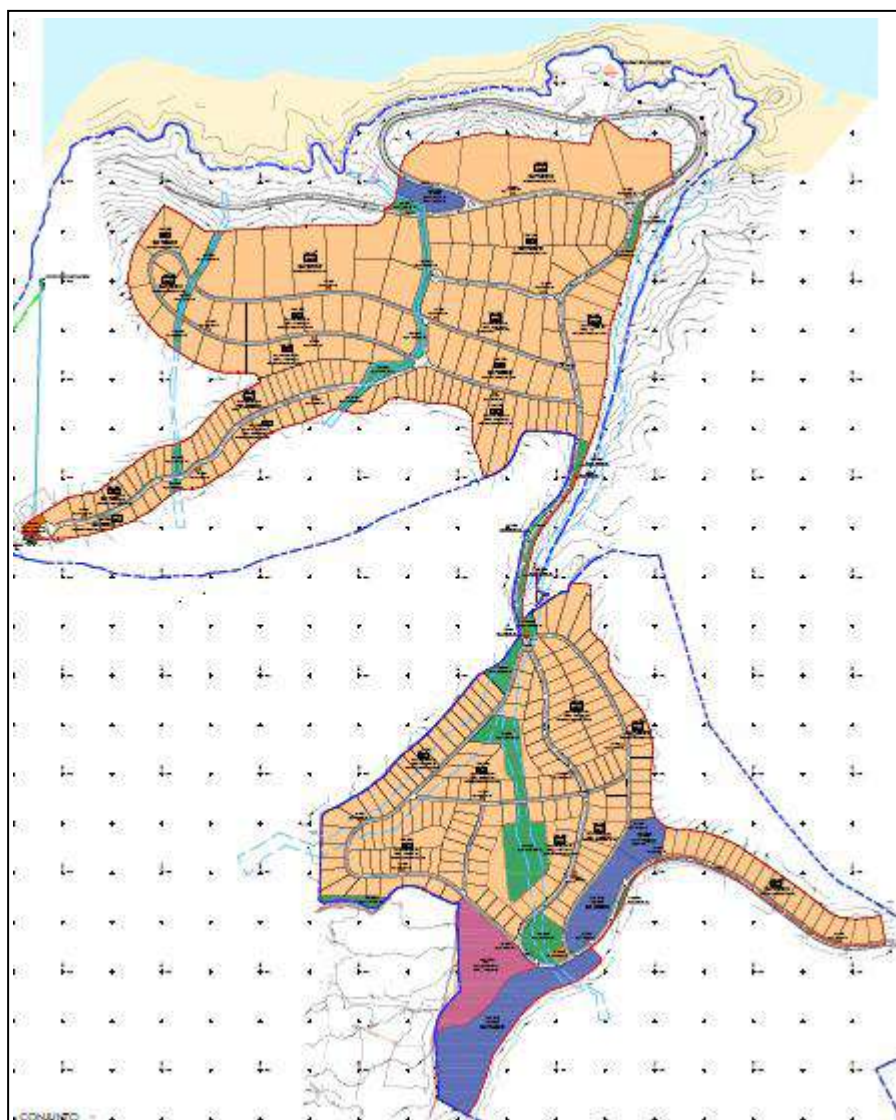


PLAN PARCIAL DE REFORMA INTERIOR DEL ÁMBITO SU-RA1 “CANTO REDONDO – PANTANO DE SAN JUAN” EN SAN MARTÍN DE VALDEIGLESIAS (MADRID).

ESTUDIO HIDROLÓGICO - HIDRÁULICO



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ANEXO II PLANOS DEL ESTUDIO HIDRÁULICO

1. OBJETO

Se redacta este "Estudio Hidrológico - Hidráulico" en relación con la ordenación urbanística propuesta por el Plan Parcial de reforma interior del ámbito SU-RA1 "Canto Redondo – Pantano de San Juan" en San Martín de Valdeiglesias, con el objeto de delimitar el Dominio Público Hidráulico y las zonas de servidumbre y de policía, así como las zonas inundables del cauce que se ve afectado por la clasificación de suelo propuesto en el desarrollo urbanístico.

Con el presente estudio, se pretende asimismo dar cumplimiento a la normativa legal que a continuación se especifica:

Reglamento del Dominio Público Hidráulico (R.D. 849/1986, de 11 de Abril). Art.14:

1. Los terrenos que puedan resultar inundados durante las crecidas no ordinarias de los lagos, lagunas, embalses, ríos o arroyos conservarán la calificación jurídica y la titularidad dominical que tuvieran.
2. El Gobierno, por Decreto, podrá establecer las limitaciones en el uso de las zonas inundables que estime necesarias para garantizar la seguridad de las personas y bienes. El Consejo de Gobierno de las Comunidades Autónomas podrá establecer, además, normas complementarias de dicha regulación (art. 11 del Texto Refundido de la Ley de Aguas).
3. Se consideran zonas inundables las delimitadas por los niveles teóricos que alcanzarían las aguas en las avenidas cuyo período estadístico de retorno sea de quinientos años, a menos que el Ministerio de Obras Públicas y Urbanismo, a propuesta del Organismo de cuenca fije, en expediente concreto, la delimitación que en cada caso resulte más adecuada al comportamiento de la corriente.

Real Decreto 9/2008, de 11 de enero, por el que se modifica el Reglamento del Dominio Público Hidráulico, aprobado por el Real Decreto 849/1986, de 11 abril.

Real Decreto 606/2003, de 23 de mayo, por el que se modifica el Real Decreto 849/1986, de 11 de abril, por el que se aprueba el Reglamento del Dominio Público Hidráulico, que se desarrolla los Títulos preliminar, I, IV, V, VI y VIII de la ley 29/1985, de 2 de agosto, de Aguas.

Real Decreto 849/1986, de 11 de abril, por el se aprueba el Reglamento del Dominio Público Hidráulico que se desarrolla los títulos preliminar, I, IV, V, VI y VII de la Ley 29/1985, de 2 de agosto, de Aguas

Reglamento de la Administración Pública del Agua y de la Planificación Hidrológica (R.D. 927/1988, de 29 de Julio). Art.87:

1. El Plan Hidrológico de cuenca, con los datos históricos disponibles sobre precipitaciones y caudales máximos y mínimos, establecerá los criterios para la realización de estudios y la determinación de actuaciones y obras relacionadas con situaciones hidrológicas extremas.
2. El Plan Hidrológico incluirá un programa para la realización de estudios conducentes a la delimitación de zonas inundables, al objeto de la aplicación del artículo 14 del Reglamento del Dominio Público Hidráulico.
3. Con independencia de las determinaciones del artículo 14 del Reglamento del Dominio Público Hidráulico, el Organismo de cuenca deberá remitir a las Administraciones públicas competentes en materia de Ordenación del Territorio y Planeamiento Urbano y de Protección Civil las conclusiones de los distintos estudios a efectos de su conocimiento y consideración de sus actuaciones.

Disposiciones Normativas del Plan Hidrológico de la Parte Española de la Demarcación Hidrográfica del Tajo (Real Decreto 1/2016, de 8 de enero, por el que se aprueba la revisión de los Planes Hidrológicos de las demarcaciones hidrográficas del Cantábrico Occidental, Guadalquivir, Ceuta, Melilla, Segura y Júcar, y de la parte española de las demarcaciones hidrográficas del Cantábrico Oriental, Miño-Sil, Duero, Tajo, Guadiana y Ebro)

Artículo 37. Medidas de protección contra las inundaciones

Para la gestión de inundaciones, sin perjuicio de las disposiciones reglamentarias de carácter general que estén en vigor, se tendrán en cuenta los siguientes criterios:

- a. Los criterios establecidos en el Plan de Gestión del Riesgo de Inundación de la parte española de la demarcación hidrográfica del Tajo para el periodo 2015 2021

Texto Refundido de la Ley de Aguas (R.D L 1/2001, de 20 de Julio).

Artículo 11. Las zonas inundables.

1. Los terrenos que puedan resultar inundados durante las crecidas no ordinarias de los lagos, lagunas, embalses, ríos o arroyos, conservarán la calificación jurídica y la titularidad dominical que tuvieren.
2. Los Organismos de cuenca darán traslado a las Administraciones competentes en materia de ordenación del territorio y urbanismo de los datos y estudios disponibles sobre avenidas, al objeto de que se tengan en cuenta en la planificación del suelo y, en particular, en las autorizaciones de usos que se acuerden en las zonas inundables.
3. El Gobierno, por Real Decreto, podrá establecer las limitaciones en el uso de las zonas inundables que estime necesarias para garantizar la seguridad de las personas y bienes. Los Consejos de Gobierno de las Comunidades Autónomas podrán establecer, además, normas complementarias de dicha regulación.

Plan Hidrológico Nacional (Ley 10/2001, de 5 de Julio).

Artículo 28. Protección del dominio público hidráulico y actuaciones en zonas inundables.

1. En el dominio público hidráulico se adoptarán las medidas necesarias para corregir las situaciones que afecten a su protección, incluyendo la eliminación de construcciones y demás instalaciones situadas en el mismo. El Ministerio de Medio Ambiente impulsará la tramitación de los expedientes de deslinde del dominio público hidráulico en aquellos tramos de ríos, arroyos y ramblas que se considere necesario para prevenir, controlar y proteger dicho dominio.
2. Las Administraciones competentes delimitarán las zonas inundables teniendo en cuenta los estudios y datos disponibles que los Organismos de cuenca deben trasladar a las mismas, de acuerdo con lo previsto en el artículo 11.2 de la Ley de Aguas. Para ello contarán con el apoyo técnico de estos Organismos y en particular, con la información relativa a caudales máximos en la red fluvial, que la Administración hidráulica deberá facilitar.
3. El Ministerio de Medio Ambiente promoverá convenios de colaboración con las Administraciones Autonómicas y Locales que tengan por finalidad eliminar las construcciones y demás instalaciones situadas en dominio público hidráulico y en zonas inundables que pudieran implicar un grave riesgo para las personas y los bienes y la protección del mencionado dominio.

2. LOCALIZACIÓN Y ÁMBITO DE ESTUDIO

El presente sector SU-RA1 se halla situado en el Termino Municipal de San Martín de Valdeiglesias, localizado al oeste de la Comunidad de Madrid. Está a 68 km de la capital y a una altitud de 676 m.s.n.m. El término municipal ocupa una superficie de 115,5 km², ubicados en la cuenca del río Alberche.

San Martín de Valdeiglesias limita con los siguientes municipios y provincias:

- Cebreros en la provincia de Ávila, al norte
- Pelayos de la Presa y Navas del Rey en Madrid, al este
- Aldea del Fresno, Villa del Prado, Cadalso de los Vidrios en Madrid y Almorox en la provincia de Toledo, al sur
- El Tiemblo y Navahondilla en la provincia de Ávila, al oeste

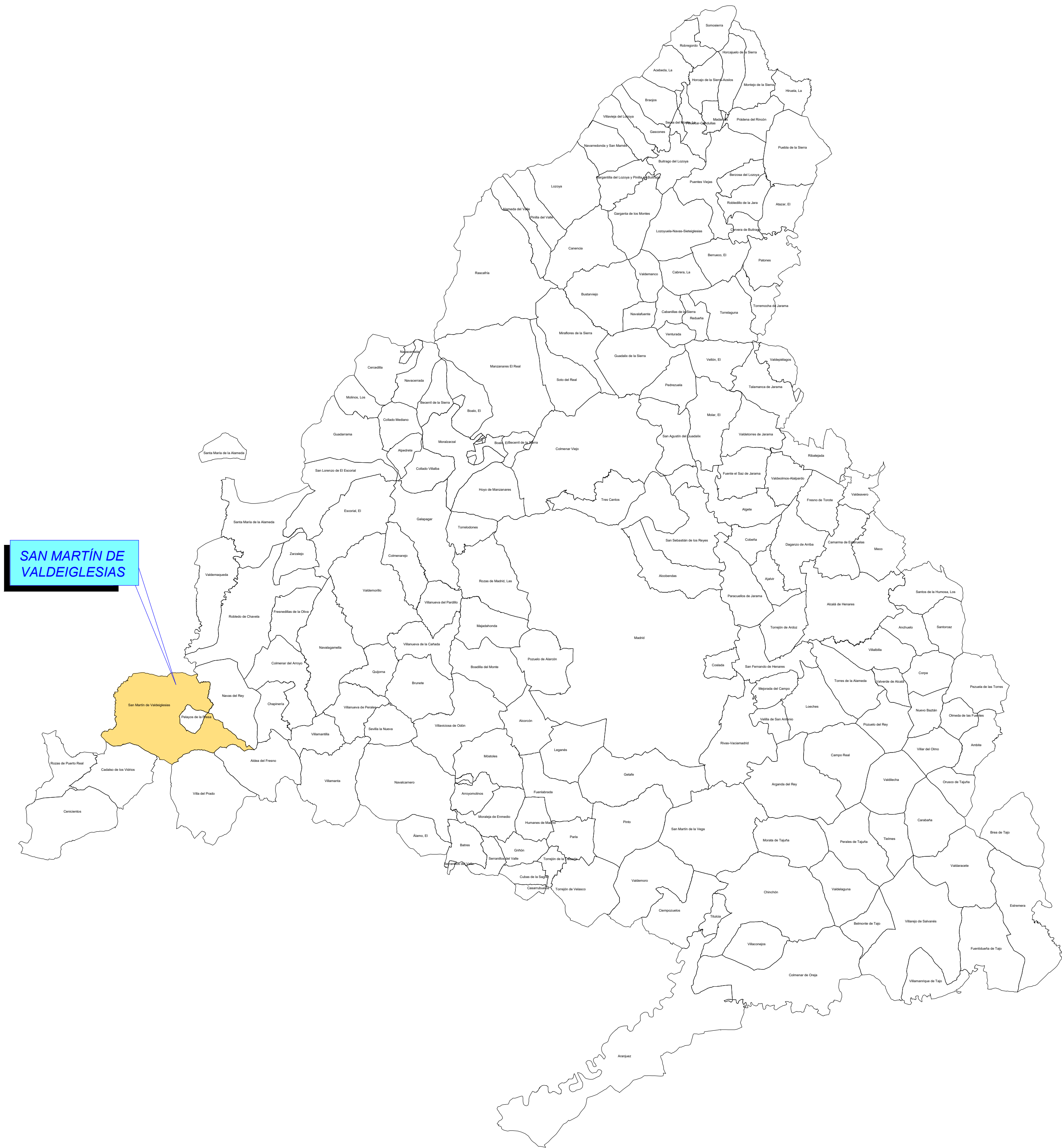
Las coordenadas extremas entre las que se ubica dentro del Sistema de Coordenadas ETRS_89_UTM Huso 30N son las siguientes:

	X_Coord	Y_Coord
Norte	385.161	4.474.318
Este	394.962	4.464.730
Sur	384.740	4.462.895
Oeste	375.881	4.466.495

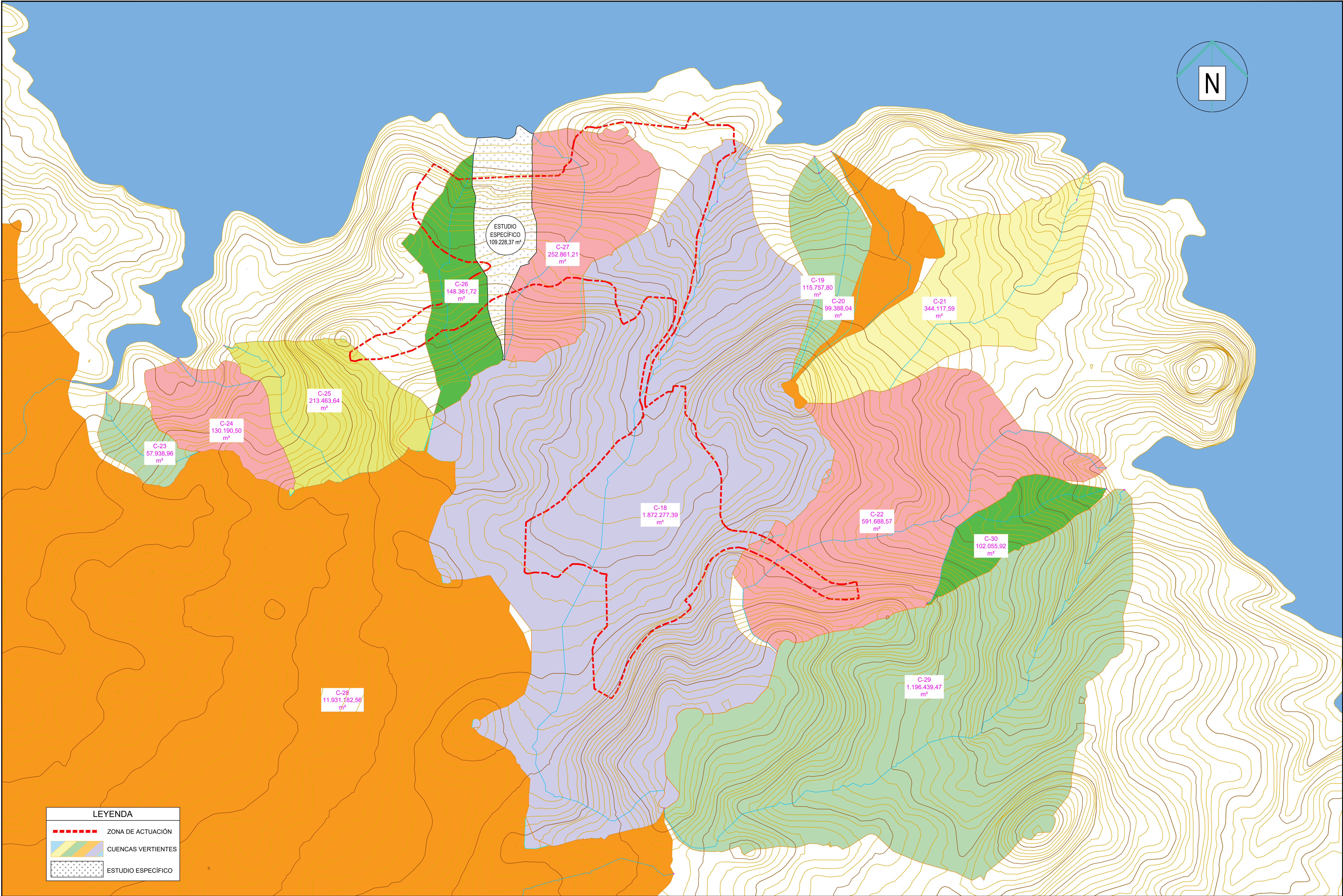
Tabla 1. Coordenadas extremas del municipio

El paraje denominando SU-RA-1 "Canto Redondo – Pantano de San Juan" afecta a unas 89,4 hectáreas y se extiende llegando a la orilla del embalse de San Juan.

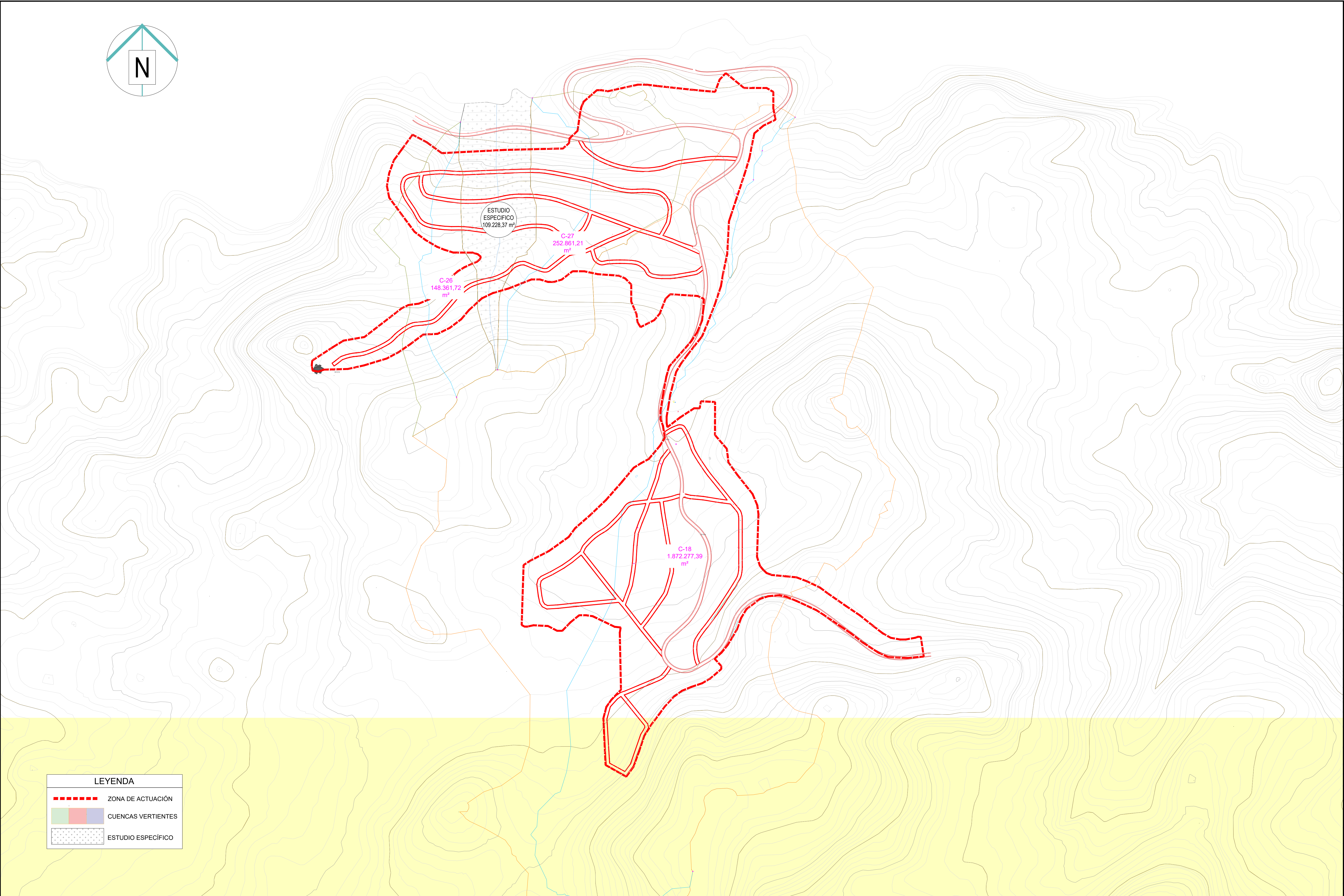
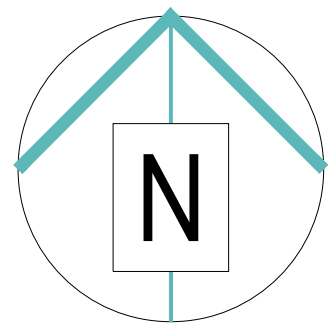
A continuación se presentan una serie de planos en los que se detallan la localización del municipio y la zona del proyecto, las cuencas de los arroyos que afectan al sector y un reportaje fotográfico de la zona de actuación.



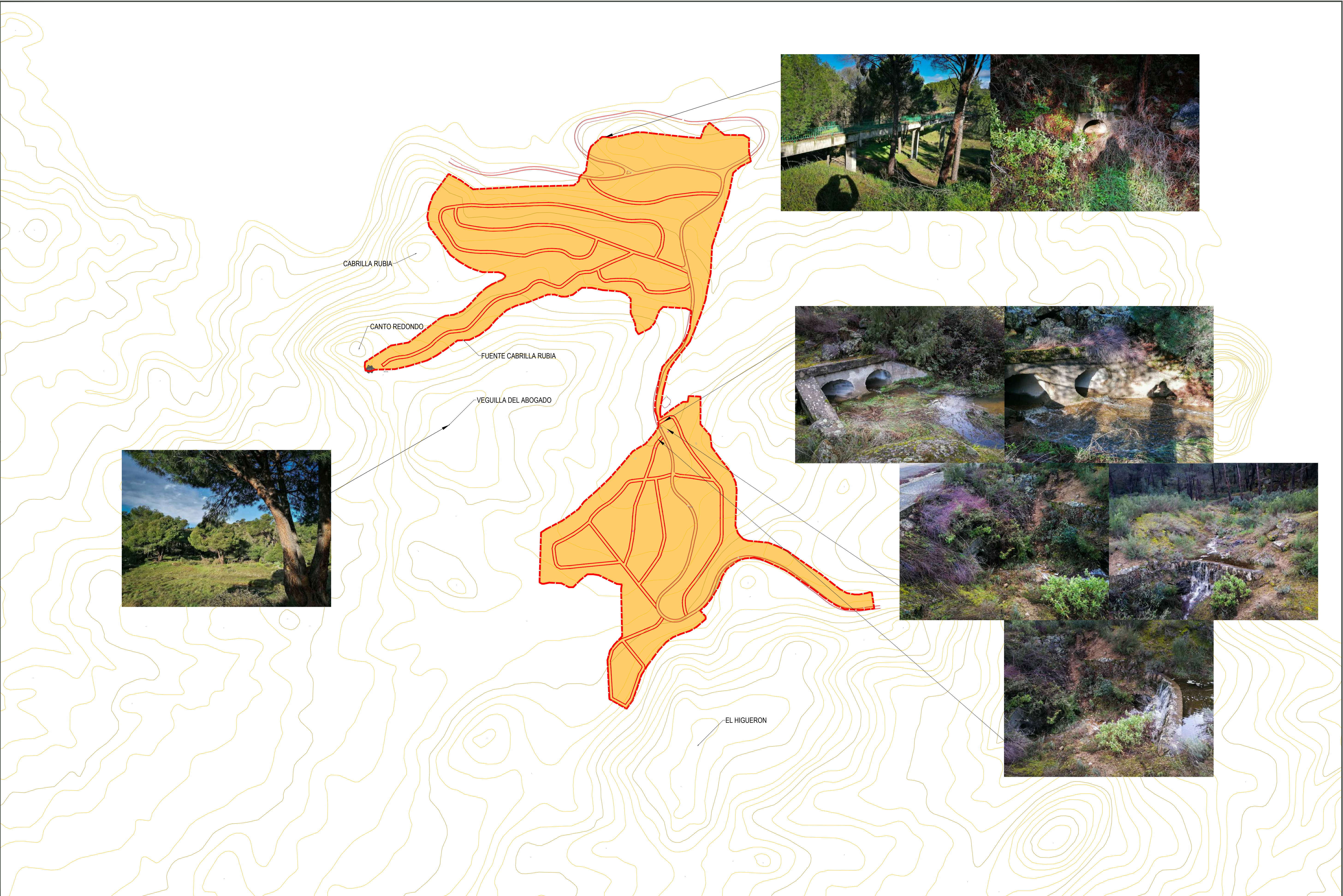
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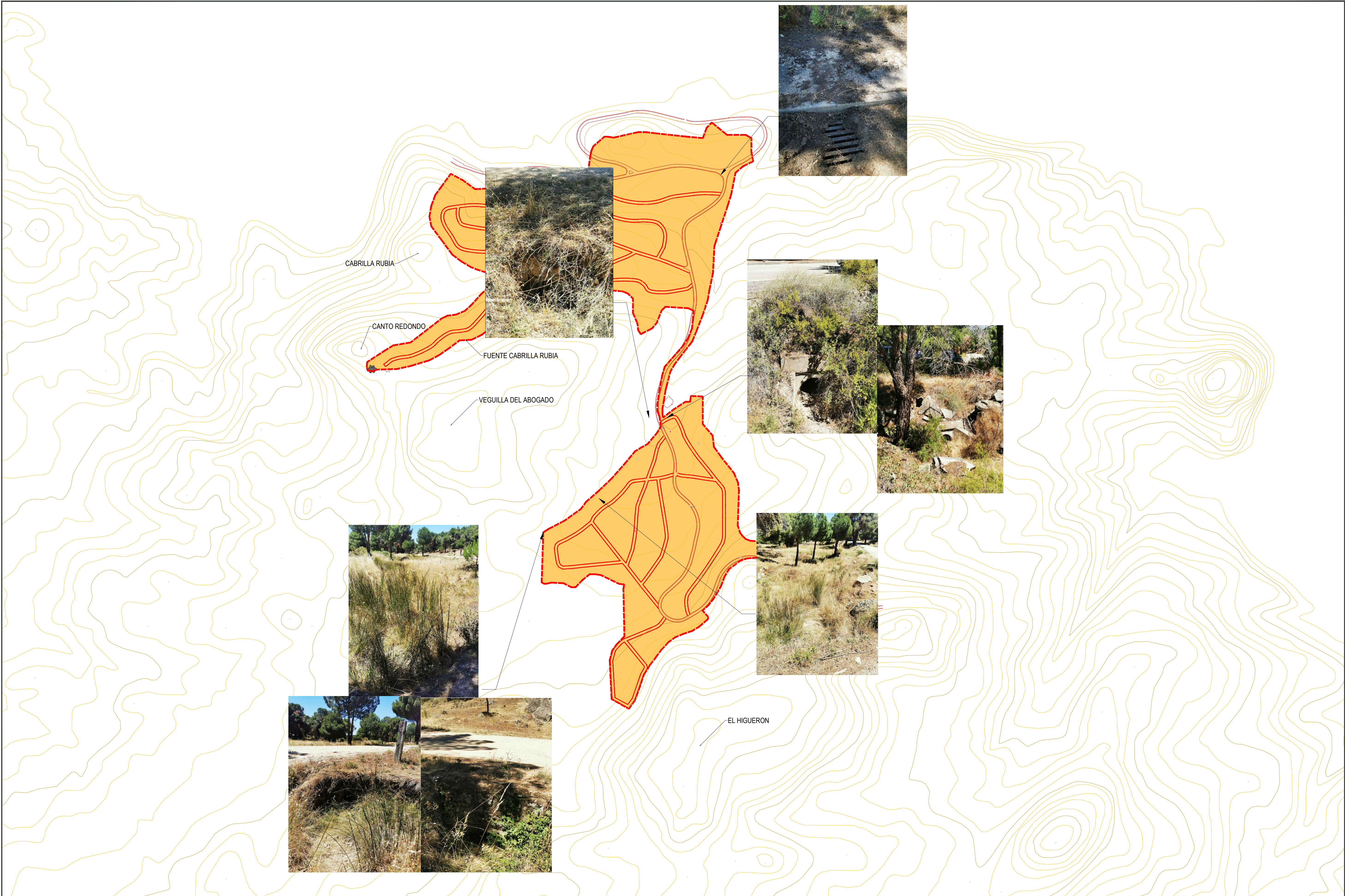
ASISTENCIA TÉCNICA:	AUTOR DEL PROYECTO:	ESCALA:	TÍTULO DEL PROYECTO:	TÍTULO DEL PLANO:	PLANO:
GARSAN S.L.		1: 6000	ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO.	DEFINICIÓN DE CUENCAS DEL	01
	Fdo: Manuel L. García Sancet I.C.C.P.	FECHA:	SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	SECTOR Y LÍMITROFES	HOJA:
		JULIO 2021			1 de 1



ASISTENCIA TÉCNICA: GARSAN S.L.	AUTOR DEL PROYECTO: Fdo: Manuel L. García Sancet I.C.C.P.	ESCALA: 1: 5000 FECHA: JULIO 2021	TÍTULO DEL PROYECTO: ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	TÍTULO DEL PLANO: CUENCAS QUE AFECTAN AL SECTOR	PLANO: 02 HOJA: 1 de 1
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ASISTENCIA TÉCNICA: GARSAN S.L.	AUTOR DEL PROYECTO: Fdo: Manuel L. García Sancet I.C.C.P.	ESCALA: 1:6000 FECHA: JULIO 2021	TÍTULO DEL PROYECTO: ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	TÍTULO DEL PLANO: TOPÓNIMOS Y REPORTAJE FOTOGRÁFICO	PLANO: 03 HOJA: 1 de 3
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ASISTENCIA TÉCNICA: GARSAN S.L.	AUTOR DEL PROYECTO: Fdo: Manuel L. García Sancet I.C.C.P.	ESCALA: 1: 6000 FECHA: JULIO 2021	TÍTULO DEL PROYECTO: ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	TÍTULO DEL PLANO: TOPÓNIMOS Y REPORTAJE FOTOGRÁFICO	PLANO: 03 HOJA: 2 de 3
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ASISTENCIA TÉCNICA: GARSAN S.L.	AUTOR DEL PROYECTO: Fdo: Manuel L. García Sancet I.C.C.P.	ESCALA: 1: 6000 FECHA: JULIO 2021	TÍTULO DEL PROYECTO: ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	TÍTULO DEL PLANO: TOPÓNIMOS Y REPORTAJE FOTOGRÁFICO	PLANO: 03 HOJA: 3 de 3
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3. DESCRIPCIÓN URBANÍSTICA Y PLANEAMIENTO PROPUESTO

El ámbito denominando SU-RA-1 "Canto Redondo – Pantano de San Juan" va a desarrollarse un Plan Especial de Reforma Interior que afecta a unas 89,4 hectáreas y se extiende llegando a la orilla del embalse de San Juan.

En dicha zona ya figuran ejecutadas con mayor o menor grado de terminación, calles que conformaban el tejido de acceso a las parcelas del sector.

La tipología de parcelación está siendo definida en estos momentos en función de la legislación urbanística municipal vigente.

A continuación se presentan una serie de cuadros y planos que resumen la ordenación propuesta:

REFORMA PLAN PARCIAL AMBITO SU-RA-1 CANTO REDONDO-PANTANO SAN JUAN

		LEY DEL SUELO		NORMAS SUBSIDIARIAS		PLAN PARCIAL 2019		PLAN 2022. resolución requerimiento		
		USO	SUPERFICIE	EDIFICABILIDAD	SUPERFICIE	EDIFICABILIDAD (0,164)	SUPERFICIE	EDIFICABILIDAD (0,164)	SUPERFICIE	EDIFICABILIDAD (0,164)
CESIÓN 10%	LUCRATIVO				746.368	147.000	687.788	147.000	698.415	147.000
	RESIDENCIAL					139.650	663.288	138.985	675.280	139.650
	TERCIARIO (HOTEL)					7.350 (max 5%)	24.500	7.350	23.135	7.350
CESIÓN 100%	RED PÚBLICA LOCAL		44.100		44.100		98.360		83.788	
	ZONAS VERDES		22.050			0	0	0	23.006	0
	PÚBLICAS								2.291	
	PRIVADAS								20.715	
	INFRAESTRUCTURAS						85.808		36.929	
	PARCELAS					*	4.086	*	0	*
	VIALES					0	81.722	0	36.929	0
	EQUIPAMIENTOS Y SERVICIOS PÚBLICOS		22.050				12.552		23.853	
CESIÓN 100%	RED PÚBLICA GENERAL		29.400		104.000		108.320		112.935	
	ZONAS VERDES		29.400		30.000	0	30.023	0	29.540	0
	PÚBLICAS								29.540	
	PRIVADAS								0	
	INFRAESTRUCTURAS		29.400		30.000		34.221		39.295	
	PARCELAS					*		*	1.170	*
	VIALES					0	34.221	0	38.125	0
	EQUIPAMIENTOS Y SERVICIOS PÚBLICOS		44.100		44.000		44.076		44.100	
PARCELAS					*	34.073	*	44.100	*	
APARCAMIENTO					0	10.003	0	0	0	
TOTAL					894.468		894.468		895.138	

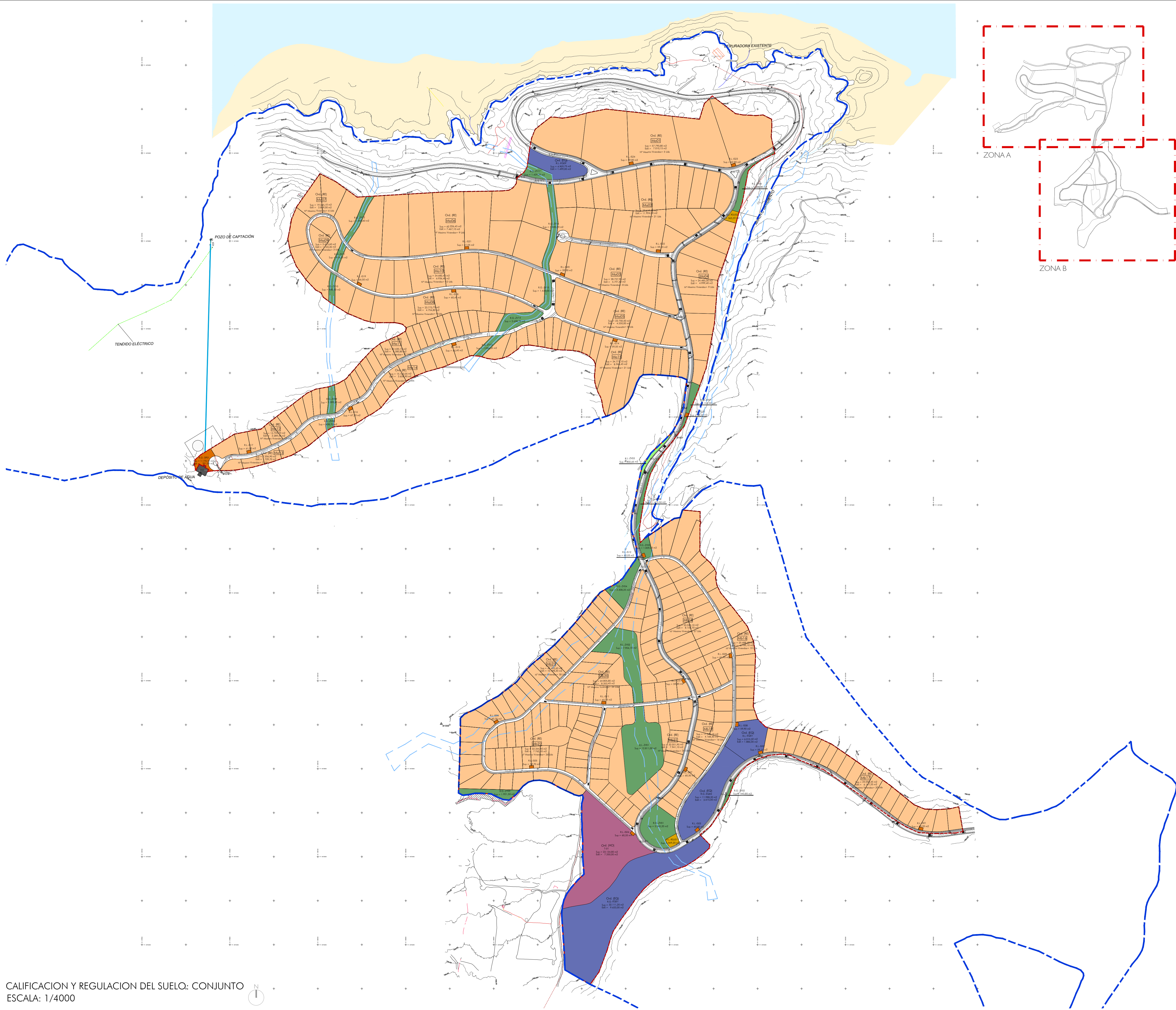
NOTA ACLARATORIA SOBRE LA CESIONES URBANAS A LA ADMINISTRACIÓN PÚBLICA:

El 100% de la superficie dedicada a equipamientos será transferida a la administración pública (Ayuntamiento y Gobierno Regional), tal y como exige la ley.

Las superficies asignadas a dicho uso coinciden (y superan) con los mínimos legales exigidos.

Por tanto, corresponde a la administración pública y no al promotor asignar el uso y destino del equipamiento. No hay superficie destinada a equipamientos para el promotor.

Además, el promotor debe entregar, en parcelas, el 10% del total de la edificabilidad lucrativa al Ayuntamiento.



RESUMEN USOS LUCRATIVOS		
MANZANA	SUP. SUELO (m ²)	SUP. EDIFICABLE (m ²)
Ma01	57.790,80	7.010,15
Ma02	39.619,55	11.924,00
Ma03	28.757,95	5.791,40
Ma04	24.485,30	4.999,40
Ma05	22.750,50	4.550,00
Ma06	62.226,45	7.467,10
Ma07	19.345,10	3.869,00
Ma08	23.773,75	4.754,80
Ma09	5.815,60	1.123,20
Ma10	34.682,45	6.936,40
Ma11	22.420,15	5.380,80
Ma12	13.705,70	3.289,45
Ma13	7.206,90	1.729,70
Ma14	15.162,05	3.638,90
Ma15	34.777,10	8.346,45
Ma16	25.688,40	6.165,10
Ma17	25.006,45	6.147,35
Ma18	33.525,10	8.142,70
Ma19	17.046,15	4.168,30
Ma20	34.805,65	8.353,45
Ma21	32.551,95	7.941,10
Ma22	32.344,40	7.762,55
Ma23	42.492,65	10.198,30
HO	23.134,80	7.350,00
TOTAL	698.415,10 M2	147.000,00 M2

VINCULACIÓN NORMATIVA DE CADA ZONA	
 ORDENANZA I: Residencial (RE)	
 ORDENANZA II: Equipamiento Urbano (EQ)	
 ORDENANZA III: Hotelera (HO)	
 ORDENANZA IV: Zonas verdes y Espacios Libres de Uso Publico (ZV)	
 ORDENANZA V: Infraestructura de Servicios (IS)	
 ORDENANZA VI: Centro de Recogida de Residuos No Peligrosos (CRR)	

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2ª REV.			
3ª REV.			
4ª REV.			
5ª REV.			

PLAN PARCIAL DE REFORMA INTERIOR

P.P.R.I. AMBITO SU-RA.1 "CANTO REDONDO - PANTANO DE SAN JUAN"

SITUACIÓN
SU-RA.1 Canto Redondo-Pantano de San Juan en San Martín de Valdeiglesias

PROMOTOR
GLOBAL OLIVANTE, S.L.

PLANO
CALIFICACION Y REGULACION DEL SUELO: CONJUNTO PO-03



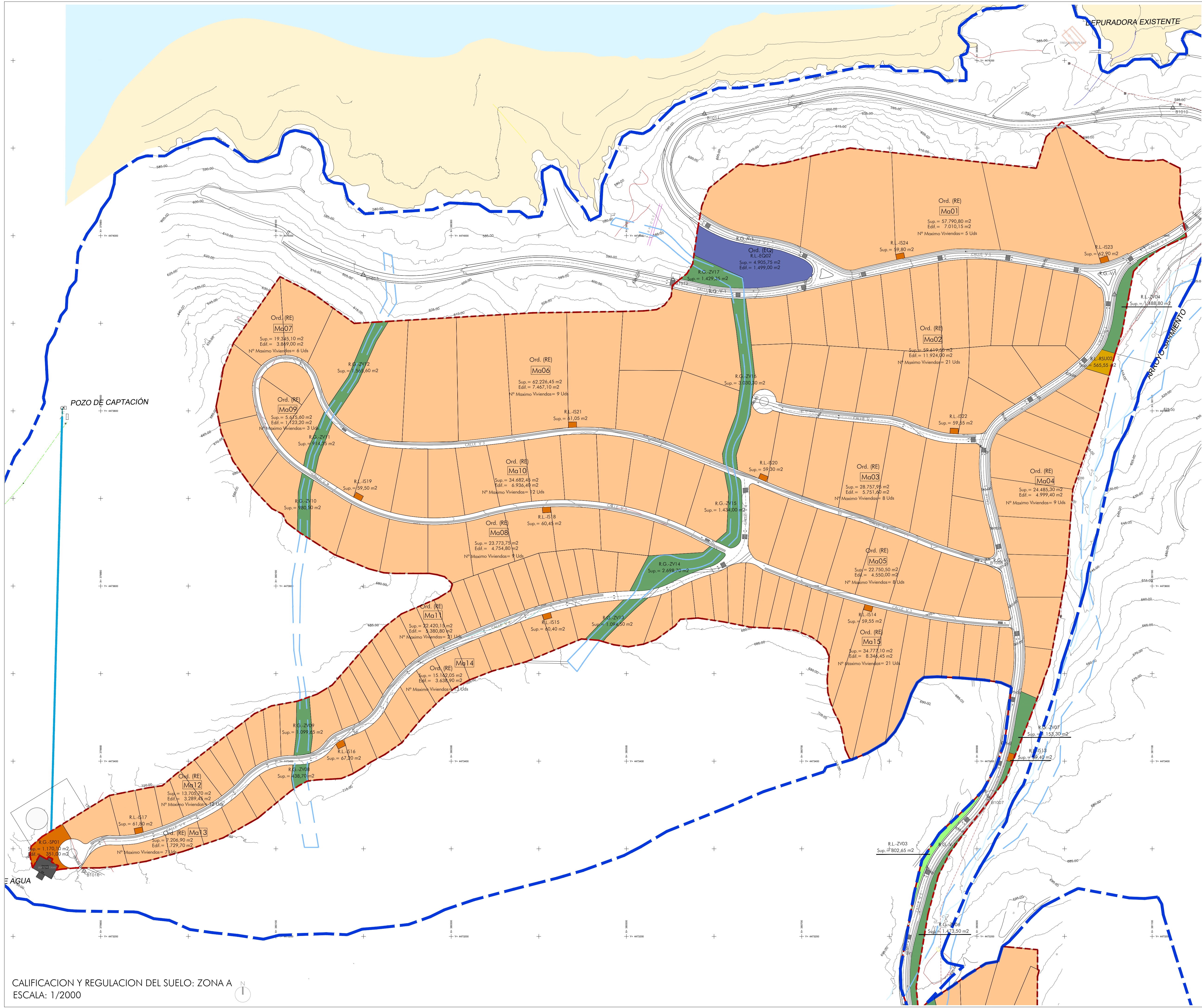
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		FECHA	11/2022
		COMPROBADO:	
		ESCALA	1/4000

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GLOBAL OLIVANTE, S.L.

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CALIFICACION Y REGULACION DEL SUELO: CONJUNTO
ESCALA: 1/4000



RESUMEN USOS LUCRATIVOS		
MANZANA	SUP. SUELO (m ²)	SUP. EDIFICABLE (m ²)
Ma01	57.790,80	7.010,15
Ma02	59.619,55	11.924,00
Ma03	28.517,95	5.751,60
Ma04	24.485,30	4.999,40
Ma05	22.750,50	4.550,00
Ma06	62.226,45	7.467,10
Ma07	19.345,10	3.869,00
Ma08	23.773,75	4.754,80
Ma09	5.615,60	1.123,20
Ma10	34.682,45	6.936,40
Ma11	22.420,15	5.380,80
Ma12	13.705,70	3.289,45
Ma13	7.206,90	1.729,70
Ma14	15.162,05	3.638,90
Ma15	34.777,10	8.346,45
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Ma17	25.006,45	6.147,35
Ma18	33.525,10	8.142,70
Ma19	17.046,15	4.168,30
Ma20	34.805,65	8.353,45
Ma21	32.551,95	7.941,10
Ma22	32.344,40	7.762,55
Ma23	42.492,65	10.198,30
HO	23.134,80	7.350,00
TOTAL	698.415,10 M2	147.000,00 M2

VINCULACIÓN NORMATIVA DE CADA ZONA	
 ORDENANZA I: Residencial (RE)	
 ORDENANZA II: Equipamiento Urbano (EQ)	
 ORDENANZA III: Hotelera (HO)	
 ORDENANZA IV: Zonas verdes y Espacios Libres de Uso Publico (ZV)	
 ORDENANZA V: Infraestructura de Servicios (IS)	
 ORDENANZA VI: Centro de Recogida de Residuos No Peligrosos (CRR)	

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REVISIONES	CARACTERÍSTICAS	FECHA	Nº Bº
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2ª REV.			
3ª REV.			
4ª REV.			
5ª REV.			

PLAN PARCIAL DE REFORMA INTERIOR

P.P.R.I. AMBITO SU-RA.1

"CANTO REDONDO - PANTANO DE SAN JUAN"

SITUACIÓN
SU-RA.1 Canto Redondo-Pantano de San Juan en San Martín de Valdeiglesias

PROMOTOR
GLOBAL OLIVANTE, S.L.

PLANO
CALIFICACION Y REGULACION DEL SUELO: ZONA A PO-03.1

PLANOS DE ORDENACION



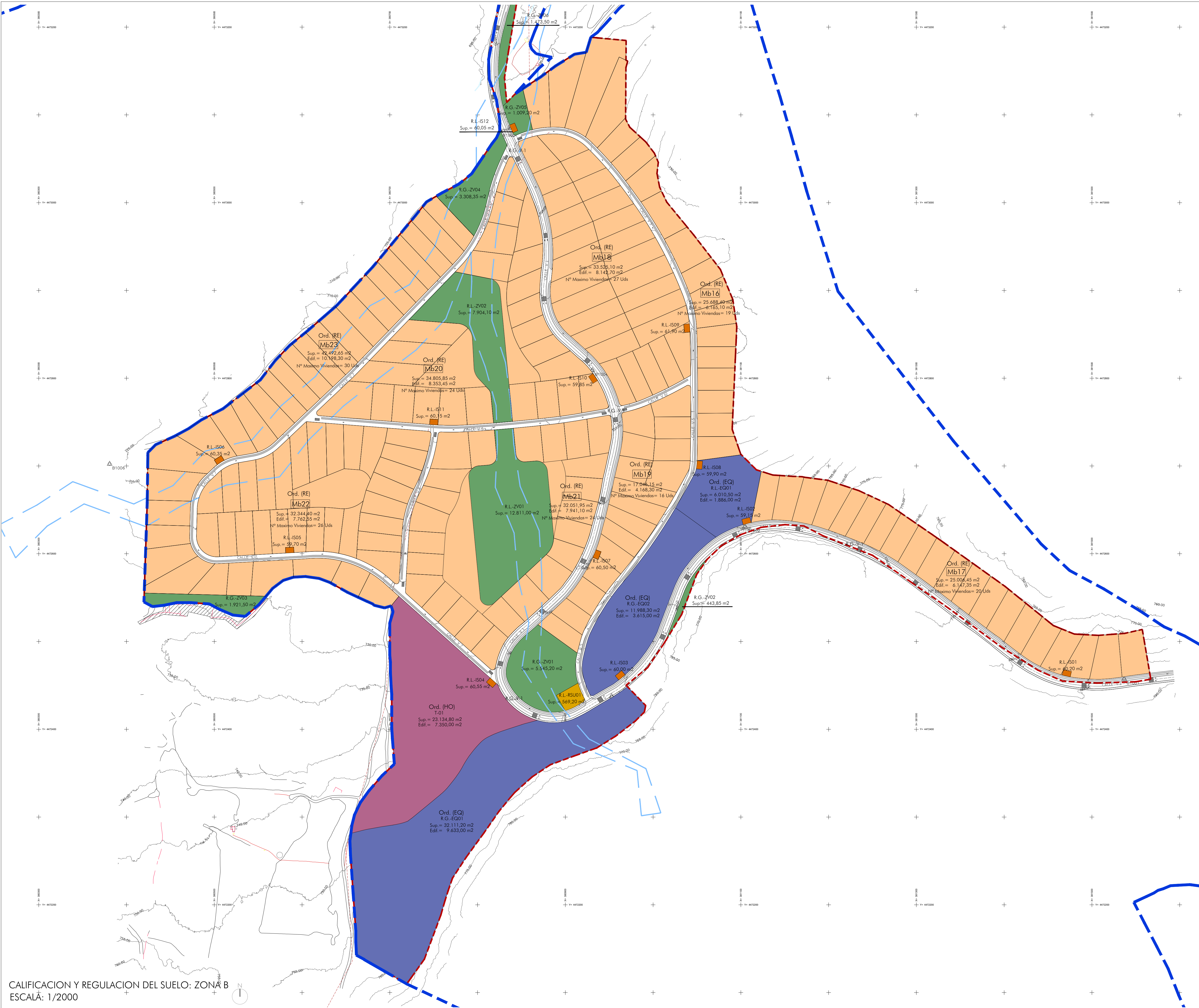
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		FECHA	11/2022
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CALIFICACION Y REGULACION DEL SUELO: ZONA A
ESCALA: 1/2000



RESUMEN USOS LUCRATIVOS		
MANZANA	SUP. SUELO (m ²)	SUP. EDIFICABLE (m ²)
Ma01	57.790,80	7.010,15
Ma02	59.619,55	11.924,00
Ma03	28.517,95	5.751,60
Ma04	24.485,30	4.999,40
Ma05	22.750,50	4.550,00
Ma06	62.226,45	7.467,10
Ma07	19.345,10	3.869,00
Ma08	23.773,75	4.754,80
Ma09	5.815,60	1.123,20
Ma10	34.682,45	6.936,40
Ma11	22.420,15	5.380,80
Ma12	13.705,70	3.289,45
Ma13	7.206,90	1.729,70
Ma14	15.162,05	3.638,90
Ma15	34.777,10	8.346,45
Ma16	25.688,40	6.165,10
Ma17	25.006,45	6.147,35
Ma18	33.525,10	8.142,70
Ma19	17.046,15	4.168,30
Ma20	34.805,85	8.353,45
Ma21	32.551,95	7.941,10
Ma22	32.344,40	7.762,55
Ma23	42.492,65	10.198,30
HO	23.134,80	7.350,00
TOTAL	698.415,10 M2	147.000,00 M2

VINCULACIÓN NORMATIVA DE CADA ZONA	
 ORDENANZA I: Residencial (RE)	
 ORDENANZA II: Equipamiento Urbano (EQ)	
 ORDENANZA III: Hotelera (HO)	
 ORDENANZA IV: Zonas verdes y Espacios Libres de Uso Publico (ZV)	
 ORDENANZA V: Infraestructura de Servicios (IS)	
 ORDENANZA VI: Centro de Recogida de Residuos No Peligrosos (CRR)	

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REVISIONES	CARACTERÍSTICAS	FECHA	Vº Bº
1ª REV.			
2ª REV.			
3ª REV.			
4ª REV.			
5ª REV.			

PLAN PARCIAL DE REFORMA INTERIOR

P.P.R.I. AMBITO SU-RA.1

"CANTO REDONDO - PANTANO DE SAN JUAN"

SITUACIÓN
SU-RA.1 Canto Redondo-Pantano de San Juan en San Martín de Valdeiglesias

PROMOTOR
GLOBAL OLIVANTE, S.L.

PLANO
PLANOS DE ORDENACION
CALIFICACION Y REGULACION DEL SUELO: ZONA B PO-03.2



Fdo. EL ARQUITECTO	Fdo. LA PROPIEDAD	PROYECTO	2382/22
		FECHA	11/2022
		COMPROBADO	
		ESCALA	
JULIO TOUZA	GLOBAL OLIVANTE, S.L.		

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CALIFICACION Y REGULACION DEL SUELO: ZONA B
ESCALA: 1/2000

4. ESTUDIO DEL MEDIO FÍSICO

Dados los objetivos del presente estudio, los factores del medio físico cuyo estudio resulta de mayor interés para el Estudio de Capacidad Hídrica son los climáticos, geológicos, edáficos e hidrológicos.

4.1.- Climatología

El área de estudio se localiza en una zona definida por la clasificación de Papadakis como de mediterráneo continental. Esta ubicación define unos índices característicos del clima mediterráneo continental, con un periodo estival de marcada sequía, con un periodo seco de 3,5 meses y una temperatura media de unos 14 °C. En cuanto a las precipitaciones, presentan unos valores medios en torno a los 550 mm anuales, produciéndose en primavera y otoño, siendo escasas en verano.

Las estaciones meteorológicas termopluviométricas más cercanas a la zona de estudio son las siguientes:

3341 – Presa de San Juan: se trata de una estación termopluviométrica, con una amplitud de datos de 40 años de registro de para la precipitación, distribuidos entre 1961 y 2000, en cuanto a la temperatura el registro alcanza los 27 años, que se distribuyen entre 1974 y 2000. Se localiza en el municipio de San Martín de Valdeiglesias, en la presa del embalse de San Juan.

3330 – El Tiemblo, "Central Puente Nuevo": se trata de una estación termopluviométrica, amplitud de datos de 38 años de registro de para la precipitación, distribuidos entre 1961 y 1999, en cuanto a la temperatura el registro alcanza los 25 años, que se distribuyen entre 1974 y 2000.

Dada la amplitud cronológica de los datos disponibles, se ha seleccionado como estación meteorológica representativa para la caracterización climática del área en estudio, la correspondiente a 3330 - El Tiemblo, "Central Puente Nuevo", situada a unos de 6,5 km al noroeste de la zona de proyecto.

La estación desestimada en términos relativos no presenta variaciones sustanciales frente a la elegida, puesto que se encuentra a unos 6,7 km, pero sin embargo su cota (540 msnm) es inferior a la de la zona de actuación y a la de la estación elegida (580 msnm), que puede ser comparable a la de la urbanización Costa de Madrid.

Las características básicas de la estación elegida son las siguientes:

Denominación	El Tiemblo, "Central Puente Nuevo"
Clave	3330
Coordenadas	Latitud 40° 24' Longitud 04° 26'
Altitud	580
Orientación	Oeste
Años de precipitación	1961-1999
Años de temperatura	1974-2000

Tabla 2. Datos de la estación termopluviométrica

Régimen térmico

En la siguiente tabla se señalan los datos de temperatura del año normal para la estación correspondiente:

	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	ANUAL
Tm	5,4	7,1	9,7	11,4	15,2	20,0	23,9	23,3	19,4	13,9	8,8	6,2	13,7
M	16	18	22,7	24,2	27,9	33,5	37,3	36,7	32,8	26	20,4	16	37
m	-6	-5,2	-3,6	-1,8	1,2	4,9	7,8	8	4,4	0,9	-3	-5,4	-7,7

Tabla 3. Datos de temperatura medios

Tm: temperatura media mensual en °C

M: temperatura media mensual de las máximas absolutas en °C

m: temperatura media mensual de las mínimas absolutas en °C

Como se puede observar en la tabla la temperatura media anual es de 13,7°C, siendo el mes más cálido julio y el más frío enero. La temperatura media de las máximas del mes más cálido es de 37,3°C y la temperatura media de las mínimas del mes más frío es -6°C, lo que supone una oscilación térmica media anual de 43,3°C. Hay 6 meses de helada segura, desde noviembre hasta abril, ambos inclusive, y la temperatura media estacional es de 12,1°C en primavera, 22,4°C en verano, 14°C en otoño y 6,2°C en invierno.

Régimen pluviométrico

En la siguiente tabla se muestra la precipitación por meses y anual total de la estación El Tiemblo, "Central Puente Nuevo":

	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	TOTAL
Pm	70	50,2	38,3	51	47	28,1	12,2	11,9	29,4	56,2	86,5	69,4	550,2

Tabla 4. Precipitación mensual y anual

Pm: precipitación en mm.

El mes más lluvioso del año es noviembre, que supone el 15,7% de las lluvias anuales, y el más seco es agosto, con tan solo un 2,2% de la precipitación total del año. La distribución de la precipitación por estaciones es 136,3 mm en primavera (24,8%), 52,2 mm en verano (9,5%), 172,1 mm (31,3%) en otoño y 189,7 mm en invierno (34,5%).

En el Climodiagrama que se presenta a continuación, se pueden observar las oscilaciones de las precipitaciones y las temperaturas a lo largo del año. Dichas oscilaciones nos indican que existe un período de sequía desde mediados del mes de mayo hasta mediados del mes de septiembre.

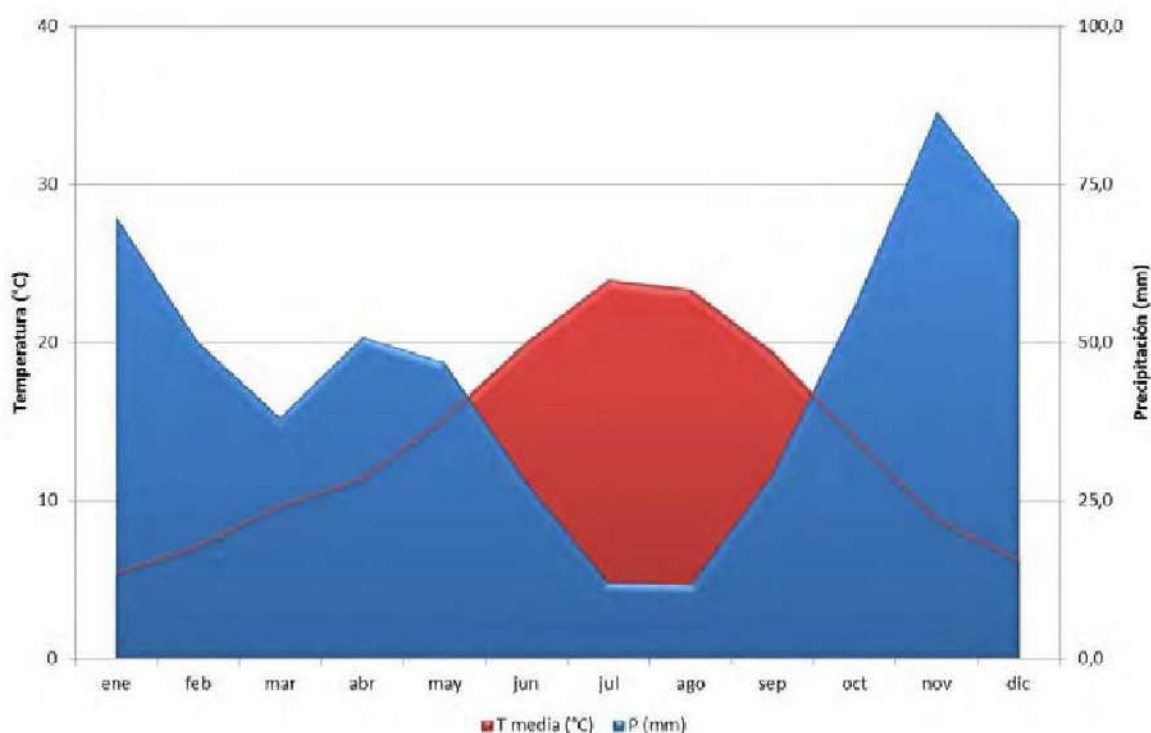


Gráfico 1. Climodiagrama a partir de los datos facilitados por la estación estación El Tiemblo, "Central Puente Nuevo"

Evapotranspiración potencial

La evapotranspiración potencial (ETP) se define el agua devuelta a la atmósfera en estado de vapor, en un suelo que tenga la superficie completamente cubierta la vegetación y en el supuesto de no existir limitación de agua para obtener un crecimiento vegetal óptimo. Para su cálculo se ha seguido el método de Thornthwaite, en el que intervienen las temperaturas medias y la latitud de cada lugar.

	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	TOTAL
ETP	11,5	16,9	32,6	44,4	75,5	112,3	147,3	132,8	89,6	51,6	22,9	13,5	750,9

Tabla 5. Evapotranspiración potencial

ETP: evapotranspiración potencial en mm

Como se deduce de los datos de la tabla, la transpiración máxima se corresponde con los meses de verano, cuando la temperatura media es mayor y las precipitaciones son casi nulas. El valor anual de la evapotranspiración es de 750,9 mm, un valor acorde con las características climáticas de la zona de estudio. Los meses con más evapotranspiración corresponden a julio y agosto, y los meses con menos son enero y diciembre.

4.2. Geología y Geomorfología

La depresión de San Martín de Valdeiglesias separa el sector occidental de la Sierra de Guadarrama de Gredos y está drenada por el río Alberche, que se encaja profundamente en el sector más suroriental de la depresión (470 m a la salida de Picadas) buscando la salida hacia la Rampa y la Campiña

Geológicamente, la zona está representada por rocas graníticas hercínicas que corresponden a afloramientos de forma y tamaño bastante irregular o algún macizo individualizado que en su mayoría se asocian a las adamellitas más tardías

Las rocas de carácter más básico son bastante escasas, y se encuentran en pequeños afloramientos asociados a las adamellitas

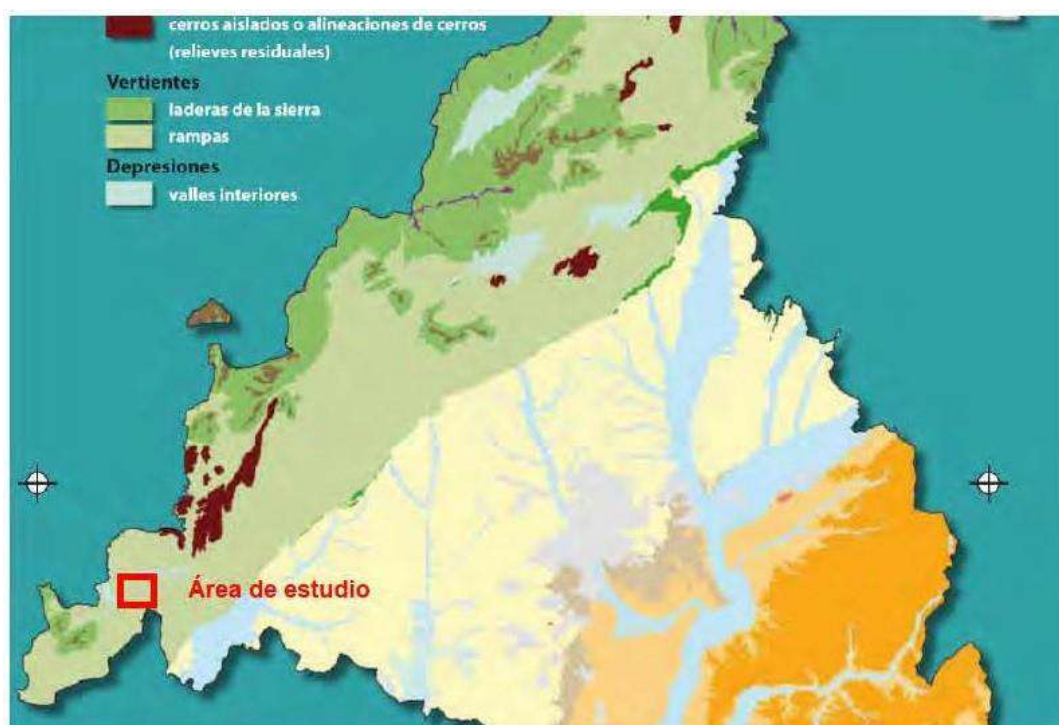


Imagen 1. Situación del área de estudio en la unidad de rampas de la sierra.

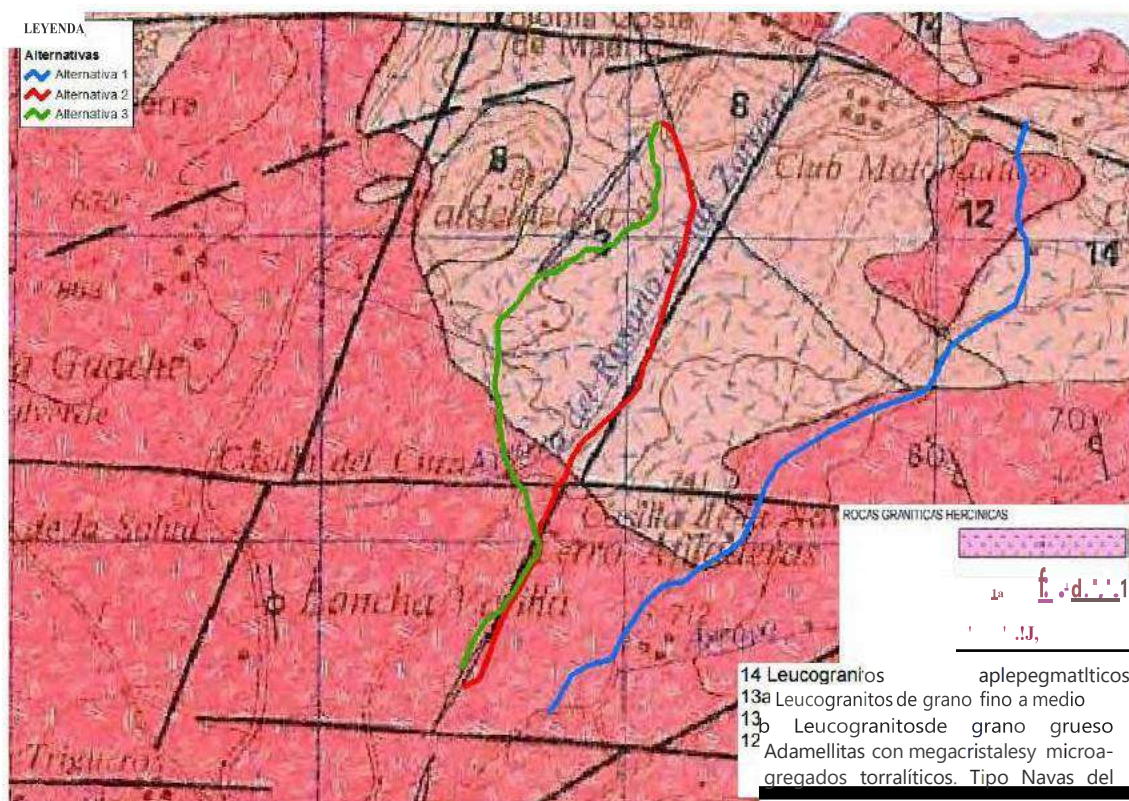


Imagen 2. Marco geológico del área de actuación

Las unidades características, se describen a continuación:

(12) Adamellitas con megacrístales biotítico-anfibólicas de Las Navas del Marqués-San Martín de Valdeiglesias

La morfología de los afloramientos de esta unidad es variable y depende principalmente del grado de meteorización y fracturación. Existen zonas de relieve suave y con ondulaciones como las de La Olivilla, la Enebrósilla al norte de la carretera de Cebreros a Robledo de Chavela, El Quexigal, y la zona situada al sur de las elevaciones que flanquean al embalse de San Juan en donde sólo aparecen asomos de lanchares y bolos aplanados romos entre los que se sitúan amplias zonas de "lehm" granítico donde con frecuencia aparecen viñedos y pinares.

En otros sectores, siempre asociados a zonas cercanas a los asomos leucograníticos, como las elevaciones del sur del embalse de San Juan, los relieves topográficos son más acusados, con buenos afloramientos de roca fresca que dan lugar a morfologías de lanchares de amplia curvatura, grandes bolos y bloques aplanados romos y domos.

Son adamellitas de grano medio a grueso, biotíticas con megacrístales de feldespato potásico dispersos y frecuentes microagregados microgranulares. No obstante, se trata de una unidad plutónica muy heterogénea, apareciendo variaciones importantes en el tamaño de grano, la abundancia de fenocristales y su composición.

De esta forma se encuentran variedades de grano medio-grueso, medianamente porfídicas, muy

homogéneas, en la zona al sur de las elevaciones de la orilla meridional del embalse de San Juan.

(14) Leucogranitos aplopegmatíticos heterogéneos

Afloran en el sector central y meridional, al norte del embalse de San Juan, y al sur de dicho embalse, Cerro Almodón, Cerro Cabrillas, proximidades de la Ciudad de San Ramón, etc., y al sureste de San Martín de Valdeiglesias (Cerro Valdenoche y la Bizca).

Están constituidos por un entramado de diques y masas tabulares irregulares de direcciones este-oeste y escaso buzamiento que conectan con stocks más importantes como los situados en los cerros adyacentes a la finca Santa Leonor.

Morfológicamente dan resaltes topográficos importantes como el Cerro Corberas, Hinojosa, Almodón, Las Cabreras, etc., donde se encuentran gran cantidad de bloques paralelepípedicos de pequeño tamaño debido al intenso diaclasado. En otras zonas como el sector oriental del Cerro de las Corberas y Los Rosados, dan lugar a relieves muy llanos y suaves con gran cantidad de "lehm" granítico de color amarillento o rosado entre el que aparece gran cantidad de canturral y algunos bloques de mayor tamaño.

Son intrusivos en las adamellitas-granodioritas biotíticas de Las Navas del Marqués-San Martín de Valdeiglesias, los leucogranitos de grano medio-grueso tipo Leonor, en los granitos microporfídicos y en las adamellitas-granodioritas porfídicas foliadas. Parecen estar íntimamente relacionados con las adamellitas-granodioritas, pues en las proximidades a los contactos, éstas manifiestan facies más leucocráticas que podrían significar el paso a términos intermedios entre éstas y los leucogranitos aplopegmatíticos. Sin embargo, los contactos entre estos leucogranitos y el resto de las unidades plutónicas anteriormente mencionadas, es neto, produciéndose, a veces, brechificaciones importantes.

Son rocas muy heterogéneas, con gran variación en el tamaño de grano desde fino a grueso y cambios en la textura con abundancia de sectores micropegmatíticos. Son bastante pobres en biotita, lo que se manifiesta en un color blanquecino de la roca que a veces se torna amarillento o rosado, debido a la alteración. En algunos sectores presentan un aspecto sacaroideo.

Puntos de Interés Geológico (PIG)

La base de datos PATRIGEO del Instituto Geológico y Minero Español (IGME), contiene los Puntos de Interés Geológico que han sido seleccionados tanto en el seno del Inventario Nacional de Puntos de Interés Geológico, como a través del proyecto MAGNA de cartografía geológica a escala 1:50.000.

Según esta base de datos, San Martín de Valdeiglesias no figura entre los municipios con presencia de alguno de los Puntos de Interés Geológico inventariados en la Comunidad de Madrid.

4.3. Edafología

De acuerdo con la litología predominante en el área de estudio, constituida por rocas metamórficas (gneises glandulares) e ígneas (granitoides) de carácter ácido, los suelos mayoritariamente representados son de los siguientes órdenes, según la clasificación Soil Taxonomy: Inceptisols y Entisols, o tipos intermedios entre ambos. Estos órdenes se encuadran en los principales suelos forestales de la Comunidad de Madrid, dominando en las zonas de Sierra y Rampa. Corresponden a suelos de escaso o moderado desarrollo, ácidos y arenosos, con abundancia relativa de materia orgánica y frecuentemente pedregosos y con roca próxima a la superficie.

Los Inceptisols son suelos jóvenes, pero con evidencias de intervención en algún grado de procesos edafogenéticos que conducen a la formación de diversos horizontes de diagnóstico (úmbrico, cámbico, cálcico o gypsico). El régimen de humedad característico es el xérico y los regímenes de temperatura son méxico o, en las zonas de mayor altitud, criico.

Los Entisols son suelos de escaso grado de evolución, que aparecen asociados a muy diversas litologías, formas del terreno o usos. Su limitado desarrollo edáfico es consecuencia de una elevada erosionabilidad. De acuerdo con su escaso desarrollo evolutivo, reflejan en gran medida las características fisicoquímicas del material en el que se desarrollan. En relación con su clasificación, se caracterizan por la ausencia, o por un escaso desarrollo, de horizontes de diagnóstico distintos al epipedión "ócrico", que corresponde a un horizonte superficial de color claro y con bajo contenido en carbono orgánico, o bien algo más oscurecido, pero de escaso espesor. Los Entisols más importantes de la Comunidad de Madrid, por su extensión y variedad taxonómica, son los Orthents, en especial los de régimen de humedad xérico, Xerorthents.

Atendiendo al Sistema de Clasificación de Suelos (Soil Taxonomy), los suelos de la zona de actuación pertenecen al siguiente orden.

Alternativa		Orden	Suborden	Grupo	Subgrupo	Longitud Km
1	1	Inceptisols/Entisols	Xerepts/Orthents	Dystroxerepts/Xerorthents	Typicdystroxerepts/O stricxerorthents	2,65
	4	Urbano	Urbano	Urbano	Urbano	0,05
2	2	Entisols	Orthents	Xerorthents	Lithicxerorthents/O stricxerorthents	58
	1	Inceptisols/Entisols	Xerepts/Orthents	Dystroxerepts/Xerorthents	Typicdystroxerepts/O stricxerorthents	1,58
	4			Urbano		0,12
	3	Entisols/Inceptisols	Urbano Orthents/			0,04
	2	Entisols	Xerepts	Xerorthents	Lithicxerorthent/s/O stricxerorthents	1,80
3	1	Inceptisols/Entisols	Orthents	Dystroxerepts/Xerorthents	Typicdystroxerepts/O stricxerorthents	0,08
	3	Entisols/Inceptisols	Xerepts/Xerepts	Xerorthent/Haploxerepts	Lithicxerorthent/Lithichaloxerepts	0,07
	4	Urbano	Urbano	Urbano		0,06

Tabla 6. Tipos de suelos según el sistema de clasificación Soil Taxonomy.

4.4. Hidrología

Hidrología superficial

La zona de estudio se ubica en la cuenca del río Alberche, que es uno de los principales afluentes del río Tago por su margen derecha. Tiene su nacimiento en el manantial de Fuente Alberche, situado sobre la loma de la Cañada Alta en las inmediaciones del Cerro Moros (Sierra de Piedrahita o de Villafranca, Gredos oriental, Sistema Central español); administrativamente se ubica entre los términos municipales de La Herguijuela y San Martín de la Vega del Alberche (Ávila - Castilla y León). Su cuenca hidrográfica presenta una superficie de 4.105 km². Tras un recorrido de unos 180 km a través de las sierras de Gredos oriental-Guadarrama occidental y la cuenca del Tago septentrional (discurriendo por las provincias de Ávila, Madrid y Toledo), desemboca al río Tago en el paraje de Entrambosríos, unos cinco kilómetros aguas arriba de la localidad toledana de Talavera de la Reina (Castilla-La Mancha).

Su trazado es fundamentalmente lineal con meandros de escasa amplitud, salvo el que describe en las proximidades de su confluencia con el río Perales (paraje de El Santo).

El área de estudio se emplaza en el sector central de la cuenca del Alberche, en el que atraviesa los piedemontes del contacto entre las sierras de Gredos oriental y Guadarrama occidental, y recibe como principal afluente por su margen izquierda al río Cofio. Este río es el tributario más significativo del Alberche por su longitud (47,28 km) y aportación hídrica.

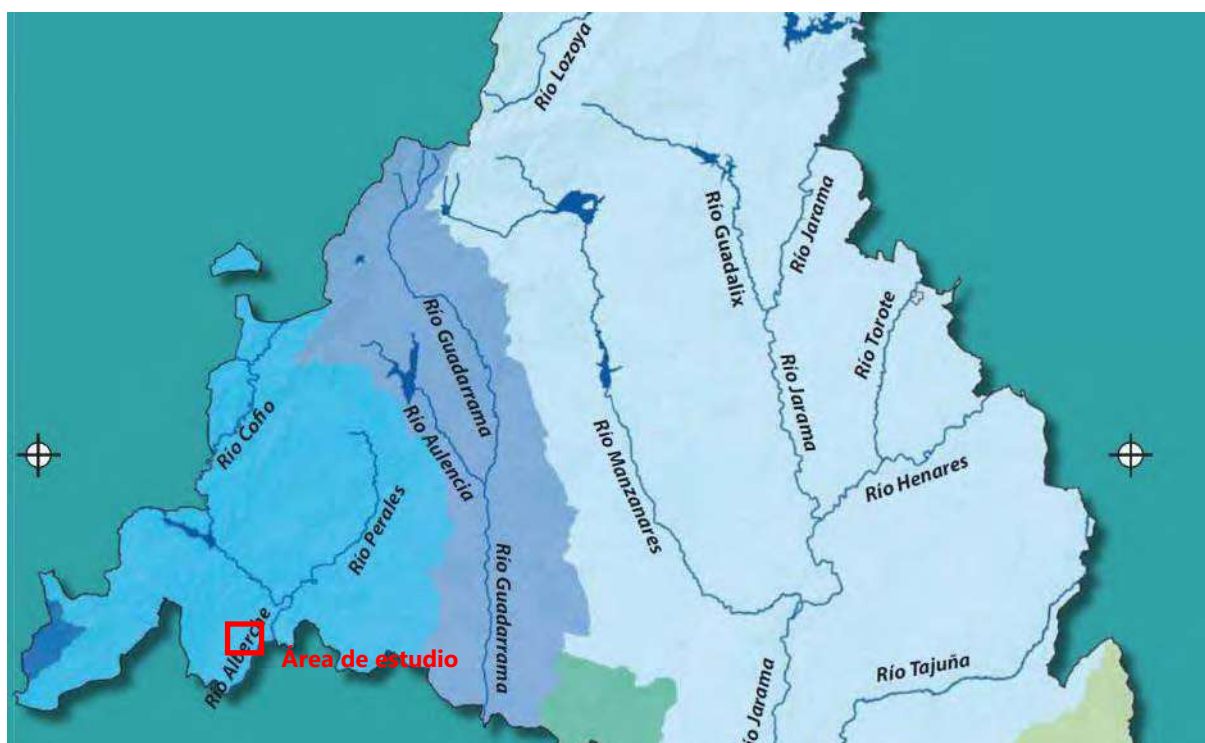


Imagen 3. Subcuencas del río Tago en la Comunidad de Madrid

Juan, uno de los más grandes de la Comunidad de Madrid.

con embarcaderos, restaurantes, clubes náuticos, camping y chiringuitos de temporada.



Imagen 4. Red hidrográfica

Hidrología subterránea

estiajes prolongados. No se consideran unidades hidrogeológicas definidas.

5. ESTUDIO HIDROLÓGICO - HIDRÁULICO

A continuación, se presenta el Estudio Hidrológico - Hidráulico de las cuencas de los tres arroyos elaborado por **GarSan S.L.** Ingenieros y Consultores, en el que se calculan los caudales punta de los mismos y se representan, a partir de los datos obtenidos mediante modelización hidráulica, el Dominio Público Hidráulico y la lámina de inundación de 100 y 500 años de período de retorno.

Los planos para cada cuenca y cada periodo de retorno se pueden observar en el anexo II.

ÍNDICE

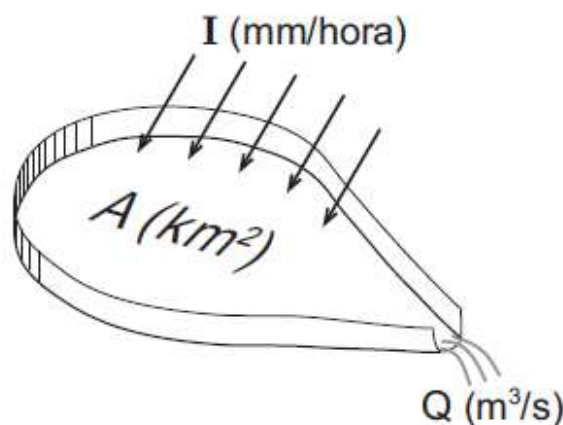
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1 OBJETO

En el presente estudio se realizan los correspondientes cálculos hidrológicos necesarios para estimar los caudales de proyecto.

Se realiza el estudio hidrológico de las cuencas de los distintos arroyos para los distintos períodos de retorno y para las distintas situaciones.

Para evaluar el caudal que producirá una precipitación se utiliza el método racional.



Suponemos una precipitación constante de intensidad I (mm/hora) que cae homogéneamente sobre una cuenca de superficie A (Km^2). Como no toda el agua caída produce escorrentía, se aplica un coeficiente de escorrentía C_e , siendo el caudal generado:

$$Q = \frac{C \cdot I \cdot A}{3,6}$$

Donde:

Q = Caudal (m^3/s).

C = coeficiente de escorrentía.

I = intensidad de lluvia en un aguacero de T_c horas (mm/h).

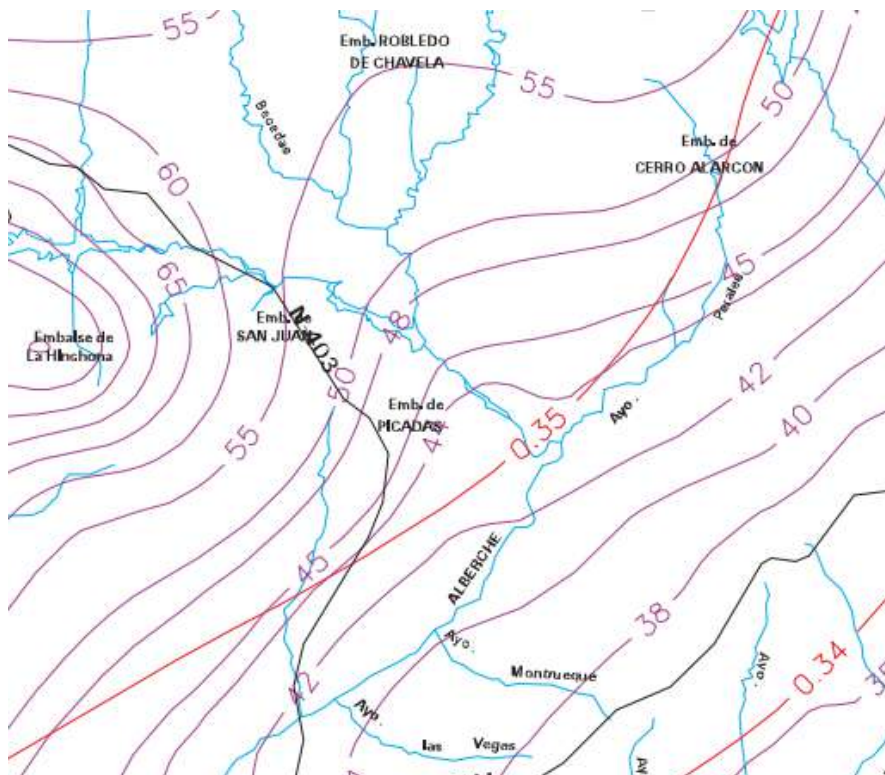
A = Superficie de la cuenca, en m².

2 PRECIPITACIONES

Para la determinación de los caudales de avenidas, se ha utilizado el método de la instrucción 5.2. IC" Drenaje superficial" y se han definido los valores para períodos de retorno de 10 años, 100 años y 500 años.

Para determinar las precipitaciones máximas diarias en la zona objeto del proyecto, se ha utilizado la aplicación informática MAXPLUWIN perteneciente a la publicación "Máximas lluvias diarias en la España Peninsular" del Ministerio de Fomento (1999).

En esta publicación se adjunta un mapa en el que se representan dos familias de curvas. La primera, en color morado, define el valor medio de la ley de frecuencias de máximas precipitaciones diarias puntuales (Pm). La segunda, en color rojo, muestra el coeficiente de variación Cv de dicha ley. El parámetro Cv permite determinar el factor KT (función de Cv y T), valor éste que multiplicado por el valor medio Pm, resulta la precipitación máxima diaria asociada a cada período de retorno T. A continuación se adjunta un fragmento del mapa mencionado correspondiente a la zona del estudio.



Mediante la aplicación informática MAXPLUWIN se realiza este proceso automáticamente, introduciendo como dato las coordenadas UTM de la zona en estudio.

En el siguiente cuadro se adjuntan los valores resultantes de la precipitación máxima diaria (Pd), para distintos períodos de retorno, obtenidos mediante la aplicación MAXPLUWIN.

Valor medio de la máxima precipitación diaria anual: Pd=52 mm

Coeficiente de variación: Cv=0,35

Coordenadas X = 382.500 Y = 4.470.500 (UTM Huso 30)

Perd. Retorno	F(q)	X(mm)	Cv
2	0,500	48	0,35
5	0,800	63	0,35
10	0,900	75	0,35
25	0,933	90	0,35
50	0,960	102	0,35
100	0,980	115	0,35
500	0,990	129	0,35

3 DESCRIPCIÓN DE CUENCAS VERTIENTES DE ESTUDIO

A continuación, se muestran los datos más importantes de las cuencas objeto de estudio:

Cuenca	longitud de cauce estacional (m)	Máxima cota en cuenca receptora (m)	Mínima Cata. Cota del cauce (m)	Área (Km2)	Pendiente media
C-18	2.782,86	875,00	590,00	1,87	0,10
C-26	860,31	778,20	590,00	0,15	0,22
C-27	979,83	768,90	580,00	0,25	0,19

4 METODOLOGÍA DE CÁLCULO

4.1 CORRECCIÓN DE LA PRECIPITACIÓN DIARIA

Inicialmente necesitamos la precipitación diaria máxima para el periodo de retorno elegido. En general, esto debe calcularse disponiendo de una larga serie de precipitaciones máximas (el día más caudaloso de cada año) y aplicar una ley estadística.

Esta precipitación diaria debe corregirse para cuencas de más de 1 km². Se establece el siguiente factor reductor para compensar que en grandes cuencas la precipitación no puede ser homogénea en toda su superficie.

$$K_A = 1 - \frac{\log \text{Superficie (km}^2\text{)}}{15}$$

La precipitación diaria disponible la multiplicamos por KA y ya utilizaremos ese valor en lo sucesivo en lugar del valor bruto de precipitación diaria.

$$P_{dc} = P_d \times K_A$$

Donde:

Pdc = Precipitación diaria corregida

Pd = Precipitación diaria calculada para el periodo de retorno elegido

KA = Factor reductor

4.2 INTENSIDAD MEDIA DIARIA

$$Id = Pdc/24$$

Donde:

- Id (mm) = intensidad diaria (mm/hora)

- Pdc (mm) = precipitación diaria corregida (mm)

4.3 TIEMPO DE CONCENTRACIÓN

El tiempo de concentración (Tc) puede definirse como el tiempo mínimo necesario para que todos los puntos de la superficie de la cuenca contribuyan simultáneamente al caudal recibido en la salida, es decir el valor de tiempo de concentración de una cuenca, es el tiempo que transcurre desde que deja de llover hasta que cesa la escorrentía directa en la sección de estudio.

Para los diversos cálculos que veremos a continuación es necesario conocer el tiempo de concentración de la cuenca. Se han desarrollado numerosas fórmulas que proporcionan una aproximación de este parámetro. La más utilizada en España es la que se incluye en la Instrucción de carreteras 5.2-IC (Ministerio de Fomento, 2016):

$$T_{mez} \quad T_c = 0,3 (L/J^{0,25})^{0,76}$$

Donde:

Tc = tiempo de concentración (horas)

L= longitud del cauce (km), es el recorrido más largo, desde el punto más alejado del desagüe de la cuenca hasta dicho desagüe

J= pendiente media (m/m), se puede evaluar mediante la expresión siguiente:

$$\text{Pendiente} = (\text{Cota máxima} - \text{Cota mínima}) / \text{Longitud del cauce}$$

4.4 INTENSIDAD DE LLUVIA

La intensidad máxima I_t (mm/h) de precipitación a utilizar en el cálculo de los caudales por el método hidrometeorológico, se obtiene por aplicación de la fórmula de regionalización de la Instrucción de Carreteras 5.2.-IC Drenaje Superficial, que es la siguiente:

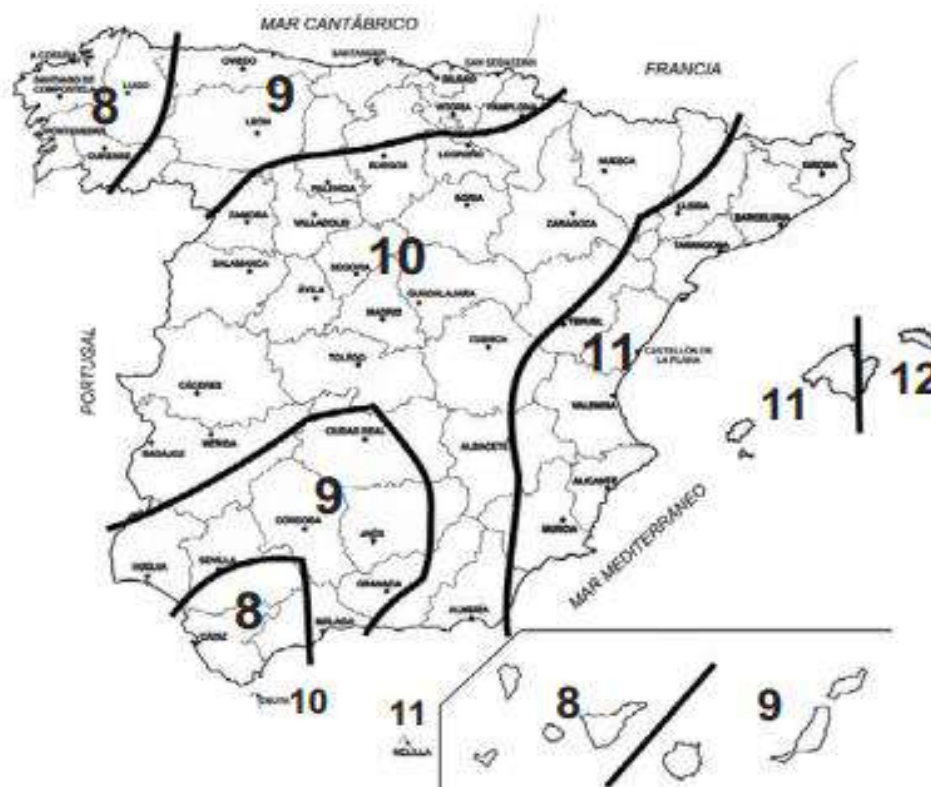
$$I_t = I_d \left(\frac{I_1}{I_d} \right)^{3,5287 - 2,5287 \cdot t^{0,1}}$$

Donde:

- I_t = intensidad media en el periodo t
- I_d = intensidad media diaria
- I_1 = intensidad en la hora más lluviosa de ese día.

En la fórmula se introduce I_1/I_d = Relación de intensidades, El valor de I_1/I_d , es decir la relación entre la intensidad horaria de precipitación y la intensidad media diaria de la precipitación para un mismo periodo de retorno se determina a partir del plano de isolíneas. Se adopta en San Martín de Valdeiglesias (Madrid) el valor de 10.

t = periodo de tiempo (horas) para el que se quiere evaluar la intensidad, utilizamos el tiempo de concentración de la cuenca = t_c (h) al ser el que proporciona un mayor caudal.



4.5 EVALUACIÓN DEL UMBRAL DE ESCORRENTÍA

El umbral de escorrentía (P_o) es igual a:

$$P_o = P_o \text{ inicial (sin corregir)} \times \beta \text{ (coeficiente corrector)}$$

El valor de P_o inicial (sin corregir) se consulta en tablas (BOE, 10 marzo 2016, tabla 2.3) dependiendo del uso del suelo (tipo de cultivo, bosque, etc.), pendiente y tipo de suelo.

El coeficiente corrector (β) se calcula dependiendo de la región (ver mapa de España) y del periodo de retorno. Se calcula con una tabla de la que se presenta un fragmento con los datos de la región de estudio.

$$\beta = \beta_m \cdot F_T$$



Para la región 32 donde nos encontramos los coeficientes correctores serán:

Región	Valor medio, β_m	Desviación respecto al valor medio para el intervalo de confianza del			Periodo de retorno T (años), F_T				
		50% Δ_{50}	67% Δ_{67}	90% Δ_{90}	2	5	25	100	500
11	0,90	0,20	0,30	0,50	0,80	0,90	1,13	1,34	1,59
12	0,95	0,20	0,25	0,45	0,75	0,90	1,14	1,33	1,56
13	0,60	0,15	0,25	0,40	0,74	0,90	1,15	1,34	1,55
21	1,20	0,20	0,35	0,55	0,74	0,88	1,18	1,47	1,90
22	1,50	0,15	0,20	0,35	0,74	0,90	1,12	1,27	1,37
23	0,70	0,20	0,35	0,55	0,77	0,89	1,15	1,44	1,82
24	1,10	0,15	0,20	0,35	0,76	0,90	1,14	1,36	1,63
25	0,60	0,15	0,20	0,35	0,82	0,92	1,12	1,29	1,48
31	0,90	0,20	0,30	0,50	0,87	0,93	1,10	1,26	1,45
32	1,00	0,20	0,30	0,50	0,82	0,91	1,12	1,31	1,54

4.6 COEFICIENTE DE ESCORRENTÍA

Se han tomado como coeficientes de escorrentía el siguiente:

$$C = ((P_{dc} - P_o') \cdot (P_{dc} + 23P_o')) / (P_{dc} + 11P_o')^2$$

Siendo:

C = coeficiente de escorrentía.

P_{dc} = Precipitación diaria corregida (mm)

P_o = Umbral de escorrentía (mm).

Si P_{dc} < P_o el coeficiente E=0, ya que si la precipitación no alcanza el umbral de escorrentía, no escurre nada.

4.7 CÁLCULO DEL COEFICIENTE DE UNIFORMIDAD TEMPORAL

En cuencas grandes (tiempo de concentración grande) es difícil que la intensidad de precipitación se mantenga homogénea a lo largo de todo el tiempo de concentración. Para ello se establece el siguiente coeficiente:

$$K_t = 1 + ((t_c)^{1,25} / ((t_c)^{1,25} + 14))$$

Donde:

K_t = Coeficiente de uniformidad en la distribución temporal de la precipitación

t_c = tiempo de concentración de la cuenca (horas)

4.8 CÁLCULO DEL CAUDAL

Aplicando el método racional, incluyendo K_t calculado en el apartado anterior, el caudal punta para una determinada precipitación será:

$$Q = \frac{C \cdot I_t \cdot A \cdot K_t}{3,6}$$

Siendo:

Q = Caudal (m³/s).

C = coeficiente de escorrentía.

I_t = intensidad de lluvia en un aguacero de T_c horas (mm/h).

A = Superficie de la cuenca, en m².

K_t = Coeficiente de uniformidad temporal

En el siguiente cuadro se reflejan los caudales para cada uno de los periodos

de retorno:

5 CAUDALES OBTENIDOS

A continuación, se muestran los caudales de proyecto obtenidos en cada cuenca para cada uno de los períodos de retorno obtenidos:

C-18	T (años)	F (q)	Precip. Max.	Int. Ag.	Coef. Esc.	A (km2)	K	Ka	Q (m3/s)
	10	0,900	74,776	30,35	0,126	1,872	1,091	0,980	2,11
	100	0,990	128,96	52,35	0,282	1,872	1,091	0,980	8,19
	500	0,998	147,212	59,75	0,325	1,872	1,091	0,980	10,78

C-26	T (años)	F (q)	Precip. Max.	Int. Ag.	Coef. Esc.	A (km2)	K	Ka	Q (m3/s)
	10	0,900	74,776	53,87	0,126	0,148	1,019	1,000	0,28
	100	0,990	128,96	92,90	0,282	0,148	1,019	1,000	1,10
	500	0,998	147,212	0,00	0,325	0,148	1,019	1,000	1,45

C-27	T (años)	F (q)	Precip. Max.	Int. Ag.	Coef. Esc.	A (km2)	K	Ka	Q (m3/s)
	10	0,900	74,776	50,24	0,126	0,253	1,022	1,000	0,45
	100	0,990	128,96	86,65	0,282	0,253	1,022	1,000	1,75
	500	0,998	147,212	98,91	0,325	0,253	1,022	1,000	2,31

6 MODELIZACIÓN HIDRÁULICA

6. CARACTERÍSTICAS PRINCIPALES

El estudio hidráulico tiene por objeto la delimitación del Dominio Público Hidráulico (T=10 años), con sus zonas de servidumbre (5m) y policía (100 m), así como la lámina de inundación de la Avenida Extrema (500 años).

Para la modelización hidráulica de los tres arroyos objeto del proyecto, se ha utilizado el programa informático HEC-RAS 6.0. Modelización hidráulica del Cuerpo de Ingenieros de Estados Unidos de Norteamérica.

Mediante este programa el análisis de la red hidrográfica de los tramos en estudio se realiza en régimen estacionario gradualmente variado en flujo rápido con los caudales calculados en el estudio hidrológico para cada uno de los períodos de retorno.

Los cálculos se realizan mediante la combinación de la ecuación de la energía (con pérdidas continuadas según la ecuación de Manning y el coeficiente de expansión y contracción en cambios de secciones), y la ecuación de continuidad.

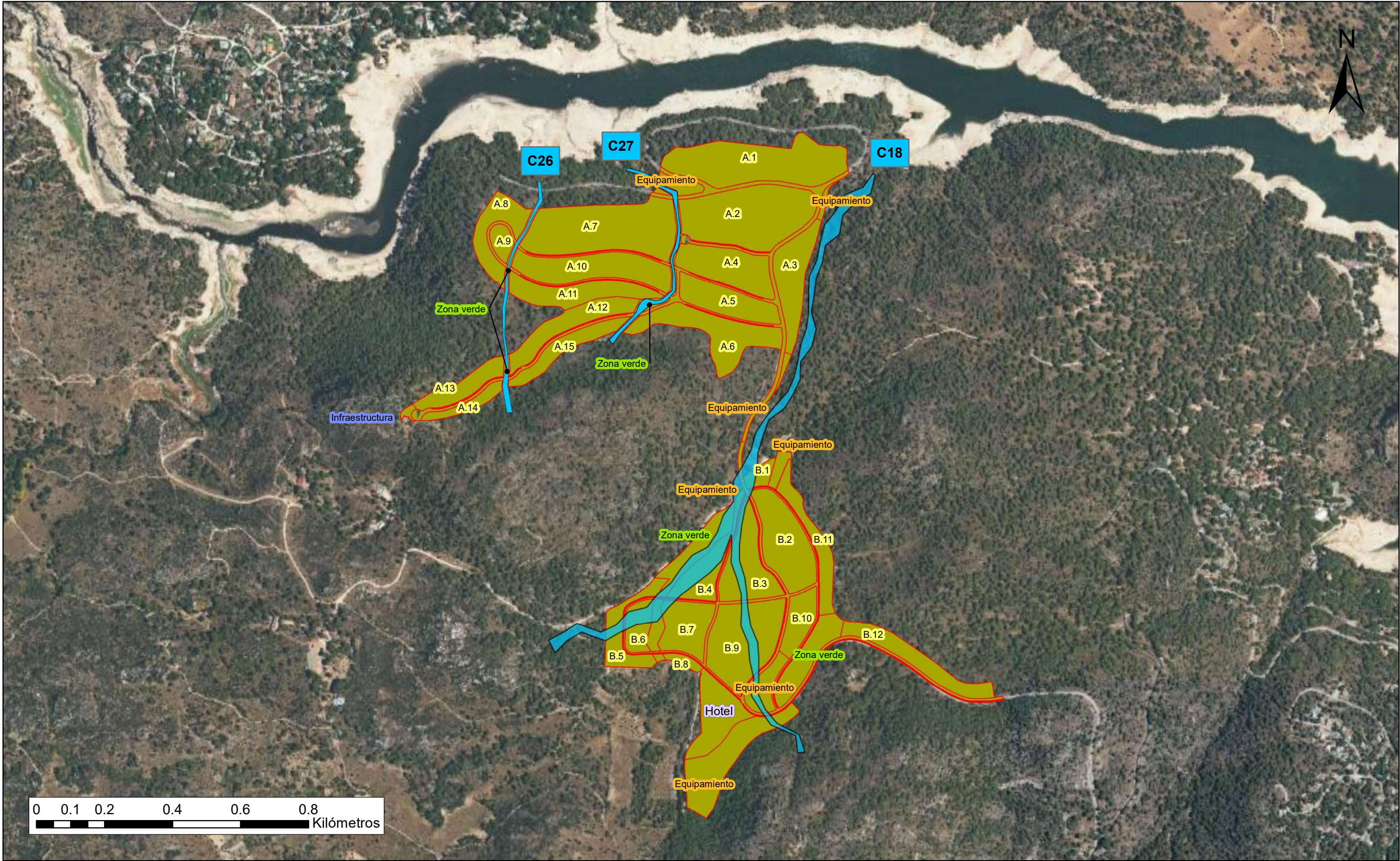
Cuando el nivel de la lámina de agua varía rápidamente, se usa en lugar de la ecuación de la energía la ecuación del momento, lo que permite modelizar correctamente situaciones de flujo mixto, cambios de secciones, así como confluencias de cauces en los que el ángulo de incidencia induzca pérdidas de energía hidráulica.

Para cada una de las situaciones estudiadas se han obtenido en cada uno de los perfiles transversales el nivel y el calado de la lámina de agua, la velocidad del flujo, el ancho de la lámina, la energía hidráulica, la pendiente hidráulica, etc. Entre otras variables hidráulicas.

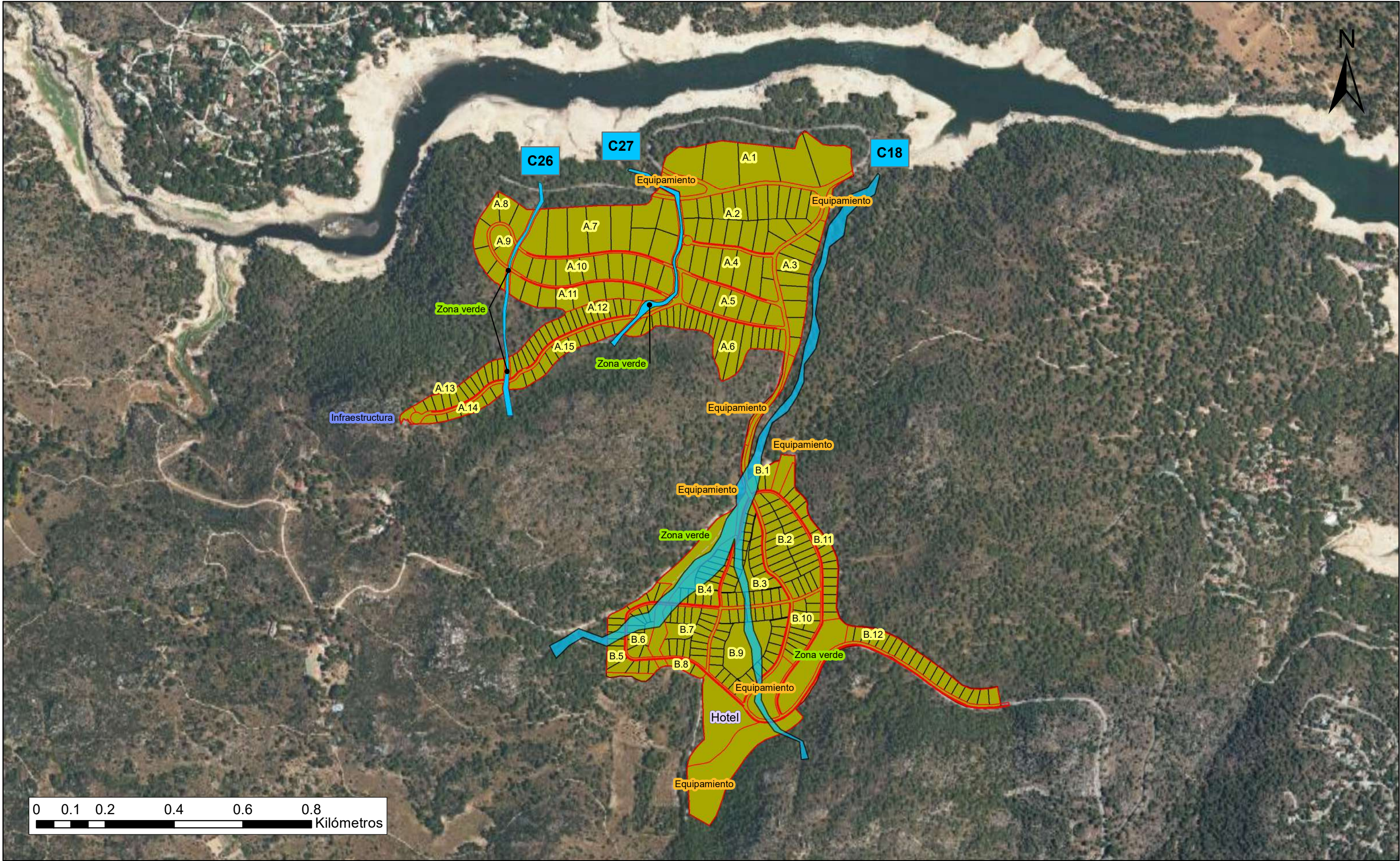
Todos estos datos tabulados, así como las secciones transversales con las líneas de nivel que alcanza la avenida de agua se han incluido en el Anejo de Resultados del Estudio Hidráulico para cada una de las situaciones estudiadas.

Con los resultados del modelo HEC-RAS se ha procedido a representar las láminas de inundación, generando los siguientes planos:

- Plano nº4
- Plano nº5
- Plano nº6
- En cada plano se representa el Dominio Público Hidráulico (T=10 años) y la lámina de inundación de 100 y 500 años de período de retorno.
- Del análisis de los resultados obtenidos en el HEC-RAS, pueden determinarse los niveles de inundación correspondientes a las secciones transversales para los períodos de retorno estudiados.



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	<div>Plano:</div> <div>LÁMINA DE INUNDACIÓN DE LA AVENIDA EXTREMA (500 AÑOS)</div>	<div>Situación:</div> <div>T.M. SAN MARTÍN DE VALDEIGLESIAS (MADRID)</div>	<div>Nº plano:</div> <div>1</div>	<div>Formato original:</div> <div>A3 (420X297)</div>



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	<div>Plano:</div> <div>LÁMINA DE INUNDACIÓN DE LA AVENIDA EXTREMA SOBRE LAS PARCELAS</div>	<div>Situación:</div> <div>T.M. SAN MARTÍN DE VALDEIGLESIAS (MADRID)</div>	<div>Nº plano:</div> <div>2</div>	<div>Formato original:</div> <div>A3 (420X297)</div>

7. CONCLUSIONES

Del presente estudio se concluye:

- De los trabajos realizados se han obtenido las cuencas vertientes de la Red Hídrica existen en la parcela en estudio.
- Se presentan, muy aproximadas, las características geológicas y topográficas del terreno.
- Se han obtenido los datos climatológicos necesarios para evaluar las precipitaciones esperadas en los distintos periodos de recurrencia.
- Se han definido en planta las zonas de ocupación de las diferentes riadas ordinarias y extraordinarias para delimitar las zonas verdes de las que se deben dotar al sector para salvaguardar la legislación relativa al Dominio Público Hidráulico.
- Asimismo, de conformidad con el art. 92 bis del texto refundido de la *Ley de Aguas*, las actuaciones que conlleve el Plan Parcial, no supondrán un deterioro del estado de las masas de aguas afectadas ni provocarán la imposibilidad del cumplimiento de los objetivos medioambientales establecidos, o que se puedan establecer para las masas de agua en cuestión, así como el resto de normativa y disposiciones legales vigentes, o que se dicten, que sean de aplicación.
- No se pretende dentro del Dominio Público Hidráulico la construcción, montaje o ubicación de instalaciones destinadas a albergar personas, aunque sea con carácter provisional o temporal, de acuerdo con lo contemplado en el art. 51.3 del *Reglamento del Dominio Público Hidráulico*.

ANEXOS

ANEXO I

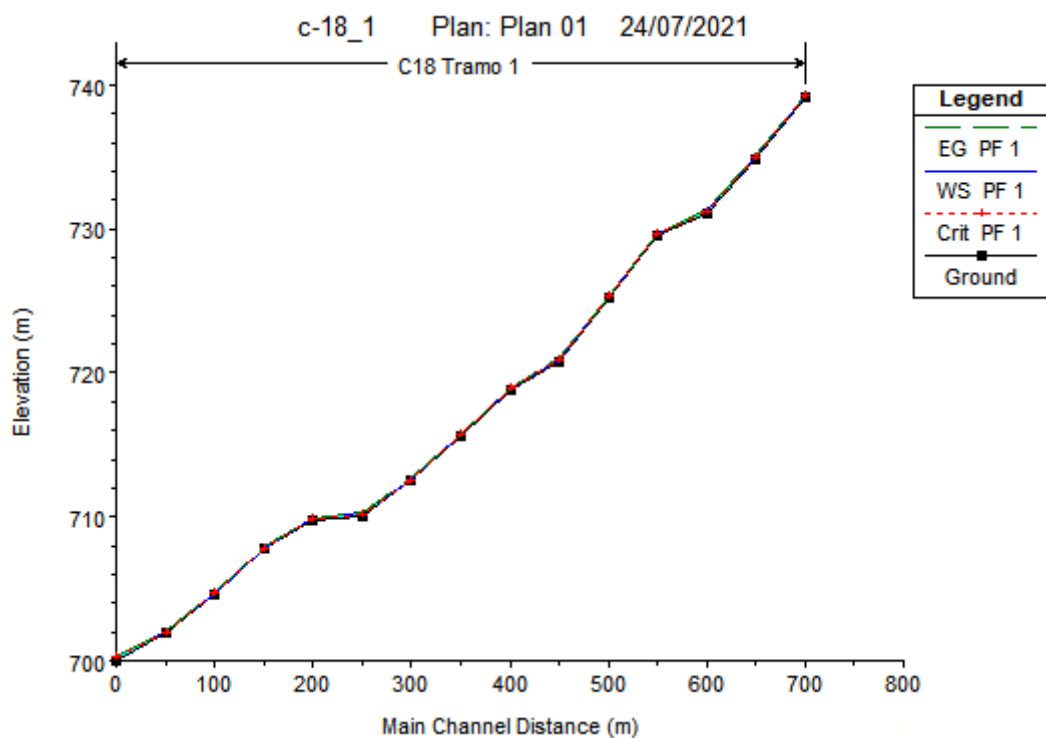
RESULTADOS DEL ESTUDIO HIDRÁULICO

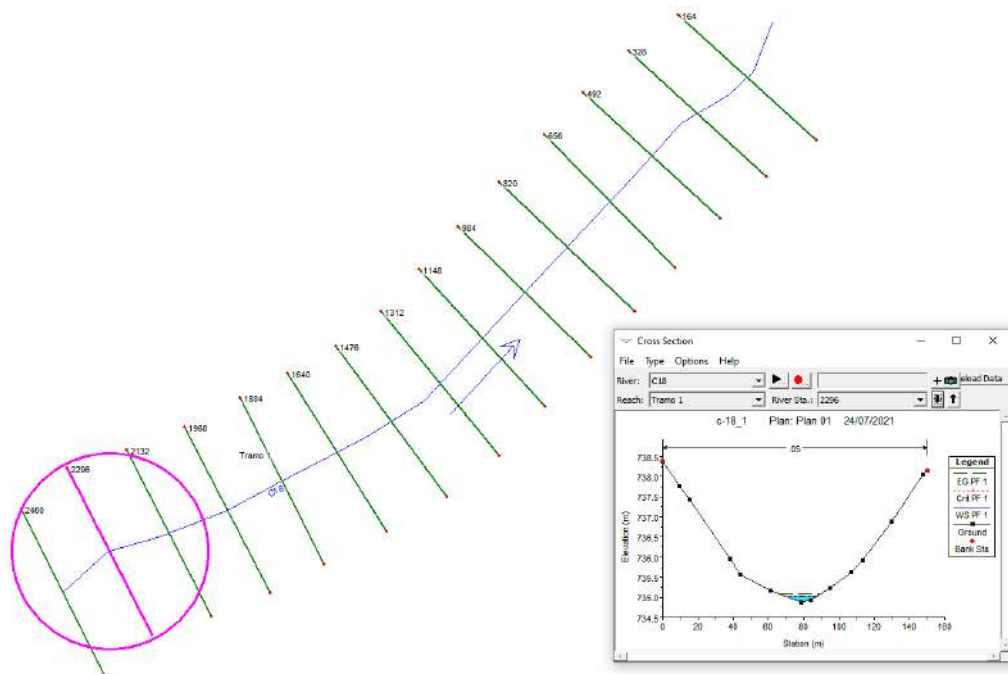
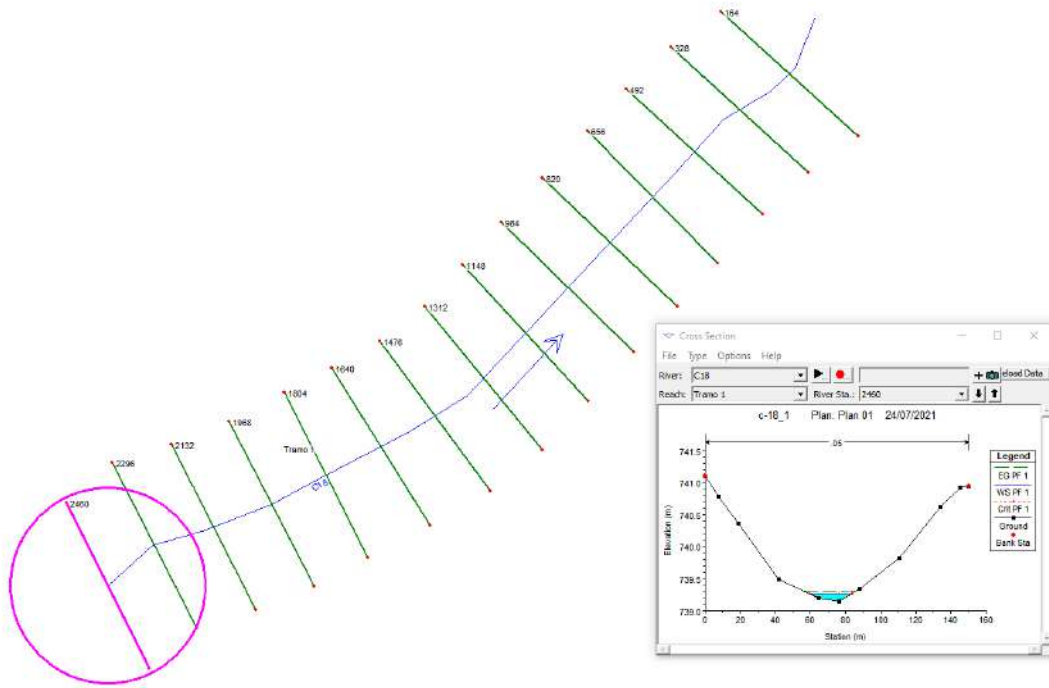


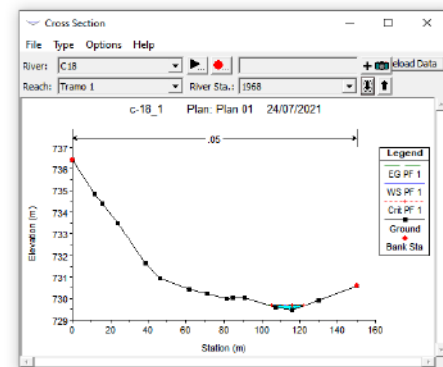
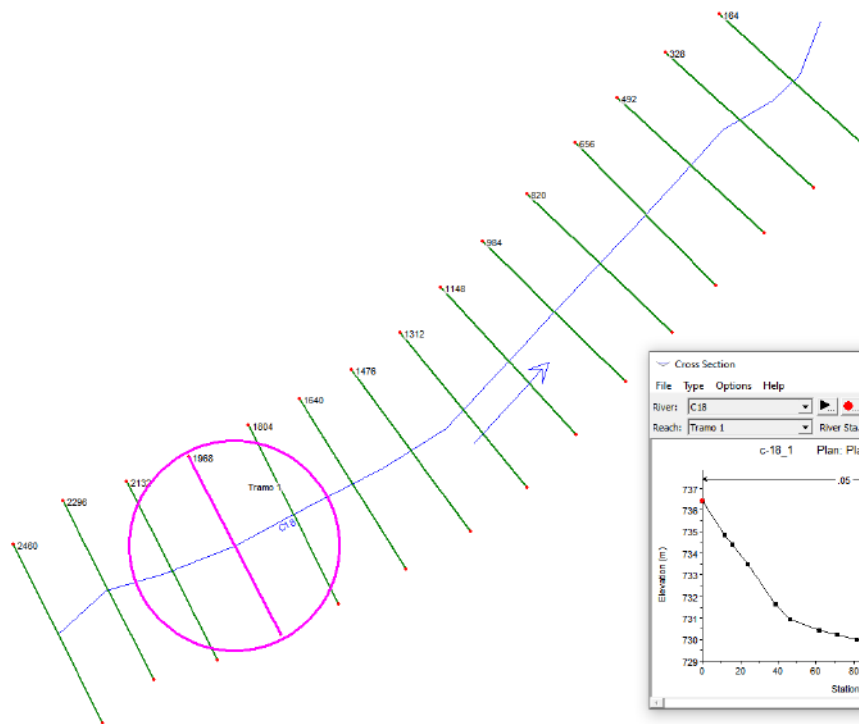
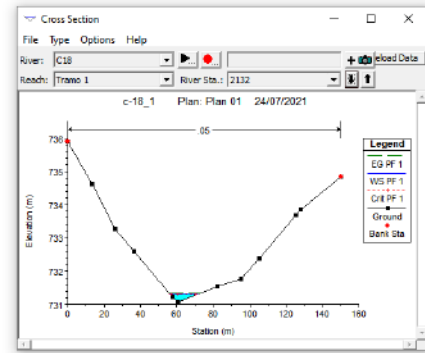
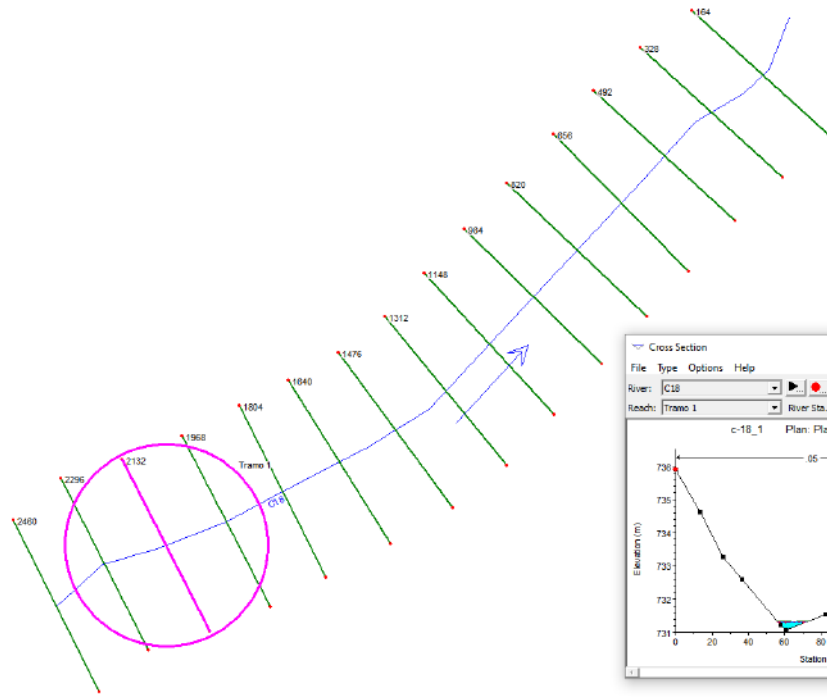
CUENCA 18_1

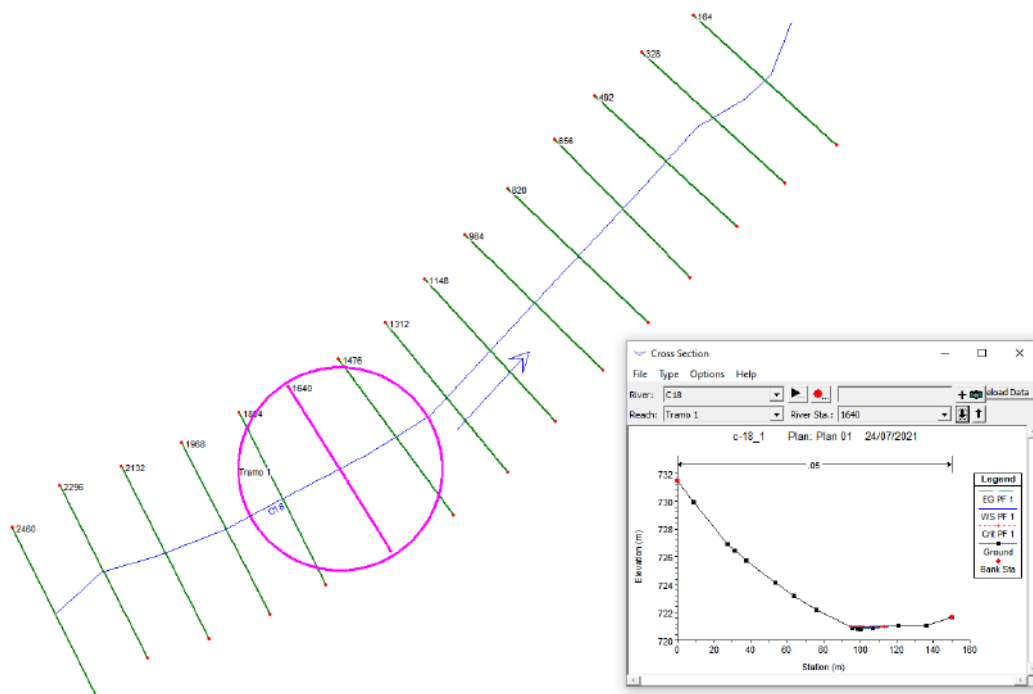
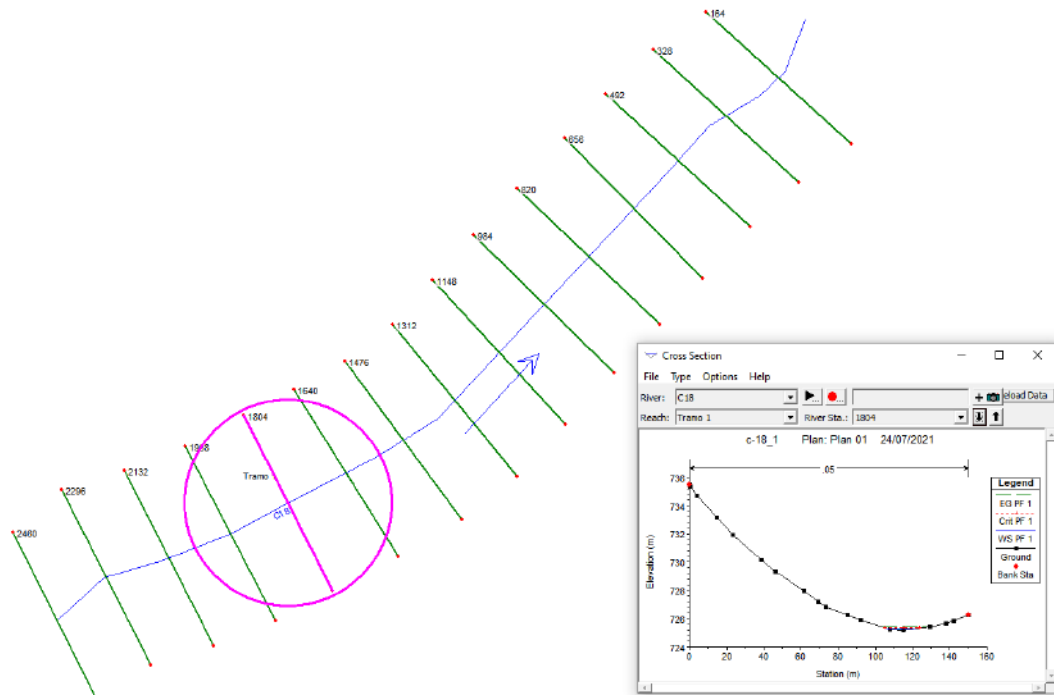
T10 (Q=1.48 m³/s)

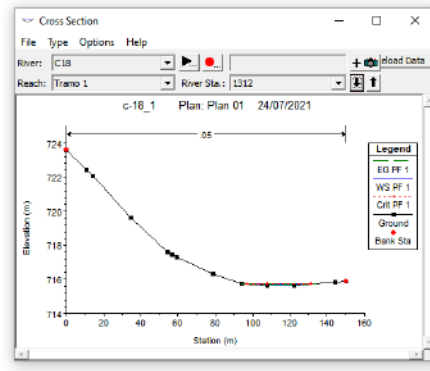
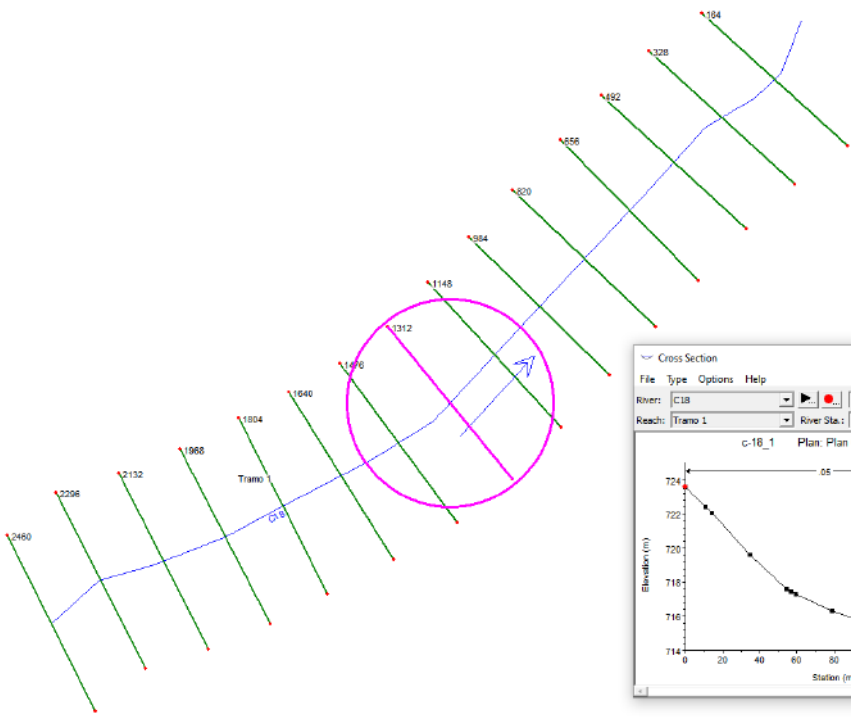
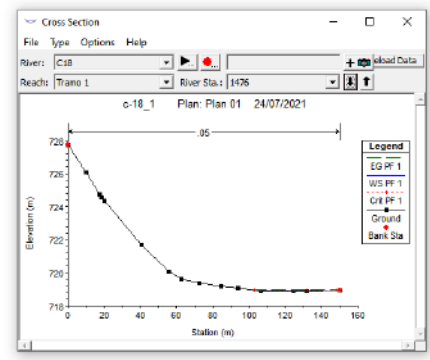
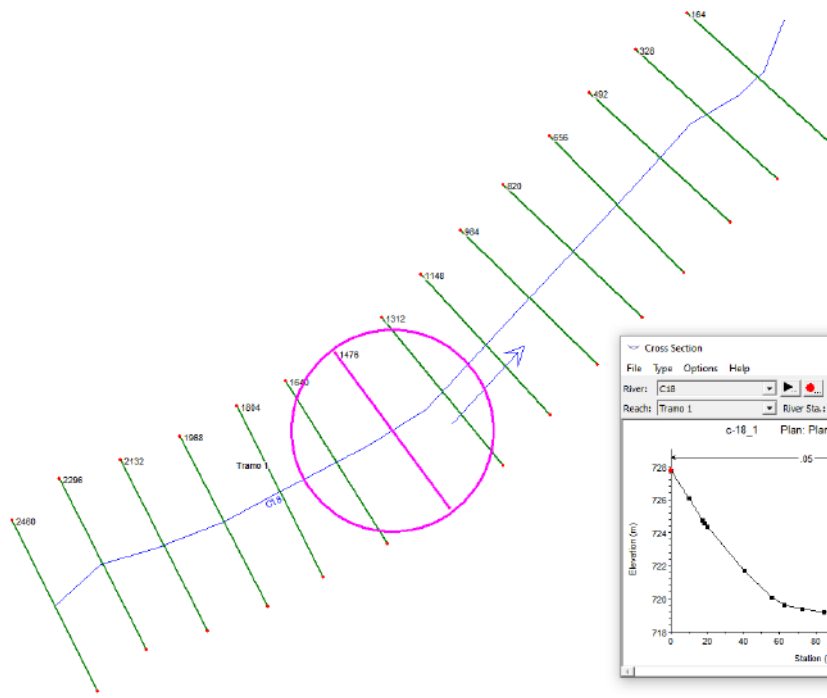
HEC-RAS Plan: Plan 01 River: C18 Reach: Tramo 1 Profile: PF 1												
Reach	River Sta	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m ²)	Top Width (m)	Froude # Chl
Tramo 1	2460	PF 1	1.48	739.15	739.27	739.27	739.31	0.059998	0.85	1.74	24.18	1.01
Tramo 1	2296	PF 1	1.48	734.88	735.01	735.03	735.09	0.126761	1.25	1.19	16.14	1.47
Tramo 1	2132	PF 1	1.48	731.08	731.32	731.29	731.35	0.022252	0.74	1.99	16.07	0.67
Tramo 1	1968	PF 1	1.48	729.49	729.66	729.66	729.71	0.053506	0.95	1.56	16.82	0.99
Tramo 1	1804	PF 1	1.48	725.21	725.32	725.35	725.41	0.159515	1.34	1.10	15.99	1.63
Tramo 1	1640	PF 1	1.48	720.79	720.97	720.95	721.00	0.027365	0.72	2.06	20.33	0.72
Tramo 1	1476	PF 1	1.48	718.87	718.94	718.94	718.97	0.066625	0.68	2.17	45.23	0.99
Tramo 1	1312	PF 1	1.48	715.62	715.72	715.72	715.74	0.065623	0.76	1.95	34.04	1.02
Tramo 1	1148	PF 1	1.48	712.51	712.59	712.59	712.62	0.061823	0.77	1.93	31.80	1.00
Tramo 1	984	PF 1	1.48	710.06	710.26	710.15	710.26	0.002954	0.24	6.14	58.90	0.24
Tramo 1	820	PF 1	1.48	709.72	709.91	709.89	709.92	0.027603	0.54	2.73	41.07	0.67
Tramo 1	656	PF 1	1.48	707.79	707.86	707.86	707.89	0.065681	0.70	2.10	41.20	1.00
Tramo 1	492	PF 1	1.48	704.56	704.65	704.67	704.72	0.161403	1.11	1.33	25.80	1.57
Tramo 1	328	PF 1	1.48	701.92	702.03	702.01	702.05	0.024552	0.57	2.58	33.08	0.65
Tramo 1	164	PF 1	1.48	700.06	700.23	700.23	700.27	0.055755	0.91	1.63	19.35	1.00

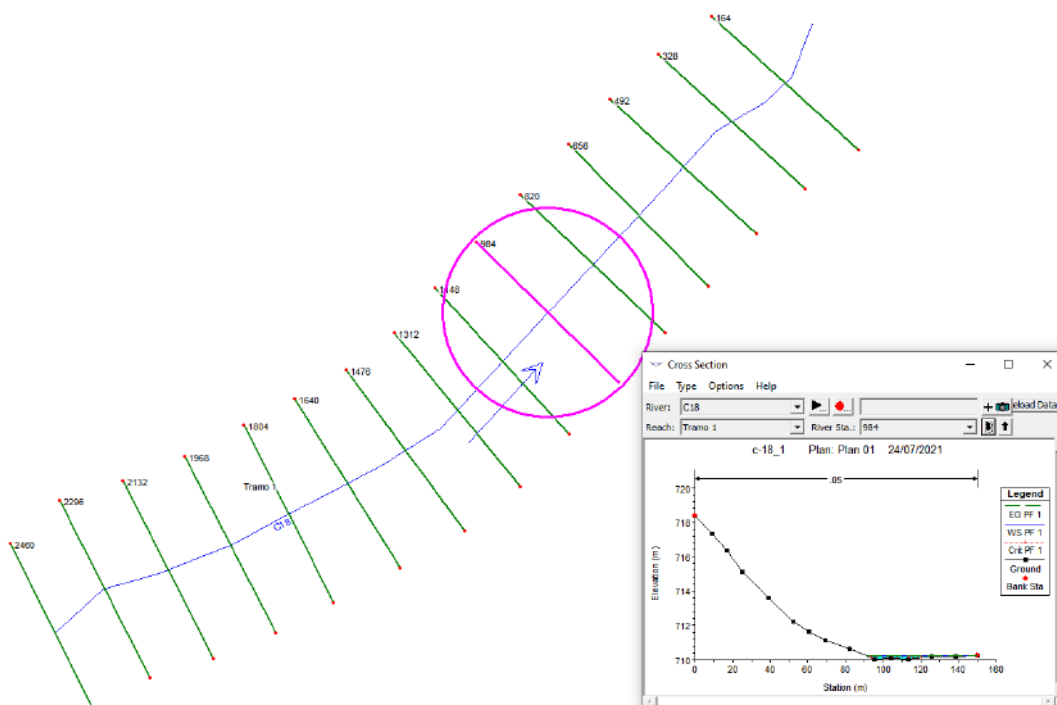
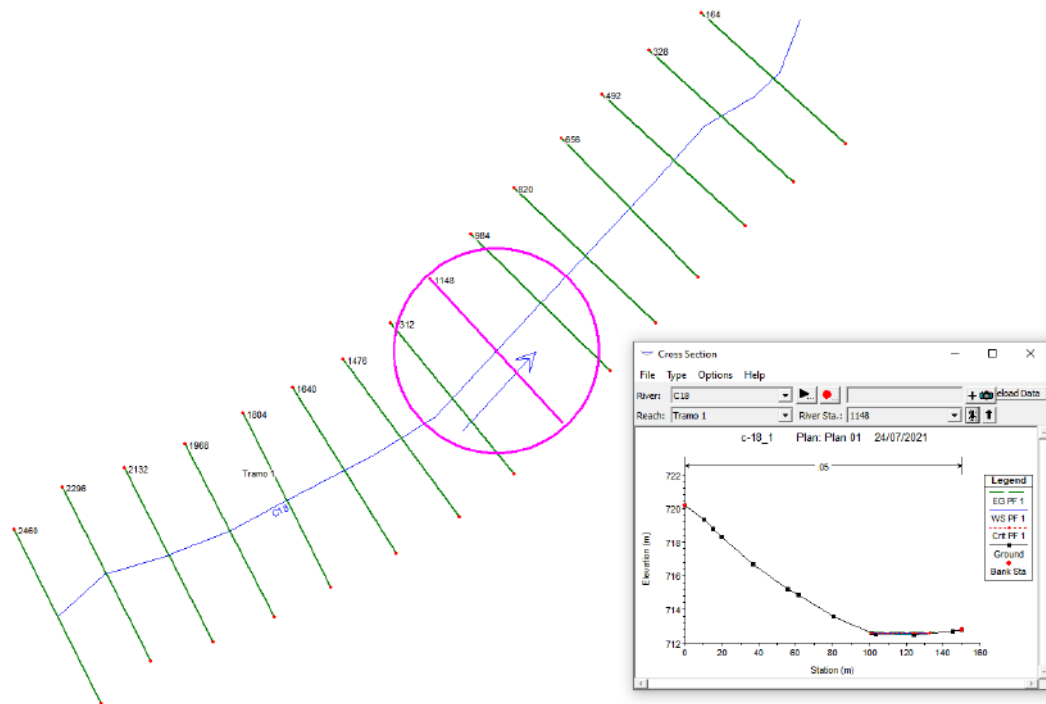


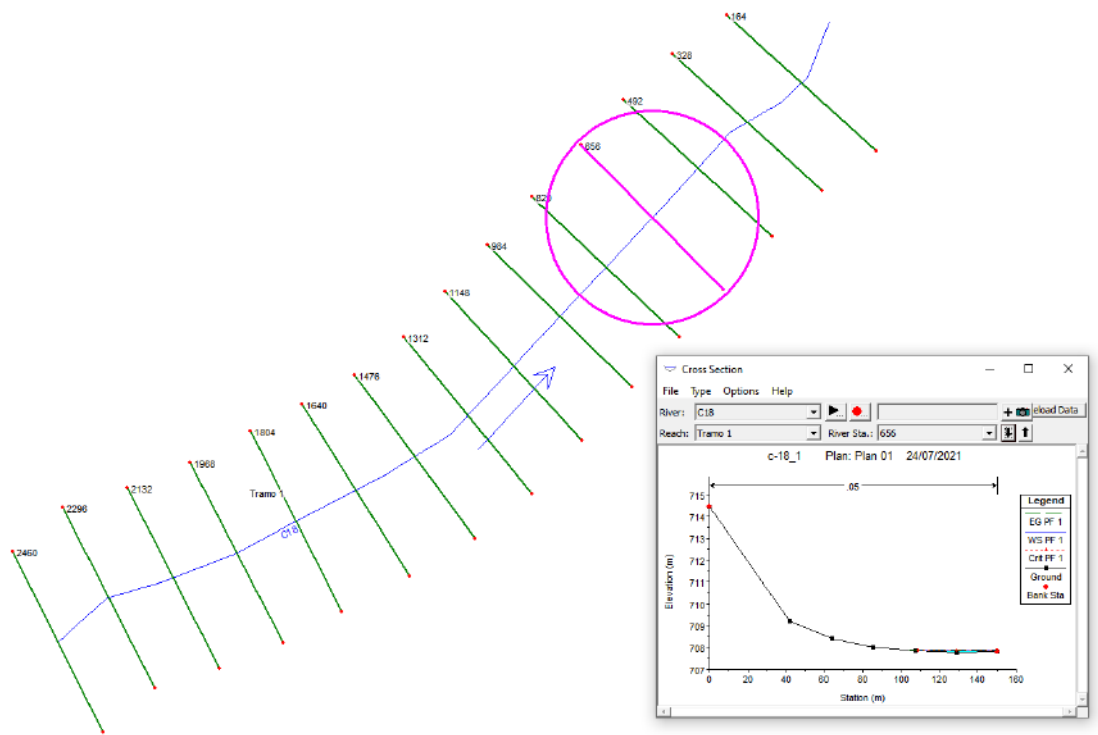
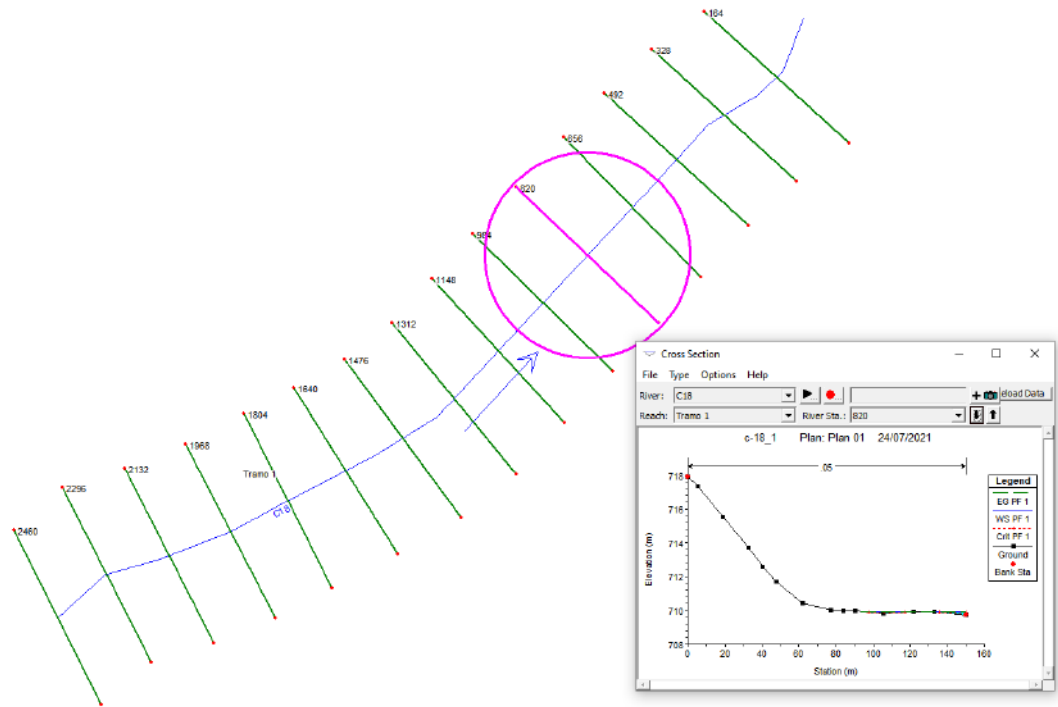


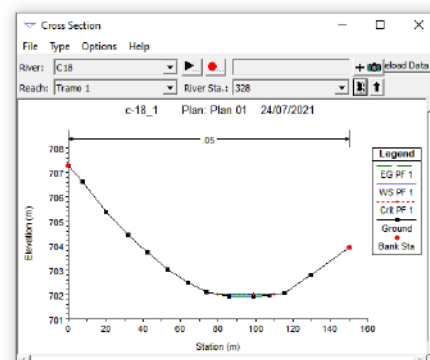
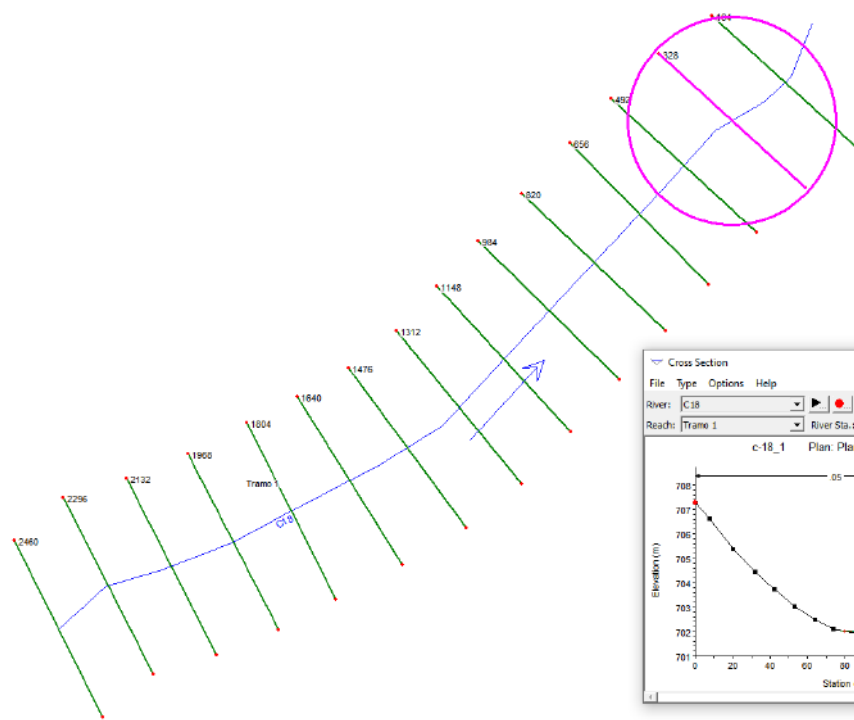
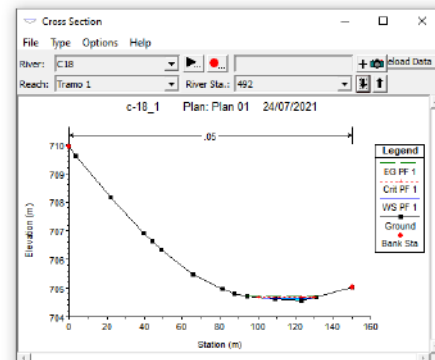
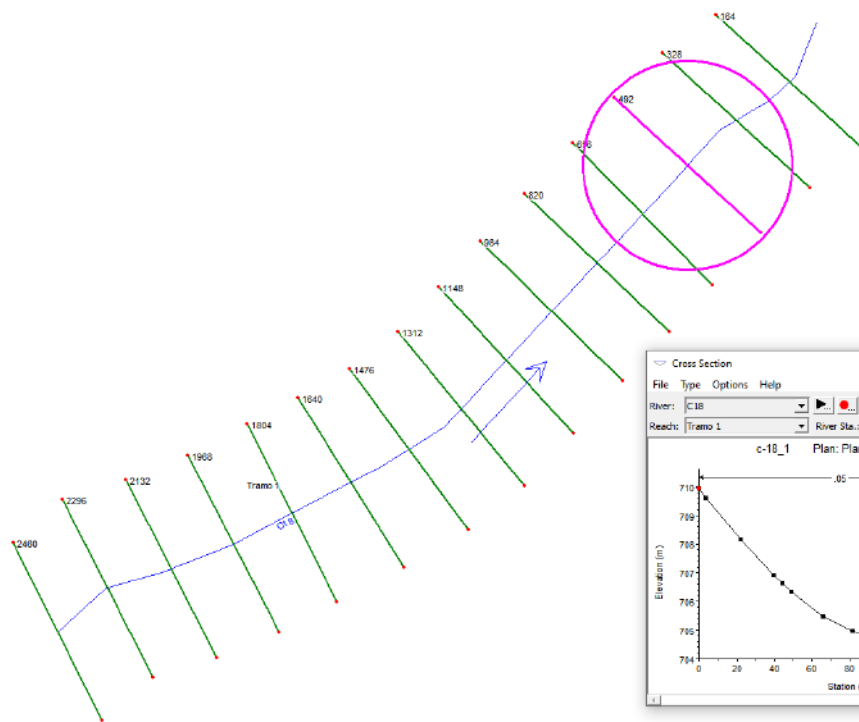


