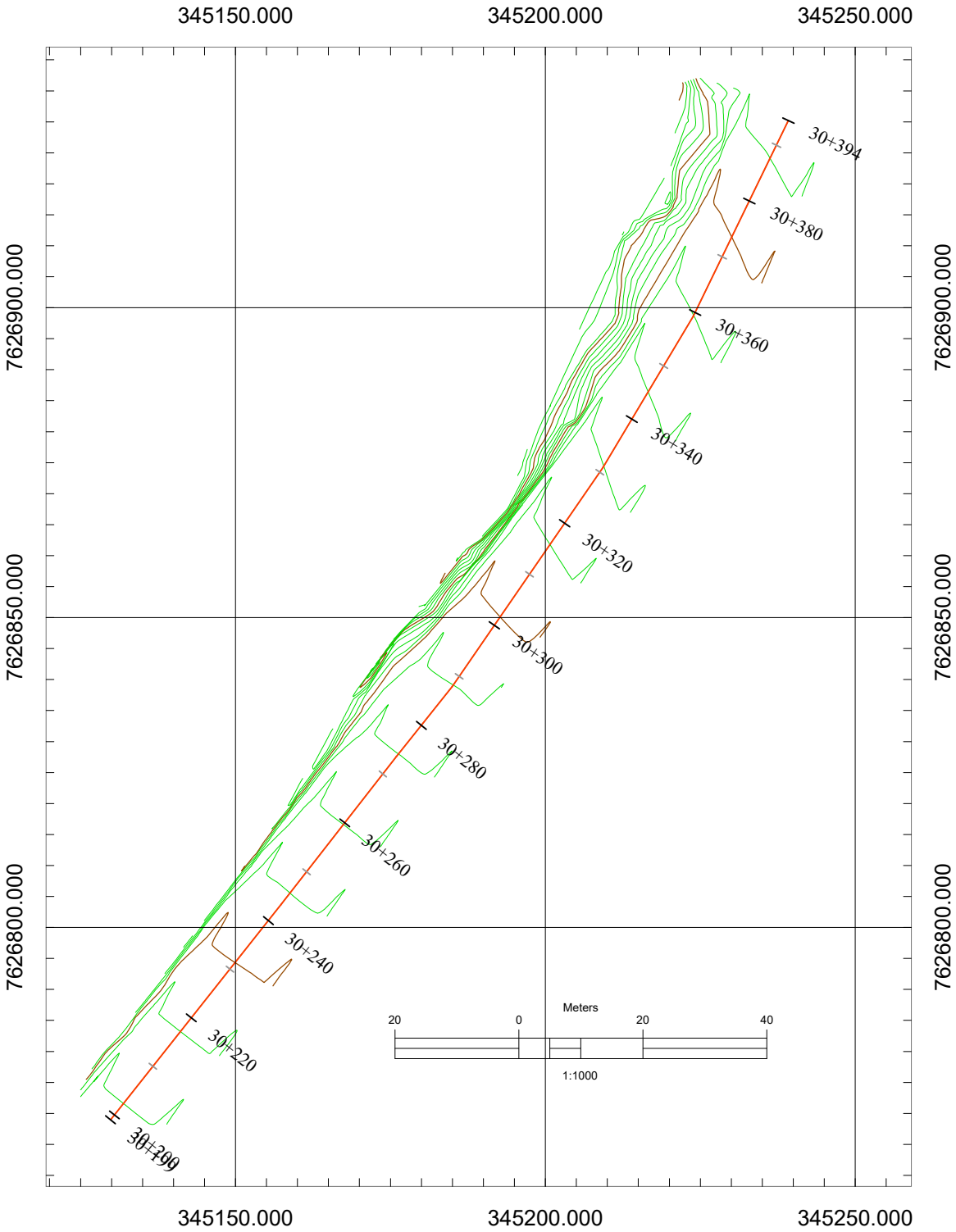
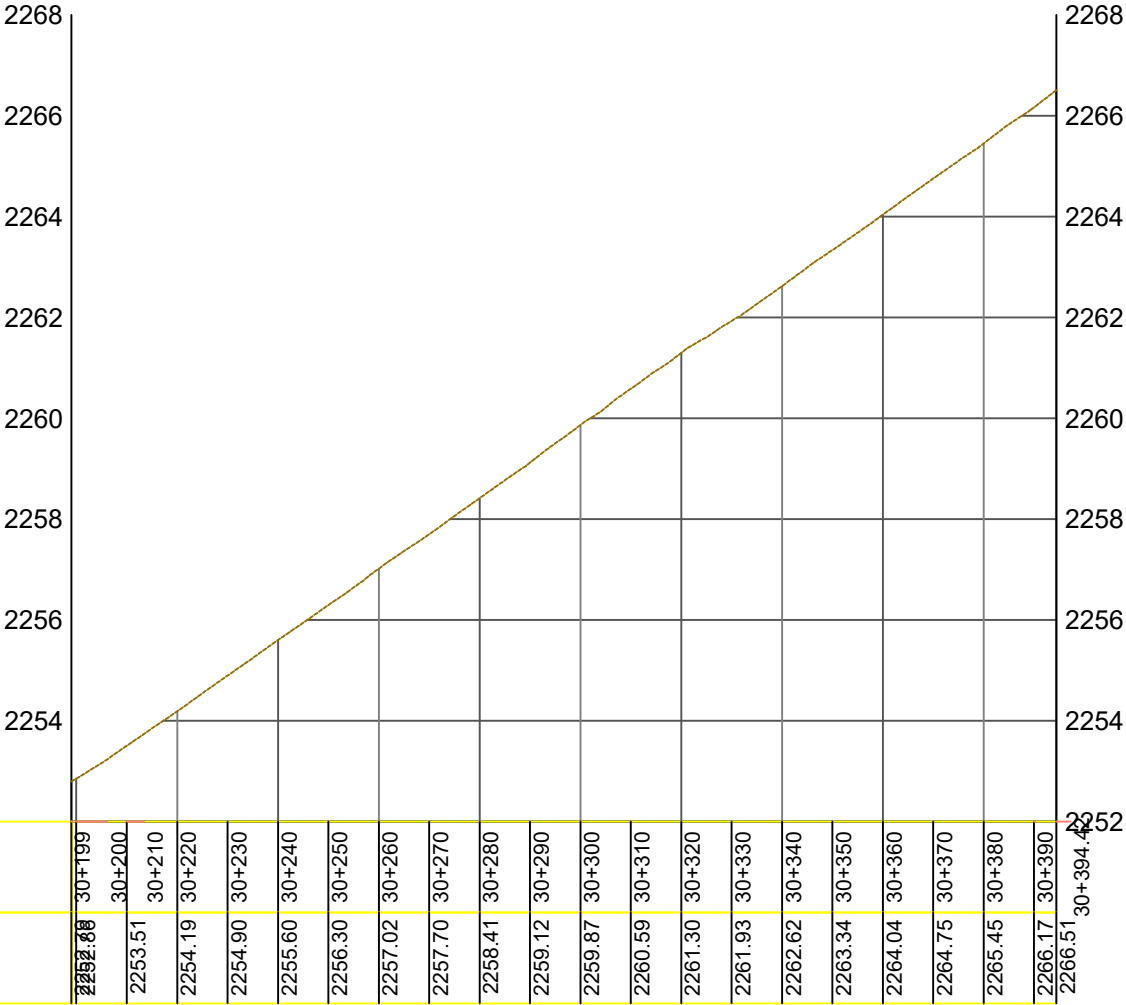


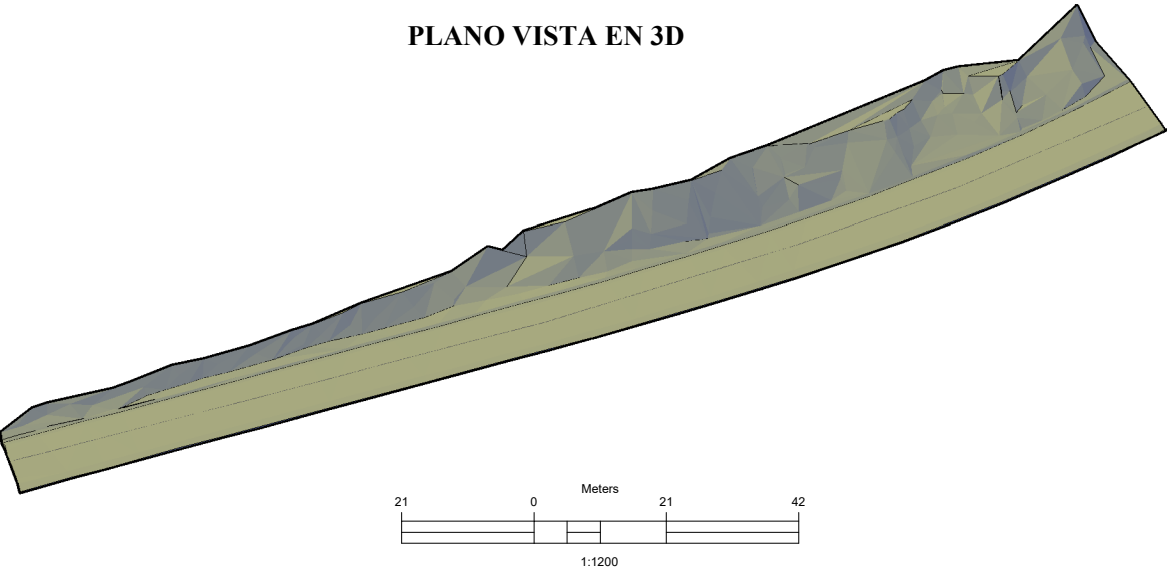
PLANO VISTA EN PLANTA



PERFIL LONGITUDINAL



PLANO VISTA EN 3D



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Tarija-Bolivia

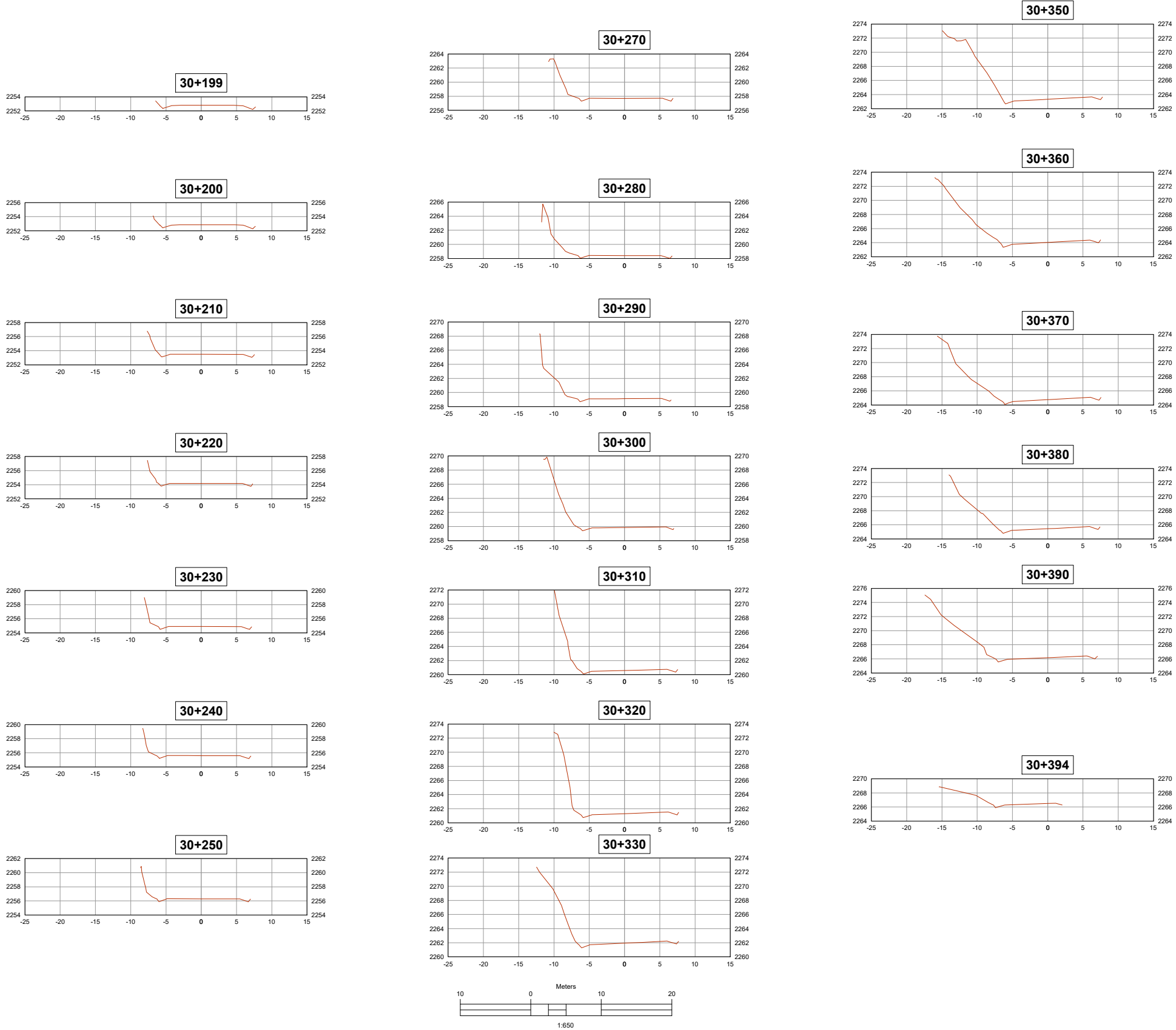


MATERIA: **PROYECTO DE GRADO II**
PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO H° LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA LARGA

ELABORADO POR:
JAVIER ADOLFO ORTEGA ARMELLA

CONTENIDO: **PLANO EN PLANTA Y PERFIL LONGITUDINAL**
Escala Planta: Indicada
Escala Perfil: Indicada
Fecha: MAYO-2025
TARIJA - BOLIVIA
Lámina Nº 1

PLANO DE SECCIONES TRANSVERSALES



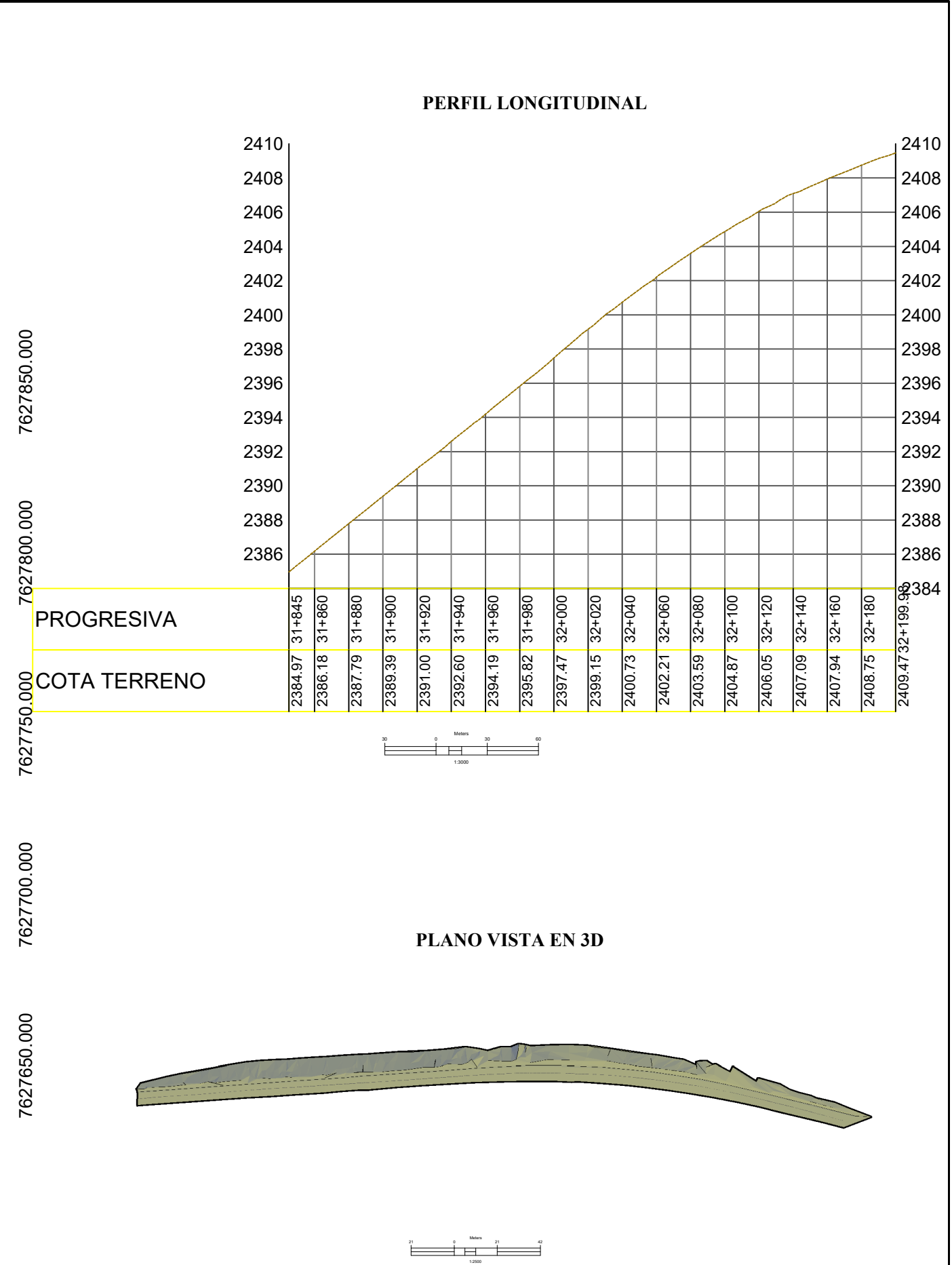
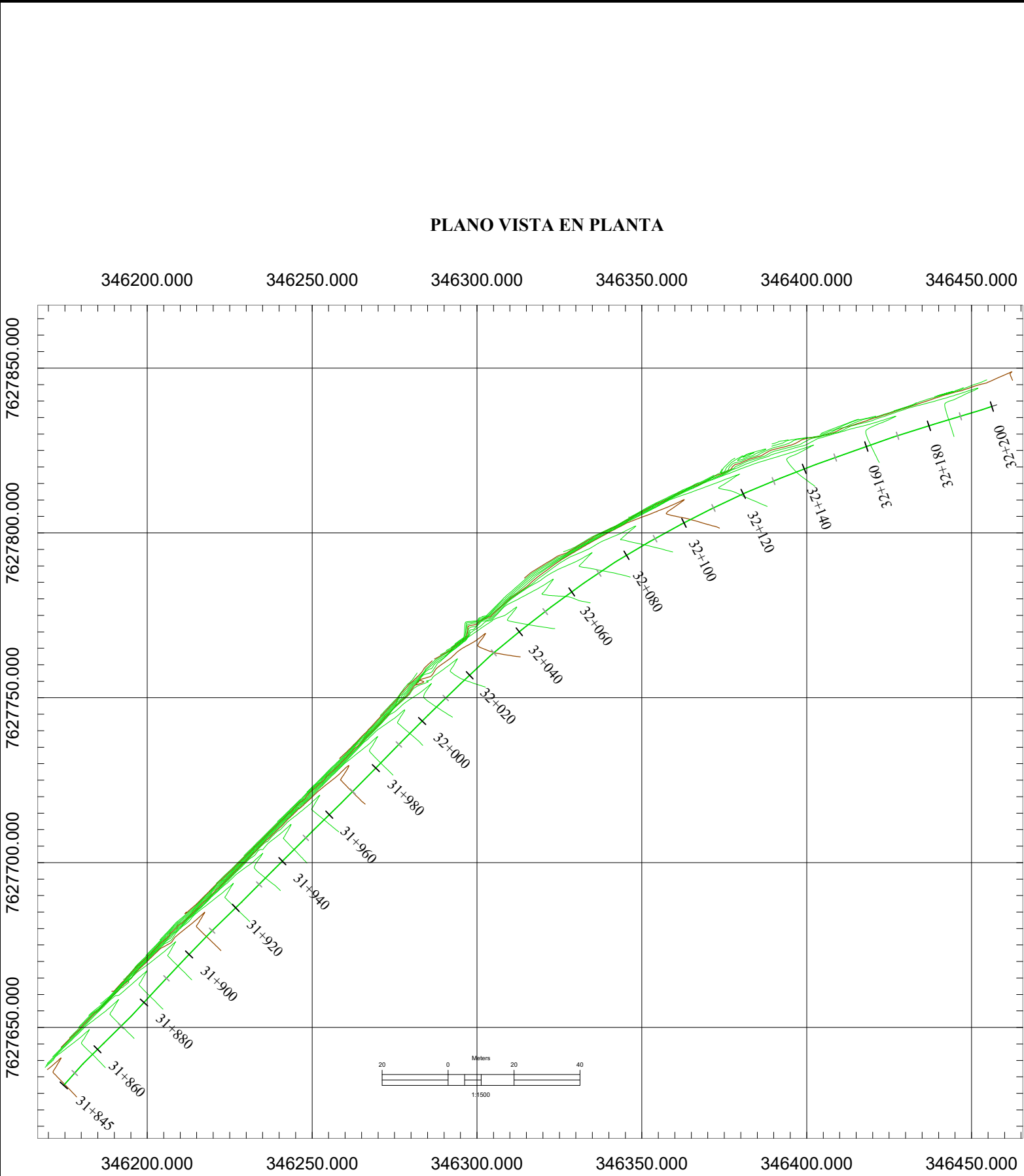
UNIVERSIDAD AUTÓNOMA
JUAN MISAEL SARACHO
Tarija-Bolivia



