

BALLAST WATER TREATMENT

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BALLAST WATER TREATMENT

THE INTERNATIONAL CONVENTION FOR THE CONTROL AND MANAGEMENT OF SHIPS' BALLAST WATER AND SEDIMENTS (BWM CONVENTION) WAS ADOPTED IN 2004 TO INTRODUCE GLOBAL REGULATIONS TO CONTROL THE TRANSFER OF POTENTIALLY INVASIVE SPECIES. ONCE THE TREATY ENTERS INTO FORCE, BALLAST WATER WILL NEED TO BE TREATED BEFORE IT IS RELEASED INTO A NEW LOCATION, SO THAT ANY MICROORGANISMS OR SMALL MARINE SPECIES ARE KILLED OFF.

The BWM Convention will enter into force on 8 September 2017.

3DELING OFFER A FAST AND COST EFFECTIVE MEASUREMENT SOLUTION TO SUPPORT THE INSTALLATION OF BALLAST WATER TREATMENT SOLUTIONS. WE WORK WITH OUR CLIENTS TO PROVIDE:

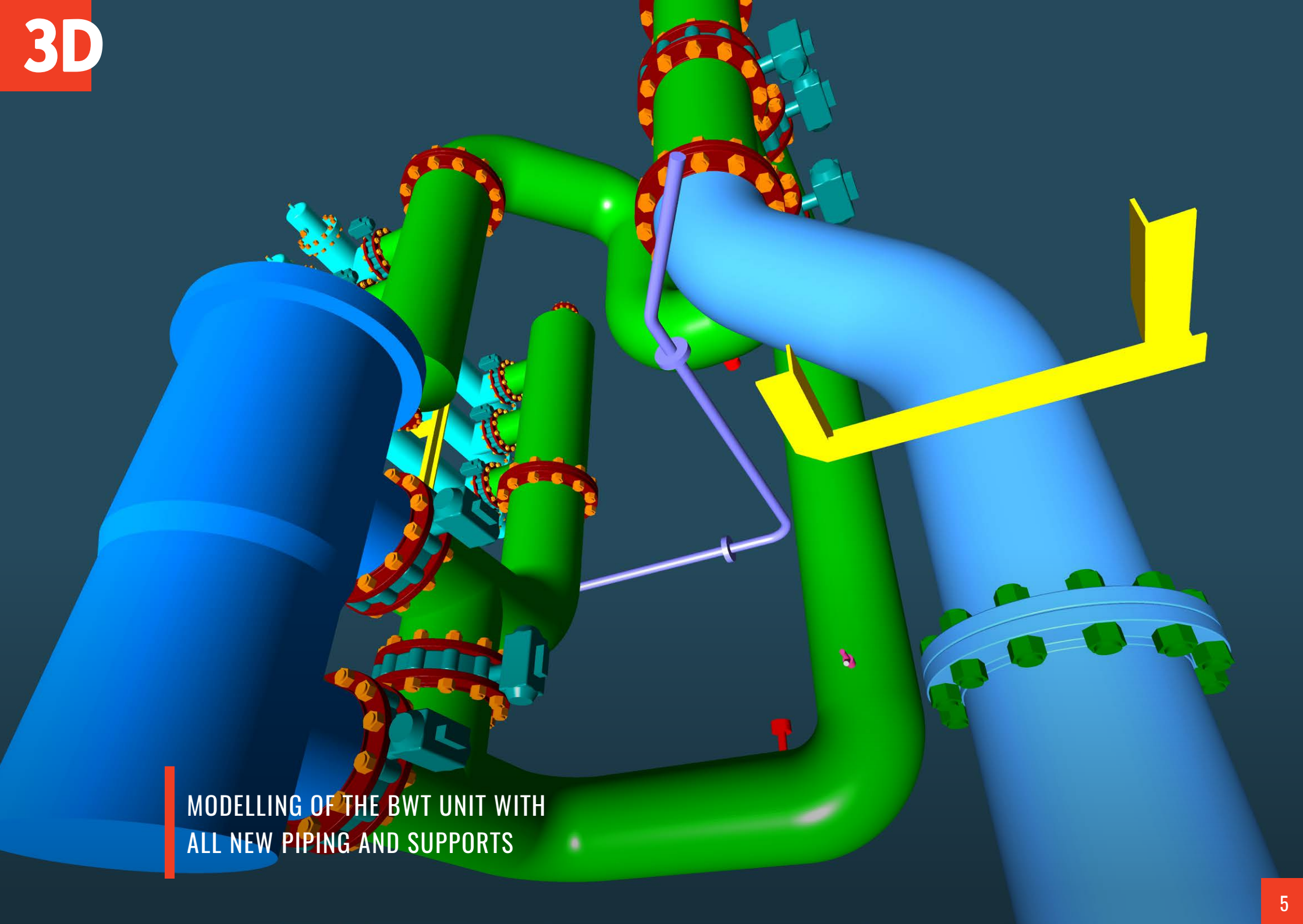
- ACCURATE AS BUILT INFORMATION
- MODELLING OF THE SYSTEM DESIGN
- CLASH ANALYSIS
- RECONFIGURATION INFORMATION FOR THE EXISTING SPACE
- ISO DOCUMENTATION IN SUPPORT OF INSTALLATION.

