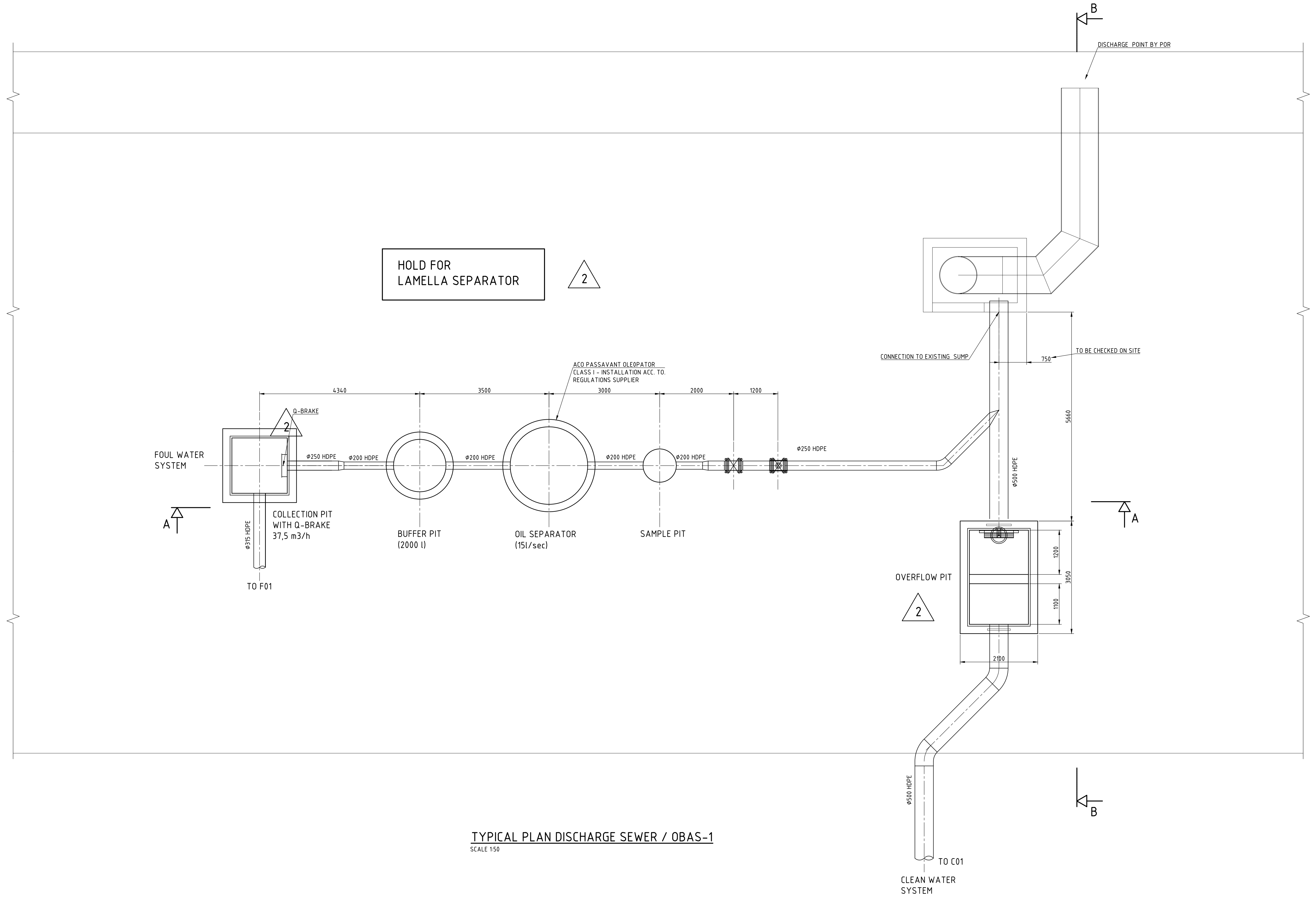
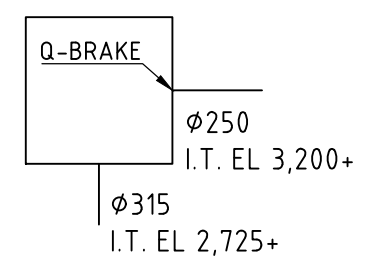


