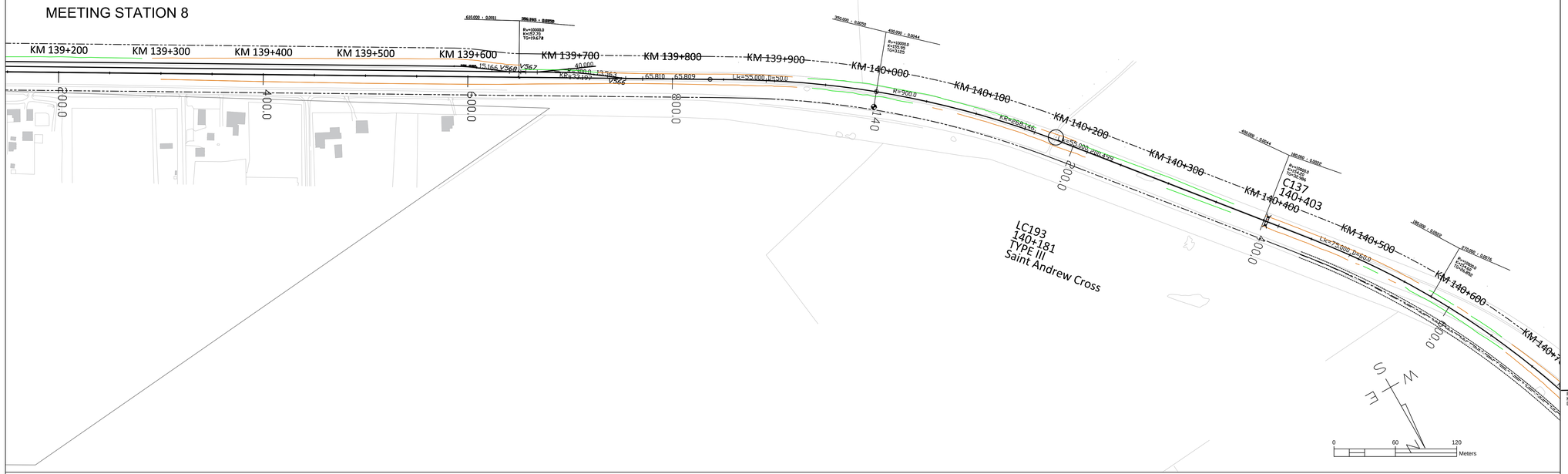
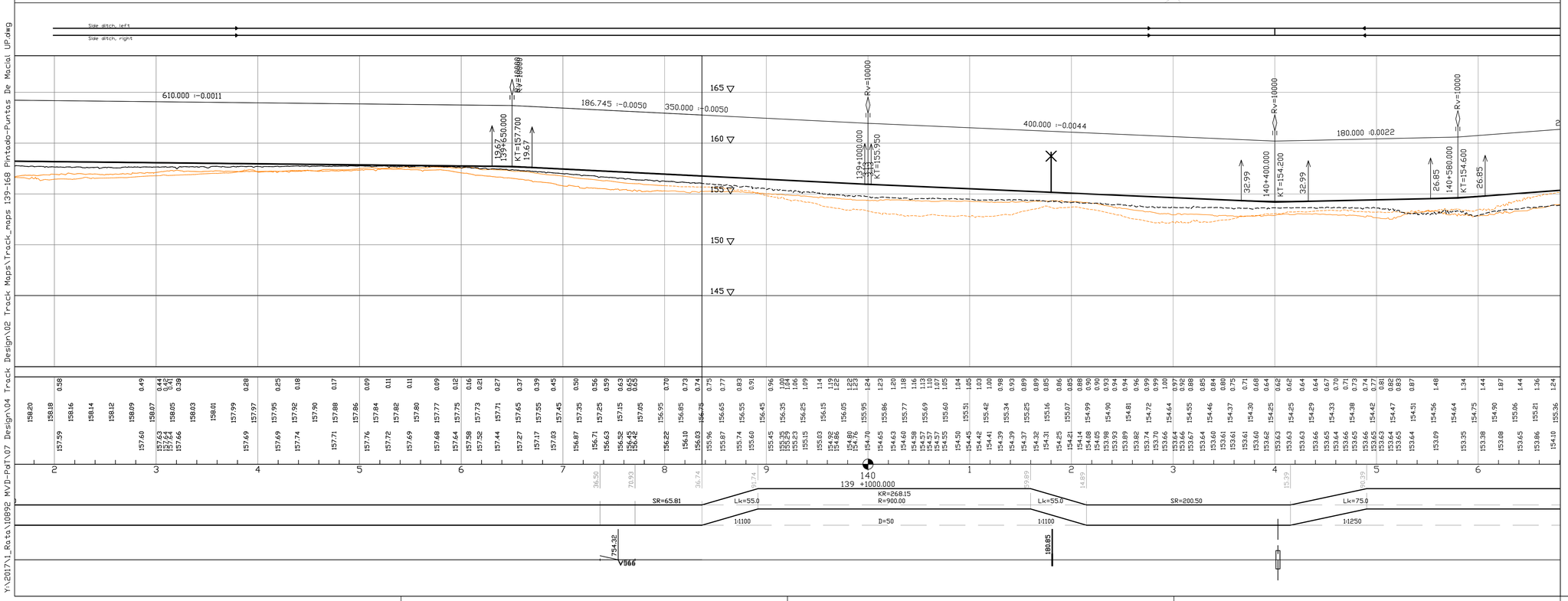
← Montevideo

Paso de Los Toros →

MEETING STATION 8





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LEGEND, MAP

- New railway alignment
- Existing railway alignment (not in the Railway Project scope)
- Railway Area borderline
- Secondary Side Tracks - Horizontal geometry pre-designed (Secondary side tracks and their switches will be designed and constructed based on Appendix Q)
- Removal track
- Street or road modification area in level crossings or underpasses/flyovers
- Modification needed to the property access
- Affected parallel roads and streets and maintenance roads
- Road closing down
- Limit of designed soil cut (open cut or cut with a retaining wall)
- Limit of designed embankment fill, not including possible ditch
- Existing stations or passenger platforms
- New passenger platforms
- Symbols
  - BXXX — Railway bridge or underpass, Flyover
  - CXXX — Culvert
  - Level crossing
  - LCXXX
- Track alignment with design geometry figures

R= curve radius (m)
KR= length of curve (m)
D= track cant (mm)
Lk= length of transition curve (m)
Rv= radius of vertical curve
K= elevation
TG= lenght of tangent
123.345= length of straight line (m)

SPT-sounding, terminated at cobble, boulder, or bedrock contact.
y. 2016= year of investigation, location of 2016 soundings not accurate
1, 217= point number

Disturbed Sample
y. 2017= year of investigation
TR02= point number

LEGEND, PROFILE

- Vertical railway alignment (S=radius of vertical curve, KT=elevation point)
- Ground surface
- Ground elevation on the left side of track centre line (-20m) and on the right side of track centre line (+20m)
- Culvert location (elevation will be designed in detailed design phase)
- Level crossing
- Overpass bridge, railway or underpass bridge
- Elevation figures
  - Difference between existing ground and designed track elevation
  - Designed track elevation (the running surface of the rail)
  - Existing ground elevation
- Km stationing
- Horizontal alignment, schematic

SR= length of straight line (m)
R= curve radius (m)
KR= length of curve (m)
D= track cant (mm)
Lk= length of transition curve (m)

Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Supplier: VR TRACK

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 139+0200 - 140+0600

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200

Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height

Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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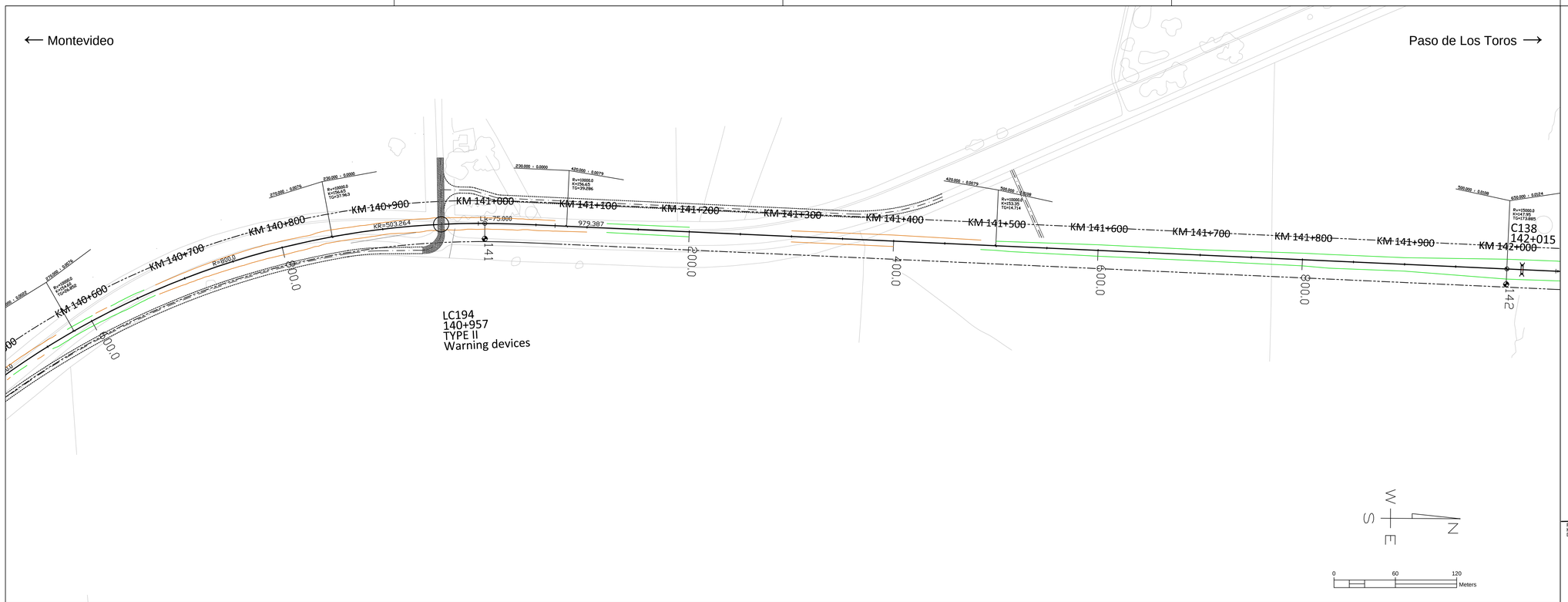

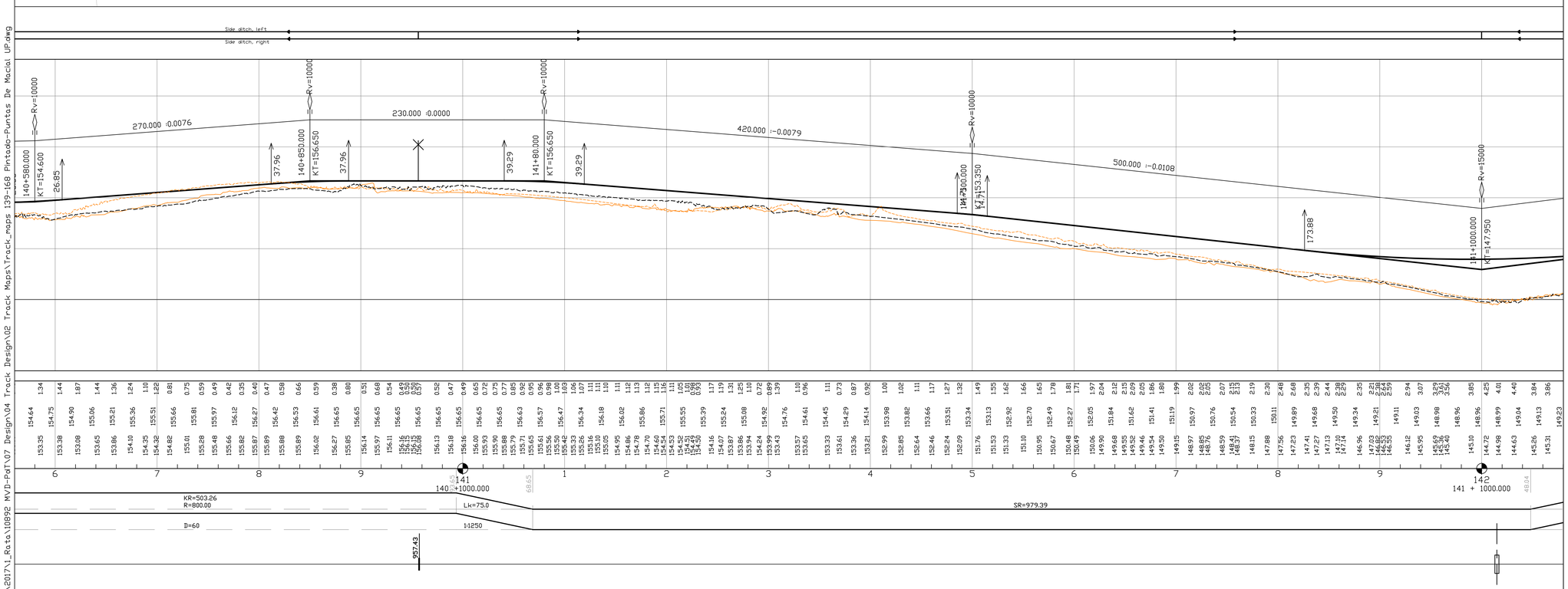

LEGEND, MAP

- New railway alignment
- Existing railway alignment (not in the Railway Project scope)
- Railway Area borderline
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  (Secondary side tracks and their switches will be designed and constructed based on Appendix Q)
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- Street or road modification area in level crossings or underpasses/flyovers
- Modification needed to the property access
- Affected parallel roads and streets and maintenance roads
- Road closing down
- Limit of designed soil cut (open cut or cut with a retaining wall)
- Limit of designed embankment fill, not including possible ditch
- Existing stations or passenger platforms
- New passenger platforms

Symbols

BXXX BXXX — Railway bridge or underpass, Flyover

CXXX — Culvert

Level crossing

LCXXX

Track alignment with design geometry figures

R= curve radius (m)
KR= length of curve (m)
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K= elevation
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123.345= length of straight line (m)

SPT-sounding, terminated at cobble, boulder, or bedrock contact.
y. 2016= year of investigation, location of 2016 soundings not accurate
1, 217= point number

Disturbed Sample
y. 2017= year of investigation
TR02= point number

LEGEND, PROFILE

Vertical railway alignment
(S=radius of vertical curve, KT=elevation point)

Ground surface

Ground elevation on the left side of track centre line (-20m) and on the right side of track centre line (+20m)

Culvert location (elevation will be designed in detailed design phase)

Level crossing

Overpass bridge, railway or underpass bridge

Elevation figures

Difference between existing ground and designed track elevation

Designed track elevation (the running surface of the rail)

Existing ground elevation

Km stationing

Horizontal alignment, schematic
SR= length of straight line (m)
R= curve radius (m)
KR= length of curve (m)
D= track cant (mm)
Lk= length of transition curve (m)

Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 140+0600 - 142+0000

Supplier: VR TRACK

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200
Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height
Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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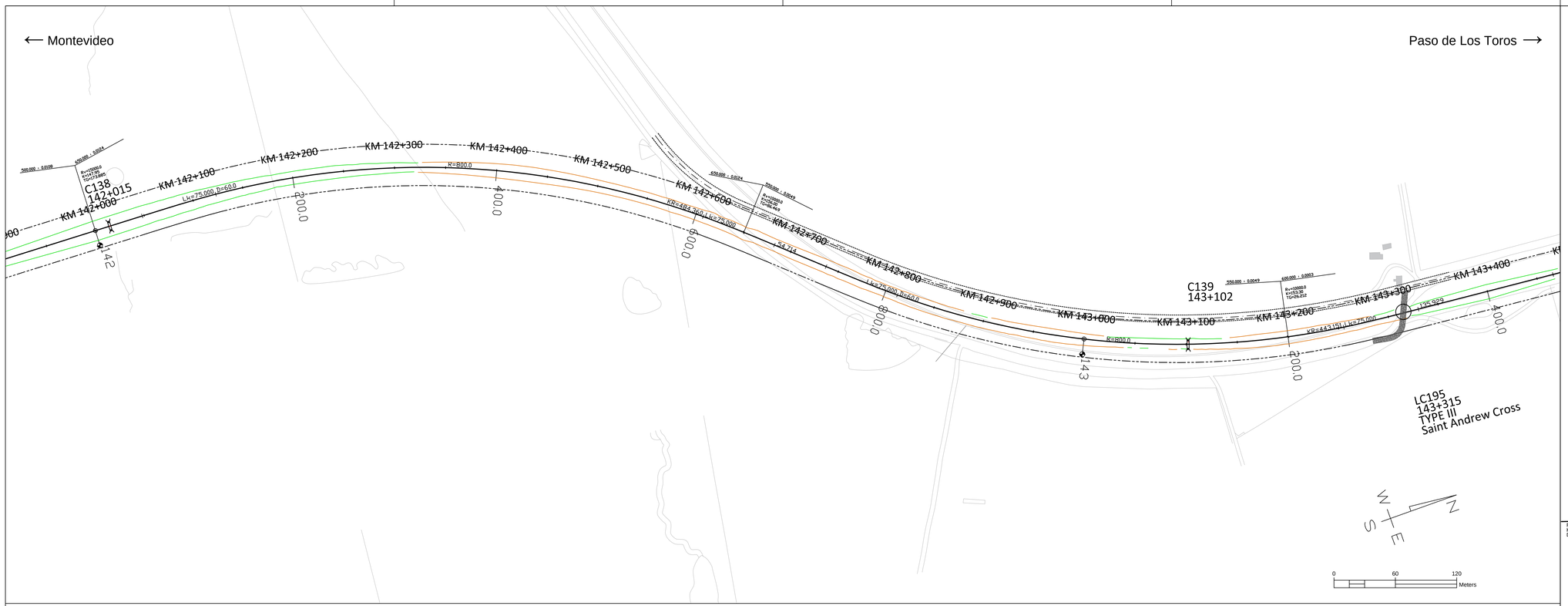

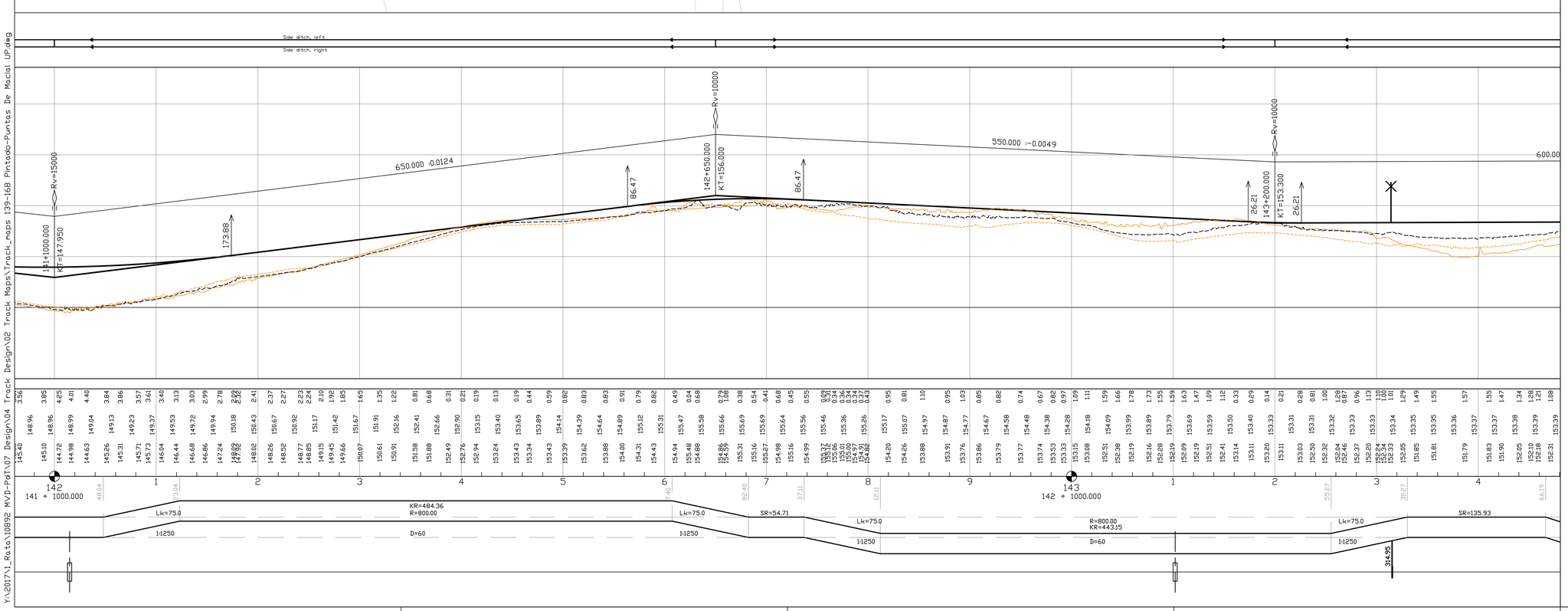

LEGEND, MAP

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- Limit of designed embankment fill, not including possible ditch
- Existing stations or passenger platforms
- New passenger platforms
- Symbols
  - BXXX — Railway bridge or underpass, Flyover
  - CXXX — Culvert
  - LCXXX — Level crossing
- Track alignment with design geometry figures
  - R= curve radius (m)
  - KR= length of curve (m)
  - D= track cant (mm)
  - Lk= length of transition curve (m)
  - Rv= radius of vertical curve
  - K= elevation
  - TG= lenght of tangent
  - 123.345= length of straight line (m)
- SPT-sounding, terminated at cobble, boulder, or bedrock contact.
  - y. 2016= year of investigation, location of 2016 soundings not accurate
  - 1, 217= point number
- Disturbed Sample
  - y. 2017= year of investigation
  - TR02= point number

LEGEND, PROFILE

- Vertical railway alignment (S=radius of vertical curve, KT=elevation point)
- Ground surface
- Ground elevation on the left side of track centre line (-20m) and on the right side of track centre line (+20m)
- Culvert location (elevation will be designed in detailed design phase)
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- Elevation figures
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  - Designed track elevation (the running surface of the rail)
  - Existing ground elevation
- Km stationing
- Horizontal alignment, schematic
  - SR= length of straight line (m)
  - R= curve radius (m)
  - KR= length of curve (m)
  - D= track cant (mm)
  - Lk= length of transition curve (m)

Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 142+0000 - 143+0400

Supplier: VR TRACK

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200

Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height

Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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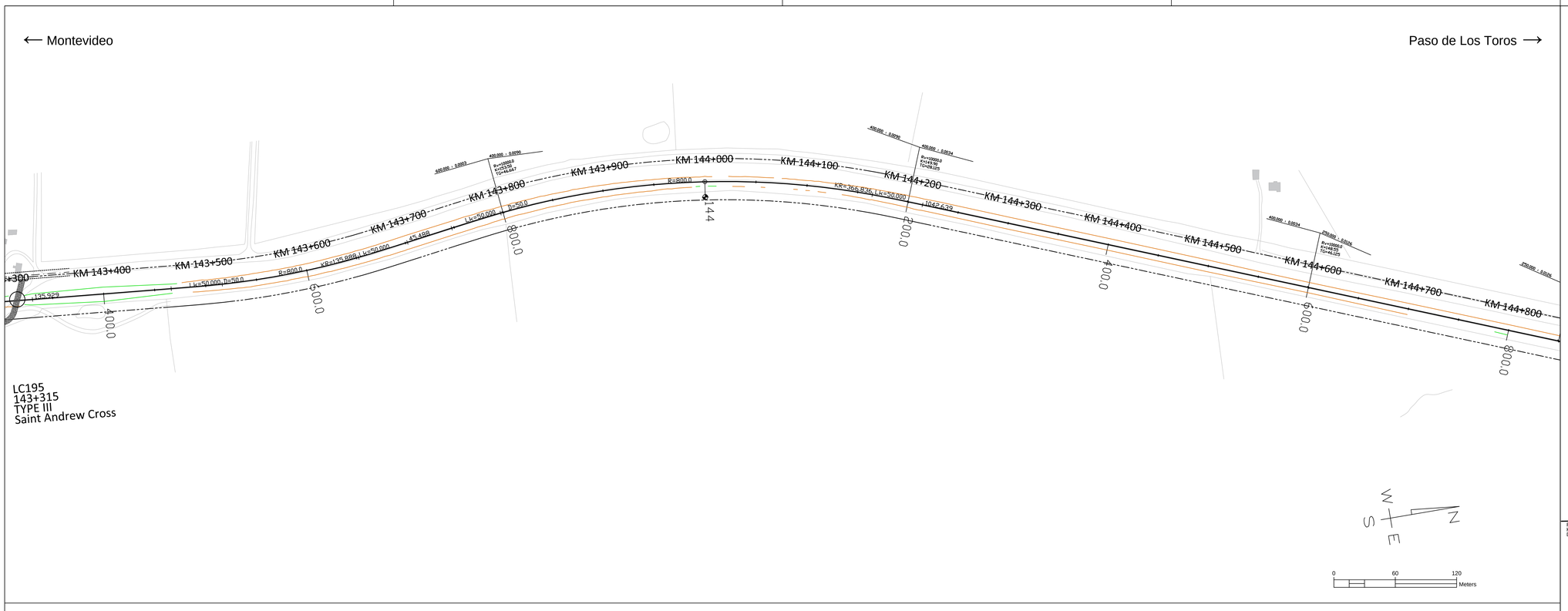

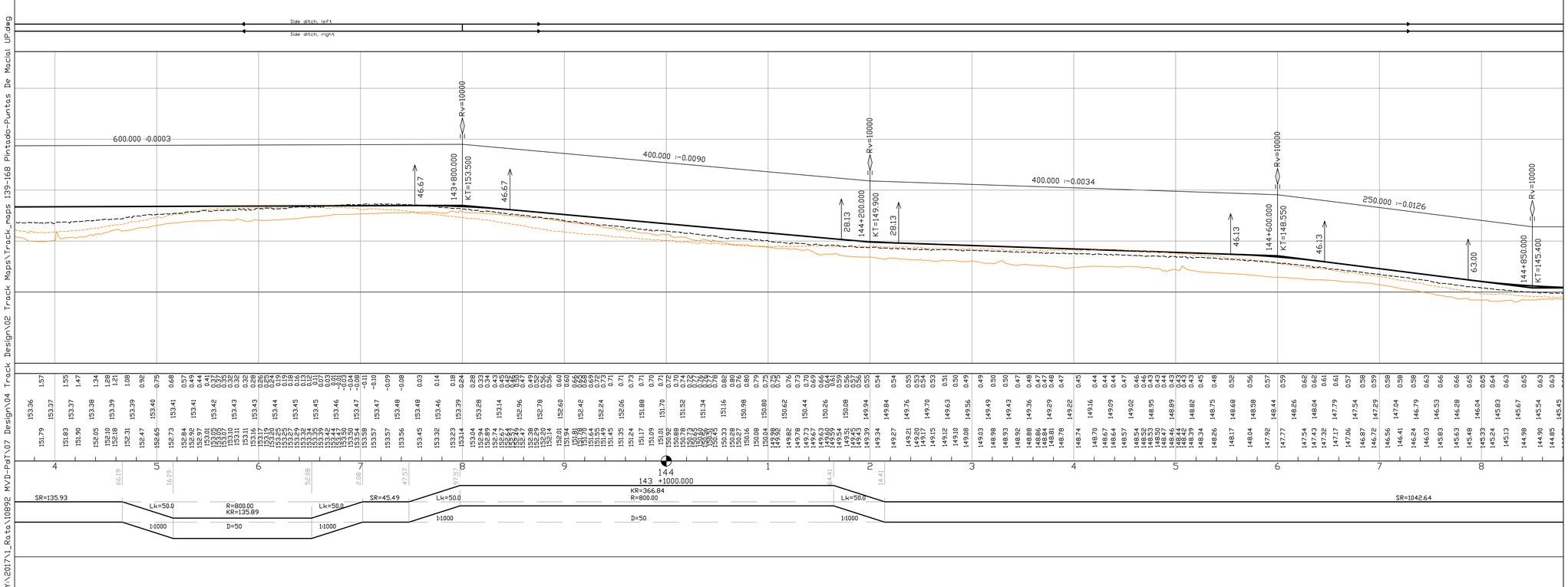

LEGEND, MAP

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- Limit of designed embankment fill, not including possible ditch
- Existing stations or passenger platforms
- New passenger platforms

Symbols

BXXX — Railway bridge or underpass, Flyover

CXXX — Culvert

Level crossing

LCXXX

Track alignment with design geometry figures

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1, 217= point number

Disturbed Sample
y. 2017= year of investigation
TR02= point number

LEGEND, PROFILE

Vertical railway alignment
(S=radius of vertical curve, KT=elevation point)

Ground surface

Ground elevation on the left side of track centre line (-20m) and on the right side of track centre line (+20m)

Culvert location (elevation will be designed in detailed design phase)

Level crossing

Overpass bridge, railway or underpass bridge

Elevation figures

Difference between existing ground and designed track elevation

Designed track elevation (the running surface of the rail)

Existing ground elevation

Km stationing

Horizontal alignment, schematic
SR= length of straight line (m)
R= curve radius (m)
KR= length of curve (m)
D= track cant (mm)
Lk= length of transition curve (m)

Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 143+0400 - 144+0800

Supplier: VR TRACK

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200
Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height
Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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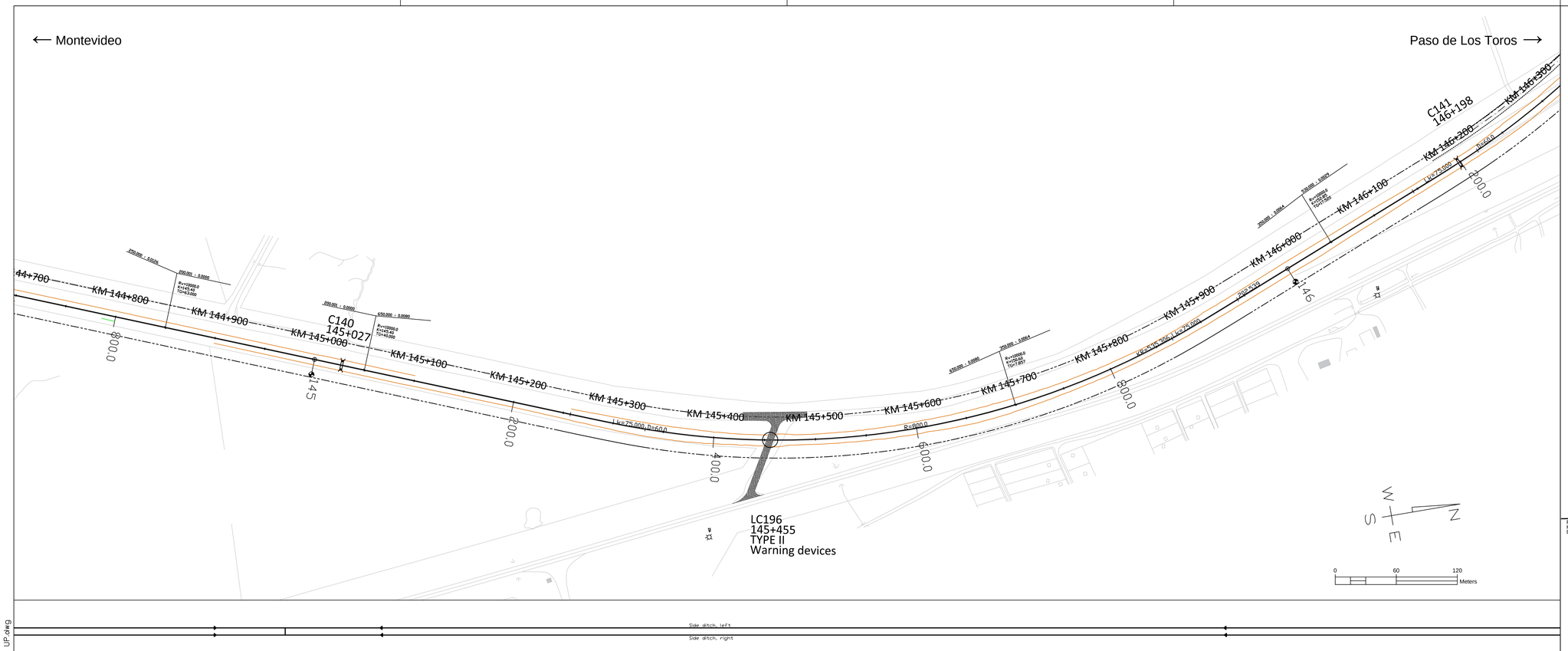

