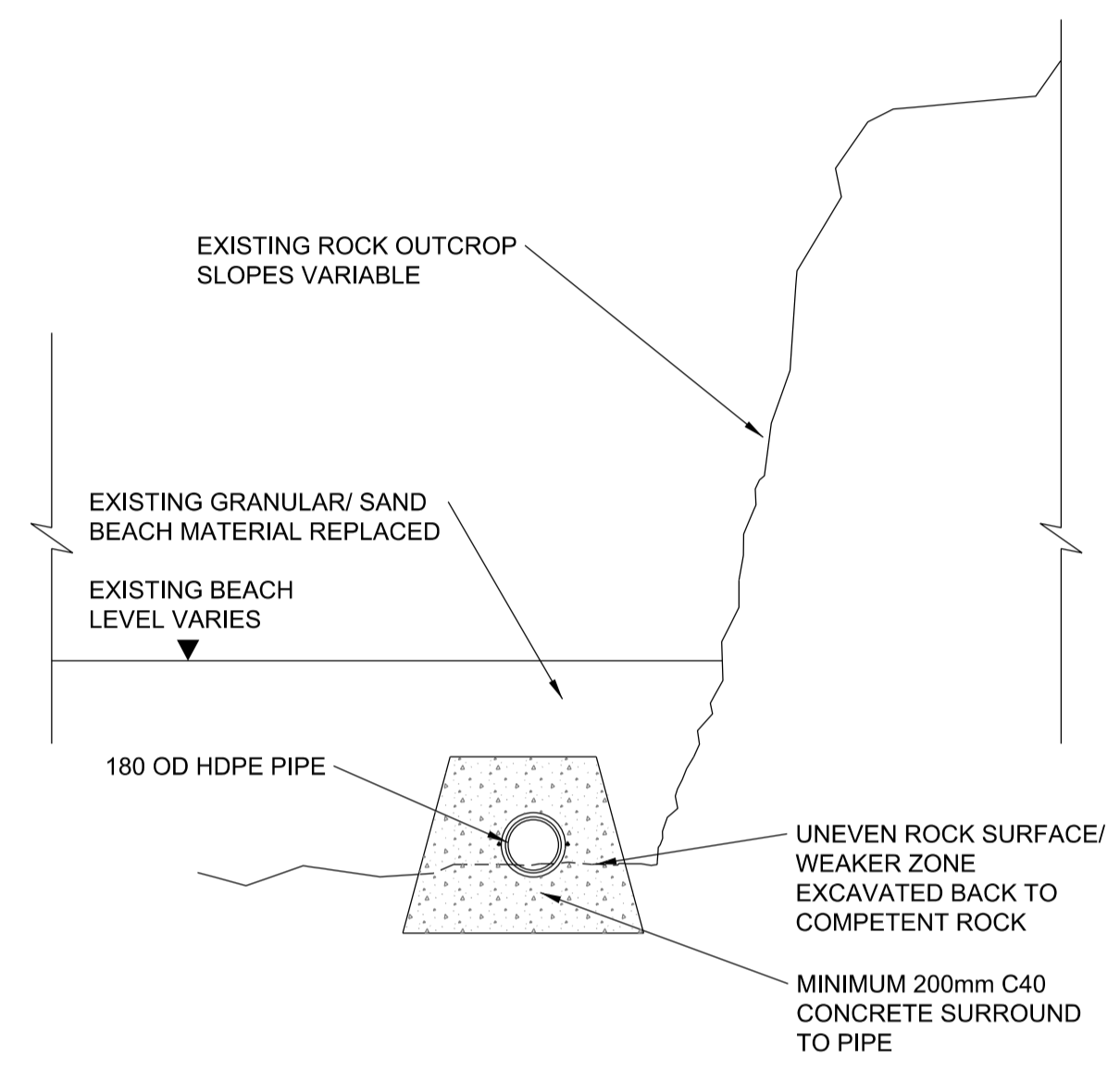


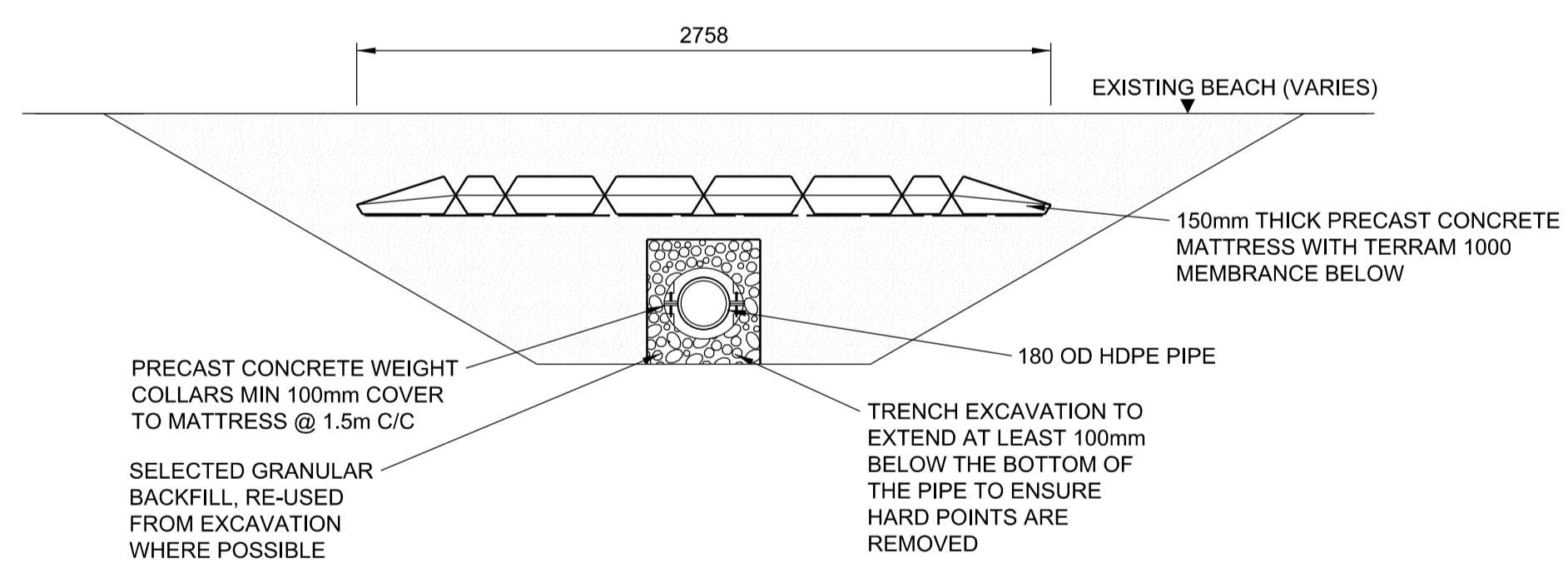
TYPICAL TRENCH PROFILE AT UPPER BEACH ZONE

