT 0.9 PMF No Breach:	**Ini:**	**111.6**	**Peak:**	**132.6**
Dist. From Dam:	**8.60 mi**			

NCDOT Bridge (Rockford Street (Hwy 601))
Stn: 137152.0 Elev: 997 feet

SD WS.	**Elv:**	**1006.4**	**FD:**	**9.4**
PMF Breach WS.	**Elv:**	**1017.5**	**FD:**	**20.5**
0.9 PMF Breach WS.	**Elv:**	**1016.2**	**FD:**	**19.2**
0.9 PMF No Breach WS.	**Elv:**	**1010.4**	**FD:**	**13.4**
TT SD:	**Ini:**	**115.2**	**Peak:**	**142.2**
TT PMF Breach:	**Ini:**	**87.0**	**Peak:**	**101.4**
TT 0.9 PMF Breach:	**Ini:**	**88.2**	**Peak:**	**102.6**
TT 0.9 PMF No Breach:	**Ini:**	**112.2**	**Peak:**	**133.2**
Dist. From Dam:	**8.67 mi**			

NCDOT Bridge (US Route 52 NB and SB)
Stn: 135439.0 Elev: 1001.3 feet

SD WS.	**Elv:**	**996.8**	**FD:**	**-4.5**
PMF Breach WS.	**Elv:**	**1013.5**	**FD:**	**12.2**
0.9 PMF Breach WS.	**Elv:**	**1012.3**	**FD:**	**11.0**
0.9 PMF No Breach WS.	**Elv:**	**1006.9**	**FD:**	**5.6**
TT SD:	**Ini:**	**118.8**	**Peak:**	**148.8**
TT PMF Breach:	**Ini:**	**91.2**	**Peak:**	**108.0**
TT 0.9 PMF Breach:	**Ini:**	**93.0**	**Peak:**	**109.8**
TT 0.9 PMF No Breach:	**Ini:**	**117.6**	**Peak:**	**142.2**
Dist. From Dam:	**8.99 mi**			

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Lovills Creek

Topographic Map 9

0 150 300 600 900 1,200 Feet

N

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015 | Scale: 1:6,000 | 1 inch = 500 ft | Map 9 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (ANDY GRIFFITH PKWY (US 52 #2))
Stn: 134000.0 Elev: 1000 feet (BACKWATER)

SD WS.	Elv:	995.7	FD: 0.0
PMF Breach WS.	Elv:	1013.2	FD: 13.2
0.9 PMF Breach WS.	Elv:	1011.9	FD: 11.9
0.9 PMF No Breach WS.	Elv:	1006.4	FD: 6.4
TT SD:	Ini:	124.8	Peak: 156.0
TT PMF Breach:	Ini:	98.4	Peak: 117.6
TT 0.9 PMF Breach:	Ini:	100.8	Peak: 120.0
TT 0.9 PMF No Breach:	Ini:	127.2	Peak: 154.8
Dist. From Dam:	9.68 mi		

Lovills Creek

Inundation Map 9

-Structures upstream are not affected by breach events
-End of backwater area

Ararat River

NCDOT Bridge (Carter Street (Route 2116))
Stn: 133140.0 Elev: 991.3 feet

SD WS.	Elv:	995.0	FD: 3.7
PMF Breach WS.	Elv:	1013.0	FD: 21.7
0.9 PMF Breach WS.	Elv:	1011.7	FD: 20.4
0.9 PMF No Breach WS.	Elv:	1006.1	FD: 14.8
TT SD:	Ini:	128.4	Peak: 162.6
TT PMF Breach:	Ini:	103.2	Peak: 125.4
TT 0.9 PMF Breach:	Ini:	105.0	Peak: 127.8
TT 0.9 PMF No Breach:	Ini:	132.0	Peak: 163.8
Dist. From Dam:	9.43 mi		

-Structures upstream are not affected by breach events
-End of backwater area

NCDOT Bridge (ANDY GRIFFITH PKWY (US 52 #3))
Stn: 134000.0 Elev: 1000 feet (BACKWATER)

SD WS.	Elv:	995.7	FD: 0.0
PMF Breach WS.	Elv:	1013.2	FD: 13.2
0.9 PMF Breach WS.	Elv:	1011.9	FD: 11.9
0.9 PMF No Breach WS.	Elv:	1006.4	FD: 6.4
TT SD:	Ini:	124.8	Peak: 156.0
TT PMF Breach:	Ini:	98.4	Peak: 117.6
TT 0.9 PMF Breach:	Ini:	100.8	Peak: 120.0
TT 0.9 PMF No Breach:	Ini:	127.2	Peak: 154.8
Dist. From Dam:	9.83 mi		

Topographic Map 10

0 150 300 600 900 1,200 Feet

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Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC LIDAR Terrain Data - 10 ' Contours				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map10 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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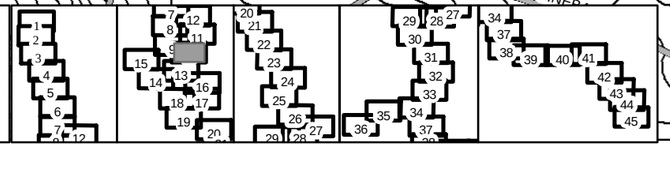

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (HAMBURG ST)
Stn: 134000.0 Elev: 1002 feet (BACKWATER)

SD WS.	Elv:	995.7	FD:	0.0
PMF Breach WS.	Elv:	1013.2	FD:	11.2
0.9 PMF Breach WS.	Elv:	1011.9	FD:	9.9
0.9 PMF No Breach WS.	Elv:	1006.4	FD:	4.4
TT SD:	Ini:	124.8	Peak:	156.0
TT PMF Breach:	Ini:	98.4	Peak:	117.6
TT 0.9 PMF Breach:	Ini:	100.8	Peak:	120.0
TT 0.9 PMF No Breach:	Ini:	127.2	Peak:	154.8
Dist. From Dam:	11.39 mi			

Culverts already impacted by local flooding not by breach events

Bridge not impacted by breach events

NCDOT Bridge (SOUTH MAIN ST)
Stn: 134000.0 Elev: 1001 feet (BACKWATER)

SD WS.	Elv:	995.7	FD:	0.0
PMF Breach WS.	Elv:	1013.2	FD:	12.2
0.9 PMF Breach WS.	Elv:	1011.9	FD:	10.9
0.9 PMF No Breach WS.	Elv:	1006.4	FD:	5.4
TT SD:	Ini:	124.8	Peak:	156.0
TT PMF Breach:	Ini:	98.4	Peak:	117.6
TT 0.9 PMF Breach:	Ini:	100.8	Peak:	120.0
TT 0.9 PMF No Breach:	Ini:	127.2	Peak:	154.8
Dist. From Dam:	10.78 mi			

Ararat River

BWBR-4 BWBR-3

HAMBURG FIRST SMITH BIRCHWOOD SAMURAI WELCOME BAPTIST CHURCH TRIPLE CROSS LONDON WILLIAM PENN ANGEL BARBER BLUFF HALE ANDOVER CULBERT DURHAM FAIRVIEW MEADOW STONE MONARCH MIDWAY WESTFIELD BROADWAY BARNETT FARM MULBERRY MAIN BURNLEY RAMP NEW TRAM GILLWALT OAK HALL VINE DIAMOND NEWSOME SUNSET BANNER JEFFERIES AUSTIN WENSLEY VERNON FAIRFAX FAIRFIELD

11-1 11-2 11-3 11-4 11-5 11-6 11-7 11-8 11-9 11-10 11-11 11-12 11-13 11-14 11-15 11-16 11-17 11-18 11-19 11-20 11-21 11-22 11-23 11-24 11-25 11-26 11-27 11-28 11-29 11-30 11-31 11-32 11-33 11-34 11-35 11-36 11-37 11-38 11-39 11-40 11-41 11-42 11-43 11-44 11-45 11-46 11-47 11-48 11-49 11-50 11-51 11-52 11-53 11-54 11-55 11-56 11-57 11-58 11-59 11-60 11-61 11-62

Topographic Map 11

0 150 300 600 900 1,200 Feet N

SINCE F&R 1881
FROEHLING & ROBERTSON, INC.
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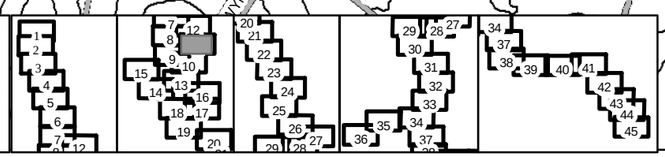
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015 | Scale: 1:6,000 | 1 inch = 500 ft | Map11 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

Disclaimer: F&R makes no warranties or guarantees regarding the accuracy or completeness of geographic features shown on this map. Spatial accuracy of measurement provided by source agencies can be obtained by contacting F&R.

Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.



Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

-Structures upstream are not affected by breach events
-End of backwater area

Bridge not impacted by breach events

12-1 12-2 12-3 12-4 12-5 12-6 12-7 12-8 12-9

GALLOWAY · BRUNSWICK · JUNCTION · HINES · INDEPENDENCE · NATIONS · TRINITY · OAK · CITY HALL · VIRGINIA · MOORE · WILLOW · MARKET · FRANKLIN · CANTEEN · GRAVES · RENFRO · CHERRY · CHURCH · MAIN · WILSON · KORNER · SPRING · SPAUGH · RIVERSIDE · BOTTOM · TESH · OLD E PINE · LUTHER RIDGE · KNOB · GRANITE QUARRY · PINE · HIDDEN HILL · HARDING · RADIO HILL · CITY VIEW · CIRCLE · BITTING · GIN BLOSSOM · HOME · SHERMAN · WELCOME BAPTIST CHURCH · HAMBURG · SECOND · FIRST · SMITH · WOMBAT · BIRCHWOOD · SAMURAI

0 150 300 600 900 1,200 Feet

N

Topographic Map 12

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map12 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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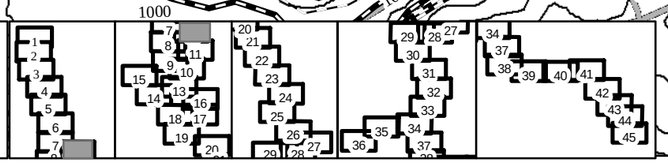

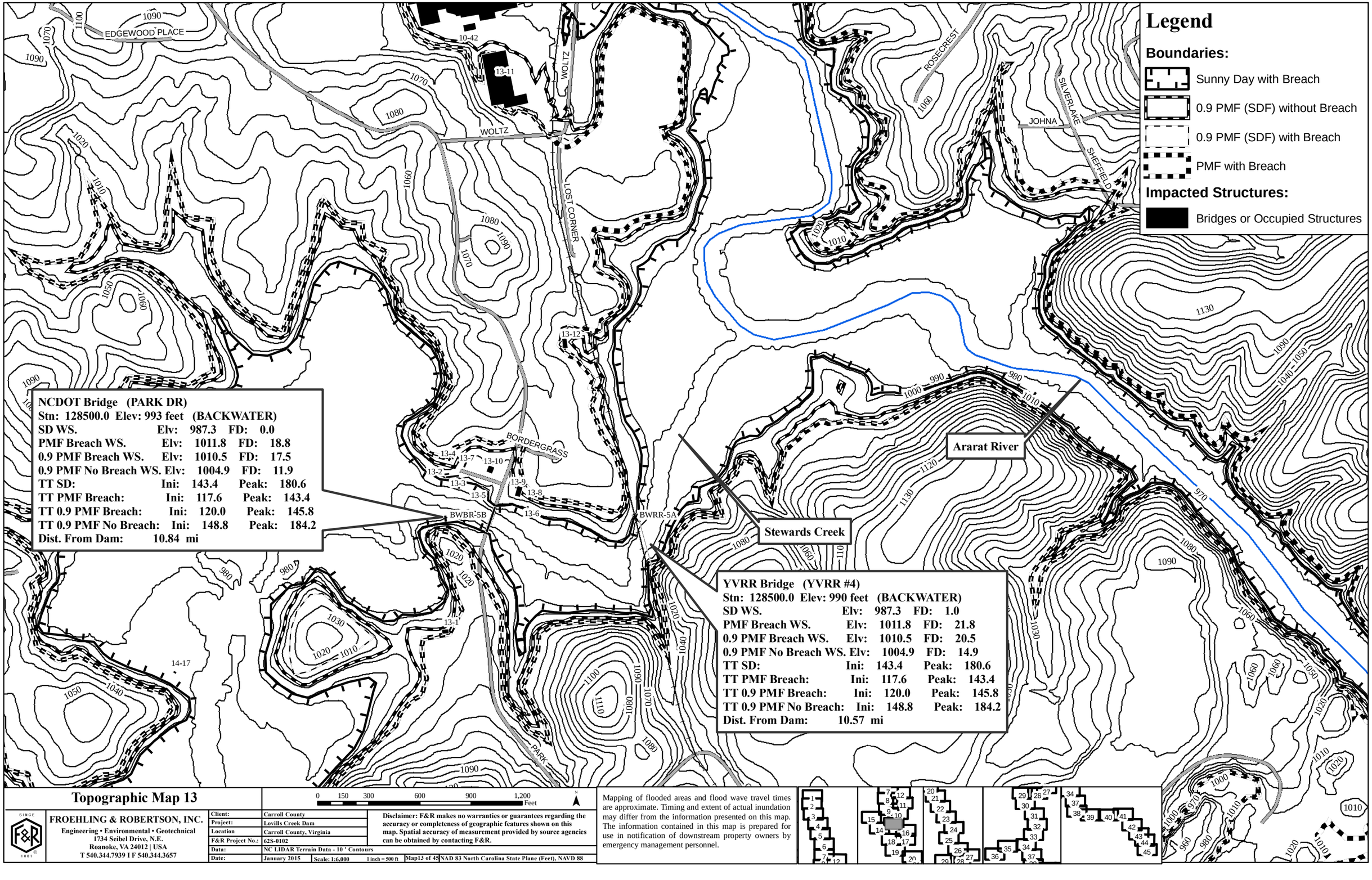

Topographic Map 13

0 150 300 600 900 1,200 Feet

N

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015 Scale: 1:6,000 1 inch = 500 ft Map13 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

Disclaimer: F&R makes no warranties or guarantees regarding the accuracy or completeness of geographic features shown on this map. Spatial accuracy of measurement provided by source agencies can be obtained by contacting F&R.

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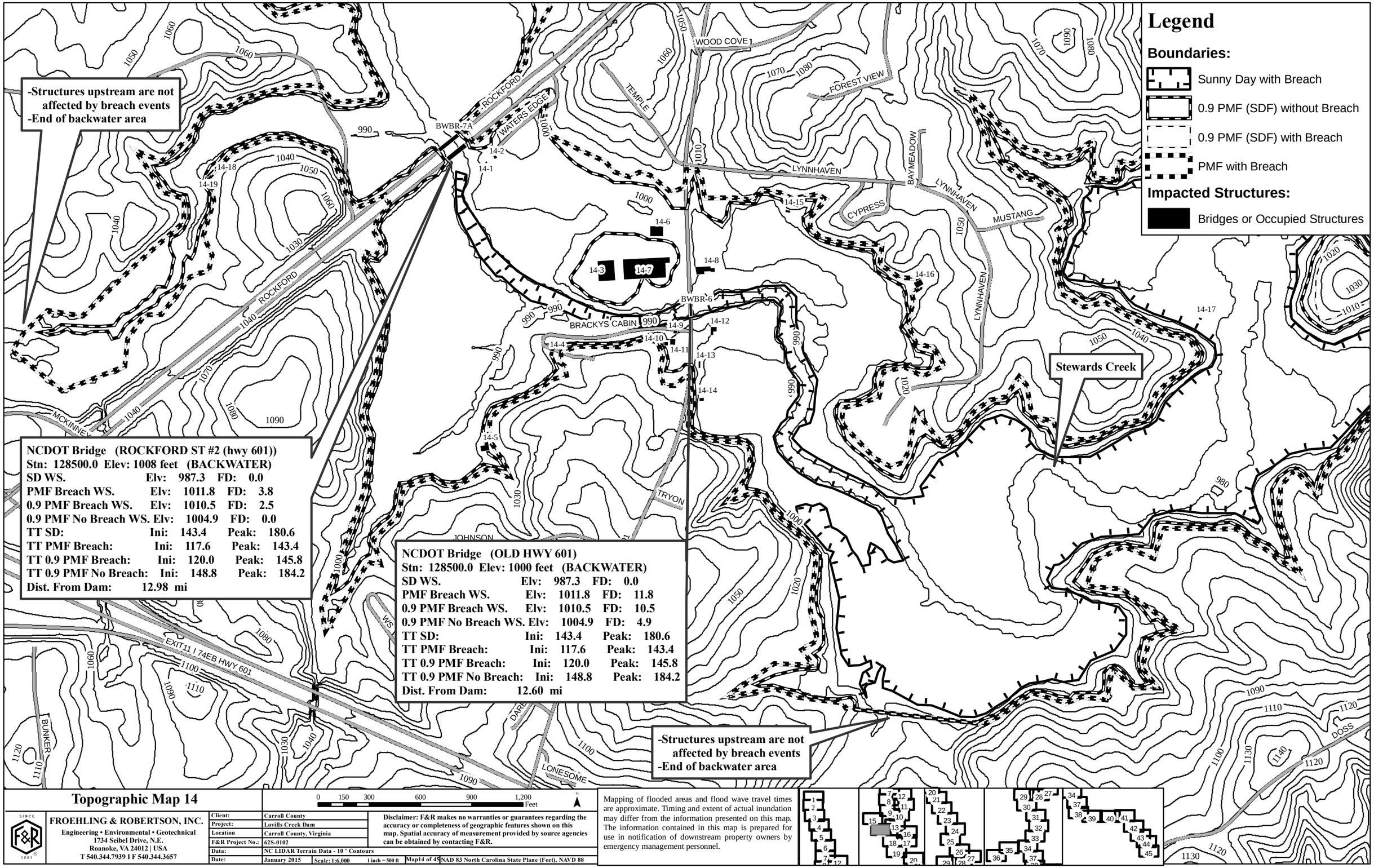
-Structures upstream are not affected by breach events
-End of backwater area
NCDOT Bridge (ROCKFORD ST #2 (hwy 601))
Stn: 128500.0 Elev: 1008 feet (BACKWATER)
SD WS. Elv: 987.3 FD: 0.0
PMF Breach WS. Elv: 1011.8 FD: 3.8
0.9 PMF Breach WS. Elv: 1010.5 FD: 2.5
0.9 PMF No Breach WS. Elv: 1004.9 FD: 0.0
TT SD: Ini: 143.4 Peak: 180.6
TT PMF Breach: Ini: 117.6 Peak: 143.4
TT 0.9 PMF Breach: Ini: 120.0 Peak: 145.8
TT 0.9 PMF No Breach: Ini: 148.8 Peak: 184.2
Dist. From Dam: 12.98 mi
NCDOT Bridge (OLD HWY 601)
Stn: 128500.0 Elev: 1000 feet (BACKWATER)
SD WS. Elv: 987.3 FD: 0.0
PMF Breach WS. Elv: 1011.8 FD: 11.8
0.9 PMF Breach WS. Elv: 1010.5 FD: 10.5
0.9 PMF No Breach WS. Elv: 1004.9 FD: 4.9
TT SD: Ini: 143.4 Peak: 180.6
TT PMF Breach: Ini: 117.6 Peak: 143.4
TT 0.9 PMF Breach: Ini: 120.0 Peak: 145.8
TT 0.9 PMF No Breach: Ini: 148.8 Peak: 184.2
Dist. From Dam: 12.60 mi
-Structures upstream are not affected by breach events
-End of backwater area
Legend
Boundaries:
Sunny Day with Breach
0.9 PMF (SDF) without Breach
0.9 PMF (SDF) with Breach
PMF with Breach
Impacted Structures:
Bridges or Occupied Structures
BWBR-7A
BWBR-6
14-1
14-2
14-3
14-4
14-5
14-6
14-7
14-8
14-9
14-10
14-11
14-12
14-13
14-14
14-15
14-16
14-17
14-18
14-19
ROCKFORD
WATERS EDGE
TEMPLE
WOOD COVE
FOREST VIEW
LYNNHAVEN
BAYMEADOW
CYPRESS
MUSTANG
BRACKYS CABIN
MCKINNEY
EXIT 11 I 74EB HWY 601
BUNKER
TRYON
JOHNSON
LONESOME
DOSS
Stewards Creek
Topographic Map 14
0 150 300 600 900 1,200 Feet
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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657
Client: Carroll County
Project: Lovills Creek Dam
Location Carroll County, Virginia
F&R Project No.: 62S-0102
Data: NC LIDAR Terrain Data - 10 ' Contours
Date: January 2015 Scale: 1:6,000 1 inch = 500 ft Map14 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88
Disclaimer: F&R makes no warranties or guarantees regarding the accuracy or completeness of geographic features shown on this map. Spatial accuracy of measurement provided by source agencies can be obtained by contacting F&R.
Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.

-Structures upstream are not affected by breach events
-End of backwater area

-Structures upstream are not affected by breach events
-End of backwater area

Stewards Creek

GARDNER
BELVUE
LOUISE
PINEVIEW
APOLLO
BROOK
VALLEY
KENSINGTON
ROCKFORD
HOLLYVIEW FARM
GLEN ECHO
OLD HWY 601
WOOD COVE
TEMPLE
PIEDMONT TRIAD WEST

15-1 15-2 15-3 15-4 15-5 15-6 15-7 15-8 15-9 15-10 15-11 15-12 15-13

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Topographic Map 15

0 150 300 600 900 1,200 Feet

N

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Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC LIDAR Terrain Data - 10 ' Contours				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map15 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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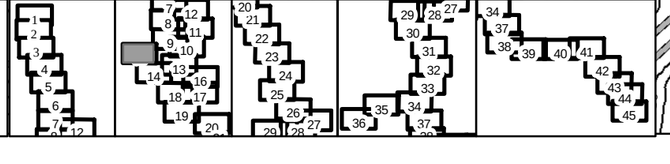

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

QUARRY

OLD BUCK SHOALS

CHARLIE NORMAN

SHEEP FARM

Quarry Inundated

Ararat River

Topographic Map 16

0 150 300 600 900 1,200 Feet

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Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC LIDAR Terrain Data - 10 ' Contours				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map16 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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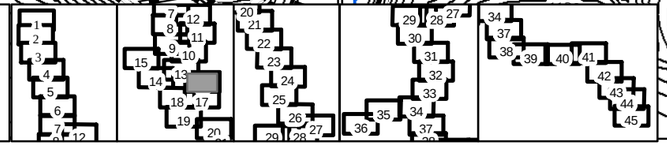

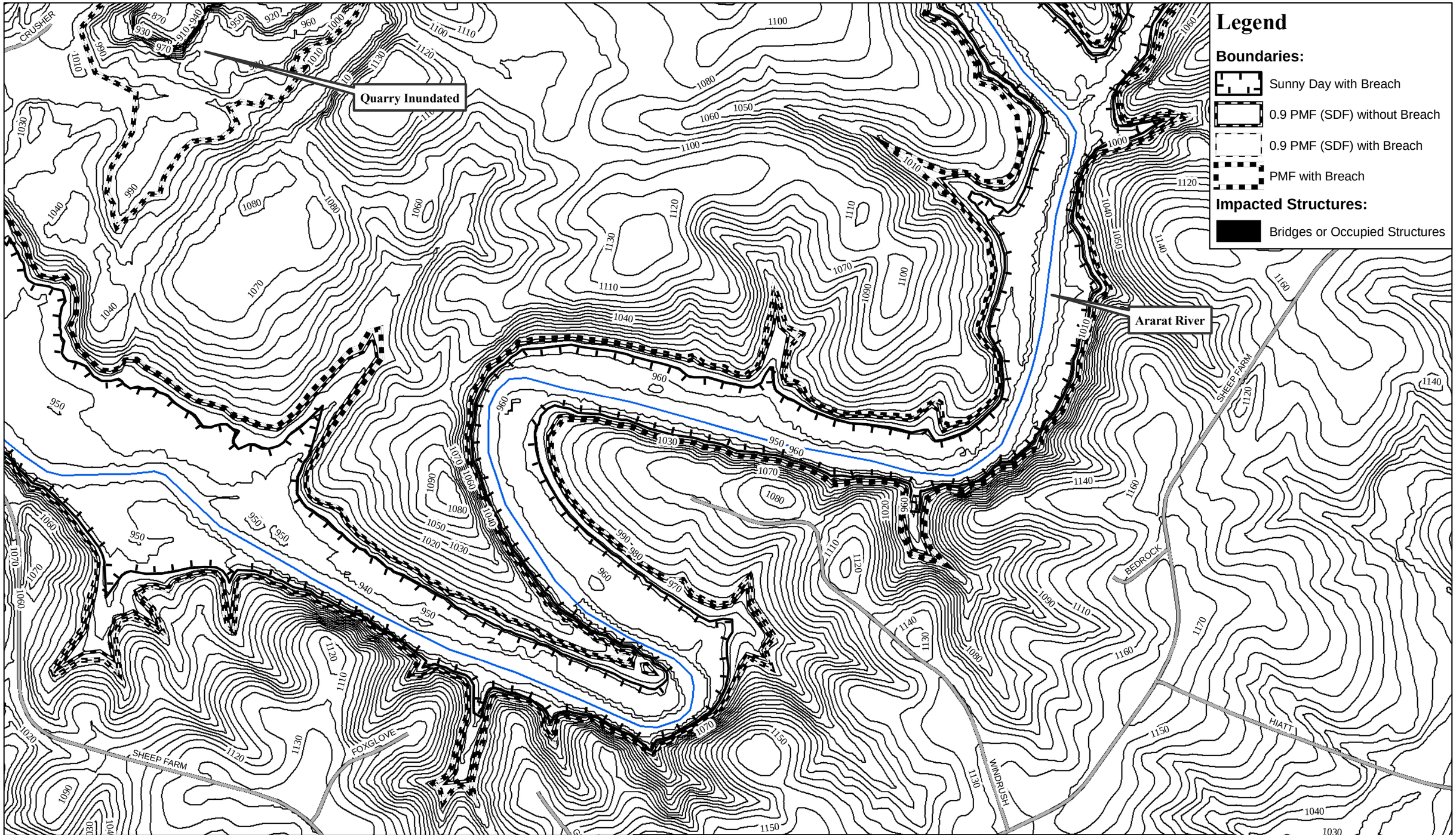

Topographic Map 17

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map17 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.

NCDOT Bridge (Sheep Farm Road (Route 2119))
Stn: 105664.0 Elev: 957 feet

SD WS.	Elv:	950.8	FD:	0.0
PMF Breach WS.	Elv:	973.9	FD:	16.9
0.9 PMF Breach WS.	Elv:	973.3	FD:	16.3
0.9 PMF No Breach WS.	Elv:	969.1	FD:	12.1
TT SD:	Ini:	198.0	Peak:	246.6
TT PMF Breach:	Ini:	154.2	Peak:	188.4
TT 0.9 PMF Breach:	Ini:	158.4	Peak:	192.6
TT 0.9 PMF No Breach:	Ini:	189.6	Peak:	234.0
Dist. From Dam:		14.63 mi		

NCDOT Bridge (Interstate 74 EB and WB)
Stn: 102791.0 Elevation of Main Bridge: 968 feet

SD WS.	Elv:	950.8	FD:	0.0
PMF Breach WS.	Elv:	973.3	FD:	5.3
0.9 PMF Breach WS.	Elv:	972.7	FD:	4.7
0.9 PMF No Breach WS.	Elv:	968.4	FD:	0.4
TT SD:	Ini:	215.4	Peak:	259.8
TT PMF Breach:	Ini:	174.0	Peak:	201.0
TT 0.9 PMF Breach:	Ini:	176.4	Peak:	205.2
TT 0.9 PMF No Breach:	Ini:	209.4	Peak:	247.2
Dist. From Dam:		15.18 mi		

NCDOT Bridge (Interstate 74 EB and WB)
Stn: 102791.0 Elev: 972 feet (Bridge over Park Drive)

SD WS.	Elv:	950.8	FD:	0.0
PMF Breach WS.	Elv:	973.3	FD:	1.3
0.9 PMF Breach WS.	Elv:	972.7	FD:	0.7
0.9 PMF No Breach WS.	Elv:	968.4	FD:	0.0

YVRR Bridge (Yadkin Valley Railroad #2)
Stn: 107250.0 Elev: 970 feet

SD WS.	Elv:	958.5	FD:	0.0
PMF Breach WS.	Elv:	978.6	FD:	8.6
0.9 PMF Breach WS.	Elv:	980.6	FD:	10.6
0.9 PMF No Breach WS.	Elv:	976.0	FD:	6.0
TT SD:	Ini:	195.0	Peak:	243.6
TT PMF Breach:	Ini:	150.6	Peak:	183.6
TT 0.9 PMF Breach:	Ini:	154.2	Peak:	188.4
TT 0.9 PMF No Breach:	Ini:	186.0	Peak:	230.4
Dist. From Dam:		14.33 mi		

NCDOT Bridge (Interstate 74 EB and WB)
Stn: 102791.0 Elev: 978 feet
(Bridge over Yadkin Valley RR) (NOT IMPACTED)

Inundation Map 17

Ararat River

-Structures upstream are not affected by breach events
-End of backwater area

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Topographic Map 18

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map18 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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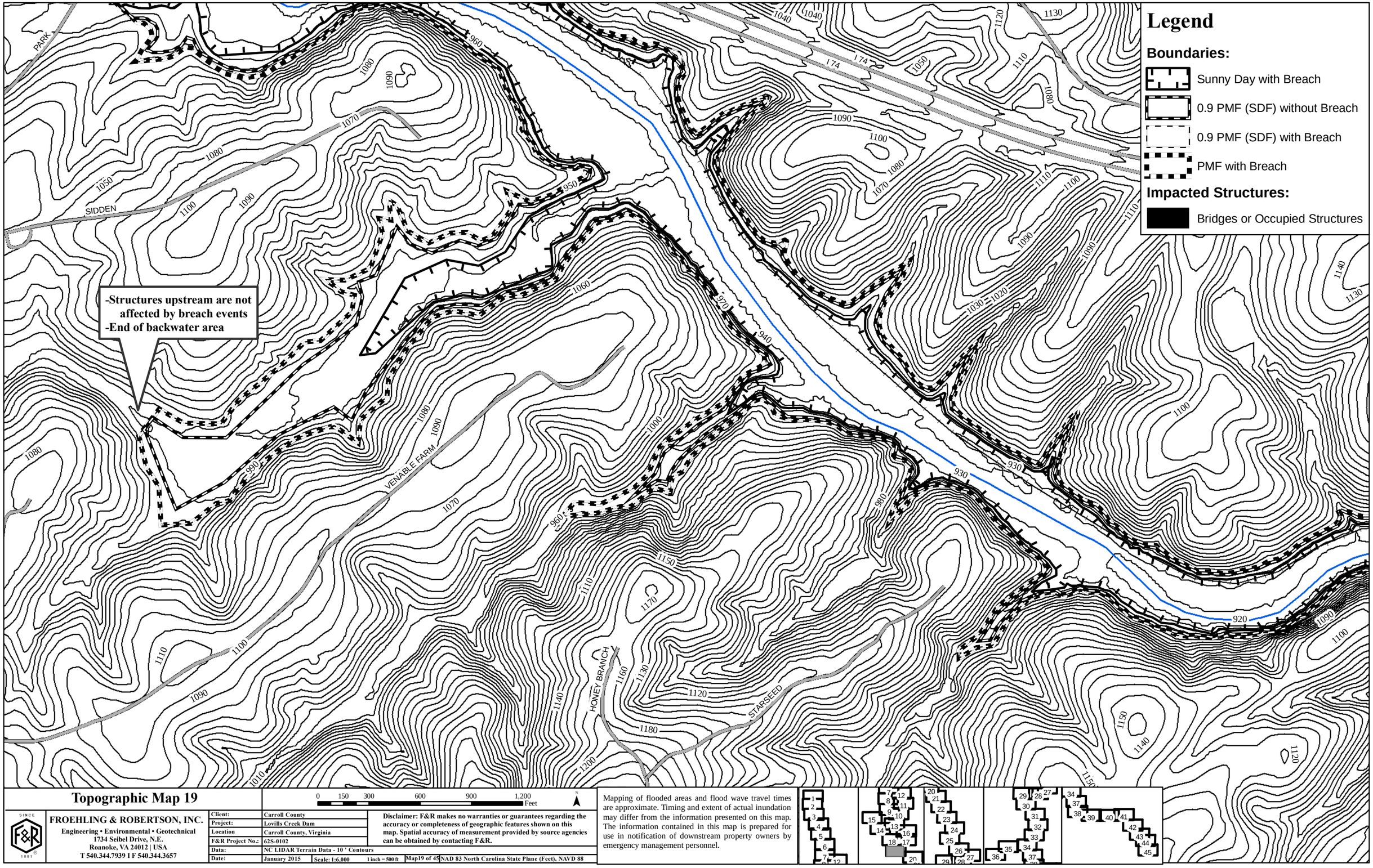

Topographic Map 19

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015 | Scale: 1:6,000 | 1 inch = 500 ft | Map19 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NEW FRONTIER
MASTERS
WIMBLEDON
SILAS RIDGE
GRAND VIEW
RICHMOND

Topographic Map 20

0 150 300 600 900 1,200 Feet

N

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015 | Scale: 1:6,000 | 1 inch = 500 ft | Map20 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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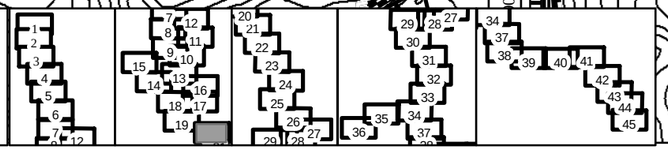

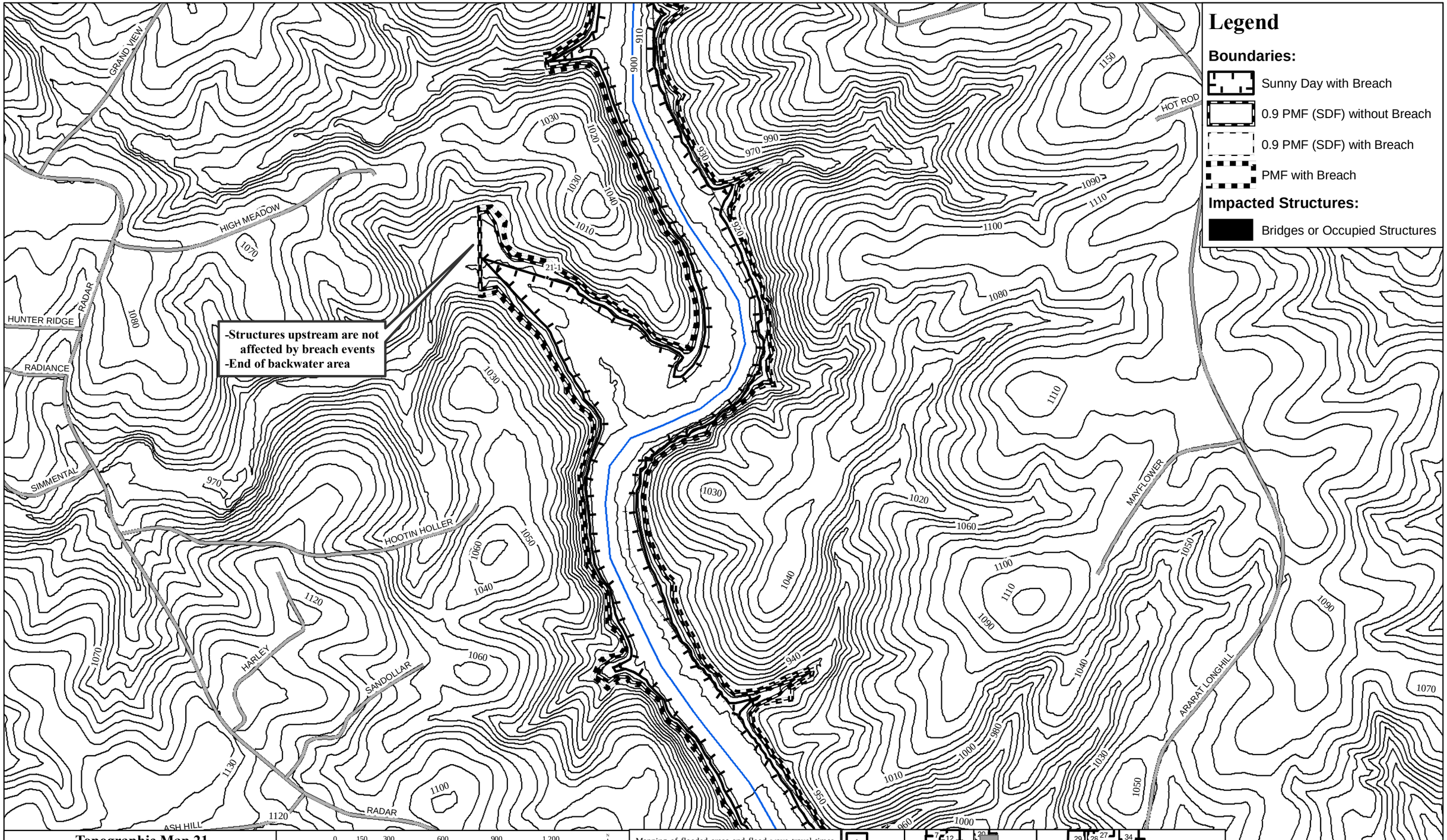

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Topographic Map 21

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
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Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map21 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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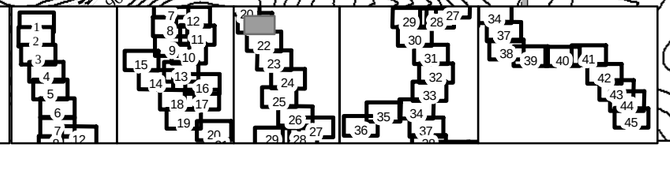

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (ARARAT LONGHILL RD)
Stn: 78250.0 Elev: 909 feet (BACKWATER)

SD WS.	Elv: 905.4	FD: 0.0	
PMF Breach WS.	Elv: 924.4	FD: 15.4	
0.9 PMF Breach WS.	Elv: 923.5	FD: 14.5	
0.9 PMF No Breach WS.	Elv: 920.6	FD: 11.6	
TT SD:	Ini: 267.6	Peak: 321.0	
TT PMF Breach:	Ini: 206.4	Peak: 241.8	
TT 0.9 PMF Breach:	Ini: 210.0	Peak: 246.0	
TT 0.9 PMF No Breach:	Ini: 244.8	Peak: 290.4	
Dist. From Dam:	19.83 mi		

-Structures upstream are not affected by breach events
-End of backwater area

-Structures upstream are not affected by breach events
-End of backwater area

NCDOT Bridge (Ararat Road (Route 2019))
Stn: 77558.0 Elev: 906 feet

SD WS.	Elv: 904.8	FD: 0.0	
PMF Breach WS.	Elv: 924.5	FD: 18.5	
0.9 PMF Breach WS.	Elv: 923.6	FD: 17.6	
0.9 PMF No Breach WS.	Elv: 920.5	FD: 14.5	
TT SD:	Ini: 269.4	Peak: 323.4	
TT PMF Breach:	Ini: 207.6	Peak: 243.0	
TT 0.9 PMF Breach:	Ini: 211.2	Peak: 247.2	
TT 0.9 PMF No Breach:	Ini: 246.0	Peak: 292.2	
Dist. From Dam:	19.96 mi		

YVRR Bridge (YVRR #5)
Stn: 78250.0 Elev: 893 feet (BACKWATER)

SD WS.	Elv: 905.4	FD: 12.4	
PMF Breach WS.	Elv: 924.4	FD: 31.4	
0.9 PMF Breach WS.	Elv: 923.5	FD: 30.5	
0.9 PMF No Breach WS.	Elv: 920.6	FD: 27.6	
TT SD:	Ini: 267.6	Peak: 321.0	
TT PMF Breach:	Ini: 206.4	Peak: 241.8	
TT 0.9 PMF Breach:	Ini: 210.0	Peak: 246.0	
TT 0.9 PMF No Breach:	Ini: 244.8	Peak: 290.4	
Dist. From Dam:	19.83 mi		

CASEY
TREE HAVEN
MARS HILL
RADA
ARARAT
FAITH
BOB HOPE
WHITTINGTON
MONET
POSEY KEY
BWBR-9
BWRR-8
BR-15
22-1
22-2
22-3
22-4
22-5
22-6
22-7
22-8
22-9
22-10
22-11
22-12
22-13
22-14
22-15
22-16
22-17
22-18

Topographic Map 22

0 150 300 600 900 1,200 Feet

N

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC LIDAR Terrain Data - 10 ' Contours				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map22 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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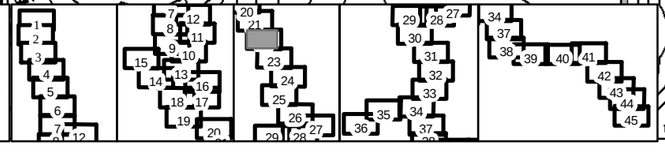
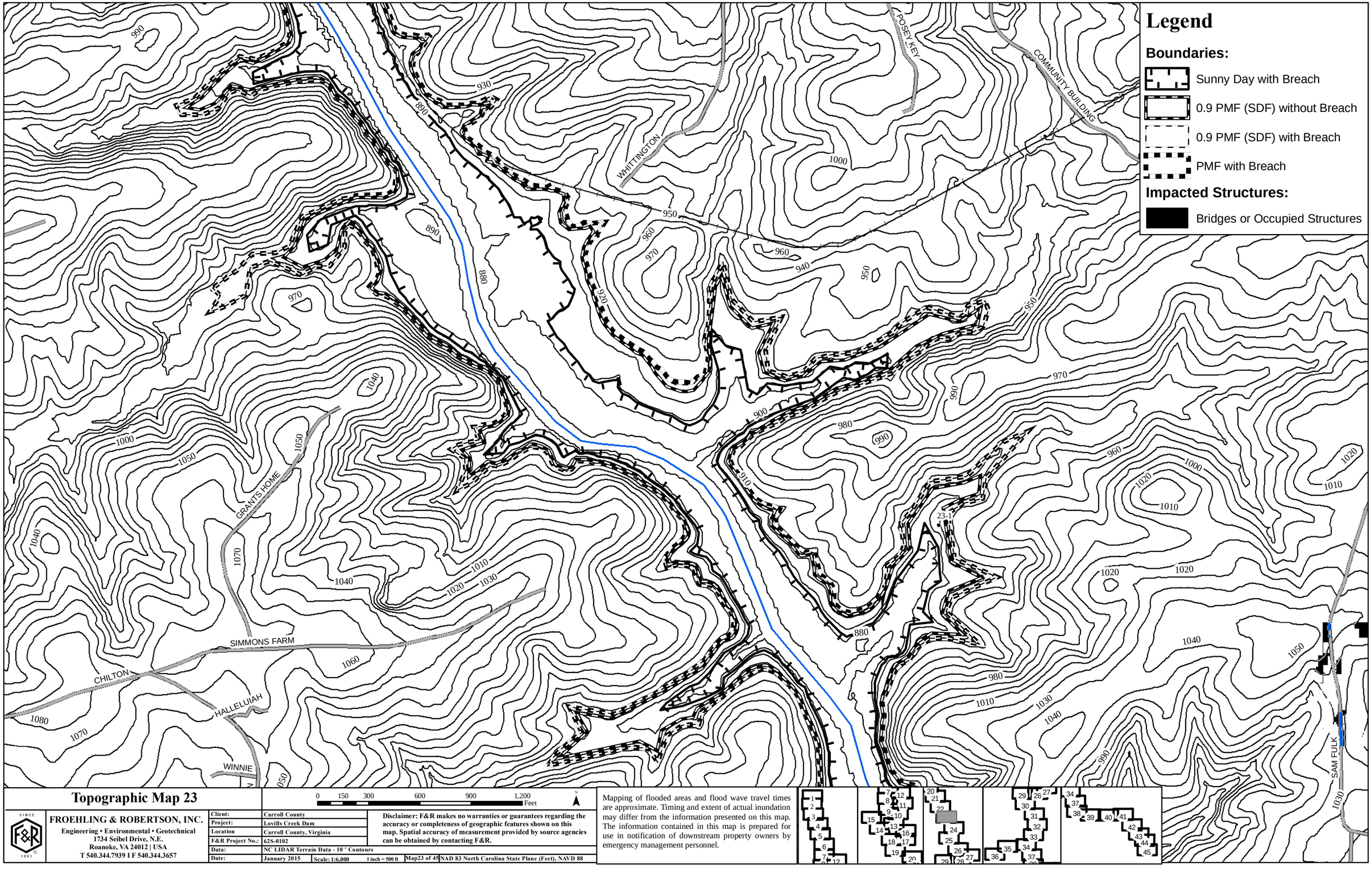
Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.





Topographic Map 23

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
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Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map23 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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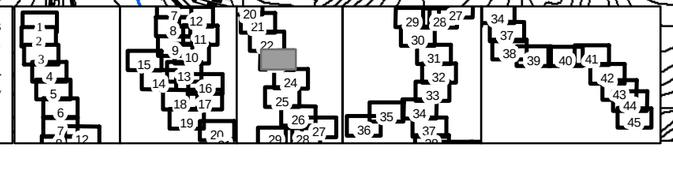

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (TOMS CREEK RD)
Stn: 64750.0 Elev: 897 feet (BACKWATER)

SD WS.	Elv: 885.1	FD: 0.0	
PMF Breach WS.	Elv: 909.3	FD: 12.3	
0.9 PMF Breach WS.	Elv: 908.5	FD: 11.5	
0.9 PMF No Breach WS.	Elv: 905.9	FD: 8.9	
TT SD:	Ini: 299.4	Peak: 358.2	
TT PMF Breach:	Ini: 230.4	Peak: 269.4	
TT 0.9 PMF Breach:	Ini: 234.0	Peak: 273.6	
TT 0.9 PMF No Breach:	Ini: 270.6	Peak: 319.8	
Dist. From Dam:	23.90 mi		

-Structures upstream are not affected by breach events
-End of backwater area

BWBR-10

24-1

SAM FULK

WARTHOG

TOMS CREEK

SANDY CREEK

COX FORD

Topographic Map 24

0 150 300 600 900 1,200 Feet

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map24 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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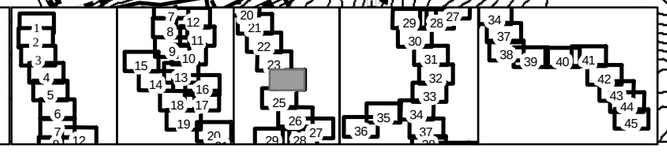

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (Route 268)
Stn: 61028.0 Elev: 891 feet

SD WS.	Elv:	879.6	FD:	0.0
PMF Breach WS.	Elv:	906.1	FD:	15.1
0.9 PMF Breach WS.	Elv:	905.2	FD:	14.2
0.9 PMF No Breach WS.	Elv:	902.7	FD:	11.7
TT SD:	Ini:	307.8	Peak:	369.0
TT PMF Breach:	Ini:	237.6	Peak:	277.8
TT 0.9 PMF Breach:	Ini:	241.2	Peak:	282.6
TT 0.9 PMF No Breach:	Ini:	277.8	Peak:	329.4
Dist. From Dam:	23.09 mi			

This Bridge is NOT IMPACTED by breach events

PRIDE ROCK
BRYANT MILL
MISTY CREEK
NC 268
BR-16
PILOT POWER DAM

25-1 25-2 25-3 25-4 25-5 25-6 25-7 25-8 25-9 25-10

Topographic Map 25

0 150 300 600 900 1,200 Feet

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T 540.344.7939 I F 540.344.3657

Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC LIDAR Terrain Data - 10 ' Contours				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map25 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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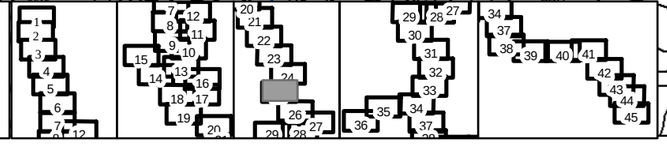

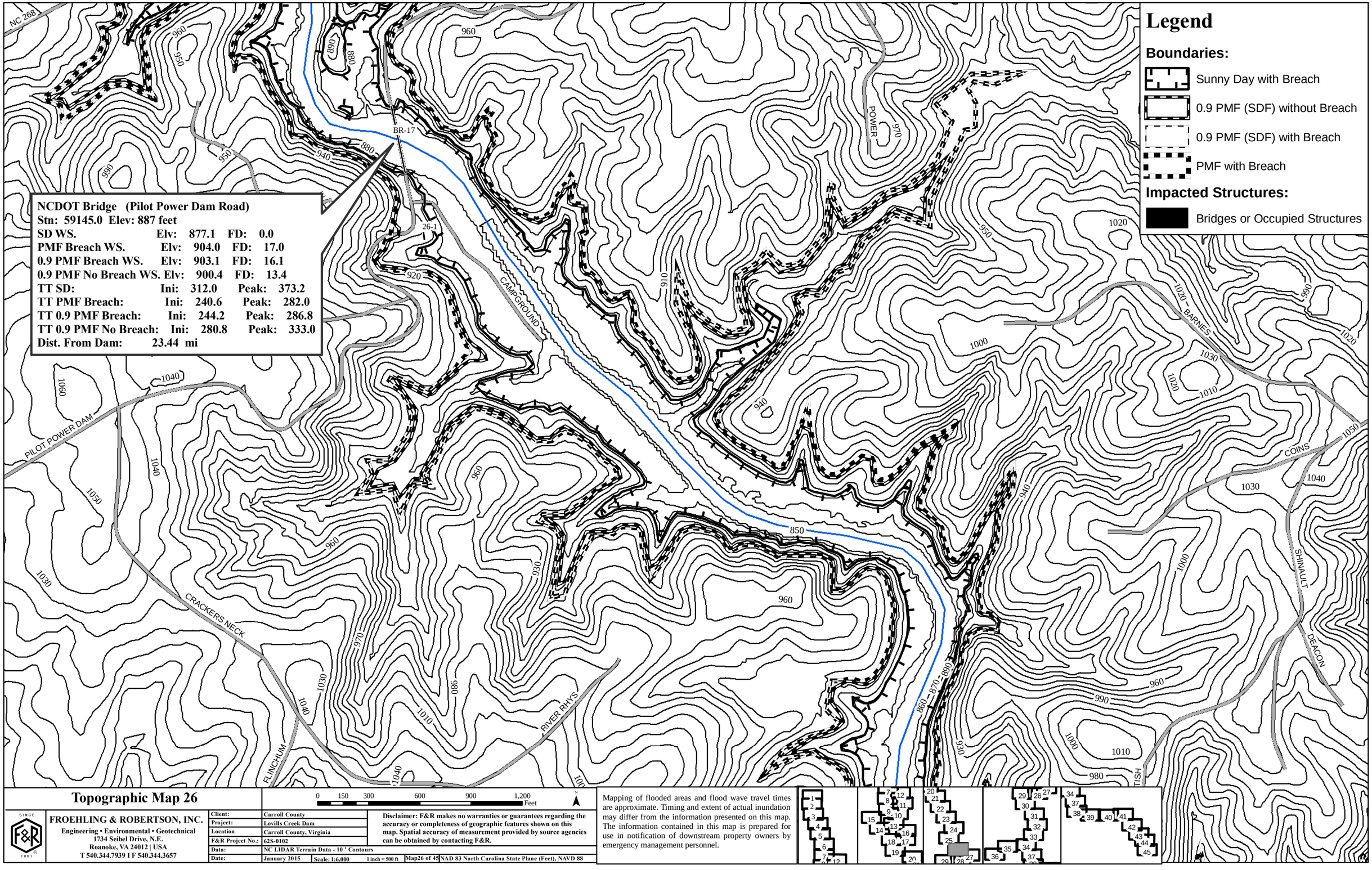

Topographic Map 26

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Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map26 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (JIM MCKINNEY RD)
Stn: 49750.0 Elev: 876 feet (BACKWATER)

SD WS.	Elv: 867.3	FD: 0.0	
PMF Breach WS.	Elv: 895.3	FD: 19.3	
0.9 PMF Breach WS.	Elv: 894.4	FD: 18.4	
0.9 PMF No Breach WS.	Elv: 891.8	FD: 15.8	
TT SD:	Ini: 337.2	Peak: 403.2	
TT PMF Breach:	Ini: 258.6	Peak: 303.0	
TT 0.9 PMF Breach:	Ini: 262.8	Peak: 307.8	
TT 0.9 PMF No Breach:	Ini: 300.0	Peak: 355.2	
Dist. From Dam:	26.28 mi		

-Structures upstream are not affected by breach events
-End of backwater area

-Structures upstream are not affected by breach events
-End of backwater area

-Structures upstream are not affected by breach events
-End of backwater area

BWBR-11

27-1 27-2 27-3 27-4 27-5 27-6

COINS
SHINAULT
DEACON
JOTISH
JIM MCKINNEY
PINNACLE VIEW CHURCH
SINGLE OAK
RUITT FARM
LOST ACRES
VALE
SHOALS

Topographic Map 27

0 150 300 600 900 1,200 Feet

N

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T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map27 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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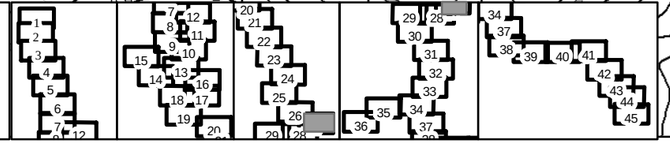

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Topographic Map 29

CRACKERS NECK

REED ISLAND

29-1

Topographic Map 28

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
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Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 | 1 inch = 500 ft | Map28 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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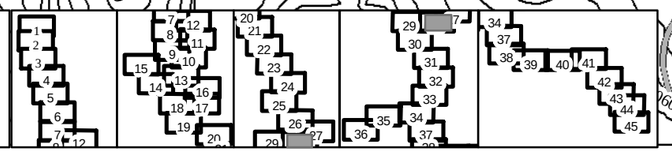

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Ararat River

NICHOLS

FLINCHUM

BILLY PRATT

LOWER PLACE

BULLINGTON

SLOPING PINE

PORK

29-1

Topographic Map 29

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
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Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 | 1 inch = 500 ft | Map29 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

BULLINGTON
SLOPING PINE
PORK
FAWLING
EQUIPMENT
CORNER
Ararat River

Topographic Map 30

0 150 300 600 900 1,200 Feet

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Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map30 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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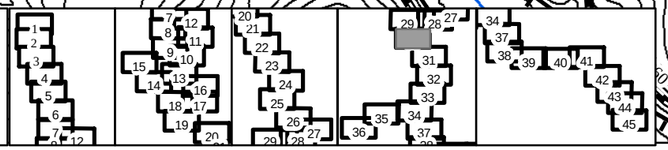

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Ararat River

CORNER

TUCKER FARM

WALTER ONEAL

MATTHEWS MILL

REEVES

CAROWIND

PILOT CHURCH

Topographic Map 31

0 150 300 600 900 1,200 Feet

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Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC LIDAR Terrain Data - 10 ' Contours				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map31 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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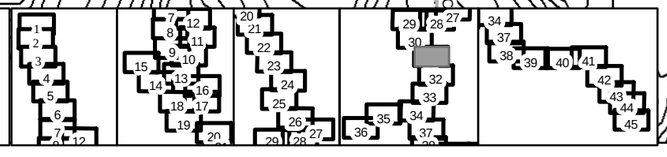


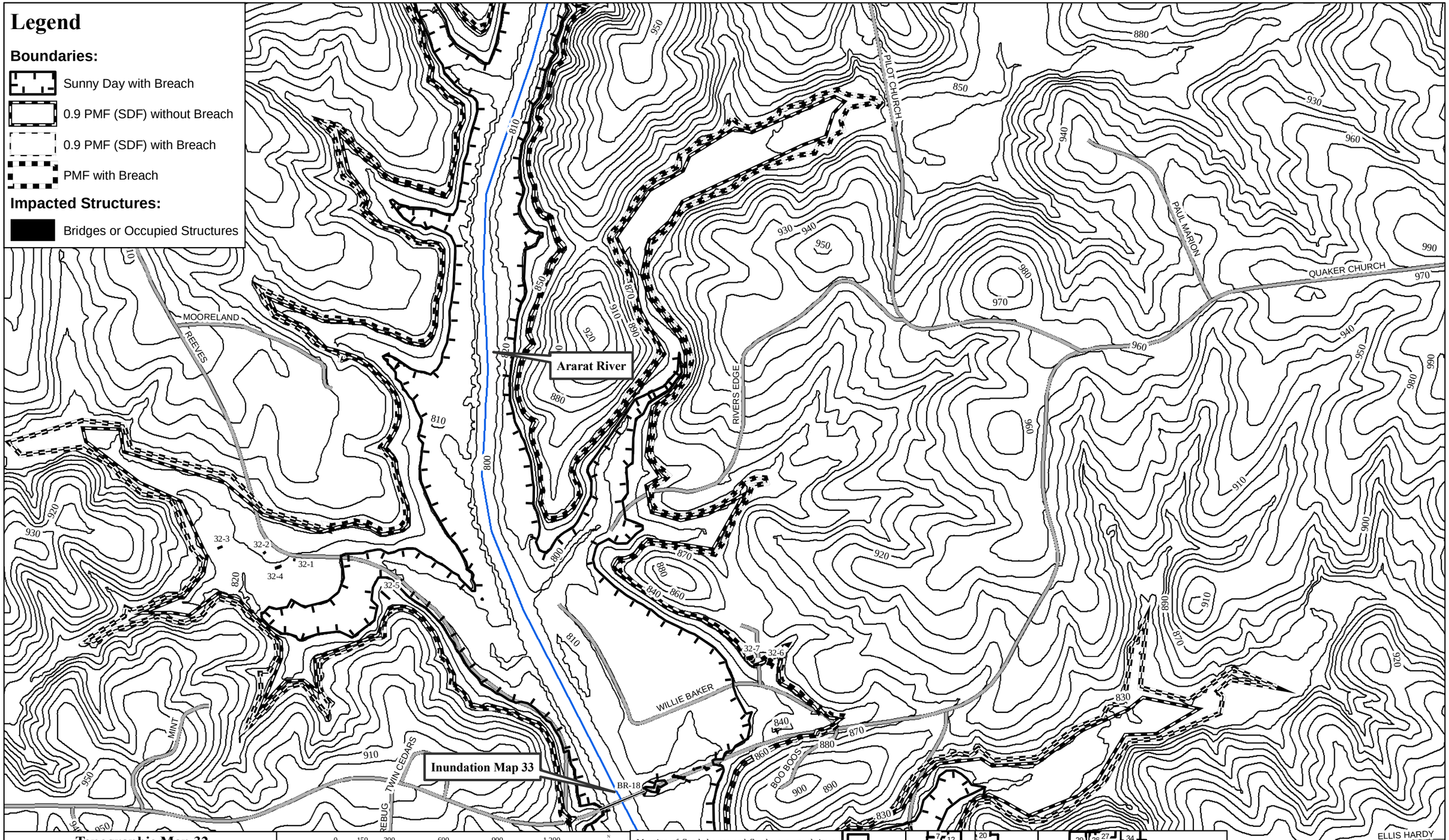
Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures



Topographic Map 32

0 150 300 600 900 1,200 Feet

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Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC LIDAR Terrain Data - 10 ' Contours				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map32 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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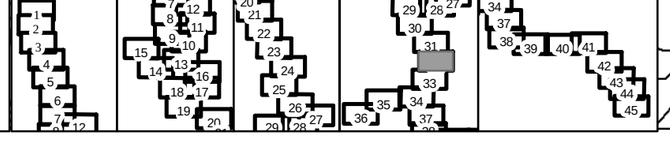

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (Quaker Church Road (Route 2080))
Stn: 14327.0 Elev: 826 feet

SD WS.	Elv:	818.6	FD:	0.0
PMF Breach WS.	Elv:	844.6	FD:	18.6
0.9 PMF Breach WS.	Elv:	843.8	FD:	17.8
0.9 PMF No Breach WS.	Elv:	841.9	FD:	15.9
TT SD:	Ini:	418.2	Peak:	494.4
TT PMF Breach:	Ini:	310.8	Peak:	364.8
TT 0.9 PMF Breach:	Ini:	315.6	Peak:	370.2
TT 0.9 PMF No Breach:	Ini:	355.2	Peak:	420.0
Dist. From Dam:		31.93 mi		

NCDOT Bridge (JOHN SCOTT ROAD)
Stn: 13500.0 Elev: 819 feet (BACKWATER)

SD WS.	Elv:	817.7	FD:	0.0
PMF Breach WS.	Elv:	842.9	FD:	23.9
0.9 PMF Breach WS.	Elv:	842.2	FD:	23.2
0.9 PMF No Breach WS.	Elv:	840.2	FD:	21.2
TT SD:	Ini:	420.6	Peak:	496.8
TT PMF Breach:	Ini:	313.2	Peak:	366.6
TT 0.9 PMF Breach:	Ini:	318.0	Peak:	372.6
TT 0.9 PMF No Breach:	Ini:	357.6	Peak:	421.8
Dist. From Dam:		32.33 mi		

Ararat River

MINT · TWIN CEDARS · FIREBUG · REEVES · QUAKER CHURCH · BOO BOOS · JOHN SCOTT · SAM SCOTT · KENT · DIXIE

BR-18 · BWBR-11B · 33-1

Topographic Map 33

0 150 300 600 900 1,200 Feet

N

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Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015 | Scale: 1:6,000 | 1 inch = 500 ft | Map33 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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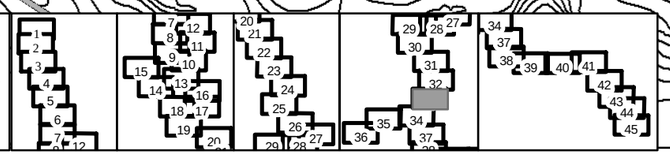

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

-Structures upstream are not affected by breach events
-End of backwater area

Ararat River

Yadkin River

Yadkin River

BR-19

BWRR-20

YVRR Bridge (Yadkin Valley Railroad #3)
Stn: 4358.0 Elev: 808 feet

SD WS.	Elv:	803.9	FD:	0.0
PMF Breach WS.	Elv:	829.2	FD:	21.2
0.9 PMF Breach WS.	Elv:	828.6	FD:	20.6
0.9 PMF No Breach WS.	Elv:	827.3	FD:	19.3
TT SD:	Ini:	439.8	Peak:	519.0
TT PMF Breach:	Ini:	325.2	Peak:	382.2
TT 0.9 PMF Breach:	Ini:	330.0	Peak:	388.2
TT 0.9 PMF No Breach:	Ini:	370.2	Peak:	438.0
Dist. From Dam:	33.82 mi			

YVRR Bridge (YVRR #12)
Stn: 874889.0 Elev: 793 feet (BACKWATER)

SD WS.	Elv:	800.7	FD:	7.7
PMF Breach WS.	Elv:	824.6	FD:	31.6
0.9 PMF Breach WS.	Elv:	824.3	FD:	31.3
0.9 PMF No Breach WS.	Elv:	823.5	FD:	30.5
TT SD:	Ini:	452.4	Peak:	534.6
TT PMF Breach:	Ini:	334.2	Peak:	396.0
TT 0.9 PMF Breach:	Ini:	339.0	Peak:	402.0
TT 0.9 PMF No Breach:	Ini:	379.2	Peak:	452.4
Dist. From Dam:	34.66 mi			

DOODLE
HARDY
SAM SCOTT
JOHN MICKLES
ARABIAN HORSE
JOHN MICKLES
34-1
34-2

Topographic Map 34

0 150 300 600 900 1,200 Feet

N

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map34 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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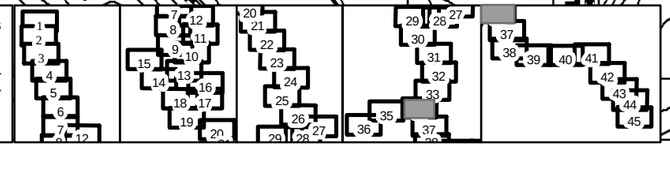

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (SILOAM ROAD (NC 1003))
Stn: 4221.0 Elev: 815 feet (BACKWATER)

SD WS.	Elv:	803.2	FD:	0.0
PMF Breach WS.	Elv:	829.0	FD:	14.0
0.9 PMF Breach WS.	Elv:	828.5	FD:	13.5
0.9 PMF No Breach WS.	Elv:	827.1	FD:	12.1
TT SD:	Ini:	439.8	Peak:	519.6
TT PMF Breach:	Ini:	325.2	Peak:	382.8
TT 0.9 PMF Breach:	Ini:	330.0	Peak:	388.2
TT 0.9 PMF No Breach:	Ini:	370.2	Peak:	438.6
Dist. From Dam:	34.68 mi			

YVRR Bridge (YVRR #6)
Stn: 4221.0 Elev: 801 feet (BACKWATER)

SD WS.	Elv:	803.2	FD:	2.2
PMF Breach WS.	Elv:	829.0	FD:	28.0
0.9 PMF Breach WS.	Elv:	828.5	FD:	27.5
0.9 PMF No Breach WS.	Elv:	827.1	FD:	26.1
TT SD:	Ini:	439.8	Peak:	519.6
TT PMF Breach:	Ini:	325.2	Peak:	382.8
TT 0.9 PMF Breach:	Ini:	330.0	Peak:	388.2
TT 0.9 PMF No Breach:	Ini:	370.2	Peak:	438.6
Dist. From Dam:	34.74 mi			

NCDOT Bridge (HARDY RD)
Stn: 4221.0 Elev: 801 feet (BACKWATER)

SD WS.	Elv:	803.2	FD:	2.2
PMF Breach WS.	Elv:	829.0	FD:	28.0
0.9 PMF Breach WS.	Elv:	828.5	FD:	27.5
0.9 PMF No Breach WS.	Elv:	827.1	FD:	26.1
TT SD:	Ini:	439.8	Peak:	519.6
TT PMF Breach:	Ini:	325.2	Peak:	382.8
TT 0.9 PMF Breach:	Ini:	330.0	Peak:	388.2
TT 0.9 PMF No Breach:	Ini:	370.2	Peak:	438.6
Dist. From Dam:	34.76 mi			

-Structures upstream are not affected by breach events
-End of backwater area

YVRR Bridge (YVRR #7)
Stn: 4221.0 Elev: 802 feet (BACKWATER)

SD WS.	Elv:	803.2	FD:	1.2
PMF Breach WS.	Elv:	829.0	FD:	27.0
0.9 PMF Breach WS.	Elv:	828.5	FD:	26.5
0.9 PMF No Breach WS.	Elv:	827.1	FD:	25.1
TT SD:	Ini:	439.8	Peak:	519.6
TT PMF Breach:	Ini:	325.2	Peak:	382.8
TT 0.9 PMF Breach:	Ini:	330.0	Peak:	388.2
TT 0.9 PMF No Breach:	Ini:	370.2	Peak:	438.6
Dist. From Dam:	35.25 mi			

-Structures upstream are not affected by breach events
-End of backwater area

YVRR Bridge (YVRR #8)
Stn: 4221.0 Elev: 809 feet (BACKWATER)

SD WS.	Elv:	803.2	FD:	0.0
PMF Breach WS.	Elv:	829.0	FD:	20.0
0.9 PMF Breach WS.	Elv:	828.5	FD:	19.5
0.9 PMF No Breach WS.	Elv:	827.1	FD:	18.1
TT SD:	Ini:	439.8	Peak:	519.6
TT PMF Breach:	Ini:	325.2	Peak:	382.8
TT 0.9 PMF Breach:	Ini:	330.0	Peak:	388.2
TT 0.9 PMF No Breach:	Ini:	370.2	Peak:	438.6
Dist. From Dam:	35.55 mi			

Yadkin River

-Structures upstream are not affected by breach events
-End of backwater area

BWBR-12 BWBR-13 BWBR-14 BWBR-15 BWBR-16 BWBR-17 BWBR-18

35-1 35-2 35-3 35-4 35-5 35-6 35-7 35-8 35-9 35-10 35-11 35-12 36-1

Siloam Siloam Academy Hardy

Topographic Map 35

0 150 300 600 900 1,200 Feet

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Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map35 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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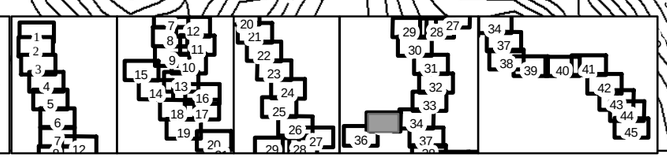

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

-Structures upstream are not affected by breach events
-End of backwater area

YVRR Bridge (YVRR #10)
Stn: 4221.0 Elev: 807 feet (BACKWATER)

SD WS.	Elv: 803.2	FD: 0.0	
PMF Breach WS.	Elv: 829.0	FD: 22.0	
0.9 PMF Breach WS.	Elv: 828.5	FD: 21.5	
0.9 PMF No Breach WS.	Elv: 827.1	FD: 20.1	
TT SD:	Ini: 439.8	Peak: 519.6	
TT PMF Breach:	Ini: 325.2	Peak: 382.8	
TT 0.9 PMF Breach:	Ini: 330.0	Peak: 388.2	
TT 0.9 PMF No Breach:	Ini: 370.2	Peak: 438.6	
Dist. From Dam:	35.97 mi		

-Structures upstream are not affected by breach events
-End of study area

YVRR Bridge (YVRR #11)
Stn: 4221.0 Elev: 808 feet (BACKWATER)

SD WS.	Elv: 803.2	FD: 0.0	
PMF Breach WS.	Elv: 829.0	FD: 21.0	
0.9 PMF Breach WS.	Elv: 828.5	FD: 20.5	
0.9 PMF No Breach WS.	Elv: 827.1	FD: 19.1	
TT SD:	Ini: 439.8	Peak: 519.6	
TT PMF Breach:	Ini: 325.2	Peak: 382.8	
TT 0.9 PMF Breach:	Ini: 330.0	Peak: 388.2	
TT 0.9 PMF No Breach:	Ini: 370.2	Peak: 438.6	
Dist. From Dam:	37.03 mi		

YVRR Bridge (YVRR #9)
Stn: 4221.0 Elev: 801 feet (BACKWATER)

SD WS.	Elv: 803.2	FD: 2.2	
PMF Breach WS.	Elv: 829.0	FD: 28.0	
0.9 PMF Breach WS.	Elv: 828.5	FD: 27.5	
0.9 PMF No Breach WS.	Elv: 827.1	FD: 26.1	
TT SD:	Ini: 439.8	Peak: 519.6	
TT PMF Breach:	Ini: 325.2	Peak: 382.8	
TT 0.9 PMF Breach:	Ini: 330.0	Peak: 388.2	
TT 0.9 PMF No Breach:	Ini: 370.2	Peak: 438.6	
Dist. From Dam:	35.82 mi		

BWRR-17
BWRR-18
BWRR-19
36-1
Yadkin River
Old Limerock Quarry
Holly Springs

0 150 300 600 900 1,200 Feet

N

Topographic Map 36

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 | 1 inch = 500 ft | Map36 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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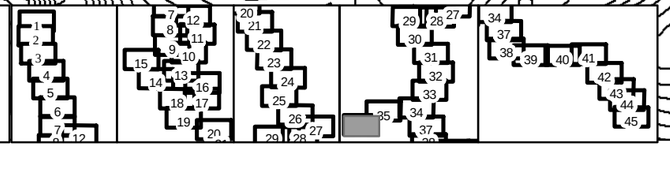

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Yadkin River

Robert Owens

John Mickles

JOHN MICKLES

ALL SEASONS

All Seasons

Friendship

Butner

BUTNER

Topographic Map 37

0 150 300 600 900 1,200 Feet

N

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map37 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

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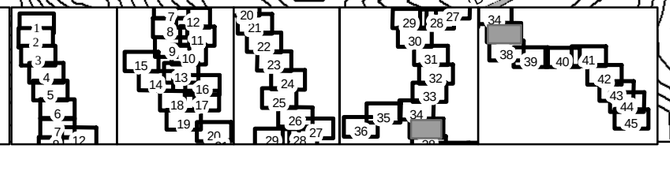

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NCDOT Bridge (FRIENDSHIP ROAD #2)
Stn: 866672.0 Elev: 801 feet (BACKWATER)

SD WS.	Elv:	793.1	FD:	0.0
PMF Breach WS.	Elv:	812.9	FD:	11.9
0.9 PMF Breach WS.	Elv:	812.6	FD:	11.6
0.9 PMF No Breach WS.	Elv:	811.9	FD:	10.9
TT SD:	Ini:	472.2	Peak:	561.6
TT PMF Breach:	Ini:	345.0	Peak:	412.8
TT 0.9 PMF Breach:	Ini:	349.2	Peak:	418.8
TT 0.9 PMF No Breach:	Ini:	390.0	Peak:	469.8
Dist. From Dam:		36.54 mi		

NCDOT Bridge (FRIENDSHIP ROAD #1)
Stn: 868033.0 Elev: 795 feet (BACKWATER)

SD WS.	Elv:	794.3	FD:	0.0
PMF Breach WS.	Elv:	815.0	FD:	20.0
0.9 PMF Breach WS.	Elv:	814.7	FD:	19.7
0.9 PMF No Breach WS.	Elv:	813.9	FD:	18.9
TT SD:	Ini:	469.8	Peak:	558.0
TT PMF Breach:	Ini:	343.2	Peak:	409.2
TT 0.9 PMF Breach:	Ini:	347.4	Peak:	415.8
TT 0.9 PMF No Breach:	Ini:	388.2	Peak:	466.8
Dist. From Dam:		36.26 mi		

Yadkin River
Walnut Grove
River Ridge
Butner
BUTNER
BWBR-21
BWBR-22
38-1
38-2

Topographic Map 38

0 150 300 600 900 1,200 Feet

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map38 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

Disclaimer: F&R makes no warranties or guarantees regarding the accuracy or completeness of geographic features shown on this map. Spatial accuracy of measurement provided by source agencies can be obtained by contacting F&R.

