Rhodair Gully Drainage Study Report

Jefferson County, Texas

FINAL REPORT

Prepared for:

Jefferson County Drainage District 7

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1 Executive Summary

Rhodair Gully is 10.4-mile channel that conveys approximately 9,200 acres of storm runoff to Taylor Bayou in Jefferson County Drainage District 7. For this study, the scope evaluated existing conditions and proposed improvements to reduce inundation along the developed drainage areas. Hydrologic and hydraulic analyses were conducted with Atlas 14 rainfall data as a base for 2-, 10-, 25-, 50-, 100-, and 500-year events.

Multiple proposed conditions were evaluated to reduce inundation levels to Rhodair Gully watershed. Primary improvements focused on the following proposed conditions:

1) proposed diversion of stormwater north to the Neches River
2) proposed detention facilities
3) proposed levee extension and pump facilities

Finally, an ultimate condition was developed which included the selected proposed conditions into one hydraulic model. The preliminary opinion of construction costs for proposed improvements are shown below.

Proposed Diversion	$24,860,172
Proposed Detention	$59,443,825
Proposed Levee Extension and Pump Facilities	$137,646,614
Total Ultimate Improvements	**$221,950,611**

Costs are high level based on available information with estimate basis within the report and subject to change with additional scoping and design. The estimated costs do not include right-of-way acquisition, operation and maintenance, and escalation and financing.

2 Introduction

Rhodair Gully is a 10.4-mile drainage channel that conveys storm runoff for approximately 9,200 acres from NE Hwy 69 to Taylor Bayou in Jefferson County Drainage District 7 as shown in the Vicinity Map below. For this study, the scope evaluated existing conditions and propose improvements to reduce inundation along the developed drainage areas.

HEC-HMS (v 4.3) was used to develop runoff flows for drainage areas for 2, 10, 25, 50, 100, and 500-year events using Atlas 14 rainfall data as the base existing conditions. Analysis of existing conditions included development of a 1D-2D coupled "existing conditions" HEC-RAS (v 5.0.7) hydraulic model that determined the overland hydraulics; verification of this "existing conditions" model to recent flood events; identify inundation areas. Analysis of proposed conditions evaluated proposed improvements to Rhodair Gully including proposed detention, drainage reroutes, pump station, crossing, and channel improvements.

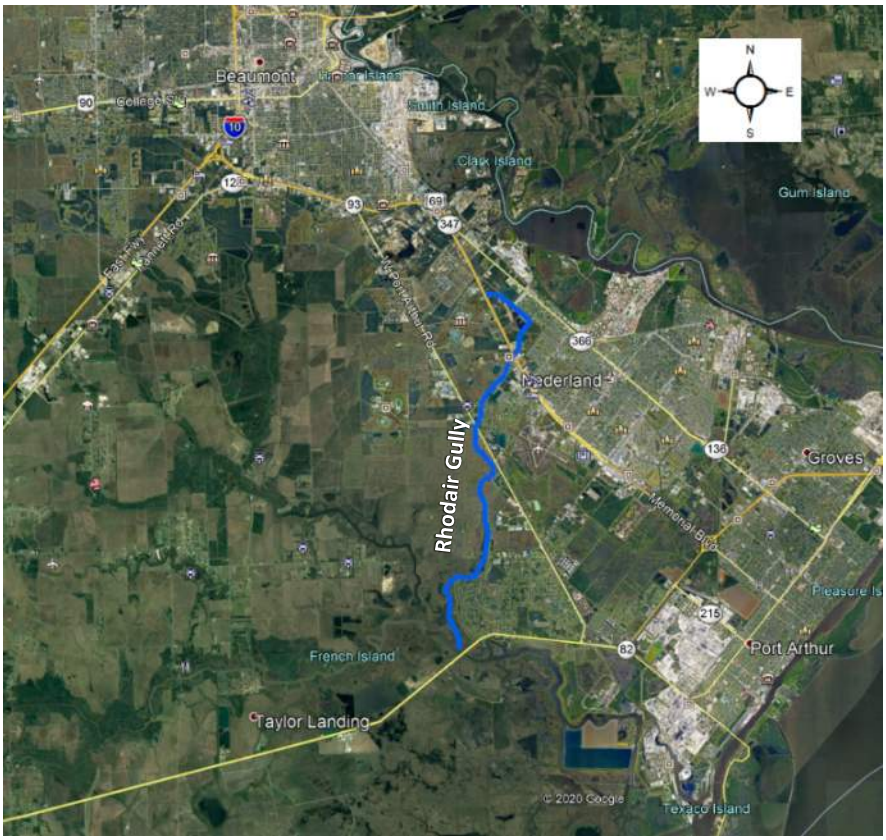


Figure 1. Vicinity Map

2.1 FEMA Flood Insurance Study

Rhodair Gully is part of FEMA Flood Insurance Study (FIS) for Jefferson County, Texas revised August 6, 2002. Rhodair Gully is shown in special flood hazard areas (floodplains) Zones A and B (100-year and 500-year) on Flood Insurance Rate Map (FIRM) Panel No. 480385 0285C revised November 20, 1991 with Base Flood Elevations from 9 ft to 14 ft NGVD. The upstream limit of study is at US Hwy 59 on Flood Profile 15P as shown on **Exhibits 1 and 2 in Appendix B**.

The existing conditions for this study are not based on the effective FEMA Flood Insurance Study due to advancements in data and tools. The HEC-RAS (v 5.0.7) models are based on version 5.0.7 that includes analysis for 2-D overland flow; in addition, cross sections were developed with elevations from LiDAR terrain data. This model is technically superior to the almost 20 year old study by FEMA.

Consequently, if proposed improvements are implemented, applications with FEMA would be required to effectively remove floodplain areas from the FEMA Special Flood Hazard Areas SFHA. These applications are typically the Conditional Letter of Map Revision (CLOMR) or LOMR. The CLOMR is applied for planned improvements for approval before construction and the LOMR is applied after actual improvements are constructed.

3 Methodology

This study was based on standards outlined in the Drainage Criteria Manual for Jefferson County DD7 (November 2019). HEC-HMS (v 4.3) was used for developing hydrology for the drainage areas run-off hydrographs. HEC-RAS (v 5.0.7) was used for evaluating the channel hydraulics and inundation depths. LiDAR data for Coastal Texas of 2017 and aerial imagery were used to manually delineate the sub basins for Rhodair. Construction plans for as-built channel improvements were incorporated into the HEC-RAS (v 5.0.7) existing model. The existing model also included the existing levee pump station south of Port Arthur Road with Atlas 14 rainfall data as the base existing condition to compare all proposed improvements.

3.1 Hydrology

HEC-HMS (v 4.3) was used to develop peak flows and flow hydrographs as directed in the Drainage Criteria Manual for drainage areas of this size. Existing HEC-HMS (v 4.3) models were developed for 2-, 10-, 25-, 50-, 100- and 500-year storm events with parameters in **Table 1 in Appendix A**. The components required to generate flow hydrographs in HEC-HMS (v 4.3) are time of concentration, rainfall data, infiltration losses and abstractions, and a transform method to convert the rainfall to a flow hydrograph.

There were ten main sub-watersheds drainage areas delineated for Rhodair Gully, and nine of these are above 200 acres with an overall drainage area map shown on **Exhibit 3 in Appendix B**.

3.1.1 Rainfall

The rainfall data used reflects the National Oceanic and Atmospheric Administration (NOAA) Atlas 14 rainfall data for Port Arthur SE TX. A 67-percent intensity position is used as the peak center so that the maximum rainfall intensity occurs at approximately two-thirds of each storm event. The table below summarizes the rainfall depth in inches that were used for each annual exceedance probability (AEP). TP-40 rainfall depths are included in the last column to compare the increases in rainfall associated with Atlas 14. For the 1% AEP, the rainfall depth has increased by approximately 3.4 inches or 23%. Rainfall data was also reviewed for Hurricane Harvey storm for comparison of existing conditions.

Rainfall Storm Probability Duration and Depth

Duration	ATLAS 14 Rainfall (in)					TP-40 Rainfall (in)
	50%	10%	4%	2%	1%	1%
15 minutes	1.23	1.76	2.08	2.32	2.57	2.2
1 hour	2.37	3.40	2.95	4.51	5.01	4.4
2 hours	3.04	4.61	4.04	6.49	7.40	6.6
3 hours	3.45	5.43	6.81	7.94	9.21	7.9
6 hours	4.16	6.84	8.79	10.50	12.30	10.5
12 hours	4.88	8.15	10.60	12.80	15.30	13
1 day	5.63	9.49	12.50	15.10	18.30	14.9

3.1.2 Time of Concentration

Time of concentration is defined by the time it takes runoff to travel the lengths of the longest flow path within a watershed. The longest flow path for each sub basin was divided into reaches that represent various types of flow including overland sheet flow, concentrated flow, and channel flow. The length of each component is then divided by the velocity of the flow to obtain the travel time of the individual reach. The time of concentration equation used is as follows:

$$T_c = \frac{L}{V}$$

Where:

T_c = time of concentration, sec

L = longest distance to outfall, ft

V = average flow velocity, ft/sec

Time of concentration (T_c) is calculated as the sum of the travel time of all components. The Natural Resources Conservation Service's (NRCS) Uplands Method was used to estimate the flow velocities for overland sheet flow (T_{sh}), concentrated sheet flow (T_{conc}), and channel flow (T_{ch}). Manning's equation was used to estimate flow velocities for channels and creeks. The table below summarizes the travel time components and time of concentration for each sub basin.

Time of Concentration

DA ID	t_{sh} (hr)	t_{conc} (hr)	t_{ch} (hr)	T_c (hr)
A	0.35	0.35	1.55	2.24
B	0.03	0.16	0.78	0.97
C	0.34	1.70	0.23	2.27
D	0.54	0.66	1.07	2.26
E-PR1	0.25	0.95	1.36	2.56
E-PR2	0.41	1.04	1.15	2.60
F	0.40	1.04	1.40	2.84
G	0.05	1.16	1.66	2.87
H	0.33	0.72	1.35	2.40
I	0.29	0.57	1.04	1.90
J	0.00	0.00	1.65	1.65

3.1.3 Losses

Infiltration losses are accounted for using the Green & Ampt method. This method estimates the infiltration losses based on the soil type of the overall watershed and the ability of the soil to convey water. The initial abstraction losses, the infiltration and surface storage during the early parts of the

storm, are based on the NRCS's Curve Number method. The NRCS curve number is a parameter based on soil type, land use, and vegetative cover of a watershed. A composite curve number was estimated based on the soil type of the watershed. Soils within the Rhodair watershed are clayey and silty and are classified as class D. Infiltration rates are typically low and the runoff potential is high.

The initial abstraction equation used is as follows:

$$I_a = 0.2S$$

Where:

I_a = initial abstraction depth (inches)

S = initial storage $= \frac{1000}{CN} - 10$

CN = NRCS Curve Number

An impervious level of each sub basin is also required to determine the total losses. Percent impervious cover values for Jefferson County were used as instructed in the Drainage Criteria Manual and were applied to the different land used within the watershed. The table below lists the percentage impervious values used for each land use category.

Land Use and Imperviousness

Land Use Categories	% Impervious
Undeveloped	0
Residential 1/2 ac	25
Residential 1/3 ac	30
Residential 1/8 ac or less	65
Light Industrial/Commercial	60
Water	100

3.1.4 Hydrograph Transformation

The Clark Unit Hydrograph method was used to compute unit hydrographs for each sub basin. Three components required for this method are time of concentration, a storage coefficient, and a time-area curve. The storage coefficient is a parameter that indicates the available storage available within each watershed cased on depressions, ponds, channels, and floodplains.

The storage coefficient equation approved by DD7 is as follows:

$$R = 3T_c$$

Where:

R = storage coefficient

T_c = time of concentration

Detailed calculations and the HEC-HMS (v 4.3) model layout are included in **Appendix C**.

3.2 Hydraulics

A 1D/2D hydraulics model was created to simulate the inundation along Rhodair Gully for various storm events using HEC RAS 5.0.7. The hydraulic model was calibrated using recent flood events. The extents of the model begin north of US 69 approximately 0.4 miles from the intersection with the Lower Neches Valley Authority freshwater canal and end at the confluence with Taylor Bayou downstream.

Proposed detention and diversion scenarios were routed using XP-SWMM with the resulting hydrographs imported back into the HEC-RAS (v 5.0.7) models. The results of the hydraulics models for HEC-RAS (v 5.0.7) and XP-SWMM for existing and proposed conditions are available in **Appendix C**.

3.2.1 HEC-RAS Model

A 1D model of the channel section was created from the upstream end to the confluence with Taylor Bayou on the downstream end. A 2D flow area was created by using the overall watershed area for Rhodair. Lateral structures were placed on both sides of the channel between the cross sections and the 2D flow area to capture the overflow coming from the cross sections and spilling into the 2D flow area.

Lateral E, a tributary of Rhodair on the east side approximately 1,500 ft south of US 69, was included in the model as a separate reach. A culvert outfall is located at the downstream end of the tributary connecting it to the main reach. A storage area and lateral structure method was used to model the confluence at Lateral E. Lateral E is connected to the storage area and uses it as the downstream boundary condition. A lateral structure was placed on the main reach and will serve to convey flow between Lateral E and Rhodair Gully.

3.2.2 Hydraulic Parameters

From a review of aerial photography, the gully appeared to be free of vegetation and obstructions. Manning's roughness coefficients of 0.032 for the channel was assigned. The edge of the channel did have vegetation with a conservative value of 0.045 used to the top of banks as there will be overflow passing over them during the major rainfall events.

The existing terrain consists of a range of open area, residential and industrial development, retail, roadways, and wooded areas. Due to the diversity of the land use an overall Manning's roughness

coefficient of 0.06 was assigned to the surface. This surface was connected to the 1D channel within the model through lateral structures, and 1D/2D interface connection techniques.

Contraction and expansion coefficients are required in steady flow models to account for the energy losses due to contraction and expansion at bridges. In dynamic models, contraction and expansion coefficients are not required because the losses due to transition zones are automatically applied in the momentum conservation equation used in HEC-RAS (v 5.0.7). For this reason, expansion and contraction coefficients were not defined in the unsteady model.

3.2.3 Terrain and Gully Geometry

The gully was modeled as a "Main" 10.4 mile channel with one connecting minor "Lateral E" 1.25 mile channel. Approximately 416 cross sections were incorporated into the 1D portion of the model. The cross sections for the gully were obtained from bathymetry, construction drawings, and LiDAR data. Ultimately the three sources of data were refined and compiled to one existing surface. Bathymetry was used for the channel from downstream of W. Port Arthur Road to the southern confluence to Taylor Bayou.

Construction plans that were internal to LJA for recent improvements to the Gully were used to delineate sections between US 59 to W. Port Arthur Road. Drainage District 7 has the construction documents on file. It should be noted that the last phase of construction to the improvements of the gully, Phase V, is currently ongoing. For modeling purposes this was incorporated to the model as existing conditions. There was a change in vertical datums between Phase III Phase IV as Drainage District 7 went from using NAVD 88 Geoid 09 to NAVD 88 Geoid 12B. To tie in the construction plans to the LiDAR data, field survey was conducted to verify benchmark elevations used in the plans. It was determined that a vertical adjustment of 0.67 feet should be applied to the last two phases of construction for the purposes of this study.

Coastal LiDAR is the third source and covers the remainder of the channel from the upstream end to US 69 as well as all overbank areas. These three different surfaces were merged to create an existing terrain. This surface was connected to the 1D channel within the model through lateral structures, and 1D/2D interface connection techniques.

3.2.4 Bridges

As outlined in the scope geometry of bridges and hydraulic structures at SH 365, W. Port Arthur Road, US 69, and LNVA Canal Crossing were incorporated to the HEC-RAS (v 5.0.7) Model. Corresponding geometries were obtained from construction as-built drawings and national bridge inventories. A portion of pipeline crossings were added to the model. However, not all pipeline crossings were modeled because geometries were not verified.

3.2.5 Routing Diversion and Detention

Detailed routing was performed using XP_SWMM to accurately model the proposed diversion and detention scenarios. The resulting hydrographs were used to determine the discharge back into the Rhodair stream reaches in HEC-RAS

The HEC-RAS (v 5.0.7) model was imported to XP-SWMM. This model was "clipped" to isolate the proposed improvement areas. Tailwater conditions were exported from the existing conditions HEC-RAS model and inputted into the downstream node within XP-SWMM. Flows calculated through HEC-HMS (v 4.3) was applied directly to the upstream node within the XP-SWMM model. Inflow links, storage notes, and outflow links were drawn directly into XP-SWMM. Preliminary sizing was performed for inflow and outflow links using hand calculations and ultimately refined within XP-SWMM.

A surface of the proposed detention ponds was created using Civil 3D to model the detention scenario. From these proposed surfaces stage-storage relationships were extracted and inputted to the storage nodes within XP-SWMM. Coefficients, Manning's values and other parameters were replicated from the HEC-RAS (v 5.0.7) model to XP-SWMM to ensure model consistency.

3.2.6 Hydraulic Boundary

There is one main outfall to which Rhodair Gully confluences with Taylor Bayou. Flood profiles were downloaded from Federal Emergency Management Agency (FEMA) data base which is attached in **Appendix B.** The Base Flood Water-Surface Elevation without floodway shows an elevation of 5 feet.

A constant hydraulic boundary stage elevation will misrepresent conditions as the model is receiving flow. It was noticed that during the initial iterations, Rhodair Gully would have negative flow before enough stormwater runoff is able to push downstream causing positive flow.

A commonly used method, normal depth, resulted in a maximum elevation during the peak of the storm near existing water surface elevations during dry weather. This maximum elevation is significantly lower than results from known storm events.

To accurately represent a rainfall event, a dynamic synthetic stage hydraulic boundary was generated as shown in **Figure 1.5.** This stage hydrograph began with an existing water surface elevation which was extracted from the Lidar which is dated in 2017. The peak of the stage was offset just after the peak of overall watershed runoff. This allows the model to perform accurately during all computation points throughout the duration of the storm.

Overall peak flows from the 100 year storm and 25 year storm events were compared by percentage to generate a 25 year hydraulic boundary. This percentage was applied to the 100 year synthetic hydraulic boundary stage to represent the hydraulic boundary conditions for a 25 year storm event.

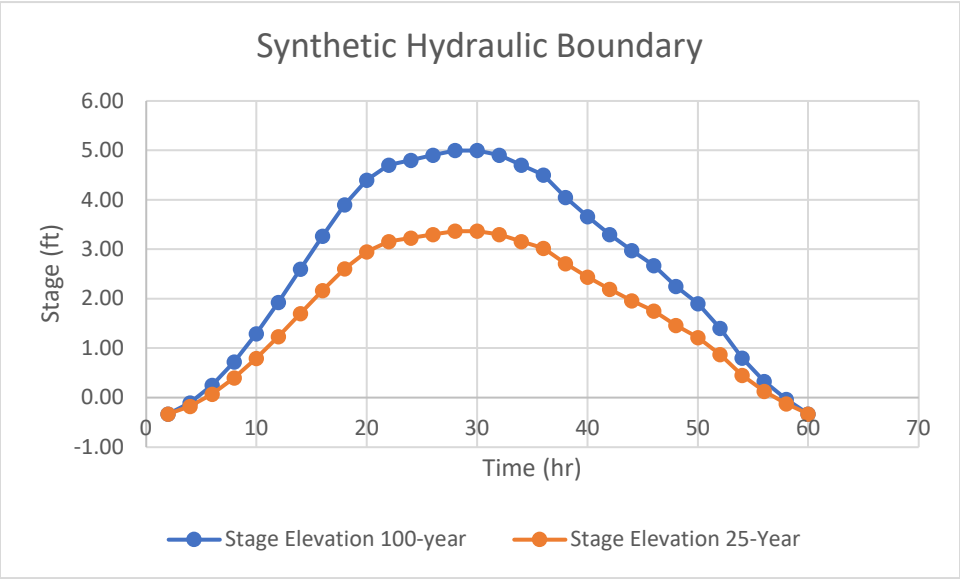


Figure 1.5. **Dynamic Synthetic Stage Hydraulic Boundary**

4 Existing Conditions

Existing conditions were reviewed for three rainfall data for TP-40, Atlas 14, and Hurricane Harvey with peak discharge and volumes shown on **Table 2 in Appendix A**. The existing 100-year (1%) water surface elevations are available on **Table 3 in Appendix A**. The inundation depths were mapped and compared as shown on **Exhibit 4 in Appendix B**. The existing base model included existing levee pump station south of West Port Arthur Road with Atlas 14 rainfall data.

4.1 Comparison of Rainfall Events

As set forth by the scope of work, HEC-HMS (v 4.3) models were developed for the 2-, 10-, 25-, 50-, 100-, and 500- year rainfall events using Atlas-14 rainfall. Existing scenarios for each rainfall event were also developed and modeled in HEC-RAS (v 5.0.7) to determine the riverine and overland inundation resulting from each of these events.

Hurricane Harvey was also modeled to validate the existing model. Rainfall data collected by Vieux & Associates was used to create hydrographs to recreate this storm event. This data includes a continuous rainfall record for every 5 minutes for Jefferson County from August 25th, 2017 to September 1, 2017 using 1-km pixels. The pixels located in the Rhodair watershed were averaged to better define the rainfall received by the gully during this event.

Figure 2 below shows a profile of the water surface elevation of the main Rhodair reach. This includes all bridge crossings along Rhodair Gully. For simplicity purposes 6 main bridge crossings: FM 365, W Port Arthur, Cloverdale Crossing, HWY-287, Wellspring Dr., and 5th avenue bridge structures are highlighted. As shown in the Harvey profile, FM 365, Cloverdale Crossing, and Wellspring DR were submerged during the storm event. The major highway bridge crossing, FM 365 was analyzed in further detail for model calibration purposes. Submerged structures shown below that are not listed nor specifically denoted are pipeline crossings.

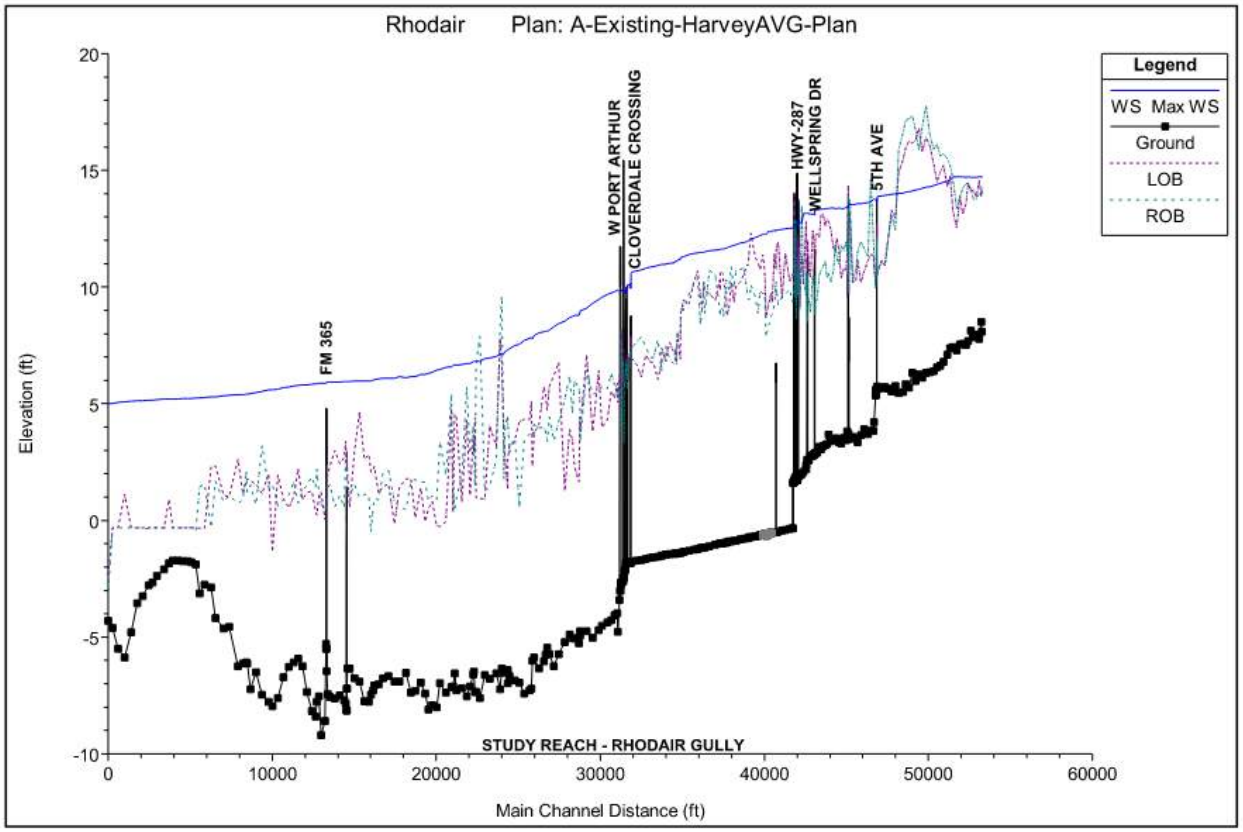


Figure 2. **Water Surface Elevation Profile for Hurricane Harvey Event**

Historical aerial photographs from Google Earth captured the inundation of FM 365 during August 2017. **Figure 3** below compare the Google Earth imagery for August 2017 on the left with the flood map results from the model. As seen of these two photographs, the Rhodair floodplain extends to the levee running parallel on the east side. FM 365 is submerged by the gully but becomes dry approximately 0.3 miles west of the gully as highlighted by the red ovals. Outside of the levee on the east, an RV park appear in dry conditions.

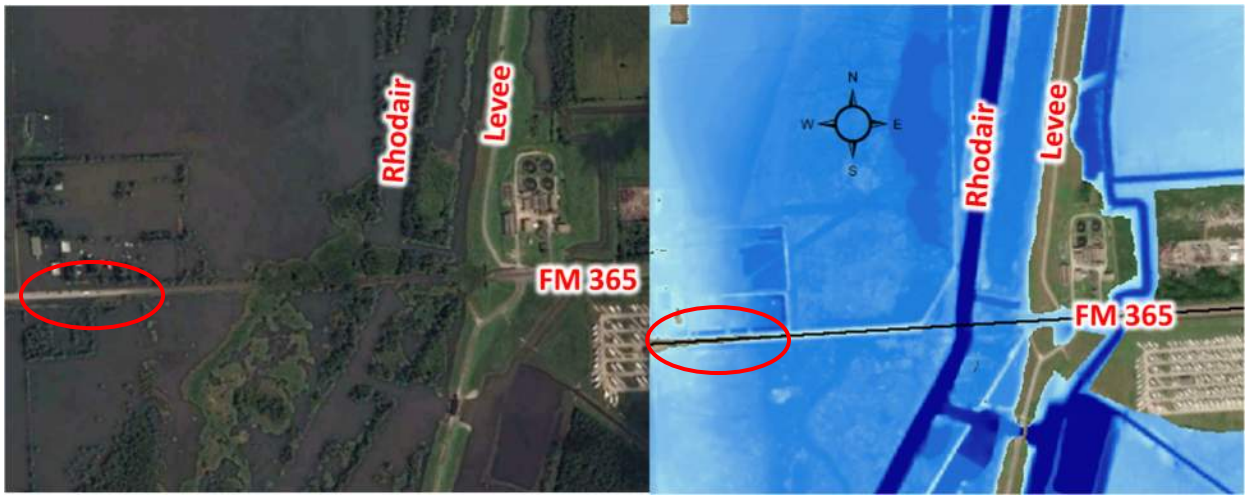


Figure 3. Inundation During Hurricane Harvey at FM 365

Although no time stamp is provided on these aerials, they verify that FM 365 was submerged due to Hurricane Harvey rainfall. Comparing the inundation map along Rhodair created from the Harvey model to the images captured by the satellite created confidence and validated the existing model to be used to create the proposed scenarios.

4.2 Existing Levee Pump Station

An existing pump station operates to drain the area east of the levee adjacent to Rhodair into the gully. There are five main pumps with a capacity to deliver 75,000 GPM each. **Figure 4** shows the location of the pump station with respect to the gully.

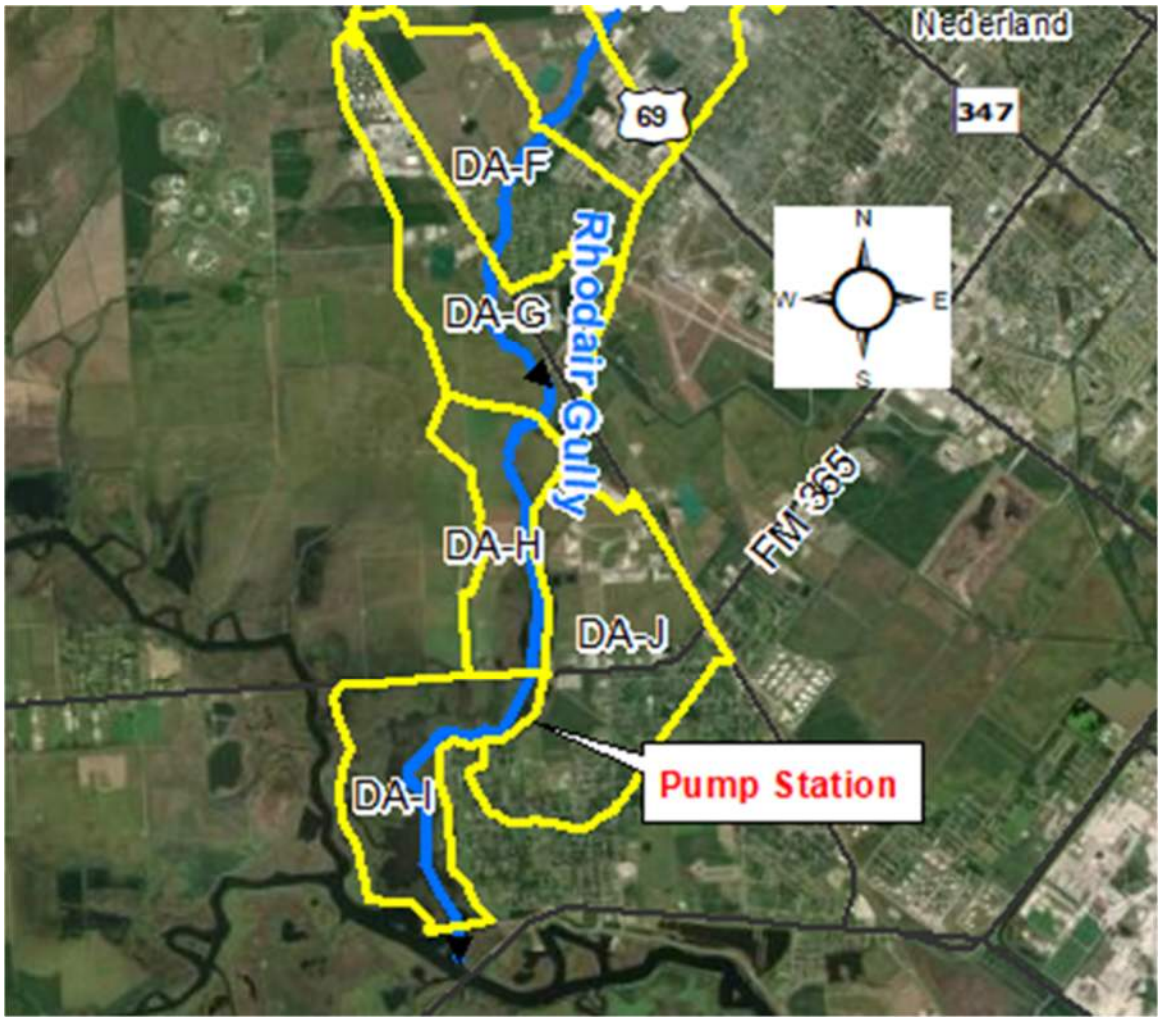


Figure 4. Existing Levee Pump Station

Drainage area J (DA-J) was identified as the total area that is pumped into Rhodair during storm events. The flows from DA-J were analyzed and modeled to determine the impact to Rhodair Gully and the upstream areas. The maximum increase in water surface elevation with the pump station operating was calculated to be 0.2 feet and it considers the on and off pump elevation and all five pumps operating at

maximum capacity. This 0.2 feet increase along Rhodair occurs locally to the pump station downstream of W Port Arthur Rd and is reduced to zero at the upstream end of the gully. The existing pump station is included in all scenarios analyzed as the existing base model as part of this study.

4.3 Areas of Existing Inundation

The existing inundation map was analyzed to identify problem areas and to be able to present recommendation for improvements. The downstream end shows significant flooding due to the backwater from Taylor Bayou as seen in **Figure 5**.

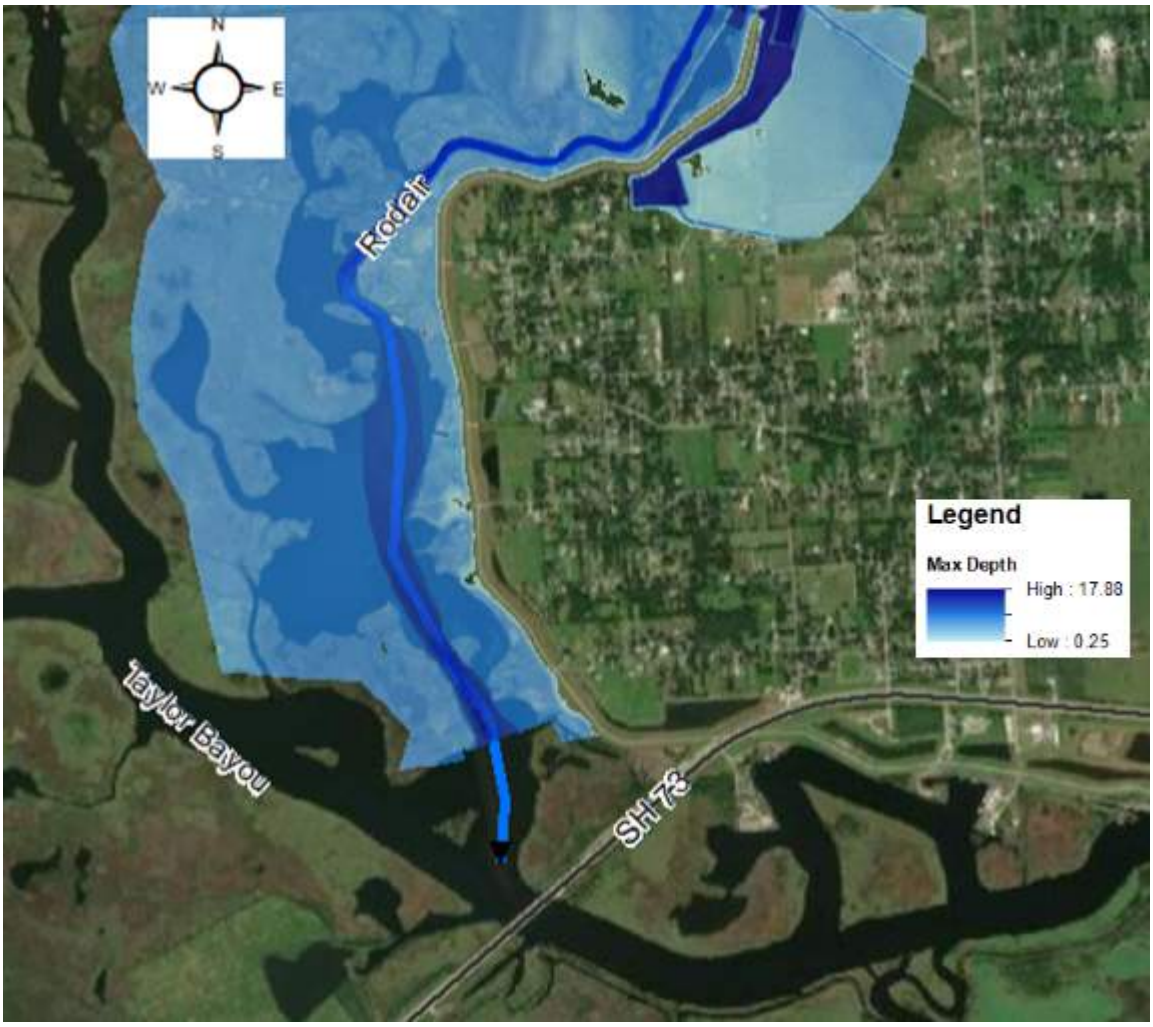


***Figure 5*. Existing Inundation Caused by Downstream Tailwater Conditions**

Shallow flooding is observed on the residential area east of Rhodair and north of W. Port Arthur Road as shown in **Figure 6**. This could be a result of the result of local storm drainage issue or storm sewer system not accounted for in the model. However, deep flooding of approximately two feet can be observed on homes adjacent to the gully on the east as well.

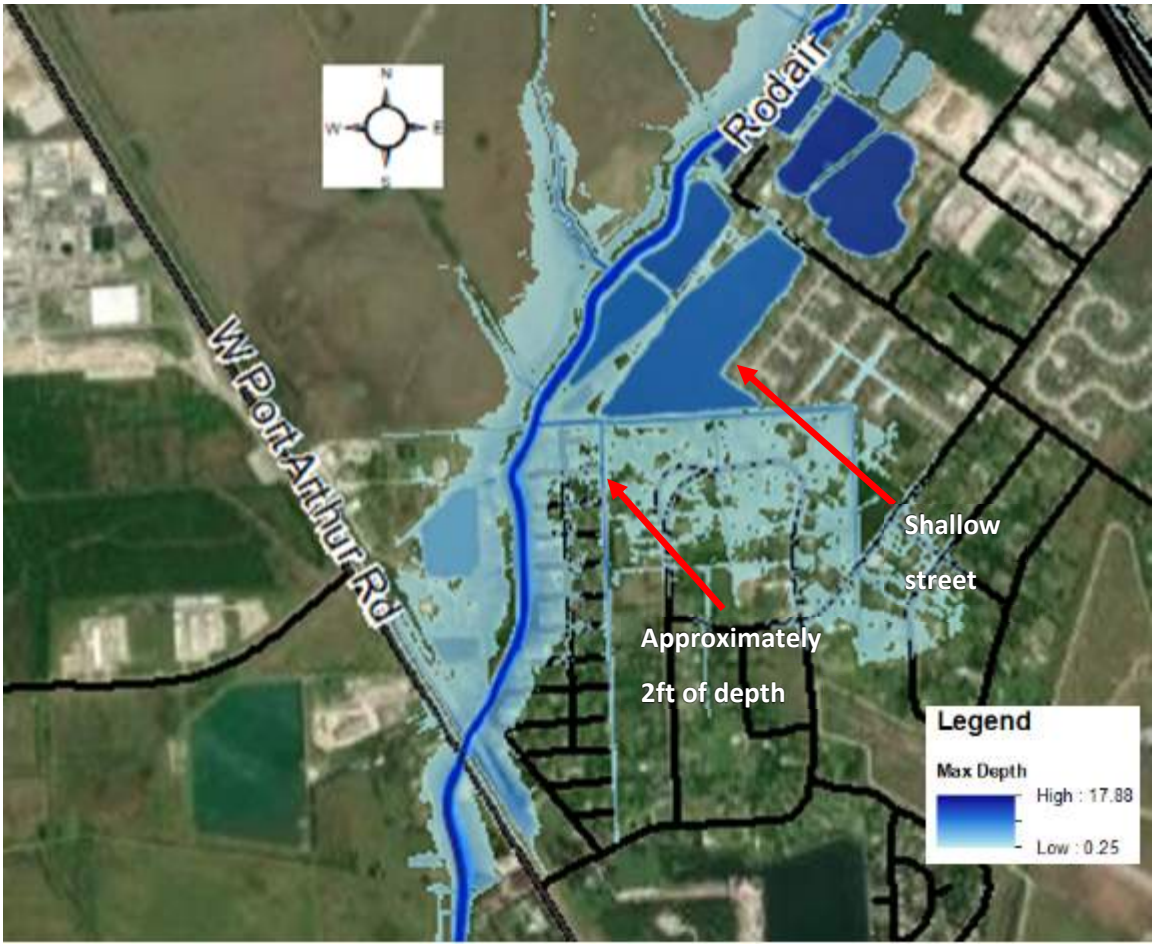


Figure 6. **Existing Residential Flooding Adjacent to Rhodair**

Wide spreading flooding is observed on Lateral E as seen in Figure 7. Although most of the overflow is shallow, depths of approximately 1.3 feet can be seen along the north side of the tributary surrounding commercial facilities.

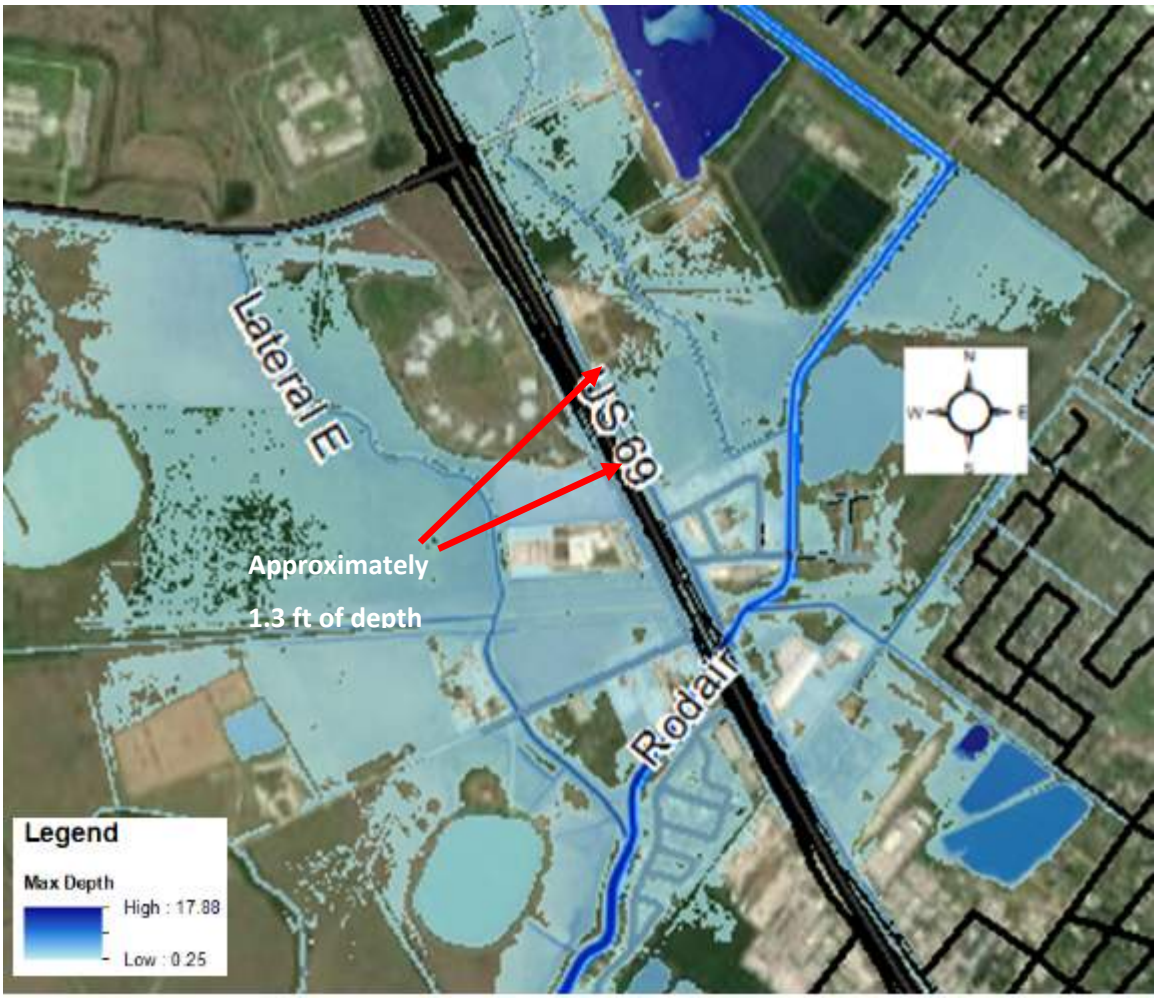


***Figure 7*. Existing Inundation on Lateral E**

5 Proposed Conditions

To mitigate flooding along Rhodair Gully, the following improvements were evaluated for proposed conditions to determine change in water surface elevations (WSEL) along the channel and inundation areas.

- Proposed Diversion: Drainage areas B and C on the north side were proposed to be partially diverted to discharge to the Neches River.
- Proposed Detention: Detention facilities were proposed in drainage areas D and E
- Proposed Levee Extension and Pump Facilities: The existing levee south of W Port Arthur Rd was proposed to be extended north with an additional pump station.
- Other conditions were evaluated but not proposed for ultimate improvements.

The proposed reduction to WSEL is compared on **Table 4 in Appendix A** and reduction to inundation areas re shown on **Exhibit 5 in Appendix B** separately for proposed conditions. The flood profiles and hydraulic results for the proposed conditions are available in **Appendix C.**

5.1 Proposed Drainage Diversion

To help reduce downstream impacts from the north, excess stormwater runoff is proposed to be diverted in the northern portion drainage areas B and C to discharge to the Neches River and provide some relief to Rhodair Gully. The proposed diversion mitigates impacts to two tertiary areas, drainage area B (DA-B) and drainage area C (DA-C) with diverted flows summarized in table below.

Summary of Proposed Flow Diversion

Area	Drainage Area acres	Existing Peak Flow cfs	Proposed Peak Flow cfs	Diverted Flow cfs
B	235	533	474	59
C	296	401	290	111

Remaining runoff for the drainage areas will normally drain to the south to Rhodair Gully with routes shown in **Figure 8**. There was an 11% peak flow reduction for DA-B, and a 38% peak flow reduction for DA-C. Hydrograph comparisons from the existing flows vs proposed diverted flows are shown in **Figures**

9 and 10. Overall there was a 0.2 ft (2.4 inches) reduction to the water surface elevation to the upstream portion of the gully and a 0.06 ft (0.72 inches) reduction to the water surface elevation midstream. A graph of the water surface elevation for the main gully is available in the stream profile in **Appendix C.**

Figure 8. Proposed Diversion Layout

The diverted flows were proposed with 48" storm sewers, as depth and cover may be a limitation for constructability under roadways; however, it may be possible to use larger box culverts to divert higher flows. Runoff will be diverted north across Hwy 347 to discharge into open areas by drainage swales to the Neches River. Because the area is already developed with limited areas for developing open drainage

ditches, the diverted flows are proposed to be captured and carried by proposed storm sewers under existing streets.

While the drainage diversions provide some relief to Rhodair Gully, the benefit of the proposed diversion may be marginal compared to the construction disruption, costs and potential risks to existing development. The design for the storm diversion will likely be complicated by existing development and utilities conflicts. In addition, construction for diversion will most probably be disruptive to existing development, residents, and traffic as existing roadways will be demolished and reconstructed to install proposed storm sewer along the diversion route and culvert crossings under Hwy 347. Areas B and C does not show to be impacted by the existing 100-year flood event and proposed flow diversion may be considered for optional improvements.

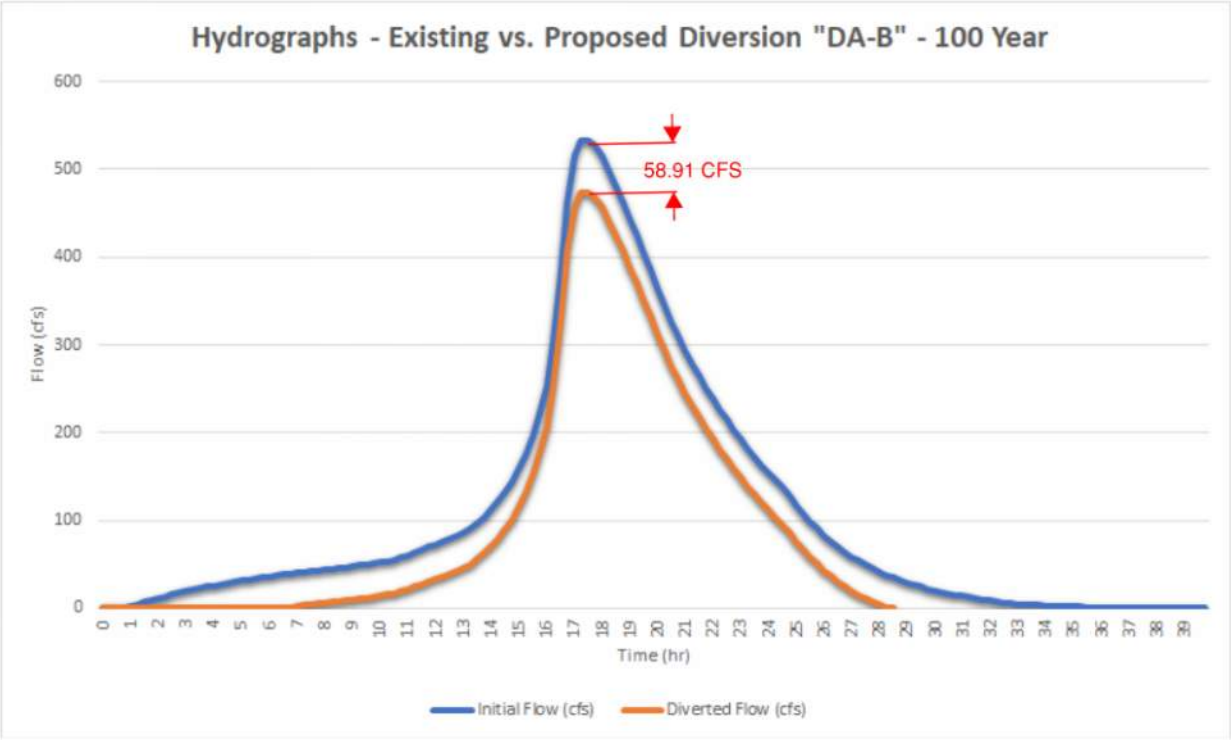


***Figure 9*. Existing vs. Diverted Flows**

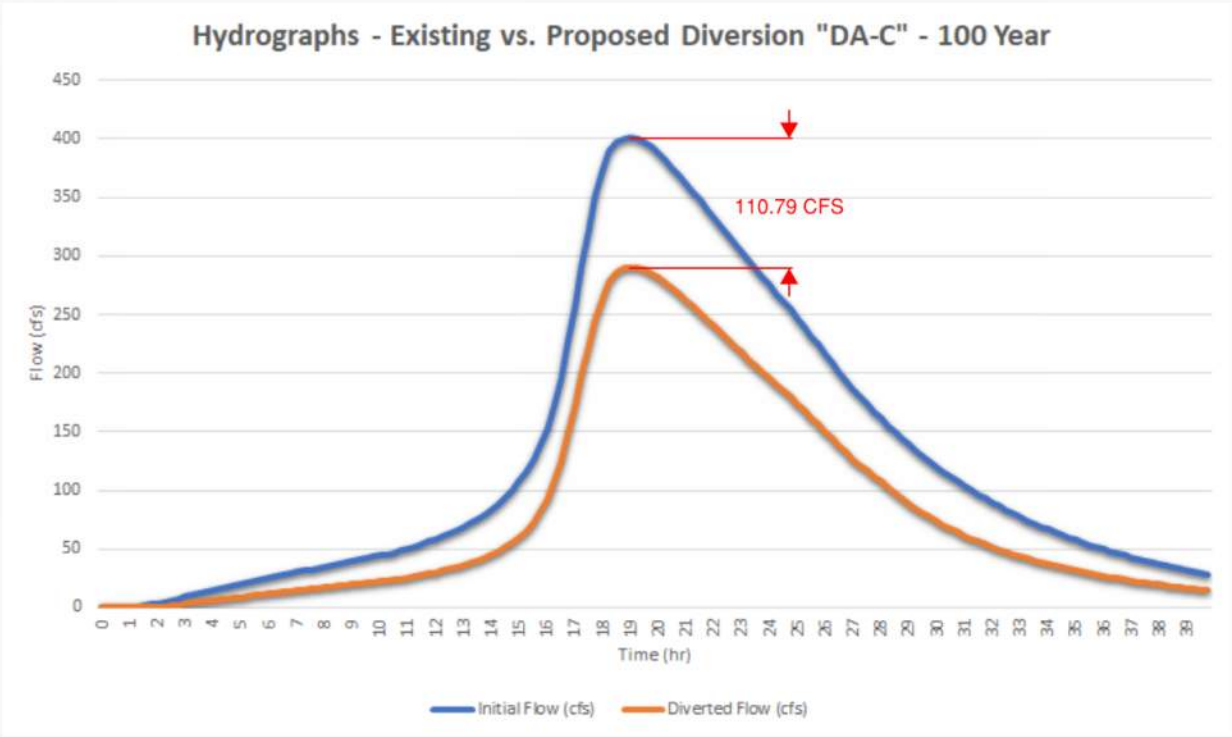


Figure 10. **Existing vs. Diverted Flows**

5.2 Proposed Detention Facilities

To mitigate the effects of flooding in the northern portion of the watershed and to reduce the water surface elevation, proposed detention facilities were proposed for drainage areas D and E. Detention for area D was proposed north of Hwy 69 , and the detention for area E was proposed with two ponds along Lateral E as summarized below.

Summary of Proposed Detention

Area Name	Drainage Area (acres)	Existing Peak Flow (cfs)	Proposed Peak Flow (cfs)	Detention Storage (ac-ft)	Total Area (acres)	Storage to Drain Area (acre-ft/acre)
D	785	1224	617	707	43	0.90
E	483	600	165	426	118	0.88

Detention Area D

Detention for area D resulted in approximately 50% peak flow reduction with graph showing the existing flow versus the proposed flow in **Figure 12.** Overall, there was a 0.91 ft (10.92 inches) reduction to the water surface elevation to the upstream portion of the gully and a 0.39 ft (4.68 inches) reduction to the water surface elevation midstream with hydraulic profiles and results available in **Appendix C.**

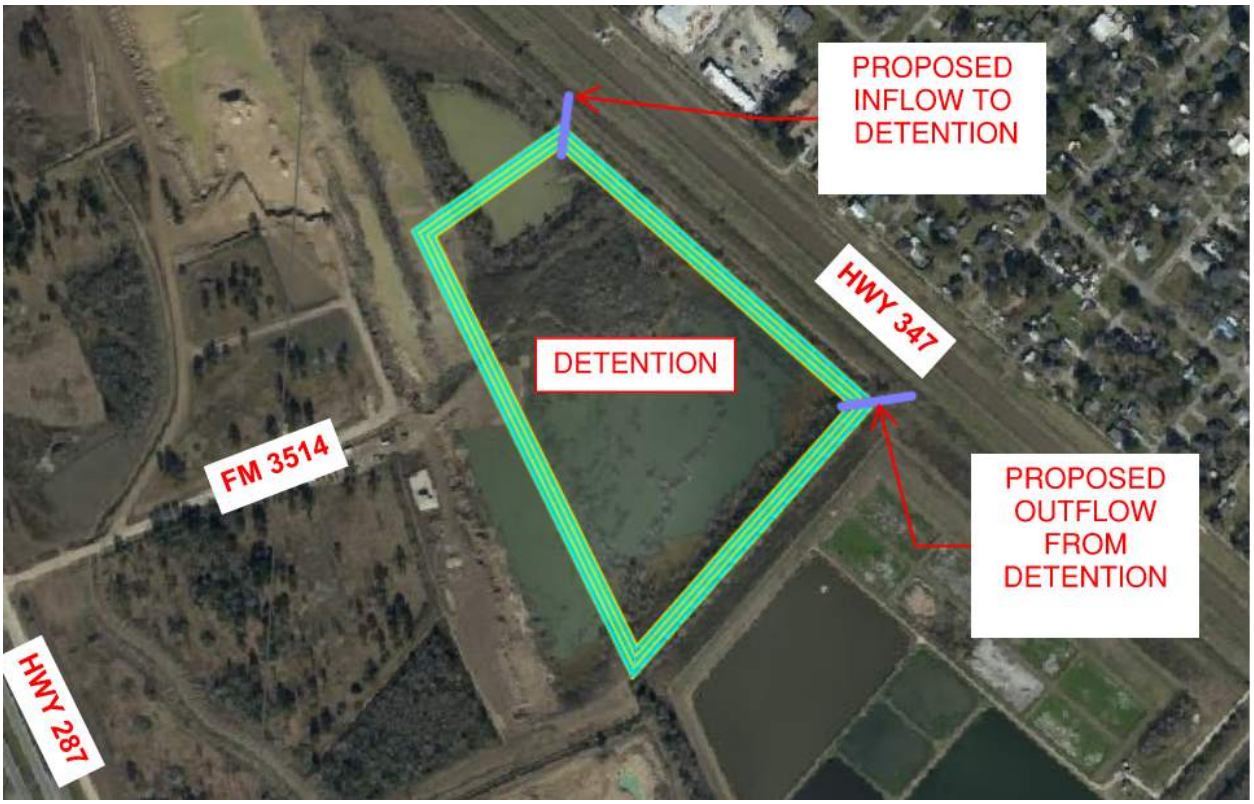


***Figure 11*. Proposed Detention Layout D**

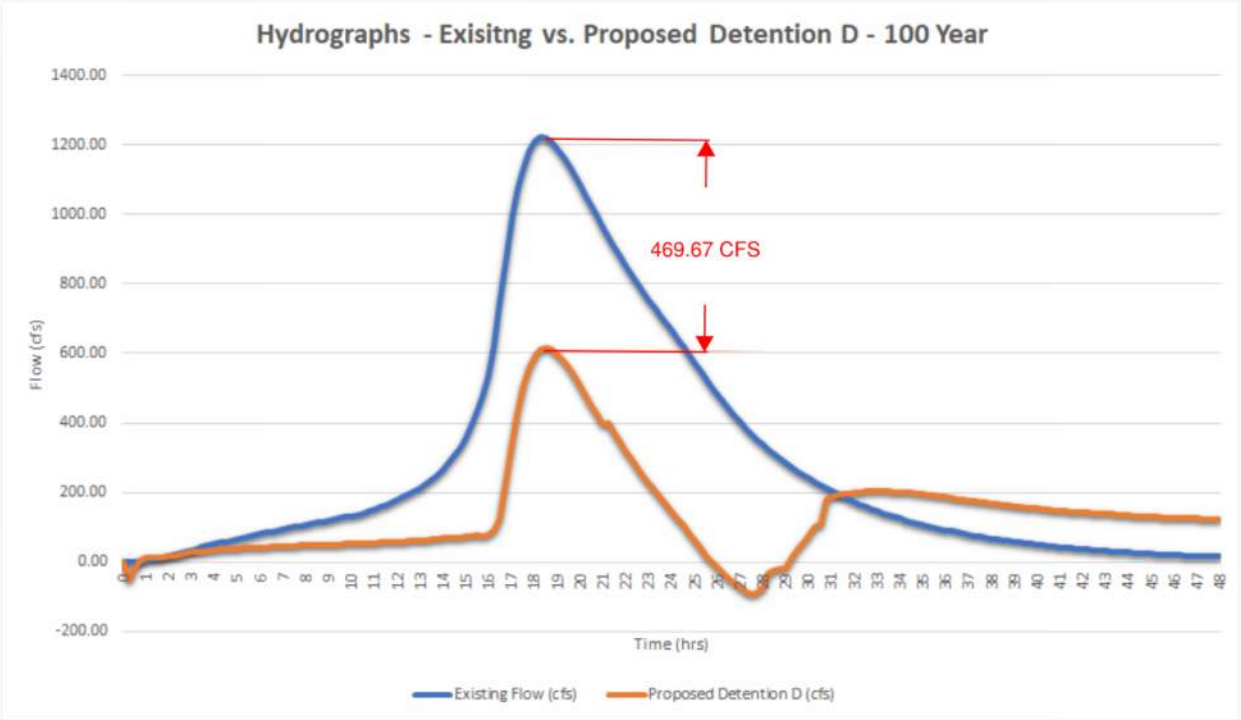


Figure 12. Existing vs Proposed Flows

Detention Area E

The proposed Detention E has two proposed ponds that reduced peak flow by approximately 73% and delays the peak outflow by 15 hours. A graph showing the existing flow versus the proposed flow is shown below in **Figure 13.** The west detention basin will store a peak volume of 323 acre-feet. The eastern detention basin has a storage volume of 103 acre-ft. The storage per drainage area ratio for E is less efficient than area D; however, detention for area E produces higher storage and reduction to peak flows.

Lateral E water surface elevation is reduced significantly. However, there was 0.14 ft (1.68 inches) reduction to the water surface elevation to the upstream portion of Rhodair Gully and a 0.22 ft (2.64 inches) reduction to the water surface elevation midstream.

***Figure 13*. Proposed Detention Layout E**

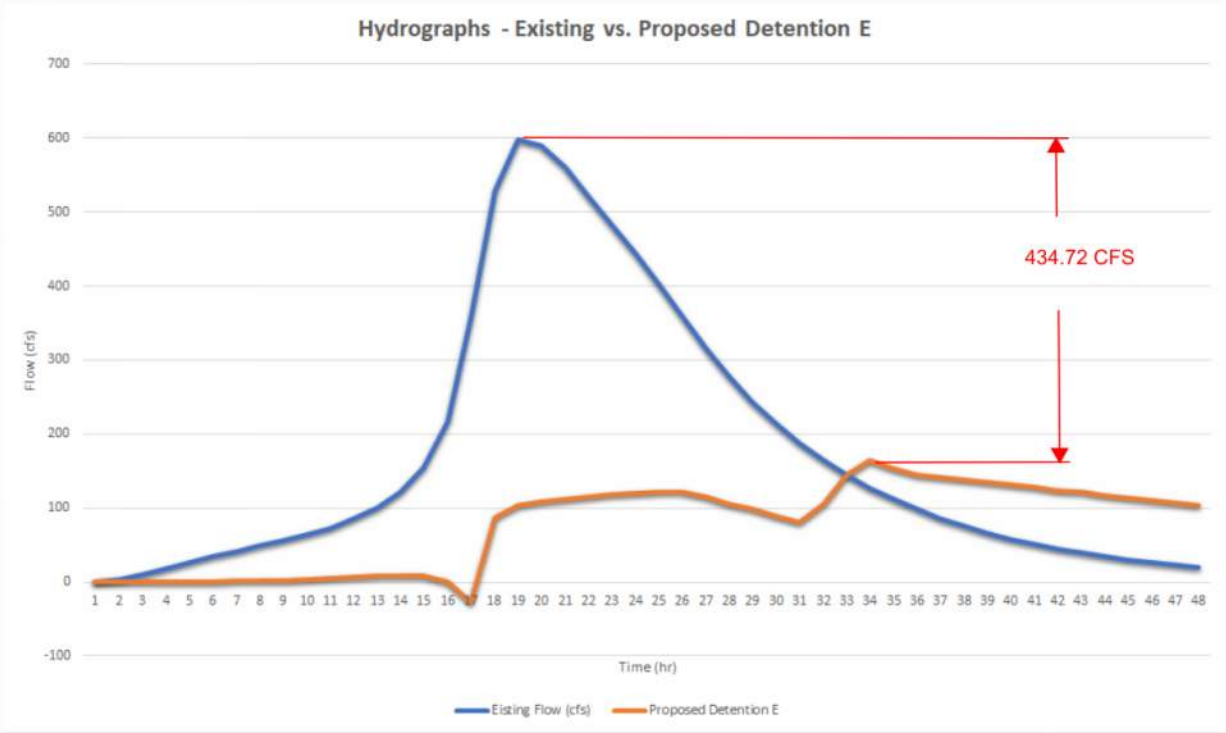


***Figure 14*. Existing vs Proposed Flows**

5.3 Proposed Levee Extension and Pump Station

To lower the downstream water surface elevation a proposed pump station and storage bay is proposed which will store excess upstream stormwater and forcefully pump flows downstream into the gully with an extended levee from the existing levee. This proposed pump station layout is shown below in **Figure 15.** The pump facility is proposed with the equivalent of 4 x 62,000 gallons per minute (GPM) pumps and approximately 2139.13 acre-feet of storage to adequately reduce the water surface elevation on Rhodair Gully.

Proposed Pump Summary

Area	Drainage Area acres	Cross Section	Existing Peak Flow cfs	Proposed Pump Flow cfs	Proposed Channel Peak Flow cfs	Storage Volume acre-ft
A-G	5809	25095	4282.62	581.45	2896.44	2139.13

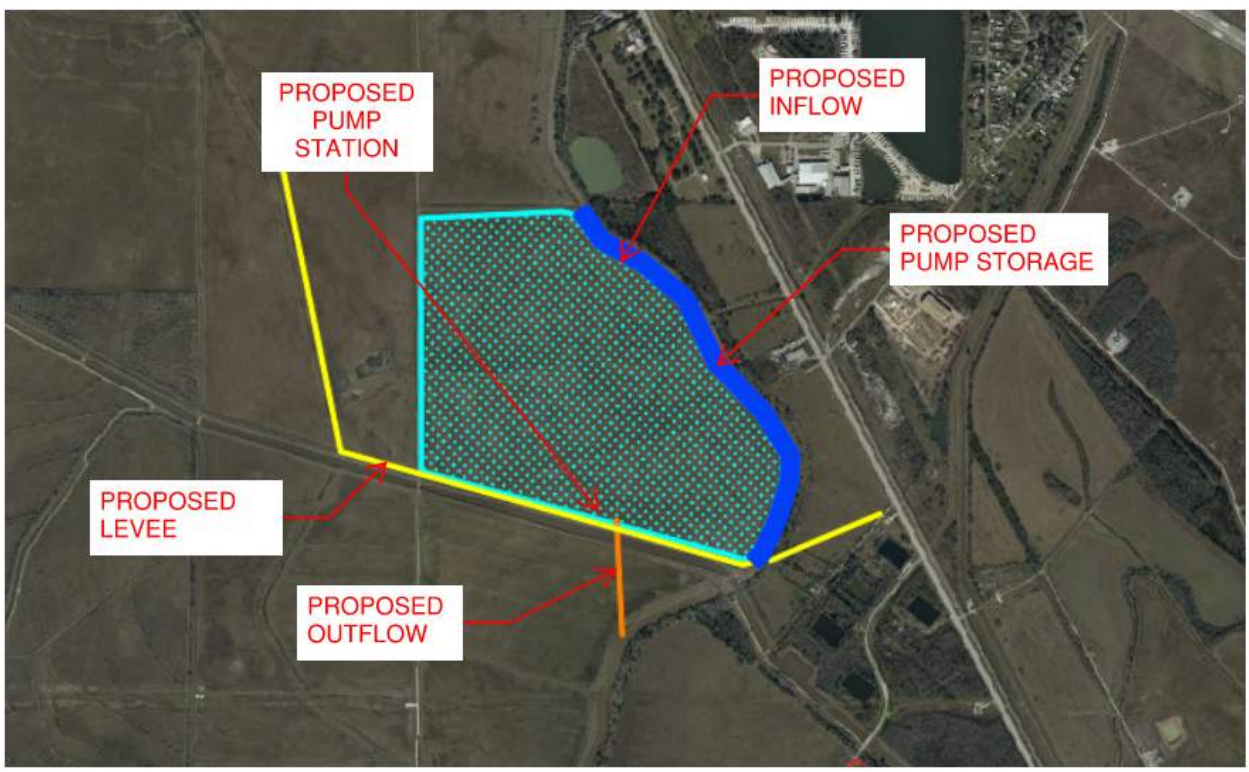


***Figure 15*. Proposed Pump and Storage Layout**

The largest benefits for the proposed pump facility can be seen downstream of the gully. The water surface elevation is reduced by 0.97 ft (11.64 inches) near the facility and 0.41 ft (4.92 inches) midstream. A graphical representation of the water surface elevations along the span of Rhodair Gully is available in the profile in **Appendix C**.

5.4 Other Conditions

Proposed condition was reviewed for dredging the lower 10,000 feet of Rhodair Gully to Taylor Bayou. The proposed improvement had negligible impacts to the water surface elevation for Rhodair Gully upstream since the tailwater conditions for Taylor Bayou was the controlling factor for Rhodair Gully. As a result, dredging improvements are not required or recommended for ultimate improvements to Rhodair Gully.

6 Results

The proposed conditions as described above have been optimized for the purposes of this study to achieve the maximum reduction in water surface elevation and mitigate the effects of flooding. Each model was ultimately combined for an ultimate conditions model with inundation map shown on **Exhibit 6 in Appendix B**. The HEC-RAS (v 5.0.7) results with stream profile for combined ultimate improvements is available in **Appendix C**.

6.1 Proposed Ultimate Conditions

The Ultimate Conditions incorporates all proposed improvements into one model: the diversion, detention basins, storage bay and pump station. Each portion of the proposal mitigates flooding effects targeted to a specific area. As it does have impact to reducing the water surface elevation downstream, the major improvements are seen for the targeted areas of improvements. This ultimate condition will combine each of the mitigation proposals together which will see multiple reductions in water surface elevation and flooding to numerous portions of the watershed as shown on **Exhibit 6**.

The proposed Ultimate Condition has influence over the entire watershed where major impacts can be seen to the upstream, midstream, and downstream portions of Rhodair Gully. Water surface elevations from each individualized model are further improved with upstream reductions of 1.16 ft (13.92 inches), midstream reductions 0.71 ft (8.52 inches) and downstream of 1.61 ft (19.32 inches) with profile available in **Appendix C**.

6.2 Summary

Each proposed improvement has a specific strategy for locations along Rhodair Gully. Therefore, the individualized levels of optimization have various impacts for different portions to Rhodair Gully.

A tabular comparison of the three proposed conditions and the ultimate condition is summarized in the table below. Additionally, inundation maps for proposed conditions are shown in **Exhibits 5 and 6**.

Summary of Max WSEL Reduction for Proposed Conditions

Maximum Change in WSEL	Proposed Diversion	Proposed Detention E	Proposed Detention D	Proposed Pump	Proposed Ultimate
Upstream 54352-43598	0.2 ft (2.4 in)	0.14 ft (1.68 in)	0.91 ft (10.92 in)	0.04 ft (0.48 in)	1.16 ft (13.92 in)
Midstream 32977-43598	0.06 ft (0.72 in)	0.22 ft (2.64 in)	0.39 ft (4.68 in)	0.41 ft (4.92 in)	0.71 ft (8.52 in)
Downstream 32854-End	0.02 ft (0.24 in)	0.08 ft (0.96 in)	0.13 ft (1.56 in)	0.97 ft (11.64 in)	1.61 ft (19.32 in)

6.3 Additional Considerations

Rhodair Gully may be improved with further considerations as follows:

- Improvements can be performed in phases depending on need and available funding.
- Determine economic cost benefit analysis as needed.
- Conduct routing and utility conflict analysis for diversion routing through existing development.
- Geotechnical investigations need to be performed for areas of excavation and fill to verify side slope soil stability.
- Obtain boundary surveys where additional right-of-way (ROW) may be required.
- Perform topographic survey, engineering, and design for planned projects.
- Apply with FEMA for improvements in effective floodplain or floodway areas.

7 VII – Costs

The preliminary opinion of probable construction costs for improvements to Rhodair Gully is summarized below with estimate in **Table 6**:

Proposed Diversion	$24,860,172
Proposed Detention Facilities	$59,443,825
Proposed Levee Extension and Pump Facilities	$137,646,614
Total Ultimate Improvements	**$221,950,611**

The cost estimate was based on the following. Percentage factors varied based on total scale.

- TXDOT 3- or 12-month pricing as available rounded up
- 20 - 40% for other incidental construction items
- 20 - 25% for professional services for geotechnical, environmental, surveying, engineering and design
- 25 - 50% for contingencies

Quantities are approximate based on preliminary layouts. Costs are high level based on available information and subject to change with additional scoping and design. The estimated costs do not include right-of-way acquisition, operation and maintenance, and escalation and financing.

