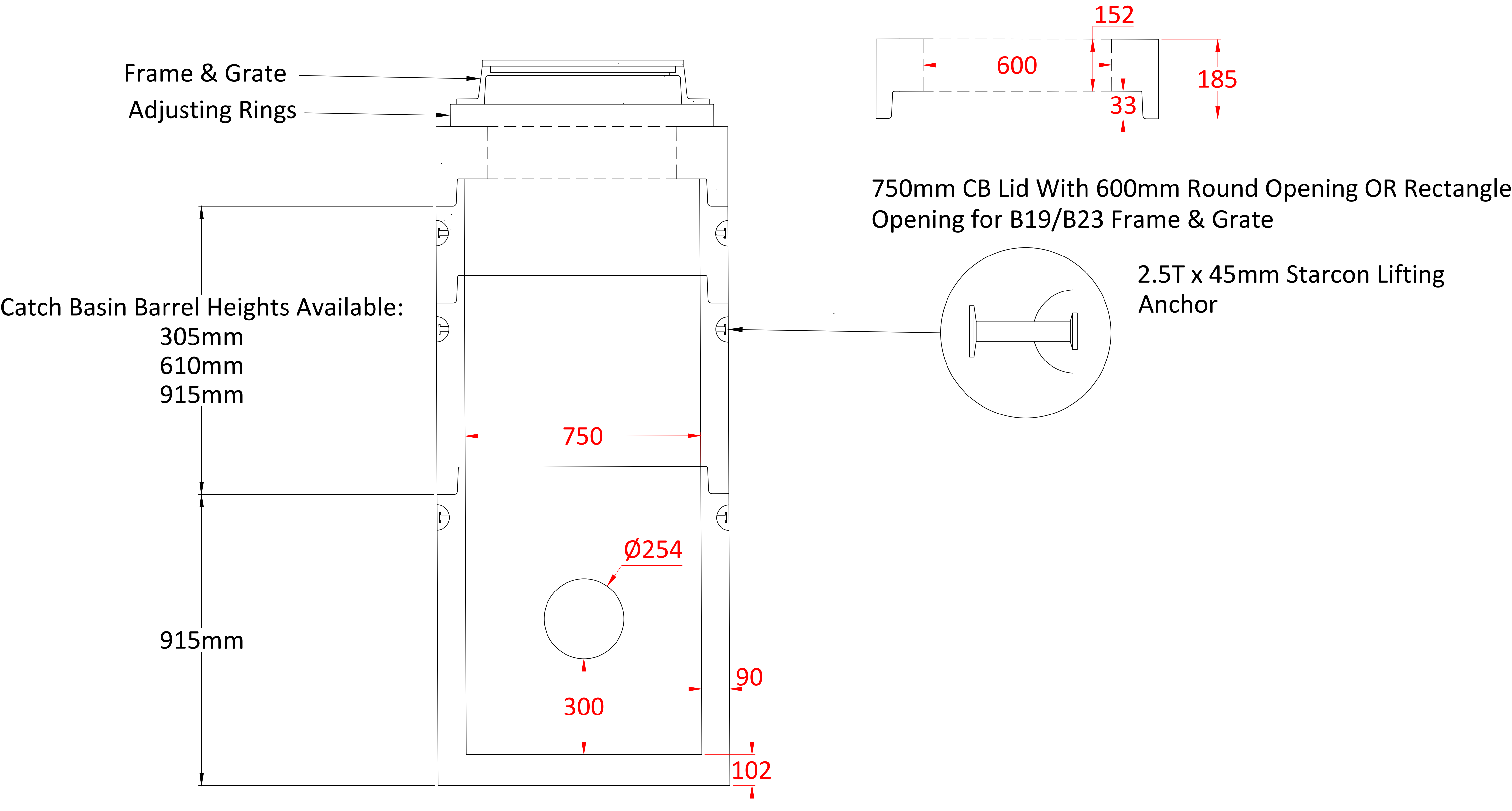


TR27 Cast Iron Grate

- Notes:
- 1. Lawn Basin is used in non-traffic or occasional load use.
 - 2. Supplied with $\varnothing 254$ recessed core.
 - 3. Lawn Basin accepts TR27 grates.
 - 4. Approx. weight: 630 lbs.
 - 5. Conforms to ASTM C478
 - 6. All dimensions are in millimeters.

TRI-KON PRECAST PRODUCTS LTD. 601 PATTERSON ST WEST CRANBROOK BC, VIC 6T3 250-426-8162					
Drawn By T.F	Checked by XXX	Approved date 00/00/00	Filename 450mm LB	Date drawn 05/30/18	
XXX		450mm x 925mm Lawn Basin			
		1	Edition 0	Sheet 1/1	



General Notes

See page 002

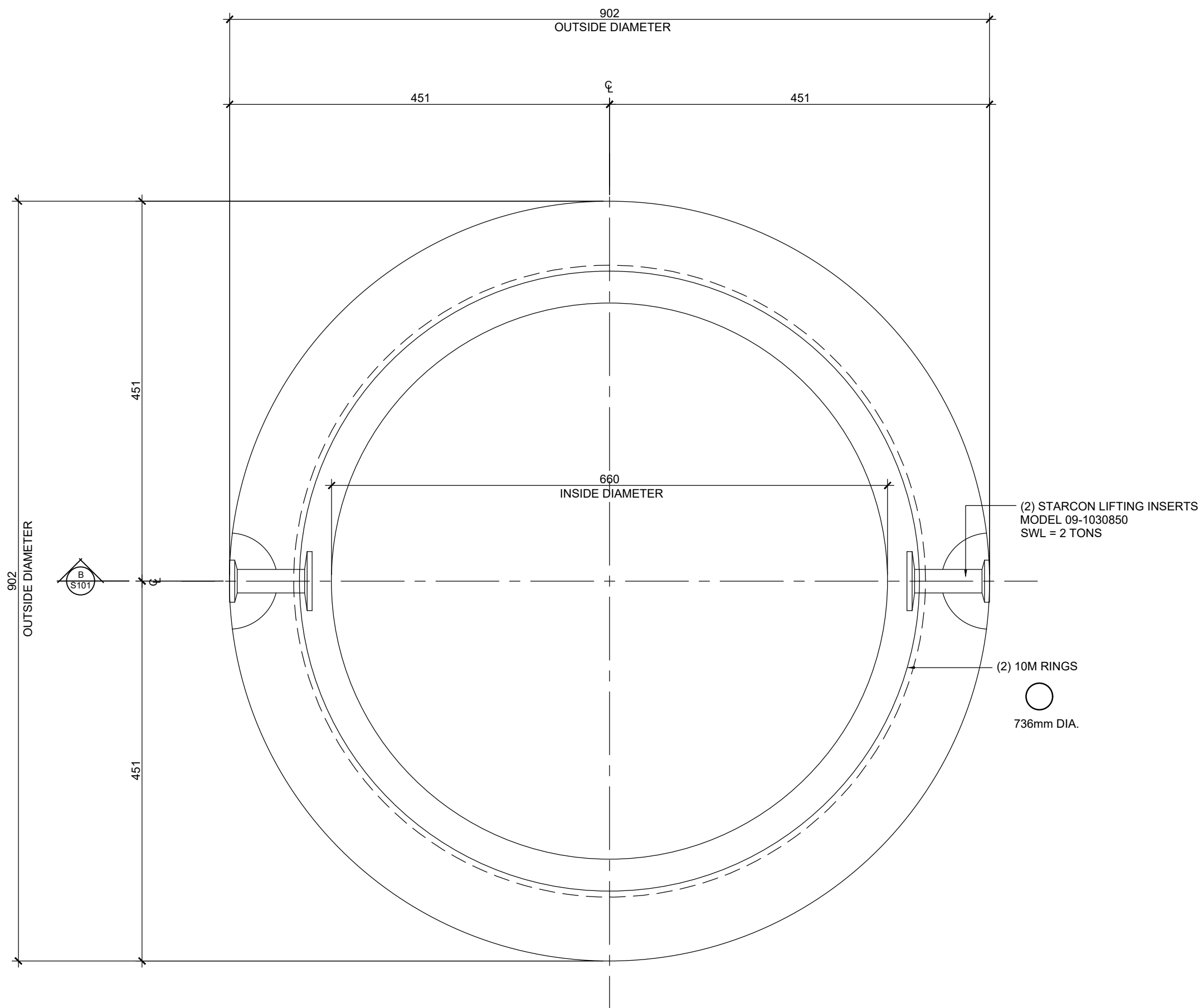
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No.	Revision	RevDate

TRI-KON
Precast
Concrete
Products

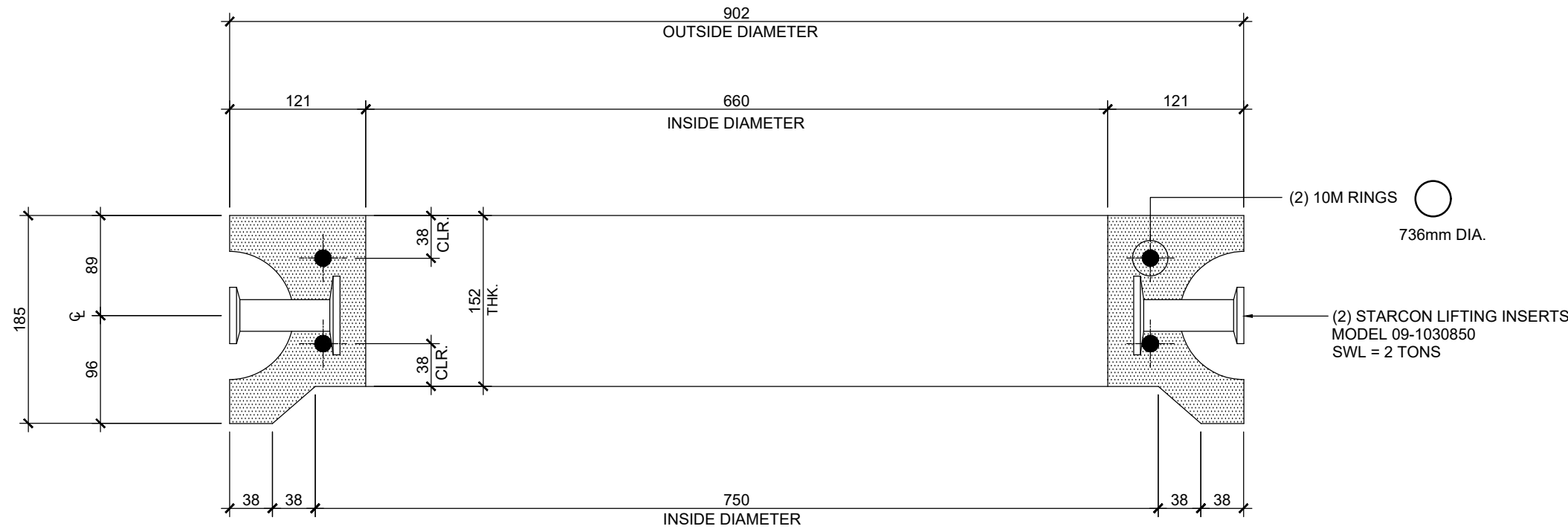
Project Name, Product Name and Location

750mm Catch Basin
Material

Contractor XXXX	Sheet 001
Date 11-20-2023	
Scale 1:1	



A 750mmØ PRECAST REINFORCED CONCRETE LID - REINFORCING LAYOUT
S101 SCALE: 1:10



B 750mmØ PRECAST REINFORCED CONCRETE LID - SECTION
S101 SCALE: 1:10

STRUCTURAL SPECIFICATIONS

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- CONCRETE COVER OVER REINFORCING IS TO BE AS SHOWN ON DRAWINGS.
- CONCRETE PROPERTIES:

ITEM	28 DAY STRENGTH	EXPOSURE	W/C	AIR (%)	CEMENT TYPE	AGG. SIZE (mm)
PRECAST CONCRETE	30 MPa	F1	.40	4 - 7	HS	20

REINFORCING STEEL

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- LAP ALL REINFORCING BAR SPLICES 32 BAR DIAMETERS MINIMUM UNLESS INDICATED OTHERWISE ON THESE DRAWINGS.
- REINFORCING STEEL IS TO BE CLEAN, FREE OF CORROSION AND UNDAMAGED.
- DO NOT WELD BARS OR USE HEAT TO BEND REINFORCING STEEL.
- UNLESS NOTED OTHERWISE MINIMUM CONCRETE COVER IS TO BE 38mm CLEAR

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- THE CONTRACTOR IS TO ENSURE THAT THE HOISTING DEVICES INCLUDING ALL ASSOCIATED ACCESSORIES (SHACKLES, SLINGS, PINS ETC.) ARE RATED TO THE APPLICABLE LOAD AND ARE IN GOOD WORKING CONDITION.
- THE CONTRACTOR IS TO ENSURE THAT ALL PERSONNEL OPERATING OR WORKING WITH THE HOISTING DEVICES ARE PROPERLY TRAINED, EXPERIENCED AND CERTIFIED ON THE HOISTING DEVICE.

Rev	Date	Description	Drawn	Design	App'd
1	FEB 1, 2021	CONCRETE STRENGTH REVISED	bpr	bm	bm
0	FEB 26, 2018	ISSUED FOR "CONSTRUCTION"	bpr	bm	bm

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THIS DRAWING IS PART OF A COMPLETE SET OF DRAWINGS AND IS TO BE READ IN CONJUNCTION WITH ALL SHEETS WITHIN THE DRAWING SET. REFER TO ALL SHEETS INCLUDING STRUCTURAL NOTES PROVIDED ON SHEET S101.

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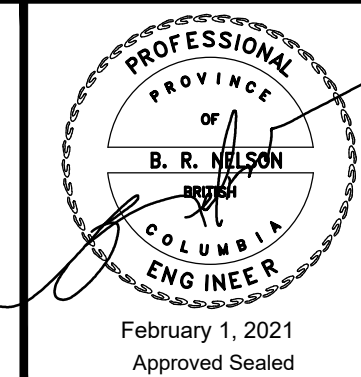
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ORIGINAL DWG SIZE: ARCH D (24" x 36") - DO NOT SCALE THIS DRAWING

1800 Willowbrook Drive
Cranbrook, BC
Canada V1C 7H9
Tel (250) 489-3013



TRI-KON PRECAST PRODUCTS LTD.
601 PATTERSON STREET WEST, CRANBROOK, BC

PRECAST REINFORCED CONCRETE MANHOLE LIDS
750mmØ LID
REINFORCING LAYOUT AND SECTION

Drawing No.

S101

Project Number

2441-00705-00

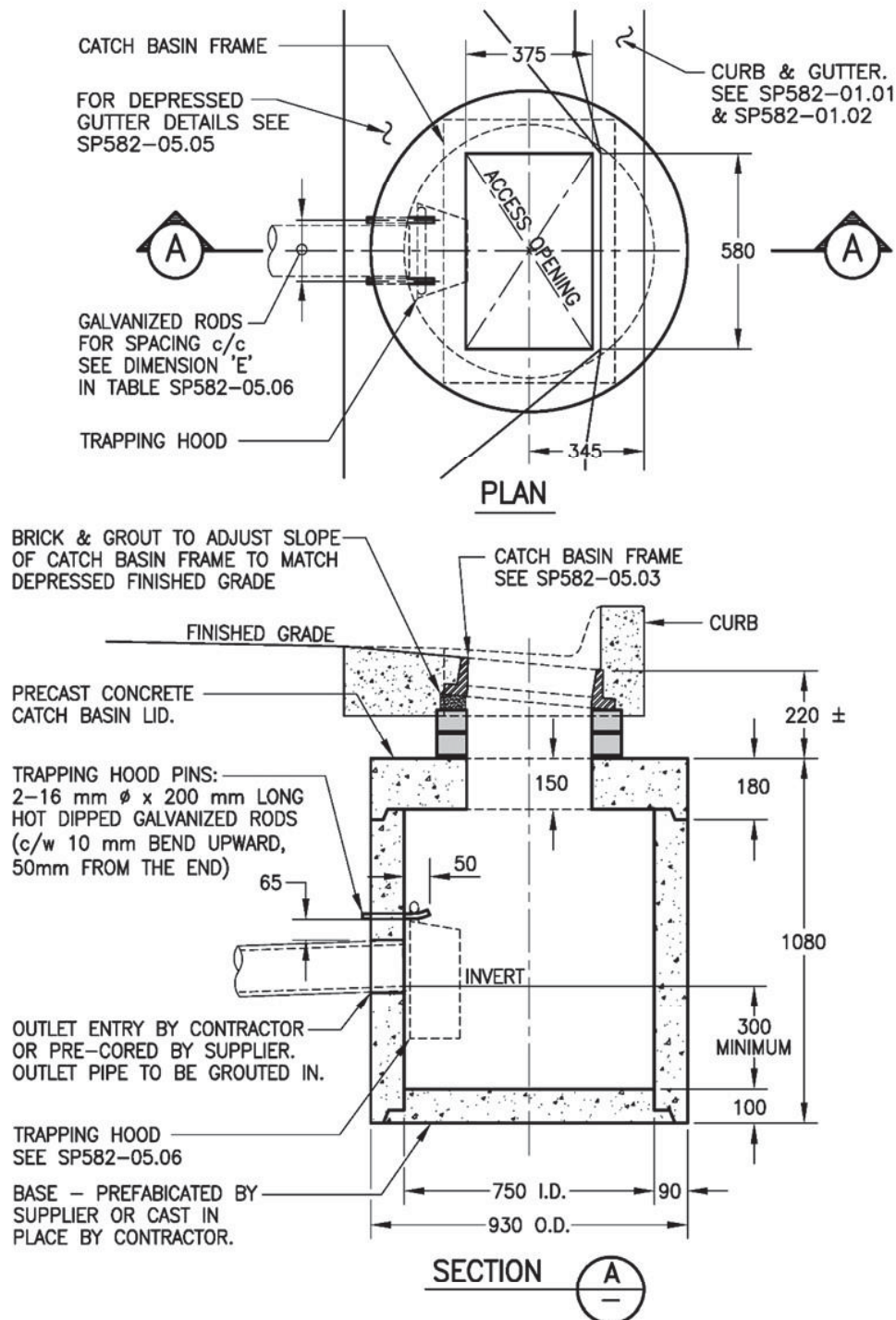
Rev.

