## NOTES:

- 1 ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
- 2 THE MINIMUM DEPTH OF COVER FROM THE FINISHED SURFACE TO THE EXTERNAL CROWN SHALL BE LAID ABOVE THIS VOID BACKFILL OF THE PIPE SHALL BE 750mm FOR SERVICE MATERIAL. CONNECTIONS, 900mm FOR WATER MAINS. GREATER DEPTHS OF COVER AND/OR PIPE STRENGTH AND/OR A HIGHER CLASS OF BEDDING MATERIAL MAY BE REQUIRED WHERE HIGH TRAFFIC LOADING IS ANTICIPATED. THE

MAXIMUM COVER SHOULD NOT EXCEED 1.2M

- WHERE PRACTICABLE. 3 CLAUSE 808 MATERIAL IN ACCORDANCE WITH THE TRANSPORT INFRASTRUCTURE IRELAND SPECIFICATION FOR ROAD WORKS IS TO BE USED AS BACKFILL MATERIAL WHERE THE WATER MAIN IS LOCATED IN ROADS. FOOTPATHS OR WHEN THE NEAREST PART OF MAY BE <500mm, SUBJECT TO CONSIDERATION THE TRENCH IS WITHIN 1M OF THE PAVED EDGE OF THE ROADWAY, CLAUSE 808 IS TO
- & SAFETY & CONSTRUCTION ACCESS REQUIREMENTS. BE COMPACTED AS PER CLAUSE 802 OF THE TRANSPORT INFRASTRUCTURE IRELAND SPECIFICATION FOR ROAD WORKS. 4 SELECTED EXCAVATED MATERIAL MAY BE USED
- APPROVAL OF IRISH WATER. 5 PIPE BEDDING SHALL COMPLY WITH WIS 4-08-02 AND IGN 4-08-01 GRANULAR MATERIAL SHALL BE 14mm TO 5mm GRADED AGGREGATE OR 10mm SINGLE SIZED

AGGREGATE IS EN 13242.

IN GREEN-FIELD AREAS ABOVE GRANULAR

PIPE SURROUND MATERIAL SUBJECT TO THE

- 6 IN SOFT GROUND CONDITIONS (CBR < 5) THE MATERIAL SHOULD BE EXCAVATED OUT AND DISPOSED OF IN ACCORDANCE WITH THE WASTE MANAGEMENT ACT AND CLAUSE 808 MATERIAL IN ACCORDANCE WITH THE TRANSPORT INFRASTRUCTURE IRELAND SPECIFICATION FOR ROAD WORKS SHALL REPLACE THE EXCAVATED MATERIAL, WRAPPED IN GEO-TEXTILE WRAPPING, ALTERNATIVELY, SPECIAL PIPE SUPPORT ARRANGEMENTS, INCLUDING PILING ETC. MAY BE REQUIRED WHERE THE DEPTH OF SOFT MATERIAL IS EXCESSIVE. SUCH ARRANGEMENTS SHALL BE SUBJECT TO ASSESSMENT BY IRISH WATER
- 7 PIPES SHALL NOT BE SUPPORTED ON STONES OR ROCKS, OR ANY HARD OBJECT AT ANY POINT ALONG THE TRENCH. ROCK SHALL BE EXCAVATED TO A DEPTH OF 150mm BELOW

BEFORE ADVANCING WITH THE WORK.

THE ACTUAL DEPTH OF THE TRENCH WITH THE VOID FILLED WITH CLAUSE 804 MATERIAL IN ACCORDANCE WITH THE TRANSPORT INFRASTRUCTURE IRELAND SPECIFICATION FOR ROAD WORKS. THE GRANULAR MATERIAL

8 SHOULD MINIMUM COVER NOT BE ACHIEVABLE,

9 MARKER TAPE TO BE 400mm WIDE BLUE

POLYETHYLENE MATERIAL IN ACCORDANCE

WITH EN 12163, PLASTIC PIPES SHALL HAVE

WARNING TAPE INCORPORATED A REINFORCED

HAVE 200mm WIDE MESH TAPE. MARKER TAPE

TO BE LAID AT TOP OF PIPE BEDDING LAYER.

