	<b>PROJECT</b>	<b>Standby SRU &amp; Additional Tanks IOCL Paradip Refinery</b>		
	<b>CLIENT</b>	<b>INDIAN OIL CORPORATION LIMITED</b>		
QCP-U/G CIVIL WORKS – INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS	<b>Project No.</b> 080557C001	<b>Document No.</b> 080557C-000-QCP-1714-001	<b>Rev. No.</b> A	Page 1 of 10
<b>QUALITY CONTROL PLAN</b> <b>U/G CIVIL WORKS</b> <b>INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS</b>				

TYPE OF QUALITY CONTROL REPORT	CERTIFICATION EXTENT
W 12/A – CW 15A	SINGLE REPORT PER EACH MATERIAL – CONCRETE MIX
CW 35 – CW 17	SINGLE REPORT PER EACH ITEM
CW 01 – QC 11	SUMMARY
CW 11Aa - CW 11A b - CW 11Ba - CW 11Bb - CW 11Ca - CW 11Cb - CW 11D - CW 11Ea - CW11Eb - CW 11Fa - CW 11Fb	SINGLE REPORT PER EACH TAG
CW 100	SINGLE REPORT PER EACH RELEASED TAG OR GROUP OF TAGS

#### REFERENCE DOCUMENTS:

- 080557C-000-PP-805 Site Co-ordination & Communication procedure
- 080557C-000-JSD-1700-002 Engineering Design Basis for Tanks Civil, Structural & UG Network
- 080557C-000-LD-1490-001 U/G network Standards
- Drawings

#### LEGENDA

H	=	HOLD (RFI required - Work stop for inspection)
W	=	WITNESS (RFI required)
WC	=	100 % SUPERVISION AND EXAMINATION BY CONTRACTOR.
P	=	PREPARATION.
S	=	SURVEILLANCE (No RFI)
R	=	REVIEW OF REPORTS
N.A.	=	NOT APPLICABLE
A	=	AUTHORIZATION / APPROVAL
IFA	=	ISSUED FOR AUTHORIZATION/APPROVAL
INFO	=	FOR INFORMATION
!	=	WARNING (control of document revision status)

A	21/10/2019	ISSUED FOR INFORMATION	SMP	PKP	LA/ANJ	JMC
REV	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED

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 	<b>PROJECT</b>		<b>Standby SRU &amp; Additional Tanks</b>	
	<b>CLIENT</b>		<b>IOCL Paradip Refinery</b>	
<b>QCP-U/G CIVIL WORKS – INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS</b>	<b>Project No.</b> 080557C001	<b>Document No.</b> 080557C-000-QCP-1714-001	<b>Rev. No.</b> A	Page 2 of 10

## QUALITY CONTROL PLAN

### U/G CIVIL WORKS

### INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS

#### QUALITY CONTROL ACTIVITIES

Nr.	CHECK AND INSPECTION ITEM	QUALITY CONTROL REPORT	ACTION		NOTES
			CONTR.	TECHNIP	
<b>A)</b>	<b>PRELIMINARY ACTIVITIES</b>				
A.1	CONTRACTOR DRAWINGS CHECK REVISION STATUS	N.A.	!	!	
A.2	CONTRACTOR TECHNICAL SPECIFICATION AND PROCEDURE	N.A.	IFA	A	
A.3	CONTRACTOR METHOD STATEMENT (if required)		IFA	A	(1)
<b>B)</b>	<b>BEFORE CONSTRUCTION / INSTALLATION</b>				
B.1	MATERIALS APPROVAL	W 12/A	IFA	A	(1)
B.2	MIXING FORMULA APPROVAL	CW 15A -CW 01	IFA	A	(1)
<b>C)</b>	<b>CONSTRUCTION / INSTALLATION OF PITS</b>				(2)
C.1	EXCAVATION				
C.1.1	POSITION AND ROUTING	CW 11Aa/b	WC	R	
C.1.2	EXCAVATION & DEPTH	CW 11Aa/b	WC	W/R	
C.1.3	COMPACTED GROUND	CW 11Aa/b	WC	R	
C.1.4	GROUND DENSITY TEST (if required)	QC11-CW 11Aa/b	WC	R	
C.1.5	LEAN CONCRETE ELEVATION (if any)	CW 11Aa/b	WC	R	
C.2	PITS EXECUTION				
C.2.1	COORDINATES CHECK (only for cast in situ)	CW 11Ab	WC	R	
C.2.2	FORMWORK	CW 11Aa/b	WC	W/R	
	- GEOMETRY AND POSITION				
	- STABILITY AND PLUMBNESS				
	- CLEANLINESS				
	- OIL COATING				
C.2.3	REINFORCEMENT	CW 11Aa/b	WC	W/R	
	- SPACERS AND CONCRETE COVER				
	- LAP SPLICE				
	- BENDING AND TIE BAR				
	- REBAR NUMBER, SIZE & SPACING				
	- CLEANLINESS				
	- WELDED WIRE FABRIC (if any)				
	- COATING TOUCH UP				

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 	<b>PROJECT</b>		<b>Standby SRU &amp; Additional Tanks</b>	
	<b>CLIENT</b>		<b>IOCL Paradip Refinery</b>	
<b>QCP-U/G CIVIL WORKS – INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS</b>	<b>Project No.</b> 080557C001	<b>Document No.</b> 080557C-000-QCP-1714-001	<b>Rev. No.</b> A	Page 3 of 10

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### U/G CIVIL WORKS

## INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS

### QUALITY CONTROL ACTIVITIES

Nr.	CHECK AND INSPECTION ITEM	QUALITY CONTROL REPORT	ACTION		NOTES
			CONTR.	TECHNIP	
C.2.4	EMBEDDED ITEMS (if any) - STEEL INSERTS: POSITION & GEOMETRY - COATING TOUCH UP	CW 11Aa/b	WC	W/R	(3)
C.2.5	WATER STOPS (if any) - POSITION AND TYPE	CW 11Aa/b	WC	R	
C.2.6	AUTHORIZATION FOR CASTING	CW 11Aa/b CW	WC	A	
C.2.7	CASTING	11Aa/ b CW35-	WC	R	
C.2.7a	SLUMP TEST & AIR CONTENT TEST (if required)	CW11Aa/b	WC	W/R	
C.2.7b	SAMPLE FOR STRENGTH TEST	CW17-CW11Aa/b	WC	W/R	
C.2.8	CURING	CW 11Aa/b CW	WC	R	
C.2.9	FORMWORK STRIPPING	11Aa/b CW	WC	R	
C.2.10	CONCRETE SURFACE REPAIRING (if any)	11Aa/b CW	WC	R	
C.2.11	PROTECTIVE COATING (where required)	11Aa/b	WC	R	
C.3	PREFABRICATED PITS INSTALLATION				
C.3.1	VISUAL CHECK BEFORE INSTALLATION	CW 11Aa	WC	W/R	
C.3.2	POSITIONING & ORIENTATION	CW 11Aa	WC	R	
C.3.3	ELEMENT TO ELEMENT SEALING (if any)	CW 11Aa	WC	R	
C.4	LEAKAGE TEST (if required)	CW40-CW11Aa/b	WC	W/R	
C.5	BACKFILLING				
C.5.1	AUTHORIZATION FOR BACKFILLING	CW 11Aa/b	WC	A	
C.5.2	BACKFILLING EXECUTION	CW 11Aa/b QC11-	WC	R	
C.5.3	DENSITY TEST (if required)	CW 11Aa/b CW	WC	W/R	
C.5.4	FINISHING WORK	11Aa/b	WC	R	
C.6	PIT COVERS INSTALLATION	CW 11Aa/b	WC	S	
C.7	STRENGHT TEST RESULT & SAMPLE UNIT WEIGHT	CW17-CW11Aa/b LAB TEST	WC	W/R	
C.8	FINAL DOCUMENTATION REVIEW	CW 11Aa/b	P	R	

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 	<b>PROJECT</b>		<b>Standby SRU &amp; Additional Tanks</b>	
	<b>CLIENT</b>		<b>IOCL Paradip Refinery</b>	
<b>QCP-U/G CIVIL WORKS – INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS</b>	<b>Project No.</b> 080557C001	<b>Document No.</b> 080557C-000-QCP-1714-001	<b>Rev. No.</b> A	Page 4 of 10

## QUALITY CONTROL PLAN

### U/G CIVIL WORKS

### INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS

#### QUALITY CONTROL ACTIVITIES

Nr.	CHECK AND INSPECTION ITEM	QUALITY CONTROL REPORT	ACTION		NOTES
			CONTR.	TECHNIP	
<b>D)</b>	<b>CONSTRUCTION OF CABLE DUCT BANK</b>				(2)
D.1	EXCAVATION				
D.1.1	POSITION AND ROUTING	CW 11Ba/b	WC	R	
D.1.2	EXCAVATION & DEPTH	CW 11Ba/b	WC	R	
D.1.3	COMPACTED GROUND	CW 11Ba/b	WC	R	
D.1.4	GROUND DENSITY TEST (if required)	QC11-CW 11Ba/b	WC	W/R	
D.1.5	LEAN CONCRETE ELEVATION (if any)	CW 11Ba/b	WC	R	
D.2	DUCT EXECUTION				
D.2.1	COORDINATES CHECK (only for cast in situ)	CW 11Bb	WC	R	
D.2.2	CONDUITS SUPPORT POSITIONING	CW 11Ba/b	WC	R	
D.2.3	PVC CONDUITS POSITIONING	CW 11Ba/b	WC	R	
D.2.4	PVC CONDUITS SEALING	CW 11Ba/b	WC	R	
D.2.5	REINFORCEMENT	CW 11Ba/b	WC	R	
D.2.6	AUTHORIZATION FOR POURING	CW 11Ba/b	WC	A	
D.2.7	RED CONCRETE POURING	CW 11Ba/b	WC	R	
D.3	PREFABRICATED DUCTS INSTALLATION (if any)				
D.3.1	VISUAL CHECK BEFORE INSTALLATION	CW 11Ba	WC	W/R	
D.3.2	POSITIONING & ORIENTATION	CW 11Ba	WC	R	
D.4	BACKFILLING				
D.4.1	AUTHORIZATION FOR BACKFILLING	CW 11Ba/b	WC	A R	
D.4.2	BACKFILLING EXECUTION	CW 11Ba/b	WC	W/R	
D.4.3	DENSITY TEST (if required)	QC11-CW 11Ba/b	WC	W/R	
D.4.4	FINISHING WORK	CW 11Ba/b	WC		

