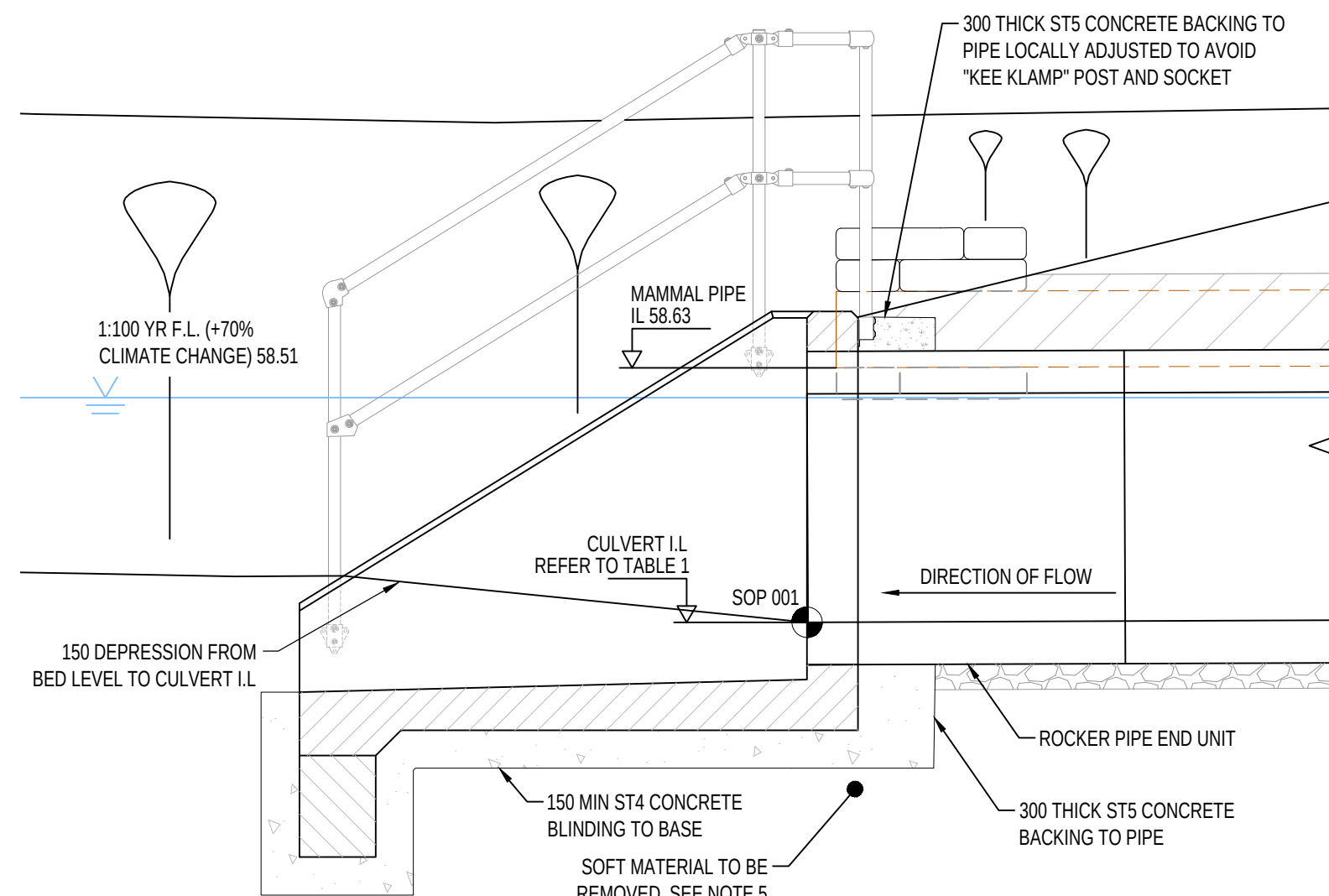