Appendix A - Tables

Table 1 - Hydrology Calculations and Parameters

DA ID	Area (ac)	Area (sq mi)	S_{conc} (ft/ft)	S_{Ch1} (ft/ft)	S_{Ch2} (ft/ft)	L_{sh} (ft)	L_{conc} (ft)	L_{ch1} (ft)	L_{ch2} (ft)	L_{ch} (ft)
A	183.1	0.29	0.0015	0.0002	0.0003	100	780	2985	1779	4764
B	235.4	0.37	0.0036	0.0012	-	100	699	4001	0	4001
C	296.3	0.46	0.0016	0.0011	-	100	4892	2451	0	2451
D	1047.1	1.64	0.0005	0.0005	0.0008	100	526	7448	2266	9714
E	1509.1	2.36	0.0010	0.0013	0.0002	100	1752	9129	2774	11903
F	1248.5	1.95	0.0027	0.0010	0.0002	100	3137	7357	4483	11840
G	1289.6	2.02	0.0009	0.0009	0.0004	100	2044	8469	7179	15648
H	726.9	1.14	0.0018	0.0023	0.0002	100	1758	1669	9099	10767
I	999.4	1.56	0.0023	-	0.0006	100	1587	0	12125	12125
J	2179.3	3.41	-	0.0018				13688		

DA ID	V_{conc} (ft/sec)	P2 (in)	n_{conc}	A_{Ch1} (ft2)	$P_{wet, Ch1}$ (ft)	R_{Ch1}	n_{Ch1}	V_{Ch1} (ft/sec)	A_{Ch2} (ft2)	$P_{wet, Ch2}$ (ft)	R_{Ch2}	n_{Ch2}
A	0.6249	5.63	0.15	15.29	19.45	0.79	0.030	0.630	165.6	44.353	3.734	0.030
B	1.2258	5.63	0.01	12.92	17.43	0.74	0.030	1.427	-	-	-	-
C	0.8016	5.63	0.15	53.29	21.81	2.44	0.030	2.920	-	-	-	-
D	0.2228	5.63	0.15	96.24	37.51	2.57	0.030	2.082	218.3	46.935	4.651	0.013
E	0.5102	5.63	0.15	52.47	22.12	2.37	0.030	3.166	674.8	98.984	6.817	0.030
F	0.8384	5.63	0.24	47.48	28.04	1.69	0.030	2.231	531.0	79.880	6.647	0.025
G	0.4878	5.63	0.01	39.58	23.58	1.68	0.030	2.121	755.3	111.070	6.800	0.030
H	0.6750	5.63	0.15	20.17	19.95	1.01	0.030	2.399	711.0	128.830	5.519	0.030
I	0.7738	5.63	0.15	167.00	82.01	2.04	0.030	-	1225.0	279.290	4.386	0.030
J		5.63		16.25	18.30	0.89	0.025	2.306				

DA ID	V_{Ch2} (ft/sec)	t_{sh} (hr)	t_{conc} (hr)	t_{Ch} (hr)	t_c (hr)	R	% Impervious	CN	Cum CN	Ia
A	2.138	0.347	0.347	1.547	2.240	6.721	8.4601	81.83	85	0.3529
B	-	0.030	0.158	0.779	0.967	2.902	30.6516	85.77	85	0.3529
C	-	0.342	1.695	0.233	2.270	6.811	32.1709	86.51	85	0.3529
D	8.746	0.538	0.655	1.066	2.260	6.779	29.1229	85.70	85	0.3529
E	2.187	0.408	0.954	1.153	2.515	7.545	24.4381	84.95	85	0.3529
F	2.581	0.399	1.039	1.398	2.837	8.511	15.0399	82.89	85	0.3529
G	3.653	0.052	1.164	1.655	2.871	8.613	23.8273	84.85	85	0.3529
H	2.194	0.326	0.723	1.345	2.395	7.185	12.1999	82.20	85	0.3529
I	3.238	0.292	0.570	1.040	1.902	5.707	32.0012	85.76	85	0.3529
J				1.649	1.649	4.947	18.4003	73.58	85	0.3529

Table 2 - Exisiting Peak Flows

Basin	Area (mi^2)	Peak Flows (cfm)								
		50% AEP	10% AEP	4% AEP	2% AEP	1% AEP	0.02 AEP	TP40	$Harvey_{avg}$	$Harvey_{max}$
DA-A	0.29	82	136	173	210	248	363	209	260	317
DA-B	0.37	201	316	365	461	533	753	461	466	565
DA-C	0.46	134	221	280	339	401	586	338	421	512
DA-D	1.64	474	782	992	1200	1420	2075	1196	1489	1811
DA-E	2.36	624	1039	1326	1605	1903	2792	1599	2045	2481
DA-F	1.95	464	781	1005	1217	1447	2134	1212	1601	1935
DA-G	2.02	480	804	1033	1251	1487	2192	1246	1649	1990
DA-H	1.14	309	515	656	796	943	1384	793	1004	1220
DA-I	1.56	517	846	1059	1286	1516	2200	1284	1527	1862
DA-J	3.41	1244	2028	2511	3062	3604	5203	3062	3516	3516

Basin	Area (mi^2)	Volume (in)								
		50% AEP	10% AEP	4% AEP	2% AEP	1% AEP	0.02 AEP	TP40	$Harvey_{avg}$	$Harvey_{max}$
DA-A	0.29	4.64	8.43	11.41	13.99	17.17	26.41	13.79	43.22	49.37
DA-B	0.37	4.9	8.72	11.72	14.32	17.52	26.81	14.12	43.91	50.01
DA-C	0.46	4.89	8.68	11.66	14.25	17.42	26.66	14.05	43.95	50.06
DA-D	1.64	4.86	8.65	11.63	14.21	17.39	26.63	14.02	43.86	49.97
DA-E	2.36	4.78	8.54	11.5	14.07	17.23	26.41	13.87	43.71	49.83
DA-F	1.95	4.63	8.35	11.28	13.82	16.94	26.03	13.62	43.41	49.55
DA-G	2.02	4.71	8.43	11.36	13.9	17.02	26.1	13.7	43.68	49.8
DA-H	1.14	4.66	8.44	11.41	13.98	17.14	26.36	13.78	43.33	49.48
DA-I	1.56	4.92	8.73	11.73	14.32	17.52	26.81	14.13	43.95	50.05
DA-J	3.41	4.78	8.59	11.58	13.98	13.98	26.67	13.98	43.53	43.53

Table 3 - Existing Water Surface Elevations

River	River STA	1% AEP Atlas 14			TP40		Harvey Avg.		Flow Comparison: 1% AEP Atlas 14		W.S.E. Comparison: 1% AEP Atlas 14	
		Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	TP40 (Δ cfs)	Harvey AVG (Δ cfs)	TP40 (Δ ft)	Harvey AVG (Δ ft)
Rodair	54352	246.36	8.08	14.54	207.84	14.36	313.73	14.72	-38.52	67.37	-0.18	0.18
Rodair	54311	246.35	8.5	14.54	207.86	14.37	313.73	14.73	-38.49	67.38	-0.17	0.19
Rodair	54290	Lat Struct			Lat Struct		Lat Struct					
Rodair	54289	Lat Struct			Lat Struct		Lat Struct					
Rodair	54174	230.42	7.79	14.53	196.5	14.36	290.33	14.71	-33.92	59.91	-0.17	0.18
Rodair	54014	198.38	7.96	14.52	177.01	14.34	241.84	14.7	-21.37	43.46	-0.18	0.18
Rodair	53844	169.59	7.86	14.52	160.73	14.34	196.35	14.71	-8.86	26.76	-0.18	0.19
Rodair	53685	150.55	8.12	14.52	151.96	14.33	162.37	14.71	1.41	11.82	-0.19	0.19
Rodair	53512	117.89	7.69	14.52	133.26	14.32	111.28	14.71	15.37	-6.61	-0.2	0.19
Rodair	53371	110.34	7.53	14.51	128.86	14.32	97.58	14.71	18.52	-12.76	-0.19	0.2
Rodair	53172	96.54	7.58	14.51	123	14.31	70.24	14.71	26.46	-26.3	-0.2	0.2
Rodair	53012	64.22	7.55	14.51	101.81	14.31	21.61	14.71	37.59	-42.61	-0.2	0.2
Rodair	52827	21.01	7.28	14.52	76.98	14.31	-43.5	14.71	55.97	-64.51	-0.21	0.19
Rodair	52798	Lat Struct			Lat Struct		Lat Struct					
Rodair	52594	-2.81	7.42	14.51	60.5	14.31	-75.38	14.71	63.31	-72.57	-0.2	0.2
Rodair	52588	Lat Struct			Lat Struct		Lat Struct					
Rodair	52581	Lat Struct			Lat Struct		Lat Struct					
Rodair	52412	472.53	7.37	14.36	462.32	14.15	451.38	14.58	-10.21	-21.15	-0.21	0.22
Rodair	52233	470.45	7.09	14.3	459.39	14.08	449.88	14.54	-11.06	-20.57	-0.22	0.24
Rodair	52006	468.45	6.79	14.23	456.94	14.01	448.21	14.49	-11.51	-20.24	-0.22	0.26
Rodair	51821	466.78	6.64	14.17	454.52	13.94	446.49	14.44	-12.26	-20.29	-0.23	0.27
Rodair	51619	465.68	6.55	14.12	452.83	13.89	445.16	14.4	-12.85	-20.52	-0.23	0.28
Rodair	51420	463.95	6.4	14.05	449.86	13.81	443.4	14.34	-14.09	-20.55	-0.24	0.29
Rodair	51176	462.67	6.36	14	448.29	13.77	442.24	14.31	-14.38	-20.43	-0.23	0.31
Rodair	50994	Lat Struct			Lat Struct		Lat Struct					
Rodair	50989	Lat Struct			Lat Struct		Lat Struct					
Rodair	50962	461.28	6.32	13.96	447.13	13.72	441.45	14.28	-14.15	-19.83	-0.24	0.32
Rodair	50720	458.89	6.12	13.9	444.77	13.65	439.64	14.23	-14.12	-19.25	-0.25	0.33
Rodair	50526	456.75	6.25	13.84	442.29	13.59	438.03	14.18	-14.46	-18.72	-0.25	0.34
Rodair	50327	456	5.97	13.82	441.42	13.56	437.62	14.17	-14.58	-18.38	-0.26	0.35
Rodair	50168	Lat Struct			Lat Struct		Lat Struct					
Rodair	50165	Lat Struct			Lat Struct		Lat Struct					
Rodair	50112	452.32	6.32	13.73	439.03	13.47	435.15	14.11	-13.29	-17.17	-0.26	0.38
Rodair	49912	451.96	5.69	13.72	438.65	13.46	434.94	14.1	-13.31	-17.02	-0.26	0.38
Rodair	49709	450.55	5.83	13.67	437.15	13.4	433.27	14.06	-13.4	-17.28	-0.27	0.39
Rodair	49534	443.84	5.5	13.62	434.8	13.35	431.58	14.02	-9.04	-12.26	-0.27	0.4
Rodair	49275	443.71	5.46	13.6	433.91	13.33	431.15	14.01	-9.8	-12.56	-0.27	0.41
Rodair	49063	443.48	5.76	13.58	433.16	13.3	430.07	13.99	-10.32	-13.41	-0.28	0.41
Rodair	48842	442.93	5.53	13.55	428.44	13.26	428.99	13.97	-14.49	-13.94	-0.29	0.42

Table 3 - Existing Water Surface Elevations

River	River STA	1% AEP Atlas 14			TP40		Harvey Avg.		Flow Comparison: 1% AEP Atlas 14		W.S.E. Comparison: 1% AEP Atlas 14	
		Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	TP40 (Δ cfs)	Harvey AVG (Δ cfs)	TP40 (Δ ft)	Harvey AVG (Δ ft)
Rodair	48641	432.61	5.64	13.51	427.13	13.22	427.49	13.94	-5.48	-5.12	-0.29	0.43
Rodair	48434	432.09	5.72	13.49	426.63	13.19	426.39	13.93	-5.46	-5.7	-0.3	0.44
Rodair	48236	431.6	5.66	13.46	426.03	13.16	425.3	13.91	-5.57	-6.3	-0.3	0.45
Rodair	47992	430.76	5.73	13.42	424.98	13.11	411.53	13.88	-5.78	-19.23	-0.31	0.46
Rodair	47977	429.65	5.61	13.33	422.43	13.01	406.69	13.81	-7.22	-22.96	-0.32	0.48
Rodair	**47949 5th Ave**	Bridge			Bridge		Bridge					
Rodair	47930	422.73	5.65	13.29	421.73	12.99	401.32	13.74	-1	-21.41	-0.3	0.45
Rodair	47908	422.85	5.58	13.3	422.2	13.01	401.77	13.75	-0.65	-21.08	-0.29	0.45
Rodair	47891	Inl Struct			Inl Struct		Inl Struct					
Rodair	47879	422.85	5.37	13.29	421.96	13	401.54	13.74	-0.89	-21.31	-0.29	0.45
Rodair	47846	Lat Struct			Lat Struct		Lat Struct					
Rodair	47783	343.63	4.21	13.31	364.14	13.01	285.1	13.76	20.51	-58.53	-0.3	0.45
Rodair	47753	Lat Struct			Lat Struct		Lat Struct					
Rodair	47751	Lat Struct			Lat Struct		Lat Struct					
Rodair	47737	343.63	3.85	13.31	364.14	13.01	285.1	13.76	20.51	-58.53	-0.3	0.45
Rodair	47564	724.68	3.84	13.2	689.29	12.91	764	13.64	-35.39	39.32	-0.29	0.44
Rodair	47409	737.92	3.69	13.18	705.39	12.89	773.17	13.62	-32.53	35.25	-0.29	0.44
Rodair	47180	767.75	3.91	13.15	730.48	12.86	797.22	13.59	-37.27	29.47	-0.29	0.44
Rodair	46984	752.87	3.66	13.13	757	12.84	832.61	13.58	4.13	79.74	-0.29	0.45
Rodair	46786	775.3	3.34	13.13	778.17	12.84	863.32	13.58	2.87	88.02	-0.29	0.45
Rodair	46660	784.04	3.52	13.09	791.28	12.8	879.92	13.54	7.24	95.88	-0.29	0.45
Rodair	46479	802.07	3.58	13.08	810.61	12.79	911.88	13.52	8.54	109.81	-0.29	0.44
Rodair	46324	824.68	3.5	13.08	827.03	12.78	958.47	13.53	2.35	133.79	-0.3	0.45
Rodair	46263	837.48	3.59	13.11	834.15	12.82	970.66	13.56	-3.33	133.18	-0.29	0.45
Rodair	46252	836.57	3.55	13.1	835.31	12.81	971.2	13.54	-1.26	134.63	-0.29	0.44
Rodair	**46247 Highland Pipelin**	Bridge			Bridge		Bridge					
Rodair	46242	834.67	3.56	13.08	834.93	12.78	970.63	13.52	0.26	135.96	-0.3	0.44
Rodair	46225	834.02	3.52	13.06	836.39	12.76	971.64	13.5	2.37	137.62	-0.3	0.44
Rodair	**46221 Pipeline**	Bridge			Bridge		Bridge					
Rodair	46218	831.67	3.56	13.05	836.08	12.75	971.07	13.49	4.41	139.4	-0.3	0.44
Rodair	46214	831.39	3.56	13.05	836.37	12.74	971.66	13.48	4.98	140.27	-0.31	0.43
Rodair	46210	832.08	3.53	13.05	836.91	12.74	972.3	13.48	4.83	140.22	-0.31	0.43
Rodair	**46206 Pipeline**	Bridge			Bridge		Bridge					
Rodair	46203	824.01	3.56	13	836.71	12.69	969.18	13.44	12.7	145.17	-0.31	0.44
Rodair	46193	829	3.71	13.02	837.86	12.7	971.55	13.46	8.86	142.55	-0.32	0.44
Rodair	46138	821.12	3.81	12.97	842.48	12.65	975.47	13.4	21.36	154.35	-0.32	0.43
Rodair	46123	Lat Struct			Lat Struct		Lat Struct					
Rodair	46121	Lat Struct			Lat Struct		Lat Struct					
Rodair	46090	826.38	3.43	12.97	847.73	12.65	983.87	13.4	21.35	157.49	-0.32	0.43

Table 3 - Existing Water Surface Elevations

River	River STA	1% AEP Atlas 14			TP40		Harvey Avg.		Flow Comparison: 1% AEP Atlas 14		W.S.E. Comparison: 1% AEP Atlas 14	
		Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	TP40 (Δ cfs)	Harvey AVG (Δ cfs)	TP40 (Δ ft)	Harvey AVG (Δ ft)
Rodair	45937	837.21	3.53	12.94	862.48	12.61	999.23	13.36	25.27	162.02	-0.33	0.42
Rodair	45779	849.48	3.3	12.94	878.71	12.61	995.17	13.37	29.23	145.69	-0.33	0.43
Rodair	45773	Lat Struct			Lat Struct		Lat Struct					
Rodair	45650	848.12	3.34	12.94	872.98	12.61	992.74	13.38	24.86	144.62	-0.33	0.44
Rodair	45631	Lat Struct			Lat Struct		Lat Struct					
Rodair	45523	860.75	3.5	12.93	886.14	12.59	998.12	13.36	25.39	137.37	-0.34	0.43
Rodair	45412	854.77	3.52	12.93	894.53	12.58	967.62	13.37	39.76	112.85	-0.35	0.44
Rodair	45306	843.09	3.45	12.93	899.52	12.57	930.58	13.38	56.43	87.49	-0.36	0.45
Rodair	45279	Lat Struct			Lat Struct		Lat Struct					
Rodair	45136	838.71	3.39	12.92	853.45	12.57	874.01	13.39	14.74	35.3	-0.35	0.47
Rodair	45100	Lat Struct			Lat Struct		Lat Struct					
Rodair	45010	851.65	3.67	12.89	848.62	12.54	866.79	13.37	-3.03	15.14	-0.35	0.48
Rodair	44902	872.65	3.28	12.88	865.13	12.52	879.37	13.36	-7.52	6.72	-0.36	0.48
Rodair	44801	892.46	3.22	12.86	877.51	12.51	897.09	13.36	-14.95	4.63	-0.35	0.5
Rodair	44674	904.1	3.18	12.84	888.86	12.49	920.96	13.34	-15.24	16.86	-0.35	0.5
Rodair	44570	Lat Struct			Lat Struct		Lat Struct					
Rodair	44550	915.83	3.03	12.83	894.76	12.49	935.47	13.33	-21.07	19.64	-0.34	0.5
Rodair	44436	934.49	3.16	12.82	893.86	12.49	950.04	13.32	-40.63	15.55	-0.33	0.5
Rodair	44308	962.81	2.9	12.8	909.41	12.48	994.69	13.3	-53.4	31.88	-0.32	0.5
Rodair	44208	944.57	2.91	12.81	924.56	12.49	1034.65	13.3	-20.01	90.08	-0.32	0.49
Rodair	44175	948.09	2.88	12.79	926.76	12.47	1038.94	13.28	-21.33	90.85	-0.32	0.49
Rodair	**44151 Wellspring Dr**	Bridge			Bridge		Bridge					
Rodair	44128	945.09	2.83	12.62	926.07	12.31	1035.21	13.14	-19.02	90.12	-0.31	0.52
Rodair	44096	948.47	2.82	12.63	928.52	12.32	1040.18	13.14	-19.95	91.71	-0.31	0.51
Rodair	44088	Lat Struct			Lat Struct		Lat Struct					
Rodair	44039	952.3	2.75	12.63	932.14	12.32	1048.5	13.13	-20.16	96.2	-0.31	0.5
Rodair	44005	Lat Struct			Lat Struct		Lat Struct					
Rodair	43915	964.08	2.78	12.62	942.82	12.31	1047.54	13.13	-21.26	83.46	-0.31	0.51
Rodair	43819	964.23	2.59	12.6	969.67	12.29	1021.5	13.14	5.44	57.27	-0.31	0.54
Rodair	43748	991.8	2.56	12.66	967.71	12.35	1058.07	13.19	-24.09	66.27	-0.31	0.53
Rodair	43737	992.76	2.56	12.66	968.81	12.35	1058.29	13.19	-23.95	65.53	-0.31	0.53
Rodair	**43701 Unnamed Rd**	Bridge			Bridge		Bridge					
Rodair	43648	992.76	2.36	12.62	968.81	12.31	1057.41	13.15	-23.95	64.65	-0.31	0.53
Rodair	43634	992.42	2.2	12.62	968.74	12.31	1056.08	13.15	-23.68	63.66	-0.31	0.53
Rodair	43598	Lat Struct			Lat Struct		Lat Struct					
Rodair	43553	Lat Struct			Lat Struct		Lat Struct					
Rodair	43477	800.6	2.07	12.6	883.71	12.27	613.27	13.16	83.11	-187.33	-0.33	0.56
Rodair	43458	Lat Struct			Lat Struct		Lat Struct					
Rodair	43367	1694.73	1.98	12.19	1626.51	11.88	1662.61	12.76	-68.22	-32.12	-0.31	0.57

Table 3 - Existing Water Surface Elevations

River	River STA		1% AEP Atlas 14			TP40		Harvey Avg.		Flow Comparison: 1% AEP Atlas 14		W.S.E. Comparison: 1% AEP Atlas 14	
			Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	TP40 (Δ cfs)	Harvey AVG (Δ cfs)	TP40 (Δ ft)	Harvey AVG (Δ ft)
Rodair	43309		Lat Struct			Lat Struct		Lat Struct					
Rodair	43308		Lat Struct			Lat Struct		Lat Struct					
Rodair	43237		1689.99	1.91	12.24	1625.96	11.94	1779.2	12.78	-64.03	89.21	-0.3	0.54
Rodair	43178		1691.9	1.94	12.3	1625.95	11.99	1749.31	12.84	-65.95	57.41	-0.31	0.54
Rodair	**43140**	**US59 NBFR**	Bridge			Bridge		Bridge					
Rodair	43113		1691.18	1.73	12.04	1624.88	11.75	1646.76	12.64	-66.3	-44.42	-0.29	0.6
Rodair	43111		1691.37	1.73	12.16	1625.33	11.87	1661.29	12.74	-66.04	-30.08	-0.29	0.58
Rodair	43109		1691.29	1.81	12.17	1625.31	11.87	1665.28	12.74	-65.98	-26.01	-0.3	0.57
Rodair	43107		1691.2	1.81	12.16	1625.29	11.87	1661.18	12.73	-65.91	-30.02	-0.29	0.57
Rodair	**43079**	**US59 NBML**	Bridge			Bridge		Bridge					
Rodair	43038		1691.08	1.81	12.09	1625.05	11.8	1652.87	12.67	-66.03	-38.21	-0.29	0.58
Rodair	43030		1690.78	1.82	12.05	1624.76	11.76	1646.34	12.64	-66.02	-44.44	-0.29	0.59
Rodair	**42987**	**US59 SBML**	Bridge			Bridge		Bridge					
Rodair	42958		1690.78	1.69	12.08	1624.98	11.79	1648.47	12.65	-65.8	-42.31	-0.29	0.57
Rodair	42954		1690.71	1.69	12.09	1624.97	11.8	1648.38	12.65	-65.74	-42.33	-0.29	0.56
Rodair	**42920**	**US59 SBFR**	Bridge			Bridge		Bridge					
Rodair	42889		1690.71	1.66	12.05	1624.75	11.77	1640.26	12.6	-65.96	-50.45	-0.28	0.55
Rodair	42862		1690.33	1.61	12.01	1624.69	11.73	1635.75	12.57	-65.64	-54.58	-0.28	0.56
Rodair	42851		Inl Struct			Inl Struct		Inl Struct					
Rodair	42791		1690.21	-0.34	11.94	1624.69	11.66	1627.84	12.53	-65.52	-62.37	-0.28	0.59
Rodair	42790		Lat Struct			Lat Struct		Lat Struct					
Rodair	42785		Lat Struct			Lat Struct		Lat Struct					
Rodair	42633		1719.84	-0.36	11.93	1650.85	11.65	1663.26	12.52	-68.99	-56.58	-0.28	0.59
Rodair	42381		1775.36	-0.41	11.91	1696.18	11.63	1720.76	12.5	-79.18	-54.6	-0.28	0.59
Rodair	42172		1805.12	-0.44	11.89	1731.42	11.62	1770.61	12.48	-73.7	-34.51	-0.27	0.59
Rodair	41952		1875.41	-0.47	11.87	1770.81	11.59	1855.51	12.45	-104.6	-19.9	-0.28	0.58
Rodair	41818		1901.52	-0.5	11.85	1792.35	11.58	1880.25	12.45	-109.17	-21.27	-0.27	0.6
Rodair	41798		1905.57	-0.5	11.85	1795.72	11.58	1882.55	12.45	-109.85	-23.02	-0.27	0.6
Rodair	**41793**	**Landrey Pipeline**	Bridge			Bridge		Bridge					
Rodair	41788		1905.56	-0.5	11.82	1795.72	11.55	1882.63	12.42	-109.84	-22.93	-0.27	0.6
Rodair	41782		1906.84	-0.5	11.82	1796.79	11.55	1883.3	12.42	-110.05	-23.54	-0.27	0.6
Rodair	41777		Lat Struct			Lat Struct		Lat Struct					
Rodair	41768		Lat Struct			Lat Struct		Lat Struct					
Rodair	41707		1923.11	-0.5	11.81	1810	11.55	1894.85	12.42	-113.11	-28.26	-0.26	0.61
Rodair	41558		1971.95	-0.53	11.79	1846.79	11.53	1967.58	12.41	-125.16	-4.37	-0.26	0.62
Rodair	41539.5*		1973.93	-0.53	11.79	1849.4	11.53	1979.41	12.4	-124.53	5.48	-0.26	0.61
Rodair	41521*		1974.68	-0.53	11.79	1852.51	11.53	1994.4	12.4	-122.17	19.72	-0.26	0.61
Rodair	41502.5*		1965.23	-0.53	11.79	1854.84	11.53	2006.1	12.39	-110.39	40.87	-0.26	0.6
Rodair	41484		1966.57	-0.53	11.79	1857.3	11.53	2013.88	12.39	-109.27	47.31	-0.26	0.6

Table 3 - Existing Water Surface Elevations

River	River STA	1% AEP Atlas 14			TP40		Harvey Avg.		Flow Comparison: 1% AEP Atlas 14		W.S.E. Comparison: 1% AEP Atlas 14	
		Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	TP40 (Δ cfs)	Harvey AVG (Δ cfs)	TP40 (Δ ft)	Harvey AVG (Δ ft)
Rodair	41386.6*	1970.11	-0.54	11.79	1860.73	11.53	2021.17	12.39	-109.38	51.06	-0.26	0.6
Rodair	41372.2*	1974.07	-0.54	11.79	1864.14	11.53	2027.43	12.39	-109.93	53.36	-0.26	0.6
Rodair	41357.8*	1977.78	-0.55	11.79	1867.55	11.53	2034.94	12.39	-110.23	57.16	-0.26	0.6
Rodair	41343.4*	1981.29	-0.56	11.79	1870.93	11.53	2041.85	12.39	-110.36	60.56	-0.26	0.6
Rodair	41332	Lat Struct			Lat Struct		Lat Struct					
Rodair	41329*	1989.01	-0.57	11.8	1877.79	11.53	2049.45	12.38	-111.22	60.44	-0.27	0.58
Rodair	41314.6*	2011.35	-0.57	11.79	1897.61	11.53	2058.92	12.38	-113.74	47.57	-0.26	0.59
Rodair	41300.2*	2066.99	-0.58	11.78	1952.63	11.52	2073.4	12.38	-114.36	6.41	-0.26	0.6
Rodair	41285.8*	2106.76	-0.59	11.78	1996.86	11.51	2091.07	12.38	-109.9	-15.69	-0.27	0.6
Rodair	41271.4*	2190.74	-0.6	11.76	2094.82	11.49	2148.56	12.37	-95.92	-42.18	-0.27	0.61
Rodair	41257*	2348.93	-0.6	11.72	2270.04	11.44	2287.75	12.34	-78.89	-61.18	-0.28	0.62
Rodair	41242.6*	2492.18	-0.61	11.68	2414.98	11.4	2437.11	12.31	-77.2	-55.07	-0.28	0.63
Rodair	41228.2*	2558.22	-0.62	11.66	2466.08	11.39	2537	12.29	-92.14	-21.22	-0.27	0.63
Rodair	41213.8*	2650.06	-0.63	11.64	2550.78	11.37	2659.62	12.26	-99.28	9.56	-0.27	0.62
Rodair	41199.4*	2672.44	-0.63	11.64	2562.67	11.37	2717.39	12.25	-109.77	44.95	-0.27	0.61
Rodair	41185	2682.66	-0.64	11.64	2567.96	11.37	2744.29	12.25	-114.7	61.63	-0.27	0.61
Rodair	41151	Lat Struct			Lat Struct		Lat Struct					
Rodair	41145.8*	2686.37	-0.63	11.64	2570.87	11.38	2747.8	12.25	-115.5	61.43	-0.26	0.61
Rodair	41134.6*	2689.66	-0.62	11.64	2573.39	11.38	2751.35	12.25	-116.27	61.69	-0.26	0.61
Rodair	41123.4*	2693.16	-0.61	11.64	2576.31	11.38	2754.93	12.25	-116.85	61.77	-0.26	0.61
Rodair	41112.2*	2696.66	-0.6	11.64	2579.23	11.37	2758.54	12.25	-117.43	61.88	-0.27	0.61
Rodair	41101	2700.17	-0.59	11.64	2582.15	11.37	2762.18	12.25	-118.02	62.01	-0.27	0.61
Rodair	41083.2*	2703.85	-0.6	11.64	2585.22	11.37	2766.03	12.25	-118.63	62.18	-0.27	0.61
Rodair	41065.4*	2707.54	-0.6	11.64	2588.3	11.37	2770.52	12.25	-119.24	62.98	-0.27	0.61
Rodair	41047.5*	2711.22	-0.6	11.64	2591.38	11.37	2775.13	12.25	-119.84	63.91	-0.27	0.61
Rodair	41029.7*	2714.9	-0.61	11.64	2594.46	11.37	2779.03	12.25	-120.44	64.13	-0.27	0.61
Rodair	41011.9*	2718.59	-0.62	11.64	2597.54	11.37	2782.95	12.25	-121.05	64.36	-0.27	0.61
Rodair	40994	2722.5	-0.62	11.64	2600.63	11.37	2786.95	12.25	-121.87	64.45	-0.27	0.61
Rodair	40836	2754.73	-0.62	11.59	2627.63	11.32	2837.11	12.21	-127.1	82.38	-0.27	0.62
Rodair	40694	2783.29	-0.66	11.55	2652.1	11.28	2885.09	12.17	-131.19	101.8	-0.27	0.62
Rodair	40540	2814.13	-0.69	11.51	2678.89	11.24	2925.45	12.13	-135.24	111.32	-0.27	0.62
Rodair	40249	2872.62	-0.72	11.4	2713	11.14	3001.08	12.04	-159.62	128.46	-0.26	0.64
Rodair	40185	Lat Struct			Lat Struct		Lat Struct					
Rodair	40181	2881.12	-0.72	11.38	2724.31	11.11	3012.07	12.01	-156.81	130.95	-0.27	0.63
Rodair	40107	2694.48	-0.75	11.4	2571.22	11.13	3073.91	11.98	-123.26	379.43	-0.27	0.58
Rodair	40105	Lat Struct			Lat Struct		Lat Struct					
Rodair	40050	2706.22	-0.75	11.38	2570.79	11.11	3087.01	11.96	-135.43	380.79	-0.27	0.58
Rodair	39822	2752.37	-0.78	11.33	2609.45	11.06	3116.23	11.91	-142.92	363.86	-0.27	0.58
Rodair	39798	Lat Struct			Lat Struct		Lat Struct					

Table 3 - Existing Water Surface Elevations

River	River STA	1% AEP Atlas 14			TP40		Harvey Avg.		Flow Comparison: 1% AEP Atlas 14		W.S.E. Comparison: 1% AEP Atlas 14	
		Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	TP40 (Δ cfs)	Harvey AVG (Δ cfs)	TP40 (Δ ft)	Harvey AVG (Δ ft)
Rodair	39617	2772.91	-0.81	11.29	2634.25	11.02	3081.57	11.88	-138.66	308.66	-0.27	0.59
Rodair	39344	2818.71	-0.88	11.21	2677.22	10.94	3085.17	11.81	-141.49	266.46	-0.27	0.6
Rodair	39227	2804.75	-0.88	11.18	2674.68	10.9	3026.24	11.79	-130.07	221.49	-0.28	0.61
Rodair	39200	Lat Struct			Lat Struct		Lat Struct					
Rodair	39060	2839.14	-0.91	11.13	2702.29	10.86	3046.95	11.75	-136.85	207.81	-0.27	0.62
Rodair	38920	2866.96	-0.91	11.09	2725.78	10.82	3053.59	11.72	-141.18	186.63	-0.27	0.63
Rodair	38916	Lat Struct			Lat Struct		Lat Struct					
Rodair	38801	2902.19	-0.94	11.05	2746.9	10.78	3126.13	11.68	-155.29	223.94	-0.27	0.63
Rodair	38792	Lat Struct			Lat Struct		Lat Struct					
Rodair	38746	2913.61	-0.94	11.04	2756.26	10.77	2789.07	11.67	-157.35	-124.54	-0.27	0.63
Rodair	38583	2912.48	-0.97	10.99	2756.14	10.72	2777.18	11.63	-156.34	-135.3	-0.27	0.64
Rodair	38572	2912.48	-0.97	10.98	2756.14	10.71	2776.29	11.63	-156.34	-136.19	-0.27	0.65
Rodair	38564	Lat Struct			Lat Struct		Lat Struct					
Rodair	38407	2909.39	-1	10.98	2755.57	10.71	2760.79	11.63	-153.82	-148.6	-0.27	0.65
Rodair	38379	2916.81	-1	10.96	2761.52	10.69	2763.87	11.62	-155.29	-152.94	-0.27	0.66
Rodair	38356	2922.71	-1	10.95	2766.34	10.68	2768.54	11.61	-156.37	-154.17	-0.27	0.66
Rodair	38311	Lat Struct			Lat Struct		Lat Struct					
Rodair	38212	Lat Struct			Lat Struct		Lat Struct					
Rodair	38089	2967.9	-1.05	10.9	2815.92	10.63	2712.87	11.58	-151.98	-255.03	-0.27	0.68
Rodair	37989	Lat Struct			Lat Struct		Lat Struct					
Rodair	37729	2996.86	-1.1	10.8	2859.18	10.53	2566.19	11.55	-137.68	-430.67	-0.27	0.75
Rodair	37455	3067.98	-1.16	10.71	2917.72	10.44	2576.96	11.51	-150.26	-491.02	-0.27	0.8
Rodair	37389	3085.15	-1.16	10.7	2931.72	10.43	2589.47	11.5	-153.43	-495.68	-0.27	0.8
Rodair	37380	Lat Struct			Lat Struct		Lat Struct					
Rodair	37275	3109.78	-1.19	10.66	2955.54	10.39	2568	11.48	-154.24	-541.78	-0.27	0.82
Rodair	37266	Lat Struct			Lat Struct		Lat Struct					
Rodair	37203	3093.15	-1.19	10.64	2951.2	10.37	2527.14	11.48	-141.95	-566.01	-0.27	0.84
Rodair	37178	Lat Struct			Lat Struct		Lat Struct					
Rodair	37013	3141.3	-1.22	10.58	2991.85	10.31	2532.36	11.46	-149.45	-608.94	-0.27	0.88
Rodair	36801	3193.75	-1.25	10.52	3037.38	10.25	2536.17	11.43	-156.37	-657.58	-0.27	0.91
Rodair	36503	3153.75	-1.3	10.45	3035.5	10.17	2591.67	11.39	-118.25	-562.08	-0.28	0.94
Rodair	36166	2916.24	-1.34	10.36	3069.31	10.05	2856.65	11.3	153.07	-59.59	-0.31	0.94
Rodair	36151	2919.14	-1.34	10.35	3072.48	10.04	2860.03	11.3	153.34	-59.11	-0.31	0.95
Rodair	36129	Lat Struct			Lat Struct		Lat Struct					
Rodair	35987	Lat Struct			Lat Struct		Lat Struct					
Rodair	35981	2951.06	-1.38	10.33	3108.46	10.01	2911.23	11.28	157.4	-39.83	-0.32	0.95
Rodair	**35939**	2958.55	-1.38	10.2	3114.86	9.85	2952.98	11.17	156.31	-5.57	-0.35	0.97
Rodair	35919	Lat Struct			Lat Struct		Lat Struct					
Rodair	35799	2992.6	-1.41	10.19	3143.81	9.84	3037.36	11.15	151.21	44.76	-0.35	0.96

Table 3 - Existing Water Surface Elevations

River	River STA	1% AEP Atlas 14			TP40		Harvey Avg.		Flow Comparison: 1% AEP Atlas 14		W.S.E. Comparison: 1% AEP Atlas 14	
		Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	TP40 (Δ cfs)	Harvey AVG (Δ cfs)	TP40 (Δ ft)	Harvey AVG (Δ ft)
Rodair	35788	Lat Struct			Lat Struct		Lat Struct					
Rodair	35708	3053.06	-1.41	10.18	2948.95	9.89	3217.01	11.08	-104.11	163.95	-0.29	0.9
Rodair	35701	Lat Struct			Lat Struct		Lat Struct					
Rodair	35693	3056.38	-1.41	10.19	2951.38	9.9	3217.39	11.09	-105	161.01	-0.29	0.9
Rodair	**35682**	Lat Struct			Lat Struct		Lat Struct					
Rodair	35659	3033.23	-1.41	10.22	2934.36	9.93	3219.92	11.1	-98.87	186.69	-0.29	0.88
Rodair	35609	3031.69	-1.44	10.17	2947.97	9.88	3274.69	11.05	-83.72	243	-0.29	0.88
Rodair	35600	Lat Struct			Lat Struct		Lat Struct					
Rodair	35547	3034.17	-1.44	10.17	2948.13	9.87	3331.18	11.03	-86.04	297.01	-0.3	0.86
Rodair	35323	3114.32	-1.47	10.15	3023.24	9.84	3489.18	10.99	-91.08	374.86	-0.31	0.84
Rodair	35312	3114.04	-1.47	10.14	3022.14	9.84	3490.64	10.98	-91.9	376.6	-0.3	0.84
Rodair	35252	Lat Struct			Lat Struct		Lat Struct					
Rodair	35065	3126.39	-1.5	10.14	3048.66	9.83	3513.16	10.98	-77.73	386.77	-0.31	0.84
Rodair	35057	3125.46	-1.51	10.14	3047.64	9.83	3512.98	10.97	-77.82	387.52	-0.31	0.83
Rodair	35052	Lat Struct			Lat Struct		Lat Struct					
Rodair	34813	3217.36	-1.55	10.08	3117.77	9.78	3624.44	10.91	-99.59	407.08	-0.3	0.83
Rodair	34556	3268	-1.58	10.03	3167.32	9.73	3666.08	10.88	-100.68	398.08	-0.3	0.85
Rodair	34353	3290.83	-1.61	10	3198.32	9.69	3691.47	10.85	-92.51	400.64	-0.31	0.85
Rodair	34081	3353.91	-1.65	9.97	3239.48	9.67	3782.98	10.81	-114.43	429.07	-0.3	0.84
Rodair	33806	3428	-1.69	9.91	3296.91	9.61	3891.46	10.74	-131.09	463.46	-0.3	0.83
Rodair	33509	3520.14	-1.73	9.85	3382.01	9.56	4006.46	10.68	-138.13	486.32	-0.29	0.83
Rodair	33208	3457.58	-1.78	9.71	3375.29	9.38	3741.98	10.64	-82.29	284.4	-0.33	0.93
Rodair	33197	3460.51	-1.78	9.63	3377.65	9.29	3744.77	10.56	-82.86	284.26	-0.34	0.93
Rodair	**33177 Cloverdale**	Bridge			Bridge		Bridge					
Rodair	33163	3459.85	-1.81	9.39	3377.51	9.12	3597.8	10.18	-82.34	137.95	-0.27	0.79
Rodair	33153	3462.35	-1.81	9.38	3379.49	9.11	3600.81	10.17	-82.86	138.46	-0.27	0.79
Rodair	33150	Lat Struct			Lat Struct		Lat Struct					
Rodair	33111	Lat Struct			Lat Struct		Lat Struct					
Rodair	33002	3647.2	-1.84	9.36	3503.45	9.13	3979.01	10.06	-143.75	331.81	-0.23	0.7
Rodair	32981	3652.81	-1.84	9.4	3508.04	9.17	3986.3	10.1	-144.77	333.49	-0.23	0.7
Rodair	**32977 Pipeline**	Bridge			Bridge		Bridge					
Rodair	32971	3652.6	-1.84	9.29	3507.66	9.04	3985.56	10.01	-144.94	332.96	-0.25	0.72
Rodair	32960	3655.44	-1.84	9.3	3509.97	9.06	3988.97	10.03	-145.47	333.53	-0.24	0.73
Rodair	32944	3659.52	-1.84	9.27	3513.2	9.02	3994.02	9.99	-146.32	334.5	-0.25	0.72
Rodair	**32922 Pipelines**	Bridge			Bridge		Bridge					
Rodair	32905	3659.23	-1.84	9.18	3512.99	8.94	3993.21	9.91	-146.24	333.98	-0.24	0.73
Rodair	32893	3662.25	-1.84	9.19	3515.47	8.95	3996.79	9.92	-146.78	334.54	-0.24	0.73
Rodair	**32854 Pipeline**	Bridge			Bridge		Bridge					
Rodair	32808	3662.25	-2.12	9.22	3515.67	9.01	3995.16	9.87	-146.58	332.91	-0.21	0.65

Table 3 - Existing Water Surface Elevations

River	River STA	1% AEP Atlas 14			TP40		Harvey Avg.		Flow Comparison: 1% AEP Atlas 14		W.S.E. Comparison: 1% AEP Atlas 14	
		Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	TP40 (Δ cfs)	Harvey AVG (Δ cfs)	TP40 (Δ ft)	Harvey AVG (Δ ft)
Rodair	32793	3666.19	-2.19	9.2	3518.7	8.99	3999.79	9.84	-147.49	333.6	-0.21	0.64
Rodair	**32743 RR**	Bridge			Bridge		Bridge					
Rodair	32717	3666.04	-2.62	9.18	3518.6	8.97	3998.98	9.82	-147.44	332.94	-0.21	0.64
Rodair	32711	3666.01	-2.66	9.21	3518.64	9	3994.18	9.86	-147.37	328.17	-0.21	0.65
Rodair	32705	3665.99	-2.69	9.22	3518.62	9.01	3993.71	9.87	-147.37	327.72	-0.21	0.65
Rodair	32698	3665.83	-2.73	9.17	3518.4	8.96	3992.36	9.81	-147.43	326.53	-0.21	0.64
Rodair	**32655 W Port Arthur Rd**	Bridge			Bridge		Bridge					
Rodair	32590	3665.83	-3.4	9.15	3518.4	8.95	3992.36	9.79	-147.43	326.53	-0.2	0.64
Rodair	32508	3665.58	-4.78	9.21	3518.15	9.01	3986.52	9.87	-147.43	320.94	-0.2	0.66
Rodair	32462	3665.2	-3.97	9.21	3517.71	9.01	3981.22	9.87	-147.49	316.02	-0.2	0.66
Rodair	32455	Lat Struct			Lat Struct		Lat Struct					
Rodair	32407	Lat Struct			Lat Struct		Lat Struct					
Rodair	32287	3622.78	-4.07	9.14	3490.62	8.94	4011.63	9.79	-132.16	388.85	-0.2	0.65
Rodair	32108	3601.05	-4.28	9.1	3491.88	8.9	3975.57	9.75	-109.17	374.52	-0.2	0.65
Rodair	31859	3509.29	-4.38	9.02	3388.84	8.81	3897.85	9.68	-120.45	388.56	-0.21	0.66
Rodair	31543	3647.63	-4.5	8.93	3495.13	8.72	4158.37	9.56	-152.5	510.74	-0.21	0.63
Rodair	31340	3780.51	-4.69	8.85	3674.52	8.64	4284.93	9.46	-105.99	504.42	-0.21	0.61
Rodair	30965	3973.35	-5.03	8.7	3822.1	8.5	4604.76	9.3	-151.25	631.41	-0.2	0.6
Rodair	30592	4011.7	-4.75	8.52	3855.9	8.32	4626.17	9.09	-155.8	614.47	-0.2	0.57
Rodair	30202	4051.82	-4.74	8.39	3899.58	8.19	4606.1	8.97	-152.24	554.28	-0.2	0.58
Rodair	30185	4039.18	-4.93	8.37	3891.96	8.17	4583.43	8.95	-147.22	544.25	-0.2	0.58
Rodair	30137	Lat Struct			Lat Struct		Lat Struct					
Rodair	30122	4045.59	-5.27	8.21	3899.83	8.01	4593.85	8.79	-145.76	548.26	-0.2	0.58
Rodair	29854	4097.38	-5.06	8.22	3944.85	8.02	4629.99	8.79	-152.53	532.61	-0.2	0.57
Rodair	29748	4095.13	-5.04	8.17	3947.96	7.97	4608.03	8.74	-147.17	512.9	-0.2	0.57
Rodair	29738	Lat Struct			Lat Struct		Lat Struct					
Rodair	29712	Lat Struct			Lat Struct		Lat Struct					
Rodair	29570	4115.25	-4.88	8.12	3973.09	7.92	4610.13	8.69	-142.16	494.88	-0.2	0.57
Rodair	29541	Lat Struct			Lat Struct		Lat Struct					
Rodair	29503	Lat Struct			Lat Struct		Lat Struct					
Rodair	29261	4140.98	-5.22	7.97	3992	7.77	4663.93	8.53	-148.98	522.95	-0.2	0.56
Rodair	28913	4238.75	-5.72	7.87	4081.14	7.67	4792.45	8.43	-157.61	553.7	-0.2	0.56
Rodair	28589	4228.71	-6.24	7.75	4072.97	7.55	4789.02	8.29	-155.74	560.31	-0.2	0.54
Rodair	28418	Lat Struct			Lat Struct		Lat Struct					
Rodair	28327	4255.09	-5.72	7.63	4094.95	7.44	4843.72	8.16	-160.14	588.63	-0.19	0.53
Rodair	28188	4260.27	-5.45	7.57	4100.37	7.38	4854.55	8.11	-159.9	594.28	-0.19	0.54
Rodair	28181	Lat Struct			Lat Struct		Lat Struct					
Rodair	28086	4193.99	-5.75	7.57	4029.78	7.38	4801.73	8.1	-164.21	607.74	-0.19	0.53
Rodair	28069	Lat Struct			Lat Struct		Lat Struct					

Table 3 - Existing Water Surface Elevations

River	River STA	1% AEP Atlas 14			TP40		Harvey Avg.		Flow Comparison: 1% AEP Atlas 14		W.S.E. Comparison: 1% AEP Atlas 14	
		Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	TP40 (Δ cfs)	Harvey AVG (Δ cfs)	TP40 (Δ ft)	Harvey AVG (Δ ft)
Rodair	27985	4213.2	-6.03	7.55	4046.18	7.36	4827.9	8.08	-167.02	614.7	-0.19	0.53
Rodair	27941	Lat Struct			Lat Struct		Lat Struct					
Rodair	27699	4082.18	-6.34	7.5	3930.3	7.31	4642.61	8.03	-151.88	560.43	-0.19	0.53
Rodair	27384	4099.93	-5.88	7.4	3951.09	7.21	4640.84	7.92	-148.84	540.91	-0.19	0.52
Rodair	27302	4144.28	-6.01	7.25	3980.13	7.06	4717.55	7.77	-164.15	573.27	-0.19	0.52
Rodair	27231	4103.11	-7.2	7.34	3941.68	7.15	4672.84	7.85	-161.43	569.73	-0.19	0.51
Rodair	27219	Lat Struct			Lat Struct		Lat Struct					
Rodair	27114	4116.71	-7.28	7.29	3954.11	7.1	4674.1	7.8	-162.6	557.39	-0.19	0.51
Rodair	26795	4148.28	-7.42	7.19	3976.44	7	4706.33	7.7	-171.84	558.05	-0.19	0.51
Rodair	26484	4179.45	-6.94	7.06	3989.57	6.87	4767.69	7.55	-189.88	588.24	-0.19	0.49
Rodair	26225	4186.36	-6.86	7.01	3995.34	6.83	4764.68	7.5	-191.02	578.32	-0.18	0.49
Rodair	25912	4187.09	-6.68	6.88	3992.47	6.71	4762.97	7.36	-194.62	575.88	-0.17	0.48
Rodair	25874	Lat Struct			Lat Struct		Lat Struct					
Rodair	25817	Lat Struct			Lat Struct		Lat Struct					
Rodair	25810	4220.46	-6.98	6.83	4016.74	6.66	4817.99	7.3	-203.72	597.53	-0.17	0.47
Rodair	25782	4247.29	-6.42	6.85	4037.8	6.68	4860.54	7.32	-209.49	613.25	-0.17	0.47
Rodair	25748	Lat Struct			Lat Struct		Lat Struct					
Rodair	25643	4351.37	-6.41	6.79	4123.63	6.62	5024.37	7.24	-227.74	673	-0.17	0.45
Rodair	25556	4435.57	-6.53	6.71	4187.6	6.55	5154.26	7.14	-247.97	718.69	-0.16	0.43
Rodair	25445	4435.57	-6.34	6.71	4187.89	6.55	5154.26	7.14	-247.68	718.69	-0.16	0.43
Rodair	25327	4434.95	-7.24	6.7	4186.73	6.54	5153.95	7.12	-248.22	719	-0.16	0.42
Rodair	25283	Lat Struct			Lat Struct		Lat Struct					
Rodair	25182	Lat Struct			Lat Struct		Lat Struct					
Rodair	25095	4191.25	-6.55	6.61	3964.96	6.45	4843.9	7.02	-226.29	652.65	-0.16	0.41
Rodair	24696	3878.39	-6.78	6.55	3682.86	6.39	4436.25	6.97	-195.53	557.86	-0.16	0.42
Rodair	24402	3858.83	-6.63	6.52	3667.5	6.36	4398.26	6.94	-191.33	539.43	-0.16	0.42
Rodair	24079	3699.86	-7.6	6.41	3520.54	6.26	4200.37	6.83	-179.32	500.51	-0.15	0.42
Rodair	23870	3585.4	-7.34	6.4	3421.63	6.25	4043.82	6.82	-163.77	458.42	-0.15	0.42
Rodair	23810	3567.71	-7.34	6.41	3407.94	6.25	4012.93	6.83	-159.77	445.22	-0.16	0.42
Rodair	23799	Lat Struct			Lat Struct		Lat Struct					
Rodair	23722	3458.48	-6.47	6.39	3310.66	6.24	3866.18	6.82	-147.82	407.7	-0.15	0.43
Rodair	23718	Lat Struct			Lat Struct		Lat Struct					
Rodair	23678	3458.28	-6.6	6.37	3310.98	6.21	3867.4	6.78	-147.3	409.12	-0.16	0.41
Rodair	23504	3424.98	-7.12	6.31	3280.9	6.16	3838.38	6.72	-144.08	413.4	-0.15	0.41
Rodair	23285	3254.24	-7.54	6.31	3121.96	6.16	3638.18	6.73	-132.28	383.94	-0.15	0.42
Rodair	22996	3262.93	-7.19	6.26	3128.19	6.11	3641.05	6.67	-134.74	378.12	-0.15	0.41
Rodair	22659	3182.76	-7.28	6.23	3043.67	6.08	3587.33	6.64	-139.09	404.57	-0.15	0.41
Rodair	22560	3070.66	-6.56	6.26	2943.83	6.1	3446.18	6.67	-126.83	375.52	-0.16	0.41
Rodair	22449	3076.11	-7.12	6.22	2945.53	6.07	3454.69	6.63	-130.58	378.58	-0.15	0.41

Table 3 - Existing Water Surface Elevations

River	River STA	1% AEP Atlas 14			TP40		Harvey Avg.		Flow Comparison: 1% AEP Atlas 14		W.S.E. Comparison: 1% AEP Atlas 14	
		Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	TP40 (Δ cfs)	Harvey AVG (Δ cfs)	TP40 (Δ ft)	Harvey AVG (Δ ft)
Rodair	22431	Lat Struct			Lat Struct		Lat Struct					
Rodair	22355	3075.2	-7.14	6.19	2942.71	6.04	3445.33	6.59	-132.49	370.13	-0.15	0.4
Rodair	22014	3044.14	-7.38	6.15	2923.03	6	3361.1	6.56	-121.11	316.96	-0.15	0.41
Rodair	21661	3190.08	-6.97	6.07	3049.79	5.92	3526.17	6.47	-140.29	336.09	-0.15	0.4
Rodair	21449	3235.08	-8	6.03	3084.17	5.89	3590.21	6.43	-150.91	355.13	-0.14	0.4
Rodair	21181	3686.79	-7.92	5.95	3493.11	5.81	4146.09	6.34	-193.68	459.3	-0.14	0.39
Rodair	20966	3825.48	-8.1	5.9	3607.05	5.77	4308.31	6.29	-218.43	482.83	-0.13	0.39
Rodair	20745	3728.33	-7.43	5.89	3534.86	5.74	4251.98	6.26	-193.47	523.65	-0.15	0.37
Rodair	20503	3462.14	-6.94	5.85	3302.13	5.73	3991.81	6.25	-160.01	529.67	-0.12	0.4
Rodair	20152	3400.48	-7.3	5.8	3190.02	5.68	3950.34	6.16	-210.46	549.86	-0.12	0.36
Rodair	19887	3190.29	-7.38	5.79	2975.9	5.68	3644.1	6.16	-214.39	453.81	-0.11	0.37
Rodair	19599	3118.85	-6.53	5.76	2948.52	5.63	3635.76	6.11	-170.33	516.91	-0.13	0.35
Rodair	19205	2726.75	-6.9	5.79	2523.57	5.66	3150.04	6.16	-203.18	423.29	-0.13	0.37
Rodair	18888	2638.41	-6.91	5.77	2479.05	5.65	3287.43	6.1	-159.36	649.02	-0.12	0.33
Rodair	18535	2423.91	-6.67	5.76	2262.48	5.64	2730.7	6.09	-161.43	306.79	-0.12	0.33
Rodair	18189	2410.22	-6.77	5.73	2252.96	5.61	2830.92	6.09	-157.26	420.7	-0.12	0.36
Rodair	17910	2275.88	-7.03	5.72	2120.87	5.6	2726.84	6.07	-155.01	450.96	-0.12	0.35
Rodair	17641	2244.83	-7.06	5.69	2090.51	5.57	2738.7	6.02	-154.32	493.87	-0.12	0.33
Rodair	17596	2215.24	-7.28	5.68	2064.07	5.56	2700.21	6.01	-151.17	484.97	-0.12	0.33
Rodair	17448	2083.94	-7.47	5.66	1934.9	5.55	2485.71	5.98	-149.04	401.77	-0.11	0.32
Rodair	17439	Lat Struct			Lat Struct		Lat Struct					
Rodair	17320	2006.39	-7.78	5.66	1850.36	5.55	2412.18	5.98	-156.03	405.79	-0.11	0.32
Rodair	17064	1887.07	-7.74	5.66	1749.94	5.55	2264.35	5.98	-137.13	377.28	-0.11	0.32
Rodair	16757	1731.83	-6.91	5.65	1608.88	5.54	2088.48	5.97	-122.95	356.65	-0.11	0.32
Rodair	16437	1611.26	-6.76	5.64	1500.59	5.53	1961.84	5.96	-110.67	350.58	-0.11	0.32
Rodair	16143	1473.09	-6.33	5.64	1373.28	5.53	1819.5	5.96	-99.81	346.41	-0.11	0.32
Rodair	16033	1409.98	-6.33	5.64	1323.84	5.53	1766.71	5.96	-86.14	356.73	-0.11	0.32
Rodair	15984	1410.14	-7.22	5.65	1324.66	5.53	1767.71	5.96	-85.48	357.57	-0.12	0.31
Rodair	**15974 Pipeline**	Bridge			Bridge		Bridge					
Rodair	15964	1409.83	-8.15	5.64	1323.67	5.53	1767.22	5.95	-86.16	357.39	-0.11	0.31
Rodair	15909	1410.05	-7.84	5.63	1321.54	5.52	1768.85	5.95	-88.51	358.8	-0.11	0.32
Rodair	15903	Lat Struct			Lat Struct		Lat Struct					
Rodair	15899	Lat Struct			Lat Struct		Lat Struct					
Rodair	15831	1394.74	-7.71	5.63	1305.89	5.52	1746.03	5.94	-88.85	351.29	-0.11	0.31
Rodair	15538	1375.64	-7.5	5.62	1284.85	5.52	1725.47	5.93	-90.79	349.83	-0.1	0.31
Rodair	15259	1371.84	-7.62	5.62	1258.84	5.51	1711.47	5.93	-113	339.63	-0.11	0.31
Rodair	14965	1301.41	-7.57	5.61	1190.57	5.51	1687.86	5.92	-110.84	386.45	-0.1	0.31
Rodair	14808	1092.86	-7.44	5.62	1007.77	5.51	1519.78	5.93	-85.09	426.92	-0.11	0.31
Rodair	14763	1091.06	-6.46	5.62	999.86	5.51	1509.22	5.93	-91.2	418.16	-0.11	0.31

Table 3 - Existing Water Surface Elevations

River	River STA	1% AEP Atlas 14			TP40		Harvey Avg.		Flow Comparison: 1% AEP Atlas 14		W.S.E. Comparison: 1% AEP Atlas 14	
		Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	TP40 (Δ cfs)	Harvey AVG (Δ cfs)	TP40 (Δ ft)	Harvey AVG (Δ ft)
Rodair	**14740 FM 365**	Bridge			Bridge		Bridge					
Rodair	14714	1089.28	-5.29	5.58	983.62	5.48	1508.85	5.88	-105.66	419.57	-0.1	0.3
Rodair	14656	1085.28	-8.6	5.59	974.48	5.48	1491.1	5.89	-110.8	405.82	-0.11	0.3
Rodair	14654	Lat Struct			Lat Struct		Lat Struct					
Rodair	14553	Lat Struct			Lat Struct		Lat Struct					
Rodair	14414	1083.6	-9.21	5.59	978.39	5.48	1560.21	5.89	-105.21	476.61	-0.11	0.3
Rodair	14280	927.55	-7.54	5.59	828.39	5.48	1394.36	5.89	-99.16	466.81	-0.11	0.3
Rodair	14274	Lat Struct			Lat Struct		Lat Struct					
Rodair	14165	1905.28	-7.76	5.57	1789.53	5.46	2427.14	5.86	-115.75	521.86	-0.11	0.29
Rodair	14151	Lat Struct			Lat Struct		Lat Struct					
Rodair	14094	1917.94	-8.41	5.57	1791.5	5.46	2416.67	5.86	-126.44	498.73	-0.11	0.29
Rodair	13857	2013.06	-8.16	5.56	1865.99	5.45	2531.92	5.84	-147.07	518.86	-0.11	0.28
Rodair	13555	2047.4	-7.34	5.54	1891.7	5.44	2538.57	5.82	-155.7	491.17	-0.1	0.28
Rodair	13297	2094.23	-6.25	5.53	1943.84	5.43	2589.87	5.81	-150.39	495.64	-0.1	0.28
Rodair	13028	2208.13	-5.91	5.51	2044.56	5.41	2759.64	5.78	-163.57	551.51	-0.1	0.27
Rodair	12743	2499.63	-6.08	5.49	2314.81	5.39	2958.49	5.75	-184.82	458.86	-0.1	0.26
Rodair	12439	2699.96	-6.28	5.47	2470.67	5.37	3161.13	5.73	-229.29	461.17	-0.1	0.26
Rodair	12124	2850.28	-6.72	5.42	2606.52	5.34	3279.5	5.68	-243.76	429.22	-0.08	0.26
Rodair	11769	3169.55	-7.61	5.39	2912.68	5.3	3752.22	5.62	-256.87	582.67	-0.09	0.23
Rodair	11431	2920.12	-7.97	5.36	2647.03	5.29	3486.66	5.59	-273.09	566.54	-0.07	0.23
Rodair	11225	2864.45	-7.76	5.36	2689.68	5.27	3433.19	5.59	-174.77	568.74	-0.09	0.23
Rodair	10798	2870.99	-7.47	5.32	2481.51	5.25	3547.61	5.52	-389.48	676.62	-0.07	0.2
Rodair	10451	2795.18	-6.51	5.28	2453.64	5.23	3465.76	5.47	-341.54	670.58	-0.05	0.19
Rodair	10114	2750.25	-7.24	5.26	2422.68	5.21	3458.25	5.44	-327.57	708	-0.05	0.18
Rodair	9896	2678.94	-6.12	5.25	2400.33	5.2	3380.96	5.42	-278.61	702.02	-0.05	0.17
Rodair	9855	2677.17	-6.09	5.25	2362.7	5.2	3377.62	5.42	-314.47	700.45	-0.05	0.17
Rodair	9765	Lat Struct			Lat Struct		Lat Struct					
Rodair	9684	Lat Struct			Lat Struct		Lat Struct					
Rodair	9653	2582.63	-6.13	5.23	2281.97	5.19	3244.14	5.39	-300.66	661.51	-0.04	0.16
Rodair	9334	2544.43	-6.25	5.23	2257.02	5.18	3257.64	5.38	-287.41	713.21	-0.05	0.15
Rodair	8819	2341.5	-4.56	5.21	2075.9	5.17	3002.58	5.35	-265.6	661.08	-0.04	0.14
Rodair	8479	2305.05	-4.63	5.2	2041.69	5.15	2960.95	5.33	-263.36	655.9	-0.05	0.13
Rodair	7988	2189.64	-4.19	5.18	1941.88	5.14	2863.41	5.3	-247.76	673.77	-0.04	0.12
Rodair	7700	2150.39	-2.88	5.17	1906.25	5.14	2823.32	5.3	-244.14	672.93	-0.03	0.13
Rodair	7312	2073.48	-2.76	5.15	1844.22	5.12	2728.51	5.26	-229.26	655.03	-0.03	0.11
Rodair	7020	2202.21	-3.12	5.14	1959.22	5.11	2912.76	5.25	-242.99	710.55	-0.03	0.11
Rodair	6774	2329.72	-1.88	5.14	2062.52	5.11	3061.76	5.24	-267.2	732.04	-0.03	0.1
Rodair	6512	2547.85	-1.78	5.14	2253.24	5.11	3362.25	5.23	-294.61	814.4	-0.03	0.09
Rodair	6261	2718.21	-1.75	5.13	2396.49	5.1	3560.55	5.23	-321.72	842.34	-0.03	0.1

Table 3 - Existing Water Surface Elevations

River	River STA	1% AEP Atlas 14			TP40		Harvey Avg.		Flow Comparison: 1% AEP Atlas 14		W.S.E. Comparison: 1% AEP Atlas 14	
		Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	Q Total (cfs)	W.S. Elev (ft)	TP40 (Δ cfs)	Harvey AVG (Δ cfs)	TP40 (Δ ft)	Harvey AVG (Δ ft)
Rodair	5983	2919.96	-1.75	5.13	2562.7	5.1	3831.77	5.22	-357.26	911.81	-0.03	0.09
Rodair	5696	3037.54	-1.72	5.12	2669.22	5.09	3835.71	5.21	-368.32	798.17	-0.03	0.09
Rodair	5387	2985.18	-1.72	5.12	2624.86	5.09	3913.77	5.21	-360.32	928.59	-0.03	0.09
Rodair	5141	3000.03	-1.84	5.12	2645	5.09	3927.97	5.2	-355.03	927.94	-0.03	0.08
Rodair	4826	3058.48	-2.09	5.11	2694.81	5.09	3985.52	5.19	-363.67	927.04	-0.02	0.08
Rodair	4416	3388.39	-2.38	5.1	2994.93	5.08	4450.28	5.17	-393.46	1061.89	-0.02	0.07
Rodair	4140	3538.35	-2.66	5.09	3111.49	5.07	4638.68	5.16	-426.86	1100.33	-0.02	0.07
Rodair	3899	3787.34	-2.78	5.09	3358.5	5.07	4983.98	5.15	-428.84	1196.64	-0.02	0.06
Rodair	3535	4167.69	-3.25	5.07	3691.56	5.06	5524.88	5.13	-476.13	1357.19	-0.01	0.06
Rodair	3189	4641.24	-3.56	5.07	4045.23	5.06	6204.58	5.13	-596.01	1563.34	-0.01	0.06
Rodair	2825	5104.09	-4.79	5.06	4468.51	5.05	6861.26	5.11	-635.58	1757.17	-0.01	0.05
Rodair	2434	5271.72	-5.87	5.05	4617.55	5.04	7046.45	5.08	-654.17	1774.73	-0.01	0.03
Rodair	2044	5421.76	-5.5	5.03	4765.35	5.02	7209.9	5.05	-656.41	1788.14	-0.01	0.02
Rodair	1695	5762.55	-4.61	5.01	5028.14	5.01	7741.51	5.02	-734.41	1978.96	0	0.01
Rodair	1436	5525.47	-4.3	5	4819.49	5	7710.16	5	-705.98	2184.69	0	0

Table 4 - Results of Proposed Conditions 100 - Year (1%) AEP

River	River STA	Existing 1% AEP Atlas 14		Proposed Diversion			Proposed Detention D			Proposed Detention E			Proposed Pump Sta			Proposed Ultimate		
		Q Total	W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E
		(cfs)	(ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)
Rodair	54352	246.36	14.54	246	14.41	(0.13)	125	13.69	(0.85)	246	14.53	(0.01)	246	14.54	-	118	13.46	(1.08)
Rodair	54311	246.35	14.54	246	14.41	(0.13)	125	13.69	(0.85)	246	14.54	-	246	14.54	-	118	13.46	(1.08)
Rodair	54290	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	54289	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	54174	230.42	14.53	234	14.40	(0.13)	123	13.68	(0.85)	231	14.53	-	230	14.53	-	118	13.45	(1.08)
Rodair	54014	198.38	14.52	212	14.37	(0.15)	122	13.66	(0.86)	199	14.51	(0.01)	199	14.52	-	118	13.43	(1.09)
Rodair	53844	169.59	14.52	194	14.37	(0.15)	120	13.65	(0.87)	171	14.51	(0.01)	170	14.52	-	117	13.42	(1.10)
Rodair	53685	150.55	14.52	183	14.36	(0.16)	120	13.64	(0.88)	152	14.51	(0.01)	151	14.51	(0.01)	117	13.41	(1.11)
Rodair	53512	117.89	14.52	162	14.35	(0.17)	120	13.63	(0.89)	120	14.51	(0.01)	119	14.51	(0.01)	117	13.40	(1.12)
Rodair	53371	110.34	14.51	157	14.34	(0.17)	120	13.62	(0.89)	113	14.51	-	111	14.51	-	117	13.39	(1.12)
Rodair	53172	96.54	14.51	150	14.34	(0.17)	120	13.62	(0.89)	100	14.50	(0.01)	98	14.51	-	117	13.38	(1.13)
Rodair	53012	64.22	14.51	128	14.34	(0.17)	116	13.61	(0.90)	68	14.51	-	66	14.51	-	117	13.37	(1.14)
Rodair	52827	21.01	14.52	102	14.34	(0.18)	116	13.61	(0.91)	26	14.51	(0.01)	23	14.51	(0.01)	117	13.37	(1.15)
Rodair	52798	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	52594	(2.81)	14.51	84	14.33	(0.18)	115	13.60	(0.91)	3	14.51	-	(1)	14.51	-	117	13.35	(1.16)
Rodair	52588	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	52581	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	52412	472.53	14.36	455	14.18	(0.18)	338	13.48	(0.88)	476	14.34	(0.02)	474	14.35	(0.01)	296	13.25	(1.11)
Rodair	52233	470.45	14.30	453	14.12	(0.18)	337	13.43	(0.87)	474	14.28	(0.02)	472	14.29	(0.01)	295	13.21	(1.09)
Rodair	52006	468.45	14.23	449	14.05	(0.18)	336	13.37	(0.86)	472	14.22	(0.01)	470	14.23	-	295	13.16	(1.07)
Rodair	51821	466.78	14.17	447	13.98	(0.19)	335	13.32	(0.85)	470	14.15	(0.02)	468	14.16	(0.01)	294	13.11	(1.06)
Rodair	51619	465.68	14.12	445	13.93	(0.19)	334	13.27	(0.85)	469	14.10	(0.02)	467	14.11	(0.01)	293	13.07	(1.05)
Rodair	51420	463.95	14.05	443	13.86	(0.19)	333	13.22	(0.83)	466	14.03	(0.02)	465	14.04	(0.01)	293	13.02	(1.03)
Rodair	51176	462.67	14.00	441	13.82	(0.18)	333	13.18	(0.82)	464	13.98	(0.02)	464	14.00	-	292	12.99	(1.01)
Rodair	50994	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	50989	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	50962	461.28	13.96	439	13.78	(0.18)	332	13.14	(0.82)	463	13.94	(0.02)	462	13.95	(0.01)	291	12.96	(1.00)
Rodair	50720	458.89	13.90	437	13.71	(0.19)	331	13.09	(0.81)	462	13.88	(0.02)	460	13.89	(0.01)	291	12.92	(0.98)
Rodair	50526	456.75	13.84	434	13.65	(0.19)	329	13.04	(0.80)	460	13.81	(0.03)	459	13.83	(0.01)	290	12.87	(0.97)
Rodair	50327	456.00	13.82	434	13.63	(0.19)	329	13.02	(0.80)	460	13.79	(0.03)	458	13.81	(0.01)	289	12.85	(0.97)
Rodair	50168	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	50165	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	50112	452.32	13.73	430	13.55	(0.18)	327	12.95	(0.78)	457	13.71	(0.02)	454	13.72	(0.01)	288	12.80	(0.93)
Rodair	49912	451.96	13.72	430	13.54	(0.18)	327	12.94	(0.78)	456	13.70	(0.02)	453	13.71	(0.01)	288	12.79	(0.93)
Rodair	49709	450.55	13.67	428	13.48	(0.19)	325	12.90	(0.77)	455	13.64	(0.03)	452	13.66	(0.01)	287	12.75	(0.92)
Rodair	49534	443.84	13.62	425	13.43	(0.19)	323	12.85	(0.77)	453	13.59	(0.03)	445	13.61	(0.01)	286	12.71	(0.91)
Rodair	49275	443.71	13.60	423	13.41	(0.19)	322	12.84	(0.76)	452	13.57	(0.03)	445	13.59	(0.01)	286	12.70	(0.90)
Rodair	49063	443.48	13.58	422	13.39	(0.19)	322	12.82	(0.76)	448	13.55	(0.03)	444	13.57	(0.01)	286	12.68	(0.90)
Rodair	48842	442.93	13.55	421	13.35	(0.20)	320	12.79	(0.76)	438	13.51	(0.04)	435	13.53	(0.02)	285	12.66	(0.89)
Rodair	48641	432.61	13.51	418	13.32	(0.19)	318	12.76	(0.75)	437	13.48	(0.03)	434	13.50	(0.01)	284	12.63	(0.88)
Rodair	48434	432.09	13.49	417	13.29	(0.20)	317	12.74	(0.75)	437	13.45	(0.04)	433	13.48	(0.01)	284	12.62	(0.87)
Rodair	48236	431.60	13.46	404	13.27	(0.19)	316	12.72	(0.74)	437	13.42	(0.04)	433	13.45	(0.01)	284	12.60	(0.86)
Rodair	47992	430.76	13.42	403	13.23	(0.19)	314	12.68	(0.74)	436	13.38	(0.04)	432	13.41	(0.01)	283	12.56	(0.86)
Rodair	47977	429.65	13.33	396	13.14	(0.19)	309	12.62	(0.71)	434	13.28	(0.05)	431	13.31	(0.02)	282	12.51	(0.82)
Rodair	**47949 5th Ave**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	47930	422.73	13.29	395	13.12	(0.17)	308	12.62	(0.67)	431	13.24	(0.05)	425	13.27	(0.02)	281	12.48	(0.81)
Rodair	47908	422.85	13.30	396	13.13	(0.17)	309	12.63	(0.67)	431	13.26	(0.04)	425	13.28	(0.02)	281	12.51	(0.79)
Rodair	47891	Inl Struct		Inl Struct			Inl Struct			Inl Struct			Inl Struct			Inl Struct		
Rodair	47879	422.85	13.29	396	13.12	(0.17)	309	12.62	(0.67)	431	13.25	(0.04)	425	13.28	(0.01)	281	12.50	(0.79)
Rodair	47846	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	47783	343.63	13.31	335	13.13	(0.18)	277	12.63	(0.68)	354	13.27	(0.04)	346	13.29	(0.02)	256	12.51	(0.80)
Rodair	47753	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	47751	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	47737	343.63	13.31	335	13.13	(0.18)	277	12.63	(0.68)	354	13.27	(0.04)	346	13.29	(0.02)	256	12.51	(0.80)
Rodair	47564	724.68	13.20	611	13.06	(0.14)	657	12.49	(0.71)	736	13.15	(0.05)	728	13.18	(0.02)	542	12.42	(0.78)
Rodair	47409	737.92	13.18	630	13.04	(0.14)	658	12.48	(0.70)	756	13.13	(0.05)	747	13.16	(0.02)	551	12.41	(0.77)
Rodair	47180	767.75	13.15	659	13.02	(0.13)	658	12.46	(0.69)	786	13.09	(0.06)	768	13.13	(0.02)	564	12.38	(0.77)
Rodair	46984	752.87	13.13	692	13.00	(0.13)	662	12.45	(0.68)	820	13.08	(0.05)	811	13.11	(0.02)	575	12.38	(0.75)
Rodair	46786	775.30	13.13	716	13.00	(0.13)	664	12.46	(0.67)	845	13.07	(0.06)	827	13.11	(0.02)	586	12.38	(0.75)
Rodair	46660	784.04	13.09	659	12.97	(0.12)	663	12.43	(0.66)	861	13.03	(0.06)	792	13.07	(0.02)	593	12.35	(0.74)

Table 4 - Results of Proposed Conditions 100 - Year (1%) AEP

River	River STA	Existing 1% AEP Atlas 14		Proposed Diversion			Proposed Detention D			Proposed Detention E			Proposed Pump Sta			Proposed Ultimate		
		Q Total	W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E
		(cfs)	(ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)
Rodair	46479	802.07	13.08	679	12.96	(0.12)	664	12.43	(0.65)	883	13.02	(0.06)	812	13.06	(0.02)	604	12.35	(0.73)
Rodair	46324	824.68	13.08	697	12.96	(0.12)	665	12.43	(0.65)	906	13.02	(0.06)	834	13.06	(0.02)	613	12.34	(0.74)
Rodair	46263	837.48	13.11	775	12.98	(0.13)	667	12.46	(0.65)	914	13.06	(0.05)	895	13.09	(0.02)	617	12.37	(0.74)
Rodair	46252	836.57	13.10	707	12.97	(0.13)	666	12.46	(0.64)	915	13.04	(0.06)	844	13.08	(0.02)	618	12.36	(0.74)
Rodair	**46247 Highland Pipelin**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	46242	834.67	13.08	706	12.95	(0.13)	665	12.43	(0.65)	915	13.01	(0.07)	841	13.06	(0.02)	618	12.34	(0.74)
Rodair	46225	834.02	13.06	707	12.94	(0.12)	665	12.42	(0.64)	917	12.99	(0.07)	842	13.04	(0.02)	618	12.33	(0.73)
Rodair	**46221 Pipeline**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	46218	831.67	13.05	707	12.93	(0.12)	665	12.40	(0.65)	917	12.97	(0.08)	838	13.03	(0.02)	618	12.31	(0.74)
Rodair	46214	831.39	13.05	707	12.93	(0.12)	664	12.40	(0.65)	918	12.97	(0.08)	838	13.02	(0.03)	618	12.31	(0.74)
Rodair	46210	832.08	13.05	708	12.93	(0.12)	664	12.40	(0.65)	918	12.97	(0.08)	838	13.02	(0.03)	619	12.31	(0.74)
Rodair	**46206 Pipeline**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	46203	824.01	13.00	706	12.89	(0.11)	662	12.36	(0.64)	918	12.91	(0.09)	822	12.98	(0.02)	618	12.27	(0.73)
Rodair	46193	829.00	13.02	708	12.91	(0.11)	663	12.37	(0.65)	919	12.93	(0.09)	837	13.00	(0.02)	619	12.28	(0.74)
Rodair	46138	821.12	12.97	712	12.87	(0.10)	661	12.33	(0.64)	926	12.87	(0.10)	823	12.95	(0.02)	621	12.25	(0.72)
Rodair	46123	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	46121	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	46090	826.38	12.97	718	12.87	(0.10)	661	12.34	(0.63)	932	12.87	(0.10)	829	12.95	(0.02)	624	12.25	(0.72)
Rodair	45937	837.21	12.94	733	12.84	(0.10)	661	12.32	(0.62)	952	12.83	(0.11)	843	12.92	(0.02)	631	12.23	(0.71)
Rodair	45779	849.48	12.94	748	12.84	(0.10)	663	12.32	(0.62)	970	12.82	(0.12)	857	12.91	(0.03)	641	12.22	(0.72)
Rodair	45773	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	45650	848.12	12.94	748	12.84	(0.10)	651	12.33	(0.61)	962	12.83	(0.11)	855	12.92	(0.02)	638	12.23	(0.71)
Rodair	45631	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	45523	860.75	12.93	762	12.83	(0.10)	651	12.32	(0.61)	978	12.81	(0.12)	868	12.90	(0.03)	645	12.22	(0.71)
Rodair	45412	854.77	12.93	761	12.83	(0.10)	651	12.32	(0.61)	981	12.80	(0.13)	864	12.90	(0.03)	652	12.21	(0.72)
Rodair	45306	843.09	12.93	756	12.82	(0.11)	651	12.31	(0.62)	979	12.79	(0.14)	854	12.90	(0.03)	658	12.20	(0.73)
Rodair	45279	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	45136	838.71	12.92	763	12.80	(0.12)	598	12.32	(0.60)	919	12.80	(0.12)	851	12.89	(0.03)	620	12.20	(0.72)
Rodair	45100	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	45010	851.65	12.89	780	12.78	(0.11)	588	12.30	(0.59)	904	12.78	(0.11)	865	12.86	(0.03)	622	12.18	(0.71)
Rodair	44902	872.65	12.88	801	12.76	(0.12)	590	12.30	(0.58)	923	12.76	(0.12)	886	12.84	(0.04)	629	12.17	(0.71)
Rodair	44801	892.46	12.86	818	12.75	(0.11)	591	12.30	(0.56)	943	12.75	(0.11)	905	12.83	(0.03)	635	12.16	(0.70)
Rodair	44674	904.10	12.84	830	12.73	(0.11)	591	12.29	(0.55)	956	12.72	(0.12)	917	12.81	(0.03)	642	12.16	(0.68)
Rodair	44570	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	44550	915.83	12.83	843	12.73	(0.10)	588	12.29	(0.54)	959	12.72	(0.11)	929	12.80	(0.03)	648	12.15	(0.68)
Rodair	44436	934.49	12.82	841	12.72	(0.10)	584	12.29	(0.53)	949	12.72	(0.10)	945	12.79	(0.03)	653	12.15	(0.67)
Rodair	44308	962.81	12.80	852	12.71	(0.09)	587	12.29	(0.51)	962	12.72	(0.08)	948	12.77	(0.03)	662	12.14	(0.66)
Rodair	44208	944.57	12.81	862	12.72	(0.09)	590	12.30	(0.51)	978	12.73	(0.08)	958	12.78	(0.03)	670	12.15	(0.66)
Rodair	44175	948.09	12.79	866	12.71	(0.08)	589	12.29	(0.50)	981	12.70	(0.09)	961	12.76	(0.03)	671	12.14	(0.65)
Rodair	**44151 Wellspring Dr**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	44128	945.09	12.62	863	12.56	(0.06)	588	12.23	(0.39)	975	12.52	(0.10)	958	12.59	(0.03)	667	12.06	(0.56)
Rodair	44096	948.47	12.63	866	12.57	(0.06)	588	12.23	(0.40)	979	12.52	(0.11)	962	12.59	(0.04)	669	12.07	(0.56)
Rodair	44088	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	44039	952.30	12.63	871	12.57	(0.06)	586	12.23	(0.40)	985	12.52	(0.11)	967	12.59	(0.04)	671	12.07	(0.56)
Rodair	44005	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	43915	964.08	12.62	885	12.56	(0.06)	585	12.24	(0.38)	999	12.51	(0.11)	980	12.58	(0.04)	674	12.06	(0.56)
Rodair	43819	964.23	12.60	887	12.54	(0.06)	601	12.23	(0.37)	1,004	12.49	(0.11)	982	12.56	(0.04)	691	12.06	(0.54)
Rodair	43748	991.80	12.66	913	12.59	(0.07)	594	12.25	(0.41)	1,030	12.56	(0.10)	1,008	12.63	(0.03)	692	12.09	(0.57)
Rodair	43737	992.76	12.66	914	12.59	(0.07)	593	12.25	(0.41)	1,031	12.56	(0.10)	1,009	12.63	(0.03)	693	12.09	(0.57)
Rodair	**43701 Unnamed Rd**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	43648	992.76	12.62	914	12.56	(0.06)	593	12.23	(0.39)	1,031	12.52	(0.10)	1,009	12.59	(0.03)	692	12.06	(0.56)
Rodair	43634	992.42	12.62	914	12.56	(0.06)	593	12.23	(0.39)	1,031	12.52	(0.10)	1,009	12.59	(0.03)	692	12.06	(0.56)
Rodair	43598	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	43553	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	43477	800.60	12.60	748	12.54	(0.06)	513	12.21	(0.39)	883	12.49	(0.11)	831	12.56	(0.04)	628	12.04	(0.56)
Rodair	43458	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	43367	1,694.73	12.19	1,638	12.14	(0.05)	1,393	11.87	(0.32)	1,784	12.02	(0.17)	1,719	12.14	(0.05)	1,528	11.60	(0.59)
Rodair	43309	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	43308	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	43237	1,689.99	12.24	1,633	12.19	(0.05)	1,394	11.91	(0.33)	1,780	12.08	(0.16)	1,714	12.19	(0.05)	1,526	11.66	(0.58)

Table 4 - Results of Proposed Conditions 100 - Year (1%) AEP

River	River STA	Existing 1% AEP Atlas 14		Proposed Diversion			Proposed Detention D			Proposed Detention E			Proposed Pump Sta			Proposed Ultimate		
		Q Total	W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E
		(cfs)	(ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)
Rodair	43178	1,691.90	12.30	1,638	12.24	(0.06)	1,397	11.95	(0.35)	1,786	12.15	(0.15)	1,719	12.25	(0.05)	1,529	11.71	(0.59)
Rodair	**43140 US59 NBFR**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	43113	1,691.18	12.04	1,637	12.01	(0.03)	1,391	11.77	(0.27)	1,783	11.85	(0.19)	1,718	11.99	(0.05)	1,527	11.50	(0.54)
Rodair	43111	1,691.37	12.16	1,637	12.12	(0.04)	1,393	11.86	(0.30)	1,785	11.99	(0.17)	1,718	12.11	(0.05)	1,529	11.61	(0.55)
Rodair	43109	1,691.29	12.17	1,637	12.12	(0.05)	1,393	11.86	(0.31)	1,785	11.99	(0.18)	1,718	12.11	(0.06)	1,529	11.61	(0.56)
Rodair	43107	1,691.20	12.16	1,637	12.12	(0.04)	1,392	11.86	(0.30)	1,785	11.99	(0.17)	1,718	12.11	(0.05)	1,529	11.61	(0.55)
Rodair	**43079 US59 NBML**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	43038	1,691.08	12.09	1,637	12.05	(0.04)	1,392	11.80	(0.29)	1,783	11.91	(0.18)	1,718	12.03	(0.06)	1,527	11.54	(0.55)
Rodair	43030	1,690.78	12.05	1,637	12.02	(0.03)	1,391	11.78	(0.27)	1,783	11.87	(0.18)	1,717	12.00	(0.05)	1,527	11.51	(0.54)
Rodair	**42987 US59 SBML**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	42958	1,690.78	12.08	1,637	12.04	(0.04)	1,392	11.80	(0.28)	1,783	11.90	(0.18)	1,718	12.03	(0.05)	1,527	11.53	(0.55)
Rodair	42954	1,690.71	12.09	1,637	12.05	(0.04)	1,392	11.80	(0.29)	1,783	11.91	(0.18)	1,717	12.03	(0.06)	1,527	11.54	(0.55)
Rodair	**42920 US59 SBFR**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	42889	1,690.71	12.05	1,637	12.01	(0.04)	1,392	11.78	(0.27)	1,783	11.87	(0.18)	1,717	11.99	(0.06)	1,527	11.52	(0.53)
Rodair	42862	1,690.33	12.01	1,636	11.98	(0.03)	1,391	11.75	(0.26)	1,782	11.83	(0.18)	1,717	11.96	(0.05)	1,527	11.49	(0.52)
Rodair	42851	Inl Struct		Inl Struct			Inl Struct			Inl Struct			Inl Struct			Inl Struct		
Rodair	42791	1,690.21	11.94	1,636	11.91	(0.03)	1,391	11.71	(0.23)	1,782	11.75	(0.19)	1,717	11.88	(0.06)	1,527	11.42	(0.52)
Rodair	42790	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	42785	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	42633	1,719.84	11.93	1,666	11.90	(0.03)	1,423	11.70	(0.23)	1,813	11.73	(0.20)	1,747	11.87	(0.06)	1,560	11.41	(0.52)
Rodair	42381	1,775.36	11.91	1,721	11.88	(0.03)	1,477	11.68	(0.23)	1,867	11.71	(0.20)	1,802	11.85	(0.06)	1,614	11.39	(0.52)
Rodair	42172	1,805.12	11.89	1,765	11.86	(0.03)	1,520	11.66	(0.23)	1,910	11.68	(0.21)	1,845	11.83	(0.06)	1,658	11.37	(0.52)
Rodair	41952	1,875.41	11.87	1,820	11.84	(0.03)	1,570	11.64	(0.23)	1,957	11.66	(0.21)	1,902	11.80	(0.07)	1,706	11.34	(0.53)
Rodair	41818	1,901.52	11.85	1,846	11.82	(0.03)	1,596	11.63	(0.22)	1,983	11.64	(0.21)	1,928	11.78	(0.07)	1,732	11.33	(0.52)
Rodair	41798	1,905.57	11.85	1,850	11.82	(0.03)	1,600	11.63	(0.22)	1,987	11.64	(0.21)	1,932	11.78	(0.07)	1,736	11.33	(0.52)
Rodair	**41793 Landrey Pipeline**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	41788	1,905.56	11.82	1,850	11.79	(0.03)	1,600	11.61	(0.21)	1,987	11.60	(0.22)	1,932	11.75	(0.07)	1,736	11.30	(0.52)
Rodair	41782	1,906.84	11.82	1,851	11.79	(0.03)	1,601	11.61	(0.21)	1,989	11.60	(0.22)	1,933	11.75	(0.07)	1,738	11.30	(0.52)
Rodair	41777	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	41768	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	41707	1,923.11	11.81	1,868	11.78	(0.03)	1,618	11.60	(0.21)	2,004	11.60	(0.21)	1,949	11.75	(0.06)	1,753	11.29	(0.52)
Rodair	41558	1,971.95	11.79	1,916	11.77	(0.02)	1,662	11.59	(0.20)	2,042	11.58	(0.21)	1,997	11.73	(0.06)	1,788	11.28	(0.51)
Rodair	41539.5*	1,973.93	11.79	1,918	11.76	(0.03)	1,665	11.59	(0.20)	2,044	11.58	(0.21)	1,999	11.73	(0.06)	1,786	11.28	(0.51)
Rodair	41521*	1,974.68	11.79	1,919	11.76	(0.03)	1,668	11.58	(0.21)	2,047	11.58	(0.21)	2,000	11.72	(0.07)	1,790	11.27	(0.52)
Rodair	41502.5*	1,965.23	11.79	1,921	11.76	(0.03)	1,671	11.58	(0.21)	2,049	11.58	(0.21)	2,002	11.72	(0.07)	1,794	11.27	(0.52)
Rodair	41484	1,966.57	11.79	1,923	11.76	(0.03)	1,674	11.58	(0.21)	2,053	11.57	(0.22)	2,004	11.72	(0.07)	1,797	11.27	(0.52)
Rodair	41386.6*	1,970.11	11.79	1,926	11.76	(0.03)	1,679	11.58	(0.21)	2,057	11.58	(0.21)	2,008	11.72	(0.07)	1,802	11.27	(0.52)
Rodair	41372.2*	1,974.07	11.79	1,931	11.76	(0.03)	1,683	11.58	(0.21)	2,061	11.58	(0.21)	2,012	11.72	(0.07)	1,806	11.27	(0.52)
Rodair	41357.8*	1,977.78	11.79	1,935	11.77	(0.02)	1,687	11.58	(0.21)	2,065	11.58	(0.21)	2,016	11.73	(0.06)	1,810	11.28	(0.51)
Rodair	41343.4*	1,981.29	11.79	1,939	11.77	(0.02)	1,691	11.59	(0.20)	2,069	11.58	(0.21)	2,020	11.73	(0.06)	1,814	11.28	(0.51)
Rodair	41332	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	41329*	1,989.01	11.80	1,947	11.77	(0.03)	1,700	11.59	(0.21)	2,074	11.58	(0.22)	2,028	11.73	(0.07)	1,819	11.28	(0.52)
Rodair	41314.6*	2,011.35	11.79	1,969	11.76	(0.03)	1,723	11.58	(0.21)	2,085	11.58	(0.21)	2,052	11.73	(0.06)	1,829	11.28	(0.51)
Rodair	41300.2*	2,066.99	11.78	2,016	11.76	(0.02)	1,782	11.57	(0.21)	2,106	11.58	(0.20)	2,101	11.72	(0.06)	1,869	11.27	(0.51)
Rodair	41285.8*	2,106.76	11.78	2,058	11.75	(0.03)	1,829	11.56	(0.22)	2,127	11.58	(0.20)	2,144	11.71	(0.07)	1,899	11.27	(0.51)
Rodair	41271.4*	2,190.74	11.76	2,145	11.73	(0.03)	1,929	11.54	(0.22)	2,176	11.57	(0.19)	2,235	11.68	(0.08)	1,974	11.25	(0.51)
Rodair	41257*	2,348.93	11.72	2,308	11.69	(0.03)	2,109	11.50	(0.22)	2,282	11.54	(0.18)	2,403	11.64	(0.08)	2,116	11.21	(0.51)
Rodair	41242.6*	2,492.18	11.68	2,453	11.65	(0.03)	2,258	11.46	(0.22)	2,382	11.52	(0.16)	2,550	11.60	(0.08)	2,231	11.18	(0.50)
Rodair	41228.2*	2,558.22	11.66	2,517	11.63	(0.03)	2,313	11.45	(0.21)	2,427	11.51	(0.15)	2,613	11.59	(0.07)	2,264	11.18	(0.48)
Rodair	41213.8*	2,650.06	11.64	2,609	11.61	(0.03)	2,402	11.43	(0.21)	2,492	11.50	(0.14)	2,705	11.56	(0.08)	2,327	11.16	(0.48)
Rodair	41199.4*	2,672.44	11.64	2,630	11.61	(0.03)	2,417	11.43	(0.21)	2,504	11.50	(0.14)	2,724	11.56	(0.08)	2,333	11.16	(0.48)
Rodair	41185	2,682.66	11.64	2,640	11.61	(0.03)	2,424	11.43	(0.21)	2,510	11.50	(0.14)	2,733	11.56	(0.08)	2,338	11.17	(0.47)
Rodair	41151	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	41145.8*	2,686.37	11.64	2,643	11.61	(0.03)	2,427	11.43	(0.21)	2,513	11.50	(0.14)	2,737	11.57	(0.07)	2,341	11.17	(0.47)
Rodair	41134.6*	2,689.66	11.64	2,647	11.62	(0.02)	2,431	11.43	(0.21)	2,517	11.50	(0.14)	2,740	11.57	(0.07)	2,345	11.17	(0.47)
Rodair	41123.4*	2,693.16	11.64	2,651	11.61	(0.03)	2,434	11.43	(0.21)	2,520	11.50	(0.14)	2,744	11.57	(0.07)	2,348	11.17	(0.47)
Rodair	41112.2*	2,696.66	11.64	2,654	11.61	(0.03)	2,438	11.43	(0.21)	2,524	11.50	(0.14)	2,747	11.56	(0.08)	2,352	11.16	(0.48)
Rodair	41101	2,700.17	11.64	2,658	11.61	(0.03)	2,441	11.42	(0.22)	2,527	11.50	(0.14)	2,751	11.56	(0.08)	2,356	11.16	(0.48)
Rodair	41083.2*	2,703.85	11.64	2,661	11.61	(0.03)	2,445	11.43	(0.21)	2,531	11.50	(0.14)	2,755	11.56	(0.08)	2,359	11.16	(0.48)
Rodair	41065.4*	2,707.54	11.64	2,665	11.61	(0.03)	2,449	11.43	(0.21)	2,535	11.50	(0.14)	2,758	11.56	(0.08)	2,363	11.16	(0.48)