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	<b>CLIENT</b>		<b>IOCL Paradip Refinery</b>	
<b>QCP-U/G CIVIL WORKS – INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS</b>	<b>Project No.</b> 080557C001	<b>Document No.</b> 080557C-000-QCP-1714-001	<b>Rev. No.</b> A	Page 5 of 10

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### U/G CIVIL WORKS

## INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS

### QUALITY CONTROL ACTIVITIES

Nr.	CHECK AND INSPECTION ITEM	QUALITY CONTROL REPORT	ACTION		NOTES
			CONTR.	TECHNIP	
D.5	FINAL DOCUMENTATION REVIEW	CW 11Ba/b	P	R	(2)
E)	<b>CONSTRUCTION OF CONCRETE TRENCHES/DITCHES</b>				
E.1	EXCAVATION				
E.1.1	POSITION AND ROUTING	CW 11Ca/b	WC	R	
E.1.2	EXCAVATION & DEPTH	CW 11Ca/b	WC	W/R	
E.1.3	COMPACTED GROUND	CW 11Ca/b	WC	W/R	
E.1.4	GROUND DENSITY TEST (if required)	QC11-CW 11Ca/b	WC	W/R	
E.1.5	LEAN CONCRETE ELEVATION (if any)	CW 11Ca/b	WC	R	
E.2	TRENCHES / DITCHES EXECUTION				
E.2.1	COORDINATES CHECK (only for cast in situ)	CW 11Cb	WC	W/R	
E.2.2	FORMWORK	CW 11Ca/b	WC	R	
	- GEOMETRY AND POSITION				
	- STABILITY AND PLUMBNESS				
	- CLEANLINESS				
	- OIL COATING				
E.2.3	REINFORCEMENT	CW 11Ca/b	WC	W/R	
	- SPACERS AND CONCRETE COVER				
	- LAP SPLICE				
	- BENDING AND TIE BAR				
	- REBAR NUMBER, SIZE & SPACING				
	- CLEANLINESS				
	- WELDED WIRE FABRIC (if any)				
	- COATING TOUCH UP				
E.2.4	EMBEDDED ITEMS (if any)	CW 11Ca/b	WC	W/R	
	- STEEL INSERTS: POSITION & GEOMETRY				
	- COATING TOUCH UP				
E.2.5	AUTHORIZATION FOR CASTING	CW 11Ca/b	WC	A	
E.2.6	CASTING:	CW 11Ca/b	WC	W/R	
E.2.6a	SLUMP TEST & AIR CONTENT TEST (if required)	CW35-CW11Ca/b	WC	W/R	

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	<b>CLIENT</b>		<b>IOCL Paradip Refinery</b>	
<b>QCP-U/G CIVIL WORKS – INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS</b>	<b>Project No.</b> 080557C001	<b>Document No.</b> 080557C-000-QCP-1714-001	<b>Rev. No.</b> A	Page 6 of 10

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### U/G CIVIL WORKS

### INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS

#### QUALITY CONTROL ACTIVITIES

Nr.	CHECK AND INSPECTION ITEM	QUALITY CONTROL REPORT	ACTION		NOTES
			CONTR.	TECHNIP	
E.2.6b	SAMPLE FOR STRENGTH TEST	CW17-CW11Ca/b	WC	W/R	
E.2.7	CURING	CW 11Ca/b	WC	R	
E.2.8	FORMWORK STRIPPING	CW 11Ca/b	WC	R	
E.2.9	CONCRETE SURFACE REPAIRING (if any)	CW 11Ca/b	WC	R	
E.2.10	PROTECTIVE COATING (where required)	CW 11Ca/b	WC	R	
E.3	PREFABRICATED TRENCHES / DITCHES INSTALLATION				
E.3.1	VISUAL CHECK BEFORE INSTALLATION	CW 11Ca	WC	R	
E.3.2	POSITIONING & ORIENTATION	CW 11Ca	WC	R	
E.3.3	ELEMENT TO ELEMENT SEALING (if any)	CW 11Ca	WC	R	
E.4	EXTERNAL BACKFILLING				
E.4.1	AUTHORIZATION FOR EXTERNAL BACKFILLING	CW 11Ca/b	WC	A	
E.4.2	BACKFILLING EXECUTION	CW 11Ca/b QC11-	WC	W/R	
E.4.3	DENSITY TEST (if required)	CW 11Ca/b CW	WC	W/R	
E.4.4	FINISHING WORK	11Ca/b	WC	W/R	
E.5	CABLE COVERING (if any)				
E.5.1	AUTHORIZATION FOR CABLE COVERING	CW 11Ca/b	WC	A	
E.5.2	SAND CABLE COVERING	CW 11Ca/b	WC	W/R	
E.6	COVERS INSTALLATION	CW 11Ca/b	WC	W/R	
E.7	STRENGHT TEST RESULT & SAMPLE UNIT WEIGHT	CW17-CW11Ca/b LAB TEST	WC	W/R	
E.8	FINAL DOCUMENTATION REVIEW	CW 11Ca/b	P	R	
<b>F)</b>	<b>CONSTRUCTION OF CABLE TRENCHES DIRECT BURIED</b>				
F.1	EXCAVATION				
F.1.1	POSITION AND ROUTING	CW 11D	WC	R	
F.1.2	EXCAVATION & DEPTH	CW 11D	WC	W/R	
F.1.3	COMPACTED GROUND	CW 11D	WC	R	
F.1.4	GROUND DENSITY TEST (if required)	QC11 - CW 11D	WC	W/R	
F.2	CABLE COVERING				
F.2.1	AUTHORIZATION FOR CABLE COVERING	CW 11D	WC	A	

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## INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS

### QUALITY CONTROL ACTIVITIES

Nr.	CHECK AND INSPECTION ITEM	QUALITY CONTROL REPORT	ACTION		NOTES
			CONTR.	TECHNIP	
F.2.2	SAND CABLE COVERING	CW 11D	WC	W/R	(2)
F.2.3	RED CONCRETE TILES / RED PLASTIC TILES / PVC COATED STEEL FENCE FABRIC	CW 11D	WC	R	
F.2.4	YELLOW WARNING TAPE	CW 11D	WC	R	
F.3	BACKFILLING				
F.3.1	AUTHORIZATION FOR BACKFILLING	CW 11D	WC	A	
F.3.2	BACKFILLING EXECUTION	CW 11D	WC	W/R	
F.3.3	DENSITY TEST (if required)	QC11 - CW 11D	WC	W/R	
F.3.4	FINISHING WORK	CW 11D CW11D	WC	W/R	
F.4	TOP LAYER RED CONCRETE ( if any )	CW 11D	WC	W/R	
F.5	FINAL DOCUMENTATION REVIEW		P	R	
<b>G)</b>	<b>CONSTRUCTION OF BOX CULVERTS</b>				
G.1	EXCAVATION	CW11Ea/b			
G.1.1	POSITION AND ROUTING	CW11Ea/b	WC	R	
G.1.2	EXCAVATION & DEPTH		WC	W/R	
		CW11Ea/b			
G.1.3	COMPACTED GROUND	QC11-CW11Ea/b	WC	R	
G.1.4	GROUND DENSITY TEST (if required)	CW11Ea/b	WC	W/R	
G.1.5	LEAN CONCRETE ELEVATION (if any)		WC	R	
G.2	CONCRETE BOX CULVERTS EXECUTION	CW11Eb			
G.2.1	COORDINATES CHECK (only for cast in situ)	CW11Ea/b	WC	W/R	
G.2.2	FORMWORK		WC	R	
	- GEOMETRY AND POSITION - STABILITY AND PLUMBNESS - CLEANLINESS - OIL COATING	CW11Ea/b			
G.2.3	REINFORCEMENT		WC	R	
	- SPACERS AND CONCRETE COVER - LAP SPLICE - BENDING AND TIE BAR - REBAR NUMBER, SIZE & SPACING				

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### U/G CIVIL WORKS

### INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS

#### QUALITY CONTROL ACTIVITIES

Nr.	CHECK AND INSPECTION ITEM	QUALITY CONTROL REPORT	ACTION		NOTES
			CONTR.	TECHNIP	
	- CLEANLINESS - WELDED WIRE FABRIC (if any) - COATING TOUCH UP				
G.2.4	EMBEDDED ITEMS - STEEL INSERTS: POSITION & GEOMETRY - COATING TOUCH UP	CW11Ea/b	WC	W/R	
G.2.5	AUTHORIZATION FOR CASTING	CW11Ea/b	WC	A	
G.2.6	CASTING:	CW11Ea/b	WC	W/R	
G.2.6a	SLUMP TEST & AIR CONTENT TEST (if required)	CW35-CW11Ea/b	WC	W/R	
G.2.6b	SAMPLE FOR STRENGTH TEST	CW17-CW11Ea/b	WC	W/R	
G.2.7	CURING	CW11Ea/b	WC	R	
G.2.8	FORMWORK STRIPPING	CW11Ea/b	WC	R	
G.2.9	CONCRETE SURFACE REPAIRING (if any)	CW11Ea/b	WC	W/R	
G.2.10	PROTECTIVE COATING (where required)	CW11Ea/b	WC	R	
G.3	PREFABRICATED BOX CULVERTS INSTALLATION				
G.3.1	VISUAL CHECK BEFORE INSTALLATION	CW11Ea	WC	W/R	
G.3.2	POSITIONING & ORIENTATION	CW11Ea	WC	R	
G.3.3	BOX CULVERT ELEMENTS JOINING (if any)	CW11Ea	WC	R	
G.4	BACKFILLING				
G.4.1	AUTHORIZATION FOR BACKFILLING	CW11Ea/b	WC	A	
G.4.2	BACKFILLING EXECUTION	CW11Ea/b QC11-	WC	W/R	
G.4.3	DENSITY TEST (if required)	CW11Ea/b	WC	W/R	
G.4.4	FINISHING WORK	CW11Ea/b	WC	R	
G.5	STRENGTH TEST RESULT & SAMPLE UNIT WEIGHT	CW17-CW11Ea/b LAB TEST	WC	W/R	
G.6	FINAL DOCUMENTATION REVIEW	CW11Ea/b	P	R	
<b>H)</b>	<b>CONSTRUCTION OF LIGHTING POLES FOUNDATIONS</b>				(2)
H.1	EXCAVATION				
H.1.1	POSITION AND ROUTING	CW11Fa/b	WC	R	
H.1.2	EXCAVATION & DEPTH	CW11Fa/b	WC	W/R	
H.1.3	COMPACTED GROUND	CW11Fa/b	WC	R	