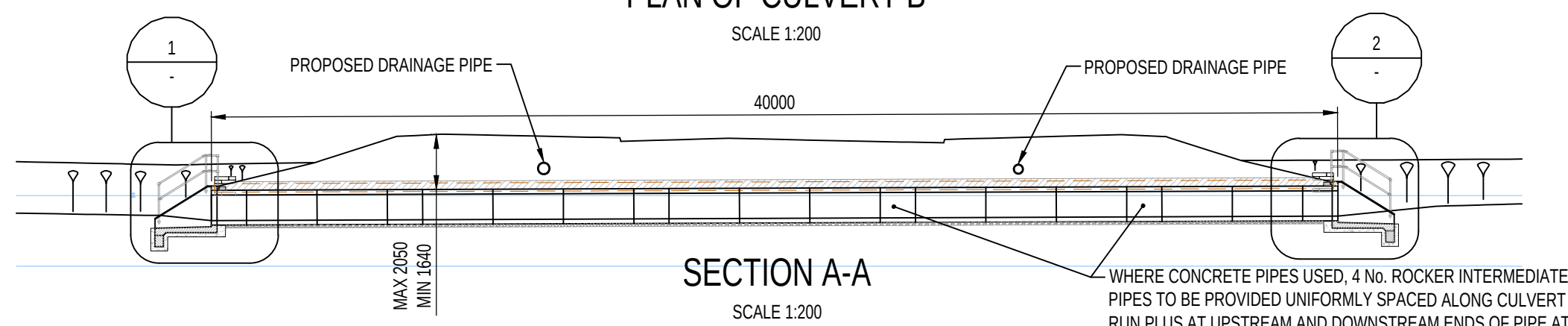
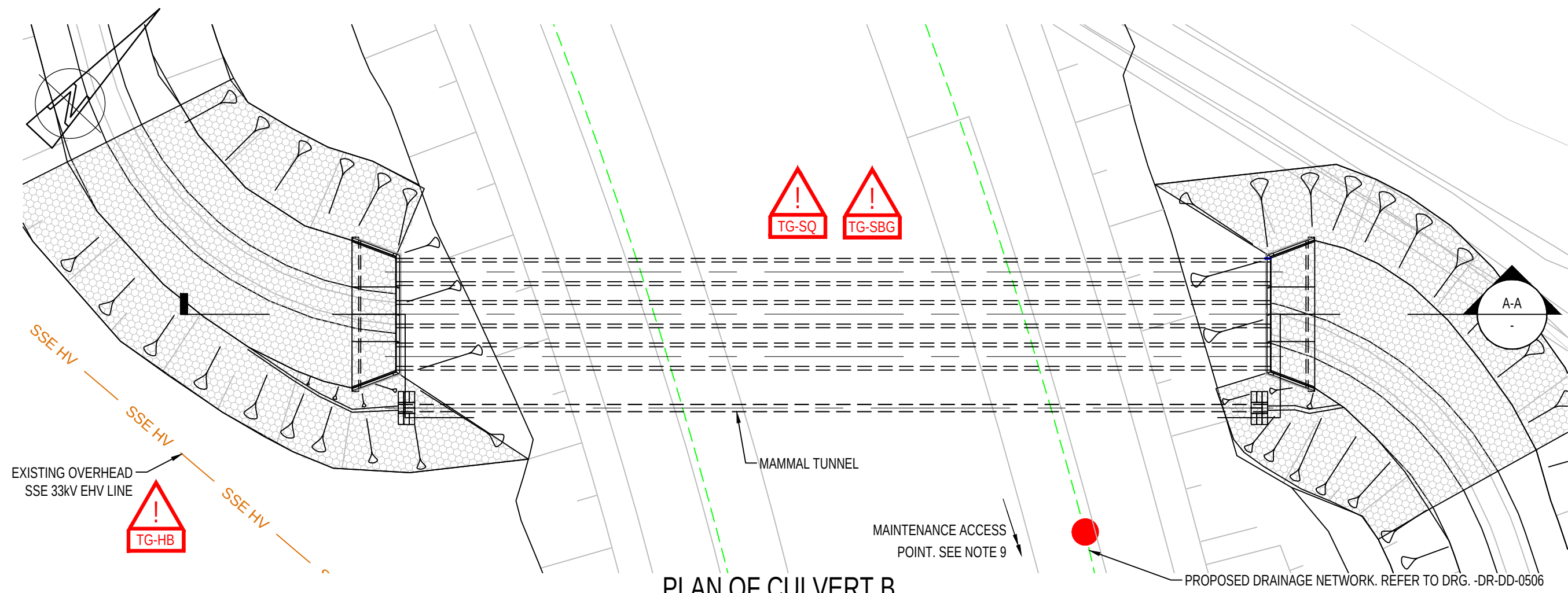
