



LEGEND

Combined Engineering Appraisal

- Major Adverse
- Moderate Adverse
- Slight Adverse
- Neutral

P01	First Fix Appraisal				
	JSE	RO	JG	GW	GH
	10/04/18	18/04/18	18/04/18	18/04/18	18/04/18

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Precision House
 McNeil Drive
 Motherwell
 ML1 4UR



Client
 58 Port Dundas Road
 Glasgow
 G4 0HF



Project Name
A96 Dualling: East of Huntly to Aberdeen

Drawing Title
BN+01 - Engineering Appraisal

Project Ref. No. 250002-92	Stage Stage 2	Scale : 1:20,000 @A1
		Dimensions :

Drawing Number	Project	Originator	Volume
A96PEA	-AMAR - HGN -		
CB	-DR-CH-011101		
Location	Type	Role	Number

Suitability	Suitability Description	Revision
S2	For Information	P01.01

0	Neutral	Overall
-1	Slight Adverse	
-2	Moderate Adverse	
-3	Major Adverse	

Rules

Total Score

= Alignment Score (Average of E, F, G, H and I) + Geo Score + Structures Score + Flooding Score (Average of L, M and N) + Utilities score + Constructability Score (Minimum value of P&Q) = Total of 6 scores for 6 categories

Then if total < or equal to -9 then should be coloured red because this represents possibility of 3 reds or 4 ambers
 If total is between -6 and -8 should be coloured amber since this could represent 2 reds or 3/4 ambers.
 If total is between -3 and -5 sho