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### QUALITY CONTROL ACTIVITIES

Nr.	CHECK AND INSPECTION ITEM	QUALITY CONTROL REPORT	ACTION		NOTES
			CONTR.	TECHNIP	
H.1.4	GROUND DENSITY TEST (if required)	QC11-CW11Fa/b	WC	W/R	
H.1.5	LEAN CONCRETE ELEVATION (if any)	CW11Fa/b	WC	R	
H.2	LIGHTING POLE FOUNDATIONS EXECUTION				
H.2.1	COORDINATES CHECK (only for cast in situ)	CW11Fb	WC	W/R	
H.2.2	FORMWORK	CW11Fa/b	WC	R	
	- GEOMETRY AND POSITION				
	- STABILITY AND PLUMBNESS				
	- CLEANLINESS				
	- OIL COATING				
H.2.3	REINFORCEMENT	CW11Fa/b	WC	W/R	
	- SPACERS AND CONCRETE COVER				
	- LAP SPLICE				
	- BENDING AND TIE BAR				
	- REBAR NUMBER, SIZE & SPACING				
	- CLEANLINESS				
	- WELDED WIRE FABRIC (if any)				
	- COATING TOUCH UP				
H.2.4	EMBEDDED ITEMS	CW11Fa/b	WC	W/R	
	- ANCHOR BOLTS NUMBER, SIZE & POSITION				
	- STEEL INSERTS: POSITION & GEOMETRY				
	- COATING TOUCH UP				
H.2.5	AUTHORIZATION FOR CASTING	CW11Fa/b	WC	A	
H.2.6	CASTING:	CW11Fa/b	WC	W/R	
H.2.6a	SLUMP TEST & AIR CONTENT TEST (if required)	CW35-CW11Fa/b	WC	W/R	
H.2.6b	SAMPLE FOR STRENGTH TEST	CW17-CW11Fa/b	WC	W/R	
H.2.7	CURING	CW11Fa/b	WC	R	
H.2.8	ANCHOR BOLTS POSITION & ELEVATION	CW11Fa/b	WC	W/R	
H.2.9	FORMWORK STRIPPING	CW11Fa/b	WC	R	
H.2.10	CONCRETE SURFACE REPAIRING (if any)	CW11Fa/b	WC	W/R	
H.2.11	PROTECTIVE COATING (where required)	CW11Fa/b	WC	R	
H.3	PREFABRICATED LIGHTING POLE FOUNDATIONS INSTALLATION				
H.3.1	VISUAL CHECK BEFORE INSTALLATION	CW11Fa	WC	W/R	
H.3.2	POSITIONING & ORIENTATION	CW11Fa	WC	R	

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 	<b>PROJECT</b>		<b>Standby SRU &amp; Additional Tanks</b>	
	<b>CLIENT</b>		<b>IOCL Paradip Refinery</b>	
<b>QCP-U/G CIVIL WORKS – INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS</b>	<b>Project No.</b> 080557C001	<b>Document No.</b> 080557C-000-QCP-1714-001	<b>Rev. No.</b> A	Page 10 of 10

## QUALITY CONTROL PLAN

### U/G CIVIL WORKS

## INSTALLATION OF CONCRETE PITS, CABLE DUCT BANKS, TRENCHES/DITCHES, CABLE TRENCHES DIRECT BURIED, BOX CULVERTS AND LIGHTING POLES FOUNDATIONS



### QUALITY CONTROL ACTIVITIES

Nr.	CHECK AND INSPECTION ITEM	QUALITY CONTROL REPORT	ACTION		NOTES
			CONTR.	TECHNIP	
H.4	BACKFILLING				
H.4.1	AUTHORIZATION FOR BACKFILLING	CW11Fa/b	WC	A	
H.4.2	BACKFILLING EXECUTION	CW11Fa/b QC11-	WC	W/R	
H.4.3	DENSITY TEST (if required)	CW11Fa/b	WC	W/R	
H.4.4	FINISHING WORK	CW11Fa/b	WC	W/R	
H.5	FOUNDATION RELEASE	CW100- CW11Fa/b	WC	W/R	
H.6	STRENGHT TEST RESULT & SAMPLE UNIT WEIGHT	CW17-CW11Fa/b LAB TEST	WC	W/R	
H.7	FINAL DOCUMENTATION REVIEW	CW11Fa/b	P	R	

NOTES: (1) A COPY OF THE DOCUMENT WILL BE DELIVERED TO OWNER FOR INFORMATION  
(2) USE CW11XA FOR PRECAST AT SITE AND CW11XB FOR CAST IN SITU  
(3) SEWER PITS LEAKAGE TEST SHALL BE EXECUTED TOGETHER WITH RELEVANT SEWER LINE  
(USE QCP 1470.01)

### GENERAL NOTES

- THE ENCLOSED ITP'S ARE INDICATIVE AND SHALL BE FOLLOWED FOR DEVELOPING THEJOB SPECIFIC ITP'S FOR THE WORKS TO BE PERFORMED BY THE CONTRACTOR. THE PROVISIONS INDICATED FOR STAGE WISE INSPECTION BY TECHNIP AND OWNER (FOR SPECIFIC ACTIVITIES) ARE THE MINIMUM AND THE ENGINEER-IN- CHARGE MAY DECIDE TO INCREASE HOLD POINTS/ WITNESS POINTS, WHILE APPROVING THE JOB SPECIFIC ITP'S. ACTIVITIES FOR WHICH ITP'S ARE NOT PROVIDED IN THIS SPECIFICATION. CONTRACTOR TO DEVELOP AND GET THE SAME APPROVED BY TECHNIP/OWNER BEFORE START OF THE WORK. IN GENERAL ROLE OF TECHNIP HAS BEEN SPECIFIED IN THE DOCUMENT THE ROLE OF OWNER TO BE SPECIFIED DURING PREPARATION OF SITE SPECIFIC ITP'S.
- CONTRACTOR TO SUBMIT JOB SPECIFIC REPORTING FORMATS AND JOB PROCEDURES FOR THE JOBS FOR EACH ACTIVITY LISTED IN THE ITP'S AND SUBMIT TO TECHNIP/OWNER FOR APPROVAL. BEFORE COMMENCEMENT OF THE ACTIVITY. IF THE CONTRACTOR HAS TO DEVIATE FROM THE GIVEN ITP FOR A VALID REASON, HE SHALL OBTAIN PRIOR WRITTEN APPROVAL OF TECHNIP/OWNER. CONTRACTOR TO CARRY OUT 100% EXAMINATION OF ALL ACTIVITIES.

 			PROJECT:		
			COMPANY:		
QUALITY CONTROL FORM <b>CW 01</b>			PROJ. No.:	QCF REV. A	SH. 1 OF 1
<b>MIX DESIGN LIST</b>			CONTRACTOR:		<b>CW 01 N° _____</b>
ITEM	MIX DESIGN FORMULA		CONCRETE CLASS	CONCRETE APPLICATION	
	REFER. NR.	APPROVAL DATE	N/mm <sup>2</sup>		
1	CW 15A N°				
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
REMARKS:					



COMPANY:

SH. 1 OF 1

## CW 100 N° \_\_\_\_\_



\_\_\_\_\_ ☐



[illegible]

DATE \_\_\_\_\_



REMARKS:

## DATE \_\_\_\_\_

 				PROJECT:			
				COMPANY:			
QUALITY CONTROL FORM <b>CW 11 Aa</b>				PROJ. No.:	QCF REV.A	SH. 1 OF 2	
<b>CONSTRUCTION / INSTALLATION OF PRECAST AT SITE PITS SUMMARY REPORT</b>				CONTRACTOR:		<b>CW 11 Aa N° ____</b>	
PIT IDENTIFICATION / ITEM _____ DWG'S & REV _____ COORDINATES _____ AREA _____						PRECAST AT SITE <input checked="" type="checkbox"/> CAST IN SITU <input type="checkbox"/>	
INSPECTIONS (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE		
					CONTR.	TECHNIP	OWNER
<b>C.1 EXCAVATION</b>							
C.1.1	POSITION AND ROUTING	<input type="checkbox"/>	<input type="checkbox"/>				
C.1.2	EXCAVATION & DEPTH	<input type="checkbox"/>	<input type="checkbox"/>				
C.1.3	COMPACTED GROUND	<input type="checkbox"/>	<input type="checkbox"/>				
C.1.4	GROUND DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC 11 (*)			
C.1.5	LEAN CONCRETE ELEVATION	<input type="checkbox"/>	<input type="checkbox"/>				
<b>C.2 PIT EXECUTION</b>							
C.2.2	FORMWORK - GEOMETRY & POSITION - STABILITY & PLUMBNESS - CLEANLINESS - OIL COATING	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
C.2.3	REINFORCEMENT - SPACERS & CONCRETE COVER - LAP SPLICE - BENDING AND TIE BAR - REBAR NUMBER, SIZE & SPACING - CLEANLINESS - WELDED WIRE FABRIC - COATING TOUCH-UP	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
C.2.4	EMBEDDED ITEMS - STEEL INSERTS: POSITION & GEOMETRY - COATING TOUCH-UP	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>				
C.2.5	WATER STOPS - POSITION & TYPE	<input type="checkbox"/>	<input type="checkbox"/>				