SCALE 1:25



TYPICAL SECTION AT ROCK ZONE

SCALE 1:25

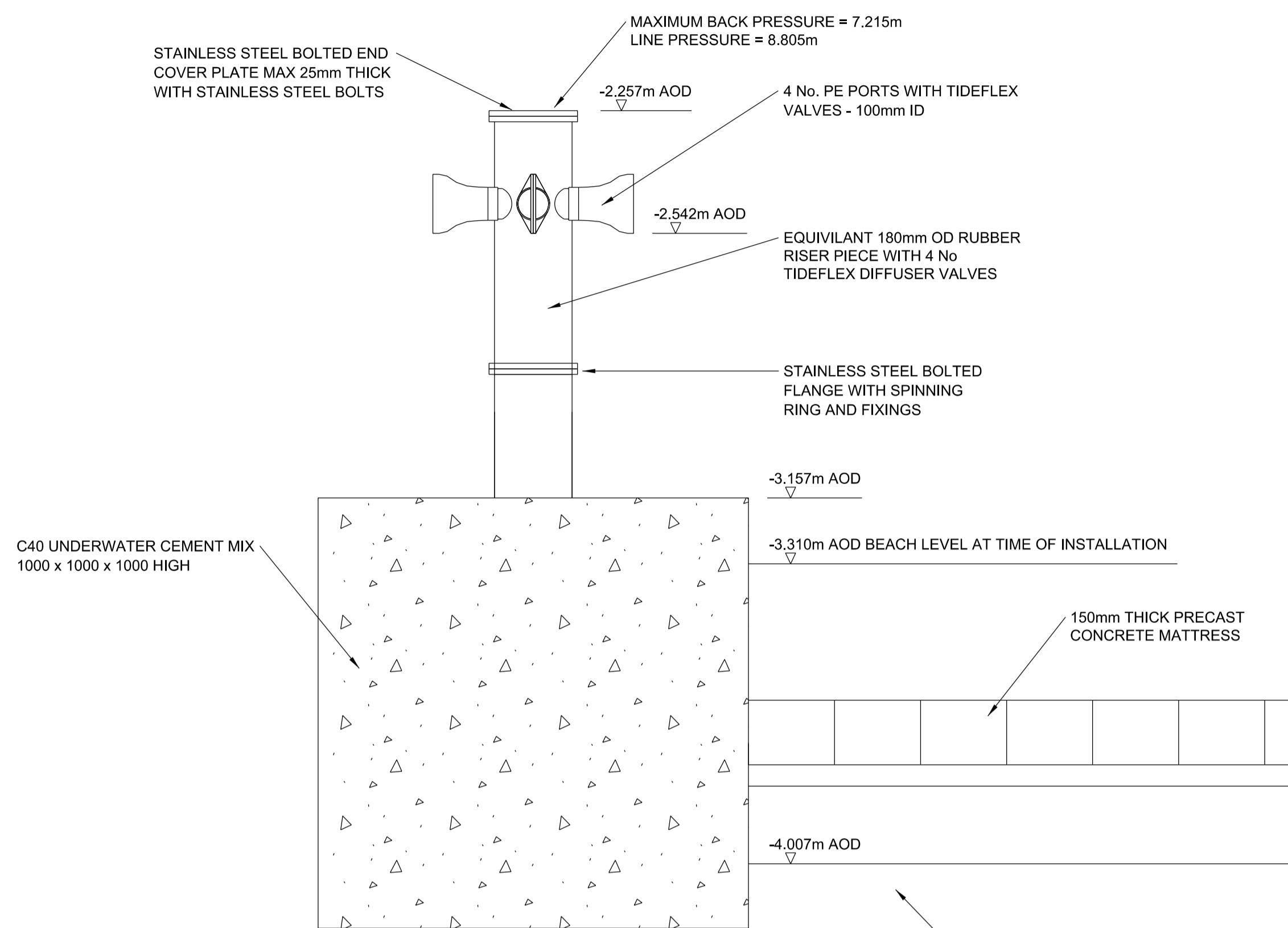


TYPICAL TRENCH PROFILE AT LOWER BEACH ZONE
MATTRESS BELOW GROUND LEVEL

SCALE 1:25

CONCRETE SPECIFICATION:

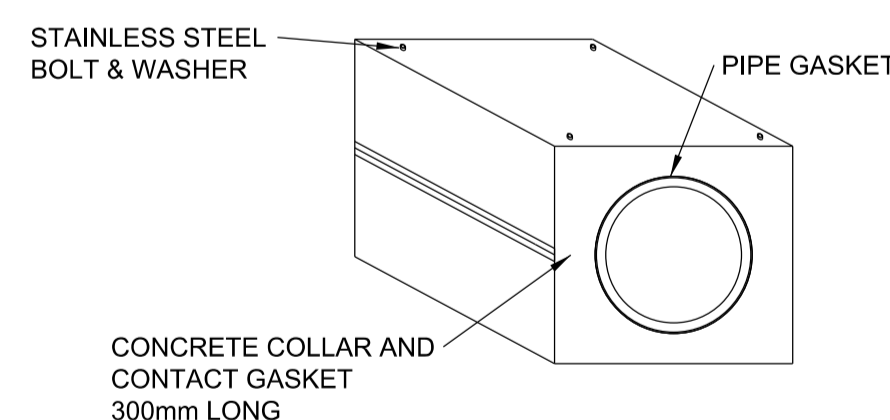
- CEMENT TO BS EN 197
- MINIMUM CEMENT CONTENT 360 Kg/m³
- MAXIMUM AGGREGATE SIZE 10mm
- MINIMUM CONCRETE DENSITY 2600 Kg/m³
- MINIMUM CONCRETE CUBE STRENGTH 50 N/mm²
- ADDITIVE FOR RAPID HARDENING AND TO PREVENT EARLY LOSSES