Chainage	Start Chainage	End Chainage	Alignment						Geotechnics			Structures			Flooding and Drainage			Utilities			Constructability		Score	Comments
			Level Difference	Bendiness	Hilliness	Earthworks	Geotechnics	Structures	Flood Plan	Watercourse Crossings	Attenuation requirement	Utilities	Temp disruption	Construction access	Adjusted Total	Total								
0	50	100	0	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
50	100	150	0	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
100	150	200	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
150	200	250	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
200	250	300	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
250	300	350	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
300	350	400	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
350	400	450	0	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
400	450	500	0	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
450	500	550	0	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
500	550	600	0	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-3	-3	Combination of moderate earthworks and some temporary disruption during construction.
550	600	650	0	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-3	-3	Combination of moderate earthworks and some temporary disruption during construction.
600	650	700	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-3	-3	Combination of moderate earthworks and some temporary disruption during construction.
650	700	750	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-3	-3	Combination of moderate earthworks and some temporary disruption during construction.
700	750	800	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-3	-3	Combination of moderate earthworks and some temporary disruption during construction.
750	800	850	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-3	-3	Combination of moderate earthworks and some temporary disruption during construction.
800	850	900	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-3	-3	Combination of moderate earthworks and some temporary disruption during construction.
850	900	950	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-3	-3	Combination of moderate earthworks and some temporary disruption during construction.
900	950	1000	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-3	-3	Combination of moderate earthworks and some temporary disruption during construction.
950	1000	1050	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-3	-3	Combination of moderate earthworks and some temporary disruption during construction.
1000	1050	1100	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-3	-3	Combination of moderate earthworks and some temporary disruption during construction.
1050	1100	1150	0	0	-2	-1	-2	-2	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-5	-5	Combination of at grade construction on non-compressible soils and cutting and embankments less than 10m high on/through non-compressible soils or rock. Some construction access issues and temporary disruption during construction.
1100	1150	1200	0	0	-2	-1	-2	-2	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-5	-5	Combination of at grade construction on non-compressible soils and cutting and embankments less than 10m high on/through non-compressible soils or rock. Some construction access issues and temporary disruption during construction.
1150	1200	1250	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	-2	-3	-3	Combination of moderate earthworks and some temporary disruption during construction.
1200	1250	1300	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1250	1300	1350	0	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1300	1350	1400	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1350	1400	1450	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1400	1450	1500	0	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1450	1500	1550	0	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1500	1550	1600	0	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1550	1600	1650	0	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1600	1650	1700	0	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1650	1700	1750	0	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1700	1750	1800	0	-2	-2	-1	-2	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Moderate cutting in rock combined with possible utility diversion (33kV HV), minor impact due to construction access.
1750	1800	1850	0	-2	-2	-1	-2	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Moderate cutting in rock combined with possible utility diversion (33kV HV), minor impact due to construction access.
1800	1850	1900	0	-2	-2	-1	-2	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-4	-4	Moderate cutting in rock combined with possible utility diversion (33kV HV), minor impact due to construction access.
1850	1900	1950	0	-2	-2	-1	-2	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Moderate cutting in rock combined with possible utility diversion (33kV HV), minor impact due to construction access.
1900	1950	2000	0	-3	-2	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	0	-1	0	-5	-6	Side Road Crossing - overall rating to be amber to account for potential geotechnical issues associated with a structure.
1950	2000	2050	0	0	-2	-1	-2	1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-1	-1	Overall rating raised to major adverse impact over the initial extent of Viaduct Structure over floodplain due to potential major geotechnical impacts associated with structure foundations. Vertical alignment to be raised in 2nd fix over floodplain.
2000	2050	2100	0	-1	-2	-1	-2	1	-3	-3	0	0	0	0	0	0	0	0	0	-1	0	-5	-9	Overall rating raised to major adverse impact over the initial extent of Viaduct Structure over floodplain due to potential major geotechnical impacts associated with structure foundations. Vertical alignment to be raised in 2nd fix over floodplain.
2050	2100	2150	0	-1	-2	-1	-2	-1	-3	-3	0	0	0	0	0	0	0	0	0	-1	0	-7	-9	Overall rating raised to major adverse impact over the initial extent of Viaduct Structure over floodplain due to potential major geotechnical impacts associated with structure foundations. Vertical alignment to be raised in 2nd fix over floodplain.
2100	2150	2200	0	-1	-2	-1	-2	-1	-3	-3	0	0	0	0	0	0	0	0	0	-1	0	-7	-9	Overall rating raised to major adverse impact over the initial extent of Viaduct Structure over floodplain due to potential major geotechnical impacts associated with structure foundations. Vertical alignment to be raised in 2nd fix over floodplain.
2150	2200	2250	0	-1	-2	-1	-2	-1	-3	-3	0	0	0	0	0	0	0	0	0	-1	0	-7	-9	Overall rating raised to major adverse impact over the initial extent of Viaduct Structure over floodplain due to potential major geotechnical impacts associated with structure foundations. Vertical alignment to be raised in 2nd fix over floodplain.
2200	2250	2300	0	-1	-2	-1	-2	-1	-3	-3	0	0	0	0	0	0	0	0	0	-1	0	-7	-9	Overall rating raised to major adverse impact over the initial extent of Viaduct Structure over floodplain due to potential major geotechnical impacts associated with structure foundations. Vertical alignment to be raised in 2nd fix over floodplain.
2250	2300	2350	0	0	-2	-1	-2	-1	-3	-3	0	0	0	0	0	0	0	0	0	-1	0	-7	-9	Overall rating raised to major adverse impact over the initial extent of Viaduct Structure over floodplain due to potential major geotechnical impacts associated with structure foundations. Vertical alignment to be raised in 2nd fix over floodplain.
2300	2350	2400	0	0	-2	-1	-2	-1	-3	-3	0	0	0	0	0	0	0	0	0	-1	0	-7	-9	Overall rating raised to major adverse impact over the initial extent of Viaduct Structure over floodplain due to potential major geotechnical impacts associated with structure foundations. Vertical alignment to be raised in 2nd fix over floodplain.
2350	2400	2450	0	0	-2	-1	-2	-1	-3	-3	0	0	0	0	0	0	0	0	0	-1	0	-7	-9	Overall rating raised to major adverse impact over the initial extent of Viaduct Structure over floodplain due to potential major geotechnical impacts associated with structure foundations. Vertical alignment to be raised in 2nd fix over floodplain.
2400	2450		0	-1	-2	-1	-2	-1	-3	-3	0	0	0	0	0	0	0	0	0	-1	0	-4	-9	Overall rating raised to major adverse impact over the initial extent of Viaduct Structure over floodplain due to potential major geotechnical impacts associated with structure foundations. Vertical alignment to be raised in 2nd fix over floodplain.