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DESTROY ALL PRINTS BEARING PREVIOUS REVISION

PRECAST REINFORCED CONCRETE CATCH BASIN

SP582-02.01

**NOTES:**

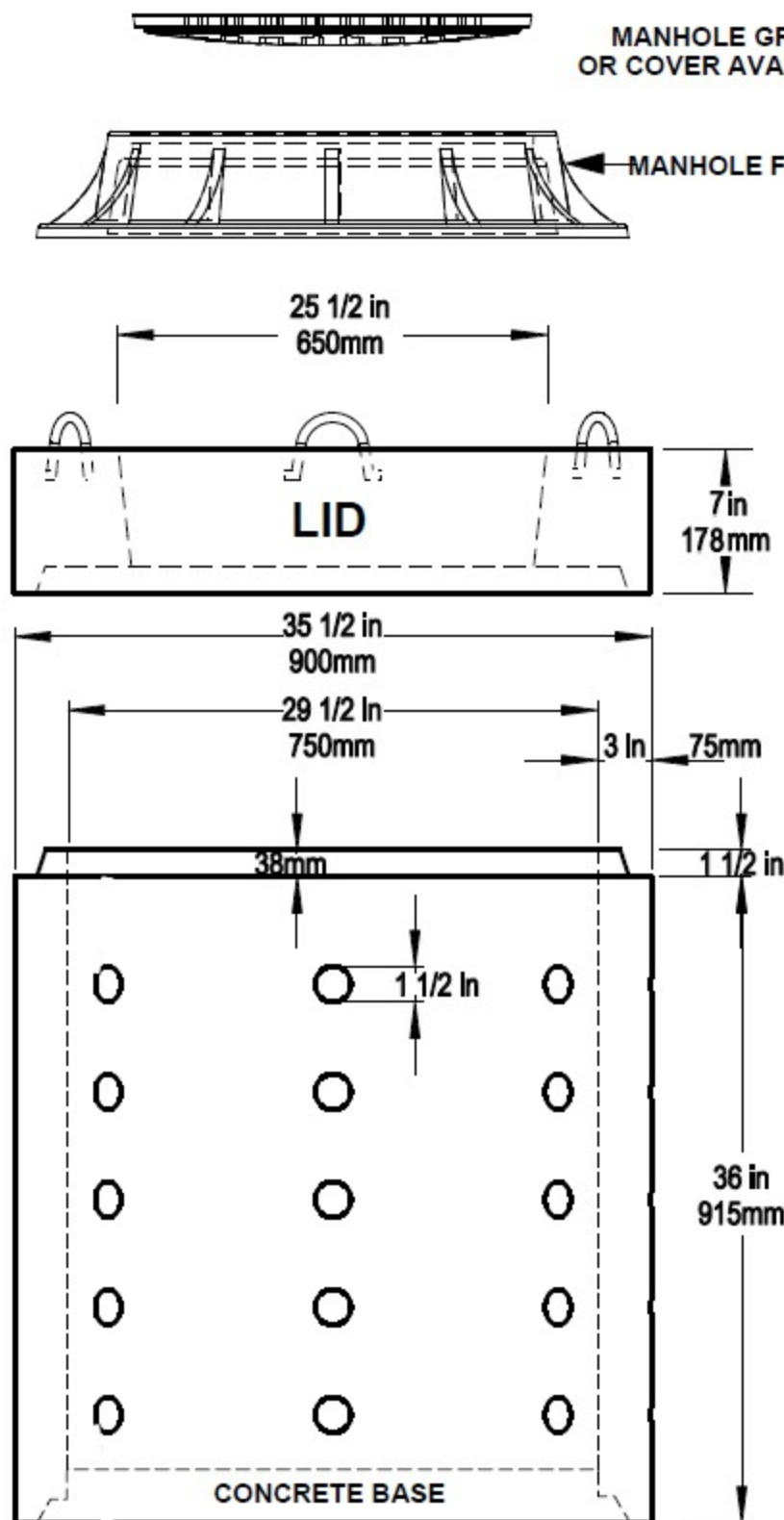
1. ALL PRECAST WORK TO CONFORM TO ASTM C478 OR CSA A257.
2. CATCH BASIN LID TO WITHSTAND HIGHWAY LIVE LOADING IN ACCORDANCE WITH THE APPLICABLE CLAUSES OF SS 582.
3. TRAPPING HOOD PINS SHALL BE SECURELY FASTENED TO THE PRECAST CONCRETE CATCH BASIN BARREL

NOT TO SCALE
ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED



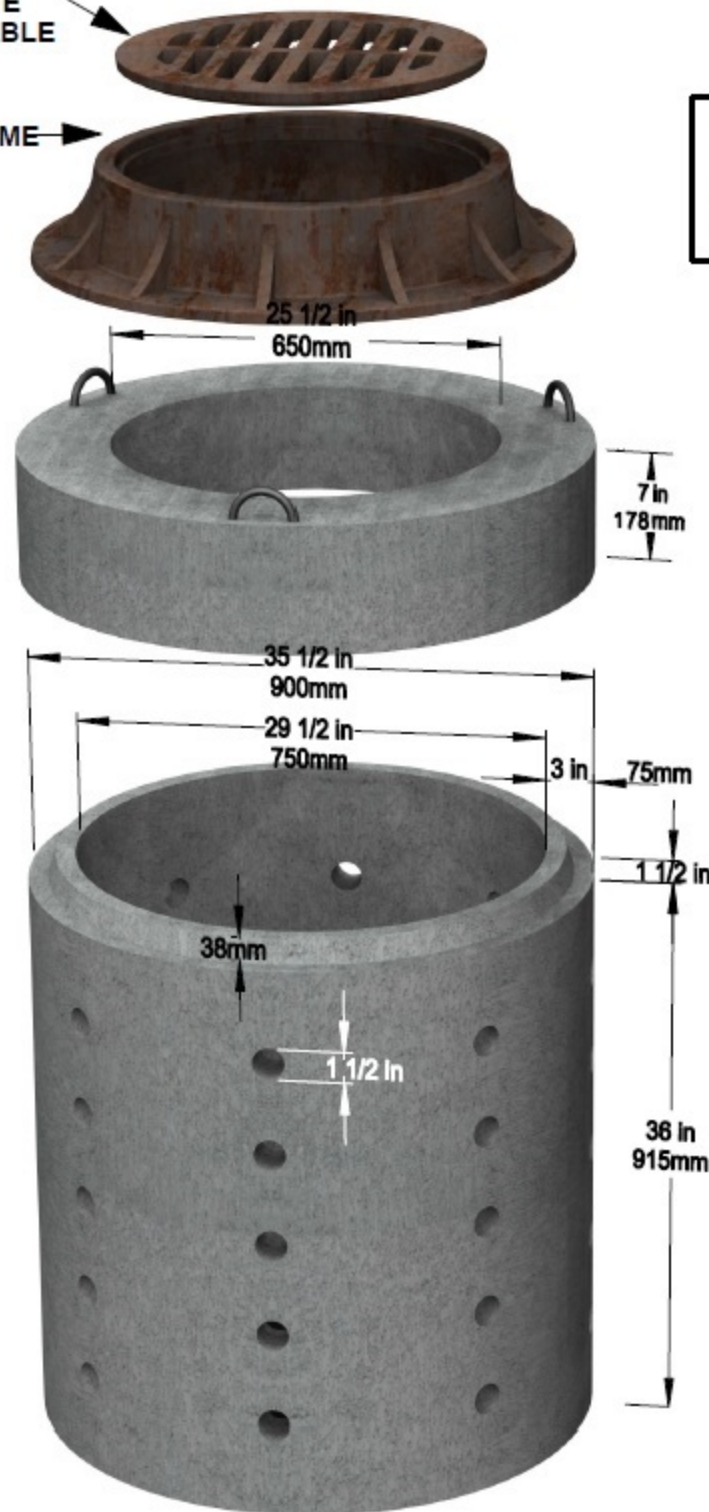
BRITISH COLUMBIA

Ministry of
Transportation
& Infrastructure

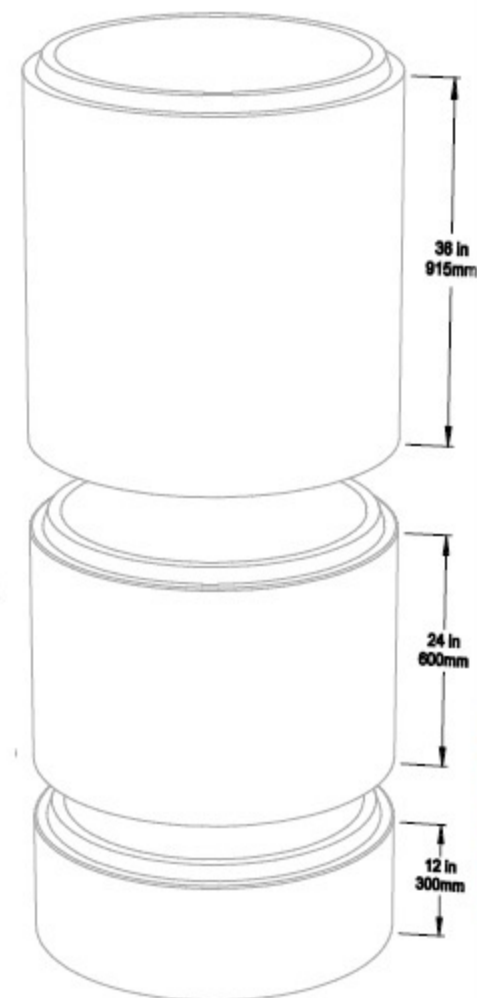


ELEVATION VIEW

SCALE: 1" = 12"



OUR PERFORATED BARREL IS ALSO COMPATIBLE WITH OUR 30" CATCH BASIN BARREL SECTIONS AND LIDS AND BASE



30 IN PERFORATED DRYWELL

AS NOTED

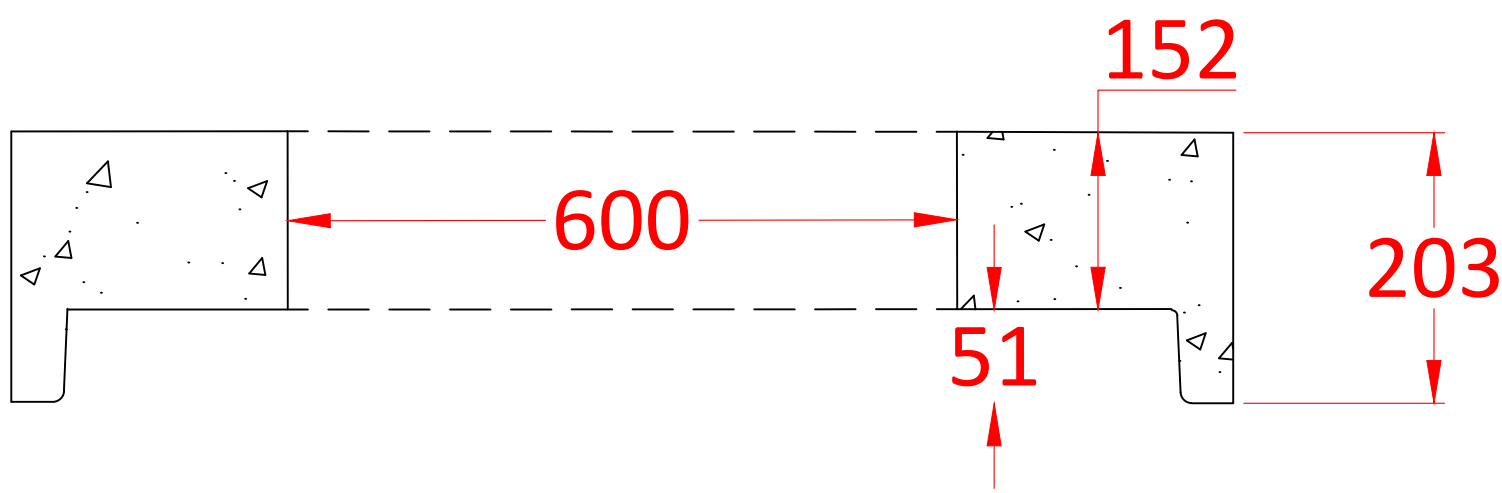
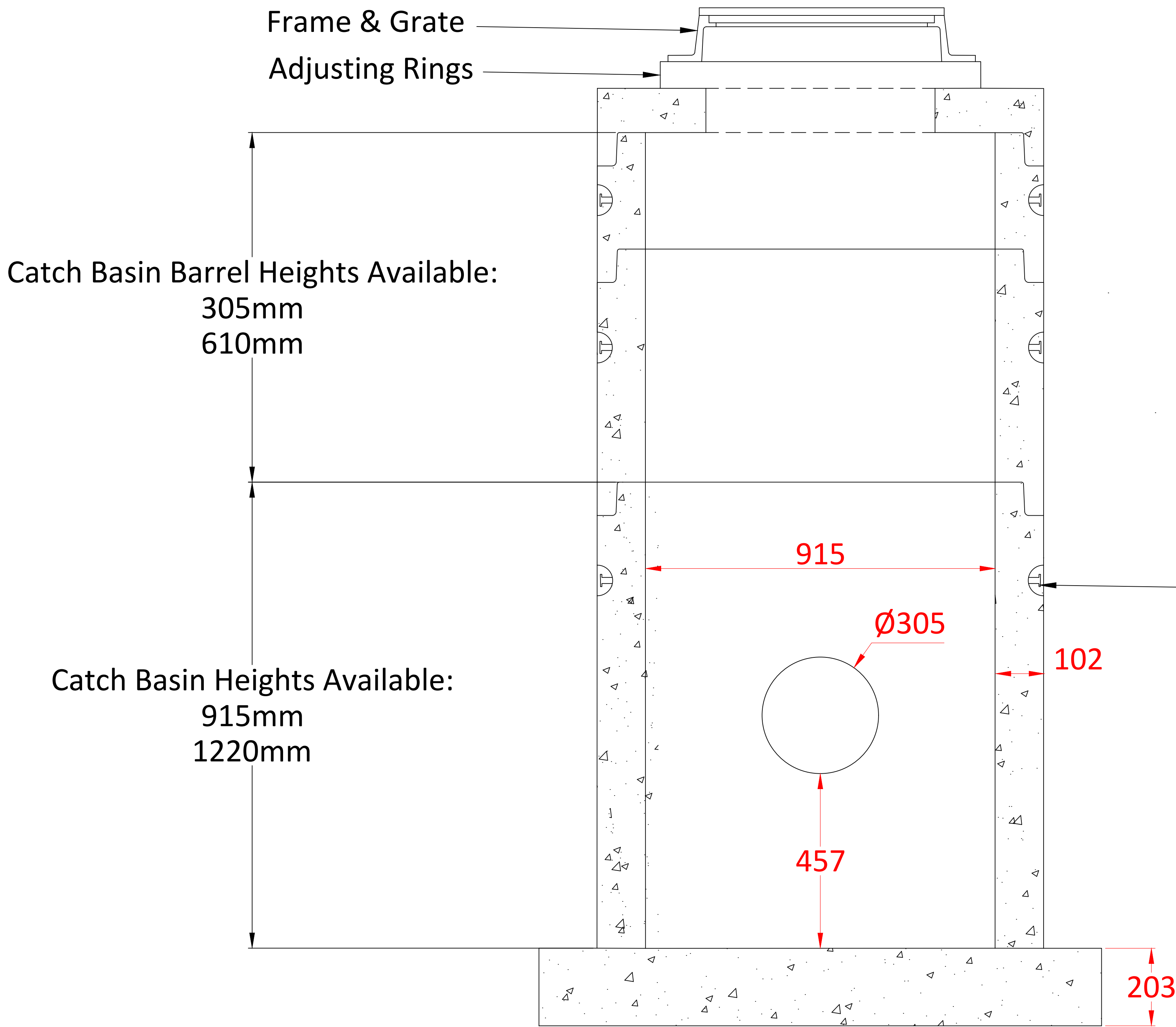
MARCH 04/2009

DRAWN: RAB

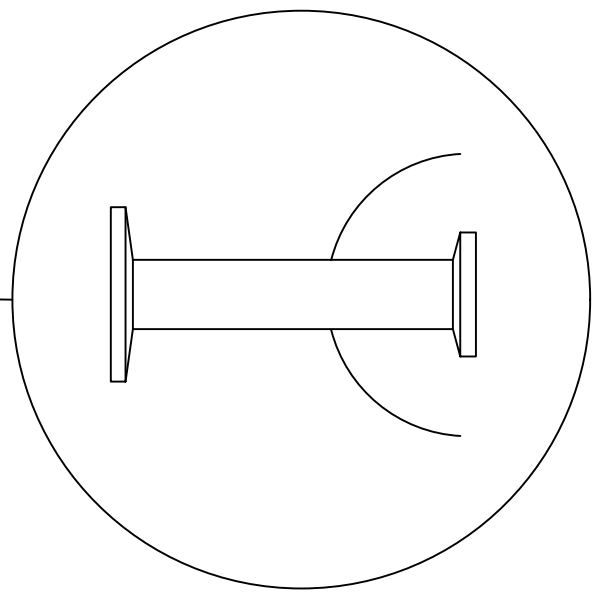
601 Patterson West
Cranbrook, B.C.
PO BOX 491 V1C 4J6
Phone 250-426-8162
Fax 250-489-4013
email: info@trikonprecast.com
www.trikonprecast.com

TRIKON
Precast
Concrete Products

Conforms to ASTM C478



915mm CB Lid With 600mm Hole



2.5T x 55mm Starcon Lifting Anchor

General Notes

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0	0	00-00-00
0	0	00-00-00
No.	Revision	RevDate

Project Name, Product Name and Location

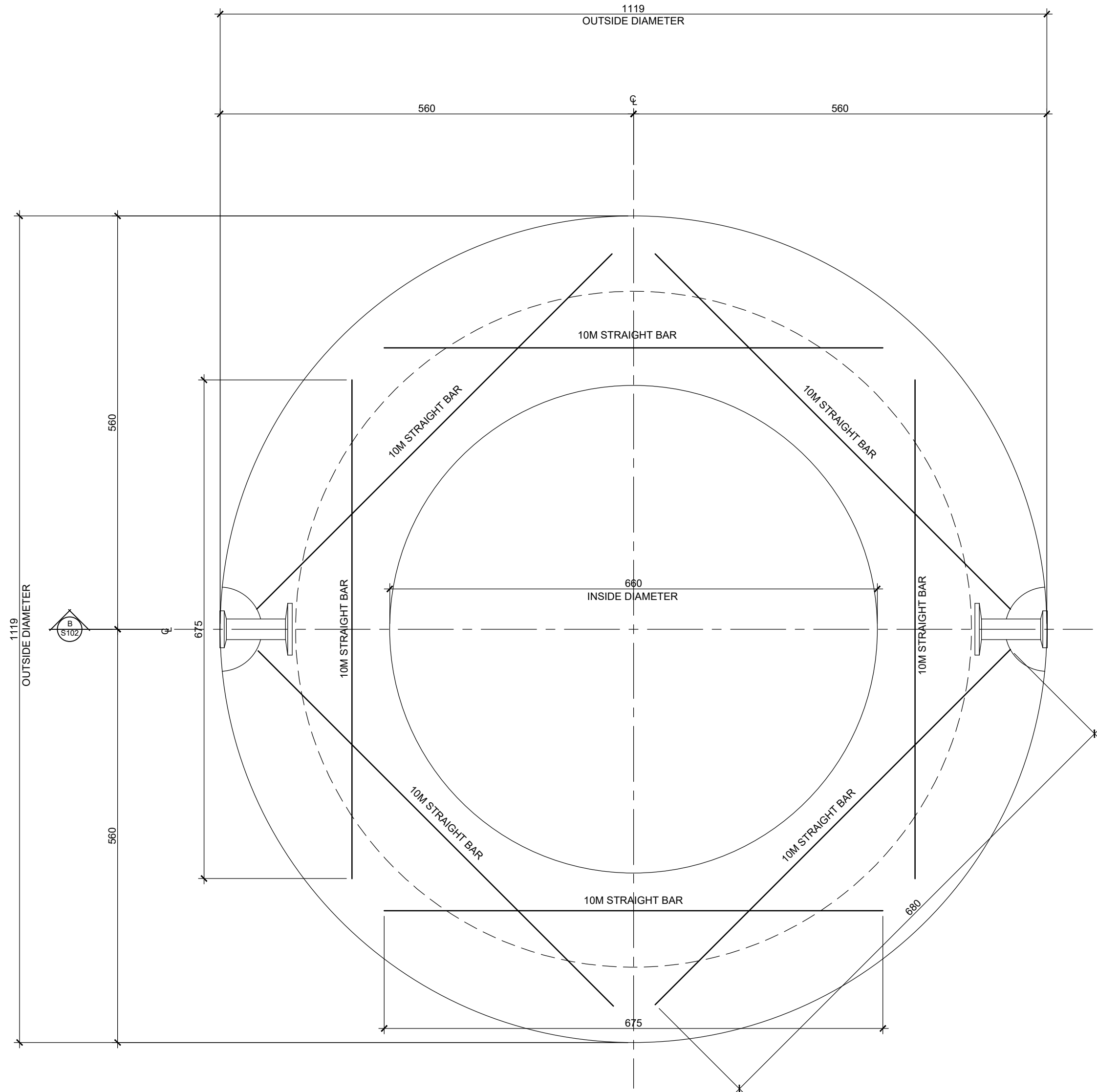
915mm Catch Basin Material

Contractor	001
Date	
Scale	

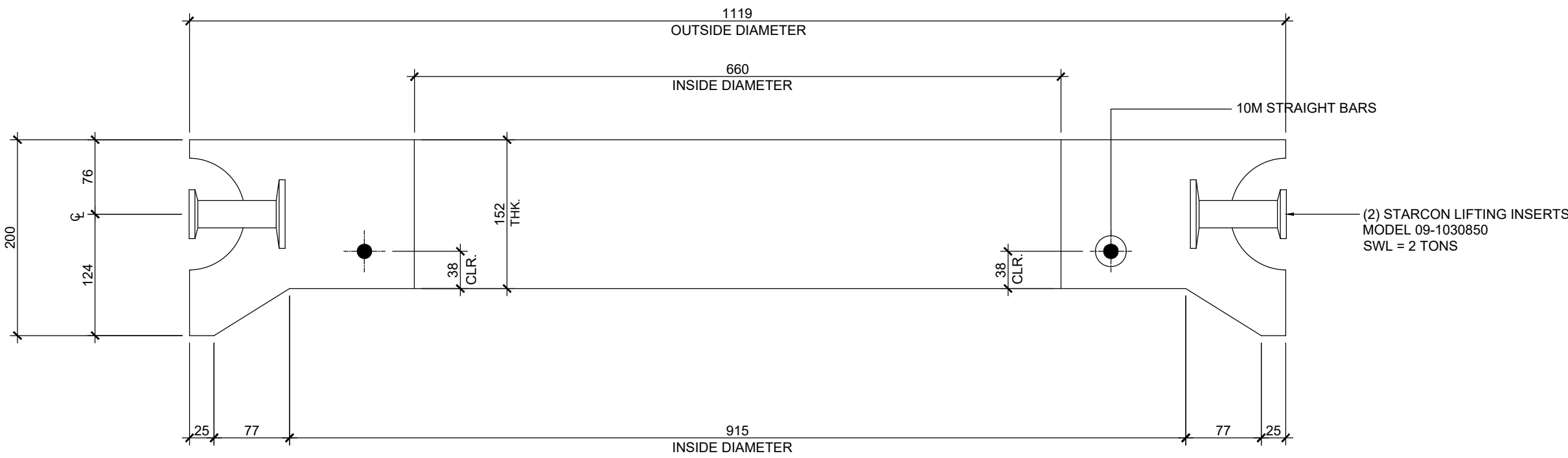
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11-20-2023

