

Note 2 -

2 For slipforming procedure a 5% batter is acceptable

Treatment at entrances shall be according to OPSD 351.010

3 Outlet treatment shall be according to the OPSD 610 Series.

All dimensions are in millimetres unless otherwise shown

Profile grade —

The transition from one curb type to another shall be a minimum length of 3.0m, except in conjunction with guide rail where it shall be according to the OPSD 900 Series.

PLAN

SECTION A-A

TYPICAL PIPE INSULATION DETAIL

The insulation material shall be extruded polystyrene according to OPSS 1605 with a minimum compressive strength of 275 kPa.

Pipe embedment or bedding, cover, and backfill shall be according to:

a) Flexible OPSD 802.013, 802.03, 802.03, and 802.023, b) Rigid — OPSD 802.030, 802.031, 802.032, 802.033, 802.050, 802.051, 802.052, and 802.053.

offinimum insulation thickness shall be 50mm.

Joints shall be staggered for multiple insulation sheets.

This OPSD is to be read in conjunction with OPSD 3090.100 and 3090.101.

Il dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING

INSULATION FOR

SEWERS AND WATERMAINS

IN SHALLOW TRENCHES

PRECAST CONCRETE DITCH INLET

600 x 600mm

Additional width when sidewalk

Finished road -surface

- Dropped curb at entrances

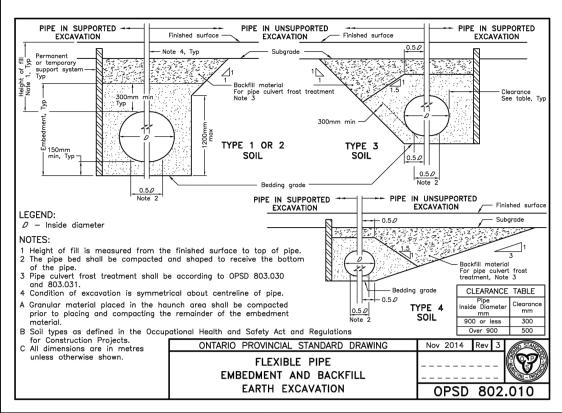
OPSD 600.110

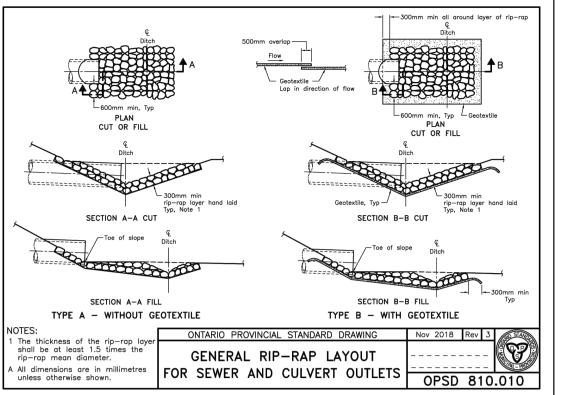
-Embedment, bedding, cover, and backfill material, Note 2

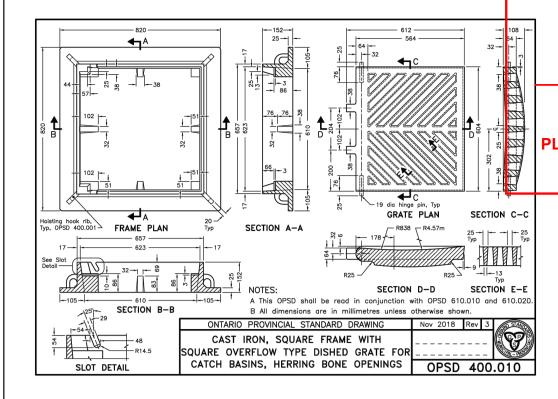
OPSD 1109.030

OPSD 705.030

nsulation, Note 1







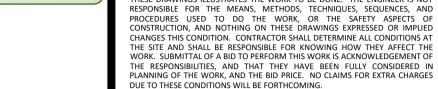


JOHN SEVIGNY C.E.T.