Table 4 - Results of Proposed Conditions 100 - Year (1%) AEP

River	River STA	Existing 1% AEP Atlas 14		Proposed Diversion			Proposed Detention D			Proposed Detention E			Proposed Pump Sta			Proposed Ultimate		
		Q Total	W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E
		(cfs)	(ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)
Rodair	41047.5*	2,711.22	11.64	2,669	11.61	(0.03)	2,453	11.43	(0.21)	2,539	11.50	(0.14)	2,762	11.56	(0.08)	2,367	11.16	(0.48)
Rodair	41029.7*	2,714.90	11.64	2,672	11.61	(0.03)	2,456	11.43	(0.21)	2,542	11.50	(0.14)	2,766	11.56	(0.08)	2,371	11.16	(0.48)
Rodair	41011.9*	2,718.59	11.64	2,676	11.61	(0.03)	2,460	11.43	(0.21)	2,546	11.50	(0.14)	2,769	11.56	(0.08)	2,375	11.16	(0.48)
Rodair	40994	2,722.50	11.64	2,680	11.61	(0.03)	2,464	11.43	(0.21)	2,550	11.50	(0.14)	2,773	11.56	(0.08)	2,378	11.16	(0.48)
Rodair	40836	2,754.73	11.59	2,713	11.56	(0.03)	2,497	11.38	(0.21)	2,576	11.45	(0.14)	2,806	11.51	(0.08)	2,412	11.12	(0.47)
Rodair	40694	2,783.29	11.55	2,741	11.52	(0.03)	2,525	11.35	(0.20)	2,606	11.41	(0.14)	2,835	11.47	(0.08)	2,442	11.08	(0.47)
Rodair	40540	2,814.13	11.51	2,773	11.48	(0.03)	2,556	11.30	(0.21)	2,638	11.37	(0.14)	2,866	11.42	(0.09)	2,475	11.03	(0.48)
Rodair	40249	2,872.62	11.40	2,833	11.38	(0.02)	2,616	11.21	(0.19)	2,693	11.28	(0.12)	2,926	11.31	(0.09)	2,533	10.94	(0.46)
Rodair	40185	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	40181	2,881.12	11.38	2,847	11.35	(0.03)	2,630	11.19	(0.19)	2,706	11.25	(0.13)	2,939	11.28	(0.10)	2,550	10.91	(0.47)
Rodair	40107	2,694.48	11.40	2,652	11.38	(0.02)	2,449	11.21	(0.19)	2,521	11.27	(0.13)	2,755	11.30	(0.10)	2,395	10.93	(0.47)
Rodair	40105	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	40050	2,706.22	11.38	2,664	11.36	(0.02)	2,459	11.19	(0.19)	2,533	11.26	(0.12)	2,767	11.28	(0.10)	2,407	10.91	(0.47)
Rodair	39822	2,752.37	11.33	2,711	11.31	(0.02)	2,507	11.14	(0.19)	2,580	11.21	(0.12)	2,814	11.22	(0.11)	2,455	10.86	(0.47)
Rodair	39798	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	39617	2,772.91	11.29	2,733	11.26	(0.03)	2,537	11.10	(0.19)	2,607	11.17	(0.12)	2,841	11.17	(0.12)	2,492	10.81	(0.48)
Rodair	39344	2,818.71	11.21	2,780	11.19	(0.02)	2,588	11.03	(0.18)	2,656	11.09	(0.12)	2,890	11.09	(0.12)	2,550	10.73	(0.48)
Rodair	39227	2,804.75	11.18	2,768	11.16	(0.02)	2,585	11.00	(0.18)	2,649	11.06	(0.12)	2,884	11.05	(0.13)	2,562	10.70	(0.48)
Rodair	39200	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	39060	2,839.14	11.13	2,803	11.11	(0.02)	2,620	10.96	(0.17)	2,683	11.02	(0.11)	2,918	11.00	(0.13)	2,597	10.65	(0.48)
Rodair	38920	2,866.96	11.09	2,831	11.07	(0.02)	2,639	10.92	(0.17)	2,712	10.98	(0.11)	2,947	10.95	(0.14)	2,627	10.61	(0.48)
Rodair	38916	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	38801	2,902.19	11.05	2,865	11.03	(0.02)	2,667	10.89	(0.16)	2,742	10.94	(0.11)	2,978	10.91	(0.14)	2,652	10.57	(0.48)
Rodair	38792	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	38746	2,913.61	11.04	2,877	11.02	(0.02)	2,678	10.88	(0.16)	2,753	10.93	(0.11)	2,989	10.90	(0.14)	2,664	10.56	(0.48)
Rodair	38583	2,912.48	10.99	2,876	10.97	(0.02)	2,677	10.83	(0.16)	2,752	10.88	(0.11)	2,989	10.84	(0.15)	2,664	10.51	(0.48)
Rodair	38572	2,912.48	10.98	2,876	10.96	(0.02)	2,677	10.83	(0.15)	2,752	10.88	(0.10)	2,989	10.84	(0.14)	2,664	10.50	(0.48)
Rodair	38564	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	38407	2,909.39	10.98	2,873	10.96	(0.02)	2,676	10.82	(0.16)	2,750	10.88	(0.10)	2,988	10.83	(0.15)	2,664	10.49	(0.49)
Rodair	38379	2,916.81	10.96	2,880	10.94	(0.02)	2,683	10.81	(0.15)	2,758	10.86	(0.10)	2,995	10.81	(0.15)	2,671	10.48	(0.48)
Rodair	38356	2,922.71	10.95	2,886	10.94	(0.01)	2,689	10.80	(0.15)	2,764	10.85	(0.10)	3,001	10.80	(0.15)	2,677	10.47	(0.48)
Rodair	38311	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	38212	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	38089	2,967.90	10.90	2,933	10.88	(0.02)	2,744	10.75	(0.15)	2,816	10.80	(0.10)	3,058	10.74	(0.16)	2,746	10.41	(0.49)
Rodair	37989	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	37729	2,996.86	10.80	2,965	10.79	(0.01)	2,790	10.66	(0.14)	2,857	10.71	(0.09)	3,106	10.62	(0.18)	2,821	10.30	(0.50)
Rodair	37455	3,067.98	10.71	3,037	10.70	(0.01)	2,861	10.58	(0.13)	2,928	10.63	(0.08)	3,178	10.52	(0.19)	2,893	10.21	(0.50)
Rodair	37389	3,085.15	10.70	3,054	10.68	(0.02)	2,878	10.56	(0.14)	2,945	10.61	(0.09)	3,195	10.50	(0.20)	2,910	10.19	(0.51)
Rodair	37380	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	37275	3,109.78	10.66	3,080	10.64	(0.02)	2,905	10.53	(0.13)	2,972	10.57	(0.09)	3,224	10.46	(0.20)	2,940	10.14	(0.52)
Rodair	37266	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	37203	3,093.15	10.64	3,062	10.63	(0.01)	2,895	10.51	(0.13)	2,959	10.56	(0.08)	3,219	10.44	(0.20)	2,928	10.13	(0.51)
Rodair	37178	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	37013	3,141.30	10.58	3,110	10.57	(0.01)	2,943	10.46	(0.12)	3,008	10.50	(0.08)	3,268	10.37	(0.21)	2,978	10.06	(0.52)

Table 4 - Results of Proposed Conditions 100 - Year (1%) AEP

River	River STA	Existing 1% AEP Atlas 14		Proposed Diversion			Proposed Detention D			Proposed Detention E			Proposed Pump Sta			Proposed Ultimate		
		Q Total	W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E
		(cfs)	(ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)
Rodair	36801	3,193.75	10.52	3,163	10.51	(0.01)	2,998	10.40	(0.12)	3,062	10.44	(0.08)	3,324	10.30	(0.22)	3,035	9.99	(0.53)
Rodair	36503	3,153.75	10.45	3,127	10.44	(0.01)	2,982	10.33	(0.12)	3,038	10.37	(0.08)	3,330	10.20	(0.25)	3,085	9.89	(0.56)
Rodair	36166	2,916.24	10.36	3,146	10.33	(0.03)	3,015	10.22	(0.14)	3,066	10.26	(0.10)	3,382	10.05	(0.31)	3,163	9.73	(0.63)
Rodair	36151	2,919.14	10.35	3,150	10.32	(0.03)	3,019	10.21	(0.14)	3,070	10.26	(0.09)	3,386	10.04	(0.31)	3,167	9.73	(0.62)
Rodair	36129	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	35987	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	35981	2,951.06	10.33	3,193	10.29	(0.04)	3,062	10.18	(0.15)	3,113	10.23	(0.10)	3,430	10.00	(0.33)	3,212	9.69	(0.64)
Rodair	35939	2,958.55	10.20	2,910	10.15	(0.05)	3,070	10.03	(0.17)	3,122	10.07	(0.13)	3,439	9.80	(0.40)	3,222	9.49	(0.71)
Rodair	35919	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	35799	2,992.60	10.19	2,940	10.14	(0.05)	3,103	10.02	(0.17)	3,154	10.06	(0.13)	3,474	9.78	(0.41)	3,258	9.48	(0.71)
Rodair	35788	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	35708	3,053.06	10.18	3,028	10.17	(0.01)	2,902	10.07	(0.11)	2,952	10.11	(0.07)	3,283	9.83	(0.35)	3,086	9.52	(0.66)
Rodair	35701	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	35693	3,056.38	10.19	3,031	10.18	(0.01)	2,905	10.08	(0.11)	2,955	10.12	(0.07)	3,286	9.85	(0.34)	3,089	9.54	(0.65)
Rodair	35682	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	35659	3,033.23	10.22	3,008	10.21	(0.01)	2,885	10.11	(0.11)	2,934	10.15	(0.07)	3,273	9.88	(0.34)	3,083	9.56	(0.66)
Rodair	35609	3,031.69	10.17	3,001	10.17	-	2,892	10.06	(0.11)	2,938	10.10	(0.07)	3,282	9.82	(0.35)	3,102	9.49	(0.68)
Rodair	35600	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	35547	3,034.17	10.17	3,028	10.15	(0.02)	2,895	10.06	(0.11)	2,942	10.10	(0.07)	3,307	9.79	(0.38)	3,104	9.48	(0.69)
Rodair	35323	3,114.32	10.15	3,071	10.13	(0.02)	2,978	10.03	(0.12)	3,024	10.07	(0.08)	3,354	9.75	(0.40)	3,191	9.44	(0.71)
Rodair	35312	3,114.04	10.14	3,073	10.12	(0.02)	2,977	10.03	(0.11)	3,024	10.07	(0.07)	3,356	9.75	(0.39)	3,191	9.43	(0.71)
Rodair	35252	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	35065	3,126.39	10.14	3,106	10.13	(0.01)	3,004	10.02	(0.12)	3,046	10.07	(0.07)	3,416	9.75	(0.39)	3,227	9.42	(0.72)
Rodair	35057	3,125.46	10.14	3,105	10.13	(0.01)	3,003	10.02	(0.12)	3,045	10.06	(0.08)	3,415	9.74	(0.40)	3,227	9.42	(0.72)
Rodair	35052	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	34813	3,217.36	10.08	3,196	10.07	(0.01)	3,093	9.97	(0.11)	3,137	10.01	(0.07)	3,494	9.67	(0.41)	3,328	9.34	(0.74)
Rodair	34556	3,268.00	10.03	3,248	10.02	(0.01)	3,149	9.91	(0.12)	3,191	9.96	(0.07)	3,568	9.60	(0.43)	3,373	9.27	(0.76)
Rodair	34353	3,290.83	10.00	3,271	9.99	(0.01)	3,173	9.88	(0.12)	3,214	9.92	(0.08)	3,584	9.56	(0.44)	3,405	9.22	(0.78)
Rodair	34081	3,353.91	9.97	3,335	9.96	(0.01)	3,235	9.85	(0.12)	3,277	9.89	(0.08)	3,651	9.52	(0.45)	3,480	9.18	(0.79)
Rodair	33806	3,428.00	9.91	3,409	9.90	(0.01)	3,307	9.80	(0.11)	3,351	9.84	(0.07)	3,723	9.43	(0.48)	3,553	9.09	(0.82)
Rodair	33509	3,520.14	9.85	3,501	9.84	(0.01)	3,399	9.74	(0.11)	3,443	9.78	(0.07)	3,829	9.35	(0.50)	3,653	9.00	(0.85)
Rodair	33208	3,457.58	9.71	3,443	9.70	(0.01)	3,373	9.59	(0.12)	3,406	9.63	(0.08)	3,867	9.05	(0.66)	3,731	8.66	(1.05)
Rodair	33197	3,460.51	9.63	3,447	9.62	(0.01)	3,375	9.50	(0.13)	3,408	9.55	(0.08)	3,870	8.92	(0.71)	3,734	8.52	(1.11)
Rodair	**33177 Cloverdale**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	33163	3,459.85	9.39	3,447	9.38	(0.01)	3,375	9.30	(0.09)	3,408	9.33	(0.06)	3,870	8.77	(0.62)	3,734	8.50	(0.89)
Rodair	33153	3,462.35	9.38	3,449	9.37	(0.01)	3,377	9.29	(0.09)	3,410	9.32	(0.06)	3,872	8.75	(0.63)	3,736	8.48	(0.90)
Rodair	33150	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	33111	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	33002	3,647.20	9.36	3,633	9.36	-	3,541	9.28	(0.08)	3,582	9.31	(0.05)	3,977	8.81	(0.55)	3,806	8.56	(0.80)
Rodair	32981	3,652.81	9.40	3,639	9.40	-	3,547	9.32	(0.08)	3,588	9.35	(0.05)	3,982	8.87	(0.53)	3,811	8.62	(0.78)
Rodair	**32977 Pipeline**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	32971	3,652.60	9.29	3,639	9.28	(0.01)	3,546	9.21	(0.08)	3,587	9.23	(0.06)	3,982	8.64	(0.65)	3,811	8.39	(0.90)
Rodair	32960	3,655.44	9.30	3,641	9.30	-	3,549	9.22	(0.08)	3,590	9.25	(0.05)	3,985	8.65	(0.65)	3,814	8.40	(0.90)
Rodair	32944	3,659.52	9.27	3,646	9.26	(0.01)	3,553	9.19	(0.08)	3,594	9.21	(0.06)	3,989	8.62	(0.65)	3,818	8.37	(0.90)
Rodair	**32922 Pipelines**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	32905	3,659.23	9.18	3,646	9.18	-	3,553	9.10	(0.08)	3,594	9.13	(0.05)	3,989	8.45	(0.73)	3,769	8.20	(0.98)
Rodair	32893	3,662.25	9.19	3,649	9.19	-	3,556	9.12	(0.07)	3,597	9.14	(0.05)	3,992	8.47	(0.72)	3,776	8.22	(0.97)
Rodair	**32854 Pipeline**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	32808	3,662.25	9.22	3,649	9.22	-	3,556	9.15	(0.07)	3,597	9.17	(0.05)	3,992	8.65	(0.57)	3,821	8.42	(0.80)
Rodair	32793	3,666.19	9.20	3,653	9.19	(0.01)	3,560	9.13	(0.07)	3,601	9.15	(0.05)	3,996	8.63	(0.57)	3,825	8.41	(0.79)
Rodair	**32743 RR**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	32717	3,666.04	9.18	3,653	9.17	(0.01)	3,560	9.11	(0.07)	3,600	9.13	(0.05)	3,996	8.61	(0.57)	3,825	8.39	(0.79)
Rodair	32711	3,666.01	9.21	3,653	9.20	(0.01)	3,559	9.14	(0.07)	3,600	9.16	(0.05)	3,996	8.65	(0.56)	3,825	8.42	(0.79)
Rodair	32705	3,665.99	9.22	3,653	9.21	(0.01)	3,559	9.15	(0.07)	3,600	9.17	(0.05)	3,996	8.66	(0.56)	3,825	8.43	(0.79)
Rodair	32698	3,665.83	9.17	3,653	9.16	(0.01)	3,559	9.10	(0.07)	3,600	9.12	(0.05)	3,996	8.60	(0.57)	3,825	8.38	(0.79)
Rodair	**32655 W Port Arthur Rd**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	32590	3,665.83	9.15	3,653	9.15	-	3,559	9.09	(0.06)	3,600	9.11	(0.04)	3,996	8.58	(0.57)	3,825	8.36	(0.79)
Rodair	32508	3,665.58	9.21	3,652	9.21	-	3,558	9.15	(0.06)	3,600	9.17	(0.04)	3,996	8.66	(0.55)	3,825	8.43	(0.78)
Rodair	32462	3,665.20	9.21	3,652	9.21	-	3,557	9.15	(0.06)	3,600	9.16	(0.05)	3,995	8.66	(0.55)	3,825	8.43	(0.78)
Rodair	32455	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		

Table 4 - Results of Proposed Conditions 100 - Year (1%) AEP

River	River STA	Existing 1% AEP Atlas 14		Proposed Diversion			Proposed Detention D			Proposed Detention E			Proposed Pump Sta			Proposed Ultimate		
		Q Total	W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E
		(cfs)	(ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)
Rodair	32407	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	32287	3,622.78	9.14	3,610	9.14	-	3,526	9.08	(0.06)	3,562	9.10	(0.04)	4,000	8.53	(0.61)	3,847	8.30	(0.84)
Rodair	32108	3,601.05	9.10	3,590	9.10	-	3,520	9.05	(0.05)	3,544	9.06	(0.04)	4,018	8.47	(0.63)	3,857	8.24	(0.86)
Rodair	31859	3,509.29	9.02	3,498	9.02	-	3,407	8.96	(0.06)	3,456	8.98	(0.04)	3,944	8.30	(0.72)	3,802	8.07	(0.95)
Rodair	31543	3,647.63	8.93	3,638	8.93	-	3,543	8.86	(0.07)	3,596	8.89	(0.04)	4,027	8.16	(0.77)	3,867	7.95	(0.98)
Rodair	31340	3,780.51	8.85	3,772	8.85	-	3,740	8.80	(0.05)	3,730	8.81	(0.04)	4,262	8.04	(0.81)	3,993	7.83	(1.02)
Rodair	30965	3,973.35	8.70	3,966	8.70	-	3,894	8.64	(0.06)	3,918	8.66	(0.04)	4,369	7.79	(0.91)	4,103	7.60	(1.10)
Rodair	30592	4,011.70	8.52	4,004	8.52	-	3,939	8.47	(0.05)	3,959	8.49	(0.03)	3,477	7.57	(0.95)	4,170	7.32	(1.20)
Rodair	30202	4,051.82	8.39	4,048	8.39	-	3,987	8.34	(0.05)	4,005	8.36	(0.03)	3,468	7.42	(0.97)	4,250	7.05	(1.34)
Rodair	30185	4,039.18	8.37	4,035	8.37	-	3,976	8.32	(0.05)	3,993	8.33	(0.04)	3,473	7.40	(0.97)	4,257	7.02	(1.35)
Rodair	30137	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	30122	4,045.59	8.21	4,044	8.21	-	3,984	8.16	(0.05)	4,001	8.18	(0.03)	3,422	7.25	(0.96)	4,270	6.74	(1.47)
Rodair	29854	4,097.38	8.22	4,098	8.22	-	4,038	8.17	(0.05)	4,055	8.18	(0.04)	3,453	7.26	(0.96)	4,322	6.73	(1.49)
Rodair	29748	4,095.13	8.17	4,095	8.17	-	4,038	8.12	(0.05)	4,054	8.13	(0.04)	3,438	7.20	(0.97)	4,338	6.62	(1.55)
Rodair	29738	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	29712	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	29570	4,115.25	8.12	4,114	8.12	-	4,061	8.07	(0.05)	4,077	8.08	(0.04)	3,447	7.16	(0.96)	4,388	6.51	(1.61)
Rodair	29541	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	29503	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	29261	4,140.98	7.97	4,139	7.96	(0.01)	4,088	7.92	(0.05)	4,103	7.93	(0.04)	3,241	7.07	(0.90)	2,372	6.43	(1.54)
Rodair	28913	4,238.75	7.87	4,237	7.87	-	4,187	7.82	(0.05)	4,203	7.84	(0.03)	3,209	7.00	(0.87)	2,386	6.37	(1.50)
Rodair	28589	4,228.71	7.75	4,229	7.74	(0.01)	4,182	7.70	(0.05)	4,197	7.71	(0.04)	3,177	6.91	(0.84)	2,379	6.30	(1.45)
Rodair	28418	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	28327	4,255.09	7.63	4,253	7.62	(0.01)	4,206	7.58	(0.05)	4,222	7.59	(0.04)	3,010	6.86	(0.77)	2,278	6.26	(1.37)
Rodair	28188	4,260.27	7.57	4,258	7.57	-	4,211	7.52	(0.05)	4,227	7.54	(0.03)	2,869	6.86	(0.71)	2,156	6.26	(1.31)
Rodair	28181	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	28086	4,193.99	7.57	4,191	7.57	-	4,138	7.52	(0.05)	4,154	7.54	(0.03)	2,838	6.85	(0.72)	2,138	6.25	(1.32)
Rodair	28069	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	27985	4,213.20	7.55	4,210	7.55	-	4,158	7.50	(0.05)	4,174	7.52	(0.03)	2,643	6.88	(0.67)	1,909	6.28	(1.27)
Rodair	27941	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	27699	4,082.18	7.50	4,080	7.49	(0.01)	4,033	7.45	(0.05)	4,048	7.46	(0.04)	2,684	6.83	(0.67)	1,913	6.26	(1.24)
Rodair	27384	4,099.93	7.40	4,098	7.39	(0.01)	4,054	7.35	(0.05)	4,069	7.36	(0.04)	2,712	6.78	(0.62)	1,945	6.22	(1.18)
Rodair	27302	4,144.28	7.25	4,142	7.25	-	4,091	7.21	(0.04)	4,108	7.22	(0.03)	2,717	6.70	(0.55)	1,951	6.17	(1.08)
Rodair	27231	4,103.11	7.34	4,100	7.33	(0.01)	4,050	7.29	(0.05)	4,066	7.30	(0.04)	2,789	6.73	(0.61)	1,991	6.20	(1.14)
Rodair	27219	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	27114	4,116.71	7.29	4,114	7.28	(0.01)	4,064	7.24	(0.05)	4,081	7.25	(0.04)	2,802	6.70	(0.59)	2,004	6.18	(1.11)
Rodair	26795	4,148.28	7.19	4,147	7.19	-	4,097	7.14	(0.05)	4,113	7.16	(0.03)	2,852	6.65	(0.54)	2,039	6.14	(1.05)
Rodair	26484	4,179.45	7.06	4,178	7.05	(0.01)	4,126	7.01	(0.05)	4,143	7.02	(0.04)	2,866	6.57	(0.49)	2,059	6.10	(0.96)
Rodair	26225	4,186.36	7.01	4,186	7.00	(0.01)	4,135	6.96	(0.05)	4,152	6.97	(0.04)	2,874	6.55	(0.46)	2,085	6.08	(0.93)
Rodair	25912	4,187.09	6.88	4,188	6.88	-	4,139	6.84	(0.04)	4,155	6.85	(0.03)	2,961	6.46	(0.42)	2,156	6.03	(0.85)
Rodair	25874	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	25817	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	25810	4,220.46	6.83	4,222	6.83	-	4,170	6.78	(0.05)	4,187	6.80	(0.03)	2,976	6.44	(0.39)	2,166	6.01	(0.82)
Rodair	25782	4,247.29	6.85	4,248	6.84	(0.01)	4,197	6.80	(0.05)	4,213	6.82	(0.03)	2,986	6.45	(0.40)	2,169	6.02	(0.83)
Rodair	25748	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	25643	4,351.37	6.79	4,356	6.79	-	4,300	6.75	(0.04)	4,317	6.76	(0.03)	3,037	6.42	(0.37)	2,195	6.00	(0.79)
Rodair	25556	4,435.57	6.71	4,409	6.71	-	4,377	6.67	(0.04)	4,395	6.68	(0.03)	3,081	6.38	(0.33)	2,215	5.98	(0.73)
Rodair	25445	4,435.57	6.71	4,410	6.71	-	4,377	6.67	(0.04)	4,396	6.68	(0.03)	3,081	6.38	(0.33)	2,215	5.98	(0.73)
Rodair	25327	4,434.95	6.70	4,409	6.69	(0.01)	4,376	6.65	(0.05)	4,394	6.66	(0.04)	3,080	6.37	(0.33)	2,215	5.98	(0.72)
Rodair	25283	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	25182	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	25095	4,191.25	6.61	4,168	6.61	-	4,136	6.57	(0.04)	4,153	6.58	(0.03)	2,884	6.33	(0.28)	2,086	5.95	(0.66)
Rodair	24696	3,878.39	6.55	3,857	6.54	(0.01)	3,832	6.50	(0.05)	3,845	6.51	(0.04)	3,214	6.19	(0.36)	2,503	5.84	(0.71)
Rodair	24402	3,858.83	6.52	3,836	6.52	-	3,814	6.48	(0.04)	3,828	6.49	(0.03)	3,203	6.17	(0.35)	2,506	5.82	(0.70)
Rodair	24079	3,699.86	6.41	3,675	6.41	-	3,660	6.37	(0.04)	3,674	6.38	(0.03)	3,078	6.09	(0.32)	2,415	5.76	(0.65)
Rodair	23870	3,585.40	6.40	3,561	6.40	-	3,551	6.36	(0.04)	3,564	6.37	(0.03)	3,002	6.08	(0.32)	2,375	5.75	(0.65)
Rodair	23810	3,567.71	6.41	3,543	6.41	-	3,535	6.36	(0.05)	3,547	6.37	(0.04)	2,993	6.08	(0.33)	2,373	5.76	(0.65)
Rodair	23799	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	23722	3,458.48	6.39	3,435	6.39	-	3,430	6.35	(0.04)	3,441	6.36	(0.03)	2,909	6.07	(0.32)	2,313	5.74	(0.65)
Rodair	23718	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		

Table 4 - Results of Proposed Conditions 100 - Year (1%) AEP

River	River STA	Existing 1% AEP Atlas 14		Proposed Diversion			Proposed Detention D			Proposed Detention E			Proposed Pump Sta			Proposed Ultimate		
		Q Total	W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E
		(cfs)	(ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)
Rodair	23678	3,458.28	6.37	3,436	6.37	-	3,429	6.32	(0.05)	3,430	6.33	(0.04)	2,910	6.05	(0.32)	2,314	5.73	(0.64)
Rodair	23504	3,424.98	6.31	3,409	6.31	-	3,400	6.26	(0.05)	3,405	6.27	(0.04)	2,887	6.00	(0.31)	2,300	5.70	(0.61)
Rodair	23285	3,254.24	6.31	3,240	6.31	-	3,234	6.26	(0.05)	3,237	6.27	(0.04)	2,755	6.00	(0.31)	2,201	5.70	(0.61)
Rodair	22996	3,262.93	6.26	3,248	6.26	-	3,242	6.21	(0.05)	3,248	6.22	(0.04)	2,761	5.96	(0.30)	2,210	5.67	(0.59)
Rodair	22659	3,182.76	6.23	3,168	6.24	0.01	3,160	6.19	(0.04)	3,133	6.20	(0.03)	2,699	5.94	(0.29)	2,157	5.65	(0.58)
Rodair	22560	3,070.66	6.26	3,056	6.26	-	3,053	6.21	(0.05)	3,025	6.22	(0.04)	2,609	5.96	(0.30)	2,089	5.66	(0.60)
Rodair	22449	3,076.11	6.22	3,061	6.22	-	3,057	6.17	(0.05)	3,028	6.19	(0.03)	2,612	5.93	(0.29)	2,092	5.64	(0.58)
Rodair	22431	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	22355	3,075.20	6.19	3,060	6.19	-	3,055	6.14	(0.05)	3,026	6.15	(0.04)	2,611	5.90	(0.29)	2,094	5.63	(0.56)
Rodair	22014	3,044.14	6.15	3,027	6.15	-	3,031	6.10	(0.05)	2,998	6.11	(0.04)	2,598	5.87	(0.28)	2,084	5.60	(0.55)
Rodair	21661	3,190.08	6.07	3,170	6.07	-	3,171	6.02	(0.05)	3,137	6.03	(0.04)	2,707	5.81	(0.26)	2,165	5.56	(0.51)
Rodair	21449	3,235.08	6.03	3,214	6.03	-	3,213	5.98	(0.05)	3,180	6.00	(0.03)	2,734	5.78	(0.25)	2,180	5.54	(0.49)
Rodair	21181	3,686.79	5.95	3,665	5.96	0.01	3,657	5.90	(0.05)	3,619	5.92	(0.03)	3,093	5.73	(0.22)	2,446	5.50	(0.45)
Rodair	20966	3,825.48	5.90	3,792	5.91	0.01	3,784	5.85	(0.05)	3,742	5.88	(0.02)	3,200	5.69	(0.21)	2,517	5.48	(0.42)
Rodair	20745	3,728.33	5.89	3,720	5.88	(0.01)	3,639	5.82	(0.07)	3,668	5.85	(0.04)	3,123	5.68	(0.21)	2,490	5.46	(0.43)
Rodair	20503	3,462.14	5.85	3,471	5.88	0.03	3,435	5.80	(0.05)	3,420	5.84	(0.01)	2,901	5.65	(0.20)	2,313	5.46	(0.39)
Rodair	20152	3,400.48	5.80	3,351	5.82	0.02	3,356	5.76	(0.04)	3,302	5.78	(0.02)	2,865	5.62	(0.18)	2,185	5.46	(0.34)
Rodair	19887	3,190.29	5.79	3,116	5.82	0.03	3,133	5.75	(0.04)	3,073	5.79	-	2,692	5.61	(0.18)	2,191	5.44	(0.35)
Rodair	19599	3,118.85	5.76	3,095	5.77	0.01	3,114	5.71	(0.05)	3,051	5.74	(0.02)	2,633	5.59	(0.17)	2,069	5.42	(0.34)
Rodair	19205	2,726.75	5.79	2,672	5.80	0.01	2,679	5.73	(0.06)	2,631	5.77	(0.02)	2,278	5.61	(0.18)	1,734	5.45	(0.34)
Rodair	18888	2,638.41	5.77	2,632	5.79	0.02	2,627	5.72	(0.05)	2,594	5.75	(0.02)	2,232	5.60	(0.17)	1,728	5.44	(0.33)
Rodair	18535	2,423.91	5.76	2,421	5.77	0.01	2,405	5.71	(0.05)	2,385	5.74	(0.02)	2,043	5.59	(0.17)	1,575	5.43	(0.33)
Rodair	18189	2,410.22	5.73	2,417	5.74	0.01	2,399	5.68	(0.05)	2,386	5.71	(0.02)	2,056	5.57	(0.16)	1,614	5.42	(0.31)
Rodair	17910	2,275.88	5.72	2,293	5.73	0.01	2,262	5.67	(0.05)	2,264	5.70	(0.02)	1,941	5.56	(0.16)	1,526	5.41	(0.31)
Rodair	17641	2,244.83	5.69	2,275	5.70	0.01	2,229	5.64	(0.05)	2,248	5.67	(0.02)	1,926	5.53	(0.16)	1,529	5.38	(0.31)
Rodair	17596	2,215.24	5.68	2,248	5.69	0.01	2,199	5.63	(0.05)	2,220	5.66	(0.02)	1,899	5.52	(0.16)	1,508	5.37	(0.31)
Rodair	17448	2,083.94	5.66	2,112	5.67	0.01	2,066	5.61	(0.05)	2,084	5.64	(0.02)	1,786	5.51	(0.15)	1,371	5.36	(0.30)
Rodair	17439	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	17320	2,006.39	5.66	2,033	5.67	0.01	1,989	5.61	(0.05)	2,008	5.64	(0.02)	1,719	5.50	(0.16)	1,348	5.36	(0.30)
Rodair	17064	1,887.07	5.66	1,911	5.67	0.01	1,868	5.61	(0.05)	1,887	5.63	(0.03)	1,614	5.50	(0.16)	1,273	5.36	(0.30)
Rodair	16757	1,731.83	5.65	1,757	5.66	0.01	1,713	5.60	(0.05)	1,734	5.63	(0.02)	1,471	5.50	(0.15)	1,162	5.36	(0.29)
Rodair	16437	1,611.26	5.64	1,636	5.65	0.01	1,592	5.60	(0.04)	1,612	5.62	(0.02)	1,359	5.49	(0.15)	1,075	5.36	(0.28)
Rodair	16143	1,473.09	5.64	1,497	5.65	0.01	1,452	5.59	(0.05)	1,475	5.62	(0.02)	1,229	5.49	(0.15)	968	5.36	(0.28)
Rodair	16033	1,409.98	5.64	1,435	5.65	0.01	1,390	5.59	(0.05)	1,414	5.62	(0.02)	1,172	5.49	(0.15)	931	5.36	(0.28)
Rodair	15984	1,410.14	5.65	1,435	5.65	-	1,392	5.60	(0.05)	1,414	5.62	(0.03)	1,171	5.50	(0.15)	929	5.36	(0.29)
Rodair	**15974 Pipeline**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	15964	1,409.83	5.64	1,435	5.65	0.01	1,391	5.59	(0.05)	1,414	5.62	(0.02)	1,171	5.49	(0.15)	929	5.35	(0.29)
Rodair	15909	1,410.05	5.63	1,434	5.64	0.01	1,389	5.59	(0.04)	1,412	5.61	(0.02)	1,172	5.49	(0.14)	929	5.35	(0.28)
Rodair	15903	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	15899	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	15831	1,394.74	5.63	1,418	5.64	0.01	1,374	5.58	(0.05)	1,395	5.61	(0.02)	1,160	5.48	(0.15)	918	5.35	(0.28)
Rodair	15538	1,375.64	5.62	1,400	5.63	0.01	1,352	5.57	(0.05)	1,376	5.60	(0.02)	1,142	5.48	(0.14)	896	5.35	(0.27)
Rodair	15259	1,371.84	5.62	1,399	5.62	-	1,344	5.57	(0.05)	1,372	5.59	(0.03)	1,127	5.47	(0.15)	853	5.35	(0.27)
Rodair	14965	1,301.41	5.61	1,332	5.62	0.01	1,269	5.57	(0.04)	1,303	5.59	(0.02)	1,041	5.47	(0.14)	774	5.34	(0.27)
Rodair	14808	1,092.86	5.62	1,122	5.63	0.01	1,065	5.57	(0.05)	1,095	5.60	(0.02)	850	5.48	(0.14)	616	5.35	(0.27)
Rodair	14763	1,091.06	5.62	1,120	5.63	0.01	1,061	5.57	(0.05)	1,093	5.60	(0.02)	849	5.48	(0.14)	609	5.35	(0.27)
Rodair	**14740 FM 365**	Bridge		Bridge			Bridge			Bridge			Bridge			Bridge		
Rodair	14714	1,089.28	5.58	1,118	5.59	0.01	1,037	5.54	(0.04)	1,088	5.56	(0.02)	847	5.45	(0.13)	608	5.33	(0.25)
Rodair	14656	1,085.28	5.59	1,114	5.59	-	1,036	5.54	(0.05)	1,085	5.57	(0.02)	843	5.45	(0.14)	598	5.33	(0.26)
Rodair	14654	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	14553	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	14414	1,083.60	5.59	1,112	5.59	-	1,030	5.54	(0.05)	1,081	5.57	(0.02)	820	5.45	(0.14)	573	5.33	(0.26)
Rodair	14280	927.55	5.59	953	5.60	0.01	878	5.54	(0.05)	924	5.57	(0.02)	673	5.45	(0.14)	434	5.33	(0.26)
Rodair	14274	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	14165	1,905.28	5.57	1,927	5.57	-	1,845	5.52	(0.05)	1,899	5.55	(0.02)	1,675	5.43	(0.14)	1,454	5.31	(0.26)
Rodair	14151	Lat Struct		Lat Struct			Lat Struct			Lat Struct			Lat Struct			Lat Struct		
Rodair	14094	1,917.94	5.57	1,941	5.57	-	1,856	5.52	(0.05)	1,912	5.54	(0.03)	1,687	5.43	(0.14)	1,453	5.31	(0.26)
Rodair	13857	2,013.06	5.56	2,033	5.56	-	1,940	5.51	(0.05)	2,004	5.54	(0.02)	1,772	5.43	(0.13)	1,527	5.31	(0.25)
Rodair	13555	2,047.40	5.54	2,064	5.55	0.01	1,969	5.50	(0.04)	2,035	5.52	(0.02)	1,802	5.41	(0.13)	1,553	5.29	(0.25)
Rodair	13297	2,094.23	5.53	2,102	5.54	0.01	2,012	5.49	(0.04)	2,078	5.51	(0.02)	1,844	5.40	(0.13)	1,606	5.29	(0.24)

Table 4 - Results of Proposed Conditions 100 - Year (1%) AEP

River	River STA	Existing 1% AEP Atlas 14		Proposed Diversion			Proposed Detention D			Proposed Detention E			Proposed Pump Sta			Proposed Ultimate		
		Q Total	W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E	Q Total	W.S.E	Comparison to 1% W.S.E
		(cfs)	(ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)	(cfs)	(ft)	(Δ ft)
Rodair	13028	2,208.13	5.51	2,216	5.52	0.01	2,124	5.47	(0.04)	2,192	5.49	(0.02)	1,956	5.39	(0.12)	1,704	5.27	(0.24)
Rodair	12743	2,499.63	5.49	2,530	5.49	-	2,405	5.45	(0.04)	2,487	5.47	(0.02)	2,224	5.37	(0.12)	1,927	5.26	(0.23)
Rodair	12439	2,699.96	5.47	2,744	5.47	-	2,587	5.43	(0.04)	2,697	5.45	(0.02)	2,378	5.35	(0.12)	2,065	5.25	(0.22)
Rodair	12124	2,850.28	5.42	2,898	5.43	0.01	2,732	5.39	(0.03)	2,850	5.40	(0.02)	2,503	5.32	(0.10)	2,133	5.23	(0.19)
Rodair	11769	3,169.55	5.39	3,216	5.39	-	3,040	5.35	(0.04)	3,150	5.36	(0.03)	2,787	5.29	(0.10)	2,394	5.20	(0.19)
Rodair	11431	2,920.12	5.36	2,928	5.37	0.01	2,798	5.33	(0.03)	2,892	5.34	(0.02)	2,557	5.27	(0.09)	2,140	5.19	(0.17)
Rodair	11225	2,864.45	5.36	2,965	5.35	(0.01)	2,745	5.33	(0.03)	2,838	5.34	(0.02)	2,510	5.27	(0.09)	2,193	5.18	(0.18)
Rodair	10798	2,870.99	5.32	2,742	5.32	-	2,749	5.29	(0.03)	2,835	5.30	(0.02)	2,507	5.23	(0.09)	2,012	5.17	(0.15)
Rodair	10451	2,795.18	5.28	2,729	5.30	0.02	2,674	5.25	(0.03)	2,748	5.26	(0.02)	2,426	5.20	(0.08)	1,981	5.15	(0.13)
Rodair	10114	2,750.25	5.26	2,705	5.28	0.02	2,632	5.24	(0.02)	2,698	5.25	(0.01)	2,377	5.19	(0.07)	1,954	5.14	(0.12)
Rodair	9896	2,678.94	5.25	2,650	5.26	0.01	2,563	5.22	(0.03)	2,630	5.23	(0.02)	2,302	5.18	(0.07)	1,935	5.12	(0.13)

TABLE 6. OPINION OF PROBABLE CONSTRUCTION COSTS FOR PROPOSED IMPROVEMENTS

ITEM	DESCRIPTION	QTY	UOM	UNIT COST	EXTENDED COST	SUBTOTAL
	SUMMARY OF PROPOSED IMPROVEMENTS					
I.	DRAINAGE DIVERSION				$ 24,860,172	
II.	DETENTION FACILITIES				$ 59,443,825	
III.	LEVEE EXTENSION AND PUMP STATION				$ 137,646,614	
IV.	**TOTAL ULTIMATE**					**$ 221,950,611**

Exclusions: pipeline/ utility relocations and modifications
ROW/ easements, operation/maintenance, legal, financing not included

DRAINAGE DIVERSION

TABLE 6. OPINION OF PROBABLE CONSTRUCTION COSTS FOR PROPOSED IMPROVEMENTS

ITEM	DESCRIPTION	QTY	UOM	UNIT COST	EXTENDED COST	SUBTOTAL
I.	**DRAINAGE DIVERSION**					
1.0	DRAINAGE AREA B					
1.1	Install storm sewer size 48"	6,482	LF	*$ 300*	$ 1,944,600	
1.2	Outfall swale to river	2,811	CY	*$ 30*	$ 84,333	
1.3	Demo and replace concrete roadway 24-ft 2-lanes	17,285	SY	*$ 200*	$ 3,457,067	
1.0	**SUBTOTAL AREA B**					**$ 5,486,000**
2.0	**DRAINAGE AREA C**					
2.1	Install storm sewer size 48"	4,654	LF	*$ 300*	$ 1,396,200	
2.2	Outfall swale to river	3,540	CY	*$ 30*	$ 106,208	
2.3	Demo and replace concrete roadway 24-ft 2-lanes	12,411	SY	*$ 200*	$ 2,482,133	
2.0	**SUBTOTAL AREA C**					**$ 3,984,542**
3.0	Miscellaneous, other: mobilization, traffic control, SWPPP	40%			$ 3,788,217	
	Exclusions: pipeline/ utility relocations and modifications ROW/ easements, operation/maintenance, legal, financing not included					
4.0	Professional services: survey, engineering, design, geotechnical, environmental	25%			$ 3,314,690	
5.0	Contingency	50%			$ 8,286,724	
I.	**TOTAL DIVERSION**					**$ 24,860,172**

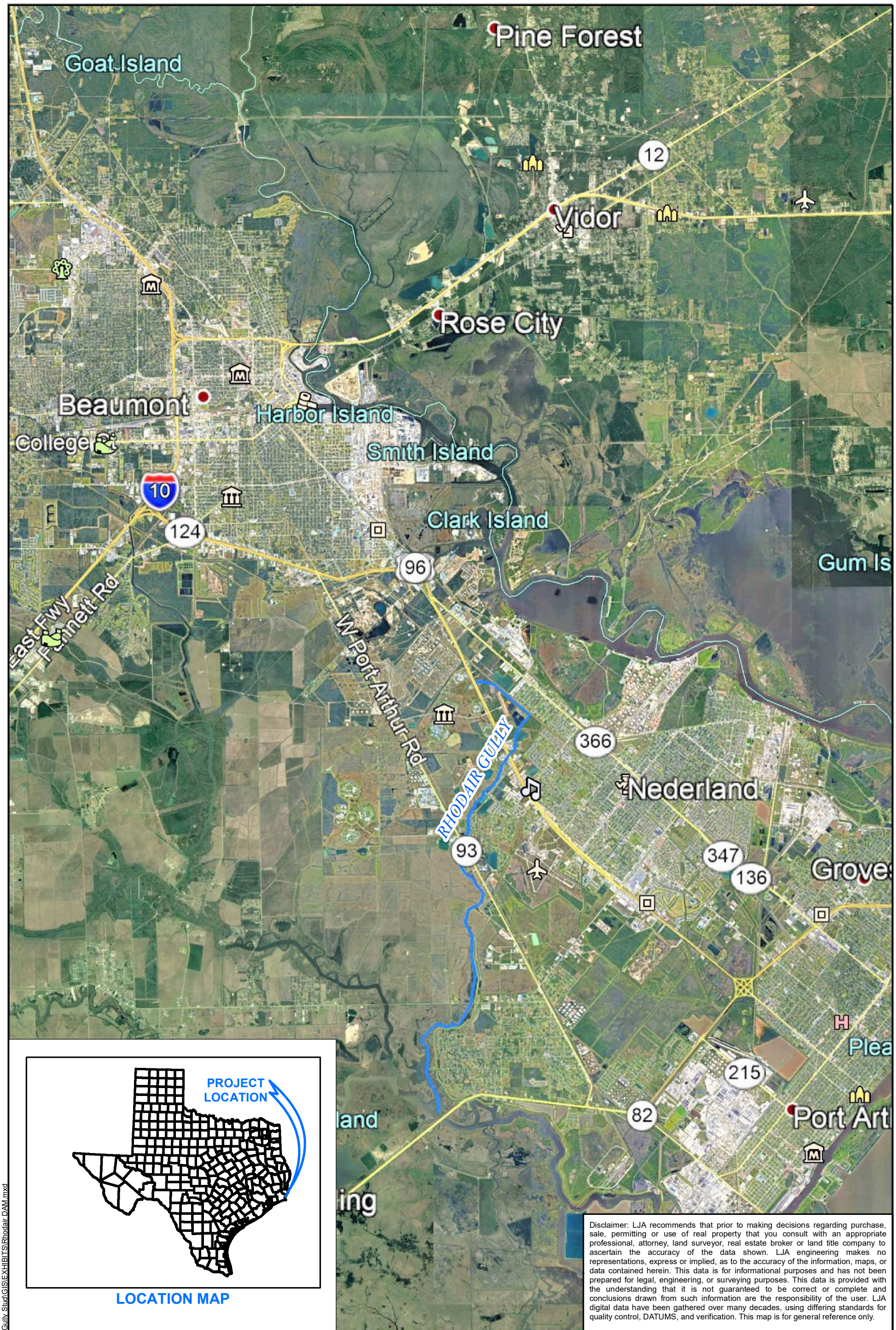
TABLE 6. OPINION OF PROBABLE CONSTRUCTION COSTS FOR PROPOSED IMPROVEMENTS

ITEM	DESCRIPTION	QTY	UOM	UNIT COST	EXTENDED COST	SUBTOTAL
II.	**DETENTION BASINS**					
1.0	**DETENTION AREA D**					
1.1	Detention excavation	473,990	CY	*$ 15*	$ 7,109,849	
1.2	Backslope swales	6,210	LF	$ 30	$ 186,300	
1.3	Inlet and outlet structures	2	EA	$ 100,000	$ 200,000	
1.0	**SUBTOTAL DETENTION D**					**$ 7,496,149**
2.0	**PUMP STATION DETENTION D**					
2.1	Pumps (1 x 33,000 GPM & 2 x 16,500 GPM)	66000	GPM	$ 30	$ 1,980,000	
2.2	Inlet Structures	1	LS	$ 3,000,000	$ 3,000,000	
2.3	Outlet Structures	1	LS	$ 3,000,000	$ 3,000,000	
1.0	**SUBTOTAL DETENTION D**					**$ 7,980,000**
3.0	**DETENTION E**					
3.1	Detention excavation	889,269	CY	*$ 15*	$ 13,339,040	
3.2	Backslope swales	16,027	LF	$ 30	$ 480,821	
3.3	Inlet and outlet structures	4	EA	$ 100,000	$ 400,000	
4.0	**SUBTOTAL DETENTION E**					**$ 14,219,861**
5.0	Miscellaneous, other: mobilization, clearing, hydromulch, SWPPP	30%			$ 6,659,958	
	Exclusions: pipeline/ utility relocations and modifications ROW/ easements, operation/maintenance, legal, financing not included					
6.0	Professional services: survey, engineering, design, geotechnical, environmental	20%			$ 5,771,964	
7.0	Contingency	50%			$ 17,315,892	
II.	**TOTAL DETENTION**					**$ 59,443,825**

TABLE 6. OPINION OF PROBABLE CONSTRUCTION COSTS FOR PROPOSED IMPROVEMENTS

ITEM	DESCRIPTION	QTY	UOM	UNIT COST	EXTENDED COST	SUBTOTAL
III.	**LEVEE EXTENSION AND PUMP STATION**					
1.0	**LEVEE EXTENSION**					
1.1	Levee excavation	**104,097**	CY	*$ 15*	$ 1,561,449	
1.2	Levee embankments	**171,842**	CY	*$ 15*	$ 2,577,630	
1.0	**SUBTOTAL LEVEE**					**$ 4,139,078**
2.0	**CHANNEL / PUMP STORAGE**					
2.1	Channel excavation	**30,333**	CY	*$ 21*	$ 632,443	
2.2	Channel embankment	**3,600**	CY	*$ 15*	$ 53,928	
2.3	Pump storage excavation	**3,944,800**	CY	*$ 15*	$ 57,870,216	
2.0	**SUBTOTAL CHANNEL / STORAGE**					**$ 58,556,587**
3.0	**PUMP STATION**					
3.1	Pumps (4 x 62,000 GPM)	248,000	GPM	$ 30	$ 7,440,000	
3.2	Inlet structures	1	LS		$ 5,000,000	
3.3	Outlet structures	1	LS		$ 5,000,000	
3.0	**SUBTOTAL PUMP STATION**					**$ 17,440,000**
4.0	Miscellaneous, other: mobilization, clearing, hydromulch, SWPPP	20%			$ 16,027,133	
	Exclusions: pipeline/ utility relocations and modifications ROW/ easements, operation/maintenance, legal, financing not included					
5.0	Professional services: survey, engineering, design, geotechnical, environmental	20%			$ 19,232,560	
6.0	Contingency	20%			$ 22,251,256	
III.	**TOTAL LEVEE EXTENSION AND PUMP STATION**					**$ 137,646,614**
IV.	**TOTAL ULTIMATE IMPROVEMENTS**					**$ 221,950,611**

Appendix B - Exhibits



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JEFFERSON COUNTY DRAINAGE DISTRICT

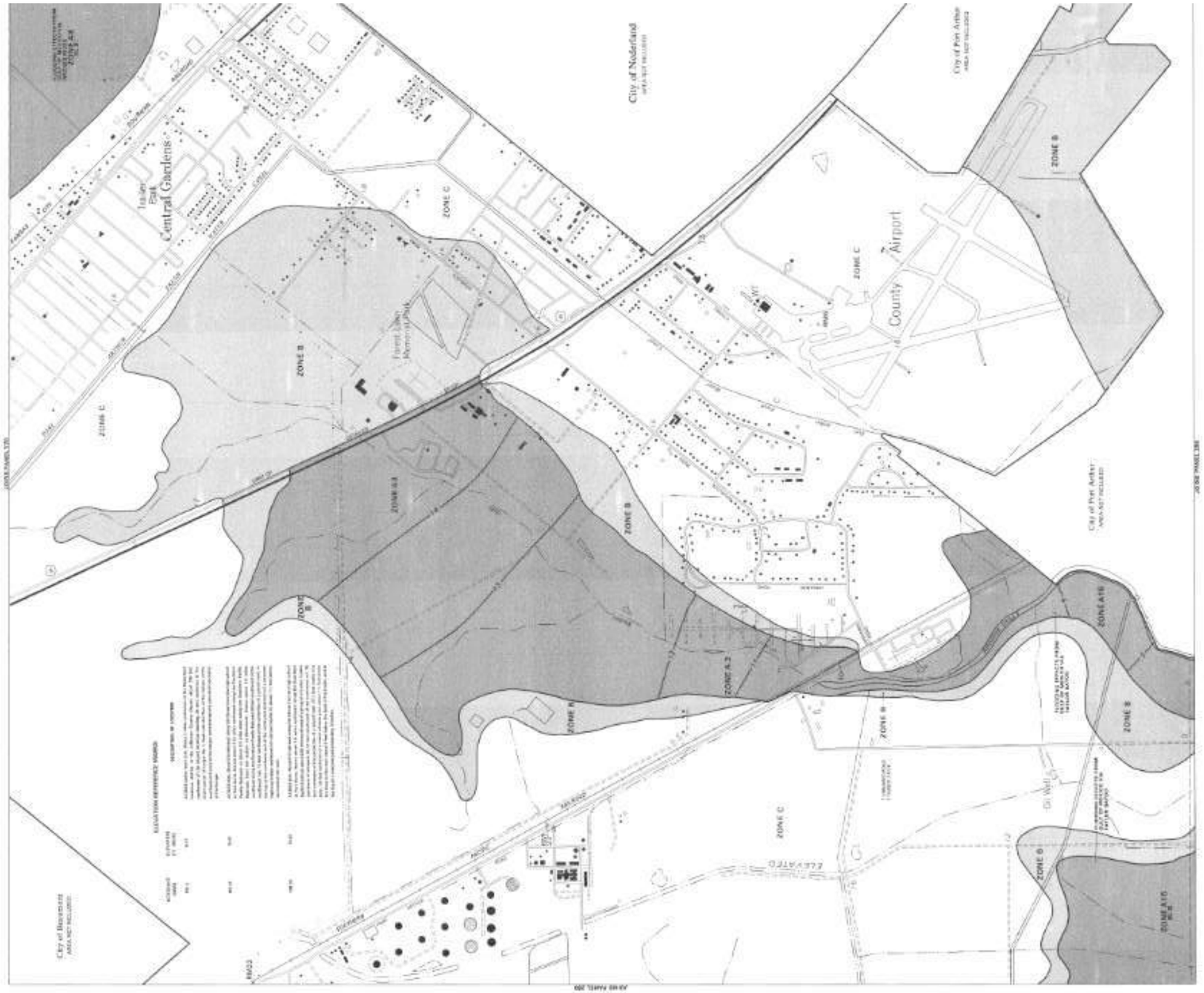
Rhodair Gully Study
located
Jefferson County, Texas

VICINITY MAP
JANUARY 2021

EXHIBIT
EX-1

Path: H:\B860 1007 Rodair Gully Study\GIS\EXHIBITS\Rhodair DAM.mxd

EX - 2 FEMA FIRM PANEL 0285C



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

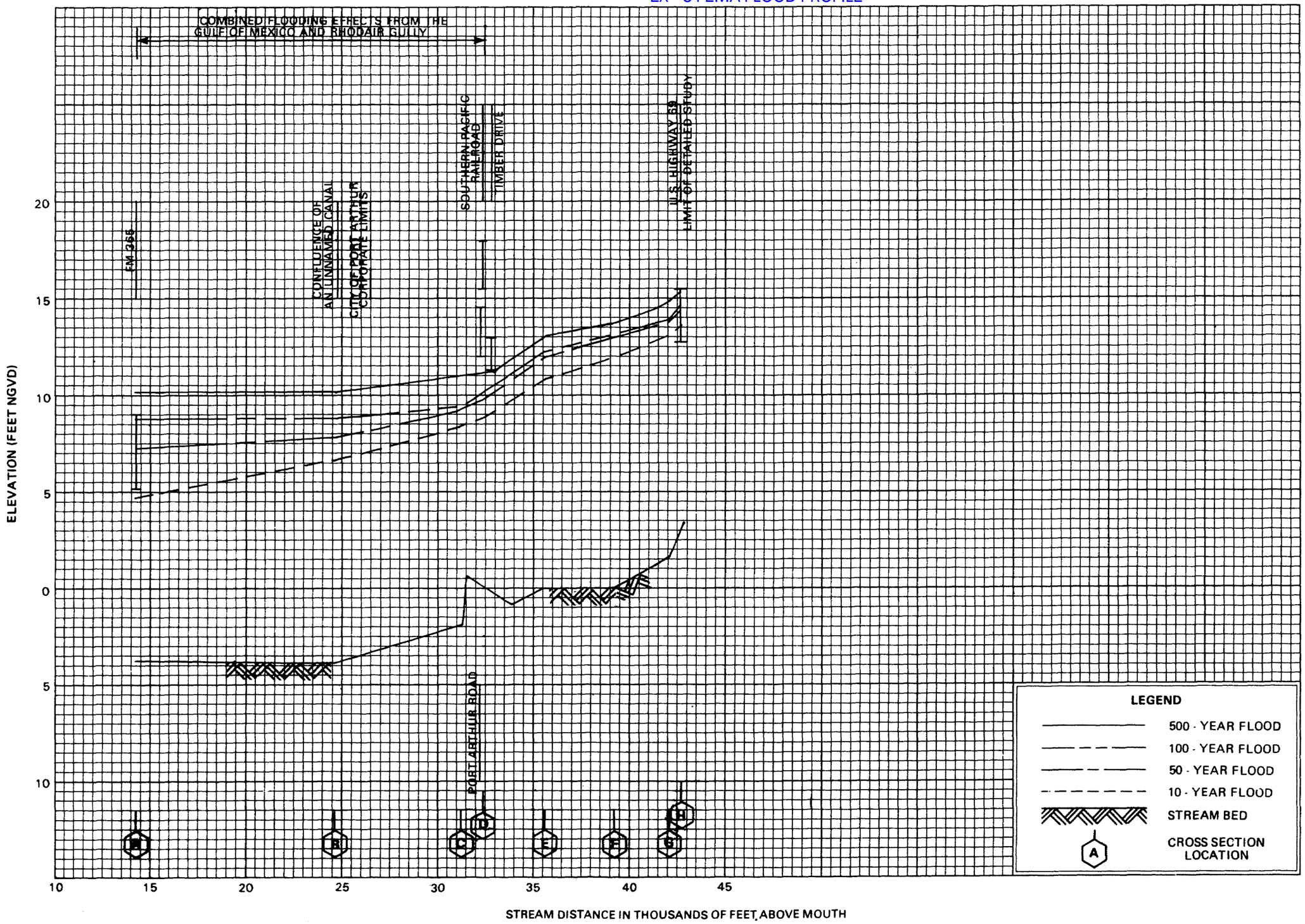
JEFFERSON COUNTY, TEXAS
UNINCORPORATED AREAS

PANEL 285 OF 600
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
480385 0285 C
MAP REVISED:
NOVEMBER 20, 1991

Federal Emergency Management Agency

EX - 3 FEMA FLOOD PROFILE



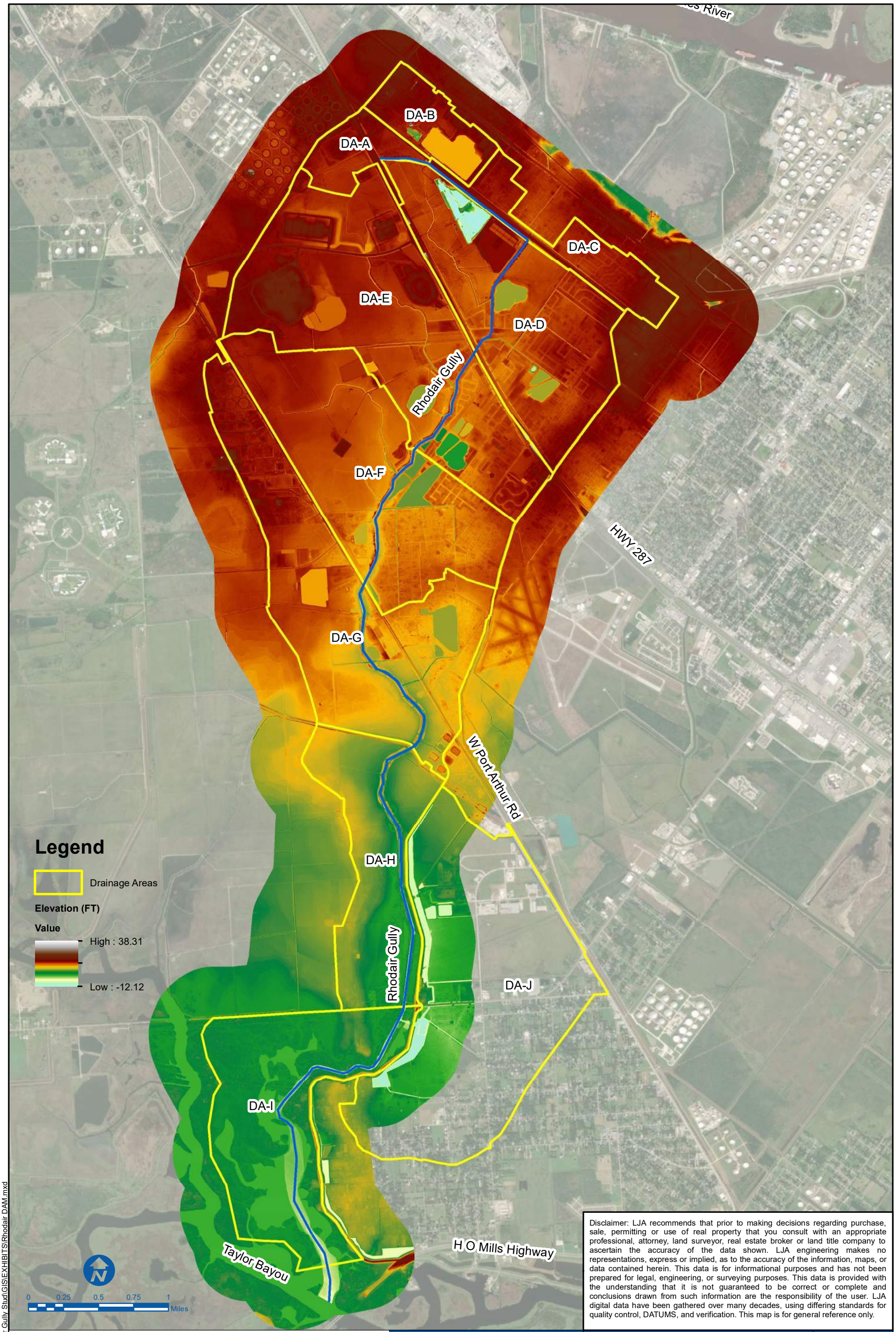
FLOOD PROFILES

RHODAIR GULLY

FEDERAL EMERGENCY MANAGEMENT AGENCY

JEFFERSON COUNTY, TX

(UNINCORPORATED AREAS)



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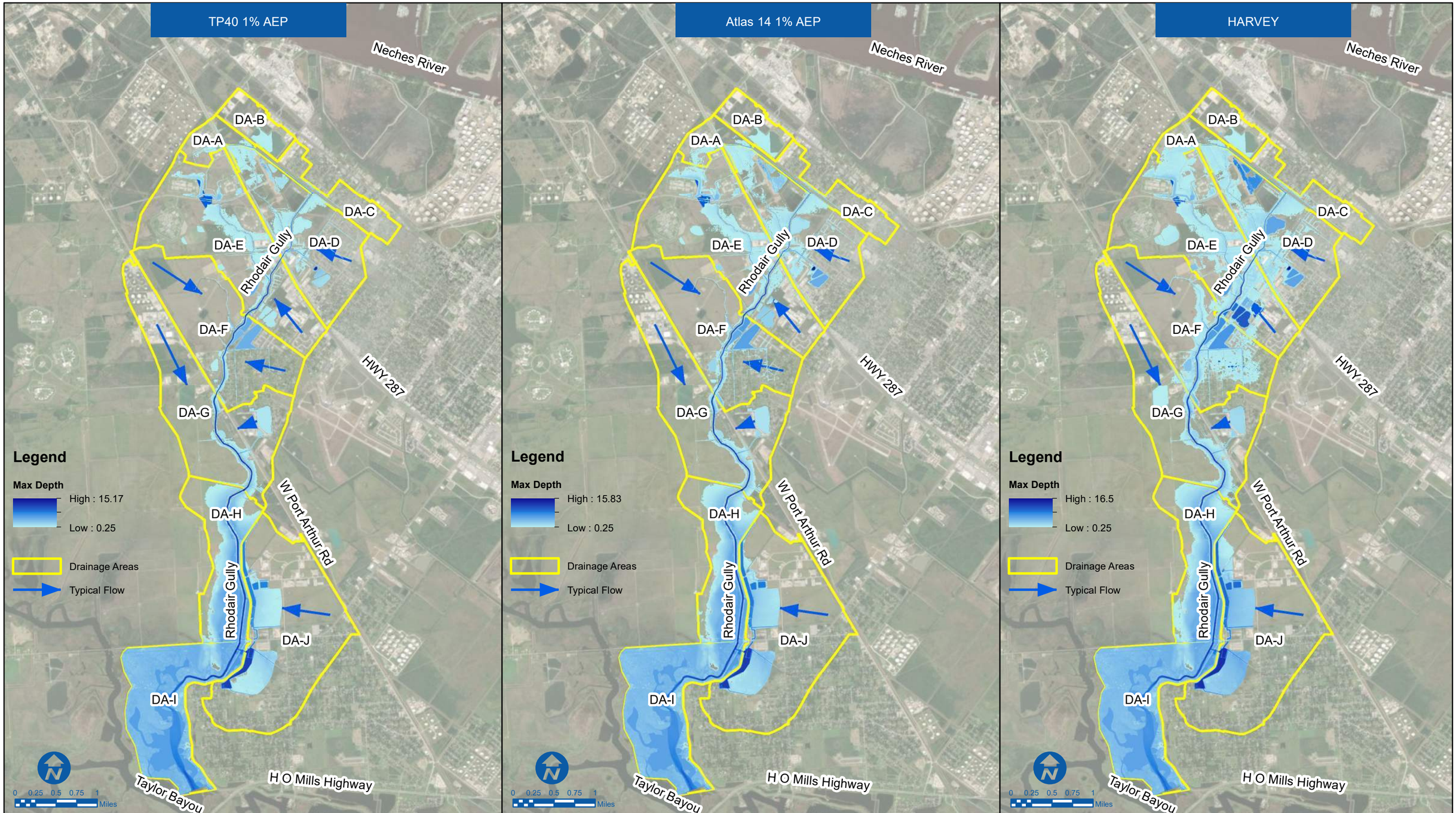
JEFFERSON COUNTY DRAINAGE DISTRICT 7

Rhodair Gully Study
located
Jefferson County, Texas

EXISTING ELEVATION MAP
JANUARY 2021

EXHIBIT
EX-4

Path: H:\B860 1007 Rodair Gully Stud\GIS\EXHIBITS\Rhodair DAM.mxd



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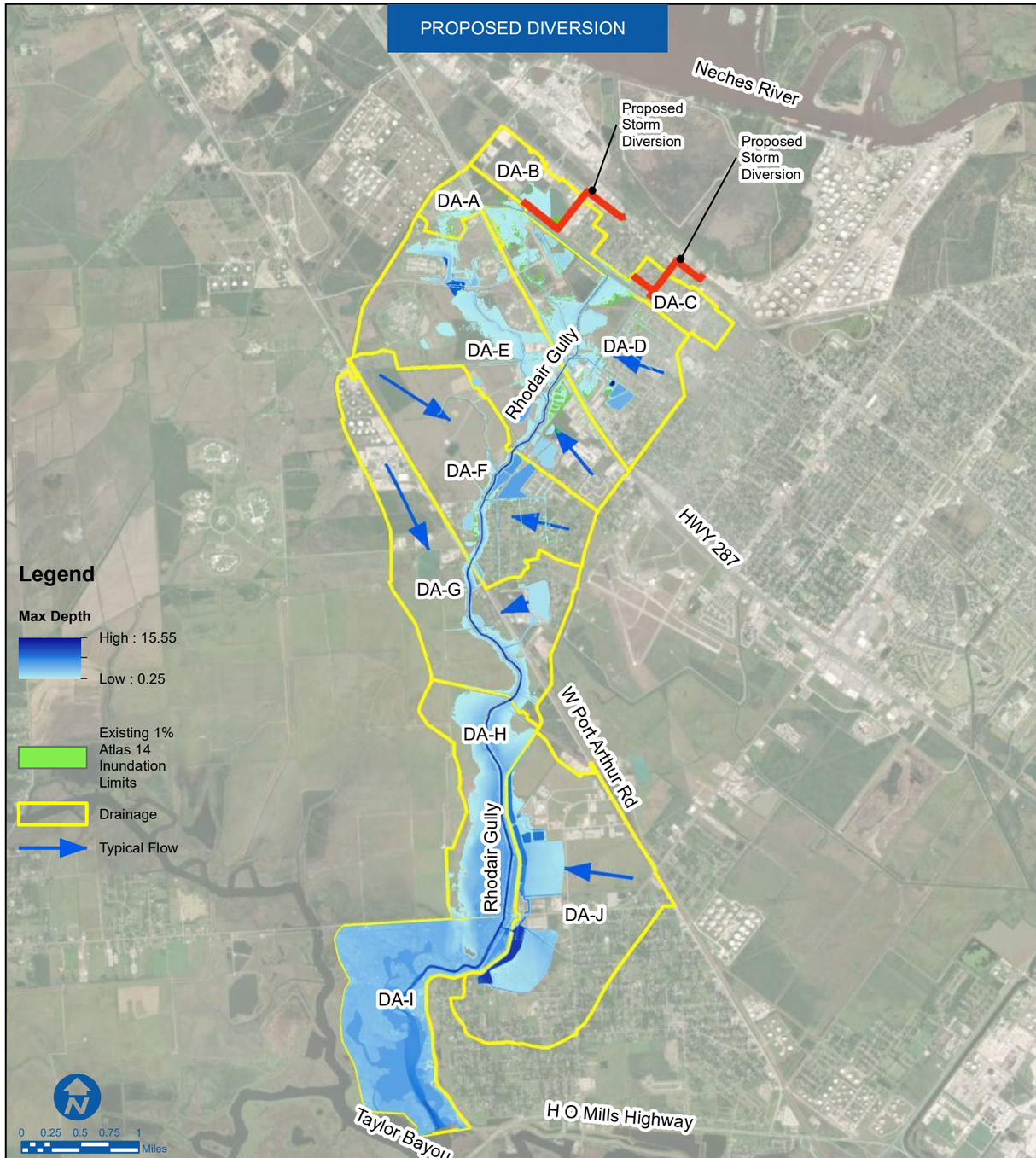
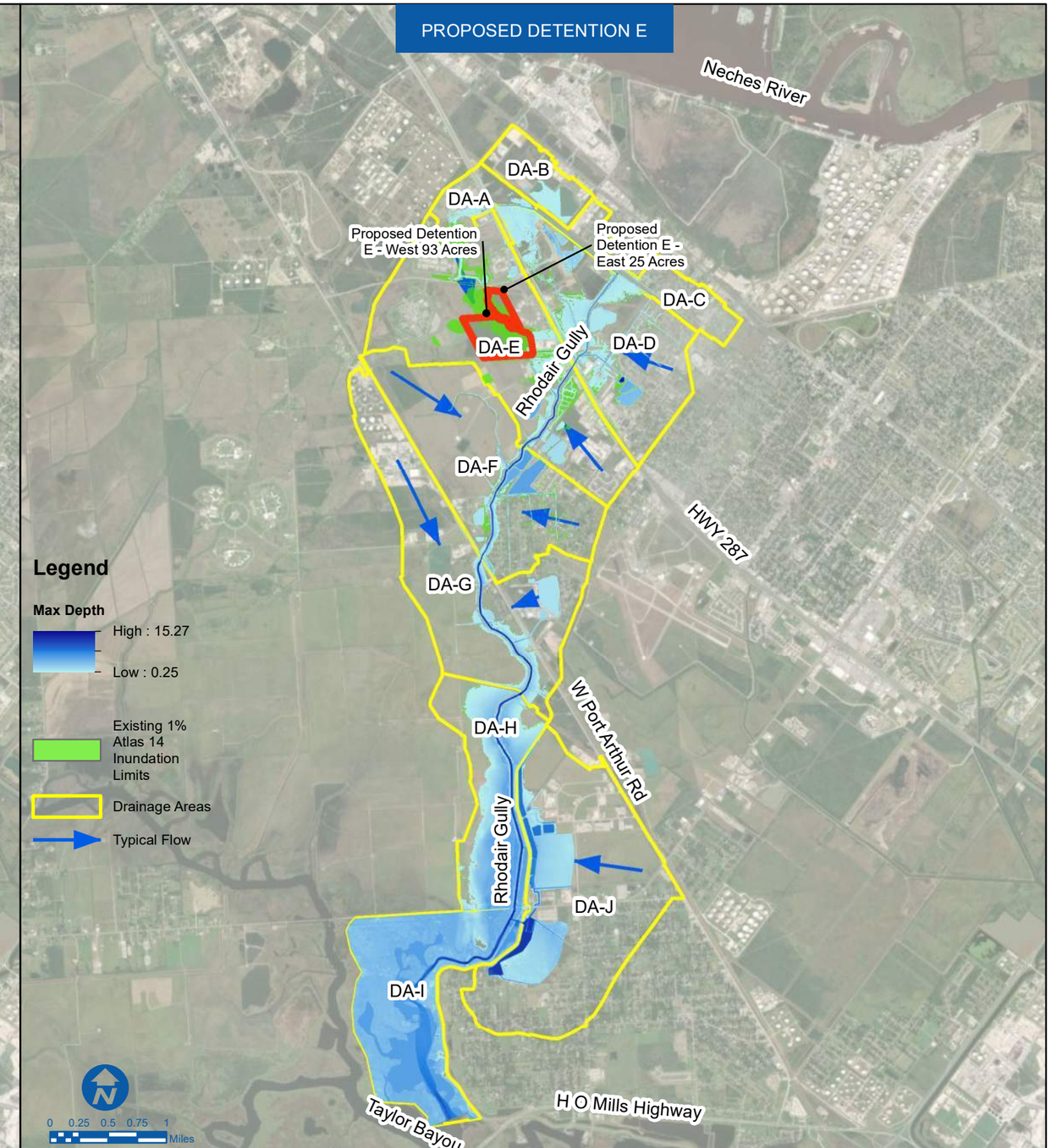
Jefferson County Drainage District 7

Rhodair Gully Study
located
Jefferson County, Texas

EXISTING CONDITIONS INUNDATION MAP
JANUARY 2021

EXHIBIT
EX-5





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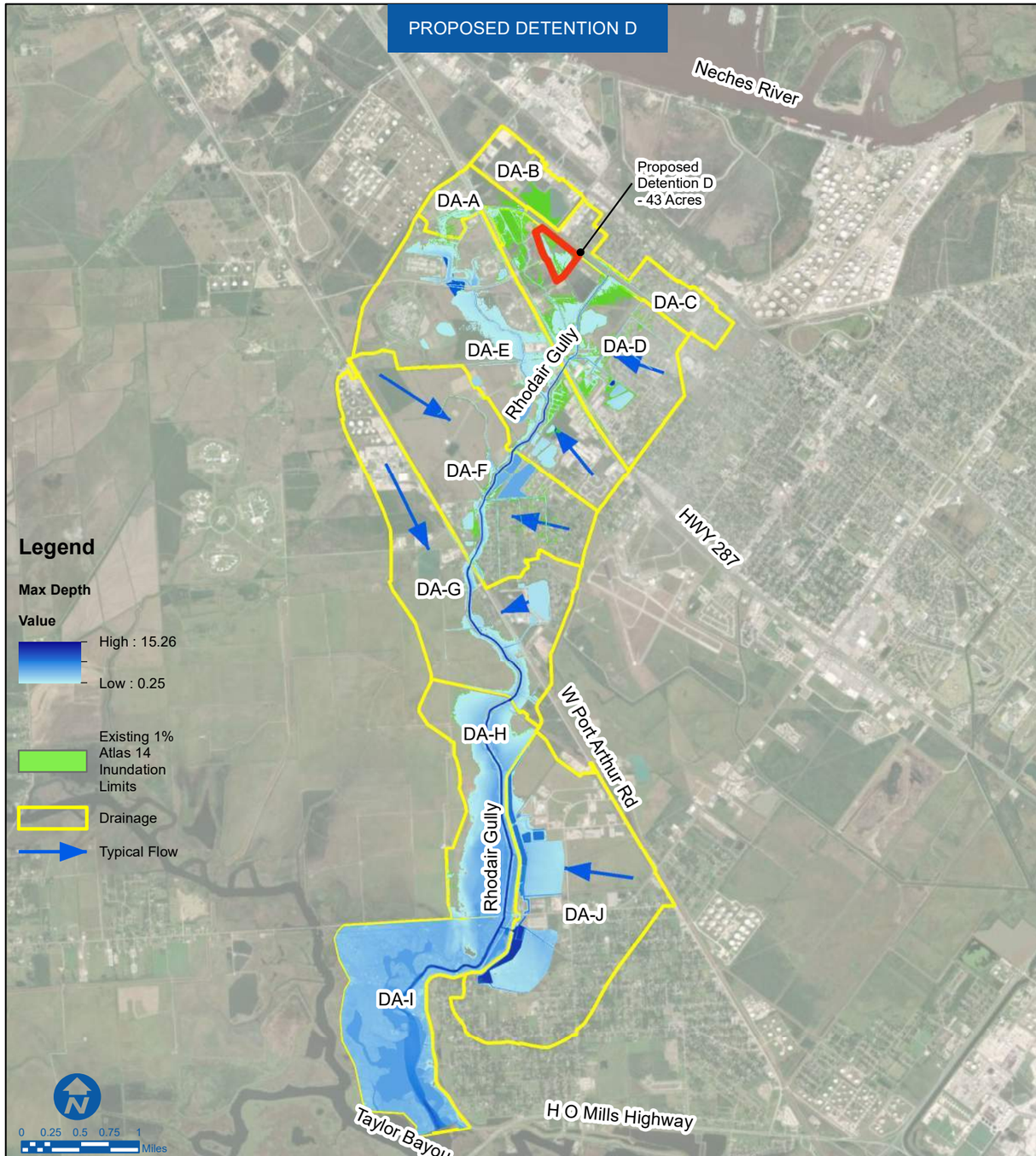
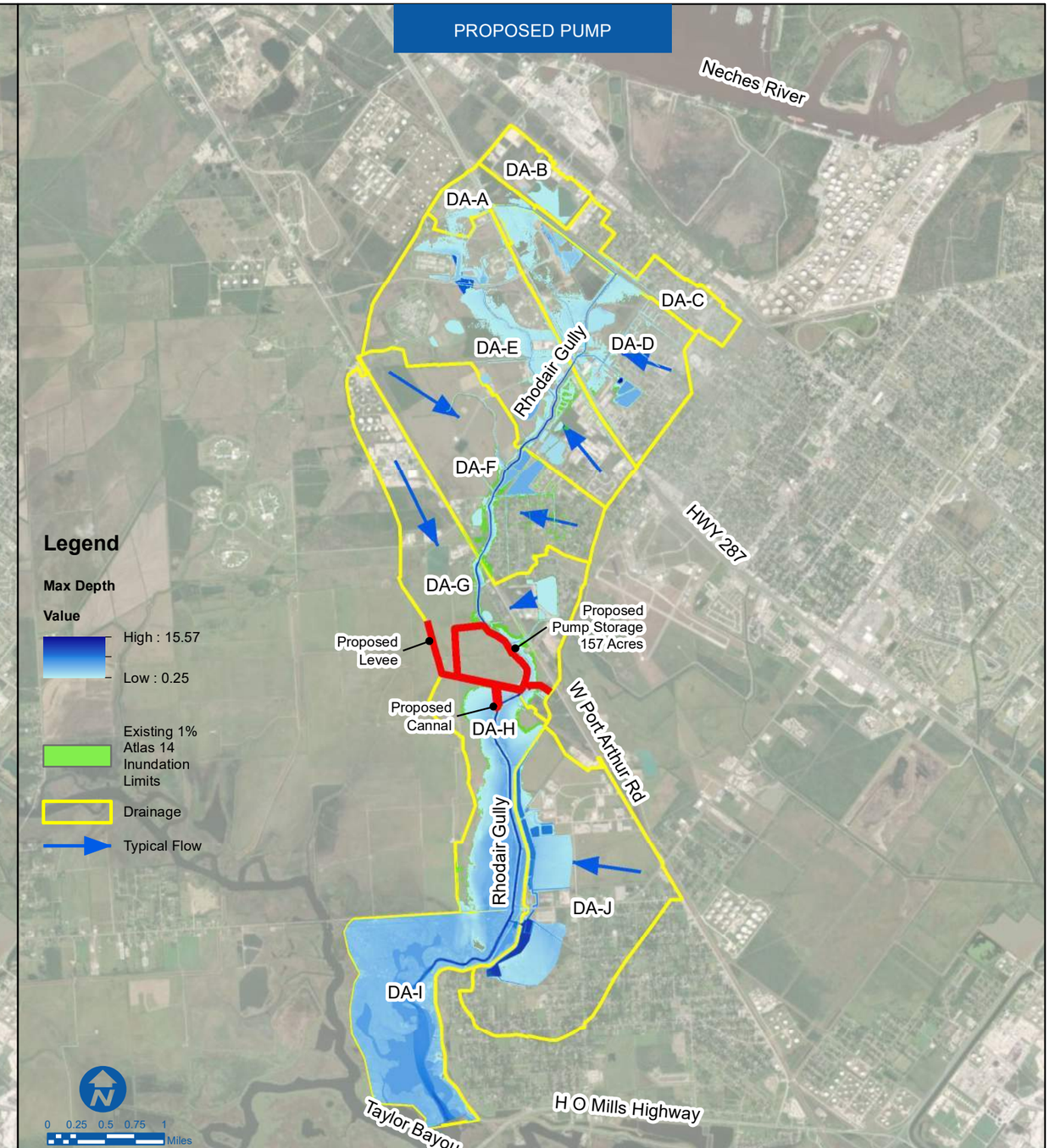
JEFFERSON COUNTY DRAINAGE DISTRICT 7

Rhodair Gully Study
located
Jefferson County, Texas

PROPOSED CONDITIONS
1% AEP - 100 YEAR
INUNDATION MAP
JANUARY 2021

EXHIBIT
EX - 6A





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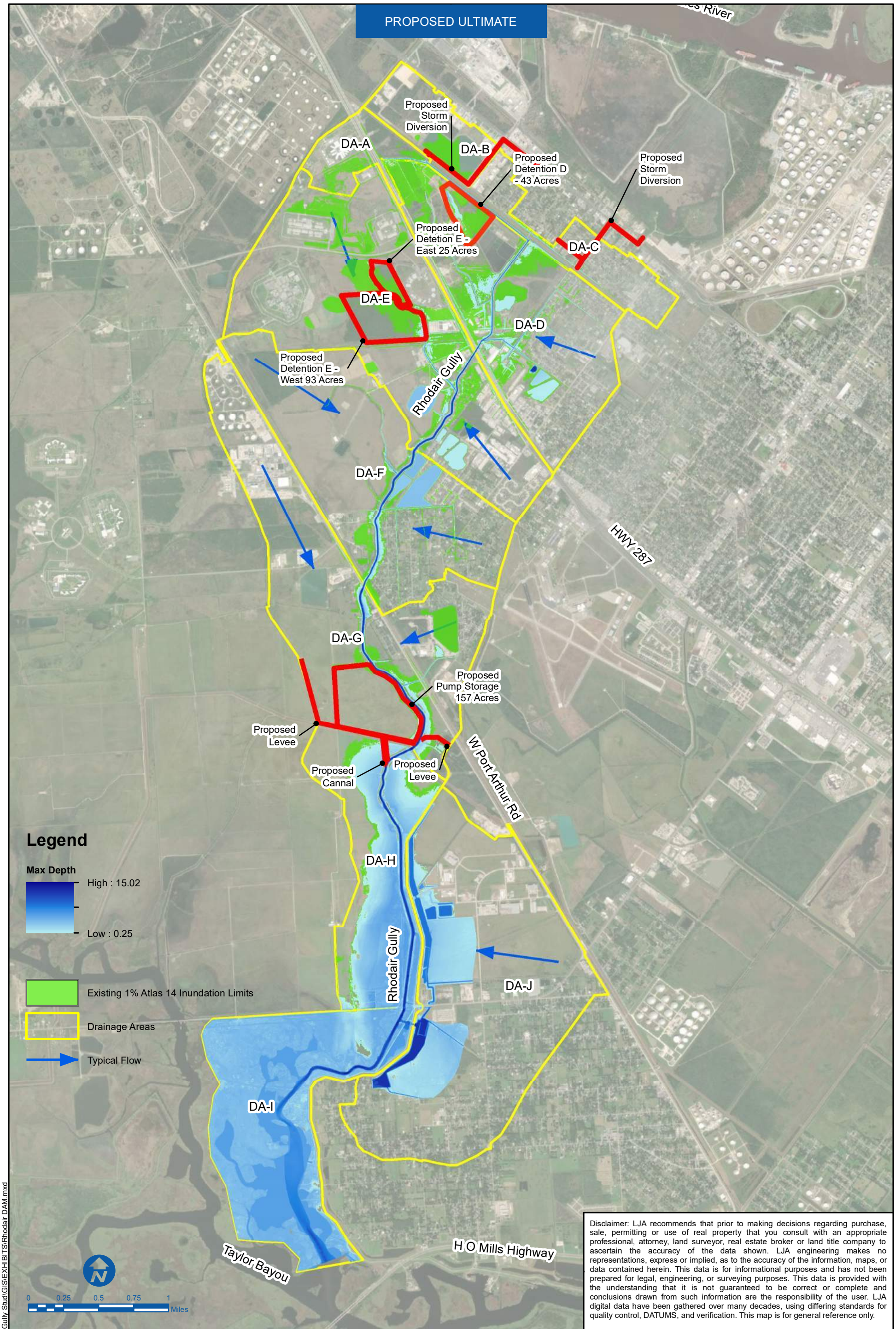
JEFFERSON COUNTY DRAINAGE DISTRICT 7