1:1



915mmØ PRECAST REINFORCED CONCRETE LID - REINFORCING LAYOUT
SCALE: 1:10



915mmØ PRECAST REINFORCED CONCRETE LID - SECTION
SCALE: 1:10

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	STRENGTH	EXPOSURE				
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Rev	Date	Description	Drawn	Design	App'd
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0	FEB 26, 2018	ISSUED FOR "CONSTRUCTION"	bpr	bm	bm

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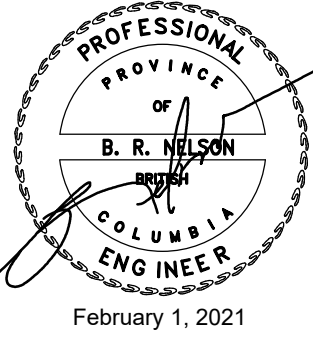
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1800 Willowbrook Drive
Cranbrook, BC
Canada V1C 7H9
Tel (250) 489-3013



TRI-KON PRECAST PRODUCTS LTD.
601 PATTERSON STREET WEST, CRANBROOK, BC

PRECAST REINFORCED CONCRETE MANHOLE LIDS
915mmØ LID
REINFORCING LAYOUT AND SECTION

Drawing No.

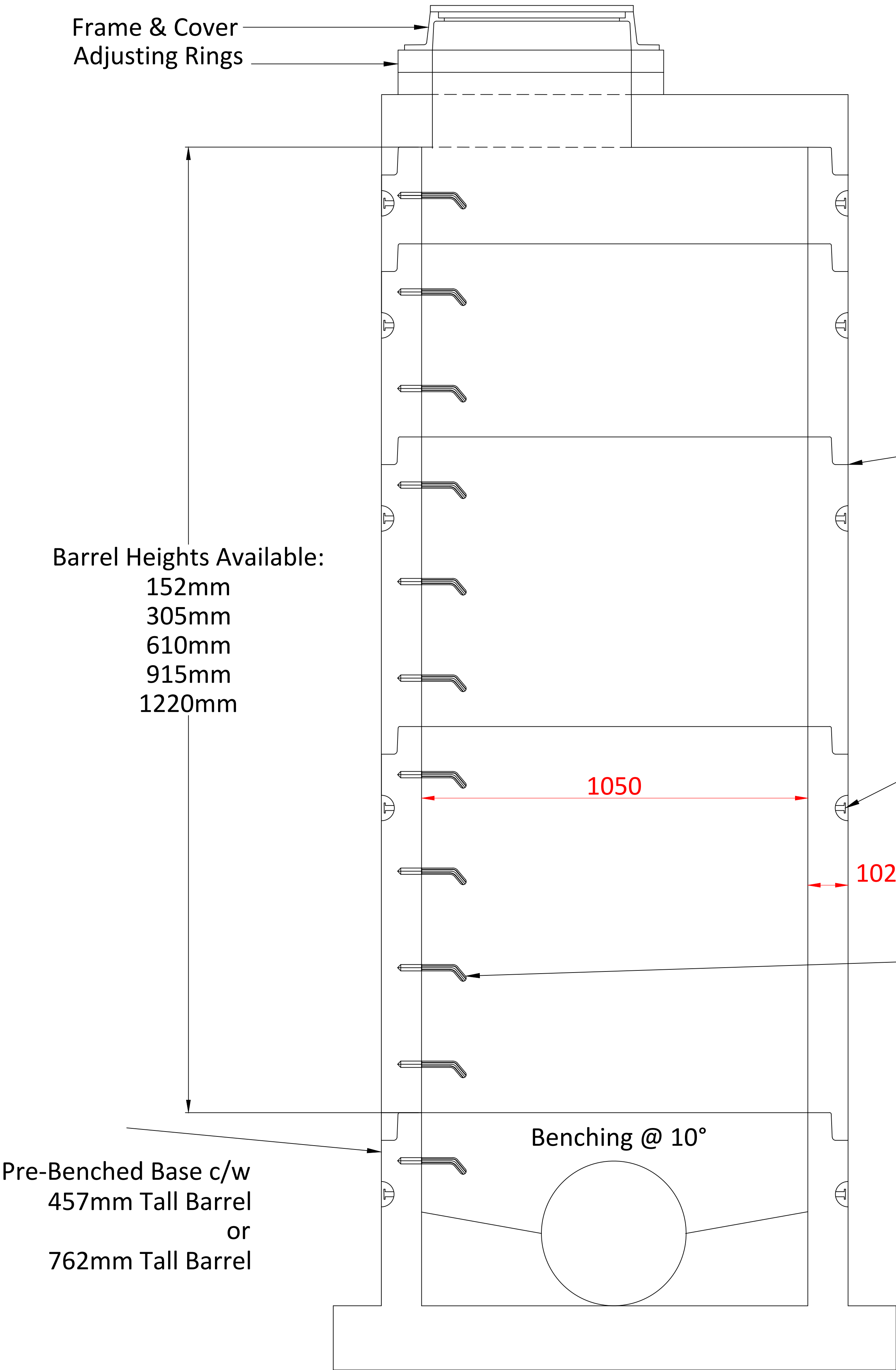
S102

Project Number

2441-00705-00

Rev.

1



General Notes

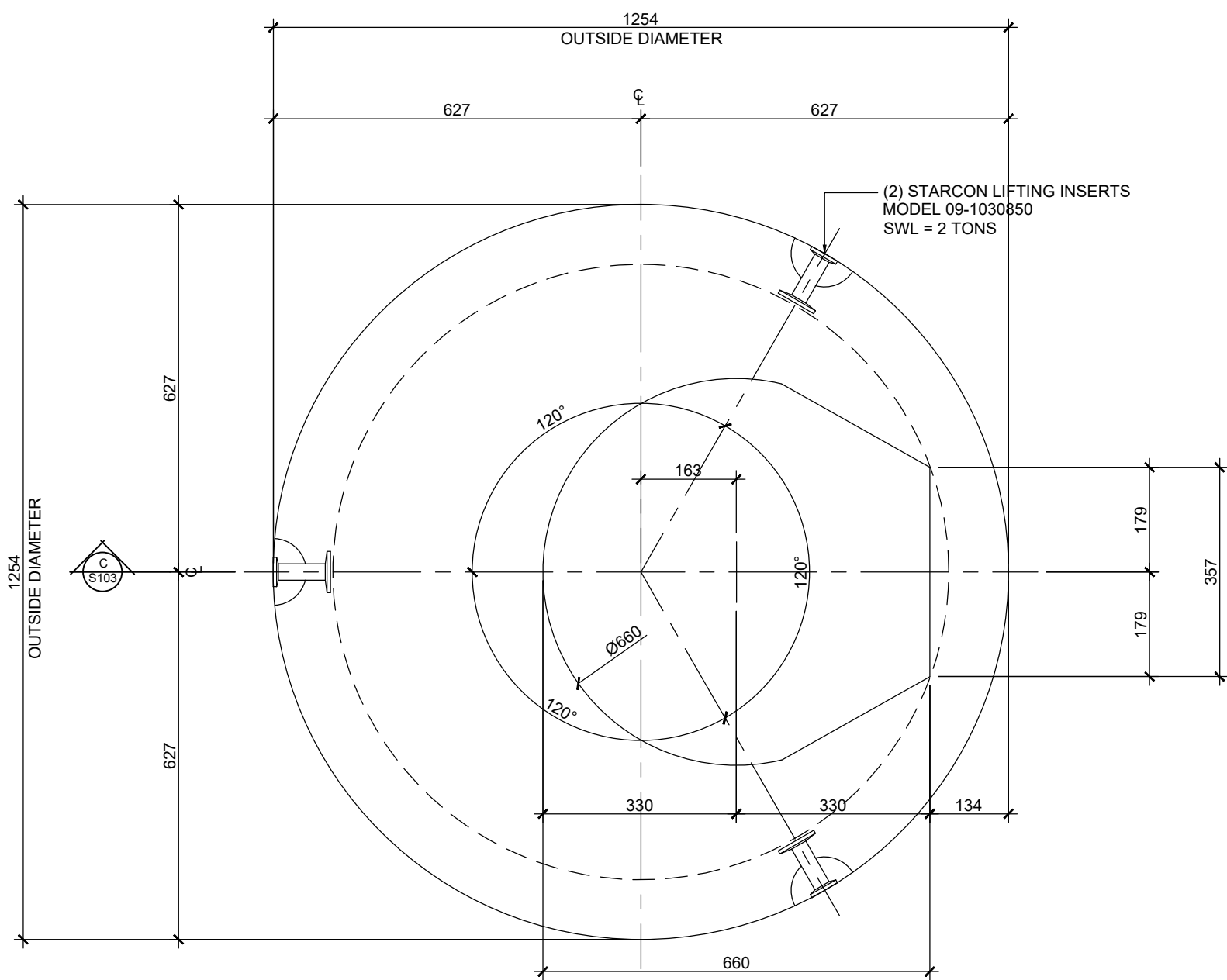
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No.	Revision	RevDate



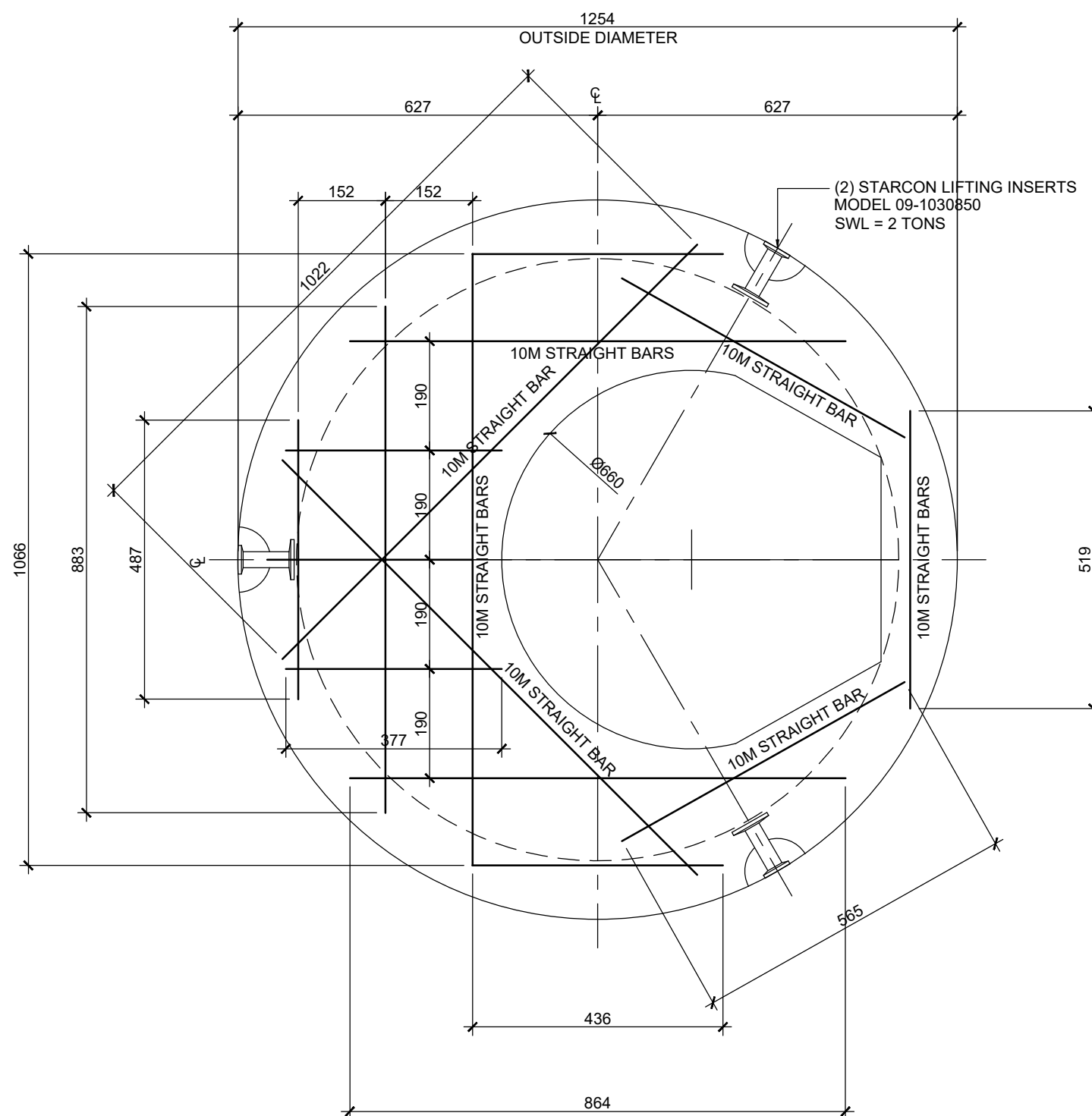
Project Name, Product Name and Location

1050mm Manhole Material

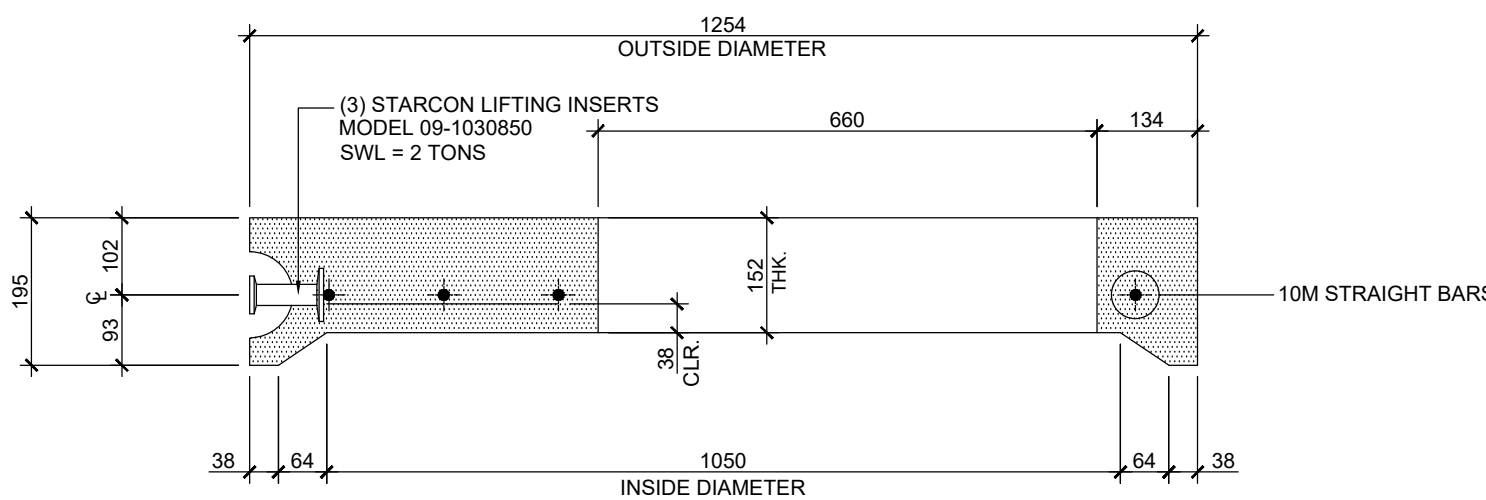
Contractor XXXX	Sheet 001
Date 11-20-2023	
Scale 1:1	



A 1050mmØ PRECAST REINFORCED CONCRETE LID - PLAN VIEW
SCALE: 1:15



B 1050mmØ PRECAST REINFORCED CONCRETE LID - REINFORCING LAYOUT
SCALE: 1:10



C 1050mmØ PRECAST REINFORCED CONCRETE LID - SECTION
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3. REINFORCING STEEL IS TO BE PLACED AS DETAILED TO 10mm TOLERANCE AND IS TO BE SUPPORTED BY METAL OR PLASTIC SUPPORTS AND/OR HANGERS IN ACCORDANCE WITH CAN/CSA A23.1.
4. LAP ALL REINFORCING BAR SPLICES 32 BAR DIAMETERS MINIMUM UNLESS INDICATED OTHERWISE ON THESE DRAWINGS.
5. REINFORCING STEEL IS TO BE CLEAN, FREE OF CORROSION AND UNDAMAGED.
6. DO NOT WELD BARS OR USE HEAT TO BEND REINFORCING STEEL.
7. UNLESS NOTED OTHERWISE MINIMUM CONCRETE COVER IS TO BE 38mm CLEAR

PRECAST COMPONENT LIFTING AND RIGGING

1. THE PRECAST CONTRACTOR IS RESPONSIBLE FOR ALL RIGGING AND LIFTING PROCEDURES REQUIRED TO ENSURE SAFE LIFTING AND PLACEMENT OF PRECAST CONCRETE COMPONENTS IN ACCORDANCE WITH INDUSTRY STANDARDS AND WORKSAFE BC REQUIREMENTS.
2. THE CONTRACTOR IS TO ENSURE THAT THE HOISTING DEVICES INCLUDING ALL ASSOCIATED ACCESSORIES (SHACKLES, SLINGS, PINS ETC.) ARE RATED TO THE APPLICABLE LOAD AND ARE IN GOOD WORKING CONDITION.
3. THE CONTRACTOR IS TO ENSURE THAT ALL PERSONNEL OPERATING OR WORKING WITH THE HOISTING DEVICES ARE PROPERLY TRAINED, EXPERIENCED AND CERTIFIED ON THE HOISTING DEVICE.