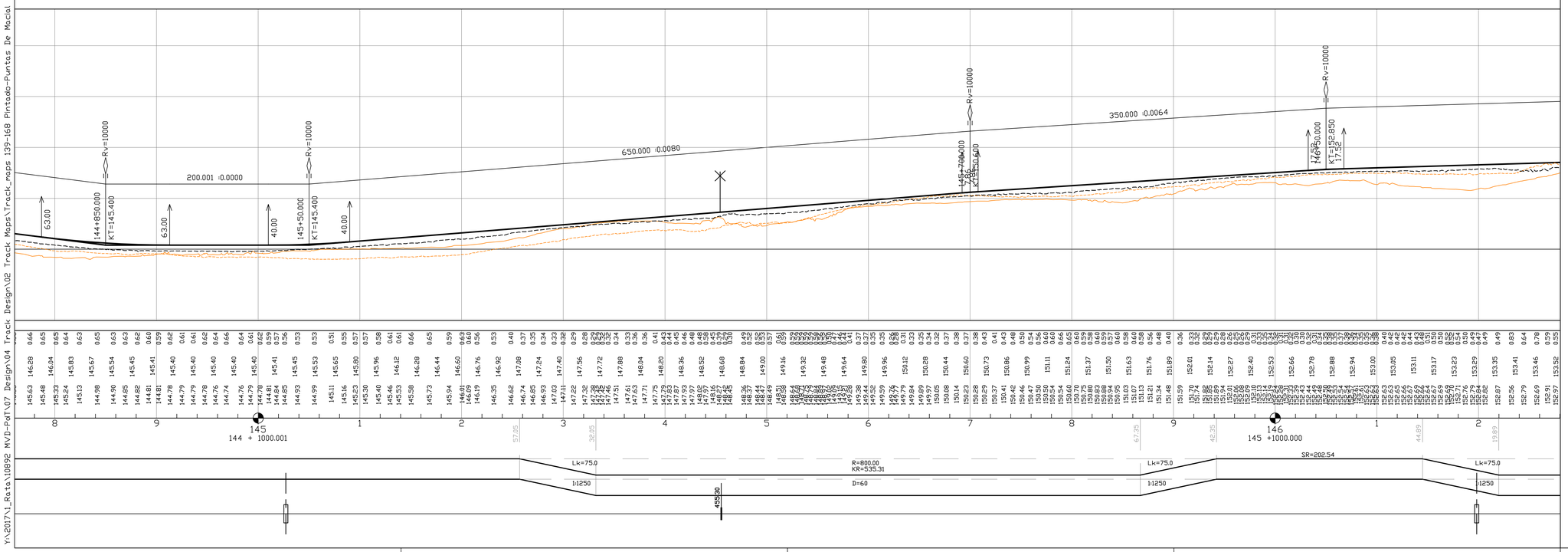

LEGEND, MAP

- New railway alignment
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- Modification needed to the property access
- Affected parallel roads and streets and maintenance roads
- Road closing down
- Limit of designed soil cut (open cut or cut with a retaining wall)
- Limit of designed embankment fill, not including possible ditch
- Existing stations or passenger platforms
- New passenger platforms

Symbols

BXXX BXXX — Railway bridge or underpass, Flyover

CXXX — Culvert

Level crossing

LCXXX

Track alignment with design geometry figures

R= curve radius (m)
KR= length of curve (m)
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y. 2016= year of investigation, location of 2016 soundings not accurate
1, 217= point number

Disturbed Sample
y. 2017= year of investigation
TR02= point number

LEGEND, PROFILE

Vertical railway alignment
(S=radius of vertical curve, KT=elevation point)

Ground surface

Ground elevation on the left side of track centre line (-20m) and on the right side of track centre line (+20m)

Culvert location (elevation will be designed in detailed design phase)

Level crossing

Overpass bridge, railway or underpass bridge

Elevation figures

Difference between existing ground and designed track elevation

Designed track elevation (the running surface of the rail)

Existing ground elevation

Km stationing

Horizontal alignment, schematic
SR= length of straight line (m)
R= curve radius (m)
KR= length of curve (m)
D= track cant (mm)
Lk= length of transition curve (m)

Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 144+0800 - 146+0200

Supplier: VR TRACK

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200
Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height
Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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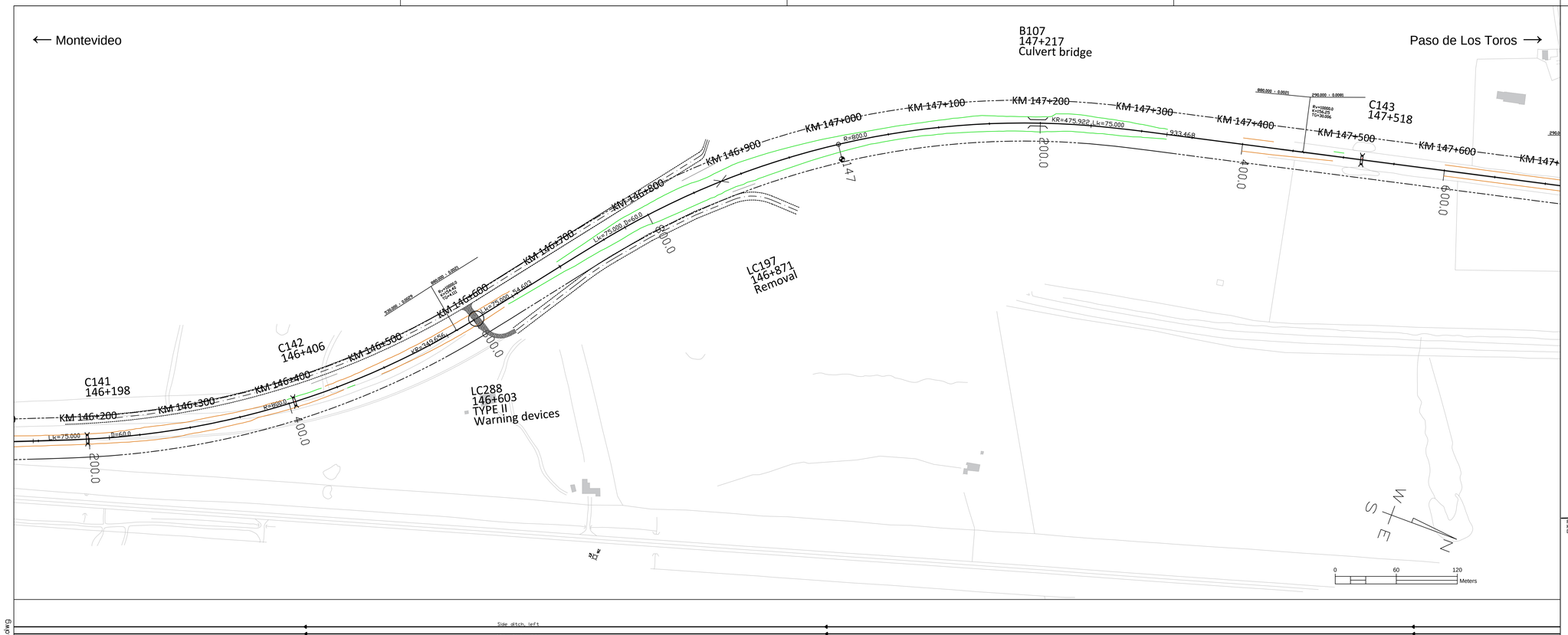

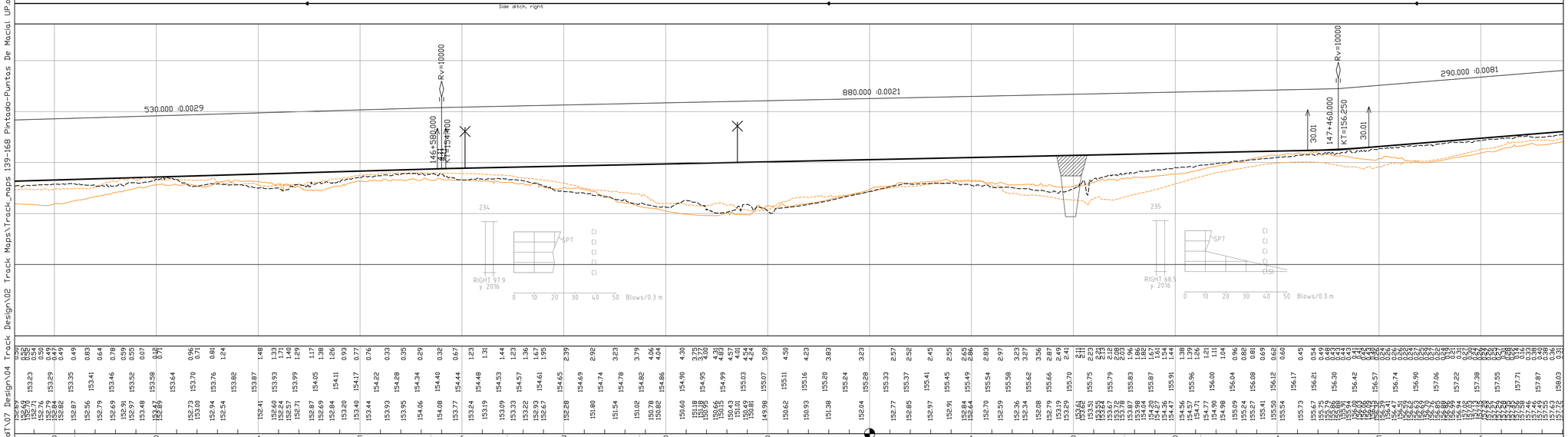

LEGEND, MAP

- New railway alignment
- Existing railway alignment (not in the Railway Project scope)
- Railway Area borderline
- Secondary Side Tracks - Horizontal geometry pre-designed (Secondary side tracks and their switches will be designed and constructed based on Appendix Q)
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- Modification needed to the property access
- Affected parallel roads and streets and maintenance roads
- Road closing down
- Limit of designed soil cut (open cut or cut with a retaining wall)
- Limit of designed embankment fill, not including possible ditch
- Existing stations or passenger platforms
- New passenger platforms
- Symbols
  - BXXX — Railway bridge or underpass, Flyover
  - CXXX — Culvert
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- Track alignment with design geometry figures
  - R= curve radius (m)
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  - TR02= point number

LEGEND, PROFILE

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- Horizontal alignment, schematic
  - SR= length of straight line (m)
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Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Supplier: VR TRACK

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 146+0200 - 147+0600

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200

Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height

Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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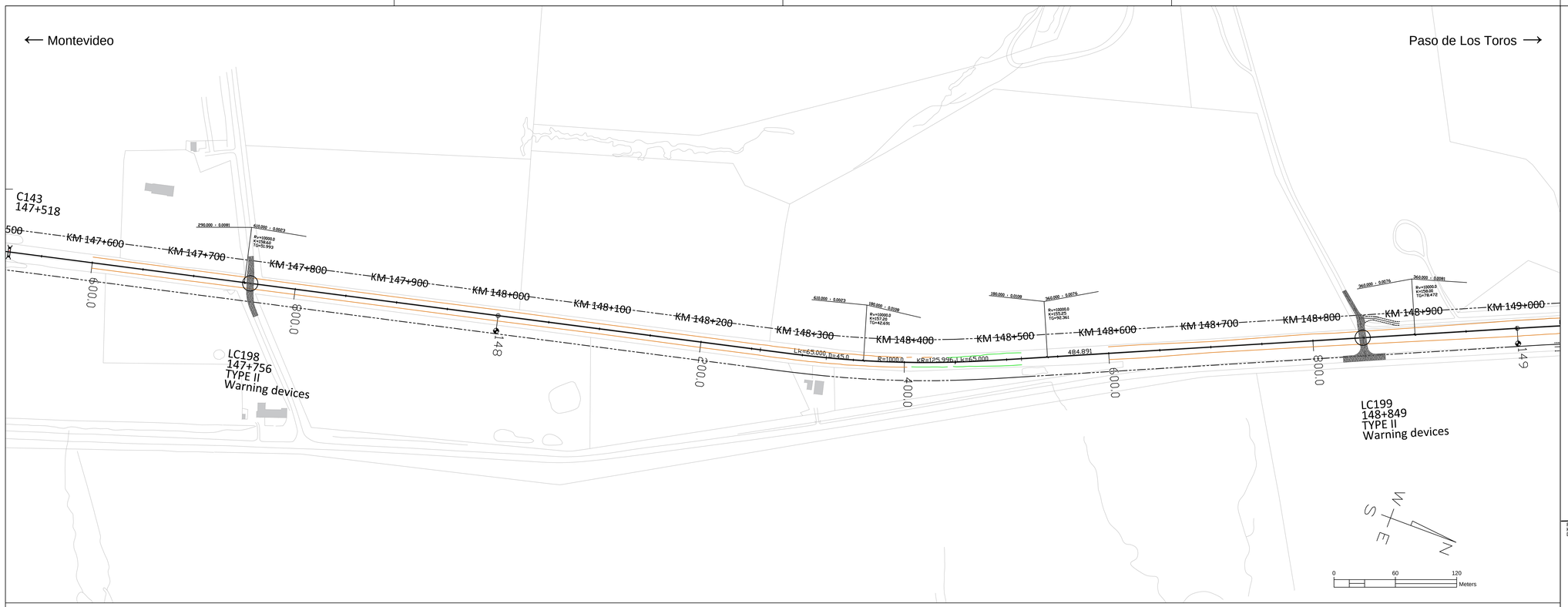

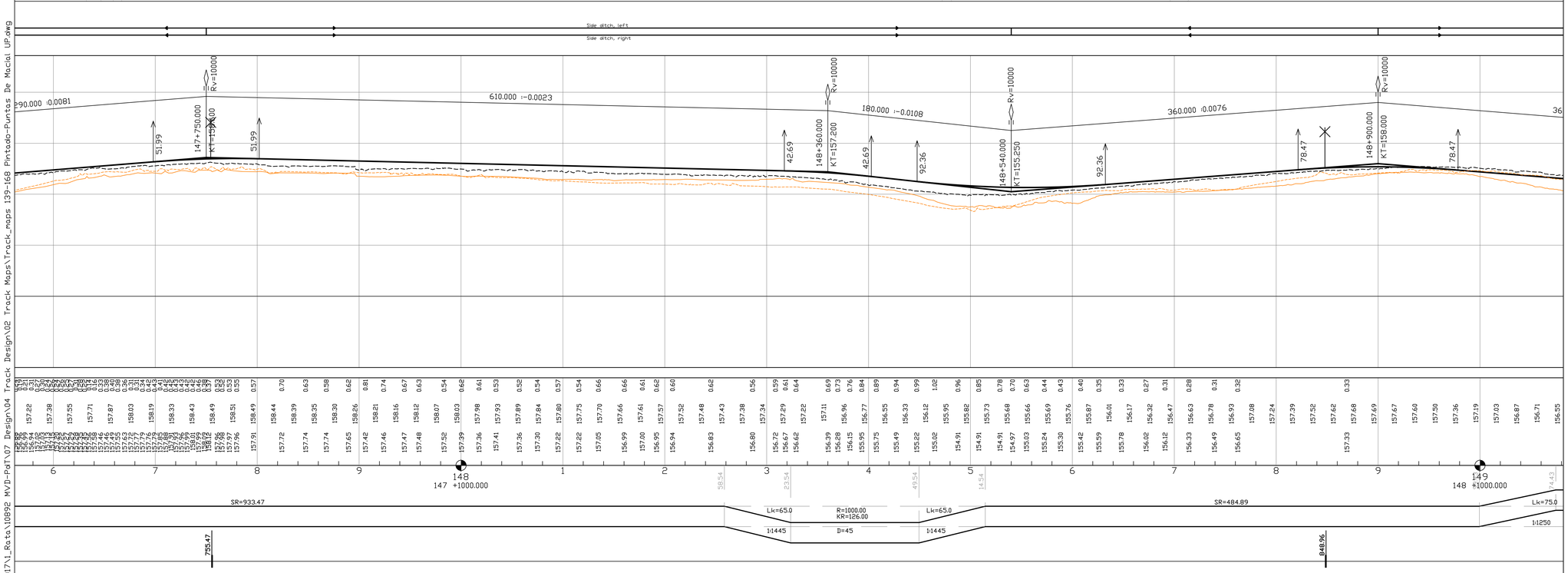

LEGEND, MAP

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LEGEND, PROFILE

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Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Supplier: VR TRACK