Rhodair Gully Study
located
Jefferson County, Texas

PROPOSED CONDITIONS
1% AEP - 100 YEAR
INUNDATION MAP
JANUARY 2021

EXHIBIT
EX - 6B



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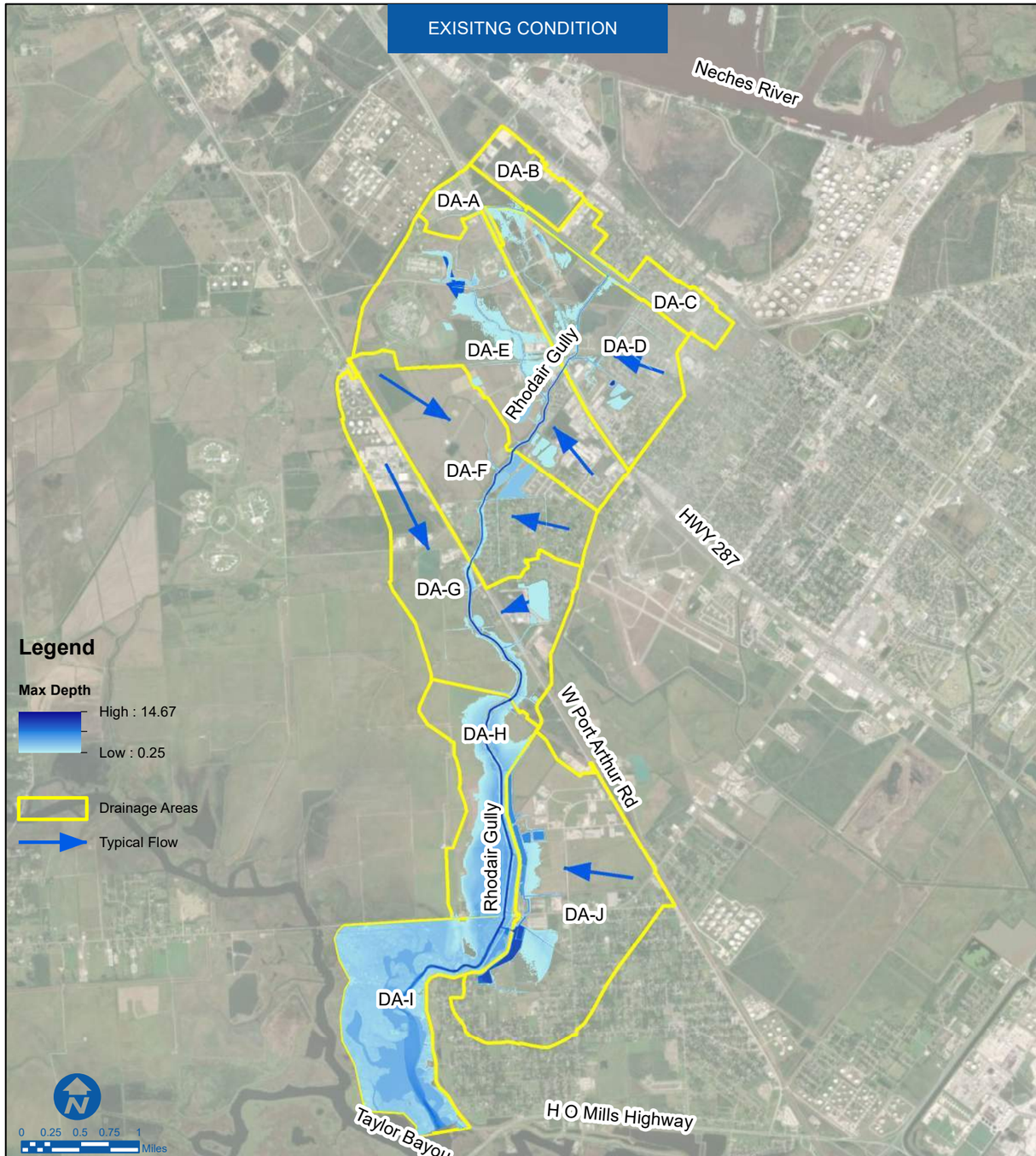
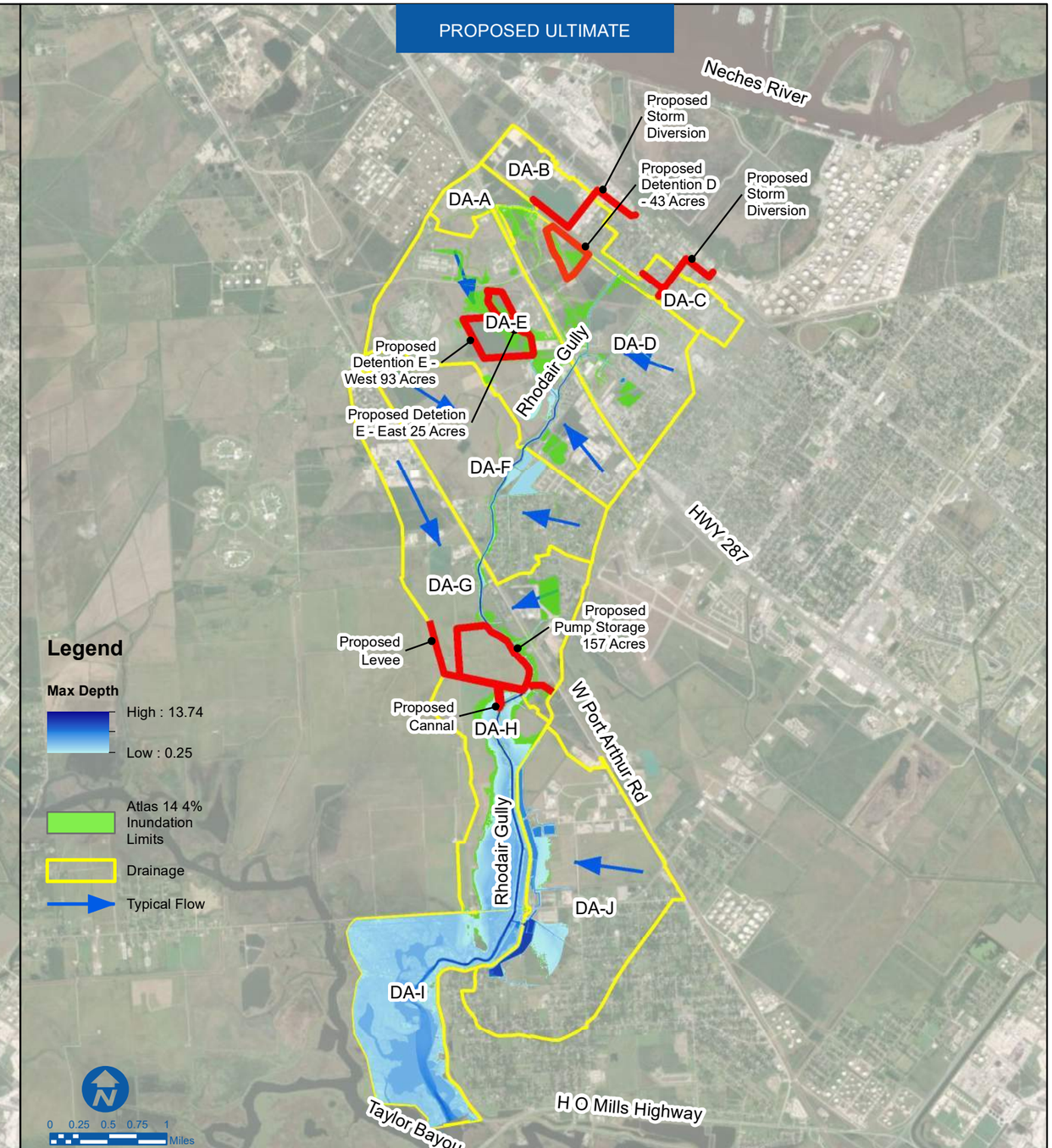
Rhodair Gully Study
located
Jefferson County, Texas

PROPOSED CONDITIONS
1% AEP - 100 YEAR
INUNDATION MAP
JANUARY 2021

EXHIBIT
EX - 6C

Path: H:\B860 1007 Rodair Gully Stud\GIS\EXHIBITS\Rhodair DAM.mxd





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JEFFERSON COUNTY DRAINAGE DISTRICT 7

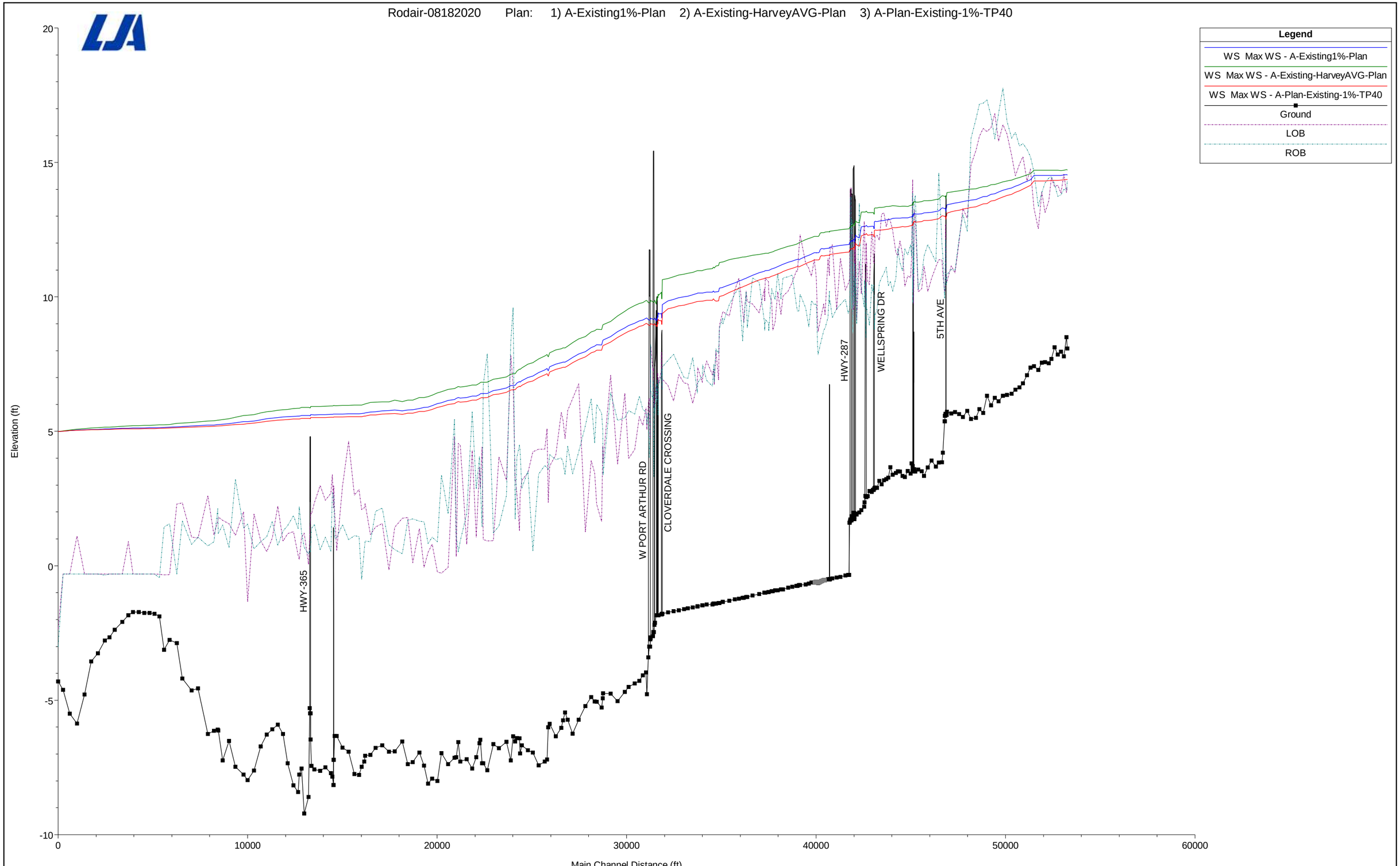
Rhodair Gully Study
located
Jefferson County, Texas

PROPOSED CONDITIONS
4% AEP - 25 YEAR
INUNDATION MAP
JANUARY 2021

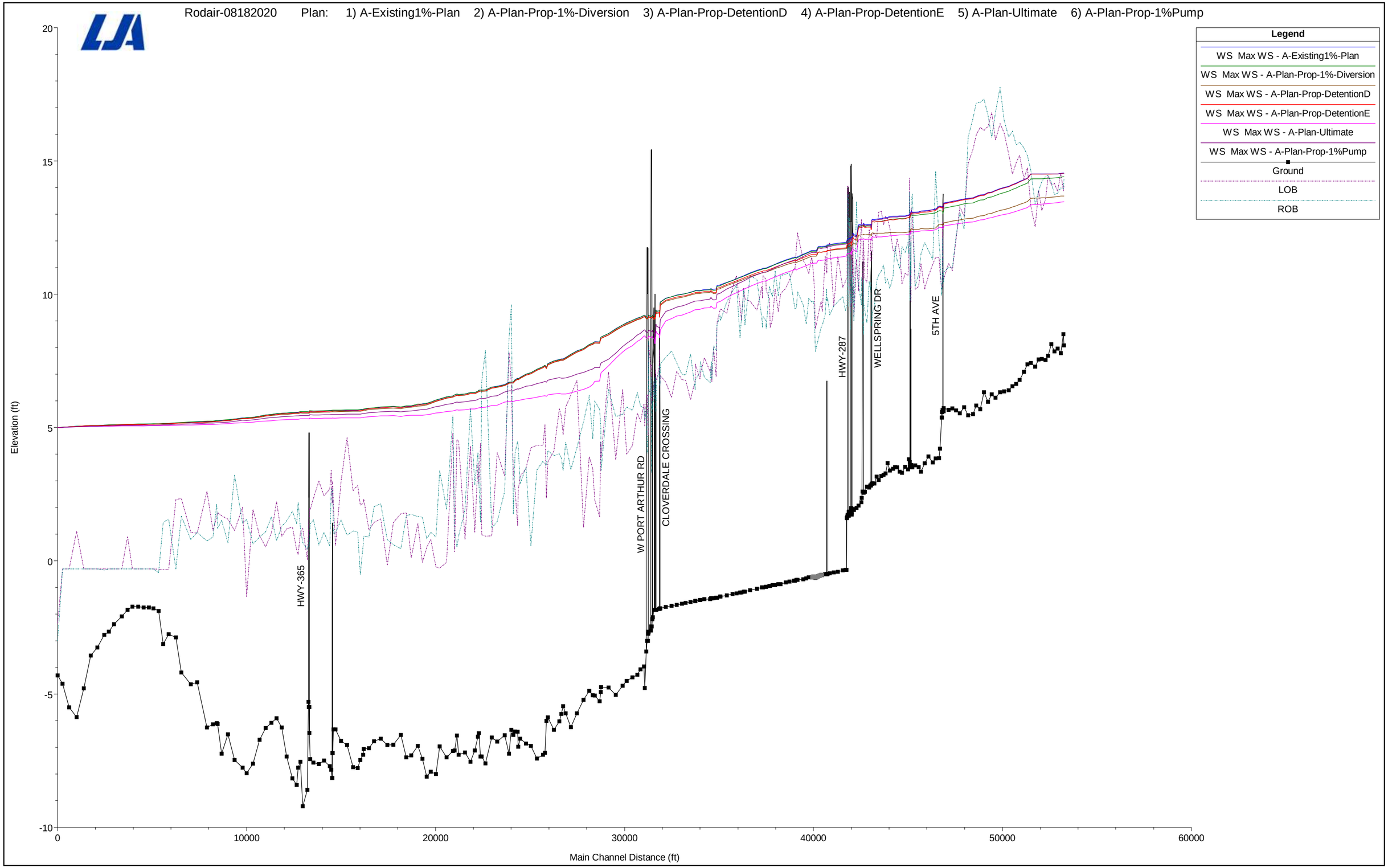
EXHIBIT
EX-7

Appendix C - Model Data

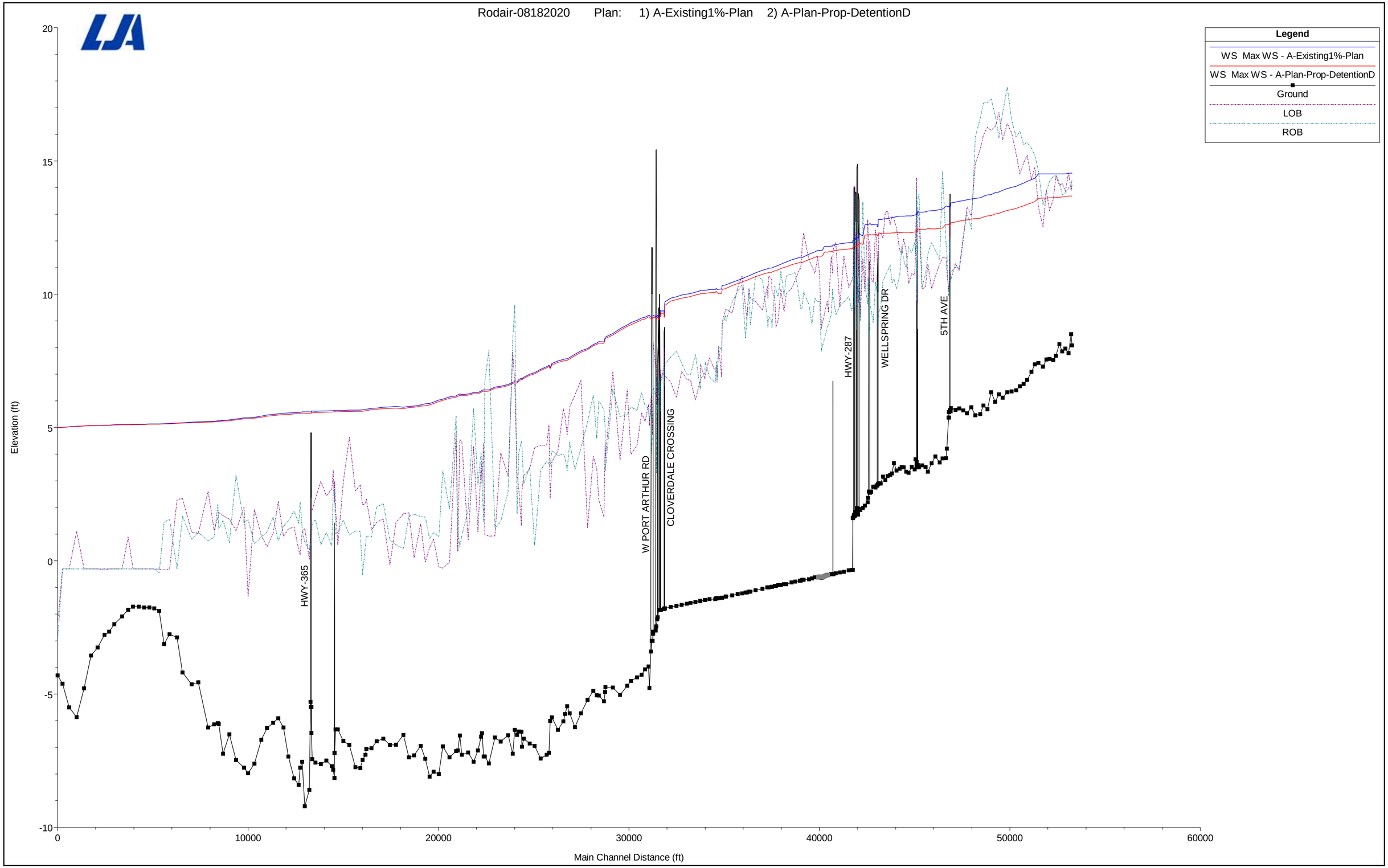
100 Year - Existing Profiles



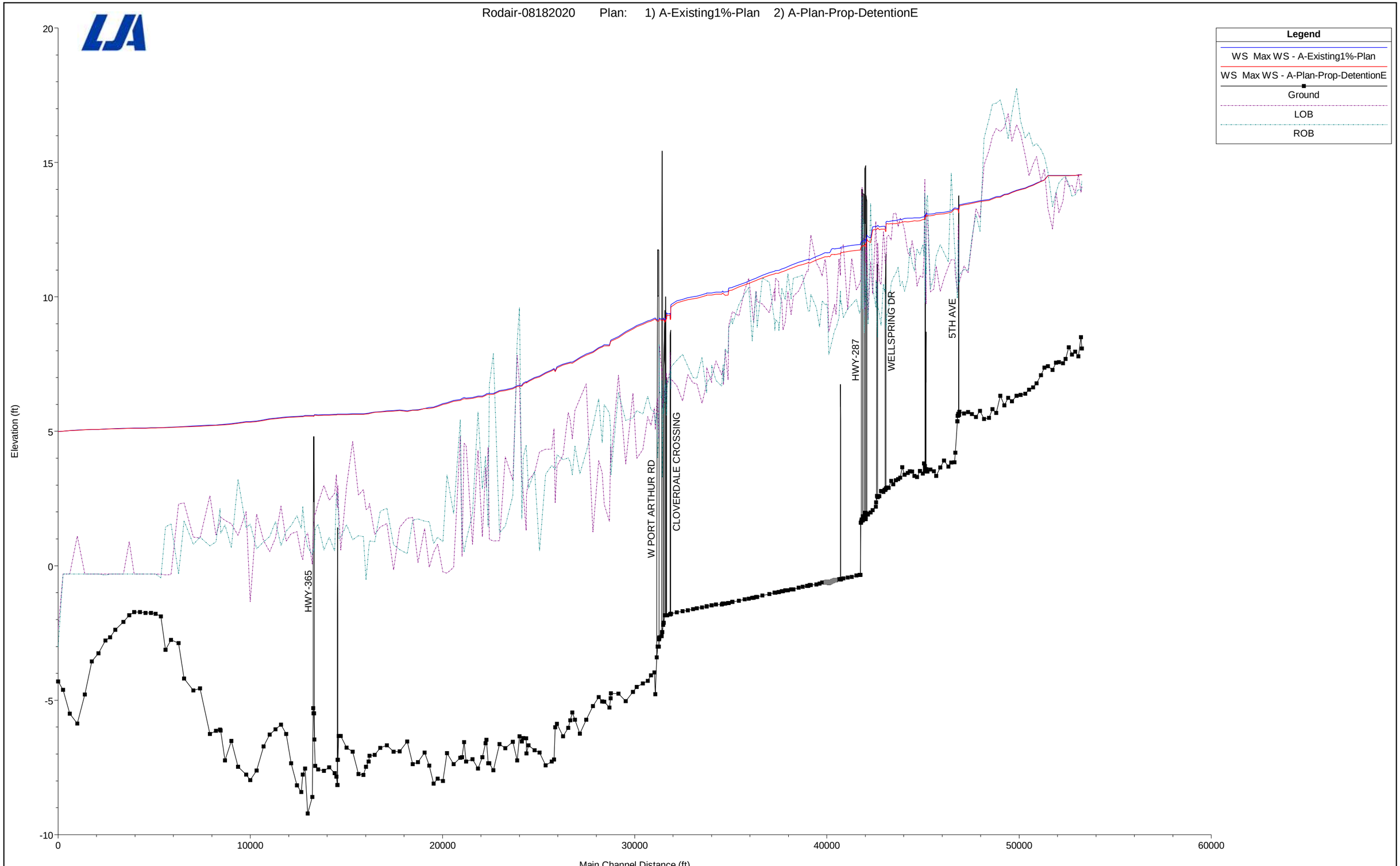
100 Year - Proposed Condition Profiles



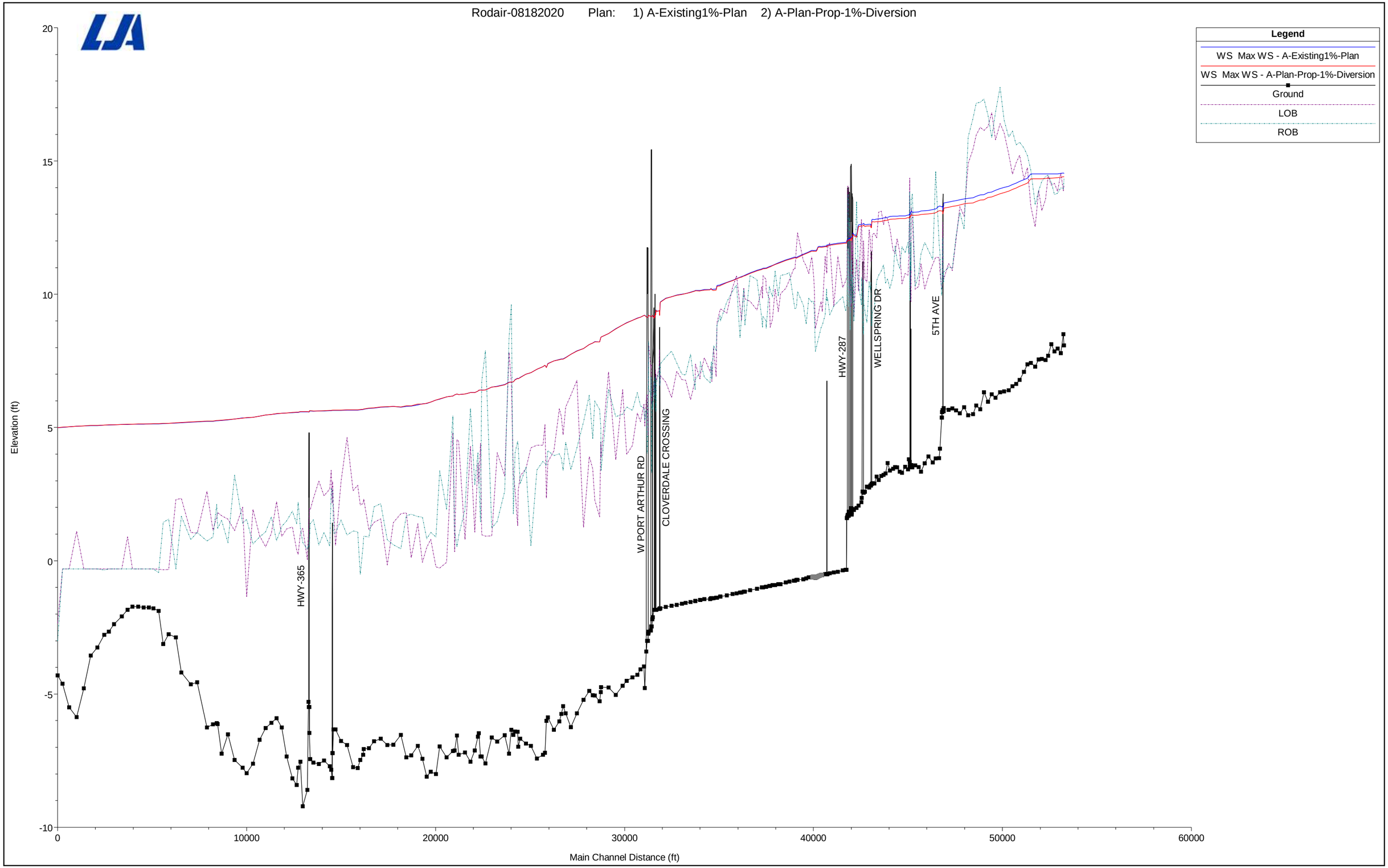
100 Year - Proposed Detention D Profile



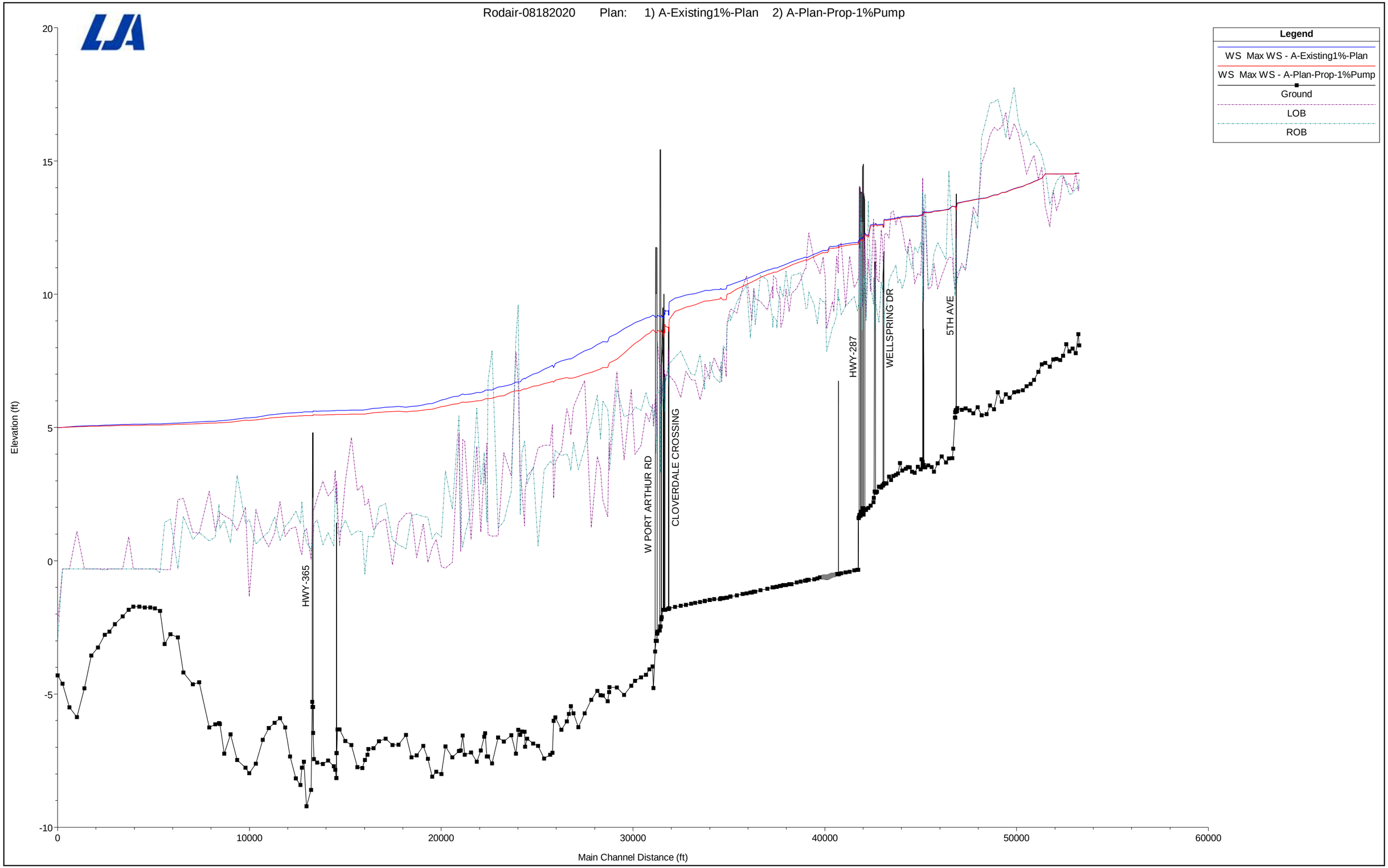
100 Year - Proposed Detention E Profile



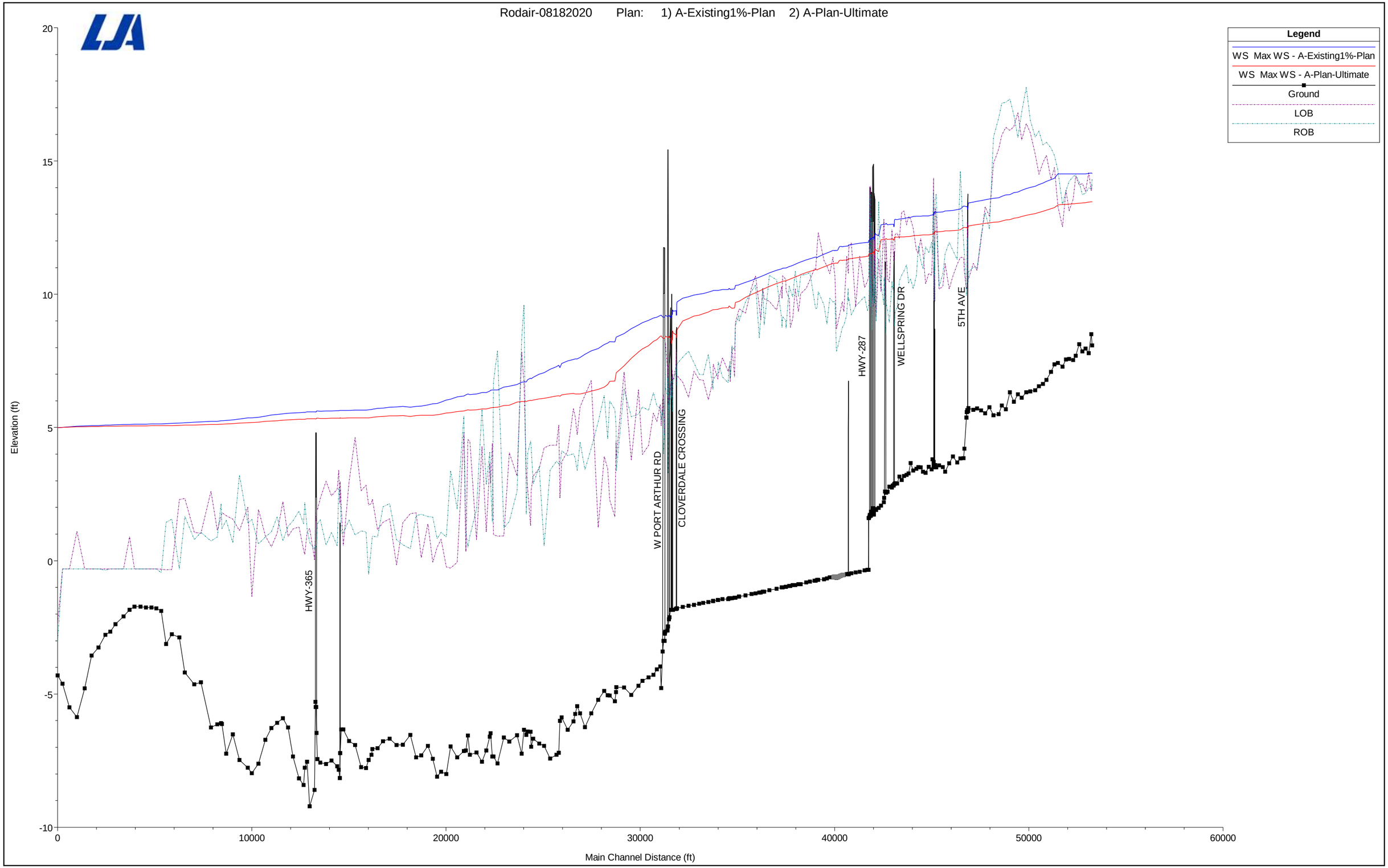
100 Year - Proposed Diversion Profile



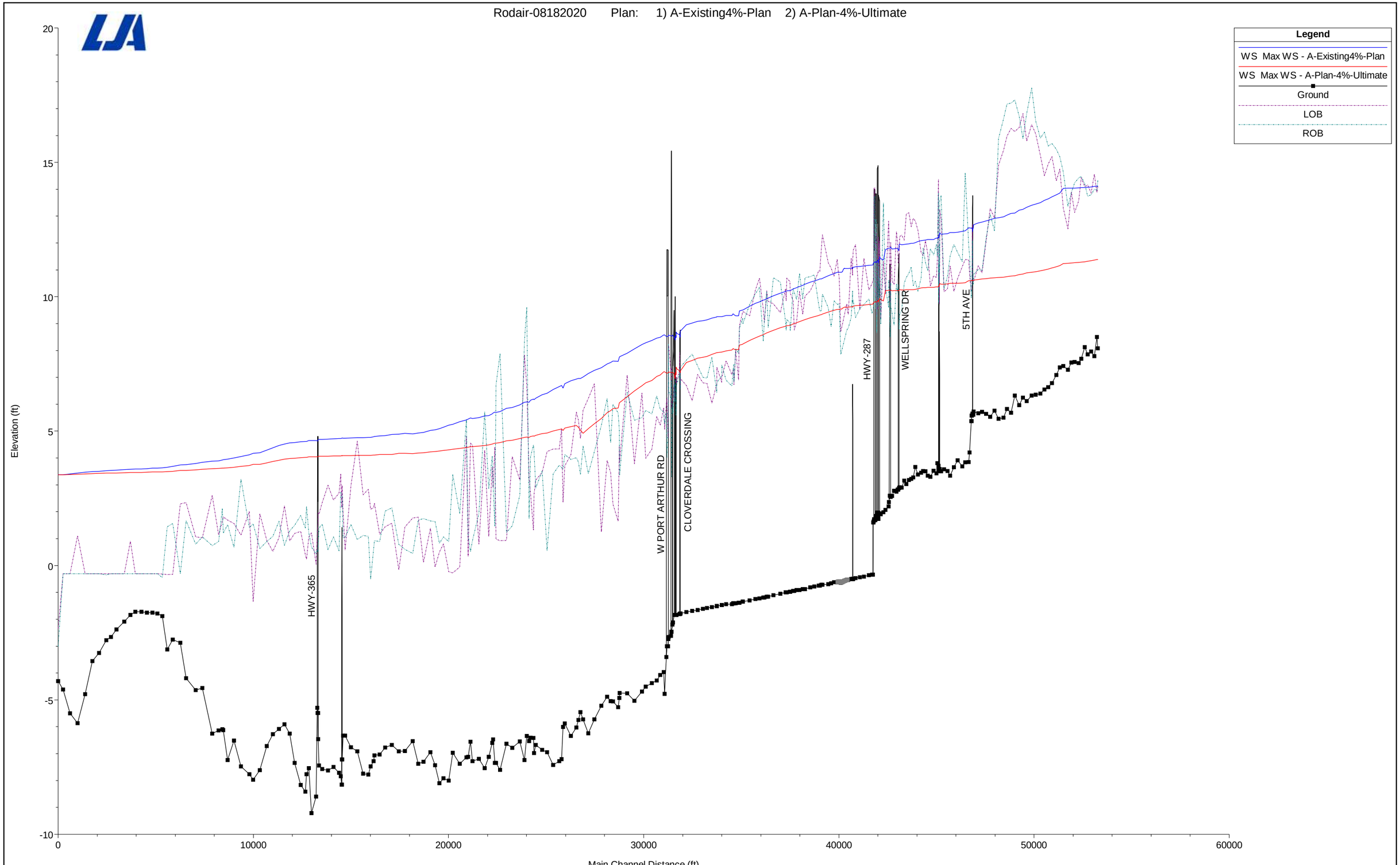
100 Year - Proposed Pump Profile



100 Year - Proposed Ultimate Profile



25 Year - Proposed Ultimate Profile



Existing 1% AEP Results

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	54352	Max WS	246.36	8.08	14.54		14.59	0.000262	1.72	147.96	76.68	0.16
Rodair	54311	Max WS	246.35	8.5	14.54		14.58	0.000182	1.47	171.69	69.46	0.13
Rodair	54290		Lat Struct									
Rodair	54289		Lat Struct									
Rodair	54174	Max WS	230.42	7.79	14.53		14.56	0.000139	1.31	179.99	61.49	0.12
Rodair	54014	Max WS	198.38	7.96	14.52		14.55	0.000132	1.3	156.57	51.25	0.11
Rodair	53844	Max WS	169.59	7.86	14.52		14.53	0.000066	0.93	188.02	64.09	0.08
Rodair	53685	Max WS	150.55	8.12	14.52		14.53	0.000056	0.84	184.8	80	0.07
Rodair	53512	Max WS	117.89	7.69	14.52		14.52	0.000032	0.63	188.71	54.19	0.06
Rodair	53371	Max WS	110.34	7.53	14.51		14.52	0.000026	0.6	187.34	56.46	0.05
Rodair	53172	Max WS	96.54	7.58	14.51		14.52	0.000015	0.44	234.16	97.17	0.04
Rodair	53012	Max WS	64.22	7.55	14.51		14.52	0.000006	0.28	250.98	117.84	0.03
Rodair	52827	Max WS	21.01	7.28	14.52		14.52	0	0.08	320.77	133.17	0.01
Rodair	52798		Lat Struct									
Rodair	52594	Max WS	-2.81	7.42	14.51		14.51	0	-0.01	220.22	66.17	0
Rodair	52588		Lat Struct									
Rodair	52581		Lat Struct									
Rodair	52412	Max WS	472.53	7.37	14.36		14.42	0.000279	2.04	232.04	52.12	0.17
Rodair	52233	Max WS	470.45	7.09	14.3		14.37	0.000307	2.11	222.84	50.84	0.18
Rodair	52006	Max WS	468.45	6.79	14.23		14.3	0.000281	2.08	225.22	48.79	0.17
Rodair	51821	Max WS	466.78	6.64	14.17		14.24	0.000328	2.22	210.14	45.96	0.18
Rodair	51619	Max WS	465.68	6.55	14.12		14.18	0.000276	2.04	228.27	50.4	0.17
Rodair	51420	Max WS	463.95	6.4	14.05		14.12	0.000314	2.19	211.88	45.89	0.18
Rodair	51176	Max WS	462.67	6.36	14		14.06	0.000209	1.88	245.97	49.54	0.15
Rodair	50994		Lat Struct									
Rodair	50989		Lat Struct									
Rodair	50962	Max WS	461.28	6.32	13.96		14.02	0.000199	1.85	248.72	49.2	0.15
Rodair	50720	Max WS	458.89	6.12	13.9		13.96	0.000245	2.03	226.1	45.19	0.16
Rodair	50526	Max WS	456.75	6.25	13.84		13.91	0.000305	2.13	214.48	47.65	0.18
Rodair	50327	Max WS	456	5.97	13.82		13.86	0.000159	1.64	277.97	56.58	0.13
Rodair	50168		Lat Struct									
Rodair	50165		Lat Struct									
Rodair	50112	Max WS	452.32	6.32	13.73		13.81	0.000328	2.18	207.07	46.64	0.18
Rodair	49912	Max WS	451.96	5.69	13.72		13.76	0.00013	1.56	289.68	54.24	0.12
Rodair	49709	Max WS	450.55	5.83	13.67		13.73	0.000227	1.87	240.46	52.35	0.15
Rodair	49534	Max WS	443.84	5.5	13.62		13.68	0.00025	2.01	220.95	45.62	0.16
Rodair	49275	Max WS	443.71	5.46	13.6		13.64	0.000112	1.44	308.85	59.13	0.11
Rodair	49063	Max WS	443.48	5.76	13.58		13.61	0.000104	1.42	314.11	62.86	0.11
Rodair	48842	Max WS	442.93	5.53	13.55		13.59	0.000142	1.58	280.09	57.5	0.12
Rodair	48641	Max WS	432.61	5.64	13.51		13.56	0.000149	1.67	266	63.05	0.13
Rodair	48434	Max WS	432.09	5.72	13.49		13.53	0.000119	1.59	300.29	78.62	0.12
Rodair	48236	Max WS	431.6	5.66	13.46		13.5	0.00013	1.64	285.04	73	0.12
Rodair	47992	Max WS	430.76	5.73	13.42		13.47	0.000153	1.78	272.92	78.89	0.13
Rodair	47977	Max WS	429.65	5.61	13.33	8.84	13.48	0.000352	3.11	138.19	78.07	0.21
Rodair	47949 5th Ave		Bridge									
Rodair	47930	Max WS	422.73	5.65	13.29		13.35	0.000039	1.96	231.87	91.54	0.16
Rodair	47908	Max WS	422.85	5.58	13.3	8.65	13.35	0.000025	1.78	312.55	116.05	0.13

Existing 1% AEP Results

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	47891		Inl Struct									
Rodair	47879	Max WS	422.85	5.37	13.29		13.32	0.000017	1.51	400.73	143.43	0.11
Rodair	47846		Lat Struct									
Rodair	47783	Max WS	343.63	4.21	13.31		13.33	0.000009	1.09	356.15	93.02	0.08
Rodair	47753		Lat Struct									
Rodair	47751		Lat Struct									
Rodair	47737	Max WS	343.63	3.85	13.31		13.33	0.000008	1.07	345.43	80.44	0.08
Rodair	47564	Max WS	724.68	3.84	13.2		13.27	0.000045	2.14	345.16	76.52	0.17
Rodair	47409	Max WS	737.92	3.69	13.18		13.26	0.000038	2.29	352.11	78.86	0.16
Rodair	47180	Max WS	767.75	3.91	13.15		13.24	0.000045	2.53	335.28	80	0.18
Rodair	46984	Max WS	752.87	3.66	13.13		13.22	0.000039	2.39	349.43	78.44	0.16
Rodair	46786	Max WS	775.3	3.34	13.13		13.2	0.000032	2.22	371.06	76.52	0.15
Rodair	46660	Max WS	784.04	3.52	13.09		13.2	0.000045	2.63	346.67	82.1	0.18
Rodair	46479	Max WS	802.07	3.58	13.08		13.19	0.000043	2.63	361.03	99.41	0.17
Rodair	46324	Max WS	824.68	3.5	13.08		13.17	0.000091	2.36	349.07	106.33	0.23
Rodair	46263	Max WS	837.48	3.59	13.11		13.16	0.000036	1.81	463.55	106.64	0.15
Rodair	46252	Max WS	836.57	3.55	13.1	7.37	13.16	0.00003	1.99	449.28	117.72	0.15
Rodair	46247 Highland Pipelin		Bridge									
Rodair	46242	Max WS	834.67	3.56	13.08		13.14	0.00003	2	445.84	112.72	0.15
Rodair	46225	Max WS	834.02	3.52	13.06	7.13	13.14	0.000031	2.25	425.01	106.4	0.15
Rodair	46221 Pipeline		Bridge									
Rodair	46218	Max WS	831.67	3.56	13.05		13.13	0.000031	2.21	424.89	104.23	0.15
Rodair	46214	Max WS	831.39	3.56	13.05		13.13	0.00003	2.28	423.96	103.62	0.15
Rodair	46210	Max WS	832.08	3.53	13.05	7.18	13.13	0.000033	2.26	415.04	101.85	0.15
Rodair	46206 Pipeline		Bridge									
Rodair	46203	Max WS	824.01	3.56	13		13.09	0.000032	2.32	413.88	98.27	0.15
Rodair	46193	Max WS	829	3.71	13.02		13.08	0.000045	2	413.67	94.59	0.17
Rodair	46138	Max WS	821.12	3.81	12.97		13.08	0.000053	2.61	327.38	76.81	0.19
Rodair	46123		Lat Struct									
Rodair	46121		Lat Struct									
Rodair	46090	Max WS	826.38	3.43	12.97		13.08	0.000045	2.56	347.77	83.74	0.18
Rodair	45937	Max WS	837.21	3.53	12.94		13.06	0.000058	2.82	329.86	84.34	0.2
Rodair	45779	Max WS	849.48	3.3	12.94		13.05	0.00005	2.69	341.59	83.9	0.19
Rodair	45773		Lat Struct									
Rodair	45650	Max WS	848.12	3.34	12.94		13.05	0.000044	2.56	365.02	85.57	0.17
Rodair	45631		Lat Struct									
Rodair	45523	Max WS	860.75	3.5	12.93		13.04	0.000051	2.67	339.78	86.42	0.19
Rodair	45412	Max WS	854.77	3.52	12.93		13.03	0.000049	2.6	348.29	86.71	0.18
Rodair	45306	Max WS	843.09	3.45	12.93		13.03	0.000047	2.59	349.75	88.11	0.18
Rodair	45279		Lat Struct									
Rodair	45136	Max WS	838.71	3.39	12.92		13.01	0.000279	2.5	365.86	79.96	0.18
Rodair	45100		Lat Struct									
Rodair	45010	Max WS	851.65	3.67	12.89		12.99	0.000057	2.62	375.25	98.78	0.2
Rodair	44902	Max WS	872.65	3.28	12.88		12.99	0.000058	2.72	370.44	91.71	0.2
Rodair	44801	Max WS	892.46	3.22	12.86		12.98	0.000057	2.7	357.83	92.1	0.2
Rodair	44674	Max WS	904.1	3.18	12.84		12.96	0.000059	2.76	343.01	75.77	0.2
Rodair	44570		Lat Struct									

Existing 1% AEP Results

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	44550	Max WS	915.83	3.03	12.83		12.95	0.000056	2.71	370.27	92.15	0.19
Rodair	44436	Max WS	934.49	3.16	12.82		12.94	0.000054	2.75	385.24	97.09	0.19
Rodair	44308	Max WS	962.81	2.9	12.8		12.92	0.000052	2.8	401.04	95.25	0.19
Rodair	44208	Max WS	944.57	2.91	12.81		12.9	0.000037	2.46	436.73	95.45	0.16
Rodair	44175	Max WS	948.09	2.88	12.79	6.96	12.9	0.000046	2.67	367.38	113.44	0.18
Rodair	44151 Wellspring Dr		Bridge									
Rodair	44128	Max WS	945.09	2.83	12.62		12.73	0.000044	2.6	449.63	120.29	0.18
Rodair	44096	Max WS	948.47	2.82	12.63		12.72	0.000041	2.49	422.7	100.19	0.17
Rodair	44088		Lat Struct									
Rodair	44039	Max WS	952.3	2.75	12.63		12.72	0.00004	2.47	421.28	89.34	0.17
Rodair	44005		Lat Struct									
Rodair	43915	Max WS	964.08	2.78	12.62		12.72	0.000037	2.59	452.4	98.51	0.17
Rodair	43819	Max WS	964.23	2.59	12.6		12.7	0.000039	2.58	419.21	89.73	0.17
Rodair	43748	Max WS	991.8	2.56	12.66		12.69	0.000009	1.27	875.17	187.5	0.08
Rodair	43737	Max WS	992.76	2.56	12.66	5.44	12.69	0.000009	1.24	860.47	185.89	0.08
Rodair	43701 Unnamed Rd		Bridge									
Rodair	43648	Max WS	992.76	2.36	12.62		12.64	0.000007	1.08	961.49	166.15	0.07
Rodair	43634	Max WS	992.42	2.2	12.62		12.64	0.000007	1.12	952.05	165.31	0.08
Rodair	43598		Lat Struct									
Rodair	43553		Lat Struct									
Rodair	43477	Max WS	800.6	2.07	12.6		12.66	0.000018	1.83	472.73	84.52	0.12
Rodair	43458		Lat Struct									
Rodair	43367	Max WS	1694.73	1.98	12.19		12.47	0.000127	4.22	406.17	73.92	0.3
Rodair	43309		Lat Struct									
Rodair	43308		Lat Struct									
Rodair	43237	Max WS	1689.99	1.91	12.24		12.46	0.000071	3.74	508.91	121.46	0.23
Rodair	43178	Max WS	1691.9	1.94	12.3	5.94	12.45	0.000047	3.11	543.92	104.21	0.19
Rodair	43140 US59 NBFR		Bridge									
Rodair	43113	Max WS	1691.18	1.73	12.04		12.29	0.000076	4	428.03	99.77	0.24
Rodair	43111	Max WS	1691.37	1.73	12.16		12.29	0.000044	2.82	608.94	103.92	0.18
Rodair	43109	Max WS	1691.29	1.81	12.17		12.29	0.000042	2.79	625.04	124.25	0.18
Rodair	43107	Max WS	1691.2	1.81	12.16	5.63	12.29	0.000041	2.81	605.59	124.19	0.18
Rodair	43079 US59 NBML		Bridge									
Rodair	43038	Max WS	1691.08	1.81	12.09		12.23	0.000042	3.03	582.39	145.15	0.18
Rodair	43030	Max WS	1690.78	1.82	12.05	5.9	12.23	0.000052	3.39	516.32	179.16	0.2
Rodair	42987 US59 SBML		Bridge									
Rodair	42958	Max WS	1690.78	1.69	12.08		12.22	0.000041	2.97	569.14	97.03	0.18
Rodair	42954	Max WS	1690.71	1.69	12.09	5.67	12.22	0.000041	2.92	593.1	107.96	0.18
Rodair	42920 US59 SBFR		Bridge									
Rodair	42889	Max WS	1690.71	1.66	12.05		12.17	0.00004	2.8	608.18	96.91	0.17
Rodair	42862	Max WS	1690.33	1.61	12.01	5.96	12.17	0.000053	3.18	545.09	83.69	0.2
Rodair	42851		Inl Struct									
Rodair	42791	Max WS	1690.21	-0.34	11.94		12.06	0.000032	2.72	641.25	101.88	0.16
Rodair	42790		Lat Struct									
Rodair	42785		Lat Struct									
Rodair	42633	Max WS	1719.84	-0.36	11.93		12.05	0.000033	2.76	644.2	104.97	0.16
Rodair	42381	Max WS	1775.36	-0.41	11.91		12.03	0.000037	2.82	658.43	112.85	0.17

Existing 1% AEP Results

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	42172	Max WS	1805.12	-0.44	11.89		12.02	0.000035	2.86	654.68	100.17	0.16
Rodair	41952	Max WS	1875.41	-0.47	11.87		12	0.00004	3	659.41	112.39	0.18
Rodair	41818	Max WS	1901.52	-0.5	11.85		12	0.000045	3.06	632.47	91.75	0.18
Rodair	41798	Max WS	1905.57	-0.5	11.85	4.25	11.99	0.000044	3.06	637.04	99.55	0.18
Rodair	41793 Landrey Pipeline		Bridge									
Rodair	41788	Max WS	1905.56	-0.5	11.82		11.97	0.000043	3.11	632.94	102.19	0.18
Rodair	41782	Max WS	1906.84	-0.5	11.82		11.96	0.000044	3.09	633.88	103.75	0.18
Rodair	41777		Lat Struct									
Rodair	41768		Lat Struct									
Rodair	41707	Max WS	1923.11	-0.5	11.81		11.96	0.000044	3.09	643.84	103.6	0.18
Rodair	41558	Max WS	1971.95	-0.53	11.79		11.95	0.000042	3.15	683.01	121.55	0.18
Rodair	41539.5*	Max WS	1973.93	-0.53	11.79		11.95	0.000042	3.16	677.25	117.65	0.18
Rodair	41521*	Max WS	1974.68	-0.53	11.79		11.94	0.000042	3.16	672.04	113.77	0.18
Rodair	41502.5*	Max WS	1965.23	-0.53	11.79		11.94	0.000042	3.15	667.36	109.87	0.18
Rodair	41484	Max WS	1966.57	-0.53	11.79		11.94	0.000042	3.15	663.13	105.97	0.18
Rodair	41386.6*	Max WS	1970.11	-0.54	11.79		11.94	0.000041	3.12	672.25	109.75	0.18
Rodair	41372.2*	Max WS	1974.07	-0.54	11.79		11.94	0.000039	3.08	680.9	113.52	0.18
Rodair	41357.8*	Max WS	1977.78	-0.55	11.79		11.94	0.000038	3.04	689.58	117.3	0.17
Rodair	41343.4*	Max WS	1981.29	-0.56	11.79		11.93	0.000037	3	698.36	117.7	0.17
Rodair	41332		Lat Struct									
Rodair	41329*	Max WS	1989.01	-0.57	11.8		11.93	0.000036	2.98	692.26	93.9	0.17
Rodair	41314.6*	Max WS	2011.35	-0.57	11.79		11.93	0.000036	2.97	698.56	91.32	0.17
Rodair	41300.2*	Max WS	2066.99	-0.58	11.78		11.92	0.000036	3.01	707.4	90.36	0.17
Rodair	41285.8*	Max WS	2106.76	-0.59	11.78		11.92	0.000037	3.02	716.71	90.5	0.17
Rodair	41271.4*	Max WS	2190.74	-0.6	11.76		11.91	0.000038	3.1	720.54	87.37	0.18
Rodair	41257*	Max WS	2348.93	-0.6	11.72		11.88	0.000043	3.29	728.15	88.19	0.19
Rodair	41242.6*	Max WS	2492.18	-0.61	11.68		11.86	0.000047	3.45	740.43	93.06	0.2
Rodair	41228.2*	Max WS	2558.22	-0.62	11.66		11.85	0.000048	3.49	753.87	98.83	0.2
Rodair	41213.8*	Max WS	2650.06	-0.63	11.64		11.84	0.00005	3.56	765.07	104.48	0.2
Rodair	41199.4*	Max WS	2672.44	-0.63	11.64		11.83	0.000049	3.54	777.44	110.16	0.2
Rodair	41185	Max WS	2682.66	-0.64	11.64		11.83	0.000047	3.49	791.23	123.57	0.2
Rodair	41151		Lat Struct									
Rodair	41145.8*	Max WS	2686.37	-0.63	11.64		11.83	0.000082	3.47	795.86	116.76	0.2
Rodair	41134.6*	Max WS	2689.66	-0.62	11.64		11.83	0.000129	3.44	801.65	115.25	0.2
Rodair	41123.4*	Max WS	2693.16	-0.61	11.64		11.82	0.000173	3.42	807.19	115.38	0.2
Rodair	41112.2*	Max WS	2696.66	-0.6	11.64		11.82	0.000242	3.4	812.17	115.86	0.2
Rodair	41101	Max WS	2700.17	-0.59	11.64		11.82	0.000324	3.38	816.53	116.7	0.21
Rodair	41083.2*	Max WS	2703.85	-0.6	11.64		11.81	0.000309	3.31	832.44	117.5	0.2
Rodair	41065.4*	Max WS	2707.54	-0.6	11.64		11.8	0.000294	3.24	848.54	118.2	0.2
Rodair	41047.5*	Max WS	2711.22	-0.6	11.64		11.8	0.000281	3.18	864.86	118.88	0.19
Rodair	41029.7*	Max WS	2714.9	-0.61	11.64		11.79	0.000267	3.12	881.72	119.34	0.19
Rodair	41011.9*	Max WS	2718.59	-0.62	11.64		11.79	0.000255	3.06	898.94	119.72	0.18
Rodair	40994	Max WS	2722.5	-0.62	11.64		11.78	0.000243	3	916.19	120.09	0.18
Rodair	40836	Max WS	2754.73	-0.62	11.59		11.74	0.000257	3.08	912.5	133.74	0.18
Rodair	40694	Max WS	2783.29	-0.66	11.55		11.7	0.000253	3.1	916.82	124.88	0.18
Rodair	40540	Max WS	2814.13	-0.69	11.51		11.66	0.000266	3.12	911.64	120.33	0.19
Rodair	40249	Max WS	2872.62	-0.72	11.4		11.57	0.0003	3.25	894.72	125.9	0.2

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Rodair	40185		Lat Struct									
Rodair	40181	Max WS	2881.12	-0.72	11.38		11.55	0.000303	3.29	893.87	131.12	0.2
Rodair	40107	Max WS	2694.48	-0.75	11.4		11.55	0.000262	3.06	891.85	119.51	0.19
Rodair	40105		Lat Struct									
Rodair	40050	Max WS	2706.22	-0.75	11.38		11.53	0.000268	3.09	890.77	124.65	0.19
Rodair	39822	Max WS	2752.37	-0.78	11.33		11.47	0.000257	2.97	938.7	138.6	0.18
Rodair	39798		Lat Struct									
Rodair	39617	Max WS	2772.91	-0.81	11.29		11.41	0.000219	2.88	968.26	130.32	0.17
Rodair	39344	Max WS	2818.71	-0.88	11.21		11.35	0.000253	2.98	953.88	128.61	0.18
Rodair	39227	Max WS	2804.75	-0.88	11.18		11.32	0.000242	3.03	942.7	138.23	0.18
Rodair	39200		Lat Struct									
Rodair	39060	Max WS	2839.14	-0.91	11.13		11.27	0.000259	3.03	941.44	124.88	0.18
Rodair	38920	Max WS	2866.96	-0.91	11.09		11.23	0.000254	3.09	942.63	129.55	0.18
Rodair	38916		Lat Struct									
Rodair	38801	Max WS	2902.19	-0.94	11.05		11.2	0.000255	3.12	943.47	127.39	0.18
Rodair	38792		Lat Struct									
Rodair	38746	Max WS	2913.61	-0.94	11.04		11.19	0.000262	3.09	951.54	135.98	0.19
Rodair	38583	Max WS	2912.48	-0.97	10.99		11.14	0.000278	3.18	931.57	133.72	0.19
Rodair	38572	Max WS	2912.48	-0.97	10.98		11.14	0.000284	3.18	931.03	133.86	0.19
Rodair	38564		Lat Struct									
Rodair	38407	Max WS	2909.39	-1	10.98		11.1	0.000211	2.8	1051.71	136.57	0.17
Rodair	38379	Max WS	2916.81	-1	10.96		11.09	0.000222	2.91	1033.44	153.8	0.17
Rodair	38356	Max WS	2922.71	-1	10.95		11.09	0.000229	2.93	1015.7	143.55	0.17
Rodair	38311		Lat Struct									
Rodair	38212		Lat Struct									
Rodair	38089	Max WS	2967.9	-1.05	10.9		11.02	0.000218	2.85	1053.27	141.61	0.17
Rodair	37989		Lat Struct									
Rodair	37729	Max WS	2996.86	-1.1	10.8		10.94	0.00024	2.95	1018.28	128.31	0.18
Rodair	37455	Max WS	3067.98	-1.16	10.71		10.86	0.000254	3.1	1000.13	133.09	0.18
Rodair	37389	Max WS	3085.15	-1.16	10.7		10.84	0.000261	3.08	1005.35	135.2	0.19
Rodair	37380		Lat Struct									
Rodair	37275	Max WS	3109.78	-1.19	10.66		10.81	0.000262	3.15	1019.66	173.39	0.19
Rodair	37266		Lat Struct									
Rodair	37203	Max WS	3093.15	-1.19	10.64		10.8	0.000257	3.13	1033.01	159.91	0.19
Rodair	37178		Lat Struct									
Rodair	37013	Max WS	3141.3	-1.22	10.58		10.74	0.000282	3.15	996.86	122.76	0.19
Rodair	36801	Max WS	3193.75	-1.25	10.52		10.67	0.000276	3.13	1022.83	132.94	0.19
Rodair	36503	Max WS	3153.75	-1.3	10.45		10.6	0.000263	3.1	1026.47	136.77	0.19
Rodair	36166	Max WS	2916.24	-1.34	10.36		10.5	0.000248	3.01	976.09	129.34	0.18
Rodair	36151	Max WS	2919.14	-1.34	10.35		10.49	0.000246	2.99	981.09	128.4	0.18
Rodair	36129		Lat Struct									
Rodair	35987		Lat Struct									
Rodair	35981	Max WS	2951.06	-1.38	10.33		10.47	0.000039	2.96	1014.25	143.06	0.18
Rodair	35939	Max WS	2958.55	-1.38	10.2		10.47	0.000078	4.26	772.34	141.14	0.25
Rodair	35919		Lat Struct									
Rodair	35799	Max WS	2992.6	-1.41	10.19		10.46	0.000078	4.17	768.64	134.15	0.25
Rodair	35788		Lat Struct									

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Rodair	35708	Max WS	3053.06	-1.41	10.18		10.49	0.000082	4.48	776.45	130.38	0.26
Rodair	35701		Lat Struct									
Rodair	35693	Max WS	3056.38	-1.41	10.19		10.48	0.00008	4.33	787.85	137.67	0.25
Rodair	35682		Lat Struct									
Rodair	35659	Max WS	3033.23	-1.41	10.22		10.48	0.00007	4.13	826.57	144.38	0.24
Rodair	35609	Max WS	3031.69	-1.44	10.17		10.49	0.000084	4.52	777.89	134.35	0.26
Rodair	35600		Lat Struct									
Rodair	35547	Max WS	3034.17	-1.44	10.17		10.47	0.000082	4.42	803.44	150.02	0.25
Rodair	35323	Max WS	3114.32	-1.47	10.15		10.44	0.000084	4.42	845.69	166	0.26
Rodair	35312	Max WS	3114.04	-1.47	10.14		10.44	0.000081	4.46	848.2	166.59	0.25
Rodair	35252		Lat Struct									
Rodair	35065	Max WS	3126.39	-1.5	10.14		10.41	0.000074	4.22	874.75	167.95	0.24
Rodair	35057	Max WS	3125.46	-1.51	10.14		10.41	0.000071	4.29	878.01	164.23	0.24
Rodair	35052		Lat Struct									
Rodair	34813	Max WS	3217.36	-1.55	10.08		10.39	0.000081	4.49	847.64	150.02	0.26
Rodair	34556	Max WS	3268	-1.58	10.03		10.35	0.000088	4.6	862.35	154.76	0.26
Rodair	34353	Max WS	3290.83	-1.61	10		10.33	0.000087	4.64	842.09	146.64	0.26
Rodair	34081	Max WS	3353.91	-1.65	9.97		10.29	0.000085	4.58	834.49	128.35	0.26
Rodair	33806	Max WS	3428	-1.69	9.91		10.25	0.000095	4.75	816.64	121.68	0.27
Rodair	33509	Max WS	3520.14	-1.73	9.85		10.21	0.000099	4.84	822.28	125.08	0.28
Rodair	33208	Max WS	3457.58	-1.78	9.71		10.2	0.000145	5.63	682.81	126.06	0.34
Rodair	33197	Max WS	3460.51	-1.78	9.63	4.85	10.2	0.000169	6.1	615.4	121.23	0.36
Rodair	33177 Cloverdale		Bridge									
Rodair	33163	Max WS	3459.85	-1.81	9.39		9.92	0.000162	5.85	627.22	120.61	0.35
Rodair	33153	Max WS	3462.35	-1.81	9.38		9.92	0.000162	5.91	620.23	118.35	0.35
Rodair	33150		Lat Struct									
Rodair	33111		Lat Struct									
Rodair	33002	Max WS	3647.2	-1.84	9.36		9.84	0.000138	5.58	707.55	128.1	0.33
Rodair	32981	Max WS	3652.81	-1.84	9.4	4.15	9.84	0.000118	5.29	764.18	137.37	0.31
Rodair	32977 Pipeline		Bridge									
Rodair	32971	Max WS	3652.6	-1.84	9.29		9.73	0.000123	5.36	748.57	137.37	0.31
Rodair	32960	Max WS	3655.44	-1.84	9.3		9.73	0.000124	5.25	763.87	141.62	0.31
Rodair	32944	Max WS	3659.52	-1.84	9.27	4.01	9.72	0.000135	5.43	691.04	142.76	0.33
Rodair	32922 Pipelines		Bridge									
Rodair	32905	Max WS	3659.23	-1.84	9.18		9.64	0.000131	5.46	753.13	149.08	0.32
Rodair	32893	Max WS	3662.25	-1.84	9.19	4.16	9.63	0.000129	5.35	743.61	147.7	0.32
Rodair	32854 Pipeline		Bridge									
Rodair	32808	Max WS	3662.25	-2.12	9.22		9.5	0.000077	4.3	1027.37	175.64	0.25
Rodair	32793	Max WS	3666.19	-2.19	9.2	3.21	9.49	0.000078	4.38	836.6	177.2	0.25
Rodair	32743 RR		Bridge									
Rodair	32717	Max WS	3666.04	-2.62	9.18		9.46	0.000071	4.27	859.29	119.59	0.24
Rodair	32711	Max WS	3666.01	-2.66	9.21		9.45	0.000073	3.96	960.63	158.54	0.24
Rodair	32705	Max WS	3665.99	-2.69	9.22		9.45	0.000076	3.88	982.47	191.93	0.24
Rodair	32698	Max WS	3665.83	-2.73	9.17	2.88	9.45	0.000071	4.28	857.27	149.35	0.24
Rodair	32655 W Port Arthur Rd		Bridge									
Rodair	32590	Max WS	3665.83	-3.4	9.15		9.42	0.000384	4.13	887.42	208.04	0.23
Rodair	32508	Max WS	3665.58	-4.78	9.21		9.39	0.000239	3.41	1158.32	145.01	0.18

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Rodair	32462	Max WS	3665.2	-3.97	9.21		9.38	0.000239	3.3	1169.57	153.17	0.18
Rodair	32455		Lat Struct									
Rodair	32407		Lat Struct									
Rodair	32287	Max WS	3622.78	-4.07	9.14		9.34	0.000296	3.64	1103.88	165.58	0.2
Rodair	32108	Max WS	3601.05	-4.28	9.1		9.28	0.000274	3.44	1121.19	153.72	0.19
Rodair	31859	Max WS	3509.29	-4.38	9.02		9.24	0.000336	3.78	1005.54	137.86	0.21
Rodair	31543	Max WS	3647.63	-4.5	8.93		9.14	0.000277	3.68	1053.19	127.28	0.2
Rodair	31340	Max WS	3780.51	-4.69	8.85		9.04	0.000279	3.51	1148.49	154.01	0.2
Rodair	30965	Max WS	3973.35	-5.03	8.7		8.93	0.000306	3.91	1138.34	161.65	0.21
Rodair	30592	Max WS	4011.7	-4.75	8.52		8.77	0.000399	4.03	1037.83	158.74	0.23
Rodair	30202	Max WS	4051.82	-4.74	8.39		8.63	0.000327	4	1176.26	193.67	0.22
Rodair	30185	Max WS	4039.18	-4.93	8.37		8.62	0.000355	4.06	1096.69	191.12	0.22
Rodair	30137		Lat Struct									
Rodair	30122	Max WS	4045.59	-5.27	8.21		8.62	0.0006	5.3	925.24	163.04	0.29
Rodair	29854	Max WS	4097.38	-5.06	8.22		8.46	0.000321	3.99	1109.17	142.52	0.21
Rodair	29748	Max WS	4095.13	-5.04	8.17		8.43	0.00035	4.12	1089.74	158.4	0.22
Rodair	29738		Lat Struct									
Rodair	29712		Lat Struct									
Rodair	29570	Max WS	4115.25	-4.88	8.12		8.36	0.00033	3.97	1088.37	131.13	0.21
Rodair	29541		Lat Struct									
Rodair	29503		Lat Struct									
Rodair	29261	Max WS	4140.98	-5.22	7.97		8.25	0.000385	4.37	1042.55	123.55	0.23
Rodair	28913	Max WS	4238.75	-5.72	7.87		8.1	0.000365	3.94	1199.47	186.85	0.22
Rodair	28589	Max WS	4228.71	-6.24	7.75		7.99	0.000332	3.99	1131.07	141.06	0.21
Rodair	28418		Lat Struct									
Rodair	28327	Max WS	4255.09	-5.72	7.63		7.89	0.000417	4.14	1092.89	150.14	0.24
Rodair	28188	Max WS	4260.27	-5.45	7.57		7.83	0.000383	4.16	1124.97	165.63	0.23
Rodair	28181		Lat Struct									
Rodair	28086	Max WS	4193.99	-5.75	7.57		7.8	0.000327	3.89	1175.49	173.06	0.21
Rodair	28069		Lat Struct									
Rodair	27985	Max WS	4213.2	-6.03	7.55		7.77	0.000299	3.77	1210.93	176.32	0.2
Rodair	27941		Lat Struct									
Rodair	27699	Max WS	4082.18	-6.34	7.5		7.7	0.00027	3.62	1238.51	172.28	0.19
Rodair	27384	Max WS	4099.93	-5.88	7.4		7.61	0.000297	3.72	1216.89	174.36	0.2
Rodair	27302	Max WS	4144.28	-6.01	7.25		7.6	0.000535	4.97	1070.72	197.4	0.27
Rodair	27231	Max WS	4103.11	-7.2	7.34		7.54	0.00029	3.67	1220.62	182.58	0.2
Rodair	27219		Lat Struct									
Rodair	27114	Max WS	4116.71	-7.28	7.29		7.51	0.000306	3.82	1195.94	174.54	0.21
Rodair	26795	Max WS	4148.28	-7.42	7.19		7.41	0.000305	3.79	1210.78	173.4	0.21
Rodair	26484	Max WS	4179.45	-6.94	7.06		7.31	0.000346	4.14	1171.42	175.58	0.22
Rodair	26225	Max WS	4186.36	-6.86	7.01		7.22	0.000291	3.73	1236.71	178.05	0.2
Rodair	25912	Max WS	4187.09	-6.68	6.88		7.12	0.00032	4	1171.46	171.95	0.21
Rodair	25874		Lat Struct									
Rodair	25817		Lat Struct									
Rodair	25810	Max WS	4220.46	-6.98	6.83		7.09	0.000366	4.15	1148.2	172.06	0.23
Rodair	25782	Max WS	4247.29	-6.42	6.85		7.07	0.000342	3.95	1235.7	171.47	0.22
Rodair	25748		Lat Struct									

Existing 1% AEP Results

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	25643	Max WS	4351.37	-6.41	6.79		7.01	0.000308	3.83	1251.42	170.72	0.21
Rodair	25556	Max WS	4435.57	-6.53	6.71		6.98	0.000374	4.28	1193.15	186.56	0.23
Rodair	25445	Max WS	4435.57	-6.34	6.71		6.93	0.000417	3.72	1191.08	149.07	0.23
Rodair	25327	Max WS	4434.95	-7.24	6.7		6.89	0.000278	3.5	1266.69	126.72	0.2
Rodair	25283		Lat Struct									
Rodair	25182		Lat Struct									
Rodair	25095	Max WS	4191.25	-6.55	6.61		6.85	0.000312	3.94	1153.75	151.4	0.21
Rodair	24696	Max WS	3878.39	-6.78	6.55		6.75	0.00029	3.7	1141.2	166.03	0.2
Rodair	24402	Max WS	3858.83	-6.63	6.52		6.68	0.000216	3.29	1335.68	180.4	0.18
Rodair	24079	Max WS	3699.86	-7.6	6.41		6.61	0.000297	3.63	1132.84	173.65	0.2
Rodair	23870	Max WS	3585.4	-7.34	6.4		6.56	0.000233	3.22	1196.4	166.8	0.18
Rodair	23810	Max WS	3567.71	-7.34	6.41		6.55	0.000194	3.04	1271.96	205.49	0.17
Rodair	23799		Lat Struct									
Rodair	23722	Max WS	3458.48	-6.47	6.39		6.54	0.000212	3.12	1235.02	202.25	0.17
Rodair	23718		Lat Struct									
Rodair	23678	Max WS	3458.28	-6.6	6.37		6.53	0.000243	3.28	1130.17	166.87	0.18
Rodair	23504	Max WS	3424.98	-7.12	6.31		6.49	0.000245	3.53	1110.3	154.03	0.18
Rodair	23285	Max WS	3254.24	-7.54	6.31		6.45	0.000216	3.03	1117.97	156.31	0.17
Rodair	22996	Max WS	3262.93	-7.19	6.26		6.4	0.000174	3.02	1218.63	170.18	0.16
Rodair	22659	Max WS	3182.76	-7.28	6.23		6.34	0.000155	2.69	1305.14	191.12	0.15
Rodair	22560	Max WS	3070.66	-6.56	6.26		6.33	0.000114	2.26	1432.39	169.48	0.13
Rodair	22449	Max WS	3076.11	-7.12	6.22		6.32	0.000133	2.63	1342.48	180.84	0.14
Rodair	22431		Lat Struct									
Rodair	22355	Max WS	3075.2	-7.14	6.19		6.31	0.000185	2.77	1122.82	143.03	0.16
Rodair	22014	Max WS	3044.14	-7.38	6.15		6.25	0.000138	2.68	1320.75	189.95	0.14
Rodair	21661	Max WS	3190.08	-6.97	6.07		6.19	0.00018	2.87	1252.37	185.82	0.16
Rodair	21449	Max WS	3235.08	-8	6.03		6.15	0.000161	2.93	1341.6	193.58	0.15
Rodair	21181	Max WS	3686.79	-7.92	5.95		6.08	0.000172	2.98	1441.29	191.2	0.16
Rodair	20966	Max WS	3825.48	-8.1	5.9		6.04	0.000187	3.11	1468.92	226.53	0.16
Rodair	20745	Max WS	3728.33	-7.43	5.89		6.02	0.000179	3.05	1467.11	213.11	0.16
Rodair	20503	Max WS	3462.14	-6.94	5.85		5.96	0.000162	2.8	1405.26	199.28	0.15
Rodair	20152	Max WS	3400.48	-7.3	5.8		5.93	0.000164	2.89	1354.58	178.58	0.15
Rodair	19887	Max WS	3190.29	-7.38	5.79		5.89	0.000139	2.6	1357.51	171.95	0.14
Rodair	19599	Max WS	3118.85	-6.53	5.76		5.86	0.000145	2.58	1382.67	184.71	0.14
Rodair	19205	Max WS	2726.75	-6.9	5.79		5.85	0.000092	2.03	1536.26	202.71	0.11
Rodair	18888	Max WS	2638.41	-6.91	5.77		5.83	0.000093	2.14	1446.37	193.78	0.12
Rodair	18535	Max WS	2423.91	-6.67	5.76		5.81	0.000072	1.83	1474.57	196.43	0.1
Rodair	18189	Max WS	2410.22	-6.77	5.73		5.78	0.000076	1.88	1448.82	202.47	0.1
Rodair	17910	Max WS	2275.88	-7.03	5.72		5.76	0.000054	1.62	1616.13	204.71	0.09
Rodair	17641	Max WS	2244.83	-7.06	5.69		5.72	0.000055	1.6	1561.54	194.11	0.09
Rodair	17596	Max WS	2215.24	-7.28	5.68		5.71	0.000053	1.57	1556.96	190.83	0.09
Rodair	17448	Max WS	2083.94	-7.47	5.66		5.7	0.000057	1.66	1405.79	174.86	0.09
Rodair	17439		Lat Struct									
Rodair	17320	Max WS	2006.39	-7.78	5.66		5.7	0.000055	1.62	1371.29	172.99	0.09
Rodair	17064	Max WS	1887.07	-7.74	5.66		5.69	0.000048	1.5	1377.75	169.02	0.08
Rodair	16757	Max WS	1731.83	-6.91	5.65		5.68	0.000041	1.35	1356.93	164.15	0.08
Rodair	16437	Max WS	1611.26	-6.76	5.64		5.67	0.000037	1.27	1339.99	159.13	0.07

Existing 1% AEP Results

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	16143	Max WS	1473.09	-6.33	5.64		5.66	0.00003	1.2	1328.68	154.28	0.07
Rodair	16033	Max WS	1409.98	-6.33	5.64		5.66	0.000028	1.12	1366.03	171.79	0.06
Rodair	15984	Max WS	1410.14	-7.22	5.65	-4.04	5.66	0.000024	0.93	1516.54	175.78	0.06
Rodair	15974 Pipeline		Bridge									
Rodair	15964	Max WS	1409.83	-8.15	5.64		5.65	0.000021	0.88	1598.82	182.32	0.05
Rodair	15909	Max WS	1410.05	-7.84	5.63		5.65	0.000026	1	1404.91	154.13	0.06
Rodair	15903		Lat Struct									
Rodair	15899		Lat Struct									
Rodair	15831	Max WS	1394.74	-7.71	5.63		5.65	0.000024	1.1	1351.16	149	0.06
Rodair	15538	Max WS	1375.64	-7.5	5.62		5.64	0.000024	1.1	1341.29	153.73	0.06
Rodair	15259	Max WS	1371.84	-7.62	5.62		5.63	0.000026	1.11	1368.12	166.52	0.06
Rodair	14965	Max WS	1301.41	-7.57	5.61		5.63	0.000021	1.01	1454.31	185.66	0.05
Rodair	14808	Max WS	1092.86	-7.44	5.62		5.63	0.000014	0.83	1531.95	207.11	0.05
Rodair	14763	Max WS	1091.06	-6.46	5.62	-4.01	5.63	0.000017	0.88	1482.03	213.78	0.05
Rodair	14740 FM 365		Bridge									
Rodair	14714	Max WS	1089.28	-5.29	5.58		5.6	0.000022	0.94	1399.11	219.16	0.05
Rodair	14656	Max WS	1085.28	-8.6	5.59		5.6	0.00001	0.76	1725.66	239.58	0.04
Rodair	14654		Lat Struct									
Rodair	14553		Lat Struct									
Rodair	14414	Max WS	1083.6	-9.21	5.59		5.59	0.000008	0.66	2064.4	277.07	0.03
Rodair	14280	Max WS	927.55	-7.54	5.59		5.59	0.000006	0.52	2185.58	307.68	0.03
Rodair	14274		Lat Struct									
Rodair	14165	Max WS	1905.28	-7.76	5.57		5.58	0.000024	1.1	2227.48	322.49	0.06
Rodair	14151		Lat Struct									
Rodair	14094	Max WS	1917.94	-8.41	5.57		5.58	0.000024	1.13	2259.75	317.64	0.06
Rodair	13857	Max WS	2013.06	-8.16	5.56		5.58	0.00003	1.19	2134.13	312.81	0.07
Rodair	13555	Max WS	2047.4	-7.34	5.54		5.56	0.000034	1.25	2010.03	284.49	0.07
Rodair	13297	Max WS	2094.23	-6.25	5.53		5.55	0.000035	1.23	1932.55	253.55	0.07
Rodair	13028	Max WS	2208.13	-5.91	5.51		5.54	0.000043	1.34	1808.38	229.87	0.08
Rodair	12743	Max WS	2499.63	-6.08	5.49		5.52	0.000055	1.54	1781.94	225.47	0.09
Rodair	12439	Max WS	2699.96	-6.28	5.47		5.51	0.000071	1.78	1724.36	231.73	0.1
Rodair	12124	Max WS	2850.28	-6.72	5.42		5.48	0.000077	1.91	1728.35	229.67	0.1
Rodair	11769	Max WS	3169.55	-7.61	5.39		5.45	0.000094	2.16	1664.89	206.86	0.12
Rodair	11431	Max WS	2920.12	-7.97	5.36		5.41	0.000081	1.97	1816.64	250.59	0.11
Rodair	11225	Max WS	2864.45	-7.76	5.36		5.42	0.000087	1.99	1692.76	237.42	0.11
Rodair	10798	Max WS	2870.99	-7.47	5.32		5.37	0.000088	1.97	1702.07	243.08	0.11
Rodair	10451	Max WS	2795.18	-6.51	5.28		5.33	0.000076	1.8	1861.84	283.06	0.1
Rodair	10114	Max WS	2750.25	-7.24	5.26		5.3	0.000068	1.71	1953.93	305.54	0.1
Rodair	9896	Max WS	2678.94	-6.12	5.25		5.29	0.000064	1.63	1980.15	326.86	0.09
Rodair	9855	Max WS	2677.17	-6.09	5.25		5.29	0.000064	1.6	2046.52	357.88	0.09
Rodair	9765		Lat Struct									
Rodair	9684		Lat Struct									
Rodair	9653	Max WS	2582.63	-6.13	5.23		5.28	0.000071	1.74	1869.66	321.16	0.1
Rodair	9334	Max WS	2544.43	-6.25	5.23		5.26	0.00005	1.43	2019.61	299.6	0.08
Rodair	8819	Max WS	2341.5	-4.56	5.21		5.23	0.000046	1.27	2166.61	358.49	0.08
Rodair	8479	Max WS	2305.05	-4.63	5.2		5.22	0.000046	1.31	2226.55	400.13	0.08
Rodair	7988	Max WS	2189.64	-4.19	5.18		5.2	0.00004	1.12	2189.39	388.46	0.07