Rev	Date	Description	Drawn	Design	App'd
1	FEB 1, 2021	CONCRETE STRENGTH REVISED	bpr	bm	bm
0	FEB 26, 2018	ISSUED FOR "CONSTRUCTION"	bpr	bm	bm

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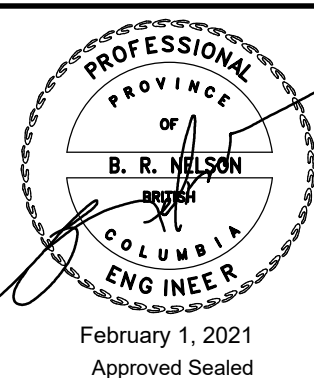
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Cranbrook, BC
Canada V1C 7H9
Tel (250) 489-3013



TRI-KON PRECAST PRODUCTS LTD.
601 PATTERSON STREET WEST, CRANBROOK, BC

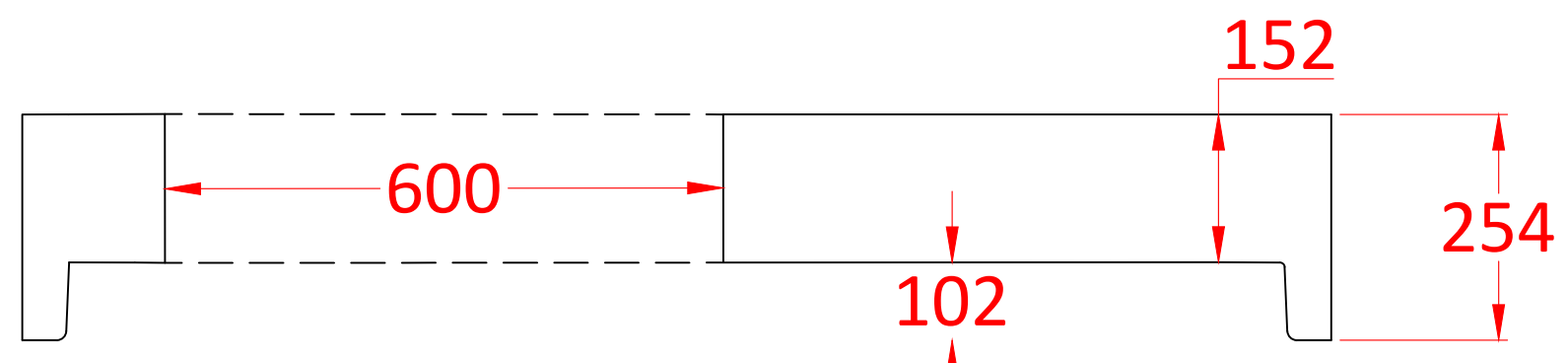
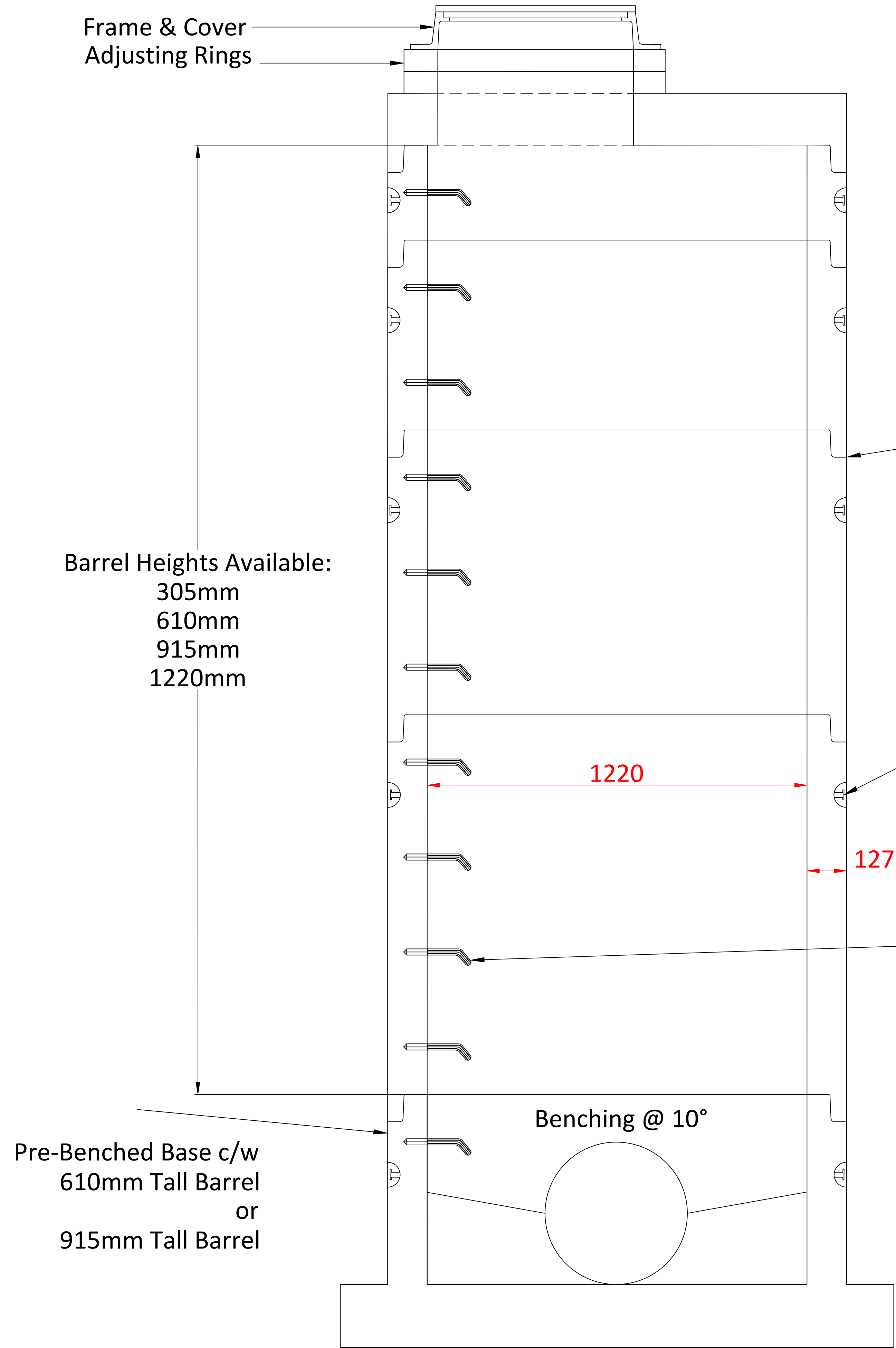
PRECAST REINFORCED CONCRETE MANHOLE LIDS
1050mmØ LID
PLAN VIEW, REINFORCING LAYOUT AND SECTION

Drawing No.

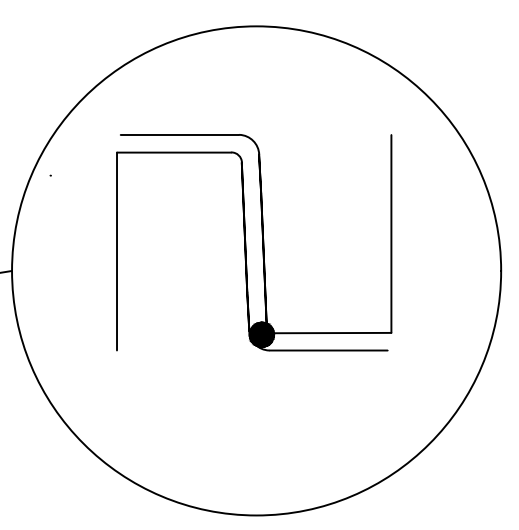
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Project Number
2441-00705-00

Rev.
1

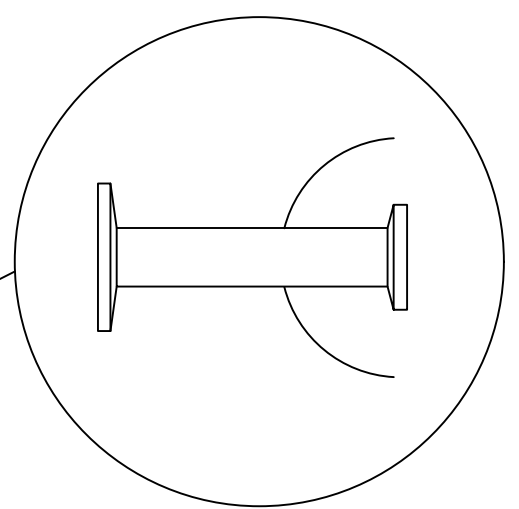


1220mm Manhole Lid With
600mm Opening

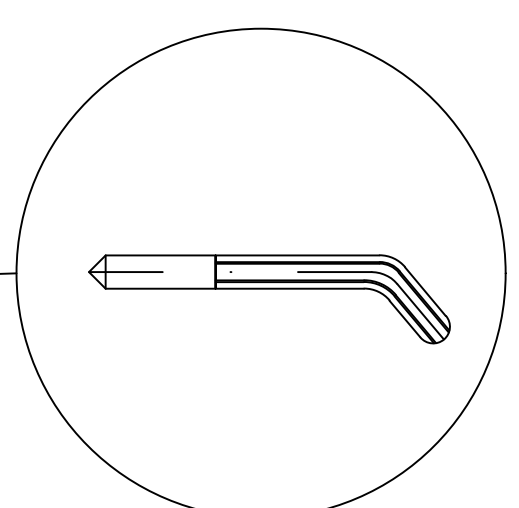


Seal Joints With Conseal
Butyl Mastic Joint Sealant

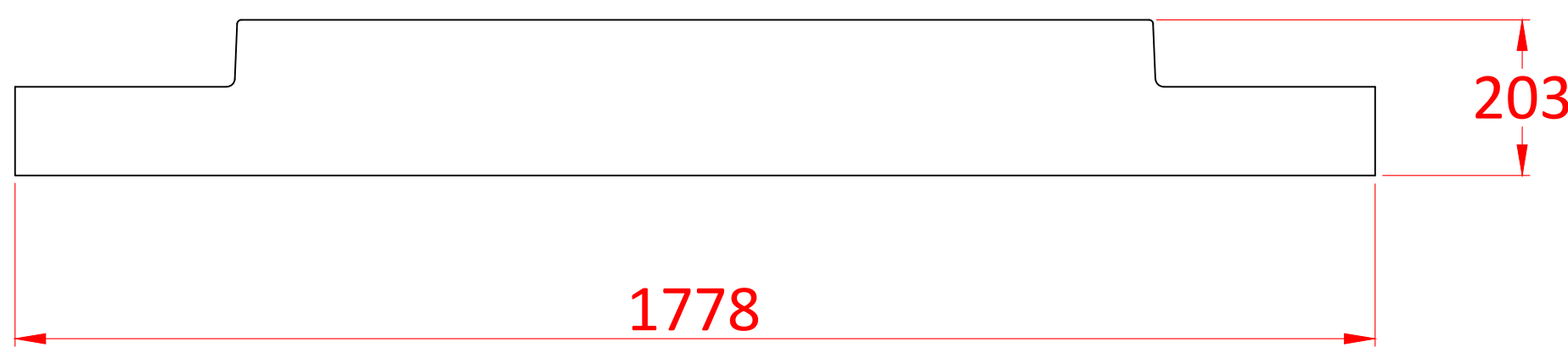
- CS-101
- CS-102
- CS-202
- CS-231



2.5T x 85mm Starcon Lifting
Anchor



Stepcon Model # PLAN 2012
305mm x 20mm Hollow
Circular Aluminum Ladder Rung
c/w Polyethylene Anchor
Insulating Sleeve
Designed & Tested to Conform
to ASTM C478



Round Slab Base
Alternative to Pre-Benched/Based
Only Base

General Notes

0	0	00-00-00
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0	0	00-00-00
0	0	00-00-00
0	0	00-00-00
No.	Revision	RevDate

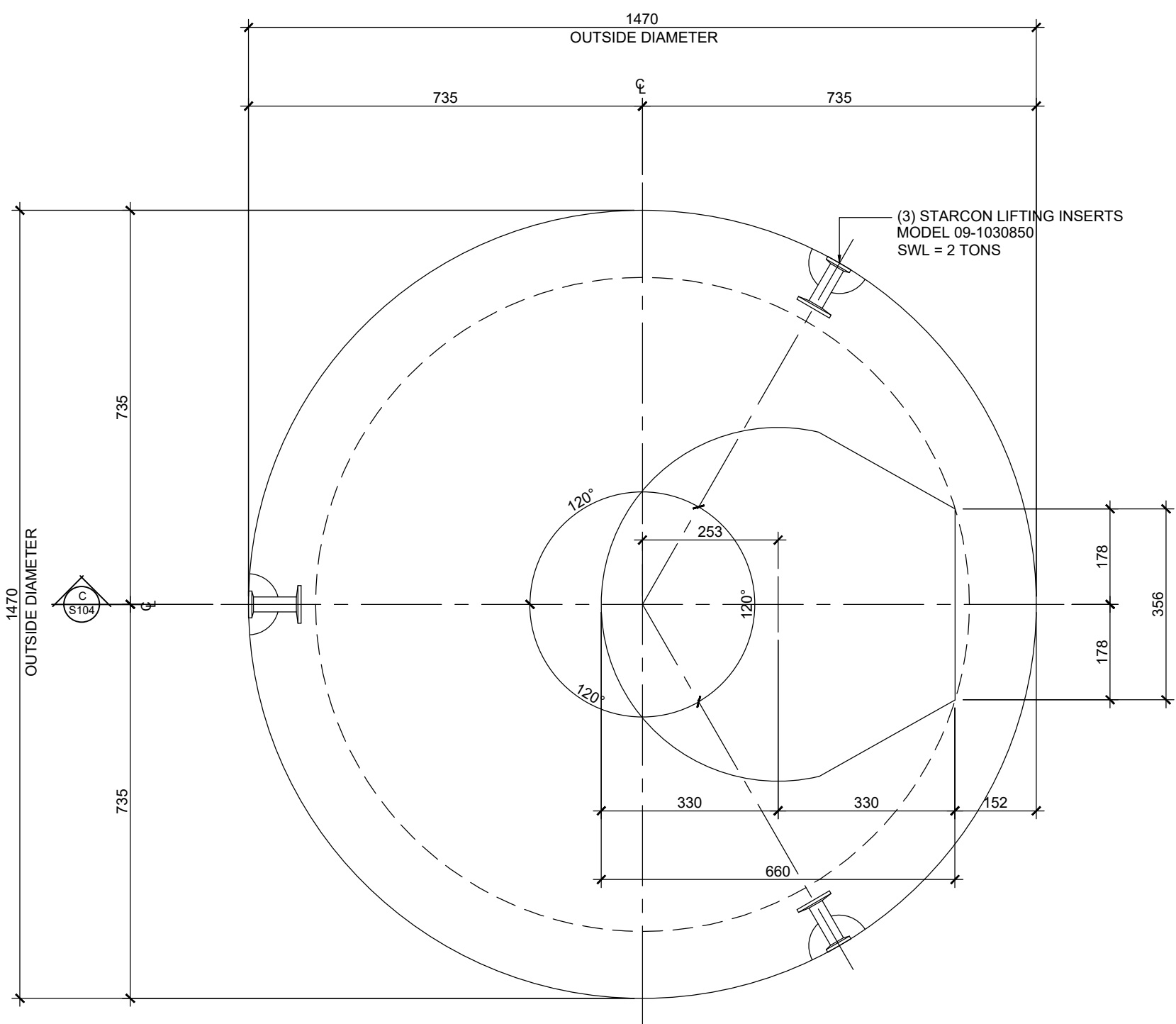
Project Name, Product Name and Location

1220mm Manhole Material

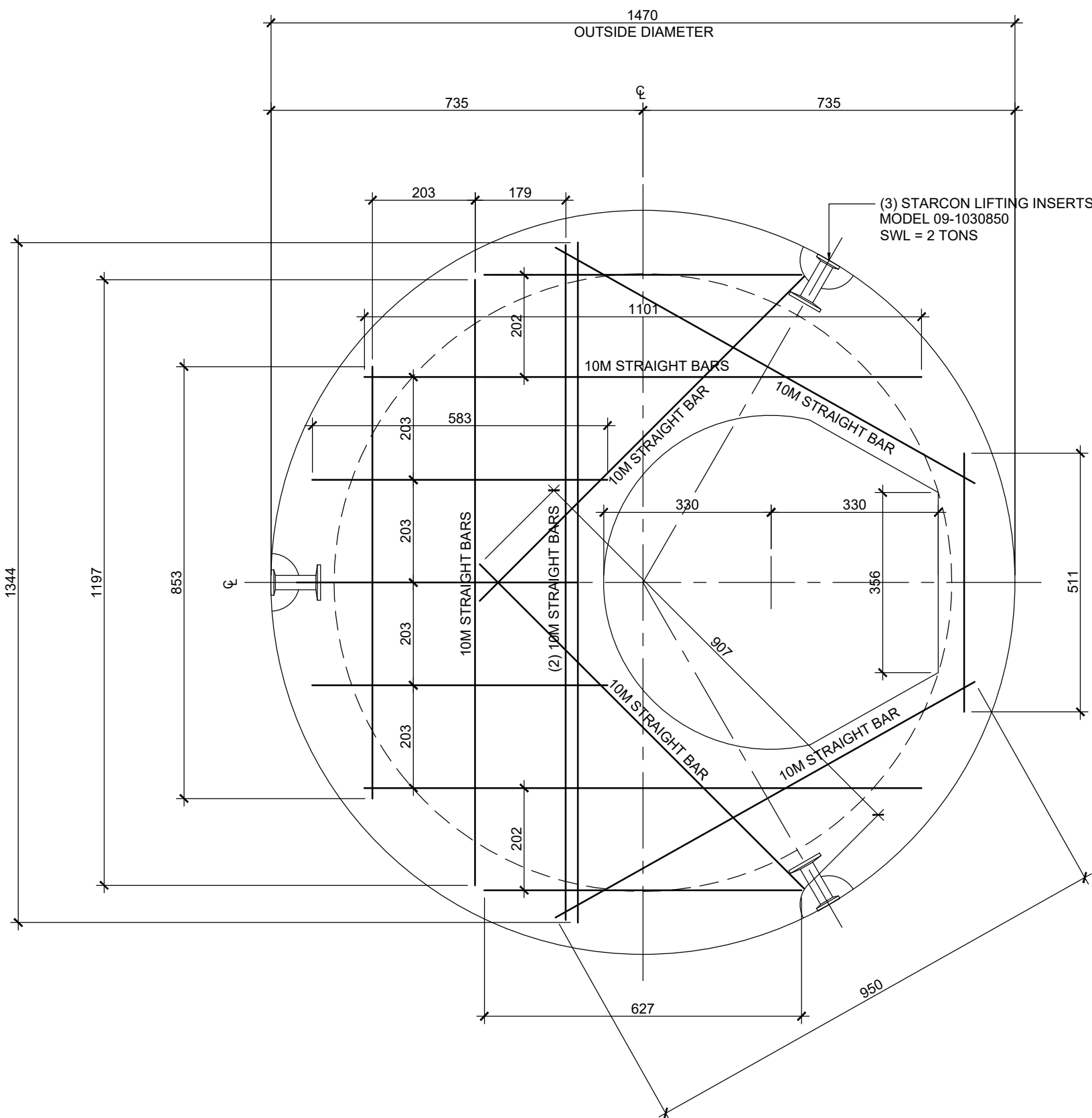
Contractor	Sheet
XXXX	001
Date	
11-20-2023	
Scale	
1:1	

DESIGN PARAMETERS

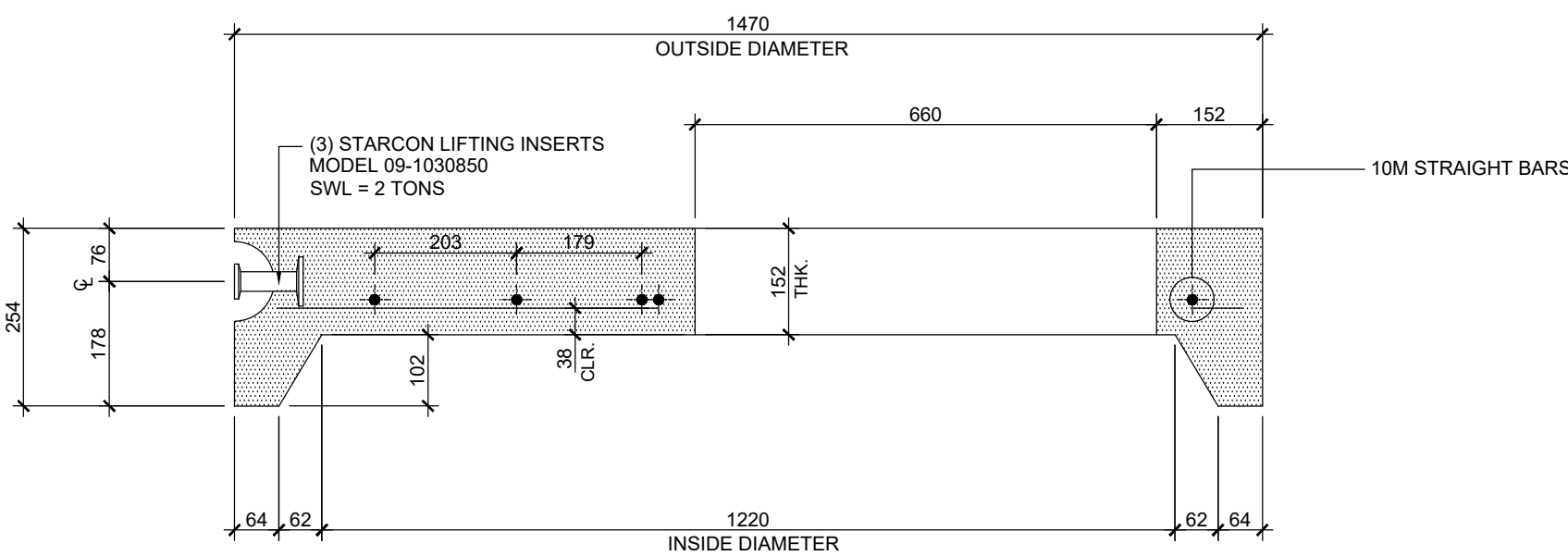
- 1) DESIGN METHODOLOGY - LSD
2) DESIGN ASSUMES MAXIMUM 600mm GRANULAR COVER
3) DESIGN ASSUMES HS-20 AXLE LOADING
4) SERVICE LIFE SHALL BE 75 YEARS



A 1220mmØ PRECAST REINFORCED CONCRETE LID - PLAN VIEW
SCALE: 1:15



B 1220mmØ PRECAST REINFORCED CONCRETE LID - REINFORCING LAYOUT
SCALE: 1:10



C 1220mmØ PRECAST REINFORCED CONCRETE LID - SECTION
SCALE: 1:10

STRUCTURAL SPECIFICATIONS

GENERAL

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- CONCRETE COVER OVER REINFORCING IS TO BE AS SHOWN ON DRAWINGS.
- CONCRETE PROPERTIES:

ITEM	28 DAY STRENGTH	EXPOSURE	W/C	AIR (%)	CEMENT TYPE	AGG. SIZE (mm)
PRECAST CONCRETE	30 MPa	F1	.40	4 - 7	HS	20

REINFORCING STEEL

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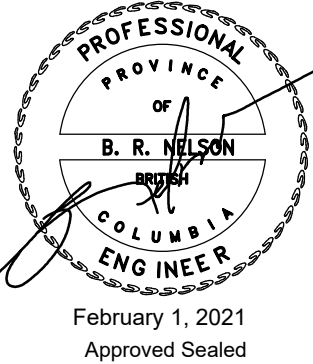
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TRI-KON PRECAST PRODUCTS LTD.
601 PATTERSON STREET WEST, CRANBROOK, BC

PRECAST REINFORCED CONCRETE MANHOLE LIDS
1220mmØ LID
PLAN VIEW, REINFORCING LAYOUT AND SECTION

Drawing No.

