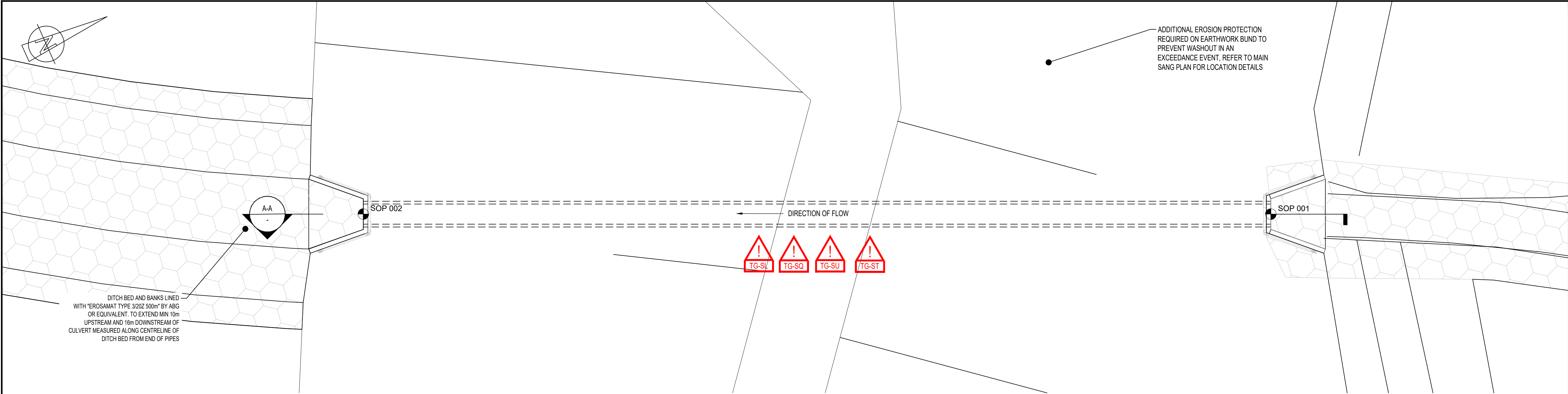
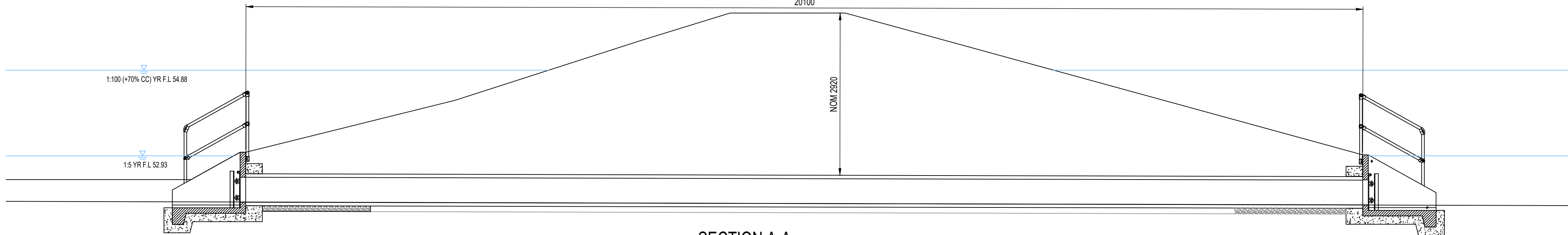




