



DeKalb County
G E O R G I A

770.621.7200 (o)

770.621.7271 (f)

DeKalbCountyga.gov

Watershed Management

1580 Roadhaven Drive

Stone Mountain, GA 30083

LETTER SHOWING SEWER CAPACITY

November 16, 2018

Chief Executive Officer
Michael Thurmond

Board of Commissioners

District 1
Nancy Jester

District 2
Jeff Rader

District 3
Larry Johnson

District 4
Stephen Bradshaw

District 5
Mereda Davis Johnson

District 6
Kathie Gannon

District 7
Gregory Adams Sr.

Attention: Matt Tanner, PE
Breedlove Land Planning, Inc.
15 Simpson St, NW
Atlanta, GA 30308

Re: 3801 Briarcliff Rd, NE
18th Dist, LL 193
Lakeside HS
NFPC

Dear Mr. Tanner:


The DeKalb County Department of Watershed Management (“DWM”) received a sewer capacity request regarding the potential availability of sanitary sewer capacity at the above-referenced location. In response to the inquiry, DWM staff confirms that sanitary sewer capacity may be available for the subject property at this time. **After evaluating your capacity request, it has been determined based on the criteria set forth in DWM’s Interim Sanitary Sewer Capacity Evaluation Program dated July 13, 2018 that DWM’s wastewater collection, transmission, and treatment system has adequate capacity to receive the wastewater flow contribution from your sewer service connection as documented in your sewer capacity request. As such, approval to proceed with the project is granted with regards to sanitary sewer capacity.**


Please note that the determination of available capacity expressed herein is not guaranteed as it is based upon the known conditions as of the date of this correspondence and on the provided anticipated capacity needs associated with the project. In the event that sewer system infrastructure improvements are required to accommodate any new flow contribution and ensure adequate sewer system capacity as a result of development on the referenced property, the developer will be responsible for the cost associated with installing any such improvements to the existing sewer system infrastructure pursuant to DeKalb County Code of Ordinances, Chapter 25, Article IV – “Sewers and Sewerage Disposal”. Once installed and accepted by DeKalb County, the improvements will be owned and maintained by DeKalb County.

This information is based on currently available data and should only be used to substantiate the potential availability of sewer services as of the date of this correspondence. Circumstances are subject to change and the potential capacity indicated herein is in no way guaranteed.

Should you have any questions or concerns in reference to this response, please do not hesitate to contact the Division of Planning & Development of DWM at mlotts@dekalbcountyga.gov.

Sincerely,


Zachary L. Williams
Executive Assistant/Chief Operating Officer


Darren Eastall
Program Administrator-Consent Decree



**DEKALB COUNTY, GEORGIA
DEPARTMENT OF WATERSHED MANAGEMENT
CAPACITY ANALYSIS**

LAKESIDE HS - CAPACITY EVALUATION

Request Date: 09/19/2018

Request Closing Date: 11/15/18

1	Property Name and Address	3801 Briarcliff Rd. NE			
2	Sewershed/Basin	NFPC			
3	Proposed Property Tie-in Manhole ID	18-193-s092			
4	Net Prop. Daily Ave. Flow from Property	18,240.00 GPD			
	Net Prop. Peak Flow from Property	72,960.00 GPD			
5	No downstream historical SSOs with incomplete remedial actions to prevent reoccurrence?	No			
6	Downstream gravity sewer capacity available per 6a-6c below?	Yes			
	a	Hydraulic Model Capacity Check	Model predicted dry weather flow less than 85% of the pipe capacity or 80% of the pipe diameter for all downstream gravity pipes?	Yes*	
			Model predicted max month average daily flow (MMADF) flow less than 100% of the pipe capacity for all downstream gravity pipes?	Yes*	
	b	Model Network Anomaly		If 6a = No, are model results due to gravity sewer model network anomalies (reverse-grade pipes, flat-grade pipes, etc)?	NA
				Is capacity determined by reviewer to be available for gravity pipes with network anomalies (reverse-grade, flat-grade pipes, etc.)?	NA
				Is capacity determination documentation provided?	NA
	c	Capacity Request Flow Monitoring		Is capacity request flow monitoring data available and analyzed?	NA
				Is capacity determined by reviewer to be available based upon analysis of flow monitoring data?	NA
			Is capacity determination documentation provided?	NA	
7	All downstream lift station firm capacities greater than model predicted flow for MMADF scenario?	NA			
8	Downstream treatment facility hydraulic capacity greater than model predicted flow for MMADF scenario?	NA			
9	Downstream intergovernmental connection capacity greater than model predicted flow for MMADF scenario?	Yes			
10	*Comments: In this profile there are positive sloped pipes that are indicating full pipe capacity greater than 80% of the pipe diameter during dry weather and MMADF simulations. In such cases, engineering judgment has been used to determine that either these are caused by the model outfall boundary conditions and/or that adequate capacity exists for the flow rates calculated by the model.				
11		Hydraulic Modeler Initial	VUC		

By signing below, this certifies, based on sound engineering judgement, that capacity is available having considered appropriate factors necessary to make that determination including sanitary flow contributions from site specific sources, use of the County's hydraulic model as certified by CH2M Hill, flow data, and historical data, which are all incorporated into the County's Interim Capacity Program and SOPs as authorized by DeKalb County government on July 13, 2018.

Name: Michelle L. (Jackam) Otts, PE
Title: Engineer Principal
Date: 11/15/18



SEWER CAPACITY EVALUATION REQUEST

Department of Watershed Management

Project Information:

Project Address:	<u>3801 BRIARCLIFF ROAD NE</u>	Project Name:	<u>LAKESIDE HS</u>
	<u>ATLANTA, GA 30345</u> <small>(City, State, Zip Code)</small>	Type of Development:	<u>GOVERNMENT</u> <small>(Private or Government)</small>
Intended Tie-In Manhole:	<u>18-193-s092</u>	Land Lot and Parcel ID:	<u>18-193-09-043</u>
Total Peak Flow Requesting:	<u>72,960</u> GPD <small>(Calculated Peak Flow - Existing Peak Flow)</small>	County District:	<u>18th</u>

Developer's Information:

Company's Name:	<u>DEKALB BOARD OF EDUCATION</u>	Address:	<u>3770 NORTH DECATUR ROAD</u>
Contact Name:	<u>JOSEPH BREW</u>	City, State, Zip Code:	<u>DECATUR, GA 30032</u>
Phone Number:	<u>678-536-9858</u>	Email Address:	<u>JOSEPH_BREW@DEKALBSCHOOLSGA.ORG</u>

Engineering Firm's Information:

Company's Name:	<u>BREEDLOVE LAND PLANNING, INC.</u>	Address:	<u>15 SIMPSON STREET NW</u>
Contact Name:	<u>MATT TANNER, PE</u>	City, State, Zip Code:	<u>ATLANTA, GA 30308</u>
Phone Number:	<u>770-483-1173</u>	Email Address:	<u>MTANNER@LANDPLANNING.NET</u>