TYPICAL PLAN DISCHARGE SEWER / OBAS-1

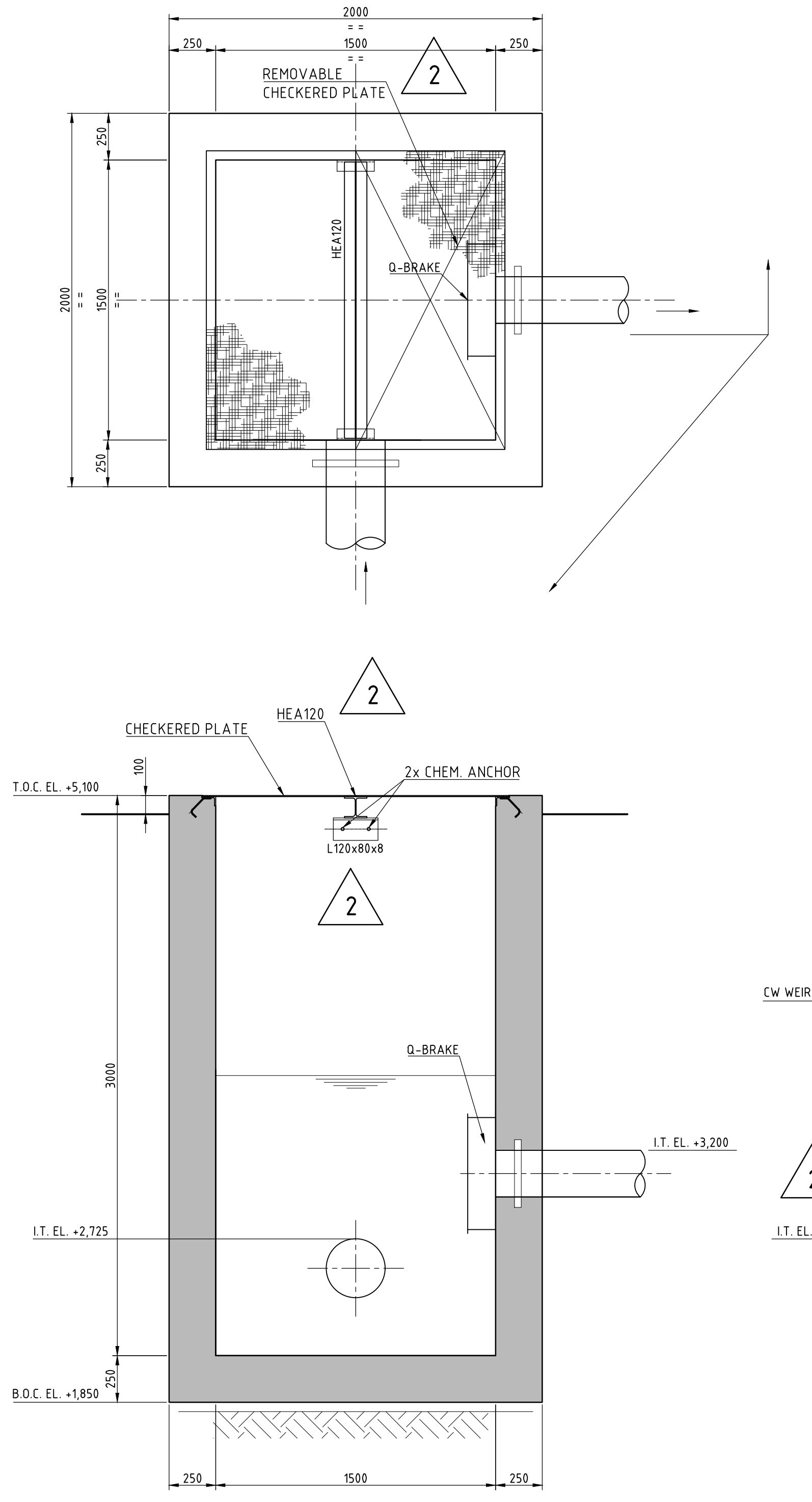
SCALE 1:50



TO OBAS 1

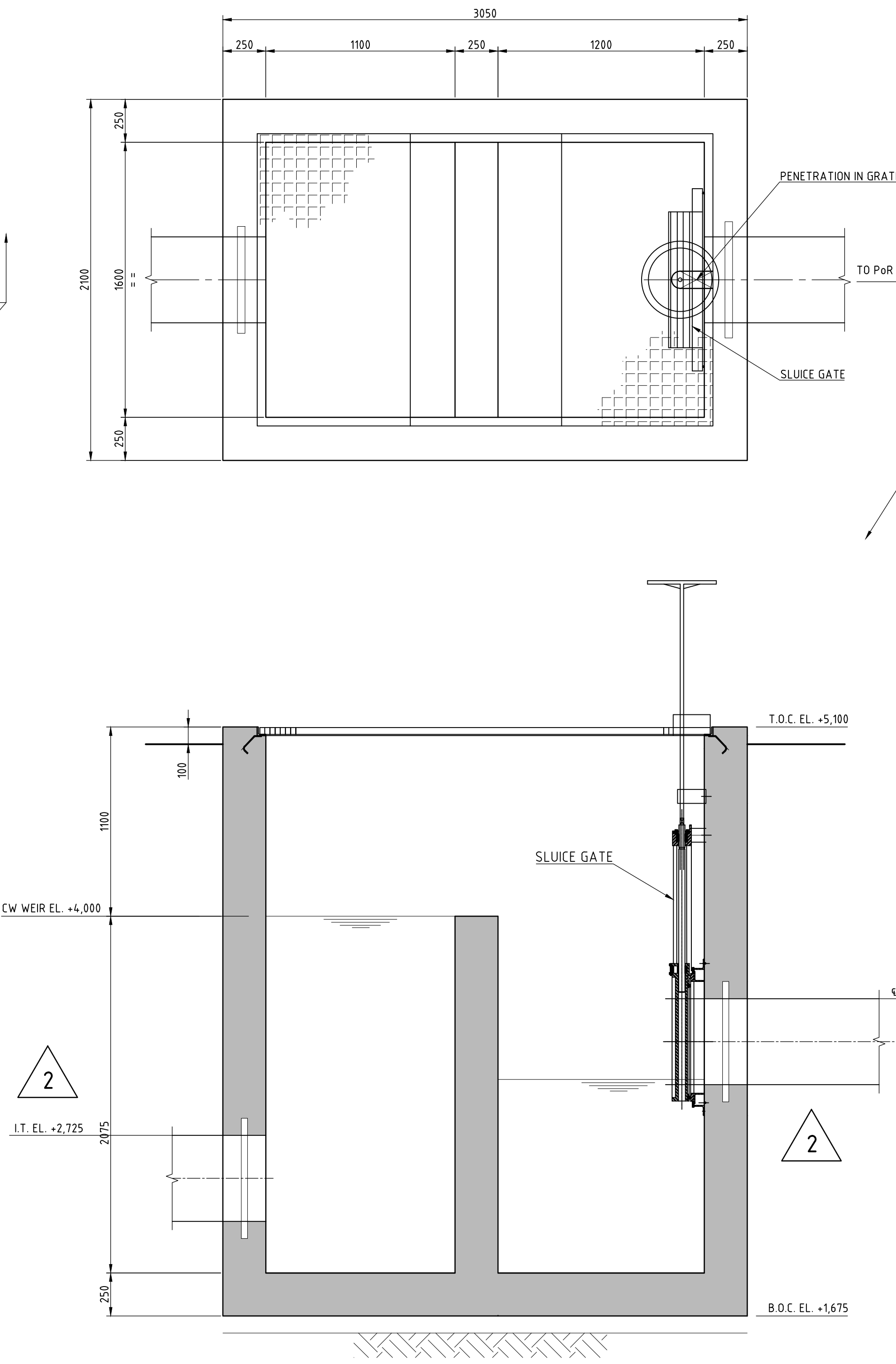
Q-BRAKE COLLECTION PIT SCHEDULE

2



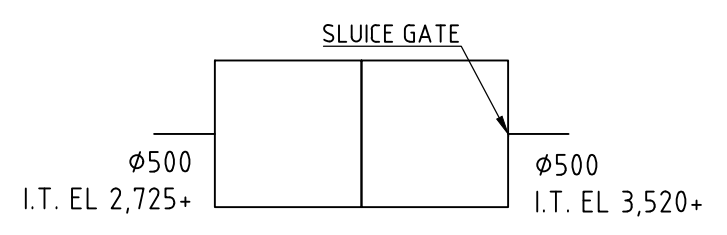
