



Parks Canada

Strategic Asset
Management,
Western and Northern
Region

Parcs Canada

Gestion Stratégique
des Biens,
Région de l'Ouest et
du Nord

Canada

PARKS CANADA

RIDING MOUNTAIN NATIONAL PARK WASAGAMING STORM WATER MANAGEMENT SYSTEM WASAGAMING, MANITOBA

ISSUED FOR TENDER

January 2018

Project Number: 827.03

DRAWING INDEX

SHEET No.

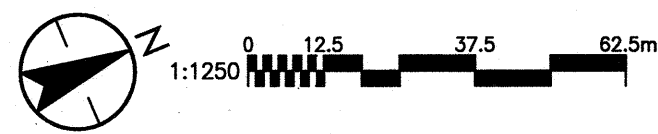
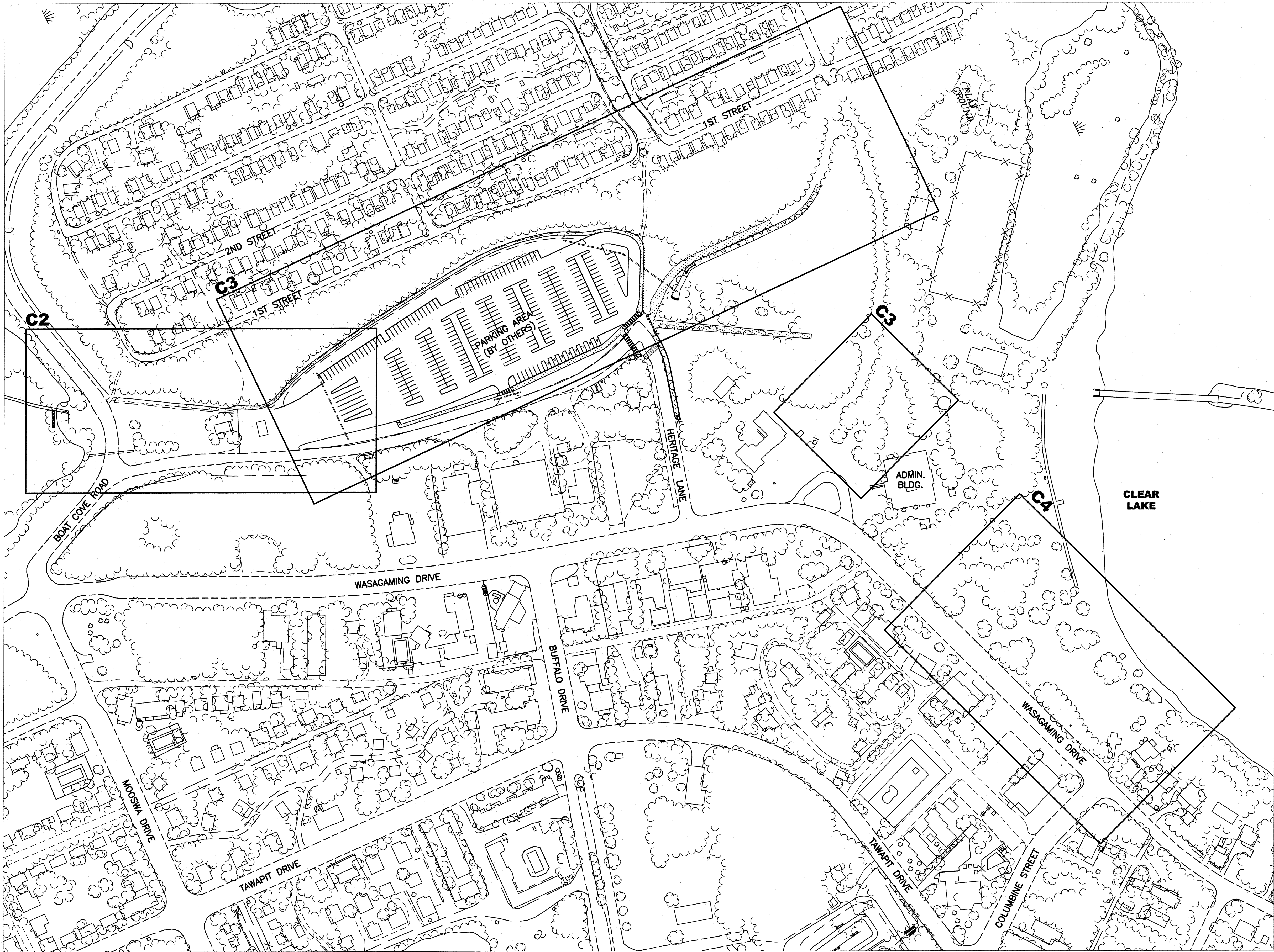
G1 of 1

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SHEET TITLE

COVER SHEET & DRAWING INDEX

OVERALL STORM WATER SERVICING PLAN
PLAN & PROFILE - 600Ø GRAVITY SEWER STA. 1+00 TO STA. 2+78.1
PARKING AREA SWALE TO 1st STREET & WEST OUTFALL STORMCEPTOR
PLAN & PROFILE - GRAVITY SEWER STA. 1+00 TO COLUMBINE ST.
DETAILS



WARNING

IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:
1) NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.
2) TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.
SEE PROVINCIAL REGULATION 140/92 FOR DETAILS

METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

EXISTING	LEGEND	PROPOSED
150 WM	WATERMAIN	150 WM
300 LBS	LAND DRAINAGE SEWER	300 LBS
250 WWS	WASTE WATER SEWER	250 WWS
○	MANHOLE	●
□	CATCH BASIN	■
▽	CURB INLET	▼
—	CULVERT	—
—	ASPHALT	—
+	SURVEY BAR	+
←	SWALE	←
*617.12	ELEVATION	x (616.53)
⊙	SWALE ELEVATION	(616.3)
⊙	BOLLARD	
—	BUSH	
—	COMPACTED CLAY FILL	—
—	GRAVEL PARKING LOT	—
—	BUILDING	—