Please include the following items in your submittal package:

- Proposed Peak Daily Flow Calculation based on attached guidelines *(See Appendix A)*
- Existing Developments New Conditions
- Separate detailed calculation sheet signed by the owner or owner's representative for each project *(See Appendix B)*
- Estimate of anticipated peak hour flow and instantaneous peak hour flow for each industrial, commercial, and mixed-use project, and for each residential project that is over four stories in height
- Geographical Information System (GIS) map clearly showing the proposed site (s) surrounds areas, and utilities
- Proposed utility plan, if available **NOT AVAILABLE YET**

Name:	<u>J. MATTHEW TANNER, PE</u>	Date:	<u>09/06/18</u>
Signed:	<u></u>	Seal:	

Capacity Evaluation Request will not be accepted until form is fully completed and all supplemental information is attached. Once Capacity Request Package has been reviewed and accepted by our internal staff, a letter will be completed within 60 days.

Internal Use Only

Date Capacity Request Reviewed and Accepted:	_____	Received By:	_____
		Signed:	_____

EXISTING AVERAGE DAILY FLOW SANITARY FLOW CALCULATIONS

High School Square Footage= Total SF: 254,168 sq.ft.

EXISTING AVERAGE DAILY FLOW = 254,168 / 1000 = 254.2 x 400 = 101,680 GPD

EXISTING PEAK FLOW SANITARY FLOW CALCULATIONS

Peaking Factor Calculation:

EXISTING PEAK FLOW = 101,680 GPD X 4.0 (PF) = 406,720 GPD



09-06-2018

PROPOSED AVERAGE DAILY FLOW SANITARY FLOW CALCULATIONS

Elementary School Square Footage = Total SF: 299,768

PROPOSED AVERAGE DAILY FLOW = $299,768 / 1000 = 299.8 \times 400 = \underline{119,920 \text{ GPD}}$

PROPOSED PEAK FLOW SANITARY FLOW CALCULATIONS

Peaking Factor Calculation:

PEAK FLOW = $119,920 \text{ GPD} \times 4.0 \text{ (PF)} = \underline{479,680 \text{ GPD}}$

TOTAL PEAK FLOW REQUESTING:

(CALCULATED PROPOSED PEAK FLOW - CALCULATED EXISTING PEAK FLOW)

$479,680 \text{ GPD} - 406,720 \text{ GDP} = \underline{72,960 \text{ GPD}}$



09-06-2018

Appendix - B

Table 1: Sanitary Flow Contributions from Site Specific Sources

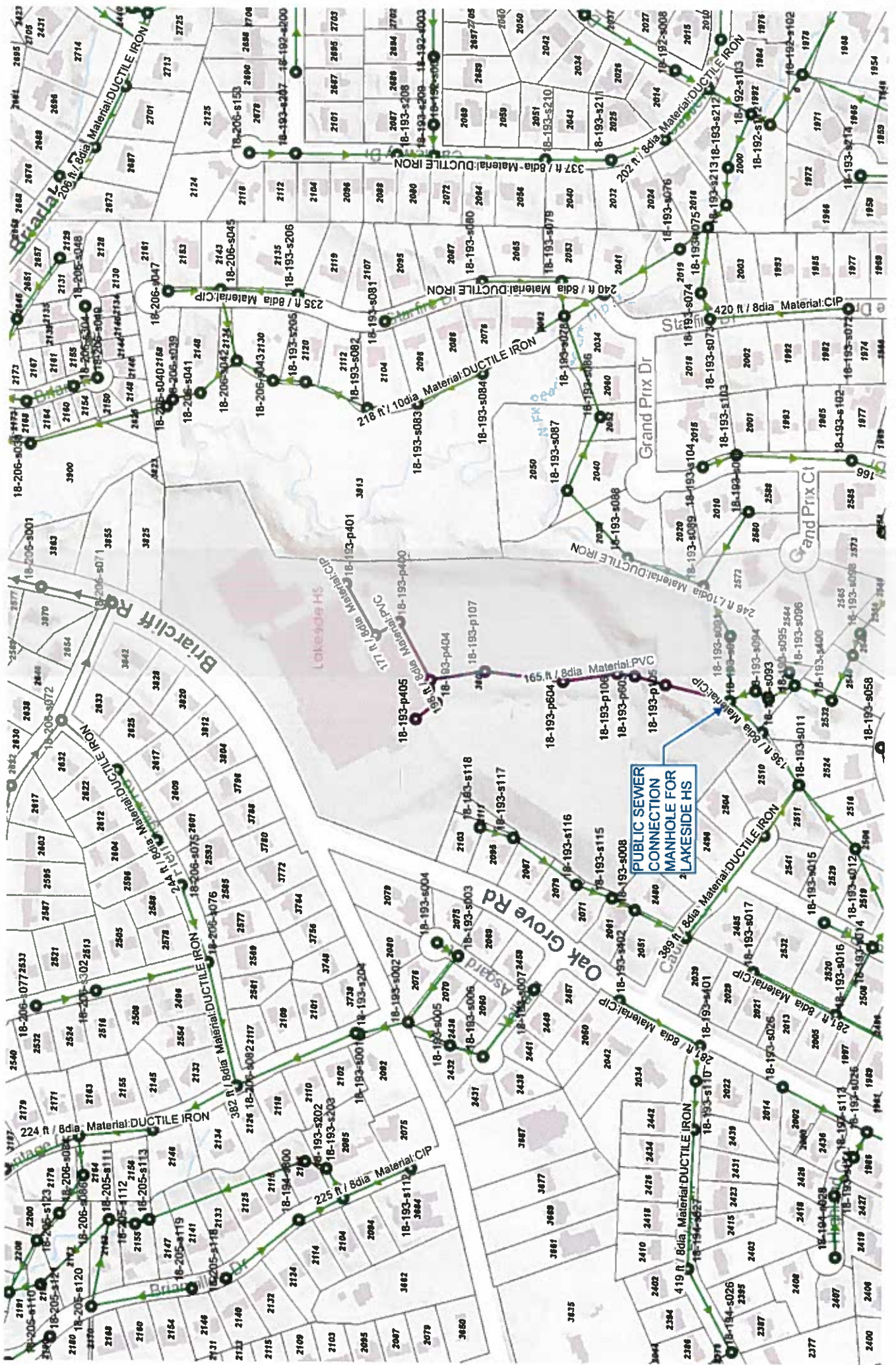
CONTRIBUTOR	UNIT	Design Average Daily Flow (gpd)
Residence, single family	per residence	240
Residence, multiple family (including apartments)	per unit	240
Commercial/Mercantile Building	per 1,000 square feet	75
Industrial/Warehouse (not including food service)	per 1,000 square feet	75
Offices (not including food service)	per 1,000 square feet	175
Shopping Center (not including food service)	per 1,000 square feet	100
Restaurant/Coffee Shop/Fast Food/ Bar/Tavern	per 1,000 square feet	1,650
Amusement/Recreation/Arcade	per 1,000 square feet	200
Barber Shop/Beauty Salon	per customer stallion	333
Caterer	per 1,000 square feet	3,300
Church (not including food service or day schools)	per 1,000 square feet	65
Coin Laundries	per machine	400
Commercial Laundries	per machine	640
Hospitals	per bed	200
Nursing Home	per bed	125
Motel/Hotel	per room	100
Police/Fire Station - w/ residents	per bed	125
Police/Fire Station - w/o food service	per 1,000 square feet	175
School - w/ kitchen	per 1,000 square feet	200
School - w/ cafeteria	per 1,000 square feet	250
School - w/ cafeteria and gym	per 1,000 square feet	300
Service Station	per fuel pump unit	120
Theater/Museum/Auditorium	per 1,000 square feet	65
Other facility not listed:	Subject to Approval by the County	