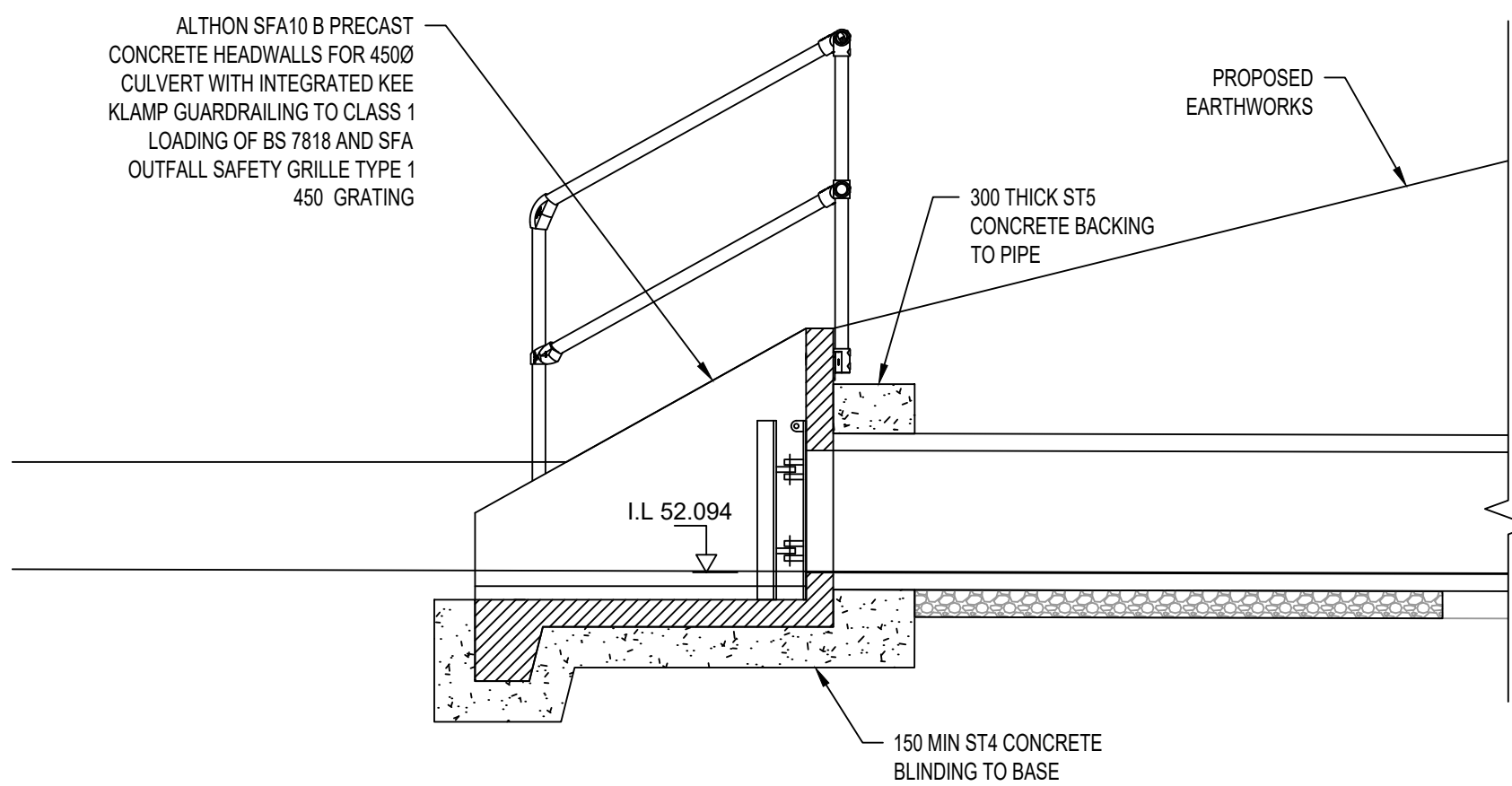
PLAN

SCALE 1:50
20/100



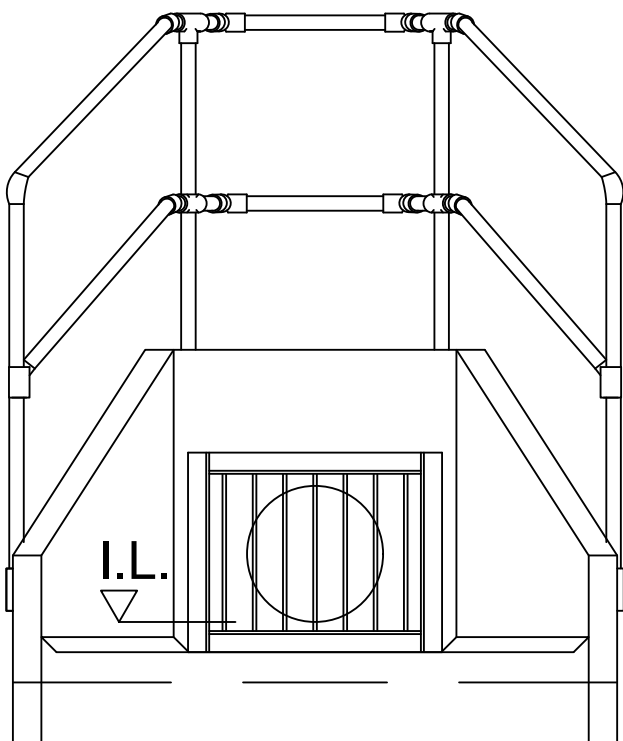
SECTION A-A

