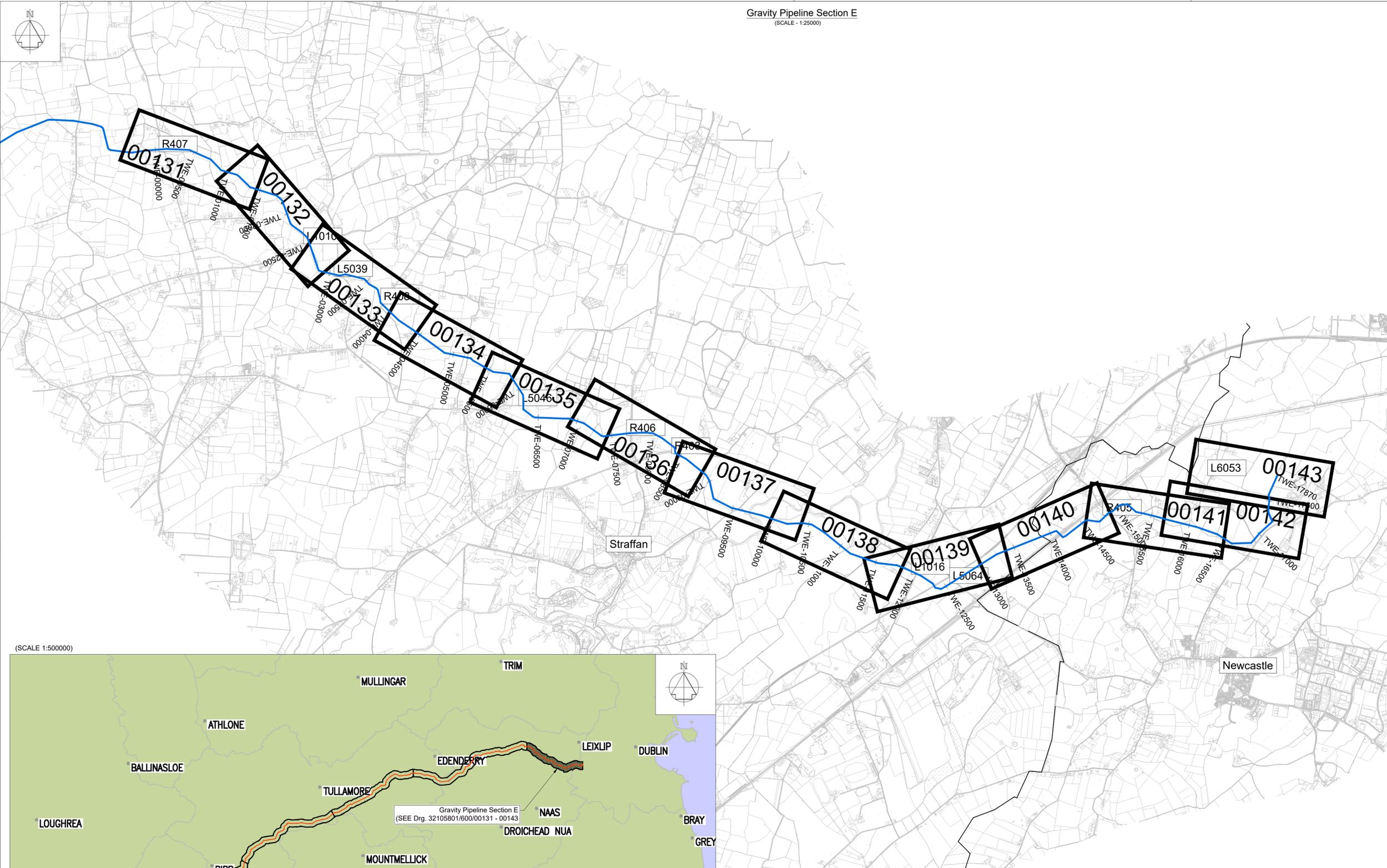


Gravity Pipeline Section E
(SCALE - 1:25000)

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Original Size
A1

Notes:
Pressure Pipeline Drawings - 32105801/600/00001 - 00025
Section A - 32105801/600/00031 - 00049
Section B - 32105801/600/00056 - 00074
Section C - 32105801/600/00081 - 00097
Section D - 32105801/600/00101 - 00123
Section E - 32105801/600/00131 - 00143



(SCALE 1:500000)



A07	DESIGN FIX 2	AL	EGSK	SPM	11.10.24
A06	POST DESIGN FIX 1 AMENDMENTS	AL	EGSK	SPM	26.04.24
A05	DESIGN FIX 1	MP	EGSK	SPM	24.11.23
A04	FOR APPROVAL	SS	AC	SPM	08.12.22
A03	FOR APPROVAL	UM	HY	CO	12.11.20
A02	FOR APPROVAL	UM	YM	CO	15.09.20
A01	FOR CLIENT REVIEW	KL	DG	ND	23.05.19
0A	FOR CLIENT REVIEW	DC	JB	SPM	27.09.18
Rev	Description	Drawn	Chk'd	App'd	Date

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Originated By JB	Drawn By DC	Checked By JB	Approved By SPM
Date 27.09.18	Date 27.09.18	Date 27.09.18	Date 27.09.18

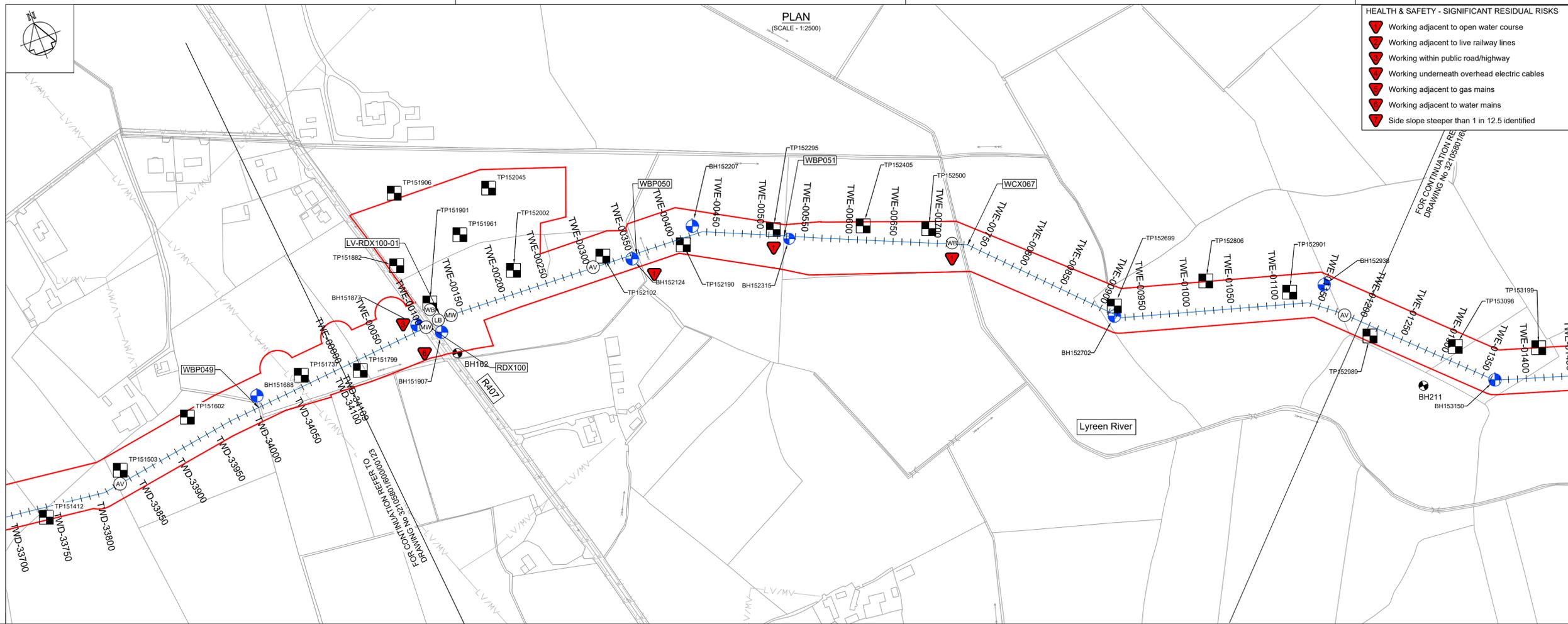
Scale: AS SHOWN @ A1 DO NOT SCALE

Project Title
WATER SUPPLY PROJECT
EASTERN AND MIDLANDS REGION

Drawing Title
GRAVITY PIPELINE SECTION E
KEY PLAN
SHEET 1 OF 1

Drawing Status: FOR CLIENT REVIEW
Jacobs Tobin No. 32105801 Client No. 9318

Drawing No.
32105801/600/00130



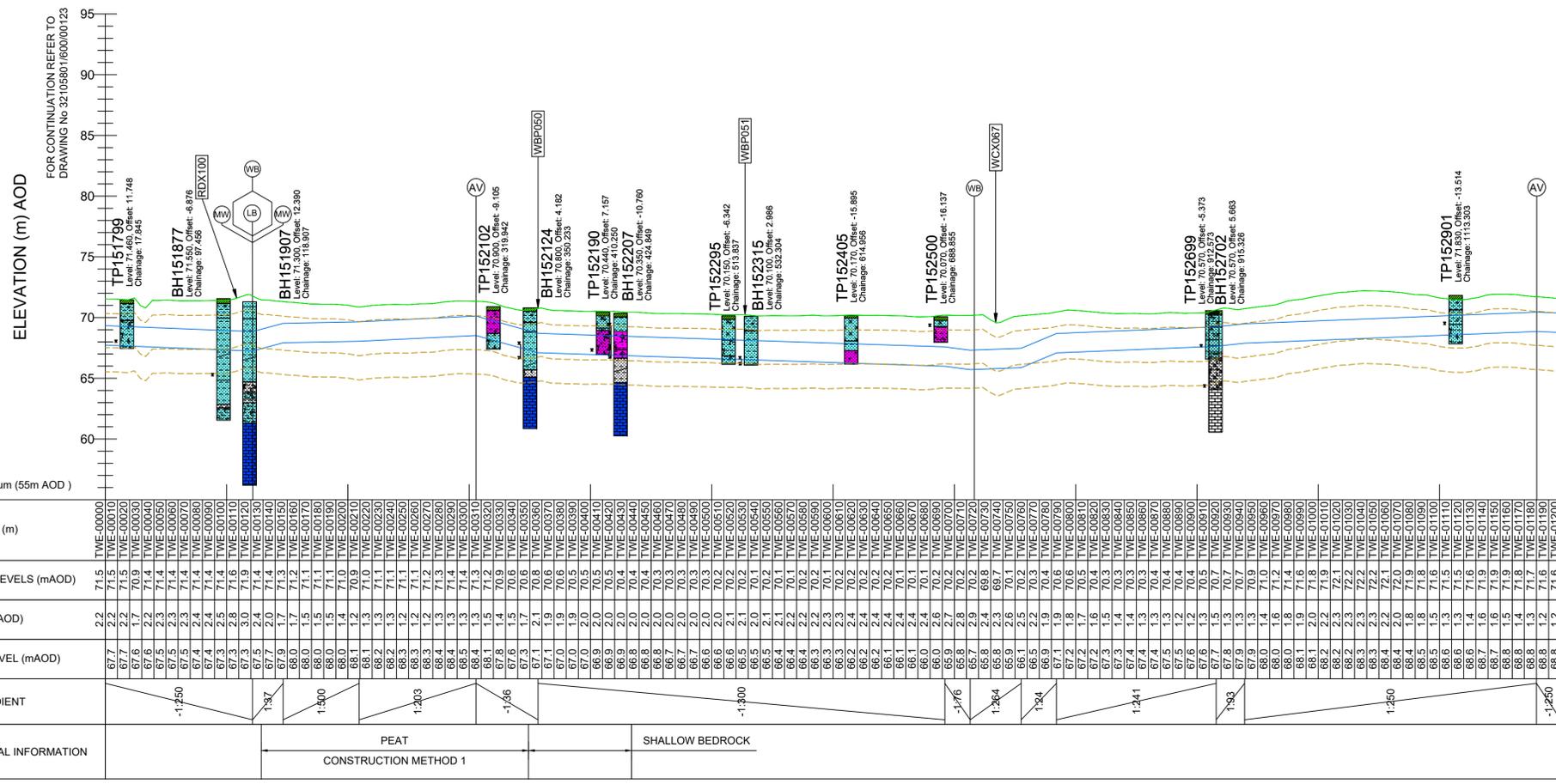
- HEALTH & SAFETY - SIGNIFICANT RESIDUAL RISKS**
- Working adjacent to open water course
 - Working adjacent to live railway lines
 - Working within public road/highway
 - Working underneath overhead electric cables
 - Working adjacent to gas mains
 - Working adjacent to water mains
 - Side slope steeper than 1 in 12.5 identified

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Original Size **A1**

- Notes:**
- All dimensions are in metres and all levels are A.O.D. Main Head unless otherwise stated.
 - The pipeline horizontal and vertical alignment are subject to further design development but any change to this will be subject to the limits and conditions detailed in this planning submission.
 - The design is based on a nominal 1.6m diameter pipeline.
 - The borehole logs shown on the long section are those within 20m of the proposed horizontal alignment. Further investigations will be undertaken pre and post planning to inform the detailed design.
 - The location of existing services are based on information provided by the service provider. The actual locations are to be verified in the field.
 - The method of working in peat is related to the anticipated depth of the peat layer - see EIA Appendix A5.2.
 - A MW access point is provided either side of every LV and at every AV. For MWs at WOs see the valve schedule.

- Legend:**
- PLAN**
- Proposed Pipe Centreline
 - Planning Application Boundary
 - Indicative/Potential Tunnel/Trenchless Section
 - Electric Overhead Powerline, Low/Medium Voltage
 - Electric Overhead Powerline, High Voltage
 - Water Mains
 - Gas Mains
 - Foul Sewers
 - Air Valve
 - Washout with outfall
 - Washout without outfall
 - Manway
 - Line Valve - see drg 600/00250
 - Line Valve - see drg 600/00251
 - Line Valve - see drg 600/00252
 - Line Valve - see drg 600/00253
 - Outfall to watercourse
 - Future Takeoff Point
 - Road Crossing
 - Watercourse Crossing - EPA
 - Watercourse Crossing
 - Potential Waterbody Crossing
 - Electric Overhead Crossing
 - Railway Crossing
 - Cable percussive borehole
 - Cable percussive borehole with rotary core follow on
 - Rotary corehole
 - Dynamic sampler
 - Dynamic sampler with rotary core follow on
 - Machine excavated trial pit
 - Peat probe
 - Russian peat corer
- PROFILE**
- Existing Ground Level
 - Proposed Pipeline
 - Minimum Cover Level (1.2 m) and guide levels (4m and 6m)
- Ground investigation key:**
- Geological unit:
- TOPSOIL
 - MADE GROUND
 - REWORKED PEAT (CUT)
 - PEAT
 - ALLUVIUM
 - LACUSTRINE DEPOSITS
 - GLACIOFLUVIAL SAND AND GRAVEL
 - GLACIAL TILL
 - LIMESTONE
 - MUDSTONE
 - SANDSTONE



CHAINAGE (m)	GROUND LEVELS (mAOD)	COVER (mAOD)	INVERT LEVEL (mAOD)	PIPE GRADIENT	ADDITIONAL INFORMATION
TWE-00000	71.5	2.2	67.7	-1:250	PEAT CONSTRUCTION METHOD 1
TWE-00010	71.5	2.2	67.7	-1:250	
TWE-00020	71.5	2.2	67.7	-1:250	
TWE-00030	71.5	2.2	67.7	-1:250	
TWE-00040	71.5	2.2	67.7	-1:250	
TWE-00050	71.5	2.2	67.7	-1:250	
TWE-00060	71.5	2.2	67.7	-1:250	
TWE-00070	71.5	2.2	67.7	-1:250	
TWE-00080	71.5	2.2	67.7	-1:250	
TWE-00090	71.5	2.2	67.7	-1:250	
TWE-00100	71.5	2.2	67.7	-1:250	SHALLOW BEDROCK
TWE-00110	71.5	2.2	67.7	-1:250	
TWE-00120	71.5	2.2	67.7	-1:250	
TWE-00130	71.5	2.2	67.7	-1:250	
TWE-00140	71.5	2.2	67.7	-1:250	
TWE-00150	71.5	2.2	67.7	-1:250	
TWE-00160	71.5	2.2	67.7	-1:250	
TWE-00170	71.5	2.2	67.7	-1:250	
TWE-00180	71.5	2.2	67.7	-1:250	
TWE-00190	71.5	2.2	67.7	-1:250	
TWE-00200	71.5	2.2	67.7	-1:250	SHALLOW BEDROCK
TWE-00210	71.5	2.2	67.7	-1:250	
TWE-00220	71.5	2.2	67.7	-1:250	
TWE-00230	71.5	2.2	67.7	-1:250	
TWE-00240	71.5	2.2	67.7	-1:250	
TWE-00250	71.5	2.2	67.7	-1:250	
TWE-00260	71.5	2.2	67.7	-1:250	
TWE-00270	71.5	2.2	67.7	-1:250	
TWE-00280	71.5	2.2	67.7	-1:250	
TWE-00290	71.5	2.2	67.7	-1:250	
TWE-00300	71.5	2.2	67.7	-1:250	SHALLOW BEDROCK
TWE-00310	71.5	2.2	67.7	-1:250	
TWE-00320	71.5	2.2	67.7	-1:250	
TWE-00330	71.5	2.2	67.7	-1:250	
TWE-00340	71.5	2.2	67.7	-1:250	
TWE-00350	71.5	2.2	67.7	-1:250	
TWE-00360	71.5	2.2	67.7	-1:250	
TWE-00370	71.5	2.2	67.7	-1:250	
TWE-00380	71.5	2.2	67.7	-1:250	
TWE-00390	71.5	2.2	67.7	-1:250	
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TWE-00780	71.5	2.2	67.7	-1:250	
TWE-00790	71.5	2.2	67.7	-1:250	
TWE-00800	71.5	2.2	67.7	-1:250	SHALLOW BEDROCK
TWE-00810	71.5	2.2	67.7	-1:250	
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TWE-00830	71.5	2.2	67.7	-1:250	
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TWE-00880	71.5	2.2	67.7	-1:250	
TWE-00890	71.5	2.2	67.7	-1:250	
TWE-00900	71.5	2.2	67.7	-1:250	SHALLOW BEDROCK
TWE-00910	71.5	2.2	67.7	-1:250	
TWE-00920	71.5	2.2	67.7	-1:250	
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TWE-00950	71.5	2.2	67.7	-1:250	
TWE-00960	71.5	2.2	67.7	-1:250	
TWE-00970	71.5	2.2	67.7	-1:250	
TWE-00980	71.5	2.2	67.7	-1:250	
TWE-00990	71.5	2.2	67.7	-1:250	
TWE-01000	71.5	2.2	67.7	-1:250	SHALLOW BEDROCK
TWE-01010	71.5	2.2	67.7	-1:250	
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TWE-01030	71.5	2.2	67.7	-1:250	
TWE-01040	71.5	2.2	67.7	-1:250	
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TWE-01070	71.5	2.2	67.7	-1:250	
TWE-01080	71.5	2.2	67.7	-1:250	
TWE-01090	71.5	2.2	67.7	-1:250	
TWE-01100	71.5	2.2	67.7	-1:250	SHALLOW BEDROCK
TWE-01110	71.5	2.2	67.7	-1:250	
TWE-01120	71.5	2.2	67.7	-1:250	
TWE-01130	71.5	2.2	67.7	-1:250	
TWE-01140	71.5	2.2	67.7	-1:250	
TWE-01150	71.5	2.2	67.7	-1:250	
TWE-01160	71.5	2.2	67.7	-1:250	
TWE-01170	71.5	2.2	67.7	-1:250	
TWE-01180	71.5	2.2	67.7	-1:250	
TWE-01190	71.5	2.2	67.7	-1:250	
TWE-01200	71.5	2.2	67.7	-1:250	