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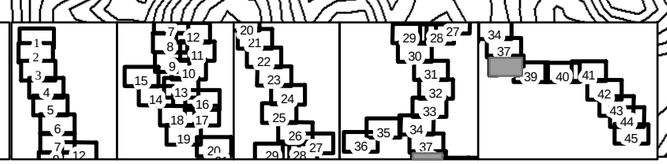

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Yadkin River

SHOALS

Topographic Map 39

0 150 300 600 900 1,200 Feet

N

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1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County				
Project:	Lovills Creek Dam				
Location	Carroll County, Virginia				
F&R Project No.:	62S-0102				
Data:	NC LIDAR Terrain Data - 10 ' Contours				
Date:	January 2015	Scale: 1:6,000	1 inch = 500 ft	Map39 of 45	NAD 83 North Carolina State Plane (Feet), NAVD 88

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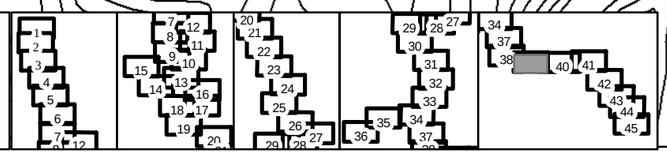

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

-Structures upstream are not affected by breach events
-End of backwater area

YVRR Bridge (YVRR #13)
Stn: 849110.0 Elev: 760 feet (BACKWATER)

SD WS.	Elv: 758.2	FD: 0.0	
PMF Breach WS.	Elv: 779.9	FD: 19.9	
0.9 PMF Breach WS.	Elv: 779.6	FD: 19.6	
0.9 PMF No Breach WS.	Elv: 778.8	FD: 18.8	
TT SD:	Ini: 515.4	Peak: 609.6	
TT PMF Breach:	Ini: 367.8	Peak: 444.6	
TT 0.9 PMF Breach:	Ini: 372.6	Peak: 451.2	
TT 0.9 PMF No Breach:	Ini: 413.4	Peak: 502.2	
Dist. From Dam:	39.49 mi		

Yadkin River

Yadkin River Park

YVRR-23

Union Hill

Topographic Map 40

0 150 300 600 900 1,200 Feet

N

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T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft Map40 of 45 NAD 83 North Carolina State Plane (Feet), NAVD 88

Disclaimer: F&R makes no warranties or guarantees regarding the accuracy or completeness of geographic features shown on this map. Spatial accuracy of measurement provided by source agencies can be obtained by contacting F&R.

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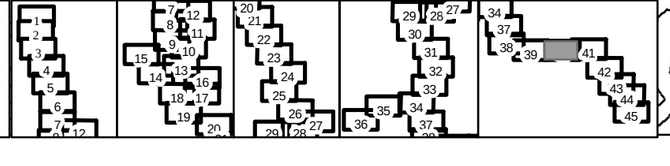

-Structures upstream are not affected by breach events
-End of backwater area

-Structures upstream are not affected by breach events
-End of backwater area

-Structures upstream are not affected by breach events
-End of backwater area

Borden

BWRR-24

BWRR-23

Union Hill

Bottom

Squirrel Valley

Roby Fulk

Roby Fulk

Yadkin River

Topographic Map 40

YVRR Bridge (YVRR #14)
Stn: 846889.0 Elev: 757 feet (BACKWATER)
SD WS. Elv: 756.5 FD: 0.0
PMF Breach WS. Elv: 779.8 FD: 22.8
0.9 PMF Breach WS. Elv: 779.4 FD: 22.4
0.9 PMF No Breach WS. Elv: 778.6 FD: 21.6
TT SD: Ini: 519.6 Peak: 614.4
TT PMF Breach: Ini: 371.4 Peak: 449.4
TT 0.9 PMF Breach: Ini: 375.6 Peak: 456.0
TT 0.9 PMF No Breach: Ini: 417.0 Peak: 507.0
Dist. From Dam: 40.02 mi

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

Topographic Map 41

0 150 300 600 900 1,200 Feet

N

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map41 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

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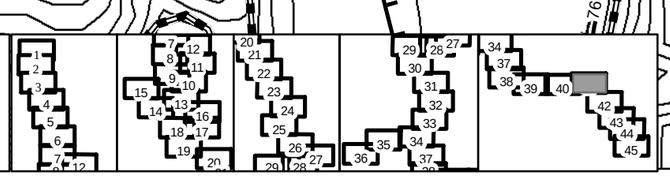


Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

-Structures upstream are not affected by breach events
-End of backwater area

Yadkin River

BWRR-25

YVRR Bridge (YVRR #15)
Stn: 838887.0 Elev: 746 feet (BACKWATER)

SD WS.	Elv:	751.8	FD:	5.8
PMF Breach WS.	Elv:	774.3	FD:	28.3
0.9 PMF Breach WS.	Elv:	773.9	FD:	27.9
0.9 PMF No Breach WS.	Elv:	772.9	FD:	26.9
TT SD:	Ini:	544.8	Peak:	640.8
TT PMF Breach:	Ini:	383.4	Peak:	468.0
TT 0.9 PMF Breach:	Ini:	388.2	Peak:	474.6
TT 0.9 PMF No Breach:	Ini:	429.6	Peak:	525.6
Dist. From Dam:	41.46 mi			

Sycamore Ford
Moonlight
Draughn

Topographic Map 42

0 150 300 600 900 1,200 Feet

N

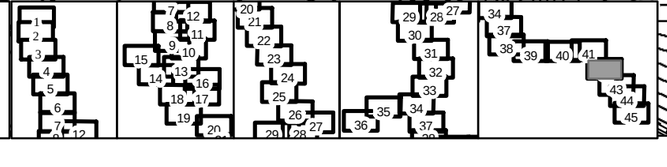
FROEHLING & ROBERTSON, INC.
Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

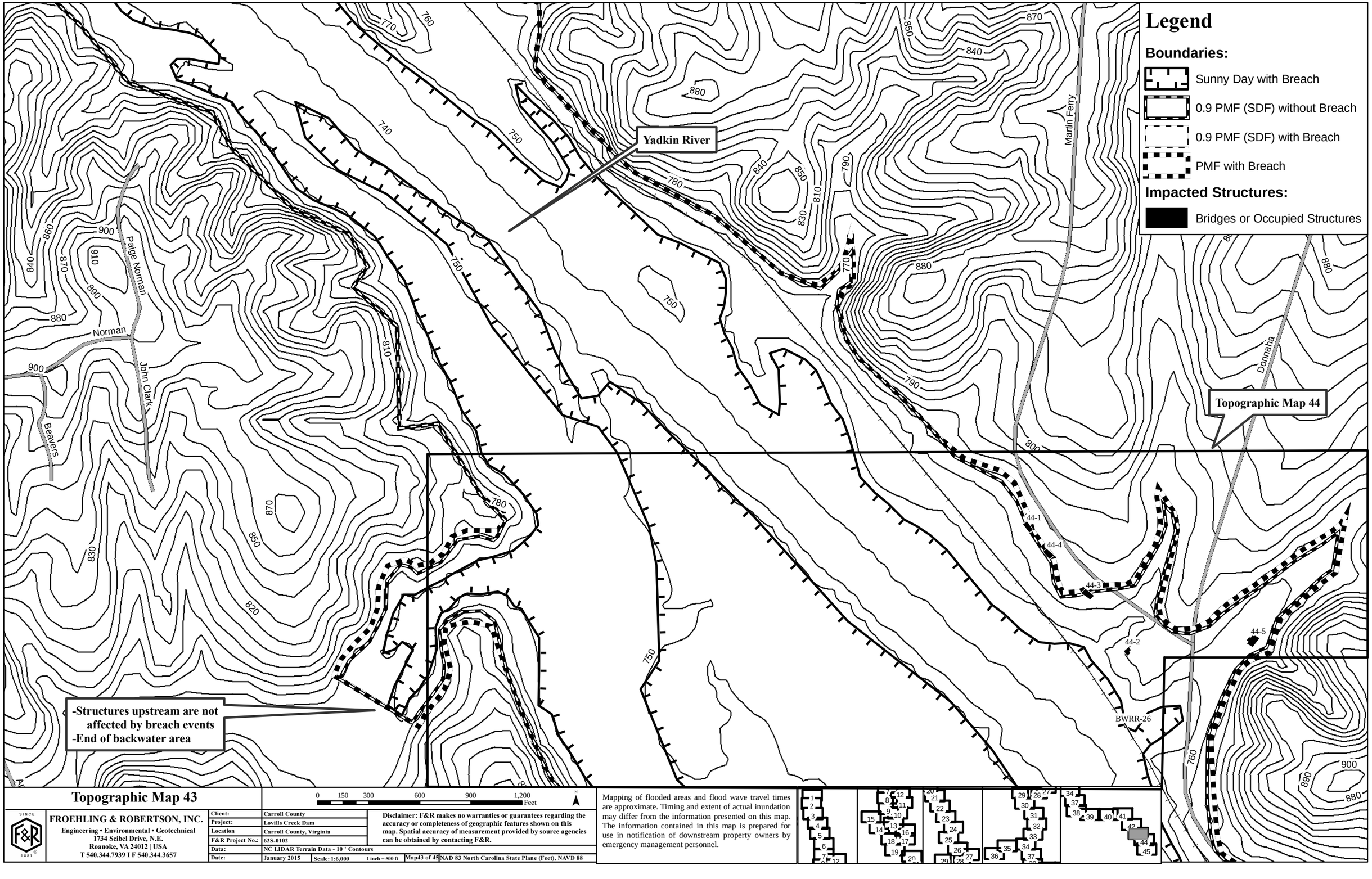
Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 | 1 inch = 500 ft | Map42 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

Disclaimer: F&R makes no warranties or guarantees regarding the accuracy or completeness of geographic features shown on this map. Spatial accuracy of measurement provided by source agencies can be obtained by contacting F&R.

Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.





Topographic Map 43

0 150 300 600 900 1,200 Feet

N

FROEHLING & ROBERTSON, INC.
Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map43 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

Disclaimer: F&R makes no warranties or guarantees regarding the accuracy or completeness of geographic features shown on this map. Spatial accuracy of measurement provided by source agencies can be obtained by contacting F&R.

Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

YVRR Bridge (YVRR #16)
Stn: 831869.0 Elev: 744 feet (BACKWATER)

SD WS.	Elv:	748.3	FD: 4.3
PMF Breach WS.	Elv:	771.8	FD: 27.8
0.9 PMF Breach WS.	Elv:	771.4	FD: 27.4
0.9 PMF No Breach WS.	Elv:	770.2	FD: 26.2
TT SD:	Ini:	565.2	Peak: 666.6
TT PMF Breach:	Ini:	396.0	Peak: 494.4
TT 0.9 PMF Breach:	Ini:	400.8	Peak: 501.0
TT 0.9 PMF No Breach:	Ini:	441.6	Peak: 552.0

Dist. From Dam: 42.87 mi

Yadkin River
Donnaha
Martin Ferry
Payne
BWRR-26
44-1
44-2
44-3
44-4
44-5
44-6
44-7
44-8
44-9
44-10
44-11
44-12
44-13
44-14

Topographic Map 44

0 150 300 600 900 1,200 Feet

FROEHLING & ROBERTSON, INC.
Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

Scale: 1:6,000 1 inch = 500 ft | Map44 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

Disclaimer: F&R makes no warranties or guarantees regarding the accuracy or completeness of geographic features shown on this map. Spatial accuracy of measurement provided by source agencies can be obtained by contacting F&R.

Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.

Topographic Map 44

NCDOT Bridge (NC Route 67)
Stn: 825519.0 Elev: 768.5 feet

SD WS.	Elv:	745.4	FD:	0.0
PMF Breach WS.	Elv:	769.2	FD:	0.7
0.9 PMF Breach WS.	Elv:	768.6	FD:	0.1
0.9 PMF No Breach WS.	Elv:	767.2	FD:	0.0
TT SD:	Ini:	583.2	Peak:	693.0
TT PMF Breach:	Ini:	408.0	Peak:	523.8
TT 0.9 PMF Breach:	Ini:	412.8	Peak:	529.8
TT 0.9 PMF No Breach:	Ini:	453.6	Peak:	580.8
Dist. From Dam:		43.90 mi		

-Structures upstream are not affected by breach events
-End of backwater area

NCDOT Bridge (DONNAHA ROAD)
Stn: 825957.0 Elev: 740 feet (BACKWATER)

SD WS.	Elv:	745.6	FD:	5.6
PMF Breach WS.	Elv:	769.4	FD:	29.4
0.9 PMF Breach WS.	Elv:	768.8	FD:	28.8
0.9 PMF No Breach WS.	Elv:	767.6	FD:	27.6
TT SD:	Ini:	580.8	Peak:	689.4
TT PMF Breach:	Ini:	407.4	Peak:	522.6
TT 0.9 PMF Breach:	Ini:	412.2	Peak:	528.6
TT 0.9 PMF No Breach:	Ini:	453.0	Peak:	579.6
Dist. From Dam:		43.82 mi		

Station 824,100 (Approximate)
-Convergence of SDF Breach events water surface elevation (<1' difference)
-End of study area
-Approximately 44.17 miles downstream of Lovills Creek Dam

Yadkin River

Legend

Boundaries:

- Sunny Day with Breach
- 0.9 PMF (SDF) without Breach
- 0.9 PMF (SDF) with Breach
- PMF with Breach

Impacted Structures:

- Bridges or Occupied Structures

NC-67 · Unknown · Donnaha · BWBR-27 · BR-20 · Reynolda · Littlefield

Topographic Map 45

0 150 300 600 900 1,200 Feet

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Engineering • Environmental • Geotechnical
1734 Seibel Drive, N.E.
Roanoke, VA 24012 | USA
T 540.344.7939 I F 540.344.3657

Client:	Carroll County
Project:	Lovills Creek Dam
Location	Carroll County, Virginia
F&R Project No.:	62S-0102
Data:	NC LIDAR Terrain Data - 10 ' Contours
Date:	January 2015

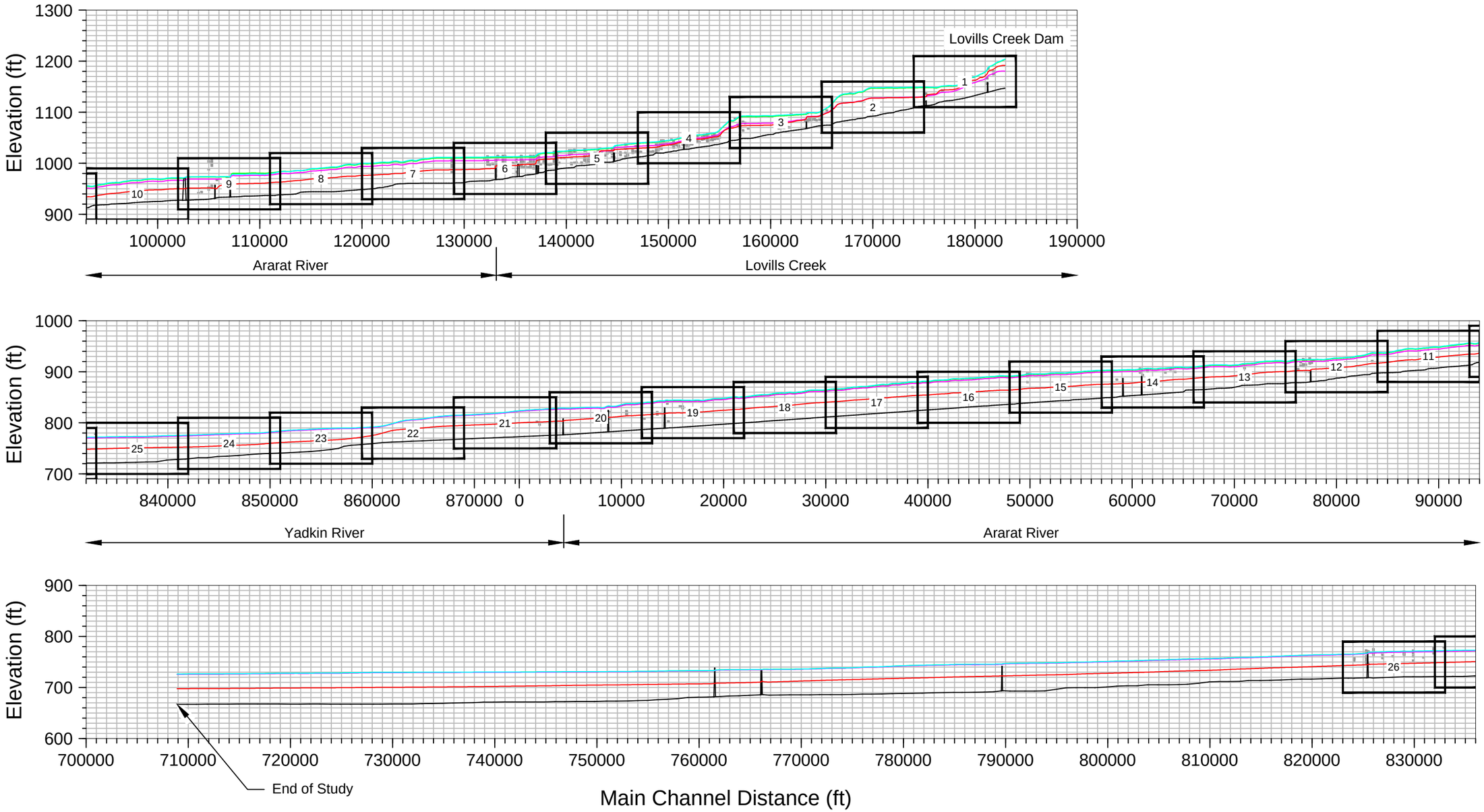
Scale: 1:6,000 | 1 inch = 500 ft | Map45 of 45 | NAD 83 North Carolina State Plane (Feet), NAVD 88

Disclaimer: F&R makes no warranties or guarantees regarding the accuracy or completeness of geographic features shown on this map. Spatial accuracy of measurement provided by source agencies can be obtained by contacting F&R.

Mapping of flooded areas and flood wave travel times are approximate. Timing and extent of actual inundation may differ from the information presented on this map. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.

Appendix F
Profile Plots

General Profile Plots



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

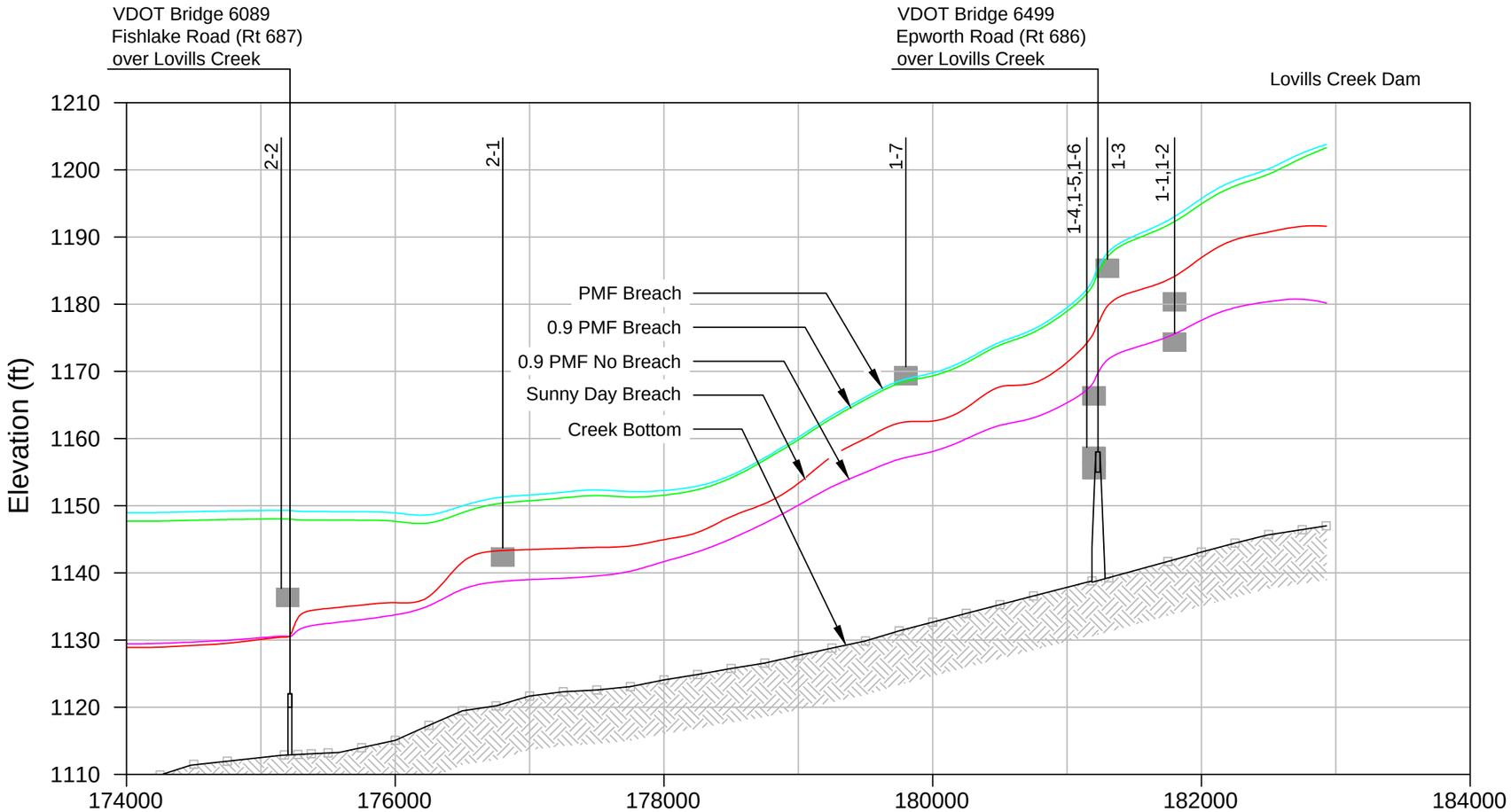
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn:	KHH
	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE INDEX

Index Plot



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

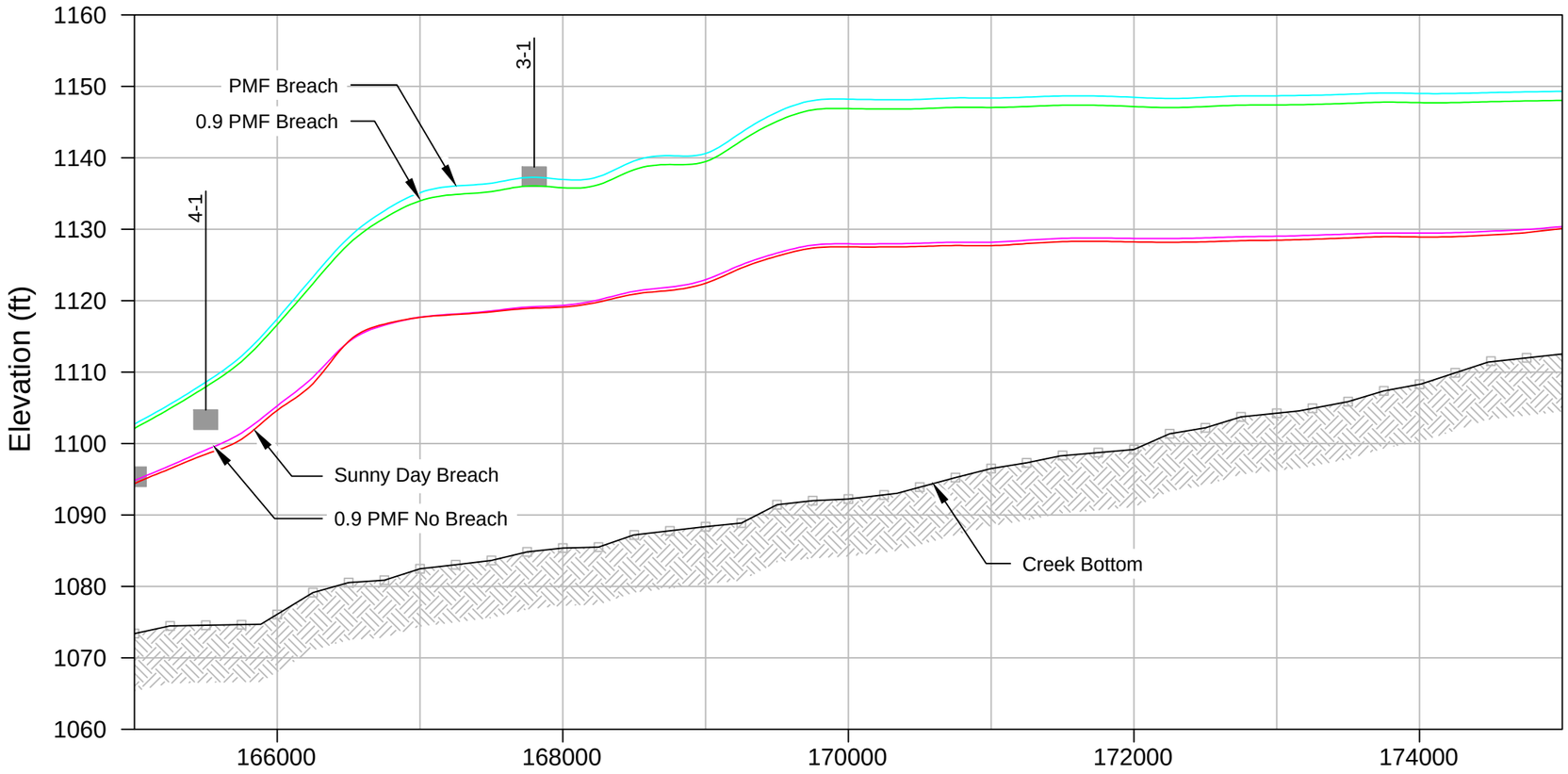
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 1



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

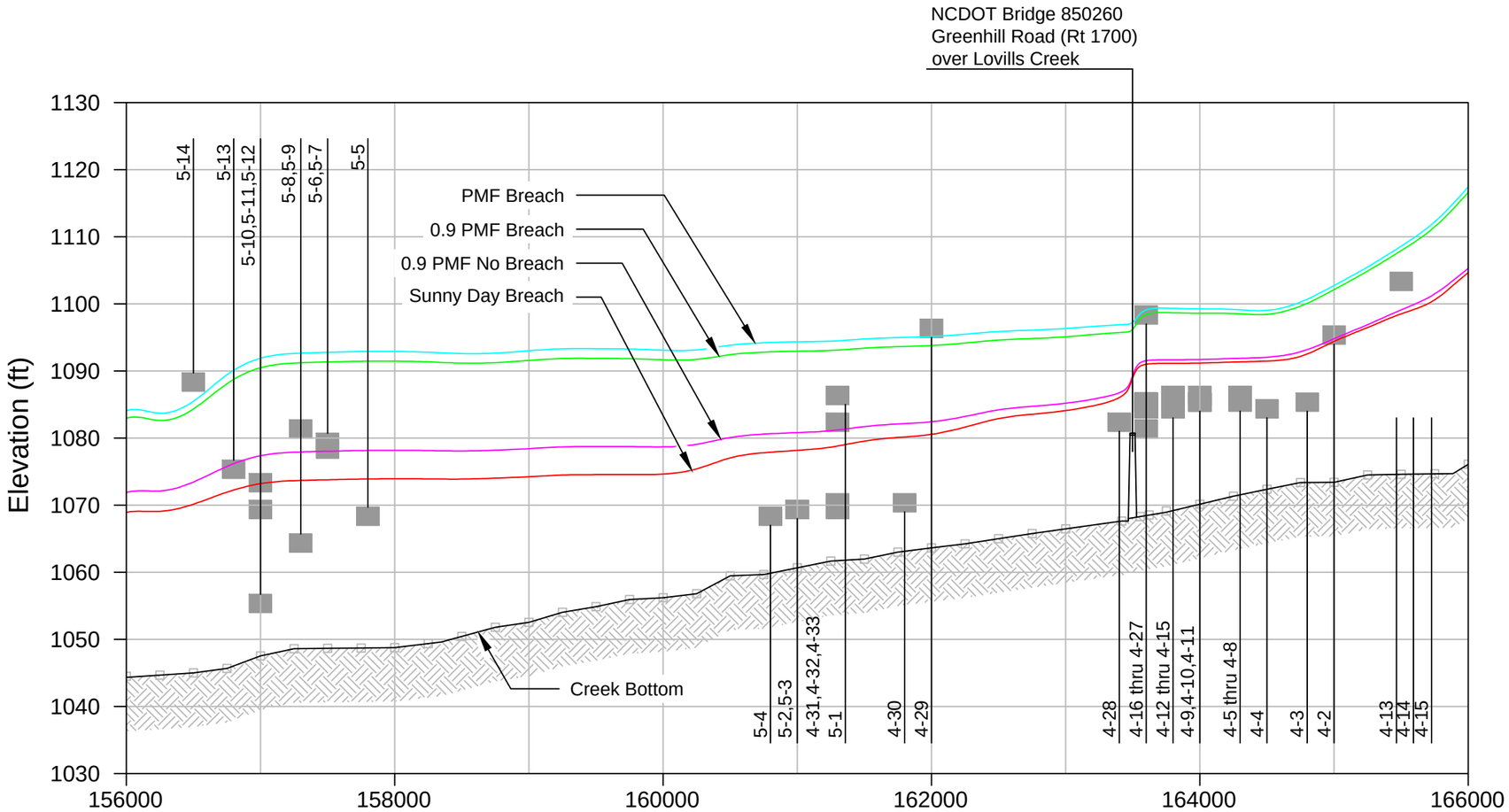
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn:	KHH
	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 2



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

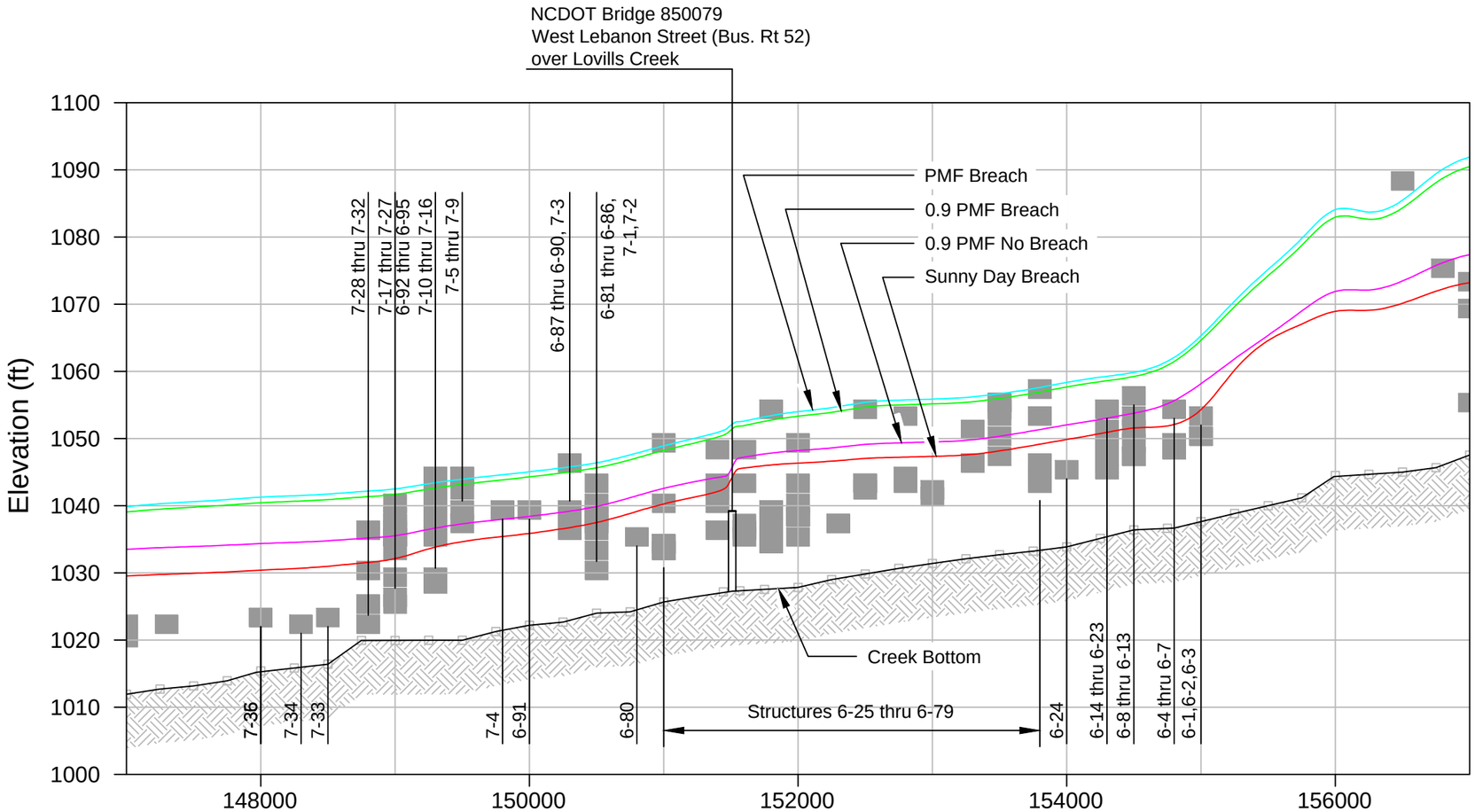
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 3



Main Channel Distance (ft)

LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

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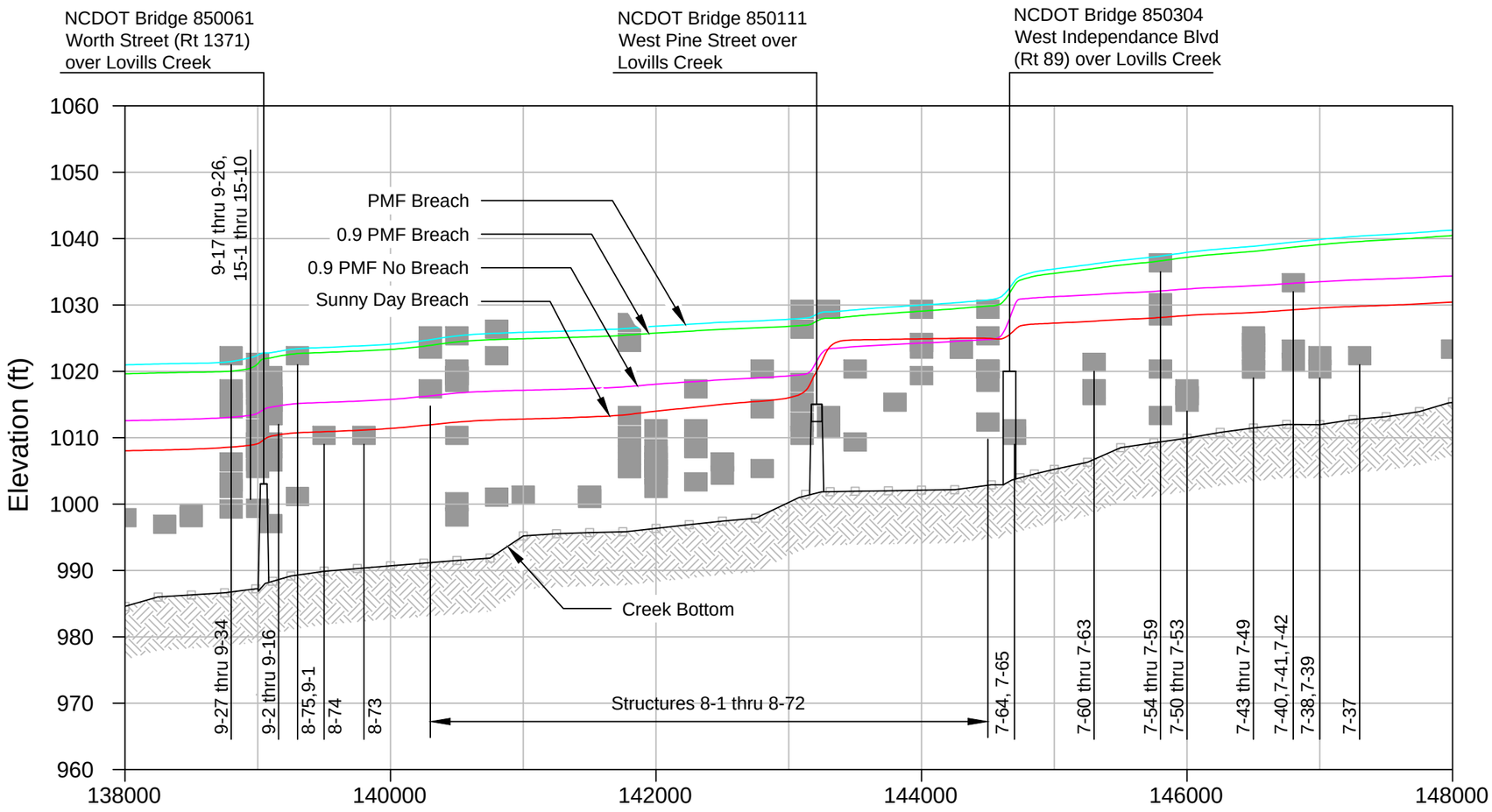
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 4



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

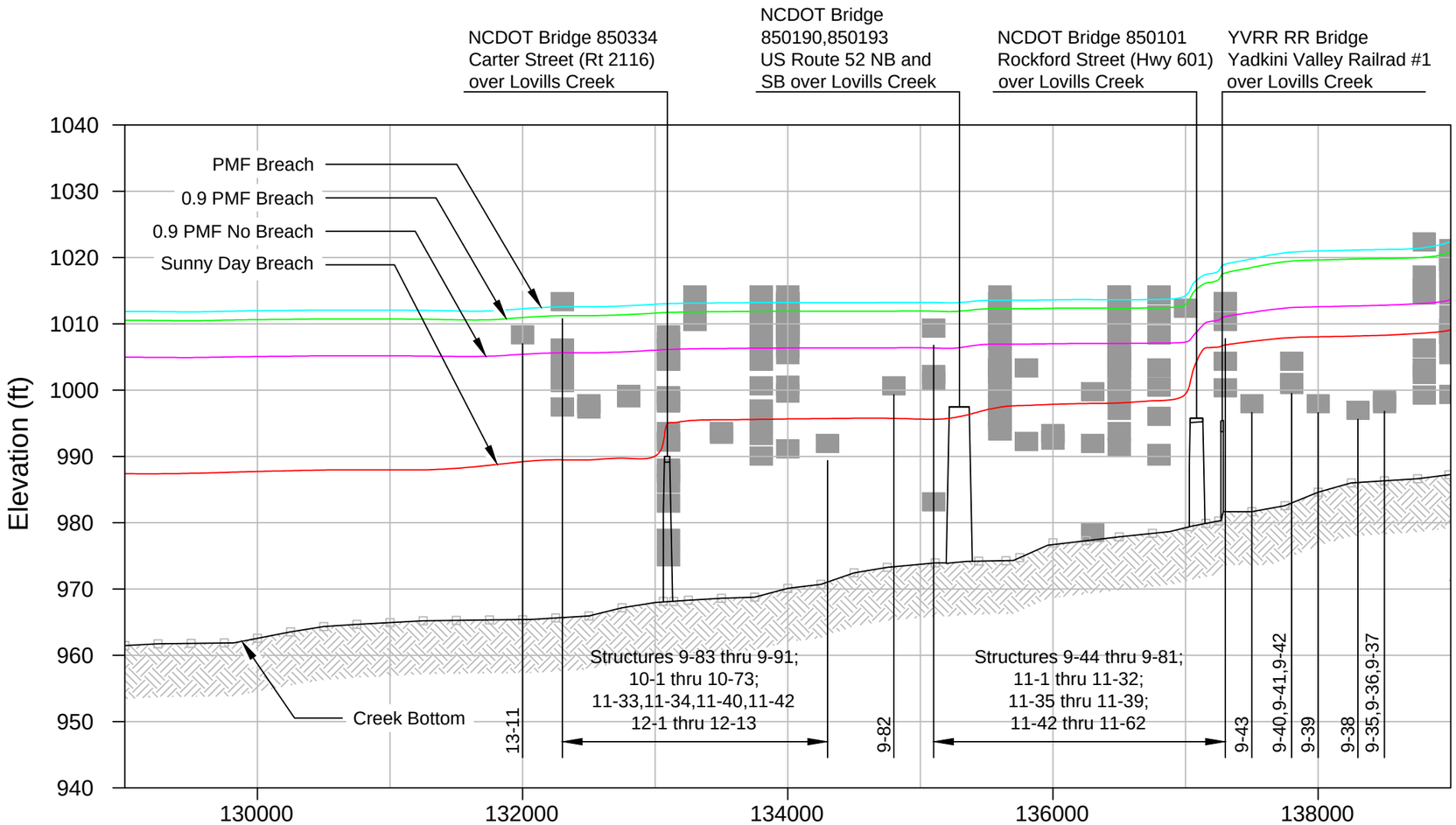
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 5



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

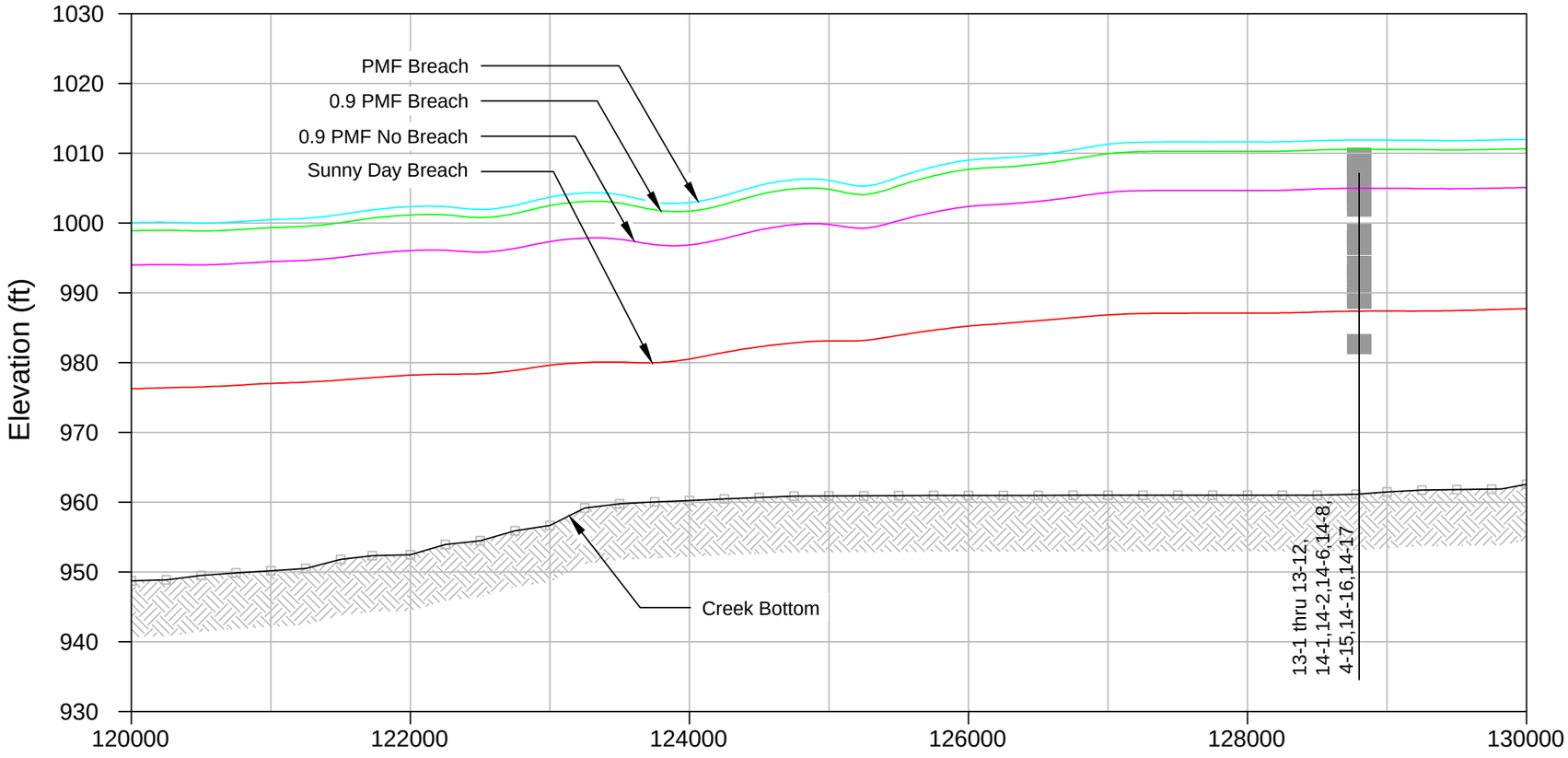
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 6



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

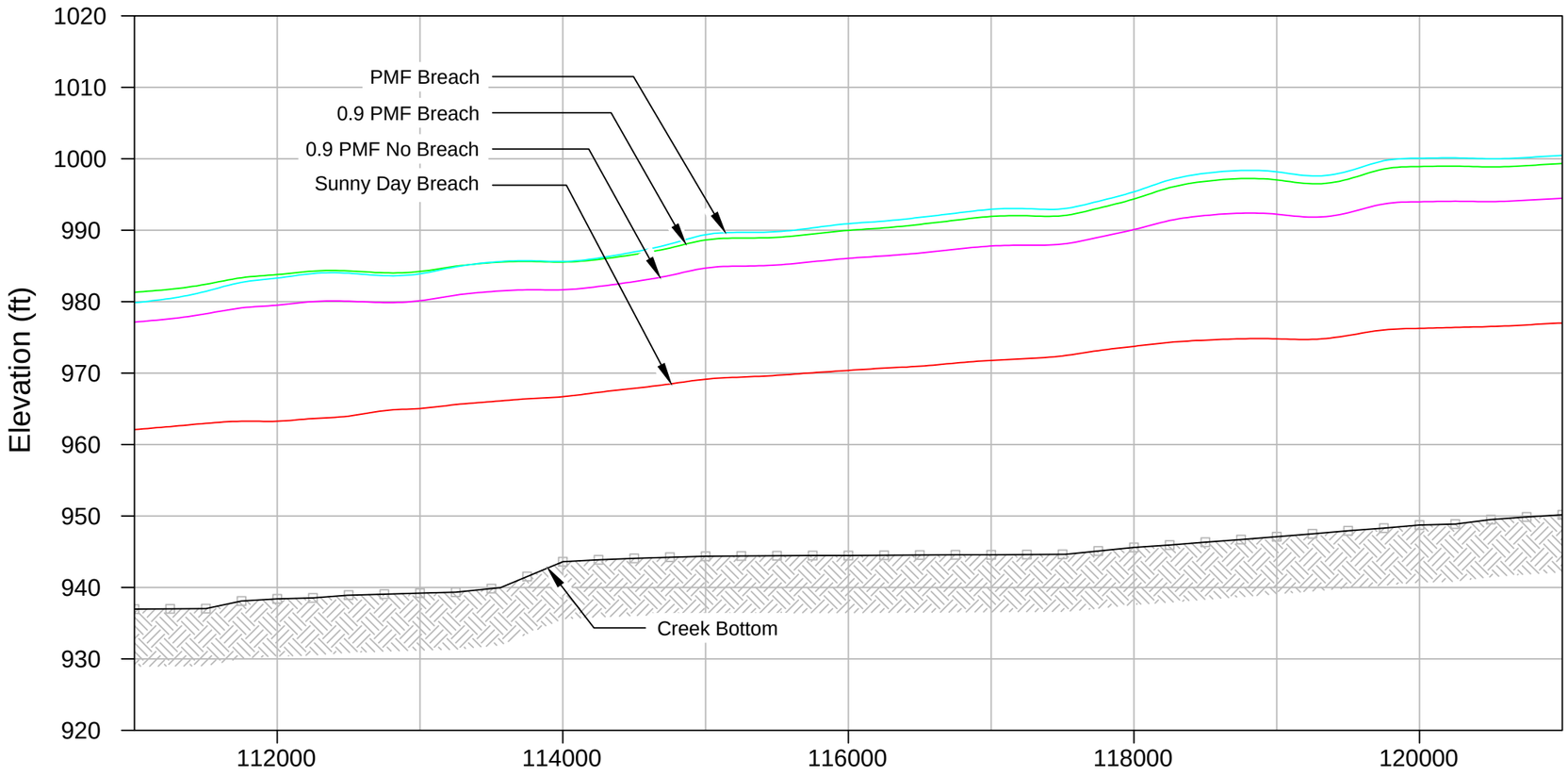
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 7



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

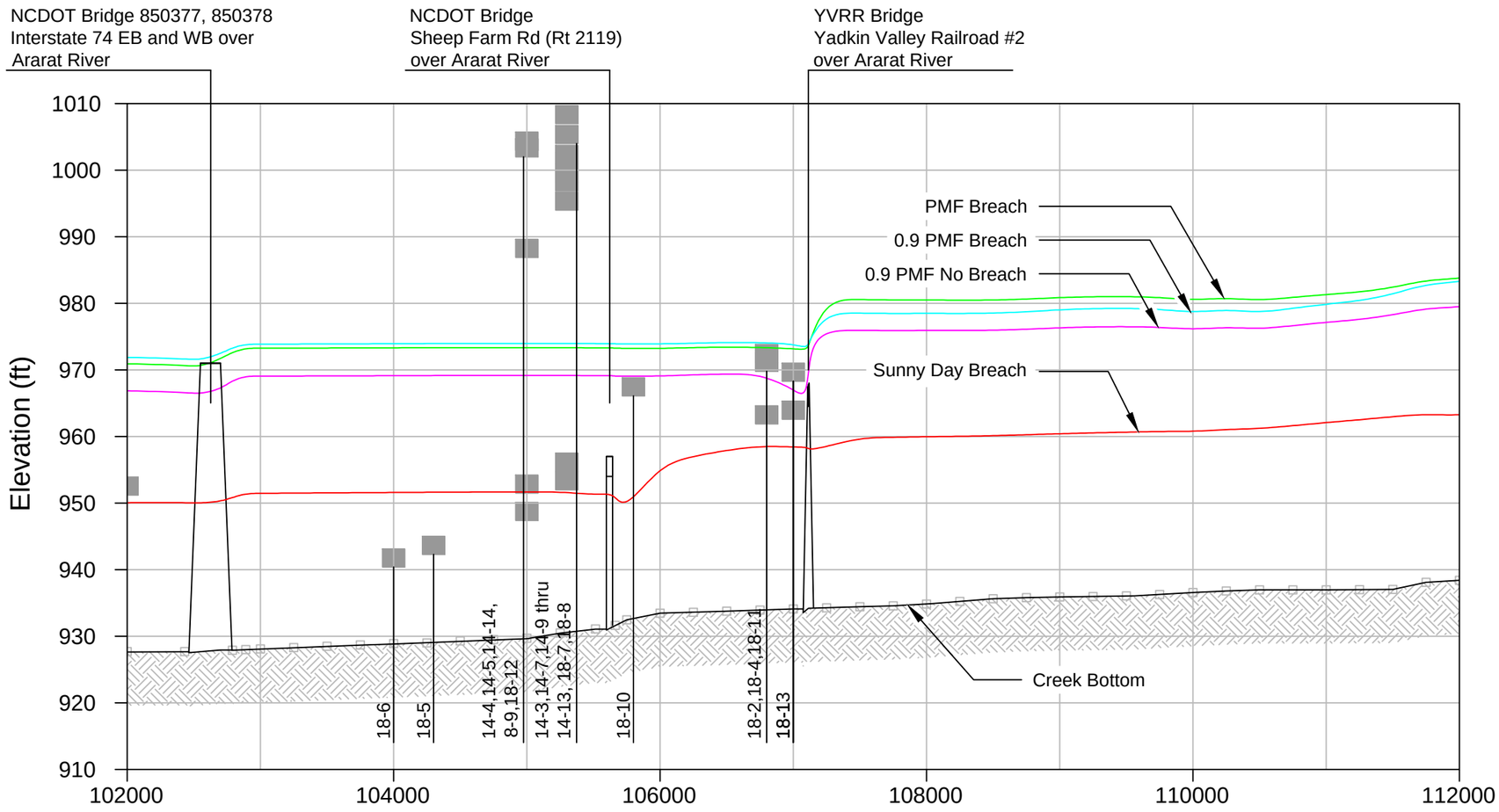
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 8



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

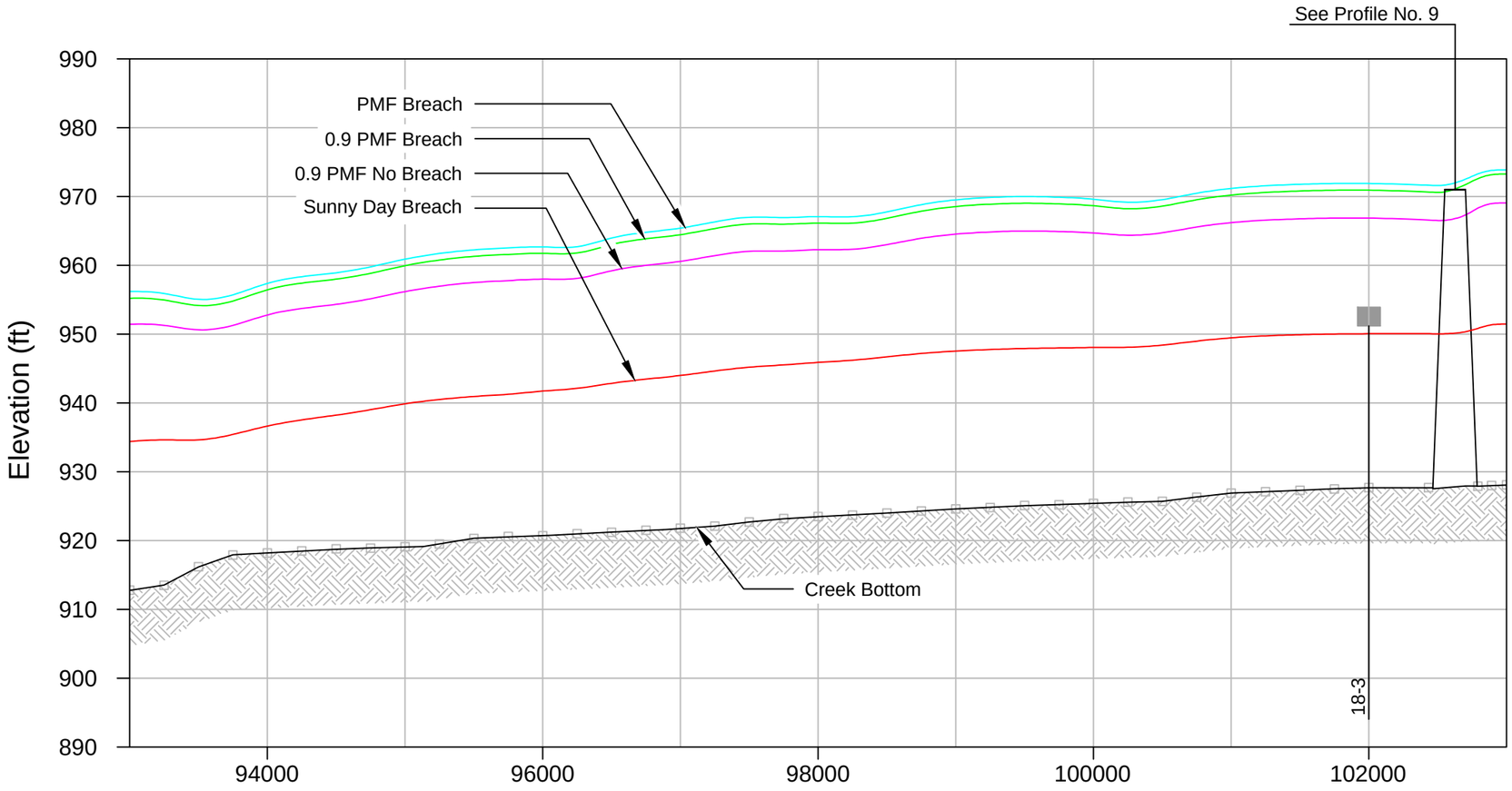
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 9



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

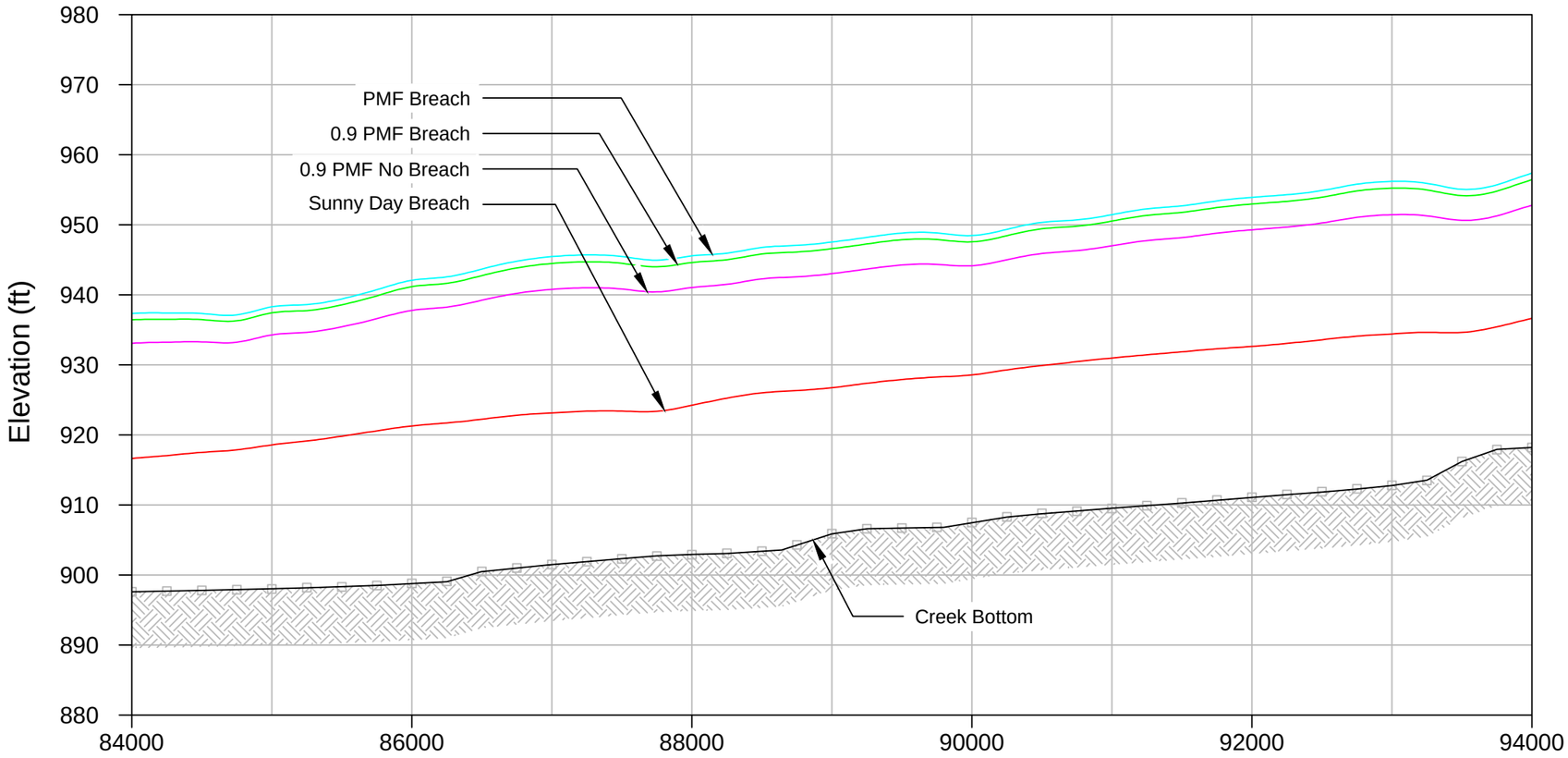
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 10