gpd = gallons per day

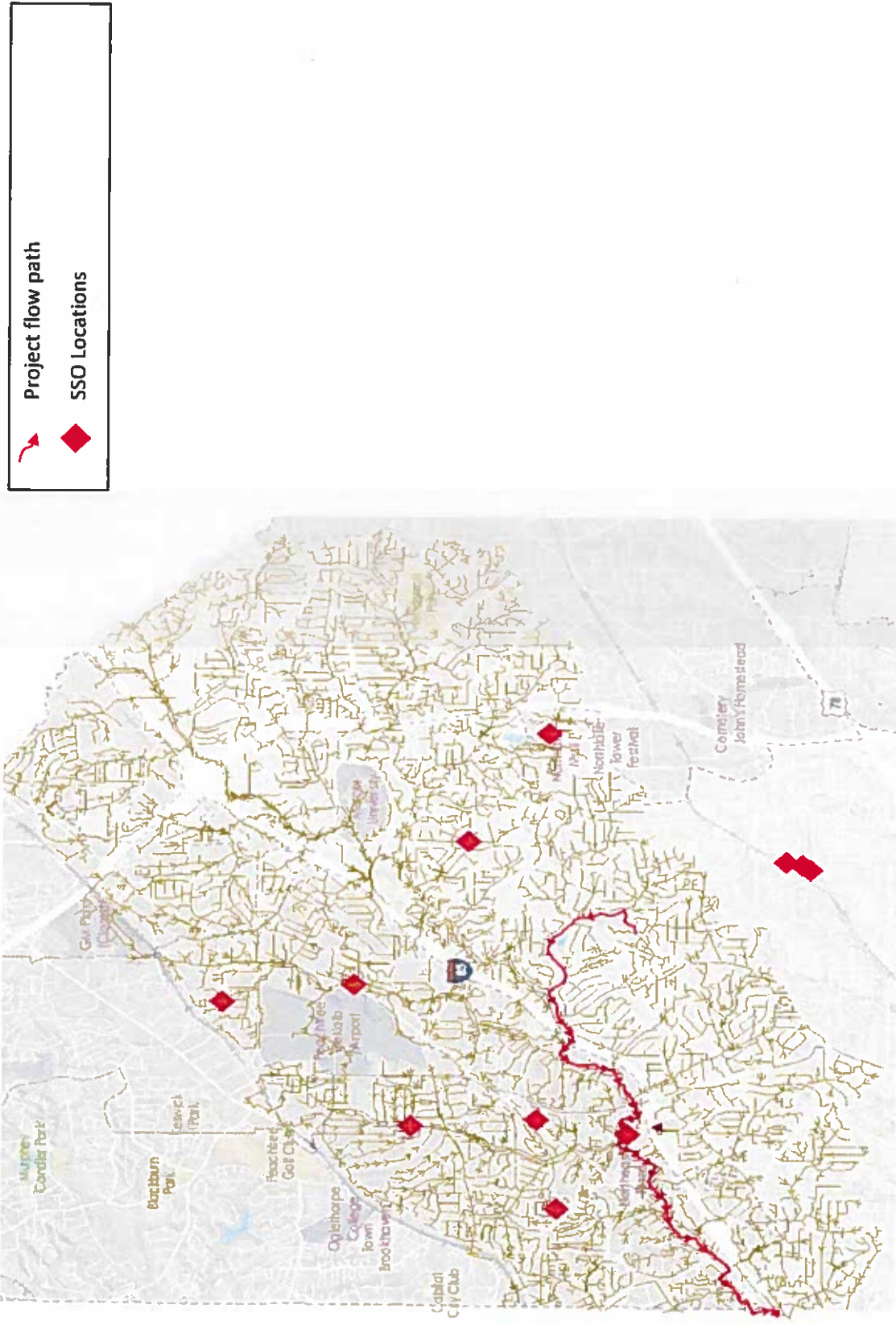
Total



NOTE: Design peak flow rates shall be calculated by multiplying the total design average daily flow rate determined per the table above by a peaking factor of 4.0.