5450	5500	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	0	-1	-1	
5500	5550	0	-1	-2	-1	-2	0	0	0	0	0	0	0	0	0	-1	-2	-2
5550	5600	0	0	-2	-1	-2	0	0	0	0	0	0	-1	0	-1	-3	-3	Utility crossings - SW and SGN.
5600	5650	0	0	-2	-1	-2	0	0	0	0	0	0	-1	0	-1	-3	-3	Utility crossings - SW and SGN.
5650	5700	0	0	-2	-1	-2	0	0	0	0	0	0	0	0	-1	-2	-3	Utility crossings - SW and SGN.
5700	5750	0	0	-2	-1	-2	0	-2	0	0	0	0	-1	0	-1	-2	-2	Possible junction location - tie in with AS6. Presence of utilities (900mm National Grid Gas Main HP).
5750	5800	0	0	-2	-1	-2	0	0	0	0	0	-2	-1	0	-1	-4	-4	Traffic Scotland Assets.
5800	5850																	
5850	5900																	
5900	5950																	
5950	6000																	

0	Neutral
-1	Slight Adverse
-2	Moderate Adverse
-3	Major Adverse

Rules

Total Score

= Alignment Score (Average of E, F, G, H and I) + Geo Score + Structures Score + Flooding Score (Average of L, M and N) + Utilities score + Constructability Score (Minimum value of P&Q) = Total of 6 scores for 6 categories

Then if total < or equal to -9 then should be coloured red because this represents possibility of 3 reds or 4 ambers
 If total is between -6 and -8 should be coloured amber since this could represent 2 reds or 3/4 ambers.
 If total is between -3 and -5 sho

Changeage	Start Changeage	End Changeage	Alignment						Geotechnics			Structures			Flooding and Drainage			Utilities			Constructability		Score	Adjusted Total	Comments
			Level Difference	Bendness	Hilliness	Earthworks	Geotechnics	Structures	Watercourse Crossings	Flood Plan	Structures	Geotechnics	Attenuation requirement	Utilities	Temp disruption	Construction access	Utilities	Temp disruption	Construction access						
0	50		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
50	100		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
100	150		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-4	-6	Side Road Crossing - overall rating to be amber to account for potential geotechnical issues associated with a structure.
150	200		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
200	250		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
250	300		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
300	350		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
350	400		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
400	450		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
450	500		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
500	550		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
550	600		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
600	650		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
650	700		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
700	750		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
750	800		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
800	850		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
850	900		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
900	950		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
950	1000		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1000	1050		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1050	1100		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1100	1150		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1150	1200		0	-1	-2	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Moderate cutting in rock.
1200	1250		0	-2	-2	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Moderate cutting in rock.
1250	1300		0	-2	-2	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Moderate cutting in rock.
1300	1350		0	-2	-2	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Moderate cutting in rock.
1350	1400		0	-2	-2	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Moderate cutting in rock.
1400	1450		0	-1	-2	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Moderate cutting in rock.
1450	1500		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1500	1550		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1550	1600		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1600	1650		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1650	1700		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1700	1750		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1750	1800		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1800	1850		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1850	1900		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
1900	1950		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Utility crossings (33kV HV) - mainline on slight embankment.
1950	2000		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2000	2050		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2050	2100		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2100	2150		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2150	2200		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2200	2250		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2250	2300		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2300	2350		0	0	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	AC Private Water Supply.
2350	2400		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2400	2450		0	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2450	2500		0	-1	-2	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high (max 3.7m) and cuttings less than 5m (max 2.5m) on potentially compressible soils.
2500	2550		0	-1	-2	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high (max 3.7m) and cuttings less than 5m (max 2.5m) on potentially compressible soils.
2550	2600		0	-1	-2	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high (max 3.7m) and cuttings less than 5m (max 2.5m) on potentially compressible soils.
2600	2650		0	-1	-2	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high (max 3.7m) and cuttings less than 5m (max 2.5m) on potentially compressible soils.
2650	2700		0	0	-2	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high (max 3.7m) and cuttings less than 5m (max 2.5m) on potentially compressible soils.
2700	2750		0	-1	-2	-1	-1	1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-1	-1	
2750	2800		0	-1	-2	-1	-1	1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-1	-1	
2800	2850		0	0	-2	-1	-1	1	0	0	0	0	0	0	0	0	0	0	0	0	-3	0	-3	-3	Difficulty of access for construction.
2850	2900		0	0	-2	-1	-1	1	0	0	0	0	0	0	0	0	0	0	0	0	-3	0	-3	-3	Difficulty of access for construction.
2900	2950		0	-1	-2	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-3	0	-4	-9	Extent of Viaduct Structure over Floodplain and railway line combined with difficulty of access for construction. Overall rating assumes potential major geotechnical impacts associated with structure foundations.
2950	3000		0	-1	-2	-1	-1	-1	-3	0	0	0	0	0	0	0	0	0	0	0	-3	0	-4	-9	Extent of Viaduct Structure over Floodplain and railway line combined with difficulty of access for construction. Overall rating assumes potential major geotechnical impacts associated with structure foundations.
3000	3050		0	-1	-2	-1	-1	-1	-3	-3	0	0	0	0	0	0	0	0	0	0	-3	0	-9	-9	Vertical alignment to be raised in 2nd fix over flood plain
			0	-1	-2	-1	-1	-1	-3	-3	0	0	0	0	0	0	0	0	0	0	-3	0	-9	-9	Vertical alignment to be raised in 2nd fix over flood plain