S104

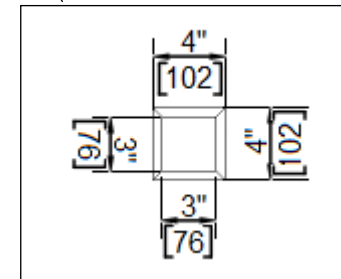
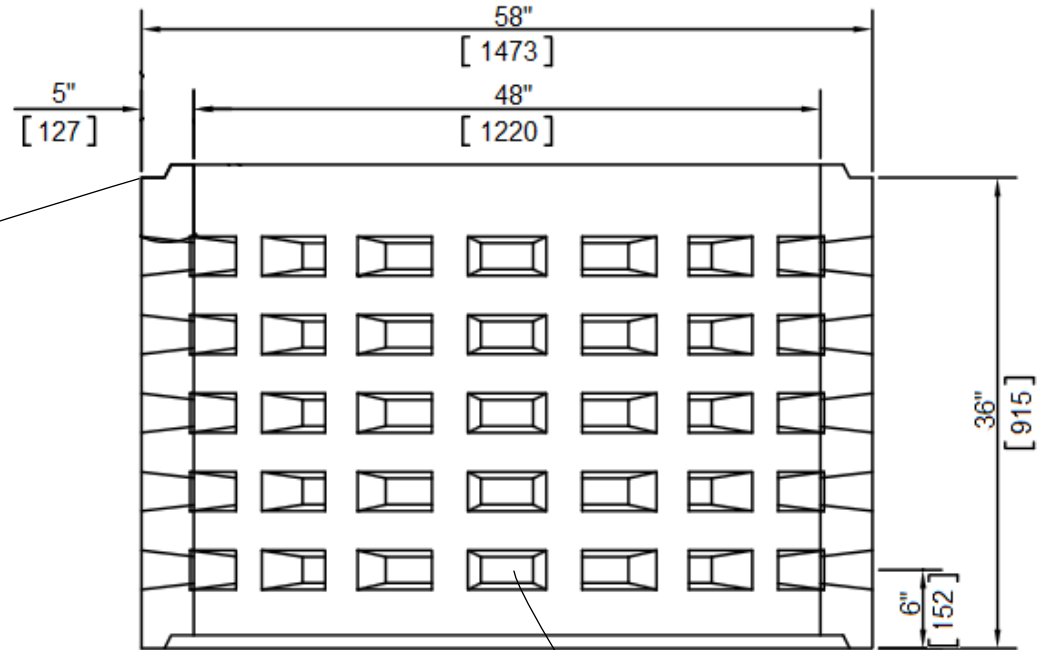
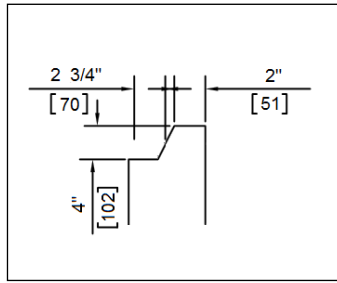
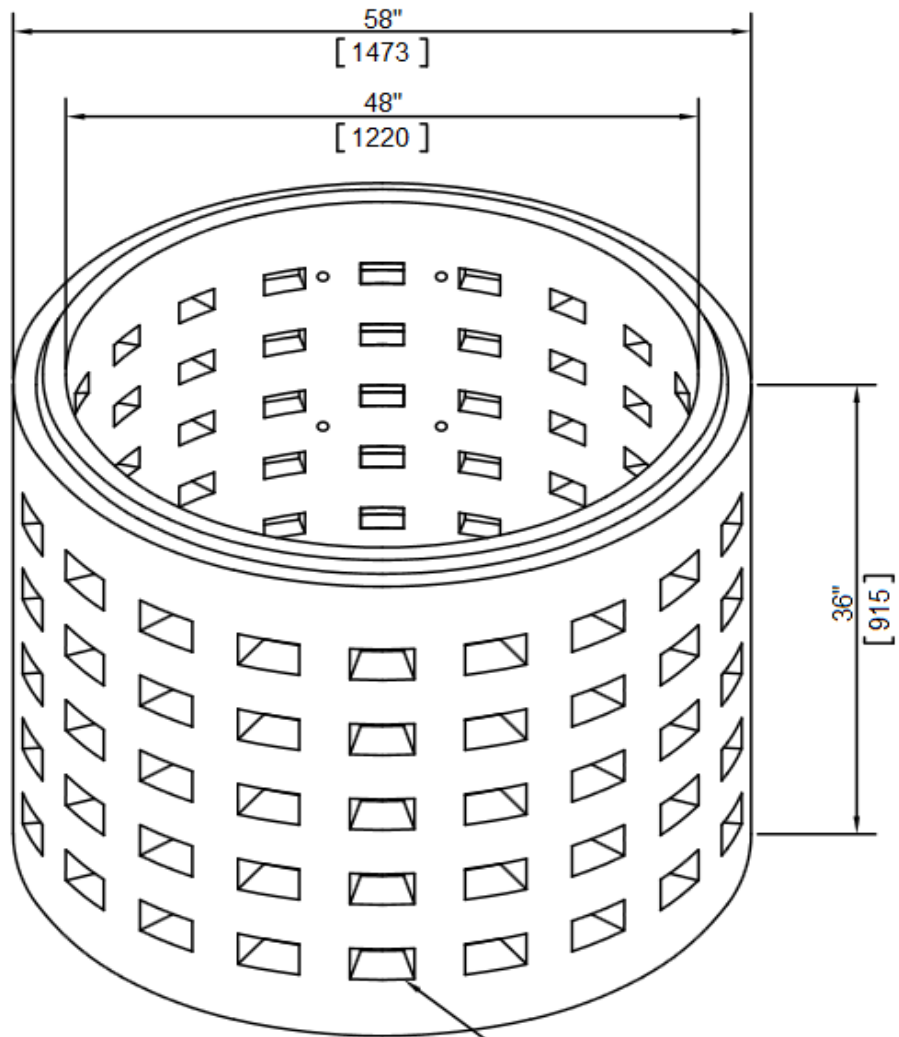
Project Number

2441-00705-00

Rev.

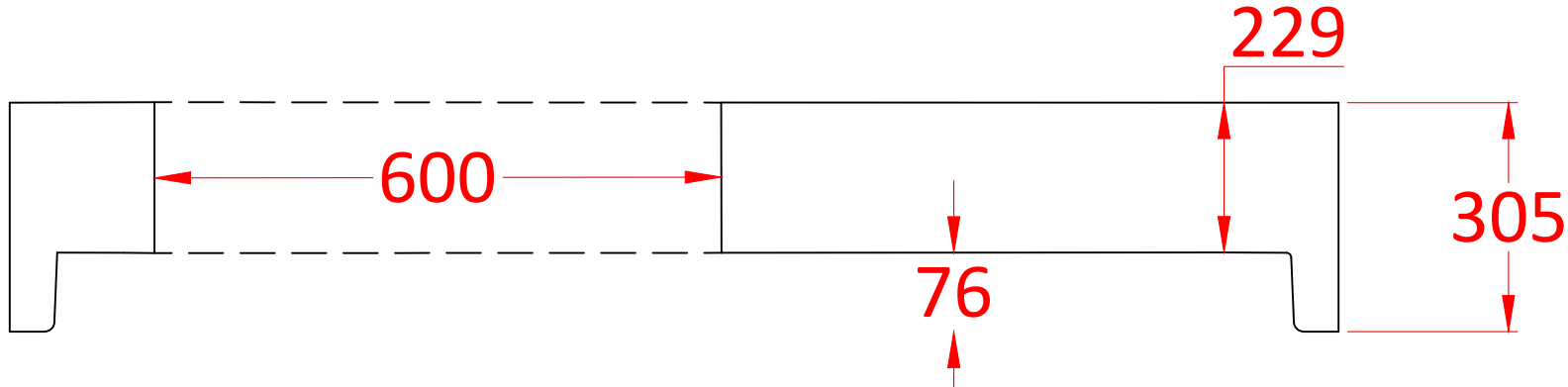
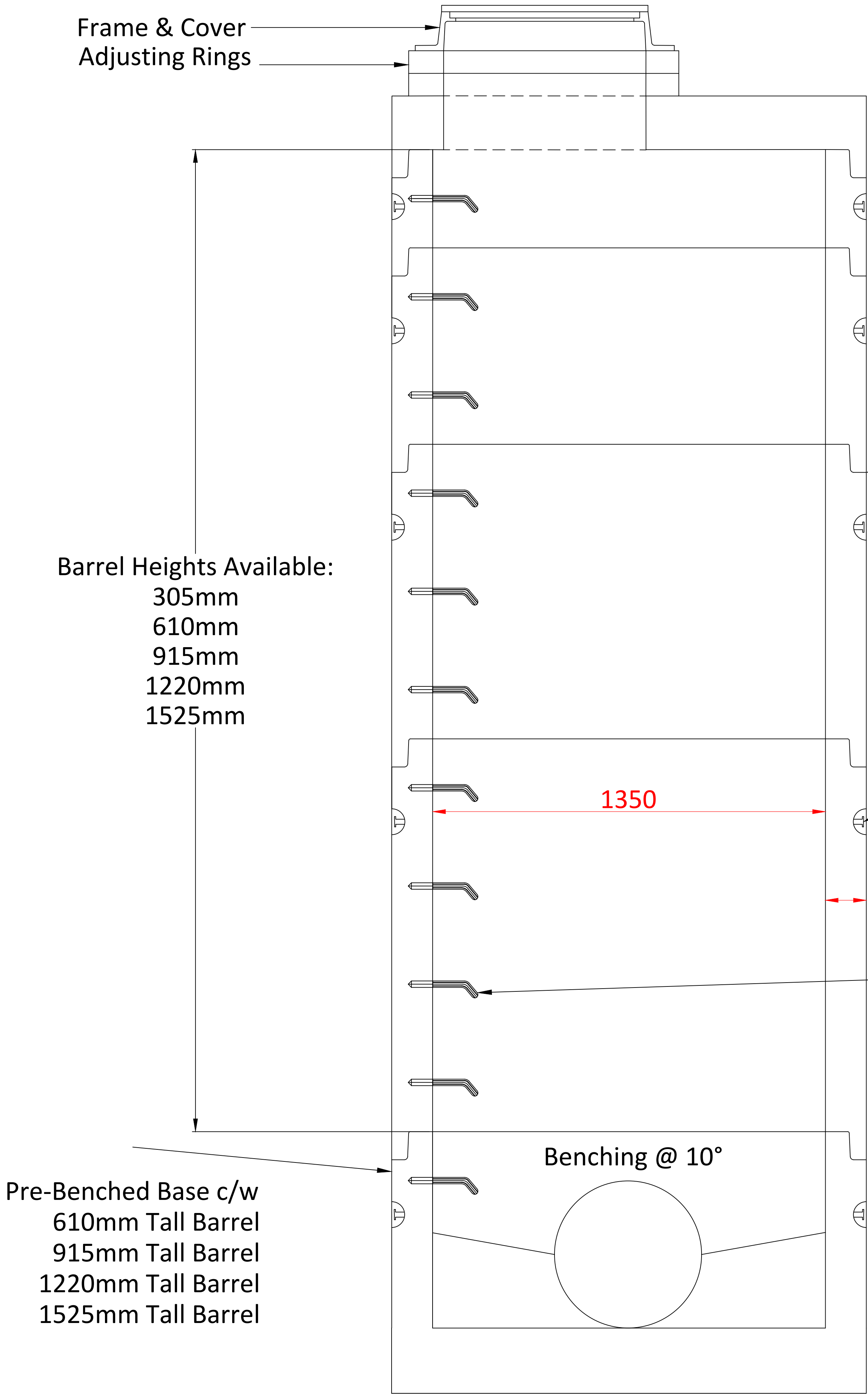
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DESTROY ALL PRINTS BEARING PREVIOUS REVISION

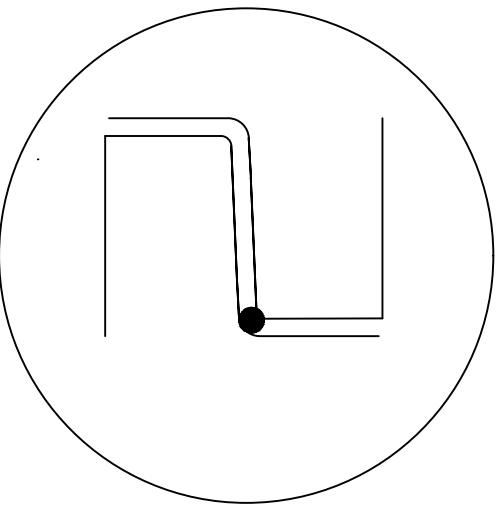


TOTAL OF 100 HOLES

Conforms to ASTM C478

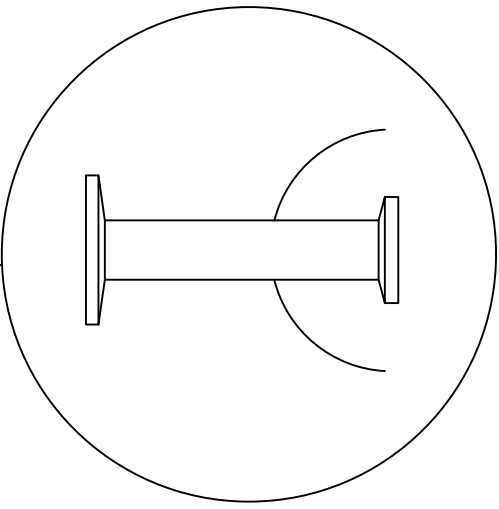


1350mm Manhole Lid With 600mm Opening

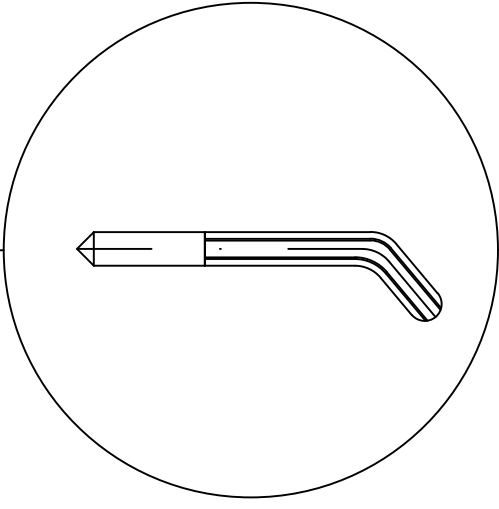


Seal Joints With Conseal Butyl Mastic Joint Sealant

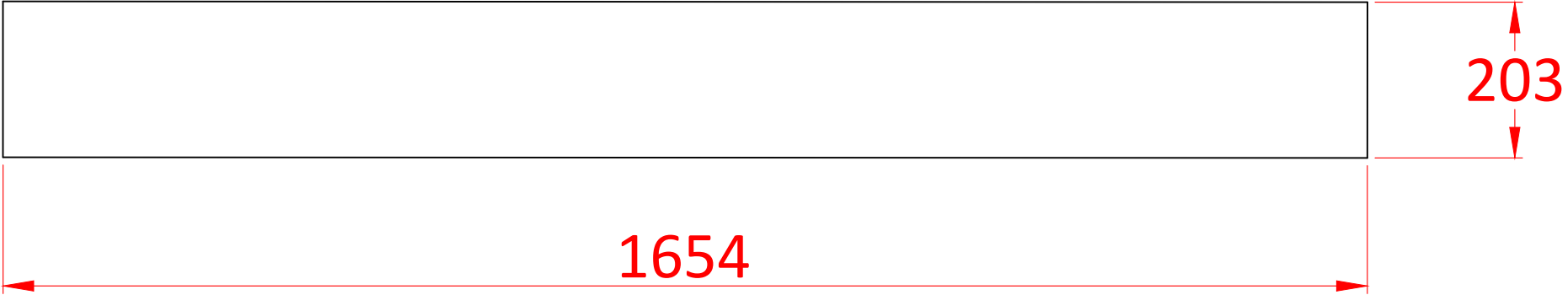
- CS-101
- CS-102
- CS-202
- CS-231



5T x 120mm Starcon Lifting Anchor



Stepcon Model # PLAN 2012
305mm x 20mm Hollow Circular Aluminum Ladder Rung c/w Polyethylene Anchor Insulating Sleeve
Designed & Tested to Conform to ASTM C478



Round Slab Base
Alternative to Pre-Benched/Based Only Base

General Notes

0	0	00-00-00
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No.	Revision	RevDate