May-17

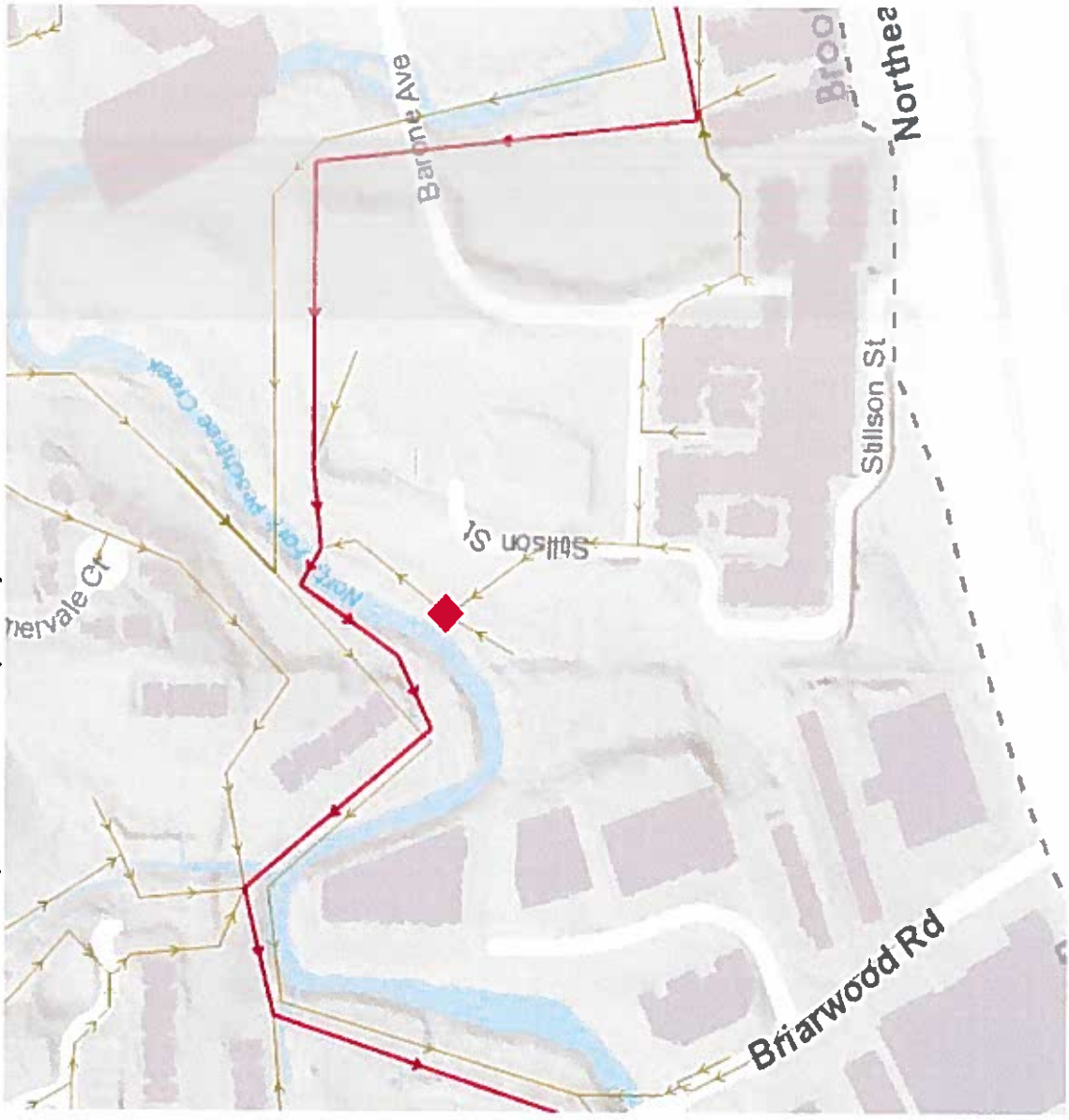


3801 Briarcliff Rd. NE. - Capacity Request - Hydraulic Model Run Results (Nov. 2018) - with all pending development peak flow added
Dry Weather Run - Sewer tie-in at 18-193-s092