0	Neutral
-1	Slight Adverse
-2	Moderate Adverse
-3	Major Adverse

Rules

Total Score

= Alignment Score (Average of E, F, G, H and I) + Geo Score + Structures Score + Flooding Score (Average of L, M and N) +Utilities score + Constructability Score (Minimum value of P&Q) = Total of 6 scores for 6 categories

Then if total < or equal to -9 then should be coloured red because this represents possibility of 3 reds or 4 ambers
 If total is between -6 and -8 should be coloured amber since this could represent 2 reds or 3/4 ambers.
 If total is between -3 and -5 sho

Changeage	Start Changeage	End Changeage	Alignment						Geotechnics			Structures			Flooding and Drainage			Utilities		Constructability		Score		Comments
			Level Difference	Bendness	Hilliness	Earthworks	Geotechnics	Structures	Flood Plan	Watercourse Crossings	Attenuation requirement	Utilities	Temp disruption	Construction access	Adjusted	Total								
0	50		0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
50	100		0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
100	150		0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
150	200		0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
200	250		0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
250	300		0	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Embankments up to 6.7m high on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.	
300	350		0	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Embankments up to 6.7m high on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.	
350	400		0	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Embankments up to 6.7m high on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.	
400	450		0	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Embankments up to 6.7m high on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.	
450	500		0	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Embankments up to 6.7m high on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.	
500	550		0	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Embankments up to 6.7m high on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.	
550	600		0	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Embankments up to 6.7m high on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.	
600	650		0	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Embankments up to 6.7m high on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.	
650	700		0	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Embankments up to 6.7m high on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.	
700	750		0	-1	-1	-1	-1	-1	0	0	-2	0	0	0	0	0	0	0	-1	0	-3	-3	Embankments up to 6.7m high on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.	
750	800		0	-1	-1	-1	-1	-1	0	0	-2	0	0	0	0	0	0	0	-1	0	-3	-3	Embankments up to 6.7m high on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.	
800	850		0	-1	-1	-1	-1	-1	0	0	-2	0	0	0	0	0	0	0	-1	0	-3	-3	Embankments up to 6.7m high on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.	
850	900		0	-1	-1	-1	-1	-1	0	0	-2	0	-1	0	0	0	0	0	-1	0	-4	-4	Embankments up to 6.7m high on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.	
900	950		0	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Embankments up to 6.7m high on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.	
950	1000		0	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1000	1050		0	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1050	1100		0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1100	1150		0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1150	1200		0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1200	1250		0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1250	1300		0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1300	1350		0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1350	1400		0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1400	1450		0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1450	1500		0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1500	1550		0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1550	1600		0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1600	1650		0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1650	1700		0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1700	1750		0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1750	1800		0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1800	1850		0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1850	1900		0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1900	1950		0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
1950	2000		0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
2000	2050		0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		
2050	2100		0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2		