 				PROJECT:			
				COMPANY:			
QUALITY CONTROL FORM <b>CW 11 Aa</b>				PROJ. No.:	QCF REV.A	SH. 2 OF 2	
<b>CONSTRUCTION / INSTALLATION OF PRECAST AT SITE PITS SUMMARY REPORT</b>				CONTRACTOR:		CW 11 Aa N° ____	
INSPECTIONS (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE		
					CONTR.	TECHNIP	OWNER
C.2.6	AUTHORIZATION FOR CASTING	YES <input type="checkbox"/>	NO <input type="checkbox"/>				
C.2.7	CASTING	<input type="checkbox"/>	<input type="checkbox"/>				
C.2.7a	SLUMP TEST & AIR CONTENT TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 35 (*)			
C.2.7b	SAMPLE FOR STRENGTH TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)			
C.2.8	CURING	<input type="checkbox"/>	<input type="checkbox"/>				
C.2.9	FORMWORK STRIPPING	<input type="checkbox"/>	<input type="checkbox"/>				
C.2.10	CONCRETE SURFACE REPAIRING	<input type="checkbox"/>	<input type="checkbox"/>				
C.2.11	PROTECTIVE COATING	<input type="checkbox"/>	<input type="checkbox"/>				
<b>C.3 PREFABRICATED PITS INSTALLATION</b>							
C.3.1	VISUAL CHECK BEFORE INSTALLATION	<input type="checkbox"/>	<input type="checkbox"/>				
C.3.2	POSITIONING & ORIENTATION	<input type="checkbox"/>	<input type="checkbox"/>				
C.3.3	ELEMENT TO ELEMENT SEALING	<input type="checkbox"/>	<input type="checkbox"/>				
C.4	LEAKAGE TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 40 (*)			
<b>C.5 BACKFILLING</b>							
C.5.1	AUTHORIZATION FOR BACKFILLING	YES <input type="checkbox"/>	NO <input type="checkbox"/>				
C.5.2	BACKFILLING EXECUTION	<input type="checkbox"/>	<input type="checkbox"/>				
C.5.3	DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC11 (*)			
C.5.4	FINISHING WORK	<input type="checkbox"/>	<input type="checkbox"/>				
C.6	PIT COVERS INSTALLATION	<input type="checkbox"/>	<input type="checkbox"/>				
C.7	STRENGHT TEST RESULT & SAMPLE UNIT WEIGHT	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)			
NOTES: (*) THE QC REPORTS N° SHALL BE INDICATED IN THE RELEVANT HERE BELOW SPACES : CW 17 N° _____; CW 35 N° _____; CW 40 N° _____; QC 11 N° _____;							
C.8) FINAL DOC. REVIEW	INSPECTORS	CONTRACTOR		PMC		OWNER	
	NAME						
	SIGNATURE						
	DATE						

		PROJECT:		
		COMPANY:		
<b>QUALITY CONTROL FORM</b> <b>CW 11 Ab</b>		PROJ. No.:	QCF REV. A	SH. 1 OF 2
<b>CONSTRUCTION OF CAST IN SITU PITS</b> <b>SUMMARY REPORT</b>		CONTRACTOR:		CW 11 Ab N° ____
<div style="display: flex; justify-content: space-between;"> <div style="width: 70%;"> PIT IDENTIFICATION / ITEM _____   DWG'S &amp; REV _____   COORDINATES _____   AREA _____ </div> <div style="width: 25%; border-left: 1px solid black; padding-left: 10px;"> PRECAST AT SITE <input type="checkbox"/>   CAST IN SITU <input checked="" type="checkbox"/> </div> </div>				
<b>INSPECTIONS</b> <b>(REF. TO QCP 1714.01)</b>		N.A.	ACC.	REMARKS/ REFERENCES
		<b>INSPECTORS SIGNATURE &amp; DATE</b>		
		CONTR.      TECHNIP      OWNER		
<b>C.1 EXCAVATION</b>				
C.1.1	POSITION AND ROUTING	<input type="checkbox"/>	<input type="checkbox"/>	
C.1.2	EXCAVATION & DEPTH	<input type="checkbox"/>	<input type="checkbox"/>	
C.1.3	COMPACTED GROUND	<input type="checkbox"/>	<input type="checkbox"/>	
C.1.4	GROUND DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC 11 (*)
C.1.5	LEAN CONCRETE ELEVATION	<input type="checkbox"/>	<input type="checkbox"/>	
<b>C.2 PIT EXECUTION</b>				
C.2.1	COORDINATES CHECK	<input type="checkbox"/>	<input type="checkbox"/>	
C.2.2	FORMWORK - GEOMETRY & POSITION - STABILITY & PLUMBNESS - CLEANLINESS - OIL COATING	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
C.2.3	REINFORCEMENT - SPACERS & CONCRETE COVER - LAP SPLICE - BENDING AND TIE BAR - REBAR NUMBER, SIZE & SPACING - CLEANLINESS - WELDED WIRE FABRIC - COATING TOUCH-UP	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
C.2.4	EMBEDDED ITEMS - STEEL INSERTS: POSITION & GEOMETRY - COATING TOUCH-UP	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	
C.2.5	WATER STOPS - POSITION & TYPE	<input type="checkbox"/>	<input type="checkbox"/>	



 				PROJECT:				
				COMPANY:				
QUALITY CONTROL FORM				CW 11 Ab		PROJ. No.:	QCF REV. A	SH. 2 OF 2
CONSTRUCTION OF CAST IN SITU PITS SUMMARY REPORT				CONTRACTOR:			CW 11 Ab N° ____	
INSPECTIONS (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE			
					CONTR.	TECHNIP	OWNER	
C.2.6	AUTHORIZATION FOR CASTING	YES <input type="checkbox"/>	NO <input type="checkbox"/>					
C.2.7	CASTING	<input type="checkbox"/>	<input type="checkbox"/>					
C.2.7a	SLUMP TEST & AIR CONTENT TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 35 (*)				
C.2.7b	SAMPLE FOR STRENGTH TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)				
C.2.8	CURING	<input type="checkbox"/>	<input type="checkbox"/>					
C.2.9	FORMWORK STRIPPING	<input type="checkbox"/>	<input type="checkbox"/>					
C.2.10	CONCRETE SURFACE REPAIRING	<input type="checkbox"/>	<input type="checkbox"/>					
C.2.11	PROTECTIVE COATING	<input type="checkbox"/>	<input type="checkbox"/>					
C.4	LEAKAGE TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 40 (*)				
<b>C.5 BACKFILLING</b>								
C.5.1	AUTHORIZATION FOR BACKFILLING	YES <input type="checkbox"/>	NO <input type="checkbox"/>					
C.5.2	BACKFILLING EXECUTION	<input type="checkbox"/>	<input type="checkbox"/>					
C.5.3	DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC11 (*)				
C.5.4	FINISHING WORK	<input type="checkbox"/>	<input type="checkbox"/>					
C.6	PIT COVERS INSTALLATION	<input type="checkbox"/>	<input type="checkbox"/>					
C.7	STRENGHT TEST RESULT & SAMPLE UNIT WEIGHT	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)				
NOTES: (*) THE QC REPORTS N° SHALL BE INDICATED IN THE RELEVANT HERE BELOW SPACES : CW 17 N° _____; CW 35 N° _____; CW 40 N° _____; QC 11 N° _____;								
C.8) FINAL DOC. REVIEW	INSPECTORS	CONTRACTOR		PMC		OWNER		
	NAME							
	SIGNATURE							
	DATE							







				PROJECT:			
				COMPANY:			
QUALITY CONTROL FORM <b>CW 11 Ba</b>				PROJ. No.:	QCF REV. A	SH. 1 OF 1	
<b>CONSTRUCTION / INSTALLATION OF PRECAST AT SITE CABLE DUCT BANK SUMMARY REPORT</b>				CONTRACTOR:		<b>CW 11 Ba N° ____</b>	
DUCT IDENTIF. / ITEM _____ DWG'S & REV _____ COORDINATES _____ AREA _____						PRECAST AT SITE <input checked="" type="checkbox"/> CAST IN SITU <input type="checkbox"/>	
INSPECTIONS (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE		
					CONTR.	TECHNIP	OWNER
<b>D.1 EXCAVATION</b>							
D.1.1	POSITION AND ROUTING	<input type="checkbox"/>	<input type="checkbox"/>				
D.1.2	EXCAVATION & DEPTH	<input type="checkbox"/>	<input type="checkbox"/>				
D.1.3	COMPACTED GROUND	<input type="checkbox"/>	<input type="checkbox"/>				
D.1.4	GROUND DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC 11 (*)			
D.1.5	LEAN CONCRETE ELEVATION	<input type="checkbox"/>	<input type="checkbox"/>				
<b>D.2 DUCT EXECUTION</b>							
D.2.2	CONDUITS SUPPORT POSITIONING	<input type="checkbox"/>	<input type="checkbox"/>				
D.2.3	PVC CONDUITS POSITIONING	<input type="checkbox"/>	<input type="checkbox"/>				
D.2.4	PVC CONDUITS SEALING	<input type="checkbox"/>	<input type="checkbox"/>				
D.2.5	REINFORCEMENT	<input type="checkbox"/>	<input type="checkbox"/>				
D.2.6	AUTHORIZATION FOR POURING	<input type="checkbox"/>	<input type="checkbox"/>				
D.2.7	RED CONCRETE POURING	<input type="checkbox"/>	<input type="checkbox"/>				
<b>D.3 PREFABRICATED DUCT INSTALLATION</b>							
D.3.1	VISUAL CHECK BEFORE INSTALLATION	<input type="checkbox"/>	<input type="checkbox"/>				
D.3.2	POSITIONING & ORIENTATION	<input type="checkbox"/>	<input type="checkbox"/>				
<b>D.4 BACKFILLING</b>							
D.4.1	AUTHORIZATION FOR BACKFILLING	YES <input type="checkbox"/>	NO <input type="checkbox"/>				
D.4.2	BACKFILLING EXECUTION	<input type="checkbox"/>	<input type="checkbox"/>				
D.4.3	DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC11 (*)			
D.4.4	FINISHING WORK	<input type="checkbox"/>	<input type="checkbox"/>				
NOTES: (*) THE QC REPORTS N° SHALL BE INDICATED IN THE RELEVANT HERE BELOW SPACES : QC 11 N° ____							
<b>D.5) FINAL DOC. REVIEW</b>	<b>INSPECTORS</b>	<b>CONTRACTOR</b>		<b>PMC</b>	<b>OWNER</b>		
	NAME						
	SIGNATURE						
	DATE						