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 147+0600 - 149+0000

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200

Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height

Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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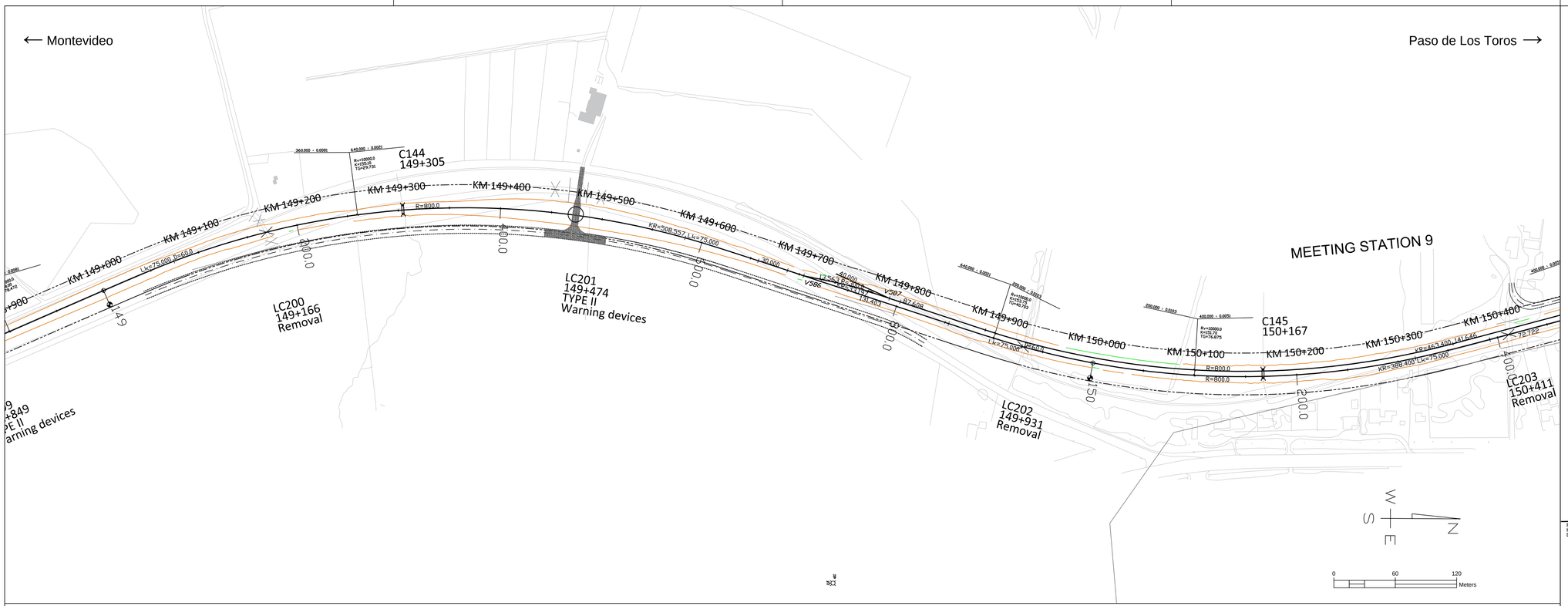

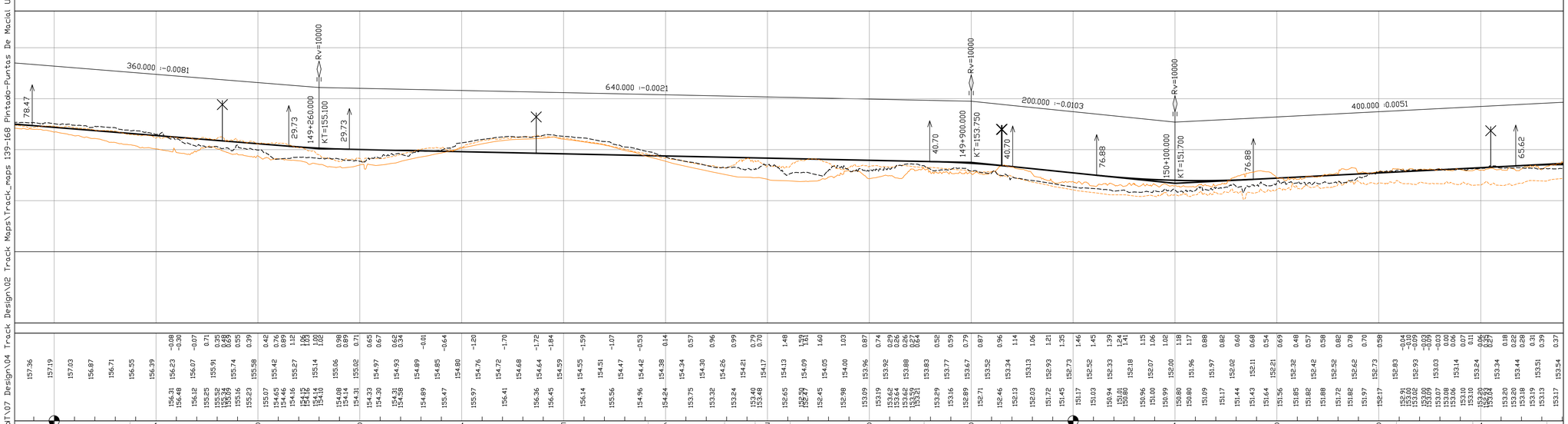

LEGEND, MAP

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- Track alignment with design geometry figures
  - R= curve radius (m)
  - KR= length of curve (m)
  - D= track cant (mm)
  - Lk= length of transition curve (m)
  - Rv= radius of vertical curve
  - K= elevation
  - TG= lenght of tangent
  - 123.345= length of straight line (m)
- SPT-sounding, terminated at cobble, boulder, or bedrock contact.
  - y. 2016= year of investigation, location of 2016 soundings not accurate
  - 1, 217= point number
- Disturbed Sample
  - y. 2017= year of investigation
  - TR02= point number

LEGEND, PROFILE

- Vertical railway alignment (S=radius of vertical curve, KT=elevation point)
- Ground surface
- Ground elevation on the left side of track centre line (-20m) and on the right side of track centre line (+20m)
- Culvert location (elevation will be designed in detailed design phase)
- Level crossing
- Overpass bridge, railway or underpass bridge
- Elevation figures
  - Difference between existing ground and designed track elevation
  - Designed track elevation (the running surface of the rail)
  - Existing ground elevation
- Km stationing
- Horizontal alignment, schematic
  - SR= length of straight line (m)
  - R= curve radius (m)
  - KR= length of curve (m)
  - D= track cant (mm)
  - Lk= length of transition curve (m)

Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 149+0000 - 150+0400

Supplier: VR TRACK

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200

Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height

Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
			-	107	195

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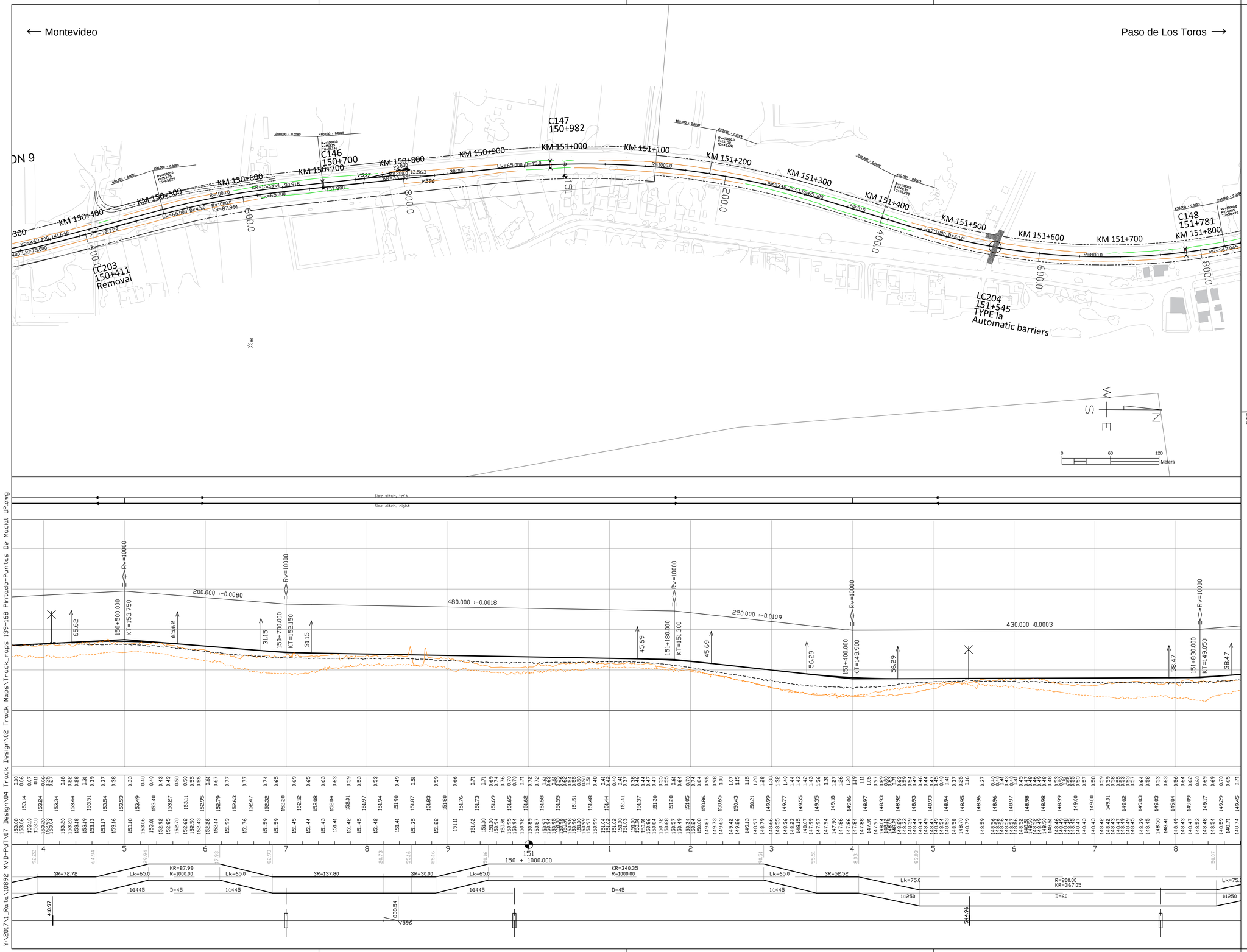

LEGEND, MAP

- New railway alignment
- Existing railway alignment (not in the Railway Project scope)
- Railway Area borderline
- Secondary Side Tracks - Horizontal geometry pre-designed (Secondary side tracks and their switches will be designed and constructed based on Appendix Q)
- Removal track
- Street or road modification area in level crossings or underpasses/flyovers
- Modification needed to the property access
- Affected parallel roads and streets and maintenance roads
- Road closing down
- Limit of designed soil cut (open cut or cut with a retaining wall)
- Limit of designed embankment fill, not including possible ditch
- Existing stations or passenger platforms
- New passenger platforms

Symbols

BXXX BXXX — Railway bridge or underpass, Flyover

CXXX — Culvert

Level crossing

LCXXX

Track alignment with design geometry figures

R= curve radius (m)
KR= length of curve (m)
D= track cant (mm)
Lk= length of transition curve (m)
Rv= radius of vertical curve
K= elevation
TG= lenght of tangent
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1, 217= point number

Disturbed Sample
y. 2017= year of investigation
TR02= point number

LEGEND, PROFILE

Vertical railway alignment
(S=radius of vertical curve, KT=elevation point)

Ground surface

Ground elevation on the left side of track centre line (-20m) and on the right side of track centre line (+20m)

Culvert location (elevation will be designed in detailed design phase)

Level crossing

Overpass bridge, railway or underpass bridge

Elevation figures

Difference between existing ground and designed track elevation

Designed track elevation (the running surface of the rail)

Existing ground elevation

Km stationing

Horizontal alignment, schematic
SR= length of straight line (m)
R= curve radius (m)
KR= length of curve (m)
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Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Supplier: VR TRACK

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 150+0400 - 151+0800

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200

Coordinate system: WGS 84 UTM 21 S, Local orthometric height
Elevation reference system

Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
			-	108	195

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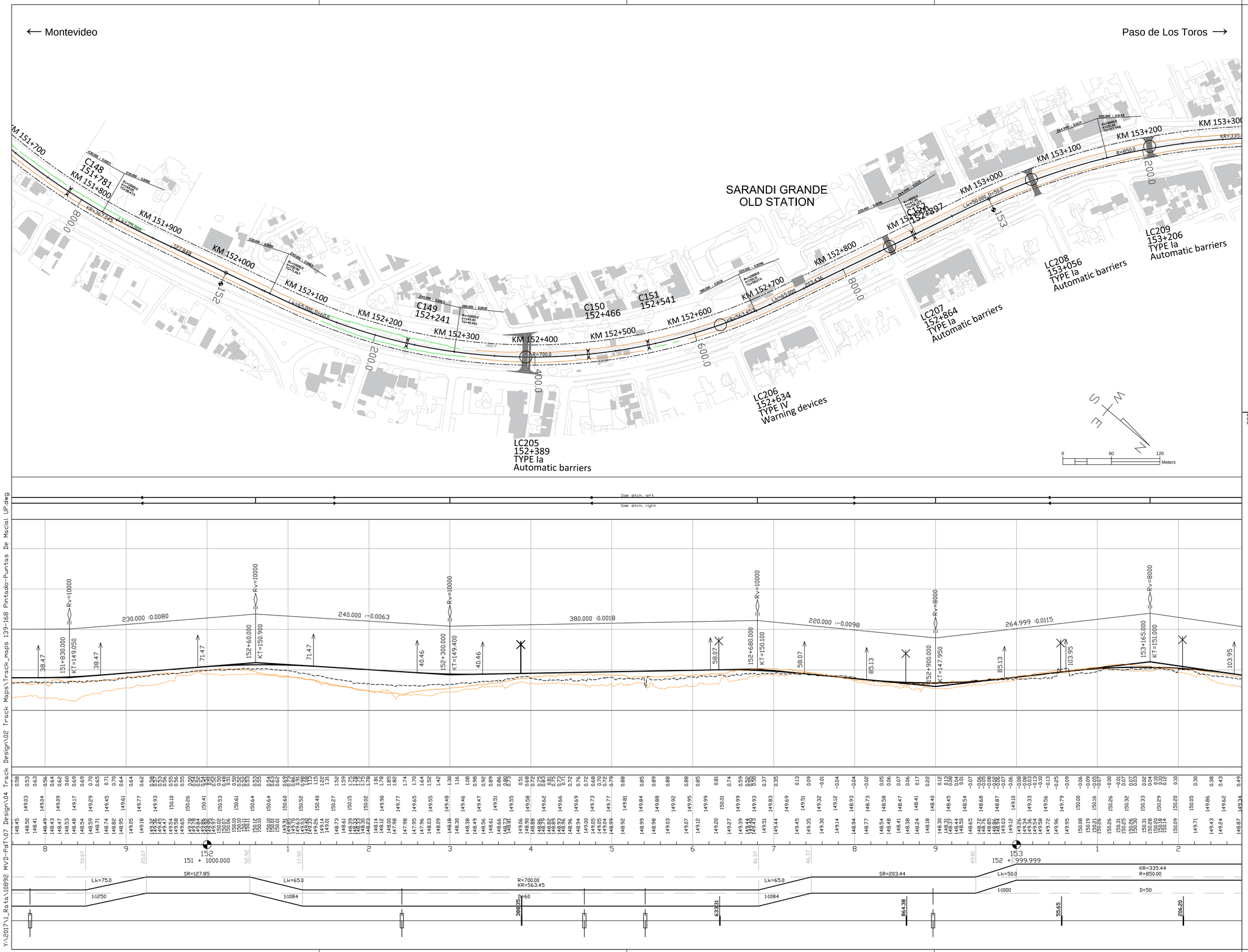

LEGEND, MAP

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- New passenger platforms

Symbols

BXXX BXXX — Railway bridge or underpass, Flyover

CXXX — Culvert

Level crossing

LCXXX

Track alignment with design geometry figures

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TR02= point number

LEGEND, PROFILE

Vertical railway alignment
(S=radius of vertical curve, KT=elevation point)

Ground surface

Ground elevation on the left side of track centre line (-20m) and on the right side of track centre line (+20m)

Culvert location (elevation will be designed in detailed design phase)