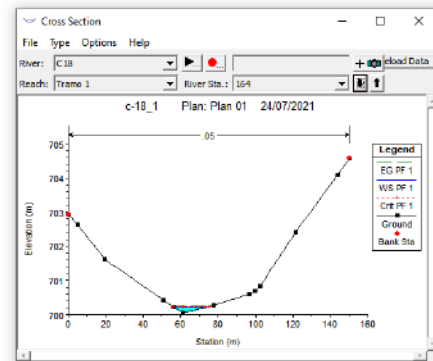
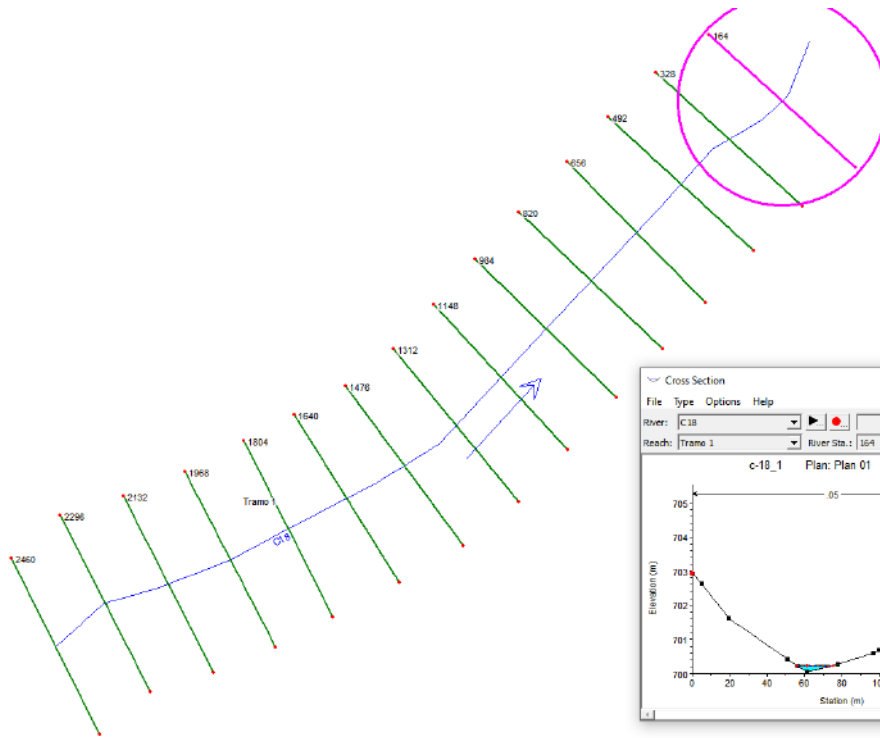


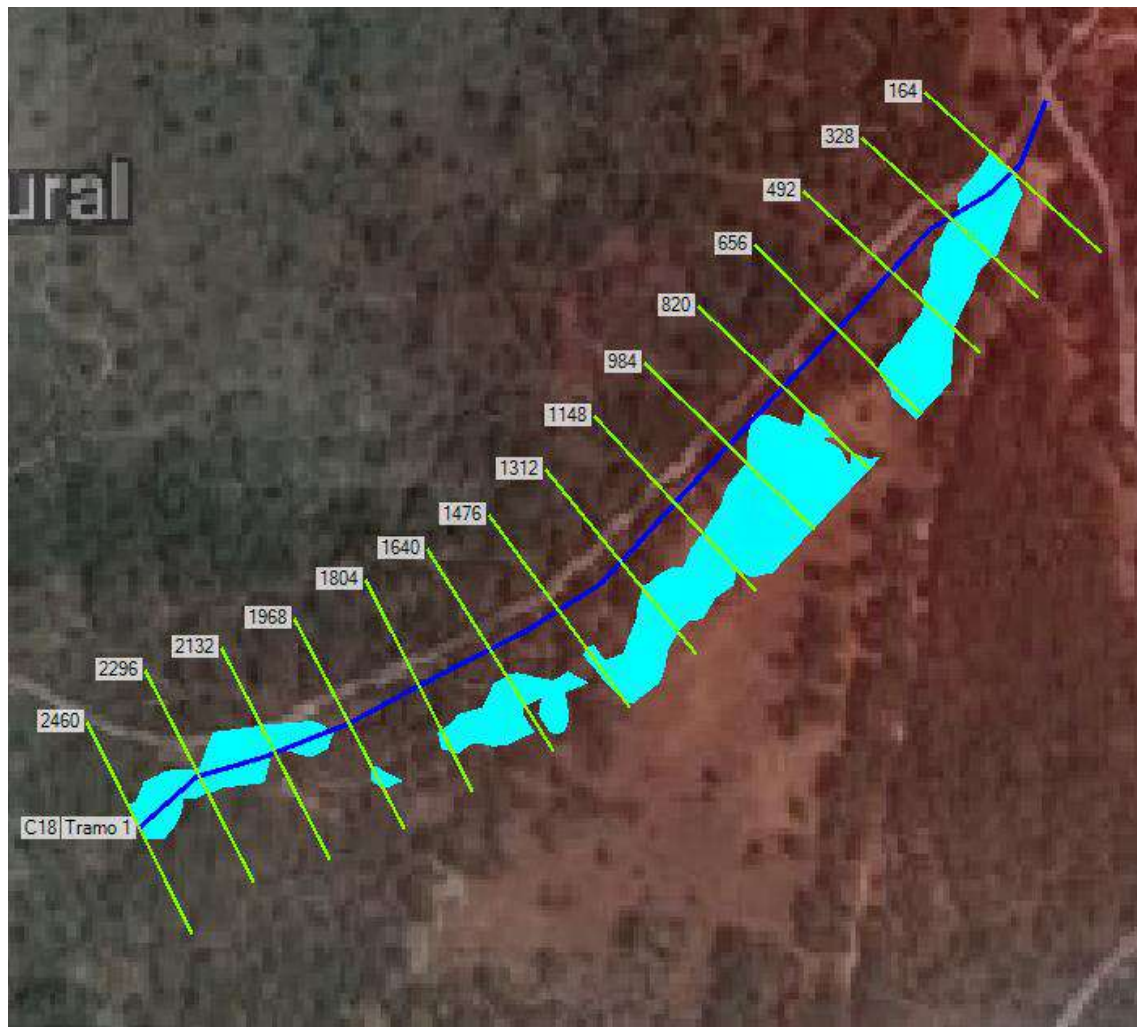






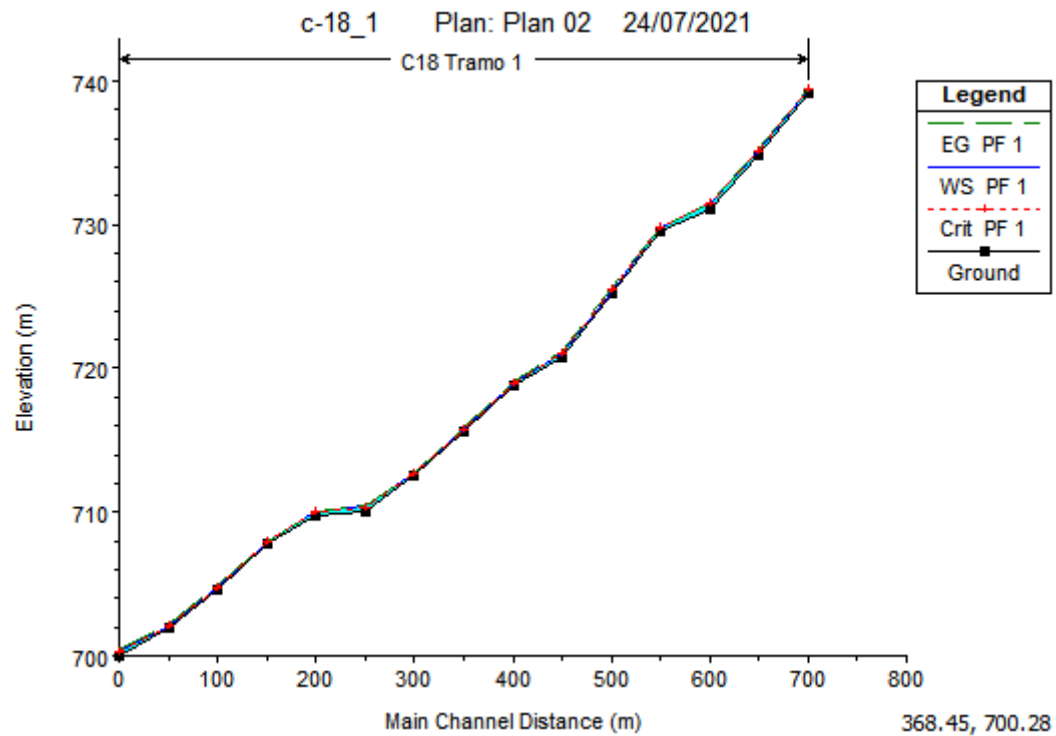


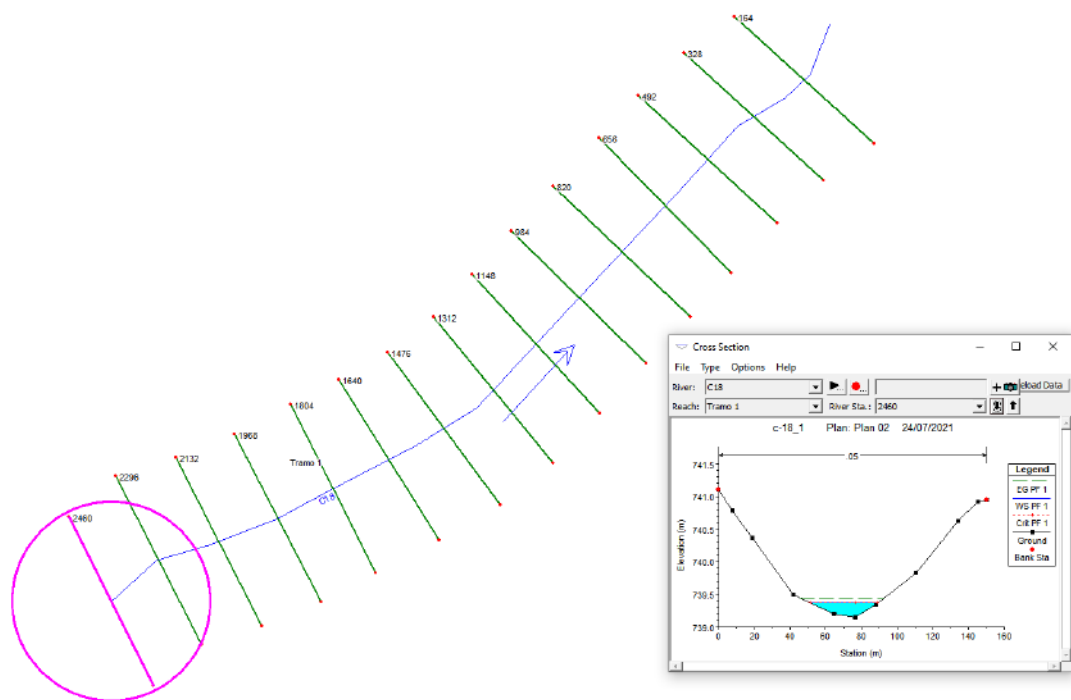




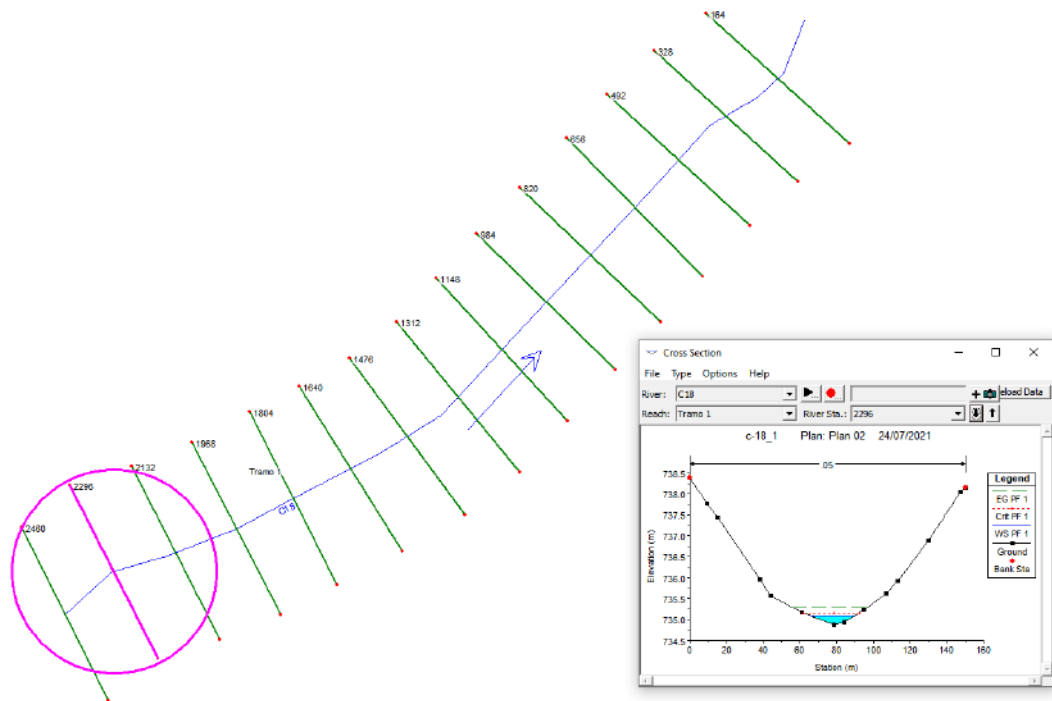
T100 (Q=5.72 m3/s)

HEC-RAS Plan: Plan 02 River: C18 Reach: Tramo 1 Profile: PF 1												
Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Tramo 1	2460	PF 1	5.72	739.15	739.38	739.38	739.44	0.050252	1.15	4.96	38.04	1.02
Tramo 1	2296	PF 1	5.72	734.88	735.10	735.16	735.29	0.161059	1.95	2.93	24.48	1.80
Tramo 1	2132	PF 1	5.72	731.08	731.48	731.44	731.54	0.025351	1.10	5.21	25.76	0.78
Tramo 1	1968	PF 1	5.72	729.49	729.79	729.79	729.88	0.045172	1.29	4.43	26.42	1.01
Tramo 1	1804	PF 1	5.72	725.21	725.40	725.47	725.64	0.211084	2.17	2.63	22.91	2.05
Tramo 1	1640	PF 1	5.72	720.79	721.10	721.08	721.14	0.034059	0.96	5.95	44.68	0.84
Tramo 1	1476	PF 1	5.72	718.87	719.01	719.01	719.06	0.051837	1.03	5.54	51.32	1.00
Tramo 1	1312	PF 1	5.72	715.62	715.78	715.80	715.86	0.081285	1.22	4.68	47.12	1.24
Tramo 1	1148	PF 1	5.72	712.51	712.68	712.68	712.74	0.051529	1.11	5.16	42.78	1.02
Tramo 1	984	PF 1	5.72	710.06	710.39	710.25	710.40	0.002910	0.40	14.19	61.99	0.27
Tramo 1	820	PF 1	5.72	709.72	709.97	709.97	710.01	0.051968	0.93	6.18	67.41	0.98
Tramo 1	656	PF 1	5.72	707.79	707.94	707.94	707.99	0.053303	1.03	5.58	53.20	1.01
Tramo 1	492	PF 1	5.72	704.56	704.75	704.76	704.83	0.076222	1.25	4.56	42.11	1.22
Tramo 1	328	PF 1	5.72	701.92	702.13	702.10	702.17	0.026787	0.91	6.31	43.33	0.76
Tramo 1	164	PF 1	5.72	700.06	700.35	700.35	700.43	0.047153	1.24	4.63	30.45	1.01

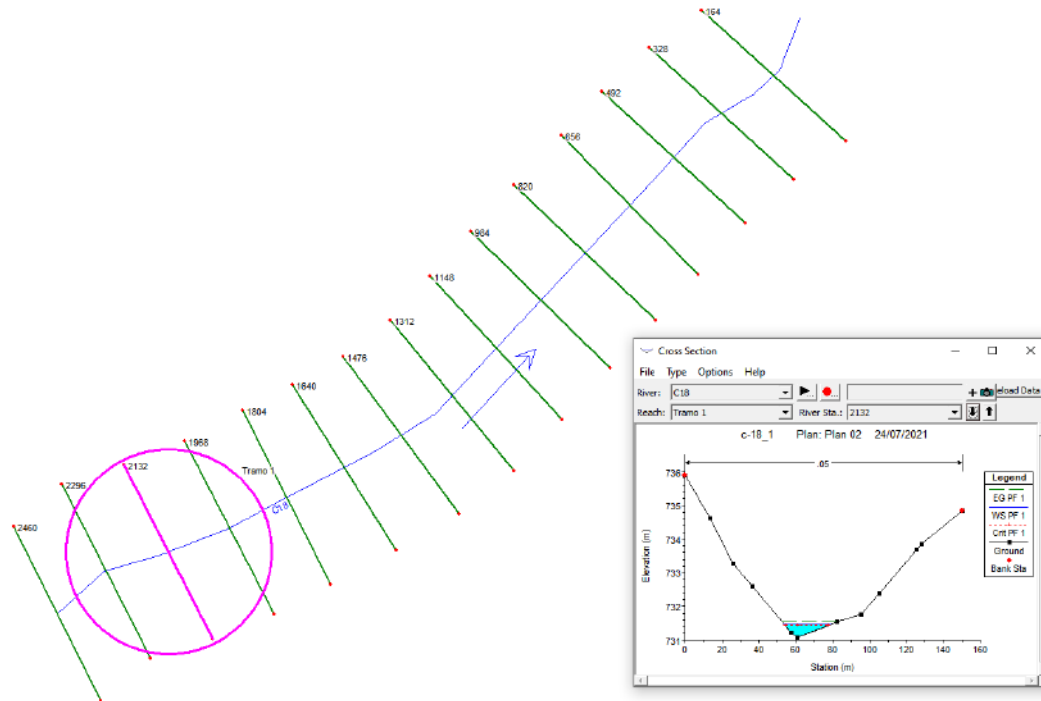




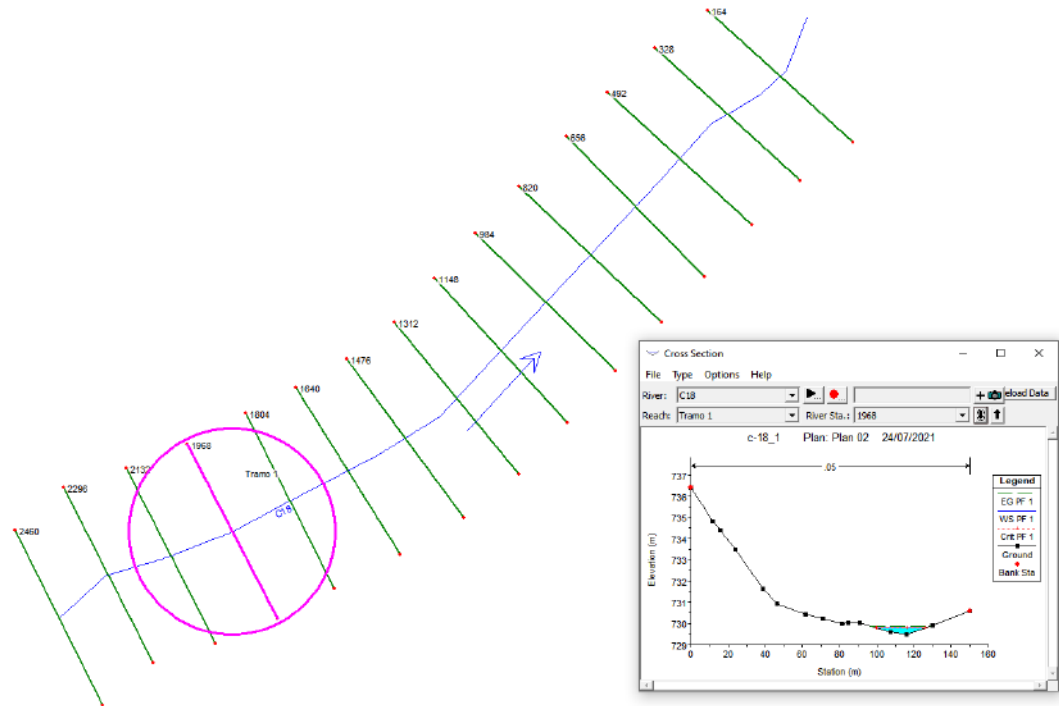
Plan: Plan 02 C18 Tramo 1 RS: 2460 Profile: PF 1					
E.G. Elev (m)	739.44	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	739.38	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	739.38	Flow Area (m2)		4.96	
E.G. Slope (m/m)	0.050252	Area (m2)		4.96	
Q Total (m3/s)	5.72	Flow (m3/s)		5.72	
Top Width (m)	38.04	Top Width (m)		38.04	
Vel Total (m/s)	1.15	Avg. Vel. (m/s)		1.15	
Max Chl Dpth (m)	0.22	Hydr. Depth (m)		0.13	
Conv. Total (m3/s)	25.5	Conv. (m3/s)		25.5	
Length Wtd. (m)	50.00	Wetted Per. (m)		38.04	
Min Ch El (m)	739.15	Shear (N/m2)		64.27	
Alpha	1.00	Stream Power (N/m s)		74.10	
Frctn Loss (m)	4.14	Cum Volume (1000 m3)		3.91	
C & E Loss (m)	0.01	Cum SA (1000 m2)		29.39	



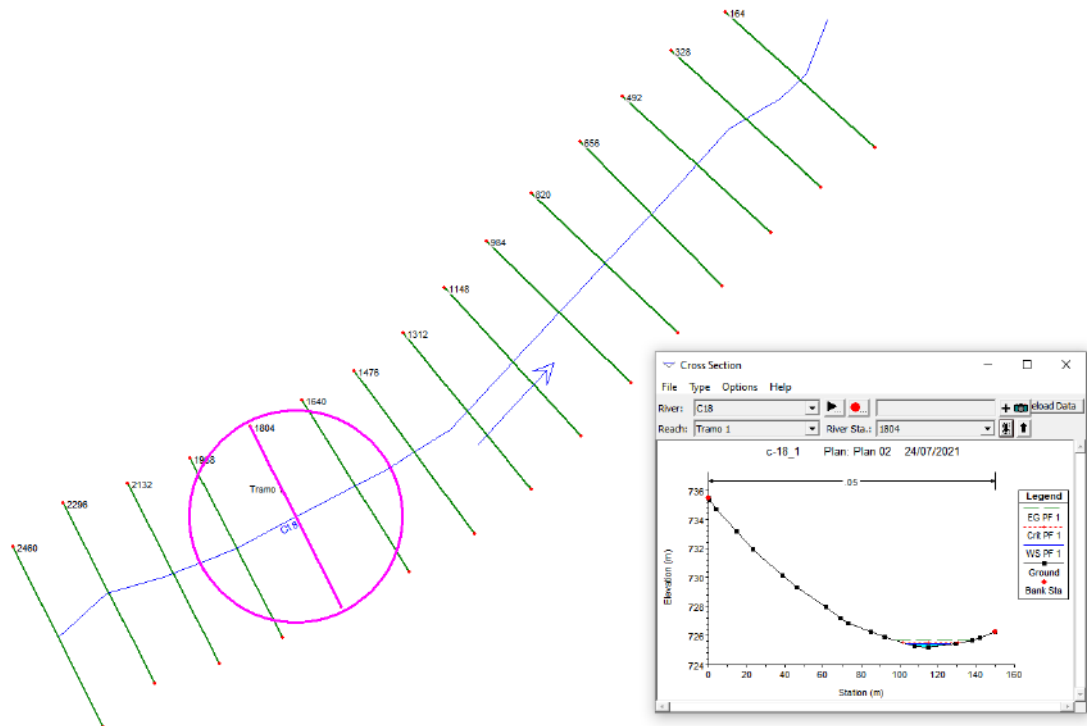
Plan: Plan 02 C18 Tramo 1 RS: 2296 Profile: PF 1					
E.G. Elev (m)	735.29	Element	Left OB	Channel	Right OB
Vel Head (m)	0.19	Wt. n-Val.		0.050	
W.S. Elev (m)	735.10	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	735.16	Flow Area (m2)		2.93	
E.G. Slope (m/m)	0.161059	Area (m2)		2.93	
Q Total (m3/s)	5.72	Flow (m3/s)		5.72	
Top Width (m)	24.48	Top Width (m)		24.48	
Vel Total (m/s)	1.95	Avg. Vel. (m/s)		1.95	
Max Chl Dpth (m)	0.22	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	14.3	Conv. (m3/s)		14.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		24.48	
Min Ch El (m)	734.88	Shear (N/m2)		189.19	
Alpha	1.00	Stream Power (N/m s)		368.99	
Frctn Loss (m)	1.69	Cum Volume (1000 m3)		3.71	
C & E Loss (m)	0.00	Cum SA (1000 m2)		27.82	



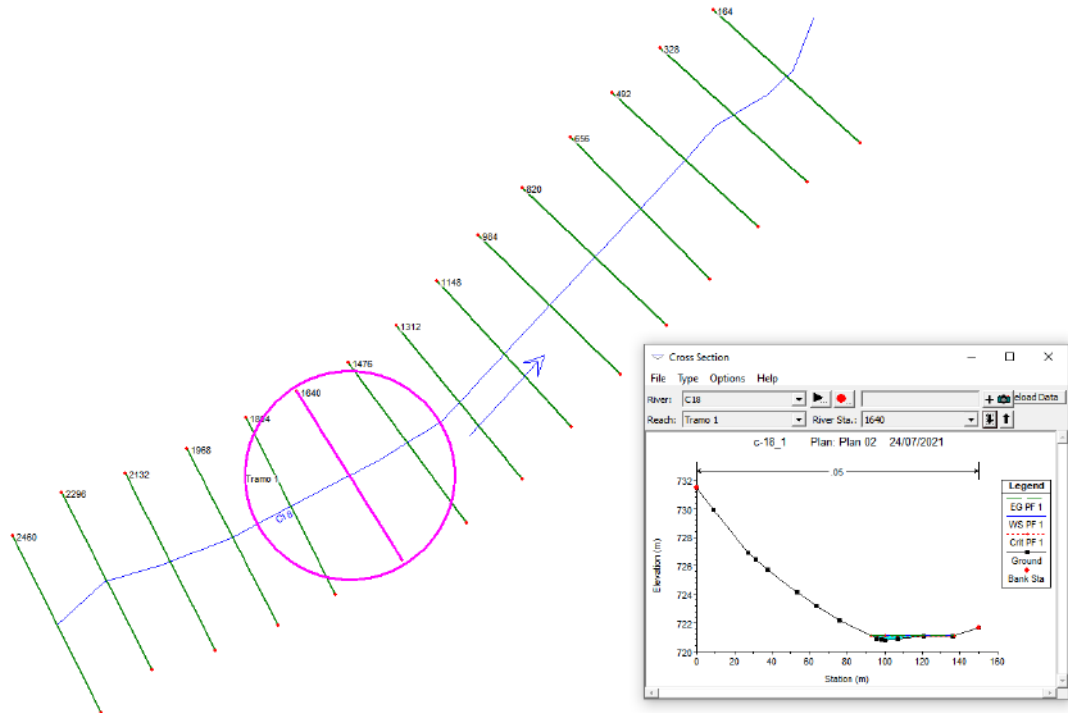
Plan: Plan 02 C18 Tramo 1 RS: 2132 Profile: PF 1					
E.G. Elev (m)	731.54	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	731.48	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	731.44	Flow Area (m2)		5.21	
E.G. Slope (m/m)	0.025351	Area (m2)		5.21	
Q Total (m3/s)	5.72	Flow (m3/s)		5.72	
Top Width (m)	25.76	Top Width (m)		25.76	
Vel Total (m/s)	1.10	Avg. Vel. (m/s)		1.10	
Max Chl Dpth (m)	0.40	Hydr. Depth (m)		0.20	
Conv. Total (m3/s)	35.9	Conv. (m3/s)		35.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		25.77	
Min Ch El (m)	731.08	Shear (N/m2)		50.28	
Alpha	1.00	Stream Power (N/m s)		55.17	
Frctn Loss (m)	1.66	Cum Volume (1000 m3)		3.51	
C & E Loss (m)	0.00	Cum SA (1000 m2)		26.57	



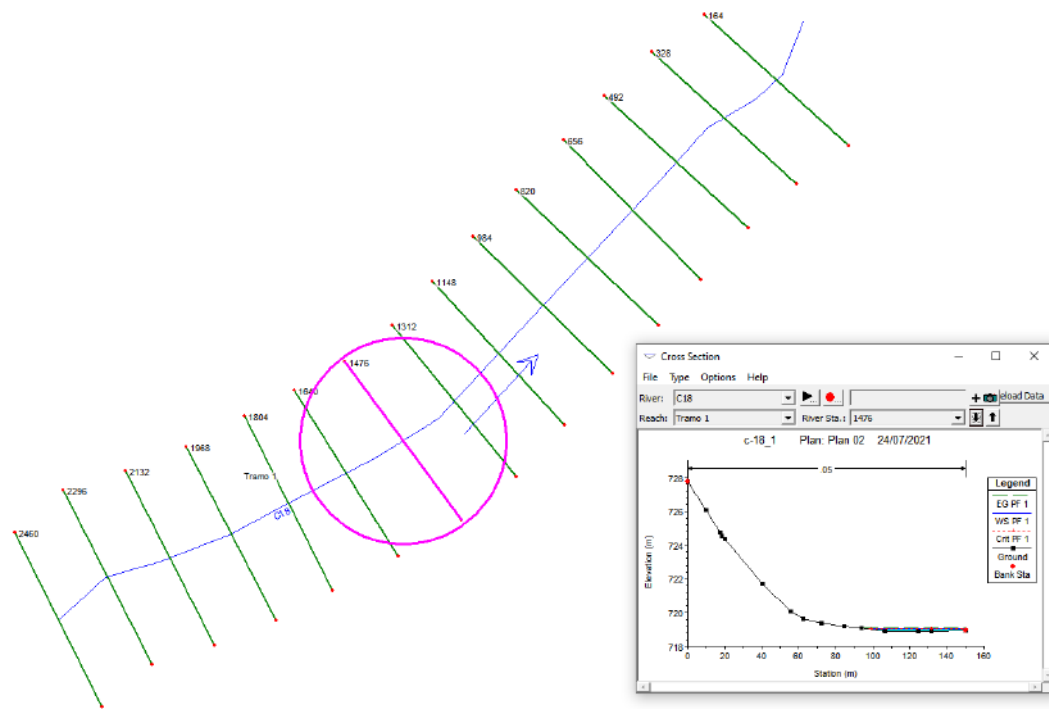
Plan: Plan 02 C18 Tramo 1 RS: 1968 Profile: PF 1					
E.G. Elev (m)	729.88	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	729.79	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	729.79	Flow Area (m2)		4.43	
E.G. Slope (m/m)	0.045172	Area (m2)		4.43	
Q Total (m3/s)	5.72	Flow (m3/s)		5.72	
Top Width (m)	26.42	Top Width (m)		26.42	
Vel Total (m/s)	1.29	Avg. Vel. (m/s)		1.29	
Max Chl Dpth (m)	0.30	Hydr. Depth (m)		0.17	
Conv. Total (m3/s)	26.9	Conv. (m3/s)		26.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		26.42	
Min Ch El (m)	729.49	Shear (N/m2)		74.22	
Alpha	1.00	Stream Power (N/m s)		95.89	
Frctn Loss (m)	4.22	Cum Volume (1000 m3)		3.27	
C & E Loss (m)	0.02	Cum SA (1000 m2)		25.26	



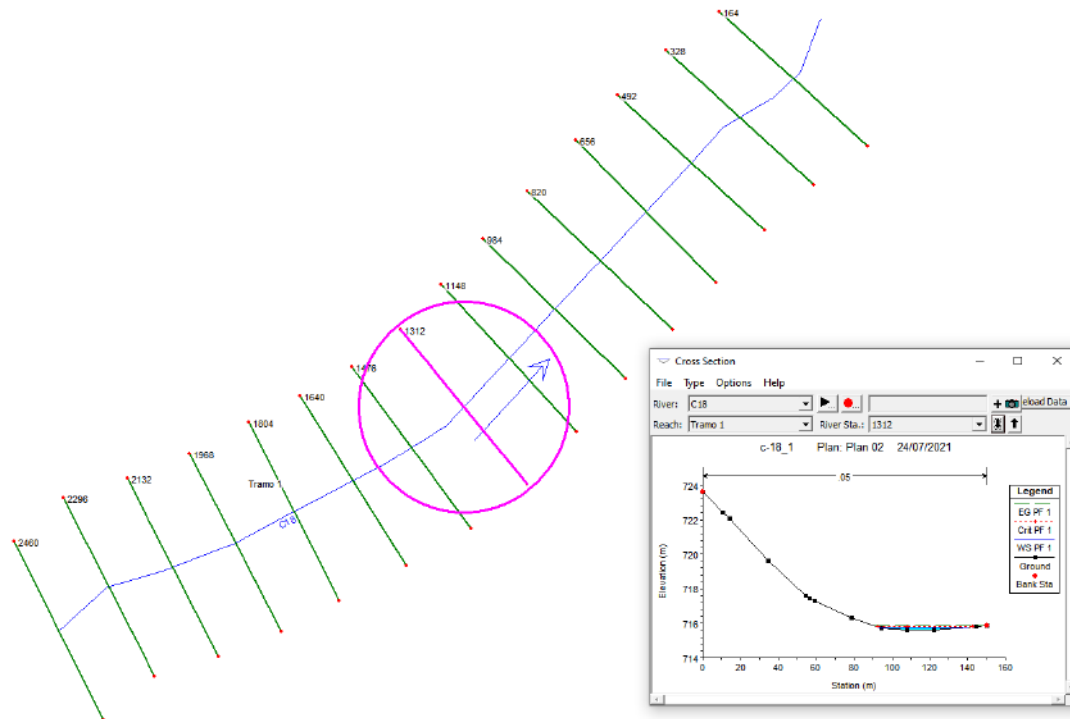
Plan: Plan 02 C18 Tramo 1 RS: 1804 Profile: PF 1					
E.G. Elev (m)	725.64	Element	Left OB	Channel	Right OB
Vel Head (m)	0.24	Wt. n-Val.		0.050	
W.S. Elev (m)	725.40	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	725.47	Flow Area (m2)		2.63	
E.G. Slope (m/m)	0.211084	Area (m2)		2.63	
Q Total (m3/s)	5.72	Flow (m3/s)		5.72	
Top Width (m)	22.91	Top Width (m)		22.91	
Vel Total (m/s)	2.17	Avg. Vel. (m/s)		2.17	
Max Chl Dpth (m)	0.19	Hydr. Depth (m)		0.11	
Conv. Total (m3/s)	12.4	Conv. (m3/s)		12.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		22.91	
Min Ch El (m)	725.21	Shear (N/m2)		237.92	
Alpha	1.00	Stream Power (N/m s)		516.80	
Frctn Loss (m)	1.96	Cum Volume (1000 m3)		3.09	
C & E Loss (m)	0.01	Cum SA (1000 m2)		24.03	



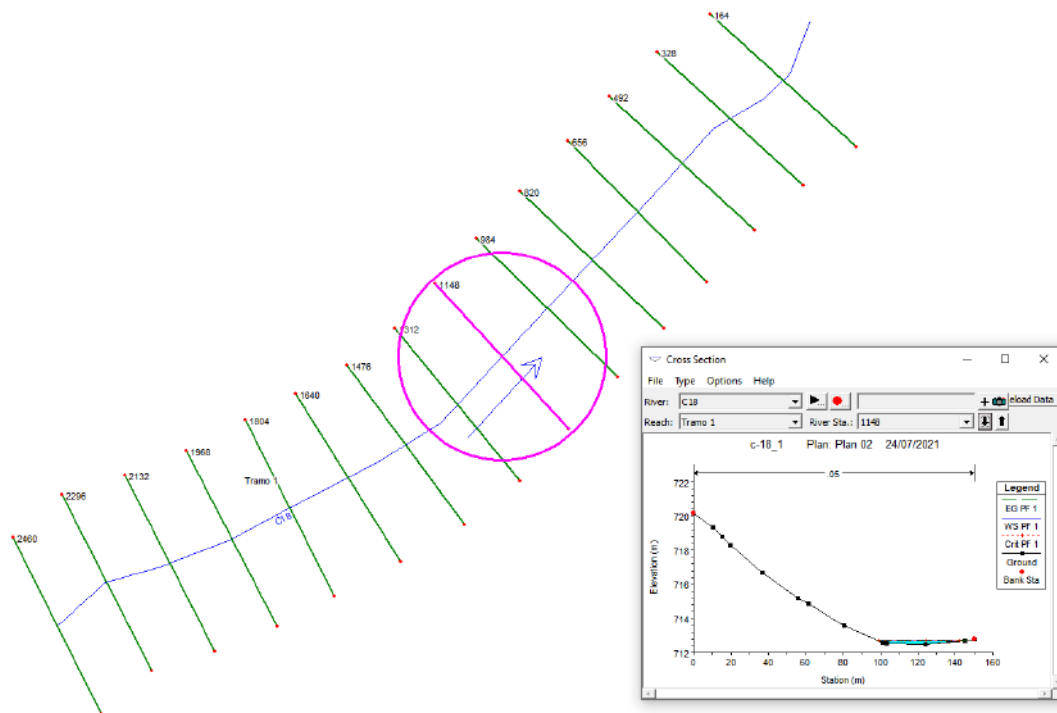
Plan: Plan 02 C18 Tramo 1 RS: 1640 Profile: PF 1					
E.G. Elev (m)	721.14	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	721.10	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	721.08	Flow Area (m2)		5.95	
E.G. Slope (m/m)	0.034059	Area (m2)		5.95	
Q Total (m3/s)	5.72	Flow (m3/s)		5.72	
Top Width (m)	44.68	Top Width (m)		44.68	
Vel Total (m/s)	0.96	Avg. Vel. (m/s)		0.96	
Max Chl Dpth (m)	0.31	Hydr. Depth (m)		0.13	
Conv. Total (m3/s)	31.0	Conv. (m3/s)		31.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		44.69	
Min Ch El (m)	720.79	Shear (N/m2)		44.44	
Alpha	1.00	Stream Power (N/m s)		42.75	
Frctn Loss (m)	2.08	Cum Volume (1000 m3)		2.87	
C & E Loss (m)	0.00	Cum SA (1000 m2)		22.34	



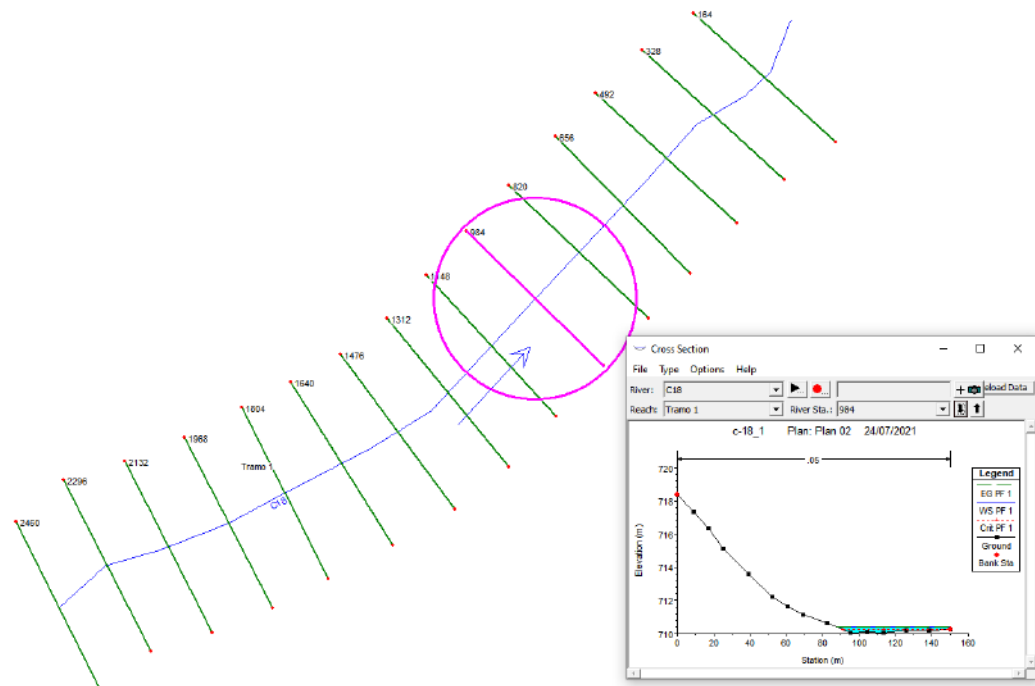
Plan: Plan 02 C18 Tramo 1 RS: 1476 Profile: PF 1					
E.G. Elev (m)	719.06	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	719.01	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	719.01	Flow Area (m2)		5.54	
E.G. Slope (m/m)	0.051837	Area (m2)		5.54	
Q Total (m3/s)	5.72	Flow (m3/s)		5.72	
Top Width (m)	51.32	Top Width (m)		51.32	
Vel Total (m/s)	1.03	Avg. Vel. (m/s)		1.03	
Max Chl Dpth (m)	0.14	Hydr. Depth (m)		0.11	
Conv. Total (m3/s)	25.1	Conv. (m3/s)		25.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		51.38	
Min Ch El (m)	718.87	Shear (N/m2)		54.84	
Alpha	1.00	Stream Power (N/m s)		56.59	
Frctn Loss (m)	3.20	Cum Volume (1000 m3)		2.59	
C & E Loss (m)	0.00	Cum SA (1000 m2)		19.94	



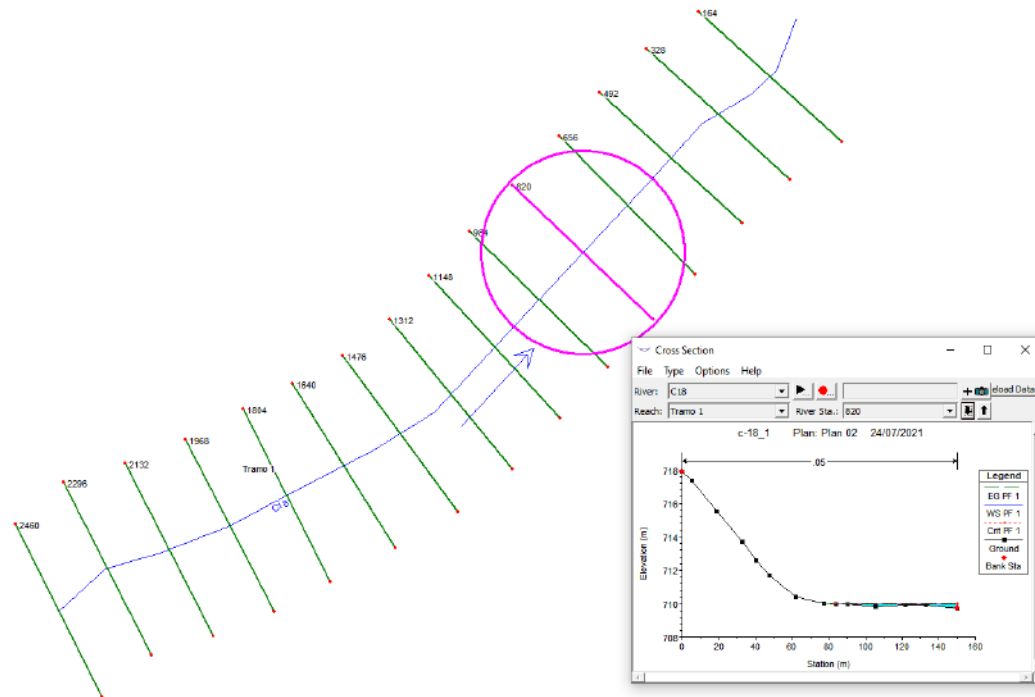
Plan: Plan 02 C18 Tramo 1 RS: 1312 Profile: PF 1					
E.G. Elev (m)	715.86	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	715.78	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	715.80	Flow Area (m2)		4.68	
E.G. Slope (m/m)	0.081285	Area (m2)		4.68	
Q Total (m3/s)	5.72	Flow (m3/s)		5.72	
Top Width (m)	47.12	Top Width (m)		47.12	
Vel Total (m/s)	1.22	Avg. Vel. (m/s)		1.22	
Max Chl Dpth (m)	0.16	Hydr. Depth (m)		0.10	
Conv. Total (m3/s)	20.1	Conv. (m3/s)		20.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		47.12	
Min Ch El (m)	715.62	Shear (N/m2)		79.15	
Alpha	1.00	Stream Power (N/m s)		96.77	
Frctn Loss (m)	2.56	Cum Volume (1000 m3)		2.33	
C & E Loss (m)	0.00	Cum SA (1000 m2)		17.48	



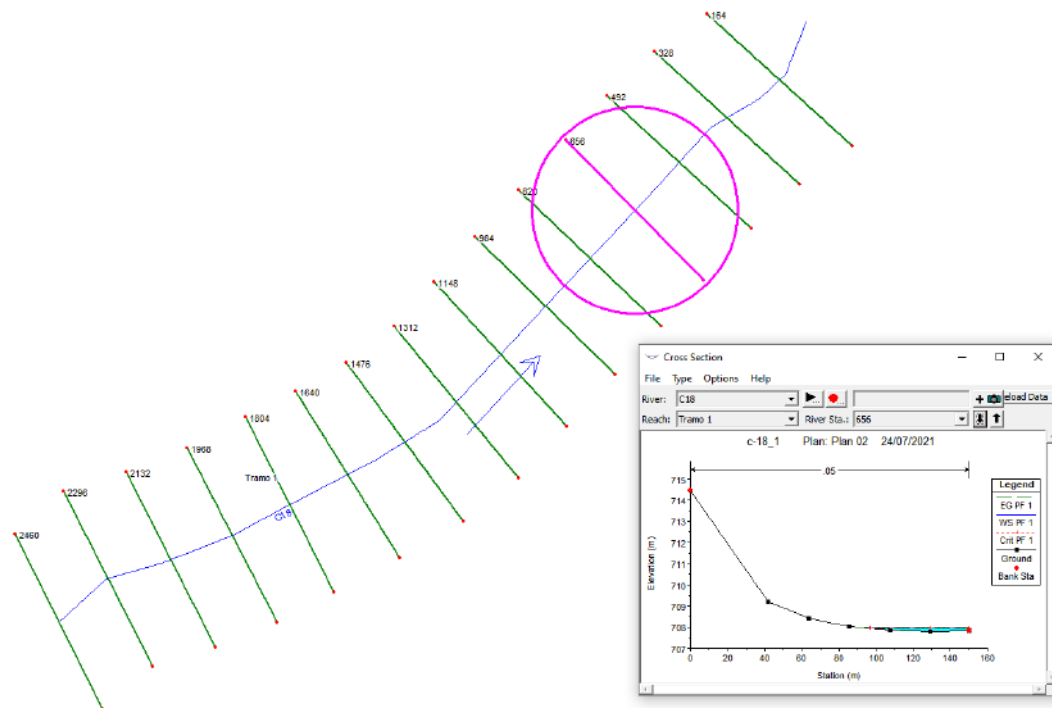
Plan: Plan 02 C18 Tramo 1 RS: 1148 Profile: PF 1					
E.G. Elev (m)	712.74	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	712.68	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	712.68	Flow Area (m2)		5.16	
E.G. Slope (m/m)	0.051529	Area (m2)		5.16	
Q Total (m3/s)	5.72	Flow (m3/s)		5.72	
Top Width (m)	42.78	Top Width (m)		42.78	
Vel Total (m/s)	1.11	Avg. Vel. (m/s)		1.11	
Max Chl Dpth (m)	0.17	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	25.2	Conv. (m3/s)		25.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		42.78	
Min Ch El (m)	712.51	Shear (N/m2)		60.96	
Alpha	1.00	Stream Power (N/m s)		67.57	
Frctn Loss (m)	0.38	Cum Volume (1000 m3)		2.09	
C & E Loss (m)	0.02	Cum SA (1000 m2)		15.23	



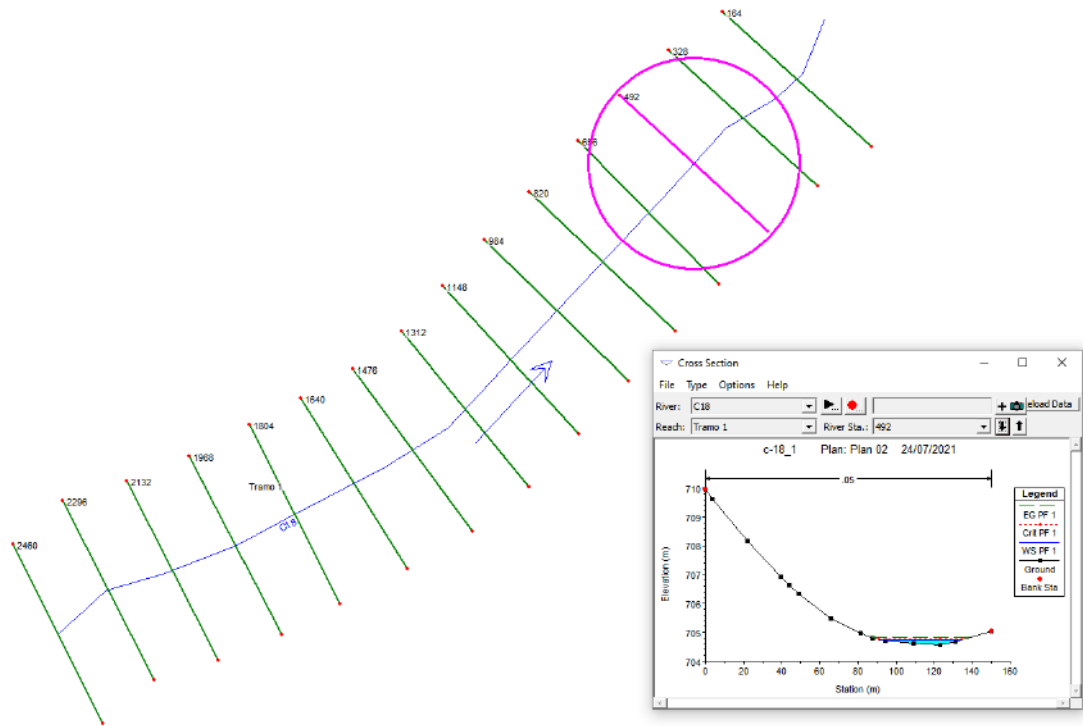
Plan: Plan 02 C18 Tramo 1 RS: 984 Profile: PF 1					
E.G. Elev (m)	710.40	Element	Left OB	Channel	Right OB
Vel Head (m)	0.01	Wt. n-Val.		0.050	
W.S. Elev (m)	710.39	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	710.25	Flow Area (m2)		14.19	
E.G. Slope (m/m)	0.002910	Area (m2)		14.19	
Q Total (m3/s)	5.72	Flow (m3/s)		5.72	
Top Width (m)	61.99	Top Width (m)		61.99	
Vel Total (m/s)	0.40	Avg. Vel. (m/s)		0.40	
Max Chl Dpth (m)	0.33	Hydr. Depth (m)		0.23	
Conv. Total (m3/s)	106.0	Conv. (m3/s)		106.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		62.13	
Min Ch El (m)	710.06	Shear (N/m2)		6.52	
Alpha	1.00	Stream Power (N/m s)		2.63	
Frctn Loss (m)	0.38	Cum Volume (1000 m3)		1.60	
C & E Loss (m)	0.00	Cum SA (1000 m2)		12.61	



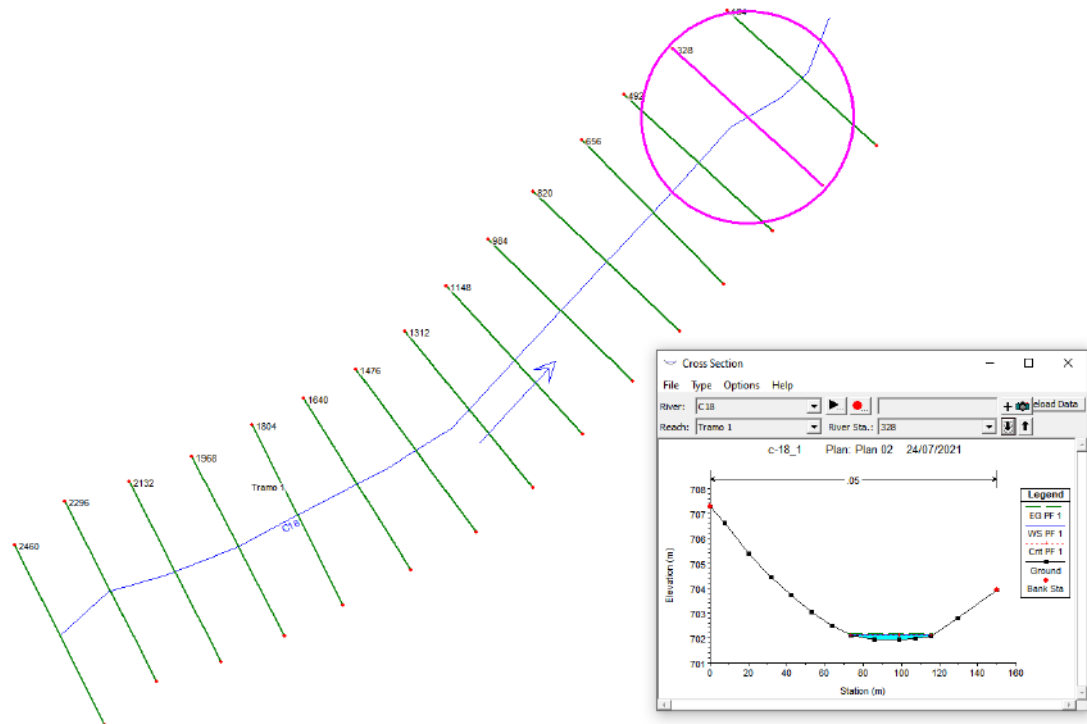
Plan: Plan 02 C18 Tramo 1 RS: 820 Profile: PF 1					
E.G. Elev (m)	710.01	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	709.97	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	709.97	Flow Area (m2)		6.18	
E.G. Slope (m/m)	0.051968	Area (m2)		6.18	
Q Total (m3/s)	5.72	Flow (m3/s)		5.72	
Top Width (m)	67.41	Top Width (m)		67.41	
Vel Total (m/s)	0.93	Avg. Vel. (m/s)		0.93	
Max Chl Dpth (m)	0.25	Hydr. Depth (m)		0.09	
Conv. Total (m3/s)	25.1	Conv. (m3/s)		25.1	
Length Wtd. (m)		Wetted Per. (m)		67.66	
Min Ch El (m)	709.72	Shear (N/m2)		46.57	
Alpha	1.00	Stream Power (N/m s)		43.08	
Frctn Loss (m)		Cum Volume (1000 m3)		1.09	
C & E Loss (m)		Cum SA (1000 m2)		9.38	



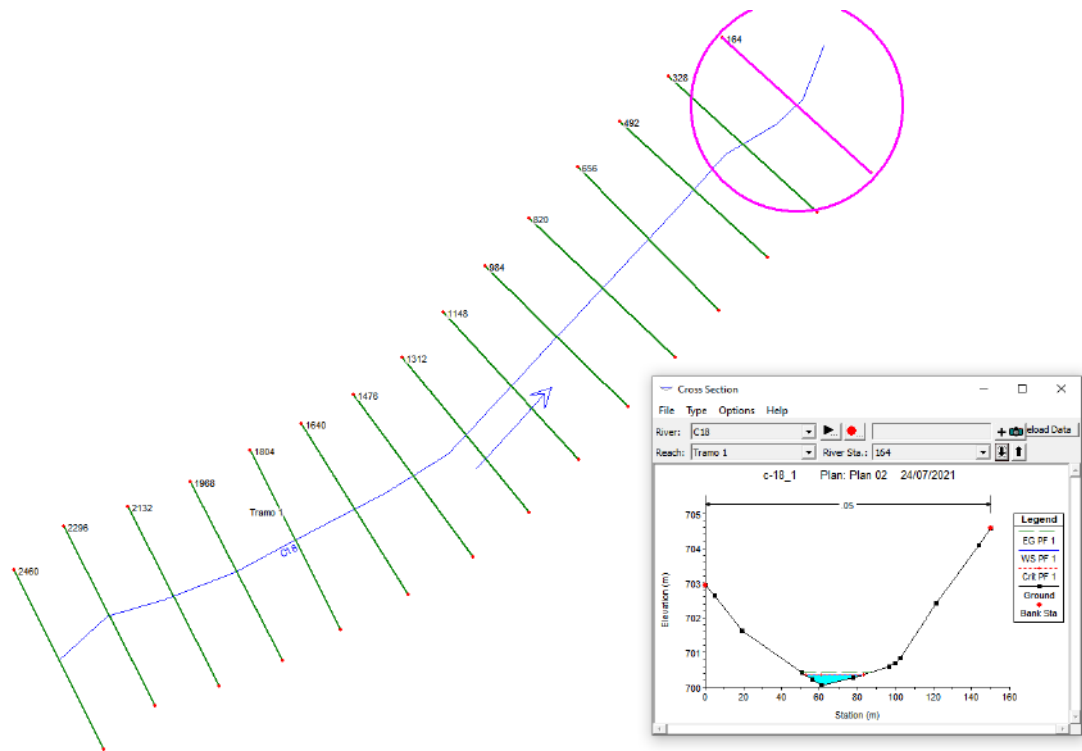
Plan: Plan 02 C18 Tramo 1 RS: 656 Profile: PF 1					
E.G. Elev (m)	707.99	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	707.94	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	707.94	Flow Area (m2)		5.58	
E.G. Slope (m/m)	0.053303	Area (m2)		5.58	
Q Total (m3/s)	5.72	Flow (m3/s)		5.72	
Top Width (m)	53.20	Top Width (m)		53.20	
Vel Total (m/s)	1.03	Avg. Vel. (m/s)		1.03	
Max Chl Dpth (m)	0.15	Hydr. Depth (m)		0.10	
Conv. Total (m3/s)	24.8	Conv. (m3/s)		24.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		53.33	
Min Ch El (m)	707.79	Shear (N/m2)		54.68	
Alpha	1.00	Stream Power (N/m s)		56.06	
Frctn Loss (m)	3.16	Cum Volume (1000 m3)		0.80	
C & E Loss (m)	0.00	Cum SA (1000 m2)		6.36	



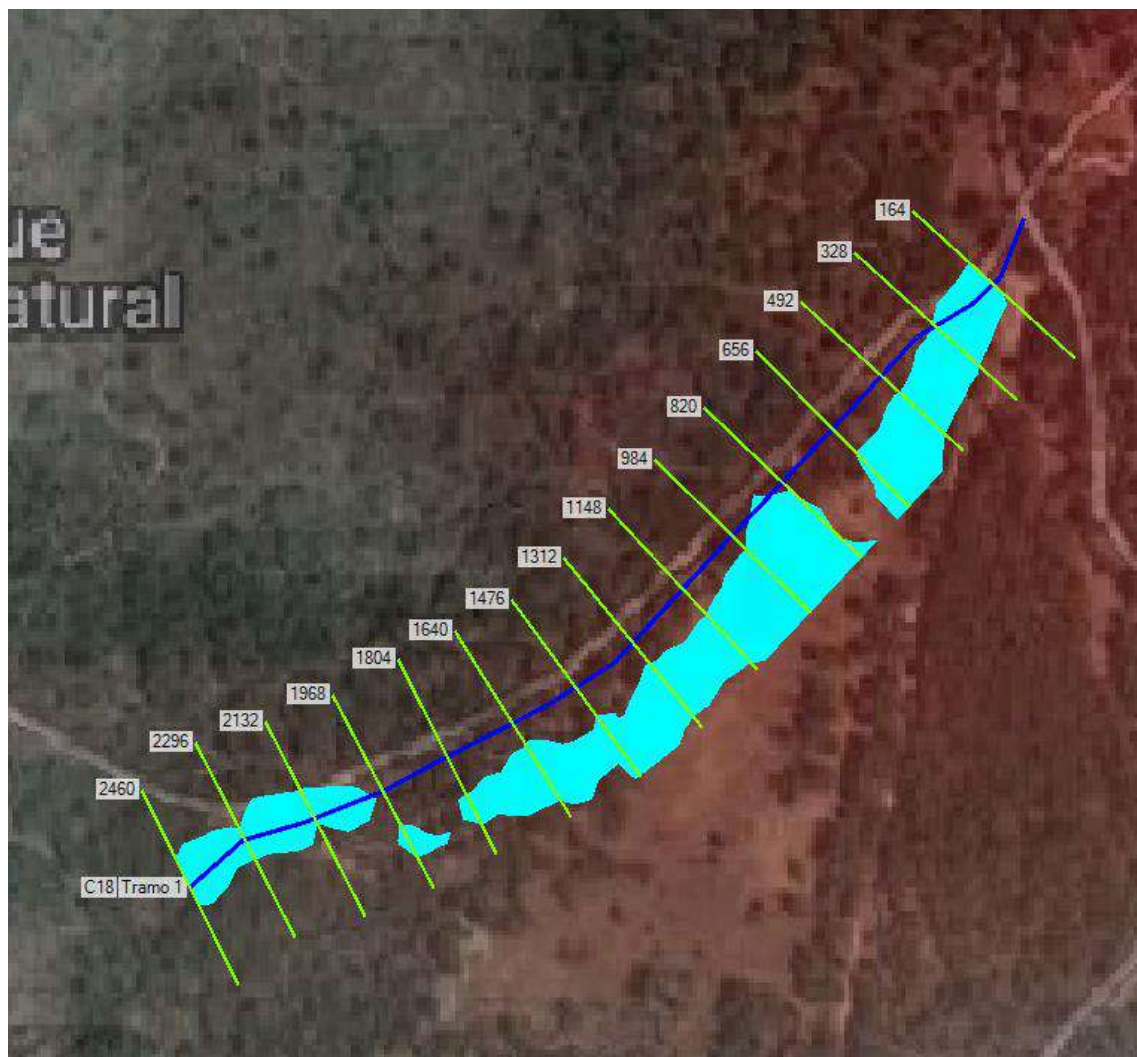
Plan: Plan 02 C18 Tramo 1 RS: 492 Profile: PF 1					
E.G. Elev (m)	704.83	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	704.75	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	704.76	Flow Area (m2)		4.56	
E.G. Slope (m/m)	0.076222	Area (m2)		4.56	
Q Total (m3/s)	5.72	Flow (m3/s)		5.72	
Top Width (m)	42.11	Top Width (m)		42.11	
Vel Total (m/s)	1.25	Avg. Vel. (m/s)		1.25	
Max Chl Dpth (m)	0.19	Hydr. Depth (m)		0.11	
Conv. Total (m3/s)	20.7	Conv. (m3/s)		20.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		42.11	
Min Ch El (m)	704.56	Shear (N/m2)		80.93	
Alpha	1.00	Stream Power (N/m s)		101.52	
Frctn Loss (m)	1.81	Cum Volume (1000 m3)		0.55	
C & E Loss (m)	0.01	Cum SA (1000 m2)		3.98	



Plan: Plan 02 C18 Tramo 1 RS: 328 Profile: PF 1					
E.G. Elev (m)	702.17	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	702.13	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	702.10	Flow Area (m2)		6.31	
E.G. Slope (m/m)	0.026787	Area (m2)		6.31	
Q Total (m3/s)	5.72	Flow (m3/s)		5.72	
Top Width (m)	43.33	Top Width (m)		43.33	
Vel Total (m/s)	0.91	Avg. Vel. (m/s)		0.91	
Max Chl Dpth (m)	0.21	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	34.9	Conv. (m3/s)		34.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		43.33	
Min Ch El (m)	701.92	Shear (N/m2)		38.26	
Alpha	1.00	Stream Power (N/m s)		34.68	
Frctn Loss (m)	1.74	Cum Volume (1000 m3)		0.27	
C & E Loss (m)	0.00	Cum SA (1000 m2)		1.84	

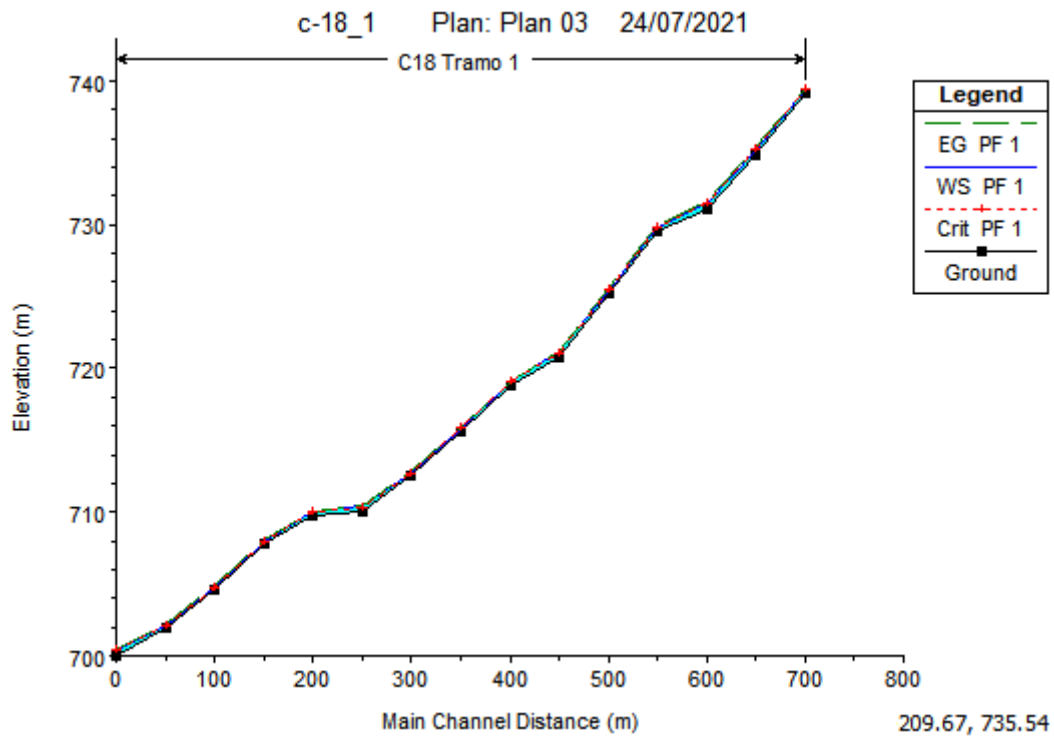


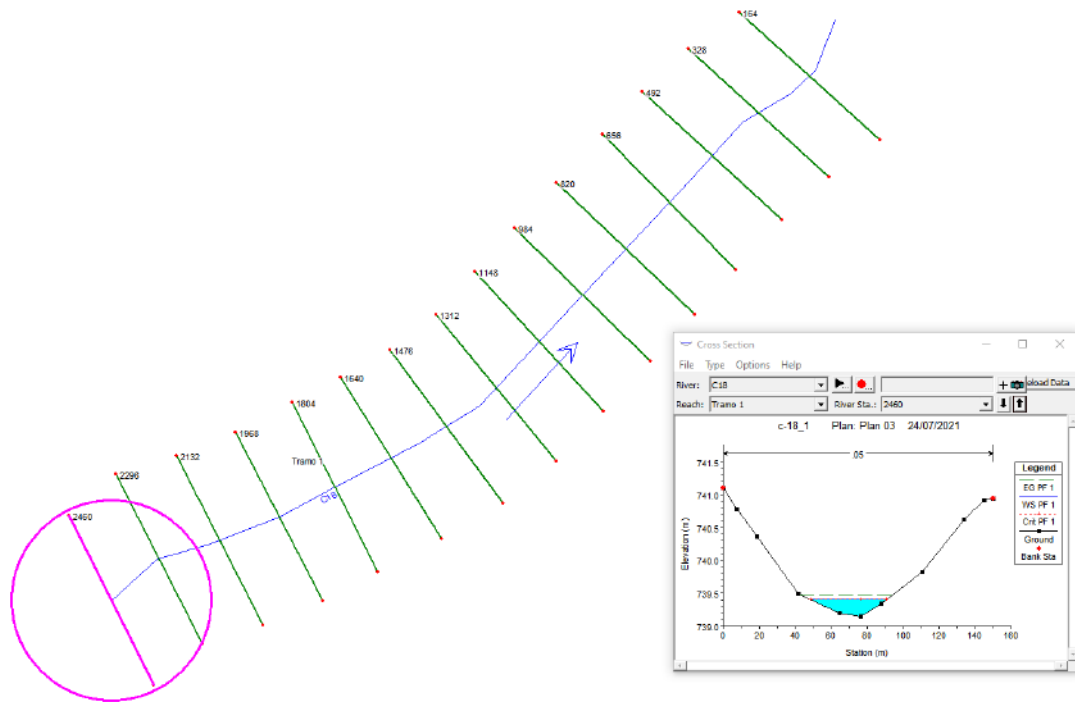
Plan: Plan 02 C18 Tramo 1 RS: 164 Profile: PF 1					
E.G. Elev (m)	700.43	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	700.35	Reach Len. (m)			
Crit W.S. (m)	700.35	Flow Area (m2)		4.63	
E.G. Slope (m/m)	0.047153	Area (m2)		4.63	
Q Total (m3/s)	5.72	Flow (m3/s)		5.72	
Top Width (m)	30.45	Top Width (m)		30.45	
Vel Total (m/s)	1.24	Avg. Vel. (m/s)		1.24	
Max Chl Dpth (m)	0.29	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	26.3	Conv. (m3/s)		26.3	
Length Wtd. (m)		Wetted Per. (m)		30.46	
Min Ch El (m)	700.06	Shear (N/m2)		70.24	
Alpha	1.00	Stream Power (N/m s)		86.85	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			



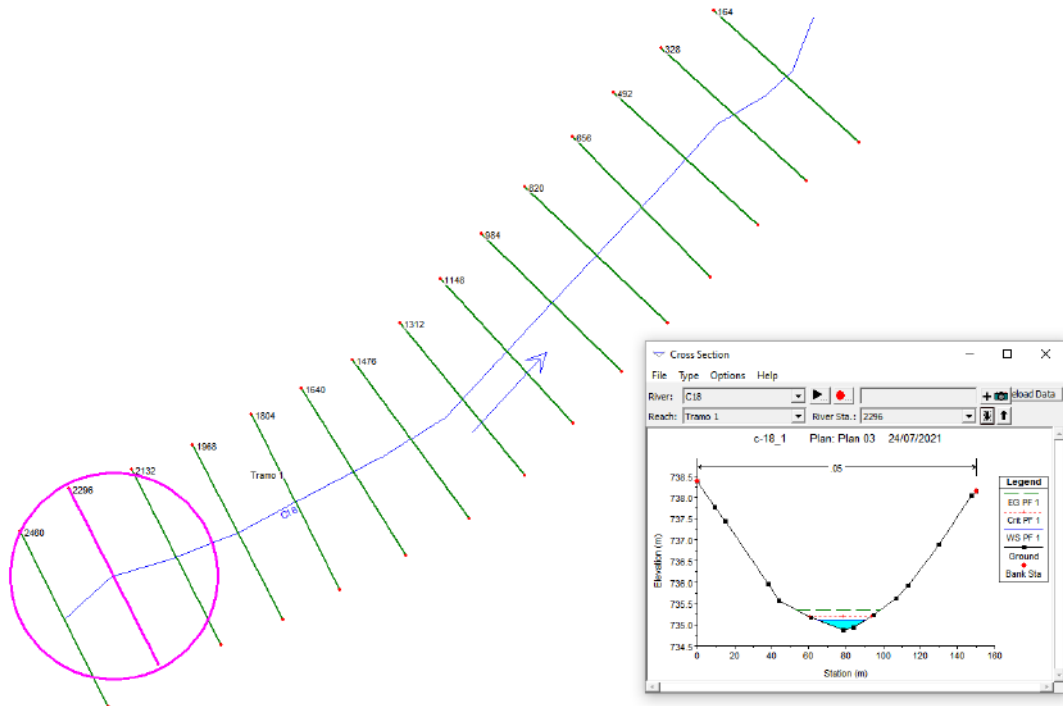
T500 (Q=7.54 m3/s)

HEC-RAS Plan: Plan 03 River: C18 Reach: Tramo 1 Profile: PF 1												
Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Tramo 1	2460	PF 1	7.54	739.15	739.41	739.41	739.48	0.047780	1.22	6.18	41.93	1.01
Tramo 1	2296	PF 1	7.54	734.88	735.12	735.19	735.36	0.173218	2.15	3.50	26.64	1.90
Tramo 1	2132	PF 1	7.54	731.08	731.52	731.48	731.59	0.026001	1.19	6.35	28.40	0.80
Tramo 1	1968	PF 1	7.54	729.49	729.83	729.83	729.93	0.044029	1.38	5.48	29.15	1.01
Tramo 1	1804	PF 1	7.54	725.21	725.42	725.51	725.71	0.225255	2.40	3.15	24.80	2.15
Tramo 1	1640	PF 1	7.54	720.79	721.12	721.10	721.18	0.036097	1.08	6.95	45.54	0.89
Tramo 1	1476	PF 1	7.54	718.87	719.03	719.03	719.10	0.048538	1.12	6.75	52.74	1.00
Tramo 1	1312	PF 1	7.54	715.62	715.80	715.82	715.89	0.088019	1.37	5.52	49.97	1.31
Tramo 1	1148	PF 1	7.54	712.51	712.71	712.71	712.78	0.048187	1.17	6.42	46.35	1.01
Tramo 1	984	PF 1	7.54	710.06	710.42	710.27	710.43	0.003358	0.47	16.12	62.71	0.29
Tramo 1	820	PF 1	7.54	709.72	710.00	709.98	710.04	0.033065	0.87	8.62	72.82	0.81
Tramo 1	656	PF 1	7.54	707.79	707.96	707.96	708.02	0.050412	1.10	6.88	56.86	1.01
Tramo 1	492	PF 1	7.54	704.56	704.76	704.79	704.86	0.081286	1.40	5.40	44.52	1.28
Tramo 1	328	PF 1	7.54	701.92	702.15	702.13	702.20	0.027632	1.01	7.46	44.54	0.79
Tramo 1	164	PF 1	7.54	700.06	700.38	700.38	700.47	0.044752	1.31	5.76	33.52	1.01

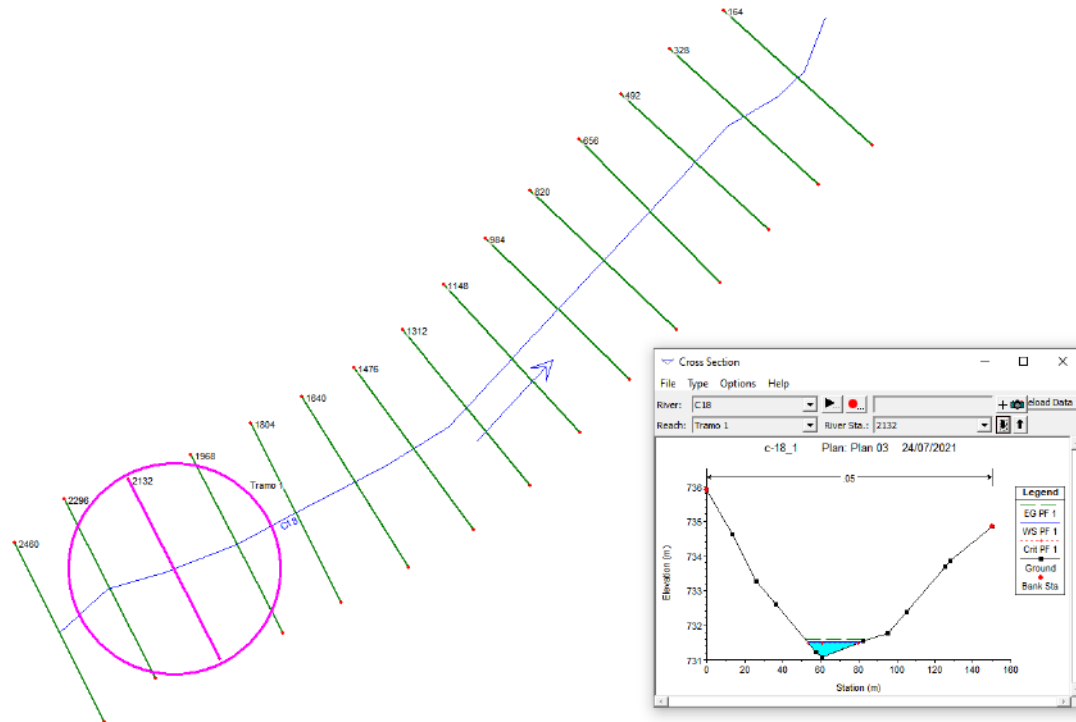




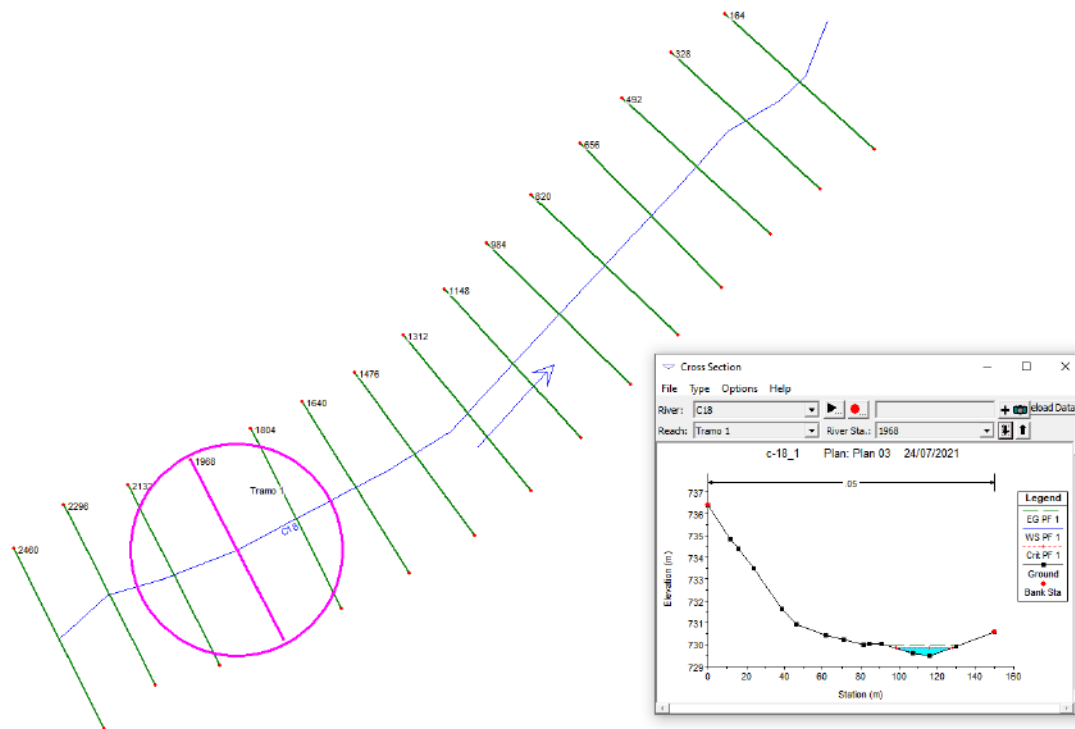
Plan: Plan 03 C18 Tramo 1 RS: 2460 Profile: PF 1					
E.G. Elev (m)	739.48	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	739.41	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	739.41	Flow Area (m2)		6.18	
E.G. Slope (m/m)	0.047780	Area (m2)		6.18	
Q Total (m3/s)	7.54	Flow (m3/s)		7.54	
Top Width (m)	41.93	Top Width (m)		41.93	
Vel Total (m/s)	1.22	Avg. Vel. (m/s)		1.22	
Max Chl Dpth (m)	0.26	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	34.5	Conv. (m3/s)		34.5	
Length Wtd. (m)	50.00	Wetted Per. (m)		41.93	
Min Ch El (m)	739.15	Shear (N/m2)		69.07	
Alpha	1.00	Stream Power (N/m s)		84.26	
Frctn Loss (m)	4.11	Cum Volume (1000 m3)		4.73	
C & E Loss (m)	0.02	Cum SA (1000 m2)		31.14	



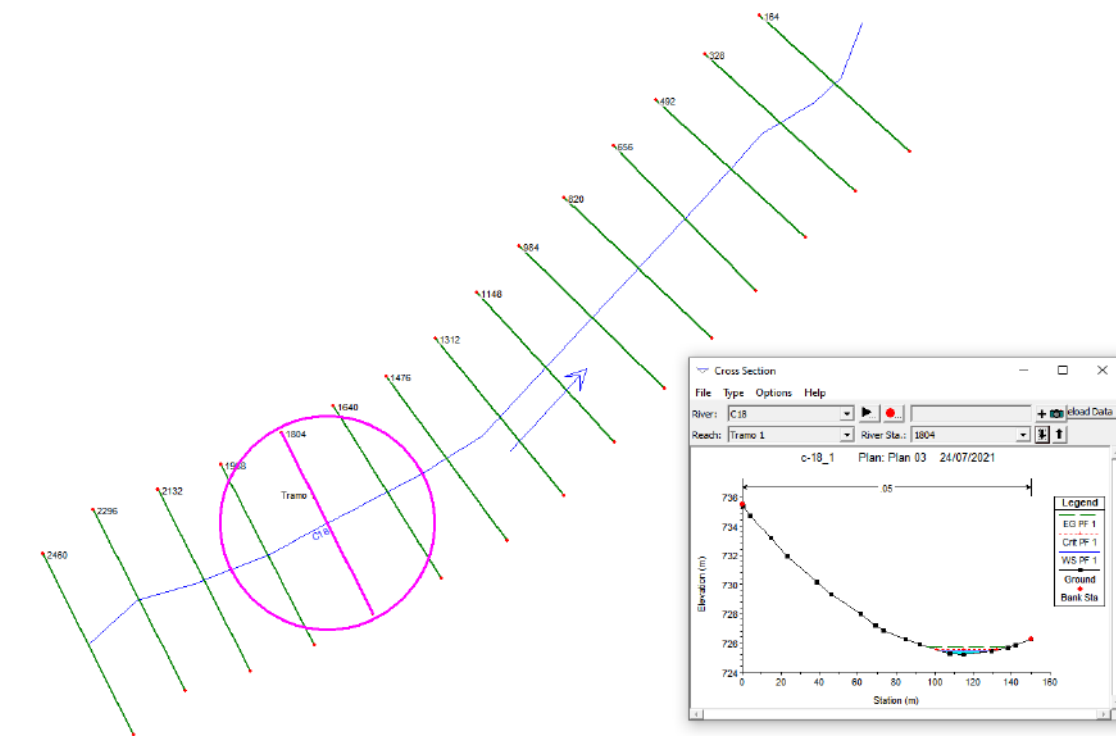
Plan: Plan 03 C18 Tramo 1 RS: 2296 Profile: PF 1					
E.G. Elev (m)	735.36	Element	Left OB	Channel	Right OB
Vel Head (m)	0.24	Wt. n-Val.		0.050	
W.S. Elev (m)	735.12	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	735.19	Flow Area (m2)		3.50	
E.G. Slope (m/m)	0.173218	Area (m2)		3.50	
Q Total (m3/s)	7.54	Flow (m3/s)		7.54	
Top Width (m)	26.64	Top Width (m)		26.64	
Vel Total (m/s)	2.15	Avg. Vel. (m/s)		2.15	
Max Chl Dpth (m)	0.24	Hydr. Depth (m)		0.13	
Conv. Total (m3/s)	18.1	Conv. (m3/s)		18.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		26.65	
Min Ch El (m)	734.88	Shear (N/m2)		223.33	
Alpha	1.00	Stream Power (N/m s)		480.65	
Frctn Loss (m)	1.68	Cum Volume (1000 m3)		4.49	
C & E Loss (m)	0.00	Cum SA (1000 m2)		29.42	



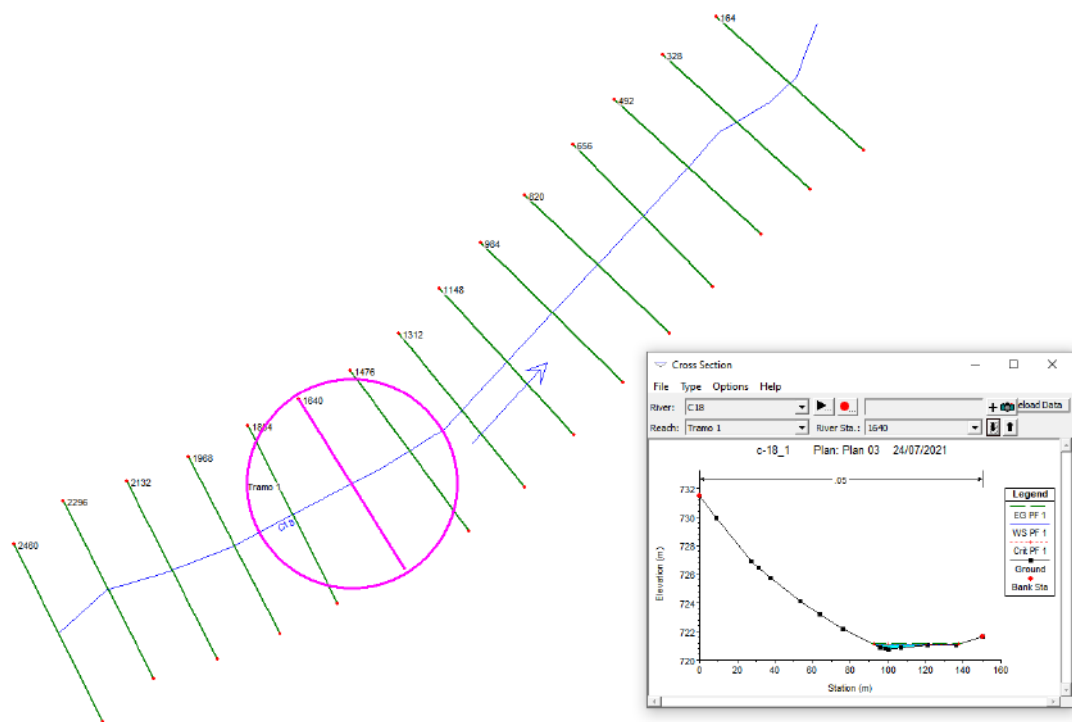
Plan: Plan 03 C18 Tramo 1 RS: 2132 Profile: PF 1					
E.G. Elev (m)	731.59	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	731.52	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	731.48	Flow Area (m2)		6.35	
E.G. Slope (m/m)	0.026001	Area (m2)		6.35	
Q Total (m3/s)	7.54	Flow (m3/s)		7.54	
Top Width (m)	28.40	Top Width (m)		28.40	
Vel Total (m/s)	1.19	Avg. Vel. (m/s)		1.19	
Max Chl Dpth (m)	0.44	Hydr. Depth (m)		0.22	
Conv. Total (m3/s)	46.8	Conv. (m3/s)		46.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		28.42	
Min Ch El (m)	731.08	Shear (N/m2)		56.97	
Alpha	1.00	Stream Power (N/m s)		67.66	
Frctn Loss (m)	1.66	Cum Volume (1000 m3)		4.24	
C & E Loss (m)	0.00	Cum SA (1000 m2)		28.05	



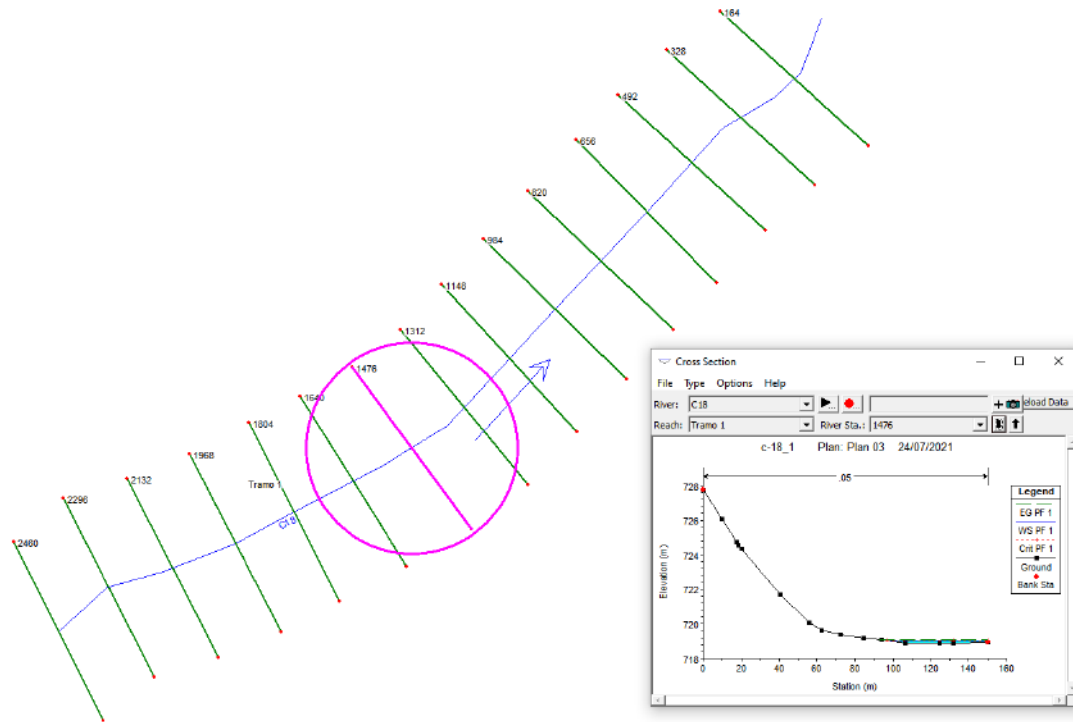
Plan: Plan 03 C18 Tramo 1 RS: 1968 Profile: PF 1					
E.G. Elev (m)	729.93	Element	Left OB	Channel	Right OB
Vel Head (m)	0.10	Wt. n-Val.		0.050	
W.S. Elev (m)	729.83	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	729.83	Flow Area (m2)		5.48	
E.G. Slope (m/m)	0.044029	Area (m2)		5.48	
Q Total (m3/s)	7.54	Flow (m3/s)		7.54	
Top Width (m)	29.15	Top Width (m)		29.15	
Vel Total (m/s)	1.38	Avg. Vel. (m/s)		1.38	
Max Chl Dpth (m)	0.34	Hydr. Depth (m)		0.19	
Conv. Total (m3/s)	35.9	Conv. (m3/s)		35.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		29.16	
Min Ch El (m)	729.49	Shear (N/m2)		81.11	
Alpha	1.00	Stream Power (N/m s)		111.64	
Frctn Loss (m)	4.19	Cum Volume (1000 m3)		3.94	
C & E Loss (m)	0.02	Cum SA (1000 m2)		26.61	



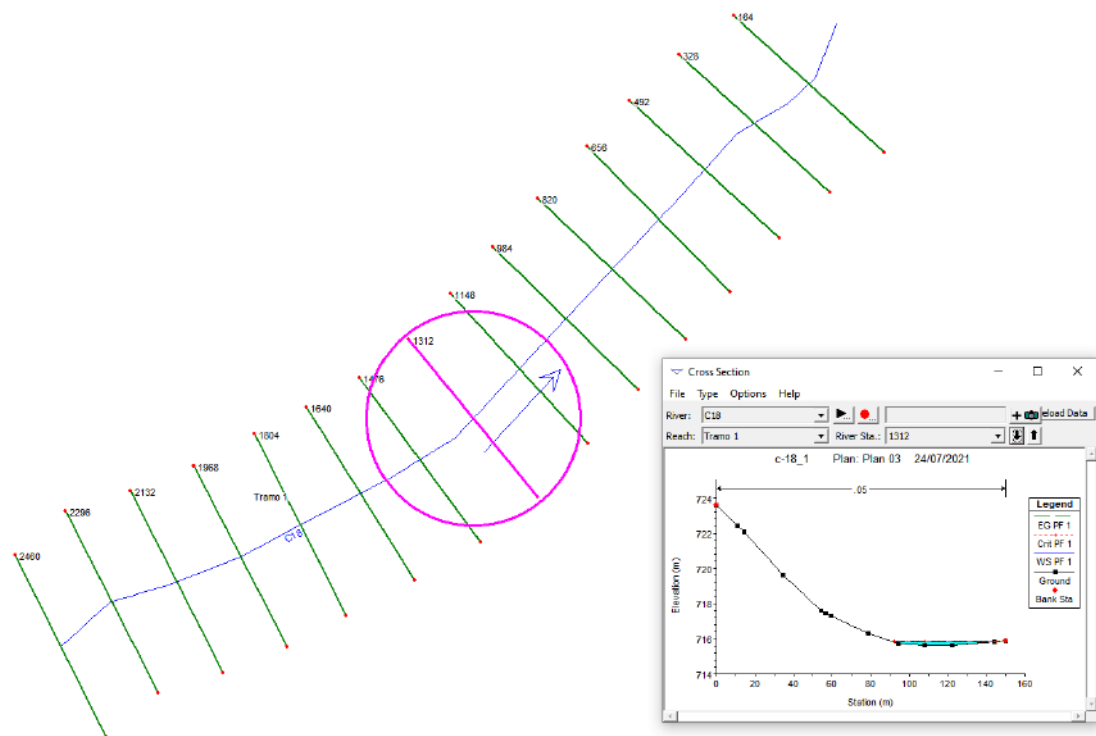
Plan: Plan 03 C18 Tramo 1 RS: 1804 Profile: PF 1					
E.G. Elev (m)	725.71	Element	Left OB	Channel	Right OB
Vel Head (m)	0.29	Wt. n-Val.		0.050	
W.S. Elev (m)	725.42	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	725.51	Flow Area (m2)		3.15	
E.G. Slope (m/m)	0.225255	Area (m2)		3.15	
Q Total (m3/s)	7.54	Flow (m3/s)		7.54	
Top Width (m)	24.80	Top Width (m)		24.80	
Vel Total (m/s)	2.40	Avg. Vel. (m/s)		2.40	
Max Chl Dpth (m)	0.21	Hydr. Depth (m)		0.13	
Conv. Total (m3/s)	15.9	Conv. (m3/s)		15.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		24.80	
Min Ch El (m)	725.21	Shear (N/m2)		280.23	
Alpha	1.00	Stream Power (N/m s)		671.57	
Frctn Loss (m)	1.99	Cum Volume (1000 m3)		3.73	
C & E Loss (m)	0.01	Cum SA (1000 m2)		25.26	



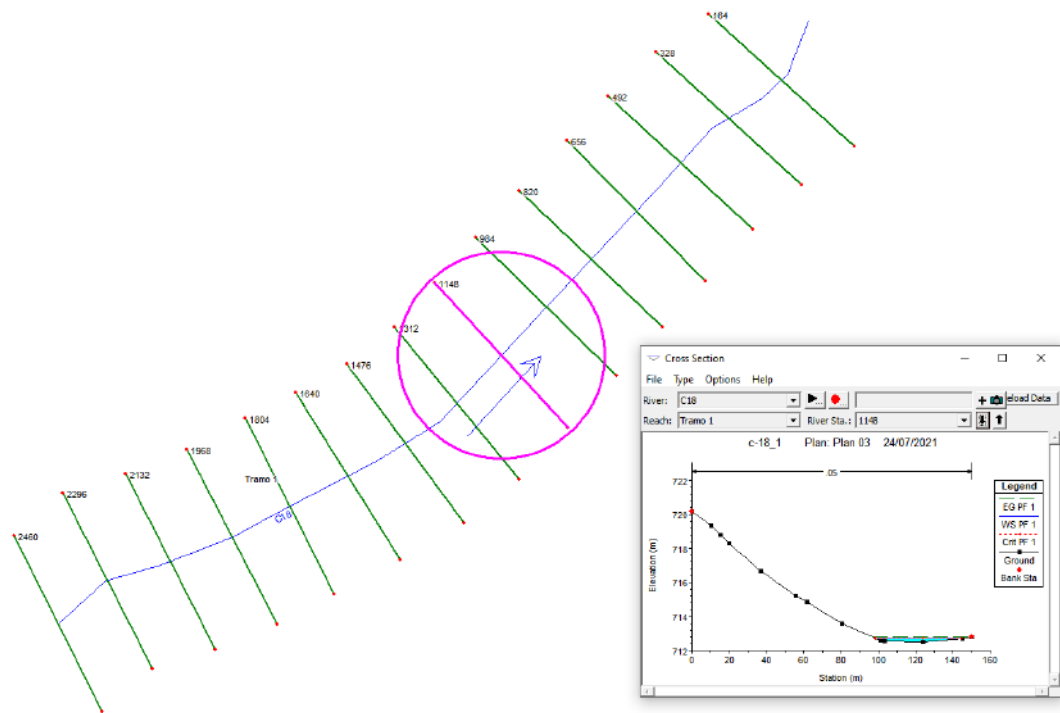
Plan: Plan 03 C18 Tramo 1 RS: 1640 Profile: PF 1					
E.G. Elev (m)	721.18	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	721.12	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	721.10	Flow Area (m2)		6.95	
E.G. Slope (m/m)	0.036097	Area (m2)		6.95	
Q Total (m3/s)	7.54	Flow (m3/s)		7.54	
Top Width (m)	45.54	Top Width (m)		45.54	
Vel Total (m/s)	1.08	Avg. Vel. (m/s)		1.08	
Max Chl Dpth (m)	0.33	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	39.7	Conv. (m3/s)		39.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		45.55	
Min Ch El (m)	720.79	Shear (N/m2)		54.01	
Alpha	1.00	Stream Power (N/m s)		58.59	
Frctn Loss (m)	2.08	Cum Volume (1000 m3)		3.48	
C & E Loss (m)	0.00	Cum SA (1000 m2)		23.50	



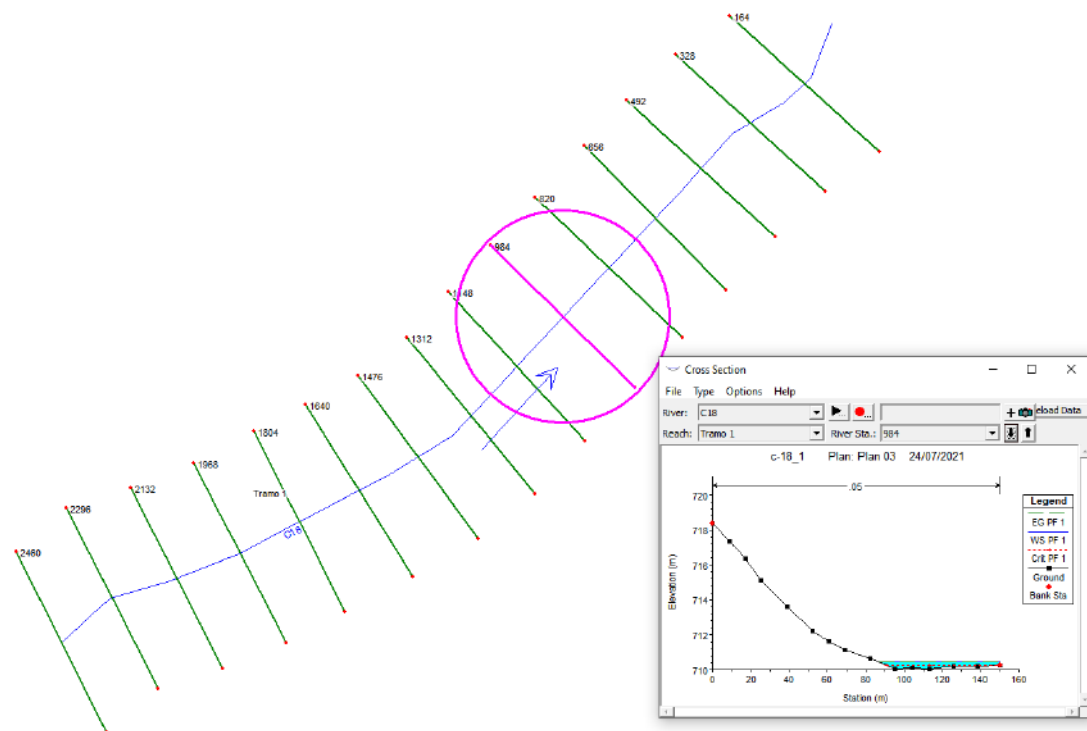
Plan: Plan 03 C18 Tramo 1 RS: 1476 Profile: PF 1					
E.G. Elev (m)	719.10	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	719.03	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	719.03	Flow Area (m2)		6.75	
E.G. Slope (m/m)	0.048538	Area (m2)		6.75	
Q Total (m3/s)	7.54	Flow (m3/s)		7.54	
Top Width (m)	52.74	Top Width (m)		52.74	
Vel Total (m/s)	1.12	Avg. Vel. (m/s)		1.12	
Max Chl Dpth (m)	0.16	Hydr. Depth (m)		0.13	
Conv. Total (m3/s)	34.2	Conv. (m3/s)		34.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		52.82	
Min Ch El (m)	718.87	Shear (N/m2)		60.80	
Alpha	1.00	Stream Power (N/m s)		67.94	
Frctn Loss (m)	3.20	Cum Volume (1000 m3)		3.13	
C & E Loss (m)	0.00	Cum SA (1000 m2)		21.04	



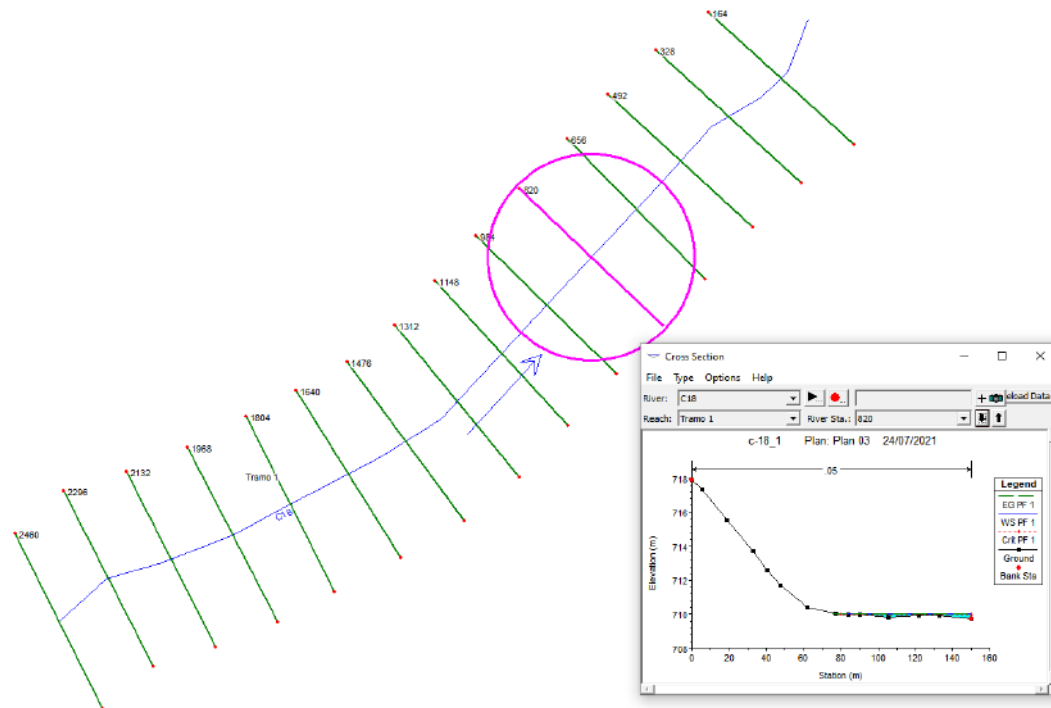
Plan: Plan 03 C18 Tramo 1 RS: 1312 Profile: PF 1					
E.G. Elev (m)	715.89	Element	Left OB	Channel	Right OB
Vel Head (m)	0.10	Wt. n-Val.		0.050	
W.S. Elev (m)	715.80	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	715.82	Flow Area (m2)		5.52	
E.G. Slope (m/m)	0.088019	Area (m2)		5.52	
Q Total (m3/s)	7.54	Flow (m3/s)		7.54	
Top Width (m)	49.97	Top Width (m)		49.97	
Vel Total (m/s)	1.37	Avg. Vel. (m/s)		1.37	
Max Chl Dpth (m)	0.18	Hydr. Depth (m)		0.11	
Conv. Total (m3/s)	25.4	Conv. (m3/s)		25.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		49.98	
Min Ch El (m)	715.62	Shear (N/m2)		95.34	
Alpha	1.00	Stream Power (N/m s)		130.22	
Frctn Loss (m)	2.45	Cum Volume (1000 m3)		2.83	
C & E Loss (m)	0.00	Cum SA (1000 m2)		18.48	



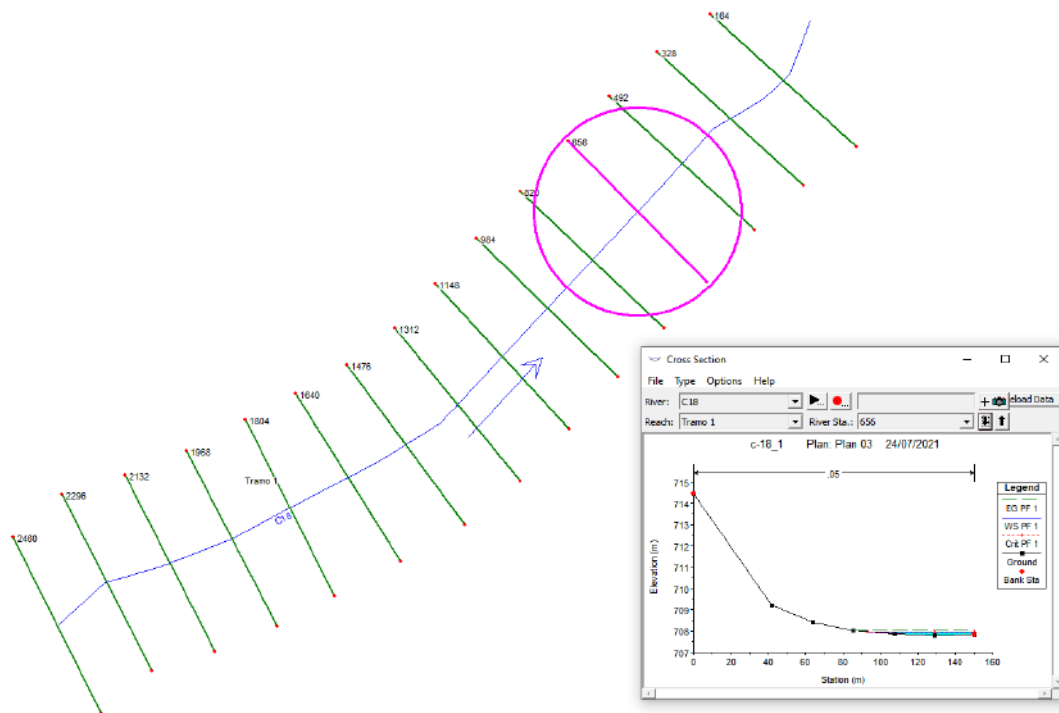
Plan: Plan 03 C18 Tramo 1 RS: 1148 Profile: PF 1					
E.G. Elev (m)	712.78	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	712.71	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	712.71	Flow Area (m2)		6.42	
E.G. Slope (m/m)	0.048187	Area (m2)		6.42	
Q Total (m3/s)	7.54	Flow (m3/s)		7.54	
Top Width (m)	46.35	Top Width (m)		46.35	
Vel Total (m/s)	1.17	Avg. Vel. (m/s)		1.17	
Max Chl Dpth (m)	0.20	Hydr. Depth (m)		0.14	
Conv. Total (m3/s)	34.3	Conv. (m3/s)		34.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		46.35	
Min Ch El (m)	712.51	Shear (N/m2)		65.42	
Alpha	1.00	Stream Power (N/m s)		76.87	
Frctn Loss (m)	0.42	Cum Volume (1000 m3)		2.53	
C & E Loss (m)	0.02	Cum SA (1000 m2)		16.07	



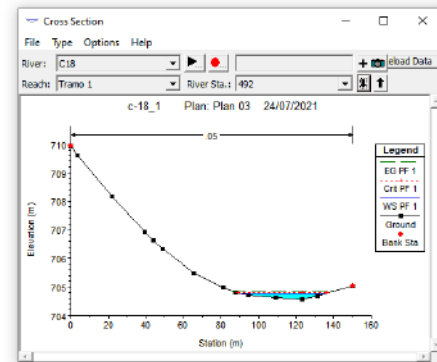
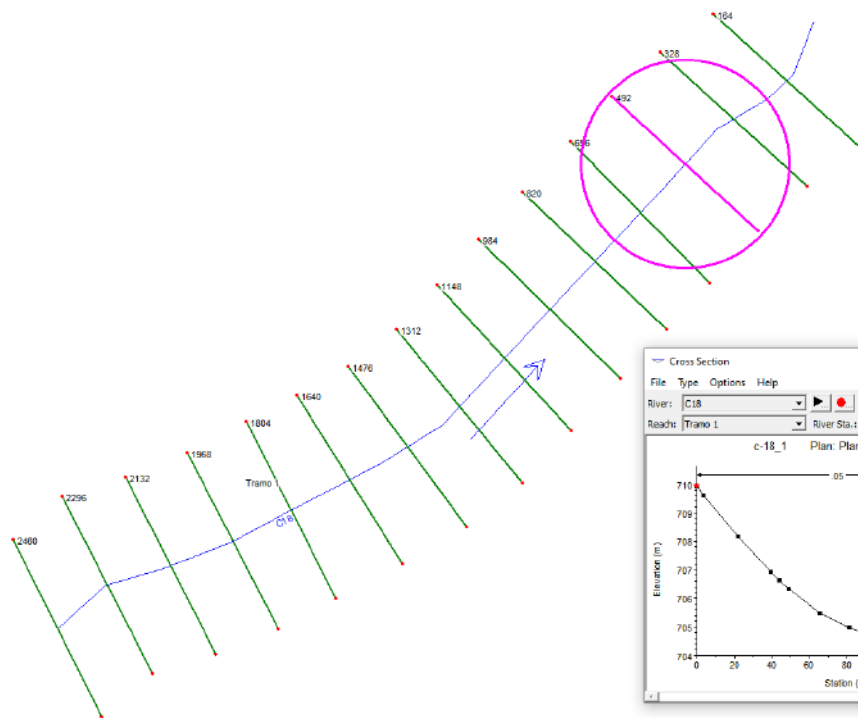
Plan: Plan 03 C18 Tramo 1 RS: 984 Profile: PF 1					
E.G. Elev (m)	710.43	Element	Left OB	Channel	Right OB
Vel Head (m)	0.01	Wt. n-Val.		0.050	
W.S. Elev (m)	710.42	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	710.27	Flow Area (m2)		16.12	
E.G. Slope (m/m)	0.003358	Area (m2)		16.12	
Q Total (m3/s)	7.54	Flow (m3/s)		7.54	
Top Width (m)	62.71	Top Width (m)		62.71	
Vel Total (m/s)	0.47	Avg. Vel. (m/s)		0.47	
Max Chl Dpth (m)	0.36	Hydr. Depth (m)		0.26	
Conv. Total (m3/s)	130.1	Conv. (m3/s)		130.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		62.88	
Min Ch El (m)	710.06	Shear (N/m2)		8.44	
Alpha	1.00	Stream Power (N/m s)		3.95	
Frctn Loss (m)	0.39	Cum Volume (1000 m3)		1.97	
C & E Loss (m)	0.00	Cum SA (1000 m2)		13.34	



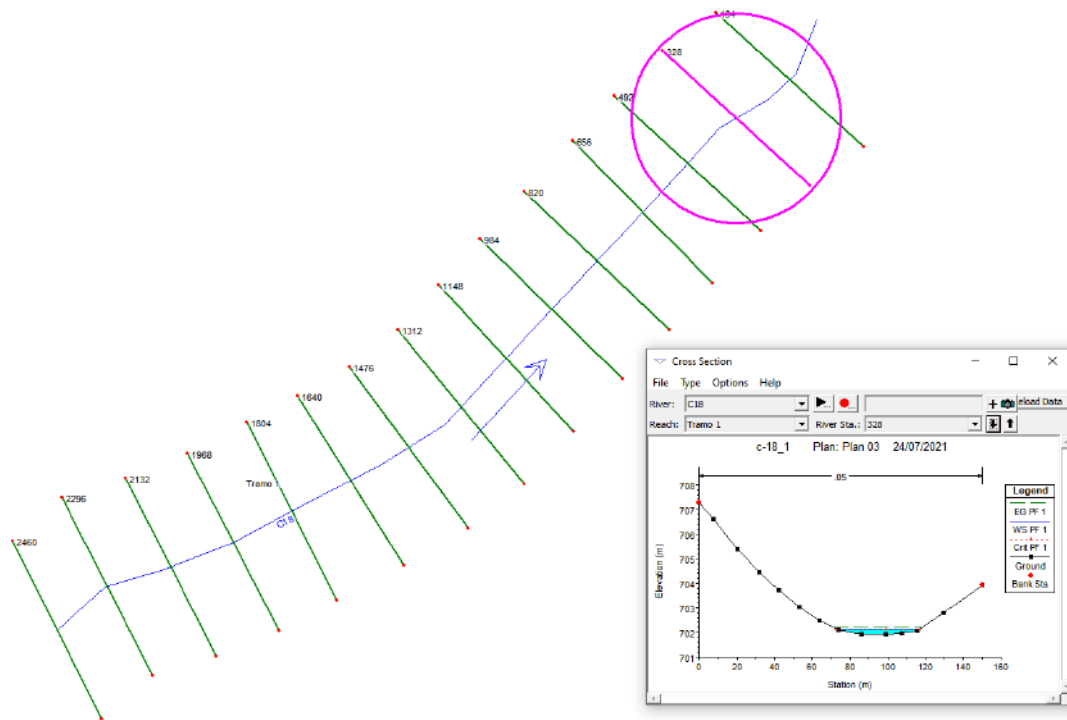
Plan: Plan 03 C18 Tramo 1 RS: 820 Profile: PF 1					
E.G. Elev (m)	710.04	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	710.00	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	709.98	Flow Area (m2)		8.62	
E.G. Slope (m/m)	0.033065	Area (m2)		8.62	
Q Total (m3/s)	7.54	Flow (m3/s)		7.54	
Top Width (m)	72.82	Top Width (m)		72.82	
Vel Total (m/s)	0.87	Avg. Vel. (m/s)		0.87	
Max Chl Dpth (m)	0.28	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	41.5	Conv. (m3/s)		41.5	
Length Wtd. (m)	50.00	Wetted Per. (m)		73.10	
Min Ch El (m)	709.72	Shear (N/m2)		38.24	
Alpha	1.00	Stream Power (N/m s)		33.44	
Frctn Loss (m)	2.02	Cum Volume (1000 m3)		1.35	
C & E Loss (m)	0.00	Cum SA (1000 m2)		9.95	



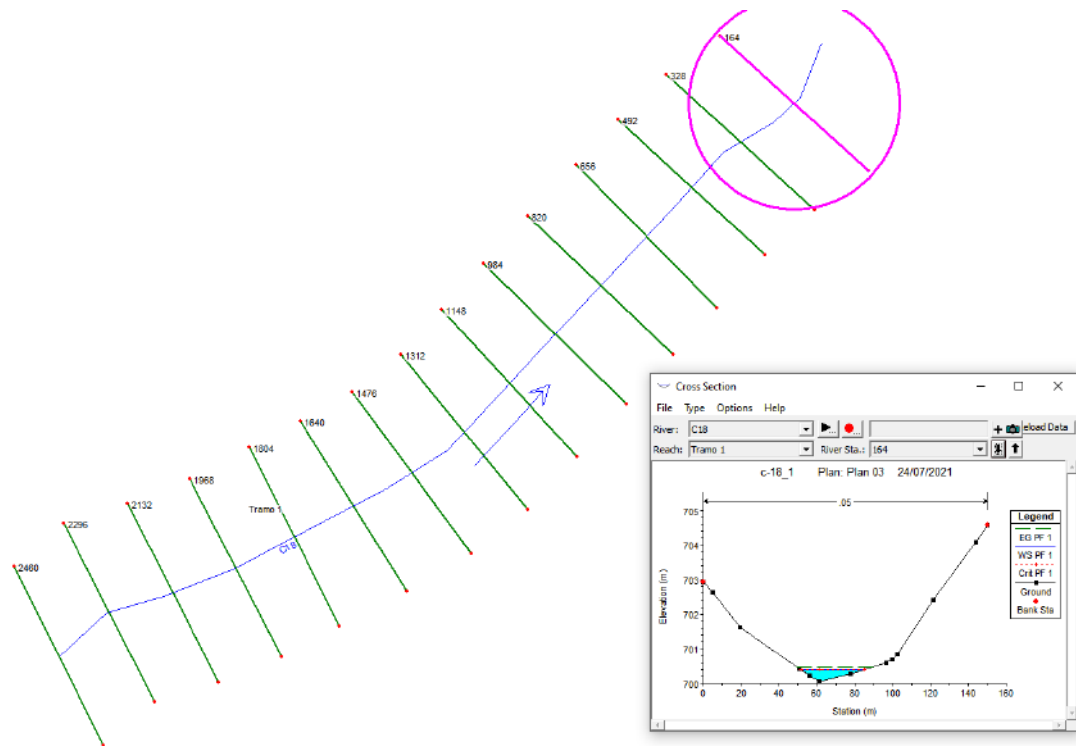
Plan: Plan 03 C18 Tramo 1 RS: 656 Profile: PF 1					
E.G. Elev (m)	708.02	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	707.96	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	707.96	Flow Area (m2)		6.88	
E.G. Slope (m/m)	0.050412	Area (m2)		6.88	
Q Total (m3/s)	7.54	Flow (m3/s)		7.54	
Top Width (m)	56.86	Top Width (m)		56.86	
Vel Total (m/s)	1.10	Avg. Vel. (m/s)		1.10	
Max Chl Dpth (m)	0.17	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	33.6	Conv. (m3/s)		33.6	
Length Wtd. (m)	50.00	Wetted Per. (m)		57.01	
Min Ch El (m)	707.79	Shear (N/m2)		59.64	
Alpha	1.00	Stream Power (N/m s)		65.38	
Frctn Loss (m)	3.16	Cum Volume (1000 m3)		0.96	
C & E Loss (m)	0.00	Cum SA (1000 m2)		6.71	



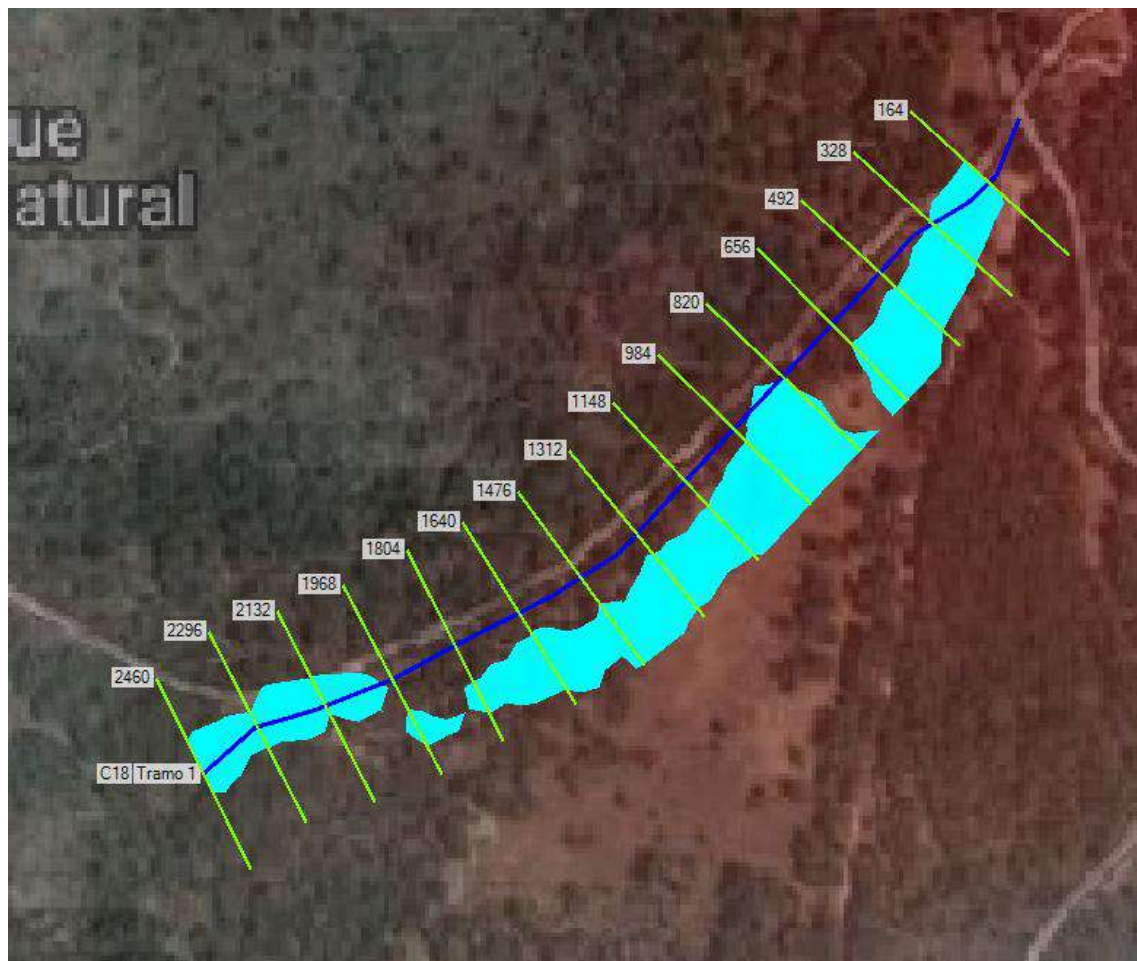
Plan: Plan 03 C18 Tramo 1 RS: 492 Profile: PF 1					
E.G. Elev (m)	704.86	Element	Left OB	Channel	Right OB
Vel Head (m)	0.10	Wt. n-Val.		0.050	
W.S. Elev (m)	704.76	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	704.79	Flow Area (m2)		5.40	
E.G. Slope (m/m)	0.081286	Area (m2)		5.40	
Q Total (m3/s)	7.54	Flow (m3/s)		7.54	
Top Width (m)	44.52	Top Width (m)		44.52	
Vel Total (m/s)	1.40	Avg. Vel. (m/s)		1.40	
Max Chl Dpth (m)	0.20	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	26.4	Conv. (m3/s)		26.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		44.52	
Min Ch El (m)	704.56	Shear (N/m2)		96.64	
Alpha	1.00	Stream Power (N/m s)		134.99	
Frctn Loss (m)	1.79	Cum Volume (1000 m3)		0.65	
C & E Loss (m)	0.01	Cum SA (1000 m2)		4.18	



Plan: Plan 03 C18 Tramo 1 RS: 328 Profile: PF 1					
E.G. Elev (m)	702.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	702.15	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	702.13	Flow Area (m2)		7.46	
E.G. Slope (m/m)	0.027632	Area (m2)		7.46	
Q Total (m3/s)	7.54	Flow (m3/s)		7.54	
Top Width (m)	44.54	Top Width (m)		44.54	
Vel Total (m/s)	1.01	Avg. Vel. (m/s)		1.01	
Max Chl Dpth (m)	0.23	Hydr. Depth (m)		0.17	
Conv. Total (m3/s)	45.4	Conv. (m3/s)		45.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		44.54	
Min Ch El (m)	701.92	Shear (N/m2)		45.40	
Alpha	1.00	Stream Power (N/m s)		45.87	
Frctn Loss (m)	1.73	Cum Volume (1000 m3)		0.33	
C & E Loss (m)	0.00	Cum SA (1000 m2)		1.95	



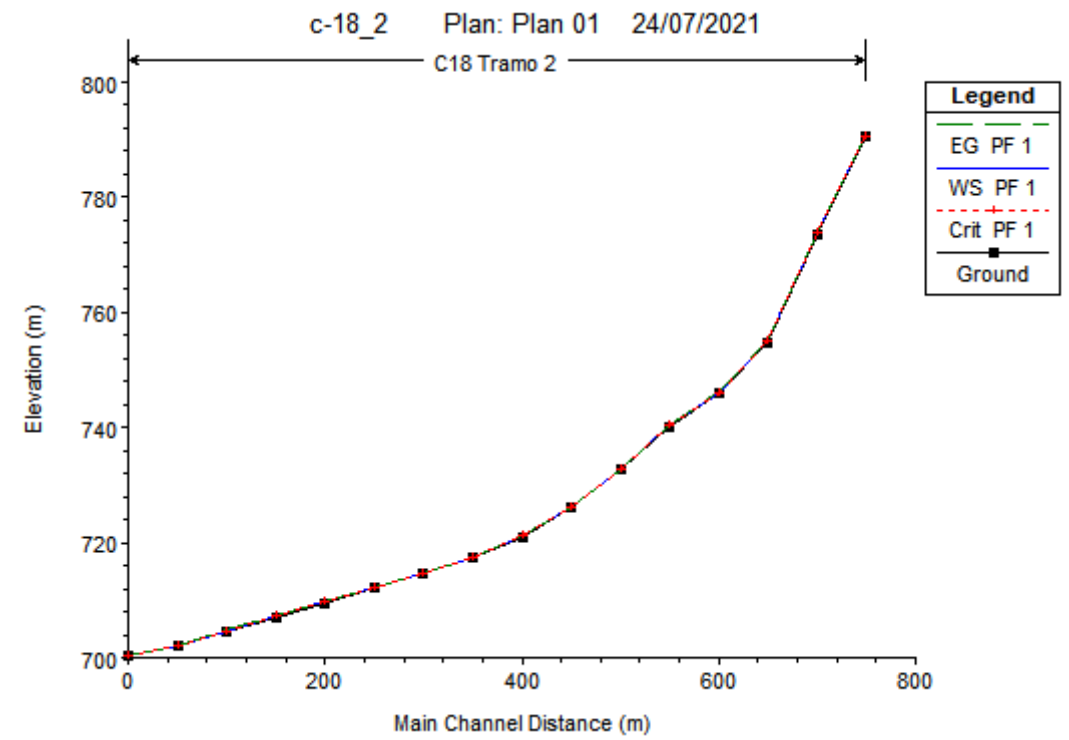
Plan: Plan 03 C18 Tramo 1 RS: 164 Profile: PF 1					
E.G. Elev (m)	700.47	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	700.38	Reach Len. (m)			
Crit W.S. (m)	700.38	Flow Area (m2)		5.76	
E.G. Slope (m/m)	0.044752	Area (m2)		5.76	
Q Total (m3/s)	7.54	Flow (m3/s)		7.54	
Top Width (m)	33.52	Top Width (m)		33.52	
Vel Total (m/s)	1.31	Avg. Vel. (m/s)		1.31	
Max Chl Dpth (m)	0.32	Hydr. Depth (m)		0.17	
Conv. Total (m3/s)	35.6	Conv. (m3/s)		35.6	
Length Wtd. (m)		Wetted Per. (m)		33.53	
Min Ch El (m)	700.06	Shear (N/m2)		75.45	
Alpha	1.00	Stream Power (N/m s)		98.69	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

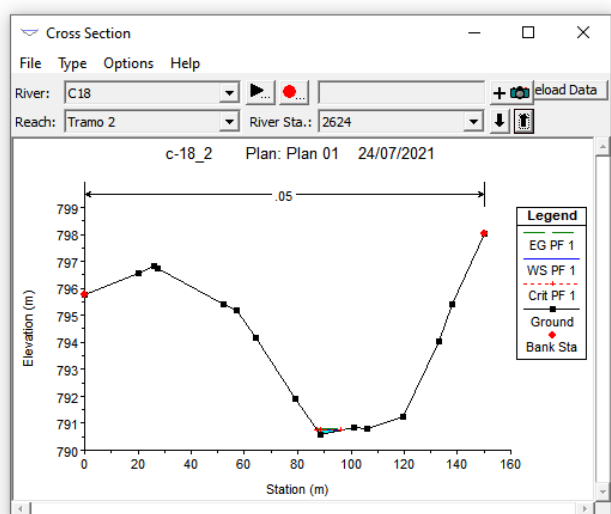
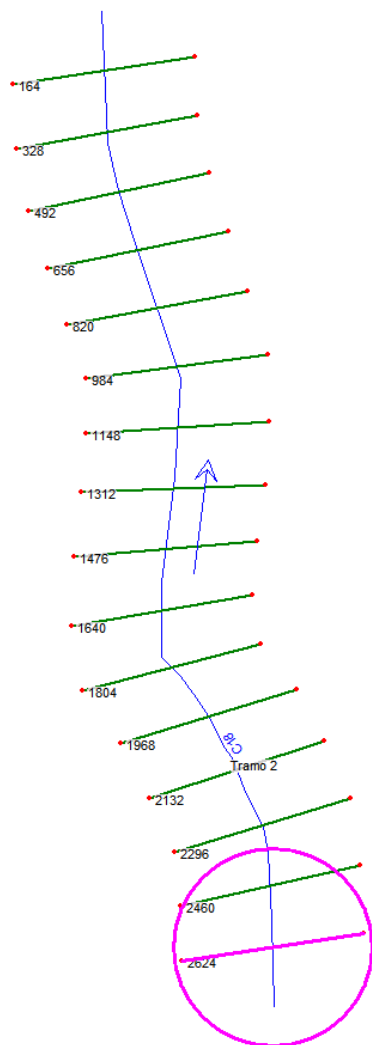


CUENCA 18_2

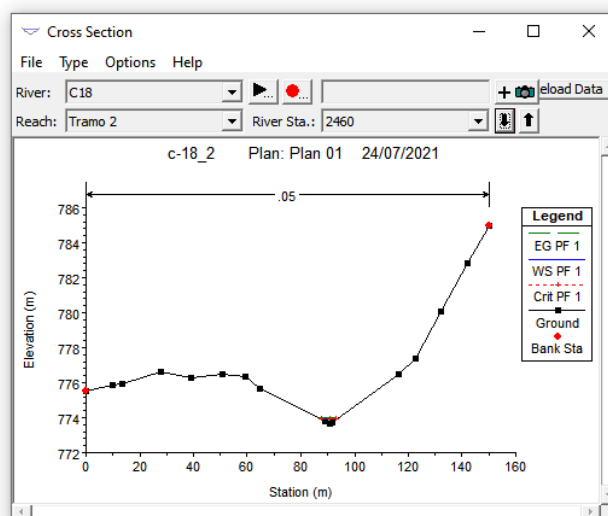
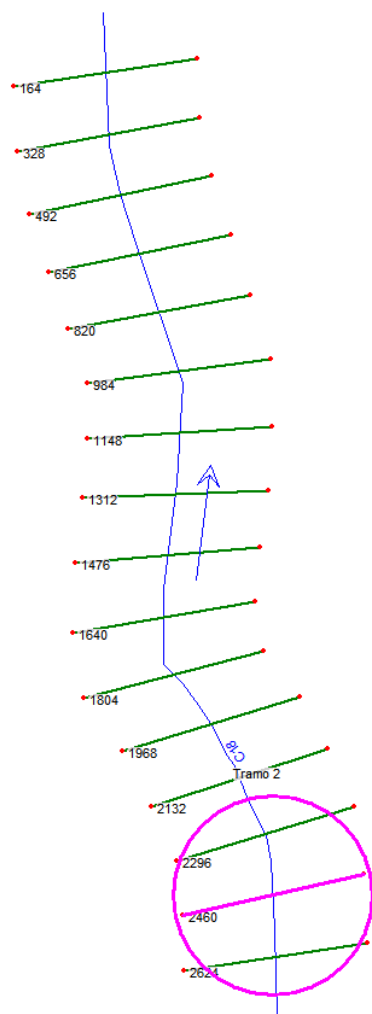
T10 (Q=0.72 m³/s)

HEC-RAS Plan: Plan 01 River: C18 Reach: Tramo 2 Profile: PF 1												
Reach	River Sta	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m ²)	Top Width (m)	Froude # Chl
Tramo 2	2624	PF 1	0.72	790.56	790.73	790.73	790.78	0.057829	0.93	0.77	8.98	1.02
Tramo 2	2460	PF 1	0.72	773.67	773.92	773.92	773.98	0.050354	1.11	0.65	5.27	1.01
Tramo 2	2296	PF 1	0.72	754.85	755.01	755.01	755.05	0.058274	0.91	0.79	9.77	1.01
Tramo 2	2132	PF 1	0.72	745.94	746.01	746.07	746.45	2.108614	2.94	0.24	7.54	5.21
Tramo 2	1968	PF 1	0.72	740.10	740.27	740.27	740.31	0.058478	0.92	0.78	9.14	1.01
Tramo 2	1804	PF 1	0.72	732.59	732.66	732.71	732.89	0.883026	2.11	0.34	9.10	3.47
Tramo 2	1640	PF 1	0.72	726.10	726.23	726.23	726.26	0.060707	0.79	0.91	14.07	1.00
Tramo 2	1476	PF 1	0.72	721.03	721.11	721.13	721.17	0.204505	1.07	0.67	16.60	1.69
Tramo 2	1312	PF 1	0.72	717.44	717.53	717.53	717.55	0.056045	0.69	1.05	18.92	0.93
Tramo 2	1148	PF 1	0.72	714.59	714.68	714.68	714.71	0.057828	0.77	0.93	14.42	0.97
Tramo 2	984	PF 1	0.72	712.03	712.14	712.14	712.17	0.044857	0.74	0.97	13.22	0.87
Tramo 2	820	PF 1	0.72	709.48	709.62	709.62	709.65	0.057125	0.81	0.89	12.80	0.97
Tramo 2	656	PF 1	0.72	707.04	707.18	707.17	707.21	0.042376	0.70	1.02	14.45	0.85
Tramo 2	492	PF 1	0.72	704.55	704.69	704.69	704.73	0.059008	0.83	0.87	12.43	1.00
Tramo 2	328	PF 1	0.72	702.05	702.21	702.19	702.23	0.024012	0.57	1.26	15.96	0.65
Tramo 2	164	PF 1	0.72	700.19	700.29	700.29	700.32	0.069816	0.75	0.95	17.67	1.04

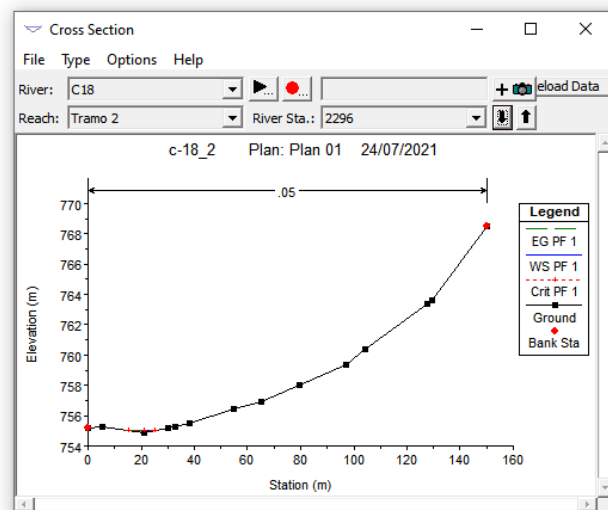
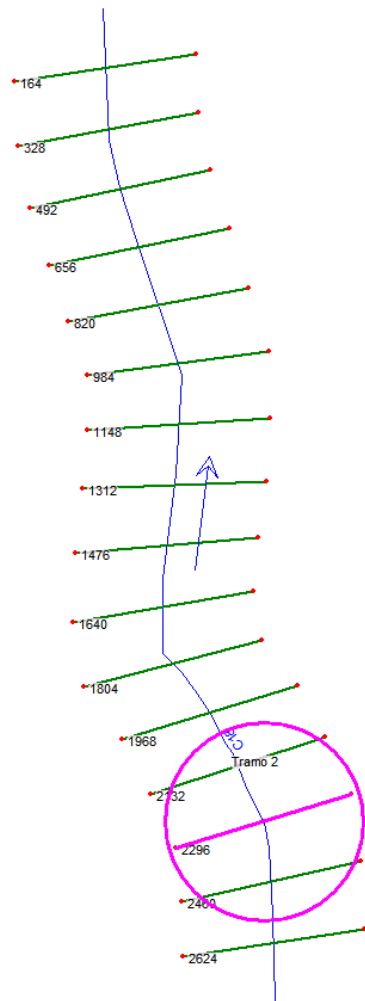




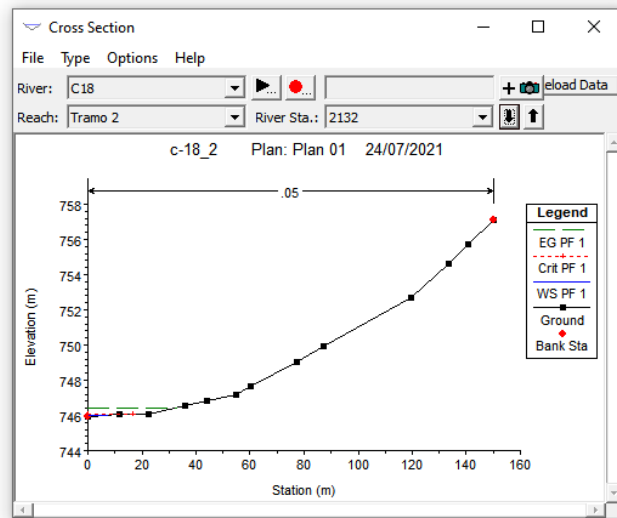
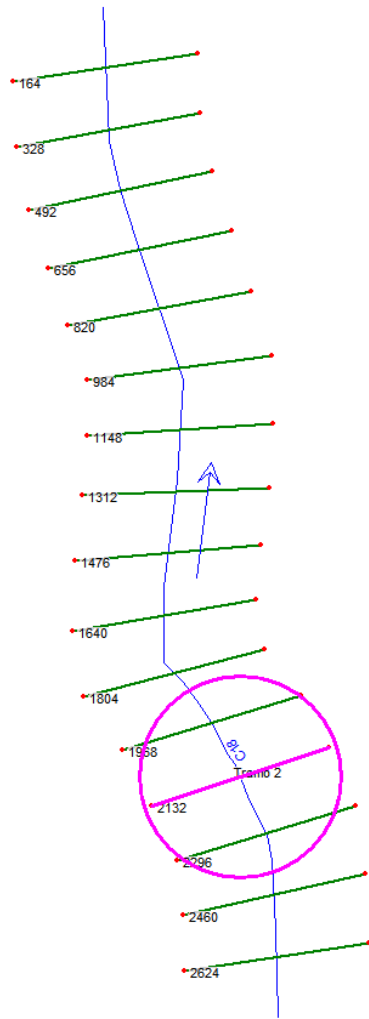
Plan: Plan 01 C18 Tramo 2 RS: 2624 Profile: PF 1					
E.G. Elev (m)	790.78	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	790.73	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	790.73	Flow Area (m2)		0.77	
E.G. Slope (m/m)	0.057829	Area (m2)		0.77	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	8.98	Top Width (m)		8.98	
Vel Total (m/s)	0.93	Avg. Vel. (m/s)		0.93	
Max Chl Dpth (m)	0.17	Hydr. Depth (m)		0.09	
Conv. Total (m3/s)	3.0	Conv. (m3/s)		3.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		8.99	
Min Ch El (m)	790.56	Shear (N/m2)		48.58	
Alpha	1.00	Stream Power (N/m s)		45.40	
Frctn Loss (m)	2.69	Cum Volume (1000 m3)		0.61	
C & E Loss (m)	0.00	Cum SA (1000 m2)		9.35	



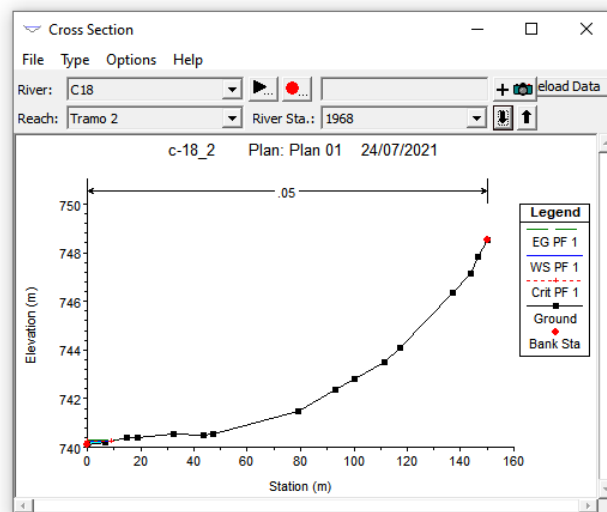
Plan: Plan 01 C18 Tramo 2 RS: 2460 Profile: PF 1					
E.G. Elev (m)	773.98	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	773.92	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	773.92	Flow Area (m2)		0.65	
E.G. Slope (m/m)	0.050354	Area (m2)		0.65	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	5.27	Top Width (m)		5.27	
Vel Total (m/s)	1.11	Avg. Vel. (m/s)		1.11	
Max Chl Dpth (m)	0.25	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	3.2	Conv. (m3/s)		3.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		5.29	
Min Ch El (m)	773.67	Shear (N/m2)		60.62	
Alpha	1.00	Stream Power (N/m s)		67.19	
Frctn Loss (m)	2.70	Cum Volume (1000 m3)		0.58	
C & E Loss (m)	0.01	Cum SA (1000 m2)		8.99	



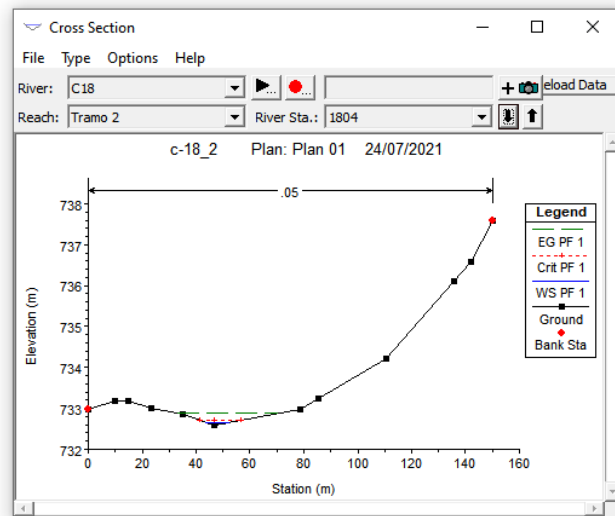
Plan: Plan 01 C18 Tramo 2 RS: 2296 Profile: PF 1					
E.G. Elev (m)	755.05	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	755.01	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	755.01	Flow Area (m2)		0.79	
E.G. Slope (m/m)	0.058274	Area (m2)		0.79	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	9.77	Top Width (m)		9.77	
Vel Total (m/s)	0.91	Avg. Vel. (m/s)		0.91	
Max Chl Dpth (m)	0.16	Hydr. Depth (m)		0.08	
Conv. Total (m3/s)	3.0	Conv. (m3/s)		3.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		9.78	
Min Ch El (m)	754.85	Shear (N/m2)		46.45	
Alpha	1.00	Stream Power (N/m s)		42.09	
Frctn Loss (m)	8.57	Cum Volume (1000 m3)		0.54	
C & E Loss (m)	0.04	Cum SA (1000 m2)		8.62	



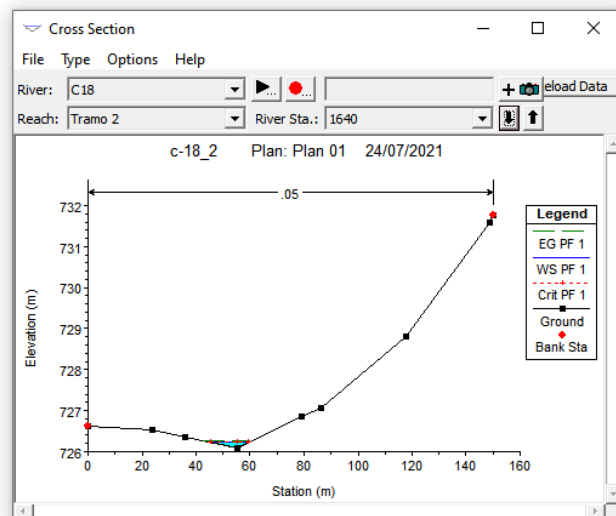
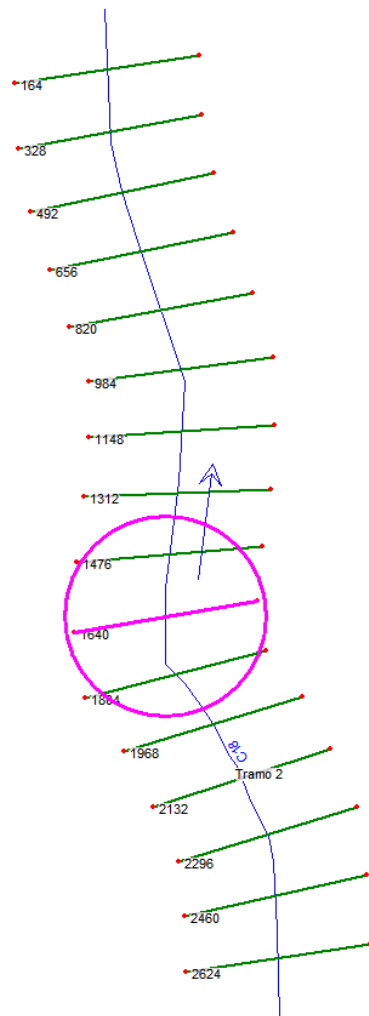
Plan: Plan 01 C18 Tramo 2 RS: 2132 Profile: PF 1					
E.G. Elev (m)	746.45	Element	Left OB	Channel	Right OB
Vel Head (m)	0.44	Wt. n-Val.		0.050	
W.S. Elev (m)	746.01	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	746.07	Flow Area (m2)		0.24	
E.G. Slope (m/m)	2.108614	Area (m2)		0.24	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	7.54	Top Width (m)		7.54	
Vel Total (m/s)	2.94	Avg. Vel. (m/s)		2.94	
Max Chl Dpth (m)	0.06	Hydr. Depth (m)		0.03	
Conv. Total (m3/s)	0.5	Conv. (m3/s)		0.5	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.61	
Min Ch El (m)	745.94	Shear (N/m2)		665.90	
Alpha	1.00	Stream Power (N/m s)		1957.50	
Frctn Loss (m)	3.07	Cum Volume (1000 m3)		0.52	
C & E Loss (m)	0.00	Cum SA (1000 m2)		8.19	



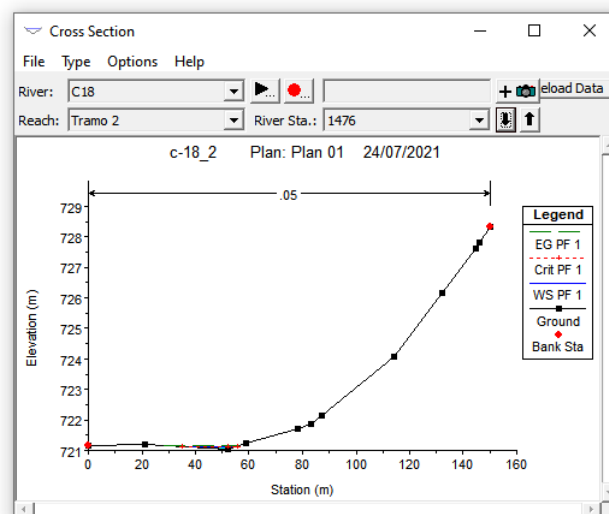
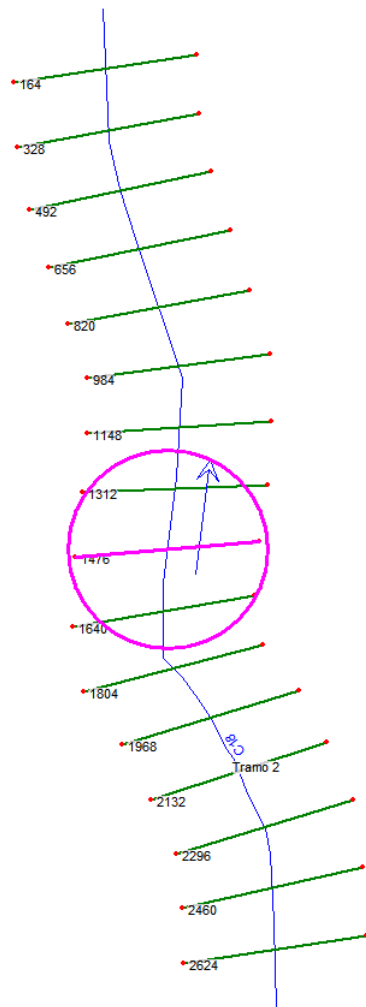
Plan: Plan 01 C18 Tramo 2 RS: 1968 Profile: PF 1					
E.G. Elev (m)	740.31	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	740.27	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	740.27	Flow Area (m2)		0.78	
E.G. Slope (m/m)	0.058478	Area (m2)		0.78	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	9.14	Top Width (m)		9.14	
Vel Total (m/s)	0.92	Avg. Vel. (m/s)		0.92	
Max Chl Dpth (m)	0.17	Hydr. Depth (m)		0.09	
Conv. Total (m3/s)	3.0	Conv. (m3/s)		3.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		9.31	
Min Ch El (m)	740.10	Shear (N/m2)		47.96	
Alpha	1.00	Stream Power (N/m s)		44.36	
Frctn Loss (m)	7.40	Cum Volume (1000 m3)		0.49	
C & E Loss (m)	0.02	Cum SA (1000 m2)		7.77	