Existing 1% AEP Results

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	7700	Max WS	2150.39	-2.88	5.17		5.19	0.000032	0.97	2672.55	482.43	0.06
Rodair	7312	Max WS	2073.48	-2.76	5.15		5.17	0.000062	1.33	2217.59	459.76	0.09
Rodair	7020	Max WS	2202.21	-3.12	5.14		5.16	0.000033	0.99	3059.37	549.28	0.07
Rodair	6774	Max WS	2329.72	-1.88	5.14		5.15	0.000025	0.83	3474.52	624.82	0.06
Rodair	6512	Max WS	2547.85	-1.78	5.14		5.14	0.00002	0.73	4256.09	756.08	0.05
Rodair	6261	Max WS	2718.21	-1.75	5.13		5.14	0.000016	0.65	4995.03	855.17	0.04
Rodair	5983	Max WS	2919.96	-1.75	5.13		5.13	0.000013	0.6	6009.46	1066.78	0.04
Rodair	5696	Max WS	3037.54	-1.72	5.12		5.12	0.00001	0.52	6627.54	1094.46	0.04
Rodair	5387	Max WS	2985.18	-1.72	5.12		5.12	0.000011	0.53	6089.75	977.28	0.04
Rodair	5141	Max WS	3000.03	-1.84	5.12		5.12	0.000012	0.57	5547.02	883.87	0.04
Rodair	4826	Max WS	3058.48	-2.09	5.11		5.12	0.000016	0.68	4812.27	739.88	0.05
Rodair	4416	Max WS	3388.39	-2.38	5.1		5.11	0.000022	0.81	5312.15	949.8	0.05
Rodair	4140	Max WS	3538.35	-2.66	5.09		5.1	0.000019	0.77	5930	988.79	0.05
Rodair	3899	Max WS	3787.34	-2.78	5.09		5.1	0.00002	0.8	6110.93	1034.86	0.05
Rodair	3535	Max WS	4167.69	-3.25	5.07		5.08	0.00002	0.8	6843.68	1115.03	0.05
Rodair	3189	Max WS	4641.24	-3.56	5.07		5.08	0.000021	0.84	7861.05	1387.14	0.05
Rodair	2825	Max WS	5104.09	-4.79	5.06		5.07	0.000026	0.98	8101.08	1489.43	0.06
Rodair	2434	Max WS	5271.72	-5.87	5.05		5.06	0.000031	1.09	7508.65	1419.64	0.07
Rodair	2044	Max WS	5421.76	-5.5	5.03		5.05	0.00004	1.23	6010.72	1099.73	0.07
Rodair	1695	Max WS	5762.55	-4.61	5.01		5.03	0.000041	1.22	6237.99	1056.19	0.07
Rodair	1436	Max WS	5525.47	-4.3	5	-1.68	5.01	0.000025	0.94	7336.9	1079.76	0.06

Existing 1% TP40 Results

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	54352	Max WS	207.84	8.08	14.36		14.4	0.000222	1.53	136.47	43.7	0.14
Rodair	54311	Max WS	207.86	8.5	14.37		14.39	0.000153	1.3	160.87	53.44	0.12
Rodair	54290		Lat Struct									
Rodair	54289		Lat Struct									
Rodair	54174	Max WS	196.5	7.79	14.36		14.38	0.000115	1.17	170.12	54.06	0.11
Rodair	54014	Max WS	177.01	7.96	14.34		14.36	0.000123	1.22	147.47	50.3	0.11
Rodair	53844	Max WS	160.73	7.86	14.34		14.35	0.00007	0.93	177.08	57.91	0.08
Rodair	53685	Max WS	151.96	8.12	14.33		14.34	0.000068	0.9	170.93	59	0.08
Rodair	53512	Max WS	133.26	7.69	14.32		14.33	0.000045	0.74	179.29	46.58	0.07
Rodair	53371	Max WS	128.86	7.53	14.32		14.33	0.000041	0.73	177.36	47.59	0.06
Rodair	53172	Max WS	123	7.58	14.31		14.32	0.000029	0.6	215.13	94.91	0.05
Rodair	53012	Max WS	101.81	7.55	14.31		14.32	0.00002	0.48	228.04	111.12	0.04
Rodair	52827	Max WS	76.98	7.28	14.31		14.32	0.000006	0.3	295.53	116.98	0.03
Rodair	52798		Lat Struct									
Rodair	52594	Max WS	60.5	7.42	14.31		14.32	0.000007	0.3	207.21	63.12	0.03
Rodair	52588		Lat Struct									
Rodair	52581		Lat Struct									
Rodair	52412	Max WS	462.32	7.37	14.15		14.21	0.000301	2.09	221.27	50.65	0.18
Rodair	52233	Max WS	459.39	7.09	14.08		14.16	0.000332	2.17	212.09	49.41	0.18
Rodair	52006	Max WS	456.94	6.79	14.01		14.08	0.000303	2.13	214.63	47.59	0.18
Rodair	51821	Max WS	454.52	6.64	13.94		14.02	0.000354	2.27	199.94	44.76	0.19
Rodair	51619	Max WS	452.83	6.55	13.89		13.96	0.000298	2.09	216.88	48.97	0.17
Rodair	51420	Max WS	449.86	6.4	13.81		13.89	0.000339	2.24	201.26	44.69	0.19
Rodair	51176	Max WS	448.29	6.36	13.77		13.82	0.000225	1.91	234.26	48.76	0.15
Rodair	50994		Lat Struct									
Rodair	50989		Lat Struct									
Rodair	50962	Max WS	447.13	6.32	13.72		13.78	0.000214	1.89	236.97	48.18	0.15
Rodair	50720	Max WS	444.77	6.12	13.65		13.72	0.000263	2.07	215.12	44.18	0.17
Rodair	50526	Max WS	442.29	6.25	13.59		13.66	0.000335	2.18	202.61	46.65	0.18
Rodair	50327	Max WS	441.42	5.97	13.56		13.61	0.000173	1.67	263.69	55.58	0.14
Rodair	50168		Lat Struct									
Rodair	50165		Lat Struct									
Rodair	50112	Max WS	439.03	6.32	13.47		13.55	0.000362	2.25	195.01	45.29	0.19
Rodair	49912	Max WS	438.65	5.69	13.46		13.5	0.000141	1.59	275.49	53.21	0.12
Rodair	49709	Max WS	437.15	5.83	13.4		13.46	0.000252	1.93	226.54	50.99	0.16
Rodair	49534	Max WS	434.8	5.5	13.35		13.41	0.000281	2.08	208.57	44.5	0.17
Rodair	49275	Max WS	433.91	5.46	13.33		13.36	0.000125	1.48	292.59	57.84	0.12
Rodair	49063	Max WS	433.16	5.76	13.3		13.33	0.000118	1.46	296.71	61.09	0.11
Rodair	48842	Max WS	428.44	5.53	13.26		13.3	0.00016	1.62	263.98	55.54	0.13
Rodair	48641	Max WS	427.13	5.64	13.22		13.27	0.000176	1.75	248.26	59.16	0.14
Rodair	48434	Max WS	426.63	5.72	13.19		13.24	0.00014	1.67	277.63	74.59	0.13
Rodair	48236	Max WS	426.03	5.66	13.16		13.21	0.000154	1.72	263.78	68.49	0.13
Rodair	47992	Max WS	424.98	5.73	13.11		13.17	0.000183	1.88	249.32	72.09	0.14
Rodair	47977	Max WS	422.43	5.61	13.01	8.81	13.17	0.000398	3.2	131.89	70.48	0.22
Rodair	47949 5th Ave		Bridge									
Rodair	47930	Max WS	421.73	5.65	12.99		13.06	0.000048	2.09	206.85	62.41	0.17
Rodair	47908	Max WS	422.2	5.58	13.01	8.65	13.06	0.00003	1.89	279.66	107.41	0.14

Existing 1% TP40 Results

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	47891		Inl Struct									
Rodair	47879	Max WS	421.96	5.37	13		13.03	0.000021	1.61	359.35	137.05	0.12
Rodair	47846		Lat Struct									
Rodair	47783	Max WS	364.14	4.21	13.01		13.04	0.000012	1.22	329.3	88.41	0.09
Rodair	47753		Lat Struct									
Rodair	47751		Lat Struct									
Rodair	47737	Max WS	364.14	3.85	13.01		13.04	0.000011	1.2	322.08	77.29	0.09
Rodair	47564	Max WS	689.29	3.84	12.91		12.98	0.000048	2.16	323.19	73.92	0.18
Rodair	47409	Max WS	705.39	3.69	12.89		12.97	0.00004	2.3	329.52	76.49	0.17
Rodair	47180	Max WS	730.48	3.91	12.86		12.95	0.000048	2.53	312.43	77.46	0.18
Rodair	46984	Max WS	757	3.66	12.84		12.94	0.000046	2.52	327.25	75.84	0.18
Rodair	46786	Max WS	778.17	3.34	12.84		12.93	0.000038	2.33	349.5	73.54	0.16
Rodair	46660	Max WS	791.28	3.52	12.8		12.92	0.000053	2.78	323.1	78.96	0.19
Rodair	46479	Max WS	810.61	3.58	12.79		12.91	0.00005	2.78	334.19	83.99	0.19
Rodair	46324	Max WS	827.03	3.5	12.78		12.89	0.000109	2.6	318.53	96.3	0.25
Rodair	46263	Max WS	834.15	3.59	12.82		12.88	0.00004	1.92	434.11	97.43	0.16
Rodair	46252	Max WS	835.31	3.55	12.81	7.37	12.88	0.000036	2.1	417.41	101.05	0.16
Rodair	46247 Highland Pipelin		Bridge									
Rodair	46242	Max WS	834.93	3.56	12.78		12.85	0.000036	2.11	414.15	98.66	0.16
Rodair	46225	Max WS	836.39	3.52	12.76	7.13	12.85	0.000036	2.37	394.65	96.89	0.16
Rodair	46221 Pipeline		Bridge									
Rodair	46218	Max WS	836.08	3.56	12.75		12.83	0.000037	2.33	394.27	96.53	0.16
Rodair	46214	Max WS	836.37	3.56	12.74		12.83	0.000036	2.41	393.45	96.82	0.16
Rodair	46210	Max WS	836.91	3.53	12.74	7.19	12.83	0.00004	2.39	384.79	95.87	0.17
Rodair	46206 Pipeline		Bridge									
Rodair	46203	Max WS	836.71	3.56	12.69		12.78	0.000039	2.47	383.68	92.81	0.17
Rodair	46193	Max WS	837.86	3.71	12.7		12.78	0.000052	2.18	384.76	87.66	0.18
Rodair	46138	Max WS	842.48	3.81	12.65		12.77	0.000068	2.84	303.89	68.76	0.21
Rodair	46123		Lat Struct									
Rodair	46121		Lat Struct									
Rodair	46090	Max WS	847.73	3.43	12.65		12.77	0.000056	2.76	322.04	75.27	0.2
Rodair	45937	Max WS	862.48	3.53	12.61		12.76	0.000075	3.08	302.78	79.08	0.22
Rodair	45779	Max WS	878.71	3.3	12.61		12.74	0.000064	2.94	314.77	77.05	0.21
Rodair	45773		Lat Struct									
Rodair	45650	Max WS	872.98	3.34	12.61		12.73	0.000055	2.78	337.37	81.58	0.19
Rodair	45631		Lat Struct									
Rodair	45523	Max WS	886.14	3.5	12.59		12.72	0.000065	2.9	312.73	74.29	0.21
Rodair	45412	Max WS	894.53	3.52	12.58		12.71	0.000065	2.89	319.11	81.03	0.21
Rodair	45306	Max WS	899.52	3.45	12.57		12.7	0.000065	2.93	319.38	80.76	0.21
Rodair	45279		Lat Struct									
Rodair	45136	Max WS	853.45	3.39	12.57		12.68	0.000358	2.72	338.52	77.77	0.2
Rodair	45100		Lat Struct									
Rodair	45010	Max WS	848.62	3.67	12.54		12.66	0.000068	2.81	340.92	96.92	0.21
Rodair	44902	Max WS	865.13	3.28	12.52		12.65	0.000067	2.88	338.33	89.77	0.21
Rodair	44801	Max WS	877.51	3.22	12.51		12.64	0.000067	2.84	326.09	87.61	0.21
Rodair	44674	Max WS	888.86	3.18	12.49		12.62	0.000068	2.89	318.23	67.99	0.21
Rodair	44570		Lat Struct									

Existing 1% TP40 Results

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Rodair	44550	Max WS	894.76	3.03	12.49		12.61	0.000062	2.82	339.06	90.28	0.2
Rodair	44436	Max WS	893.86	3.16	12.49		12.61	0.00006	2.79	353.31	94.63	0.2
Rodair	44308	Max WS	909.41	2.9	12.48		12.6	0.000056	2.8	370.49	93.51	0.2
Rodair	44208	Max WS	924.56	2.91	12.49		12.59	0.000042	2.54	406.42	93.1	0.17
Rodair	44175	Max WS	926.76	2.88	12.47	6.91	12.59	0.000043	2.74	338.75	106.01	0.18
Rodair	44151 Wellspring Dr		Bridge									
Rodair	44128	Max WS	926.07	2.83	12.31		12.42	0.00005	2.69	412.21	120.29	0.19
Rodair	44096	Max WS	928.52	2.82	12.32		12.42	0.000046	2.57	391.98	98.28	0.18
Rodair	44088		Lat Struct									
Rodair	44039	Max WS	932.14	2.75	12.32		12.42	0.000045	2.54	394.57	83.47	0.18
Rodair	44005		Lat Struct									
Rodair	43915	Max WS	942.82	2.78	12.31		12.41	0.000041	2.66	421.67	98.51	0.17
Rodair	43819	Max WS	969.67	2.59	12.29		12.4	0.000046	2.73	391.08	88.58	0.18
Rodair	43748	Max WS	967.71	2.56	12.35		12.38	0.00001	1.3	818.57	179.32	0.09
Rodair	43737	Max WS	968.81	2.56	12.35	5.41	12.38	0.00001	1.27	812.14	173.42	0.09
Rodair	43701 Unnamed Rd		Bridge									
Rodair	43648	Max WS	968.81	2.36	12.31		12.33	0.000008	1.1	910.38	164.82	0.08
Rodair	43634	Max WS	968.74	2.2	12.31		12.33	0.000008	1.14	901.39	162.24	0.08
Rodair	43598		Lat Struct									
Rodair	43553		Lat Struct									
Rodair	43477	Max WS	883.71	2.07	12.27		12.34	0.000025	2.11	445.35	81.9	0.14
Rodair	43458		Lat Struct									
Rodair	43367	Max WS	1626.51	1.98	11.88		12.17	0.000135	4.26	383.79	70.5	0.31
Rodair	43309		Lat Struct									
Rodair	43308		Lat Struct									
Rodair	43237	Max WS	1625.96	1.91	11.94		12.15	0.000075	3.74	476.64	94.22	0.24
Rodair	43178	Max WS	1625.95	1.94	11.99	5.85	12.14	0.000049	3.1	523.73	96.46	0.19
Rodair	43140 US59 NBFR		Bridge									
Rodair	43113	Max WS	1624.88	1.73	11.75		12	0.00008	3.99	409.52	87.14	0.25
Rodair	43111	Max WS	1625.33	1.73	11.87		11.99	0.000045	2.82	579.85	92.85	0.18
Rodair	43109	Max WS	1625.31	1.81	11.87		11.99	0.000045	2.79	590.29	111.11	0.18
Rodair	43107	Max WS	1625.29	1.81	11.87	5.54	11.99	0.000043	2.81	582.16	111.06	0.18
Rodair	43079 US59 NBML		Bridge									
Rodair	43038	Max WS	1625.05	1.81	11.8		11.94	0.000044	3.02	559.27	124.56	0.19
Rodair	43030	Max WS	1624.76	1.82	11.76	5.81	11.94	0.000054	3.38	497.11	179.16	0.21
Rodair	42987 US59 SBML		Bridge									
Rodair	42958	Max WS	1624.98	1.69	11.79		11.93	0.000042	2.95	549.94	93.15	0.18
Rodair	42954	Max WS	1624.97	1.69	11.8	5.58	11.93	0.000043	2.91	569.6	101.31	0.18
Rodair	42920 US59 SBFR		Bridge									
Rodair	42889	Max WS	1624.75	1.66	11.77		11.89	0.000041	2.79	585.56	92.31	0.18
Rodair	42862	Max WS	1624.69	1.61	11.73	5.87	11.89	0.000055	3.17	522.15	80.59	0.2
Rodair	42851		Inl Struct									
Rodair	42791	Max WS	1624.69	-0.34	11.66		11.78	0.000033	2.7	614.76	88.21	0.16
Rodair	42790		Lat Struct									
Rodair	42785		Lat Struct									
Rodair	42633	Max WS	1650.85	-0.36	11.65		11.77	0.000034	2.73	616.65	92.79	0.16
Rodair	42381	Max WS	1696.18	-0.41	11.63		11.75	0.000037	2.79	627.24	110.82	0.17

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Rodair	42172	Max WS	1731.42	-0.44	11.62		11.74	0.000035	2.83	628.41	88.96	0.17
Rodair	41952	Max WS	1770.81	-0.47	11.59		11.73	0.000039	2.92	630.29	102.91	0.17
Rodair	41818	Max WS	1792.35	-0.5	11.58		11.72	0.000044	2.98	608.88	84.19	0.18
Rodair	41798	Max WS	1795.72	-0.5	11.58	4.09	11.72	0.000043	2.98	611.87	86.87	0.18
Rodair	41793 Landrey Pipeline		Bridge									
Rodair	41788	Max WS	1795.72	-0.5	11.55		11.69	0.000042	3.02	606.76	94.6	0.18
Rodair	41782	Max WS	1796.79	-0.5	11.55		11.69	0.000043	3.01	607.17	97.05	0.18
Rodair	41777		Lat Struct									
Rodair	41768		Lat Struct									
Rodair	41707	Max WS	1810	-0.5	11.55		11.69	0.000043	3	616.62	100.51	0.18
Rodair	41558	Max WS	1846.79	-0.53	11.53		11.68	0.00004	3.04	651.28	121.55	0.18
Rodair	41539.5*	Max WS	1849.4	-0.53	11.53		11.67	0.000041	3.05	646.52	117.65	0.18
Rodair	41521*	Max WS	1852.51	-0.53	11.53		11.67	0.000041	3.06	642.27	113.77	0.18
Rodair	41502.5*	Max WS	1854.84	-0.53	11.53		11.67	0.000041	3.06	638.6	109.87	0.18
Rodair	41484	Max WS	1857.3	-0.53	11.53		11.67	0.000041	3.07	635.37	105.97	0.18
Rodair	41386.6*	Max WS	1860.73	-0.54	11.53		11.67	0.00004	3.03	643.57	106.83	0.18
Rodair	41372.2*	Max WS	1864.14	-0.54	11.53		11.67	0.000039	3	651.56	107.03	0.17
Rodair	41357.8*	Max WS	1867.55	-0.55	11.53		11.67	0.000038	2.96	660.26	105.18	0.17
Rodair	41343.4*	Max WS	1870.93	-0.56	11.53		11.67	0.000036	2.92	669.4	104.72	0.17
Rodair	41332		Lat Struct									
Rodair	41329*	Max WS	1877.79	-0.57	11.53		11.66	0.000035	2.89	668.63	88.01	0.17
Rodair	41314.6*	Max WS	1897.61	-0.57	11.53		11.66	0.000035	2.88	675.46	86.87	0.17
Rodair	41300.2*	Max WS	1952.63	-0.58	11.52		11.65	0.000036	2.92	684	87.3	0.17
Rodair	41285.8*	Max WS	1996.86	-0.59	11.51		11.65	0.000036	2.95	693.05	88.01	0.17
Rodair	41271.4*	Max WS	2094.82	-0.6	11.49		11.63	0.000039	3.05	697.35	85.09	0.18
Rodair	41257*	Max WS	2270.04	-0.6	11.44		11.61	0.000044	3.27	704.24	86.03	0.19
Rodair	41242.6*	Max WS	2414.98	-0.61	11.4		11.59	0.000049	3.44	714.95	91.2	0.2
Rodair	41228.2*	Max WS	2466.08	-0.62	11.39		11.58	0.000049	3.46	727.16	97.1	0.2
Rodair	41213.8*	Max WS	2550.78	-0.63	11.37		11.56	0.000051	3.53	736.94	102.88	0.2
Rodair	41199.4*	Max WS	2562.67	-0.63	11.37		11.56	0.000049	3.49	748.07	108.63	0.2
Rodair	41185	Max WS	2567.96	-0.64	11.37		11.56	0.000047	3.44	759.14	114.64	0.2
Rodair	41151		Lat Struct									
Rodair	41145.8*	Max WS	2570.87	-0.63	11.38		11.56	0.000083	3.42	765.47	109.47	0.2
Rodair	41134.6*	Max WS	2573.39	-0.62	11.38		11.55	0.00013	3.39	771.38	110.19	0.2
Rodair	41123.4*	Max WS	2576.31	-0.61	11.38		11.55	0.000175	3.37	776.77	111.29	0.2
Rodair	41112.2*	Max WS	2579.23	-0.6	11.37		11.55	0.000246	3.36	781.45	112.56	0.2
Rodair	41101	Max WS	2582.15	-0.59	11.37		11.54	0.000332	3.34	785.47	113.94	0.21
Rodair	41083.2*	Max WS	2585.22	-0.6	11.37		11.54	0.000315	3.27	801.19	114.56	0.2
Rodair	41065.4*	Max WS	2588.3	-0.6	11.37		11.53	0.0003	3.2	817.13	115.1	0.2
Rodair	41047.5*	Max WS	2591.38	-0.6	11.37		11.52	0.000286	3.14	833.31	115.56	0.19
Rodair	41029.7*	Max WS	2594.46	-0.61	11.37		11.52	0.000272	3.08	850.05	116.1	0.19
Rodair	41011.9*	Max WS	2597.54	-0.62	11.37		11.51	0.000259	3.02	867.15	116.39	0.18
Rodair	40994	Max WS	2600.63	-0.62	11.37		11.51	0.000246	2.96	884.32	115.82	0.18
Rodair	40836	Max WS	2627.63	-0.62	11.32		11.47	0.00026	3.03	877.35	127.56	0.18
Rodair	40694	Max WS	2652.1	-0.66	11.28		11.43	0.000255	3.05	883.91	120.89	0.18
Rodair	40540	Max WS	2678.89	-0.69	11.24		11.38	0.000267	3.07	879.89	116.77	0.19
Rodair	40249	Max WS	2713	-0.72	11.14		11.3	0.000295	3.17	861.75	122.47	0.2

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Rodair	40185		Lat Struct									
Rodair	40181	Max WS	2724.31	-0.72	11.11		11.27	0.000298	3.22	859.71	127.08	0.2
Rodair	40107	Max WS	2571.22	-0.75	11.13		11.27	0.000267	3.02	859.98	116.93	0.19
Rodair	40105		Lat Struct									
Rodair	40050	Max WS	2570.79	-0.75	11.11		11.26	0.000269	3.04	857.86	120.05	0.19
Rodair	39822	Max WS	2609.45	-0.78	11.06		11.19	0.000258	2.91	902.02	134.02	0.18
Rodair	39798		Lat Struct									
Rodair	39617	Max WS	2634.25	-0.81	11.02		11.14	0.000219	2.82	934.7	116.33	0.17
Rodair	39344	Max WS	2677.22	-0.88	10.94		11.07	0.000255	2.92	919.63	125.19	0.18
Rodair	39227	Max WS	2674.68	-0.88	10.9		11.04	0.000244	2.98	906.42	127.83	0.18
Rodair	39200		Lat Struct									
Rodair	39060	Max WS	2702.29	-0.91	10.86		11	0.000262	2.98	908.58	116.73	0.18
Rodair	38920	Max WS	2725.78	-0.91	10.82		10.96	0.000255	3.03	908.54	122.42	0.18
Rodair	38916		Lat Struct									
Rodair	38801	Max WS	2746.9	-0.94	10.78		10.93	0.000253	3.05	910.39	120.1	0.18
Rodair	38792		Lat Struct									
Rodair	38746	Max WS	2756.26	-0.94	10.77		10.91	0.000261	3.02	917	123.57	0.18
Rodair	38583	Max WS	2756.14	-0.97	10.72		10.87	0.000277	3.11	896.52	128.02	0.19
Rodair	38572	Max WS	2756.14	-0.97	10.71		10.86	0.000284	3.11	895.87	128.12	0.19
Rodair	38564		Lat Struct									
Rodair	38407	Max WS	2755.57	-1	10.71		10.82	0.000211	2.74	1015.56	132.54	0.17
Rodair	38379	Max WS	2761.52	-1	10.69		10.82	0.000222	2.85	992.69	148.01	0.17
Rodair	38356	Max WS	2766.34	-1	10.68		10.81	0.000228	2.87	978.12	136.74	0.17
Rodair	38311		Lat Struct									
Rodair	38212		Lat Struct									
Rodair	38089	Max WS	2815.92	-1.05	10.63		10.75	0.000219	2.8	1015.29	140.01	0.17
Rodair	37989		Lat Struct									
Rodair	37729	Max WS	2859.18	-1.1	10.53		10.66	0.000242	2.91	984.26	122.6	0.18
Rodair	37455	Max WS	2917.72	-1.16	10.44		10.59	0.000255	3.04	965.1	126.23	0.18
Rodair	37389	Max WS	2931.72	-1.16	10.43		10.57	0.000263	3.02	970.8	122.77	0.18
Rodair	37380		Lat Struct									
Rodair	37275	Max WS	2955.54	-1.19	10.39		10.54	0.000264	3.1	972.69	171.2	0.19
Rodair	37266		Lat Struct									
Rodair	37203	Max WS	2951.2	-1.19	10.37		10.52	0.000262	3.09	989.2	159.91	0.19
Rodair	37178		Lat Struct									
Rodair	37013	Max WS	2991.85	-1.22	10.31		10.46	0.000281	3.1	964.28	117.12	0.19
Rodair	36801	Max WS	3037.38	-1.25	10.25		10.4	0.000278	3.08	987.1	128.87	0.19
Rodair	36503	Max WS	3035.5	-1.3	10.17		10.32	0.000273	3.09	988.45	134.4	0.19
Rodair	36166	Max WS	3069.31	-1.34	10.05		10.21	0.00031	3.28	937.57	122	0.2
Rodair	36151	Max WS	3072.48	-1.34	10.04		10.21	0.000309	3.27	942.29	122.9	0.2
Rodair	36129		Lat Struct									
Rodair	35987		Lat Struct									
Rodair	35981	Max WS	3108.46	-1.38	10.01		10.18	0.000049	3.23	969.48	136.84	0.2
Rodair	35939	Max WS	3114.86	-1.38	9.85		10.19	0.0001	4.68	724.16	134.25	0.28
Rodair	35919		Lat Struct									
Rodair	35799	Max WS	3143.81	-1.41	9.84		10.16	0.000099	4.57	722.52	130.19	0.28
Rodair	35788		Lat Struct									

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Rodair	35708	Max WS	2948.95	-1.41	9.89		10.2	0.000085	4.48	738.9	127.98	0.26
Rodair	35701		Lat Struct									
Rodair	35693	Max WS	2951.38	-1.41	9.9		10.19	0.000083	4.32	748.24	130.89	0.26
Rodair	35682		Lat Struct									
Rodair	35659	Max WS	2934.36	-1.41	9.93		10.19	0.000074	4.13	784.82	141.48	0.24
Rodair	35609	Max WS	2947.97	-1.44	9.88		10.19	0.000088	4.55	738.01	132.85	0.26
Rodair	35600		Lat Struct									
Rodair	35547	Max WS	2948.13	-1.44	9.87		10.18	0.000087	4.45	759.21	145.66	0.26
Rodair	35323	Max WS	3023.24	-1.47	9.84		10.15	0.00009	4.46	796.16	162.47	0.27
Rodair	35312	Max WS	3022.14	-1.47	9.84		10.15	0.000086	4.49	798.57	163.7	0.26
Rodair	35252		Lat Struct									
Rodair	35065	Max WS	3048.66	-1.5	9.83		10.11	0.000079	4.28	824.53	160.16	0.25
Rodair	35057	Max WS	3047.64	-1.51	9.83		10.12	0.000076	4.33	828.68	157.77	0.25
Rodair	35052		Lat Struct									
Rodair	34813	Max WS	3117.77	-1.55	9.78		10.09	0.000085	4.51	802.93	147.79	0.26
Rodair	34556	Max WS	3167.32	-1.58	9.73		10.06	0.000093	4.63	816.1	154.11	0.27
Rodair	34353	Max WS	3198.32	-1.61	9.69		10.03	0.000092	4.68	797.27	145.36	0.27
Rodair	34081	Max WS	3239.48	-1.65	9.67		9.99	0.000089	4.58	795.94	127.76	0.26
Rodair	33806	Max WS	3296.91	-1.69	9.61		9.95	0.000098	4.73	780.13	120.43	0.28
Rodair	33509	Max WS	3382.01	-1.73	9.56		9.91	0.000103	4.81	785.33	124.24	0.28
Rodair	33208	Max WS	3375.29	-1.78	9.38		9.89	0.000159	5.74	640.76	126.06	0.35
Rodair	33197	Max WS	3377.65	-1.78	9.29	4.76	9.89	0.000185	6.21	574.39	121.23	0.38
Rodair	33177 Cloverdale		Bridge									
Rodair	33163	Max WS	3377.51	-1.81	9.12		9.66	0.000172	5.91	594.83	120.61	0.36
Rodair	33153	Max WS	3379.49	-1.81	9.11		9.66	0.000172	5.96	588.91	108.5	0.36
Rodair	33150		Lat Struct									
Rodair	33111		Lat Struct									
Rodair	33002	Max WS	3503.45	-1.84	9.13		9.6	0.00014	5.52	677.39	128.1	0.33
Rodair	32981	Max WS	3508.04	-1.84	9.17	4.01	9.59	0.000119	5.23	731.87	137.37	0.31
Rodair	32977 Pipeline		Bridge									
Rodair	32971	Max WS	3507.66	-1.84	9.04		9.48	0.000125	5.31	715.08	137.37	0.32
Rodair	32960	Max WS	3509.97	-1.84	9.06		9.47	0.000126	5.2	729.24	141.62	0.31
Rodair	32944	Max WS	3513.2	-1.84	9.02	3.87	9.47	0.000137	5.36	656.58	142.76	0.33
Rodair	32922 Pipelines		Bridge									
Rodair	32905	Max WS	3512.99	-1.84	8.94		9.39	0.000134	5.41	716.75	149.08	0.32
Rodair	32893	Max WS	3515.47	-1.84	8.95	4.02	9.38	0.000132	5.29	707.7	147.7	0.32
Rodair	32854 Pipeline		Bridge									
Rodair	32808	Max WS	3515.67	-2.12	9.01		9.28	0.000078	4.24	990.55	175.64	0.25
Rodair	32793	Max WS	3518.7	-2.19	8.99	3.08	9.28	0.000077	4.3	818.09	177.2	0.25
Rodair	32743 RR		Bridge									
Rodair	32717	Max WS	3518.6	-2.62	8.97		9.25	0.00007	4.18	841.1	117.68	0.24
Rodair	32711	Max WS	3518.64	-2.66	9		9.24	0.000074	3.9	929.09	150.71	0.24
Rodair	32705	Max WS	3518.62	-2.69	9.01		9.24	0.000077	3.83	945.41	159.46	0.24
Rodair	32698	Max WS	3518.4	-2.73	8.96	2.76	9.24	0.000071	4.19	839.09	147.9	0.24
Rodair	32655 W Port Arthur Rd		Bridge									
Rodair	32590	Max WS	3518.4	-3.4	8.95		9.21	0.000379	4.05	869.57	208.04	0.23
Rodair	32508	Max WS	3518.15	-4.78	9.01		9.18	0.000236	3.34	1128.96	145.01	0.18

Existing 1% TP40 Results

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	32462	Max WS	3517.71	-3.97	9.01		9.17	0.000237	3.24	1138.54	153.17	0.18
Rodair	32455		Lat Struct									
Rodair	32407		Lat Struct									
Rodair	32287	Max WS	3490.62	-4.07	8.94		9.13	0.000297	3.6	1069.73	165.58	0.2
Rodair	32108	Max WS	3491.88	-4.28	8.9		9.08	0.000278	3.42	1089.62	153.72	0.19
Rodair	31859	Max WS	3388.84	-4.38	8.81		9.02	0.000339	3.74	976.11	137.86	0.21
Rodair	31543	Max WS	3495.13	-4.5	8.72		8.92	0.000273	3.61	1025.74	127.28	0.19
Rodair	31340	Max WS	3674.52	-4.69	8.64		8.83	0.000284	3.49	1117.03	152.09	0.2
Rodair	30965	Max WS	3822.1	-5.03	8.5		8.72	0.000305	3.85	1105.15	160.02	0.21
Rodair	30592	Max WS	3855.9	-4.75	8.32		8.57	0.000398	3.96	1006.39	155.4	0.23
Rodair	30202	Max WS	3899.58	-4.74	8.19		8.42	0.000326	3.95	1137.41	193.67	0.21
Rodair	30185	Max WS	3891.96	-4.93	8.17		8.42	0.000354	4.01	1059.39	179.74	0.22
Rodair	30137		Lat Struct									
Rodair	30122	Max WS	3899.83	-5.27	8.01		8.41	0.000602	5.25	892.59	159.06	0.28
Rodair	29854	Max WS	3944.85	-5.06	8.02		8.25	0.000318	3.93	1081.06	141.19	0.21
Rodair	29748	Max WS	3947.96	-5.04	7.97		8.22	0.000349	4.07	1058.27	156.75	0.22
Rodair	29738		Lat Struct									
Rodair	29712		Lat Struct									
Rodair	29570	Max WS	3973.09	-4.88	7.92		8.15	0.000329	3.91	1062.42	129.27	0.21
Rodair	29541		Lat Struct									
Rodair	29503		Lat Struct									
Rodair	29261	Max WS	3992	-5.22	7.77		8.05	0.000382	4.3	1018.4	122.99	0.23
Rodair	28913	Max WS	4081.14	-5.72	7.67		7.9	0.000365	3.89	1162.91	183.67	0.22
Rodair	28589	Max WS	4072.97	-6.24	7.55		7.79	0.000329	3.92	1103.93	140.05	0.21
Rodair	28418		Lat Struct									
Rodair	28327	Max WS	4094.95	-5.72	7.44		7.69	0.000415	4.07	1064.18	148.95	0.24
Rodair	28188	Max WS	4100.37	-5.45	7.38		7.63	0.000381	4.09	1093.19	164.64	0.23
Rodair	28181		Lat Struct									
Rodair	28086	Max WS	4029.78	-5.75	7.38		7.6	0.000324	3.82	1142.38	172.19	0.21
Rodair	28069		Lat Struct									
Rodair	27985	Max WS	4046.18	-6.03	7.36		7.57	0.000294	3.7	1177.44	174.53	0.2
Rodair	27941		Lat Struct									
Rodair	27699	Max WS	3930.3	-6.34	7.31		7.5	0.000267	3.57	1205.52	170.47	0.19
Rodair	27384	Max WS	3951.09	-5.88	7.21		7.41	0.000295	3.66	1183.55	171.92	0.2
Rodair	27302	Max WS	3980.13	-6.01	7.06		7.4	0.000535	4.91	1032.79	195.6	0.27
Rodair	27231	Max WS	3941.68	-7.2	7.15		7.35	0.000286	3.6	1186.17	179.66	0.2
Rodair	27219		Lat Struct									
Rodair	27114	Max WS	3954.11	-7.28	7.1		7.31	0.000302	3.76	1162.88	173.75	0.2
Rodair	26795	Max WS	3976.44	-7.42	7		7.21	0.0003	3.71	1178.26	172.69	0.2
Rodair	26484	Max WS	3989.57	-6.94	6.87		7.11	0.000337	4.04	1139.23	174.81	0.22
Rodair	26225	Max WS	3995.34	-6.86	6.83		7.02	0.000283	3.63	1204.28	177.35	0.2
Rodair	25912	Max WS	3992.47	-6.68	6.71		6.93	0.000309	3.89	1140.96	170.52	0.21
Rodair	25874		Lat Struct									
Rodair	25817		Lat Struct									
Rodair	25810	Max WS	4016.74	-6.98	6.66		6.9	0.000354	4.03	1118.14	170.92	0.22
Rodair	25782	Max WS	4037.8	-6.42	6.68		6.89	0.00033	3.83	1205.75	170.41	0.21
Rodair	25748		Lat Struct									

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Rodair	25643	Max WS	4123.63	-6.41	6.62		6.83	0.000293	3.7	1222.59	170.1	0.2
Rodair	25556	Max WS	4187.6	-6.53	6.55		6.8	0.000353	4.12	1162.87	185.39	0.22
Rodair	25445	Max WS	4187.89	-6.34	6.55		6.75	0.000382	3.59	1167.49	144.47	0.22
Rodair	25327	Max WS	4186.73	-7.24	6.54		6.71	0.000259	3.36	1246.69	125.94	0.19
Rodair	25283		Lat Struct									
Rodair	25182		Lat Struct									
Rodair	25095	Max WS	3964.96	-6.55	6.45		6.67	0.000294	3.79	1130.32	149.54	0.2
Rodair	24696	Max WS	3682.86	-6.78	6.39		6.58	0.000276	3.58	1115.24	164.78	0.2
Rodair	24402	Max WS	3667.5	-6.63	6.36		6.51	0.000206	3.18	1307.49	178.67	0.17
Rodair	24079	Max WS	3520.54	-7.6	6.26		6.45	0.000281	3.51	1106.5	168.33	0.2
Rodair	23870	Max WS	3421.63	-7.34	6.25		6.4	0.000223	3.12	1170.65	166.09	0.17
Rodair	23810	Max WS	3407.94	-7.34	6.25		6.39	0.000187	2.95	1240.22	201.07	0.16
Rodair	23799		Lat Struct									
Rodair	23722	Max WS	3310.66	-6.47	6.24		6.38	0.000206	3.04	1203.39	201.12	0.17
Rodair	23718		Lat Struct									
Rodair	23678	Max WS	3310.98	-6.6	6.21		6.37	0.000236	3.2	1104.45	164.58	0.18
Rodair	23504	Max WS	3280.9	-7.12	6.16		6.33	0.000237	3.44	1086.71	153.6	0.18
Rodair	23285	Max WS	3121.96	-7.54	6.16		6.29	0.00021	2.96	1094.04	154.03	0.17
Rodair	22996	Max WS	3128.19	-7.19	6.11		6.24	0.000169	2.95	1192.73	167.85	0.16
Rodair	22659	Max WS	3043.67	-7.28	6.08		6.19	0.00015	2.62	1276.29	188.38	0.14
Rodair	22560	Max WS	2943.83	-6.56	6.1		6.18	0.000111	2.21	1406.47	168.44	0.12
Rodair	22449	Max WS	2945.53	-7.12	6.07		6.17	0.000128	2.56	1315.05	179.69	0.14
Rodair	22431		Lat Struct									
Rodair	22355	Max WS	2942.71	-7.14	6.04		6.15	0.000179	2.7	1101.82	137.11	0.15
Rodair	22014	Max WS	2923.03	-7.38	6		6.1	0.000134	2.62	1291.99	188.63	0.14
Rodair	21661	Max WS	3049.79	-6.97	5.92		6.04	0.000173	2.8	1225.1	183.33	0.16
Rodair	21449	Max WS	3084.17	-8	5.89		6	0.000154	2.84	1313.49	192.65	0.15
Rodair	21181	Max WS	3493.11	-7.92	5.81		5.93	0.000162	2.87	1414.76	190.12	0.15
Rodair	20966	Max WS	3607.05	-8.1	5.77		5.9	0.000175	2.98	1438.74	226.53	0.16
Rodair	20745	Max WS	3534.86	-7.43	5.74		5.87	0.00017	2.94	1437.09	213.11	0.16
Rodair	20503	Max WS	3302.13	-6.94	5.73		5.84	0.000154	2.7	1382.59	199.28	0.15
Rodair	20152	Max WS	3190.02	-7.3	5.68		5.79	0.000151	2.75	1332.21	178.58	0.15
Rodair	19887	Max WS	2975.9	-7.38	5.68		5.77	0.000126	2.45	1337.44	171.95	0.13
Rodair	19599	Max WS	2948.52	-6.53	5.63		5.72	0.000135	2.48	1359.41	184.71	0.14
Rodair	19205	Max WS	2523.57	-6.9	5.66		5.71	0.000083	1.91	1510.07	202.71	0.11
Rodair	18888	Max WS	2479.05	-6.91	5.65		5.71	0.000086	2.04	1423.49	193.78	0.11
Rodair	18535	Max WS	2262.48	-6.67	5.64		5.68	0.000065	1.73	1451.1	196.43	0.1
Rodair	18189	Max WS	2252.96	-6.77	5.61		5.66	0.000069	1.79	1425.19	202.47	0.1
Rodair	17910	Max WS	2120.87	-7.03	5.6		5.64	0.000049	1.53	1592.34	204.71	0.08
Rodair	17641	Max WS	2090.51	-7.06	5.57		5.61	0.00005	1.51	1539.35	194.11	0.08
Rodair	17596	Max WS	2064.07	-7.28	5.56		5.6	0.000048	1.48	1535.17	190.83	0.08
Rodair	17448	Max WS	1934.9	-7.47	5.55		5.58	0.000051	1.56	1386.18	174.86	0.09
Rodair	17439		Lat Struct									
Rodair	17320	Max WS	1850.36	-7.78	5.55		5.58	0.000048	1.51	1352.34	172.99	0.08
Rodair	17064	Max WS	1749.94	-7.74	5.55		5.57	0.000043	1.41	1359.21	169.02	0.08
Rodair	16757	Max WS	1608.88	-6.91	5.54		5.56	0.000036	1.27	1338.78	164.15	0.07
Rodair	16437	Max WS	1500.59	-6.76	5.53		5.56	0.000033	1.2	1322.42	159.13	0.07

Existing 1% TP40 Results

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Rodair	16143	Max WS	1373.28	-6.33	5.53		5.55	0.000028	1.13	1311.75	154.28	0.06
Rodair	16033	Max WS	1323.84	-6.33	5.53		5.55	0.000026	1.06	1347.03	171.79	0.06
Rodair	15984	Max WS	1324.66	-7.22	5.53	-4.13	5.55	0.000022	0.88	1496.98	175.78	0.05
Rodair	15974 Pipeline		Bridge									
Rodair	15964	Max WS	1323.67	-8.15	5.53		5.54	0.00002	0.84	1578.52	182.32	0.05
Rodair	15909	Max WS	1321.54	-7.84	5.52		5.54	0.000024	0.95	1387.79	154.13	0.06
Rodair	15903		Lat Struct									
Rodair	15899		Lat Struct									
Rodair	15831	Max WS	1305.89	-7.71	5.52		5.54	0.000022	1.04	1334.66	149	0.06
Rodair	15538	Max WS	1284.85	-7.5	5.52		5.53	0.000022	1.04	1324.73	153.73	0.06
Rodair	15259	Max WS	1258.84	-7.62	5.51		5.53	0.000023	1.03	1350.74	166.52	0.06
Rodair	14965	Max WS	1190.57	-7.57	5.51		5.52	0.000018	0.93	1434.88	185.66	0.05
Rodair	14808	Max WS	1007.77	-7.44	5.51		5.52	0.000013	0.78	1510.11	207.11	0.04
Rodair	14763	Max WS	999.86	-6.46	5.51	-4.12	5.52	0.000015	0.82	1459.58	213.78	0.05
Rodair	14740 FM 365		Bridge									
Rodair	14714	Max WS	983.62	-5.29	5.48		5.49	0.000019	0.86	1376.35	219.16	0.05
Rodair	14656	Max WS	974.48	-8.6	5.48		5.49	0.000009	0.69	1700.99	239.58	0.04
Rodair	14654		Lat Struct									
Rodair	14553		Lat Struct									
Rodair	14414	Max WS	978.39	-9.21	5.48		5.49	0.000006	0.6	2035.28	277.07	0.03
Rodair	14280	Max WS	828.39	-7.54	5.48		5.49	0.000005	0.47	2152.7	307.68	0.03
Rodair	14274		Lat Struct									
Rodair	14165	Max WS	1789.53	-7.76	5.46		5.48	0.000022	1.05	2193.87	322.49	0.06
Rodair	14151		Lat Struct									
Rodair	14094	Max WS	1791.5	-8.41	5.46		5.48	0.000022	1.07	2227.06	317.64	0.06
Rodair	13857	Max WS	1865.99	-8.16	5.45		5.47	0.000027	1.12	2102.12	312.81	0.06
Rodair	13555	Max WS	1891.7	-7.34	5.44		5.46	0.00003	1.17	1980.66	284.49	0.07
Rodair	13297	Max WS	1943.84	-6.25	5.43		5.45	0.000031	1.16	1906.9	253.55	0.07
Rodair	13028	Max WS	2044.56	-5.91	5.41		5.44	0.000038	1.26	1785.12	229.87	0.07
Rodair	12743	Max WS	2314.81	-6.08	5.39		5.42	0.000049	1.44	1759.66	225.47	0.08
Rodair	12439	Max WS	2470.67	-6.28	5.37		5.41	0.000061	1.65	1702.74	231.43	0.09
Rodair	12124	Max WS	2606.52	-6.72	5.34		5.38	0.000066	1.76	1708.79	229.67	0.1
Rodair	11769	Max WS	2912.68	-7.61	5.3		5.36	0.000081	2	1648.02	206.86	0.11
Rodair	11431	Max WS	2647.03	-7.97	5.29		5.34	0.000068	1.81	1798.98	250.59	0.1
Rodair	11225	Max WS	2689.68	-7.76	5.27		5.32	0.000079	1.89	1670.82	237.42	0.11
Rodair	10798	Max WS	2481.51	-7.47	5.25		5.29	0.000067	1.72	1686.07	243.08	0.1
Rodair	10451	Max WS	2453.64	-6.51	5.23		5.26	0.00006	1.59	1846.83	283.06	0.09
Rodair	10114	Max WS	2422.68	-7.24	5.21		5.24	0.000054	1.52	1937.94	305.54	0.09
Rodair	9896	Max WS	2400.33	-6.12	5.2		5.23	0.000053	1.47	1962.75	326.86	0.09
Rodair	9855	Max WS	2362.7	-6.09	5.2		5.23	0.000051	1.42	2027.51	357.88	0.08
Rodair	9765		Lat Struct									
Rodair	9684		Lat Struct									
Rodair	9653	Max WS	2281.97	-6.13	5.19		5.22	0.000057	1.55	1854.13	321.16	0.09
Rodair	9334	Max WS	2257.02	-6.25	5.18		5.21	0.00004	1.27	2005.48	299.6	0.07
Rodair	8819	Max WS	2075.9	-4.56	5.17		5.18	0.000037	1.13	2150.76	358.49	0.07
Rodair	8479	Max WS	2041.69	-4.63	5.15		5.17	0.000037	1.16	2210.11	400.13	0.07
Rodair	7988	Max WS	1941.88	-4.19	5.14		5.16	0.000032	1	2174.66	388.46	0.06

Existing 1% TP40 Results

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Rodair	7700	Max WS	1906.25	-2.88	5.14		5.15	0.000026	0.86	2654.51	482.43	0.06
Rodair	7312	Max WS	1844.22	-2.76	5.12		5.13	0.00005	1.19	2202.51	459.76	0.08
Rodair	7020	Max WS	1959.22	-3.12	5.11		5.12	0.000027	0.88	3042.31	549.28	0.06
Rodair	6774	Max WS	2062.52	-1.88	5.11		5.12	0.00002	0.74	3456	624.6	0.05
Rodair	6512	Max WS	2253.24	-1.78	5.11		5.11	0.000016	0.65	4234.47	756.08	0.04
Rodair	6261	Max WS	2396.49	-1.75	5.1		5.11	0.000012	0.58	4971.34	855.17	0.04
Rodair	5983	Max WS	2562.7	-1.75	5.1		5.1	0.00001	0.53	5980.85	1066.78	0.04
Rodair	5696	Max WS	2669.22	-1.72	5.09		5.1	0.000008	0.46	6598.7	1094.46	0.03
Rodair	5387	Max WS	2624.86	-1.72	5.09		5.1	0.000008	0.47	6064.49	977.28	0.03
Rodair	5141	Max WS	2645	-1.84	5.09		5.09	0.000009	0.5	5524.68	883.87	0.03
Rodair	4826	Max WS	2694.81	-2.09	5.09		5.09	0.000013	0.6	4794.63	739.88	0.04
Rodair	4416	Max WS	2994.93	-2.38	5.08		5.08	0.000017	0.72	5291.24	949.8	0.05
Rodair	4140	Max WS	3111.49	-2.66	5.07		5.08	0.000015	0.68	5909.58	988.79	0.04
Rodair	3899	Max WS	3358.5	-2.78	5.07		5.07	0.000016	0.71	6089.31	1034.86	0.05
Rodair	3535	Max WS	3691.56	-3.25	5.06		5.06	0.000015	0.71	6825.47	1114.84	0.05
Rodair	3189	Max WS	4045.23	-3.56	5.06		5.06	0.000016	0.73	7838.08	1387.14	0.05
Rodair	2825	Max WS	4468.51	-4.79	5.05		5.05	0.00002	0.86	8081.74	1489.43	0.05
Rodair	2434	Max WS	4617.55	-5.87	5.04		5.04	0.000024	0.96	7494.94	1419.64	0.06
Rodair	2044	Max WS	4765.35	-5.5	5.02		5.04	0.000031	1.08	6004.77	1099.73	0.07
Rodair	1695	Max WS	5028.14	-4.61	5.01		5.02	0.000031	1.07	6236.43	1056.19	0.07
Rodair	1436	Max WS	4819.49	-4.3	5	-1.8	5.01	0.000019	0.82	7336.9	1079.76	0.05

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Rodair	54352	Max WS	313.73	8.08	14.72		14.79	0.000356	2.07	162.31	80.29	0.19
Rodair	54311	Max WS	313.73	8.5	14.73		14.78	0.000249	1.77	185.15	75.44	0.16
Rodair	54290		Lat Struct									
Rodair	54289		Lat Struct									
Rodair	54174	Max WS	290.33	7.79	14.71		14.75	0.000188	1.57	192.71	75.77	0.14
Rodair	54014	Max WS	241.84	7.96	14.7		14.74	0.000168	1.51	165.98	52.24	0.13
Rodair	53844	Max WS	196.35	7.86	14.71		14.72	0.000076	1.02	201.32	80.36	0.09
Rodair	53685	Max WS	162.37	8.12	14.71		14.72	0.000055	0.86	200.28	82.3	0.07
Rodair	53512	Max WS	111.28	7.69	14.71		14.72	0.000024	0.56	201.12	80.26	0.05
Rodair	53371	Max WS	97.58	7.53	14.71		14.71	0.000017	0.5	199.1	62.79	0.04
Rodair	53172	Max WS	70.24	7.58	14.71		14.71	0.000007	0.31	253.84	104.72	0.03
Rodair	53012	Max WS	21.61	7.55	14.71		14.71	0.000001	0.09	274.38	117.84	0.01
Rodair	52827	Max WS	-43.5	7.28	14.71		14.71	0.000001	-0.15	347.21	134.14	0.01
Rodair	52798		Lat Struct									
Rodair	52594	Max WS	-75.38	7.42	14.71		14.71	0.000008	-0.34	233.51	69.39	0.03
Rodair	52588		Lat Struct									
Rodair	52581		Lat Struct									
Rodair	52412	Max WS	451.38	7.37	14.58		14.64	0.000226	1.85	244.22	54.11	0.15
Rodair	52233	Max WS	449.88	7.09	14.54		14.6	0.000239	1.91	235.39	53.19	0.16
Rodair	52006	Max WS	448.21	6.79	14.49		14.54	0.000223	1.88	237.86	50.24	0.15
Rodair	51821	Max WS	446.49	6.64	14.44		14.5	0.000263	2	222.82	48.33	0.16
Rodair	51619	Max WS	445.16	6.55	14.4		14.45	0.000217	1.83	242.65	52.42	0.15
Rodair	51420	Max WS	443.4	6.4	14.34		14.4	0.000244	1.97	225.64	47.6	0.16
Rodair	51176	Max WS	442.24	6.36	14.31		14.35	0.000161	1.69	261.25	50.53	0.13
Rodair	50994		Lat Struct									
Rodair	50989		Lat Struct									
Rodair	50962	Max WS	441.45	6.32	14.28		14.32	0.000155	1.67	264.46	50.75	0.13
Rodair	50720	Max WS	439.64	6.12	14.23		14.28	0.00019	1.82	241.26	46.66	0.14
Rodair	50526	Max WS	438.03	6.25	14.18		14.24	0.000227	1.89	231.16	49.01	0.15
Rodair	50327	Max WS	437.62	5.97	14.17		14.2	0.00012	1.47	298.05	58	0.11
Rodair	50168		Lat Struct									
Rodair	50165		Lat Struct									
Rodair	50112	Max WS	435.15	6.32	14.11		14.16	0.000244	1.94	224.76	48.62	0.16
Rodair	49912	Max WS	434.94	5.69	14.1		14.13	0.0001	1.4	310.28	55.73	0.1
Rodair	49709	Max WS	433.27	5.83	14.06		14.1	0.000168	1.66	261.16	54.2	0.13
Rodair	49534	Max WS	431.58	5.5	14.02		14.07	0.00019	1.8	239.57	47.38	0.14
Rodair	49275	Max WS	431.15	5.46	14.01		14.03	0.000086	1.29	333.23	61.03	0.1
Rodair	49063	Max WS	430.07	5.76	13.99		14.02	0.000076	1.28	340.51	65.49	0.09
Rodair	48842	Max WS	428.99	5.53	13.97		14	0.000102	1.42	304.93	60.86	0.11
Rodair	48641	Max WS	427.49	5.64	13.94		13.98	0.000111	1.52	294.36	68.8	0.11
Rodair	48434	Max WS	426.39	5.72	13.93		13.96	0.000088	1.44	336.09	85.72	0.1
Rodair	48236	Max WS	425.3	5.66	13.91		13.94	0.000096	1.48	318.73	79.15	0.11
Rodair	47992	Max WS	411.53	5.73	13.88		13.92	0.000103	1.55	310.4	84.38	0.11
Rodair	47977	Max WS	406.69	5.61	13.81	8.75	13.92	0.000453	2.74	149.26	82.33	0.22
Rodair	47949 5th Ave		Bridge									
Rodair	47930	Max WS	401.32	5.65	13.74		13.78	0.000026	1.68	274.87	98.08	0.13
Rodair	47908	Max WS	401.77	5.58	13.75	8.58	13.78	0.000017	1.54	366.51	125.77	0.11

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Rodair	47891		Inl Struct									
Rodair	47879	Max WS	401.54	5.37	13.74		13.76	0.000012	1.31	466.82	151.86	0.09
Rodair	47846		Lat Struct									
Rodair	47783	Max WS	285.1	4.21	13.76		13.77	0.000005	0.84	399.1	99.12	0.06
Rodair	47753		Lat Struct									
Rodair	47751		Lat Struct									
Rodair	47737	Max WS	285.1	3.85	13.76		13.77	0.000004	0.83	382.23	84.13	0.06
Rodair	47564	Max WS	764	3.84	13.64		13.71	0.000039	2.06	379.82	80.46	0.16
Rodair	47409	Max WS	773.17	3.69	13.62		13.69	0.000033	2.23	387.5	81.77	0.15
Rodair	47180	Max WS	797.22	3.91	13.59		13.68	0.000038	2.44	371.84	84.06	0.16
Rodair	46984	Max WS	832.61	3.66	13.58		13.67	0.000038	2.46	385.88	83.13	0.16
Rodair	46786	Max WS	863.32	3.34	13.58		13.66	0.000032	2.31	406.33	80.63	0.15
Rodair	46660	Max WS	879.92	3.52	13.54		13.65	0.000045	2.75	384.22	86.02	0.18
Rodair	46479	Max WS	911.88	3.58	13.52		13.64	0.000044	2.78	406.58	105.51	0.18
Rodair	46324	Max WS	958.47	3.5	13.53		13.62	0.000087	2.41	398.5	114.12	0.23
Rodair	46263	Max WS	970.66	3.59	13.56		13.61	0.000044	1.87	519.64	131.2	0.17
Rodair	46252	Max WS	971.2	3.55	13.54	7.65	13.61	0.000032	2.14	507.76	150.32	0.15
Rodair	46247 Highland Pipelin		Bridge									
Rodair	46242	Max WS	970.63	3.56	13.52		13.59	0.000032	2.16	500.88	138.34	0.15
Rodair	46225	Max WS	971.64	3.52	13.5	7.44	13.59	0.000034	2.45	476.24	129.09	0.16
Rodair	46221 Pipeline		Bridge									
Rodair	46218	Max WS	971.07	3.56	13.49		13.57	0.000034	2.41	474.18	123.24	0.16
Rodair	46214	Max WS	971.66	3.56	13.48		13.58	0.000034	2.5	472.1	119.45	0.16
Rodair	46210	Max WS	972.3	3.53	13.48	7.5	13.58	0.000036	2.47	462.19	115.53	0.16
Rodair	46206 Pipeline		Bridge									
Rodair	46203	Max WS	969.18	3.56	13.44		13.54	0.000036	2.55	458.36	108.22	0.16
Rodair	46193	Max WS	971.55	3.71	13.46		13.53	0.000049	2.13	457.05	103.35	0.18
Rodair	46138	Max WS	975.47	3.81	13.4		13.53	0.000059	2.88	363.03	90.34	0.2
Rodair	46123		Lat Struct									
Rodair	46121		Lat Struct									
Rodair	46090	Max WS	983.87	3.43	13.4		13.52	0.000051	2.84	385.03	89.19	0.19
Rodair	45937	Max WS	999.23	3.53	13.36		13.51	0.000066	3.13	366.34	89	0.21
Rodair	45779	Max WS	995.17	3.3	13.37		13.5	0.000055	2.94	379.98	93.77	0.2
Rodair	45773		Lat Struct									
Rodair	45650	Max WS	992.74	3.34	13.38		13.5	0.000048	2.8	404.06	95.1	0.19
Rodair	45631		Lat Struct									
Rodair	45523	Max WS	998.12	3.5	13.36		13.49	0.000054	2.88	377.79	88.84	0.2
Rodair	45412	Max WS	967.62	3.52	13.37		13.49	0.00005	2.74	387.48	89.33	0.19
Rodair	45306	Max WS	930.58	3.45	13.38		13.49	0.000045	2.65	390.72	91.42	0.18
Rodair	45279		Lat Struct									
Rodair	45136	Max WS	874.01	3.39	13.39		13.48	0.00023	2.39	405	86.37	0.16
Rodair	45100		Lat Struct									
Rodair	45010	Max WS	866.79	3.67	13.37		13.46	0.000044	2.44	424.29	105.07	0.17
Rodair	44902	Max WS	879.37	3.28	13.36		13.46	0.000044	2.51	416.35	98.22	0.18
Rodair	44801	Max WS	897.09	3.22	13.36		13.45	0.000043	2.49	405.16	106.99	0.17
Rodair	44674	Max WS	920.96	3.18	13.34		13.44	0.000048	2.58	384.27	93.69	0.18
Rodair	44570		Lat Struct									

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Rodair	44550	Max WS	935.47	3.03	13.33		13.43	0.000045	2.54	417.2	96.07	0.18
Rodair	44436	Max WS	950.04	3.16	13.32		13.42	0.000042	2.57	435.33	103.13	0.17
Rodair	44308	Max WS	994.69	2.9	13.3		13.41	0.000043	2.67	449.51	98.26	0.18
Rodair	44208	Max WS	1034.65	2.91	13.3		13.4	0.000035	2.5	484.94	101.59	0.16
Rodair	44175	Max WS	1038.94	2.88	13.28	7.17	13.4	0.000043	2.71	425.02	118.26	0.18
Rodair	44151 Wellspring Dr		Bridge									
Rodair	44128	Max WS	1035.21	2.83	13.14		13.24	0.00004	2.62	511.39	120.29	0.17
Rodair	44096	Max WS	1040.18	2.82	13.14		13.23	0.000038	2.52	474.82	104.04	0.17
Rodair	44088		Lat Struct									
Rodair	44039	Max WS	1048.5	2.75	13.13		13.23	0.000038	2.51	469.7	100.8	0.16
Rodair	44005		Lat Struct									
Rodair	43915	Max WS	1047.54	2.78	13.13		13.23	0.000035	2.61	502.83	98.51	0.16
Rodair	43819	Max WS	1021.5	2.59	13.14		13.24	0.000034	2.53	467.49	89.73	0.16
Rodair	43748	Max WS	1058.07	2.56	13.19		13.21	0.000008	1.25	976.57	192.9	0.08
Rodair	43737	Max WS	1058.29	2.56	13.19	5.54	13.21	0.000008	1.23	943.15	192.9	0.08
Rodair	43701 Unnamed Rd		Bridge									
Rodair	43648	Max WS	1057.41	2.36	13.15		13.17	0.000006	1.06	1051.89	175.18	0.07
Rodair	43634	Max WS	1056.08	2.2	13.15		13.17	0.000007	1.1	1041.22	171.25	0.07
Rodair	43598		Lat Struct									
Rodair	43553		Lat Struct									
Rodair	43477	Max WS	613.27	2.07	13.16		13.19	0.000008	1.3	521.04	89.31	0.08
Rodair	43458		Lat Struct									
Rodair	43367	Max WS	1662.61	1.98	12.76		12.98	0.000095	3.79	450.26	83.49	0.26
Rodair	43309		Lat Struct									
Rodair	43308		Lat Struct									
Rodair	43237	Max WS	1779.2	1.91	12.78		12.98	0.000063	3.66	580	139.48	0.22
Rodair	43178	Max WS	1749.31	1.94	12.84	6	12.98	0.000041	3.02	579.49	140.79	0.18
Rodair	43140 US59 NBFR		Bridge									
Rodair	43113	Max WS	1646.76	1.73	12.64		12.84	0.000057	3.63	467.26	123.81	0.21
Rodair	43111	Max WS	1661.29	1.73	12.74		12.84	0.000033	2.57	673.49	124.44	0.16
Rodair	43109	Max WS	1665.28	1.81	12.74		12.84	0.000032	2.55	699.86	144.3	0.16
Rodair	43107	Max WS	1661.18	1.81	12.73	5.58	12.84	0.000031	2.57	651.25	144.2	0.16
Rodair	43079 US59 NBML		Bridge									
Rodair	43038	Max WS	1652.87	1.81	12.67		12.78	0.000032	2.77	627.95	173.46	0.16
Rodair	43030	Max WS	1646.34	1.82	12.64	5.84	12.78	0.000039	3.09	554.63	179.16	0.18
Rodair	42987 US59 SBML		Bridge									
Rodair	42958	Max WS	1648.47	1.69	12.65		12.76	0.000031	2.72	606.25	130.99	0.16
Rodair	42954	Max WS	1648.38	1.69	12.65	5.61	12.76	0.000031	2.66	638.44	131.54	0.16
Rodair	42920 US59 SBFR		Bridge									
Rodair	42889	Max WS	1640.26	1.66	12.6		12.7	0.00003	2.54	652.98	109.76	0.15
Rodair	42862	Max WS	1635.75	1.61	12.57	5.87	12.7	0.000039	2.86	594.34	92.7	0.17
Rodair	42851		Inl Struct									
Rodair	42791	Max WS	1627.84	-0.34	12.53		12.62	0.000024	2.45	709.14	122.48	0.14
Rodair	42790		Lat Struct									
Rodair	42785		Lat Struct									
Rodair	42633	Max WS	1663.26	-0.36	12.52		12.61	0.000025	2.5	715.8	130.29	0.14
Rodair	42381	Max WS	1720.76	-0.41	12.5		12.6	0.000028	2.56	726.1	117.64	0.15

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Rodair	42172	Max WS	1770.61	-0.44	12.48		12.59	0.000027	2.64	719.2	120.31	0.15
Rodair	41952	Max WS	1855.51	-0.47	12.45		12.57	0.000032	2.77	727.02	116.79	0.16
Rodair	41818	Max WS	1880.25	-0.5	12.45		12.57	0.000035	2.82	691.21	104.85	0.16
Rodair	41798	Max WS	1882.55	-0.5	12.45	4.22	12.57	0.000034	2.82	700.27	111.57	0.16
Rodair	41793 Landrey Pipeline		Bridge									
Rodair	41788	Max WS	1882.63	-0.5	12.42		12.55	0.000034	2.88	698.5	116.23	0.16
Rodair	41782	Max WS	1883.3	-0.5	12.42		12.55	0.000034	2.85	700.23	117.37	0.16
Rodair	41777		Lat Struct									
Rodair	41768		Lat Struct									
Rodair	41707	Max WS	1894.85	-0.5	12.42		12.55	0.000034	2.84	708.81	110.14	0.16
Rodair	41558	Max WS	1967.58	-0.53	12.41		12.54	0.000033	2.93	757.5	121.55	0.16
Rodair	41539.5*	Max WS	1979.41	-0.53	12.4		12.54	0.000034	2.96	748.96	117.65	0.16
Rodair	41521*	Max WS	1994.4	-0.53	12.4		12.53	0.000034	2.99	740.89	113.77	0.17
Rodair	41502.5*	Max WS	2006.1	-0.53	12.39		12.53	0.000035	3.01	733.43	109.87	0.17
Rodair	41484	Max WS	2013.88	-0.53	12.39		12.53	0.000035	3.02	726.55	105.97	0.17
Rodair	41386.6*	Max WS	2021.17	-0.54	12.39		12.52	0.000035	2.99	737.68	109.75	0.17
Rodair	41372.2*	Max WS	2027.43	-0.54	12.39		12.52	0.000034	2.96	748.38	113.52	0.16
Rodair	41357.8*	Max WS	2034.94	-0.55	12.39		12.52	0.000033	2.93	759.1	117.3	0.16
Rodair	41343.4*	Max WS	2041.85	-0.56	12.39		12.52	0.000032	2.9	769.55	121.08	0.16
Rodair	41332		Lat Struct									
Rodair	41329*	Max WS	2049.45	-0.57	12.38		12.51	0.000031	2.88	749.4	97.1	0.16
Rodair	41314.6*	Max WS	2058.92	-0.57	12.38		12.51	0.00003	2.86	755.36	96.61	0.16
Rodair	41300.2*	Max WS	2073.4	-0.58	12.38		12.51	0.00003	2.83	765.23	97.91	0.16
Rodair	41285.8*	Max WS	2091.07	-0.59	12.38		12.51	0.000029	2.82	775.34	99.29	0.16
Rodair	41271.4*	Max WS	2148.56	-0.6	12.37		12.5	0.00003	2.86	777.97	97.09	0.16
Rodair	41257*	Max WS	2287.75	-0.6	12.34		12.48	0.000033	3.01	786.61	98.81	0.17
Rodair	41242.6*	Max WS	2437.11	-0.61	12.31		12.46	0.000036	3.16	801.83	104.65	0.17
Rodair	41228.2*	Max WS	2537	-0.62	12.29		12.45	0.000038	3.24	817.57	107.72	0.18
Rodair	41213.8*	Max WS	2659.62	-0.63	12.26		12.44	0.000041	3.35	831.49	111.34	0.18
Rodair	41199.4*	Max WS	2717.39	-0.63	12.25		12.43	0.000041	3.38	846.19	115.74	0.18
Rodair	41185	Max WS	2744.29	-0.64	12.25		12.42	0.00004	3.36	868.95	132.94	0.18
Rodair	41151		Lat Struct									
Rodair	41145.8*	Max WS	2747.8	-0.63	12.25		12.42	0.00007	3.32	870.64	129.56	0.18
Rodair	41134.6*	Max WS	2751.35	-0.62	12.25		12.42	0.000108	3.29	874.65	125.24	0.19
Rodair	41123.4*	Max WS	2754.93	-0.61	12.25		12.42	0.000144	3.26	879.9	123.85	0.19
Rodair	41112.2*	Max WS	2758.54	-0.6	12.25		12.41	0.0002	3.23	885.12	123.5	0.19
Rodair	41101	Max WS	2762.18	-0.59	12.25		12.41	0.000266	3.21	889.98	123.72	0.19
Rodair	41083.2*	Max WS	2766.03	-0.6	12.25		12.4	0.000254	3.14	906.48	124.99	0.18
Rodair	41065.4*	Max WS	2770.52	-0.6	12.25		12.4	0.000243	3.09	923.12	126.33	0.18
Rodair	41047.5*	Max WS	2775.13	-0.6	12.25		12.39	0.000232	3.03	939.99	127.62	0.18
Rodair	41029.7*	Max WS	2779.03	-0.61	12.25		12.39	0.000222	2.97	957.37	129.53	0.17
Rodair	41011.9*	Max WS	2782.95	-0.62	12.25		12.38	0.000212	2.92	975.11	132.96	0.17
Rodair	40994	Max WS	2786.95	-0.62	12.25		12.38	0.000203	2.86	992.93	136.45	0.17
Rodair	40836	Max WS	2837.11	-0.62	12.21		12.34	0.000215	2.95	999.59	144.94	0.17
Rodair	40694	Max WS	2885.09	-0.66	12.17		12.31	0.000215	2.99	997.91	138.22	0.17
Rodair	40540	Max WS	2925.45	-0.69	12.13		12.27	0.000227	3.02	989.61	130.67	0.17
Rodair	40249	Max WS	3001.08	-0.72	12.04		12.19	0.000263	3.14	976.79	132.91	0.19

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Rodair	40185		Lat Struct									
Rodair	40181	Max WS	3012.07	-0.72	12.01		12.17	0.000261	3.19	979.77	138.99	0.19
Rodair	40107	Max WS	3073.91	-0.75	11.98		12.15	0.000273	3.26	963.01	125.91	0.19
Rodair	40105		Lat Struct									
Rodair	40050	Max WS	3087.01	-0.75	11.96		12.13	0.000278	3.29	967.2	137.51	0.19
Rodair	39822	Max WS	3116.23	-0.78	11.91		12.06	0.00026	3.13	1021.69	144.76	0.19
Rodair	39798		Lat Struct									
Rodair	39617	Max WS	3081.57	-0.81	11.88		12.02	0.000217	3	1047.61	136.94	0.17
Rodair	39344	Max WS	3085.17	-0.88	11.81		11.96	0.000239	3.03	1033.63	134.7	0.18
Rodair	39227	Max WS	3026.24	-0.88	11.79		11.93	0.000223	3.04	1033.39	152.64	0.17
Rodair	39200		Lat Struct									
Rodair	39060	Max WS	3046.95	-0.91	11.75		11.89	0.000234	3.02	1023.83	137.57	0.18
Rodair	38920	Max WS	3053.59	-0.91	11.72		11.86	0.000227	3.06	1028.36	140.13	0.18
Rodair	38916		Lat Struct									
Rodair	38801	Max WS	3126.13	-0.94	11.68		11.83	0.000234	3.13	1028.45	140.13	0.18
Rodair	38792		Lat Struct									
Rodair	38746	Max WS	2789.07	-0.94	11.67		11.78	0.000188	2.75	1042.13	147.09	0.16
Rodair	38583	Max WS	2777.18	-0.97	11.63		11.75	0.000197	2.81	1022.42	150.1	0.16
Rodair	38572	Max WS	2776.29	-0.97	11.63		11.75	0.0002	2.8	1021.87	151.84	0.16
Rodair	38564		Lat Struct									
Rodair	38407	Max WS	2760.79	-1	11.63		11.72	0.000149	2.47	1149.94	168.94	0.14
Rodair	38379	Max WS	2763.87	-1	11.62		11.72	0.000155	2.55	1139.53	172.49	0.15
Rodair	38356	Max WS	2768.54	-1	11.61		11.71	0.00016	2.57	1120.99	172.4	0.15
Rodair	38311		Lat Struct									
Rodair	38212		Lat Struct									
Rodair	38089	Max WS	2712.87	-1.05	11.58		11.67	0.000141	2.41	1151.96	145.26	0.14
Rodair	37989		Lat Struct									
Rodair	37729	Max WS	2566.19	-1.1	11.55		11.63	0.000133	2.32	1120.71	147.29	0.13
Rodair	37455	Max WS	2576.96	-1.16	11.51		11.59	0.000134	2.38	1113.93	147.86	0.14
Rodair	37389	Max WS	2589.47	-1.16	11.5		11.58	0.000136	2.36	1120.07	145.33	0.14
Rodair	37380		Lat Struct									
Rodair	37275	Max WS	2568	-1.19	11.48		11.57	0.000129	2.35	1162.97	173.39	0.13
Rodair	37266		Lat Struct									
Rodair	37203	Max WS	2527.14	-1.19	11.48		11.56	0.000124	2.31	1166.9	159.91	0.13
Rodair	37178		Lat Struct									
Rodair	37013	Max WS	2532.36	-1.22	11.46		11.54	0.000132	2.3	1119.26	157.43	0.13
Rodair	36801	Max WS	2536.17	-1.25	11.43		11.51	0.000123	2.24	1151.35	146.21	0.13
Rodair	36503	Max WS	2591.67	-1.3	11.39		11.47	0.000125	2.29	1156.95	140.27	0.13
Rodair	36166	Max WS	2856.65	-1.34	11.3		11.41	0.000167	2.64	1108.01	144.56	0.15
Rodair	36151	Max WS	2860.03	-1.34	11.3		11.4	0.000166	2.63	1112.76	144.85	0.15
Rodair	36129		Lat Struct									
Rodair	35987		Lat Struct									
Rodair	35981	Max WS	2911.23	-1.38	11.28		11.38	0.000027	2.62	1149.57	143.06	0.15
Rodair	35939	Max WS	2952.98	-1.38	11.17		11.39	0.000054	3.8	919.68	160.31	0.21
Rodair	35919		Lat Struct									
Rodair	35799	Max WS	3037.36	-1.41	11.15		11.37	0.000056	3.79	901.2	140.99	0.21
Rodair	35788		Lat Struct									

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Rodair	35708	Max WS	3217.01	-1.41	11.08		11.35	0.000066	4.27	903.97	155.23	0.23
Rodair	35701		Lat Struct									
Rodair	35693	Max WS	3217.39	-1.41	11.09		11.35	0.000063	4.11	911.34	137.67	0.23
Rodair	35682		Lat Struct									
Rodair	35659	Max WS	3219.92	-1.41	11.1		11.34	0.000058	3.96	956.9	147.49	0.22
Rodair	35609	Max WS	3274.69	-1.44	11.05		11.34	0.000071	4.42	896.44	137.27	0.24
Rodair	35600		Lat Struct									
Rodair	35547	Max WS	3331.18	-1.44	11.03		11.32	0.000072	4.4	934.39	156.26	0.24
Rodair	35323	Max WS	3489.18	-1.47	10.99		11.29	0.000077	4.48	987.7	171.76	0.25
Rodair	35312	Max WS	3490.64	-1.47	10.98		11.29	0.000075	4.53	990.18	171.64	0.25
Rodair	35252		Lat Struct									
Rodair	35065	Max WS	3513.16	-1.5	10.98		11.26	0.000068	4.3	1024.72	180.31	0.24
Rodair	35057	Max WS	3512.98	-1.51	10.97		11.26	0.000067	4.38	1025.99	179.86	0.24
Rodair	35052		Lat Struct									
Rodair	34813	Max WS	3624.44	-1.55	10.91		11.23	0.000077	4.61	975.25	156.58	0.25
Rodair	34556	Max WS	3666.08	-1.58	10.88		11.21	0.000081	4.67	994.62	156.9	0.26
Rodair	34353	Max WS	3691.47	-1.61	10.85		11.19	0.00008	4.73	967.99	149.62	0.26
Rodair	34081	Max WS	3782.98	-1.65	10.81		11.15	0.000081	4.71	942.93	129.33	0.26
Rodair	33806	Max WS	3891.46	-1.69	10.74		11.11	0.000091	4.91	919.39	124.77	0.27
Rodair	33509	Max WS	4006.46	-1.73	10.68		11.07	0.000095	5.02	926.84	126.77	0.28
Rodair	33208	Max WS	3741.98	-1.78	10.64		11.09	0.000119	5.46	799.32	126.06	0.31
Rodair	33197	Max WS	3744.77	-1.78	10.56	5.13	11.1	0.000138	5.9	728.67	121.23	0.33
Rodair	33177 Cloverdale		Bridge									
Rodair	33163	Max WS	3597.8	-1.81	10.18		10.65	0.000129	5.54	722.01	120.61	0.32
Rodair	33153	Max WS	3600.81	-1.81	10.17		10.65	0.000129	5.59	713.35	118.35	0.32
Rodair	33150		Lat Struct									
Rodair	33111		Lat Struct									
Rodair	33002	Max WS	3979.01	-1.84	10.06		10.54	0.000126	5.61	796.77	128.1	0.32
Rodair	32981	Max WS	3986.3	-1.84	10.1	4.45	10.53	0.000109	5.33	859.55	137.37	0.3
Rodair	32977 Pipeline		Bridge									
Rodair	32971	Max WS	3985.56	-1.84	10.01		10.45	0.000112	5.38	848.12	137.37	0.3
Rodair	32960	Max WS	3988.97	-1.84	10.03		10.45	0.000112	5.25	866.69	141.62	0.3
Rodair	32944	Max WS	3994.02	-1.84	9.99	4.31	10.45	0.000122	5.43	794.55	142.76	0.31
Rodair	32922 Pipelines		Bridge									
Rodair	32905	Max WS	3993.21	-1.84	9.91		10.37	0.000118	5.46	862.41	149.08	0.31
Rodair	32893	Max WS	3996.79	-1.84	9.92	4.45	10.36	0.000116	5.34	851.6	147.7	0.31
Rodair	32854 Pipeline		Bridge									
Rodair	32808	Max WS	3995.16	-2.12	9.87		10.16	0.000072	4.34	1142.01	175.64	0.25
Rodair	32793	Max WS	3999.79	-2.19	9.84	3.49	10.15	0.000074	4.47	894.44	177.2	0.25
Rodair	32743 RR		Bridge									
Rodair	32717	Max WS	3998.98	-2.62	9.82		10.11	0.000068	4.36	916.93	136.49	0.24
Rodair	32711	Max WS	3994.18	-2.66	9.86		10.11	0.000067	3.98	1090.48	211.42	0.23
Rodair	32705	Max WS	3993.71	-2.69	9.87		10.1	0.000069	3.88	1119.66	211.42	0.23
Rodair	32698	Max WS	3992.36	-2.73	9.81	3.18	10.11	0.000068	4.36	915.21	184.55	0.24
Rodair	32655 W Port Arthur Rd		Bridge									
Rodair	32590	Max WS	3992.36	-3.4	9.79		10.07	0.000369	4.22	945.23	208.04	0.23
Rodair	32508	Max WS	3986.52	-4.78	9.87		10.05	0.000228	3.46	1253.12	145.01	0.18

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Rodair	32462	Max WS	3981.22	-3.97	9.87		10.04	0.000226	3.35	1270.26	153.17	0.18
Rodair	32455		Lat Struct									
Rodair	32407		Lat Struct									
Rodair	32287	Max WS	4011.63	-4.07	9.79		10	0.000286	3.73	1211.2	165.58	0.2
Rodair	32108	Max WS	3975.57	-4.28	9.75		9.94	0.000265	3.53	1220.99	153.72	0.19
Rodair	31859	Max WS	3897.85	-4.38	9.68		9.91	0.000327	3.89	1096.47	137.86	0.21
Rodair	31543	Max WS	4158.37	-4.5	9.56		9.79	0.000295	3.95	1132.91	127.28	0.2
Rodair	31340	Max WS	4284.93	-4.69	9.46		9.67	0.00029	3.72	1246.01	160.98	0.2
Rodair	30965	Max WS	4604.76	-5.03	9.3		9.56	0.000337	4.25	1235.54	166.75	0.22
Rodair	30592	Max WS	4626.17	-4.75	9.09		9.38	0.000431	4.35	1129.82	167.68	0.24
Rodair	30202	Max WS	4606.1	-4.74	8.97		9.23	0.000342	4.24	1288.35	193.67	0.22
Rodair	30185	Max WS	4583.43	-4.93	8.95		9.23	0.00037	4.3	1207.25	191.12	0.23
Rodair	30137		Lat Struct									
Rodair	30122	Max WS	4593.85	-5.27	8.79		9.23	0.00062	5.58	1019.9	166.64	0.29
Rodair	29854	Max WS	4629.99	-5.06	8.79		9.06	0.00034	4.25	1191.81	146.33	0.22
Rodair	29748	Max WS	4608.03	-5.04	8.74		9.03	0.000364	4.35	1182.52	163.24	0.23
Rodair	29738		Lat Struct									
Rodair	29712		Lat Struct									
Rodair	29570	Max WS	4610.13	-4.88	8.69		8.96	0.000345	4.2	1165.33	137.01	0.22
Rodair	29541		Lat Struct									
Rodair	29503		Lat Struct									
Rodair	29261	Max WS	4663.93	-5.22	8.53		8.85	0.000409	4.66	1112.02	125.4	0.24
Rodair	28913	Max WS	4792.45	-5.72	8.43		8.69	0.000376	4.16	1306.66	195.82	0.23
Rodair	28589	Max WS	4789.02	-6.24	8.29		8.57	0.000356	4.27	1209.03	143.89	0.22
Rodair	28418		Lat Struct									
Rodair	28327	Max WS	4843.72	-5.72	8.16		8.46	0.000444	4.43	1174.15	153.17	0.25
Rodair	28188	Max WS	4854.55	-5.45	8.11		8.4	0.00041	4.45	1213.98	168.35	0.24
Rodair	28181		Lat Struct									
Rodair	28086	Max WS	4801.73	-5.75	8.1		8.36	0.000356	4.19	1267.48	175.46	0.22
Rodair	28069		Lat Struct									
Rodair	27985	Max WS	4827.9	-6.03	8.08		8.33	0.000328	4.08	1304.55	180.55	0.22
Rodair	27941		Lat Struct									
Rodair	27699	Max WS	4642.61	-6.34	8.03		8.25	0.000292	3.89	1330.76	176.51	0.2
Rodair	27384	Max WS	4640.84	-5.88	7.92		8.16	0.000316	3.97	1310.22	180.37	0.21
Rodair	27302	Max WS	4717.55	-6.01	7.77		8.15	0.000561	5.26	1174.72	203.81	0.28
Rodair	27231	Max WS	4672.84	-7.2	7.85		8.09	0.000314	3.94	1316.87	191.18	0.21
Rodair	27219		Lat Struct									
Rodair	27114	Max WS	4674.1	-7.28	7.8		8.05	0.000329	4.1	1286.37	176.77	0.22
Rodair	26795	Max WS	4706.33	-7.42	7.7		7.94	0.000329	4.06	1299.29	175.31	0.22
Rodair	26484	Max WS	4767.69	-6.94	7.55		7.84	0.000379	4.45	1258.08	177.61	0.23
Rodair	26225	Max WS	4764.68	-6.86	7.5		7.74	0.000318	4.02	1324.08	179.91	0.21
Rodair	25912	Max WS	4762.97	-6.68	7.36		7.64	0.000352	4.32	1254.22	175.76	0.22
Rodair	25874		Lat Struct									
Rodair	25817		Lat Struct									
Rodair	25810	Max WS	4817.99	-6.98	7.3		7.6	0.000403	4.48	1229.36	174.76	0.24
Rodair	25782	Max WS	4860.54	-6.42	7.32		7.58	0.000378	4.27	1316.53	174.06	0.23
Rodair	25748		Lat Struct									