FOR CONTINUATION REFER TO DRAWING No 32105801/600/00132

Rev	Description	Drawn	Chk'd	App'd	Date
A07	DESIGN FIX 2	AL	EGSK	SPM	11.10.24
A06	POST DESIGN FIX 1 AMENDMENTS	AL	EGSK	SPM	26.04.24
A05	DESIGN FIX 1	MP	EGSK	SPM	24.11.23
A04	FOR APPROVAL	SS	AC	SPM	08.12.22
A03	FOR APPROVAL	UM	HY	CO	12.11.20
A02	FOR APPROVAL	UM	YM	CO	15.09.20
A01	FOR CLIENT REVIEW	KL	DG	ND	23.05.19
0A	FOR CLIENT REVIEW	MVS	HG	SPM	28.09.18

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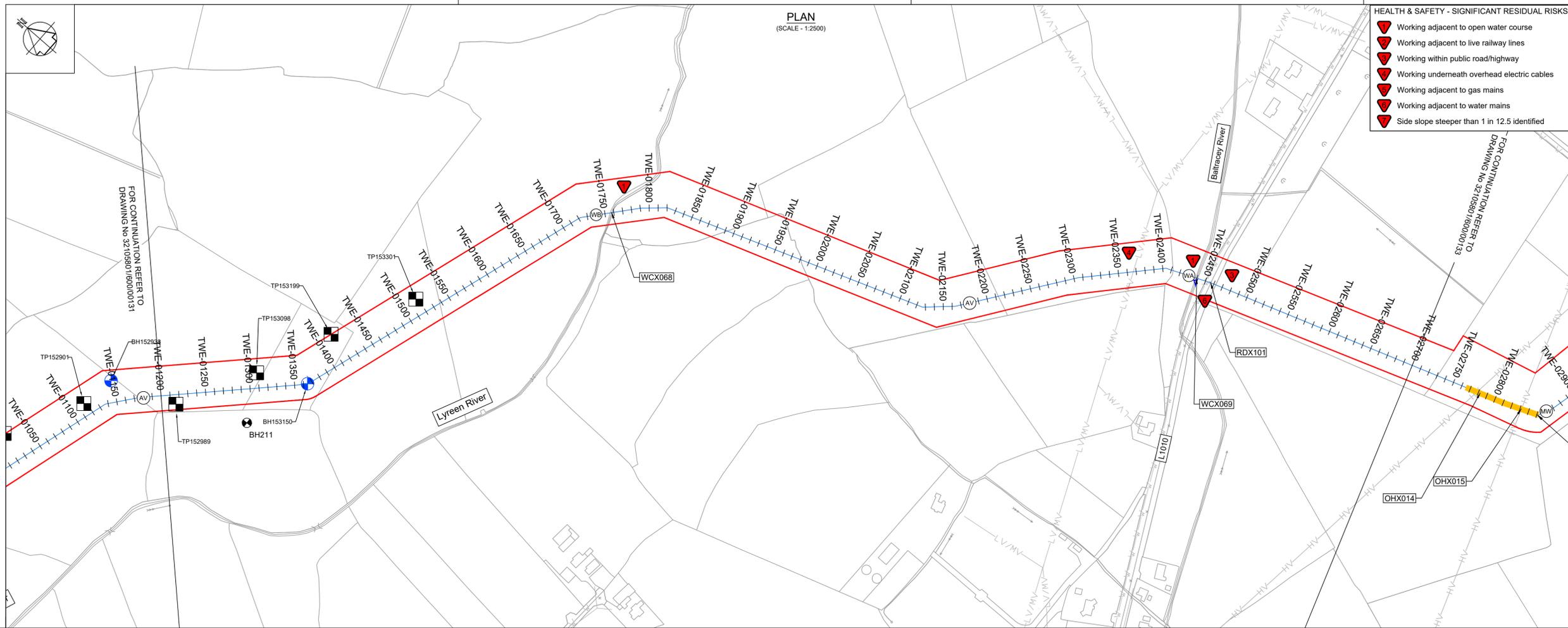
Original By JB	Drawn By MVS	Checked By HG	Approved By SPM
Date 28.09.18	Date 28.09.18	Date 28.09.18	Date 28.09.18

Scale
AS SHOWN @A1 DO NOT SCALE

Project Title
WATER SUPPLY PROJECT
EASTERN AND MIDLANDS REGION

Drawing Title
GRAVITY PIPELINE SECTION E
PLAN AND LONGITUDINAL SECTION
SHEET 1 OF 13

Drawing Status FOR CLIENT REVIEW
Jacobs Tobin No. 32105801 Client No. 9318
Drawing No. 32105801/600/00131



HEALTH & SAFETY - SIGNIFICANT RESIDUAL RISKS

- Working adjacent to open water course
- Working adjacent to live railway lines
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- A MW access point is provided either side of every LV and at every AV. For MWs at WOs see the valve schedule.

Legend:

PLAN

- Proposed Pipe Centreline
- Planning Application Boundary
- Indicative/Potential Tunnel/Trenchless Section
- Electric Overhead Powerline, Low/Medium Voltage
- Electric Overhead Powerline, High Voltage
- Water Mains
- Gas Mains
- Foul Sewers
- Air Valve
- Washout with outfall
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- Line Valve - see drg 600/00250
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- Outfall to watercourse
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- Electric Overhead Crossing
- Railway Crossing
- Cable percussive borehole
- Cable percussive borehole with rotary core follow on
- Rotary corehole
- Dynamic sampler
- Dynamic sampler with rotary core follow on
- Machine excavated trial pit
- Peat probe
- Russian peat corer

PROFILE

- Existing Ground Level
- Proposed Pipeline
- Minimum Cover Level (1.2 m) and guide levels (4m and 6m)

Ground investigation key:

Geological unit:

- TOPSOIL
- MADE GROUND
- REWORKED PEAT (CUT)
- PEAT
- ALLUVIUM
- LACUSTRINE DEPOSITS
- GLACIOFLUVIAL SAND AND GRAVEL
- GLACIAL TILL
- LIMESTONE
- MUDSTONE
- SANDSTONE
- CLAY
- SILT
- SAND
- GRAVEL
- BOULDER
- LIMESTONE
- MUDSTONE
- SANDSTONE

Rev	Description	Drawn	Chk'd	App'd	Date
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Jacobs TOBIN
CONSULTING ENGINEERS

Original By	Drawn By	Checked By	Approved By
JB	KP	HG	SPM

Date	Date	Date	Date
28.09.18	28.09.18	28.09.18	28.09.18

Scale: AS SHOWN @ A1 DO NOT SCALE

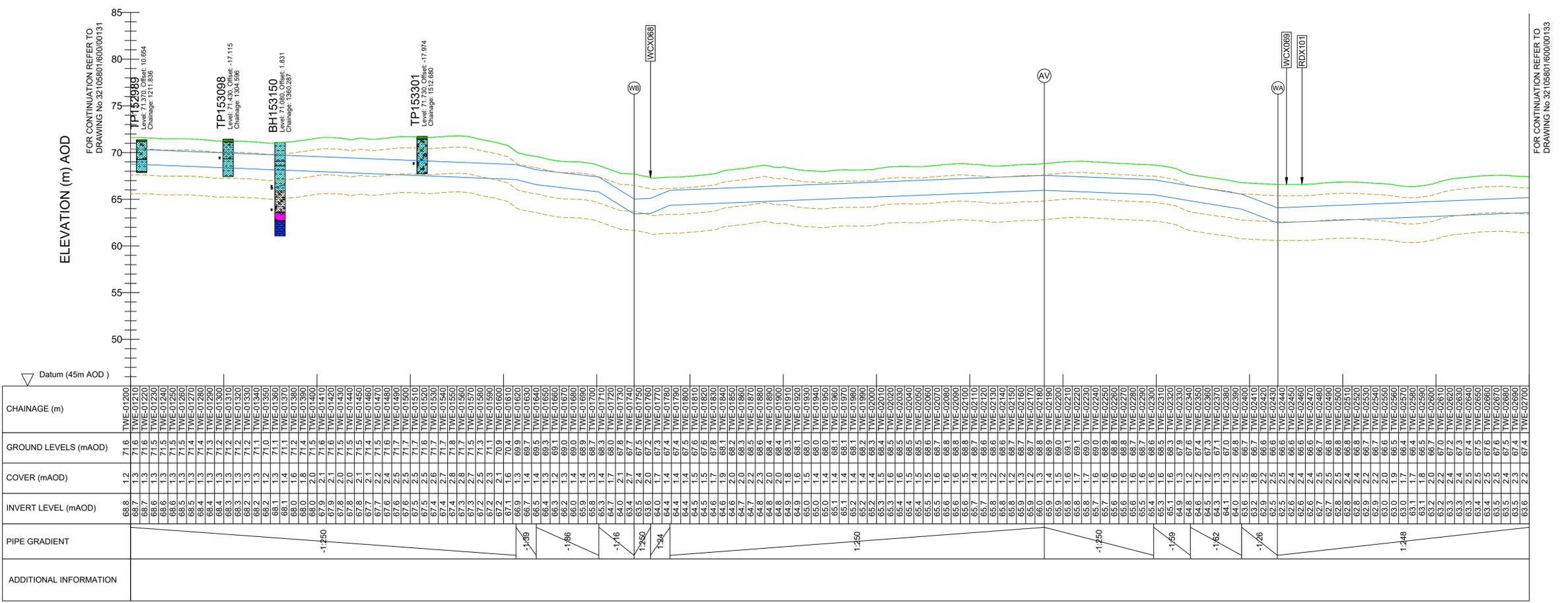
Project Title: WATER SUPPLY PROJECT EASTERN AND MIDLANDS REGION

Drawing Title: GRAVITY PIPELINE SECTION E PLAN AND LONGITUDINAL SECTION SHEET 2 OF 13

Drawing Status: FOR CLIENT REVIEW

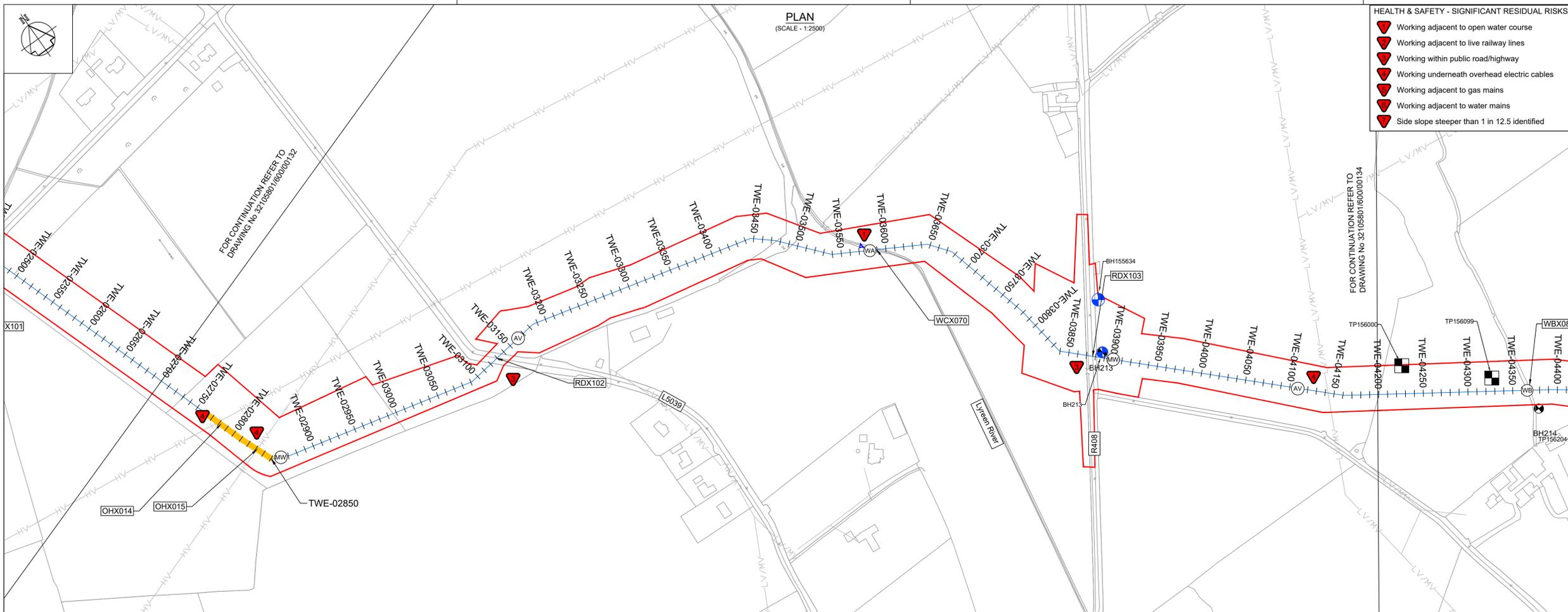
Jacobs Tobin No. 32105801 Client No. 9318

Drawing No. 32105801/600/00132



CHAINAGE (m)	GROUND LEVELS (mAOD)	COVER (mAOD)	INVERT LEVEL (mAOD)	PIPE GRADIENT	ADDITIONAL INFORMATION
TWE-01200	71.6	1.2	68.8		
TWE-01210	71.6	1.3	68.7		
TWE-01220	71.5	1.3	68.6		
TWE-01230	71.5	1.3	68.6		
TWE-01240	71.5	1.3	68.6		
TWE-01250	71.5	1.3	68.6		
TWE-01260	71.5	1.3	68.5		
TWE-01270	71.4	1.3	68.4		
TWE-01280	71.3	1.3	68.4		
TWE-01290	71.3	1.3	68.3		
TWE-01300	71.2	1.3	68.3		
TWE-01310	71.2	1.3	68.3		
TWE-01320	71.2	1.3	68.2		
TWE-01330	71.2	1.3	68.2		
TWE-01340	71.1	1.3	68.2		
TWE-01350	71.1	1.2	68.2		
TWE-01360	71.1	1.3	68.1		
TWE-01370	71.1	1.4	68.1		
TWE-01380	71.2	1.6	68.0		
TWE-01390	71.2	1.6	68.0		
TWE-01400	71.1	2.0	68.0		
TWE-01410	71.1	2.1	67.9		
TWE-01420	71.6	2.1	67.9		
TWE-01430	71.5	2.0	67.8		
TWE-01440	71.5	2.0	67.8		
TWE-01450	71.5	2.1	67.8		
TWE-01460	71.4	2.1	67.7		
TWE-01470	71.3	2.2	67.6		
TWE-01480	71.3	2.2	67.6		
TWE-01490	71.7	2.5	67.6		
TWE-01500	71.7	2.5	67.6		
TWE-01510	71.7	2.5	67.5		
TWE-01520	71.6	2.5	67.5		
TWE-01530	71.7	2.6	67.4		
TWE-01540	71.7	2.7	67.4		
TWE-01550	71.8	2.8	67.4		
TWE-01560	71.8	2.9	67.3		
TWE-01570	71.5	2.9	67.3		
TWE-01580	71.3	2.5	67.2		
TWE-01590	71.1	2.3	67.2		
TWE-01600	70.9	2.1	67.2		
TWE-01610	70.4	1.6	67.1		
TWE-01620	69.9	1.3	66.9		
TWE-01630	69.9	1.3	66.9		
TWE-01640	69.5	1.4	66.5		
TWE-01650	69.5	1.4	66.5		
TWE-01660	69.1	1.2	66.2		
TWE-01670	69.0	1.3	66.2		
TWE-01680	69.0	1.4	66.0		
TWE-01690	68.9	1.4	66.0		
TWE-01700	68.9	1.3	66.0		
TWE-01710	68.3	1.4	66.3		
TWE-01720	68.0	1.7	66.0		
TWE-01730	67.9	1.7	66.0		
TWE-01740	67.5	2.4	65.5		
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TWE-01770	67.4	1.4	64.4		
TWE-01780	67.4	1.4	64.4		
TWE-01790	67.6	1.4	64.5		
TWE-01800	67.6	1.5	64.5		
TWE-01810	67.8	1.7	64.6		
TWE-01820	67.8	1.9	64.6		
TWE-01830	68.1	1.9	64.6		
TWE-01840	68.2	2.0	64.6		
TWE-01850	68.2	2.0	64.7		
TWE-01860	68.5	2.2	64.7		
TWE-01870	68.6	2.3	64.8		
TWE-01880	68.6	2.0	64.8		
TWE-01890	68.4	2.0	64.8		
TWE-01900	68.4	1.8	64.8		
TWE-01910	68.9	1.6	64.9		
TWE-01920	68.9	1.6	64.9		
TWE-01930	68.0	1.5	65.0		
TWE-01940	68.0	1.4	65.0		
TWE-01950	68.1	1.4	65.0		
TWE-01960	68.1	1.4	65.1		
TWE-01970	68.1	1.4	65.1		
TWE-01980	68.2	1.4	65.2		
TWE-01990	68.2	1.4	65.2		
TWE-02000	68.3	1.5	65.3		
TWE-02010	68.3	1.6	65.3		
TWE-02020	68.5	1.6	65.5		
TWE-02030	68.4	1.6	65.4		
TWE-02040	68.4	1.5	65.4		
TWE-02050	68.5	1.5	65.5		
TWE-02060	68.5	1.5	65.5		
TWE-02070	68.7	1.6	65.7		
TWE-02080	68.7	1.6	65.7		
TWE-02090	68.8	1.6	65.8		
TWE-02100	68.7	1.4	65.7		
TWE-02110	68.7	1.3	65.7		
TWE-02120	68.6	1.2	65.6		
TWE-02130	68.6	1.2	65.6		
TWE-02140	68.7	1.2	65.8		
TWE-02150	68.7	1.2	65.8		
TWE-02160	68.7	1.3	65.9		
TWE-02170	68.8	1.3	65.9		
TWE-02180	68.9	1.4	65.9		
TWE-02190	69.0	1.5	66.0		
TWE-02200	69.0	1.6	66.0		
TWE-02210	69.1	1.6	66.1		
TWE-02220	69.1	1.7	66.1		
TWE-02230	69.0	1.7	66.0		
TWE-02240	69.0	1.6	66.0		
TWE-02250	68.9	1.6	65.9		
TWE-02260	68.9	1.6	65.9		
TWE-02270	68.8	1.6	65.8		
TWE-02280	68.7	1.6	65.8		
TWE-02290	68.7	1.6	65.8		
TWE-02300	68.6	1.6	65.7		
TWE-02310	68.5	1.6	65.6		
TWE-02320	68.5	1.6	65.6		
TWE-02330	68.9	1.3	66.9		
TWE-02340	68.9	1.3	66.9		
TWE-02350	68.8	1.2	66.8		
TWE-02360	68.7	1.2	66.7		
TWE-02370	68.7	1.3	66.7		
TWE-02380	68.4	1.3	66.4		
TWE-02390	68.4	1.2	66.4		
TWE-02400	68.6	1.5	66.6		
TWE-02410	68.7	1.6	66.7		
TWE-02420	68.6	1.6	66.6		
TWE-02430	68.6	1.6	66.6		
TWE-02440	68.6	1.6	66.6		
TWE-02450	68.6	2.4	66.6		
TWE-02460	68.6	2.4	66.6		
TWE-02470	68.7	2.5	66.7		
TWE-02480	68.7	2.5	66.7		
TWE-02490	68.8	2.5	66.8		
TWE-02500	68.8	2.4	66.8		
TWE-02510	68.8	2.4	66.8		
TWE-02520	68.9	2.2	66.9		
TWE-02530	68.9	2.2	66.9		
TWE-02540	68.7	2.2	66.7		
TWE-02550	68.0	2.0	66.0		
TWE-02560	68.0	1.9	66.0		
TWE-02570	68.0	1.7	66.0		
TWE-02580	68.1	1.7	66.1		
TWE-02590	68.1	1.8	66.1		
TWE-02600	68.2	1.8	66.2		
TWE-02610	68.2	1.8	66.2		
TWE-02620	68.3	2.2	66.3		
TWE-02630	68.3	2.4	66.3		
TWE-02640	68.3	2.5	66.4		
TWE-02650	68.4	2.5	66.5		
TWE-02660	68.3	2.5	66.4		
TWE-02670	68.3	2.4	66.4		
TWE-02680	68.3	2.4	66.4		
TWE-02690	68.3	2.2	66.4		
TWE-02700	68.3	2.2	66.4		