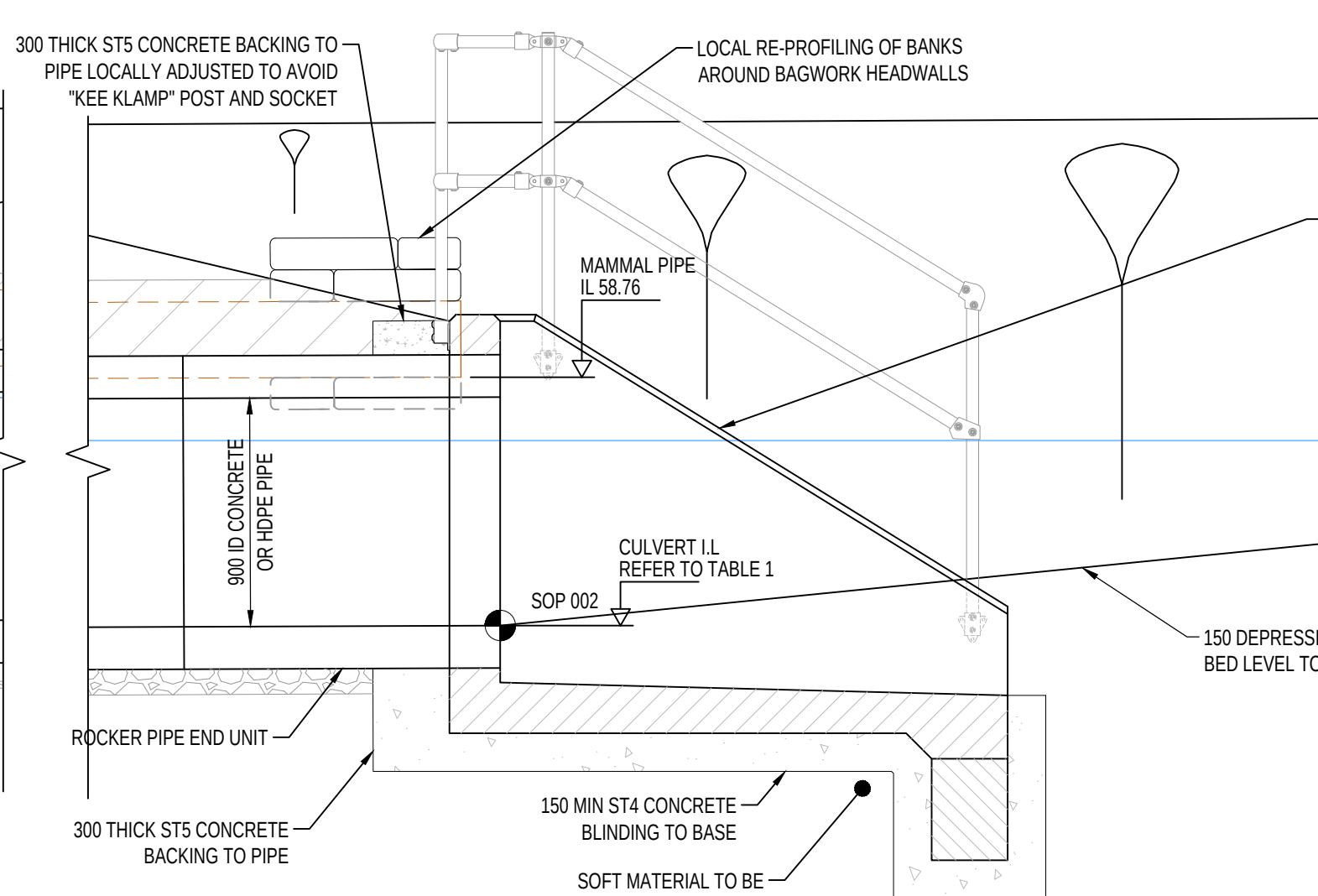