DIFFUSER DETAIL

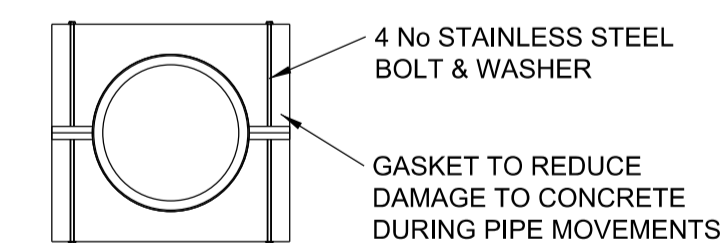
SCALE 1: 10

SELECTED GRANULAR BACKFILL FROM EXCAVATED MATERIAL OR CONCRETE - DEPENDING ON BEACH GROUND FORMATION



CONCRETE WEIGHT COLLAR DETAIL

SCALE 1: 10



FIXING DETAIL

SCALE 1: 10

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES ABOVE ORDANCE DATUM UNLESS NOTED OTHERWISE
2. ALL WORKS COMPLY WITH DŴR CYMRU WELSH WATER STANDARD DETAILS
3. FOR OUTFALL PLAN AND LONGITUDINAL SECTIONS REFER TO DRAWING 2/TC-2011
4. FOR CLASSIFICATION OF TRENCH ZONES SEE LONGITUDINAL SECTION ON 2/TC-2011
5. OUTFALL PIPE ALONG BEACH LAID ON A BED OF MATERIAL WHICH WILL PROVIDES AN EVEN AND CONTINUOUS SUPPORT. BED CHECKED FOR HARD POINTS, ANY FOUND WERE REMOVED
6. PIPE WAS NOT SUPPORTED DIRECTLY ON ROCK ANYWHERE ALONG ITS LENGTH
7. ALL STAINLESS STEEL IS BS 1.4462 EN 10088
8. CONCRETE WEIGHT COLLAR AT 1.5m CENTRES

Rev	Date	By	Description	H&S Box Updated
X04	12/04/13	LTG	AS BUILT ISSUE	Y
C03	19/03/12	LTG	CONSTRUCTION ISSUE	Y
T02	30/01/12	LTG	REVISED TARGET COST ISSUE TO INCORPORATE TRIAL PIT AND LATEST CHAIN SURVEY	N
T01	23/11/11	LTG	TARGET COST ISSUE	N
P00	31/10/11	LTG	PRELIMINARY ISSUE	N

Drawing Status
AS BUILT

Job Title
LLANGRANNOG OUTFALL

Drawing Title
TYPICAL TRENCH DETAILS

Consultants Job No. **217036** Originator **LTG**
 Scale **AS SHOWN** Checked **LTG** Approved **MJU** Date **OCT 2011**
 Scheme No. **2/TC** Drawing No. **2012** Rev **X04**

Rev	Construction Risks	Maintenance/ Operating	Demolition/ Adaptation Risks
X04	-	RISK OF DROWNING, ADVERSE WEATHER CONDITIONS, PUBLIC INTERFERENCE, CONTACT WITH RAW OR TREATED SEWAGE AND SLIPS/ TRIPS/ FALLS	LIFTING/ CRANAGE (SOME WITHIN TIDAL RANGE) - RISK OF CRUSHING/ DROWNING, DEEP EXCAVATIONS, HIGH GROUND WATER LEVELS, TIDAL INUNDATION, RISK OF DROWNING IN SEA, ADVERSE WEATHER, PUBLIC INTERFERENCE, ENVIRONMENTAL POLLUTION INCIDENTS, CONTACT WITH RAW OR TREATED SEWAGE, CONFINED SPACE WORKING, WORKING WITH CONCRETE, EXISTING SERVICES AND SLIPS/ TRIPS/ FALLS

Health & Safety Information Box

1. The headings for the risks identified are given in the above table; the Contractor should refer to the Design Risk Register for details.
 2. It is assumed that all the works on this drawing will be carried out by a competent Contractor who has carried out a comprehensive risk assessment.