02	2016-01-24	ISSUED FOR TENDER	KR	RS
01	2016-01-12	ISSUED FOR REVIEW	KR	RS
No.	Date	Description	Drawn by Dessiné par	Approved Approuvé

Revision / Revision

A	Detail number	A Numéro de détail
B	Sheet number	B Numéro de la feuille

Linear dimensions
In millimetres

Dimensions linéaires
en millimètres

Consultant's Name
Nom de l'expert-conseil

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Suite 500, 311 Portage Ave.
Winnipeg MB Canada R3B 2B9
Tel. 204.489.5900
Fax. 204.453.9012
www.stantec.com

Eng. Stamp
Sceau de l'ingénieur

PROVINCE OF MANITOBA
REGISTERED PROFESSIONAL ENGINEER
SW 34116
S. W. LOCK
MANITOBA
1998

Parks Canada
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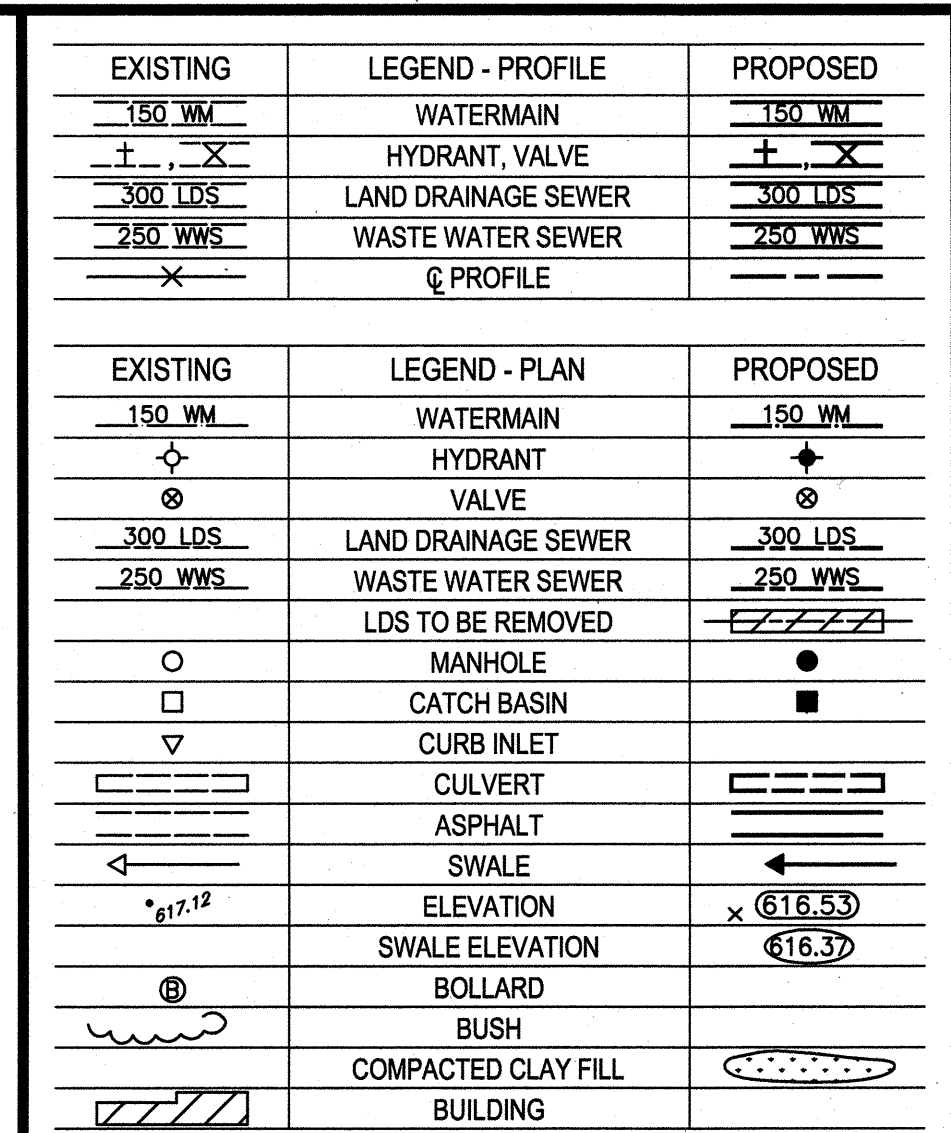
Canada

**ENGINEERS
GEOSCIENTISTS
MANITOBA**
Certificate of Authorization
Stantec Consulting Ltd.
No. 1301


Project title/Titre du projet
**RIDING MOUNTAIN NATIONAL PARK
WASAGAMING STORM WATER
MANAGEMENT SYSTEM
WASAGAMING, MANITOBA**



Drawing title/Titre du dessin
**OVERALL STORMWATER
SERVICING PLAN**

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
RS	KR	2016-10-12
Designed by/Concept par	Reviewed by/Revisé par	Scale/Echelle
RS	RS	
Client Acceptance/Acceptation du client	Approved by/Approuvé par	
Date	Date	
Project No./N° du projet	Asset No./N° du bien	Sheet No./N° de la feuille
827.03		C1 of 05
Drawing Set No./N° de série du dessin		



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No.	Date	Description	Drawn by Dessiné par	Approved Approuvé

Revision / Revision	
	Detail number Sheet number
A Numéro de detail B Numéro de la feuille	

<p>Linear dimensions in millimetres</p> <p>Consultant's Name Nom de l'expert-conseil</p>  <p>Stantec</p> <p>Suite 500, 311 Portage Ave. Winnipeg MB Canada R3B 2B9</p> <p>Tel. 204.489.5900 Fax. 204.453.9012 www.stantec.com</p>	<p>Dimensions linéaires en millimètres</p> <p>Eng. Stamp Sceau de l'ingénieur</p> 
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No. 1301