SCALE 1:50



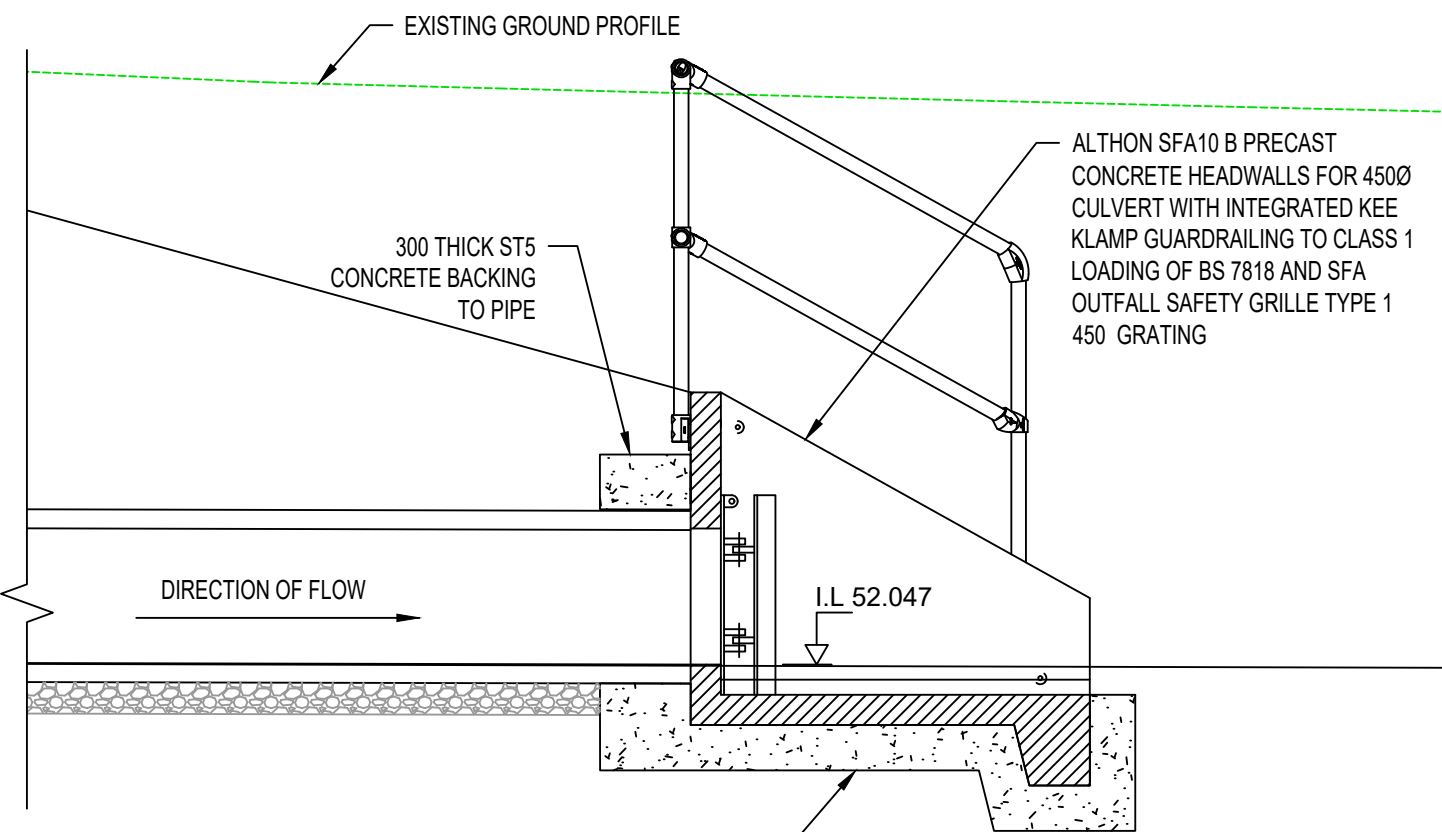
UPSTREAM / INLET HEADWALL
(SECTION ALONG C.L. OF CULVERT)