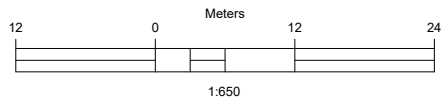
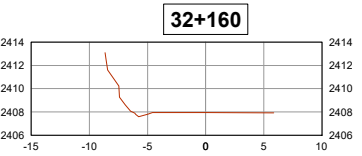
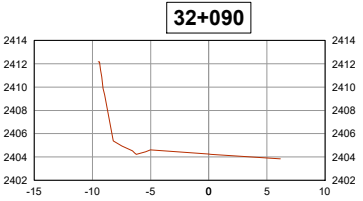
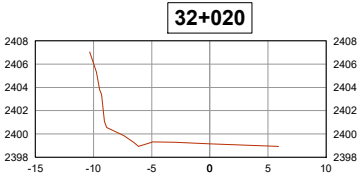
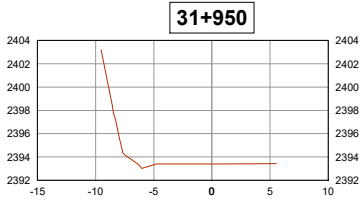
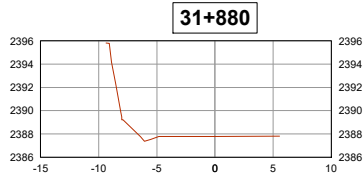
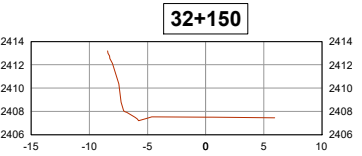
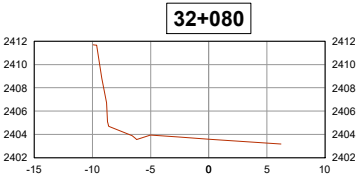
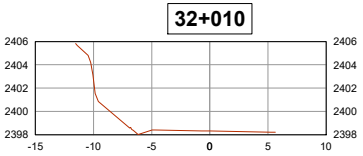
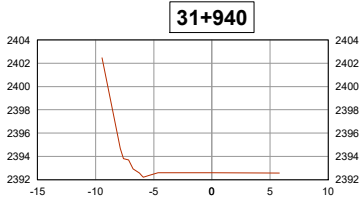
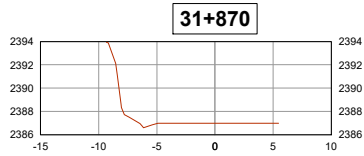
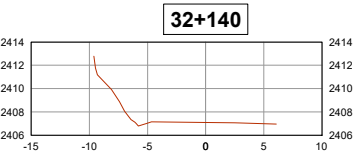
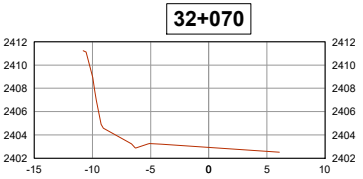
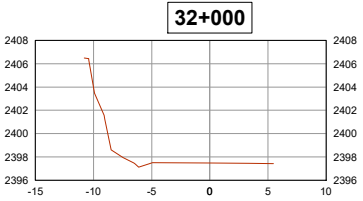
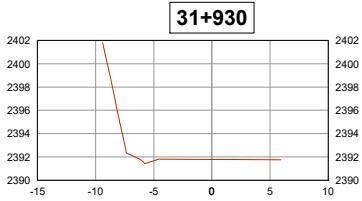
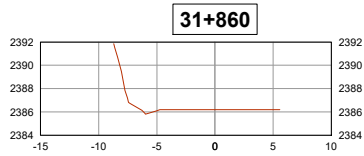
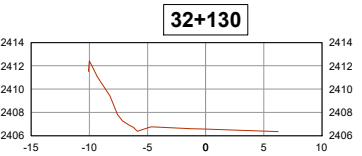
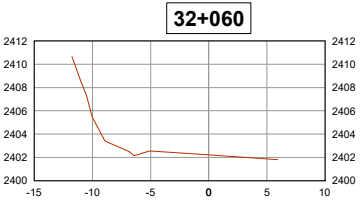
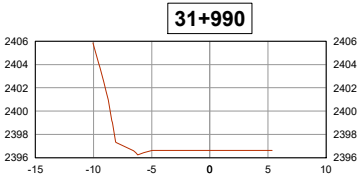
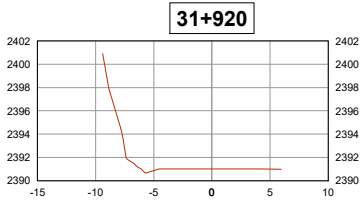
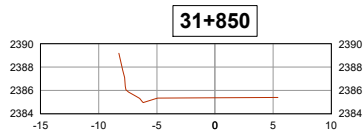
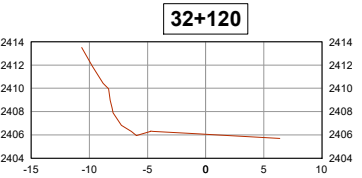
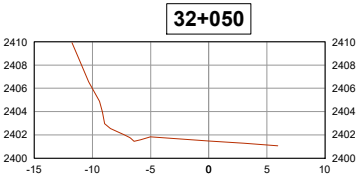
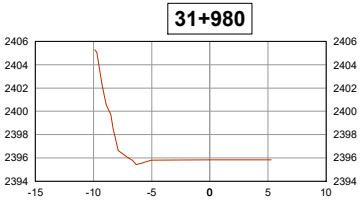
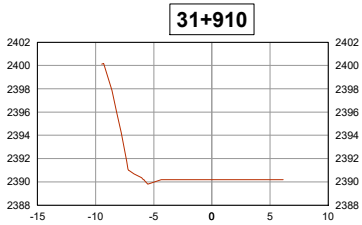
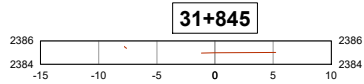
MATERIA: PROYECTO DE GRADO II
PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO H° LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA LARGA

ELABORADO POR:
JAVIER ADOLFO ORTEGA ARMELLA

CONTENIDO: PLANO DE SECCIONES TRANSVERSALES
Escala: Escala Planta: Indicada Escala Perfil: Indicada
Fecha: MAYO-2025 TARIJA - BOLIVIA
Lámina Nº 2



PLANO DE SECCIONES TRANSVERSALES



UNIVERSIDAD AUTÓNOMA
JUAN MISAEL SARACHO
Tarija-Bolivia



MATERIA: PROYECTO DE GRADO II
PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO H°
LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA LARGA

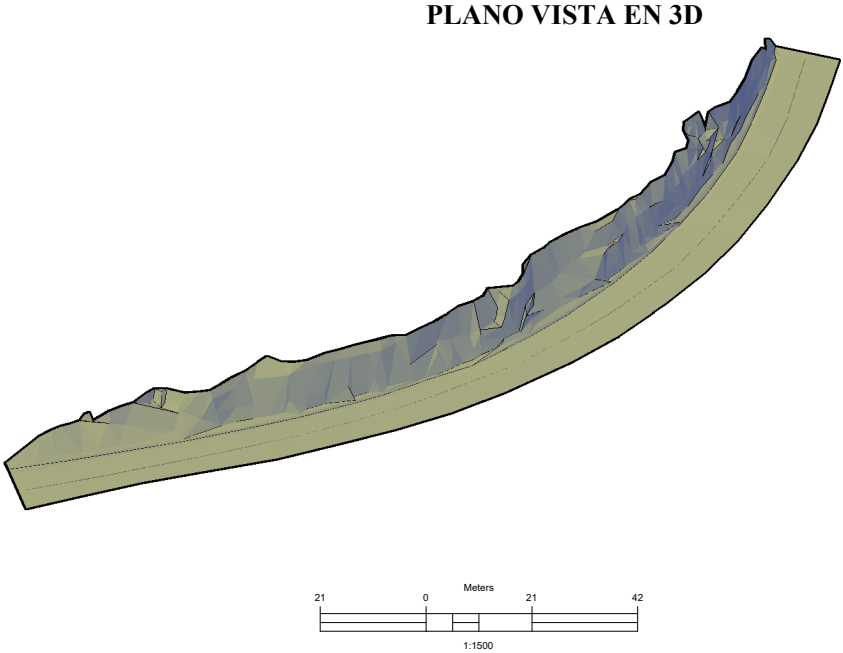
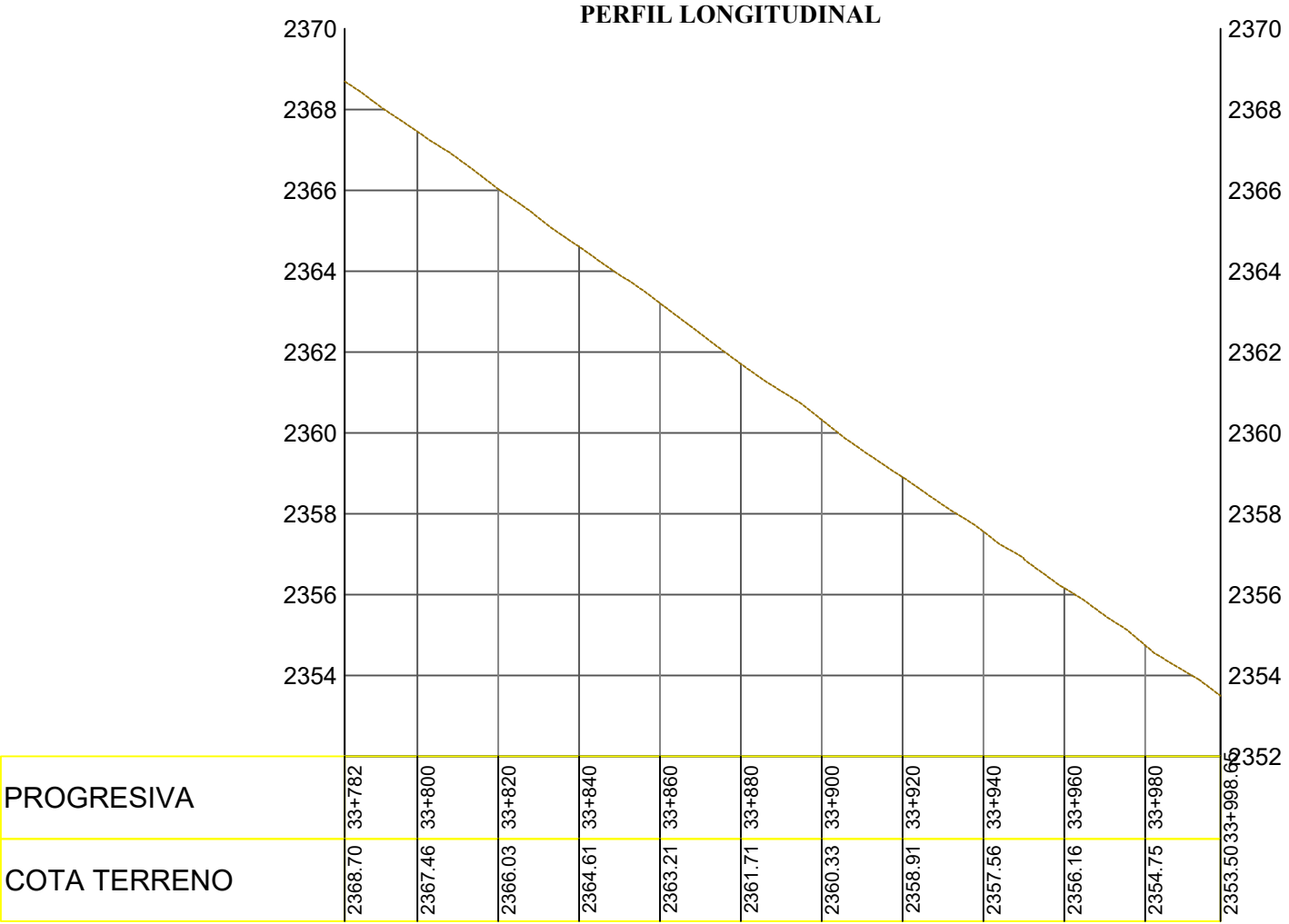
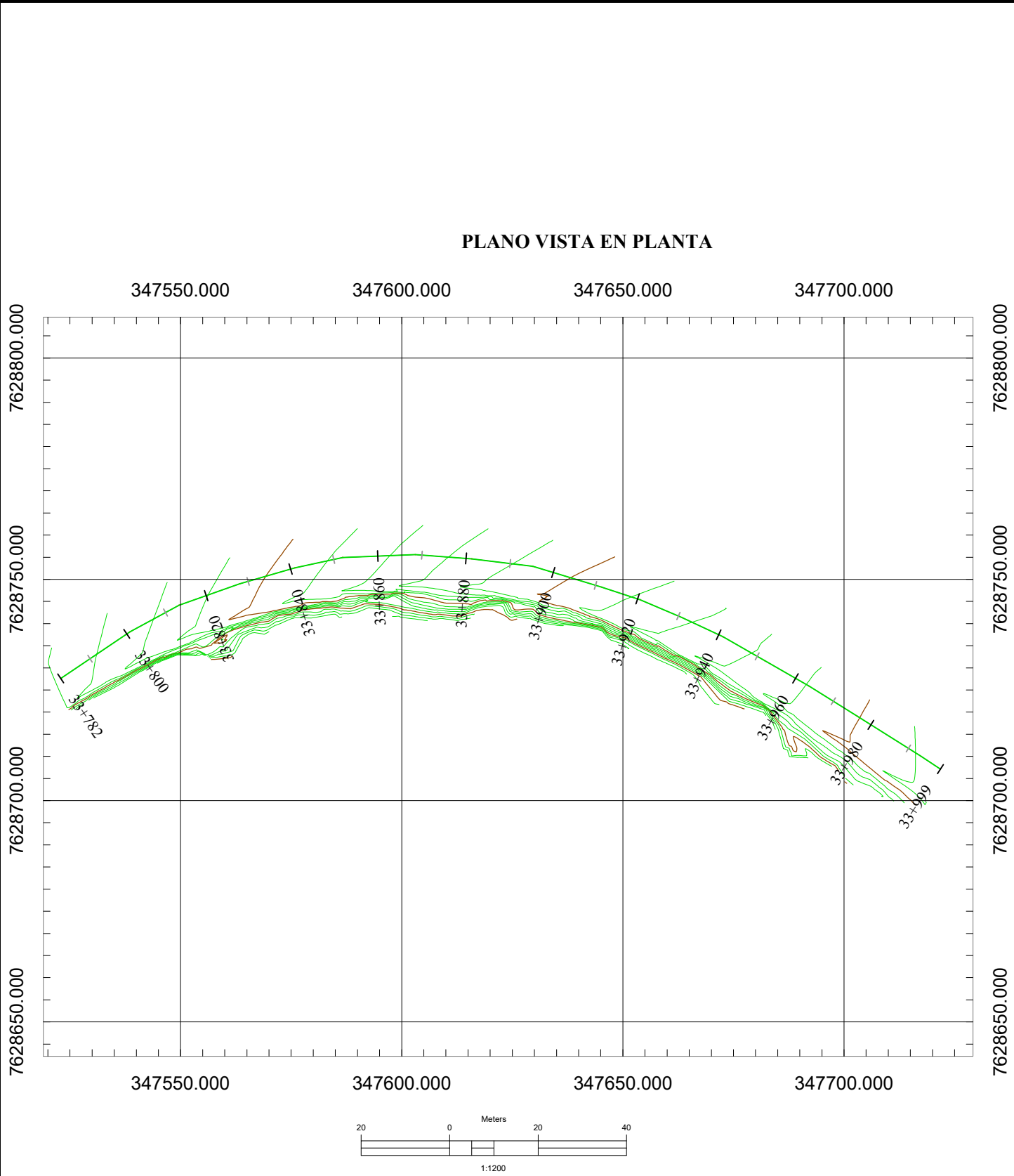
ELABORADO POR:
JAVIER ADOLFO ORTEGA ARMELLA