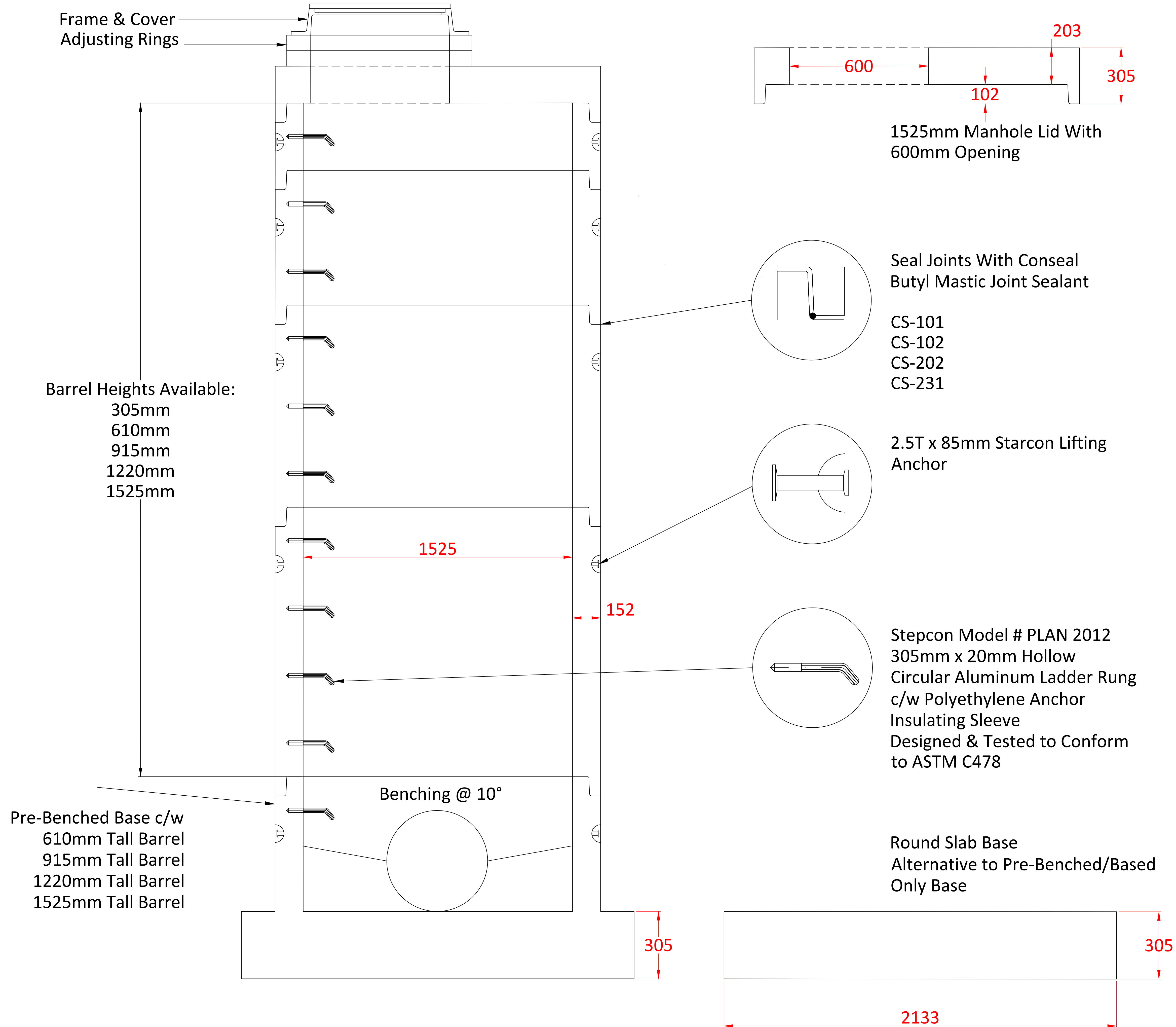


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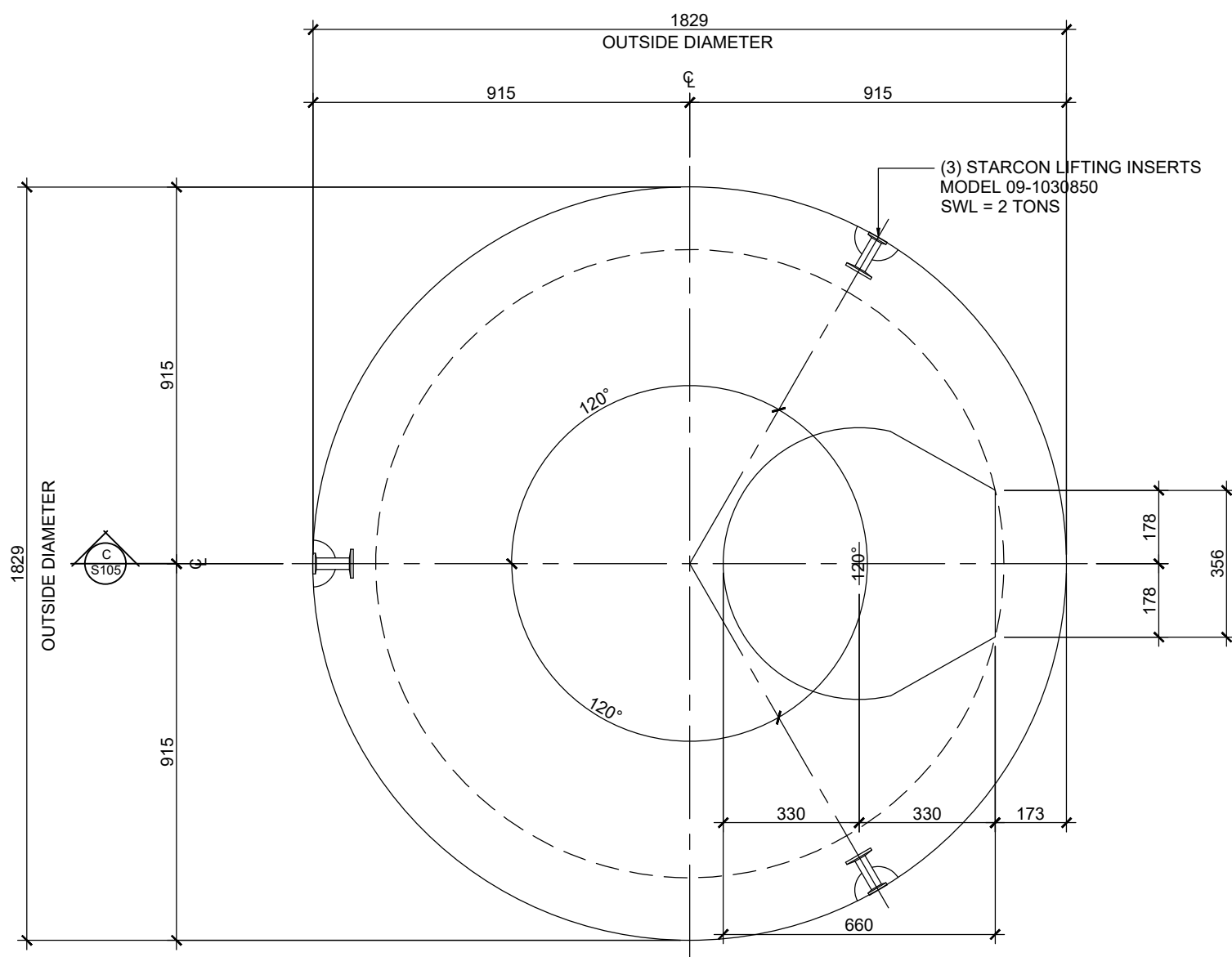
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Contractor	Sheet
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Date	
11-20-2023	
Scale	
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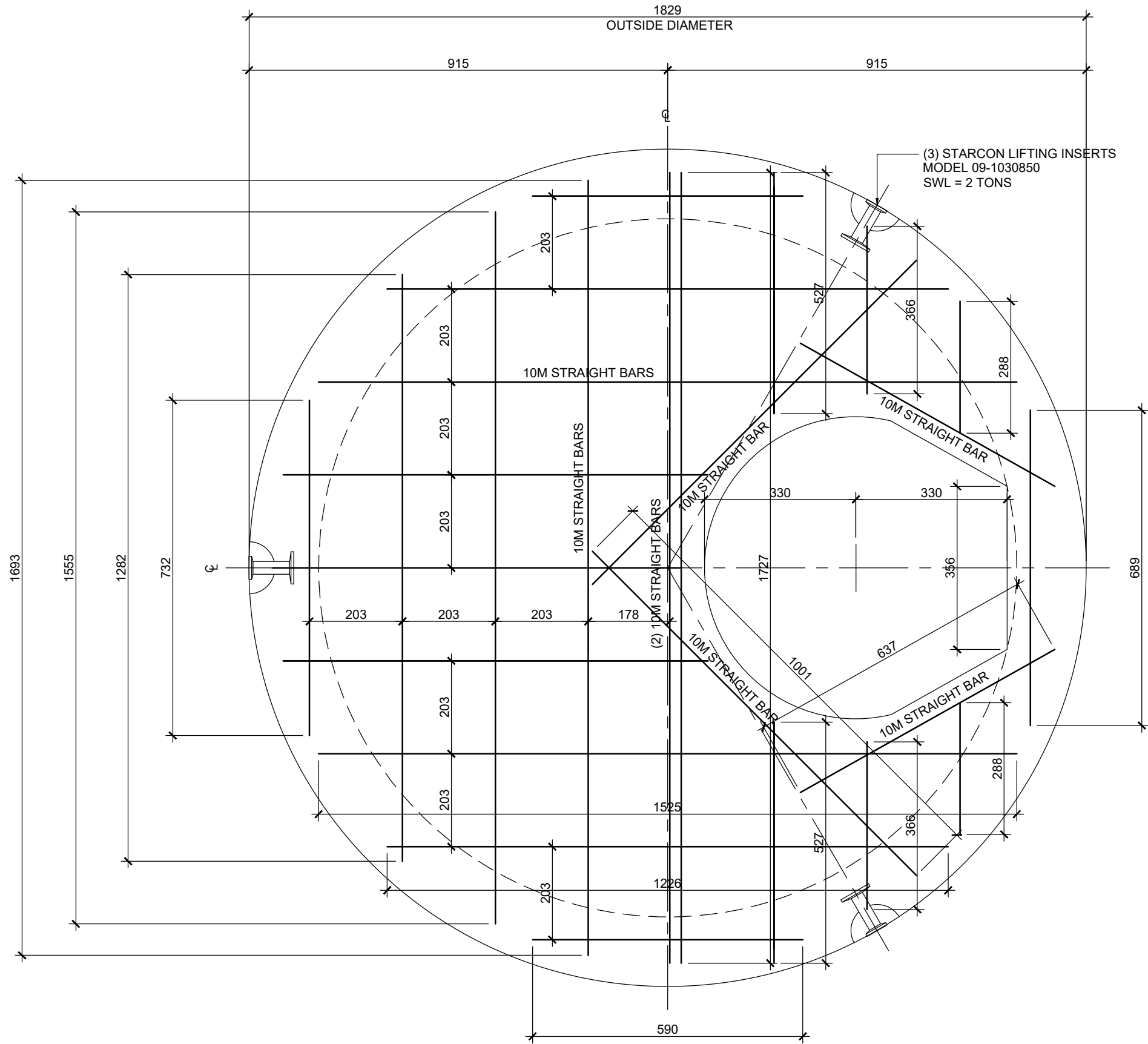
~ Tri-Kon Precast Products Ltd. ~ 601 Patterson Street West ~ Cranbrook BC ~ V1C 6T3 ~ 250-426-8162 ~ info@trikonprecast.com ~



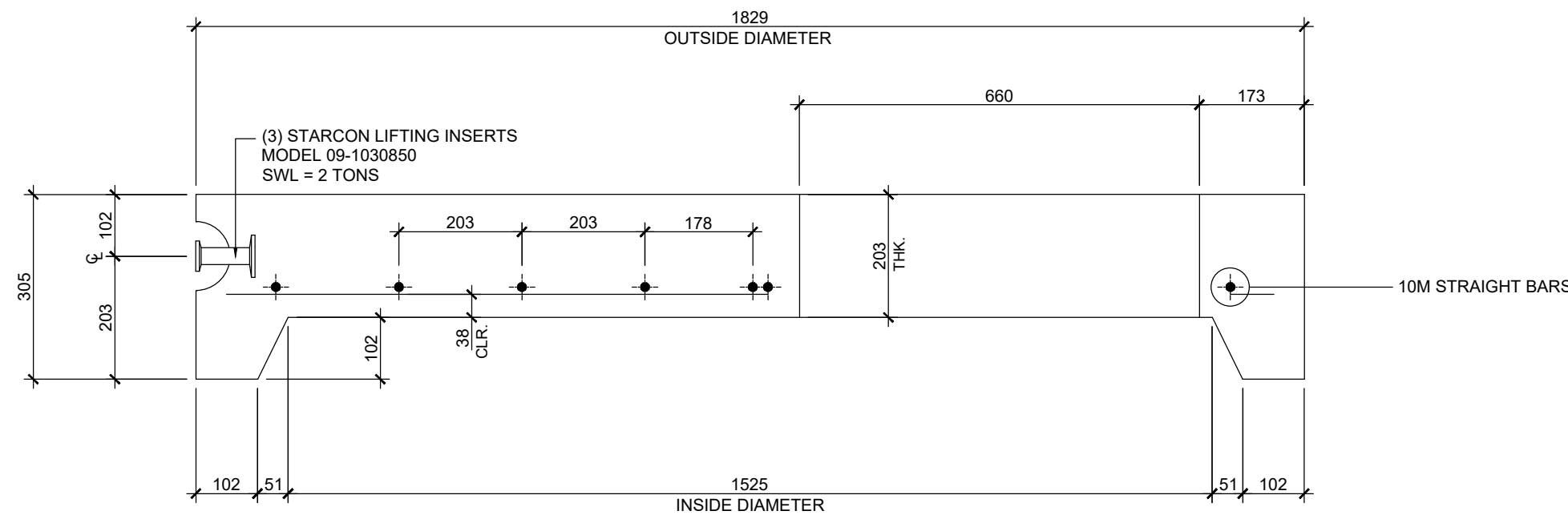
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No.	Revision	RevDate
TRI-KON Precast Concrete Products		
Project Name, Product Name and Location		
1525mm Manhole Material		
Contractor XXXX	Sheet 001	
Date 11-20-2023		
Scale 1:1		



A 1525mmØ PRECAST REINFORCED CONCRETE LID - PLAN VIEW
SCALE: 1:15



B 1525mmØ PRECAST REINFORCED CONCRETE LID - REINFORCING LAYOUT
SCALE: 1:10



C 1525mmØ PRECAST REINFORCED CONCRETE LID - SECTION
SCALE: 1:10

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0	FEB 26, 2018	ISSUED FOR "CONSTRUCTION"	bpr	bm	bm

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ORIGINAL DWG SIZE: ARCH D (24" x 36") - DO NOT SCALE THIS DRAWING

1800 Willowbrook Drive
Cranbrook, BC
Canada V1C 7H9
Tel (250) 489-3013



TRI-KON PRECAST PRODUCTS LTD.
601 PATTERSON STREET WEST, CRANBROOK, BC

PRECAST REINFORCED CONCRETE MANHOLE LIDS
1525mmØ LID
PLAN VIEW, REINFORCING LAYOUT AND SECTION

Drawing No.

S105

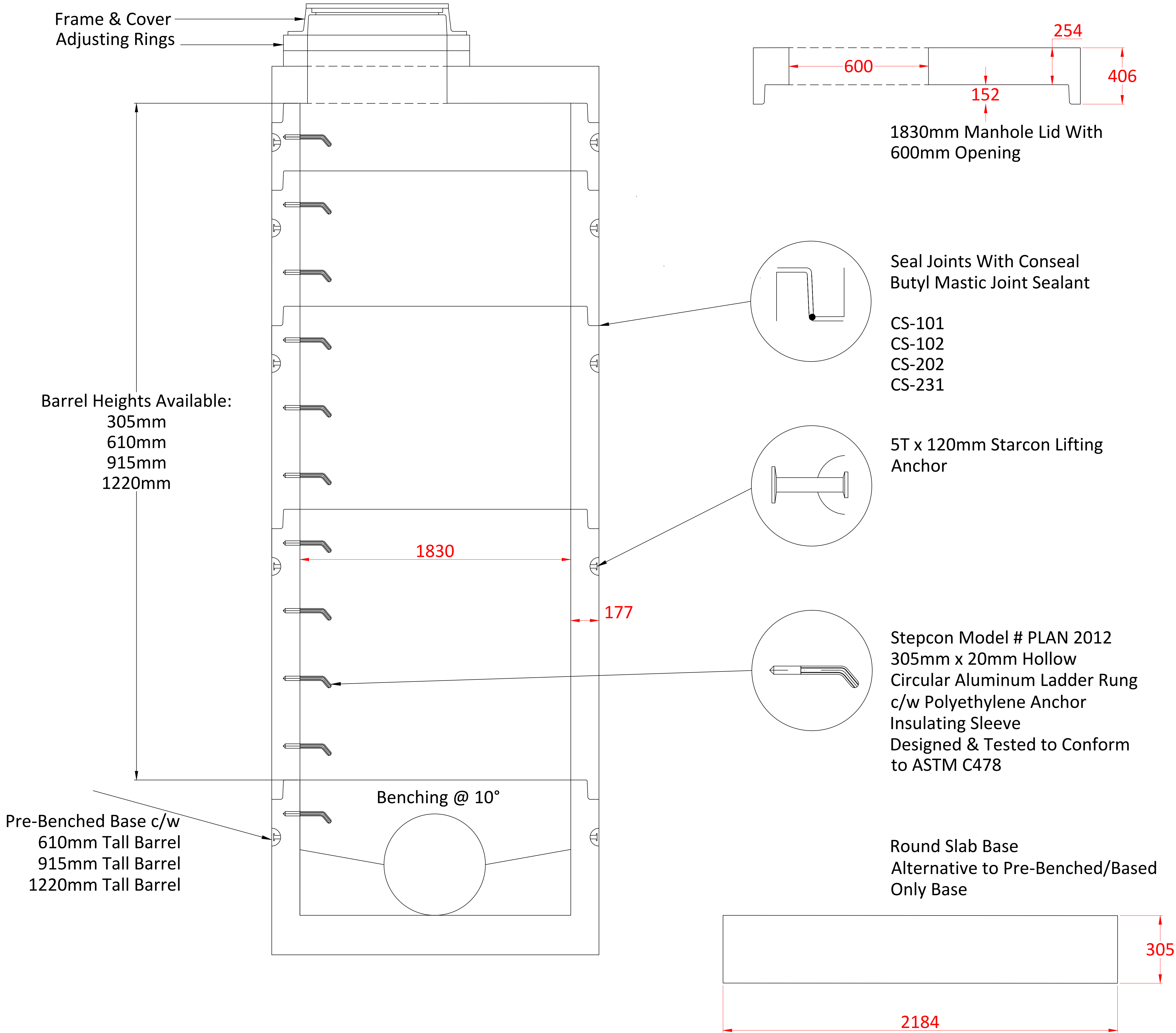
Project Number


2441-00705-00

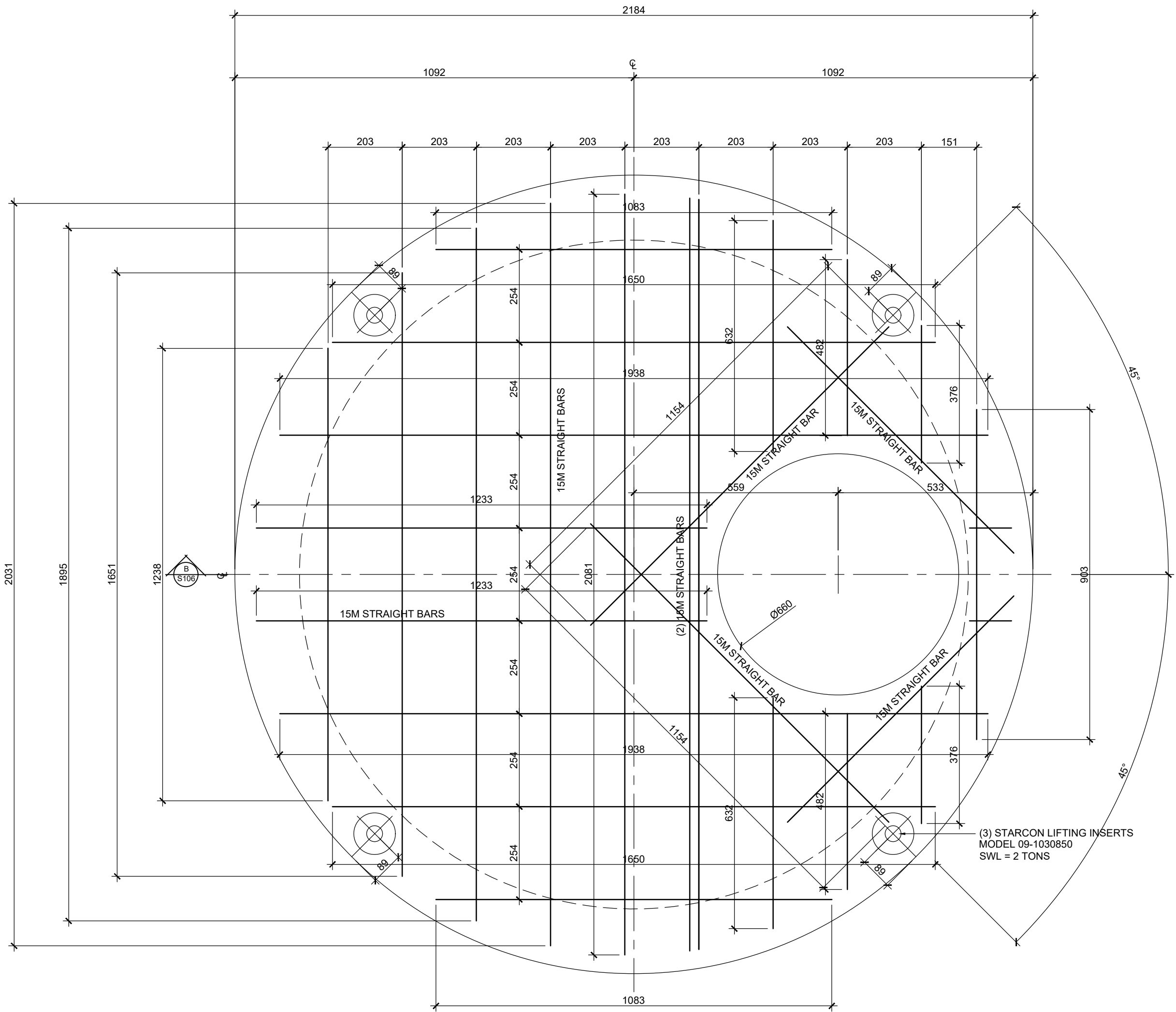
Rev.