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Rodair	25643	Max WS	5024.37	-6.41	7.24		7.51	0.000351	4.21	1328.76	172.33	0.22
Rodair	25556	Max WS	5154.26	-6.53	7.14		7.47	0.000433	4.72	1274.44	190.13	0.25
Rodair	25445	Max WS	5154.26	-6.34	7.14		7.4	0.000515	4.09	1259.24	159.91	0.26
Rodair	25327	Max WS	5153.95	-7.24	7.12		7.35	0.000335	3.9	1320.5	128.98	0.22
Rodair	25283		Lat Struct									
Rodair	25182		Lat Struct									
Rodair	25095	Max WS	4843.9	-6.55	7.02		7.31	0.000364	4.37	1217.14	155.12	0.23
Rodair	24696	Max WS	4436.25	-6.78	6.97		7.21	0.000328	4.05	1211.54	169.98	0.22
Rodair	24402	Max WS	4398.26	-6.63	6.94		7.13	0.000244	3.58	1412.53	187.64	0.19
Rodair	24079	Max WS	4200.37	-7.6	6.83		7.05	0.000334	3.92	1204.78	175.17	0.21
Rodair	23870	Max WS	4043.82	-7.34	6.82		7	0.00026	3.46	1266.2	169.19	0.19
Rodair	23810	Max WS	4012.93	-7.34	6.83		6.99	0.000212	3.25	1358.05	205.49	0.17
Rodair	23799		Lat Struct									
Rodair	23722	Max WS	3866.18	-6.47	6.82		6.98	0.000227	3.31	1321.21	205.65	0.18
Rodair	23718		Lat Struct									
Rodair	23678	Max WS	3867.4	-6.6	6.78		6.97	0.000262	3.5	1201.26	172.45	0.19
Rodair	23504	Max WS	3838.38	-7.12	6.72		6.93	0.000268	3.77	1174.28	155.64	0.19
Rodair	23285	Max WS	3638.18	-7.54	6.73		6.89	0.000233	3.23	1184.65	162.62	0.18
Rodair	22996	Max WS	3641.05	-7.19	6.67		6.83	0.000189	3.23	1290.05	173.76	0.17
Rodair	22659	Max WS	3587.33	-7.28	6.64		6.77	0.000171	2.89	1384.05	195.53	0.16
Rodair	22560	Max WS	3446.18	-6.56	6.67		6.76	0.000125	2.43	1502.68	171.46	0.13
Rodair	22449	Max WS	3454.69	-7.12	6.63		6.75	0.000146	2.82	1416.94	183.81	0.15
Rodair	22431		Lat Struct									
Rodair	22355	Max WS	3445.33	-7.14	6.59		6.73	0.000202	2.98	1185.9	169.93	0.17
Rodair	22014	Max WS	3361.1	-7.38	6.56		6.68	0.000146	2.82	1400.05	194.21	0.15
Rodair	21661	Max WS	3526.17	-6.97	6.47		6.61	0.00019	3.03	1329.12	192.71	0.16
Rodair	21449	Max WS	3590.21	-8	6.43		6.57	0.000173	3.1	1420.18	199.12	0.16
Rodair	21181	Max WS	4146.09	-7.92	6.34		6.49	0.000191	3.21	1515.83	194.01	0.17
Rodair	20966	Max WS	4308.31	-8.1	6.29		6.45	0.000206	3.34	1556.83	226.53	0.17
Rodair	20745	Max WS	4251.98	-7.43	6.26		6.42	0.000204	3.32	1547.47	213.11	0.17
Rodair	20503	Max WS	3991.81	-6.94	6.25		6.39	0.000187	3.08	1485.87	199.28	0.16
Rodair	20152	Max WS	3950.34	-7.3	6.16		6.31	0.000196	3.22	1417.68	178.58	0.17
Rodair	19887	Max WS	3644.1	-7.38	6.16		6.28	0.00016	2.85	1421.11	171.95	0.15
Rodair	19599	Max WS	3635.76	-6.53	6.11		6.23	0.000173	2.89	1447.72	184.71	0.16
Rodair	19205	Max WS	3150.04	-6.9	6.16		6.23	0.000107	2.24	1611.7	202.71	0.12
Rodair	18888	Max WS	3287.43	-6.91	6.1		6.19	0.000129	2.56	1510.47	193.78	0.14
Rodair	18535	Max WS	2730.7	-6.67	6.09		6.15	0.000081	1.99	1540.48	196.43	0.11
Rodair	18189	Max WS	2830.92	-6.77	6.09		6.15	0.000092	2.12	1520.82	202.47	0.11
Rodair	17910	Max WS	2726.84	-7.03	6.07		6.12	0.000068	1.86	1687.5	204.71	0.1
Rodair	17641	Max WS	2738.7	-7.06	6.02		6.07	0.000073	1.88	1626.28	194.11	0.1
Rodair	17596	Max WS	2700.21	-7.28	6.01		6.06	0.00007	1.84	1620.39	190.83	0.1
Rodair	17448	Max WS	2485.71	-7.47	5.98		6.03	0.000072	1.91	1461.77	174.86	0.1
Rodair	17439		Lat Struct									
Rodair	17320	Max WS	2412.18	-7.78	5.98		6.03	0.000071	1.88	1426.93	172.99	0.1
Rodair	17064	Max WS	2264.35	-7.74	5.98		6.02	0.000062	1.73	1432.14	169.02	0.09
Rodair	16757	Max WS	2088.48	-6.91	5.97		6.01	0.000053	1.57	1409.51	164.15	0.09
Rodair	16437	Max WS	1961.84	-6.76	5.96		6	0.000049	1.49	1390.47	159.13	0.08

Harvey Results

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Rodair	16143	Max WS	1819.5	-6.33	5.96		5.99	0.000042	1.43	1377.34	154.28	0.08
Rodair	16033	Max WS	1766.71	-6.33	5.96		5.98	0.000039	1.35	1420.04	171.79	0.07
Rodair	15984	Max WS	1767.71	-7.22	5.96	-3.7	5.98	0.000034	1.12	1572	175.78	0.07
Rodair	15974 Pipeline		Bridge									
Rodair	15964	Max WS	1767.22	-8.15	5.95		5.97	0.00003	1.07	1656.15	182.32	0.06
Rodair	15909	Max WS	1768.85	-7.84	5.95		5.97	0.000037	1.22	1452.95	154.13	0.07
Rodair	15903		Lat Struct									
Rodair	15899		Lat Struct									
Rodair	15831	Max WS	1746.03	-7.71	5.94		5.97	0.000034	1.33	1397.32	149	0.07
Rodair	15538	Max WS	1725.47	-7.5	5.93		5.96	0.000035	1.34	1388.79	153.73	0.07
Rodair	15259	Max WS	1711.47	-7.62	5.93		5.95	0.000036	1.34	1419.64	166.52	0.07
Rodair	14965	Max WS	1687.86	-7.57	5.92		5.94	0.000032	1.26	1511.11	185.66	0.07
Rodair	14808	Max WS	1519.78	-7.44	5.93		5.94	0.000025	1.11	1595.51	207.11	0.06
Rodair	14763	Max WS	1509.22	-6.46	5.93	-3.53	5.95	0.000028	1.17	1547.74	213.78	0.06
Rodair	14740 FM 365		Bridge									
Rodair	14714	Max WS	1508.85	-5.29	5.88		5.9	0.000037	1.25	1464.46	219.16	0.07
Rodair	14656	Max WS	1491.1	-8.6	5.89		5.9	0.000018	1	1798.22	239.58	0.05
Rodair	14654		Lat Struct									
Rodair	14553		Lat Struct									
Rodair	14414	Max WS	1560.21	-9.21	5.89		5.9	0.000014	0.91	2147.02	277.07	0.05
Rodair	14280	Max WS	1394.36	-7.54	5.89		5.89	0.000012	0.76	2276.84	307.68	0.04
Rodair	14274		Lat Struct									
Rodair	14165	Max WS	2427.14	-7.76	5.86		5.88	0.000035	1.35	2321.37	322.49	0.07
Rodair	14151		Lat Struct									
Rodair	14094	Max WS	2416.67	-8.41	5.86		5.88	0.000034	1.37	2352.55	317.64	0.07
Rodair	13857	Max WS	2531.92	-8.16	5.84		5.87	0.000043	1.44	2223.61	312.81	0.08
Rodair	13555	Max WS	2538.57	-7.34	5.82		5.85	0.000047	1.5	2088.82	284.49	0.08
Rodair	13297	Max WS	2589.87	-6.25	5.81		5.84	0.000048	1.47	2002.19	253.55	0.08
Rodair	13028	Max WS	2759.64	-5.91	5.78		5.82	0.000061	1.63	1869.31	229.87	0.09
Rodair	12743	Max WS	2958.49	-6.08	5.75		5.8	0.00007	1.76	1841.13	225.47	0.1
Rodair	12439	Max WS	3161.13	-6.28	5.73		5.78	0.000088	2.02	1784.29	232.58	0.11
Rodair	12124	Max WS	3279.5	-6.72	5.68		5.75	0.000093	2.13	1787.25	229.67	0.12
Rodair	11769	Max WS	3752.22	-7.61	5.62		5.71	0.000121	2.49	1713.8	206.86	0.13
Rodair	11431	Max WS	3486.66	-7.97	5.59		5.67	0.000105	2.29	1874.89	250.59	0.12
Rodair	11225	Max WS	3433.19	-7.76	5.59		5.67	0.000114	2.32	1747.23	237.42	0.13
Rodair	10798	Max WS	3547.61	-7.47	5.52		5.61	0.000123	2.38	1752.73	243.08	0.13
Rodair	10451	Max WS	3465.76	-6.51	5.47		5.54	0.000108	2.17	1916.06	283.06	0.12
Rodair	10114	Max WS	3458.25	-7.24	5.44		5.5	0.0001	2.1	2007.16	305.54	0.12
Rodair	9896	Max WS	3380.96	-6.12	5.42		5.48	0.000095	2	2035.73	326.86	0.12
Rodair	9855	Max WS	3377.62	-6.09	5.42		5.47	0.000094	1.97	2107.34	357.88	0.11
Rodair	9765		Lat Struct									
Rodair	9684		Lat Struct									
Rodair	9653	Max WS	3244.14	-6.13	5.39		5.46	0.000105	2.13	1921.09	321.16	0.12
Rodair	9334	Max WS	3257.64	-6.25	5.38		5.43	0.000078	1.79	2065.72	299.6	0.1
Rodair	8819	Max WS	3002.58	-4.56	5.35		5.39	0.000071	1.59	2218.15	358.49	0.1
Rodair	8479	Max WS	2960.95	-4.63	5.33		5.37	0.000071	1.64	2280.94	400.13	0.1
Rodair	7988	Max WS	2863.41	-4.19	5.3		5.33	0.000064	1.44	2237.82	388.46	0.09

Harvey Results

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Rodair	7700	Max WS	2823.32	-2.88	5.3		5.32	0.000052	1.25	2732.12	482.43	0.08
Rodair	7312	Max WS	2728.51	-2.76	5.26		5.29	0.000101	1.71	2266.62	459.76	0.11
Rodair	7020	Max WS	2912.76	-3.12	5.25		5.26	0.000055	1.28	3115.3	549.28	0.08
Rodair	6774	Max WS	3061.76	-1.88	5.24		5.25	0.000041	1.07	3537.03	625.58	0.07
Rodair	6512	Max WS	3362.25	-1.78	5.23		5.25	0.000033	0.95	4330.01	756.08	0.06
Rodair	6261	Max WS	3560.55	-1.75	5.23		5.23	0.000026	0.84	5076.06	855.17	0.06
Rodair	5983	Max WS	3831.77	-1.75	5.22		5.22	0.000022	0.78	6106.05	1066.78	0.05
Rodair	5696	Max WS	3835.71	-1.72	5.21		5.21	0.000015	0.64	6723.36	1094.46	0.04
Rodair	5387	Max WS	3913.77	-1.72	5.21		5.21	0.000017	0.69	6174.76	977.28	0.05
Rodair	5141	Max WS	3927.97	-1.84	5.2		5.21	0.000019	0.74	5621.25	883.87	0.05
Rodair	4826	Max WS	3985.52	-2.09	5.19		5.2	0.000027	0.88	4871.64	739.88	0.06
Rodair	4416	Max WS	4450.28	-2.38	5.17		5.18	0.000036	1.06	5380.94	949.8	0.07
Rodair	4140	Max WS	4638.68	-2.66	5.16		5.17	0.000031	1	5998.03	988.79	0.06
Rodair	3899	Max WS	4983.98	-2.78	5.15		5.17	0.000034	1.04	6178.1	1034.86	0.07
Rodair	3535	Max WS	5524.88	-3.25	5.13		5.15	0.000033	1.06	6908.56	1119.75	0.07
Rodair	3189	Max WS	6204.58	-3.56	5.13		5.14	0.000036	1.11	7936.4	1387.14	0.07
Rodair	2825	Max WS	6861.26	-4.79	5.11		5.12	0.000046	1.3	8169.36	1489.43	0.08
Rodair	2434	Max WS	7046.45	-5.87	5.08		5.1	0.000055	1.45	7558.06	1419.64	0.09
Rodair	2044	Max WS	7209.9	-5.5	5.05		5.08	0.00007	1.63	6034.2	1099.73	0.1
Rodair	1695	Max WS	7741.51	-4.61	5.02		5.05	0.000073	1.64	6245.58	1056.19	0.1
Rodair	1436	Max WS	7710.16	-4.3	5	-1.31	5.02	0.000049	1.32	7336.9	1079.76	0.08

Proposed Diversion

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Rodair	54352	Max WS	246.36	8.08	14.41		14.46	0.000298	1.79	138.72	56.02	0.17
Rodair	54311	Max WS	246.35	8.5	14.41		14.45	0.000206	1.53	163.4	55.23	0.14
Rodair	54290		Lat Struct									
Rodair	54289		Lat Struct									
Rodair	54174	Max WS	233.97	7.79	14.4		14.43	0.000158	1.38	172.41	54.25	0.12
Rodair	54014	Max WS	212.07	7.96	14.37		14.41	0.000171	1.44	149.24	50.49	0.13
Rodair	53844	Max WS	193.8	7.86	14.37		14.39	0.000099	1.11	179.02	58.23	0.1
Rodair	53685	Max WS	183.04	8.12	14.36		14.37	0.000096	1.07	172.7	62.15	0.1
Rodair	53512	Max WS	162.01	7.69	14.35		14.36	0.000066	0.9	180.57	47.04	0.08
Rodair	53371	Max WS	156.93	7.53	14.34		14.36	0.000059	0.89	178.54	47.84	0.08
Rodair	53172	Max WS	150.07	7.58	14.34		14.35	0.000043	0.73	217.31	95.21	0.07
Rodair	53012	Max WS	127.89	7.55	14.34		14.34	0.00003	0.6	230.49	111.69	0.05
Rodair	52827	Max WS	101.77	7.28	14.34		14.34	0.00001	0.39	298.11	119.54	0.03
Rodair	52798		Lat Struct									
Rodair	52594	Max WS	84.36	7.42	14.33		14.34	0.000013	0.42	208.51	63.43	0.04
Rodair	52588		Lat Struct									
Rodair	52581		Lat Struct									
Rodair	52412	Max WS	455.47	7.37	14.18		14.24	0.000288	2.04	222.79	50.86	0.17
Rodair	52233	Max WS	452.62	7.09	14.12		14.19	0.000316	2.12	213.73	49.62	0.18
Rodair	52006	Max WS	449.48	6.79	14.05		14.12	0.000287	2.08	216.38	47.79	0.17
Rodair	51821	Max WS	446.78	6.64	13.98		14.06	0.000334	2.21	201.77	44.97	0.18
Rodair	51619	Max WS	444.58	6.55	13.93		14	0.00028	2.03	219.05	49.24	0.17
Rodair	51420	Max WS	442.58	6.4	13.86		13.94	0.000319	2.18	203.44	44.94	0.18
Rodair	51176	Max WS	441.09	6.36	13.82		13.87	0.000212	1.86	236.79	48.94	0.15
Rodair	50994		Lat Struct									
Rodair	50989		Lat Struct									
Rodair	50962	Max WS	439.2	6.32	13.78		13.83	0.0002	1.83	239.61	48.39	0.15
Rodair	50720	Max WS	437.05	6.12	13.71		13.77	0.000246	2.01	217.74	44.41	0.16
Rodair	50526	Max WS	434.23	6.25	13.65		13.72	0.00031	2.11	205.62	46.91	0.18
Rodair	50327	Max WS	433.79	5.97	13.63		13.67	0.00016	1.62	267.39	55.84	0.13
Rodair	50168		Lat Struct									
Rodair	50165		Lat Struct									
Rodair	50112	Max WS	430.2	6.32	13.55		13.62	0.000332	2.17	198.35	45.65	0.18
Rodair	49912	Max WS	429.63	5.69	13.54		13.57	0.00013	1.54	279.47	53.51	0.12
Rodair	49709	Max WS	427.5	5.83	13.48		13.54	0.00023	1.85	230.63	51.4	0.15
Rodair	49534	Max WS	425.29	5.5	13.43		13.49	0.000256	2	212.35	44.81	0.16
Rodair	49275	Max WS	422.69	5.46	13.41		13.44	0.000113	1.42	297.64	58.25	0.11
Rodair	49063	Max WS	421.96	5.76	13.39		13.42	0.000106	1.4	302.21	61.65	0.11
Rodair	48842	Max WS	420.88	5.53	13.35		13.39	0.000145	1.56	269.19	56.18	0.12
Rodair	48641	Max WS	418.31	5.64	13.32		13.36	0.000158	1.68	254.07	60.34	0.13
Rodair	48434	Max WS	417.09	5.72	13.29		13.33	0.000126	1.6	285.19	75.99	0.12
Rodair	48236	Max WS	403.58	5.66	13.27		13.31	0.000129	1.6	271.07	70.08	0.12
Rodair	47992	Max WS	402.63	5.73	13.23		13.27	0.000152	1.74	257.7	76.46	0.13
Rodair	47977	Max WS	395.87	5.61	13.14	8.71	13.28	0.000328	2.94	134.44	75.05	0.2
Rodair	47949 5th Ave		Bridge									
Rodair	47930	Max WS	395.46	5.65	13.12		13.17	0.000039	1.9	216.75	84.03	0.16
Rodair	47908	Max WS	395.73	5.58	13.13	8.55	13.17	0.000024	1.72	293.07	111.12	0.13
Rodair	47891		Inl Struct									
Rodair	47879	Max WS	395.59	5.37	13.12		13.15	0.000017	1.47	376.41	139.58	0.11
Rodair	47846		Lat Struct									

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Rodair	47783	Max WS	335.45	4.21	13.13		13.15	0.000009	1.1	340.12	90.36	0.08
Rodair	47753		Lat Struct									
Rodair	47751		Lat Struct									
Rodair	47737	Max WS	335.45	3.85	13.13		13.15	0.000009	1.08	331.52	78.81	0.08
Rodair	47564	Max WS	611.38	3.84	13.06		13.11	0.000035	1.86	334.54	75.28	0.15
Rodair	47409	Max WS	629.95	3.69	13.04		13.1	0.00003	2	341.48	77.75	0.14
Rodair	47180	Max WS	659.16	3.91	13.02		13.09	0.000036	2.22	324.96	78.87	0.16
Rodair	46984	Max WS	691.5	3.66	13		13.08	0.000035	2.24	339.53	77.29	0.16
Rodair	46786	Max WS	716.09	3.34	13		13.07	0.000029	2.09	361.29	75.32	0.14
Rodair	46660	Max WS	658.83	3.52	12.97		13.05	0.000034	2.26	336.53	80.88	0.15
Rodair	46479	Max WS	678.5	3.58	12.96		13.04	0.000032	2.26	349.13	93.26	0.15
Rodair	46324	Max WS	697.29	3.5	12.96		13.02	0.000071	2.08	336.03	102.8	0.2
Rodair	46263	Max WS	775.38	3.59	12.98		13.03	0.000032	1.72	449.92	101.87	0.14
Rodair	46252	Max WS	706.95	3.55	12.97	7.09	13.02	0.000023	1.72	434.55	111.4	0.13
Rodair	46247 Highland Pipelin		Bridge									
Rodair	46242	Max WS	705.72	3.56	12.95		13	0.000023	1.73	431.95	107.24	0.13
Rodair	46225	Max WS	707.17	3.52	12.94	6.82	13	0.000024	1.94	412.32	101.25	0.13
Rodair	46221 Pipeline		Bridge									
Rodair	46218	Max WS	706.93	3.56	12.93		12.99	0.000024	1.91	412.44	101.13	0.13
Rodair	46214	Max WS	707.35	3.56	12.93		12.99	0.000023	1.98	411.7	100.44	0.13
Rodair	46210	Max WS	707.57	3.53	12.93	6.87	12.99	0.000026	1.96	402.92	99.63	0.14
Rodair	46206 Pipeline		Bridge									
Rodair	46203	Max WS	706.21	3.56	12.89		12.96	0.000025	2.02	403.13	96.08	0.13
Rodair	46193	Max WS	707.74	3.71	12.91		12.95	0.000034	1.76	402.89	92.23	0.15
Rodair	46138	Max WS	712.06	3.81	12.87		12.95	0.000043	2.31	319.55	73.96	0.17
Rodair	46123		Lat Struct									
Rodair	46121		Lat Struct									
Rodair	46090	Max WS	717.61	3.43	12.87		12.95	0.000036	2.26	339.16	81.33	0.16
Rodair	45937	Max WS	732.69	3.53	12.84		12.94	0.000047	2.51	321.57	82.89	0.18
Rodair	45779	Max WS	747.97	3.3	12.84		12.93	0.000041	2.41	333.29	81.74	0.17
Rodair	45773		Lat Struct									
Rodair	45650	Max WS	748.25	3.34	12.84		12.92	0.000036	2.3	356.35	84.36	0.16
Rodair	45631		Lat Struct									
Rodair	45523	Max WS	762.22	3.5	12.83		12.92	0.000042	2.4	331.21	85.67	0.17
Rodair	45412	Max WS	761.31	3.52	12.83		12.91	0.000041	2.36	339.48	86.05	0.17
Rodair	45306	Max WS	756.39	3.45	12.82		12.91	0.00004	2.36	340.65	87.25	0.17
Rodair	45279		Lat Struct									
Rodair	45136	Max WS	762.55	3.39	12.8		12.89	0.000247	2.32	356.96	79.17	0.17
Rodair	45100		Lat Struct									
Rodair	45010	Max WS	780.44	3.67	12.78		12.87	0.000051	2.46	364.16	98.02	0.19
Rodair	44902	Max WS	800.67	3.28	12.76		12.86	0.000051	2.55	360.2	91.12	0.19
Rodair	44801	Max WS	818.42	3.22	12.75		12.85	0.000051	2.53	347.69	91.41	0.19
Rodair	44674	Max WS	829.96	3.18	12.73		12.84	0.000053	2.58	335.01	72.62	0.19
Rodair	44570		Lat Struct									
Rodair	44550	Max WS	843.06	3.03	12.73		12.83	0.000049	2.55	360.4	91.52	0.18
Rodair	44436	Max WS	840.55	3.16	12.72		12.82	0.000046	2.52	375.67	96.29	0.18
Rodair	44308	Max WS	852.21	2.9	12.71		12.81	0.000043	2.52	392.53	94.67	0.17
Rodair	44208	Max WS	862.23	2.91	12.72		12.8	0.000033	2.28	428.19	94.52	0.15
Rodair	44175	Max WS	865.82	2.88	12.71	6.77	12.8	0.00004	2.47	357.58	111.4	0.17
Rodair	44151 Wellspring Dr		Bridge									
Rodair	44128	Max WS	862.78	2.83	12.56		12.65	0.000038	2.4	442.46	120.29	0.16

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	44096	Max WS	866.24	2.82	12.57		12.65	0.000035	2.3	416.72	99.76	0.16
Rodair	44088		Lat Struct									
Rodair	44039	Max WS	871.24	2.75	12.57		12.65	0.000035	2.28	415.98	87.96	0.16
Rodair	44005		Lat Struct									
Rodair	43915	Max WS	884.51	2.78	12.56		12.65	0.000032	2.4	446.63	98.51	0.15
Rodair	43819	Max WS	887.19	2.59	12.54		12.63	0.000034	2.4	413.96	89.73	0.16
Rodair	43748	Max WS	913.19	2.56	12.59		12.62	0.000008	1.18	862.69	185.9	0.08
Rodair	43737	Max WS	914.34	2.56	12.59	5.33	12.62	0.000008	1.16	849.98	183.3	0.08
Rodair	43701 Unnamed Rd		Bridge									
Rodair	43648	Max WS	914.34	2.36	12.56		12.57	0.000006	1	950.76	165.55	0.07
Rodair	43634	Max WS	914.16	2.2	12.56		12.57	0.000006	1.04	941.4	164.91	0.07
Rodair	43598		Lat Struct									
Rodair	43553		Lat Struct									
Rodair	43477	Max WS	748.11	2.07	12.54		12.59	0.000016	1.72	467.39	84	0.11
Rodair	43458		Lat Struct									
Rodair	43367	Max WS	1638.17	1.98	12.14		12.41	0.000121	4.11	402.43	73.47	0.29
Rodair	43309		Lat Struct									
Rodair	43308		Lat Struct									
Rodair	43237	Max WS	1633.3	1.91	12.19		12.39	0.000068	3.64	502.69	119.07	0.23
Rodair	43178	Max WS	1637.82	1.94	12.24	5.86	12.39	0.000045	3.03	540.26	102.58	0.19
Rodair	43140 US59 NBFR		Bridge									
Rodair	43113	Max WS	1637.32	1.73	12.01		12.24	0.000073	3.89	425.53	98.87	0.24
Rodair	43111	Max WS	1637.34	1.73	12.12		12.24	0.000042	2.75	604.29	103.59	0.18
Rodair	43109	Max WS	1637.25	1.81	12.12		12.24	0.00004	2.72	619.48	123.09	0.17
Rodair	43107	Max WS	1637.14	1.81	12.12	5.56	12.24	0.000039	2.74	602.01	123.03	0.17
Rodair	43079 US59 NBML		Bridge									
Rodair	43038	Max WS	1637.05	1.81	12.05		12.18	0.00004	2.95	579.1	138.74	0.18
Rodair	43030	Max WS	1636.69	1.82	12.02	5.83	12.18	0.000049	3.3	513.71	179.16	0.2
Rodair	42987 US59 SBML		Bridge									
Rodair	42958	Max WS	1636.69	1.69	12.04		12.17	0.000039	2.89	566.4	96.57	0.17
Rodair	42954	Max WS	1636.59	1.69	12.05	5.59	12.17	0.000039	2.84	589.72	107.19	0.17
Rodair	42920 US59 SBFR		Bridge									
Rodair	42889	Max WS	1636.59	1.66	12.01		12.13	0.000038	2.73	605.13	96.28	0.17
Rodair	42862	Max WS	1635.9	1.61	11.98	5.88	12.12	0.000051	3.09	542.11	83.29	0.2
Rodair	42851		Inl Struct									
Rodair	42791	Max WS	1635.9	-0.34	11.91		12.02	0.000031	2.64	638.04	99.98	0.15
Rodair	42790		Lat Struct									
Rodair	42785		Lat Struct									
Rodair	42633	Max WS	1666.27	-0.36	11.9		12.01	0.000032	2.68	640.93	103.45	0.16
Rodair	42381	Max WS	1720.92	-0.41	11.88		12	0.000035	2.75	654.91	112.6	0.16
Rodair	42172	Max WS	1764.74	-0.44	11.86		11.98	0.000034	2.81	651.63	99.44	0.16
Rodair	41952	Max WS	1820.05	-0.47	11.84		11.97	0.000038	2.92	656.14	111.29	0.17
Rodair	41818	Max WS	1846.05	-0.5	11.82		11.96	0.000043	2.98	629.85	90.91	0.18
Rodair	41798	Max WS	1850.09	-0.5	11.82	4.16	11.96	0.000042	2.98	634.2	98.92	0.18
Rodair	41793 Landrey Pipeline		Bridge									
Rodair	41788	Max WS	1850.09	-0.5	11.79		11.93	0.000041	3.03	630.15	101.53	0.18
Rodair	41782	Max WS	1851.37	-0.5	11.79		11.93	0.000042	3.01	631.04	103.21	0.18
Rodair	41777		Lat Struct									
Rodair	41768		Lat Struct									
Rodair	41707	Max WS	1867.61	-0.5	11.78		11.92	0.000042	3.01	641	103.46	0.18
Rodair	41558	Max WS	1916.19	-0.53	11.77		11.91	0.00004	3.07	679.75	121.55	0.18

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Rodair	41539.5*	Max WS	1918.33	-0.53	11.76		11.91	0.00004	3.08	674.1	117.65	0.18
Rodair	41521*	Max WS	1919.38	-0.53	11.76		11.91	0.00004	3.08	669	113.77	0.18
Rodair	41502.5*	Max WS	1920.91	-0.53	11.76		11.91	0.00004	3.09	664.42	109.87	0.18
Rodair	41484	Max WS	1922.68	-0.53	11.76		11.91	0.00004	3.09	660.3	105.97	0.18
Rodair	41386.6*	Max WS	1926.47	-0.54	11.76		11.91	0.000039	3.06	669.3	109.75	0.18
Rodair	41372.2*	Max WS	1930.64	-0.54	11.76		11.91	0.000038	3.02	677.83	113.52	0.17
Rodair	41357.8*	Max WS	1934.63	-0.55	11.77		11.9	0.000037	2.99	686.39	116.76	0.17
Rodair	41343.4*	Max WS	1938.68	-0.56	11.77		11.9	0.000036	2.95	695.13	116.96	0.17
Rodair	41332		Lat Struct									
Rodair	41329*	Max WS	1946.75	-0.57	11.77		11.9	0.000035	2.92	689.69	92.65	0.17
Rodair	41314.6*	Max WS	1969.49	-0.57	11.76		11.9	0.000035	2.91	696.03	90.78	0.17
Rodair	41300.2*	Max WS	2016.18	-0.58	11.76		11.89	0.000035	2.94	704.85	89.92	0.17
Rodair	41285.8*	Max WS	2057.71	-0.59	11.75		11.88	0.000035	2.96	714.12	90.18	0.17
Rodair	41271.4*	Max WS	2145.43	-0.6	11.73		11.87	0.000037	3.05	718.01	87.15	0.17
Rodair	41257*	Max WS	2307.65	-0.6	11.69		11.85	0.000042	3.24	725.56	87.88	0.18
Rodair	41242.6*	Max WS	2452.52	-0.61	11.65		11.83	0.000046	3.4	737.68	92.83	0.19
Rodair	41228.2*	Max WS	2517.4	-0.62	11.63		11.82	0.000047	3.44	750.99	98.62	0.2
Rodair	41213.8*	Max WS	2608.94	-0.63	11.61		11.8	0.000049	3.52	762.05	104.28	0.2
Rodair	41199.4*	Max WS	2630.21	-0.63	11.61		11.8	0.000047	3.49	774.29	109.98	0.2
Rodair	41185	Max WS	2639.94	-0.64	11.61		11.8	0.000046	3.45	787.7	122.87	0.19
Rodair	41151		Lat Struct									
Rodair	41145.8*	Max WS	2643.47	-0.63	11.61		11.8	0.00008	3.42	792.52	116.08	0.2
Rodair	41134.6*	Max WS	2646.99	-0.62	11.62		11.79	0.000126	3.4	798.33	114.82	0.2
Rodair	41123.4*	Max WS	2650.52	-0.61	11.61		11.79	0.000169	3.37	803.87	114.98	0.2
Rodair	41112.2*	Max WS	2654.04	-0.6	11.61		11.79	0.000237	3.35	808.82	115.49	0.2
Rodair	41101	Max WS	2657.57	-0.59	11.61		11.78	0.000318	3.33	813.16	116.39	0.2
Rodair	41083.2*	Max WS	2661.27	-0.6	11.61		11.78	0.000303	3.27	829.04	117.18	0.2
Rodair	41065.4*	Max WS	2664.86	-0.6	11.61		11.77	0.000288	3.2	845.11	117.87	0.19
Rodair	41047.5*	Max WS	2668.57	-0.6	11.61		11.76	0.000275	3.14	861.41	118.5	0.19
Rodair	41029.7*	Max WS	2672.27	-0.61	11.61		11.76	0.000262	3.08	878.26	118.93	0.19
Rodair	41011.9*	Max WS	2675.98	-0.62	11.61		11.75	0.00025	3.02	895.46	119.29	0.18
Rodair	40994	Max WS	2679.69	-0.62	11.61		11.75	0.000238	2.96	912.69	119.77	0.18
Rodair	40836	Max WS	2712.58	-0.62	11.56		11.71	0.000252	3.04	908.72	133.13	0.18
Rodair	40694	Max WS	2741.2	-0.66	11.52		11.67	0.000248	3.06	913.38	124.45	0.18
Rodair	40540	Max WS	2773.14	-0.69	11.48		11.63	0.000261	3.09	908.42	120	0.19
Rodair	40249	Max WS	2832.82	-0.72	11.38		11.54	0.000294	3.21	891.56	125.63	0.2
Rodair	40185		Lat Struct									
Rodair	40181	Max WS	2846.74	-0.72	11.35		11.52	0.000298	3.26	890.62	130.83	0.2
Rodair	40107	Max WS	2652.23	-0.75	11.38		11.52	0.000257	3.03	888.94	119.24	0.18
Rodair	40105		Lat Struct									
Rodair	40050	Max WS	2664.04	-0.75	11.36		11.5	0.000262	3.05	887.78	124.06	0.18
Rodair	39822	Max WS	2710.87	-0.78	11.31		11.44	0.000251	2.93	935.48	138.2	0.18
Rodair	39798		Lat Struct									
Rodair	39617	Max WS	2733.28	-0.81	11.26		11.39	0.000214	2.85	965.3	130.09	0.17
Rodair	39344	Max WS	2780.33	-0.88	11.19		11.32	0.000249	2.94	951.11	128.28	0.18
Rodair	39227	Max WS	2767.95	-0.88	11.16		11.29	0.000237	3	939.78	137.39	0.18
Rodair	39200		Lat Struct									
Rodair	39060	Max WS	2802.63	-0.91	11.11		11.25	0.000254	3	938.88	124.45	0.18
Rodair	38920	Max WS	2831.01	-0.91	11.07		11.21	0.000249	3.06	940.06	128.94	0.18
Rodair	38916		Lat Struct									
Rodair	38801	Max WS	2865.06	-0.94	11.03		11.18	0.00025	3.09	941.05	126.76	0.18

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Rodair	38792		Lat Struct									
Rodair	38746	Max WS	2876.57	-0.94	11.02		11.16	0.000257	3.06	948.99	134.34	0.18
Rodair	38583	Max WS	2875.69	-0.97	10.97		11.12	0.000273	3.15	929.17	133.32	0.19
Rodair	38572	Max WS	2875.69	-0.97	10.96		11.12	0.000279	3.14	928.63	133.52	0.19
Rodair	38564		Lat Struct									
Rodair	38407	Max WS	2872.77	-1	10.96		11.08	0.000208	2.77	1049.27	136.18	0.17
Rodair	38379	Max WS	2880.26	-1	10.94		11.07	0.000218	2.88	1030.72	153.53	0.17
Rodair	38356	Max WS	2886.19	-1	10.94		11.07	0.000225	2.9	1013.2	143.05	0.17
Rodair	38311		Lat Struct									
Rodair	38212		Lat Struct									
Rodair	38089	Max WS	2933.32	-1.05	10.88		11	0.000215	2.83	1050.87	141.51	0.17
Rodair	37989		Lat Struct									
Rodair	37729	Max WS	2965.25	-1.1	10.79		10.92	0.000237	2.93	1016.23	127.86	0.18
Rodair	37455	Max WS	3037.13	-1.16	10.7		10.85	0.000251	3.08	998.15	132.72	0.18
Rodair	37389	Max WS	3054.41	-1.16	10.68		10.83	0.000258	3.05	1003.37	134.3	0.18
Rodair	37380		Lat Struct									
Rodair	37275	Max WS	3079.83	-1.19	10.64		10.8	0.000258	3.13	1017.17	173.39	0.19
Rodair	37266		Lat Struct									
Rodair	37203	Max WS	3061.69	-1.19	10.63		10.78	0.000254	3.11	1030.78	159.91	0.18
Rodair	37178		Lat Struct									
Rodair	37013	Max WS	3110.31	-1.22	10.57		10.72	0.000277	3.13	995.25	122.53	0.19
Rodair	36801	Max WS	3163.41	-1.25	10.51		10.66	0.000272	3.11	1021.18	132.9	0.19
Rodair	36503	Max WS	3126.82	-1.3	10.44		10.58	0.00026	3.08	1024.82	136.67	0.19
Rodair	36166	Max WS	3146.19	-1.34	10.33		10.49	0.000292	3.26	972.19	128.35	0.2
Rodair	36151	Max WS	3149.97	-1.34	10.32		10.49	0.00029	3.24	977.13	127.81	0.2
Rodair	36129		Lat Struct									
Rodair	35987		Lat Struct									
Rodair	35981	Max WS	3193.11	-1.38	10.29		10.45	0.000046	3.21	1008.89	143.06	0.19
Rodair	35939	Max WS	2909.88	-1.38	10.15		10.42	0.000077	4.21	765.93	140.55	0.25
Rodair	35919		Lat Struct									
Rodair	35799	Max WS	2939.52	-1.41	10.14		10.41	0.000077	4.12	762.72	133.86	0.24
Rodair	35788		Lat Struct									
Rodair	35708	Max WS	3027.64	-1.41	10.17		10.47	0.000081	4.45	775.34	130.3	0.26
Rodair	35701		Lat Struct									
Rodair	35693	Max WS	3030.93	-1.41	10.18		10.47	0.000079	4.29	786.64	137.67	0.25
Rodair	35682		Lat Struct									
Rodair	35659	Max WS	3007.69	-1.41	10.21		10.47	0.000069	4.1	825.24	144.33	0.24
Rodair	35609	Max WS	3001.42	-1.44	10.17		10.47	0.000082	4.48	777.03	134.31	0.26
Rodair	35600		Lat Struct									
Rodair	35547	Max WS	3027.78	-1.44	10.15		10.45	0.000082	4.43	799.87	149.84	0.25
Rodair	35323	Max WS	3071.1	-1.47	10.13		10.42	0.000083	4.37	842.82	165.84	0.26
Rodair	35312	Max WS	3072.65	-1.47	10.12		10.42	0.00008	4.41	845.44	166.47	0.25
Rodair	35252		Lat Struct									
Rodair	35065	Max WS	3105.82	-1.5	10.13		10.4	0.000073	4.2	872.96	167.47	0.24
Rodair	35057	Max WS	3105.06	-1.51	10.13		10.4	0.000071	4.26	876.26	163.95	0.24
Rodair	35052		Lat Struct									
Rodair	34813	Max WS	3196.11	-1.55	10.07		10.37	0.00008	4.47	846.12	149.94	0.25
Rodair	34556	Max WS	3247.77	-1.58	10.02		10.34	0.000087	4.58	860.88	154.73	0.26
Rodair	34353	Max WS	3271.27	-1.61	9.99		10.31	0.000086	4.62	840.7	146.6	0.26
Rodair	34081	Max WS	3334.72	-1.65	9.96		10.28	0.000085	4.56	833.28	128.33	0.26
Rodair	33806	Max WS	3409.19	-1.69	9.9		10.24	0.000094	4.73	815.52	121.64	0.27

Proposed Diversion

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Rodair	33509	Max WS	3501.48	-1.73	9.84		10.2	0.000099	4.82	821.15	125.06	0.28
Rodair	33208	Max WS	3443.41	-1.78	9.7		10.19	0.000145	5.62	681.6	126.06	0.34
Rodair	33197	Max WS	3446.51	-1.78	9.62	4.83	10.19	0.000168	6.08	614.29	121.23	0.36
Rodair	33177 Cloverdale		Bridge									
Rodair	33163	Max WS	3446.51	-1.81	9.38		9.91	0.000161	5.83	626.54	120.61	0.35
Rodair	33153	Max WS	3449.04	-1.81	9.37		9.91	0.000161	5.89	619.58	118.35	0.35
Rodair	33150		Lat Struct									
Rodair	33111		Lat Struct									
Rodair	33002	Max WS	3633.08	-1.84	9.36		9.84	0.000137	5.57	706.88	128.1	0.33
Rodair	32981	Max WS	3638.6	-1.84	9.4	4.13	9.83	0.000117	5.28	763.42	137.37	0.31
Rodair	32977 Pipeline		Bridge									
Rodair	32971	Max WS	3638.6	-1.84	9.28		9.72	0.000122	5.35	747.9	137.37	0.31
Rodair	32960	Max WS	3641.49	-1.84	9.3		9.72	0.000123	5.24	763.16	141.62	0.31
Rodair	32944	Max WS	3645.77	-1.84	9.26	3.99	9.72	0.000134	5.41	690.36	142.76	0.33
Rodair	32922 Pipelines		Bridge									
Rodair	32905	Max WS	3645.9	-1.84	9.18		9.63	0.000131	5.45	752.5	149.08	0.32
Rodair	32893	Max WS	3648.97	-1.84	9.19	4.14	9.63	0.000129	5.33	742.98	147.7	0.32
Rodair	32854 Pipeline		Bridge									
Rodair	32808	Max WS	3648.97	-2.12	9.22		9.49	0.000077	4.28	1026.71	175.64	0.25
Rodair	32793	Max WS	3652.97	-2.19	9.19	3.2	9.49	0.000077	4.37	836.28	177.2	0.25
Rodair	32743 RR		Bridge									
Rodair	32717	Max WS	3652.97	-2.62	9.17		9.45	0.000071	4.25	858.99	119.55	0.24
Rodair	32711	Max WS	3652.78	-2.66	9.2		9.45	0.000073	3.95	960.05	158.17	0.24
Rodair	32705	Max WS	3652.76	-2.69	9.21		9.44	0.000076	3.87	981.75	191.79	0.24
Rodair	32698	Max WS	3652.74	-2.73	9.16	2.87	9.44	0.000071	4.26	856.97	149.3	0.24
Rodair	32655 W Port Arthur Rd		Bridge									
Rodair	32590	Max WS	3652.74	-3.4	9.15		9.41	0.000382	4.12	887.13	208.04	0.23
Rodair	32508	Max WS	3652.29	-4.78	9.21		9.38	0.000237	3.4	1157.79	145.01	0.18
Rodair	32462	Max WS	3651.89	-3.97	9.21		9.37	0.000238	3.29	1169.02	153.17	0.18
Rodair	32455		Lat Struct									
Rodair	32407		Lat Struct									
Rodair	32287	Max WS	3610.39	-4.07	9.14		9.34	0.000294	3.63	1103.32	165.58	0.2
Rodair	32108	Max WS	3589.6	-4.28	9.1		9.28	0.000272	3.43	1120.67	153.72	0.19
Rodair	31859	Max WS	3498.07	-4.38	9.02		9.23	0.000334	3.77	1005.13	137.86	0.21
Rodair	31543	Max WS	3637.79	-4.5	8.93		9.13	0.000276	3.67	1052.8	127.28	0.2
Rodair	31340	Max WS	3771.69	-4.69	8.85		9.03	0.000278	3.5	1148.06	153.99	0.2
Rodair	30965	Max WS	3965.58	-5.03	8.7		8.93	0.000306	3.91	1137.93	161.63	0.21
Rodair	30592	Max WS	4004.21	-4.75	8.52		8.77	0.000398	4.02	1037.48	158.7	0.23
Rodair	30202	Max WS	4048.07	-4.74	8.39		8.63	0.000326	4	1175.82	193.67	0.22
Rodair	30185	Max WS	4035.49	-4.93	8.37		8.62	0.000355	4.06	1096.26	191.12	0.22
Rodair	30137		Lat Struct									
Rodair	30122	Max WS	4043.82	-5.27	8.21		8.62	0.0006	5.3	924.87	163.03	0.29
Rodair	29854	Max WS	4097.58	-5.06	8.22		8.46	0.000321	4	1108.8	142.5	0.21
Rodair	29748	Max WS	4094.57	-5.04	8.17		8.42	0.00035	4.12	1089.3	158.38	0.22
Rodair	29738		Lat Struct									
Rodair	29712		Lat Struct									
Rodair	29570	Max WS	4114.49	-4.88	8.12		8.36	0.000331	3.97	1087.97	131.1	0.21
Rodair	29541		Lat Struct									
Rodair	29503		Lat Struct									
Rodair	29261	Max WS	4138.76	-5.22	7.96		8.25	0.000385	4.37	1042.12	123.54	0.23
Rodair	28913	Max WS	4237.05	-5.72	7.87		8.1	0.000365	3.94	1198.74	186.79	0.22

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	28589	Max WS	4229.14	-6.24	7.74		7.98	0.000333	3.99	1130.45	141.04	0.22
Rodair	28418		Lat Struct									
Rodair	28327	Max WS	4252.87	-5.72	7.62		7.88	0.000417	4.14	1092.22	150.11	0.24
Rodair	28188	Max WS	4258.09	-5.45	7.57		7.83	0.000383	4.16	1124.21	165.6	0.23
Rodair	28181		Lat Struct									
Rodair	28086	Max WS	4190.94	-5.75	7.57		7.8	0.000327	3.88	1174.78	173.04	0.21
Rodair	28069		Lat Struct									
Rodair	27985	Max WS	4209.82	-6.03	7.55		7.76	0.000299	3.77	1210.19	176.29	0.2
Rodair	27941		Lat Struct									
Rodair	27699	Max WS	4079.75	-6.34	7.49		7.69	0.00027	3.62	1237.74	172.24	0.19
Rodair	27384	Max WS	4098.45	-5.88	7.39		7.6	0.000297	3.72	1216.07	174.3	0.2
Rodair	27302	Max WS	4141.54	-6.01	7.25		7.59	0.000535	4.97	1069.78	197.36	0.27
Rodair	27231	Max WS	4100.27	-7.2	7.33		7.54	0.00029	3.67	1219.79	182.51	0.2
Rodair	27219		Lat Struct									
Rodair	27114	Max WS	4114.43	-7.28	7.28		7.5	0.000306	3.82	1195.13	174.52	0.21
Rodair	26795	Max WS	4146.81	-7.42	7.19		7.4	0.000306	3.79	1209.93	173.38	0.21
Rodair	26484	Max WS	4178.41	-6.94	7.05		7.3	0.000347	4.14	1170.5	175.56	0.22
Rodair	26225	Max WS	4186.36	-6.86	7		7.21	0.000291	3.73	1235.72	178.03	0.2
Rodair	25912	Max WS	4187.7	-6.68	6.88		7.12	0.000321	4	1170.41	171.91	0.21
Rodair	25874		Lat Struct									
Rodair	25817		Lat Struct									
Rodair	25810	Max WS	4221.52	-6.98	6.83		7.08	0.000367	4.15	1147.11	172.02	0.23
Rodair	25782	Max WS	4248.07	-6.42	6.84		7.07	0.000343	3.95	1234.62	171.43	0.22
Rodair	25748		Lat Struct									
Rodair	25643	Max WS	4356.44	-6.41	6.79		7.01	0.000309	3.84	1250.3	170.7	0.21
Rodair	25556	Max WS	4409.46	-6.53	6.71		6.97	0.00037	4.25	1192.06	186.52	0.23
Rodair	25445	Max WS	4409.62	-6.34	6.71		6.92	0.000411	3.7	1190.22	148.53	0.23
Rodair	25327	Max WS	4408.96	-7.24	6.69		6.88	0.000275	3.48	1265.98	126.7	0.19
Rodair	25283		Lat Struct									
Rodair	25182		Lat Struct									
Rodair	25095	Max WS	4168.49	-6.55	6.61		6.84	0.000309	3.92	1153.03	151.34	0.21
Rodair	24696	Max WS	3856.93	-6.78	6.54		6.75	0.000287	3.69	1140.52	165.99	0.2
Rodair	24402	Max WS	3836.28	-6.63	6.52		6.67	0.000214	3.27	1335.03	180.35	0.18
Rodair	24079	Max WS	3675.06	-7.6	6.41		6.61	0.000293	3.61	1132.5	173.64	0.2
Rodair	23870	Max WS	3561.2	-7.34	6.4		6.56	0.00023	3.19	1196.12	166.79	0.18
Rodair	23810	Max WS	3542.58	-7.34	6.41		6.55	0.000192	3.02	1271.6	205.49	0.16
Rodair	23799		Lat Struct									
Rodair	23722	Max WS	3434.64	-6.47	6.39		6.54	0.000209	3.1	1234.73	202.24	0.17
Rodair	23718		Lat Struct									
Rodair	23678	Max WS	3435.81	-6.6	6.37		6.53	0.00024	3.26	1130	166.85	0.18
Rodair	23504	Max WS	3409.16	-7.12	6.31		6.49	0.000243	3.51	1110.24	154.03	0.18
Rodair	23285	Max WS	3239.51	-7.54	6.31		6.45	0.000214	3.02	1117.92	156.3	0.17
Rodair	22996	Max WS	3247.53	-7.19	6.26		6.4	0.000173	3.01	1218.67	170.19	0.16
Rodair	22659	Max WS	3167.78	-7.28	6.24		6.34	0.000154	2.68	1305.23	191.13	0.15
Rodair	22560	Max WS	3055.78	-6.56	6.26		6.33	0.000113	2.25	1432.44	169.48	0.13
Rodair	22449	Max WS	3060.8	-7.12	6.22		6.32	0.000132	2.61	1342.61	180.84	0.14
Rodair	22431		Lat Struct									
Rodair	22355	Max WS	3059.51	-7.14	6.19		6.31	0.000183	2.76	1122.98	143.09	0.16
Rodair	22014	Max WS	3026.64	-7.38	6.15		6.26	0.000136	2.66	1321.1	189.98	0.14
Rodair	21661	Max WS	3170.29	-6.97	6.07		6.19	0.000177	2.85	1252.93	185.87	0.16
Rodair	21449	Max WS	3214.32	-8	6.03		6.15	0.000159	2.91	1342.32	193.61	0.15

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Rodair	21181	Max WS	3665.15	-7.92	5.96		6.08	0.00017	2.96	1442.05	191.23	0.16
Rodair	20966	Max WS	3792.08	-8.1	5.91		6.05	0.000183	3.08	1470.67	226.53	0.16
Rodair	20745	Max WS	3720.36	-7.43	5.88		6.02	0.000179	3.04	1466.92	213.11	0.16
Rodair	20503	Max WS	3470.91	-6.94	5.88		5.99	0.000162	2.79	1410.74	199.28	0.15
Rodair	20152	Max WS	3350.66	-7.3	5.82		5.93	0.000158	2.84	1356.85	178.58	0.15
Rodair	19887	Max WS	3116.31	-7.38	5.82		5.91	0.000132	2.53	1361.59	171.95	0.14
Rodair	19599	Max WS	3094.97	-6.53	5.77		5.87	0.000142	2.56	1384.88	184.71	0.14
Rodair	19205	Max WS	2671.57	-6.9	5.8		5.86	0.000088	1.99	1538.18	202.71	0.11
Rodair	18888	Max WS	2632.36	-6.91	5.79		5.85	0.000092	2.13	1449.63	193.78	0.12
Rodair	18535	Max WS	2420.5	-6.67	5.77		5.82	0.000071	1.83	1477.26	196.43	0.1
Rodair	18189	Max WS	2417.01	-6.77	5.74		5.8	0.000076	1.89	1451.48	202.47	0.1
Rodair	17910	Max WS	2293.19	-7.03	5.73		5.77	0.000054	1.63	1618.71	204.71	0.09
Rodair	17641	Max WS	2274.88	-7.06	5.7		5.74	0.000056	1.62	1563.58	194.11	0.09
Rodair	17596	Max WS	2248.3	-7.28	5.69		5.72	0.000054	1.59	1558.88	190.83	0.09
Rodair	17448	Max WS	2112.23	-7.47	5.67		5.71	0.000058	1.68	1407.55	174.86	0.09
Rodair	17439		Lat Struct									
Rodair	17320	Max WS	2033.44	-7.78	5.67		5.71	0.000056	1.64	1373.02	172.99	0.09
Rodair	17064	Max WS	1911.42	-7.74	5.67		5.7	0.000049	1.51	1379.44	169.02	0.08
Rodair	16757	Max WS	1756.97	-6.91	5.66		5.69	0.000042	1.37	1358.53	164.15	0.08
Rodair	16437	Max WS	1636.47	-6.76	5.65		5.68	0.000038	1.29	1341.51	159.13	0.07
Rodair	16143	Max WS	1497	-6.33	5.65		5.67	0.000031	1.21	1330.14	154.28	0.07
Rodair	16033	Max WS	1434.79	-6.33	5.65		5.67	0.000029	1.14	1367.64	171.79	0.06
Rodair	15984	Max WS	1434.51	-7.22	5.65	-4.01	5.67	0.000025	0.94	1518.2	175.78	0.06
Rodair	15974 Pipeline		Bridge									
Rodair	15964	Max WS	1434.51	-8.15	5.65		5.66	0.000022	0.9	1600.56	182.32	0.05
Rodair	15909	Max WS	1434.1	-7.84	5.64		5.66	0.000027	1.02	1406.36	154.13	0.06
Rodair	15903		Lat Struct									
Rodair	15899		Lat Struct									
Rodair	15831	Max WS	1418.33	-7.71	5.64		5.66	0.000025	1.11	1352.54	149	0.06
Rodair	15538	Max WS	1399.77	-7.5	5.63		5.65	0.000025	1.12	1342.69	153.73	0.06
Rodair	15259	Max WS	1398.63	-7.62	5.62		5.64	0.000027	1.13	1369.58	166.52	0.06
Rodair	14965	Max WS	1332.19	-7.57	5.62		5.64	0.000022	1.03	1455.86	185.66	0.06
Rodair	14808	Max WS	1121.81	-7.44	5.63		5.64	0.000015	0.85	1533.62	207.11	0.05
Rodair	14763	Max WS	1120.31	-6.46	5.63	-3.97	5.64	0.000018	0.9	1483.74	213.78	0.05
Rodair	14740 FM 365		Bridge									
Rodair	14714	Max WS	1118.37	-5.29	5.59		5.6	0.000023	0.96	1400.64	219.16	0.06
Rodair	14656	Max WS	1114.26	-8.6	5.59		5.6	0.000011	0.78	1727.34	239.58	0.04
Rodair	14654		Lat Struct									
Rodair	14553		Lat Struct									
Rodair	14414	Max WS	1112.06	-9.21	5.59		5.6	0.000008	0.67	2066.37	277.07	0.03
Rodair	14280	Max WS	953.29	-7.54	5.6		5.6	0.000006	0.54	2187.83	307.68	0.03
Rodair	14274		Lat Struct									
Rodair	14165	Max WS	1927.26	-7.76	5.57		5.59	0.000025	1.12	2229.71	322.49	0.06
Rodair	14151		Lat Struct									
Rodair	14094	Max WS	1941.21	-8.41	5.57		5.59	0.000025	1.14	2261.88	317.64	0.06
Rodair	13857	Max WS	2033.31	-8.16	5.56		5.58	0.000031	1.2	2136.23	312.81	0.07
Rodair	13555	Max WS	2063.73	-7.34	5.55		5.57	0.000034	1.26	2012.01	284.49	0.07
Rodair	13297	Max WS	2102.02	-6.25	5.54		5.56	0.000035	1.23	1934.41	253.55	0.07
Rodair	13028	Max WS	2216.46	-5.91	5.52		5.55	0.000043	1.35	1810.01	229.87	0.08
Rodair	12743	Max WS	2529.58	-6.08	5.49		5.53	0.000056	1.55	1783.03	225.47	0.09
Rodair	12439	Max WS	2743.5	-6.28	5.47		5.52	0.000073	1.81	1725.15	231.74	0.1

Proposed Diversion

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Rodair	12124	Max WS	2897.68	-6.72	5.43		5.48	0.000079	1.94	1729.19	229.67	0.11
Rodair	11769	Max WS	3216	-7.61	5.39		5.46	0.000096	2.19	1665.11	206.86	0.12
Rodair	11431	Max WS	2928.3	-7.97	5.37		5.43	0.000081	1.98	1819.32	250.59	0.11
Rodair	11225	Max WS	2964.58	-7.76	5.35		5.41	0.000093	2.07	1689.28	237.42	0.11
Rodair	10798	Max WS	2741.74	-7.47	5.32		5.37	0.00008	1.88	1703.85	243.08	0.11
Rodair	10451	Max WS	2728.77	-6.51	5.3		5.34	0.000072	1.75	1866.39	283.06	0.1
Rodair	10114	Max WS	2705.26	-7.24	5.28		5.32	0.000065	1.68	1957.82	305.54	0.1
Rodair	9896	Max WS	2649.61	-6.12	5.26		5.3	0.000063	1.61	1983.43	326.86	0.09
Rodair	9855	Max WS	2649.14	-6.09	5.26		5.3	0.000062	1.58	2050.19	357.88	0.09
Rodair	9765		Lat Struct									
Rodair	9684		Lat Struct									
Rodair	9653	Max WS	2559.23	-6.13	5.25		5.29	0.00007	1.72	1873.36	321.16	0.1
Rodair	9334	Max WS	2527.08	-6.25	5.24		5.27	0.000049	1.41	2022.98	299.6	0.08
Rodair	8819	Max WS	2344.2	-4.56	5.22		5.24	0.000046	1.27	2170.48	358.49	0.08
Rodair	8479	Max WS	2316.5	-4.63	5.21		5.23	0.000046	1.31	2230.63	400.13	0.08
Rodair	7988	Max WS	2208.75	-4.19	5.19		5.21	0.000041	1.13	2193.23	388.46	0.07
Rodair	7700	Max WS	2173	-2.88	5.18		5.2	0.000033	0.98	2677.43	482.43	0.06
Rodair	7312	Max WS	2100.72	-2.76	5.16		5.18	0.000063	1.34	2221.54	459.76	0.09
Rodair	7020	Max WS	2240.06	-3.12	5.15		5.16	0.000034	1	3063.75	549.28	0.07
Rodair	6774	Max WS	2377.28	-1.88	5.15		5.16	0.000026	0.84	3479.51	624.87	0.06
Rodair	6512	Max WS	2606.56	-1.78	5.14		5.15	0.000021	0.75	4262.69	756.08	0.05
Rodair	6261	Max WS	2777.64	-1.75	5.14		5.15	0.000016	0.66	5002.29	855.17	0.05
Rodair	5983	Max WS	2972.96	-1.75	5.13		5.14	0.000014	0.61	6018.19	1066.78	0.04
Rodair	5696	Max WS	3068.38	-1.72	5.13		5.13	0.00001	0.52	6639.49	1094.46	0.04
Rodair	5387	Max WS	3057.21	-1.72	5.13		5.13	0.000011	0.55	6096.31	977.28	0.04
Rodair	5141	Max WS	3096.78	-1.84	5.12		5.13	0.000013	0.59	5552.82	883.87	0.04
Rodair	4826	Max WS	3141.45	-2.09	5.12		5.13	0.000017	0.7	4816.91	739.88	0.05
Rodair	4416	Max WS	3496.37	-2.38	5.1		5.11	0.000023	0.84	5317.13	949.8	0.05
Rodair	4140	Max WS	3640.51	-2.66	5.1		5.1	0.00002	0.79	5935.05	988.79	0.05
Rodair	3899	Max WS	3934.5	-2.78	5.09		5.1	0.000022	0.83	6114.3	1034.86	0.05
Rodair	3535	Max WS	4353.82	-3.25	5.08		5.09	0.000021	0.84	6849.8	1115.1	0.05
Rodair	3189	Max WS	4785.74	-3.56	5.08		5.08	0.000022	0.87	7865.82	1387.14	0.05
Rodair	2825	Max WS	5272.12	-4.79	5.06		5.07	0.000028	1.01	8106.74	1489.43	0.06
Rodair	2434	Max WS	5437.17	-5.87	5.05		5.06	0.000033	1.13	7512.53	1419.64	0.07
Rodair	2044	Max WS	5596.46	-5.5	5.03		5.05	0.000043	1.27	6012.54	1099.73	0.08
Rodair	1695	Max WS	5965.12	-4.61	5.01		5.03	0.000044	1.27	6238.39	1056.19	0.08
Rodair	1436	Max WS	5845.58	-4.3	5	-1.62	5.01	0.000028	1	7336.9	1079.76	0.06

Proposed Detention D

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Rodair	54352	Max WS	124.9	8.08	13.69		13.71	0.000132	1.12	111.12	34.28	0.11
Rodair	54311	Max WS	124.9	8.5	13.69		13.7	0.000105	0.97	129.02	42.79	0.1
Rodair	54290		Lat Struct									
Rodair	54289		Lat Struct									
Rodair	54174	Max WS	122.8	7.79	13.68		13.69	0.000072	0.88	138.93	39.26	0.08
Rodair	54014	Max WS	121.81	7.96	13.66		13.68	0.000107	1.02	119.64	36.81	0.1
Rodair	53844	Max WS	119.92	7.86	13.65		13.66	0.000067	0.84	143.03	41.86	0.08
Rodair	53685	Max WS	119.84	8.12	13.64		13.65	0.000068	0.86	139.94	39.87	0.08
Rodair	53512	Max WS	119.61	7.69	13.63		13.64	0.000055	0.8	149.67	39.94	0.07
Rodair	53371	Max WS	119.6	7.53	13.62		13.64	0.000058	0.81	147.01	40.46	0.07
Rodair	53172	Max WS	119.59	7.58	13.62		13.62	0.000045	0.71	168.48	50.61	0.07
Rodair	53012	Max WS	116.29	7.55	13.61		13.62	0.000046	0.68	170.67	51.91	0.07
Rodair	52827	Max WS	116.07	7.28	13.61		13.61	0.000027	0.56	221.04	91.23	0.05
Rodair	52798		Lat Struct									
Rodair	52594	Max WS	115.43	7.42	13.6		13.6	0.000043	0.7	165.55	50.71	0.06
Rodair	52588		Lat Struct									
Rodair	52581		Lat Struct									
Rodair	52412	Max WS	337.73	7.37	13.48		13.53	0.000245	1.79	188.74	46.65	0.16
Rodair	52233	Max WS	336.96	7.09	13.43		13.48	0.00027	1.86	180.96	45.3	0.16
Rodair	52006	Max WS	336.18	6.79	13.37		13.42	0.000244	1.82	185.14	44.39	0.16
Rodair	51821	Max WS	335.23	6.64	13.32		13.37	0.000281	1.94	172.98	41.33	0.17
Rodair	51619	Max WS	334.43	6.55	13.27		13.32	0.000236	1.78	187.84	45.27	0.15
Rodair	51420	Max WS	333.49	6.4	13.22		13.27	0.000266	1.9	175.45	41.46	0.16
Rodair	51176	Max WS	332.72	6.36	13.18		13.22	0.000178	1.61	206.15	46.67	0.14
Rodair	50994		Lat Struct									
Rodair	50989		Lat Struct									
Rodair	50962	Max WS	331.95	6.32	13.14		13.18	0.000165	1.58	209.73	45.93	0.13
Rodair	50720	Max WS	330.58	6.12	13.09		13.14	0.000202	1.73	190.91	41.99	0.14
Rodair	50526	Max WS	329.19	6.25	13.04		13.09	0.00027	1.85	177.62	44.56	0.16
Rodair	50327	Max WS	328.87	5.97	13.02		13.05	0.000135	1.41	233.98	53.38	0.12
Rodair	50168		Lat Struct									
Rodair	50165		Lat Struct									
Rodair	50112	Max WS	326.84	6.32	12.95		13.01	0.000283	1.9	171.98	42.81	0.17
Rodair	49912	Max WS	326.52	5.69	12.94		12.97	0.000105	1.32	248.29	51.23	0.11
Rodair	49709	Max WS	325.07	5.83	12.9		12.94	0.000192	1.61	201.37	48.47	0.14
Rodair	49534	Max WS	323.22	5.5	12.85		12.9	0.00021	1.73	187.17	42.7	0.15
Rodair	49275	Max WS	322.36	5.46	12.84		12.86	0.000091	1.22	264.96	55.75	0.1
Rodair	49063	Max WS	321.5	5.76	12.82		12.84	0.00009	1.2	268.04	58.3	0.1
Rodair	48842	Max WS	319.94	5.53	12.79		12.82	0.000117	1.34	238.61	52.46	0.11
Rodair	48641	Max WS	318.38	5.64	12.76		12.79	0.000135	1.44	222.3	54.18	0.12
Rodair	48434	Max WS	316.98	5.72	12.74		12.77	0.000106	1.37	245.17	68.42	0.11
Rodair	48236	Max WS	315.56	5.66	12.72		12.75	0.000114	1.4	234.68	62.22	0.11
Rodair	47992	Max WS	313.57	5.73	12.68		12.72	0.000134	1.52	220.52	62.63	0.12
Rodair	47977	Max WS	308.73	5.61	12.62	8.35	12.72	0.000261	2.49	124.05	62.4	0.18
Rodair	47949 5th Ave		Bridge									
Rodair	47930	Max WS	308.32	5.65	12.62		12.66	0.000034	1.67	186.08	50.57	0.14
Rodair	47908	Max WS	309.14	5.58	12.63	8.21	12.66	0.000021	1.5	242.9	84.87	0.12

Proposed Detention D

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	47891		Inl Struct									
Rodair	47879	Max WS	308.94	5.37	12.62		12.64	0.000014	1.28	309.05	127.77	0.1
Rodair	47846		Lat Struct									
Rodair	47783	Max WS	277.1	4.21	12.63		12.64	0.000009	1	296.41	81.28	0.08
Rodair	47753		Lat Struct									
Rodair	47751		Lat Struct									
Rodair	47737	Max WS	277.25	3.85	12.63		12.64	0.000008	0.98	293.24	70.65	0.07
Rodair	47564	Max WS	657.43	3.84	12.49		12.57	0.000057	2.26	293.08	70.19	0.19
Rodair	47409	Max WS	657.77	3.69	12.48		12.56	0.000045	2.31	298.91	72.66	0.17
Rodair	47180	Max WS	658.28	3.91	12.46		12.55	0.000049	2.45	282.76	70.71	0.18
Rodair	46984	Max WS	661.81	3.66	12.45		12.54	0.000043	2.36	299.09	70.28	0.17
Rodair	46786	Max WS	664.06	3.34	12.46		12.53	0.000034	2.12	322.74	67.97	0.15
Rodair	46660	Max WS	662.53	3.52	12.43		12.53	0.000046	2.48	294.9	74.62	0.18
Rodair	46479	Max WS	663.69	3.58	12.43		12.52	0.000041	2.41	305.2	78.4	0.17
Rodair	46324	Max WS	664.51	3.5	12.43		12.51	0.000067	2.3	288.33	71.52	0.2
Rodair	46263	Max WS	667.2	3.59	12.46		12.51	0.00003	1.67	400.63	89.3	0.14
Rodair	46252	Max WS	666.07	3.55	12.46	6.99	12.51	0.000028	1.79	383.19	92.29	0.14
Rodair	46247 Highland Pipelin		Bridge									
Rodair	46242	Max WS	664.9	3.56	12.43		12.48	0.000028	1.8	381.22	90.32	0.14
Rodair	46225	Max WS	664.62	3.52	12.42	6.71	12.48	0.000028	1.99	362.55	89.54	0.14
Rodair	46221 Pipeline		Bridge									
Rodair	46218	Max WS	664.62	3.56	12.4		12.46	0.000028	1.96	362.45	89.51	0.14
Rodair	46214	Max WS	664.27	3.56	12.4		12.46	0.000027	2.02	361.72	89.8	0.14
Rodair	46210	Max WS	664.29	3.53	12.4	6.76	12.46	0.00003	2.01	353.14	89.63	0.14
Rodair	46206 Pipeline		Bridge									
Rodair	46203	Max WS	662.43	3.56	12.36		12.42	0.000029	2.06	354.19	86.75	0.14
Rodair	46193	Max WS	663.42	3.71	12.37		12.42	0.000038	1.86	356.74	80.46	0.16
Rodair	46138	Max WS	661.23	3.81	12.33		12.42	0.000051	2.37	282.97	64.29	0.18
Rodair	46123		Lat Struct									
Rodair	46121		Lat Struct									
Rodair	46090	Max WS	661.48	3.43	12.34		12.42	0.000041	2.28	300.1	66.2	0.17
Rodair	45937	Max WS	661.31	3.53	12.32		12.41	0.000052	2.49	280.19	74.41	0.19
Rodair	45779	Max WS	662.55	3.3	12.32		12.4	0.000043	2.33	293.8	68.19	0.17
Rodair	45773		Lat Struct									
Rodair	45650	Max WS	650.72	3.34	12.33		12.4	0.000036	2.18	314.63	78.18	0.16
Rodair	45631		Lat Struct									
Rodair	45523	Max WS	650.84	3.5	12.32		12.4	0.000041	2.24	294.41	61.09	0.17
Rodair	45412	Max WS	651.43	3.52	12.32		12.39	0.000041	2.21	298.43	70.38	0.16
Rodair	45306	Max WS	651.21	3.45	12.31		12.39	0.000039	2.22	300.7	66.86	0.16
Rodair	45279		Lat Struct									
Rodair	45136	Max WS	597.84	3.39	12.32		12.38	0.000204	2.01	319.1	76.76	0.15
Rodair	45100		Lat Struct									
Rodair	45010	Max WS	587.74	3.67	12.3		12.37	0.000037	2.04	318.19	95.75	0.16
Rodair	44902	Max WS	590.3	3.28	12.3		12.36	0.000035	2.06	318.23	88.67	0.15
Rodair	44801	Max WS	590.56	3.22	12.3		12.36	0.000034	1.99	307.83	80.7	0.15
Rodair	44674	Max WS	590.78	3.18	12.29		12.35	0.000033	1.99	304.75	65.39	0.15
Rodair	44570		Lat Struct									
Rodair	44550	Max WS	588.47	3.03	12.29		12.35	0.00003	1.92	321.34	89.45	0.14

Proposed Detention D

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	44436	Max WS	584.49	3.16	12.29		12.35	0.000029	1.89	334.99	93.31	0.14
Rodair	44308	Max WS	586.62	2.9	12.29		12.35	0.000026	1.87	353.15	92.38	0.13
Rodair	44208	Max WS	590.42	2.91	12.3		12.34	0.000019	1.67	388.81	91.86	0.12
Rodair	44175	Max WS	588.97	2.88	12.29	6.03	12.34	0.000019	1.78	330.58	102.02	0.12
Rodair	44151 Wellspring Dr		Bridge									
Rodair	44128	Max WS	588.41	2.83	12.23		12.28	0.000021	1.74	402.44	120.29	0.12
Rodair	44096	Max WS	587.71	2.82	12.23		12.28	0.000019	1.64	383.97	92.63	0.12
Rodair	44088		Lat Struct									
Rodair	44039	Max WS	586.3	2.75	12.23		12.28	0.000018	1.62	387.85	82.44	0.11
Rodair	44005		Lat Struct									
Rodair	43915	Max WS	585.26	2.78	12.24		12.28	0.000017	1.67	414.68	98.51	0.11
Rodair	43819	Max WS	600.96	2.59	12.23		12.27	0.000018	1.71	385.76	87.72	0.11
Rodair	43748	Max WS	593.53	2.56	12.25		12.26	0.000004	0.81	800.55	176.2	0.06
Rodair	43737	Max WS	593.45	2.56	12.25	4.77	12.26	0.000004	0.79	796.18	171.97	0.05
Rodair	43701 Unnamed Rd		Bridge									
Rodair	43648	Max WS	593.21	2.36	12.23		12.23	0.000003	0.69	895.91	164.02	0.05
Rodair	43634	Max WS	593.11	2.2	12.23		12.23	0.000003	0.71	887.27	161.35	0.05
Rodair	43598		Lat Struct									
Rodair	43553		Lat Struct									
Rodair	43477	Max WS	512.66	2.07	12.21		12.24	0.000009	1.24	440.45	81.41	0.08
Rodair	43458		Lat Struct									
Rodair	43367	Max WS	1392.59	1.98	11.87		12.08	0.0001	3.66	382.63	70.22	0.26
Rodair	43309		Lat Struct									
Rodair	43308		Lat Struct									
Rodair	43237	Max WS	1393.66	1.91	11.91		12.07	0.000056	3.22	474.01	93.56	0.21
Rodair	43178	Max WS	1396.88	1.94	11.95	5.51	12.06	0.000037	2.68	520.82	95.54	0.17
Rodair	43140 US59 NBFR		Bridge									
Rodair	43113	Max WS	1391.49	1.73	11.77		11.95	0.000058	3.41	410.89	87.7	0.21
Rodair	43111	Max WS	1392.6	1.73	11.86		11.95	0.000034	2.42	578.89	92.23	0.16
Rodair	43109	Max WS	1392.55	1.81	11.86		11.95	0.000033	2.39	589.07	110.76	0.16
Rodair	43107	Max WS	1392.49	1.81	11.86	5.21	11.95	0.000032	2.41	581.32	110.73	0.15
Rodair	43079 US59 NBML		Bridge									
Rodair	43038	Max WS	1392.49	1.81	11.8		11.91	0.000032	2.58	559.75	124.73	0.16
Rodair	43030	Max WS	1391.14	1.82	11.78	5.47	11.91	0.000039	2.89	498.14	179.16	0.18
Rodair	42987 US59 SBML		Bridge									
Rodair	42958	Max WS	1392.29	1.69	11.8		11.9	0.000031	2.53	550.33	93.23	0.15
Rodair	42954	Max WS	1392.24	1.69	11.8	5.25	11.9	0.000032	2.49	569.98	101.39	0.16
Rodair	42920 US59 SBFR		Bridge									
Rodair	42889	Max WS	1392.24	1.66	11.78		11.87	0.00003	2.39	586.47	92.41	0.15
Rodair	42862	Max WS	1390.92	1.61	11.75	5.5	11.87	0.00004	2.7	523.84	80.82	0.17
Rodair	42851		Inl Struct									
Rodair	42791	Max WS	1390.92	-0.34	11.71		11.79	0.000024	2.3	618.65	89.63	0.14
Rodair	42790		Lat Struct									
Rodair	42785		Lat Struct									
Rodair	42633	Max WS	1423.06	-0.36	11.7		11.78	0.000025	2.34	620.83	94.31	0.14
Rodair	42381	Max WS	1477.15	-0.41	11.68		11.77	0.000028	2.42	632.4	111.02	0.15
Rodair	42172	Max WS	1519.96	-0.44	11.66		11.76	0.000027	2.47	632.65	90.81	0.14
Rodair	41952	Max WS	1569.89	-0.47	11.64		11.75	0.00003	2.58	635.34	104.49	0.15

Proposed Detention D

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	41818	Max WS	1596.01	-0.5	11.63		11.74	0.000034	2.64	613.13	85.32	0.16
Rodair	41798	Max WS	1600.07	-0.5	11.63	3.79	11.74	0.000034	2.64	616.27	88.51	0.16
Rodair	41793 Landrey Pipeline		Bridge									
Rodair	41788	Max WS	1600.07	-0.5	11.61		11.72	0.000033	2.68	612.1	97.25	0.16
Rodair	41782	Max WS	1601.35	-0.5	11.61		11.72	0.000033	2.66	612.6	98.93	0.16
Rodair	41777		Lat Struct									
Rodair	41768		Lat Struct									
Rodair	41707	Max WS	1617.57	-0.5	11.6		11.71	0.000034	2.66	622.26	102.64	0.16
Rodair	41558	Max WS	1662.22	-0.53	11.59		11.7	0.000032	2.72	658	121.55	0.16
Rodair	41539.5*	Max WS	1665.27	-0.53	11.59		11.7	0.000032	2.73	653.06	117.65	0.16
Rodair	41521*	Max WS	1668.49	-0.53	11.58		11.7	0.000032	2.74	648.62	113.77	0.16
Rodair	41502.5*	Max WS	1671.18	-0.53	11.58		11.7	0.000033	2.74	644.74	109.87	0.16
Rodair	41484	Max WS	1674.42	-0.53	11.58		11.7	0.000033	2.75	641.31	105.97	0.16
Rodair	41386.6*	Max WS	1678.7	-0.54	11.58		11.7	0.000032	2.72	649.56	109.75	0.16
Rodair	41372.2*	Max WS	1682.89	-0.54	11.58		11.7	0.000031	2.69	657.48	109.95	0.16
Rodair	41357.8*	Max WS	1687.08	-0.55	11.58		11.69	0.00003	2.66	666.02	108.22	0.15
Rodair	41343.4*	Max WS	1691.28	-0.56	11.59		11.69	0.000029	2.62	675	106.4	0.15
Rodair	41332		Lat Struct									
Rodair	41329*	Max WS	1699.55	-0.57	11.59		11.69	0.000028	2.6	673.25	88.62	0.15
Rodair	41314.6*	Max WS	1722.79	-0.57	11.58		11.69	0.000028	2.6	679.94	87.35	0.15
Rodair	41300.2*	Max WS	1781.62	-0.58	11.57		11.68	0.000029	2.65	688.5	87.83	0.15
Rodair	41285.8*	Max WS	1828.59	-0.59	11.56		11.67	0.00003	2.68	697.57	88.43	0.15
Rodair	41271.4*	Max WS	1929.13	-0.6	11.54		11.66	0.000032	2.8	701.85	85.53	0.16
Rodair	41257*	Max WS	2108.79	-0.6	11.5		11.64	0.000037	3.02	709.03	86.36	0.17
Rodair	41242.6*	Max WS	2258.16	-0.61	11.46		11.62	0.000042	3.2	720.19	91.53	0.18
Rodair	41228.2*	Max WS	2313.47	-0.62	11.45		11.61	0.000042	3.23	732.68	97.41	0.18
Rodair	41213.8*	Max WS	2402.05	-0.63	11.43		11.6	0.000044	3.3	742.81	103.18	0.19
Rodair	41199.4*	Max WS	2416.84	-0.63	11.43		11.59	0.000043	3.27	754.14	108.95	0.19
Rodair	41185	Max WS	2423.78	-0.64	11.43		11.59	0.000041	3.23	765.52	117.96	0.18
Rodair	41151		Lat Struct									
Rodair	41145.8*	Max WS	2427.33	-0.63	11.43		11.59	0.000072	3.2	771.52	111.74	0.19
Rodair	41134.6*	Max WS	2430.81	-0.62	11.43		11.59	0.000114	3.19	777.42	111.34	0.19
Rodair	41123.4*	Max WS	2434.37	-0.61	11.43		11.59	0.000153	3.17	782.86	112.09	0.19
Rodair	41112.2*	Max WS	2437.92	-0.6	11.43		11.58	0.000215	3.15	787.64	113.25	0.19
Rodair	41101	Max WS	2441.48	-0.59	11.42		11.58	0.00029	3.14	791.77	114.49	0.19
Rodair	41083.2*	Max WS	2445.22	-0.6	11.43		11.57	0.000276	3.07	807.49	115.14	0.19
Rodair	41065.4*	Max WS	2448.96	-0.6	11.43		11.57	0.000263	3.01	823.43	115.72	0.18
Rodair	41047.5*	Max WS	2452.7	-0.6	11.43		11.56	0.00025	2.95	839.61	116.13	0.18
Rodair	41029.7*	Max WS	2456.43	-0.61	11.43		11.56	0.000238	2.89	856.36	116.67	0.18
Rodair	41011.9*	Max WS	2460.17	-0.62	11.43		11.55	0.000227	2.84	873.45	117.24	0.17
Rodair	40994	Max WS	2463.91	-0.62	11.43		11.55	0.000217	2.78	890.57	117.03	0.17
Rodair	40836	Max WS	2497.12	-0.62	11.38		11.51	0.000229	2.86	884.84	128.97	0.17
Rodair	40694	Max WS	2524.58	-0.66	11.35		11.47	0.000225	2.88	891.41	121.52	0.17
Rodair	40540	Max WS	2556.42	-0.69	11.3		11.43	0.000237	2.9	887.6	117.82	0.18
Rodair	40249	Max WS	2615.9	-0.72	11.21		11.36	0.000267	3.03	870.81	123.88	0.19
Rodair	40185		Lat Struct									
Rodair	40181	Max WS	2629.6	-0.72	11.19		11.34	0.00027	3.08	869.33	128.39	0.19
Rodair	40107	Max WS	2449.4	-0.75	11.21		11.34	0.000234	2.85	869.3	117.6	0.17