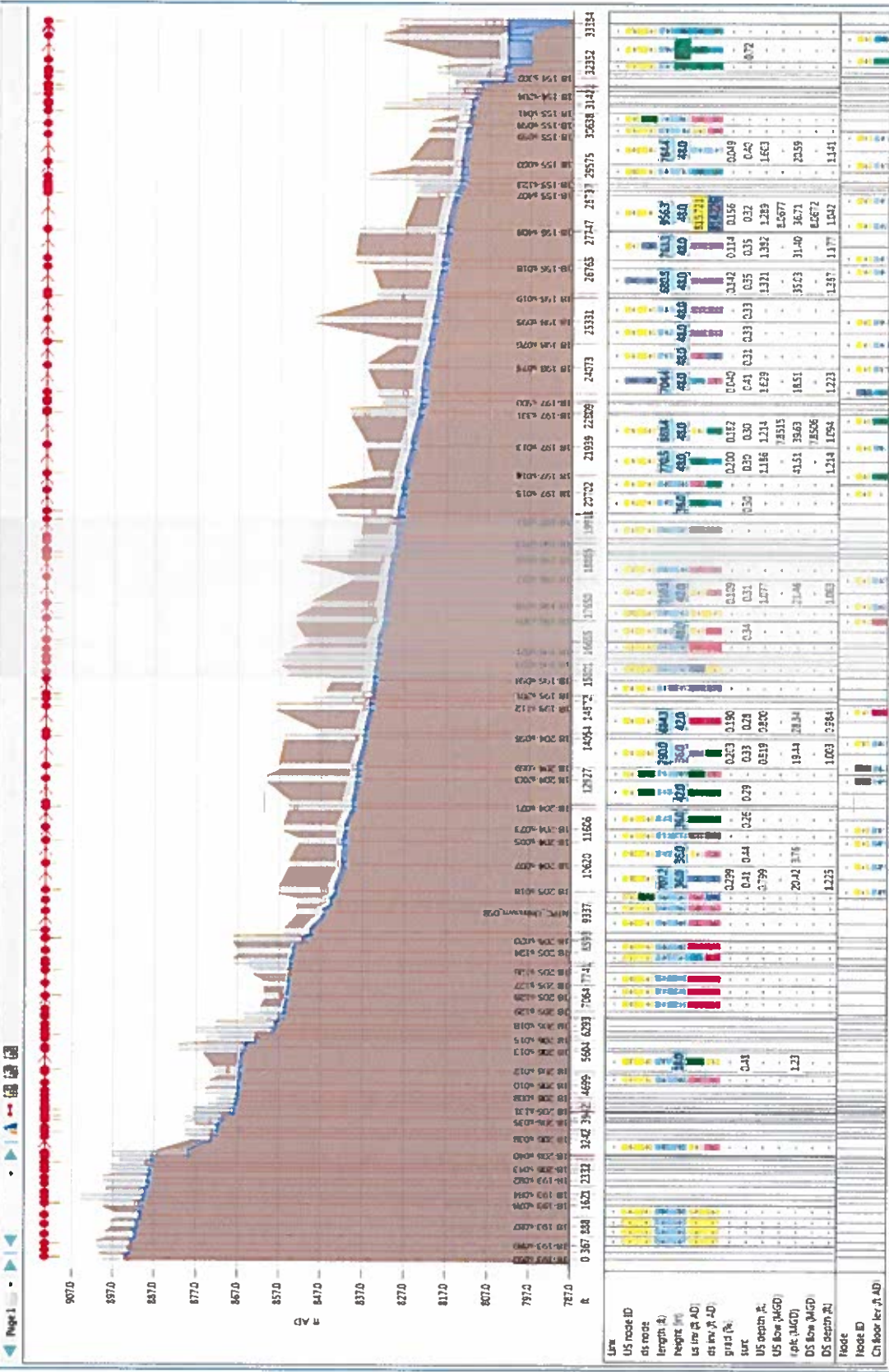


	Project flow path
	SSO Locations

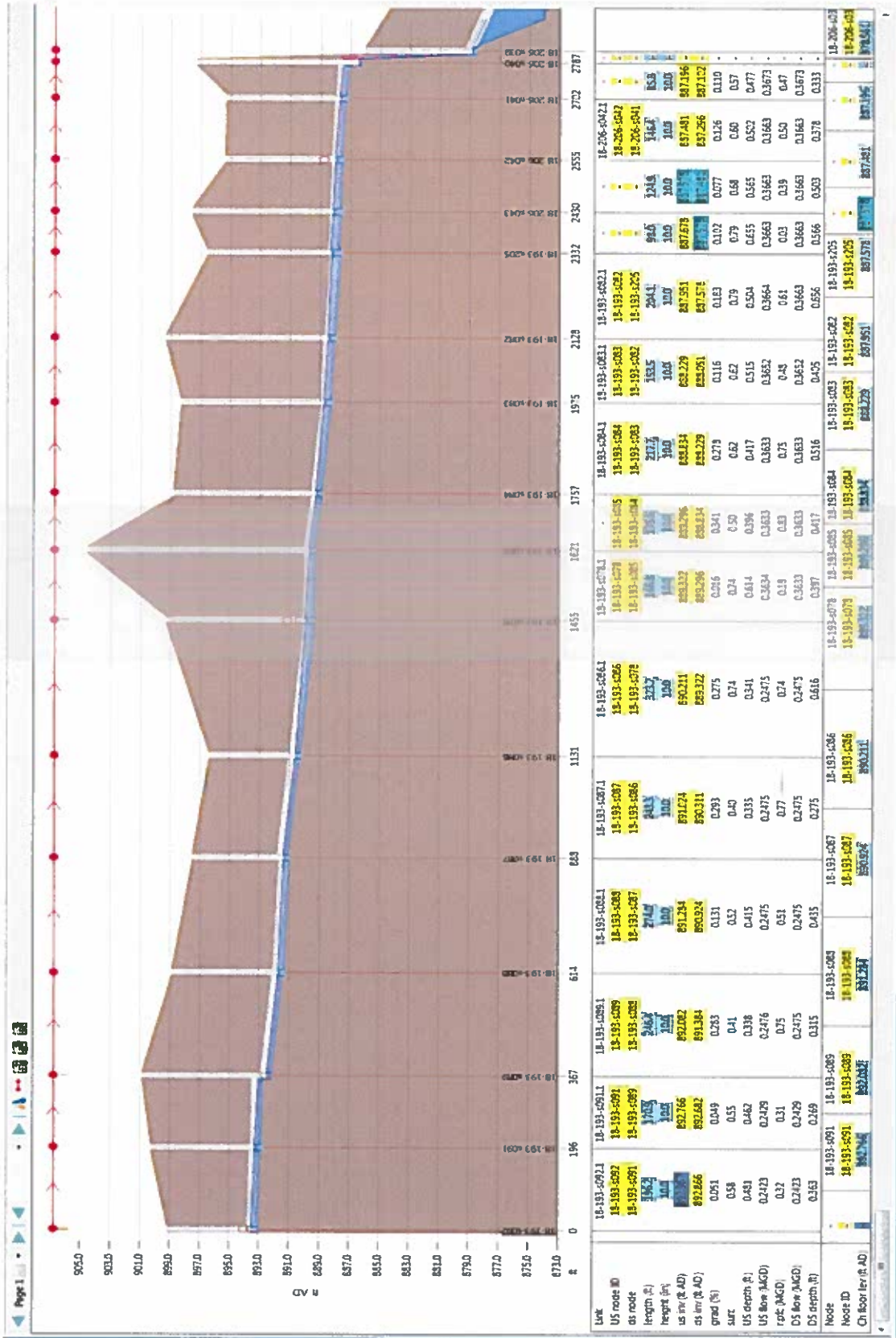
Plan Zoom in Showing Flow Path Not Impacted by SSO



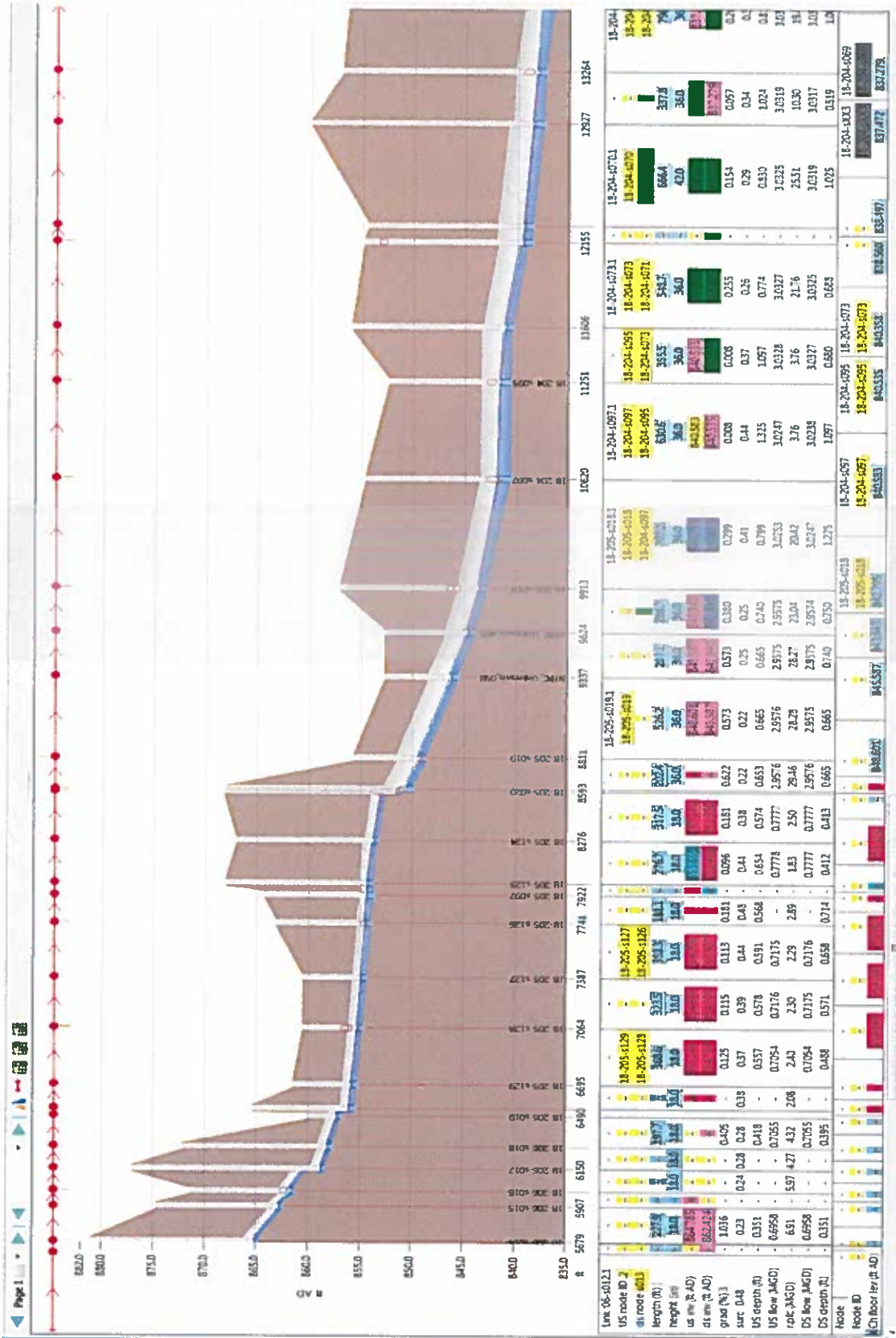
Model Run Version: NFPC_Scenario #1 2015 DWF_2017GISupdate_withSCRPeakFlows_DWFRun_VUO11072018