1

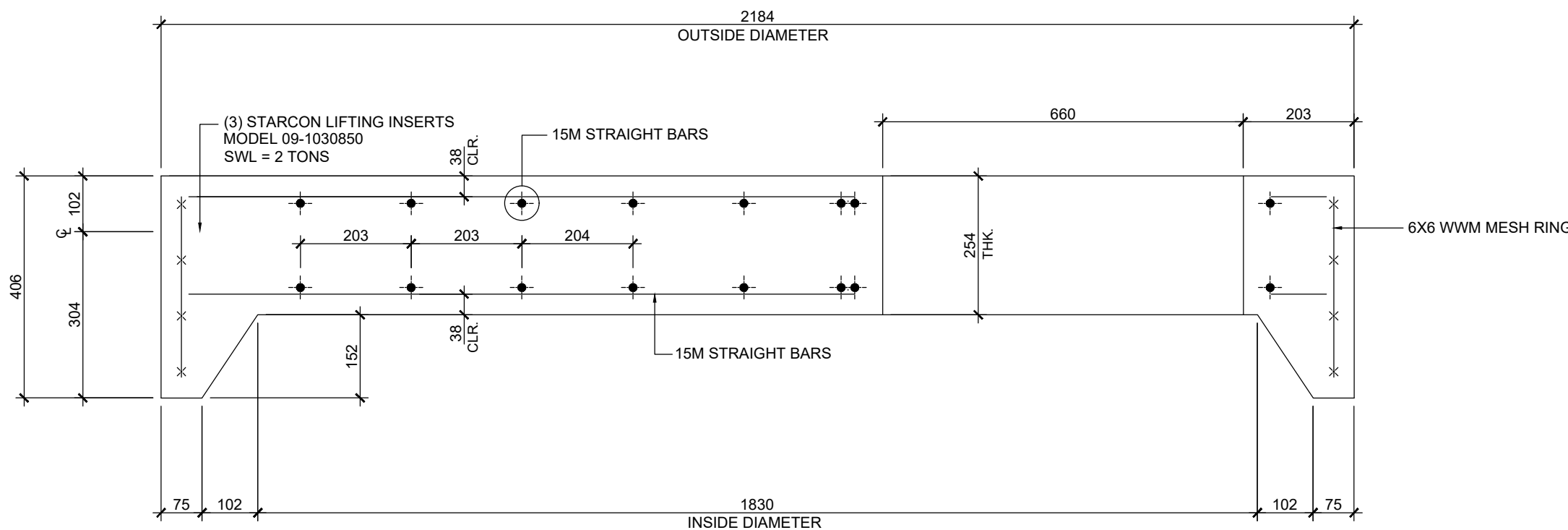
DESTROY ALL PRINTS BEARING PREVIOUS REVISION



General Notes		
0	0	00-00-00
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0	0	00-00-00
0	0	00-00-00
0	0	00-00-00
No.	Revision	RevDate
		
Project Name, Product Name and Location		
1830mm Manhole Material		
Contractor XXXX	Sheet 001	
Date 11-20-2023		
Scale 1:1		



A 1830mmØ PRECAST REINFORCED CONCRETE LID - REINFORCING LAYOUT
SCALE: 1:10



B 1830mmØ PRECAST REINFORCED CONCRETE LID - SECTION
SCALE: 1:10

STRUCTURAL SPECIFICATIONS

GENERAL

1. ALL CONSTRUCTION SHALL CONFORM TO ASTM C1433M STANDARDS AND SUBSEQUENT REVISIONS.
2. ALL REFERENCES TO STANDARDS SHALL REFER TO THE LATEST REVISED ISSUE.
3. THESE DRAWING PREPARED BY McELHANNEY CONSULTING SERVICES LTD. (McELHANNEY) ARE INTENDED FOR STRUCTURAL REQUIREMENTS OF THIS PROJECT ONLY. ALL OTHER ASPECTS ASSOCIATED WITH THIS PROJECT WHICH INCLUDE, BUT ARE NOT LIMITED TO CIVIL, GEOTECHNICAL, MECHANICAL, ELECTRICAL, ARE TO BE DESIGNED, SPECIFIED AND APPROVED BY OTHERS AND ARE CONSIDERED BEYOND McELHANNEY SCOPE OF WORK.
4. STRUCTURAL ELEMENTS PRESENTED ON THESE DRAWINGS ARE FOR PERMANENT STRUCTURE AND FOUNDATIONS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY AND CONSTRUCTION BRACING AND SUPPORT INCLUDING GEOTECHNICAL REQUIREMENTS UNTIL THE PROJECT IS COMPLETED.
5. REFER TO CIVIL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR DIMENSIONS, GRADES, SLEEVES, EQUIPMENT, SHAFTS, INSERTS, NAILERS, CHAMFERS, ETC. GRADES, ELEVATIONS AND SLOPES SHOWN ON STRUCTURAL DRAWINGS ARE FOR REFERENCE ONLY AND MUST BE CONFIRMED PRIOR TO CONSTRUCTION.

FIELD REVIEWS BY McELHANNEY CONSULTING SERVICES LTD.

1. McELHANNEY ASSUMES NO RESPONSIBILITY FOR FIELD REVIEWS OF THE CONSTRUCTION OR VERIFICATION OF THE CONSTRUCTION UNLESS EXPRESSLY RETAINED TO DO SO.
2. McELHANNEY CONSULTING SERVICES LTD. (McELHANNEY) PROVIDE FIELD REVIEWS ONLY FOR THE WORK SHOWN ON THESE DRAWINGS. FIELD REVIEWS BY McELHANNEY ARE PERIODIC AND AT THE SOLE DISCRETION OF McELHANNEY IN ORDER TO ASCERTAIN THAT THE WORK IS IN GENERAL CONFORMANCE WITH THE DESIGN DRAWINGS AND SUPPORTING DOCUMENTS.
3. FIELD REVIEWS BY McELHANNEY ARE NOT FOR THE CONTRACTORS BENEFIT NOR DOES IT MAKE McELHANNEY GUARANTORS OF THE CONTRACTORS WORK. IT REMAINS THE CONTRACTORS RESPONSIBILITY TO BUILD THE WORK IN CONFORMANCE WITH THE CONTRACT DOCUMENTS.
4. McELHANNEY WILL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUB-CONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
5. IF McELHANNEY IS RETAINED FOR FIELD REVIEWS THEN THE CONTRACTOR IS TO PROVIDE 24 HOUR NOTICE PRIOR TO CONCRETE POURS.

CONCRETE

1. PREPARATION, PLACING, FINISHING AND TESTING OF CONCRETE IS TO CONFORM TO CSA A23.1. AND CSA A23.2
2. BEFORE PLACING CONCRETE, THE CONTRACTOR SHALL CHECK ALL APPLICABLE DRAWINGS FOR ANCHOR BOLTS, INSERTS, EMBEDS, RECESSES AND BLOCKOUTS. THEIR LOCATIONS SHALL BE CONFIRMED BY THE VARIOUS SUBTRADES.
3. CONCRETE COVER OVER REINFORCING IS TO BE AS SHOWN ON DRAWINGS.

CONCRETE PROPERTIES:

ITEM	28 DAY STRENGTH	EXPOSURE	W/C	AIR (%)	CEMENT TYPE	AGG. SIZE (mm)
PRECAST CONCRETE	30 MPa	F1	.40	4 - 7	HS	20

REINFORCING STEEL

1. REINFORCING STEEL IS TO CONFORM TO CSA G30.12M - GRADE 400 MPa.
2. REINFORCING STEEL BENDS AND OTHER DETAILS OF REINFORCEMENT PLACEMENT SHALL BE IN ACCORDANCE WITH CAN/CSA A.23.1. AND ALSO THE REINFORCING STEEL INSTITUTE OF CANADA "MANUAL OF STANDARD PRACTICE".
3. REINFORCING STEEL IS TO BE PLACED AS DETAILED TO 10mm TOLERANCE AND IS TO BE SUPPORTED BY METAL OR PLASTIC SUPPORTS AND/OR HANGERS IN ACCORDANCE WITH CAN/CSA A23.1
4. LAP ALL REINFORCING BAR SPLICES 32 BAR DIAMETERS MINIMUM UNLESS INDICATED OTHERWISE ON THESE DRAWINGS.
5. REINFORCING STEEL IS TO BE CLEAN, FREE OF CORROSION AND UNDAMAGED.
6. DO NOT WELD BARS OR USE HEAT TO BEND REINFORCING STEEL.
7. UNLESS NOTED OTHERWISE MINIMUM CONCRETE COVER IS TO BE 38mm CLEAR

PRECAST COMPONENT LIFTING AND RIGGING

1. THE PRECAST CONTRACTOR IS RESPONSIBLE FOR ALL RIGGING AND LIFTING PROCEDURES REQUIRED TO ENSURE SAFE LIFTING AND PLACEMENT OF PRECAST CONCRETE COMPONENTS IN ACCORDANCE WITH INDUSTRY STANDARDS AND WORKSAFE BC REQUIREMENTS.
2. THE CONTRACTOR IS TO ENSURE THAT THE HOISTING DEVICES INCLUDING ALL ASSOCIATED ACCESSORIES (SHACKLES, SLINGS, PINS ETC.) ARE RATED TO THE APPLICABLE LOAD AND ARE IN GOOD WORKING CONDITION.
3. THE CONTRACTOR IS TO ENSURE THAT ALL PERSONNEL OPERATING OR WORKING WITH THE HOISTING DEVICES ARE PROPERLY TRAINED, EXPERIENCED AND CERTIFIED ON THE HOISTING DEVICE.

Rev	Date	Description	Drawn	Design	App'd
1	FEB 1, 2021	CONCRETE STRENGTH REVISED	bpr	bm	bm
0	FEB 26, 2018	ISSUED FOR "CONSTRUCTION"	bpr	bm	bm

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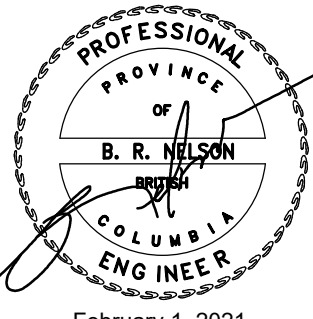
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Canada V1C 7H9
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February 1, 2021
Approved Sealed

TRI-KON PRECAST PRODUCTS LTD.
601 PATTERSON STREET WEST, CRANBROOK, BC

PRECAST REINFORCED CONCRETE MANHOLE LIDS
1830mmØ LID
REINFORCING LAYOUT AND SECTION

Drawing No.

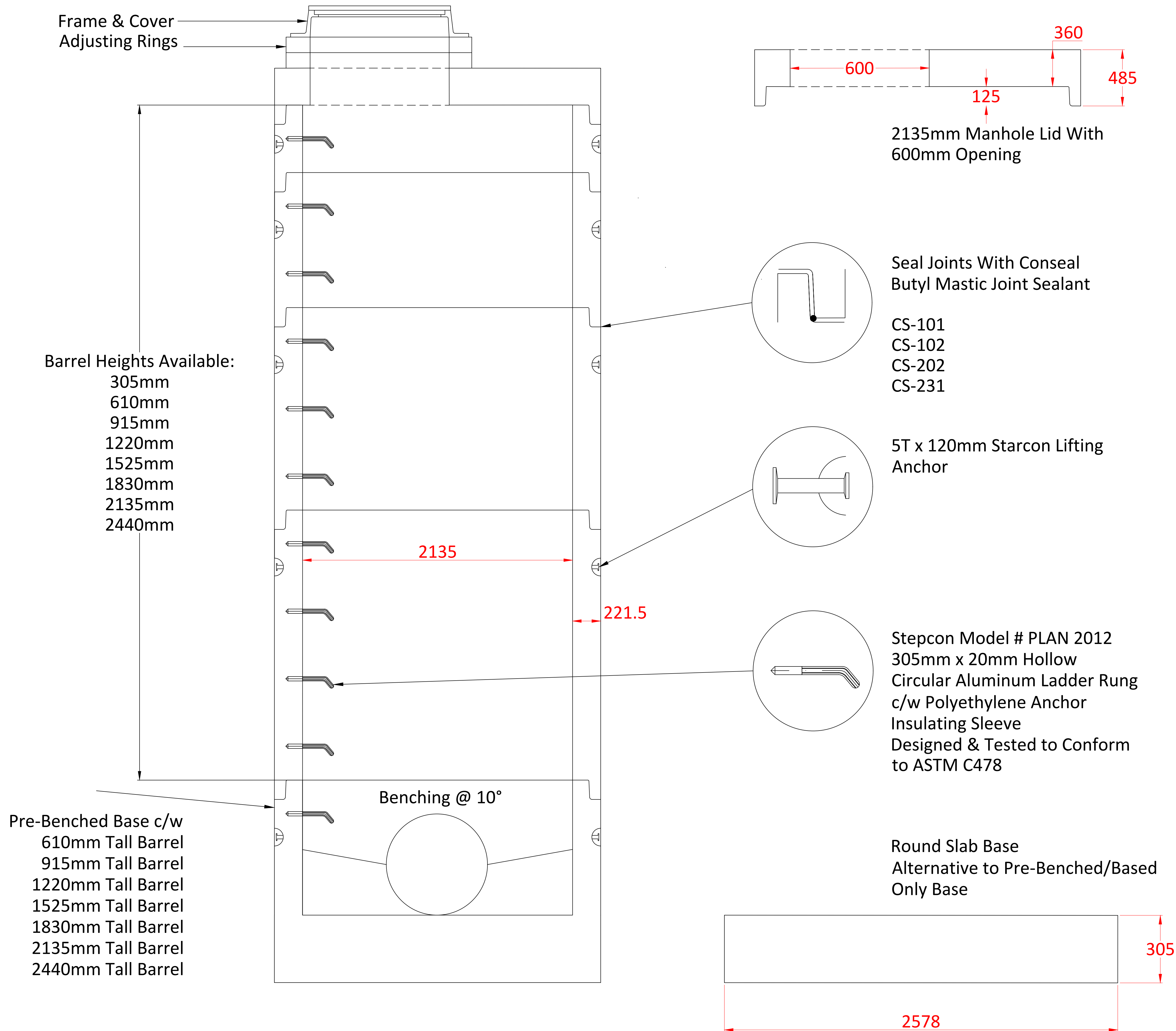
S106

Project Number

2441-00705-00

Rev.

