

Rycroft Homes Ltd c/o Shaun O'Reilly,
Pinnacle Consulting Engineers,
Grosvenor Court,
67A Patrick Street,
Dun Laoghaire,
Co. Dublin

Uisce Éireann
Bosca OP 448
Oifig Sheachadta
na Cathrach Theas
Cathair Chorcaí

Irish Water
PO Box 448
South City
Delivery Office
Cork City

www.water.ie

12 July 2019

Re: Design Submission for Development at Brayton Park, Kilcock, Co. Kildare (the “Development”) (the “Design Submission”) / 1923439420.

Dear Shaun,

Many thanks for your recent Design Submission.

We have reviewed your proposal for the connection(s) at the Development. Based on the information provided, which included the documents outlined in Appendix A to this letter, Irish Water has no objection to your proposals.

This letter does not constitute an offer, in whole or in part, to provide a connection to any Irish Water infrastructure. Before you can connect to our network you must sign a connection agreement with Irish Water. This can be applied for by completing the connection application form at www.water.ie/connections. Irish Water's current charges for water and wastewater connections are set out in the Water Charges Plan as approved by the Commission for Regulation of Utilities (CRU) (https://www.cru.ie/document_group/irish-waters-water-charges-plan-2018/).

You the Customer (including any designers/contractors or other related parties appointed by you) is entirely responsible for the design and construction of all water and/or wastewater infrastructure within the Development which is necessary to facilitate connection(s) from the boundary of the Development to Irish Water's network(s) (the “**Self-Lay Works**”), as reflected in your Design Submission. Acceptance of the Design Submission by Irish Water does not, in any way, render Irish Water liable for any elements of the design and/or construction of the Self-Lay Works.

If you have any further questions, please contact your Irish Water Representative

Name: Dermot Phelan
Phone: 01 8925466
Email: dphelan@water.ie

Yours sincerely,



Maria O'Dwyer

Connections and Developer Services

Appendix A

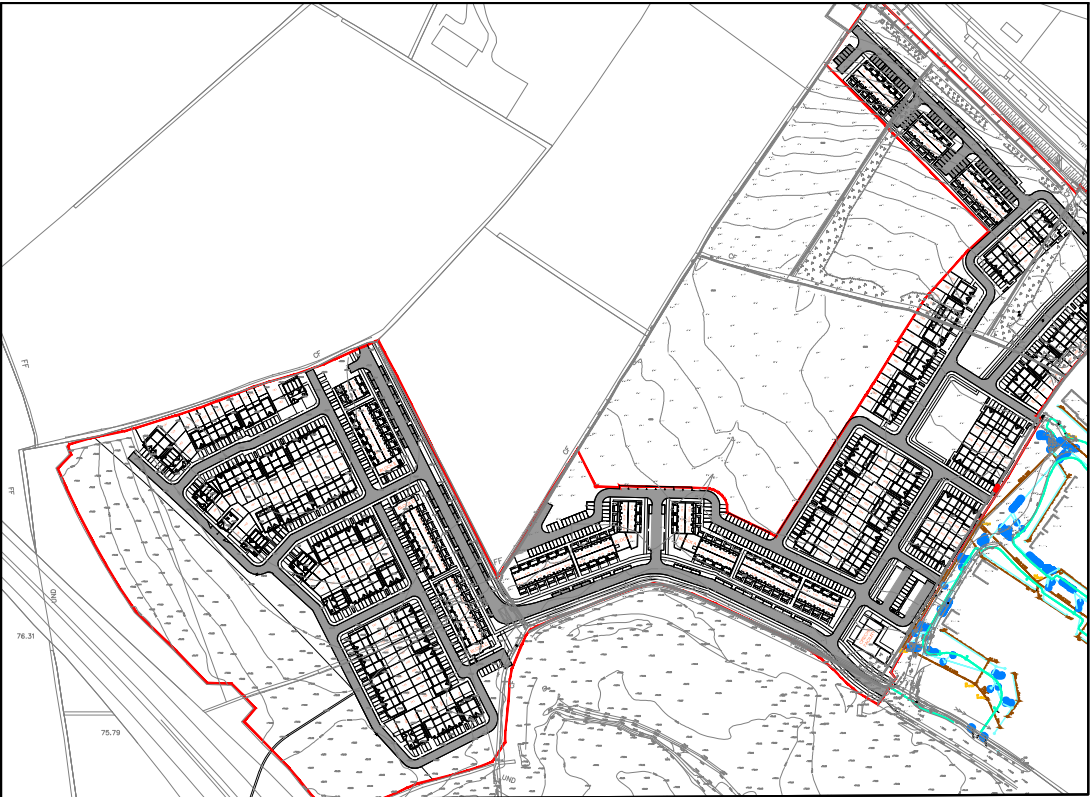
Document Title & Revision

- 200-3 Proposed Surface Water and Foul Sewer Layout Sheet 1 of 2
- 201-3 Proposed Surface Water and Foul Sewer Layout Sheet 2 of 2
- 202-4 Water Main and Levels Layout Sheet 1 of 2
- 203-4 Water Main and Levels Layout Sheet 2 of 2
- 210-1 Proposed Foul Sewer Longitudinal Sections Sheet 1
- 211-1 Proposed Foul Sewer Longitudinal Sections Sheet 2
- 212-1 Proposed Foul Sewer Longitudinal Sections Sheet 3

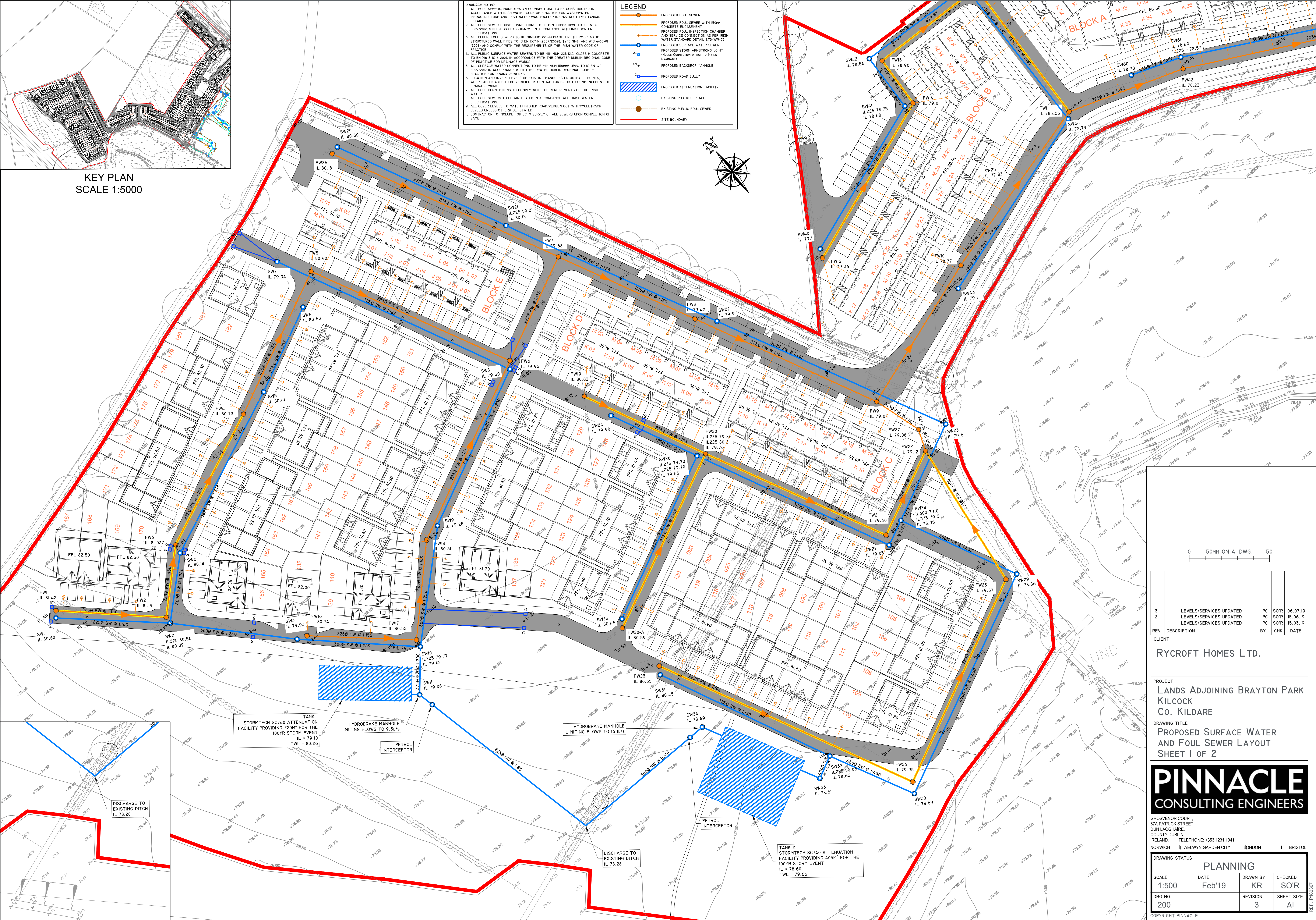
Standard Details/Code of Practice Exemption: N/A

For further information, visit www.water.ie/connections

Notwithstanding any matters listed above, the Customer (including any appointed designers/contractors, etc.) is entirely responsible for the design and construction of the Self-Lay Works. Acceptance of the Design Submission by Irish Water will not, in any way, render Irish Water liable for any elements of the design and/or construction of the Self-Lay Works.