BEING GIVEN TO THE TRENCH DEPTH, HEALTH

DEPTH OF BEDDING

'C' (mm)

150

200

TRENCH WIDTH

'B' (mm)

< SEE NOTE 10.

500

600

600

750

750

750

900

900

DEPTH OF REINSTATED - TOPSOIL TO MATCH

- SELECTED BACKFILL.

REFER TO NOTE 4

FOR DETAILS

- MARKER TAPE.

FOR DETAILS.

REFER TO NOTE 9

EXISTING.

10 TRENCH WIDTHS FOR PIPE SIZES ≤80mm

PIPE DIAMETER

'A' (mm)

< 200

> 250

PIPE DIAMETER

'A' (mm)

< 80

150

200

250

300

350

GRASSED AREAS

BAND BRACING WIRE. SERVICE PIPES SHALL

CONCRETE GRADE C8/10 SHALL BE USED AS

2. STRUCTURAL DESIGN AND REINFORCEMENT DETAIL TO BE PROVIDED BY THE DEVELOPER AND SUBMITTED TO IRISH WATER FOR RFVIFW.

ROCKER PIPE -

FLOW

LONG BODY

LONG BODY FLEXIBLE COUPLING

LONG BODY

FLEXIBLE COUPLING

DI FLANGED

DISMANTLING

TAPER

FLEXIBLE COUPLING

NOTES:

3. CONCRETE FOR FLOW METER CHAMBER TO BE C30/37

UNLESS NOTED OTHERWISE.

- 4. PRECAST METER CHAMBER(WITH CONCRETE 8. DUCTILE IRON PIPES AND FITTINGS TO BE IN WATER APPROVAL.
- 5. METER CHAMBER SHALL BE COVERED WITH
- IS EN124 RATING D400. COVER AND FRAME BY THE DEVELOPER BASED ON GROUND SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS WITHIN THE SITE. SHOULD ANTI 1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) CONDITIONS AND IS SUBJECT TO THE
  - APPROVAL OF IRISH WATER. 200mm ALL ROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE STAINLESS STEEL METAL BAND AROUND
  - COVER IN GRASS AREAS. 7. ANTI CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
- SURROUND) MAY BE USED SUBJECT TO IRISH ACCORDANCE WITH IS EN545. PE PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN VALVES, FITTINGS AND PIPEWORK.

FLANGED PLAIN

ENDED DI PIPE

FLOW METER (WITH

25mm O.D. TAPPING

TO BE PROVIDED

10xPIPEØ MIN. FROM FLOW METER TO DISMANTLING JOINT (ENTRY)

5xPIPEØ MIN. FROM FLOW METER TO DISMANTLING JOINT (EXITING)

FLOOR PLAN

-----+

RESTRAINER IF REQUIRED)

PRESSURE TAPPING DUCT TO KIOSK TO BE

INSTALLED WITH DRAW CORD(REFER TO\_\_\_\_\_

STD-W-36) DUCT END TO BE SEALED

250

400x400x200

WATER TIGHT SEAL -

CAST IN RECESSED LIFTING \_

HEAVY DUTY COVER AND FRAME \_ STAMPED "Me" CLASS D400 TO IS EN124 (TO SUIT 900 SQ. OPE) 1No. MIN. OR 3No. COURSES

> ENGINEERING BRICKWORK SET IN C50/60 MORTAR

METER CHAMBER (<300mmø)

MAX. OF CLASS B

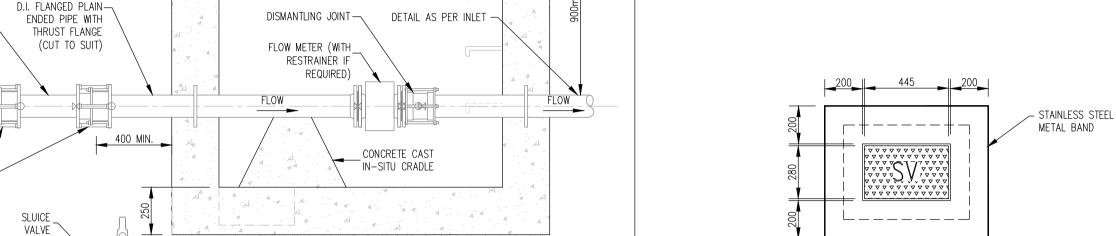
CONCRETE ROOF SLAB.