2100	2150	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2150	2200	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2200	2250	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2250	2300	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2300	2350	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2350	2400	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2400	2450	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2450	2500	0	-1	-1	-1	-1	0	0	0	0	0	0	-1	-1	0	-3	-3	Utility crossings (33kV HV) - mainline in cutting.	
2500	2550	0	-1	-1	-1	-1	0	0	0	0	0	0	-1	-1	0	-3	-3	Utility crossings (33kV HV) - mainline in cutting.	
2550	2600	0	-1	-1	-1	-1	0	0	0	0	0	0	-1	0	0	-2	-2		
2600	2650	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2650	2700	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	-1	0	-2	-2	
2700	2750	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	0	-2	-2	
2750	2800	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	0	-2	-2	
2800	2850	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	0	-2	-2	
2850	2900	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	0	-2	-2	
2900	2950	0	0	-1	-1	-1	-1	0	0	0	0	0	0	-1	0	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils.
2950	3000	0	0	-1	-1	-1	-1	0	0	0	0	0	0	-1	0	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils.
3000	3050	0	0	-1	-1	-1	-1	0	0	0	0	0	0	-1	0	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils.
3050	3100	0	0	-1	-1	-1	-1	0	0	0	0	0	0	-1	0	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils.
3100	3150	0	0	-1	-1	-1	-1	0	0	0	0	0	0	-1	0	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils.
3150	3200	0	0	-1	-1	-1	-1	0	0	0	0	0	0	-1	0	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils.
3200	3250	0	0	-1	-1	-1	-1	0	0	0	0	0	0	-1	0	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils.
3250	3300	0	0	-1	-1	-1	-1	0	0	0	0	0	0	-1	0	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils.
3300	3350	0	-1	-1	-1	-1	1	0	0	0	0	0	0	-1	0	0	-1	-1	
3350	3400	0	-1	-1	-1	-1	1	0	0	0	0	0	0	-3	0	0	-3	-3	Major impact on access for construction.
3400	3450	0	-1	-1	-1	-1	1	0	0	0	0	0	0	-3	0	0	-3	-3	Major impact on access for construction.
3450	3500	0	-1	-1	-1	-1	1	0	0	0	0	0	0	-3	0	0	-3	-3	Major impact on access for construction.
3500	3550	0	0	-1	-1	-1	1	0	0	0	0	0	0	-3	0	0	-3	-3	Major impact on access for construction.
3550	3600	0	0	-1	-1	-1	-1	-3	0	0	0	0	0	-3	0	0	-9	-9	Extent of Viaduct Structure over Floodplain and railway line. Overall rating assumes potential major geotechnical impacts associated with structure foundations.
3600	3650	0	0	-1	-1	-1	-1	-3	0	0	0	0	0	-3	0	0	-9	-9	Extent of Viaduct Structure over Floodplain and railway line. Overall rating assumes potential major geotechnical impacts associated with structure foundations.
3650	3700	0	0	-1	-1	-1	-1	-3	0	0	0	0	0	-3	0	0	-9	-9	Extent of Viaduct Structure over Floodplain and railway line. Overall rating assumes potential major geotechnical impacts associated with structure foundations.
3700	3750	0	0	-1	-1	-1	-1	-3	0	0	0	0	0	-3	0	0	-9	-9	Extent of Viaduct Structure over Floodplain and railway line. Overall rating assumes potential major geotechnical impacts associated with structure foundations.
3750	3800	0	-1	-1	-1	-1	-1	-3	0	0	0	0	0	-3	0	0	-9	-9	Extent of Viaduct Structure over Floodplain and railway line. Overall rating assumes potential major geotechnical impacts associated with structure foundations.
3800	3850	0	-1	-1	-1	-1	-1	-3	0	0	0	0	0	-3	0	0	-9	-9	Extent of Viaduct Structure over Floodplain and railway line. Overall rating assumes potential major geotechnical impacts associated with structure foundations.
3850	3900	0	-1	-1	-1	-1	-1	-3	0	0	0	0	0	-3	0	0	-9	-9	Extent of Viaduct Structure over Floodplain and railway line. Overall rating assumes potential major geotechnical impacts associated with structure foundations.
3900	3950	0	-1	-1	-1	-1	-1	-3	0	0	0	0	0	-3	0	0	-9	-9	Extent of Viaduct Structure over Floodplain and railway line. Overall rating assumes potential major geotechnical impacts associated with structure foundations.
3950	4000	0	-1	-1	-1	-1	-1	-3	0	0	0	0	0	-3	0	0	-9	-9	Extent of Viaduct Structure over Floodplain and railway line. Overall rating assumes potential major geotechnical impacts associated with structure foundations.
4000	4050	0	-1	-1	-1	-1	-1	-3	0	0	0	0	0	-3	0	0	-9	-9	Extent of Viaduct Structure over Floodplain and railway line. Overall rating assumes potential major geotechnical impacts associated with structure foundations.
4050	4100	0	-2	-1	-1	-1	-2	-3	0	0	0	0	0	-3	0	0	-10	-10	Extent of Viaduct Structure over Floodplain and railway line. Overall rating assumes potential major geotechnical impacts associated with structure foundations.
4100	4150	0	-1	-1	-1	-1	-2	-3	0	0	0	0	0	-3	0	0	-10	-10	Extent of Viaduct Structure over Floodplain and railway line. Overall rating assumes potential major geotechnical impacts associated with structure foundations.
4150	4200	0	-1	-1	-1	-1	0	-3	0	0	0	0	0	-3	0	0	-7	-9	Extent of Viaduct Structure over Floodplain and railway line. Overall rating assumes potential major geotechnical impacts associated with structure foundations.
4200	4250	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
4250	4300	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
4300	4350	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	
4350	4400	0	0	-1	-1	-1	0	0	0	0	0	0	0	-2	0	0	-3	-3	Utility crossings (SSE 275kV HV) - mainline at grade. Clearance to be reviewed at 2nd fix due to potential upstream alignment changes.
4400	4450	0	0	-1	-1	-1	0	0	0	0	0	0	0	-2	0	0	-3	-3	Utility crossings (SSE 275kV HV) - mainline at grade. Clearance to be reviewed at 2nd fix due to potential upstream alignment changes.
4450	4500	0	0	-1	-1	-1	0	0	0	0	0	0	0	-2	0	0	-3	-3	Utility crossings (SSE 275kV HV) - mainline at grade. Clearance to be reviewed at 2nd fix due to potential upstream alignment changes.
4500	4550	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
4550	4600	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
4600	4650	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
4650	4700	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
4700	4750	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
4750	4800	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
4800	4850	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
4850	4900	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
4900	4950	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
4950	5000	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
5000	5050	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
5050	5100	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
5100	5150	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
5150	5200	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-2	0	0	-2	-2	SSE 132kV line - mainline in cut. Pylon to west side of mainline.
5200	5250	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	Cumulative utility presence in the area
5250	5300	0	0	-1	-1	-1	0	-2	0	0	0	0	0	-2	0	0	-5	-6	New Overbridge for local road. Overall rating to be amber to account for potential geotechnical issues associated with a structure. Utility crossings (SW Distribution Mains) - mainline in slight cut.
5300	5350	0	0	-1	-1	-1	0	0	0	0	0	0	0	-2	0	0	-3	-3	Utility crossings (SW Distribution Mains) - mainline in slight cut.
5350	5400	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
5400	5450	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
5450	5500	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
5500	5550	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
5550	5600	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
5600	5650	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
5650	5700	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
5700	5750	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
5750	5800	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
5800	5850	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	
5850	5900	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	