CONTENIDO: PLANO DE SECCIONES TRANSVERSALES

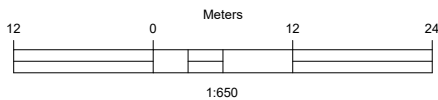
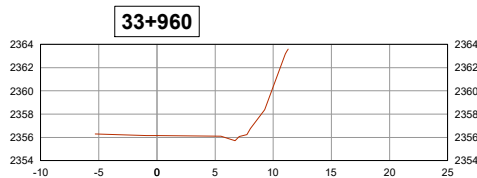
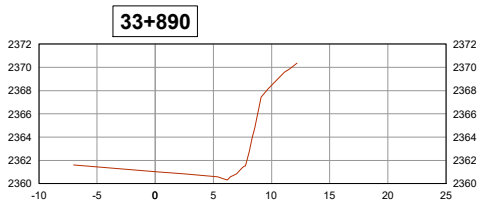
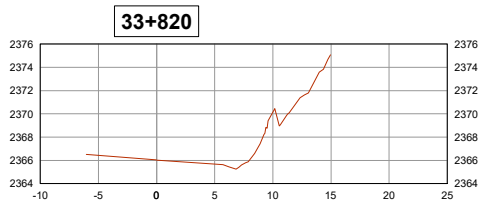
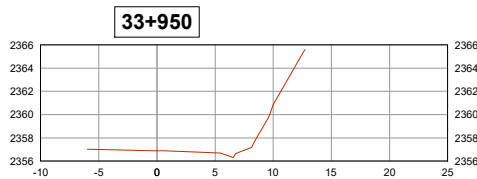
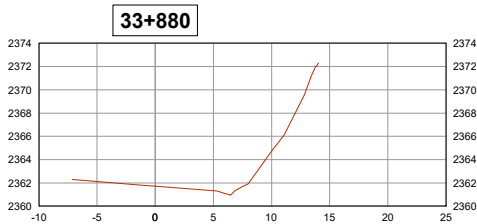
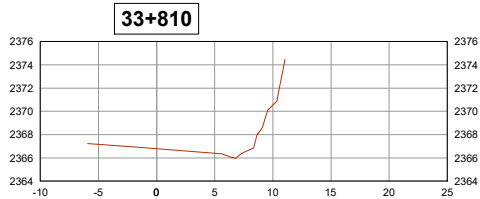
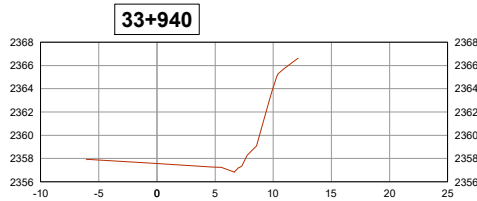
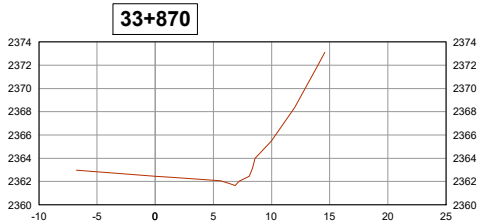
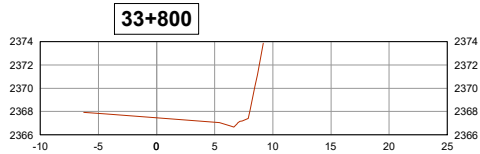
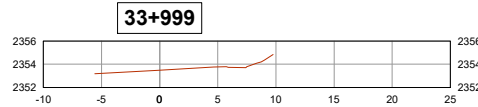
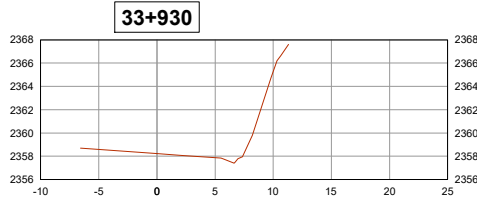
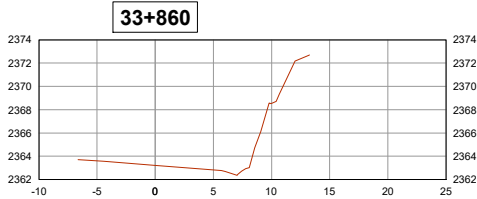
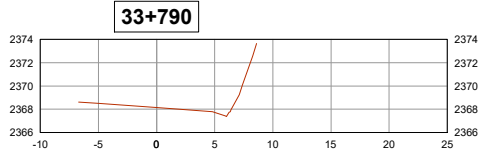
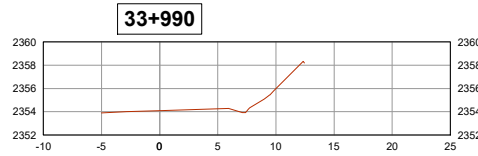
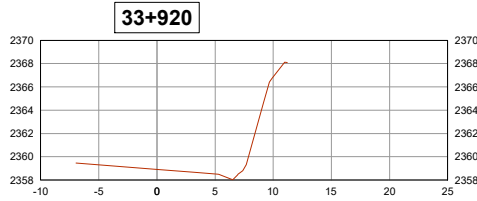
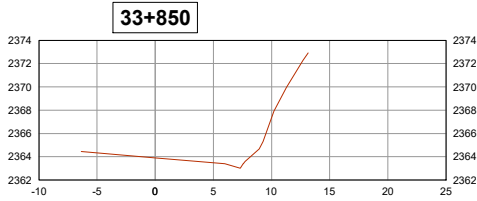
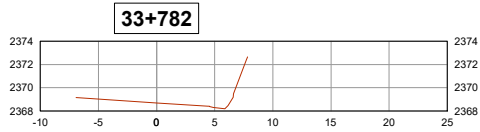
Escala: Escala Planta: Indicada
Escala Perfil: Indicada

Fecha: MAYO-2025
TARIJA - BOLIVIA

Lámina Nº 4



PLANO DE SECCIONES TRANSVERSALES



UNIVERSIDAD AUTÓNOMA
JUAN MISAEL SARACHO
Tarija-Bolivia



MATERIA: PROYECTO DE GRADO II

PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO H°
LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA
LARGA

ELABORADO POR:

JAVIER ADOLFO ORTEGA ARMELLA

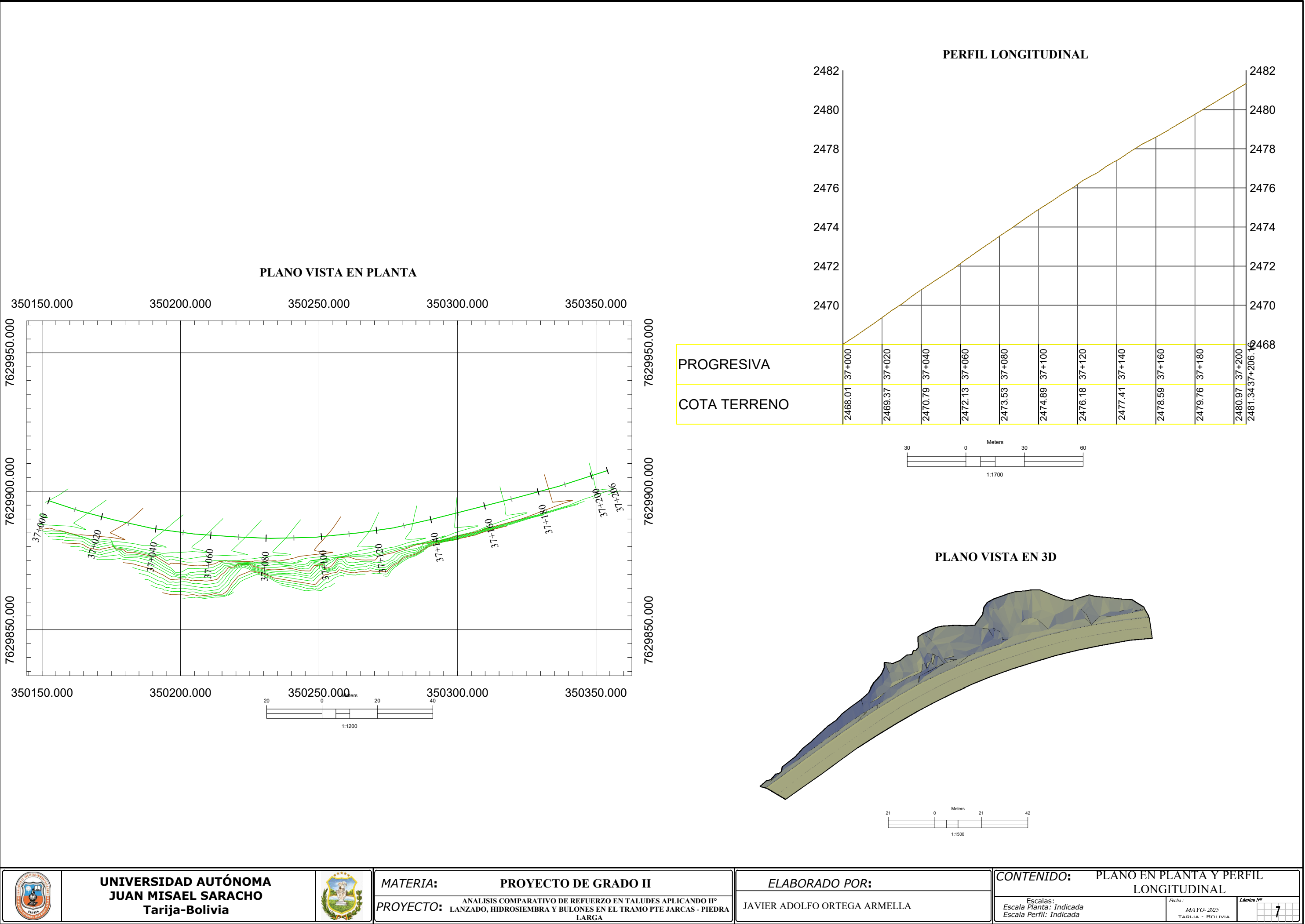
CONTENIDO: PLANO DE SECCIONES
TRANSVERSALES

Escala: Escala Planta: Indicada
Escala Perfil: Indicada

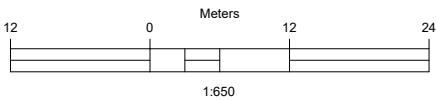
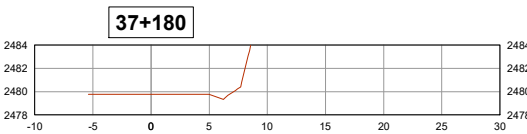
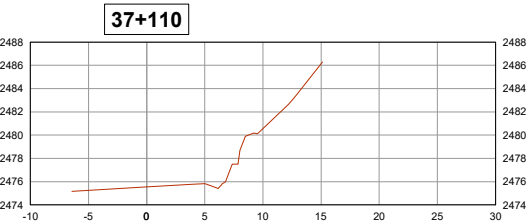
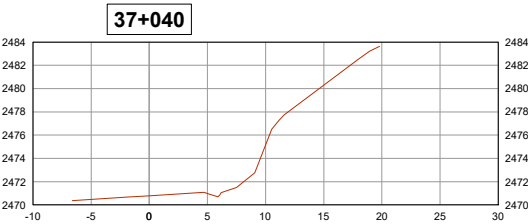
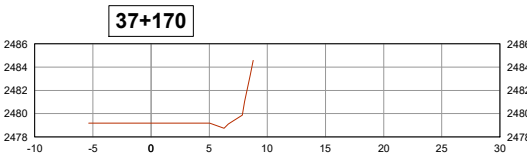
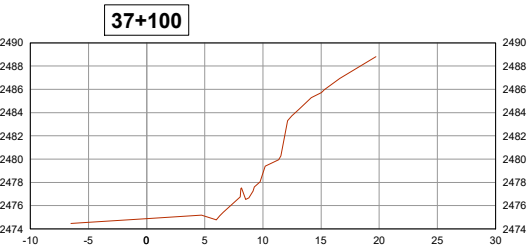
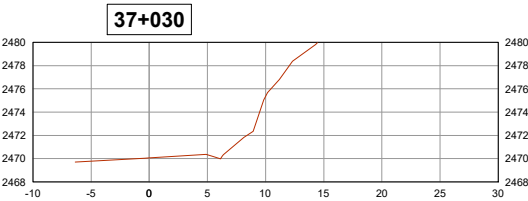
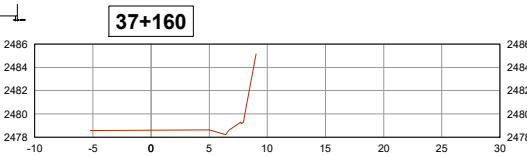
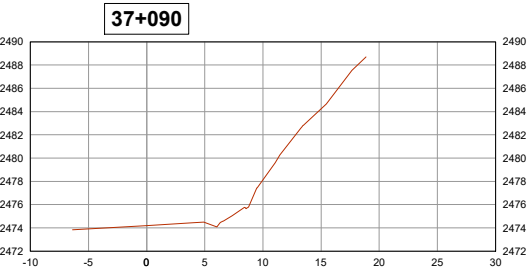
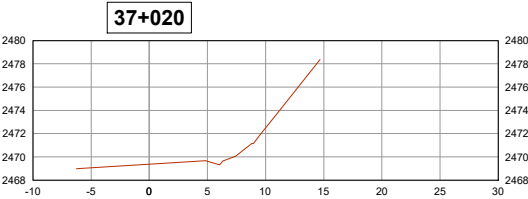
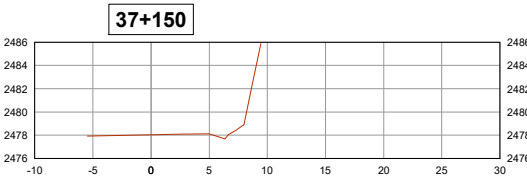
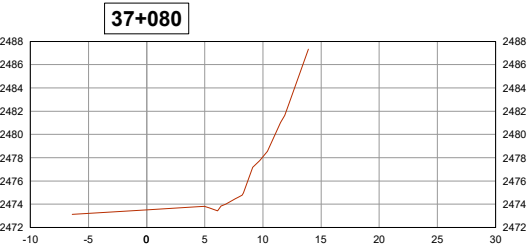
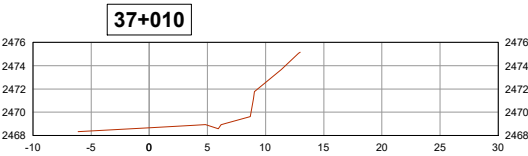
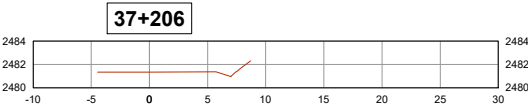
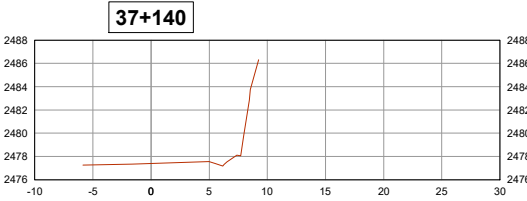
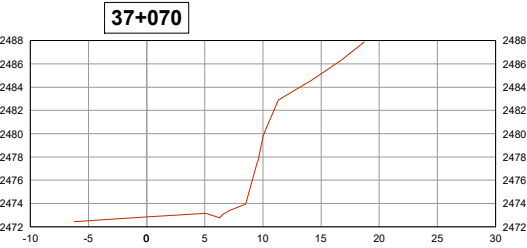
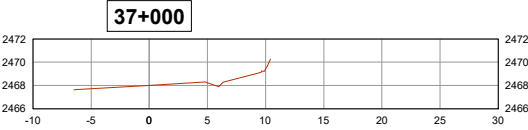
Fecha: MAYO-2025
TARIJA - BOLIVIA

Lámina Nº

6



PLANO DE SECCIONES TRANSVERSALES



UNIVERSIDAD AUTÓNOMA
JUAN MISAEL SARACHO
Tarija-Bolivia



MATERIA: PROYECTO DE GRADO II
PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO Hº LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA LARGA

ELABORADO POR:
JAVIER ADOLFO ORTEGA ARMELLA

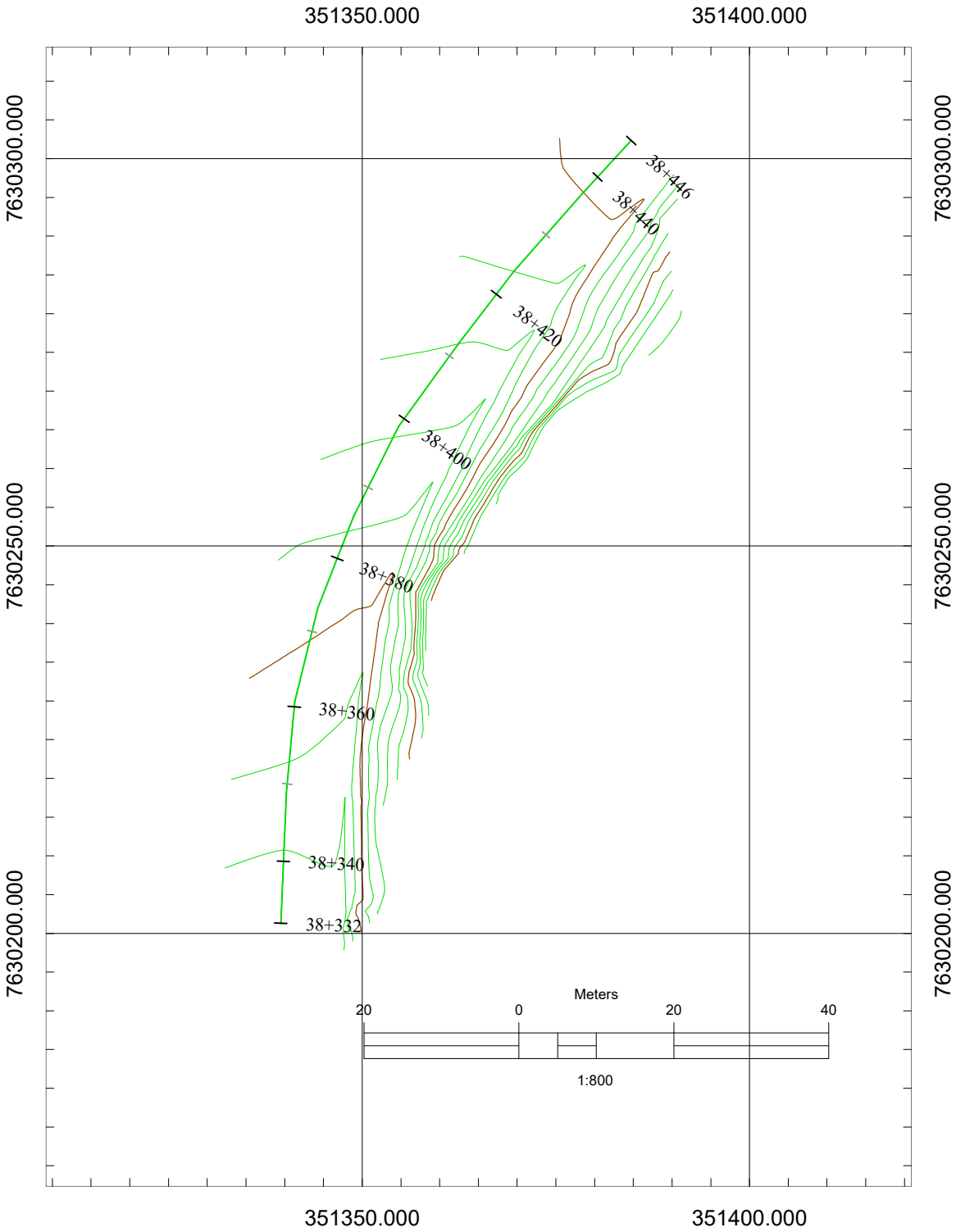
CONTENIDO: PLANO DE SECCIONES TRANSVERSALES

Escala: Escala Planta: Indicada
Escala Perfil: Indicada

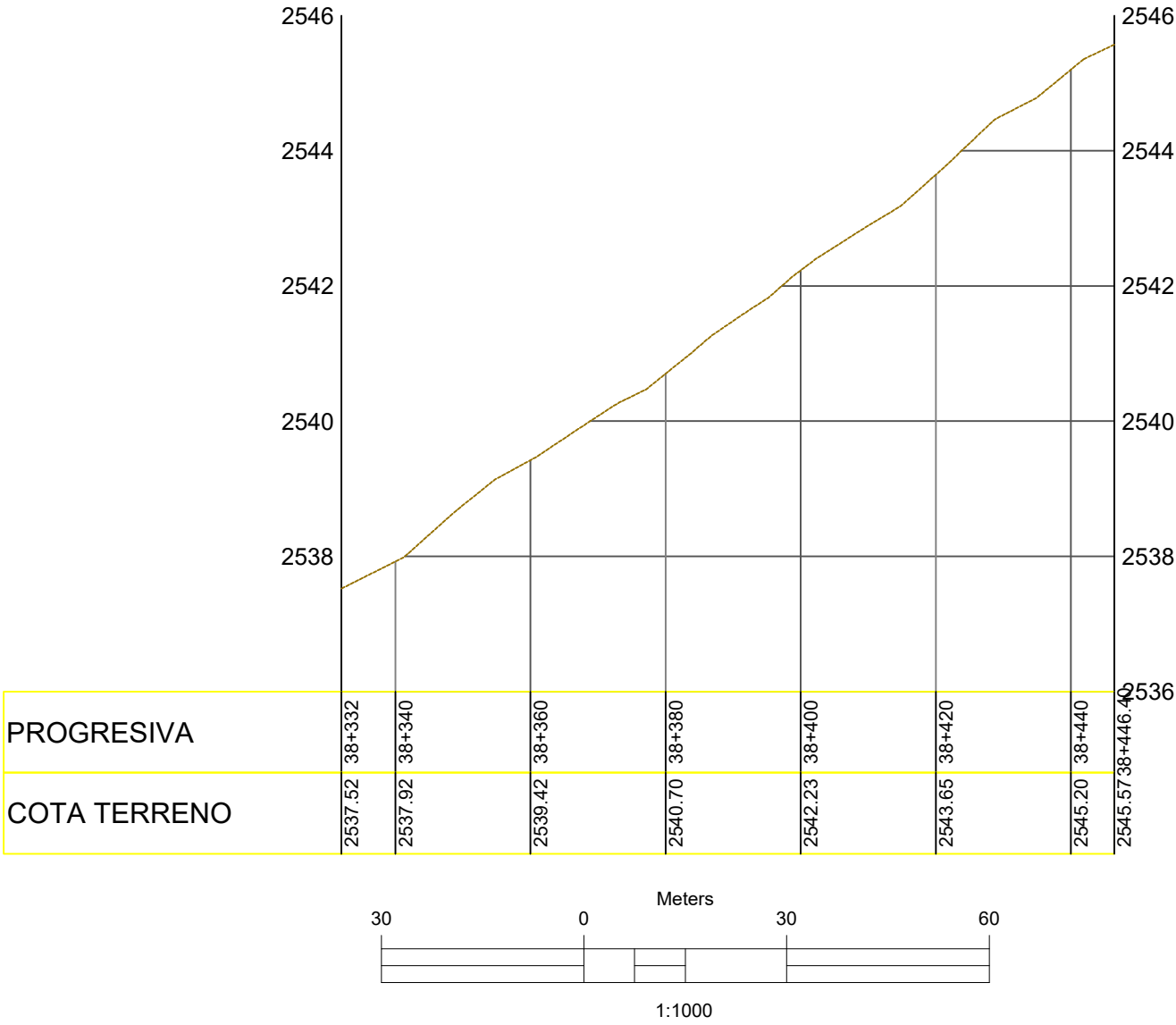
Fecha: MAYO-2025
TARIJA - BOLIVIA

Lámina Nº 8

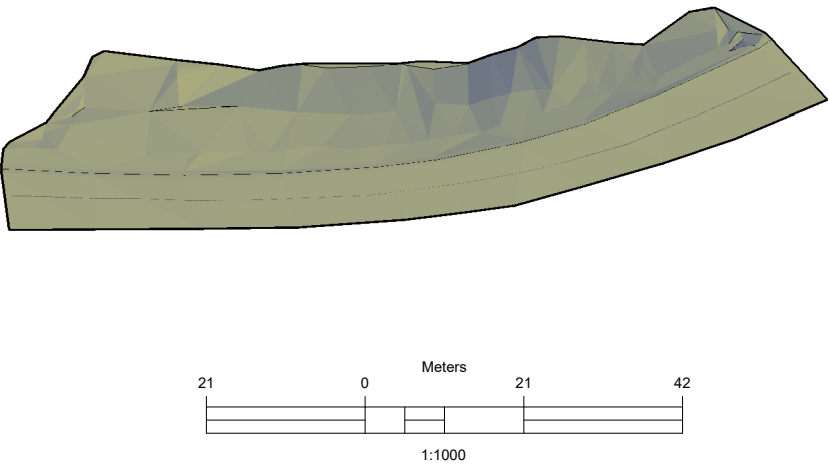
PLANO VISTA EN PLANTA



PERFIL LONGITUDINAL



PLANO VISTA EN 3D



UNIVERSIDAD AUTÓNOMA
JUAN MISAEL SARACHO
Tarija-Bolivia



MATERIA: PROYECTO DE GRADO II

PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO H°
LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA
LARGA