LONGITUDINAL SECTION
(SCALE - Hor 1:2500, Ver 1:250)



- HEALTH & SAFETY - SIGNIFICANT RESIDUAL RISKS**
- Working adjacent to open water course
 - Working adjacent to live railway lines
 - Working within public road/highway
 - Working underneath overhead electric cables
 - Working adjacent to gas mains
 - Working adjacent to water mains
 - Side slope steeper than 1 in 12.5 identified

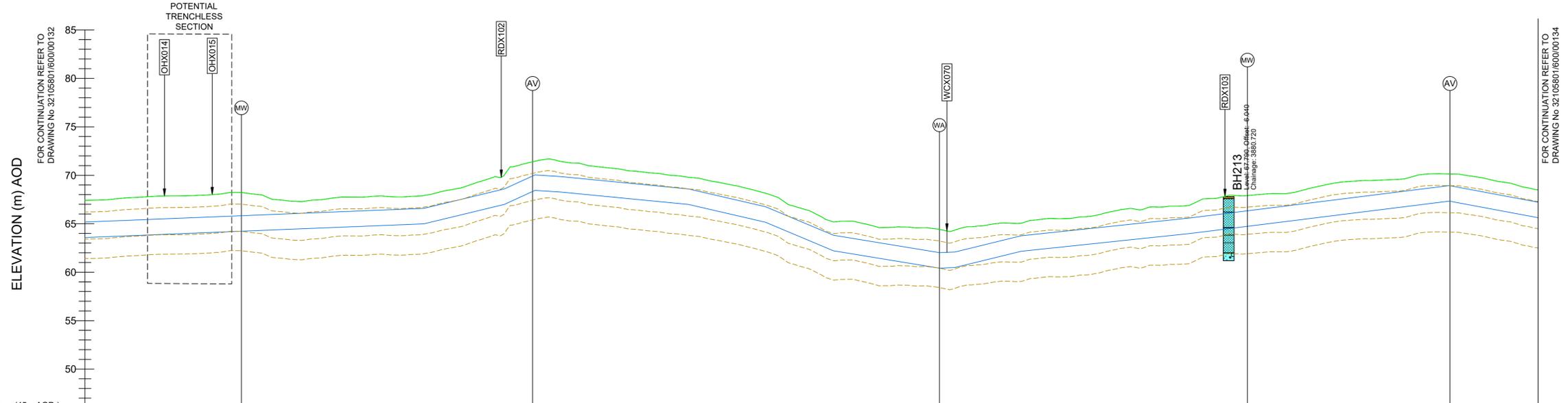
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Original Size **A1**

Notes:

- All dimensions are in metres and all levels are A.O.D. Main Head unless otherwise stated.
- The pipeline horizontal and vertical alignment are subject to further design development but any change to this will be subject to the limits and conditions detailed in this planning submission.
- The design is based on a nominal 1.6m diameter pipeline. Further investigations will be undertaken pre and post planning to inform the detailed design.
- The location of existing services are based on information provided by the service provider. The actual locations are to be verified in the field.
- The Method of working in peat is related to the anticipated depth of the peat layer - see EIA Appendix A5.2.
- A MW access point is provided either side of every LV and at every AV. For MWs at WOs see the valve schedule.

- Legend:
- PLAN**
- Proposed Pipe Centreline
 - Planning Application Boundary
 - Indicative/Potential Tunnel/Trenchless Section
 - Electric Overhead Powerline, Low/Medium Voltage
 - Electric Overhead Powerline, High Voltage
 - Water Mains
 - Gas Mains
 - Foul Sewers
 - Air Valve
 - Washout with outfall
 - Washout without outfall
 - Manway
 - Line Valve - see drg 600/00250
 - Line Valve - see drg 600/00251
 - Line Valve - see drg 600/00252
 - Line Valve - see drg 600/00253
 - Outfall to watercourse
 - Future Takeoff Point
 - Road Crossing
 - Watercourse Crossing - EPA
 - Watercourse Crossing
 - Potential Waterbody Crossing
 - Electric Overhead Crossing
 - Railway Crossing
 - Cable percussive borehole
 - Cable percussive borehole with rotary core follow on
 - Rotary corehole
 - Dynamic sampler
 - Dynamic sampler with rotary core follow on
 - Machine excavated trial pit
 - Peat probe
 - Russian peat corer
- PROFILE**
- Existing Ground Level
 - Proposed Pipeline
 - Minimum Cover Level (1.2 m) and guide levels (4m and 6m)
- Ground investigation key:
- Geological unit:
- TOPSOIL
 - MADE GROUND
 - REWORKED PEAT (CUT)
 - PEAT
 - ALLUVIUM
 - LACUSTRINE DEPOSITS
 - GLACIOFLUVIAL SAND AND GRAVEL
 - GLACIAL TILL
 - LIMESTONE
 - MUDSTONE
 - SANDSTONE
 - CLAY
 - SILT
 - SAND
 - GRAVEL
 - BOULDER
 - LIMESTONE
 - MUDSTONE
 - SANDSTONE



CHAINAGE (m)	GROUND LEVELS (mAOD)	COVER (mAOD)	INVERT LEVEL (mAOD)	PIPE GRADIENT	ADDITIONAL INFORMATION
67.4	67.4	2.2	65.6		
67.5	67.5	2.2	65.7		
67.6	67.6	2.3	65.8		
67.7	67.7	2.3	65.9		
67.8	67.8	2.4	66.0		
67.9	67.9	2.4	66.1		
68.0	68.0	2.4	66.2		
68.1	68.1	2.4	66.3		
68.2	68.2	2.4	66.4		
68.3	68.3	2.4	66.5		
68.4	68.4	2.4	66.6		
68.5	68.5	2.4	66.7		
68.6	68.6	2.4	66.8		
68.7	68.7	2.4	66.9		
68.8	68.8	2.4	67.0		
68.9	68.9	2.4	67.1		
69.0	69.0	2.4	67.2		
69.1	69.1	2.4	67.3		
69.2	69.2	2.4	67.4		
69.3	69.3	2.4	67.5		
69.4	69.4	2.4	67.6		
69.5	69.5	2.4	67.7		
69.6	69.6	2.4	67.8		
69.7	69.7	2.4	67.9		
69.8	69.8	2.4	68.0		
69.9	69.9	2.4	68.1		
70.0	70.0	2.4	68.2		
70.1	70.1	2.4	68.3		
70.2	70.2	2.4	68.4		
70.3	70.3	2.4	68.5		
70.4	70.4	2.4	68.6		
70.5	70.5	2.4	68.7		
70.6	70.6	2.4	68.8		
70.7	70.7	2.4	68.9		
70.8	70.8	2.4	69.0		
70.9	70.9	2.4	69.1		
71.0	71.0	2.4	69.2		
71.1	71.1	2.4	69.3		
71.2	71.2	2.4	69.4		
71.3	71.3	2.4	69.5		
71.4	71.4	2.4	69.6		
71.5	71.5	2.4	69.7		
71.6	71.6	2.4	69.8		
71.7	71.7	2.4	69.9		
71.8	71.8	2.4	70.0		
71.9	71.9	2.4	70.1		
72.0	72.0	2.4	70.2		
72.1	72.1	2.4	70.3		
72.2	72.2	2.4	70.4		
72.3	72.3	2.4	70.5		
72.4	72.4	2.4	70.6		
72.5	72.5	2.4	70.7		
72.6	72.6	2.4	70.8		
72.7	72.7	2.4	70.9		
72.8	72.8	2.4	71.0		
72.9	72.9	2.4	71.1		
73.0	73.0	2.4	71.2		
73.1	73.1	2.4	71.3		
73.2	73.2	2.4	71.4		
73.3	73.3	2.4	71.5		
73.4	73.4	2.4	71.6		
73.5	73.5	2.4	71.7		
73.6	73.6	2.4	71.8		
73.7	73.7	2.4	71.9		
73.8	73.8	2.4	72.0		
73.9	73.9	2.4	72.1		
74.0	74.0	2.4	72.2		
74.1	74.1	2.4	72.3		
74.2	74.2	2.4	72.4		
74.3	74.3	2.4	72.5		
74.4	74.4	2.4	72.6		
74.5	74.5	2.4	72.7		
74.6	74.6	2.4	72.8		
74.7	74.7	2.4	72.9		
74.8	74.8	2.4	73.0		
74.9	74.9	2.4	73.1		
75.0	75.0	2.4	73.2		
75.1	75.1	2.4	73.3		
75.2	75.2	2.4	73.4		
75.3	75.3	2.4	73.5		
75.4	75.4	2.4	73.6		
75.5	75.5	2.4	73.7		
75.6	75.6	2.4	73.8		
75.7	75.7	2.4	73.9		
75.8	75.8	2.4	74.0		
75.9	75.9	2.4	74.1		
76.0	76.0	2.4	74.2		
76.1	76.1	2.4	74.3		
76.2	76.2	2.4	74.4		
76.3	76.3	2.4	74.5		
76.4	76.4	2.4	74.6		
76.5	76.5	2.4	74.7		
76.6	76.6	2.4	74.8		
76.7	76.7	2.4	74.9		
76.8	76.8	2.4	75.0		
76.9	76.9	2.4	75.1		
77.0	77.0	2.4	75.2		
77.1	77.1	2.4	75.3		
77.2	77.2	2.4	75.4		
77.3	77.3	2.4	75.5		
77.4	77.4	2.4	75.6		
77.5	77.5	2.4	75.7		
77.6	77.6	2.4	75.8		
77.7	77.7	2.4	75.9		
77.8	77.8	2.4	76.0		
77.9	77.9	2.4	76.1		
78.0	78.0	2.4	76.2		
78.1	78.1	2.4	76.3		
78.2	78.2	2.4	76.4		
78.3	78.3	2.4	76.5		
78.4	78.4	2.4	76.6		
78.5	78.5	2.4	76.7		
78.6	78.6	2.4	76.8		
78.7	78.7	2.4	76.9		
78.8	78.8	2.4	77.0		
78.9	78.9	2.4	77.1		
79.0	79.0	2.4	77.2		
79.1	79.1	2.4	77.3		
79.2	79.2	2.4	77.4		
79.3	79.3	2.4	77.5		
79.4	79.4	2.4	77.6		
79.5	79.5	2.4	77.7		
79.6	79.6	2.4	77.8		
79.7	79.7	2.4	77.9		
79.8	79.8	2.4	78.0		
79.9	79.9	2.4	78.1		
80.0	80.0	2.4	78.2		

Rev	Description	Drawn	Chk'd	App'd	Date
A07	DESIGN FIX 2	AL	EG/SK	SPM	11.10.24
A06	POST DESIGN FIX 1 AMENDMENTS	AL	EG/SK	SPM	26.04.24
A05	DESIGN FIX 1	MP	EG/SK	SPM	24.11.23
A04	FOR APPROVAL	SS	AC	SPM	08.12.22
A03	FOR APPROVAL	UM	HY	CO	12.11.20
A02	FOR APPROVAL	UM	YM	CO	15.09.20
A01	FOR CLIENT REVIEW	KL	DG	ND	23.05.19
0A	FOR CLIENT REVIEW	MVS	HG	SPM	28.09.18

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Jacobs TOBIN
CONSULTING ENGINEERS

Original By	Drawn By	Checked By	Approved By
JB	KP	HG	SPM
Date	Date	Date	Date
28.09.18	28.09.18	28.09.18	28.09.18

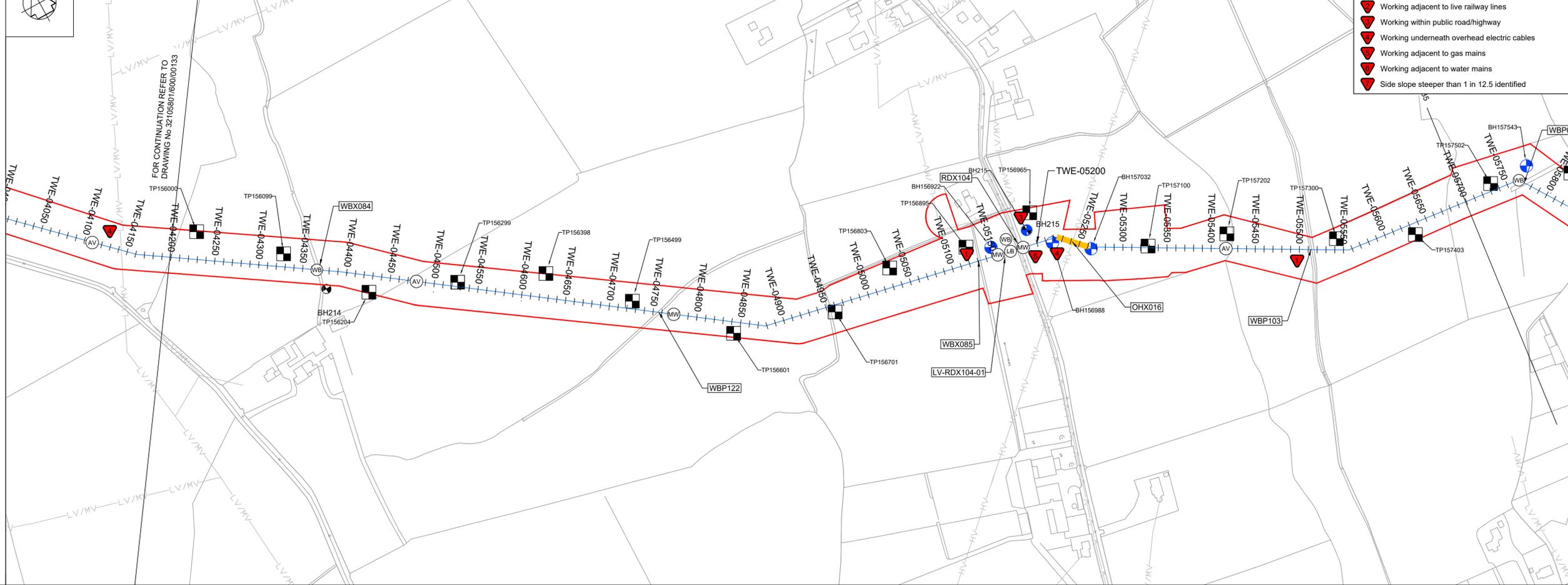
Project Title
**WATER SUPPLY PROJECT
EASTERN AND MIDLANDS REGION**

Drawing Title
**GRAVITY PIPELINE SECTION E
PLAN AND LONGITUDINAL SECTION
SHEET 3 OF 13**

Drawing Status: FOR CLIENT REVIEW
Drawing No. 32105801 | Client No. 9318
Drawing No. 32105801/600/00133



PLAN
(SCALE - 1:2500)



- HEALTH & SAFETY - SIGNIFICANT RESIDUAL RISKS**
- Working adjacent to open water course
 - Working adjacent to live railway lines
 - Working within public road/highway
 - Working underneath overhead electric cables
 - Working adjacent to gas mains
 - Working adjacent to water mains
 - Side slope steeper than 1 in 12.5 identified

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Original Size
A1

- Notes:**
- All dimensions are in metres and all levels are A.O.D.
 - The pipeline horizontal and vertical alignment are subject to further design development but any change to this will be subject to the limits and conditions detailed in this planning submission.
 - The design is based on a nominal 1.6m diameter pipeline.
 - The borehole logs shown on the long section are those within 20m of the proposed horizontal alignment. Further investigations will be undertaken pre and post planning to inform the detailed design.
 - The location of existing services are based on information provided by the service provider. The actual locations are to be verified in the field.
 - The Method of working in peat is related to the anticipated depth of the peat layer - see EIA Appendix A5.2
 - A MW access point is provided either side of every LV and at every AV. For MWs at WOs see the valve schedule.