ANAGER (A), DEVELOPMENT REVIEW EAST **DEPARTMENT, CITY OF OTTAWA**

APPROVED

By sevignyjo at 10:14 am, Jan 09, 2025



CHANGES.

UNAUTHORIZED CHANGES:

CONSTRUCTION DOCUMENT.

AND INTERPRETATION OF DRAWINGS

SEWHERE IN THE CONTRACT DOCUMENTS.

ENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION ARE PART OF THE ONTRACT DOCUMENTS AND DESCRIBE USE AND INTENT OF THE DRAWING. T

WNER-CONTRACTOR AGREEMENTS, CONDITIONS OF THE CONTRACT, T PECIFICATIONS, ADDENDA, AND MODIFICATIONS ISSUED AFTER EXECUTION OF HE CONTRACT. THESE CONTRACT DOCUMENTS ARE COMPLEMENTARY, AND WHAT IS REQUIRED BY ANY ONE SHALL BE BINDING AS IF REQUIRED BY ALL. WORK OF COMPLETELY DELINEATED HEREON SHALL BE CONSTRUCTED OF THE SAME HATERIALS AND DETAILED SIMILARLY AS WORK SHOWN MORE COMPLETELY

Y USE OF THE DRAWINGS FOR CONSTRUCTION OF THE PROJECT, THE OWNER ONFIRMS THAT HE HAS REVIEWED AND APPROVED THE DRAWINGS. THE ONTRACTOR CONFIRMS THAT HE HAS VISITED THE SITE, FAMILIARIZED HIMSELF

VITH THE LOCAL CONDITIONS. VERIFIED FIELD DIMENSIONS AND CORRELATED HIS SSERVATIONS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

S INSTRUMENTS OF SERVICE, ALL DRAWINGS, SPECIFICATIONS, CADD FILES OF OTHER ELECTRONIC MEDIA AND COPIED THERE OF FURNISHED BY THE ENGINE RE HIS PROPERTY. THEY ARE TO BE USED ONLY FOR THIS PROJECT AND ARE NOT

O BE USED ON ANY OTHER PROJECT, INCLUDING REPEATS OF THE PROJECT

UNLESS THE REVISION TITLE IS "ISSUED FOR CONSTRUCTION", THESE DRAWINGS

SHALL BE CONSIDERED PRELIMINARY AND SHALL NOT BE USED AS A

THESE DRAWINGS ILLUSTRATES THE WORK TO BE DONE. THE ENGINEER IS NOT

CHANGES TO THE DRAWINGS MAY ONLY BE MADE BY THE ENGINEER.

IN THE EVENT THE CLIENT, THE CLIENT'S CONTRACTORS OR SUBCONTRACTORS, OR ANYONE FOR WHOM THE CLIENT IS LEGALLY LIABLE MAKES OR PERMITS TO BE MADE ANY CHANGES TO ANY REPORTS, PLANS, SPECIFICATIONS OR OTHER CONSTRUCTION DOCUMENTS PREPARED BY LRL ASSOCIATES LTD. (LRL) WITHOUT OBTAINING LRL'S PRIOR WRITTEN CONSENT, THE CLIENT SHALL ASSUME FULL RESPONSIBILITY FOR THE RESULTS OF SUCH CHANGES. THEREFORE THE CLIENT AGREES TO WAIVE ANY CLAIM AGAINST LRL AND TO RELEASE LRL FROM ANY LIABILITY ARISING DIRECTLY OR INDIRECTLY FROM SUCH UNAUTHORIZED

IN ADDITION, THE CLIENT AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD HARMLESS LRL FROM ANY DAMAGES. LIABILITIES OR COST, INCLUDING REASONABLE ATTORNEY'S FEES AND COST OF DEFENSE, ARISING FROM SUCH CHANGES

IN ADDITION, THE CLIENT AGREES TO INCLUDE IN ANY CONTRACTS FOR CONSTRUCTION APPROPRIATE LANGUAGE THAT PROHIBITS THE CONTRACTOR OR ANY SUBCONTRACTORS OF ANY TIER FROM MAKING ANY CHANGES OR WRITTEN APPROVAL OF LRL AND THAT FURTHER REQUIRES THE CONTRACTOR TO INDEMNIFY BOTH LRL AND THE CLIENT FROM ANY LIABILITY OR COST ARISING FROM SUCH CHANGES MADE WITHOUT SUCH PROPER AUTHORIZATION.