ELABORADO POR:

JAVIER ADOLFO ORTEGA ARMELLA

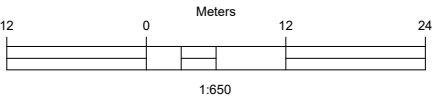
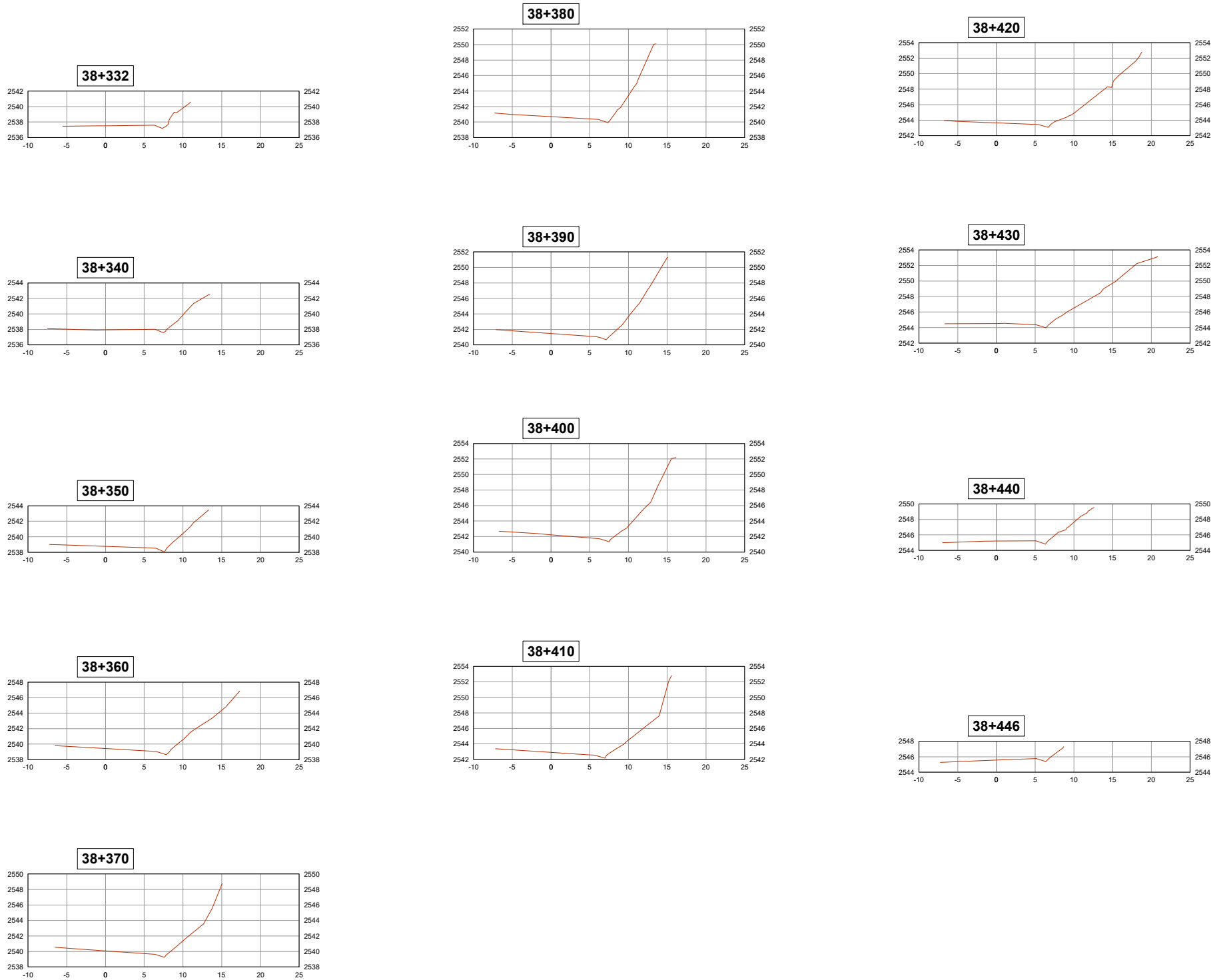
CONTENIDO: PLANO EN PLANTA Y PERFIL
LONGITUDINAL

Escala: Escala Planta: Indicada
Escala Perfil: Indicada

Fecha: MAYO-2025
TARIJA - BOLIVIA

Lámina Nº 9

PLANO DE SECCIONES TRANSVERSALES



UNIVERSIDAD AUTÓNOMA
JUAN MISAEL SARACHO
Tarija-Bolivia



MATERIA: PROYECTO DE GRADO II
PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO H° LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA LARGA

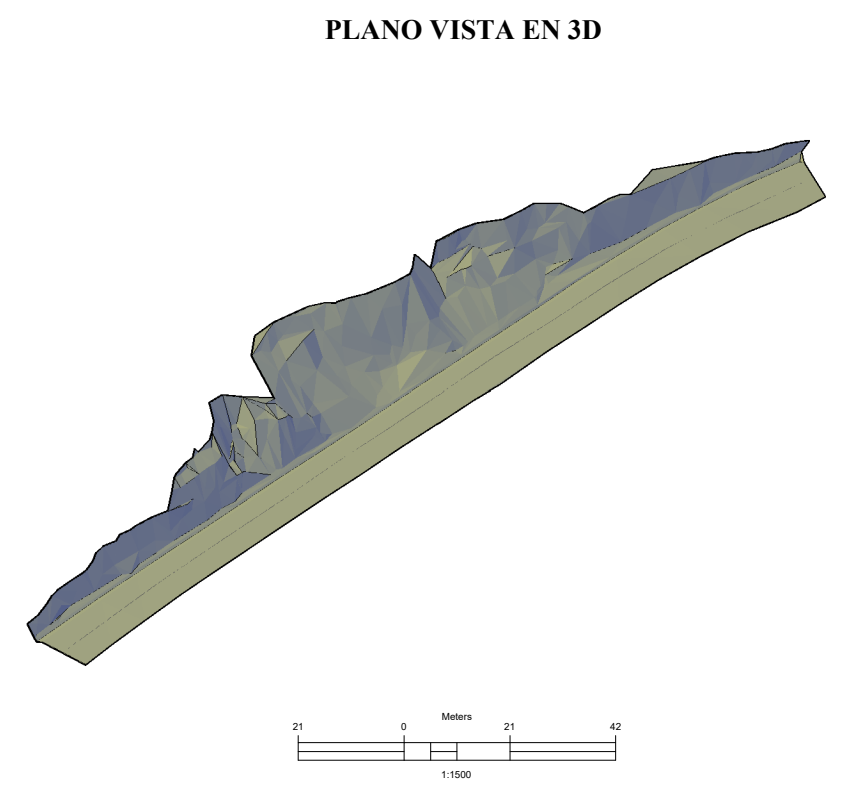
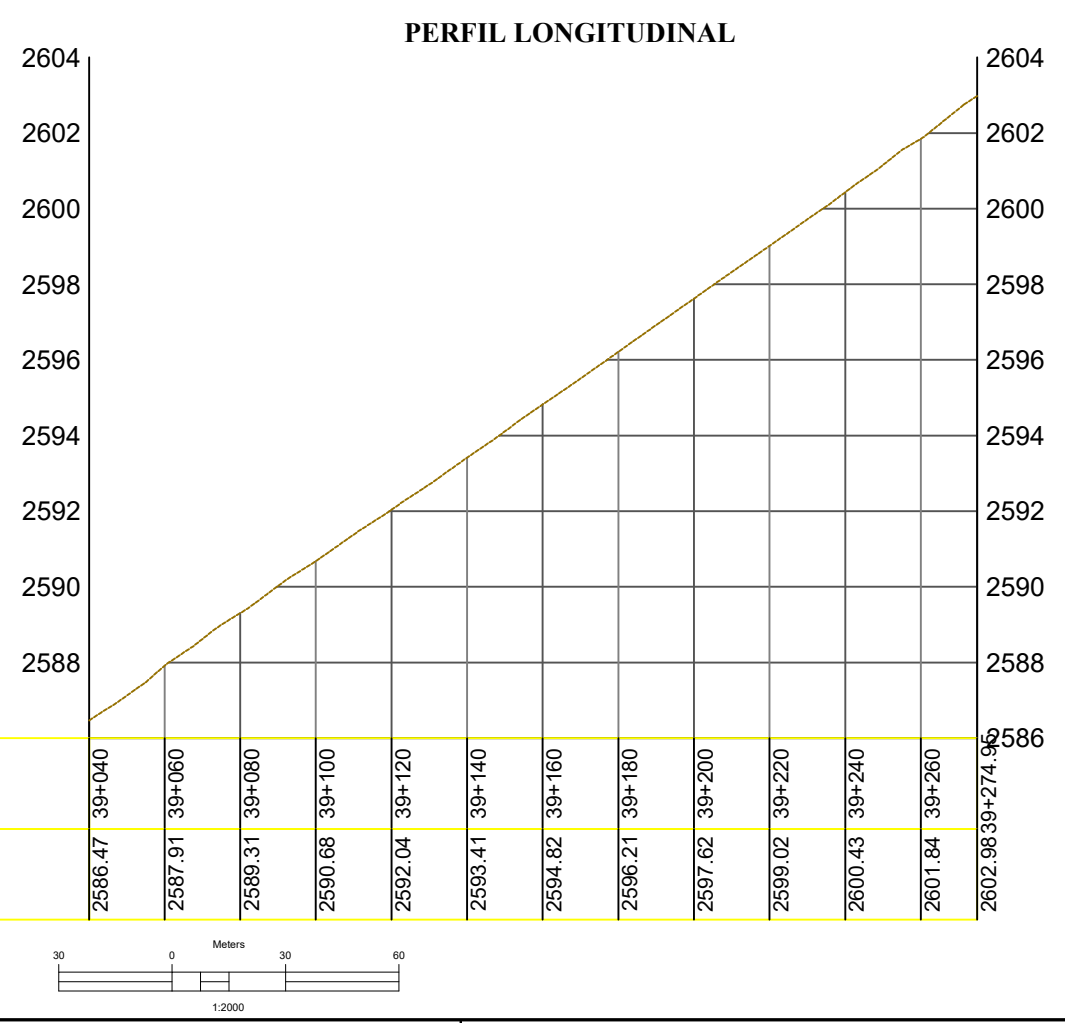
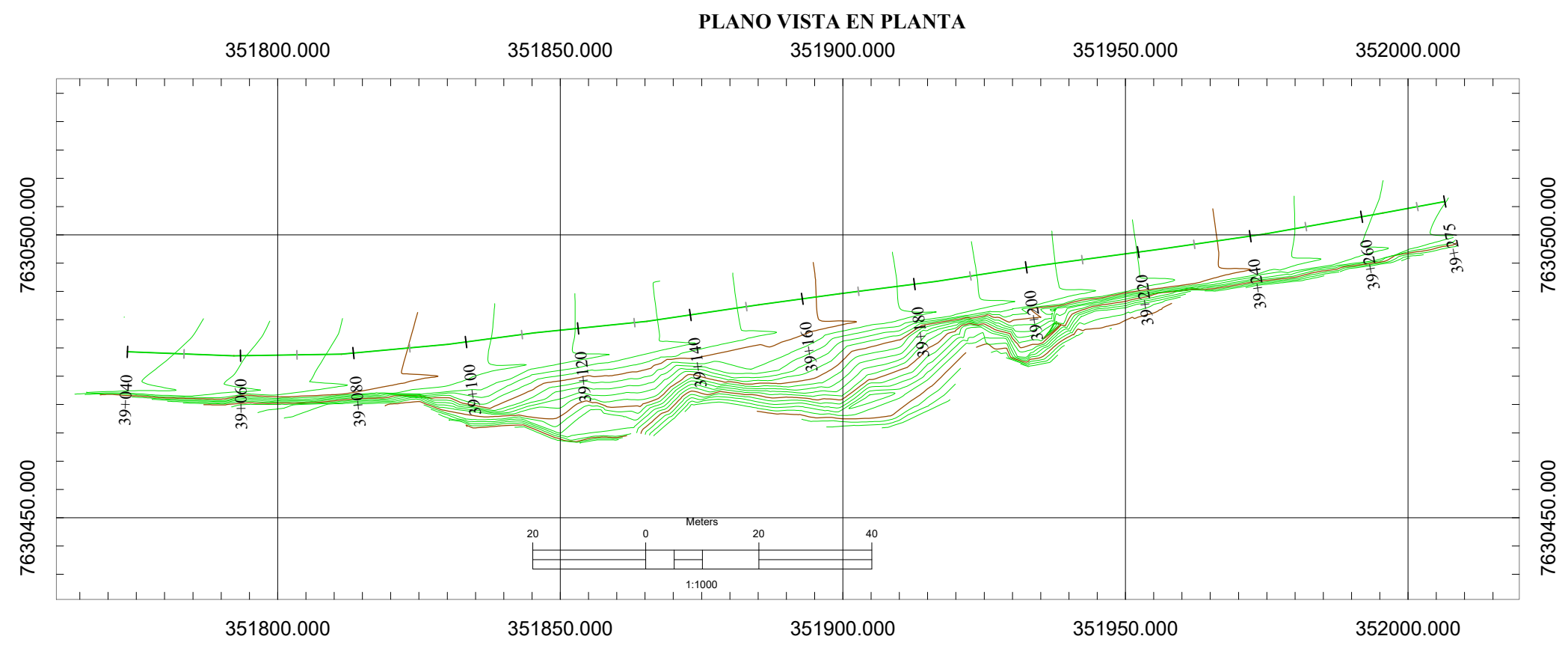
ELABORADO POR:
JAVIER ADOLFO ORTEGA ARMELLA

CONTENIDO: PLANO DE SECCIONES TRANSVERSALES

Escala: Escala Planta: Indicada Escala Perfil: Indicada

Fecha: MAYO-2025 TARIJA - BOLIVIA

Lámina Nº 10



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JUAN MISAEL SARACHO
Tarija-Bolivia