- Legend:**
- PLAN**
- Proposed Pipe Centreline
 - Planning Application Boundary
 - Indicative/Potential Tunnel/Trenchless Section
 - Electric Overhead Powerline, Low/Medium Voltage
 - Electric Overhead Powerline, High Voltage
 - Water Mains
 - Gas Mains
 - Foul Sewers
 - Air Valve
 - Washout with outfall
 - Washout without outfall
 - Manway
 - Line Valve - see drg 600/00250
 - Line Valve - see drg 600/00251
 - Line Valve - see drg 600/00252
 - Line Valve - see drg 600/00253
 - Outfall to watercourse
 - Future Takeoff Point
 - Road Crossing
 - Watercourse Crossing - EPA
 - Watercourse Crossing
 - Potential Waterbody Crossing
 - Electric Overhead Crossing
 - Railway Crossing
 - Cable percussive borehole
 - Cable percussive borehole with rotary core follow on
 - Rotary corehole
 - Dynamic sampler
 - Dynamic sampler with rotary core follow on
 - Machine excavated trial pit
 - Peat probe
 - Russian peat corer

- PROFILE**
- Existing Ground Level
 - Proposed Pipeline
 - Minimum Cover Level (1.2 m) and guide levels (4m and 6m)

- Ground investigation key:**
- Geological unit:
- TOPSOIL
 - MADE GROUND
 - REWORKED PEAT (CUT)
 - PEAT
 - ALLUVIUM
 - LACUSTRINE DEPOSITS
 - GLACIOFLUVIAL SAND AND GRAVEL
 - GLACIAL TILL
 - LIMESTONE
 - MUDSTONE
 - SANDSTONE
 - CLAY
 - SILT
 - SAND
 - GRAVEL
 - BOULDER
 - LIMESTONE
 - MUDSTONE
 - SANDSTONE

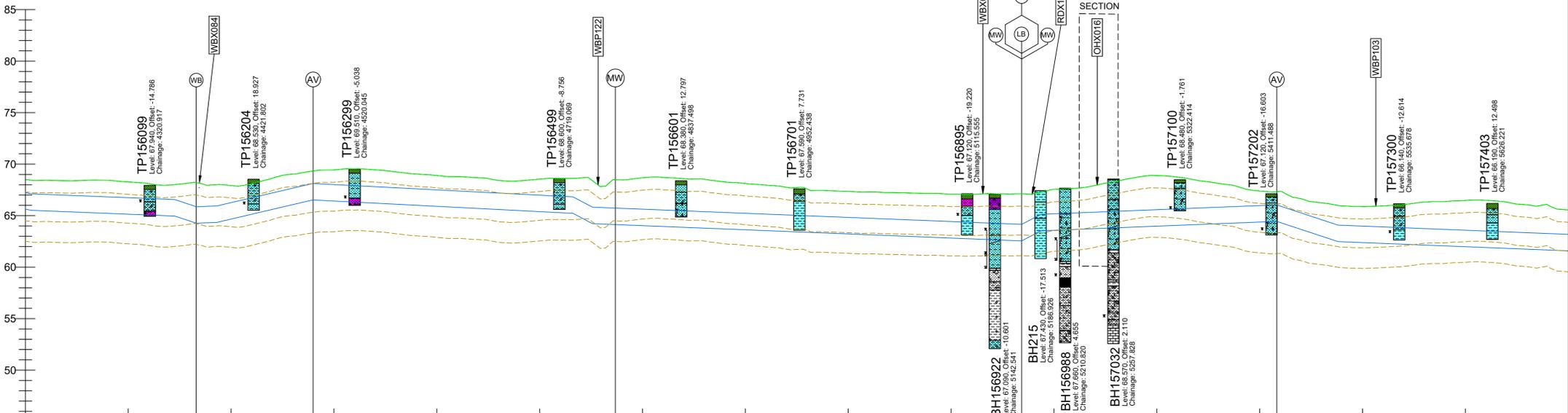
Rev	Description	Drawn	Chk'd	App'd	Date
A07	DESIGN FIX 2	AL	EG/SK	SPM	11.10.24
A06	POST DESIGN FIX 1 AMENDMENTS	AL	EG/SK	SPM	26.04.24
A05	DESIGN FIX 1	MP	EG/SK	SPM	24.11.23
A04	FOR APPROVAL	SS	AC	SPM	08.12.22
A03	FOR APPROVAL	UM	HY	CO	12.11.20
A02	FOR APPROVAL	UM	YM	CO	15.09.20
A01	FOR CLIENT REVIEW	KL	DG	ND	23.05.19
0A	FOR CLIENT REVIEW	MVS	HG	SPM	28.09.18

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ELEVATION (m) AOD



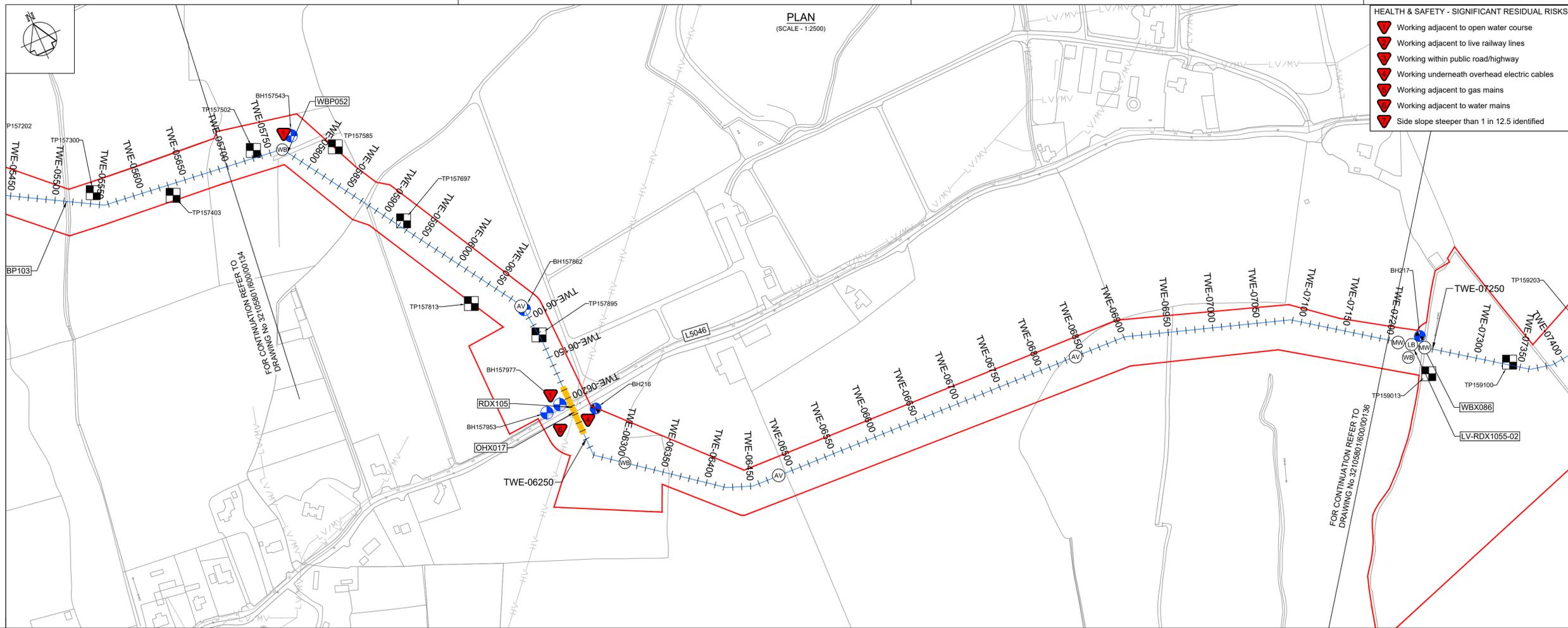
CHAINAGE (m)	GROUND LEVELS (mAOD)	COVER (mAOD)	INVERT LEVEL (mAOD)	PIPE GRADIENT	ADDITIONAL INFORMATION
69.5	TWE-04200	1.3	65.6	-1:250	
69.6	TWE-04210	1.3	65.5	-1:250	
69.7	TWE-04220	1.4	65.4	-1:250	
69.8	TWE-04230	1.4	65.3	-1:250	
69.9	TWE-04240	1.4	65.2	-1:250	
70.0	TWE-04250	1.5	65.1	-1:250	
70.1	TWE-04260	1.5	65.0	-1:250	
70.2	TWE-04270	1.6	64.9	-1:250	
70.3	TWE-04280	1.6	64.8	-1:250	
70.4	TWE-04290	1.6	64.7	-1:250	
70.5	TWE-04300	1.6	64.6	-1:250	
70.6	TWE-04310	1.6	64.5	-1:250	
70.7	TWE-04320	1.6	64.4	-1:250	
70.8	TWE-04330	1.6	64.3	-1:250	
70.9	TWE-04340	1.6	64.2	-1:250	
71.0	TWE-04350	1.6	64.1	-1:250	
71.1	TWE-04360	1.6	64.0	-1:250	
71.2	TWE-04370	1.6	63.9	-1:250	
71.3	TWE-04380	1.6	63.8	-1:250	
71.4	TWE-04390	1.6	63.7	-1:250	
71.5	TWE-04400	1.6	63.6	-1:250	
71.6	TWE-04410	1.6	63.5	-1:250	
71.7	TWE-04420	1.6	63.4	-1:250	
71.8	TWE-04430	1.6	63.3	-1:250	
71.9	TWE-04440	1.6	63.2	-1:250	
72.0	TWE-04450	1.6	63.1	-1:250	
72.1	TWE-04460	1.6	63.0	-1:250	
72.2	TWE-04470	1.6	62.9	-1:250	
72.3	TWE-04480	1.6	62.8	-1:250	
72.4	TWE-04490	1.6	62.7	-1:250	
72.5	TWE-04500	1.6	62.6	-1:250	
72.6	TWE-04510	1.6	62.5	-1:250	
72.7	TWE-04520	1.6	62.4	-1:250	
72.8	TWE-04530	1.6	62.3	-1:250	
72.9	TWE-04540	1.6	62.2	-1:250	
73.0	TWE-04550	1.6	62.1	-1:250	
73.1	TWE-04560	1.6	62.0	-1:250	
73.2	TWE-04570	1.6	61.9	-1:250	
73.3	TWE-04580	1.6	61.8	-1:250	
73.4	TWE-04590	1.6	61.7	-1:250	
73.5	TWE-04600	1.6	61.6	-1:250	
73.6	TWE-04610	1.6	61.5	-1:250	
73.7	TWE-04620	1.6	61.4	-1:250	
73.8	TWE-04630	1.6	61.3	-1:250	
73.9	TWE-04640	1.6	61.2	-1:250	
74.0	TWE-04650	1.6	61.1	-1:250	
74.1	TWE-04660	1.6	61.0	-1:250	
74.2	TWE-04670	1.6	60.9	-1:250	
74.3	TWE-04680	1.6	60.8	-1:250	
74.4	TWE-04690	1.6	60.7	-1:250	
74.5	TWE-04700	1.6	60.6	-1:250	
74.6	TWE-04710	1.6	60.5	-1:250	
74.7	TWE-04720	1.6	60.4	-1:250	
74.8	TWE-04730	1.6	60.3	-1:250	
74.9	TWE-04740	1.6	60.2	-1:250	
75.0	TWE-04750	1.6	60.1	-1:250	
75.1	TWE-04760	1.6	60.0	-1:250	
75.2	TWE-04770	1.6	59.9	-1:250	
75.3	TWE-04780	1.6	59.8	-1:250	
75.4	TWE-04790	1.6	59.7	-1:250	
75.5	TWE-04800	1.6	59.6	-1:250	
75.6	TWE-04810	1.6	59.5	-1:250	
75.7	TWE-04820	1.6	59.4	-1:250	
75.8	TWE-04830	1.6	59.3	-1:250	
75.9	TWE-04840	1.6	59.2	-1:250	
76.0	TWE-04850	1.6	59.1	-1:250	
76.1	TWE-04860	1.6	59.0	-1:250	
76.2	TWE-04870	1.6	58.9	-1:250	
76.3	TWE-04880	1.6	58.8	-1:250	
76.4	TWE-04890	1.6	58.7	-1:250	
76.5	TWE-04900	1.6	58.6	-1:250	
76.6	TWE-04910	1.6	58.5	-1:250	
76.7	TWE-04920	1.6	58.4	-1:250	
76.8	TWE-04930	1.6	58.3	-1:250	
76.9	TWE-04940	1.6	58.2	-1:250	
77.0	TWE-04950	1.6	58.1	-1:250	
77.1	TWE-04960	1.6	58.0	-1:250	
77.2	TWE-04970	1.6	57.9	-1:250	
77.3	TWE-04980	1.6	57.8	-1:250	
77.4	TWE-04990	1.6	57.7	-1:250	
77.5	TWE-05000	1.6	57.6	-1:250	
77.6	TWE-05010	1.6	57.5	-1:250	
77.7	TWE-05020	1.6	57.4	-1:250	
77.8	TWE-05030	1.6	57.3	-1:250	
77.9	TWE-05040	1.6	57.2	-1:250	
78.0	TWE-05050	1.6	57.1	-1:250	
78.1	TWE-05060	1.6	57.0	-1:250	
78.2	TWE-05070	1.6	56.9	-1:250	
78.3	TWE-05080	1.6	56.8	-1:250	
78.4	TWE-05090	1.6	56.7	-1:250	
78.5	TWE-05100	1.6	56.6	-1:250	
78.6	TWE-05110	1.6	56.5	-1:250	
78.7	TWE-05120	1.6	56.4	-1:250	
78.8	TWE-05130	1.6	56.3	-1:250	
78.9	TWE-05140	1.6	56.2	-1:250	
79.0	TWE-05150	1.6	56.1	-1:250	
79.1	TWE-05160	1.6	56.0	-1:250	
79.2	TWE-05170	1.6	55.9	-1:250	
79.3	TWE-05180	1.6	55.8	-1:250	
79.4	TWE-05190	1.6	55.7	-1:250	
79.5	TWE-05200	1.6	55.6	-1:250	
79.6	TWE-05210	1.6	55.5	-1:250	
79.7	TWE-05220	1.6	55.4	-1:250	
79.8	TWE-05230	1.6	55.3	-1:250	
79.9	TWE-05240	1.6	55.2	-1:250	
80.0	TWE-05250	1.6	55.1	-1:250	
80.1	TWE-05260	1.6	55.0	-1:250	
80.2	TWE-05270	1.6	54.9	-1:250	
80.3	TWE-05280	1.6	54.8	-1:250	
80.4	TWE-05290	1.6	54.7	-1:250	
80.5	TWE-05300	1.6	54.6	-1:250	
80.6	TWE-05310	1.6	54.5	-1:250	
80.7	TWE-05320	1.6	54.4	-1:250	
80.8	TWE-05330	1.6	54.3	-1:250	
80.9	TWE-05340	1.6	54.2	-1:250	
81.0	TWE-05350	1.6	54.1	-1:250	
81.1	TWE-05360	1.6	54.0	-1:250	
81.2	TWE-05370	1.6	53.9	-1:250	
81.3	TWE-05380	1.6	53.8	-1:250	
81.4	TWE-05390	1.6	53.7	-1:250	
81.5	TWE-05400	1.6	53.6	-1:250	
81.6	TWE-05410	1.6	53.5	-1:250	
81.7	TWE-05420	1.6	53.4	-1:250	
81.8	TWE-05430	1.6	53.3	-1:250	
81.9	TWE-05440	1.6	53.2	-1:250	
82.0	TWE-05450	1.6	53.1	-1:250	
82.1	TWE-05460	1.6	53.0	-1:250	
82.2	TWE-05470	1.6	52.9	-1:250	
82.3	TWE-05480	1.6	52.8	-1:250	
82.4	TWE-05490	1.6	52.7	-1:250	
82.5	TWE-05500	1.6	52.6	-1:250	
82.6	TWE-05510	1.6	52.5	-1:250	
82.7	TWE-05520	1.6	52.4	-1:250	
82.8	TWE-05530	1.6	52.3	-1:250	
82.9	TWE-05540	1.6	52.2	-1:250	
83.0	TWE-05550	1.6	52.1	-1:250	
83.1	TWE-05560	1.6	52.0	-1:250	
83.2	TWE-05570	1.6	51.9	-1:250	
83.3	TWE-05580	1.6	51.8	-1:250	
83.4	TWE-05590	1.6	51.7	-1:250	
83.5	TWE-05600	1.6	51.6	-1:250	
83.6	TWE-05610	1.6	51.5	-1:250	
83.7	TWE-05620	1.6	51.4	-1:250	
83.8	TWE-05630	1.6	51.3	-1:250	
83.9	TWE-05640	1.6	51.2	-1:250	
84.0	TWE-05650	1.6	51.1	-1:250	
84.1	TWE-05660	1.6	51.0	-1:250	
84.2	TWE-05670	1.6	50.9	-1:250	
84.3	TWE-05680	1.6	50.8	-1:250	
84.4	TWE-05690	1.6	50.7	-1:250	
84.5	TWE-05700	1.6	50.6	-1:250	
84.6	TWE-05710	1.6	50.5	-1:250	
84.7	TWE-05720	1.6	50.4	-1:250	
84.8	TWE-05730	1.6	50.3	-1:250	
84.9	TWE-05740	1.6	50.2	-1:250	
85.0	TWE-05750	1.6	50.1	-1:250	

LONGITUDINAL SECTION
(SCALE - Hor 1:2500, Ver 1:250)

PEAT
CONSTRUCTION METHOD 1

FOR CONTINUATION REFER TO
DRAWING No 32105801/600/00135

Original By JB	Drawn By KP	Checked By HG	Approved By SPM
Date 28.09.18	Date 28.09.18	Date 28.09.18	Date 28.09.18
Scale AS SHOWN @ A1		DO NOT SCALE	
Project Title WATER SUPPLY PROJECT EASTERN AND MIDLANDS REGION			
Drawing Title GRAVITY PIPELINE SECTION E PLAN AND LONGITUDINAL SECTION SHEET 4 OF 13			
Drawing Status FOR CLIENT REVIEW			
Jacobs Tobin No. 32105801		Client No. 9318	
Drawing No. 32105801/600/00134			



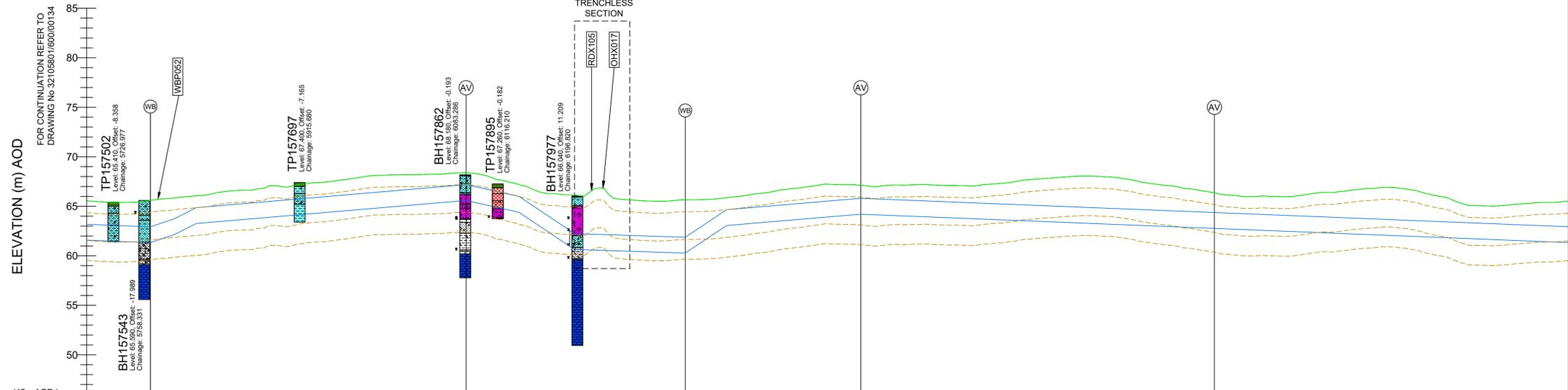
- HEALTH & SAFETY - SIGNIFICANT RESIDUAL RISKS**
- Working adjacent to open water course
 - Working adjacent to live railway lines
 - Working within public road/highway
 - Working underneath overhead electric cables
 - Working adjacent to gas mains
 - Working adjacent to water mains
 - Side slope steeper than 1 in 12.5 identified

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Original Size **A1**

- Notes:**
- All dimensions are in metres and all levels are A.O.D. Main Head unless otherwise stated.
 - The pipeline horizontal and vertical alignment are subject to further design development but any change to this will be subject to the limits and conditions detailed in this planning submission.
 - The design is based on a nominal 1.6m diameter pipeline.
 - The borehole logs shown on the long section are within 20m of the proposed horizontal alignment. Further investigations will be undertaken pre and post planning to inform the detailed design.
 - The location of existing services are based on information provided by the service provider. The actual locations are to be verified in the field.
 - The Method of working in peat is related to the anticipated depth of the peat layer - see EIA Appendix A5.2.
 - A MW access point is provided either side of every LV and at every AV. For MWs at WOs see the valve schedule.