1



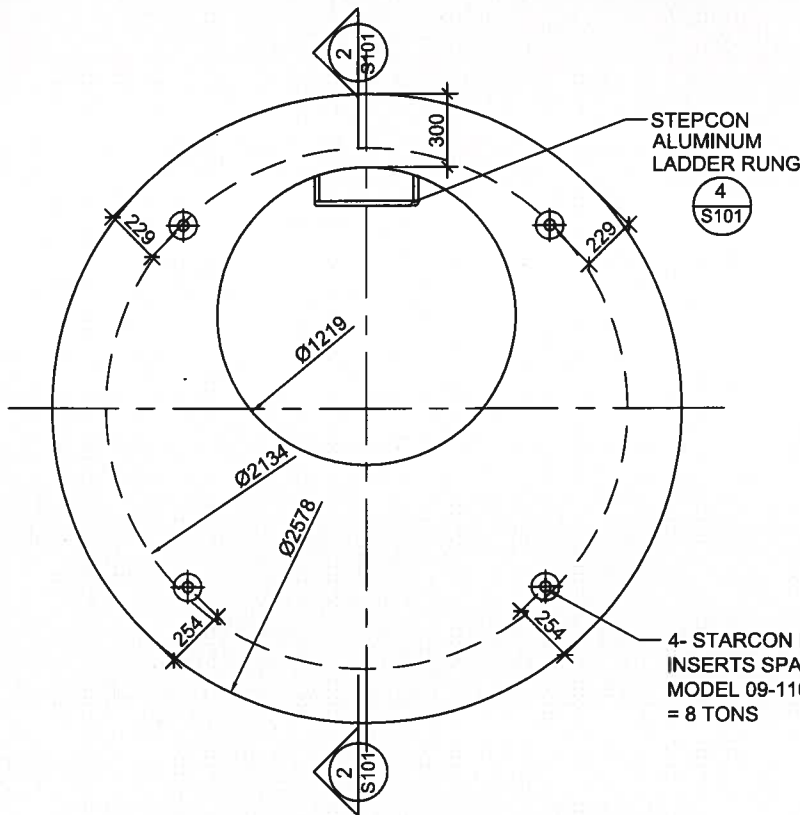
General Notes

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No.	Revision	RevDate

Project Name, Product Name and Location

2135mm Manhole Material

Contractor	Sheet
XXXX	001
Date	
11-20-2023	
Scale	
1:1	



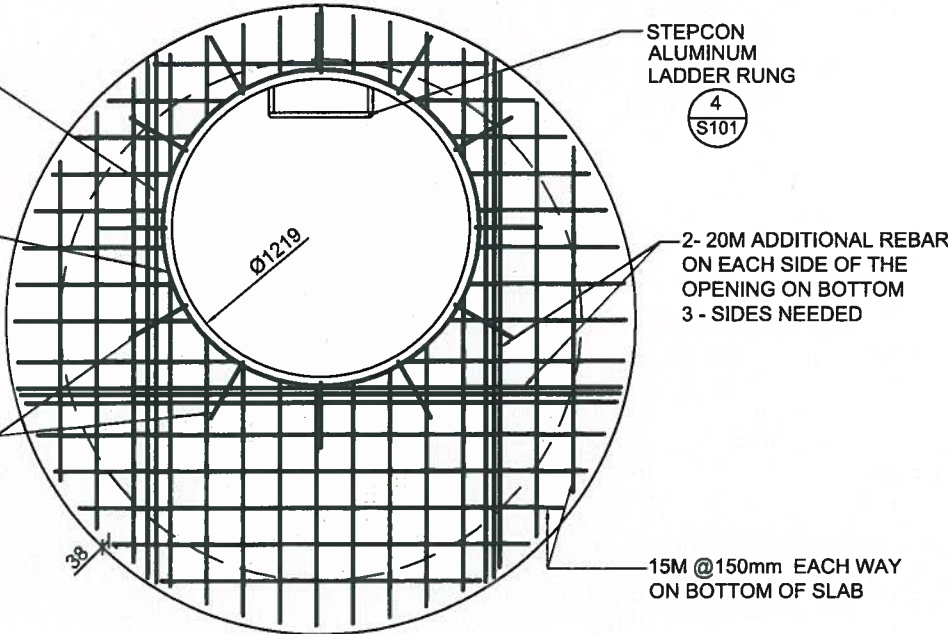
1 MANHOLE SLAB TOP VIEW
SCALE: 1:30

2- 20M ADDITIONAL REBAR
ON EACH SIDE OF THE
OPENING ON BOTTOM
3-SIDES NEEDED

15M CIRCULAR REBAR
AROUND THE PERIMETER
OF THE OPENING
TOP & BOTTOM

10M @ 300mm AROUND
THE PERIMETER OF THE
OPENING
250
250

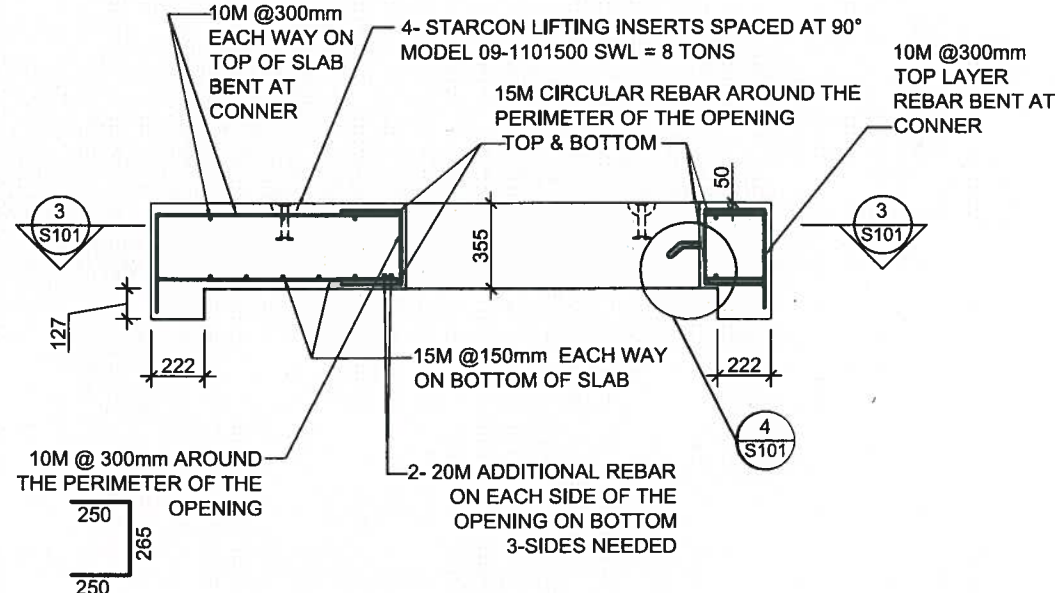
4- STARCON LIFTING
INSERTS SPACED AT 90°
MODEL 09-1101500 SWL
= 8 TONS



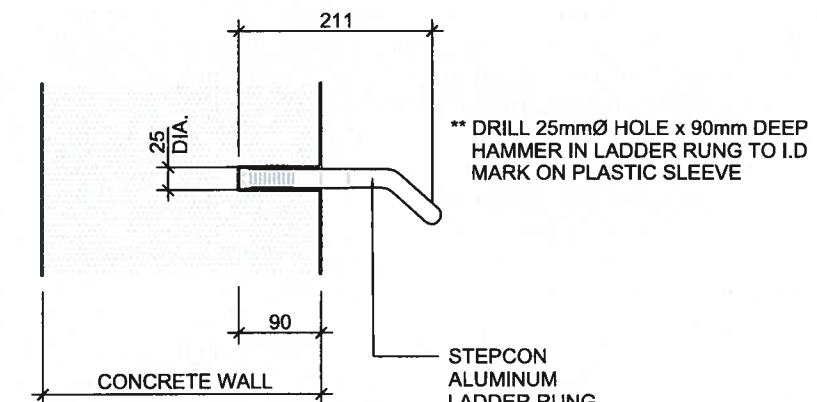
3 BOTTOM REINFORCING STEEL
SCALE: 1:30

2- 20M ADDITIONAL REBAR
ON EACH SIDE OF THE
OPENING ON BOTTOM
3 - SIDES NEEDED

15M @150mm EACH WAY
ON BOTTOM OF SLAB



2 CROSS SECTION
SCALE: 1:30



4 LADDER RUNG DETAIL
SCALE: 1:8

NOTES GENERAL

- 1) ALL REFERENCES TO STANDARDS SHALL REFER TO THE LATEST REVISED ISSUE
- 2) THE STRUCTURAL ENGINEER ASSUMES NO RESPONSIBILITY FOR INSPECTION OF CONSTRUCTION OR VERIFICATION OF THE CONSTRUCTION UNLESS EXPRESSLY RETAINED TO DO SO.

DESIGN PARAMETERS

- 1) DESIGN METHODOLOGY - LSD
- 2) DESIGN ASSUMES 75mm GRANULAR COVER OR LESS
- 3) DESIGN ASSUMES CL625/CL800 AXLE LOADING AS PER CSA-S6
- 4) DESIGN MEETS CSA-S6 SPECIFICATIONS
- 5) JOINTS MEET ASTM C990M SPECIFICATIONS

CONCRETE

- 1) ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH SPECIFICATIONS AND CSA STANDARD CAN/CSA-A23.1-14 AND CAN/CSA-A23.2-14, FOR PRECAST CONCRETE WORK REFER TO CSA-A23.4-16.
- 2) CONCRETE PROPERTIES:

ITEM	AGG. SIZE	28 DAY STRENGTH	W/C RATIO	AIR	TYPE
ALL	20mm	45 MPa.	0.50	5%-8%	HS

- 3) BEFORE PLACING CONCRETE, THE CONTRACTOR SHALL CHECK ALL APPLICABLE DRAWINGS FOR ANCHOR BOLTS, INSERTS, EMBEDS, RECESSES AND BLOCKOUTS. THEIR LOCATIONS SHALL BE CONFIRMED BY THE VARIOUS SUBTRADES.

- 4) CONCRETE COVER OVER REINFORCEMENT IS TO BE:
 - a. 38mm FOR THE PRECAST CONCRETE UNLESS OTHER NOTED
 - b. 50mm FOR THE CAST IN CONCRETE

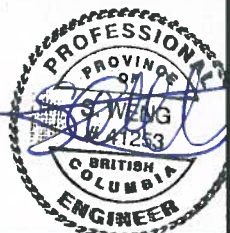
REINFORCING STEEL

- 1) STEEL REINFORCEMENT SHALL BE MINIMUM GRADE 400 MPa. DEFORMED BARS CONFORMING TO CAN/CSA G30.18M92 9R2002.
- 2) REINFORCING STEEL IS TO BE PLACED AS DETAILED TO 10mm TOLERANCE AND IS TO BE SUPPORTED BY METAL OR PLASTIC SUPPORTS AND/OR HANGERS IN ACCORDANCE WITH CAN/CSA A23.1
- 3) LAP ALL REINFORCING BAR SPLICES 32 BAR DIAMETERS MINIMUM UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
- 4) REINFORCING STEEL IS TO BE CLEAN, FREE OF CORROSION AND UNDAMAGED.
- 5) DO NOT WELD BARS OR USE HEAT TO BEND REINFORCING STEEL.

REFERENCE DRAWINGS

- 1) STRUCTURAL SIZING IS BASED ON DESIGN DRAWINGS PREPARED BY INLAND PIPE DATED 15-11-15. (2100 MANHOLE SLAB TOP, REV1).
- 2) IF CHANGES ARE MADE TO THE LAYOUT OF THE STRUCTURE, OR SITE CONDITIONS VARY FROM ASSUMED, OR THE ASSUMED LOAD PATHS ARE ALTERED (RELOCATED ELEMENTS, ETC), THE STRUCTURAL ENGINEER SHOULD BE NOTIFIED SUCH THAT CHANGES CAN BE MADE TO THE DESIGN IF REQUIRED.

NO.	DATE	DESCRIPTION	DRAWN	DESIGN	APP'D
1	JULY-05-2017	ISSUE FOR CONSTRUCTION	SW	SW	SW



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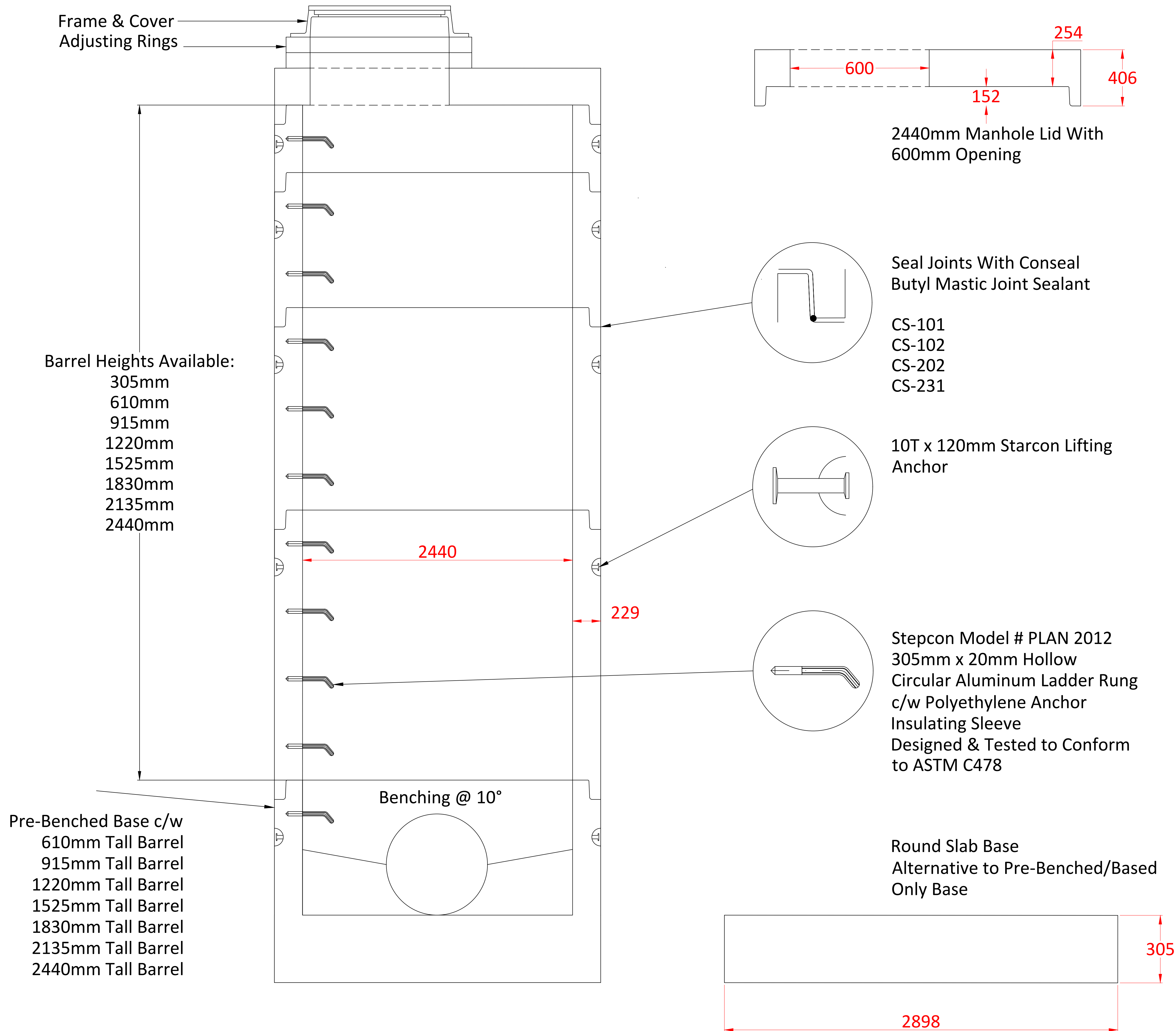
TRIKON PRECAST CONCRETE PRODUCTS
2100mm MANHOLE SLAB TOP
PLAN, SECTIONS, AND NOTES

SC Engineering Ltd.
Structural & Civil Consulting Services

PROJECT NUMBER			
170100430			
SHEET	S101	REV	0

CRANBROOK, BC, V1C 6R6 Canada
Tel: 250-581-1399

July 05, 2017



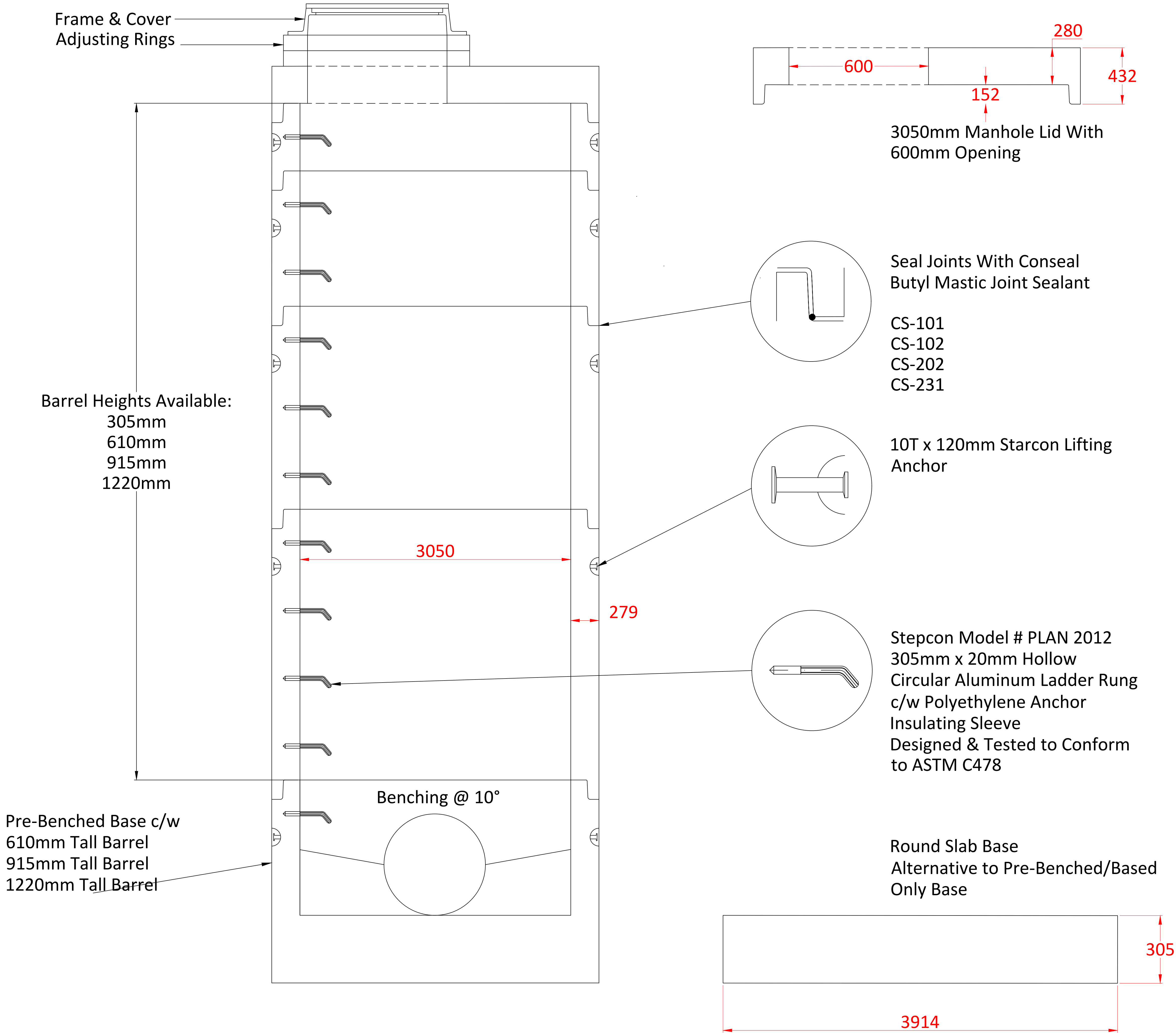
General Notes

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0	0	00-00-00
0	0	00-00-00
No.	Revision	RevDate


Project Name, Product Name and Location

2440mm Manhole Material

Contractor XXXX	Sheet 001
Date 11-20-2023	
Scale 1:1	



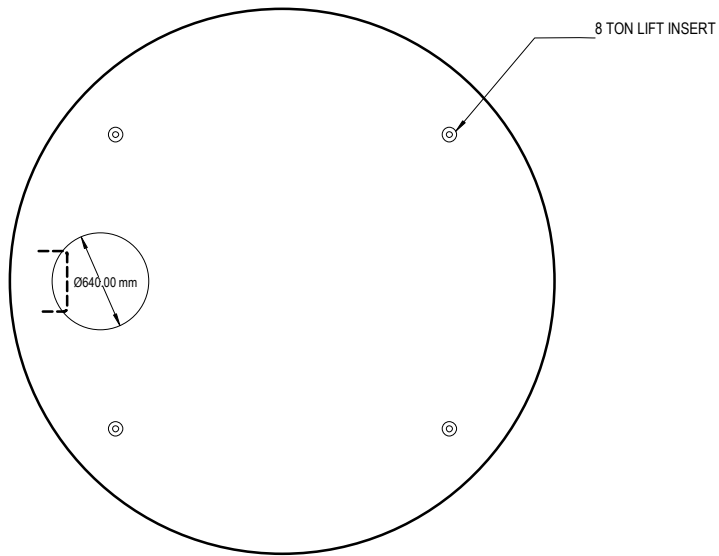
General Notes		
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No.	Revision	RevDate



Project Name, Product Name and Location

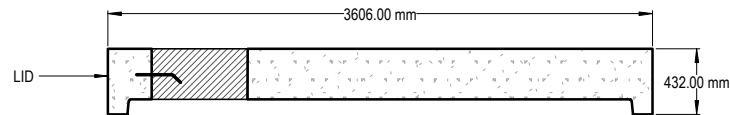
3050mm Manhole Material

Contractor XXXX	Sheet 001
Date 11-20-2023	
Scale 1:1	

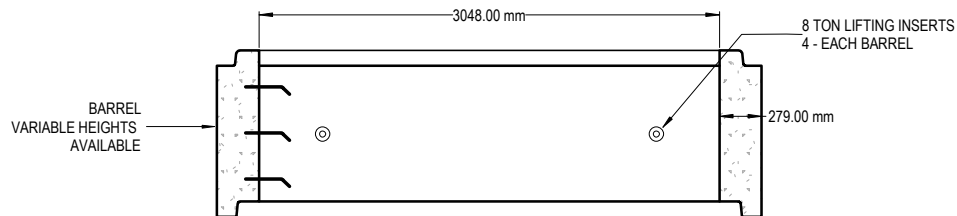


PLAN VIEW OF LID

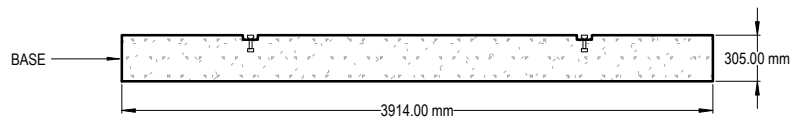
NOTES:
 3050 MANHOLE BARREL MANUFACTURED TO ASTM C478
 BARREL SUPPLIED WITH ALUMINUM LADDER RUNGS @ 305mm o/c
 MINIMUM CONCRETE STRENGTH @ 7 DAYS: 35MPA
 BARREL WEIGHT APPROX: 14,300 LBS (6500KG) / VERTICAL METRE
 BASE WEIGHT APPROX: 18,000 LBS (8165KG)
 LID WEIGHT APPROX: 16,700 LBS (7560KG)



SECTION VIEW OF LID



SECTION VIEW OF BARREL /BASE



3050 MANHOLE BARREL

SCALE 1:50

MARCH 23/2011

DRAWN: RAB

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 www.trikonprecast.com

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