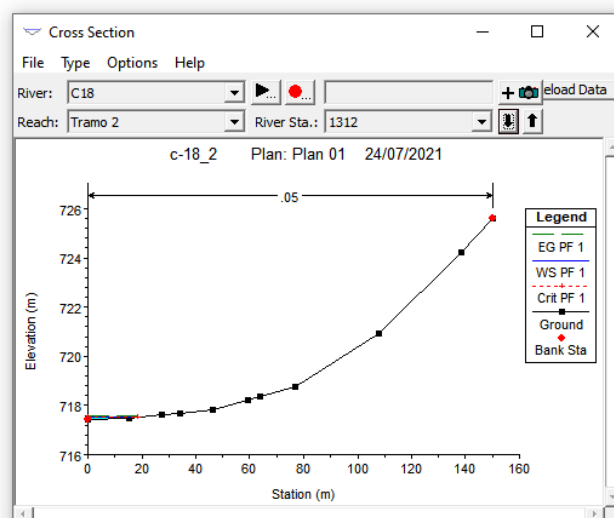
Plan: Plan 01 C18 Tramo 2 RS: 1804 Profile: PF 1					
E.G. Elev (m)	732.89	Element	Left OB	Channel	Right OB
Vel Head (m)	0.23	Wt. n-Val.		0.050	
W.S. Elev (m)	732.66	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	732.71	Flow Area (m2)		0.34	
E.G. Slope (m/m)	0.883026	Area (m2)		0.34	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	9.10	Top Width (m)		9.10	
Vel Total (m/s)	2.11	Avg. Vel. (m/s)		2.11	
Max Chl Dpth (m)	0.08	Hydr. Depth (m)		0.04	
Conv. Total (m3/s)	0.8	Conv. (m3/s)		0.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		9.10	
Min Ch El (m)	732.59	Shear (N/m2)		325.04	
Alpha	1.00	Stream Power (N/m s)		684.84	
Frctn Loss (m)	3.08	Cum Volume (1000 m3)		0.46	
C & E Loss (m)	0.00	Cum SA (1000 m2)		7.31	



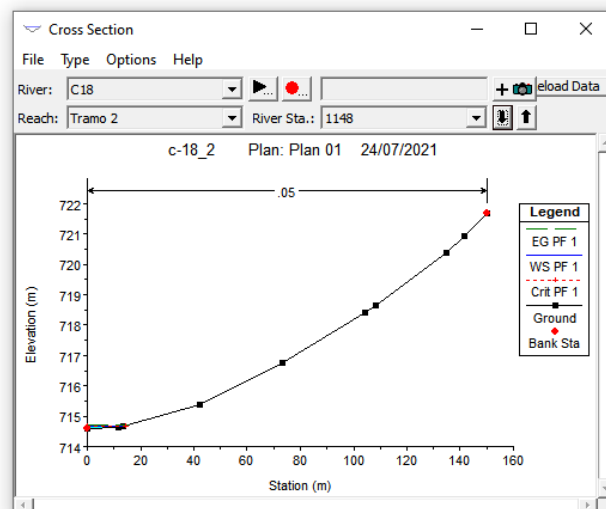
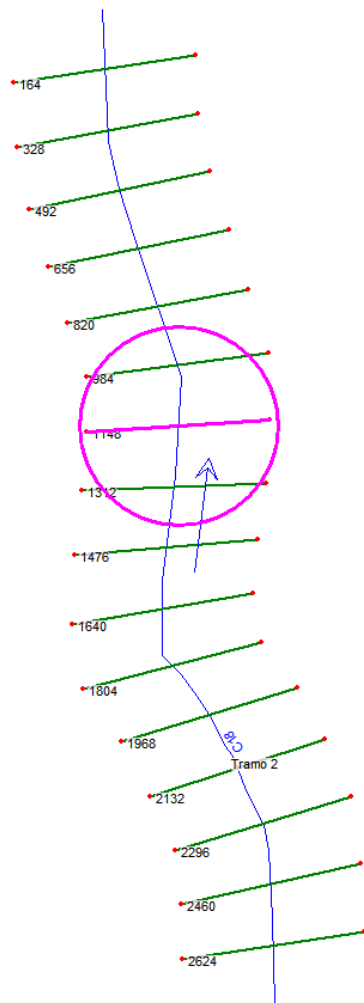
Plan: Plan 01 C18 Tramo 2 RS: 1640 Profile: PF 1					
E.G. Elev (m)	726.26	Element	Left OB	Channel	Right OB
Vel Head (m)	0.03	Wt. n-Val.		0.050	
W.S. Elev (m)	726.23	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	726.23	Flow Area (m2)		0.91	
E.G. Slope (m/m)	0.060707	Area (m2)		0.91	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	14.07	Top Width (m)		14.07	
Vel Total (m/s)	0.79	Avg. Vel. (m/s)		0.79	
Max Chl Dpth (m)	0.13	Hydr. Depth (m)		0.06	
Conv. Total (m3/s)	2.9	Conv. (m3/s)		2.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		14.07	
Min Ch El (m)	726.10	Shear (N/m2)		38.42	
Alpha	1.00	Stream Power (N/m s)		30.46	
Frctn Loss (m)	5.09	Cum Volume (1000 m3)		0.43	
C & E Loss (m)	0.00	Cum SA (1000 m2)		6.73	



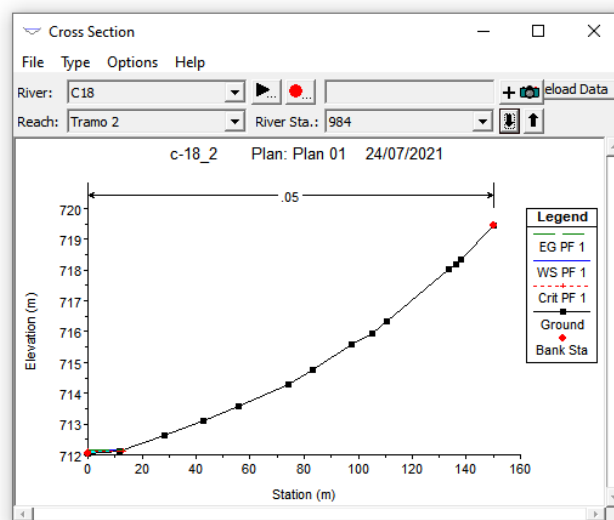
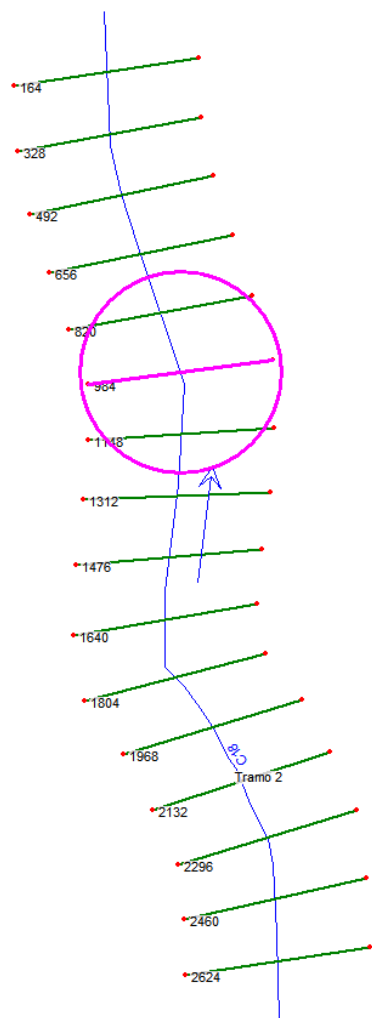
Plan: Plan 01 C18 Tramo 2 RS: 1476 Profile: PF 1					
E.G. Elev (m)	721.17	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	721.11	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	721.13	Flow Area (m2)		0.67	
E.G. Slope (m/m)	0.204505	Area (m2)		0.67	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	16.60	Top Width (m)		16.60	
Vel Total (m/s)	1.07	Avg. Vel. (m/s)		1.07	
Max Chl Dpth (m)	0.08	Hydr. Depth (m)		0.04	
Conv. Total (m3/s)	1.6	Conv. (m3/s)		1.6	
Length Wtd. (m)	50.00	Wetted Per. (m)		16.61	
Min Ch El (m)	721.03	Shear (N/m2)		81.40	
Alpha	1.00	Stream Power (N/m s)		86.95	
Frctn Loss (m)	3.04	Cum Volume (1000 m3)		0.39	
C & E Loss (m)	0.00	Cum SA (1000 m2)		5.97	



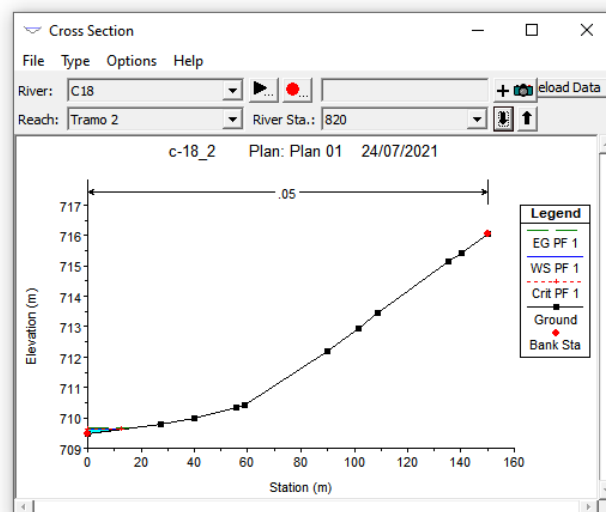
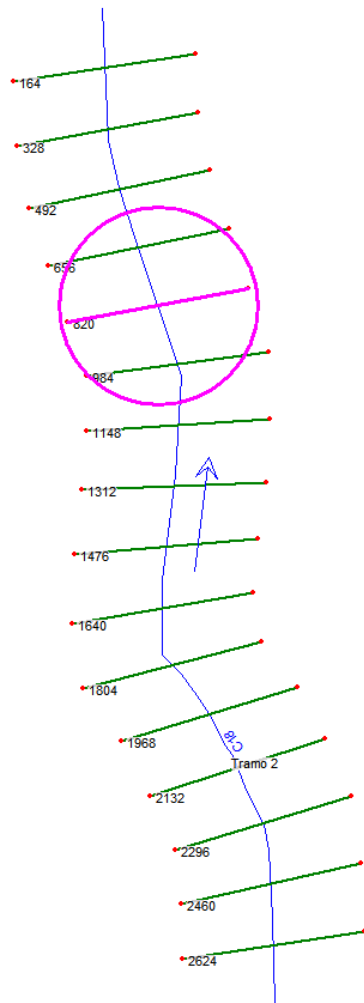
Plan: Plan 01 C18 Tramo 2 RS: 1312 Profile: PF 1					
E.G. Elev (m)	717.55	Element	Left OB	Channel	Right OB
Vel Head (m)	0.02	Wt. n-Val.		0.050	
W.S. Elev (m)	717.53	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	717.53	Flow Area (m2)		1.05	
E.G. Slope (m/m)	0.056045	Area (m2)		1.05	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	18.92	Top Width (m)		18.92	
Vel Total (m/s)	0.69	Avg. Vel. (m/s)		0.69	
Max Chl Dpth (m)	0.09	Hydr. Depth (m)		0.06	
Conv. Total (m3/s)	3.0	Conv. (m3/s)		3.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		19.01	
Min Ch El (m)	717.44	Shear (N/m2)		30.33	
Alpha	1.00	Stream Power (N/m s)		20.82	
Frctn Loss (m)	2.85	Cum Volume (1000 m3)		0.35	
C & E Loss (m)	0.00	Cum SA (1000 m2)		5.08	



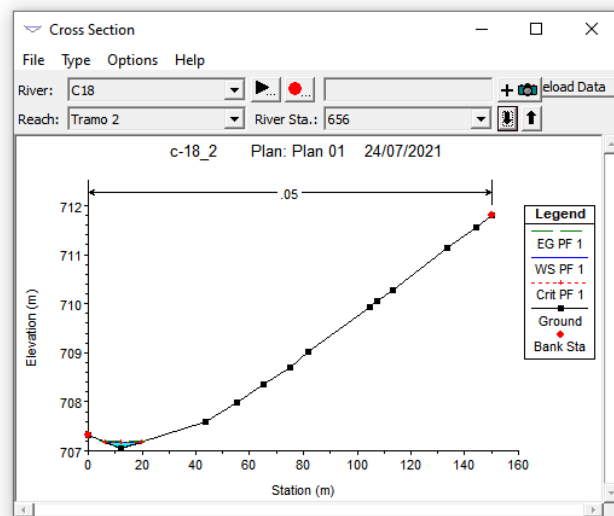
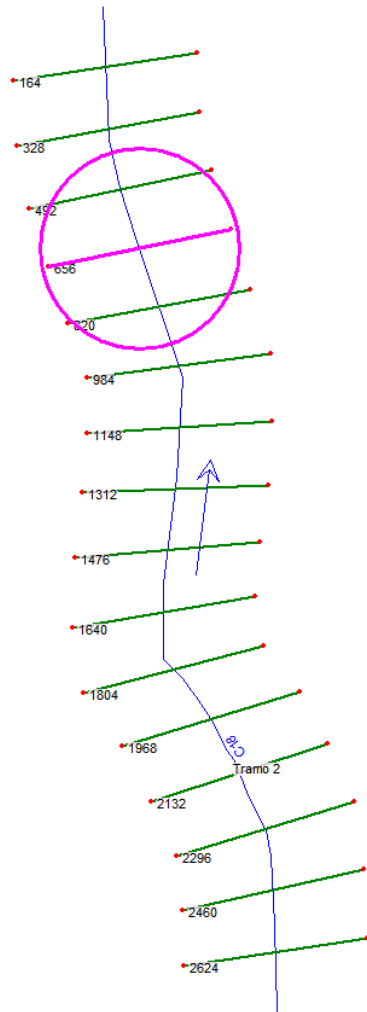
Plan: Plan 01 C18 Tramo 2 RS: 1148 Profile: PF 1					
E.G. Elev (m)	714.71	Element	Left OB	Channel	Right OB
Vel Head (m)	0.03	Wt. n-Val.		0.050	
W.S. Elev (m)	714.68	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	714.68	Flow Area (m2)		0.93	
E.G. Slope (m/m)	0.057828	Area (m2)		0.93	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	14.42	Top Width (m)		14.42	
Vel Total (m/s)	0.77	Avg. Vel. (m/s)		0.77	
Max Chl Dpth (m)	0.09	Hydr. Depth (m)		0.06	
Conv. Total (m3/s)	3.0	Conv. (m3/s)		3.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		14.51	
Min Ch El (m)	714.59	Shear (N/m2)		36.46	
Alpha	1.00	Stream Power (N/m s)		28.14	
Frctn Loss (m)	2.54	Cum Volume (1000 m3)		0.30	
C & E Loss (m)	0.00	Cum SA (1000 m2)		4.25	



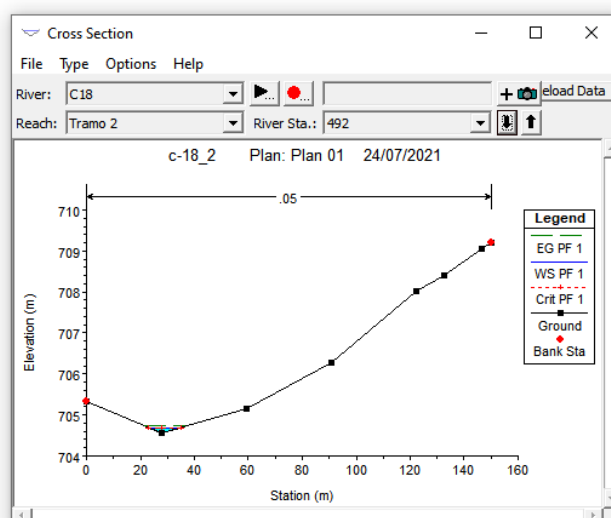
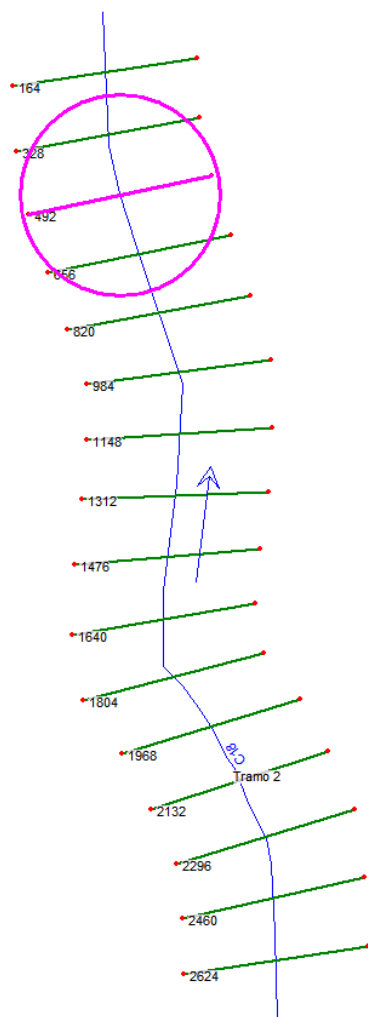
Plan: Plan 01 C18 Tramo 2 RS: 984 Profile: PF 1					
E.G. Elev (m)	712.17	Element	Left OB	Channel	Right OB
Vel Head (m)	0.03	Wt. n-Val.		0.050	
W.S. Elev (m)	712.14	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	712.14	Flow Area (m2)		0.97	
E.G. Slope (m/m)	0.044857	Area (m2)		0.97	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	13.22	Top Width (m)		13.22	
Vel Total (m/s)	0.74	Avg. Vel. (m/s)		0.74	
Max Chl Dpth (m)	0.11	Hydr. Depth (m)		0.07	
Conv. Total (m3/s)	3.4	Conv. (m3/s)		3.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		13.34	
Min Ch El (m)	712.03	Shear (N/m2)		32.10	
Alpha	1.00	Stream Power (N/m s)		23.74	
Frctn Loss (m)	2.52	Cum Volume (1000 m3)		0.25	
C & E Loss (m)	0.00	Cum SA (1000 m2)		3.55	



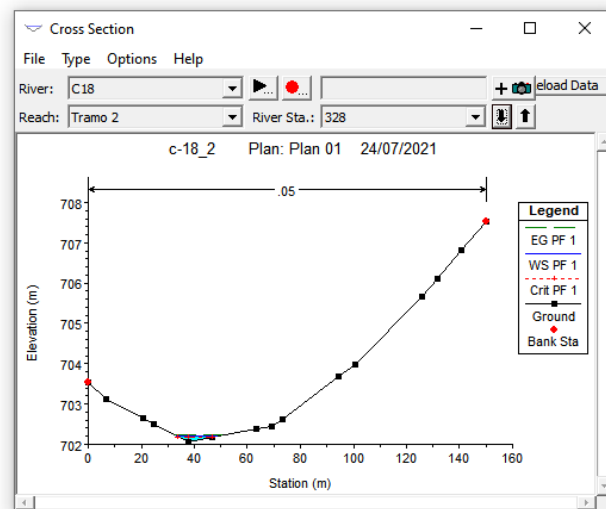
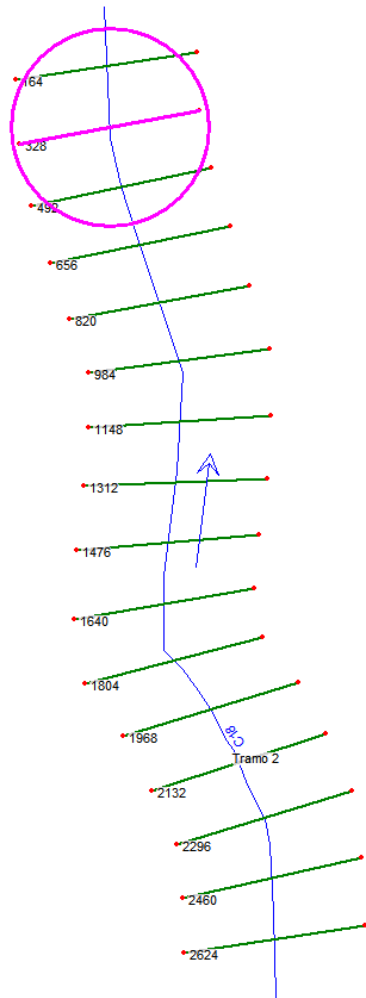
Plan: Plan 01 C18 Tramo 2 RS: 820 Profile: PF 1					
E.G. Elev (m)	709.65	Element	Left OB	Channel	Right OB
Vel Head (m)	0.03	Wt. n-Val.		0.050	
W.S. Elev (m)	709.62	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	709.62	Flow Area (m2)		0.89	
E.G. Slope (m/m)	0.057125	Area (m2)		0.89	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	12.80	Top Width (m)		12.80	
Vel Total (m/s)	0.81	Avg. Vel. (m/s)		0.81	
Max Chl Dpth (m)	0.14	Hydr. Depth (m)		0.07	
Conv. Total (m3/s)	3.0	Conv. (m3/s)		3.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		12.94	
Min Ch El (m)	709.48	Shear (N/m2)		38.72	
Alpha	1.00	Stream Power (N/m s)		31.17	
Frctn Loss (m)	2.45	Cum Volume (1000 m3)		0.20	
C & E Loss (m)	0.00	Cum SA (1000 m2)		2.90	



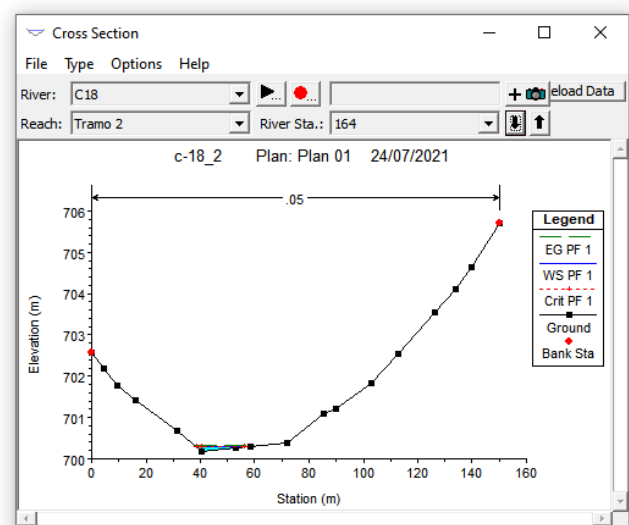
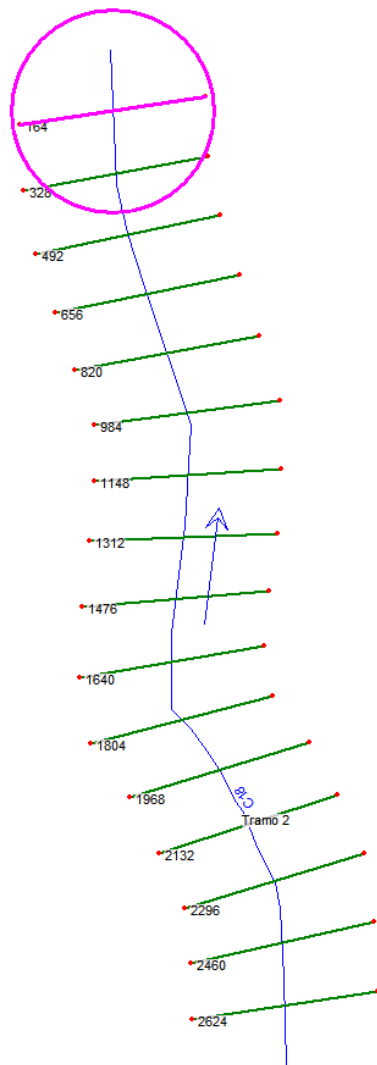
Plan: Plan 01 C18 Tramo 2 RS: 656 Profile: PF 1					
E.G. Elev (m)	707.21	Element	Left OB	Channel	Right OB
Vel Head (m)	0.03	Wt. n-Val.		0.050	
W.S. Elev (m)	707.18	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	707.17	Flow Area (m2)		1.02	
E.G. Slope (m/m)	0.042376	Area (m2)		1.02	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	14.45	Top Width (m)		14.45	
Vel Total (m/s)	0.70	Avg. Vel. (m/s)		0.70	
Max Chl Dpth (m)	0.14	Hydr. Depth (m)		0.07	
Conv. Total (m3/s)	3.5	Conv. (m3/s)		3.5	
Length Wtd. (m)	50.00	Wetted Per. (m)		14.45	
Min Ch El (m)	707.04	Shear (N/m2)		29.40	
Alpha	1.00	Stream Power (N/m s)		20.71	
Frctn Loss (m)	2.48	Cum Volume (1000 m3)		0.16	
C & E Loss (m)	0.00	Cum SA (1000 m2)		2.22	



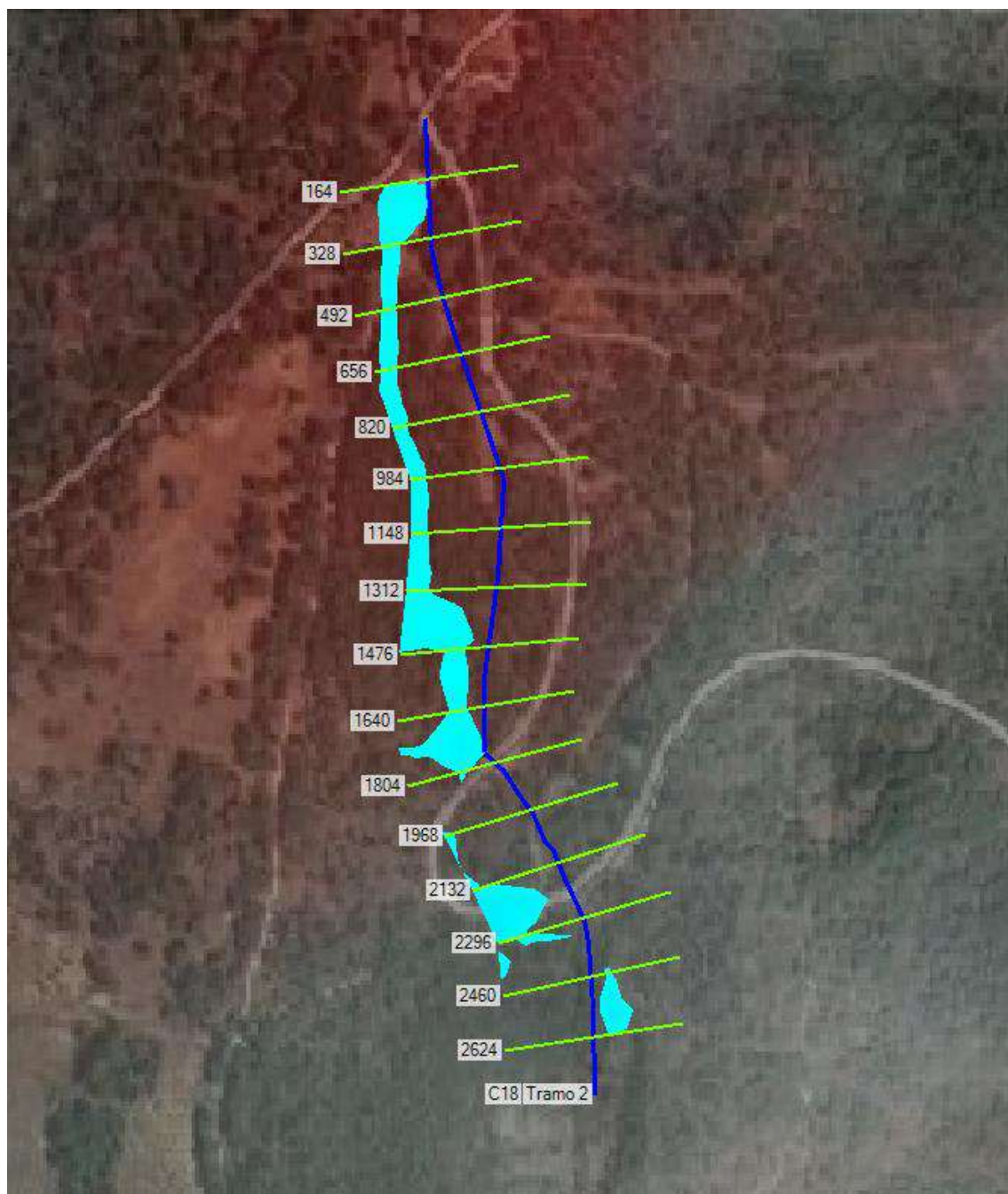
Plan: Plan 01 C18 Tramo 2 RS: 492 Profile: PF 1					
E.G. Elev (m)	704.73	Element	Left OB	Channel	Right OB
Vel Head (m)	0.03	Wt. n-Val.		0.050	
W.S. Elev (m)	704.69	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	704.69	Flow Area (m2)		0.87	
E.G. Slope (m/m)	0.059008	Area (m2)		0.87	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	12.43	Top Width (m)		12.43	
Vel Total (m/s)	0.83	Avg. Vel. (m/s)		0.83	
Max Chl Dpth (m)	0.14	Hydr. Depth (m)		0.07	
Conv. Total (m3/s)	3.0	Conv. (m3/s)		3.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		12.43	
Min Ch El (m)	704.55	Shear (N/m2)		40.57	
Alpha	1.00	Stream Power (N/m s)		33.52	
Frctn Loss (m)	1.79	Cum Volume (1000 m3)		0.11	
C & E Loss (m)	0.01	Cum SA (1000 m2)		1.55	



Plan: Plan 01 C18 Tramo 2 RS: 328 Profile: PF 1					
E.G. Elev (m)	702.23	Element	Left OB	Channel	Right OB
Vel Head (m)	0.02	Wt. n-Val.		0.050	
W.S. Elev (m)	702.21	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	702.19	Flow Area (m2)		1.26	
E.G. Slope (m/m)	0.024012	Area (m2)		1.26	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	15.96	Top Width (m)		15.96	
Vel Total (m/s)	0.57	Avg. Vel. (m/s)		0.57	
Max Chl Dpth (m)	0.16	Hydr. Depth (m)		0.08	
Conv. Total (m3/s)	4.6	Conv. (m3/s)		4.6	
Length Wtd. (m)	50.00	Wetted Per. (m)		15.97	
Min Ch El (m)	702.05	Shear (N/m2)		18.61	
Alpha	1.00	Stream Power (N/m s)		10.62	
Frctn Loss (m)	1.91	Cum Volume (1000 m3)		0.06	
C & E Loss (m)	0.00	Cum SA (1000 m2)		0.84	

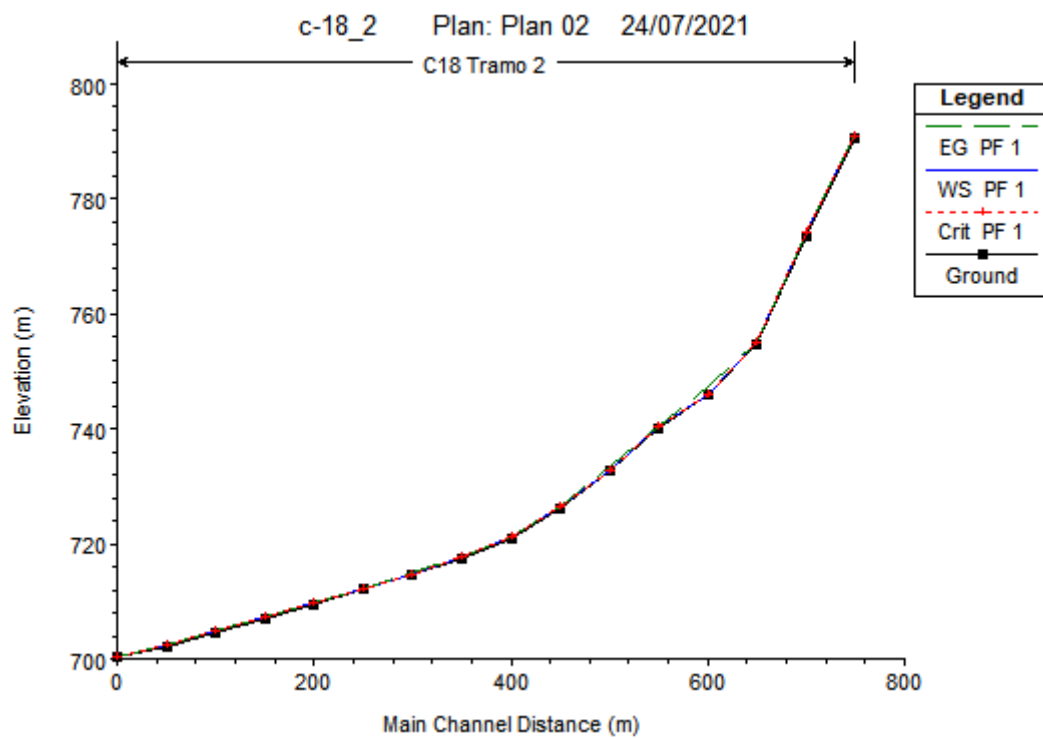


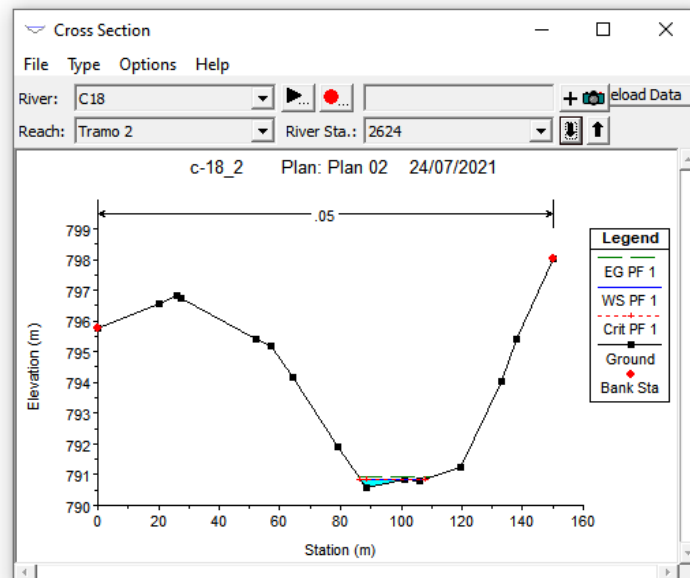
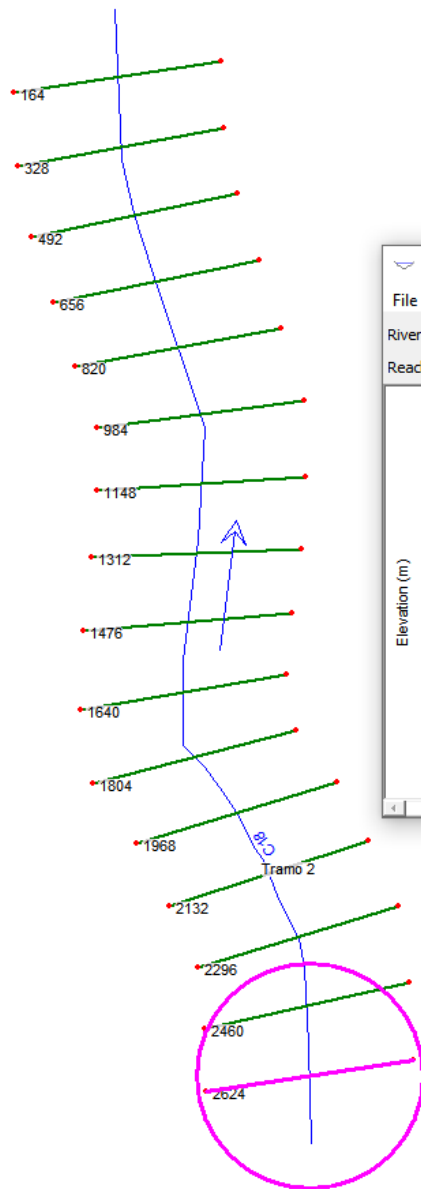
Plan: Plan 01 C18 Tramo 2 RS: 164 Profile: PF 1					
E.G. Elev (m)	700.32	Element	Left OB	Channel	Right OB
Vel Head (m)	0.03	Wt. n-Val.		0.050	
W.S. Elev (m)	700.29	Reach Len. (m)			
Crit W.S. (m)	700.29	Flow Area (m2)		0.95	
E.G. Slope (m/m)	0.069816	Area (m2)		0.95	
Q Total (m3/s)	0.72	Flow (m3/s)		0.72	
Top Width (m)	17.67	Top Width (m)		17.67	
Vel Total (m/s)	0.75	Avg. Vel. (m/s)		0.75	
Max Chl Dpth (m)	0.10	Hydr. Depth (m)		0.05	
Conv. Total (m3/s)	2.7	Conv. (m3/s)		2.7	
Length Wtd. (m)		Wetted Per. (m)		17.68	
Min Ch El (m)	700.19	Shear (N/m2)		36.95	
Alpha	1.00	Stream Power (N/m s)		27.88	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			



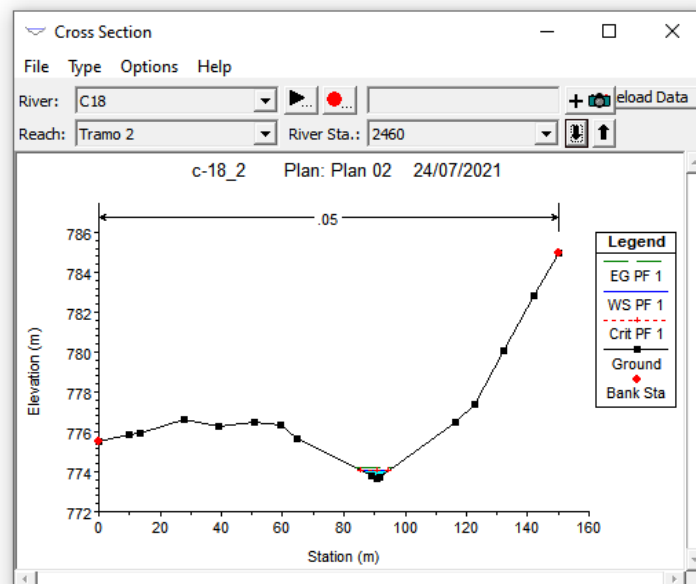
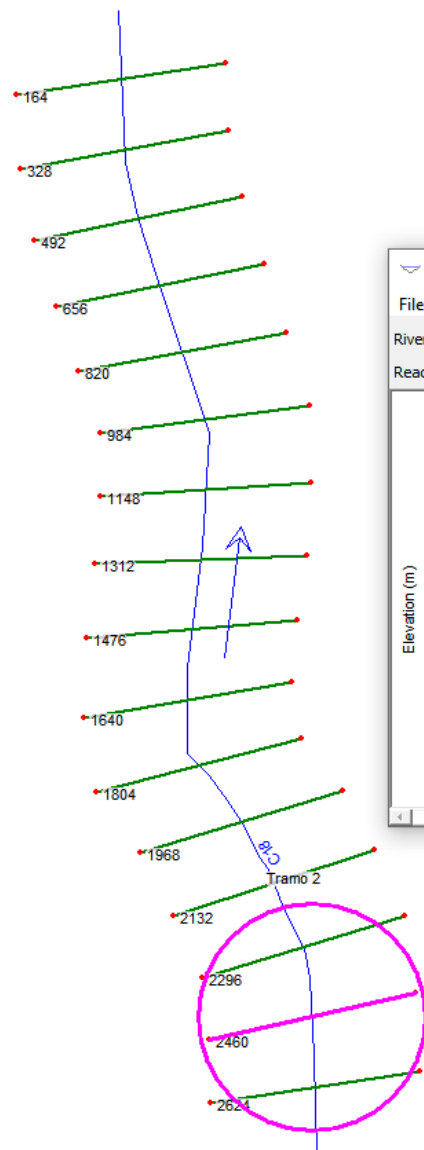
T100 (Q=2.80 m3/s)

HEC-RAS Plan: Plan 02 River: C18 Reach: Tramo 2 Profile: PF 1												
Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Tramo 2	2624	PF 1	2.80	790.56	790.86	790.86	790.92	0.051914	1.10	2.55	21.47	1.02
Tramo 2	2460	PF 1	2.80	773.67	774.09	774.09	774.20	0.042558	1.45	1.93	9.18	1.01
Tramo 2	2296	PF 1	2.80	754.85	755.13	755.13	755.20	0.048857	1.19	2.35	16.81	1.02
Tramo 2	2132	PF 1	2.80	745.94	746.04	746.15	747.29	3.417794	4.95	0.57	11.46	7.11
Tramo 2	1968	PF 1	2.80	740.10	740.39	740.39	740.47	0.048239	1.18	2.37	16.77	1.00
Tramo 2	1804	PF 1	2.80	732.59	732.70	732.80	733.40	1.600066	3.70	0.76	13.55	4.99
Tramo 2	1640	PF 1	2.80	726.10	726.32	726.32	726.38	0.051933	1.05	2.67	24.10	1.01
Tramo 2	1476	PF 1	2.80	721.03	721.16	721.21	721.30	0.278857	1.69	1.66	26.07	2.13
Tramo 2	1312	PF 1	2.80	717.44	717.60	717.60	717.66	0.053123	1.03	2.73	25.74	1.01
Tramo 2	1148	PF 1	2.80	714.59	714.76	714.77	714.84	0.059800	1.23	2.27	17.73	1.10
Tramo 2	984	PF 1	2.80	712.03	712.24	712.24	712.31	0.048573	1.21	2.32	15.97	1.01
Tramo 2	820	PF 1	2.80	709.48	709.72	709.72	709.78	0.052861	1.10	2.55	21.61	1.02
Tramo 2	656	PF 1	2.80	707.04	707.27	707.27	707.32	0.052090	1.07	2.62	23.13	1.01
Tramo 2	492	PF 1	2.80	704.55	704.79	704.79	704.85	0.049658	1.09	2.57	21.36	1.00
Tramo 2	328	PF 1	2.80	702.05	702.31	702.28	702.35	0.028582	0.83	3.37	27.60	0.76
Tramo 2	164	PF 1	2.80	700.19	700.37	700.37	700.42	0.054733	0.94	2.98	33.12	1.00

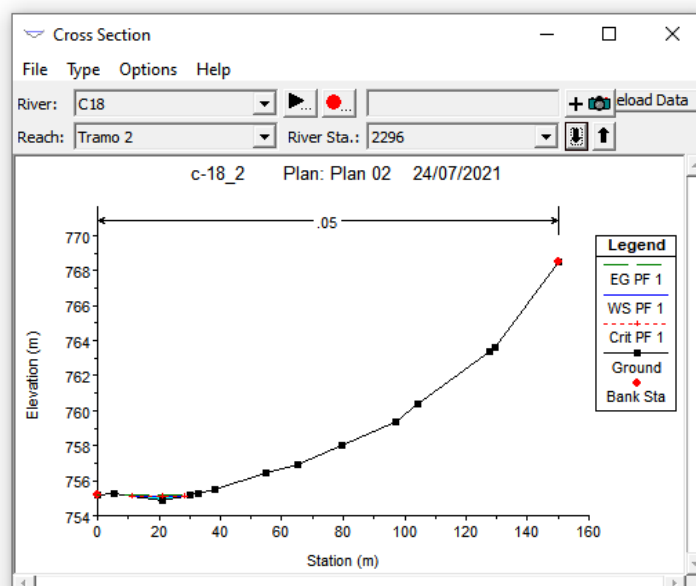
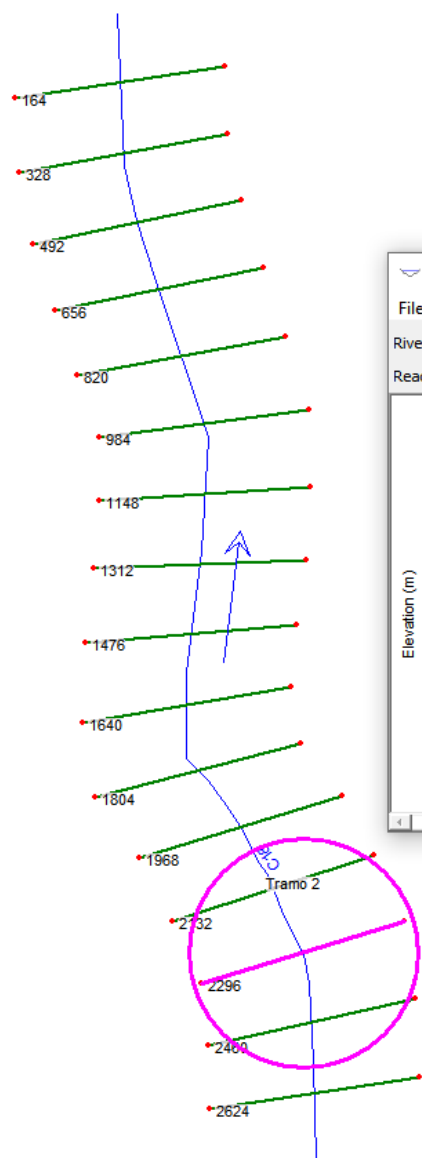




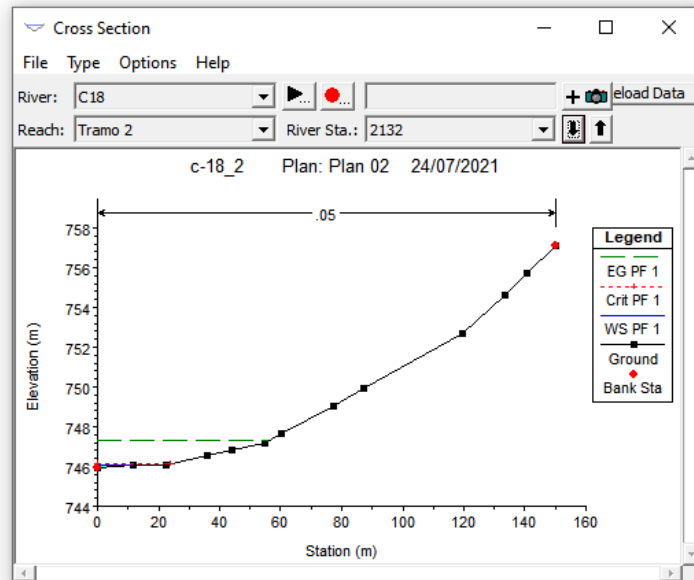
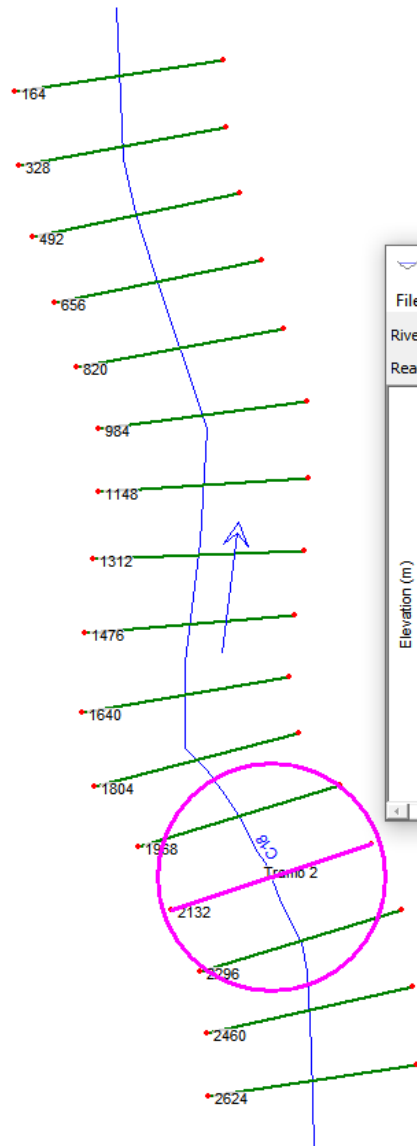
Plan: Plan 03 C18 Tramo 2 RS: 2624 Profile: PF 1					
E.G. Elev (m)	790.92	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	790.86	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	790.86	Flow Area (m2)		2.55	
E.G. Slope (m/m)	0.051914	Area (m2)		2.55	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	21.47	Top Width (m)		21.47	
Vel Total (m/s)	1.10	Avg. Vel. (m/s)		1.10	
Max Chl Dpth (m)	0.30	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	12.3	Conv. (m3/s)		12.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		21.49	
Min Ch El (m)	790.56	Shear (N/m2)		60.33	
Alpha	1.00	Stream Power (N/m s)		66.33	
Frctn Loss (m)	2.34	Cum Volume (1000 m3)		1.67	
C & E Loss (m)	0.00	Cum SA (1000 m2)		14.92	



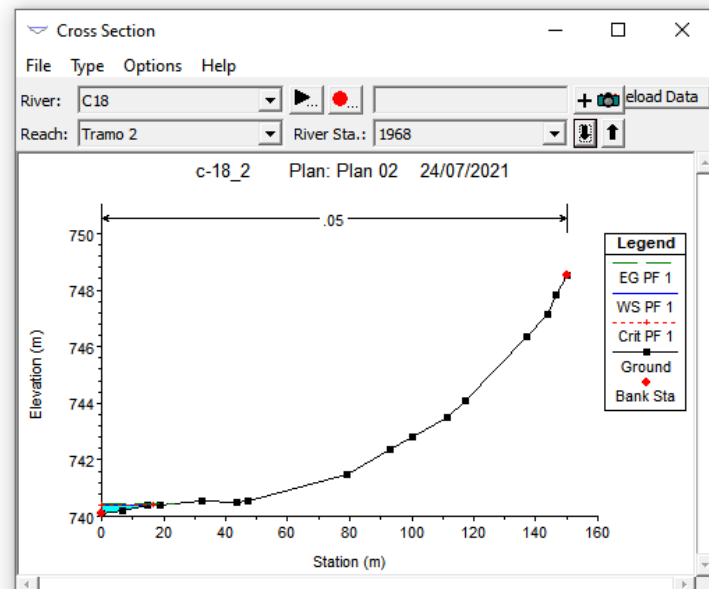
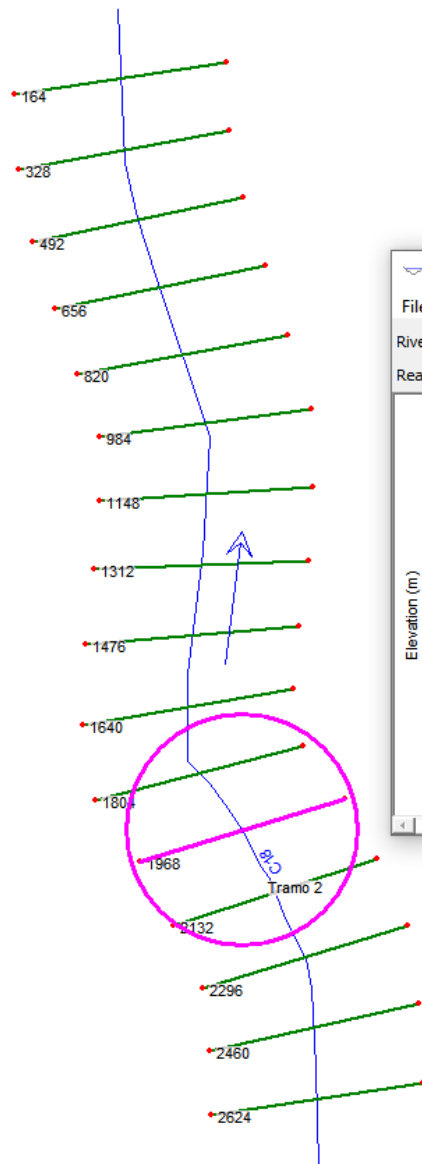
Plan: Plan 03 C18 Tramo 2 RS: 2460 Profile: PF 1					
E.G. Elev (m)	774.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.11	Wt. n-Val.		0.050	
W.S. Elev (m)	774.09	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	774.09	Flow Area (m2)		1.93	
E.G. Slope (m/m)	0.042558	Area (m2)		1.93	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	9.18	Top Width (m)		9.18	
Vel Total (m/s)	1.45	Avg. Vel. (m/s)		1.45	
Max Chl Dpth (m)	0.42	Hydr. Depth (m)		0.21	
Conv. Total (m3/s)	13.6	Conv. (m3/s)		13.6	
Length Wtd. (m)	50.00	Wetted Per. (m)		9.22	
Min Ch El (m)	773.67	Shear (N/m2)		87.24	
Alpha	1.00	Stream Power (N/m s)		126.77	
Frctn Loss (m)	2.28	Cum Volume (1000 m3)		1.56	
C & E Loss (m)	0.01	Cum SA (1000 m2)		14.15	



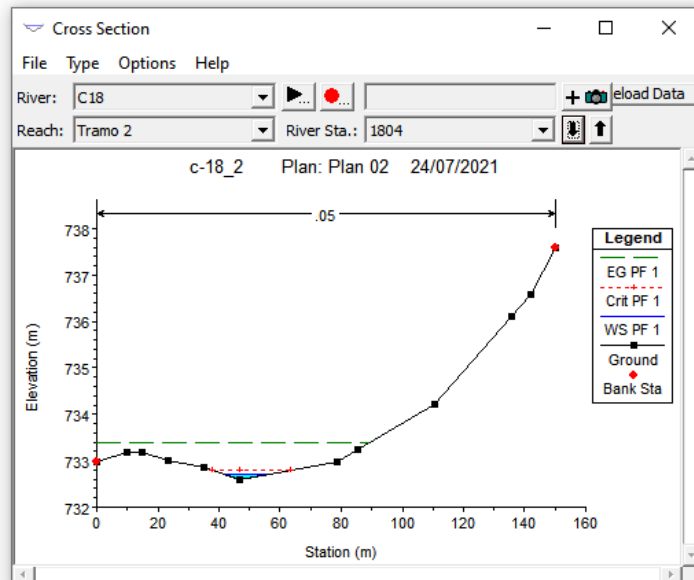
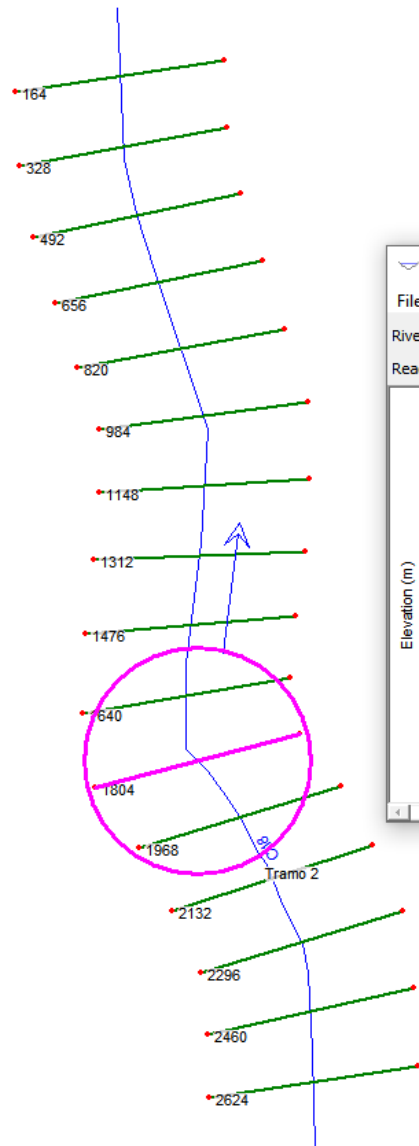
Plan: Plan 03 C18 Tramo 2 RS: 2296 Profile: PF 1					
E.G. Elev (m)	755.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	755.13	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	755.13	Flow Area (m2)		2.35	
E.G. Slope (m/m)	0.048857	Area (m2)		2.35	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	16.81	Top Width (m)		16.81	
Vel Total (m/s)	1.19	Avg. Vel. (m/s)		1.19	
Max Chl Dpth (m)	0.28	Hydr. Depth (m)		0.14	
Conv. Total (m3/s)	12.7	Conv. (m3/s)		12.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		16.82	
Min Ch El (m)	754.85	Shear (N/m2)		66.99	
Alpha	1.00	Stream Power (N/m s)		79.78	
Frctn Loss (m)	7.80	Cum Volume (1000 m3)		1.46	
C & E Loss (m)	0.12	Cum SA (1000 m2)		13.50	



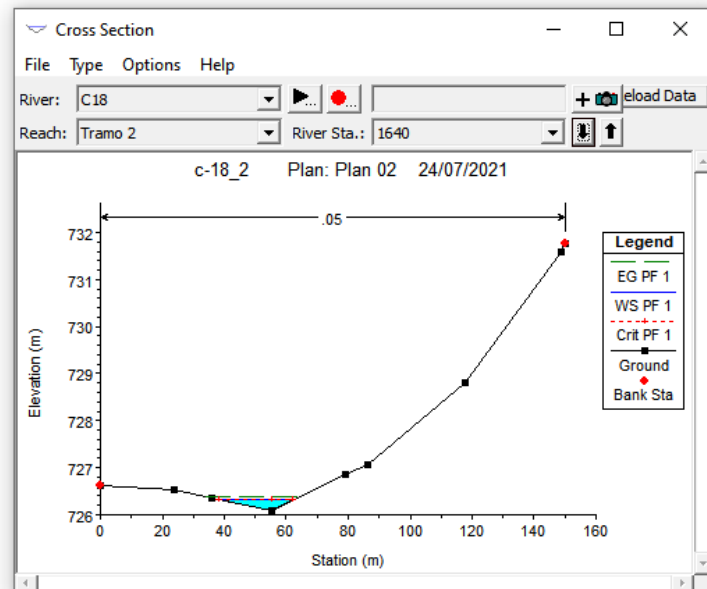
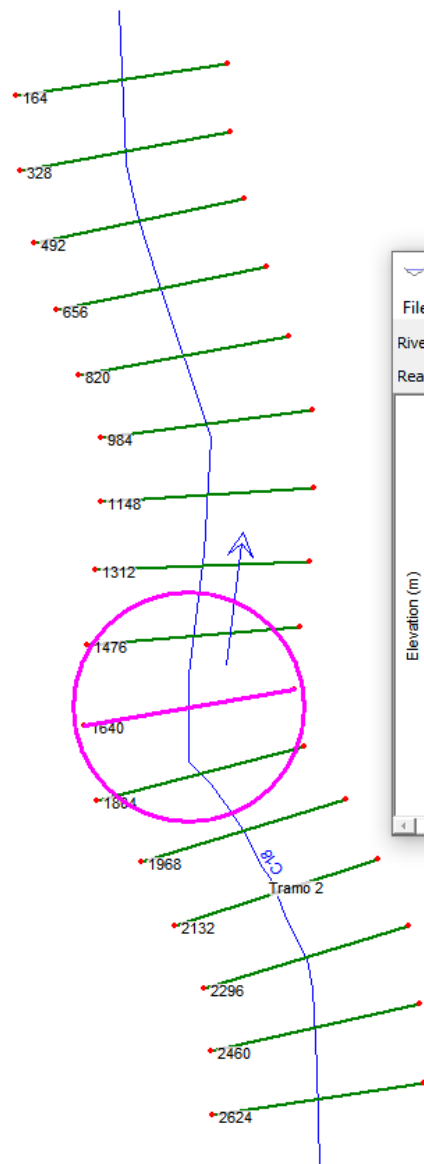
Plan: Plan 03 C18 Tramo 2 RS: 2132 Profile: PF 1					
E.G. Elev (m)	747.29	Element	Left OB	Channel	Right OB
Vel Head (m)	1.25	Wt. n-Val.		0.050	
W.S. Elev (m)	746.04	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	746.15	Flow Area (m2)		0.57	
E.G. Slope (m/m)	3.417794	Area (m2)		0.57	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	11.46	Top Width (m)		11.46	
Vel Total (m/s)	4.95	Avg. Vel. (m/s)		4.95	
Max Chl Dpth (m)	0.10	Hydr. Depth (m)		0.05	
Conv. Total (m3/s)	1.5	Conv. (m3/s)		1.5	
Length Wtd. (m)	50.00	Wetted Per. (m)		11.56	
Min Ch El (m)	745.94	Shear (N/m2)		1640.64	
Alpha	1.00	Stream Power (N/m s)		8117.46	
Frctn Loss (m)	2.48	Cum Volume (1000 m3)		1.38	
C & E Loss (m)	0.00	Cum SA (1000 m2)		12.80	



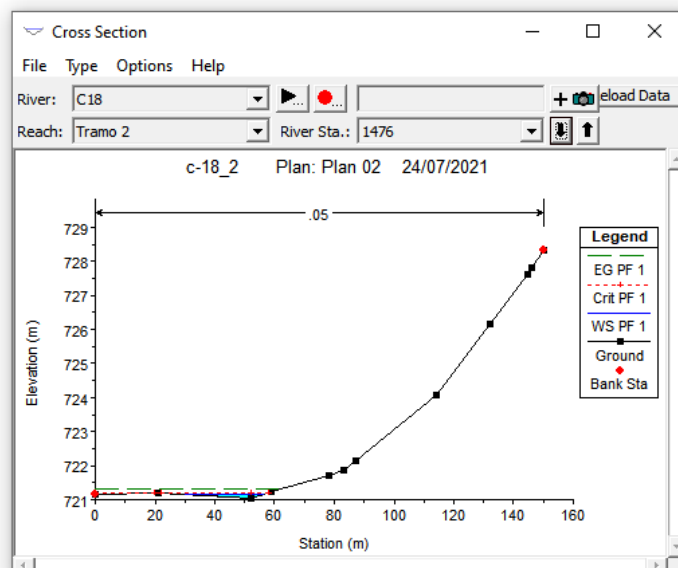
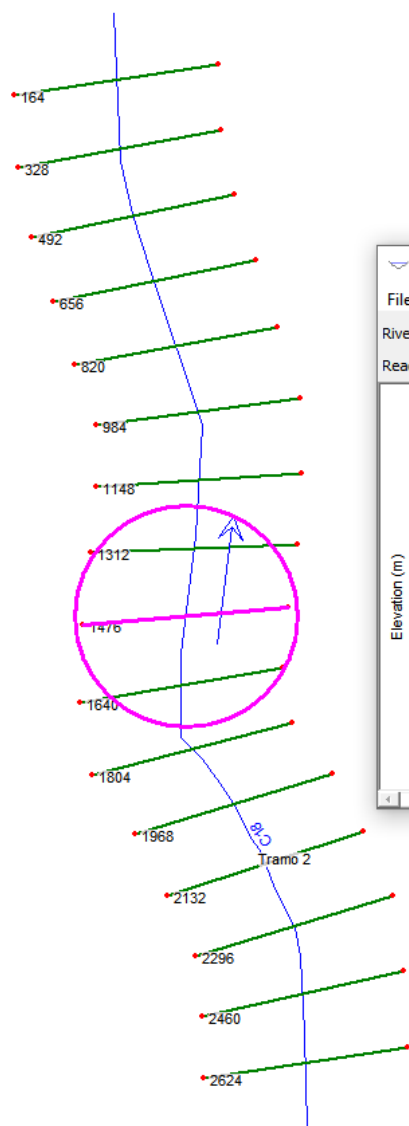
Plan: Plan 03 C18 Tramo 2 RS: 1968 Profile: PF 1					
E.G. Elev (m)	740.47	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	740.39	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	740.39	Flow Area (m2)		2.37	
E.G. Slope (m/m)	0.048239	Area (m2)		2.37	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	16.77	Top Width (m)		16.77	
Vel Total (m/s)	1.18	Avg. Vel. (m/s)		1.18	
Max Chl Dpth (m)	0.29	Hydr. Depth (m)		0.14	
Conv. Total (m3/s)	12.7	Conv. (m3/s)		12.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		17.07	
Min Ch El (m)	740.10	Shear (N/m2)		65.81	
Alpha	1.00	Stream Power (N/m s)		77.61	
Frctn Loss (m)	7.00	Cum Volume (1000 m3)		1.31	
C & E Loss (m)	0.06	Cum SA (1000 m2)		12.09	



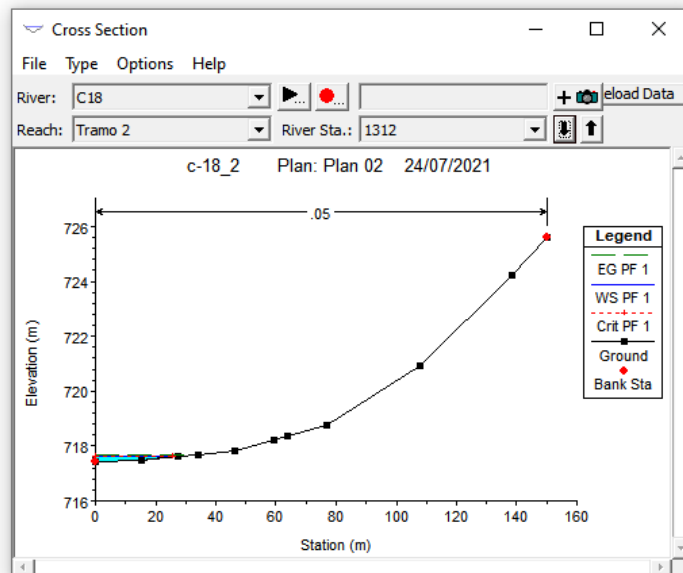
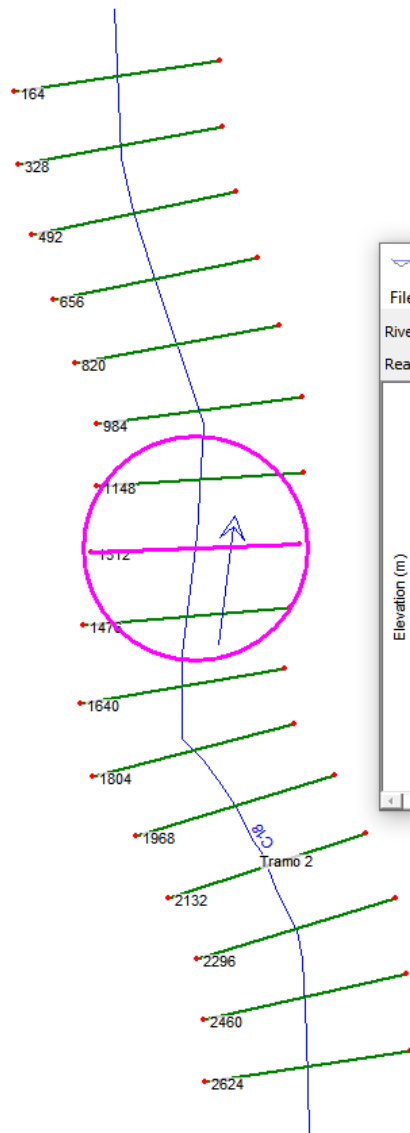
Plan: Plan 03 C18 Tramo 2 RS: 1804 Profile: PF 1					
E.G. Elev (m)	733.40	Element	Left OB	Channel	Right OB
Vel Head (m)	0.70	Wt. n-Val.		0.050	
W.S. Elev (m)	732.70	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	732.80	Flow Area (m2)		0.76	
E.G. Slope (m/m)	1.600066	Area (m2)		0.76	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	13.55	Top Width (m)		13.55	
Vel Total (m/s)	3.70	Avg. Vel. (m/s)		3.70	
Max Chl Dpth (m)	0.11	Hydr. Depth (m)		0.06	
Conv. Total (m3/s)	2.2	Conv. (m3/s)		2.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		13.55	
Min Ch El (m)	732.59	Shear (N/m2)		876.76	
Alpha	1.00	Stream Power (N/m s)		3241.90	
Frctn Loss (m)	2.61	Cum Volume (1000 m3)		1.23	
C & E Loss (m)	0.00	Cum SA (1000 m2)		11.33	



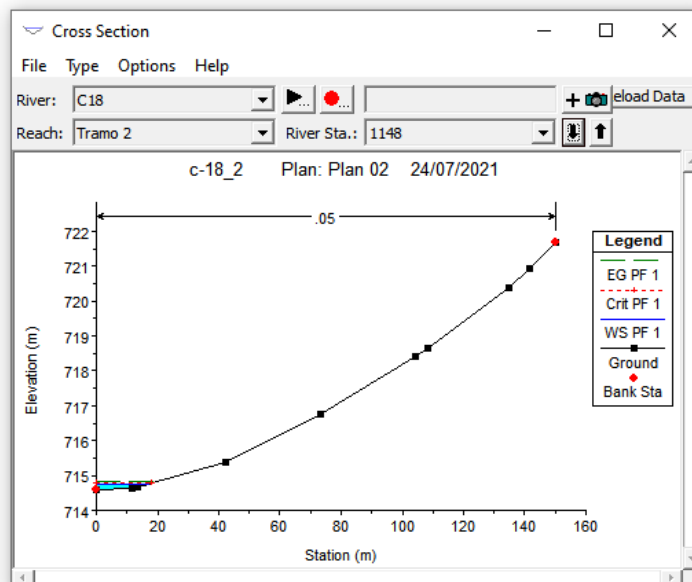
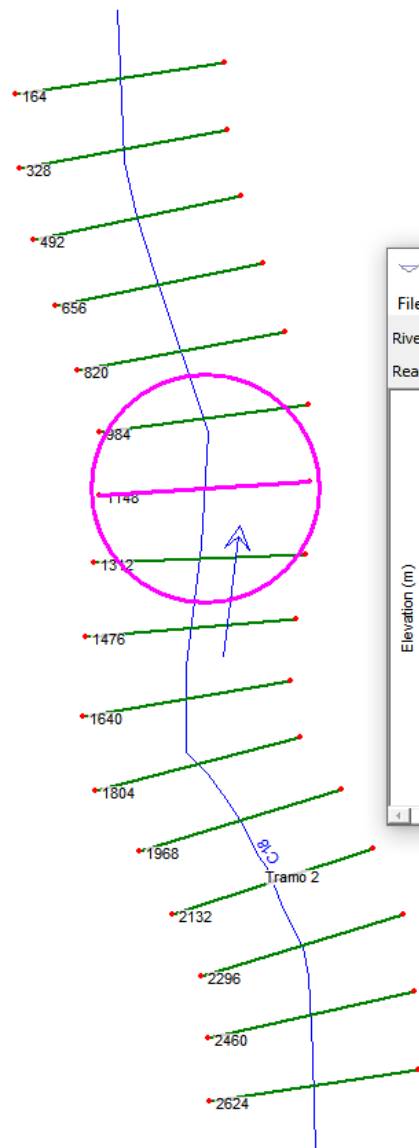
Plan: Plan 03 C18 Tramo 2 RS: 1640 Profile: PF 1					
E.G. Elev (m)	726.38	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	726.32	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	726.32	Flow Area (m2)		2.67	
E.G. Slope (m/m)	0.051933	Area (m2)		2.67	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	24.10	Top Width (m)		24.10	
Vel Total (m/s)	1.05	Avg. Vel. (m/s)		1.05	
Max Chl Dpth (m)	0.22	Hydr. Depth (m)		0.11	
Conv. Total (m3/s)	12.3	Conv. (m3/s)		12.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		24.11	
Min Ch El (m)	726.10	Shear (N/m2)		56.32	
Alpha	1.00	Stream Power (N/m s)		59.15	
Frctn Loss (m)	5.07	Cum Volume (1000 m3)		1.15	
C & E Loss (m)	0.01	Cum SA (1000 m2)		10.39	



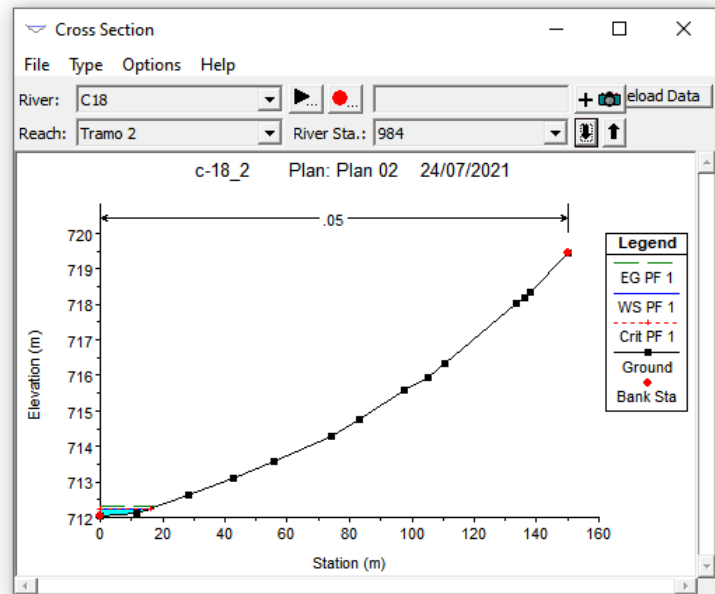
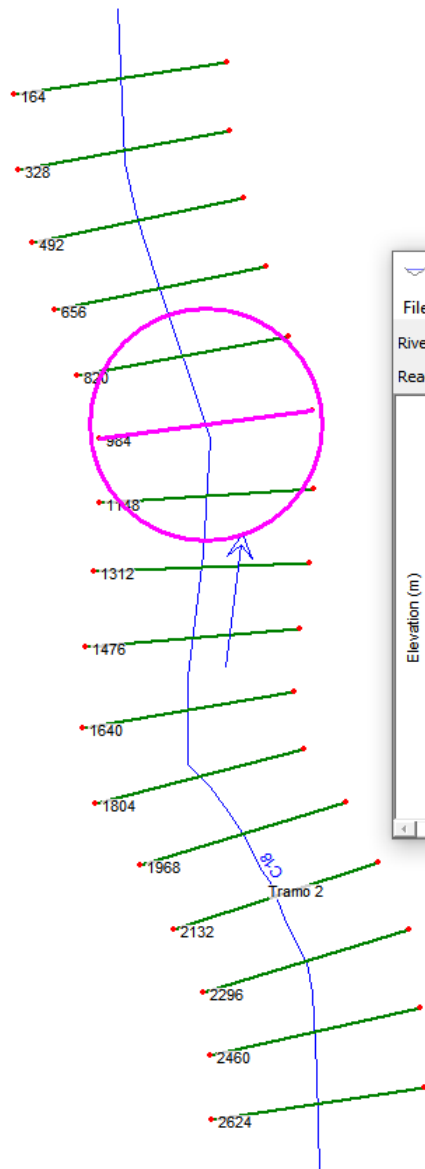
Plan: Plan 03 C18 Tramo 2 RS: 1476 Profile: PF 1					
E.G. Elev (m)	721.30	Element	Left OB	Channel	Right OB
Vel Head (m)	0.14	Wt. n-Val.		0.050	
W.S. Elev (m)	721.16	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	721.21	Flow Area (m2)		1.66	
E.G. Slope (m/m)	0.278857	Area (m2)		1.66	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	26.07	Top Width (m)		26.07	
Vel Total (m/s)	1.69	Avg. Vel. (m/s)		1.69	
Max Chl Dpth (m)	0.13	Hydr. Depth (m)		0.06	
Conv. Total (m3/s)	5.3	Conv. (m3/s)		5.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		26.07	
Min Ch El (m)	721.03	Shear (N/m2)		174.28	
Alpha	1.00	Stream Power (N/m s)		293.67	
Frctn Loss (m)	2.84	Cum Volume (1000 m3)		1.04	
C & E Loss (m)	0.00	Cum SA (1000 m2)		9.14	



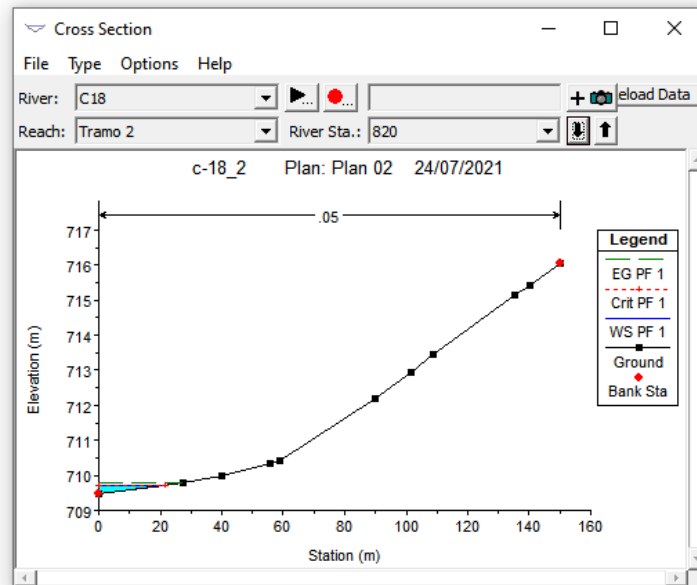
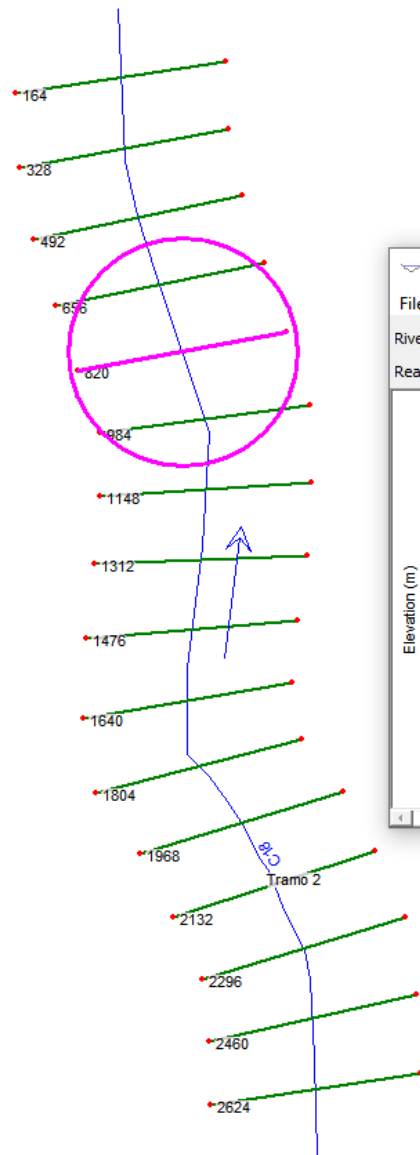
Plan: Plan 03 C18 Tramo 2 RS: 1312 Profile: PF 1					
E.G. Elev (m)	717.66	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	717.60	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	717.60	Flow Area (m2)		2.73	
E.G. Slope (m/m)	0.053123	Area (m2)		2.73	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	25.74	Top Width (m)		25.74	
Vel Total (m/s)	1.03	Avg. Vel. (m/s)		1.03	
Max Chl Dpth (m)	0.16	Hydr. Depth (m)		0.11	
Conv. Total (m3/s)	12.1	Conv. (m3/s)		12.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		25.90	
Min Ch El (m)	717.44	Shear (N/m2)		54.81	
Alpha	1.00	Stream Power (N/m s)		56.31	
Frctn Loss (m)	2.82	Cum Volume (1000 m3)		0.93	
C & E Loss (m)	0.00	Cum SA (1000 m2)		7.84	



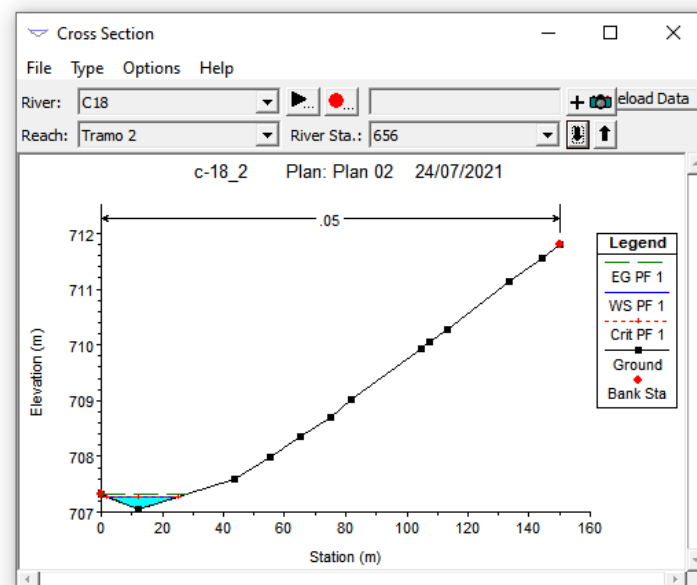
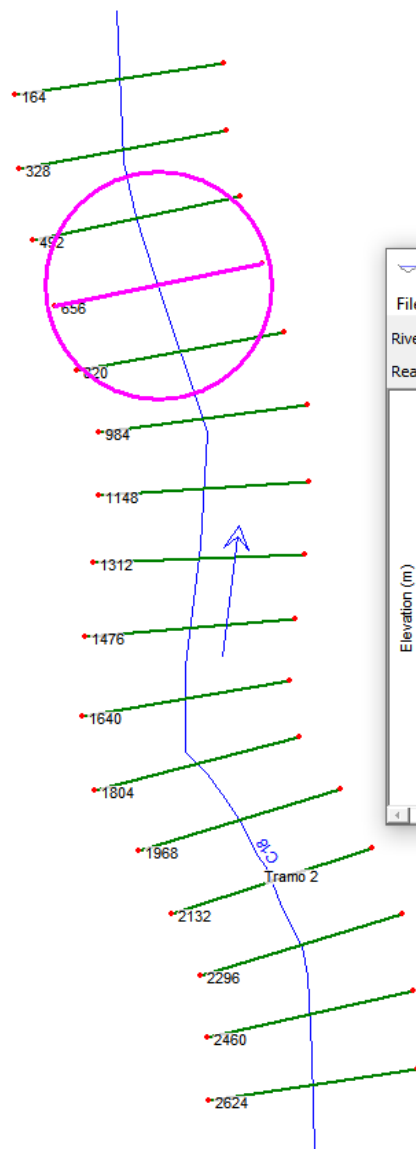
Plan: Plan 03 C18 Tramo 2 RS: 1148 Profile: PF 1					
E.G. Elev (m)	714.84	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	714.76	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	714.77	Flow Area (m2)		2.27	
E.G. Slope (m/m)	0.059800	Area (m2)		2.27	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	17.73	Top Width (m)		17.73	
Vel Total (m/s)	1.23	Avg. Vel. (m/s)		1.23	
Max Chl Dpth (m)	0.17	Hydr. Depth (m)		0.13	
Conv. Total (m3/s)	11.5	Conv. (m3/s)		11.5	
Length Wtd. (m)	50.00	Wetted Per. (m)		17.91	
Min Ch El (m)	714.59	Shear (N/m2)		74.31	
Alpha	1.00	Stream Power (N/m s)		91.70	
Frctn Loss (m)	2.46	Cum Volume (1000 m3)		0.80	
C & E Loss (m)	0.00	Cum SA (1000 m2)		6.75	



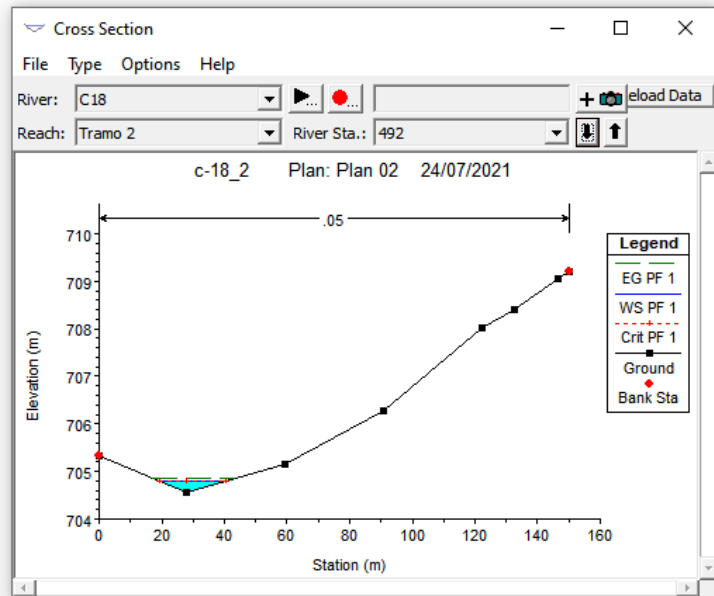
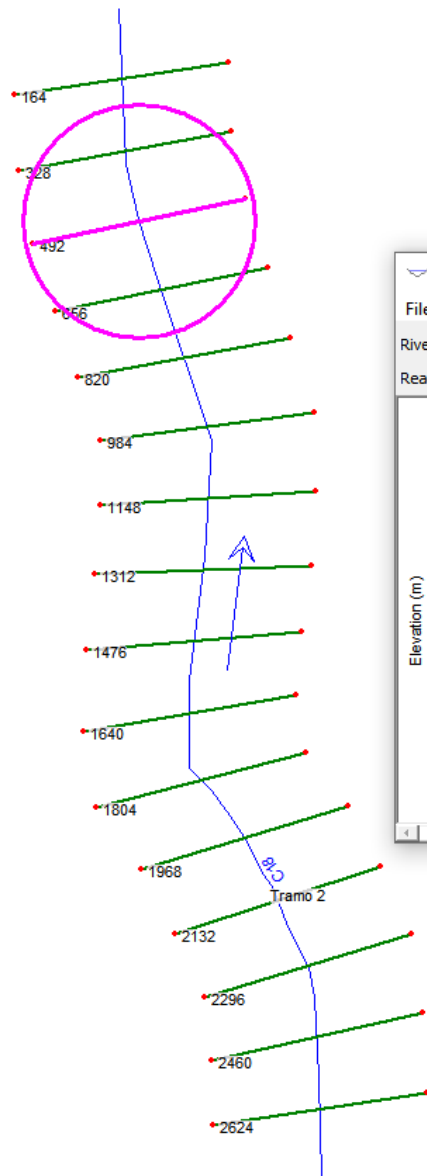
Plan: Plan 03 C18 Tramo 2 RS: 984 Profile: PF 1					
E.G. Elev (m)	712.31	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	712.24	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	712.24	Flow Area (m2)		2.32	
E.G. Slope (m/m)	0.048573	Area (m2)		2.32	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	15.97	Top Width (m)		15.97	
Vel Total (m/s)	1.21	Avg. Vel. (m/s)		1.21	
Max Chl Dpth (m)	0.21	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	12.7	Conv. (m3/s)		12.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		16.18	
Min Ch El (m)	712.03	Shear (N/m2)		68.27	
Alpha	1.00	Stream Power (N/m s)		82.42	
Frctn Loss (m)	2.53	Cum Volume (1000 m3)		0.69	
C & E Loss (m)	0.00	Cum SA (1000 m2)		5.91	



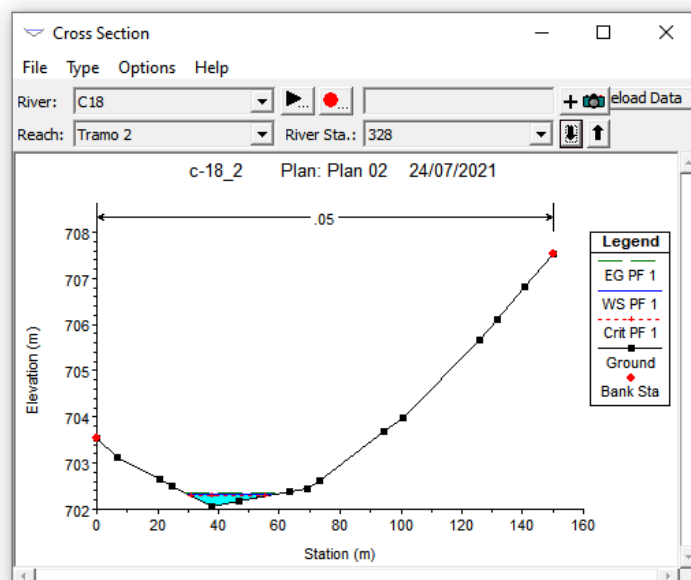
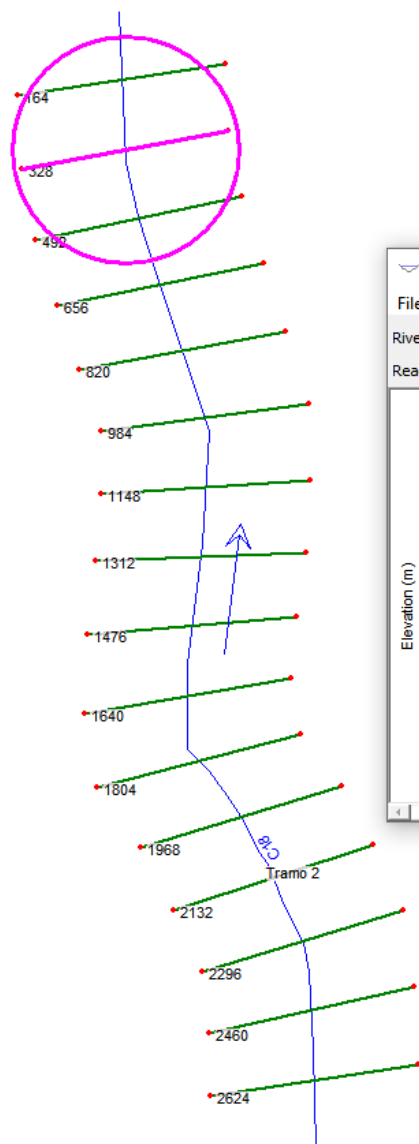
Plan: Plan 03 C18 Tramo 2 RS: 820 Profile: PF 1					
E.G. Elev (m)	709.78	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	709.72	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	709.72	Flow Area (m2)		2.55	
E.G. Slope (m/m)	0.052861	Area (m2)		2.55	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	21.61	Top Width (m)		21.61	
Vel Total (m/s)	1.10	Avg. Vel. (m/s)		1.10	
Max Chl Dpth (m)	0.24	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	12.2	Conv. (m3/s)		12.2	
Length Wtd. (m)		Wetted Per. (m)		21.85	
Min Ch El (m)	709.48	Shear (N/m2)		60.50	
Alpha	1.00	Stream Power (N/m s)		66.43	
Frctn Loss (m)		Cum Volume (1000 m3)		0.57	
C & E Loss (m)		Cum SA (1000 m2)		4.97	



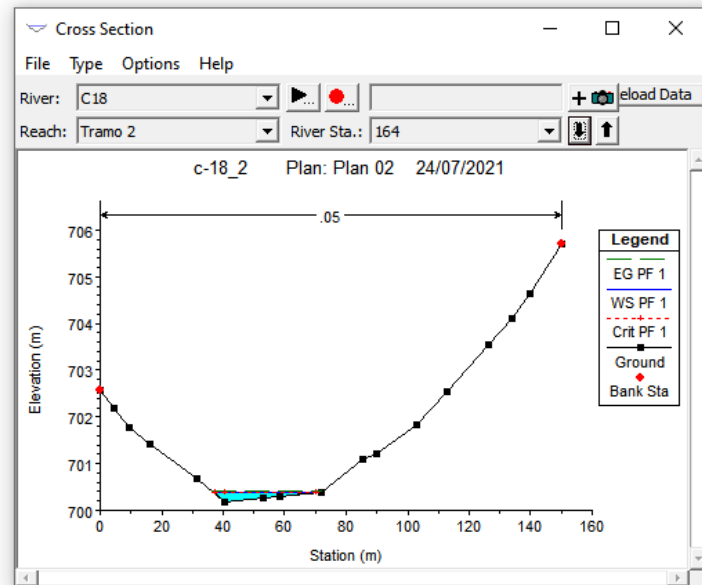
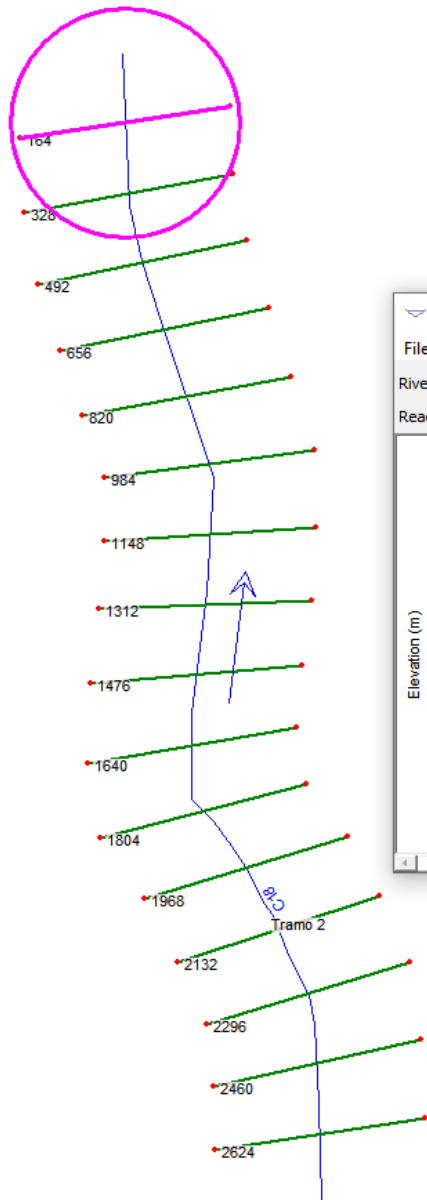
Plan: Plan 03 C18 Tramo 2 RS: 656 Profile: PF 1					
E.G. Elev (m)	707.32	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	707.27	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	707.27	Flow Area (m2)		2.62	
E.G. Slope (m/m)	0.052090	Area (m2)		2.62	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	23.13	Top Width (m)		23.13	
Vel Total (m/s)	1.07	Avg. Vel. (m/s)		1.07	
Max Chl Dpth (m)	0.23	Hydr. Depth (m)		0.11	
Conv. Total (m3/s)	12.3	Conv. (m3/s)		12.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		23.13	
Min Ch El (m)	707.04	Shear (N/m2)		57.86	
Alpha	1.00	Stream Power (N/m s)		61.83	
Frctn Loss (m)	2.47	Cum Volume (1000 m3)		0.44	
C & E Loss (m)	0.00	Cum SA (1000 m2)		3.85	



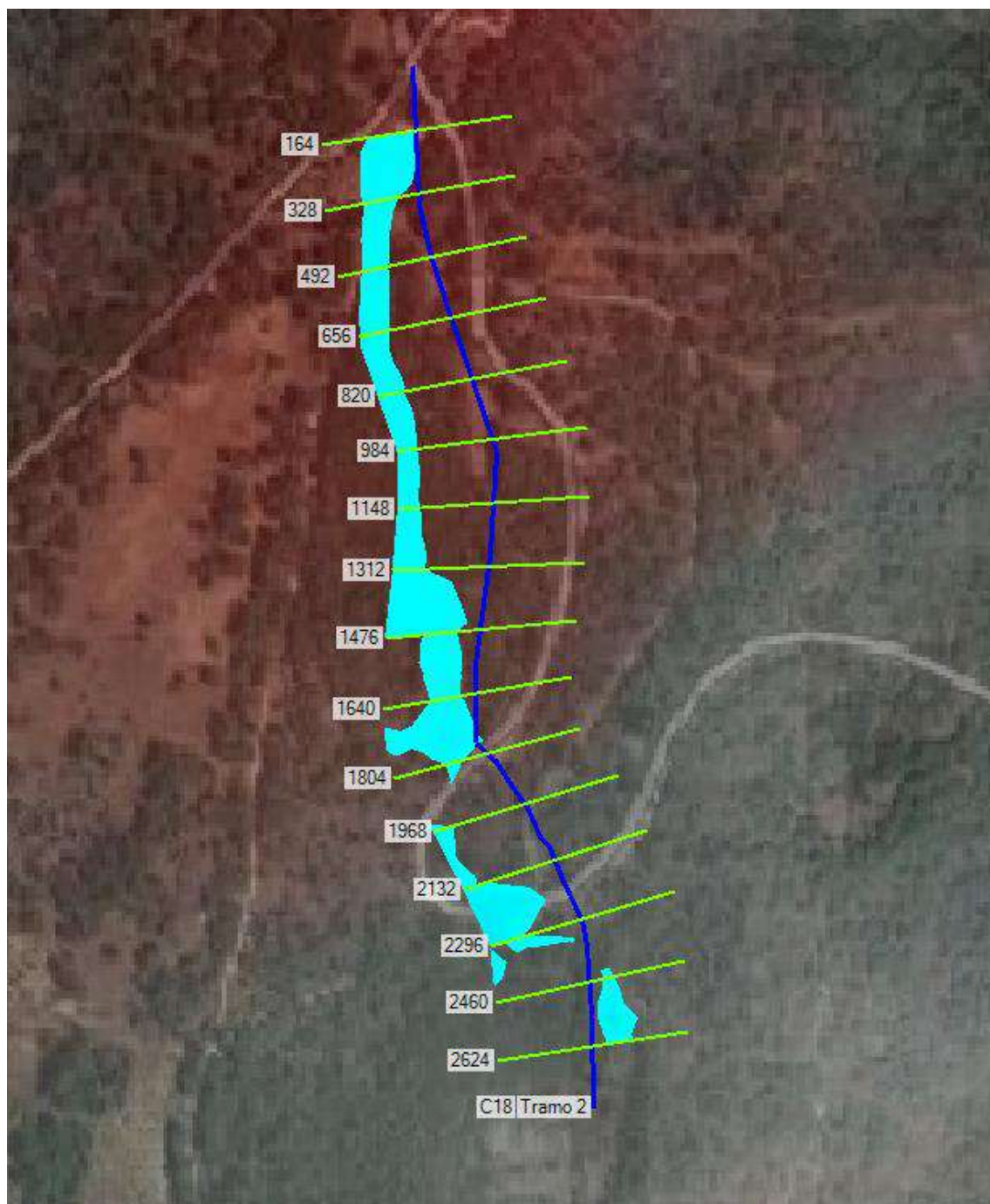
Plan: Plan 03 C18 Tramo 2 RS: 492 Profile: PF 1					
E.G. Elev (m)	704.85	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	704.79	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	704.79	Flow Area (m2)		2.57	
E.G. Slope (m/m)	0.049658	Area (m2)		2.57	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	21.36	Top Width (m)		21.36	
Vel Total (m/s)	1.09	Avg. Vel. (m/s)		1.09	
Max Chl Dpth (m)	0.24	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	12.6	Conv. (m3/s)		12.6	
Length Wtd. (m)	50.00	Wetted Per. (m)		21.37	
Min Ch El (m)	704.55	Shear (N/m2)		58.69	
Alpha	1.00	Stream Power (N/m s)		63.82	
Frctn Loss (m)	1.85	Cum Volume (1000 m3)		0.31	
C & E Loss (m)	0.01	Cum SA (1000 m2)		2.74	



Plan: Plan 03 C18 Tramo 2 RS: 328 Profile: PF 1					
E.G. Elev (m)	702.35	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	702.31	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	702.28	Flow Area (m2)		3.37	
E.G. Slope (m/m)	0.028582	Area (m2)		3.37	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	27.60	Top Width (m)		27.60	
Vel Total (m/s)	0.83	Avg. Vel. (m/s)		0.83	
Max Chl Dpth (m)	0.26	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	16.6	Conv. (m3/s)		16.6	
Length Wtd. (m)	50.00	Wetted Per. (m)		27.60	
Min Ch El (m)	702.05	Shear (N/m2)		34.19	
Alpha	1.00	Stream Power (N/m s)		28.43	
Frctn Loss (m)	1.93	Cum Volume (1000 m3)		0.16	
C & E Loss (m)	0.00	Cum SA (1000 m2)		1.52	

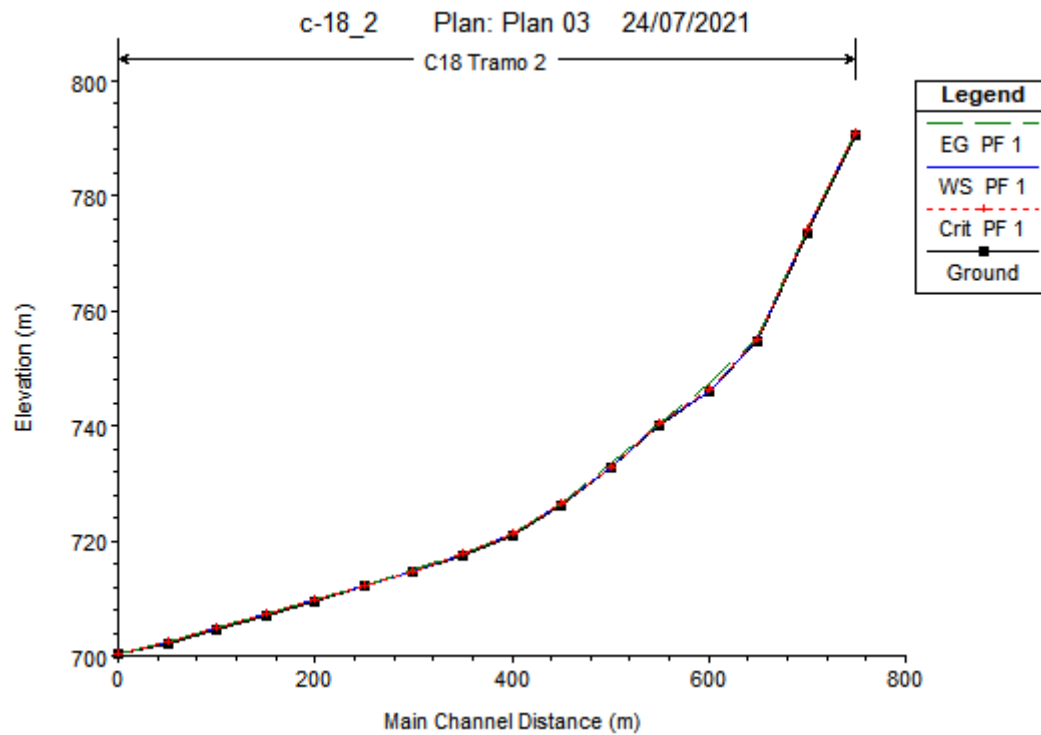


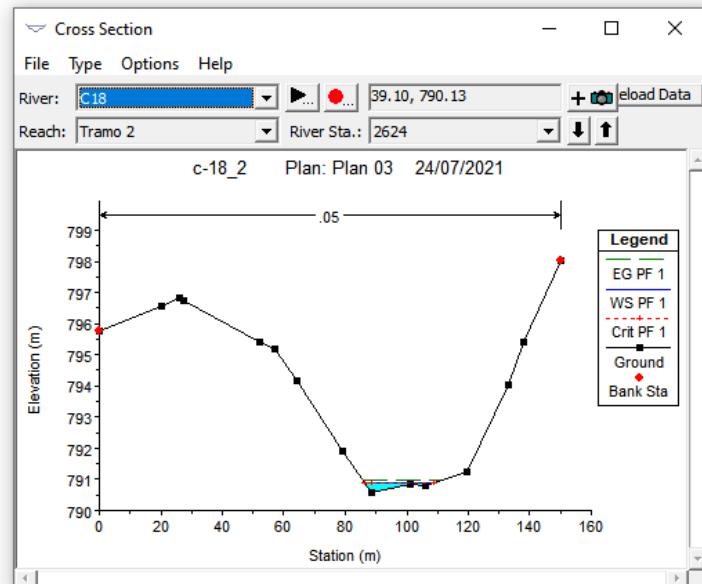
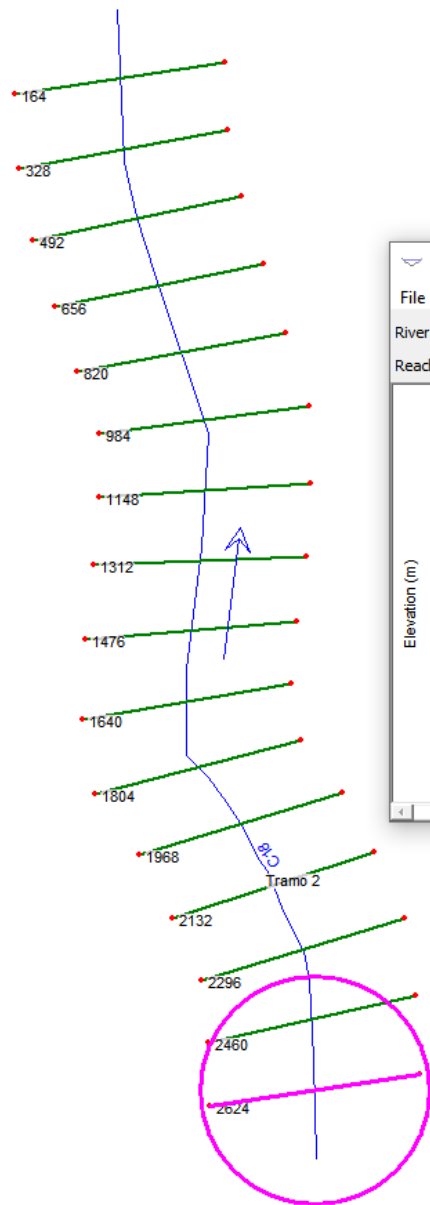
Plan: Plan 03 C18 Tramo 2 RS: 164 Profile: PF 1					
E.G. Elev (m)	700.42	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	700.37	Reach Len. (m)			
Crit W.S. (m)	700.37	Flow Area (m2)		2.98	
E.G. Slope (m/m)	0.054733	Area (m2)		2.98	
Q Total (m3/s)	2.80	Flow (m3/s)		2.80	
Top Width (m)	33.12	Top Width (m)		33.12	
Vel Total (m/s)	0.94	Avg. Vel. (m/s)		0.94	
Max Chl Dpth (m)	0.18	Hydr. Depth (m)		0.09	
Conv. Total (m3/s)	12.0	Conv. (m3/s)		12.0	
Length Wtd. (m)		Wetted Per. (m)		33.13	
Min Ch El (m)	700.19	Shear (N/m2)		48.29	
Alpha	1.00	Stream Power (N/m s)		45.36	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			



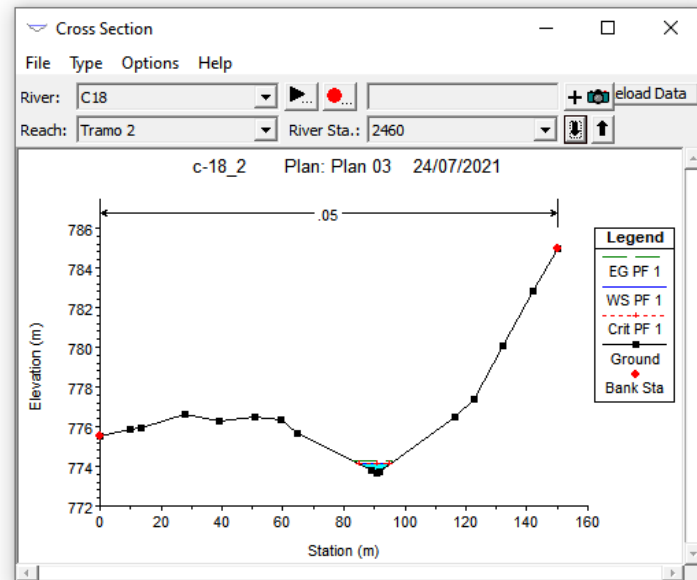
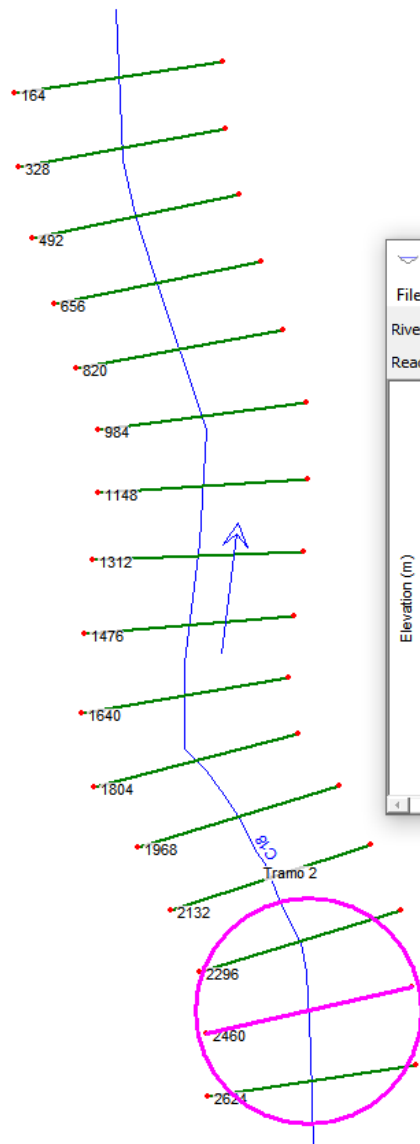
T500 (Q=3.69 m3/s)

HEC-RAS Plan: Plan 03 River: C18 Reach: Tramo 2 Profile: PF 1												
Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Tramo 2	2624	PF 1	3.69	790.56	790.88	790.88	790.96	0.050259	1.20	3.09	22.40	1.03
Tramo 2	2460	PF 1	3.69	773.67	774.14	774.14	774.26	0.040886	1.53	2.41	10.27	1.01
Tramo 2	2296	PF 1	3.69	754.85	755.16	755.16	755.24	0.047086	1.26	2.93	18.77	1.02
Tramo 2	2132	PF 1	3.69	745.94	746.05	746.17	747.34	3.200368	5.03	0.73	13.81	6.97
Tramo 2	1968	PF 1	3.69	740.10	740.43	740.43	740.50	0.049170	1.22	3.03	20.66	1.02
Tramo 2	1804	PF 1	3.69	732.59	732.72	732.83	733.45	1.422228	3.79	0.97	15.36	4.81
Tramo 2	1640	PF 1	3.69	726.10	726.35	726.35	726.41	0.050545	1.11	3.31	26.87	1.01
Tramo 2	1476	PF 1	3.69	721.03	721.17	721.22	721.34	0.294586	1.84	2.00	28.67	2.22
Tramo 2	1312	PF 1	3.69	717.44	717.63	717.63	717.69	0.051601	1.10	3.37	28.29	1.01
Tramo 2	1148	PF 1	3.69	714.59	714.79	714.80	714.88	0.061299	1.36	2.72	18.71	1.14
Tramo 2	984	PF 1	3.69	712.03	712.27	712.27	712.35	0.045162	1.29	2.87	16.96	1.00
Tramo 2	820	PF 1	3.69	709.48	709.74	709.74	709.81	0.057568	1.21	3.04	23.59	1.08
Tramo 2	656	PF 1	3.69	707.04	707.29	707.29	707.36	0.050007	1.13	3.27	25.85	1.01
Tramo 2	492	PF 1	3.69	704.55	704.80	704.82	704.89	0.077324	1.38	2.68	21.80	1.25
Tramo 2	328	PF 1	3.69	702.05	702.34	702.31	702.38	0.028914	0.89	4.14	30.77	0.78
Tramo 2	164	PF 1	3.69	700.19	700.39	700.39	700.44	0.054402	1.02	3.61	35.19	1.02

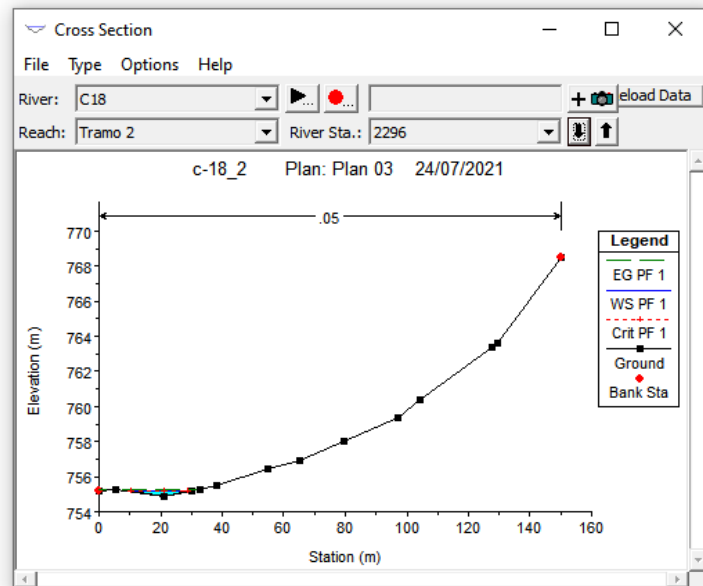
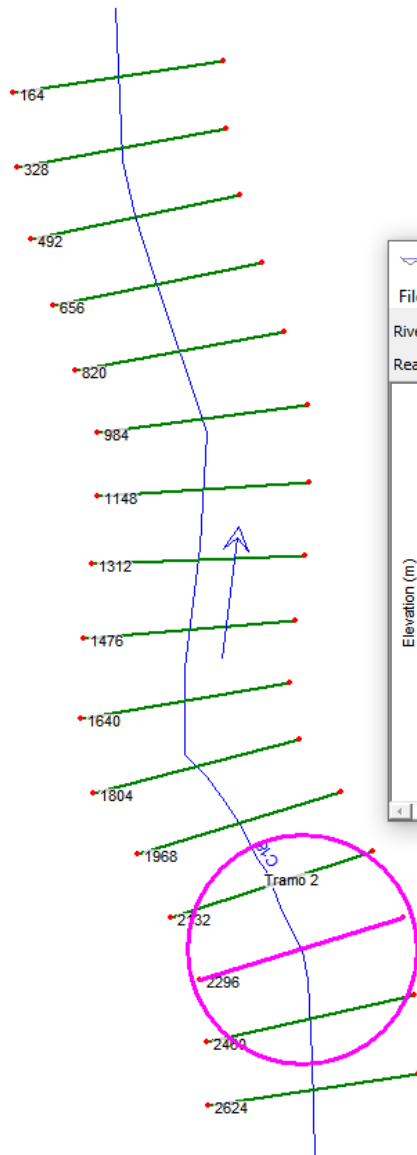




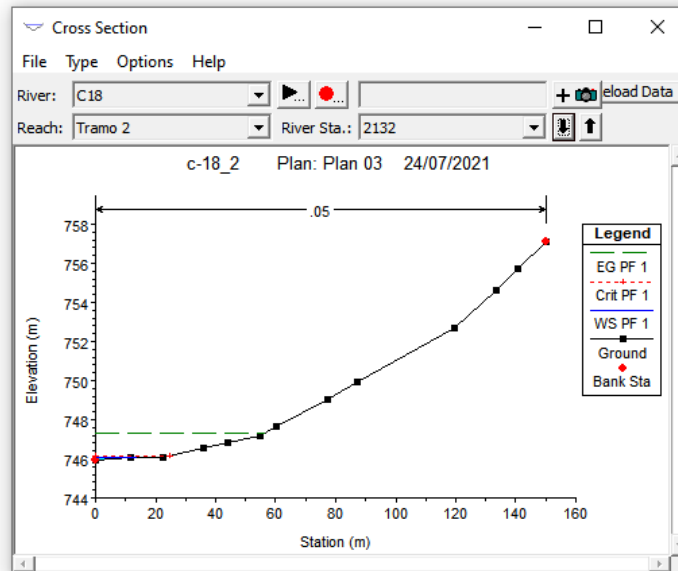
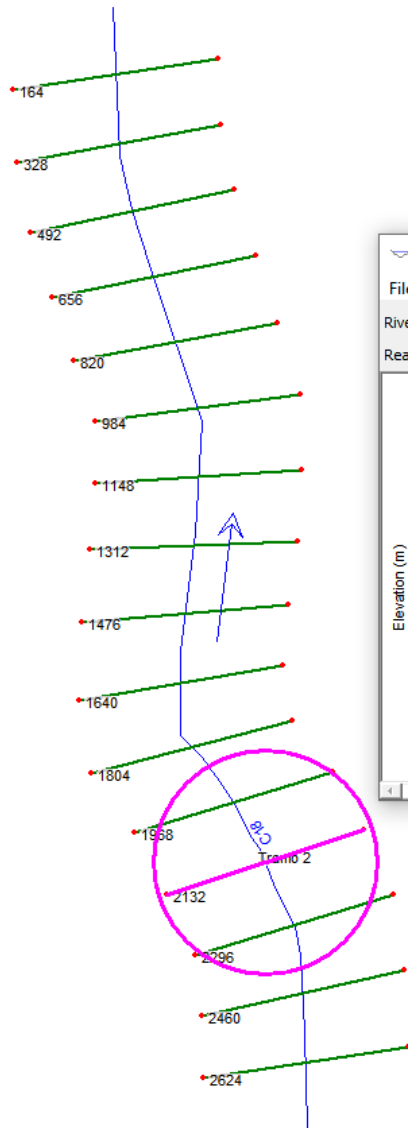
Plan: Plan 03 C18 Tramo 2 RS: 2624 Profile: PF 1					
E.G. Elev (m)	790.96	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	790.88	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	790.88	Flow Area (m2)		3.09	
E.G. Slope (m/m)	0.050259	Area (m2)		3.09	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	22.40	Top Width (m)		22.40	
Vel Total (m/s)	1.20	Avg. Vel. (m/s)		1.20	
Max Chl Dpth (m)	0.32	Hydr. Depth (m)		0.14	
Conv. Total (m3/s)	16.5	Conv. (m3/s)		16.5	
Length Wtd. (m)	50.00	Wetted Per. (m)		22.43	
Min Ch El (m)	790.56	Shear (N/m2)		67.84	
Alpha	1.00	Stream Power (N/m s)		81.09	
Frctn Loss (m)	2.26	Cum Volume (1000 m3)		2.04	
C & E Loss (m)	0.00	Cum SA (1000 m2)		16.46	



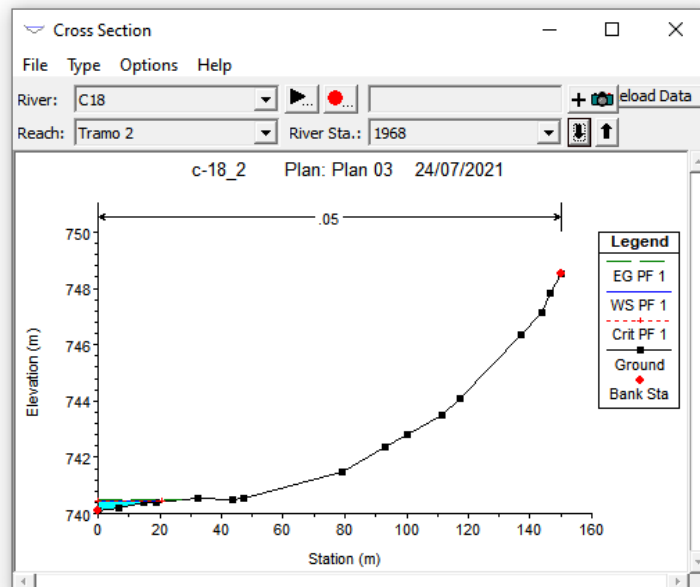
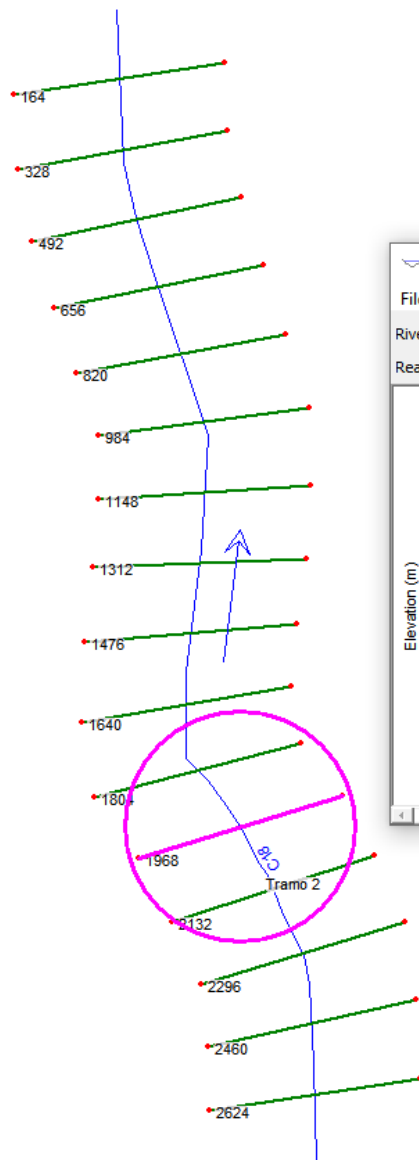
Plan: Plan 03 C18 Tramo 2 RS: 2460 Profile: PF 1					
E.G. Elev (m)	774.26	Element	Left OB	Channel	Right OB
Vel Head (m)	0.12	Wt. n-Val.		0.050	
W.S. Elev (m)	774.14	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	774.14	Flow Area (m2)		2.41	
E.G. Slope (m/m)	0.040886	Area (m2)		2.41	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	10.27	Top Width (m)		10.27	
Vel Total (m/s)	1.53	Avg. Vel. (m/s)		1.53	
Max Chl Dpth (m)	0.47	Hydr. Depth (m)		0.23	
Conv. Total (m3/s)	18.2	Conv. (m3/s)		18.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		10.31	
Min Ch El (m)	773.67	Shear (N/m2)		93.57	
Alpha	1.00	Stream Power (N/m s)		143.44	
Frctn Loss (m)	2.19	Cum Volume (1000 m3)		1.90	
C & E Loss (m)	0.01	Cum SA (1000 m2)		15.64	



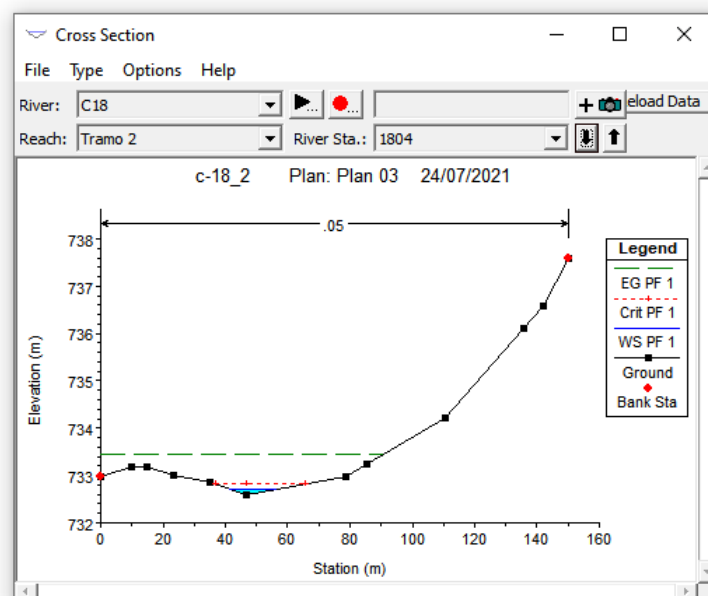
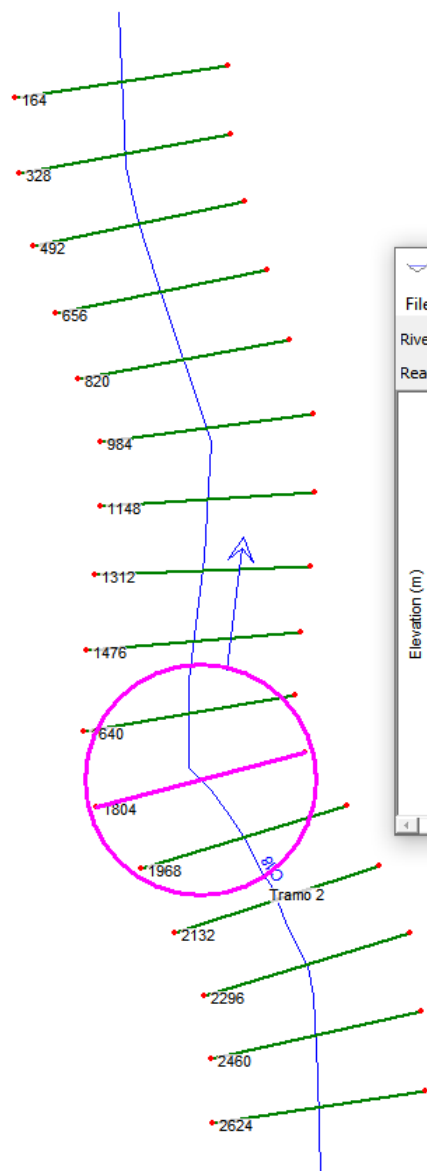
Plan: Plan 03 C18 Tramo 2 RS: 2296 Profile: PF 1					
E.G. Elev (m)	755.24	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	755.16	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	755.16	Flow Area (m2)		2.93	
E.G. Slope (m/m)	0.047086	Area (m2)		2.93	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	18.77	Top Width (m)		18.77	
Vel Total (m/s)	1.26	Avg. Vel. (m/s)		1.26	
Max Chl Dpth (m)	0.31	Hydr. Depth (m)		0.16	
Conv. Total (m3/s)	17.0	Conv. (m3/s)		17.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		18.78	
Min Ch El (m)	754.85	Shear (N/m2)		72.10	
Alpha	1.00	Stream Power (N/m s)		90.73	
Frctn Loss (m)	7.60	Cum Volume (1000 m3)		1.77	
C & E Loss (m)	0.14	Cum SA (1000 m2)		14.92	



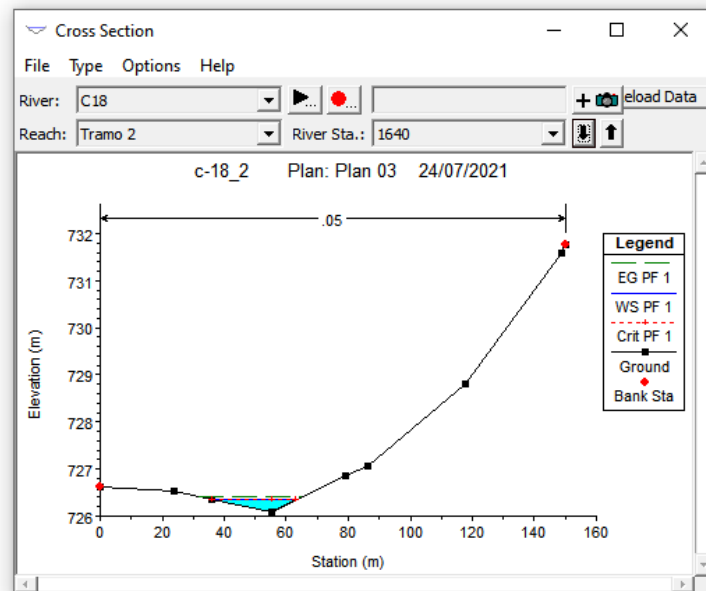
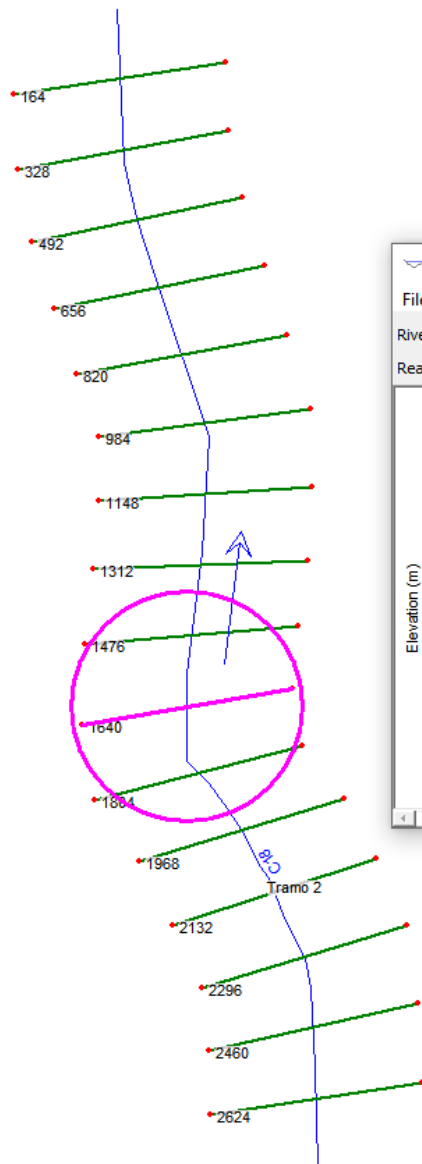
Plan: Plan 03 C18 Tramo 2 RS: 2132 Profile: PF 1					
E.G. Elev (m)	747.34	Element	Left OB	Channel	Right OB
Vel Head (m)	1.29	Wt. n-Val.		0.050	
W.S. Elev (m)	746.05	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	746.17	Flow Area (m2)		0.73	
E.G. Slope (m/m)	3.200368	Area (m2)		0.73	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	13.81	Top Width (m)		13.81	
Vel Total (m/s)	5.03	Avg. Vel. (m/s)		5.03	
Max Chl Dpth (m)	0.11	Hydr. Depth (m)		0.05	
Conv. Total (m3/s)	2.1	Conv. (m3/s)		2.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		13.93	
Min Ch El (m)	745.94	Shear (N/m2)		1653.75	
Alpha	1.00	Stream Power (N/m s)		8316.46	
Frctn Loss (m)	2.48	Cum Volume (1000 m3)		1.68	
C & E Loss (m)	0.00	Cum SA (1000 m2)		14.10	



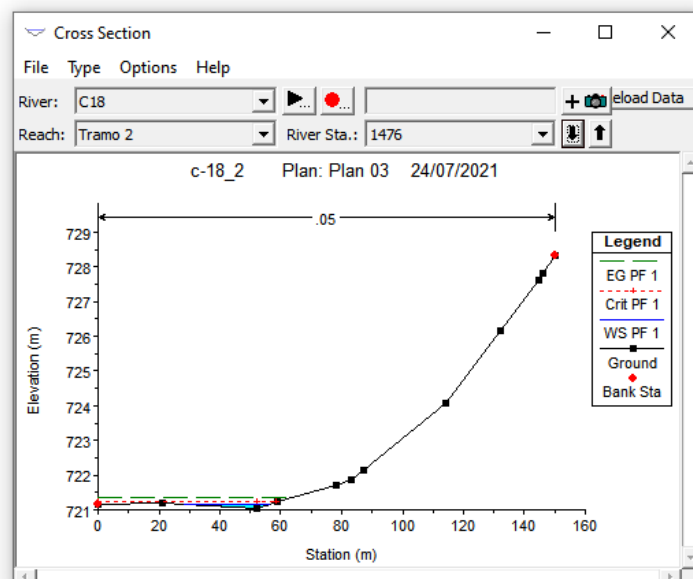
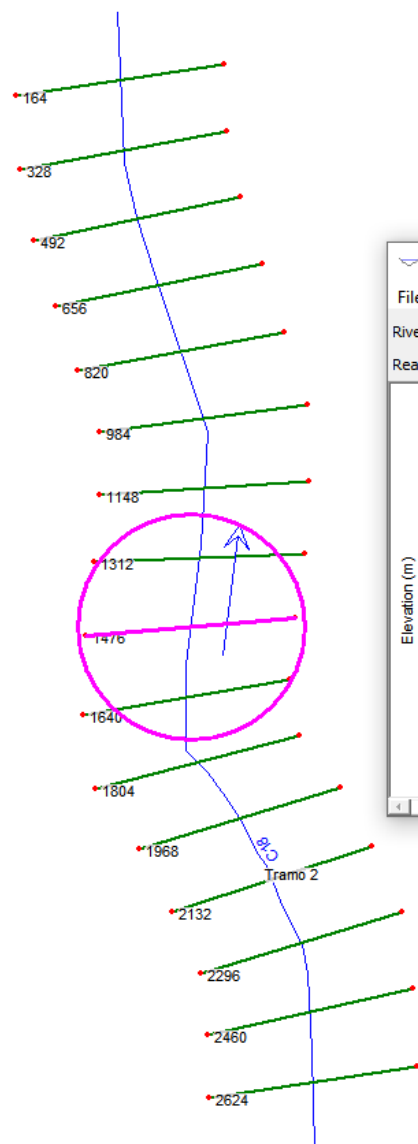
Plan: Plan 03 C18 Tramo 2 RS: 1968 Profile: PF 1					
E.G. Elev (m)	740.50	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	740.43	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	740.43	Flow Area (m2)		3.03	
E.G. Slope (m/m)	0.049170	Area (m2)		3.03	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	20.66	Top Width (m)		20.66	
Vel Total (m/s)	1.22	Avg. Vel. (m/s)		1.22	
Max Chl Dpth (m)	0.33	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	16.6	Conv. (m3/s)		16.6	
Length Wtd. (m)	50.00	Wetted Per. (m)		20.99	
Min Ch El (m)	740.10	Shear (N/m2)		69.51	
Alpha	1.00	Stream Power (N/m s)		84.75	
Frctn Loss (m)	6.99	Cum Volume (1000 m3)		1.58	
C & E Loss (m)	0.07	Cum SA (1000 m2)		13.24	



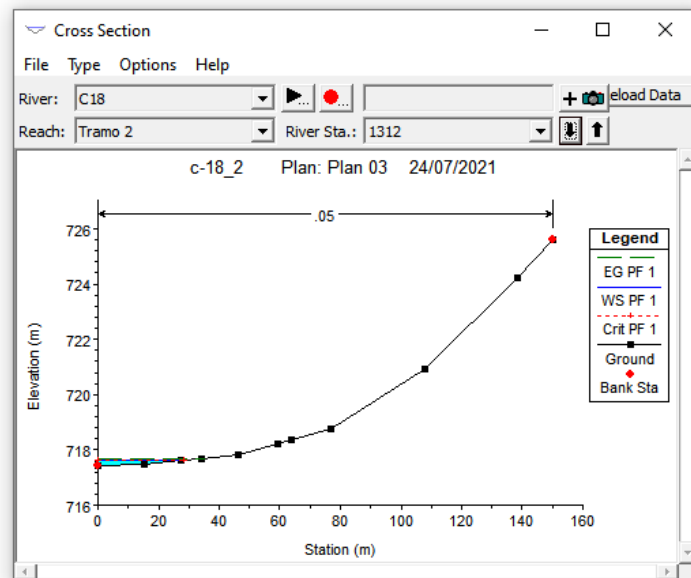
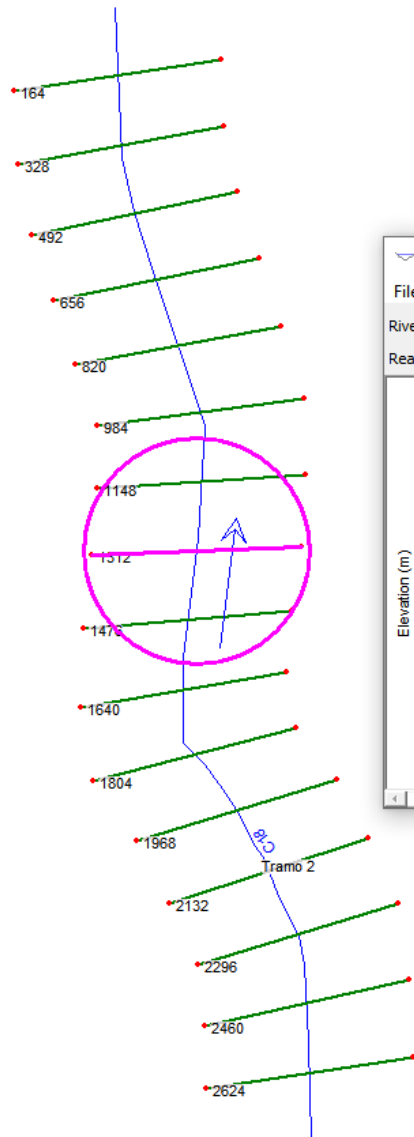
Plan: Plan 03 C18 Tramo 2 RS: 1804 Profile: PF 1					
E.G. Elev (m)	733.45	Element	Left OB	Channel	Right OB
Vel Head (m)	0.73	Wt. n-Val.		0.050	
W.S. Elev (m)	732.72	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	732.83	Flow Area (m2)		0.97	
E.G. Slope (m/m)	1.422228	Area (m2)		0.97	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	15.36	Top Width (m)		15.36	
Vel Total (m/s)	3.79	Avg. Vel. (m/s)		3.79	
Max Chl Dpth (m)	0.13	Hydr. Depth (m)		0.06	
Conv. Total (m3/s)	3.1	Conv. (m3/s)		3.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		15.37	
Min Ch El (m)	732.59	Shear (N/m2)		883.60	
Alpha	1.00	Stream Power (N/m s)		3349.30	
Frctn Loss (m)	2.54	Cum Volume (1000 m3)		1.48	
C & E Loss (m)	0.00	Cum SA (1000 m2)		12.34	



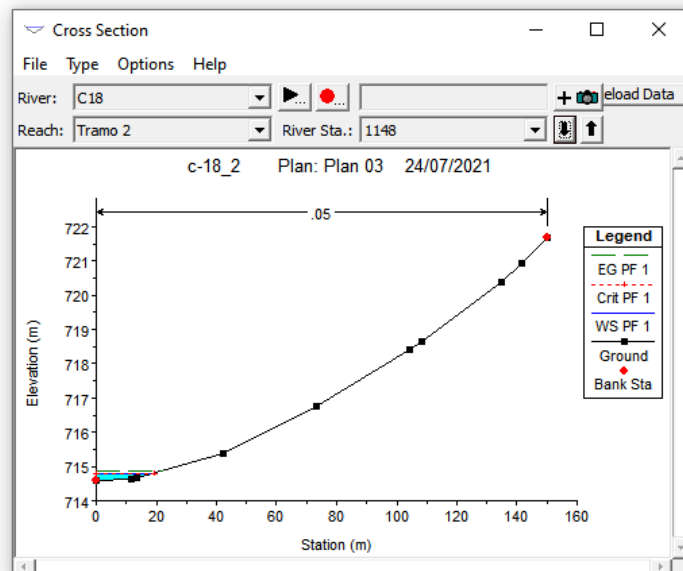
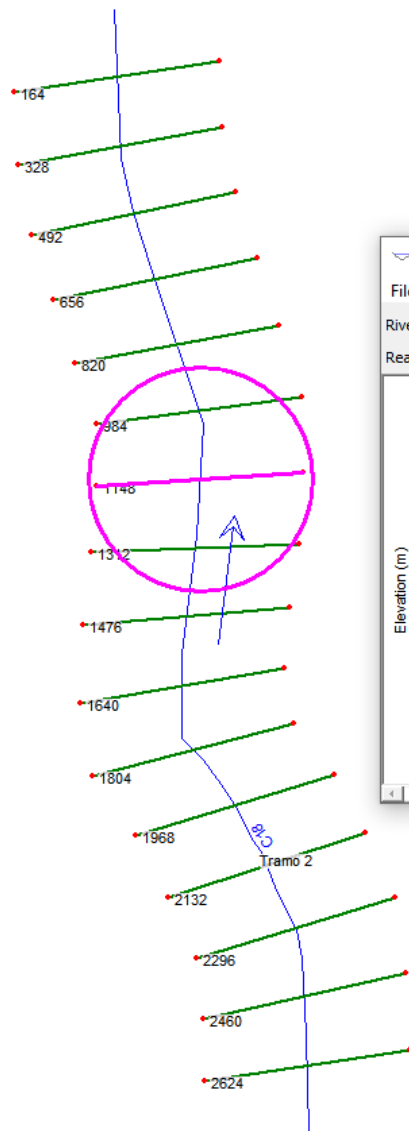
Plan: Plan 03 C18 Tramo 2 RS: 1640 Profile: PF 1					
E.G. Elev (m)	726.41	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	726.35	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	726.35	Flow Area (m2)		3.31	
E.G. Slope (m/m)	0.050545	Area (m2)		3.31	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	26.87	Top Width (m)		26.87	
Vel Total (m/s)	1.11	Avg. Vel. (m/s)		1.11	
Max Chl Dpth (m)	0.25	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	16.4	Conv. (m3/s)		16.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		26.87	
Min Ch El (m)	726.10	Shear (N/m2)		61.11	
Alpha	1.00	Stream Power (N/m s)		68.06	
Frctn Loss (m)	5.05	Cum Volume (1000 m3)		1.38	
C & E Loss (m)	0.01	Cum SA (1000 m2)		11.28	



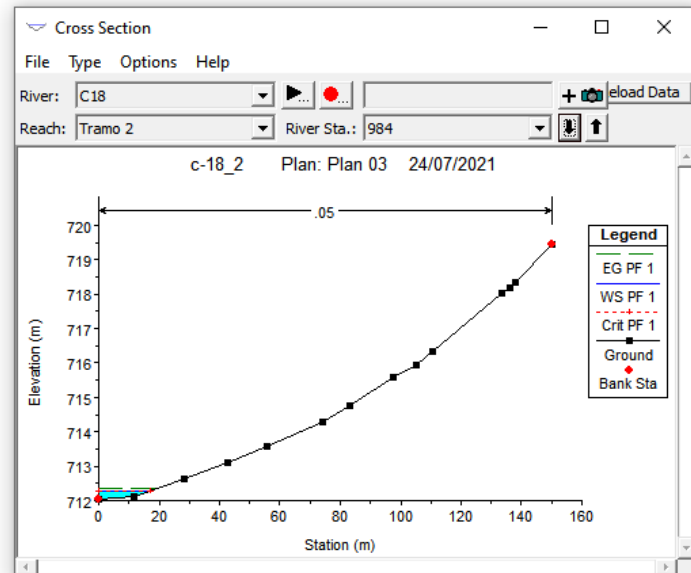
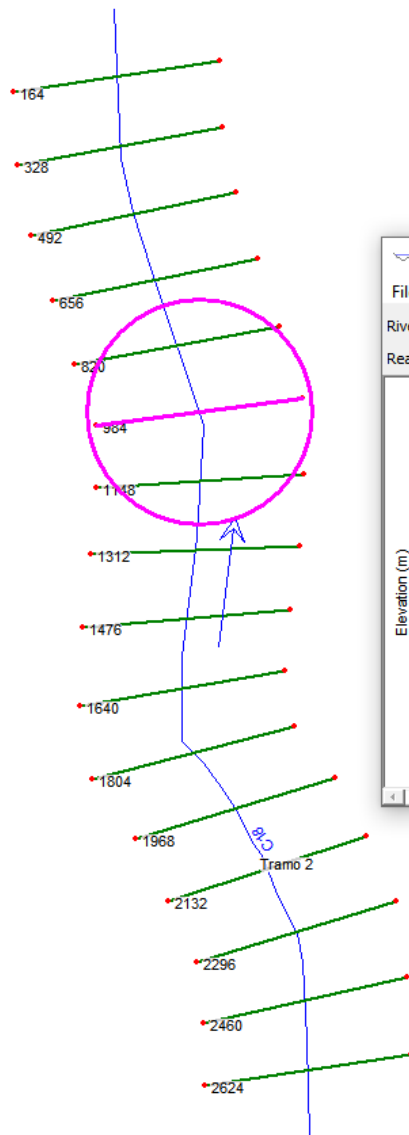
Plan: Plan 03 C18 Tramo 2 RS: 1476 Profile: PF 1					
E.G. Elev (m)	721.34	Element	Left OB	Channel	Right OB
Vel Head (m)	0.17	Wt. n-Val.		0.050	
W.S. Elev (m)	721.17	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	721.22	Flow Area (m2)		2.00	
E.G. Slope (m/m)	0.294586	Area (m2)		2.00	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	28.67	Top Width (m)		28.67	
Vel Total (m/s)	1.84	Avg. Vel. (m/s)		1.84	
Max Chl Dpth (m)	0.14	Hydr. Depth (m)		0.07	
Conv. Total (m3/s)	6.8	Conv. (m3/s)		6.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		28.67	
Min Ch El (m)	721.03	Shear (N/m2)		201.88	
Alpha	1.00	Stream Power (N/m s)		371.81	
Frctn Loss (m)	2.59	Cum Volume (1000 m3)		1.24	
C & E Loss (m)	0.00	Cum SA (1000 m2)		9.89	



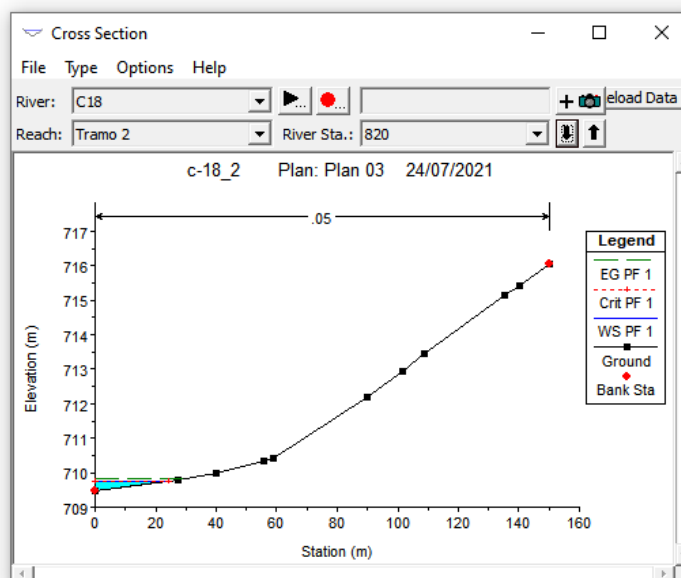
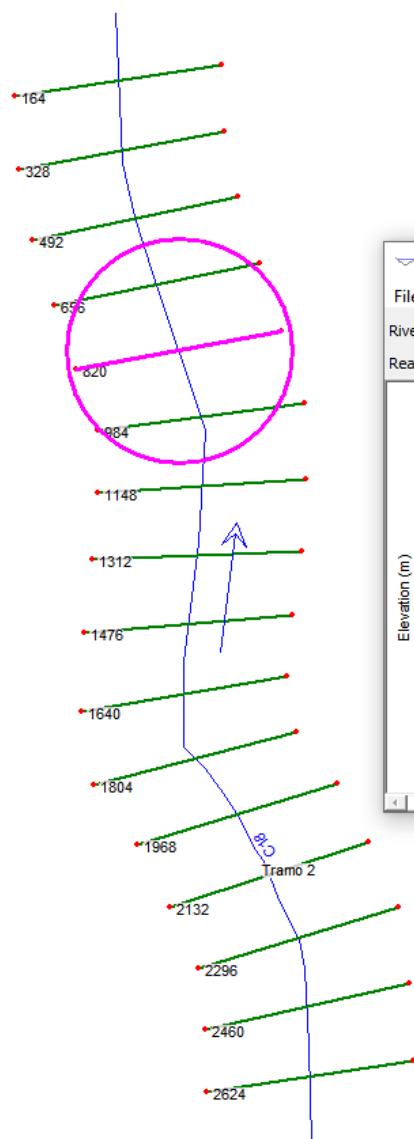
Plan: Plan 03 C18 Tramo 2 RS: 1312 Profile: PF 1					
E.G. Elev (m)	717.69	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	717.63	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	717.63	Flow Area (m2)		3.37	
E.G. Slope (m/m)	0.051601	Area (m2)		3.37	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	28.29	Top Width (m)		28.29	
Vel Total (m/s)	1.10	Avg. Vel. (m/s)		1.10	
Max Chl Dpth (m)	0.19	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	16.2	Conv. (m3/s)		16.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		28.48	
Min Ch El (m)	717.44	Shear (N/m2)		59.88	
Alpha	1.00	Stream Power (N/m s)		65.57	
Frctn Loss (m)	2.81	Cum Volume (1000 m3)		1.11	
C & E Loss (m)	0.00	Cum SA (1000 m2)		8.47	



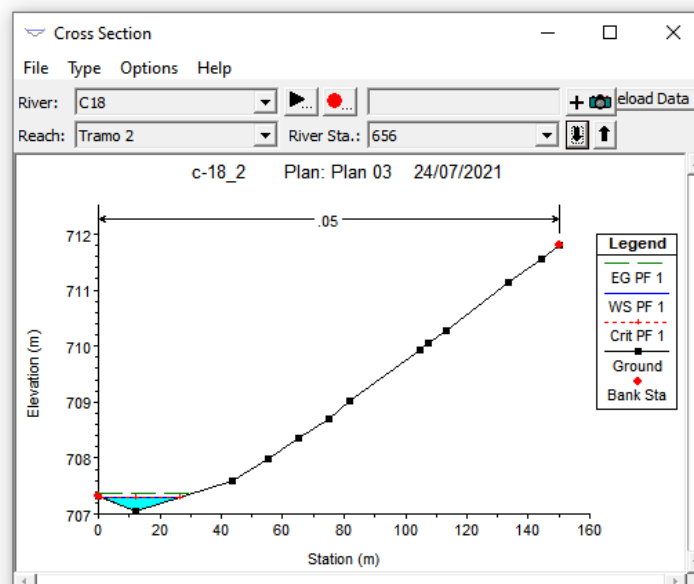
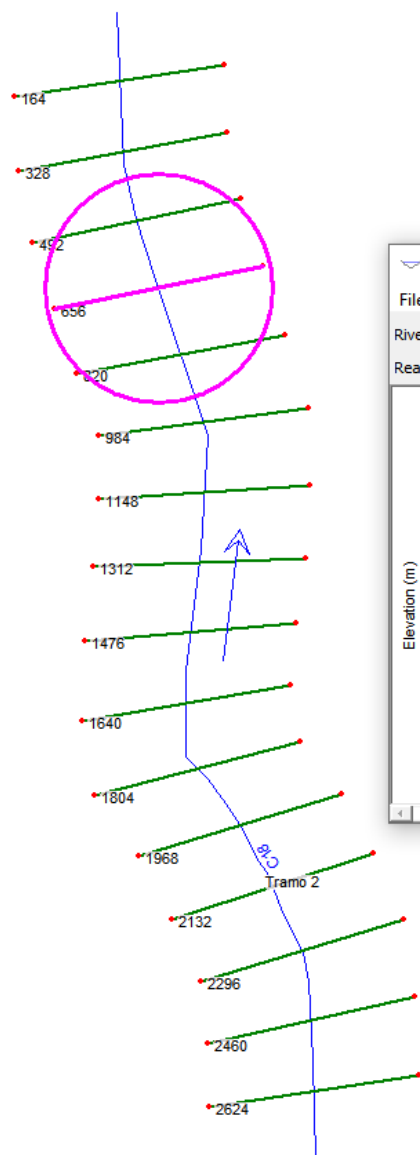
Plan: Plan 03 C18 Tramo 2 RS: 1148 Profile: PF 1					
E.G. Elev (m)	714.88	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	714.79	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	714.80	Flow Area (m2)		2.72	
E.G. Slope (m/m)	0.061299	Area (m2)		2.72	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	18.71	Top Width (m)		18.71	
Vel Total (m/s)	1.36	Avg. Vel. (m/s)		1.36	
Max Chl Dpth (m)	0.20	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	14.9	Conv. (m3/s)		14.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		18.91	
Min Ch El (m)	714.59	Shear (N/m2)		86.36	
Alpha	1.00	Stream Power (N/m s)		117.29	
Frctn Loss (m)	2.30	Cum Volume (1000 m3)		0.96	
C & E Loss (m)	0.00	Cum SA (1000 m2)		7.30	