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

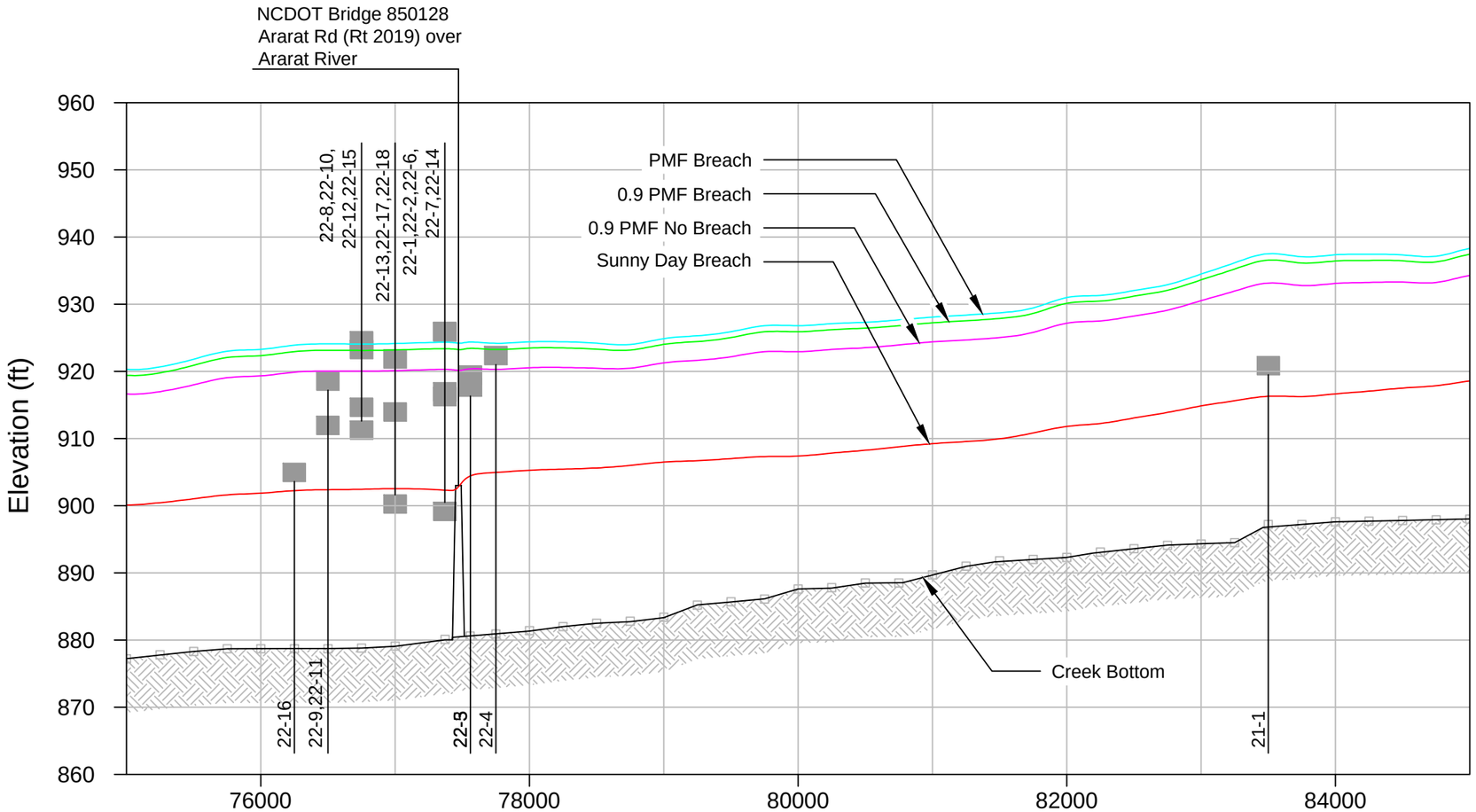
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 11



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

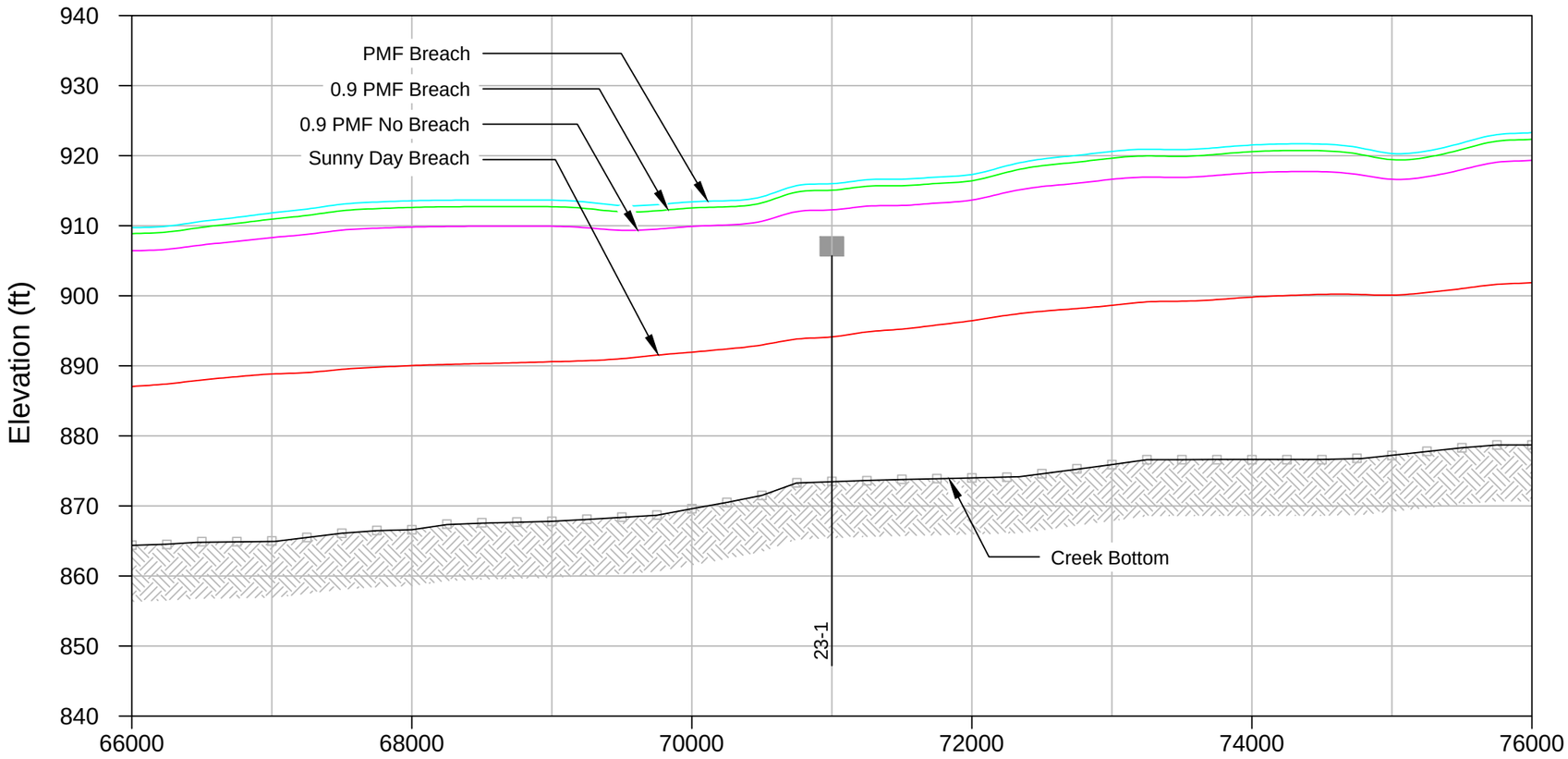
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 12



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

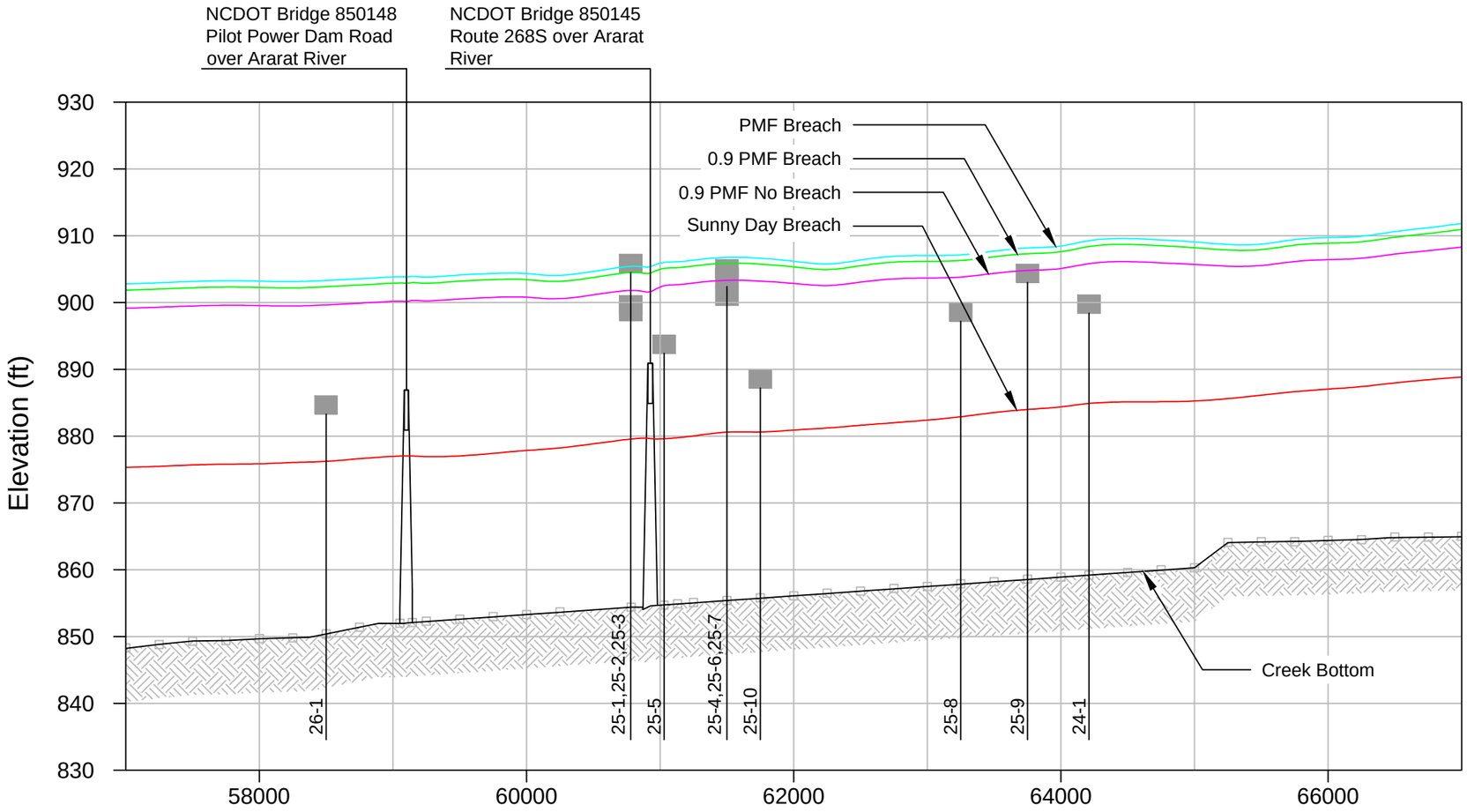
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn:	KHH
	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 13



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

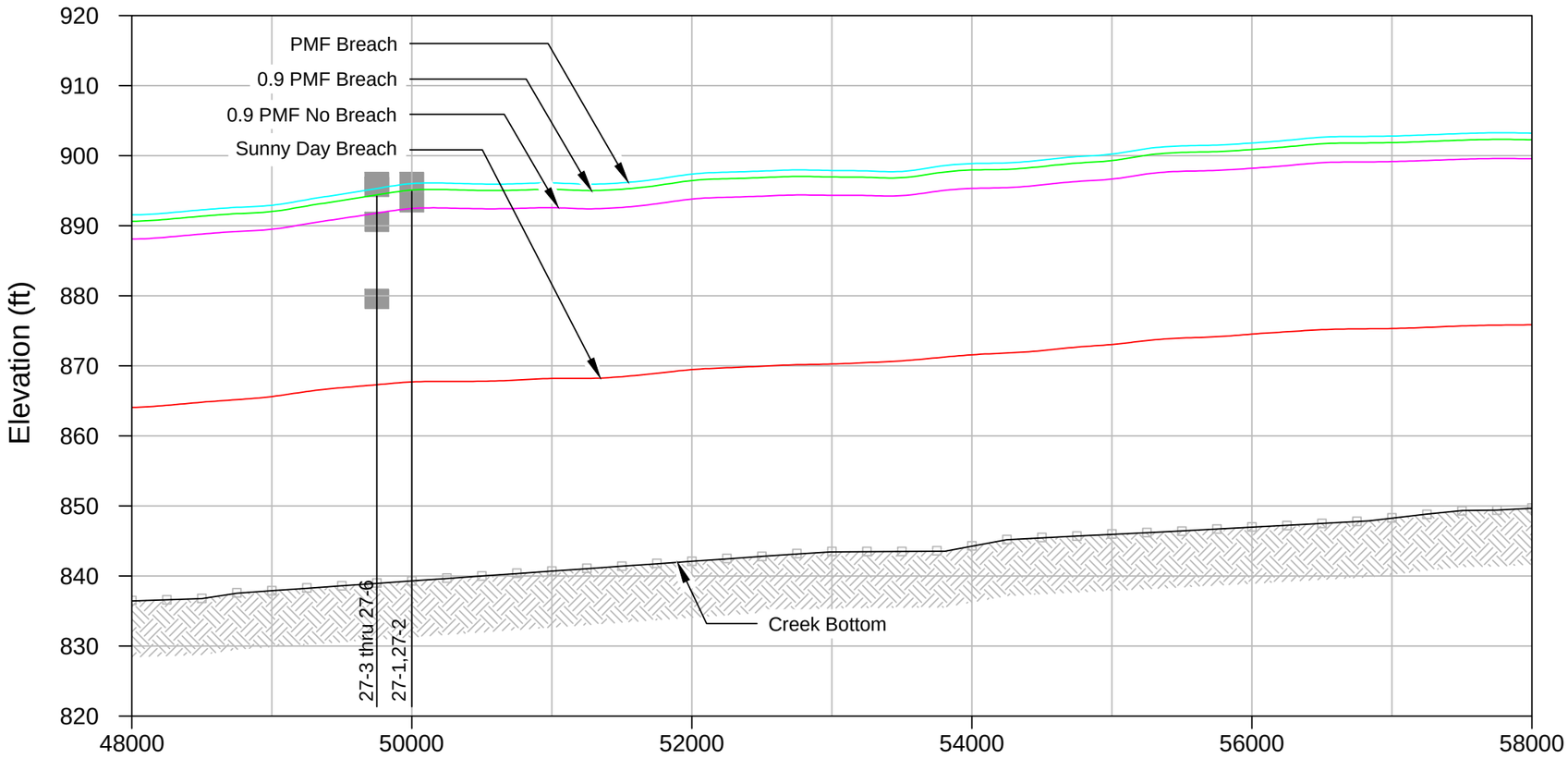
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 14



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

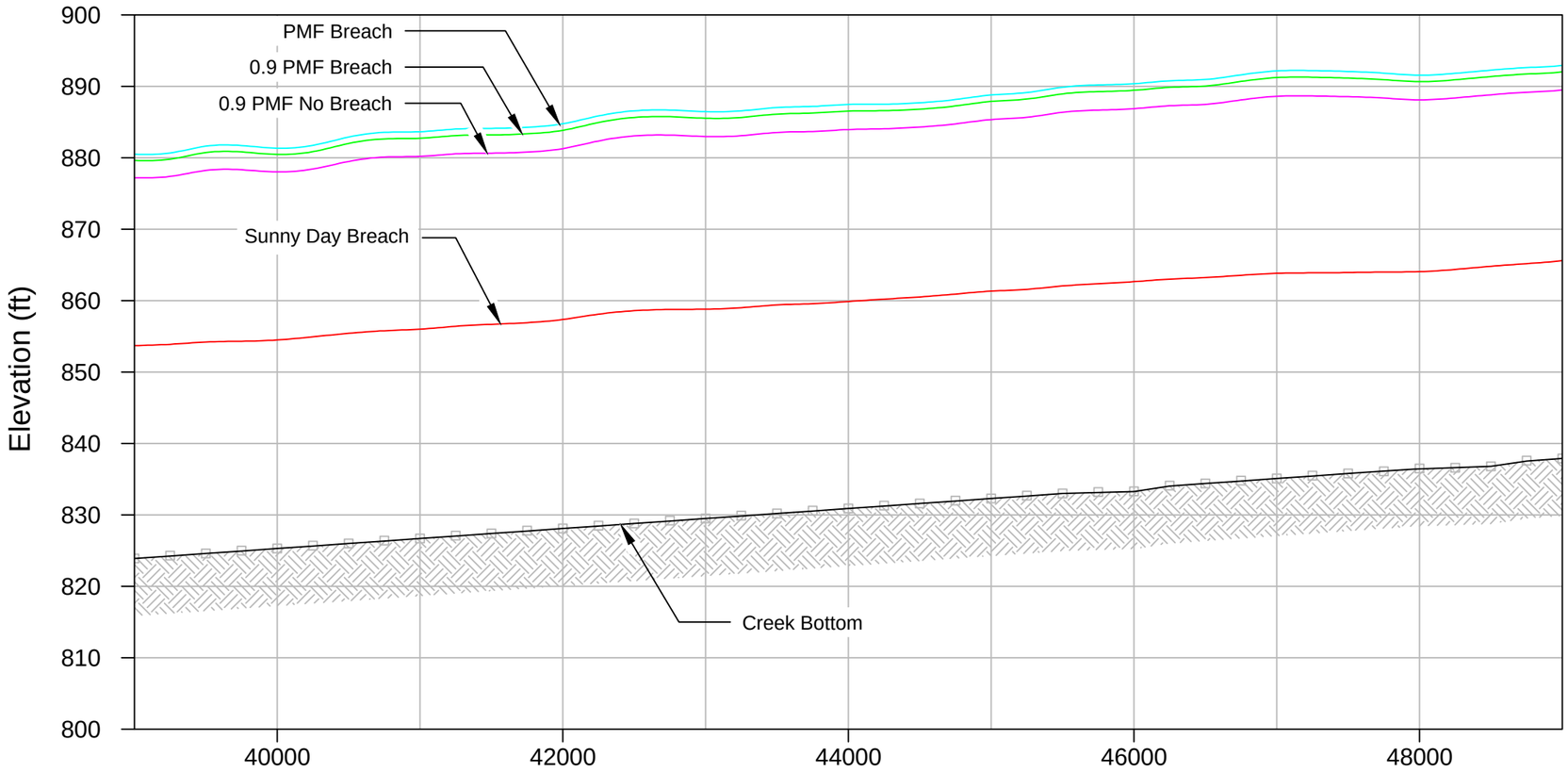
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 15



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

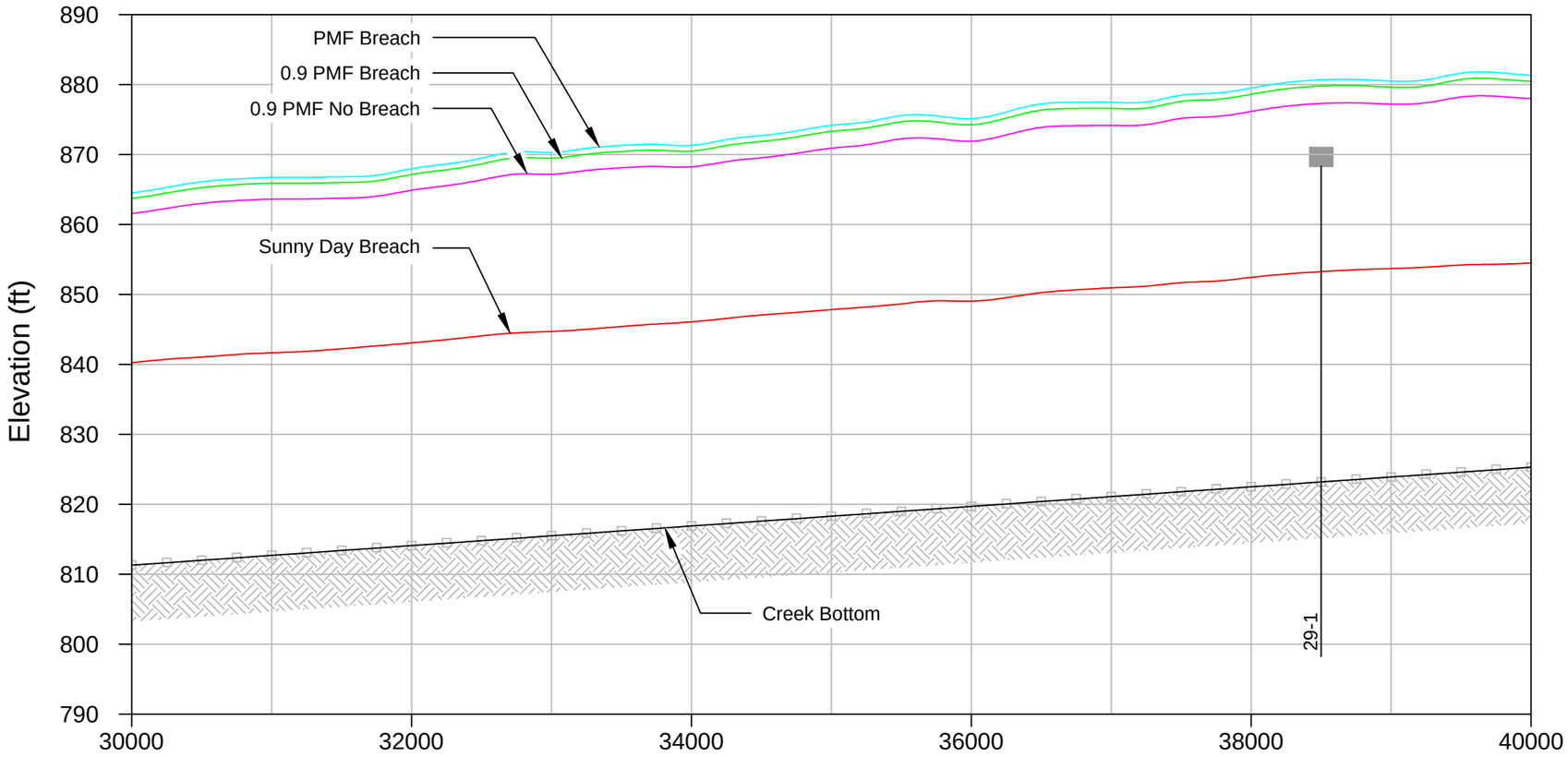
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 16



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

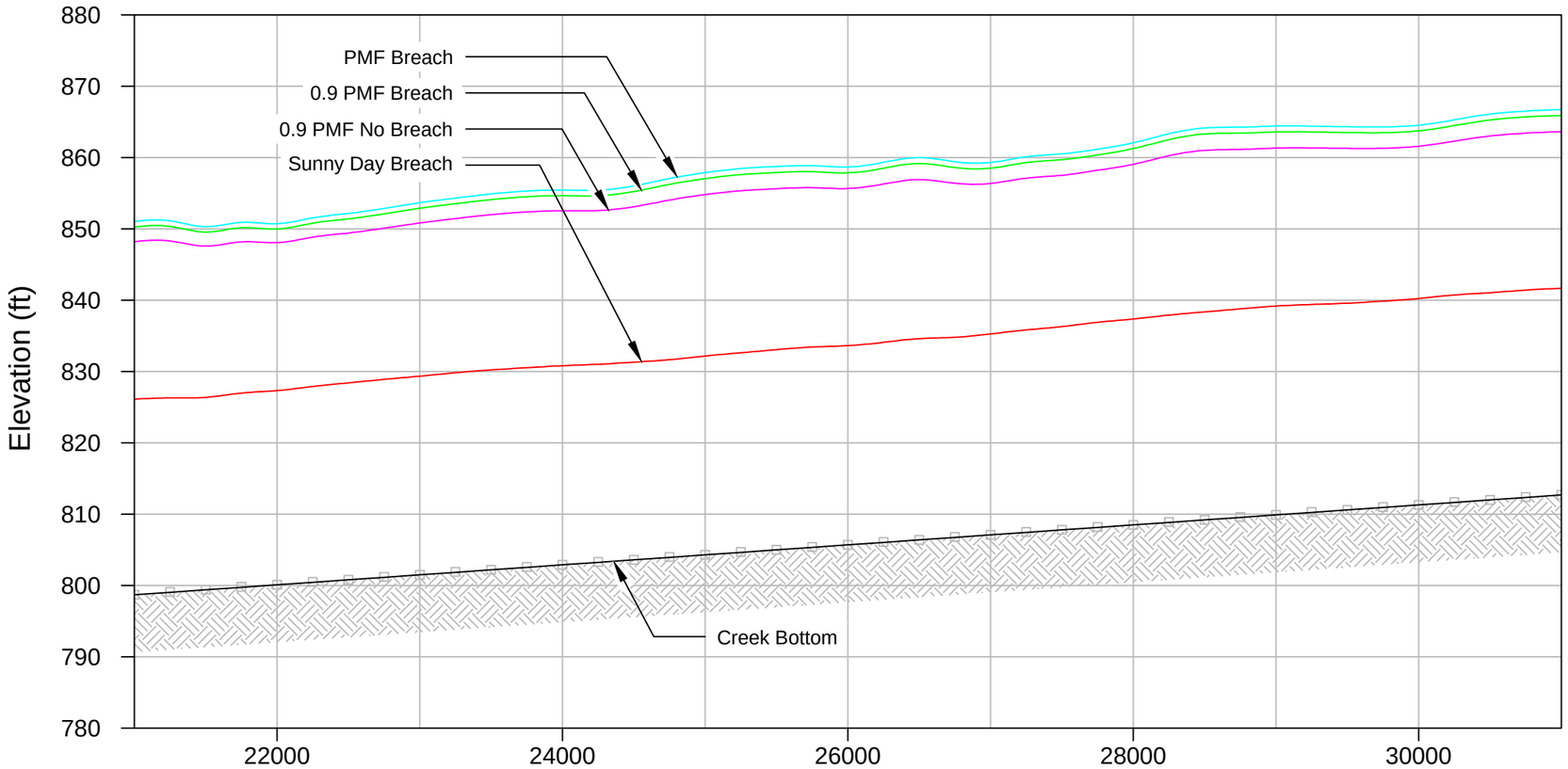
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 17



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

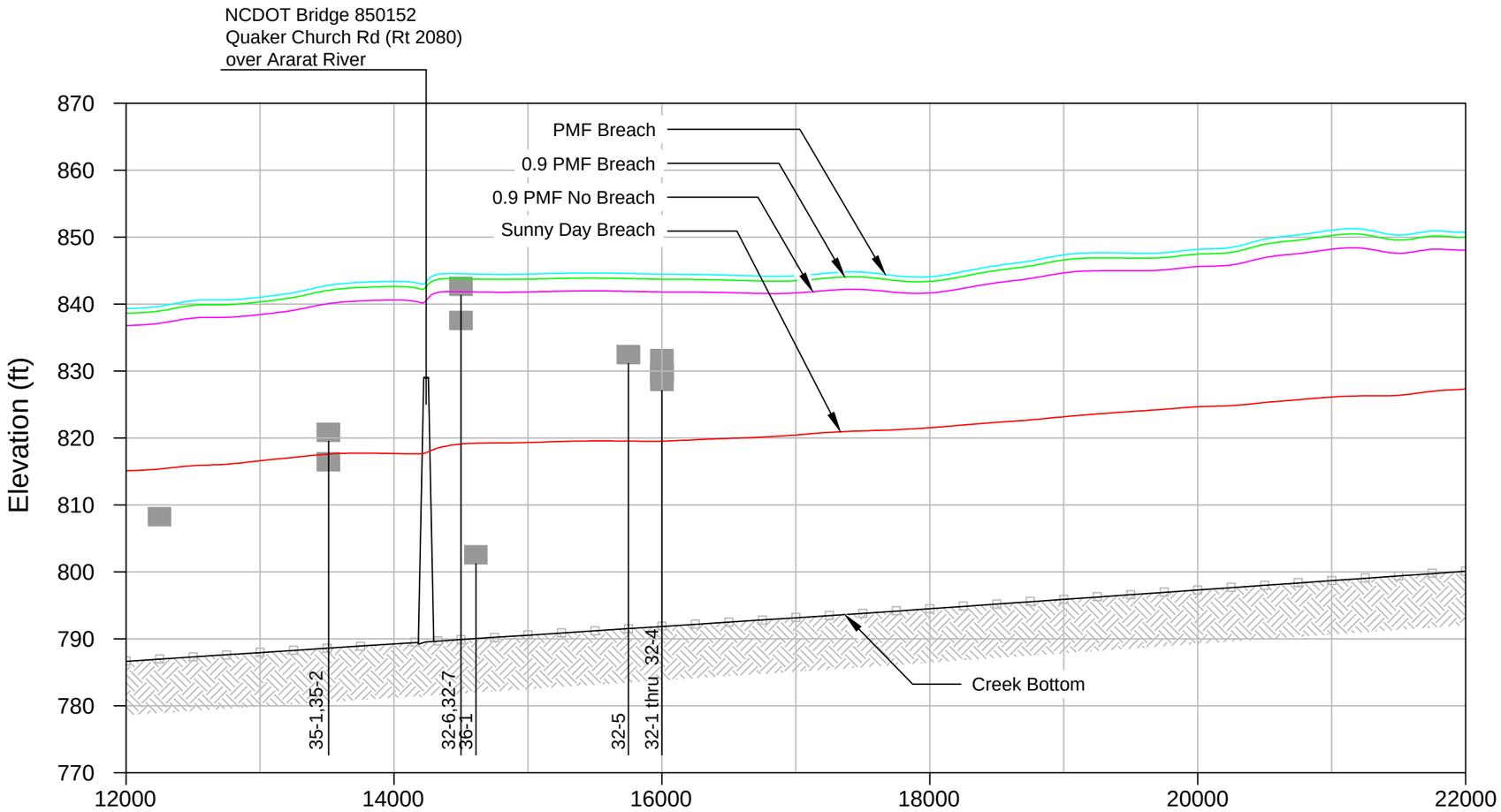
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 18



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

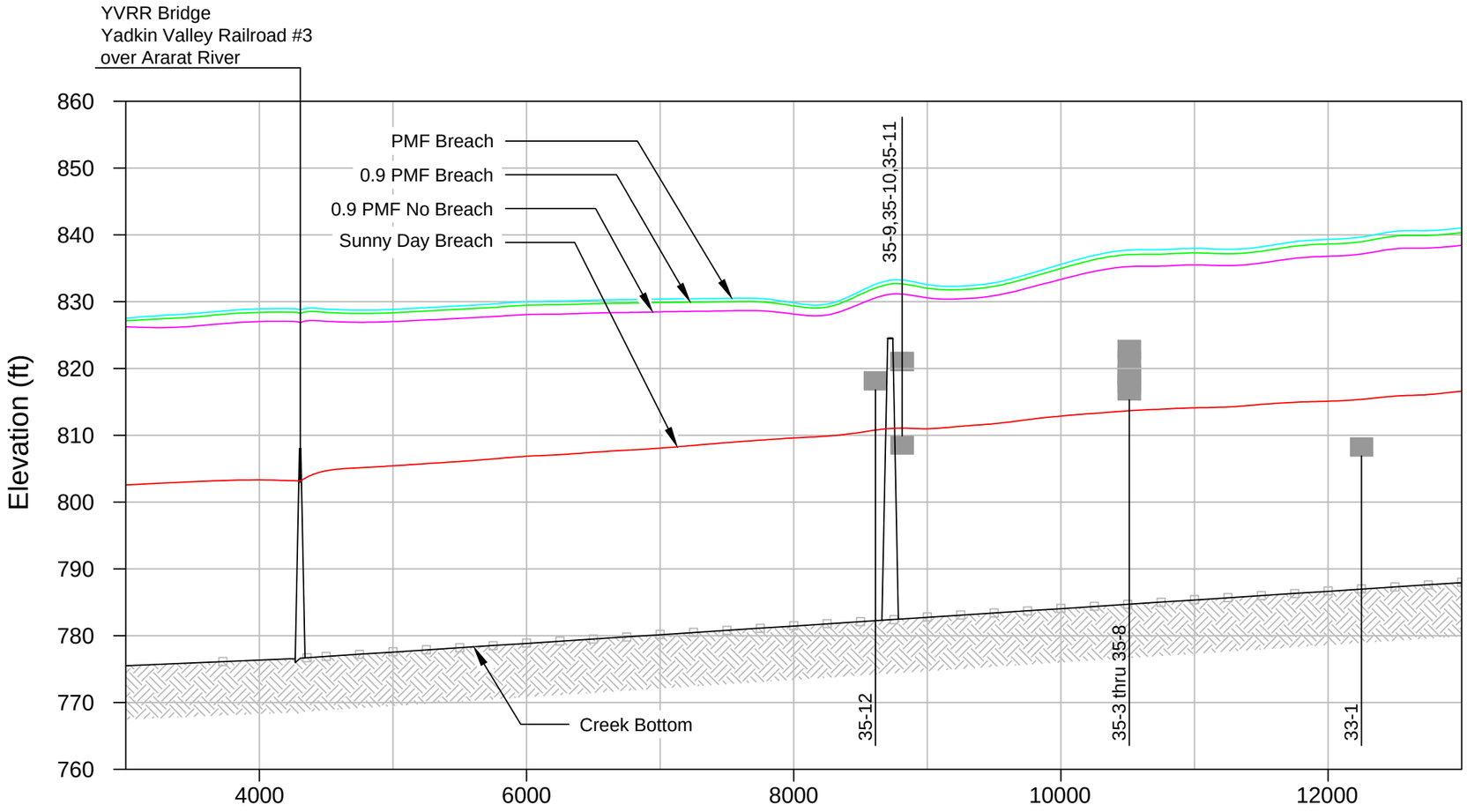
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 19



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

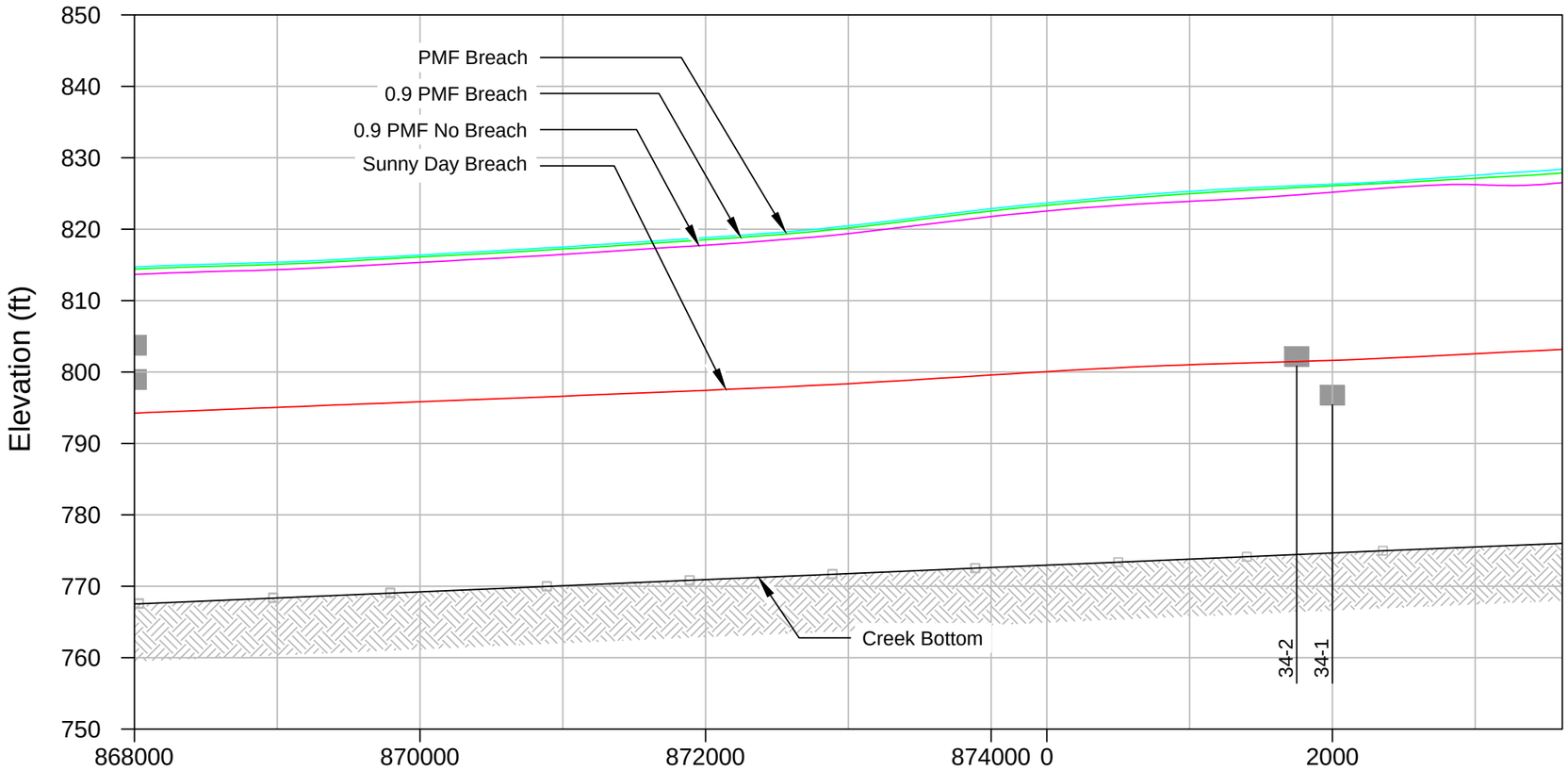
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 20



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

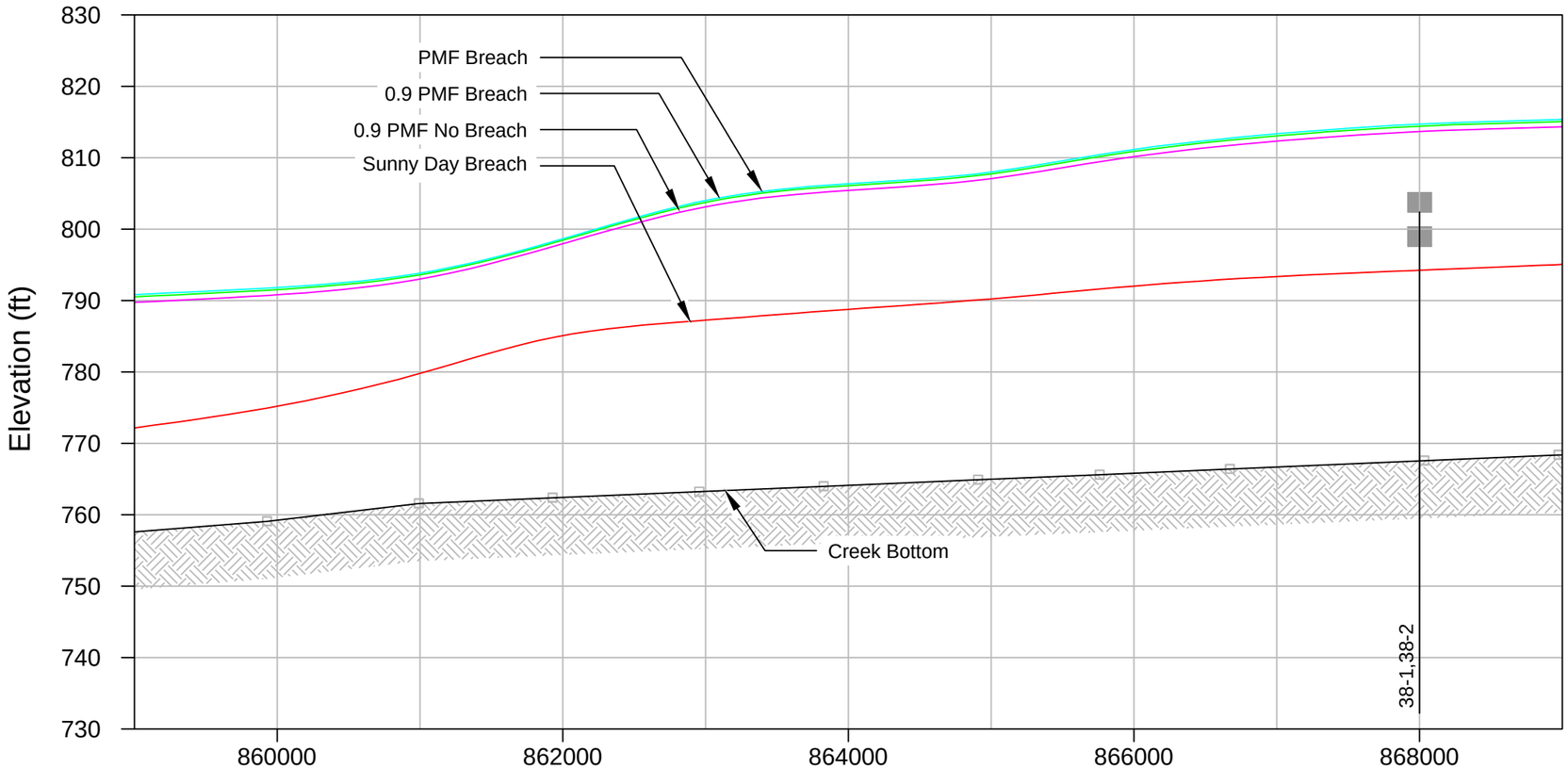
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 21



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

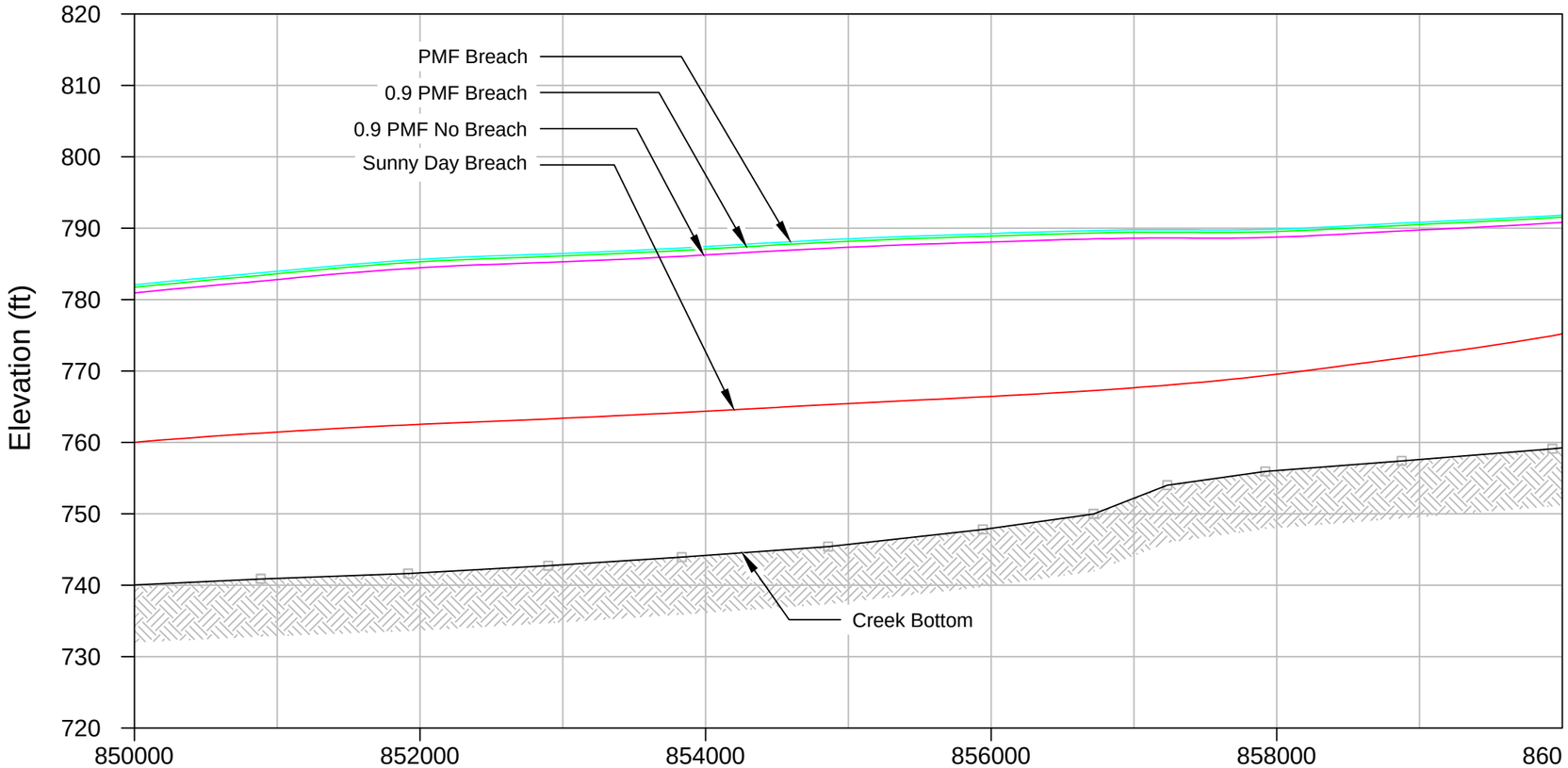
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 22



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

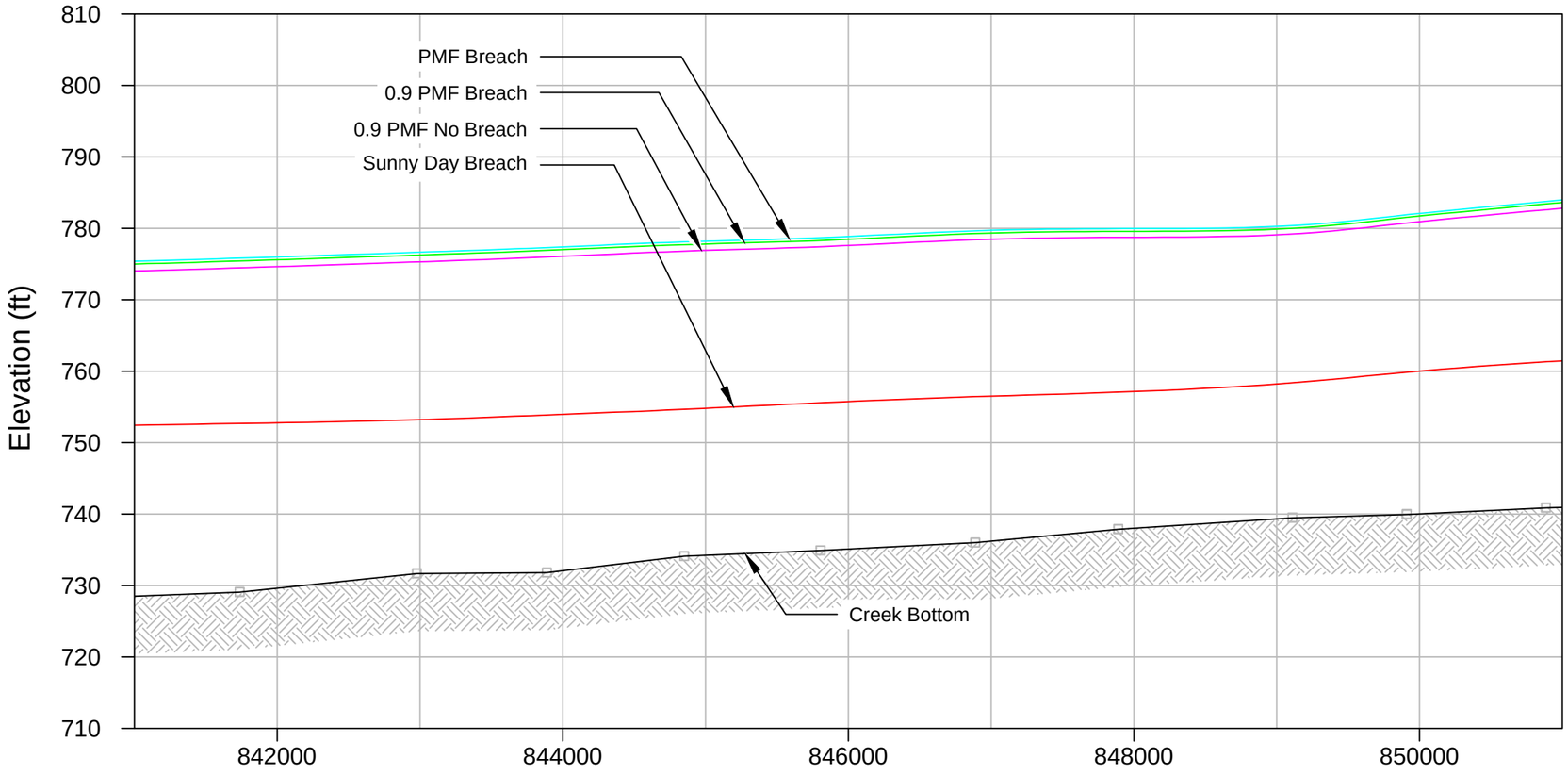
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 23



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

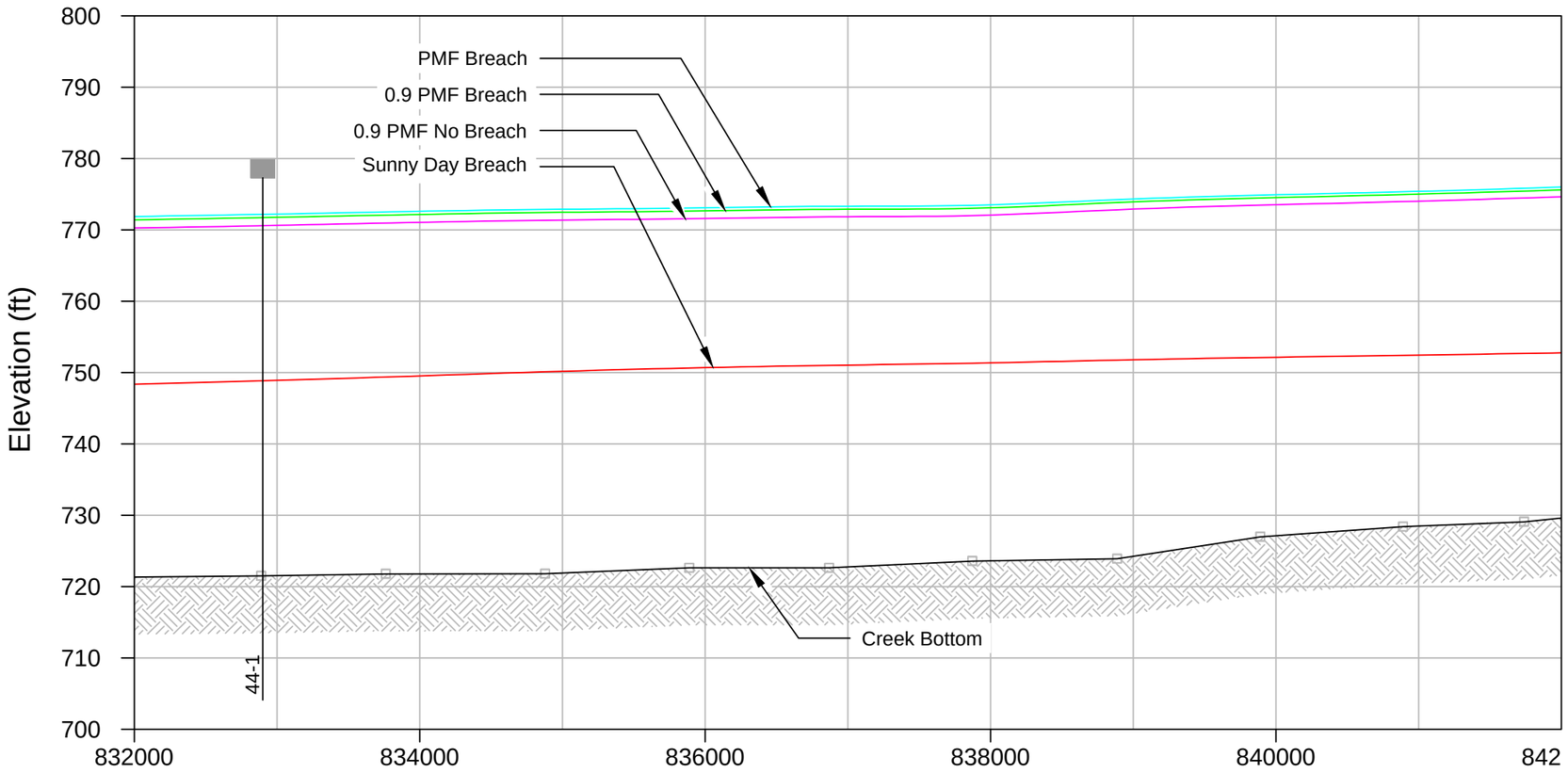
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 24



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

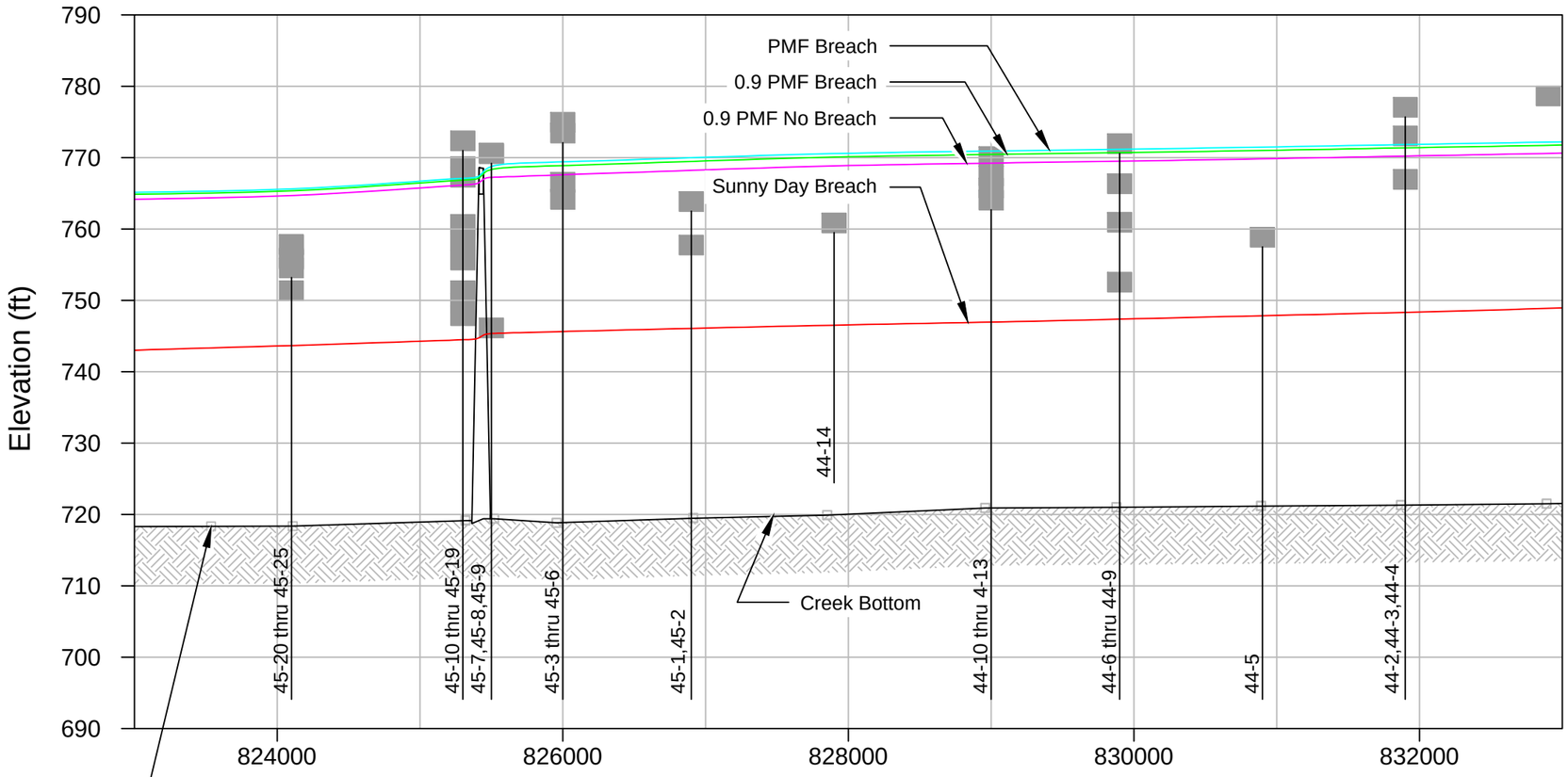
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 25



Sta. 823500.0: Convergence of PMF Breach, 0.9 PMF Breach and no breach events. Structures downstream not affected by breach events.

LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Occupied Structure

FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

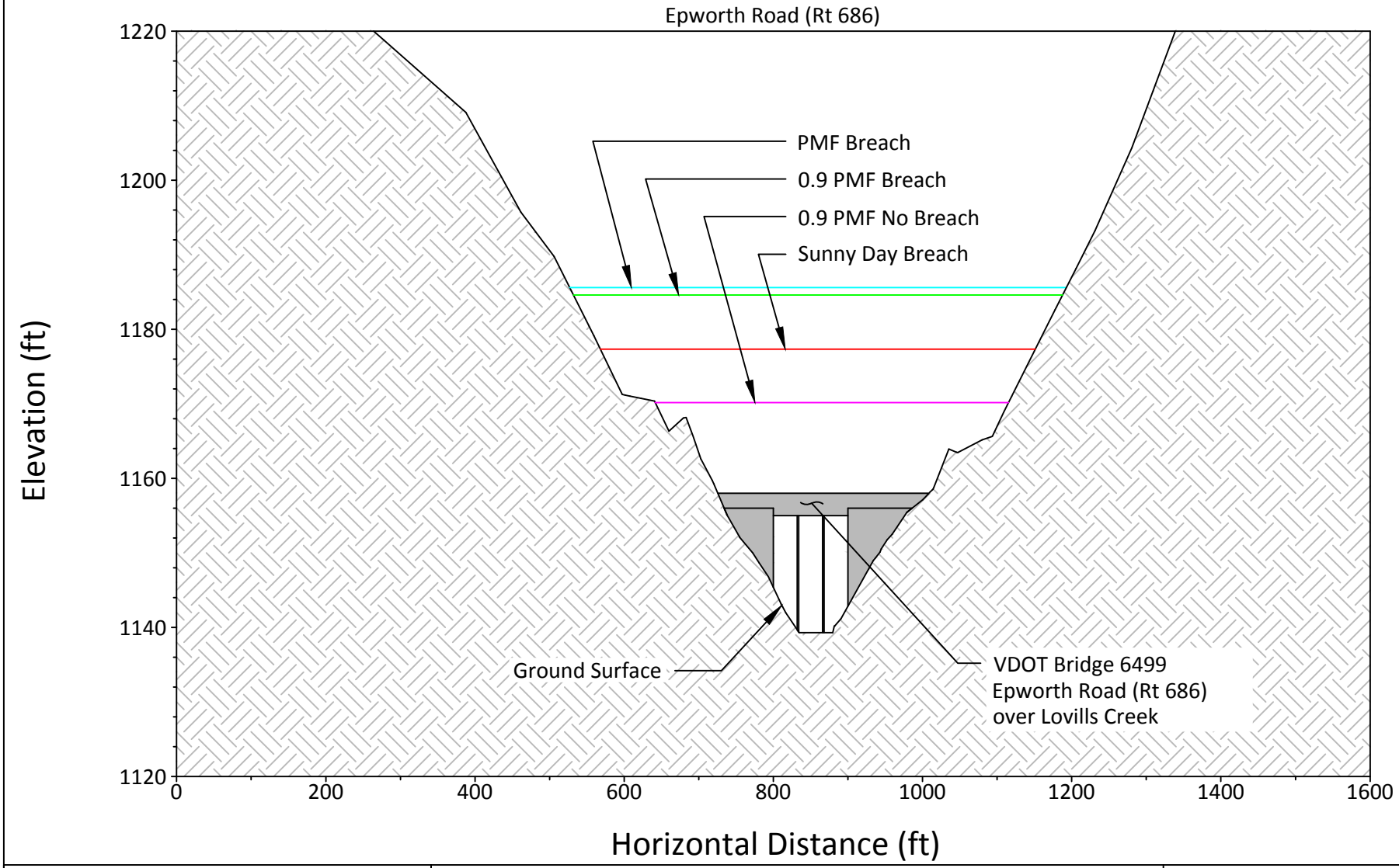
Date:	December, 2014	
Scale:	As Shown	
Drawn:	KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

GENERAL PROFILE PLOT

Profile No. 26

Cross-Section Profile Plots



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

SINCE F&R 1881

FROEHLING & ROBERTSON, INC.