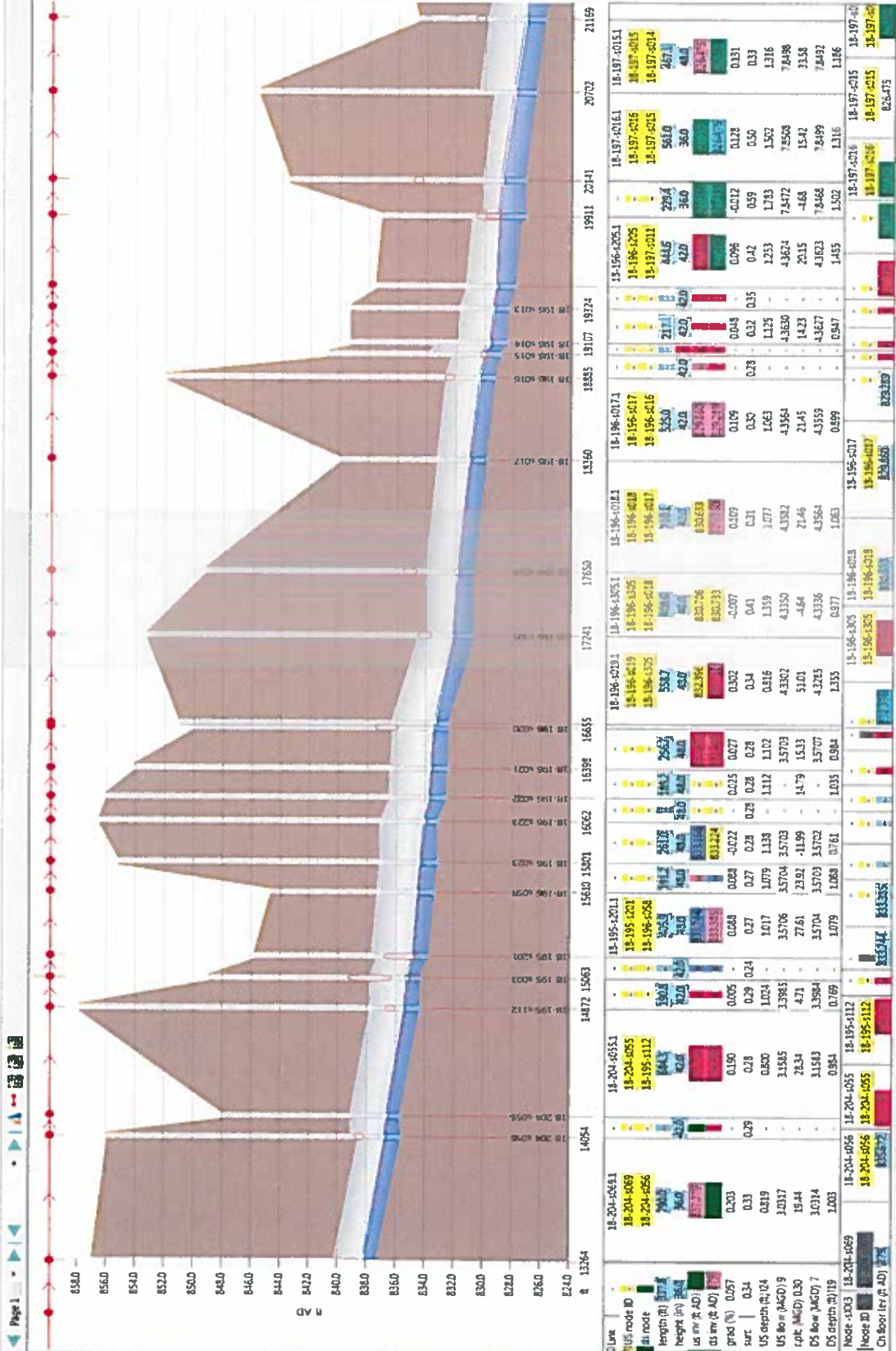
Entire Section. No simulated surcharge (d\O greater than 80%).



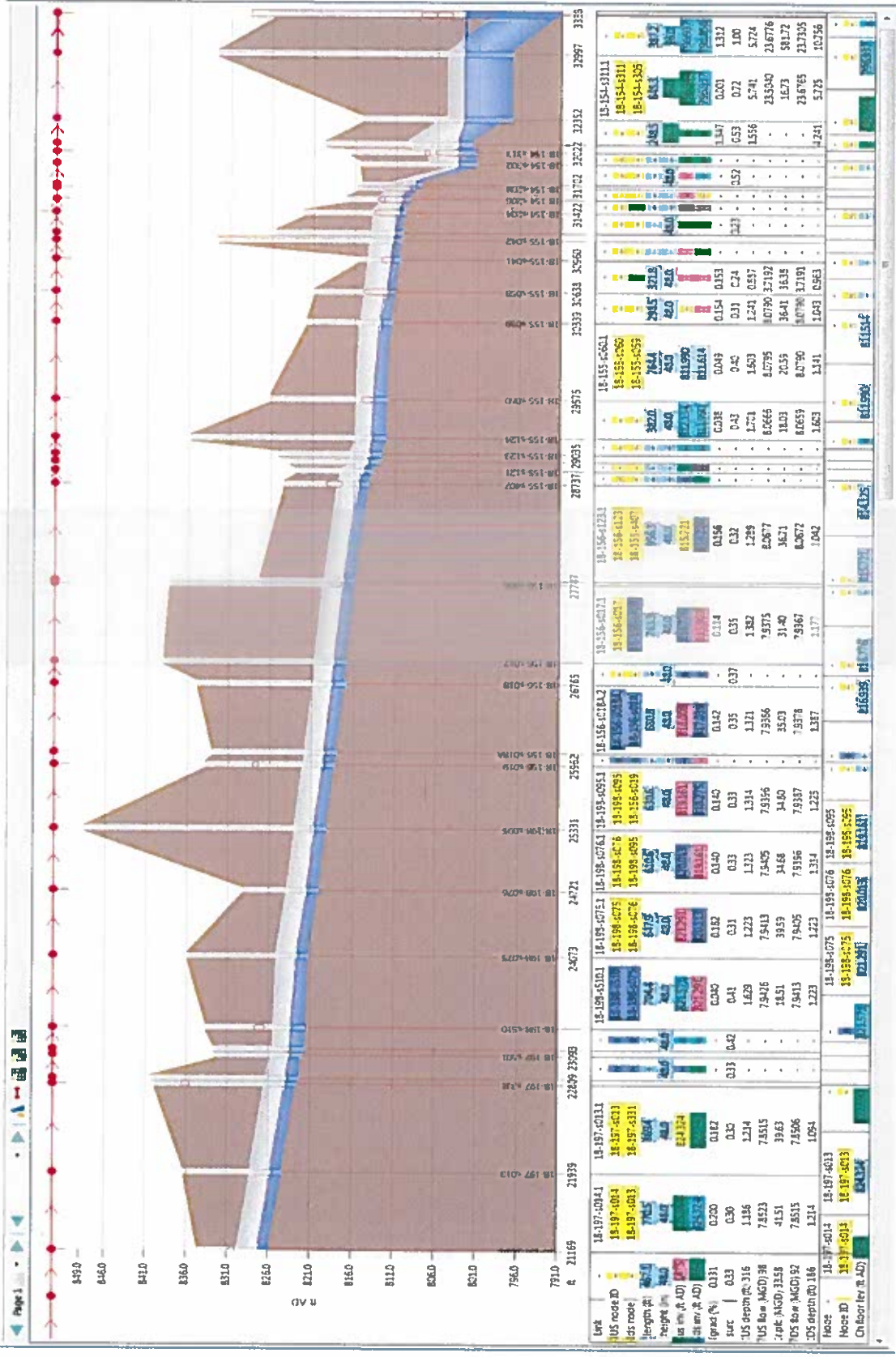
Profile Zoom in - Section 1.