Project title/Titre du projet

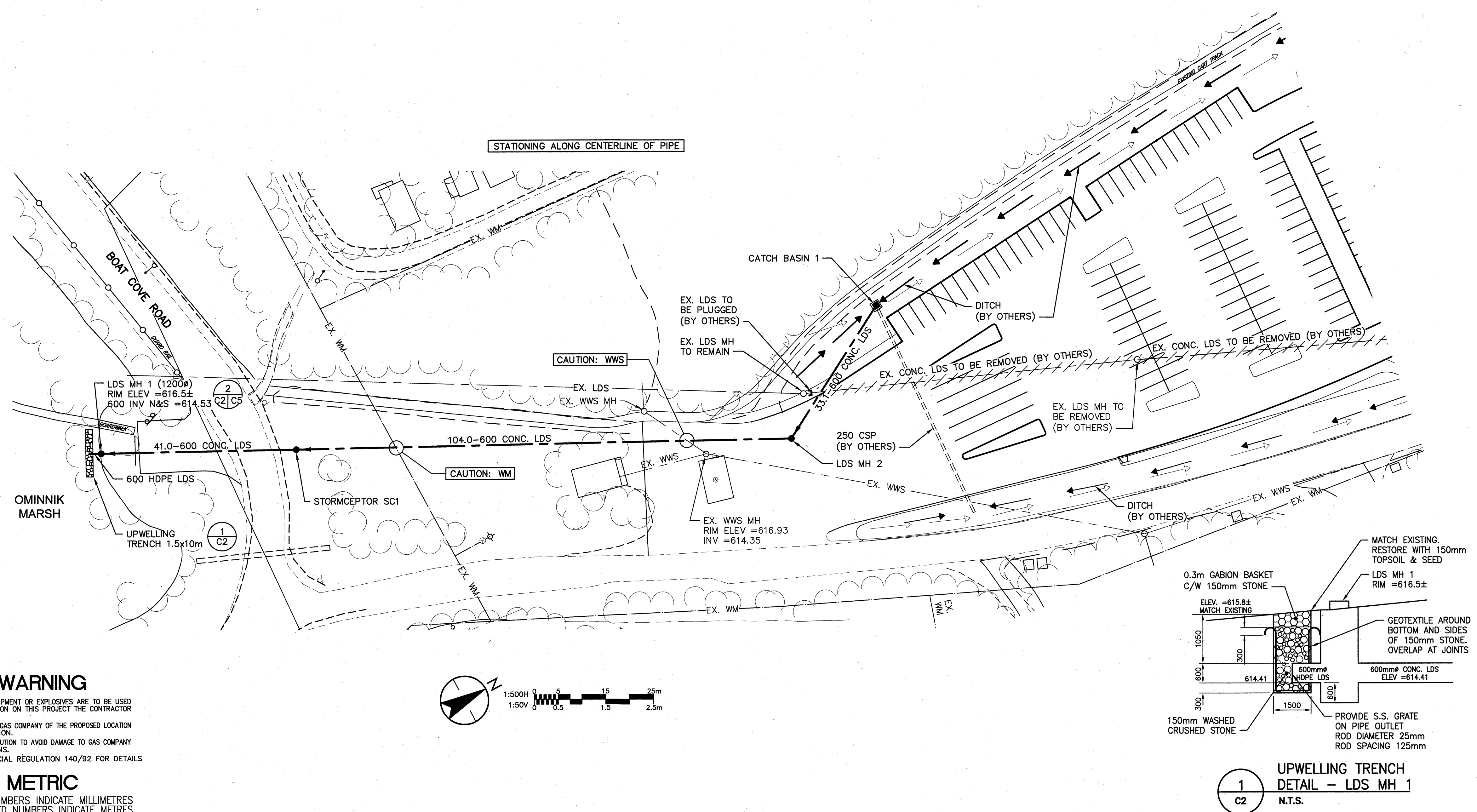
RIDING MOUNTAIN NATIONAL PARK WASAGAMING STORM WATER MANAGEMENT SYSTEM WASAGAMING, MANITOBA

Drawing title/Titre du dessin

PLAN & PROFILE
600Ø GRAVITY SEWER
STA. 1+00 TO 2+78.1

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
	KR	2016-10-12
Designed by/Concept par	Reviewed by/Revisé par	Scale/Echelle
RS	RS	
Client Acceptance/Acceptation du client	Approved by/Approuvé par	
Date	Date	

Project No./Nº du projet 827.03	Asset No./Nº du bien	Sheet No./ Nº de la feuille
Drawing Set No./Nº de série du dessin		C2 of 05



WARNING

IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:

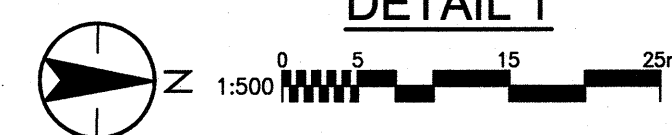
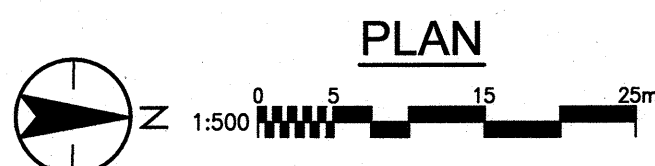
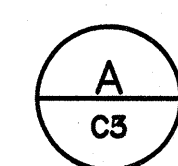
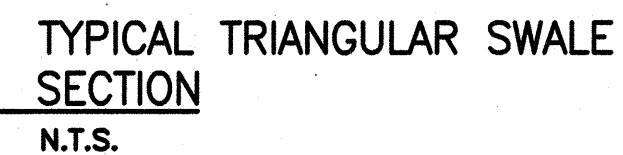
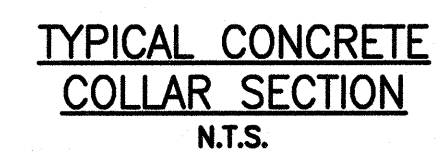
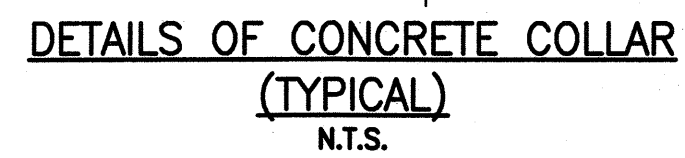
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- 2) TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.

SEE PROVINCIAL REGULATION 140/92 FOR DETAILS.

METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

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2018/01/24 3:24 PM By: Ramnarace, Kesh



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DECIMALIZED NUMBERS INDICATE METRES

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No.	Date	Description	Drawn by Design par	Approved Approve

Linear dimensions in millimetres	Dimensions linéaires en millimètres
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Consultant's Name Nom de l'expert-conseil	Eng. Stamp Sceau de l'ingénieur
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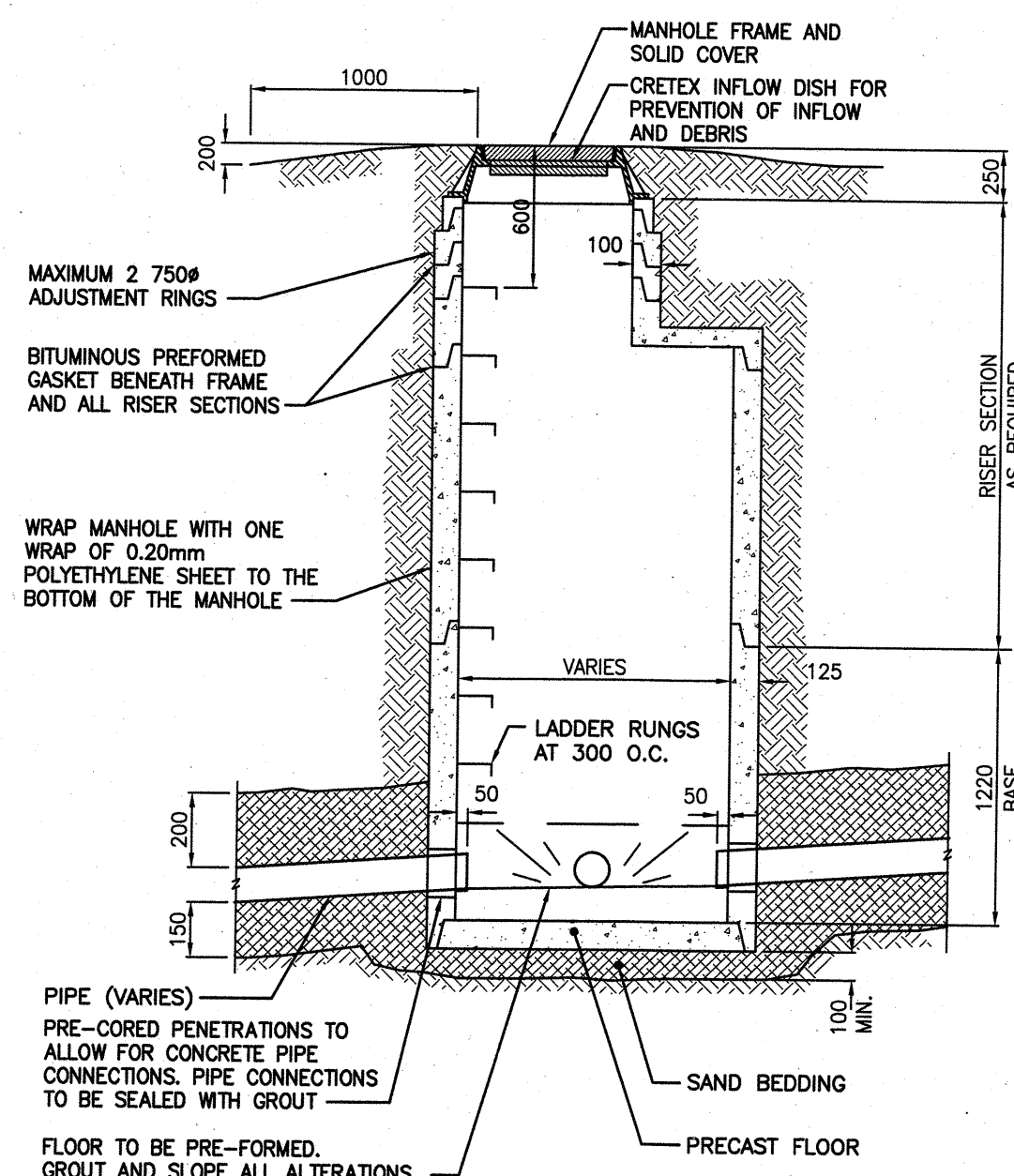
Project title/Titre du projet