KEY PLAN
SCALE 1:5000



LEGEND

- PROPOSED FOUL SEWER
- PROPOSED FOUL SEWER WITH 150mm CONCRETE ENCASUREMENT
- PROPOSED FOUL INSPECTION CHAMBER AND SERVICE CONNECTION AS PER IRISH WATER STANDARD DETAIL STD-WP-03
- PROPOSED SURFACE WATER SEWER
- PROPOSED STORY ARMSTRONG JOINT (HOUSE CONNECTION DIRECT TO MAIN DRAINAGE)
- PROPOSED BACKDROP MANHOLE
- PROPOSED ROAD GULLY
- PROPOSED ATTENUATION FACILITY
- PROPOSED PUBLIC SURFACE
- EXISTING PUBLIC FOUL SEWER
- SITE BOUNDARY

DRAINAGE NOTES:

1. ALL FOUL SEWERS, MANHOLES AND CONNECTIONS TO BE CONSTRUCTED IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE AND IRISH WATER WASTEWATER INFRASTRUCTURE STANDARD DETAILS.
2. ALL FOUL SEWER HOUSE CONNECTIONS TO BE MIN 100mm UPVC TO IS EN 1401 2009/2002. STIFFNESS CLASS BKN/M2 IN ACCORDANCE WITH IRISH WATER SPECIFICATIONS.
3. ALL PUBLIC FOUL SEWERS TO BE MINIMUM 225mm DIAMETER THERMOPLASTIC STRUCTURED WALL PIPES TO IS EN 1346 (2007/2009). TYPE SWR AND WIS 4-35-01 (2008) AND COMPLY WITH THE REQUIREMENTS OF THE IRISH WATER CODE OF PRACTICE.
4. ALL PUBLIC SURFACE WATER SEWERS TO BE MINIMUM 225 DIA. CLASS H CONCRETE TO EN196 8 IS 6 2004 IN ACCORDANCE WITH THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS.
5. ALL SURFACE WATER CONNECTIONS TO BE MINIMUM 150mm UPVC TO IS EN 1401 2009/2002 IN ACCORDANCE WITH THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS.
6. LOCATION AND INVERT LEVELS OF EXISTING MANHOLES OR OUTFALL POINTS, WHERE APPLICABLE TO BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCEMENT OF PRACTICE FOR DRAINAGE WORKS.
7. ALL FOUL CONNECTIONS TO COMPLY WITH THE REQUIREMENTS OF THE IRISH WATER.
8. ALL FOUL SEWERS TO BE AIR TESTED IN ACCORDANCE WITH IRISH WATER SPECIFICATIONS.
9. ALL COVER LEVELS TO MATCH FINISHED ROAD/VERGE/FOOTPATH/CYCLETRACK LEVELS UNLESS OTHERWISE STATED.
10. CONTRACTOR TO INCLUDE FOR CCTV SURVEY OF ALL SEWERS UPON COMPLETION OF SAME.

0 50MM ON A1 DWG. 50

3	LEVELS/SERVICES UPDATED	PC	SO'R	06.07.19
2	LEVELS/SERVICES UPDATED	PC	SO'R	15.06.19
1	LEVELS/SERVICES UPDATED	PC	SO'R	15.03.19
REV	DESCRIPTION	BY	CHK	DATE

CLIENT
RYCROFT HOMES LTD.

PROJECT
**LANDS ADJOINING BRAYTON PARK
KILCOCK
CO. KILDARE**

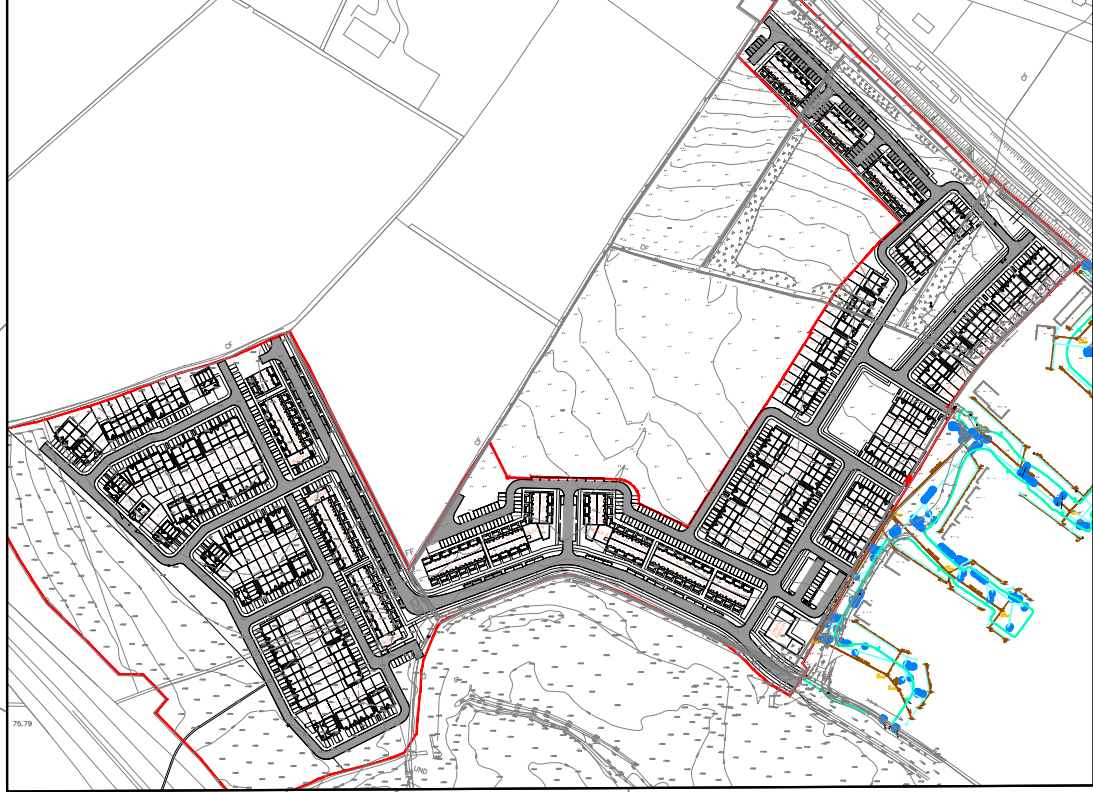
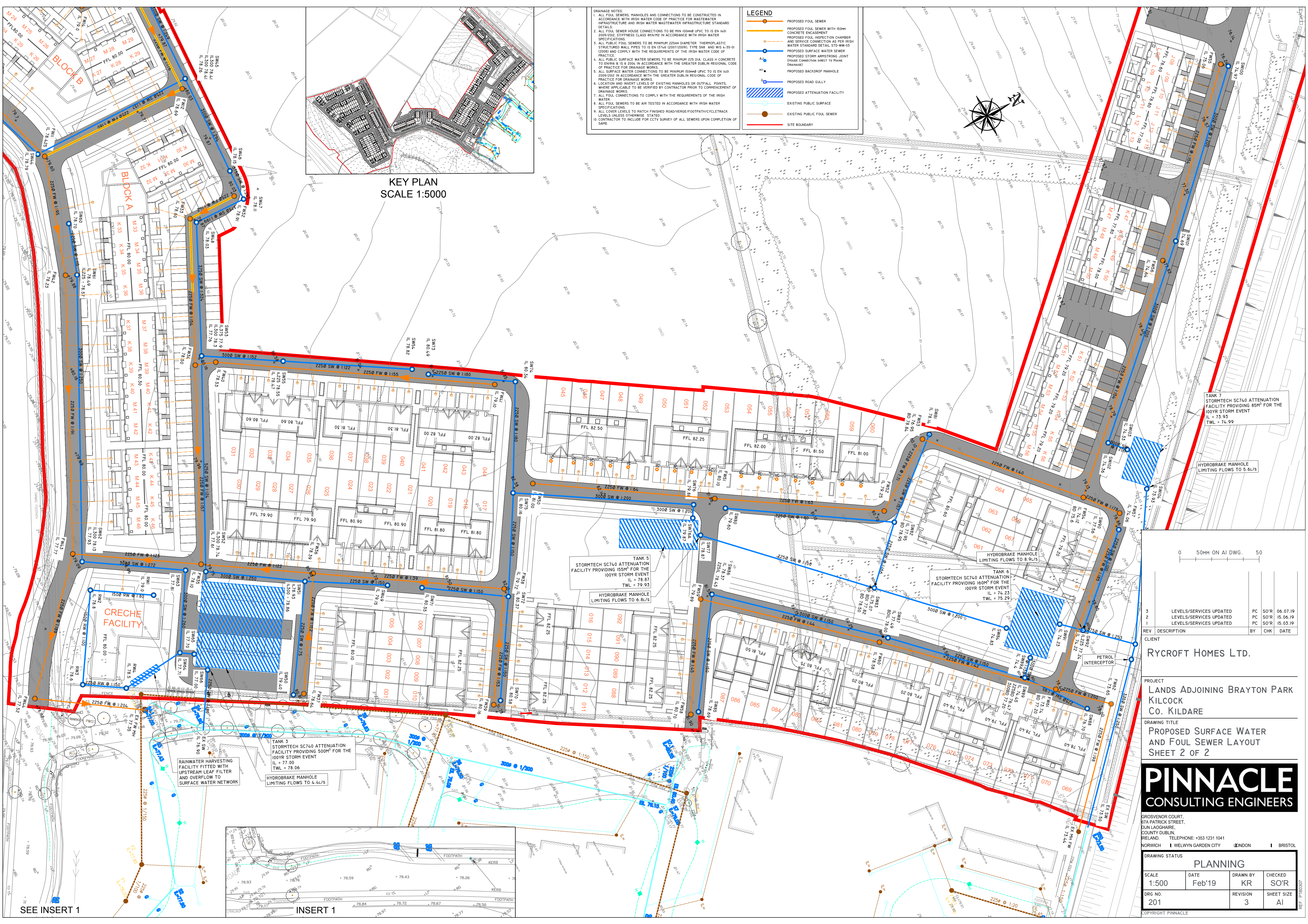
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**PROPOSED SURFACE WATER
AND FOUL SEWER LAYOUT
SHEET 1 OF 2**

