

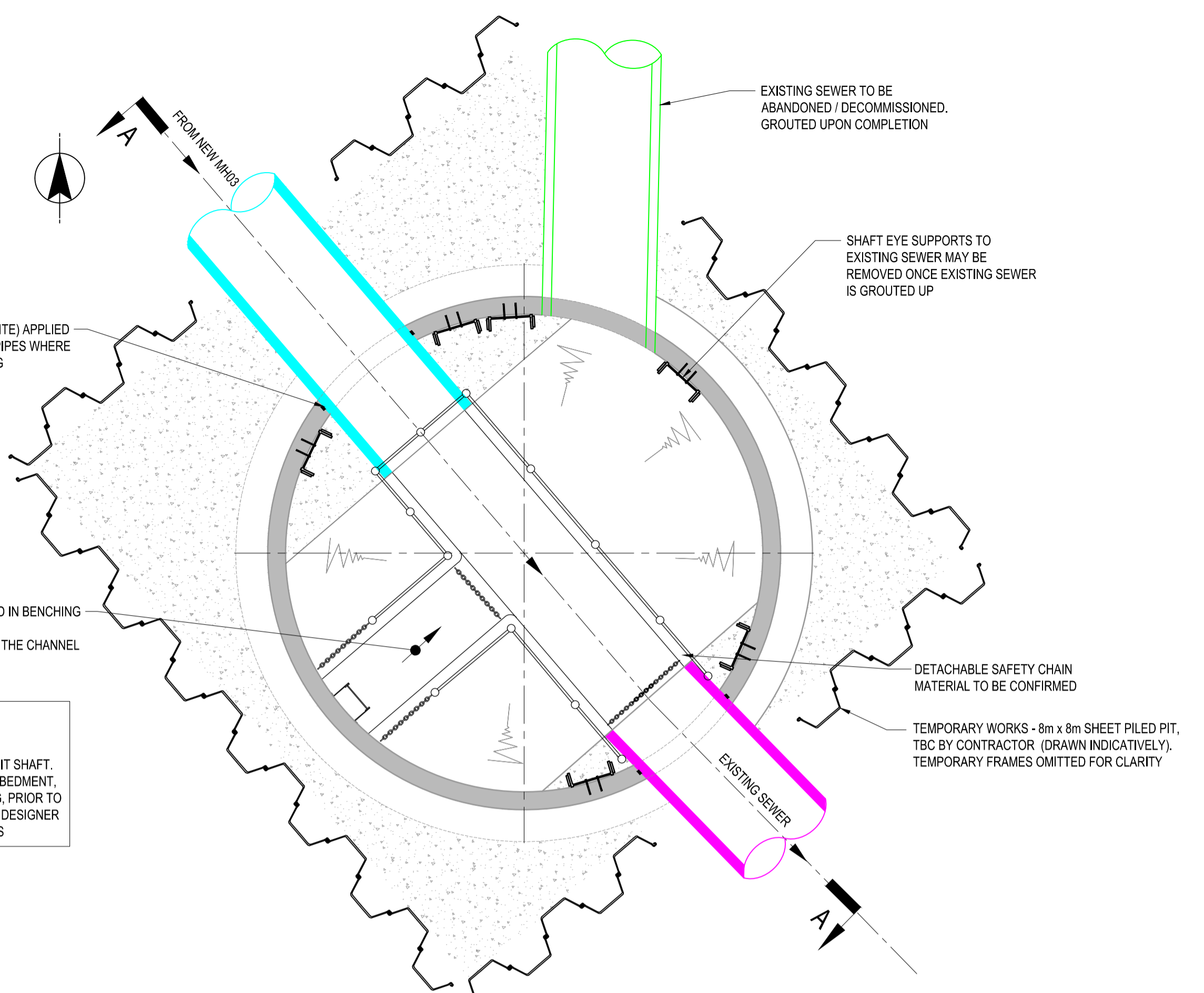
SECTION A-A
SCALE 1:50
NOTE: SECTION DRAWN INDICATIVELY FOR CLARITY

SIGNIFICANT DESIGNER'S IDENTIFIED HAZARDS	
HAZ001	STRIKING BURIED SERVICES
HAZ002	EXCESSIVE WATER INGRESS
HAZ003	UNKNOWN GROUND CONDITIONS
HAZ004	STABILITY OF EXCAVATIONS
HAZ005	DAMAGE TO EXISTING STRUCTURES DUE TO EXISTING DEFECTS
HAZ007	FAILURE OF SHAFT DUE TO FLOTATION
HAZ011	ENCOUNTERING UNEXPLODED ORDNANCE
HAZ012	INJURY DUE TO LIFTING OPERATIONS
HAZ013	STRUCTURAL FAILURE OF THE COVER SLAB DUE TO OVERLOADING