SCALE 1:25



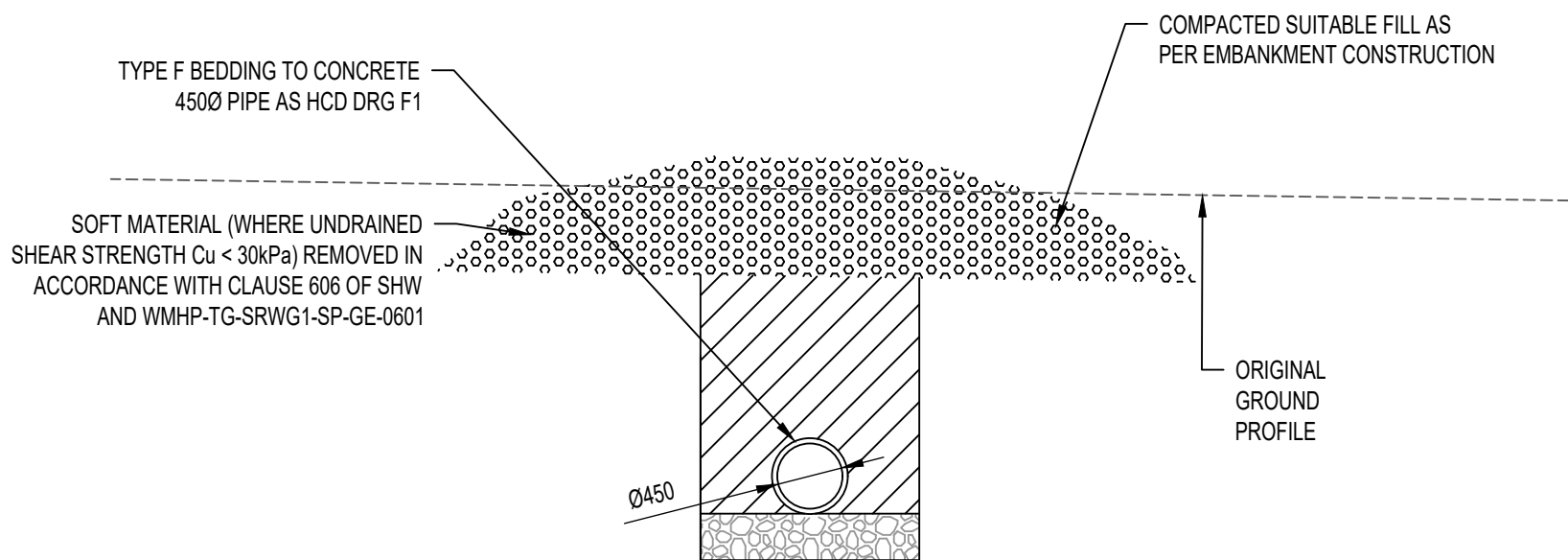
HEADWALL ELEVATION

SCALE 1:25



DOWNSTREAM / OUTLET HEADWALL
(SECTION ALONG C.L. OF CULVERT)

SCALE 1:25



PIPE BEDDING DETAIL

SCALE 1:50

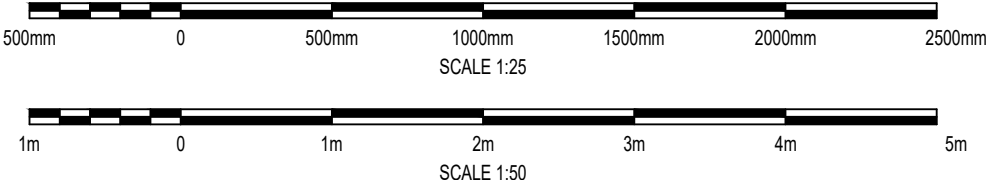
SETTING OUT COORDINATES

SOP_NO.	EASTING	NORTHING
SOP 001	482288.925	167499.120
SOP 002	482280.606	167480.603

SIGNIFICANT RESIDUAL HAZARDS

RESIDUAL HAZARD	STAGE	SUGGESTED CONTROL MEASURE
ACCESS INSIDE CULVERT - WORKING IN / AROUND WATER	M	REMOTE METHODS OF INSPECTION TO BE USED. ENTRY INTO CULVERT SHOULD NOT OCCUR UNDER ANY CIRCUMSTANCES DUE TO THE SMALL DIAMETER OF THE CULVERTS. INSPECTION OF CULVERTS VIA REMOTE METHODS SHOULD TAKE PLACE DURING PERIODS OF LOW FLOW.
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
ENCOUNTERING GROUNDWATER IN EXCAVATION	C/D	CONTRACTOR TO IMPLEMENT SUITABLE WATER MANAGEMENT MEASURES AS NECESSARY
UNEXPLODED ORDNANCE	C/D	"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