3D

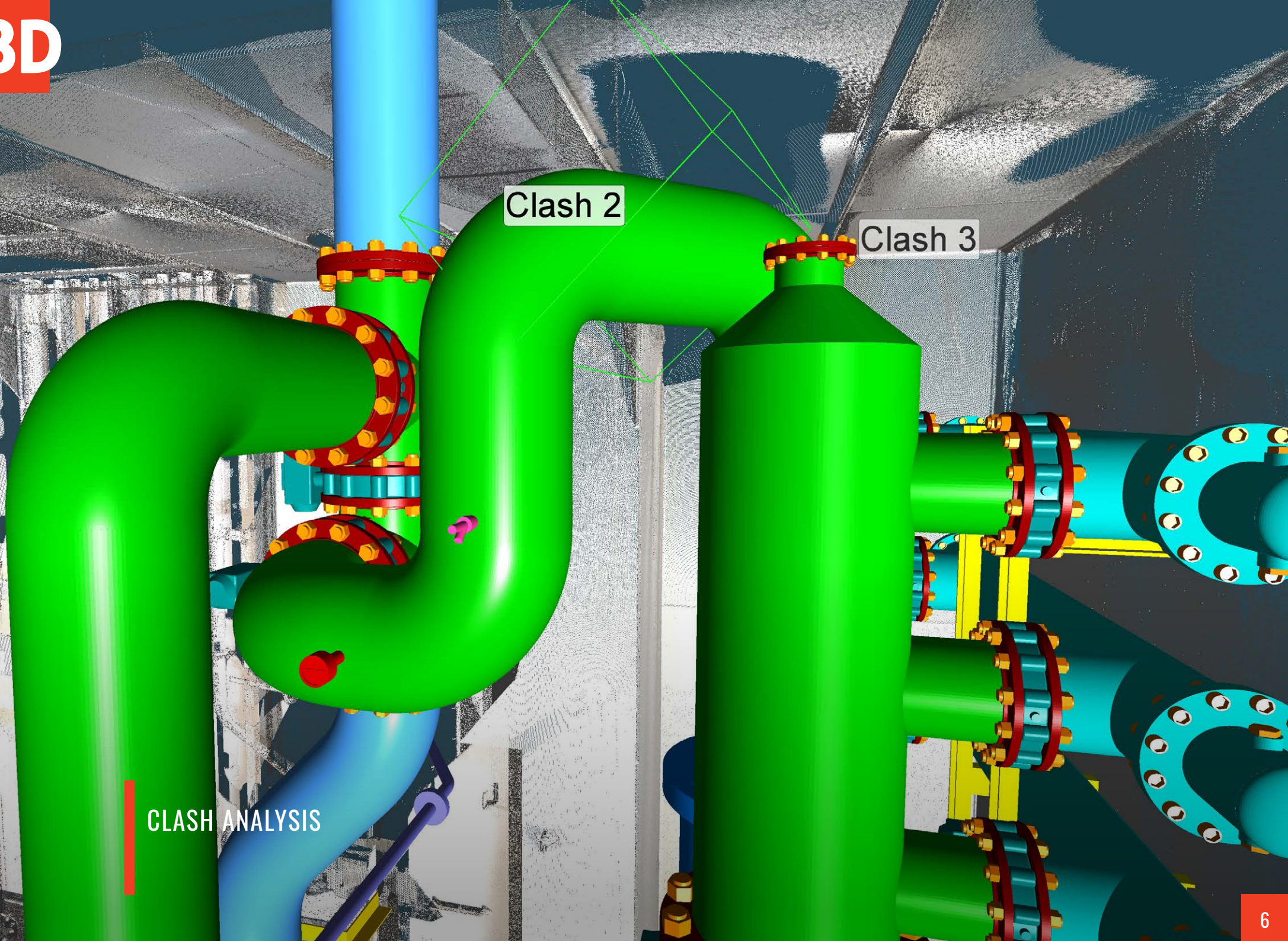
LASER SCANNING AND POINT CLOUD
REGISTRATION OF INSTALLATION AREA

3D

MODELLING OF EXISTING PIPEWORK
FOR SYSTEM CONNECTIONS



MODELLING OF THE BWT UNIT WITH
ALL NEW PIPING AND SUPPORTS



Clash 2

Clash 3

CLASH ANALYSIS

Clash 3

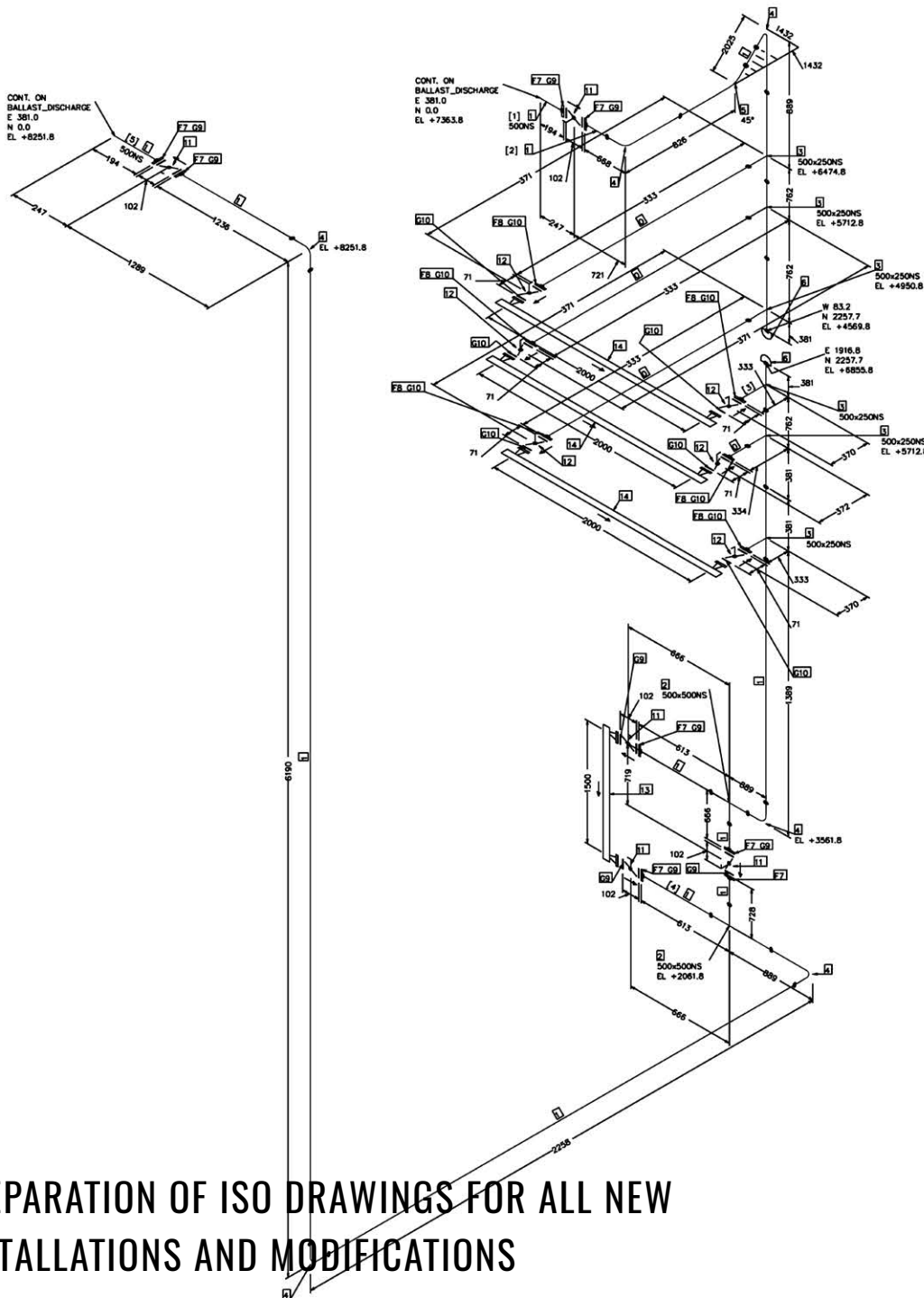
Clash 2

Clash 1

DISCUSSION WITH CLIENT
ON DESIGN AMENDMENTS

3D

RECONFIGURATION
OF EXISTING SPACE



PREPARATION OF ISO DRAWINGS FOR ALL NEW INSTALLATIONS AND MODIFICATIONS

[1] DENOTES PIPE SPOOL NO
[] DENOTES PARTS LIST NO

SHOP FIELD SOCKET SCREWED COMPN SITE PIPE LAGGED TRACED
WELD WELD WELD JOINT JOINT CONNECTION SUPPORT PIPE PIPE PIPE

3D eling	
3D laser scanning services	
REVISION: 0	DATE: 24 FEB 2017