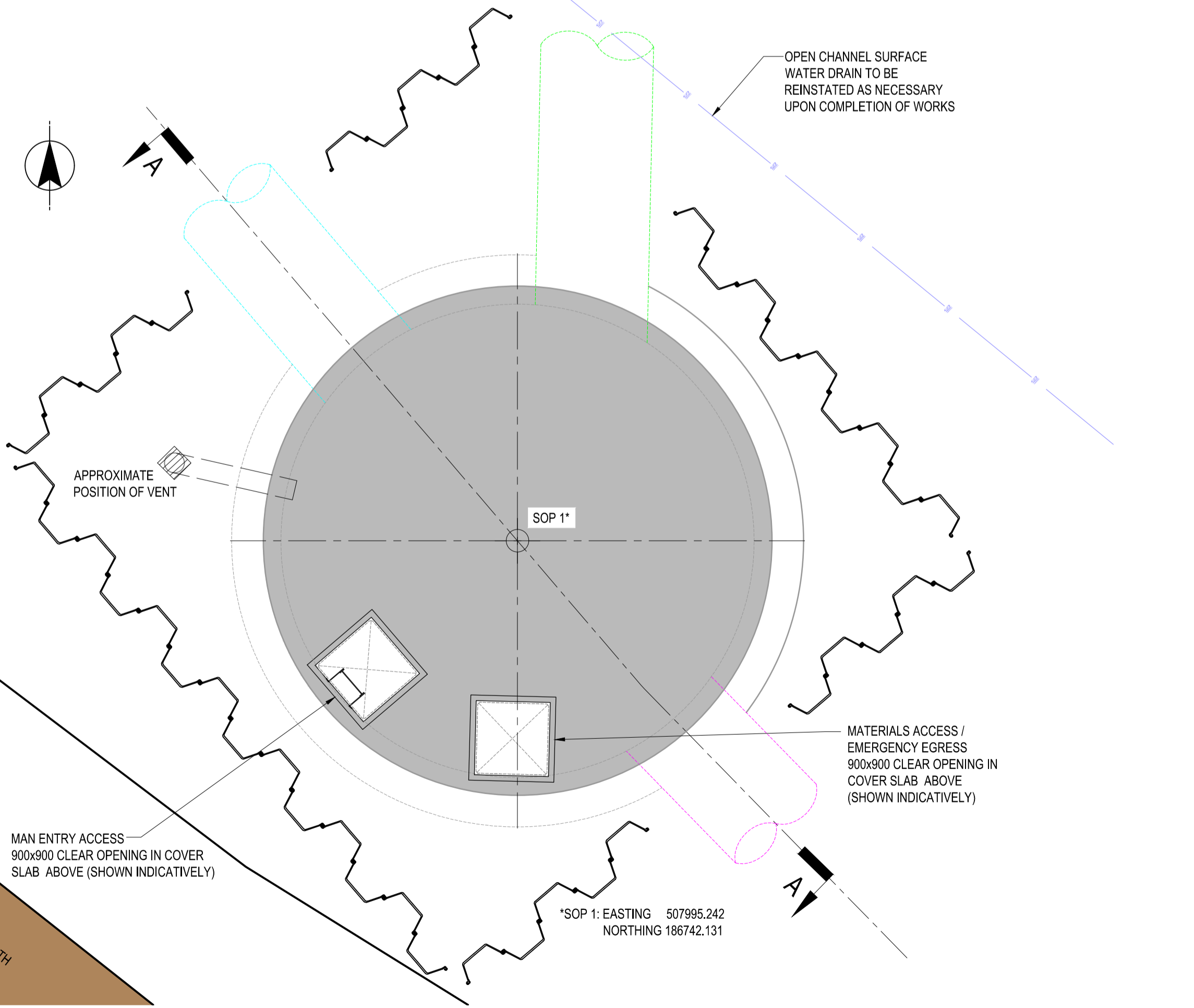
- FOR MORE DETAILED INFORMATION ON THE HIGHLIGHTED HAZARDS, REFER TO COWI UK LIMITED DESIGNER'S RISK ASSESSMENT FOR THIS PROJECT.

- 'EVERYDAY' LOW RISK HAZARDS AND THOSE HAZARDS WHICH SHOULD BE OBVIOUS TO A COMPETENT CONTRACTOR HAVE NOT BEEN INDICATED ON THIS DRAWING.

- SHOULD ANY ADDITIONAL HAZARDS BE IDENTIFIED DURING THE COURSE OF THE WORKS, THE CONTRACTOR SHALL NOTIFY ALL RELEVANT MEMBERS OF THE PROJECT TEAM.