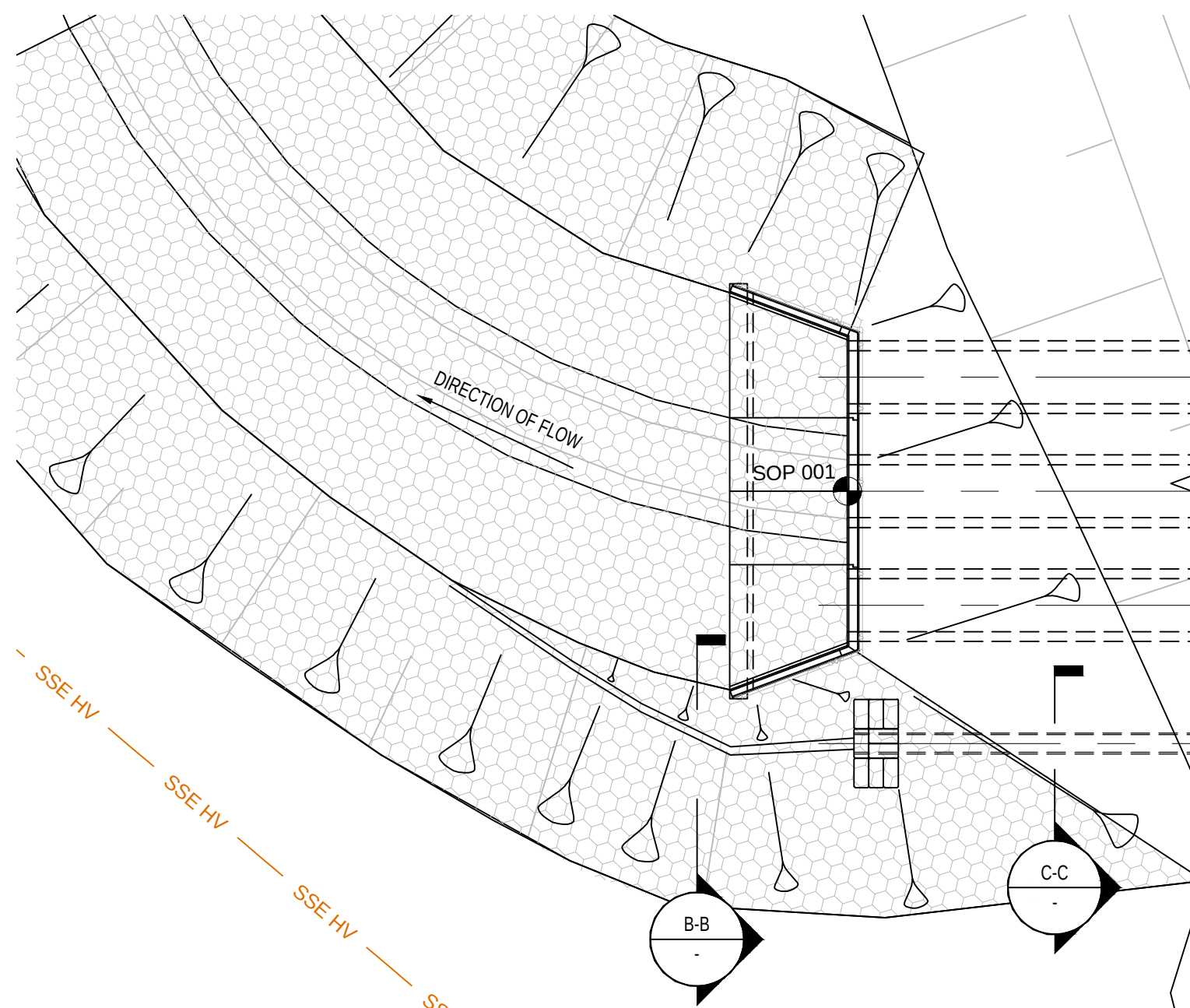
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