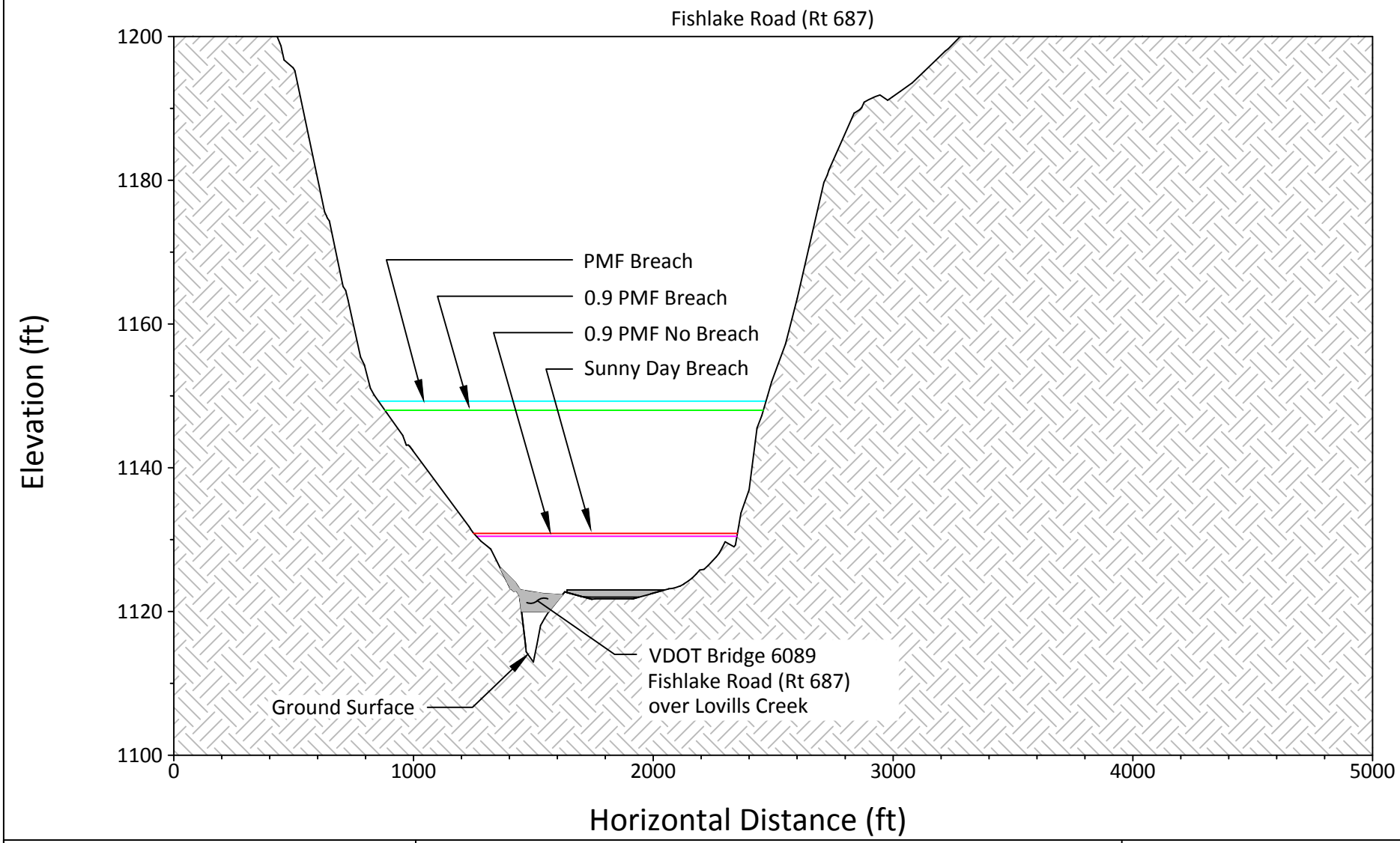
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
181310
Profile

X-Sect. Profile No.
1



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

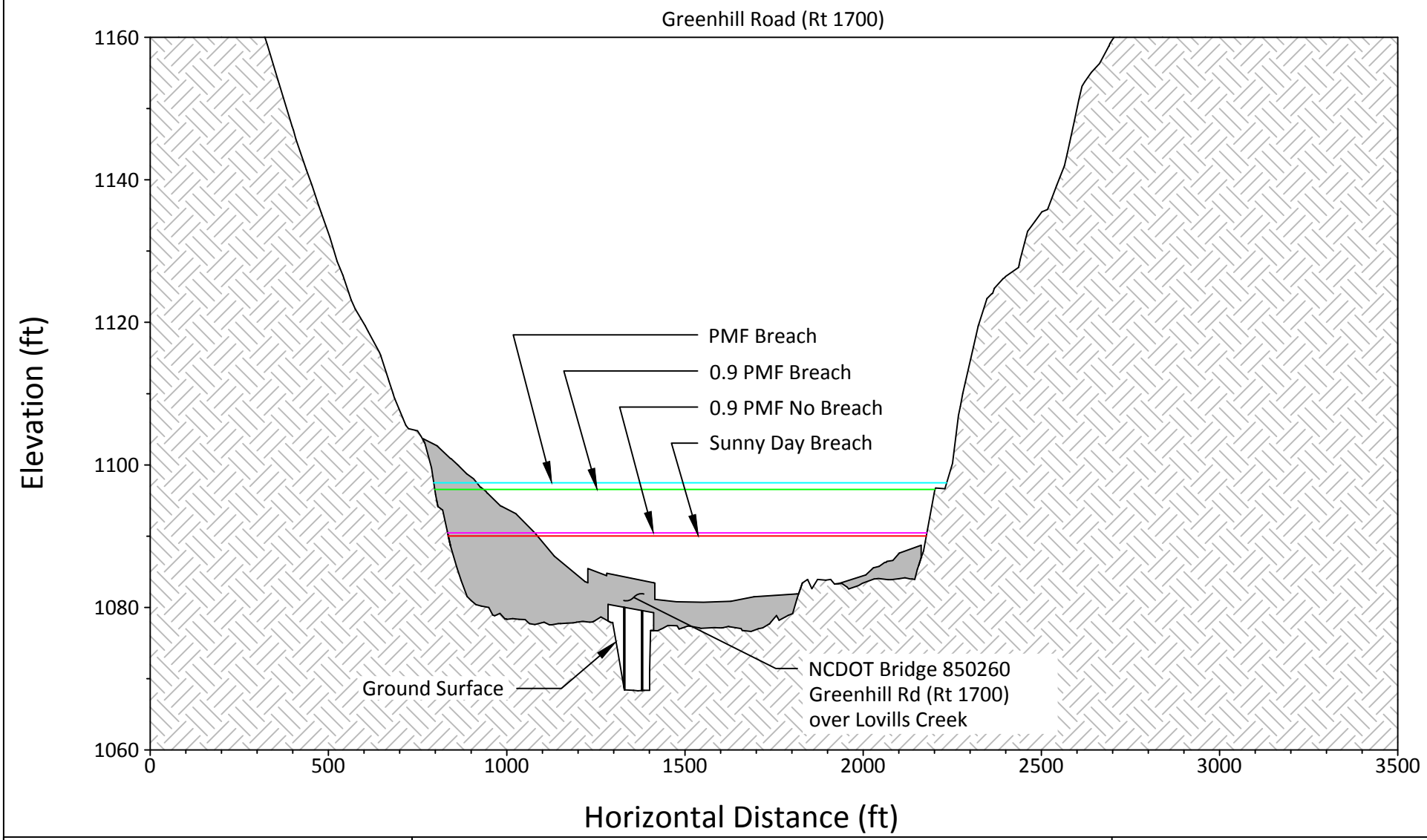
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
175275
Profile

X-Sect. Profile No.
2



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

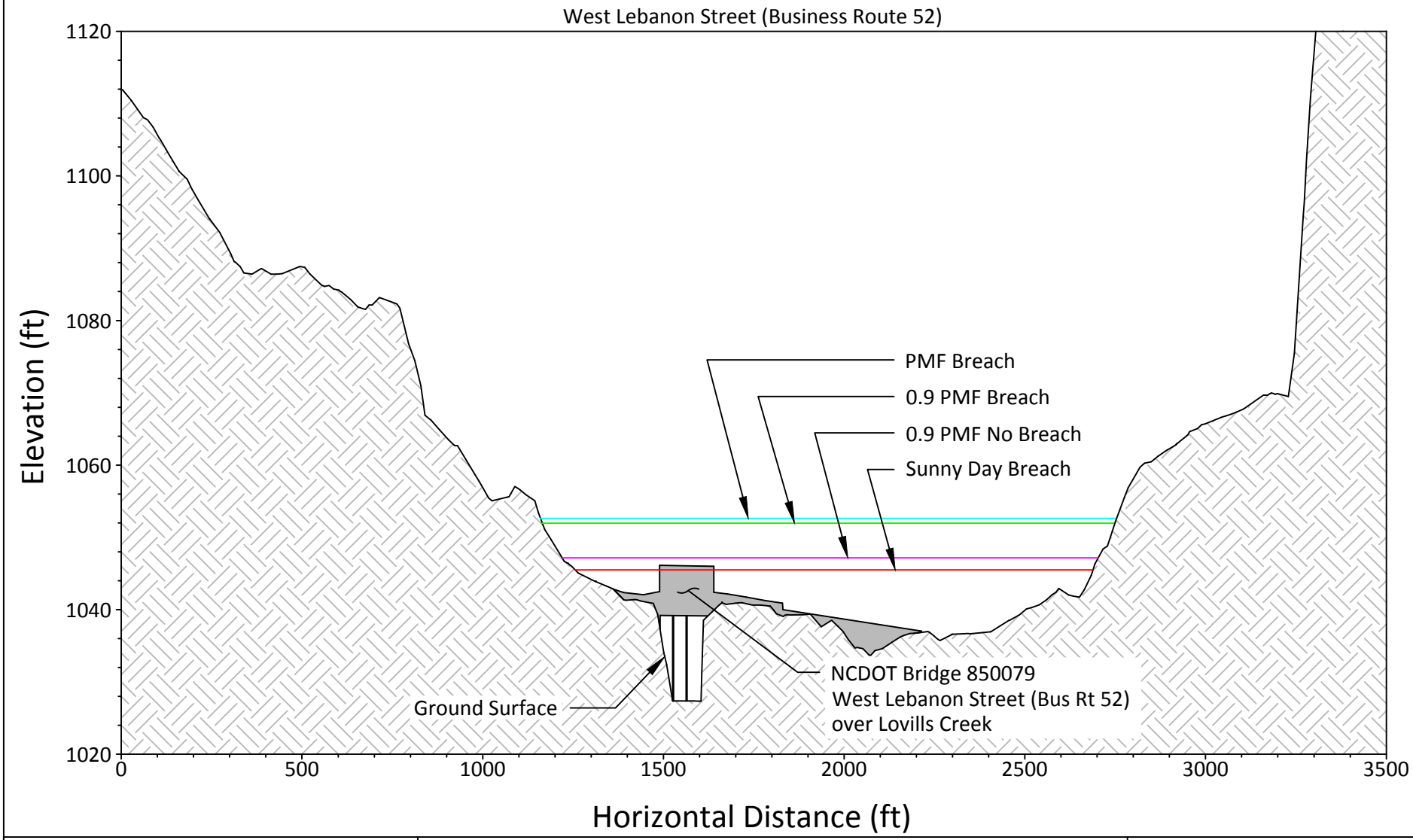
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
163555
Profile

X-Sect. Profile No.
3



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

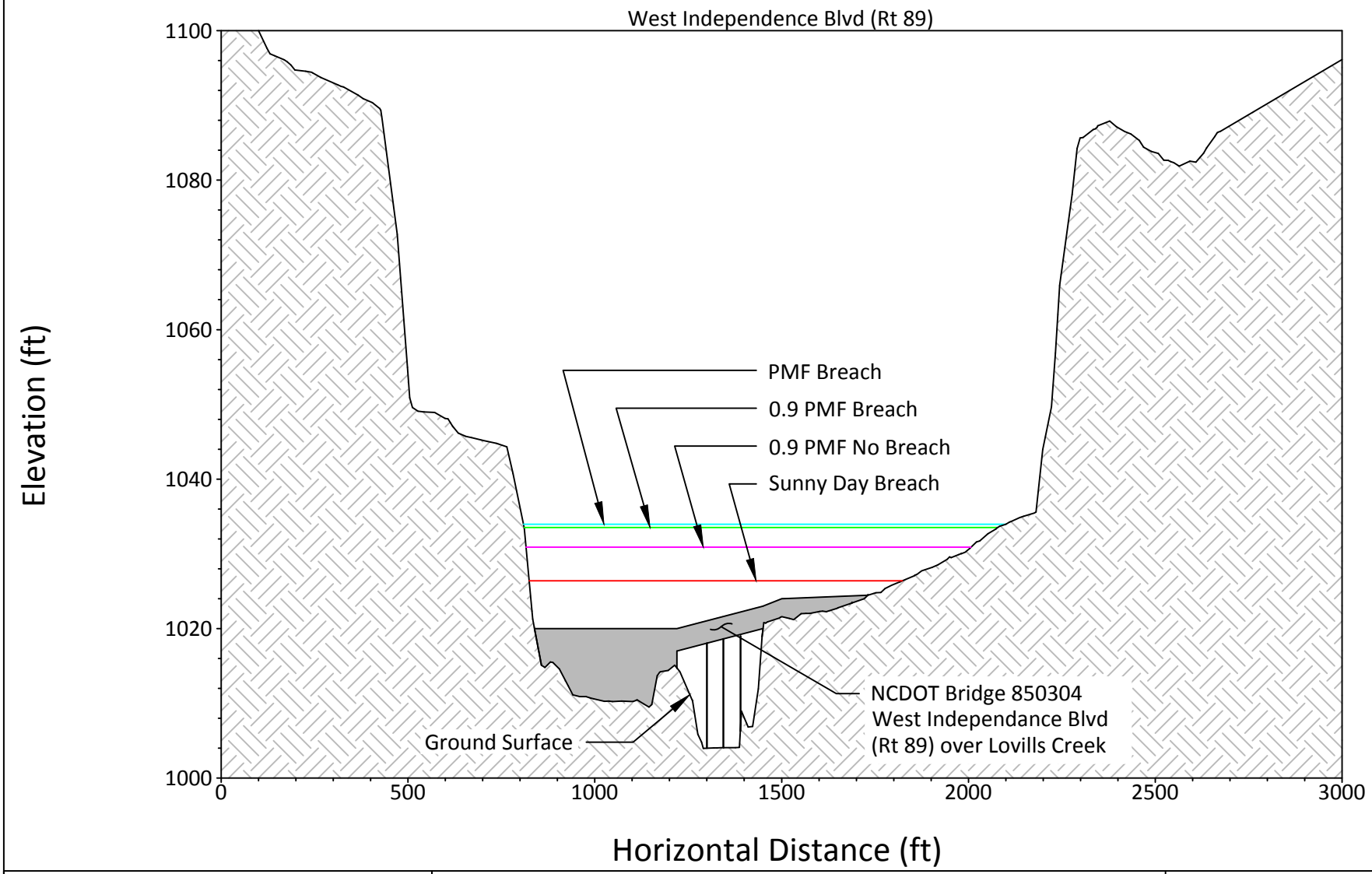
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
151567
Profile

X-Sect. Profile No.
4



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

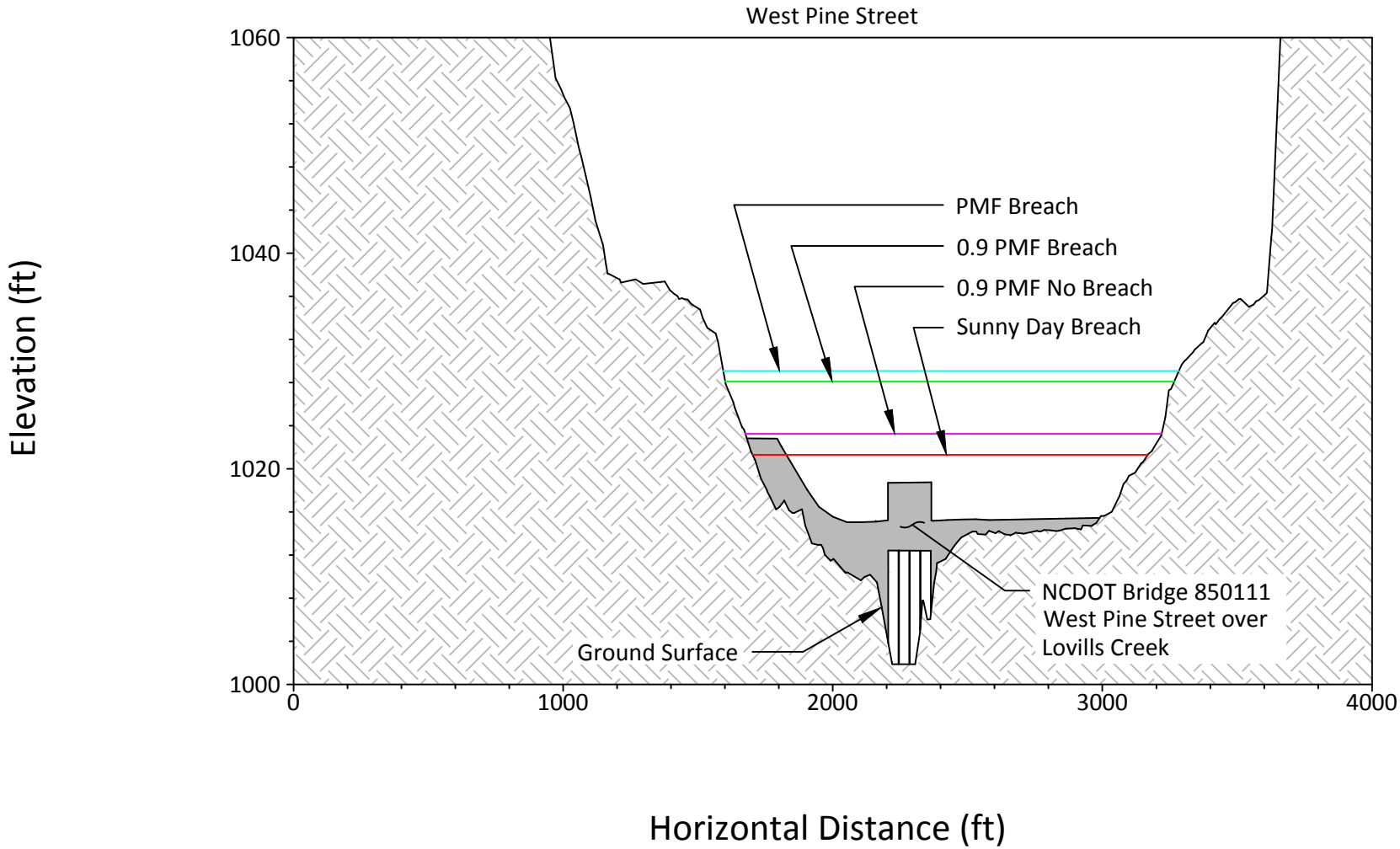
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
144741
Profile

X-Sect. Profile No.
5



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

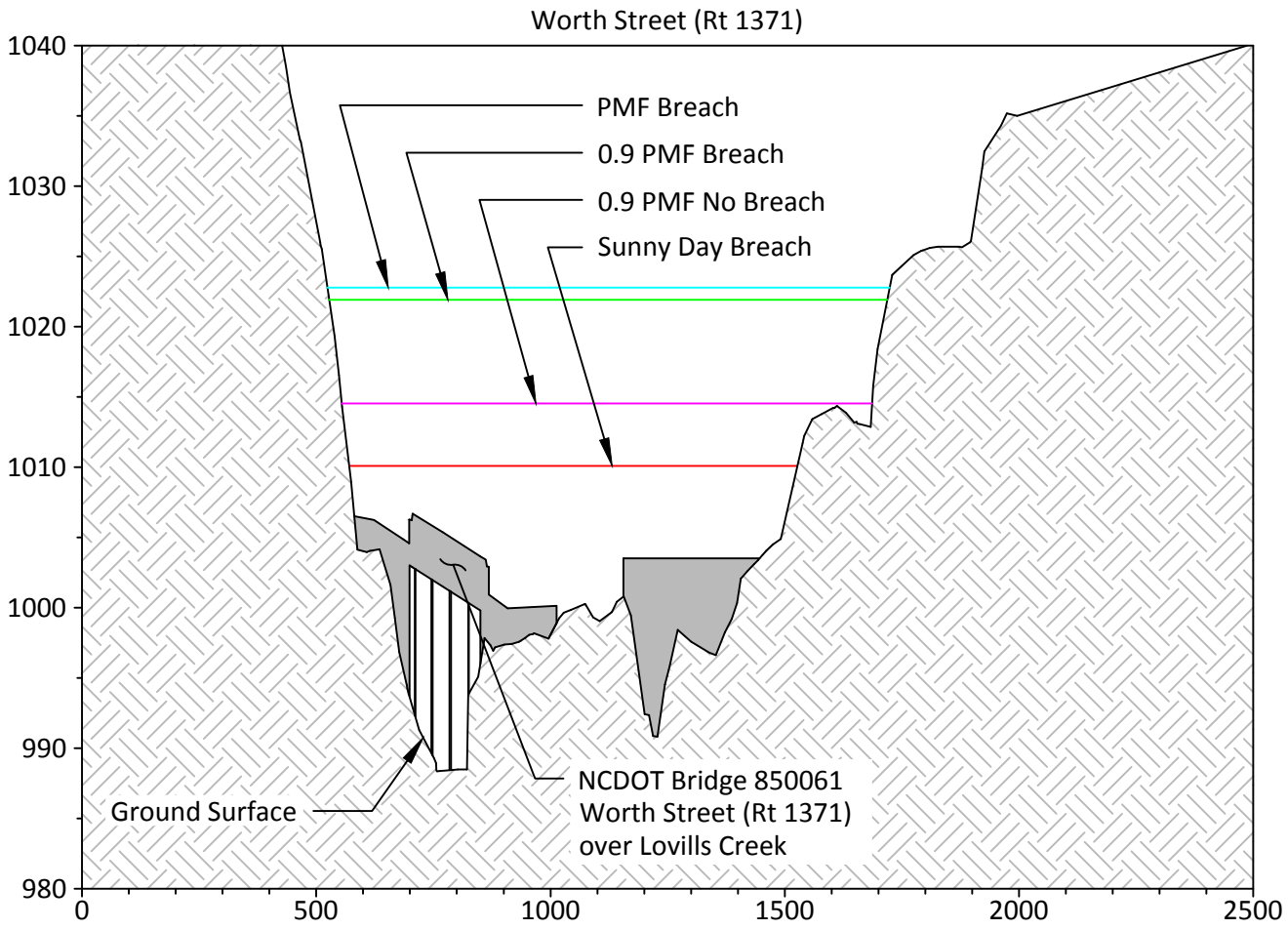
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
143311
Profile

X-Sect. Profile No.
6



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

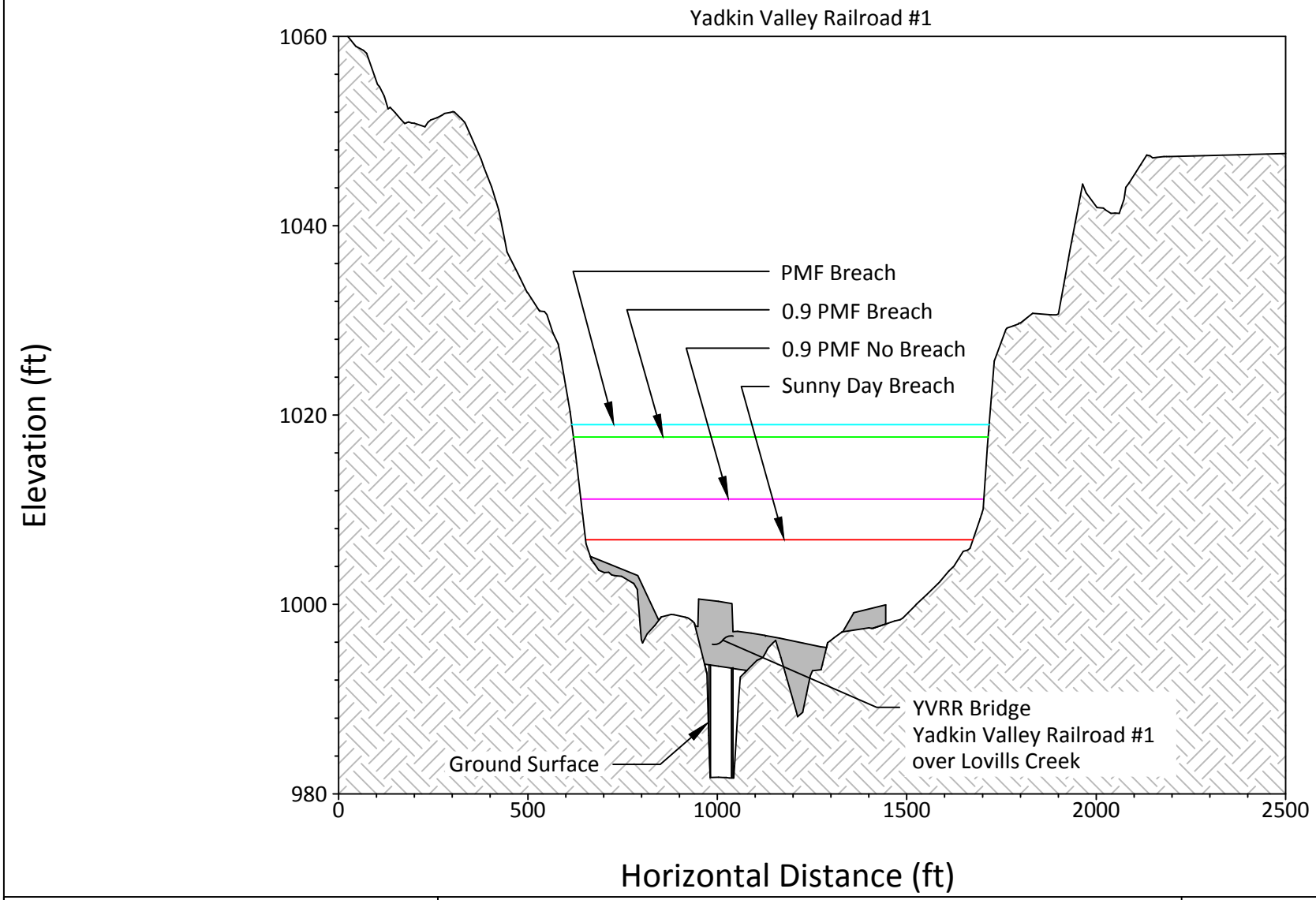
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
139113
Profile

X-Sect. Profile No.
7



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

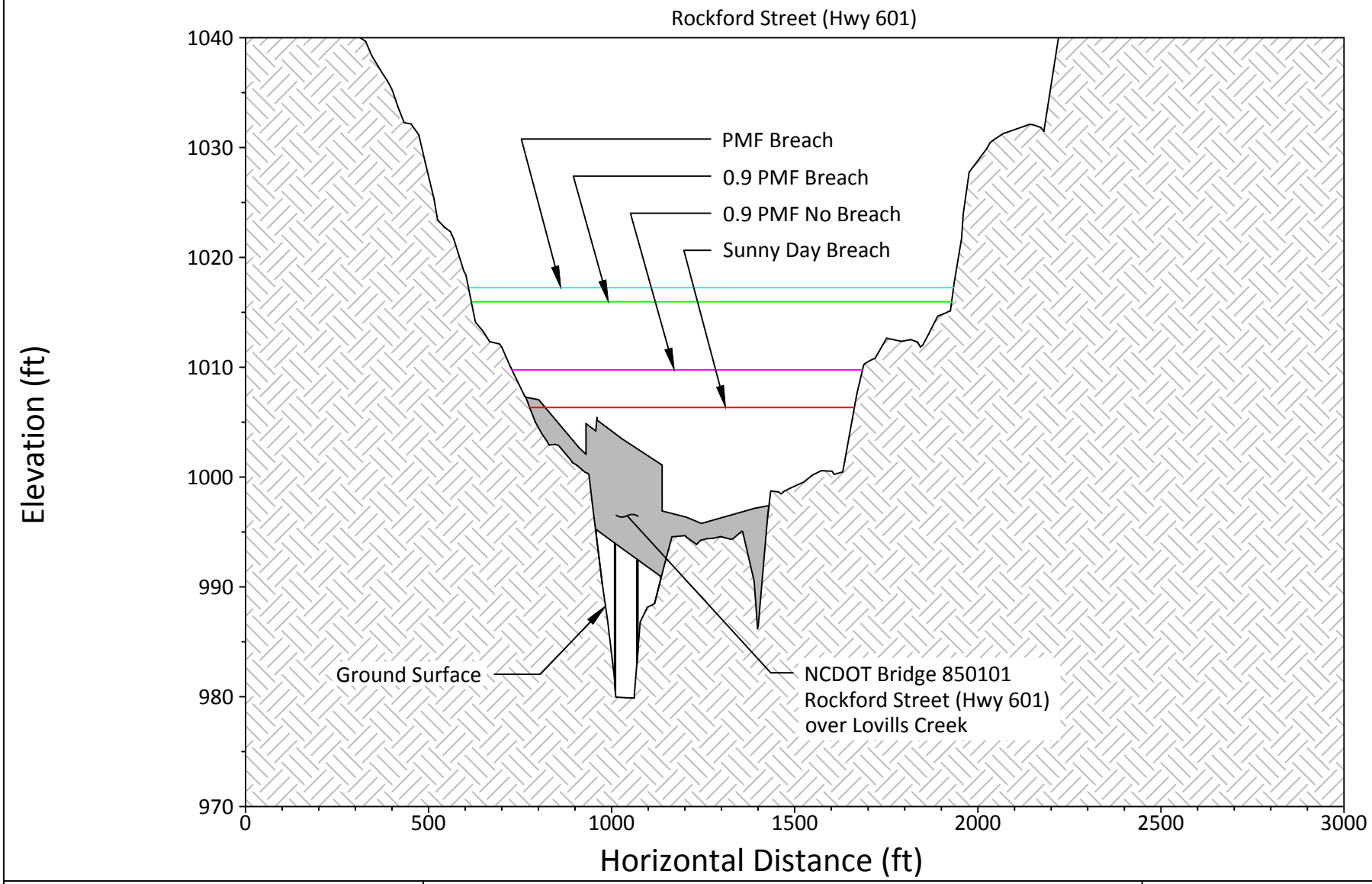
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
137500
Profile

X-Sect. Profile No.
8



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

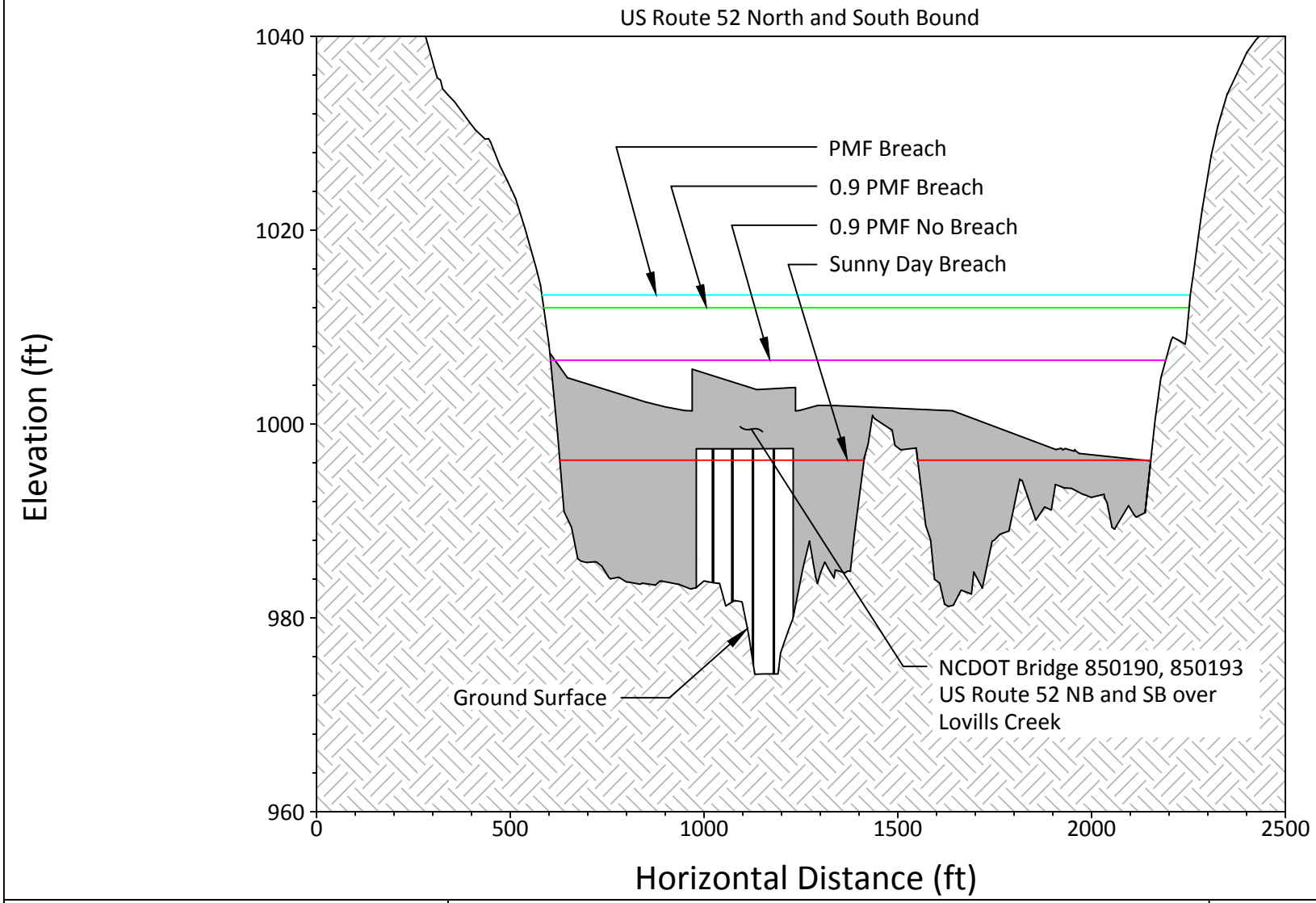
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
137152
Profile

X-Sect. Profile No.
9



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

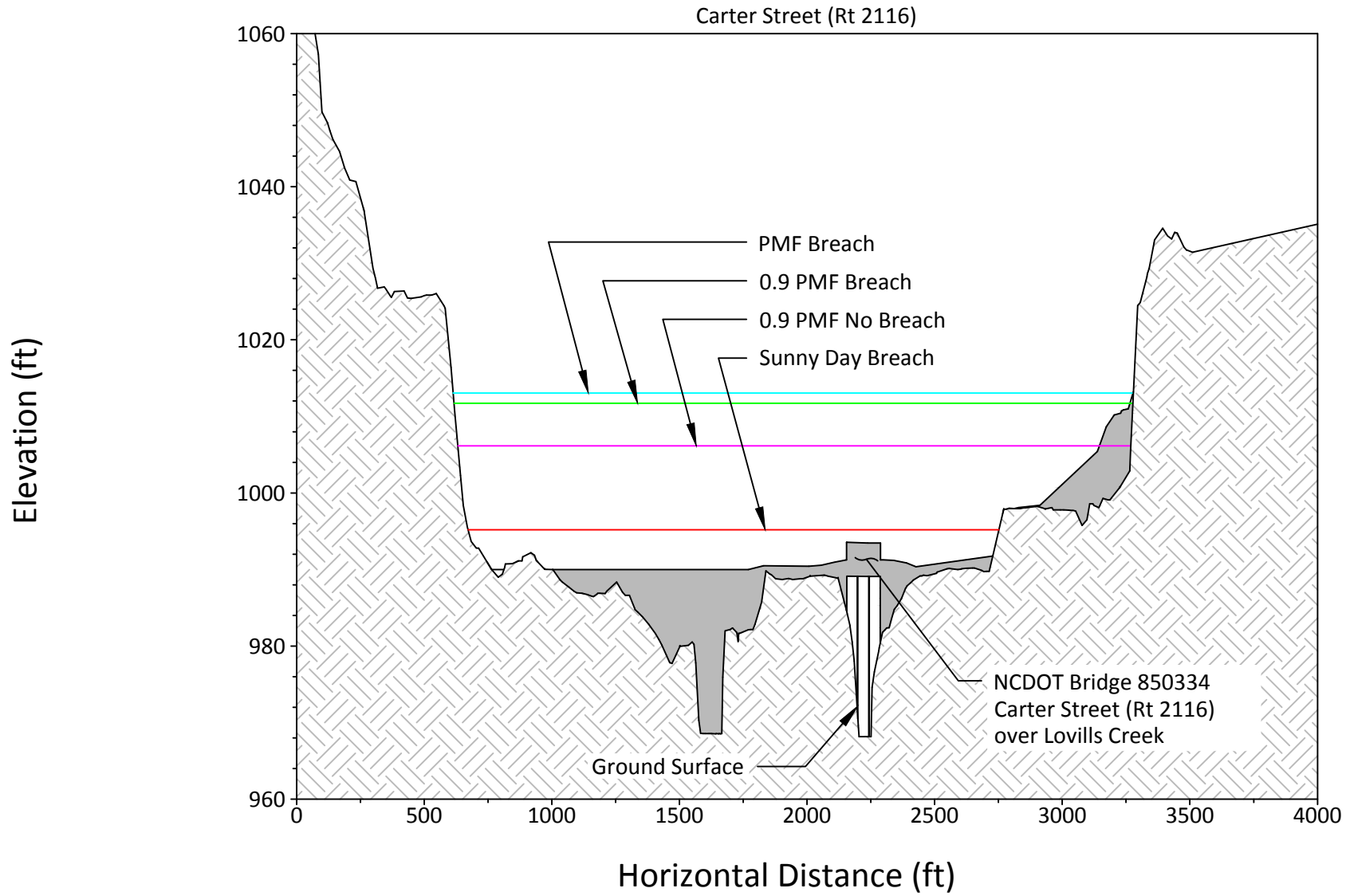
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
135439
Profile

X-Sect. Profile No.
10



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

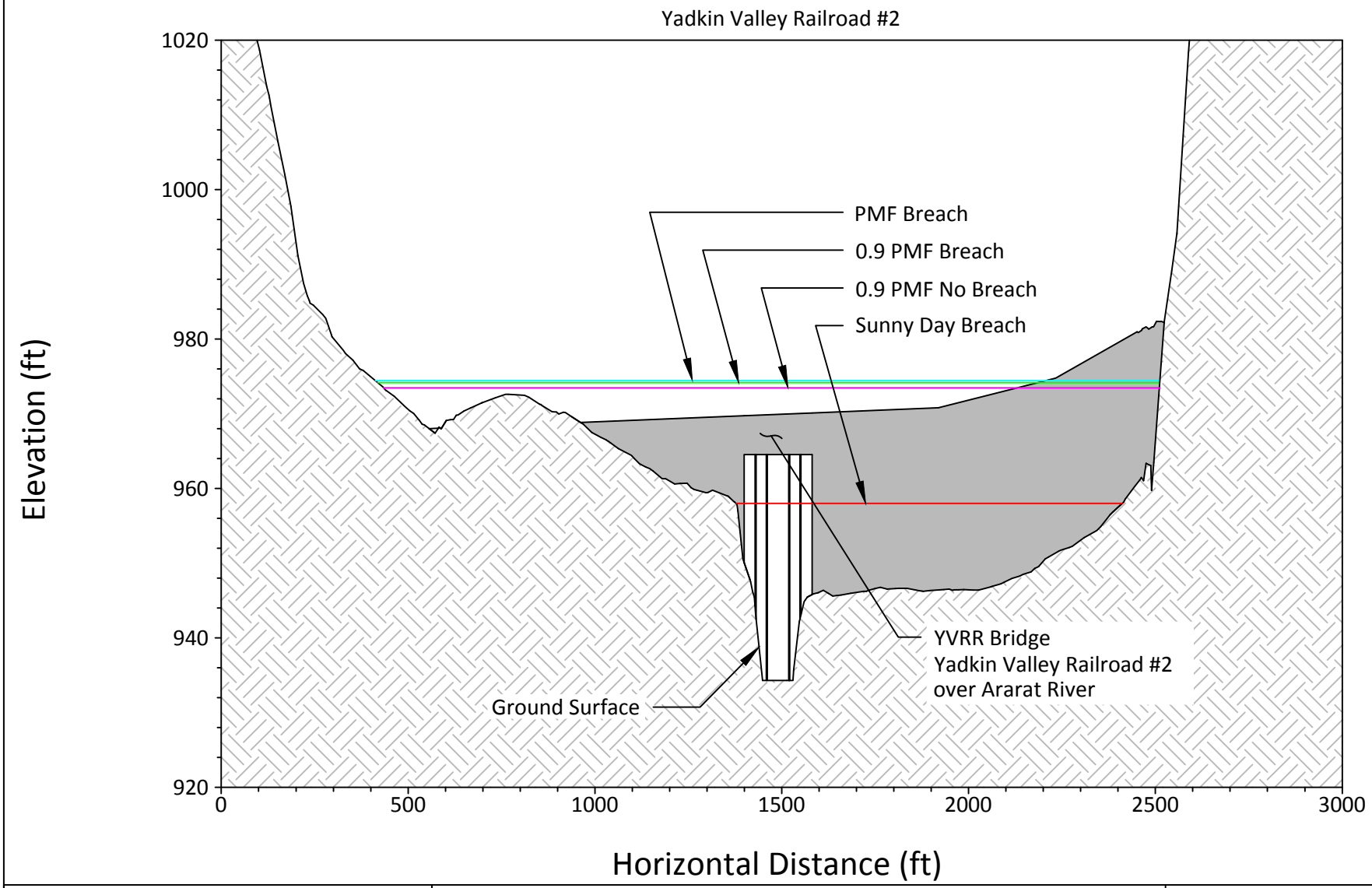
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
133140
Profile

X-Sect. Profile No.
11



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

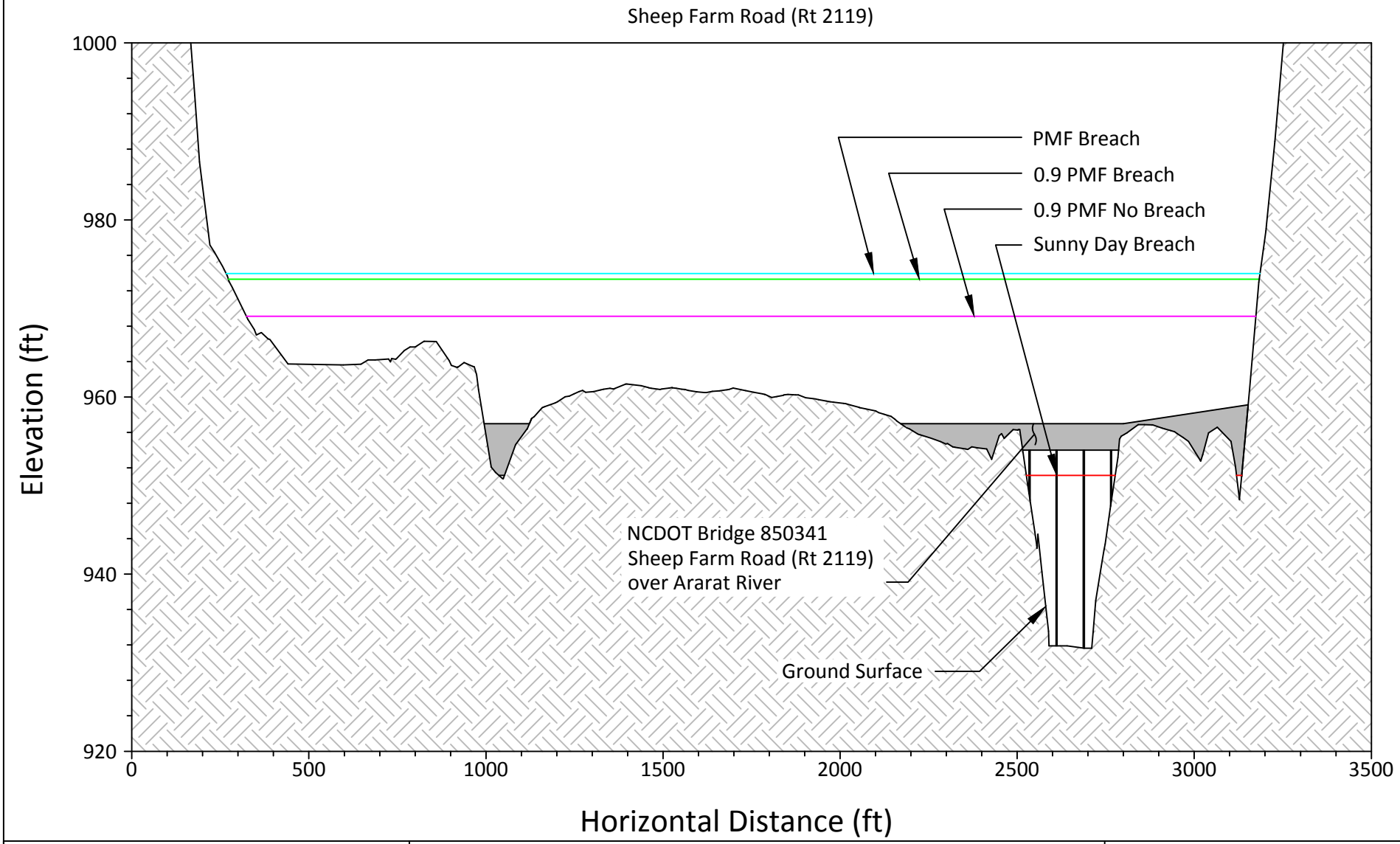
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
107250
Profile

X-Sect. Profile No.
12



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

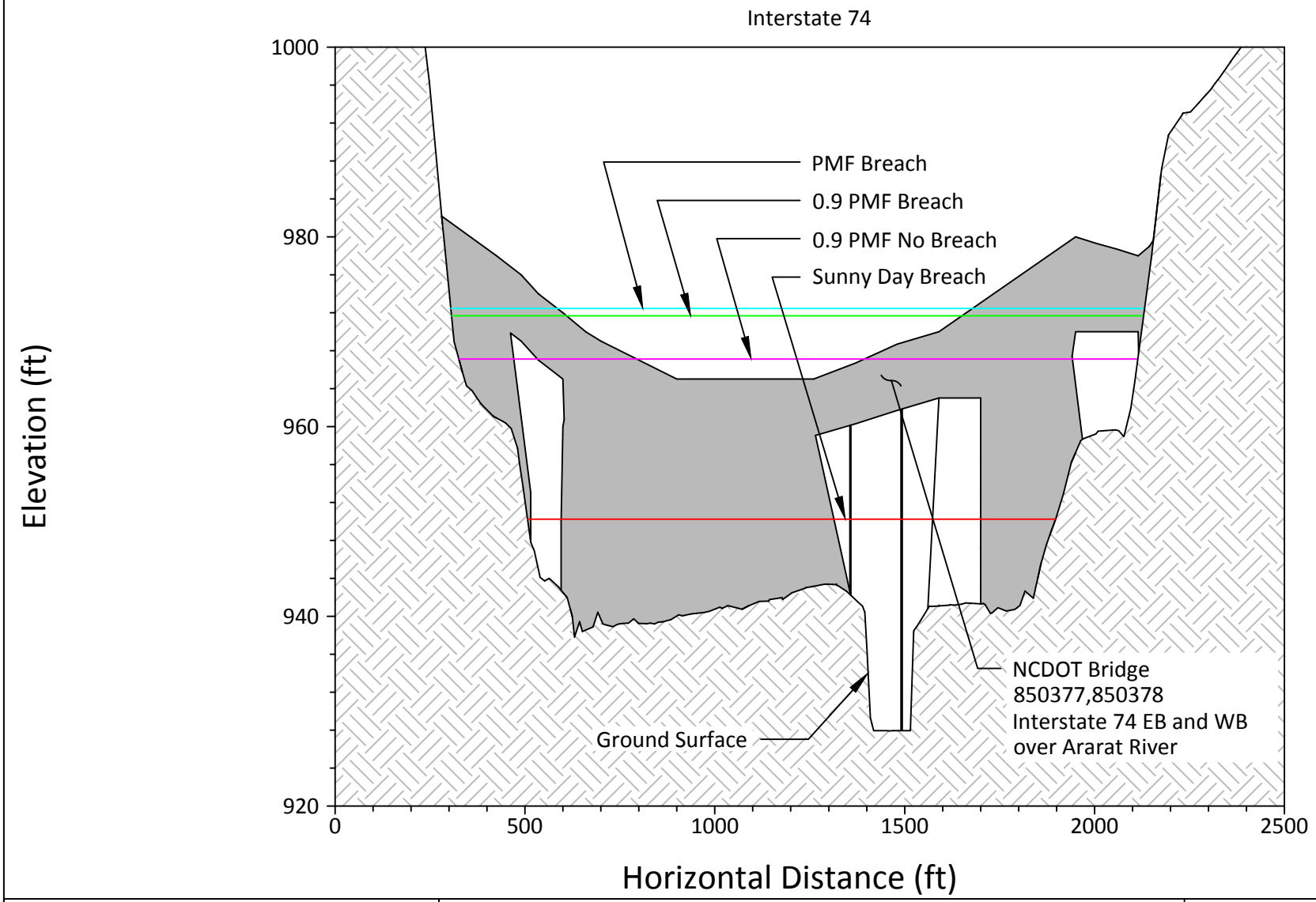
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
105664
Profile

X-Sect. Profile No.
13



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

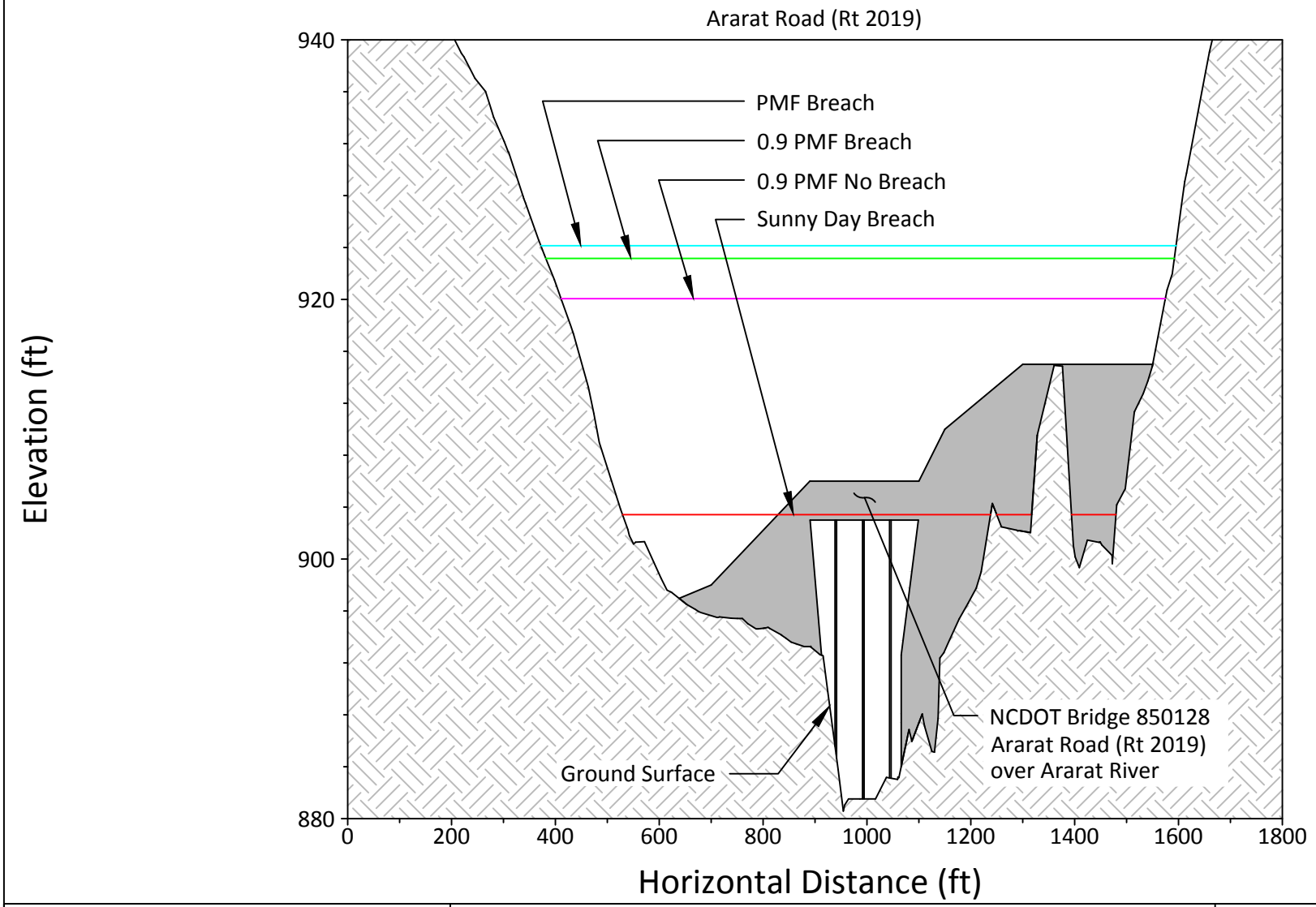
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
102791
Profile

X-Sect. Profile No.
14



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

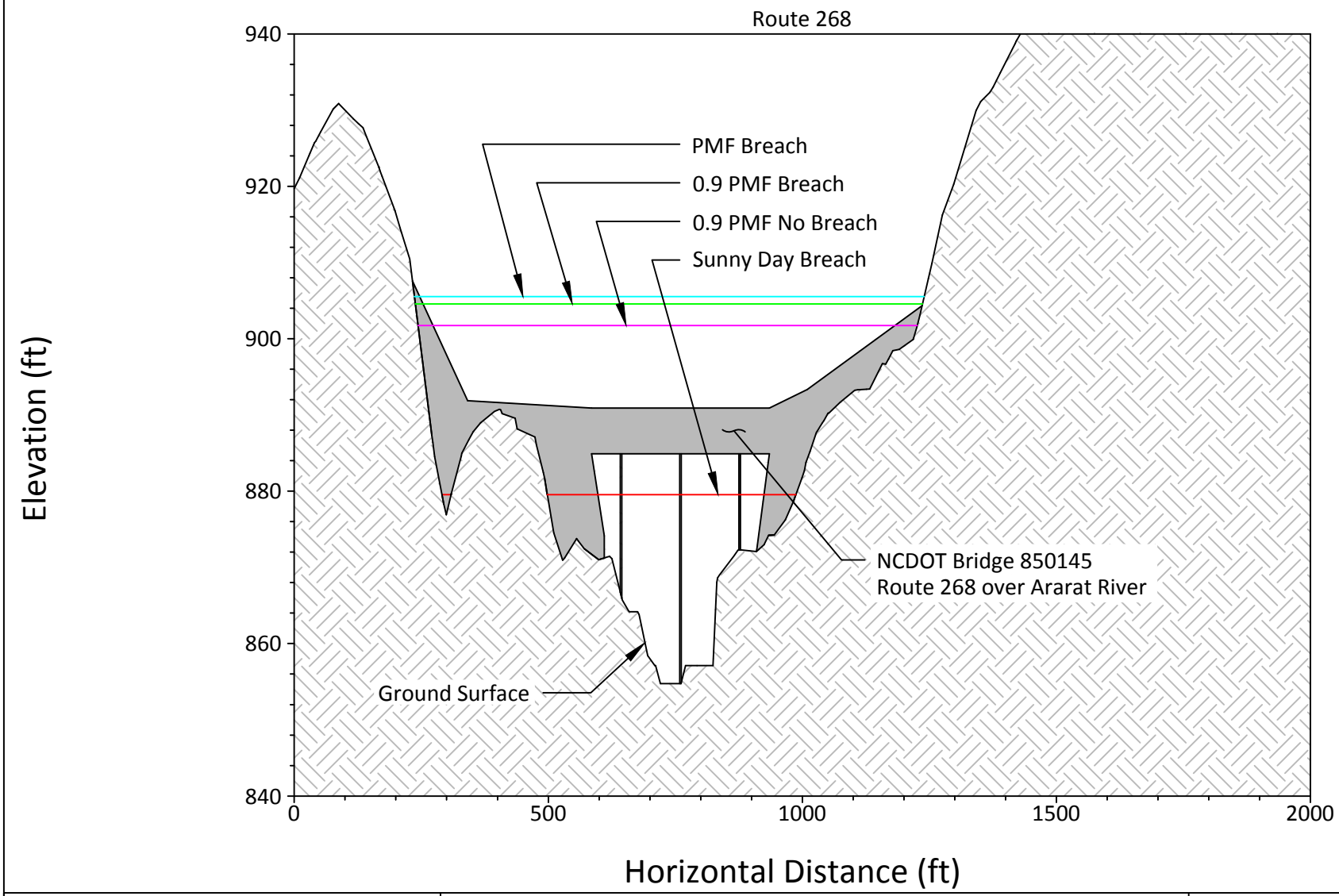
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
77558
Profile

X-Sect. Profile No.
15



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

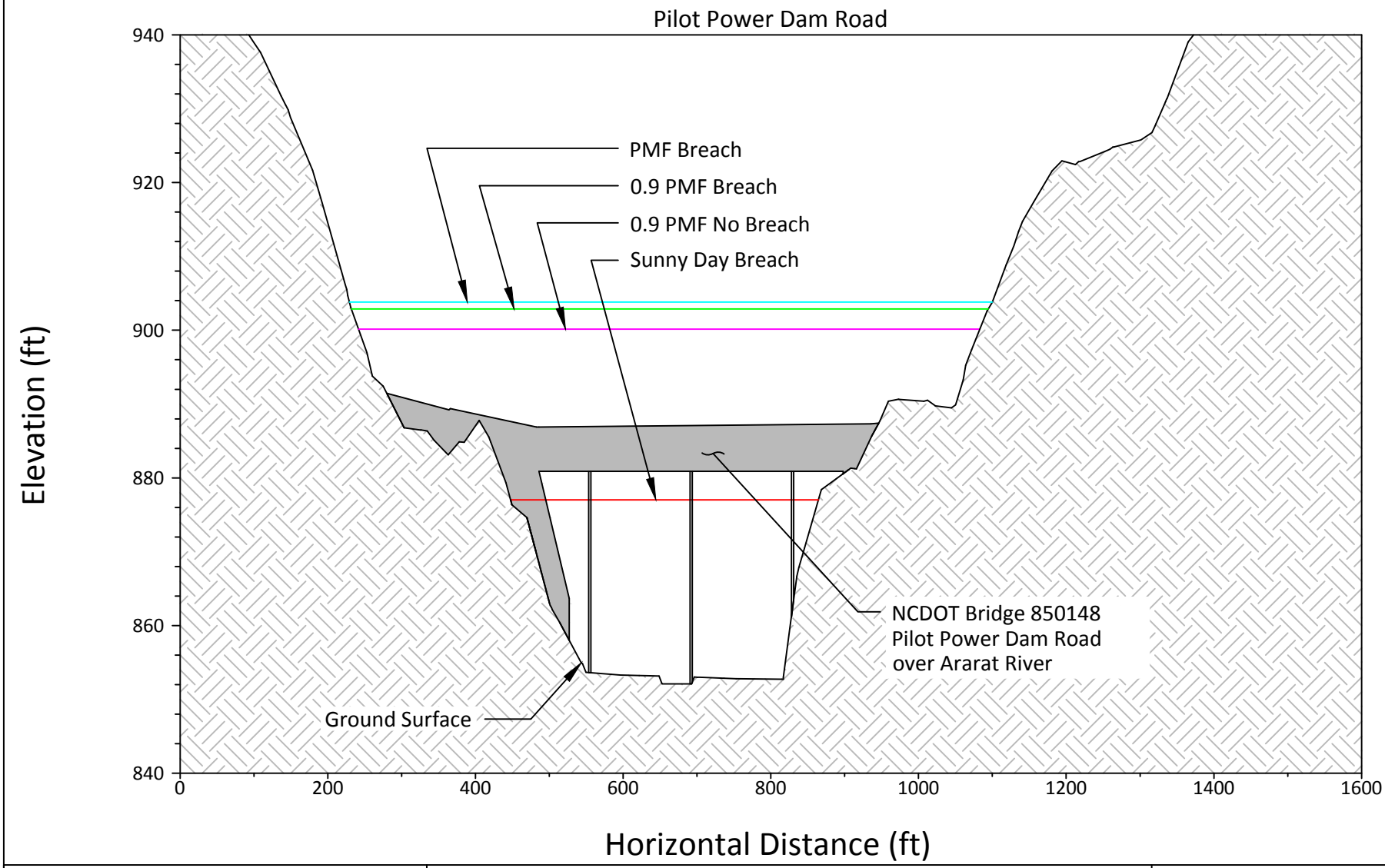
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
61028
Profile

X-Sect. Profile No.
16



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

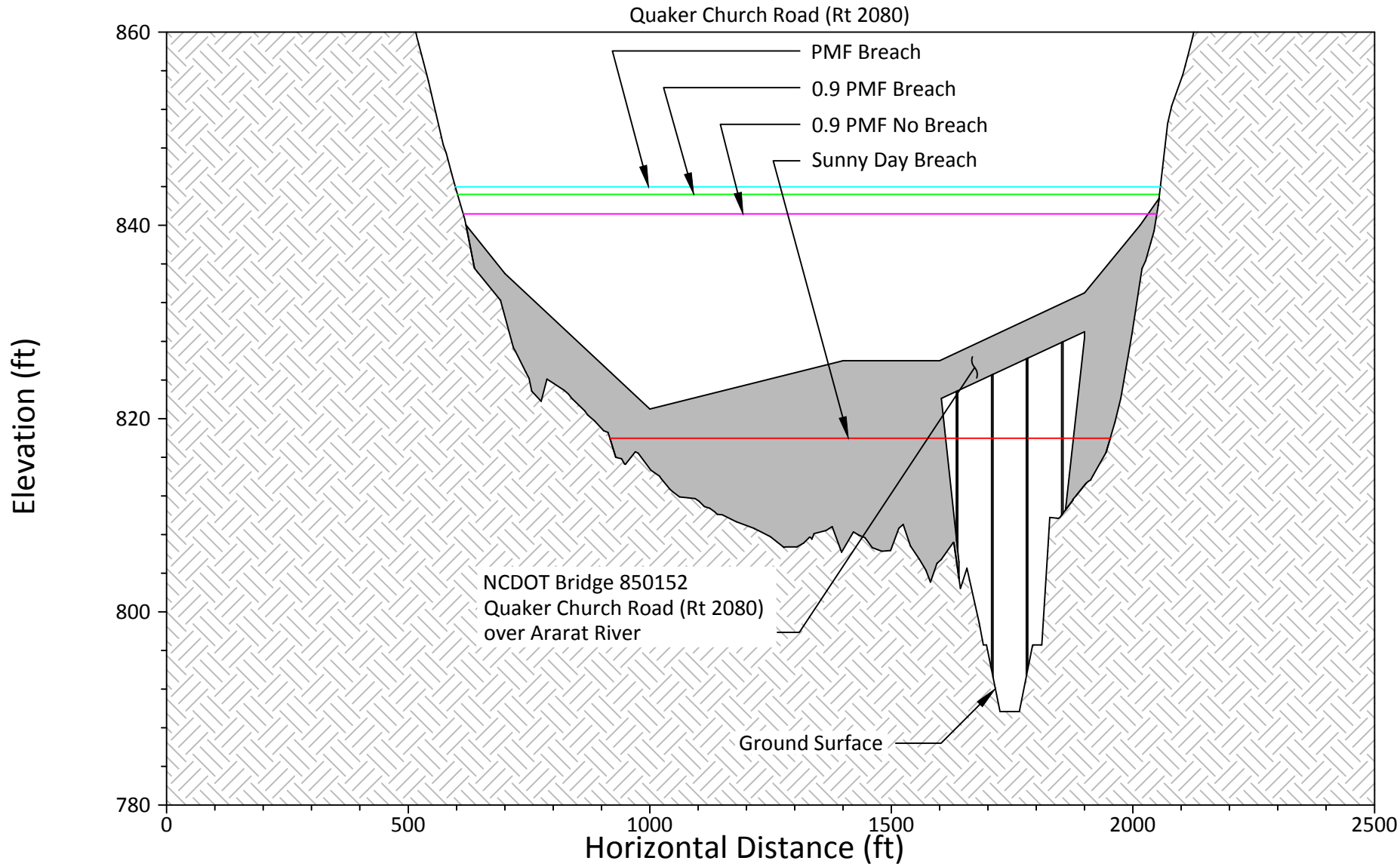
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
59145
Profile

X-Sect. Profile No.
17



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

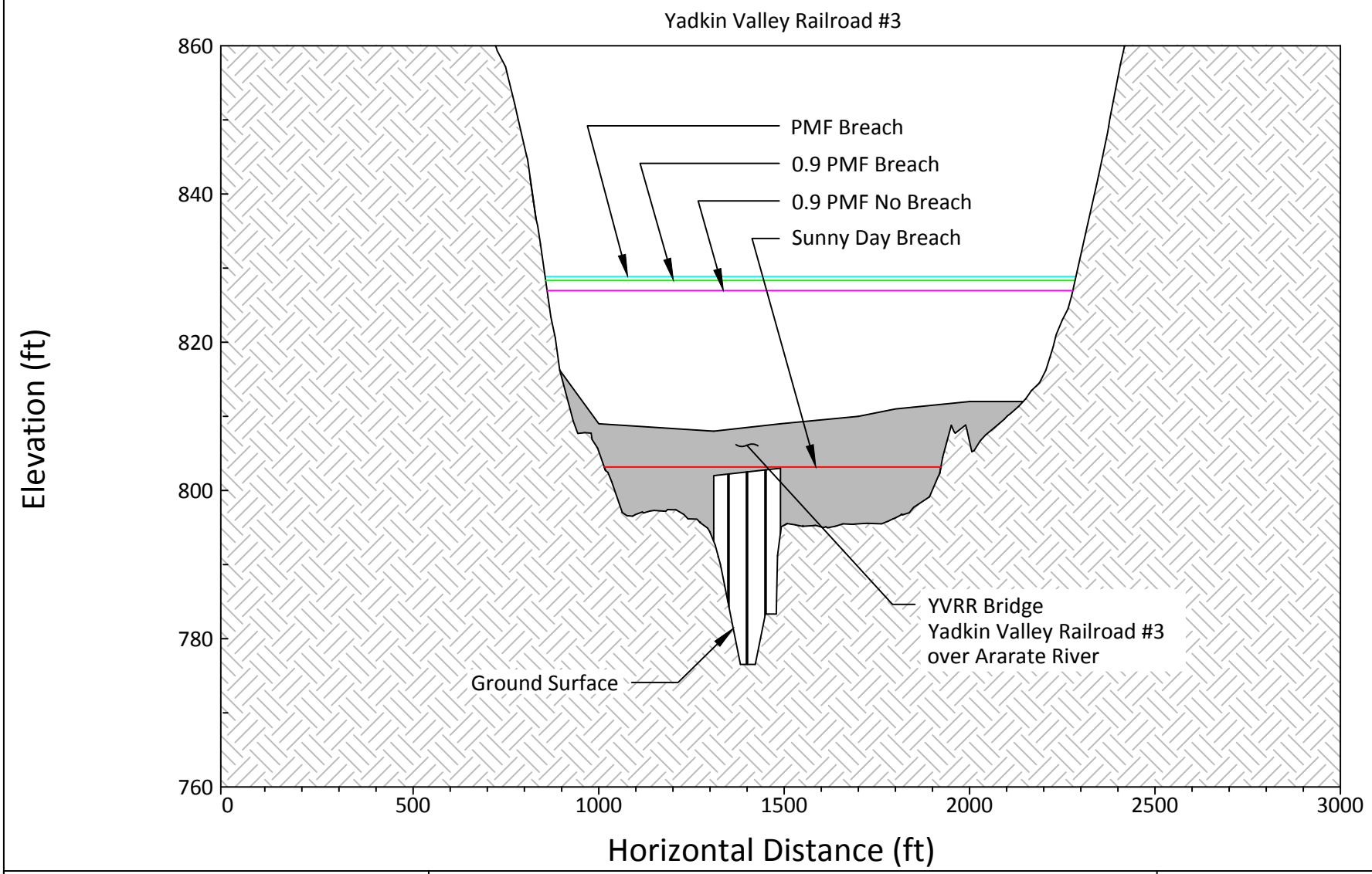
FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
14327
Profile

X-Sect. Profile No.
18



LEGEND

- Sunny Day Breach
- PMF Breach
- 0.9 PMF Breach
- 0.9 PMF No Breach
- Creek Bottom
- Bridge Structure

FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

Date:	December, 2014
Scale:	As Shown
Drawn: KHH	62S-0102

Lovills Creek Dam
Carroll County, VA; Surry County, NC; Mount Airy, NC
Carroll County, Virginia