				PROJECT:			
				COMPANY:			
QUALITY CONTROL FORM <b>CW 11 Bb</b>				PROJ. No.:	QCF REV. A	SH. 1 OF 1	
<b>CONSTRUCTION OF CAST IN SITU CABLE DUCT BANK SUMMARY REPORT</b>				CONTRACTOR:		<b>CW 11 Bb N°</b> ____	
DUCT IDENTIF. / ITEM _____ DWG'S & REV _____ COORDINATES _____ AREA _____						PRECAST AT SITE <input type="checkbox"/> CAST IN SITU <input checked="" type="checkbox"/>	
<b>INSPECTIONS (REF. TO QCP 1714.01)</b>		<b>N.A.</b>	<b>ACC.</b>	<b>REMARKS/ REFERENCES</b>		<b>INSPECTORS SIGNATURE &amp; DATE</b>	
						CONTR.	TECHNIP
<b>D.1 EXCAVATION</b>							
D.1.1	POSITION AND ROUTING	<input type="checkbox"/>	<input type="checkbox"/>				
D.1.2	EXCAVATION & DEPTH	<input type="checkbox"/>	<input type="checkbox"/>				
D.1.3	COMPACTED GROUND	<input type="checkbox"/>	<input type="checkbox"/>				
D.1.4	GROUND DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC 11 (*)			
D.1.5	LEAN CONCRETE ELEVATION	<input type="checkbox"/>	<input type="checkbox"/>				
<b>D.2 DUCT EXECUTION</b>							
D.2.1	COORDINATES CHECK	<input type="checkbox"/>	<input type="checkbox"/>				
D.2.2	CONDUITS SUPPORT POSITIONING	<input type="checkbox"/>	<input type="checkbox"/>				
D.2.3	PVC CONDUITS POSITIONING	<input type="checkbox"/>	<input type="checkbox"/>				
D.2.4	PVC CONDUITS SEALING	<input type="checkbox"/>	<input type="checkbox"/>				
D.2.5	REINFORCEMENT	<input type="checkbox"/>	<input type="checkbox"/>				
D.2.6	AUTHORIZATION FOR POURING	<input type="checkbox"/>	<input type="checkbox"/>				
D.2.7	RED CONCRETE POURING	<input type="checkbox"/>	<input type="checkbox"/>				
<b>D.4 BACKFILLING</b>							
D.4.1	AUTHORIZATION FOR BACKFILLING	YES <input type="checkbox"/>	NO <input type="checkbox"/>				
D.4.2	BACKFILLING EXECUTION	<input type="checkbox"/>	<input type="checkbox"/>				
D.4.3	DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC11 (*)			
D.4.4	FINISHING WORK	<input type="checkbox"/>	<input type="checkbox"/>				
NOTES: (*) THE QC REPORTS N° SHALL BE INDICATED IN THE RELEVANT HERE BELOW SPACES : QC 11 N° ____							
<b>D.5) FINAL DOC. REVIEW</b>	<b>INSPECTORS</b>	<b>CONTRACTOR</b>		<b>PMC</b>		<b>OWNER</b>	
	NAME						
	SIGNATURE						
	DATE						

				PROJECT:			
				COMPANY:			
QUALITY CONTROL FORM <b>CW 11 Ca</b>				PROJ. No.:	QCF REV. A	SH. 1 OF 2	
<b>CONSTRUCTION / INSTALLATION OF PRECAST AT SITE TRENCHES / DITCHES SUMMARY REPORT</b>				CONTRACTOR:		<b>CW 11 Ca N° ____</b>	
TRENCH/DITCHE IDENTIFICATION / ITEM _____  DWG'S & REV _____  COORDINATES _____  AREA _____						PRECAST AT SITE <input checked="" type="checkbox"/>  CAST IN SITU <input type="checkbox"/>	
INSPECTIONS (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES		INSPECTORS SIGNATURE & DATE	
						CONTR.	TECHNIP
<b>E.1 EXCAVATION</b>							
E.1.1	POSITION AND ROUTING	<input type="checkbox"/>	<input type="checkbox"/>				
E.1.2	EXCAVATION & DEPTH	<input type="checkbox"/>	<input type="checkbox"/>				
E.1.3	COMPACTED GROUND	<input type="checkbox"/>	<input type="checkbox"/>				
E.1.4	GROUND DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC 11 (*)			
E.1.5	LEAN CONCRETE ELEVATION	<input type="checkbox"/>	<input type="checkbox"/>				
<b>E.2 TRENCHES / DITCHES EXECUTION</b>							
E.2.2	FORMWORK - GEOMETRY & POSITION - STABILITY & PLUMBNESS - CLEANLINESS - OIL COATING	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
E.2.3	REINFORCEMENT - SPACERS & CONCRETE COVER - LAP SPLICE - BENDING AND TIE BAR - REBAR NUMBER, SIZE & SPACING - CLEANLINESS - WELDED WIRE FABRIC - COATING TOUCH-UP	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
E.2.4	EMBEDDED ITEMS - STEEL INSERTS: POSITION & GEOMETRY - COATING TOUCH-UP	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>				
E.2.5	AUTHORIZATION FOR CASTING <div style="display: flex; justify-content: space-around; width: 100%;"> <span>YES <input type="checkbox"/></span> <span>NO <input type="checkbox"/></span> </div>						

 				PROJECT:			
				COMPANY:			
QUALITY CONTROL FORM <b>CW 11 Ca</b>				PROJ. No.:	QCF REV. A	SH. 2 OF 2	
<b>CONSTRUCTION / INSTALLATION OF PRECAST AT SITE TRENCHES / DITCHES SUMMARY REPORT</b>				CONTRACTOR:		CW 11 Ca N° ____	
INSPECTIONS (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE		
					CONTR.	TECHNIP	OWNER
E.2.6	CASTING	<input type="checkbox"/>	<input type="checkbox"/>				
E.2.6a	SLUMP TEST & AIR CONTENT TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 35 (*)			
E.2.6b	SAMPLE FOR STRENGTH TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)			
E.2.7	CURING	<input type="checkbox"/>	<input type="checkbox"/>				
E.2.8	FORMWORK STRIPPING	<input type="checkbox"/>	<input type="checkbox"/>				
E.2.9	CONCRETE SURFACE REPAIRING	<input type="checkbox"/>	<input type="checkbox"/>				
E.2.10	PROTECTIVE COATING	<input type="checkbox"/>	<input type="checkbox"/>				
<b>E.3 PREFABRICATED TRENCHES / DITCHES INSTALLATION</b>							
E.3.1	VISUAL CHECK BEFORE INSTALLATION	<input type="checkbox"/>	<input type="checkbox"/>				
E.3.2	POSITIONING & ORIENTATION	<input type="checkbox"/>	<input type="checkbox"/>				
E.3.3	ELEMENT TO ELEMENT SEALING	<input type="checkbox"/>	<input type="checkbox"/>				
<b>E.4 EXTERNAL BACKFILLING</b>							
E.4.1	AUTHORIZATION FOR EXTERNAL BACKFILLING			YES <input type="checkbox"/>	NO <input type="checkbox"/>		
E.4.2	BACKFILLING EXECUTION	<input type="checkbox"/>	<input type="checkbox"/>				
E.4.3	DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC11 (*)			
E.4.4	FINISHING WORK	<input type="checkbox"/>	<input type="checkbox"/>				
<b>E.5 CABLES COVERING</b>							
E.5.1	AUTHORIZATION FOR CABLES COVERING			YES <input type="checkbox"/>	NO <input type="checkbox"/>		
E.5.2	SAND CABLE COVERING	<input type="checkbox"/>	<input type="checkbox"/>				
<b>E.6 COVERS INSTALLATION</b>							
E.7	STRENGTH TEST RESULT & SAMPLE UNIT WEIGHT	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)			
NOTES: (*) THE QC REPORTS N° SHALL BE INDICATED IN THE RELEVANT HERE BELOW SPACES : CW 17 N° _____; CW 35 N° _____; QC 11 N° _____;							
<b>E.8 FINAL DOC. REVIEW</b>	<b>INSPECTORS</b>	<b>CONTRACTOR</b>		<b>PMC</b>		<b>OWNER</b>	
	NAME						
	SIGNATURE						
	DATE						



 				PROJECT:			
				COMPANY:			
QUALITY CONTROL FORM		CW 11 Cb		PROJ. No.:	QCF REV. A	SH. 1 OF 2	
<b>CONSTRUCTION OF CAST IN SITU TRENCHES / DITCHES SUMMARY REPORT</b>				CONTRACTOR:		CW 11 Cb N° ____	
TRENCH/DITCH E IDENTIFICATION / ITEM _____  DWG'S & REV _____  COORDINATES _____  AREA _____						PRECAST AT SITE <input type="checkbox"/>  CAST IN SITU <input checked="" type="checkbox"/>	
INSPECTIONS (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE		
					CONTR.	TECHNIP	OWNER
<b>E.1 EXCAVATION</b>							
E.1.1	POSITION AND ROUTING	<input type="checkbox"/>	<input type="checkbox"/>				
E.1.2	EXCAVATION & DEPTH	<input type="checkbox"/>	<input type="checkbox"/>				
E.1.3	COMPACTED GROUND	<input type="checkbox"/>	<input type="checkbox"/>				
E.1.4	GROUND DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC 11 (*)			
E.1.5	LEAN CONCRETE ELEVATION	<input type="checkbox"/>	<input type="checkbox"/>				
<b>E.2 TRENCHES / DITCHES EXECUTION</b>							
E.2.1	COORDINATES CHECK	<input type="checkbox"/>	<input type="checkbox"/>				
E.2.2	FORMWORK - GEOMETRY & POSITION - STABILITY & PLUMBNESS - CLEANLINESS - OIL COATING	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
E.2.3	REINFORCEMENT - SPACERS & CONCRETE COVER - LAP SPLICE - BENDING AND TIE BAR - REBAR NUMBER, SIZE & SPACING - CLEANLINESS - WELDED WIRE FABRIC - COATING TOUCH-UP	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
E.2.4	EMBEDDED ITEMS - STEEL INSERTS: POSITION & GEOMETRY - COATING TOUCH-UP	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>				
E.2.5	AUTHORIZATION FOR CASTING	YES <input type="checkbox"/>	NO <input type="checkbox"/>				

 				PROJECT:			
				COMPANY:			
QUALITY CONTROL FORM <b>CW 11 Cb</b>				PROJ. No.:	QCF REV. A	SH. 2 OF 2	
<b>CONSTRUCTION OF CAST IN SITU TRENCHES / DITCHES SUMMARY REPORT</b>				CONTRACTOR:		CW 11 Cb N° ____	
INSPECTIONS (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE		
					CONTR.	TECHNIP	OWNER
E.2.6	CASTING	<input type="checkbox"/>	<input type="checkbox"/>				
E.2.6a	SLUMP TEST & AIR CONTENT TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 35 (*)			
E.2.6b	SAMPLE FOR STRENGTH TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)			
E.2.7	CURING	<input type="checkbox"/>	<input type="checkbox"/>				
E.2.8	FORMWORK STRIPPING	<input type="checkbox"/>	<input type="checkbox"/>				
E.2.9	CONCRETE SURFACE REPAIRING	<input type="checkbox"/>	<input type="checkbox"/>				
E.2.10	PROTECTIVE COATING	<input type="checkbox"/>	<input type="checkbox"/>				
<b>E.4 EXTERNAL BACKFILLING</b>							
E.4.1	AUTHORIZATION FOR EXTERNAL BACKFILLING			YES <input type="checkbox"/>	NO <input type="checkbox"/>		
E.4.2	BACKFILLING EXECUTION	<input type="checkbox"/>	<input type="checkbox"/>				
E.4.3	DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC11 (*)			
E.4.4	FINISHING WORK	<input type="checkbox"/>	<input type="checkbox"/>				
<b>E.5 CABLES COVERING</b>							
E.5.1	AUTHORIZATION FOR CABLES COVERING			YES <input type="checkbox"/>	NO <input type="checkbox"/>		
E.5.2	SAND CABLE COVERING	<input type="checkbox"/>	<input type="checkbox"/>				
<b>E.6 COVERS INSTALLATION</b>		<input type="checkbox"/>	<input type="checkbox"/>				
<b>E.7</b>	<b>STRENGHT TEST RESULT &amp; SAMPLE UNIT WEIGHT</b>	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)			
NOTES: (*) THE QC REPORTS N° SHALL BE INDICATED IN THE RELEVANT HERE BELOW SPACES : CW 17 N° _____; CW 35 N° _____; QC 11 N° _____;							
<b>E.8) FINAL DOC. REVIEW</b>	<b>INSPECTORS</b>	<b>CONTRACTOR</b>		<b>PMC</b>		<b>OWNER</b>	
	NAME						
	SIGNATURE						
	DATE						