C30/37 REINFORCED

CONCRETE SLAB

DEEP SUMP

- FLOATATION MEASURES BE REQUIRED THEY SHALL BE SUBJECT TO APPROVAL FROM IRISH WATER. 10. PIPEWORK TO BE DOWNSIZED TO
- ACCOMMODATE THE REQUIRED RANGE OF THE FLOW METER. STRAIGHT PIPE LENGTHS UPSTREAM AND DOWNSTREAM OF THE METER TO BE PROVIDED. IF THE METER IS NOT CAPABLE OF ACCURATE NIGHT FLOW MEASUREMENTS. A BY-PASS FLOW METER SHALL BE PROVIDED WITH APPROPRIATE
- 11. ALL CONCRETE TO BE IN ACCORDANCE WITH
- APPROVED HEAVY DUTY METAL COVERS TO 9. ALL CHAMBERS TO BE CHECKED FOR UPLIFT IS EN206. - COVER TO BE SET AS PER MANUFACTURERS HEAVY DUTY COVER AND FRAME SPECIFICATION STAMPED "Me" CLASS D400 TO IS — EN124 (TO SUIT 900 SQ. OPE) CONCRETE ROOF SLAB C30/37 REINFORCED SLAB



75mm CONCRETE

BLINDING C12/15

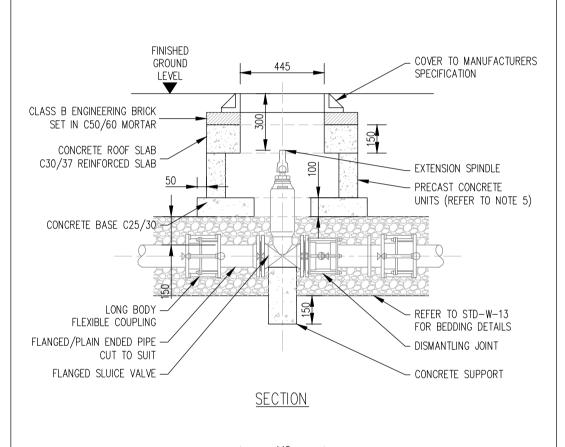
THICKENED FLOOR

SLAB UNDER SUMP

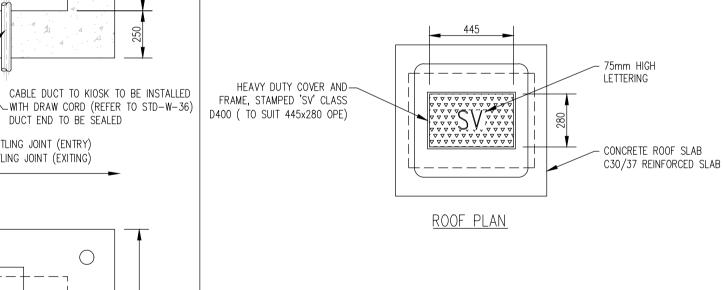
DETAIL AS PER INLET -

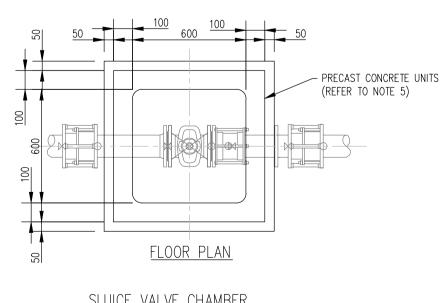
THRUST FLANGE -

DUCT END TO BE SEALED



PLINTH IN GRASSED AREAS





SLUICE VALVE CHAMBER (PRECAST CONCRETE CONSTRUCTION) (STD - W - 14)

NOTES:

- 1. 1 ALL DIMENSIONS ARE IN MILLIMETRES
- 2. HYDRANT CHAMBERS SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS 261 OR BS 5834. COVER AND TRAFFIC CONDITIONS AND IS SUBJECT
- TO THE APPROVAL OF IRISH WATER COVERS SHALL COMPLY WITH THE EN 1074-6 & BS 750. FIRE HYDRANTS

CLOSING.