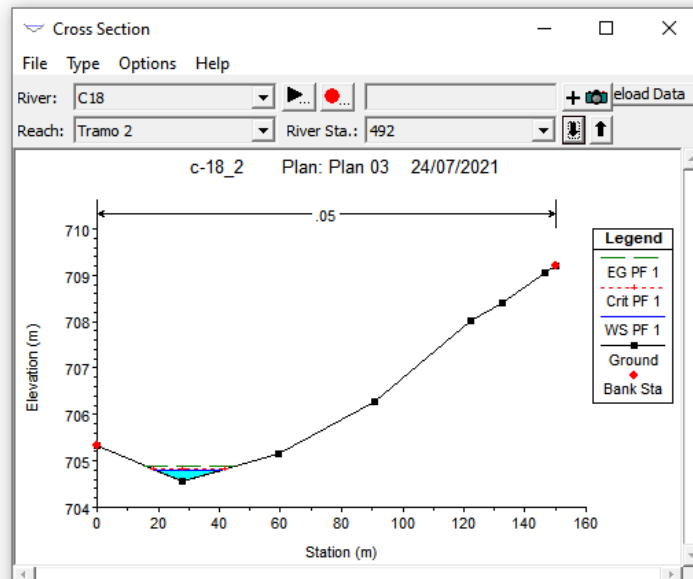
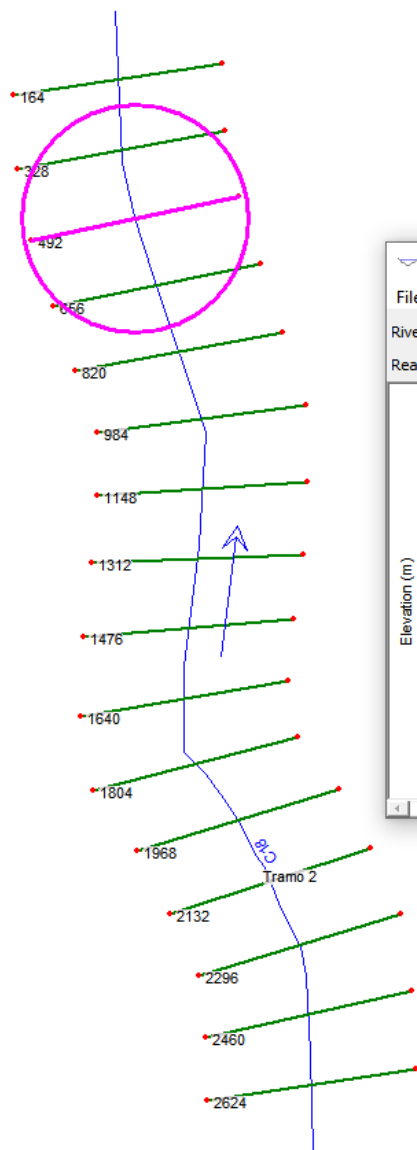
Plan: Plan 03 C18 Tramo 2 RS: 984 Profile: PF 1					
E.G. Elev (m)	712.35	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	712.27	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	712.27	Flow Area (m2)		2.87	
E.G. Slope (m/m)	0.045162	Area (m2)		2.87	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	16.96	Top Width (m)		16.96	
Vel Total (m/s)	1.29	Avg. Vel. (m/s)		1.29	
Max Chl Dpth (m)	0.24	Hydr. Depth (m)		0.17	
Conv. Total (m3/s)	17.4	Conv. (m3/s)		17.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		17.21	
Min Ch El (m)	712.03	Shear (N/m2)		73.80	
Alpha	1.00	Stream Power (N/m s)		94.98	
Frctn Loss (m)	2.54	Cum Volume (1000 m3)		0.82	
C & E Loss (m)	0.00	Cum SA (1000 m2)		6.40	



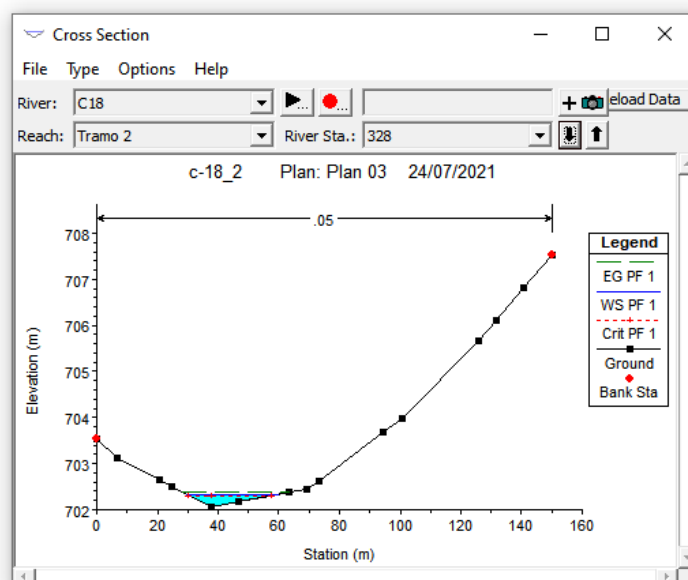
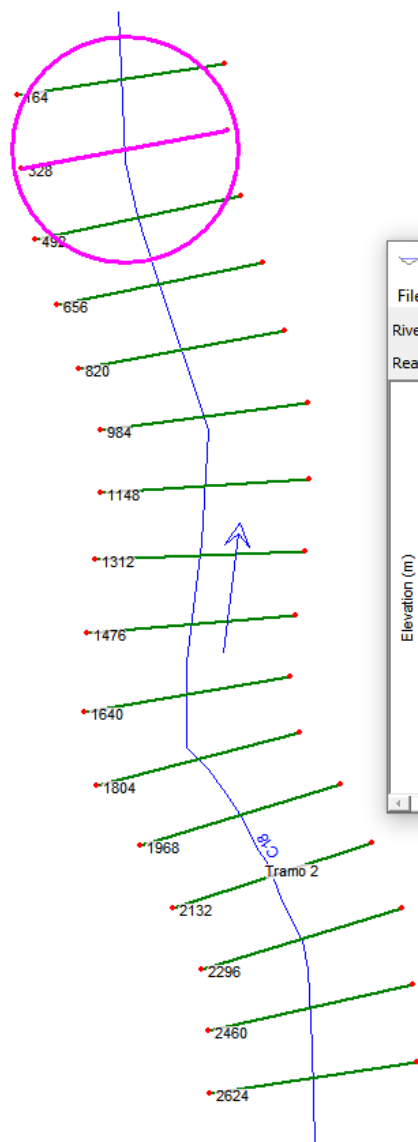
Plan: Plan 03 C18 Tramo 2 RS: 820 Profile: PF 1					
E.G. Elev (m)	709.81	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	709.74	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	709.74	Flow Area (m2)		3.04	
E.G. Slope (m/m)	0.057568	Area (m2)		3.04	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	23.59	Top Width (m)		23.59	
Vel Total (m/s)	1.21	Avg. Vel. (m/s)		1.21	
Max Chl Dpth (m)	0.26	Hydr. Depth (m)		0.13	
Conv. Total (m3/s)	15.4	Conv. (m3/s)		15.4	
Length Wtd. (m)		Wetted Per. (m)		23.85	
Min Ch El (m)	709.48	Shear (N/m2)		71.91	
Alpha	1.00	Stream Power (N/m s)		87.35	
Frctn Loss (m)		Cum Volume (1000 m3)		0.67	
C & E Loss (m)		Cum SA (1000 m2)		5.39	



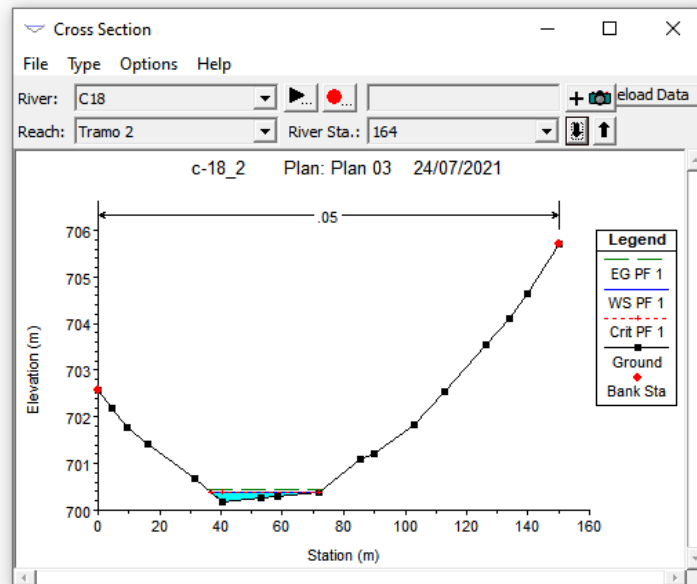
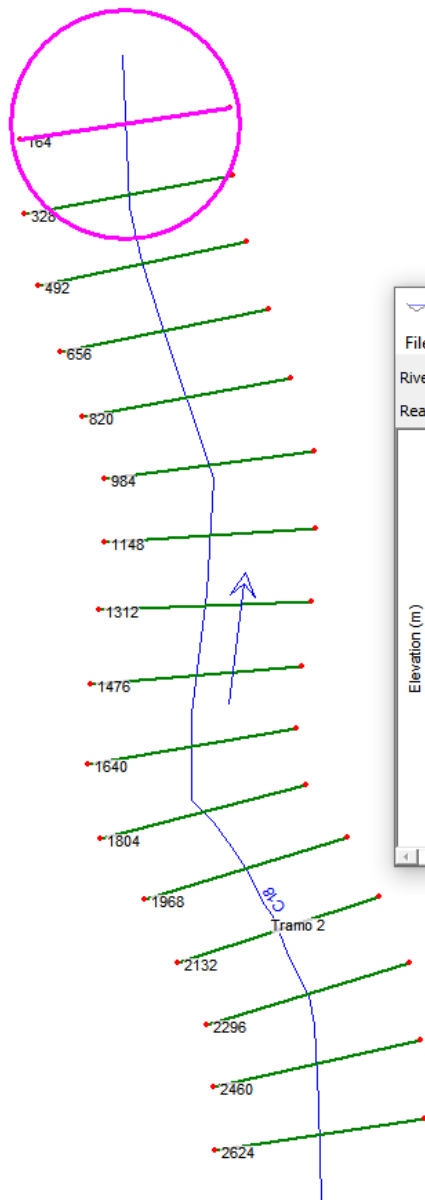
Plan: Plan 03 C18 Tramo 2 RS: 656 Profile: PF 1					
E.G. Elev (m)	707.36	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	707.29	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	707.29	Flow Area (m2)		3.27	
E.G. Slope (m/m)	0.050007	Area (m2)		3.27	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	25.85	Top Width (m)		25.85	
Vel Total (m/s)	1.13	Avg. Vel. (m/s)		1.13	
Max Chl Dpth (m)	0.25	Hydr. Depth (m)		0.13	
Conv. Total (m3/s)	16.5	Conv. (m3/s)		16.5	
Length Wtd. (m)	50.00	Wetted Per. (m)		25.85	
Min Ch El (m)	707.04	Shear (N/m2)		62.08	
Alpha	1.00	Stream Power (N/m s)		70.00	
Frctn Loss (m)	2.49	Cum Volume (1000 m3)		0.51	
C & E Loss (m)	0.00	Cum SA (1000 m2)		4.15	



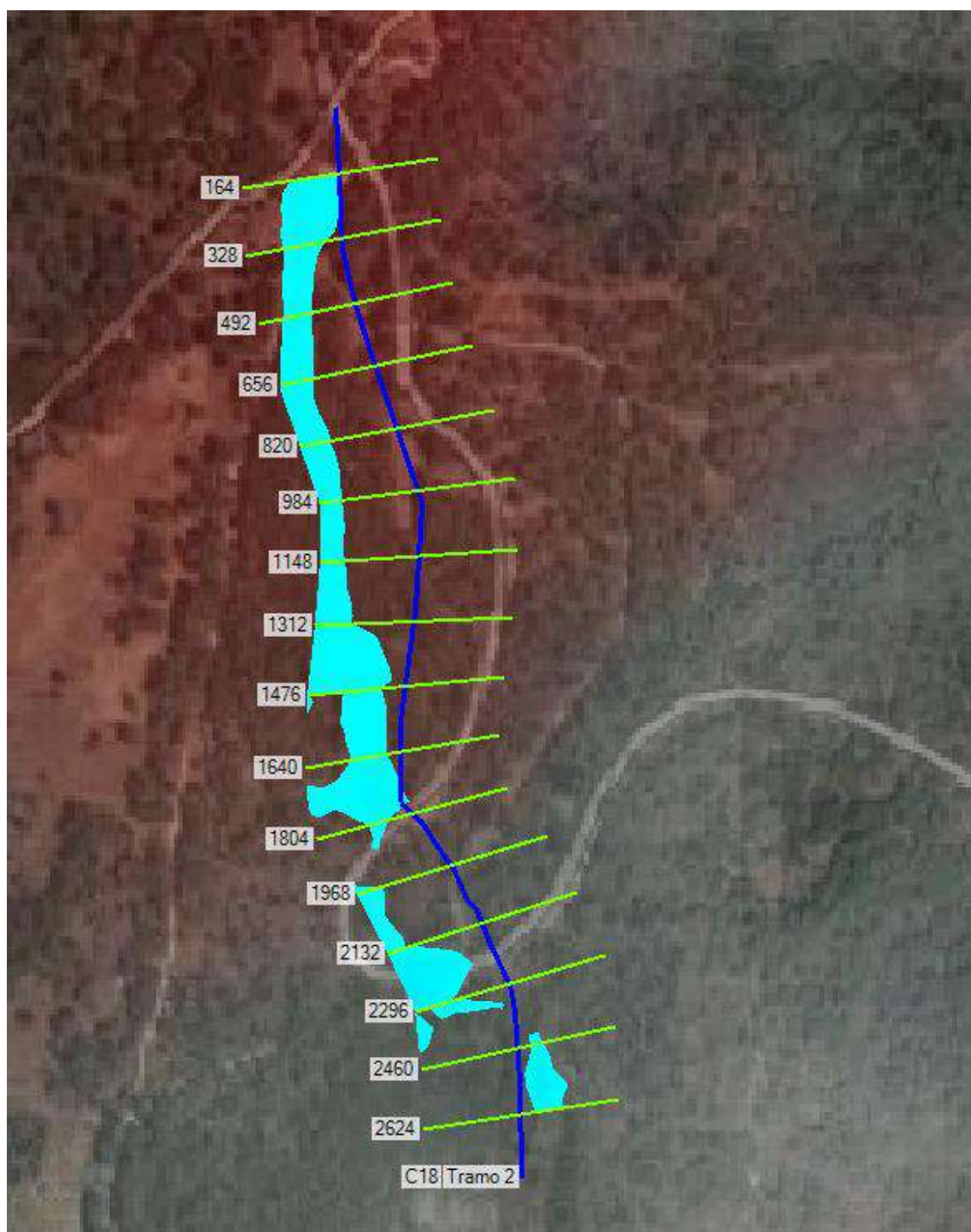
Plan: Plan 03 C18 Tramo 2 RS: 492 Profile: PF 1					
E.G. Elev (m)	704.89	Element	Left OB	Channel	Right OB
Vel Head (m)	0.10	Wt. n-Val.		0.050	
W.S. Elev (m)	704.80	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	704.82	Flow Area (m2)		2.68	
E.G. Slope (m/m)	0.077324	Area (m2)		2.68	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	21.80	Top Width (m)		21.80	
Vel Total (m/s)	1.38	Avg. Vel. (m/s)		1.38	
Max Chl Dpth (m)	0.25	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	13.3	Conv. (m3/s)		13.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		21.81	
Min Ch El (m)	704.55	Shear (N/m2)		93.28	
Alpha	1.00	Stream Power (N/m s)		128.31	
Frctn Loss (m)	1.86	Cum Volume (1000 m3)		0.36	
C & E Loss (m)	0.01	Cum SA (1000 m2)		2.96	



Plan: Plan 03 C18 Tramo 2 RS: 328 Profile: PF 1					
E.G. Elev (m)	702.38	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	702.34	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	702.31	Flow Area (m2)		4.14	
E.G. Slope (m/m)	0.028914	Area (m2)		4.14	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	30.77	Top Width (m)		30.77	
Vel Total (m/s)	0.89	Avg. Vel. (m/s)		0.89	
Max Chl Dpth (m)	0.29	Hydr. Depth (m)		0.13	
Conv. Total (m3/s)	21.7	Conv. (m3/s)		21.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		30.78	
Min Ch El (m)	702.05	Shear (N/m2)		38.10	
Alpha	1.00	Stream Power (N/m s)		34.00	
Frctn Loss (m)	1.93	Cum Volume (1000 m3)		0.19	
C & E Loss (m)	0.00	Cum SA (1000 m2)		1.65	



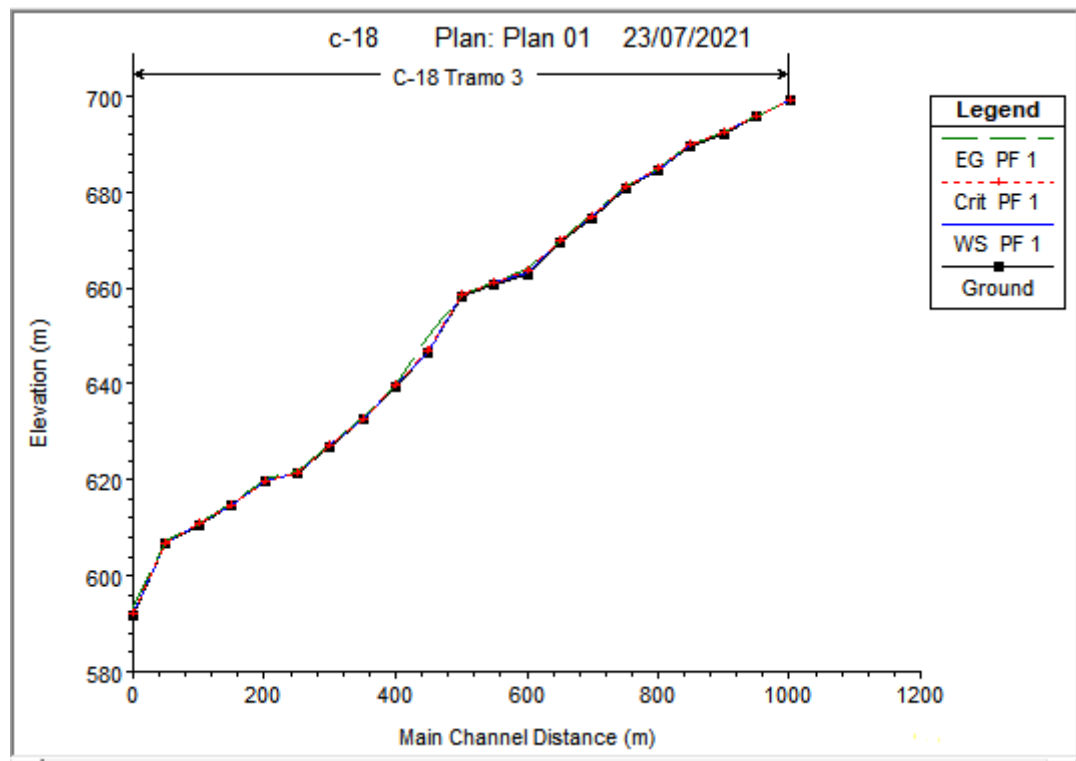
Plan: Plan 03 C18 Tramo 2 RS: 164 Profile: PF 1					
E.G. Elev (m)	700.44	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	700.39	Reach Len. (m)			
Crit W.S. (m)	700.39	Flow Area (m2)		3.61	
E.G. Slope (m/m)	0.054402	Area (m2)		3.61	
Q Total (m3/s)	3.69	Flow (m3/s)		3.69	
Top Width (m)	35.19	Top Width (m)		35.19	
Vel Total (m/s)	1.02	Avg. Vel. (m/s)		1.02	
Max Chl Dpth (m)	0.20	Hydr. Depth (m)		0.10	
Conv. Total (m3/s)	15.8	Conv. (m3/s)		15.8	
Length Wtd. (m)		Wetted Per. (m)		35.20	
Min Ch El (m)	700.19	Shear (N/m2)		54.72	
Alpha	1.00	Stream Power (N/m s)		55.93	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

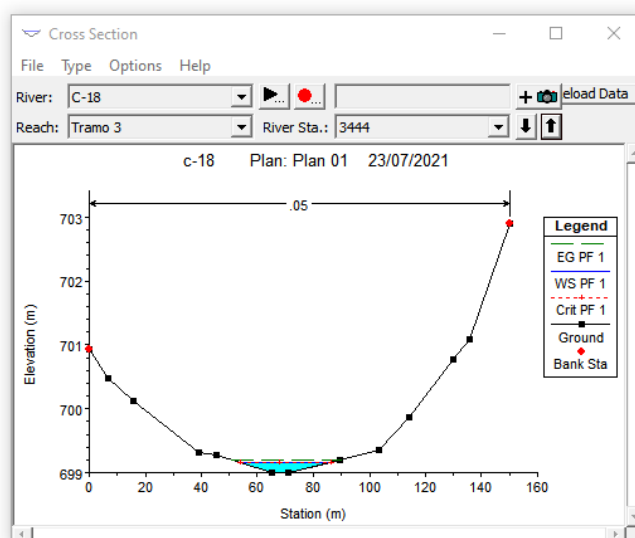
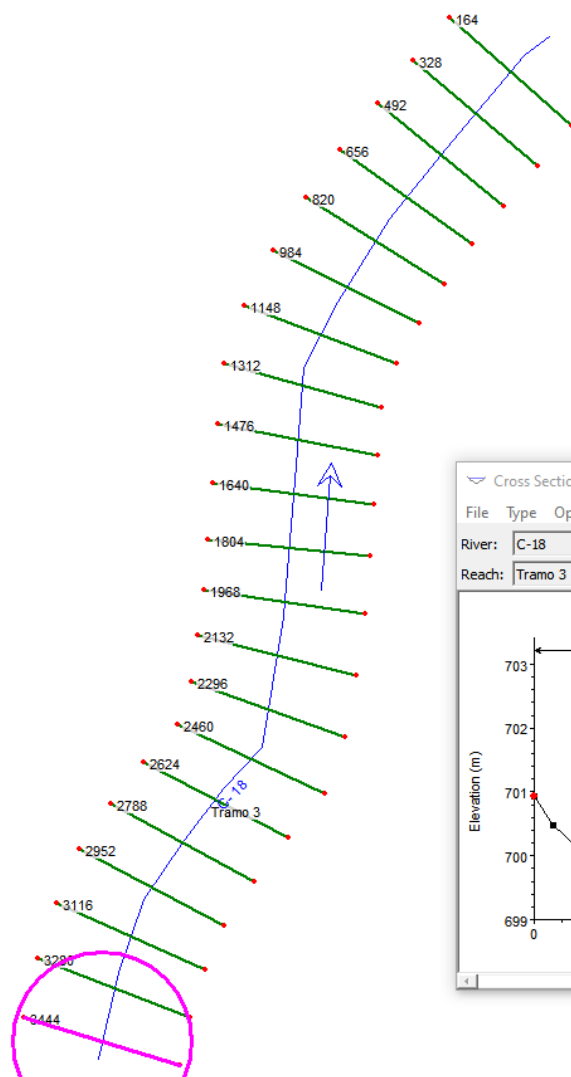


CUENCA 18_3

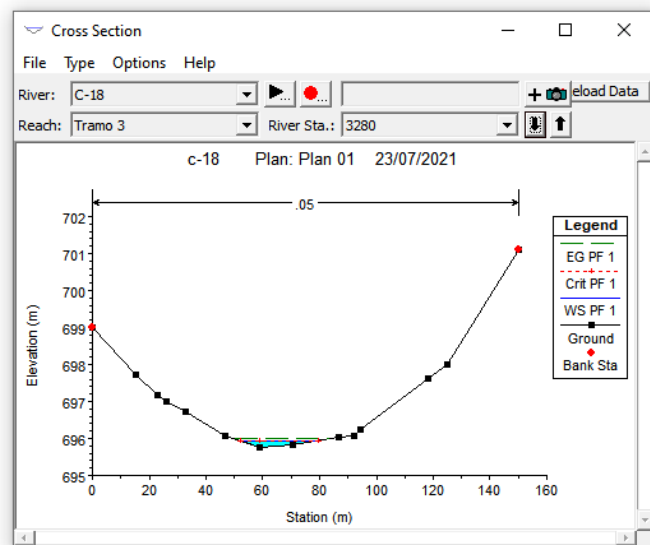
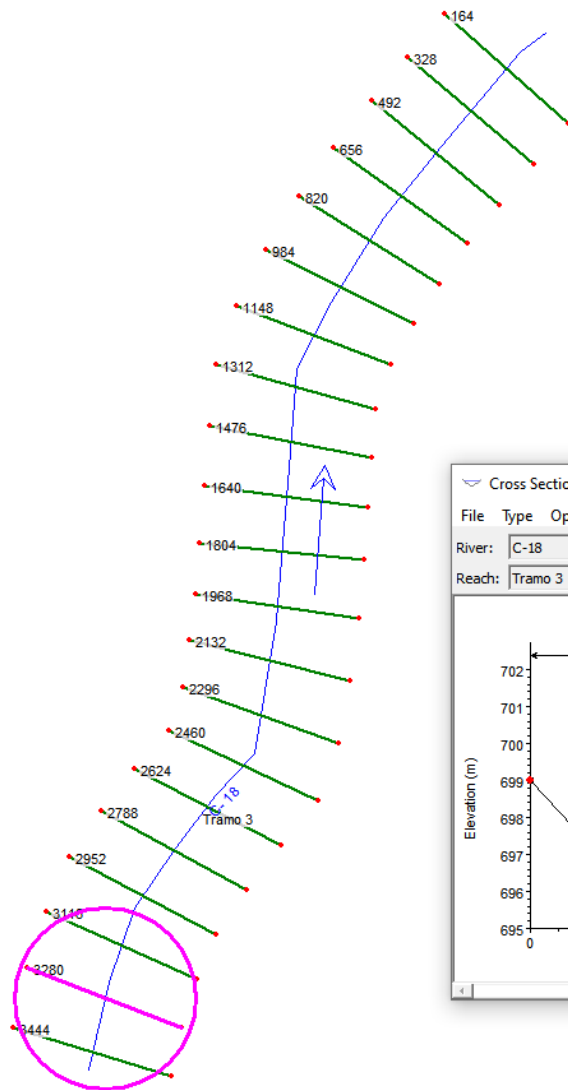
T10 (Q=2.83 m³/s)

HEC-RAS Plan: Plan 01 River: C-18 Reach: Tramo 3 Profile: PF 1												
Reach	River Sta	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m ²)	Top Width (m)	Froude # Chl
Tramo 3	3444	PF 1	2.83	699.00	699.15	699.15	699.20	0.056031	0.96	2.94	31.97	1.02
Tramo 3	3280	PF 1	2.83	695.76	695.92	695.94	695.99	0.074284	1.14	2.48	25.93	1.18
Tramo 3	3116	PF 1	2.83	692.13	692.38	692.41	692.49	0.065892	1.46	1.94	12.80	1.20
Tramo 3	2952	PF 1	2.83	689.69	689.93	689.93	690.00	0.049209	1.16	2.44	18.18	1.01
Tramo 3	2788	PF 1	2.83	684.36	684.63	684.76	685.08	0.278257	2.98	0.95	6.29	2.45
Tramo 3	2624	PF 1	2.83	680.84	681.10	681.10	681.17	0.047805	1.18	2.39	16.98	1.01
Tramo 3	2460	PF 1	2.83	674.61	674.79	674.89	675.28	0.617042	3.10	0.91	10.41	3.34
Tramo 3	2296	PF 1	2.83	669.42	669.71	669.71	669.80	0.044377	1.32	2.14	12.19	1.01
Tramo 3	2132	PF 1	2.83	662.98	663.28	663.48	664.24	0.597083	4.33	0.65	4.37	3.57
Tramo 3	1968	PF 1	2.83	660.75	660.98	660.98	661.04	0.052114	1.09	2.60	22.41	1.02
Tramo 3	1804	PF 1	2.83	658.23	658.47	658.47	658.54	0.050166	1.15	2.46	18.97	1.02
Tramo 3	1640	PF 1	2.83	646.31	646.53	646.80	649.85	3.143567	8.07	0.35	3.19	7.78
Tramo 3	1476	PF 1	2.83	639.28	639.68	639.70	639.81	0.056261	1.61	1.76	8.88	1.15
Tramo 3	1312	PF 1	2.83	632.66	632.78	632.88	633.19	0.597984	2.83	1.00	12.81	3.23
Tramo 3	1148	PF 1	2.83	626.87	627.15	627.15	627.24	0.048222	1.38	2.05	11.61	1.05
Tramo 3	984	PF 1	2.83	621.20	621.40	621.50	621.80	0.432049	2.80	1.01	10.29	2.85
Tramo 3	820	PF 1	2.83	619.80	619.93	619.93	619.98	0.053815	0.99	2.86	29.12	1.01
Tramo 3	656	PF 1	2.83	614.57	614.76	614.82	614.96	0.245940	2.03	1.40	15.10	2.13
Tramo 3	492	PF 1	2.83	610.70	610.86	610.86	610.92	0.051248	1.06	2.66	23.45	1.01
Tramo 3	328	PF 1	2.83	606.56	606.83	606.90	607.02	0.131653	1.92	1.48	10.87	1.66
Tramo 3	164	PF 1	2.83	591.83	592.10	592.33	593.42	0.834882	5.08	0.56	3.76	4.21

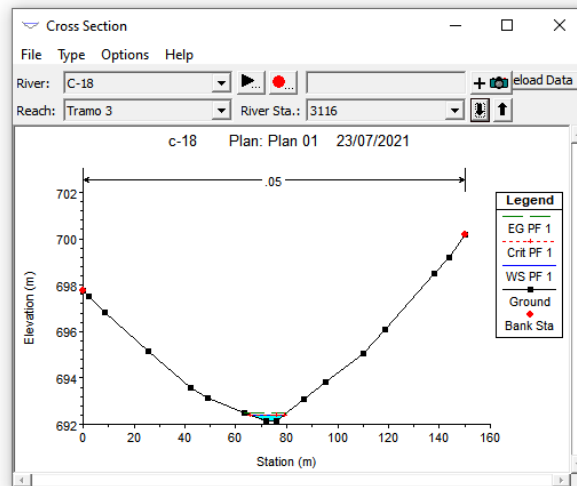
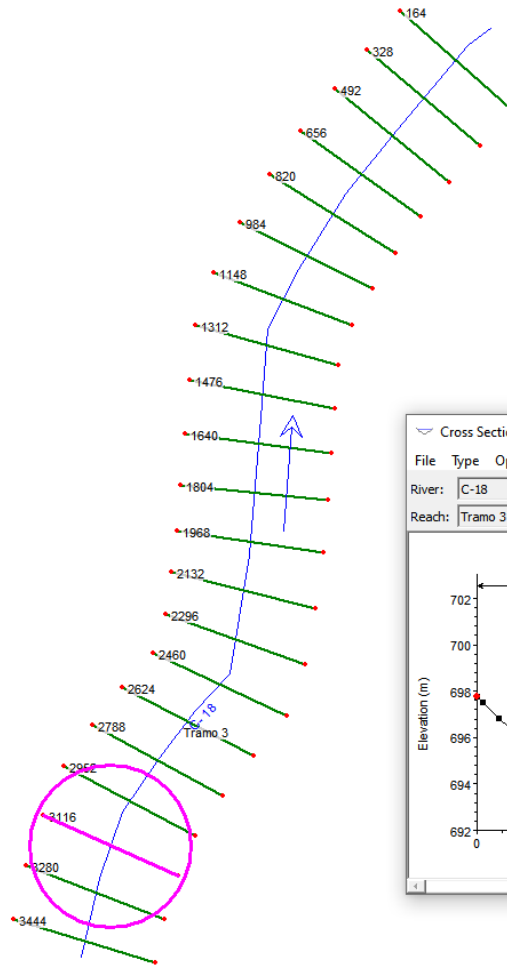




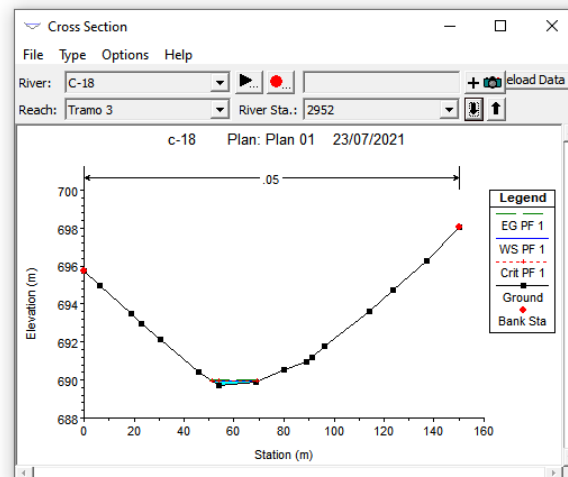
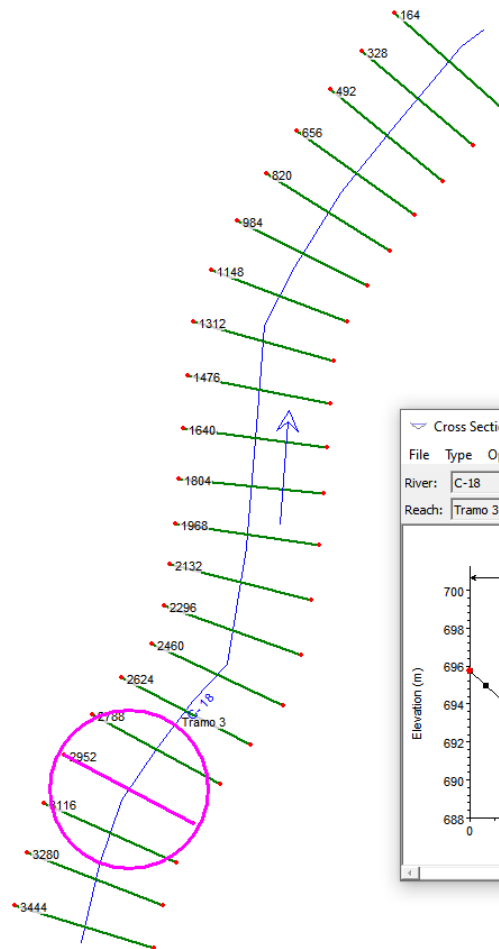
Plan: Plan 01 C-18 Tramo 3 RS: 3444 Profile: PF 1					
E.G. Elev (m)	699.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	699.15	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	699.15	Flow Area (m2)		2.94	
E.G. Slope (m/m)	0.056031	Area (m2)		2.94	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	31.97	Top Width (m)		31.97	
Vel Total (m/s)	0.96	Avg. Vel. (m/s)		0.96	
Max Chl Dpth (m)	0.15	Hydr. Depth (m)		0.09	
Conv. Total (m3/s)	12.0	Conv. (m3/s)		12.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		31.98	
Min Ch El (m)	699.00	Shear (N/m2)		50.46	
Alpha	1.00	Stream Power (N/m s)		48.63	
Frctn Loss (m)	3.21	Cum Volume (1000 m3)		1.76	
C & E Loss (m)	0.00	Cum SA (1000 m2)		14.58	



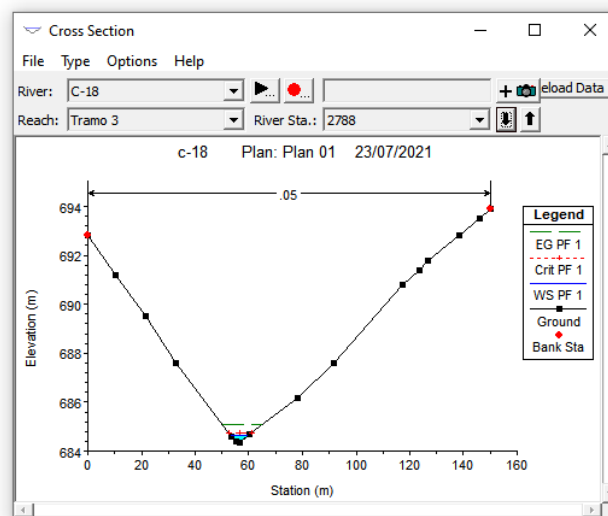
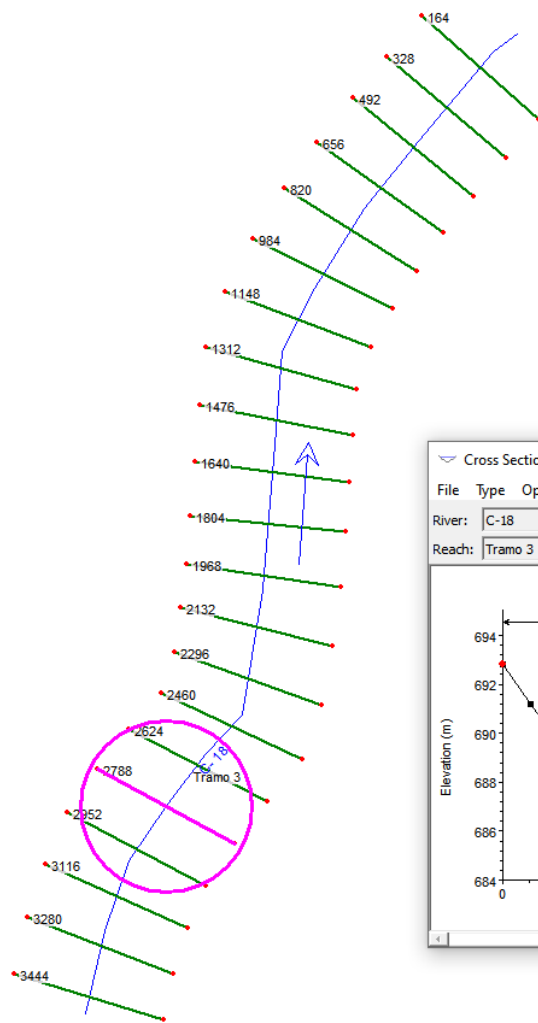
Plan: Plan 01 C-18 Tramo 3 RS: 3280 Profile: PF 1					
E.G. Elev (m)	695.99	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	695.92	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	695.94	Flow Area (m2)		2.48	
E.G. Slope (m/m)	0.074284	Area (m2)		2.48	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	25.93	Top Width (m)		25.93	
Vel Total (m/s)	1.14	Avg. Vel. (m/s)		1.14	
Max Chl Dpth (m)	0.16	Hydr. Depth (m)		0.10	
Conv. Total (m3/s)	10.4	Conv. (m3/s)		10.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		25.93	
Min Ch El (m)	695.76	Shear (N/m2)		69.71	
Alpha	1.00	Stream Power (N/m s)		79.49	
Frctn Loss (m)	3.49	Cum Volume (1000 m3)		1.63	
C & E Loss (m)	0.00	Cum SA (1000 m2)		13.14	



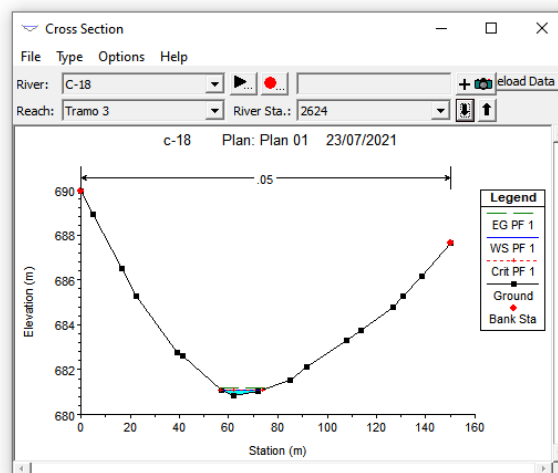
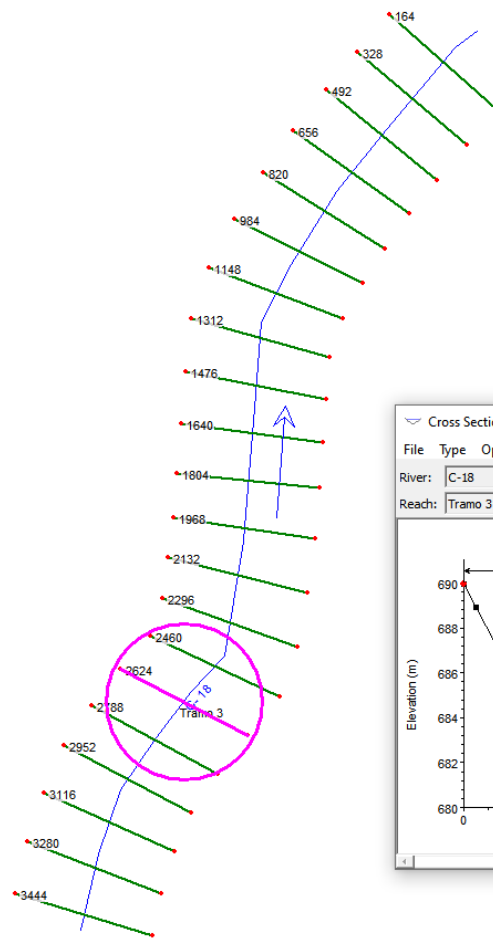
Plan: Plan 01 C-18 Tramo 3 RS: 3116 Profile: PF 1					
E.G. Elev (m)	692.49	Element	Left OB	Channel	Right OB
Vel Head (m)	0.11	Wt. n-Val.		0.050	
W.S. Elev (m)	692.38	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	692.41	Flow Area (m2)		1.94	
E.G. Slope (m/m)	0.065892	Area (m2)		1.94	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	12.80	Top Width (m)		12.80	
Vel Total (m/s)	1.46	Avg. Vel. (m/s)		1.46	
Max Chl Dpth (m)	0.25	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	11.0	Conv. (m3/s)		11.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		12.82	
Min Ch El (m)	692.13	Shear (N/m2)		97.83	
Alpha	1.00	Stream Power (N/m s)		142.68	
Frctn Loss (m)	2.35	Cum Volume (1000 m3)		1.52	
C & E Loss (m)	0.00	Cum SA (1000 m2)		12.17	



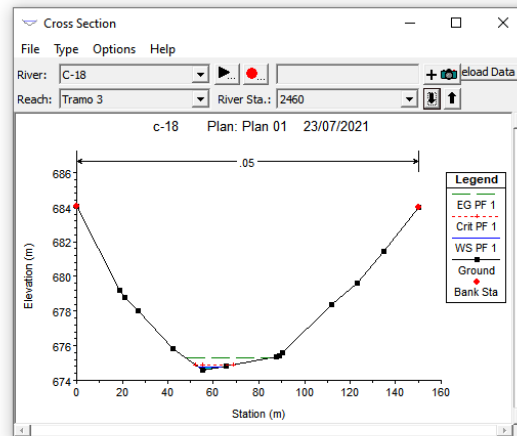
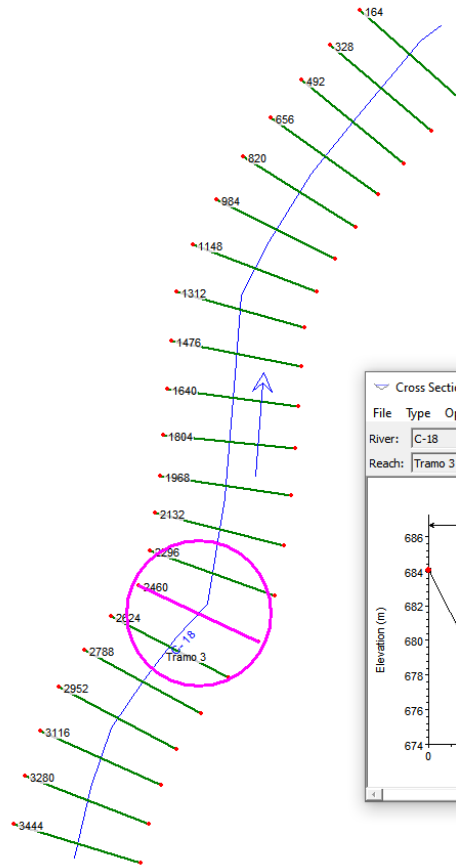
Plan: Plan 01 C-18 Tramo 3 RS: 2952 Profile: PF 1					
E.G. Elev (m)	690.00	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	689.93	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	689.93	Flow Area (m2)		2.44	
E.G. Slope (m/m)	0.049209	Area (m2)		2.44	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	18.18	Top Width (m)		18.18	
Vel Total (m/s)	1.16	Avg. Vel. (m/s)		1.16	
Max Chl Dpth (m)	0.24	Hydr. Depth (m)		0.13	
Conv. Total (m3/s)	12.8	Conv. (m3/s)		12.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		18.19	
Min Ch El (m)	689.69	Shear (N/m2)		64.64	
Alpha	1.00	Stream Power (N/m s)		75.08	
Frctn Loss (m)	4.88	Cum Volume (1000 m3)		1.41	
C & E Loss (m)	0.04	Cum SA (1000 m2)		11.39	



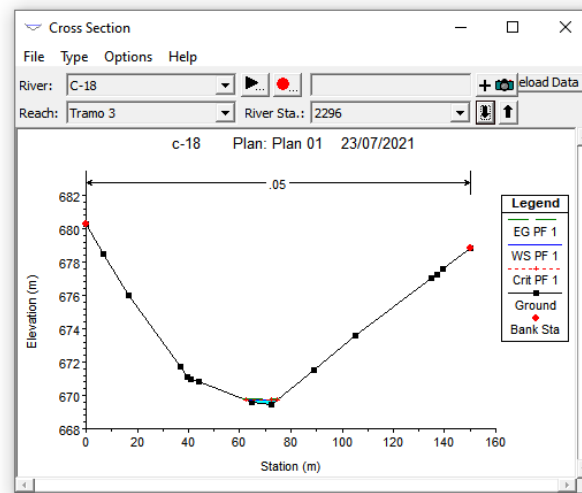
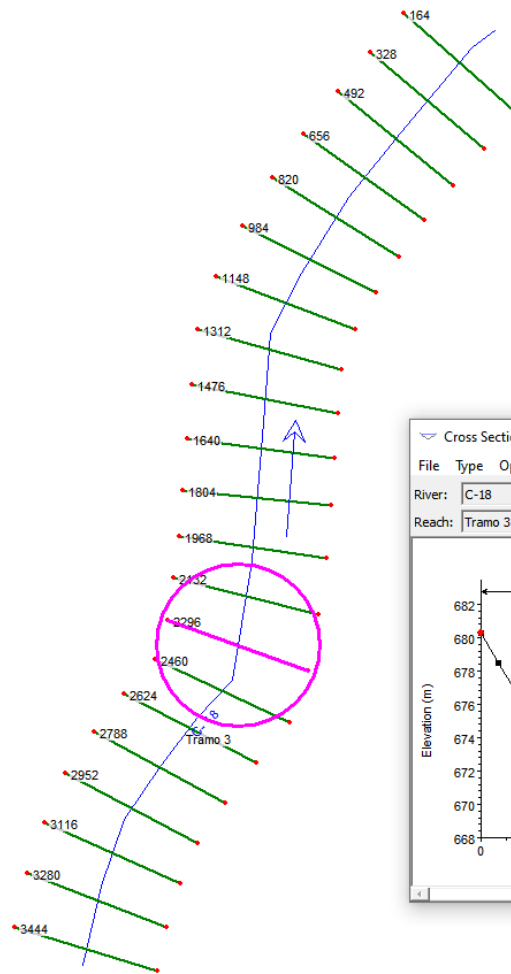
Plan: Plan 01 C-18 Tramo 3 RS: 2788 Profile: PF 1					
E.G. Elev (m)	685.08	Element	Left OB	Channel	Right OB
Vel Head (m)	0.45	Wt. n-Val.		0.050	
W.S. Elev (m)	684.63	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	684.76	Flow Area (m2)		0.95	
E.G. Slope (m/m)	0.278257	Area (m2)		0.95	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	6.29	Top Width (m)		6.29	
Vel Total (m/s)	2.98	Avg. Vel. (m/s)		2.98	
Max Chl Dpth (m)	0.27	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	5.4	Conv. (m3/s)		5.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		6.31	
Min Ch El (m)	684.36	Shear (N/m2)		410.12	
Alpha	1.00	Stream Power (N/m s)		1223.09	
Frctn Loss (m)	2.24	Cum Volume (1000 m3)		1.32	
C & E Loss (m)	0.01	Cum SA (1000 m2)		10.78	



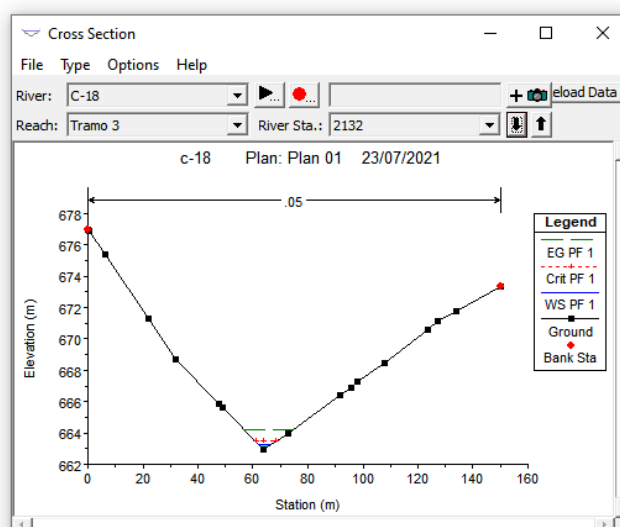
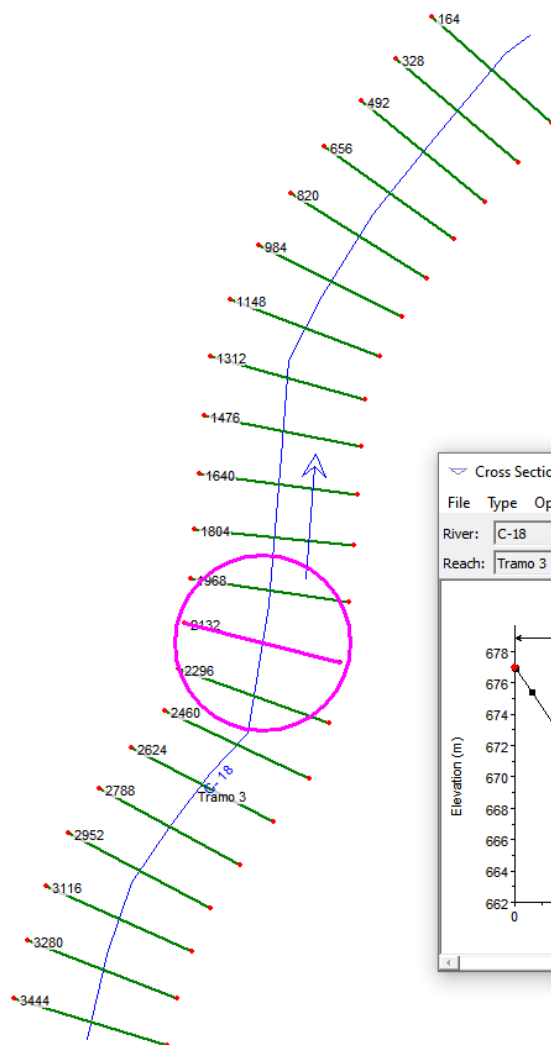
Plan: Plan 01 C-18 Tramo 3 RS: 2624 Profile: PF 1					
E.G. Elev (m)	681.17	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	681.10	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	681.10	Flow Area (m2)		2.39	
E.G. Slope (m/m)	0.047805	Area (m2)		2.39	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	16.98	Top Width (m)		16.98	
Vel Total (m/s)	1.18	Avg. Vel. (m/s)		1.18	
Max Chl Dpth (m)	0.26	Hydr. Depth (m)		0.14	
Conv. Total (m3/s)	12.9	Conv. (m3/s)		12.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		16.99	
Min Ch El (m)	680.84	Shear (N/m2)		66.00	
Alpha	1.00	Stream Power (N/m s)		78.10	
Frctn Loss (m)	5.85	Cum Volume (1000 m3)		1.24	
C & E Loss (m)	0.04	Cum SA (1000 m2)		10.20	



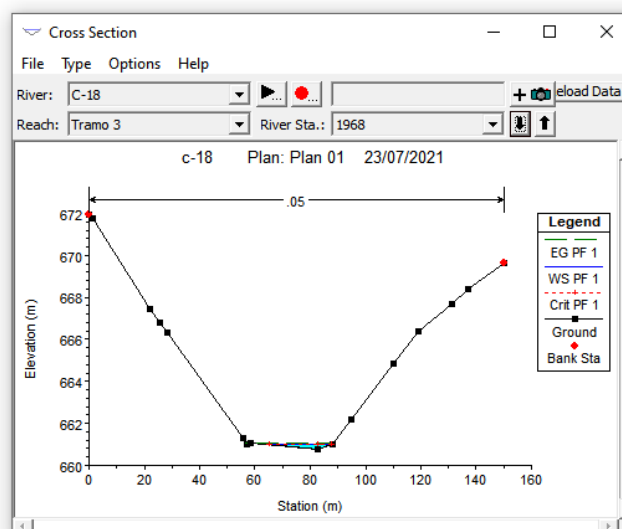
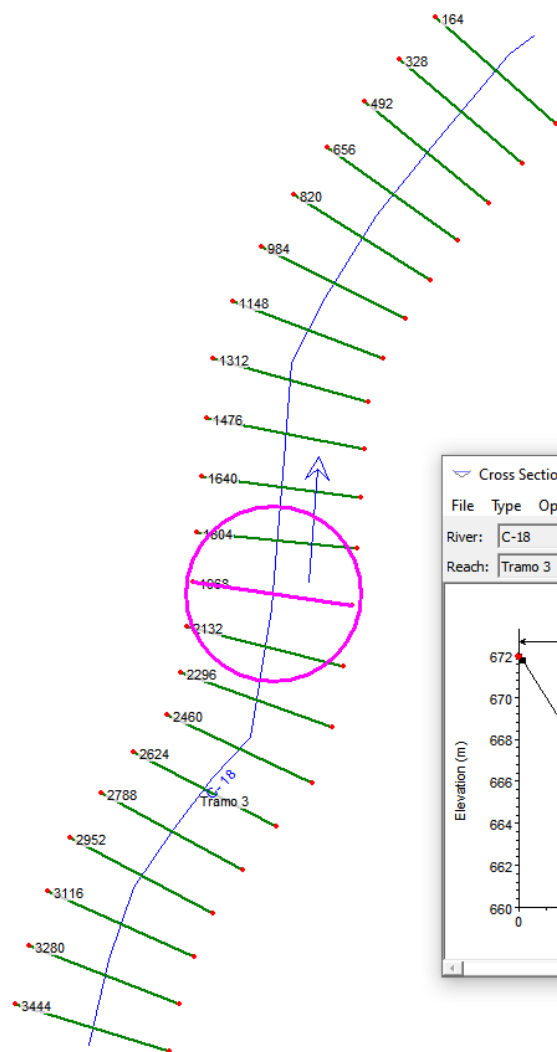
Plan: Plan 01 C-18 Tramo 3 RS: 2460 Profile: PF 1					
E.G. Elev (m)	675.28	Element	Left OB	Channel	Right OB
Vel Head (m)	0.49	Wt. n-Val.		0.050	
W.S. Elev (m)	674.79	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	674.89	Flow Area (m2)		0.91	
E.G. Slope (m/m)	0.617042	Area (m2)		0.91	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	10.41	Top Width (m)		10.41	
Vel Total (m/s)	3.10	Avg. Vel. (m/s)		3.10	
Max Chl Dpth (m)	0.18	Hydr. Depth (m)		0.09	
Conv. Total (m3/s)	3.6	Conv. (m3/s)		3.6	
Length Wtd. (m)	50.00	Wetted Per. (m)		10.42	
Min Ch El (m)	674.61	Shear (N/m2)		530.13	
Alpha	1.00	Stream Power (N/m s)		1642.89	
Frctn Loss (m)	2.31	Cum Volume (1000 m3)		1.16	
C & E Loss (m)	0.00	Cum SA (1000 m2)		9.52	



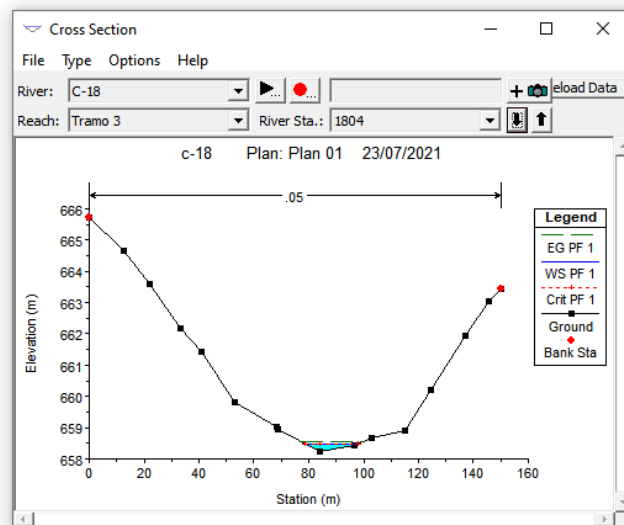
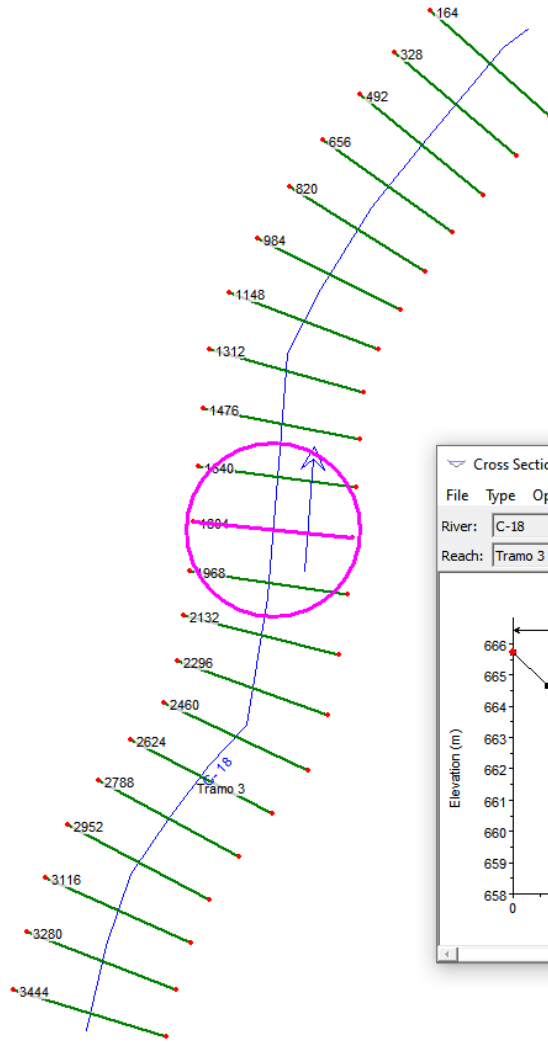
Plan: Plan 01 C-18 Tramo 3 RS: 2296 Profile: PF 1					
E.G. Elev (m)	669.80	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	669.71	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	669.71	Flow Area (m2)		2.14	
E.G. Slope (m/m)	0.044377	Area (m2)		2.14	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	12.19	Top Width (m)		12.19	
Vel Total (m/s)	1.32	Avg. Vel. (m/s)		1.32	
Max Chl Dpth (m)	0.29	Hydr. Depth (m)		0.18	
Conv. Total (m3/s)	13.4	Conv. (m3/s)		13.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		12.22	
Min Ch El (m)	669.42	Shear (N/m2)		76.35	
Alpha	1.00	Stream Power (N/m s)		100.82	
Frctn Loss (m)	5.48	Cum Volume (1000 m3)		1.08	
C & E Loss (m)	0.09	Cum SA (1000 m2)		8.95	



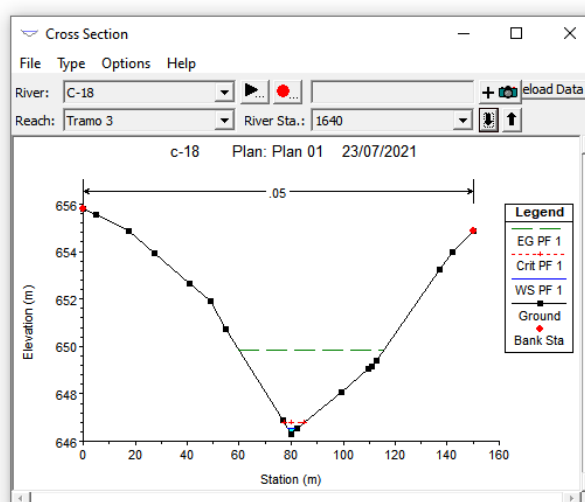
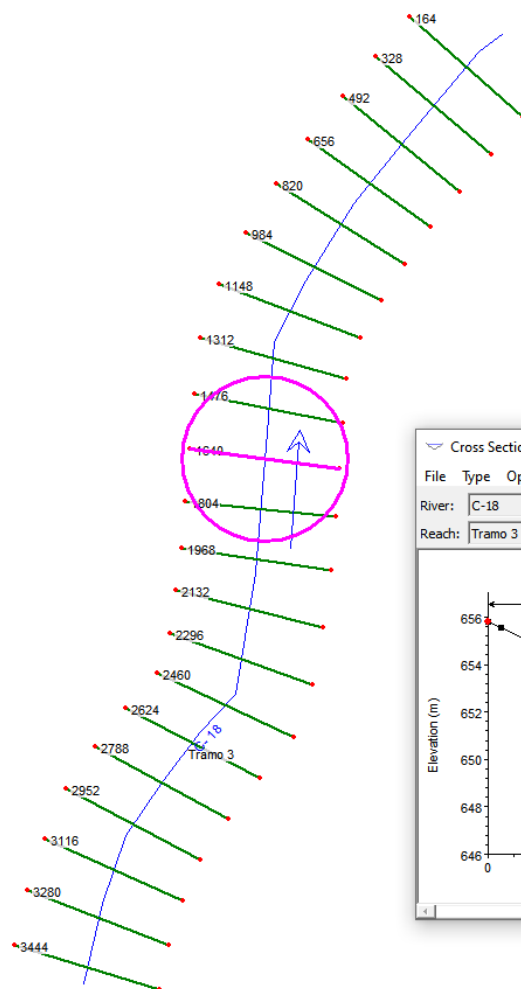
Plan: Plan 01 C-18 Tramo 3 RS: 2132 Profile: PF 1					
E.G. Elev (m)	664.24	Element	Left OB	Channel	Right OB
Vel Head (m)	0.96	Wt. n-Val.		0.050	
W.S. Elev (m)	663.28	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	663.48	Flow Area (m2)		0.65	
E.G. Slope (m/m)	0.597083	Area (m2)		0.65	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	4.37	Top Width (m)		4.37	
Vel Total (m/s)	4.33	Avg. Vel. (m/s)		4.33	
Max Chl Dpth (m)	0.30	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	3.7	Conv. (m3/s)		3.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		4.41	
Min Ch El (m)	662.98	Shear (N/m2)		868.13	
Alpha	1.00	Stream Power (N/m s)		3758.26	
Frctn Loss (m)	6.21	Cum Volume (1000 m3)		1.01	
C & E Loss (m)	0.27	Cum SA (1000 m2)		8.54	



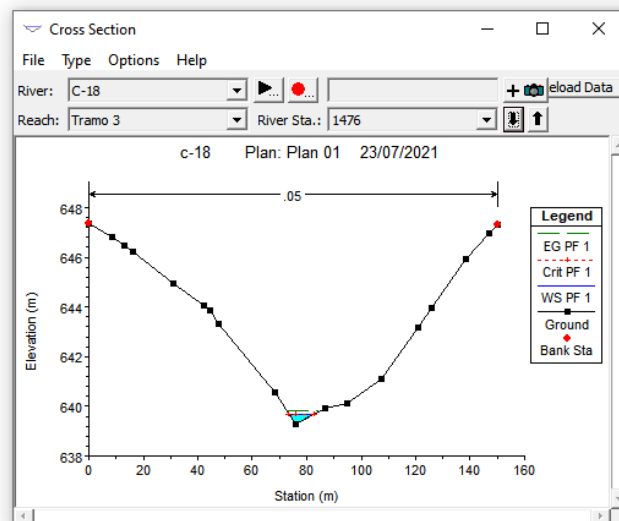
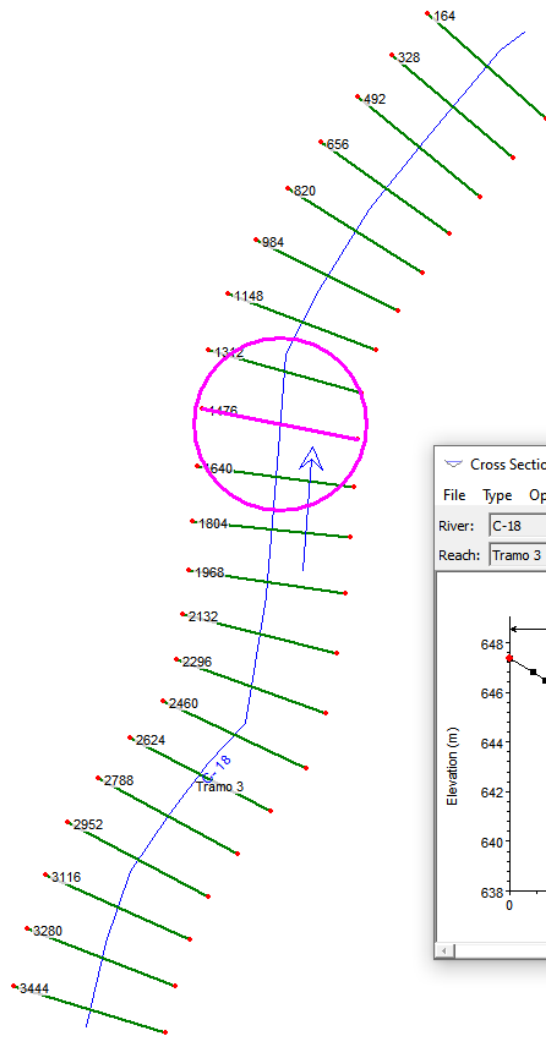
Plan: Plan 01 C-18 Tramo 3 RS: 1968 Profile: PF 1					
E.G. Elev (m)	661.04	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	660.98	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	660.98	Flow Area (m2)		2.60	
E.G. Slope (m/m)	0.052114	Area (m2)		2.60	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	22.41	Top Width (m)		22.41	
Vel Total (m/s)	1.09	Avg. Vel. (m/s)		1.09	
Max Chl Dpth (m)	0.23	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	12.4	Conv. (m3/s)		12.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		22.41	
Min Ch El (m)	660.75	Shear (N/m2)		59.36	
Alpha	1.00	Stream Power (N/m s)		64.53	
Frctn Loss (m)	2.50	Cum Volume (1000 m3)		0.93	
C & E Loss (m)	0.00	Cum SA (1000 m2)		7.87	



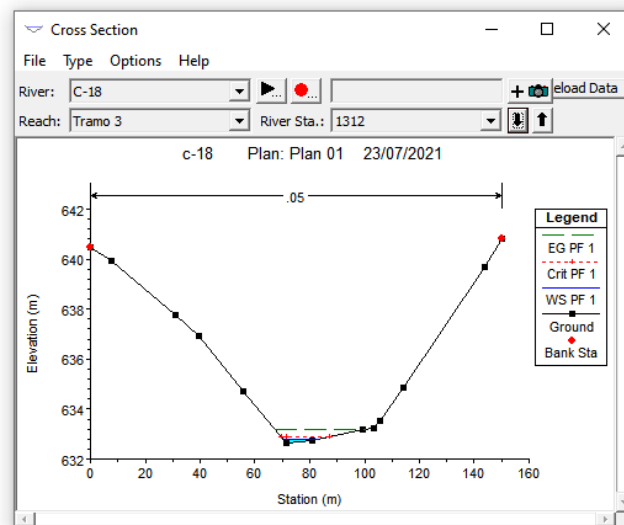
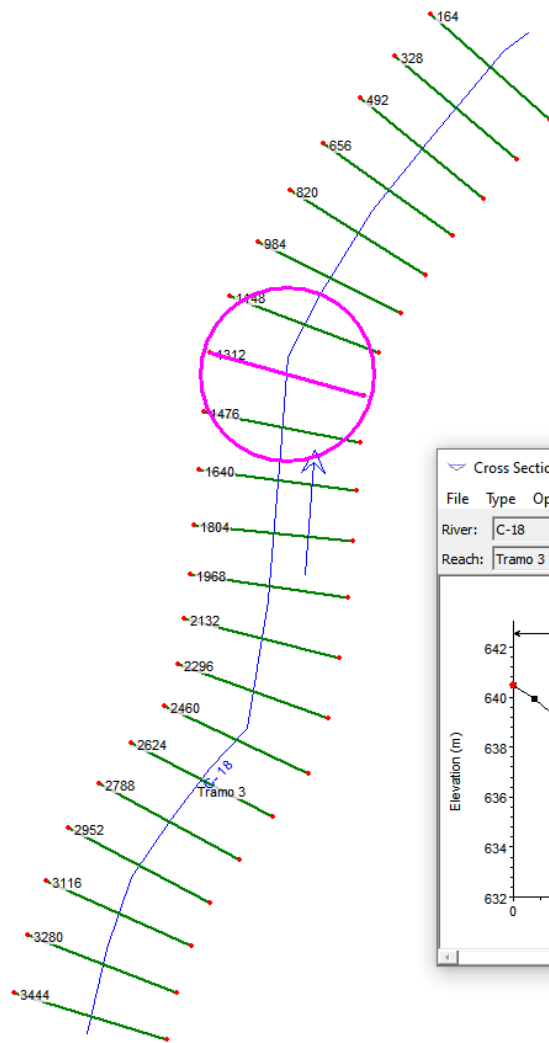
Plan: Plan 01 C-18 Tramo 3 RS: 1804 Profile: PF 1					
E.G. Elev (m)	658.54	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	658.47	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	658.47	Flow Area (m2)		2.46	
E.G. Slope (m/m)	0.050166	Area (m2)		2.46	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	18.97	Top Width (m)		18.97	
Vel Total (m/s)	1.15	Avg. Vel. (m/s)		1.15	
Max Chl Dpth (m)	0.24	Hydr. Depth (m)		0.13	
Conv. Total (m3/s)	12.6	Conv. (m3/s)		12.6	
Length Wtd. (m)	50.00	Wetted Per. (m)		18.98	
Min Ch El (m)	658.23	Shear (N/m2)		63.87	
Alpha	1.00	Stream Power (N/m s)		73.36	
Frctn Loss (m)	8.01	Cum Volume (1000 m3)		0.80	
C & E Loss (m)	0.36	Cum SA (1000 m2)		6.83	



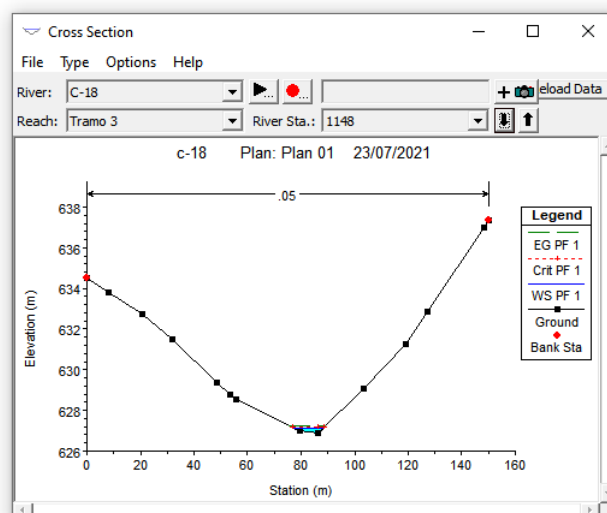
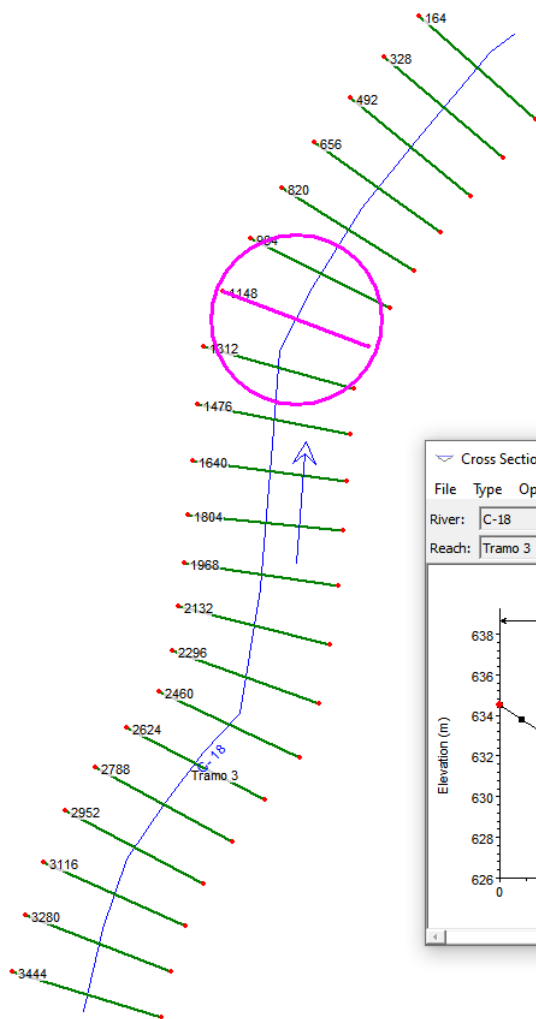
Plan: Plan 01 C-18 Tramo 3 RS: 1640 Profile: PF 1					
E.G. Elev (m)	649.85	Element	Left OB	Channel	Right OB
Vel Head (m)	3.32	Wt. n-Val.		0.050	
W.S. Elev (m)	646.53	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	646.80	Flow Area (m2)		0.35	
E.G. Slope (m/m)	3.143567	Area (m2)		0.35	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	3.19	Top Width (m)		3.19	
Vel Total (m/s)	8.07	Avg. Vel. (m/s)		8.07	
Max Chl Dpth (m)	0.22	Hydr. Depth (m)		0.11	
Conv. Total (m3/s)	1.6	Conv. (m3/s)		1.6	
Length Wtd. (m)	50.00	Wetted Per. (m)		3.23	
Min Ch El (m)	646.31	Shear (N/m2)		3349.79	
Alpha	1.00	Stream Power (N/m s)		27048.77	
Frctn Loss (m)	9.08	Cum Volume (1000 m3)		0.73	
C & E Loss (m)	0.96	Cum SA (1000 m2)		6.28	



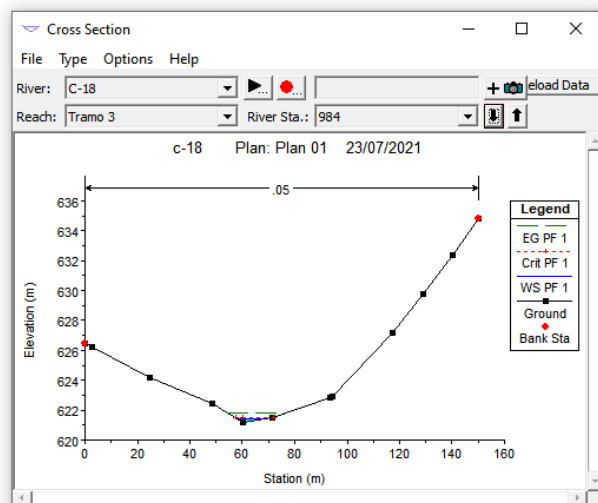
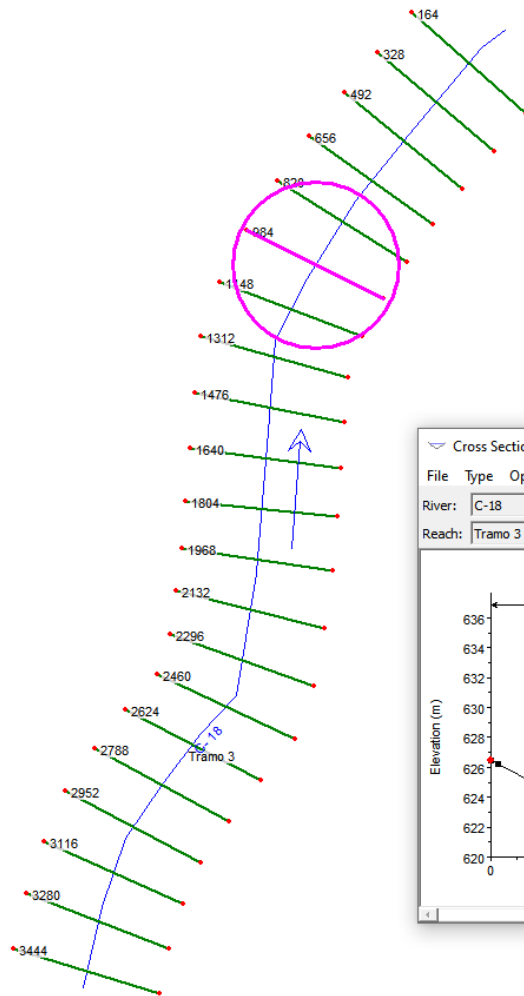
Plan: Plan 01 C-18 Tramo 3 RS: 1476 Profile: PF 1					
E.G. Elev (m)	639.81	Element	Left OB	Channel	Right OB
Vel Head (m)	0.13	Wt. n-Val.		0.050	
W.S. Elev (m)	639.68	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	639.70	Flow Area (m2)		1.76	
E.G. Slope (m/m)	0.056261	Area (m2)		1.76	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	8.88	Top Width (m)		8.88	
Vel Total (m/s)	1.61	Avg. Vel. (m/s)		1.61	
Max Chl Dpth (m)	0.40	Hydr. Depth (m)		0.20	
Conv. Total (m3/s)	11.9	Conv. (m3/s)		11.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		8.92	
Min Ch El (m)	639.28	Shear (N/m2)		108.84	
Alpha	1.00	Stream Power (N/m s)		174.97	
Frctn Loss (m)	6.59	Cum Volume (1000 m3)		0.68	
C & E Loss (m)	0.03	Cum SA (1000 m2)		5.98	



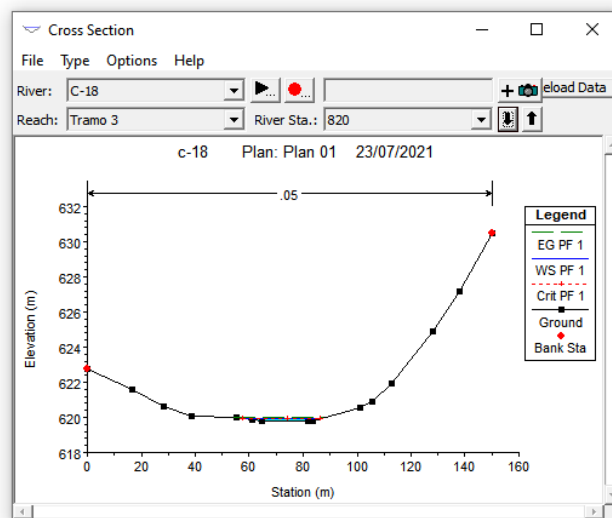
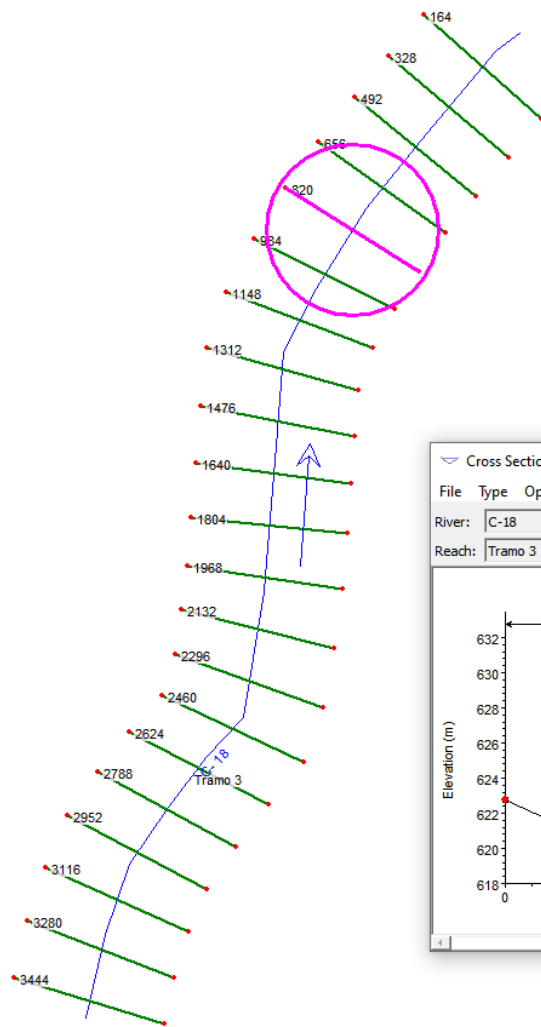
Plan: Plan 01 C-18 Tramo 3 RS: 1312 Profile: PF 1					
E.G. Elev (m)	633.19	Element	Left OB	Channel	Right OB
Vel Head (m)	0.41	Wt. n-Val.		0.050	
W.S. Elev (m)	632.78	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	632.88	Flow Area (m2)		1.00	
E.G. Slope (m/m)	0.597984	Area (m2)		1.00	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	12.81	Top Width (m)		12.81	
Vel Total (m/s)	2.83	Avg. Vel. (m/s)		2.83	
Max Chl Dpth (m)	0.12	Hydr. Depth (m)		0.08	
Conv. Total (m3/s)	3.7	Conv. (m3/s)		3.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		12.82	
Min Ch El (m)	632.66	Shear (N/m2)		458.11	
Alpha	1.00	Stream Power (N/m s)		1294.76	
Frctn Loss (m)	5.85	Cum Volume (1000 m3)		0.61	
C & E Loss (m)	0.09	Cum SA (1000 m2)		5.44	



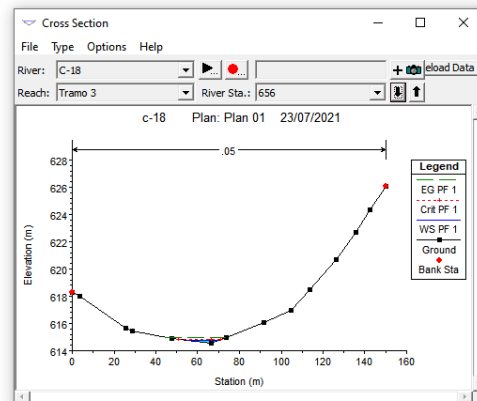
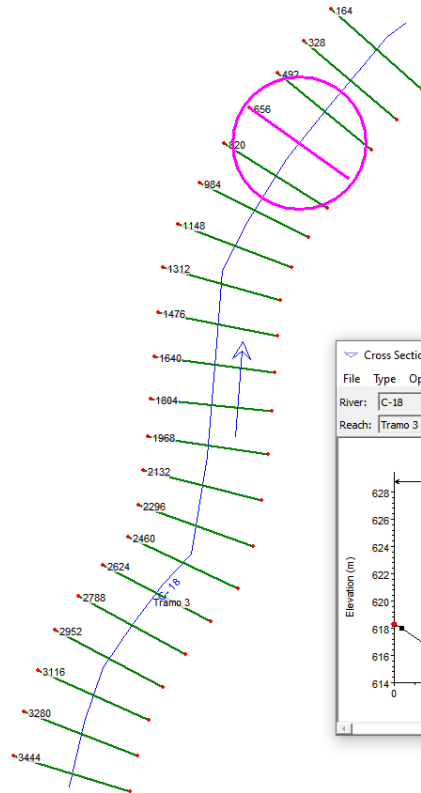
Plan: Plan 01 C-18 Tramo 3 RS: 1148 Profile: PF 1					
E.G. Elev (m)	627.24	Element	Left OB	Channel	Right OB
Vel Head (m)	0.10	Wt. n-Val.		0.050	
W.S. Elev (m)	627.15	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	627.15	Flow Area (m2)		2.05	
E.G. Slope (m/m)	0.048222	Area (m2)		2.05	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	11.61	Top Width (m)		11.61	
Vel Total (m/s)	1.38	Avg. Vel. (m/s)		1.38	
Max Chl Dpth (m)	0.28	Hydr. Depth (m)		0.18	
Conv. Total (m3/s)	12.9	Conv. (m3/s)		12.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		11.63	
Min Ch El (m)	626.87	Shear (N/m2)		83.35	
Alpha	1.00	Stream Power (N/m s)		115.07	
Frctn Loss (m)	5.42	Cum Volume (1000 m3)		0.54	
C & E Loss (m)	0.03	Cum SA (1000 m2)		4.83	



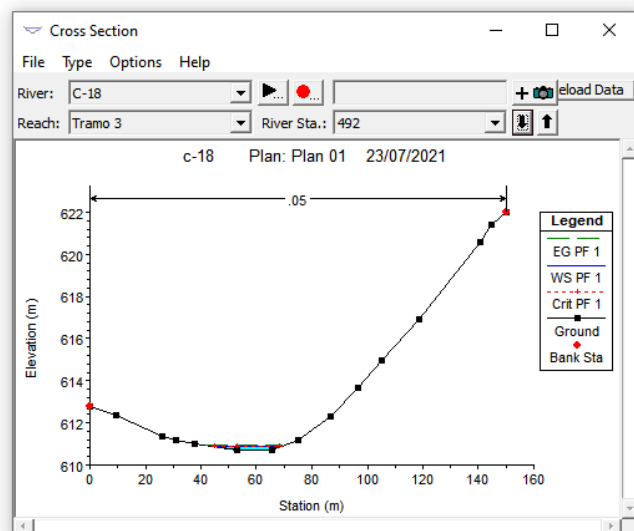
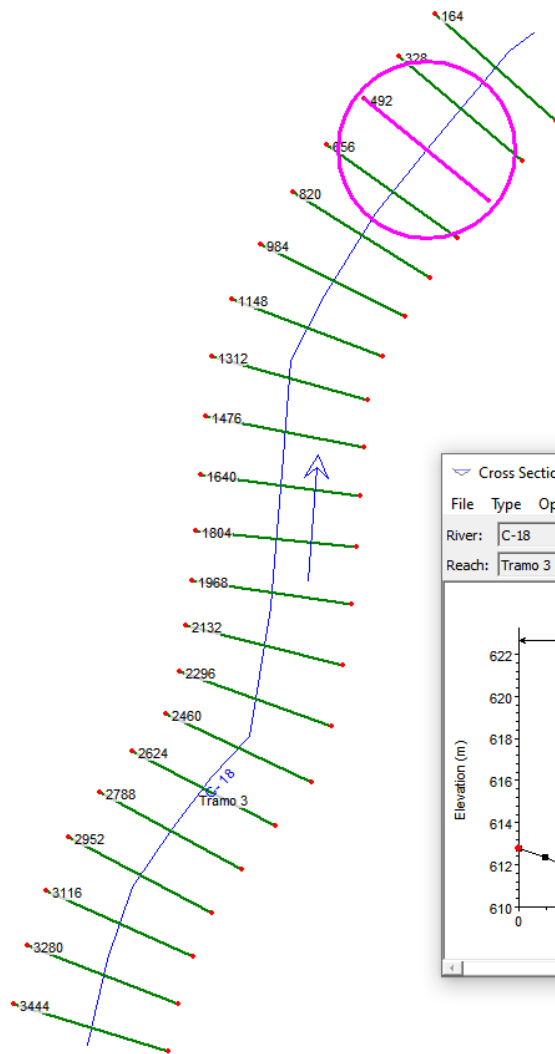
Plan: Plan 01 C-18 Tramo 3 RS: 984 Profile: PF 1					
E.G. Elev (m)	621.80	Element	Left OB	Channel	Right OB
Vel Head (m)	0.40	Wt. n-Val.		0.050	
W.S. Elev (m)	621.40	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	621.50	Flow Area (m2)		1.01	
E.G. Slope (m/m)	0.432049	Area (m2)		1.01	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	10.29	Top Width (m)		10.29	
Vel Total (m/s)	2.80	Avg. Vel. (m/s)		2.80	
Max Chl Dpth (m)	0.20	Hydr. Depth (m)		0.10	
Conv. Total (m3/s)	4.3	Conv. (m3/s)		4.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		10.31	
Min Ch El (m)	621.20	Shear (N/m2)		415.91	
Alpha	1.00	Stream Power (N/m s)		1163.49	
Frctn Loss (m)	1.61	Cum Volume (1000 m3)		0.46	
C & E Loss (m)	0.00	Cum SA (1000 m2)		4.28	



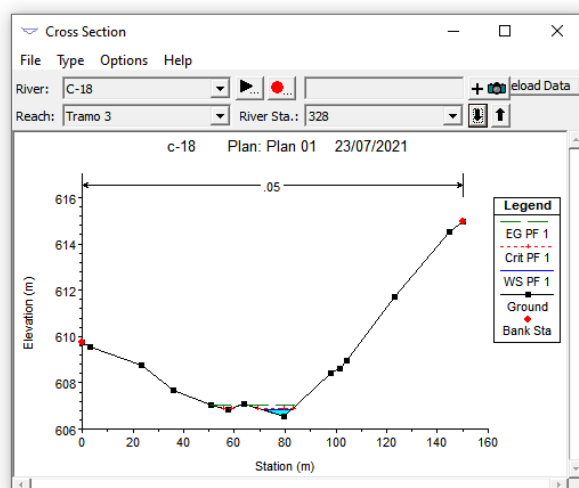
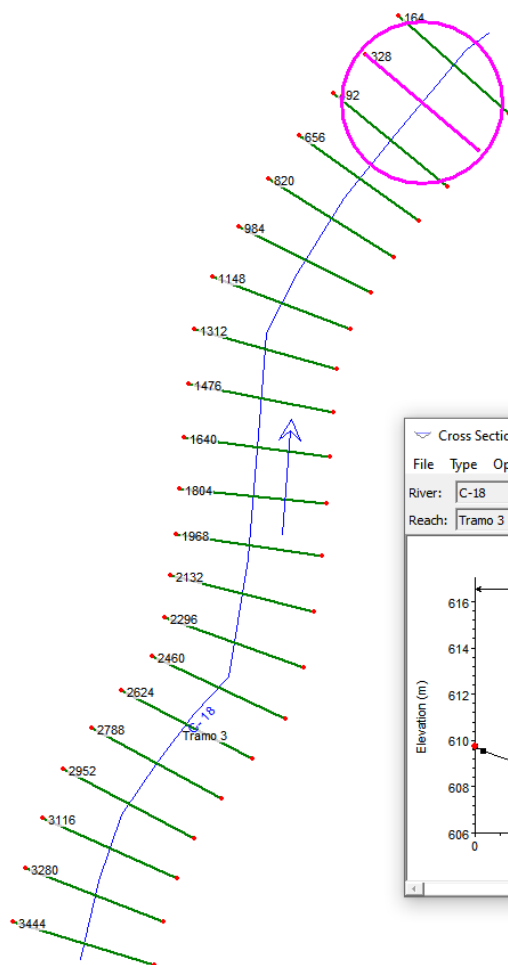
Plan: Plan 01 C-18 Tramo 3 RS: 820 Profile: PF 1					
E.G. Elev (m)	619.98	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	619.93	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	619.93	Flow Area (m2)		2.86	
E.G. Slope (m/m)	0.053815	Area (m2)		2.86	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	29.12	Top Width (m)		29.12	
Vel Total (m/s)	0.99	Avg. Vel. (m/s)		0.99	
Max Chl Dpth (m)	0.13	Hydr. Depth (m)		0.10	
Conv. Total (m3/s)	12.2	Conv. (m3/s)		12.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		29.12	
Min Ch El (m)	619.80	Shear (N/m2)		51.89	
Alpha	1.00	Stream Power (N/m s)		51.29	
Frctn Loss (m)	5.00	Cum Volume (1000 m3)		0.36	
C & E Loss (m)	0.02	Cum SA (1000 m2)		3.29	



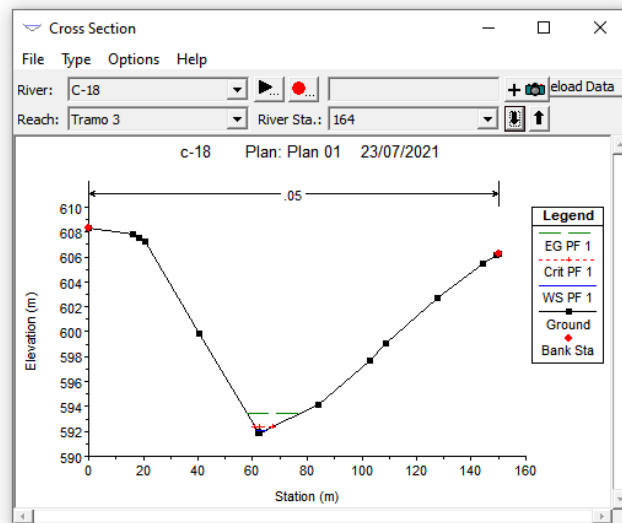
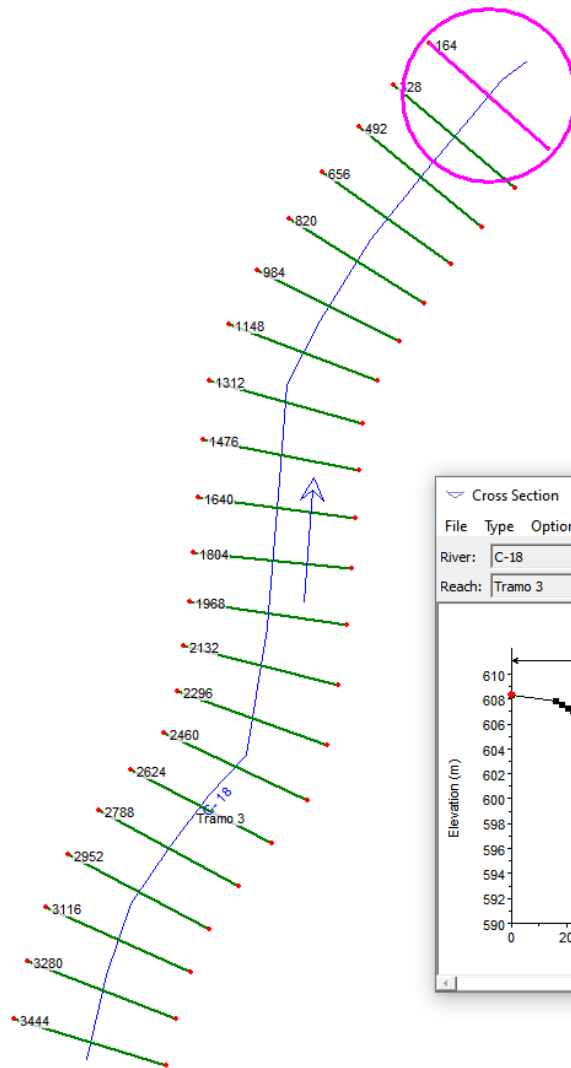
Plan: Plan 01 C-18 Tramo 3 RS: 656 Profile: PF 1					
E.G. Elev (m)	614.96	Element	Left OB	Channel	Right OB
Vel Head (m)	0.21	Wt. n-Val.		0.050	
W.S. Elev (m)	614.76	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	614.82	Flow Area (m2)		1.40	
E.G. Slope (m/m)	0.245940	Area (m2)		1.40	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	15.10	Top Width (m)		15.10	
Vel Total (m/s)	2.03	Avg. Vel. (m/s)		2.03	
Max Chl Dpth (m)	0.18	Hydr. Depth (m)		0.09	
Conv. Total (m3/s)	5.7	Conv. (m3/s)		5.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		15.10	
Min Ch El (m)	614.57	Shear (N/m2)		222.90	
Alpha	1.00	Stream Power (N/m s)		451.92	
Frctn Loss (m)	2.55	Cum Volume (1000 m3)		0.26	
C & E Loss (m)	0.00	Cum SA (1000 m2)		2.19	



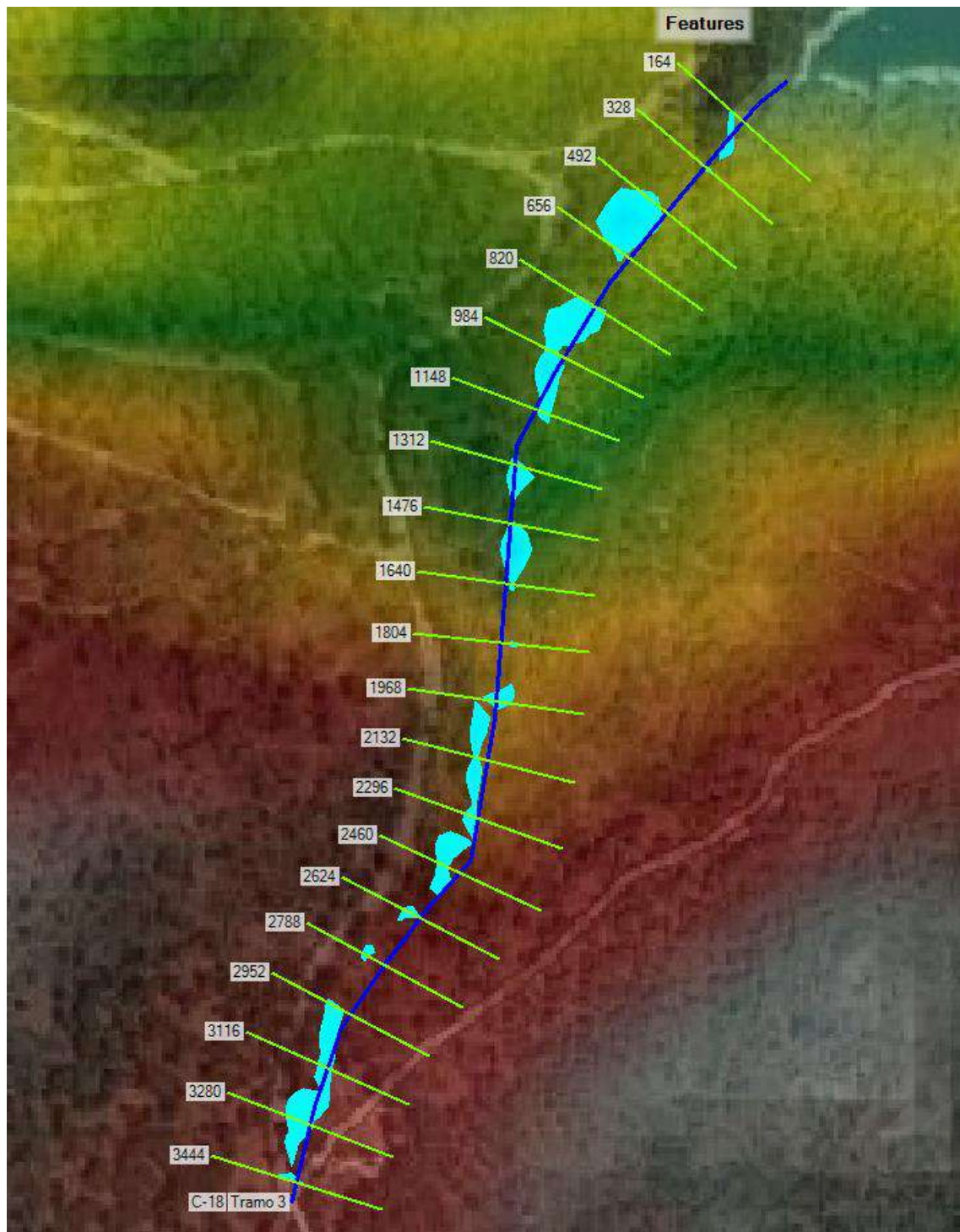
Plan: Plan 01 C-18 Tramo 3 RS: 492 Profile: PF 1					
E.G. Elev (m)	610.92	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	610.86	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	610.86	Flow Area (m2)		2.66	
E.G. Slope (m/m)	0.051248	Area (m2)		2.66	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	23.45	Top Width (m)		23.45	
Vel Total (m/s)	1.06	Avg. Vel. (m/s)		1.06	
Max Chl Dpth (m)	0.16	Hydr. Depth (m)		0.11	
Conv. Total (m3/s)	12.5	Conv. (m3/s)		12.5	
Length Wtd. (m)	50.00	Wetted Per. (m)		23.46	
Min Ch El (m)	610.70	Shear (N/m2)		57.09	
Alpha	1.00	Stream Power (N/m s)		60.63	
Frctn Loss (m)	3.89	Cum Volume (1000 m3)		0.15	
C & E Loss (m)	0.01	Cum SA (1000 m2)		1.22	



Plan: Plan 01 C-18 Tramo 3 RS: 328 Profile: PF 1					
E.G. Elev (m)	607.02	Element	Left OB	Channel	Right OB
Vel Head (m)	0.19	Wt. n-Val.		0.050	
W.S. Elev (m)	606.83	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	606.90	Flow Area (m2)		1.48	
E.G. Slope (m/m)	0.131653	Area (m2)		1.48	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	10.87	Top Width (m)		10.87	
Vel Total (m/s)	1.92	Avg. Vel. (m/s)		1.92	
Max Chl Dpth (m)	0.27	Hydr. Depth (m)		0.14	
Conv. Total (m3/s)	7.8	Conv. (m3/s)		7.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		10.88	
Min Ch El (m)	606.56	Shear (N/m2)		175.19	
Alpha	1.00	Stream Power (N/m s)		335.70	
Frctn Loss (m)	13.49	Cum Volume (1000 m3)		0.05	
C & E Loss (m)	0.11	Cum SA (1000 m2)		0.37	

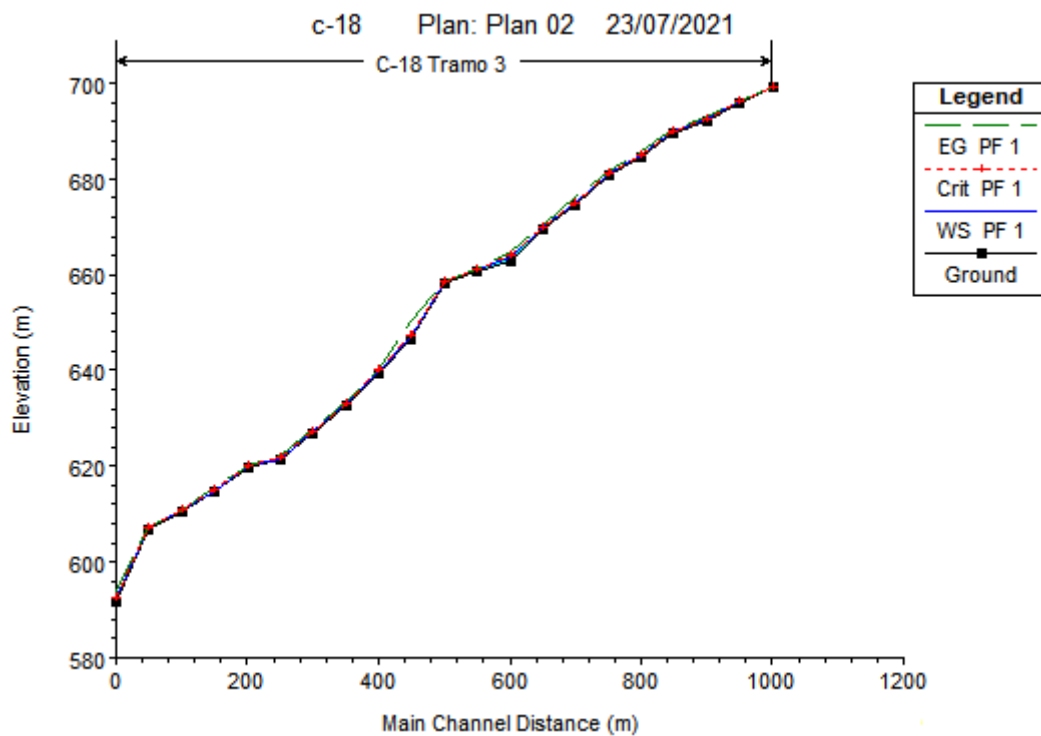


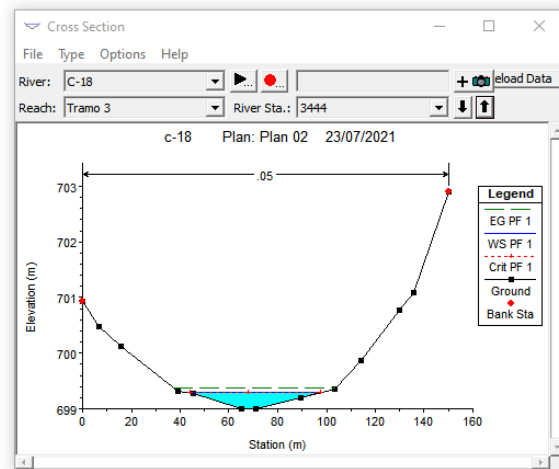
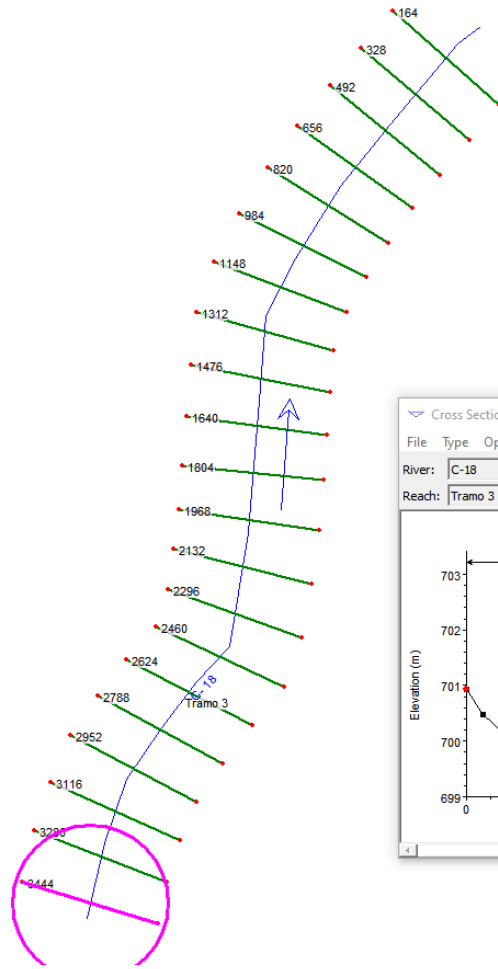
Plan: Plan 01 C-18 Tramo 3 RS: 164 Profile: PF 1					
E.G. Elev (m)	593.42	Element	Left OB	Channel	Right OB
Vel Head (m)	1.31	Wt. n-Val.		0.050	
W.S. Elev (m)	592.10	Reach Len. (m)			
Crit W.S. (m)	592.33	Flow Area (m2)		0.56	
E.G. Slope (m/m)	0.834882	Area (m2)		0.56	
Q Total (m3/s)	2.83	Flow (m3/s)		2.83	
Top Width (m)	3.76	Top Width (m)		3.76	
Vel Total (m/s)	5.08	Avg. Vel. (m/s)		5.08	
Max Chl Dpth (m)	0.27	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	3.1	Conv. (m3/s)		3.1	
Length Wtd. (m)		Wetted Per. (m)		3.81	
Min Ch El (m)	591.83	Shear (N/m2)		1198.47	
Alpha	1.00	Stream Power (N/m s)		6083.12	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			



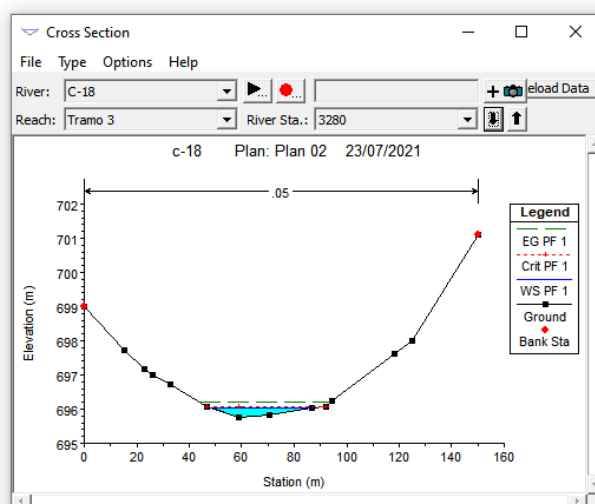
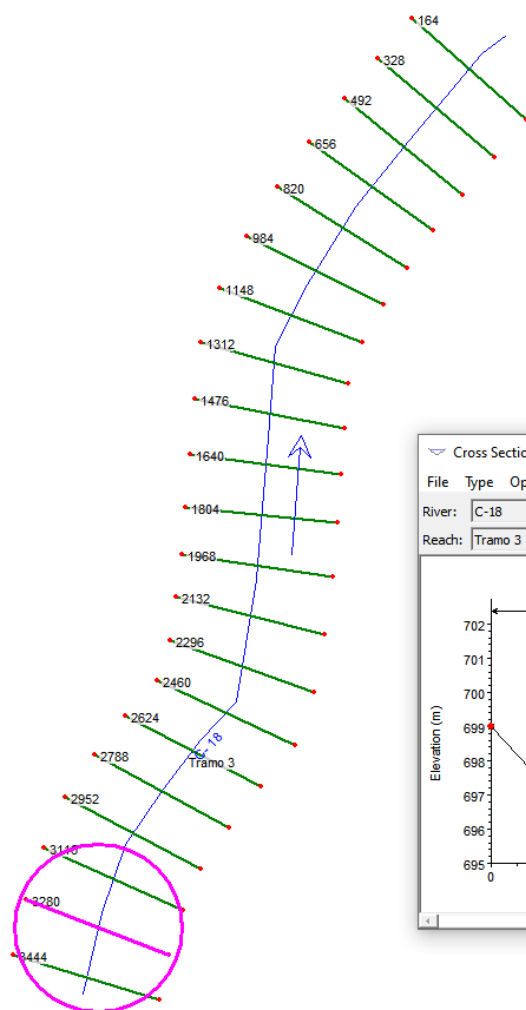
T100 (Q=10,95 m3/s)

HEC-RAS Plan: Plan 02 River: C-18 Reach: Tramo 3 Profile: PF 1												
Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Tramo 3	3444	PF 1	10.95	699.00	699.29	699.37	699.37	0.045540	1.27	8.65	53.58	1.01
Tramo 3	3280	PF 1	10.95	695.76	696.04	696.08	696.20	0.093730	1.78	6.17	39.49	1.43
Tramo 3	3116	PF 1	10.95	692.13	692.61	692.64	692.79	0.051595	1.92	5.71	20.79	1.17
Tramo 3	2952	PF 1	10.95	689.69	690.10	690.13	690.27	0.049176	1.81	6.04	23.08	1.13
Tramo 3	2788	PF 1	10.95	684.36	684.85	685.07	685.64	0.225749	3.93	2.79	10.42	2.43
Tramo 3	2624	PF 1	10.95	680.84	681.30	681.30	681.44	0.040601	1.67	6.54	24.43	1.03
Tramo 3	2460	PF 1	10.95	674.61	674.89	675.10	676.02	0.734220	4.70	2.33	16.21	3.96
Tramo 3	2296	PF 1	10.95	669.42	669.95	669.97	670.14	0.043228	1.93	5.68	17.96	1.09
Tramo 3	2132	PF 1	10.95	662.98	663.51	663.84	665.00	0.438828	5.41	2.02	7.68	3.37
Tramo 3	1968	PF 1	10.95	660.75	661.14	661.14	661.26	0.042014	1.51	7.26	32.54	1.02
Tramo 3	1804	PF 1	10.95	658.23	658.63	658.66	658.80	0.058193	1.81	6.06	26.40	1.21
Tramo 3	1640	PF 1	10.95	646.31	646.73	647.14	650.33	1.506901	8.40	1.30	6.45	5.97
Tramo 3	1476	PF 1	10.95	639.28	639.92	640.01	640.21	0.066861	2.41	4.55	14.27	1.36
Tramo 3	1312	PF 1	10.95	632.66	632.91	633.08	633.57	0.374207	3.60	3.04	19.04	2.88
Tramo 3	1148	PF 1	10.95	626.87	627.36	627.41	627.60	0.056288	2.16	5.08	16.55	1.24
Tramo 3	984	PF 1	10.95	621.20	621.55	621.72	622.19	0.280765	3.54	3.09	15.97	2.57
Tramo 3	820	PF 1	10.95	619.80	620.07	620.07	620.15	0.045975	1.29	8.49	51.40	1.01
Tramo 3	656	PF 1	10.95	614.57	614.87	615.00	615.35	0.304283	3.08	3.56	24.09	2.56
Tramo 3	492	PF 1	10.95	610.70	611.03	611.03	611.13	0.041650	1.46	7.50	35.10	1.01
Tramo 3	328	PF 1	10.95	606.56	606.99	607.09	607.32	0.180295	2.54	4.32	26.39	2.00
Tramo 3	164	PF 1	10.95	591.83	592.37	592.72	593.95	0.426304	5.57	1.96	6.93	3.34

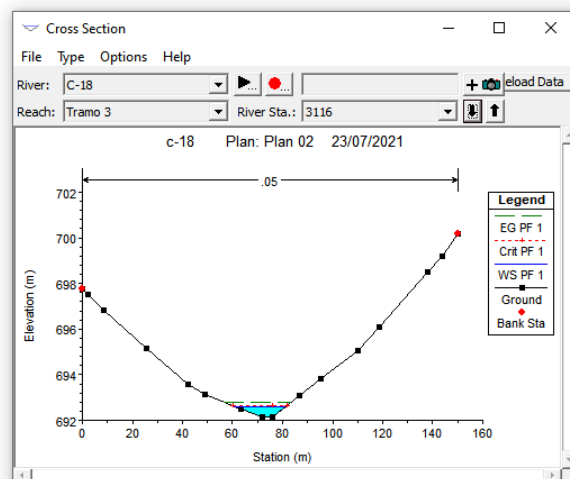
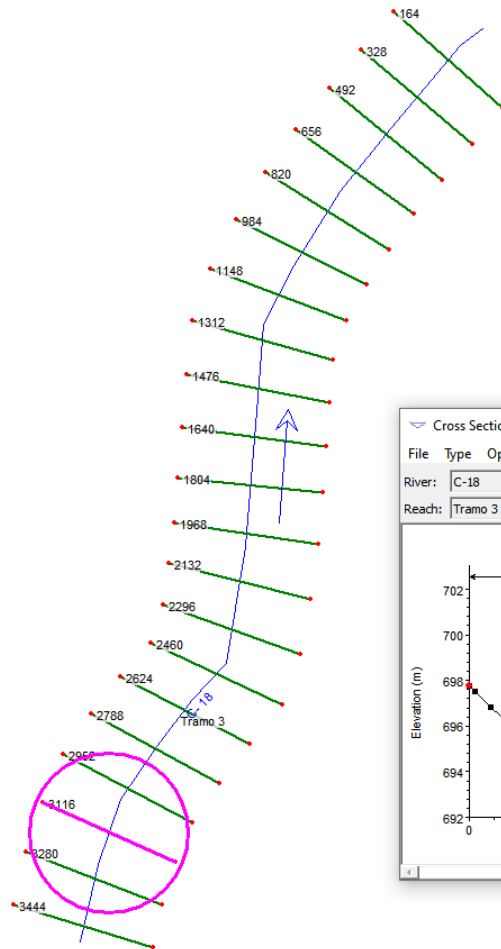




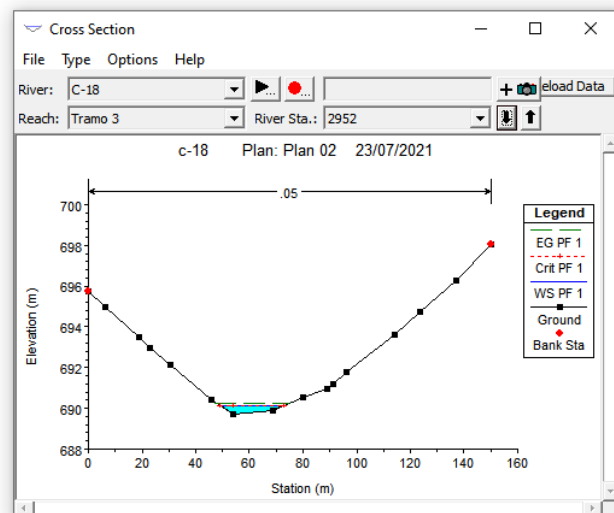
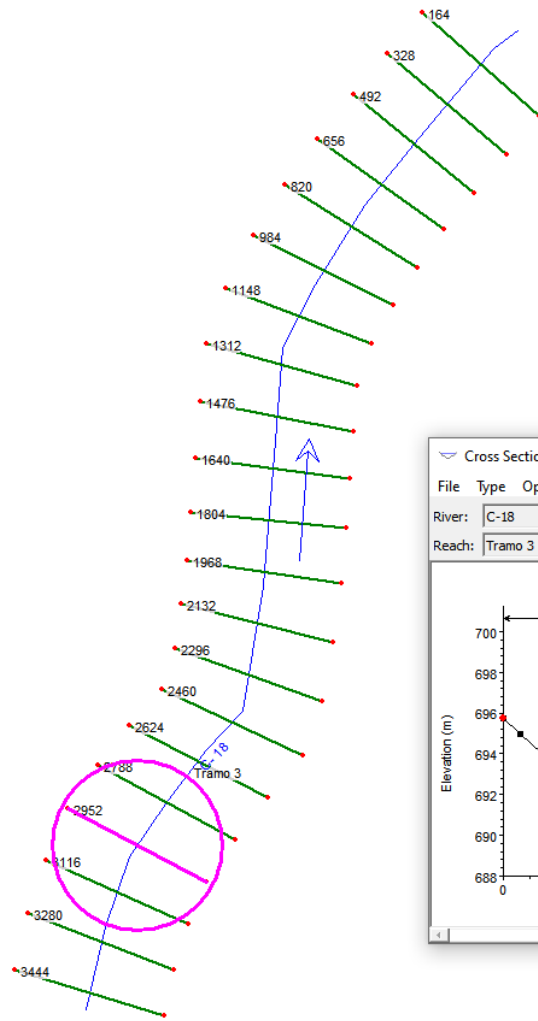
Plan: Plan 02 C-18 Tramo 3 RS: 3444 Profile: PF 1					
E.G. Elev (m)	699.37	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	699.29	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	699.29	Flow Area (m2)		8.65	
E.G. Slope (m/m)	0.045540	Area (m2)		8.65	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	53.58	Top Width (m)		53.58	
Vel Total (m/s)	1.27	Avg. Vel. (m/s)		1.27	
Max Chl Dpth (m)	0.29	Hydr. Depth (m)		0.16	
Conv. Total (m3/s)	51.3	Conv. (m3/s)		51.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		53.59	
Min Ch El (m)	699.00	Shear (N/m2)		72.11	
Alpha	1.00	Stream Power (N/m s)		91.26	
Frctn Loss (m)	3.16	Cum Volume (1000 m3)		4.84	
C & E Loss (m)	0.01	Cum SA (1000 m2)		22.93	



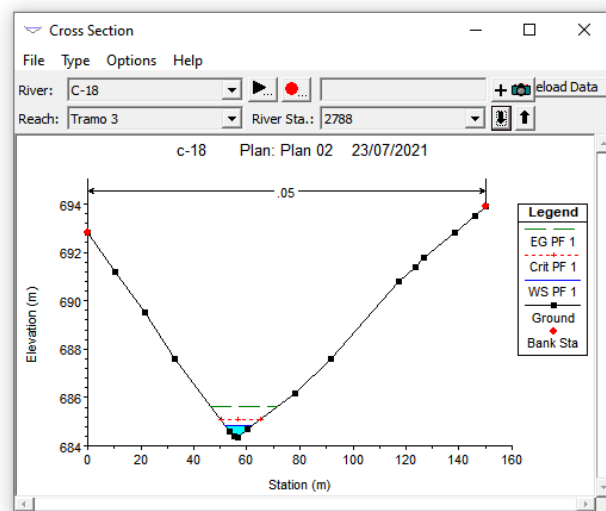
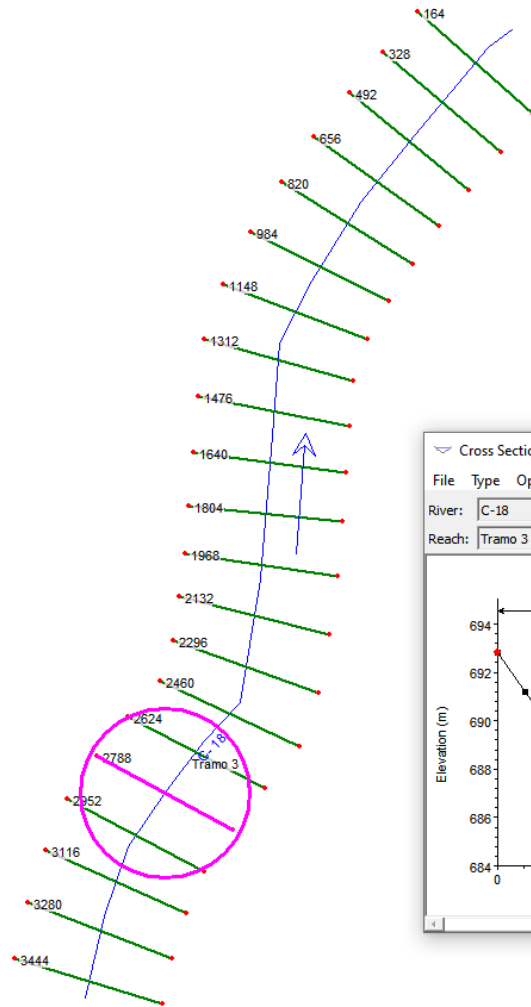
Plan: Plan 02 C-18 Tramo 3 RS: 3280 Profile: PF 1					
E.G. Elev (m)	696.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.16	Wt. n-Val.		0.050	
W.S. Elev (m)	696.04	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	696.08	Flow Area (m2)		6.17	
E.G. Slope (m/m)	0.093730	Area (m2)		6.17	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	39.49	Top Width (m)		39.49	
Vel Total (m/s)	1.78	Avg. Vel. (m/s)		1.78	
Max Chl Dpth (m)	0.28	Hydr. Depth (m)		0.16	
Conv. Total (m3/s)	35.8	Conv. (m3/s)		35.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		39.49	
Min Ch El (m)	695.76	Shear (N/m2)		143.53	
Alpha	1.00	Stream Power (N/m s)		254.84	
Frctn Loss (m)	3.40	Cum Volume (1000 m3)		4.47	
C & E Loss (m)	0.00	Cum SA (1000 m2)		20.60	



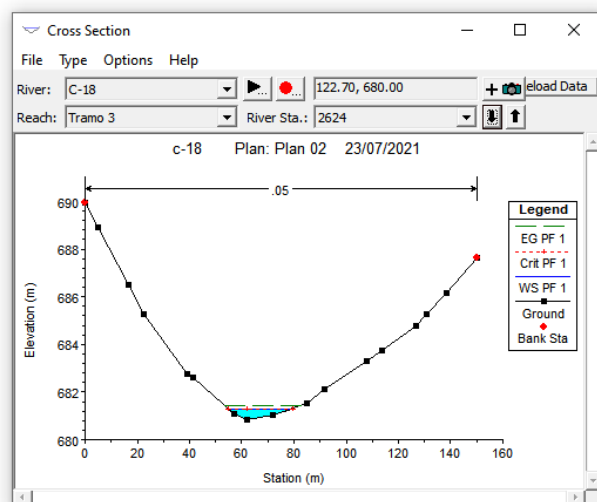
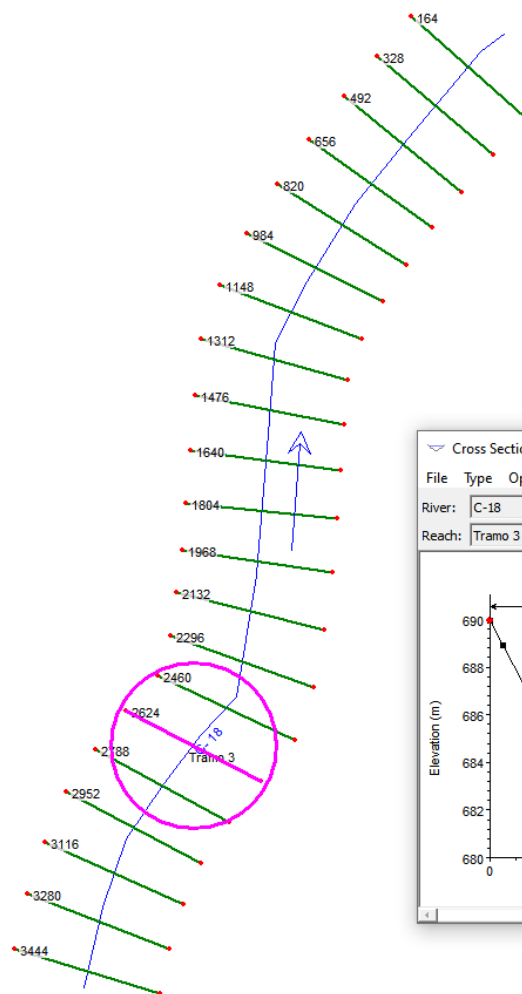
Plan: Plan 02 C-18 Tramo 3 RS: 3116 Profile: PF 1					
E.G. Elev (m)	692.79	Element	Left OB	Channel	Right OB
Vel Head (m)	0.19	Wt. n-Val.		0.050	
W.S. Elev (m)	692.61	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	692.64	Flow Area (m2)		5.71	
E.G. Slope (m/m)	0.051595	Area (m2)		5.71	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	20.79	Top Width (m)		20.79	
Vel Total (m/s)	1.92	Avg. Vel. (m/s)		1.92	
Max Chl Dpth (m)	0.48	Hydr. Depth (m)		0.27	
Conv. Total (m3/s)	48.2	Conv. (m3/s)		48.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		20.82	
Min Ch El (m)	692.13	Shear (N/m2)		138.78	
Alpha	1.00	Stream Power (N/m s)		266.16	
Frctn Loss (m)	2.52	Cum Volume (1000 m3)		4.17	
C & E Loss (m)	0.01	Cum SA (1000 m2)		19.09	



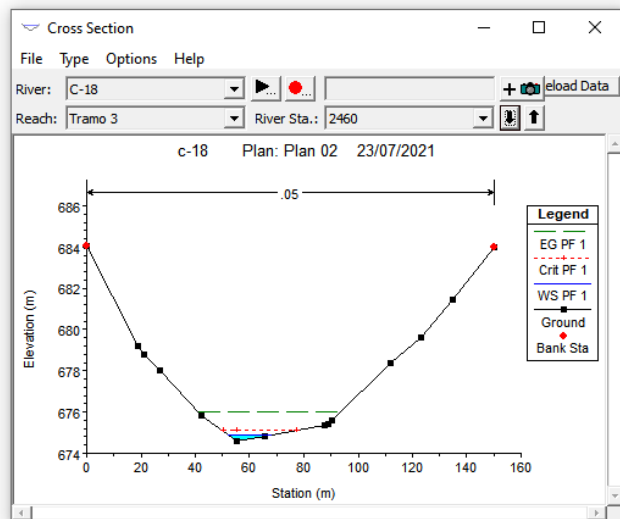
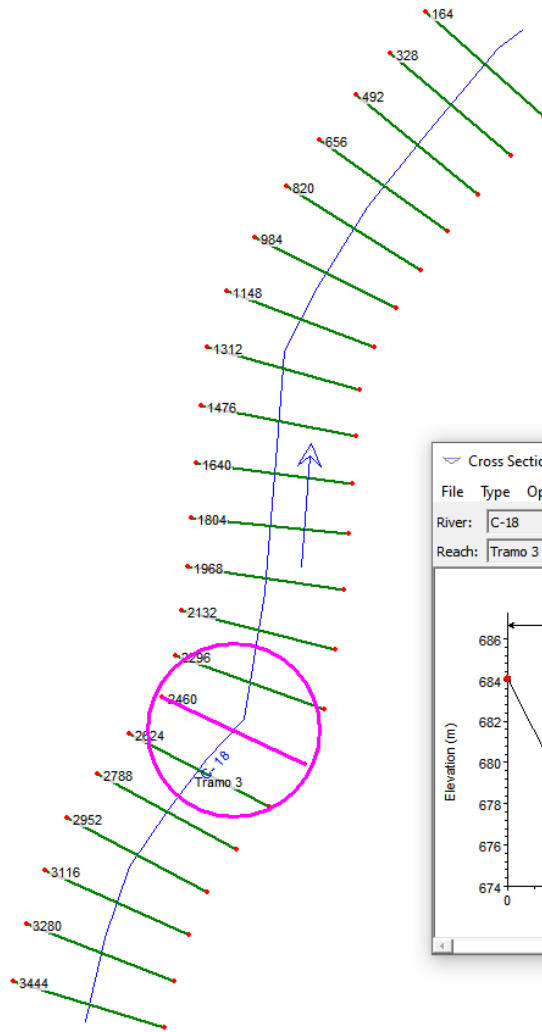
Plan: Plan 02 C-18 Tramo 3 RS: 2952 Profile: PF 1					
E.G. Elev (m)	690.27	Element	Left OB	Channel	Right OB
Vel Head (m)	0.17	Wt. n-Val.		0.050	
W.S. Elev (m)	690.10	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	690.13	Flow Area (m2)		6.04	
E.G. Slope (m/m)	0.049176	Area (m2)		6.04	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	23.08	Top Width (m)		23.08	
Vel Total (m/s)	1.81	Avg. Vel. (m/s)		1.81	
Max Chl Dpth (m)	0.41	Hydr. Depth (m)		0.26	
Conv. Total (m3/s)	49.4	Conv. (m3/s)		49.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		23.10	
Min Ch El (m)	689.69	Shear (N/m2)		126.06	
Alpha	1.00	Stream Power (N/m s)		228.56	
Frctn Loss (m)	4.57	Cum Volume (1000 m3)		3.88	
C & E Loss (m)	0.06	Cum SA (1000 m2)		18.00	



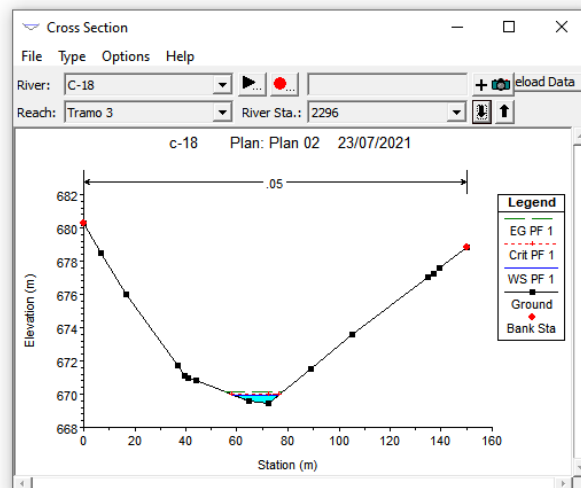
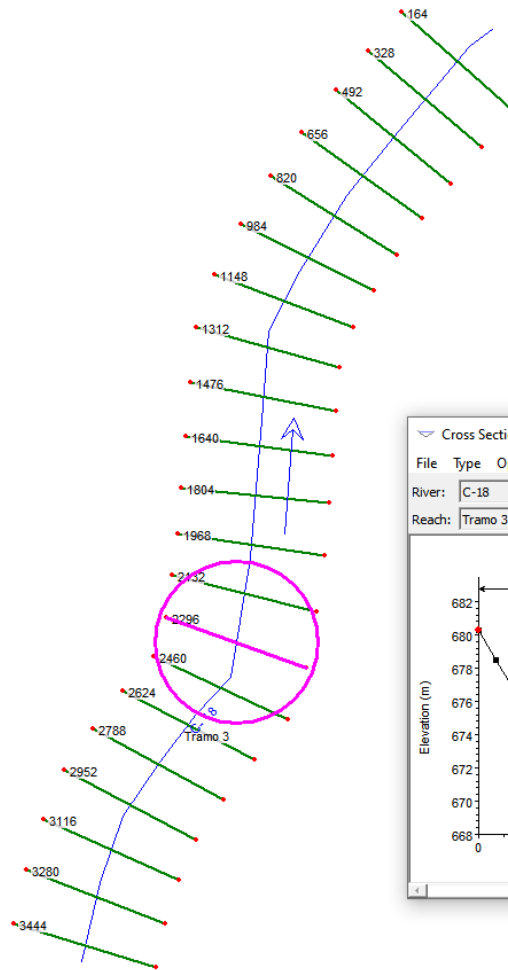
Plan: Plan 02 C-18 Tramo 3 RS: 2788 Profile: PF 1					
E.G. Elev (m)	685.64	Element	Left OB	Channel	Right OB
Vel Head (m)	0.79	Wt. n-Val.		0.050	
W.S. Elev (m)	684.85	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	685.07	Flow Area (m2)		2.79	
E.G. Slope (m/m)	0.225749	Area (m2)		2.79	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	10.42	Top Width (m)		10.42	
Vel Total (m/s)	3.93	Avg. Vel. (m/s)		3.93	
Max Chl Dpth (m)	0.49	Hydr. Depth (m)		0.27	
Conv. Total (m3/s)	23.0	Conv. (m3/s)		23.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		10.47	
Min Ch El (m)	684.36	Shear (N/m2)		588.91	
Alpha	1.00	Stream Power (N/m s)		2314.73	
Frctn Loss (m)	4.00	Cum Volume (1000 m3)		3.66	
C & E Loss (m)	0.19	Cum SA (1000 m2)		17.16	



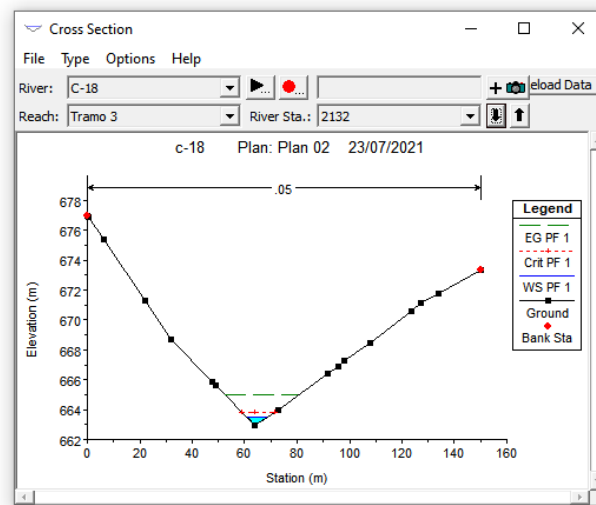
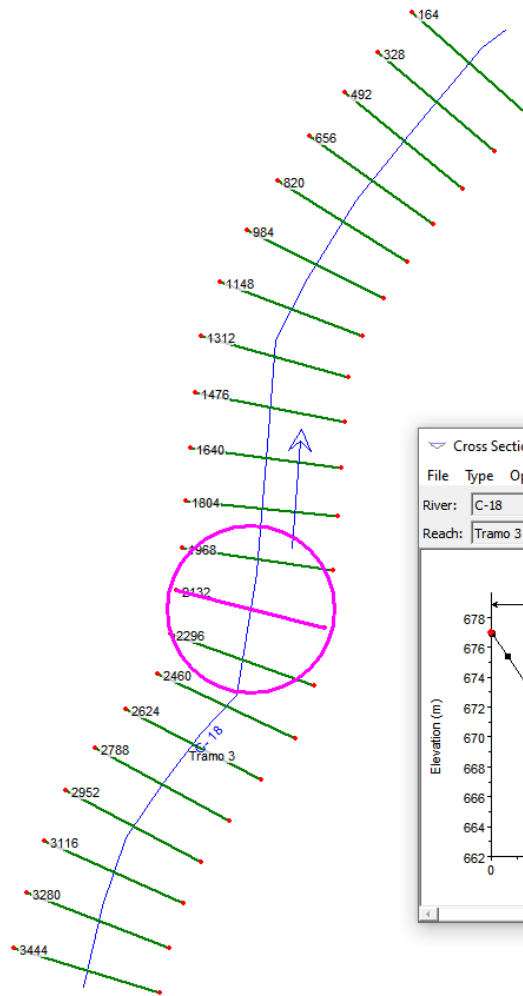
Plan: Plan 02 C-18 Tramo 3 RS: 2624 Profile: PF 1					
E.G. Elev (m)	681.44	Element	Left OB	Channel	Right OB
Vel Head (m)	0.14	Wt. n-Val.		0.050	
W.S. Elev (m)	681.30	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	681.30	Flow Area (m2)		6.54	
E.G. Slope (m/m)	0.040601	Area (m2)		6.54	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	24.43	Top Width (m)		24.43	
Vel Total (m/s)	1.67	Avg. Vel. (m/s)		1.67	
Max Chl Dpth (m)	0.46	Hydr. Depth (m)		0.27	
Conv. Total (m3/s)	54.3	Conv. (m3/s)		54.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		24.45	
Min Ch El (m)	680.84	Shear (N/m2)		106.55	
Alpha	1.00	Stream Power (N/m s)		178.32	
Frctn Loss (m)	5.32	Cum Volume (1000 m3)		3.43	
C & E Loss (m)	0.10	Cum SA (1000 m2)		16.29	



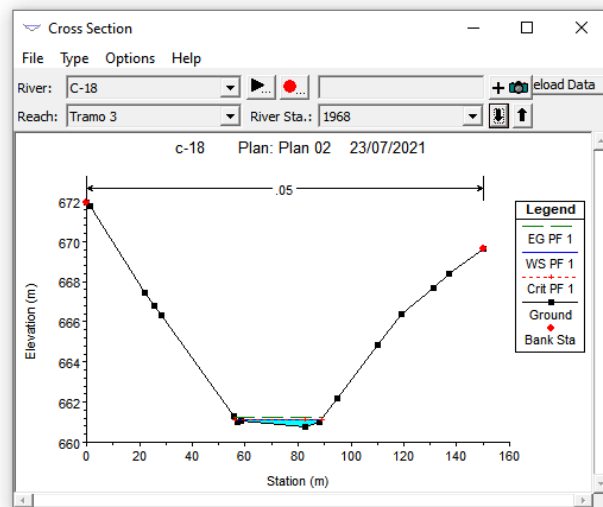
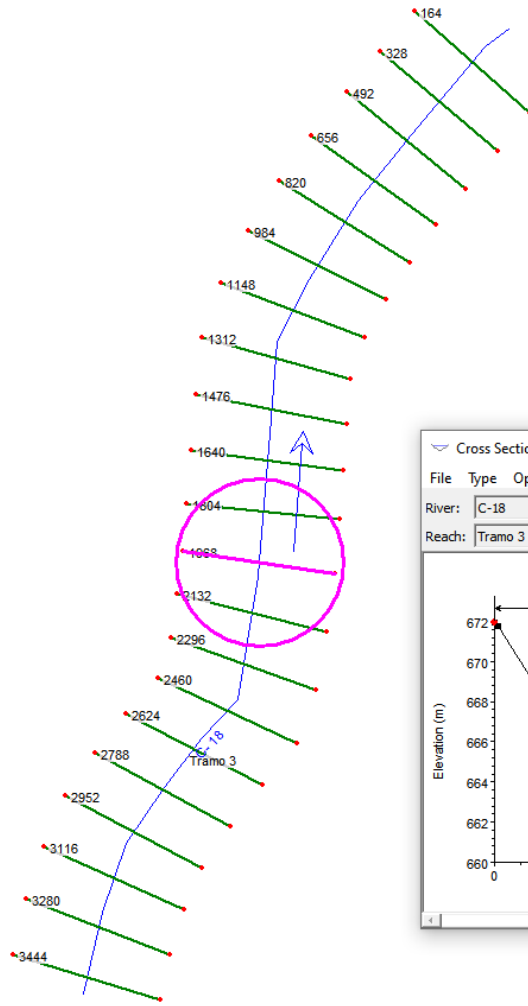
Plan: Plan 02 C-18 Tramo 3 RS: 2460 Profile: PF 1					
E.G. Elev (m)	676.02	Element	Left OB	Channel	Right OB
Vel Head (m)	1.13	Wt. n-Val.		0.050	
W.S. Elev (m)	674.89	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	675.10	Flow Area (m2)		2.33	
E.G. Slope (m/m)	0.734220	Area (m2)		2.33	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	16.21	Top Width (m)		16.21	
Vel Total (m/s)	4.70	Avg. Vel. (m/s)		4.70	
Max Chl Dpth (m)	0.28	Hydr. Depth (m)		0.14	
Conv. Total (m3/s)	12.8	Conv. (m3/s)		12.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		16.23	
Min Ch El (m)	674.61	Shear (N/m2)		1033.79	
Alpha	1.00	Stream Power (N/m s)		4857.75	
Frctn Loss (m)	5.60	Cum Volume (1000 m3)		3.21	
C & E Loss (m)	0.28	Cum SA (1000 m2)		15.27	



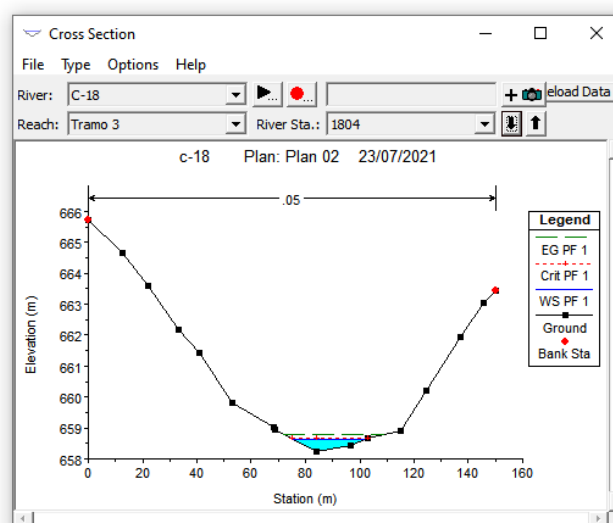
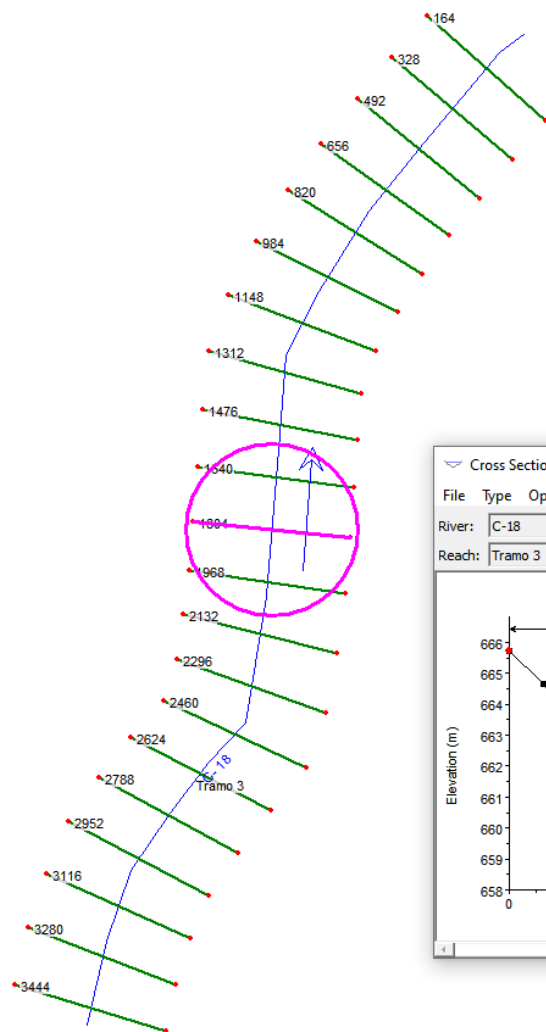
Plan: Plan 02 C-18 Tramo 3 RS: 2296 Profile: PF 1					
E.G. Elev (m)	670.14	Element	Left OB	Channel	Right OB
Vel Head (m)	0.19	Wt. n-Val.		0.050	
W.S. Elev (m)	669.95	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	669.97	Flow Area (m2)		5.68	
E.G. Slope (m/m)	0.043228	Area (m2)		5.68	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	17.96	Top Width (m)		17.96	
Vel Total (m/s)	1.93	Avg. Vel. (m/s)		1.93	
Max Chl Dpth (m)	0.53	Hydr. Depth (m)		0.32	
Conv. Total (m3/s)	52.7	Conv. (m3/s)		52.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		18.01	
Min Ch El (m)	669.42	Shear (N/m2)		133.76	
Alpha	1.00	Stream Power (N/m s)		257.78	
Frctn Loss (m)	5.01	Cum Volume (1000 m3)		3.00	
C & E Loss (m)	0.13	Cum SA (1000 m2)		14.42	



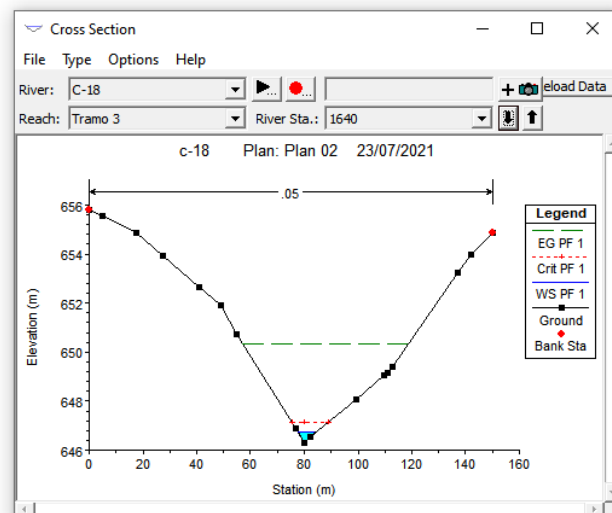
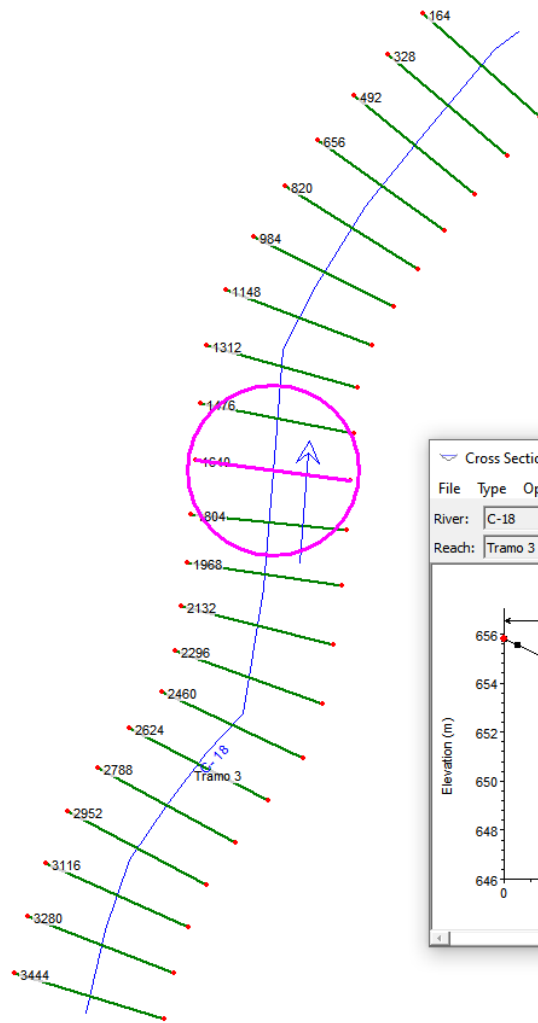
Plan: Plan 02 C-18 Tramo 3 RS: 2132 Profile: PF 1					
E.G. Elev (m)	665.00	Element	Left OB	Channel	Right OB
Vel Head (m)	1.49	Wt. n-Val.		0.050	
W.S. Elev (m)	663.51	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	663.84	Flow Area (m2)		2.02	
E.G. Slope (m/m)	0.438828	Area (m2)		2.02	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	7.68	Top Width (m)		7.68	
Vel Total (m/s)	5.41	Avg. Vel. (m/s)		5.41	
Max Chl Dpth (m)	0.53	Hydr. Depth (m)		0.26	
Conv. Total (m3/s)	16.5	Conv. (m3/s)		16.5	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.76	
Min Ch El (m)	662.98	Shear (N/m2)		1122.74	
Alpha	1.00	Stream Power (N/m s)		6073.47	
Frctn Loss (m)	1.86	Cum Volume (1000 m3)		2.81	
C & E Loss (m)	0.03	Cum SA (1000 m2)		13.78	