Cross-Section
4358
Profile

X-Sect. Profile No.
19

Appendix G

Summary Table of Impacted Bridges

Summary Table of Impacted Bridges

Structure Information								Inundation Information															
								Sunny Day Breach				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Profile Cross-Section No.	Bridge Location	Va. or NC Structure ID Number	Crossing	Owner	Station	Distance from Dam (miles)	Deck Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth at Deck (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth at Deck (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth at Deck (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth at Deck (feet)
1	Epworth Road (Route 686)	6499	LOVILLS CREEK	VDOT	181310	0.31	1158.0	1181.4	1.8	1.8	23.3	1188.9	1.2	1.8	30.9	1188.6	1.8	1.2	30.6	1172.7	2.4	2.4	14.7
2	Fishlake Road (Route 687)	6089	LOVILLS CREEK	VDOT	175275	1.45	1123.0	1134.0	14.4	10.2	11.0	1149.2	12.0	8.4	26.2	1147.9	12.0	7.8	24.9	1131.7	15.6	12.0	8.7
3	Greenhill Road (Route 1700)	850260	LOVILLS CREEK	NCDOT	163555	3.67	1081.0	1090.9	54.0	38.4	9.8	1098.7	43.8	30.0	17.7	1098.0	44.4	30.0	17.0	1091.4	57.0	40.8	10.4
4	West Lebanon Street (Bus 52)	850079	LOVILLS CREEK	NCDOT	151567	5.94	1042.5	1045.5	81.0	81.0	3.0	1052.4	64.8	62.4	9.9	1051.7	66.0	62.4	9.2	1047.1	82.8	80.4	4.6
5	West Independence Blvd (Route 89)	850304	LOVILLS CREEK	NCDOT	144741	7.23	1020.0	1027.0	96.0	106.2	7.0	1034.3	74.4	77.4	14.3	1033.7	75.6	78.6	13.7	1030.9	96.0	102.6	10.9
6	West Pine Street	850111	LOVILLS CREEK	NCDOT	143311	7.50	1015.3	1024.7	100.2	112.2	9.4	1028.9	76.2	79.8	13.6	1027.9	77.4	81.0	12.6	1023.4	98.4	106.2	8.1
7	Worth Street (Route 1371)	850061	LOVILLS CREEK	NCDOT	139113	8.30	1001.0	1010.3	109.8	130.2	9.3	1022.8	83.4	93.6	21.8	1022.1	84.6	94.8	21.1	1014.6	107.4	123.0	13.6
8	Yadkin Valley Railroad #1	N/A	LOVILLS CREEK	YVRR	137500	8.60	997.0	1007.3	114.6	141.0	10.3	1019.8	86.4	100.2	22.8	1018.5	87.6	102.0	21.5	1011.7	111.6	132.6	14.7
9	Rockford Street (Hwy 601)	850101	LOVILLS CREEK	NCDOT	137152	8.67	997.0	1006.4	115.2	142.2	9.4	1017.5	87.0	101.4	20.5	1016.2	88.2	102.6	19.2	1010.4	112.2	133.2	13.4
10	US Route 52 NB and SB	850190, 850193	LOVILLS CREEK	NCDOT	135439	8.99	1001.3	996.8	118.8	148.8	-4.5	1013.5	91.2	108.0	12.2	1012.3	93.0	109.8	11.0	1006.9	117.6	142.2	5.6
11	Carter Street (Route 2116)	850334	LOVILLS CREEK	NCDOT	133140	9.43	991.3	995.0	128.4	162.6	3.7	1013.0	103.2	125.4	21.7	1011.7	105.0	127.8	20.4	1006.1	132.0	163.8	14.8
12	Yadkin Valley Railroad #2	N/A	ARARAT RIVER	YVRR	107250	14.33	970.0	958.5	195.0	243.6	0.0	978.6	150.6	183.6	8.6	980.6	154.2	188.4	10.6	976.0	186.0	230.4	6.0
13	Sheep Farm Road (Route 2119)	850341	ARARAT RIVER	NCDOT	105664	14.63	957.0	950.8	198.0	246.6	0.0	973.9	154.2	188.4	16.9	973.3	158.4	192.6	16.3	969.1	189.6	234.0	12.1
14	Interstate 74 EB and WB	850378	ARARAT RIVER	NCDOT	102791	15.18	968.0	950.8	215.4	259.8	0.0	973.3	174.0	201.0	5.3	972.7	176.4	205.2	4.7	968.4	209.4	247.2	0.4
15	Ararat Road (Route 2019)	850128	ARARAT RIVER	NCDOT	77558	19.96	906.0	904.8	269.4	323.4	0.0	924.5	207.6	243.0	18.5	923.6	211.2	247.2	17.6	920.5	246.0	292.2	14.5
16	Route 268	850145	ARARAT RIVER	NCDOT	61028	23.09	891.0	879.6	307.8	369.0	0.0	906.1	237.6	277.8	15.1	905.2	241.2	282.6	14.2	902.7	277.8	329.4	11.7
17	Pilot Power Dam Road	850148	ARARAT RIVER	NCDOT	59145	23.44	887.0	877.1	312.0	373.2	0.0	904.0	240.6	282.0	17.0	903.1	244.2	286.8	16.1	900.4	280.8	333.0	13.4
18	Quaker Church Road (Route 2080)	850152	ARARAT RIVER	NCDOT	14327	31.93	826.0	818.6	418.2	494.4	0.0	844.6	310.8	364.8	18.6	843.8	315.6	370.2	17.8	841.9	355.2	420.0	15.9
19	Yadkin Valley Railroad #3	N/A	ARARAT RIVER	YVRR	4358	33.82	808.0	803.9	439.8	519.0	0.0	829.2	325.2	382.2	21.2	828.6	330.0	388.2	20.6	827.3	370.2	438.0	19.3
20	NC Route 67	N/A	YADKIN RIVER	NCDOT	825519	43.90	768.5	745.4	583.2	693.0	0.0	769.2	408.0	523.8	0.7	768.6	412.8	529.8	0.1	767.2	453.6	580.8	0.0
Backwater-1	ANDY GRIFFITH PKWY (US 52 #2)	N/A	ARARAT RIVER	NCDOT	134000	9.68	1000	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	13.2	1011.9	100.8	120.0	11.9	1006.4	127.2	154.8	6.4
Backwater-2	ANDY GRIFFITH PKWY (US 52 #3)	N/A	ARARAT RIVER	NCDOT	134000	9.83	1000	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	13.2	1011.9	100.8	120.0	11.9	1006.4	127.2	154.8	6.4
Backwater-3	SOUTH MAIN ST	N/A	ARARAT RIVER	NCDOT	134000	10.78	1001	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	12.2	1011.9	100.8	120.0	10.9	1006.4	127.2	154.8	5.4
Backwater-4	HAMBURG ST	N/A	ARARAT RIVER	NCDOT	134000	11.39	1002	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	11.2	1011.9	100.8	120.0	9.9	1006.4	127.2	154.8	4.4
Backwater-5A	YVRR #4	N/A	STEWARDS CREEK	YVRR	128500	10.57	990	987.3	143.4	180.6	1.0	1011.8	117.6	143.4	21.8	1010.5	120.0	145.8	20.5	1004.9	148.8	184.2	14.9
Backwater-5B	PARK DR	N/A	STEWARDS CREEK	NCDOT	128500	10.84	993	987.3	143.4	180.6	0.0	1011.8	117.6	143.4	18.8	1010.5	120.0	145.8	17.5	1004.9	148.8	184.2	11.9
Backwater-6	OLD HWY 601	N/A	STEWARDS CREEK	NCDOT	128500	12.60	1000	987.3	143.4	180.6	0.0	1011.8	117.6	143.4	11.8	1010.5	120.0	145.8	10.5	1004.9	148.8	184.2	4.9
Backwater-7A	ROCKFORD ST #2 (hwy 601)	N/A	STEWARDS CREEK	NCDOT	128500	12.98	1008	987.3	143.4	180.6	0.0	1011.8	117.6	143.4	3.8	1010.5	120.0	145.8	2.5	1004.9	148.8	184.2	0.0
Backwater-7B	Interstate 74 EB and WB	850377	PARK DRIVE	NCDOT	102791	15.18	972	950.8	215.4	259.8	0.0	973.3	174.0	201.0	1.3	972.7	176.4	205.2	0.7	968.4	209.4	247.2	0.0
Backwater-8	YVRR #5	N/A	TRIB OF ARARAT RIVER	YVRR	78250	19.83	893	905.4	267.6	321.0	12.4	924.4	206.4	241.8	31.4	923.5	210.0	246.0	30.5	920.6	244.8	290.4	27.6
Backwater-9	ARARAT LONGHILL RD	N/A	TRIB OF ARARAT RIVER	NCDOT	78250	19.83	909	905.4	267.6	321.0	0.0	924.4	206.4	241.8	15.4	923.5	210.0	246.0	14.5	920.6	244.8	290.4	11.6
Backwater-10	TOMS CREEK RD	N/A	TRIB OF ARARAT RIVER	NCDOT	64750	23.90	897	885.1	299.4	358.2	0.0	909.3	230.4	269.4	12.3	908.5	234.0	273.6	11.5	905.9	270.6	319.8	8.9
Backwater-11A	JIM MCKINNEY RD	N/A	TRIB OF ARARAT RIVER	NCDOT	49750	26.28	876	867.3	337.2	403.2	0.0	895.3	258.6	303.0	19.3	894.4	262.8	307.8	18.4	891.8	300.0	355.2	15.8
Backwater-11B	JOHN SCOTT ROAD	N/A	TRIB OF ARARAT RIVER	NCDOT	13500	32.33	819	817.7	420.6	496.8	0.0	842.9	313.2	366.6	23.9	842.2	318.0	372.6	23.2	840.2	357.6	421.8	21.2
Backwater-12	SILOAM ROAD (NC 1003)	N/A	TRIB OF YADKIN RIVER	NCDOT	4221	34.68	815	803.2	439.8	519.6	0.0	829.0	325.2	382.8	14.0	828.5	330.0	388.2	13.5	827.1	370.2	438.6	12.1
Backwater-13	YVRR #6	N/A	TRIB OF YADKIN RIVER	YVRR	4221	34.74	801	803.2	439.8	519.6	2.2	829.0	325.2	382.8	28.0	828.5	330.0	388.2	27.5	827.1	370.2	438.6	26.1
Backwater-14	HARDY RD	N/A	TRIB OF YADKIN RIVER	NCDOT	4221	34.76	801	803.2	439.8	519.6	2.2	829.0	325.2	382.8	28.0	828.5	330.0	388.2	27.5	827.1	370.2	438.6	26.1
Backwater-15	YVRR #7	N/A	TRIB OF YADKIN RIVER	YVRR	4221	35.25	802	803.2	439.8	519.6	1.2	829.0	325.2	382.8	27.0	828.5	330.0	388.2	26.5	827.1	370.2	438.6	25.1
Backwater-16	YVRR #8	N/A	TRIB OF YADKIN RIVER	YVRR	4221	35.55	809	803.2	439.8	519.6	0.0	829.0	325.2	382.8	20.0	828.5	330.0	388.2	19.5	827.1	370.2	438.6	18.1
Backwater-17	YVRR #9	N/A	TRIB OF YADKIN RIVER	YVRR	4221	35.82	801	803.2	439.8	519.6	2.2	829.0	325.2	382.8	28.0	828.5	330.0	388.2	27.5	827.1	370.2	438.6	26.1
Backwater-18	YVRR #10	N/A	TRIB OF YADKIN RIVER	YVRR	4221	35.97	807	803.2	439.8	519.6	0.0	829.0	325.2	382.8	22.0	828.5	330.0	388.2	21.5	827.1	370.2	438.6	20.1
Backwater-19	YVRR #11	N/A	TRIB OF YADKIN RIVER	YVRR	4221	37.03	808	803.2	439.8	519.6	0.0	829.0	325.2	382.8	21.0	828.5	330.0	388.2	20.5	827.1	370.2	438.6	19.1
Backwater-20	YVRR #12	N/A	TRIB OF YADKIN RIVER	YVRR	874889	34.66	793	800.7	452.4	534.6	7.7	824.6	334.2	396.0	31.6	824.3	339.0	402.0	31.3	823.5	379.2	452.4	30.5
Backwater-21	FRIENDSHIP ROAD #1	N/A	TRIB OF YADKIN RIVER	NCDOT	868033	36.26	795	794.3	469.8	558.0	0.0	815.0	343.2	409.2	20.0	814.7	347.4	415.8	19.7	813.9	388.2	466.8	18.9
Backwater-22	FRIENDSHIP ROAD #2	N/A	TRIB OF YADKIN RIVER	NCDOT	866672	36.54	801	793.1	472.2	561.6	0.0	812.9	345.0	412.8	11.9	812.6	349.2	418.8	11.6	811.9	390.0	469.8	10.9
Backwater-23	YVRR #13	N/A	TRIB OF YADKIN RIVER	YVRR	849110	39.49	760	758.2	515.4	609.6	0.0	779.9	367.8	444.6	19.9	779.6	372.6	451.2	19.6	778.8	413.4	502.2	18.8
Backwater-24	YVRR #14	N/A	TRIB OF YADKIN RIVER	YVRR	846889	40.02	757	756.5	519.6	614.4	0.0	779.8	371.4	449.4	22.8	779.4	375.6	456.0	22.4	778.6	417.0	507.0	21.6
Backwater-25	YVRR #15	N/A	TRIB OF YADKIN RIVER	YVRR	838887	41.46	746	751.8	544.8	640.8	5.8	774.3	383.4	468.0	28.3	773.9	388.2	474.6	27.9	772.9	429.6	525.6	26.9
Backwater-26	YVRR #16	N/A	TRIB OF YADKIN RIVER	YVRR	831869	42.87	744	748.3	565.2	666.6	4.3	771.8	396.0	494.4	27.8	771.4	400.8	501.0	27.4	770.2	441.6	552.0	26.2
Backwater-27	DONNAHA ROAD	N/A	TRIB OF YADKIN RIVER	NCDOT	825957	43.82	740	745.6	580.8	689.4	5.6	769.4	407.4	522.6	29.4	768.8	412.2	528.6	28.8	767.6	453.0	579.6	27.6

Summary Table of Impacted Structures

Structure Information

Summary Table of Occupied Structures (Part 1)									
Structure Information									
Property Information			Owner Information				Location / Elevation		
Building No.	Property Address	City / Town	Owner	Owner Address	Owner Tele.	Parcel No.	Station	Distance from Dam (miles)	Structure Elevation (feet)
1-1	126 MAYES DR	CANA, VA	RUDISILL DEENA MAYES	342 PINE HURST LN 12H PAWLEYS ISLAND, SC	N/A	163-A-64C	181750	0.24	1179.0
1-2	104 MAYES DR	CANA, VA	RUDISILL DEENA MAYES	342 PINE HURST LN 12H PAWLEYS ISLAND, SC	N/A	163-A-64B	181750	0.23	1173.0
1-3	1018 EPWORTH RD	CANA, VA	RINCONADA WOLFRANO LUNA & MARIA	1018 EPWORTH RD CANA, VA 24317	N/A	163-A-71	181310	0.34	1184.0
1-4	1074 EPWORTH RD	CANA, VA	HAYNES TIMOTHY M & MERINDA	8101 WARDS GAP RD CANA, VA 24317	N/A	163-A-73	181185	0.34	1165.0
1-5	1096 EPWORTH RD	CANA, VA	HAYNES TIMOTHY MICHAEL	8101 WARDS GAP RD CANA, VA 24317	N/A	163-A-74	181185	0.34	1156.0
1-6	1114 EPWORTH RD	CANA, VA	MAYES BRIAN S & JENNIFER LEIGH	86 LACY LANE CANA, VA 24317	N/A	163-A-75	181185	0.36	1154.0
1-7	1392 EPWORTH RD	CANA, VA	HINKLE CHARLES F & HINKLE HAZEL L	PO BOX 74 CANA, VA 24317	N/A	163-A-36	179750	0.60	1168.0
2-1	1101 FISH LAKE RD	CANA, VA	SOWERS WILLIS RICHARD & JUDY	767 FISH LAKE RD CANA, VA 24317	N/A	163-A-117	176750	1.17	1141.0
2-2	960 FISH LAKE RD	CANA, VA	DUNCAN JOSEPH JACK & DAISY MAE	930 FISH LAKE RD CANA, VA 24317	N/A	163-A-115	175175	1.49	1135.0
3-1	LAKEMONT TR	MOUNT AIRY, NC	RIVER HILL POA INC	660 W LEBANON ST MOUNT AIRY NC 27030	N/A	502203143425	167750	3.07	1136.0
4-1	000306 LAKEMONT TR	MOUNT AIRY, NC	HAAS STEVEN S &	306 LAKEMONT TRL MOUNT AIRY NC 27030	N/A	502217121180	165500	3.30	1102.0
4-2	000231 LAKEMONT TR	MOUNT AIRY, NC	ALLRED HOWARD WAYNE	772 W SOMMERDALE CT RURAL HALL NC 27045	N/A	502203217923	165000	3.40	1094.0
4-3	000140 PLANTATION PLACE LN	MOUNT AIRY, NC	JOHNSON WILLIAM A	140 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477425	164750	3.45	1084.0
4-4	000138 PLANTATION PLACE LN	MOUNT AIRY, NC	JK HOLDINGS OF MOUNT AIRY LLC	201 TECHNOLOGY LN MOUNT AIRY NC 27030	N/A	502203106477424	164500	3.49	1083.0
4-5	000132 PLANTATION PLACE LN	MOUNT AIRY, NC	CREWS MICHELE	132 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477422	164250	3.55	1084.0
4-6	000130 PLANTATION PLACE LN	MOUNT AIRY, NC	SMITH JAMES A LIFE ESTATE	130 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477421	164250	3.54	1085.0
4-7	000137 PLANTATION PLACE LN	MOUNT AIRY, NC	JACKSON THOMAS R	1007 ROCKFORD ST MOUNT AIRY NC 27030	N/A	502203106477426	164250	3.55	1085.0
4-8	000135 PLANTATION PLACE LN	MOUNT AIRY, NC	LYDENS PETER F &	135 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477427	164250	3.54	1085.0
4-9	000124 PLANTATION PLACE LN	MOUNT AIRY, NC	EICH ERNEST PAUL III	124 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477418	164000	3.59	1085.0
4-10	000120 PLANTATION PLACE LN	MOUNT AIRY, NC	PATTERSON AMELIA QUESINBERRY	120 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477416	164000	3.58	1084.0
4-11	000131 PLANTATION PLACE LN	MOUNT AIRY, NC	BARNETT FREDERICK E	131 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477429	164000	3.58	1084.0
4-12	000118 PLANTATION PLACE LN	MOUNT AIRY, NC	KNISKERN GARY D	118 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477415	163750	3.64	1083.0
4-13	000116 PLANTATION PLACE LN	MOUNT AIRY, NC	REFVEM WILLIAM ERIC	667 CROSS CREEK DR MOUNT AIRY NC 27030	N/A	502203106477414	163750	3.63	1084.0
4-14	000127 PLANTATION PLACE LN	MOUNT AIRY, NC	S&E LIVING TRUST	127 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477431	163750	3.63	1085.0
4-15	000123 PLANTATION PLACE LN	MOUNT AIRY, NC	PECK MARGARET A	123 PLANTATION PLACE MOUNT AIRY NC 27030	N/A	502203106477433	163750	3.63	1084.0
4-16	001500 GREENHILL RD	MOUNT AIRY, NC	AQUA NORTH CAROLINA INC	202 MACKENAN CT CARY NC 27511	N/A	502203105032	163555	3.67	1097.0
4-17	000114 PLANTATION PLACE LN	MOUNT AIRY, NC	JOLLEY WILLIAM T III	114 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477413	163622	3.66	1084.0
4-18	000110 PLANTATION PLACE LN	MOUNT AIRY, NC	BELL LLOYD	110 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477411	163622	3.66	1084.0
4-27	000102 PLANTATION PLACE LN	MOUNT AIRY, NC	TAYLOR JERRY DEAN	102 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477444	163555	3.68	1083.0
4-20	000100 PLANTATION PLACE LN	MOUNT AIRY, NC	HIATT MARK A	100 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477443	163555	3.67	1083.0
4-21	000119 PLANTATION PLACE LN	MOUNT AIRY, NC	MARION JAMES FRANKLIN	119 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477435	163622	3.66	1084.0
4-22	000107 PLANTATION PLACE LN	MOUNT AIRY, NC	MILLS SARAH LYNN	168 GRADUATE LN #318 BOONE NC 28607	N/A	502203106477441	163555	3.67	1084.0
4-23	000101 PLANTATION PLACE LN	MOUNT AIRY, NC	COOK PHILLIP DOUGLAS	101 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477445	163555	3.67	1084.0
4-24	000109 PLANTATION PLACE LN	MOUNT AIRY, NC	MARTIN CONRAD D	109 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477440	163622	3.67	1083.0
4-25	000115 PLANTATION PLACE LN	MOUNT AIRY, NC	HAZELNUT PLANTATION LLC	140 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477437	163622	3.66	1084.0
4-26	000117 PLANTATION PLACE LN	MOUNT AIRY, NC	BLACKMON ZACK W SR	2029 ROCKFORD ST MOUNT AIRY NC 27030	N/A	502203106477436	163622	3.66	1083.0
4-19	000108 PLANTATION PLACE LN	MOUNT AIRY, NC	LAHTELA ALBERT E TRUSTEE	108 PLANTATION PLACE LN MOUNT AIRY NC	N/A	502203106477410	163622	3.66	1080.0
4-28	001463 GREENHILL RD	MOUNT AIRY, NC	ICE WILLIAM T	1463 GREENHILL RD MOUNT AIRY NC 27030	N/A	502105198846	163418	3.70	1081.0
4-29	001234 GREENHILL RD	MOUNT AIRY, NC	WRIGHT BETTY	1234 GREENHILL RD MOUNT AIRY NC 27030	N/A	502106397733	162000	3.98	1095.0
4-30	GREENHILL RD	MOUNT AIRY, NC	WOLTZ INVESTMENT LLC	119 RAWLEY AVE MOUNT AIRY NC 27030	N/A	502106389219602	161750	4.03	1069.0
4-31	001129 GREENHILL RD	MOUNT AIRY, NC	WOLTZ INVESTMENT LLC	119 RAWLEY AVE MOUNT AIRY NC 27030	N/A	502106481634	161250	4.13	1085.0
4-32	GREENHILL RD	MOUNT AIRY, NC	WOLTZ INVESTMENT LLC	119 RAWLEY AVE MOUNT AIRY NC 27030	N/A	502106389219602	161250	4.11	1069.0
4-33	001129 GREENHILL RD	MOUNT AIRY, NC	WOLTZ INVESTMENT LLC	119 RAWLEY AVE MOUNT AIRY NC 27030	N/A	502106481634	161250	4.11	1081.0
5-1	GREENHILL RD	MOUNT AIRY, NC	WOLTZ INVESTMENT LLC	119 RAWLEY AVE MOUNT AIRY NC 27030	N/A	502106389219602	161250	4.11	1068.0
5-2	001105 GREENHILL RD	MOUNT AIRY, NC	WOLTZ INVESTMENT LLC	119 RAWLEY AVE MOUNT AIRY NC 27030	N/A	502106389219601	161000	4.16	1068.0
5-3	001105 GREENHILL RD	MOUNT AIRY, NC	WOLTZ INVESTMENT LLC	119 RAWLEY AVE MOUNT AIRY NC 27030	N/A	502106389219601	161000	4.16	1068.0

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5-4	001105 GREENHILL RD	MOUNT AIRY, NC	WOLTZ INVESTMENT LLC	119 RAWLEY AVE MOUNT AIRY NC 27030	N/A	502106389219601	160750	4.20	1067.0
5-5	000174 KENNESAW LN	MOUNT AIRY, NC	HAROLD SYLVIA M TRUSTEE	174 KENNESAW LN MOUNT AIRY NC 27030	N/A	502110379049	157750	4.78	1067.0
5-6	000350 PINE CREEK TR	MOUNT AIRY, NC	FRYE GEORGE FLETCHER	350 PINE CREEK TRL MOUNT AIRY NC 27030	N/A	502110359803	157500	4.88	1078.0
5-7	000341 PINE CREEK TR	MOUNT AIRY, NC	BRADLEY ROBERT HENDERSON	341 PINE CREEK TRL MOUNT AIRY NC 27030	N/A	502110462118	157500	4.82	1077.0
5-8	000350 PINE CREEK TR	MOUNT AIRY, NC	FRYE GEORGE FLETCHER	350 PINE CREEK TRL MOUNT AIRY NC 27030	N/A	502110359803	157250	4.92	1080.0
5-9	000350 PINE CREEK TR	MOUNT AIRY, NC	FRYE GEORGE FLETCHER	350 PINE CREEK TRL MOUNT AIRY NC 27030	N/A	502110359803	157250	4.91	1063.0
5-10	000423 PINE CREEK TR	MOUNT AIRY, NC	FUSSELL STEPHEN WARD	423 PINE CREEK TRL MOUNT AIRY NC 27030	N/A	502110454629	157000	4.92	1054.0
5-11	000423 PINE CREEK TR	MOUNT AIRY, NC	FUSSELL STEPHEN WARD	423 PINE CREEK TRL MOUNT AIRY NC 27030	N/A	502110454629	157000	4.92	1072.0
5-12	000404 PINE CREEK TR	MOUNT AIRY, NC	PELL JAMES WELDON III	404 PINE CREEK TRL MOUNT AIRY NC 27030	N/A	502110450502	157000	4.91	1068.0
5-13	000437 PINE CREEK TR	MOUNT AIRY, NC	SIMMONS MARK WAYNE	437 PINE CREEK TRL MOUNT AIRY NC 27030	N/A	502110454330	156750	4.96	1074.0
5-14	000449 PINE CREEK TR	MOUNT AIRY, NC	JOHNSON RICHARD DAVID II	449 PINE CREEK TRL MOUNT AIRY NC 27030	N/A	502110454038	156750	4.97	1087.0
6-1	ALLRED MILL RD	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	502114447574	155000	5.30	1049.0
6-2	000105 RIVER WALK RD	MOUNT AIRY, NC	RIVER RUN HOLDINGS LLC	PO BOX 1826 MOUNT AIRY NC 27030	N/A	502114439166405	155000	5.29	1049.0
6-3	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	155000	5.29	1052.0
6-4	000213 RIVER WALK RD	MOUNT AIRY, NC	NUNN NANCY G	213 RIVER WALK RD UNIT 5B MOUNT AIRY NC	N/A	502114439166409	154750	5.35	1047.0
6-5	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154750	5.34	1053.0
6-6	000131 RIVER WALK RD	MOUNT AIRY, NC	FIELDER MARY GOLDSWORTHY	131 RIVER WALK RD MOUNT AIRY NC 27030	N/A	502114439166407	154750	5.34	1047.0
6-7	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154750	5.35	1048.0
6-8	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154500	5.40	1055.0
6-9	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154500	5.40	1052.0
6-10	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154500	5.38	1048.0
6-11	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154500	5.39	1046.0
6-12	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154500	5.38	1046.0
6-13	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154500	5.39	1050.0
6-14	000556 ALLRED MILL RD	MOUNT AIRY, NC	BOWMAN CECIL EARL JR	556 ALLRED MILL RD MOUNT AIRY NC 27030	N/A	502114436042	154250	5.44	1053.0
6-15	000548 ALLRED MILL RD	MOUNT AIRY, NC	GERLI ALEXANDER N	548 ALLRED MILL RD MOUNT AIRY NC 27030	N/A	502114426880	154250	5.44	1050.0
6-16	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154250	5.43	1046.0
6-17	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154250	5.44	1045.0
6-18	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154250	5.43	1044.0
6-19	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154250	5.45	1047.0
6-20	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154250	5.45	1046.0
6-21	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154250	5.45	1045.0
6-22	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154250	5.43	1046.0
6-23	RIVER RUN DR	MOUNT AIRY, NC	RIVER RUN CONDOMINIUMS	RIVER RUN DR MOUNT AIRY NC 27030	N/A	502114439166	154250	5.43	1048.0
6-24	000542 ALLRED MILL RD	MOUNT AIRY, NC	GPH MOUNT AIRY LLC	PO BOX 160488 ALTAMONTE SPRINGS FL 32716	N/A	502119521401	154000	5.48	1044.0
6-25	000542 ALLRED MILL RD	MOUNT AIRY, NC	GPH MOUNT AIRY LLC	PO BOX 160488 ALTAMONTE SPRINGS FL 32716	N/A	502119521401	153750	5.53	1043.0
6-26	000542 ALLRED MILL RD	MOUNT AIRY, NC	GPH MOUNT AIRY LLC	PO BOX 160488 ALTAMONTE SPRINGS FL 32716	N/A	502119521401	153750	5.53	1042.0
6-27	000542 ALLRED MILL RD	MOUNT AIRY, NC	GPH MOUNT AIRY LLC	PO BOX 160488 ALTAMONTE SPRINGS FL 32716	N/A	502119521401	153750	5.54	1045.0
6-28	000528 ALLRED MILL RD	MOUNT AIRY, NC	SCHEIFLING MAGDALENE LIFE EST	528 ALLRED MILL RD MOUNT AIRY NC 27030	N/A	502118426200	153750	5.56	1056.0
6-29	000528 ALLRED MILL RD	MOUNT AIRY, NC	SCHEIFLING MAGDALENE LIFE EST	528 ALLRED MILL RD MOUNT AIRY NC 27030	N/A	502118426200	153750	5.55	1052.0
6-30	000532 ALLRED MILL RD	MOUNT AIRY, NC	WELCH LISA R	124 BOAZ LN MOUNT AIRY NC 27030	N/A	502118426300	153750	5.54	1056.0
6-31	000792 LEBANON ST	MOUNT AIRY, NC	BRAY PROPERTIES LLC	PO BOX 804 MOUNT AIRY NC 27203	N/A	502118416710501	153500	5.57	1046.0
6-32	000520 ALLRED MILL RD	MOUNT AIRY, NC	BADGETT ADAM FRANKLIN	520 ALLRED MILL RD MOUNT AIRY NC 27030	N/A	502118425023	153500	5.59	1054.0
6-33	000520 ALLRED MILL RD	MOUNT AIRY, NC	BADGETT ADAM FRANKLIN	520 ALLRED MILL RD MOUNT AIRY NC 27030	N/A	502118425023	153500	5.59	1054.0
6-34	000520 ALLRED MILL RD	MOUNT AIRY, NC	BADGETT ADAM FRANKLIN	520 ALLRED MILL RD MOUNT AIRY NC 27030	N/A	502118425023	153500	5.59	1052.0
6-35	000524 ALLRED MILL RD	MOUNT AIRY, NC	SEAL BERTIE W LIFE ESTATE	524 ALLREAD MILL RD MOUNT AIRY NC 27030	N/A	502118425151	153500	5.60	1054.0

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6-36	000524 ALLRED MILL RD	MOUNT AIRY, NC	SEAL BERTIE W LIFE ESTATE	524 ALLREAD MILL RD MOUNT AIRY NC 27030	N/A	502118425151	153500	5.61	1049.0
6-37	000343 COUNTY CLUB RD	MOUNT AIRY, NC	BLACKMON BRENDA JOYCE	1586 BENT RIDGE PL SW OCEAN ISLE BEACH NC	N/A	502115628598	153500	5.66	1053.0
6-38	000792 LEBANON ST	MOUNT AIRY, NC	BRAY PROPERTIES LLC	PO BOX 804 MOUNT AIRY NC 27203	N/A	502118416710501	153250	5.62	1045.0
6-39	000354 OAKDALE ST	MOUNT AIRY, NC	WYCHE NANNIE YORK	354 W OAKDALE ST MOUNT AIRY NC 27030	N/A	502119615912	153250	5.62	1050.0
6-40	000770 LEBANON ST	MOUNT AIRY, NC	HICKS TONY JAMES	1608 E FAIRFIELD DR MOUNT AIRY NC 27030	N/A	502118418572	153000	5.67	1041.0
6-41	000770 LEBANON ST	MOUNT AIRY, NC	HICKS TONY JAMES	1608 E FAIRFIELD DR MOUNT AIRY NC 27030	N/A	502118418572	153000	5.67	1040.0
6-42	000792 LEBANON ST	MOUNT AIRY, NC	BRAY PROPERTIES LLC	PO BOX 804 MOUNT AIRY NC 27203	N/A	502118416710501	152750	5.72	1042.0
6-43	000792 LEBANON ST	MOUNT AIRY, NC	BRAY PROPERTIES LLC	PO BOX 804 MOUNT AIRY NC 27203	N/A	502118416710501	152750	5.72	1043.0
6-44	000792 LEBANON ST	MOUNT AIRY, NC	BRAY PROPERTIES LLC	PO BOX 804 MOUNT AIRY NC 27203	N/A	502118416710501	152750	5.72	1052.0
6-45	000788 LEBANON ST	MOUNT AIRY, NC	BRAY PROPERTIES LLC	PO BOX 804 MOUNT AIRY NC 27203	N/A	502118415305	152500	5.77	1042.0
6-46	000801 LEBANON ST	MOUNT AIRY, NC	BRAY PROPERTIES LLC	PO BOX 804 MOUNT AIRY NC 27203	N/A	502118411387	152500	5.77	1053.0
6-47	000792 LEBANON ST	MOUNT AIRY, NC	BRAY PROPERTIES LLC	PO BOX 804 MOUNT AIRY NC 27203	N/A	502118416710501	152500	5.76	1042.0
6-48	000308 WRENN AV	MOUNT AIRY, NC	BURKE CAROL M	308 WRENN AVE MOUNT AIRY NC 27030	N/A	502119615090	152500	5.83	1041.0
6-49	LEBANON ST	MOUNT AIRY, NC	LOVILL ROBERT J III TRUSTEE	660 W LEBANON ST MOUNT AIRY NC 27030	N/A	502119514563	152250	5.81	1036.0
6-50	LEBANON ST	MOUNT AIRY, NC	LOVILL ROBERT J III TRUSTEE	660 W LEBANON ST MOUNT AIRY NC 27030	N/A	502119514563	152250	5.82	1036.0
6-51	000660 LEBANON ST	MOUNT AIRY, NC	LOVILL ROBERT J III TRUSTEE	660 W LEBANON ST MOUNT AIRY NC 27030	N/A	502119501941	152000	5.87	1037.0
6-52	000730 LEBANON ST	MOUNT AIRY, NC	VANNIEUWKOOP ERIC JACOB	150 HARLEY HILL TRL MOUNT AIRY NC 27030	N/A	502119500909	152000	5.86	1037.0
6-53	000769 LEBANON ST	MOUNT AIRY, NC	BRAY PROPERTIES LLC	PO BOX 804 MOUNT AIRY NC 27203	N/A	502118411050	152000	5.86	1042.0
6-54	000765 LEBANON ST	MOUNT AIRY, NC	MCARTHUR NATHANIEL & MARTHA	244 JONES SCHOOL RD MOUNT AIRY NC 27030	N/A	502118406968	152000	5.86	1039.0
6-55	000660 LEBANON ST	MOUNT AIRY, NC	LOVILL ROBERT J III TRUSTEE	660 W LEBANON ST MOUNT AIRY NC 27030	N/A	502119501941	152000	5.86	1034.0
6-56	000660 LEBANON ST	MOUNT AIRY, NC	LOVILL ROBERT J III TRUSTEE	660 W LEBANON ST MOUNT AIRY NC 27030	N/A	502119501941	152000	5.86	1037.0
6-57	000328 GRACE ST	MOUNT AIRY, NC	GORDON BETTY JO SIMMONS	328 GRACE ST MOUNT AIRY NC 27030	N/A	502119507688	152000	5.86	1048.0
6-58	000765 LEBANON ST	MOUNT AIRY, NC	MCARTHUR NATHANIEL & MARTHA	244 JONES SCHOOL RD MOUNT AIRY NC 27030	N/A	502118406968	151750	5.90	1038.0
6-59	000749 LEBANON ST	MOUNT AIRY, NC	SLATE DUSTY D	411 BRENTWOOD AVE MOUNT AIRY NC 27030	N/A	502118407888	151750	5.91	1038.0
6-60	000644 LEBANON ST	MOUNT AIRY, NC	BRANNOCK PROPERTIES LLC	640 WEST LEBANON ST MOUNT AIRY NC 27030	N/A	502119502864	151750	5.90	1036.0
6-61	000640 LEBANON ST	MOUNT AIRY, NC	BRANNOCK PROPERTIES LLC	640 WEST LEBANON ST MOUNT AIRY NC 27030	N/A	502119502683	151750	5.90	1034.0
6-62	000638 LEBANON ST	MOUNT AIRY, NC	BRANCO PROPERTIES LLC	640 W LEBANON ST MOUNT AIRY NC 27030	N/A	502119504505	151750	5.91	1033.0
6-63	000332 GRACE ST	MOUNT AIRY, NC	HATCHER DAVID B	332 GRACE ST MOUNT AIRY NC 27030	N/A	502119508557	151750	5.91	1053.0
6-64	000502 LEBANON ST	MOUNT AIRY, NC	DIRUSSO FRANCIS CHRISTIAN	502 W LEBANON ST STE 100 MOUNT AIRY NC	N/A	502119507301	151567	5.94	1047.0
6-65	000560 LEBANON ST	MOUNT AIRY, NC	ROTENIZER ANTHONY MYLES	1247 MCKINNEY RD MOUNT AIRY NC 27030	N/A	502119505402	151567	5.94	1036.0
6-66	000691 LEBANON ST	MOUNT AIRY, NC	VETERAN'S MEMORIAL PARK INC	PO BOX 445 MOUNT AIRY NC 27030	N/A	502118403145	151567	5.95	1035.0
6-67	000691 LEBANON ST	MOUNT AIRY, NC	VETERAN'S MEMORIAL PARK INC	PO BOX 445 MOUNT AIRY NC 27030	N/A	502118403145	151567	5.94	1034.0
6-68	000526 LEBANON ST	MOUNT AIRY, NC	VRC INVESTMENTS LLC	252 N MAIN ST STE 260 PO BOX 1044 MOUNT	N/A	502119506432	151567	5.94	1042.0
6-69	000691 LEBANON ST	MOUNT AIRY, NC	VETERAN'S MEMORIAL PARK INC	PO BOX 445 MOUNT AIRY NC 27030	N/A	502118403145	151444	5.96	1039.0
6-70	001276 SOUTH ST	MOUNT AIRY, NC	SHELTON MILDRED BERRIER	403 BRENTWOOD AVE MOUNT AIRY NC 27030	N/A	502119505160	151444	5.96	1047.0
6-71	000527 LEBANON ST	MOUNT AIRY, NC	JOYCE ROY L	4474 WESTFIELD RD PO BOX 1376 MOUNT AIRY	N/A	502119503268	151444	5.97	1041.0
6-72	000527 LEBANON ST	MOUNT AIRY, NC	JOYCE ROY L	4474 WESTFIELD RD PO BOX 1376 MOUNT AIRY	N/A	502119503268	151444	5.96	1042.0
6-73	001263 SOUTH ST	MOUNT AIRY, NC	BRAY E D III	PO BOX 804 MOUNT AIRY NC 27030	N/A	502119503116	151444	5.98	1035.0
6-74	001247 SOUTH ST	MOUNT AIRY, NC	BRAYS RECAPPING SERVICE INC	1219 N SOUTH ST PO BOX 804 MOUNT AIRY NC	N/A	502119501010	151000	6.05	1032.0
6-75	001230 SOUTH ST	MOUNT AIRY, NC	BRAY PROPERTIES LLC	PO BOX 804 MOUNT AIRY NC 27203	N/A	502007595820	151000	6.05	1048.0
6-76	001219 SOUTH ST	MOUNT AIRY, NC	BRAYS RECAPPING SERVICE INC	1219 N SOUTH ST PO BOX 804 MOUNT AIRY NC	N/A	502007592981	151000	6.05	1033.0
6-77	001219 SOUTH ST	MOUNT AIRY, NC	BRAYS RECAPPING SERVICE INC	1219 N SOUTH ST PO BOX 804 MOUNT AIRY NC	N/A	502007592981	151000	6.05	1032.0
6-78	001247 SOUTH ST	MOUNT AIRY, NC	BRAYS RECAPPING SERVICE INC	1219 N SOUTH ST PO BOX 804 MOUNT AIRY NC	N/A	502119501010	151000	6.07	1033.0
6-79	001249 SOUTH ST	MOUNT AIRY, NC	BRAY PROPERTIES LLC 1/2	PO BOX 804 MOUNT AIRY NC 27030	N/A	502119503001	151000	6.06	1039.0
6-80	001119 SOUTH ST	MOUNT AIRY, NC	SURRY COUNTY	118 HAMBY RD STE 329 DOBSON NC 27017	N/A	502006494075	150750	6.10	1034.0
6-81	000691 LEBANON ST	MOUNT AIRY, NC	VETERAN'S MEMORIAL PARK INC	PO BOX 445 MOUNT AIRY NC 27030	N/A	502118403145	150500	6.15	1042.0

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6-82	000691 LEBANON ST	MOUNT AIRY, NC	VETERAN'S MEMORIAL PARK INC	PO BOX 445 MOUNT AIRY NC 27030	N/A	502118403145	150500	6.15	1029.0
6-83	000691 LEBANON ST	MOUNT AIRY, NC	VETERAN'S MEMORIAL PARK INC	PO BOX 445 MOUNT AIRY NC 27030	N/A	502118403145	150500	6.14	1039.0
6-84	000691 LEBANON ST	MOUNT AIRY, NC	VETERAN'S MEMORIAL PARK INC	PO BOX 445 MOUNT AIRY NC 27030	N/A	502118403145	150500	6.14	1038.0
6-85	000691 LEBANON ST	MOUNT AIRY, NC	VETERAN'S MEMORIAL PARK INC	PO BOX 445 MOUNT AIRY NC 27030	N/A	502118403145	150500	6.14	1037.0
6-86	000691 LEBANON ST	MOUNT AIRY, NC	VETERAN'S MEMORIAL PARK INC	PO BOX 445 MOUNT AIRY NC 27030	N/A	502118403145	150500	6.14	1036.0
6-87	000691 LEBANON ST	MOUNT AIRY, NC	VETERAN'S MEMORIAL PARK INC	PO BOX 445 MOUNT AIRY NC 27030	N/A	502118403145	150250	6.19	1037.0
6-88	000691 LEBANON ST	MOUNT AIRY, NC	VETERAN'S MEMORIAL PARK INC	PO BOX 445 MOUNT AIRY NC 27030	N/A	502118403145	150250	6.20	1035.0
6-89	000691 LEBANON ST	MOUNT AIRY, NC	VETERAN'S MEMORIAL PARK INC	PO BOX 445 MOUNT AIRY NC 27030	N/A	502118403145	150250	6.20	1045.0
6-90	000691 LEBANON ST	MOUNT AIRY, NC	VETERAN'S MEMORIAL PARK INC	PO BOX 445 MOUNT AIRY NC 27030	N/A	502118403145	150250	6.19	1036.0
6-91	000691 LEBANON ST	MOUNT AIRY, NC	VETERAN'S MEMORIAL PARK INC	PO BOX 445 MOUNT AIRY NC 27030	N/A	502118403145	150000	6.24	1038.0
6-92	000272 HICKORY ST	MOUNT AIRY, NC	SHEETS JERRY WAYNE SR	105 ARLINGTON HEIGHTS LN MOUNT AIRY NC	N/A	502118206860	149250	6.53	1043.0
6-93	000280 HICKORY ST	MOUNT AIRY, NC	KAT DESIGNS INC	280 HICKORY ST MOUNT AIRY NC 27030	N/A	502118208496	149250	6.53	1038.0
6-94	000272 HICKORY ST	MOUNT AIRY, NC	SHEETS JERRY WAYNE SR	105 ARLINGTON HEIGHTS LN MOUNT AIRY NC	N/A	502118206860	149250	6.55	1043.0
6-95	000272 HICKORY ST	MOUNT AIRY, NC	SHEETS JERRY WAYNE SR	105 ARLINGTON HEIGHTS LN MOUNT AIRY NC	N/A	502118206860	149250	6.49	1041.0
7-1	001119 SOUTH ST	MOUNT AIRY, NC	SURRY COUNTY	118 HAMBY RD STE 329 DOBSON NC 27017	N/A	502006494075	150500	6.14	1035.0
7-2	001119 SOUTH ST	MOUNT AIRY, NC	SURRY COUNTY	118 HAMBY RD STE 329 DOBSON NC 27017	N/A	502006494075	150500	6.14	1032.0
7-3	001119 SOUTH ST	MOUNT AIRY, NC	SURRY COUNTY	118 HAMBY RD STE 329 DOBSON NC 27017	N/A	502006494075	150250	6.19	1038.0
7-4	000426 ORCHARD ST	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	502006488907	149750	6.30	1038.0
7-5	000417 ORCHARD ST	MOUNT AIRY, NC	MT AIRY BOARD OF EDUCATION	PO BOX 710 MOUNT AIRY NC 27030	N/A	502006488676	149500	6.34	1041.0
7-6	000426 ORCHARD ST	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	502006488907	149500	6.35	1038.0
7-7	000426 ORCHARD ST	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	502006488907	149500	6.35	1036.0
7-8	000417 ORCHARD ST	MOUNT AIRY, NC	MT AIRY BOARD OF EDUCATION	PO BOX 710 MOUNT AIRY NC 27030	N/A	502006488676	149500	6.33	1043.0
7-9	000417 ORCHARD ST	MOUNT AIRY, NC	MT AIRY BOARD OF EDUCATION	PO BOX 710 MOUNT AIRY NC 27030	N/A	502006488676	149500	6.33	1043.0
7-10	001119 SOUTH ST	MOUNT AIRY, NC	SURRY COUNTY	118 HAMBY RD STE 329 DOBSON NC 27017	N/A	502006494075	149250	6.39	1027.0
7-11	000505 ORCHARD ST	MOUNT AIRY, NC	WHITAKER BRANDON K	694 SIMPSON MILL RD MOUNT AIRY NC 27030	N/A	502006488520	149250	6.39	1036.0
7-12	000509 ORCHARD ST	MOUNT AIRY, NC	WHITAKER BRANDON K	694 SIMPSON MILL RD MOUNT AIRY NC 27030	N/A	502006488416	149250	6.38	1035.0
7-13	000513 ORCHARD ST	MOUNT AIRY, NC	ADAMS LOLEAN SIMMONS	513 ORCHARD ST MOUNT AIRY NC 27030	N/A	502006488401	149250	6.38	1035.0
7-14	000517 ORCHARD ST	MOUNT AIRY, NC	BARR MARK DWANE	123 WOMBAT LN MOUNT AIRY NC 27030	N/A	502006487396	149250	6.39	1039.0
7-15	000517 ORCHARD ST	MOUNT AIRY, NC	BARR MARK DWANE	123 WOMBAT LN MOUNT AIRY NC 27030	N/A	502006487396	149250	6.39	1034.0
7-16	001119 SOUTH ST	MOUNT AIRY, NC	SURRY COUNTY	118 HAMBY RD STE 329 DOBSON NC 27017	N/A	502006494075	149250	6.39	1028.0
7-17	000422 HAY ST	MOUNT AIRY, NC	TOLBERT DEBORAH SUE	2686 WESTFIELD RD PO BOX 366 MOUNT AIRY NC	N/A	502006487256	149000	6.43	1036.0
7-18	000561 HAY ST	MOUNT AIRY, NC	561 HAY STREET LLC	PO BOX 804 MOUNT AIRY NC 27030	N/A	502006387072	149000	6.43	1024.0
7-19	000561 HAY ST	MOUNT AIRY, NC	561 HAY STREET LLC	PO BOX 804 MOUNT AIRY NC 27030	N/A	502006387072	149000	6.43	1025.0
7-20	001119 SOUTH ST	MOUNT AIRY, NC	SURRY COUNTY	118 HAMBY RD STE 329 DOBSON NC 27017	N/A	502006494075	149000	6.43	1028.0
7-21	000426 HAY ST	MOUNT AIRY, NC	HAYMORE BILLIE JEAN L	313 E DEVON DR MOUNT AIRY NC 27030	N/A	502006487218	149000	6.43	1034.0
7-22	000426 HAY ST	MOUNT AIRY, NC	HAYMORE BILLIE JEAN L	313 E DEVON DR MOUNT AIRY NC 27030	N/A	502006487218	149000	6.43	1034.0
7-23	000422 HAY ST	MOUNT AIRY, NC	TOLBERT DEBORAH SUE	2686 WESTFIELD RD PO BOX 366 MOUNT AIRY NC	N/A	502006487256	149000	6.43	1034.0
7-24	000426 HAY ST	MOUNT AIRY, NC	HAYMORE BILLIE JEAN L	313 E DEVON DR MOUNT AIRY NC 27030	N/A	502006487218	149000	6.43	1032.0
7-25	000418 HAY ST	MOUNT AIRY, NC	BYRD JERRY A	418 HAY STREET MOUNT AIRY NC 27030	N/A	502006488206	149000	6.43	1037.0
7-26	000414 HAY ST	MOUNT AIRY, NC	ARRINGTON RUTH WILLIAMS	414 HAY ST MOUNT AIRY NC 27030	N/A	502006488267	149000	6.43	1039.0
7-27	000426 HAY ST	MOUNT AIRY, NC	HAYMORE BILLIE JEAN L	313 E DEVON DR MOUNT AIRY NC 27030	N/A	502006487218	149000	6.43	1035.0
7-28	HAY ST	MOUNT AIRY, NC	MT AIRY BOARD OF EDUCATION	PO BOX 710 MOUNT AIRY NC 27030	N/A	502006389770	148750	6.48	1024.0
7-29	001119 SOUTH ST	MOUNT AIRY, NC	SURRY COUNTY	118 HAMBY RD STE 329 DOBSON NC 27017	N/A	502006494075	148750	6.48	1029.0
7-30	000561 HAY ST	MOUNT AIRY, NC	561 HAY STREET LLC	PO BOX 804 MOUNT AIRY NC 27030	N/A	502006387072	148750	6.47	1021.0
7-31	000561 HAY ST	MOUNT AIRY, NC	561 HAY STREET LLC	PO BOX 804 MOUNT AIRY NC 27030	N/A	502006387072	148750	6.47	1024.0
7-32	000851 SOUTH ST	MOUNT AIRY, NC	BRAY E DEAN III	PO BOX 804 MOUNT AIRY NC 27030	N/A	502006478991	148750	6.47	1035.0

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Building No.	Property Address	City / Town	Owner	Owner Address	Owner Tele.	Parcel No.	Station	Distance from Dam (miles)	Structure Elevation (feet)
7-33	000511 HAY ST	MOUNT AIRY, NC	UPC REAL ESTATE HOLDINGS INC	511 HAY ST MOUNT AIRY NC 27030	N/A	502006474982	148500	6.52	1022.0
7-34	000511 HAY ST	MOUNT AIRY, NC	UPC REAL ESTATE HOLDINGS INC	511 HAY ST MOUNT AIRY NC 27030	N/A	502006474982	148250	6.57	1021.0
7-35	000511 HAY ST	MOUNT AIRY, NC	UPC REAL ESTATE HOLDINGS INC	511 HAY ST MOUNT AIRY NC 27030	N/A	502006474982	148000	6.62	1022.0
7-36	000511 HAY ST	MOUNT AIRY, NC	UPC REAL ESTATE HOLDINGS INC	511 HAY ST MOUNT AIRY NC 27030	N/A	502006474982	148000	6.62	1022.0
7-37	WEST ST	MOUNT AIRY, NC	SAWYERS WILLIAM ELMER	140 COPPER SPRINGS TRL MOUNT AIRY NC	N/A	502010472458	147250	6.76	1021.0
7-38	000632 WEST ST	MOUNT AIRY, NC	MCCLELLAN WILLIAM D	4433 WEST LONELY CT DUNNELLON FL 34433	N/A	502010472359	147000	6.80	1019.0
7-39	N/A	MOUNT AIRY, NC	SOUTHERN RAILWAY COMPANY	110 FRANKLIN RD SE ROANOKE VA 24042	N/A	N/A	147000	6.80	1021.0
7-40	000631 WEST ST	MOUNT AIRY, NC	WIDENER CARL MATTHEW	1439 E PINE ST MOUNT AIRY NC 27030	N/A	502010476159	146750	6.85	1022.0
7-41	000631 WEST ST	MOUNT AIRY, NC	WIDENER CARL MATTHEW	1439 E PINE ST MOUNT AIRY NC 27030	N/A	502010476159	146750	6.86	1032.0
7-42	000635 WEST ST	MOUNT AIRY, NC	MCCLELLAN WILLIAM D	4433 WEST LONELY CT DUNNELLON FL 34433	N/A	502010472261	146750	6.87	1020.0
7-43	SOUTH ST	MOUNT AIRY, NC	MCCLELLAN WILLIAM D	4433 WEST LONELY CT DUNNELLON FL 34433	N/A	502010466966	146500	6.92	1023.0
7-44	000733 SOUTH ST	MOUNT AIRY, NC	MT AIRY IRON & METAL CO	733 N SOUTH ST PO BOX 295 MOUNT AIRY NC	N/A	502010464567	146500	6.91	1019.0
7-45	000733 SOUTH ST	MOUNT AIRY, NC	MT AIRY IRON & METAL CO	733 N SOUTH ST PO BOX 295 MOUNT AIRY NC	N/A	502010464567	146500	6.90	1019.0
7-46	000733 SOUTH ST	MOUNT AIRY, NC	MT AIRY IRON & METAL CO	733 N SOUTH ST PO BOX 295 MOUNT AIRY NC	N/A	502010464567	146500	6.90	1024.0
7-47	000733 SOUTH ST	MOUNT AIRY, NC	MT AIRY IRON & METAL CO	733 N SOUTH ST PO BOX 295 MOUNT AIRY NC	N/A	502010464567	146500	6.92	1022.0
7-48	000733 SOUTH ST	MOUNT AIRY, NC	MT AIRY IRON & METAL CO	733 N SOUTH ST PO BOX 295 MOUNT AIRY NC	N/A	502010464567	146500	6.92	1021.0
7-49	000733 SOUTH ST	MOUNT AIRY, NC	MT AIRY IRON & METAL CO	733 N SOUTH ST PO BOX 295 MOUNT AIRY NC	N/A	502010464567	146500	6.91	1023.0
7-50	000230 FREDRICK ST	MOUNT AIRY, NC	HAZEL JAMES LANSDELL JR	230 FREDERICK ST PO BOX 1324 MOUNT AIRY NC	N/A	502010368518	146000	7.00	1015.0
7-51	000230 FREDRICK ST	MOUNT AIRY, NC	HAZEL JAMES LANSDELL JR	230 FREDERICK ST PO BOX 1324 MOUNT AIRY NC	N/A	502010368518	146000	6.99	1016.0
7-52	000230 FREDRICK ST	MOUNT AIRY, NC	HAZEL JAMES LANSDELL JR	230 FREDERICK ST PO BOX 1324 MOUNT AIRY NC	N/A	502010368518	146000	7.01	1015.0
7-53	000230 FREDRICK ST	MOUNT AIRY, NC	HAZEL JAMES LANSDELL JR	230 FREDERICK ST PO BOX 1324 MOUNT AIRY NC	N/A	502010368518	146000	7.02	1014.0
7-54	000220 FREDERICK ST	MOUNT AIRY, NC	REF PROPERTIES LLC	198 N MAIN ST MOUNT AIRY NC 27030	N/A	502010368010	145750	7.04	1019.0
7-55	000461 SOUTH ST	MOUNT AIRY, NC	BRAY PROPERTIES LLC 1/2	PO BOX 804 MOUNT AIRY NC 27030	N/A	502010468141	145750	7.05	1028.0
7-56	000219 FREDERICK ST	MOUNT AIRY, NC	PINE STATE CORP APPAREL LLC	219 FREDERICK ST MOUNT AIRY NC 27030	N/A	502010354882	145750	7.04	1027.0
7-57	000219 FREDERICK ST	MOUNT AIRY, NC	PINE STATE CORP APPAREL LLC	219 FREDERICK ST MOUNT AIRY NC 27030	N/A	502010354882	145750	7.04	1029.0
7-58	000078 MAYBERRY MALL	MOUNT AIRY, NC	BELK'S DEPT OF MOUNT AIRY NC I	2801 W TYVOLA RD CHARLOTTE NC 28217	N/A	502010363624	145750	7.08	1012.0
7-59	000461 SOUTH ST	MOUNT AIRY, NC	BRAY PROPERTIES LLC 1/2	PO BOX 804 MOUNT AIRY NC 27030	N/A	502010468141	145750	7.04	1035.0
7-60	000630 INDEPENDENCE BV	MOUNT AIRY, NC	BRAY E DEAN III	PO BOX 804 MOUNT AIRY NC 27030	N/A	502010359487	145250	7.14	1020.0
7-61	000630 INDEPENDENCE BV	MOUNT AIRY, NC	BRAY E DEAN III	PO BOX 804 MOUNT AIRY NC 27030	N/A	502010359487	145250	7.16	1016.0
7-62	000540 INDEPENDENCE BV	MOUNT AIRY, NC	SNIDER PROPERTIES OF MT AIRY L	161 BECKY LN (MT AIRY) PO BOX 901 MOUNT AIRY	N/A	502010455793	145250	7.14	1015.0
7-63	000630 INDEPENDENCE BV	MOUNT AIRY, NC	BRAY E DEAN III	PO BOX 804 MOUNT AIRY NC 27030	N/A	502010359487	145250	7.15	1016.0
7-64	000540 INDEPENDENCE BV	MOUNT AIRY, NC	JOHNSON GRADY EDWARD & CAROL	540 W INDEPENDENCE BLVD PO BOX 901 MOUNT	N/A	502010456444	144741	7.24	1010.0
7-65	000540 INDEPENDENCE BV	MOUNT AIRY, NC	JOHNSON GRADY EDWARD & CAROL	540 W INDEPENDENCE BLVD PO BOX 901 MOUNT	N/A	502010456444	144741	7.24	1009.0
8-1	000507 LOVILL ST	MOUNT AIRY, NC	HOUSING AUTHORITY	PO BOX 767 MOUNT AIRY NC 27030	N/A	502011551013	144526	7.29	1024.0
8-2	000507 LOVILL ST	MOUNT AIRY, NC	HOUSING AUTHORITY	PO BOX 767 MOUNT AIRY NC 27030	N/A	502011551013	144526	7.29	1028.0
8-3	000711 INDEPENDENCE BV	MOUNT AIRY, NC	GRANITE/NEW MARKET CROSSING LL	210 AIRPORT RD STE 200 PO BOX 1928 MOUNT	N/A	502014443726	144526	7.27	1011.0
8-4	000697 INDEPENDENCE BV	MOUNT AIRY, NC	CHURPEYES INC	5623 FAIRFIELD RD COLUMBIA SC 29203	N/A	502014442807	144526	7.27	1019.0
8-5	000697 INDEPENDENCE BV	MOUNT AIRY, NC	CHURPEYES INC	5623 FAIRFIELD RD COLUMBIA SC 29203	N/A	502014442807	144526	7.27	1019.0
8-6	000697 INDEPENDENCE BV	MOUNT AIRY, NC	CHURPEYES INC	5623 FAIRFIELD RD COLUMBIA SC 29203	N/A	502014442807	144526	7.28	1017.0
8-7	000507 LOVILL ST	MOUNT AIRY, NC	HOUSING AUTHORITY	PO BOX 767 MOUNT AIRY NC 27030	N/A	502011551013	144250	7.34	1022.0
8-8	000507 LOVILL ST	MOUNT AIRY, NC	HOUSING AUTHORITY	PO BOX 767 MOUNT AIRY NC 27030	N/A	502011551013	144250	7.33	1022.0
8-9	000507 LOVILL ST	MOUNT AIRY, NC	HOUSING AUTHORITY	PO BOX 767 MOUNT AIRY NC 27030	N/A	502011551013	144250	7.34	1022.0
8-10	000507 LOVILL ST	MOUNT AIRY, NC	HOUSING AUTHORITY	PO BOX 767 MOUNT AIRY NC 27030	N/A	502011551013	144000	7.38	1023.0
8-11	000507 LOVILL ST	MOUNT AIRY, NC	HOUSING AUTHORITY	PO BOX 767 MOUNT AIRY NC 27030	N/A	502011551013	144000	7.37	1028.0
8-12	000507 LOVILL ST	MOUNT AIRY, NC	HOUSING AUTHORITY	PO BOX 767 MOUNT AIRY NC 27030	N/A	502011551013	144000	7.37	1022.0
8-13	000711 INDEPENDENCE BV	MOUNT AIRY, NC	GRANITE/NEW MARKET CROSSING LL	210 AIRPORT RD STE 200 PO BOX 1928 MOUNT	N/A	502014443726	144000	7.38	1018.0

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8-14	000725 INDEPENDENCE BV	MOUNT AIRY, NC	GRANITE/MA-PINE STREET LLC	PO BOX 1928 MOUNT AIRY NC 27030	N/A	502014443746	143750	7.42	1014.0
8-15	000206 SOUTH ST	MOUNT AIRY, NC	LOY HERBERT M	830 OLD US HIGHWAY 601 MOUNT AIRY NC	N/A	502015541269	143500	7.47	1019.0
8-16	000644 PINE ST	MOUNT AIRY, NC	KING'S GARAGE	644 W PINE ST MOUNT AIRY NC 27030	N/A	502014447683	143500	7.47	1008.0
8-17	000699 PINE ST	MOUNT AIRY, NC	WARD AUSTIN	PO BOX 427 MOUNT AIRY NC 27030	N/A	502014348149	143311	7.51	1012.0
8-18	000512 PINE ST	MOUNT AIRY, NC	A SHAEL LLC	7804 MENDI COURT RALEIGH NC 27606	N/A	502015543112	143311	7.51	1028.0
8-19	000644 PINE ST	MOUNT AIRY, NC	KING'S GARAGE	644 W PINE ST MOUNT AIRY NC 27030	N/A	502014447683	143311	7.50	1010.0
8-20	000675 PINE ST	MOUNT AIRY, NC	WARD AUSTIN	PO BOX 427 MOUNT AIRY NC 27030	N/A	502014440178	143126	7.54	1014.0
8-21	000699 PINE ST	MOUNT AIRY, NC	WARD AUSTIN	PO BOX 427 MOUNT AIRY NC 27030	N/A	502014348149	143126	7.54	1011.0
8-22	000699 PINE ST	MOUNT AIRY, NC	WARD AUSTIN	PO BOX 427 MOUNT AIRY NC 27030	N/A	502014348149	143126	7.54	1009.0
8-23	000600 PINE ST	MOUNT AIRY, NC	WORTH JOHN L	PO BOX 309 MOUNT AIRY NC 27030	N/A	502015541123	143126	7.54	1017.0
8-24	000541 PINE ST	MOUNT AIRY, NC	PR INVESTMENT PROPERTY LLC	PO BOX 1928 MOUNT AIRY NC 27030	N/A	502015531875	143126	7.56	1028.0
8-25	000580 GRANITE ST	MOUNT AIRY, NC	SOUTHERN RAILWAY COMPANY	110 FRANKLIN RD SE ROANOKE VA 24042	N/A	502014439840	143126	7.57	1025.0
8-26	000704 BLUEMONT RD	MOUNT AIRY, NC	WIDENER SHERMAN B	158 CRUTCHFIELD RD DOBSON NC 27017	N/A	502014336977	142750	7.61	1013.0
8-27	000580 GRANITE ST	MOUNT AIRY, NC	SOUTHERN RAILWAY COMPANY	110 FRANKLIN RD SE ROANOKE VA 24042	N/A	502014439840	142750	7.64	1019.0
8-28	000700 BLUEMONT RD	MOUNT AIRY, NC	WIDENER SHERMAN B	158 CRUTCHFIELD RD DOBSON NC 27017	N/A	502014338928	142750	7.61	1004.0
8-29	000645 PINE ST	MOUNT AIRY, NC	HANESBRANDS INC	1000 E HANES MILL RD WINSTON SALEM NC	N/A	502014432146	142500	7.66	1005.0
8-30	000605 BLUEMONT RD	MOUNT AIRY, NC	STORE MASTER FUNDING III LLC	8501 E PRINCESS DR STE 190 SCOTTSDALE AZ	N/A	502014430776	142500	7.66	1003.0
8-31	000716 BLUEMONT RD	MOUNT AIRY, NC	SURRY INVESTMENTS LLC	C/O JOSE RODRIGUEZ 366 FOREST OAKS DR	N/A	502014337749	142500	7.66	1005.0
8-32	CRESTVIEW ST	MOUNT AIRY, NC	GOUGH CHAD G	318 DEERHAVEN LN INDEPENDENCE VA 24348	N/A	502014335531	142250	7.71	1007.0
8-33	CRESTVIEW ST	MOUNT AIRY, NC	GOUGH CHAD G	318 DEERHAVEN LN INDEPENDENCE VA 24348	N/A	502014335531	142250	7.71	1008.0
8-34	CRESTVIEW ST	MOUNT AIRY, NC	GOUGH CHAD G	318 DEERHAVEN LN INDEPENDENCE VA 24348	N/A	502014335531	142250	7.71	1010.0
8-35	000630 DERBY ST	MOUNT AIRY, NC	630 DERBY STREET INVESTORS LLC	8600 RHEEM AVE SOUTH GATE CA 90280	N/A	502014438189	142250	7.70	1016.0
8-36	000734 BLUEMONT RD	MOUNT AIRY, NC	GOUGH CHAD GRAYSON	376 PINEVIEW DR MOUNT AIRY NC 27030	N/A	502014336489	142250	7.71	1002.0
8-37	000738 BLUEMONT RD	MOUNT AIRY, NC	GOUGH CHAD GRAYSON	376 PINEVIEW DR MOUNT AIRY NC 27030	N/A	502014336342	142000	7.75	1005.0
8-38	000738 BLUEMONT RD	MOUNT AIRY, NC	GOUGH CHAD GRAYSON	376 PINEVIEW DR MOUNT AIRY NC 27030	N/A	502014336342	142000	7.76	1006.0
8-39	BLUEMONT RD	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	502014338208	142000	7.75	1001.0
8-40	000760 BLUEMONT RD	MOUNT AIRY, NC	SURRATT CARLOS FRANKLIN	768 E BLUEMONT RD MOUNT AIRY NC 27030	N/A	502014336220	142000	7.78	1010.0
8-41	000758 BLUEMONT RD	MOUNT AIRY, NC	SURRATT CARLOS FRANKLIN	768 E BLUEMONT RD MOUNT AIRY NC 27030	N/A	502014336199	142000	7.77	1007.0
8-42	000101 PARRISH LN	MOUNT AIRY, NC	HODGES SHIRLEY SMITH	PO BOX 826 TOAST NC 27049	N/A	502014337126	142000	7.76	1004.0
8-43	000645 PINE ST	MOUNT AIRY, NC	HANESBRANDS INC	1000 E HANES MILL RD WINSTON SALEM NC	N/A	502014432146	142000	7.77	1004.0
8-44	000738 BLUEMONT RD	MOUNT AIRY, NC	GOUGH CHAD GRAYSON	376 PINEVIEW DR MOUNT AIRY NC 27030	N/A	502014336342	142000	7.75	1003.0
8-45	000104 PARRISH LN	MOUNT AIRY, NC	BLEVINS DONALD LEE	104 PARRISH LN MOUNT AIRY NC 27030	N/A	502014326987	141750	7.82	1012.0
8-46	000104 PARRISH LN	MOUNT AIRY, NC	BLEVINS DONALD LEE	104 PARRISH LN MOUNT AIRY NC 27030	N/A	502014326987	141750	7.81	1009.0
8-47	000104 PARRISH LN	MOUNT AIRY, NC	BLEVINS DONALD LEE	104 PARRISH LN MOUNT AIRY NC 27030	N/A	502014326987	141750	7.81	1006.0
8-48	510 SOUTH ST	MOUNT AIRY, NC	MEDDATA LLC	200 PEBBLE CREEK TRL MOUNT AIRY, NC	N/A	502015521718	141750	7.85	1026.0
8-49	000645 PINE ST	MOUNT AIRY, NC	HANESBRANDS INC	1000 E HANES MILL RD WINSTON SALEM NC	N/A	502014432146	141750	7.80	1004.0
8-50	000108 PARRISH LN	MOUNT AIRY, NC	SURRY ENTERPRISES LLC	5130 INDIANA AVE WINSTON SALEM NC 27106	N/A	502014327966	141750	7.80	1008.0
8-51	000502 FACTORY ST	MOUNT AIRY, NC	HICKORY & FACTORY LLC	226 SAVANNAH LN MOUNT AIRY NC 27030	N/A	502018426360	141750	7.80	1006.0
8-52	000618 BLUEMONT RD	MOUNT AIRY, NC	GORDON BETTY JO SIMMONS	328 GRACE ST MOUNT AIRY NC 27030	N/A	502014237184	141750	7.92	1023.0
8-53	000349 ANDY GRIFFITH PK	MOUNT AIRY, NC	STARWOOD INVESTMENT L P	PO BOX 789749 WICHITA KS 67278	N/A	502014325962	141750	7.80	1004.0
8-54	000645 PINE ST	MOUNT AIRY, NC	HANESBRANDS INC	1000 E HANES MILL RD WINSTON SALEM NC	N/A	502014432146	141750	7.81	1005.0
8-55	000351 ANDY GRIFFITH PK	MOUNT AIRY, NC	SURRY ENTERPRISES LLC	5130 INDIANA AVE WINSTON SALEM NC 27106	N/A	502014327877	141500	7.85	1000.0
8-56	000355 ANDY GRIFFITH PK	MOUNT AIRY, NC	GORDON BECKY SIMMONS	355 S ANDY GRIFFITH PKWY MOUNT AIRY NC	N/A	502014326763	141500	7.85	999.5
8-57	ANDY GRIFFITH PK	MOUNT AIRY, NC	TORRES DEBORAH G	2344 TURKEY FORD RD MOUNT AIRY NC 27030	N/A	502018329239	141000	7.96	1000.0
8-58	000631 FACTORY ST	MOUNT AIRY, NC	COCKERHAM RAY W & LUCILLE	631 FACTORY ST MOUNT AIRY NC 27030	N/A	502018429107	140750	7.99	1025.0
8-59	000637 FACTORY ST	MOUNT AIRY, NC	MARTIN CALLIE LEFTWICH	798 CROSSINGHAM RD MOUNT AIRY NC 27030	N/A	502018429048	140750	8.00	1021.0