GENERAL NOTES:

EXISTING SERVICES AND LITHLITES SHOWN ON THESE DRAWINGS ARE TAKEN FROM HE BEST AVAILABLE RECORDS, BUT MAY NOT BE COMPLETE OR TO DATE. CONTRACTOR SHALL VERIFY IN FIELD FOR LOCATION AND ELEVATION OF PIPES AND CHECK WITH THE UTILITY COMPANIES BEFORE DIGGING OR PERFORMING

CONTRACTOR IS ADVISED TO COLLECT INFORMATION ON SOIL CONDITIONS BEFORE START OF CONSTRUCTION.

THE ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS. SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE ENGINEER'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS INCONSISTENCIES AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.

SUBJECT FOR APPROVAL

09	ISSUED FOR APPROVAL	M.L.	17 DEC 2024
08	ISSUED FOR APPROVAL	M.L.	24 OCT 2024
07	ISSUED FOR APPROVAL	M.L.	11 OCT 2024
06	ISSUED FOR APPROVAL	M.L.	08 AUG 2024
05	ISSUED FOR APPROVAL	S.V.	30 JUL 2024
04	ISSUED FOR APPROVAL	M.L.	28 JUN 2024
03	ISSUED FOR APPROVAL	M.L.	29 JAN 2024
02	ISSUED FOR APPROVAL	M.L.	25 OCT 2023
01	ISSUED FOR COORDINATION	M.L.	06 OCT 2023
No.	REVISIONS	BY	DATE







ENGINEERING I INGÉNIERIE 5430 Canotek Road | Ottawa, ON, K1J 9G2 www.lrl.ca I (613) 842-3434

TRIM WORKS DEVELOPMENT LTD

ESIGNED BY:	DRAWN BY:	APPROVED BY:
M.L.	M.L.	M.B.
ROJECT		

PLAZA TRIM ROAD DEVELOPMENT 1280 TRIM RD,

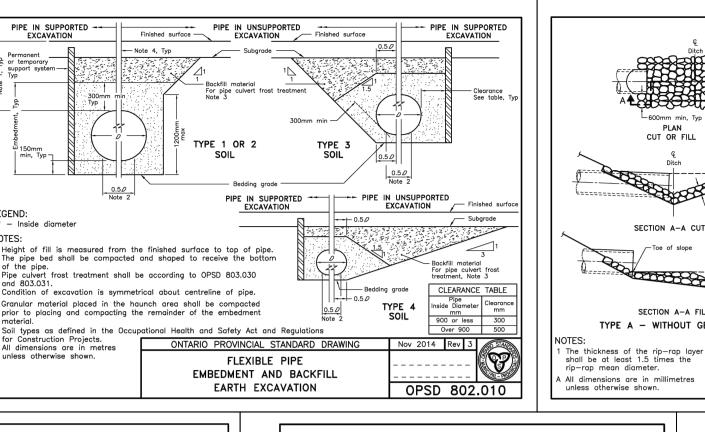
OTTAWA, ON

CONSTRUCTION DETAIL PLAN

PROJECT NO 230202

APRIL 2023

C901



2 to 8%

DUMMY JOINT (OPTIONAL)

CONTRACTION JOINT (Note 4)

12mm expansion joint material

Sidewalk width shall be wider when specified.

Contraction Joint may be tooled or sawcut.

All dimensions are in millimetres unless otherwise show

CONCRETE SIDEWALK

EXPANSION JOINT

R5 L125mm R5 Note 1

Sidewalk thickness at residential driveways and adjacent to curb shall be 150mm.

This OPSD shall be read in conjunction with OPSD 310.030, 310.031, 310.033, and 310.039.