- Legend:**
- PLAN**
- Proposed Pipe Centreline
 - Planning Application Boundary
 - Indicative/Potential Tunnel/Trenchless Section
 - Electric Overhead Powerline, Low/Medium Voltage
 - Electric Overhead Powerline, High Voltage
 - Water Mains
 - Gas Mains
 - Foul Sewers
 - Air Valve
 - Washout with outfall
 - Washout without outfall
 - Manway
 - Line Valve - see drg 600/00250
 - Line Valve - see drg 600/00251
 - Line Valve - see drg 600/00252
 - Line Valve - see drg 600/00253
 - Outfall to watercourse
 - Future Takeoff Point
 - Road Crossing
 - Watercourse Crossing - EPA
 - Watercourse Crossing
 - Potential Waterbody Crossing
 - Electric Overhead Crossing
 - Railway Crossing
 - Cable percussive borehole
 - Cable percussive borehole with rotary core follow on
 - Rotary corehole
 - Dynamic sampler
 - Dynamic sampler with rotary core follow on
 - Machine excavated trial pit
 - Peat probe
 - Russian peat corer
- PROFILE**
- Existing Ground Level
 - Proposed Pipeline
 - Minimum Cover Level (1.2 m) and guide levels (4m and 6m)
- Ground investigation key:**
- Geological unit:
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 - MADE GROUND
 - REWORKED PEAT (CUT)
 - PEAT
 - ALLUVIUM
 - LACUSTRINE DEPOSITS
 - GLACIOFLUVIAL SAND AND GRAVEL
 - GLACIAL TILL
 - LIMESTONE
 - MUDSTONE
 - SANDSTONE
 - CLAY
 - SILT
 - SAND
 - GRAVEL
 - BOULDER
 - LIMESTONE
 - MUDSTONE
 - SANDSTONE



CHAINAGE (m)	GROUND LEVELS (mAOD)	COVER (mAOD)	INVERT LEVEL (mAOD)	PIPE GRADIENT	ADDITIONAL INFORMATION
61.6	65.5	2.4	61.6	-1:250	
61.7	65.3	2.3	61.5	-1:300	
61.8	65.4	2.3	61.5	-1:300	
61.9	65.4	2.4	61.4	-1:117	
62.0	65.4	2.4	61.5	-1:117	
62.1	65.5	2.6	61.5	-1:117	
62.2	65.8	2.1	61.8	-1:117	
62.3	65.9	2.1	61.8	-1:117	
62.4	65.9	2.1	61.8	-1:117	
62.5	66.0	1.9	61.9	-1:117	
62.6	66.0	1.9	61.9	-1:117	
62.7	66.1	1.9	62.0	-1:117	
62.8	66.1	1.9	62.0	-1:117	
62.9	66.2	1.9	62.1	-1:117	
63.0	66.2	1.9	62.1	-1:117	
63.1	66.3	1.9	62.2	-1:117	
63.2	66.3	1.9	62.2	-1:117	
63.3	66.3	1.9	62.2	-1:117	
63.4	66.3	1.9	62.2	-1:117	
63.5	66.3	1.9	62.2	-1:117	
63.6	66.3	1.9	62.2	-1:117	
63.7	66.3	1.9	62.2	-1:117	
63.8	66.3	1.9	62.2	-1:117	
63.9	66.3	1.9	62.2	-1:117	
64.0	66.3	1.9	62.2	-1:117	
64.1	66.3	1.9	62.2	-1:117	
64.2	66.3	1.9	62.2	-1:117	
64.3	66.3	1.9	62.2	-1:117	
64.4	66.3	1.9	62.2	-1:117	
64.5	66.3	1.9	62.2	-1:117	
64.6	66.3	1.9	62.2	-1:117	
64.7	66.3	1.9	62.2	-1:117	
64.8	66.3	1.9	62.2	-1:117	
64.9	66.3	1.9	62.2	-1:117	
65.0	66.3	1.9	62.2	-1:117	
65.1	66.3	1.9	62.2	-1:117	
65.2	66.3	1.9	62.2	-1:117	
65.3	66.3	1.9	62.2	-1:117	
65.4	66.3	1.9	62.2	-1:117	
65.5	66.3	1.9	62.2	-1:117	
65.6	66.3	1.9	62.2	-1:117	
65.7	66.3	1.9	62.2	-1:117	
65.8	66.3	1.9	62.2	-1:117	
65.9	66.3	1.9	62.2	-1:117	
66.0	66.3	1.9	62.2	-1:117	
66.1	66.3	1.9	62.2	-1:117	
66.2	66.3	1.9	62.2	-1:117	
66.3	66.3	1.9	62.2	-1:117	
66.4	66.3	1.9	62.2	-1:117	
66.5	66.3	1.9	62.2	-1:117	
66.6	66.3	1.9	62.2	-1:117	
66.7	66.3	1.9	62.2	-1:117	
66.8	66.3	1.9	62.2	-1:117	
66.9	66.3	1.9	62.2	-1:117	
67.0	66.3	1.9	62.2	-1:117	
67.1	66.3	1.9	62.2	-1:117	
67.2	66.3	1.9	62.2	-1:117	
67.3	66.3	1.9	62.2	-1:117	
67.4	66.3	1.9	62.2	-1:117	
67.5	66.3	1.9	62.2	-1:117	
67.6	66.3	1.9	62.2	-1:117	
67.7	66.3	1.9	62.2	-1:117	
67.8	66.3	1.9	62.2	-1:117	
67.9	66.3	1.9	62.2	-1:117	
68.0	66.3	1.9	62.2	-1:117	
68.1	66.3	1.9	62.2	-1:117	
68.2	66.3	1.9	62.2	-1:117	
68.3	66.3	1.9	62.2	-1:117	
68.4	66.3	1.9	62.2	-1:117	
68.5	66.3	1.9	62.2	-1:117	
68.6	66.3	1.9	62.2	-1:117	
68.7	66.3	1.9	62.2	-1:117	
68.8	66.3	1.9	62.2	-1:117	
68.9	66.3	1.9	62.2	-1:117	
69.0	66.3	1.9	62.2	-1:117	
69.1	66.3	1.9	62.2	-1:117	
69.2	66.3	1.9	62.2	-1:117	
69.3	66.3	1.9	62.2	-1:117	
69.4	66.3	1.9	62.2	-1:117	
69.5	66.3	1.9	62.2	-1:117	
69.6	66.3	1.9	62.2	-1:117	
69.7	66.3	1.9	62.2	-1:117	
69.8	66.3	1.9	62.2	-1:117	
69.9	66.3	1.9	62.2	-1:117	
70.0	66.3	1.9	62.2	-1:117	

FOR CONTINUATION REFER TO DRAWING No 32105801/600/00136

Rev	Description	Drawn	Chk'd	App'd	Date
A07	DESIGN FIX 2	AL	EGSK	SPM	11.10.24
A06	POST DESIGN FIX 1 AMENDMENTS	AL	EGSK	SPM	26.04.24
A05	DESIGN FIX 1	MP	EGSK	SPM	24.11.23
A04	FOR APPROVAL	SS	AC	SPM	08.12.22
A03	FOR APPROVAL	UM	HY	CO	12.11.20
A02	FOR APPROVAL	UM	YM	CO	15.09.19
A01	FOR CLIENT REVIEW	KL	DG	ND	23.05.19
0A	FOR CLIENT REVIEW	MVS	HG	SPM	28.09.18

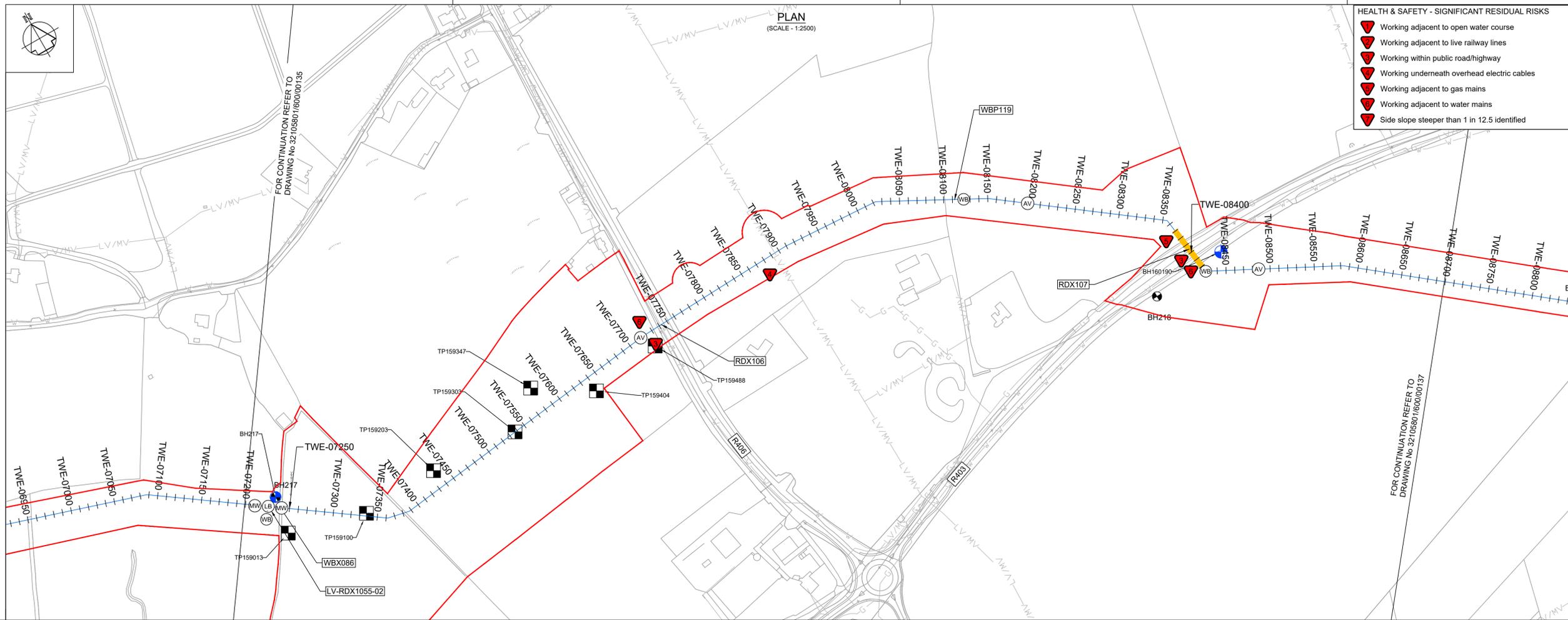
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Irish Water

UISCE ÉIREANN
COLVILL HOUSE,
TALBOT STREET,
DUBLIN 1,
IRELAND

Call 1890 278 278
Int: 00 353 1 707 2828

Jacobs TOBIN
CONSULTING ENGINEERS

Originated By	Drawn By	Checked By	Approved By
JPB	KP	HG	SPM
Date: 28.09.18	Date: 28.09.18	Date: 28.09.18	Date: 28.09.18
Scale: AS SHOWN @ A1		DO NOT SCALE	
Project Title: WATER SUPPLY PROJECT EASTERN AND MIDLANDS REGION			
Drawing Title: GRAVITY PIPELINE SECTION E PLAN AND LONGITUDINAL SECTION SHEET 5 OF 13			
Drawing Status: FOR CLIENT REVIEW			
Jacobs Tobin No. 32105801		Client No. 9318	
Drawing No. 32105801/600/00135			



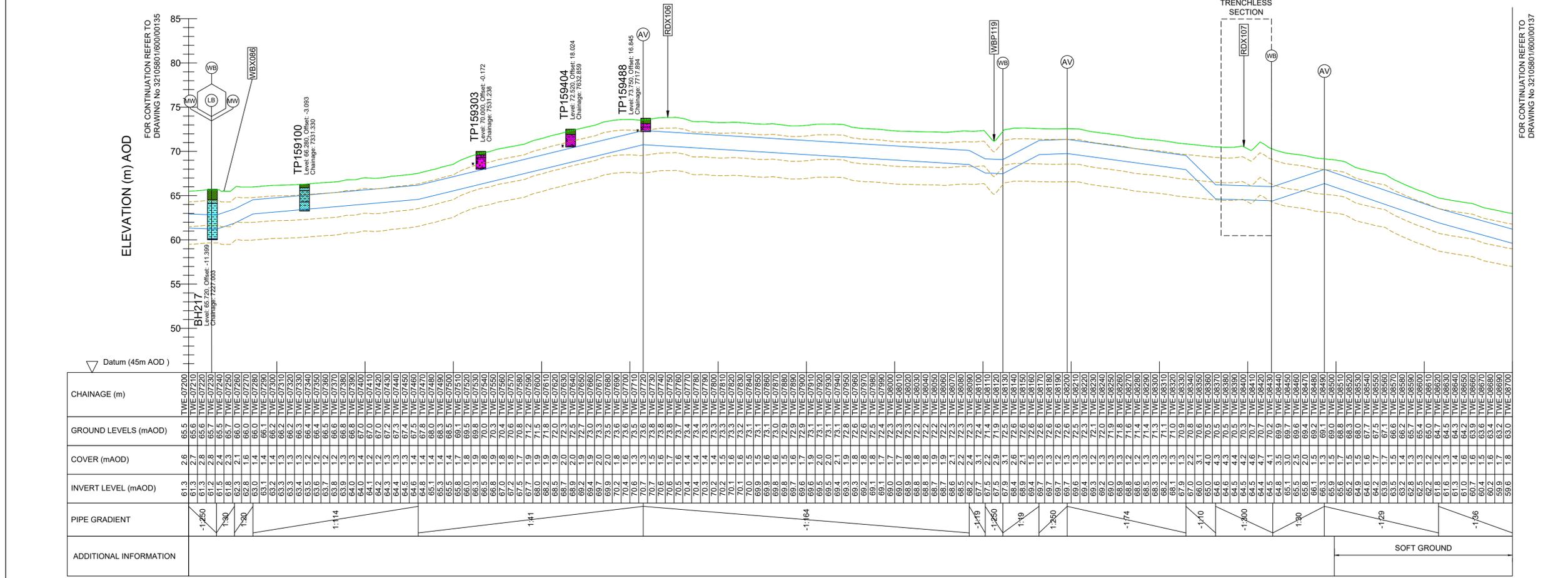
- HEALTH & SAFETY - SIGNIFICANT RESIDUAL RISKS**
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 - Side slope steeper than 1 in 12.5 identified

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Survey Ireland and Government of Ireland

Original Size
A1

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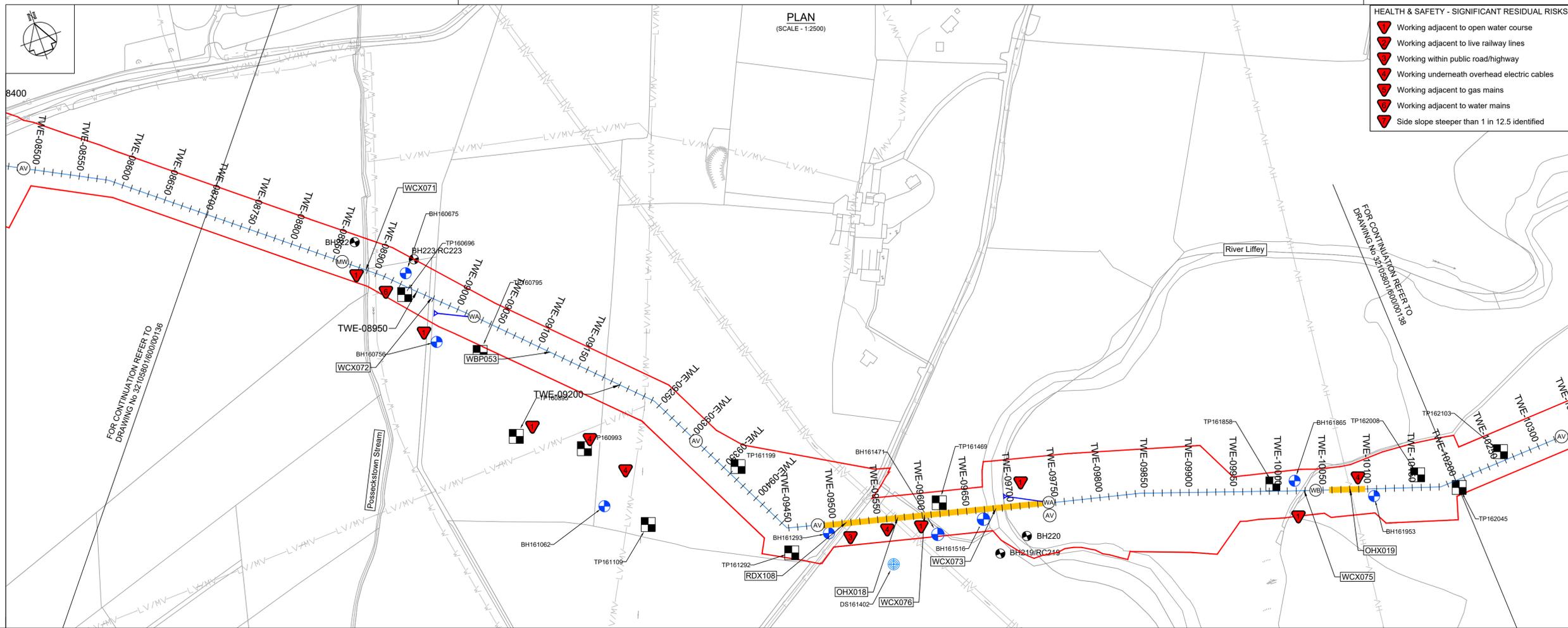
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Jacobs TOBIN
CONSULTING ENGINEERS