Level crossing

Overpass bridge, railway or underpass bridge

Elevation figures

Difference between existing ground and designed track elevation

Designed track elevation (the running surface of the rail)

Existing ground elevation

Km stationing

Horizontal alignment, schematic
SR= length of straight line (m)
R= curve radius (m)
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Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Supplier: VR TRACK

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 151+0800 - 153+0200

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200

Coordinate system: WGS 84 UTM 21 S, Local orthometric height
Elevation reference system:

Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
			-	109	195

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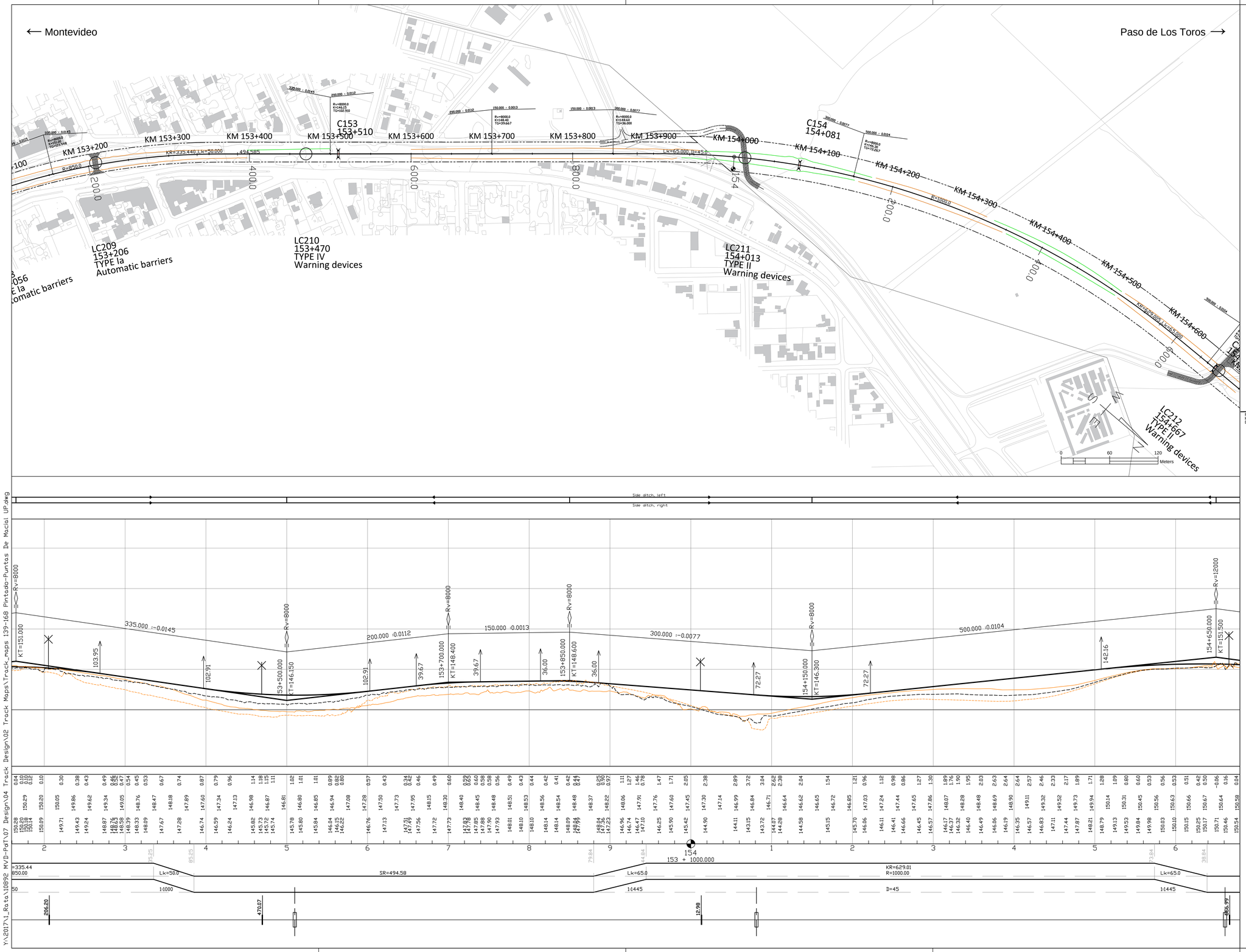

LEGEND, MAP

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- Limit of designed embankment fill, not including possible ditch
- Existing stations or passenger platforms
- New passenger platforms

Symbols

BXXX — Railway bridge or underpass, Flyover

CXXX — Culvert

LCXXX — Level crossing

Track alignment with design geometry figures

R= curve radius (m)
KR= length of curve (m)
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Disturbed Sample
y. 2017= year of investigation
TR02= point number

LEGEND, PROFILE

Vertical railway alignment
(S=radius of vertical curve, KT=elevation point)

Ground surface

Ground elevation on the left side of track centre line (-20m) and on the right side of track centre line (+20m)

Culvert location (elevation will be designed in detailed design phase)

Level crossing

Overpass bridge, railway or underpass bridge

Elevation figures

Difference between existing ground and designed track elevation

Designed track elevation (the running surface of the rail)

Existing ground elevation

Km stationing

Horizontal alignment, schematic
SR= length of straight line (m)
R= curve radius (m)
KR= length of curve (m)
D= track cant (mm)
Lk= length of transition curve (m)

Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Supplier: VR TRACK

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 153+0200 - 154+0600

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200

Coordinate system: WGS 84 UTM 21 S, Local orthometric height
Elevation reference system:

Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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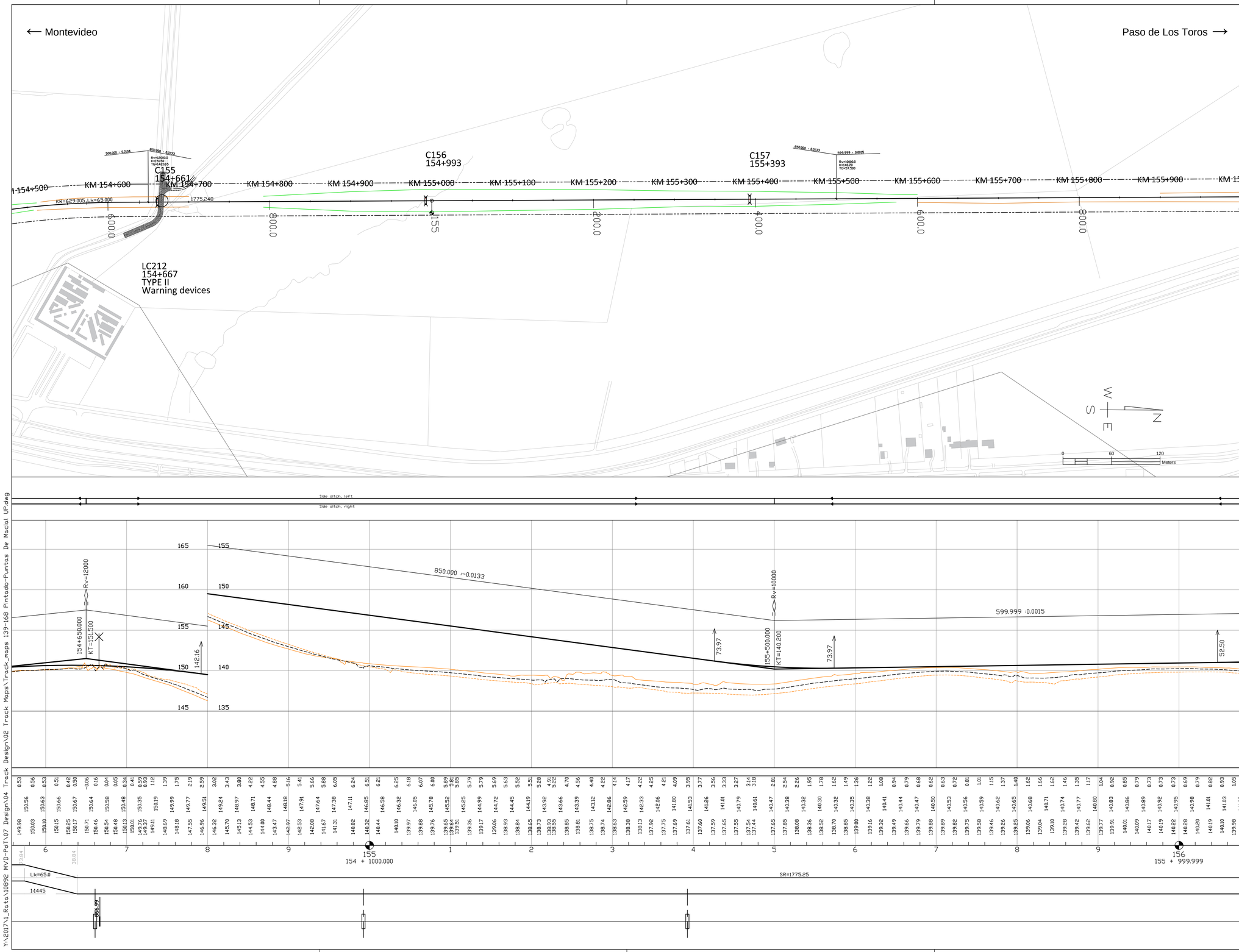

LEGEND, MAP

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- Existing stations or passenger platforms
- New passenger platforms

Symbols

BXXX — Railway bridge or underpass, Flyover

CXXX — Culvert

Level crossing

LCXXX

Track alignment with design geometry figures

R= curve radius (m)
KR= length of curve (m)
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Disturbed Sample
y. 2017= year of investigation
TR02= point number

LEGEND, PROFILE

Vertical railway alignment
(S=radius of vertical curve, KT=elevation point)

Ground surface

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Elevation figures

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Existing ground elevation

Km stationing

Horizontal alignment, schematic
SR= length of straight line (m)
R= curve radius (m)
KR= length of curve (m)
D= track cant (mm)
Lk= length of transition curve (m)

Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Supplier: VR TRACK

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 154+0600 - 156+0000

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200
Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height
Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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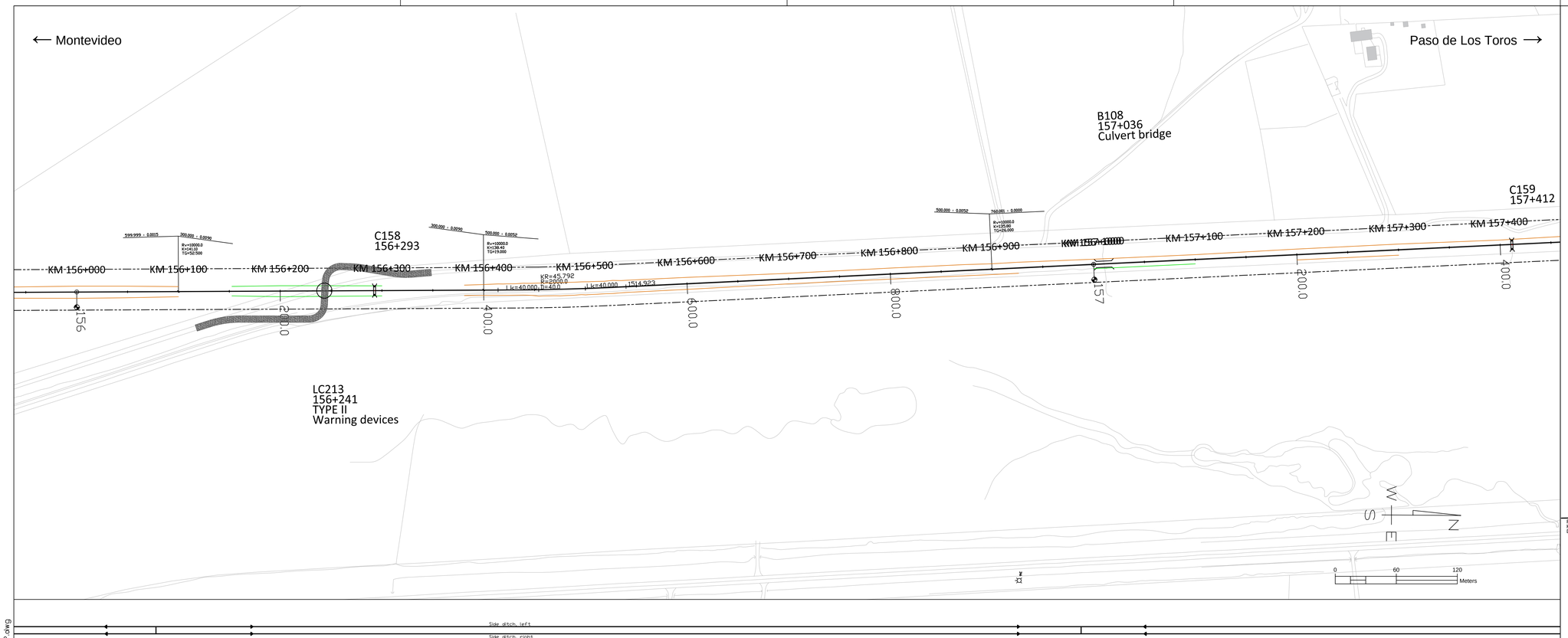

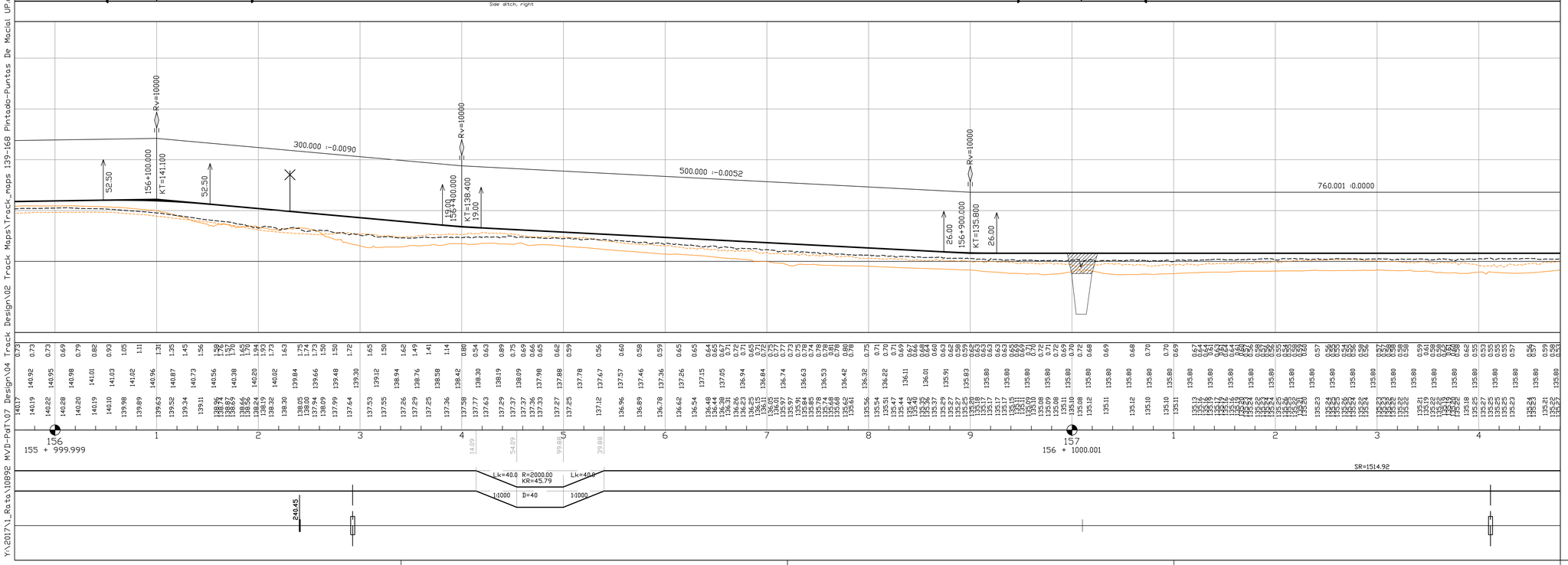

LEGEND, MAP

- New railway alignment
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- Limit of designed embankment fill, not including possible ditch
- Existing stations or passenger platforms
- New passenger platforms

Symbols

BXXX BXXX — Railway bridge or underpass, Flyover

CXXX — Culvert

LCXXX — Level crossing

Track alignment with design geometry figures

R= curve radius (m)
KR= length of curve (m)
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y. 2016= year of investigation, location of 2016 soundings not accurate
1, 217= point number