FRAME PLAN Hoisting hook rib, Typ, OPSD 400.001

—— ø578 ——

2 2 19 gg 19

SECTION A-A

SECTION B-B

A All dimensions are in millimetres unless otherwise show

ONTARIO PROVINCIAL STANDARD DRAWING

CAST IRON, SQUARE FRAME WITH

CIRCULAR WATERTIGHT COVER

FOR MAINTENANCE HOLES

4-16mm dia x 57mm long stainless steel hex bolts 7

3mm rubber washer —

ø575 ——►

TYPICAL SECTION

Subgrade or granular base as specified

Curb with gutter

Sidewalk bay, Typ-

Dummy joints, Typ-

JOINT LAYOUT

OPSD 310.010

‰□□□b□□o>

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DANGER C

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2 0 0 0 0 0 0 0 0 D

22

COVER PLAN

287 6624 216 64 24 114 114 64

SECTION C-C

R19

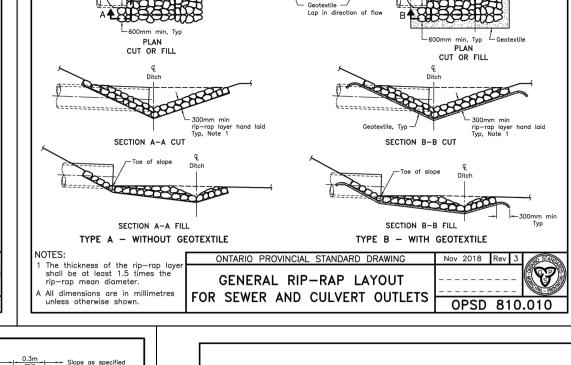
OPSD 401.030

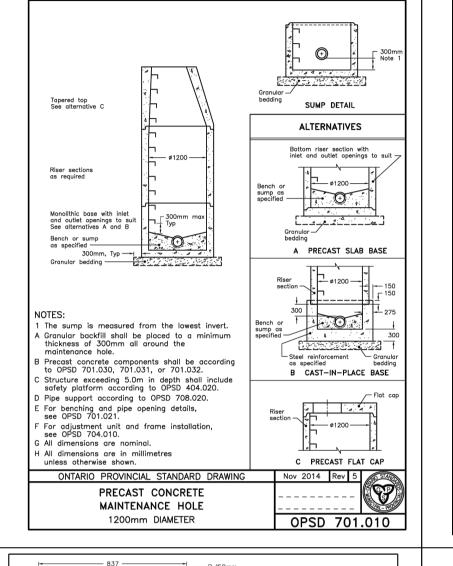
√38mm dia x 14mm deep

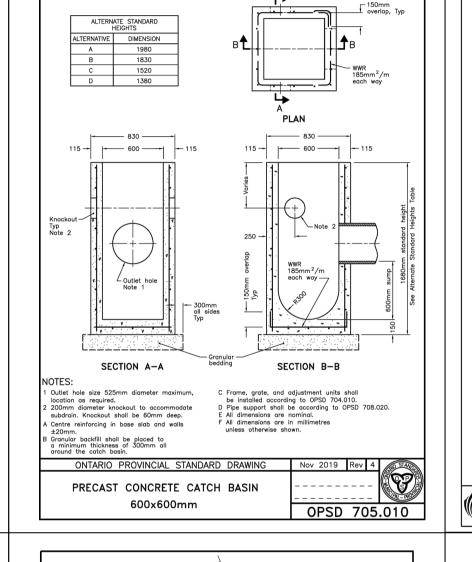
SECTION D-D

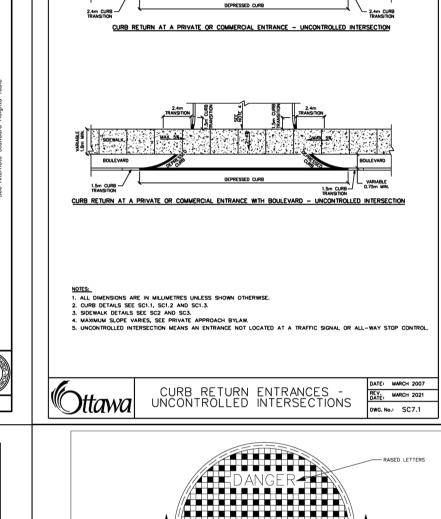
HOLE DETAIL

Boulevard









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Ottawa 🔛

TOP VIEW

BOTTOM VIEW NTS

CATCH BASIN

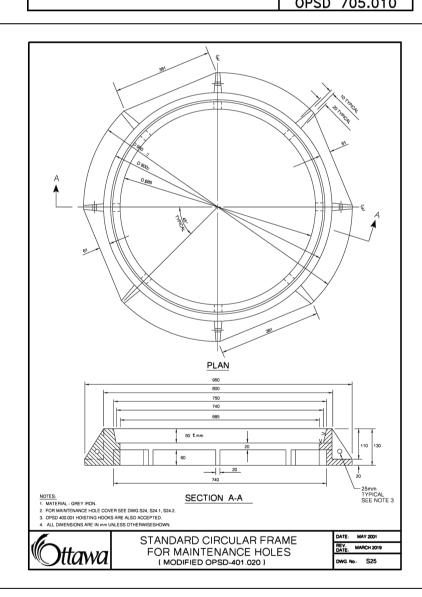
MAINTENANCE HOLE COVER

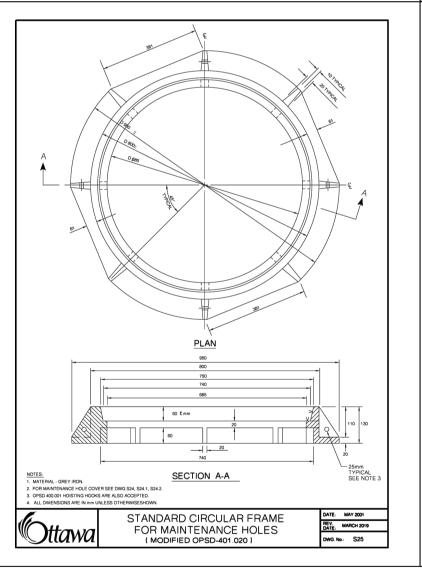
(MODIFIED OPSD-401.020)

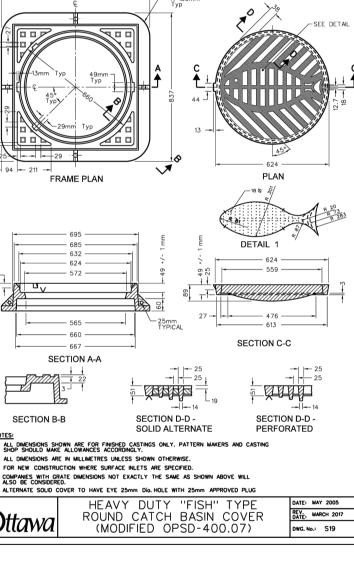
1. MATERIAL - GREY IRON. 2. FOR FRAME DETAIL SEE DETAIL DWG No. S25.

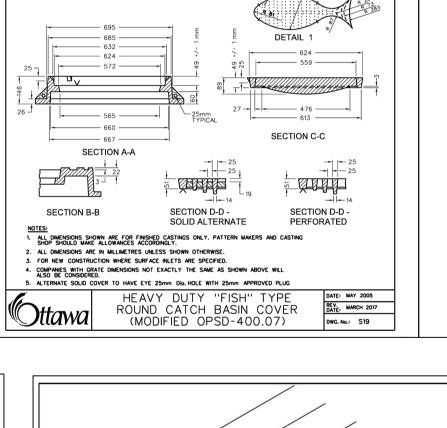
E +7-1.5mm. HBASIN MAINTENANCE HOLE APPLICATIONS ONLY

