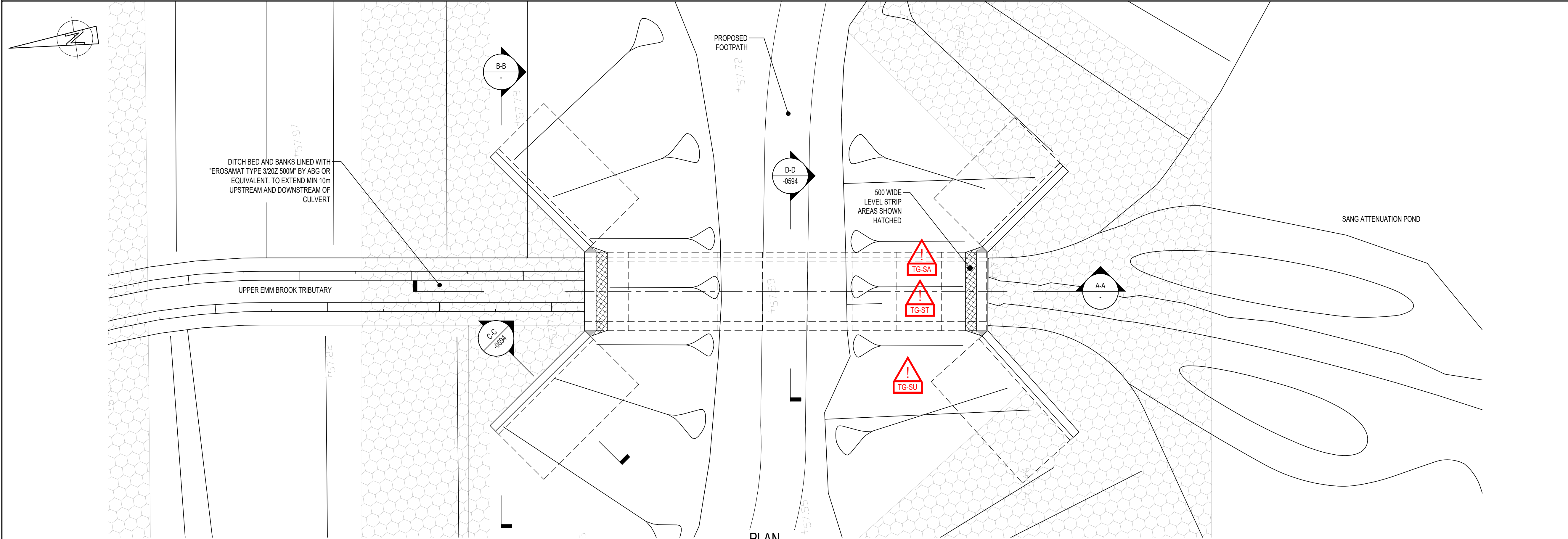
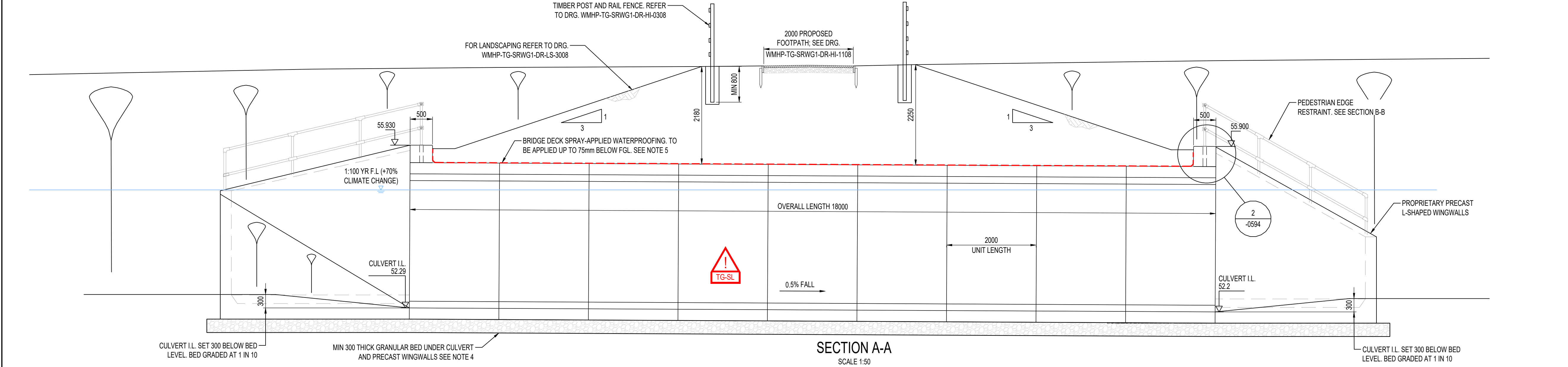
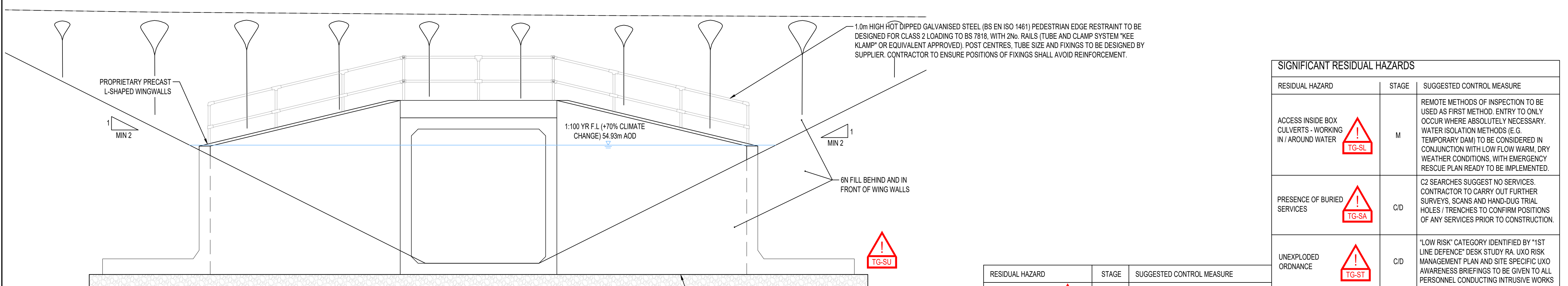