Disturbed Sample
y. 2017= year of investigation
TR02= point number

LEGEND, PROFILE

Vertical railway alignment
(S=radius of vertical curve, KT=elevation point)

Ground surface

Ground elevation on the left side of track centre line (-20m) and on the right side of track centre line (+20m)

Culvert location (elevation will be designed in detailed design phase)

Level crossing

Overpass bridge, railway or underpass bridge

Elevation figures

Difference between existing ground and designed track elevation

Designed track elevation (the running surface of the rail)

Existing ground elevation

Km stationing

Horizontal alignment, schematic
SR= length of straight line (m)
R= curve radius (m)
KR= length of curve (m)
D= track cant (mm)
Lk= length of transition curve (m)

Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 156+0000 - 157+0400

Supplier: VR TRACK

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc		

Scale: map 1:2000, profile 1:2000 / 1:200

Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height

Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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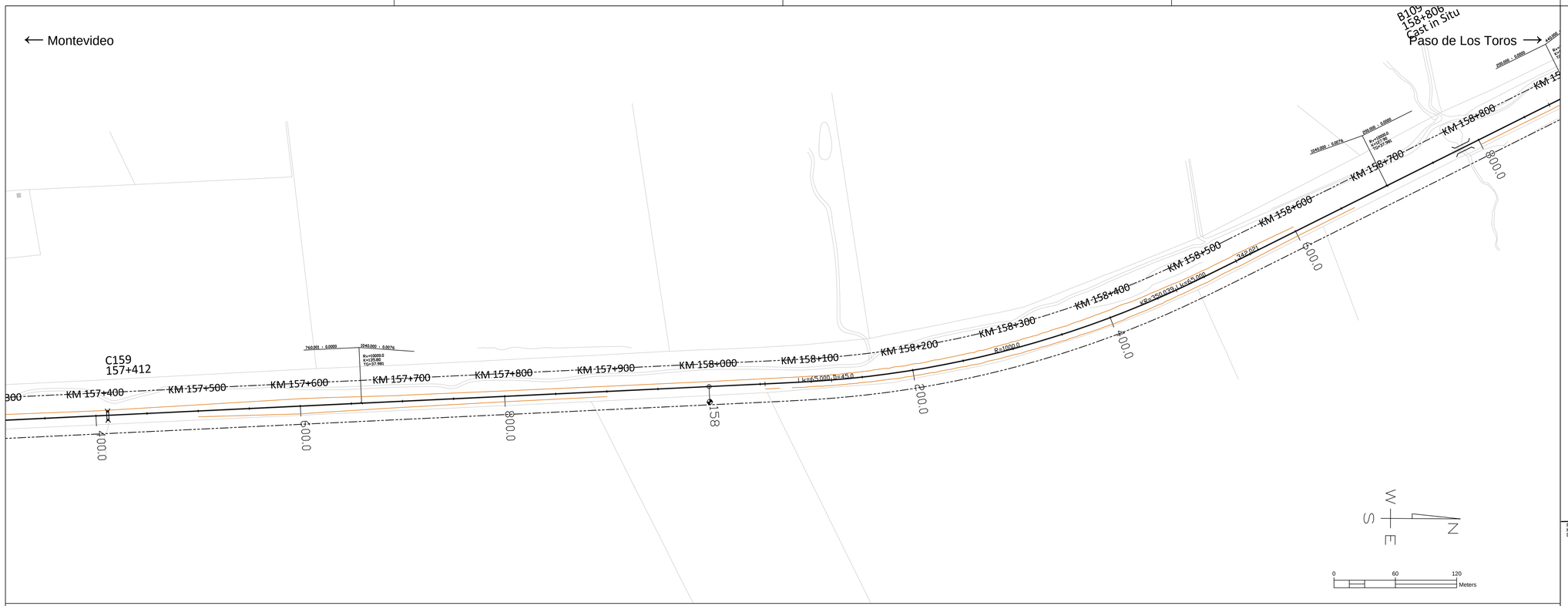

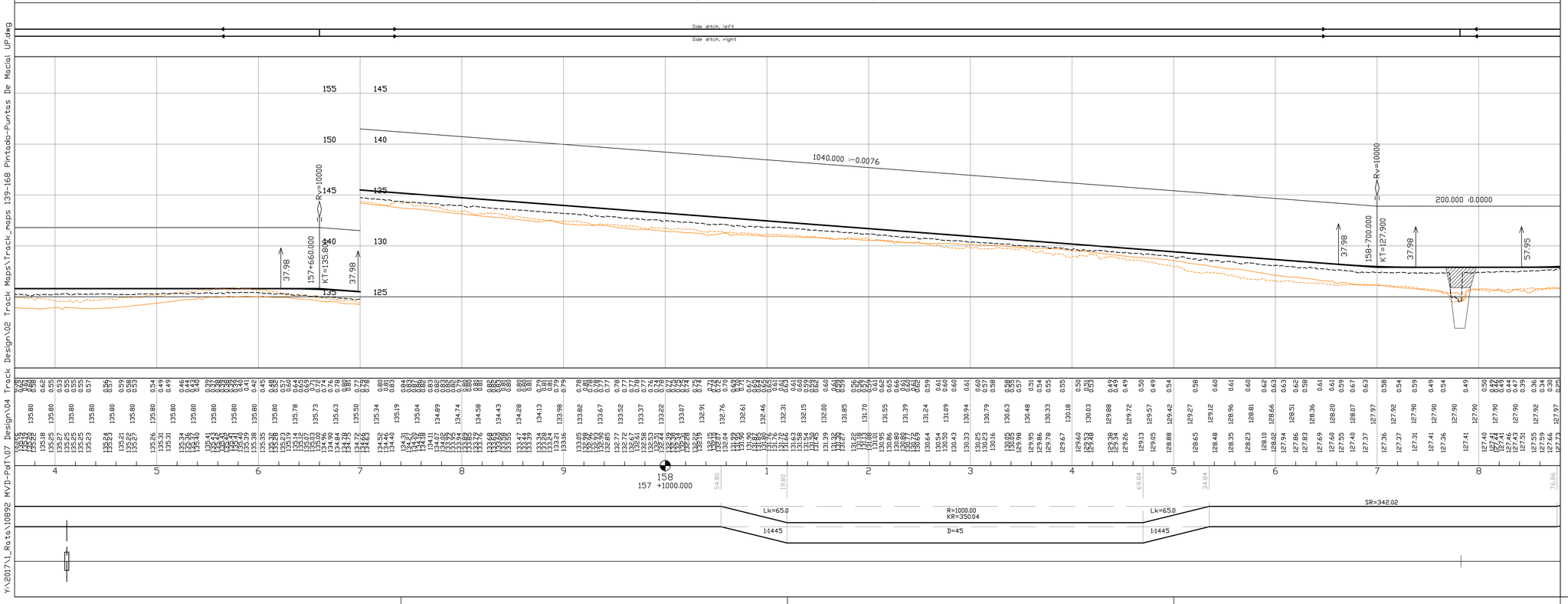

LEGEND, MAP

- New railway alignment
- Existing railway alignment (not in the Railway Project scope)
- Railway Area borderline
- Secondary Side Tracks - Horizontal geometry pre-designed (Secondary side tracks and their switches will be designed and constructed based on Appendix Q)
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- New passenger platforms

Symbols

BXXX BXXX — Railway bridge or underpass, Flyover

CXXX — Culvert

Level crossing

LCXXX

Track alignment with design geometry figures

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KR= length of curve (m)
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LEGEND, PROFILE

Vertical railway alignment
(S=radius of vertical curve, KT=elevation point)

Ground surface

Ground elevation on the left side of track centre line (-20m) and on the right side of track centre line (+20m)

Culvert location (elevation will be designed in detailed design phase)

Level crossing

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Elevation figures

Difference between existing ground and designed track elevation

Designed track elevation (the running surface of the rail)

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Km stationing

Horizontal alignment, schematic
SR= length of straight line (m)
R= curve radius (m)
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Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 157+0400 - 158+0800

Supplier: VR TRACK

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200

Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height

Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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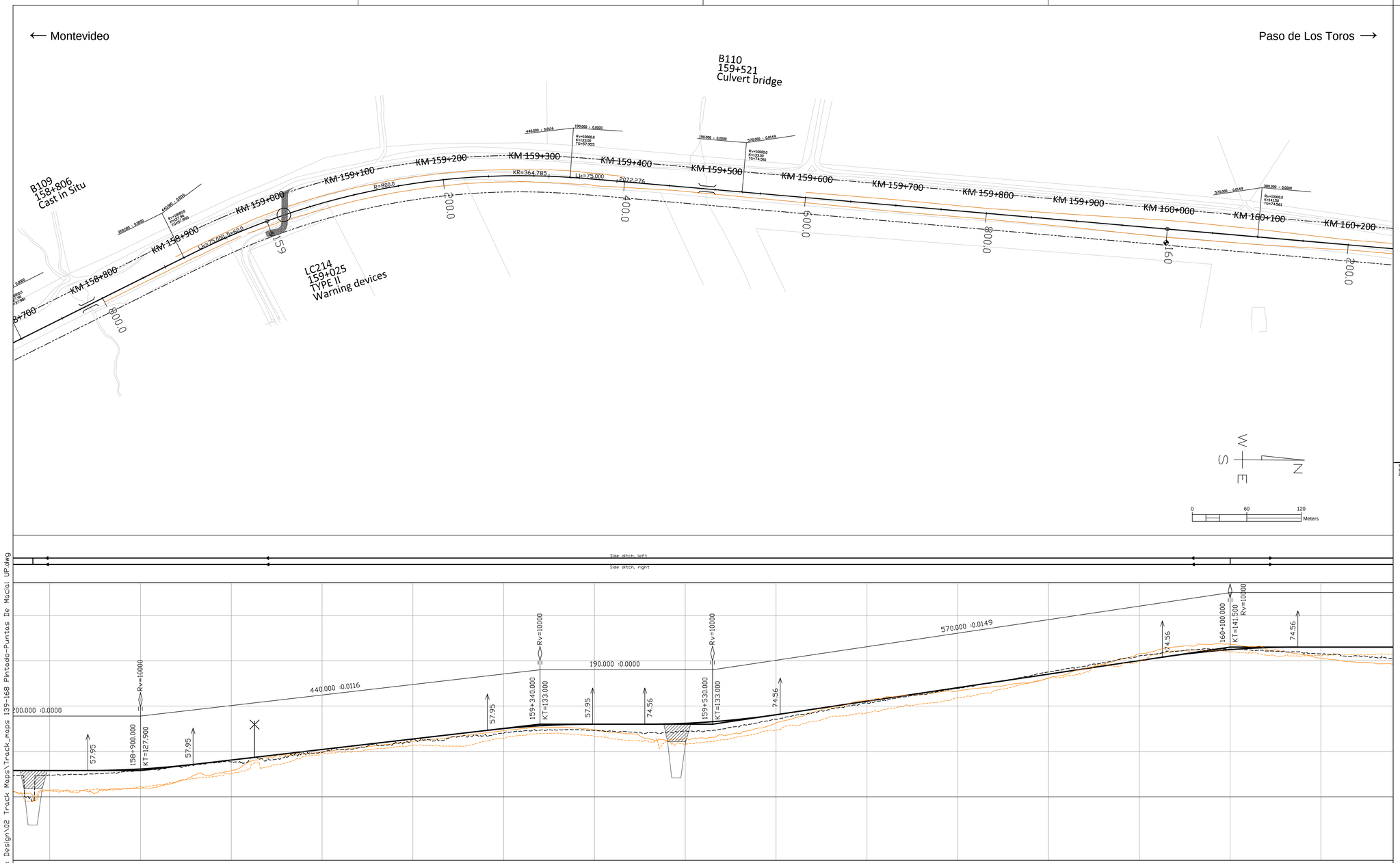

LEGEND, MAP

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- Existing railway alignment (not in the Railway Project scope)
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Horizontal alignment, schematic
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Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Supplier: VR TRACK

Content: Track map and profile Km 158+0800 - 160+0200

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200
Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height
Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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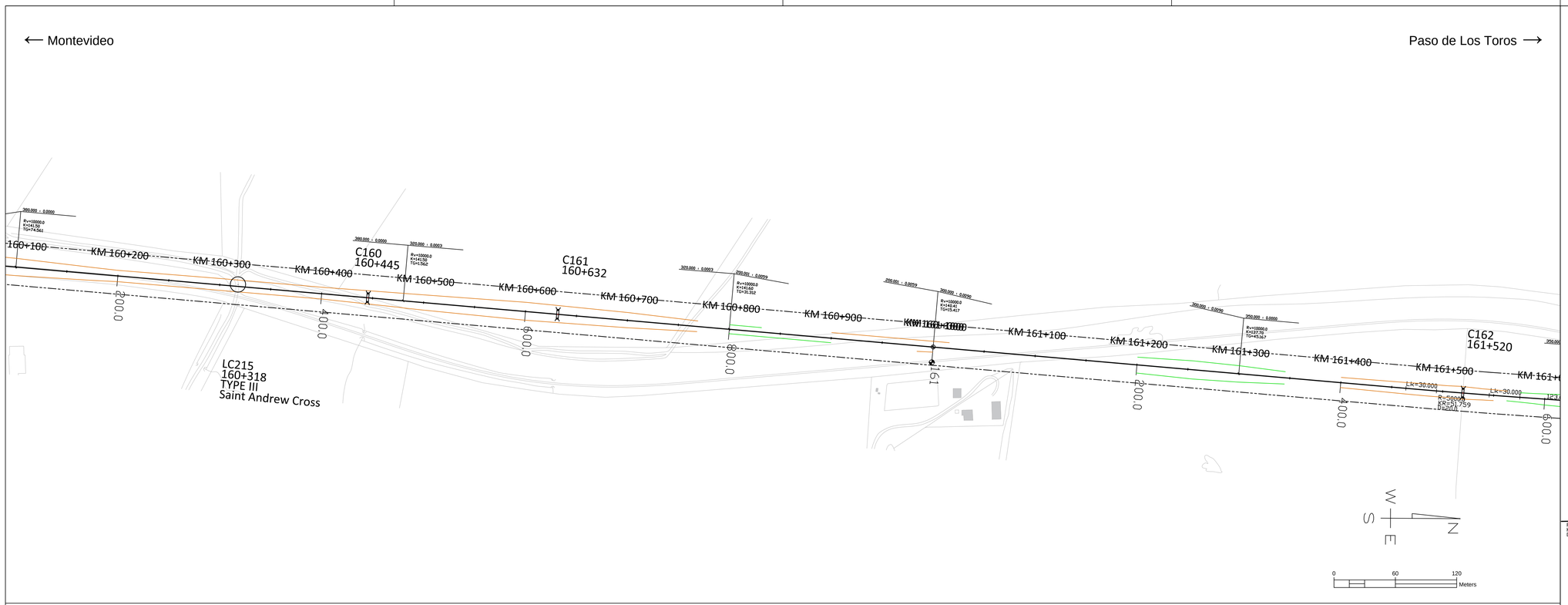