Profile Zoom in - Section 3.



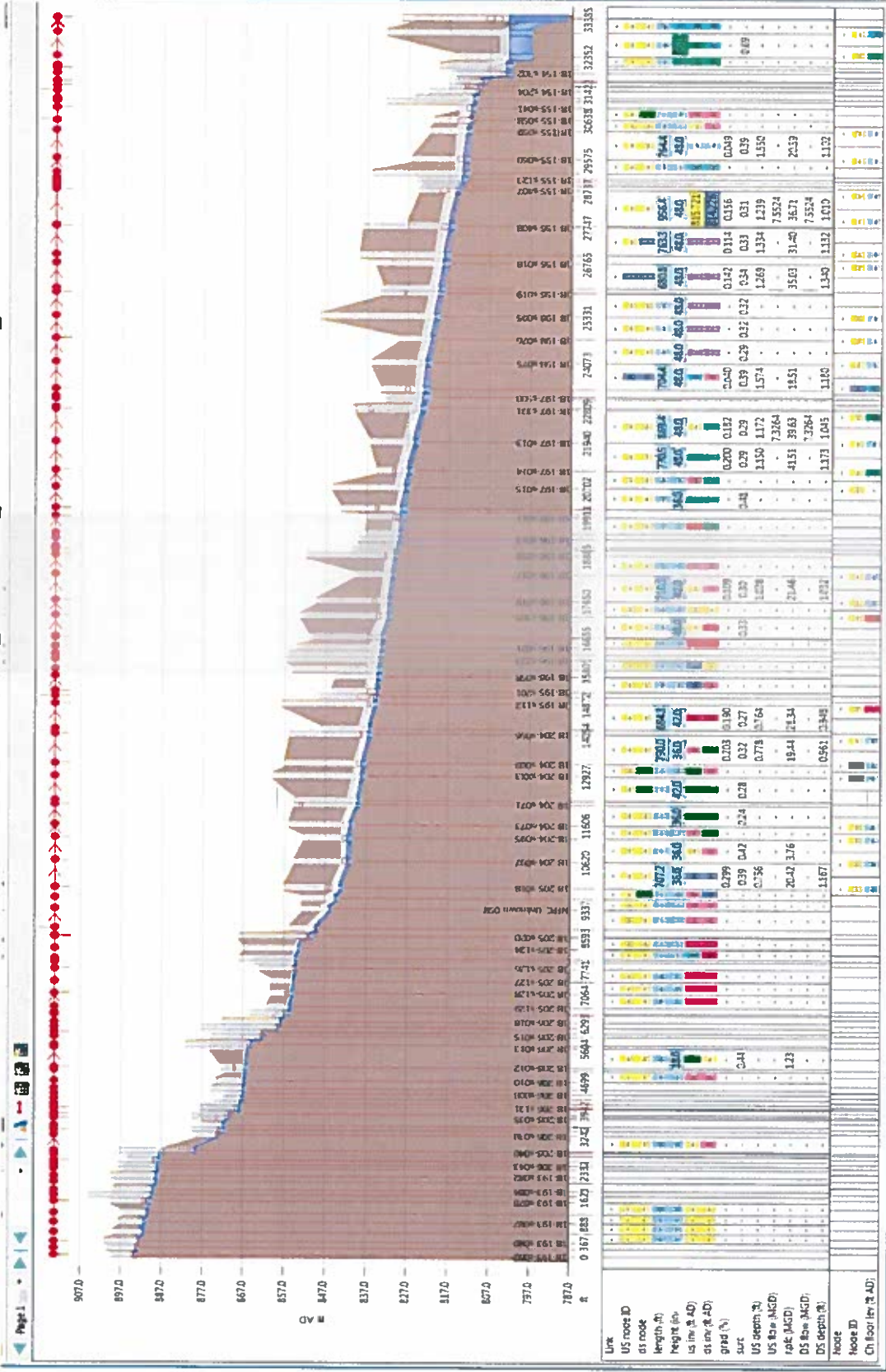
Profile Zoom in - Section 4.