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Building No.	Property Address	City / Town	Owner	Owner Address	Owner Tele.	Parcel No.	Station	Distance from Dam (miles)	Structure Elevation (feet)
8-60	000502 FACTORY ST	MOUNT AIRY, NC	HICKORY & FACTORY LLC	226 SAVANNAH LN MOUNT AIRY NC 27030	N/A	502018426360	140750	7.99	999.7
8-61	000641 FACTORY ST	MOUNT AIRY, NC	SMITH ED HEIRS	116 PENNSYLVANIA AVE FOLKSTON GA 31537	N/A	502018419937	140500	8.04	1019.0
8-62	000826 MARSHALL ST	MOUNT AIRY, NC	ATHAR MOHAMMED AZHAR DR	826 MARSHALL ST MOUNT AIRY NC 27030	N/A	502019510712	140500	8.07	1024.0
8-63	000435 ANDY GRIFFITH PK	MOUNT AIRY, NC	DUNBAR STONIE	435 S ANDY GRIFFITH PKWY MOUNT AIRY NC	N/A	502018410424	140500	8.04	999.0
8-64	000641 FACTORY ST	MOUNT AIRY, NC	SMITH ED HEIRS	116 PENNSYLVANIA AVE FOLKSTON GA 31537	N/A	502018419937	140500	8.04	1017.0
8-65	000664 FACTORY ST	MOUNT AIRY, NC	BROOKS MARY ELLEN M	664 FACTORY ST MOUNT AIRY NC 27030	N/A	502018418613	140500	8.08	1018.0
8-66	000702 DEPOT ST	MOUNT AIRY, NC	TESH TERESA LYNN	702 DEPOT ST MOUNT AIRY NC 27030	N/A	502018414722	140500	8.06	1018.0
8-67	N/A	MOUNT AIRY, NC	SOUTHERN RAILWAY COMPANY	110 FRANKLIN RD SE ROANOKE VA 24042	N/A	N/A	140500	8.05	1009.0
8-68	001050 WORTH ST	MOUNT AIRY, NC	TNT CARPORTS INC	2344 TURKEY FORD RD MOUNT AIRY NC 27030	N/A	502018411489	140500	8.04	996.7
8-69	000702 DEPOT ST	MOUNT AIRY, NC	TESH TERESA LYNN	702 DEPOT ST MOUNT AIRY NC 27030	N/A	502018414722	140500	8.06	1017.0
8-70	000851 FACTORY ST	MOUNT AIRY, NC	ROYSTER STEPHEN G (1/2) &	PO BOX 1005 MOUNT AIRY NC 27030	N/A	502019510562	140250	8.13	1024.0
8-71	N/A	MOUNT AIRY, NC	SOUTHERN RAILWAY COMPANY	110 FRANKLIN RD SE ROANOKE VA 24042	N/A	N/A	140250	8.09	1016.0
8-72	000664 FACTORY ST	MOUNT AIRY, NC	BROOKS MARY ELLEN M	664 FACTORY ST MOUNT AIRY NC 27030	N/A	502018418613	140250	8.13	1022.0
8-73	000502 ANDY GRIFFITH PK	MOUNT AIRY, NC	13 BONES LLC	502 S ANDY GRIFFITH PKWY MOUNT AIRY NC	N/A	502018312567	139750	8.18	1009.0
8-74	002000 WOODLAND DR	MOUNT AIRY, NC	SBNC LLC	129 FAST LN MOORESVILLE NC 28117	N/A	502018305979	139500	8.23	1009.0
8-75	N/A	MOUNT AIRY, NC	SOUTHERN RAILWAY COMPANY	110 FRANKLIN RD SE ROANOKE VA 24042	N/A	N/A	139250	8.29	1021.0
9-1	001911 WOODLAND DR	MOUNT AIRY, NC	VENABLE CLYDE J JR	PO BOX 886 MOUNT AIRY NC 27030	N/A	502018307687	139250	8.30	999.8
9-2	000202 SNOWHILL DR	MOUNT AIRY, NC	SOUTHERN STATE COOPERATIVE INC	PO BOX 52427 ATLANTA GA 30355	N/A	502018305013	139113	8.33	1015.0
9-3	000202 SNOWHILL DR	MOUNT AIRY, NC	SOUTHERN STATE COOPERATIVE INC	PO BOX 52427 ATLANTA GA 30355	N/A	502018305013	139113	8.34	1012.0
9-4	000202 SNOWHILL DR	MOUNT AIRY, NC	SOUTHERN STATE COOPERATIVE INC	PO BOX 52427 ATLANTA GA 30355	N/A	502018305013	139113	8.33	1007.0
9-5	000202 SNOWHILL DR	MOUNT AIRY, NC	SOUTHERN STATE COOPERATIVE INC	PO BOX 52427 ATLANTA GA 30355	N/A	502018305013	139113	8.35	1008.0
9-6	000202 SNOWHILL DR	MOUNT AIRY, NC	SOUTHERN STATE COOPERATIVE INC	PO BOX 52427 ATLANTA GA 30355	N/A	502018305013	139113	8.35	1012.0
9-7	001922 CAUDLE DR	MOUNT AIRY, NC	CORAM J G SR	182 GRANDVIEW DR MOUNT AIRY NC 27030	N/A	502018305356	139113	8.30	1018.0
9-8	001908 CAUDLE DR	MOUNT AIRY, NC	T & H PROPERTY LLC	PO BOX 341 DOBSON NC 27017	N/A	502018308362	139113	8.30	1005.0
9-9	000246 SNOWHILL DR	MOUNT AIRY, NC	LAWSON JOHN JUNIOR	4680 SALEM HWY STUART VA 24171	N/A	592906391923	139113	8.38	1012.0
9-10	000256 SNOWHILL DR	MOUNT AIRY, NC	SNOWHILL DRIVE LLC	701 W PINE ST STE 100 MOUNT AIRY NC 27030	N/A	592906299956	139113	8.40	1015.0
9-11	000256 SNOWHILL DR	MOUNT AIRY, NC	SNOWHILL DRIVE LLC	701 W PINE ST STE 100 MOUNT AIRY NC 27030	N/A	592906299956	139113	8.39	1014.0
9-12	001905 WOODLAND DR	MOUNT AIRY, NC	DR/MT AIRY LLC A NC LLC	930 W FIRST ST STE 303 FORT WORTH TX 76102	N/A	502018400537	139113	8.31	995.7
9-13	000256 SNOWHILL DR	MOUNT AIRY, NC	SNOWHILL DRIVE LLC	701 W PINE ST STE 100 MOUNT AIRY NC 27030	N/A	592906299956	139113	8.40	1015.0
9-14	000256 SNOWHILL DR	MOUNT AIRY, NC	SNOWHILL DRIVE LLC	701 W PINE ST STE 100 MOUNT AIRY NC 27030	N/A	592906299956	139113	8.41	1016.0
9-15	000256 SNOWHILL DR	MOUNT AIRY, NC	SNOWHILL DRIVE LLC	701 W PINE ST STE 100 MOUNT AIRY NC 27030	N/A	592906299956	139113	8.41	1015.0
9-16	000256 SNOWHILL DR	MOUNT AIRY, NC	SNOWHILL DRIVE LLC	701 W PINE ST STE 100 MOUNT AIRY NC 27030	N/A	592906299956	139113	8.40	1014.0
9-17	001911 CAUDLE DR	MOUNT AIRY, NC	FAM PROPERTIES LLC	109 WOODCOVE DR MOUNT AIRY NC 27030	N/A	502018307094	138986	8.33	998.0
9-18	000172 ASHBURN PARK LN	MOUNT AIRY, NC	ASHBURN PARK LANE LLC	701 W PINE STREET STE 100 MOUNT AIRY NC	N/A	592906299519	138986	8.41	1018.0
9-19	000172 ASHBURN PARK LN	MOUNT AIRY, NC	ASHBURN PARK LANE LLC	701 W PINE STREET STE 100 MOUNT AIRY NC	N/A	592906299519	138986	8.40	1015.0
9-20	000172 ASHBURN PARK LN	MOUNT AIRY, NC	ASHBURN PARK LANE LLC	701 W PINE STREET STE 100 MOUNT AIRY NC	N/A	592906299519	138986	8.40	1016.0
9-21	000172 ASHBURN PARK LN	MOUNT AIRY, NC	ASHBURN PARK LANE LLC	701 W PINE STREET STE 100 MOUNT AIRY NC	N/A	592906299519	138986	8.40	1018.0
9-22	000172 ASHBURN PARK LN	MOUNT AIRY, NC	ASHBURN PARK LANE LLC	701 W PINE STREET STE 100 MOUNT AIRY NC	N/A	592906299519	138986	8.42	1019.0
9-23	000221 SNOWHILL DR	MOUNT AIRY, NC	EAST SNOWHILL DRIVE LLC	701 W PINE ST STE 100 MOUNT AIRY NC 27030	N/A	592906393892	138986	8.35	1017.0
9-24	000126 WELCH RD	MOUNT AIRY, NC	TILLEY SHANNON ANNETTE	126 WELCH RD MOUNT AIRY NC 27030	N/A	502018401112	138986	8.33	1018.0
9-25	000239 SNOWHILL DR	MOUNT AIRY, NC	WEST SNOWHILL DRIVE LLC	701 W PINE ST STE 100 MOUNT AIRY NC 27030	N/A	592906392716	138986	8.37	1020.0
9-26	000172 ASHBURN PARK LN	MOUNT AIRY, NC	ASHBURN PARK LANE LLC	701 W PINE STREET STE 100 MOUNT AIRY NC	N/A	592906299519	138986	8.41	1018.0
9-27	000139 KODIAK LN	MOUNT AIRY, NC	AMFIKLIA LLC	139 KODIAK LN MOUNT AIRY NC 27030	N/A	502018407376	138750	8.38	997.9
9-28	000123 WELCH RD	MOUNT AIRY, NC	ATKINS LACY LIFE ESTATE	123 WELCH RD MOUNT AIRY NC 27030	N/A	502018403024	138750	8.37	1016.0
9-29	000123 WELCH RD	MOUNT AIRY, NC	ATKINS LACY LIFE ESTATE	123 WELCH RD MOUNT AIRY NC 27030	N/A	502018403024	138750	8.38	1013.0
9-30	000140 WELCH RD	MOUNT AIRY, NC	MCCRARY PARLIE	1203 80TH ST NEWPORT NEWS VA 23605	N/A	592906490946	138750	8.37	1021.0

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9-31	000119 WELCH RD	MOUNT AIRY, NC	WEIDINGER PROPERTIES LLC	305 BAY HARBOUR RD MOORESVILLE NC 28117	N/A	502018404200	138750	8.37	1005.0
9-32	000123 WELCH RD	MOUNT AIRY, NC	ATKINS LACY LIFE ESTATE	123 WELCH RD MOUNT AIRY NC 27030	N/A	502018403024	138750	8.37	1002.0
9-33	000123 WELCH RD	MOUNT AIRY, NC	ATKINS LACY LIFE ESTATE	123 WELCH RD MOUNT AIRY NC 27030	N/A	502018403024	138750	8.37	1001.0
9-34	000177 WELCH RD	MOUNT AIRY, NC	WILSON MICHAEL GRAY	177 WELCH RD MOUNT AIRY NC 27030	N/A	592906399515	138750	8.41	1014.0
9-35	000161 KODIAK LN	MOUNT AIRY, NC	SLATE G EDWARD	246 WRENN AVE MOUNT AIRY NC 27030	N/A	502019500104	138500	8.42	997.3
9-36	000692 ANDY GRIFFITH PK	MOUNT AIRY, NC	LOWE'S HOME CENTERS INC	PO BOX 1000 MOORESVILLE NC 28115	N/A	592906498212	138500	8.41	996.8
9-37	000692 ANDY GRIFFITH PK	MOUNT AIRY, NC	DREAMY HOLLOW APARTMENT CO	EASLEY, MCCALEB & ASSOCIATES PO BOX 98309	N/A	592906498476	138500	8.43	996.6
9-38	000173 KODIAK LN	MOUNT AIRY, NC	SLATE MOTOR CO INC	1039 HWY 52 BYPASS PO BOX 368 MOUNT AIRY	N/A	592907592915	138250	8.46	995.6
9-39	000688 ANDY GRIFFITH PK	MOUNT AIRY, NC	STRAUSS PROPERTIES LLC	5100 BERNARD DR ROANOKE VA 24018	N/A	592906497643	138000	8.52	996.6
9-40	001018 ROCKFORD ST	MOUNT AIRY, NC	BRAY PROPERTIES LLC	PO BOX 804 MOUNT AIRY NC 27203	N/A	592907597737	137750	8.56	1003.0
9-41	001104 SOUTH ST	MOUNT AIRY, NC	CARTER DWAYNE M	213 APOLLO DR MOUNT AIRY NC 27030	N/A	592907595624	137750	8.56	999.8
9-42	001104 SOUTH ST	MOUNT AIRY, NC	CARTER DWAYNE M	213 APOLLO DR MOUNT AIRY NC 27030	N/A	592907595624	137750	8.56	999.5
9-43	000752 ANDY GRIFFITH PK	MOUNT AIRY, NC	CHOVIA SHOPS MT AIRY LLC	2720 E CAMELBACK RD STE 220 PHOENIX AZ	N/A	592907594111	137500	8.60	996.6
9-44	001916 ROCKFORD ST	MOUNT AIRY, NC	GOLDEN ARCH LIMITED PARTNERSHI	971 PINEBROOK KNOLLS DR WINSTON SALEM NC	N/A	592907584842	137250	8.67	1009.0
9-45	001012 ROCKFORD ST	MOUNT AIRY, NC	WILLIAMS PROPERTIES II LLC	5446 UNIVERSITY PKWY WINSTON SALEM NC	N/A	592907599739	137250	8.65	1012.0
9-46	001018 ROCKFORD ST	MOUNT AIRY, NC	BRAY PROPERTIES LLC	PO BOX 804 MOUNT AIRY NC 27203	N/A	592907597737	137250	8.65	1003.0
9-47	001916 ROCKFORD ST	MOUNT AIRY, NC	GOLDEN ARCH LIMITED PARTNERSHI	971 PINEBROOK KNOLLS DR WINSTON SALEM NC	N/A	592907584842	137250	8.65	1012.0
9-48	001906 ROCKFORD ST	MOUNT AIRY, NC	TAR HEEL CAPITAL WENDYS LLC	166 SOUTHGATE DR STE 10 BOONE NC 28607	N/A	592907595073	137250	8.65	999.0
9-49	001007 ROCKFORD ST	MOUNT AIRY, NC	J & S PARTNERSHIP	1007 ROCKFORD ST MOUNT AIRY NC 27030	N/A	592907692748	137027	8.70	1011.0
9-50	000728 SUNSET DR	MOUNT AIRY, NC	BENGE SHIRLEY ANN	728 SUNSET DR MOUNT AIRY NC 27030	N/A	592907695895	136750	8.80	1007.0
9-51	000728 SUNSET DR	MOUNT AIRY, NC	BENGE SHIRLEY ANN	728 SUNSET DR MOUNT AIRY NC 27030	N/A	592907695895	136750	8.80	1013.0
9-52	000814 FORREST DR	MOUNT AIRY, NC	HARRELL OIL CO OF MT AIRY INC	814-16 FORREST DR PO BOX 1947 MOUNT AIRY	N/A	592907589713	136750	8.75	989.1
9-53	000814 FORREST DR	MOUNT AIRY, NC	HARRELL OIL CO OF MT AIRY INC	814-16 FORREST DR PO BOX 1947 MOUNT AIRY	N/A	592907589713	136750	8.76	988.7
9-54	000814 FORREST DR	MOUNT AIRY, NC	HARRELL OIL CO OF MT AIRY INC	814-16 FORREST DR PO BOX 1947 MOUNT AIRY	N/A	592907589713	136750	8.77	994.7
9-55	001927 ROCKFORD ST	MOUNT AIRY, NC	MOUNT AIRY PARTNERS LLC	PO BOX 1600 LYNCHBURG VA 24505	N/A	592907587850	136750	8.75	999.1
9-56	001015 ROCKFORD ST	MOUNT AIRY, NC	SIMMONS RENTALS LLC	173 PINE CREEK TRL MOUNT AIRY NC 27030	N/A	592907693489	136750	8.76	1002.0
9-57	001011 OLD ROCKFORD ST	MOUNT AIRY, NC	KING SUSAN ARLEENA	2802 BRIDGEVILLE LN CHARLOTTE NC 28262	N/A	592907693578	136750	8.76	1007.0
9-58	000728 SUNSET DR	MOUNT AIRY, NC	BENGE SHIRLEY ANN	728 SUNSET DR MOUNT AIRY NC 27030	N/A	592907695895	136750	8.80	1010.0
9-59	000731 SUNSET DR	MOUNT AIRY, NC	THE LARA GROUP LLC	128 ASHTON CT MOUNT AIRY NC 27030	N/A	592907695636	136500	8.84	1010.0
9-60	000744 HILLCREST DR	MOUNT AIRY, NC	HIATT MARK WALKER	2464 ROUND PEAK CHURCH RD LOWGAP NC	N/A	592907694592	136500	8.82	1003.0
9-61	000732 HILLCREST DR	MOUNT AIRY, NC	SIMMONS RENTALS LLC	173 PINE CREEK TRL MOUNT AIRY NC 27030	N/A	592907695581	136500	8.82	1013.0
9-62	000732 HILLCREST DR	MOUNT AIRY, NC	SIMMONS RENTALS LLC	173 PINE CREEK TRL MOUNT AIRY NC 27030	N/A	592907695581	136500	8.81	1012.0
9-63	000732 HILLCREST DR	MOUNT AIRY, NC	SIMMONS RENTALS LLC	173 PINE CREEK TRL MOUNT AIRY NC 27030	N/A	592907695581	136500	8.81	1013.0
9-64	HILLCREST DR	MOUNT AIRY, NC	RIVERTRACK CROSSING LLC	173 PINECREEK TRL MOUNT AIRY NC 27030	N/A	592907694371	136500	8.80	997.8
9-65	HILLCREST DR	MOUNT AIRY, NC	RIVERTRACK CROSSING LLC	173 PINECREEK TRL MOUNT AIRY NC 27030	N/A	592907694371	136500	8.81	1003.0
9-66	000820 FORREST DR	MOUNT AIRY, NC	HARRELL OIL CO OF MT AIRY INC	814-16 FORREST DR PO BOX 1947 MOUNT AIRY	N/A	592907589489	136500	8.81	998.7
9-67	000820 FORREST DR	MOUNT AIRY, NC	HARRELL OIL CO OF MT AIRY INC	814-16 FORREST DR PO BOX 1947 MOUNT AIRY	N/A	592907589489	136500	8.80	1002.0
9-68	000820 FORREST DR	MOUNT AIRY, NC	HARRELL OIL CO OF MT AIRY INC	814-16 FORREST DR PO BOX 1947 MOUNT AIRY	N/A	592907589489	136500	8.81	1002.0
9-69	000823 FORREST DR	MOUNT AIRY, NC	HARRELL OIL CO OF MT AIRY INC	814-16 FORREST DR PO BOX 1947 MOUNT AIRY	N/A	592907680576	136500	8.79	992.4
9-70	N/A	MOUNT AIRY, NC	SOUTHERN RAILWAY COMPANY	110 FRANKLIN RD SE ROANOKE VA 24042	N/A	N/A	136500	8.80	990.0
9-71	HILLCREST DR	MOUNT AIRY, NC	RIVERTRACK CROSSING LLC	173 PINECREEK TRL MOUNT AIRY NC 27030	N/A	592907694371	136500	8.80	1004.0
9-72	NEWSOME ST	MOUNT AIRY, NC	C RICHARD VAUGHN SR TRUST	PO BOX 1928 MOUNT AIRY NC 27030	N/A	592908788515	136250	8.86	977.2
9-73	000825 FORREST DR	MOUNT AIRY, NC	HARRELL OIL CO OF MT AIRY INC	814-16 FORREST DR PO BOX 1947 MOUNT AIRY	N/A	592907683437	136250	8.84	990.6
9-74	000827 FORREST DR	MOUNT AIRY, NC	HARRELL OIL CO OF MT AIRY INC	814-16 FORREST DR PO BOX 1947 MOUNT AIRY	N/A	592907681391	136250	8.84	998.4
9-75	000825 FORREST DR	MOUNT AIRY, NC	HARRELL OIL CO OF MT AIRY INC	814-16 FORREST DR PO BOX 1947 MOUNT AIRY	N/A	592907683437	136000	8.89	991.1
9-76	000825 FORREST DR	MOUNT AIRY, NC	HARRELL OIL CO OF MT AIRY INC	814-16 FORREST DR PO BOX 1947 MOUNT AIRY	N/A	592907683437	136000	8.89	992.1

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9-77	000825 FORREST DR	MOUNT AIRY, NC	HARRELL OIL CO OF MT AIRY INC	814-16 FORREST DR PO BOX 1947 MOUNT AIRY	N/A	592907683437	135750	8.94	990.9
9-78	000839 FORREST DR	MOUNT AIRY, NC	SIMMONS W P INC	526 S FRANKLIN ST EXT PO BOX 1045 MOUNT AIRY	N/A	592907682069	135112	9.06	1008.0
9-79	000839 REEVES DR	MOUNT AIRY, NC	SIMMONS W P INC	526 S FRANKLIN ST EXT PO BOX 1045 MOUNT AIRY	N/A	592907672993	135112	9.10	1000.0
9-80	000839 REEVES DR	MOUNT AIRY, NC	SIMMONS W P INC	526 S FRANKLIN ST EXT PO BOX 1045 MOUNT AIRY	N/A	592907672993	135112	9.11	1001.0
9-81	FORREST DR	MOUNT AIRY, NC	HARRELL OIL CO OF MT AIRY INC	814-16 FORREST DR PO BOX 1947 MOUNT AIRY	N/A	592907678967	135112	9.06	981.8
9-82	000834 REEVES DR	MOUNT AIRY, NC	BARR CAROLYN L	834 REEVES DR MOUNT AIRY NC 27030	N/A	592907674509	134750	9.18	999.3
9-83	000820 REEVES DR	MOUNT AIRY, NC	MOSELEY & REECE INC	820 REEVES DR PO BOX 1208 MOUNT AIRY NC	N/A	592911666871	134250	9.22	990.6
9-84	001287 NEWSOME ST	MOUNT AIRY, NC	CENTRAL CONTINUING CARE ASSOCI	1287 NEWSOME ST MOUNT AIRY NC 27030	N/A	592908980106	134000	9.37	1007.0
9-85	001287 NEWSOME ST	MOUNT AIRY, NC	CENTRAL CONTINUING CARE ASSOCI	1287 NEWSOME ST MOUNT AIRY NC 27030	N/A	592908980106	134000	9.42	1005.0
9-86	001297 NEWSOME ST	MOUNT AIRY, NC	BEROTH OIL CO INC	PO BOX 4089 WINSTON SALEM NC 27115	N/A	592908972658	134000	9.37	1007.0
9-87	001297 NEWSOME ST	MOUNT AIRY, NC	BEROTH OIL CO INC	PO BOX 4089 WINSTON SALEM NC 27115	N/A	592908972658	134000	9.39	1004.0
9-88	001316 CARTER ST	MOUNT AIRY, NC	NALLEY ANITA L (1/2) &	PO BOX 1929 EASLEY SC 29641	N/A	592912874128	134000	9.27	989.8
9-89	001316 CARTER ST	MOUNT AIRY, NC	MOUNT AIRY OIL COMPANY INC	650 RIVERSIDE DR PO BOX 824 MOUNT AIRY NC	N/A	592912874128201	134000	9.35	1007.0
9-90	001293 NEWSOME ST	MOUNT AIRY, NC	HIRA PROPERTIES INC	455 N ANDY GRIFFITH PKWY MOUNT AIRY NC	N/A	592908971858	134000	9.37	1011.0
9-91	001380 CARTER ST	MOUNT AIRY, NC	BEROTH MT AIRY LLC	PO BOX 1176 KING NC 27021	N/A	592912862846	133750	9.33	994.4
10-3	ROCKFORD ST	MOUNT AIRY, NC	WHITE RAY	110 BRAMBLEGATE CT KERNERSVILLE NC 27284	N/A	591900916815	133750	10.83	1005.0
10-4	ROCKFORD ST	MOUNT AIRY, NC	WHITE RAY	110 BRAMBLEGATE CT KERNERSVILLE NC 27284	N/A	591900916815	133750	10.83	1005.0
10-5	000165 BROOK ST	MOUNT AIRY, NC	MONDRAGON MARIA G	236 LOVERS LN MOUNT AIRY NC 27030	N/A	593906375927	133750	10.03	1010.0
10-6	000176 BROOK ST	MOUNT AIRY, NC	JOYCE DELMAR RAY	618 SNODDY RD MOUNT AIRY NC 27030	N/A	593906373838	133750	10.00	1011.0
10-7	000222 NEW ST	MOUNT AIRY, NC	EASTER HAYWOOD BERLIE	222 NEW ST MOUNT AIRY NC 27030	N/A	593905272914	133750	9.85	1011.0
10-8	000222 NEW ST	MOUNT AIRY, NC	EASTER HAYWOOD BERLIE	222 NEW ST MOUNT AIRY NC 27030	N/A	593905272914	133750	9.85	1008.0
10-9	000222 NEW ST	MOUNT AIRY, NC	EASTER HAYWOOD BERLIE	222 NEW ST MOUNT AIRY NC 27030	N/A	593905272914	133750	9.85	1008.0
10-10	000313 DEVON DR	MOUNT AIRY, NC	HAYMORE RITCHIE DEAN	313 E DEVON DR MOUNT AIRY NC 27030	N/A	593905280053	133750	9.83	1007.0
10-11	000313 DEVON DR	MOUNT AIRY, NC	HAYMORE RITCHIE DEAN	313 E DEVON DR MOUNT AIRY NC 27030	N/A	593905280053	133750	9.83	1011.0
10-12	000313 DEVON DR	MOUNT AIRY, NC	HAYMORE RITCHIE DEAN	313 E DEVON DR MOUNT AIRY NC 27030	N/A	593905280053	133750	9.82	1009.0
10-13	DEVON DR	MOUNT AIRY, NC	HAYMORE RITCHIE DEAN	313 E DEVON DR MOUNT AIRY NC 27030	N/A	593905270922	133750	9.82	1005.0
10-14	DEVON DR	MOUNT AIRY, NC	HAYMORE RITCHIE DEAN	313 E DEVON DR MOUNT AIRY NC 27030	N/A	593905270922	133750	9.81	1005.0
10-15	DEVON DR	MOUNT AIRY, NC	HAYMORE RITCHIE DEAN	313 E DEVON DR MOUNT AIRY NC 27030	N/A	593905270922	133750	9.81	1004.0
10-16	DEVON DR	MOUNT AIRY, NC	HAYMORE RITCHIE DEAN	313 E DEVON DR MOUNT AIRY NC 27030	N/A	593905270922	134000	9.76	1008.0
10-17	000501 DEVON DR	MOUNT AIRY, NC	NOONKESTER DWIGHT L & ALICE H	501 E DEVON DR MOUNT AIRY NC 27030	N/A	593905176675	134000	9.65	1008.0
10-18	001539 DEVON DR	MOUNT AIRY, NC	NEAL JOSEPH KEVIN	1539 W DEVON DR MOUNT AIRY NC 27030	N/A	593905083403	134000	9.63	998.2
10-19	001537 DEVON DR	MOUNT AIRY, NC	ARMBRISTER JAMES H JR	1537 W DEVON DR MOUNT AIRY NC 27030	N/A	593905084317	133750	9.67	1007.0
10-20	001539 DEVON DR	MOUNT AIRY, NC	NEAL JOSEPH KEVIN	1539 W DEVON DR MOUNT AIRY NC 27030	N/A	593905083403	133750	9.67	999.4
10-21	000509 DEVON DR	MOUNT AIRY, NC	RIGGS DONNIE	509 E DEVON DR MOUNT AIRY NC 27030	N/A	593905174617	133750	9.67	1013.0
10-22	001540 DEVON DR	MOUNT AIRY, NC	HILL JANICE FRYE	1540 W DEVON DR MOUNT AIRY NC 27030	N/A	593905072989	133750	9.64	1008.0
10-23	000513 DEVON DR	MOUNT AIRY, NC	TAYLOR KAYE DARLENE JTWROS	513 E DEVON DR MOUNT AIRY NC 27030	N/A	593905172624	133750	9.64	1003.0
10-24	000504 ARLINGTON ST	MOUNT AIRY, NC	COCKERHAM ALBERT K	504 ARLINGTON ST MOUNT AIRY NC 27030	N/A	593905075909	133750	9.63	1011.0
10-25	001536 DEVON DR	MOUNT AIRY, NC	NORTH CAROLINA DIST CNCL OF	PO BOX 1875 MOUNT AIRY NC 27030	N/A	592908989169	133750	9.63	994.4
10-26	000504 ARLINGTON ST	MOUNT AIRY, NC	COCKERHAM ALBERT K	504 ARLINGTON ST MOUNT AIRY NC 27030	N/A	593905075909	133750	9.63	1010.0
10-27	001759 ANDY GRIFFITH PK	MOUNT AIRY, NC	SMITH PAIGE (1/2)	243 MOUNT CARMEL CHURCH RD MOUNT AIRY	N/A	593909263938601	133750	9.61	995.8
10-28	000531 DEVON DR	MOUNT AIRY, NC	HERNANDEZ GLADYS DEL MONSERRAT	531 D DEVON DR MOUNT AIRY NC 27030	N/A	593905076873	133750	9.61	1011.0
10-29	000508 ARLINGTON ST	MOUNT AIRY, NC	FARMER HURLEY LESTER	508 ARLINGTON ST MOUNT AIRY NC 27030	N/A	593905073861	133750	9.58	1007.0
10-30	000508 ARLINGTON ST	MOUNT AIRY, NC	FARMER HURLEY LESTER	508 ARLINGTON ST MOUNT AIRY NC 27030	N/A	593905073861	133750	9.58	1004.0
10-31	000512 ARLINGTON ST	MOUNT AIRY, NC	TILLEY LESTER	512 ARLINGTON ST MOUNT AIRY NC 27030	N/A	593905072792	133750	9.57	995.2
10-32	000512 ARLINGTON ST	MOUNT AIRY, NC	TILLEY LESTER	512 ARLINGTON ST MOUNT AIRY NC 27030	N/A	593905072792	133750	9.56	1004.0
10-33	000541 ARLINGTON ST	MOUNT AIRY, NC	TORRES GABRIEL RODRIQUEZ	16398 FANCY GAP HWY CANA VA 24317	N/A	593909077472	133750	9.56	993.8

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Building No.	Property Address	City / Town	Owner	Owner Address	Owner Tele.	Parcel No.	Station	Distance from Dam (miles)	Structure Elevation (feet)
10-34	ANDY GRIFFITH PK	MOUNT AIRY, NC	MARION MARGIE S ETAL	4235 BUCK CHASE CT WINSTON SALEM NC 27101	N/A	593909162428	133750	9.55	999.3
10-35	000538 ARLINGTON ST	MOUNT AIRY, NC	DUKE ENERGY CORPORATION	PO BOX 1007 CHARLOTTE NC 28201	N/A	592908978539	133750	9.53	1006.0
10-36	000538 ARLINGTON ST	MOUNT AIRY, NC	DUKE ENERGY CORPORATION	PO BOX 1007 CHARLOTTE NC 28201	N/A	592908978539	133250	9.62	1006.0
10-37	000541 ARLINGTON ST	MOUNT AIRY, NC	TORRES GABRIEL RODRIQUEZ	16398 FANCY GAP HWY CANA VA 24317	N/A	593909077472	133250	9.59	1004.0
10-38	001309 BROOKLEN AV	MOUNT AIRY, NC	HIATT JAMES HOOVER	1309 BROOKLEN AVE MOUNT AIRY NC 27030	N/A	592911565133	133250	9.53	1013.0
10-39	001309 BROOKLEN AV	MOUNT AIRY, NC	HIATT JAMES HOOVER	1309 BROOKLEN AVE MOUNT AIRY NC 27030	N/A	592911565133	133750	9.43	1011.0
10-40	001309 BROOKLEN AV	MOUNT AIRY, NC	HIATT JAMES HOOVER	1309 BROOKLEN AVE MOUNT AIRY NC 27030	N/A	592911565133	133750	9.43	1010.0
10-41	001600 ANDY GRIFFITH PK	MOUNT AIRY, NC	YORK GARY T	PO BOX 48 MOUNT AIRY NC 27030	N/A	593909061917	133250	9.52	994.9
10-42	130 WASTEWATER TREATMENT	MOUNT AIRY, NC	TJ ENTERPRISES LLC	134 S RENFRO ST MOUNT AIRY NC 27030	N/A	593909064900	132250	9.70	988.7
10-43	001301 BROOKLEN AV	MOUNT AIRY, NC	HIATT JAMES HOOVER	1309 BROOKLEN AVE MOUNT AIRY NC 27030	N/A	592911569137	133750	9.41	1009.0
10-44	001515 CARTER ST	MOUNT AIRY, NC	NORTH CAROLINA FOAM INDUSTRIES	1515 CARTER ST PO BOX 1528 MOUNT AIRY NC	N/A	592915648927	132750	9.60	1001.0
10-45	001313 CARTER ST	MOUNT AIRY, NC	MT AIRY CHURCH OF GOD	PO BOX 1445 MOUNT AIRY NC 27030	N/A	592912971054	133061	9.54	1005.0
10-46	318 WASTEWATER TREATMENT	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592912962349	133061	9.50	998.0
10-47	318 WASTEWATER TREATMENT	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592912962349	133061	9.50	997.0
10-48	318 WASTEWATER TREATMENT	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592912962349	133061	9.50	986.9
10-49	318 WASTEWATER TREATMENT	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592912962349	133061	9.50	1007.0
10-50	318 WASTEWATER TREATMENT	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592912962349	133061	9.50	984.6
10-51	318 WASTEWATER TREATMENT	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592912962349	133061	9.48	1006.0
10-52	318 WASTEWATER TREATMENT	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592912962349	132250	9.63	1003.0
10-53	318 WASTEWATER TREATMENT	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592912962349	133061	9.48	981.6
10-54	001515 CARTER ST	MOUNT AIRY, NC	NORTH CAROLINA FOAM INDUSTRIES	1515 CARTER ST PO BOX 1528 MOUNT AIRY NC	N/A	592915648927	133140	9.45	1002.0
10-55	318 WASTEWATER TREATMENT	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592912962349	133061	9.46	1003.0
10-56	001400 CARTER ST	MOUNT AIRY, NC	NESTER DALLAS G	225 CREEKSIDE EAST DR WILMINGTON NC 28411	N/A	592911754983	132250	9.62	992.4
10-57	318 WASTEWATER TREATMENT	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592912962349	132250	9.61	976.3
10-58	001515 CARTER ST	MOUNT AIRY, NC	NORTH CAROLINA FOAM INDUSTRIES	1515 CARTER ST PO BOX 1528 MOUNT AIRY NC	N/A	592915648927	132500	9.57	999.8
10-59	001515 CARTER ST	MOUNT AIRY, NC	NORTH CAROLINA FOAM INDUSTRIES	1515 CARTER ST PO BOX 1528 MOUNT AIRY NC	N/A	592915648927	133061	9.46	996.1
10-60	001510 CARTER ST	MOUNT AIRY, NC	INSTEEL WIRE PRODUCTS COMPANY	1373 BOGGS DR MOUNT AIRY NC 27030	N/A	592911659884	133750	9.33	996.6
10-61	318 WASTEWATER TREATMENT	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592912962349	132250	9.61	1005.0
10-62	318 WASTEWATER TREATMENT	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592912962349	132500	9.56	991.8
10-63	001510 CARTER ST	MOUNT AIRY, NC	INSTEEL WIRE PRODUCTS COMPANY	1373 BOGGS DR MOUNT AIRY NC 27030	N/A	592911659884	133061	9.45	1012.0
10-64	001510 CARTER ST	MOUNT AIRY, NC	INSTEEL WIRE PRODUCTS COMPANY	1373 BOGGS DR MOUNT AIRY NC 27030	N/A	592911659884	133061	9.45	995.8
10-65	001510 CARTER ST	MOUNT AIRY, NC	INSTEEL WIRE PRODUCTS COMPANY	1373 BOGGS DR MOUNT AIRY NC 27030	N/A	592911659884	133500	9.37	997.8
10-66	001313 CARTER ST	MOUNT AIRY, NC	MT AIRY CHURCH OF GOD	PO BOX 1445 MOUNT AIRY NC 27030	N/A	592912971054	132750	9.51	973.5
10-67	318 WASTEWATER TREATMENT	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592912962349	133061	9.45	992.0
10-68	001510 CARTER ST	MOUNT AIRY, NC	INSTEEL WIRE PRODUCTS COMPANY	1373 BOGGS DR MOUNT AIRY NC 27030	N/A	592911659884	132750	9.50	997.8
10-69	318 WASTEWATER TREATMENT	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592912962349	133061	9.45	991.0
10-70	001510 CARTER ST	MOUNT AIRY, NC	INSTEEL WIRE PRODUCTS COMPANY	1373 BOGGS DR MOUNT AIRY NC 27030	N/A	592911659884	133061	9.44	997.5
10-71	318 WASTEWATER TREATMENT	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592912962349	133750	9.31	990.8
10-72	001400 CARTER ST	MOUNT AIRY, NC	NESTER DALLAS G	225 CREEKSIDE EAST DR WILMINGTON NC 28411	N/A	592911754983	133500	9.36	986.1
10-73	000820 REEVES DR	MOUNT AIRY, NC	MOSELEY & REECE INC	820 REEVES DR PO BOX 1208 MOUNT AIRY NC	N/A	592911666871	133061	9.44	993.6
11-1	000820 REEVES DR	MOUNT AIRY, NC	MOSELEY & REECE INC	820 REEVES DR PO BOX 1208 MOUNT AIRY NC	N/A	592911666871	134000	9.27	992.4
11-2	001510 CARTER ST	MOUNT AIRY, NC	INSTEEL WIRE PRODUCTS COMPANY	1373 BOGGS DR MOUNT AIRY NC 27030	N/A	592911659884	134000	9.27	996.7
11-3	000220 TRIPLE CROSS TR	MOUNT AIRY, NC	REYNOLDS BETTY J	C/O ON THE WAY CHURCH 202 TRIPLE CROSS TRL	N/A	503019525229	134000	10.77	1010.0
11-4	FAIRVIEW DR	MOUNT AIRY, NC	FRANCE LANFORD E	258 FAIRVIEW DR MOUNT AIRY NC 27030	N/A	503018321035	134000	10.37	1000.0
11-5	FAIRVIEW DR	MOUNT AIRY, NC	FRANCE LANFORD E	258 FAIRVIEW DR MOUNT AIRY NC 27030	N/A	503018321035	134000	10.31	993.9
11-6	FAIRVIEW DR	MOUNT AIRY, NC	FRANCE LANFORD E	258 FAIRVIEW DR MOUNT AIRY NC 27030	N/A	503018321035	134000	10.30	994.0

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11-7	001609 PITTMAN ST	MOUNT AIRY, NC	BIG ROCK CABIN LLC	300 N MAIN ST PO BOX 1721 MOUNT AIRY NC	N/A	503017200918	134000	10.09	995.8
11-8	001609 PITTMAN ST	MOUNT AIRY, NC	BIG ROCK CABIN LLC	300 N MAIN ST PO BOX 1721 MOUNT AIRY NC	N/A	503017200918	134000	10.08	997.1
11-9	001609 PITTMAN ST	MOUNT AIRY, NC	BIG ROCK CABIN LLC	300 N MAIN ST PO BOX 1721 MOUNT AIRY NC	N/A	503017200918	134000	10.07	1001.0
11-10	001613 PITTMAN ST	MOUNT AIRY, NC	CONNELL GEORGE DAVIDSON	1609 PITTMAN ST MOUNT AIRY NC 27030	N/A	503017200728	134000	10.07	1006.0
11-11	PITTMAN ST	MOUNT AIRY, NC	VOGLER RONALD D	1605 PITTMAN ST MOUNT AIRY NC 27030	N/A	503017117275	134000	10.05	992.5
11-12	PITTMAN ST	MOUNT AIRY, NC	VOGLER RONALD D	1605 PITTMAN ST MOUNT AIRY NC 27030	N/A	503017117275	134000	10.05	994.8
11-13	PITTMAN ST	MOUNT AIRY, NC	VOGLER RONALD D	1605 PITTMAN ST MOUNT AIRY NC 27030	N/A	503017117275	134000	10.04	998.0
11-14	PITTMAN ST	MOUNT AIRY, NC	VOGLER RONALD D	1605 PITTMAN ST MOUNT AIRY NC 27030	N/A	503017117275	134000	10.04	994.6
11-15	001352 MAIN ST	MOUNT AIRY, NC	COX DENNIS RHOTEN	1601 PITTMAN ST MOUNT AIRY NC 27030	N/A	503017019762	134000	10.00	1010.0
11-16	001351 MAIN ST	MOUNT AIRY, NC	WALL HARVEY RAY	408 FULTON AVE MOUNT AIRY NC 27030	N/A	503017018873	134000	9.99	1012.0
11-17	001352 MAIN ST	MOUNT AIRY, NC	COX DENNIS RHOTEN	1601 PITTMAN ST MOUNT AIRY NC 27030	N/A	503017019762	134000	9.99	1008.0
11-18	001375 MAIN ST	MOUNT AIRY, NC	SLATE GRADY B	246 WRENN AVE MOUNT AIRY NC 27030	N/A	503017111895	134000	9.98	1003.0
11-19	001384 MAIN ST	MOUNT AIRY, NC	COAST TO COAST HOMES LLC	PO BOX 1752 MOUNT AIRY NC 27030	N/A	503017017560	134000	9.96	1001.0
11-20	001220 MAIN ST	MOUNT AIRY, NC	LAWSON RALPH LEE	1220 S MAIN ST MOUNT AIRY NC 27030	N/A	503017017615	134000	9.95	1006.0
11-21	001412 MAIN ST	MOUNT AIRY, NC	BEROTH OIL CO INC	PO BOX 4089 WINSTON SALEM NC 27115	N/A	503017019380	134000	9.93	1002.0
11-22	001412 MAIN ST	MOUNT AIRY, NC	BEROTH OIL CO INC	PO BOX 4089 WINSTON SALEM NC 27115	N/A	503017019380	134000	9.93	1002.0
11-23	001384 MAIN ST	MOUNT AIRY, NC	COAST TO COAST HOMES LLC	PO BOX 1752 MOUNT AIRY NC 27030	N/A	503017017560	134000	9.93	992.5
11-24	001508 MAIN ST	MOUNT AIRY, NC	JOYCE CHARLES R	160 ESSEX LN MOUNT AIRY NC 27030	N/A	503017100956	134000	9.92	1007.0
11-25	001510 MAIN ST	MOUNT AIRY, NC	THACKER GLENN	586 ALLRED MILL RD MOUNT AIRY NC 27030	N/A	503017101828	134000	9.92	1009.0
11-26	001412 MAIN ST	MOUNT AIRY, NC	BEROTH OIL CO INC	PO BOX 4089 WINSTON SALEM NC 27115	N/A	503017019380	134000	9.92	1002.0
11-27	001504 MAIN ST	MOUNT AIRY, NC	TAYLOR RONNIE R	1046 N GREEN DR NEWPORT NEWS VA 23602	N/A	503017019076	134000	9.92	1002.0
11-28	001506 MAIN ST	MOUNT AIRY, NC	THACKER GLENN	586 ALLRED MILL RD MOUNT AIRY NC 27030	N/A	503017110022	134000	9.91	1004.0
11-29	001420 MAIN ST	MOUNT AIRY, NC	COX DENNIS RHOTEN	1601 PITTMAN ST MOUNT AIRY NC 27030	N/A	503017017157	134000	9.89	996.8
11-30	001420 MAIN ST	MOUNT AIRY, NC	COX DENNIS RHOTEN	1601 PITTMAN ST MOUNT AIRY NC 27030	N/A	503017017157	134000	9.89	998.8
11-31	001420 MAIN ST	MOUNT AIRY, NC	COX DENNIS RHOTEN	1601 PITTMAN ST MOUNT AIRY NC 27030	N/A	503017017157	134000	9.87	996.5
11-32	001512 MAIN ST	MOUNT AIRY, NC	GATES SHARON RICE	1512 S MAIN ST MOUNT AIRY NC 27030	N/A	503017004416	134000	9.81	1001.0
11-33	000215 BLUFF ST	MOUNT AIRY, NC	SMITH GLENDA D	215 BLUFF ST MOUNT AIRY NC 27030	N/A	502020916328	134000	9.79	1011.0
11-34	000413 WORTH ST	MOUNT AIRY, NC	JEFFERSON WAYNE WRIGHT	413 WORTH ST STE A MOUNT AIRY NC 27030	N/A	502020811372	134000	9.63	1008.0
11-35	000416 WORTH ST	MOUNT AIRY, NC	HIATT JAMES WILLIAM	416 WORTH ST MOUNT AIRY NC 27030	N/A	502020719590	134000	9.62	1009.0
11-36	000416 WORTH ST	MOUNT AIRY, NC	HIATT JAMES WILLIAM	416 WORTH ST MOUNT AIRY NC 27030	N/A	502020719590	134000	9.62	1009.0
11-37	000440 CULBERT ST	MOUNT AIRY, NC	DAKOTA HOLDINGS LLC	430 CULBERT ST MOUNT AIRY NC 27030	N/A	502020811088	134000	9.62	1004.0
11-38	000440 CULBERT ST	MOUNT AIRY, NC	DAKOTA HOLDINGS LLC	430 CULBERT ST MOUNT AIRY NC 27030	N/A	502020811088	134000	9.61	1003.0
11-39	000427 WORTH ST	MOUNT AIRY, NC	OWEN RICHARD G	427 WORTH ST MOUNT AIRY NC 27030	N/A	502020810264	134000	9.61	1004.0
11-40	000440 CULBERT ST	MOUNT AIRY, NC	DAKOTA HOLDINGS LLC	430 CULBERT ST MOUNT AIRY NC 27030	N/A	502020811088	134000	9.61	1003.0
11-41	000435 CULBERT ST	MOUNT AIRY, NC	NORMAN JEFFERY ALLEN	435 CULBERT ST MOUNT AIRY NC 27030	N/A	502020804864	134000	9.61	1008.0
11-42	000427 WORTH ST	MOUNT AIRY, NC	OWEN RICHARD G	427 WORTH ST MOUNT AIRY NC 27030	N/A	502020810264	134000	9.60	1013.0
11-43	000426 WORTH ST	MOUNT AIRY, NC	JESSUP KARY J	407 ROBIN RD MOUNT AIRY NC 27030	N/A	502020719424	134000	9.60	1012.0
11-44	001504 WENSLEY DR	MOUNT AIRY, NC	SMITH DONALD EUGENE	1504 W WENSLEY DR MOUNT AIRY NC 27030	N/A	592908999590	134000	9.60	1011.0
11-45	000440 CULBERT ST	MOUNT AIRY, NC	DAKOTA HOLDINGS LLC	430 CULBERT ST MOUNT AIRY NC 27030	N/A	502020811088	134000	9.60	1007.0
11-46	000439 CULBERT ST	MOUNT AIRY, NC	NUNN REBECCA D	439 CULBERT ST MOUNT AIRY NC 27030	N/A	502020803327	134000	9.59	1001.0
11-47	001508 FAIRFIELD DR	MOUNT AIRY, NC	SNOW SWANSON C	1508 W FAIRFIELD DR MOUNT AIRY NC 27030	N/A	592908988875	134000	9.59	1011.0
11-48	000439 CULBERT ST	MOUNT AIRY, NC	NUNN REBECCA D	439 CULBERT ST MOUNT AIRY NC 27030	N/A	502020804714	134000	9.58	995.6
11-49	000445 CULBERT ST	MOUNT AIRY, NC	HORNADAY LORINE BURDEN	445 CULBERT ST MOUNT AIRY NC 27030	N/A	502020801872	134000	9.57	999.8
11-50	000445 CULBERT ST	MOUNT AIRY, NC	HORNADAY LORINE BURDEN	445 CULBERT ST MOUNT AIRY NC 27030	N/A	502020801872	134000	9.56	1005.0
11-51	001504 FAIRFIELD DR	MOUNT AIRY, NC	HARDY LASSIE C	1504 W FAIRFIELD DR MOUNT AIRY NC 27030	N/A	592908986950	134000	9.55	1012.0
11-52	001501 FAIRFIELD DR	MOUNT AIRY, NC	BROWN ANDREW GRAY	1501 W FAIRFIELD DR MOUNT AIRY NC 27030	N/A	592908998256	134000	9.55	1006.0

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11-53	001500 FAIRFIELD DR	MOUNT AIRY, NC	DAVIS PEGGY BALDWIN	1500 W FAIRFIELD DR MOUNT AIRY NC 27030	N/A	592908995086	134000	9.55	1010.0
11-54	000502 PENN ST	MOUNT AIRY, NC	HOLDER FAMILY LIMITED PARTNERS	149 BARTOW TRL MOUNT AIRY NC 27030	N/A	502020709807	134000	9.54	1012.0
11-55	000503 PENN ST	MOUNT AIRY, NC	ELLIS KAYLA DENISE	503 PENN ST MOUNT AIRY NC 27030	N/A	502020800724	134000	9.54	1010.0
11-56	000920 NEWSOME ST	MOUNT AIRY, NC	NEWMAN TAMMY SAWYERS HEIRS	152 CHATHAM RD MOUNT AIRY NC 27030	N/A	502020800519	134000	9.53	1005.0
11-57	000919 NEWSOME ST	MOUNT AIRY, NC	SURRY COUNTY	118 HAMBY RD STE 329 DOBSON NC 27017	N/A	502020901180	134000	9.52	1010.0
11-58	000920 NEWSOME ST	MOUNT AIRY, NC	NEWMAN TAMMY SAWYERS HEIRS	152 CHATHAM RD MOUNT AIRY NC 27030	N/A	502020800519	134000	9.51	1011.0
11-59	000511 PENN ST	MOUNT AIRY, NC	HAYDEN SYLVIA	511 PENN ST MOUNT AIRY NC 27030	N/A	502020709648	134000	9.51	1012.0
11-60	000915 NEWSOME ST	MOUNT AIRY, NC	SURRY COUNTY	118 HAMBY RD STE 329 DOBSON NC 27017	N/A	502020802502	134000	9.51	1002.0
11-61	000920 NEWSOME ST	MOUNT AIRY, NC	NEWMAN TAMMY SAWYERS HEIRS	152 CHATHAM RD MOUNT AIRY NC 27030	N/A	502020800519	134000	9.51	1010.0
11-62	001018 NEWSOME ST	MOUNT AIRY, NC	HOUSING AUTHORITY	PO BOX 767 MOUNT AIRY NC 27030	N/A	592908896311	134000	9.44	1010.0
12-1	001018 NEWSOME ST	MOUNT AIRY, NC	HOUSING AUTHORITY	PO BOX 767 MOUNT AIRY NC 27030	N/A	592908896311	134000	9.44	1013.0
12-2	001018 NEWSOME ST	MOUNT AIRY, NC	HOUSING AUTHORITY	PO BOX 767 MOUNT AIRY NC 27030	N/A	592908896311	134000	9.43	1009.0
12-3	000118 EFLAND LN	MOUNT AIRY, NC	HAWKS WELDON E	2862 WILLIS GAP RD ARARAT VA 24053	N/A	503009052830	134000	9.93	1012.0
12-4	CITY VIEW DR	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	503009152338602	134000	10.12	1008.0
12-5	000122 EFLAND LN	MOUNT AIRY, NC	CHILDRESS FRED H	1442 PARK DR MOUNT AIRY NC 27030	N/A	503009052765	134000	9.93	1010.0
12-6	000118 EFLAND LN	MOUNT AIRY, NC	HAWKS WELDON E	2862 WILLIS GAP RD ARARAT VA 24053	N/A	503009052830	134000	9.93	1010.0
12-7	000440 PINE ST	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	502012956220	134000	9.77	1010.0
12-8	000350 RIVERSIDE DR	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	502012962421	134000	9.76	1010.0
12-9	000350 RIVERSIDE DR	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	502012962421	134000	9.72	1009.0
13-1	000350 RIVERSIDE DR	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	502012962421	128778	10.70	1011.7
13-2	000350 RIVERSIDE DR	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	502012962421	128778	10.69	1008.0
13-3	002084 PARK DR	MOUNT AIRY, NC	HATFIELD IRVING	2084 PARK DR MOUNT AIRY NC 27030	N/A	592900616481	128778	10.56	1006.0
13-4	000108 STEDMAN TR	MOUNT AIRY, NC	WATTS MILANO LEE	125 STEDMAN TR MOUNT AIRY NC 27030	N/A	592900626400	128778	10.42	990.9
13-5	000108 STEDMAN TR	MOUNT AIRY, NC	WATTS MILANO LEE	125 STEDMAN TR MOUNT AIRY NC 27030	N/A	592900626400	128778	10.41	988.4
13-6	000108 STEDMAN TR	MOUNT AIRY, NC	WATTS MILANO LEE	125 STEDMAN TR MOUNT AIRY NC 27030	N/A	592900626400	128778	10.41	1007.0
13-7	000108 STEDMAN TR	MOUNT AIRY, NC	WATTS MILANO LEE	125 STEDMAN TR MOUNT AIRY NC 27030	N/A	592900626400	128778	10.40	987.8
13-8	001979 PARK DR	MOUNT AIRY, NC	WILLIAMS JONATHAN BRENT	1979 PARK DR MOUNT AIRY NC 27030	N/A	592900720050	128778	10.40	991.4
13-9	000108 STEDMAN TR	MOUNT AIRY, NC	WATTS MILANO LEE	125 STEDMAN TR MOUNT AIRY NC 27030	N/A	592900626400	128778	10.40	996.1
13-10	001979 PARK DR	MOUNT AIRY, NC	WILLIAMS JONATHAN BRENT	1979 PARK DR MOUNT AIRY NC 27030	N/A	592900720050	128778	10.39	1005.0
13-11	001979 PARK DR	MOUNT AIRY, NC	WILLIAMS JONATHAN BRENT	1979 PARK DR MOUNT AIRY NC 27030	N/A	592900720050	128778	10.38	1003.0
13-12	000108 STEDMAN TR	MOUNT AIRY, NC	WATTS MILANO LEE	125 STEDMAN TR MOUNT AIRY NC 27030	N/A	592900626400	128778	10.38	997.1
14-1	001552 WOLTZ ST	MOUNT AIRY, NC	NORTH CAROLINA FOAM INDUSTRIES	1515 CARTER ST PO BOX 1528 MOUNT AIRY NC	N/A	592915648488	128778	10.34	1007.0
14-2	001893 PARK DR	MOUNT AIRY, NC	DIXON DENNIS	1893 PARK DR MOUNT AIRY NC 27030	N/A	592904733085	128778	10.29	1007.0
14-3	000159 WATERS EDGE TR	MOUNT AIRY, NC	CITY OF MOUNT AIRY	300 S MAIN ST PO BOX 70 MOUNT AIRY NC 27030	N/A	592903019978	128778	11.49	1001.0
14-4	000238 OLD HWY 601	MOUNT AIRY, NC	SINK FAMILY LIMITED PARTNERSHI	29 HOLLYVIEW FARM MOUNT AIRY NC 27030	N/A	592900110801	128778	11.47	1002.0
14-5	000268 OLD HWY 601	MOUNT AIRY, NC	SINK FAMILY LIMITED PARTNERSHI	29 HOLLYVIEW FARM MOUNT AIRY NC 27030	N/A	592900117294	128778	11.35	1007.0
14-6	000324 OLD HWY 601	MOUNT AIRY, NC	ROGERS RAYMOND BRACKY	324 OLD US HIGHWAY 601 PO BOX 729 MOUNT	N/A	592900103810	128778	11.34	1003.0
14-7	OLD HWY 601	MOUNT AIRY, NC	ROGERS RAYMOND BRACKY	324 OLD US HIGHWAY 601 PO BOX 729 MOUNT	N/A	592900102258	128778	11.34	1002.0
14-8	000238 OLD HWY 601	MOUNT AIRY, NC	SINK FAMILY LIMITED PARTNERSHI	29 HOLLYVIEW FARM MOUNT AIRY NC 27030	N/A	592900110801	128778	11.30	1003.0
14-9	000268 OLD HWY 601	MOUNT AIRY, NC	SINK FAMILY LIMITED PARTNERSHI	29 HOLLYVIEW FARM MOUNT AIRY NC 27030	N/A	592900117294	128778	11.30	1004.0
14-10	000269 OLD HWY 601	MOUNT AIRY, NC	HORTON AMBER DEE	367 RABBIT RIDGE RD ARARAT VA 24053	N/A	592900211451	128778	11.26	992.5
14-11	000113 BRACKYS CABIN LN	MOUNT AIRY, NC	HOLDER SAMUEL L JR	352 OLD US HIGHWAY 601 MOUNT AIRY NC	N/A	592900109922	128778	11.25	996.9
14-12	000113 BRACKYS CABIN LN	MOUNT AIRY, NC	HOLDER SAMUEL L JR	352 OLD US HIGHWAY 601 MOUNT AIRY NC	N/A	592900109922	128778	11.25	1001.0
14-13	000113 BRACKYS CABIN LN	MOUNT AIRY, NC	HOLDER SAMUEL L JR	352 OLD US HIGHWAY 601 MOUNT AIRY NC	N/A	592900109922	128778	11.25	999.9
14-14	000303 OLD HWY 601	MOUNT AIRY, NC	SMITH DARRELL E	303 OLD HWY 601 MOUNT AIRY NC 27030	N/A	592900201957	128778	11.22	998.2
14-15	OLD HWY 601	MOUNT AIRY, NC	JOHNSON GRADY EDWARD	224 BETH LN MOUNT AIRY NC 27030	N/A	592900203687	128778	11.21	994.0

Summary Table of Occupied Structures (Part 1)									
Structure Information									
Property Information			Owner Information				Location / Elevation		
Building No.	Property Address	City / Town	Owner	Owner Address	Owner Tele.	Parcel No.	Station	Distance from Dam (miles)	Structure Elevation (feet)
14-16	OLD HWY 601	MOUNT AIRY, NC	JOHNSON GRADY EDWARD	224 BETH LN MOUNT AIRY NC 27030	N/A	592900203687	128778	11.18	986.9
14-17	LYNNHAVEN RD	MOUNT AIRY, NC	HORTON AMBER DEE	367 RABBIT RIDGE RD ARARAT VA 24053	N/A	592900305866	128778	11.16	995.5
14-18	000146 CYPRESS CR	MOUNT AIRY, NC	KING DANNY LEE	146 CYPRESS CIR MOUNT AIRY NC 27030	N/A	592903312379	128778	11.05	1008.0
14-19	LYNNHAVEN RD	MOUNT AIRY, NC	TORRES SARAH LEANNE	2344 TURKEY FORD RD MOUNT AIRY NC 27030	N/A	592900419308	128778	10.79	981.3
15-1	000162 LOUISE AV	MOUNT AIRY, NC	LOWE OTTIS G	162 LOUISE AVE MOUNT AIRY NC 27030	N/A	591912768091	128778	11.50	1008.0
15-2	000170 LOUISE AV	MOUNT AIRY, NC	DRAUGHN KAY SUSAN SIMMONS	142 TOMMYS WAY DOBSON NC 27017	N/A	591912769082	128778	11.49	1005.0
15-3	000170 LOUISE AV	MOUNT AIRY, NC	DRAUGHN KAY SUSAN SIMMONS	142 TOMMYS WAY DOBSON NC 27017	N/A	591912769082	128778	11.47	1011.7
15-4	000178 LOUISE AV	MOUNT AIRY, NC	HOLDER FAMILY LIMITED PARTNERS	149 BARTOW TRL MOUNT AIRY NC 27030	N/A	591912860071	128778	11.46	1008.0
15-5	000178 LOUISE AV	MOUNT AIRY, NC	HOLDER FAMILY LIMITED PARTNERS	149 BARTOW TRL MOUNT AIRY NC 27030	N/A	591912860071	128778	11.46	1010.0
15-6	000186 LOUISE AV	MOUNT AIRY, NC	HIATT FREDRICK SR LIFE ESTATE	186 LOUISE AVE MOUNT AIRY NC 27030	N/A	591912861062	128778	11.46	1004.0
15-7	000186 LOUISE AV	MOUNT AIRY, NC	HIATT FREDRICK SR LIFE ESTATE	186 LOUISE AVE MOUNT AIRY NC 27030	N/A	591912861062	128778	11.44	1007.0
15-8	000196 LOUISE AV	MOUNT AIRY, NC	LAWSON STEVEN T	337 SIMMONS RD PILOT MOUNTAIN NC 27041	N/A	591912862052	128778	11.43	1007.0
15-9	000204 LOUISE AV	MOUNT AIRY, NC	VERNON HILDA GAY	204 LOUISE AVE MOUNT AIRY NC 27030	N/A	591912863042	128778	11.43	1007.0
15-10	000204 LOUISE AV	MOUNT AIRY, NC	VERNON HILDA GAY	204 LOUISE AVE MOUNT AIRY NC 27030	N/A	591912863042	128778	11.42	1007.0
15-11	29 HOLLYVIEW FARM RD	MOUNT AIRY, NC	SINK FAMILY LIMITED PARTNERSHI	29 HOLLYVIEW FARM MOUNT AIRY NC 27030	N/A	592903131460	128778	11.41	1004.0
15-12	29 HOLLYVIEW FARM RD	MOUNT AIRY, NC	SINK FAMILY LIMITED PARTNERSHI	29 HOLLYVIEW FARM MOUNT AIRY NC 27030	N/A	592903131460	128778	11.38	1003.0
15-13	29 HOLLYVIEW FARM RD	MOUNT AIRY, NC	SINK FAMILY LIMITED PARTNERSHI	29 HOLLYVIEW FARM MOUNT AIRY NC 27030	N/A	592903131460	128778	11.34	1003.0
18-1	002196 PARK DR	MOUNT AIRY, NC	ARARAT ROCK PRODUCTS CO	525 QUARRY RD PO BOX 988 MOUNT AIRY NC	N/A	593800184556	107000	14.41	968.3
18-2	002196 PARK DR	MOUNT AIRY, NC	ARARAT ROCK PRODUCTS CO	525 QUARRY RD PO BOX 988 MOUNT AIRY NC	N/A	593800184556	106750	14.46	971.1
18-3	002957 PARK DR	MOUNT AIRY, NC	SIMMONS VENTURES LLC	120 GUINESS LN MOUNT AIRY NC 27030	N/A	592800547228	102000	15.35	951.2
18-4	002196 PARK DR	MOUNT AIRY, NC	ARARAT ROCK PRODUCTS CO	525 QUARRY RD PO BOX 988 MOUNT AIRY NC	N/A	593800184556	106750	14.45	969.8
18-5	002747 PARK DR	MOUNT AIRY, NC	SWAIN DEBBIE K	2747 PARK DR MOUNT AIRY NC 27030	N/A	592800660231	104250	14.92	942.3
18-6	002747 PARK DR	MOUNT AIRY, NC	SWAIN DEBBIE K	2747 PARK DR MOUNT AIRY NC 27030	N/A	592800660231	104000	14.96	940.4
18-7	000215 NAVIGATOR LN	MOUNT AIRY, NC	NICHOLS BOBBY R & FRANCES K	146 LURAY LN MOUNT AIRY NC 27030	N/A	592800656078	105250	14.72	952.0
18-8	000215 NAVIGATOR LN	MOUNT AIRY, NC	NICHOLS BOBBY R & FRANCES K	146 LURAY LN MOUNT AIRY NC 27030	N/A	592800656078	105250	14.72	954.8
18-9	000215 NAVIGATOR LN	MOUNT AIRY, NC	NICHOLS BOBBY R & FRANCES K	146 LURAY LN MOUNT AIRY NC 27030	N/A	592800656078	105000	14.76	951.5
18-10	001625 SHEEP FARM RD	MOUNT AIRY, NC	1625 SHEEP FARM ROAD LLC	6370 ALTURA BLVD BUENA PARK CA 90620	N/A	592800850322	105750	14.62	966.1
18-11	001625 SHEEP FARM RD	MOUNT AIRY, NC	1625 SHEEP FARM ROAD LLC	6370 ALTURA BLVD BUENA PARK CA 90620	N/A	592800850322	106750	14.43	961.9
18-12	000215 NAVIGATOR LN	MOUNT AIRY, NC	NICHOLS BOBBY R & FRANCES K	146 LURAY LN MOUNT AIRY NC 27030	N/A	592800656078	105000	14.76	947.4
18-13	001625 SHEEP FARM RD	MOUNT AIRY, NC	1625 SHEEP FARM ROAD LLC	6370 ALTURA BLVD BUENA PARK CA 90620	N/A	592800850322	107000	14.38	962.6
21-1	HIGH MEADOW TR	MOUNT AIRY, NC	BELL CARL E & JANE (1/2) &	501 RIDGEWAY DR MOUNT AIRY NC 27030	N/A	593700757855	83500	18.86	919.5
22-1	ARARAT LONGHILL RD	PILOT MOUNTAIN, NC	DAVIS J C (1/2) &	744 ARARAT RD PILOT MOUNTAIN NC 27041	N/A	594700326749	77372	20.64	924.3
22-2	ARARAT LONGHILL RD	PILOT MOUNTAIN, NC	DAVIS J C (1/2) &	744 ARARAT RD PILOT MOUNTAIN NC 27041	N/A	594700326749	77372	20.61	914.9
22-3	000147 FAITH LN	ARARAT, NC	THOMAS JIMMIE R LIFE ESTATE	147 FAITH LN PO BOX 9 ARARAT NC 27007	N/A	594600091293	77558	19.99	916.3
22-4	1605 ARARAT LONGHILL RD	ARARAT, NC	SPAINHOUR MICHAEL SHELDON	1605 ARARAT LONGHILL RD ARARAT NC 27007	N/A	594600095507	77750	19.95	921.0
22-5	1605 ARARAT LONGHILL RD	ARARAT, NC	SPAINHOUR MICHAEL SHELDON	1605 ARARAT LONGHILL RD ARARAT NC 27007	N/A	594600095507	77558	19.98	918.1
22-6	000147 FAITH LN	ARARAT, NC	THOMAS JIMMIE R LIFE ESTATE	147 FAITH LN PO BOX 9 ARARAT NC 27007	N/A	594600091293	77372	20.02	915.6
22-7	001415 ARARAT RD	ARARAT, NC	ARARAT VOLUNTEER FIRE DEPT IN	PO BOX 63 ARARAT NC 27007	N/A	594601190183	77372	20.00	897.8
22-8	000129 BULLARD LN	MOUNT AIRY, NC	SIMMONS WENDELL STEPHEN	120 GUINNESS LN MOUNT AIRY NC 27030	N/A	594600183931	76750	20.12	913.3
22-9	000129 BULLARD LN	MOUNT AIRY, NC	SIMMONS WENDELL STEPHEN	120 GUINNESS LN MOUNT AIRY NC 27030	N/A	594600183931	76500	20.17	910.6
22-10	001375 ARARAT RD	GREENSBORO, NC	MCCASKILL PAMELA ANN ROBERTSON	5409 FOXWOOD DR GREENSBORO NC 27410	N/A	594600194094	76750	20.12	921.9
22-11	001375 ARARAT RD	GREENSBORO, NC	MCCASKILL PAMELA ANN ROBERTSON	5409 FOXWOOD DR GREENSBORO NC 27410	N/A	594600194094	76500	20.16	917.2
22-12	001399 ARARAT RD	ARARAT, NC	KEY BRADLEY	1399 ARARAT RD PO BOX 106 ARARAT NC 27007	N/A	594600192097	76750	20.11	909.9
22-13	001399 ARARAT RD	ARARAT, NC	KEY BRADLEY	1399 ARARAT RD PO BOX 106 ARARAT NC 27007	N/A	594600192097	77000	20.06	912.6
22-14	001384 ARARAT RD	ARARAT, NC	MARION TRUDY BASS	PO BOX 5 ARARAT NC 27007	N/A	594600192373	77372	19.99	924.3
22-15	001375 ARARAT RD	GREENSBORO, NC	MCCASKILL PAMELA ANN ROBERTSON	5409 FOXWOOD DR GREENSBORO NC 27410	N/A	594600194094	76750	20.11	923.2