PLAN
SCALE 1:100



SECTION A-A
SCALE 1:50

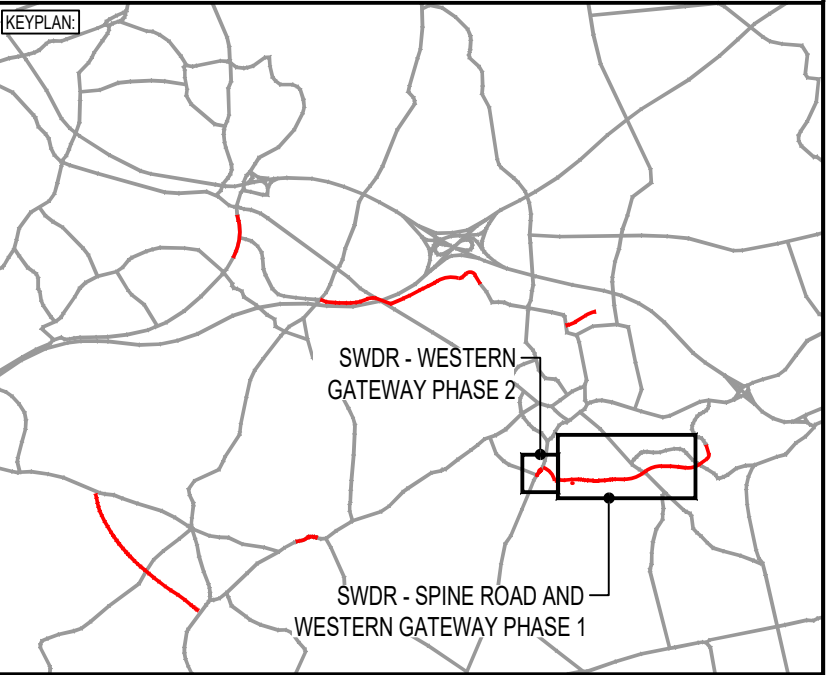


END ELEVATION B-B
SCALE 1:50

SIGNIFICANT RESIDUAL HAZARDS		
RESIDUAL HAZARD	STAGE	SUGGESTED CONTROL MEASURE
ACCESS INSIDE BOX CULVERTS - WORKING IN / AROUND WATER 	M	REMOTE METHODS OF INSPECTION TO BE USED AS FIRST METHOD. ENTRY TO ONLY OCCUR WHERE ABSOLUTELY NECESSARY. WATER ISOLATION METHODS (E.G. TEMPORARY DAM) TO BE CONSIDERED IN CONJUNCTION WITH LOW FLOW WARM, DRY WEATHER CONDITIONS, WITH EMERGENCY RESCUE PLAN READY TO BE IMPLEMENTED.
PRESENCE OF BURIED SERVICES 	C/D	C2 SEARCHES SUGGEST NO SERVICES. CONTRACTOR TO CARRY OUT FURTHER SURVEYS, SCANS AND HAND-DUG TRIAL HOLES / TRENCHES TO CONFIRM POSITIONS OF ANY SERVICES PRIOR TO CONSTRUCTION.
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.		