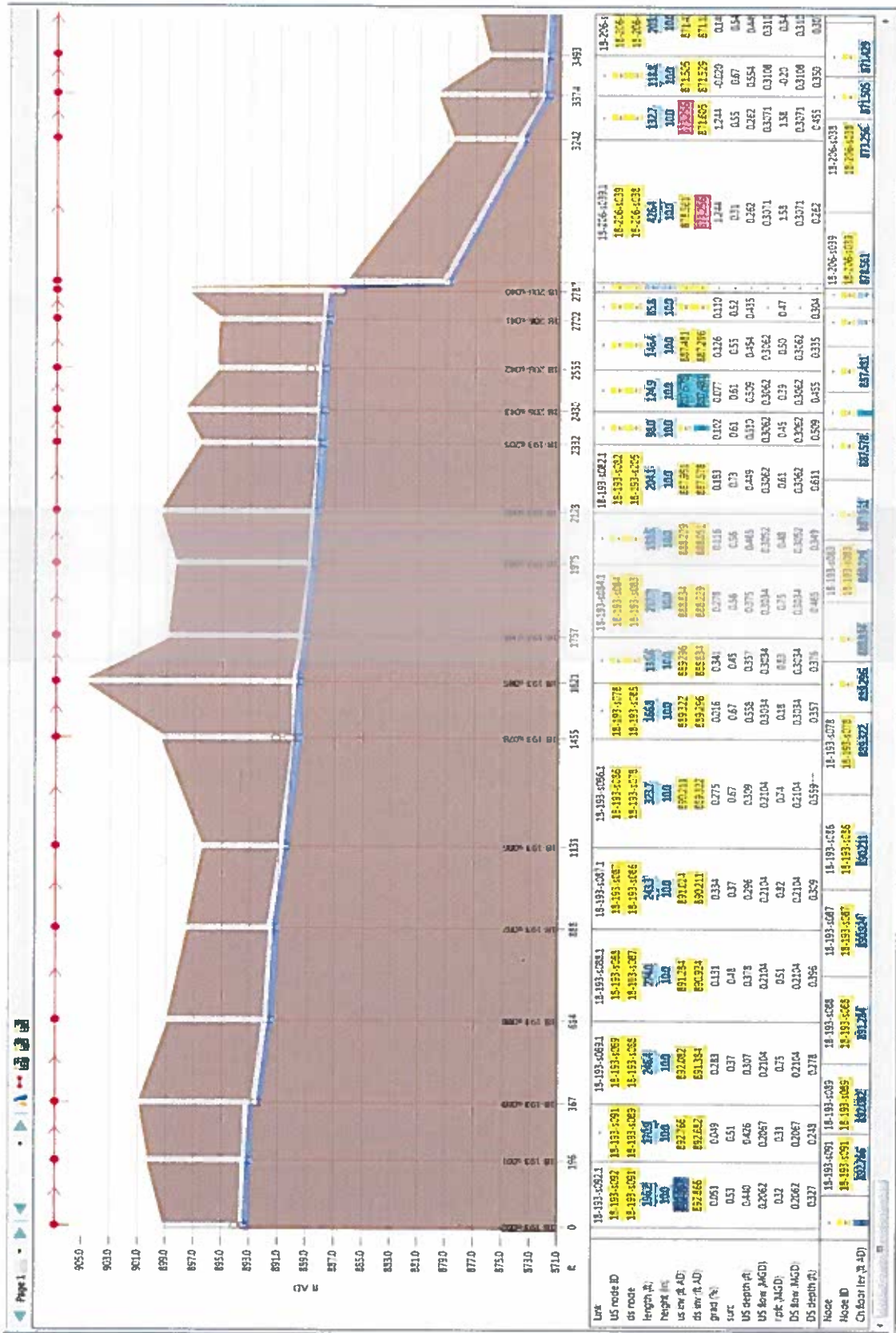
Profile Zoom in - Section 5.



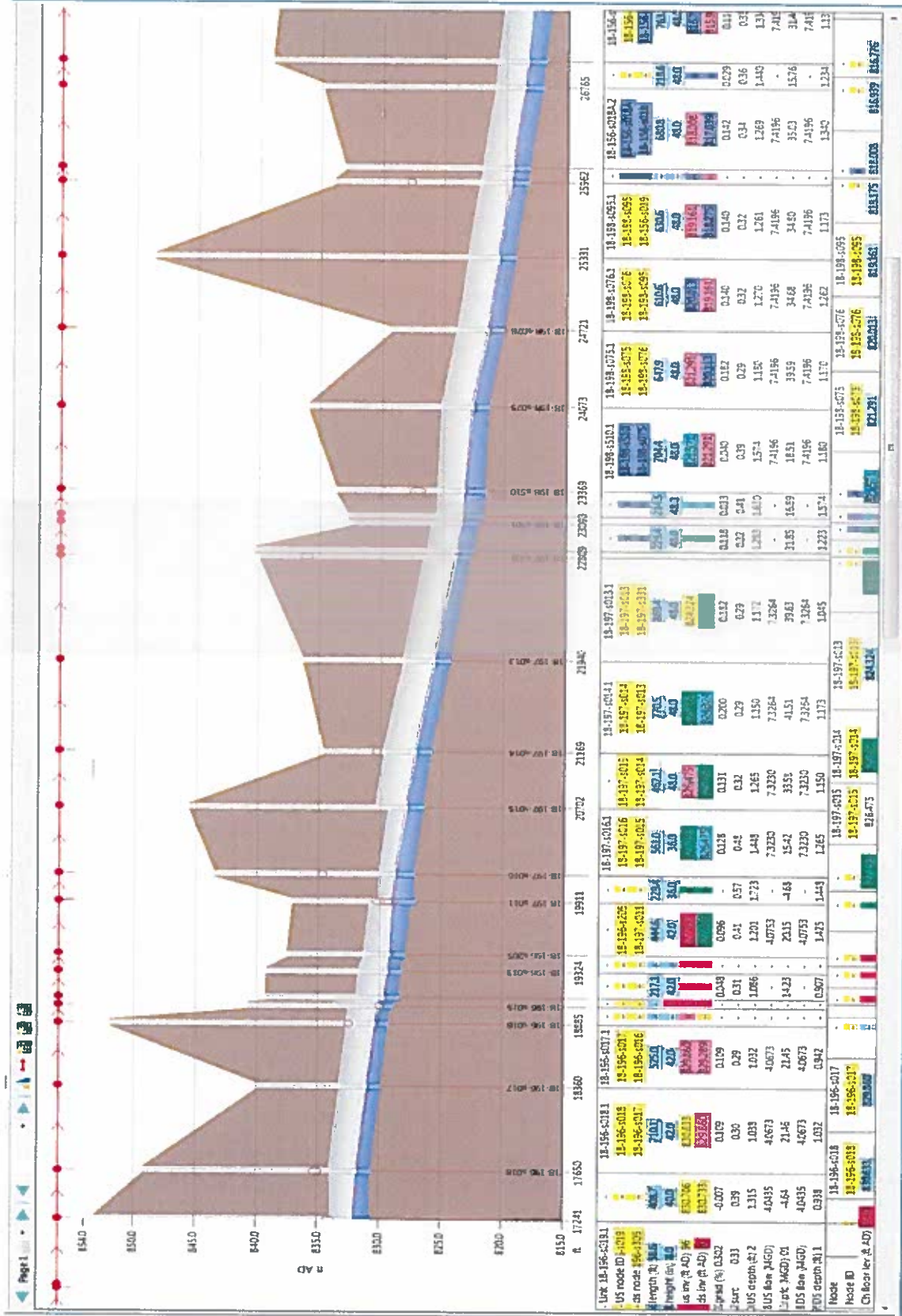
MMADF – Sewer tie-in at 18-193-s092
Model Run Version: NFPC_Scenario #4 2015DWF+MMADF_Ext_2017Update_MMADFRun_withSCRPeakFlows_VUO11072018



Entire Section. No model predicted flow over the full pipe depth, under Max. Month Average Daily Flow model.



Profile Zoom in - Section 1.



Profile Zoom in - Section 4.