		PROJECT:					
		COMPANY:					
QUALITY CONTROL FORM <b>CW 11 D</b>		PROJ. No.:	QCF REV. A	SH. 1 OF 1			
<b>CONSTRUCTION OF CABLE TRENCHS DIRECT BURIED SUMMARY REPORT</b>		CONTRACTOR:		CW 11 D N° ____			
TRENCH / ITEM _____ DRAWING No. & REV. _____ COORDINATES _____ TRENCH SECTION _____ AREA _____							
<b>INSPECTIONS</b> (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES	<b>INSPECTORS SIGNATURE &amp; DATE</b>		
					CONTR.	TECHNIP	OWNER
<b>F.1 EXCAVATION</b>							
F.1.1	POSITION AND ROUTING	<input type="checkbox"/>	<input type="checkbox"/>				
F.1.2	EXCAVATION & DEPTH	<input type="checkbox"/>	<input type="checkbox"/>				
F.1.3	COMPACTED GROUND	<input type="checkbox"/>	<input type="checkbox"/>				
F.1.4	GROUND DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC 11 (*)			
<b>F.2 CABLE COVERING</b>							
F.2.1	AUTHORIZATION FOR CABLE COVERING	YES <input type="checkbox"/>	NO <input type="checkbox"/>				
F.2.2	SAND CABLE COVERING	<input type="checkbox"/>	<input type="checkbox"/>				
F.2.3	RED CONCRETE TILES / RED PLASTIC TILES / PVC COATED STEEL FENCE FABRIC	<input type="checkbox"/>	<input type="checkbox"/>				
F.2.4	YELLOW WARNING TAPE	<input type="checkbox"/>	<input type="checkbox"/>				
<b>F.3 BACKFILLING</b>							
F.3.1	AUTHORIZATION FOR BACKFILLING	YES <input type="checkbox"/>	NO <input type="checkbox"/>				
F.3.2	BACKFILLING EXECUTION	<input type="checkbox"/>	<input type="checkbox"/>				
F.3.3	DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC11 (*)			
F.3.4	FINISHING WORK	<input type="checkbox"/>	<input type="checkbox"/>				
<b>F.4 TOP LAYER OF RED CONCRETE</b>		<input type="checkbox"/>	<input type="checkbox"/>				
NOTES: (*) THE QC REPORTS N° SHALL BE INDICATED IN THE RELEVANT HERE BELOW SPACES : QC 11 N° _____;							
F.5) FINAL DOC. REVIEW	<b>INSPECTORS</b>	<b>CONTRACTOR</b>		<b>PMC</b>	<b>OWNER</b>		
	NAME						
	SIGNATURE						
	DATE						



				PROJECT:			
				COMPANY:			
QUALITY CONTROL FORM <b>CW 11 Ea</b>				PROJ. No.:	QCF REV. A	SH. 1 OF 2	
<b>CONSTRUCTION / INSTALLATION OF PRECAST AT SITE BOX CULVERTS SUMMARY REPORT</b>				CONTRACTOR:		<b>CW 11 Ea N°</b> _____	
BOX CULVERT IDENTIFICATION / ITEM _____  DWG'S & REV _____  COORDINATES _____  AREA _____						PRECAST AT SITE <input checked="" type="checkbox"/>  CAST IN SITU <input type="checkbox"/>	
INSPECTIONS (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE		
					CONTR.	TECHNIP	OWNER
<b>G.1 EXCAVATION</b>							
G.1.1	POSITION AND ROUTING	<input type="checkbox"/>	<input type="checkbox"/>				
G.1.2	EXCAVATION & DEPTH	<input type="checkbox"/>	<input type="checkbox"/>				
G.1.3	COMPACTED GROUND	<input type="checkbox"/>	<input type="checkbox"/>				
G.1.4	GROUND DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC 11 (*)			
G.1.5	LEAN CONCRETE ELEVATION	<input type="checkbox"/>	<input type="checkbox"/>				
<b>G.2 CONCRETE BOX CULVERTS EXECUTION</b>							
G.2.2	FORMWORK - GEOMETRY & POSITION - STABILITY & PLUMBNESS - CLEANLINESS - OIL COATING	<input type="checkbox"/>     <input type="checkbox"/>	<input type="checkbox"/>     <input type="checkbox"/>				
G.2.3	REINFORCEMENT - SPACERS & CONCRETE COVER - LAP SPLICE - BENDING AND TIE BAR - REBAR NUMBER, SIZE & SPACING - CLEANLINESS - WELDED WIRE FABRIC - COATING TOUCH-UP	<input type="checkbox"/>        <input type="checkbox"/>	<input type="checkbox"/>        <input type="checkbox"/>				
G.2.4	EMBEDDED ITEMS - STEEL INSERTS: POSITION & GEOMETRY - COATING TOUCH-UP	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>				
G.2.5	AUTHORIZATION FOR CASTING <div style="display: flex; justify-content: space-around; width: 100%;"> <span>YES <input type="checkbox"/></span> <span>NO <input type="checkbox"/></span> </div>						







 				PROJECT:			
				COMPANY:			
QUALITY CONTROL FORM <b>CW 11 Ea</b>				PROJ. No.:	QCF REV. A	SH. 2 OF 2	
<b>CONSTRUCTION / INSTALLATION OF PRECAST AT SITE BOX CULVERTS SUMMARY REPORT</b>				CONTRACTOR:		CW 11 Ea N° ____	
INSPECTIONS (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE		
					CONTR.	TECHNIP	OWNER
G.2.6	CASTING	<input type="checkbox"/>	<input type="checkbox"/>				
G.2.6a	SLUMP TEST & AIR CONTENT TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 35 (*)			
G.2.6b	SAMPLE FOR STRENGTH TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)			
G.2.7	CURING	<input type="checkbox"/>	<input type="checkbox"/>				
G.2.8	FORMWORK STRIPPING	<input type="checkbox"/>	<input type="checkbox"/>				
G.2.9	CONCRETE SURFACE REPAIRING	<input type="checkbox"/>	<input type="checkbox"/>				
G.2.10	PROTECTIVE COATING	<input type="checkbox"/>	<input type="checkbox"/>				
<b>G.3 PREFABRICATED BOX CULVERTS INSTALLATION</b>							
G.3.1	VISUAL CHECK BEFORE INSTALLATION	<input type="checkbox"/>	<input type="checkbox"/>				
G.3.2	POSITIONING & ORIENTATION	<input type="checkbox"/>	<input type="checkbox"/>				
G.3.3	BOX CULVERT ELEMENTS JOINING	<input type="checkbox"/>	<input type="checkbox"/>				
<b>G.4 BACKFILLING</b>							
G.4.1	AUTHORIZATION FOR BACKFILLING	YES <input type="checkbox"/> NO <input type="checkbox"/>					
G.4.2	BACKFILLING EXECUTION	<input type="checkbox"/>	<input type="checkbox"/>				
G.4.3	DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC11 (*)			
G.4.4	FINISHING WORK	<input type="checkbox"/>	<input type="checkbox"/>				
<b>G.5</b>	<b>STRENGHT TEST RESULT &amp; SAMPLE UNIT WEIGHT</b>	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)			
NOTES: (*) THE QC REPORTS N° SHALL BE INDICATED IN THE RELEVANT HERE BELOW SPACES : CW 17 N° _____; CW 35 N° _____; QC 11 N° _____;							
<b>G 6) FINAL DOC. REVIEW</b>	<b>INSPECTORS</b>	<b>CONTRACTOR</b>		<b>PMC</b>	<b>OWNER</b>		
	NAME						
	SIGNATURE						
	DATE						

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				COMPANY:						
QUALITY CONTROL FORM <b>CW 11 Eb</b>				PROJ. No.:		QCF REV. A		SH. 1 OF 2		
<b>CONSTRUCTION OF CAST IN SITU BOX CULVERTS SUMMARY REPORT</b>				CONTRACTOR:				<b>CW 11 Eb N° ____</b>		
BOX CULVERT IDENTIFICATION / ITEM _____  DWG'S & REV _____  COORDINATES _____  AREA _____								PRECAST AT SITE <input type="checkbox"/>  CAST IN SITU <input checked="" type="checkbox"/>		
<b>INSPECTIONS (REF. TO QCP 1714.01)</b>			<b>N.A.</b>	<b>ACC.</b>	<b>REMARKS/ REFERENCES</b>	<b>INSPECTORS SIGNATURE &amp; DATE</b>				
						CONTR.		TECHNIP		OWNER
<b>G.1 EXCAVATION</b>										
G.1.1		POSITION AND ROUTING		<input type="checkbox"/>	<input type="checkbox"/>					
G.1.2		EXCAVATION & DEPTH		<input type="checkbox"/>	<input type="checkbox"/>					
G.1.3		COMPACTED GROUND		<input type="checkbox"/>	<input type="checkbox"/>					
G.1.4		GROUND DENSITY TEST		<input type="checkbox"/>	<input type="checkbox"/>	QC 11 (*)				
G.1.5		LEAN CONCRETE ELEVATION		<input type="checkbox"/>	<input type="checkbox"/>					
<b>G.2 BOX CULVERTS EXECUTION</b>										
G.2.1		COORDINATES CHECK		<input type="checkbox"/>	<input type="checkbox"/>					
G.2.2		FORMWORK								
		- GEOMETRY & POSITION		<input type="checkbox"/>	<input type="checkbox"/>					
		- STABILITY & PLUMBNESS		<input type="checkbox"/>	<input type="checkbox"/>					
		- CLEANLINESS		<input type="checkbox"/>	<input type="checkbox"/>					
		- OIL COATING		<input type="checkbox"/>	<input type="checkbox"/>					
G.2.3		REINFORCEMENT								
		- SPACERS & CONCRETE COVER		<input type="checkbox"/>	<input type="checkbox"/>					
		- LAP SPLICE		<input type="checkbox"/>	<input type="checkbox"/>					
		- BENDING AND TIE BAR		<input type="checkbox"/>	<input type="checkbox"/>					
		- REBAR NUMBER, SIZE & SPACING		<input type="checkbox"/>	<input type="checkbox"/>					
		- CLEANLINESS		<input type="checkbox"/>	<input type="checkbox"/>					
		- WELDED WIRE FABRIC		<input type="checkbox"/>	<input type="checkbox"/>					
		- COATING TOUCH-UP		<input type="checkbox"/>	<input type="checkbox"/>					
G.2.4		EMBEDDED ITEMS								
		- STEEL INSERTS: POSITION & GEOMETRY		<input type="checkbox"/>	<input type="checkbox"/>					
		- COATING TOUCH-UP		<input type="checkbox"/>	<input type="checkbox"/>					
G.2.5		AUTHORIZATION FOR CASTING		YES <input type="checkbox"/>	NO <input type="checkbox"/>					