Originated By	Drawn By	Checked By	Approved By
JB	KP	HG	SPM
Date	Date	Date	Date
28.09.18	28.09.18	28.09.18	28.09.18
Scale		AS SHOWN @ A1	
Project Title		DO NOT SCALE	
WATER SUPPLY PROJECT EASTERN AND MIDLANDS REGION			
Drawing Title GRAVITY PIPELINE SECTION E PLAN AND LONGITUDINAL SECTION SHEET 6 OF 12			
Drawing Status FOR CLIENT REVIEW			
Jacobs Tobin No. 32105801		Client No. 9318	
Drawing No. 32105801/600/00136			



- HEALTH & SAFETY - SIGNIFICANT RESIDUAL RISKS**
- Working adjacent to open water course
 - Working adjacent to live railway lines
 - Working within public road/highway
 - Working underneath overhead electric cables
 - Working adjacent to gas mains
 - Working adjacent to water mains
 - Side slope steeper than 1 in 12.5 identified

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Original Size **A1**

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- Legend:**
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- Proposed Pipe Centreline
 - Planning Application Boundary
 - Indicative/Potential Tunnel/Trenchless Section
 - Electric Overhead Powerline, Low/Medium Voltage
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 - Water Mains
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 - Washout with outfall
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 - Road Crossing
 - Watercourse Crossing - EPA
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 - Electric Overhead Crossing
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 - Rotary corehole
 - Dynamic sampler
 - Dynamic sampler with rotary core follow on
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 - Peat probe
 - Russian peat corer

- PROFILE**
- Existing Ground Level
 - Proposed Pipeline
 - Minimum Cover Level (1.2 m) and guide levels (4m and 6m)

- Ground investigation key:**
- Geological unit:**
- TOPSOIL
 - MADE GROUND
 - REWORKED PEAT (CUT)
 - PEAT
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 - LACUSTRINE DEPOSITS
 - GLACIOFLUVIAL SAND AND GRAVEL
 - GLACIAL TILL
 - LIMESTONE
 - MUDSTONE
 - SANDSTONE
 - CLAY
 - SILT
 - SAND
 - GRAVEL
 - BOULDER
 - LIMESTONE
 - MUDSTONE
 - SANDSTONE

Rev	Description	Drawn	Chk'd	App'd	Date
A07	DESIGN FIX 2	AL	EGSK	SPM	11.10.24
A06	POST DESIGN FIX 1 AMENDMENTS	AL	EGSK	SPM	26.04.24
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A03	FOR APPROVAL	UM	HY	CO	12.11.20
A02	FOR APPROVAL	UM	YM	CO	15.09.20
A01	FOR CLIENT REVIEW	KL	DG	ND	23.05.19
0A	FOR CLIENT REVIEW	MVS	HG	SPM	28.09.18

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Originated By	Drawn By	Checked By	Approved By
JB	KP	HG	SPM

Date	Date	Date	Date
28.09.18	28.09.18	28.09.18	28.09.18

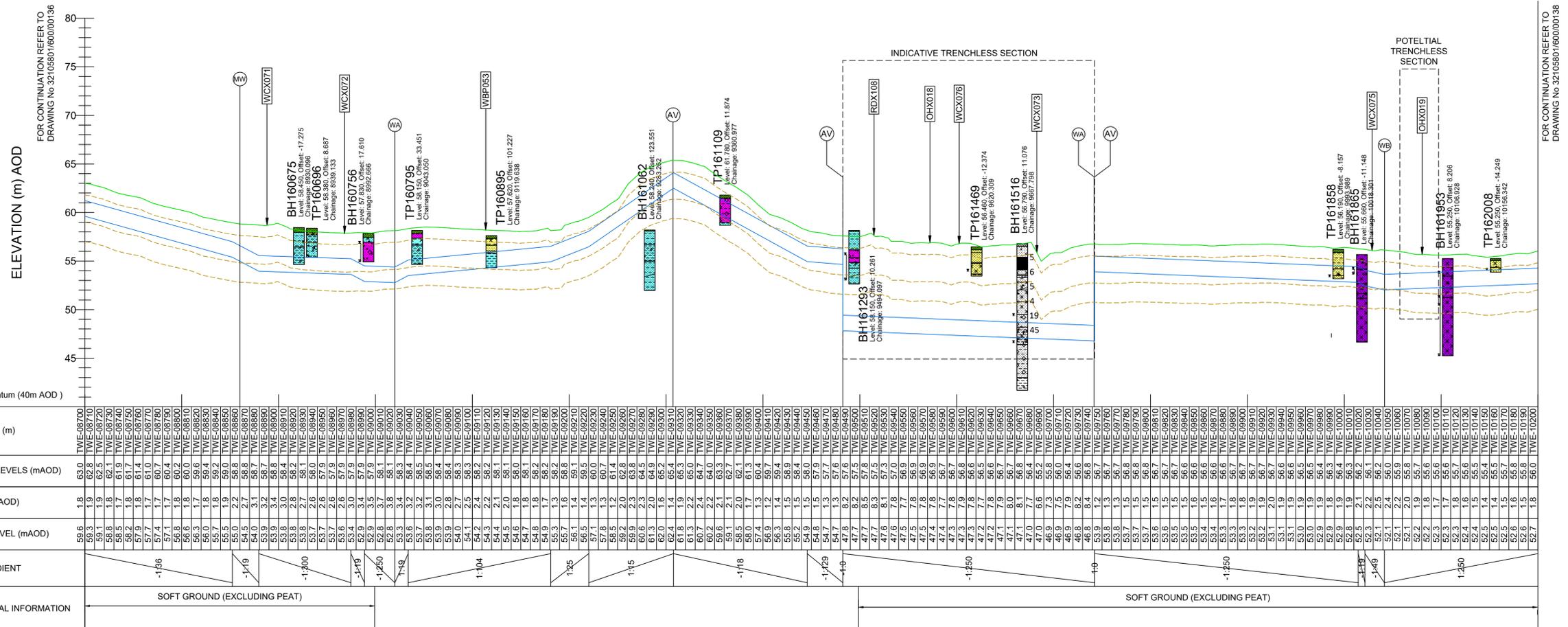
Scale: AS SHOWN @ A1 DO NOT SCALE

Project Title: WATER SUPPLY PROJECT EASTERN AND MIDLANDS REGION

Drawing Title: GRAVITY PIPELINE SECTION E PLAN AND LONGITUDINAL SECTION SHEET 7 OF 13

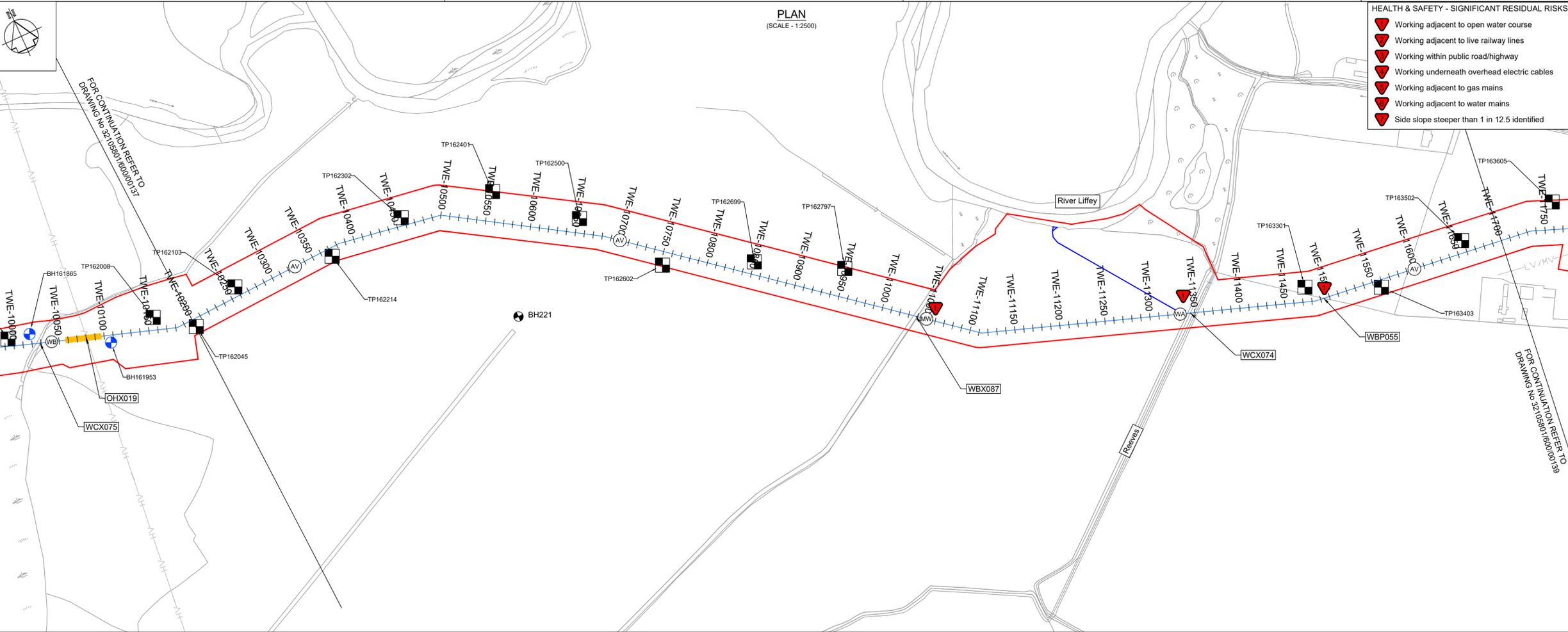
Drawing Status: FOR CLIENT REVIEW
Jacobs Tobin No. 32105801 Client No. 9318

Drawing No. 32105801/600/00137



LONGITUDINAL SECTION
(SCALE - Hor 1:2500, Ver 1:250)

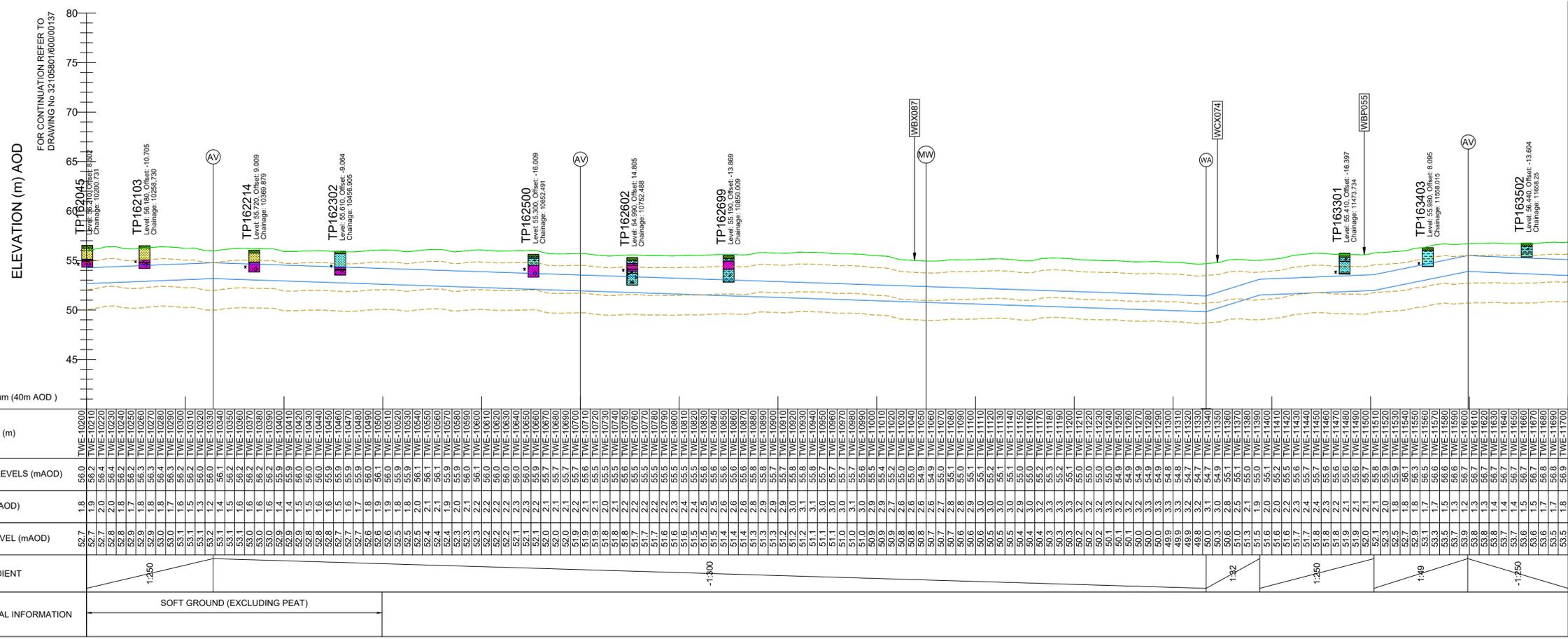
CHAINAGE (m)	GROUND LEVELS (mAOD)	COVER (mAOD)	INVERT LEVEL (mAOD)	PIPE GRADIENT	ADDITIONAL INFORMATION
1.8	63.0	1.8	59.6		
2.8	62.8	1.9	59.3		
3.8	62.1	1.9	58.8		
4.8	62.1	1.9	58.8		
5.8	61.7	1.8	58.5		
6.8	61.4	1.8	57.9		
7.8	61.0	1.7	57.4		
8.8	60.7	1.7	57.1		
9.8	60.4	1.7	56.8		
10.8	60.2	1.8	56.6		
11.8	59.6	1.7	56.3		
12.8	59.6	1.7	56.3		
13.8	59.4	1.8	56.0		
14.8	59.2	1.8	55.7		
15.8	59.0	1.9	55.5		
16.8	58.8	2.2	54.5		
17.8	58.7	2.7	54.0		
18.8	58.7	3.1	53.7		
19.8	58.6	3.2	53.6		
20.8	58.6	3.2	53.6		
21.8	58.4	3.0	53.8		
22.8	58.2	2.8	53.8		
23.8	58.1	2.8	53.8		
24.8	58.0	2.6	53.7		
25.8	57.9	2.6	53.7		
26.8	57.9	2.6	53.7		
27.8	57.9	2.6	53.7		
28.8	57.9	2.6	53.7		
29.8	57.9	2.6	53.7		
30.8	57.9	2.6	53.7		
31.8	57.9	2.6	53.7		
32.8	57.9	2.6	53.7		
33.8	57.9	2.6	53.7		
34.8	57.9	2.6	53.7		
35.8	57.9	2.6	53.7		
36.8	57.9	2.6	53.7		
37.8	57.9	2.6	53.7		
38.8	57.9	2.6	53.7		
39.8	57.9	2.6	53.7		
40.8	57.9	2.6	53.7		
41.8	57.9	2.6	53.7		
42.8	57.9	2.6	53.7		
43.8	57.9	2.6	53.7		
44.8	57.9	2.6	53.7		
45.8	57.9	2.6	53.7		
46.8	57.9	2.6	53.7		
47.8	57.9	2.6	53.7		
48.8	57.9	2.6	53.7		
49.8	57.9	2.6	53.7		
50.8	57.9	2.6	53.7		
51.8	57.9	2.6	53.7		
52.8	57.9	2.6	53.7		
53.8	57.9	2.6	53.7		
54.8	57.9	2.6	53.7		
55.8	57.9	2.6	53.7		
56.8	57.9	2.6	53.7		
57.8	57.9	2.6	53.7		
58.8	57.9	2.6	53.7		
59.8	57.9	2.6	53.7		
60.8	57.9	2.6	53.7		
61.8	57.9	2.6	53.7		
62.8	57.9	2.6	53.7		
63.8	57.9	2.6	53.7		
64.8	57.9	2.6	53.7		
65.8	57.9	2.6	53.7		
66.8	57.9	2.6	53.7		
67.8	57.9	2.6	53.7		
68.8	57.9	2.6	53.7		
69.8	57.9	2.6	53.7		
70.8	57.9	2.6	53.7		
71.8	57.9	2.6	53.7		
72.8	57.9	2.6	53.7		
73.8	57.9	2.6	53.7		
74.8	57.9	2.6	53.7		
75.8	57.9	2.6	53.7		
76.8	57.9	2.6	53.7		
77.8	57.9	2.6	53.7		
78.8	57.9	2.6	53.7		
79.8	57.9	2.6	53.7		
80.8	57.9	2.6	53.7		
81.8	57.9	2.6	53.7		
82.8	57.9	2.6	53.7		
83.8	57.9	2.6	53.7		
84.8	57.9	2.6	53.7		
85.8	57.9	2.6	53.7		
86.8	57.9	2.6	53.7		
87.8	57.9	2.6	53.7		
88.8	57.9	2.6	53.7		
89.8	57.9	2.6	53.7		
90.8	57.9	2.6	53.7		
91.8	57.9	2.6	53.7		
92.8	57.9	2.6	53.7		
93.8	57.9	2.6	53.7		
94.8	57.9	2.6	53.7		
95.8	57.9	2.6	53.7		
96.8	57.9	2.6	53.7		
97.8	57.9	2.6	53.7		
98.8	57.9	2.6	53.7		
99.8	57.9	2.6	53.7		
100.8	57.9	2.6	53.7		