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	40105		Lat Struct									
Rodair	40050	Max WS	2459.03	-0.75	11.19		11.32	0.000238	2.87	867.62	121.08	0.18
Rodair	39822	Max WS	2506.54	-0.78	11.14		11.26	0.00023	2.77	913.49	135.23	0.17
Rodair	39798		Lat Struct									
Rodair	39617	Max WS	2536.9	-0.81	11.1		11.22	0.000196	2.69	945.16	121.09	0.16
Rodair	39344	Max WS	2588.42	-0.88	11.03		11.15	0.000229	2.79	931.56	125.96	0.17
Rodair	39227	Max WS	2585.3	-0.88	11		11.13	0.00022	2.85	919.23	131.94	0.17
Rodair	39200		Lat Struct									
Rodair	39060	Max WS	2619.73	-0.91	10.96		11.09	0.000236	2.85	920.59	119.94	0.18
Rodair	38920	Max WS	2638.96	-0.91	10.92		11.05	0.000229	2.9	921.49	124.76	0.17
Rodair	38916		Lat Struct									
Rodair	38801	Max WS	2666.52	-0.94	10.89		11.02	0.000229	2.92	923.34	122.56	0.17
Rodair	38792		Lat Struct									
Rodair	38746	Max WS	2677.7	-0.94	10.88		11.01	0.000236	2.9	930.53	127.65	0.18
Rodair	38583	Max WS	2677.3	-0.97	10.83		10.97	0.00025	2.98	911.1	130.32	0.18
Rodair	38572	Max WS	2677.3	-0.97	10.83		10.97	0.000256	2.98	910.53	130.69	0.18
Rodair	38564		Lat Struct									
Rodair	38407	Max WS	2675.81	-1	10.82		10.93	0.00019	2.62	1030.8	133.78	0.16
Rodair	38379	Max WS	2682.99	-1	10.81		10.92	0.0002	2.73	1010.02	151.48	0.16
Rodair	38356	Max WS	2688.98	-1	10.8		10.92	0.000206	2.75	994.16	139.23	0.16
Rodair	38311		Lat Struct									
Rodair	38212		Lat Struct									
Rodair	38089	Max WS	2744.38	-1.05	10.75		10.86	0.000198	2.69	1032.23	140.72	0.16
Rodair	37989		Lat Struct									
Rodair	37729	Max WS	2790.05	-1.1	10.66		10.78	0.00022	2.8	1000.21	124.54	0.17
Rodair	37455	Max WS	2860.6	-1.16	10.58		10.71	0.000233	2.94	982.24	129.54	0.18
Rodair	37389	Max WS	2877.51	-1.16	10.56		10.69	0.00024	2.92	987.65	126.98	0.18
Rodair	37380		Lat Struct									
Rodair	37275	Max WS	2905.05	-1.19	10.53		10.66	0.000241	3	996.61	173.39	0.18
Rodair	37266		Lat Struct									
Rodair	37203	Max WS	2894.8	-1.19	10.51		10.65	0.000238	2.98	1011.76	159.91	0.18
Rodair	37178		Lat Struct									
Rodair	37013	Max WS	2943.3	-1.22	10.46		10.6	0.000258	3	981.32	120.25	0.18
Rodair	36801	Max WS	2997.6	-1.25	10.4		10.54	0.000255	2.98	1006.39	132.61	0.18
Rodair	36503	Max WS	2981.9	-1.3	10.33		10.46	0.000247	2.98	1009.71	135.74	0.18
Rodair	36166	Max WS	3015.16	-1.34	10.22		10.37	0.000279	3.16	958.48	124.85	0.19
Rodair	36151	Max WS	3018.97	-1.34	10.21		10.37	0.000278	3.15	963.39	125.79	0.19
Rodair	36129		Lat Struct									
Rodair	35987		Lat Struct									
Rodair	35981	Max WS	3061.97	-1.38	10.18		10.34	0.000045	3.12	993.47	143.06	0.19
Rodair	35939	Max WS	3069.75	-1.38	10.03		10.35	0.00009	4.51	749.54	138.91	0.27
Rodair	35919		Lat Struct									
Rodair	35799	Max WS	3102.93	-1.41	10.02		10.33	0.00009	4.41	746.71	133.05	0.26
Rodair	35788		Lat Struct									
Rodair	35708	Max WS	2902.18	-1.41	10.07		10.35	0.000077	4.31	762.37	129.36	0.25
Rodair	35701		Lat Struct									
Rodair	35693	Max WS	2905.31	-1.41	10.08		10.35	0.000075	4.17	772.77	137.67	0.24
Rodair	35682		Lat Struct									

Proposed Detention D

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	35659	Max WS	2885.31	-1.41	10.11		10.35	0.000066	3.98	810.49	143.83	0.23
Rodair	35609	Max WS	2891.89	-1.44	10.06		10.35	0.000079	4.37	762.97	133.77	0.25
Rodair	35600		Lat Struct									
Rodair	35547	Max WS	2895.29	-1.44	10.06		10.34	0.000078	4.28	786.77	149.05	0.25
Rodair	35323	Max WS	2977.75	-1.47	10.03		10.31	0.000081	4.29	827.1	165.01	0.25
Rodair	35312	Max WS	2977.16	-1.47	10.03		10.31	0.000077	4.32	829.62	165.68	0.25
Rodair	35252		Lat Struct									
Rodair	35065	Max WS	3003.89	-1.5	10.02		10.28	0.000071	4.12	855.33	164.47	0.24
Rodair	35057	Max WS	3003.04	-1.51	10.02		10.28	0.000069	4.17	859.04	161.59	0.24
Rodair	35052		Lat Struct									
Rodair	34813	Max WS	3093.33	-1.55	9.97		10.26	0.000078	4.38	830.5	149.17	0.25
Rodair	34556	Max WS	3149.3	-1.58	9.91		10.22	0.000086	4.5	844.42	154.49	0.26
Rodair	34353	Max WS	3172.53	-1.61	9.88		10.2	0.000084	4.53	825.17	146.15	0.26
Rodair	34081	Max WS	3235.33	-1.65	9.85		10.16	0.000083	4.48	819.7	128.12	0.26
Rodair	33806	Max WS	3307.49	-1.69	9.8		10.13	0.000092	4.64	802.87	121.21	0.27
Rodair	33509	Max WS	3399.47	-1.73	9.74		10.08	0.000097	4.73	808.35	124.78	0.28
Rodair	33208	Max WS	3372.52	-1.78	9.59		10.07	0.000145	5.58	666.99	126.06	0.34
Rodair	33197	Max WS	3375.36	-1.78	9.5	4.76	10.07	0.000169	6.04	600.32	121.23	0.36
Rodair	33177 Cloverdale		Bridge									
Rodair	33163	Max WS	3374.82	-1.81	9.3		9.82	0.00016	5.77	616.19	120.61	0.35
Rodair	33153	Max WS	3377.28	-1.81	9.29		9.81	0.00016	5.83	609.46	118.35	0.35
Rodair	33150		Lat Struct									
Rodair	33111		Lat Struct									
Rodair	33002	Max WS	3541.09	-1.84	9.28		9.74	0.000134	5.47	697.2	128.1	0.33
Rodair	32981	Max WS	3546.51	-1.84	9.32	4.05	9.74	0.000115	5.19	752.88	137.37	0.3
Rodair	32977 Pipeline		Bridge									
Rodair	32971	Max WS	3546.16	-1.84	9.21		9.63	0.00012	5.26	737.49	137.37	0.31
Rodair	32960	Max WS	3548.98	-1.84	9.22		9.63	0.000121	5.15	752.33	141.62	0.31
Rodair	32944	Max WS	3552.98	-1.84	9.19	3.9	9.63	0.000131	5.32	679.69	142.76	0.32
Rodair	32922 Pipelines		Bridge									
Rodair	32905	Max WS	3552.79	-1.84	9.1		9.55	0.000128	5.36	741.69	149.08	0.32
Rodair	32893	Max WS	3555.78	-1.84	9.12	4.05	9.54	0.000126	5.24	732.23	147.7	0.31
Rodair	32854 Pipeline		Bridge									
Rodair	32808	Max WS	3555.78	-2.12	9.15		9.42	0.000075	4.21	1015.62	175.64	0.25
Rodair	32793	Max WS	3559.69	-2.19	9.13	3.12	9.42	0.000075	4.28	830.76	177.2	0.25
Rodair	32743 RR		Bridge									
Rodair	32717	Max WS	3559.5	-2.62	9.11		9.38	0.000068	4.17	853.58	118.95	0.24
Rodair	32711	Max WS	3559.24	-2.66	9.14		9.38	0.000071	3.87	950.42	154.86	0.24
Rodair	32705	Max WS	3559.2	-2.69	9.15		9.37	0.000074	3.8	969.9	187.68	0.24
Rodair	32698	Max WS	3558.95	-2.73	9.1	2.79	9.37	0.000069	4.18	851.61	148.82	0.24
Rodair	32655 W Port Arthur Rd		Bridge									
Rodair	32590	Max WS	3558.95	-3.4	9.09		9.34	0.00037	4.04	881.92	208.04	0.23
Rodair	32508	Max WS	3558.12	-4.78	9.15		9.32	0.00023	3.33	1149.02	145.01	0.18
Rodair	32462	Max WS	3557.11	-3.97	9.15		9.31	0.00023	3.23	1159.8	153.17	0.18
Rodair	32455		Lat Struct									
Rodair	32407		Lat Struct									
Rodair	32287	Max WS	3526.46	-4.07	9.08		9.27	0.000287	3.57	1093.26	165.58	0.2
Rodair	32108	Max WS	3519.7	-4.28	9.05		9.22	0.000267	3.39	1112.11	153.72	0.19

Proposed Detention D

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	31859	Max WS	3407.45	-4.38	8.96		9.16	0.000324	3.7	996.61	137.86	0.21
Rodair	31543	Max WS	3542.76	-4.5	8.86		9.06	0.000268	3.61	1043.62	127.28	0.19
Rodair	31340	Max WS	3739.54	-4.69	8.8		8.99	0.000278	3.49	1140.8	153.55	0.2
Rodair	30965	Max WS	3894.47	-5.03	8.64		8.87	0.0003	3.86	1128.89	161.18	0.21
Rodair	30592	Max WS	3939.27	-4.75	8.47		8.71	0.000393	3.98	1029.33	157.88	0.23
Rodair	30202	Max WS	3987.01	-4.74	8.34		8.57	0.000323	3.97	1165.88	193.67	0.21
Rodair	30185	Max WS	3975.67	-4.93	8.32		8.57	0.000351	4.03	1086.54	191.12	0.22
Rodair	30137		Lat Struct									
Rodair	30122	Max WS	3984.43	-5.27	8.16		8.56	0.000594	5.26	916.82	162.68	0.28
Rodair	29854	Max WS	4038.3	-5.06	8.17		8.4	0.000317	3.96	1101.82	142.19	0.21
Rodair	29748	Max WS	4038.3	-5.04	8.12		8.37	0.000346	4.09	1081.54	157.94	0.22
Rodair	29738		Lat Struct									
Rodair	29712		Lat Struct									
Rodair	29570	Max WS	4060.92	-4.88	8.07		8.3	0.000327	3.94	1081.59	130.59	0.21
Rodair	29541		Lat Struct									
Rodair	29503		Lat Struct									
Rodair	29261	Max WS	4087.73	-5.22	7.92		8.2	0.000382	4.34	1036.3	123.4	0.23
Rodair	28913	Max WS	4186.92	-5.72	7.82		8.05	0.000363	3.92	1189.85	186.14	0.22
Rodair	28589	Max WS	4181.62	-6.24	7.7		7.94	0.00033	3.96	1123.93	140.78	0.21
Rodair	28418		Lat Struct									
Rodair	28327	Max WS	4205.72	-5.72	7.58		7.83	0.000415	4.11	1085.37	149.83	0.24
Rodair	28188	Max WS	4210.71	-5.45	7.52		7.78	0.000381	4.13	1116.68	165.37	0.23
Rodair	28181		Lat Struct									
Rodair	28086	Max WS	4138.22	-5.75	7.52		7.75	0.000324	3.86	1167.05	172.83	0.21
Rodair	28069		Lat Struct									
Rodair	27985	Max WS	4157.53	-6.03	7.5		7.71	0.000296	3.74	1202.35	175.89	0.2
Rodair	27941		Lat Struct									
Rodair	27699	Max WS	4033.32	-6.34	7.45		7.64	0.000268	3.6	1230	171.83	0.19
Rodair	27384	Max WS	4054.06	-5.88	7.35		7.55	0.000295	3.7	1208.25	173.73	0.2
Rodair	27302	Max WS	4091.05	-6.01	7.21		7.54	0.000532	4.94	1061.11	196.94	0.27
Rodair	27231	Max WS	4050.2	-7.2	7.29		7.49	0.000287	3.64	1211.83	181.81	0.2
Rodair	27219		Lat Struct									
Rodair	27114	Max WS	4064.33	-7.28	7.24		7.46	0.000303	3.8	1187.54	174.34	0.21
Rodair	26795	Max WS	4096.51	-7.42	7.14		7.36	0.000303	3.76	1202.48	173.22	0.21
Rodair	26484	Max WS	4125.85	-6.94	7.01		7.26	0.000343	4.11	1163.17	175.39	0.22
Rodair	26225	Max WS	4135.48	-6.86	6.96		7.17	0.000289	3.7	1228.29	177.87	0.2
Rodair	25912	Max WS	4138.63	-6.68	6.84		7.07	0.000318	3.98	1163.39	171.59	0.21
Rodair	25874		Lat Struct									
Rodair	25817		Lat Struct									
Rodair	25810	Max WS	4170.29	-6.98	6.78		7.04	0.000363	4.12	1140.18	171.76	0.23
Rodair	25782	Max WS	4196.65	-6.42	6.8		7.02	0.00034	3.92	1227.7	171.2	0.22
Rodair	25748		Lat Struct									
Rodair	25643	Max WS	4299.92	-6.41	6.75		6.97	0.000305	3.81	1243.61	170.55	0.21
Rodair	25556	Max WS	4376.92	-6.53	6.67		6.93	0.00037	4.24	1184.87	186.23	0.23
Rodair	25445	Max WS	4377.47	-6.34	6.67		6.88	0.000406	3.7	1184.59	146.82	0.23
Rodair	25327	Max WS	4376.09	-7.24	6.65		6.84	0.000274	3.47	1261.22	126.51	0.19
Rodair	25283		Lat Struct									
Rodair	25182		Lat Struct									

Proposed Detention D

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	25095	Max WS	4136.17	-6.55	6.57		6.8	0.000308	3.91	1147.29	150.93	0.21
Rodair	24696	Max WS	3831.58	-6.78	6.5		6.71	0.000287	3.68	1133.95	165.62	0.2
Rodair	24402	Max WS	3814.35	-6.63	6.48		6.63	0.000214	3.27	1327.73	179.85	0.18
Rodair	24079	Max WS	3660.16	-7.6	6.37		6.57	0.000295	3.61	1125.22	173.49	0.2
Rodair	23870	Max WS	3551.49	-7.34	6.36		6.52	0.000232	3.2	1188.93	166.6	0.18
Rodair	23810	Max WS	3534.96	-7.34	6.36		6.5	0.000194	3.02	1262.69	205.49	0.17
Rodair	23799		Lat Struct									
Rodair	23722	Max WS	3429.97	-6.47	6.35		6.49	0.000212	3.11	1225.76	201.87	0.17
Rodair	23718		Lat Struct									
Rodair	23678	Max WS	3429.11	-6.6	6.32		6.48	0.000243	3.27	1122.58	166.17	0.18
Rodair	23504	Max WS	3400.48	-7.12	6.26		6.45	0.000245	3.52	1103.24	153.9	0.18
Rodair	23285	Max WS	3233.56	-7.54	6.26		6.41	0.000217	3.03	1110.75	155.38	0.17
Rodair	22996	Max WS	3241.78	-7.19	6.21		6.35	0.000175	3.02	1210.65	169.49	0.16
Rodair	22659	Max WS	3160.14	-7.28	6.19		6.3	0.000156	2.69	1296.18	190.45	0.15
Rodair	22560	Max WS	3052.88	-6.56	6.21		6.29	0.000115	2.26	1424.39	169.18	0.13
Rodair	22449	Max WS	3056.73	-7.12	6.17		6.27	0.000133	2.63	1333.91	180.49	0.14
Rodair	22431		Lat Struct									
Rodair	22355	Max WS	3054.78	-7.14	6.14		6.26	0.000186	2.77	1116.08	140.6	0.16
Rodair	22014	Max WS	3030.99	-7.38	6.1		6.21	0.000139	2.68	1311.37	189.47	0.14
Rodair	21661	Max WS	3170.76	-6.97	6.02		6.14	0.000181	2.87	1243.1	184.85	0.16
Rodair	21449	Max WS	3212.96	-8	5.98		6.1	0.000162	2.93	1331.91	193.25	0.15
Rodair	21181	Max WS	3657.06	-7.92	5.9		6.03	0.000173	2.97	1431.45	190.86	0.16
Rodair	20966	Max WS	3783.52	-8.1	5.85		5.99	0.000186	3.09	1457.5	226.53	0.16
Rodair	20745	Max WS	3638.63	-7.43	5.82		5.95	0.000175	3	1452.49	213.11	0.16
Rodair	20503	Max WS	3434.75	-6.94	5.8		5.92	0.000163	2.79	1395.75	199.28	0.15
Rodair	20152	Max WS	3355.87	-7.3	5.76		5.88	0.000162	2.86	1346.09	178.58	0.15
Rodair	19887	Max WS	3133.44	-7.38	5.75		5.85	0.000136	2.56	1350.54	171.95	0.14
Rodair	19599	Max WS	3114.48	-6.53	5.71		5.8	0.000147	2.6	1372.88	184.71	0.14
Rodair	19205	Max WS	2678.7	-6.9	5.73		5.79	0.00009	2.01	1524.8	202.71	0.11
Rodair	18888	Max WS	2626.97	-6.91	5.72		5.79	0.000094	2.14	1437.2	193.78	0.12
Rodair	18535	Max WS	2404.81	-6.67	5.71		5.76	0.000072	1.83	1464.81	196.43	0.1
Rodair	18189	Max WS	2398.86	-6.77	5.68		5.73	0.000076	1.89	1438.78	202.47	0.1
Rodair	17910	Max WS	2262.22	-7.03	5.67		5.71	0.000054	1.62	1605.98	204.71	0.09
Rodair	17641	Max WS	2228.63	-7.06	5.64		5.67	0.000055	1.59	1551.98	194.11	0.09
Rodair	17596	Max WS	2198.8	-7.28	5.63		5.66	0.000053	1.56	1547.58	190.83	0.09
Rodair	17448	Max WS	2065.57	-7.47	5.61		5.65	0.000057	1.65	1397.24	174.86	0.09
Rodair	17439		Lat Struct									
Rodair	17320	Max WS	1988.56	-7.78	5.61		5.65	0.000055	1.61	1362.81	172.99	0.09
Rodair	17064	Max WS	1868.47	-7.74	5.61		5.64	0.000048	1.49	1369.48	169.02	0.08
Rodair	16757	Max WS	1713.45	-6.91	5.6		5.63	0.00004	1.34	1348.9	164.15	0.07
Rodair	16437	Max WS	1591.62	-6.76	5.6		5.62	0.000037	1.26	1332.21	159.13	0.07
Rodair	16143	Max WS	1452.33	-6.33	5.59		5.61	0.00003	1.18	1321.14	154.28	0.07
Rodair	16033	Max WS	1389.94	-6.33	5.59		5.61	0.000028	1.11	1357.64	171.79	0.06
Rodair	15984	Max WS	1392.14	-7.22	5.6	-4.06	5.61	0.000024	0.92	1507.94	175.78	0.06
Rodair	15974 Pipeline		Bridge									
Rodair	15964	Max WS	1390.79	-8.15	5.59		5.6	0.000021	0.87	1589.89	182.32	0.05
Rodair	15909	Max WS	1389.18	-7.84	5.59		5.6	0.000026	0.99	1397.38	154.13	0.06
Rodair	15903		Lat Struct									

Proposed Detention D

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	15899		Lat Struct									
Rodair	15831	Max WS	1373.77	-7.71	5.58		5.6	0.000024	1.09	1343.89	149	0.06
Rodair	15538	Max WS	1351.77	-7.5	5.57		5.59	0.000024	1.09	1333.81	153.73	0.06
Rodair	15259	Max WS	1343.97	-7.62	5.57		5.59	0.000025	1.1	1360.05	166.52	0.06
Rodair	14965	Max WS	1269.42	-7.57	5.57		5.58	0.00002	0.99	1445.33	185.66	0.05
Rodair	14808	Max WS	1065.12	-7.44	5.57		5.58	0.000014	0.81	1521.9	207.11	0.04
Rodair	14763	Max WS	1060.9	-6.46	5.57	-4.05	5.58	0.000016	0.86	1471.68	213.78	0.05
Rodair	14740 FM 365		Bridge									
Rodair	14714	Max WS	1037.35	-5.29	5.54		5.55	0.00002	0.9	1388.67	219.16	0.05
Rodair	14656	Max WS	1035.76	-8.6	5.54		5.55	0.00001	0.73	1714.2	239.58	0.04
Rodair	14654		Lat Struct									
Rodair	14553		Lat Struct									
Rodair	14414	Max WS	1030.11	-9.21	5.54		5.55	0.000007	0.63	2051.18	277.07	0.03
Rodair	14280	Max WS	878.17	-7.54	5.54		5.54	0.000005	0.5	2170.88	307.68	0.03
Rodair	14274		Lat Struct									
Rodair	14165	Max WS	1844.61	-7.76	5.52		5.54	0.000023	1.08	2212.26	322.49	0.06
Rodair	14151		Lat Struct									
Rodair	14094	Max WS	1856.39	-8.41	5.52		5.53	0.000023	1.1	2244.77	317.64	0.06
Rodair	13857	Max WS	1940.47	-8.16	5.51		5.53	0.000029	1.15	2119.54	312.81	0.06
Rodair	13555	Max WS	1969.07	-7.34	5.5		5.52	0.000032	1.21	1997.01	284.49	0.07
Rodair	13297	Max WS	2012.43	-6.25	5.49		5.51	0.000033	1.19	1921.11	253.55	0.07
Rodair	13028	Max WS	2123.96	-5.91	5.47		5.49	0.00004	1.3	1798.22	229.87	0.07
Rodair	12743	Max WS	2405.21	-6.08	5.45		5.48	0.000052	1.49	1772.29	225.47	0.09
Rodair	12439	Max WS	2587.07	-6.28	5.43		5.47	0.000066	1.71	1715.05	231.6	0.1
Rodair	12124	Max WS	2731.6	-6.72	5.39		5.44	0.000072	1.84	1719.76	229.67	0.1
Rodair	11769	Max WS	3040.12	-7.61	5.35		5.41	0.000087	2.08	1657.86	206.86	0.11
Rodair	11431	Max WS	2797.56	-7.97	5.33		5.38	0.000075	1.9	1808.32	250.59	0.1
Rodair	11225	Max WS	2745.06	-7.76	5.33		5.38	0.000081	1.92	1685.17	237.42	0.11
Rodair	10798	Max WS	2748.56	-7.47	5.29		5.34	0.000081	1.9	1694.96	243.08	0.11
Rodair	10451	Max WS	2673.92	-6.51	5.25		5.3	0.000071	1.73	1854.09	283.06	0.1
Rodair	10114	Max WS	2631.71	-7.24	5.24		5.28	0.000063	1.64	1946.05	305.54	0.09
Rodair	9896	Max WS	2563.27	-6.12	5.22		5.26	0.00006	1.56	1971.75	326.86	0.09
Rodair	9855	Max WS	2562.17	-6.09	5.22		5.26	0.000059	1.54	2037.34	357.88	0.09
Rodair	9765		Lat Struct									
Rodair	9684		Lat Struct									
Rodair	9653	Max WS	2469.98	-6.13	5.21		5.25	0.000066	1.67	1862.25	321.16	0.1
Rodair	9334	Max WS	2473.45	-6.25	5.2		5.23	0.000048	1.39	2011.95	299.6	0.08
Rodair	8819	Max WS	2212.29	-4.56	5.19		5.21	0.000042	1.2	2157.9	358.49	0.07
Rodair	8479	Max WS	2165.87	-4.63	5.17		5.2	0.000041	1.23	2218.03	400.13	0.07
Rodair	7988	Max WS	2057.62	-4.19	5.16		5.18	0.000036	1.06	2182.71	388.46	0.07
Rodair	7700	Max WS	1990.25	-2.88	5.16		5.17	0.000028	0.9	2664.67	482.43	0.06
Rodair	7312	Max WS	1909.01	-2.76	5.14		5.15	0.000053	1.22	2211.25	459.76	0.08
Rodair	7020	Max WS	2053.41	-3.12	5.13		5.14	0.000029	0.92	3051.58	549.28	0.06
Rodair	6774	Max WS	2214.25	-1.88	5.12		5.13	0.000023	0.79	3466.08	624.72	0.05
Rodair	6512	Max WS	2438.68	-1.78	5.12		5.13	0.000018	0.7	4247.01	756.08	0.05
Rodair	6261	Max WS	2611.1	-1.75	5.12		5.13	0.000015	0.63	4985.8	855.17	0.04
Rodair	5983	Max WS	2785.35	-1.75	5.12		5.12	0.000012	0.57	5997.98	1066.78	0.04
Rodair	5696	Max WS	2871.6	-1.72	5.11		5.11	0.000009	0.49	6619.25	1094.46	0.03

Proposed Detention D

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	5387	Max WS	2856.88	-1.72	5.11		5.11	0.00001	0.51	6078.7	977.28	0.03
Rodair	5141	Max WS	2892.69	-1.84	5.1		5.11	0.000011	0.55	5537.3	883.87	0.04
Rodair	4826	Max WS	2926.97	-2.09	5.1		5.11	0.000015	0.65	4804.5	739.88	0.04
Rodair	4416	Max WS	3246.74	-2.38	5.09		5.1	0.00002	0.78	5302.67	949.8	0.05
Rodair	4140	Max WS	3368.74	-2.66	5.08		5.09	0.000017	0.74	5920.73	988.79	0.05
Rodair	3899	Max WS	3637.74	-2.78	5.08		5.08	0.000019	0.77	6100.34	1034.86	0.05
Rodair	3535	Max WS	4009.42	-3.25	5.07		5.07	0.000018	0.77	6836.15	1114.95	0.05
Rodair	3189	Max WS	4398.33	-3.56	5.06		5.07	0.000019	0.8	7850.26	1387.14	0.05
Rodair	2825	Max WS	4847.7	-4.79	5.06		5.06	0.000024	0.93	8092.72	1489.43	0.06
Rodair	2434	Max WS	5000.36	-5.87	5.04		5.05	0.000028	1.04	7502.62	1419.64	0.06
Rodair	2044	Max WS	5152.5	-5.5	5.02		5.04	0.000036	1.17	6008.14	1099.73	0.07
Rodair	1695	Max WS	5456.79	-4.61	5.01		5.03	0.000037	1.16	6237.32	1056.19	0.07
Rodair	1436	Max WS	5382.15	-4.3	5	-1.7	5.01	0.000024	0.92	7336.9	1079.76	0.06

Proposed Detention E

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	54352	Max WS	246.36	8.08	14.53		14.58	0.000264	1.72	147.45	76.63	0.16
Rodair	54311	Max WS	246.39	8.5	14.54		14.57	0.000183	1.47	171.23	69.19	0.13
Rodair	54290		Lat Struct									
Rodair	54289		Lat Struct									
Rodair	54174	Max WS	230.65	7.79	14.53		14.55	0.00014	1.31	179.58	60.58	0.12
Rodair	54014	Max WS	199.16	7.96	14.51		14.54	0.000133	1.31	156.21	51.21	0.12
Rodair	53844	Max WS	170.95	7.86	14.51		14.53	0.000068	0.94	187.55	63.43	0.08
Rodair	53685	Max WS	152.41	8.12	14.51		14.52	0.000058	0.86	184.17	79.92	0.08
Rodair	53512	Max WS	120.4	7.69	14.51		14.51	0.000033	0.64	188.27	53.66	0.06
Rodair	53371	Max WS	113	7.53	14.51		14.51	0.000027	0.61	186.88	56.21	0.05
Rodair	53172	Max WS	99.69	7.58	14.5		14.51	0.000016	0.46	233.35	97.08	0.04
Rodair	53012	Max WS	68.17	7.55	14.51		14.51	0.000007	0.3	249.99	117.84	0.03
Rodair	52827	Max WS	26	7.28	14.51		14.51	0.000001	0.09	319.66	132.69	0.01
Rodair	52798		Lat Struct									
Rodair	52594	Max WS	2.82	7.42	14.51		14.51	0	0.01	219.68	66.04	0
Rodair	52588		Lat Struct									
Rodair	52581		Lat Struct									
Rodair	52412	Max WS	476.43	7.37	14.34		14.41	0.000286	2.06	231.43	52.04	0.17
Rodair	52233	Max WS	474.34	7.09	14.28		14.36	0.000314	2.14	222.17	50.73	0.18
Rodair	52006	Max WS	471.89	6.79	14.22		14.29	0.000287	2.1	224.5	48.7	0.17
Rodair	51821	Max WS	470	6.64	14.15		14.23	0.000335	2.24	209.39	45.85	0.19
Rodair	51619	Max WS	468.57	6.55	14.1		14.17	0.000282	2.06	227.39	50.28	0.17
Rodair	51420	Max WS	466.09	6.4	14.03		14.11	0.000321	2.21	211.01	45.79	0.18
Rodair	51176	Max WS	464.35	6.36	13.98		14.04	0.000213	1.9	244.99	49.48	0.15
Rodair	50994		Lat Struct									
Rodair	50989		Lat Struct									
Rodair	50962	Max WS	462.89	6.32	13.94		14	0.000203	1.87	247.7	49.09	0.15
Rodair	50720	Max WS	461.74	6.12	13.88		13.94	0.000251	2.05	225.1	45.05	0.16
Rodair	50526	Max WS	460.38	6.25	13.81		13.89	0.000314	2.16	213.35	47.55	0.18
Rodair	50327	Max WS	459.9	5.97	13.79		13.84	0.000164	1.66	276.58	56.48	0.13
Rodair	50168		Lat Struct									
Rodair	50165		Lat Struct									
Rodair	50112	Max WS	456.56	6.32	13.71		13.78	0.00034	2.22	205.79	46.5	0.19
Rodair	49912	Max WS	456.32	5.69	13.7		13.74	0.000135	1.58	288.16	54.13	0.12
Rodair	49709	Max WS	455.04	5.83	13.64		13.7	0.000236	1.9	238.89	52.2	0.16
Rodair	49534	Max WS	453.31	5.5	13.59		13.65	0.000266	2.07	219.45	45.47	0.17
Rodair	49275	Max WS	452.26	5.46	13.57		13.6	0.000119	1.47	306.84	58.97	0.11
Rodair	49063	Max WS	447.62	5.76	13.55		13.58	0.000108	1.44	311.91	62.63	0.11
Rodair	48842	Max WS	437.95	5.53	13.51		13.55	0.000142	1.58	278.03	57.25	0.12
Rodair	48641	Max WS	436.87	5.64	13.48		13.52	0.000155	1.7	263.68	62.49	0.13
Rodair	48434	Max WS	436.74	5.72	13.45		13.49	0.000124	1.62	297.3	78.06	0.12
Rodair	48236	Max WS	436.61	5.66	13.42		13.47	0.000136	1.67	282.17	72.45	0.12
Rodair	47992	Max WS	435.83	5.73	13.38		13.43	0.000161	1.82	269.64	78.44	0.14
Rodair	47977	Max WS	434.28	5.61	13.28	8.85	13.44	0.000368	3.16	137.28	77.76	0.21
Rodair	47949 5th Ave		Bridge									
Rodair	47930	Max WS	430.6	5.65	13.24		13.31	0.000042	2.01	227.84	90.01	0.16
Rodair	47908	Max WS	430.84	5.58	13.26	8.69	13.31	0.000027	1.83	307.52	114.74	0.14

Proposed Detention E

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	47891		Inl Struct									
Rodair	47879	Max WS	430.72	5.37	13.25		13.28	0.000018	1.55	394.45	142.48	0.11
Rodair	47846		Lat Struct									
Rodair	47783	Max WS	353.69	4.21	13.27		13.29	0.000009	1.13	352.16	92.46	0.08
Rodair	47753		Lat Struct									
Rodair	47751		Lat Struct									
Rodair	47737	Max WS	353.69	3.85	13.27		13.28	0.000009	1.11	341.97	80.04	0.08
Rodair	47564	Max WS	736.44	3.84	13.15		13.22	0.000048	2.2	341.45	76.09	0.18
Rodair	47409	Max WS	755.98	3.69	13.13		13.21	0.000041	2.37	348.21	78.46	0.17
Rodair	47180	Max WS	786.25	3.91	13.09		13.2	0.000049	2.61	331.18	79.55	0.18
Rodair	46984	Max WS	819.53	3.66	13.08		13.18	0.000047	2.63	345.35	77.97	0.18
Rodair	46786	Max WS	844.61	3.34	13.07		13.17	0.000039	2.44	367.02	76.02	0.17
Rodair	46660	Max WS	860.52	3.52	13.03		13.16	0.000056	2.92	341.65	81.5	0.2
Rodair	46479	Max WS	883.48	3.58	13.02		13.15	0.000053	2.92	354.62	98.23	0.2
Rodair	46324	Max WS	905.6	3.5	13.02		13.12	0.000115	2.65	342.12	104.67	0.26
Rodair	46263	Max WS	913.58	3.59	13.06		13.12	0.000044	2	457.51	104	0.17
Rodair	46252	Max WS	914.95	3.55	13.04	7.54	13.12	0.000037	2.2	442.34	115.11	0.16
Rodair	46247 Highland Pipelin		Bridge									
Rodair	46242	Max WS	914.94	3.56	13.01		13.09	0.000038	2.22	438.4	109.45	0.16
Rodair	46225	Max WS	917.13	3.52	12.99	7.32	13.09	0.000039	2.5	417.64	102.92	0.17
Rodair	46221 Pipeline		Bridge									
Rodair	46218	Max WS	917.13	3.56	12.97		13.07	0.000039	2.46	417.04	102.29	0.17
Rodair	46214	Max WS	917.61	3.56	12.97		13.07	0.000038	2.55	416.05	101.56	0.17
Rodair	46210	Max WS	918.13	3.53	12.97	7.38	13.07	0.000042	2.53	407.26	100.31	0.17
Rodair	46206 Pipeline		Bridge									
Rodair	46203	Max WS	918.11	3.56	12.91		13.02	0.000041	2.62	405.03	96.45	0.17
Rodair	46193	Max WS	919.37	3.71	12.93		13.01	0.000057	2.27	405.54	92.84	0.19
Rodair	46138	Max WS	926.32	3.81	12.87		13.01	0.000072	3	319.76	74.02	0.22
Rodair	46123		Lat Struct									
Rodair	46121		Lat Struct									
Rodair	46090	Max WS	932.43	3.43	12.87		13.01	0.00006	2.93	339.46	81.41	0.2
Rodair	45937	Max WS	951.73	3.53	12.83		12.99	0.00008	3.27	320.37	82.6	0.23
Rodair	45779	Max WS	969.94	3.3	12.82		12.97	0.000069	3.13	331.94	81.42	0.22
Rodair	45773		Lat Struct									
Rodair	45650	Max WS	961.75	3.34	12.83		12.97	0.000059	2.96	355.5	84.2	0.2
Rodair	45631		Lat Struct									
Rodair	45523	Max WS	978.3	3.5	12.81		12.95	0.00007	3.09	329.52	82.12	0.22
Rodair	45412	Max WS	980.74	3.52	12.8		12.95	0.000069	3.05	337.46	85.89	0.22
Rodair	45306	Max WS	979.13	3.45	12.79		12.94	0.000068	3.07	338.12	86.87	0.22
Rodair	45279		Lat Struct									
Rodair	45136	Max WS	919.17	3.39	12.8		12.92	0.00036	2.8	356.64	79.14	0.2
Rodair	45100		Lat Struct									
Rodair	45010	Max WS	904.11	3.67	12.78		12.9	0.000068	2.85	364.11	98.02	0.21
Rodair	44902	Max WS	922.97	3.28	12.76		12.89	0.000068	2.94	359.89	91.11	0.22
Rodair	44801	Max WS	942.72	3.22	12.75		12.88	0.000068	2.91	347.16	91.39	0.21
Rodair	44674	Max WS	955.87	3.18	12.72		12.86	0.00007	2.98	334.3	72.4	0.22
Rodair	44570		Lat Struct									
Rodair	44550	Max WS	958.51	3.03	12.72		12.85	0.000064	2.9	359.99	91.49	0.21

Proposed Detention E

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	44436	Max WS	949.3	3.16	12.72		12.85	0.000059	2.84	375.81	96.31	0.2
Rodair	44308	Max WS	961.74	2.9	12.72		12.84	0.000055	2.84	392.78	94.69	0.2
Rodair	44208	Max WS	977.78	2.91	12.73		12.83	0.000042	2.58	428.49	94.55	0.17
Rodair	44175	Max WS	981.24	2.88	12.7	7.04	12.82	0.000051	2.8	357.24	111.33	0.19
Rodair	44151 Wellspring Dr		Bridge									
Rodair	44128	Max WS	975.49	2.83	12.52		12.63	0.000049	2.74	437.13	120.29	0.19
Rodair	44096	Max WS	979.44	2.82	12.52		12.63	0.000046	2.61	412.43	99.47	0.18
Rodair	44088		Lat Struct									
Rodair	44039	Max WS	984.98	2.75	12.52		12.63	0.000045	2.59	412.22	87	0.18
Rodair	44005		Lat Struct									
Rodair	43915	Max WS	998.66	2.78	12.51		12.63	0.000042	2.73	442.13	98.51	0.18
Rodair	43819	Max WS	1004.42	2.59	12.49		12.61	0.000045	2.73	409.59	89.73	0.18
Rodair	43748	Max WS	1030.09	2.56	12.56		12.59	0.000011	1.34	856.54	184.86	0.09
Rodair	43737	Max WS	1031.34	2.56	12.56	5.5	12.59	0.00001	1.31	844.81	182.08	0.09
Rodair	43701 Unnamed Rd		Bridge									
Rodair	43648	Max WS	1031.34	2.36	12.52		12.54	0.000008	1.14	944.6	165.33	0.08
Rodair	43634	Max WS	1031.24	2.2	12.52		12.54	0.000008	1.18	935.21	164.52	0.08
Rodair	43598		Lat Struct									
Rodair	43553		Lat Struct									
Rodair	43477	Max WS	882.68	2.07	12.49		12.56	0.000023	2.05	463.27	83.6	0.13
Rodair	43458		Lat Struct									
Rodair	43367	Max WS	1784.28	1.98	12.02		12.34	0.000153	4.57	393.48	72.4	0.32
Rodair	43309		Lat Struct									
Rodair	43308		Lat Struct									
Rodair	43237	Max WS	1779.69	1.91	12.08		12.33	0.000085	4.02	490.66	99.06	0.25
Rodair	43178	Max WS	1785.77	1.94	12.15	6.07	12.32	0.000056	3.35	533.81	99.75	0.21
Rodair	43140 US59 NBFR		Bridge									
Rodair	43113	Max WS	1782.75	1.73	11.85		12.14	0.000092	4.32	415.58	91.55	0.27
Rodair	43111	Max WS	1785.31	1.73	11.99		12.14	0.000052	3.05	591.39	98.52	0.2
Rodair	43109	Max WS	1785.23	1.81	11.99		12.14	0.000051	3.01	604.06	118.03	0.19
Rodair	43107	Max WS	1785.14	1.81	11.99	5.75	12.14	0.000049	3.03	591.78	117.88	0.19
Rodair	43079 US59 NBML		Bridge									
Rodair	43038	Max WS	1783.47	1.81	11.91		12.07	0.00005	3.27	567.96	126.81	0.2
Rodair	43030	Max WS	1782.66	1.82	11.87	6.04	12.07	0.000062	3.66	503.93	179.16	0.22
Rodair	42987 US59 SBML		Bridge									
Rodair	42958	Max WS	1783.14	1.69	11.9		12.06	0.000048	3.2	557.14	94.73	0.19
Rodair	42954	Max WS	1783.05	1.69	11.91	5.79	12.06	0.00005	3.15	578.47	103.49	0.2
Rodair	42920 US59 SBFR		Bridge									
Rodair	42889	Max WS	1782.58	1.66	11.87		12.01	0.000047	3.02	593.64	94	0.19
Rodair	42862	Max WS	1781.79	1.61	11.83	6.1	12.01	0.000064	3.43	529.73	81.61	0.22
Rodair	42851		Inl Struct									
Rodair	42791	Max WS	1781.62	-0.34	11.75		11.88	0.000039	2.93	622.1	91	0.17
Rodair	42790		Lat Struct									
Rodair	42785		Lat Struct									
Rodair	42633	Max WS	1812.52	-0.36	11.73		11.87	0.00004	2.97	624.01	95.54	0.18
Rodair	42381	Max WS	1867.42	-0.41	11.71		11.85	0.000044	3.04	635.4	111.2	0.18
Rodair	42172	Max WS	1909.69	-0.44	11.68		11.83	0.000042	3.1	634.6	92.18	0.18
Rodair	41952	Max WS	1957.49	-0.47	11.66		11.82	0.000047	3.21	636.87	105.01	0.19

Proposed Detention E

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	41818	Max WS	1983.33	-0.5	11.64		11.81	0.000053	3.27	613.97	85.54	0.2
Rodair	41798	Max WS	1987.33	-0.5	11.64	4.37	11.8	0.000052	3.27	617.1	88.89	0.2
Rodair	41793 Landrey Pipeline		Bridge									
Rodair	41788	Max WS	1987.33	-0.5	11.6		11.77	0.000051	3.33	611.82	97.19	0.2
Rodair	41782	Max WS	1988.59	-0.5	11.6		11.77	0.000052	3.31	612.38	98.88	0.2
Rodair	41777		Lat Struct									
Rodair	41768		Lat Struct									
Rodair	41707	Max WS	2003.92	-0.5	11.6		11.77	0.000052	3.3	621.95	102.62	0.2
Rodair	41558	Max WS	2041.5	-0.53	11.58		11.76	0.000048	3.34	657.39	121.55	0.19
Rodair	41539.5*	Max WS	2044.15	-0.53	11.58		11.75	0.000049	3.35	652.38	117.65	0.19
Rodair	41521*	Max WS	2046.53	-0.53	11.58		11.75	0.000049	3.36	647.91	113.77	0.2
Rodair	41502.5*	Max WS	2049.42	-0.53	11.58		11.75	0.000049	3.36	643.99	109.87	0.2
Rodair	41484	Max WS	2052.71	-0.53	11.57		11.75	0.000049	3.37	640.51	105.97	0.2
Rodair	41386.6*	Max WS	2056.89	-0.54	11.58		11.75	0.000048	3.33	648.84	109.75	0.19
Rodair	41372.2*	Max WS	2061.07	-0.54	11.58		11.75	0.000047	3.29	656.85	109.71	0.19
Rodair	41357.8*	Max WS	2065.27	-0.55	11.58		11.74	0.000045	3.25	665.51	108.04	0.19
Rodair	41343.4*	Max WS	2068.62	-0.56	11.58		11.74	0.000044	3.21	674.6	106.26	0.19
Rodair	41332		Lat Struct									
Rodair	41329*	Max WS	2074.29	-0.57	11.58		11.74	0.000042	3.18	673.04	88.59	0.18
Rodair	41314.6*	Max WS	2085.17	-0.57	11.58		11.74	0.000041	3.15	680.05	87.37	0.18
Rodair	41300.2*	Max WS	2106.2	-0.58	11.58		11.73	0.000041	3.13	689.43	87.99	0.18
Rodair	41285.8*	Max WS	2126.79	-0.59	11.58		11.73	0.00004	3.12	699.09	88.65	0.18
Rodair	41271.4*	Max WS	2176.39	-0.6	11.57		11.72	0.00004	3.14	704.31	85.77	0.18
Rodair	41257*	Max WS	2282.34	-0.6	11.54		11.71	0.000043	3.26	713.03	86.72	0.19
Rodair	41242.6*	Max WS	2382.04	-0.61	11.52		11.69	0.000045	3.35	725.6	91.87	0.19
Rodair	41228.2*	Max WS	2427.26	-0.62	11.51		11.68	0.000045	3.36	738.7	97.74	0.19
Rodair	41213.8*	Max WS	2491.67	-0.63	11.5		11.67	0.000046	3.4	749.88	103.57	0.19
Rodair	41199.4*	Max WS	2503.97	-0.63	11.5		11.67	0.000045	3.36	761.71	109.35	0.19
Rodair	41185	Max WS	2509.9	-0.64	11.5		11.67	0.000043	3.32	773.85	120.27	0.19
Rodair	41151		Lat Struct									
Rodair	41145.8*	Max WS	2513.46	-0.63	11.5		11.67	0.000076	3.29	779.41	113.47	0.19
Rodair	41134.6*	Max WS	2516.73	-0.62	11.5		11.67	0.000119	3.27	785.29	112.9	0.19
Rodair	41123.4*	Max WS	2520.3	-0.61	11.5		11.66	0.00016	3.25	790.77	113.15	0.19
Rodair	41112.2*	Max WS	2523.86	-0.6	11.5		11.66	0.000224	3.23	795.63	114.11	0.2
Rodair	41101	Max WS	2527.43	-0.59	11.5		11.66	0.000302	3.22	799.84	115.2	0.2
Rodair	41083.2*	Max WS	2531.18	-0.6	11.5		11.65	0.000287	3.15	815.62	115.91	0.19
Rodair	41065.4*	Max WS	2534.93	-0.6	11.5		11.64	0.000273	3.09	831.61	116.55	0.19
Rodair	41047.5*	Max WS	2538.68	-0.6	11.5		11.64	0.000261	3.03	847.83	117.04	0.18
Rodair	41029.7*	Max WS	2542.43	-0.61	11.5		11.63	0.000248	2.97	864.62	117.41	0.18
Rodair	41011.9*	Max WS	2546.18	-0.62	11.5		11.63	0.000237	2.91	881.76	117.98	0.18
Rodair	40994	Max WS	2549.93	-0.62	11.5		11.62	0.000226	2.86	898.91	118.56	0.17
Rodair	40836	Max WS	2576.27	-0.62	11.45		11.58	0.000238	2.93	893.82	130.37	0.18
Rodair	40694	Max WS	2605.57	-0.66	11.41		11.55	0.000234	2.95	899.7	122.39	0.18
Rodair	40540	Max WS	2637.52	-0.69	11.37		11.51	0.000246	2.97	895.47	118.65	0.18
Rodair	40249	Max WS	2693.45	-0.72	11.28		11.42	0.000276	3.09	878.68	124.54	0.19
Rodair	40185		Lat Struct									
Rodair	40181	Max WS	2706	-0.72	11.25		11.4	0.00028	3.14	877.41	129.45	0.19
Rodair	40107	Max WS	2520.81	-0.75	11.27		11.41	0.000242	2.91	876.81	118.11	0.18

Proposed Detention E

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	40105		Lat Struct									
Rodair	40050	Max WS	2532.63	-0.75	11.26		11.39	0.000247	2.94	875.33	122.15	0.18
Rodair	39822	Max WS	2579.75	-0.78	11.21		11.33	0.000237	2.83	921.93	136.28	0.18
Rodair	39798		Lat Struct									
Rodair	39617	Max WS	2607.49	-0.81	11.17		11.28	0.000202	2.75	952.75	127.23	0.16
Rodair	39344	Max WS	2656.28	-0.88	11.09		11.22	0.000236	2.85	939.12	126.95	0.18
Rodair	39227	Max WS	2648.66	-0.88	11.06		11.19	0.000225	2.9	927.15	133.9	0.17
Rodair	39200		Lat Struct									
Rodair	39060	Max WS	2682.87	-0.91	11.02		11.15	0.000242	2.9	927.68	121.69	0.18
Rodair	38920	Max WS	2711.56	-0.91	10.98		11.11	0.000237	2.96	928.71	126.46	0.18
Rodair	38916		Lat Struct									
Rodair	38801	Max WS	2741.54	-0.94	10.94		11.08	0.000237	2.98	930.25	123.95	0.18
Rodair	38792		Lat Struct									
Rodair	38746	Max WS	2752.88	-0.94	10.93		11.07	0.000244	2.96	937.7	129.77	0.18
Rodair	38583	Max WS	2752.47	-0.97	10.88		11.03	0.000258	3.05	918.18	131.48	0.18
Rodair	38572	Max WS	2752.35	-0.97	10.88		11.03	0.000264	3.04	917.63	131.89	0.19
Rodair	38564		Lat Struct									
Rodair	38407	Max WS	2750.49	-1	10.88		10.99	0.000197	2.68	1038.05	134.39	0.16
Rodair	38379	Max WS	2757.77	-1	10.86		10.98	0.000207	2.79	1018.16	152.06	0.17
Rodair	38356	Max WS	2763.55	-1	10.85		10.98	0.000213	2.8	1001.61	140.67	0.17
Rodair	38311		Lat Struct									
Rodair	38212		Lat Struct									
Rodair	38089	Max WS	2816.39	-1.05	10.8		10.92	0.000204	2.74	1039.58	141.03	0.16
Rodair	37989		Lat Struct									
Rodair	37729	Max WS	2857.37	-1.1	10.71		10.83	0.000227	2.85	1006.49	125.35	0.17
Rodair	37455	Max WS	2928.14	-1.16	10.63		10.76	0.00024	2.99	988.47	130.89	0.18
Rodair	37389	Max WS	2945.36	-1.16	10.61		10.75	0.000247	2.97	993.76	130.21	0.18
Rodair	37380		Lat Struct									
Rodair	37275	Max WS	2972.04	-1.19	10.57		10.72	0.000248	3.05	1004.72	173.39	0.18
Rodair	37266		Lat Struct									
Rodair	37203	Max WS	2959.22	-1.19	10.56		10.7	0.000244	3.03	1019.26	159.91	0.18
Rodair	37178		Lat Struct									
Rodair	37013	Max WS	3007.91	-1.22	10.5		10.65	0.000266	3.05	986.79	121.18	0.19
Rodair	36801	Max WS	3062.08	-1.25	10.44		10.59	0.000262	3.03	1012.22	132.73	0.19
Rodair	36503	Max WS	3038.21	-1.3	10.37		10.51	0.000252	3.02	1015.66	136.1	0.18
Rodair	36166	Max WS	3066.34	-1.34	10.26		10.42	0.000284	3.2	963.83	125.94	0.19
Rodair	36151	Max WS	3070.14	-1.34	10.26		10.41	0.000283	3.18	968.77	126.58	0.19
Rodair	36129		Lat Struct									
Rodair	35987		Lat Struct									
Rodair	35981	Max WS	3113.47	-1.38	10.23		10.38	0.000045	3.16	999.54	143.06	0.19
Rodair	35939	Max WS	3121.58	-1.38	10.07		10.39	0.000092	4.56	754.98	139.53	0.27
Rodair	35919		Lat Struct									
Rodair	35799	Max WS	3153.9	-1.41	10.06		10.37	0.000091	4.46	751.88	133.33	0.27
Rodair	35788		Lat Struct									
Rodair	35708	Max WS	2952.01	-1.41	10.11		10.4	0.000079	4.36	767.43	129.72	0.25
Rodair	35701		Lat Struct									
Rodair	35693	Max WS	2955.23	-1.41	10.12		10.4	0.000077	4.22	778.19	137.67	0.25
Rodair	35682		Lat Struct									

Proposed Detention E

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	35659	Max WS	2934.35	-1.41	10.15		10.4	0.000068	4.03	816.25	144.02	0.23
Rodair	35609	Max WS	2938.26	-1.44	10.1		10.4	0.000081	4.42	768.32	133.98	0.25
Rodair	35600		Lat Struct									
Rodair	35547	Max WS	2941.89	-1.44	10.1		10.39	0.000079	4.33	792.68	149.5	0.25
Rodair	35323	Max WS	3024.09	-1.47	10.07		10.36	0.000082	4.34	833.67	165.36	0.25
Rodair	35312	Max WS	3023.8	-1.47	10.07		10.36	0.000079	4.37	836.18	166.04	0.25
Rodair	35252		Lat Struct									
Rodair	35065	Max WS	3046.31	-1.5	10.07		10.33	0.000072	4.15	862.09	165.75	0.24
Rodair	35057	Max WS	3045.42	-1.51	10.06		10.33	0.00007	4.21	865.65	162.66	0.24
Rodair	35052		Lat Struct									
Rodair	34813	Max WS	3136.56	-1.55	10.01		10.3	0.000079	4.42	836.48	149.47	0.25
Rodair	34556	Max WS	3191.13	-1.58	9.96		10.27	0.000087	4.54	850.69	154.58	0.26
Rodair	34353	Max WS	3214.38	-1.61	9.92		10.24	0.000085	4.57	831.07	146.32	0.26
Rodair	34081	Max WS	3277.06	-1.65	9.89		10.21	0.000084	4.51	824.84	128.2	0.26
Rodair	33806	Max WS	3350.66	-1.69	9.84		10.17	0.000093	4.68	807.64	121.37	0.27
Rodair	33509	Max WS	3442.79	-1.73	9.78		10.13	0.000098	4.77	813.17	124.88	0.28
Rodair	33208	Max WS	3405.59	-1.78	9.63		10.11	0.000146	5.61	672.31	126.06	0.34
Rodair	33197	Max WS	3408.46	-1.78	9.55	4.8	10.11	0.000169	6.07	605.35	121.23	0.36
Rodair	33177 Cloverdale		Bridge									
Rodair	33163	Max WS	3407.92	-1.81	9.33		9.85	0.000161	5.81	619.78	120.61	0.35
Rodair	33153	Max WS	3410.41	-1.81	9.32		9.85	0.000161	5.86	612.96	118.35	0.35
Rodair	33150		Lat Struct									
Rodair	33111		Lat Struct									
Rodair	33002	Max WS	3581.93	-1.84	9.31		9.78	0.000136	5.52	700.51	128.1	0.33
Rodair	32981	Max WS	3587.59	-1.84	9.35	4.09	9.77	0.000116	5.23	756.51	137.37	0.31
Rodair	32977 Pipeline		Bridge									
Rodair	32971	Max WS	3587.03	-1.84	9.23		9.66	0.000121	5.3	740.94	137.37	0.31
Rodair	32960	Max WS	3589.88	-1.84	9.25		9.66	0.000122	5.2	755.94	141.62	0.31
Rodair	32944	Max WS	3593.92	-1.84	9.21	3.94	9.66	0.000133	5.36	683.2	142.76	0.32
Rodair	32922 Pipelines		Bridge									
Rodair	32905	Max WS	3593.52	-1.84	9.13		9.58	0.000129	5.4	745.17	149.08	0.32
Rodair	32893	Max WS	3596.54	-1.84	9.14	4.09	9.57	0.000127	5.29	735.7	147.7	0.32
Rodair	32854 Pipeline		Bridge									
Rodair	32808	Max WS	3596.75	-2.12	9.17		9.45	0.000076	4.25	1019.24	175.64	0.25
Rodair	32793	Max WS	3600.69	-2.19	9.15	3.15	9.44	0.000076	4.32	832.55	177.2	0.25
Rodair	32743 RR		Bridge									
Rodair	32717	Max WS	3600.49	-2.62	9.13		9.41	0.00007	4.21	855.32	119.14	0.24
Rodair	32711	Max WS	3600.49	-2.66	9.16		9.4	0.000072	3.91	953.52	155.58	0.24
Rodair	32705	Max WS	3600.47	-2.69	9.17		9.4	0.000075	3.83	973.71	189.47	0.24
Rodair	32698	Max WS	3600.25	-2.73	9.12	2.83	9.4	0.00007	4.22	853.32	148.94	0.24
Rodair	32655 W Port Arthur Rd		Bridge									
Rodair	32590	Max WS	3600.05	-3.4	9.11		9.37	0.000376	4.07	883.58	208.04	0.23
Rodair	32508	Max WS	3599.82	-4.78	9.17		9.34	0.000234	3.36	1151.83	145.01	0.18
Rodair	32462	Max WS	3599.6	-3.97	9.16		9.33	0.000234	3.26	1162.72	153.17	0.18
Rodair	32455		Lat Struct									
Rodair	32407		Lat Struct									
Rodair	32287	Max WS	3562.25	-4.07	9.1		9.29	0.000291	3.6	1096.51	165.58	0.2
Rodair	32108	Max WS	3544.16	-4.28	9.06		9.24	0.00027	3.41	1114.36	153.72	0.19

Proposed Detention E

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	31859	Max WS	3455.69	-4.38	8.98		9.19	0.000331	3.74	999.6	137.86	0.21
Rodair	31543	Max WS	3595.61	-4.5	8.89		9.09	0.000273	3.65	1047.71	127.28	0.19
Rodair	31340	Max WS	3730.02	-4.69	8.81		8.99	0.000276	3.48	1142.03	153.62	0.19
Rodair	30965	Max WS	3918.45	-5.03	8.66		8.89	0.000302	3.88	1131.87	161.33	0.21
Rodair	30592	Max WS	3959.09	-4.75	8.49		8.73	0.000395	3.99	1031.89	158.14	0.23
Rodair	30202	Max WS	4004.76	-4.74	8.36		8.59	0.000324	3.98	1168.96	193.67	0.21
Rodair	30185	Max WS	3993	-4.93	8.33		8.58	0.000352	4.04	1089.56	191.12	0.22
Rodair	30137		Lat Struct									
Rodair	30122	Max WS	4001.39	-5.27	8.18		8.58	0.000595	5.27	919.34	162.79	0.28
Rodair	29854	Max WS	4055.43	-5.06	8.18		8.42	0.000318	3.97	1103.99	142.29	0.21
Rodair	29748	Max WS	4054.48	-5.04	8.13		8.39	0.000347	4.1	1083.95	158.08	0.22
Rodair	29738		Lat Struct									
Rodair	29712		Lat Struct									
Rodair	29570	Max WS	4077.49	-4.88	8.08		8.32	0.000328	3.95	1083.57	130.75	0.21
Rodair	29541		Lat Struct									
Rodair	29503		Lat Struct									
Rodair	29261	Max WS	4103.32	-5.22	7.93		8.21	0.000383	4.35	1038.11	123.44	0.23
Rodair	28913	Max WS	4203.48	-5.72	7.84		8.07	0.000364	3.93	1192.58	186.34	0.22
Rodair	28589	Max WS	4196.63	-6.24	7.71		7.95	0.000331	3.97	1125.94	140.86	0.21
Rodair	28418		Lat Struct									
Rodair	28327	Max WS	4221.79	-5.72	7.59		7.85	0.000416	4.12	1087.47	149.92	0.24
Rodair	28188	Max WS	4226.75	-5.45	7.54		7.79	0.000382	4.14	1118.98	165.44	0.23
Rodair	28181		Lat Struct									
Rodair	28086	Max WS	4154.38	-5.75	7.54		7.76	0.000325	3.86	1169.44	172.9	0.21
Rodair	28069		Lat Struct									
Rodair	27985	Max WS	4173.5	-6.03	7.52		7.73	0.000297	3.75	1204.78	176.01	0.2
Rodair	27941		Lat Struct									
Rodair	27699	Max WS	4048.14	-6.34	7.46		7.66	0.000269	3.61	1232.38	171.96	0.19
Rodair	27384	Max WS	4069.28	-5.88	7.36		7.57	0.000296	3.71	1210.62	173.9	0.2
Rodair	27302	Max WS	4107.68	-6.01	7.22		7.56	0.000533	4.95	1063.74	197.07	0.27
Rodair	27231	Max WS	4066.3	-7.2	7.3		7.51	0.000288	3.65	1214.26	182.03	0.2
Rodair	27219		Lat Struct									
Rodair	27114	Max WS	4080.63	-7.28	7.25		7.47	0.000304	3.81	1189.85	174.39	0.21
Rodair	26795	Max WS	4113.13	-7.42	7.16		7.37	0.000304	3.77	1204.72	173.27	0.21
Rodair	26484	Max WS	4142.74	-6.94	7.02		7.27	0.000345	4.12	1165.35	175.44	0.22
Rodair	26225	Max WS	4152.05	-6.86	6.97		7.18	0.00029	3.71	1230.48	177.91	0.2
Rodair	25912	Max WS	4154.55	-6.68	6.85		7.09	0.000319	3.99	1165.43	171.68	0.21
Rodair	25874		Lat Struct									
Rodair	25817		Lat Struct									
Rodair	25810	Max WS	4186.85	-6.98	6.8		7.05	0.000365	4.13	1142.18	171.83	0.23
Rodair	25782	Max WS	4212.96	-6.42	6.82		7.04	0.000341	3.93	1229.7	171.27	0.22
Rodair	25748		Lat Struct									
Rodair	25643	Max WS	4317.48	-6.41	6.76		6.98	0.000307	3.82	1245.52	170.6	0.21
Rodair	25556	Max WS	4395.37	-6.53	6.68		6.95	0.000371	4.25	1186.86	186.31	0.23
Rodair	25445	Max WS	4395.6	-6.34	6.68		6.89	0.000408	3.71	1186.15	147.02	0.23
Rodair	25327	Max WS	4394.19	-7.24	6.66		6.85	0.000276	3.48	1262.53	126.56	0.19
Rodair	25283		Lat Struct									
Rodair	25182		Lat Struct									

Proposed Detention E

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	25095	Max WS	4152.6	-6.55	6.58		6.81	0.00031	3.92	1148.82	151.04	0.21
Rodair	24696	Max WS	3845.46	-6.78	6.51		6.72	0.000288	3.69	1135.63	165.71	0.2
Rodair	24402	Max WS	3827.92	-6.63	6.49		6.64	0.000215	3.27	1329.56	179.98	0.18
Rodair	24079	Max WS	3673.64	-7.6	6.38		6.58	0.000296	3.62	1126.91	173.53	0.2
Rodair	23870	Max WS	3564.07	-7.34	6.37		6.53	0.000233	3.21	1190.58	166.64	0.18
Rodair	23810	Max WS	3547.38	-7.34	6.37		6.51	0.000194	3.03	1264.73	205.49	0.17
Rodair	23799		Lat Struct									
Rodair	23722	Max WS	3440.97	-6.47	6.36		6.5	0.000213	3.12	1227.79	201.95	0.17
Rodair	23718		Lat Struct									
Rodair	23678	Max WS	3430.12	-6.6	6.33		6.49	0.000242	3.27	1124.24	166.32	0.18
Rodair	23504	Max WS	3405.17	-7.12	6.27		6.46	0.000245	3.52	1104.8	153.93	0.18
Rodair	23285	Max WS	3236.98	-7.54	6.27		6.42	0.000217	3.03	1112.35	155.57	0.17
Rodair	22996	Max WS	3247.55	-7.19	6.22		6.36	0.000175	3.02	1212.41	169.65	0.16
Rodair	22659	Max WS	3132.88	-7.28	6.2		6.3	0.000152	2.66	1298.24	190.6	0.15
Rodair	22560	Max WS	3024.89	-6.56	6.22		6.29	0.000112	2.24	1426.17	169.25	0.13
Rodair	22449	Max WS	3028.24	-7.12	6.19		6.28	0.00013	2.6	1335.97	180.57	0.14
Rodair	22431		Lat Struct									
Rodair	22355	Max WS	3026.38	-7.14	6.15		6.27	0.000182	2.74	1117.81	141.24	0.16
Rodair	22014	Max WS	2997.63	-7.38	6.11		6.22	0.000136	2.65	1314.09	189.58	0.14
Rodair	21661	Max WS	3137.37	-6.97	6.03		6.15	0.000176	2.84	1246.22	185.18	0.16
Rodair	21449	Max WS	3179.61	-8	6		6.12	0.000158	2.89	1335.39	193.35	0.15
Rodair	21181	Max WS	3618.98	-7.92	5.92		6.05	0.000168	2.93	1435.49	190.99	0.16
Rodair	20966	Max WS	3741.6	-8.1	5.88		6.01	0.000181	3.05	1463.03	226.53	0.16
Rodair	20745	Max WS	3667.94	-7.43	5.85		5.98	0.000176	3.01	1459.82	213.11	0.16
Rodair	20503	Max WS	3420.31	-6.94	5.84		5.96	0.000159	2.76	1404.06	199.28	0.15
Rodair	20152	Max WS	3302.26	-7.3	5.78		5.9	0.000155	2.81	1351.09	178.58	0.15
Rodair	19887	Max WS	3073.26	-7.38	5.79		5.88	0.00013	2.5	1355.92	171.95	0.14
Rodair	19599	Max WS	3050.84	-6.53	5.74		5.83	0.000139	2.53	1379	184.71	0.14
Rodair	19205	Max WS	2631.46	-6.9	5.77		5.82	0.000086	1.97	1531.7	202.71	0.11
Rodair	18888	Max WS	2593.51	-6.91	5.75		5.82	0.000091	2.11	1443.49	193.78	0.11
Rodair	18535	Max WS	2385.06	-6.67	5.74		5.79	0.00007	1.81	1471.04	196.43	0.1
Rodair	18189	Max WS	2386.03	-6.77	5.71		5.76	0.000075	1.87	1445.14	202.47	0.1
Rodair	17910	Max WS	2263.99	-7.03	5.7		5.74	0.000054	1.61	1612.29	204.71	0.09
Rodair	17641	Max WS	2247.88	-7.06	5.67		5.7	0.000056	1.6	1557.58	194.11	0.09
Rodair	17596	Max WS	2220.01	-7.28	5.66		5.69	0.000053	1.57	1553	190.83	0.09
Rodair	17448	Max WS	2084.14	-7.47	5.64		5.68	0.000057	1.66	1402.19	174.86	0.09
Rodair	17439		Lat Struct									
Rodair	17320	Max WS	2007.82	-7.78	5.64		5.68	0.000055	1.62	1367.71	172.99	0.09
Rodair	17064	Max WS	1886.91	-7.74	5.63		5.67	0.000049	1.5	1374.26	169.02	0.08
Rodair	16757	Max WS	1733.75	-6.91	5.63		5.66	0.000041	1.36	1353.52	164.15	0.08
Rodair	16437	Max WS	1612.21	-6.76	5.62		5.65	0.000037	1.27	1336.66	159.13	0.07
Rodair	16143	Max WS	1475.17	-6.33	5.62		5.64	0.000031	1.2	1325.44	154.28	0.07
Rodair	16033	Max WS	1413.52	-6.33	5.62		5.64	0.000028	1.12	1362.4	171.79	0.06
Rodair	15984	Max WS	1413.94	-7.22	5.62	-4.04	5.64	0.000024	0.93	1512.83	175.78	0.06
Rodair	15974 Pipeline		Bridge									
Rodair	15964	Max WS	1413.51	-8.15	5.62		5.63	0.000022	0.89	1595	182.32	0.05
Rodair	15909	Max WS	1411.5	-7.84	5.61		5.63	0.000026	1.01	1401.68	154.13	0.06
Rodair	15903		Lat Struct									

Proposed Detention E

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	15899		Lat Struct									
Rodair	15831	Max WS	1395.27	-7.71	5.61		5.63	0.000024	1.1	1348.03	149	0.06
Rodair	15538	Max WS	1375.85	-7.5	5.6		5.62	0.000025	1.1	1338.05	153.73	0.06
Rodair	15259	Max WS	1372.06	-7.62	5.59		5.61	0.000026	1.12	1364.59	166.52	0.06
Rodair	14965	Max WS	1302.88	-7.57	5.59		5.61	0.000021	1.01	1450.34	185.66	0.05
Rodair	14808	Max WS	1095.08	-7.44	5.6		5.61	0.000015	0.83	1527.5	207.11	0.05
Rodair	14763	Max WS	1092.97	-6.46	5.6	-4.01	5.61	0.000017	0.88	1477.44	213.78	0.05
Rodair	14740 FM 365		Bridge									
Rodair	14714	Max WS	1088.07	-5.29	5.56		5.57	0.000022	0.94	1394.32	219.16	0.05
Rodair	14656	Max WS	1084.54	-8.6	5.57		5.57	0.00001	0.76	1720.42	239.58	0.04
Rodair	14654		Lat Struct									
Rodair	14553		Lat Struct									
Rodair	14414	Max WS	1081.23	-9.21	5.57		5.57	0.000008	0.66	2058.35	277.07	0.03
Rodair	14280	Max WS	924.22	-7.54	5.57		5.57	0.000006	0.52	2178.88	307.68	0.03
Rodair	14274		Lat Struct									
Rodair	14165	Max WS	1899.44	-7.76	5.55		5.56	0.000024	1.1	2220.44	322.49	0.06
Rodair	14151		Lat Struct									
Rodair	14094	Max WS	1912.05	-8.41	5.54		5.56	0.000024	1.13	2252.8	317.64	0.06
Rodair	13857	Max WS	2004.06	-8.16	5.54		5.55	0.00003	1.19	2127.32	312.81	0.07
Rodair	13555	Max WS	2034.95	-7.34	5.52		5.54	0.000034	1.25	2003.91	284.49	0.07
Rodair	13297	Max WS	2078.38	-6.25	5.51		5.53	0.000035	1.22	1927.15	253.55	0.07
Rodair	13028	Max WS	2191.55	-5.91	5.49		5.52	0.000043	1.34	1803.56	229.87	0.08
Rodair	12743	Max WS	2486.79	-6.08	5.47		5.5	0.000055	1.53	1777.13	225.47	0.09
Rodair	12439	Max WS	2696.84	-6.28	5.45		5.49	0.000071	1.78	1719.39	231.66	0.1
Rodair	12124	Max WS	2850.04	-6.72	5.4		5.45	0.000077	1.91	1723.08	229.67	0.11
Rodair	11769	Max WS	3150.3	-7.61	5.36		5.43	0.000093	2.15	1660.68	206.86	0.12
Rodair	11431	Max WS	2892.06	-7.97	5.34		5.39	0.00008	1.96	1811.61	250.59	0.11
Rodair	11225	Max WS	2837.78	-7.76	5.34		5.4	0.000086	1.98	1687.77	237.42	0.11
Rodair	10798	Max WS	2835.16	-7.47	5.3		5.35	0.000086	1.95	1697.55	243.08	0.11
Rodair	10451	Max WS	2748.23	-6.51	5.26		5.31	0.000074	1.77	1856.92	283.06	0.1
Rodair	10114	Max WS	2698.28	-7.24	5.25		5.29	0.000066	1.68	1948.75	305.54	0.1
Rodair	9896	Max WS	2629.59	-6.12	5.23		5.27	0.000062	1.6	1974.61	326.86	0.09
Rodair	9855	Max WS	2628.06	-6.09	5.23		5.27	0.000062	1.58	2040.47	357.88	0.09
Rodair	9765		Lat Struct									
Rodair	9684		Lat Struct									
Rodair	9653	Max WS	2536.4	-6.13	5.22		5.26	0.000069	1.71	1864.62	321.16	0.1
Rodair	9334	Max WS	2531.7	-6.25	5.21		5.24	0.00005	1.42	2014.2	299.6	0.08
Rodair	8819	Max WS	2271.03	-4.56	5.19		5.21	0.000044	1.23	2160.4	358.49	0.08
Rodair	8479	Max WS	2218.47	-4.63	5.18		5.2	0.000043	1.26	2220.62	400.13	0.08
Rodair	7988	Max WS	2104.54	-4.19	5.17		5.19	0.000037	1.08	2184.79	388.46	0.07
Rodair	7700	Max WS	2048.21	-2.88	5.16		5.17	0.000029	0.92	2667.23	482.43	0.06
Rodair	7312	Max WS	1942.87	-2.76	5.14		5.16	0.000055	1.25	2213.8	459.76	0.08
Rodair	7020	Max WS	2091.08	-3.12	5.14		5.15	0.00003	0.94	3054.59	549.28	0.06
Rodair	6774	Max WS	2253.76	-1.88	5.13		5.14	0.000023	0.8	3469.49	624.76	0.05
Rodair	6512	Max WS	2468.55	-1.78	5.13		5.13	0.000019	0.71	4249.65	756.08	0.05
Rodair	6261	Max WS	2660.7	-1.75	5.12		5.13	0.000015	0.64	4988.53	855.17	0.04
Rodair	5983	Max WS	2891.57	-1.75	5.12		5.12	0.000013	0.6	6000.97	1066.78	0.04
Rodair	5696	Max WS	2913.99	-1.72	5.11		5.12	0.000009	0.5	6619.79	1094.46	0.03

Proposed Detention E

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	5387	Max WS	2938.17	-1.72	5.11		5.12	0.00001	0.52	6083.32	977.28	0.04
Rodair	5141	Max WS	2948.07	-1.84	5.11		5.11	0.000012	0.56	5541.09	883.87	0.04
Rodair	4826	Max WS	2989.06	-2.09	5.11		5.11	0.000016	0.67	4807.52	739.88	0.04
Rodair	4416	Max WS	3294.02	-2.38	5.09		5.1	0.000021	0.79	5306.65	949.8	0.05
Rodair	4140	Max WS	3426.17	-2.66	5.09		5.09	0.000018	0.75	5924.6	988.79	0.05
Rodair	3899	Max WS	3660.73	-2.78	5.08		5.09	0.000019	0.77	6105.75	1034.86	0.05
Rodair	3535	Max WS	4014.87	-3.25	5.07		5.08	0.000018	0.77	6838.84	1114.98	0.05
Rodair	3189	Max WS	4471.56	-3.56	5.07		5.08	0.000019	0.81	7855.67	1387.14	0.05
Rodair	2825	Max WS	4926.21	-4.79	5.06		5.07	0.000024	0.94	8096.39	1489.43	0.06
Rodair	2434	Max WS	5101.51	-5.87	5.04		5.05	0.000029	1.06	7505.54	1419.64	0.06
Rodair	2044	Max WS	5262.18	-5.5	5.03		5.04	0.000038	1.19	6009.35	1099.73	0.07
Rodair	1695	Max WS	5587.07	-4.61	5.01		5.03	0.000038	1.19	6237.64	1056.19	0.07
Rodair	1436	Max WS	5372.55	-4.3	5	-1.7	5.01	0.000024	0.92	7336.9	1079.76	0.06

Proposed Pump

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	54352	Max WS	246.36	8.08	14.54		14.59	0.000263	1.72	147.79	76.66	0.16
Rodair	54311	Max WS	246.39	8.5	14.54		14.58	0.000183	1.47	171.53	69.37	0.13
Rodair	54290		Lat Struct									
Rodair	54289		Lat Struct									
Rodair	54174	Max WS	230.49	7.79	14.53		14.56	0.000139	1.31	179.85	60.87	0.12
Rodair	54014	Max WS	198.63	7.96	14.52		14.54	0.000132	1.3	156.45	51.24	0.11
Rodair	53844	Max WS	170.03	7.86	14.52		14.53	0.000067	0.93	187.87	63.87	0.08
Rodair	53685	Max WS	151.16	8.12	14.51		14.52	0.000057	0.85	184.59	79.97	0.08
Rodair	53512	Max WS	118.72	7.69	14.51		14.52	0.000032	0.63	188.56	54.01	0.06
Rodair	53371	Max WS	111.22	7.53	14.51		14.52	0.000026	0.6	187.18	56.35	0.05
Rodair	53172	Max WS	97.56	7.58	14.51		14.51	0.000015	0.45	233.89	97.14	0.04
Rodair	53012	Max WS	65.52	7.55	14.51		14.51	0.000007	0.29	250.65	117.84	0.03
Rodair	52827	Max WS	22.62	7.28	14.51		14.51	0	0.08	320.4	133.01	0.01
Rodair	52798		Lat Struct									
Rodair	52594	Max WS	-1.25	7.42	14.51		14.51	0	-0.01	220.04	66.13	0
Rodair	52588		Lat Struct									
Rodair	52581		Lat Struct									
Rodair	52412	Max WS	474.42	7.37	14.35		14.42	0.000282	2.05	231.82	52.09	0.17
Rodair	52233	Max WS	472.05	7.09	14.29		14.36	0.00031	2.12	222.6	50.8	0.18
Rodair	52006	Max WS	469.77	6.79	14.23		14.3	0.000283	2.09	224.96	48.76	0.17
Rodair	51821	Max WS	468.07	6.64	14.16		14.24	0.000331	2.23	209.87	45.91	0.18
Rodair	51619	Max WS	466.65	6.55	14.11		14.18	0.000278	2.05	227.95	50.36	0.17
Rodair	51420	Max WS	465.04	6.4	14.04		14.12	0.000317	2.2	211.56	45.85	0.18
Rodair	51176	Max WS	463.88	6.36	14		14.05	0.000211	1.89	245.61	49.52	0.15
Rodair	50994		Lat Struct									
Rodair	50989		Lat Struct									
Rodair	50962	Max WS	462.48	6.32	13.95		14.01	0.000201	1.86	248.34	49.16	0.15
Rodair	50720	Max WS	460.35	6.12	13.89		13.95	0.000248	2.04	225.72	45.13	0.16
Rodair	50526	Max WS	459.01	6.25	13.83		13.9	0.00031	2.14	214.04	47.61	0.18
Rodair	50327	Max WS	458.4	5.97	13.81		13.85	0.000161	1.65	277.43	56.54	0.13
Rodair	50168		Lat Struct									
Rodair	50165		Lat Struct									
Rodair	50112	Max WS	453.93	6.32	13.72		13.8	0.000332	2.2	206.55	46.58	0.18
Rodair	49912	Max WS	453.07	5.69	13.71		13.75	0.000132	1.57	289.06	54.2	0.12
Rodair	49709	Max WS	451.73	5.83	13.66		13.71	0.00023	1.88	239.84	52.3	0.16
Rodair	49534	Max WS	445.3	5.5	13.61		13.67	0.000254	2.02	220.36	45.56	0.16
Rodair	49275	Max WS	445.05	5.46	13.59		13.62	0.000114	1.44	308.08	59.07	0.11
Rodair	49063	Max WS	444.45	5.76	13.57		13.6	0.000105	1.43	313.28	62.77	0.11
Rodair	48842	Max WS	434.52	5.53	13.53		13.57	0.000138	1.56	279.34	57.4	0.12
Rodair	48641	Max WS	433.72	5.64	13.5		13.54	0.000151	1.68	265.18	62.85	0.13
Rodair	48434	Max WS	433.34	5.72	13.48		13.52	0.00012	1.6	299.24	78.41	0.12
Rodair	48236	Max WS	433.22	5.66	13.45		13.49	0.000132	1.65	284.03	72.82	0.12
Rodair	47992	Max WS	432.48	5.73	13.41		13.46	0.000155	1.8	271.78	78.72	0.13
Rodair	47977	Max WS	430.64	5.61	13.31	8.84	13.46	0.000357	3.12	137.88	77.96	0.21
Rodair	47949 5th Ave		Bridge									
Rodair	47930	Max WS	425.01	5.65	13.27		13.33	0.00004	1.97	230.5	91.04	0.16
Rodair	47908	Max WS	425.12	5.58	13.28	8.67	13.33	0.000025	1.79	310.85	115.7	0.13

Proposed Pump

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	47891		Inl Struct									
Rodair	47879	Max WS	425.12	5.37	13.28		13.31	0.000017	1.52	398.6	143.16	0.11
Rodair	47846		Lat Struct									
Rodair	47783	Max WS	346.29	4.21	13.29		13.31	0.000009	1.1	354.8	92.83	0.08
Rodair	47753		Lat Struct									
Rodair	47751		Lat Struct									
Rodair	47737	Max WS	346.29	3.85	13.29		13.31	0.000008	1.08	344.26	80.3	0.08
Rodair	47564	Max WS	727.93	3.84	13.18		13.25	0.000046	2.16	343.91	76.38	0.17
Rodair	47409	Max WS	746.96	3.69	13.16		13.24	0.000039	2.33	350.8	78.73	0.16
Rodair	47180	Max WS	767.8	3.91	13.13		13.23	0.000045	2.53	333.9	79.85	0.18
Rodair	46984	Max WS	811.28	3.66	13.11		13.21	0.000045	2.58	348.03	78.28	0.18
Rodair	46786	Max WS	826.74	3.34	13.11		13.2	0.000037	2.38	369.66	76.35	0.16
Rodair	46660	Max WS	792.39	3.52	13.07		13.18	0.000046	2.67	344.84	81.88	0.18
Rodair	46479	Max WS	811.5	3.58	13.06		13.17	0.000044	2.67	358.79	99	0.18
Rodair	46324	Max WS	833.53	3.5	13.06		13.15	0.000095	2.4	346.63	105.83	0.23
Rodair	46263	Max WS	894.7	3.59	13.09		13.15	0.000042	1.94	461.31	105.92	0.16
Rodair	46252	Max WS	844.49	3.55	13.08	7.39	13.14	0.000031	2.02	446.71	116.78	0.15
Rodair	46247 Highland Pipelin		Bridge									
Rodair	46242	Max WS	841	3.56	13.06		13.12	0.000031	2.03	443.29	111.57	0.15
Rodair	46225	Max WS	842.02	3.52	13.04	7.15	13.12	0.000032	2.28	422.57	105	0.15
Rodair	46221 Pipeline		Bridge									
Rodair	46218	Max WS	837.99	3.56	13.03		13.1	0.000032	2.23	422.43	103.63	0.15
Rodair	46214	Max WS	837.7	3.56	13.02		13.1	0.000031	2.31	421.51	103.03	0.15
Rodair	46210	Max WS	838.39	3.53	13.02	7.19	13.1	0.000034	2.29	412.63	101.32	0.16
Rodair	46206 Pipeline		Bridge									
Rodair	46203	Max WS	822.07	3.56	12.98		13.06	0.000032	2.32	411.42	97.76	0.15
Rodair	46193	Max WS	836.92	3.71	13		13.06	0.000046	2.03	411.32	94.12	0.17
Rodair	46138	Max WS	823.38	3.81	12.95		13.05	0.000054	2.63	325.44	76	0.19
Rodair	46123		Lat Struct									
Rodair	46121		Lat Struct									
Rodair	46090	Max WS	828.63	3.43	12.95		13.05	0.000045	2.57	345.66	83.07	0.18
Rodair	45937	Max WS	843.3	3.53	12.92		13.04	0.00006	2.85	327.66	84.03	0.2
Rodair	45779	Max WS	856.64	3.3	12.91		13.03	0.000051	2.73	339.38	83.37	0.19
Rodair	45773		Lat Struct									
Rodair	45650	Max WS	854.93	3.34	12.92		13.02	0.000045	2.59	362.77	85.1	0.18
Rodair	45631		Lat Struct									
Rodair	45523	Max WS	868.01	3.5	12.9		13.01	0.000052	2.7	337.46	86.21	0.19
Rodair	45412	Max WS	863.57	3.52	12.9		13.01	0.000051	2.64	345.89	86.54	0.19
Rodair	45306	Max WS	853.99	3.45	12.9		13	0.000049	2.63	347.23	87.88	0.18
Rodair	45279		Lat Struct									
Rodair	45136	Max WS	851.38	3.39	12.89		12.98	0.000293	2.55	363.34	79.74	0.18
Rodair	45100		Lat Struct									
Rodair	45010	Max WS	865.26	3.67	12.86		12.97	0.00006	2.68	371.91	98.5	0.2
Rodair	44902	Max WS	885.86	3.28	12.84		12.96	0.000061	2.78	367.25	91.53	0.2
Rodair	44801	Max WS	905.14	3.22	12.83		12.95	0.00006	2.76	354.61	91.84	0.2
Rodair	44674	Max WS	916.86	3.18	12.81		12.93	0.000062	2.82	340.34	74.7	0.21
Rodair	44570		Lat Struct									
Rodair	44550	Max WS	928.61	3.03	12.8		12.92	0.000058	2.77	367.04	91.95	0.2