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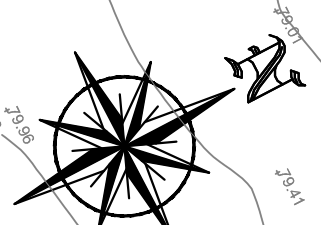
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DRAWING STATUS			
PLANNING			
SCALE 1:500	DATE Feb'19	DRAWN BY KR	CHECKED SO'R
DRG NO. 200	REVISION 3	SHEET SIZE A1	

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- LEGEND
- PROPOSED FOUL SEWER
 - PROPOSED FOUL SEWER WITH 150MM CONCRETE ENCASUREMENT
 - PROPOSED FOUL INSPECTION CHAMBER AND SERVICE CONNECTION AS PER IRISH WATER STANDARD DETAIL, STD-WW-03
 - PROPOSED SURFACE WATER SEWER
 - PROPOSED STORM ARMSTRONG JOINT (HOUSE CONNECTION DIRECT TO MAIN DRAINAGE)
 - PROPOSED BACKDROP MANHOLE
 - PROPOSED ROAD GULLY
 - PROPOSED ATTENUATION FACILITY
 - EXISTING PUBLIC SURFACE
 - EXISTING PUBLIC FOUL SEWER
 - SITE BOUNDARY



KEY PLAN
SCALE 1:5000

TANK 7
STORMTECH SC740 ATTENUATION
FACILITY PROVIDING 85M³ FOR THE
100YR STORM EVENT
IL = 75.95
TWL = 74.99

HYDROBRAKE MANHOLE
LIMITING FLOWS TO 5.6L/S

TANK 5
STORMTECH SC740 ATTENUATION
FACILITY PROVIDING 15M³ FOR THE
100YR STORM EVENT
IL = 78.87
TWL = 79.93

HYDROBRAKE MANHOLE
LIMITING FLOWS TO 6.8L/S

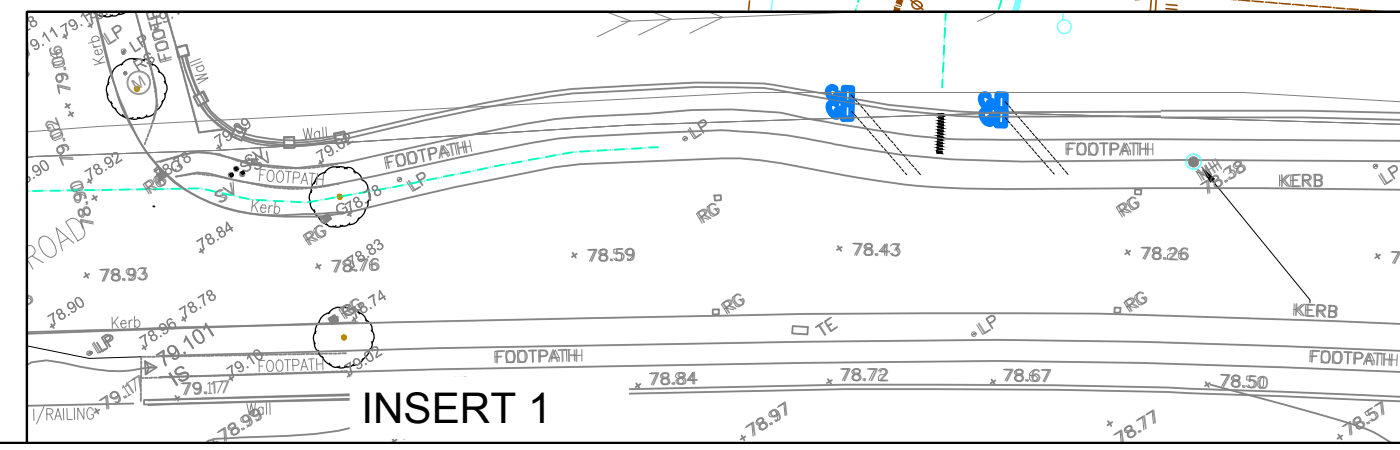
TANK 6
STORMTECH SC740 ATTENUATION
FACILITY PROVIDING 140M³ FOR THE
100YR STORM EVENT
IL = 74.23
TWL = 75.29

HYDROBRAKE MANHOLE
LIMITING FLOWS TO 8.9L/S

RAINWATER HARVESTING
FACILITY FITTED WITH
UPSTREAM LEAF FILTER
AND OVERFLOW TO
SURFACE WATER NETWORK

TANK 3
STORMTECH SC740 ATTENUATION
FACILITY PROVIDING 500M³ FOR THE
100YR STORM EVENT
IL = 77.60
TWL = 78.06

HYDROBRAKE MANHOLE
LIMITING FLOWS TO 4.4L/S



INSERT 1

SEE INSERT 1

3	LEVELS/SERVICES UPDATED	PC	SO'R	06.07.19
2	LEVELS/SERVICES UPDATED	PC	SO'R	15.06.19
1	LEVELS/SERVICES UPDATED	PC	SO'R	15.03.19
REV	DESCRIPTION	BY	CHK	DATE
CLIENT				