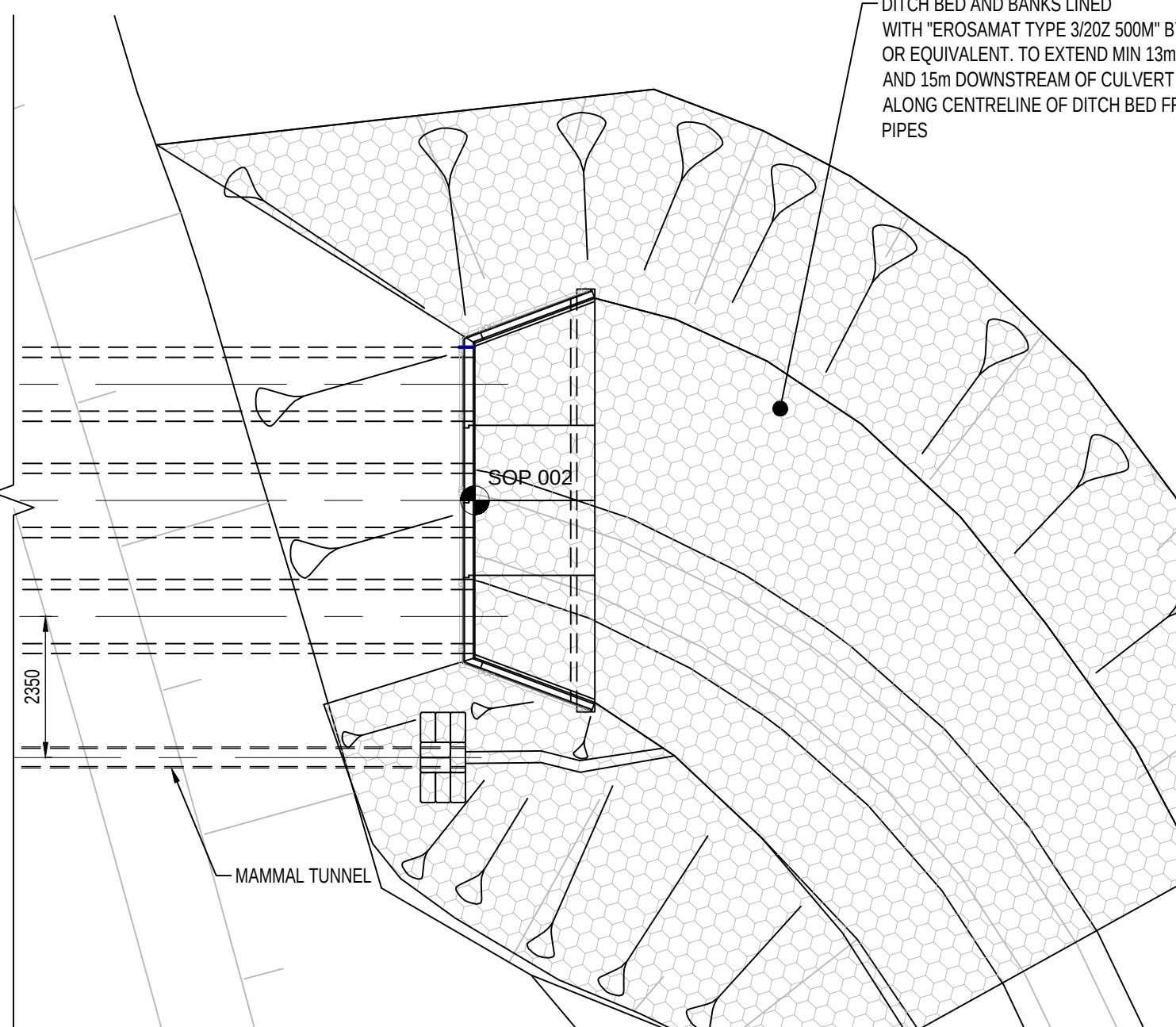
DETAIL 1 - DOWNSTREAM / OUTLET HEADWALL
SCALE 1:25