Q-BRAKE COLLECTION PIT

SCALE 1:20



OVERFLOW PIT

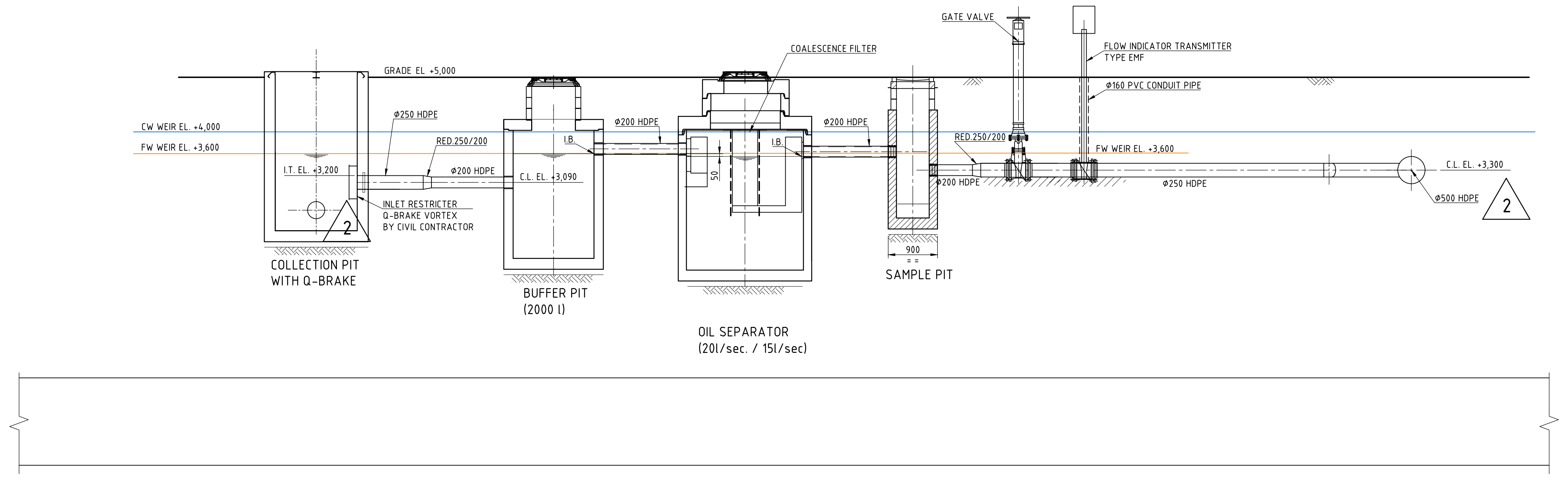
SCALE 1:20



TO LP 1

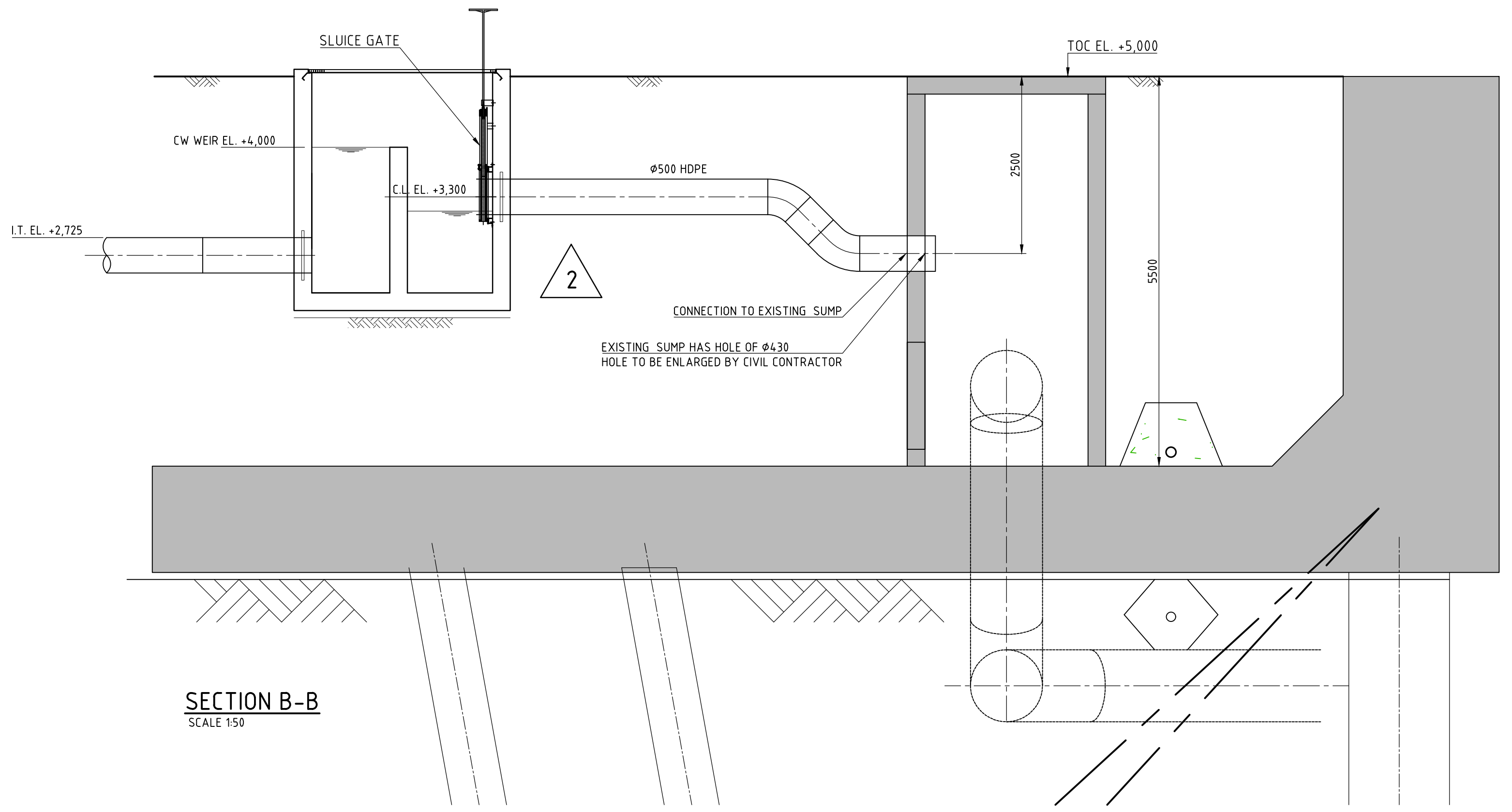
OVERFLOW PIT SCHEDULE

2



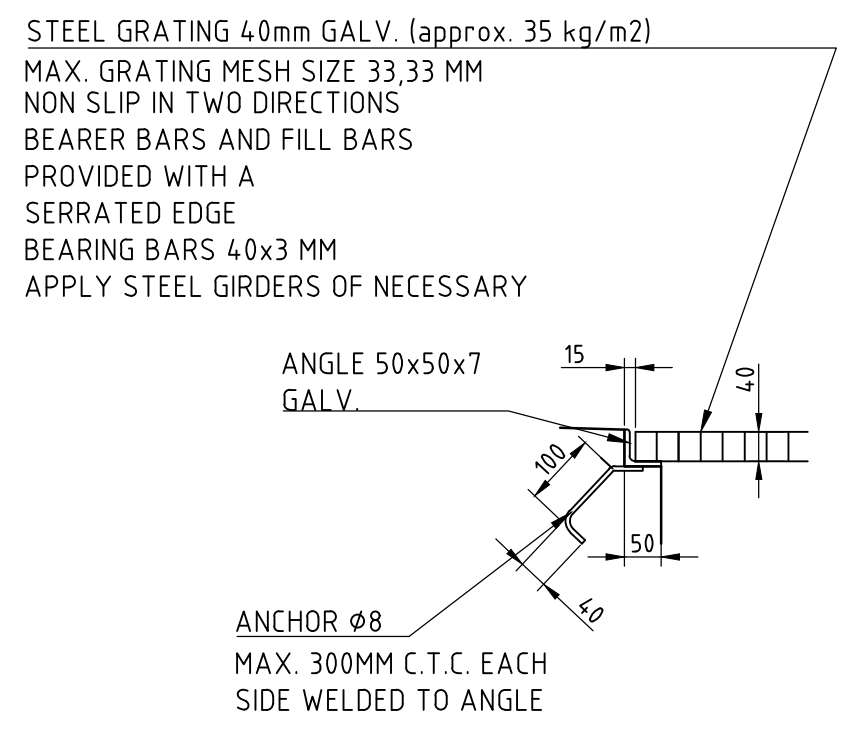