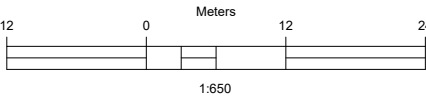
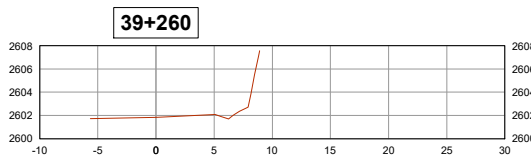
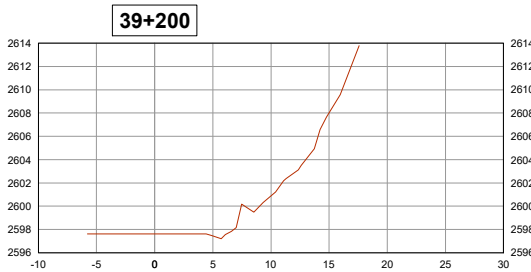
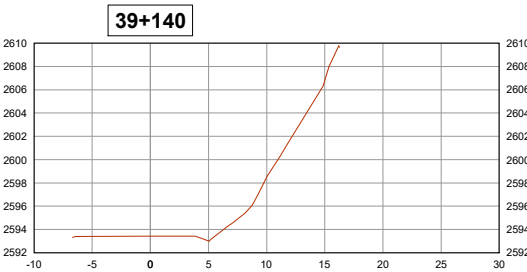
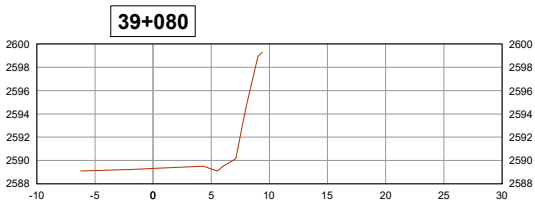
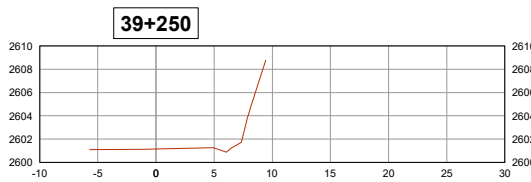
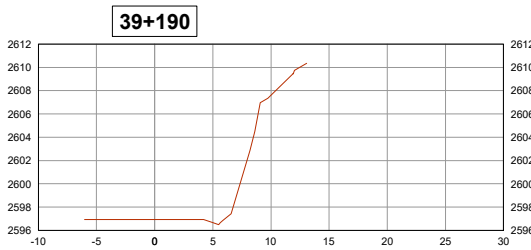
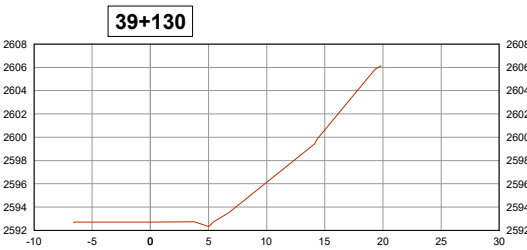
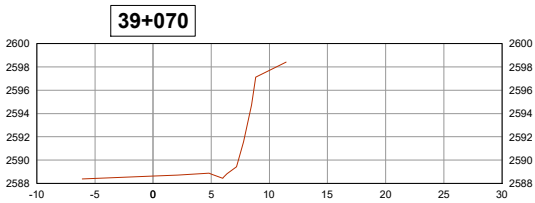
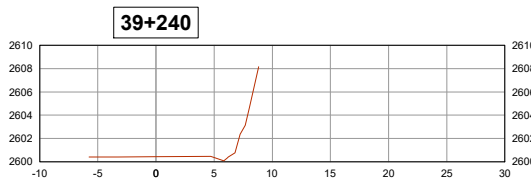
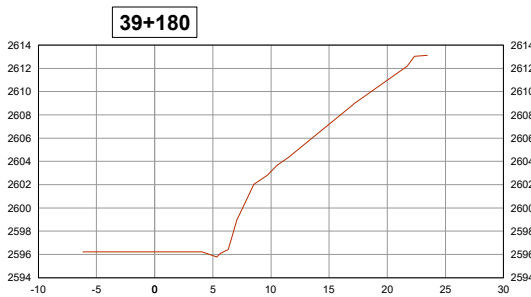
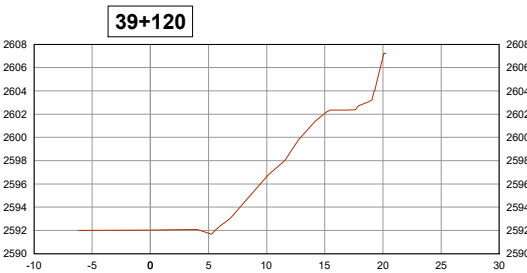
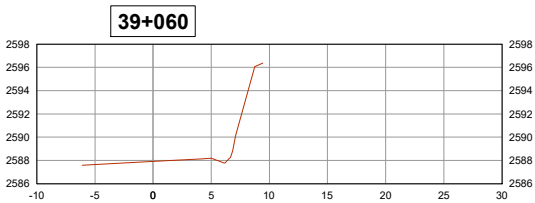
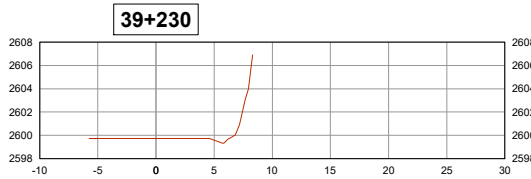
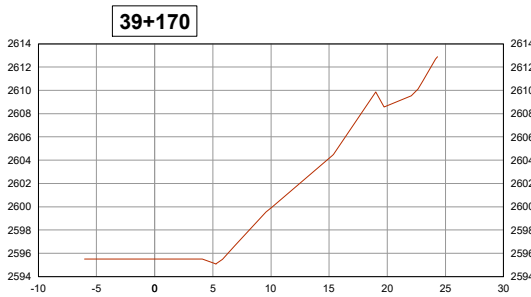
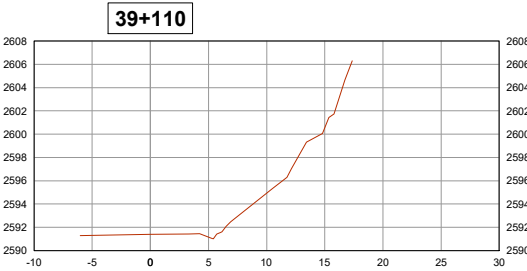
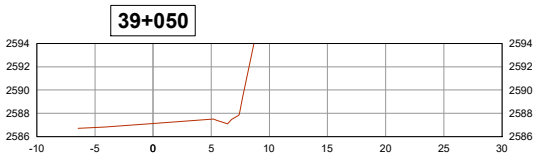
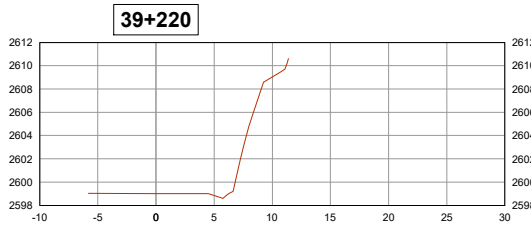
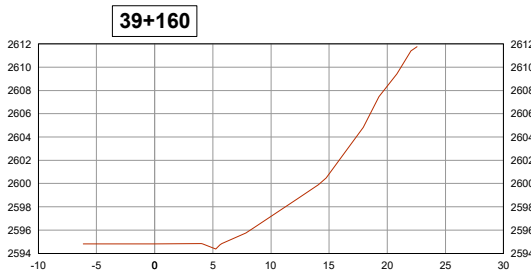
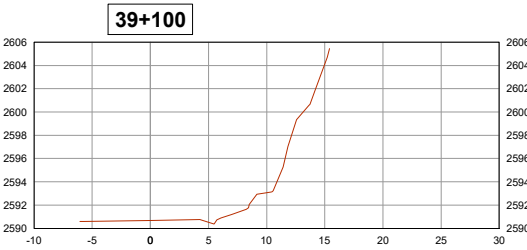
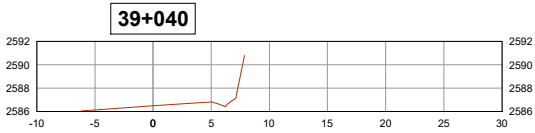


MATERIA: **PROYECTO DE GRADO II**
PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO Hº LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA LARGA

ELABORADO POR:
JAVIER ADOLFO ORTEGA ARMELLA

CONTENIDO: **PLANO EN PLANTA Y PERFIL LONGITUDINAL**
Escala: Escala Planta: Indicada, Escala Perfil: Indicada
Fecha: MAYO-2025, TARIJA - BOLIVIA
Lámina Nº: 11

PLANO DE SECCIONES TRANSVERSALES



UNIVERSIDAD AUTÓNOMA
JUAN MISAEL SARACHO
Tarija-Bolivia



MATERIA: PROYECTO DE GRADO II
PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO H° LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA LARGA

ELABORADO POR:
JAVIER ADOLFO ORTEGA ARMELLA

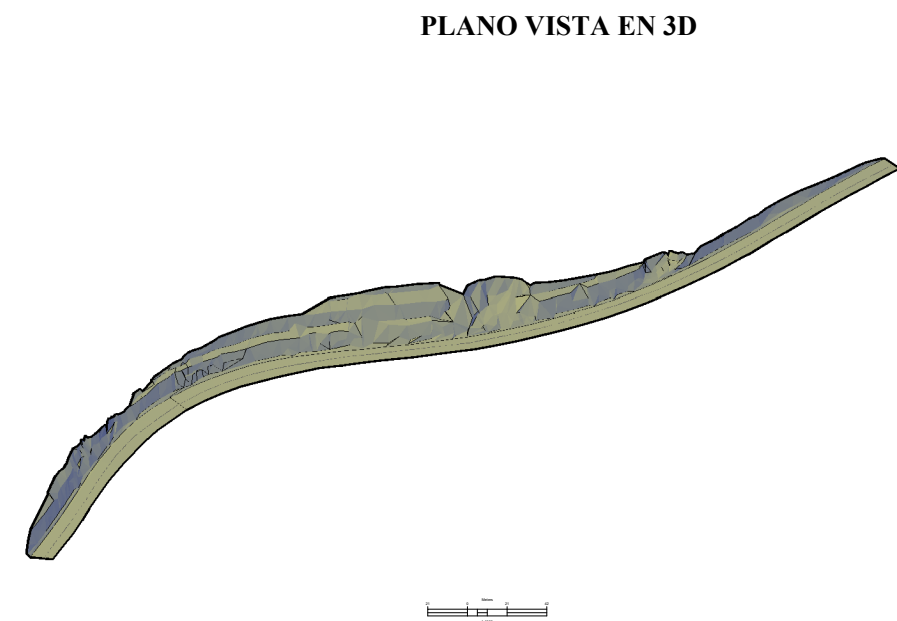
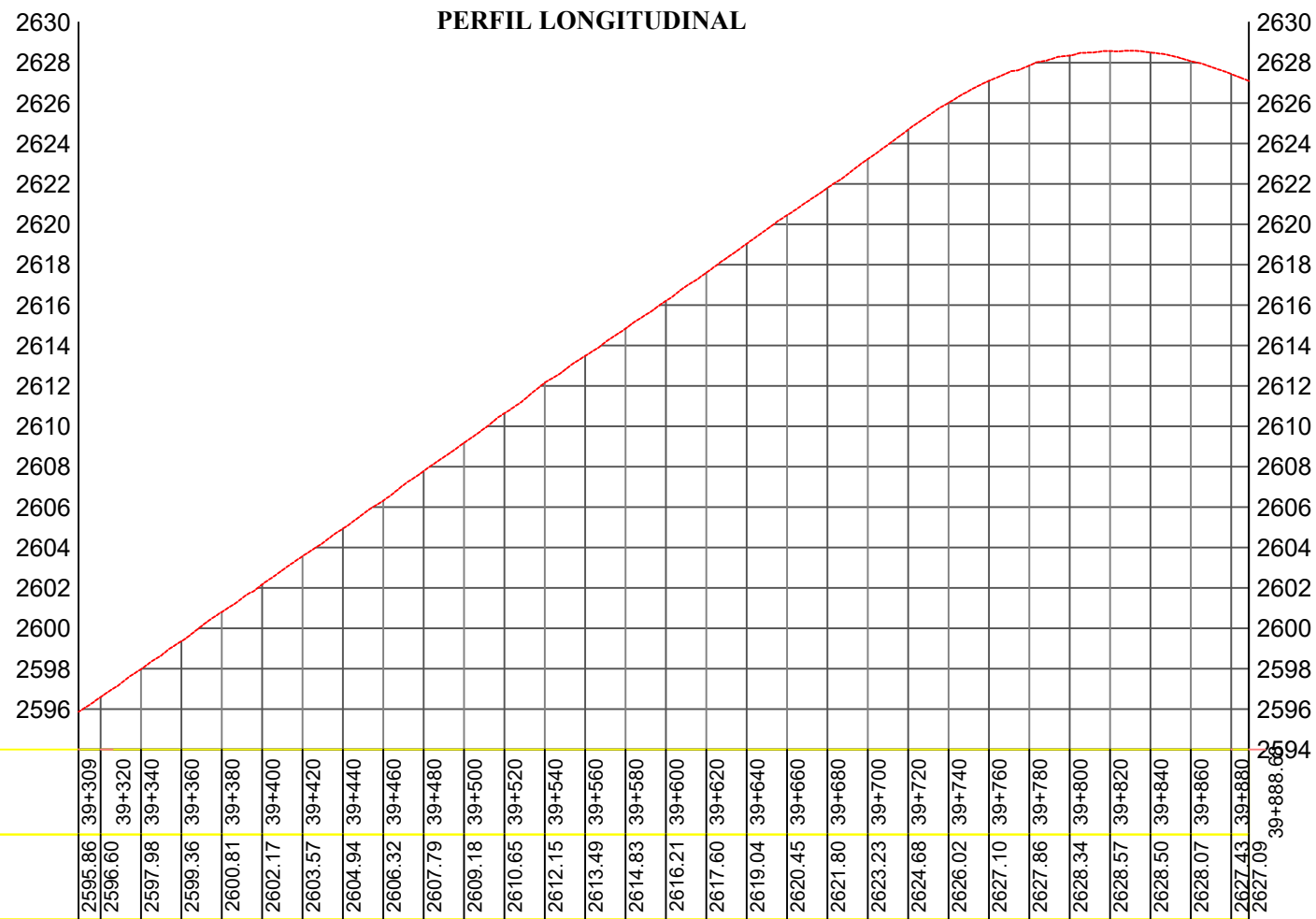
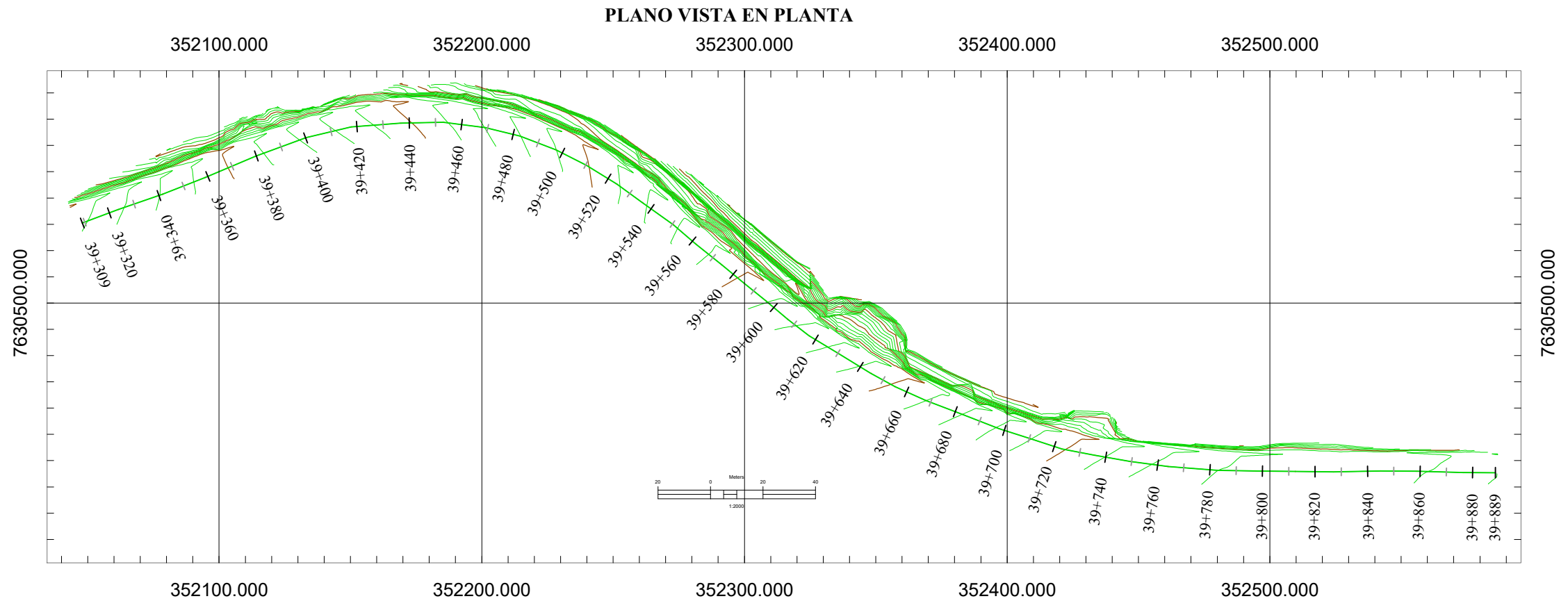
CONTENIDO: PLANO DE SECCIONES TRANSVERSALES

Escala: Escala Planta: Indicada Escala Perfil: Indicada

Fecha: MAYO-2025 TARIJA - BOLIVIA

Lámina Nº

12



UNIVERSIDAD AUTÓNOMA
JUAN MISAEL SARACHO
Tarija-Bolivia



MATERIA: PROYECTO DE GRADO II
PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO H° LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA LARGA

ELABORADO POR:
JAVIER ADOLFO ORTEGA ARMELLA

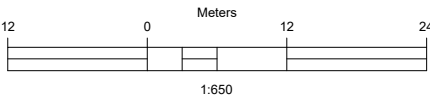
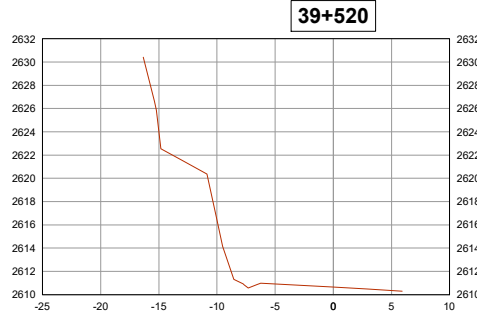
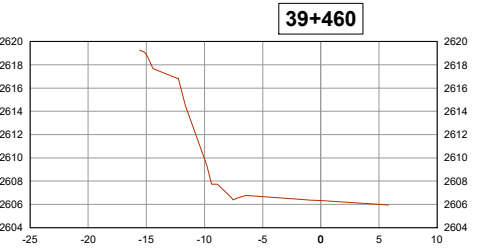
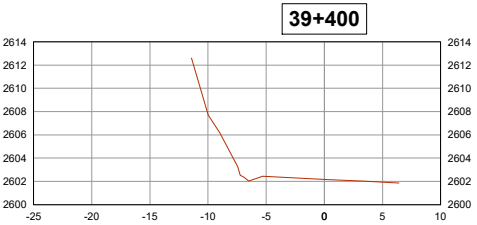
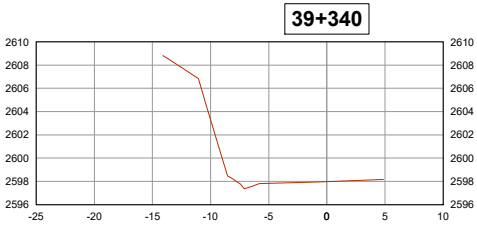
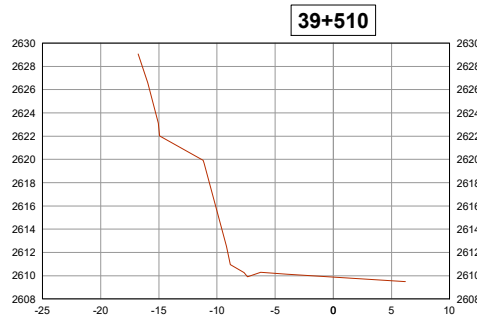
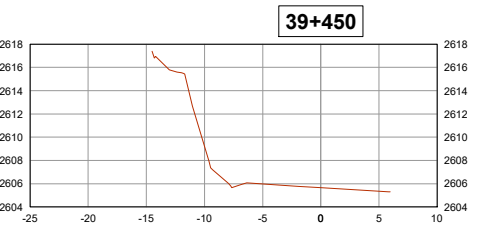
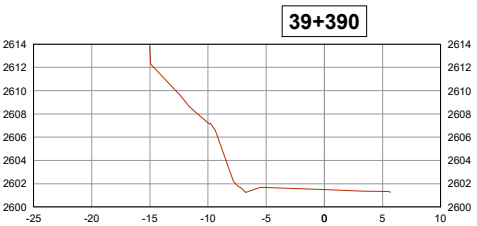
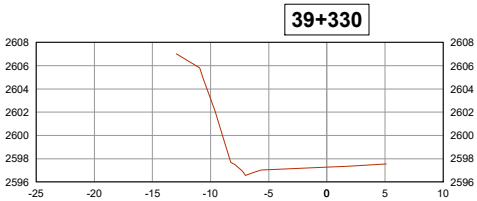
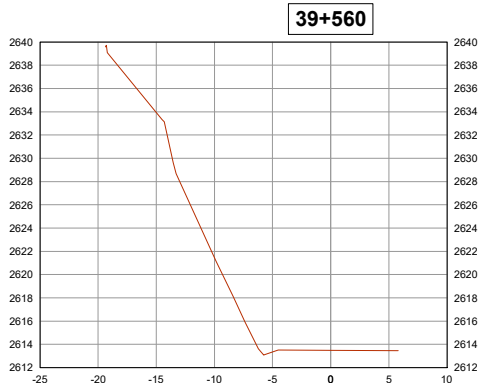
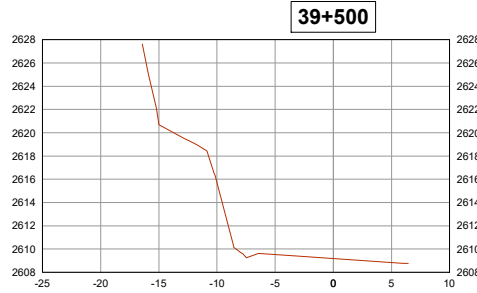
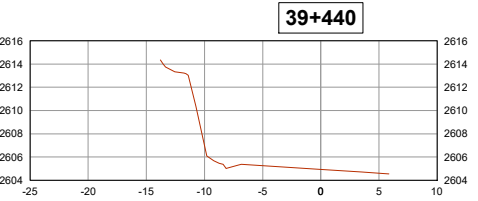
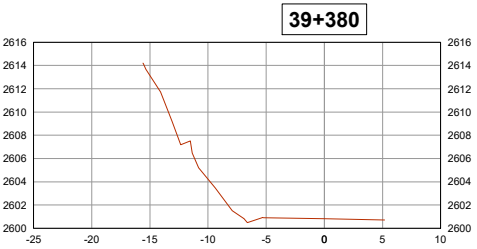
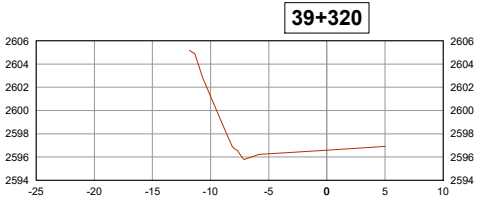
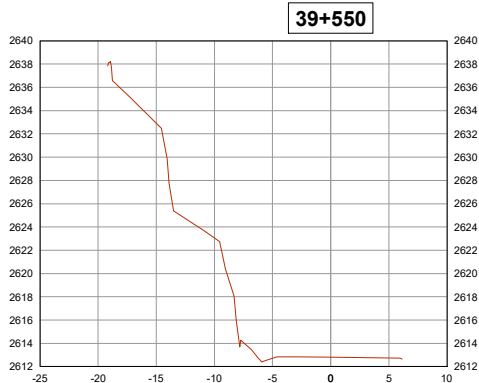
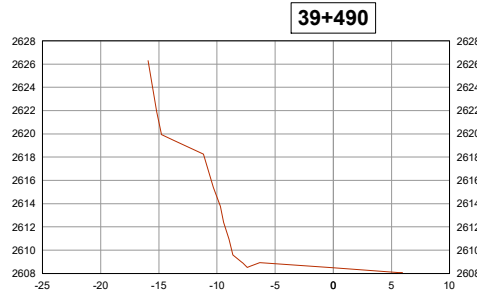
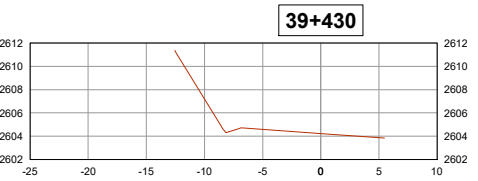
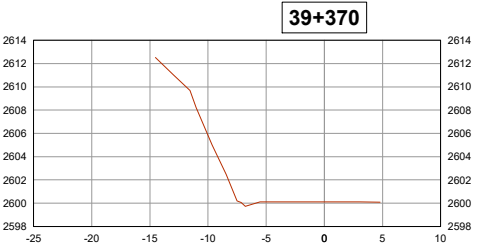
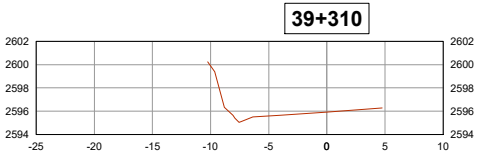
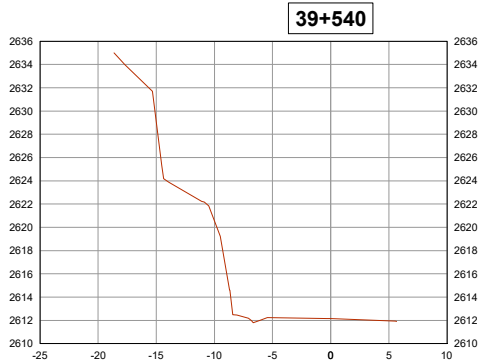
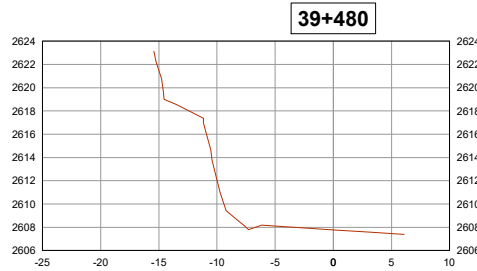
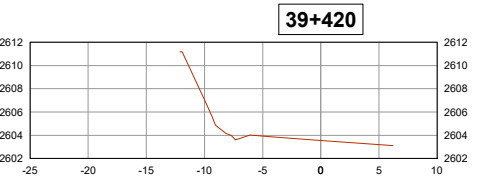
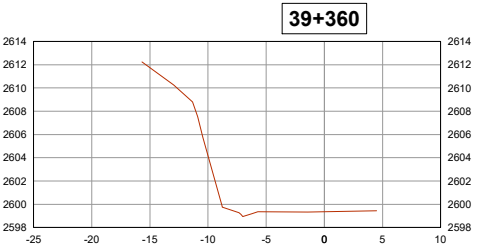
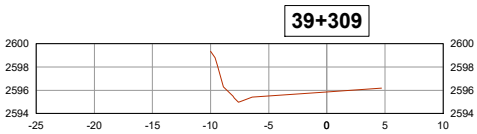
CONTENIDO: PLANO EN PLANTA Y PERFIL LONGITUDINAL