PLAN VIEW 1-1 THROUGH TUNNEL AXIS
SCALE 1:50



PLAN VIEW 2-2 AT COVER LEVEL
SCALE 1:50

DO NOT SCALE - IF IN DOUBT ASK

eight₂O CLEARWATER COURT
VASTERN ROAD
READING
RG1 8DB

Barhale THE COACH HOUSE,
TYTTEHANGER PARK,
COURSERS ROAD, ST ALBANS,
HERTFORDSHIRE, AL4 0PF

COWI KELVIN HOUSE, RTC BUSINESS
PARK, LONDON ROAD, DERBY,
DE24 8UP, UK
TEL: +44 1332 343800 E-MAIL:
info_@cowi.com

- NOTES**
- ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES RELATING TO ORDNANCE DATUM UNLESS SHOWN OTHERWISE
 - DO NOT SCALE FROM THIS DRAWING. DO NOT TAKE DIGITAL DIMENSIONS OFF THIS DRAWING. WORK TO FIGURED DIMENSIONS ONLY - IF IN DOUBT ASK!
 - ALL WORKS CARRIED OUT IN ACCORDANCE WITH THE FOLLOWING DOCUMENTS:
 - AM-DES-CIV-C01-SEC1 CIVIL DESIGN STANDARD. THAMES WATER UTILITIES LTD.
 - AM-DES-CIV-C03-SEC1 TUNNELLING DESIGN STANDARD. THAMES WATER UTILITIES LTD.
 - AM-DES-CIV-C04-SEC1 TUNNELLING SPECIFICATION. THAMES WATER UTILITIES LTD.
 - THE SPECIFICATION FOR TUNNELLING BTS & ICE 2015
 - BS 6164 : 2011 : CODE OF PRACTICE FOR HEALTH & SAFETY IN TUNNELLING IN THE CONSTRUCTION INDUSTRY
 - CESWI 7th EDITION
 - THE REQUIREMENTS OF SEWERS FOR ADOPTION, 7TH EDITION FOR CONSTRUCTION METHODOLOGY. REFER TO THE CONTRACTOR'S SPECIFIC METHOD STATEMENT FOR THE WORKS
 - THE CONTRACTOR IS TO CONFIRM ALL LEVELS AND SETTING OUT PRIOR TO COMMENCEMENT OF THE WORKS
 - TOPOGRAPHICAL SURVEY INFORMATION WAS BASED ON LIDAR DATA COURTESY OF THE ENVIRONMENT AGENCY AND A PROPOSED GROUND MODEL PROVIDED BY STANTEC.
 - THE UNDERGROUND SERVICES INFORMATION HAS BEEN PROVIDED BY STANTEC. THE DERIVATION OF THIS INFORMATION IS UNKNOWN AT THIS TIME. COWI ACCEPTS NO LIABILITY WITH REGARDS TO THE ACCURACY OF THE INFORMATION. CONTRACTOR TO VERIFY THIS INFORMATION PRIOR TO COMMENCEMENT OF WORKS
 - TRIAL EXCAVATIONS ARE TO BE UNDERTAKEN TO VERIFY AND ESTABLISH THE ACTUAL POSITIONS OF SERVICES AND OTHER APPARATUS ON SITE. SAFE DIGGING PRACTICES ARE TO BE USED TO VERIFY LOCATIONS BEFORE ANY MECHANICAL PLANT IS USED
 - CONSTRUCTION TOLERANCES IN ACCORDANCE WITH THE 'SPECIFICATION FOR TUNNELLING' BTS & ICE 2010, TABLE 15, SECTION 328, TOLERANCES FOR TUNNELS, SHAFTS AND UNDERGROUND WORKS
 - ALL PROPRIETARY PRODUCTS TO BE USED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTION
 - TEMPORARY ACCESS ARRANGEMENTS, TEMPORARY PROTECTIVE BARRIERS AND TEMPORARY PLATFORMS DESIGNED BY OTHERS
 - SERVICE DIVERSIONS ARE THE RESPONSIBILITY OF OTHERS
 - BENCHING AND HANDRAIL DESIGNS TO BE CONFIRMED AND AGREED WITH OPERATIONS

FOR APPROVAL

CURRENT REVISION INFORMATION

P04. MINOR LEVEL AMENDMENTS AS AGREED WITH THE DESIGNER

Revision	Status	Stability Description	Author	Checked	Reviewed	Date
P04	S3	FOR INFORMATION	RPB	CB	SR	29.04.20
P03	S3	FOR APPROVAL	NEML	KEMS	KEMS	11.3.20
P02	S1	FOR APPROVAL	DEMC	KEMS	MNRE	24.01.20
P01	S1	FOR APPROVAL	DEMC	KEMS	MNRE	16.12.19

Thames Water Utilities

Location Code: TS001304 OS Reference: TQ0787 Security Reference: UBR

Project Group: WWI Sub Process: N/A

Location/Town: THE GREENWAY, ICKENHAM, UXBRIDGE, UB10 8LS.

Site Name: TS001304 - RUISLIP_BR_TS001

Project Name: H582_05 - GREENWAY

Drawing Title: DIVERSION SEWER SHAFT 04
6m I.D. SHAFT GENERAL ARRANGEMENT

Scale: AS SHOWN Sheet Size: A1 Status: S3

Drawing Number: H582_05-HI-TS001304-101-DR-C_0142 Revision: P04