RIDING MOUNTAIN NATIONAL PARK
WASAGAMING STORM WATER
MANAGEMENT SYSTEM
WASAGAMING, MANITOBA

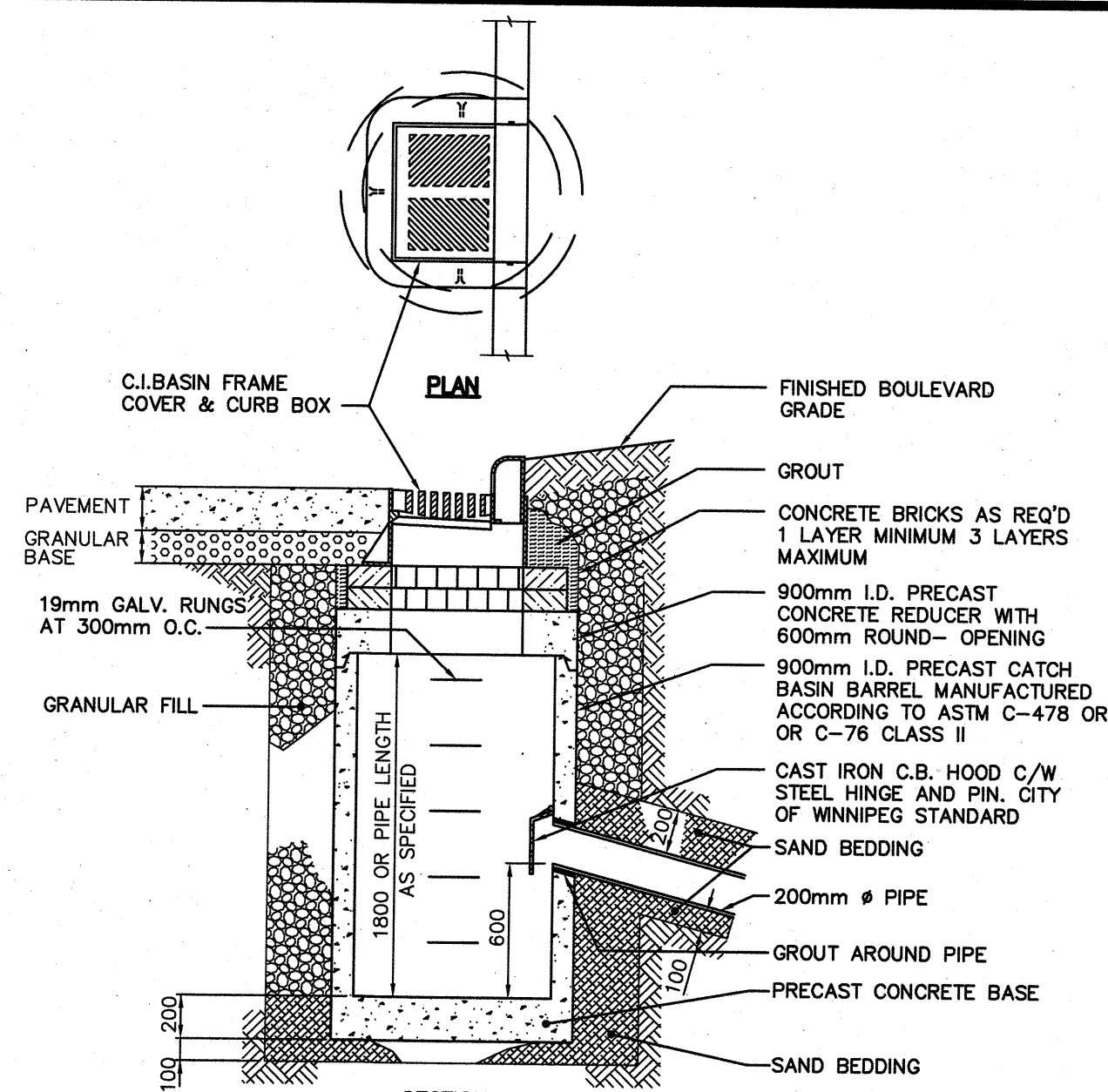
Drawing Title/Titre du dessin

PARKING AREA SWALE
TO 1st STREET &
WEST OUTFALL STORMCEPTOR

Surveyed by/Arpenté par		Drawn by/Dessiné par		Date
KR		KR		2016-10-12
Designed by/Concept par		Reviewed by/Revisé par		Scale/Echelle
RS		RS		
Client Acceptance/Acceptation du client			Approved by/Approuvé par	
Date			Date	
Project No./Nº du projet		Asset No./Nº du bien		Sheet No./ Nº de la feuille
827.03				
Drawing Set No./Nº de série du dessin				
		C3 of 05		

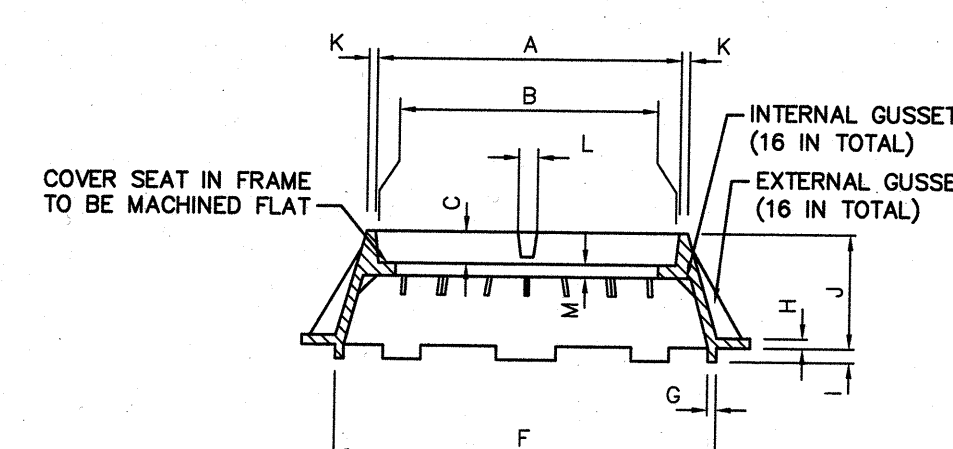
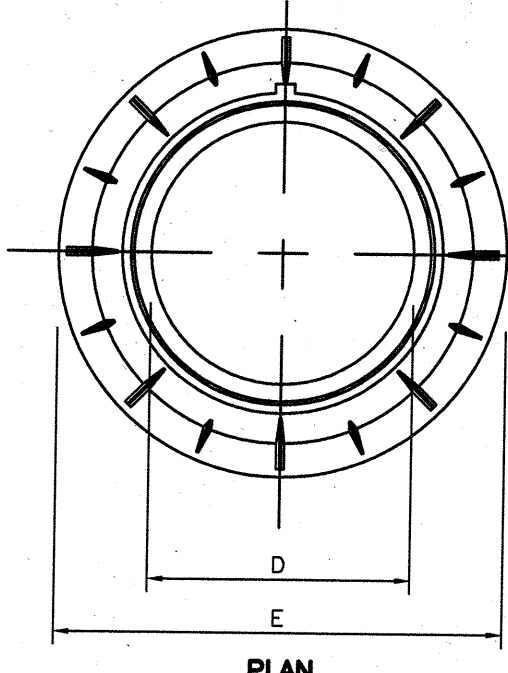