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PROJECT
LANDS ADJOINING BRAYTON PARK
KILCOCK
CO. KILDARE

DRAWING TITLE
PROPOSED SURFACE WATER
AND FOUL SEWER LAYOUT
SHEET 2 OF 2

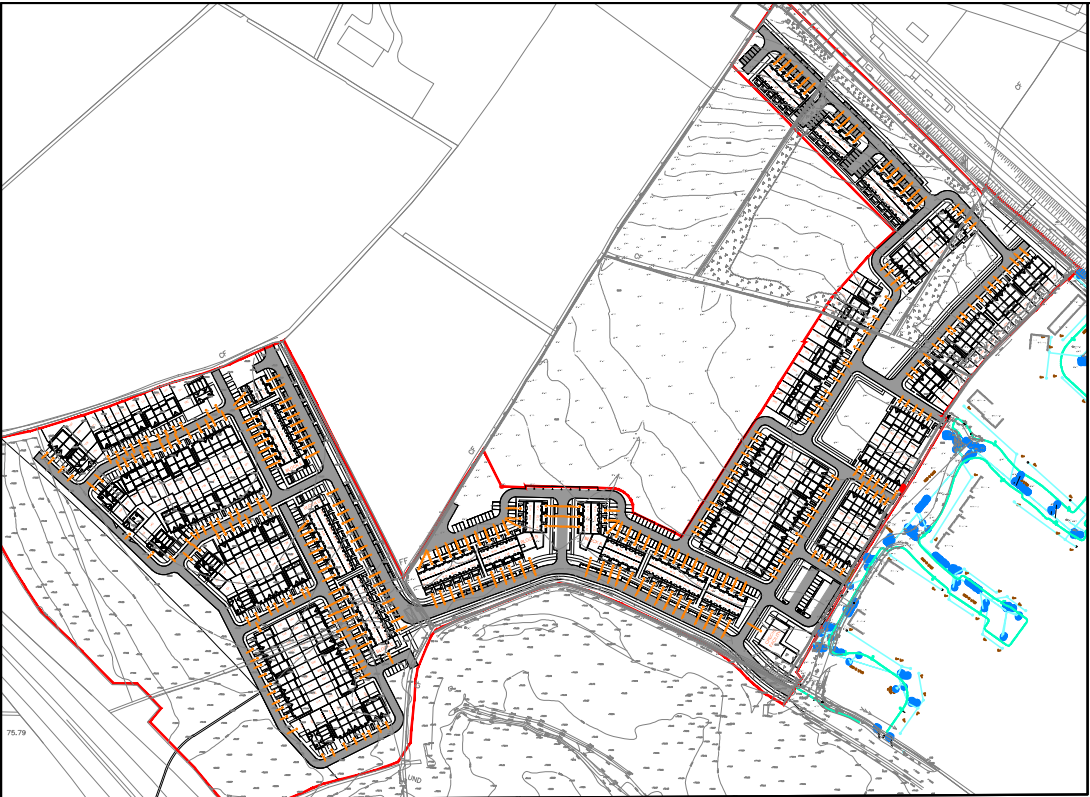
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PLANNING			
SCALE 1:500	DATE Feb'19	DRAWN BY KR	CHECKED SO'R
DRG NO. 201		REVISION 3	SHEET SIZE A1
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REF: 6190707



KEY PLAN
SCALE 1:5000



050MM ON A1 DWG.50

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2	LEVELS/SERVICES UPDATED	PC	SO'R	15.03.19
1	FINISHED FLOOR LEVELS REVISED	KR	SO'R	11.09.18
REV	DESCRIPTION	BY	CHK	DATE

CLIENT
RYCROFT HOMES LTD.

PROJECT
LANDS ADJOINING BRAYTON PARK
KILCOCK
CO. KILDARE

DRAWING TITLE
WATERMAIN AND LEVELS LAYOUT
SHEET 1 OF 2

PINNACLE
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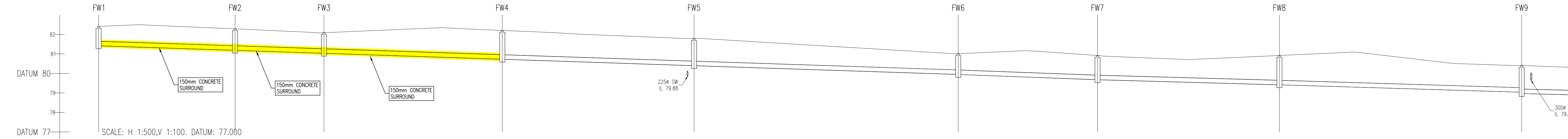
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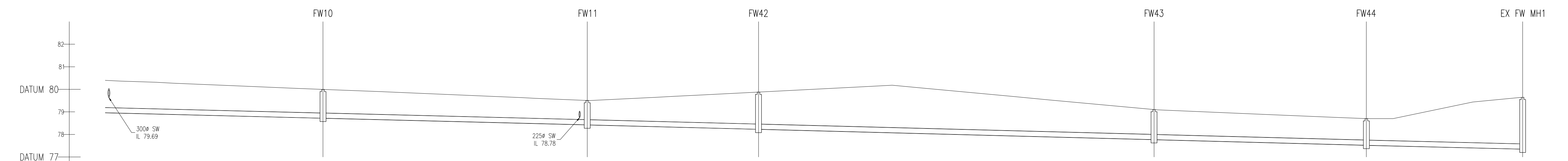
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PLANNING

SCALE 1:500	DATE 14.09.18	DRAWN BY KR	CHECKED SO'R
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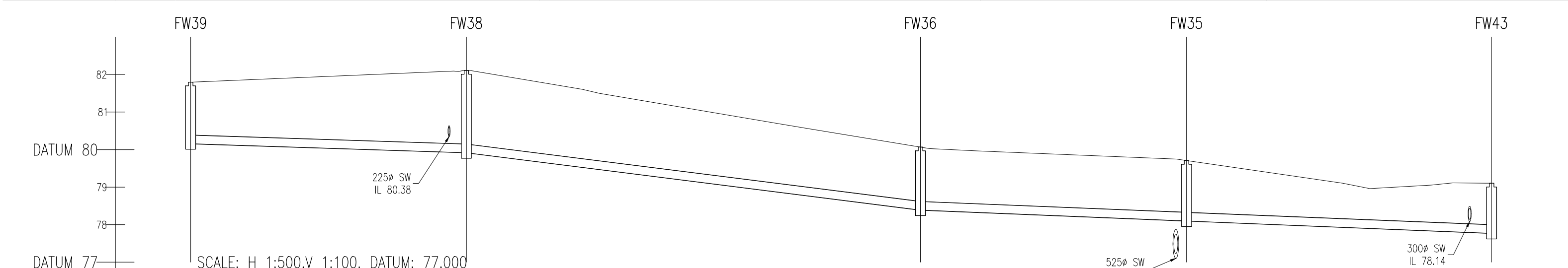
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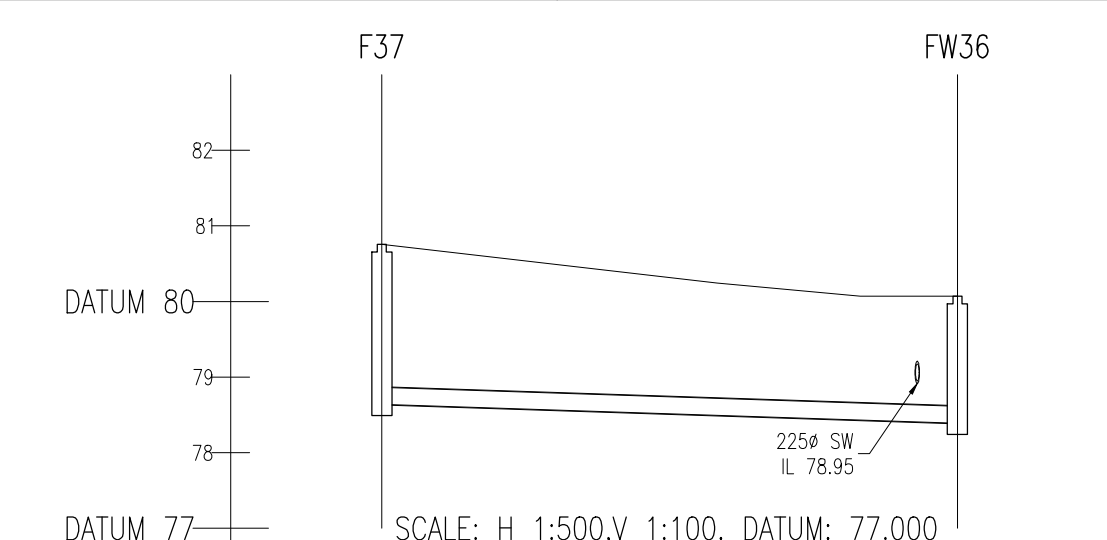
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INVERT LEVEL		81.420		81.190	81.190	82.290											
DEPTH (m)		0.680		1.100			81.037	82.091									
DISTANCE (m)			35.10		22.87				45.86			49.33			67.94		
PIPE SLOPE			1:153		1:149				1:149				1:151			1:133	
PIPE SIZE			225mm		225mm				225mm				225mm			225mm	