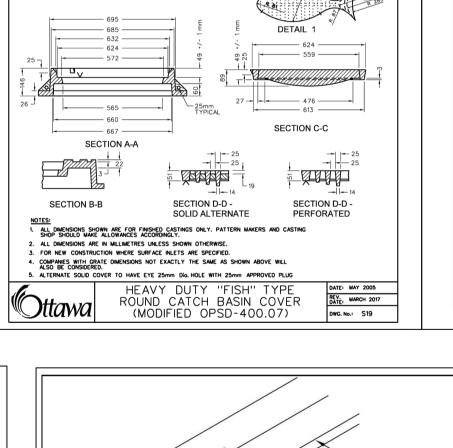
DWG. No.: S28.1

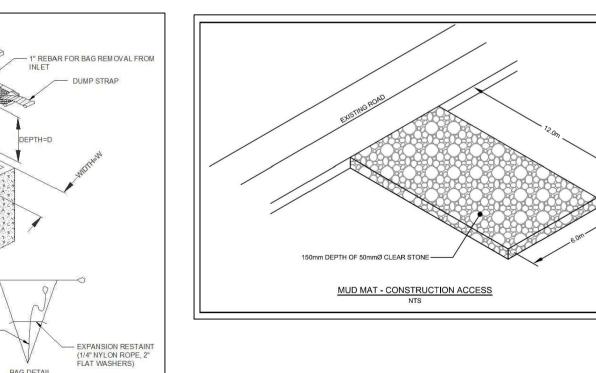


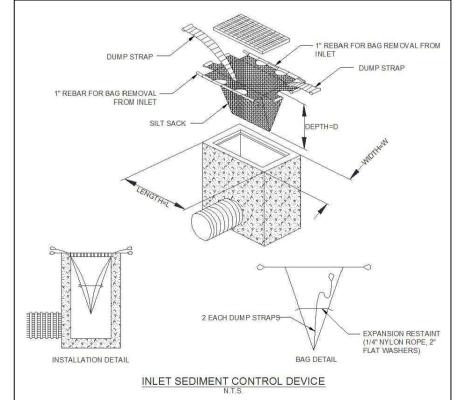


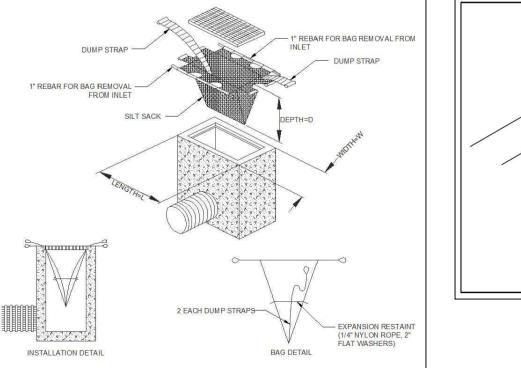


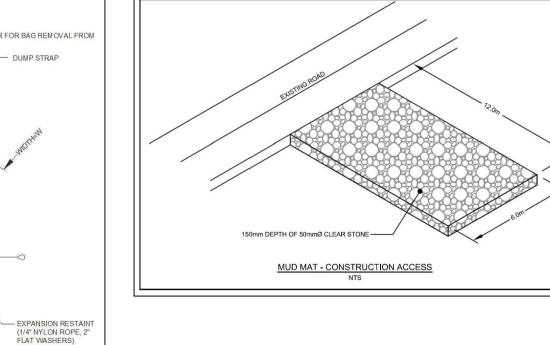


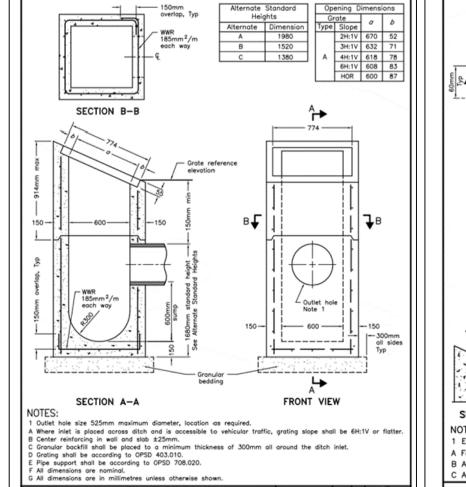


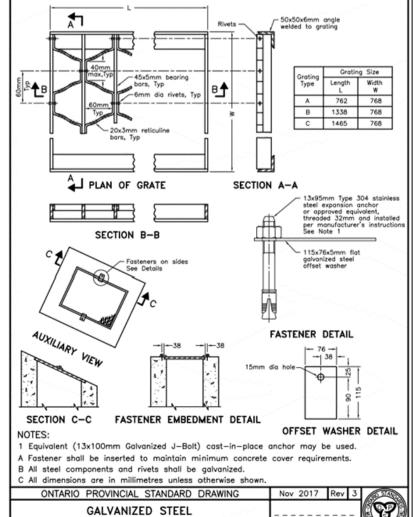












OPSD 403.010

HONEYCOMB GRATING

FOR DITCH INLETS

PERSPECTIVE VIEW

PLAN

DISTANCE IS BASED UPON
THE VORTEX SIZE AND CONNECTIONS.
AMPLE OVERFLOW SPACE IS TO BE
PROVIDED.