Summary Table of Occupied Structures (Part 1)									
Structure Information									
Property Information			Owner Information				Location / Elevation		
Building No.	Property Address	City / Town	Owner	Owner Address	Owner Tele.	Parcel No.	Station	Distance from Dam (miles)	Structure Elevation (feet)
22-16	BULLARD LN	MOUNT AIRY, NC	SIMMONS SABRA MARIE B	120 GUINNESS LN MOUNT AIRY NC 27030	N/A	594600183601	76250	20.20	903.6
22-17	001415 ARARAT RD	ARARAT, NC	ARARAT VOLUNTEER FIRE DEPT IN	PO BOX 63 ARARAT NC 27007	N/A	594601190183	77000	20.06	898.9
22-18	001389 ARARAT RD	GREENSBORO, NC	MCCASKILL PAMELA ANN ROBERTSON	5409 FOXWOOD DR GREENSBORO NC 27410	N/A	594600194117	77000	20.06	920.5
23-1	000441 SAM FULK RD	PILOT MOUNTAIN, NC	BECK RUSSELL LONNIE	1160 ARARAT RD PILOT MOUNTAIN NC 27041	N/A	594600541614	71000	21.28	905.7
24-1	000506 TOMS CREEK RD	PILOT MOUNTAIN, NC	REID ELIZABETH ANN FULK	273 PILOT POWER DAM RD PILOT MOUNTAIN NC	N/A	594600927105	64210	23.13	898.4
25-1	002555 NC 268	PILOT MOUNTAIN, NC	SECHRIST TIMOTHY D	2555 NC HWY 268 PO BOX 278 PILOT MOUNTAIN	N/A	594500551356	60784	23.19	904.5
25-2	002555 NC 268	PILOT MOUNTAIN, NC	SECHRIST TIMOTHY D	2555 NC HWY 268 PO BOX 278 PILOT MOUNTAIN	N/A	594500551356	60784	23.18	898.3
25-3	002555 NC 268	PILOT MOUNTAIN, NC	SECHRIST TIMOTHY D	2555 NC HWY 268 PO BOX 278 PILOT MOUNTAIN	N/A	594500551356	60784	23.16	897.3
25-4	002413 NC 268	PILOT MOUNTAIN, NC	AKERS DANNY R	2413 NC 268 PILOT MOUNTAIN NC 27041	N/A	594500666111	61500	23.02	902.4
25-5	002522 NC 268	PILOT MOUNTAIN, NC	SURRY COUNTY	118 HAMBY RD STE 333 DOBSON NC 27017	N/A	594500555903	61028	23.10	892.4
25-6	002413 NC 268	PILOT MOUNTAIN, NC	AKERS DANNY R	2413 NC 268 PILOT MOUNTAIN NC 27041	N/A	594500666111	61500	23.01	903.7
25-7	002413 NC 268	PILOT MOUNTAIN, NC	AKERS DANNY R	2413 NC 268 PILOT MOUNTAIN NC 27041	N/A	594500666111	61500	23.00	899.6
25-8	002264 NC 268	PILOT MOUNTAIN, NC	TUCKER ADAM WESLEE	2158 NC 268 PILOT MOUNTAIN NC 27041	N/A	594500774579	63250	22.67	897.2
25-9	NC 268	PILOT MOUNTAIN, NC	TUCKER MICHAEL TERRY	2322 NC 268 PILOT MOUNTAIN NC 27041	N/A	594500782462	63750	22.57	903.0
25-10	002410 NC 268	PILOT MOUNTAIN, NC	TUCKER HOWARD TERRY	2310 NC 268 PO BOX 238 PILOT MOUNTAIN NC	N/A	594500664688	61750	22.95	887.2
26-1	753 PILOT POWER DAM RD	PILOT MOUNTAIN, NC	BAILEY ALLEN KEITH	130 BAILEY LN PILOT MOUNTAIN NC 27041	N/A	594500638783	58500	23.57	883.3
27-1	000469 JIM MCKINNEY RD	PINNACLE, NC	HUNT RONNIE DALE SR	469 JIM MCKINNEY RD PINNACLE NC 27043	N/A	595504616931	50000	26.10	894.9
27-2	000469 JIM MCKINNEY RD	PINNACLE, NC	HUNT RONNIE DALE SR	469 JIM MCKINNEY RD PINNACLE NC 27043	N/A	595504616931	50000	26.12	892.0
27-3	000125 HOOD TR	PINNACLE, NC	HUNT RONNIE DALE SR	469 JIM MCKINNEY RD PINNACLE NC 27043	N/A	595504710813	49750	26.21	894.9
27-4	000469 JIM MCKINNEY RD	PINNACLE, NC	HUNT RONNIE DALE SR	469 JIM MCKINNEY RD PINNACLE NC 27043	N/A	595504616931	49750	26.14	889.2
27-5	000490 JIM MCKINNEY RD	PINNACLE, NC	MCKINNEY SHEILA D	504 JIM MCKINNEY RD PINNACLE NC 27043	N/A	595500600966	49750	25.96	878.2
27-6	000469 JIM MCKINNEY RD	PINNACLE, NC	HUNT RONNIE DALE SR	469 JIM MCKINNEY RD PINNACLE NC 27043	N/A	595504616931	49750	26.14	894.2
29-1	000275 FLINCHUM LN	PILOT MOUNTAIN, NC	PADDOCK STEVEN LEROY	275 FLINCHUM LN PILOT MOUNTAIN NC 27041	N/A	594400687365	38500	27.35	868.3
32-1	001108 REEVES RD	SILOAM, NC	SMITH DANIEL ALTON	1108 REEVES RD SILOAM NC 27047	N/A	594300734297	16000	31.71	828.4
32-2	000948 REEVES RD	SILOAM, NC	ANDERSON JAMES ROY	948 REEVES RD SILOAM NC 27047	N/A	594300633602	16000	31.72	830.5
32-3	000948 REEVES RD	SILOAM, NC	ANDERSON JAMES ROY	948 REEVES RD SILOAM NC 27047	N/A	594300633602	16000	31.73	827.1
32-4	000952 REEVES RD	SILOAM, NC	THOMAS ROBERT TRACY	952 REEVES RD SILOAM NC 27047	N/A	594300630145	16000	31.72	828.3
32-5	001016 REEVES RD	SILOAM, NC	CARTER JAYNET LYNN	1016 REEVES RD SILOAM NC 27047	N/A	594300732314	15750	31.72	831.1
32-6	000113 SMOKEY BOTTOM TR	PINNACLE, NC	MARION KATHY	3027 QUAKER CHURCH RD PINNACLE NC 27043	N/A	594300839283	14500	31.93	836.2
32-7	000113 SMOKEY BOTTOM TR	PINNACLE, NC	MARION KATHY	3027 QUAKER CHURCH RD PINNACLE NC 27043	N/A	594300839283	14500	31.91	841.3
33-1	000414 JOHN SCOTT RD	SILOAM, NC	HOLT TIMOTHY RAY	132 HOLTS LN SILOAM NC 27047	N/A	595300017041	12250	32.33	806.9
34-1	001073 JOHN MICKLES RD	PINNACLE, NC	SCOTT FREDDY RAY & BARBARA M	873 JOHN MICKLE RD PINNACLE NC 27043	N/A	594200665378	876743	34.27	795.4
34-2	001073 JOHN MICKLES RD	PINNACLE, NC	SCOTT FREDDY RAY & BARBARA M	873 JOHN MICKLE RD PINNACLE NC 27043	N/A	594200665378	876743	34.27	800.8
35-1	RIVER SILOAM RD	SILOAM, NC	SCOTT BILLY FRANKLIN	108 BILL SCOTT TRL SILOAM NC 27047	N/A	593200557607	878117	33.85	819.5
35-2	RIVER SILOAM RD	SILOAM, NC	SCOTT BILLY FRANKLIN	108 BILL SCOTT TRL SILOAM NC 27047	N/A	593200557607	878117	33.85	815.1
35-3	000132 OLD TOWN LN	SILOAM, NC	HARDY CHARLIE JUNIOR	132 OLD TOWN LN PO BOX 52 SILOAM NC 27047	N/A	593200777152	878117	33.85	817.4
35-4	000132 OLD TOWN LN	SILOAM, NC	HARDY CHARLIE JUNIOR	132 OLD TOWN LN PO BOX 52 SILOAM NC 27047	N/A	593200777152	878117	33.85	821.5
35-5	000132 OLD TOWN LN	SILOAM, NC	HARDY CHARLIE JUNIOR	132 OLD TOWN LN PO BOX 52 SILOAM NC 27047	N/A	593200777152	878117	33.85	819.8
35-6	000132 OLD TOWN LN	SILOAM, NC	HARDY CHARLIE JUNIOR	132 OLD TOWN LN PO BOX 52 SILOAM NC 27047	N/A	593200777152	878117	33.85	817.8
35-7	000132 OLD TOWN LN	SILOAM, NC	HARDY CHARLIE JUNIOR	132 OLD TOWN LN PO BOX 52 SILOAM NC 27047	N/A	593200777152	878117	33.85	815.3
35-8	000132 OLD TOWN LN	SILOAM, NC	HARDY CHARLIE JUNIOR	132 OLD TOWN LN PO BOX 52 SILOAM NC 27047	N/A	593200777152	878117	33.85	816.3
35-9	007034 SILOAM RD	SILOAM, NC	INGRAM JOYCE A (1/2) &	PO BOX 16 SILOAM NC 27047	N/A	593200878047	878117	33.85	807.2
35-10	007034 SILOAM RD	SILOAM, NC	INGRAM JOYCE A (1/2) &	PO BOX 16 SILOAM NC 27047	N/A	593200878047	878117	33.85	819.7
35-11	007034 SILOAM RD	SILOAM, NC	INGRAM JOYCE A (1/2) &	PO BOX 16 SILOAM NC 27047	N/A	593200878047	878117	33.85	819.7
35-12	SILOAM RD	MOUNT AIRY, NC	YOCO INC	OLD HWY 601 PO BOX 48 MOUNT AIRY NC 27030	N/A	593200963237	878117	33.85	816.8
36-1	002120 RIVER SILOAM RD	SILOAM, NC	SCOTT BILLY FRANKLIN	108 BILL SCOTT TRL SILOAM NC 27047	N/A	593200450252	878117	33.85	801.2

Summary Table of Occupied Structures (Part 1)									
Structure Information									
Property Information			Owner Information				Location / Elevation		
Building No.	Property Address	City / Town	Owner	Owner Address	Owner Tele.	Parcel No.	Station	Distance from Dam (miles)	Structure Elevation (feet)
38-1	5245 FRIENDSHIP CIRCLE	EAST BEND, NC	GORDY MARK S & AVIS S	5245 FRIENDSHIP CIRCLE EAST BEND, NC 27018	N/A	594100577955	868033	35.92	797.6
38-2	5313 FRIENDSHIP CIRCLE RD	EAST BEND, NC	RIDGLEWAY ATLON H & MARGARETTE G	5313 FRIENDSHIP CIRCLE RD EAST BEND, NC 27018	N/A	594100587313	868033	35.92	802.4
44-1	6715 Martin Ferry RD	Tobaccoville, NC	Smith Walter E	6715 Martin Ferry RD Tobaccoville, NC 27050	N/A	5970-57-3583	832889	42.57	772.0
44-2	7636 Donnaha RD	Tobaccoville, NC	Culler Kenneth L	6681 Martin Ferry RD Tobaccoville, NC 27050	N/A	5970-56-9758	831869	42.77	771.7
44-3	6681 Martin Ferry RD	Tobaccoville, NC	Culler Kenneth L	6681 Martin Ferry RD Tobaccoville, NC 27050	N/A	5970-57-7018	831869	42.77	765.6
44-4	6705 Martin Ferry RD	Tobaccoville, NC	Jones Carol Ann Allen	6705 Martin Ferry RD Tobaccoville, NC 27050	N/A	5970-57-4386	832889	42.57	771.5
44-5	7685 Donnaha RD	Tobaccoville, NC	Cox Russell E & Peggy S	7685 Donnaha RD Tobaccoville, NC 27050	N/A	5970-66-6922	830889	42.95	757.5
44-6	6545 Payne RD	Tobaccoville, NC	Cruz Jeanie	6545 Payne RD Tobaccoville, NC 27050	N/A	5970-75-4017	829877	43.15	770.6
44-7	6545 Payne RD	Tobaccoville, NC	Cruz Jeanie	6545 Payne RD Tobaccoville, NC 27050	N/A	5970-75-4017	829877	43.15	759.6
44-8	7331 Donnaha RD	Tobaccoville, NC	Roberts Renee Lioy	7331 Donnaha RD TOBACCOVILLE, NC 27050	N/A	5970-75-2198	829877	43.15	765.0
44-9	POINDEXTER RD	EAST BEND, NC	DOUB ANNE R ET AL	2145 FLINT HILL RD EAST BEND, NC 27018	N/A	597000540560	829877	43.15	751.2
44-10	8318 Donnaha RD	Tobaccoville, NC	Allen John Stanley	8318 Donnaha RD Tobaccoville, NC 27050	N/A	5970-94-5612	828958	43.32	764.4
44-11	7225 Donnaha RD	Tobaccoville, NC	Ross Sylvia Hicks	7225 Donnaha RD Tobaccoville, NC 27050	N/A	5970-74-7557	828958	43.32	766.1
44-12	7255 Donnaha RD	Tobaccoville, NC	Martin G Steve & Debra	7255 Donnaha RD Tobaccoville, NC 27050	N/A	5970-74-6827	828958	43.32	768.8
44-13	7255 Donnaha RD	Tobaccoville, NC	Martin G Steve & Debra	7255 Donnaha RD Tobaccoville, NC 27050	N/A	5970-74-6827	828958	43.32	762.7
44-14	7111 Donnaha RD	Tobaccoville, NC	Johnson Peggy P Heirs	7111 Donnaha RD Tobaccoville, NC 27050	N/A	5970-83-0828	827852	43.53	759.5
45-1	6839 Donnaha RD	Tobaccoville, NC	Smith Danielle & Smith Sanders	6839 Donnaha RD TOBACCOVILLE, NC 27050	N/A	5970-82-5070	826913	43.71	756.4
45-2	6949 Donnaha RD	King, NC	City Of King	PO Box 1132 King, NC 27021	N/A	5970-82-7770	826913	43.71	762.5
45-3	6671 Donnaha RD	Tobaccoville, NC	Salmons Leonard Gray	6670 Donnaha RD Tobaccoville, NC 27050	N/A	5970-81-4083	825957	43.89	765.2
45-4	6755 Donnaha RD	Tobaccoville, NC	Wall Rebecca S	6791 Donnaha RD Tobaccoville, NC 27050	N/A	5970-81-6065	825957	43.89	762.8
45-5	6815 Donnaha RD	Tobaccoville, NC	Wall Rebecca S	6791 Donnaha RD Tobaccoville, NC 27050	N/A	5970-71-9951	825957	43.89	769.0
45-6	6815 Donnaha RD	Tobaccoville, NC	Wall Rebecca S	6791 Donnaha RD Tobaccoville, NC 27050	N/A	5970-71-9951	825957	43.89	768.8
45-7	9995 REYNOLDA RD	Tobaccoville, NC	Donnaha Mart Llc	2536 Polo RD Winston-Salem, NC 27106	N/A	5970-80-2552	825519	43.97	769.1
45-8	9925 Reynolda RD	Tobaccoville, NC	Colbert Donald Andrew	129 Retnuh DR Winston-Salem, NC 27105	N/A	5970-80-6458	825519	43.97	769.0
45-9	6131 DONNAHA PARK	PINNACLE, NC	STATE OF NC PROPERTY OFFICE	1792 PILOT KNOB PK RD PINNACLE, NC 27043	N/A	597000608634	825519	43.97	744.8
45-10	2005 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	759.2
45-11	2009 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	754.3
45-12	1012 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	757.0
45-13	1016 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	748.2
45-14	1021 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	746.5
45-15	1017 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	750.0
45-16	1013 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	759.3
45-17	1004 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	767.0
45-18	1008 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	765.9
45-19	1009 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	767.1
45-20	3004 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	753.2
45-21	3008 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	750.0
45-22	3005 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	754.4
45-23	3009 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	754.6
45-24	2008 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	756.5
45-25	2004 RIVERTRAILS DR	PFAFFTOWN, NC	KINNEY LOIS K	P O BOX 7 PFAFFTOWN, NC 27040	N/A	597000600700	825318	44.01	756.4

Flood Wave Information

Summary Table of Occupied Structures (Part 2)																	
Structure Number / Elevation		**Inundation Information**															
		Sunny Day				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Building No.	Structure Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)
1-1	1179.0	1182.9	1.2	1.2	3.8	1192.0	1.2	1.2	13.0	1191.2	1.2	0.6	12.2	1174.7	1.8	1.8	0.0
1-2	1173.0	1182.9	1.2	1.2	9.8	1192.0	1.2	1.2	19.0	1191.2	1.2	0.6	18.2	1174.7	1.8	1.8	1.7
1-3	1184.0	1181.4	1.8	1.8	0.0	1188.9	1.2	1.8	4.9	1188.6	1.8	1.2	4.6	1172.7	2.4	2.4	0.0
1-4	1165.0	1174.4	1.8	1.8	9.4	1182.0	1.2	1.8	17.0	1181.5	1.8	1.2	16.5	1167.2	2.4	2.4	2.2
1-5	1156.0	1174.4	1.8	1.8	18.4	1182.0	1.2	1.8	26.0	1181.5	1.8	1.2	25.5	1167.2	2.4	2.4	11.2
1-6	1154.0	1174.4	1.8	1.8	20.4	1182.0	1.2	1.8	28.0	1181.5	1.8	1.2	27.5	1167.2	2.4	2.4	13.2
1-7	1168.0	1163.0	3.6	3.0	0.0	1168.9	2.4	3.0	0.9	1168.6	3.0	2.4	0.6	1157.2	4.2	4.2	0.0
2-1	1141.0	1143.3	10.8	8.4	2.3	1151.3	7.8	6.6	10.3	1150.4	8.4	6.0	9.4	1138.7	12.0	10.2	0.0
2-2	1135.0	1130.6	14.4	10.2	0.0	1149.3	12.6	8.4	14.3	1148.1	12.6	8.4	13.1	1130.7	16.2	12.0	0.0
3-1	1136.0	1119.0	45.0	29.4	0.0	1137.6	38.4	24.6	1.6	1136.4	39.0	24.6	0.4	1119.2	48.6	31.8	0.0
4-1	1102.0	1098.7	49.2	33.6	0.0	1108.6	40.8	27.6	6.6	1107.9	41.4	27.0	5.9	1099.2	52.2	36.0	0.0
4-2	1094.0	1094.6	49.8	34.8	0.6	1102.7	40.8	27.6	8.7	1102.1	41.4	27.6	8.1	1094.9	52.8	37.2	0.9
4-3	1084.0	1091.8	50.4	34.8	7.8	1100.1	41.4	28.2	16.1	1099.4	42.0	28.2	15.4	1092.6	53.4	37.2	8.6
4-4	1083.0	1091.4	50.4	35.4	8.4	1098.7	41.4	28.2	15.7	1098.1	42.0	28.2	15.1	1092.0	54.0	37.8	9.0
4-5	1084.0	1091.4	51.6	36.0	7.3	1099.3	42.0	28.8	15.3	1098.6	42.6	28.8	14.6	1091.9	54.6	38.4	7.9
4-6	1085.0	1091.4	51.6	36.0	6.3	1099.3	42.0	28.8	14.3	1098.6	42.6	28.8	13.6	1091.9	54.6	38.4	6.9
4-7	1085.0	1091.4	51.6	36.0	6.3	1099.3	42.0	28.8	14.3	1098.6	42.6	28.8	13.6	1091.9	54.6	38.4	6.9
4-8	1085.0	1091.4	51.6	36.0	6.3	1099.3	42.0	28.8	14.3	1098.6	42.6	28.8	13.6	1091.9	54.6	38.4	6.9
4-9	1085.0	1091.1	52.2	36.6	6.1	1099.2	42.6	28.8	14.2	1098.6	43.2	28.8	13.6	1091.7	55.2	39.0	6.7
4-10	1084.0	1091.1	52.2	36.6	7.1	1099.2	42.6	28.8	15.2	1098.6	43.2	28.8	14.6	1091.7	55.2	39.0	7.7
4-11	1084.0	1091.1	52.2	36.6	7.1	1099.2	42.6	28.8	15.2	1098.6	43.2	28.8	14.6	1091.7	55.2	39.0	7.7
4-12	1083.0	1091.1	53.4	37.2	8.1	1099.4	43.2	29.4	16.4	1098.7	43.8	29.4	15.7	1091.7	56.4	39.6	8.7
4-13	1084.0	1091.1	53.4	37.2	7.1	1099.4	43.2	29.4	15.4	1098.7	43.8	29.4	14.7	1091.7	56.4	39.6	7.7
4-14	1085.0	1091.1	53.4	37.2	6.1	1099.4	43.2	29.4	14.4	1098.7	43.8	29.4	13.7	1091.7	56.4	39.6	6.7
4-15	1084.0	1091.1	53.4	37.2	7.1	1099.4	43.2	29.4	15.4	1098.7	43.8	29.4	14.7	1091.7	56.4	39.6	7.7
4-16	1097.0	1090.9	54.0	38.4	0.0	1098.7	43.8	30.0	1.7	1098.0	44.4	30.0	1.0	1091.4	57.0	40.8	0.0
4-17	1084.0	1091.1	54.0	37.8	7.1	1099.4	43.8	30.0	15.4	1098.7	44.4	29.4	14.7	1091.7	57.0	40.2	7.7
4-18	1084.0	1091.1	54.0	37.8	7.1	1099.4	43.8	30.0	15.4	1098.7	44.4	29.4	14.7	1091.7	57.0	40.2	7.7
4-27	1083.0	1090.9	54.0	38.4	7.8	1098.7	43.8	30.0	15.7	1098.0	44.4	30.0	15.0	1091.4	57.0	40.8	8.4
4-20	1083.0	1090.9	54.0	38.4	7.8	1098.7	43.8	30.0	15.7	1098.0	44.4	30.0	15.0	1091.4	57.0	40.8	8.4
4-21	1084.0	1091.1	54.0	37.8	7.1	1099.4	43.8	30.0	15.4	1098.7	44.4	29.4	14.7	1091.7	57.0	40.2	7.7
4-22	1084.0	1090.9	54.0	38.4	6.8	1098.7	43.8	30.0	14.7	1098.0	44.4	30.0	14.0	1091.4	57.0	40.8	7.4
4-23	1084.0	1090.9	54.0	38.4	6.8	1098.7	43.8	30.0	14.7	1098.0	44.4	30.0	14.0	1091.4	57.0	40.8	7.4
4-24	1083.0	1091.1	54.0	37.8	8.1	1099.4	43.8	30.0	16.4	1098.7	44.4	29.4	15.7	1091.7	57.0	40.2	8.7
4-25	1084.0	1091.1	54.0	37.8	7.1	1099.4	43.8	30.0	15.4	1098.7	44.4	29.4	14.7	1091.7	57.0	40.2	7.7
4-26	1083.0	1091.1	54.0	37.8	8.1	1099.4	43.8	30.0	16.4	1098.7	44.4	29.4	15.7	1091.7	57.0	40.2	8.7
4-19	1080.0	1091.1	54.0	37.8	11.1	1099.4	43.8	30.0	19.4	1098.7	44.4	29.4	18.7	1091.7	57.0	40.2	11.7
4-28	1081.0	1085.6	54.0	38.4	4.6	1097.0	43.8	30.6	16.0	1095.8	44.4	30.0	14.8	1086.5	57.0	40.8	5.5
4-29	1095.0	1080.4	56.4	44.4	0.0	1095.1	46.2	35.4	0.1	1093.7	46.8	35.4	0.0	1082.3	59.4	46.8	0.0
4-30	1069.0	1080.1	57.0	45.0	11.1	1095.0	46.8	36.0	26.0	1093.6	47.4	36.0	24.6	1082.1	60.0	47.4	13.1
4-31	1085.0	1078.5	58.2	46.8	0.0	1094.4	48.0	37.8	9.4	1093.0	48.6	37.8	8.0	1081.0	61.2	49.2	0.0
4-32	1069.0	1078.5	58.2	46.8	9.5	1094.4	48.0	37.8	25.4	1093.0	48.6	37.8	24.0	1081.0	61.2	49.2	12.0
4-33	1081.0	1078.5	58.2	46.8	0.0	1094.4	48.0	37.8	13.4	1093.0	48.6	37.8	12.0	1081.0	61.2	49.2	0.0
5-1	1068.0	1078.5	58.2	46.8	10.5	1094.4	48.0	37.8	26.4	1093.0	48.6	37.8	25.0	1081.0	61.2	49.2	13.0
5-2	1068.0	1078.2	58.2	47.4	10.2	1094.4	48.6	39.0	26.3	1093.0	49.2	39.0	25.0	1080.8	61.8	49.8	12.8
5-3	1068.0	1078.2	58.2	47.4	10.2	1094.4	48.6	39.0	26.3	1093.0	49.2	39.0	25.0	1080.8	61.8	49.8	12.8

Summary Table of Occupied Structures (Part 2)																	
Structure Number / Elevation		**Inundation Information**															
		Sunny Day				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Building No.	Structure Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)
5-4	1067.0	1077.8	58.8	48.0	10.8	1094.2	49.2	39.6	27.2	1092.8	49.8	39.0	25.8	1080.6	62.4	50.4	13.6
5-5	1067.0	1073.9	68.4	58.8	6.9	1092.9	57.0	48.0	25.9	1091.5	57.6	48.0	24.5	1078.2	71.4	60.6	11.2
5-6	1078.0	1073.8	69.6	60.0	0.0	1092.8	57.6	49.2	14.8	1091.3	58.2	49.2	13.3	1078.0	72.6	62.4	0.0
5-7	1077.0	1073.8	69.6	60.0	0.0	1092.8	57.6	49.2	15.8	1091.3	58.2	49.2	14.3	1078.0	72.6	62.4	1.0
5-8	1080.0	1073.7	70.2	63.0	0.0	1092.7	58.2	51.0	12.7	1091.2	58.8	51.0	11.2	1077.9	73.2	64.8	0.0
5-9	1063.0	1073.7	70.2	63.0	10.7	1092.7	58.2	51.0	29.7	1091.2	58.8	51.0	28.2	1077.9	73.2	64.8	14.9
5-10	1054.0	1073.4	71.4	64.2	19.4	1092.2	58.8	51.6	38.2	1090.8	59.4	52.2	36.8	1077.6	74.4	66.0	23.6
5-11	1072.0	1073.4	71.4	64.2	1.4	1092.2	58.8	51.6	20.2	1090.8	59.4	52.2	18.8	1077.6	74.4	66.0	5.6
5-12	1068.0	1073.4	71.4	64.2	5.4	1092.2	58.8	51.6	24.2	1090.8	59.4	52.2	22.8	1077.6	74.4	66.0	9.6
5-13	1074.0	1072.1	71.4	64.8	0.0	1089.8	59.4	52.2	15.8	1088.5	60.0	52.2	14.5	1075.9	74.4	66.6	1.9
5-14	1087.0	1072.1	71.4	64.8	0.0	1089.8	59.4	52.2	2.8	1088.5	60.0	52.2	1.5	1075.9	74.4	66.6	0.0
6-1	1049.0	1053.4	73.8	67.2	4.4	1065.1	60.0	53.4	16.1	1064.4	61.2	54.0	15.4	1058.1	76.2	68.4	9.1
6-2	1049.0	1053.4	73.8	67.2	4.4	1065.1	60.0	53.4	16.1	1064.4	61.2	54.0	15.4	1058.1	76.2	68.4	9.1
6-3	1052.0	1053.4	73.8	67.2	1.4	1065.1	60.0	53.4	13.1	1064.4	61.2	54.0	12.4	1058.1	76.2	68.4	6.1
6-4	1047.0	1051.5	73.8	67.2	4.5	1061.1	60.6	54.0	14.1	1060.5	61.2	54.0	13.5	1054.8	76.2	68.4	7.8
6-5	1053.0	1051.5	73.8	67.2	0.0	1061.1	60.6	54.0	8.0	1060.5	61.2	54.0	7.5	1054.8	76.2	68.4	1.8
6-6	1047.0	1051.5	73.8	67.2	4.5	1061.1	60.6	54.0	14.1	1060.5	61.2	54.0	13.5	1054.8	76.2	68.4	7.8
6-7	1048.0	1051.5	73.8	67.2	3.5	1061.1	60.6	54.0	13.1	1060.5	61.2	54.0	12.5	1054.8	76.2	68.4	6.8
6-8	1055.0	1051.8	73.8	67.8	0.0	1059.7	60.6	54.0	4.7	1059.1	61.2	54.6	4.1	1053.8	76.8	69.0	0.0
6-9	1052.0	1051.8	73.8	67.8	0.0	1059.7	60.6	54.0	7.7	1059.1	61.2	54.6	7.1	1053.8	76.8	69.0	1.8
6-10	1048.0	1051.8	73.8	67.8	3.8	1059.7	60.6	54.0	11.7	1059.1	61.2	54.6	11.1	1053.8	76.8	69.0	5.8
6-11	1046.0	1051.8	73.8	67.8	5.8	1059.7	60.6	54.0	13.7	1059.1	61.2	54.6	13.1	1053.8	76.8	69.0	7.8
6-12	1046.0	1051.8	73.8	67.8	5.8	1059.7	60.6	54.0	13.7	1059.1	61.2	54.6	13.1	1053.8	76.8	69.0	7.8
6-13	1050.0	1051.8	73.8	67.8	1.8	1059.7	60.6	54.0	9.7	1059.1	61.2	54.6	9.1	1053.8	76.8	69.0	3.8
6-14	1053.0	1050.7	74.4	68.4	0.0	1059.2	60.6	54.6	6.2	1058.5	61.8	55.2	5.5	1052.8	76.8	69.6	0.0
6-15	1050.0	1050.7	74.4	68.4	0.7	1059.2	60.6	54.6	9.2	1058.5	61.8	55.2	8.5	1052.8	76.8	69.6	2.8
6-16	1046.0	1050.7	74.4	68.4	4.7	1059.2	60.6	54.6	13.2	1058.5	61.8	55.2	12.5	1052.8	76.8	69.6	6.8
6-17	1045.0	1050.7	74.4	68.4	5.7	1059.2	60.6	54.6	14.2	1058.5	61.8	55.2	13.5	1052.8	76.8	69.6	7.8
6-18	1044.0	1050.7	74.4	68.4	6.7	1059.2	60.6	54.6	15.2	1058.5	61.8	55.2	14.5	1052.8	76.8	69.6	8.8
6-19	1047.0	1050.7	74.4	68.4	3.7	1059.2	60.6	54.6	12.2	1058.5	61.8	55.2	11.5	1052.8	76.8	69.6	5.8
6-20	1046.0	1050.7	74.4	68.4	4.7	1059.2	60.6	54.6	13.2	1058.5	61.8	55.2	12.5	1052.8	76.8	69.6	6.8
6-21	1045.0	1050.7	74.4	68.4	5.7	1059.2	60.6	54.6	14.2	1058.5	61.8	55.2	13.5	1052.8	76.8	69.6	7.8
6-22	1046.0	1050.7	74.4	68.4	4.7	1059.2	60.6	54.6	13.2	1058.5	61.8	55.2	12.5	1052.8	76.8	69.6	6.8
6-23	1048.0	1050.7	74.4	68.4	2.7	1059.2	60.6	54.6	11.2	1058.5	61.8	55.2	10.5	1052.8	76.8	69.6	4.8
6-24	1044.0	1049.9	75.0	69.0	5.9	1058.4	61.2	55.2	14.4	1057.7	61.8	55.2	13.7	1052.0	77.4	70.2	8.0
6-25	1043.0	1049.0	75.0	69.6	6.0	1057.4	61.2	55.8	14.3	1056.7	62.4	55.8	13.7	1051.2	78.0	70.8	8.2
6-26	1042.0	1049.0	75.0	69.6	7.0	1057.4	61.2	55.8	15.3	1056.7	62.4	55.8	14.7	1051.2	78.0	70.8	9.2
6-27	1045.0	1049.0	75.0	69.6	4.0	1057.4	61.2	55.8	12.3	1056.7	62.4	55.8	11.7	1051.2	78.0	70.8	6.2
6-28	1056.0	1049.0	75.0	69.6	0.0	1057.4	61.2	55.8	1.3	1056.7	62.4	55.8	0.7	1051.2	78.0	70.8	0.0
6-29	1052.0	1049.0	75.0	69.6	0.0	1057.4	61.2	55.8	5.3	1056.7	62.4	55.8	4.7	1051.2	78.0	70.8	0.0
6-30	1056.0	1049.0	75.0	69.6	0.0	1057.4	61.2	55.8	1.3	1056.7	62.4	55.8	0.7	1051.2	78.0	70.8	0.0
6-31	1046.0	1048.1	75.6	70.8	2.1	1056.7	61.8	56.4	10.7	1056.0	62.4	57.0	10.0	1050.3	78.0	72.0	4.3
6-32	1054.0	1048.1	75.6	70.8	0.0	1056.7	61.8	56.4	2.7	1056.0	62.4	57.0	2.0	1050.3	78.0	72.0	0.0
6-33	1054.0	1048.1	75.6	70.8	0.0	1056.7	61.8	56.4	2.7	1056.0	62.4	57.0	2.0	1050.3	78.0	72.0	0.0
6-34	1052.0	1048.1	75.6	70.8	0.0	1056.7	61.8	56.4	4.7	1056.0	62.4	57.0	4.0	1050.3	78.0	72.0	0.0
6-35	1054.0	1048.1	75.6	70.8	0.0	1056.7	61.8	56.4	2.7	1056.0	62.4	57.0	2.0	1050.3	78.0	72.0	0.0

Summary Table of Occupied Structures (Part 2)																	
Structure Number / Elevation		**Inundation Information**															
		Sunny Day				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Building No.	Structure Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)
6-36	1049.0	1048.1	75.6	70.8	0.0	1056.7	61.8	56.4	7.7	1056.0	62.4	57.0	7.0	1050.3	78.0	72.0	1.3
6-37	1053.0	1048.1	75.6	70.8	0.0	1056.7	61.8	56.4	3.7	1056.0	62.4	57.0	3.0	1050.3	78.0	72.0	0.0
6-38	1045.0	1047.5	76.2	72.6	2.5	1056.0	62.4	57.6	11.0	1055.3	63.0	58.2	10.3	1049.7	78.6	73.8	4.7
6-39	1050.0	1047.5	76.2	72.6	0.0	1056.0	62.4	57.6	6.0	1055.3	63.0	58.2	5.3	1049.7	78.6	73.8	0.0
6-40	1041.0	1047.3	76.8	73.8	6.3	1055.9	62.4	58.2	14.9	1055.2	63.6	58.8	14.2	1049.5	79.2	74.4	8.5
6-41	1040.0	1047.3	76.8	73.8	7.3	1055.9	62.4	58.2	15.9	1055.2	63.6	58.8	15.2	1049.5	79.2	74.4	9.5
6-42	1042.0	1047.2	78.0	75.0	5.2	1055.7	63.0	58.8	13.7	1055.0	64.2	59.4	13.0	1049.4	79.8	75.6	7.3
6-43	1043.0	1047.2	78.0	75.0	4.2	1055.7	63.0	58.8	12.7	1055.0	64.2	59.4	12.0	1049.4	79.8	75.6	6.3
6-44	1052.0	1047.2	78.0	75.0	0.0	1055.7	63.0	58.8	3.7	1055.0	64.2	59.4	3.0	1049.4	79.8	75.6	0.0
6-45	1042.0	1047.1	78.6	76.2	5.1	1055.5	63.6	59.4	13.5	1054.8	64.8	60.0	12.8	1049.2	81.0	76.2	7.2
6-46	1053.0	1047.1	78.6	76.2	0.0	1055.5	63.6	59.4	2.5	1054.8	64.8	60.0	1.8	1049.2	81.0	76.2	0.0
6-47	1042.0	1047.1	78.6	76.2	5.1	1055.5	63.6	59.4	13.5	1054.8	64.8	60.0	12.8	1049.2	81.0	76.2	7.2
6-48	1041.0	1047.1	78.6	76.2	6.1	1055.5	63.6	59.4	14.5	1054.8	64.8	60.0	13.8	1049.2	81.0	76.2	8.2
6-49	1036.0	1046.6	79.2	78.6	10.6	1054.5	64.2	61.2	18.5	1053.8	64.8	61.2	17.8	1048.5	81.6	78.6	12.5
6-50	1036.0	1046.6	79.2	78.6	10.6	1054.5	64.2	61.2	18.5	1053.8	64.8	61.2	17.8	1048.5	81.6	78.6	12.5
6-51	1037.0	1046.4	80.4	79.8	9.4	1054.1	64.2	61.2	17.1	1053.4	65.4	61.8	16.4	1048.2	82.2	79.2	11.2
6-52	1037.0	1046.4	80.4	79.8	9.4	1054.1	64.2	61.2	17.1	1053.4	65.4	61.8	16.4	1048.2	82.2	79.2	11.2
6-53	1042.0	1046.4	80.4	79.8	4.4	1054.1	64.2	61.2	12.1	1053.4	65.4	61.8	11.4	1048.2	82.2	79.2	6.2
6-54	1039.0	1046.4	80.4	79.8	7.4	1054.1	64.2	61.2	15.1	1053.4	65.4	61.8	14.4	1048.2	82.2	79.2	9.2
6-55	1034.0	1046.4	80.4	79.8	12.4	1054.1	64.2	61.2	20.1	1053.4	65.4	61.8	19.4	1048.2	82.2	79.2	14.2
6-56	1037.0	1046.4	80.4	79.8	9.4	1054.1	64.2	61.2	17.1	1053.4	65.4	61.8	16.4	1048.2	82.2	79.2	11.2
6-57	1048.0	1046.4	80.4	79.8	0.0	1054.1	64.2	61.2	6.1	1053.4	65.4	61.8	5.4	1048.2	82.2	79.2	0.2
6-58	1038.0	1046.0	81.0	80.4	8.0	1053.3	64.8	61.8	15.3	1052.6	66.0	62.4	14.6	1047.8	82.2	79.8	9.8
6-59	1038.0	1046.0	81.0	80.4	8.0	1053.3	64.8	61.8	15.3	1052.6	66.0	62.4	14.6	1047.8	82.2	79.8	9.8
6-60	1036.0	1046.0	81.0	80.4	10.0	1053.3	64.8	61.8	17.3	1052.6	66.0	62.4	16.6	1047.8	82.2	79.8	11.8
6-61	1034.0	1046.0	81.0	80.4	12.0	1053.3	64.8	61.8	19.3	1052.6	66.0	62.4	18.6	1047.8	82.2	79.8	13.8
6-62	1033.0	1046.0	81.0	80.4	13.0	1053.3	64.8	61.8	20.3	1052.6	66.0	62.4	19.6	1047.8	82.2	79.8	14.8
6-63	1053.0	1046.0	81.0	80.4	0.0	1053.3	64.8	61.8	0.3	1052.6	66.0	62.4	0.0	1047.8	82.2	79.8	0.0
6-64	1047.0	1045.5	81.0	81.0	0.0	1052.4	64.8	62.4	5.4	1051.7	66.0	62.4	4.7	1047.1	82.8	80.4	0.1
6-65	1036.0	1045.5	81.0	81.0	9.5	1052.4	64.8	62.4	16.4	1051.7	66.0	62.4	15.7	1047.1	82.8	80.4	11.1
6-66	1035.0	1045.5	81.0	81.0	10.5	1052.4	64.8	62.4	17.4	1051.7	66.0	62.4	16.7	1047.1	82.8	80.4	12.1
6-67	1034.0	1045.5	81.0	81.0	11.5	1052.4	64.8	62.4	18.4	1051.7	66.0	62.4	17.7	1047.1	82.8	80.4	13.1
6-68	1042.0	1045.5	81.0	81.0	3.5	1052.4	64.8	62.4	10.4	1051.7	66.0	62.4	9.7	1047.1	82.8	80.4	5.1
6-69	1039.0	1042.1	81.6	81.0	3.1	1051.0	65.4	62.4	12.0	1050.3	66.0	63.0	11.3	1044.4	82.8	80.4	5.4
6-70	1047.0	1042.1	81.6	81.0	0.0	1051.0	65.4	62.4	4.0	1050.3	66.0	63.0	3.3	1044.4	82.8	80.4	0.0
6-71	1041.0	1042.1	81.6	81.0	1.1	1051.0	65.4	62.4	10.0	1050.3	66.0	63.0	9.3	1044.4	82.8	80.4	3.4
6-72	1042.0	1042.1	81.6	81.0	0.1	1051.0	65.4	62.4	9.0	1050.3	66.0	63.0	8.3	1044.4	82.8	80.4	2.4
6-73	1035.0	1042.1	81.6	81.0	7.1	1051.0	65.4	62.4	16.0	1050.3	66.0	63.0	15.3	1044.4	82.8	80.4	9.4
6-74	1032.0	1040.4	82.2	82.2	8.4	1049.0	65.4	63.0	17.0	1048.3	66.6	63.6	16.3	1042.7	83.4	81.6	10.7
6-75	1048.0	1040.4	82.2	82.2	0.0	1049.0	65.4	63.0	1.0	1048.3	66.6	63.6	0.3	1042.7	83.4	81.6	0.0
6-76	1033.0	1040.4	82.2	82.2	7.4	1049.0	65.4	63.0	16.0	1048.3	66.6	63.6	15.3	1042.7	83.4	81.6	9.7
6-77	1032.0	1040.4	82.2	82.2	8.4	1049.0	65.4	63.0	17.0	1048.3	66.6	63.6	16.3	1042.7	83.4	81.6	10.7
6-78	1033.0	1040.4	82.2	82.2	7.4	1049.0	65.4	63.0	16.0	1048.3	66.6	63.6	15.3	1042.7	83.4	81.6	9.7
6-79	1039.0	1040.4	82.2	82.2	1.4	1049.0	65.4	63.0	10.0	1048.3	66.6	63.6	9.3	1042.7	83.4	81.6	3.7
6-80	1034.0	1038.8	82.2	83.4	4.8	1047.5	66.0	63.6	13.5	1046.8	66.6	64.2	12.8	1041.2	84.0	82.2	7.2
6-81	1042.0	1037.4	82.8	84.0	0.0	1046.3	66.0	64.2	4.3	1045.6	67.2	64.8	3.5	1039.8	84.0	82.8	0.0

Summary Table of Occupied Structures (Part 2)

Structure Number / Elevation		Inundation Information															
		Sunny Day				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Building No.	Structure Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)
6-82	1029.0	1037.4	82.8	84.0	8.4	1046.3	66.0	64.2	17.3	1045.6	67.2	64.8	16.6	1039.8	84.0	82.8	10.8
6-83	1039.0	1037.4	82.8	84.0	0.0	1046.3	66.0	64.2	7.3	1045.6	67.2	64.8	6.5	1039.8	84.0	82.8	0.8
6-84	1038.0	1037.4	82.8	84.0	0.0	1046.3	66.0	64.2	8.3	1045.6	67.2	64.8	7.5	1039.8	84.0	82.8	1.8
6-85	1037.0	1037.4	82.8	84.0	0.4	1046.3	66.0	64.2	9.3	1045.6	67.2	64.8	8.5	1039.8	84.0	82.8	2.8
6-86	1036.0	1037.4	82.8	84.0	1.4	1046.3	66.0	64.2	10.3	1045.6	67.2	64.8	9.5	1039.8	84.0	82.8	3.8
6-87	1037.0	1036.6	82.8	84.6	0.0	1045.6	66.6	64.8	8.6	1044.9	67.2	64.8	7.9	1039.0	84.6	83.4	2.0
6-88	1035.0	1036.6	82.8	84.6	1.6	1045.6	66.6	64.8	10.6	1044.9	67.2	64.8	9.9	1039.0	84.6	83.4	4.0
6-89	1045.0	1036.6	82.8	84.6	0.0	1045.6	66.6	64.8	0.6	1044.9	67.2	64.8	0.0	1039.0	84.6	83.4	0.0
6-90	1036.0	1036.6	82.8	84.6	0.6	1045.6	66.6	64.8	9.6	1044.9	67.2	64.8	8.9	1039.0	84.6	83.4	3.0
6-91	1038.0	1035.8	83.4	85.2	0.0	1045.1	66.6	64.8	7.0	1044.3	67.8	65.4	6.3	1038.4	84.6	84.0	0.4
6-92	1043.0	1033.7	84.6	87.6	0.0	1043.3	67.8	66.6	0.3	1042.5	69.0	67.2	0.0	1036.5	86.4	86.4	0.0
6-93	1038.0	1033.7	84.6	87.6	0.0	1043.3	67.8	66.6	5.3	1042.5	69.0	67.2	4.5	1036.5	86.4	86.4	0.0
6-94	1043.0	1033.7	84.6	87.6	0.0	1043.3	67.8	66.6	0.3	1042.5	69.0	67.2	0.0	1036.5	86.4	86.4	0.0
6-95	1041.0	1033.7	84.6	87.6	0.0	1043.3	67.8	66.6	2.3	1042.5	69.0	67.2	1.5	1036.5	86.4	86.4	0.0
7-1	1035.0	1037.4	82.8	84.0	2.4	1046.3	66.0	64.2	11.3	1045.6	67.2	64.8	10.6	1039.8	84.0	82.8	4.8
7-2	1032.0	1037.4	82.8	84.0	5.4	1046.3	66.0	64.2	14.3	1045.6	67.2	64.8	13.6	1039.8	84.0	82.8	7.8
7-3	1038.0	1036.6	82.8	84.6	0.0	1045.6	66.6	64.8	7.6	1044.9	67.2	64.8	6.9	1039.0	84.6	83.4	1.0
7-4	1038.0	1035.3	84.0	85.8	0.0	1044.5	67.2	65.4	6.5	1043.7	67.8	66.0	5.7	1037.9	85.2	84.6	0.0
7-5	1041.0	1034.7	84.6	87.0	0.0	1044.0	67.2	66.0	3.0	1043.2	68.4	66.6	2.2	1037.3	85.8	85.8	0.0
7-6	1038.0	1034.7	84.6	87.0	0.0	1044.0	67.2	66.0	6.0	1043.2	68.4	66.6	5.2	1037.3	85.8	85.8	0.0
7-7	1036.0	1034.7	84.6	87.0	0.0	1044.0	67.2	66.0	8.0	1043.2	68.4	66.6	7.2	1037.3	85.8	85.8	1.3
7-8	1043.0	1034.7	84.6	87.0	0.0	1044.0	67.2	66.0	1.0	1043.2	68.4	66.6	0.2	1037.3	85.8	85.8	0.0
7-9	1043.0	1034.7	84.6	87.0	0.0	1044.0	67.2	66.0	1.0	1043.2	68.4	66.6	0.2	1037.3	85.8	85.8	0.0
7-10	1027.0	1033.7	84.6	87.6	6.7	1043.3	67.8	66.6	16.3	1042.5	69.0	67.2	15.5	1036.5	86.4	86.4	9.5
7-11	1036.0	1033.7	84.6	87.6	0.0	1043.3	67.8	66.6	7.3	1042.5	69.0	67.2	6.5	1036.5	86.4	86.4	0.5
7-12	1035.0	1033.7	84.6	87.6	0.0	1043.3	67.8	66.6	8.3	1042.5	69.0	67.2	7.5	1036.5	86.4	86.4	1.5
7-13	1035.0	1033.7	84.6	87.6	0.0	1043.3	67.8	66.6	8.3	1042.5	69.0	67.2	7.5	1036.5	86.4	86.4	1.5
7-14	1039.0	1033.7	84.6	87.6	0.0	1043.3	67.8	66.6	4.3	1042.5	69.0	67.2	3.5	1036.5	86.4	86.4	0.0
7-15	1034.0	1033.7	84.6	87.6	0.0	1043.3	67.8	66.6	9.3	1042.5	69.0	67.2	8.5	1036.5	86.4	86.4	2.5
7-16	1028.0	1033.7	84.6	87.6	5.7	1043.3	67.8	66.6	15.3	1042.5	69.0	67.2	14.5	1036.5	86.4	86.4	8.5
7-17	1036.0	1031.9	85.2	89.4	0.0	1042.4	67.8	67.8	6.4	1041.6	69.0	68.4	5.5	1035.4	86.4	87.6	0.0
7-18	1024.0	1031.9	85.2	89.4	7.9	1042.4	67.8	67.8	18.4	1041.6	69.0	68.4	17.6	1035.4	86.4	87.6	11.4
7-19	1025.0	1031.9	85.2	89.4	6.9	1042.4	67.8	67.8	17.4	1041.6	69.0	68.4	16.6	1035.4	86.4	87.6	10.4
7-20	1028.0	1031.9	85.2	89.4	3.9	1042.4	67.8	67.8	14.4	1041.6	69.0	68.4	13.6	1035.4	86.4	87.6	7.4
7-21	1034.0	1031.9	85.2	89.4	0.0	1042.4	67.8	67.8	8.4	1041.6	69.0	68.4	7.5	1035.4	86.4	87.6	1.4
7-22	1034.0	1031.9	85.2	89.4	0.0	1042.4	67.8	67.8	8.4	1041.6	69.0	68.4	7.5	1035.4	86.4	87.6	1.4
7-23	1034.0	1031.9	85.2	89.4	0.0	1042.4	67.8	67.8	8.4	1041.6	69.0	68.4	7.5	1035.4	86.4	87.6	1.4
7-24	1032.0	1031.9	85.2	89.4	0.0	1042.4	67.8	67.8	10.4	1041.6	69.0	68.4	9.5	1035.4	86.4	87.6	3.4
7-25	1037.0	1031.9	85.2	89.4	0.0	1042.4	67.8	67.8	5.4	1041.6	69.0	68.4	4.5	1035.4	86.4	87.6	0.0
7-26	1039.0	1031.9	85.2	89.4	0.0	1042.4	67.8	67.8	3.4	1041.6	69.0	68.4	2.5	1035.4	86.4	87.6	0.0
7-27	1035.0	1031.9	85.2	89.4	0.0	1042.4	67.8	67.8	7.4	1041.6	69.0	68.4	6.5	1035.4	86.4	87.6	0.4
7-28	1024.0	1031.5	85.8	90.0	7.5	1042.1	68.4	68.4	18.1	1041.3	69.6	69.0	17.3	1035.1	87.0	88.2	11.1
7-29	1029.0	1031.5	85.8	90.0	2.5	1042.1	68.4	68.4	13.1	1041.3	69.6	69.0	12.3	1035.1	87.0	88.2	6.1
7-30	1021.0	1031.5	85.8	90.0	10.5	1042.1	68.4	68.4	21.1	1041.3	69.6	69.0	20.3	1035.1	87.0	88.2	14.1
7-31	1024.0	1031.5	85.8	90.0	7.5	1042.1	68.4	68.4	18.1	1041.3	69.6	69.0	17.3	1035.1	87.0	88.2	11.1
7-32	1035.0	1031.5	85.8	90.0	0.0	1042.1	68.4	68.4	7.1	1041.3	69.6	69.0	6.3	1035.1	87.0	88.2	0.1

Summary Table of Occupied Structures (Part 2)																	
Structure Number / Elevation		**Inundation Information**															
		Sunny Day				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Building No.	Structure Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)
7-33	1022.0	1031.0	86.4	90.6	9.0	1041.7	69.0	69.0	19.7	1040.9	70.2	69.6	18.9	1034.8	87.6	88.8	12.8
7-34	1021.0	1030.6	87.0	91.8	9.6	1041.5	69.0	69.6	20.5	1040.6	70.2	70.2	19.6	1034.5	88.2	90.0	13.5
7-35	1022.0	1030.4	87.6	92.4	8.4	1041.3	69.6	70.2	19.3	1040.5	70.8	70.8	18.5	1034.4	88.8	91.2	12.4
7-36	1022.0	1030.4	87.6	92.4	8.4	1041.3	69.6	70.2	19.3	1040.5	70.8	70.8	18.5	1034.4	88.8	91.2	12.4
7-37	1021.0	1029.8	90.0	95.4	8.8	1040.3	71.4	72.0	19.3	1039.5	72.0	72.6	18.5	1033.8	90.6	93.0	12.8
7-38	1019.0	1029.5	90.6	96.0	10.5	1039.9	71.4	72.0	20.9	1039.1	72.6	73.2	20.1	1033.5	91.2	94.2	14.5
7-39	1021.0	1029.5	90.6	96.0	8.5	1039.9	71.4	72.0	18.9	1039.1	72.6	73.2	18.1	1033.5	91.2	94.2	12.5
7-40	1022.0	1029.2	91.2	97.2	7.2	1039.4	72.0	72.6	17.4	1038.6	73.2	73.2	16.6	1033.2	91.8	94.8	11.2
7-41	1032.0	1029.2	91.2	97.2	0.0	1039.4	72.0	72.6	7.4	1038.6	73.2	73.2	6.6	1033.2	91.8	94.8	1.2
7-42	1020.0	1029.2	91.2	97.2	9.2	1039.4	72.0	72.6	19.4	1038.6	73.2	73.2	18.6	1033.2	91.8	94.8	13.2
7-43	1023.0	1028.8	91.8	98.4	5.8	1038.8	72.0	73.2	15.8	1038.0	73.2	74.4	15.0	1032.9	92.4	96.0	9.8
7-44	1019.0	1028.8	91.8	98.4	9.8	1038.8	72.0	73.2	19.8	1038.0	73.2	74.4	19.0	1032.9	92.4	96.0	13.8
7-45	1019.0	1028.8	91.8	98.4	9.8	1038.8	72.0	73.2	19.8	1038.0	73.2	74.4	19.0	1032.9	92.4	96.0	13.8
7-46	1024.0	1028.8	91.8	98.4	4.8	1038.8	72.0	73.2	14.8	1038.0	73.2	74.4	14.0	1032.9	92.4	96.0	8.8
7-47	1022.0	1028.8	91.8	98.4	6.8	1038.8	72.0	73.2	16.8	1038.0	73.2	74.4	16.0	1032.9	92.4	96.0	10.8
7-48	1021.0	1028.8	91.8	98.4	7.8	1038.8	72.0	73.2	17.8	1038.0	73.2	74.4	17.0	1032.9	92.4	96.0	11.8
7-49	1023.0	1028.8	91.8	98.4	5.8	1038.8	72.0	73.2	15.8	1038.0	73.2	74.4	15.0	1032.9	92.4	96.0	9.8
7-50	1015.0	1028.5	93.0	100.2	13.5	1038.0	72.6	74.4	23.0	1037.2	73.8	75.6	22.2	1032.4	93.6	97.8	17.4
7-51	1016.0	1028.5	93.0	100.2	12.5	1038.0	72.6	74.4	22.0	1037.2	73.8	75.6	21.2	1032.4	93.6	97.8	16.4
7-52	1015.0	1028.5	93.0	100.2	13.5	1038.0	72.6	74.4	23.0	1037.2	73.8	75.6	22.2	1032.4	93.6	97.8	17.4
7-53	1014.0	1028.5	93.0	100.2	14.5	1038.0	72.6	74.4	24.0	1037.2	73.8	75.6	23.2	1032.4	93.6	97.8	18.4
7-54	1019.0	1028.0	93.6	102.0	9.0	1037.2	73.2	75.6	18.2	1036.4	74.4	76.2	17.4	1032.0	94.2	99.0	13.0
7-55	1028.0	1028.0	93.6	102.0	0.0	1037.2	73.2	75.6	9.2	1036.4	74.4	76.2	8.4	1032.0	94.2	99.0	4.0
7-56	1027.0	1028.0	93.6	102.0	1.0	1037.2	73.2	75.6	10.2	1036.4	74.4	76.2	9.4	1032.0	94.2	99.0	5.0
7-57	1029.0	1028.0	93.6	102.0	0.0	1037.2	73.2	75.6	8.2	1036.4	74.4	76.2	7.4	1032.0	94.2	99.0	3.0
7-58	1012.0	1028.0	93.6	102.0	16.0	1037.2	73.2	75.6	25.2	1036.4	74.4	76.2	24.4	1032.0	94.2	99.0	20.0
7-59	1035.0	1028.0	93.6	102.0	0.0	1037.2	73.2	75.6	2.2	1036.4	74.4	76.2	1.4	1032.0	94.2	99.0	0.0
7-60	1020.0	1027.5	94.8	104.4	7.5	1036.0	73.8	76.8	16.0	1035.3	75.0	77.4	15.3	1031.5	95.4	100.8	11.5
7-61	1016.0	1027.5	94.8	104.4	11.5	1036.0	73.8	76.8	20.0	1035.3	75.0	77.4	19.3	1031.5	95.4	100.8	15.5
7-62	1015.0	1027.5	94.8	104.4	12.5	1036.0	73.8	76.8	21.0	1035.3	75.0	77.4	20.3	1031.5	95.4	100.8	16.5
7-63	1016.0	1027.5	94.8	104.4	11.5	1036.0	73.8	76.8	20.0	1035.3	75.0	77.4	19.3	1031.5	95.4	100.8	15.5
7-64	1010.0	1027.0	96.0	106.2	17.0	1034.3	74.4	77.4	24.3	1033.7	75.6	78.6	23.7	1030.9	96.0	102.6	20.9
7-65	1009.0	1027.0	96.0	106.2	18.0	1034.3	74.4	77.4	25.3	1033.7	75.6	78.6	24.7	1030.9	96.0	102.6	21.9
8-1	1024.0	1025.1	96.6	106.8	1.1	1030.8	75.0	78.0	6.8	1029.9	76.2	78.6	5.9	1024.9	96.6	103.2	0.9
8-2	1028.0	1025.1	96.6	106.8	0.0	1030.8	75.0	78.0	2.8	1029.9	76.2	78.6	1.9	1024.9	96.6	103.2	0.0
8-3	1011.0	1025.1	96.6	106.8	14.1	1030.8	75.0	78.0	19.8	1029.9	76.2	78.6	18.9	1024.9	96.6	103.2	13.9
8-4	1019.0	1025.1	96.6	106.8	6.1	1030.8	75.0	78.0	11.8	1029.9	76.2	78.6	10.9	1024.9	96.6	103.2	5.9
8-5	1019.0	1025.1	96.6	106.8	6.1	1030.8	75.0	78.0	11.8	1029.9	76.2	78.6	10.9	1024.9	96.6	103.2	5.9
8-6	1017.0	1025.1	96.6	106.8	8.1	1030.8	75.0	78.0	13.8	1029.9	76.2	78.6	12.9	1024.9	96.6	103.2	7.9
8-7	1022.0	1025.0	97.2	108.0	3.0	1030.3	75.0	78.6	8.3	1029.4	76.2	79.2	7.4	1024.5	97.2	103.8	2.5
8-8	1022.0	1025.0	97.2	108.0	3.0	1030.3	75.0	78.6	8.3	1029.4	76.2	79.2	7.4	1024.5	97.2	103.8	2.5
8-9	1022.0	1025.0	97.2	108.0	3.0	1030.3	75.0	78.6	8.3	1029.4	76.2	79.2	7.4	1024.5	97.2	103.8	2.5
8-10	1023.0	1024.9	97.8	109.2	1.9	1030.0	75.6	79.2	7.0	1029.1	76.8	79.8	6.1	1024.3	97.2	104.4	1.3
8-11	1028.0	1024.9	97.8	109.2	0.0	1030.0	75.6	79.2	2.0	1029.1	76.8	79.8	1.1	1024.3	97.2	104.4	0.0
8-12	1022.0	1024.9	97.8	109.2	2.9	1030.0	75.6	79.2	8.0	1029.1	76.8	79.8	7.1	1024.3	97.2	104.4	2.3
8-13	1018.0	1024.9	97.8	109.2	6.9	1030.0	75.6	79.2	12.0	1029.1	76.8	79.8	11.1	1024.3	97.2	104.4	6.3

Summary Table of Occupied Structures (Part 2)																	
Structure Number / Elevation		**Inundation Information**															
		Sunny Day				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Building No.	Structure Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)
8-14	1014.0	1024.8	99.0	109.8	10.8	1029.7	75.6	79.2	15.7	1028.7	76.8	80.4	14.7	1024.0	97.8	105.0	10.0
8-15	1019.0	1024.7	99.6	111.0	5.7	1029.3	76.2	79.8	10.3	1028.3	77.4	80.4	9.3	1023.7	98.4	105.6	4.7
8-16	1008.0	1024.7	99.6	111.0	16.7	1029.3	76.2	79.8	21.3	1028.3	77.4	80.4	20.3	1023.7	98.4	105.6	15.7
8-17	1012.0	1024.7	100.2	112.2	12.7	1028.9	76.2	79.8	16.9	1027.9	77.4	81.0	15.9	1023.4	98.4	106.2	11.4
8-18	1028.0	1024.7	100.2	112.2	0.0	1028.9	76.2	79.8	0.9	1027.9	77.4	81.0	0.0	1023.4	98.4	106.2	0.0
8-19	1010.0	1024.7	100.2	112.2	14.7	1028.9	76.2	79.8	18.9	1027.9	77.4	81.0	17.9	1023.4	98.4	106.2	13.4
8-20	1014.0	1016.1	100.8	112.8	2.1	1028.0	76.8	80.4	14.0	1026.9	78.0	81.6	12.9	1019.5	99.0	106.2	5.5
8-21	1011.0	1016.1	100.8	112.8	5.1	1028.0	76.8	80.4	17.0	1026.9	78.0	81.6	15.9	1019.5	99.0	106.2	8.5
8-22	1009.0	1016.1	100.8	112.8	7.1	1028.0	76.8	80.4	19.0	1026.9	78.0	81.6	17.9	1019.5	99.0	106.2	10.5
8-23	1017.0	1016.1	100.8	112.8	0.0	1028.0	76.8	80.4	11.0	1026.9	78.0	81.6	9.9	1019.5	99.0	106.2	2.5
8-24	1028.0	1016.1	100.8	112.8	0.0	1028.0	76.8	80.4	0.0	1026.9	78.0	81.6	0.0	1019.5	99.0	106.2	0.0
8-25	1025.0	1016.1	100.8	112.8	0.0	1028.0	76.8	80.4	3.0	1026.9	78.0	81.6	1.9	1019.5	99.0	106.2	0.0
8-26	1013.0	1015.4	101.4	113.4	2.4	1027.6	77.4	81.6	14.6	1026.5	78.6	82.2	13.5	1019.0	99.6	107.4	6.0
8-27	1019.0	1015.4	101.4	113.4	0.0	1027.6	77.4	81.6	8.6	1026.5	78.6	82.2	7.5	1019.0	99.6	107.4	0.0
8-28	1004.0	1015.4	101.4	113.4	11.4	1027.6	77.4	81.6	23.6	1026.5	78.6	82.2	22.5	1019.0	99.6	107.4	15.0
8-29	1005.0	1015.1	102.0	114.6	10.1	1027.4	77.4	82.2	22.4	1026.4	78.6	82.8	21.4	1018.8	100.2	108.6	13.8
8-30	1003.0	1015.1	102.0	114.6	12.1	1027.4	77.4	82.2	24.4	1026.4	78.6	82.8	23.4	1018.8	100.2	108.6	15.8
8-31	1005.0	1015.1	102.0	114.6	10.1	1027.4	77.4	82.2	22.4	1026.4	78.6	82.8	21.4	1018.8	100.2	108.6	13.8
8-32	1007.0	1014.5	102.0	115.2	7.5	1027.1	78.0	82.8	20.1	1026.0	79.2	84.0	19.0	1018.4	100.8	109.2	11.4
8-33	1008.0	1014.5	102.0	115.2	6.5	1027.1	78.0	82.8	19.1	1026.0	79.2	84.0	18.0	1018.4	100.8	109.2	10.4
8-34	1010.0	1014.5	102.0	115.2	4.5	1027.1	78.0	82.8	17.1	1026.0	79.2	84.0	16.0	1018.4	100.8	109.2	8.4
8-35	1016.0	1014.5	102.0	115.2	0.0	1027.1	78.0	82.8	11.1	1026.0	79.2	84.0	10.0	1018.4	100.8	109.2	2.4
8-36	1002.0	1014.5	102.0	115.2	12.5	1027.1	78.0	82.8	25.1	1026.0	79.2	84.0	24.0	1018.4	100.8	109.2	16.4
8-37	1005.0	1014.1	102.6	115.8	9.1	1026.8	78.6	83.4	21.8	1025.8	79.8	84.6	20.8	1018.1	101.4	110.4	13.1
8-38	1006.0	1014.1	102.6	115.8	8.1	1026.8	78.6	83.4	20.8	1025.8	79.8	84.6	19.8	1018.1	101.4	110.4	12.1
8-39	1001.0	1014.1	102.6	115.8	13.1	1026.8	78.6	83.4	25.8	1025.8	79.8	84.6	24.8	1018.1	101.4	110.4	17.1
8-40	1010.0	1014.1	102.6	115.8	4.1	1026.8	78.6	83.4	16.8	1025.8	79.8	84.6	15.8	1018.1	101.4	110.4	8.1
8-41	1007.0	1014.1	102.6	115.8	7.1	1026.8	78.6	83.4	19.8	1025.8	79.8	84.6	18.8	1018.1	101.4	110.4	11.1
8-42	1004.0	1014.1	102.6	115.8	10.1	1026.8	78.6	83.4	22.8	1025.8	79.8	84.6	21.8	1018.1	101.4	110.4	14.1
8-43	1004.0	1014.1	102.6	115.8	10.1	1026.8	78.6	83.4	22.8	1025.8	79.8	84.6	21.8	1018.1	101.4	110.4	14.1
8-44	1003.0	1014.1	102.6	115.8	11.1	1026.8	78.6	83.4	23.8	1025.8	79.8	84.6	22.8	1018.1	101.4	110.4	15.1
8-45	1012.0	1013.3	103.2	117.6	1.3	1026.4	78.6	85.2	14.4	1025.4	80.4	86.4	13.4	1017.6	102.0	112.2	5.6
8-46	1009.0	1013.3	103.2	117.6	4.3	1026.4	78.6	85.2	17.4	1025.4	80.4	86.4	16.4	1017.6	102.0	112.2	8.6
8-47	1006.0	1013.3	103.2	117.6	7.3	1026.4	78.6	85.2	20.4	1025.4	80.4	86.4	19.4	1017.6	102.0	112.2	11.6
8-48	1026.0	1013.3	103.2	117.6	0.0	1026.4	78.6	85.2	0.4	1025.4	80.4	86.4	0.0	1017.6	102.0	112.2	0.0
8-49	1004.0	1013.3	103.2	117.6	9.3	1026.4	78.6	85.2	22.4	1025.4	80.4	86.4	21.4	1017.6	102.0	112.2	13.6
8-50	1008.0	1013.3	103.2	117.6	5.3	1026.4	78.6	85.2	18.4	1025.4	80.4	86.4	17.4	1017.6	102.0	112.2	9.6
8-51	1006.0	1013.3	103.2	117.6	7.3	1026.4	78.6	85.2	20.4	1025.4	80.4	86.4	19.4	1017.6	102.0	112.2	11.6
8-52	1023.0	1013.3	103.2	117.6	0.0	1026.4	78.6	85.2	3.4	1025.4	80.4	86.4	2.4	1017.6	102.0	112.2	0.0
8-53	1004.0	1013.3	103.2	117.6	9.3	1026.4	78.6	85.2	22.4	1025.4	80.4	86.4	21.4	1017.6	102.0	112.2	13.6
8-54	1005.0	1013.3	103.2	117.6	8.3	1026.4	78.6	85.2	21.4	1025.4	80.4	86.4	20.4	1017.6	102.0	112.2	12.6
8-55	1000.0	1013.1	103.8	118.8	13.1	1026.2	79.2	85.8	26.2	1025.2	81.0	87.0	25.2	1017.4	102.6	113.4	17.4
8-56	999.5	1013.1	103.8	118.8	13.6	1026.2	79.2	85.8	26.7	1025.2	81.0	87.0	25.7	1017.4	102.6	113.4	17.9
8-57	1000.0	1012.8	105.0	121.2	12.8	1025.9	80.4	87.6	25.9	1024.9	81.6	88.8	24.9	1017.2	103.8	115.2	17.2
8-58	1025.0	1012.7	106.2	122.4	0.0	1025.7	81.0	88.2	0.7	1024.8	82.2	89.4	0.0	1017.0	104.4	116.4	0.0
8-59	1021.0	1012.7	106.2	122.4	0.0	1025.7	81.0	88.2	4.7	1024.8	82.2	89.4	3.8	1017.0	104.4	116.4	0.0