- DRAWING No. STD-W-28. THRUST BLOCKS
- 5. VALVE CHAMBER TO BE CONSTRUCTED OF NOT SHOWN FOR CLARITY
- IS EN 206 12. ALL THRUST FLANGES TO BE ADEQUATELY RESTRAINED BY THRUST BLOCKS AS PER

11. ALL CONCRETE TO BE IN ACCORDANCE WITH

7. DUCTILE IRON PIPES AND FITTINGS TO BE IN

CONCRETE PLINTH WITH PROTECTIVE STEEL

METAL BAND AROUND COVER IN GREEN

TO BE PROVIDED AS PER STANDARD

STEEP SLOPES.

DRAWING STD-W-28 AT ALL TEES AND

BENDS, TAPERS, DEAD ENDS AND PIPES AT

ACCORDANCE WITH IS EN 545.

8. 200mm ALL AROUND, 100mm DEEP

COVER AND FRAME SHALL BE SUITABLE FOR 9. THRUST BLOCKS(NOT SHOWN ON DRAWING)

AND SHALL COMPLY WITH BS 5163-1, BS 10. ANTICORROSION TAPE TO BE PROVIDED

5163-2, IS EN 1074-1, IS EN 1074-2, OR AROUND BURIED FLANGES.

1. 1 ALL DIMENSIONS ARE IN MILLIMETRES

(mm) UNLESS NOTED OTHERWISE.

COVERED WITH APPROVED HEAVY DUTY

METAL COVERS TO IS 261 OR BS 5834.

ROAD AND TRAFFIC CONDITIONS AND IS

SUBJECT TO THE APPROVAL OF IRISH

3. SLUICE VALVES SHALL BE RESILIENT SEATED

EQUIVALENT EU SPECIFICATIONS.

PRECAST CONCRETE UNITS OR HIGH

DENSITY BLOCKWORK. ALTERNATIVELY

APPROVAL FROM IRISH WATER.

CONCRETE CHAMBERS SHALL BE

STD-W-13.

PROPRIETARY PREFABRICATED CHAMBER

UNITS MAY ALSO BE USED SUBJECT TO

SURROUNDED BY A MINIMUM OF 150mm

COMPACTED CLAUSE 808 MATERIAL AS PER

4. ALL SLUICE VALVES SHALL BE

ANTI-CLOCKWISE CLOSING.

2. SLUICE VALVE CHAMBERS SHALL BE

- (mm) UNLESS NOTED OTHERWISE.
- 3. ALL HYDRANTS, SURFACE BOX FRAMES AND RELEVANT PROVISIONS OF IS EN 14339, IS
  - SHALL BE TYPE 2. THE HYDRANT INLET SHALL BE 80mm DIAMETER WITH PN16. 4. ALL HYDRANTS SHALL BE CLOCKWISE

PRECAST CONCRETE UNITS OR HIGH

DENSITY BLOCKWORK. ALTERNATIVELY

APPROVAL FROM IRISH WATER.