INCOMING PIPE CONNECTIONS MAY VARY AND MAY NOT BE AS SHOWN

VORTEX PIPE OVERFLOW SIDE TO BE KEPT SEPARATE FROM THE MAN ENTRY SIDE.

- 100mm THICK CONCRETE SEPARATION WALL TO BE 500mm ABOVE THE VORTEX TOP, THIS WALL SHALL BE INSTALLED IF THE UPPER OVERFLOW CAN NOT BE ISOLATED AWAY FROM THE LANDINGS AND WORKERS.

VORTEX DROP SHAFT TO CONNECT TO AN ENERGY DISSIPATION BASIN AT THE BENCHING ABOVE THE OBVERT OF THE PIPE. APPROPRIATE BENCHING MAY NEED TO BE DESIGNED FOR SUPPORT.

CONCRETE BASE WITH NEW PIPE OR OPTIONA BOX SECTION MH TOP (DOG-HOUSE STYLE) ON EXISTING PIPES.

WITH VORTEX DROP PIPE

GENERAL ARRANGEMENT

VORTEX DROP PIPES TO BE USED WHERE THE INVERTS BETWEEN INCOMING AND OUT GOING SEWERS ARE GREATER THAN 6 METRES.

DESIGNS SHALL BE REVIEWED BY THE CITY ON A CASE BY CASE BASIS.

6. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

 APPROVED REGULAR FRAME AND COVER TO BE USED WHERE VEHICULAR TRAFFIC TRAVELS OVER THE STRUCTURE. APPROVED LIGHT COVERS TO BE USED FOR RAISED APPLICATIONS. MH MAY NOT BE AS PER ABOVE BUT MUST HAVE A 1200mm DIAMETER STANDARD ACCESS CHAMBER SEPARATED FROM THE VORTEX CHAMBER VIA WALL. WORKER ACCESS OR MAINTENANCE IS NOT TO BE COMPROMISED. THE MI CAN BE SQUARE OR ROUND.

OBTAIN VORTEX INFORMATION AND DESIGN CRITERIA FROM THE SUPPLIER AS REQUIRED. DROP STRUCTURE CAPACITY TO BE CLEARLY MARKED ON THE UNIT. PRODUCT MATERIAL AND STRAPPING AS PER THE SUPPLIER SPECS.

JOINT DETAIL

OPSD 219.110

THERE IS NO PREFERENCE TO MH TYPE. ROUND MH's ARE OPTIONAL

2.3m max, Typ

300mm min of geotextile in trench

SECTION A-A

RAILINGS AND LANDINGS AS PER CITY STANDARDS

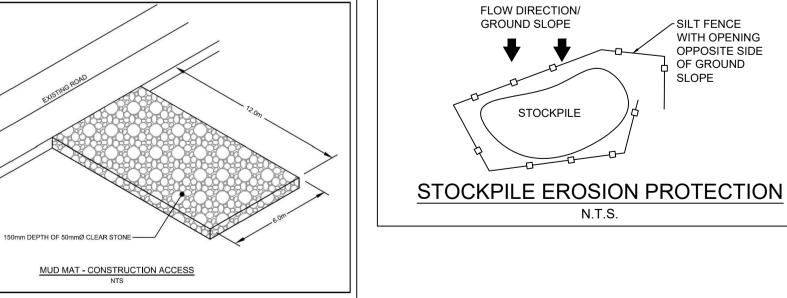
2000mm HIGH REMOVABLE — PARTITION WALL

Ittawa

A All dimensions are in millimetres unless otherwise shown

LIGHT-DUTY

SILT FENCE BARRIER



0089