SECTION A-A

SCALE 1:50



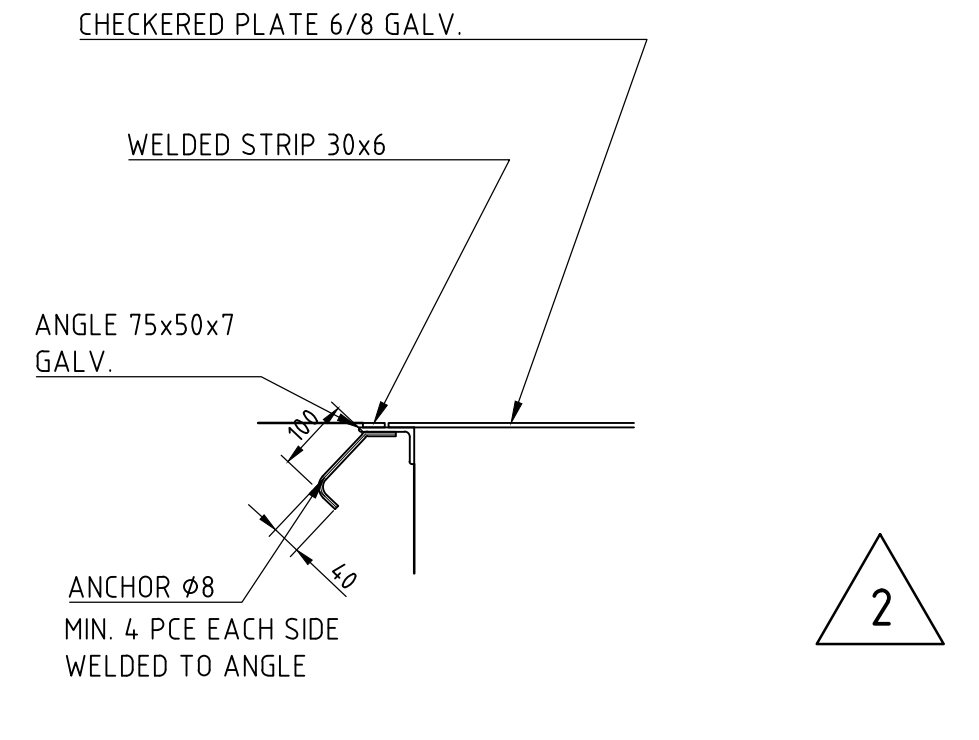
SECTION B-B

SCALE 1:50



GRATING/ANCHOR DETAIL

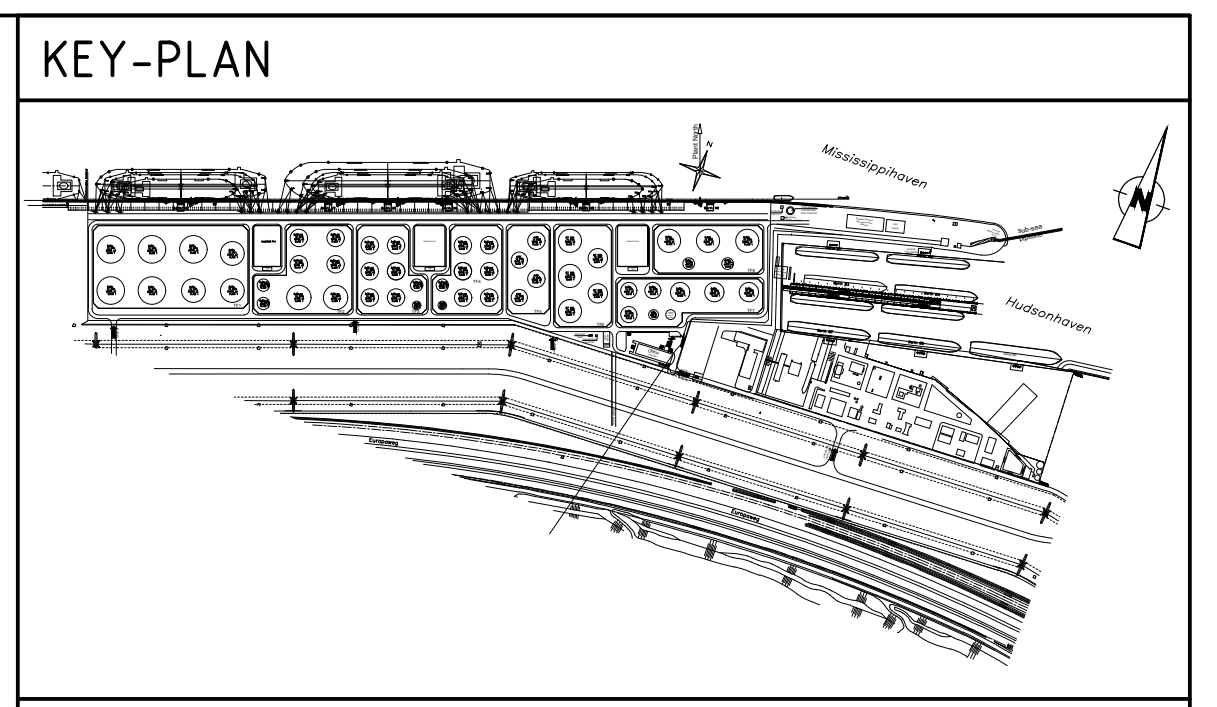
SCALE 1:10



CHECKERED PLATE/ANCHOR DETAIL

SCALE 1:10

KEY-PLAN