UOC NO: ---	PROJECT NO: 17108
THERMAL INSU SPEC:	
BATCH REF: BWT	
PIPING SPEC: ST	ISS: 1
NEW BWT SYSTEM	

FABRICATION MATERIALS			
PT NO	COMPONENT DESCRIPTION	BORE	ITEM CODE QTY
PIPE			
1	ERW TUBE, STD CS, ASTM A105, type E (E=0.85)	500	SI/PA 10408
FITTINGS			
2	TEE ANSI B16.9 BW STD CS, ASTM A105	500 x 500	SI/TA-2.11 2
3	TEE ANSI B16.9 BW STD CS, ASTM A105	500 x 250	SI/TA-2.1V 6
4	ELBOW 45DEG ANSI B16.28 BW CS, ASTM A105	500	SI/EB-2 6
5	ELBOW 45DEG ANSI B16.9 BW CS, ASTM A105	500	SI/EC-2 1
6	CAP SHORT ANSI B16.9 BW CS, ASTM A105	500	SI/KD-200 2
FLANGES			
7	FLANGE ANSI B16.5 SOW #150,RF CS, ASTM A105	500	SI/FH-BB 8
8	FLANGE ANSI B16.5 SOW #150,RF CS, ASTM A105	250	SI/FH-BB 6
ERECTION MATERIALS			
PT NO	COMPONENT DESCRIPTION	BORE	ITEM CODE QTY
GASKETS			
9	GASKET 1/16" thick filled or reinforced PTFE, ASME B16.21	500	SI/GC-BB-SF_11 10
10	GASKET 1/16" thick filled or reinforced PTFE, ASME B16.21	250	SI/GC-BB-SF_VV 12
VALVES / IN-LINE ITEMS			
11	BUTTERFLY C-VALVE ANSI #150,RF Hylork XL 130 CS body w/ 316 SS trim, RFTE ST, GO	500	SI/AF-WBBS-H.X 5
12	VALVE BUTTERFLY LUG #150,RF CS body w/ 316 SS trim, RFTE ST, GO	250	SI/VF-BBA_VV 6
INSTRUMENTS			
13	FILTER FLANGED 500 #150 RF CS, ASTM A105	500	SI/OW-Filer-B 1
14	UV REACTOR FLANGED 2500mm #150 RF CS, ASTM A105	250	SI/OM-UV-React 3
PIPE SPOOLS			
[1] [2] [3] [4] [5]			
Revision	Description	Date	Approved by
0	To be validated	24 FEB 2017	GC
PIPE NS	500 250 0		
CL LENGTH	26.6 6.5 2.0		