Summary Table of Occupied Structures (Part 2)																	
Structure Number / Elevation		**Inundation Information**															
		Sunny Day				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Building No.	Structure Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)
8-60	999.7	1012.7	106.2	122.4	13.0	1025.7	81.0	88.2	26.0	1024.8	82.2	89.4	25.1	1017.0	104.4	116.4	17.3
8-61	1019.0	1012.4	106.8	123.6	0.0	1025.4	81.6	89.4	6.4	1024.5	82.8	90.6	5.5	1016.8	105.0	117.6	0.0
8-62	1024.0	1012.4	106.8	123.6	0.0	1025.4	81.6	89.4	1.4	1024.5	82.8	90.6	0.5	1016.8	105.0	117.6	0.0
8-63	999.0	1012.4	106.8	123.6	13.4	1025.4	81.6	89.4	26.4	1024.5	82.8	90.6	25.5	1016.8	105.0	117.6	17.8
8-64	1017.0	1012.4	106.8	123.6	0.0	1025.4	81.6	89.4	8.4	1024.5	82.8	90.6	7.5	1016.8	105.0	117.6	0.0
8-65	1018.0	1012.4	106.8	123.6	0.0	1025.4	81.6	89.4	7.4	1024.5	82.8	90.6	6.5	1016.8	105.0	117.6	0.0
8-66	1018.0	1012.4	106.8	123.6	0.0	1025.4	81.6	89.4	7.4	1024.5	82.8	90.6	6.5	1016.8	105.0	117.6	0.0
8-67	1009.0	1012.4	106.8	123.6	3.4	1025.4	81.6	89.4	16.4	1024.5	82.8	90.6	15.5	1016.8	105.0	117.6	7.8
8-68	996.7	1012.4	106.8	123.6	15.7	1025.4	81.6	89.4	28.7	1024.5	82.8	90.6	27.8	1016.8	105.0	117.6	20.1
8-69	1017.0	1012.4	106.8	123.6	0.0	1025.4	81.6	89.4	8.4	1024.5	82.8	90.6	7.5	1016.8	105.0	117.6	0.0
8-70	1024.0	1011.8	107.4	124.8	0.0	1024.6	81.6	90.0	0.6	1023.7	83.4	91.2	0.0	1016.2	105.6	118.8	0.0
8-71	1016.0	1011.8	107.4	124.8	0.0	1024.6	81.6	90.0	8.6	1023.7	83.4	91.2	7.7	1016.2	105.6	118.8	0.2
8-72	1022.0	1011.8	107.4	124.8	0.0	1024.6	81.6	90.0	2.6	1023.7	83.4	91.2	1.7	1016.2	105.6	118.8	0.0
8-73	1009.0	1011.1	108.0	126.6	2.1	1023.8	82.2	91.2	14.8	1023.0	84.0	93.0	14.0	1015.5	106.2	120.6	6.5
8-74	1009.0	1010.9	108.6	127.8	1.9	1023.6	82.8	91.8	14.6	1022.8	84.0	93.0	13.8	1015.3	106.8	121.2	6.3
8-75	1021.0	1010.8	109.2	129.0	0.0	1023.4	83.4	92.4	2.4	1022.7	84.6	94.2	1.7	1015.2	107.4	122.4	0.0
9-1	999.8	1010.8	109.2	129.0	11.0	1023.4	83.4	92.4	23.6	1022.7	84.6	94.2	22.9	1015.2	107.4	122.4	15.4
9-2	1015.0	1010.3	109.8	130.2	0.0	1022.8	83.4	93.6	7.8	1022.1	84.6	94.8	7.1	1014.6	107.4	123.0	0.0
9-3	1012.0	1010.3	109.8	130.2	0.0	1022.8	83.4	93.6	10.8	1022.1	84.6	94.8	10.1	1014.6	107.4	123.0	2.6
9-4	1007.0	1010.3	109.8	130.2	3.3	1022.8	83.4	93.6	15.8	1022.1	84.6	94.8	15.1	1014.6	107.4	123.0	7.6
9-5	1008.0	1010.3	109.8	130.2	2.3	1022.8	83.4	93.6	14.8	1022.1	84.6	94.8	14.1	1014.6	107.4	123.0	6.6
9-6	1012.0	1010.3	109.8	130.2	0.0	1022.8	83.4	93.6	10.8	1022.1	84.6	94.8	10.1	1014.6	107.4	123.0	2.6
9-7	1018.0	1010.3	109.8	130.2	0.0	1022.8	83.4	93.6	4.8	1022.1	84.6	94.8	4.1	1014.6	107.4	123.0	0.0
9-8	1005.0	1010.3	109.8	130.2	5.3	1022.8	83.4	93.6	17.8	1022.1	84.6	94.8	17.1	1014.6	107.4	123.0	9.6
9-9	1012.0	1010.3	109.8	130.2	0.0	1022.8	83.4	93.6	10.8	1022.1	84.6	94.8	10.1	1014.6	107.4	123.0	2.6
9-10	1015.0	1010.3	109.8	130.2	0.0	1022.8	83.4	93.6	7.8	1022.1	84.6	94.8	7.1	1014.6	107.4	123.0	0.0
9-11	1014.0	1010.3	109.8	130.2	0.0	1022.8	83.4	93.6	8.8	1022.1	84.6	94.8	8.1	1014.6	107.4	123.0	0.6
9-12	995.7	1010.3	109.8	130.2	14.6	1022.8	83.4	93.6	27.1	1022.1	84.6	94.8	26.4	1014.6	107.4	123.0	18.9
9-13	1015.0	1010.3	109.8	130.2	0.0	1022.8	83.4	93.6	7.8	1022.1	84.6	94.8	7.1	1014.6	107.4	123.0	0.0
9-14	1016.0	1010.3	109.8	130.2	0.0	1022.8	83.4	93.6	6.8	1022.1	84.6	94.8	6.1	1014.6	107.4	123.0	0.0
9-15	1015.0	1010.3	109.8	130.2	0.0	1022.8	83.4	93.6	7.8	1022.1	84.6	94.8	7.1	1014.6	107.4	123.0	0.0
9-16	1014.0	1010.3	109.8	130.2	0.0	1022.8	83.4	93.6	8.8	1022.1	84.6	94.8	8.1	1014.6	107.4	123.0	0.6
9-17	998.0	1008.9	109.8	130.2	10.9	1022.1	83.4	93.6	24.1	1020.4	85.2	95.4	22.4	1013.4	108.0	123.6	15.4
9-18	1018.0	1008.9	109.8	130.2	0.0	1022.1	83.4	93.6	4.1	1020.4	85.2	95.4	2.4	1013.4	108.0	123.6	0.0
9-19	1015.0	1008.9	109.8	130.2	0.0	1022.1	83.4	93.6	7.1	1020.4	85.2	95.4	5.4	1013.4	108.0	123.6	0.0
9-20	1016.0	1008.9	109.8	130.2	0.0	1022.1	83.4	93.6	6.1	1020.4	85.2	95.4	4.4	1013.4	108.0	123.6	0.0
9-21	1018.0	1008.9	109.8	130.2	0.0	1022.1	83.4	93.6	4.1	1020.4	85.2	95.4	2.4	1013.4	108.0	123.6	0.0
9-22	1019.0	1008.9	109.8	130.2	0.0	1022.1	83.4	93.6	3.1	1020.4	85.2	95.4	1.4	1013.4	108.0	123.6	0.0
9-23	1017.0	1008.9	109.8	130.2	0.0	1022.1	83.4	93.6	5.1	1020.4	85.2	95.4	3.4	1013.4	108.0	123.6	0.0
9-24	1018.0	1008.9	109.8	130.2	0.0	1022.1	83.4	93.6	4.1	1020.4	85.2	95.4	2.4	1013.4	108.0	123.6	0.0
9-25	1020.0	1008.9	109.8	130.2	0.0	1022.1	83.4	93.6	2.1	1020.4	85.2	95.4	0.4	1013.4	108.0	123.6	0.0
9-26	1018.0	1008.9	109.8	130.2	0.0	1022.1	83.4	93.6	4.1	1020.4	85.2	95.4	2.4	1013.4	108.0	123.6	0.0
9-27	997.9	1008.5	110.4	131.4	10.6	1021.2	84.0	94.2	23.3	1019.9	85.2	96.0	22.0	1013.0	108.6	124.2	15.1
9-28	1016.0	1008.5	110.4	131.4	0.0	1021.2	84.0	94.2	5.2	1019.9	85.2	96.0	3.9	1013.0	108.6	124.2	0.0
9-29	1013.0	1008.5	110.4	131.4	0.0	1021.2	84.0	94.2	8.2	1019.9	85.2	96.0	6.9	1013.0	108.6	124.2	0.0
9-30	1021.0	1008.5	110.4	131.4	0.0	1021.2	84.0	94.2	0.2	1019.9	85.2	96.0	0.0	1013.0	108.6	124.2	0.0

Summary Table of Occupied Structures (Part 2)																	
Structure Number / Elevation		**Inundation Information**															
		Sunny Day				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Building No.	Structure Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)
9-31	1005.0	1008.5	110.4	131.4	3.5	1021.2	84.0	94.2	16.2	1019.9	85.2	96.0	14.9	1013.0	108.6	124.2	8.0
9-32	1002.0	1008.5	110.4	131.4	6.5	1021.2	84.0	94.2	19.2	1019.9	85.2	96.0	17.9	1013.0	108.6	124.2	11.0
9-33	1001.0	1008.5	110.4	131.4	7.5	1021.2	84.0	94.2	20.2	1019.9	85.2	96.0	18.9	1013.0	108.6	124.2	12.0
9-34	1014.0	1008.5	110.4	131.4	0.0	1021.2	84.0	94.2	7.2	1019.9	85.2	96.0	5.9	1013.0	108.6	124.2	0.0
9-35	997.3	1008.3	111.0	133.2	11.0	1021.2	84.0	95.4	23.9	1019.9	85.8	97.2	22.6	1012.8	108.6	126.0	15.5
9-36	996.8	1008.3	111.0	133.2	11.5	1021.2	84.0	95.4	24.4	1019.9	85.8	97.2	23.1	1012.8	108.6	126.0	16.0
9-37	996.6	1008.3	111.0	133.2	11.7	1021.2	84.0	95.4	24.6	1019.9	85.8	97.2	23.3	1012.8	108.6	126.0	16.2
9-38	995.6	1008.1	111.6	134.4	12.5	1021.1	84.6	96.6	25.5	1019.8	86.4	97.8	24.2	1012.7	109.2	127.2	17.1
9-39	996.6	1008.0	112.8	135.6	11.4	1021.0	85.2	97.2	24.4	1019.6	87.0	98.4	23.0	1012.6	110.4	127.8	16.0
9-40	1003.0	1008.0	113.4	136.8	5.0	1020.9	85.8	97.8	17.9	1019.5	87.6	99.6	16.5	1012.5	111.0	129.0	9.5
9-41	999.8	1008.0	113.4	136.8	8.2	1020.9	85.8	97.8	21.1	1019.5	87.6	99.6	19.7	1012.5	111.0	129.0	12.7
9-42	999.5	1008.0	113.4	136.8	8.5	1020.9	85.8	97.8	21.4	1019.5	87.6	99.6	20.0	1012.5	111.0	129.0	13.0
9-43	996.6	1007.3	114.6	141.0	10.7	1019.8	86.4	100.2	23.2	1018.5	87.6	102.0	21.9	1011.7	111.6	132.6	15.1
9-44	1009.0	1006.5	115.2	141.6	0.0	1017.7	86.4	100.8	8.6	1016.4	88.2	102.6	7.4	1010.5	112.2	133.2	1.5
9-45	1012.0	1006.5	115.2	141.6	0.0	1017.7	86.4	100.8	5.6	1016.4	88.2	102.6	4.4	1010.5	112.2	133.2	0.0
9-46	1003.0	1006.5	115.2	141.6	3.5	1017.7	86.4	100.8	14.7	1016.4	88.2	102.6	13.4	1010.5	112.2	133.2	7.5
9-47	1012.0	1006.5	115.2	141.6	0.0	1017.7	86.4	100.8	5.6	1016.4	88.2	102.6	4.4	1010.5	112.2	133.2	0.0
9-48	999.0	1006.5	115.2	141.6	7.5	1017.7	86.4	100.8	18.7	1016.4	88.2	102.6	17.4	1010.5	112.2	133.2	11.5
9-49	1011.0	998.4	115.2	142.2	0.0	1013.7	87.0	101.4	2.7	1012.4	88.8	103.2	1.4	1007.1	112.2	133.8	0.0
9-50	1007.0	998.5	115.8	142.8	0.0	1013.7	87.6	102.0	6.7	1012.4	88.8	103.8	5.4	1007.1	112.8	134.4	0.1
9-51	1013.0	998.5	115.8	142.8	0.0	1013.7	87.6	102.0	0.7	1012.4	88.8	103.8	0.0	1007.1	112.8	134.4	0.0
9-52	989.1	998.5	115.8	142.8	9.4	1013.7	87.6	102.0	24.6	1012.4	88.8	103.8	23.3	1007.1	112.8	134.4	18.0
9-53	988.7	998.5	115.8	142.8	9.8	1013.7	87.6	102.0	25.0	1012.4	88.8	103.8	23.7	1007.1	112.8	134.4	18.4
9-54	994.7	998.5	115.8	142.8	3.8	1013.7	87.6	102.0	19.0	1012.4	88.8	103.8	17.7	1007.1	112.8	134.4	12.4
9-55	999.1	998.5	115.8	142.8	0.0	1013.7	87.6	102.0	14.6	1012.4	88.8	103.8	13.3	1007.1	112.8	134.4	8.0
9-56	1002.0	998.5	115.8	142.8	0.0	1013.7	87.6	102.0	11.7	1012.4	88.8	103.8	10.4	1007.1	112.8	134.4	5.1
9-57	1007.0	998.5	115.8	142.8	0.0	1013.7	87.6	102.0	6.7	1012.4	88.8	103.8	5.4	1007.1	112.8	134.4	0.1
9-58	1010.0	998.5	115.8	142.8	0.0	1013.7	87.6	102.0	3.7	1012.4	88.8	103.8	2.4	1007.1	112.8	134.4	0.0
9-59	1010.0	998.0	116.4	144.0	0.0	1013.6	87.6	103.2	3.6	1012.3	89.4	105.0	2.3	1007.0	113.4	135.6	0.0
9-60	1003.0	998.0	116.4	144.0	0.0	1013.6	87.6	103.2	10.6	1012.3	89.4	105.0	9.3	1007.0	113.4	135.6	4.0
9-61	1013.0	998.0	116.4	144.0	0.0	1013.6	87.6	103.2	0.6	1012.3	89.4	105.0	0.0	1007.0	113.4	135.6	0.0
9-62	1012.0	998.0	116.4	144.0	0.0	1013.6	87.6	103.2	1.6	1012.3	89.4	105.0	0.3	1007.0	113.4	135.6	0.0
9-63	1013.0	998.0	116.4	144.0	0.0	1013.6	87.6	103.2	0.6	1012.3	89.4	105.0	0.0	1007.0	113.4	135.6	0.0
9-64	997.8	998.0	116.4	144.0	0.2	1013.6	87.6	103.2	15.8	1012.3	89.4	105.0	14.5	1007.0	113.4	135.6	9.2
9-65	1003.0	998.0	116.4	144.0	0.0	1013.6	87.6	103.2	10.6	1012.3	89.4	105.0	9.3	1007.0	113.4	135.6	4.0
9-66	998.7	998.0	116.4	144.0	0.0	1013.6	87.6	103.2	14.9	1012.3	89.4	105.0	13.6	1007.0	113.4	135.6	8.3
9-67	1002.0	998.0	116.4	144.0	0.0	1013.6	87.6	103.2	11.6	1012.3	89.4	105.0	10.3	1007.0	113.4	135.6	5.0
9-68	1002.0	998.0	116.4	144.0	0.0	1013.6	87.6	103.2	11.6	1012.3	89.4	105.0	10.3	1007.0	113.4	135.6	5.0
9-69	992.4	998.0	116.4	144.0	5.6	1013.6	87.6	103.2	21.2	1012.3	89.4	105.0	19.9	1007.0	113.4	135.6	14.6
9-70	990.0	998.0	116.4	144.0	8.0	1013.6	87.6	103.2	23.6	1012.3	89.4	105.0	22.3	1007.0	113.4	135.6	17.0
9-71	1004.0	998.0	116.4	144.0	0.0	1013.6	87.6	103.2	9.6	1012.3	89.4	105.0	8.3	1007.0	113.4	135.6	3.0
9-72	977.2	998.0	117.0	145.2	20.8	1013.7	88.2	104.4	36.5	1012.4	90.0	106.2	35.2	1007.0	114.0	137.4	29.8
9-73	990.6	998.0	117.0	145.2	7.4	1013.7	88.2	104.4	23.1	1012.4	90.0	106.2	21.8	1007.0	114.0	137.4	16.4
9-74	998.4	998.0	117.0	145.2	0.0	1013.7	88.2	104.4	15.3	1012.4	90.0	106.2	14.0	1007.0	114.0	137.4	8.6
9-75	991.1	997.9	117.6	146.4	6.8	1013.6	89.4	105.0	22.5	1012.3	90.6	106.8	21.2	1007.0	115.2	138.6	15.9
9-76	992.1	997.9	117.6	146.4	5.8	1013.6	89.4	105.0	21.5	1012.3	90.6	106.8	20.2	1007.0	115.2	138.6	14.9

Summary Table of Occupied Structures (Part 2)																	
Structure Number / Elevation		**Inundation Information**															
		Sunny Day				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Building No.	Structure Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)
9-77	990.9	997.6	118.2	147.6	6.7	1013.5	90.0	106.2	22.6	1012.2	91.8	108.0	21.3	1006.9	116.4	139.8	16.0
9-78	1008.0	995.5	119.4	149.4	0.0	1013.3	92.4	109.2	5.3	1012.0	94.2	111.0	4.0	1006.4	118.8	143.4	0.0
9-79	1000.0	995.5	119.4	149.4	0.0	1013.3	92.4	109.2	13.3	1012.0	94.2	111.0	12.0	1006.4	118.8	143.4	6.4
9-80	1001.0	995.5	119.4	149.4	0.0	1013.3	92.4	109.2	12.3	1012.0	94.2	111.0	11.0	1006.4	118.8	143.4	5.4
9-81	981.8	995.5	119.4	149.4	13.7	1013.3	92.4	109.2	31.5	1012.0	94.2	111.0	30.2	1006.4	118.8	143.4	24.6
9-82	999.3	995.8	120.6	150.6	0.0	1013.2	94.2	112.8	13.9	1011.9	96.0	114.6	12.6	1006.4	121.8	148.2	7.1
9-83	990.6	995.7	123.6	154.2	5.1	1013.2	97.2	115.8	22.6	1011.9	99.0	118.2	21.3	1006.4	125.4	152.4	15.8
9-84	1007.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	6.2	1011.9	100.8	120.0	4.9	1006.4	127.2	154.8	0.0
9-85	1005.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	8.2	1011.9	100.8	120.0	6.9	1006.4	127.2	154.8	1.4
9-86	1007.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	6.2	1011.9	100.8	120.0	4.9	1006.4	127.2	154.8	0.0
9-87	1004.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	9.2	1011.9	100.8	120.0	7.9	1006.4	127.2	154.8	2.4
9-88	989.8	995.7	124.8	156.0	5.9	1013.2	98.4	117.6	23.4	1011.9	100.8	120.0	22.1	1006.4	127.2	154.8	16.6
9-89	1007.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	6.2	1011.9	100.8	120.0	4.9	1006.4	127.2	154.8	0.0
9-90	1011.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	2.2	1011.9	100.8	120.0	0.9	1006.4	127.2	154.8	0.0
9-91	994.4	995.6	126.0	158.4	1.2	1013.2	100.2	121.2	18.8	1011.9	102.0	123.0	17.5	1006.3	129.0	159.0	11.9
10-3	1005.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	8.2	1011.9	102.0	123.0	6.9	1006.3	129.0	159.0	1.3
10-4	1005.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	8.2	1011.9	102.0	123.0	6.9	1006.3	129.0	159.0	1.3
10-5	1010.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	3.2	1011.9	102.0	123.0	1.9	1006.3	129.0	159.0	0.0
10-6	1011.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	2.2	1011.9	102.0	123.0	0.9	1006.3	129.0	159.0	0.0
10-7	1011.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	2.2	1011.9	102.0	123.0	0.9	1006.3	129.0	159.0	0.0
10-8	1008.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	5.2	1011.9	102.0	123.0	3.9	1006.3	129.0	159.0	0.0
10-9	1008.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	5.2	1011.9	102.0	123.0	3.9	1006.3	129.0	159.0	0.0
10-10	1007.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	6.2	1011.9	102.0	123.0	4.9	1006.3	129.0	159.0	0.0
10-11	1011.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	2.2	1011.9	102.0	123.0	0.9	1006.3	129.0	159.0	0.0
10-12	1009.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	4.2	1011.9	102.0	123.0	2.9	1006.3	129.0	159.0	0.0
10-13	1005.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	8.2	1011.9	102.0	123.0	6.9	1006.3	129.0	159.0	1.3
10-14	1005.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	8.2	1011.9	102.0	123.0	6.9	1006.3	129.0	159.0	1.3
10-15	1004.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	9.2	1011.9	102.0	123.0	7.9	1006.3	129.0	159.0	2.3
10-16	1008.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	5.2	1011.9	100.8	120.0	3.9	1006.4	127.2	154.8	0.0
10-17	1008.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	5.2	1011.9	100.8	120.0	3.9	1006.4	127.2	154.8	0.0
10-18	998.2	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	15.0	1011.9	100.8	120.0	13.7	1006.4	127.2	154.8	8.1
10-19	1007.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	6.2	1011.9	102.0	123.0	4.9	1006.3	129.0	159.0	0.0
10-20	999.4	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	13.8	1011.9	102.0	123.0	12.5	1006.3	129.0	159.0	6.9
10-21	1013.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	0.2	1011.9	102.0	123.0	0.0	1006.3	129.0	159.0	0.0
10-22	1008.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	5.2	1011.9	102.0	123.0	3.9	1006.3	129.0	159.0	0.0
10-23	1003.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	10.2	1011.9	102.0	123.0	8.9	1006.3	129.0	159.0	3.3
10-24	1011.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	2.2	1011.9	102.0	123.0	0.9	1006.3	129.0	159.0	0.0
10-25	994.4	995.6	126.0	158.4	1.2	1013.2	100.2	121.2	18.8	1011.9	102.0	123.0	17.5	1006.3	129.0	159.0	11.9
10-26	1010.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	3.2	1011.9	102.0	123.0	1.9	1006.3	129.0	159.0	0.0
10-27	995.8	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	17.4	1011.9	102.0	123.0	16.1	1006.3	129.0	159.0	10.5
10-28	1011.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	2.2	1011.9	102.0	123.0	0.9	1006.3	129.0	159.0	0.0
10-29	1007.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	6.2	1011.9	102.0	123.0	4.9	1006.3	129.0	159.0	0.0
10-30	1004.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	9.2	1011.9	102.0	123.0	7.9	1006.3	129.0	159.0	2.3
10-31	995.2	995.6	126.0	158.4	0.4	1013.2	100.2	121.2	18.0	1011.9	102.0	123.0	16.7	1006.3	129.0	159.0	11.1
10-32	1004.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	9.2	1011.9	102.0	123.0	7.9	1006.3	129.0	159.0	2.3
10-33	993.8	995.6	126.0	158.4	1.8	1013.2	100.2	121.2	19.4	1011.9	102.0	123.0	18.1	1006.3	129.0	159.0	12.5

Summary Table of Occupied Structures (Part 2)

Structure Number / Elevation		Inundation Information															
		Sunny Day				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Building No.	Structure Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)
10-34	999.3	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	13.9	1011.9	102.0	123.0	12.6	1006.3	129.0	159.0	7.0
10-35	1006.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	7.2	1011.9	102.0	123.0	5.9	1006.3	129.0	159.0	0.3
10-36	1006.0	995.5	128.4	160.8	0.0	1013.1	102.6	123.6	7.1	1011.8	104.4	126.0	5.8	1006.3	132.0	162.0	0.3
10-37	1004.0	995.5	128.4	160.8	0.0	1013.1	102.6	123.6	9.1	1011.8	104.4	126.0	7.8	1006.3	132.0	162.0	2.3
10-38	1013.0	995.5	128.4	160.8	0.0	1013.1	102.6	123.6	0.1	1011.8	104.4	126.0	0.0	1006.3	132.0	162.0	0.0
10-39	1011.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	2.2	1011.9	102.0	123.0	0.9	1006.3	129.0	159.0	0.0
10-40	1010.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	3.2	1011.9	102.0	123.0	1.9	1006.3	129.0	159.0	0.0
10-41	994.9	995.5	128.4	160.8	0.6	1013.1	102.6	123.6	18.2	1011.8	104.4	126.0	16.9	1006.3	132.0	162.0	11.4
10-42	988.7	989.6	130.2	165.0	0.9	1012.6	105.6	129.6	23.9	1011.3	107.4	132.0	22.6	1005.7	135.0	168.6	17.0
10-43	1009.0	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	4.2	1011.9	102.0	123.0	2.9	1006.3	129.0	159.0	0.0
10-44	1001.0	990.0	129.0	163.8	0.0	1012.7	104.4	127.8	11.7	1011.3	106.2	130.2	10.3	1005.7	133.8	166.2	4.7
10-45	1005.0	989.1	129.0	163.2	0.0	1013.0	103.8	126.0	8.0	1011.7	105.6	128.4	6.7	1006.1	132.6	164.4	1.1
10-46	998.0	989.1	129.0	163.2	0.0	1013.0	103.8	126.0	15.0	1011.7	105.6	128.4	13.7	1006.1	132.6	164.4	8.1
10-47	997.0	989.1	129.0	163.2	0.0	1013.0	103.8	126.0	16.0	1011.7	105.6	128.4	14.7	1006.1	132.6	164.4	9.1
10-48	986.9	989.1	129.0	163.2	2.2	1013.0	103.8	126.0	26.1	1011.7	105.6	128.4	24.8	1006.1	132.6	164.4	19.2
10-49	1007.0	989.1	129.0	163.2	0.0	1013.0	103.8	126.0	6.0	1011.7	105.6	128.4	4.7	1006.1	132.6	164.4	0.0
10-50	984.6	989.1	129.0	163.2	4.5	1013.0	103.8	126.0	28.4	1011.7	105.6	128.4	27.1	1006.1	132.6	164.4	21.5
10-51	1006.0	989.1	129.0	163.2	0.0	1013.0	103.8	126.0	7.0	1011.7	105.6	128.4	5.7	1006.1	132.6	164.4	0.1
10-52	1003.0	989.6	130.2	165.0	0.0	1012.6	105.6	129.6	9.6	1011.3	107.4	132.0	8.3	1005.7	135.0	168.6	2.7
10-53	981.6	989.1	129.0	163.2	7.5	1013.0	103.8	126.0	31.4	1011.7	105.6	128.4	30.1	1006.1	132.6	164.4	24.5
10-54	1002.0	995.0	128.4	162.6	0.0	1013.0	103.2	125.4	11.0	1011.7	105.0	127.8	9.7	1006.1	132.0	163.8	4.1
10-55	1003.0	989.1	129.0	163.2	0.0	1013.0	103.8	126.0	10.0	1011.7	105.6	128.4	8.7	1006.1	132.6	164.4	3.1
10-56	992.4	989.6	130.2	165.0	0.0	1012.6	105.6	129.6	20.2	1011.3	107.4	132.0	18.9	1005.7	135.0	168.6	13.3
10-57	976.3	989.6	130.2	165.0	13.3	1012.6	105.6	129.6	36.3	1011.3	107.4	132.0	35.0	1005.7	135.0	168.6	29.4
10-58	999.8	989.3	129.6	164.4	0.0	1012.5	105.0	128.4	12.7	1011.2	106.8	130.8	11.4	1005.6	133.8	167.4	5.8
10-59	996.1	989.1	129.0	163.2	0.0	1013.0	103.8	126.0	16.9	1011.7	105.6	128.4	15.6	1006.1	132.6	164.4	10.0
10-60	996.6	995.6	126.0	158.4	0.0	1013.2	100.2	121.2	16.6	1011.9	102.0	123.0	15.3	1006.3	129.0	159.0	9.7
10-61	1005.0	989.6	130.2	165.0	0.0	1012.6	105.6	129.6	7.6	1011.3	107.4	132.0	6.3	1005.7	135.0	168.6	0.7
10-62	991.8	989.3	129.6	164.4	0.0	1012.5	105.0	128.4	20.7	1011.2	106.8	130.8	19.4	1005.6	133.8	167.4	13.8
10-63	1012.0	989.1	129.0	163.2	0.0	1013.0	103.8	126.0	1.0	1011.7	105.6	128.4	0.0	1006.1	132.6	164.4	0.0
10-64	995.8	989.1	129.0	163.2	0.0	1013.0	103.8	126.0	17.2	1011.7	105.6	128.4	15.9	1006.1	132.6	164.4	10.3
10-65	997.8	995.5	127.2	159.6	0.0	1013.1	101.4	122.4	15.3	1011.8	103.2	124.8	14.0	1006.3	130.2	160.8	8.5
10-66	973.5	990.0	129.0	163.8	16.5	1012.7	104.4	127.8	39.2	1011.3	106.2	130.2	37.8	1005.7	133.8	166.2	32.2
10-67	992.0	989.1	129.0	163.2	0.0	1013.0	103.8	126.0	21.0	1011.7	105.6	128.4	19.7	1006.1	132.6	164.4	14.1
10-68	997.8	990.0	129.0	163.8	0.0	1012.7	104.4	127.8	14.9	1011.3	106.2	130.2	13.5	1005.7	133.8	166.2	7.9
10-69	991.0	989.1	129.0	163.2	0.0	1013.0	103.8	126.0	22.0	1011.7	105.6	128.4	20.7	1006.1	132.6	164.4	15.1
10-70	997.5	989.1	129.0	163.2	0.0	1013.0	103.8	126.0	15.5	1011.7	105.6	128.4	14.2	1006.1	132.6	164.4	8.6
10-71	990.8	995.6	126.0	158.4	4.8	1013.2	100.2	121.2	22.4	1011.9	102.0	123.0	21.1	1006.3	129.0	159.0	15.5
10-72	986.1	995.5	127.2	159.6	9.4	1013.1	101.4	122.4	27.0	1011.8	103.2	124.8	25.7	1006.3	130.2	160.8	20.2
10-73	993.6	989.1	129.0	163.2	0.0	1013.0	103.8	126.0	19.4	1011.7	105.6	128.4	18.1	1006.1	132.6	164.4	12.5
11-1	992.4	995.7	124.8	156.0	3.3	1013.2	98.4	117.6	20.8	1011.9	100.8	120.0	19.5	1006.4	127.2	154.8	14.0
11-2	996.7	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	16.5	1011.9	100.8	120.0	15.2	1006.4	127.2	154.8	9.6
11-3	1010.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	3.2	1011.9	100.8	120.0	1.9	1006.4	127.2	154.8	0.0
11-4	1000.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	13.2	1011.9	100.8	120.0	11.9	1006.4	127.2	154.8	6.4
11-5	993.9	995.7	124.8	156.0	1.8	1013.2	98.4	117.6	19.3	1011.9	100.8	120.0	18.0	1006.4	127.2	154.8	12.5
11-6	994.0	995.7	124.8	156.0	1.7	1013.2	98.4	117.6	19.2	1011.9	100.8	120.0	17.9	1006.4	127.2	154.8	12.4

Summary Table of Occupied Structures (Part 2)																	
Structure Number / Elevation		**Inundation Information**															
		Sunny Day				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Building No.	Structure Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)
11-7	995.8	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	17.4	1011.9	100.8	120.0	16.1	1006.4	127.2	154.8	10.6
11-8	997.1	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	16.1	1011.9	100.8	120.0	14.8	1006.4	127.2	154.8	9.3
11-9	1001.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	12.2	1011.9	100.8	120.0	10.9	1006.4	127.2	154.8	5.4
11-10	1006.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	7.2	1011.9	100.8	120.0	5.9	1006.4	127.2	154.8	0.4
11-11	992.5	995.7	124.8	156.0	3.2	1013.2	98.4	117.6	20.7	1011.9	100.8	120.0	19.4	1006.4	127.2	154.8	13.9
11-12	994.8	995.7	124.8	156.0	0.9	1013.2	98.4	117.6	18.4	1011.9	100.8	120.0	17.1	1006.4	127.2	154.8	11.6
11-13	998.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	15.2	1011.9	100.8	120.0	13.9	1006.4	127.2	154.8	8.4
11-14	994.6	995.7	124.8	156.0	1.1	1013.2	98.4	117.6	18.6	1011.9	100.8	120.0	17.3	1006.4	127.2	154.8	11.8
11-15	1010.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	3.2	1011.9	100.8	120.0	1.9	1006.4	127.2	154.8	0.0
11-16	1012.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	1.2	1011.9	100.8	120.0	0.0	1006.4	127.2	154.8	0.0
11-17	1008.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	5.2	1011.9	100.8	120.0	3.9	1006.4	127.2	154.8	0.0
11-18	1003.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	10.2	1011.9	100.8	120.0	8.9	1006.4	127.2	154.8	3.4
11-19	1001.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	12.2	1011.9	100.8	120.0	10.9	1006.4	127.2	154.8	5.4
11-20	1006.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	7.2	1011.9	100.8	120.0	5.9	1006.4	127.2	154.8	0.4
11-21	1002.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	11.2	1011.9	100.8	120.0	9.9	1006.4	127.2	154.8	4.4
11-22	1002.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	11.2	1011.9	100.8	120.0	9.9	1006.4	127.2	154.8	4.4
11-23	992.5	995.7	124.8	156.0	3.2	1013.2	98.4	117.6	20.7	1011.9	100.8	120.0	19.4	1006.4	127.2	154.8	13.9
11-24	1007.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	6.2	1011.9	100.8	120.0	4.9	1006.4	127.2	154.8	0.0
11-25	1009.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	4.2	1011.9	100.8	120.0	2.9	1006.4	127.2	154.8	0.0
11-26	1002.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	11.2	1011.9	100.8	120.0	9.9	1006.4	127.2	154.8	4.4
11-27	1002.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	11.2	1011.9	100.8	120.0	9.9	1006.4	127.2	154.8	4.4
11-28	1004.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	9.2	1011.9	100.8	120.0	7.9	1006.4	127.2	154.8	2.4
11-29	996.8	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	16.4	1011.9	100.8	120.0	15.1	1006.4	127.2	154.8	9.6
11-30	998.8	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	14.4	1011.9	100.8	120.0	13.1	1006.4	127.2	154.8	7.6
11-31	996.5	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	16.7	1011.9	100.8	120.0	15.4	1006.4	127.2	154.8	9.9
11-32	1001.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	12.2	1011.9	100.8	120.0	10.9	1006.4	127.2	154.8	5.4
11-33	1011.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	2.2	1011.9	100.8	120.0	0.9	1006.4	127.2	154.8	0.0
11-34	1008.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	5.2	1011.9	100.8	120.0	3.9	1006.4	127.2	154.8	0.0
11-35	1009.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	4.2	1011.9	100.8	120.0	2.9	1006.4	127.2	154.8	0.0
11-36	1009.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	4.2	1011.9	100.8	120.0	2.9	1006.4	127.2	154.8	0.0
11-37	1004.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	9.2	1011.9	100.8	120.0	7.9	1006.4	127.2	154.8	2.4
11-38	1003.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	10.2	1011.9	100.8	120.0	8.9	1006.4	127.2	154.8	3.4
11-39	1004.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	9.2	1011.9	100.8	120.0	7.9	1006.4	127.2	154.8	2.4
11-40	1003.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	10.2	1011.9	100.8	120.0	8.9	1006.4	127.2	154.8	3.4
11-41	1008.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	5.2	1011.9	100.8	120.0	3.9	1006.4	127.2	154.8	0.0
11-42	1013.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	0.2	1011.9	100.8	120.0	0.0	1006.4	127.2	154.8	0.0
11-43	1012.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	1.2	1011.9	100.8	120.0	0.0	1006.4	127.2	154.8	0.0
11-44	1011.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	2.2	1011.9	100.8	120.0	0.9	1006.4	127.2	154.8	0.0
11-45	1007.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	6.2	1011.9	100.8	120.0	4.9	1006.4	127.2	154.8	0.0
11-46	1001.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	12.2	1011.9	100.8	120.0	10.9	1006.4	127.2	154.8	5.4
11-47	1011.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	2.2	1011.9	100.8	120.0	0.9	1006.4	127.2	154.8	0.0
11-48	995.6	995.7	124.8	156.0	0.1	1013.2	98.4	117.6	17.6	1011.9	100.8	120.0	16.3	1006.4	127.2	154.8	10.8
11-49	999.8	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	13.4	1011.9	100.8	120.0	12.1	1006.4	127.2	154.8	6.6
11-50	1005.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	8.2	1011.9	100.8	120.0	6.9	1006.4	127.2	154.8	1.4
11-51	1012.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	1.2	1011.9	100.8	120.0	0.0	1006.4	127.2	154.8	0.0
11-52	1006.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	7.2	1011.9	100.8	120.0	5.9	1006.4	127.2	154.8	0.4

Summary Table of Occupied Structures (Part 2)

Structure Number / Elevation		Inundation Information															
		Sunny Day				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Building No.	Structure Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)
11-53	1010.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	3.2	1011.9	100.8	120.0	1.9	1006.4	127.2	154.8	0.0
11-54	1012.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	1.2	1011.9	100.8	120.0	0.0	1006.4	127.2	154.8	0.0
11-55	1010.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	3.2	1011.9	100.8	120.0	1.9	1006.4	127.2	154.8	0.0
11-56	1005.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	8.2	1011.9	100.8	120.0	6.9	1006.4	127.2	154.8	1.4
11-57	1010.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	3.2	1011.9	100.8	120.0	1.9	1006.4	127.2	154.8	0.0
11-58	1011.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	2.2	1011.9	100.8	120.0	0.9	1006.4	127.2	154.8	0.0
11-59	1012.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	1.2	1011.9	100.8	120.0	0.0	1006.4	127.2	154.8	0.0
11-60	1002.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	11.2	1011.9	100.8	120.0	9.9	1006.4	127.2	154.8	4.4
11-61	1010.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	3.2	1011.9	100.8	120.0	1.9	1006.4	127.2	154.8	0.0
11-62	1010.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	3.2	1011.9	100.8	120.0	1.9	1006.4	127.2	154.8	0.0
12-1	1013.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	0.2	1011.9	100.8	120.0	0.0	1006.4	127.2	154.8	0.0
12-2	1009.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	4.2	1011.9	100.8	120.0	2.9	1006.4	127.2	154.8	0.0
12-3	1012.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	1.2	1011.9	100.8	120.0	0.0	1006.4	127.2	154.8	0.0
12-4	1008.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	5.2	1011.9	100.8	120.0	3.9	1006.4	127.2	154.8	0.0
12-5	1010.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	3.2	1011.9	100.8	120.0	1.9	1006.4	127.2	154.8	0.0
12-6	1010.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	3.2	1011.9	100.8	120.0	1.9	1006.4	127.2	154.8	0.0
12-7	1010.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	3.2	1011.9	100.8	120.0	1.9	1006.4	127.2	154.8	0.0
12-8	1010.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	3.2	1011.9	100.8	120.0	1.9	1006.4	127.2	154.8	0.0
12-9	1009.0	995.7	124.8	156.0	0.0	1013.2	98.4	117.6	4.2	1011.9	100.8	120.0	2.9	1006.4	127.2	154.8	0.0
13-1	1011.7	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	0.2	1010.6	118.2	143.4	0.0	1005.0	147.0	181.2	0.0
13-2	1008.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	3.9	1010.6	118.2	143.4	2.6	1005.0	147.0	181.2	0.0
13-3	1006.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	5.9	1010.6	118.2	143.4	4.6	1005.0	147.0	181.2	0.0
13-4	990.9	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	21.0	1010.6	118.2	143.4	19.7	1005.0	147.0	181.2	14.1
13-5	988.4	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	23.5	1010.6	118.2	143.4	22.2	1005.0	147.0	181.2	16.6
13-6	1007.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	4.9	1010.6	118.2	143.4	3.6	1005.0	147.0	181.2	0.0
13-7	987.8	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	24.1	1010.6	118.2	143.4	22.8	1005.0	147.0	181.2	17.2
13-8	991.4	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	20.5	1010.6	118.2	143.4	19.2	1005.0	147.0	181.2	13.6
13-9	996.1	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	15.8	1010.6	118.2	143.4	14.5	1005.0	147.0	181.2	8.9
13-10	1005.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	6.9	1010.6	118.2	143.4	5.6	1005.0	147.0	181.2	0.0
13-11	1003.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	8.9	1010.6	118.2	143.4	7.6	1005.0	147.0	181.2	2.0
13-12	997.1	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	14.8	1010.6	118.2	143.4	13.5	1005.0	147.0	181.2	7.9
14-1	1007.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	4.9	1010.6	118.2	143.4	3.6	1005.0	147.0	181.2	0.0
14-2	1007.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	4.9	1010.6	118.2	143.4	3.6	1005.0	147.0	181.2	0.0
14-3	1001.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	10.9	1010.6	118.2	143.4	9.6	1005.0	147.0	181.2	4.0
14-4	1002.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	9.9	1010.6	118.2	143.4	8.6	1005.0	147.0	181.2	3.0
14-5	1007.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	4.9	1010.6	118.2	143.4	3.6	1005.0	147.0	181.2	0.0
14-6	1003.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	8.9	1010.6	118.2	143.4	7.6	1005.0	147.0	181.2	2.0
14-7	1002.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	9.9	1010.6	118.2	143.4	8.6	1005.0	147.0	181.2	3.0
14-8	1003.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	8.9	1010.6	118.2	143.4	7.6	1005.0	147.0	181.2	2.0
14-9	1004.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	7.9	1010.6	118.2	143.4	6.6	1005.0	147.0	181.2	1.0
14-10	992.5	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	19.4	1010.6	118.2	143.4	18.1	1005.0	147.0	181.2	12.5
14-11	996.9	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	15.0	1010.6	118.2	143.4	13.7	1005.0	147.0	181.2	8.1
14-12	1001.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	10.9	1010.6	118.2	143.4	9.6	1005.0	147.0	181.2	4.0
14-13	999.9	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	12.0	1010.6	118.2	143.4	10.7	1005.0	147.0	181.2	5.1
14-14	998.2	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	13.7	1010.6	118.2	143.4	12.4	1005.0	147.0	181.2	6.8
14-15	994.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	17.9	1010.6	118.2	143.4	16.6	1005.0	147.0	181.2	11.0

Summary Table of Occupied Structures (Part 2)																	
Structure Number / Elevation		**Inundation Information**															
		Sunny Day				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Building No.	Structure Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)
14-16	986.9	987.4	141.6	177.6	0.5	1011.9	116.4	141.0	25.0	1010.6	118.2	143.4	23.7	1005.0	147.0	181.2	18.1
14-17	995.5	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	16.4	1010.6	118.2	143.4	15.1	1005.0	147.0	181.2	9.5
14-18	1008.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	3.9	1010.6	118.2	143.4	2.6	1005.0	147.0	181.2	0.0
14-19	981.3	987.4	141.6	177.6	6.1	1011.9	116.4	141.0	30.6	1010.6	118.2	143.4	29.3	1005.0	147.0	181.2	23.7
15-1	1008.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	3.9	1010.6	118.2	143.4	2.6	1005.0	147.0	181.2	0.0
15-2	1005.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	6.9	1010.6	118.2	143.4	5.6	1005.0	147.0	181.2	0.0
15-3	1011.7	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	0.2	1010.6	118.2	143.4	0.0	1005.0	147.0	181.2	0.0
15-4	1008.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	3.9	1010.6	118.2	143.4	2.6	1005.0	147.0	181.2	0.0
15-5	1010.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	1.9	1010.6	118.2	143.4	0.6	1005.0	147.0	181.2	0.0
15-6	1004.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	7.9	1010.6	118.2	143.4	6.6	1005.0	147.0	181.2	1.0
15-7	1007.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	4.9	1010.6	118.2	143.4	3.6	1005.0	147.0	181.2	0.0
15-8	1007.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	4.9	1010.6	118.2	143.4	3.6	1005.0	147.0	181.2	0.0
15-9	1007.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	4.9	1010.6	118.2	143.4	3.6	1005.0	147.0	181.2	0.0
15-10	1007.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	4.9	1010.6	118.2	143.4	3.6	1005.0	147.0	181.2	0.0
15-11	1004.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	7.9	1010.6	118.2	143.4	6.6	1005.0	147.0	181.2	1.0
15-12	1003.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	8.9	1010.6	118.2	143.4	7.6	1005.0	147.0	181.2	2.0
15-13	1003.0	987.4	141.6	177.6	0.0	1011.9	116.4	141.0	8.9	1010.6	118.2	143.4	7.6	1005.0	147.0	181.2	2.0
18-1	968.3	958.4	195.6	244.2	0.0	973.9	150.6	184.2	5.6	973.2	154.8	189.0	4.9	967.2	186.6	230.4	0.0
18-2	971.1	958.6	196.2	244.8	0.0	974.1	151.2	184.8	3.0	973.4	155.4	189.6	2.3	969.4	186.6	231.0	0.0
18-3	951.2	950.1	217.2	262.8	0.0	971.9	175.2	203.4	20.7	970.9	178.2	207.6	19.7	966.9	211.2	249.6	15.7
18-4	969.8	958.6	196.2	244.8	0.0	974.1	151.2	184.8	4.3	973.4	155.4	189.6	3.6	969.4	186.6	231.0	0.0
18-5	942.3	951.6	205.8	252.0	9.3	974.0	164.4	195.0	31.7	973.3	167.4	198.6	31.0	969.2	199.8	240.6	26.9
18-6	940.4	951.6	207.6	253.2	11.2	973.9	166.2	195.6	33.5	973.3	169.2	199.8	32.9	969.1	201.6	241.2	28.7
18-7	952.0	951.7	198.6	247.8	0.0	974.0	156.6	190.8	22.0	973.3	160.2	195.0	21.3	969.2	191.4	236.4	17.2
18-8	954.8	951.7	198.6	247.8	0.0	974.0	156.6	190.8	19.2	973.3	160.2	195.0	18.5	969.2	191.4	236.4	14.4
18-9	951.5	951.7	200.4	249.6	0.2	974.0	158.4	192.6	22.5	973.3	161.4	196.8	21.8	969.2	193.2	238.2	17.7
18-10	966.1	949.2	198.0	246.6	0.0	973.9	154.2	187.8	7.8	973.2	157.8	192.6	7.1	969.0	189.0	233.4	2.9
18-11	961.9	958.6	196.2	244.8	0.0	974.1	151.2	184.8	12.2	973.4	155.4	189.6	11.5	969.4	186.6	231.0	7.5
18-12	947.4	951.7	200.4	249.6	4.3	974.0	158.4	192.6	26.6	973.3	161.4	196.8	25.9	969.2	193.2	238.2	21.8
18-13	962.6	958.4	195.6	244.2	0.0	973.9	150.6	184.2	11.3	973.2	154.8	189.0	10.6	967.2	186.6	230.4	4.6
21-1	919.5	916.5	257.4	309.0	0.0	938.1	201.0	234.6	18.6	937.1	204.0	238.8	17.6	933.6	238.8	282.6	14.1
22-1	924.3	902.4	270.0	323.4	0.0	924.4	208.2	243.6	0.1	923.4	211.2	247.8	0.0	920.4	246.6	292.8	0.0
22-2	914.9	902.4	270.0	323.4	0.0	924.4	208.2	243.6	9.5	923.4	211.2	247.8	8.5	920.4	246.6	292.8	5.5
22-3	916.3	904.8	269.4	323.4	0.0	924.5	207.6	243.0	8.2	923.6	211.2	247.2	7.3	920.5	246.0	292.2	4.2
22-4	921.0	904.9	268.8	322.8	0.0	924.0	207.6	242.4	3.0	923.1	210.6	246.6	2.1	920.1	246.0	291.6	0.0
22-5	918.1	904.8	269.4	323.4	0.0	924.5	207.6	243.0	6.4	923.6	211.2	247.2	5.5	920.5	246.0	292.2	2.4
22-6	915.6	902.4	270.0	323.4	0.0	924.4	208.2	243.6	8.8	923.4	211.2	247.8	7.8	920.4	246.6	292.8	4.8
22-7	897.8	902.4	270.0	323.4	4.6	924.4	208.2	243.6	26.6	923.4	211.2	247.8	25.6	920.4	246.6	292.8	22.6
22-8	913.3	902.4	271.2	325.2	0.0	924.1	210.0	244.8	10.8	923.1	213.0	249.0	9.8	920.0	248.4	294.0	6.7
22-9	910.6	902.4	271.8	325.8	0.0	924.1	210.6	245.4	13.5	923.2	213.6	250.2	12.6	920.1	249.0	294.6	9.5
22-10	921.9	902.4	271.2	325.2	0.0	924.1	210.0	244.8	2.1	923.1	213.0	249.0	1.2	920.0	248.4	294.0	0.0
22-11	917.2	902.4	271.8	325.8	0.0	924.1	210.6	245.4	6.9	923.2	213.6	250.2	6.0	920.1	249.0	294.6	2.9
22-12	909.9	902.4	271.2	325.2	0.0	924.1	210.0	244.8	14.2	923.1	213.0	249.0	13.2	920.0	248.4	294.0	10.1
22-13	912.6	902.6	270.6	324.6	0.0	924.1	209.4	244.2	11.5	923.2	212.4	249.0	10.6	920.1	247.8	293.4	7.5
22-14	924.3	902.4	270.0	323.4	0.0	924.4	208.2	243.6	0.1	923.4	211.2	247.8	0.0	920.4	246.6	292.8	0.0
22-15	923.2	902.4	271.2	325.2	0.0	924.1	210.0	244.8	0.8	923.1	213.0	249.0	0.0	920.0	248.4	294.0	0.0

Summary Table of Occupied Structures (Part 2)																	
Structure Number / Elevation		**Inundation Information**															
		Sunny Day				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Building No.	Structure Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)
22-16	903.6	902.3	273.0	327.0	0.0	924.0	211.2	246.6	20.4	923.1	214.2	250.8	19.5	920.0	249.6	295.8	16.4
22-17	898.9	902.6	270.6	324.6	3.7	924.1	209.4	244.2	25.2	923.2	212.4	249.0	24.3	920.1	247.8	293.4	21.2
22-18	920.5	902.6	270.6	324.6	0.0	924.1	209.4	244.2	3.6	923.2	212.4	249.0	2.7	920.1	247.8	293.4	0.0
23-1	905.7	893.9	285.6	342.0	0.0	915.7	220.2	257.4	10.0	914.8	223.2	261.6	9.1	912.0	259.2	307.2	6.3
24-1	898.4	885.0	301.2	361.2	0.0	909.5	232.2	271.8	11.1	908.6	235.8	276.0	10.2	906.0	271.8	322.2	7.6
25-1	904.5	879.7	308.4	369.6	0.0	905.8	237.6	278.4	1.3	904.9	241.2	283.2	0.4	902.2	278.4	330.0	0.0
25-2	898.3	879.7	308.4	369.6	0.0	905.8	237.6	278.4	7.5	904.9	241.2	283.2	6.6	902.2	278.4	330.0	3.9
25-3	897.3	879.7	308.4	369.6	0.0	905.8	237.6	278.4	8.5	904.9	241.2	283.2	7.6	902.2	278.4	330.0	4.9
25-4	902.4	880.8	306.6	367.2	0.0	906.9	236.4	276.6	4.5	906.0	240.0	281.4	3.6	903.5	276.6	327.6	1.1
25-5	892.4	879.6	307.8	369.0	0.0	906.1	237.6	277.8	13.7	905.2	241.2	282.6	12.8	902.7	277.8	329.4	10.3
25-6	903.7	880.8	306.6	367.2	0.0	906.9	236.4	276.6	3.2	906.0	240.0	281.4	2.3	903.5	276.6	327.6	0.0
25-7	899.6	880.8	306.6	367.2	0.0	906.9	236.4	276.6	7.3	906.0	240.0	281.4	6.4	903.5	276.6	327.6	3.9
25-8	897.2	882.9	303.0	363.6	0.0	907.0	233.4	273.6	9.8	906.2	237.0	277.8	9.0	903.7	273.6	324.6	6.5
25-9	903.0	884.0	301.8	362.4	0.0	908.3	232.8	272.4	5.3	907.4	236.4	277.2	4.4	904.9	273.0	323.4	1.9
25-10	887.2	880.5	306.0	366.6	0.0	906.6	235.8	276.0	19.4	905.8	239.4	280.8	18.6	903.2	276.0	327.0	16.0
26-1	883.3	876.2	313.8	375.0	0.0	903.3	241.8	283.2	20.0	902.4	245.4	288.0	19.1	899.6	282.0	334.8	16.3
27-1	894.9	867.8	336.6	402.0	0.0	896.2	258.0	301.8	1.3	895.2	262.2	307.2	0.3	892.6	299.4	354.0	0.0
27-2	892.0	867.8	336.6	402.0	0.0	896.2	258.0	301.8	4.1	895.2	262.2	307.2	3.2	892.6	299.4	354.0	0.6
27-3	894.9	867.3	337.2	403.2	0.0	895.3	258.6	303.0	0.4	894.4	262.8	307.8	0.0	891.8	300.0	355.2	0.0
27-4	889.2	867.3	337.2	403.2	0.0	895.3	258.6	303.0	6.1	894.4	262.8	307.8	5.2	891.8	300.0	355.2	2.6
27-5	878.2	867.3	337.2	403.2	0.0	895.3	258.6	303.0	17.1	894.4	262.8	307.8	16.2	891.8	300.0	355.2	13.6
27-6	894.2	867.3	337.2	403.2	0.0	895.3	258.6	303.0	1.1	894.4	262.8	307.8	0.2	891.8	300.0	355.2	0.0
29-1	868.3	853.3	365.4	435.0	0.0	880.7	277.2	324.0	12.4	879.8	281.4	329.4	11.5	877.3	319.8	377.4	9.0
32-1	828.4	819.5	411.6	486.6	0.0	844.4	304.2	358.2	16.0	843.7	309.0	363.6	15.3	841.8	348.0	412.8	13.4
32-2	830.5	819.5	411.6	486.6	0.0	844.4	304.2	358.2	13.9	843.7	309.0	363.6	13.2	841.8	348.0	412.8	11.3
32-3	827.1	819.5	411.6	486.6	0.0	844.4	304.2	358.2	17.3	843.7	309.0	363.6	16.6	841.8	348.0	412.8	14.7
32-4	828.3	819.5	411.6	486.6	0.0	844.4	304.2	358.2	16.1	843.7	309.0	363.6	15.4	841.8	348.0	412.8	13.5
32-5	831.1	819.5	412.2	487.8	0.0	844.6	304.8	358.8	13.5	843.8	309.6	364.8	12.7	841.9	348.6	413.4	10.8
32-6	836.2	819.2	418.2	493.8	0.0	844.5	310.2	363.6	8.3	843.8	314.4	369.0	7.6	841.8	354.0	418.2	5.6
32-7	841.3	819.2	418.2	493.8	0.0	844.5	310.2	363.6	3.2	843.8	314.4	369.0	2.5	841.8	354.0	418.2	0.5
33-1	806.9	815.3	423.6	500.4	8.4	839.5	315.0	369.0	32.6	838.8	319.2	374.4	31.9	836.9	358.8	424.2	30.0
34-1	795.4	801.8	445.2	526.2	6.4	826.5	329.4	389.4	31.1	826.4	334.2	395.4	31.0	825.8	374.4	445.8	30.4
34-2	800.8	801.8	445.2	526.2	1.0	826.5	329.4	389.4	25.7	826.4	334.2	395.4	25.6	825.8	374.4	445.8	25.0
35-1	819.5	803.1	441.0	520.8	0.0	827.8	326.4	385.2	8.3	827.7	331.2	391.2	8.2	827.4	371.4	441.6	8.0
35-2	815.1	803.1	441.0	520.8	0.0	827.8	326.4	385.2	12.7	827.7	331.2	391.2	12.6	827.4	371.4	441.6	12.4
35-3	817.4	803.1	441.0	520.8	0.0	827.8	326.4	385.2	10.4	827.7	331.2	391.2	10.3	827.4	371.4	441.6	10.1
35-4	821.5	803.1	441.0	520.8	0.0	827.8	326.4	385.2	6.3	827.7	331.2	391.2	6.2	827.4	371.4	441.6	6.0
35-5	819.8	803.1	441.0	520.8	0.0	827.8	326.4	385.2	8.0	827.7	331.2	391.2	7.9	827.4	371.4	441.6	7.7
35-6	817.8	803.1	441.0	520.8	0.0	827.8	326.4	385.2	10.0	827.7	331.2	391.2	9.9	827.4	371.4	441.6	9.7
35-7	815.3	803.1	441.0	520.8	0.0	827.8	326.4	385.2	12.5	827.7	331.2	391.2	12.4	827.4	371.4	441.6	12.2
35-8	816.3	803.1	441.0	520.8	0.0	827.8	326.4	385.2	11.5	827.7	331.2	391.2	11.4	827.4	371.4	441.6	11.2
35-9	807.2	803.1	441.0	520.8	0.0	827.8	326.4	385.2	20.6	827.7	331.2	391.2	20.5	827.4	371.4	441.6	20.3
35-10	819.7	803.1	441.0	520.8	0.0	827.8	326.4	385.2	8.1	827.7	331.2	391.2	8.0	827.4	371.4	441.6	7.8
35-11	819.7	803.1	441.0	520.8	0.0	827.8	326.4	385.2	8.1	827.7	331.2	391.2	8.0	827.4	371.4	441.6	7.8
35-12	816.8	803.1	441.0	520.8	0.0	827.8	326.4	385.2	11.0	827.7	331.2	391.2	10.9	827.4	371.4	441.6	10.7
36-1	801.2	803.1	441.0	520.8	1.9	827.8	326.4	385.2	26.6	827.7	331.2	391.2	26.5	827.4	371.4	441.6	26.3

Summary Table of Occupied Structures (Part 2)																	
Structure Number / Elevation		**Inundation Information**															
		Sunny Day				PMF Breach				0.9 PMF Breach				0.9 PMF No Breach			
Building No.	Structure Elevation (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)	Water Surface Elevation (feet)	Initial Flow Travel Time (min)	Peak Flow Travel Time (min)	Maximum Depth (feet)
38-1	797.6	794.3	469.8	558.0	0.0	815.0	343.2	409.2	17.4	814.7	347.4	415.8	17.1	813.9	388.2	466.8	16.3
38-2	802.4	794.3	469.8	558.0	0.0	815.0	343.2	409.2	12.6	814.7	347.4	415.8	12.3	813.9	388.2	466.8	11.5
44-1	772.0	748.9	563.4	663.6	0.0	772.2	394.2	489.0	0.1	771.7	399.0	495.6	0.0	770.6	439.8	546.6	0.0
44-2	771.7	748.3	565.2	666.6	0.0	771.8	396.0	494.4	0.1	771.4	400.8	501.0	0.0	770.2	441.6	552.0	0.0
44-3	765.6	748.3	565.2	666.6	0.0	771.8	396.0	494.4	6.2	771.4	400.8	501.0	5.8	770.2	441.6	552.0	4.6
44-4	771.5	748.9	563.4	663.6	0.0	772.2	394.2	489.0	0.6	771.7	399.0	495.6	0.2	770.6	439.8	546.6	0.0
44-5	757.5	747.9	567.6	670.2	0.0	771.4	397.8	499.8	13.9	771.0	402.6	506.4	13.5	769.8	443.4	556.8	12.3
44-6	770.6	747.4	570.0	673.2	0.0	771.2	399.6	505.2	0.6	770.7	404.4	511.8	0.1	769.5	445.2	562.2	0.0
44-7	759.6	747.4	570.0	673.2	0.0	771.2	399.6	505.2	11.6	770.7	404.4	511.8	11.1	769.5	445.2	562.2	9.9
44-8	765.0	747.4	570.0	673.2	0.0	771.2	399.6	505.2	6.2	770.7	404.4	511.8	5.7	769.5	445.2	562.2	4.5
44-9	751.2	747.4	570.0	673.2	0.0	771.2	399.6	505.2	20.0	770.7	404.4	511.8	19.5	769.5	445.2	562.2	18.3
44-10	764.4	746.9	573.0	676.8	0.0	770.9	401.4	510.0	6.5	770.4	406.2	516.6	6.0	769.2	447.0	567.6	4.8
44-11	766.1	746.9	573.0	676.8	0.0	770.9	401.4	510.0	4.8	770.4	406.2	516.6	4.3	769.2	447.0	567.6	3.1
44-12	768.8	746.9	573.0	676.8	0.0	770.9	401.4	510.0	2.1	770.4	406.2	516.6	1.6	769.2	447.0	567.6	0.4
44-13	762.7	746.9	573.0	676.8	0.0	770.9	401.4	510.0	8.2	770.4	406.2	516.6	7.7	769.2	447.0	567.6	6.5
44-14	759.5	746.5	575.4	681.0	0.0	770.6	403.8	516.0	11.1	770.1	408.6	522.0	10.6	768.9	449.4	573.0	9.4
45-1	756.4	746.1	578.4	685.8	0.0	770.0	405.6	519.6	13.6	769.5	410.4	525.6	13.1	768.2	451.2	576.6	11.8
45-2	762.5	746.1	578.4	685.8	0.0	770.0	405.6	519.6	7.5	769.5	410.4	525.6	7.0	768.2	451.2	576.6	5.7
45-3	765.2	745.6	580.8	689.4	0.0	769.4	407.4	522.6	4.1	768.8	412.2	528.6	3.6	767.6	453.0	579.6	2.3
45-4	762.8	745.6	580.8	689.4	0.0	769.4	407.4	522.6	6.6	768.8	412.2	528.6	6.0	767.6	453.0	579.6	4.8
45-5	769.0	745.6	580.8	689.4	0.0	769.4	407.4	522.6	0.4	768.8	412.2	528.6	0.0	767.6	453.0	579.6	0.0
45-6	768.8	745.6	580.8	689.4	0.0	769.4	407.4	522.6	0.6	768.8	412.2	528.6	0.0	767.6	453.0	579.6	0.0
45-7	769.1	745.4	583.2	693.0	0.0	769.2	408.0	523.8	0.1	768.6	412.8	529.8	0.0	767.2	453.6	580.8	0.0
45-8	769.0	745.4	583.2	693.0	0.0	769.2	408.0	523.8	0.2	768.6	412.8	529.8	0.0	767.2	453.6	580.8	0.0
45-9	744.8	745.4	583.2	693.0	0.6	769.2	408.0	523.8	24.4	768.6	412.8	529.8	23.8	767.2	453.6	580.8	22.4
45-10	759.2	744.5	584.4	694.8	0.0	767.2	408.0	524.4	8.0	767.0	412.8	530.4	7.8	766.3	453.6	580.8	7.0
45-11	754.3	744.5	584.4	694.8	0.0	767.2	408.0	524.4	12.9	767.0	412.8	530.4	12.7	766.3	453.6	580.8	12.0
45-12	757.0	744.5	584.4	694.8	0.0	767.2	408.0	524.4	10.2	767.0	412.8	530.4	10.0	766.3	453.6	580.8	9.3
45-13	748.2	744.5	584.4	694.8	0.0	767.2	408.0	524.4	19.0	767.0	412.8	530.4	18.8	766.3	453.6	580.8	18.1
45-14	746.5	744.5	584.4	694.8	0.0	767.2	408.0	524.4	20.7	767.0	412.8	530.4	20.5	766.3	453.6	580.8	19.8
45-15	750.0	744.5	584.4	694.8	0.0	767.2	408.0	524.4	17.2	767.0	412.8	530.4	17.0	766.3	453.6	580.8	16.3
45-16	759.3	744.5	584.4	694.8	0.0	767.2	408.0	524.4	7.9	767.0	412.8	530.4	7.7	766.3	453.6	580.8	7.0
45-17	767.0	744.5	584.4	694.8	0.0	767.2	408.0	524.4	0.2	767.0	412.8	530.4	0.0	766.3	453.6	580.8	0.0
45-18	765.9	744.5	584.4	694.8	0.0	767.2	408.0	524.4	1.3	767.0	412.8	530.4	1.1	766.3	453.6	580.8	0.4
45-19	767.1	744.5	584.4	694.8	0.0	767.2	408.0	524.4	0.1	767.0	412.8	530.4	0.0	766.3	453.6	580.8	0.0
45-20	753.2	744.5	584.4	694.8	0.0	767.2	408.0	524.4	14.0	767.0	412.8	530.4	13.8	766.3	453.6	580.8	13.1
45-21	750.0	744.5	584.4	694.8	0.0	767.2	408.0	524.4	17.2	767.0	412.8	530.4	17.0	766.3	453.6	580.8	16.3
45-22	754.4	744.5	584.4	694.8	0.0	767.2	408.0	524.4	12.8	767.0	412.8	530.4	12.6	766.3	453.6	580.8	11.9
45-23	754.6	744.5	584.4	694.8	0.0	767.2	408.0	524.4	12.6	767.0	412.8	530.4	12.4	766.3	453.6	580.8	11.7
45-24	756.5	744.5	584.4	694.8	0.0	767.2	408.0	524.4	10.7	767.0	412.8	530.4	10.5	766.3	453.6	580.8	9.8
45-25	756.4	744.5	584.4	694.8	0.0	767.2	408.0	524.4	10.8	767.0	412.8	530.4	10.6	766.3	453.6	580.8	9.9