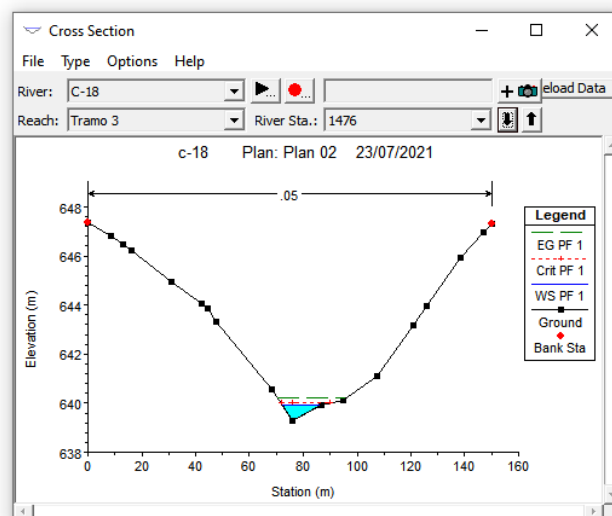
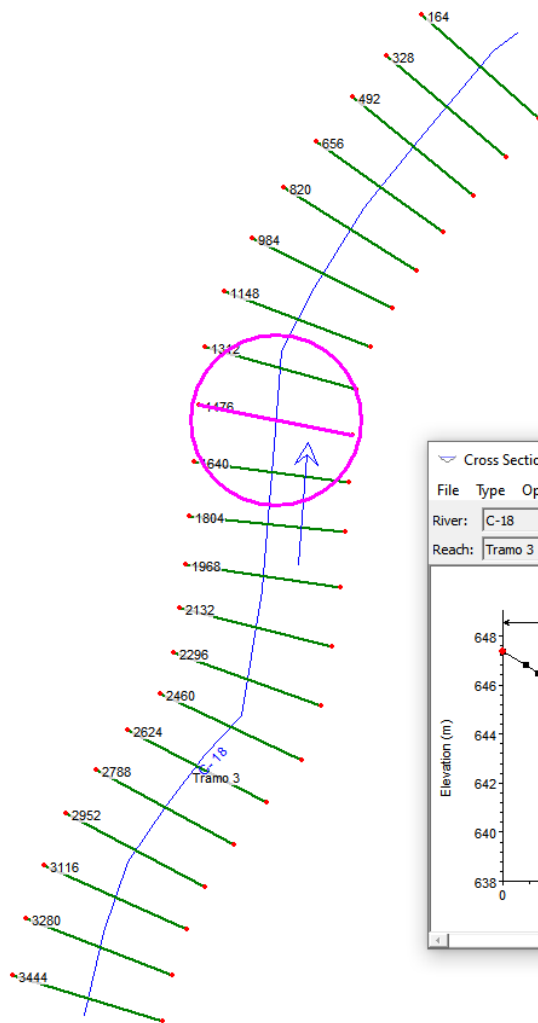
Plan: Plan 02 C-18 Tramo 3 RS: 1968 Profile: PF 1					
E.G. Elev (m)	661.26	Element	Left OB	Channel	Right OB
Vel Head (m)	0.12	Wt. n-Val.		0.050	
W.S. Elev (m)	661.14	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	661.14	Flow Area (m2)		7.26	
E.G. Slope (m/m)	0.042014	Area (m2)		7.26	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	32.54	Top Width (m)		32.54	
Vel Total (m/s)	1.51	Avg. Vel. (m/s)		1.51	
Max Chl Dpth (m)	0.39	Hydr. Depth (m)		0.22	
Conv. Total (m3/s)	53.4	Conv. (m3/s)		53.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		32.57	
Min Ch El (m)	660.75	Shear (N/m2)		91.88	
Alpha	1.00	Stream Power (N/m s)		138.51	
Frctn Loss (m)	2.46	Cum Volume (1000 m3)		2.58	
C & E Loss (m)	0.01	Cum SA (1000 m2)		12.77	



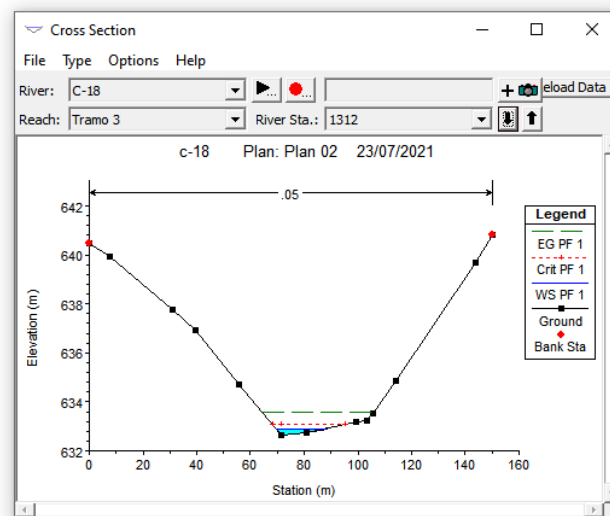
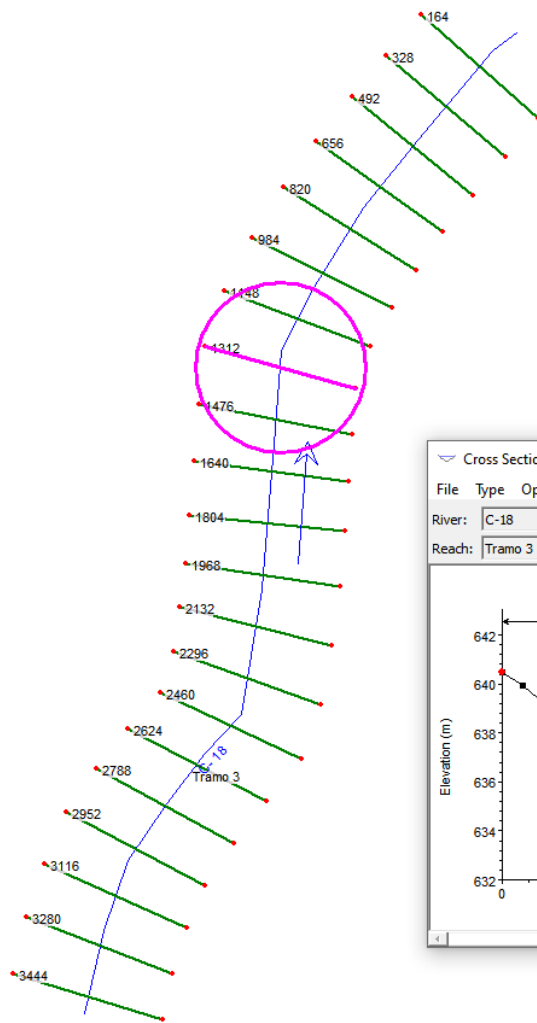
Plan: Plan 02 C-18 Tramo 3 RS: 1804 Profile: PF 1					
E.G. Elev (m)	658.80	Element	Left OB	Channel	Right OB
Vel Head (m)	0.17	Wt. n-Val.		0.050	
W.S. Elev (m)	658.63	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	658.66	Flow Area (m2)		6.06	
E.G. Slope (m/m)	0.058193	Area (m2)		6.06	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	26.40	Top Width (m)		26.40	
Vel Total (m/s)	1.81	Avg. Vel. (m/s)		1.81	
Max Chl Dpth (m)	0.40	Hydr. Depth (m)		0.23	
Conv. Total (m3/s)	45.4	Conv. (m3/s)		45.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		26.41	
Min Ch El (m)	658.23	Shear (N/m2)		130.88	
Alpha	1.00	Stream Power (N/m s)		236.58	
Frctn Loss (m)	8.13	Cum Volume (1000 m3)		2.25	
C & E Loss (m)	0.34	Cum SA (1000 m2)		11.30	



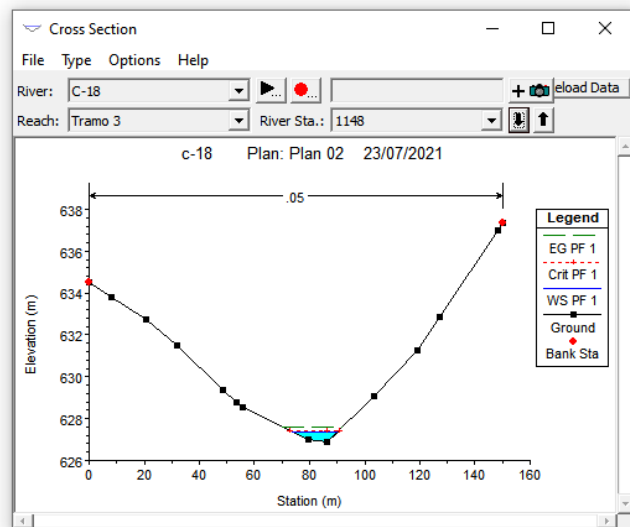
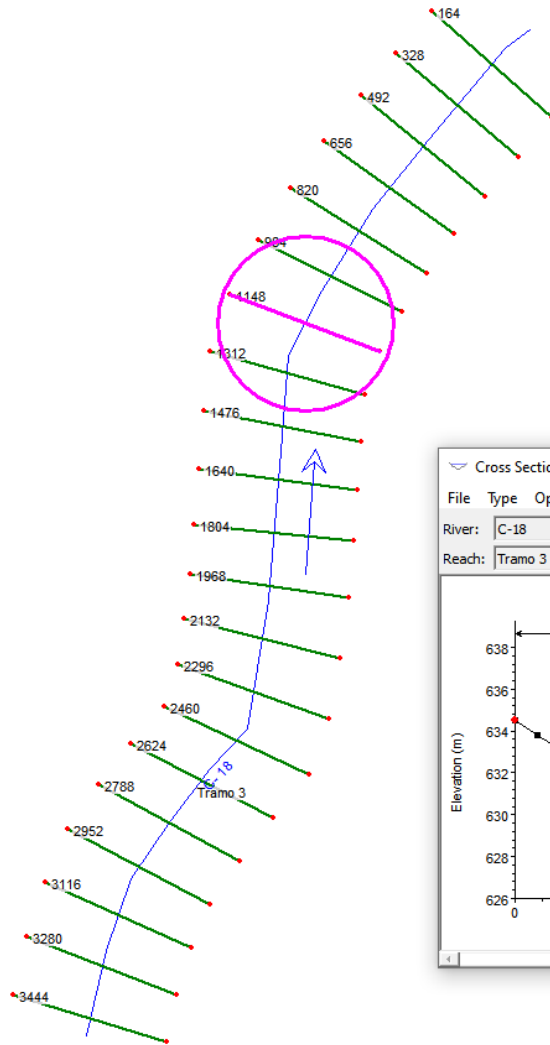
Plan: Plan 02 C-18 Tramo 3 RS: 1640 Profile: PF 1					
E.G. Elev (m)	650.33	Element	Left OB	Channel	Right OB
Vel Head (m)	3.60	Wt. n-Val.		0.050	
W.S. Elev (m)	646.73	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	647.14	Flow Area (m2)		1.30	
E.G. Slope (m/m)	1.506901	Area (m2)		1.30	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	6.45	Top Width (m)		6.45	
Vel Total (m/s)	8.40	Avg. Vel. (m/s)		8.40	
Max Chl Dpth (m)	0.42	Hydr. Depth (m)		0.20	
Conv. Total (m3/s)	8.9	Conv. (m3/s)		8.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		6.51	
Min Ch El (m)	646.31	Shear (N/m2)		2957.28	
Alpha	1.00	Stream Power (N/m s)		24840.55	
Frctn Loss (m)	9.12	Cum Volume (1000 m3)		2.06	
C & E Loss (m)	0.99	Cum SA (1000 m2)		10.48	



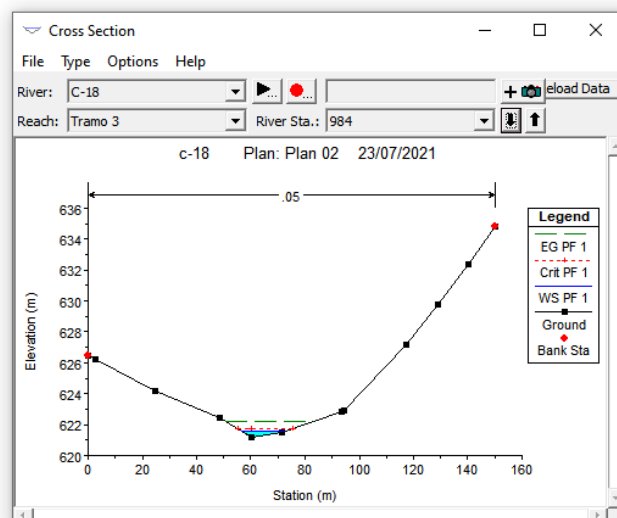
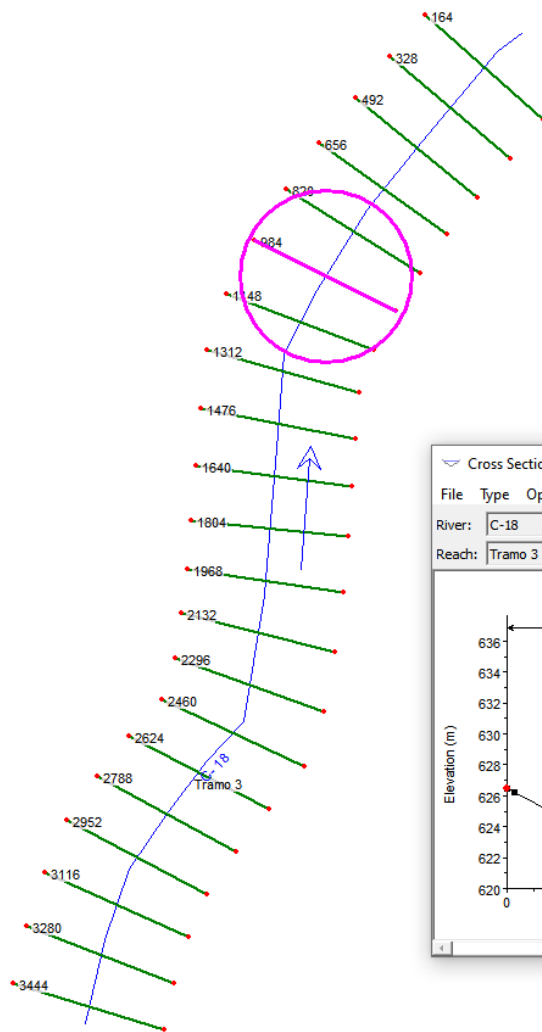
Plan: Plan 02 C-18 Tramo 3 RS: 1476 Profile: PF 1					
E.G. Elev (m)	640.21	Element	Left OB	Channel	Right OB
Vel Head (m)	0.30	Wt. n-Val.		0.050	
W.S. Elev (m)	639.92	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	640.01	Flow Area (m2)		4.55	
E.G. Slope (m/m)	0.066861	Area (m2)		4.55	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	14.27	Top Width (m)		14.27	
Vel Total (m/s)	2.41	Avg. Vel. (m/s)		2.41	
Max Chl Dpth (m)	0.64	Hydr. Depth (m)		0.32	
Conv. Total (m3/s)	42.3	Conv. (m3/s)		42.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		14.35	
Min Ch El (m)	639.28	Shear (N/m2)		208.00	
Alpha	1.00	Stream Power (N/m s)		500.32	
Frctn Loss (m)	6.61	Cum Volume (1000 m3)		1.92	
C & E Loss (m)	0.04	Cum SA (1000 m2)		9.96	



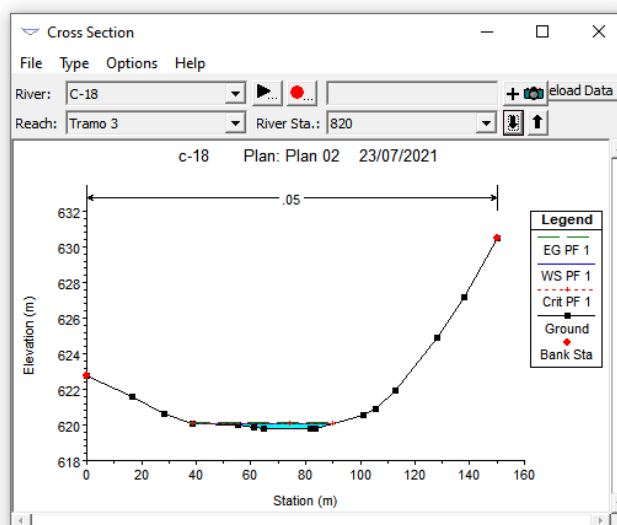
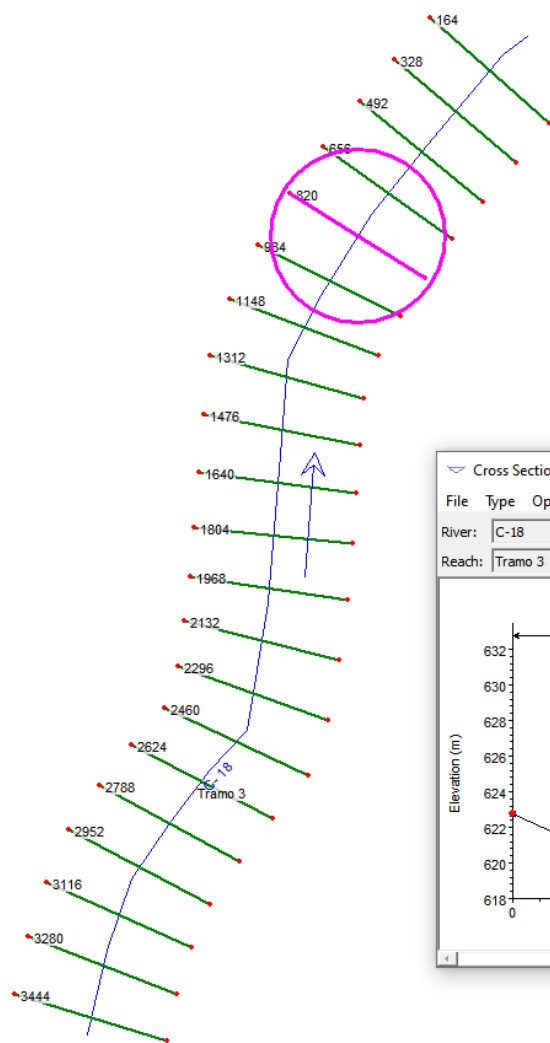
Plan: Plan 02 C-18 Tramo 3 RS: 1312 Profile: PF 1					
E.G. Elev (m)	633.57	Element	Left OB	Channel	Right OB
Vel Head (m)	0.66	Wt. n-Val.		0.050	
W.S. Elev (m)	632.91	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	633.08	Flow Area (m2)		3.04	
E.G. Slope (m/m)	0.374207	Area (m2)		3.04	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	19.04	Top Width (m)		19.04	
Vel Total (m/s)	3.60	Avg. Vel. (m/s)		3.60	
Max Chl Dpth (m)	0.25	Hydr. Depth (m)		0.16	
Conv. Total (m3/s)	17.9	Conv. (m3/s)		17.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		19.06	
Min Ch El (m)	632.66	Shear (N/m2)		585.62	
Alpha	1.00	Stream Power (N/m s)		2107.99	
Frctn Loss (m)	5.84	Cum Volume (1000 m3)		1.73	
C & E Loss (m)	0.13	Cum SA (1000 m2)		9.12	



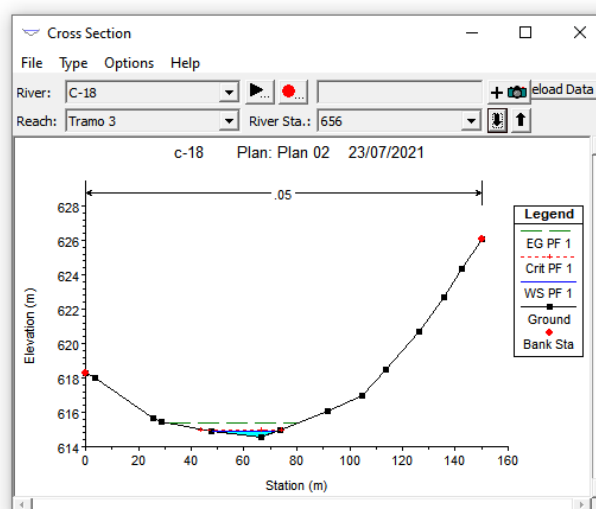
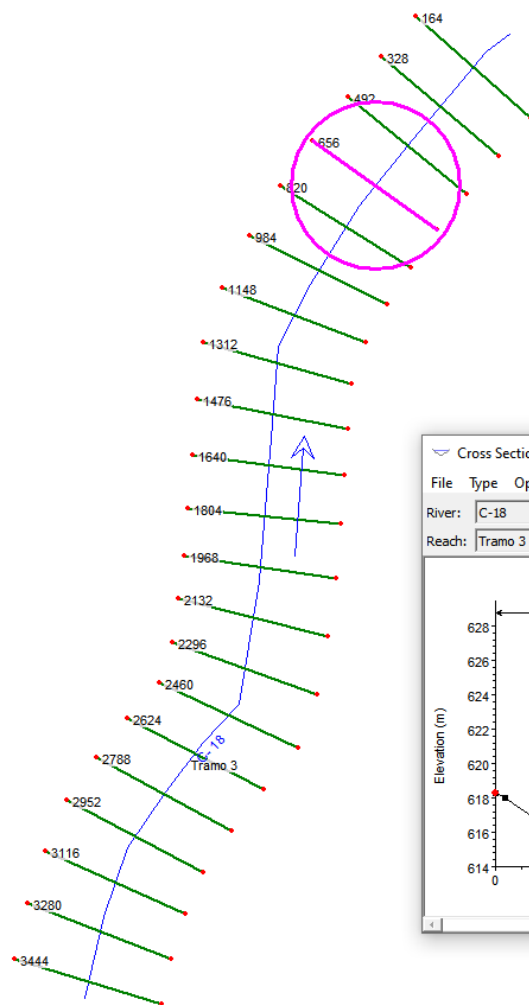
Plan: Plan 02 C-18 Tramo 3 RS: 1148 Profile: PF 1					
E.G. Elev (m)	627.60	Element	Left OB	Channel	Right OB
Vel Head (m)	0.24	Wt. n-Val.		0.050	
W.S. Elev (m)	627.36	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	627.41	Flow Area (m2)		5.08	
E.G. Slope (m/m)	0.056288	Area (m2)		5.08	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	16.55	Top Width (m)		16.55	
Vel Total (m/s)	2.16	Avg. Vel. (m/s)		2.16	
Max Chl Dpth (m)	0.49	Hydr. Depth (m)		0.31	
Conv. Total (m3/s)	46.2	Conv. (m3/s)		46.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		16.60	
Min Ch El (m)	626.87	Shear (N/m2)		168.96	
Alpha	1.00	Stream Power (N/m s)		364.14	
Frctn Loss (m)	5.37	Cum Volume (1000 m3)		1.52	
C & E Loss (m)	0.04	Cum SA (1000 m2)		8.23	



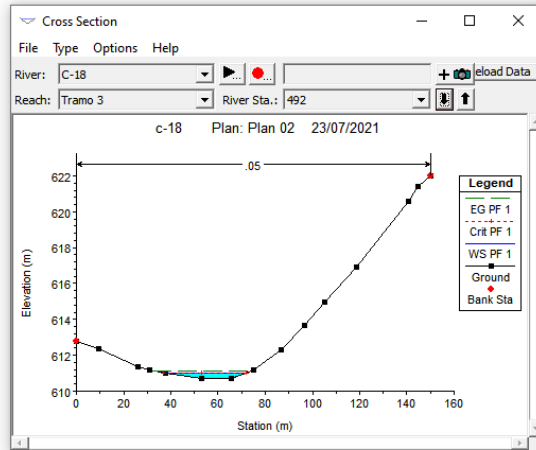
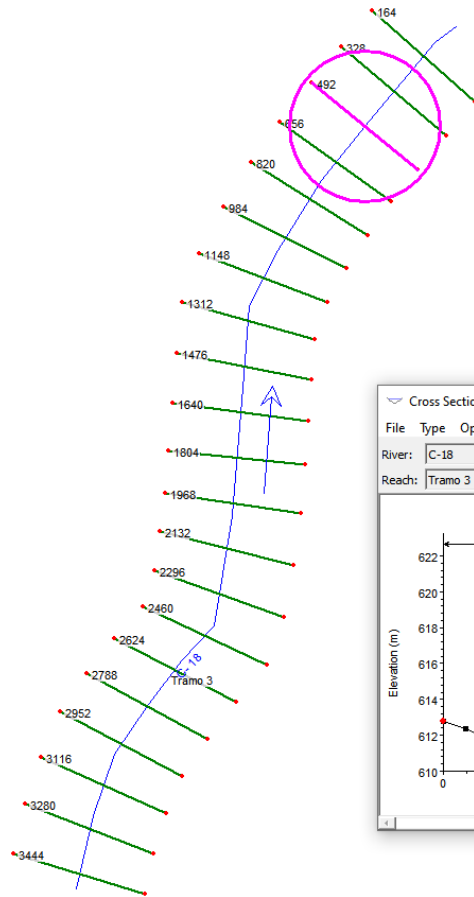
Plan: Plan 02 C-18 Tramo 3 RS: 984 Profile: PF 1					
E.G. Elev (m)	622.19	Element	Left OB	Channel	Right OB
Vel Head (m)	0.64	Wt. n-Val.		0.050	
W.S. Elev (m)	621.55	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	621.72	Flow Area (m2)		3.09	
E.G. Slope (m/m)	0.280765	Area (m2)		3.09	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	15.97	Top Width (m)		15.97	
Vel Total (m/s)	3.54	Avg. Vel. (m/s)		3.54	
Max Chl Dpth (m)	0.35	Hydr. Depth (m)		0.19	
Conv. Total (m3/s)	20.7	Conv. (m3/s)		20.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		15.99	
Min Ch El (m)	621.20	Shear (N/m2)		532.22	
Alpha	1.00	Stream Power (N/m s)		1885.62	
Frctn Loss (m)	1.72	Cum Volume (1000 m3)		1.32	
C & E Loss (m)	0.01	Cum SA (1000 m2)		7.42	



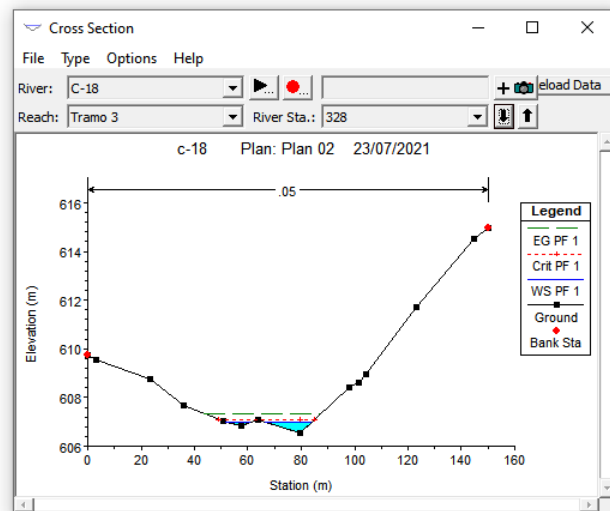
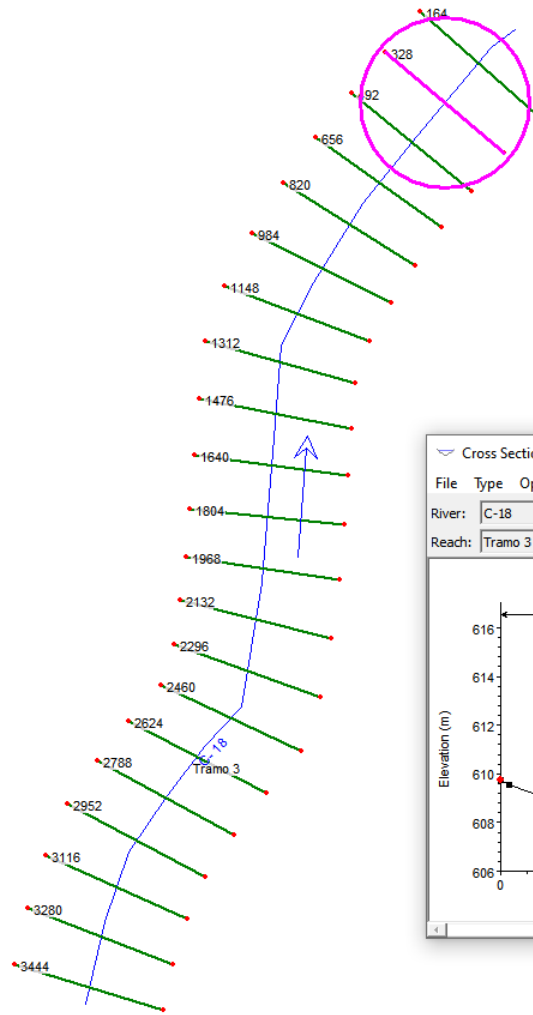
Plan: Plan 02 C-18 Tramo 3 RS: 820 Profile: PF 1					
E.G. Elev (m)	620.15	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	620.07	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	620.07	Flow Area (m2)		8.49	
E.G. Slope (m/m)	0.045975	Area (m2)		8.49	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	51.40	Top Width (m)		51.40	
Vel Total (m/s)	1.29	Avg. Vel. (m/s)		1.29	
Max Chl Dpth (m)	0.27	Hydr. Depth (m)		0.17	
Conv. Total (m3/s)	51.1	Conv. (m3/s)		51.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		51.40	
Min Ch El (m)	619.80	Shear (N/m2)		74.42	
Alpha	1.00	Stream Power (N/m s)		96.04	
Frctn Loss (m)	4.77	Cum Volume (1000 m3)		1.03	
C & E Loss (m)	0.04	Cum SA (1000 m2)		5.74	



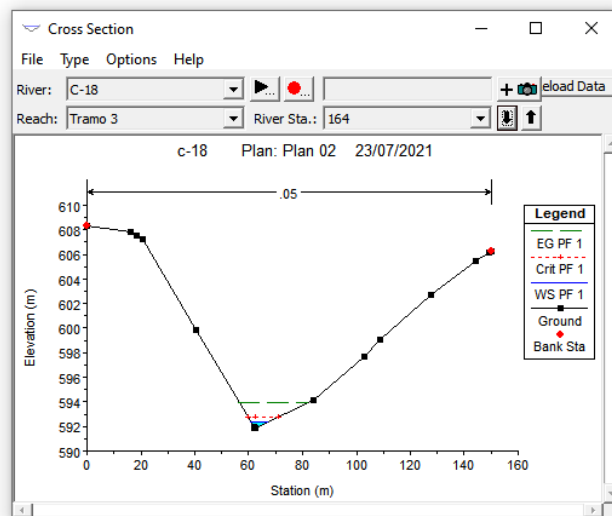
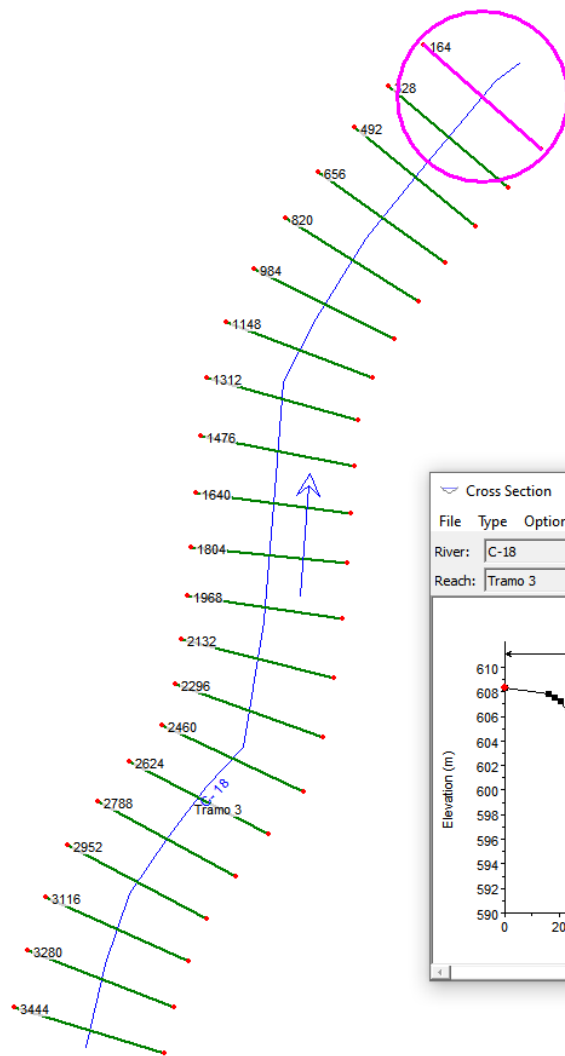
Plan: Plan 02 C-18 Tramo 3 RS: 656 Profile: PF 1					
E.G. Elev (m)	615.35	Element	Left OB	Channel	Right OB
Vel Head (m)	0.48	Wt. n-Val.		0.050	
W.S. Elev (m)	614.87	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	615.00	Flow Area (m2)		3.56	
E.G. Slope (m/m)	0.304283	Area (m2)		3.56	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	24.09	Top Width (m)		24.09	
Vel Total (m/s)	3.08	Avg. Vel. (m/s)		3.08	
Max Chl Dpth (m)	0.30	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	19.9	Conv. (m3/s)		19.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		24.10	
Min Ch El (m)	614.57	Shear (N/m2)		440.13	
Alpha	1.00	Stream Power (N/m s)		1355.52	
Frctn Loss (m)	2.06	Cum Volume (1000 m3)		0.73	
C & E Loss (m)	0.00	Cum SA (1000 m2)		3.85	



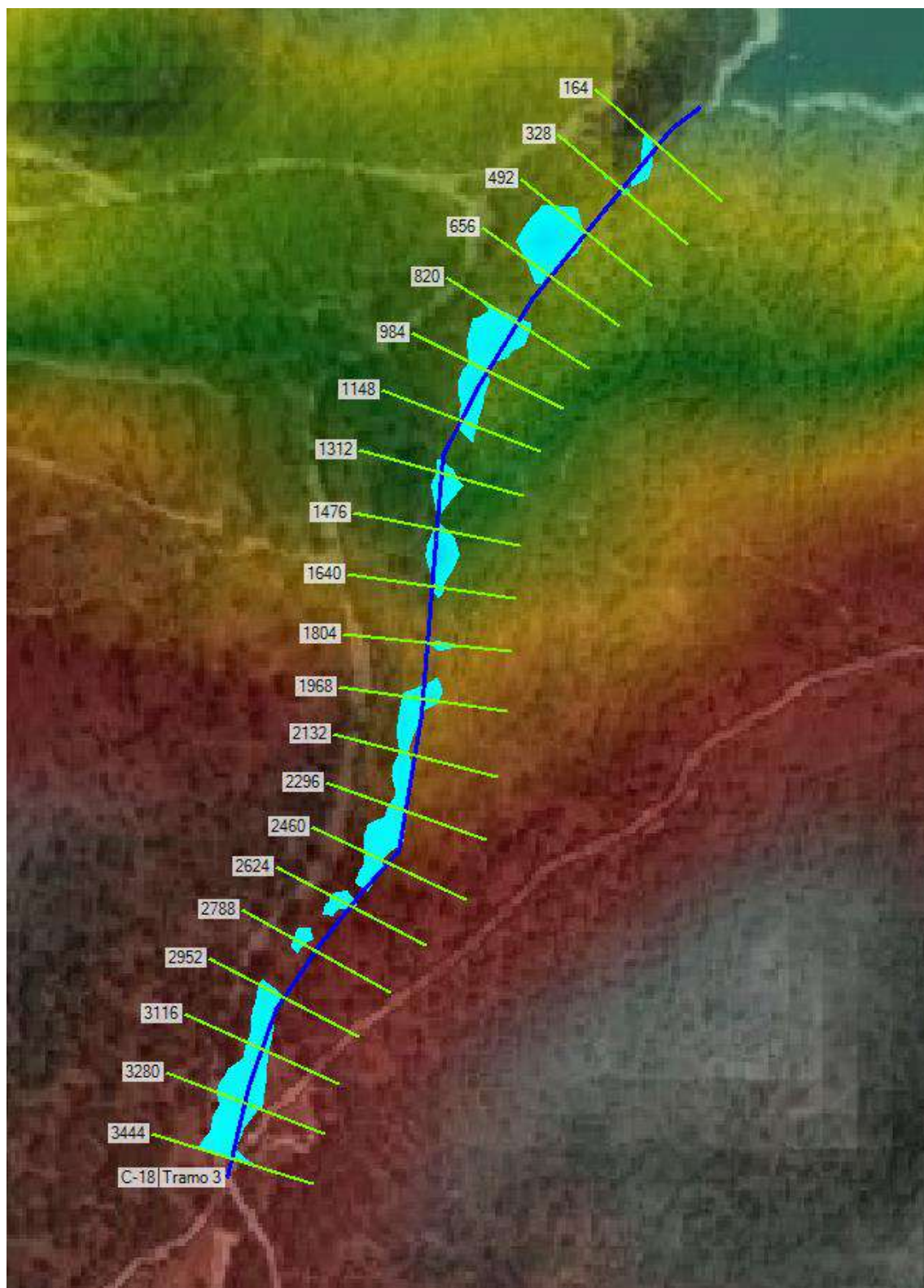
Plan: Plan 02 C-18 Tramo 3 RS: 492 Profile: PF 1					
E.G. Elev (m)	611.13	Element	Left OB	Channel	Right OB
Vel Head (m)	0.11	Wt. n-Val.		0.050	
W.S. Elev (m)	611.03	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	611.03	Flow Area (m2)		7.50	
E.G. Slope (m/m)	0.041650	Area (m2)		7.50	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	35.10	Top Width (m)		35.10	
Vel Total (m/s)	1.46	Avg. Vel. (m/s)		1.46	
Max Chl Dpth (m)	0.33	Hydr. Depth (m)		0.21	
Conv. Total (m3/s)	53.7	Conv. (m3/s)		53.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		35.11	
Min Ch El (m)	610.70	Shear (N/m2)		87.29	
Alpha	1.00	Stream Power (N/m s)		127.37	
Frctn Loss (m)	3.80	Cum Volume (1000 m3)		0.45	
C & E Loss (m)	0.02	Cum SA (1000 m2)		2.37	



Plan: Plan 02 C-18 Tramo 3 RS: 328 Profile: PF 1					
E.G. Elev (m)	607.32	Element	Left OB	Channel	Right OB
Vel Head (m)	0.33	Wt. n-Val.		0.050	
W.S. Elev (m)	606.99	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	607.09	Flow Area (m2)		4.32	
E.G. Slope (m/m)	0.180295	Area (m2)		4.32	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	26.39	Top Width (m)		26.39	
Vel Total (m/s)	2.54	Avg. Vel. (m/s)		2.54	
Max Chl Dpth (m)	0.43	Hydr. Depth (m)		0.16	
Conv. Total (m3/s)	25.8	Conv. (m3/s)		25.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		26.42	
Min Ch El (m)	606.56	Shear (N/m2)		288.75	
Alpha	1.00	Stream Power (N/m s)		732.66	
Frctn Loss (m)	13.24	Cum Volume (1000 m3)		0.16	
C & E Loss (m)	0.13	Cum SA (1000 m2)		0.83	

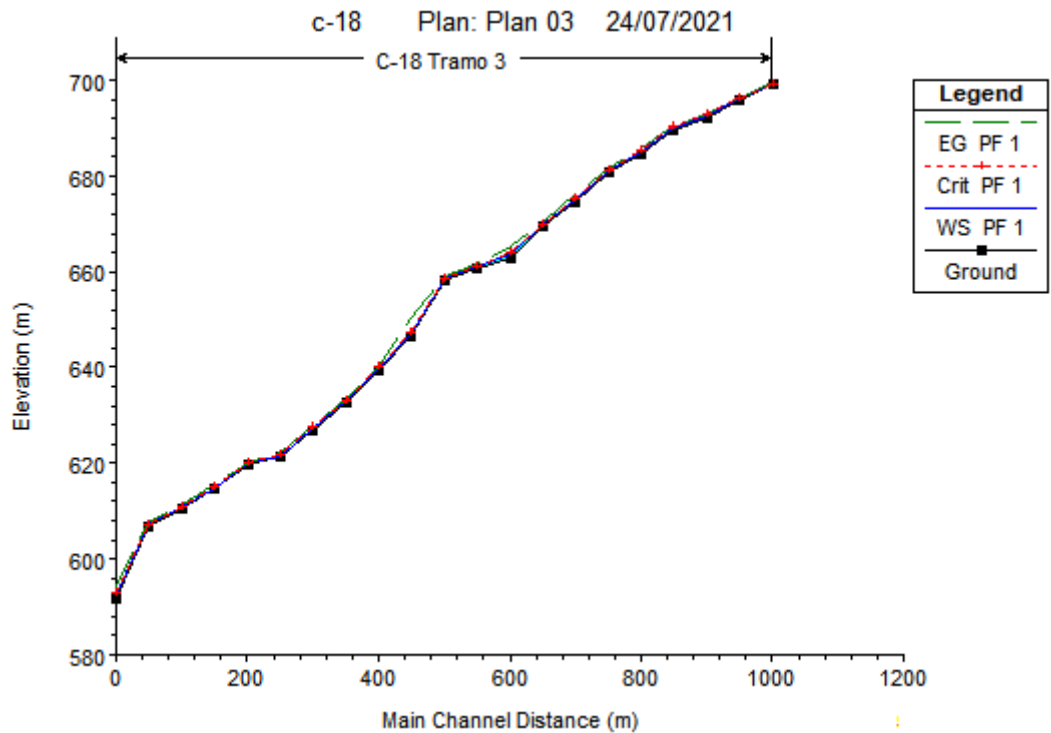


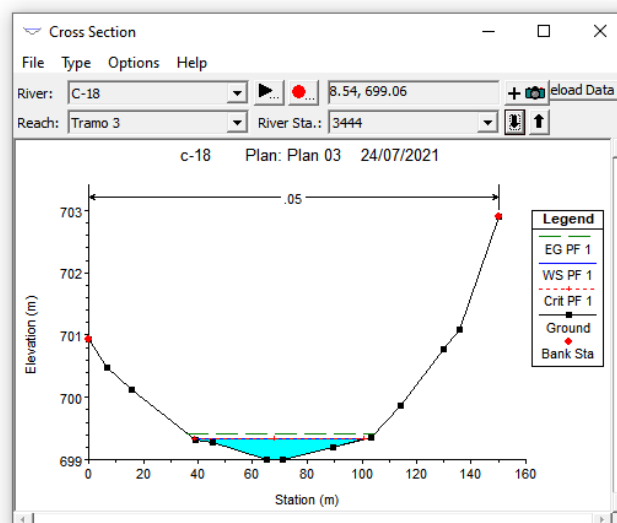
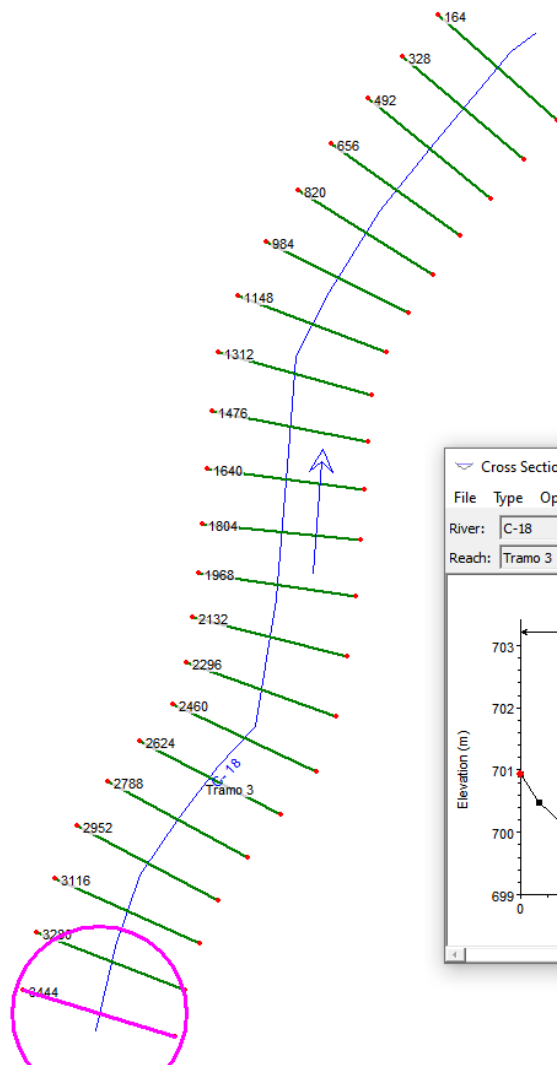
Plan: Plan 02 C-18 Tramo 3 RS: 164 Profile: PF 1					
E.G. Elev (m)	593.95	Element	Left OB	Channel	Right OB
Vel Head (m)	1.58	Wt. n-Val.		0.050	
W.S. Elev (m)	592.37	Reach Len. (m)			
Crit W.S. (m)	592.72	Flow Area (m2)		1.96	
E.G. Slope (m/m)	0.426304	Area (m2)		1.96	
Q Total (m3/s)	10.95	Flow (m3/s)		10.95	
Top Width (m)	6.93	Top Width (m)		6.93	
Vel Total (m/s)	5.57	Avg. Vel. (m/s)		5.57	
Max Chl Dpth (m)	0.54	Hydr. Depth (m)		0.28	
Conv. Total (m3/s)	16.8	Conv. (m3/s)		16.8	
Length Wtd. (m)		Wetted Per. (m)		7.05	
Min Ch El (m)	591.83	Shear (N/m2)		1165.68	
Alpha	1.00	Stream Power (N/m s)		6496.82	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			



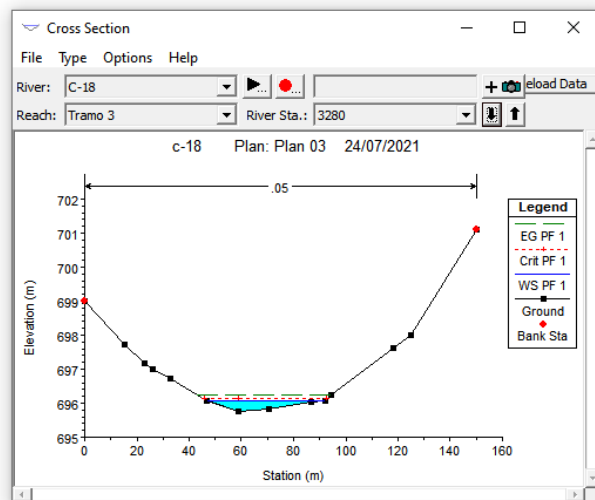
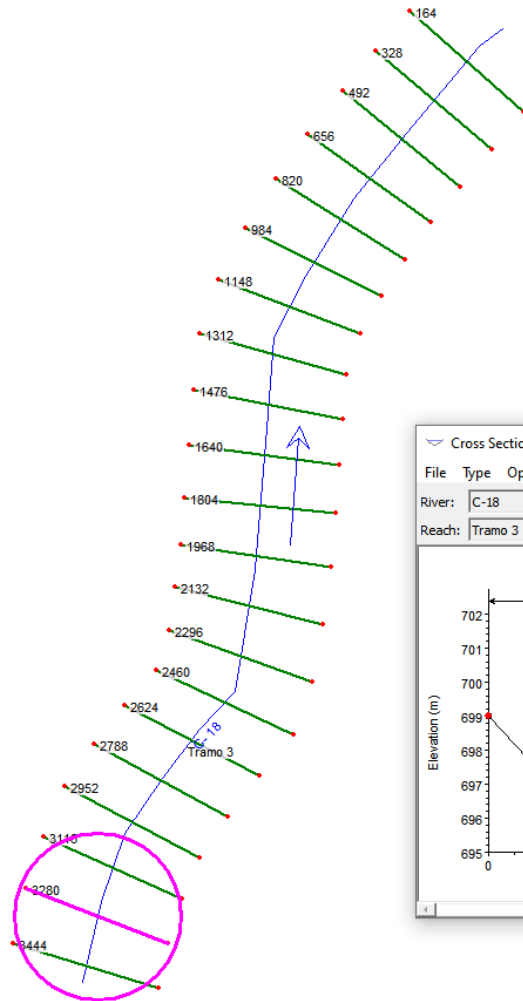
T500 (Q=14.42 m3/s)

HEC-RAS Plan: Plan 03 River: C-18 Reach: Tramo 3 Profile: PF 1												
Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Tramo 3	3444	PF 1	14.42	699.00	699.33	699.33	699.42	0.044955	1.33	10.86	61.94	1.01
Tramo 3	3280	PF 1	14.42	695.76	696.07	696.12	696.25	0.094842	1.89	7.64	45.02	1.46
Tramo 3	3116	PF 1	14.42	692.13	692.67	692.71	692.88	0.050334	2.05	7.04	22.82	1.18
Tramo 3	2952	PF 1	14.42	689.69	690.15	690.19	690.36	0.050613	1.99	7.23	24.48	1.17
Tramo 3	2788	PF 1	14.42	684.36	684.92	685.16	685.76	0.206285	4.07	3.54	11.72	2.37
Tramo 3	2624	PF 1	14.42	680.84	681.35	681.36	681.52	0.042815	1.84	7.82	26.30	1.08
Tramo 3	2460	PF 1	14.42	674.61	674.93	675.16	676.07	0.612235	4.72	3.05	18.41	3.70
Tramo 3	2296	PF 1	14.42	669.42	670.01	670.04	670.24	0.044900	2.11	6.85	19.49	1.13
Tramo 3	2132	PF 1	14.42	662.98	663.58	663.93	665.12	0.382470	5.50	2.62	8.74	3.21
Tramo 3	1968	PF 1	14.42	660.75	661.19	661.19	661.33	0.038746	1.63	8.84	33.06	1.01
Tramo 3	1804	PF 1	14.42	658.23	658.67	658.72	658.88	0.063487	2.01	7.19	28.62	1.28
Tramo 3	1640	PF 1	14.42	646.31	646.79	647.24	650.20	1.175316	8.17	1.76	7.56	5.40
Tramo 3	1476	PF 1	14.42	639.28	640.00	640.09	640.31	0.069159	2.49	5.79	17.69	1.39
Tramo 3	1312	PF 1	14.42	632.66	632.95	633.13	633.68	0.344336	3.77	3.82	20.94	2.82
Tramo 3	1148	PF 1	14.42	626.87	627.42	627.49	627.71	0.058048	2.35	6.14	17.96	1.28
Tramo 3	984	PF 1	14.42	621.20	621.59	621.79	622.31	0.259353	3.75	3.84	17.16	2.53
Tramo 3	820	PF 1	14.42	619.80	620.10	620.10	620.20	0.043404	1.40	10.30	52.86	1.01
Tramo 3	656	PF 1	14.42	614.57	614.89	615.05	615.49	0.327029	3.43	4.20	25.57	2.70
Tramo 3	492	PF 1	14.42	610.70	611.07	611.07	611.20	0.039997	1.56	9.26	38.06	1.01
Tramo 3	328	PF 1	14.42	606.56	607.02	607.13	607.41	0.191904	2.75	5.25	29.91	2.09
Tramo 3	164	PF 1	14.42	591.83	592.44	592.83	594.12	0.382845	5.74	2.51	7.83	3.23

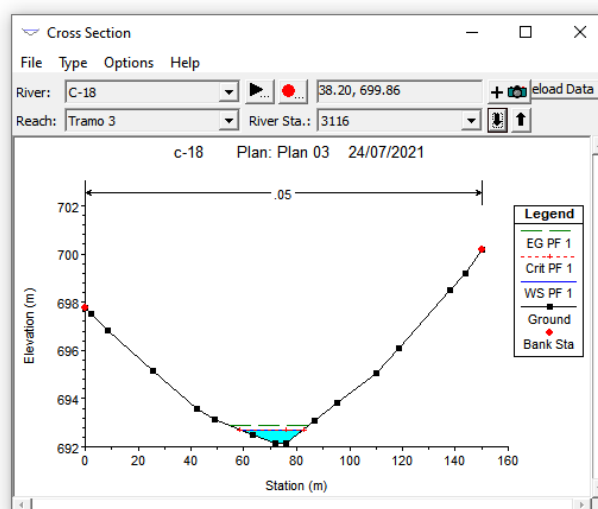
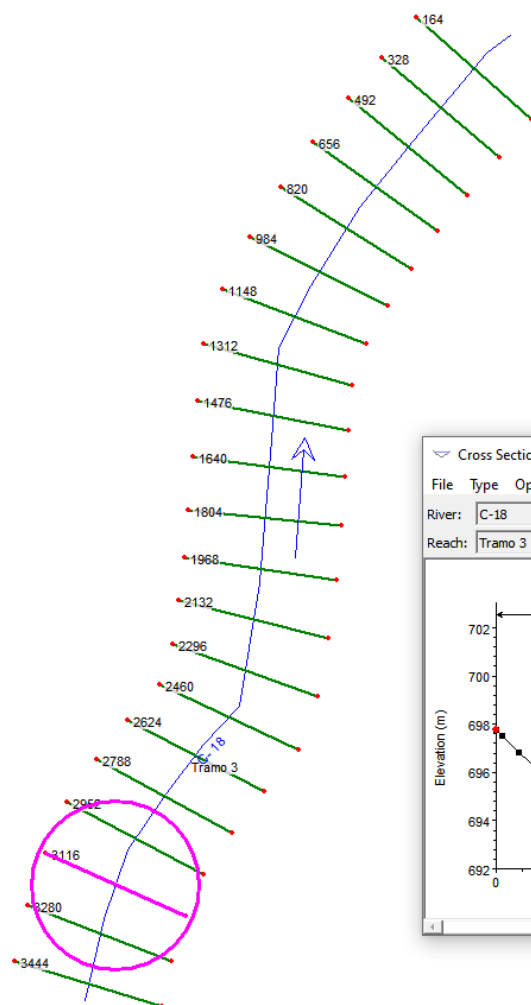




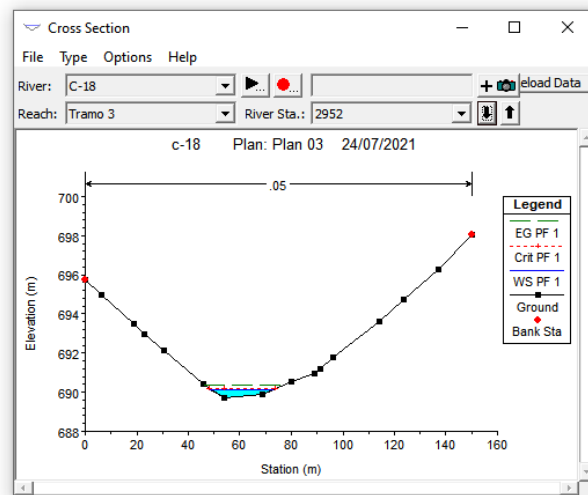
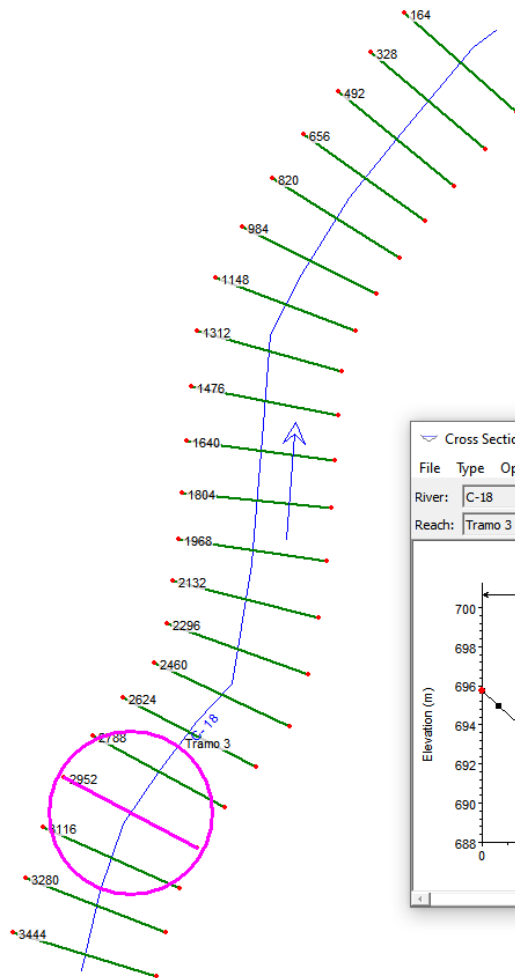
Plan: Plan 03 C-18 Tramo 3 RS: 3444 Profile: PF 1					
E.G. Elev (m)	699.42	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	699.33	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	699.33	Flow Area (m2)		10.86	
E.G. Slope (m/m)	0.044955	Area (m2)		10.86	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	61.94	Top Width (m)		61.94	
Vel Total (m/s)	1.33	Avg. Vel. (m/s)		1.33	
Max Chl Dpth (m)	0.33	Hydr. Depth (m)		0.18	
Conv. Total (m3/s)	68.0	Conv. (m3/s)		68.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		61.94	
Min Ch El (m)	699.00	Shear (N/m2)		77.27	
Alpha	1.00	Stream Power (N/m s)		102.63	
Frctn Loss (m)	3.15	Cum Volume (1000 m3)		5.94	
C & E Loss (m)	0.01	Cum SA (1000 m2)		25.06	



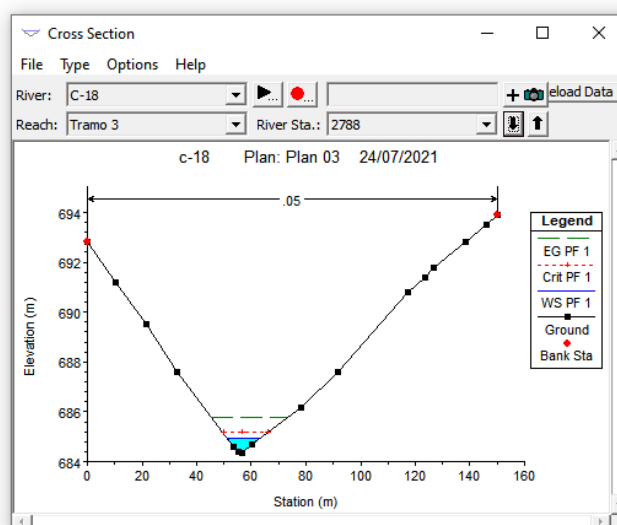
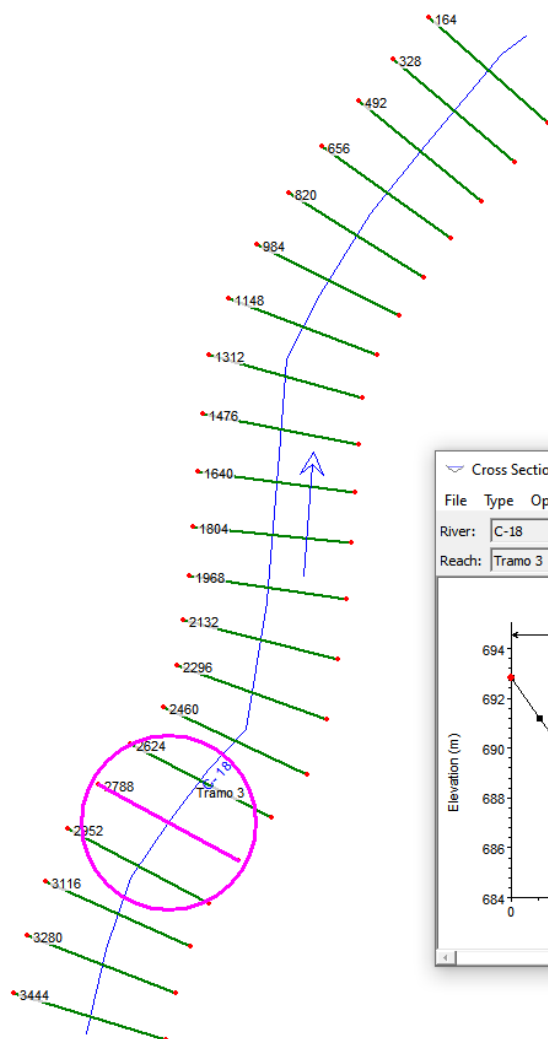
Plan: Plan 03 C-18 Tramo 3 RS: 3280 Profile: PF 1					
E.G. Elev (m)	696.25	Element	Left OB	Channel	Right OB
Vel Head (m)	0.18	Wt. n-Val.		0.050	
W.S. Elev (m)	696.07	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	696.12	Flow Area (m2)		7.64	
E.G. Slope (m/m)	0.094842	Area (m2)		7.64	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	45.02	Top Width (m)		45.02	
Vel Total (m/s)	1.89	Avg. Vel. (m/s)		1.89	
Max Chl Dpth (m)	0.31	Hydr. Depth (m)		0.17	
Conv. Total (m3/s)	46.8	Conv. (m3/s)		46.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		45.03	
Min Ch El (m)	695.76	Shear (N/m2)		157.79	
Alpha	1.00	Stream Power (N/m s)		297.84	
Frctn Loss (m)	3.37	Cum Volume (1000 m3)		5.48	
C & E Loss (m)	0.00	Cum SA (1000 m2)		22.39	



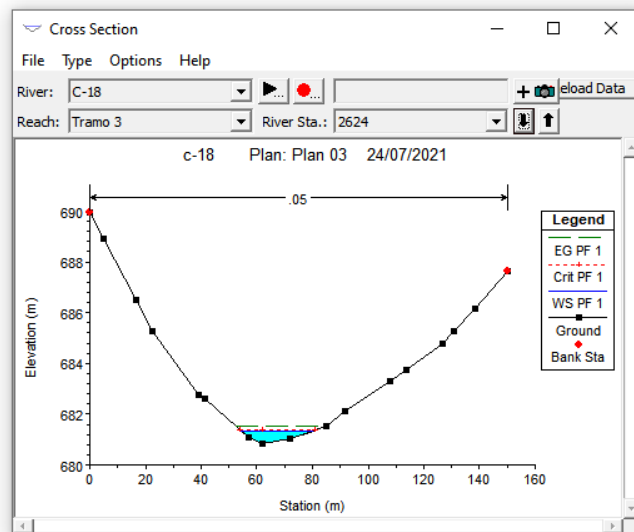
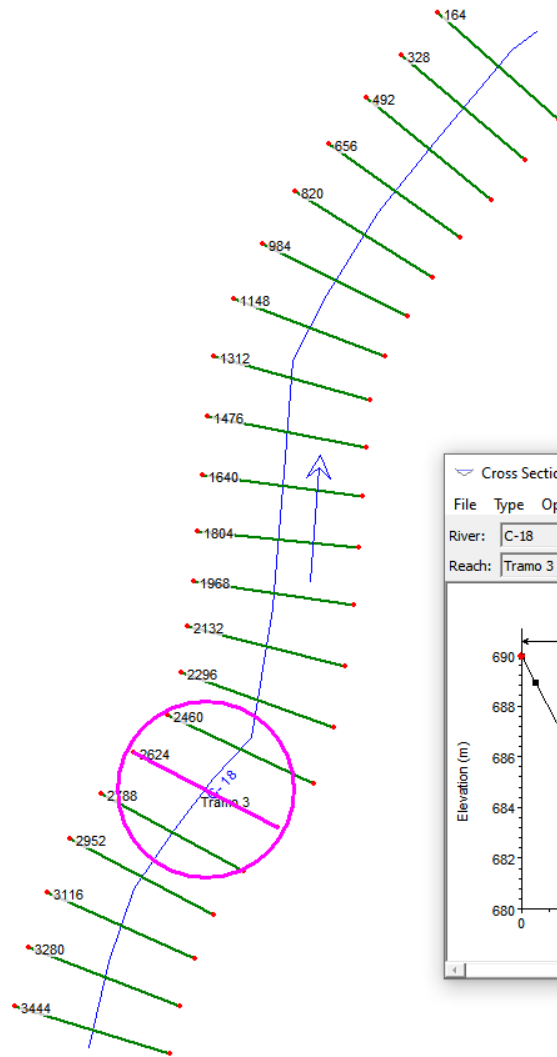
Plan: Plan 03 C-18 Tramo 3 RS: 3116 Profile: PF 1					
E.G. Elev (m)	692.88	Element	Left OB	Channel	Right OB
Vel Head (m)	0.21	Wt. n-Val.		0.050	
W.S. Elev (m)	692.67	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	692.71	Flow Area (m2)		7.04	
E.G. Slope (m/m)	0.050334	Area (m2)		7.04	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	22.82	Top Width (m)		22.82	
Vel Total (m/s)	2.05	Avg. Vel. (m/s)		2.05	
Max Chl Dpth (m)	0.54	Hydr. Depth (m)		0.31	
Conv. Total (m3/s)	64.3	Conv. (m3/s)		64.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		22.85	
Min Ch El (m)	692.13	Shear (N/m2)		152.13	
Alpha	1.00	Stream Power (N/m s)		311.47	
Frctn Loss (m)	2.52	Cum Volume (1000 m3)		5.11	
C & E Loss (m)	0.00	Cum SA (1000 m2)		20.69	



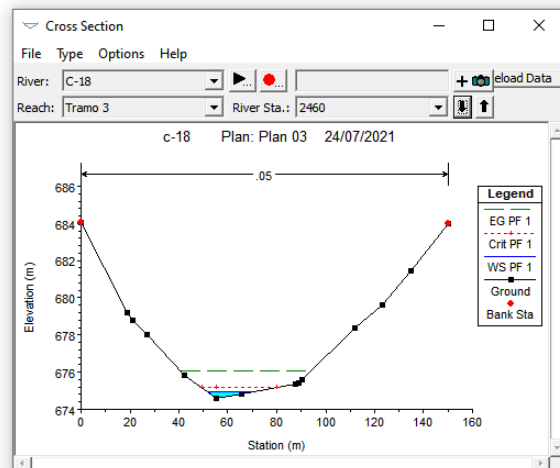
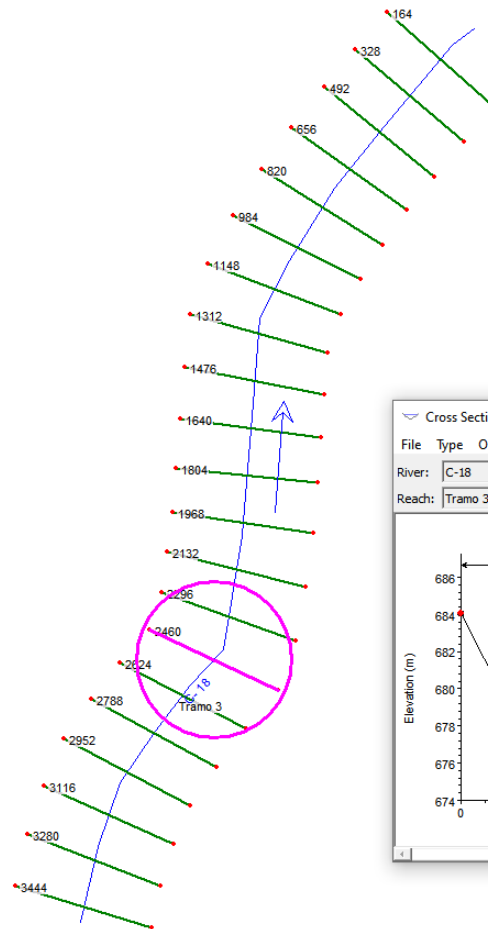
Plan: Plan 03 C-18 Tramo 3 RS: 2952 Profile: PF 1					
E.G. Elev (m)	690.36	Element	Left OB	Channel	Right OB
Vel Head (m)	0.20	Wt. n-Val.		0.050	
W.S. Elev (m)	690.15	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	690.19	Flow Area (m2)		7.23	
E.G. Slope (m/m)	0.050613	Area (m2)		7.23	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	24.48	Top Width (m)		24.48	
Vel Total (m/s)	1.99	Avg. Vel. (m/s)		1.99	
Max Chl Dpth (m)	0.46	Hydr. Depth (m)		0.30	
Conv. Total (m3/s)	64.1	Conv. (m3/s)		64.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		24.51	
Min Ch El (m)	689.69	Shear (N/m2)		146.42	
Alpha	1.00	Stream Power (N/m s)		291.95	
Frctn Loss (m)	4.53	Cum Volume (1000 m3)		4.76	
C & E Loss (m)	0.06	Cum SA (1000 m2)		19.51	



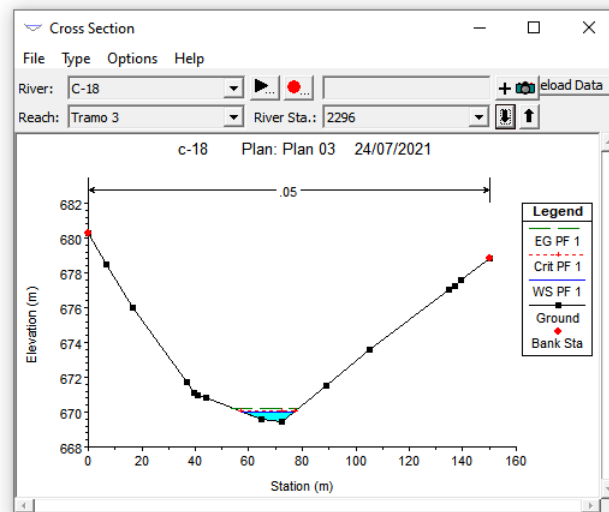
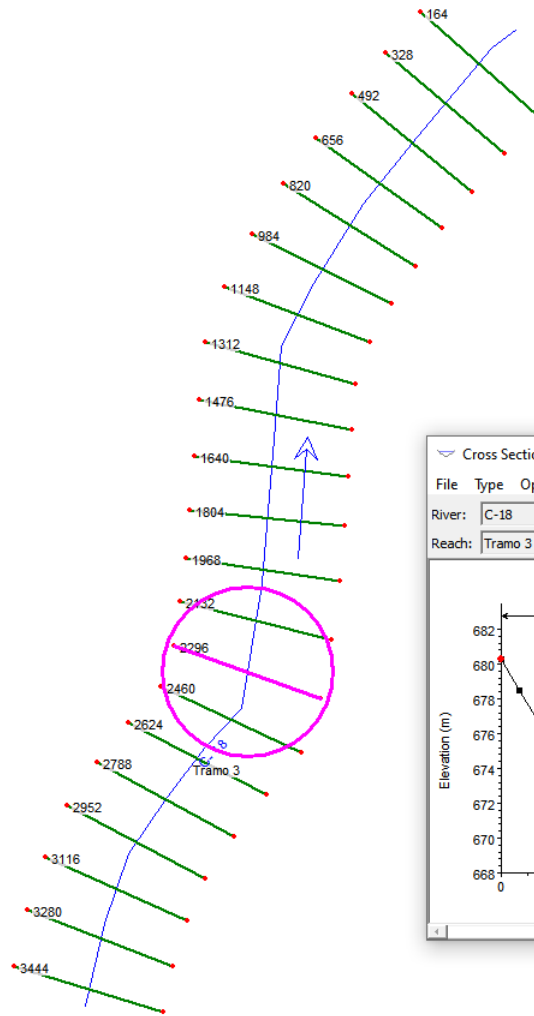
Plan: Plan 03 C-18 Tramo 3 RS: 2788 Profile: PF 1					
E.G. Elev (m)	685.76	Element	Left OB	Channel	Right OB
Vel Head (m)	0.85	Wt. n-Val.		0.050	
W.S. Elev (m)	684.92	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	685.16	Flow Area (m2)		3.54	
E.G. Slope (m/m)	0.206285	Area (m2)		3.54	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	11.72	Top Width (m)		11.72	
Vel Total (m/s)	4.07	Avg. Vel. (m/s)		4.07	
Max Chl Dpth (m)	0.56	Hydr. Depth (m)		0.30	
Conv. Total (m3/s)	31.7	Conv. (m3/s)		31.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		11.78	
Min Ch El (m)	684.36	Shear (N/m2)		607.76	
Alpha	1.00	Stream Power (N/m s)		2476.45	
Frctn Loss (m)	4.04	Cum Volume (1000 m3)		4.49	
C & E Loss (m)	0.20	Cum SA (1000 m2)		18.60	



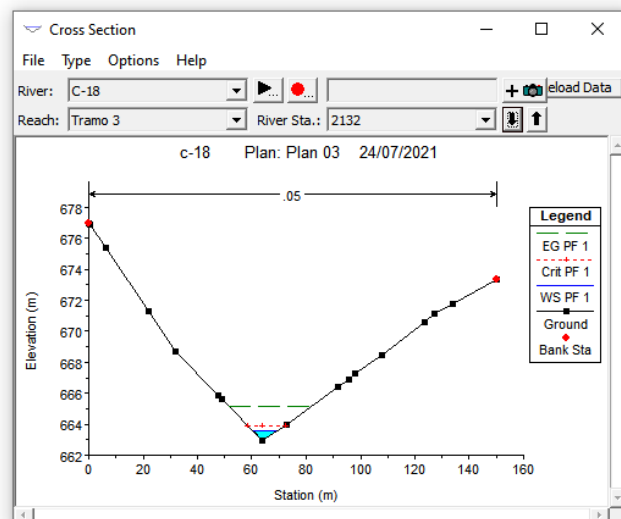
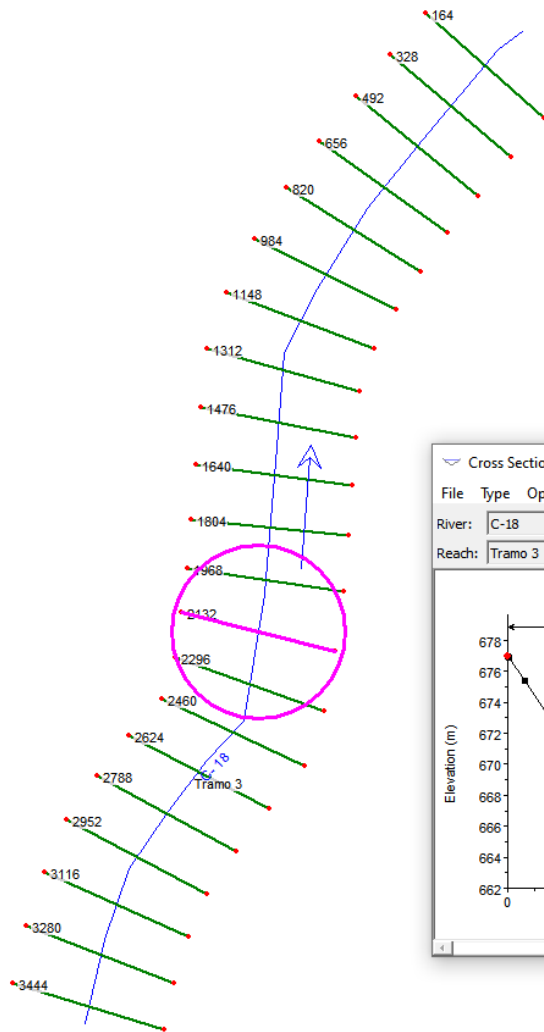
Plan: Plan 03 C-18 Tramo 3 RS: 2624 Profile: PF 1					
E.G. Elev (m)	681.52	Element	Left OB	Channel	Right OB
Vel Head (m)	0.17	Wt. n-Val.		0.050	
W.S. Elev (m)	681.35	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	681.36	Flow Area (m2)		7.82	
E.G. Slope (m/m)	0.042815	Area (m2)		7.82	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	26.30	Top Width (m)		26.30	
Vel Total (m/s)	1.84	Avg. Vel. (m/s)		1.84	
Max Chl Dpth (m)	0.51	Hydr. Depth (m)		0.30	
Conv. Total (m3/s)	69.7	Conv. (m3/s)		69.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		26.33	
Min Ch El (m)	680.84	Shear (N/m2)		124.78	
Alpha	1.00	Stream Power (N/m s)		229.95	
Frctn Loss (m)	5.36	Cum Volume (1000 m3)		4.20	
C & E Loss (m)	0.10	Cum SA (1000 m2)		17.65	



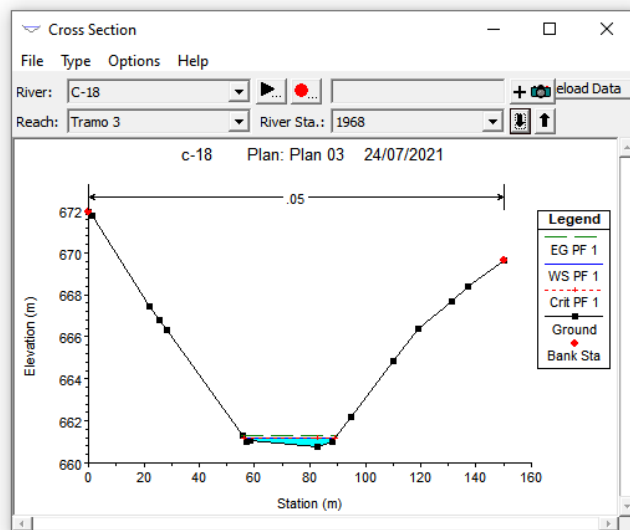
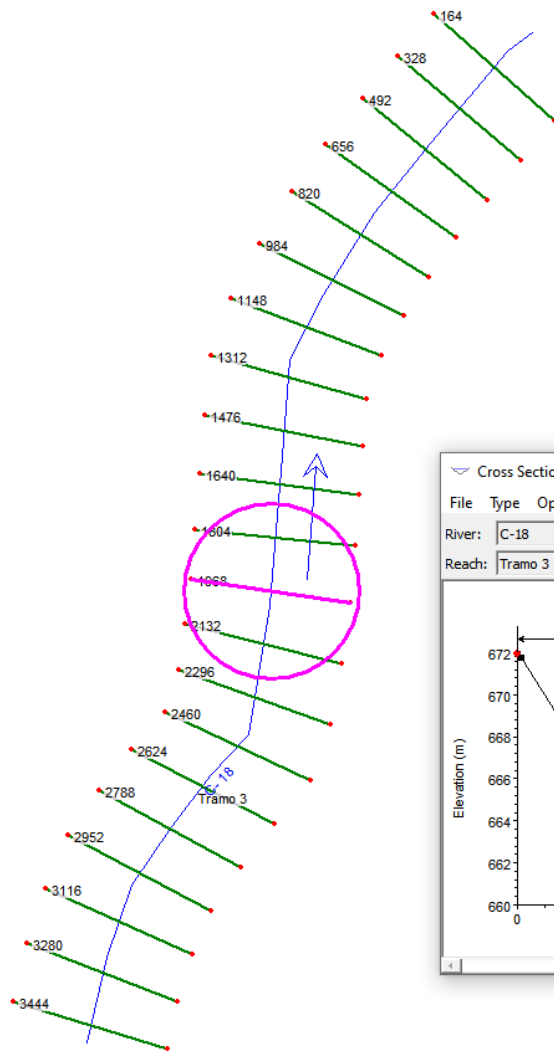
Plan: Plan 03 C-18 Tramo 3 RS: 2460 Profile: PF 1					
E.G. Elev (m)	676.07	Element	Left OB	Channel	Right OB
Vel Head (m)	1.14	Wt. n-Val.		0.050	
W.S. Elev (m)	674.93	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	675.16	Flow Area (m2)		3.05	
E.G. Slope (m/m)	0.612235	Area (m2)		3.05	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	18.41	Top Width (m)		18.41	
Vel Total (m/s)	4.72	Avg. Vel. (m/s)		4.72	
Max Chl Dpth (m)	0.32	Hydr. Depth (m)		0.17	
Conv. Total (m3/s)	18.4	Conv. (m3/s)		18.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		18.43	
Min Ch El (m)	674.61	Shear (N/m2)		994.87	
Alpha	1.00	Stream Power (N/m s)		4696.93	
Frctn Loss (m)	5.56	Cum Volume (1000 m3)		3.93	
C & E Loss (m)	0.27	Cum SA (1000 m2)		16.54	



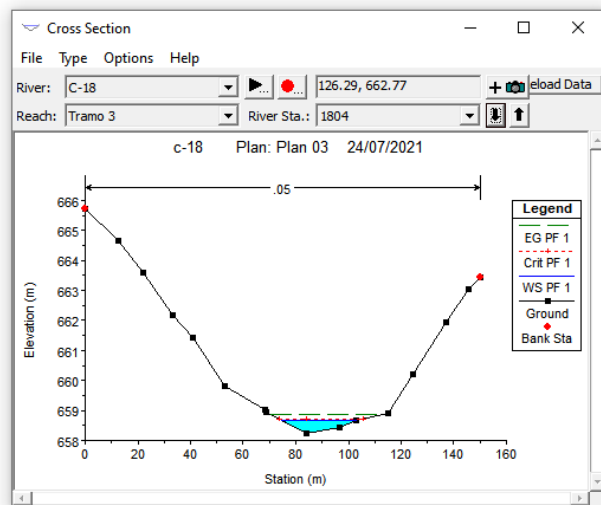
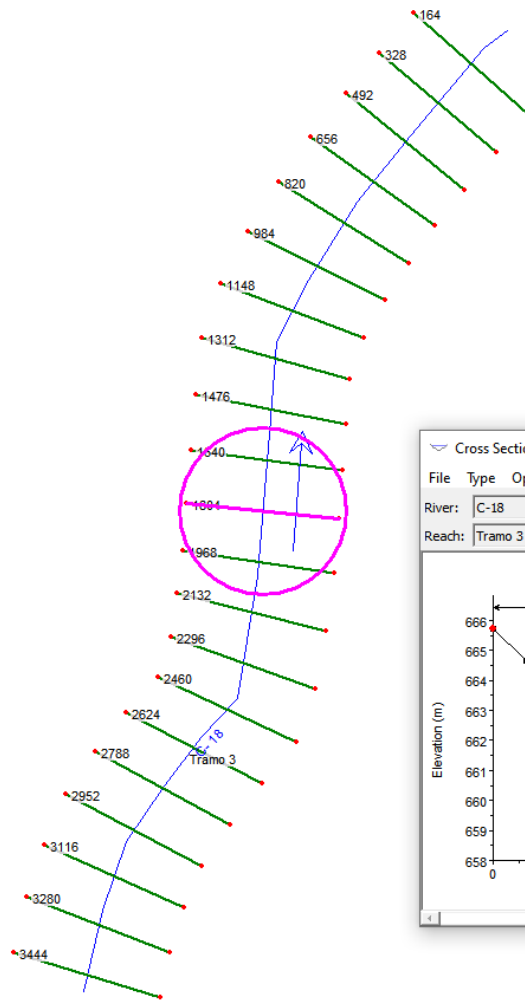
Plan: Plan 03 C-18 Tramo 3 RS: 2296 Profile: PF 1					
E.G. Elev (m)	670.24	Element	Left OB	Channel	Right OB
Vel Head (m)	0.23	Wt. n-Val.		0.050	
W.S. Elev (m)	670.01	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	670.04	Flow Area (m2)		6.85	
E.G. Slope (m/m)	0.044900	Area (m2)		6.85	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	19.49	Top Width (m)		19.49	
Vel Total (m/s)	2.11	Avg. Vel. (m/s)		2.11	
Max Chl Dpth (m)	0.59	Hydr. Depth (m)		0.35	
Conv. Total (m3/s)	68.1	Conv. (m3/s)		68.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		19.54	
Min Ch El (m)	669.42	Shear (N/m2)		154.27	
Alpha	1.00	Stream Power (N/m s)		324.91	
Frctn Loss (m)	4.98	Cum Volume (1000 m3)		3.68	
C & E Loss (m)	0.13	Cum SA (1000 m2)		15.59	



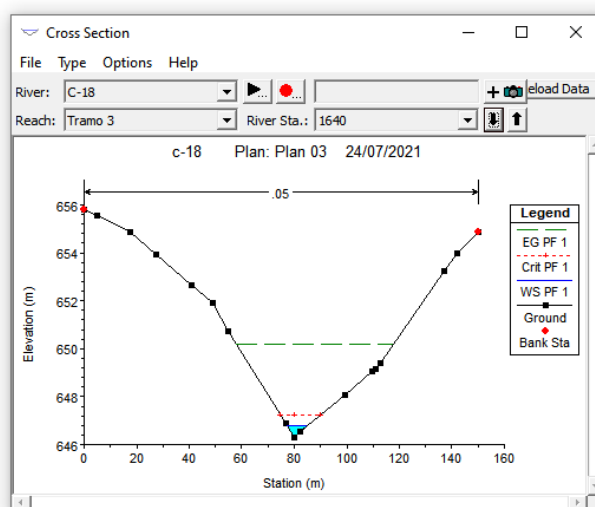
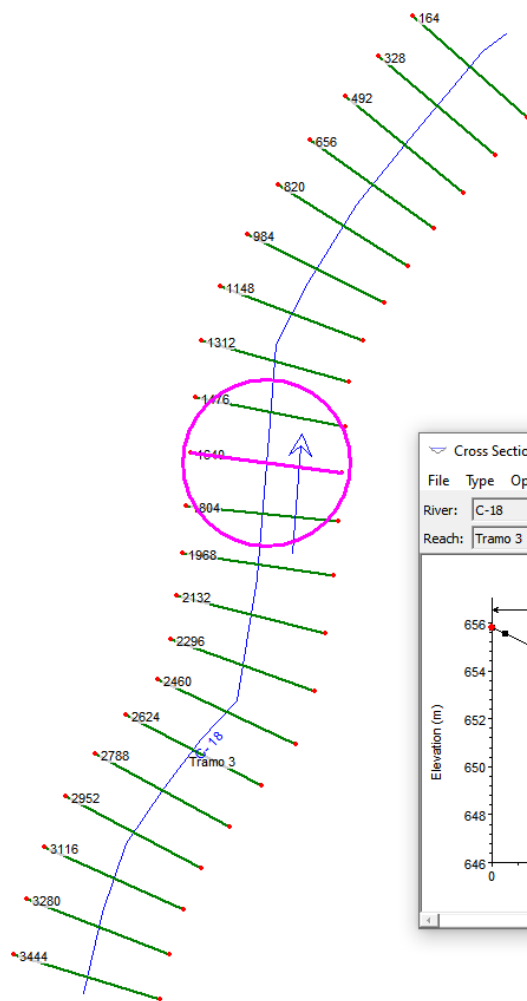
Plan: Plan 03 C-18 Tramo 3 RS: 2132 Profile: PF 1					
E.G. Elev (m)	665.12	Element	Left OB	Channel	Right OB
Vel Head (m)	1.54	Wt. n-Val.		0.050	
W.S. Elev (m)	663.58	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	663.93	Flow Area (m2)		2.62	
E.G. Slope (m/m)	0.382470	Area (m2)		2.62	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	8.74	Top Width (m)		8.74	
Vel Total (m/s)	5.50	Avg. Vel. (m/s)		5.50	
Max Chl Dpth (m)	0.60	Hydr. Depth (m)		0.30	
Conv. Total (m3/s)	23.3	Conv. (m3/s)		23.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		8.83	
Min Ch El (m)	662.98	Shear (N/m2)		1113.29	
Alpha	1.00	Stream Power (N/m s)		6127.25	
Frctn Loss (m)	1.78	Cum Volume (1000 m3)		3.45	
C & E Loss (m)	0.03	Cum SA (1000 m2)		14.88	



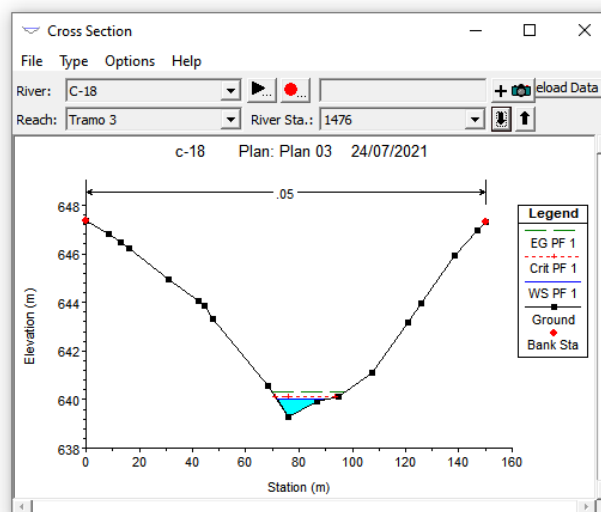
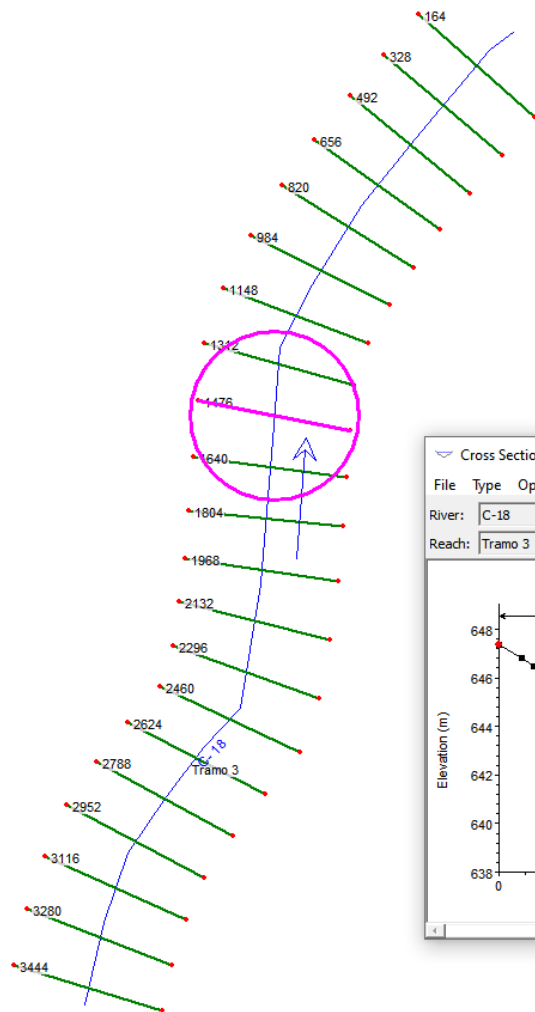
Plan: Plan 03 C-18 Tramo 3 RS: 1968 Profile: PF 1					
E.G. Elev (m)	661.33	Element	Left OB	Channel	Right OB
Vel Head (m)	0.14	Wt. n-Val.		0.050	
W.S. Elev (m)	661.19	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	661.19	Flow Area (m2)		8.84	
E.G. Slope (m/m)	0.038746	Area (m2)		8.84	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	33.06	Top Width (m)		33.06	
Vel Total (m/s)	1.63	Avg. Vel. (m/s)		1.63	
Max Chl Dpth (m)	0.44	Hydr. Depth (m)		0.27	
Conv. Total (m3/s)	73.3	Conv. (m3/s)		73.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		33.10	
Min Ch El (m)	660.75	Shear (N/m2)		101.42	
Alpha	1.00	Stream Power (N/m s)		165.53	
Frctn Loss (m)	2.44	Cum Volume (1000 m3)		3.16	
C & E Loss (m)	0.01	Cum SA (1000 m2)		13.84	



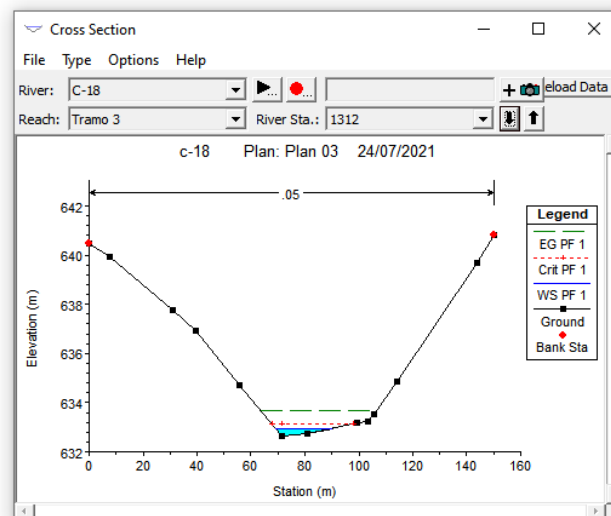
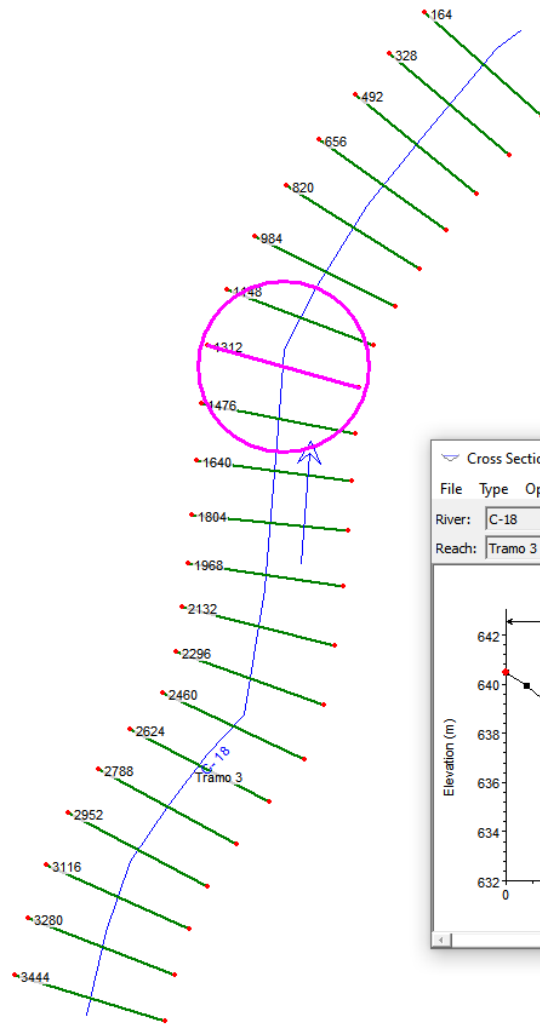
Plan: Plan 03 C-18 Tramo 3 RS: 1804 Profile: PF 1					
E.G. Elev (m)	658.88	Element	Left OB	Channel	Right OB
Vel Head (m)	0.21	Wt. n-Val.		0.050	
W.S. Elev (m)	658.67	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	658.72	Flow Area (m2)		7.19	
E.G. Slope (m/m)	0.063487	Area (m2)		7.19	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	28.62	Top Width (m)		28.62	
Vel Total (m/s)	2.01	Avg. Vel. (m/s)		2.01	
Max Chl Dpth (m)	0.44	Hydr. Depth (m)		0.25	
Conv. Total (m3/s)	57.2	Conv. (m3/s)		57.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		28.63	
Min Ch El (m)	658.23	Shear (N/m2)		156.33	
Alpha	1.00	Stream Power (N/m s)		313.55	
Frctn Loss (m)	8.36	Cum Volume (1000 m3)		2.76	
C & E Loss (m)	0.32	Cum SA (1000 m2)		12.30	



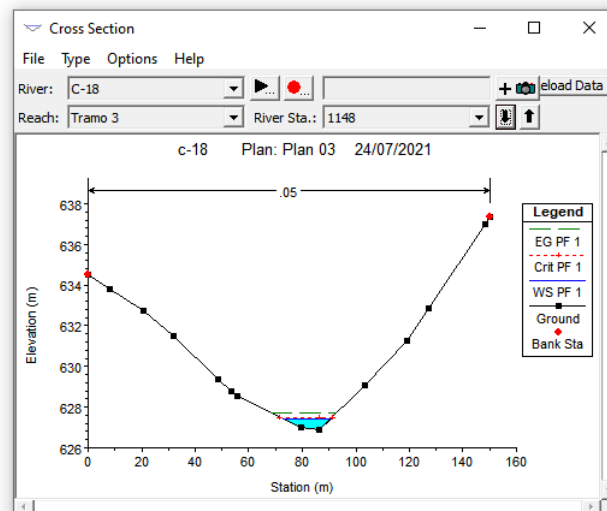
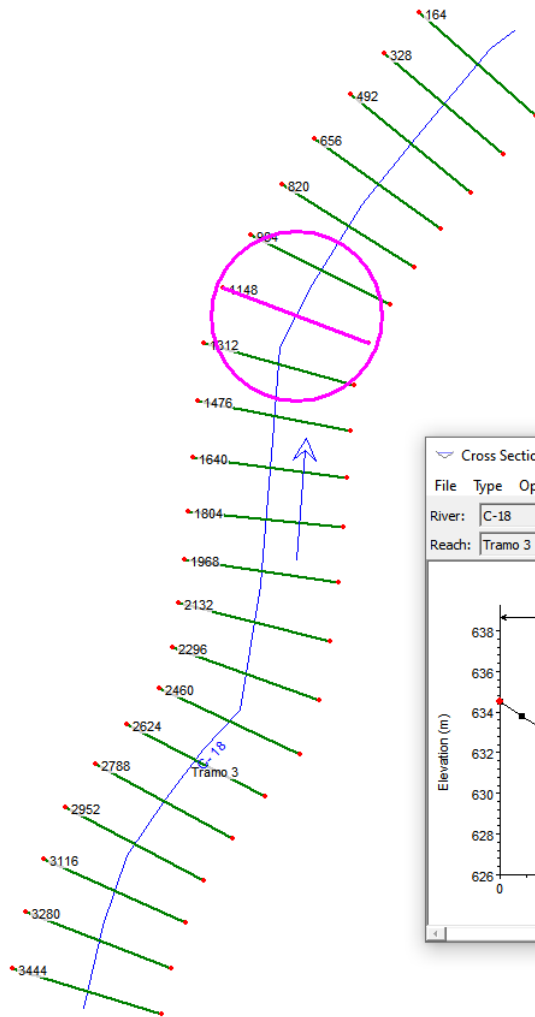
Plan: Plan 03 C-18 Tramo 3 RS: 1640 Profile: PF 1					
E.G. Elev (m)	650.20	Element	Left OB	Channel	Right OB
Vel Head (m)	3.41	Wt. n-Val.		0.050	
W.S. Elev (m)	646.79	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	647.24	Flow Area (m2)		1.76	
E.G. Slope (m/m)	1.175316	Area (m2)		1.76	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	7.56	Top Width (m)		7.56	
Vel Total (m/s)	8.17	Avg. Vel. (m/s)		8.17	
Max Chl Dpth (m)	0.48	Hydr. Depth (m)		0.23	
Conv. Total (m3/s)	13.3	Conv. (m3/s)		13.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.62	
Min Ch El (m)	646.31	Shear (N/m2)		2667.19	
Alpha	1.00	Stream Power (N/m s)		21798.18	
Frctn Loss (m)	8.96	Cum Volume (1000 m3)		2.54	
C & E Loss (m)	0.93	Cum SA (1000 m2)		11.39	



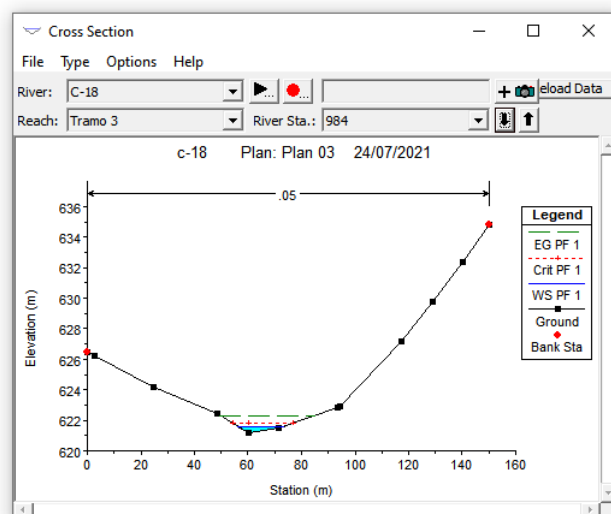
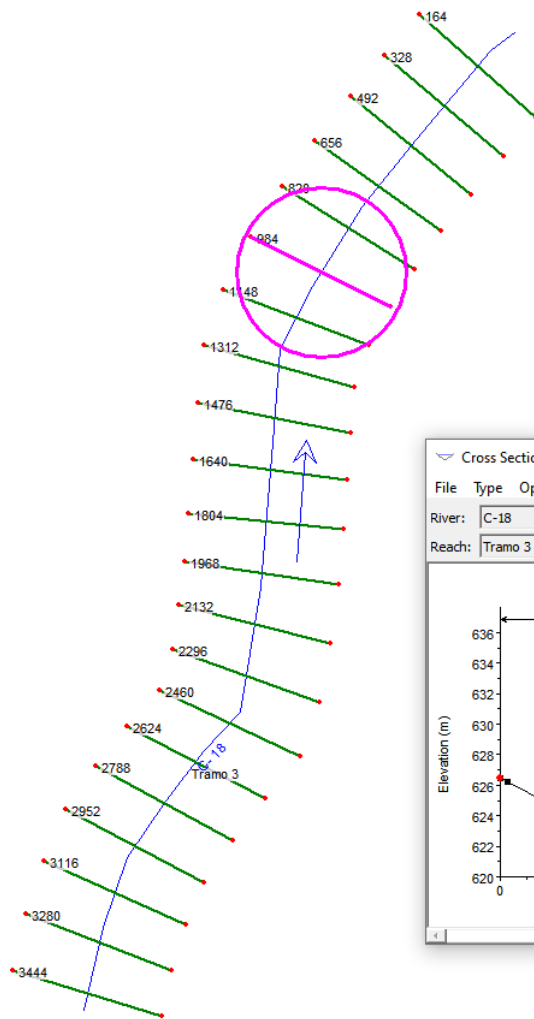
Plan: Plan 03 C-18 Tramo 3 RS: 1476 Profile: PF 1					
E.G. Elev (m)	640.31	Element	Left OB	Channel	Right OB
Vel Head (m)	0.32	Wt. n-Val.		0.050	
W.S. Elev (m)	640.00	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	640.09	Flow Area (m2)		5.79	
E.G. Slope (m/m)	0.069159	Area (m2)		5.79	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	17.69	Top Width (m)		17.69	
Vel Total (m/s)	2.49	Avg. Vel. (m/s)		2.49	
Max Chl Dpth (m)	0.72	Hydr. Depth (m)		0.33	
Conv. Total (m3/s)	54.8	Conv. (m3/s)		54.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		17.77	
Min Ch El (m)	639.28	Shear (N/m2)		220.94	
Alpha	1.00	Stream Power (N/m s)		550.20	
Frctn Loss (m)	6.60	Cum Volume (1000 m3)		2.35	
C & E Loss (m)	0.04	Cum SA (1000 m2)		10.76	



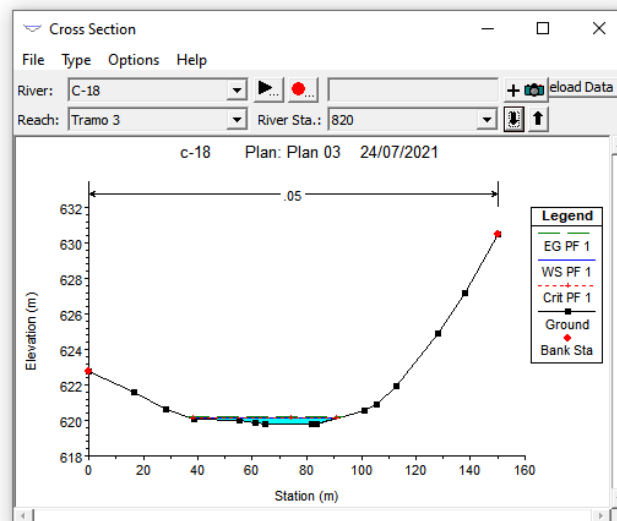
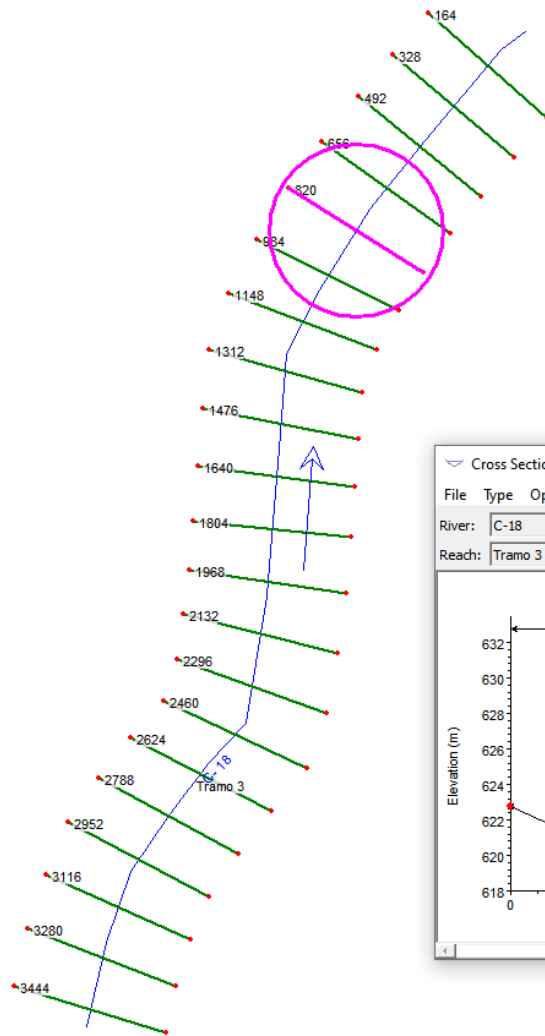
Plan: Plan 03 C-18 Tramo 3 RS: 1312 Profile: PF 1					
E.G. Elev (m)	633.68	Element	Left OB	Channel	Right OB
Vel Head (m)	0.73	Wt. n-Val.		0.050	
W.S. Elev (m)	632.95	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	633.13	Flow Area (m2)		3.82	
E.G. Slope (m/m)	0.344336	Area (m2)		3.82	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	20.94	Top Width (m)		20.94	
Vel Total (m/s)	3.77	Avg. Vel. (m/s)		3.77	
Max Chl Dpth (m)	0.29	Hydr. Depth (m)		0.18	
Conv. Total (m3/s)	24.6	Conv. (m3/s)		24.6	
Length Wtd. (m)	50.00	Wetted Per. (m)		20.96	
Min Ch El (m)	632.66	Shear (N/m2)		615.60	
Alpha	1.00	Stream Power (N/m s)		2322.85	
Frctn Loss (m)	5.83	Cum Volume (1000 m3)		2.11	
C & E Loss (m)	0.13	Cum SA (1000 m2)		9.79	



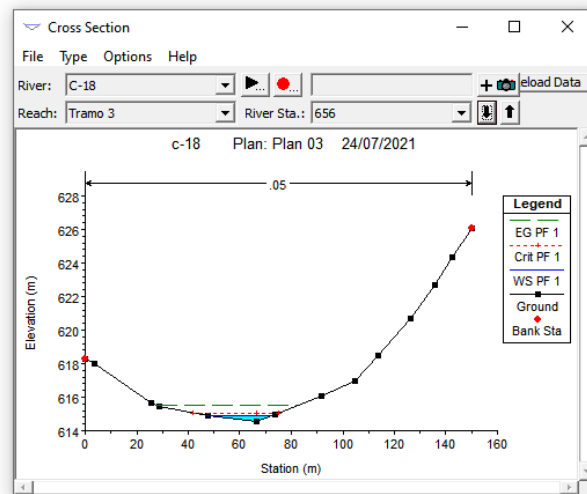
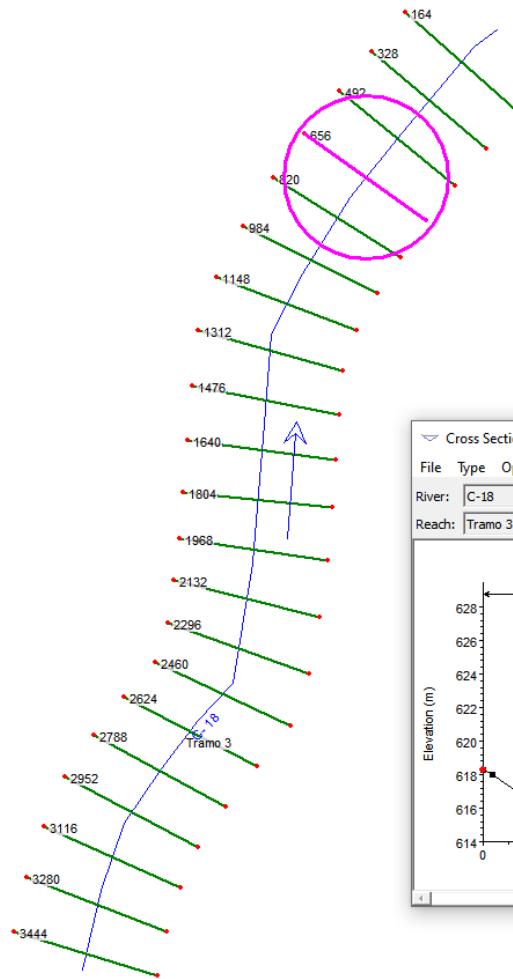
Plan: Plan 03 C-18 Tramo 3 RS: 1148 Profile: PF 1					
E.G. Elev (m)	627.71	Element	Left OB	Channel	Right OB
Vel Head (m)	0.28	Wt. n-Val.		0.050	
W.S. Elev (m)	627.42	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	627.49	Flow Area (m2)		6.14	
E.G. Slope (m/m)	0.058048	Area (m2)		6.14	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	17.96	Top Width (m)		17.96	
Vel Total (m/s)	2.35	Avg. Vel. (m/s)		2.35	
Max Chl Dpth (m)	0.55	Hydr. Depth (m)		0.34	
Conv. Total (m3/s)	59.9	Conv. (m3/s)		59.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		18.01	
Min Ch El (m)	626.87	Shear (N/m2)		193.93	
Alpha	1.00	Stream Power (N/m s)		455.81	
Frctn Loss (m)	5.35	Cum Volume (1000 m3)		1.86	
C & E Loss (m)	0.04	Cum SA (1000 m2)		8.82	



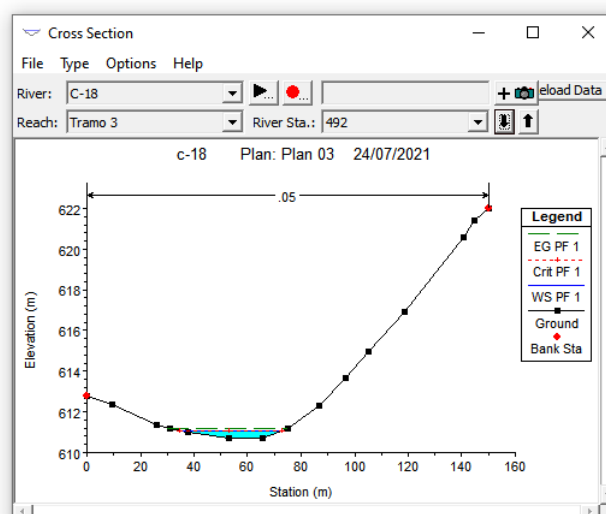
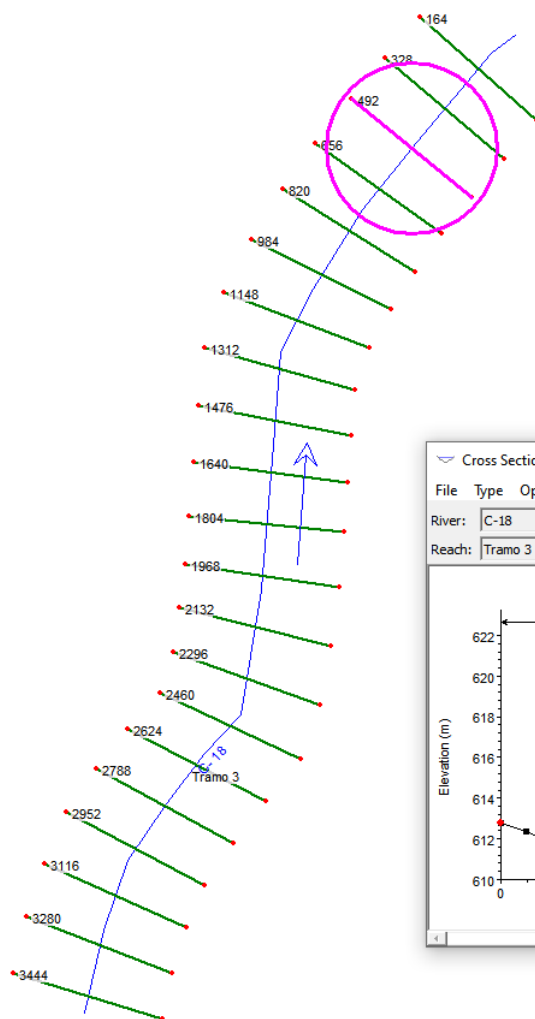
Plan: Plan 03 C-18 Tramo 3 RS: 984 Profile: PF 1					
E.G. Elev (m)	622.31	Element	Left OB	Channel	Right OB
Vel Head (m)	0.72	Wt. n-Val.		0.050	
W.S. Elev (m)	621.59	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	621.79	Flow Area (m2)		3.84	
E.G. Slope (m/m)	0.259353	Area (m2)		3.84	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	17.16	Top Width (m)		17.16	
Vel Total (m/s)	3.75	Avg. Vel. (m/s)		3.75	
Max Chl Dpth (m)	0.39	Hydr. Depth (m)		0.22	
Conv. Total (m3/s)	28.3	Conv. (m3/s)		28.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		17.19	
Min Ch El (m)	621.20	Shear (N/m2)		568.67	
Alpha	1.00	Stream Power (N/m s)		2133.75	
Frctn Loss (m)	1.75	Cum Volume (1000 m3)		1.61	
C & E Loss (m)	0.02	Cum SA (1000 m2)		7.94	



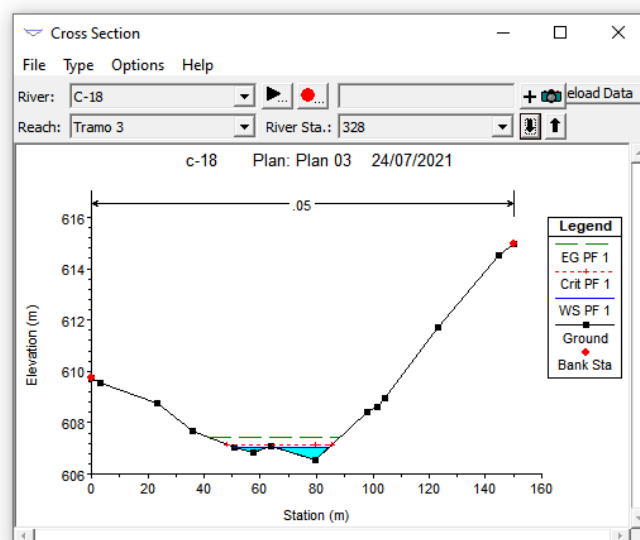
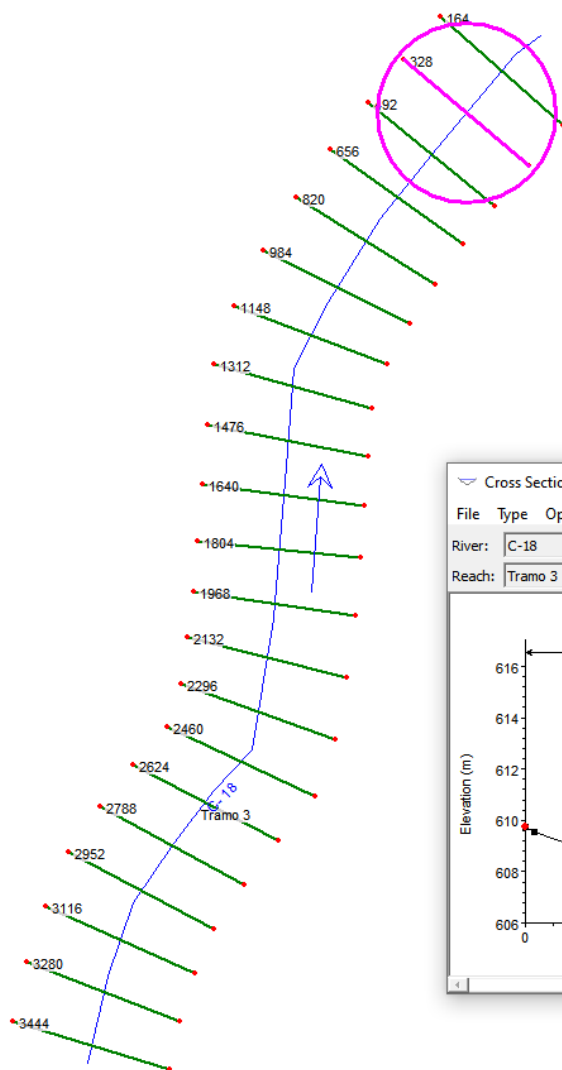
Plan: Plan 03 C-18 Tramo 3 RS: 820 Profile: PF 1					
E.G. Elev (m)	620.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.10	Wt. n-Val.		0.050	
W.S. Elev (m)	620.10	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	620.10	Flow Area (m2)		10.30	
E.G. Slope (m/m)	0.043404	Area (m2)		10.30	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	52.86	Top Width (m)		52.86	
Vel Total (m/s)	1.40	Avg. Vel. (m/s)		1.40	
Max Chl Dpth (m)	0.30	Hydr. Depth (m)		0.19	
Conv. Total (m3/s)	69.2	Conv. (m3/s)		69.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		52.87	
Min Ch El (m)	619.80	Shear (N/m2)		82.91	
Alpha	1.00	Stream Power (N/m s)		116.09	
Frctn Loss (m)	4.66	Cum Volume (1000 m3)		1.26	
C & E Loss (m)	0.05	Cum SA (1000 m2)		6.19	



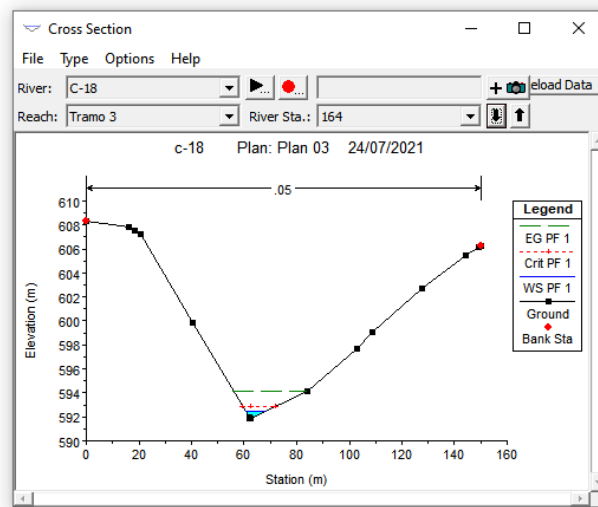
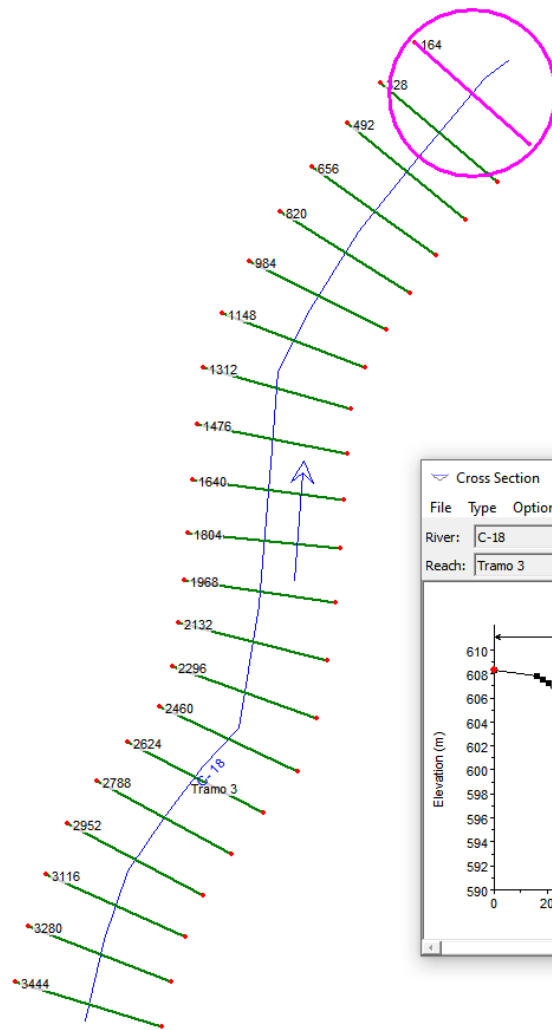
Plan: Plan 03 C-18 Tramo 3 RS: 656 Profile: PF 1					
E.G. Elev (m)	615.49	Element	Left OB	Channel	Right OB
Vel Head (m)	0.60	Wt. n-Val.		0.050	
W.S. Elev (m)	614.89	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	615.05	Flow Area (m2)		4.20	
E.G. Slope (m/m)	0.327029	Area (m2)		4.20	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	25.57	Top Width (m)		25.57	
Vel Total (m/s)	3.43	Avg. Vel. (m/s)		3.43	
Max Chl Dpth (m)	0.32	Hydr. Depth (m)		0.16	
Conv. Total (m3/s)	25.2	Conv. (m3/s)		25.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		25.58	
Min Ch El (m)	614.57	Shear (N/m2)		526.95	
Alpha	1.00	Stream Power (N/m s)		1808.02	
Frctn Loss (m)	1.97	Cum Volume (1000 m3)		0.89	
C & E Loss (m)	0.00	Cum SA (1000 m2)		4.23	



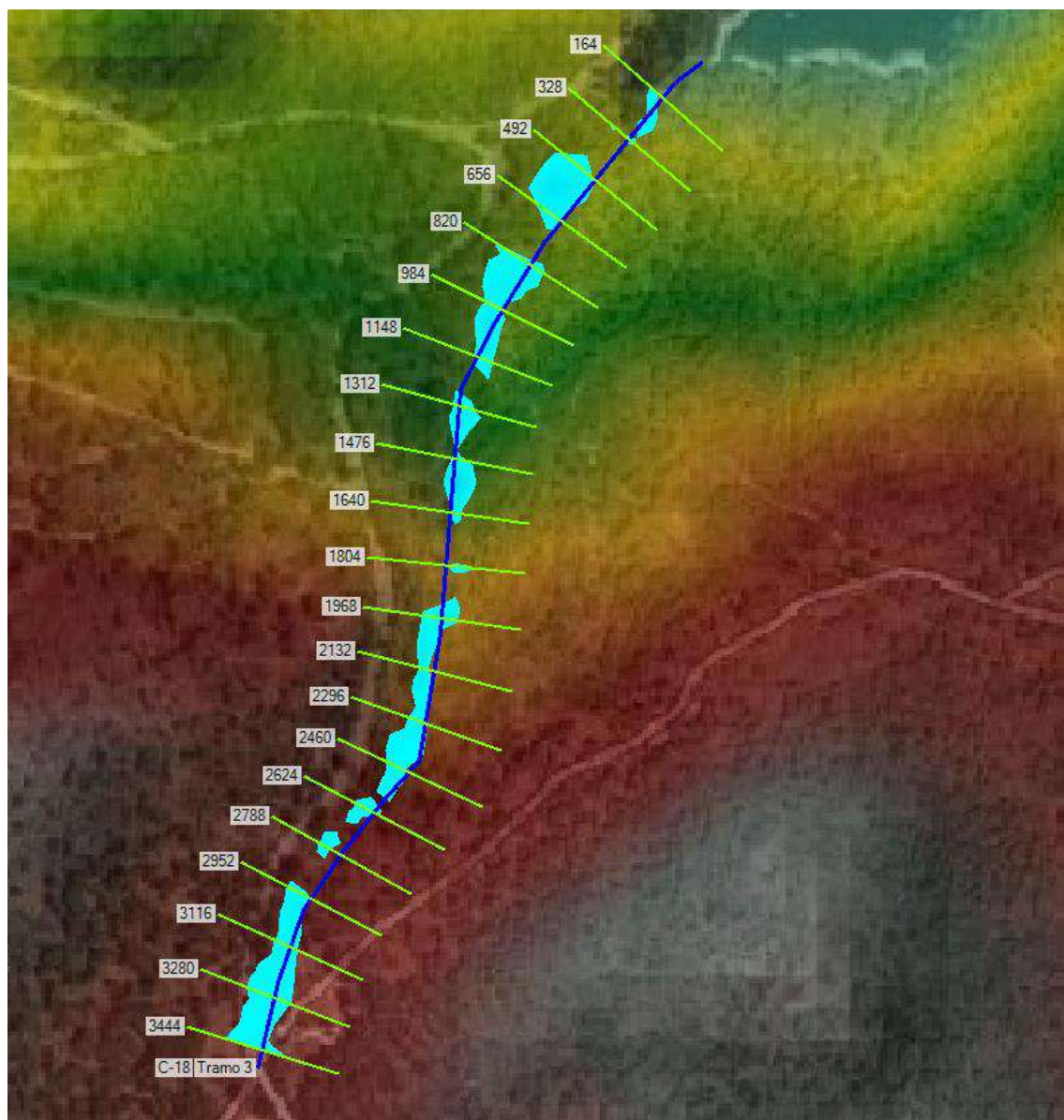
Plan: Plan 03 C-18 Tramo 3 RS: 492 Profile: PF 1					
E.G. Elev (m)	611.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.12	Wt. n-Val.		0.050	
W.S. Elev (m)	611.07	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	611.07	Flow Area (m2)		9.26	
E.G. Slope (m/m)	0.039997	Area (m2)		9.26	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	38.06	Top Width (m)		38.06	
Vel Total (m/s)	1.56	Avg. Vel. (m/s)		1.56	
Max Chl Dpth (m)	0.37	Hydr. Depth (m)		0.24	
Conv. Total (m3/s)	72.1	Conv. (m3/s)		72.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		38.07	
Min Ch El (m)	610.70	Shear (N/m2)		95.36	
Alpha	1.00	Stream Power (N/m s)		148.57	
Frctn Loss (m)	3.77	Cum Volume (1000 m3)		0.56	
C & E Loss (m)	0.03	Cum SA (1000 m2)		2.64	



Plan: Plan 03 C-18 Tramo 3 RS: 328 Profile: PF 1					
E.G. Elev (m)	607.41	Element	Left OB	Channel	Right OB
Vel Head (m)	0.38	Wt. n-Val.		0.050	
W.S. Elev (m)	607.02	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	607.13	Flow Area (m2)		5.25	
E.G. Slope (m/m)	0.191904	Area (m2)		5.25	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	29.91	Top Width (m)		29.91	
Vel Total (m/s)	2.75	Avg. Vel. (m/s)		2.75	
Max Chl Dpth (m)	0.46	Hydr. Depth (m)		0.18	
Conv. Total (m3/s)	32.9	Conv. (m3/s)		32.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		29.94	
Min Ch El (m)	606.56	Shear (N/m2)		330.10	
Alpha	1.00	Stream Power (N/m s)		906.25	
Frctn Loss (m)	13.16	Cum Volume (1000 m3)		0.19	
C & E Loss (m)	0.13	Cum SA (1000 m2)		0.94	



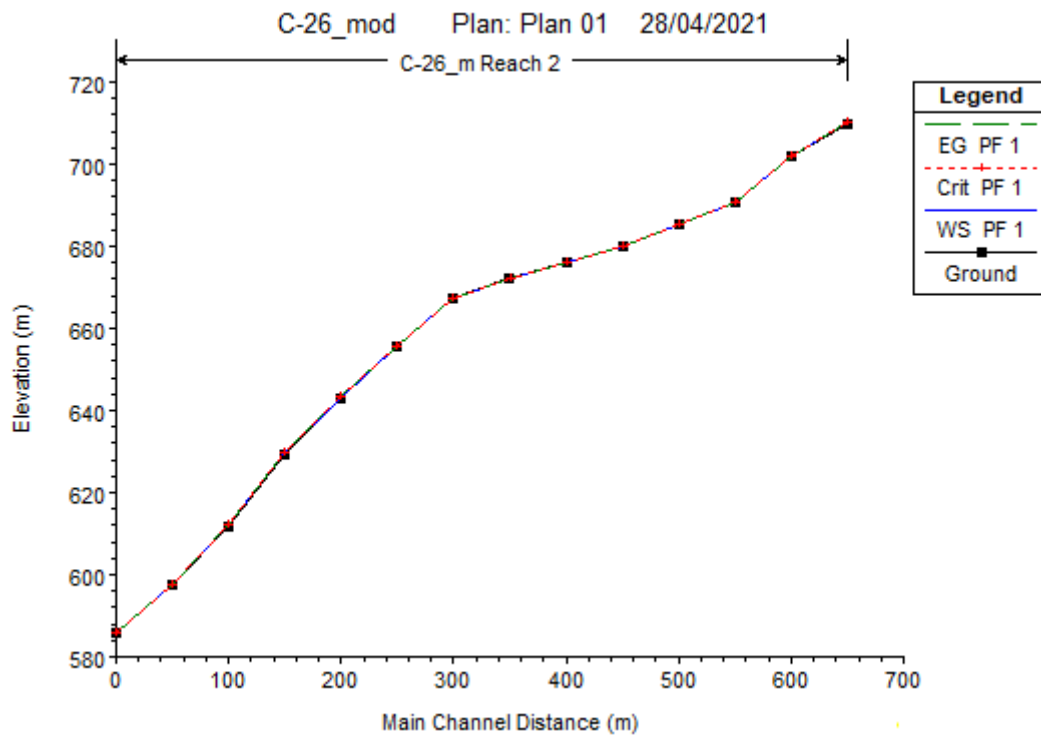
Plan: Plan 03 C-18 Tramo 3 RS: 164 Profile: PF 1					
E.G. Elev (m)	594.12	Element	Left OB	Channel	Right OB
Vel Head (m)	1.68	Wt. n-Val.		0.050	
W.S. Elev (m)	592.44	Reach Len. (m)			
Crit W.S. (m)	592.83	Flow Area (m2)		2.51	
E.G. Slope (m/m)	0.382845	Area (m2)		2.51	
Q Total (m3/s)	14.42	Flow (m3/s)		14.42	
Top Width (m)	7.83	Top Width (m)		7.83	
Vel Total (m/s)	5.74	Avg. Vel. (m/s)		5.74	
Max Chl Dpth (m)	0.61	Hydr. Depth (m)		0.32	
Conv. Total (m3/s)	23.3	Conv. (m3/s)		23.3	
Length Wtd. (m)		Wetted Per. (m)		7.96	
Min Ch El (m)	591.83	Shear (N/m2)		1185.37	
Alpha	1.00	Stream Power (N/m s)		6801.54	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

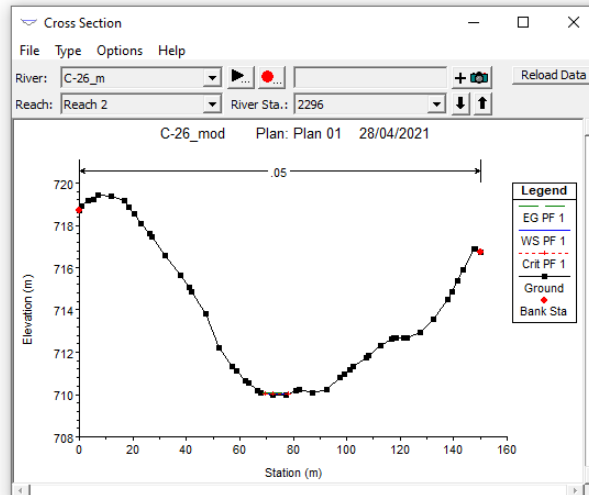
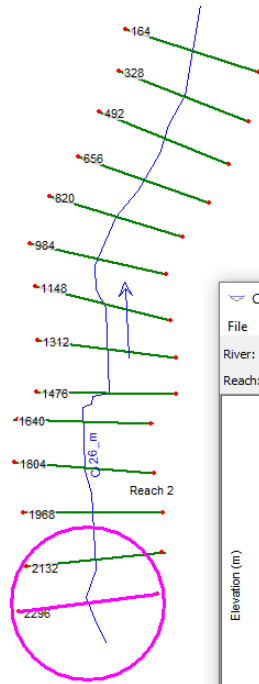


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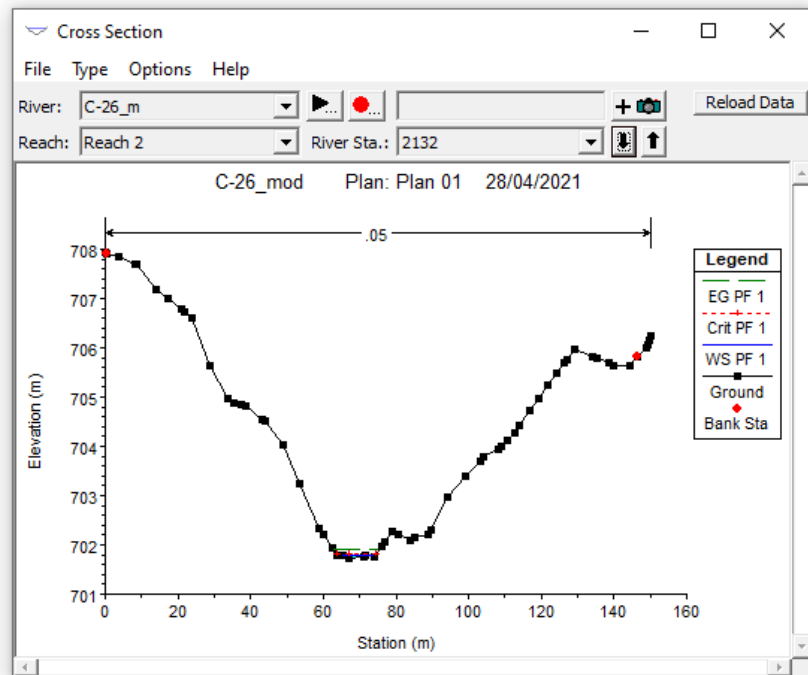
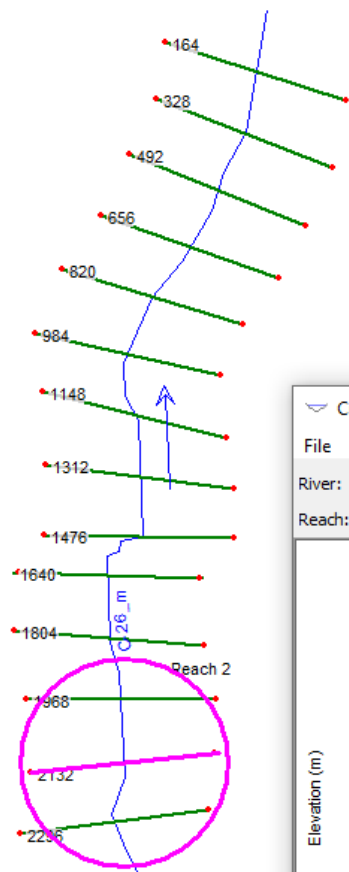
T10 (Q=0.28 m³/s)

Reach	River Sta	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m ²)	Top Width (m)	Froude # Chl
Reach 2	2296	PF 1	0.28	709.95	710.03	710.03	710.06	0.057231	0.65	0.43	8.75	0.93
Reach 2	2132	PF 1	0.28	701.74	701.78	701.81	701.90	1.003357	1.52	0.18	8.83	3.36
Reach 2	1968	PF 1	0.28	690.75	690.85	690.86	690.91	0.093487	1.04	0.27	3.74	1.24
Reach 2	1804	PF 1	0.28	685.41	685.54	685.56	685.60	0.106024	1.09	0.26	3.73	1.33
Reach 2	1640	PF 1	0.28	679.76	679.83	679.84	679.88	0.123816	0.94	0.30	6.06	1.36
Reach 2	1476	PF 1	0.28	675.94	676.04	676.04	676.07	0.062827	0.75	0.37	6.38	1.00
Reach 2	1312	PF 1	0.28	672.00	672.03	672.03	672.04	0.065091	0.41	0.69	30.54	0.87
Reach 2	1148	PF 1	0.28	667.28	667.39	667.41	667.45	0.138466	1.12	0.25	4.29	1.48
Reach 2	984	PF 1	0.28	655.63	655.71	655.74	655.83	0.468291	1.52	0.18	5.00	2.52
Reach 2	820	PF 1	0.28	643.08	643.17	643.20	643.25	0.156360	1.28	0.22	3.36	1.60
Reach 2	656	PF 1	0.28	629.45	629.54	629.60	629.75	0.571923	2.02	0.14	2.82	2.92
Reach 2	492	PF 1	0.28	611.92	612.02	612.05	612.10	0.190128	1.27	0.22	3.97	1.72
Reach 2	328	PF 1	0.28	597.38	597.44	597.47	597.56	0.970191	1.54	0.18	8.37	3.32
Reach 2	164	PF 1	0.28	585.75	585.84	585.85	585.89	0.158565	1.01	0.28	6.11	1.52

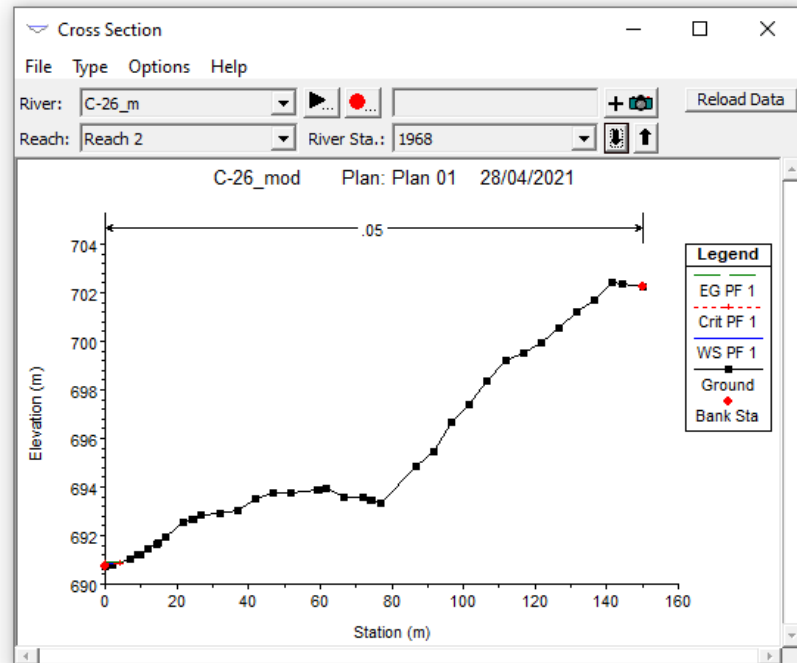
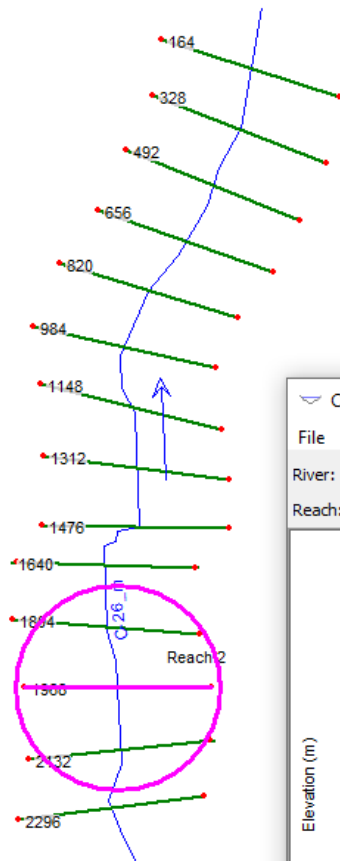




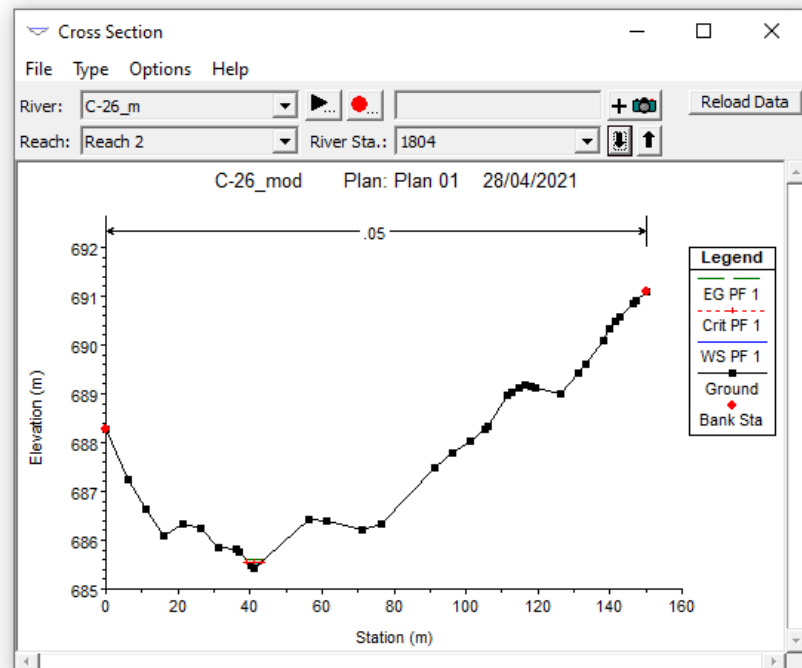
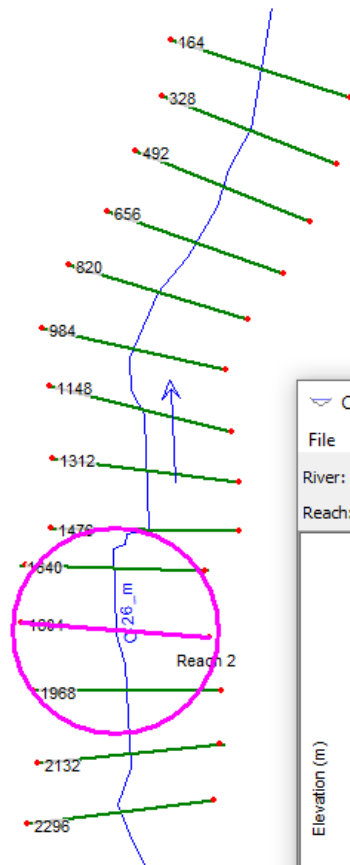
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	2296		Plan:
Plan:					
E.G. Elev (m)	710.06	Element	Left OB	Channel	Right OB
Vel Head (m)	0.02	Wt. n-Val.		0.050	
W.S. Elev (m)	710.03	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	710.03	Flow Area (m2)		0.43	
E.G. Slope (m/m)	0.057231	Area (m2)		0.43	
Q Total (m3/s)	0.28	Flow (m3/s)		0.28	
Top Width (m)	8.75	Top Width (m)		8.75	
Vel Total (m/s)	0.65	Avg. Vel. (m/s)		0.65	
Max Chl Dpth (m)	0.08	Hydr. Depth (m)		0.05	
Conv. Total (m3/s)	1.2	Conv. (m3/s)		1.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		8.75	
Min Ch El (m)	709.95	Shear (N/m2)		27.81	
Alpha	1.00	Stream Power (N/m s)		17.95	
Frctn Loss (m)	8.10	Cum Volume (1000 m3)		0.18	
C & E Loss (m)	0.01	Cum SA (1000 m2)		4.73	



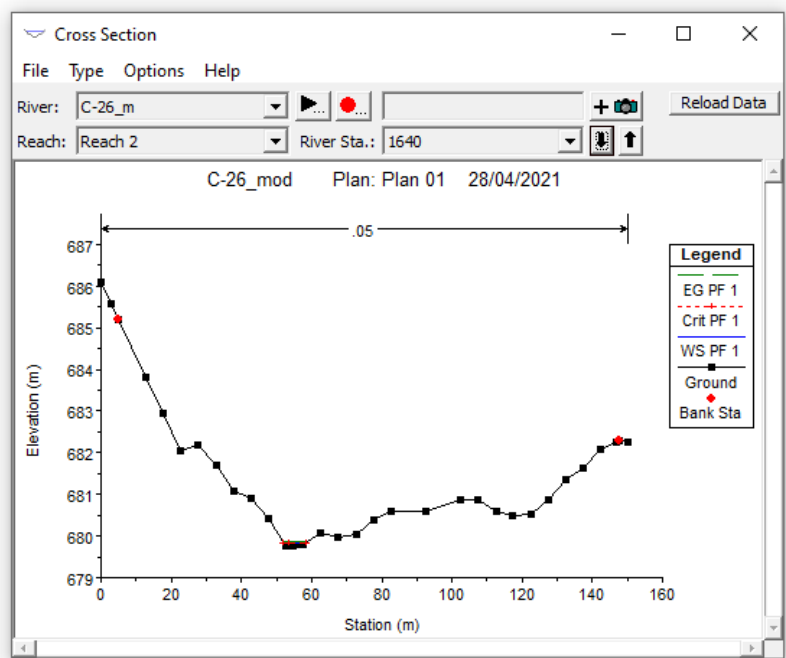
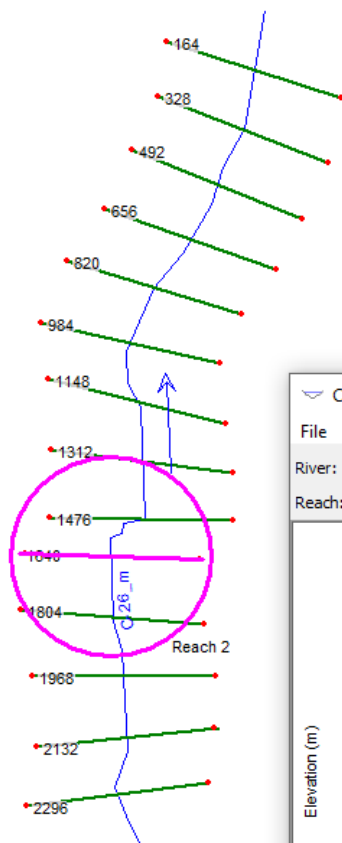
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	2132		Plan:
Plan:					
E.G. Elev (m)	701.90	Element	Left OB	Channel	Right OB
Vel Head (m)	0.12	Wt. n-Val.		0.050	
W.S. Elev (m)	701.78	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	701.81	Flow Area (m2)		0.18	
E.G. Slope (m/m)	1.003357	Area (m2)		0.18	
Q Total (m3/s)	0.28	Flow (m3/s)		0.28	
Top Width (m)	8.83	Top Width (m)		8.83	
Vel Total (m/s)	1.52	Avg. Vel. (m/s)		1.52	
Max Chl Dpth (m)	0.04	Hydr. Depth (m)		0.02	
Conv. Total (m3/s)	0.3	Conv. (m3/s)		0.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		8.83	
Min Ch El (m)	701.74	Shear (N/m2)		205.42	
Alpha	1.00	Stream Power (N/m s)		312.03	
Frctn Loss (m)	10.97	Cum Volume (1000 m3)		0.17	
C & E Loss (m)	0.02	Cum SA (1000 m2)		4.29	