PROPRIETARY PREFABRICATED CHAMBER

UNITS MAY ALSO BE USED SUBJECT TO

FINISHED

GROUND

CLASS B ENGINEERING BRICK

SET IN C50/60 MORTAR

C30/37 REINFORCED SLAB

RISER PIPE OF SUITABLE

CONCRETE BASE C25/30

HEAVY DUTY COVER-

AND FRAME, STAMPED

'FH' CLASS D400 ( TO

SUIT 445x280 OPE)

LENGTH TO SUIT CONDITIONS

CONCRETE ROOF SLAB

DI DOUBLE FLANGED DN80, DU

- 6. CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL AS PER
- DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545. AND FRAME SHALL BE SUITABLE FOR ROAD 8. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE STEEL

- - - - - - - - -

PLINTH IN GRASSED AREAS

**SECTION** 

<u>ROOF PLAN</u>

FLOOR PLAN

(PRECAST CONCRETE CONSTRUCTION)

FIRE HYDRANT CHAMBER

<u>(STD - W - 16)</u>

METAL BAND AROUND COVER IN GREEN 9. THRUST BLOCKS(NOT SHOWN ON DRAWING) TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES AND

STAINLESS STEEL

METAL BAND

COVER TO

MANUFACTURERS

PRECAST CONCRETE

- REFER TO STD-W-13

FOR BEDDING DETAILS

TEE WITH FLANGED

BRANCH

75mm HIGH

CONCRETE ROOF SLAB

C30/37 REINFORCED SLAB

PRECAST CONCRETE UNITS

(REFER TO NOTE 5)

Jan. 2021 AS SHOWN @ A1

UNITS (REFER TO NOTE 5)

- BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES. 10. ANTICORROSION TAPE TO BE PROVIDED
- 5. VALVE CHAMBER TO BE CONSTRUCTED OF 11. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206

AROUND BURIED FLANGES.

VALVE SHALL HAVE A LARGE AND A SMALL AIR ESCAPE ORIFICE WITH AN ISOLATING VALVE. 5. SERVICE CONNECTIONS SHALL NOT BE PROVIDED WITHIN 2m OF THE AIR VALVE 6. AIR VALVE CHAMBERS TO BE OF PRECAST

1. 1 ALL DIMENSIONS ARE IN MILLIMETRES

(mm) UNLESS NOTED OTHERWISE.

ROAD AND TRAFFIC CONDITIONS AND IS

SUBJECT TO THE APPROVAL OF IRISH

REQUIREMENTS OF IS EN 1074-4. AIR

4. THE AIR VALVES SHALL OF BODIES AND

COVERS OF CAST IRON TO BS EN 1563

WITH FLANGES DRILLED TO PN 16 IN

ACCORDANCE WITH BS EN 1092. EACH

VALVES SHALL BE DOUBLE ORIFICE TYPE

3. AIR VALVES SHALL COMPLY WITH THE

CONCRETE UNITS OR HIGH DENSITY

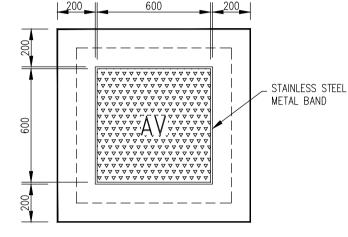
- BLOCKWORK. ALTERNATIVE PROPRIETARY PREFABRICATED CHAMBER UNITS MAY ALSO BE USED, SUBJECT TO APPROVAL FROM
- IRISH WATER. 2. AIR VALVE CHAMBERS SHALL BE COVERED PRECAST CONCRETE CHAMBERS SHALL BE WITH APPROVED VENTILATED HEAVY DUTY
- SURROUNDED BY A MINIMUM OF 150mm METAL COVERS TO IS EN 124 RATING D400. COMPACTED CLAUSE 808 MATERIAL AS PER COVER AND FRAME SHALL BE SUITABLE FOR STD-WW-13.

8. DUCTILE IRON PIPES AND FITTINGS TO BE IN

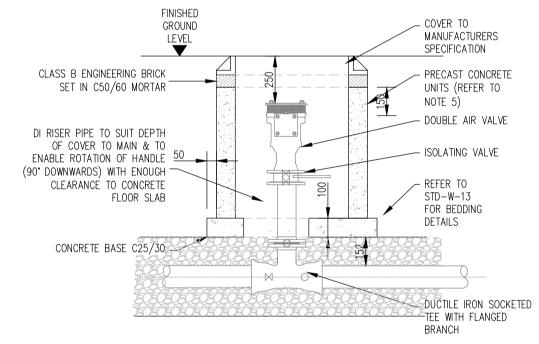
9. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE STEEL METAL BAND AROUND COVER IN GREEN

ACCORDANCE WITH IS EN 545.