Escala: Escala Planta: Indicada Escala Perfil: Indicada

Fecha: MAYO-2025 TARIJA - BOLIVIA

Lámina Nº 13

PLANO DE SECCIONES TRANSVERSALES



UNIVERSIDAD AUTÓNOMA
JUAN MISAEL SARACHO
Tarija-Bolivia



MATERIA: PROYECTO DE GRADO II
PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO H° LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA LARGA

ELABORADO POR:
JAVIER ADOLFO ORTEGA ARMELLA

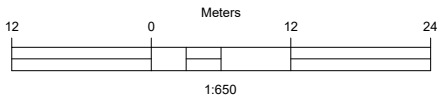
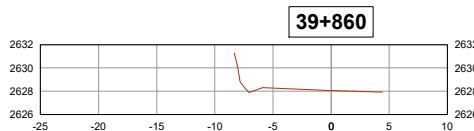
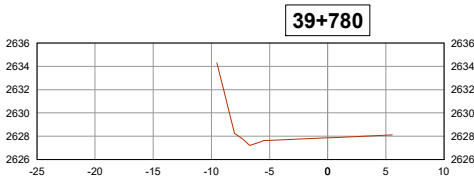
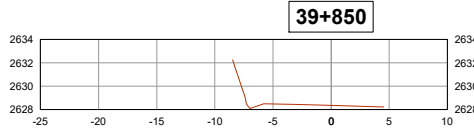
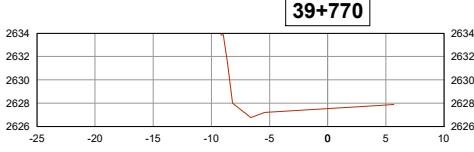
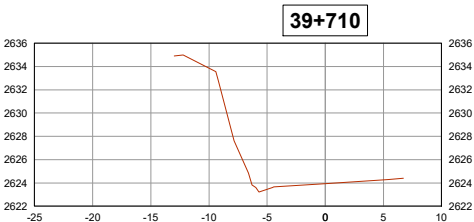
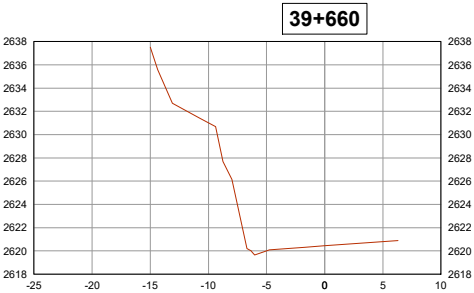
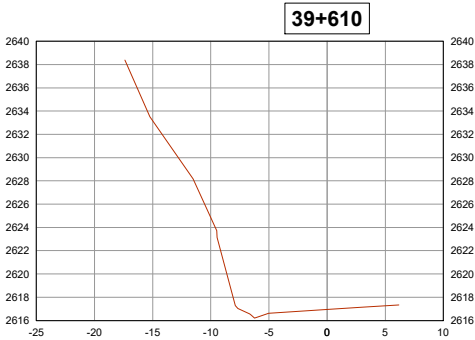
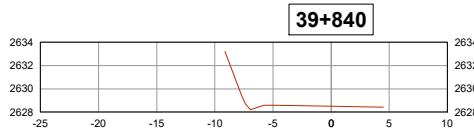
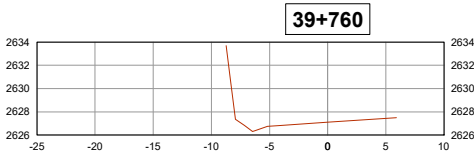
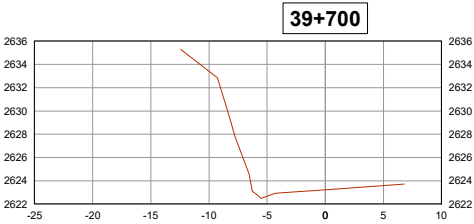
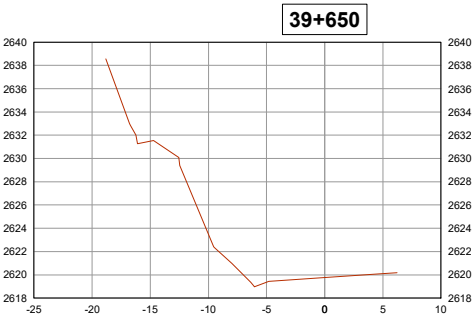
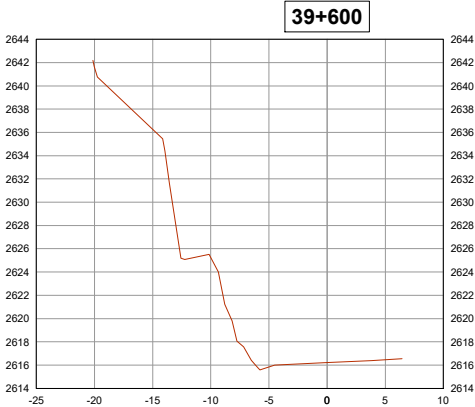
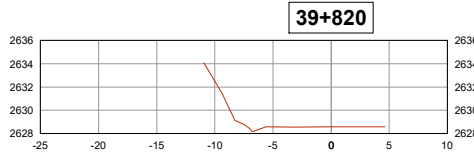
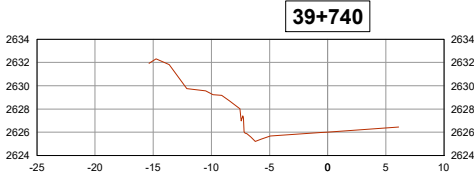
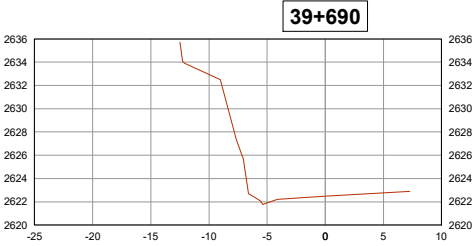
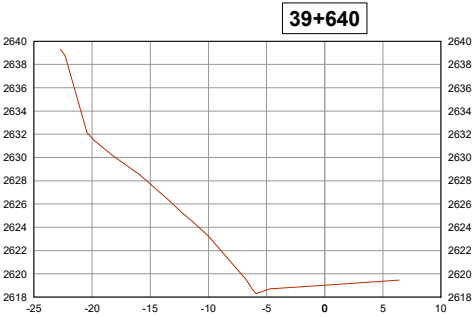
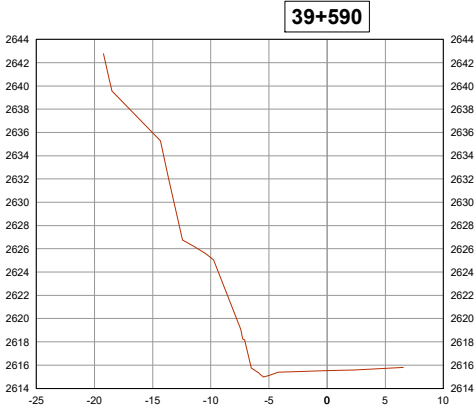
CONTENIDO: PLANO DE SECCIONES TRANSVERSALES

Escala: Escala Planta: Indicada
Escala Perfil: Indicada

Fecha: MAYO-2025
TARIJA - BOLIVIA

Lámina Nº 14

PLANO DE SECCIONES TRANSVERSALES



UNIVERSIDAD AUTÓNOMA
JUAN MISAEL SARACHO
Tarija-Bolivia



MATERIA: PROYECTO DE GRADO II
PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO H°
LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA LARGA

ELABORADO POR:
JAVIER ADOLFO ORTEGA ARMELLA

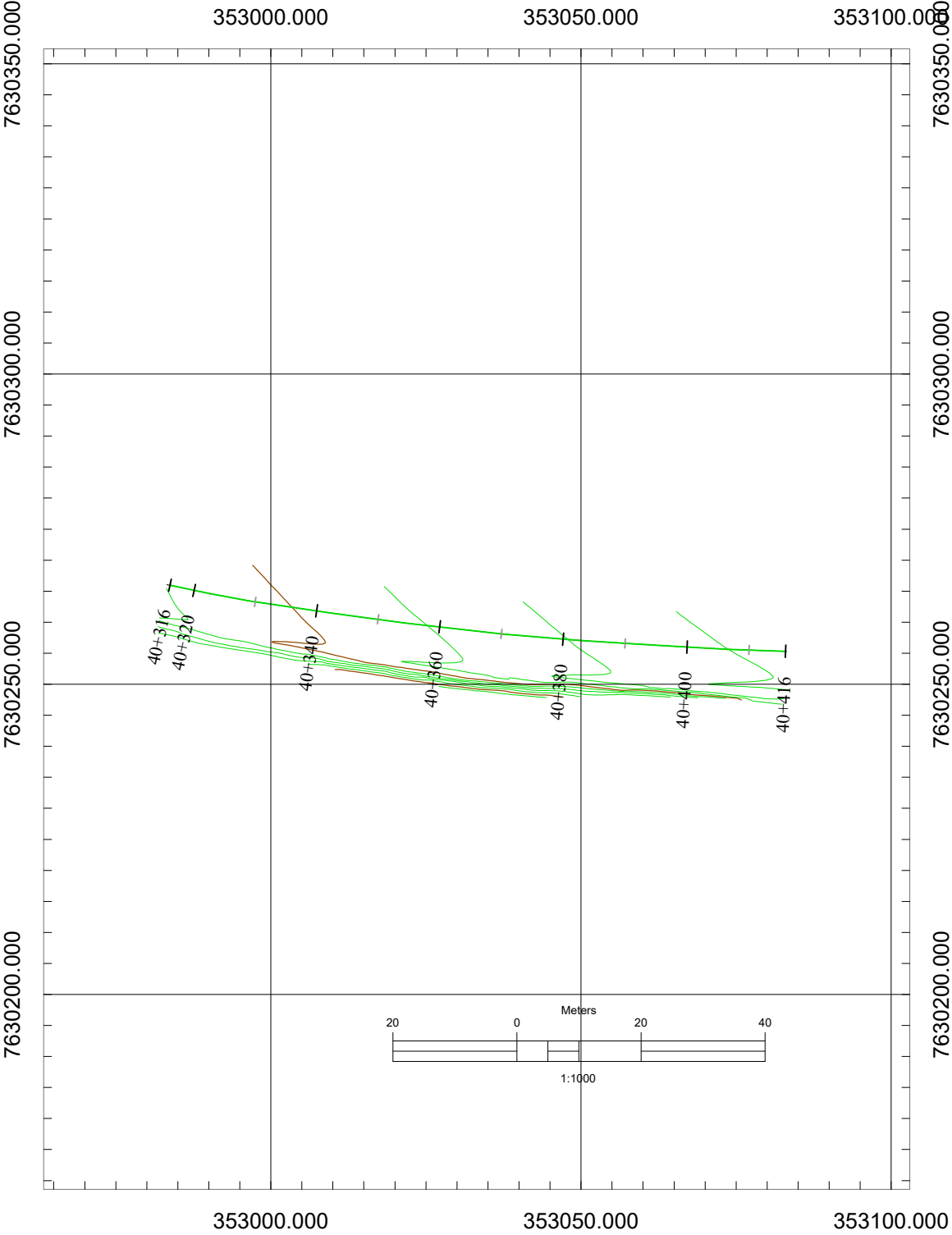
CONTENIDO: PLANO DE SECCIONES TRANSVERSALES

Escala: Escala Planta: Indicada
Escala Perfil: Indicada

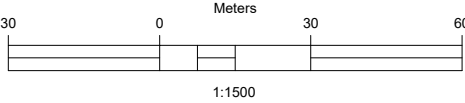
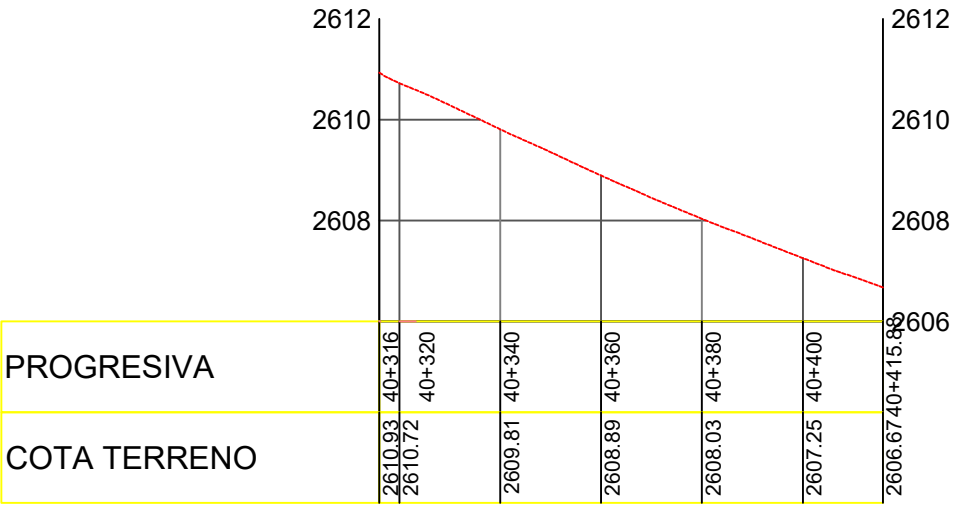
Fecha: MAYO-2025
TARIJA - BOLIVIA

Lámina Nº 15

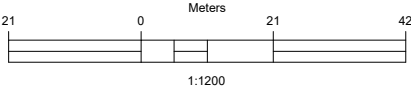
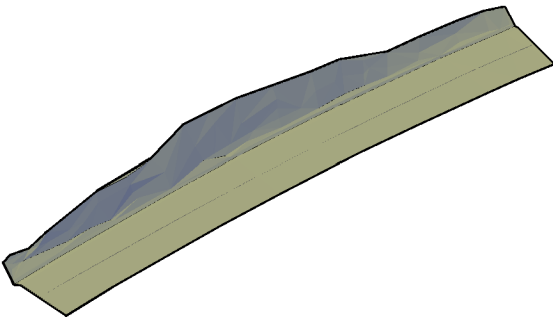
PLANO VISTA EN PLANTA



PERFIL LONGITUDINAL



PLANO VISTA EN 3D



UNIVERSIDAD AUTÓNOMA
JUAN MISAEL SARACHO
Tarija-Bolivia



MATERIA: PROYECTO DE GRADO II

PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO H°
LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA
LARGA

ELABORADO POR:

JAVIER ADOLFO ORTEGA ARMELLA

CONTENIDO: PLANO EN PLANTA Y PERFIL
LONGITUDINAL

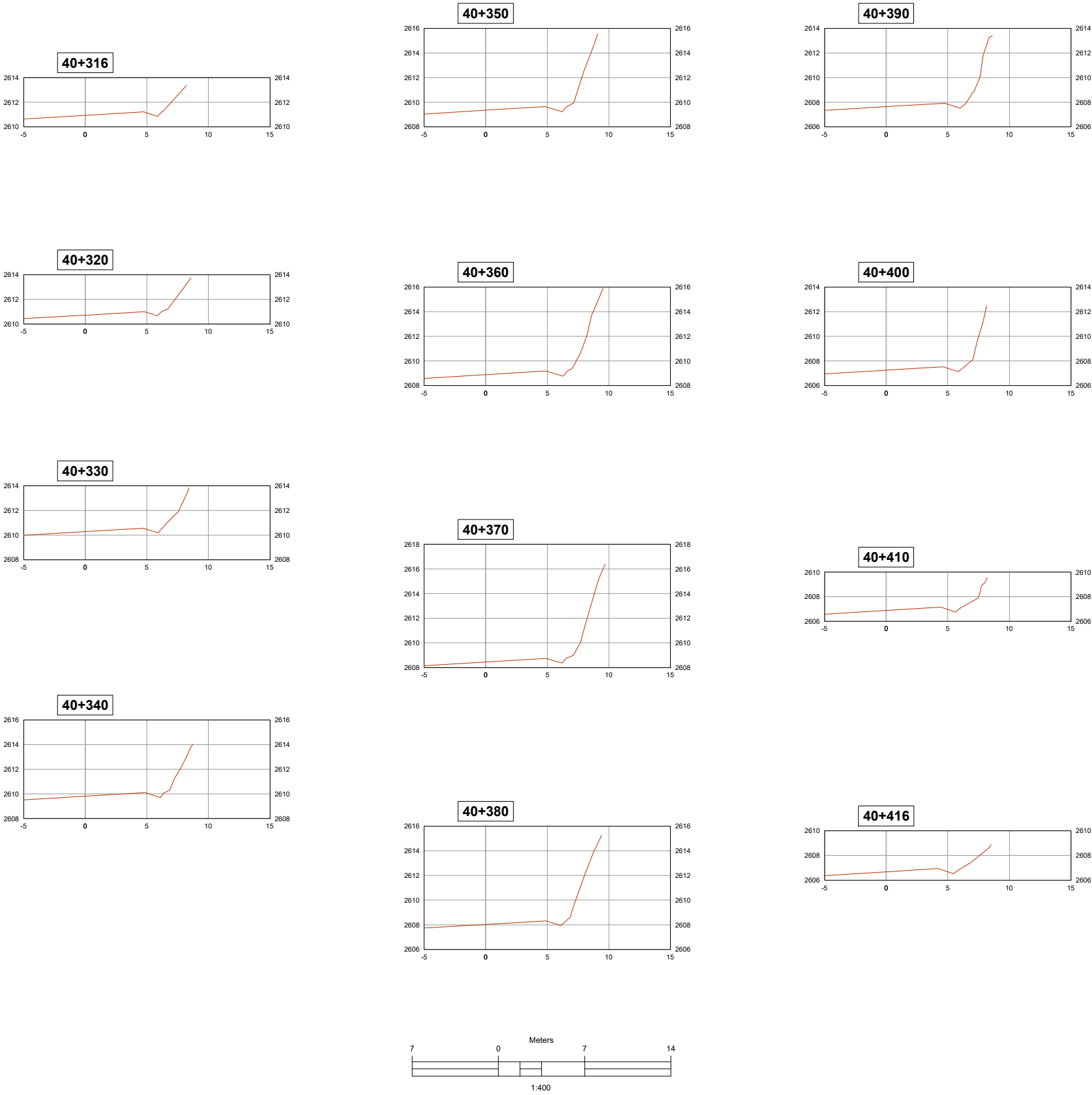
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Escala Perfil: Indicada

Fecha: MAYO-2025
TARIJA - BOLIVIA

Lámina Nº

16

PLANO DE SECCIONES TRANSVERSALES



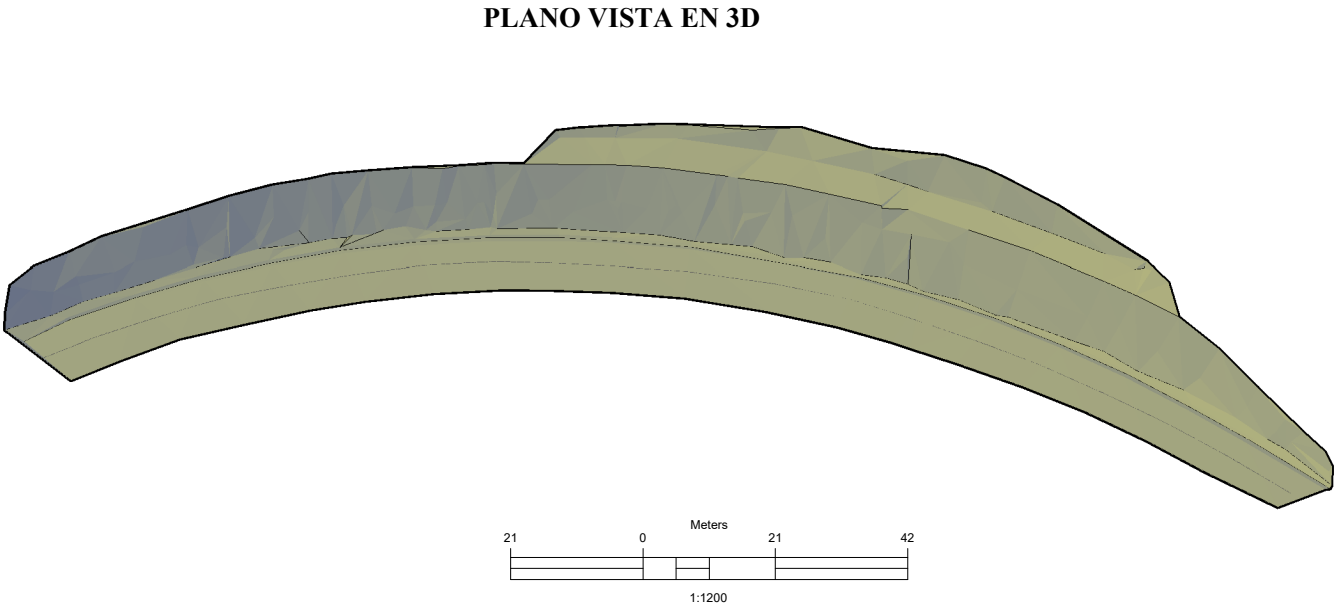
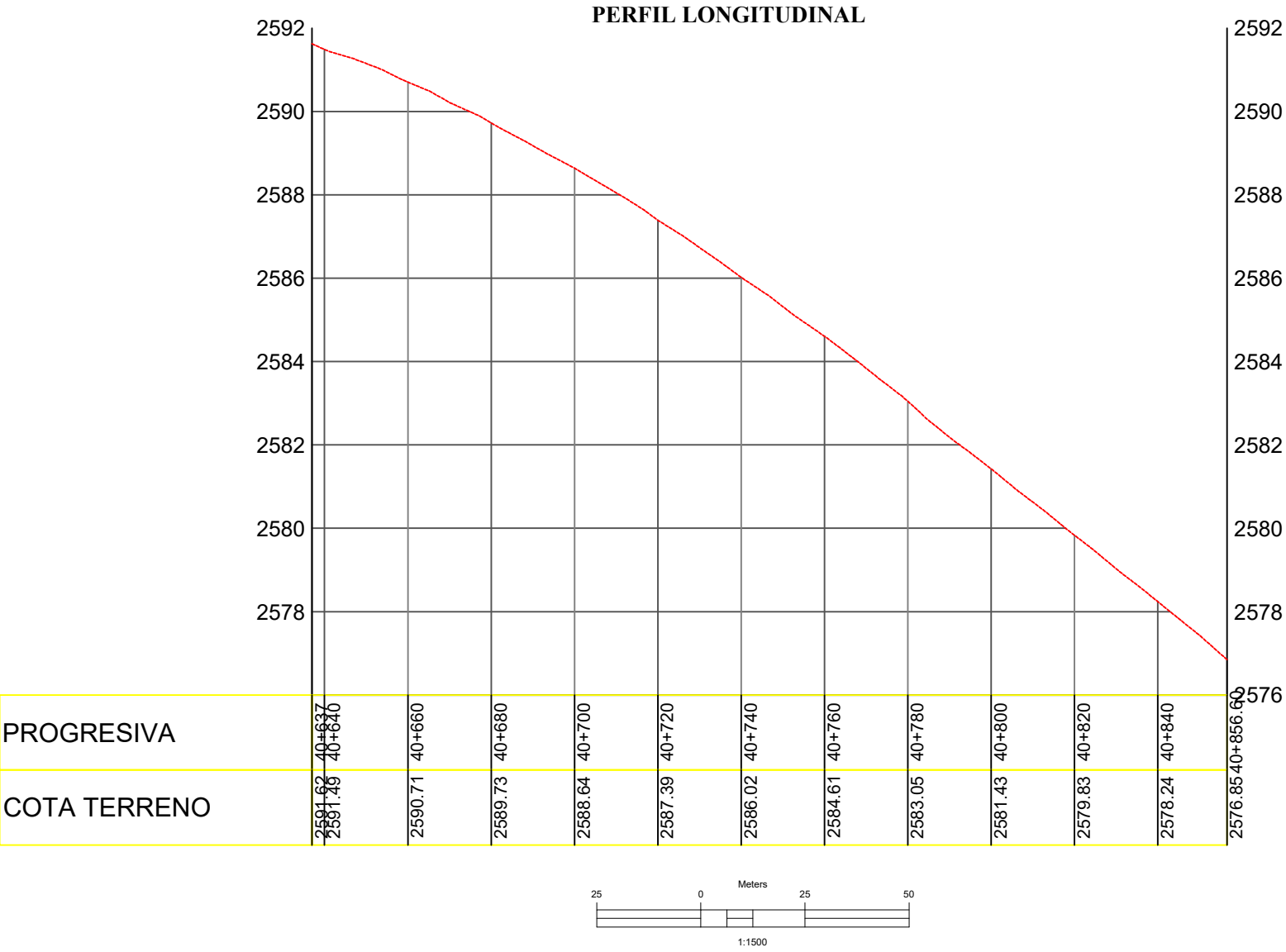
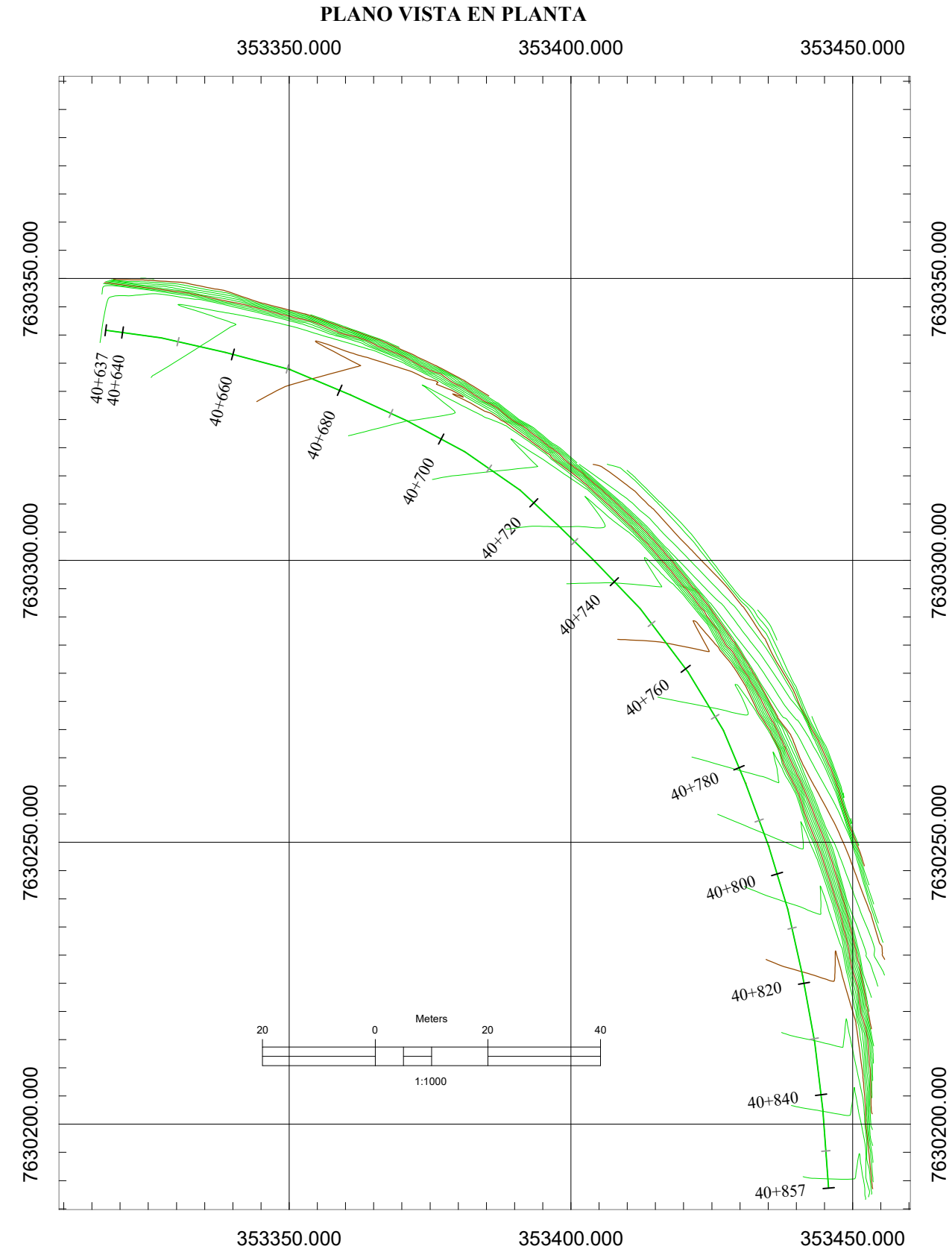
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JUAN MISAEL SARACHO
Tarija-Bolivia



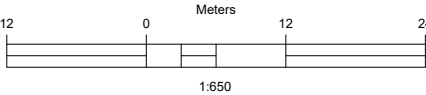
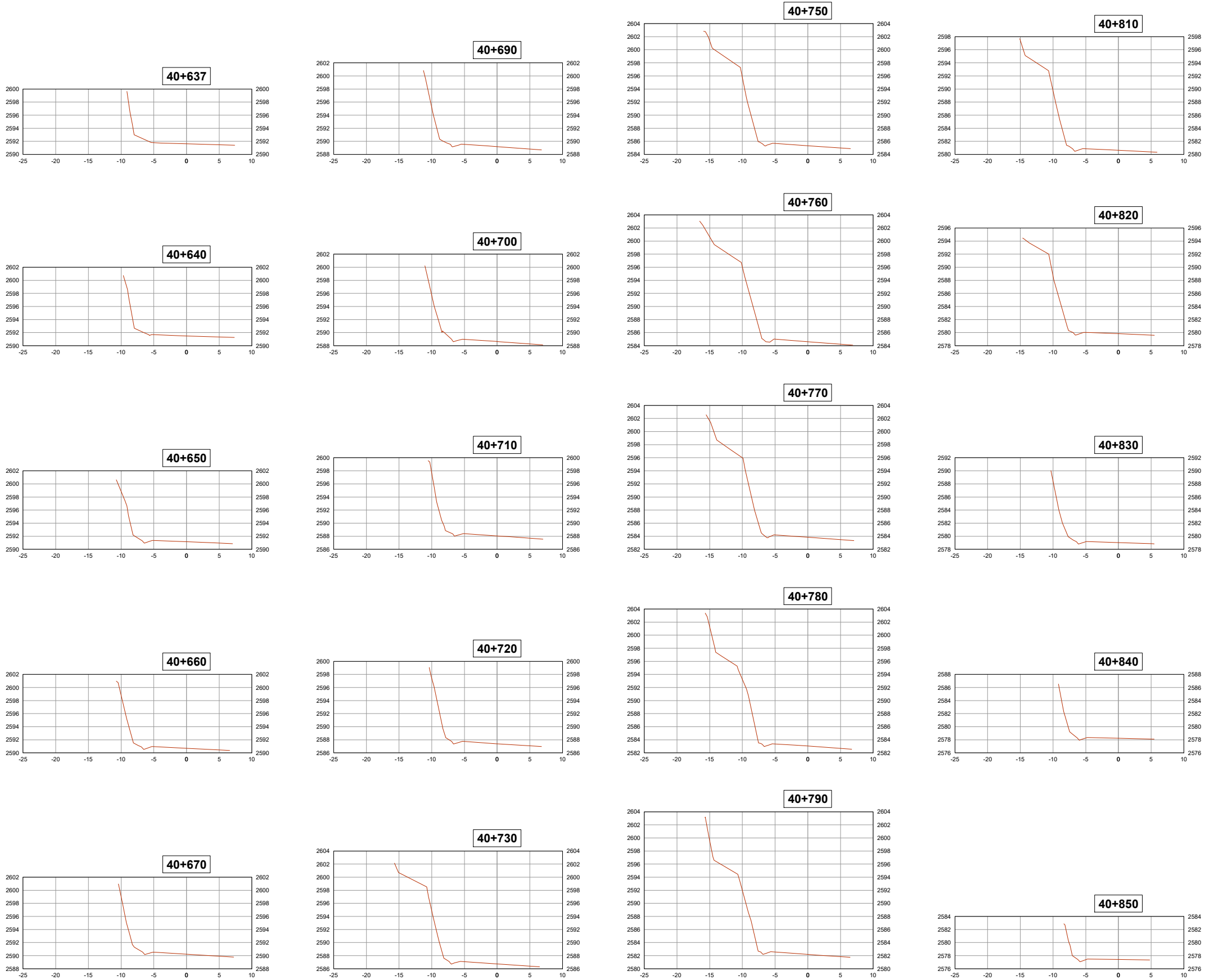
MATERIA: PROYECTO DE GRADO II
PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO Hº LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA LARGA

ELABORADO POR:
JAVIER ADOLFO ORTEGA ARMELLA

CONTENIDO:		PLANO DE SECCIONES TRANSVERSALES	
Escala: Escala Planta: Indicada Escala Perfil: Indicada		Fecha: MAYO-2025 TARIJA - BOLIVIA	Lámina Nº 17



PLANO DE SECCIONES TRANSVERSALES



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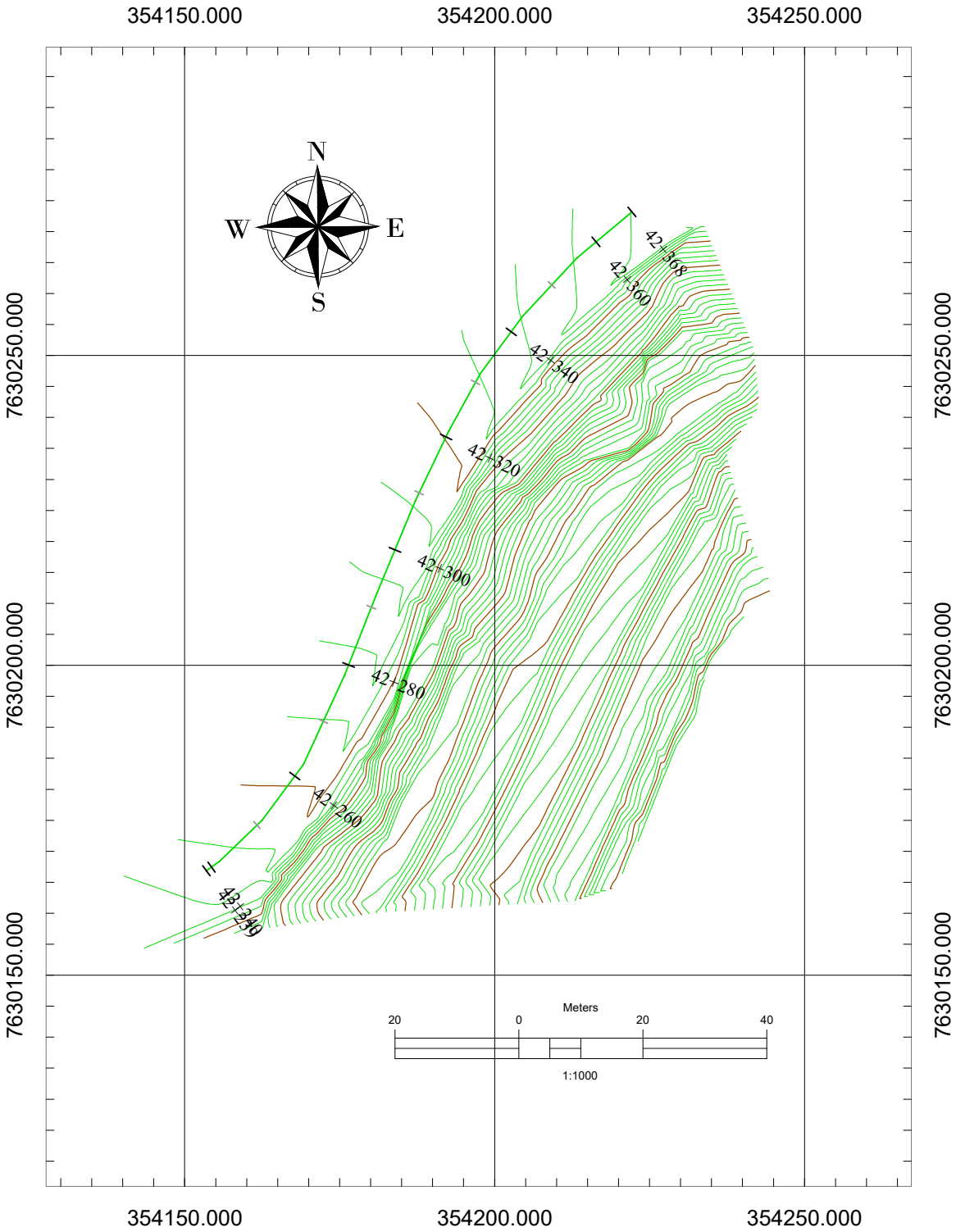