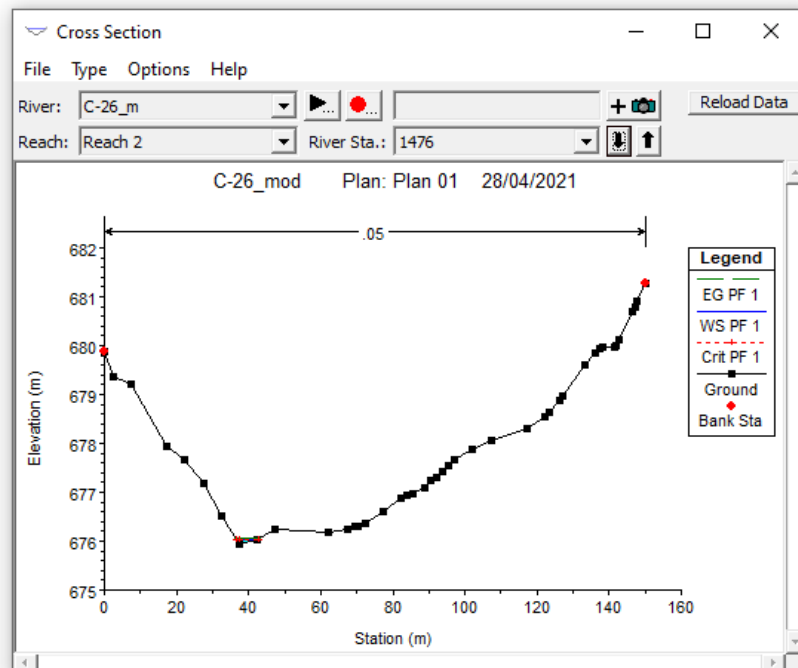
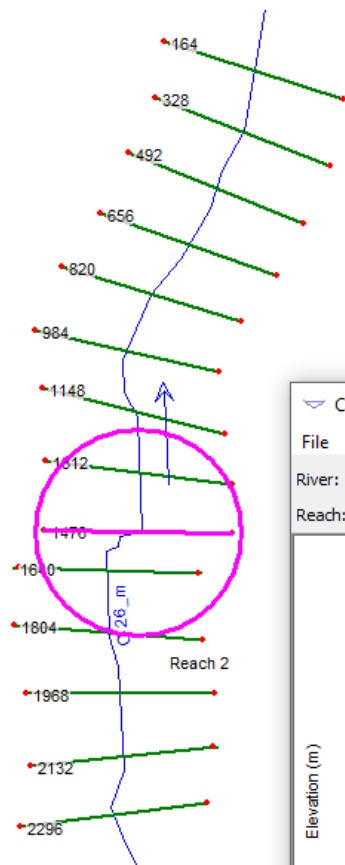
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	1968		Plan:
Plan:					
E.G. Elev (m)	690.91	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	690.85	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	690.86	Flow Area (m2)		0.27	
E.G. Slope (m/m)	0.093487	Area (m2)		0.27	
Q Total (m3/s)	0.28	Flow (m3/s)		0.28	
Top Width (m)	3.74	Top Width (m)		3.74	
Vel Total (m/s)	1.04	Avg. Vel. (m/s)		1.04	
Max Chl Dpth (m)	0.10	Hydr. Depth (m)		0.07	
Conv. Total (m3/s)	0.9	Conv. (m3/s)		0.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		3.85	
Min Ch El (m)	690.75	Shear (N/m2)		64.21	
Alpha	1.00	Stream Power (N/m s)		66.72	
Frctn Loss (m)	5.31	Cum Volume (1000 m3)		0.15	
C & E Loss (m)	0.00	Cum SA (1000 m2)		3.97	



River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	1804		Plan:
Plan:					
E.G. Elev (m)	685.60	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	685.54	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	685.56	Flow Area (m2)		0.26	
E.G. Slope (m/m)	0.106024	Area (m2)		0.26	
Q Total (m3/s)	0.28	Flow (m3/s)		0.28	
Top Width (m)	3.73	Top Width (m)		3.73	
Vel Total (m/s)	1.09	Avg. Vel. (m/s)		1.09	
Max Chl Dpth (m)	0.13	Hydr. Depth (m)		0.07	
Conv. Total (m3/s)	0.9	Conv. (m3/s)		0.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		3.74	
Min Ch El (m)	685.41	Shear (N/m2)		71.37	
Alpha	1.00	Stream Power (N/m s)		77.92	
Frctn Loss (m)	5.72	Cum Volume (1000 m3)		0.14	
C & E Loss (m)	0.00	Cum SA (1000 m2)		3.78	

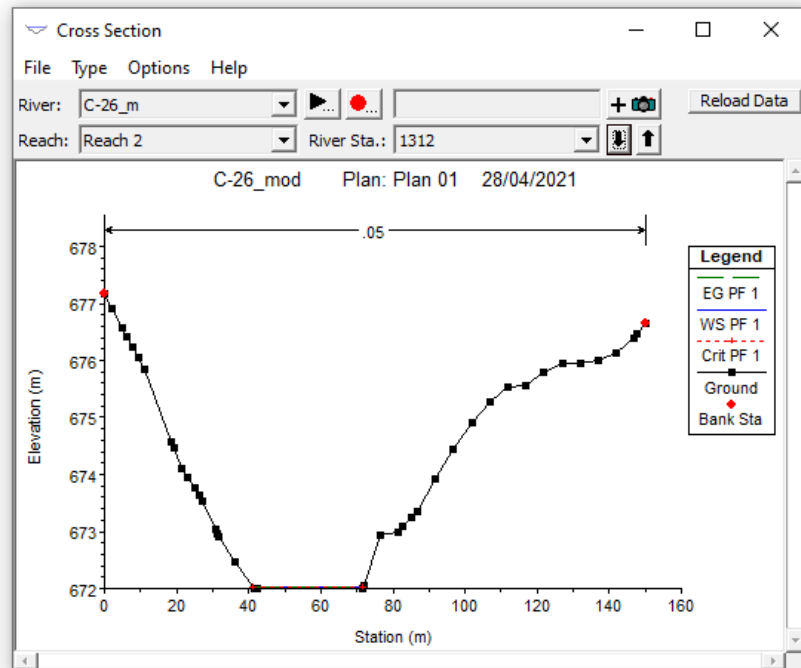
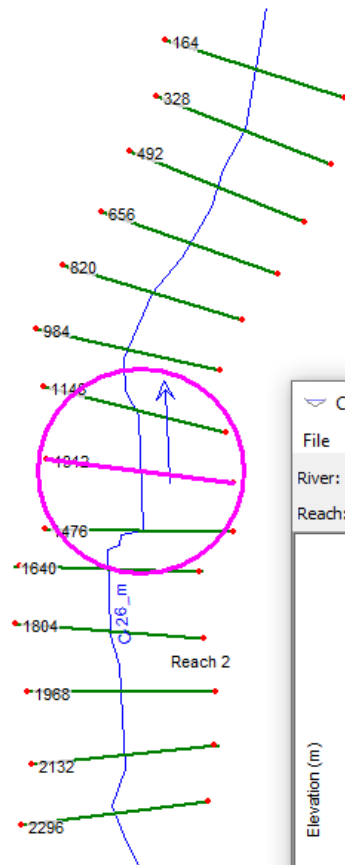


River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	1640		Plan:
Plan:					
E.G. Elev (m)	679.88	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	679.83	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	679.84	Flow Area (m2)		0.30	
E.G. Slope (m/m)	0.123816	Area (m2)		0.30	
Q Total (m3/s)	0.28	Flow (m3/s)		0.28	
Top Width (m)	6.06	Top Width (m)		6.06	
Vel Total (m/s)	0.94	Avg. Vel. (m/s)		0.94	
Max Chl Dpth (m)	0.07	Hydr. Depth (m)		0.05	
Conv. Total (m3/s)	0.8	Conv. (m3/s)		0.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		6.06	
Min Ch El (m)	679.76	Shear (N/m2)		59.49	
Alpha	1.00	Stream Power (N/m s)		56.06	
Frctn Loss (m)	3.13	Cum Volume (1000 m3)		0.13	
C & E Loss (m)	0.00	Cum SA (1000 m2)		3.54	

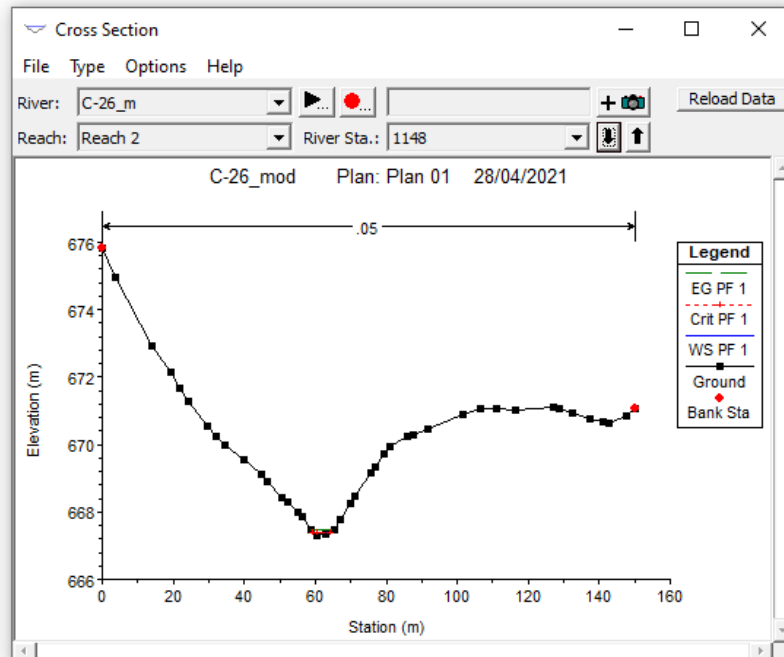
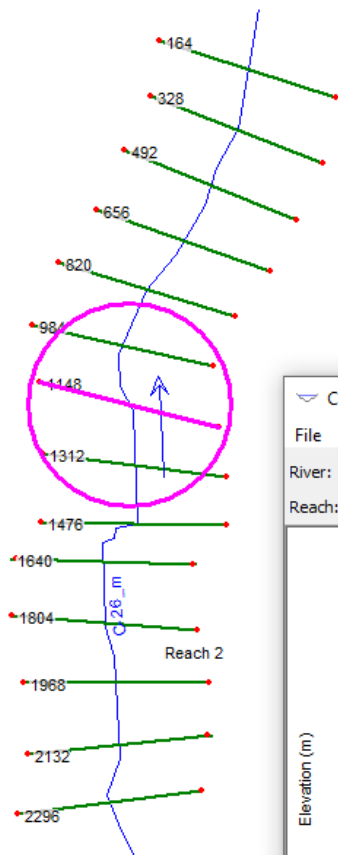


River: C-26_m Profile: PF 1
 Reach: Reach 2 RS: 1476 Plan:

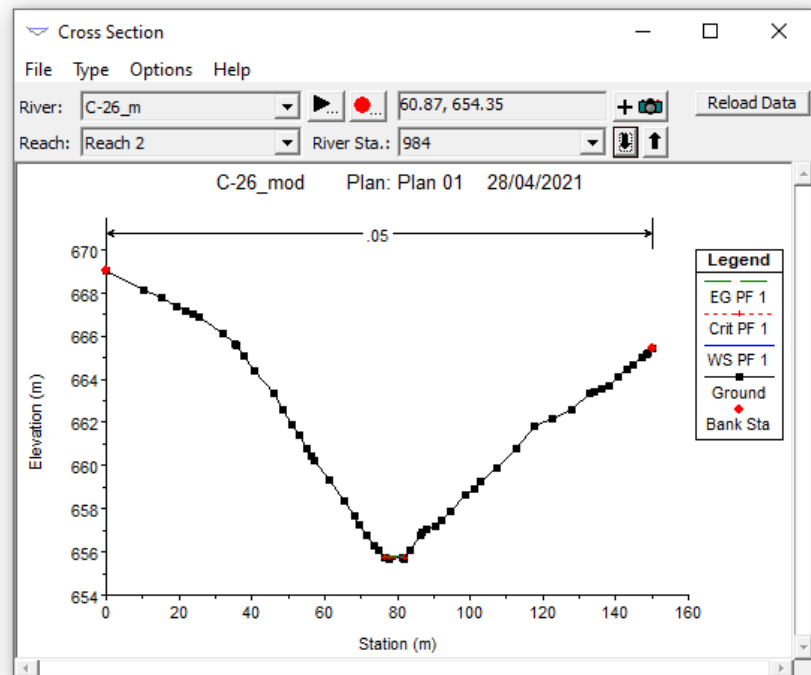
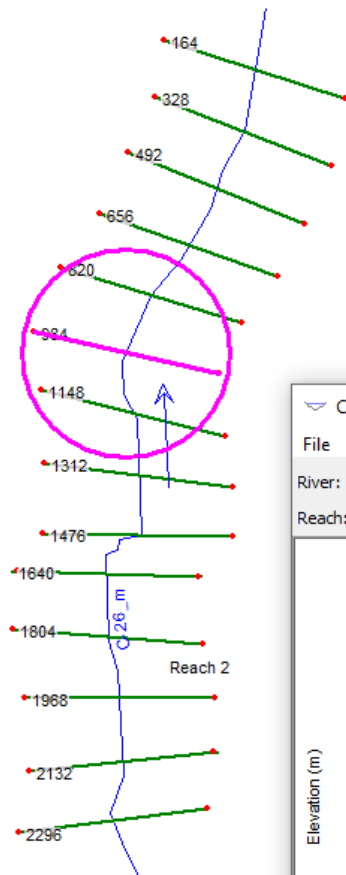
Plan:					
E.G. Elev (m)	676.07	Element	Left OB	Channel	Right OB
Vel Head (m)	0.03	Wt. n-Val.		0.050	
W.S. Elev (m)	676.04	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	676.04	Flow Area (m2)		0.37	
E.G. Slope (m/m)	0.062827	Area (m2)		0.37	
Q Total (m3/s)	0.28	Flow (m3/s)		0.28	
Top Width (m)	6.38	Top Width (m)		6.38	
Vel Total (m/s)	0.75	Avg. Vel. (m/s)		0.75	
Max Chl Dpth (m)	0.10	Hydr. Depth (m)		0.06	
Conv. Total (m3/s)	1.1	Conv. (m3/s)		1.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		6.39	
Min Ch El (m)	675.94	Shear (N/m2)		35.87	
Alpha	1.00	Stream Power (N/m s)		27.01	
Frctn Loss (m)	3.20	Cum Volume (1000 m3)		0.11	
C & E Loss (m)	0.01	Cum SA (1000 m2)		3.23	



River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	1312		Plan:
Plan:					
E.G. Elev (m)	672.04	Element	Left OB	Channel	Right OB
Vel Head (m)	0.01	Wt. n-Val.		0.050	
W.S. Elev (m)	672.03	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	672.03	Flow Area (m2)		0.69	
E.G. Slope (m/m)	0.065091	Area (m2)		0.69	
Q Total (m3/s)	0.28	Flow (m3/s)		0.28	
Top Width (m)	30.54	Top Width (m)		30.54	
Vel Total (m/s)	0.41	Avg. Vel. (m/s)		0.41	
Max Chl Dpth (m)	0.03	Hydr. Depth (m)		0.02	
Conv. Total (m3/s)	1.1	Conv. (m3/s)		1.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		30.54	
Min Ch El (m)	672.00	Shear (N/m2)		14.38	
Alpha	1.00	Stream Power (N/m s)		5.85	
Frctn Loss (m)	4.58	Cum Volume (1000 m3)		0.08	
C & E Loss (m)	0.01	Cum SA (1000 m2)		2.31	

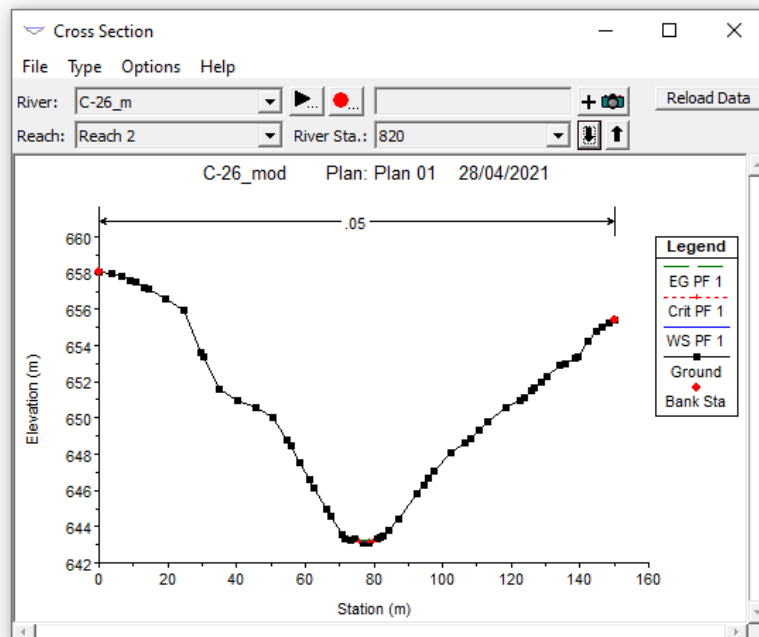
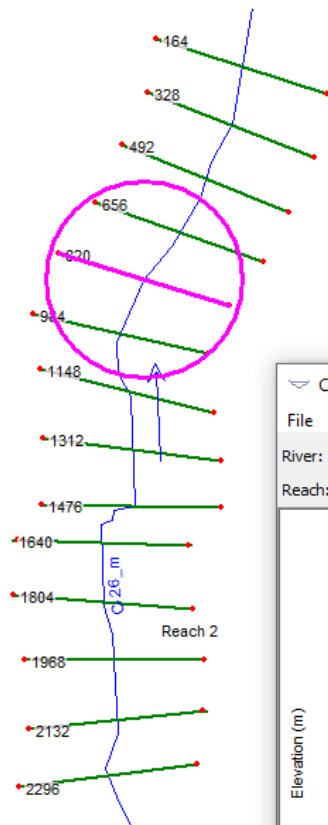


River:	C-26_m	Profile:	PF 1		
Reach	Reach 2	RS:	1148		Plan:
Plan:					
E.G. Elev (m)	667.45	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	667.39	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	667.41	Flow Area (m2)		0.25	
E.G. Slope (m/m)	0.138466	Area (m2)		0.25	
Q Total (m3/s)	0.28	Flow (m3/s)		0.28	
Top Width (m)	4.29	Top Width (m)		4.29	
Vel Total (m/s)	1.12	Avg. Vel. (m/s)		1.12	
Max Chl Dpth (m)	0.11	Hydr. Depth (m)		0.06	
Conv. Total (m3/s)	0.8	Conv. (m3/s)		0.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		4.30	
Min Ch El (m)	667.28	Shear (N/m2)		79.09	
Alpha	1.00	Stream Power (N/m s)		88.44	
Frctn Loss (m)	11.62	Cum Volume (1000 m3)		0.06	
C & E Loss (m)	0.01	Cum SA (1000 m2)		1.44	

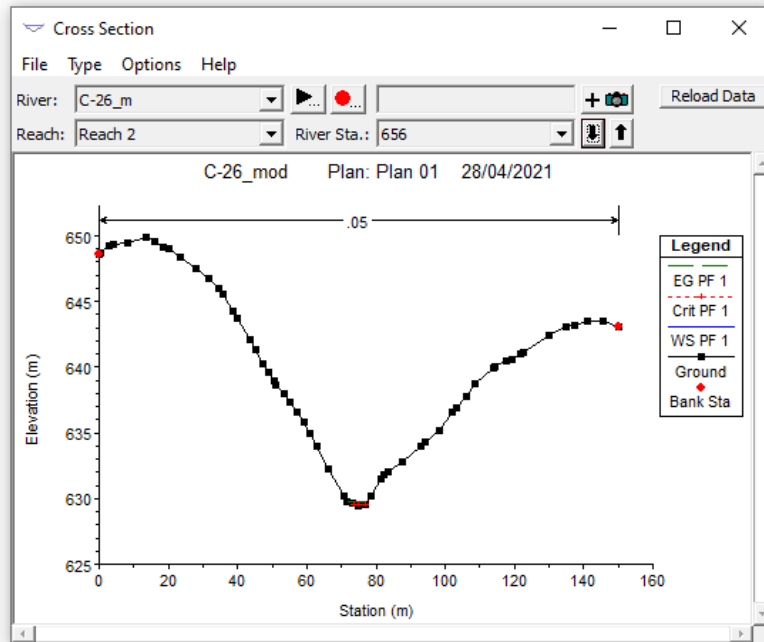
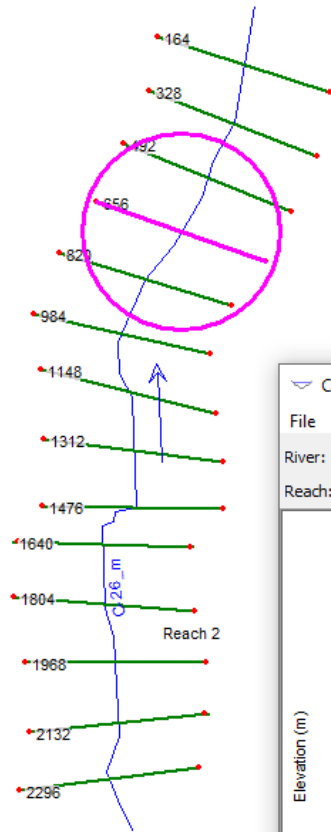


River: C-26_m Profile: PF 1
 Reach: Reach 2 RS: 984 Plan:

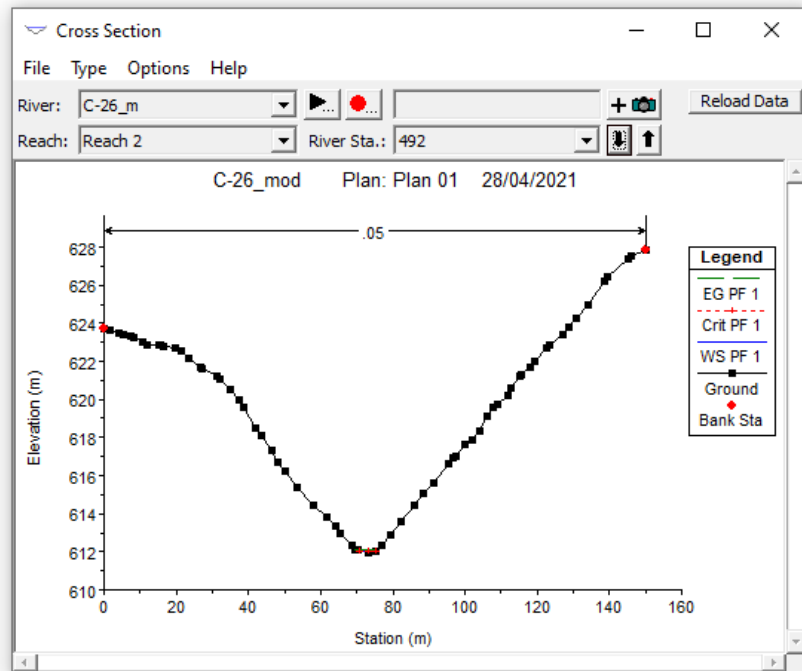
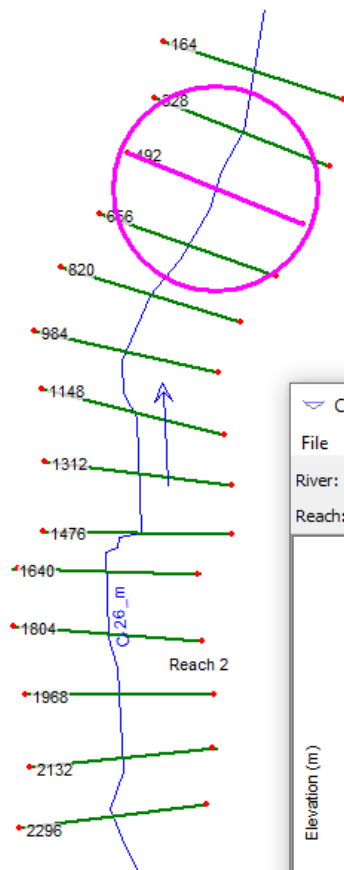
Plan:					
E.G. Elev (m)	655.83	Element	Left OB	Channel	Right OB
Vel Head (m)	0.12	Wt. n-Val.		0.050	
W.S. Elev (m)	655.71	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	655.74	Flow Area (m2)		0.18	
E.G. Slope (m/m)	0.468291	Area (m2)		0.18	
Q Total (m3/s)	0.28	Flow (m3/s)		0.28	
Top Width (m)	5.00	Top Width (m)		5.00	
Vel Total (m/s)	1.52	Avg. Vel. (m/s)		1.52	
Max Chl Dpth (m)	0.08	Hydr. Depth (m)		0.04	
Conv. Total (m3/s)	0.4	Conv. (m3/s)		0.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		5.00	
Min Ch El (m)	655.63	Shear (N/m2)		169.46	
Alpha	1.00	Stream Power (N/m s)		257.06	
Frctn Loss (m)	12.56	Cum Volume (1000 m3)		0.05	
C & E Loss (m)	0.01	Cum SA (1000 m2)		1.20	



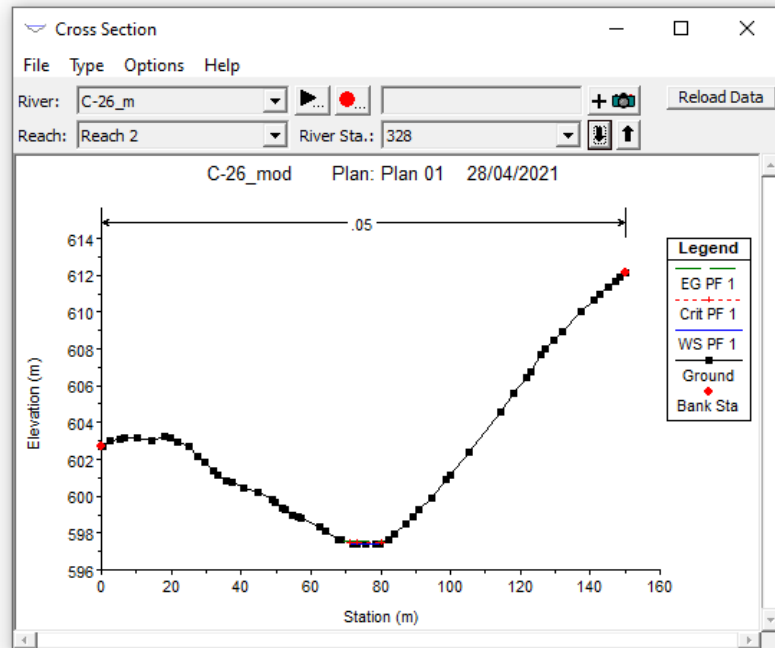
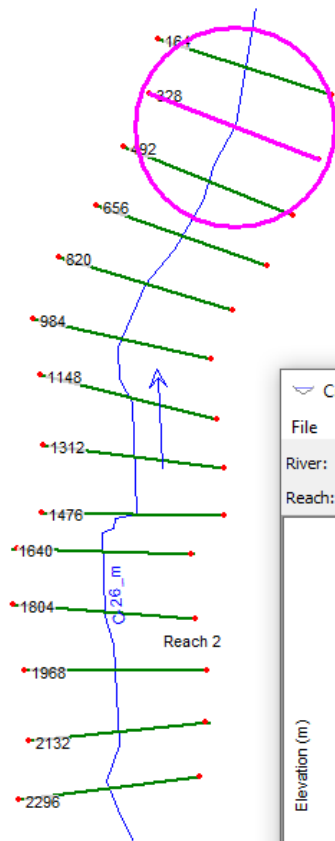
River:	C-26_m	Profile:	PF 1		
Reach	Reach 2	RS:	820		Plan:
Plan:					
E.G. Elev (m)	643.25	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	643.17	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	643.20	Flow Area (m2)		0.22	
E.G. Slope (m/m)	0.156360	Area (m2)		0.22	
Q Total (m3/s)	0.28	Flow (m3/s)		0.28	
Top Width (m)	3.36	Top Width (m)		3.36	
Vel Total (m/s)	1.28	Avg. Vel. (m/s)		1.28	
Max Chl Dpth (m)	0.09	Hydr. Depth (m)		0.07	
Conv. Total (m3/s)	0.7	Conv. (m3/s)		0.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		3.37	
Min Ch El (m)	643.08	Shear (N/m2)		99.69	
Alpha	1.00	Stream Power (N/m s)		127.48	
Frctn Loss (m)	13.48	Cum Volume (1000 m3)		0.04	
C & E Loss (m)	0.01	Cum SA (1000 m2)		0.99	



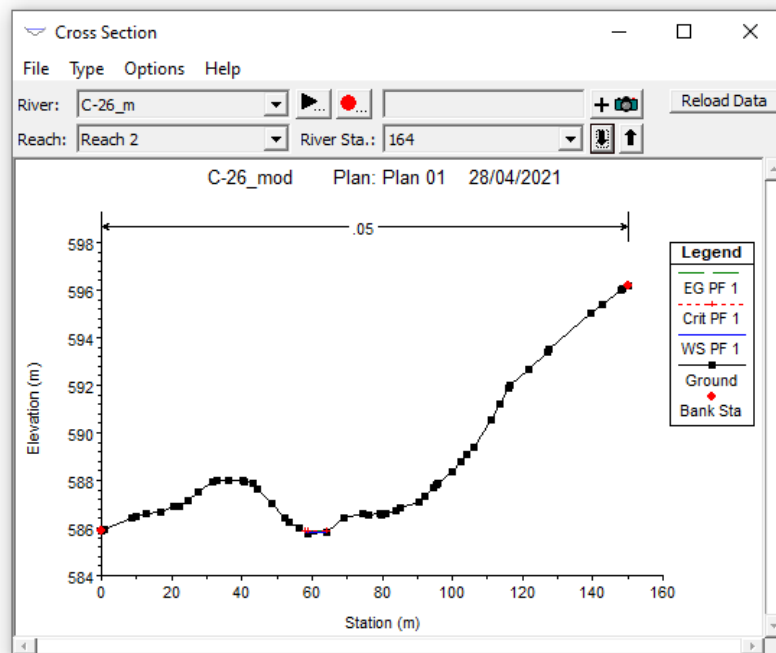
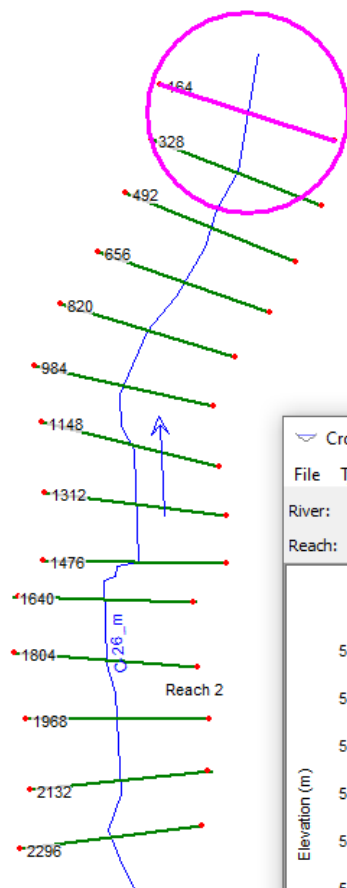
River:	C-26_m	Profile:	PF 1		
Reach	Reach 2	RS:	656		Plan:
Plan:					
E.G. Elev (m)	629.75	Element	Left OB	Channel	Right OB
Vel Head (m)	0.21	Wt. n-Val.		0.050	
W.S. Elev (m)	629.54	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	629.60	Flow Area (m2)		0.14	
E.G. Slope (m/m)	0.571923	Area (m2)		0.14	
Q Total (m3/s)	0.28	Flow (m3/s)		0.28	
Top Width (m)	2.82	Top Width (m)		2.82	
Vel Total (m/s)	2.02	Avg. Vel. (m/s)		2.02	
Max Chl Dpth (m)	0.09	Hydr. Depth (m)		0.05	
Conv. Total (m3/s)	0.4	Conv. (m3/s)		0.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		2.83	
Min Ch El (m)	629.45	Shear (N/m2)		274.52	
Alpha	1.00	Stream Power (N/m s)		555.60	
Frcn Loss (m)	17.60	Cum Volume (1000 m3)		0.03	
C & E Loss (m)	0.03	Cum SA (1000 m2)		0.84	



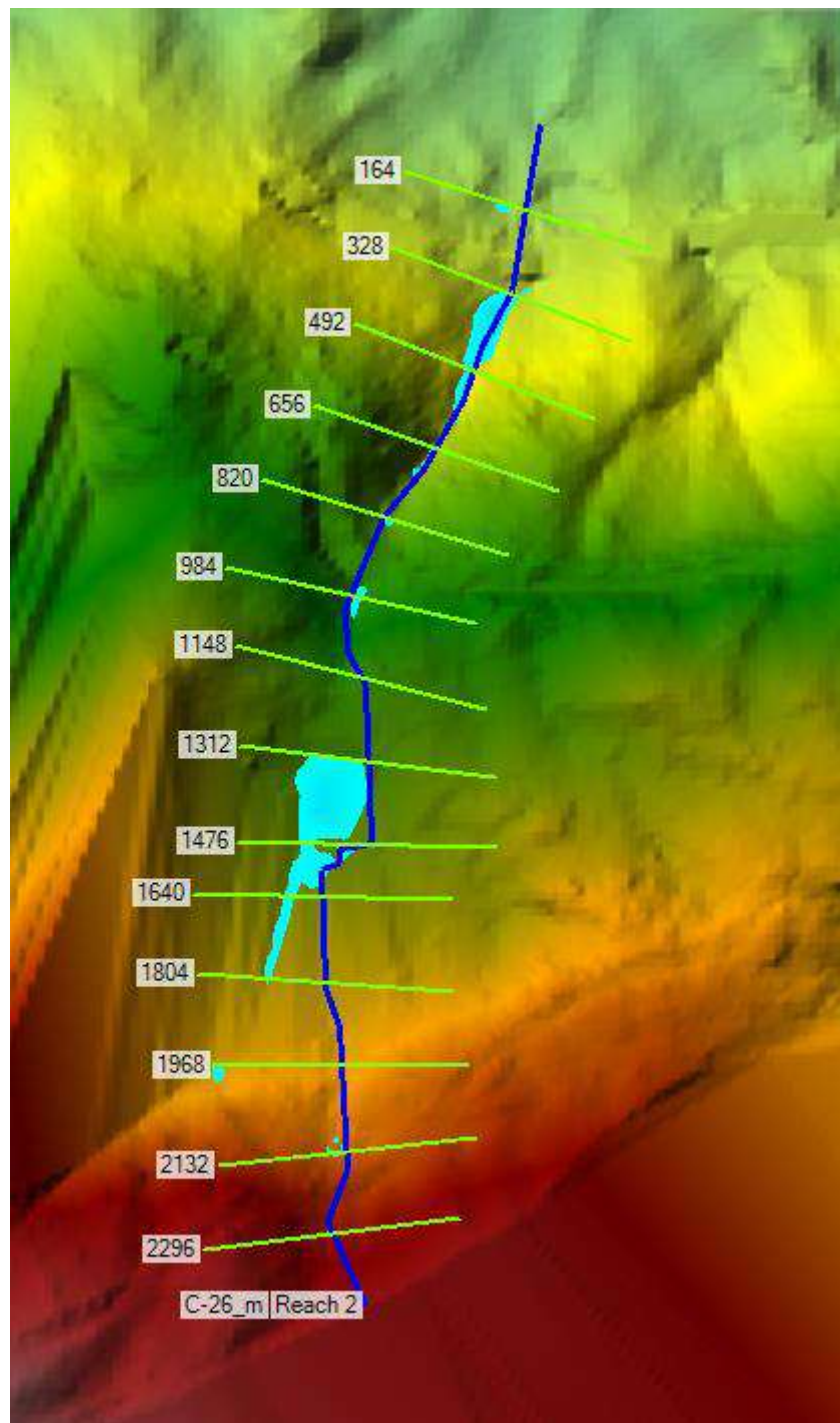
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	492		Plan:
Plan:					
E.G. Elev (m)	612.10	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	612.02	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	612.05	Flow Area (m2)		0.22	
E.G. Slope (m/m)	0.190128	Area (m2)		0.22	
Q Total (m3/s)	0.28	Flow (m3/s)		0.28	
Top Width (m)	3.97	Top Width (m)		3.97	
Vel Total (m/s)	1.27	Avg. Vel. (m/s)		1.27	
Max Chl Dpth (m)	0.10	Hydr. Depth (m)		0.06	
Conv. Total (m3/s)	0.6	Conv. (m3/s)		0.6	
Length Wtd. (m)	50.00	Wetted Per. (m)		3.98	
Min Ch El (m)	611.92	Shear (N/m2)		103.44	
Alpha	1.00	Stream Power (N/m s)		131.21	
Frctn Loss (m)	14.56	Cum Volume (1000 m3)		0.02	
C & E Loss (m)	0.00	Cum SA (1000 m2)		0.67	



River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	328		Plan:
Plan:					
E.G. Elev (m)	597.56	Element	Left OB	Channel	Right OB
Vel Head (m)	0.12	Wt. n-Val.		0.050	
W.S. Elev (m)	597.44	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	597.47	Flow Area (m2)		0.18	
E.G. Slope (m/m)	0.970191	Area (m2)		0.18	
Q Total (m3/s)	0.28	Flow (m3/s)		0.28	
Top Width (m)	8.37	Top Width (m)		8.37	
Vel Total (m/s)	1.54	Avg. Vel. (m/s)		1.54	
Max Chl Dpth (m)	0.06	Hydr. Depth (m)		0.02	
Conv. Total (m3/s)	0.3	Conv. (m3/s)		0.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		8.37	
Min Ch El (m)	597.38	Shear (N/m2)		207.13	
Alpha	1.00	Stream Power (N/m s)		318.14	
Frctn Loss (m)	11.63	Cum Volume (1000 m3)		0.01	
C & E Loss (m)	0.02	Cum SA (1000 m2)		0.36	

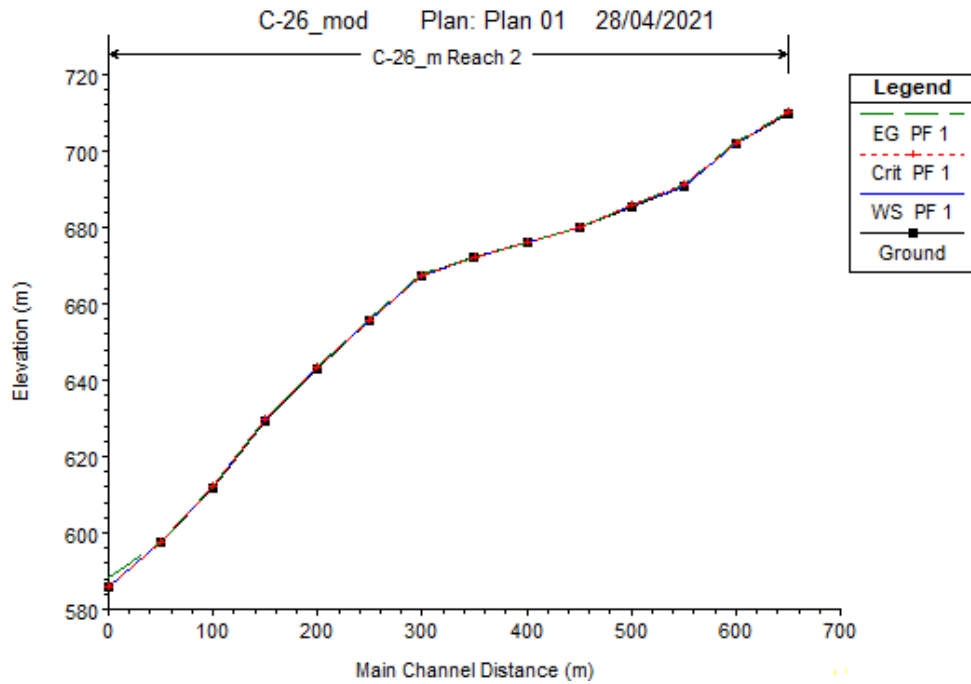


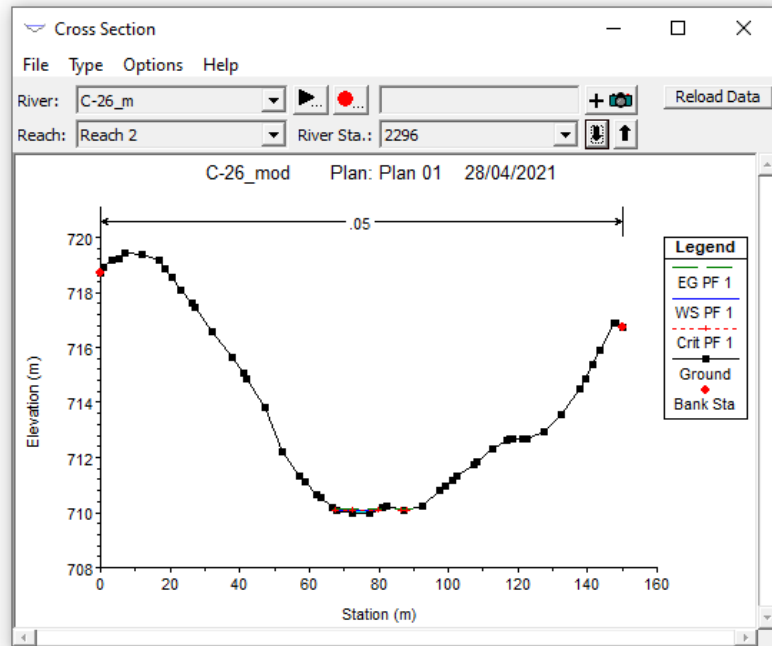
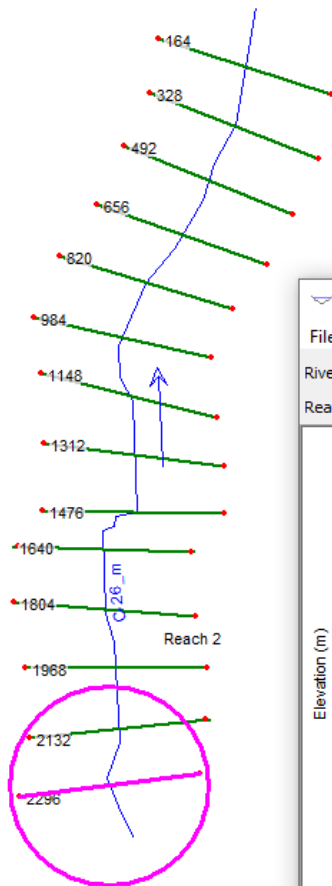
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	164		Plan:
Plan:					
E.G. Elev (m)	585.89	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	585.84	Reach Len. (m)			
Crit W.S. (m)	585.85	Flow Area (m2)		0.28	
E.G. Slope (m/m)	0.158565	Area (m2)		0.28	
Q Total (m3/s)	0.28	Flow (m3/s)		0.28	
Top Width (m)	6.11	Top Width (m)		6.11	
Vel Total (m/s)	1.01	Avg. Vel. (m/s)		1.01	
Max Chl Dpth (m)	0.09	Hydr. Depth (m)		0.05	
Conv. Total (m3/s)	0.7	Conv. (m3/s)		0.7	
Length Wtd. (m)		Wetted Per. (m)		6.11	
Min Ch El (m)	585.75	Shear (N/m2)		70.41	
Alpha	1.00	Stream Power (N/m s)		71.23	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			



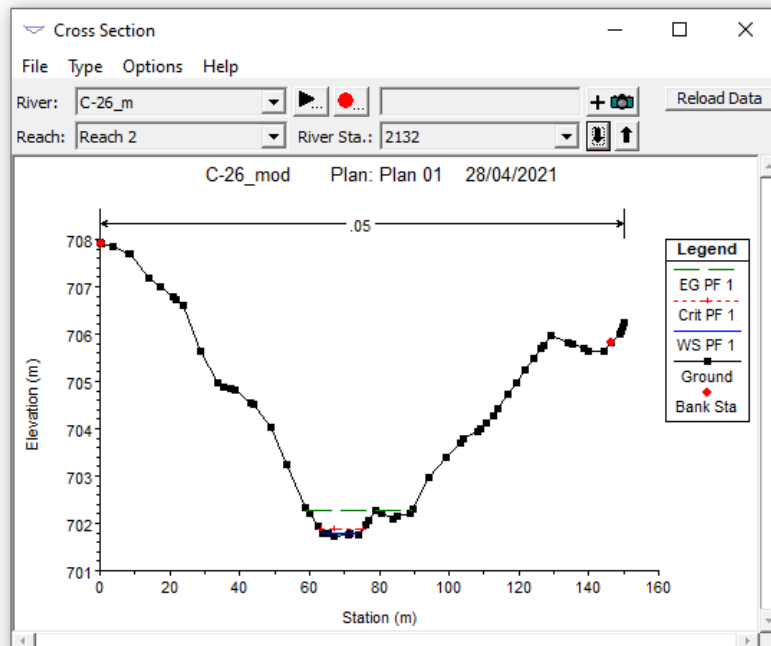
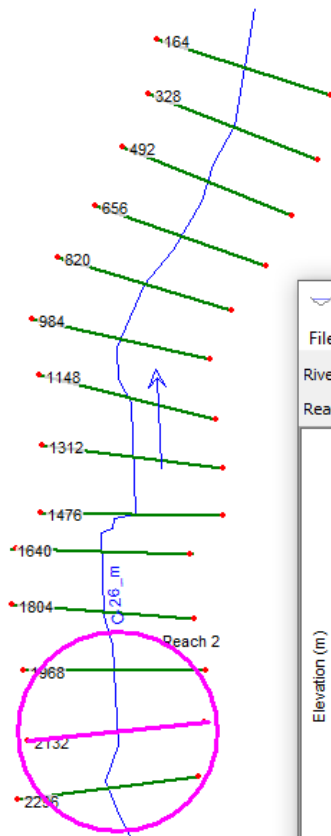
T100 (Q=1.10 m³/s)

HEC-RAS Plan:												
Reach	River Sta	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m ²)	Top Width (m)	Froude # Chl
Reach 2	2296	PF 1	1.10	709.95	710.10	710.10	710.15	0.056985	0.92	1.19	14.00	1.01
Reach 2	2132	PF 1	1.10	701.74	701.80	701.87	702.28	2.133038	3.07	0.36	10.50	5.31
Reach 2	1968	PF 1	1.10	690.75	690.96	690.98	691.06	0.078971	1.42	0.77	5.84	1.25
Reach 2	1804	PF 1	1.10	685.41	685.62	685.67	685.78	0.148200	1.75	0.63	5.75	1.70
Reach 2	1640	PF 1	1.10	679.76	679.91	679.93	680.00	0.092015	1.34	0.82	7.91	1.33
Reach 2	1476	PF 1	1.10	675.94	676.12	676.13	676.19	0.063903	1.15	0.96	8.81	1.11
Reach 2	1312	PF 1	1.10	672.00	672.05	672.06	672.08	0.108857	0.82	1.35	30.88	1.25
Reach 2	1148	PF 1	1.10	667.28	667.49	667.50	667.58	0.075625	1.33	0.83	7.00	1.23
Reach 2	984	PF 1	1.10	655.63	655.84	655.84	655.91	0.047368	1.20	0.92	6.27	1.00
Reach 2	820	PF 1	1.10	643.08	643.32	643.32	643.38	0.050580	1.06	1.03	8.98	1.00
Reach 2	656	PF 1	1.10	629.45	629.73	629.73	629.82	0.045963	1.29	0.85	5.08	1.01
Reach 2	492	PF 1	1.10	611.92	612.15	612.15	612.22	0.048184	1.19	0.93	6.56	1.01
Reach 2	328	PF 1	1.10	597.38	597.53	597.53	597.58	0.053647	1.00	1.10	11.01	1.01
Reach 2	164	PF 1	1.10	585.75	585.82	585.94	588.07	9.671677	6.64	0.17	4.74	11.35



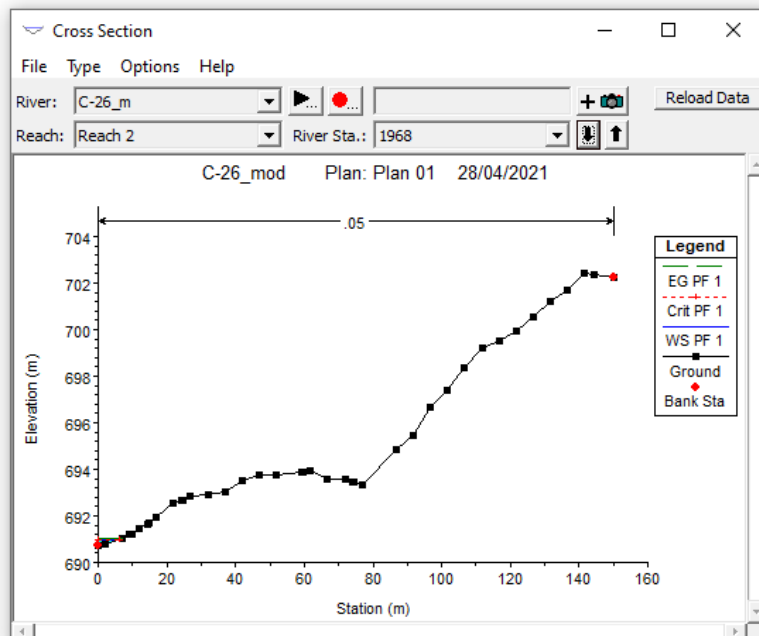
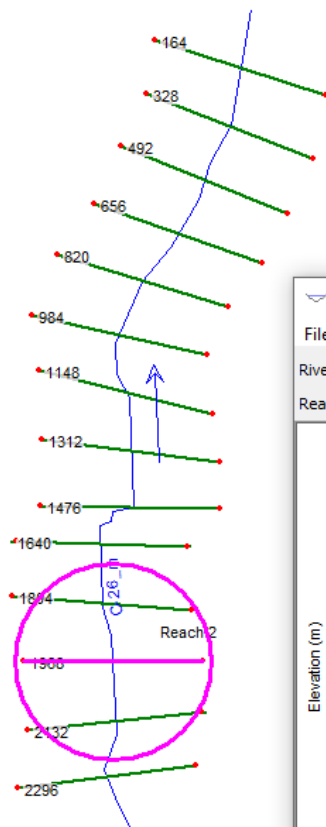


River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	2296	↓	↑
Plan:					
E.G. Elev (m)	710.15	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	710.10	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	710.10	Flow Area (m2)		1.19	
E.G. Slope (m/m)	0.056985	Area (m2)		1.19	
Q Total (m3/s)	1.10	Flow (m3/s)		1.10	
Top Width (m)	14.00	Top Width (m)		14.00	
Vel Total (m/s)	0.92	Avg. Vel. (m/s)		0.92	
Max Chl Dpth (m)	0.15	Hydr. Depth (m)		0.09	
Conv. Total (m3/s)	4.6	Conv. (m3/s)		4.6	
Length Wtd. (m)	50.00	Wetted Per. (m)		14.01	
Min Ch El (m)	709.95	Shear (N/m2)		47.52	
Alpha	1.00	Stream Power (N/m s)		43.87	
Frctn Loss (m)	7.93	Cum Volume (1000 m3)		0.56	
C & E Loss (m)	0.03	Cum SA (1000 m2)		6.20	

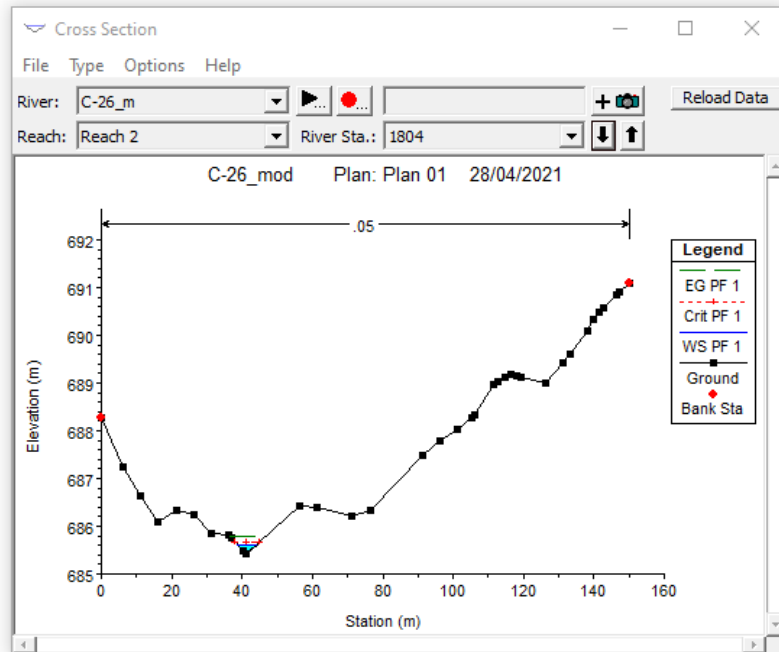
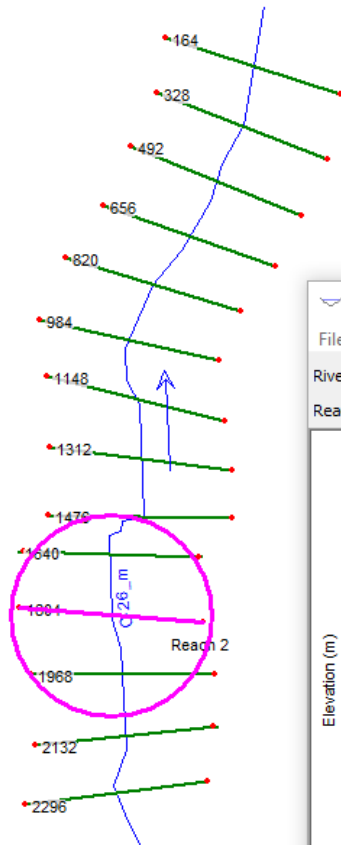


River: Profile:
 Reach: RS: Plan:

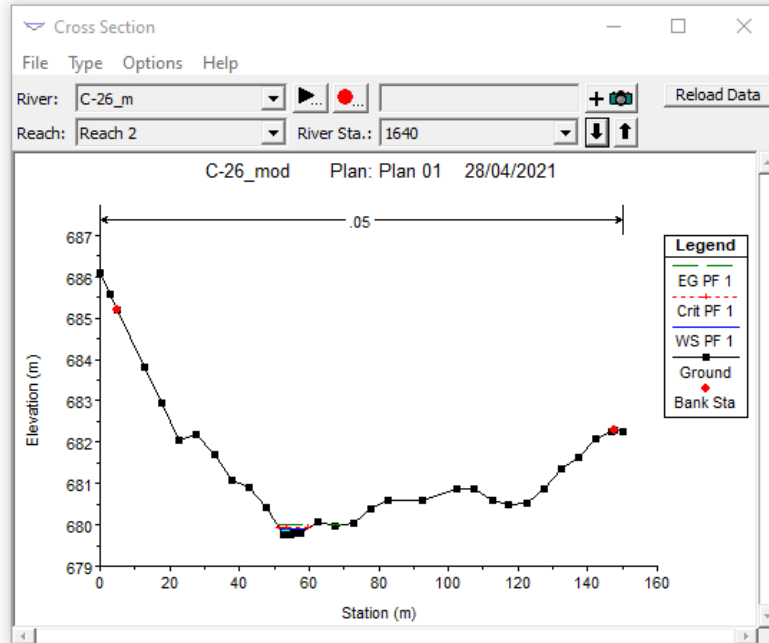
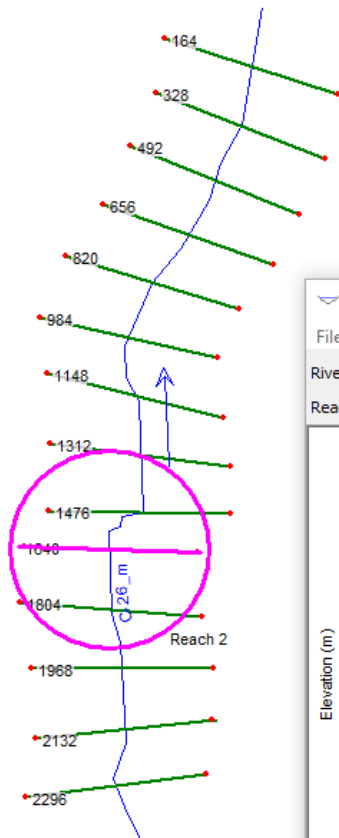
Plan:					
E.G. Elev (m)	702.28	Element	Left OB	Channel	Right OB
Vel Head (m)	0.48	Wt. n-Val.		0.050	
W.S. Elev (m)	701.80	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	701.87	Flow Area (m2)		0.36	
E.G. Slope (m/m)	2.133038	Area (m2)		0.36	
Q Total (m3/s)	1.10	Flow (m3/s)		1.10	
Top Width (m)	10.50	Top Width (m)		10.50	
Vel Total (m/s)	3.07	Avg. Vel. (m/s)		3.07	
Max Chl Dpth (m)	0.06	Hydr. Depth (m)		0.03	
Conv. Total (m3/s)	0.8	Conv. (m3/s)		0.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		10.50	
Min Ch El (m)	701.74	Shear (N/m2)		713.44	
Alpha	1.00	Stream Power (N/m s)		2191.70	
Frctn Loss (m)	11.11	Cum Volume (1000 m3)		0.52	
C & E Loss (m)	0.11	Cum SA (1000 m2)		5.59	



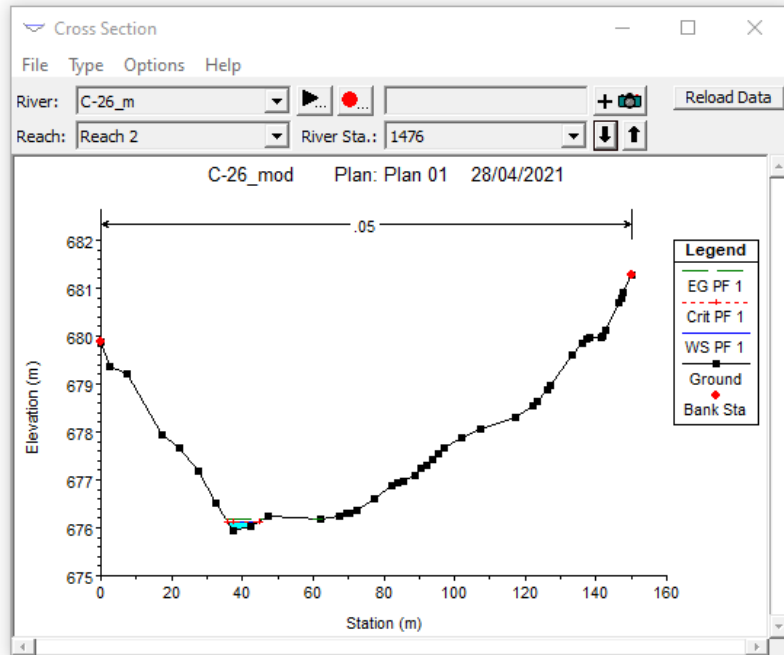
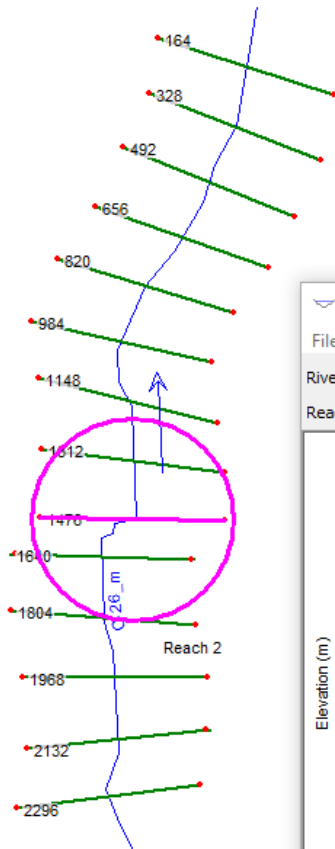
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	1968		Plan:
Plan:					
E.G. Elev (m)	691.06	Element	Left OB	Channel	Right OB
Vel Head (m)	0.10	Wt. n-Val.		0.050	
W.S. Elev (m)	690.96	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	690.98	Flow Area (m2)		0.77	
E.G. Slope (m/m)	0.078971	Area (m2)		0.77	
Q Total (m3/s)	1.10	Flow (m3/s)		1.10	
Top Width (m)	5.84	Top Width (m)		5.84	
Vel Total (m/s)	1.42	Avg. Vel. (m/s)		1.42	
Max Chl Dpth (m)	0.21	Hydr. Depth (m)		0.13	
Conv. Total (m3/s)	3.9	Conv. (m3/s)		3.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		6.05	
Min Ch El (m)	690.75	Shear (N/m2)		98.80	
Alpha	1.00	Stream Power (N/m s)		140.72	
Frctn Loss (m)	5.28	Cum Volume (1000 m3)		0.49	
C & E Loss (m)	0.01	Cum SA (1000 m2)		5.18	



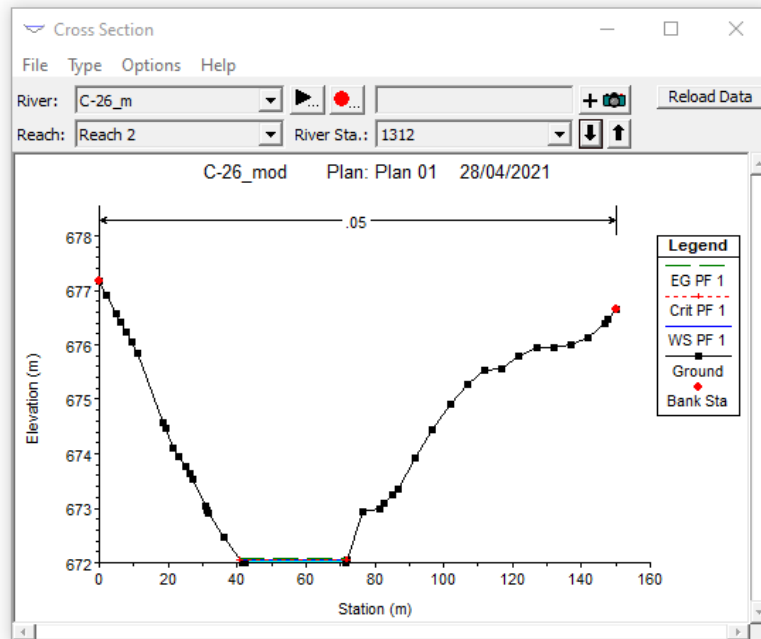
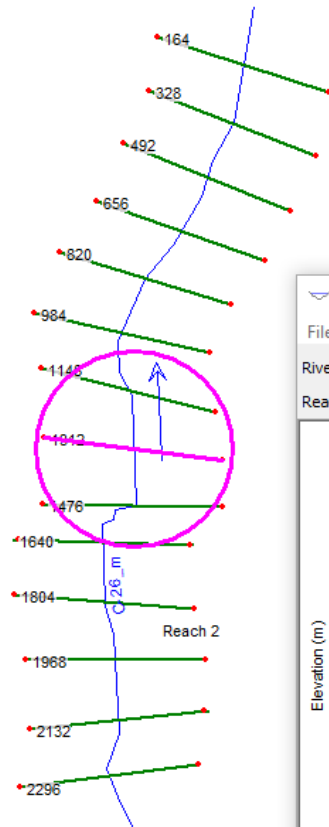
River:	C-26_m	Profile:	PF 1		
Reach	Reach 2	RS:	1804		Plan:
Plan:					
E.G. Elev (m)	685.78	Element	Left OB	Channel	Right OB
Vel Head (m)	0.16	Wt. n-Val.		0.050	
W.S. Elev (m)	685.62	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	685.67	Flow Area (m2)		0.63	
E.G. Slope (m/m)	0.148200	Area (m2)		0.63	
Q Total (m3/s)	1.10	Flow (m3/s)		1.10	
Top Width (m)	5.75	Top Width (m)		5.75	
Vel Total (m/s)	1.75	Avg. Vel. (m/s)		1.75	
Max Chl Dpth (m)	0.21	Hydr. Depth (m)		0.11	
Conv. Total (m3/s)	2.9	Conv. (m3/s)		2.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		5.76	
Min Ch El (m)	685.41	Shear (N/m2)		158.11	
Alpha	1.00	Stream Power (N/m s)		277.43	
Frctn Loss (m)	5.76	Cum Volume (1000 m3)		0.46	
C & E Loss (m)	0.02	Cum SA (1000 m2)		4.89	



River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	1640		Plan:
Plan:					
E.G. Elev (m)	680.00	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	679.91	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	679.93	Flow Area (m2)		0.82	
E.G. Slope (m/m)	0.092015	Area (m2)		0.82	
Q Total (m3/s)	1.10	Flow (m3/s)		1.10	
Top Width (m)	7.91	Top Width (m)		7.91	
Vel Total (m/s)	1.34	Avg. Vel. (m/s)		1.34	
Max Chl Dpth (m)	0.15	Hydr. Depth (m)		0.10	
Conv. Total (m3/s)	3.6	Conv. (m3/s)		3.6	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.93	
Min Ch El (m)	679.76	Shear (N/m2)		93.54	
Alpha	1.00	Stream Power (N/m s)		125.24	
Frctn Loss (m)	3.80	Cum Volume (1000 m3)		0.42	
C & E Loss (m)	0.01	Cum SA (1000 m2)		4.55	



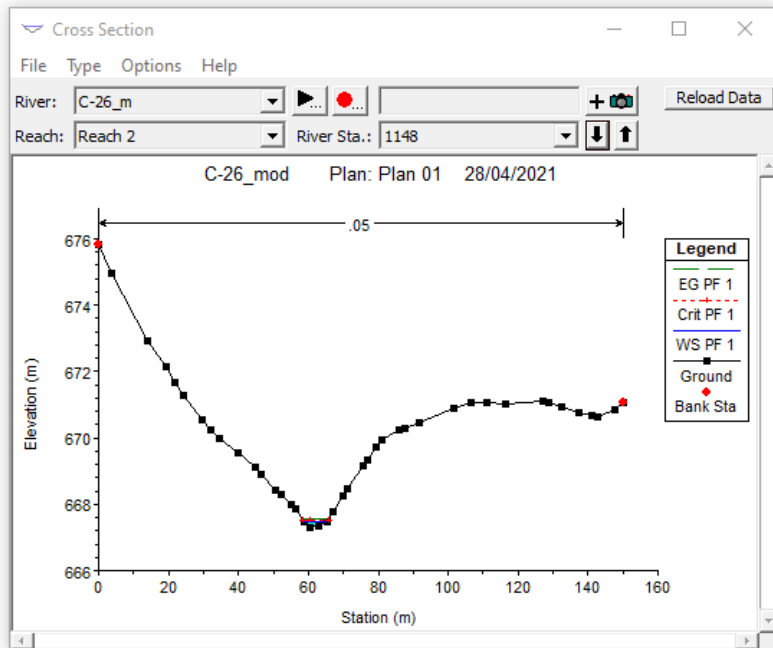
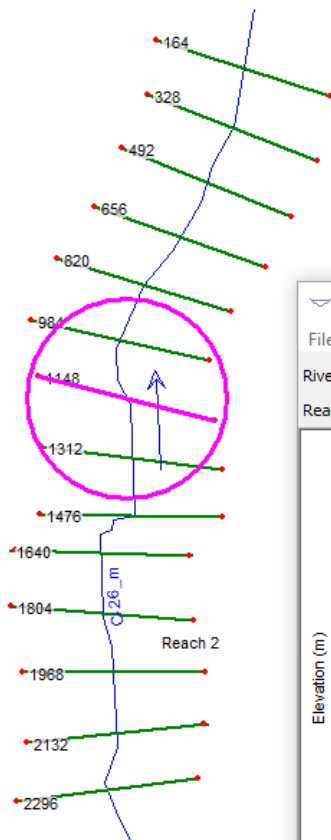
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	1476		Plan:
Plan:					
E.G. Elev (m)	676.19	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	676.12	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	676.13	Flow Area (m2)		0.96	
E.G. Slope (m/m)	0.063903	Area (m2)		0.96	
Q Total (m3/s)	1.10	Flow (m3/s)		1.10	
Top Width (m)	8.81	Top Width (m)		8.81	
Vel Total (m/s)	1.15	Avg. Vel. (m/s)		1.15	
Max Chl Dpth (m)	0.18	Hydr. Depth (m)		0.11	
Conv. Total (m3/s)	4.4	Conv. (m3/s)		4.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		8.82	
Min Ch El (m)	675.94	Shear (N/m2)		67.98	
Alpha	1.00	Stream Power (N/m s)		78.17	
Frctn Loss (m)	4.10	Cum Volume (1000 m3)		0.38	
C & E Loss (m)	0.01	Cum SA (1000 m2)		4.13	



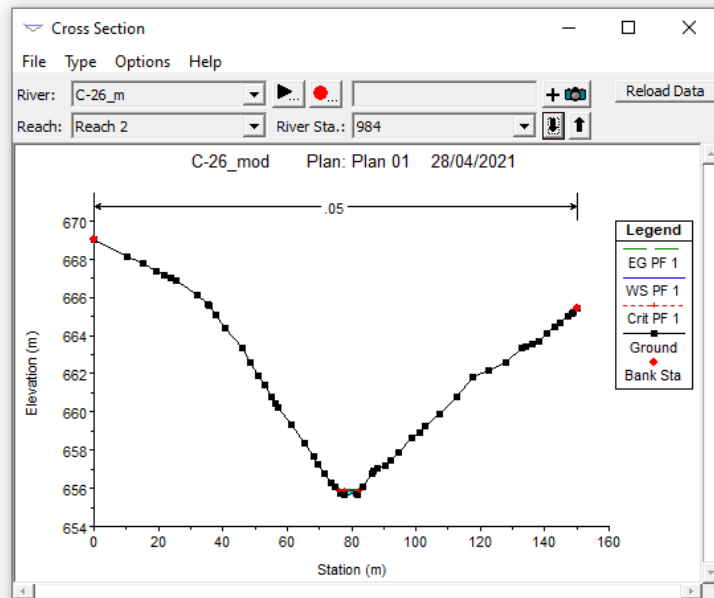
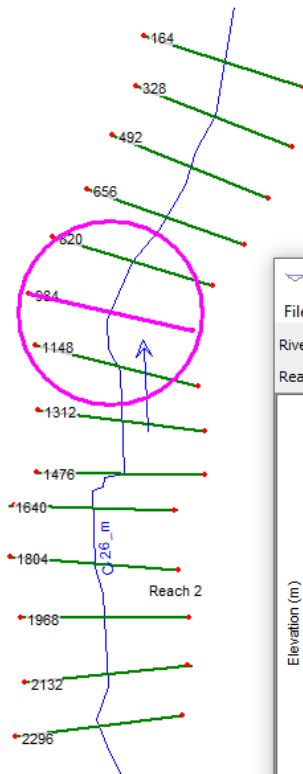
River:
C-26_m
Profile:
PF 1
Reach:
Reach 2
RS:
1312
Plan:

Plan:

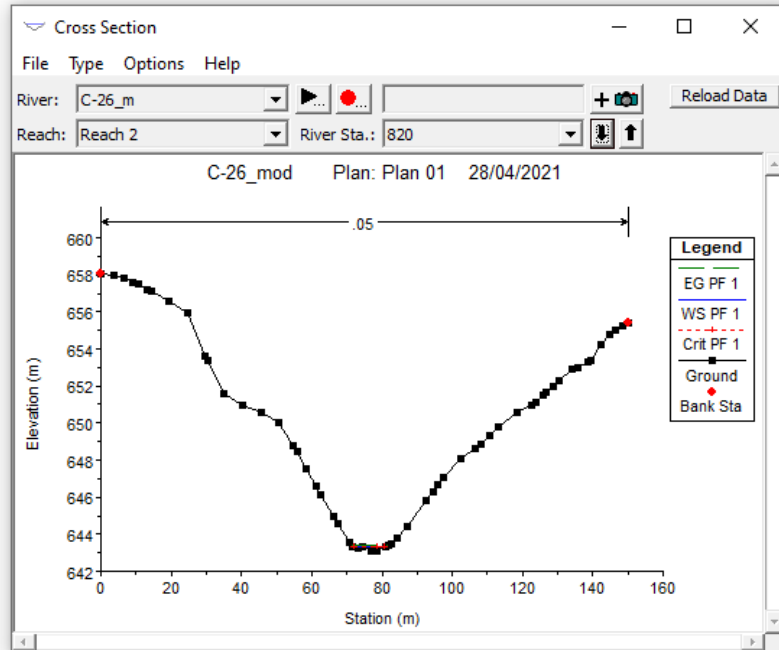
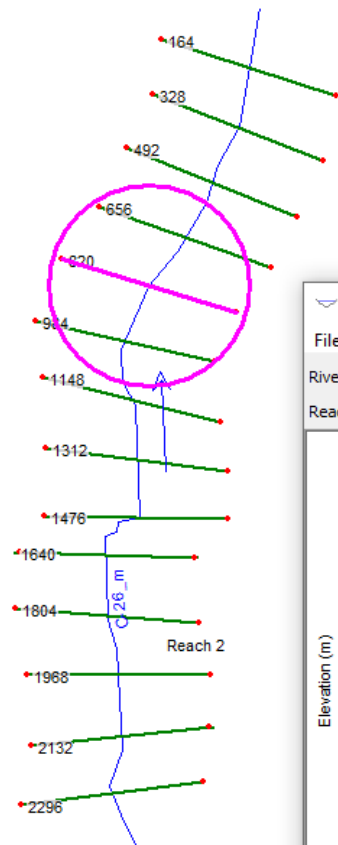
E.G. Elev (m)	672.08	Element	Left OB	Channel	Right OB
Vel Head (m)	0.03	Wt. n-Val.		0.050	
W.S. Elev (m)	672.05	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	672.06	Flow Area (m2)		1.35	
E.G. Slope (m/m)	0.108857	Area (m2)		1.35	
Q Total (m3/s)	1.10	Flow (m3/s)		1.10	
Top Width (m)	30.88	Top Width (m)		30.88	
Vel Total (m/s)	0.82	Avg. Vel. (m/s)		0.82	
Max Chl Dpth (m)	0.05	Hydr. Depth (m)		0.04	
Conv. Total (m3/s)	3.3	Conv. (m3/s)		3.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		30.89	
Min Ch El (m)	672.00	Shear (N/m2)		46.52	
Alpha	1.00	Stream Power (N/m s)		38.02	
Frctn Loss (m)	4.50	Cum Volume (1000 m3)		0.32	
C & E Loss (m)	0.01	Cum SA (1000 m2)		3.14	



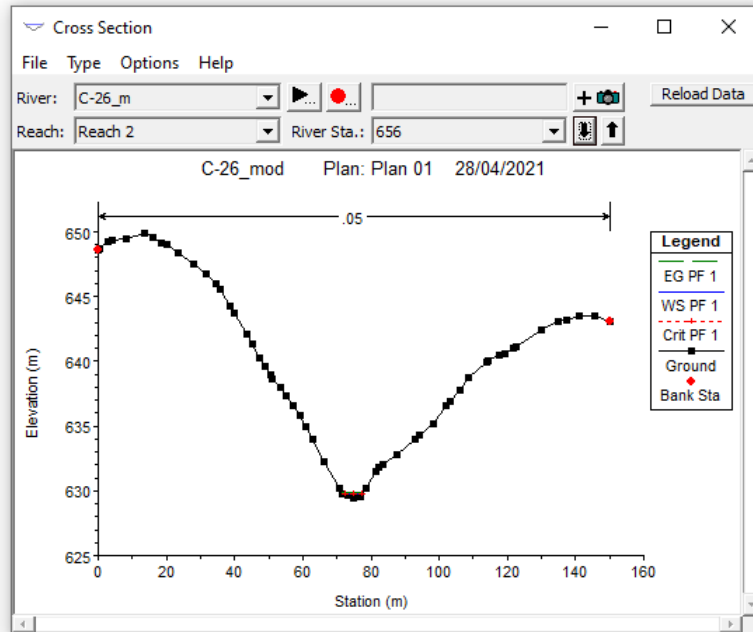
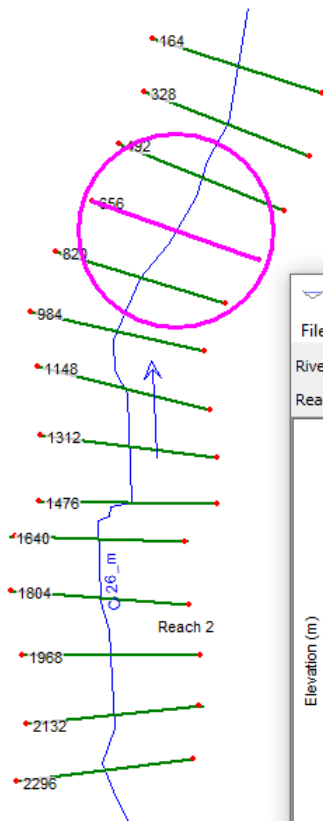
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	1148		Plan:
Plan:					
E.G. Elev (m)	667.58	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	667.49	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	667.50	Flow Area (m2)		0.83	
E.G. Slope (m/m)	0.075625	Area (m2)		0.83	
Q Total (m3/s)	1.10	Flow (m3/s)		1.10	
Top Width (m)	7.00	Top Width (m)		7.00	
Vel Total (m/s)	1.33	Avg. Vel. (m/s)		1.33	
Max Chl Dpth (m)	0.21	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	4.0	Conv. (m3/s)		4.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.02	
Min Ch El (m)	667.28	Shear (N/m2)		87.70	
Alpha	1.00	Stream Power (N/m s)		116.21	
Frctn Loss (m)	2.44	Cum Volume (1000 m3)		0.27	
C & E Loss (m)	0.00	Cum SA (1000 m2)		2.19	



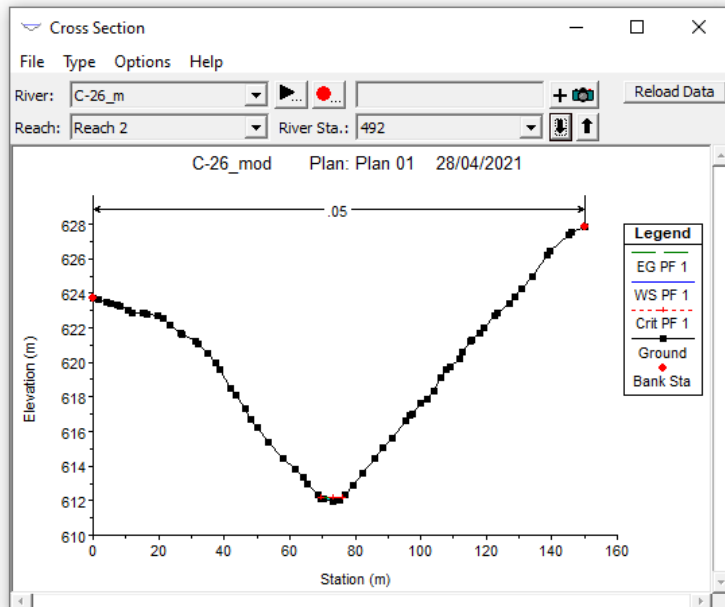
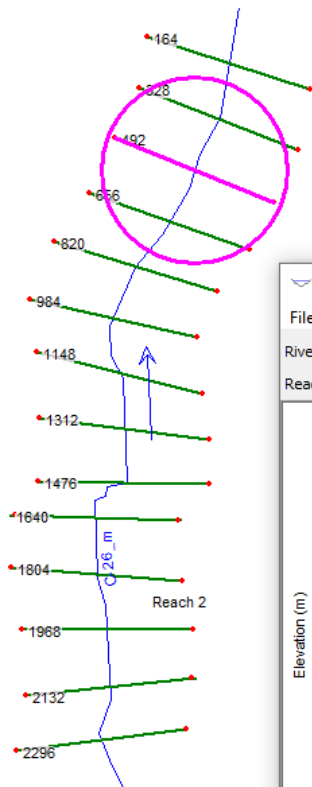
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	984		Plan:
Plan:					
E.G. Elev (m)	655.91	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	655.84	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	655.84	Flow Area (m2)		0.92	
E.G. Slope (m/m)	0.047368	Area (m2)		0.92	
Q Total (m3/s)	1.10	Flow (m3/s)		1.10	
Top Width (m)	6.27	Top Width (m)		6.27	
Vel Total (m/s)	1.20	Avg. Vel. (m/s)		1.20	
Max Chl Dpth (m)	0.21	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	5.1	Conv. (m3/s)		5.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		6.31	
Min Ch El (m)	655.63	Shear (N/m2)		67.40	
Alpha	1.00	Stream Power (N/m s)		81.01	
Frctn Loss (m)	2.45	Cum Volume (1000 m3)		0.22	
C & E Loss (m)	0.00	Cum SA (1000 m2)		1.86	



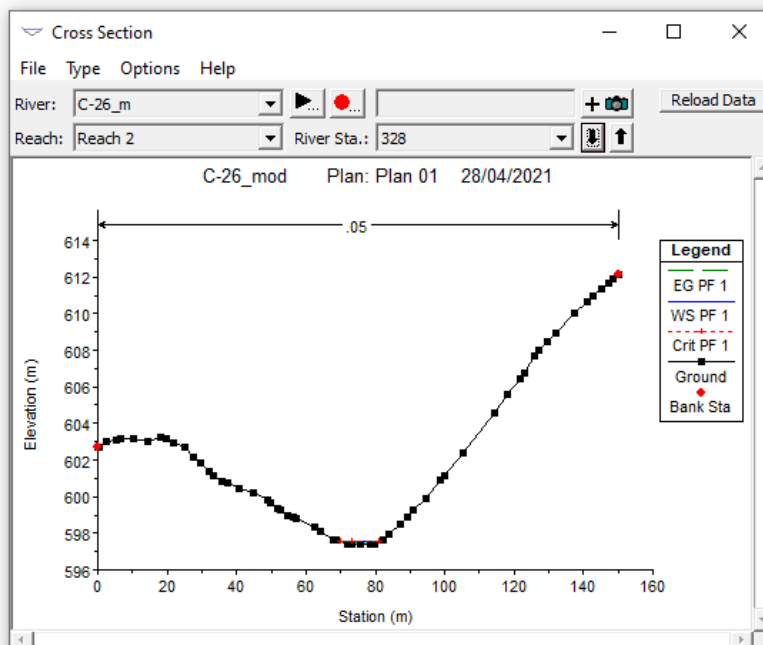
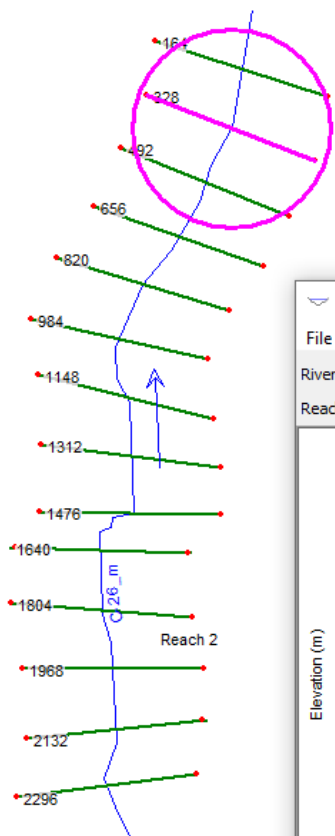
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	820		Plan:
Plan:					
E.G. Elev (m)	643.38	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	643.32	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	643.32	Flow Area (m2)		1.03	
E.G. Slope (m/m)	0.050580	Area (m2)		1.03	
Q Total (m3/s)	1.10	Flow (m3/s)		1.10	
Top Width (m)	8.98	Top Width (m)		8.98	
Vel Total (m/s)	1.06	Avg. Vel. (m/s)		1.06	
Max Chl Dpth (m)	0.24	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	4.9	Conv. (m3/s)		4.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		9.01	
Min Ch El (m)	643.08	Shear (N/m2)		56.98	
Alpha	1.00	Stream Power (N/m s)		60.57	
Frctn Loss (m)	2.41	Cum Volume (1000 m3)		0.17	
C & E Loss (m)	0.00	Cum SA (1000 m2)		1.48	



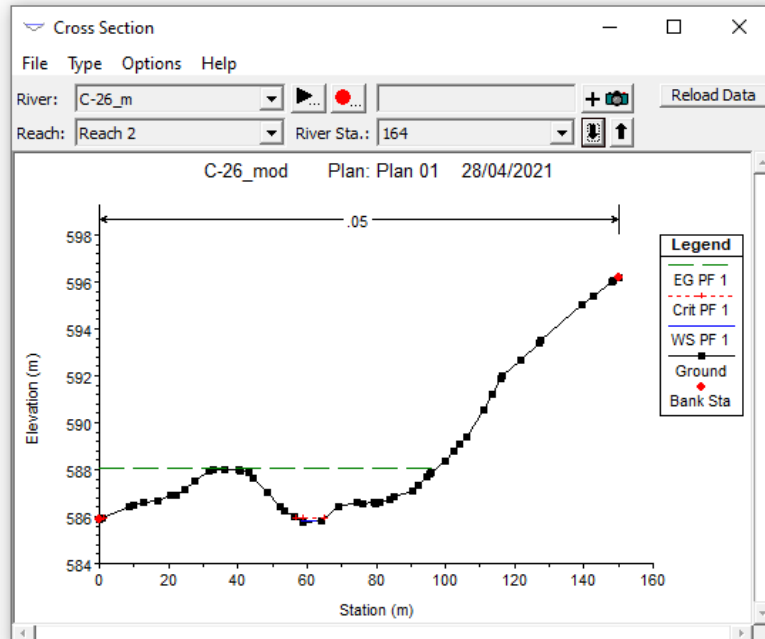
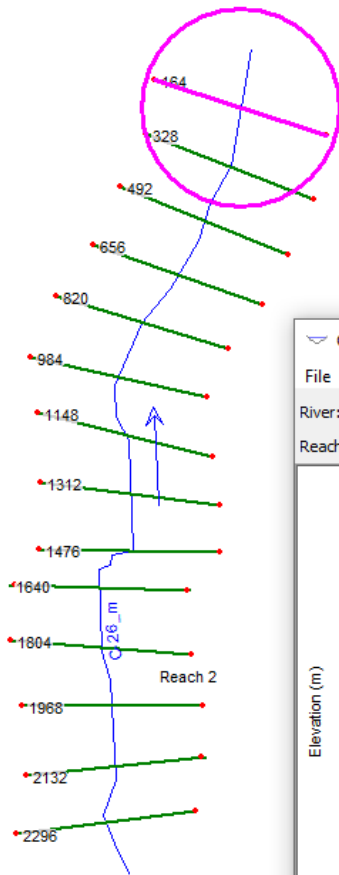
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	656		Plan:
Plan:					
E.G. Elev (m)	629.82	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	629.73	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	629.73	Flow Area (m2)		0.85	
E.G. Slope (m/m)	0.045963	Area (m2)		0.85	
Q Total (m3/s)	1.10	Flow (m3/s)		1.10	
Top Width (m)	5.08	Top Width (m)		5.08	
Vel Total (m/s)	1.29	Avg. Vel. (m/s)		1.29	
Max Chl Dpth (m)	0.28	Hydr. Depth (m)		0.17	
Conv. Total (m3/s)	5.1	Conv. (m3/s)		5.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		5.14	
Min Ch El (m)	629.45	Shear (N/m2)		74.60	
Alpha	1.00	Stream Power (N/m s)		96.42	
Frctn Loss (m)	2.35	Cum Volume (1000 m3)		0.13	
C & E Loss (m)	0.00	Cum SA (1000 m2)		1.12	



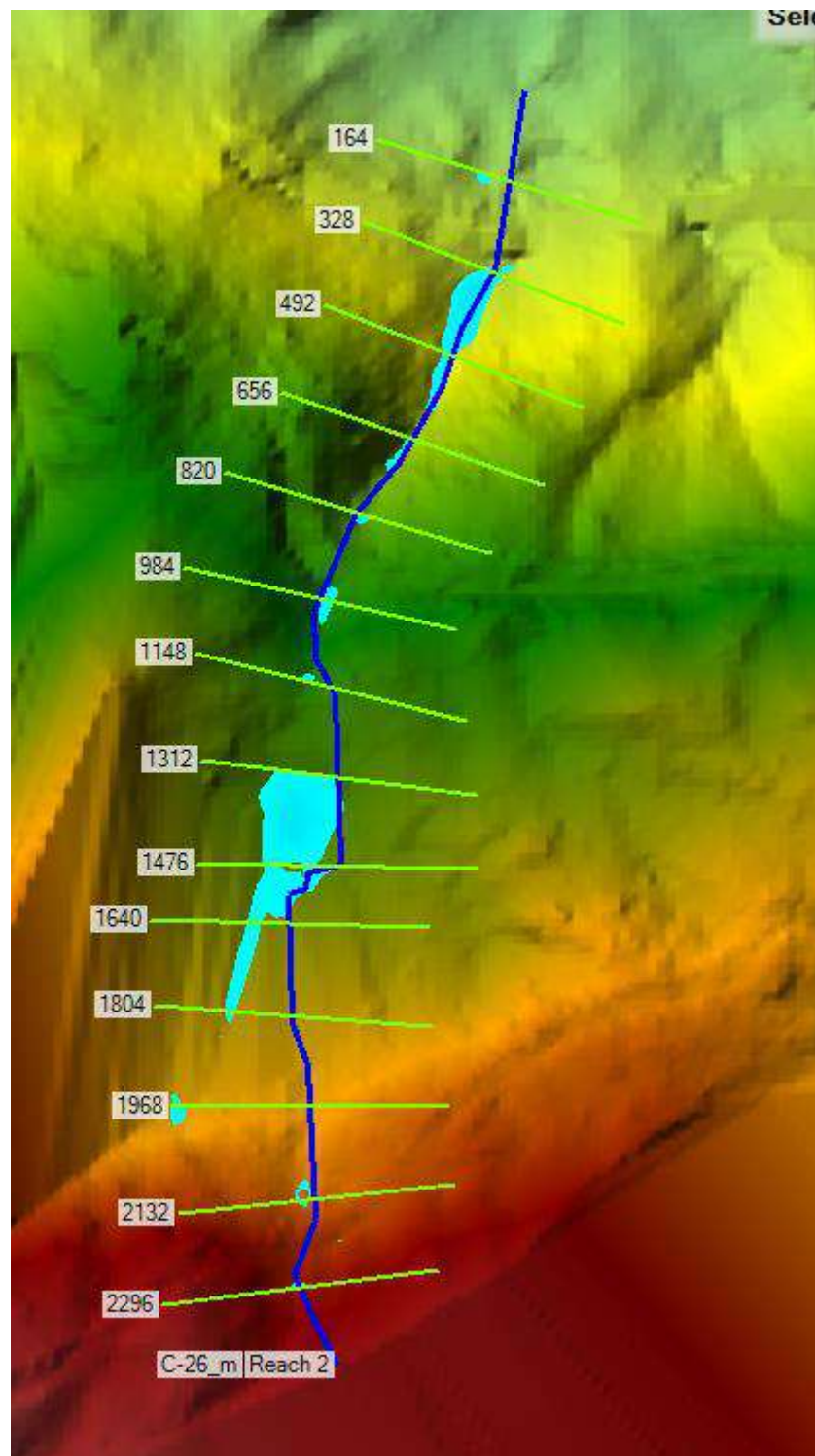
River:	C-26_m	Profile:	PF 1		
Reach	Reach 2	RS:	492	Plan:	
Plan:					
E.G. Elev (m)	612.22	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	612.15	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	612.15	Flow Area (m2)		0.93	
E.G. Slope (m/m)	0.048184	Area (m2)		0.93	
Q Total (m3/s)	1.10	Flow (m3/s)		1.10	
Top Width (m)	6.56	Top Width (m)		6.56	
Vel Total (m/s)	1.19	Avg. Vel. (m/s)		1.19	
Max Chl Dpth (m)	0.23	Hydr. Depth (m)		0.14	
Conv. Total (m3/s)	5.0	Conv. (m3/s)		5.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		6.59	
Min Ch El (m)	611.92	Shear (N/m2)		66.45	
Alpha	1.00	Stream Power (N/m s)		78.89	
Frctn Loss (m)	2.54	Cum Volume (1000 m3)		0.08	
C & E Loss (m)	0.01	Cum SA (1000 m2)		0.83	



River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	328		Plan:
Plan:					
E.G. Elev (m)	597.58	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	597.53	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	597.53	Flow Area (m2)		1.10	
E.G. Slope (m/m)	0.053647	Area (m2)		1.10	
Q Total (m3/s)	1.10	Flow (m3/s)		1.10	
Top Width (m)	11.01	Top Width (m)		11.01	
Vel Total (m/s)	1.00	Avg. Vel. (m/s)		1.00	
Max Chl Dpth (m)	0.15	Hydr. Depth (m)		0.10	
Conv. Total (m3/s)	4.7	Conv. (m3/s)		4.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		11.02	
Min Ch El (m)	597.38	Shear (N/m2)		52.60	
Alpha	1.00	Stream Power (N/m s)		52.50	
Frctn Loss (m)	9.29	Cum Volume (1000 m3)		0.03	
C & E Loss (m)	0.22	Cum SA (1000 m2)		0.39	

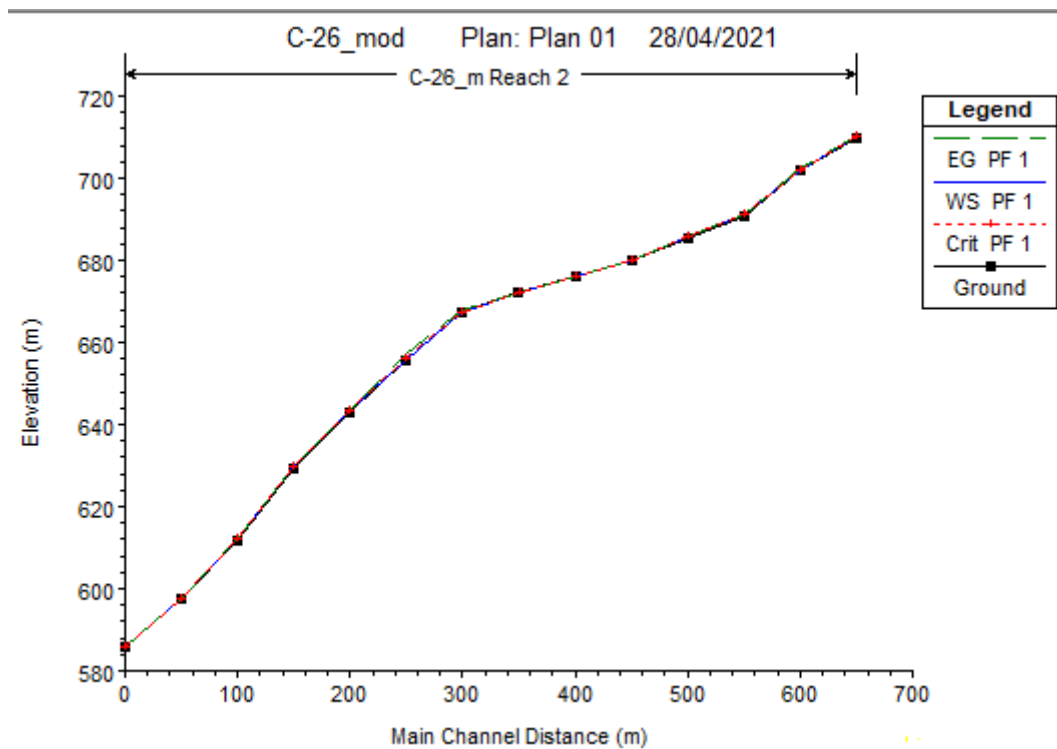


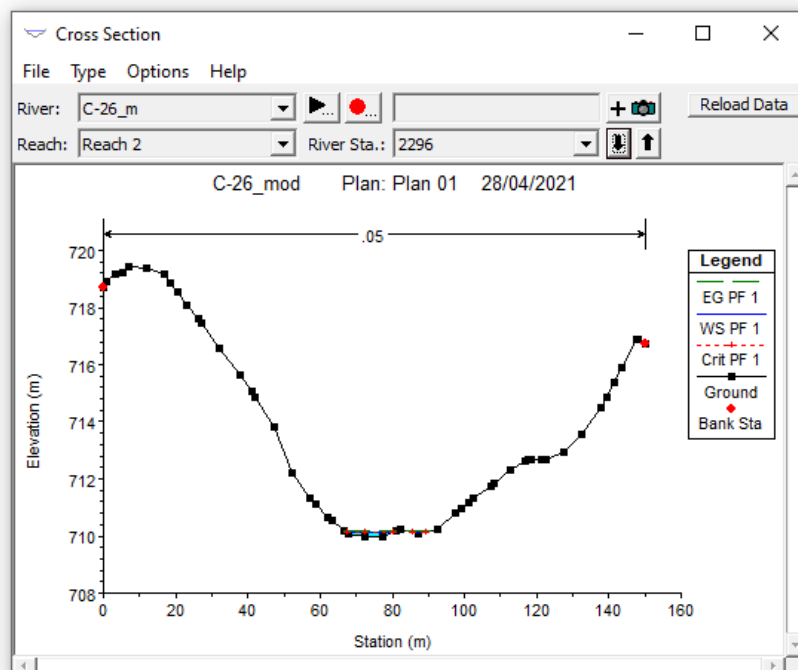
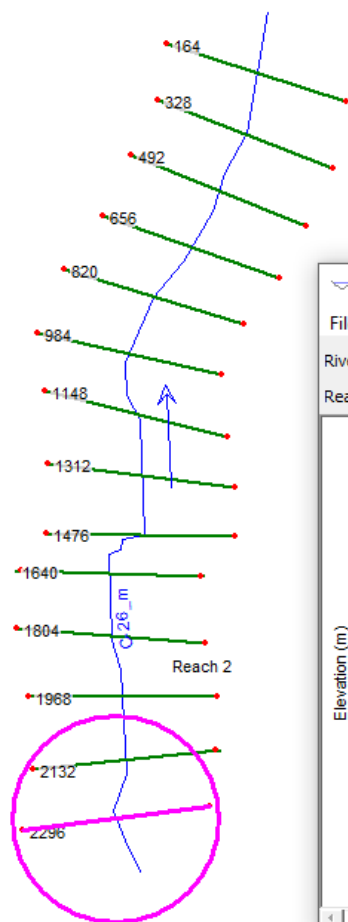
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	164		Plan:
Plan:					
E.G. Elev (m)	588.07	Element	Left OB	Channel	Right OB
Vel Head (m)	2.25	Wt. n-Val.		0.050	
W.S. Elev (m)	585.82	Reach Len. (m)			
Crit W.S. (m)	585.94	Flow Area (m2)		0.17	
E.G. Slope (m/m)	9.671677	Area (m2)		0.17	
Q Total (m3/s)	1.10	Flow (m3/s)		1.10	
Top Width (m)	4.74	Top Width (m)		4.74	
Vel Total (m/s)	6.64	Avg. Vel. (m/s)		6.64	
Max Chl Dpth (m)	0.07	Hydr. Depth (m)		0.03	
Conv. Total (m3/s)	0.4	Conv. (m3/s)		0.4	
Length Wtd. (m)		Wetted Per. (m)		4.74	
Min Ch El (m)	585.75	Shear (N/m2)		3310.79	
Alpha	1.00	Stream Power (N/m s)		21994.95	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			



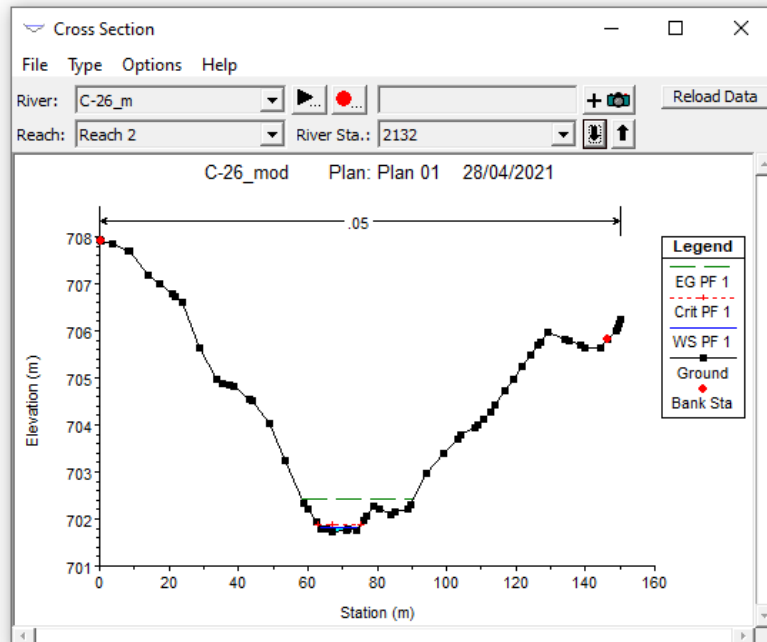
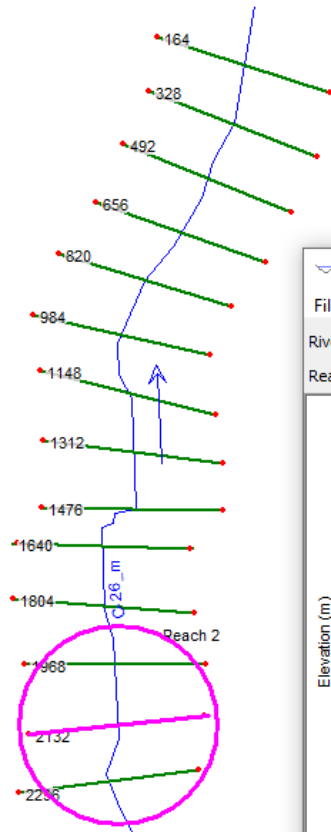
T500 (Q=1.45 m³/s)

HEC-RAS Plan:												
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Reach 2	2296	PF 1	1.45	709.95	710.12	710.12	710.17	0.054283	0.95	1.52	16.38	1.00
Reach 2	2132	PF 1	1.45	701.74	701.81	701.89	702.41	2.207321	3.45	0.42	10.61	5.54
Reach 2	1968	PF 1	1.45	690.75	690.99	691.01	691.11	0.078885	1.53	0.95	6.41	1.27
Reach 2	1804	PF 1	1.45	685.41	685.64	685.70	685.82	0.148416	1.88	0.77	6.36	1.73
Reach 2	1640	PF 1	1.45	679.76	679.93	679.96	680.04	0.092182	1.46	0.99	8.43	1.36
Reach 2	1476	PF 1	1.45	675.94	676.14	676.16	676.22	0.063856	1.24	1.17	9.52	1.14
Reach 2	1312	PF 1	1.45	672.00	672.05	672.07	672.10	0.145049	0.99	1.46	30.94	1.46
Reach 2	1148	PF 1	1.45	667.28	667.52	667.53	667.62	0.060873	1.36	1.07	7.37	1.14
Reach 2	984	PF 1	1.45	655.63	655.72	655.87	657.29	4.219637	5.55	0.26	5.26	7.95
Reach 2	820	PF 1	1.45	643.08	643.33	643.35	643.42	0.078266	1.34	1.08	9.18	1.25
Reach 2	656	PF 1	1.45	629.45	629.77	629.77	629.87	0.044365	1.35	1.07	5.81	1.01
Reach 2	492	PF 1	1.45	611.92	612.18	612.18	612.26	0.045905	1.28	1.13	6.84	1.01
Reach 2	328	PF 1	1.45	597.38	597.55	597.55	597.61	0.051608	1.08	1.34	11.61	1.01
Reach 2	164	PF 1	1.45	585.75	585.97	585.97	586.03	0.050241	1.13	1.28	10.07	1.01

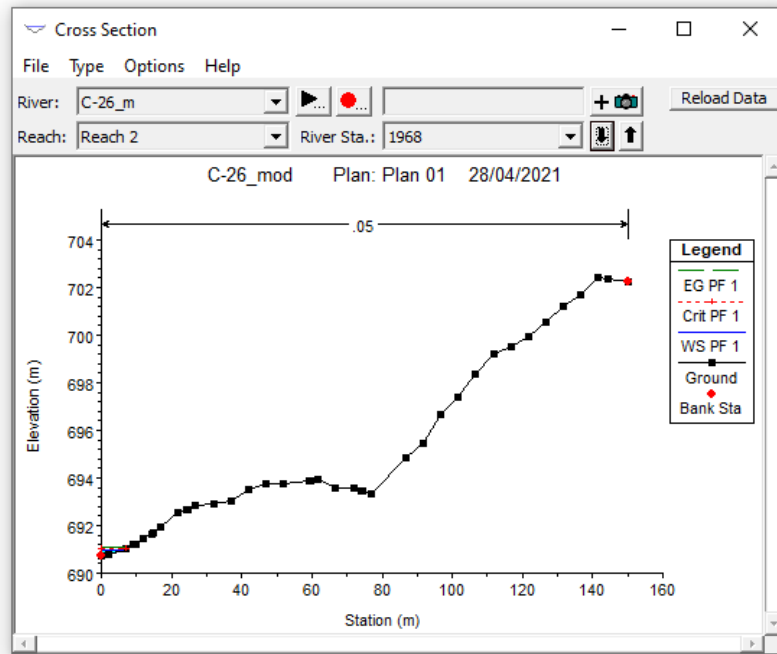
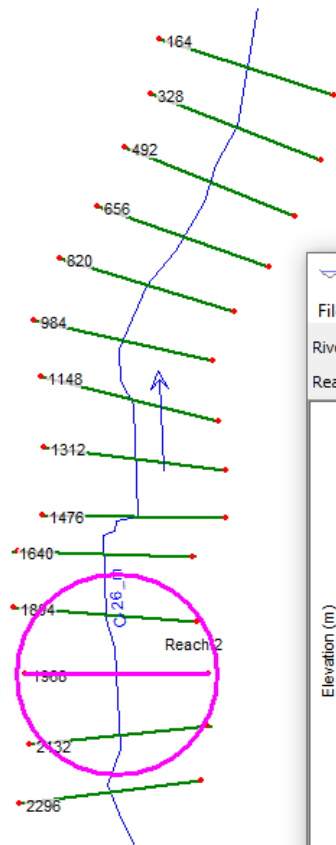




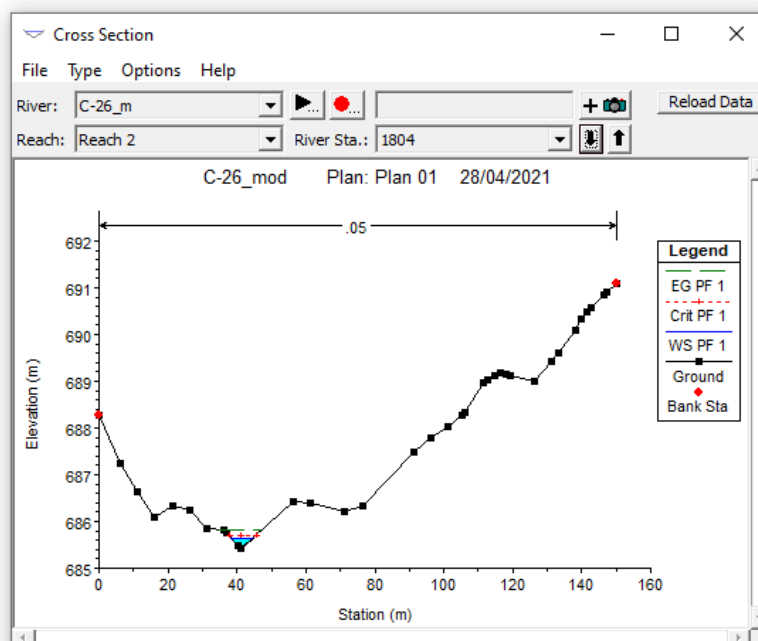
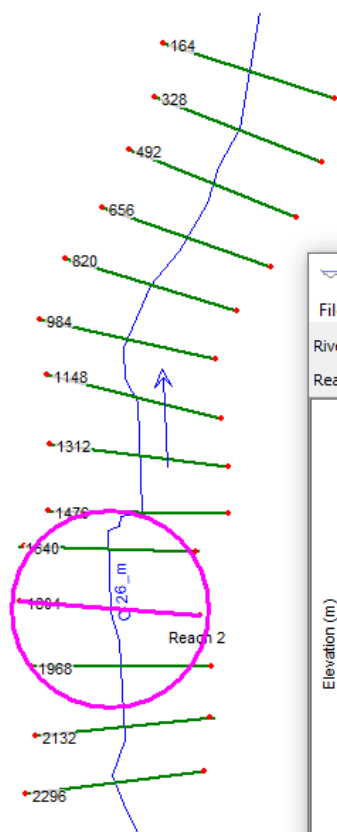
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	2296		Plan:
Plan:					
E.G. Elev (m)	710.17	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	710.12	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	710.12	Flow Area (m2)		1.52	
E.G. Slope (m/m)	0.054283	Area (m2)		1.52	
Q Total (m3/s)	1.45	Flow (m3/s)		1.45	
Top Width (m)	16.38	Top Width (m)		16.38	
Vel Total (m/s)	0.95	Avg. Vel. (m/s)		0.95	
Max Chl Dpth (m)	0.17	Hydr. Depth (m)		0.09	
Conv. Total (m3/s)	6.2	Conv. (m3/s)		6.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		16.39	
Min Ch El (m)	709.95	Shear (N/m2)		49.34	
Alpha	1.00	Stream Power (N/m s)		47.09	
Frctn Loss (m)	7.81	Cum Volume (1000 m3)		0.66	
C & E Loss (m)	0.05	Cum SA (1000 m2)		6.58	



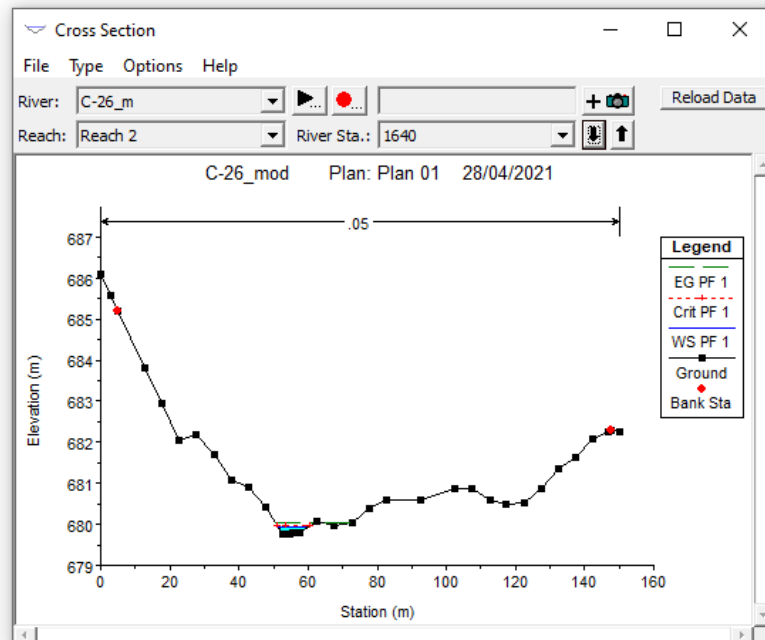
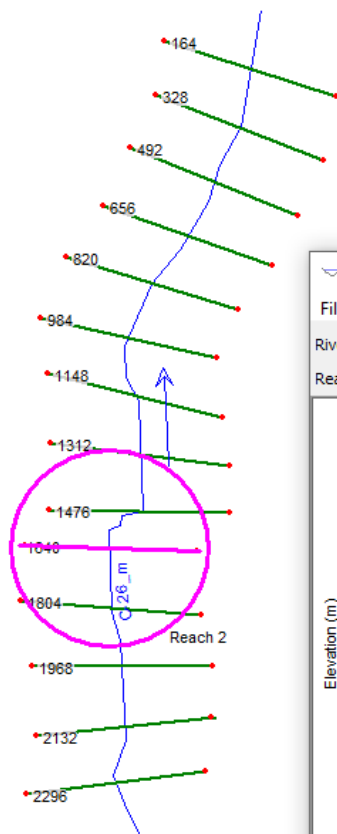
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	2132		Plan:
Plan:					
E.G. Elev (m)	702.41	Element	Left OB	Channel	Right OB
Vel Head (m)	0.61	Wt. n-Val.		0.050	
W.S. Elev (m)	701.81	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	701.89	Flow Area (m2)		0.42	
E.G. Slope (m/m)	2.207321	Area (m2)		0.42	
Q Total (m3/s)	1.45	Flow (m3/s)		1.45	
Top Width (m)	10.61	Top Width (m)		10.61	
Vel Total (m/s)	3.45	Avg. Vel. (m/s)		3.45	
Max Chl Dpth (m)	0.06	Hydr. Depth (m)		0.04	
Conv. Total (m3/s)	1.0	Conv. (m3/s)		1.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		10.61	
Min Ch El (m)	701.74	Shear (N/m2)		856.96	
Alpha	1.00	Stream Power (N/m s)		2957.84	
Frctn Loss (m)	11.16	Cum Volume (1000 m3)		0.61	
C & E Loss (m)	0.15	Cum SA (1000 m2)		5.90	



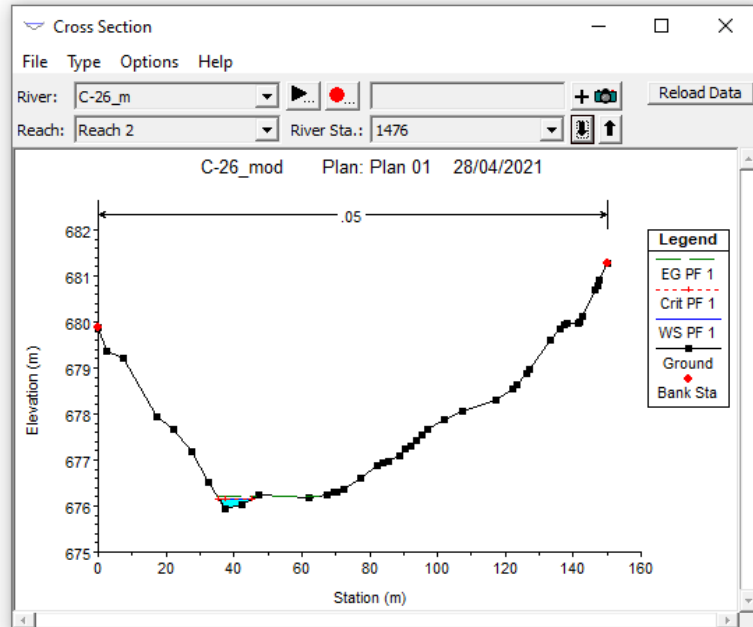
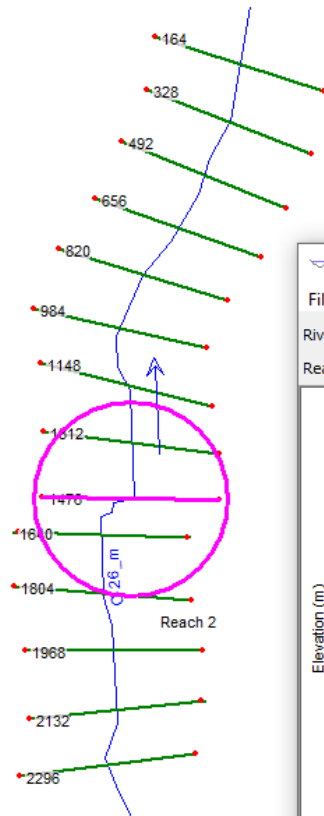
River:	C-26_m	Profile:	PF 1		
Reach	Reach 2	RS:	1968		Plan:
Plan:					
E.G. Elev (m)	691.11	Element	Left OB	Channel	Right OB
Vel Head (m)	0.12	Wt. n-Val.		0.050	
W.S. Elev (m)	690.99	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	691.01	Flow Area (m2)		0.95	
E.G. Slope (m/m)	0.078885	Area (m2)		0.95	
Q Total (m3/s)	1.45	Flow (m3/s)		1.45	
Top Width (m)	6.41	Top Width (m)		6.41	
Vel Total (m/s)	1.53	Avg. Vel. (m/s)		1.53	
Max Chl Dpth (m)	0.24	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	5.2	Conv. (m3/s)		5.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		6.65	
Min Ch El (m)	690.75	Shear (N/m2)		110.10	
Alpha	1.00	Stream Power (N/m s)		168.60	
Frctn Loss (m)	5.28	Cum Volume (1000 m3)		0.57	
C & E Loss (m)	0.01	Cum SA (1000 m2)		5.48	



River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	1804		Plan:
Plan:					
E.G. Elev (m)	685.82	Element	Left OB	Channel	Right OB
Vel Head (m)	0.18	Wt. n-Val.		0.050	
W.S. Elev (m)	685.64	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	685.70	Flow Area (m2)		0.77	
E.G. Slope (m/m)	0.148416	Area (m2)		0.77	
Q Total (m3/s)	1.45	Flow (m3/s)		1.45	
Top Width (m)	6.36	Top Width (m)		6.36	
Vel Total (m/s)	1.88	Avg. Vel. (m/s)		1.88	
Max Chl Dpth (m)	0.23	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	3.8	Conv. (m3/s)		3.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		6.38	
Min Ch El (m)	685.41	Shear (N/m2)		175.81	
Alpha	1.00	Stream Power (N/m s)		331.01	
Frctn Loss (m)	5.77	Cum Volume (1000 m3)		0.53	
C & E Loss (m)	0.02	Cum SA (1000 m2)		5.16	

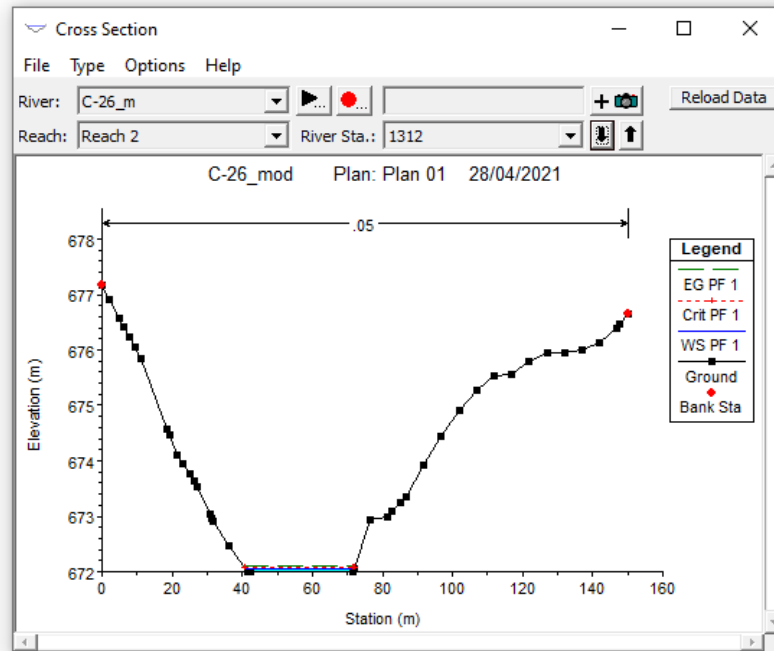
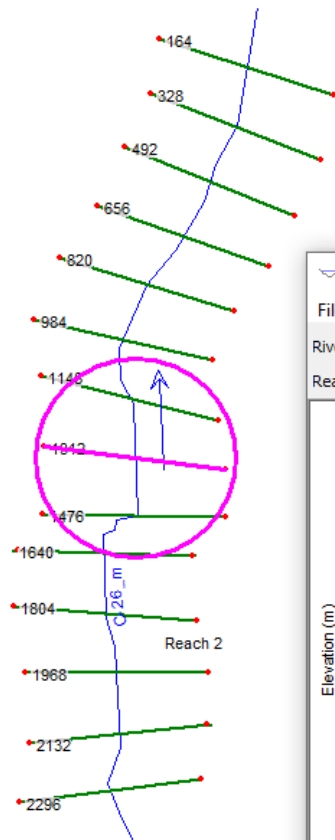


River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	1640		Plan:
Plan:					
E.G. Elev (m)	680.04	Element	Left OB	Channel	Right OB
Vel Head (m)	0.11	Wt. n-Val.		0.050	
W.S. Elev (m)	679.93	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	679.96	Flow Area (m2)		0.99	
E.G. Slope (m/m)	0.092182	Area (m2)		0.99	
Q Total (m3/s)	1.45	Flow (m3/s)		1.45	
Top Width (m)	8.43	Top Width (m)		8.43	
Vel Total (m/s)	1.46	Avg. Vel. (m/s)		1.46	
Max Chl Dpth (m)	0.17	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	4.8	Conv. (m3/s)		4.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		8.45	
Min Ch El (m)	679.76	Shear (N/m2)		106.38	
Alpha	1.00	Stream Power (N/m s)		155.13	
Frctn Loss (m)	3.80	Cum Volume (1000 m3)		0.49	
C & E Loss (m)	0.01	Cum SA (1000 m2)		4.79	

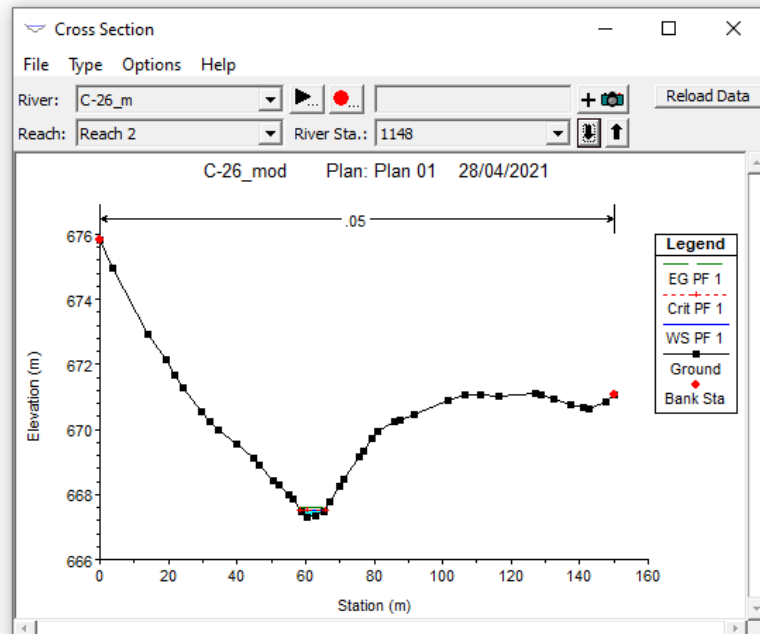
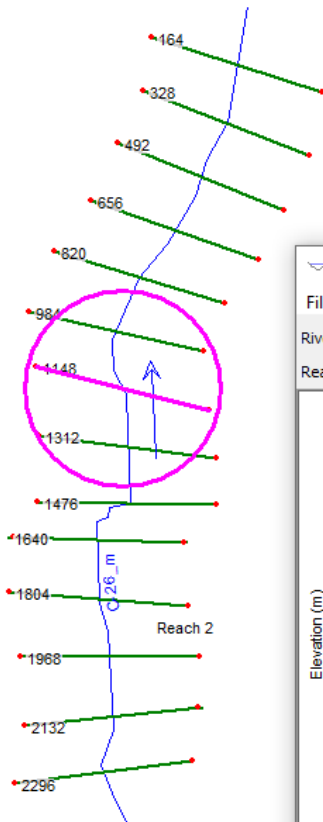


River: C-26_m Profile: PF 1
 Reach: Reach 2 RS: 1476 Plan:

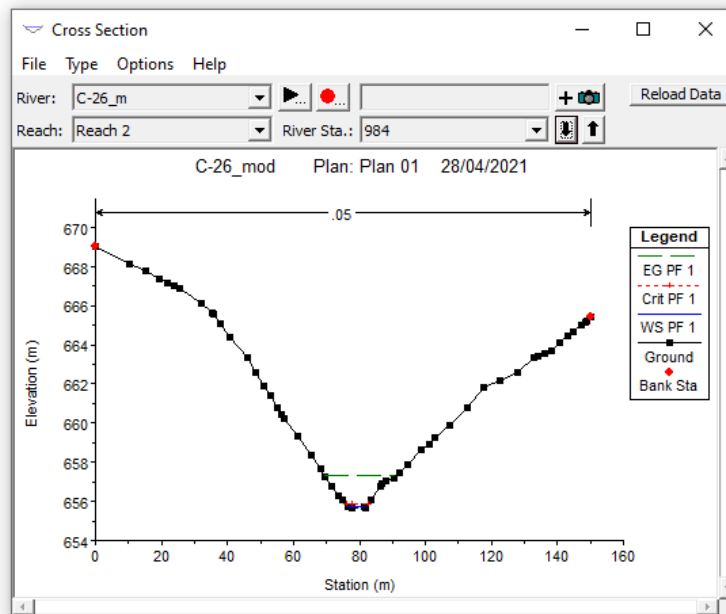
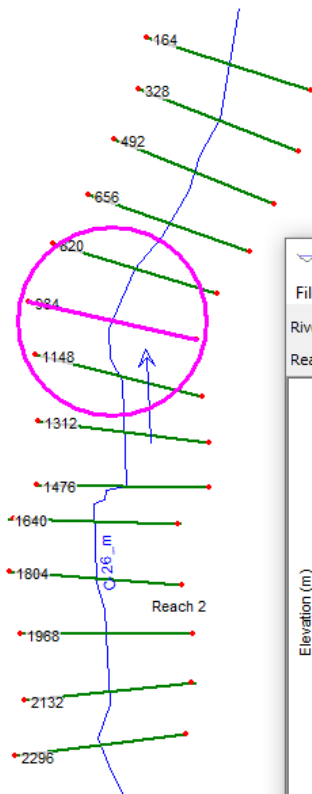
Plan:					
E.G. Elev (m)	676.22	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	676.14	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	676.16	Flow Area (m2)		1.17	
E.G. Slope (m/m)	0.063856	Area (m2)		1.17	
Q Total (m3/s)	1.45	Flow (m3/s)		1.45	
Top Width (m)	9.52	Top Width (m)		9.52	
Vel Total (m/s)	1.24	Avg. Vel. (m/s)		1.24	
Max Chl Dpth (m)	0.20	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	5.7	Conv. (m3/s)		5.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		9.54	
Min Ch El (m)	675.94	Shear (N/m2)		76.51	
Alpha	1.00	Stream Power (N/m s)		95.21	
Frctn Loss (m)	4.12	Cum Volume (1000 m3)		0.43	
C & E Loss (m)	0.01	Cum SA (1000 m2)		4.34	



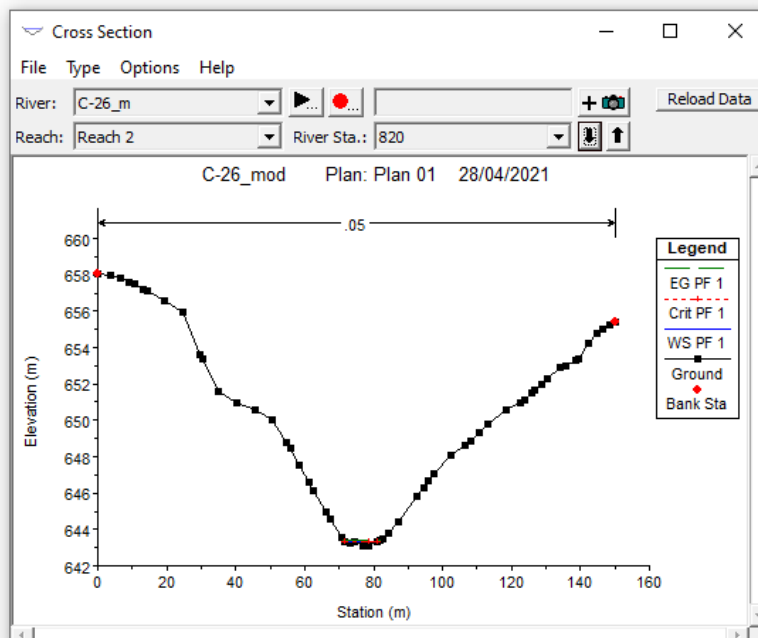
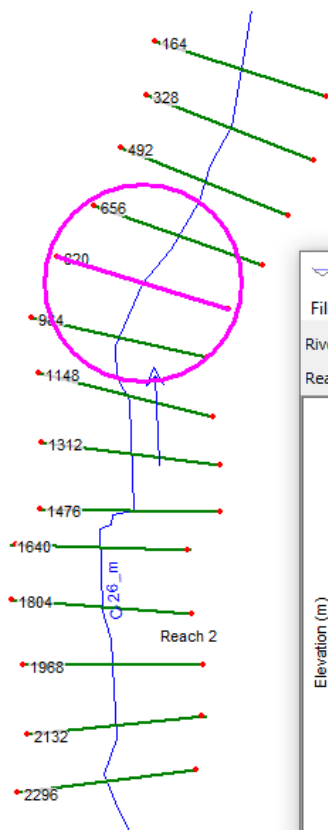
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	1312		Plan:
Plan:					
E.G. Elev (m)	672.10	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	672.05	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	672.07	Flow Area (m2)		1.46	
E.G. Slope (m/m)	0.145049	Area (m2)		1.46	
Q Total (m3/s)	1.45	Flow (m3/s)		1.45	
Top Width (m)	30.94	Top Width (m)		30.94	
Vel Total (m/s)	0.99	Avg. Vel. (m/s)		0.99	
Max Chl Dpth (m)	0.05	Hydr. Depth (m)		0.05	
Conv. Total (m3/s)	3.8	Conv. (m3/s)		3.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		30.95	
Min Ch El (m)	672.00	Shear (N/m2)		67.05	
Alpha	1.00	Stream Power (N/m s)		66.65	
Frctn Loss (m)	4.48	Cum Volume (1000 m3)		0.37	
C & E Loss (m)	0.00	Cum SA (1000 m2)		3.33	



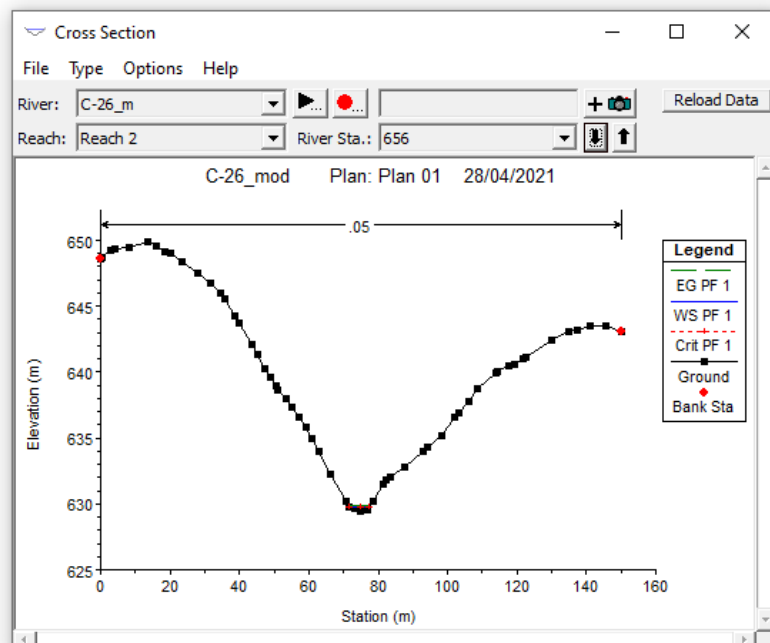
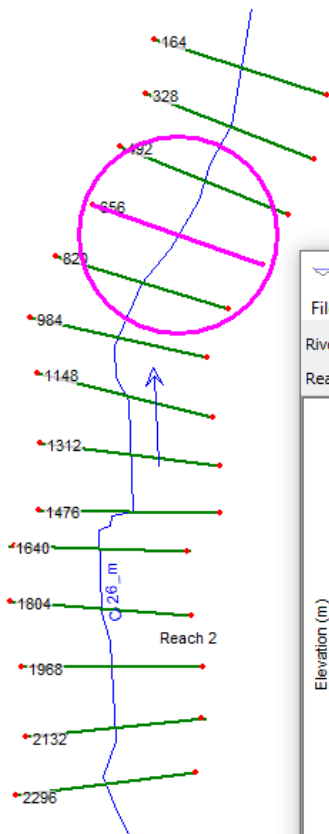
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	1148		Plan:
Plan:					
E.G. Elev (m)		Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	667.52	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	667.53	Flow Area (m2)		1.07	
E.G. Slope (m/m)	0.060873	Area (m2)		1.07	
Q Total (m3/s)	1.45	Flow (m3/s)		1.45	
Top Width (m)	7.37	Top Width (m)		7.37	
Vel Total (m/s)	1.36	Avg. Vel. (m/s)		1.36	
Max Chl Dpth (m)	0.24	Hydr. Depth (m)		0.14	
Conv. Total (m3/s)	5.9	Conv. (m3/s)		5.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.39	
Min Ch El (m)	667.28	Shear (N/m2)		86.21	
Alpha	1.00	Stream Power (N/m s)		117.09	
Frctn Loss (m)	9.92	Cum Volume (1000 m3)		0.30	
C & E Loss (m)	0.17	Cum SA (1000 m2)		2.37	



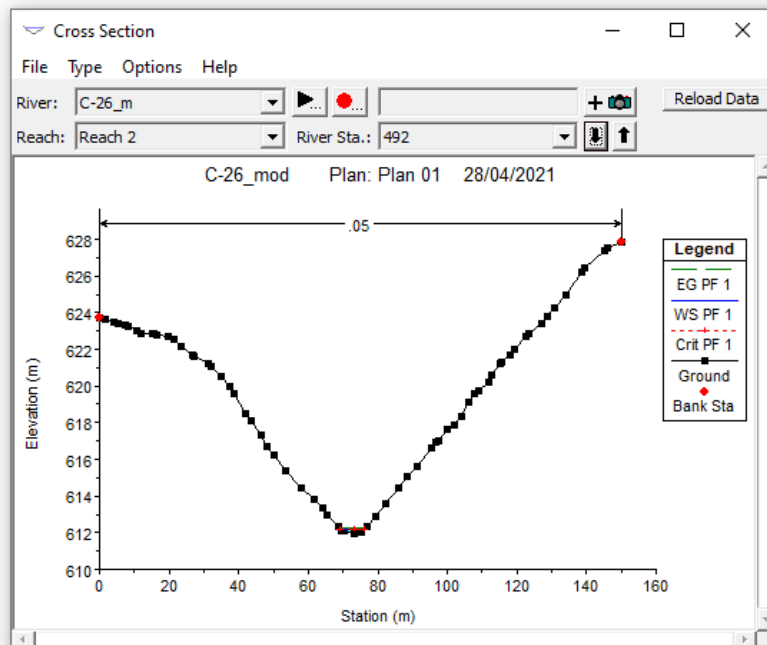
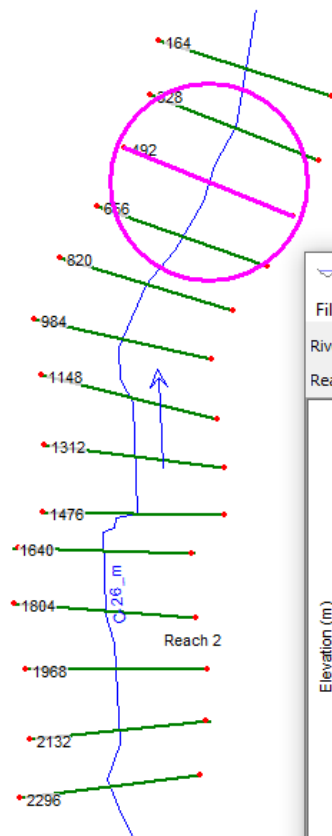
River:	C-26_m	Profile:	PF 1		
Reach	Reach 2	RS:	984		Plan:
Plan:					
E.G. Elev (m)	657.29	Element	Left OB	Channel	Right OB
Vel Head (m)	1.57	Wt. n-Val.		0.050	
W.S. Elev (m)	655.72	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	655.87	Flow Area (m2)		0.26	
E.G. Slope (m/m)	4.219637	Area (m2)		0.26	
Q Total (m3/s)	1.45	Flow (m3/s)		1.45	
Top Width (m)	5.26	Top Width (m)		5.26	
Vel Total (m/s)	5.55	Avg. Vel. (m/s)		5.55	
Max Chl Dpth (m)	0.09	Hydr. Depth (m)		0.05	
Conv. Total (m3/s)	0.7	Conv. (m3/s)		0.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		5.27	
Min Ch El (m)	655.63	Shear (N/m2)		2053.28	
Alpha	1.00	Stream Power (N/m s)		11390.89	
Frctn Loss (m)	13.42	Cum Volume (1000 m3)		0.27	
C & E Loss (m)	0.44	Cum SA (1000 m2)		2.05	



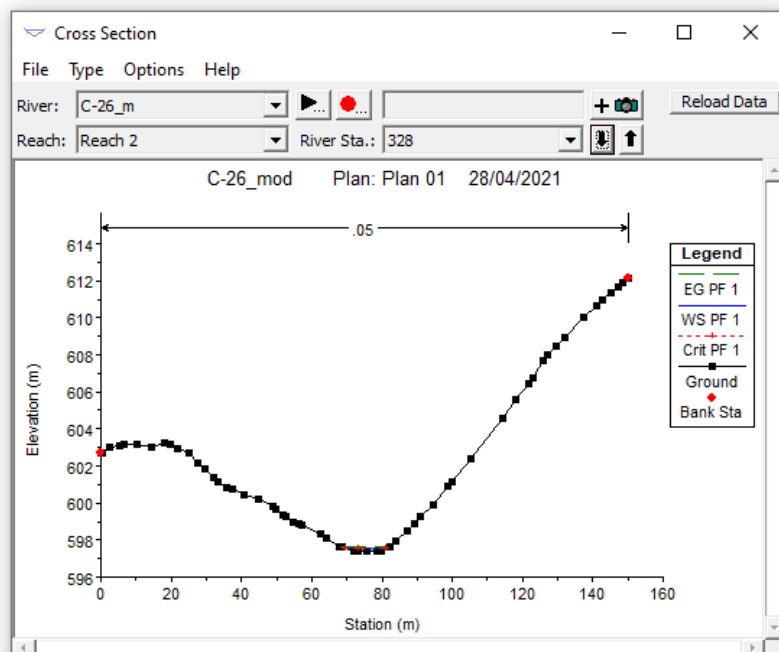
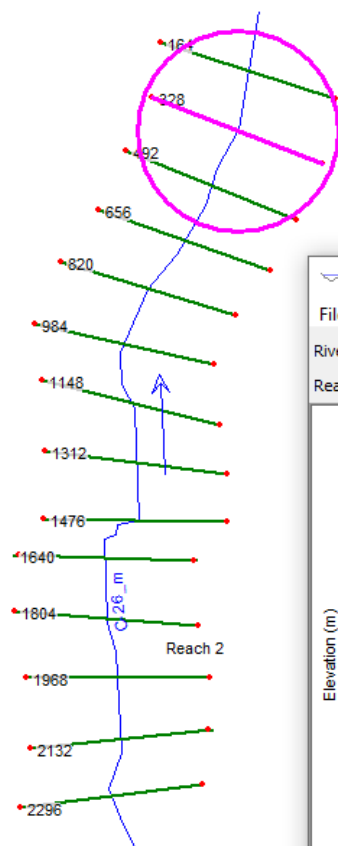
River:	C-26_m	Profile:	PF 1		
Reach	Reach 2	RS:	820	Plan:	
Plan:					
E.G. Elev (m)	643.42	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	643.33	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	643.35	Flow Area (m2)		1.08	
E.G. Slope (m/m)	0.078266	Area (m2)		1.08	
Q Total (m3/s)	1.45	Flow (m3/s)		1.45	
Top Width (m)	9.18	Top Width (m)		9.18	
Vel Total (m/s)	1.34	Avg. Vel. (m/s)		1.34	
Max Chl Dpth (m)	0.25	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	5.2	Conv. (m3/s)		5.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		9.20	
Min Ch El (m)	643.08	Shear (N/m2)		90.12	
Alpha	1.00	Stream Power (N/m s)		120.91	
Frctn Loss (m)	2.37	Cum Volume (1000 m3)		0.24	
C & E Loss (m)	0.00	Cum SA (1000 m2)		1.69	



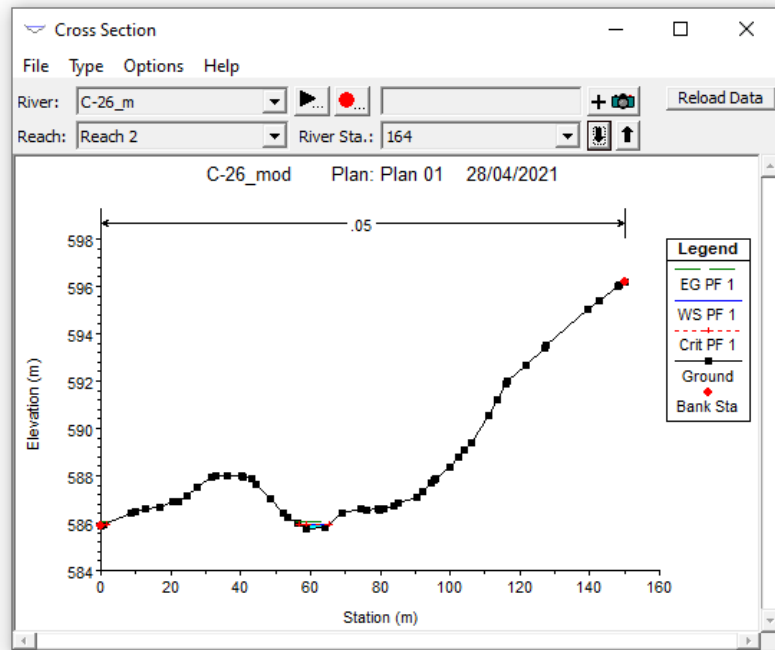
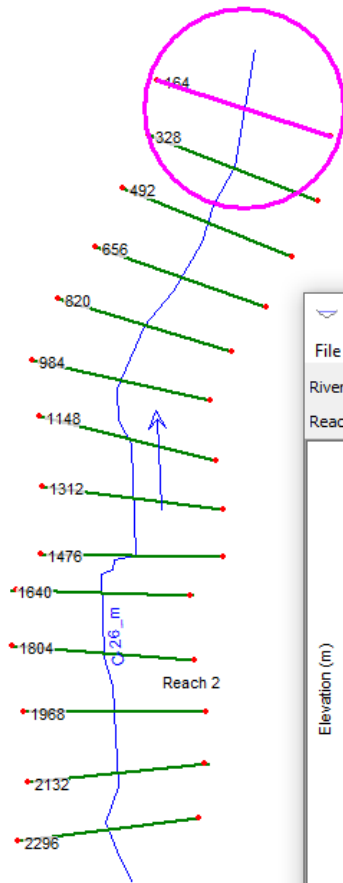
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	656	Plan:	
Plan:					
E.G. Elev (m)	629.87	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	629.77	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	629.77	Flow Area (m2)		1.07	
E.G. Slope (m/m)	0.044365	Area (m2)		1.07	
Q Total (m3/s)	1.45	Flow (m3/s)		1.45	
Top Width (m)	5.81	Top Width (m)		5.81	
Vel Total (m/s)	1.35	Avg. Vel. (m/s)		1.35	
Max Chl Dpth (m)	0.32	Hydr. Depth (m)		0.18	
Conv. Total (m3/s)	6.9	Conv. (m3/s)		6.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		5.87	
Min Ch El (m)	629.45	Shear (N/m2)		79.30	
Alpha	1.00	Stream Power (N/m s)		107.40	
Frctn Loss (m)	2.26	Cum Volume (1000 m3)		0.18	
C & E Loss (m)	0.00	Cum SA (1000 m2)		1.32	



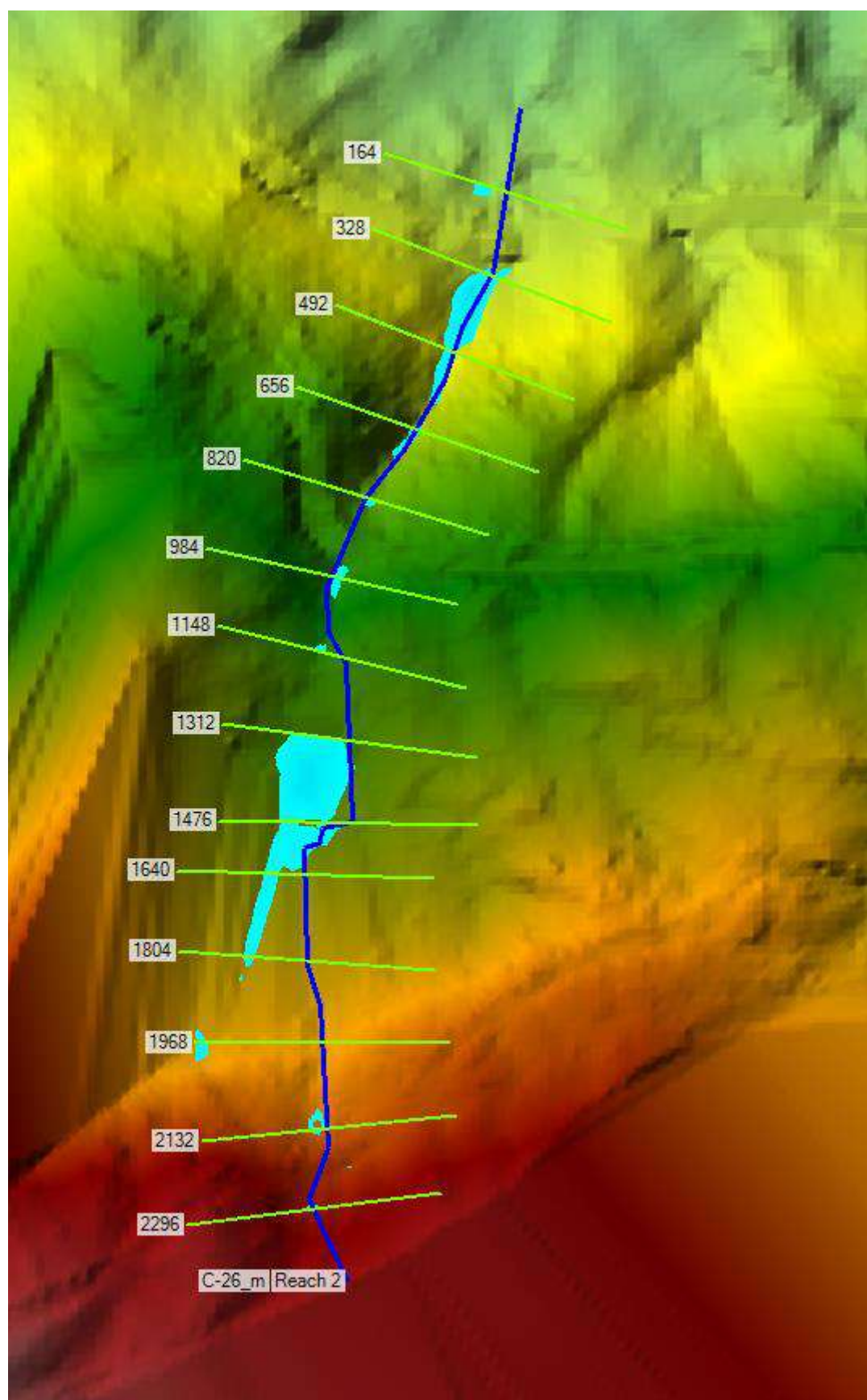
River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	492		Plan:
Plan:					
E.G. Elev (m)	612.26	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	612.18	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	612.18	Flow Area (m2)		1.13	
E.G. Slope (m/m)	0.045905	Area (m2)		1.13	
Q Total (m3/s)	1.45	Flow (m3/s)		1.45	
Top Width (m)	6.84	Top Width (m)		6.84	
Vel Total (m/s)	1.28	Avg. Vel. (m/s)		1.28	
Max Chl Dpth (m)	0.26	Hydr. Depth (m)		0.17	
Conv. Total (m3/s)	6.8	Conv. (m3/s)		6.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		6.88	
Min Ch El (m)	611.92	Shear (N/m2)		73.89	
Alpha	1.00	Stream Power (N/m s)		94.93	
Frctn Loss (m)	2.43	Cum Volume (1000 m3)		0.13	
C & E Loss (m)	0.01	Cum SA (1000 m2)		1.00	



River:	C-26_m	Profile:	PF 1		
Reach:	Reach 2	RS:	328		Plan:
Plan:					
E.G. Elev (m)	597.61	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	597.55	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	597.55	Flow Area (m2)		1.34	
E.G. Slope (m/m)	0.051608	Area (m2)		1.34	
Q Total (m3/s)	1.45	Flow (m3/s)		1.45	
Top Width (m)	11.61	Top Width (m)		11.61	
Vel Total (m/s)	1.08	Avg. Vel. (m/s)		1.08	
Max Chl Dpth (m)	0.17	Hydr. Depth (m)		0.12	
Conv. Total (m3/s)	6.4	Conv. (m3/s)		6.4	
Length Wtd. (m)	50.00	Wetted Per. (m)		11.62	
Min Ch El (m)	597.38	Shear (N/m2)		58.54	
Alpha	1.00	Stream Power (N/m s)		63.15	
Frctn Loss (m)	2.55	Cum Volume (1000 m3)		0.07	
C & E Loss (m)	0.00	Cum SA (1000 m2)		0.54	