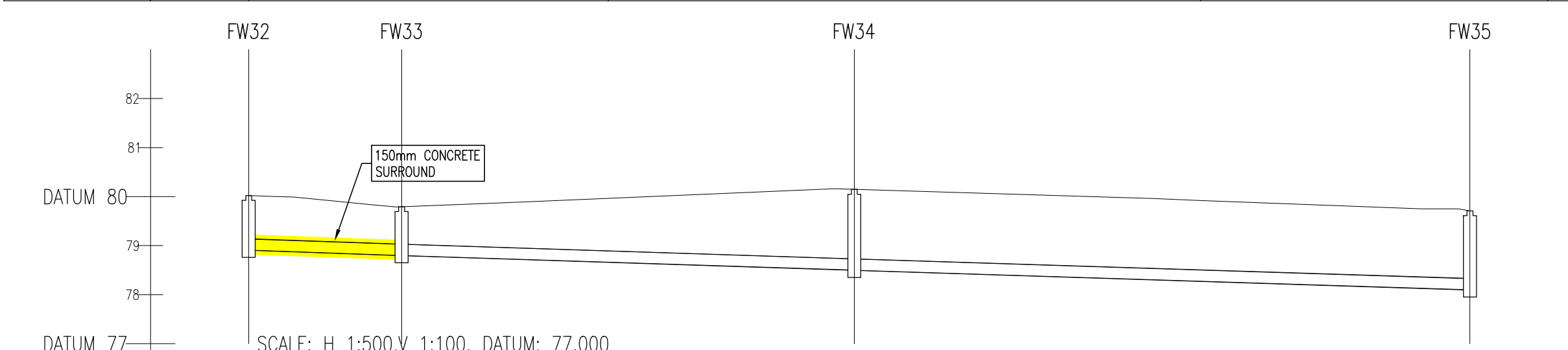
COVER LEVEL																	
INVERT LEVEL																	
DEPTH (m)																	
DISTANCE (m)			49.99														
PIPE SLOPE			1:200														
PIPE SIZE			225mm														



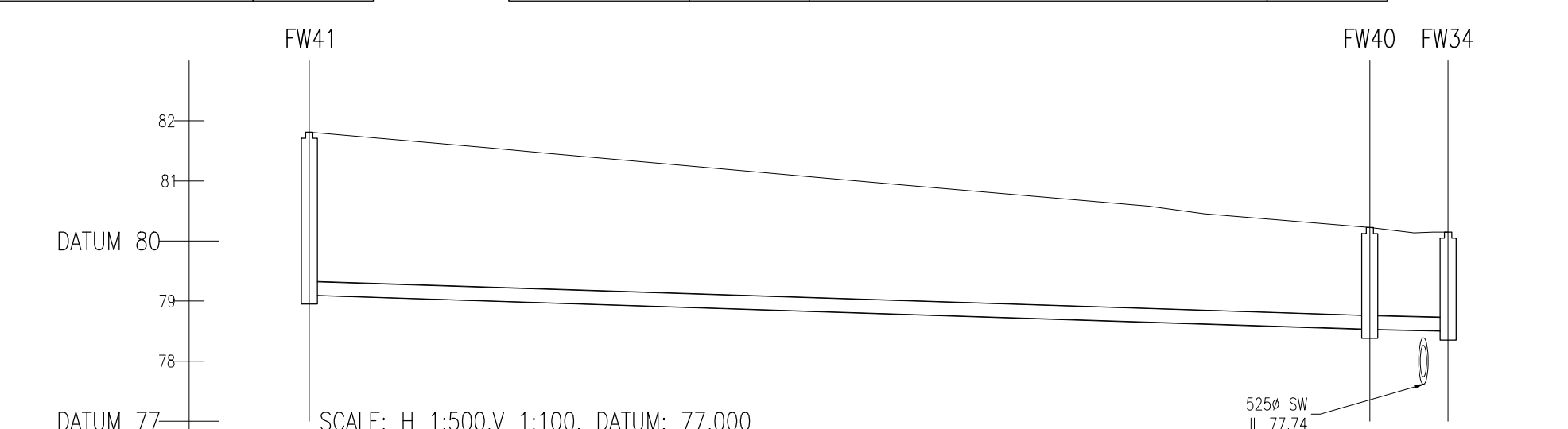
COVER LEVEL																	
INVERT LEVEL																	
DEPTH (m)																	
DISTANCE (m)			36.68														
PIPE SLOPE			1:153														
PIPE SIZE			225mm														



COVER LEVEL																	
INVERT LEVEL																	
DEPTH (m)																	
DISTANCE (m)																	
PIPE SLOPE																	
PIPE SIZE																	



COVER LEVEL																	
INVERT LEVEL																	
DEPTH (m)																	
DISTANCE (m)			15.60														
PIPE SLOPE			1:142														
PIPE SIZE			225mm														



COVER LEVEL																	
INVERT LEVEL																	
DEPTH (m)																	
DISTANCE (m)																	
PIPE SLOPE																	
PIPE SIZE																	



I	LEVELS/SERVICES UPDATED	PC	SO'R	06.07.19
REV	DESCRIPTION	BY	CHK	DATE

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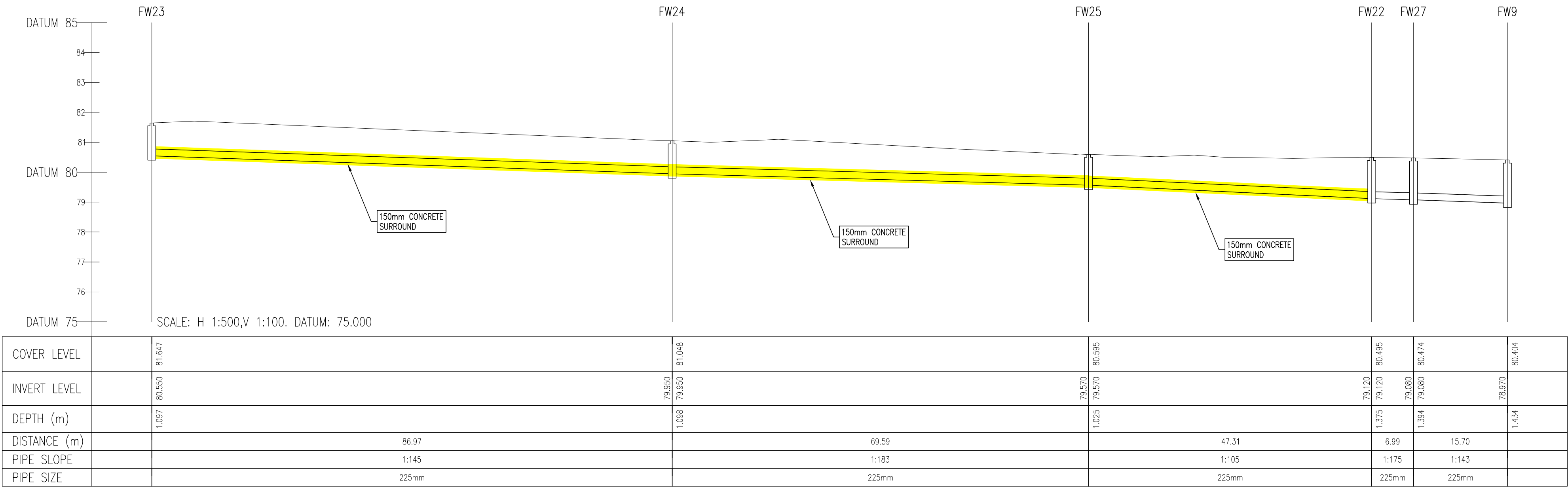
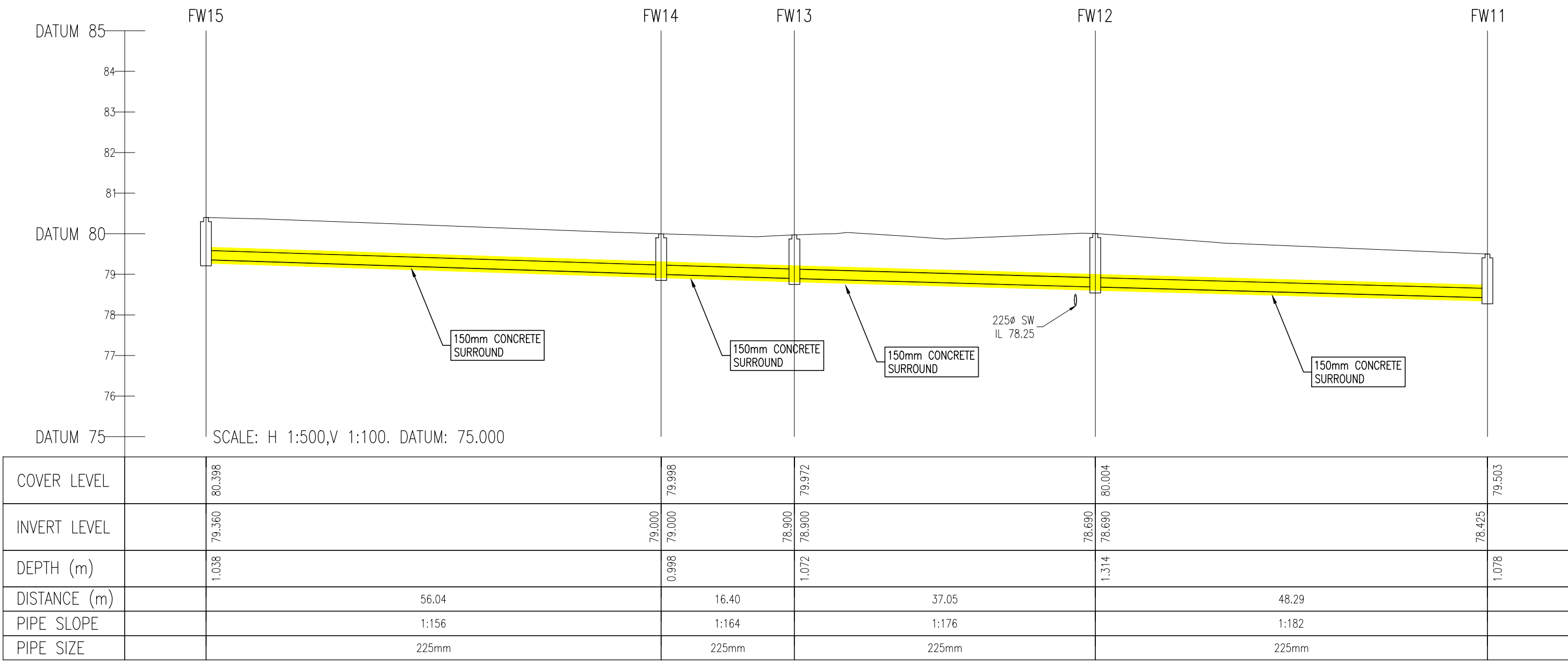
PROJECT
LANDS ADJOINING BRAYTON PARK
KILCOCK
CO. KILDARE