Proposed Pump

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	44436	Max WS	945.01	3.16	12.79		12.91	0.000056	2.8	381.86	96.82	0.2
Rodair	44308	Max WS	948.35	2.9	12.77		12.89	0.000051	2.78	398.11	95.05	0.19
Rodair	44208	Max WS	957.61	2.91	12.78		12.88	0.000039	2.51	434.06	95.16	0.17
Rodair	44175	Max WS	961.26	2.88	12.76	6.99	12.88	0.000048	2.72	364.14	112.77	0.18
Rodair	44151 Wellspring Dr		Bridge									
Rodair	44128	Max WS	958.36	2.83	12.59		12.69	0.000046	2.66	445.4	120.29	0.18
Rodair	44096	Max WS	961.71	2.82	12.59		12.69	0.000042	2.54	419.22	99.94	0.17
Rodair	44088		Lat Struct									
Rodair	44039	Max WS	966.54	2.75	12.59		12.69	0.000042	2.52	418.18	88.7	0.17
Rodair	44005		Lat Struct									
Rodair	43915	Max WS	980.02	2.78	12.58		12.69	0.000039	2.65	448.88	98.51	0.17
Rodair	43819	Max WS	982.38	2.59	12.56		12.67	0.000041	2.65	415.87	89.73	0.17
Rodair	43748	Max WS	1008.13	2.56	12.63		12.65	0.00001	1.3	868.76	186.67	0.09
Rodair	43737	Max WS	1009.23	2.56	12.63	5.47	12.65	0.000009	1.27	855.1	184.7	0.08
Rodair	43701 Unnamed Rd		Bridge									
Rodair	43648	Max WS	1009.39	2.36	12.59		12.61	0.000008	1.1	955.66	165.83	0.08
Rodair	43634	Max WS	1009.17	2.2	12.59		12.61	0.000008	1.14	946.23	165.09	0.08
Rodair	43598		Lat Struct									
Rodair	43553		Lat Struct									
Rodair	43477	Max WS	831.46	2.07	12.56		12.62	0.00002	1.91	469.41	84.2	0.12
Rodair	43458		Lat Struct									
Rodair	43367	Max WS	1719.19	1.98	12.14		12.43	0.000134	4.32	402.26	73.45	0.3
Rodair	43309		Lat Struct									
Rodair	43308		Lat Struct									
Rodair	43237	Max WS	1714.31	1.91	12.19		12.42	0.000075	3.82	502.98	119.26	0.24
Rodair	43178	Max WS	1718.81	1.94	12.25	5.98	12.41	0.000049	3.18	540.79	102.8	0.2
Rodair	43140 US59 NBFR		Bridge									
Rodair	43113	Max WS	1717.79	1.73	11.99		12.25	0.000081	4.1	424.17	98.37	0.25
Rodair	43111	Max WS	1718.12	1.73	12.11		12.24	0.000046	2.88	603.42	103.53	0.19
Rodair	43109	Max WS	1718.03	1.81	12.11		12.24	0.000045	2.85	618.48	122.84	0.18
Rodair	43107	Max WS	1717.93	1.81	12.11	5.66	12.24	0.000043	2.87	601.34	122.77	0.18
Rodair	43079 US59 NBML		Bridge									
Rodair	43038	Max WS	1717.93	1.81	12.03		12.18	0.000045	3.1	577.97	137.39	0.19
Rodair	43030	Max WS	1717.18	1.82	12	5.94	12.18	0.000055	3.47	512.53	179.16	0.21
Rodair	42987 US59 SBML		Bridge									
Rodair	42958	Max WS	1717.56	1.69	12.03		12.17	0.000043	3.04	565.46	96.42	0.18
Rodair	42954	Max WS	1717.48	1.69	12.03	5.7	12.17	0.000044	2.99	588.61	106.84	0.18
Rodair	42920 US59 SBFR		Bridge									
Rodair	42889	Max WS	1717.08	1.66	11.99		12.12	0.000042	2.87	603.7	95.99	0.18
Rodair	42862	Max WS	1716.82	1.61	11.96	6	12.12	0.000056	3.25	540.34	83.06	0.21
Rodair	42851		Inl Struct									
Rodair	42791	Max WS	1716.82	-0.34	11.88		12	0.000034	2.78	635.15	98.51	0.16
Rodair	42790		Lat Struct									
Rodair	42785		Lat Struct									
Rodair	42633	Max WS	1747.19	-0.36	11.87		11.99	0.000035	2.82	637.84	101.9	0.16
Rodair	42381	Max WS	1801.75	-0.41	11.85		11.98	0.000039	2.89	651.35	112.34	0.17
Rodair	42172	Max WS	1845.02	-0.44	11.83		11.96	0.000037	2.95	648.39	98.64	0.17
Rodair	41952	Max WS	1901.7	-0.47	11.8		11.95	0.000042	3.06	652.25	110.37	0.18

Proposed Pump

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Rodair	41818	Max WS	1927.62	-0.5	11.78		11.94	0.000047	3.13	626.58	89.57	0.19
Rodair	41798	Max WS	1931.64	-0.5	11.78	4.28	11.94	0.000046	3.13	630.62	98.12	0.19
Rodair	41793 Landrey Pipeline		Bridge									
Rodair	41788	Max WS	1931.63	-0.5	11.75		11.91	0.000046	3.18	626.31	100.54	0.19
Rodair	41782	Max WS	1932.9	-0.5	11.75		11.91	0.000046	3.16	627.14	102.44	0.19
Rodair	41777		Lat Struct									
Rodair	41768		Lat Struct									
Rodair	41707	Max WS	1948.99	-0.5	11.75		11.9	0.000046	3.15	637.06	103.3	0.19
Rodair	41558	Max WS	1996.79	-0.53	11.73		11.89	0.000044	3.22	675	121.55	0.19
Rodair	41539.5*	Max WS	1999.14	-0.53	11.73		11.89	0.000044	3.22	669.47	117.65	0.19
Rodair	41521*	Max WS	2000.22	-0.53	11.72		11.88	0.000044	3.23	664.5	113.77	0.19
Rodair	41502.5*	Max WS	2001.66	-0.53	11.72		11.88	0.000044	3.23	660.07	109.87	0.19
Rodair	41484	Max WS	2003.73	-0.53	11.72		11.88	0.000045	3.24	656.08	105.97	0.19
Rodair	41386.6*	Max WS	2007.79	-0.54	11.72		11.88	0.000043	3.2	664.95	109.75	0.18
Rodair	41372.2*	Max WS	2011.93	-0.54	11.72		11.88	0.000042	3.16	673.35	113.52	0.18
Rodair	41357.8*	Max WS	2015.98	-0.55	11.73		11.88	0.000041	3.13	681.83	115.83	0.18
Rodair	41343.4*	Max WS	2020.05	-0.56	11.73		11.88	0.000039	3.09	690.66	113.49	0.18
Rodair	41332		Lat Struct									
Rodair	41329*	Max WS	2028.32	-0.57	11.73		11.87	0.000038	3.06	686.11	91.99	0.18
Rodair	41314.6*	Max WS	2051.54	-0.57	11.73		11.87	0.000038	3.05	692.52	89.37	0.17
Rodair	41300.2*	Max WS	2100.84	-0.58	11.72		11.86	0.000039	3.08	701.26	89.26	0.18
Rodair	41285.8*	Max WS	2144.27	-0.59	11.71		11.86	0.000039	3.1	710.44	89.82	0.18
Rodair	41271.4*	Max WS	2235.09	-0.6	11.68		11.84	0.000041	3.19	714.29	86.83	0.18
Rodair	41257*	Max WS	2402.57	-0.6	11.64		11.82	0.000046	3.39	721.49	87.49	0.19
Rodair	41242.6*	Max WS	2550.33	-0.61	11.6		11.8	0.000051	3.56	733.12	92.46	0.2
Rodair	41228.2*	Max WS	2613.23	-0.62	11.59		11.79	0.000051	3.59	746.15	98.26	0.2
Rodair	41213.8*	Max WS	2704.84	-0.63	11.56		11.77	0.000053	3.67	756.83	103.96	0.21
Rodair	41199.4*	Max WS	2724.46	-0.63	11.56		11.77	0.000052	3.63	768.84	109.71	0.21
Rodair	41185	Max WS	2733.44	-0.64	11.56		11.76	0.00005	3.59	781.71	121.77	0.2
Rodair	41151		Lat Struct									
Rodair	41145.8*	Max WS	2736.94	-0.63	11.57		11.76	0.000088	3.56	786.87	114.9	0.2
Rodair	41134.6*	Max WS	2740.44	-0.62	11.57		11.76	0.000138	3.54	792.73	114.09	0.21
Rodair	41123.4*	Max WS	2743.95	-0.61	11.57		11.76	0.000185	3.51	798.24	114.28	0.21
Rodair	41112.2*	Max WS	2747.33	-0.6	11.56		11.75	0.000259	3.49	803.15	114.89	0.21
Rodair	41101	Max WS	2750.84	-0.59	11.56		11.75	0.000348	3.47	807.39	115.87	0.21
Rodair	41083.2*	Max WS	2754.53	-0.6	11.56		11.74	0.000331	3.4	823.25	116.64	0.21
Rodair	41065.4*	Max WS	2758.21	-0.6	11.56		11.73	0.000315	3.34	839.3	117.3	0.2
Rodair	41047.5*	Max WS	2761.9	-0.6	11.56		11.73	0.0003	3.27	855.58	117.85	0.2
Rodair	41029.7*	Max WS	2765.59	-0.61	11.56		11.72	0.000286	3.2	872.41	118.26	0.19
Rodair	41011.9*	Max WS	2769.28	-0.62	11.56		11.72	0.000273	3.14	889.6	118.69	0.19
Rodair	40994	Max WS	2772.96	-0.62	11.56		11.71	0.00026	3.08	906.81	119.23	0.18
Rodair	40836	Max WS	2805.5	-0.62	11.51		11.67	0.000275	3.17	901.62	131.82	0.19
Rodair	40694	Max WS	2834.52	-0.66	11.47		11.62	0.000271	3.19	906.31	123.11	0.19
Rodair	40540	Max WS	2866.3	-0.69	11.42		11.58	0.000285	3.21	901.1	119.25	0.19
Rodair	40249	Max WS	2925.53	-0.72	11.31		11.48	0.000322	3.35	882.74	124.88	0.2
Rodair	40185		Lat Struct									
Rodair	40181	Max WS	2939.49	-0.72	11.28		11.46	0.000327	3.4	881.12	129.93	0.21
Rodair	40107	Max WS	2754.77	-0.75	11.3		11.46	0.000285	3.17	880.07	118.4	0.19

Proposed Pump

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Rodair	40105		Lat Struct									
Rodair	40050	Max WS	2766.5	-0.75	11.28		11.44	0.000291	3.2	878.33	122.55	0.19
Rodair	39822	Max WS	2813.54	-0.78	11.22		11.37	0.00028	3.08	924.12	136.61	0.19
Rodair	39798		Lat Struct									
Rodair	39617	Max WS	2840.52	-0.81	11.17		11.31	0.000239	2.99	953.88	127.6	0.18
Rodair	39344	Max WS	2890.18	-0.88	11.09		11.24	0.00028	3.1	938.6	126.9	0.19
Rodair	39227	Max WS	2883.94	-0.88	11.05		11.21	0.000268	3.16	925.76	133.54	0.19
Rodair	39200		Lat Struct									
Rodair	39060	Max WS	2918.41	-0.91	11		11.16	0.000288	3.16	925.47	121.25	0.19
Rodair	38920	Max WS	2947.34	-0.91	10.95		11.11	0.000282	3.22	925.45	125.69	0.19
Rodair	38916		Lat Struct									
Rodair	38801	Max WS	2977.98	-0.94	10.91		11.08	0.000283	3.25	926.26	123.11	0.19
Rodair	38792		Lat Struct									
Rodair	38746	Max WS	2989.42	-0.94	10.9		11.06	0.000291	3.22	933.23	128.45	0.2
Rodair	38583	Max WS	2989.28	-0.97	10.84		11.01	0.00031	3.33	912.32	130.52	0.2
Rodair	38572	Max WS	2989.26	-0.97	10.84		11.01	0.000318	3.32	911.68	130.86	0.2
Rodair	38564		Lat Struct									
Rodair	38407	Max WS	2987.71	-1	10.83		10.96	0.000236	2.93	1031.75	133.86	0.18
Rodair	38379	Max WS	2995.07	-1	10.81		10.95	0.000249	3.05	1010.58	151.66	0.18
Rodair	38356	Max WS	3000.96	-1	10.8		10.95	0.000256	3.06	994.44	139.28	0.18
Rodair	38311		Lat Struct									
Rodair	38212		Lat Struct									
Rodair	38089	Max WS	3057.77	-1.05	10.74		10.88	0.000247	3	1030.72	140.66	0.18
Rodair	37989		Lat Struct									
Rodair	37729	Max WS	3106.32	-1.1	10.62		10.78	0.000276	3.13	996.08	124.07	0.19
Rodair	37455	Max WS	3177.91	-1.16	10.52		10.69	0.000294	3.28	975.38	128.07	0.2
Rodair	37389	Max WS	3195.11	-1.16	10.5		10.67	0.000303	3.26	980.46	124.98	0.2
Rodair	37380		Lat Struct									
Rodair	37275	Max WS	3223.87	-1.19	10.46		10.63	0.000305	3.35	985.02	173.39	0.2
Rodair	37266		Lat Struct									
Rodair	37203	Max WS	3218.75	-1.19	10.44		10.61	0.000303	3.35	1000.19	159.91	0.2
Rodair	37178		Lat Struct									
Rodair	37013	Max WS	3268.19	-1.22	10.37		10.55	0.000328	3.37	971	117.9	0.21
Rodair	36801	Max WS	3323.77	-1.25	10.3		10.47	0.000327	3.35	992.89	130.07	0.21
Rodair	36503	Max WS	3330.47	-1.3	10.2		10.37	0.000325	3.38	992.07	134.71	0.21
Rodair	36166	Max WS	3381.7	-1.34	10.05		10.25	0.000376	3.62	937.36	121.98	0.22
Rodair	36151	Max WS	3385.59	-1.34	10.04		10.24	0.000375	3.6	941.98	122.86	0.22
Rodair	36129		Lat Struct									
Rodair	35987		Lat Struct									
Rodair	35981	Max WS	3429.82	-1.38	10		10.2	0.00006	3.57	968.02	136.2	0.22
Rodair	35939	Max WS	3438.6	-1.38	9.8		10.21	0.000124	5.2	717.21	132.76	0.31
Rodair	35919		Lat Struct									
Rodair	35799	Max WS	3474.44	-1.41	9.78		10.19	0.000124	5.09	715.32	126.62	0.31
Rodair	35788		Lat Struct									
Rodair	35708	Max WS	3283.18	-1.41	9.83		10.22	0.000108	5.02	731.75	127.56	0.29
Rodair	35701		Lat Struct									
Rodair	35693	Max WS	3286.19	-1.41	9.85		10.21	0.000105	4.85	741.54	128.54	0.29
Rodair	35682		Lat Struct									

Proposed Pump

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Rodair	35659	Max WS	3272.83	-1.41	9.88		10.21	0.000093	4.64	778.06	140.86	0.27
Rodair	35609	Max WS	3282.02	-1.44	9.82		10.21	0.000112	5.1	729.98	132.56	0.3
Rodair	35600		Lat Struct									
Rodair	35547	Max WS	3306.81	-1.44	9.79		10.18	0.000113	5.05	746.98	144.31	0.3
Rodair	35323	Max WS	3354.09	-1.47	9.75		10.14	0.000115	5.01	781.69	160.9	0.3
Rodair	35312	Max WS	3355.6	-1.47	9.75		10.14	0.00011	5.04	783.89	162.52	0.29
Rodair	35252		Lat Struct									
Rodair	35065	Max WS	3415.51	-1.5	9.75		10.11	0.000103	4.84	810.62	158.29	0.29
Rodair	35057	Max WS	3415.16	-1.51	9.74		10.11	0.000098	4.9	814.63	156.26	0.28
Rodair	35052		Lat Struct									
Rodair	34813	Max WS	3493.91	-1.55	9.67		10.08	0.000112	5.12	787.37	147.02	0.3
Rodair	34556	Max WS	3568.25	-1.58	9.6		10.03	0.000124	5.3	796.13	153.84	0.31
Rodair	34353	Max WS	3583.93	-1.61	9.56		9.99	0.000122	5.32	778.03	144.81	0.31
Rodair	34081	Max WS	3650.7	-1.65	9.52		9.94	0.00012	5.25	777.17	127.46	0.31
Rodair	33806	Max WS	3722.71	-1.69	9.43		9.89	0.000134	5.46	759.13	119.65	0.32
Rodair	33509	Max WS	3829.19	-1.73	9.35		9.83	0.000142	5.58	760.25	123.65	0.33
Rodair	33208	Max WS	3866.89	-1.78	9.05		9.78	0.00024	6.86	599.72	126.06	0.43
Rodair	33197	Max WS	3869.95	-1.78	8.92	5.25	9.78	0.000283	7.46	529.94	107.2	0.46
Rodair	33177 Cloverdale		Bridge									
Rodair	33163	Max WS	3869.95	-1.81	8.77		9.55	0.000261	7.08	555.63	98.26	0.44
Rodair	33153	Max WS	3872.46	-1.81	8.75		9.55	0.000262	7.14	554.31	92.12	0.44
Rodair	33150		Lat Struct									
Rodair	33111		Lat Struct									
Rodair	33002	Max WS	3976.7	-1.84	8.81		9.47	0.000205	6.52	637.76	121.94	0.4
Rodair	32981	Max WS	3982.22	-1.84	8.87	4.45	9.46	0.000173	6.16	691.25	137.37	0.37
Rodair	32977 Pipeline		Bridge									
Rodair	32971	Max WS	3982.22	-1.84	8.64		9.26	0.000189	6.33	660.31	125.4	0.38
Rodair	32960	Max WS	3985.1	-1.84	8.65		9.25	0.000192	6.22	672.33	141.62	0.38
Rodair	32944	Max WS	3989.38	-1.84	8.62	4.29	9.25	0.00018	6.37	626	142.76	0.38
Rodair	32922 Pipelines		Bridge									
Rodair	32905	Max WS	3989.38	-1.84	8.45		9.11	0.000211	6.54	646.91	124.79	0.4
Rodair	32893	Max WS	3992.37	-1.84	8.47	4.44	9.1	0.000207	6.38	645.45	111.36	0.4
Rodair	32854 Pipeline		Bridge									
Rodair	32808	Max WS	3992.37	-2.12	8.65		9.04	0.000116	5.04	927.33	175.64	0.3
Rodair	32793	Max WS	3996.35	-2.19	8.63	3.49	9.03	0.000114	5.09	785.55	177.2	0.3
Rodair	32743 RR		Bridge									
Rodair	32717	Max WS	3996.35	-2.62	8.61		8.99	0.000103	4.94	808.65	114.56	0.29
Rodair	32711	Max WS	3996.01	-2.66	8.65		8.98	0.00011	4.63	877.95	138.63	0.29
Rodair	32705	Max WS	3996	-2.69	8.66		8.98	0.000116	4.56	891.67	149.19	0.3
Rodair	32698	Max WS	3995.99	-2.73	8.6	3.18	8.98	0.000104	4.96	806.11	132.53	0.29
Rodair	32655 W Port Arthur Rd		Bridge									
Rodair	32590	Max WS	3995.99	-3.4	8.58		8.94	0.000556	4.78	836.35	208.04	0.28
Rodair	32508	Max WS	3995.72	-4.78	8.66		8.9	0.000343	3.95	1078.38	145.01	0.22
Rodair	32462	Max WS	3995.47	-3.97	8.66		8.88	0.000346	3.83	1084.78	152.51	0.22
Rodair	32455		Lat Struct									
Rodair	32407		Lat Struct									
Rodair	32287	Max WS	4000.33	-4.07	8.53		8.82	0.000456	4.33	1002.78	165.58	0.25
Rodair	32108	Max WS	4017.78	-4.28	8.47		8.73	0.000433	4.14	1023.95	153.72	0.24

Proposed Pump

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	31859	Max WS	3944.39	-4.38	8.3		8.63	0.000559	4.63	906.75	137.86	0.27
Rodair	31543	Max WS	4027.17	-4.5	8.16		8.46	0.000438	4.41	955.06	124.2	0.24
Rodair	31340	Max WS	4262.42	-4.69	8.04		8.33	0.000479	4.35	1026.87	148.46	0.25
Rodair	30965	Max WS	4369.07	-5.03	7.79		8.14	0.000512	4.78	994.54	153.26	0.26
Rodair	30592	Max WS	3476.83	-4.75	7.57		7.8	0.000435	3.91	896.38	127.87	0.24
Rodair	30202	Max WS	3467.66	-4.74	7.42		7.65	0.000342	3.85	1006	160.24	0.22
Rodair	30185	Max WS	3472.68	-4.93	7.4		7.64	0.000373	3.9	935.3	144.71	0.22
Rodair	30137		Lat Struct									
Rodair	30122	Max WS	3422.11	-5.27	7.25		7.61	0.000597	4.97	785.17	123.82	0.28
Rodair	29854	Max WS	3453	-5.06	7.26		7.47	0.000315	3.73	978.59	128.78	0.21
Rodair	29748	Max WS	3437.52	-5.04	7.2		7.43	0.000346	3.85	945.5	137.61	0.22
Rodair	29738		Lat Struct									
Rodair	29712		Lat Struct									
Rodair	29570	Max WS	3447.09	-4.88	7.16		7.37	0.000322	3.68	967.56	119.08	0.21
Rodair	29541		Lat Struct									
Rodair	29503		Lat Struct									
Rodair	29261	Max WS	3240.57	-5.22	7.07		7.28	0.00032	3.76	933.06	121.06	0.21
Rodair	28913	Max WS	3208.92	-5.72	7		7.17	0.000297	3.34	1041.83	176.3	0.2
Rodair	28589	Max WS	3176.71	-6.24	6.91		7.08	0.00025	3.28	1014.96	135.71	0.18
Rodair	28418		Lat Struct									
Rodair	28327	Max WS	3010.21	-5.72	6.86		7.02	0.000281	3.21	979.35	145.83	0.19
Rodair	28188	Max WS	2868.85	-5.45	6.86		7	0.000228	3.05	1007.49	160.98	0.18
Rodair	28181		Lat Struct									
Rodair	28086	Max WS	2838.16	-5.75	6.85		6.98	0.000196	2.86	1051.55	169.62	0.16
Rodair	28069		Lat Struct									
Rodair	27985	Max WS	2642.57	-6.03	6.88		6.98	0.000149	2.55	1094.54	168.77	0.14
Rodair	27941		Lat Struct									
Rodair	27699	Max WS	2683.5	-6.34	6.83		6.93	0.000147	2.57	1126.17	165.72	0.14
Rodair	27384	Max WS	2712.04	-5.88	6.78		6.88	0.000163	2.64	1111.05	166.49	0.15
Rodair	27302	Max WS	2717.02	-6.01	6.7		6.88	0.000291	3.54	962.9	192.93	0.2
Rodair	27231	Max WS	2788.74	-7.2	6.73		6.84	0.000167	2.68	1112.97	173.55	0.15
Rodair	27219		Lat Struct									
Rodair	27114	Max WS	2802.4	-7.28	6.7		6.82	0.000175	2.79	1094.94	170.83	0.16
Rodair	26795	Max WS	2851.63	-7.42	6.65		6.76	0.000176	2.78	1116.82	171.3	0.16
Rodair	26484	Max WS	2866.45	-6.94	6.57		6.71	0.000195	3.01	1086.82	173.7	0.16
Rodair	26225	Max WS	2874.19	-6.86	6.55		6.66	0.000162	2.7	1154.86	176.2	0.15
Rodair	25912	Max WS	2961.38	-6.68	6.46		6.6	0.000185	2.97	1100.07	168.19	0.16
Rodair	25874		Lat Struct									
Rodair	25817		Lat Struct									
Rodair	25810	Max WS	2976.44	-6.98	6.44		6.58	0.000211	3.07	1080.64	169.42	0.17
Rodair	25782	Max WS	2985.91	-6.42	6.45		6.57	0.000197	2.91	1167.18	168.57	0.16
Rodair	25748		Lat Struct									
Rodair	25643	Max WS	3036.77	-6.41	6.42		6.54	0.000171	2.79	1188.04	169.35	0.15
Rodair	25556	Max WS	3080.98	-6.53	6.38		6.52	0.000204	3.09	1131.48	184.19	0.17
Rodair	25445	Max WS	3080.97	-6.34	6.38		6.49	0.000214	2.69	1143.32	140.58	0.17
Rodair	25327	Max WS	3080.41	-7.24	6.37		6.47	0.000147	2.51	1226.19	125.18	0.14
Rodair	25283		Lat Struct									
Rodair	25182		Lat Struct									

Proposed Pump

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	25095	Max WS	2883.61	-6.55	6.33		6.45	0.000162	2.79	1112.41	148.09	0.15
Rodair	24696	Max WS	3213.71	-6.78	6.19		6.35	0.000225	3.19	1083.19	163.85	0.18
Rodair	24402	Max WS	3203.37	-6.63	6.17		6.29	0.000168	2.84	1273.58	176.72	0.15
Rodair	24079	Max WS	3078.2	-7.6	6.09		6.24	0.000227	3.13	1078.52	160.99	0.18
Rodair	23870	Max WS	3002.4	-7.34	6.08		6.2	0.000181	2.8	1142.53	165.29	0.16
Rodair	23810	Max WS	2993.03	-7.34	6.08		6.19	0.000153	2.64	1206.85	189.11	0.15
Rodair	23799		Lat Struct									
Rodair	23722	Max WS	2909.41	-6.47	6.07		6.18	0.00017	2.73	1169.63	198.56	0.15
Rodair	23718		Lat Struct									
Rodair	23678	Max WS	2909.7	-6.6	6.05		6.17	0.000193	2.86	1077.87	161.76	0.16
Rodair	23504	Max WS	2887.13	-7.12	6		6.14	0.000194	3.08	1063.28	153.16	0.16
Rodair	23285	Max WS	2755.33	-7.54	6		6.11	0.000173	2.66	1070.44	152.22	0.15
Rodair	22996	Max WS	2761.43	-7.19	5.96		6.07	0.000138	2.64	1168.57	165.66	0.14
Rodair	22659	Max WS	2699.07	-7.28	5.94		6.02	0.000124	2.36	1249.58	187.08	0.13
Rodair	22560	Max WS	2609.32	-6.56	5.96		6.02	0.000092	1.99	1381.99	167.42	0.11
Rodair	22449	Max WS	2611.73	-7.12	5.93		6.01	0.000106	2.31	1290.03	178.57	0.12
Rodair	22431		Lat Struct									
Rodair	22355	Max WS	2610.94	-7.14	5.9		5.99	0.000148	2.43	1083.71	134.83	0.14
Rodair	22014	Max WS	2597.83	-7.38	5.87		5.95	0.000111	2.36	1268.14	187.45	0.13
Rodair	21661	Max WS	2707.2	-6.97	5.81		5.9	0.000142	2.51	1204.76	181.7	0.14
Rodair	21449	Max WS	2733.88	-8	5.78		5.87	0.000126	2.55	1293.49	191.83	0.13
Rodair	21181	Max WS	3093.18	-7.92	5.73		5.82	0.000131	2.56	1398.14	189.36	0.14
Rodair	20966	Max WS	3200.16	-8.1	5.69		5.79	0.000142	2.67	1420.86	226.53	0.14
Rodair	20745	Max WS	3122.65	-7.43	5.68		5.78	0.000136	2.62	1423	213.11	0.14
Rodair	20503	Max WS	2900.55	-6.94	5.65		5.74	0.000123	2.4	1365.72	199.28	0.13
Rodair	20152	Max WS	2864.52	-7.3	5.62		5.71	0.000124	2.48	1321.24	178.58	0.13
Rodair	19887	Max WS	2691.99	-7.38	5.61		5.68	0.000106	2.24	1325.86	171.95	0.12
Rodair	19599	Max WS	2632.73	-6.53	5.59		5.66	0.00011	2.23	1350.56	184.71	0.12
Rodair	19205	Max WS	2277.54	-6.9	5.61		5.66	0.000068	1.73	1500.65	202.71	0.1
Rodair	18888	Max WS	2232.35	-6.91	5.6		5.65	0.000071	1.85	1413.37	193.78	0.1
Rodair	18535	Max WS	2043.38	-6.67	5.59		5.63	0.000054	1.57	1441.67	196.43	0.09
Rodair	18189	Max WS	2055.79	-6.77	5.57		5.61	0.000059	1.64	1416.2	202.47	0.09
Rodair	17910	Max WS	1941.26	-7.03	5.56		5.59	0.000042	1.41	1583.06	204.71	0.08
Rodair	17641	Max WS	1925.57	-7.06	5.53		5.56	0.000043	1.39	1530.91	194.11	0.08
Rodair	17596	Max WS	1899.24	-7.28	5.52		5.55	0.000041	1.37	1526.98	190.83	0.08
Rodair	17448	Max WS	1786.15	-7.47	5.51		5.54	0.000044	1.44	1378.73	174.86	0.08
Rodair	17439		Lat Struct									
Rodair	17320	Max WS	1719.39	-7.78	5.5		5.53	0.000042	1.41	1344.71	172.99	0.08
Rodair	17064	Max WS	1614.22	-7.74	5.5		5.53	0.000037	1.3	1351.85	169.02	0.07
Rodair	16757	Max WS	1471.26	-6.91	5.5		5.52	0.000031	1.17	1331.95	164.15	0.07
Rodair	16437	Max WS	1358.88	-6.76	5.49		5.51	0.000028	1.09	1316.06	159.13	0.06
Rodair	16143	Max WS	1228.76	-6.33	5.49		5.51	0.000022	1.01	1305.69	154.28	0.06
Rodair	16033	Max WS	1171.62	-6.33	5.49		5.51	0.00002	0.94	1340.42	171.79	0.05
Rodair	15984	Max WS	1171.34	-7.22	5.5	-4.29	5.5	0.000018	0.79	1490.17	175.78	0.05
Rodair	15974 Pipeline		Bridge									
Rodair	15964	Max WS	1171.34	-8.15	5.49		5.5	0.000016	0.75	1571.57	182.32	0.04
Rodair	15909	Max WS	1171.59	-7.84	5.49		5.5	0.000019	0.85	1382.09	154.13	0.05
Rodair	15903		Lat Struct									

Proposed Pump

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Rodair	15899		Lat Struct									
Rodair	15831	Max WS	1159.94	-7.71	5.48		5.5	0.000018	0.93	1329.25	149	0.05
Rodair	15538	Max WS	1142.17	-7.5	5.48		5.49	0.000018	0.93	1318.97	153.73	0.05
Rodair	15259	Max WS	1127.06	-7.62	5.47		5.49	0.000018	0.93	1344.36	166.52	0.05
Rodair	14965	Max WS	1040.84	-7.57	5.47		5.48	0.000014	0.82	1428.11	185.66	0.04
Rodair	14808	Max WS	850.31	-7.44	5.48		5.48	0.000009	0.66	1502.48	207.11	0.04
Rodair	14763	Max WS	848.67	-6.46	5.48	-4.32	5.48	0.000011	0.7	1451.71	213.78	0.04
Rodair	14740 FM 365		Bridge									
Rodair	14714	Max WS	847.18	-5.29	5.45		5.46	0.000014	0.75	1369.47	219.16	0.04
Rodair	14656	Max WS	843.22	-8.6	5.45		5.46	0.000007	0.6	1692.99	239.58	0.03
Rodair	14654		Lat Struct									
Rodair	14553		Lat Struct									
Rodair	14414	Max WS	820.42	-9.21	5.45		5.46	0.000005	0.51	2026.78	277.07	0.03
Rodair	14280	Max WS	672.61	-7.54	5.45		5.45	0.000003	0.39	2143.64	307.68	0.02
Rodair	14274		Lat Struct									
Rodair	14165	Max WS	1675.01	-7.76	5.43		5.45	0.00002	0.99	2184.32	322.49	0.05
Rodair	14151		Lat Struct									
Rodair	14094	Max WS	1686.74	-8.41	5.43		5.45	0.00002	1.01	2217.29	317.64	0.05
Rodair	13857	Max WS	1771.69	-8.16	5.43		5.44	0.000025	1.07	2092.89	312.81	0.06
Rodair	13555	Max WS	1802.42	-7.34	5.41		5.43	0.000028	1.12	1973.25	284.49	0.06
Rodair	13297	Max WS	1844.49	-6.25	5.4		5.42	0.000029	1.1	1900.24	253.55	0.06
Rodair	13028	Max WS	1955.58	-5.91	5.39		5.41	0.000035	1.21	1779.67	229.87	0.07
Rodair	12743	Max WS	2223.59	-6.08	5.37		5.4	0.000045	1.39	1754.65	225.47	0.08
Rodair	12439	Max WS	2377.81	-6.28	5.35		5.39	0.000057	1.59	1697.91	231.36	0.09
Rodair	12124	Max WS	2503.3	-6.72	5.32		5.36	0.000062	1.7	1704.01	229.67	0.09
Rodair	11769	Max WS	2787.26	-7.61	5.29		5.34	0.000075	1.92	1644.91	206.86	0.1
Rodair	11431	Max WS	2557.2	-7.97	5.27		5.31	0.000064	1.75	1792.89	250.59	0.1
Rodair	11225	Max WS	2510	-7.76	5.27		5.32	0.000069	1.77	1671.01	237.42	0.1
Rodair	10798	Max WS	2507.31	-7.47	5.23		5.28	0.000069	1.74	1681.64	243.08	0.1
Rodair	10451	Max WS	2426.3	-6.51	5.2		5.24	0.000059	1.58	1839.59	283.06	0.09
Rodair	10114	Max WS	2377.3	-7.24	5.19		5.22	0.000052	1.49	1931.38	305.54	0.09
Rodair	9896	Max WS	2302.48	-6.12	5.18		5.21	0.000049	1.41	1956.65	326.86	0.08
Rodair	9855	Max WS	2301	-6.09	5.18		5.21	0.000049	1.39	2020.86	357.88	0.08
Rodair	9765		Lat Struct									
Rodair	9684		Lat Struct									
Rodair	9653	Max WS	2212.38	-6.13	5.17		5.2	0.000054	1.5	1848.09	321.16	0.09
Rodair	9334	Max WS	2183.58	-6.25	5.16		5.19	0.000038	1.23	1999.96	299.6	0.07
Rodair	8819	Max WS	1990.07	-4.56	5.15		5.17	0.000034	1.09	2144.5	358.49	0.07
Rodair	8479	Max WS	1948.1	-4.63	5.14		5.16	0.000034	1.11	2203.5	400.13	0.07
Rodair	7988	Max WS	1845.3	-4.19	5.13		5.14	0.000029	0.95	2168.65	388.46	0.06
Rodair	7700	Max WS	1807.37	-2.88	5.12		5.13	0.000023	0.82	2647.39	482.43	0.05
Rodair	7312	Max WS	1745.87	-2.76	5.1		5.12	0.000045	1.13	2195.93	459.76	0.08
Rodair	7020	Max WS	1860.72	-3.12	5.1		5.11	0.000024	0.84	3034.62	549.28	0.06
Rodair	6774	Max WS	1952.37	-1.88	5.1		5.1	0.000018	0.7	3447.81	624.5	0.05
Rodair	6512	Max WS	2133.63	-1.78	5.1		5.1	0.000014	0.62	4225.34	756.08	0.04
Rodair	6261	Max WS	2259.34	-1.75	5.09		5.09	0.000011	0.55	4960.91	855.17	0.04
Rodair	5983	Max WS	2401.33	-1.75	5.09		5.09	0.000009	0.5	5968.14	1066.78	0.03
Rodair	5696	Max WS	2478.85	-1.72	5.08		5.09	0.000007	0.43	6589.33	1094.46	0.03

Proposed Pump

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	5387	Max WS	2467.17	-1.72	5.08		5.08	0.000007	0.44	6052.73	977.28	0.03
Rodair	5141	Max WS	2503.82	-1.84	5.08		5.08	0.000008	0.48	5514.51	883.87	0.03
Rodair	4826	Max WS	2531.44	-2.09	5.08		5.08	0.000011	0.57	4786.43	739.88	0.04
Rodair	4416	Max WS	2808.39	-2.38	5.07		5.07	0.000015	0.68	5281.67	949.8	0.04
Rodair	4140	Max WS	2900.49	-2.66	5.06		5.07	0.000013	0.64	5899.98	988.79	0.04
Rodair	3899	Max WS	3128.59	-2.78	5.06		5.06	0.000014	0.66	6080.08	1034.86	0.04
Rodair	3535	Max WS	3423.68	-3.25	5.05		5.06	0.000013	0.66	6816.45	1114.75	0.04
Rodair	3189	Max WS	3738.39	-3.56	5.05		5.05	0.000014	0.68	7827.94	1387.14	0.04
Rodair	2825	Max WS	4131.37	-4.79	5.04		5.05	0.000017	0.79	8072.75	1489.43	0.05
Rodair	2434	Max WS	4271.96	-5.87	5.03		5.04	0.000021	0.89	7488.67	1419.64	0.05
Rodair	2044	Max WS	4417.81	-5.5	5.02		5.03	0.000027	1	6002.04	1099.73	0.06
Rodair	1695	Max WS	4668.43	-4.61	5.01		5.02	0.000027	0.99	6235.69	1056.19	0.06
Rodair	1436	Max WS	3578.47	-4.3	5	-2.04	5	0.000011	0.61	7336.9	1079.76	0.04

Proposed Ultimate

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	54352	Max WS	118.43	8.08	13.46		13.48	0.000142	1.14	103.54	32.83	0.11
Rodair	54311	Max WS	118.43	8.5	13.46		13.48	0.000112	0.99	119.65	40.29	0.1
Rodair	54290		Lat Struct									
Rodair	54289		Lat Struct									
Rodair	54174	Max WS	117.82	7.79	13.45		13.47	0.000077	0.9	130.24	37.48	0.09
Rodair	54014	Max WS	117.79	7.96	13.43		13.45	0.000119	1.06	111.39	35.11	0.1
Rodair	53844	Max WS	117.35	7.86	13.42		13.43	0.000075	0.88	133.61	39.59	0.08
Rodair	53685	Max WS	117.33	8.12	13.41		13.42	0.000077	0.9	130.87	38.17	0.09
Rodair	53512	Max WS	117.33	7.69	13.4		13.41	0.000062	0.83	140.52	38.4	0.08
Rodair	53371	Max WS	117.33	7.53	13.39		13.4	0.000067	0.85	137.69	39.04	0.08
Rodair	53172	Max WS	117.33	7.58	13.38		13.39	0.000052	0.75	156.91	47.38	0.07
Rodair	53012	Max WS	116.55	7.55	13.37		13.38	0.000054	0.73	158.71	48.56	0.07
Rodair	52827	Max WS	116.5	7.28	13.37		13.37	0.000035	0.6	200.98	77.72	0.06
Rodair	52798		Lat Struct									
Rodair	52594	Max WS	116.6	7.42	13.35		13.36	0.000054	0.76	153.83	46.53	0.07
Rodair	52588		Lat Struct									
Rodair	52581		Lat Struct									
Rodair	52412	Max WS	295.91	7.37	13.25		13.3	0.000218	1.66	178.44	45.36	0.15
Rodair	52233	Max WS	295.29	7.09	13.21		13.25	0.00024	1.72	171.24	43.98	0.15
Rodair	52006	Max WS	294.69	6.79	13.16		13.2	0.000215	1.68	175.89	43.25	0.15
Rodair	51821	Max WS	293.96	6.64	13.11		13.16	0.000245	1.79	164.68	40.17	0.16
Rodair	51619	Max WS	293.38	6.55	13.07		13.12	0.000207	1.64	178.96	44.19	0.14
Rodair	51420	Max WS	292.51	6.4	13.02		13.07	0.00023	1.74	167.64	40.45	0.15
Rodair	51176	Max WS	291.93	6.36	12.99		13.03	0.000155	1.48	197.54	46.01	0.13
Rodair	50994		Lat Struct									
Rodair	50989		Lat Struct									
Rodair	50962	Max WS	291.35	6.32	12.96		12.99	0.000142	1.45	201.48	45.23	0.12
Rodair	50720	Max WS	290.62	6.12	12.92		12.96	0.000173	1.58	183.69	41.35	0.13
Rodair	50526	Max WS	289.74	6.25	12.87		12.92	0.000236	1.7	170.26	43.94	0.15
Rodair	50327	Max WS	289.44	5.97	12.85		12.88	0.000116	1.28	225.26	52.76	0.11
Rodair	50168		Lat Struct									
Rodair	50165		Lat Struct									
Rodair	50112	Max WS	288.11	6.32	12.8		12.84	0.000244	1.74	165.44	42.08	0.15
Rodair	49912	Max WS	287.81	5.69	12.79		12.81	0.000089	1.2	240.49	50.63	0.1
Rodair	49709	Max WS	287.09	5.83	12.75		12.78	0.000166	1.48	194.32	47.74	0.13
Rodair	49534	Max WS	286.36	5.5	12.71		12.75	0.000181	1.58	181.21	42.18	0.13
Rodair	49275	Max WS	285.93	5.46	12.7		12.72	0.000078	1.11	257.28	55.18	0.09
Rodair	49063	Max WS	285.51	5.76	12.68		12.7	0.000077	1.1	260.17	57.6	0.09
Rodair	48842	Max WS	284.96	5.53	12.66		12.68	0.000101	1.23	231.75	51.8	0.1
Rodair	48641	Max WS	284.26	5.64	12.63		12.66	0.000119	1.33	215.45	53.1	0.11
Rodair	48434	Max WS	283.98	5.72	12.62		12.64	0.000093	1.26	236.72	66.64	0.1
Rodair	48236	Max WS	283.58	5.66	12.6		12.62	0.000101	1.29	227.18	60.47	0.1
Rodair	47992	Max WS	282.93	5.73	12.56		12.59	0.000119	1.41	213.24	60.8	0.11
Rodair	47977	Max WS	281.76	5.61	12.51	8.22	12.6	0.00023	2.31	121.87	60.91	0.17
Rodair	47949 5th Ave		Bridge									
Rodair	47930	Max WS	280.65	5.65	12.48		12.57	0.000041	2.35	119.46	48.26	0.17
Rodair	47908	Max WS	281.49	5.58	12.51	8.09	12.54	0.000019	1.4	233.15	80.25	0.11

Proposed Ultimate

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	47891		Inl Struct									
Rodair	47879	Max WS	281.21	5.37	12.5		12.52	0.000013	1.2	294.15	124.13	0.09
Rodair	47846		Lat Struct									
Rodair	47783	Max WS	256.2	4.21	12.51		12.52	0.000008	0.94	286.79	78.77	0.07
Rodair	47753		Lat Struct									
Rodair	47751		Lat Struct									
Rodair	47737	Max WS	256.3	3.85	12.51		12.52	0.000007	0.92	284.91	67.79	0.07
Rodair	47564	Max WS	541.96	3.84	12.42		12.47	0.00004	1.9	288.09	69.55	0.16
Rodair	47409	Max WS	550.82	3.69	12.41		12.47	0.000033	1.96	293.73	72.02	0.15
Rodair	47180	Max WS	563.97	3.91	12.38		12.45	0.000038	2.12	277.73	68.81	0.16
Rodair	46984	Max WS	574.76	3.66	12.38		12.45	0.000034	2.07	293.8	68.89	0.15
Rodair	46786	Max WS	586.39	3.34	12.38		12.44	0.000028	1.9	317.21	66.91	0.14
Rodair	46660	Max WS	593.36	3.52	12.35		12.43	0.000038	2.26	288.98	73.61	0.16
Rodair	46479	Max WS	604.13	3.58	12.35		12.42	0.000035	2.23	298.67	76.84	0.16
Rodair	46324	Max WS	613.16	3.5	12.34		12.41	0.000059	2.17	282.09	69.25	0.19
Rodair	46263	Max WS	617.25	3.59	12.37		12.41	0.000026	1.57	392.4	87.45	0.13
Rodair	46252	Max WS	617.89	3.55	12.36	6.86	12.41	0.000026	1.69	374.75	90.21	0.13
Rodair	46247 Highland Pipelin		Bridge									
Rodair	46242	Max WS	617.55	3.56	12.34		12.38	0.000026	1.7	373.07	88.39	0.13
Rodair	46225	Max WS	618.23	3.52	12.33	6.58	12.38	0.000025	1.88	354.55	87.7	0.13
Rodair	46221 Pipeline		Bridge									
Rodair	46218	Max WS	618.23	3.56	12.31		12.37	0.000026	1.85	354.48	87.88	0.13
Rodair	46214	Max WS	618.45	3.56	12.31		12.37	0.000024	1.91	353.76	88.01	0.13
Rodair	46210	Max WS	618.69	3.53	12.31	6.64	12.37	0.000028	1.91	345.19	87.67	0.14
Rodair	46206 Pipeline		Bridge									
Rodair	46203	Max WS	617.99	3.56	12.27		12.33	0.000026	1.95	346.71	84.47	0.14
Rodair	46193	Max WS	618.57	3.71	12.28		12.33	0.000034	1.77	349.66	78.77	0.15
Rodair	46138	Max WS	620.74	3.81	12.25		12.33	0.000048	2.26	277.46	63.06	0.18
Rodair	46123		Lat Struct									
Rodair	46121		Lat Struct									
Rodair	46090	Max WS	623.58	3.43	12.25		12.32	0.000038	2.18	294.35	64.31	0.16
Rodair	45937	Max WS	631.36	3.53	12.23		12.32	0.00005	2.42	273.5	72.48	0.18
Rodair	45779	Max WS	640.7	3.3	12.22		12.31	0.000042	2.29	287.49	62.34	0.17
Rodair	45773		Lat Struct									
Rodair	45650	Max WS	637.54	3.34	12.23		12.3	0.000036	2.17	306.87	76.94	0.16
Rodair	45631		Lat Struct									
Rodair	45523	Max WS	645.2	3.5	12.22		12.3	0.000043	2.26	288.26	57.81	0.17
Rodair	45412	Max WS	651.77	3.52	12.21		12.29	0.000043	2.25	291.56	61.57	0.17
Rodair	45306	Max WS	657.51	3.45	12.2		12.28	0.000043	2.29	293.48	64.7	0.17
Rodair	45279		Lat Struct									
Rodair	45136	Max WS	619.56	3.39	12.2		12.27	0.000234	2.13	310	76.27	0.16
Rodair	45100		Lat Struct									
Rodair	45010	Max WS	621.9	3.67	12.18		12.25	0.000045	2.22	306.19	92.45	0.17
Rodair	44902	Max WS	629.35	3.28	12.17		12.25	0.000043	2.25	306.69	88.19	0.17
Rodair	44801	Max WS	635.03	3.22	12.16		12.24	0.000042	2.19	297.4	76.03	0.17
Rodair	44674	Max WS	641.9	3.18	12.16		12.23	0.000042	2.22	295.97	63.56	0.17
Rodair	44570		Lat Struct									
Rodair	44550	Max WS	647.8	3.03	12.15		12.23	0.000038	2.17	309.15	81.92	0.16

Proposed Ultimate

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Rodair	44436	Max WS	652.57	3.16	12.15		12.22	0.000039	2.17	321.56	92.44	0.16
Rodair	44308	Max WS	661.53	2.9	12.14		12.22	0.000035	2.16	339.5	91.79	0.16
Rodair	44208	Max WS	670.02	2.91	12.15		12.21	0.000026	1.95	375.34	91.13	0.14
Rodair	44175	Max WS	671.19	2.88	12.14	6.26	12.21	0.000026	2.07	323.68	100.23	0.14
Rodair	44151 Wellspring Dr		Bridge									
Rodair	44128	Max WS	666.73	2.83	12.06		12.13	0.00003	2.03	382.44	120.29	0.14
Rodair	44096	Max WS	668.51	2.82	12.07		12.13	0.000027	1.92	369.87	82.14	0.14
Rodair	44088		Lat Struct									
Rodair	44039	Max WS	670.74	2.75	12.07		12.12	0.000026	1.9	374.27	80.23	0.13
Rodair	44005		Lat Struct									
Rodair	43915	Max WS	674.46	2.78	12.06		12.12	0.000024	1.98	397.83	98.51	0.13
Rodair	43819	Max WS	691.15	2.59	12.06		12.12	0.000026	2.01	371.03	83.73	0.14
Rodair	43748	Max WS	692.27	2.56	12.09		12.11	0.000006	0.97	772.66	171.06	0.07
Rodair	43737	Max WS	692.68	2.56	12.09	4.95	12.11	0.000006	0.95	771.07	169.4	0.07
Rodair	43701 Unnamed Rd		Bridge									
Rodair	43648	Max WS	692.22	2.36	12.06		12.07	0.000005	0.82	869.07	162.97	0.06
Rodair	43634	Max WS	692.04	2.2	12.06		12.07	0.000005	0.85	860.87	159.99	0.06
Rodair	43598		Lat Struct									
Rodair	43553		Lat Struct									
Rodair	43477	Max WS	628.49	2.07	12.04		12.08	0.000014	1.55	426.4	80.16	0.1
Rodair	43458		Lat Struct									
Rodair	43367	Max WS	1527.84	1.98	11.6		11.88	0.000137	4.19	364.73	65.95	0.31
Rodair	43309		Lat Struct									
Rodair	43308		Lat Struct									
Rodair	43237	Max WS	1526.21	1.91	11.66		11.86	0.000075	3.65	451.4	88.13	0.24
Rodair	43178	Max WS	1528.79	1.94	11.71	5.71	11.86	0.000049	3.03	505.23	91.25	0.19
Rodair	43140 US59 NBFR		Bridge									
Rodair	43113	Max WS	1526.92	1.73	11.5		11.73	0.000078	3.87	394.96	80.1	0.24
Rodair	43111	Max WS	1528.59	1.73	11.61		11.73	0.000045	2.75	556.93	82.52	0.18
Rodair	43109	Max WS	1528.55	1.81	11.61		11.73	0.000045	2.72	563.78	88.46	0.18
Rodair	43107	Max WS	1528.52	1.81	11.61	5.4	11.73	0.000043	2.73	561.15	88.39	0.18
Rodair	43079 US59 NBML		Bridge									
Rodair	43038	Max WS	1527.35	1.81	11.54		11.67	0.000043	2.93	538.75	116.84	0.18
Rodair	43030	Max WS	1526.96	1.82	11.51	5.67	11.67	0.000053	3.28	480.18	177.63	0.2
Rodair	42987 US59 SBML		Bridge									
Rodair	42958	Max WS	1526.96	1.69	11.53		11.66	0.000041	2.87	532.84	85.47	0.18
Rodair	42954	Max WS	1527.18	1.69	11.54	5.44	11.66	0.000043	2.83	548.65	96.95	0.18
Rodair	42920 US59 SBFR		Bridge									
Rodair	42889	Max WS	1526.93	1.66	11.52		11.64	0.00004	2.71	565.71	89.3	0.17
Rodair	42862	Max WS	1526.82	1.61	11.49	5.71	11.64	0.000055	3.08	502.85	78.14	0.2
Rodair	42851		Inl Struct									
Rodair	42791	Max WS	1526.56	-0.34	11.42		11.53	0.000032	2.61	594.48	81.73	0.16
Rodair	42790		Lat Struct									
Rodair	42785		Lat Struct									
Rodair	42633	Max WS	1559.84	-0.36	11.41		11.52	0.000033	2.66	595.13	84.96	0.16
Rodair	42381	Max WS	1613.97	-0.41	11.39		11.5	0.000037	2.74	600.16	108.57	0.17
Rodair	42172	Max WS	1658.38	-0.44	11.37		11.49	0.000036	2.79	607.13	83.44	0.17
Rodair	41952	Max WS	1706.04	-0.47	11.34		11.47	0.00004	2.9	605.62	93.09	0.17

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Rodair	41818	Max WS	1732.25	-0.5	11.33		11.47	0.000045	2.97	588.22	79.84	0.18
Rodair	41798	Max WS	1736.34	-0.5	11.33	4	11.46	0.000044	2.97	590.72	81.27	0.18
Rodair	41793 Landrey Pipeline		Bridge									
Rodair	41788	Max WS	1736.34	-0.5	11.3		11.44	0.000044	3.01	584.92	81.64	0.18
Rodair	41782	Max WS	1737.64	-0.5	11.3		11.44	0.000044	3	584.67	82.72	0.18
Rodair	41777		Lat Struct									
Rodair	41768		Lat Struct									
Rodair	41707	Max WS	1753.44	-0.5	11.29		11.43	0.000044	3	593.47	81.66	0.18
Rodair	41558	Max WS	1787.53	-0.53	11.28		11.42	0.000042	3.03	622.4	105.51	0.18
Rodair	41539.5*	Max WS	1786.33	-0.53	11.28		11.42	0.000042	3.03	617.96	104.43	0.18
Rodair	41521*	Max WS	1789.96	-0.53	11.27		11.42	0.000042	3.04	614.35	104.69	0.18
Rodair	41502.5*	Max WS	1793.67	-0.53	11.27		11.42	0.000042	3.05	611.6	102.5	0.18
Rodair	41484	Max WS	1797.47	-0.53	11.27		11.42	0.000042	3.06	609.49	97.93	0.18
Rodair	41386.6*	Max WS	1801.67	-0.54	11.27		11.41	0.000041	3.02	617.43	97.52	0.18
Rodair	41372.2*	Max WS	1805.88	-0.54	11.27		11.41	0.00004	2.99	625.66	96.49	0.18
Rodair	41357.8*	Max WS	1810.09	-0.55	11.28		11.41	0.000039	2.95	634.46	97.22	0.17
Rodair	41343.4*	Max WS	1814.32	-0.56	11.28		11.41	0.000038	2.92	643.4	98.4	0.17
Rodair	41332		Lat Struct									
Rodair	41329*	Max WS	1819.41	-0.57	11.28		11.41	0.000036	2.88	646.47	85.52	0.17
Rodair	41314.6*	Max WS	1828.85	-0.57	11.28		11.41	0.000036	2.85	653.81	84.6	0.17
Rodair	41300.2*	Max WS	1868.71	-0.58	11.27		11.4	0.000036	2.88	662.51	85.41	0.17
Rodair	41285.8*	Max WS	1898.51	-0.59	11.27		11.39	0.000036	2.88	671.66	86.36	0.17
Rodair	41271.4*	Max WS	1973.73	-0.6	11.25		11.38	0.000037	2.95	677.18	83.64	0.17
Rodair	41257*	Max WS	2115.88	-0.6	11.21		11.36	0.000042	3.13	684.65	84.73	0.18
Rodair	41242.6*	Max WS	2230.83	-0.61	11.18		11.35	0.000045	3.26	695.03	89.99	0.19
Rodair	41228.2*	Max WS	2264.06	-0.62	11.18		11.34	0.000045	3.25	706.45	95.9	0.19
Rodair	41213.8*	Max WS	2327.37	-0.63	11.16		11.33	0.000045	3.3	715.7	100.26	0.19
Rodair	41199.4*	Max WS	2333.32	-0.63	11.16		11.33	0.000044	3.25	726.33	100.56	0.19
Rodair	41185	Max WS	2337.58	-0.64	11.17		11.33	0.000042	3.2	737.36	100.5	0.18
Rodair	41151		Lat Struct									
Rodair	41145.8*	Max WS	2341.18	-0.63	11.17		11.33	0.000074	3.18	743.42	103.31	0.19
Rodair	41134.6*	Max WS	2344.79	-0.62	11.17		11.32	0.000117	3.17	748.89	106.22	0.19
Rodair	41123.4*	Max WS	2348.39	-0.61	11.17		11.32	0.000158	3.15	753.87	108.21	0.19
Rodair	41112.2*	Max WS	2352	-0.6	11.16		11.32	0.000223	3.14	758.19	110.08	0.19
Rodair	41101	Max WS	2355.6	-0.59	11.16		11.31	0.000302	3.13	761.86	111.8	0.2
Rodair	41083.2*	Max WS	2359.4	-0.6	11.16		11.31	0.000287	3.07	777.42	112.31	0.19
Rodair	41065.4*	Max WS	2363.19	-0.6	11.16		11.3	0.000273	3	793.21	112.73	0.19
Rodair	41047.5*	Max WS	2366.99	-0.6	11.16		11.3	0.00026	2.95	809.29	112.49	0.18
Rodair	41029.7*	Max WS	2370.78	-0.61	11.16		11.29	0.000247	2.89	825.97	112.55	0.18
Rodair	41011.9*	Max WS	2374.58	-0.62	11.16		11.29	0.000234	2.83	843.07	112.29	0.17
Rodair	40994	Max WS	2378.37	-0.62	11.16		11.28	0.000222	2.77	860.29	111.89	0.17
Rodair	40836	Max WS	2412.03	-0.62	11.12		11.24	0.000239	2.86	851.39	122	0.18
Rodair	40694	Max WS	2442.15	-0.66	11.08		11.21	0.000234	2.88	859.21	118.77	0.17
Rodair	40540	Max WS	2474.89	-0.69	11.03		11.17	0.000244	2.91	856.36	113.92	0.18
Rodair	40249	Max WS	2533.05	-0.72	10.94		11.08	0.000278	3.03	837.76	117.37	0.19
Rodair	40185		Lat Struct									
Rodair	40181	Max WS	2549.77	-0.72	10.91		11.06	0.000281	3.09	834.81	122.58	0.19
Rodair	40107	Max WS	2395.32	-0.75	10.93		11.06	0.000251	2.89	836.79	114.7	0.18

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Rodair	40105		Lat Struct									
Rodair	40050	Max WS	2407.05	-0.75	10.91		11.04	0.000256	2.91	834.09	117.66	0.18
Rodair	39822	Max WS	2454.96	-0.78	10.86		10.98	0.000249	2.81	875.44	129.56	0.18
Rodair	39798		Lat Struct									
Rodair	39617	Max WS	2492.45	-0.81	10.81		10.93	0.000212	2.74	911.79	111.97	0.17
Rodair	39344	Max WS	2550.09	-0.88	10.73		10.86	0.000252	2.86	894.32	123.89	0.18
Rodair	39227	Max WS	2561.86	-0.88	10.7		10.83	0.000243	2.93	880.9	120.64	0.18
Rodair	39200		Lat Struct									
Rodair	39060	Max WS	2597.15	-0.91	10.65		10.79	0.000261	2.94	884.71	113.91	0.18
Rodair	38920	Max WS	2626.81	-0.91	10.61		10.75	0.000257	3	883.46	118.37	0.18
Rodair	38916		Lat Struct									
Rodair	38801	Max WS	2652.07	-0.94	10.57		10.71	0.000256	3.02	885.6	116.38	0.18
Rodair	38792		Lat Struct									
Rodair	38746	Max WS	2663.81	-0.94	10.56		10.7	0.000266	2.99	891.51	118.71	0.19
Rodair	38583	Max WS	2663.67	-0.97	10.51		10.65	0.000282	3.09	870.01	122.82	0.19
Rodair	38572	Max WS	2663.67	-0.97	10.5		10.65	0.000289	3.09	869.36	122.2	0.19
Rodair	38564		Lat Struct									
Rodair	38407	Max WS	2663.66	-1	10.49		10.61	0.000212	2.72	987.62	130.05	0.17
Rodair	38379	Max WS	2671.05	-1	10.48		10.6	0.000226	2.83	961.7	142.76	0.17
Rodair	38356	Max WS	2677.04	-1	10.47		10.6	0.000233	2.85	949.44	132.13	0.17
Rodair	38311		Lat Struct									
Rodair	38212		Lat Struct									
Rodair	38089	Max WS	2745.73	-1.05	10.41		10.53	0.000226	2.8	985.68	130.21	0.17
Rodair	37989		Lat Struct									
Rodair	37729	Max WS	2820.62	-1.1	10.3		10.44	0.000256	2.95	956.47	120.33	0.18
Rodair	37455	Max WS	2893.16	-1.16	10.21		10.36	0.000276	3.11	935.58	121.93	0.19
Rodair	37389	Max WS	2910.44	-1.16	10.19		10.33	0.000285	3.09	942	116.56	0.19
Rodair	37380		Lat Struct									
Rodair	37275	Max WS	2940.49	-1.19	10.14		10.3	0.000288	3.18	932.39	146.9	0.19
Rodair	37266		Lat Struct									
Rodair	37203	Max WS	2927.7	-1.19	10.13		10.28	0.000285	3.17	950.73	153.49	0.19
Rodair	37178		Lat Struct									
Rodair	37013	Max WS	2978.02	-1.22	10.06		10.22	0.000302	3.18	935.07	115.3	0.2
Rodair	36801	Max WS	3034.58	-1.25	9.99		10.15	0.000306	3.18	955.47	119.99	0.2
Rodair	36503	Max WS	3084.93	-1.3	9.89		10.05	0.000317	3.25	951.14	129.9	0.2
Rodair	36166	Max WS	3163.02	-1.34	9.73		9.93	0.000375	3.52	899.99	117.38	0.22
Rodair	36151	Max WS	3166.98	-1.34	9.73		9.92	0.000374	3.51	904.4	118.25	0.22
Rodair	36129		Lat Struct									
Rodair	35987		Lat Struct									
Rodair	35981	Max WS	3211.63	-1.38	9.69		9.88	0.00006	3.48	927.07	127.02	0.22
Rodair	35939	Max WS	3221.73	-1.38	9.49		9.89	0.000123	5.06	677.91	124.31	0.31
Rodair	35919		Lat Struct									
Rodair	35799	Max WS	3258.23	-1.41	9.48		9.86	0.000123	4.95	678.81	114.04	0.31
Rodair	35788		Lat Struct									
Rodair	35708	Max WS	3086.24	-1.41	9.52		9.89	0.000108	4.9	692.17	125.02	0.29
Rodair	35701		Lat Struct									
Rodair	35693	Max WS	3089.38	-1.41	9.54		9.88	0.000106	4.74	702.36	121.8	0.29
Rodair	35682		Lat Struct									

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Rodair	35659	Max WS	3082.82	-1.41	9.56		9.88	0.000094	4.54	733.87	137.34	0.27
Rodair	35609	Max WS	3102.45	-1.44	9.49		9.88	0.000114	5.02	687.48	131	0.3
Rodair	35600		Lat Struct									
Rodair	35547	Max WS	3104.29	-1.44	9.48		9.86	0.000113	4.92	703.46	138.35	0.29
Rodair	35323	Max WS	3190.94	-1.47	9.44		9.82	0.000118	4.97	731.47	156.05	0.3
Rodair	35312	Max WS	3191.13	-1.47	9.43		9.81	0.000113	4.99	733.43	154.29	0.3
Rodair	35252		Lat Struct									
Rodair	35065	Max WS	3227.42	-1.5	9.42		9.77	0.000104	4.76	760.58	150.71	0.29
Rodair	35057	Max WS	3226.61	-1.51	9.42		9.77	0.000099	4.81	765.25	150.14	0.28
Rodair	35052		Lat Struct									
Rodair	34813	Max WS	3328.38	-1.55	9.34		9.73	0.000116	5.08	738.01	143.96	0.3
Rodair	34556	Max WS	3372.73	-1.58	9.27		9.69	0.000127	5.23	745.02	152.83	0.31
Rodair	34353	Max WS	3405.32	-1.61	9.22		9.65	0.000126	5.28	728.84	143.23	0.31
Rodair	34081	Max WS	3479.9	-1.65	9.18		9.6	0.000124	5.21	734.32	126.78	0.31
Rodair	33806	Max WS	3552.77	-1.69	9.09		9.54	0.000141	5.43	717.8	117.51	0.33
Rodair	33509	Max WS	3653.42	-1.73	9		9.48	0.000149	5.57	716.89	122.59	0.34
Rodair	33208	Max WS	3731.36	-1.78	8.66		9.42	0.000264	6.98	554.84	106.48	0.45
Rodair	33197	Max WS	3734.05	-1.78	8.52	5.12	9.41	0.000282	7.57	493.24	90.76	0.47
Rodair	33177 Cloverdale		Bridge									
Rodair	33163	Max WS	3734.05	-1.81	8.5		9.27	0.000273	7.07	531.69	78.36	0.45
Rodair	33153	Max WS	3736.47	-1.81	8.48		9.27	0.000274	7.14	530.47	81.42	0.45
Rodair	33150		Lat Struct									
Rodair	33111		Lat Struct									
Rodair	33002	Max WS	3805.83	-1.84	8.56		9.2	0.000208	6.44	609.04	104.73	0.4
Rodair	32981	Max WS	3811.33	-1.84	8.62	4.29	9.2	0.000175	6.08	658.05	123.87	0.37
Rodair	32977 Pipeline		Bridge									
Rodair	32971	Max WS	3811.14	-1.84	8.39		8.99	0.000192	6.25	632.27	104.2	0.39
Rodair	32960	Max WS	3813.99	-1.84	8.4		8.99	0.000196	6.15	639.18	115.29	0.39
Rodair	32944	Max WS	3818.21	-1.84	8.37	4.14	8.99	0.000181	6.27	608.68	142.76	0.38
Rodair	32922 Pipelines		Bridge									
Rodair	32905	Max WS	3768.76	-1.84	8.2		8.83	0.00021	6.38	617.44	110.42	0.4
Rodair	32893	Max WS	3776.36	-1.84	8.22	4.26	8.82	0.000206	6.24	618.38	102.26	0.4
Rodair	32854 Pipeline		Bridge									
Rodair	32808	Max WS	3821.16	-2.12	8.42		8.8	0.000117	4.97	887.23	175.64	0.3
Rodair	32793	Max WS	3825.14	-2.19	8.41	3.35	8.79	0.000114	5	765.5	177.2	0.3
Rodair	32743 RR		Bridge									
Rodair	32717	Max WS	3825.14	-2.62	8.39		8.76	0.000103	4.85	788.7	113.67	0.29
Rodair	32711	Max WS	3825.08	-2.66	8.42		8.74	0.000112	4.57	846.91	134.61	0.29
Rodair	32705	Max WS	3824.98	-2.69	8.43		8.74	0.000119	4.51	857.81	145.85	0.3
Rodair	32698	Max WS	3824.98	-2.73	8.38	3.02	8.74	0.000104	4.87	786.13	125.19	0.29
Rodair	32655 W Port Arthur Rd		Bridge									
Rodair	32590	Max WS	3824.98	-3.4	8.36		8.7	0.000552	4.69	816.41	208.04	0.27
Rodair	32508	Max WS	3824.82	-4.78	8.43		8.66	0.000341	3.88	1045.44	145.01	0.22
Rodair	32462	Max WS	3824.78	-3.97	8.43		8.65	0.000345	3.76	1050.94	144.52	0.22
Rodair	32455		Lat Struct									
Rodair	32407		Lat Struct									
Rodair	32287	Max WS	3846.83	-4.07	8.3		8.58	0.000463	4.29	964.11	165.58	0.25
Rodair	32108	Max WS	3856.71	-4.28	8.24		8.49	0.000438	4.09	987.89	153.72	0.24

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Rodair	31859	Max WS	3801.62	-4.38	8.07		8.39	0.00057	4.6	874.62	137.86	0.27
Rodair	31543	Max WS	3866.62	-4.5	7.95		8.24	0.000433	4.33	929.59	120.95	0.24
Rodair	31340	Max WS	3992.63	-4.69	7.83		8.1	0.000457	4.18	995.1	147.13	0.25
Rodair	30965	Max WS	4102.92	-5.03	7.6		7.92	0.000485	4.59	965.11	150.98	0.26
Rodair	30592	Max WS	4170.07	-4.75	7.32		7.68	0.000693	4.84	865.31	119.01	0.3
Rodair	30202	Max WS	4250.48	-4.74	7.05		7.42	0.000594	4.94	947.37	155.42	0.28
Rodair	30185	Max WS	4256.66	-4.93	7.02		7.4	0.000649	5.01	881.74	134.64	0.29
Rodair	30137		Lat Struct									
Rodair	30122	Max WS	4269.53	-5.27	6.74		7.37	0.001124	6.58	725.35	108.56	0.38
Rodair	29854	Max WS	4322.22	-5.06	6.73		7.1	0.000597	4.94	912.43	121.27	0.28
Rodair	29748	Max WS	4338.37	-5.04	6.62		7.03	0.000685	5.2	868.49	126.11	0.3
Rodair	29738		Lat Struct									
Rodair	29712		Lat Struct									
Rodair	29570	Max WS	4388.17	-4.88	6.51		6.91	0.00066	5.04	892.11	115.86	0.29
Rodair	29541		Lat Struct									
Rodair	29503		Lat Struct									
Rodair	29261	Max WS	2372.45	-5.22	6.43		6.56	0.000217	2.97	855.39	119.66	0.17
Rodair	28913	Max WS	2385.7	-5.72	6.37		6.48	0.00021	2.71	931.25	172.41	0.16
Rodair	28589	Max WS	2379.08	-6.24	6.3		6.41	0.000175	2.63	936.34	125.34	0.15
Rodair	28418		Lat Struct									
Rodair	28327	Max WS	2277.71	-5.72	6.26		6.37	0.000206	2.63	893.12	140.15	0.16
Rodair	28188	Max WS	2156.41	-5.45	6.26		6.35	0.000163	2.47	915.87	145.83	0.15
Rodair	28181		Lat Struct									
Rodair	28086	Max WS	2137.68	-5.75	6.25		6.34	0.000139	2.31	954.04	143.76	0.14
Rodair	28069		Lat Struct									
Rodair	27985	Max WS	1908.96	-6.03	6.28		6.34	0.000097	1.97	999.97	138.61	0.11
Rodair	27941		Lat Struct									
Rodair	27699	Max WS	1912.6	-6.34	6.26		6.32	0.000092	1.96	1032.72	158.98	0.11
Rodair	27384	Max WS	1945.02	-5.88	6.22		6.29	0.000104	2.03	1020.77	158.79	0.12
Rodair	27302	Max WS	1950.75	-6.01	6.17		6.28	0.000191	2.76	861.48	189.13	0.16
Rodair	27231	Max WS	1990.68	-7.2	6.2		6.26	0.000104	2.04	1022.14	163.93	0.12
Rodair	27219		Lat Struct									
Rodair	27114	Max WS	2003.79	-7.28	6.18		6.25	0.000109	2.12	1006.3	165.41	0.12
Rodair	26795	Max WS	2038.91	-7.42	6.14		6.21	0.000109	2.11	1031.02	168.87	0.12
Rodair	26484	Max WS	2059.28	-6.94	6.1		6.17	0.00012	2.29	1004.3	171.94	0.13
Rodair	26225	Max WS	2084.64	-6.86	6.08		6.14	0.000102	2.07	1072.65	174.15	0.12
Rodair	25912	Max WS	2156.14	-6.68	6.03		6.1	0.000115	2.27	1027.29	163.55	0.13
Rodair	25874		Lat Struct									
Rodair	25817		Lat Struct									
Rodair	25810	Max WS	2166.3	-6.98	6.01		6.09	0.000132	2.36	1008.88	165.89	0.13
Rodair	25782	Max WS	2169.06	-6.42	6.02		6.09	0.000123	2.24	1095.26	163.97	0.13
Rodair	25748		Lat Struct									
Rodair	25643	Max WS	2194.59	-6.41	6		6.07	0.000104	2.12	1117.28	167.66	0.12
Rodair	25556	Max WS	2215	-6.53	5.98		6.06	0.000122	2.34	1058.03	181.43	0.13
Rodair	25445	Max WS	2214.8	-6.34	5.98		6.04	0.000123	2.04	1088.11	134.53	0.13
Rodair	25327	Max WS	2214.8	-7.24	5.98		6.03	0.000085	1.88	1176.71	123.36	0.11
Rodair	25283		Lat Struct									
Rodair	25182		Lat Struct									

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Rodair	25095	Max WS	2085.73	-6.55	5.95		6.02	0.000097	2.11	1057.4	140.77	0.12
Rodair	24696	Max WS	2502.84	-6.78	5.84		5.94	0.000156	2.59	1025.11	162.2	0.15
Rodair	24402	Max WS	2505.55	-6.63	5.82		5.9	0.000117	2.31	1212.25	172.03	0.13
Rodair	24079	Max WS	2415.14	-7.6	5.76		5.86	0.000156	2.56	1027.03	155.45	0.15
Rodair	23870	Max WS	2375.12	-7.34	5.75		5.84	0.000126	2.3	1088.87	163.92	0.13
Rodair	23810	Max WS	2373.31	-7.34	5.76		5.83	0.000108	2.17	1146.21	180.29	0.12
Rodair	23799		Lat Struct									
Rodair	23722	Max WS	2313.18	-6.47	5.74		5.82	0.000122	2.26	1106.51	190.46	0.13
Rodair	23718		Lat Struct									
Rodair	23678	Max WS	2314.43	-6.6	5.73		5.82	0.000138	2.36	1027.32	155.95	0.14
Rodair	23504	Max WS	2300.05	-7.12	5.7		5.8	0.000137	2.54	1016.65	152.26	0.14
Rodair	23285	Max WS	2201.13	-7.54	5.7		5.77	0.000124	2.2	1024.56	147.8	0.13
Rodair	22996	Max WS	2209.81	-7.19	5.67		5.74	0.000098	2.19	1120.33	161.78	0.12
Rodair	22659	Max WS	2156.66	-7.28	5.65		5.71	0.000088	1.95	1195.85	184.97	0.11
Rodair	22560	Max WS	2088.93	-6.56	5.66		5.7	0.000065	1.64	1333.07	165.26	0.1
Rodair	22449	Max WS	2092.34	-7.12	5.64		5.7	0.000075	1.91	1239.3	176.19	0.1
Rodair	22431		Lat Struct									
Rodair	22355	Max WS	2093.94	-7.14	5.63		5.69	0.000105	2.01	1047.06	128.89	0.12
Rodair	22014	Max WS	2083.86	-7.38	5.6		5.66	0.000079	1.95	1218.01	184.8	0.1
Rodair	21661	Max WS	2165.31	-6.97	5.56		5.62	0.0001	2.07	1159.89	178.22	0.12
Rodair	21449	Max WS	2179.69	-8	5.54		5.6	0.000087	2.09	1247.52	190.13	0.11
Rodair	21181	Max WS	2445.93	-7.92	5.5		5.57	0.000089	2.08	1356.64	187.53	0.11
Rodair	20966	Max WS	2516.74	-8.1	5.48		5.55	0.000095	2.16	1374.19	226.53	0.12
Rodair	20745	Max WS	2490.09	-7.43	5.46		5.53	0.000094	2.15	1377.05	213.11	0.12
Rodair	20503	Max WS	2313.21	-6.94	5.46		5.52	0.000084	1.96	1328.29	199.28	0.11
Rodair	20152	Max WS	2184.62	-7.3	5.46		5.51	0.000076	1.93	1292.87	178.58	0.1
Rodair	19887	Max WS	2191.44	-7.38	5.44		5.49	0.000075	1.86	1297.08	171.95	0.1
Rodair	19599	Max WS	2069.03	-6.53	5.42		5.46	0.000072	1.79	1319.25	184.71	0.1
Rodair	19205	Max WS	1733.62	-6.9	5.45		5.47	0.000042	1.35	1466.63	202.71	0.08
Rodair	18888	Max WS	1728.13	-6.91	5.44		5.47	0.000045	1.46	1382.46	193.78	0.08
Rodair	18535	Max WS	1575.38	-6.67	5.43		5.46	0.000034	1.24	1410.79	196.43	0.07
Rodair	18189	Max WS	1614.09	-6.77	5.42		5.45	0.000038	1.31	1385.74	202.47	0.07
Rodair	17910	Max WS	1526.25	-7.03	5.41		5.43	0.000027	1.13	1552.15	204.71	0.06
Rodair	17641	Max WS	1529.4	-7.06	5.38		5.4	0.000029	1.13	1502.32	194.11	0.06
Rodair	17596	Max WS	1507.78	-7.28	5.37		5.39	0.000027	1.1	1498.95	190.83	0.06
Rodair	17448	Max WS	1370.77	-7.47	5.36		5.38	0.000027	1.13	1353.63	174.86	0.06
Rodair	17439		Lat Struct									
Rodair	17320	Max WS	1348.15	-7.78	5.36		5.38	0.000027	1.12	1320.54	172.99	0.06
Rodair	17064	Max WS	1272.85	-7.74	5.36		5.38	0.000024	1.04	1328.37	169.02	0.06
Rodair	16757	Max WS	1161.77	-6.91	5.36		5.37	0.00002	0.94	1309.13	164.15	0.05
Rodair	16437	Max WS	1074.85	-6.76	5.36		5.37	0.000018	0.87	1294.11	159.13	0.05
Rodair	16143	Max WS	968.35	-6.33	5.36		5.37	0.000015	0.81	1284.6	154.28	0.05
Rodair	16033	Max WS	931.02	-6.33	5.36		5.36	0.000013	0.76	1316.78	171.79	0.04
Rodair	15984	Max WS	929.32	-7.22	5.36	-4.57	5.36	0.000012	0.63	1465.75	175.78	0.04
Rodair	15974 Pipeline		Bridge									
Rodair	15964	Max WS	929.32	-8.15	5.35		5.36	0.00001	0.6	1546.32	182.32	0.04
Rodair	15909	Max WS	928.72	-7.84	5.35		5.36	0.000013	0.68	1360.91	154.13	0.04
Rodair	15903		Lat Struct									

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Rodair	15899		Lat Struct									
Rodair	15831	Max WS	917.89	-7.71	5.35		5.36	0.000012	0.74	1308.93	149	0.04
Rodair	15538	Max WS	896.28	-7.5	5.35		5.35	0.000011	0.74	1298.64	153.73	0.04
Rodair	15259	Max WS	852.76	-7.62	5.35		5.35	0.000011	0.71	1323.02	166.52	0.04
Rodair	14965	Max WS	773.93	-7.57	5.34		5.35	0.000008	0.62	1404.39	185.66	0.03
Rodair	14808	Max WS	616.03	-7.44	5.35		5.35	0.000005	0.48	1475.66	207.11	0.03
Rodair	14763	Max WS	609.29	-6.46	5.35	-4.66	5.35	0.000006	0.51	1424.13	213.78	0.03
Rodair	14740 FM 365		Bridge									
Rodair	14714	Max WS	608.26	-5.29	5.33		5.33	0.000008	0.54	1342.59	219.16	0.03
Rodair	14656	Max WS	597.67	-8.6	5.33		5.33	0.000003	0.43	1663.67	239.58	0.02
Rodair	14654		Lat Struct									
Rodair	14553		Lat Struct									
Rodair	14414	Max WS	573.28	-9.21	5.33		5.33	0.000002	0.36	1992.41	277.07	0.02
Rodair	14280	Max WS	434.28	-7.54	5.33		5.33	0.000001	0.25	2104.89	307.68	0.01
Rodair	14274		Lat Struct									
Rodair	14165	Max WS	1454.06	-7.76	5.31		5.32	0.000016	0.87	2145.01	322.49	0.05
Rodair	14151		Lat Struct									
Rodair	14094	Max WS	1452.76	-8.41	5.31		5.32	0.000015	0.88	2179.04	317.64	0.05
Rodair	13857	Max WS	1527.28	-8.16	5.31		5.32	0.000019	0.93	2055.57	312.81	0.05
Rodair	13555	Max WS	1553.42	-7.34	5.29		5.31	0.000021	0.98	1939.34	284.49	0.06
Rodair	13297	Max WS	1606.25	-6.25	5.29		5.3	0.000023	0.97	1870.63	253.55	0.06
Rodair	13028	Max WS	1703.63	-5.91	5.27		5.29	0.000028	1.07	1753.01	229.87	0.06
Rodair	12743	Max WS	1926.79	-6.08	5.26		5.28	0.000036	1.22	1729.77	225.47	0.07
Rodair	12439	Max WS	2064.5	-6.28	5.25		5.27	0.000045	1.4	1673.25	231	0.08
Rodair	12124	Max WS	2132.93	-6.72	5.23		5.26	0.000046	1.46	1683.39	229.67	0.08
Rodair	11769	Max WS	2394.04	-7.61	5.2		5.24	0.000057	1.66	1627.23	206.86	0.09
Rodair	11431	Max WS	2139.84	-7.97	5.19		5.22	0.000046	1.48	1774.42	250.59	0.08
Rodair	11225	Max WS	2192.94	-7.76	5.18		5.21	0.000055	1.56	1648.82	237.42	0.09
Rodair	10798	Max WS	2012.43	-7.47	5.17		5.19	0.000046	1.41	1665.34	243.08	0.08
Rodair	10451	Max WS	1980.94	-6.51	5.15		5.17	0.00004	1.3	1824.2	283.06	0.07
Rodair	10114	Max WS	1953.6	-7.24	5.14		5.16	0.000036	1.24	1915.02	305.54	0.07
Rodair	9896	Max WS	1934.54	-6.12	5.12		5.14	0.000035	1.2	1939.23	326.86	0.07
Rodair	9855	Max WS	1899.36	-6.09	5.12		5.14	0.000034	1.16	2001.3	357.88	0.07
Rodair	9765		Lat Struct									
Rodair	9684		Lat Struct									
Rodair	9653	Max WS	1830.99	-6.13	5.12		5.14	0.000038	1.25	1832.51	321.16	0.07
Rodair	9334	Max WS	1834.74	-6.25	5.12		5.13	0.000027	1.04	1985.64	299.6	0.06
Rodair	8819	Max WS	1668.12	-4.56	5.1		5.11	0.000025	0.92	2127.52	358.49	0.06
Rodair	8479	Max WS	1582.46	-4.63	5.1		5.11	0.000023	0.91	2186.42	400.13	0.06
Rodair	7988	Max WS	1511.72	-4.19	5.09		5.1	0.00002	0.79	2154.63	388.46	0.05
Rodair	7700	Max WS	1491.93	-2.88	5.08		5.09	0.000016	0.68	2630.07	482.43	0.05
Rodair	7312	Max WS	1418.33	-2.76	5.08		5.08	0.00003	0.92	2182.46	459.76	0.06
Rodair	7020	Max WS	1523.89	-3.12	5.07		5.08	0.000017	0.69	3019.2	549.28	0.05
Rodair	6774	Max WS	1625.53	-1.88	5.07		5.07	0.000013	0.58	3430.84	624.3	0.04
Rodair	6512	Max WS	1783.91	-1.78	5.07		5.07	0.00001	0.52	4205.5	756.08	0.04
Rodair	6261	Max WS	1900.64	-1.75	5.07		5.07	0.000008	0.46	4940.22	855.17	0.03
Rodair	5983	Max WS	2014.53	-1.75	5.06		5.07	0.000007	0.42	5942.89	1066.78	0.03
Rodair	5696	Max WS	2103.51	-1.72	5.06		5.06	0.000005	0.36	6560.59	1094.46	0.02

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Rodair	5387	Max WS	2066.48	-1.72	5.06		5.06	0.000005	0.37	6030.99	977.28	0.03
Rodair	5141	Max WS	2084.84	-1.84	5.06		5.06	0.000006	0.4	5495.67	883.87	0.03
Rodair	4826	Max WS	2129.38	-2.09	5.06		5.06	0.000008	0.48	4771.79	739.88	0.03
Rodair	4416	Max WS	2364.8	-2.38	5.05		5.05	0.000011	0.57	5265.19	949.8	0.04
Rodair	4140	Max WS	2444.35	-2.66	5.05		5.05	0.000009	0.54	5883.79	988.79	0.03
Rodair	3899	Max WS	2611.53	-2.78	5.04		5.05	0.00001	0.55	6065.68	1034.86	0.04
Rodair	3535	Max WS	2817.28	-3.25	5.04		5.04	0.000009	0.55	6799.67	1114.58	0.03
Rodair	3189	Max WS	3116.35	-3.56	5.04		5.04	0.00001	0.57	7811.84	1387.14	0.04
Rodair	2825	Max WS	3447.08	-4.79	5.03		5.04	0.000012	0.66	8057.3	1489.43	0.04
Rodair	2434	Max WS	3597.32	-5.87	5.02		5.03	0.000015	0.75	7478.11	1419.64	0.04
Rodair	2044	Max WS	3742.87	-5.5	5.02		5.02	0.000019	0.85	5997.36	1099.73	0.05
Rodair	1695	Max WS	3941.18	-4.61	5.01		5.02	0.000019	0.84	6234.42	1056.19	0.05
Rodair	1436	Max WS	3081.91	-4.3	5	-2.15	5	0.000008	0.53	7336.9	1079.76	0.03