MATERIA: PROYECTO DE GRADO II
PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO H° LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA LARGA

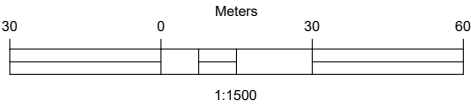
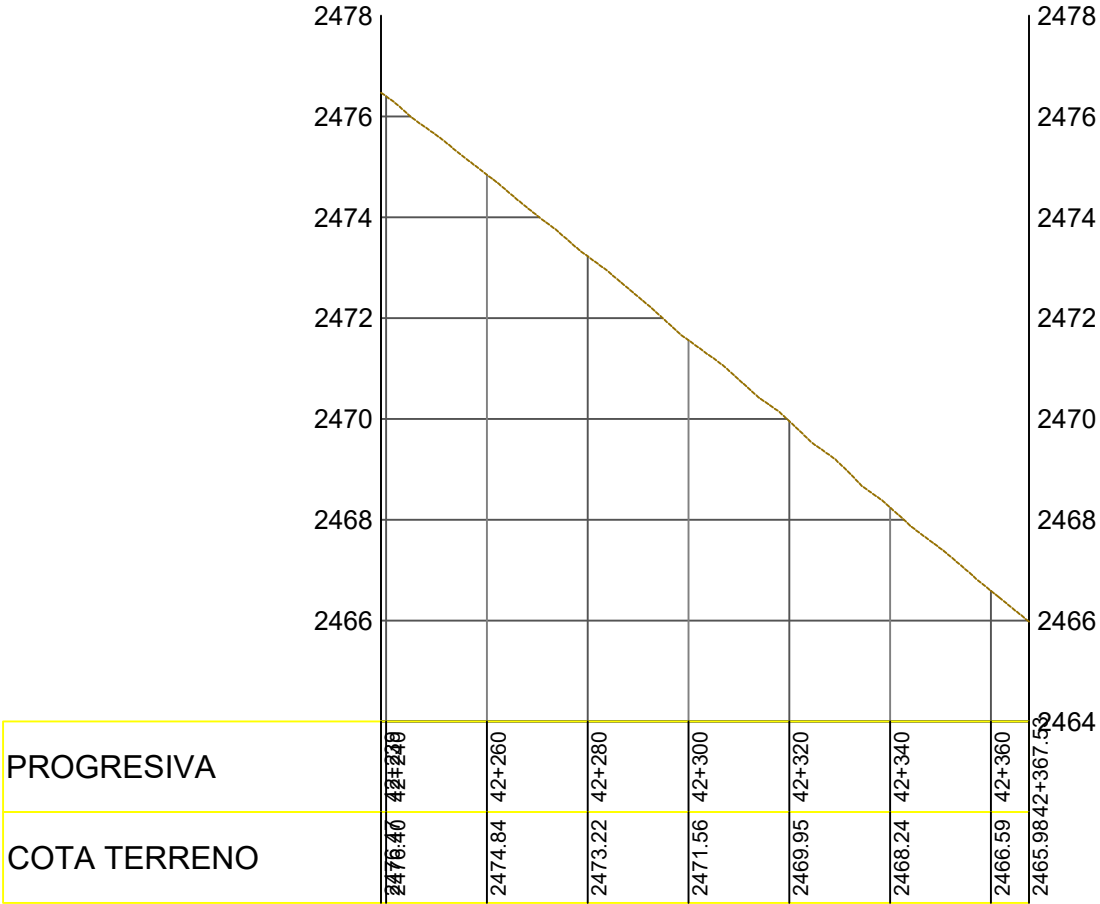
ELABORADO POR:
JAVIER ADOLFO ORTEGA ARMELLA

CONTENIDO: PLANO DE SECCIONES TRANSVERSALES
Escala: Escala Planta: Indicada Escala Perfil: Indicada
Fecha: MAYO-2025 TARIJA - BOLIVIA
Lámina Nº 19

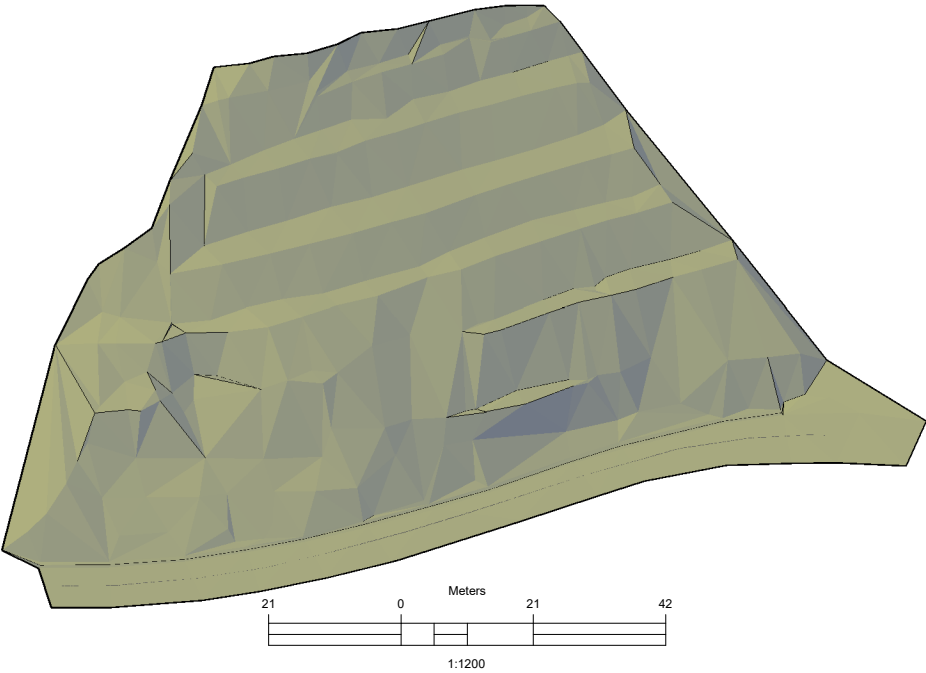
PLANO VISTA EN PLANTA



PERFIL LONGITUDINAL



PLANO VISTA EN 3D



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MATERIA: **PROYECTO DE GRADO II**
PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO Hº LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA LARGA

ELABORADO POR:
JAVIER ADOLFO ORTEGA ARMELLA

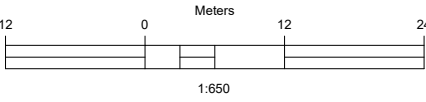
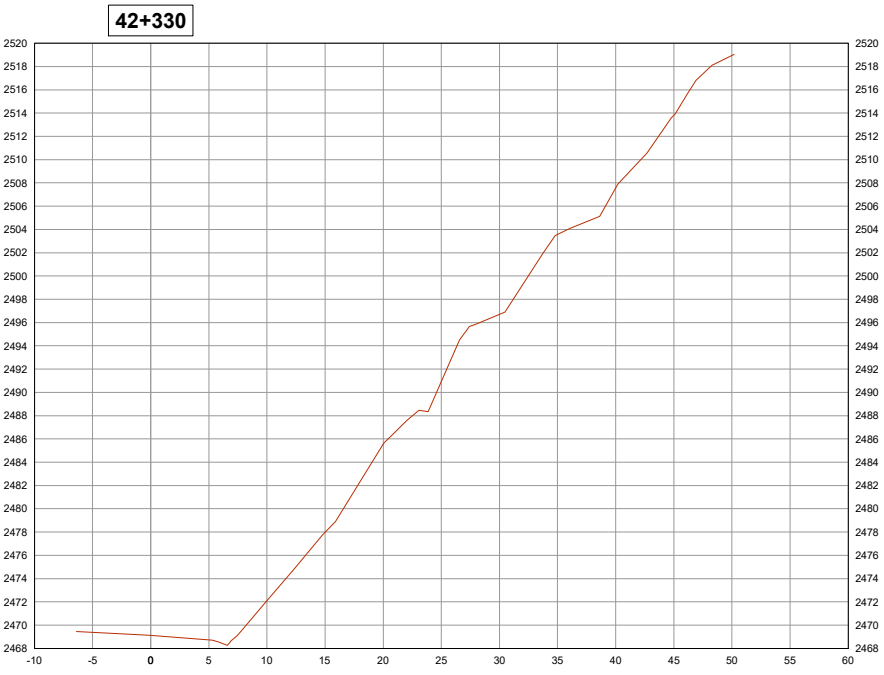
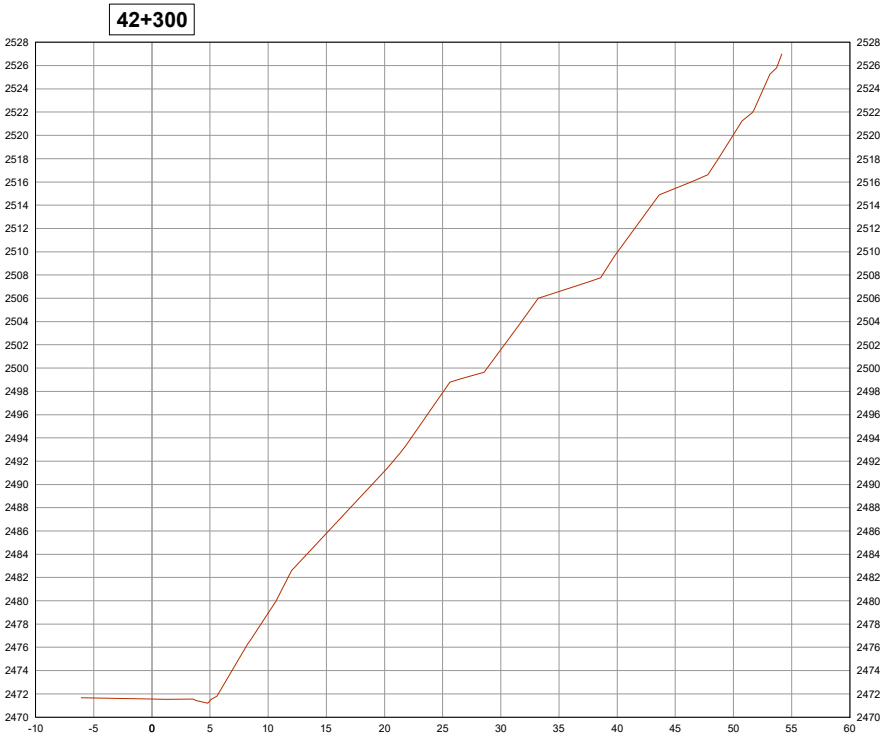
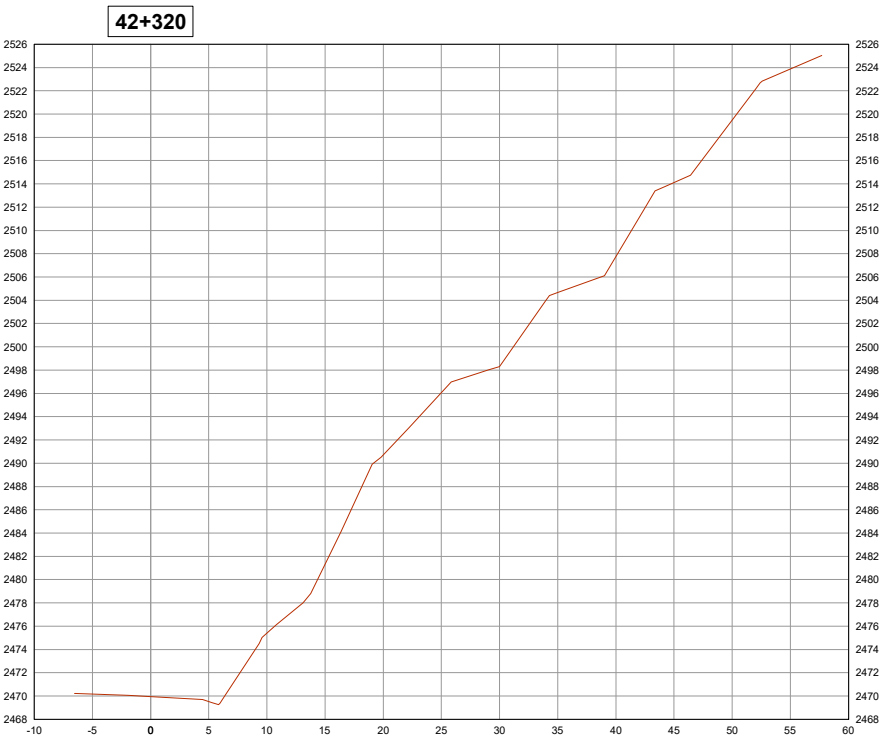
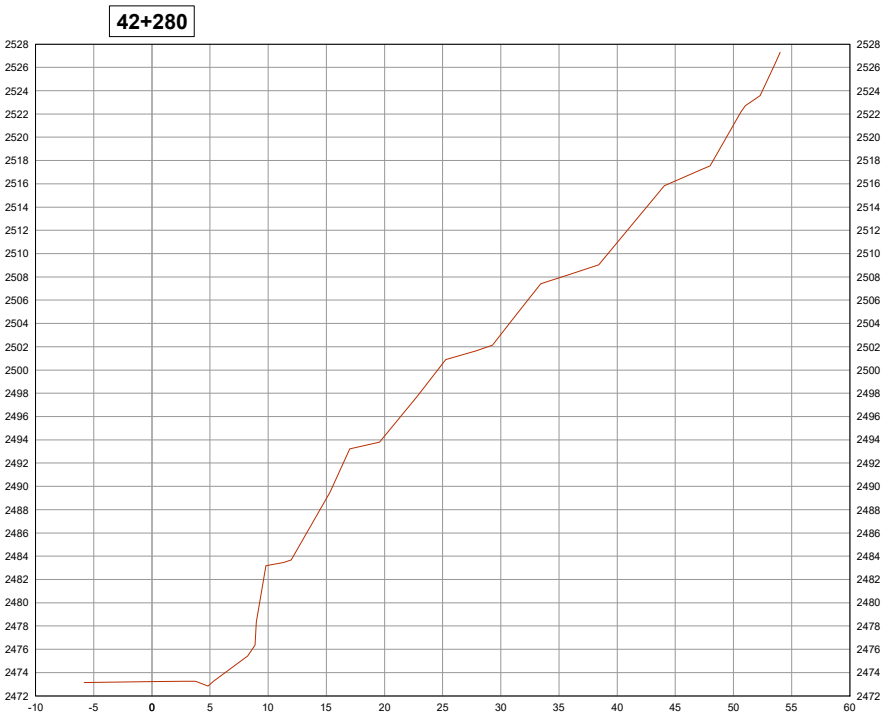
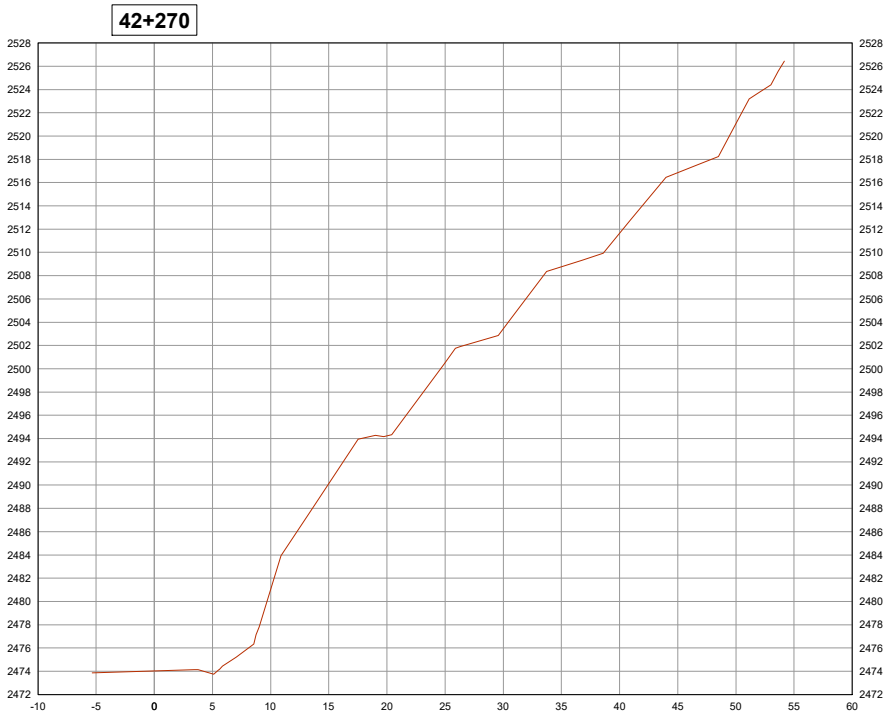
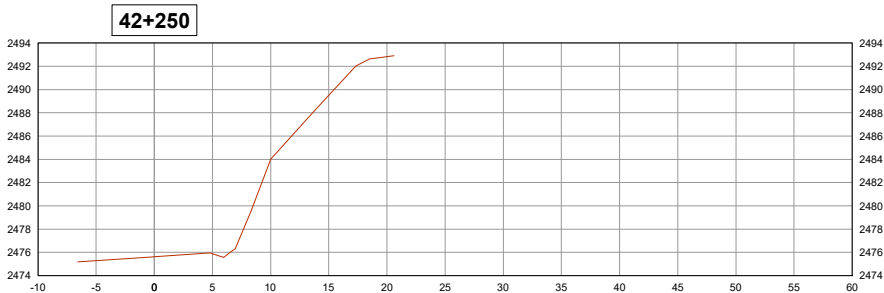
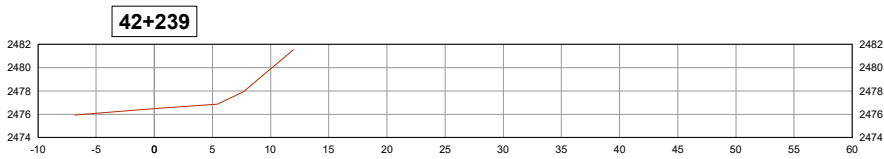
CONTENIDO: **PLANO EN PLANTA Y PERFIL LONGITUDINAL**

Escala:
Escala Planta: Indicada
Escala Perfil: Indicada

Fecha:
MAYO-2025
TARIJA - BOLIVIA

Lámina Nº
20

PLANO DE SECCIONES TRANSVERSALES



UNIVERSIDAD AUTÓNOMA
JUAN MISAEL SARACHO
Tarija-Bolivia



MATERIA: PROYECTO DE GRADO II

PROYECTO: ANALISIS COMPARATIVO DE REFUERZO EN TALUDES APLICANDO H° LANZADO, HIDROSIEMBRA Y BULONES EN EL TRAMO PTE JARCAS - PIEDRA LARGA

ELABORADO POR:

JAVIER ADOLFO ORTEGA ARMELLA

CONTENIDO: PLANO DE SECCIONES TRANSVERSALES

Escalas:
Escala Planta: Indicada
Escala Perfil: Indicada

Fecha: MAYO-2025
TARIJA - BOLIVIA

Lámina Nº 21