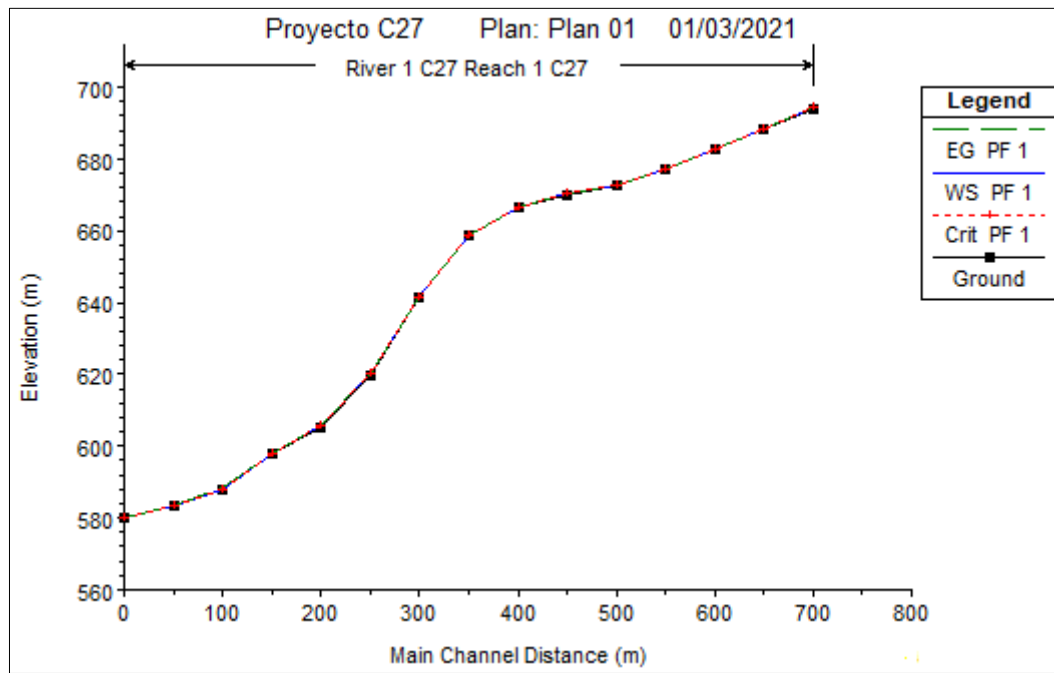
River:	C-26_m	Profile:	PF 1		
Reach	Reach 2	RS:	164		Plan:
Plan:					
E.G. Elev (m)	586.03	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.		0.050	
W.S. Elev (m)	585.97	Reach Len. (m)			
Crit W.S. (m)	585.97	Flow Area (m2)		1.28	
E.G. Slope (m/m)	0.050241	Area (m2)		1.28	
Q Total (m3/s)	1.45	Flow (m3/s)		1.45	
Top Width (m)	10.07	Top Width (m)		10.07	
Vel Total (m/s)	1.13	Avg. Vel. (m/s)		1.13	
Max Chl Dpth (m)	0.22	Hydr. Depth (m)		0.13	
Conv. Total (m3/s)	6.5	Conv. (m3/s)		6.5	
Length Wtd. (m)		Wetted Per. (m)		10.16	
Min Ch El (m)	585.75	Shear (N/m2)		62.26	
Alpha	1.00	Stream Power (N/m s)		70.28	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

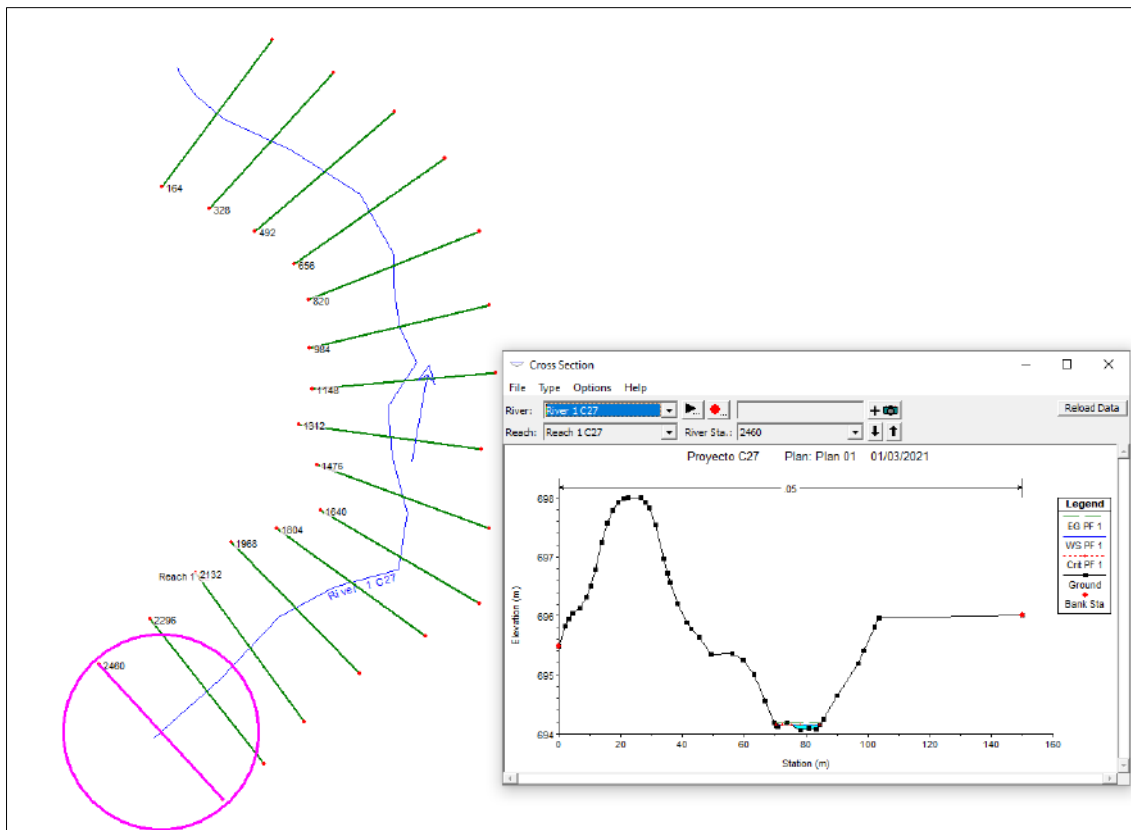


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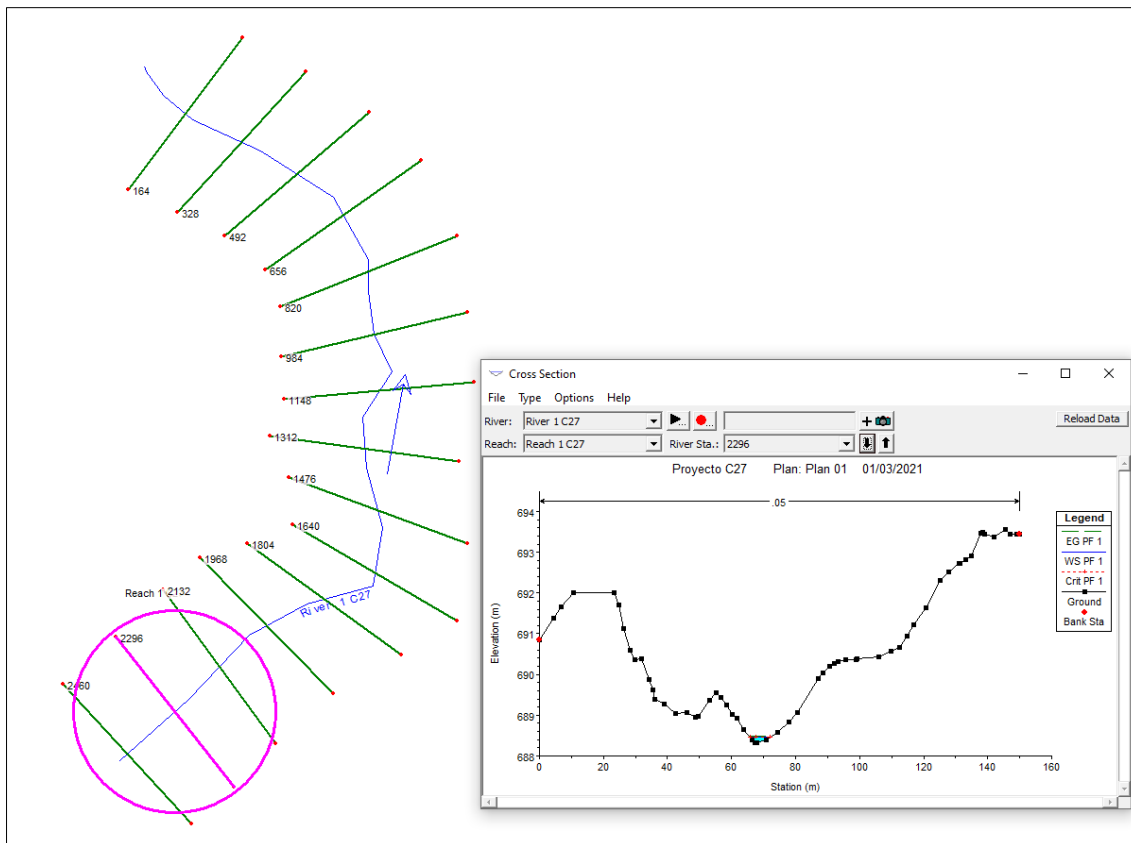
T2 (Q=0,45 m3/s)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Reach 1 C27	2460	PF 1	0.45	694.06	694.16	694.16	694.18	0.064463	0.72	0.63	11.70	0.99
Reach 1 C27	2296	PF 1	0.45	688.33	688.46	688.46	688.50	0.060585	0.91	0.49	6.15	1.03
Reach 1 C27	2132	PF 1	0.45	682.79	682.93	682.93	682.97	0.058032	0.85	0.53	7.14	1.00
Reach 1 C27	1968	PF 1	0.45	677.00	677.04	677.04	677.05	0.061960	0.51	0.89	27.51	0.90
Reach 1 C27	1804	PF 1	0.45	672.43	672.53	672.52	672.55	0.039078	0.70	0.64	8.56	0.82
Reach 1 C27	1640	PF 1	0.45	670.07	670.17	670.17	670.21	0.057037	0.86	0.52	6.84	0.99
Reach 1 C27	1476	PF 1	0.45	666.44	666.63	666.63	666.67	0.057481	0.95	0.47	5.36	1.02
Reach 1 C27	1312	PF 1	0.45	658.77	658.91	658.91	658.95	0.058124	0.92	0.49	5.83	1.02
Reach 1 C27	1148	PF 1	0.45	641.40	641.57	641.57	641.61	0.056521	0.90	0.50	6.03	1.00
Reach 1 C27	984	PF 1	0.45	619.89	620.07	620.07	620.11	0.054085	0.95	0.47	5.12	1.00
Reach 1 C27	820	PF 1	0.45	605.42	605.59	605.59	605.63	0.055385	0.92	0.49	5.64	1.00
Reach 1 C27	656	PF 1	0.45	597.77	597.90	597.90	597.94	0.059553	0.85	0.53	7.26	1.01
Reach 1 C27	492	PF 1	0.45	588.00	588.14	588.14	588.18	0.053708	0.98	0.46	4.74	1.00
Reach 1 C27	328	PF 1	0.45	583.47	583.58	583.58	583.61	0.058529	0.85	0.53	7.08	1.00
Reach 1 C27	164	PF 1	0.45	579.82	580.00	580.00	580.04	0.059195	0.96	0.47	5.38	1.03

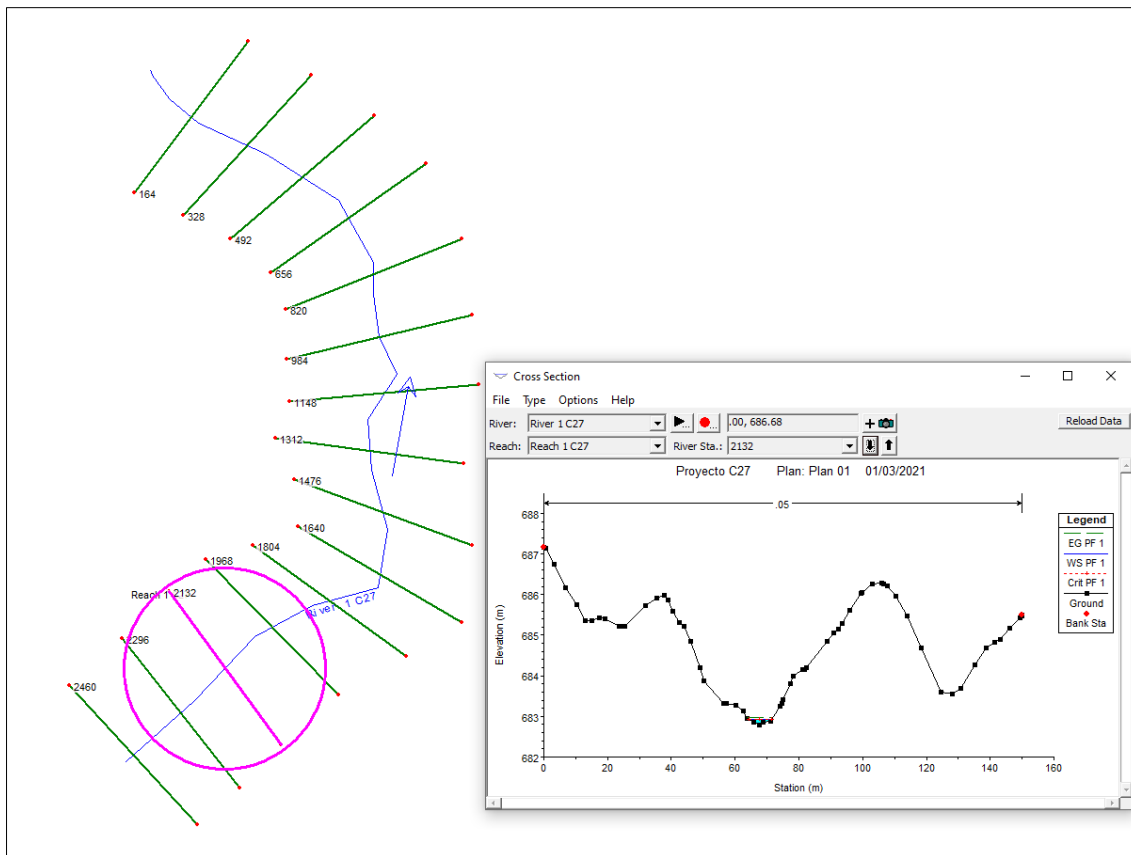




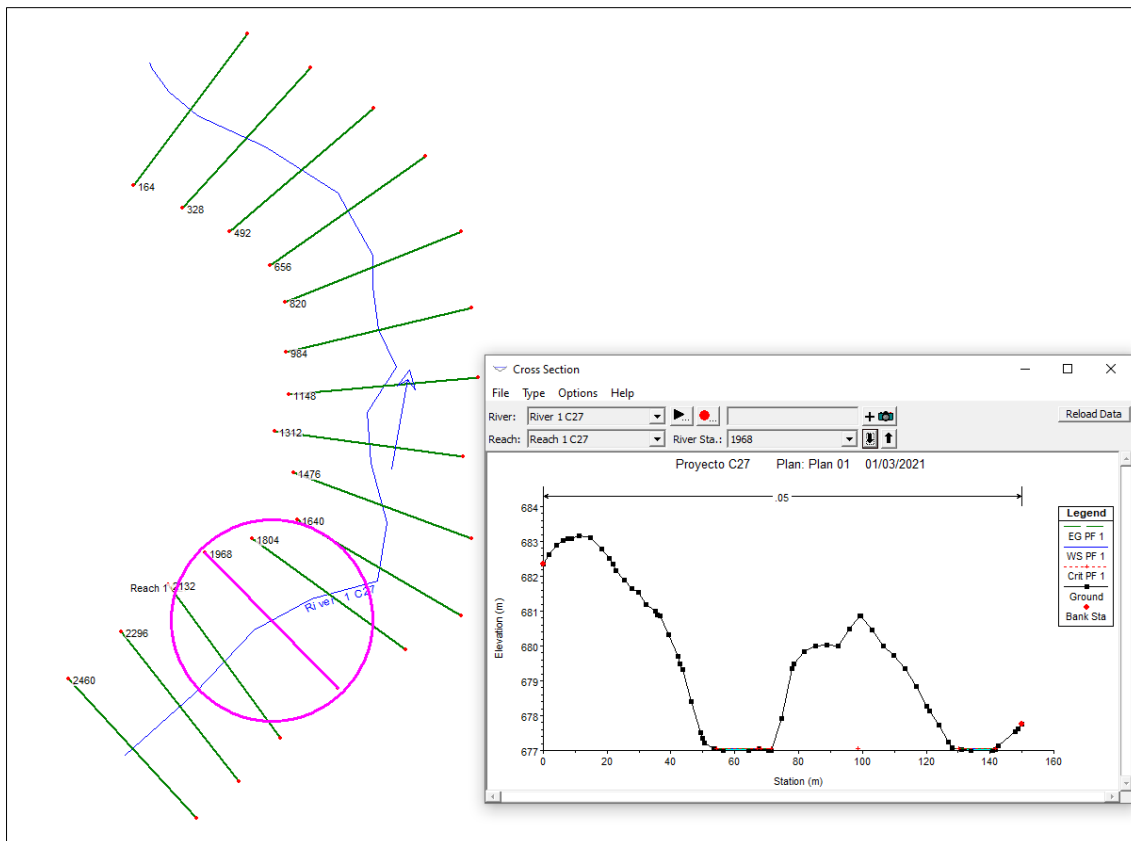
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Reach:	Reach 1 C27	RS:	2460	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 2460 Profile: PF 1					
E.G. Elev (m)	694.18	Element	Left OB	Channel	Right OB
Vel Head (m)	0.03	Wt. n-Val.		0.050	
W.S. Elev (m)	694.16	Reach Len. (m)	50.00	50.00	50.00
Crit W.S. (m)	694.16	Flow Area (m2)		0.63	
E.G. Slope (m/m)	0.064463	Area (m2)		0.63	
Q Total (m3/s)	0.45	Flow (m3/s)		0.45	
Top Width (m)	11.70	Top Width (m)		11.70	
Vel Total (m/s)	0.72	Avg. Vel. (m/s)		0.72	
Max Chl Dpth (m)	0.10	Hydr. Depth (m)		0.05	
Conv. Total (m3/s)	1.8	Conv. (m3/s)		1.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		11.71	
Min Ch El (m)	694.06	Shear (N/m2)		33.74	
Alpha	1.00	Stream Power (N/m s)		24.29	
Frctn Loss (m)	3.12	Cum Volume (1000 m3)		0.38	
C & E Loss (m)	0.00	Cum SA (1000 m2)		5.59	



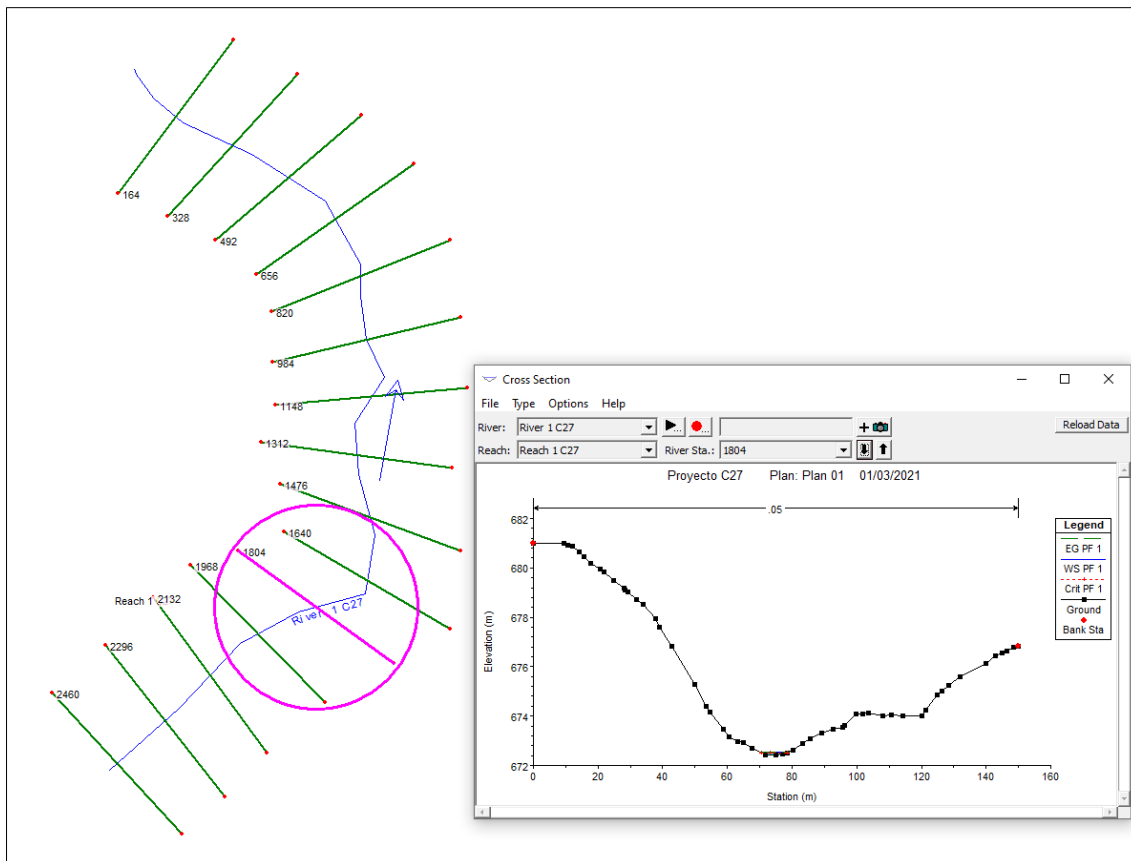
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River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	2296	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 2296 Profile: PF 1					
E.G. Elev (m)	688.50	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	688.46	Reach Len. (m)	50.20	50.00	49.80
Crit W.S. (m)	688.46	Flow Area (m2)		0.49	
E.G. Slope (m/m)	0.060585	Area (m2)		0.49	
Q Total (m3/s)	0.45	Flow (m3/s)		0.45	
Top Width (m)	6.15	Top Width (m)		6.15	
Vel Total (m/s)	0.91	Avg. Vel. (m/s)		0.91	
Max Chl Dpth (m)	0.12	Hydr. Depth (m)		0.08	
Conv. Total (m3/s)	1.8	Conv. (m3/s)		1.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		6.16	
Min Ch El (m)	688.33	Shear (N/m2)		47.49	
Alpha	1.00	Stream Power (N/m s)		43.38	
Frctn Loss (m)	2.96	Cum Volume (1000 m3)		0.35	
C & E Loss (m)	0.00	Cum SA (1000 m2)		5.14	



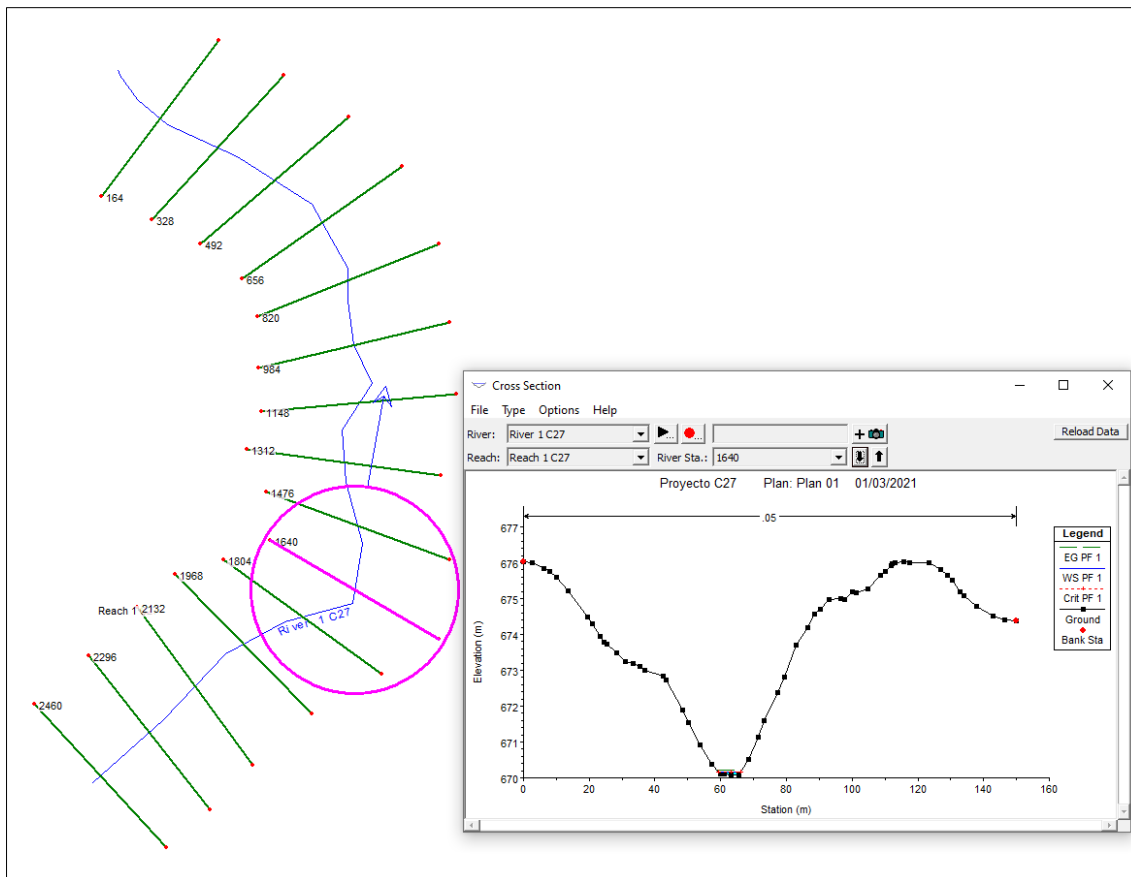
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Reach:	Reach 1 C27	RS:	2132	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 2132 Profile: PF 1					
E.G. Elev (m)	682.97	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	682.93	Reach Len. (m)	49.00	50.00	50.70
Crit W.S. (m)	682.93	Flow Area (m2)		0.53	
E.G. Slope (m/m)	0.058032	Area (m2)		0.53	
Q Total (m3/s)	0.45	Flow (m3/s)		0.45	
Top Width (m)	7.14	Top Width (m)		7.14	
Vel Total (m/s)	0.85	Avg. Vel. (m/s)		0.85	
Max Chl Dpth (m)	0.14	Hydr. Depth (m)		0.07	
Conv. Total (m3/s)	1.9	Conv. (m3/s)		1.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.15	
Min Ch El (m)	682.79	Shear (N/m2)		42.17	
Alpha	1.00	Stream Power (N/m s)		35.84	
Frctn Loss (m)	3.00	Cum Volume (1000 m3)		0.32	
C & E Loss (m)	0.01	Cum SA (1000 m2)		4.81	



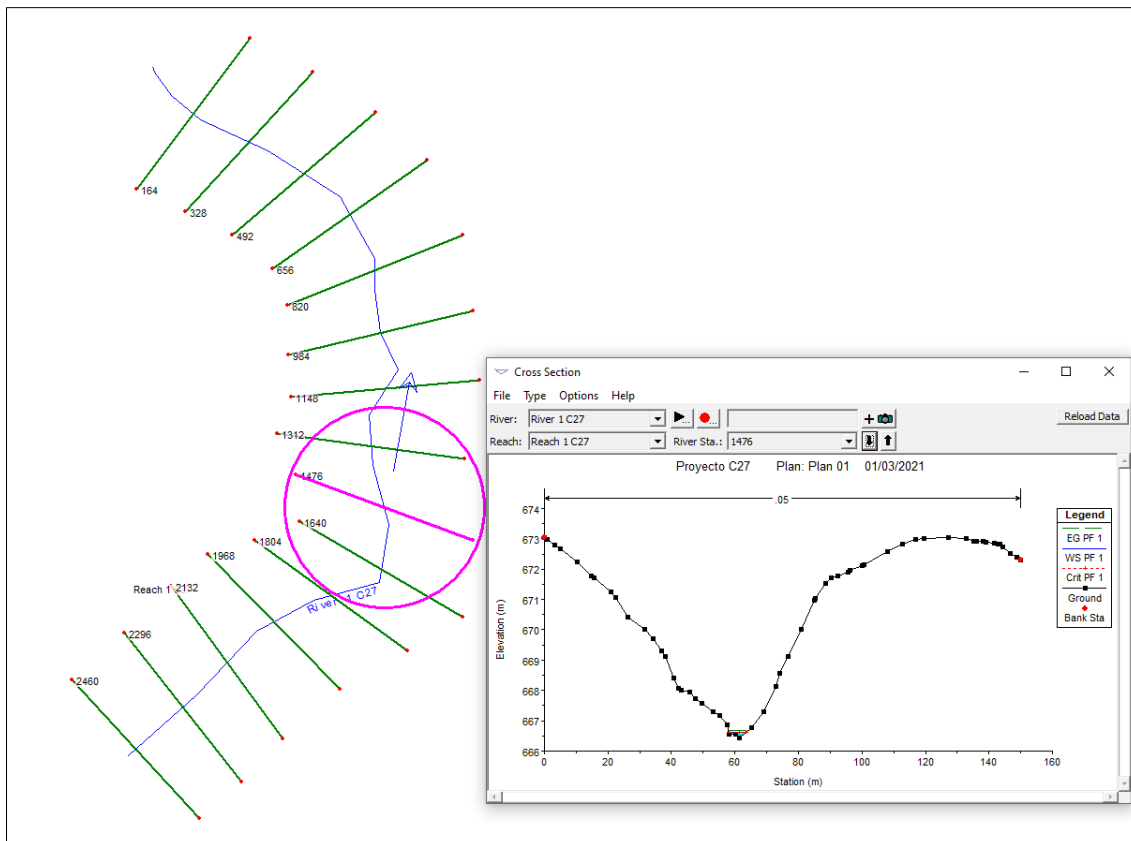
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Reach:	Reach 1 C27	RS:	1968	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1968 Profile: PF 1					
E.G. Elev (m)		Element	Left OB	Channel	Right OB
Vel Head (m)	0.01	Wt. n-Val.		0.050	
W.S. Elev (m)	677.04	Reach Len. (m)	46.90	50.00	51.50
Crit W.S. (m)	677.04	Flow Area (m2)		0.89	
E.G. Slope (m/m)	0.061960	Area (m2)		0.89	
Q Total (m3/s)	0.45	Flow (m3/s)		0.45	
Top Width (m)	27.51	Top Width (m)		27.51	
Vel Total (m/s)	0.51	Avg. Vel. (m/s)		0.51	
Max Chl Dpth (m)	0.04	Hydr. Depth (m)		0.03	
Conv. Total (m3/s)	1.8	Conv. (m3/s)		1.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		27.52	
Min Ch El (m)	677.00	Shear (N/m2)		19.66	
Alpha	1.00	Stream Power (N/m s)		9.94	
Frctn Loss (m)	2.43	Cum Volume (1000 m3)		0.29	
C & E Loss (m)	0.00	Cum SA (1000 m2)		3.95	



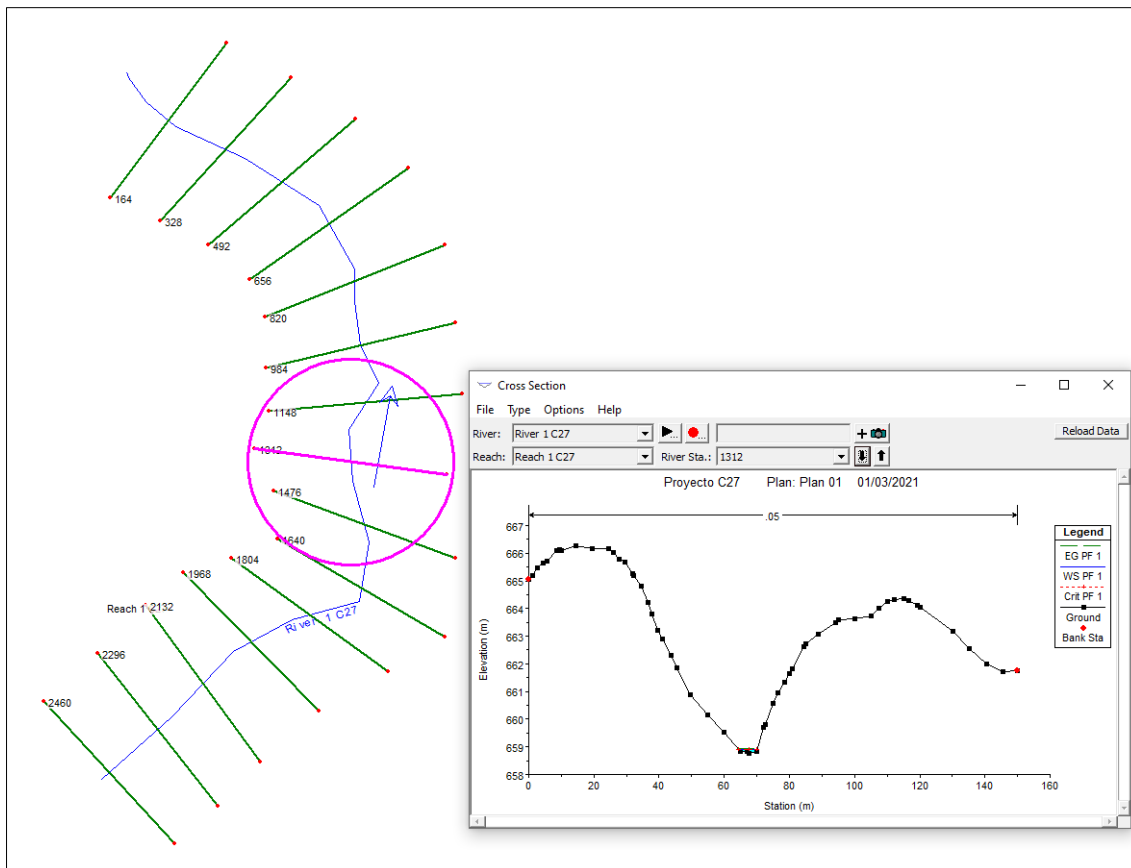
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River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	1804	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1804 Profile: PF 1					
E.G. Elev (m)	672.55	Element	Left OB	Channel	Right OB
Vel Head (m)	0.03	Wt. n-Val.		0.050	
W.S. Elev (m)	672.53	Reach Len. (m)	46.10	50.00	50.80
Crit W.S. (m)	672.52	Flow Area (m2)		0.64	
E.G. Slope (m/m)	0.039078	Area (m2)		0.64	
Q Total (m3/s)	0.45	Flow (m3/s)		0.45	
Top Width (m)	8.56	Top Width (m)		8.56	
Vel Total (m/s)	0.70	Avg. Vel. (m/s)		0.70	
Max Chl Dpth (m)	0.10	Hydr. Depth (m)		0.07	
Conv. Total (m3/s)	2.3	Conv. (m3/s)		2.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		8.57	
Min Ch El (m)	672.43	Shear (N/m2)		28.68	
Alpha	1.00	Stream Power (N/m s)		20.13	
Frctn Loss (m)	2.34	Cum Volume (1000 m3)		0.25	
C & E Loss (m)	0.00	Cum SA (1000 m2)		3.04	



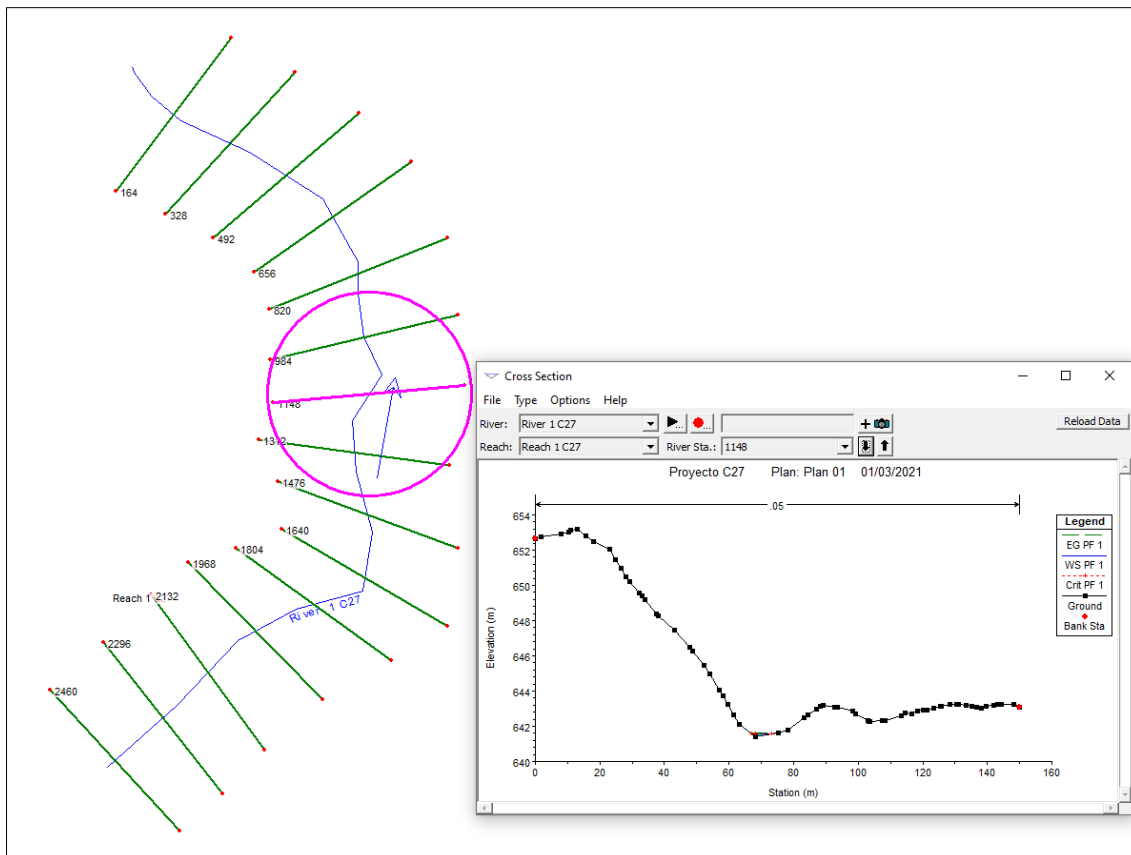
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River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	1640	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1640 Profile: PF 1					
E.G. Elev (m)	670.21	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	670.17	Reach Len. (m)	47.00	50.00	49.90
Crit W.S. (m)	670.17	Flow Area (m2)		0.52	
E.G. Slope (m/m)	0.057037	Area (m2)		0.52	
Q Total (m3/s)	0.45	Flow (m3/s)		0.45	
Top Width (m)	6.84	Top Width (m)		6.84	
Vel Total (m/s)	0.86	Avg. Vel. (m/s)		0.86	
Max Chl Dpth (m)	0.10	Hydr. Depth (m)		0.08	
Conv. Total (m3/s)	1.9	Conv. (m3/s)		1.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		6.85	
Min Ch El (m)	670.07	Shear (N/m2)		42.74	
Alpha	1.00	Stream Power (N/m s)		36.76	
Frctn Loss (m)	2.86	Cum Volume (1000 m3)		0.22	
C & E Loss (m)	0.00	Cum SA (1000 m2)		2.66	



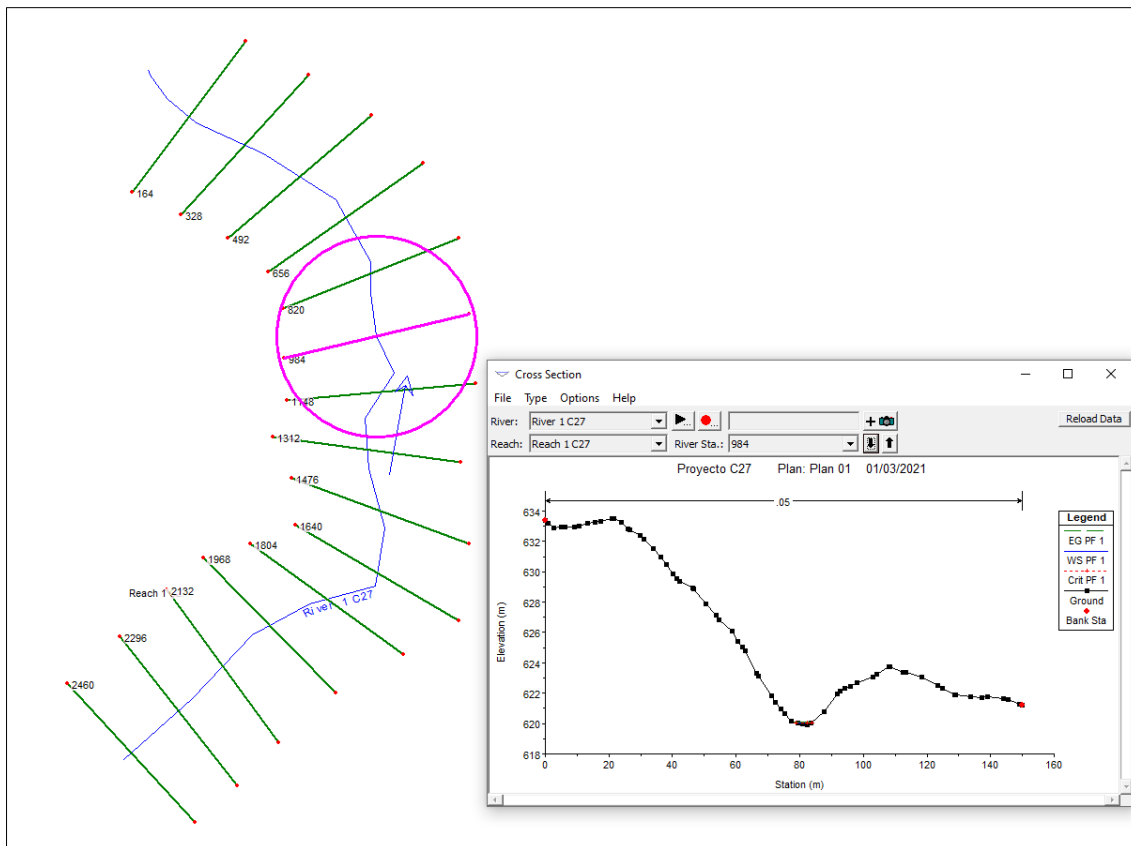
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River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	1476	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1476 Profile: PF 1					
		Element	Left OB	Channel	Right OB
E.G. Elev (m)	666.67	Wt. n-Val.		0.050	
Vel Head (m)	0.05	Reach Len. (m)	47.40	50.00	52.50
W.S. Elev (m)	666.63	Flow Area (m2)		0.47	
Crit W.S. (m)	666.63	Area (m2)		0.47	
E.G. Slope (m/m)	0.057481	Flow (m3/s)		0.45	
Q Total (m3/s)	0.45	Top Width (m)		5.36	
Top Width (m)	5.36	Avg. Vel. (m/s)		0.95	
Vel Total (m/s)	0.95	Hydr. Depth (m)		0.09	
Max Chl Dpth (m)	0.19	Conv. (m3/s)		1.9	
Conv. Total (m3/s)	1.9	Wetted Per. (m)		5.38	
Length Wtd. (m)	50.00	Shear (N/m2)		49.64	
Min Ch El (m)	666.44	Stream Power (N/m s)		47.12	
Alpha	1.00	Cum Volume (1000 m3)		0.20	
Frctn Loss (m)	2.89	Cum SA (1000 m2)		2.35	
C & E Loss (m)	0.00				



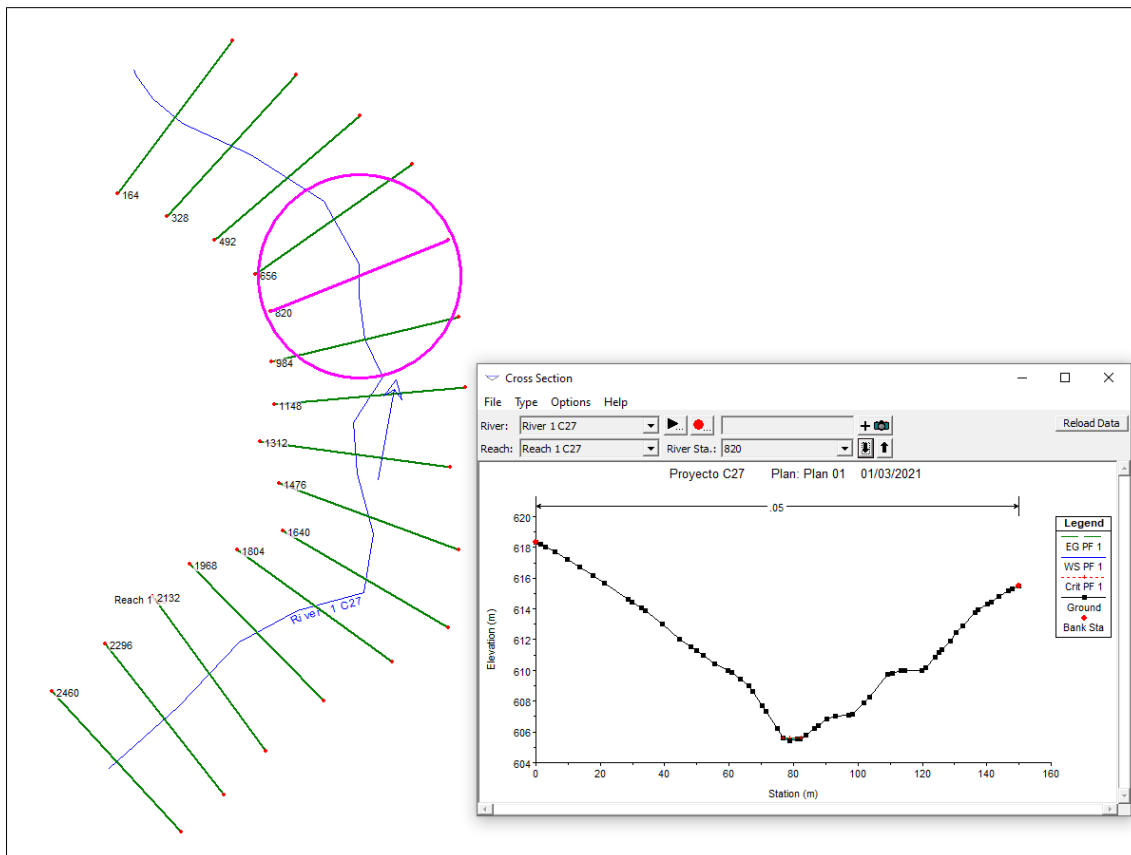
Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	1312	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1312 Profile: PF 1					
E.G. Elev (m)	658.95	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	658.91	Reach Len. (m)	46.70	50.00	51.60
Crit W.S. (m)	658.91	Flow Area (m2)		0.49	
E.G. Slope (m/m)	0.058124	Area (m2)		0.49	
Q Total (m3/s)	0.45	Flow (m3/s)		0.45	
Top Width (m)	5.83	Top Width (m)		5.83	
Vel Total (m/s)	0.92	Avg. Vel. (m/s)		0.92	
Max Chl Dpth (m)	0.14	Hydr. Depth (m)		0.08	
Conv. Total (m3/s)	1.9	Conv. (m3/s)		1.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		5.85	
Min Ch El (m)	658.77	Shear (N/m2)		47.60	
Alpha	1.00	Stream Power (N/m s)		43.85	
Frctn Loss (m)	2.87	Cum Volume (1000 m3)		0.17	
C & E Loss (m)	0.00	Cum SA (1000 m2)		2.07	



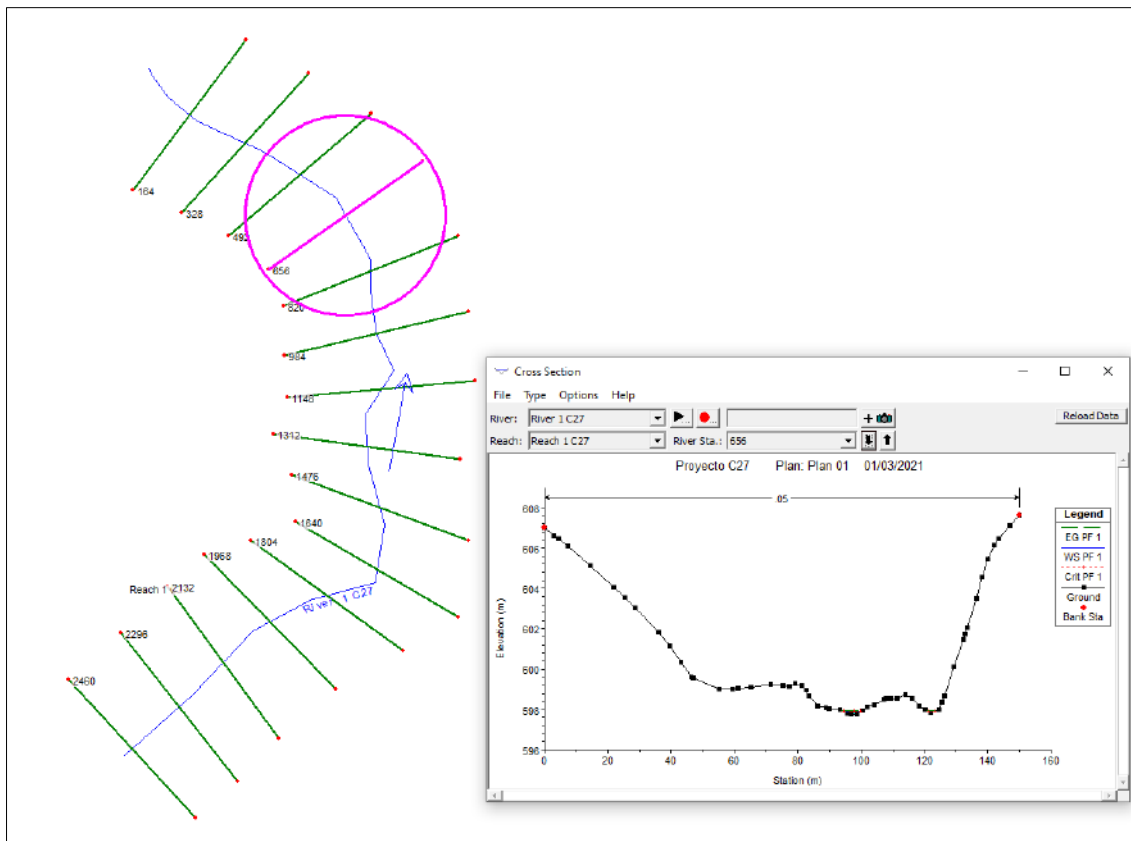
Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	1148	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1148 Profile: PF 1					
E.G. Elev (m)	641.61	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	641.57	Reach Len. (m)	47.60	50.00	50.30
Crit W.S. (m)	641.57	Flow Area (m2)		0.50	
E.G. Slope (m/m)	0.056521	Area (m2)		0.50	
Q Total (m3/s)	0.45	Flow (m3/s)		0.45	
Top Width (m)	6.03	Top Width (m)		6.03	
Vel Total (m/s)	0.90	Avg. Vel. (m/s)		0.90	
Max Chl Dpth (m)	0.17	Hydr. Depth (m)		0.08	
Conv. Total (m3/s)	1.9	Conv. (m3/s)		1.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		6.05	
Min Ch El (m)	641.40	Shear (N/m2)		45.75	
Alpha	1.00	Stream Power (N/m s)		41.24	
Frctn Loss (m)	2.76	Cum Volume (1000 m3)		0.15	
C & E Loss (m)	0.00	Cum SA (1000 m2)		1.78	



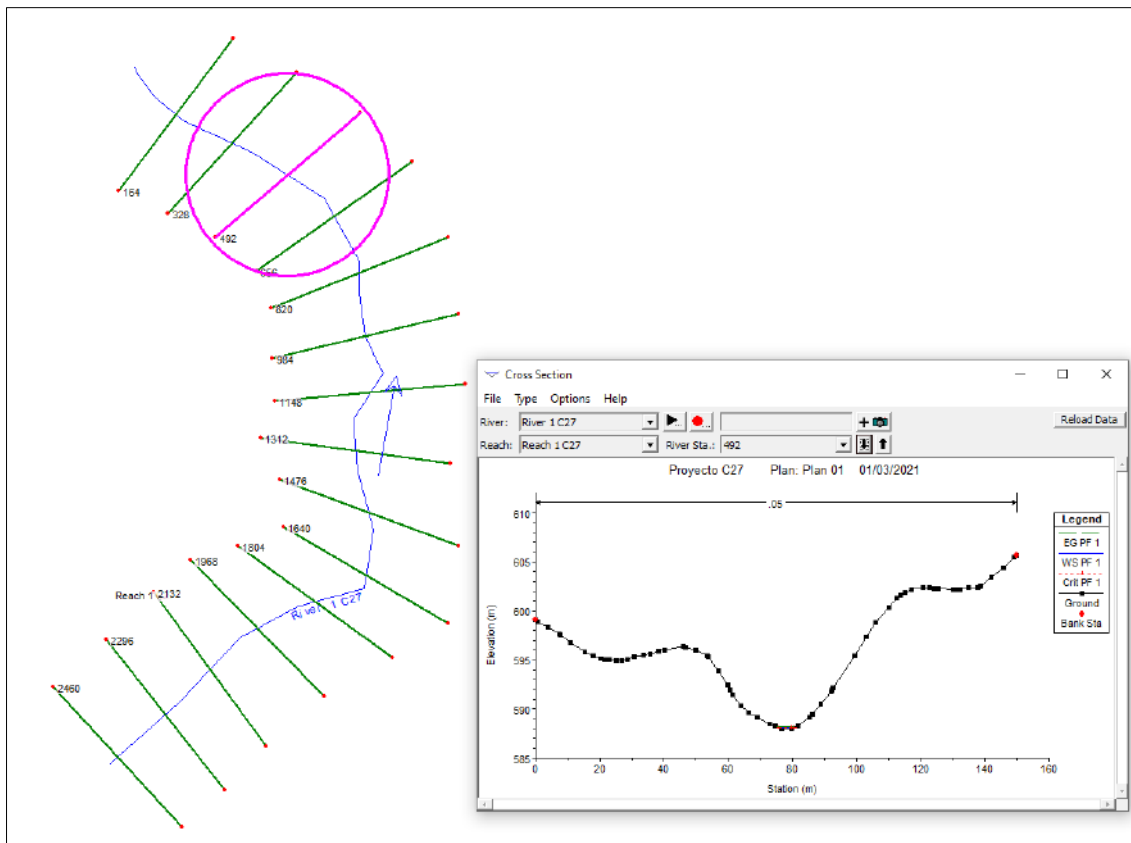
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Reach:	Reach 1 C27	RS:	984	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 984 Profile: PF 1					
E.G. Elev (m)	620.11	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	620.07	Reach Len. (m)	48.20	50.00	51.00
Crit W.S. (m)	620.07	Flow Area (m2)		0.47	
E.G. Slope (m/m)	0.054085	Area (m2)		0.47	
Q Total (m3/s)	0.45	Flow (m3/s)		0.45	
Top Width (m)	5.12	Top Width (m)		5.12	
Vel Total (m/s)	0.95	Avg. Vel. (m/s)		0.95	
Max Chl Dpth (m)	0.18	Hydr. Depth (m)		0.09	
Conv. Total (m3/s)	1.9	Conv. (m3/s)		1.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		5.13	
Min Ch El (m)	619.89	Shear (N/m2)		48.94	
Alpha	1.00	Stream Power (N/m s)		46.48	
Frctn Loss (m)	2.74	Cum Volume (1000 m3)		0.12	
C & E Loss (m)	0.00	Cum SA (1000 m2)		1.50	



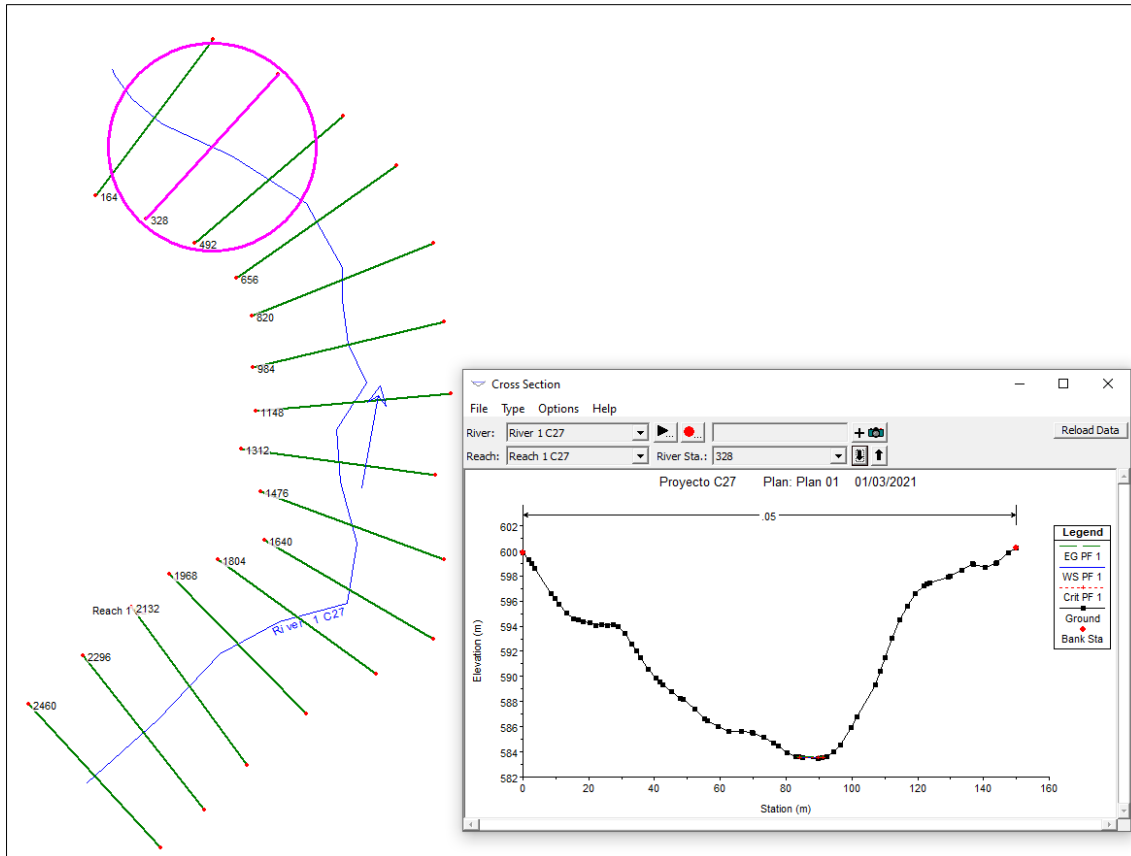
Cross Section Output					
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Reach:	Reach 1 C27	RS:	820	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 820 Profile: PF 1					
E.G. Elev (m)	605.63	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	605.59	Reach Len. (m)	48.00	50.00	51.90
Crit W.S. (m)	605.59	Flow Area (m2)		0.49	
E.G. Slope (m/m)	0.055385	Area (m2)		0.49	
Q Total (m3/s)	0.45	Flow (m3/s)		0.45	
Top Width (m)	5.64	Top Width (m)		5.64	
Vel Total (m/s)	0.92	Avg. Vel. (m/s)		0.92	
Max Chl Dpth (m)	0.17	Hydr. Depth (m)		0.09	
Conv. Total (m3/s)	1.9	Conv. (m3/s)		1.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		5.66	
Min Ch El (m)	605.42	Shear (N/m2)		46.95	
Alpha	1.00	Stream Power (N/m s)		43.20	
Frctn Loss (m)	2.87	Cum Volume (1000 m3)		0.10	
C & E Loss (m)	0.00	Cum SA (1000 m2)		1.23	



Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	656	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 656 Profile: PF 1					
E.G. Elev (m)	597.94	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	597.90	Reach Len. (m)	49.60	50.00	49.70
Crit W.S. (m)	597.90	Flow Area (m2)		0.53	
E.G. Slope (m/m)	0.059553	Area (m2)		0.53	
Q Total (m3/s)	0.45	Flow (m3/s)		0.45	
Top Width (m)	7.26	Top Width (m)		7.26	
Vel Total (m/s)	0.85	Avg. Vel. (m/s)		0.85	
Max Chl Dpth (m)	0.13	Hydr. Depth (m)		0.07	
Conv. Total (m3/s)	1.8	Conv. (m3/s)		1.8	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.27	
Min Ch El (m)	597.77	Shear (N/m2)		42.48	
Alpha	1.00	Stream Power (N/m s)		36.13	
Frctn Loss (m)	2.83	Cum Volume (1000 m3)		0.07	
C & E Loss (m)	0.00	Cum SA (1000 m2)		0.91	



Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	492	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 492 Profile: PF 1					
E.G. Elev (m)	588.18	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	588.14	Reach Len. (m)	49.20	50.00	50.20
Crit W.S. (m)	588.14	Flow Area (m2)		0.46	
E.G. Slope (m/m)	0.053708	Area (m2)		0.46	
Q Total (m3/s)	0.45	Flow (m3/s)		0.45	
Top Width (m)	4.74	Top Width (m)		4.74	
Vel Total (m/s)	0.98	Avg. Vel. (m/s)		0.98	
Max Chl Dpth (m)	0.14	Hydr. Depth (m)		0.10	
Conv. Total (m3/s)	1.9	Conv. (m3/s)		1.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		4.75	
Min Ch El (m)	588.00	Shear (N/m2)		51.00	
Alpha	1.00	Stream Power (N/m s)		49.85	
Frctn Loss (m)	2.80	Cum Volume (1000 m3)		0.05	
C & E Loss (m)	0.00	Cum SA (1000 m2)		0.61	



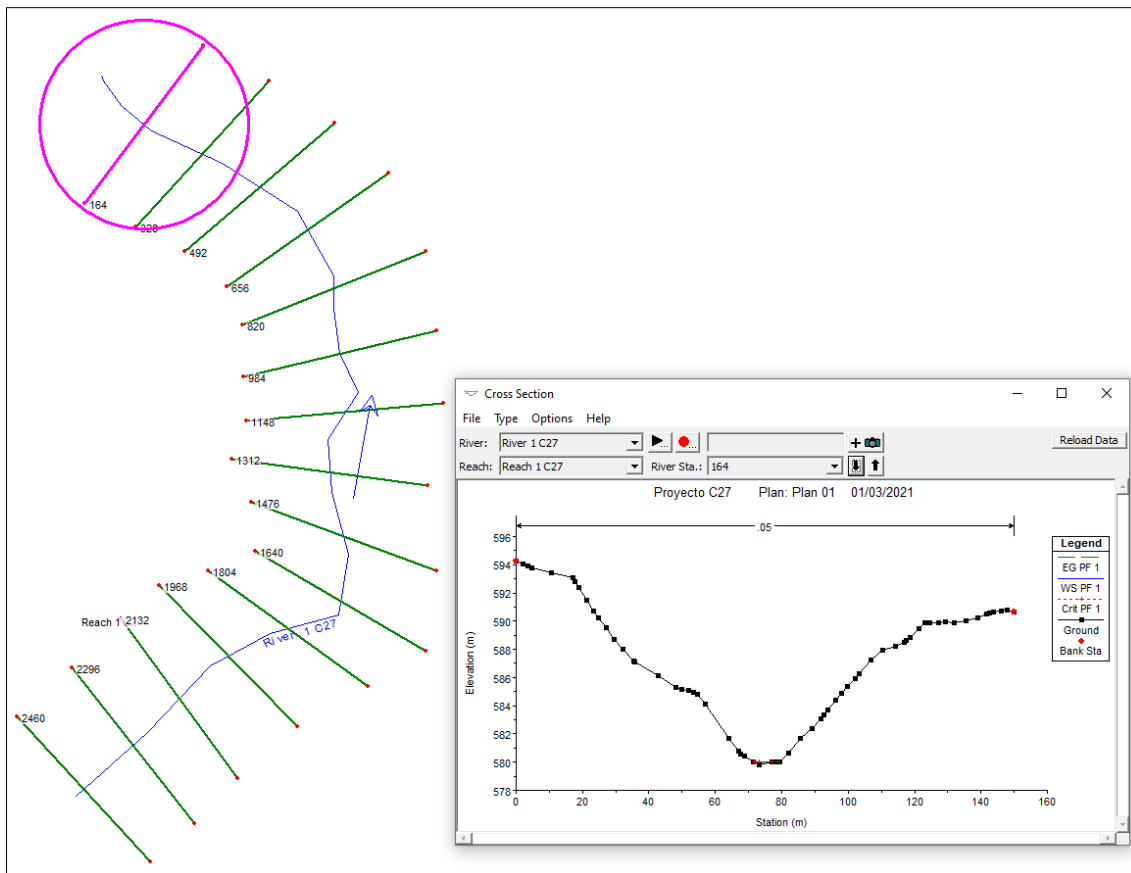
Cross Section Output

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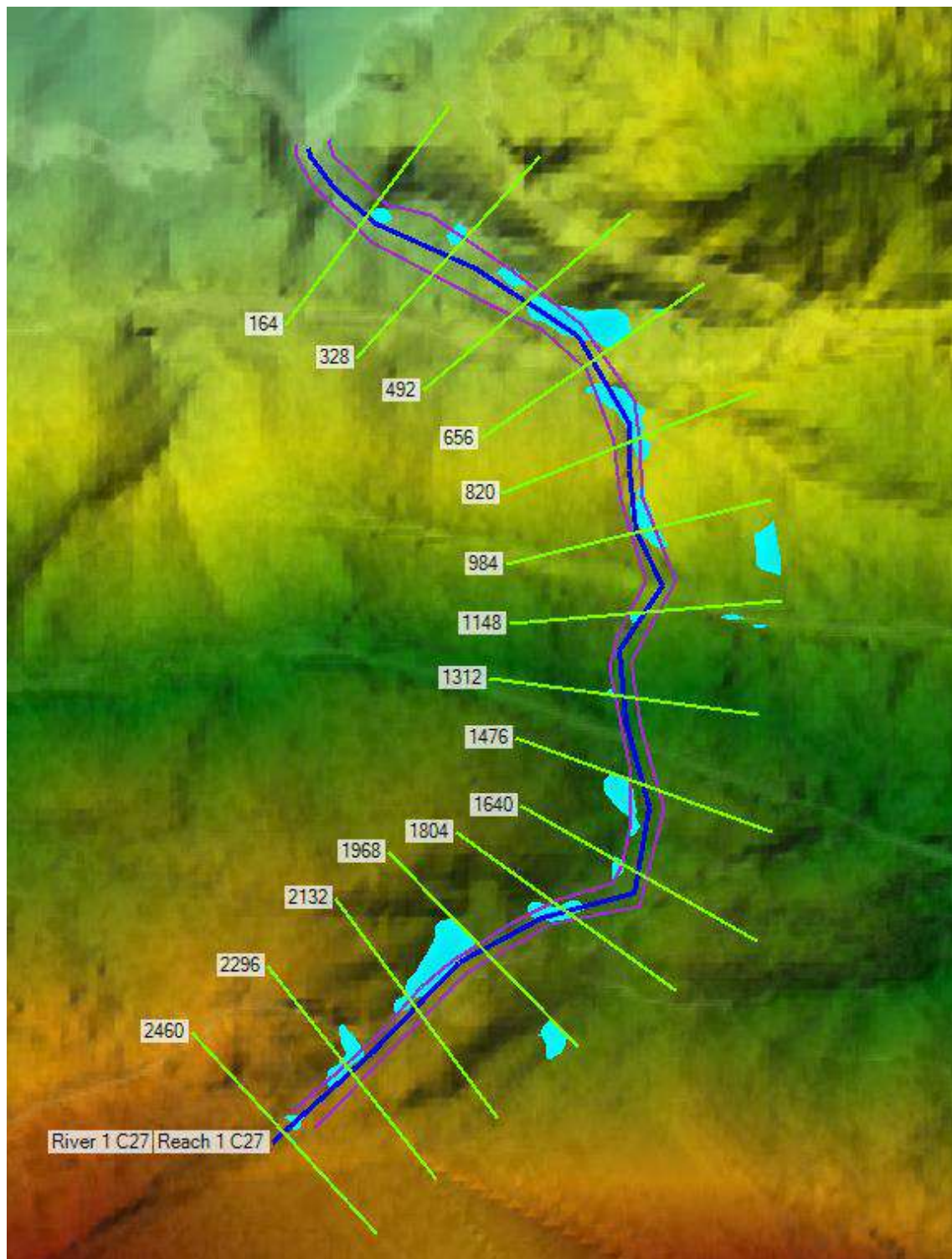
River: River 1 C27 Profile: PF 1

Reach: Reach 1 C27 RS: 328 Plan: c27

Plan: c27 River 1 C27 Reach 1 C27 RS: 328 Profile: PF 1					
		Element	Left OB	Channel	Right OB
E.G. Elev (m)	583.61	Wt. n-Val.		0.050	
Vel Head (m)	0.04	Reach Len. (m)	48.30	50.00	52.40
W.S. Elev (m)	583.58	Flow Area (m2)		0.53	
Crit W.S. (m)	583.58	Area (m2)		0.53	
E.G. Slope (m/m)	0.058529	Flow (m3/s)		0.45	
Q Total (m3/s)	0.45	Top Width (m)		7.08	
Top Width (m)	7.08	Avg. Vel. (m/s)		0.85	
Vel Total (m/s)	0.85	Hydr. Depth (m)		0.07	
Max Chl Dpth (m)	0.11	Conv. (m3/s)		1.9	
Conv. Total (m3/s)	1.9	Wetted Per. (m)		7.09	
Length Wtd. (m)	50.00	Shear (N/m2)		42.62	
Min Ch El (m)	583.47	Stream Power (N/m s)		36.43	
Alpha	1.00	Cum Volume (1000 m3)		0.02	
Frctn Loss (m)	2.94	Cum SA (1000 m2)		0.31	
C & E Loss (m)	0.00				

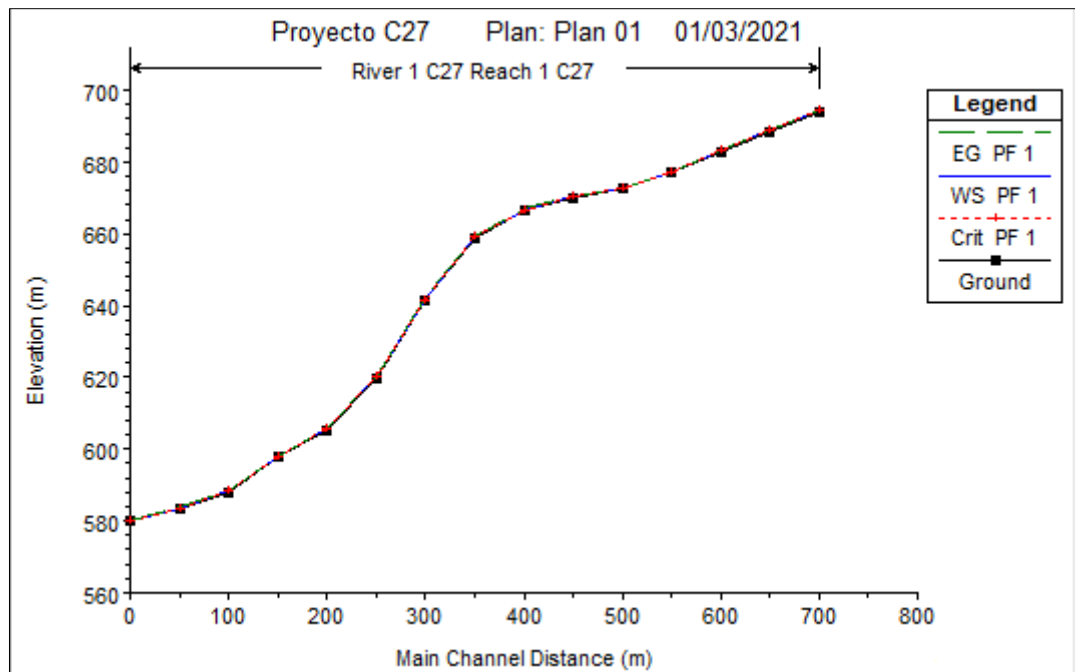


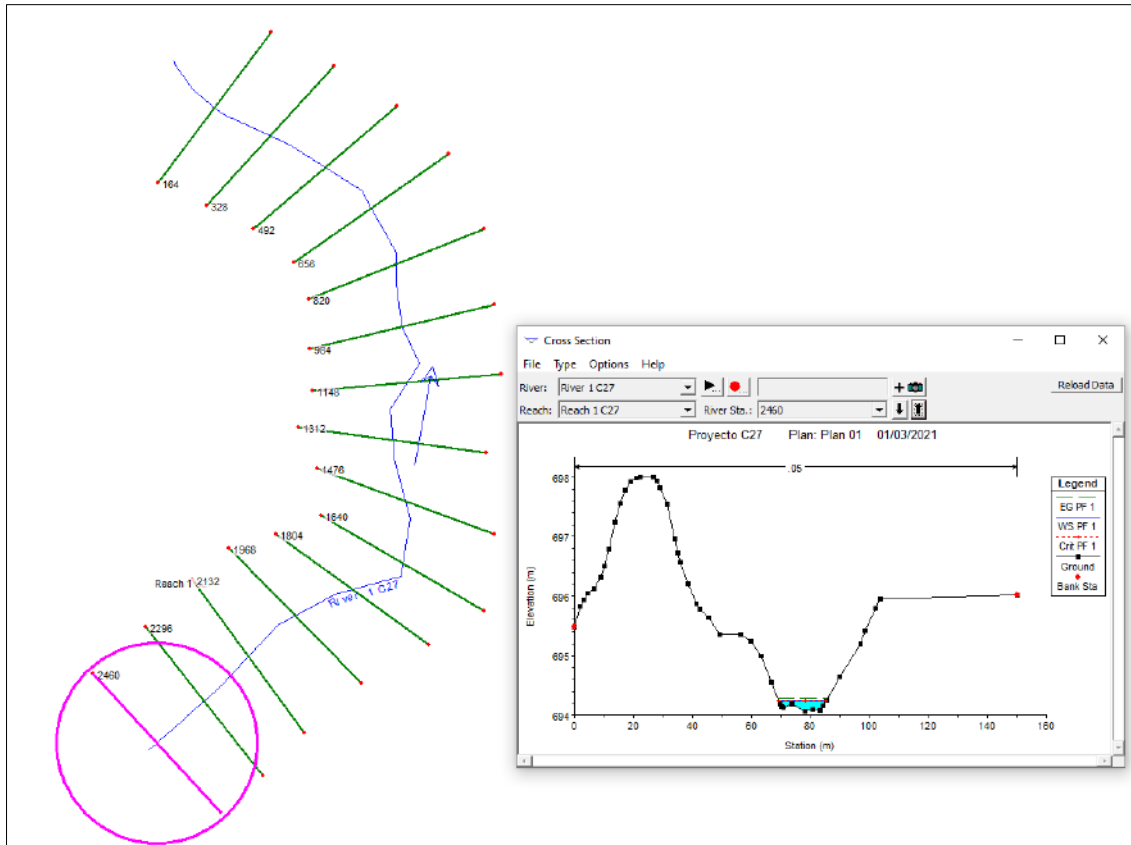
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File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	164	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 164 Profile: PF 1					
E.G. Elev (m)		Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.		0.050	
W.S. Elev (m)	580.00	Reach Len. (m)			
Crit W.S. (m)	580.00	Flow Area (m2)		0.47	
E.G. Slope (m/m)	0.059195	Area (m2)		0.47	
Q Total (m3/s)	0.45	Flow (m3/s)		0.45	
Top Width (m)	5.38	Top Width (m)		5.38	
Vel Total (m/s)	0.96	Avg. Vel. (m/s)		0.96	
Max Chl Dpth (m)	0.17	Hydr. Depth (m)		0.09	
Conv. Total (m3/s)	1.8	Conv. (m3/s)		1.8	
Length Wtd. (m)		Wetted Per. (m)		5.39	
Min Ch El (m)	579.82	Shear (N/m2)		50.64	
Alpha	1.00	Stream Power (N/m s)		48.47	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			



T100 (Q=1,75 m³/s)

Reach	River Sta	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m ²)	Top Width (m)	Froude # Chl
Reach 1 C27	2460	PF 1	1.75	694.06	694.23	694.23	694.28	0.052746	1.03	1.69	15.88	1.01
Reach 1 C27	2296	PF 1	1.75	688.33	688.58	688.58	688.65	0.046388	1.23	1.43	9.40	1.00
Reach 1 C27	2132	PF 1	1.75	682.79	683.04	683.04	683.12	0.046126	1.24	1.41	9.09	1.00
Reach 1 C27	1968	PF 1	1.75	677.00	677.08	677.08	677.12	0.061318	0.81	2.16	32.55	1.01
Reach 1 C27	1804	PF 1	1.75	672.43	672.62	672.62	672.68	0.046240	1.13	1.54	11.42	0.98
Reach 1 C27	1640	PF 1	1.75	670.07	670.29	670.29	670.37	0.046361	1.27	1.38	8.57	1.01
Reach 1 C27	1476	PF 1	1.75	666.44	666.76	666.76	666.85	0.044842	1.34	1.30	7.26	1.01
Reach 1 C27	1312	PF 1	1.75	658.77	659.03	659.03	659.13	0.044877	1.36	1.29	7.04	1.01
Reach 1 C27	1148	PF 1	1.75	641.40	641.68	641.68	641.76	0.048173	1.20	1.45	10.07	1.01
Reach 1 C27	984	PF 1	1.75	619.89	620.20	620.20	620.29	0.045092	1.34	1.30	7.29	1.01
Reach 1 C27	820	PF 1	1.75	605.42	605.72	605.72	605.81	0.044125	1.37	1.27	6.77	1.01
Reach 1 C27	656	PF 1	1.75	597.77	598.01	598.01	598.06	0.051500	1.06	1.65	14.48	1.01
Reach 1 C27	492	PF 1	1.75	588.00	588.28	588.28	588.37	0.044128	1.36	1.28	6.91	1.01
Reach 1 C27	328	PF 1	1.75	583.47	583.68	583.68	583.76	0.046438	1.19	1.46	10.02	1.00
Reach 1 C27	164	PF 1	1.75	579.82	580.11	580.11	580.19	0.047256	1.25	1.40	9.05	1.01





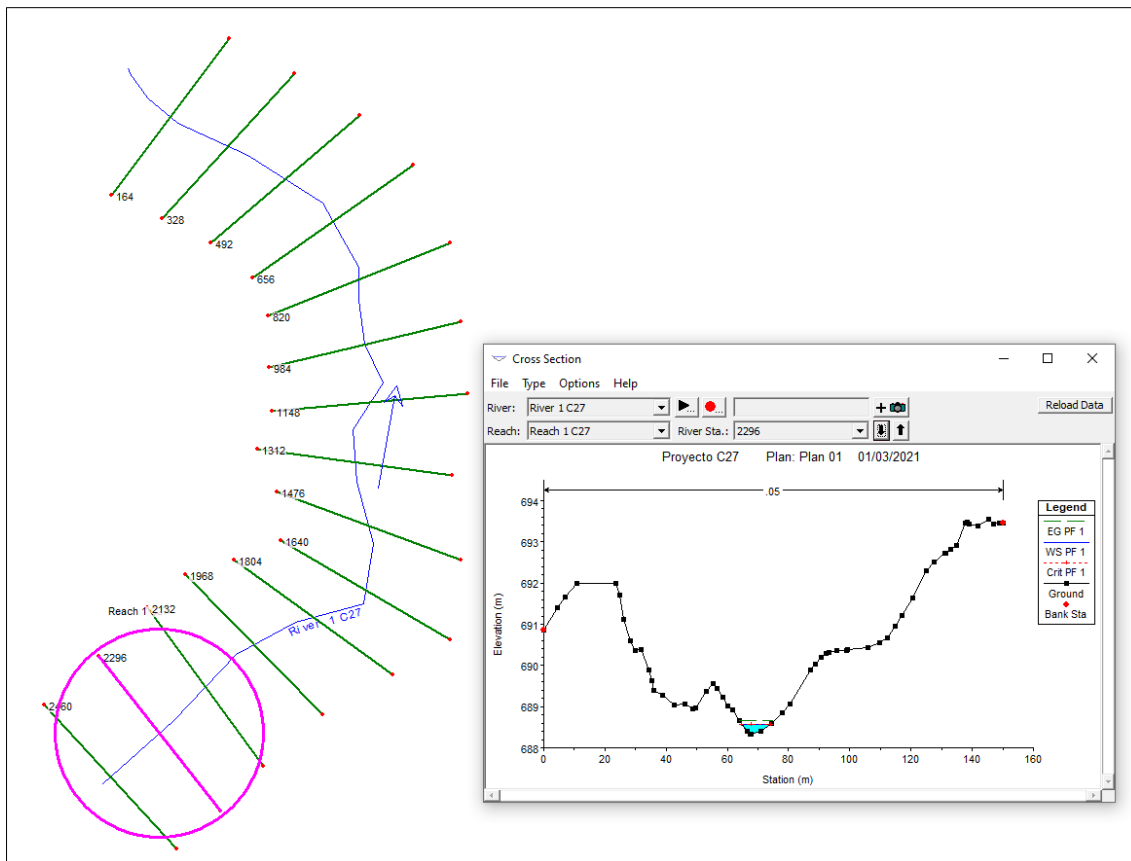
Cross Section Output

File Type Options Help

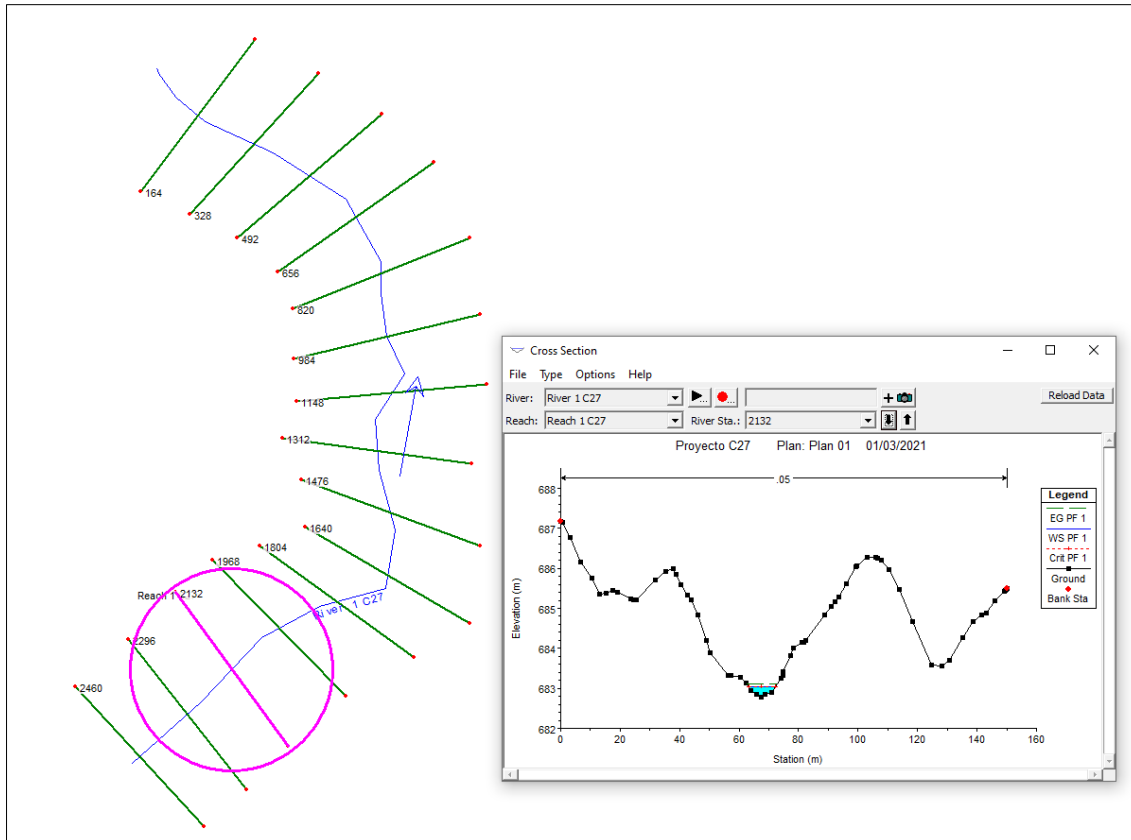
River: River 1 C27 Profile: PF 1

Reach: Reach 1 C27 RS: 2460 Plan: c27

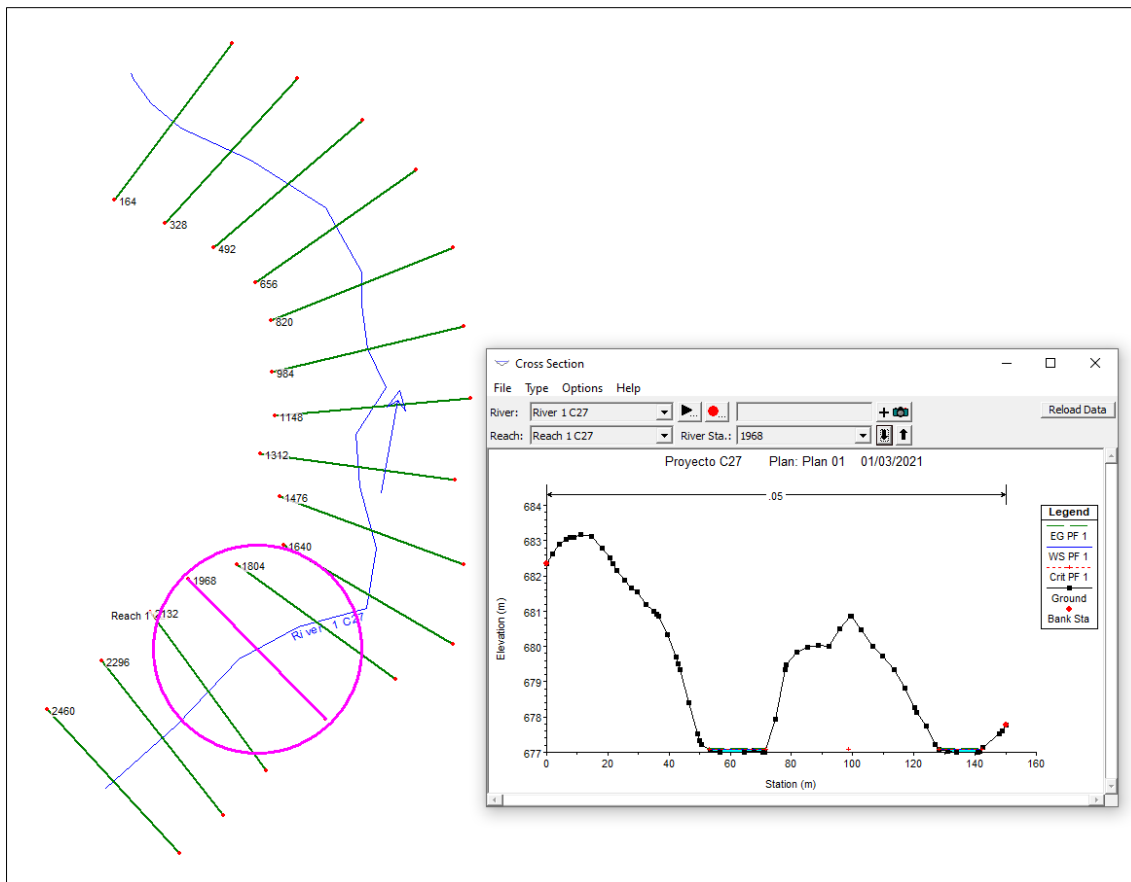
Plan: c27 River 1 C27 Reach 1 C27 RS: 2460 Profile: PF 1					
		Element	Left OB	Channel	Right OB
E.G. Elev (m)	694.28	Wt. n-Val.		0.050	
Vel Head (m)	0.05	Reach Len. (m)	50.00	50.00	50.00
W.S. Elev (m)	694.23	Flow Area (m2)		1.69	
Crit W.S. (m)	694.23	Area (m2)		1.69	
E.G. Slope (m/m)	0.052746	Flow (m3/s)		1.75	
Q Total (m3/s)	1.75	Top Width (m)		15.88	
Top Width (m)	15.88	Avg. Vel. (m/s)		1.03	
Vel Total (m/s)	1.03	Hydr. Depth (m)		0.11	
Max Chl Dpth (m)	0.17	Conv. (m3/s)		7.6	
Conv. Total (m3/s)	7.6	Wetted Per. (m)		15.89	
Length Wtd. (m)	50.00	Shear (N/m2)		55.16	
Min Ch El (m)	694.06	Stream Power (N/m s)		56.97	
Alpha	1.00	Cum Volume (1000 m3)		1.02	
Frctn Loss (m)	2.47	Cum SA (1000 m2)		7.67	
C & E Loss (m)	0.00				



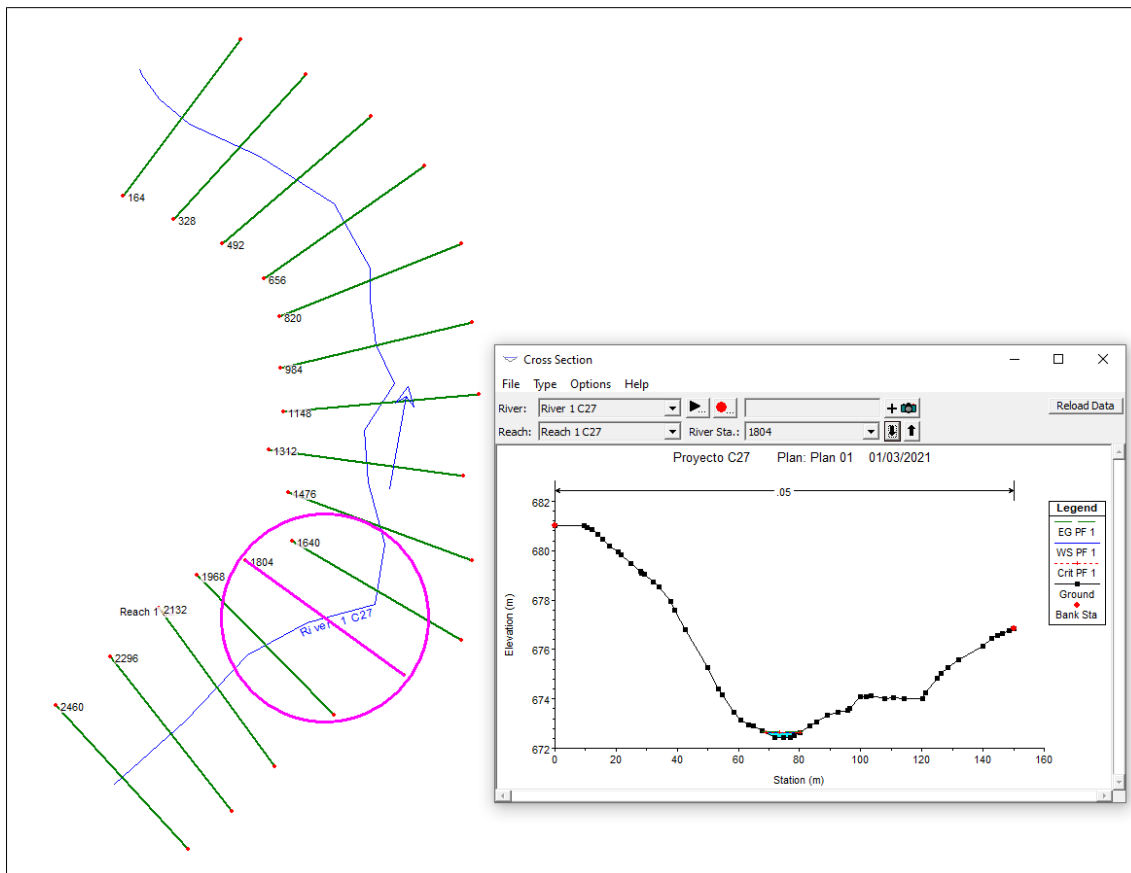
Cross Section Output					
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River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	2296	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 2296 Profile: PF 1					
E.G. Elev (m)	688.65	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	688.58	Reach Len. (m)	50.20	50.00	49.80
Crit W.S. (m)	688.58	Flow Area (m2)		1.43	
E.G. Slope (m/m)	0.046388	Area (m2)		1.43	
Q Total (m3/s)	1.75	Flow (m3/s)		1.75	
Top Width (m)	9.40	Top Width (m)		9.40	
Vel Total (m/s)	1.23	Avg. Vel. (m/s)		1.23	
Max Chl Dpth (m)	0.25	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	8.1	Conv. (m3/s)		8.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		9.42	
Min Ch El (m)	688.33	Shear (N/m2)		69.00	
Alpha	1.00	Stream Power (N/m s)		84.53	
Frctn Loss (m)	2.31	Cum Volume (1000 m3)		0.95	
C & E Loss (m)	0.00	Cum SA (1000 m2)		7.03	



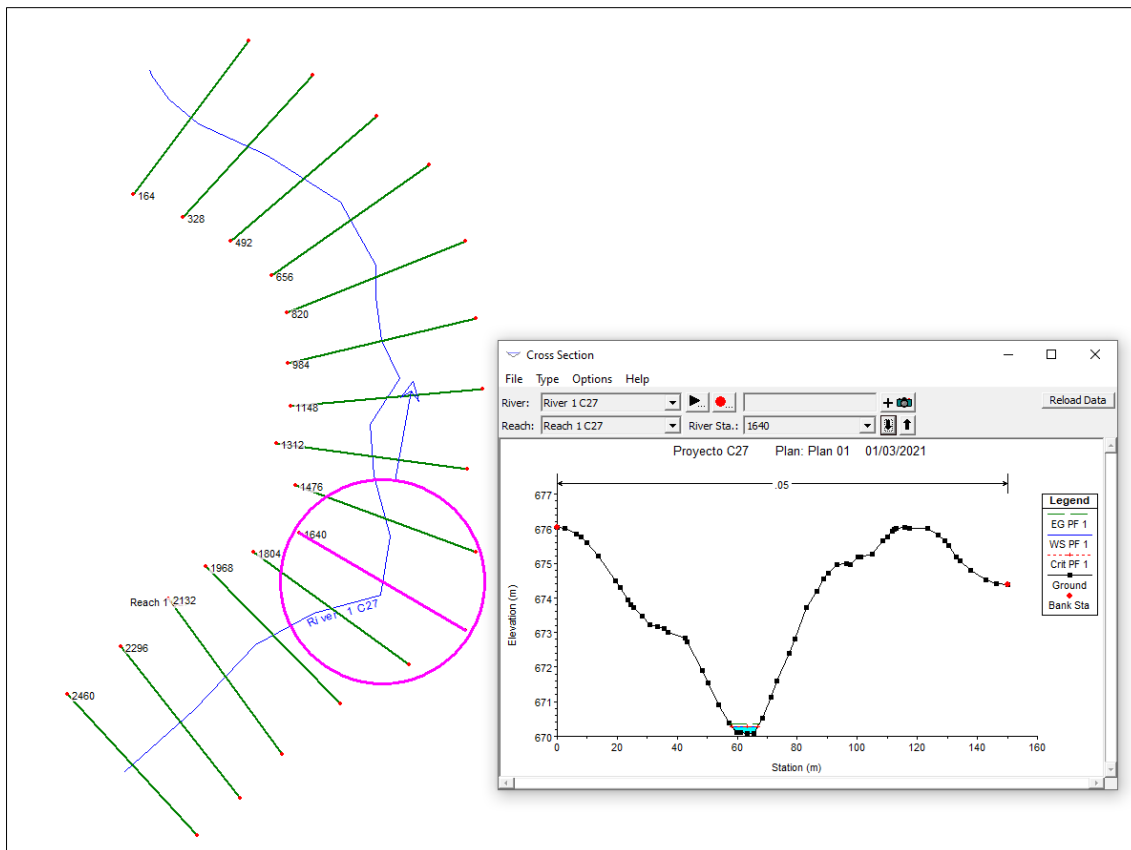
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Reach:	Reach 1 C27	RS:	2132	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 2132 Profile: PF 1					
E.G. Elev (m)	683.12	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	683.04	Reach Len. (m)	49.00	50.00	50.70
Crit W.S. (m)	683.04	Flow Area (m2)		1.41	
E.G. Slope (m/m)	0.046126	Area (m2)		1.41	
Q Total (m3/s)	1.75	Flow (m3/s)		1.75	
Top Width (m)	9.09	Top Width (m)		9.09	
Vel Total (m/s)	1.24	Avg. Vel. (m/s)		1.24	
Max Chl Dpth (m)	0.25	Hydr. Depth (m)		0.16	
Conv. Total (m3/s)	8.1	Conv. (m3/s)		8.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		9.11	
Min Ch El (m)	682.79	Shear (N/m2)		70.11	
Alpha	1.00	Stream Power (N/m s)		86.90	
Frctn Loss (m)	2.65	Cum Volume (1000 m3)		0.88	
C & E Loss (m)	0.01	Cum SA (1000 m2)		6.57	



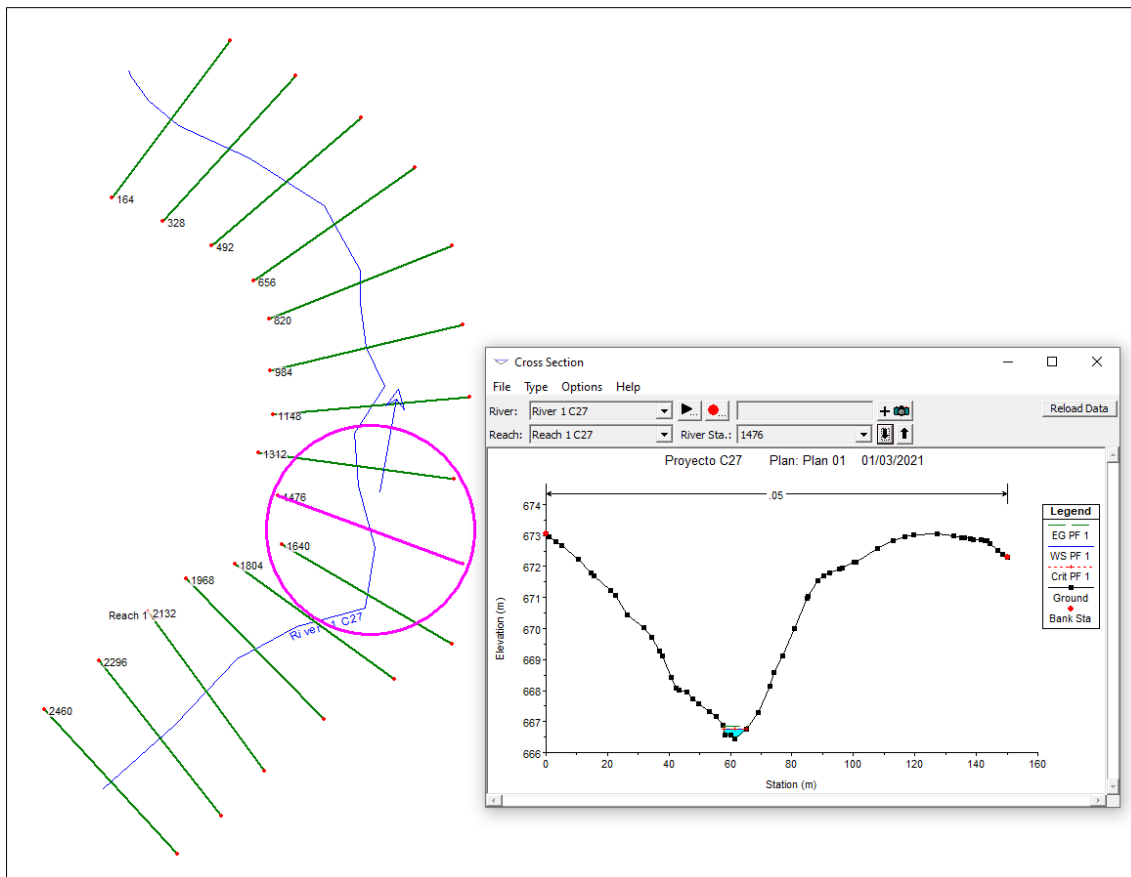
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Reach:	Reach 1 C27	RS:	1968	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1968 Profile: PF 1					
E.G. Elev (m)		Element	Left OB	Channel	Right OB
Vel Head (m)	0.03	Wt. n-Val.		0.050	
W.S. Elev (m)	677.08	Reach Len. (m)	46.90	50.00	51.50
Crit W.S. (m)	677.08	Flow Area (m2)		2.16	
E.G. Slope (m/m)	0.061318	Area (m2)		2.16	
Q Total (m3/s)	1.75	Flow (m3/s)		1.75	
Top Width (m)	32.55	Top Width (m)		32.55	
Vel Total (m/s)	0.81	Avg. Vel. (m/s)		0.81	
Max Chl Dpth (m)	0.08	Hydr. Depth (m)		0.07	
Conv. Total (m3/s)	7.1	Conv. (m3/s)		7.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		32.56	
Min Ch El (m)	677.00	Shear (N/m2)		39.85	
Alpha	1.00	Stream Power (N/m s)		32.31	
Frctn Loss (m)	2.65	Cum Volume (1000 m3)		0.79	
C & E Loss (m)	0.00	Cum SA (1000 m2)		5.53	



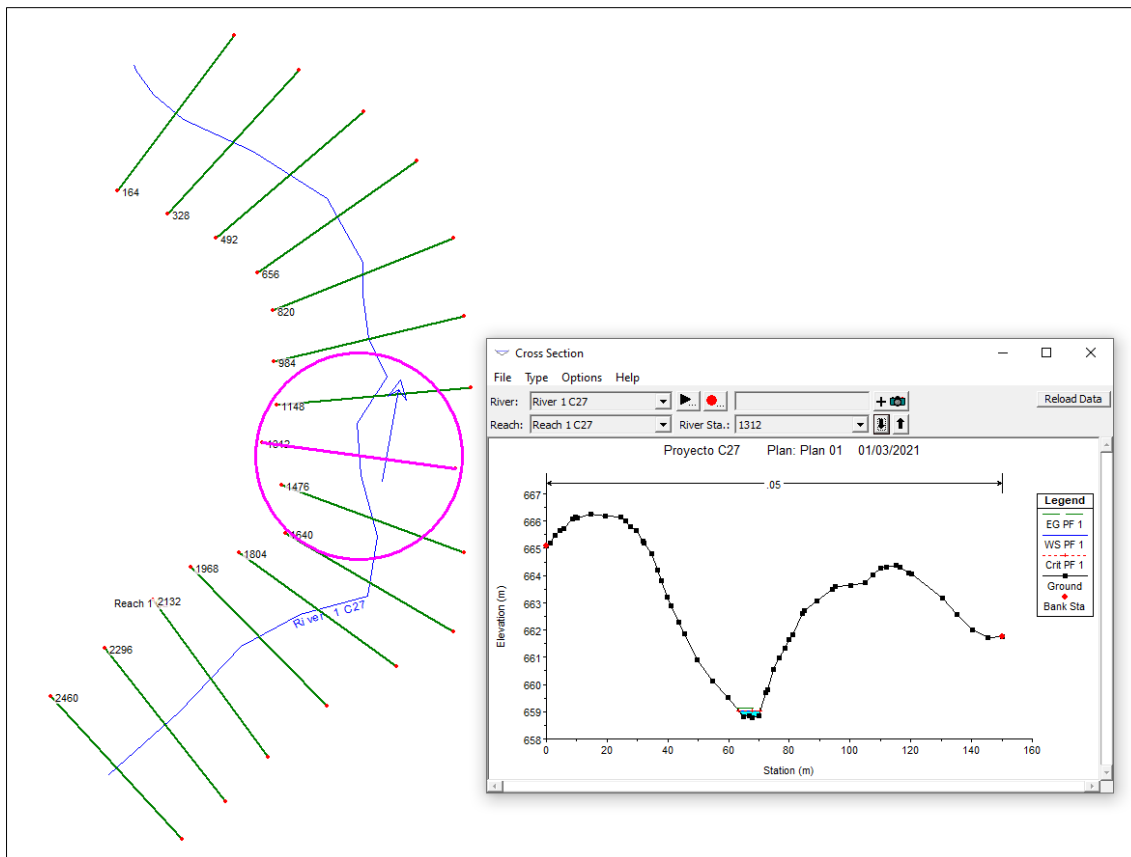
Cross Section Output					
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River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	1804	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1804 Profile: PF 1					
E.G. Elev (m)	672.68	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	672.62	Reach Len. (m)	46.10	50.00	50.80
Crit W.S. (m)	672.62	Flow Area (m2)		1.54	
E.G. Slope (m/m)	0.046240	Area (m2)		1.54	
Q Total (m3/s)	1.75	Flow (m3/s)		1.75	
Top Width (m)	11.42	Top Width (m)		11.42	
Vel Total (m/s)	1.13	Avg. Vel. (m/s)		1.13	
Max Chl Dpth (m)	0.19	Hydr. Depth (m)		0.14	
Conv. Total (m3/s)	8.1	Conv. (m3/s)		8.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		11.43	
Min Ch El (m)	672.43	Shear (N/m2)		61.29	
Alpha	1.00	Stream Power (N/m s)		69.43	
Frctn Loss (m)	2.32	Cum Volume (1000 m3)		0.69	
C & E Loss (m)	0.00	Cum SA (1000 m2)		4.43	



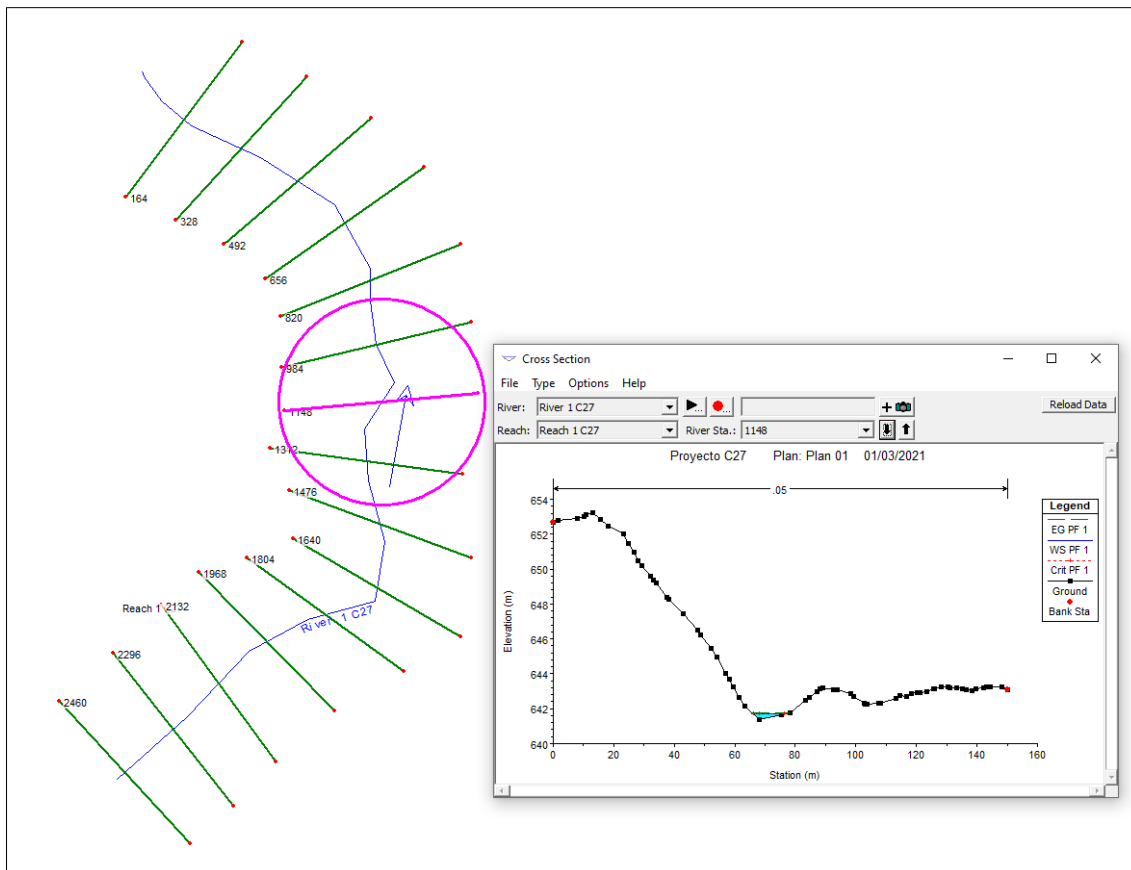
Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	1640	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1640 Profile: PF 1					
E.G. Elev (m)	670.37	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	670.29	Reach Len. (m)	47.00	50.00	49.90
Crit W.S. (m)	670.29	Flow Area (m2)		1.38	
E.G. Slope (m/m)	0.046361	Area (m2)		1.38	
Q Total (m3/s)	1.75	Flow (m3/s)		1.75	
Top Width (m)	8.57	Top Width (m)		8.57	
Vel Total (m/s)	1.27	Avg. Vel. (m/s)		1.27	
Max Chl Dpth (m)	0.22	Hydr. Depth (m)		0.16	
Conv. Total (m3/s)	8.1	Conv. (m3/s)		8.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		8.59	
Min Ch El (m)	670.07	Shear (N/m2)		72.87	
Alpha	1.00	Stream Power (N/m s)		92.60	
Frctn Loss (m)	2.28	Cum Volume (1000 m3)		0.62	
C & E Loss (m)	0.00	Cum SA (1000 m2)		3.93	



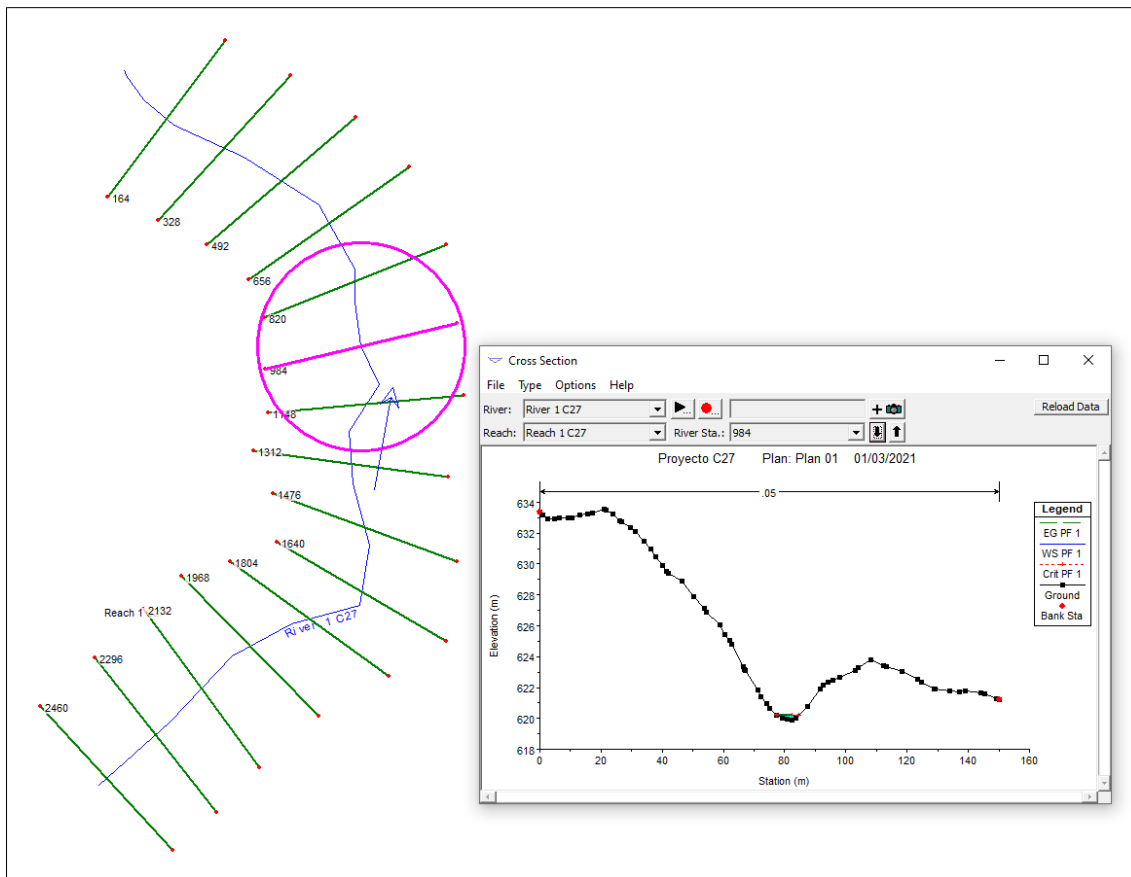
Cross Section Output					
File Type Options Help					
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Reach:	Reach 1 C27	RS:	1476	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1476 Profile: PF 1					
E.G. Elev (m)	666.85	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	666.76	Reach Len. (m)	47.40	50.00	52.50
Crit W.S. (m)	666.76	Flow Area (m2)		1.30	
E.G. Slope (m/m)	0.044842	Area (m2)		1.30	
Q Total (m3/s)	1.75	Flow (m3/s)		1.75	
Top Width (m)	7.26	Top Width (m)		7.26	
Vel Total (m/s)	1.34	Avg. Vel. (m/s)		1.34	
Max Chl Dpth (m)	0.32	Hydr. Depth (m)		0.18	
Conv. Total (m3/s)	8.3	Conv. (m3/s)		8.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.32	
Min Ch El (m)	666.44	Shear (N/m2)		78.39	
Alpha	1.00	Stream Power (N/m s)		105.16	
Frctn Loss (m)	2.24	Cum Volume (1000 m3)		0.55	
C & E Loss (m)	0.00	Cum SA (1000 m2)		3.54	



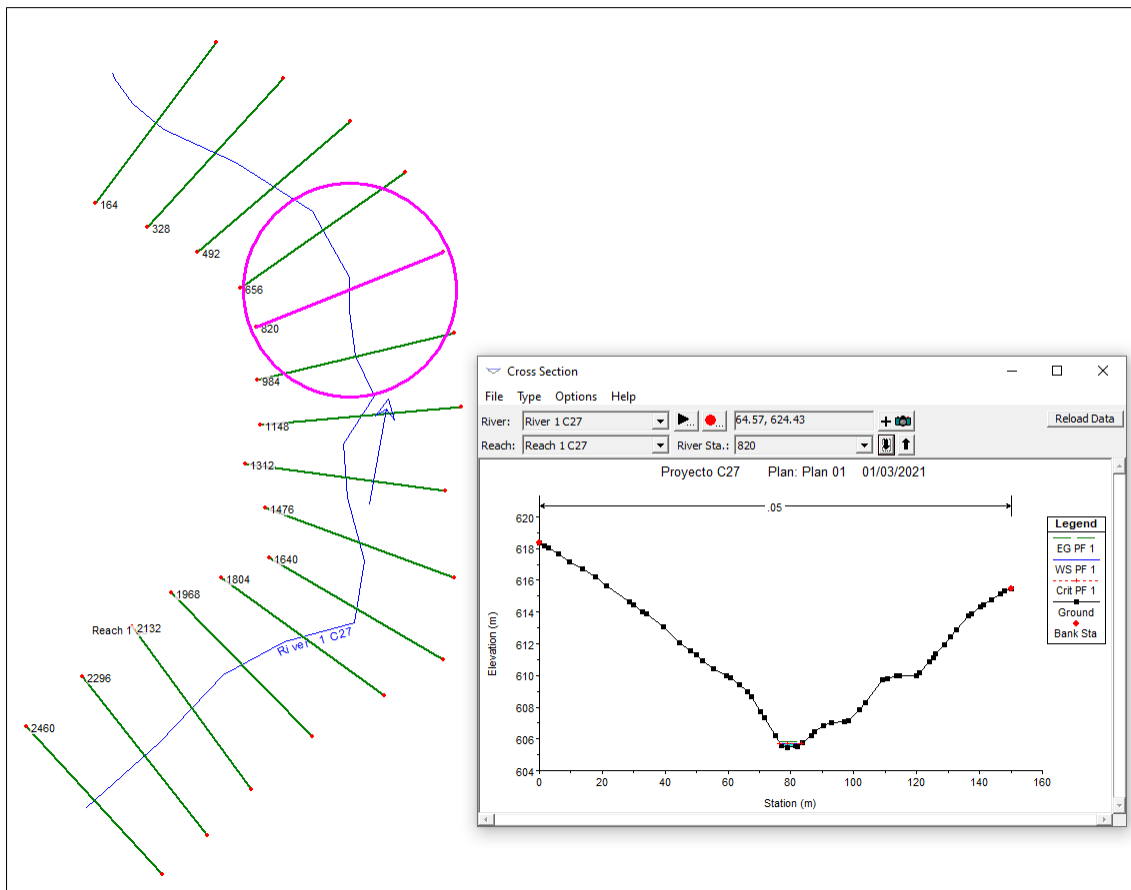
Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	1312	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1312 Profile: PF 1					
E.G. Elev (m)	659.13	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	659.03	Reach Len. (m)	46.70	50.00	51.60
Crit W.S. (m)	659.03	Flow Area (m2)		1.29	
E.G. Slope (m/m)	0.044877	Area (m2)		1.29	
Q Total (m3/s)	1.75	Flow (m3/s)		1.75	
Top Width (m)	7.04	Top Width (m)		7.04	
Vel Total (m/s)	1.36	Avg. Vel. (m/s)		1.36	
Max Chl Dpth (m)	0.26	Hydr. Depth (m)		0.18	
Conv. Total (m3/s)	8.3	Conv. (m3/s)		8.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.09	
Min Ch El (m)	658.77	Shear (N/m2)		79.91	
Alpha	1.00	Stream Power (N/m s)		108.56	
Frctn Loss (m)	2.32	Cum Volume (1000 m3)		0.49	
C & E Loss (m)	0.01	Cum SA (1000 m2)		3.18	



Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	1148	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1148 Profile: PF 1					
E.G. Elev (m)	641.76	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.		0.050	
W.S. Elev (m)	641.68	Reach Len. (m)	47.60	50.00	50.30
Crit W.S. (m)	641.68	Flow Area (m2)		1.45	
E.G. Slope (m/m)	0.048173	Area (m2)		1.45	
Q Total (m3/s)	1.75	Flow (m3/s)		1.75	
Top Width (m)	10.07	Top Width (m)		10.07	
Vel Total (m/s)	1.20	Avg. Vel. (m/s)		1.20	
Max Chl Dpth (m)	0.28	Hydr. Depth (m)		0.14	
Conv. Total (m3/s)	8.0	Conv. (m3/s)		8.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		10.10	
Min Ch El (m)	641.40	Shear (N/m2)		67.94	
Alpha	1.00	Stream Power (N/m s)		81.86	
Frctn Loss (m)	2.33	Cum Volume (1000 m3)		0.42	
C & E Loss (m)	0.00	Cum SA (1000 m2)		2.75	



Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	984	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 984 Profile: PF 1					
E.G. Elev (m)	620.29	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	620.20	Reach Len. (m)	48.20	50.00	51.00
Crit W.S. (m)	620.20	Flow Area (m2)		1.30	
E.G. Slope (m/m)	0.045092	Area (m2)		1.30	
Q Total (m3/s)	1.75	Flow (m3/s)		1.75	
Top Width (m)	7.29	Top Width (m)		7.29	
Vel Total (m/s)	1.34	Avg. Vel. (m/s)		1.34	
Max Chl Dpth (m)	0.31	Hydr. Depth (m)		0.18	
Conv. Total (m3/s)	8.2	Conv. (m3/s)		8.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.32	
Min Ch El (m)	619.89	Shear (N/m2)		78.65	
Alpha	1.00	Stream Power (N/m s)		105.65	
Frctn Loss (m)	2.23	Cum Volume (1000 m3)		0.35	
C & E Loss (m)	0.00	Cum SA (1000 m2)		2.32	



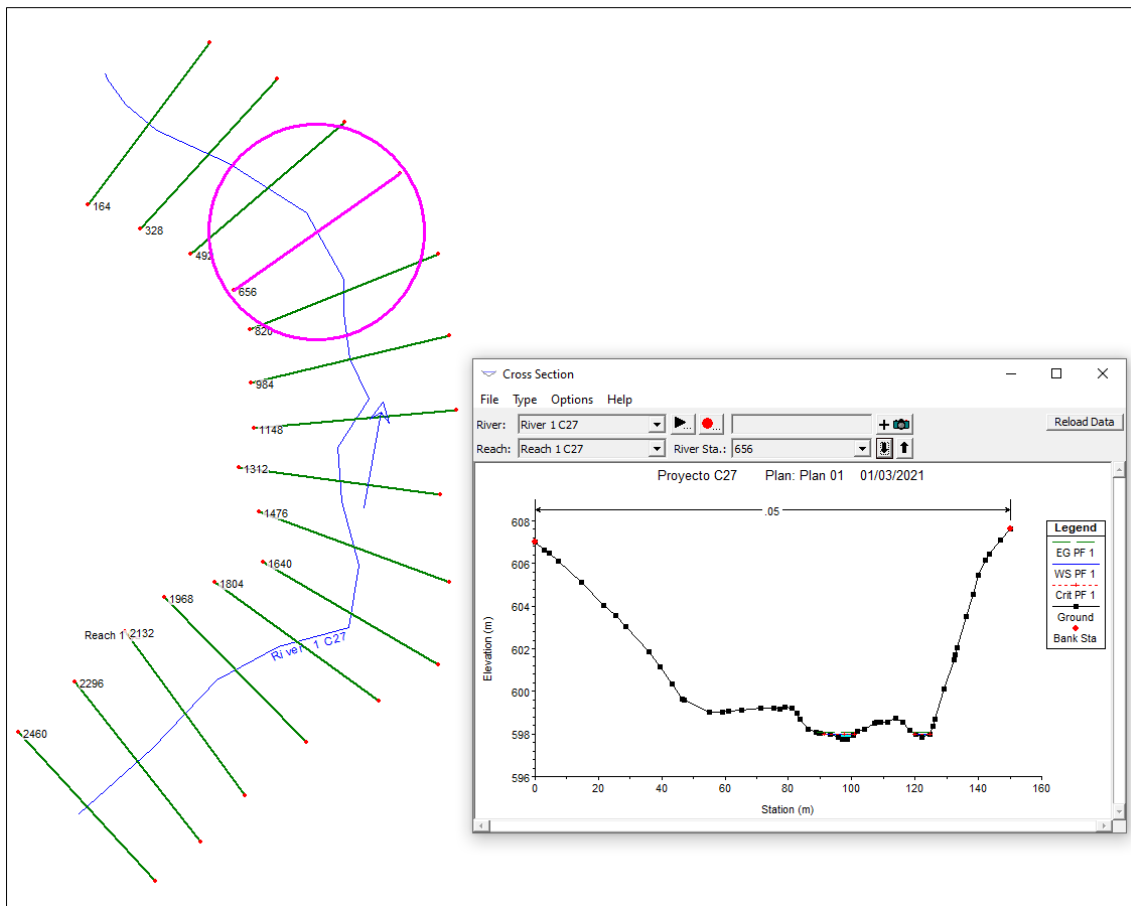
Cross Section Output

File Type Options Help

River: River 1 C27 Profile: PF 1

Reach: Reach 1 C27 RS: 820 Plan: c27

Plan: c27 River 1 C27 Reach 1 C27 RS: 820 Profile: PF 1					
		Element	Left OB	Channel	Right OB
E.G. Elev (m)	605.81	Wt. n-Val.		0.050	
Vel Head (m)	0.10	Reach Len. (m)	48.00	50.00	51.90
W.S. Elev (m)	605.72	Flow Area (m2)		1.27	
Crit W.S. (m)	605.72	Area (m2)		1.27	
E.G. Slope (m/m)	0.044125	Flow (m3/s)		1.75	
Q Total (m3/s)	1.75	Top Width (m)		6.77	
Top Width (m)	6.77	Avg. Vel. (m/s)		1.37	
Vel Total (m/s)	1.37	Hydr. Depth (m)		0.19	
Max Chl Dpth (m)	0.30	Conv. (m3/s)		8.3	
Conv. Total (m3/s)	8.3	Wetted Per. (m)		6.82	
Length Wtd. (m)	50.00	Shear (N/m2)		80.87	
Min Ch El (m)	605.42	Stream Power (N/m s)		111.07	
Alpha	1.00	Cum Volume (1000 m3)		0.29	
Frcbn Loss (m)	2.38	Cum SA (1000 m2)		1.97	
C & E Loss (m)	0.01				



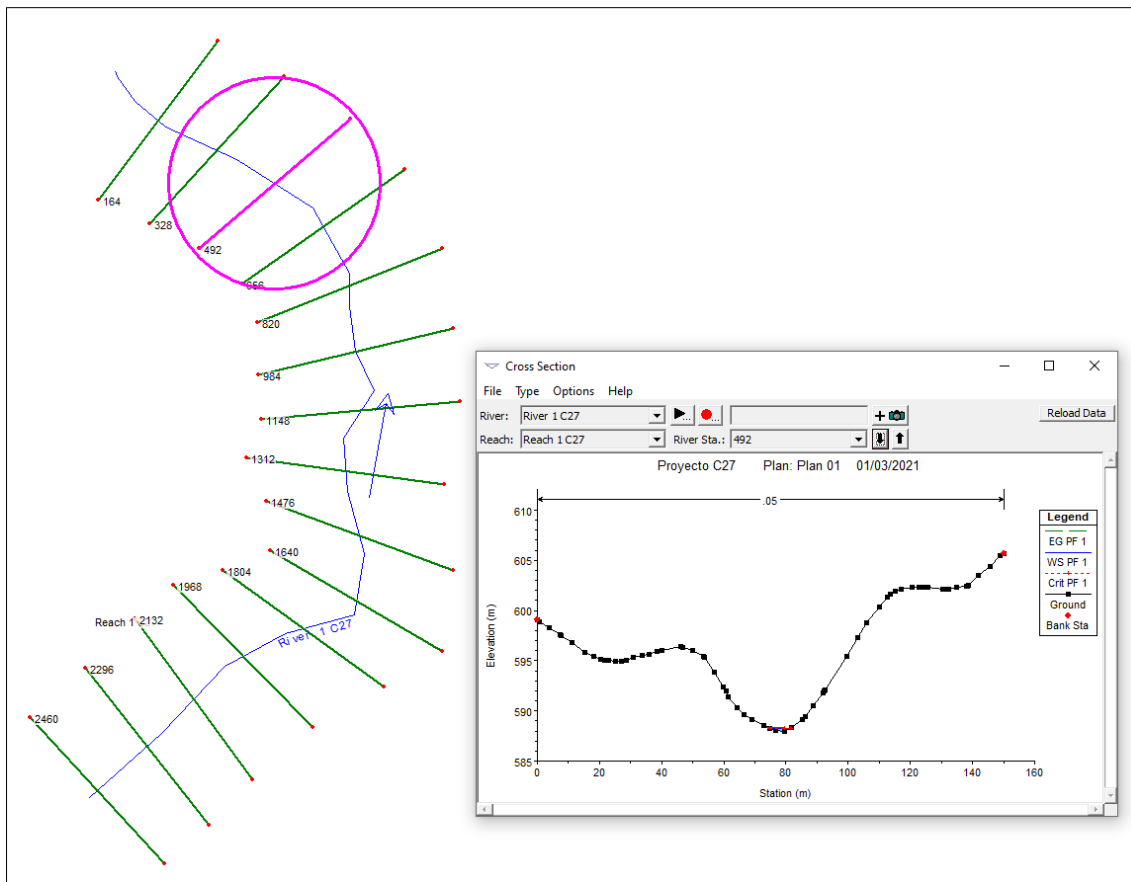
Cross Section Output

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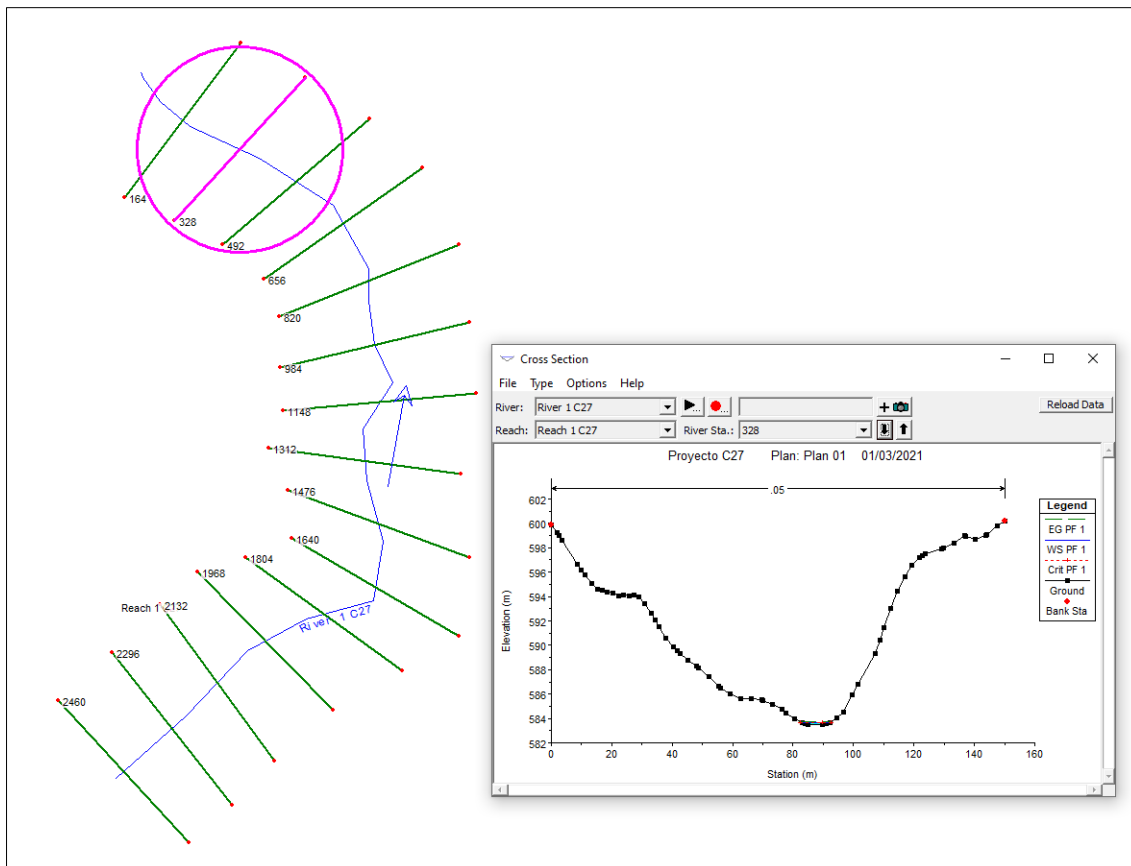
River: River 1 C27 Profile: PF 1

Reach: Reach 1 C27 RS: 656 Plan: c27

Plan: c27 River 1 C27 Reach 1 C27 RS: 656 Profile: PF 1					
		Element	Left OB	Channel	Right OB
E.G. Elev (m)	598.06	Wt. n-Val.		0.050	
Vel Head (m)	0.06	Reach Len. (m)	49.60	50.00	49.70
W.S. Elev (m)	598.01	Flow Area (m2)		1.65	
Crit W.S. (m)	598.01	Area (m2)		1.65	
E.G. Slope (m/m)	0.051500	Flow (m3/s)		1.75	
Q Total (m3/s)	1.75	Top Width (m)		14.48	
Top Width (m)	14.48	Avg. Vel. (m/s)		1.06	
Vel Total (m/s)	1.06	Hydr. Depth (m)		0.11	
Max Chl Dpth (m)	0.24	Conv. (m3/s)		7.7	
Conv. Total (m3/s)	7.7	Wetted Per. (m)		14.51	
Length Wtd. (m)	50.00	Shear (N/m2)		57.28	
Min Ch El (m)	597.77	Stream Power (N/m s)		60.92	
Alpha	1.00	Cum Volume (1000 m3)		0.21	
Frctn Loss (m)	2.38	Cum SA (1000 m2)		1.43	
C & E Loss (m)	0.00				



Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	492	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 492 Profile: PF 1					
E.G. Elev (m)	588.37	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	588.28	Reach Len. (m)	49.20	50.00	50.20
Crit W.S. (m)	588.28	Flow Area (m2)		1.28	
E.G. Slope (m/m)	0.044128	Area (m2)		1.28	
Q Total (m3/s)	1.75	Flow (m3/s)		1.75	
Top Width (m)	6.91	Top Width (m)		6.91	
Vel Total (m/s)	1.36	Avg. Vel. (m/s)		1.36	
Max Chl Dpth (m)	0.28	Hydr. Depth (m)		0.19	
Conv. Total (m3/s)	8.3	Conv. (m3/s)		8.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		6.95	
Min Ch El (m)	588.00	Shear (N/m2)		79.98	
Alpha	1.00	Stream Power (N/m s)		109.03	
Frctn Loss (m)	2.26	Cum Volume (1000 m3)		0.14	
C & E Loss (m)	0.01	Cum SA (1000 m2)		0.90	



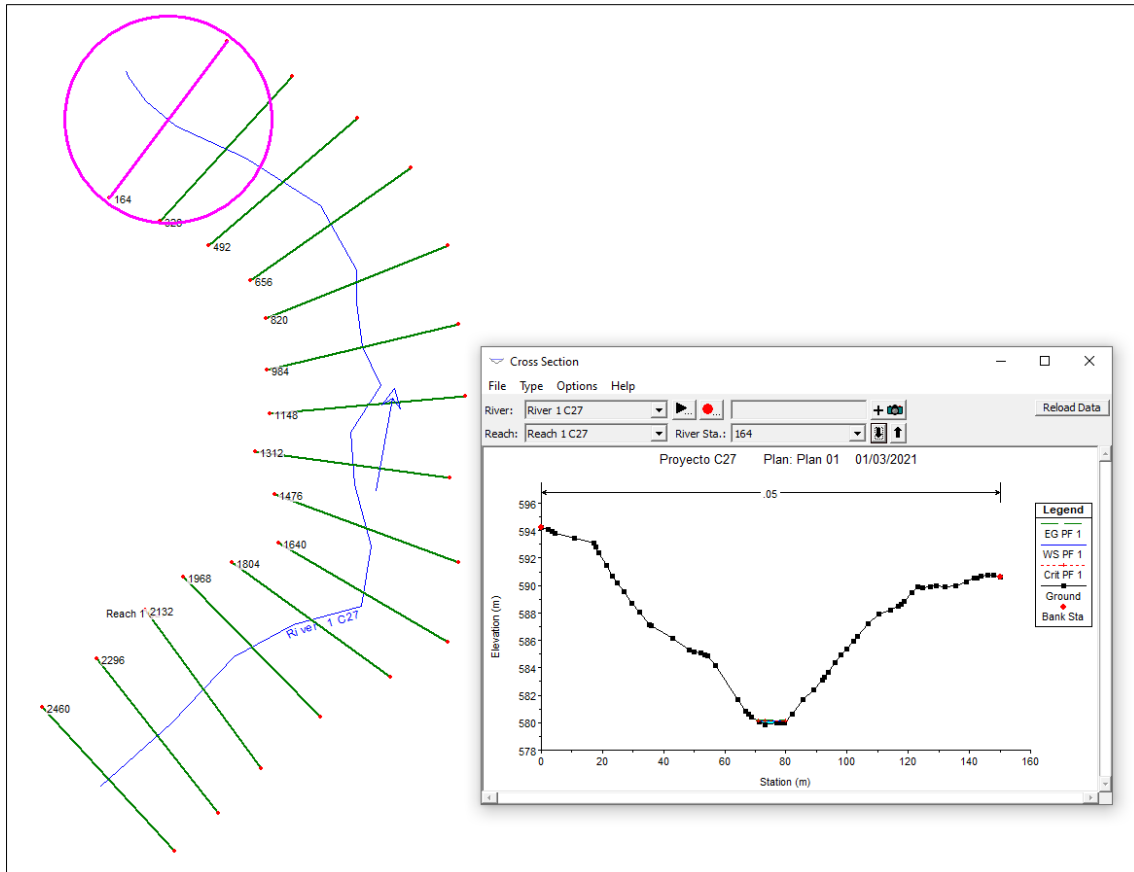
Cross Section Output

File Type Options Help

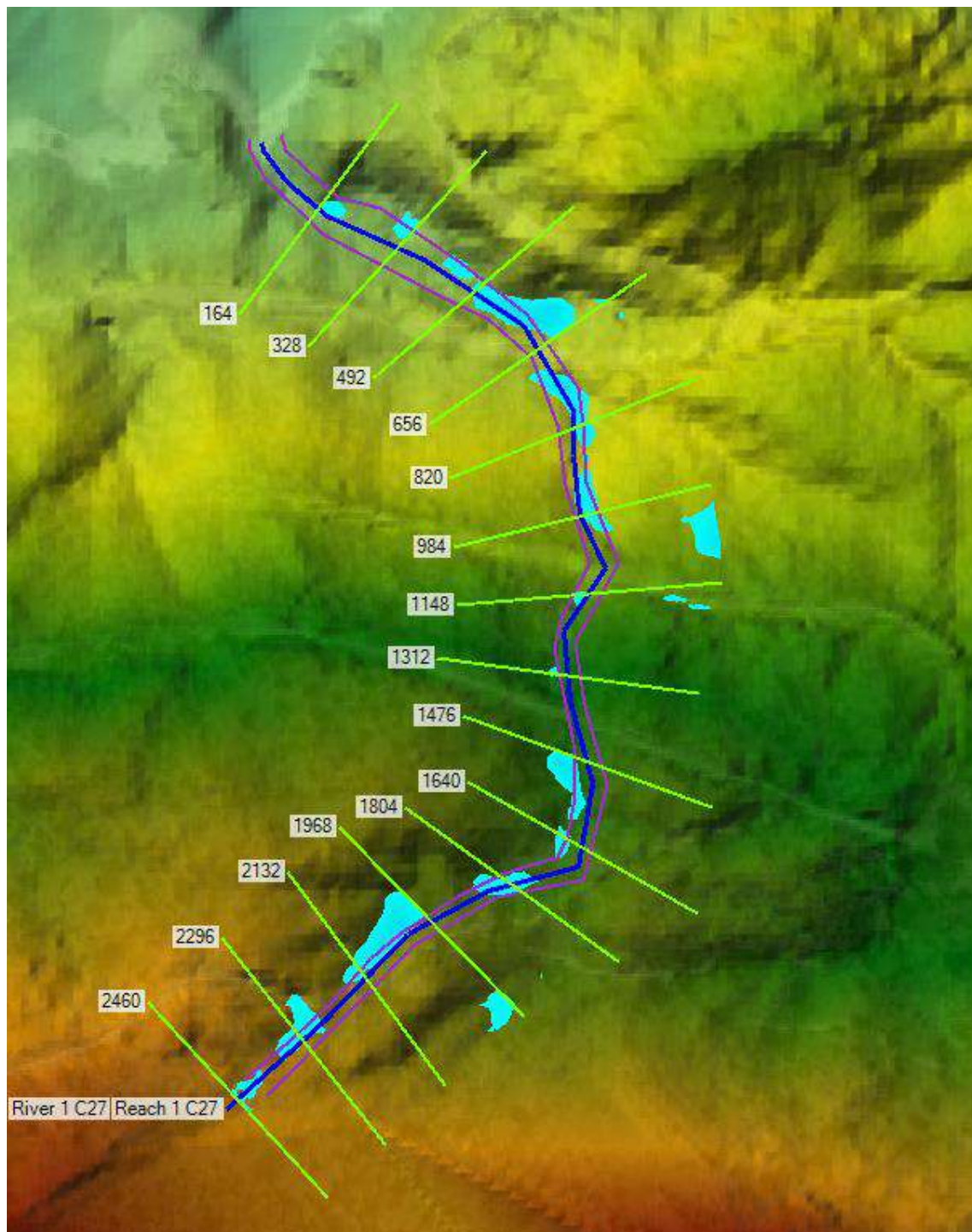
River: River 1 C27 Profile: PF 1

Reach: Reach 1 C27 RS: 328 Plan: c27

Plan: c27 River 1 C27 Reach 1 C27 RS: 328 Profile: PF 1					
		Element	Left OB	Channel	Right OB
E.G. Elev (m)	583.76	Wt. n-Val.		0.050	
Vel Head (m)	0.07	Reach Len. (m)	48.30	50.00	52.40
W.S. Elev (m)	583.68	Flow Area (m2)		1.46	
Crit W.S. (m)	583.68	Area (m2)		1.46	
E.G. Slope (m/m)	0.046438	Flow (m3/s)		1.75	
Q Total (m3/s)	1.75	Top Width (m)		10.02	
Top Width (m)	10.02	Avg. Vel. (m/s)		1.19	
Vel Total (m/s)	1.19	Hydr. Depth (m)		0.15	
Max Chl Dpth (m)	0.21	Conv. (m3/s)		8.1	
Conv. Total (m3/s)	8.1	Wetted Per. (m)		10.03	
Length Wtd. (m)	50.00	Shear (N/m2)		66.47	
Min Ch El (m)	583.47	Stream Power (N/m s)		79.42	
Alpha	1.00	Cum Volume (1000 m3)		0.07	
Frctn Loss (m)	2.34	Cum SA (1000 m2)		0.48	
C & E Loss (m)	0.00				

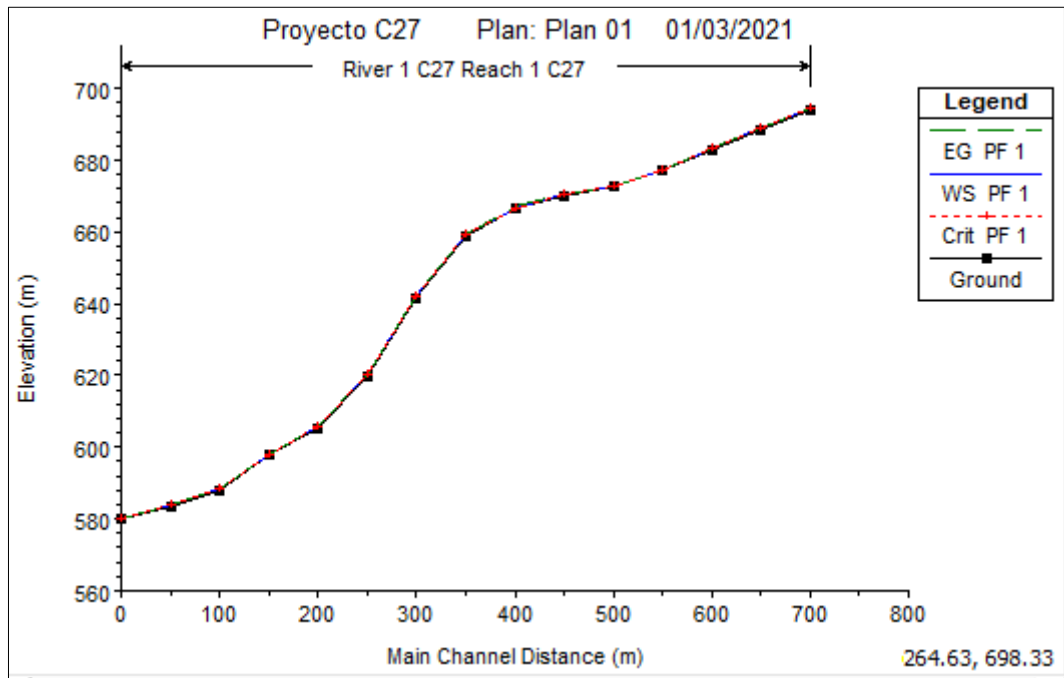


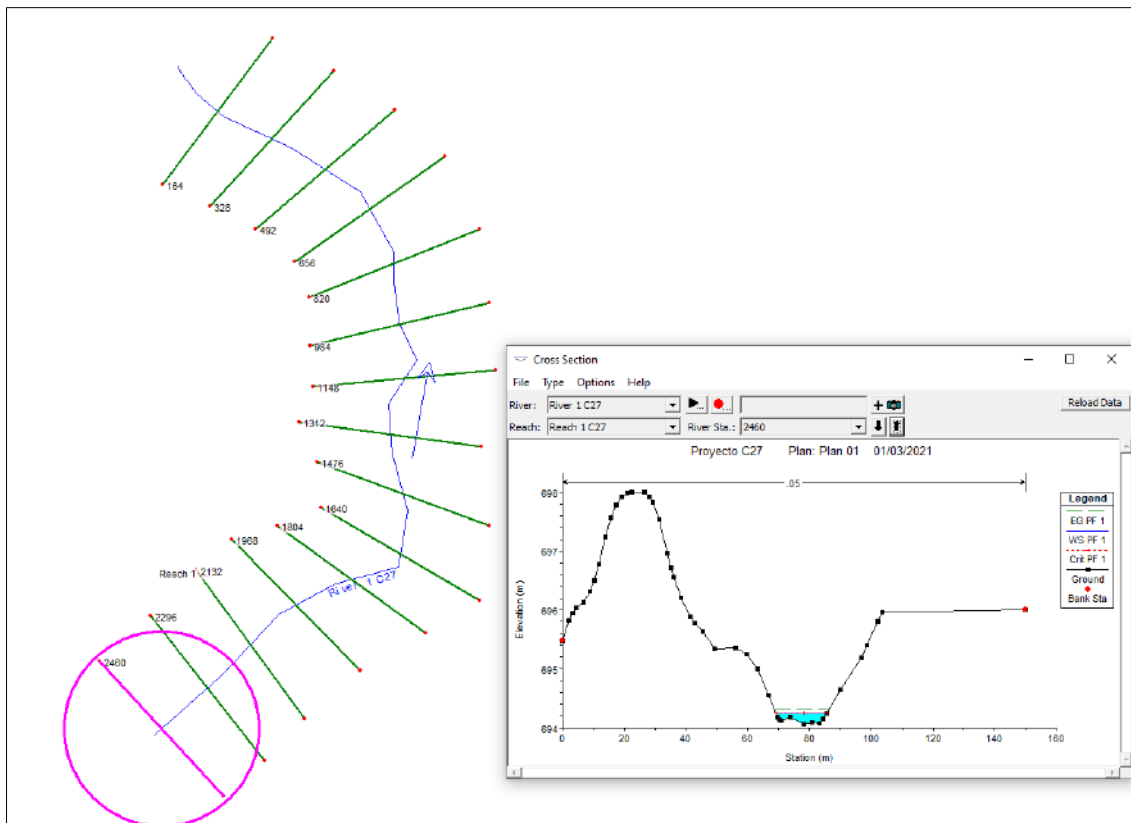
Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	164	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 164 Profile: PF 1					
E.G. Elev (m)	580.19	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	580.11	Reach Len. (m)			
Crit W.S. (m)	580.11	Flow Area (m2)		1.40	
E.G. Slope (m/m)	0.047256	Area (m2)		1.40	
Q Total (m3/s)	1.75	Flow (m3/s)		1.75	
Top Width (m)	9.05	Top Width (m)		9.05	
Vel Total (m/s)	1.25	Avg. Vel. (m/s)		1.25	
Max Chl Dpth (m)	0.29	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	8.1	Conv. (m3/s)		8.1	
Length Wtd. (m)		Wetted Per. (m)		9.09	
Min Ch El (m)	579.82	Shear (N/m2)		71.41	
Alpha	1.00	Stream Power (N/m s)		89.24	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			



T500 (Q=2,31 m³/s)

Reach	River Sta	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m ²)	Top Width (m)	Froude # Chl
Reach 1 C27	2460	PF 1	2.31	694.06	694.25	694.25	694.32	0.049332	1.12	2.07	16.34	1.00
Reach 1 C27	2296	PF 1	2.31	688.33	688.61	688.61	688.70	0.044680	1.31	1.77	10.29	1.01
Reach 1 C27	2132	PF 1	2.31	682.79	683.07	683.07	683.16	0.044180	1.33	1.73	9.65	1.01
Reach 1 C27	1968	PF 1	2.31	677.00	677.09	677.09	677.14	0.063318	0.91	2.54	32.99	1.05
Reach 1 C27	1804	PF 1	2.31	672.43	672.65	672.65	672.72	0.046242	1.23	1.87	12.18	1.00
Reach 1 C27	1640	PF 1	2.31	670.07	670.32	670.32	670.42	0.043141	1.35	1.71	9.15	1.00
Reach 1 C27	1476	PF 1	2.31	666.44	666.80	666.80	666.90	0.042681	1.44	1.60	7.72	1.01
Reach 1 C27	1312	PF 1	2.31	658.77	659.08	659.08	659.18	0.041827	1.45	1.59	7.45	1.00
Reach 1 C27	1148	PF 1	2.31	641.40	641.72	641.72	641.80	0.046005	1.28	1.81	11.12	1.01
Reach 1 C27	984	PF 1	2.31	619.89	620.24	620.24	620.35	0.042705	1.45	1.60	7.67	1.01
Reach 1 C27	820	PF 1	2.31	605.42	605.76	605.76	605.87	0.041755	1.48	1.56	7.14	1.01
Reach 1 C27	656	PF 1	2.31	597.77	598.03	598.03	598.10	0.050141	1.11	2.08	16.86	1.01
Reach 1 C27	492	PF 1	2.31	588.00	588.32	588.32	588.43	0.041634	1.45	1.60	7.51	1.00
Reach 1 C27	328	PF 1	2.31	583.47	583.71	583.71	583.80	0.044957	1.30	1.77	10.42	1.01
Reach 1 C27	164	PF 1	2.31	579.82	580.14	580.14	580.23	0.044755	1.35	1.71	9.41	1.01