2
C2 C5
TYPICAL MANHOLE SECTION
N.T.S.

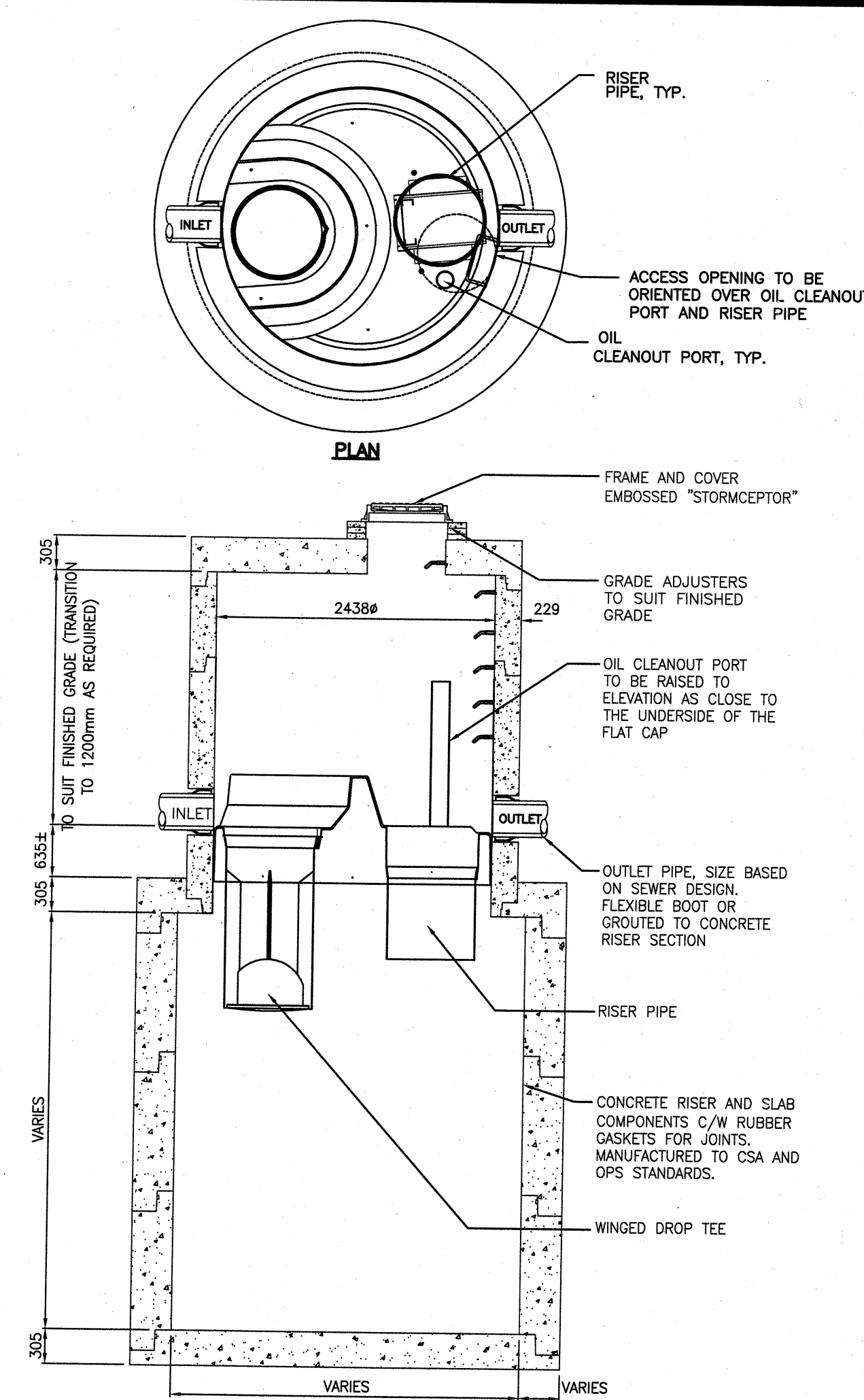


3
C4 C5
SECTION CATCH BASIN
DETAIL
N.T.S.

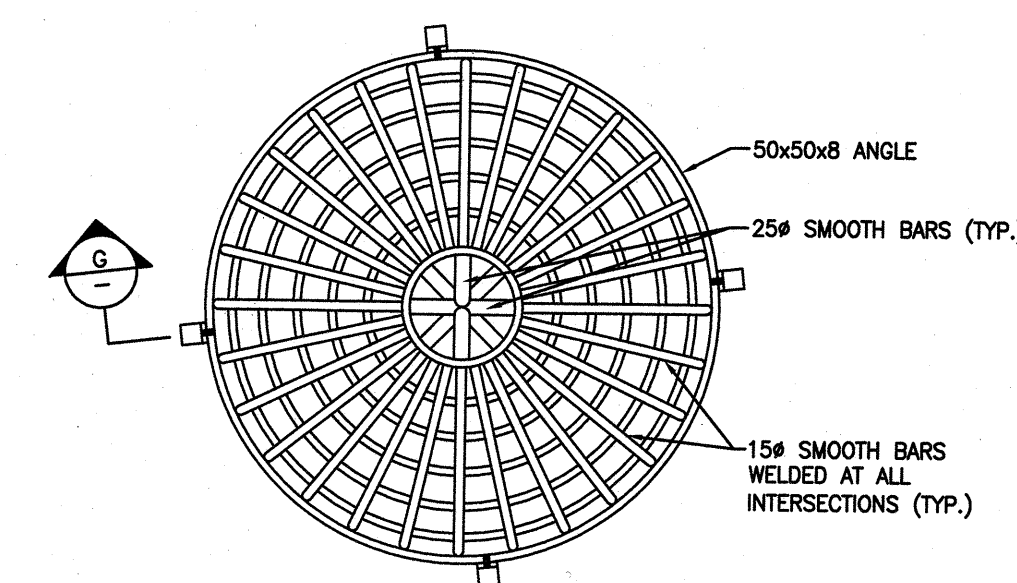
NOTE: CATCH BASINS TO HAVE CURB & GUTTER FRAME AND COVER, GRATED COVER OR DITCH INLET GRATE AS NOTED IN DRAWINGS.