- HEALTH & SAFETY - SIGNIFICANT RESIDUAL RISKS**
- Working adjacent to open water course
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 - Foul Sewers
- PROFILE**
- Existing Ground Level
 - Proposed Pipeline
 - Minimum Cover Level (1.2 m) and guide levels (4m and 6m)
- Ground investigation key:**
- Geological unit:
- TOPSOIL
 - MADE GROUND
 - REWORKED PEAT (CUT)
 - PEAT
 - ALLUVIUM
 - LACUSTRINE DEPOSITS
 - GLACIOFLUVIAL SAND AND GRAVEL
 - GLACIAL TILL
 - LIMESTONE
 - MUDSTONE
 - SANDSTONE
- Other symbols:**
- AV Air Valve
 - WA Washout with outfall
 - WB Washout without outfall
 - MW Manway
 - LA Line Valve - see drg 600/00250
 - LB Line Valve - see drg 600/00251
 - LC Line Valve - see drg 600/00252
 - LD Line Valve - see drg 600/00253
 - Outfall to watercourse
 - Future Takeoff Point
 - Road Crossing
 - Watercourse Crossing - EPA
 - Watercourse Crossing
 - Potential Waterbody Crossing
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Rev	Description	Drawn	Chk'd	App'd	Date
A07	DESIGN FIX 2	AL	EGSK	SPM	11.10.24
A06	POST DESIGN FIX 1 AMENDMENTS	AL	EGSK	SPM	26.04.24
A05	DESIGN FIX 1	MP	EGSK	SPM	24.11.23
A04	FOR APPROVAL	SS	AC	SPM	08.12.22
A03	FOR APPROVAL	UM	HY	CO	12.11.20
A02	FOR APPROVAL	UM	YM	CO	15.09.20
A01	FOR CLIENT REVIEW	KL	DG	ND	23.05.19
0A	FOR CLIENT REVIEW	MVS	HG	SPM	28.09.18

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Originated By	Drawn By	Checked By	Approved By
JB	KP	HG	SPM
Date: 28.09.18	Date: 28.09.18	Date: 28.09.18	Date: 28.09.18

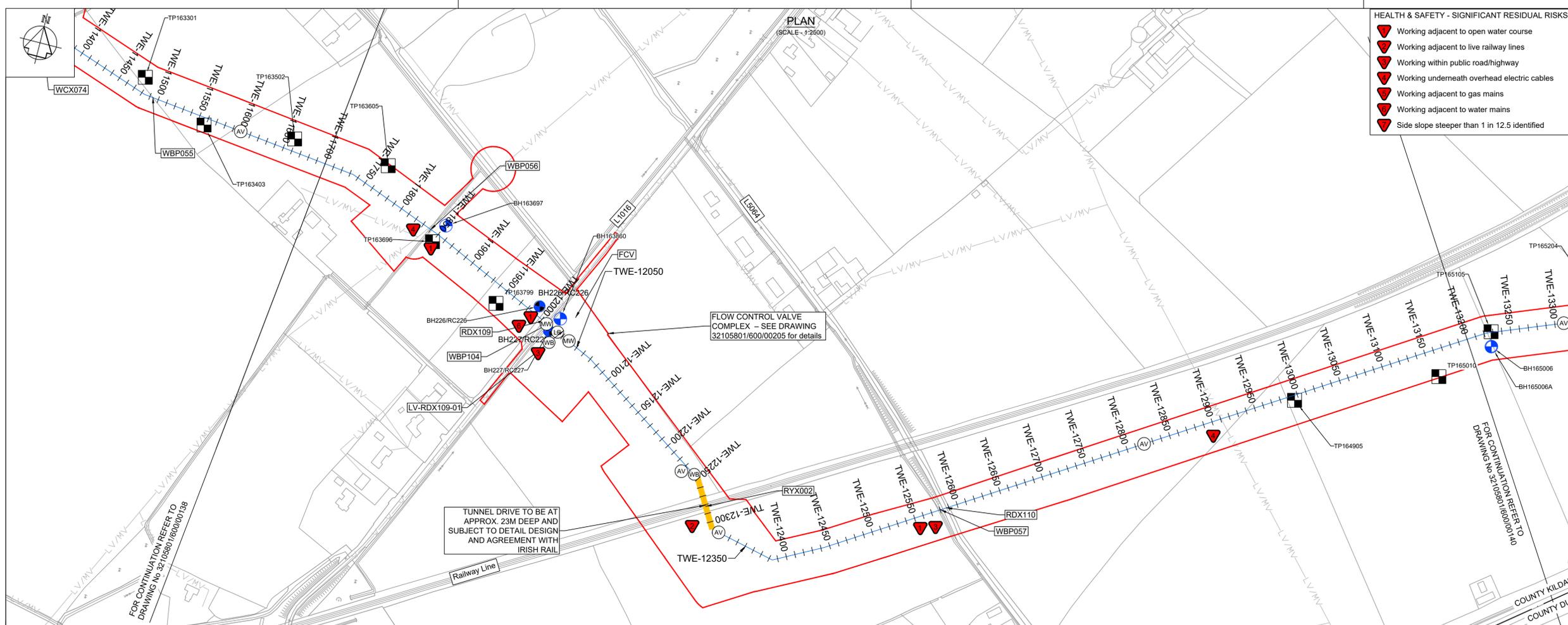
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Project Title: WATER SUPPLY PROJECT EASTERN AND MIDLANDS REGION

Drawing Title: GRAVITY PIPELINE SECTION E PLAN AND LONGITUDINAL SECTION SHEET 8 OF 13

Drawing Status: FOR CLIENT REVIEW
Jacobs Tobin No. 32105801 Client No. 9318

Drawing No. 32105801/600/00138



- HEALTH & SAFETY - SIGNIFICANT RESIDUAL RISKS**
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Legend:

PLAN

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Ground investigation key:

Geological unit:

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- PEAT
- ALLUVIUM
- LACUSTRINE DEPOSITS
- GLACIOFLUVIAL SAND AND GRAVEL
- GLACIAL TILL
- LIMESTONE
- MUDSTONE
- SANDSTONE

Typo soil major constituent:

- CLAY
- SILT
- SAND
- GRAVEL
- BOULDER
- LIMESTONE
- MUDSTONE
- SANDSTONE

A07	DESIGN FIX 2	AL	EGSK	SPM	11.10.24
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Rev Description Drawn Chk'd App'd Date

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DUBLIN 1,
IRELAND

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Jacobs TOBIN
CONSULTING ENGINEERS

Original By	Drawn By	Checked By	Approved By
JB	MVS	HG	SPM
Date	Date	Date	Date
28.09.18	28.09.18	28.09.18	28.09.18

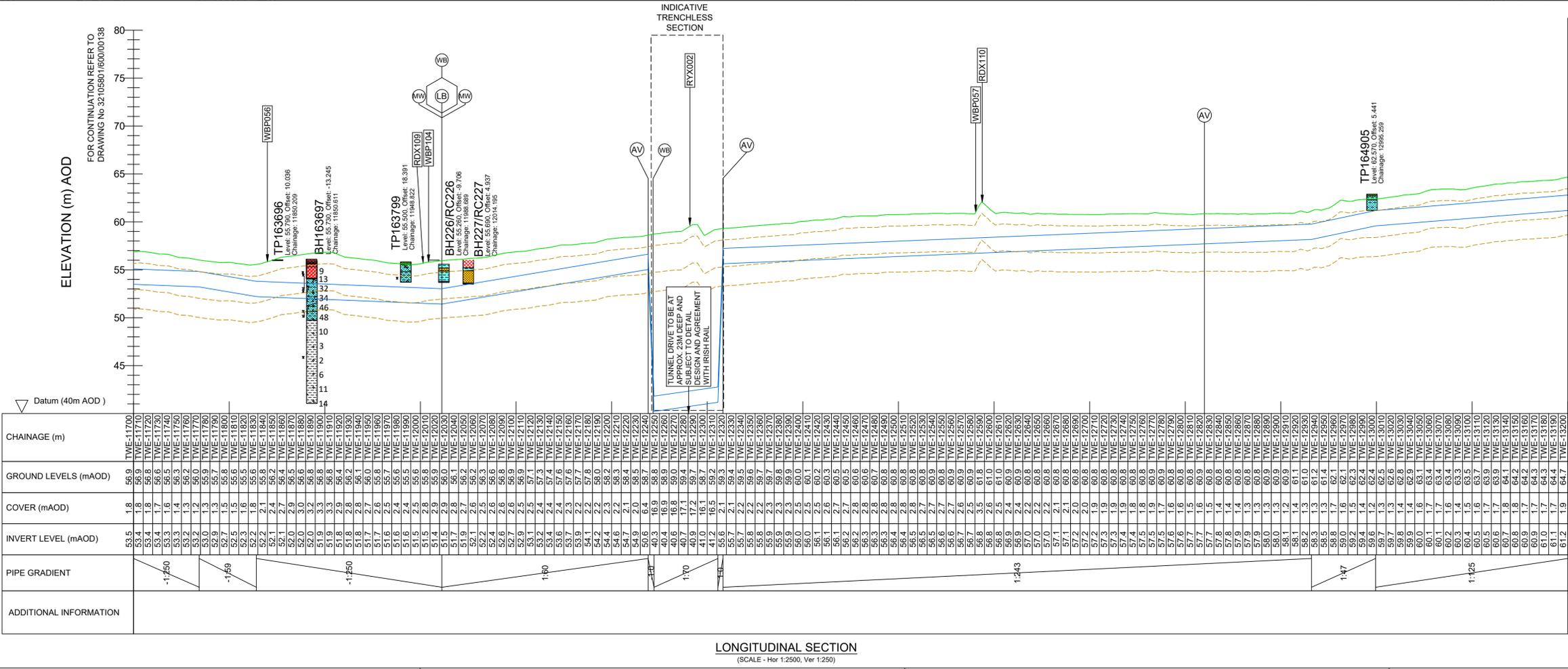
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Project Title: WATER SUPPLY PROJECT EASTERN AND MIDLANDS REGION

Drawing Title: GRAVITY PIPELINE SECTION E PLAN AND LONGITUDINAL SECTION SHEET 9 OF 13

Drawing Status: FOR CLIENT REVIEW
Jacobs Tobin No. 32105801 Client No. 9318

Drawing No. 32105801/600/00139

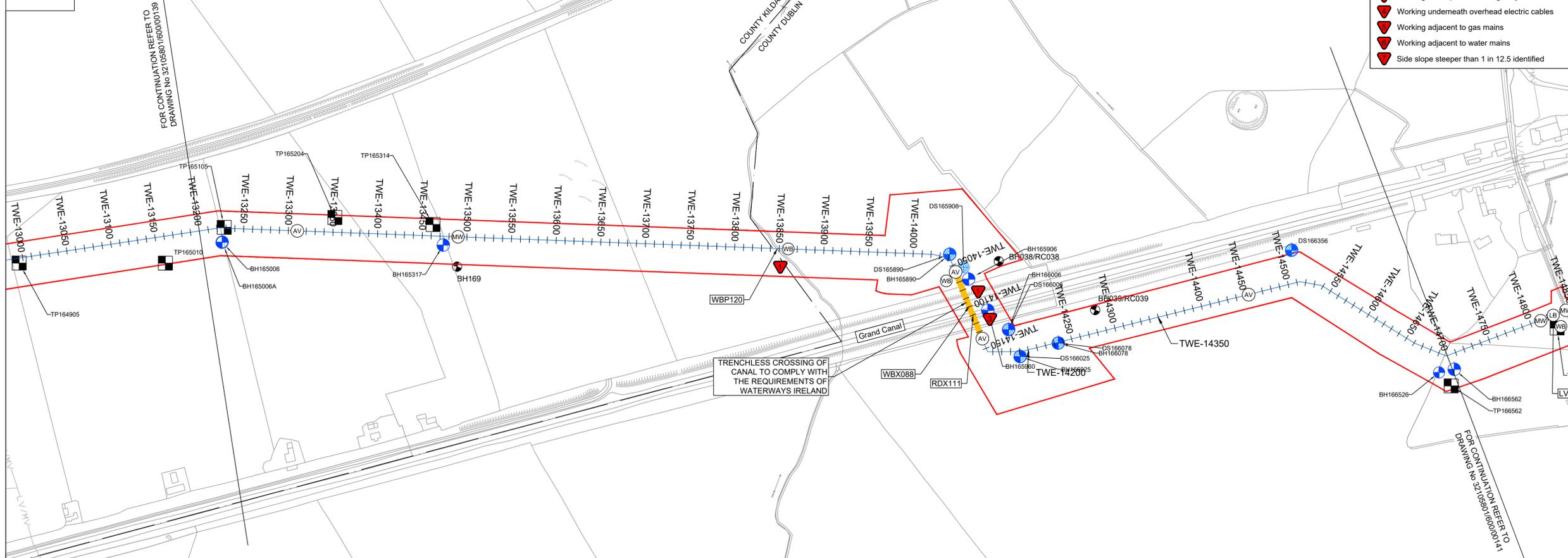


LONGITUDINAL SECTION
(SCALE - Hor 1:2500, Ver 1:250)



PLAN
(SCALE - 1:2500)

COUNTY KILDARE
COUNTY DUBLIN



- HEALTH & SAFETY - SIGNIFICANT RESIDUAL RISKS**
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Original Size
A1

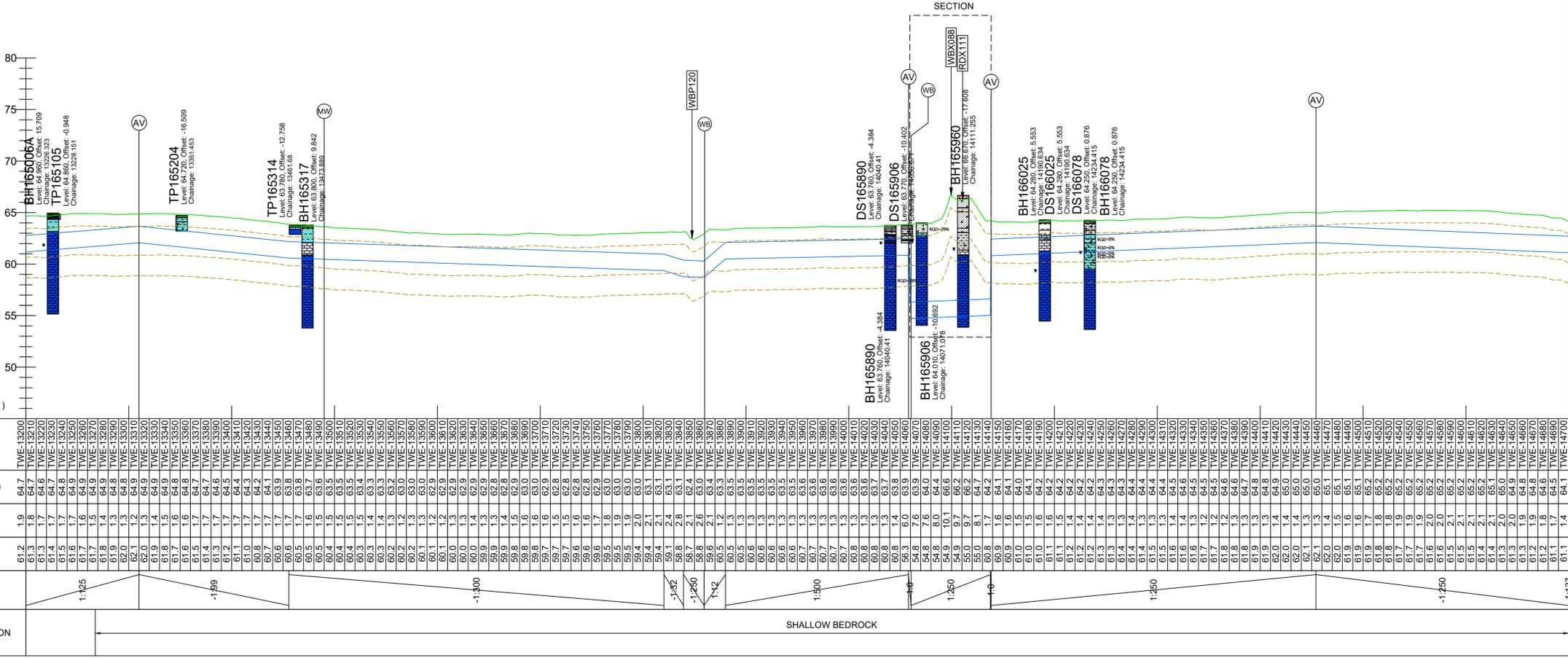
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 - GLACIAL TILL
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 - MUDSTONE
 - SANDSTONE

FOR CONTINUATION REFER TO
DRAWING No 32105801/600/00141

ELEVATION (m) AOD

FOR CONTINUATION REFER TO
DRAWING No 32105801/600/00189



LONGITUDINAL SECTION
(SCALE - Hor 1:2500, Ver 1:250)