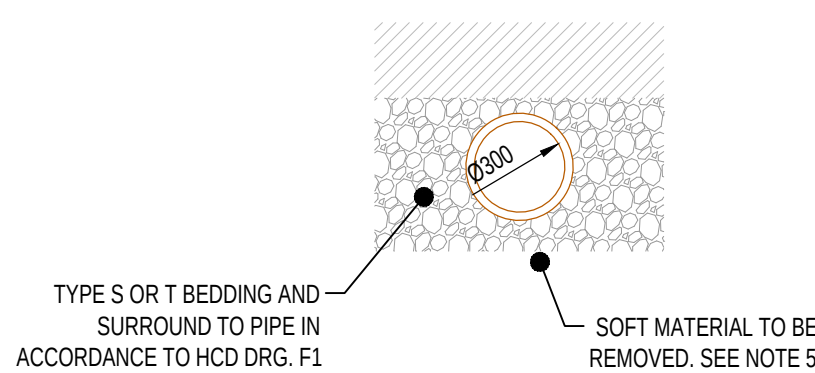
DETAIL 2 - UPSTREAM / INLET HEADWALL
SCALE 1:25



PLAN OF INLET AND OUTLET
SCALE 1:100



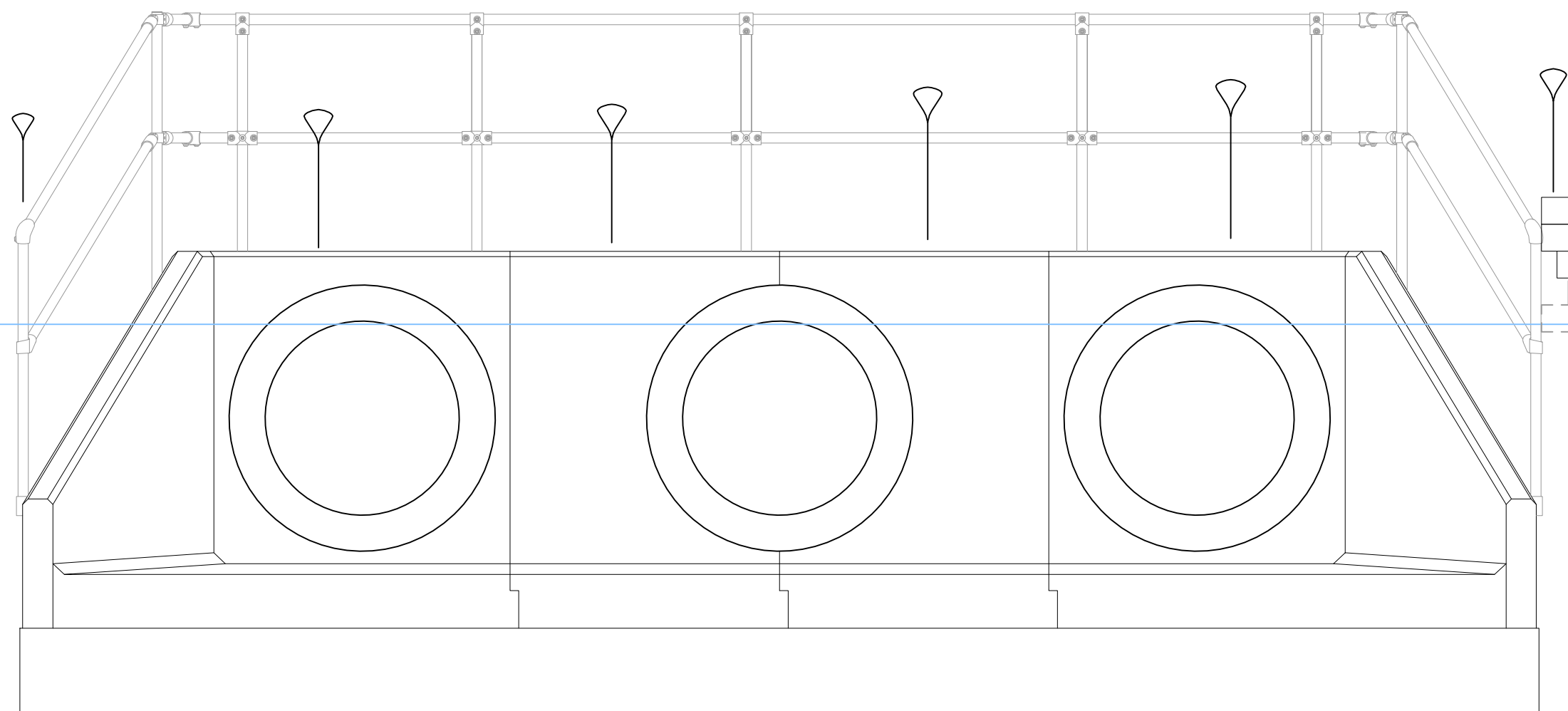
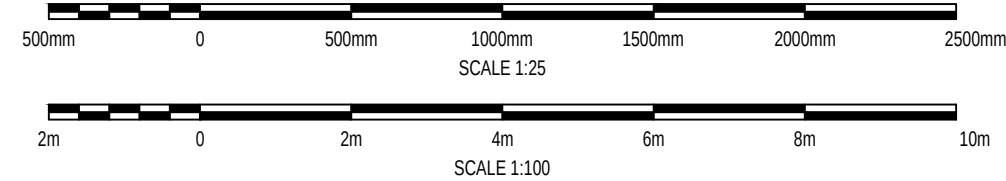
TYPICAL PIPE SECTION -
PIPE BEDDING DETAIL
SCALE 1:50