5
MANHOLE FRAME
DETAIL
N.T.S.

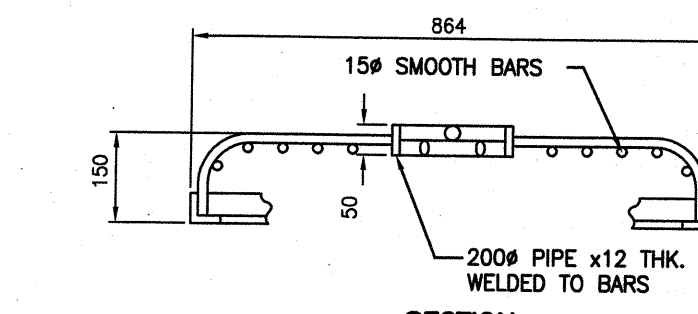


1
STORMCEPTOR DETAIL
N.T.S.

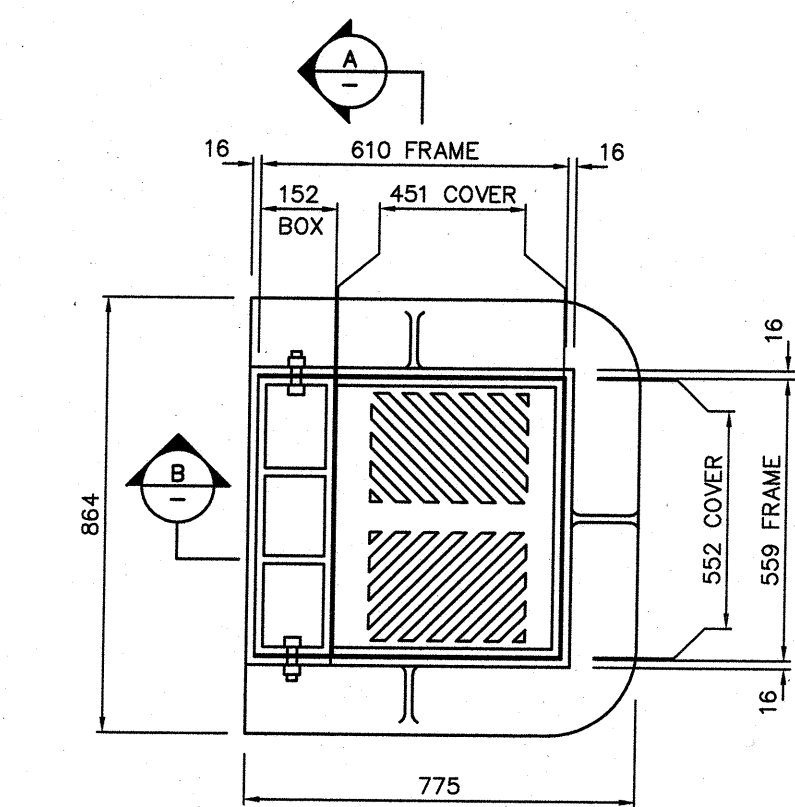


NOTES:
DITCH INLET GRATE TO BE SHOPOST IRONWORKS MK. A1 OR APPROVED EQUAL GALVANIZE ENTIRE ASSEMBLY AFTER FABRICATION.

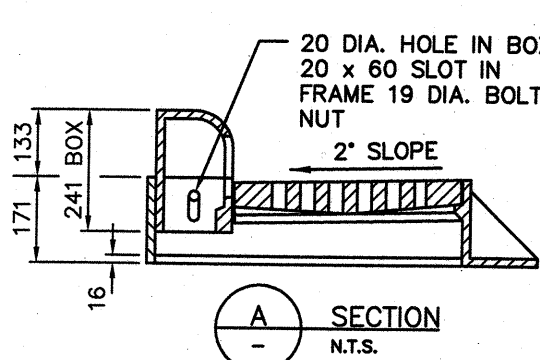
9
DITCH INLET GRATE
DETAIL
1:10



G
DITCH INLET GRATE ATTACHMENT
SECTION
N.T.S.