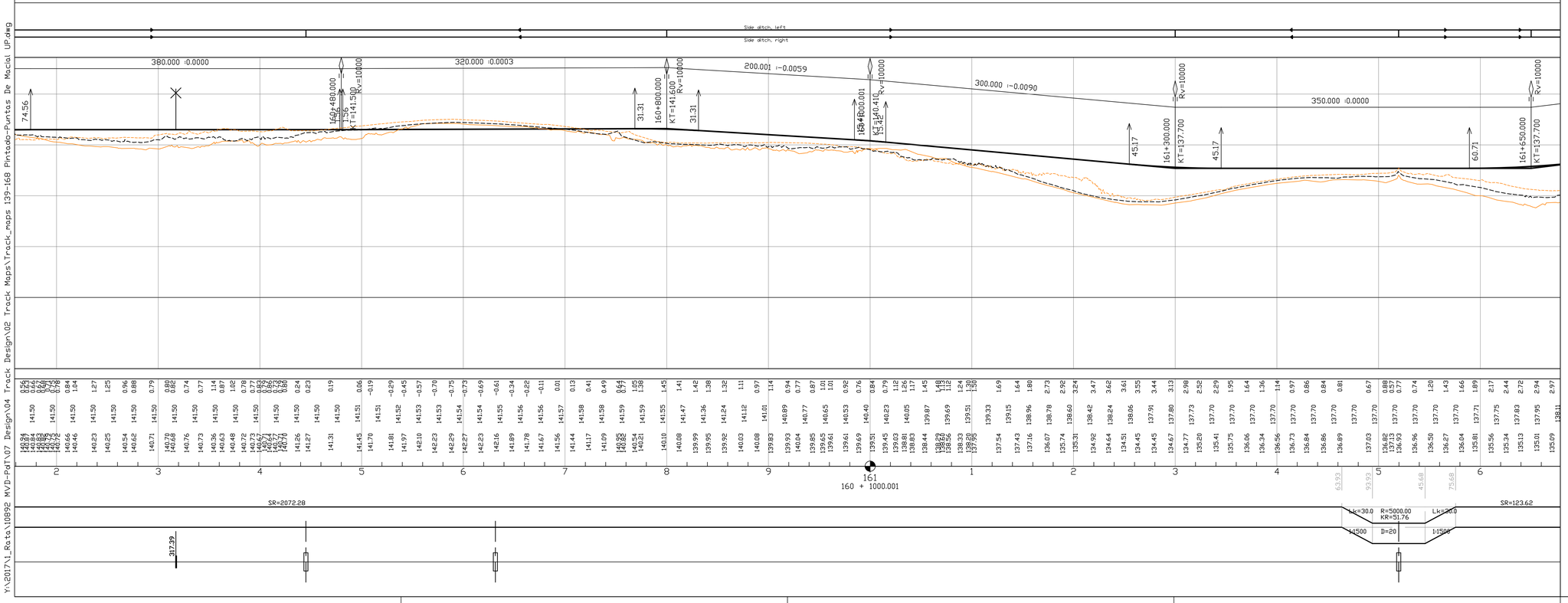

LEGEND, MAP

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- Limit of designed embankment fill, not including possible ditch
- Existing stations or passenger platforms
- New passenger platforms
- Symbols
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  - CXXX — Culvert
  - Level crossing
  - LCXXX
- Track alignment with design geometry figures
  - R= curve radius (m)
  - KR= length of curve (m)
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  - Rv= radius of vertical curve
  - K= elevation
  - TG= lenght of tangent
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  - y. 2017= year of investigation
  - TR02= point number

LEGEND, PROFILE

- Vertical railway alignment
  (S=radius of vertical curve, KT=elevation point)
- Ground surface
- Ground elevation on the left side of track centre line (-20m) and on the right side of track centre line (+20m)
- Culvert location (elevation will be designed in detailed design phase)
- Level crossing
- Overpass bridge, railway or underpass bridge
- Elevation figures
  - Difference between existing ground and designed track elevation
  - Designed track elevation (the running surface of the rail)
  - Existing ground elevation
- Km stationing
- Horizontal alignment, schematic
  - SR= length of straight line (m)
  - R= curve radius (m)
  - KR= length of curve (m)
  - D= track cant (mm)
  - Lk= length of transition curve (m)

Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Supplier: VR TRACK

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 160+0200 - 161+0600

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200

Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height

Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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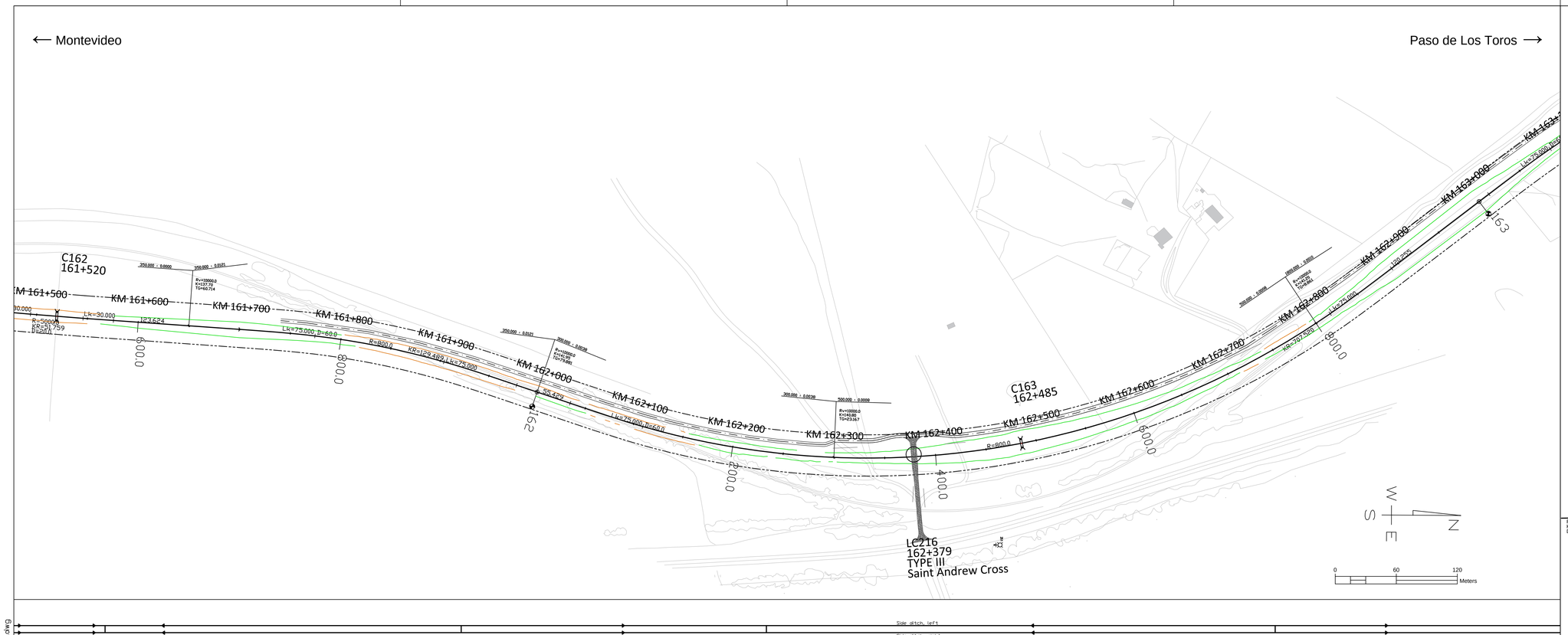

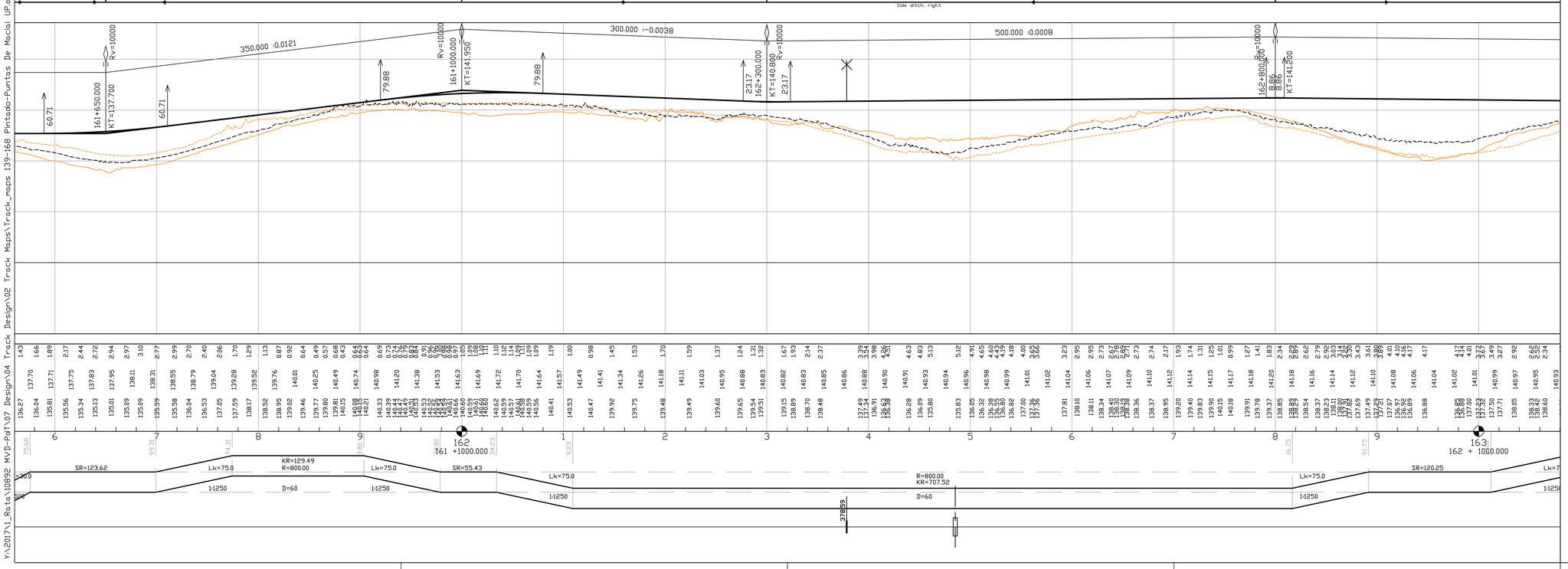

LEGEND, MAP

- New railway alignment
- Existing railway alignment (not in the Railway Project scope)
- Railway Area borderline
- Secondary Side Tracks - Horizontal geometry pre-designed (Secondary side tracks and their switches will be designed and constructed based on Appendix Q)
- Removal track
- Street or road modification area in level crossings or underpasses/flyovers
- Modification needed to the property access
- Affected parallel roads and streets and maintenance roads
- Road closing down
- Limit of designed soil cut (open cut or cut with a retaining wall)
- Limit of designed embankment fill, not including possible ditch
- Existing stations or passenger platforms
- New passenger platforms

Symbols

BXXX BXXX — Railway bridge or underpass, Flyover

CXXX — Culvert

Level crossing

LCXXX

Track alignment with design geometry figures

R= curve radius (m)
KR= length of curve (m)
D= track cant (mm)
Lk= length of transition curve (m)
Rv= radius of vertical curve
K= elevation
TG= lenght of tangent
123.345= length of straight line (m)

SPT-sounding, terminated at cobble, boulder, or bedrock contact.
y. 2016= year of investigation, location of 2016 soundings not accurate
1, 217= point number

Disturbed Sample
y. 2017= year of investigation
TR02= point number

LEGEND, PROFILE

Vertical railway alignment
(S=radius of vertical curve, KT=elevation point)

Ground surface

Ground elevation on the left side of track centre line (-20m) and on the right side of track centre line (+20m)

Culvert location (elevation will be designed in detailed design phase)

Level crossing

Overpass bridge, railway or underpass bridge

Elevation figures

Difference between existing ground and designed track elevation

Designed track elevation (the running surface of the rail)

Existing ground elevation

Km stationing

Horizontal alignment, schematic

SR= length of straight line (m)
R= curve radius (m)
KR= length of curve (m)
D= track cant (mm)
Lk= length of transition curve (m)

Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Supplier: VR TRACK

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 161+0600 - 163+0000

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200
Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height
Railway line: Montevideo - Paso de Los Toros
Archive | Type | Number | Rev. | Sheet | Sheets total
- 116 195

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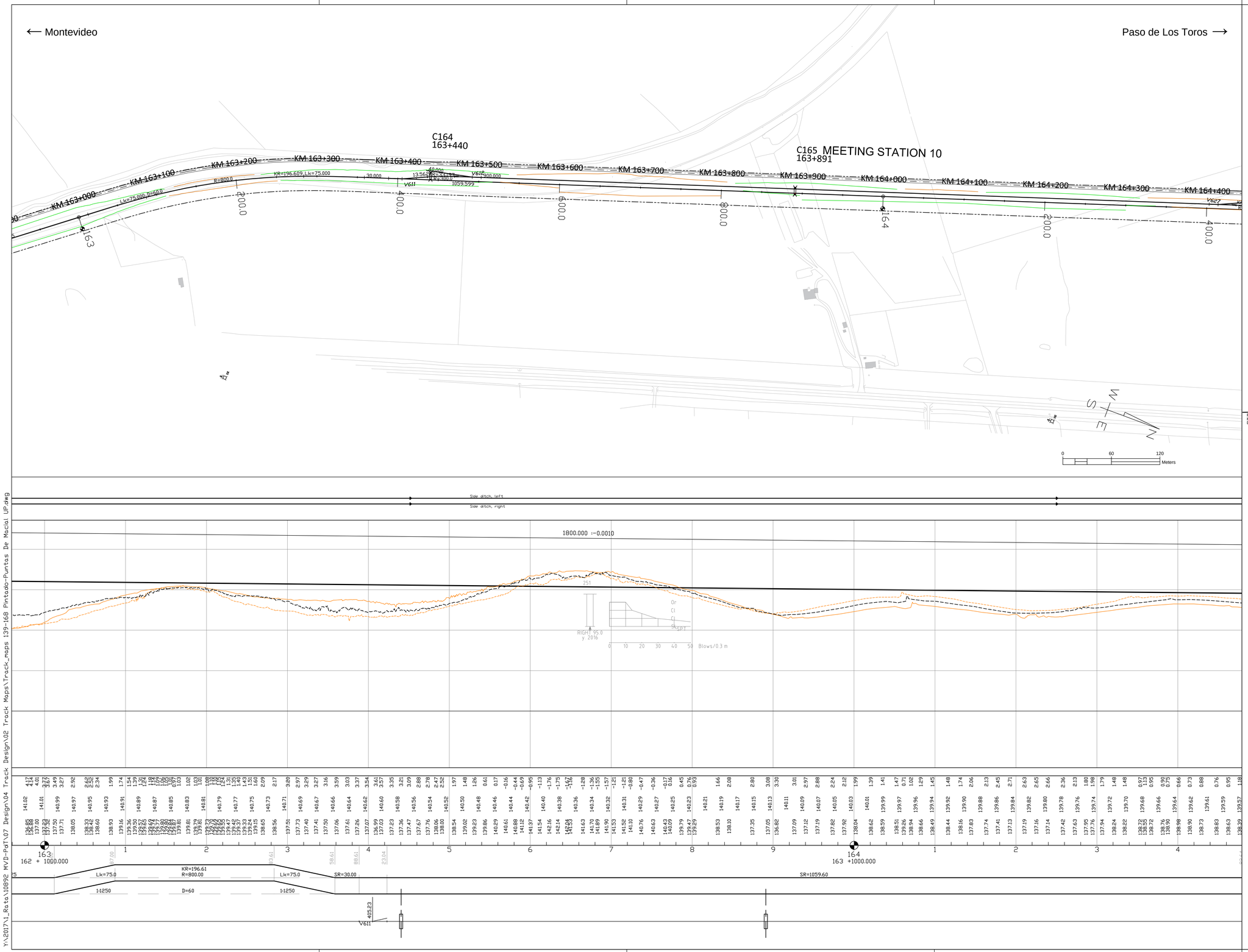

LEGEND, MAP

- New railway alignment
- Existing railway alignment (not in the Railway Project scope)
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- Road closing down
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- Limit of designed embankment fill, not including possible ditch
- Existing stations or passenger platforms
- New passenger platforms

Symbols

BXXX — Railway bridge or underpass, Flyover

CXXX — Culvert

LCXXX — Level crossing

Track alignment with design geometry figures

R= curve radius (m)
KR= length of curve (m)
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K= elevation
TG= lenght of tangent
123.345= length of straight line (m)

SPT-sounding, terminated at cobble, boulder, or bedrock contact.
y. 2016= year of investigation, location of 2016 soundings not accurate
1, 217= point number

Disturbed Sample
y. 2017= year of investigation
TR02= point number

LEGEND, PROFILE

Vertical railway alignment
(S=radius of vertical curve, KT=elevation point)

Ground surface

Ground elevation on the left side of track centre line (-20m) and on the right side of track centre line (+20m)

Culvert location (elevation will be designed in detailed design phase)

Level crossing

Overpass bridge, railway or underpass bridge

Elevation figures

Difference between existing ground and designed track elevation

Designed track elevation (the running surface of the rail)

Existing ground elevation

Km stationing

Horizontal alignment, schematic
SR= length of straight line (m)
R= curve radius (m)
KR= length of curve (m)
D= track cant (mm)
Lk= length of transition curve (m)

Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Supplier: VR TRACK

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 163+0000 - 164+0400

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200

Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height

Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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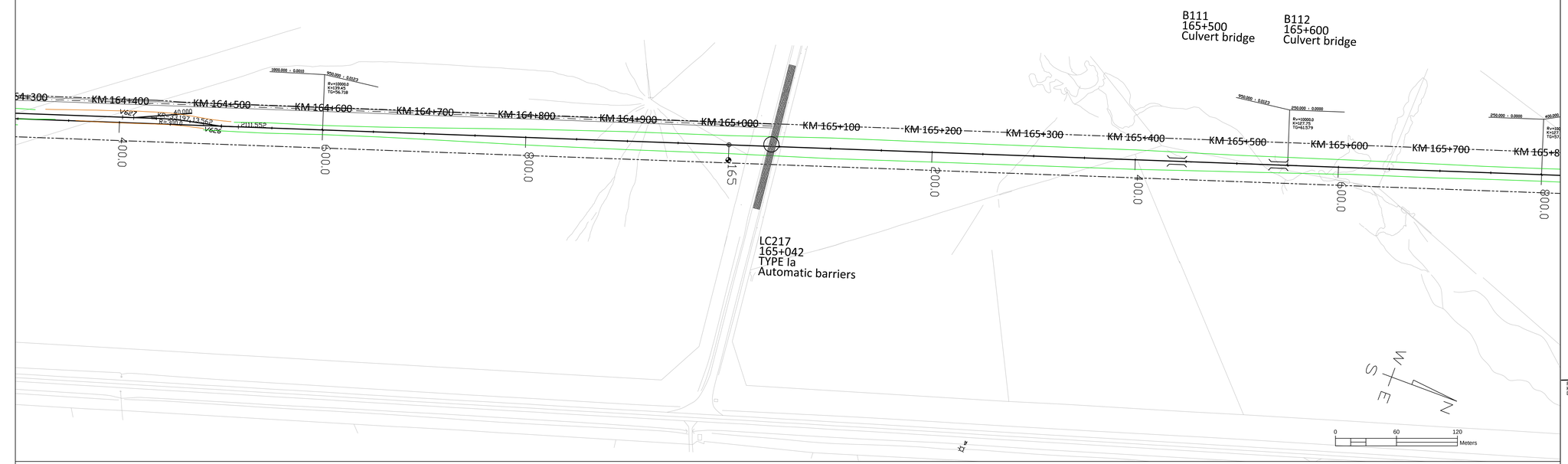
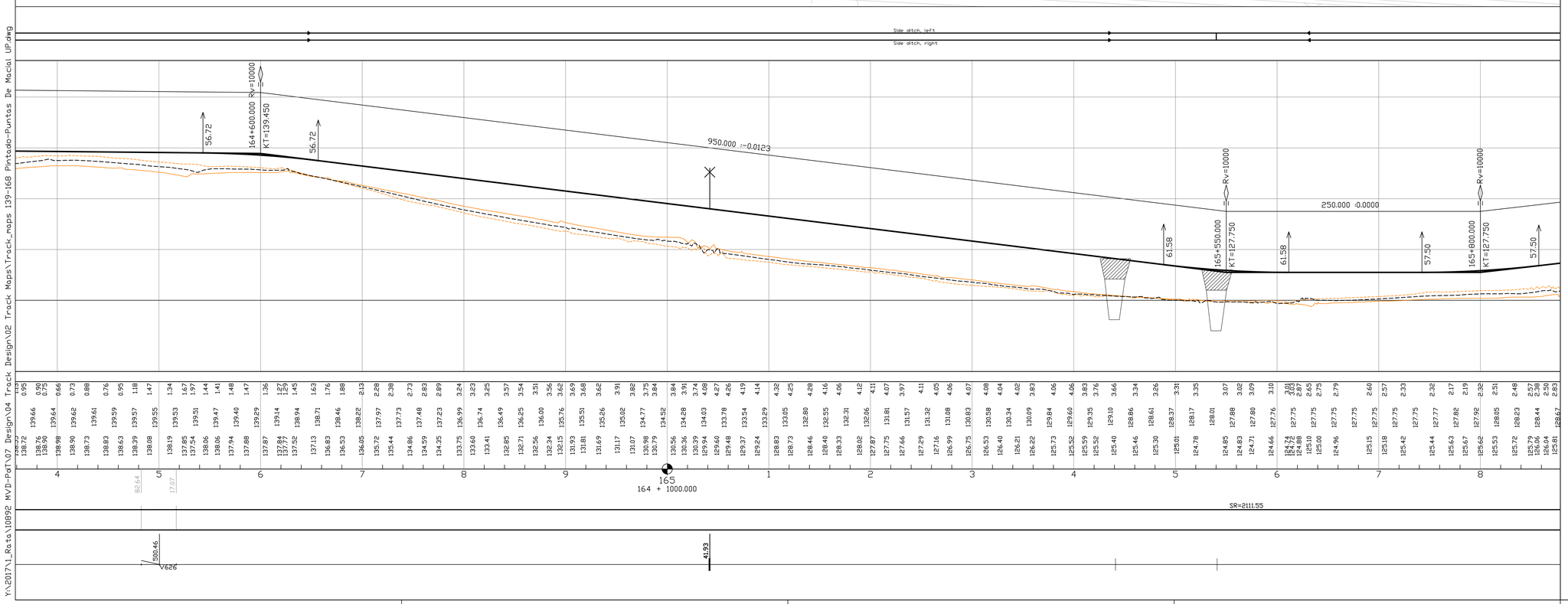
← Montevideo

Paso de Los Toros →





LEGEND, MAP

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- Existing stations or passenger platforms
- New passenger platforms
- Symbols
  - BXXX — Railway bridge or underpass, Flyover
  - CXXX — Culvert
  - Level crossing
  - LCXXX
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  - 1, 217= point number
- Disturbed Sample
  - y. 2017= year of investigation
  - TR02= point number

LEGEND, PROFILE

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- Horizontal alignment, schematic
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  - Lk= length of transition curve (m)

Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Supplier: VR TRACK

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 164+0400 - 165+0800

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200

Coordinate system: WGS 84 UTM 21 S, Local orthometric height
Elevation reference system

Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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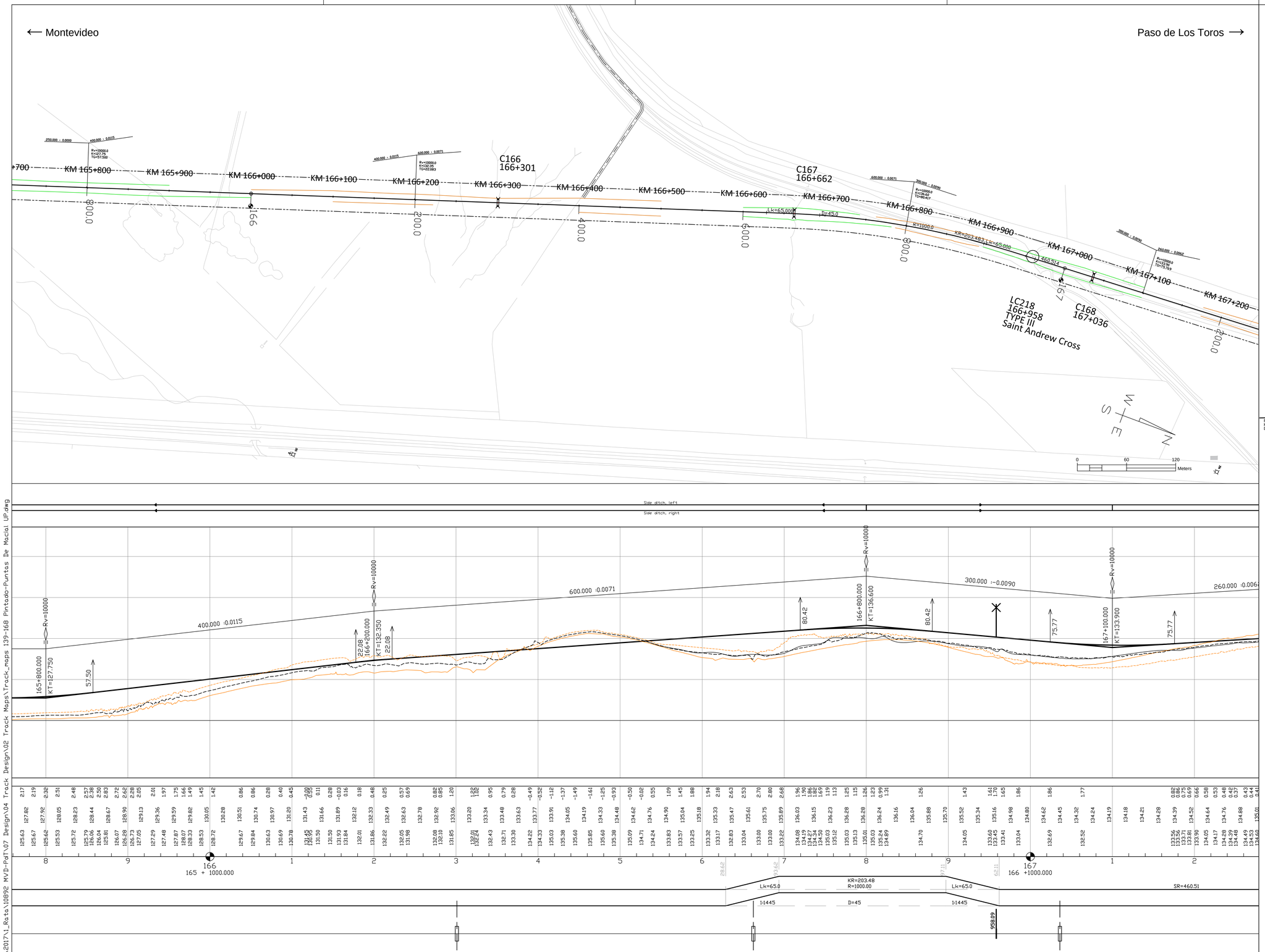

LEGEND, MAP

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LEGEND, PROFILE

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Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Supplier: VR TRACK

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 165+0800 - 167+0200

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200

Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height

Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
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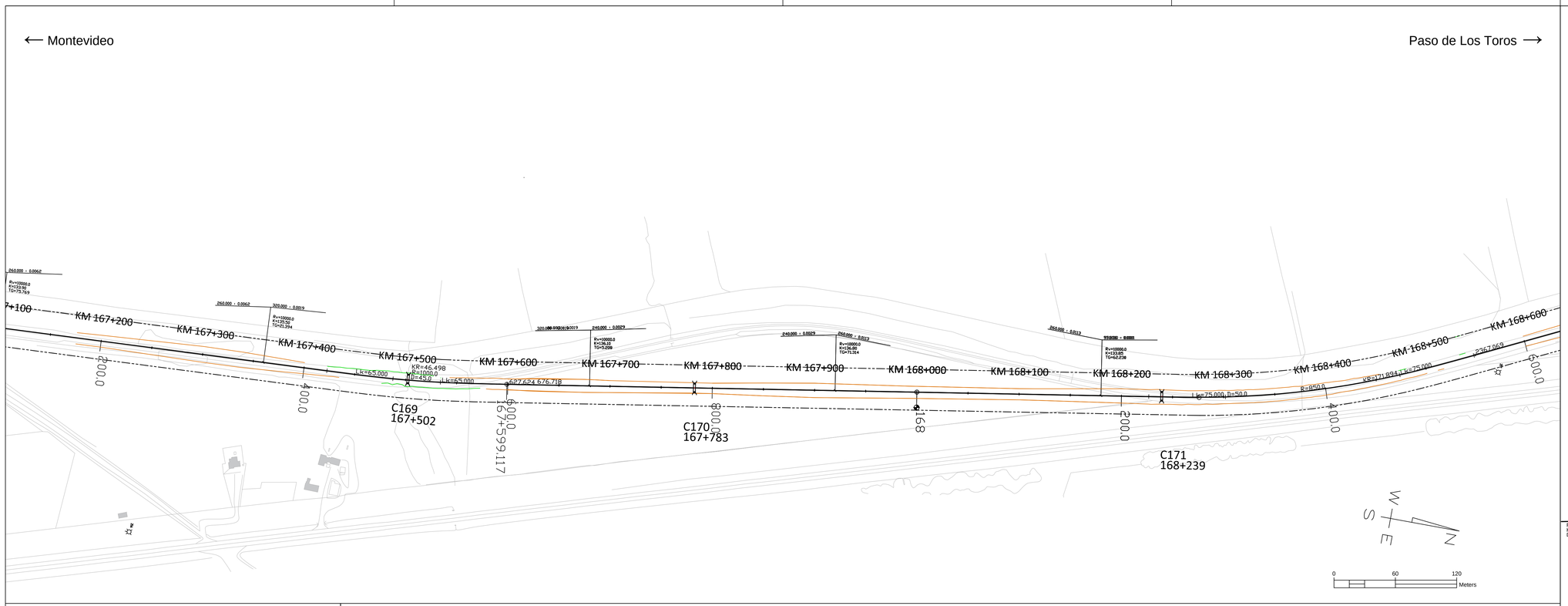

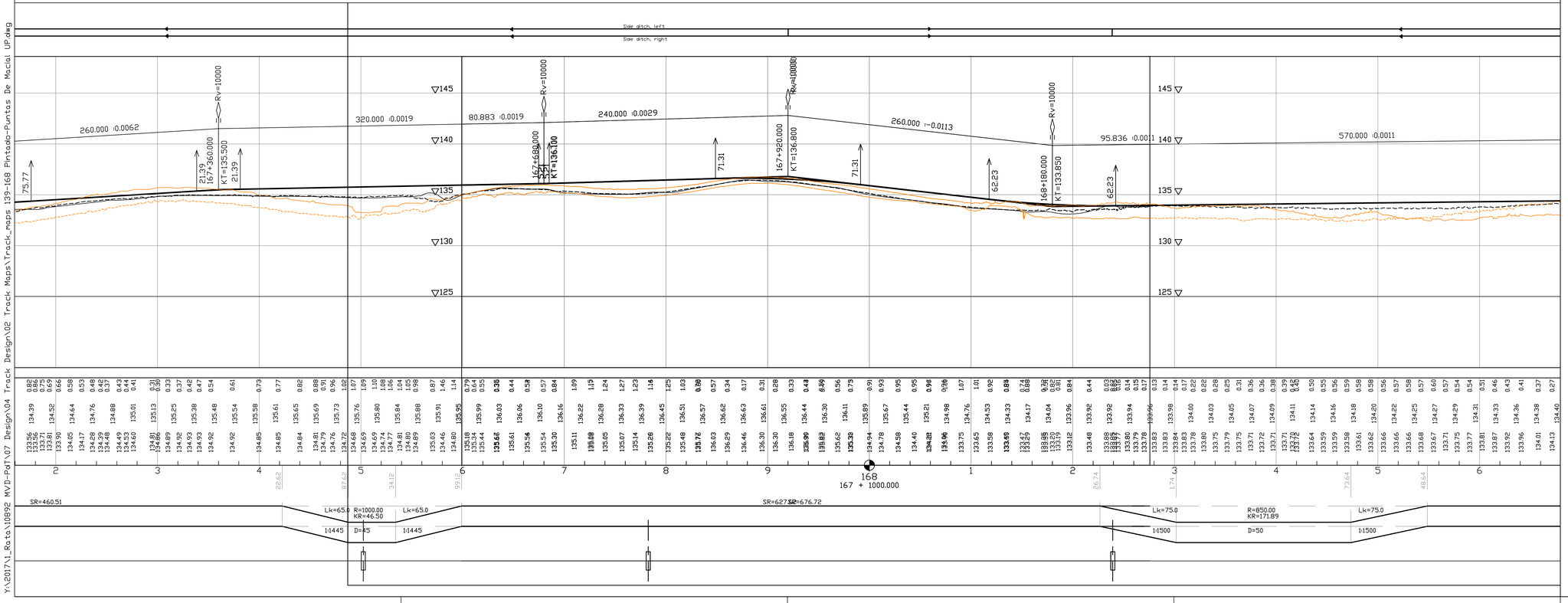

LEGEND, MAP

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LEGEND, PROFILE

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- Km stationing
- Horizontal alignment, schematic
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  - R= curve radius (m)
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  - D= track cant (mm)
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Version 15.12.2017

Revision	Explanation	Date	Designer	Date	Acceptor

Customer: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS

Supplier: VR TRACK

Project: Railway Project

Design phase: Pre-engineering, Phase 2

Content: Track map and profile

Km 167+0200 - 168+0600

Drawer	15.12.2017	UPa
Designer	15.12.2017	HMa / MLe
Supervisor	15.12.2017	SVi
Accept.		
Owner acc.		

Scale: map 1:2000, profile 1:2000 / 1:200

Coordinate system / Elevation reference system: WGS 84 UTM 21 S, Local orthometric height

Railway line: Montevideo - Paso de Los Toros

Archive	Type	Number	Rev.	Sheet	Sheets total
			-	120	195

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