Cross Section Output

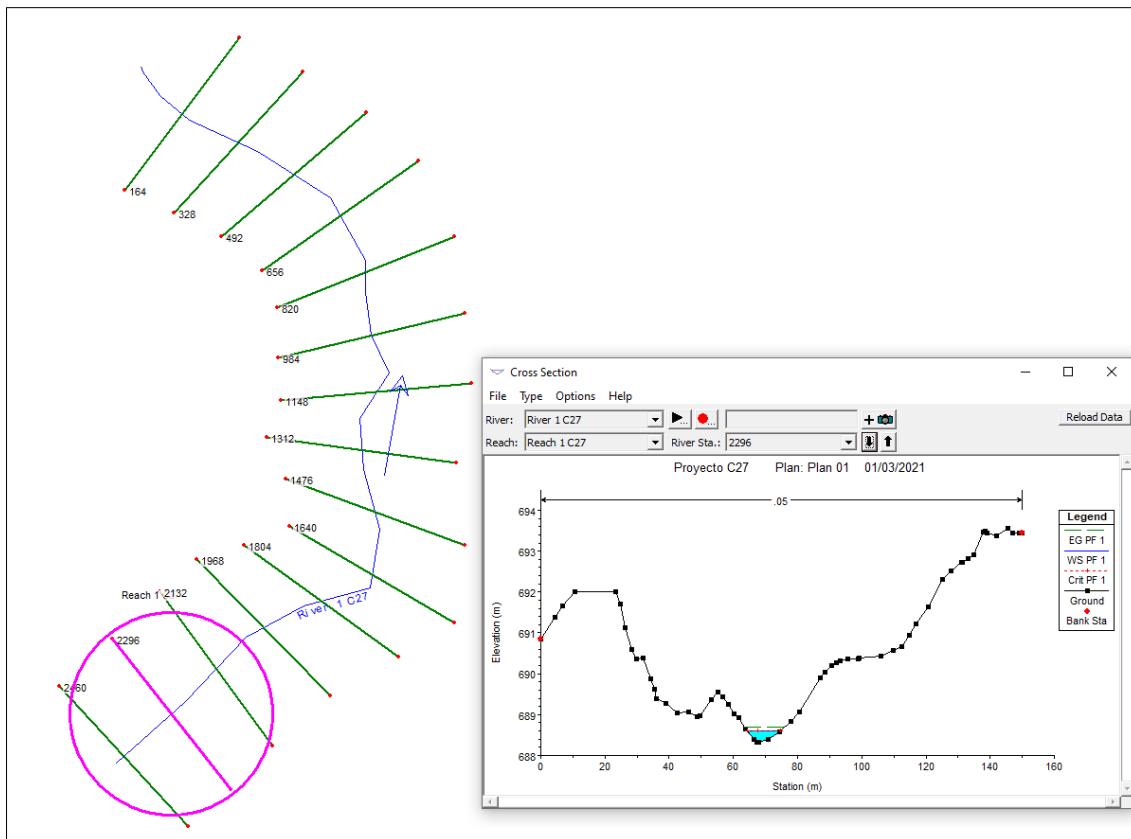
File Type Options Help

River: River 1 C27 Profile: PF 1

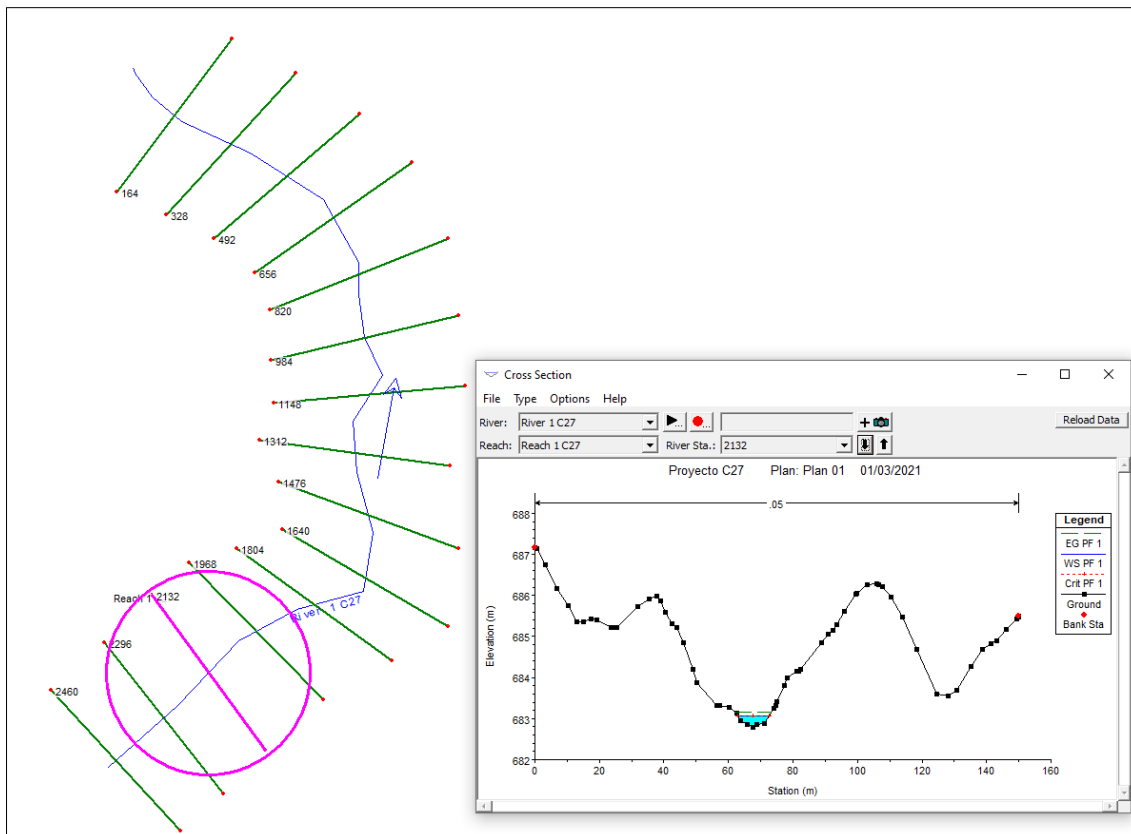
Reach: Reach 1 C27 RS: 2460 Plan: c27

Plan: c27 River 1 C27 Reach 1 C27 RS: 2460 Profile: PF 1

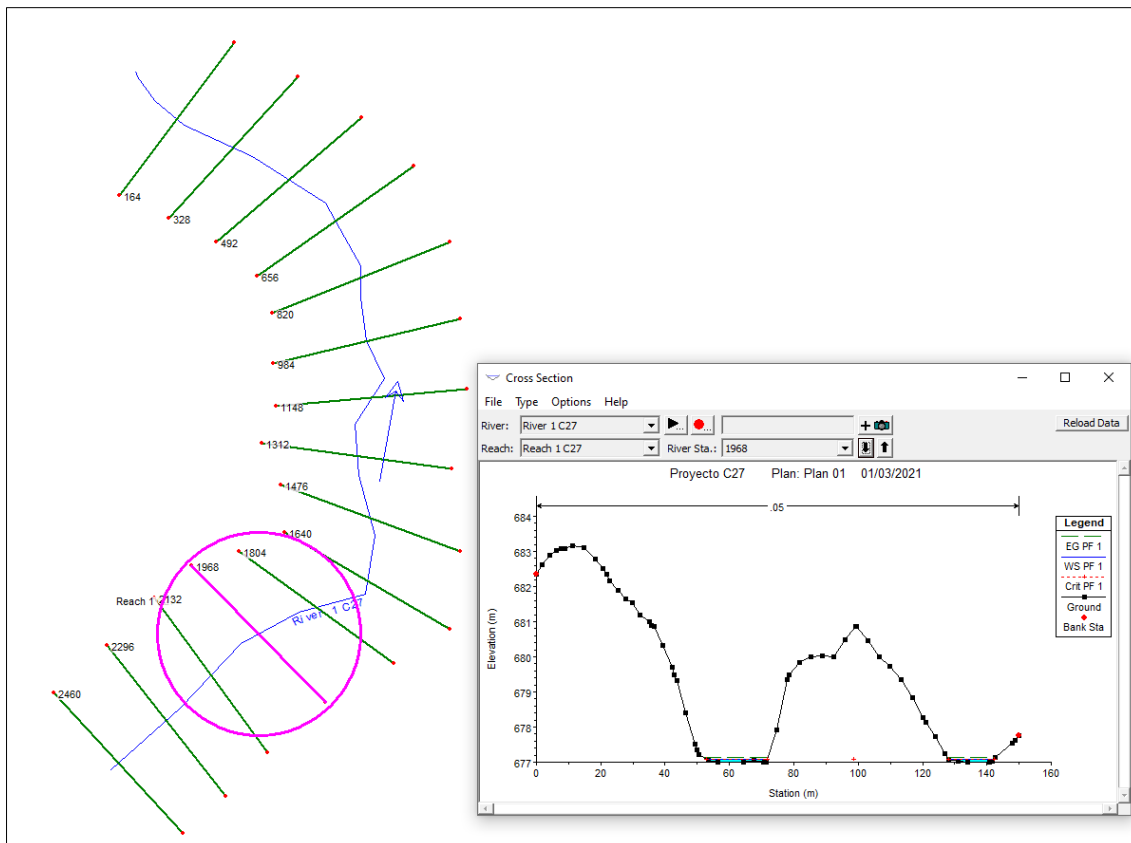
Element	Left OB	Channel	Right OB
E.G. Elev (m)	694.32		
Vel Head (m)	0.06		
W.S. Elev (m)	694.25		
Crit W.S. (m)	694.25		
E.G. Slope (m/m)	0.049332		
Q Total (m3/s)	2.31		
Top Width (m)	16.34		
Vel Total (m/s)	1.12		
Max Chl Dpth (m)	0.19		
Conv. Total (m3/s)	10.4		
Length Wtd. (m)	50.00		
Min Ch El (m)	694.06		
Alpha	1.00		
Frctn Loss (m)	2.35		
C & E Loss (m)	0.00		
Wt. n-Val.		0.050	
Reach Len. (m)	50.00	50.00	50.00
Flow Area (m2)		2.07	
Area (m2)		2.07	
Flow (m3/s)		2.31	
Top Width (m)		16.34	
Avg. Vel. (m/s)		1.12	
Hydr. Depth (m)		0.13	
Conv. (m3/s)		10.4	
Wetted Per. (m)		16.36	
Shear (N/m2)		61.10	
Stream Power (N/m s)		68.31	
Cum Volume (1000 m3)		1.26	
Cum SA (1000 m2)		8.15	



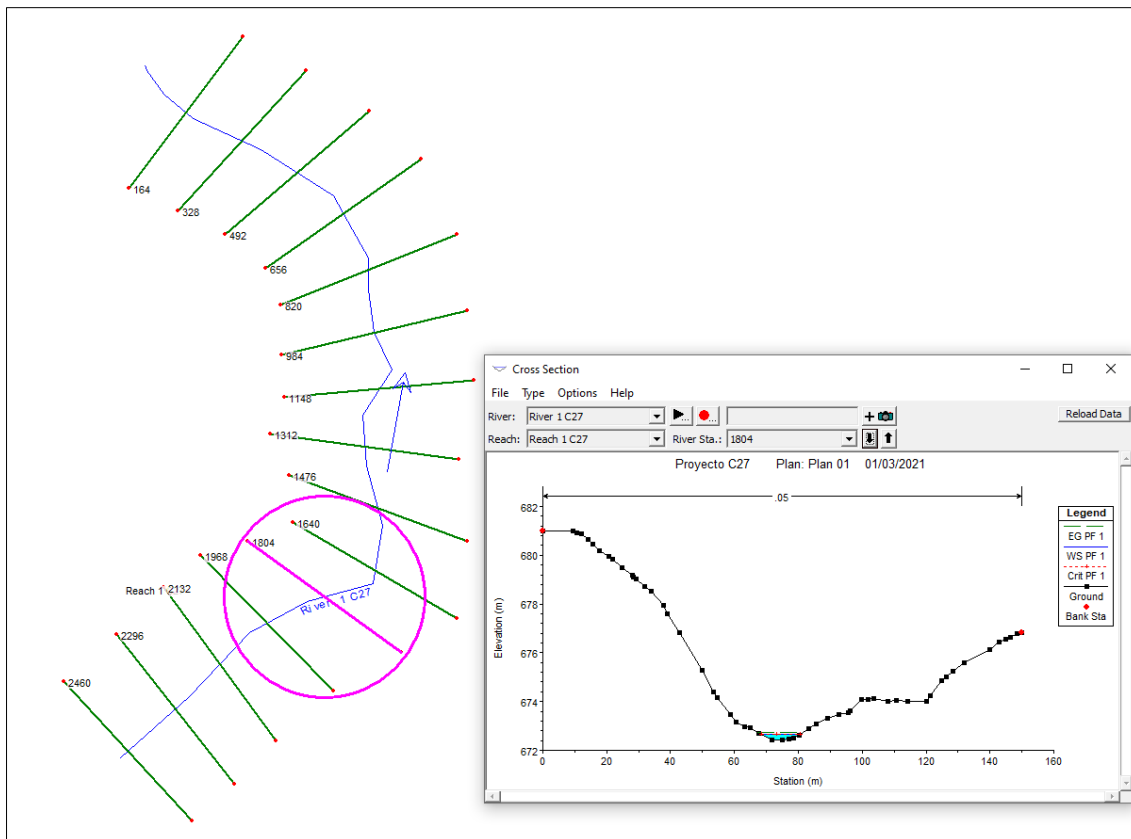
Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	2296	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 2296 Profile: PF 1					
E.G. Elev (m)	688.70	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	688.61	Reach Len. (m)	50.20	50.00	49.80
Crit W.S. (m)	688.61	Flow Area (m2)		1.77	
E.G. Slope (m/m)	0.044680	Area (m2)		1.77	
Q Total (m3/s)	2.31	Flow (m3/s)		2.31	
Top Width (m)	10.29	Top Width (m)		10.29	
Vel Total (m/s)	1.31	Avg. Vel. (m/s)		1.31	
Max Chl Dpth (m)	0.28	Hydr. Depth (m)		0.17	
Conv. Total (m3/s)	10.9	Conv. (m3/s)		10.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		10.31	
Min Ch El (m)	688.33	Shear (N/m2)		75.19	
Alpha	1.00	Stream Power (N/m s)		98.16	
Frctn Loss (m)	2.22	Cum Volume (1000 m3)		1.16	
C & E Loss (m)	0.00	Cum SA (1000 m2)		7.48	



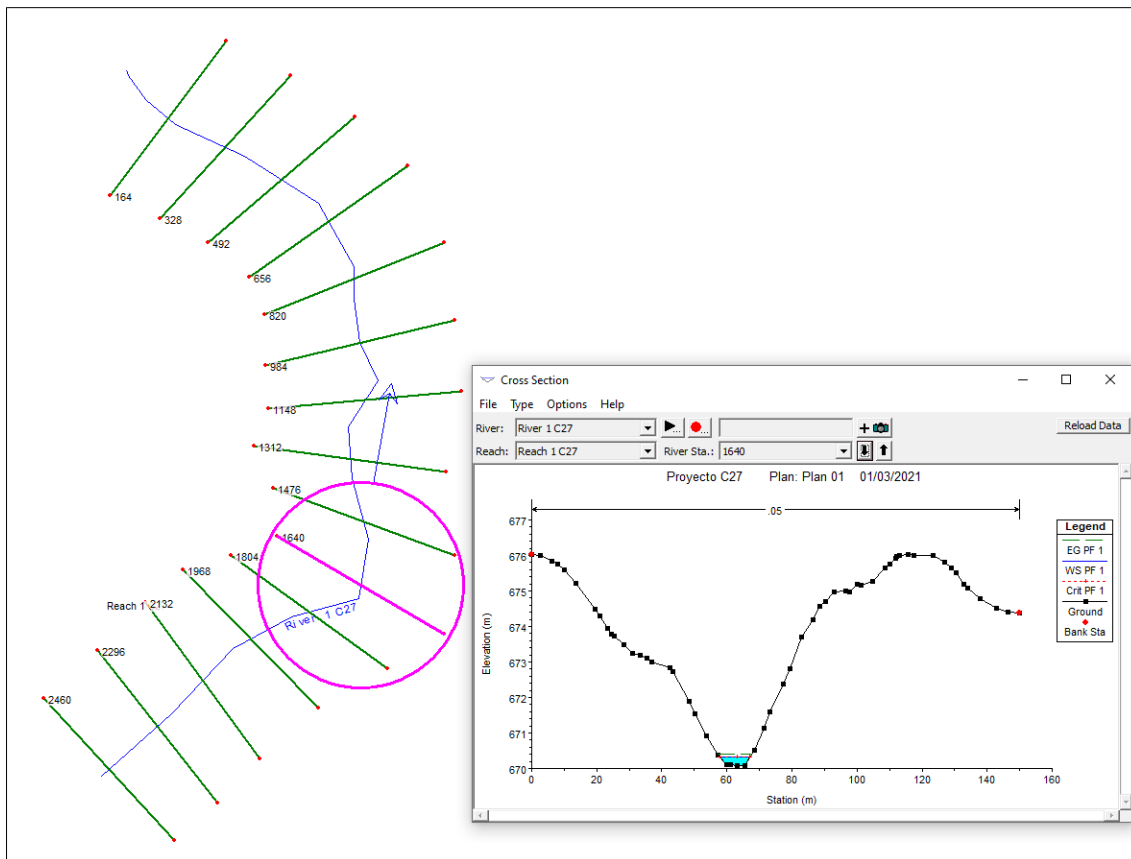
Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	2132	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 2132 Profile: PF 1					
E.G. Elev (m)	683.16	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	683.07	Reach Len. (m)	49.00	50.00	50.70
Crit W.S. (m)	683.07	Flow Area (m2)		1.73	
E.G. Slope (m/m)	0.044180	Area (m2)		1.73	
Q Total (m3/s)	2.31	Flow (m3/s)		2.31	
Top Width (m)	9.65	Top Width (m)		9.65	
Vel Total (m/s)	1.33	Avg. Vel. (m/s)		1.33	
Max Chl Dpth (m)	0.28	Hydr. Depth (m)		0.18	
Conv. Total (m3/s)	11.0	Conv. (m3/s)		11.0	
Length Wtd. (m)	50.00	Wetted Per. (m)		9.67	
Min Ch El (m)	682.79	Shear (N/m2)		77.53	
Alpha	1.00	Stream Power (N/m s)		103.49	
Frctn Loss (m)	2.62	Cum Volume (1000 m3)		1.07	
C & E Loss (m)	0.01	Cum SA (1000 m2)		6.99	



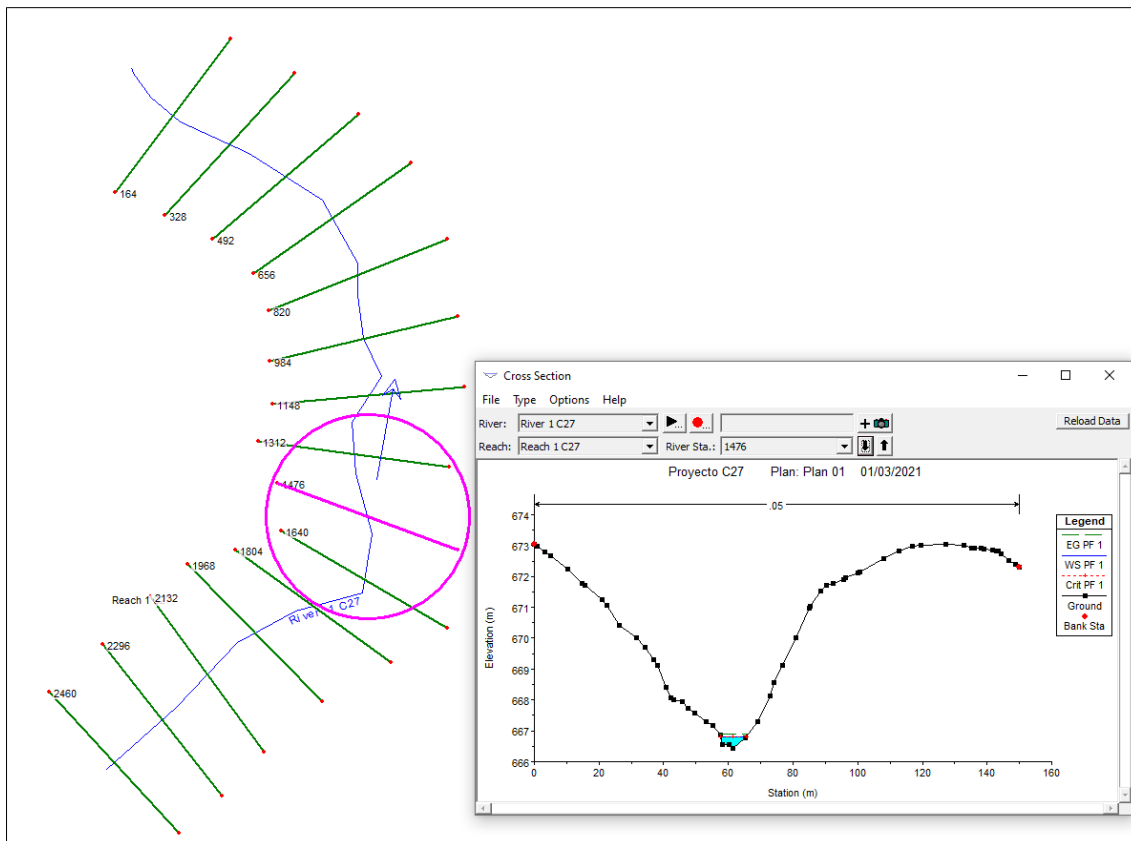
Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	1968	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1968 Profile: PF 1					
E.G. Elev (m)	677.14	Element	Left OB	Channel	Right OB
Vel Head (m)	0.04	Wt. n-Val.		0.050	
W.S. Elev (m)	677.09	Reach Len. (m)	46.90	50.00	51.50
Crit W.S. (m)	677.09	Flow Area (m2)		2.54	
E.G. Slope (m/m)	0.063318	Area (m2)		2.54	
Q Total (m3/s)	2.31	Flow (m3/s)		2.31	
Top Width (m)	32.99	Top Width (m)		32.99	
Vel Total (m/s)	0.91	Avg. Vel. (m/s)		0.91	
Max Chl Dpth (m)	0.09	Hydr. Depth (m)		0.08	
Conv. Total (m3/s)	9.2	Conv. (m3/s)		9.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		33.01	
Min Ch El (m)	677.00	Shear (N/m2)		47.75	
Alpha	1.00	Stream Power (N/m s)		43.45	
Frctn Loss (m)	2.69	Cum Volume (1000 m3)		0.97	
C & E Loss (m)	0.00	Cum SA (1000 m2)		5.92	



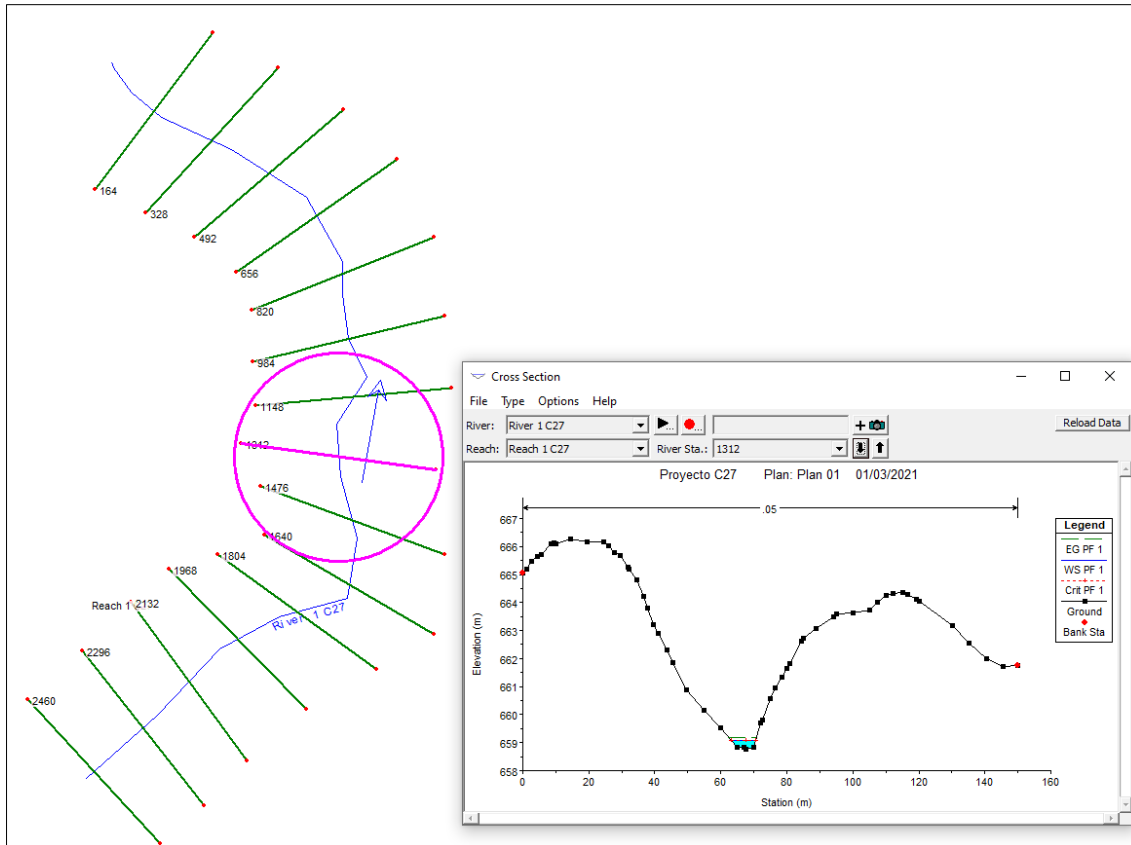
Cross Section Output					
File Type Options Help					
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Reach:	Reach 1 C27	RS:	1804	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1804 Profile: PF 1					
E.G. Elev (m)	672.72	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.		0.050	
W.S. Elev (m)	672.65	Reach Len. (m)	46.10	50.00	50.80
Crit W.S. (m)	672.65	Flow Area (m2)		1.87	
E.G. Slope (m/m)	0.046242	Area (m2)		1.87	
Q Total (m3/s)	2.31	Flow (m3/s)		2.31	
Top Width (m)	12.18	Top Width (m)		12.18	
Vel Total (m/s)	1.23	Avg. Vel. (m/s)		1.23	
Max Chl Dpth (m)	0.22	Hydr. Depth (m)		0.15	
Conv. Total (m3/s)	10.7	Conv. (m3/s)		10.7	
Length Wtd. (m)	50.00	Wetted Per. (m)		12.19	
Min Ch El (m)	672.43	Shear (N/m2)		69.66	
Alpha	1.00	Stream Power (N/m s)		85.93	
Frctn Loss (m)	2.23	Cum Volume (1000 m3)		0.86	
C & E Loss (m)	0.00	Cum SA (1000 m2)		4.79	



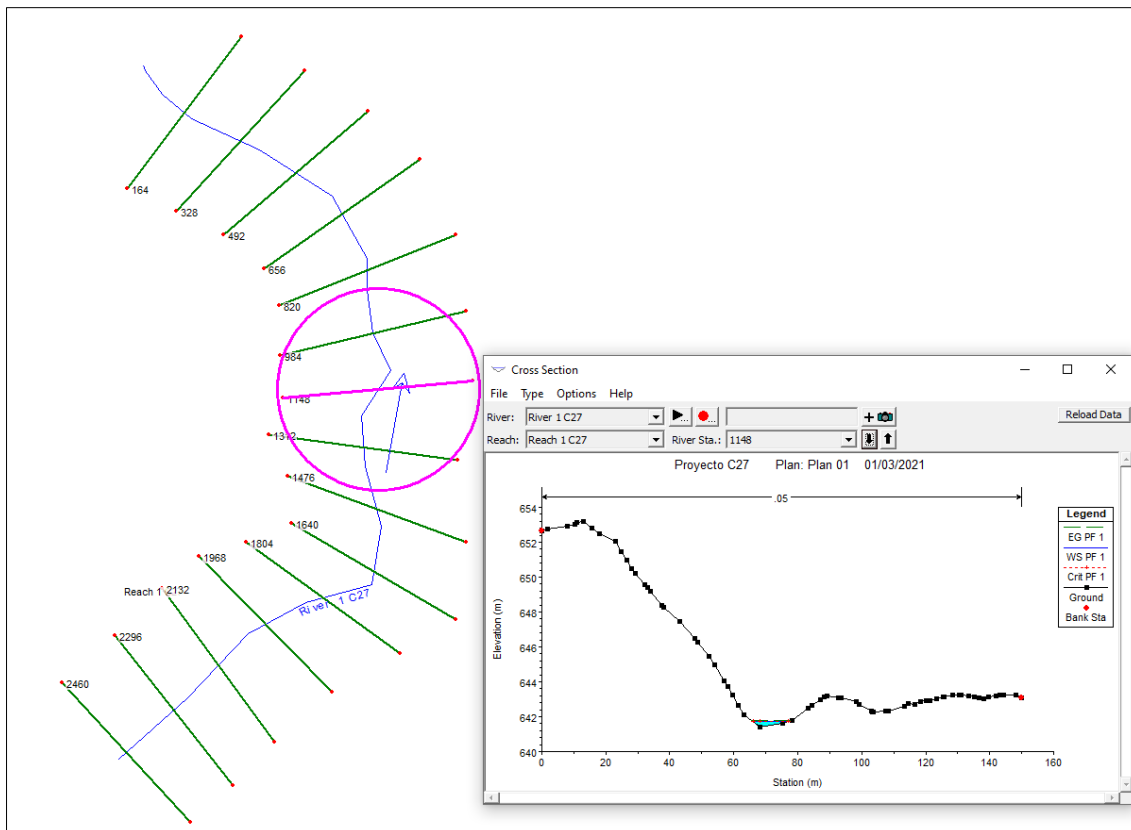
Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	1640	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1640 Profile: PF 1					
E.G. Elev (m)	670.42	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	670.32	Reach Len. (m)	47.00	50.00	49.90
Crit W.S. (m)	670.32	Flow Area (m2)		1.71	
E.G. Slope (m/m)	0.043141	Area (m2)		1.71	
Q Total (m3/s)	2.31	Flow (m3/s)		2.31	
Top Width (m)	9.15	Top Width (m)		9.15	
Vel Total (m/s)	1.35	Avg. Vel. (m/s)		1.35	
Max Chl Dpth (m)	0.25	Hydr. Depth (m)		0.19	
Conv. Total (m3/s)	11.1	Conv. (m3/s)		11.1	
Length Wtd. (m)	50.00	Wetted Per. (m)		9.18	
Min Ch El (m)	670.07	Shear (N/m2)		78.68	
Alpha	1.00	Stream Power (N/m s)		106.49	
Frctn Loss (m)	2.15	Cum Volume (1000 m3)		0.77	
C & E Loss (m)	0.00	Cum SA (1000 m2)		4.26	



Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	1476	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1476 Profile: PF 1					
E.G. Elev (m)	666.90	Element	Left OB	Channel	Right OB
Vel Head (m)	0.11	Wt. n-Val.		0.050	
W.S. Elev (m)	666.80	Reach Len. (m)	47.40	50.00	52.50
Crit W.S. (m)	666.80	Flow Area (m2)		1.60	
E.G. Slope (m/m)	0.042681	Area (m2)		1.60	
Q Total (m3/s)	2.31	Flow (m3/s)		2.31	
Top Width (m)	7.72	Top Width (m)		7.72	
Vel Total (m/s)	1.44	Avg. Vel. (m/s)		1.44	
Max Chl Dpth (m)	0.36	Hydr. Depth (m)		0.21	
Conv. Total (m3/s)	11.2	Conv. (m3/s)		11.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.78	
Min Ch El (m)	666.44	Shear (N/m2)		86.21	
Alpha	1.00	Stream Power (N/m s)		124.24	
Frctn Loss (m)	2.11	Cum Volume (1000 m3)		0.68	
C & E Loss (m)	0.00	Cum SA (1000 m2)		3.84	



Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	1312	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 1312 Profile: PF 1					
E.G. Elev (m)	659.18	Element	Left OB	Channel	Right OB
Vel Head (m)	0.11	Wt. n-Val.		0.050	
W.S. Elev (m)	659.08	Reach Len. (m)	46.70	50.00	51.60
Crit W.S. (m)	659.08	Flow Area (m2)		1.59	
E.G. Slope (m/m)	0.041827	Area (m2)		1.59	
Q Total (m3/s)	2.31	Flow (m3/s)		2.31	
Top Width (m)	7.45	Top Width (m)		7.45	
Vel Total (m/s)	1.45	Avg. Vel. (m/s)		1.45	
Max Chl Dpth (m)	0.31	Hydr. Depth (m)		0.21	
Conv. Total (m3/s)	11.3	Conv. (m3/s)		11.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.51	
Min Ch El (m)	658.77	Shear (N/m2)		86.82	
Alpha	1.00	Stream Power (N/m s)		126.14	
Frctn Loss (m)	2.19	Cum Volume (1000 m3)		0.60	
C & E Loss (m)	0.01	Cum SA (1000 m2)		3.46	



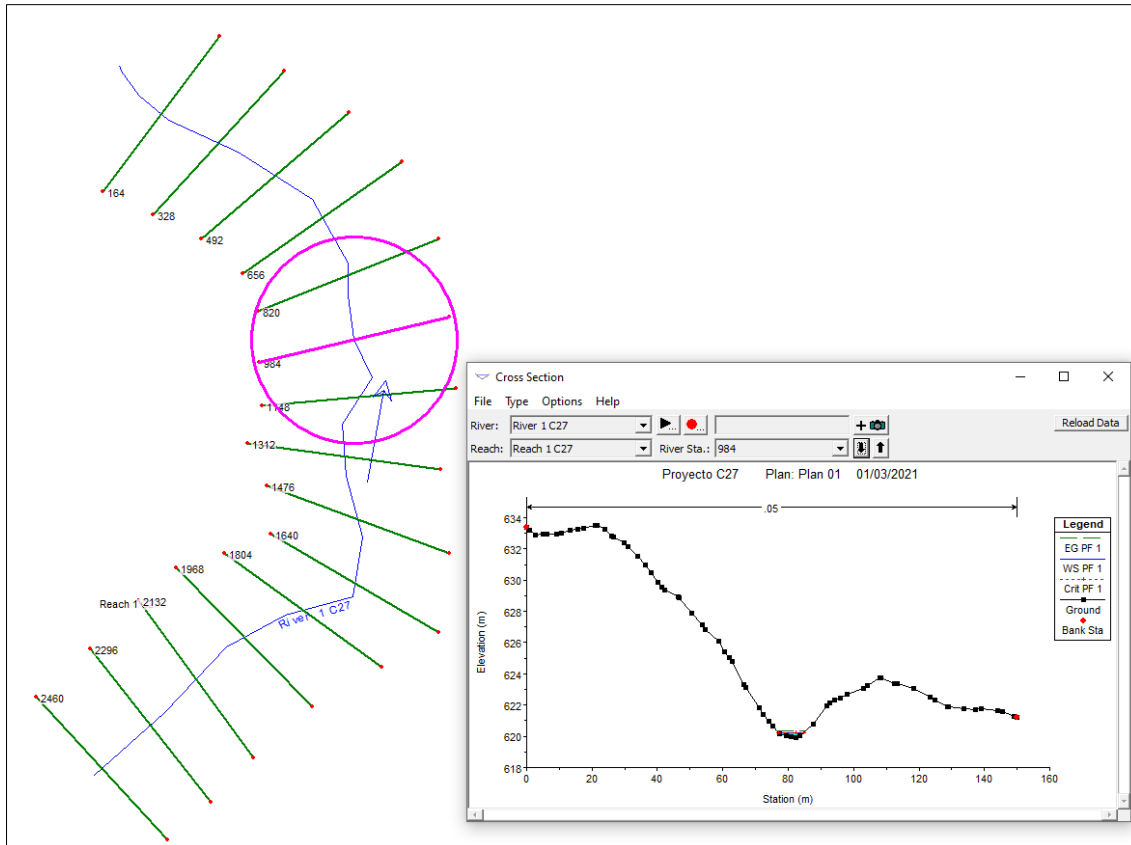
Cross Section Output

File Type Options Help

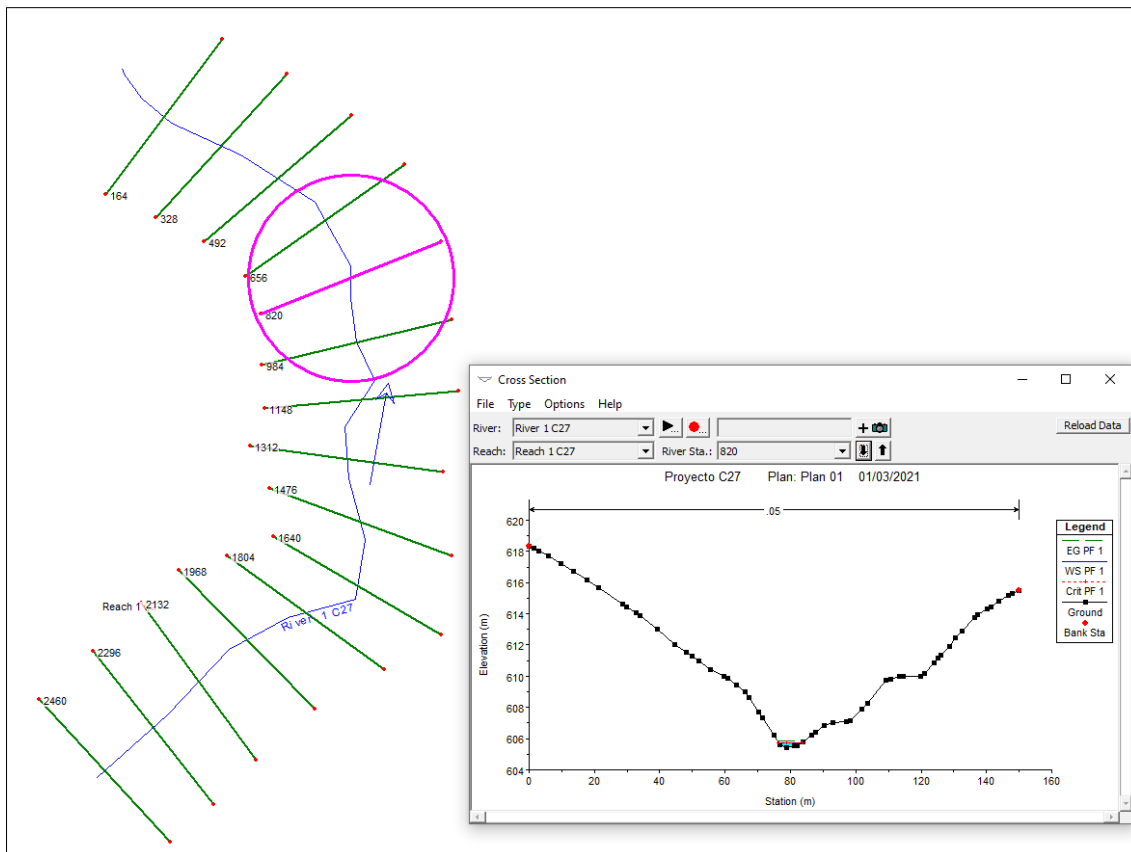
River: River 1 C27 Profile: PF 1

Reach: Reach 1 C27 RS: 1148 Plan: c27

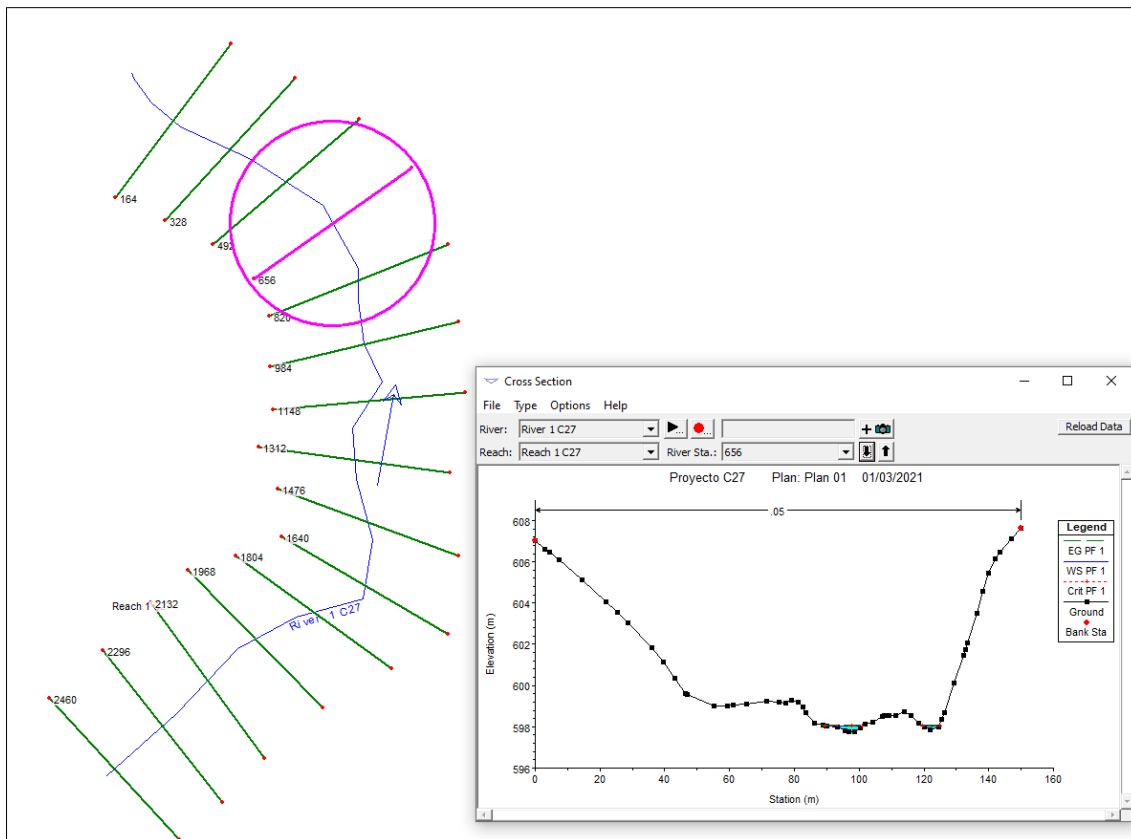
Plan: c27 River 1 C27 Reach 1 C27 RS: 1148 Profile: PF 1					
		Element	Left OB	Channel	Right OB
E.G. Elev (m)	641.80	Wt. n-Val.		0.050	
Vel Head (m)	0.08	Reach Len. (m)	47.60	50.00	50.30
W.S. Elev (m)	641.72	Flow Area (m2)		1.81	
Crit W.S. (m)	641.72	Area (m2)		1.81	
E.G. Slope (m/m)	0.046005	Flow (m3/s)		2.31	
Q Total (m3/s)	2.31	Top Width (m)		11.12	
Top Width (m)	11.12	Avg. Vel. (m/s)		1.28	
Vel Total (m/s)	1.28	Hydr. Depth (m)		0.16	
Max Chl Dpth (m)	0.32	Conv. (m3/s)		10.8	
Conv. Total (m3/s)	10.8	Wetted Per. (m)		11.15	
Length Wtd. (m)	50.00	Shear (N/m2)		73.24	
Min Ch El (m)	641.40	Stream Power (N/m s)		93.49	
Alpha	1.00	Cum Volume (1000 m3)		0.52	
Frctn Loss (m)	2.22	Cum SA (1000 m2)		2.99	
C & E Loss (m)	0.00				



Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	984	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 984 Profile: PF 1					
E.G. Elev (m)		Element	Left OB	Channel	Right OB
Vel Head (m)	0.11	Wt. n-Val.		0.050	
W.S. Elev (m)	620.24	Reach Len. (m)	48.20	50.00	51.00
Crit W.S. (m)	620.24	Flow Area (m2)		1.60	
E.G. Slope (m/m)	0.042705	Area (m2)		1.60	
Q Total (m3/s)	2.31	Flow (m3/s)		2.31	
Top Width (m)	7.67	Top Width (m)		7.67	
Vel Total (m/s)	1.45	Avg. Vel. (m/s)		1.45	
Max Chl Dpth (m)	0.35	Hydr. Depth (m)		0.21	
Conv. Total (m3/s)	11.2	Conv. (m3/s)		11.2	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.72	
Min Ch El (m)	619.89	Shear (N/m2)		86.68	
Alpha	1.00	Stream Power (N/m s)		125.37	
Frctn Loss (m)	2.11	Cum Volume (1000 m3)		0.43	
C & E Loss (m)	0.00	Cum SA (1000 m2)		2.52	



Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	820	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 820 Profile: PF 1					
E.G. Elev (m)		Element	Left OB	Channel	Right OB
Vel Head (m)	0.11	Wt. n-Val.		0.050	
W.S. Elev (m)	605.76	Reach Len. (m)	48.00	50.00	51.90
Crit W.S. (m)	605.76	Flow Area (m2)		1.56	
E.G. Slope (m/m)	0.041755	Area (m2)		1.56	
Q Total (m3/s)	2.31	Flow (m3/s)		2.31	
Top Width (m)	7.14	Top Width (m)		7.14	
Vel Total (m/s)	1.48	Avg. Vel. (m/s)		1.48	
Max Chl Dpth (m)	0.34	Hydr. Depth (m)		0.22	
Conv. Total (m3/s)	11.3	Conv. (m3/s)		11.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.20	
Min Ch El (m)	605.42	Shear (N/m2)		88.95	
Alpha	1.00	Stream Power (N/m s)		131.36	
Frctn Loss (m)	2.28	Cum Volume (1000 m3)		0.35	
C & E Loss (m)	0.01	Cum SA (1000 m2)		2.15	



Cross Section Output

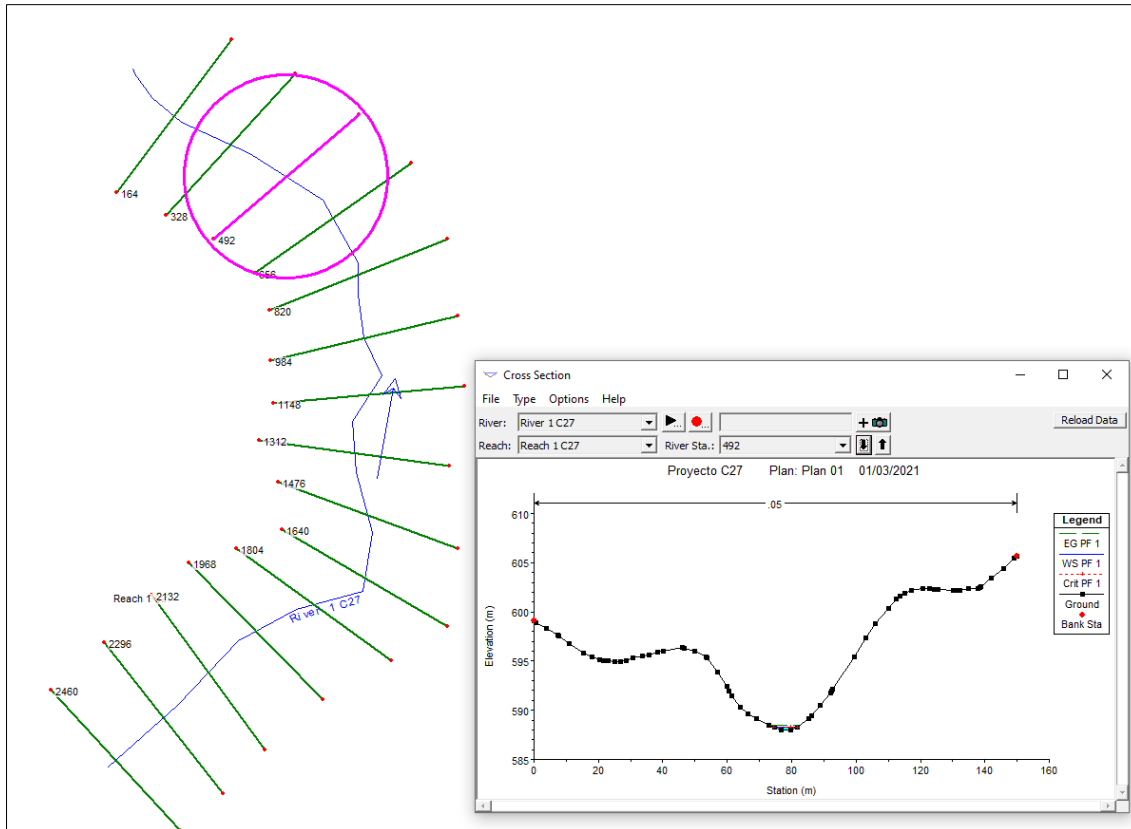
File Type Options Help

River: River 1 C27 Profile: PF 1

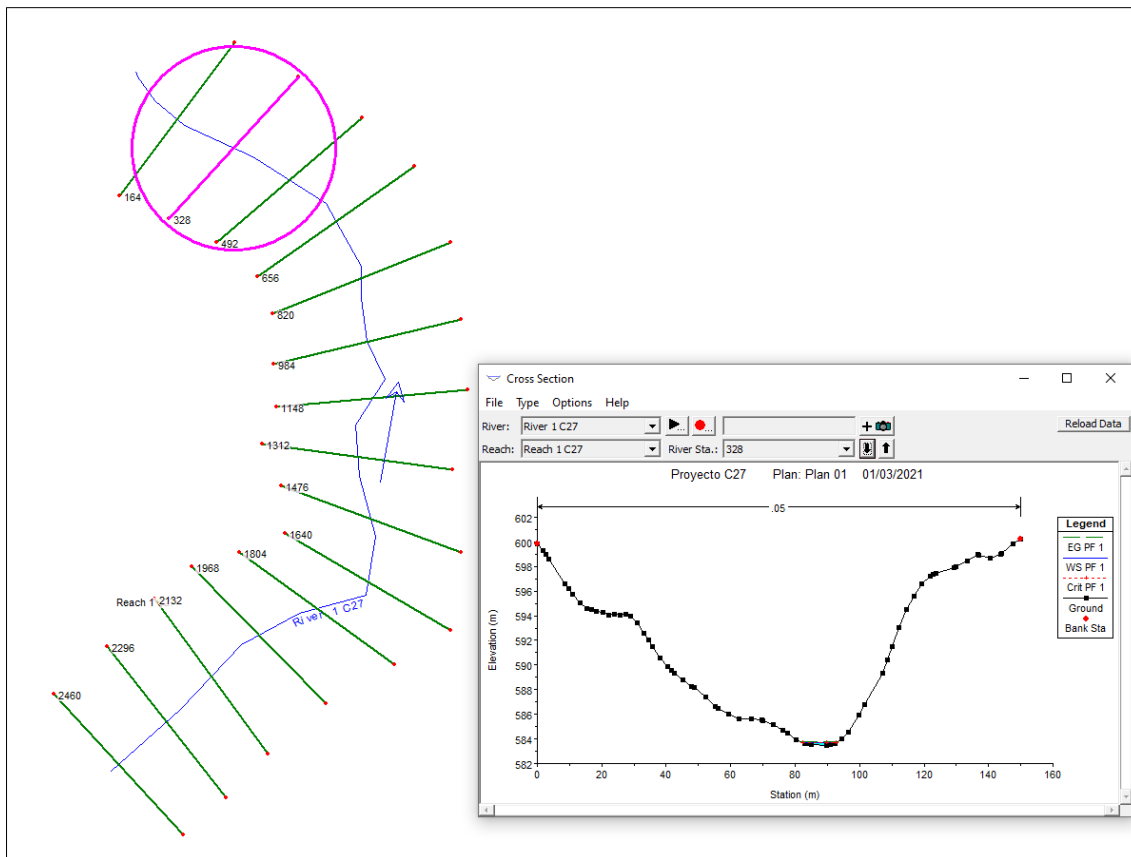
Reach: Reach 1 C27 RS: 656 Plan: c27

Plan: c27 River 1 C27 Reach 1 C27 RS: 656 Profile: PF 1

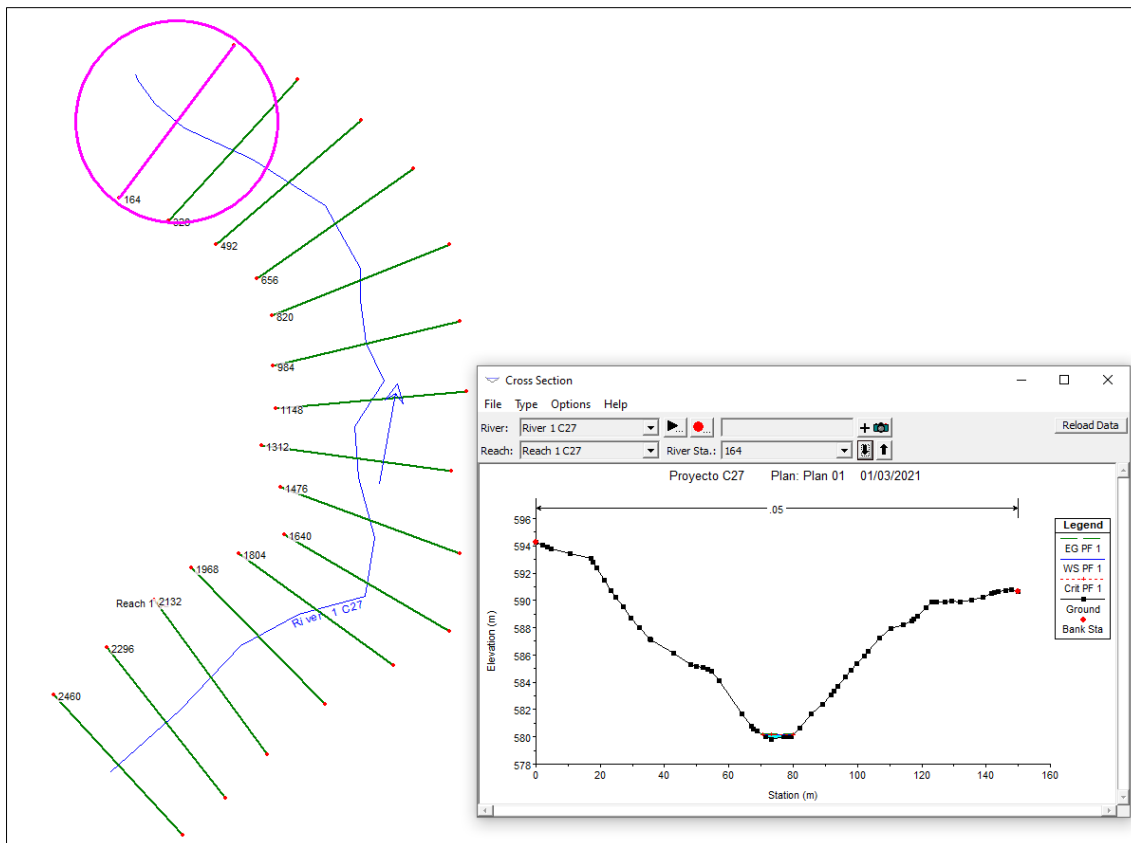
		Element	Left OB	Channel	Right OB
E.G. Elev (m)	598.10	Wt. n-Val.		0.050	
Vel Head (m)	0.06	Reach Len. (m)	49.60	50.00	49.70
W.S. Elev (m)	598.03	Flow Area (m2)		2.08	
Crit W.S. (m)	598.03	Area (m2)		2.08	
E.G. Slope (m/m)	0.050141	Flow (m3/s)		2.31	
Q Total (m3/s)	2.31	Top Width (m)		16.86	
Top Width (m)	16.86	Avg. Vel. (m/s)		1.11	
Vel Total (m/s)	1.11	Hydr. Depth (m)		0.12	
Max Chl Dpth (m)	0.26	Conv. (m3/s)		10.3	
Conv. Total (m3/s)	10.3	Wetted Per. (m)		16.90	
Length Wtd. (m)	50.00	Shear (N/m2)		60.59	
Min Ch El (m)	597.77	Stream Power (N/m s)		67.19	
Alpha	1.00	Cum Volume (1000 m3)		0.26	
Frctn Loss (m)	2.28	Cum SA (1000 m2)		1.55	
C & E Loss (m)	0.00				



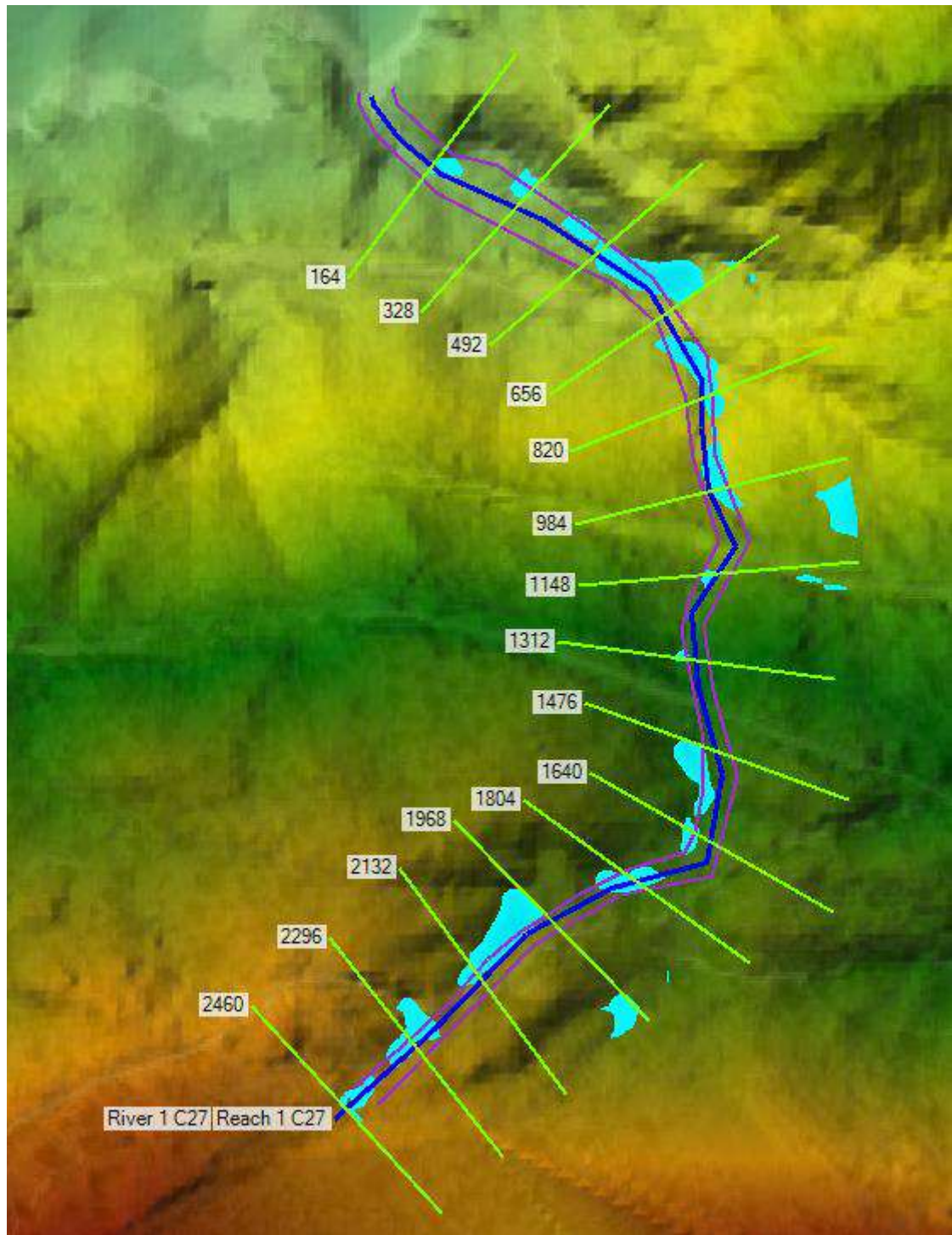
Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	492	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 492 Profile: PF 1					
E.G. Elev (m)	588.43	Element	Left OB	Channel	Right OB
Vel Head (m)	0.11	Wt. n-Val.		0.050	
W.S. Elev (m)	588.32	Reach Len. (m)	49.20	50.00	50.20
Crit W.S. (m)	588.32	Flow Area (m2)		1.60	
E.G. Slope (m/m)	0.041634	Area (m2)		1.60	
Q Total (m3/s)	2.31	Flow (m3/s)		2.31	
Top Width (m)	7.51	Top Width (m)		7.51	
Vel Total (m/s)	1.45	Avg. Vel. (m/s)		1.45	
Max Chl Dpth (m)	0.32	Hydr. Depth (m)		0.21	
Conv. Total (m3/s)	11.3	Conv. (m3/s)		11.3	
Length Wtd. (m)	50.00	Wetted Per. (m)		7.55	
Min Ch El (m)	588.00	Shear (N/m2)		86.28	
Alpha	1.00	Stream Power (N/m s)		124.93	
Frctn Loss (m)	2.16	Cum Volume (1000 m3)		0.17	
C & E Loss (m)	0.01	Cum SA (1000 m2)		0.94	



Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	328	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 328 Profile: PF 1					
E.G. Elev (m)	583.80	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	583.71	Reach Len. (m)	48.30	50.00	52.40
Crit W.S. (m)	583.71	Flow Area (m2)		1.77	
E.G. Slope (m/m)	0.044957	Area (m2)		1.77	
Q Total (m3/s)	2.31	Flow (m3/s)		2.31	
Top Width (m)	10.42	Top Width (m)		10.42	
Vel Total (m/s)	1.30	Avg. Vel. (m/s)		1.30	
Max Chl Dpth (m)	0.24	Hydr. Depth (m)		0.17	
Conv. Total (m3/s)	10.9	Conv. (m3/s)		10.9	
Length Wtd. (m)	50.00	Wetted Per. (m)		10.44	
Min Ch El (m)	583.47	Shear (N/m2)		74.96	
Alpha	1.00	Stream Power (N/m s)		97.56	
Frctn Loss (m)	2.24	Cum Volume (1000 m3)		0.09	
C & E Loss (m)	0.00	Cum SA (1000 m2)		0.50	

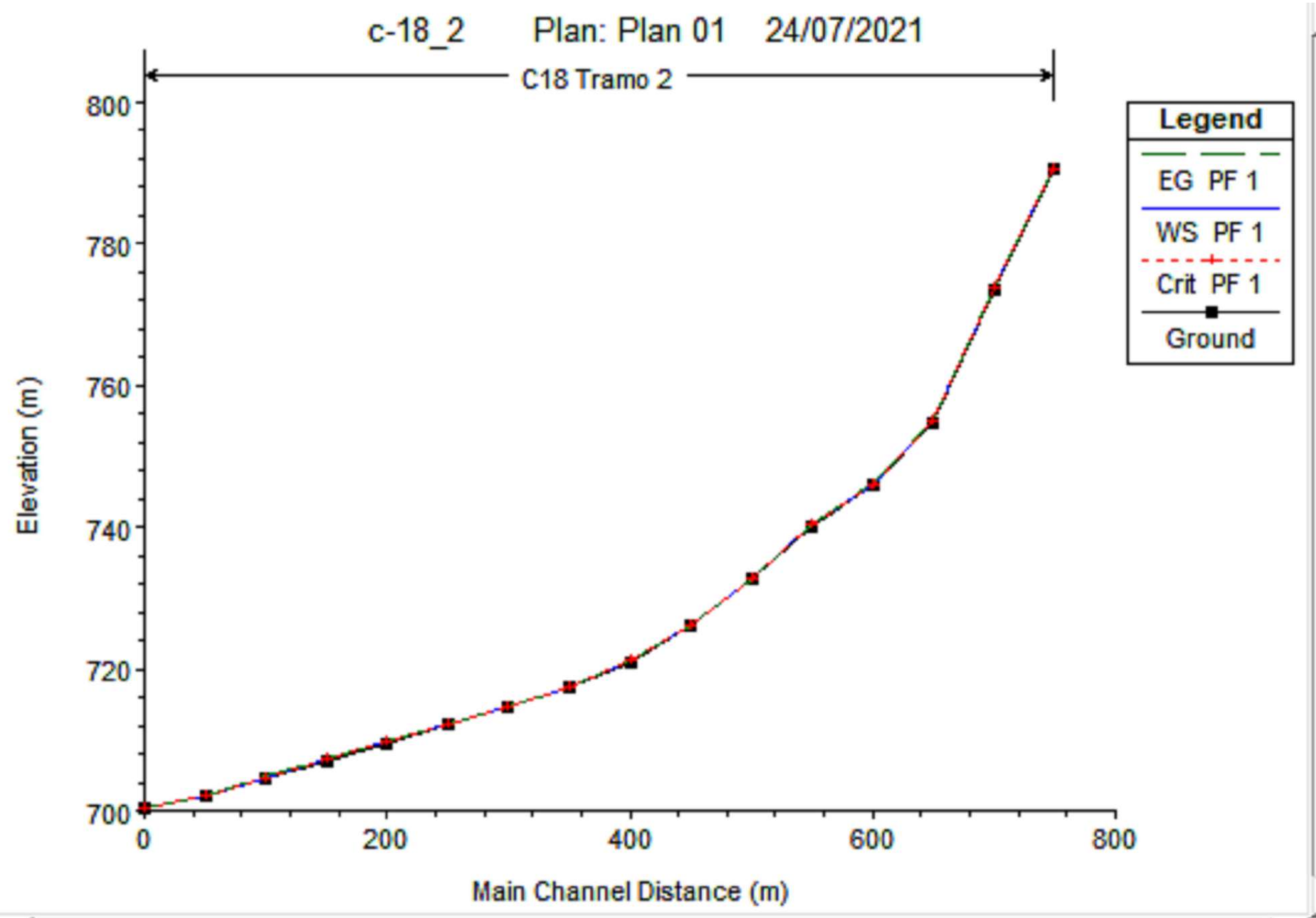
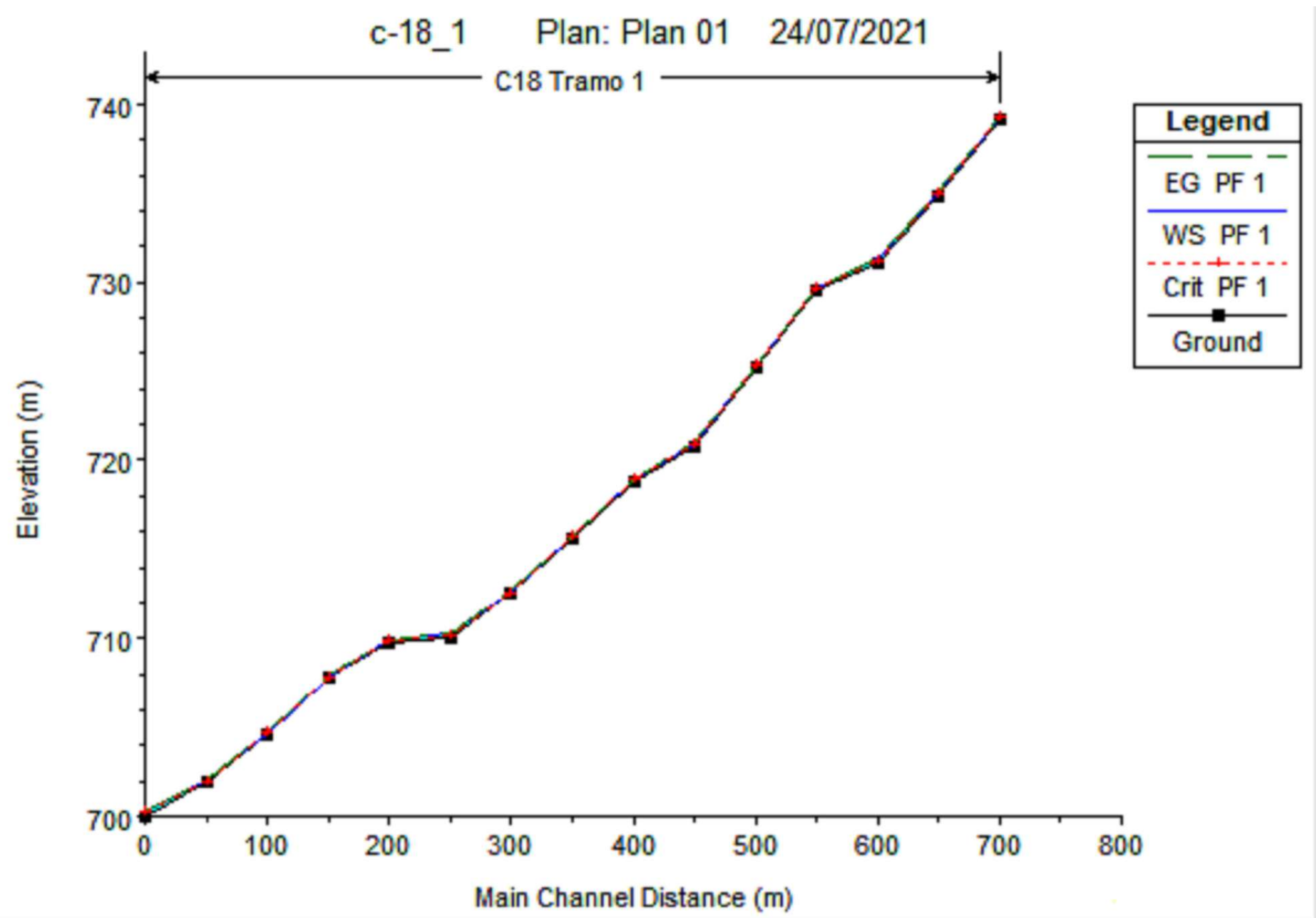
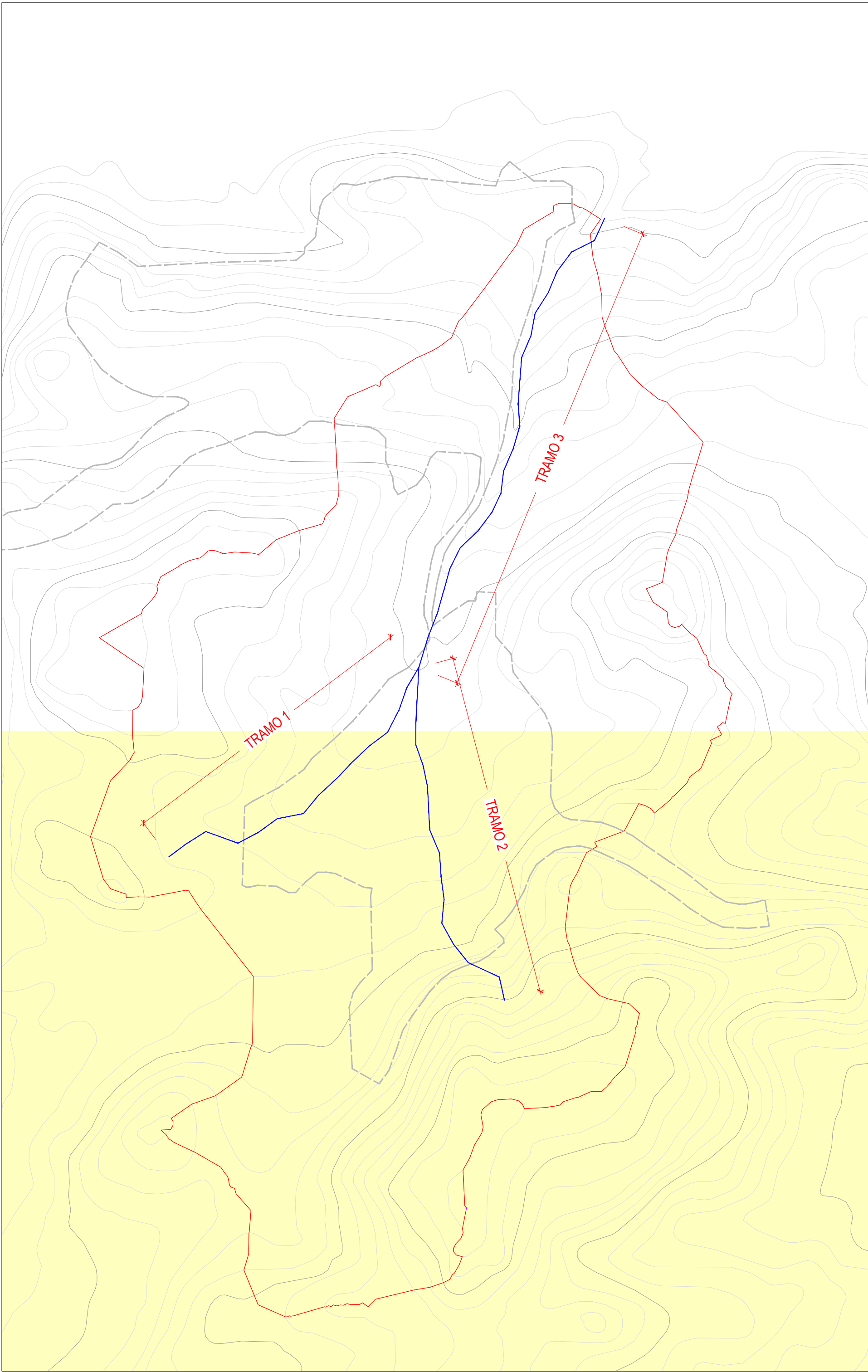


Cross Section Output					
File Type Options Help					
River:	River 1 C27	Profile:	PF 1		
Reach:	Reach 1 C27	RS:	164	Plan:	c27
Plan: c27 River 1 C27 Reach 1 C27 RS: 164 Profile: PF 1					
E.G. Elev (m)		Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.		0.050	
W.S. Elev (m)	580.14	Reach Len. (m)			
Crit W.S. (m)	580.14	Flow Area (m2)		1.71	
E.G. Slope (m/m)	0.044755	Area (m2)		1.71	
Q Total (m3/s)	2.31	Flow (m3/s)		2.31	
Top Width (m)	9.41	Top Width (m)		9.41	
Vel Total (m/s)	1.35	Avg. Vel. (m/s)		1.35	
Max Chl Dpth (m)	0.32	Hydr. Depth (m)		0.18	
Conv. Total (m3/s)	10.9	Conv. (m3/s)		10.9	
Length Wtd. (m)		Wetted Per. (m)		9.45	
Min Ch El (m)	579.82	Shear (N/m2)		79.34	
Alpha	1.00	Stream Power (N/m s)		107.32	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

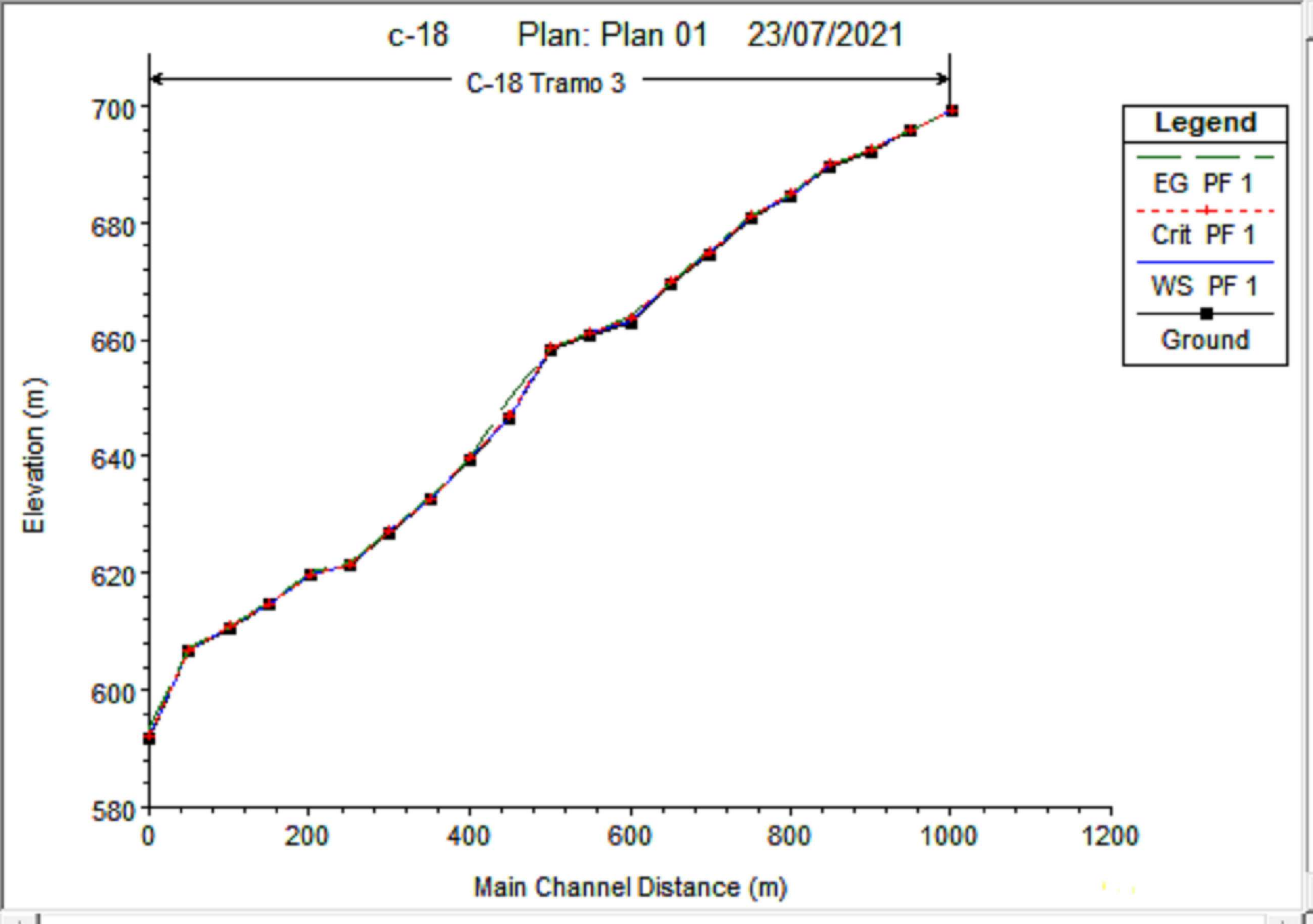
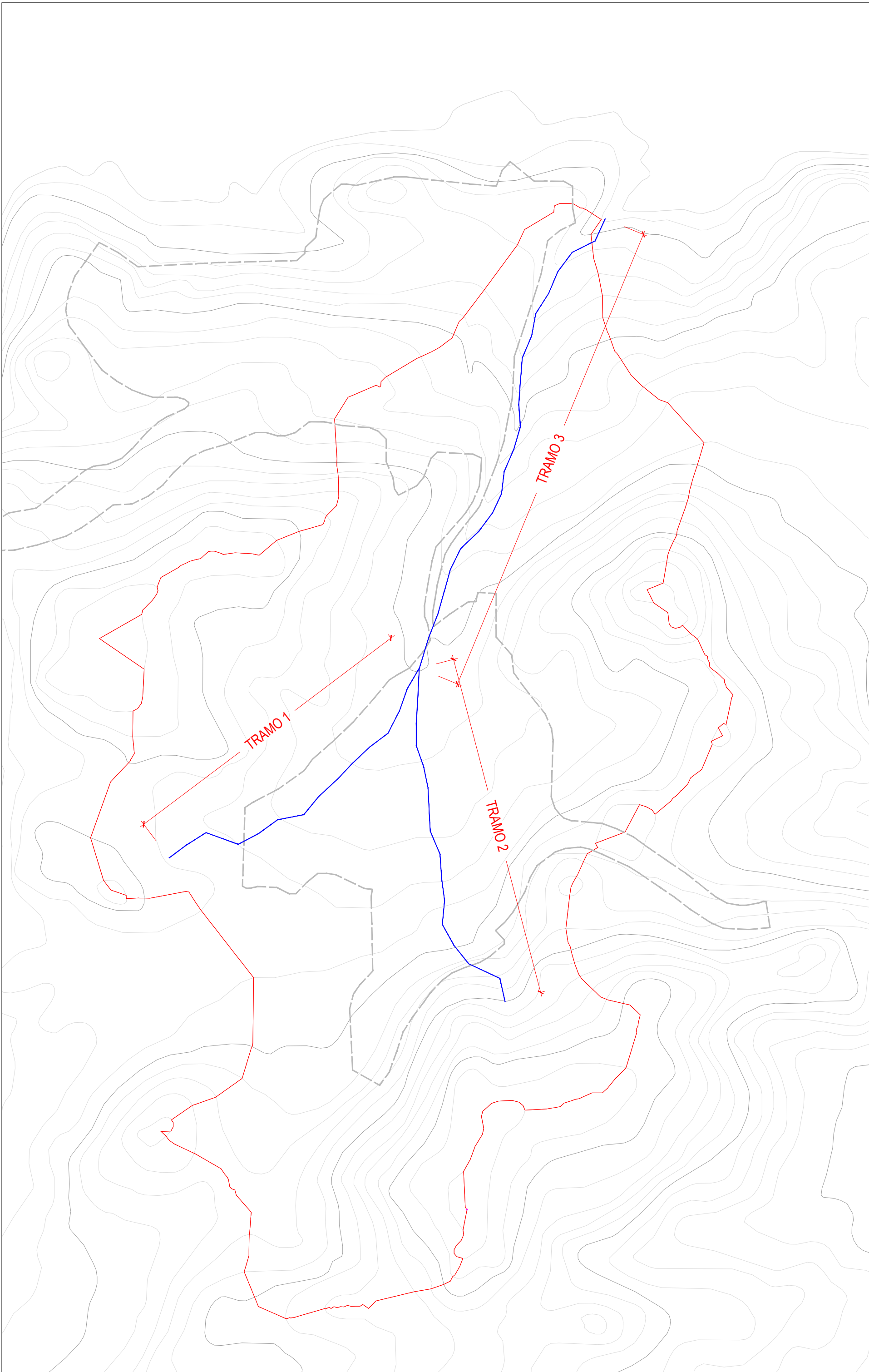


ANEXO II

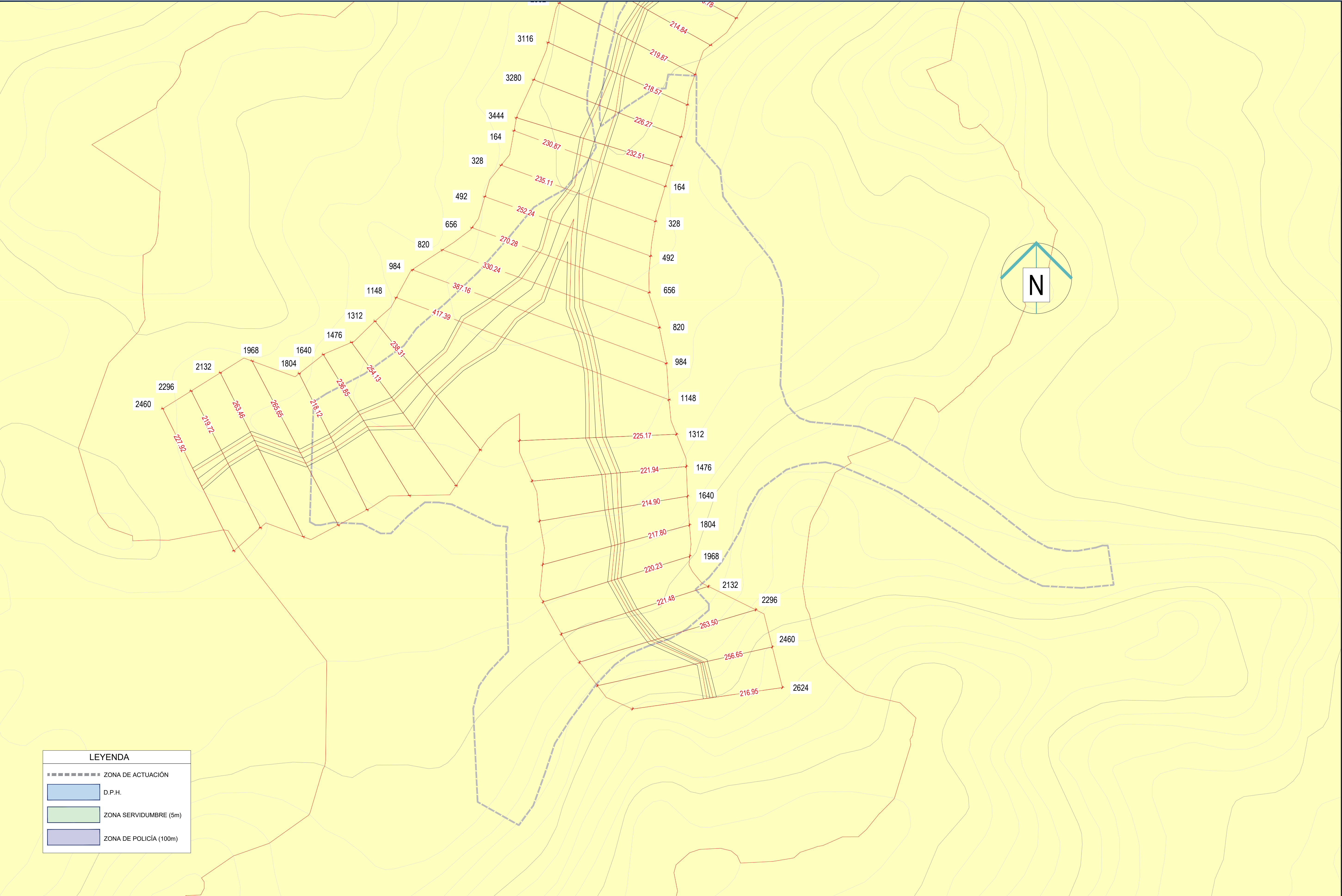
PLANOS DEL ESTUDIO HIDRÁULICO



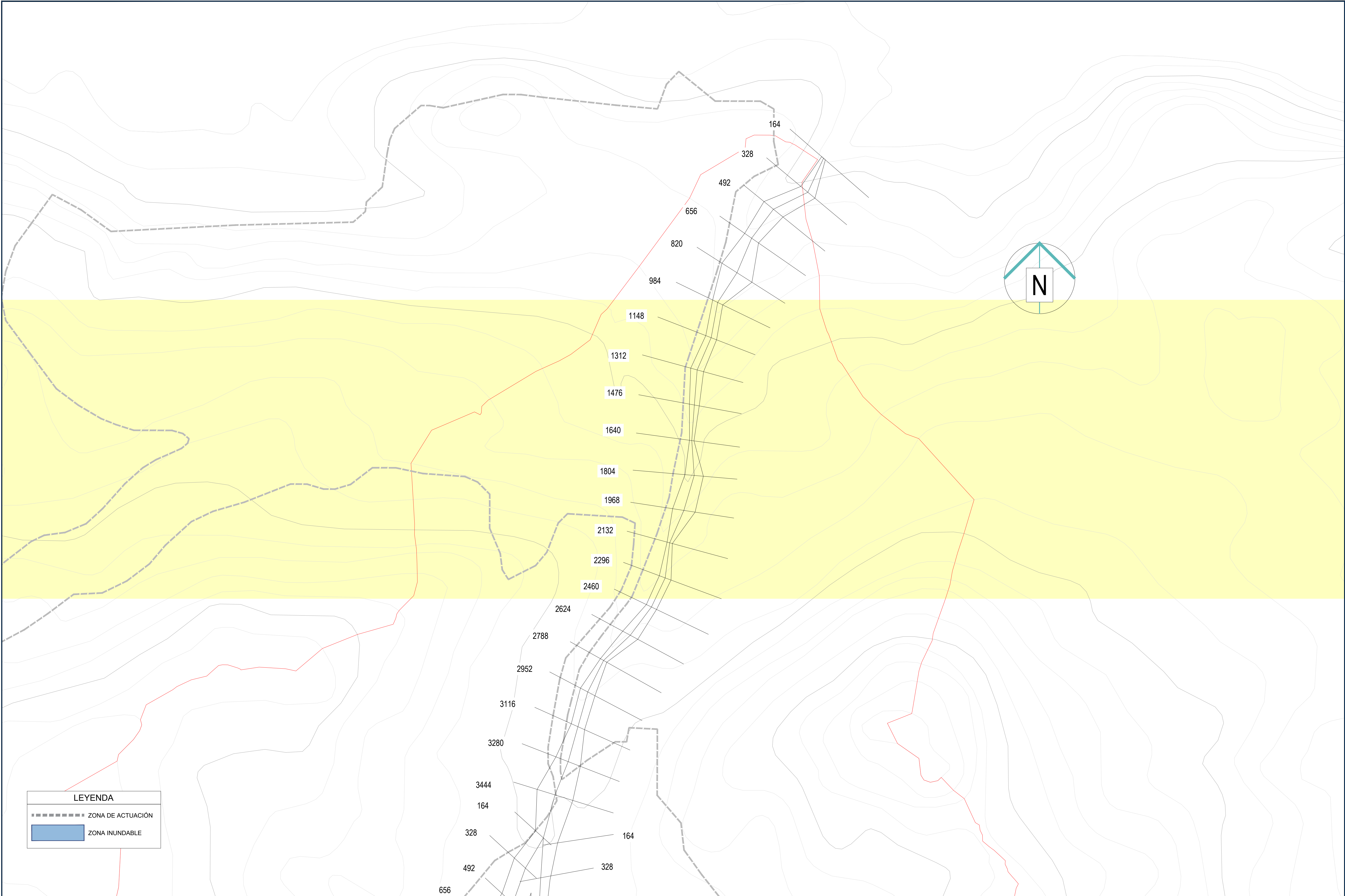
ASISTENCIA TÉCNICA:	AUTOR DEL PROYECTO:		ESCALA:	TÍTULO DEL PROYECTO:	TÍTULO DEL PLANO:	PLANO:
GARSAN S.L.			1:7500	ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	DETALLE CUENCA 18 PLANTA DE LA CUENCA Y PERFIL	04
	Fdo: Manuel L. García Sancet I.C.C.P.		FECHA:			HOJA:
			JULIO 2021			1 de 8



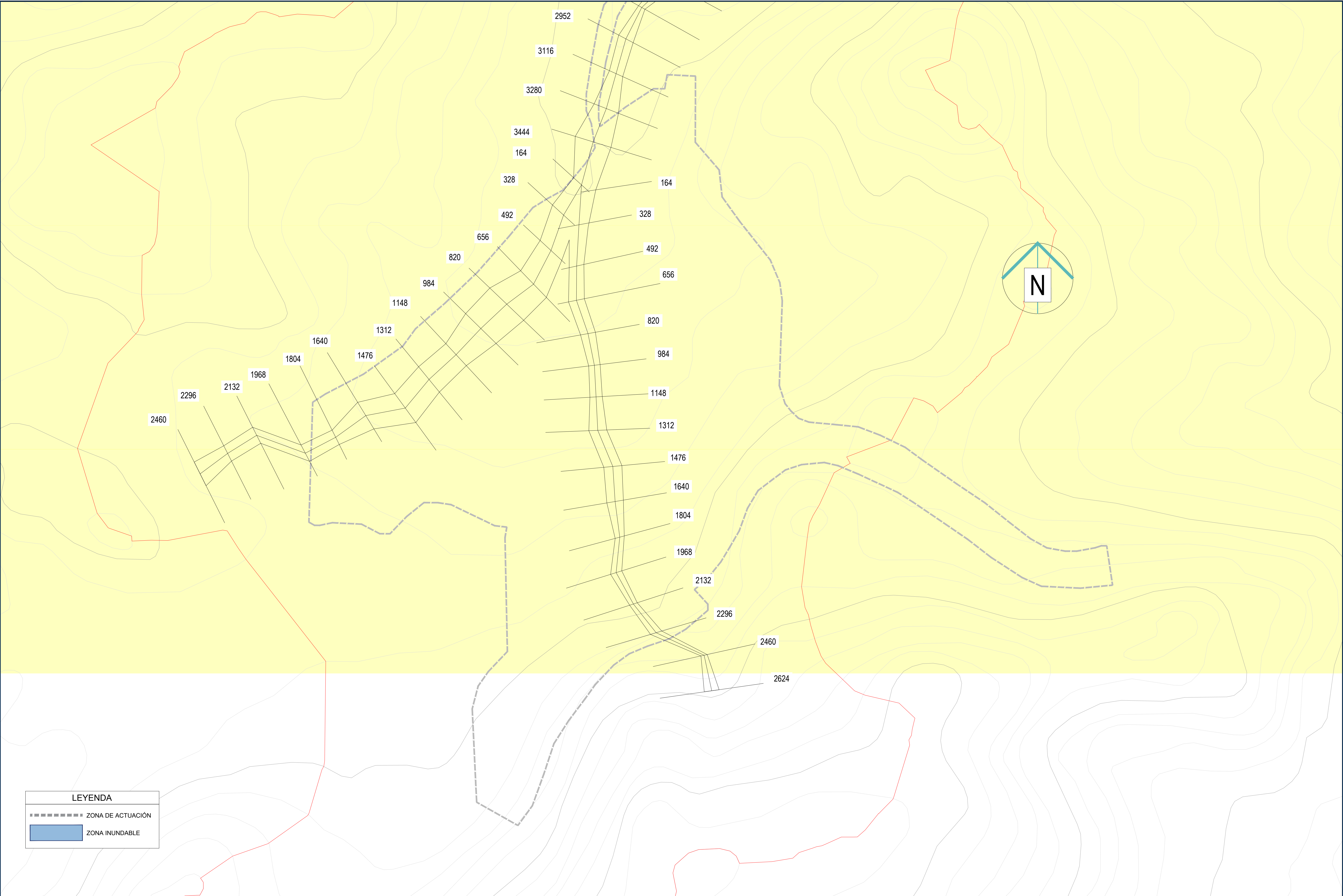
ASISTENCIA TÉCNICA:	AUTOR DEL PROYECTO:		ESCALA:	TÍTULO DEL PROYECTO:	TÍTULO DEL PLANO:	PLANO:
GARSAN S.L.			1:7500	ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	DETALLE CUENCA 18 PLANTA DE LA CUENCA Y PERFIL	04
	Fdo: Manuel L. García Sancet I.C.C.P.		FECHA:			HOJA:
			JULIO 2021			2 de 8



<div>ASISTENCIA TÉCNICA:</div> <div>GARSAN S.L.</div>	<div>AUTOR DEL PROYECTO:</div> <div>Fdo: Manuel L. García Sancet I.C.C.P.</div>		<div>ESCALA:</div> <div>1:2500</div> <div>FECHA:</div> <div>JULIO 2021</div>	<div>TÍTULO DEL PROYECTO:</div> <div>ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS</div>	<div>TÍTULO DEL PLANO:</div> <div>DETALLE CUENCA 18 T-10 AÑOS, ZONA DE POLICIA Y SERVIDUMBRE</div>	<div>PLANO:</div> <div>04</div> <div>HOJA:</div> <div>4 de 8</div>
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ASISTENCIA TÉCNICA: GARSAN S.L.	AUTOR DEL PROYECTO: Fdo: Manuel L. García Sancet I.C.C.P.	ESCALA: 1:2500 FECHA: JULIO 2021	TÍTULO DEL PROYECTO: ESTUDIO HIDROGEOLOGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	TÍTULO DEL PLANO: DETALLE CUENCA 18 T-100 AÑOS	PLANO: 04 HOJA: 5 de 8
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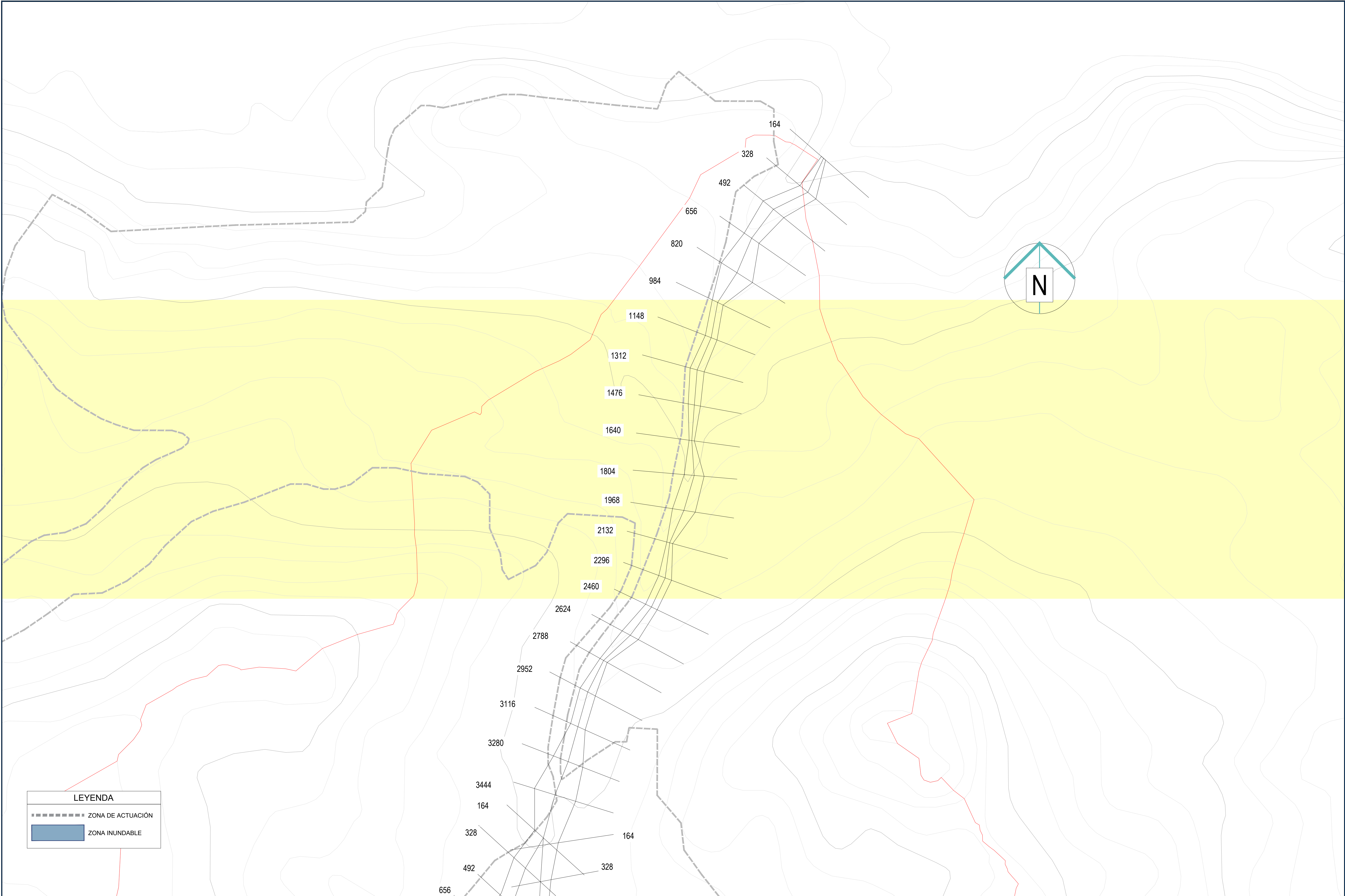


LEYENDA

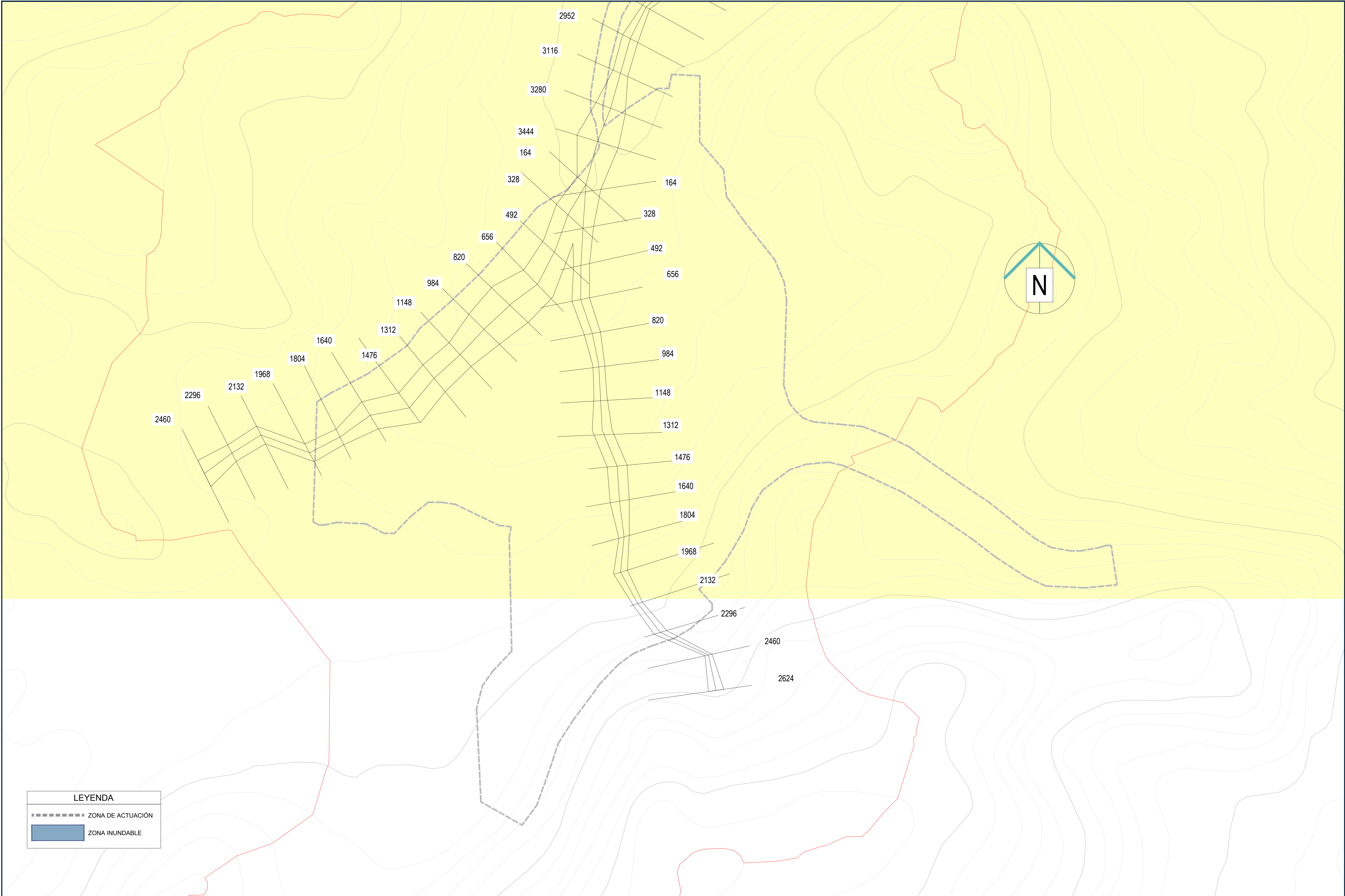
ZONA DE ACTUACIÓN

ZONA INUNDABLE

ASISTENCIA TÉCNICA: GARSAN S.L.	AUTOR DEL PROYECTO: Fdo: Manuel L. García Sancet I.C.C.P.	ESCALA: 1:2500 FECHA: JULIO 2021	TÍTULO DEL PROYECTO: ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	TÍTULO DEL PLANO: DETALLE CUENCA 18 T-100 AÑOS	PLANO: 04 HOJA: 6 de 8
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<div>ASISTENCIA TÉCNICA:</div> <div>GARSAN S.L.</div>	<div>AUTOR DEL PROYECTO:</div> <div>Fdo: Manuel L. García Sancet I.C.C.P.</div>	<div>ESCALA:</div> <div>1:2500</div> <div>FECHA:</div> <div>JULIO 2021</div>	<div>TÍTULO DEL PROYECTO:</div> <div>ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS</div>	<div>TÍTULO DEL PLANO:</div> <div>DETALLE CUENCA 18 T-500 AÑOS</div>	<div>PLANO:</div> <div>04</div> <div>HOJA:</div> <div>7 de 8</div>
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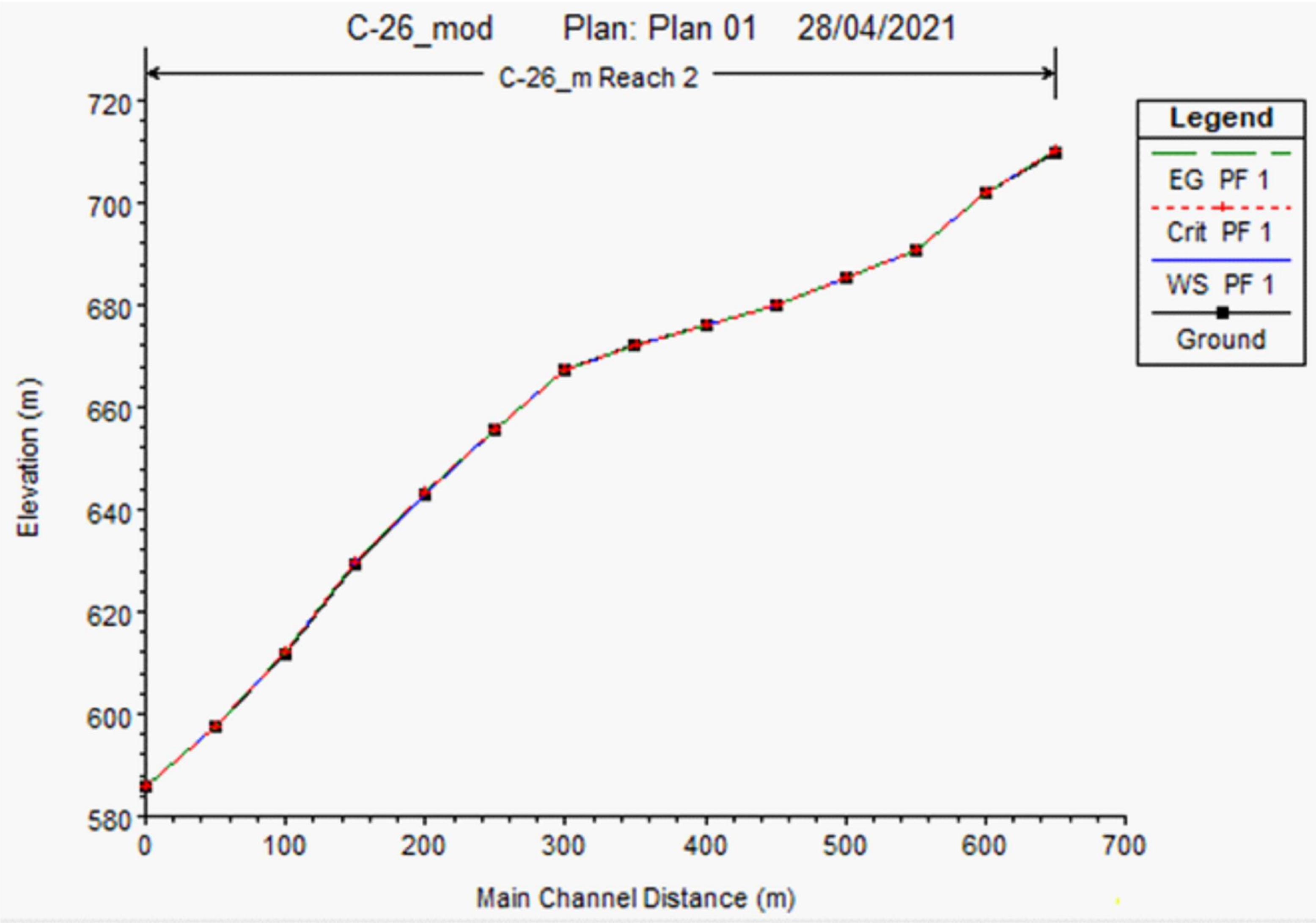
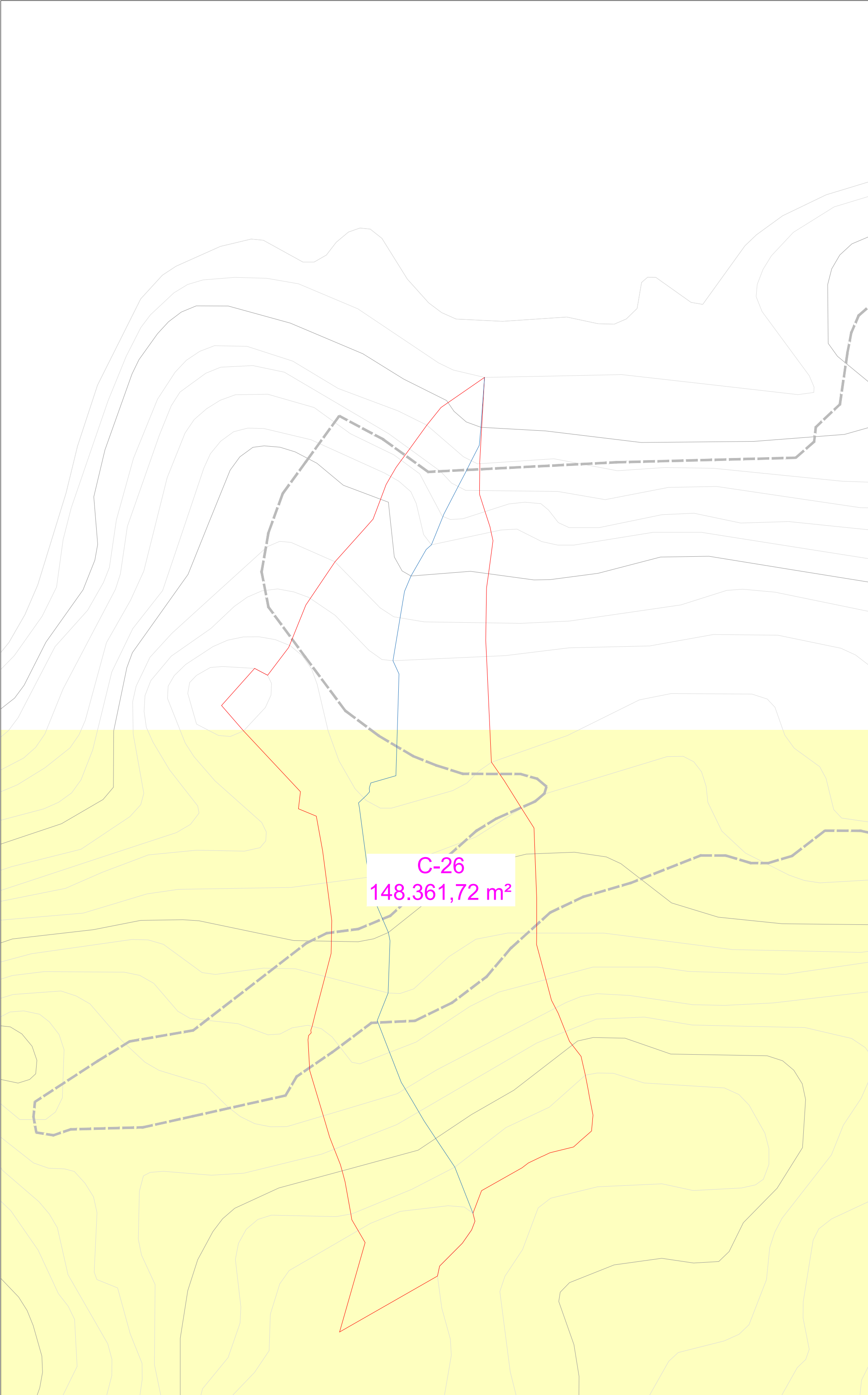
LEYENDA

ZONA DE ACTUACIÓN

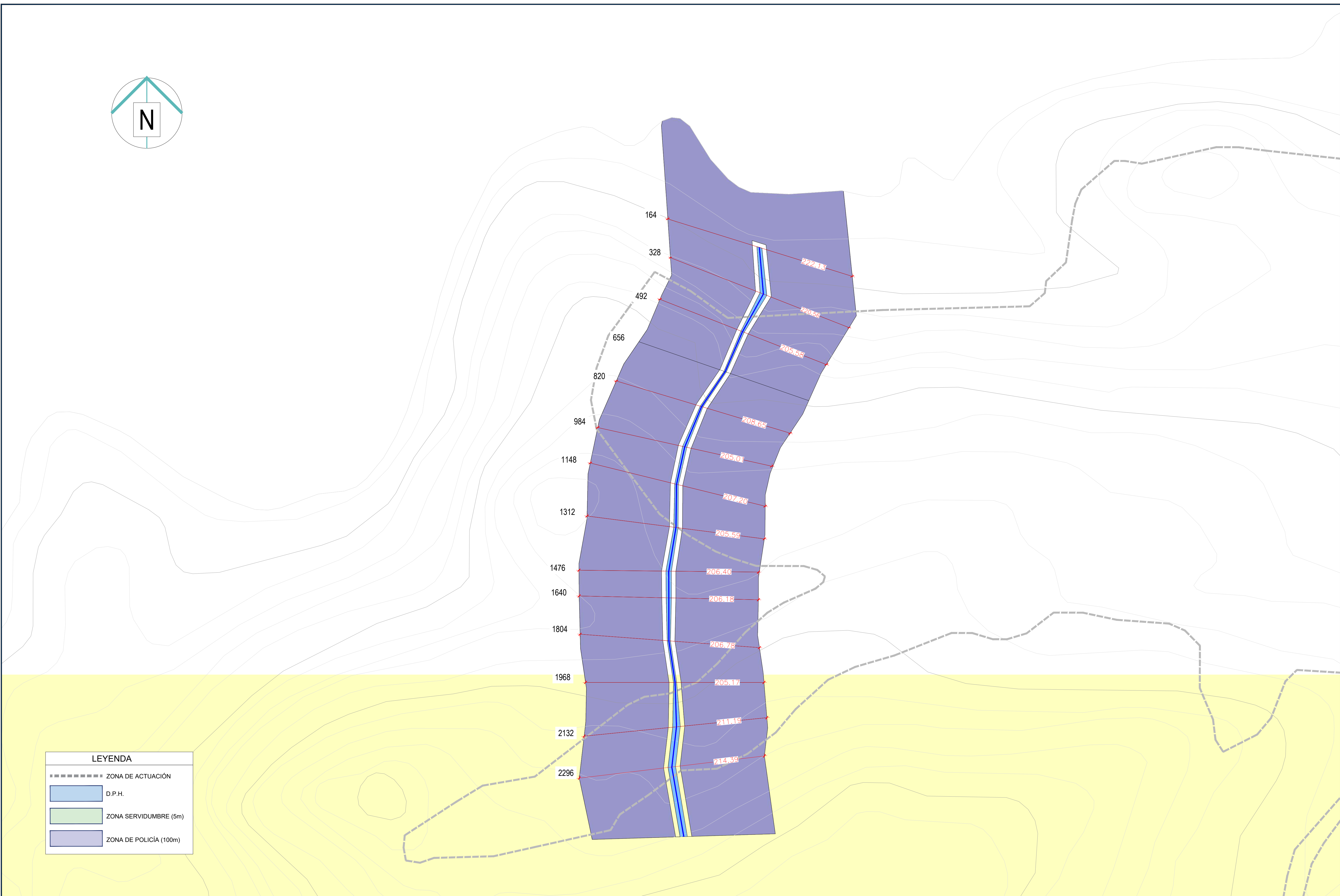
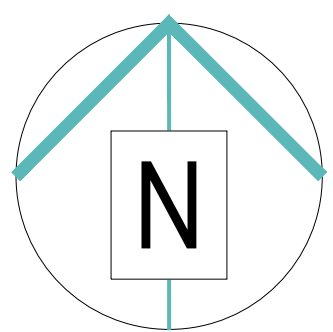
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ZONA INUNDABLE

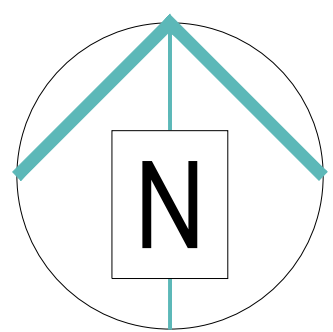
ASISTENCIA TÉCNICA: GARSAN S.L.	AUTOR DEL PROYECTO: Fdo: Manuel L. García Sancet I.C.C.P.	ESCALA: 1:2500 FECHA: JULIO 2021	TÍTULO DEL PROYECTO: ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	TÍTULO DEL PLANO: DETALLE CUENCA 18 T-500 AÑOS	PLANO: 04 HOJA: 8 de 8
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ASISTENCIA TÉCNICA: GARSAN S.L.	AUTOR DEL PROYECTO: Fdo: Manuel L. García Sancet I.C.C.P.		ESCALA: 1: 2000 FECHA: JULIO 2021	TÍTULO DEL PROYECTO: ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	TÍTULO DEL PLANO: DETALLE CUENCA 26 T-10 AÑOS, ZONA DE POLICIA Y SERVIDUMBRE	PLANO: 05 HOJA: 1 de 4
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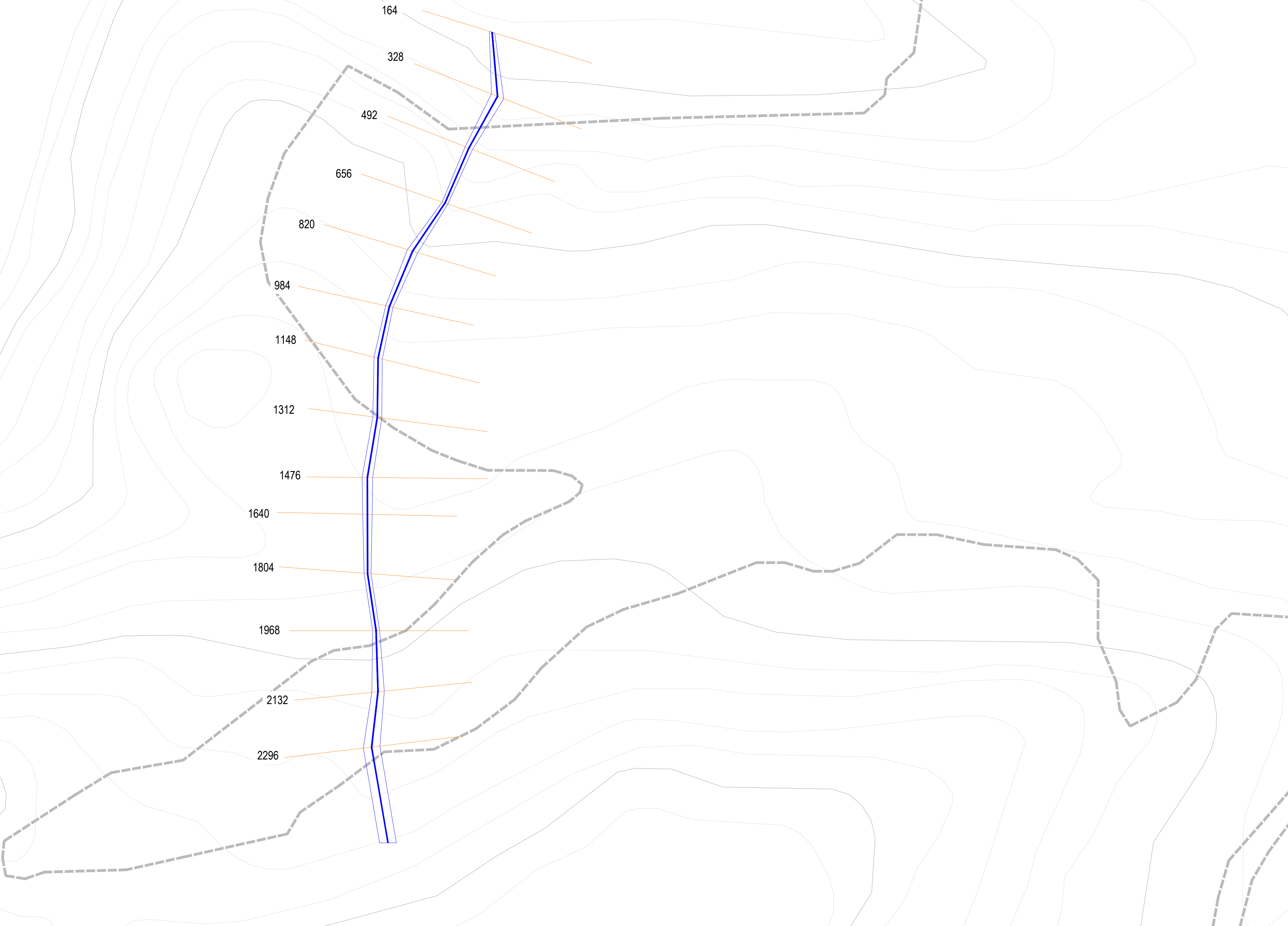
ASISTENCIA TÉCNICA: GARSAN S.L.	AUTOR DEL PROYECTO: Fdo: Manuel L. García Sancet I.C.C.P.	ESCALA: 1: 2000 FECHA: JULIO 2021	TÍTULO DEL PROYECTO: ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	TÍTULO DEL PLANO: DETALLE CUENCA 26 T-10 AÑOS, ZONA DE POLICIA Y SERVIDUMBRE	PLANO: 05 HOJA: 2 de 4
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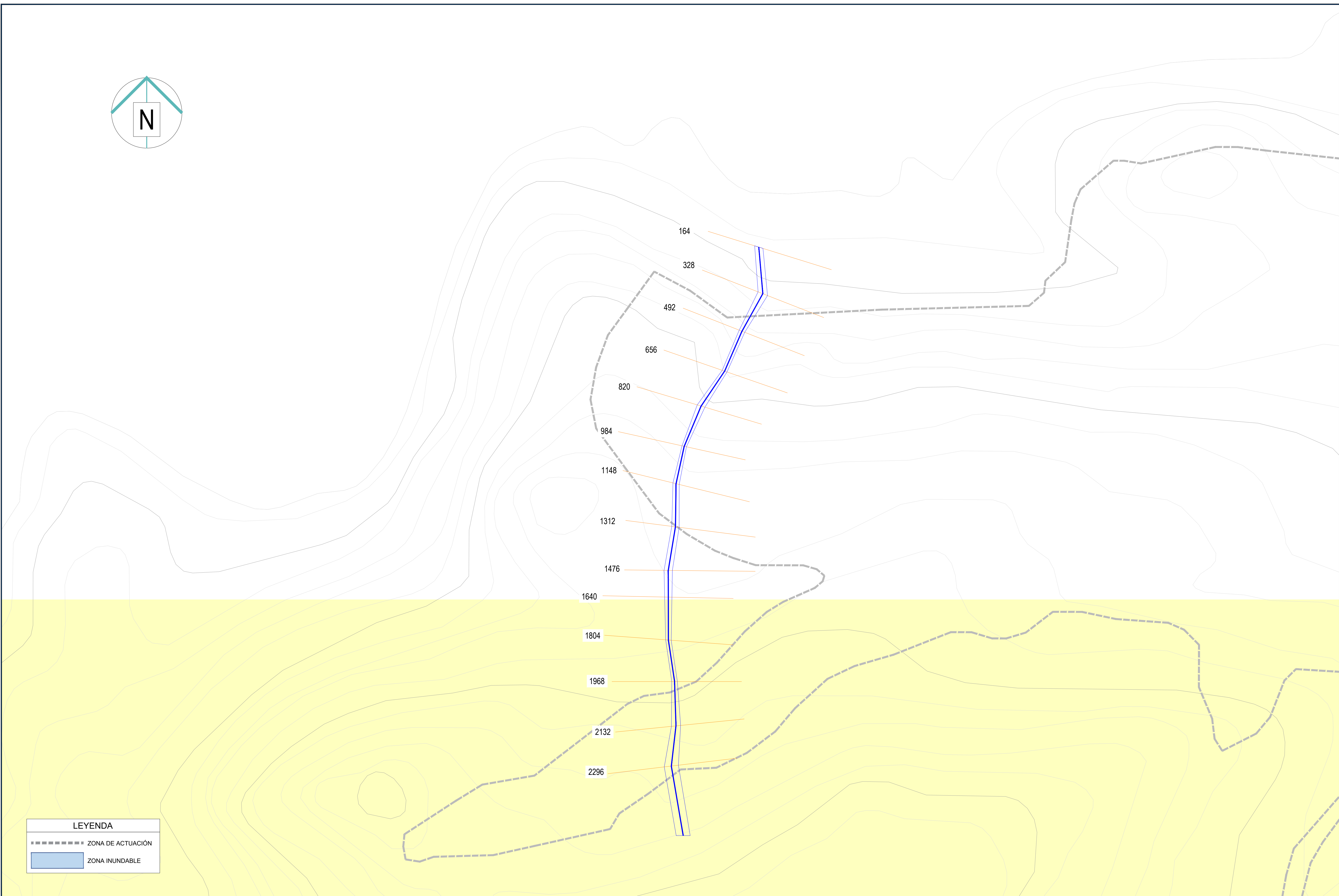
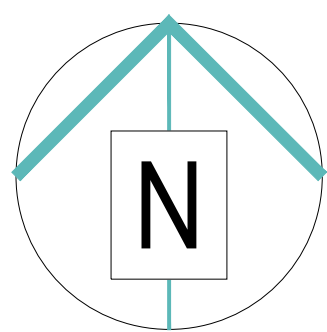
LEYENDA

ZONA DE ACTUACIÓN

ZONA INUNDABLE



ASISTENCIA TÉCNICA: GARSAN S.L.	AUTOR DEL PROYECTO: Fdo: Manuel L. García Sancet I.C.C.P.		ESCALA: 1: 2000 FECHA: JULIO 2021	TÍTULO DEL PROYECTO: ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	TÍTULO DEL PLANO: DETALLE CUENCA 26 T-100 AÑOS	PLANO: 05 HOJA: 3 de 4
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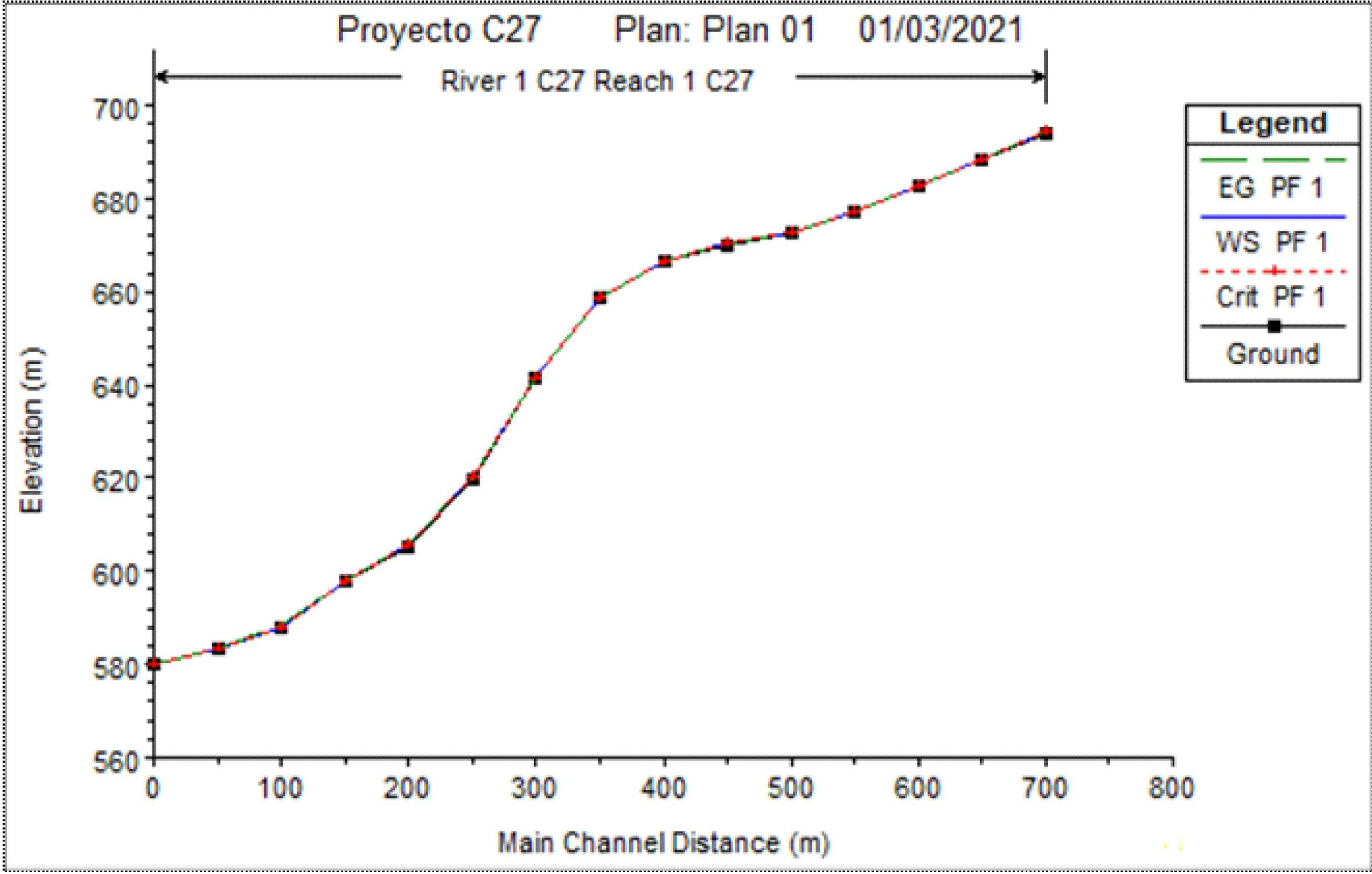
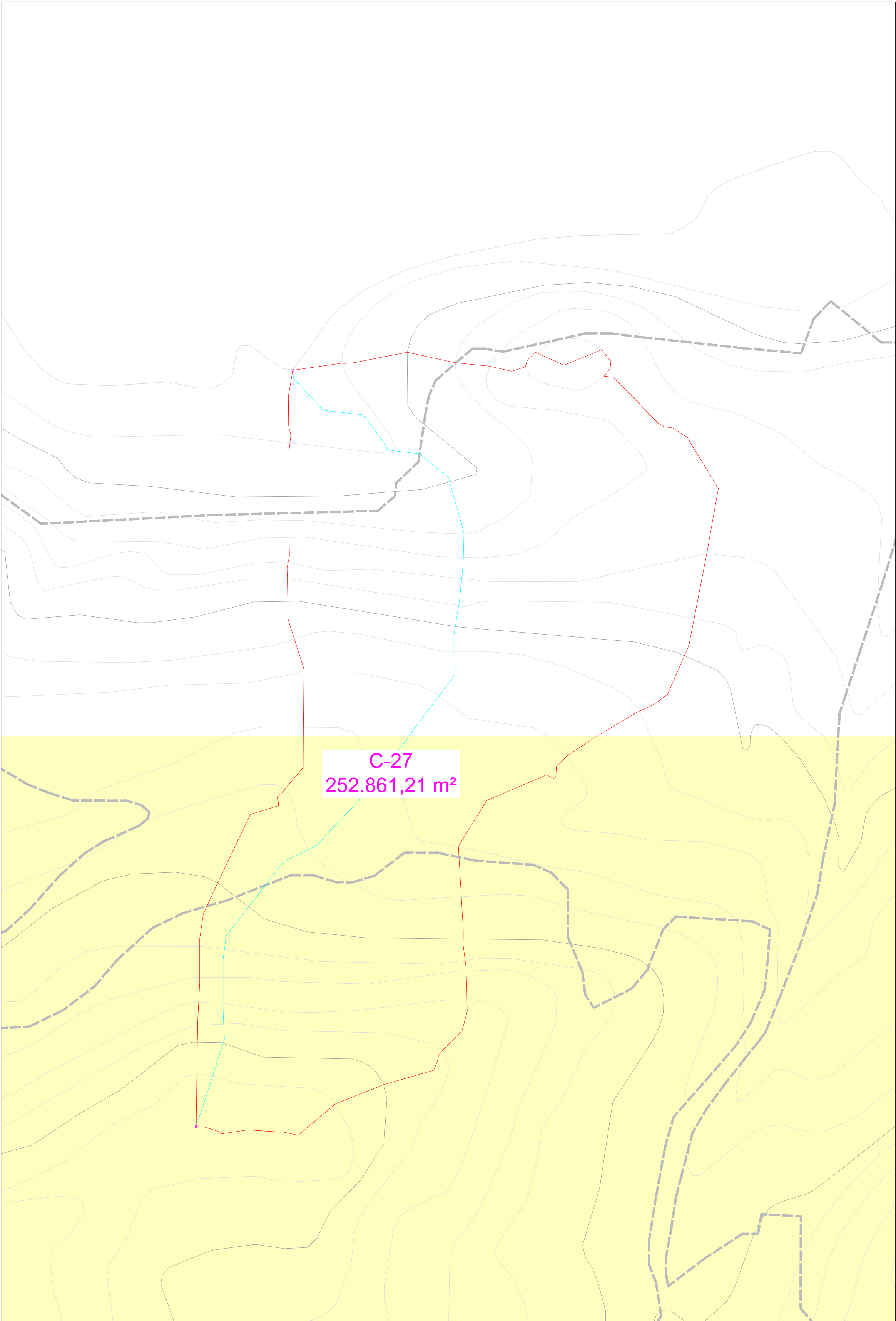


LEYENDA

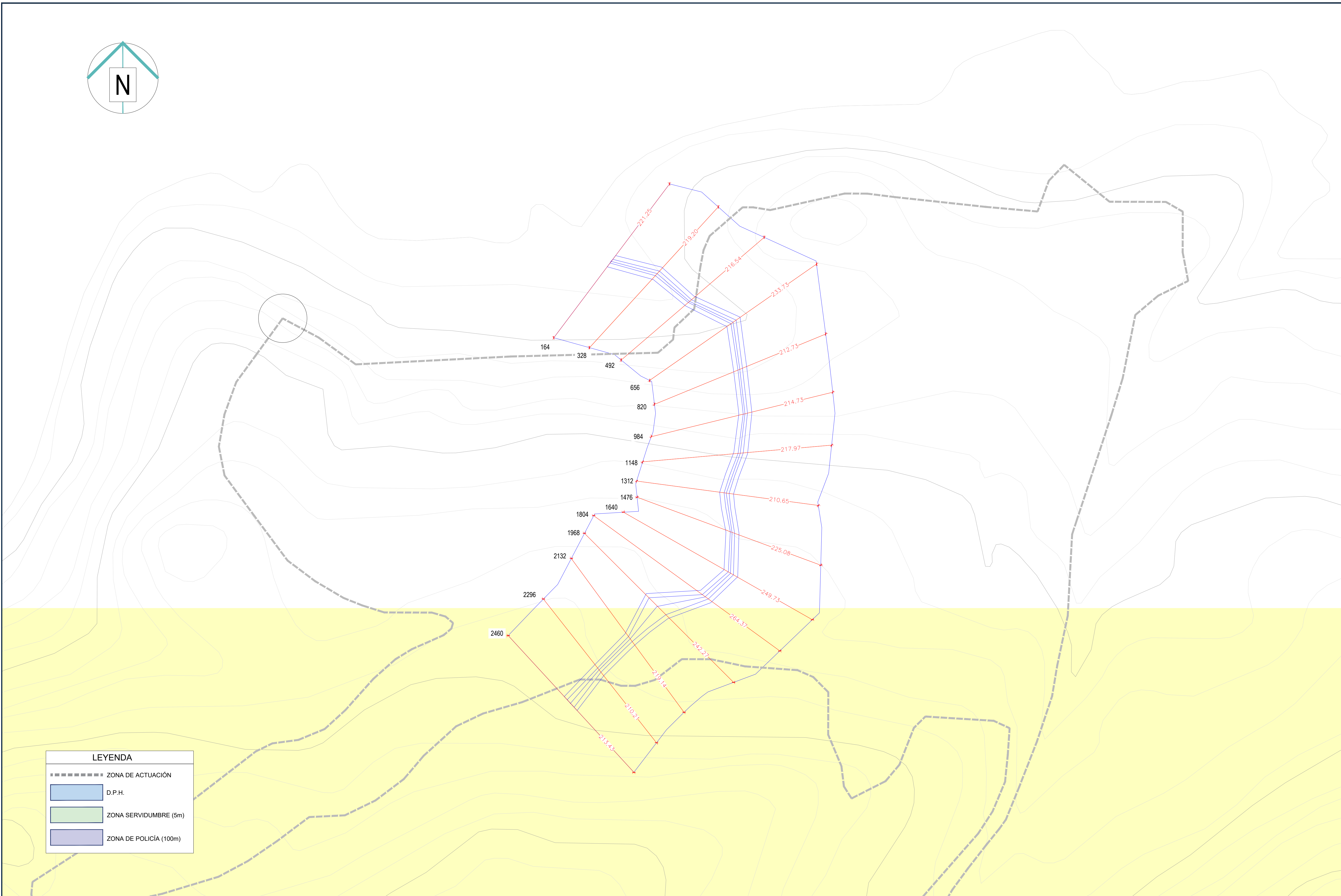
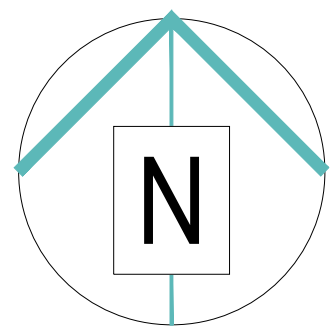
ZONA DE ACTUACIÓN

ZONA INUNDABLE

ASISTENCIA TÉCNICA: GARSAN S.L.	AUTOR DEL PROYECTO: Fdo: Manuel L. García Sancet I.C.C.P.	ESCALA: 1: 2000 FECHA: JULIO 2021	TÍTULO DEL PROYECTO: ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	TÍTULO DEL PLANO: DETALLE CUENCA 26 T-500 AÑOS	PLANO: 05 HOJA: 4 de 4
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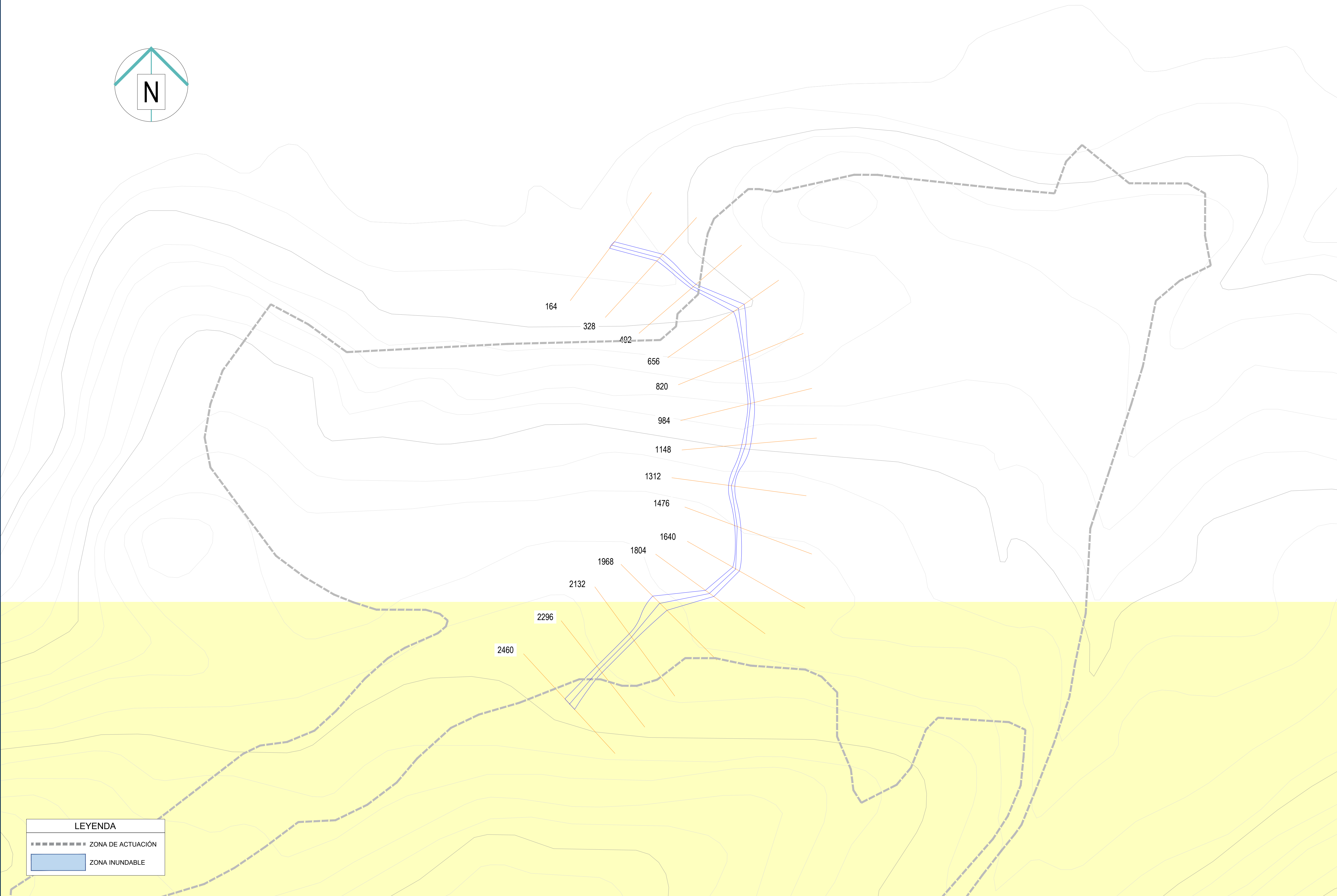
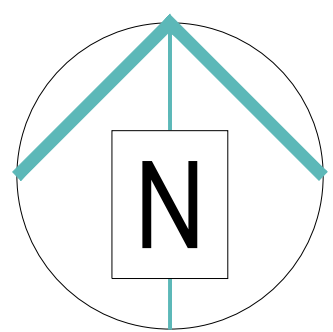


ASISTENCIA TÉCNICA: GARSAN S.L.	AUTOR DEL PROYECTO: Fdo: Manuel L. García Sancet I.C.C.P.	ESCALA: 1: 3000 FECHA: JULIO 2021	TÍTULO DEL PROYECTO: ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	TÍTULO DEL PLANO: DETALLE CUENCA 27 T-10 AÑOS, ZONA DE POLICIA Y SERVIDUMBRE	PLANO: 06 HOJA: 1 de 4
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LEYENDA	
	ZONA DE ACTUACIÓN
	D.P.H.
	ZONA SERVIDUMBRE (5m)
	ZONA DE POLICÍA (100m)

ASISTENCIA TÉCNICA: GARSAN S.L.	AUTOR DEL PROYECTO: Fdo: Manuel L. García Sancet I.C.C.P.	ESCALA: 1: 2000 FECHA: JULIO 2021	TÍTULO DEL PROYECTO: ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	TÍTULO DEL PLANO: DETALLE CUENCA 27 T-10 AÑOS, ZONA DE POLICIA Y SERVIDUMBRE	PLANO: 06 HOJA: 2 de 4
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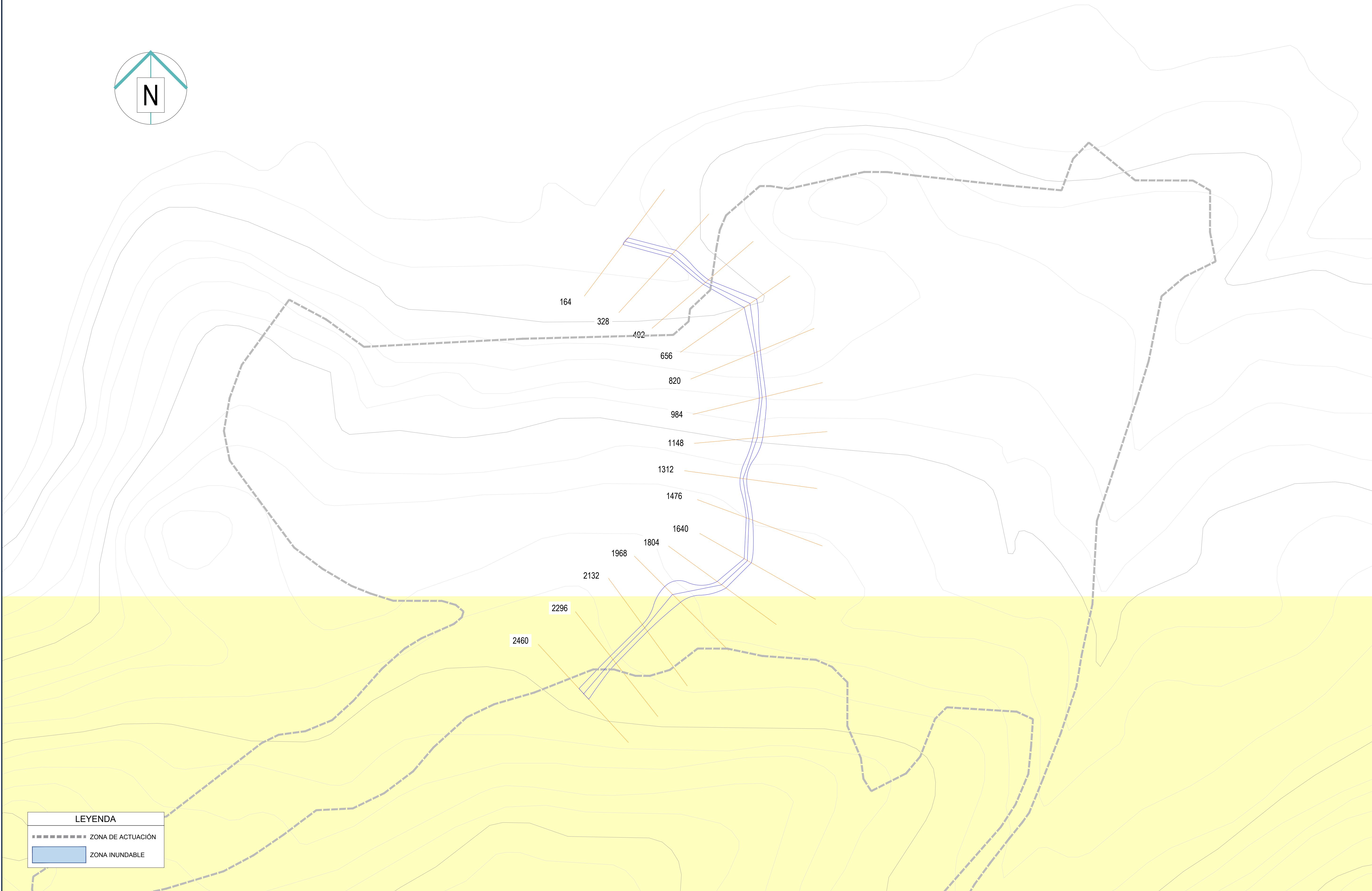
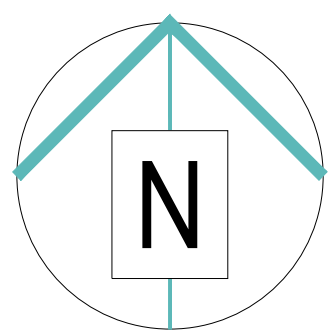


LEYENDA

ZONA DE ACTUACIÓN

ZONA INUNDABLE

ASISTENCIA TÉCNICA:	AUTOR DEL PROYECTO:		ESCALA:	TÍTULO DEL PROYECTO:	TÍTULO DEL PLANO:	PLANO:
GARSAN S.L.	Fdo: Manuel L. García Sancet I.C.C.P.		1: 2000	ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	DETALLE CUENCA 27 T-100 AÑOS	06
			FECHA:			HOJA:
			JULIO 2021			3 de 4



LEYENDA

ZONA DE ACTUACIÓN

ZONA INUNDABLE

ASISTENCIA TÉCNICA: GARSAN S.L.	AUTOR DEL PROYECTO: Fdo: Manuel L. García Sancet I.C.C.P.		ESCALA: 1: 2000 FECHA: JULIO 2021	TÍTULO DEL PROYECTO: ESTUDIO HIDROGEOLÓGICO E HIDRÁULICO. SU-RA-I - SAN MARTÍN DE VALDEIGLESIAS	TÍTULO DEL PLANO: DETALLE CUENCA 27 T-500 AÑOS	PLANO: 06 HOJA: 4 de 4
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