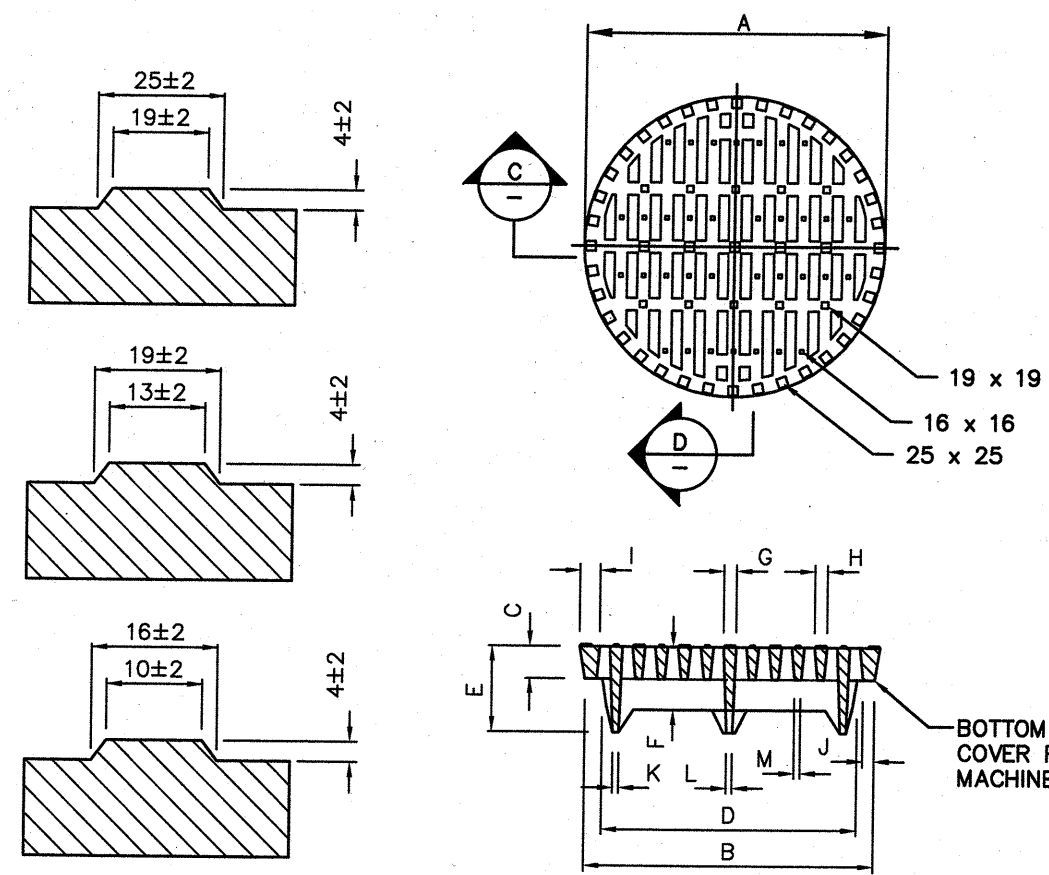


4
BARRIER CURB AND GUTTER
DETAIL
N.T.S.

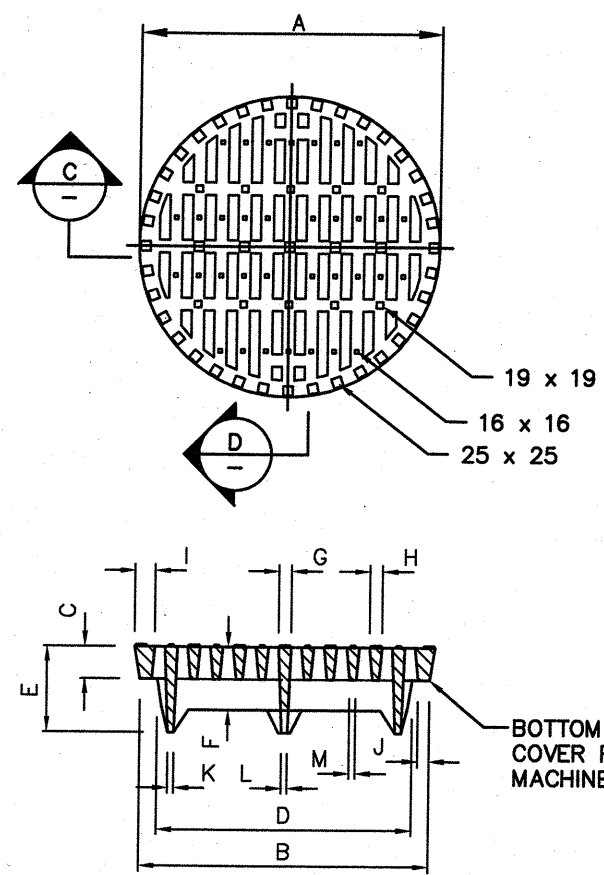


A
SECTION
N.T.S.

B
SECTION
N.T.S.



CHECKER DETAILS
N.T.S.

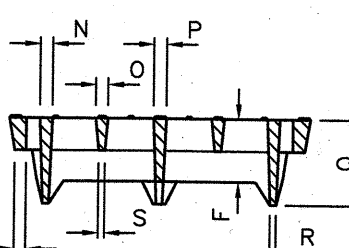


C
SECTION
N.T.S.

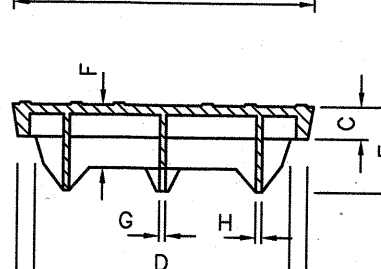
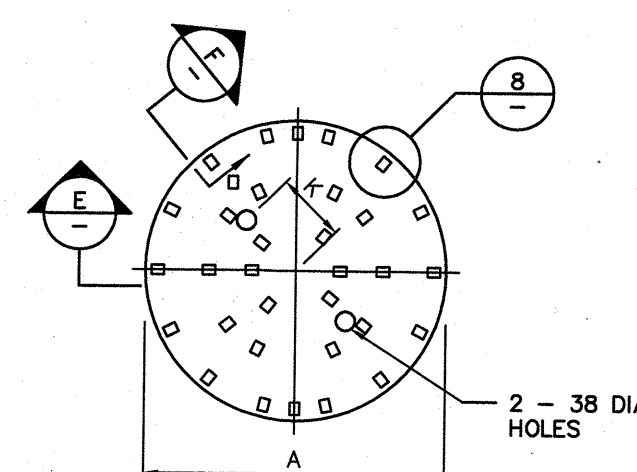
6
MANHOLE COVER (GRATED)
DETAIL
N.T.S.

DIMENSIONS

DIMENSION	VALUE	TOLERANCE
A	597	± 2
B	575	± 6
C	64	± 1
D	506	± 12
E	170	± 30
F	125	± 6
G	25	± 6
H	19	± 2
I	40	± 4
J	23	± 6
K	12	± 6
L	13	± 4
M	25	± 6
N	25	± 6
O	25	± 6
P	170	± 30
Q	12	± 6
R	13	± 4

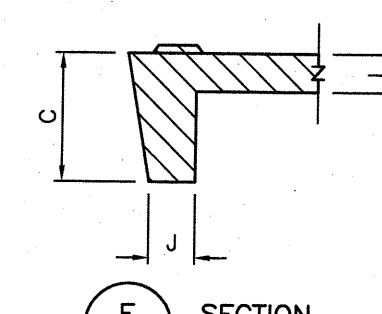


D
SECTION
N.T.S.



E
SECTION
N.T.S.

7
MANHOLE COVER (SOLID)
DETAIL
N.T.S.



8
CHECKER
DETAIL
N.T.S.

DIMENSIONS

DIMENSION	VALUE	TOLERANCE
A	597	± 2
B	575	± 6
C	64	± 1
D	506	± 12
E	170	± 30
F	125	± 6
G	25	± 6
H	19	± 2
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Revision / Révision

A	B	Detail number Sheet number	A Numéro de détail B Numéro de la feuille
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Linear dimensions in millimetres	Dimensions linéaires en millimètres
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Drawing title/Titre du dessin

DETAILS

Surveyed by/Arpenté par RS	Drawn by/Dessiné par KR	Date 2016-10-12
Designed by/Concept par RS	Reviewed by/Revisé par RS	Scale/Echelle
Client Acceptance/Acceptation du client	Approved by/Approuvé par	Date
Project No./N° du projet 827.03	Asset No./N° du bien	Sheet No./N° de la feuille C5 of 5