5900	5950	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	-1	-1	
5950	6000	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	0	-1	-1	
6000	6050	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	-1	-1	
6050	6100	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	-1	-1	
6100	6150	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	-1	-1	
6150	6200	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	-1	-1	
6200	6250	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	-1	-1	
6250	6300	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
6300	6350	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
6350	6400	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
6400	6450	0	-1	-1	-1	-1	0	0	0	0	0	-1	0	0	-1	-2	-2	SW Distribution Main.
6450	6500	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
6500	6550	0	0	-1	-1	-1	0	-2	0	0	0	0	0	0	-1	-4	-6	Possible junction location. Overall rating to be amber to account for potential geotechnical issues associated with a structure.
6550	6600	0	0	-1	-1	-1	0	0	0	0	0	-1	0	0	-1	-3	-3	SW Distribution Main.
6600	6650	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
6650	6700	0	0	-1	-1	-1	0	0	0	0	0	-1	0	0	-1	-3	-3	SGN Medium Pressure Main.
6700	6750	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
6750	6800	0	0	-1	-1	-1	0	0	0	0	-1	-3	0	0	-1	-5	-5	Possible junction location - tie in with AS6. Presence of utilities (900mm National Grid Gas Main HP).
6800	6850							0	0	0	-1							
6850	6900																	
6900	6950																	
6950	7000																	