RESIDUAL HAZARD	STAGE	SUGGESTED CONTROL MEASURE
ENCOUNTERING GROUNDWATER IN EXCAVATION 	C/D	CONTRACTOR TO IMPLEMENT SUITABLE WATER MANAGEMENT MEASURES AS NECESSARY

- DO NOT SCALE
- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
 - ALL LEVELS ARE IN METRES AOD UNLESS NOTED OTHERWISE.
 - CULVERT UNITS TO BE CE-MARKED TO BS EN 14844 WITH SPIGOT AND SOCKET JOINTING BETWEEN UNITS. PRECAST WINGWALL UNITS TO BE CE-MARKED TO BS EN 15258. UNITS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DESIGN SHALL BE IN ACCORDANCE WITH THIS DRAWING, DRAWINGS -0594, -0599 AND THE AIP DOCUMENT (WMHP-TG-SRWG1-RP-SE-0590).
 - FORMATION LEVEL TO BE INSPECTED AND ANY SOFT AREAS (WHERE UNDRAINED SHEAR STRENGTH $C_u < 30 \text{ kPa}$) 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 WHERE WORKING IN GROUND WATER. OTHERWISE CLASS 1 GRANULAR FILL TO EARTHWORKS SPECIFICATION WMHP-TG-SRWG1-SP-GE-0601 GENERALLY. THIS IS TO BE OVERLAIN BY 300 THK CLASS 6A (OR CLASS 1 IF DRY) BEDDING TO CULVERT.
 - SPRAY-APPLIED WATERPROOFING TO COMPLY WITH APPENDIX 20'1 (WMHP-TG-WOTFR-SP-SE-2000). WATERPROOFING TERMINATION DETAIL TO BE IN ACCORDANCE WITH SUPPLIERS INSTRUCTIONS. TERMINATION AT TAPED EDGE ASSUMED. FORMED "F3" MOULD FINISH TO BE WATER-JETTED BY THE PRECASTER OR OTHER METHOD IN ACCORDANCE WITH SHW 1708.4 TO ACHIEVE U4 FINISH PRIOR TO WATERPROOFING APPLICATION.
 - 1 IN 100 YEAR FLOOD LEVEL BASED ON FLOOD MODELLING BY WSP SHOWN ON DRG. 66439-CUL-001 REV A, DATED 30/09/20.
 - C2 SEARCH INFORMATION INDICATES NO SERVICES AT SITE LOCATION. THE CONTRACTOR SHALL VERIFY THIS BY UNDERTAKING FURTHER SURVEYS, SCANS AND TRIAL HOLES TO CONFIRM AND LOCATE ANY UTILITIES PRIOR TO CONSTRUCTION.
 - 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 ITS ACCURACY PRIOR TO CONSTRUCTION.
 - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWINGS WMHP-TG-SRWG1-DR-SE-0590, -0594, -0599 AND WMHP-TG-SRWG1-DR-DD-0534. REFER TO DRG. -SE-0599 FOR STANDARD DETAILS AND -DD-0534 FOR LOCATION PLAN.



P04	01/11/2021	WA	TAA COMMENTS ADDRESSED	KL	CMF
P03	09/08/2021	WA	DETAILED DESIGN	KL	JC
P02	22/07/2021	WA	TAA COMMENTS ADDRESSED	KL	CMF
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: **SUITABLE FOR REVIEW & COMMENT** **S3**

DESIGNER:  **Tony Gee** Consulting Civil, Structural and Geotechnical Engineers

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PROJECT: **WOKINGHAM MAJOR HIGHWAYS PROGRAMME**
SPINE ROAD AND WESTERN GATEWAY PHASE 1

TITLE: **SANG CULVERT E**
STRUCTURE REFERENCE: 3107
GENERAL ARRANGEMENT **SHEET 1**

SCALE @ A1: AS SHOWN	CHECKED: KL	APPROVED: CMF
PROJECT NO: C118047	DESIGNED: VIA	DRAWN: PW
DRAWING NO: WMHP-TG-SRWG1-DR-SE-0593	DATE: May 21	REV: P04