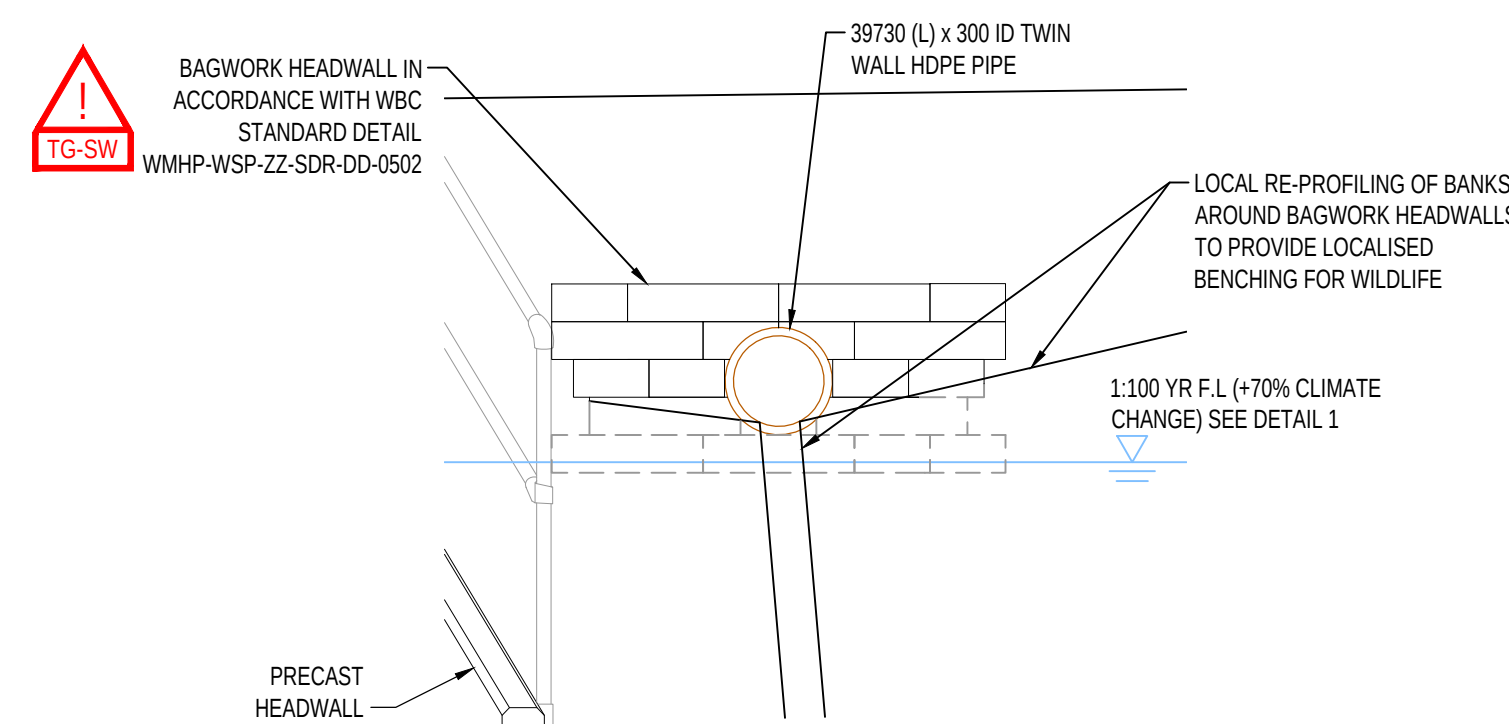
SECTION C-C
THROUGH MAMMAL TUNNEL
SCALE 1:25

SETTING OUT COORDINATES			
SOP_NO.	EASTING	NORTHING	INVERT LEVEL
SOP 001	482720.912	167870.104	57.624
SOP 002	482750.002	167897.558	57.781

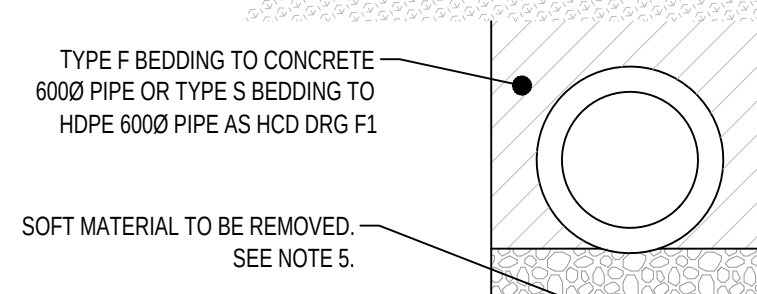
TABLE 1



HEADWALL ELEVATION
SCALE 1:25



ELEVATION B-B
MAMMAL TUNNEL HEADWALL
SCALE 1:25



TYPICAL PIPE SECTION -
PIPE BEDDING DETAIL
SCALE 1:50

SIGNIFICANT RESIDUAL HAZARDS		
RESIDUAL HAZARD	STAGE	SUGGESTED CONTROL MEASURE
WORKING IN WATER/ GROUNDWATER 	C/MID	CONTRACTOR TO USE SUITABLE MEANS TO MANAGE GROUNDWATER BY PUMPING OR CUT-OFF (E.G. GROUTING) METHODS.
UNEXPLODED ORDNANCE 	C	"LOW RISK" CATEGORY IDENTIFIED BY "1ST LINE DEFENCE" DESK STUDY RA. UXO RISK MANAGEMENT PLAN AND SITE SPECIFIC UXO AWARENESS BRIEFINGS TO BE GIVEN TO ALL PERSONNEL CONDUCTING INTRUSIVE WORKS
POSSIBLE PRESENCE OF BURIED SERVICES 	C/D	SEARCH RESULTS HAVE INDICATED NO SERVICES IN CULVERT LOCATION (SEE NOTE 7). HOWEVER, CONTRACTOR TO CONFIRM VIA LATEST STATUTORY UNDERTAKERS' SEARCHES AND SCAN AREA PRIOR TO CONSTRUCTION
PRESENCE OF OVERHEAD POWERLINES 	C/D	IT IS RECOMMENDED THAT OVERHEAD 33kV POWERLINES ARE DIVERTED PRIOR TO THE COMMENCEMENT OF THE WORKS. OTHERWISE CONTRACTOR TO ENSURE LOCATION OF OVERHEAD CABLES AND ELECTRICITY PYLON / POLE(S) ARE DEMARCATED WITH SUITABLE WARNING POST SYSTEMS OR SIMILAR AND ALL SITE OPERATIVES TO BE BRIEFED TO FOLLOW A SAFE SYSTEM OF WORK
STRIKING OF SERVICES WHILST INSTALLING BAGWORK 	C	LOCATION OF BAGWORK TO BE SCANNED FOR SERVICES PRIOR TO INSTALLATION OF BAGWORK