0	Neutral	Overall
-1	Slight Adverse	
-2	Moderate Adverse	
-3	Major Adverse	

Rules

Total Score

= Alignment Score (Average of E, F, G, H and I) + Geo Score + Structures Score + Flooding Score (Average of L, M and N) + Utilities score + Constructability Score (Minimum value of P&Q) = Total of 6 scores for 6 categories

Then if total < or equal to -9 then should be coloured red because this represents possibility of 3 reds or 4 ambers

If total is between -6 and -8 should be coloured amber since this could represent 2 reds or 3/4 ambers.

If total is between -3 and -5 sho

Changeage	Start Changeage	End Changeage	Alignment						Geotechnics			Structures			Flooding and Drainage			Utilities		Constructability		Score		Comments
			Level Difference	Bendness	Hilliness	Earthworks	Geotechnics	Structures	Watercourse Crossings	Flood Plan	Structures	Geotechnics	Utilities	Attenuation requirement	Construction access	Temp disruption	Adjusted	Total						
	0	50	-2	-1	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	50	100	-2	-1	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	100	150	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	150	200	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	200	250	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	250	300	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	300	350	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	350	400	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	400	450	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	450	500	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	500	550	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	550	600	-2	-1	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	600	650	-2	-1	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	650	700	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	700	750	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	750	800	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	800	850	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	850	900	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	900	950	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	950	1000	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	1000	1050	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	1050	1100	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	1100	1150	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	1150	1200	-2	-1	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	1200	1250	-2	-1	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	1250	1300	-2	-1	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	1300	1350	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	1350	1400	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	1400	1450	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	1450	1500	-2	0	0	0	-1	-1	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.		
	1500	1550	-2	0	0	0	-1	-1	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.		
	1550	1600	-2	0	0	0	-1	-1	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.		
	1600	1650	-2	0	0	0	-1	-1	0	0	0	0	0	0	0	0	0	-1	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.		
	1650	1700	-2	-1	0	0	-1	-1	0	-3	0	0	0	0	0	0	0	-1	0	-4	-4	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.		
	1700	1750	-2	-1	0	0	-1	-1	0	-3	0	0	0	0	0	0	0	-1	0	-4	-4	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.		
	1750	1800	-2	-1	0	0	-1	-1	0	-3	0	0	0	0	0	0	0	-1	0	-4	-4	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.		
	1800	1850	-2	-1	0	0	-1	-1	0	-3	0	0	0	0	0	0	0	-1	0	-4	-4	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.		
	1850	1900	-2	-1	0	0	-1	-1	0	-3	0	0	0	0	0	0	0	-1	0	-4	-4	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.		
	1900	1950	-2	-1	0	0	-1	-1	0	-3	0	0	0	0	0	0	0	-1	0	-3	-3	Combination of at grade construction on potentially compressible soils and embankments less than 10m high and cuttings less than 5m on potentially compressible soils. Small diameter culvert coupled with alignment passing adjacent to a floodplain. Some construction access and disruption during construction issues.		
	1950	2000	-2	-1	0	0	-1	-1	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	2000	2050	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	2050	2100	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	2100	2150	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	2150	2200	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			
	2200	2250	-2	-1	0	0	-1	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-2			