DRAWING TITLE
PROPOSED FOUL SEWER
LONGITUDINAL SECTIONS
SHEET I

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DRAWING STATUS	PLANNING		
SCALE	DATE	DRAWN BY	CHECKED
100/500	Feb'19	KR	SO'R
DRG NO.	REVISION	SHEET SIZE	
210	1	A1	



I	LEVELS/SERVICES UPDATED	PC	SO'R	06.07.19
REV	DESCRIPTION	BY	CHK	DATE
CLIENT				

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PROJECT
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KILCOCK
CO. KILDARE

DRAWING TITLE
PROPOSED FOUL SEWER
LONGITUDINAL SECTIONS
SHEET 2

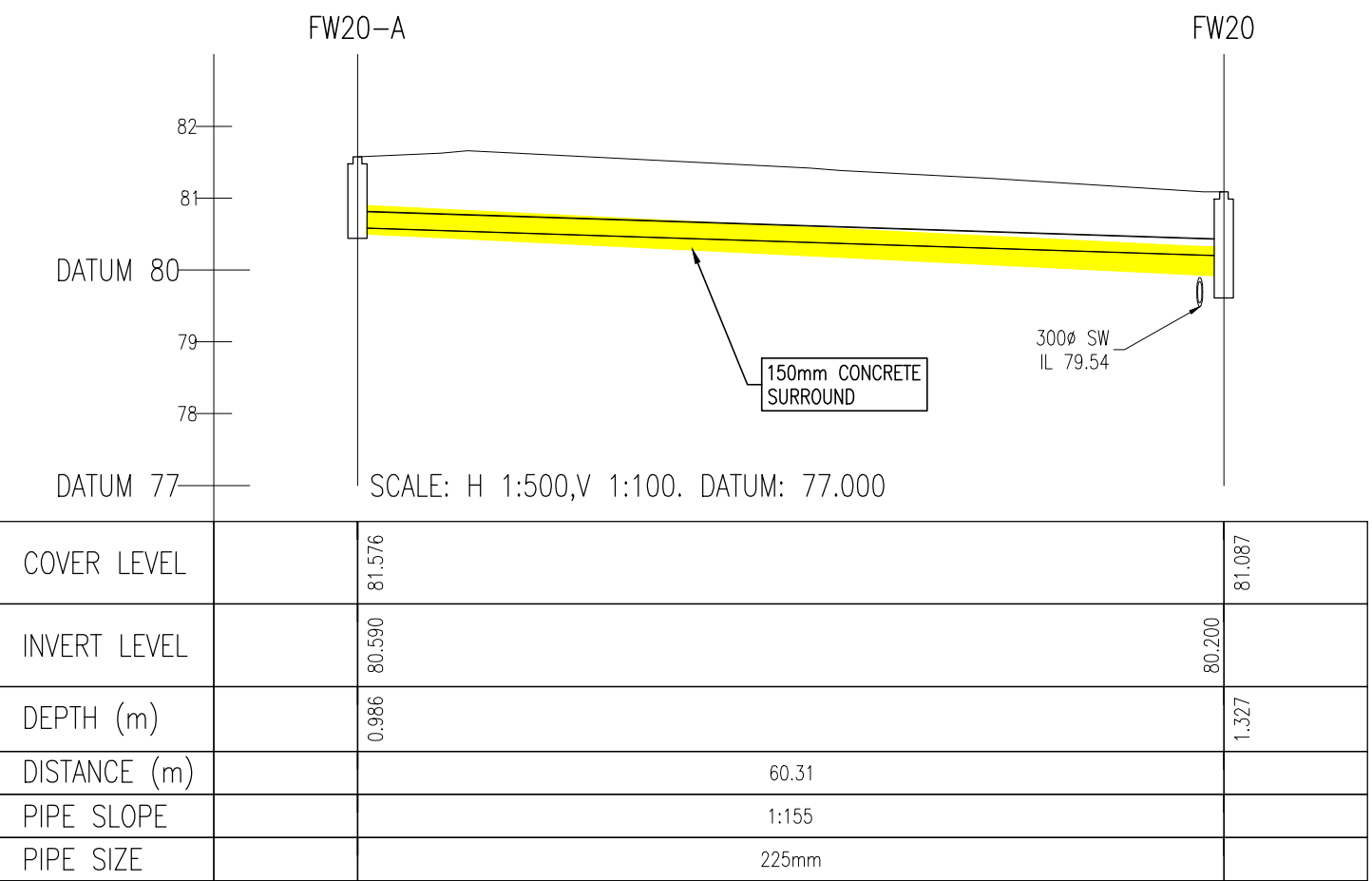
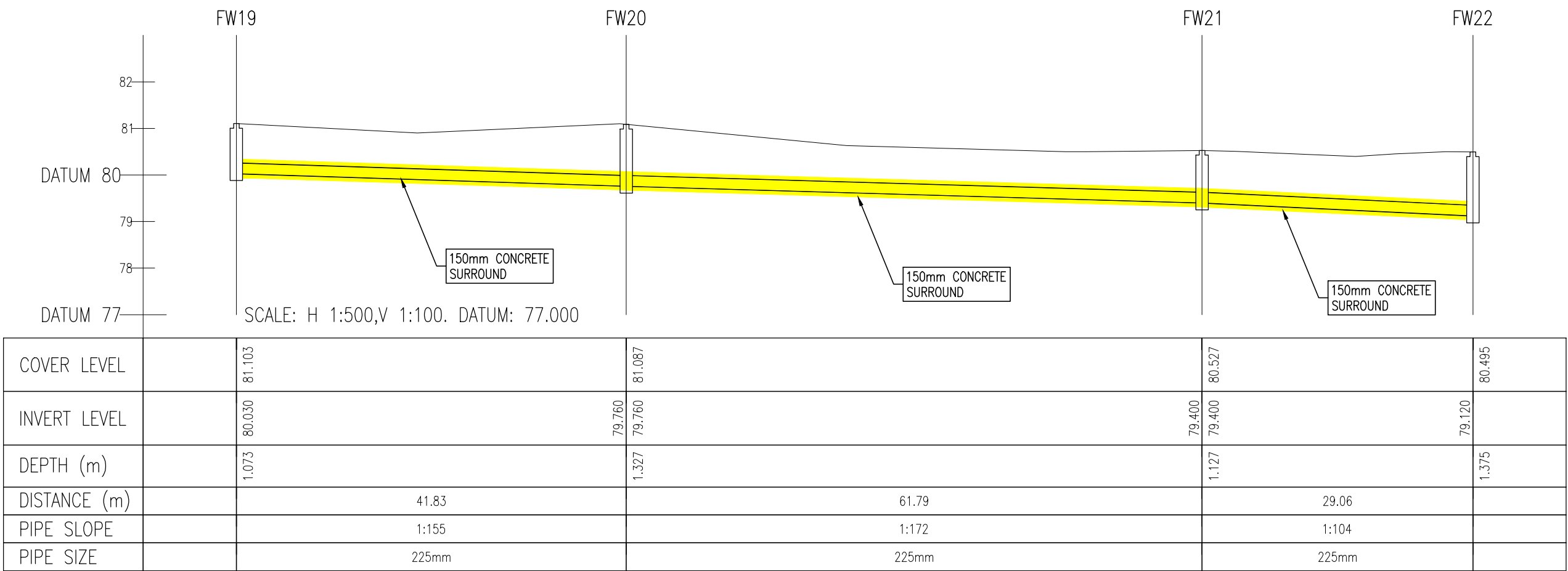
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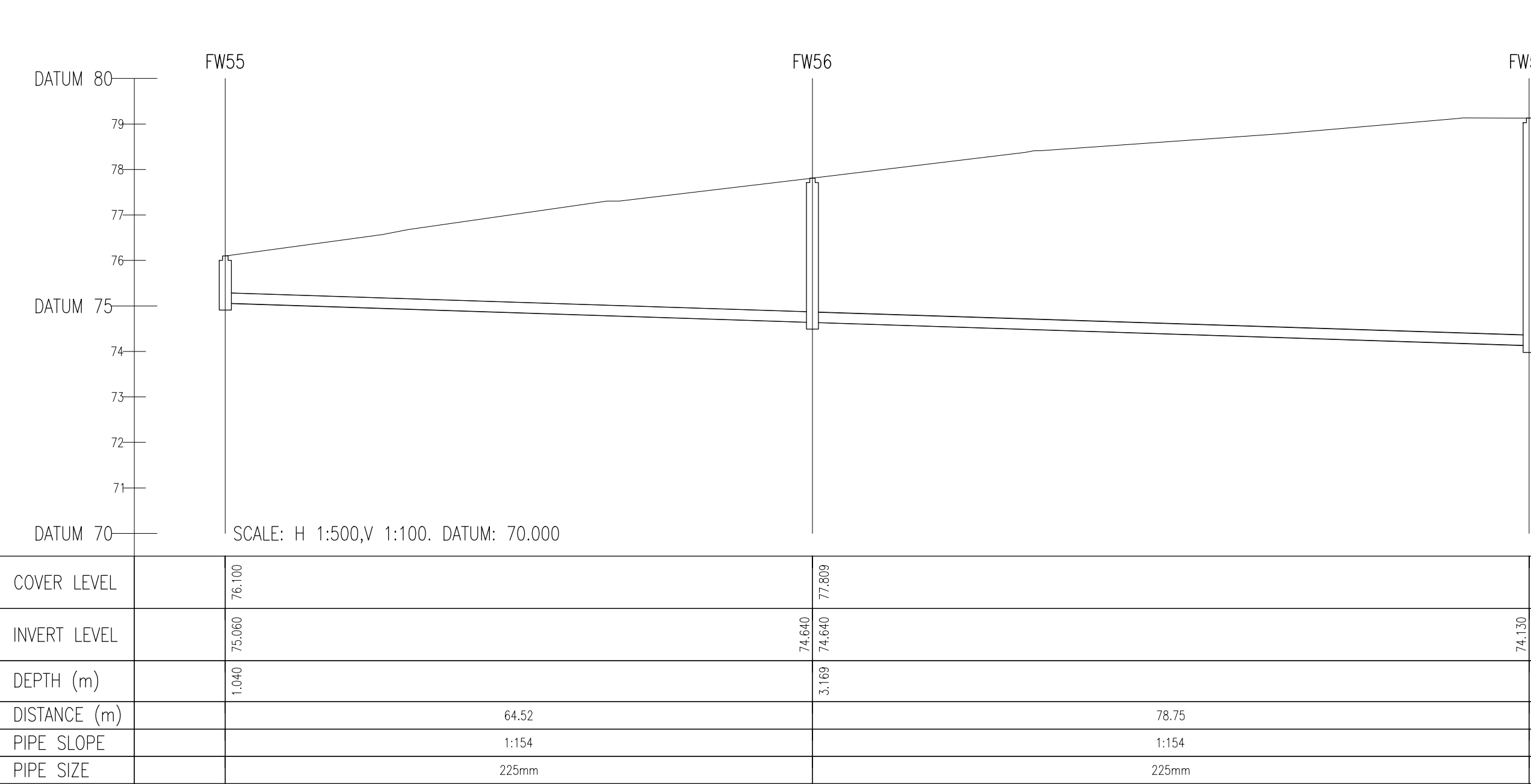
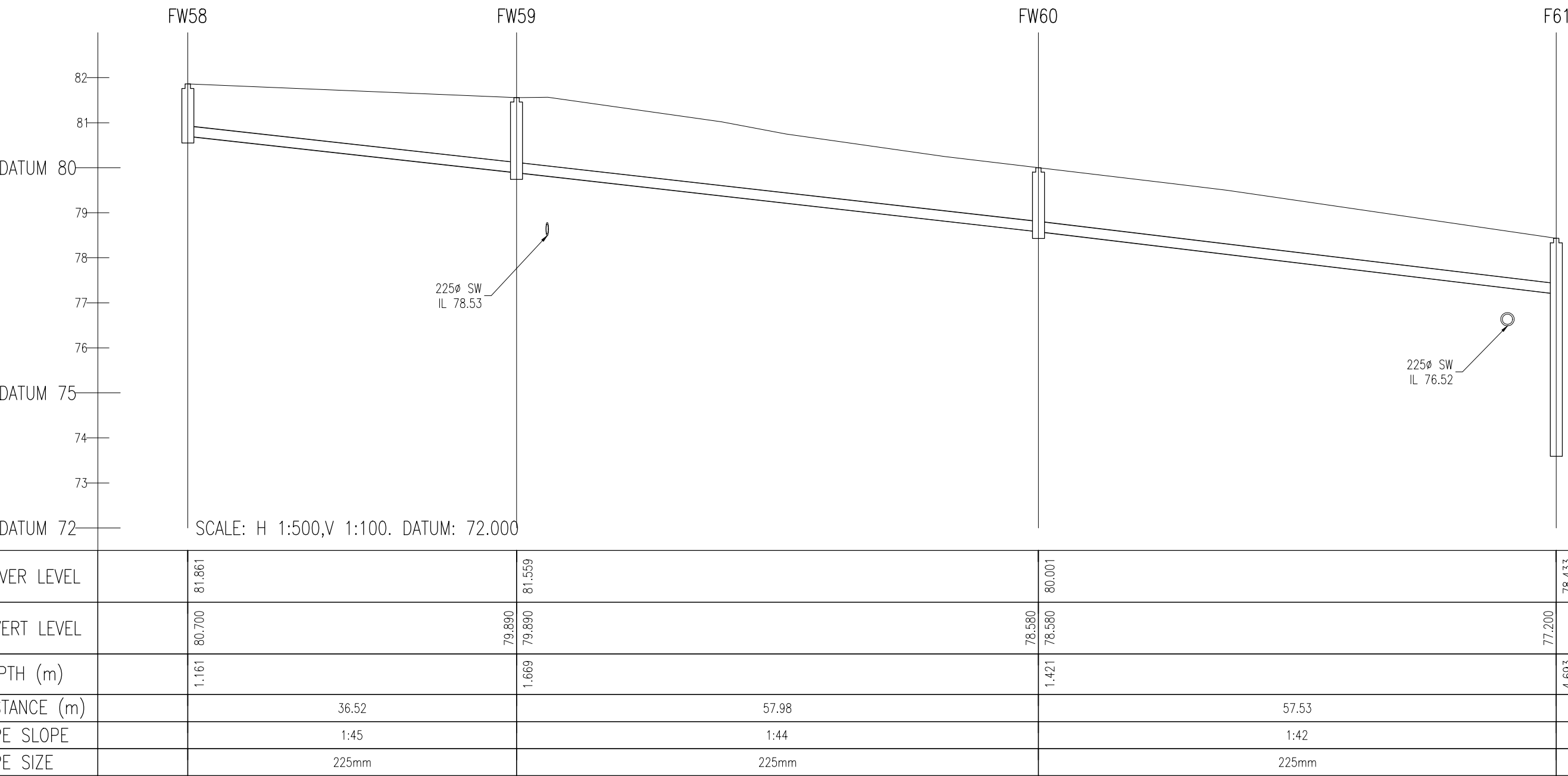
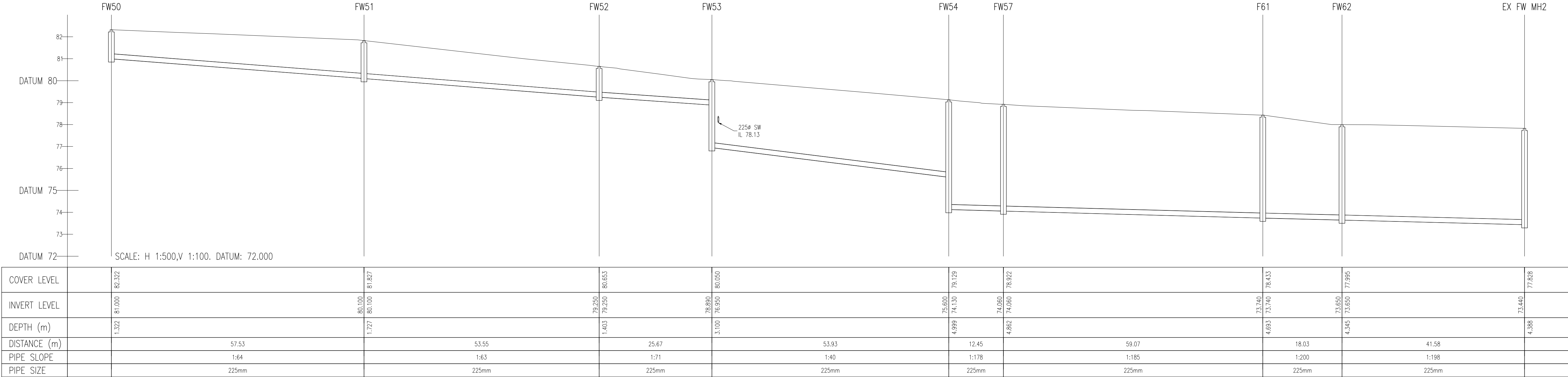
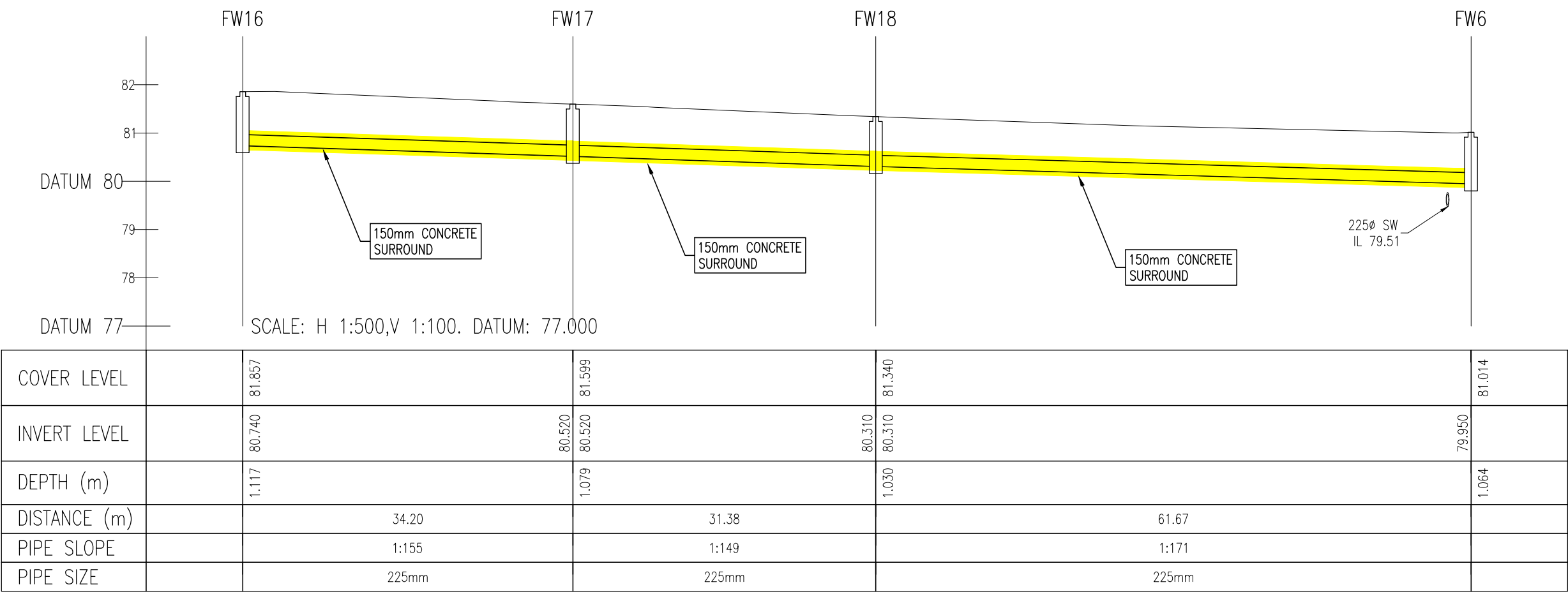
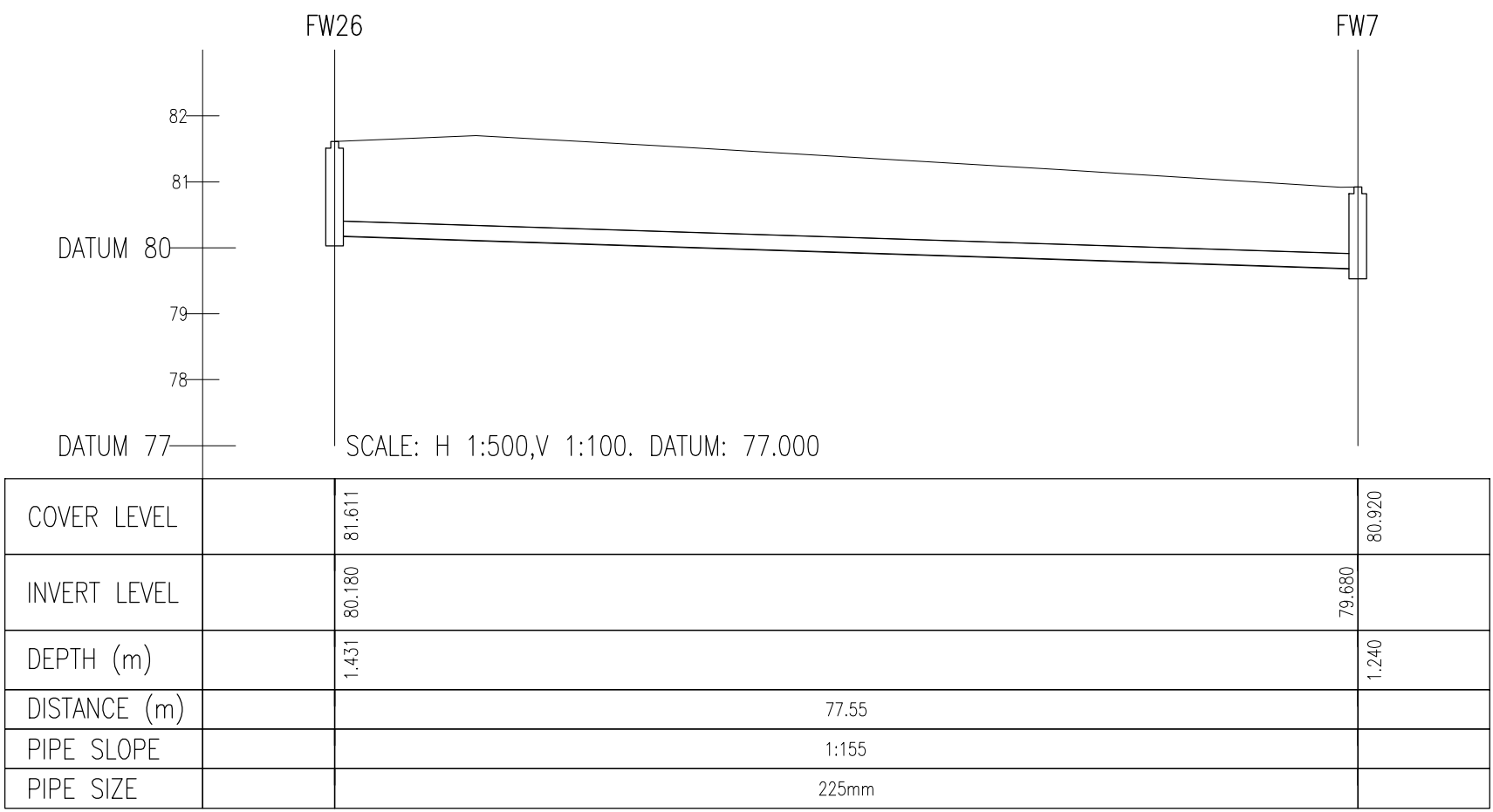
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211	1	A1	

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REF: P160307



I	LEVELS/SERVICES UPDATED	PC	SO'R	06.07.19
REV	DESCRIPTION	BY	CHK	DATE
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PROJECT
LANDS ADJOINING BRAYTON PARK
KILCOCK
CO. KILDARE

DRAWING TITLE
PROPOSED FOUL SEWER
LONGITUDINAL SECTIONS
SHEET 3

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DRAWING STATUS			
PLANNING			
SCALE	DATE	DRAWN BY	CHECKED
100/500	Feb'19	KR	SO'R
DRG NO.	REVISION	SHEET SIZE	
212	1	A1	

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