FOR CONTINUATION REFER TO
DRAWING No 32105801/600/00141

CHAINAGE (m)	GROUND LEVELS (mAOD)	COVER (mAOD)	INVERT LEVEL (mAOD)	PIPE GRADIENT	ADDITIONAL INFORMATION
61.2	64.7	1.9	61.2		
61.3	64.7	1.9	61.3		
61.4	64.7	1.9	61.4		
61.5	64.7	1.9	61.5		
61.6	64.9	1.6	61.6	1:125	
61.7	64.9	1.6	61.7		
61.8	64.9	1.6	61.8		
61.9	64.8	1.3	61.9		
62.0	64.8	1.3	62.0		
62.1	64.9	1.3	62.1		
62.2	64.9	1.3	62.2		
62.3	64.9	1.3	62.3		
62.4	64.9	1.3	62.4		
62.5	64.9	1.3	62.5		
62.6	64.8	1.6	62.6		
62.7	64.8	1.6	62.7		
62.8	64.8	1.6	62.8		
62.9	64.8	1.6	62.9		
63.0	64.8	1.6	63.0		
63.1	64.8	1.6	63.1		
63.2	64.8	1.6	63.2		
63.3	64.8	1.6	63.3		
63.4	64.8	1.6	63.4		
63.5	64.8	1.6	63.5		
63.6	64.8	1.6	63.6		
63.7	64.8	1.6	63.7		
63.8	64.8	1.6	63.8		
63.9	64.8	1.6	63.9		
64.0	64.8	1.6	64.0		
64.1	64.8	1.6	64.1		
64.2	64.8	1.6	64.2		
64.3	64.8	1.6	64.3		
64.4	64.8	1.6	64.4		
64.5	64.8	1.6	64.5		
64.6	64.8	1.6	64.6		
64.7	64.8	1.6	64.7		
64.8	64.8	1.6	64.8		
64.9	64.8	1.6	64.9		
65.0	64.8	1.6	65.0		
65.1	64.8	1.6	65.1		
65.2	64.8	1.6	65.2		
65.3	64.8	1.6	65.3		
65.4	64.8	1.6	65.4		
65.5	64.8	1.6	65.5		
65.6	64.8	1.6	65.6		
65.7	64.8	1.6	65.7		
65.8	64.8	1.6	65.8		
65.9	64.8	1.6	65.9		
66.0	64.8	1.6	66.0		
66.1	64.8	1.6	66.1		
66.2	64.8	1.6	66.2		
66.3	64.8	1.6	66.3		
66.4	64.8	1.6	66.4		
66.5	64.8	1.6	66.5		
66.6	64.8	1.6	66.6		
66.7	64.8	1.6	66.7		
66.8	64.8	1.6	66.8		
66.9	64.8	1.6	66.9		
67.0	64.8	1.6	67.0		
67.1	64.8	1.6	67.1		
67.2	64.8	1.6	67.2		
67.3	64.8	1.6	67.3		
67.4	64.8	1.6	67.4		
67.5	64.8	1.6	67.5		
67.6	64.8	1.6	67.6		
67.7	64.8	1.6	67.7		
67.8	64.8	1.6	67.8		
67.9	64.8	1.6	67.9		
68.0	64.8	1.6	68.0		
68.1	64.8	1.6	68.1		
68.2	64.8	1.6	68.2		
68.3	64.8	1.6	68.3		
68.4	64.8	1.6	68.4		
68.5	64.8	1.6	68.5		
68.6	64.8	1.6	68.6		
68.7	64.8	1.6	68.7		
68.8	64.8	1.6	68.8		
68.9	64.8	1.6	68.9		
69.0	64.8	1.6	69.0		
69.1	64.8	1.6	69.1		
69.2	64.8	1.6	69.2		
69.3	64.8	1.6	69.3		
69.4	64.8	1.6	69.4		
69.5	64.8	1.6	69.5		
69.6	64.8	1.6	69.6		
69.7	64.8	1.6	69.7		
69.8	64.8	1.6	69.8		
69.9	64.8	1.6	69.9		
70.0	64.8	1.6	70.0		

Rev	Description	Drawn	Chk'd	App'd	Date
A07	DESIGN FIX 2	AL	EGSK	SPM	11.10.24
A06	POST DESIGN FIX 1 AMENDMENTS	AL	EGSK	SPM	26.04.24
A05	DESIGN FIX 1	MP	EGSK	SPM	24.11.23
A04	FOR APPROVAL	SS	AC	SPM	08.12.22
A03	FOR APPROVAL	UM	HY	CO	12.11.20
A02	FOR APPROVAL	UM	YM	CO	15.09.20
A01	FOR CLIENT REVIEW	KL	DG	ND	23.05.19
0A	FOR CLIENT REVIEW	MVS	HG	SPM	28.09.18

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Int: 00 353 1 707 2828



Originated By	Drawn By	Checked By	Approved By
Job	MVS	HG	SPM
Date	Date	Date	Date
28.09.18	28.09.18	28.09.18	28.09.18

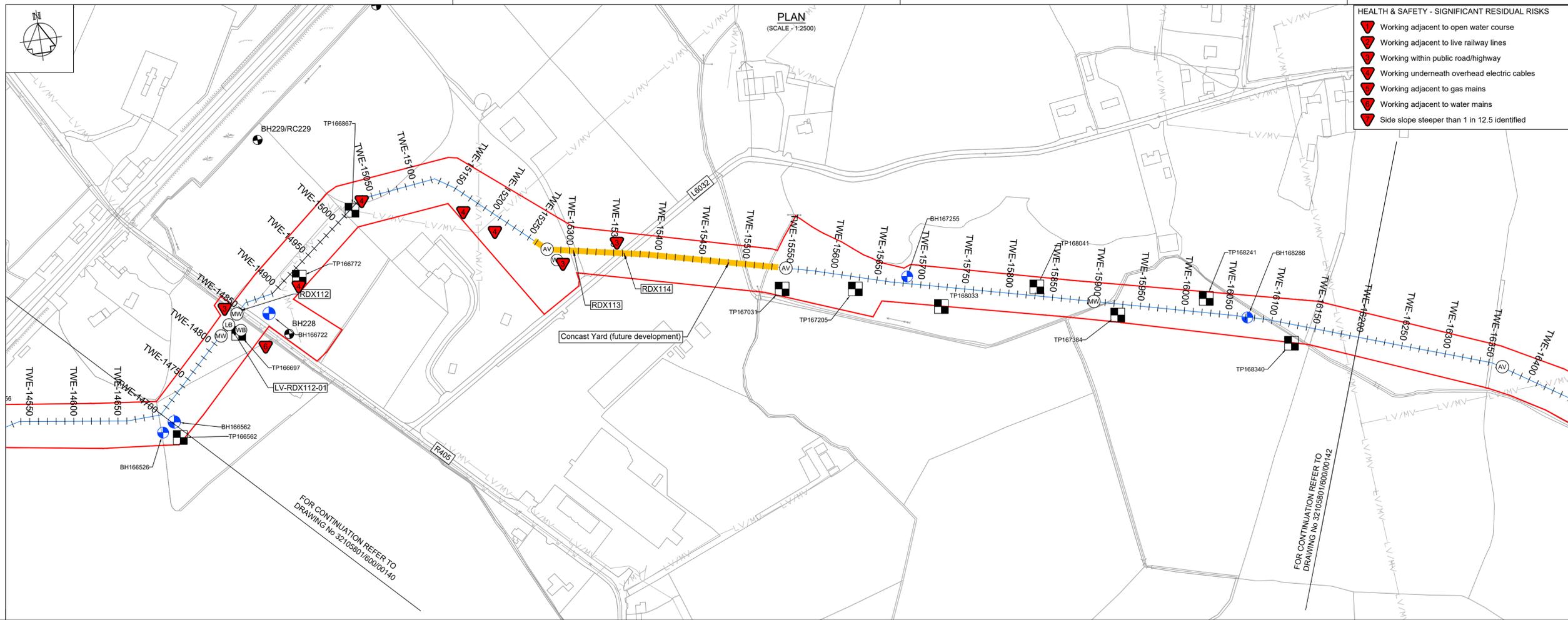
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Project Title: WATER SUPPLY PROJECT
EASTERN AND MIDLANDS REGION

Drawing Title: GRAVITY PIPELINE SECTION E
PLAN AND LONGITUDINAL SECTION
SHEET 10 OF 13

Drawing Status: FOR CLIENT REVIEW
Jacobs Tobin No. 32105801 Client No. 9318

Drawing No. 32105801/600/00140



- HEALTH & SAFETY - SIGNIFICANT RESIDUAL RISKS**
- Working adjacent to open water course
 - Working adjacent to live railway lines
 - Working within public road/highway
 - Working underneath overhead electric cables
 - Working adjacent to gas mains
 - Working adjacent to water mains
 - Side slope steeper than 1 in 12.5 identified

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Original Size **A1**

- Notes:**
- All dimensions are in metres and all levels are A.O.D. Main Head unless otherwise stated.
 - The pipeline horizontal and vertical alignment are subject to further design development but any change to this will be subject to the limits and conditions detailed in this planning submission.
 - The design is based on a nominal 1.6m diameter pipeline. The borehole logs shown on the long section are those within 20m of the proposed horizontal alignment. Further investigations will be undertaken pre and post planning to inform the detailed design.
 - The location of existing services are based on information provided by the service provider. The actual locations are to be verified in the field.
 - The Method of working in peat is related to the anticipated depth of the peat layer - see EIA Appendix A5.2.
 - A MW access point is provided either side of every LV and at every AV. For MWs at WOs see the valve schedule.

- Legend:**
- PLAN**
- Proposed Pipe Centreline
 - Planning Application Boundary
 - Indicative/Potential Tunnel/Trenchless Section
 - Electric Overhead Powerline, Low/Medium Voltage
 - Electric Overhead Powerline, High Voltage
 - Water Mains
 - Gas Mains
 - Foul Sewers
 - Air Valve
 - Washout with outfall
 - Washout without outfall
 - Manway
 - Line Valve - see drg 600/00250
 - Line Valve - see drg 600/00251
 - Line Valve - see drg 600/00252
 - Line Valve - see drg 600/00253
 - Outfall to watercourse
 - Future Takeoff Point
 - Road Crossing
 - Watercourse Crossing - EPA
 - Watercourse Crossing
 - Potential Waterbody Crossing
 - Electric Overhead Crossing
 - Railway Crossing
 - Cable percussive borehole
 - Cable percussive borehole with rotary core follow on
 - Rotary corehole
 - Dynamic sampler
 - Dynamic sampler with rotary core follow on
 - Machine excavated trial pit
 - Peat probe
 - Russian peat corer
- PROFILE**
- Existing Ground Level
 - Proposed Pipeline
 - Minimum Cover Level (1.2 m) and guide levels (4m and 6m)
- Ground investigation key:**

- Geological unit:**
- TOPSOIL
 - MADE GROUND
 - REWORKED PEAT (CUT)
 - PEAT
 - ALLUVIUM
 - LACUSTRINE DEPOSITS
 - GLACIOFLUVIAL SAND AND GRAVEL
 - GLACIAL TILL
 - LIMESTONE
 - MUDSTONE
 - SANDSTONE
 - CLAY
 - SILT
 - SAND
 - GRAVEL
 - BOULDER
 - LIMESTONE
 - MUDSTONE
 - SANDSTONE

Rev	Description	Drawn	Chk'd	App'd	Date
A07	DESIGN FIX 2	AL	EG/SK	SPM	11.10.24
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Uisce Éireann
Irish Water

UISCE ÉIREANN
COLVILL HOUSE,
TALBOT STREET,
DUBLIN 1,
IRELAND

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Jacobs TOBIN
CONSULTING ENGINEERS

Original By	Drawn By	Checked By	Approved By
MSV	MSV	HG	SPM
Date	Date	Date	Date
28.09.18	28.09.18	28.09.18	28.09.18

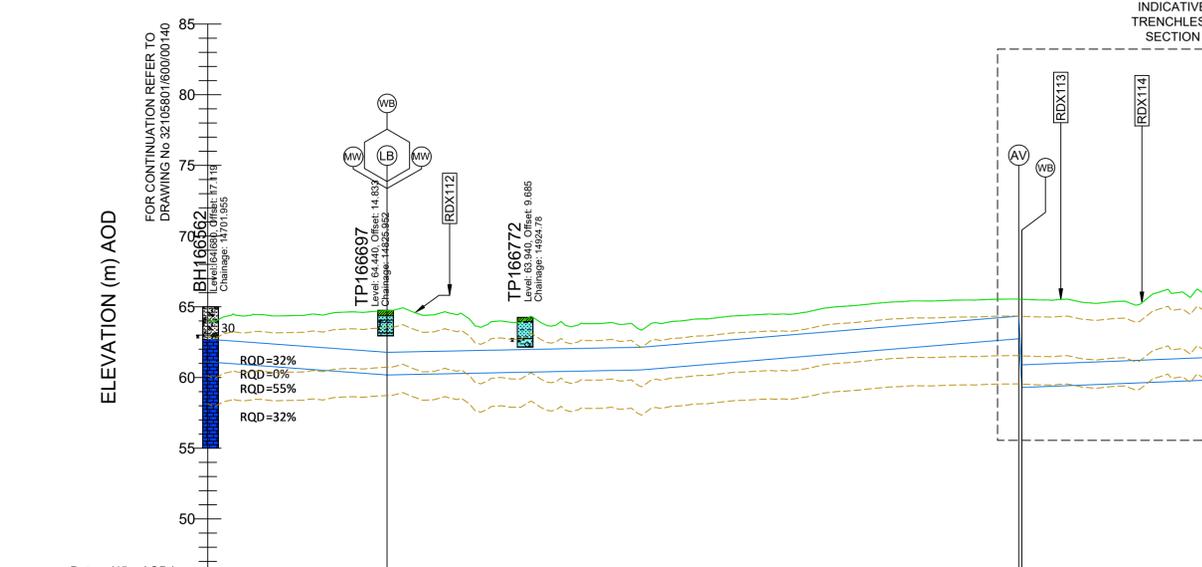
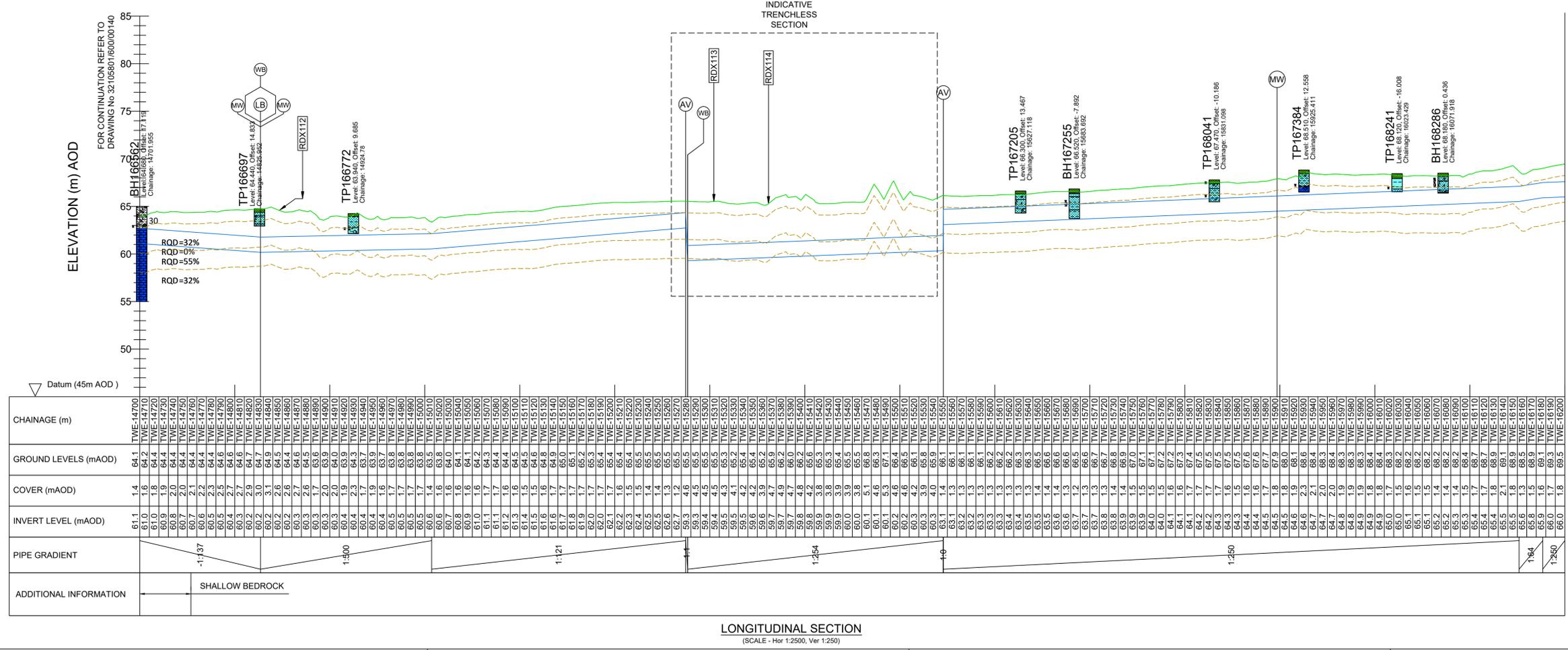
Scale: AS SHOWN @A1 DO NOT SCALE

Project Title: WATER SUPPLY PROJECT EASTERN AND MIDLANDS REGION

Drawing Title: GRAVITY PIPELINE SECTION E PLAN AND LONGITUDINAL SECTION SHEET 11 OF 13

Drawing Status: FOR CLIENT REVIEW
Jacobs Tobin No. 32105801 Client No. 9318

Drawing No. 32105801/600/00141



CHAINAGE (m)	GROUND LEVELS (mAOD)	COVER (mAOD)	INVERT LEVEL (mAOD)	PIPE GRADIENT	ADDITIONAL INFORMATION
61.1	64.2	1.4	61.1	1:37	SHALLOW BEDROCK
61.2	64.4	1.6	61.0	1:37	
61.3	64.4	1.8	60.9	1:37	
61.4	64.4	1.9	60.8	1:37	
61.5	64.4	2.0	60.7	1:37	
61.6	64.4	2.1	60.7	1:37	
61.7	64.4	2.2	60.6	1:37	
61.8	64.4	2.2	60.5	1:37	
61.9	64.4	2.3	60.4	1:37	
62.0	64.4	2.3	60.3	1:37	
62.1	64.4	2.4	60.2	1:37	
62.2	64.4	2.4	60.1	1:37	
62.3	64.4	2.5	60.0	1:37	
62.4	64.4	2.5	59.9	1:37	
62.5	64.4	2.6	59.8	1:37	
62.6	64.4	2.6	59.7	1:37	
62.7	64.4	2.7	59.6	1:37	
62.8	64.4	2.7	59.5	1:37	
62.9	64.4	2.8	59.4	1:37	
63.0	64.4	2.8	59.3	1:37	
63.1	64.4	2.9	59.2	1:37	
63.2	64.4	2.9	59.1	1:37	
63.3	64.4	3.0	59.0	1:37	
63.4	64.4	3.0	58.9	1:37	
63.5	64.4	3.1	58.8	1:37	
63.6	64.4	3.1	58.7	1:37	
63.7	64.4	3.2	58.6	1:37	
63.8	64.4	3.2	58.5	1:37	
63.9	64.4	3.3	58.4	1:37	
64.0	64.4	3.3	58.3	1:37	
64.1	64.4	3.4	58.2	1:37	
64.2	64.4	3.4	58.1	1:37	
64.3	64.4	3.5	58.0	1:37	
64.4	64.4	3.5	57.9	1:37	
64.5	64.4	3.6	57.8	1:37	
64.6	64.4	3.6	57.7	1:37	
64.7	64.4	3.7	57.6	1:37	
64.8	64.4	3.7	57.5	1:37	
64.9	64.4	3.8	57.4	1:37	
65.0	64.4	3.8	57.3	1:37	
65.1	64.4	3.9	57.2	1:37	
65.2	64.4	3.9	57.1	1:37	
65.3	64.4	4.0	57.0	1:37	
65.4	64.4	4.0	56.9	1:37	
65.5	64.4	4.1	56.8	1:37	
65.6	64.4	4.1	56.7	1:37	
65.7	64.4	4.2	56.6	1:37	
65.8	64.4	4.2	56.5	1:37	
65.9	64.4	4.3	56.4	1:37	
66.0	64.4	4.3	56.3	1:37	

LONGITUDINAL SECTION
(SCALE - Hor 1:250)