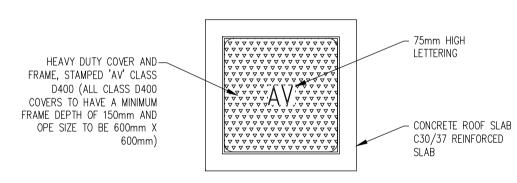
- AND SHALL INCLUDE AN ISOLATING VALVE. THE ISOLATING VALVE SHALL BE A GATE 10. THRUST BLOCKS(NOT SHOWN ON DRAWING) VALVE CONFORMING TO IS EN 1074-2 AND TO BE PROVIDED AS PER STANDARD SHALL BE OF A BOLTLESS BONNET DESIGN DRAWING STD-W-28 AT ALL TEES AND BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES.
  - . ANTICORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
  - 12. THE LOCATION OF THE AIR VALVE SHALL BE THE SUBJECT OF PARTICULAR AGREEMENT WITH IRISH WATER TO ENSURE THAT THE RISK OF CONTAMINATION THROUGH THE VALVE IS ELIMINATED;.
  - 13. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206



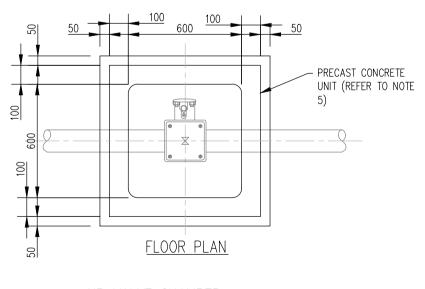
PLINTH IN GRASSED AREAS



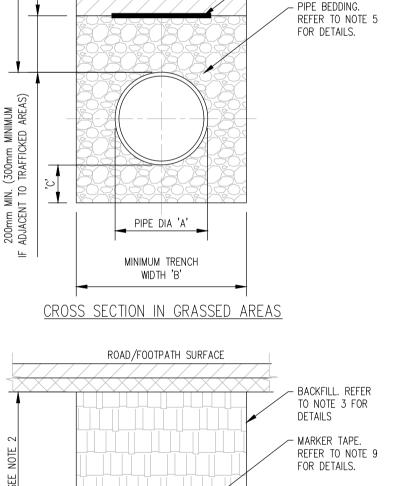
<u>SECTION</u>

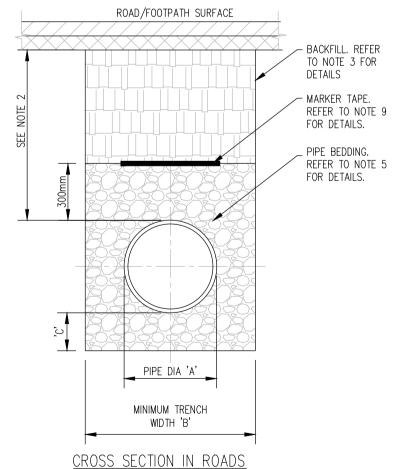


ROOF PLAN



AIR VALVE CHAMBER (PRECAST CONCRETE CONSTRUCTION) (STD - W - 20)SCALE 1:20





TRENCH BACKFILL AND BEDDING (STD - W - 13)

## PLANNING DRAWING. NOT FOR CONSTRUCTION. ALL LEVELS GIVEN ARE

(STD - W - 26)

SCALE 1:20

RELATIVE TO ORDNANCE DATUM. THIS DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES ONLY AND MUST NOT BE USED FOR CONSTRUCTION UNDER ANY CIRCUMSTANCES

<u>ROOF PLAN</u>

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- drawings and all other relevant drawings and Specifications. DO NOT SCALE THIS DRAWING. Use figured dimensions only. No part of this document may be reproduced or transmitted in any

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REVISION NOTE

Henry J Lyons Waterfront South Central **Proposed Watermain Details** RFM RFM DD

R064-207

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