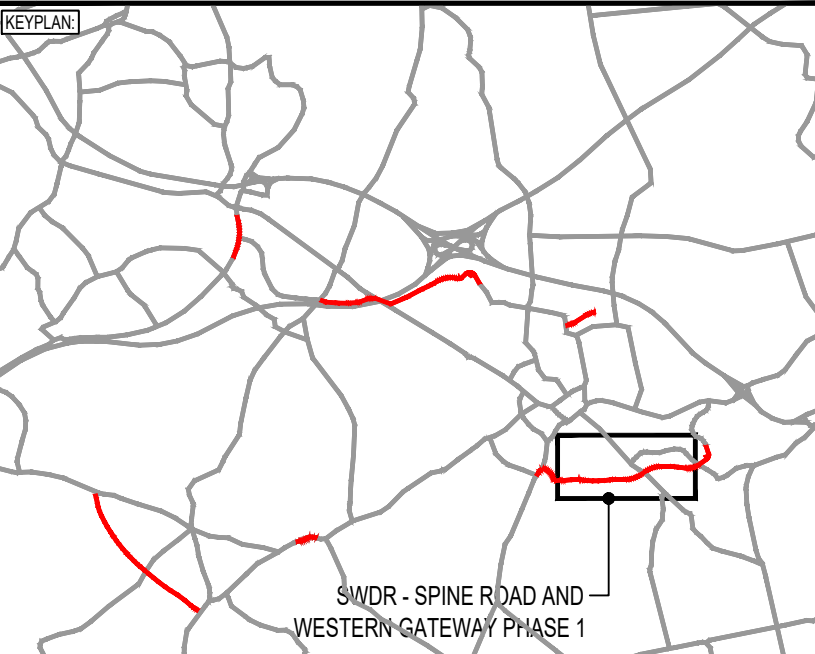
NOTE: The above hazards do not include every hazard or assumption, but identify significant residual construction hazards that are not likely to be obvious to a competent contractor and those that could be difficult to manage effectively. Refer also to the designer's risk documentation.



DO NOT SCALE

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- ALL LEVELS ARE IN METRES AOD UNLESS NOTED OTHERWISE.
- INTEGRATED GUARDRAIL ON HEADWALL TO BE HOT DIP GALVANISED TUBE AND CLAMP "KEE KLAMP" OR EQUIVALENT AND MEET CLASS 1 LOADING OF 500N/m TO BS 7818.
- DRAWING TO BE READ IN CONJUNCTION WITH CULVERT LOCATION PLAN WMHP-TG-SRWG1-DR-DD-0534
- CONCRETE PIPES TO BE CE-MARKED TO BS EN 1916. PIPES TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- PRECAST HEADWALL TO BE DESIGNED BY PRECASTER BASED ON BS EN1992-1-1 AND SHALL BE IN ACCORDANCE WITH BS EN13069.
- 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 6A SELF COMPACTING GRANULAR FILL.
- FLOOD LEVELS 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 HAZARD TG-SQ.
- EXISTING BACKGROUND INFORMATION TAKEN FROM SURVEY FILE "XTOPOSURVEY" BY MURPHY SURVEYS, COMMISSIONED BY WSP, SUPPLIED BY WBC, AND FILE "XTOPO_ALL" SUPPLIED BY WSP. CONTRACTOR TO VERIFY SURVEY ACCURACY PRIOR TO CONSTRUCTION.



P01	02/09/2021	BPH	FIRST ISSUE	KL	JC
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS:

SUITABLE FOR REVIEW & COMMENT

S3

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CLIENT:

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PROJECT:

WOKINGHAM MAJOR HIGHWAYS PROGRAMME
SPINE ROAD AND WESTERN GATEWAY PHASE 1

TITLE:

HIGHWAYS
DRAINAGE DESIGN
CULVERT H

SCALE @ AT:

N/A

CHECKED:

KL

APPROVED:

CMF

PROJECT NO:

C118047

DESIGNED:

VIA

DRAWN:

BPH

DATE:

June 21

DRAWING NO:

WMHP-TG-SRWG1-DR-DD-0538

REV:

P01