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				COMPANY:			
QUALITY CONTROL FORM <b>CW 11 Eb</b>				PROJ. No.:	QCF REV. A	SH. 2 OF 2	
<b>CONSTRUCTION OF CAST IN SITU BOX CULVERTS SUMMARY REPORT</b>				CONTRACTOR:		CW 11 Eb N° ____	
INSPECTIONS (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE		
					CONTR.	TECHNIP	OWNER
G.2.6	CASTING	<input type="checkbox"/>	<input type="checkbox"/>				
G.2.6a	SLUMP TEST & AIR CONTENT TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 35 (*)			
G.2.6b	SAMPLE FOR STRENGTH TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)			
G.2.7	CURING	<input type="checkbox"/>	<input type="checkbox"/>				
G.2.8	FORMWORK STRIPPING	<input type="checkbox"/>	<input type="checkbox"/>				
G.2.9	CONCRETE SURFACE REPAIRING	<input type="checkbox"/>	<input type="checkbox"/>				
G.2.10	PROTECTIVE COATING	<input type="checkbox"/>	<input type="checkbox"/>				
<b>G.4 BACKFILLING</b>							
G.4.1	AUTHORIZATION FOR BACKFILLING			YES <input type="checkbox"/>	NO <input type="checkbox"/>		
G.4.2	BACKFILLING EXECUTION	<input type="checkbox"/>	<input type="checkbox"/>				
G.4.3	DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC11 (*)			
G.4.4	FINISHING WORK	<input type="checkbox"/>	<input type="checkbox"/>				
<b>G.5</b>	<b>STRENGHT TEST RESULT &amp; SAMPLE UNIT WEIGHT</b>	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)			
NOTES: (*) THE QC REPORTS N° SHALL BE INDICATED IN THE RELEVANT HERE BELOW SPACES : CW 17 N° _____; CW 35 N° _____; QC 11 N° _____;							
<b>G 6) FINAL DOC. REVIEW</b>	<b>INSPECTORS</b>	<b>CONTRACTOR</b>		<b>PMC</b>		<b>OWNER</b>	
	NAME						
	SIGNATURE						
	DATE						

 				PROJECT:			
				COMPANY:			
QUALITY CONTROL FORM <b>CW 11 Fa</b>				PROJ. No.:	QCF REV. 0	SH. 1 OF 2	
<b>CONSTRUCTION / INSTALLATION OF PRECAST AT SITE LIGHTING POLES FOUNDATIONS SUMMARY REPORT</b>				CONTRACTOR:		CW 11 Fa N° ____	
LIGHTING POLE IDENTIFICATION / ITEM _____  DWG'S & REV _____  COORDINATES _____  AREA _____						PRECAST AT SITE <input checked="" type="checkbox"/>  CAST IN SITU <input type="checkbox"/>	
INSPECTIONS (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE		
					CONTR.	TECHNIP	OWNER
<b>H.1 EXCAVATION</b>							
H.1.1	POSITION AND ROUTING	<input type="checkbox"/>	<input type="checkbox"/>				
H.1.2	EXCAVATION & DEPTH	<input type="checkbox"/>	<input type="checkbox"/>				
H.1.3	COMPACTED GROUND	<input type="checkbox"/>	<input type="checkbox"/>				
H.1.4	GROUND DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC 11 (*)			
H.1.5	LEAN CONCRETE ELEVATION	<input type="checkbox"/>	<input type="checkbox"/>				
<b>H.2 LIGHTING POLES FOUNDATIONS EXECUTION</b>							
H.2.2	FORMWORK - GEOMETRY & POSITION - STABILITY & PLUMBNESS - CLEANLINESS - OIL COATING	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
H.2.3	REINFORCEMENT - SPACERS & CONCRETE COVER - LAP SPLICE - BENDING AND TIE BAR - REBAR NUMBER, SIZE & SPACING - CLEANLINESS - WELDED WIRE FABRIC - COATING TOUCH-UP	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
H.2.4	EMBEDDED ITEMS - ANCHOR BOLTS NUMBER, SIZE & POSITION - STEEL INSERTS: POSITION & GEOMETRY - COATING TOUCH-UP	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
H.2.5	AUTHORIZATION FOR CASTING			YES <input type="checkbox"/>	NO <input type="checkbox"/>		

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				COMPANY:			
QUALITY CONTROL FORM		CW 11 Fa		PROJ. No.:	QCF REV. A	SH. 2 OF 2	
<b>CONSTRUCTION / INSTALLATION OF PRECAST AT SITE LIGHTING POLES FOUNDATIONS SUMMARY REPORT</b>				CONTRACTOR:		CW 11 Fa N° ____	
INSPECTIONS (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE		
					CONTR.	TECHNIP	OWNERY
H.2.6	CASTING	<input type="checkbox"/>	<input type="checkbox"/>				
H.2.6a	SLUMP TEST & AIR CONTENT TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 35 (*)			
H.2.6b	SAMPLE FOR STRENGTH TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)			
H.2.7	CURING	<input type="checkbox"/>	<input type="checkbox"/>				
H.2.8	ANCHOR BOLTS POSITION & ELEVATION	<input type="checkbox"/>	<input type="checkbox"/>				
H.2.9	FORMWORK STRIPPING	<input type="checkbox"/>	<input type="checkbox"/>				
H.2.10	CONCRETE SURFACE REPAIRING	<input type="checkbox"/>	<input type="checkbox"/>				
H.2.11	PROTECTIVE COATING	<input type="checkbox"/>	<input type="checkbox"/>				
<b>H.3 PREFABRICATED LIGHTING POLES FOUNDATIONS INSTALLATION</b>							
H.3.1	VISUAL CHECK BEFORE INSTALLATION	<input type="checkbox"/>	<input type="checkbox"/>				
H.3.2	POSITIONING & ORIENTATION	<input type="checkbox"/>	<input type="checkbox"/>				
<b>H.4 BACKFILLING</b>							
H.4.1	AUTHORIZATION FOR BACKFILLING	YES <input type="checkbox"/>	NO <input type="checkbox"/>				
H.4.2	BACKFILLING EXECUTION	<input type="checkbox"/>	<input type="checkbox"/>				
H.4.3	DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC11 (*)			
H.4.4	FINISHING WORK	<input type="checkbox"/>	<input type="checkbox"/>				
H.5	FOUNDATION RELEASE	<input type="checkbox"/>	<input type="checkbox"/>	CW 100 (*)			
H.6	STRENGHT TEST RESULT & SAMPLE UNIT WEIGHT	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)			
NOTES: (*) THE QC REPORTS N° SHALL BE INDICATED IN THE RELEVANT HERE BELOW SPACES : CW 17 N° _____; CW 35 N° _____; CW 100 N° _____; QC 11 N° _____;							
H 7) FINAL DOC. REVIEW	INSPECTORS	CONTRACTOR		PMC		OWNER	
	NAME						
	SIGNATURE						
	DATE						

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				COMPANY:			
QUALITY CONTROL FORM <b>CW 11 Fb</b>				PROJ. No.:	QCF REV. A	SH. 1 OF 2	
<b>CONSTRUCTION OF CAST IN SITU LIGHTING POLES FOUNDATIONS SUMMARY REPORT</b>				CONTRACTOR:		<b>CW 11 Fb N° ____</b>	
LIGHTING POLE IDENTIFICATION / ITEM _____ DWG'S & REV _____ COORDINATES _____ AREA _____						PRECAST AT SITE <input type="checkbox"/> CAST IN SITU <input checked="" type="checkbox"/>	
INSPECTIONS (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE		
					CONTR.	TECHNIP	OWNER
<b>H.1 EXCAVATION</b>							
H.1.1	POSITION AND ROUTING	<input type="checkbox"/>	<input type="checkbox"/>				
H.1.2	EXCAVATION & DEPTH	<input type="checkbox"/>	<input type="checkbox"/>				
H.1.3	COMPACTED GROUND	<input type="checkbox"/>	<input type="checkbox"/>				
H.1.4	GROUND DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC 11 (*)			
H.1.5	LEAN CONCRETE ELEVATION	<input type="checkbox"/>	<input type="checkbox"/>				
<b>H.2 LIGHTING POLES FOUNDATIONS EXECUTION</b>							
H.2.1	COORDINATES CHECK	<input type="checkbox"/>	<input type="checkbox"/>				
H.2.2	FORMWORK						
	- GEOMETRY & POSITION	<input type="checkbox"/>	<input type="checkbox"/>				
	- STABILITY & PLUMBNESS	<input type="checkbox"/>	<input type="checkbox"/>				
	- CLEANLINESS	<input type="checkbox"/>	<input type="checkbox"/>				
	- OIL COATING	<input type="checkbox"/>	<input type="checkbox"/>				
H.2.3	REINFORCEMENT						
	- SPACERS & CONCRETE COVER	<input type="checkbox"/>	<input type="checkbox"/>				
	- LAP SPLICE	<input type="checkbox"/>	<input type="checkbox"/>				
	- BENDING AND TIE BAR	<input type="checkbox"/>	<input type="checkbox"/>				
	- REBAR NUMBER, SIZE & SPACING	<input type="checkbox"/>	<input type="checkbox"/>				
	- CLEANLINESS	<input type="checkbox"/>	<input type="checkbox"/>				
	- WELDED WIRE FABRIC	<input type="checkbox"/>	<input type="checkbox"/>				
	- COATING TOUCH-UP	<input type="checkbox"/>	<input type="checkbox"/>				
H.2.4	EMBEDDED ITEMS						
	- ANCHOR BOLTS NUMBER, SIZE & POSITION	<input type="checkbox"/>	<input type="checkbox"/>				
	- STEEL INSERTS: POSITION & GEOMETRY	<input type="checkbox"/>	<input type="checkbox"/>				
	- COATING TOUCH-UP	<input type="checkbox"/>	<input type="checkbox"/>				
H.2.5	AUTHORIZATION FOR CASTING	YES <input type="checkbox"/> NO <input type="checkbox"/>					