NOTE: The above hazards do not include every hazard or assumption, but identify significant residual construction hazards that are not likely to be obvious to a competent contractor and those that could be difficult to manage effectively. Refer also to the designer's risk documentation.

DO NOT SCALE

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- ALL LEVELS ARE IN METRES AOD UNLESS NOTED OTHERWISE.
- CONCRETE PIPES TO BE CE-MARKED TO BS EN 1916. PIPES TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- PRECAST HEADWALLS TO BE DESIGNED BY PRECASTER BASED ON BS EN 1992-1-1 AND SHALL BE IN ACCORDANCE WITH BS EN13369.
- FORMATION LEVEL TO BE INSPECTED AND ANY SOFT AREAS (WHERE UNDRAINED SHEAR STRENGTH $C_u < 30$ kPa) TESTED IN ACCORDANCE WITH EARTHWORKS SPECIFICATION WMHP-TG-SRWG1-SP-GE-0601 WITH HAND SHEAR VANE TESTING. SOFT AREAS TO BE DUG AND REPLACED WITH MIN 300 THK CLASS 0A SELF-COMPACTING GRANULAR FILL WHERE WORKING IN GROUND WATER. OTHERWISE CLASS 1 GRANULAR FILL TO EARTHWORKS SPECIFICATION WMHP-TG-SRWG1-SP-GE-0601 GENERALLY.
- 1 IN 100 YR FLOOD LEVEL BASED ON FLOOD MODELLING BY WSP SHOWN ON DRG. 66439-CUL-001 REV A, DATED 30/09/20.
- EXISTING UTILITIES INFORMATION TAKEN FROM WSP DRAWING WMHP-WSP-SR-DR-UT-0001 BASED ON C2 SEARCH INFORMATION. THE CONTRACTOR SHALL UNDERTAKE FURTHER SURVEYS, SCANS AND TRIAL HOLES TO CONFIRM AND LOCATE UTILITIES PRIOR TO CONSTRUCTION. SEE RESIDUAL HAZARDS TG-SQ AND TG-HB.
- EXISTING BACKGROUND INFORMATION TAKEN FROM SURVEY FILE "XTOPOSURVEY" BY MURPHY SURVEYS, COMMISSIONED BY WSP. SUPPLIED BY WBC. FILE "XTOPOL" ALL SUPPLIED BY WSP AND "SD19630-02A Spine Road and Western Gateway, 3D Topo, FINAL" BY TECHNICS, COMMISSIONED BY BB. CONTRACTOR TO VERIFY SURVEY ACCURACY PRIOR TO CONSTRUCTION.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING WMHP-TG-SRWG1-DR-DD-0535 FOR KEY PLAN AND MAINTENANCE ACCESS POINT.
- REFER TO DRG. WMHP-TG-SRWG1-DR-DD-0534 FOR LOCATION PLAN.

KEYPLAN

SWDR - WESTERN GATEWAY PHASE 2
SWDR - SPINE ROAD AND WESTERN GATEWAY PHASE 1

P02	09/08/2021	BPH	DETAILED DESIGN	KL	JC
P01	30/06/2021	BPH	FIRST ISSUE	WA	CMF
REV	DATE	BY	DESCRIPTION	CHK	APP

SUITABLE FOR REVIEW & COMMENTS3

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PROJECT:

WOKINGHAM MAJOR HIGHWAYS PROGRAMME
SPINE ROAD AND WESTERN GATEWAY PHASE 1

TITLE:

PIPE CULVERT B -
UPPER EMM BROOK TRIBUTARY
DITCH DIVERSION

SCALE @ A1: N/A	CHECKED: KL	APPROVED: CMF
PROJECT NO: C118047	DESIGNED: VIA	DRAWN: BPH
DRAWING NO: WMHP-TG-SRWG1-DR-DD-0536	DATE: May 21	REV: P02