GENERAL NOTES

- ALL DIMENSIONS IN MM
- ELEVATION IN M ACC. TO N.A.P.
- (I.B) INTERN BOTTOM ELEVATION IN M ACC. TO N.A.P.
- (I.T) INTERN TOP ELEVATION IN M ACC. TO N.A.P.

FOR COATING AND PAINTING STANDPIPE / INDICATOR SEE PAINTING SPECIFICATION

LP CLEAN WATER DISCHARGE POINT (LOZINGSPUNT)

CONCRETE

- CONCRETE ACCORDING TO NEN-EN 206-1, NEN 8005, NEN-EN 1992-1-1.
  DELIVERY OF CONCRETE MIX WITH KOMO CERTIFICATE
- REINFORCEMENT ACCORDING TO NEN-EN 10080, NEN 6008
  DELIVERY OF REINFORCEMENT WITH KOMO CERTIFICATE (ACC. TO BRL0501)

CONCRETE EXECUTION CLASS:

- EXECUTION CLASS 3 IN ACCORDANCE WITH NEN-EN 13670

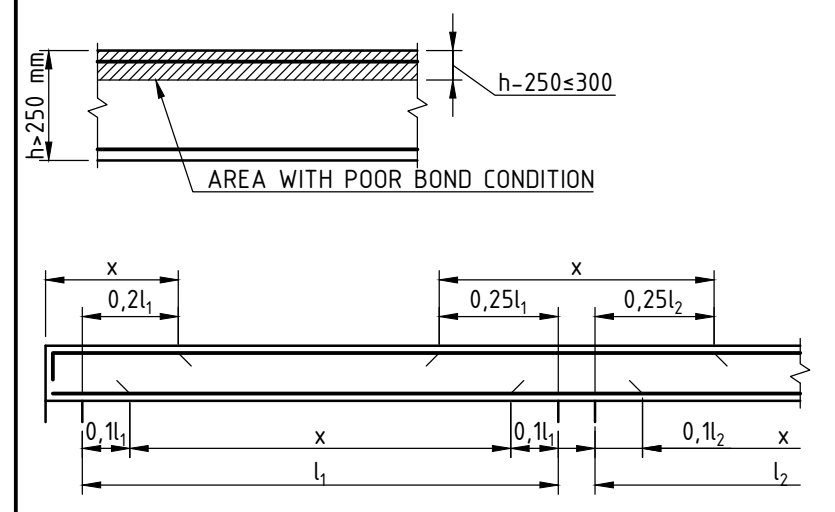
CONCRETE SPECIFICATION:

- CONCRETE STRENGTH CLASS: C30/37
- CONCRETE EXPOSURE CLASSES: XC4, XS1, XD2, XA2, XF1
- STEEL REINFORCEMENT: B500B
- CONCRETE COVER: 50MM
- CHLORIDE CLASS: CL 0,20.
- CONSISTENCY CLASS: BY CONTRACTOR
- SLAG CEMENT: CEM III/B 42,5N LH SR (HEAT OF HYDRATION ≤245 KJ/KG)
- MAX. AGGREGATE SIEVE SIZE: DMAX = 31½ MM
- MAX. CONCRETE TEMPERATURE: 45°C (FIELD CONCRETE CORE TEMPERATURE PEAK DURING HARDENING)
- MAX. INTERNAL TEMP. GRADIENT: 15°C BETWEEN CONCRETE CORE AND SURFACE LAYER;
- CONCRETE CURING TIME: CURING CLASS 3 IN ACCORDANCE WITH NEN-EN 13670, TABLE F.2

ANCHORAGE AND LAP LENGTH

ANCHOR AND LAP LENGTH							
BAR SIZE	Ø8	Ø10	Ø12	Ø16	Ø20	Ø25	Ø32
ANCHORAGE LENGTH l_{bd}	290	360	430	580	720	900	1150
LAP LENGTH L_o	410	510	610	810	1010	1260	1610

- ANCHORAGE AND LAP LENGTH WILL BE MULTIPLIED WITH 1,4 FOR BARS WITH POOR BOND CONDITIONS.
- LAPS SHALL BE STAGGERED WITH A MAXIMUM OF 50% LAPS BETWEEN 1,3L_o LAP LENGTH ACCORDING TO THE CENTER OF A LAP LENGTH TO BE MULTIPLIED BY 1,1 IF NOT STAGGERED.
- LAPS SHALL NOT BE PLACED IN THE "x" AREAS.



REFERENCE DRAWINGS

HHTT-KH-016351	UNDERGROUND CLEAN WATER SEWER LAYOUT PART 1
HHTT-KH-016352	UNDERGROUND CLEAN WATER SEWER LAYOUT PART 2
HHTT-KH-016353	UNDERGROUND CLEAN WATER SEWER LAYOUT PART 3
HHTT-KH-016354	UNDERGROUND CLEAN WATER SEWER LAYOUT PART 4
HHTT-KH-016361	UNDERGROUND FOUL WATER SEWER LAYOUT PART 1
HHTT-KH-016362	UNDERGROUND FOUL WATER SEWER LAYOUT PART 2
HHTT-KH-016363	UNDERGROUND FOUL WATER SEWER LAYOUT PART 3
HHTT-KH-016364	UNDERGROUND FOUL WATER SEWER LAYOUT PART 4
HHTT-KH-016318	UNDERGROUND INFRASTRUCTURE SEWER DETAILS 1 - OBAS 2
HHTT-KH-016319	UNDERGROUND INFRASTRUCTURE SEWER DETAILS 1 - OBAS 3

FOR DETAIL DESIGN

Released for Detail Design

16 October 2019
HHTT Document Control

KH Engineering 67620-D-1416-1100-315

REV.	DATE	DESCRIPTION	DRAWN	CHECK	APP'D
2	11-10-2019	REVISED AS INDICATED	BRS	RIW	RIW
1	02-10-2019	REVISED FOR DETAIL DESIGN	EPA	RIW	RIW
0	05-07-2019	FOR DETAIL DESIGN	EPA	RIW	RIW

PROJECT : HHTT
CLIENT : HES Hartel Tank Terminal B.V.

TITLE : UNDERGROUND INFRASTRUCTURE
SEWER DETAILS 1 - OBAS-1

PROJ No : 67620-001
CLIENT PROJ No :
DRAWING No : HHTT-KH-016315
SCALE : 1:50
A0+
SHEET : 1/1
REV. 2