					PROJECT:		
					COMPANY:		
QUALITY CONTROL FORM <b>CW 11 Fb</b>					PROJ. No.:	QCF REV. A	SH. 2 OF 2
<b>CONSTRUCTION OF CAST IN SITU LIGHTING POLES FOUNDATIONS SUMMARY REPORT</b>					CONTRACTOR:		<b>CW 11 Fb N° ____</b>
INSPECTIONS (REF. TO QCP 1714.01)		N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE		
					CONTR.	TECHNIP	OWNER
H.2.6	CASTING	<input type="checkbox"/>	<input type="checkbox"/>				
H.2.6a	SLUMP TEST & AIR CONTENT TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 35 (*)			
H.2.6b	SAMPLE FOR STRENGTH TEST	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)			
H.2.7	CURING	<input type="checkbox"/>	<input type="checkbox"/>				
H.2.8	ANCHOR BOLTS POSITION & ELEVATION	<input type="checkbox"/>	<input type="checkbox"/>				
H.2.9	FORMWORK STRIPPING	<input type="checkbox"/>	<input type="checkbox"/>				
H.2.10	CONCRETE SURFACE REPAIRING	<input type="checkbox"/>	<input type="checkbox"/>				
H.2.11	PROTECTIVE COATING	<input type="checkbox"/>	<input type="checkbox"/>				
<b>H.4 BACKFILLING</b>							
H.4.1	AUTHORIZATION FOR BACKFILLING			YES <input type="checkbox"/>	NO <input type="checkbox"/>		
H.4.2	BACKFILLING EXECUTION	<input type="checkbox"/>	<input type="checkbox"/>				
H.4.3	DENSITY TEST	<input type="checkbox"/>	<input type="checkbox"/>	QC11 (*)			
H.4.4	FINISHING WORK	<input type="checkbox"/>	<input type="checkbox"/>				
H.5	FOUNDATION RELEASE	<input type="checkbox"/>	<input type="checkbox"/>	CW 100 (*)			
H.6	STRENGHT TEST RESULT & SAMPLE UNIT WEIGHT	<input type="checkbox"/>	<input type="checkbox"/>	CW 17 (*)			
NOTES: (*) THE QC REPORTS N° SHALL BE INDICATED IN THE RELEVANT HERE BELOW SPACES : CW 17 N° _____; CW 35 N° _____; CW 100 N° _____; QC 11 N° _____;							
<b>H 7) FINAL DOC. REVIEW</b>	<b>INSPECTORS</b>	<b>CONTRACTOR</b>		<b>PMC</b>		<b>OWNER</b>	
	NAME						
	SIGNATURE						
	DATE						

 		PROJECT:	
		COMPANY:	
QUALITY CONTROL FORM <b>CW 15 A</b>		PROJ. No.:	QCF REV. A
			SH. 1 OF 1
<b>CONCRETE MIX DESIGN APPROVAL</b>		CONTRACTOR: <b>CW 15 A N°</b> _____	
1. MIX DESIGN N°	_____		
2. SPECIFIED CONCRETE STRENGTH (28 DAYS) (CONCRETE CLASS)	_____		
3. MIX DESIGN CONCRETE STRENGTH (28 DAYS)	_____		
4. MIX DESIGN CONCRETE SLUMP	_____		
5. CEMENT TYPE	_____		
6. ADMIXTURES	_____		
7. PURPOSE	_____		
8. BATCHING PLANT	_____		
9. ATTACHMENT DATA	_____		
REMARKS:			
RESULT:                      ACCEPTED <input type="checkbox"/> NOT ACCEPTED <input type="checkbox"/>			
<b>INSPECTORS</b>	<b>CONTRACTOR</b>	<b>PMC</b>	<b>OWNER</b>
NAME			
SIGNATURE			
DATE			





PROJECT:

COMPANY:

QUALITY CONTROL FORM

CW 17

PROJ. No.:

QCF REV. A

SH. 1 OF 1

CONCRETE SAMPLE COMPRESSION TEST

CONTRACTOR:

CW 17 N° \_\_\_\_\_

## SAMPLE DATA

SAMPLE NR	ITEM	AREA	CONCRETE		SAMPLE DATE	CASTING TEMPERATURE (C)	ADMIXTURE TYPE & DOSAGE	REMARKS
			CLASS	MIX DESIGN				

## TEST RESULT

SAMPLE NR.	AGE AT TEST (DAYS)	RESULT			ATTACHED QUALIFIED LABORATORY TEST RECORD  N° & DATE		REMARKS
		STRENGHT	ACC.	UNACC.			

INSPECTORS

CONTRACTOR



PMC

OWNER

NAME

SIGNATURE

DATE

 		PROJECT:						
		COMPANY:						
QUALITY CONTROL FORM <b>CW 35</b>		PROJ. No.:	QCF REV. A	SH. 1 OF 1				
<b>CONCRETE SLUMP TEST &amp; AIR CONTENT TICKET REPORT</b>		CONTRACTOR:		<b>CW 35 N° _____</b>				
CASTING ITEM(S): _____								
AREA _____								
DATE _____								
BATCH PLANT _____								
CONCRETE CLASS _____								
CONCRETE MIX DESIGN No. _____								
TRUCK & TICKET No.	VOLUME OF CONCRETE (m³)	LOADING BATCH TIME	OFF LOADING TIME START	OFF LOADING TIME FINISH	OFF LOADING TIME	SLUMP AT SITE (cm)	AIR CONTENT (%)	CONCRETE TEMP. AT SITE (°C)
REMARKS:								
TEST RESULT:                      ACCEPTED <input type="checkbox"/>								
<b>INSPECTORS</b>		<b>CONTRACTOR</b>		<b>PMC</b>		<b>OWNER</b>		
NAME								
SIGNATURE								
DATE								



PROJECT:

COMPANY:

QUALITY CONTROL FORM

QC 11

PROJ. No.:

QCF REV: A

SH. 1 OF 1

**COMPACTION TEST  
SUMMARY**

CONTRACTOR:

QC 11 N° \_\_\_\_\_

PROGR	ITEM OR LOCATION IDENTIFICAT.	AREA	DATE	MATERIAL TO BE COMPACTED (sub-grade, backfilling, sub- base....etc.)	VISUAL CHECK	LAYER THICKNESS CHECK	SMOOTHNES S CHECK	QUALIFIED LABORATORY TEST REP. N° (REPORT ATTACHED)	No. OF LAYERS REQ.	LAYER N°	TEST RESULT		REMARKS
											ACC.	NOT ACC.	
1											<input type="checkbox"/>	<input type="checkbox"/>	
2											<input type="checkbox"/>	<input type="checkbox"/>	
3											<input type="checkbox"/>	<input type="checkbox"/>	
4											<input type="checkbox"/>	<input type="checkbox"/>	
5											<input type="checkbox"/>	<input type="checkbox"/>	
6											<input type="checkbox"/>	<input type="checkbox"/>	
7											<input type="checkbox"/>	<input type="checkbox"/>	
8											<input type="checkbox"/>	<input type="checkbox"/>	
9											<input type="checkbox"/>	<input type="checkbox"/>	
10											<input type="checkbox"/>	<input type="checkbox"/>	
.....											<input type="checkbox"/>	<input type="checkbox"/>	

NOTE: THIS QCF CAN BE DONE BY ELECTRONIC SHEET

INSPECTORS	CONTRACTOR	PMC	OWNER
NAME			
SIGNATURE			
DATE			



PROJECT:

COMPANY:

QUALITY CONTROL FORM

QC 10

PROJ. No.:

SH. 1 OF 1

CONCRETE TEST SUMMARY FOR \_\_\_\_\_



CONTRACTOR:

QC 10 N° \_\_\_\_\_

PROGR	ITEM OR DESCRIPTION	AREA/ LOCATION	CASTING DATE	SITE CASTING TEMP. °C	Q.TY m³	CONCRETE		SLUMP TEST & AIR CONTENT TEST		STRENGTH TEST		REPORTS (1)	REMARKS
						CLASS	MIX DESIGN NUMBER	TICKET NR	CW 35 NR LAB. TEST	SAMPLE NR	CW 17 NR LAB. TEST		
1													
2													
3													
4													
5													
6													
7													
8													
10													
11													
12													
13													
14													

NOTE: THIS QCF SHALL BE DONE BY ELECTRONIC SHEET

(1) CW 33 FOR CONCRETE STRUCTURES – CW 32B FOR RIGID PAVING – CW 54 FOR CONCRETE PILES

 		PROJECT:	
		COMPANY:	
QUALITY CONTROL FORM <b>W 12/A</b>		PROJ. No.:	QCF REV. A
<b>CONSTRUCTION MATERIALS APPROVAL</b>		CONTRACTOR:	<b>W 12/A N°</b> _____
CIVIL <input type="checkbox"/>	PIPING <input type="checkbox"/>	MACHINERY <input type="checkbox"/>	INSULATION <input type="checkbox"/>
BLDG. <input type="checkbox"/>	MECHANIC. <input type="checkbox"/>	ELECTRICAL <input type="checkbox"/>	STEEL STR. <input type="checkbox"/>
NDT <input type="checkbox"/>	SUPPORT PRF. <input type="checkbox"/>	_____ <input type="checkbox"/>	_____ <input type="checkbox"/>
1. MATERIALS			
2. SUPPLIER			
3. PURPOSE			
4. ATTACHMENT DATA			
5. TYPE OF TEST PERFORMED			
6. TEST STANDARD UTILIZED			
REMARKS:			
RESULT:		ACCEPTED <input type="checkbox"/>	NOT ACCEPTED <input type="checkbox"/>
<b>INSPECTORS</b>	<b>CONTRACTOR</b>	<b>PMC</b>	<b>OWNER</b>
NAME			
SIGNATURE			
DATE			