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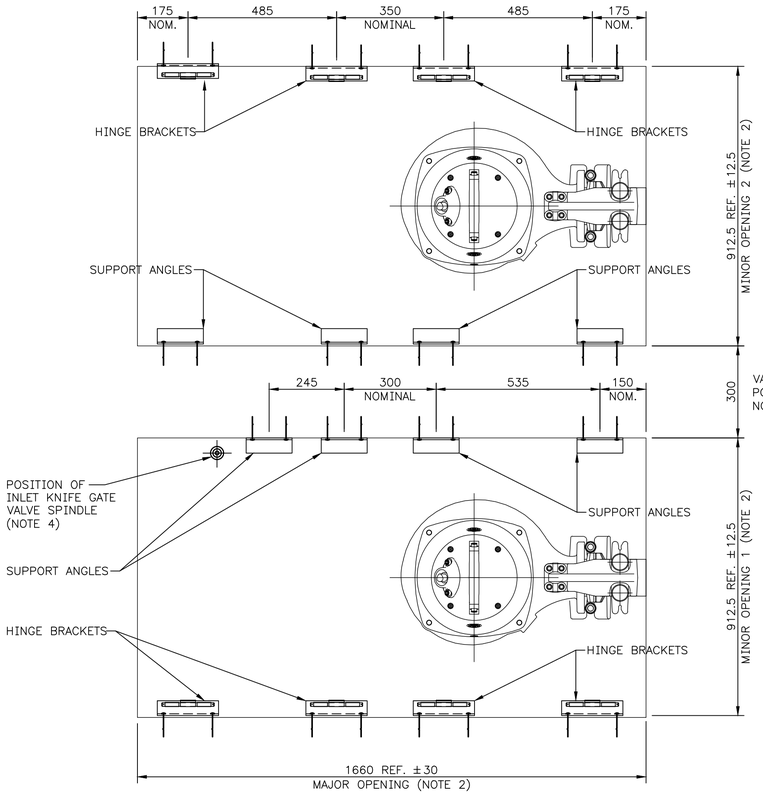
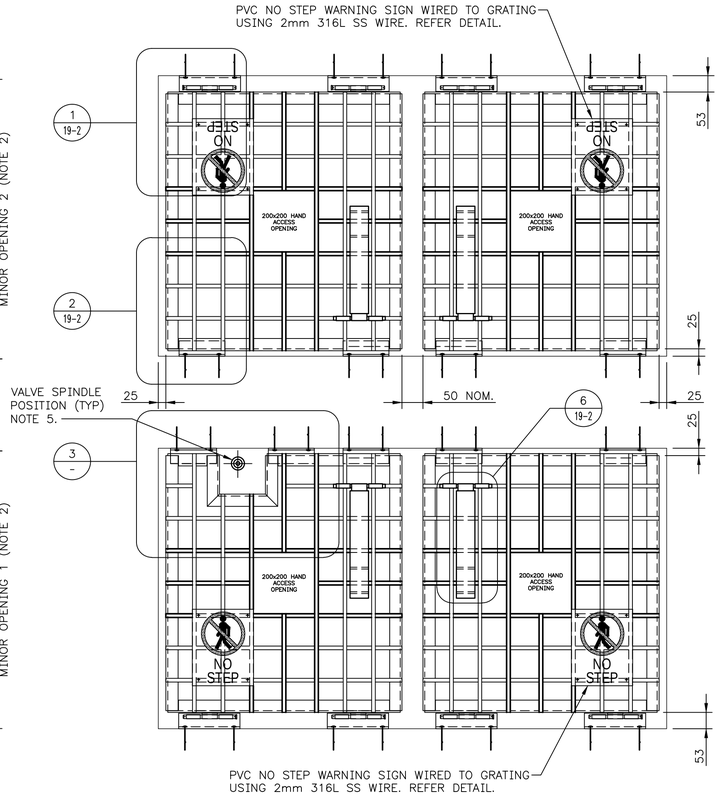
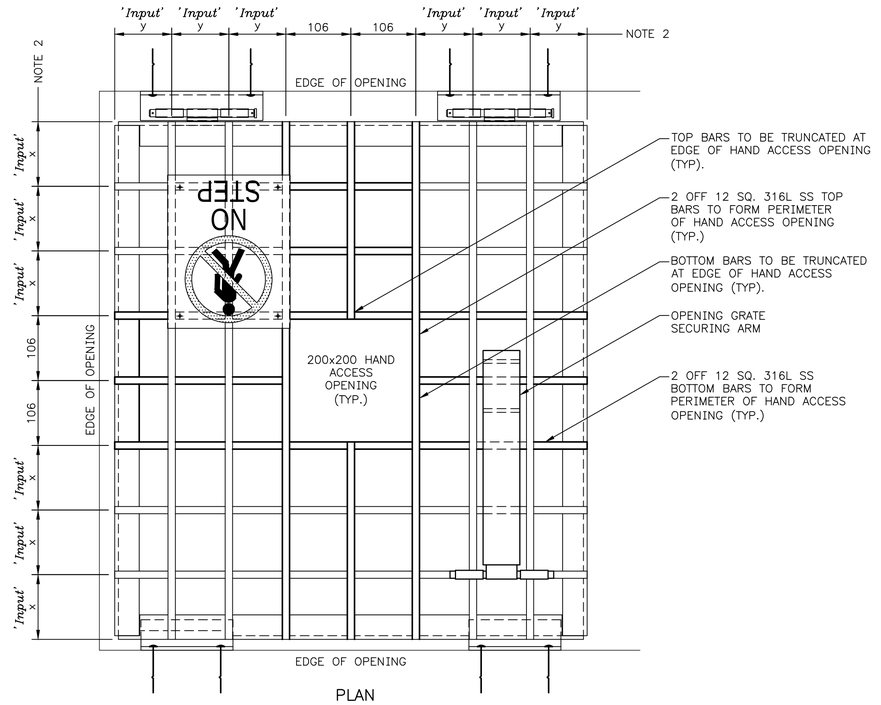


PLAN
GRATING SUPPORT ANGLES
SCALE 1



PLAN
GRATING ASSEMBLY
SCALE 1



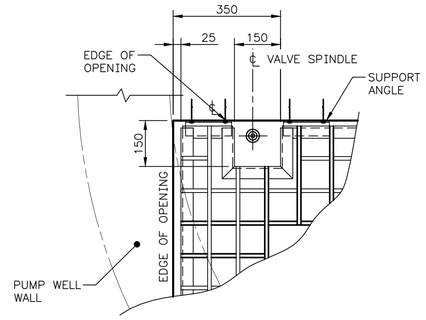
PLAN
GRATING
SCALE 2

GRATING CONSTRUCTION

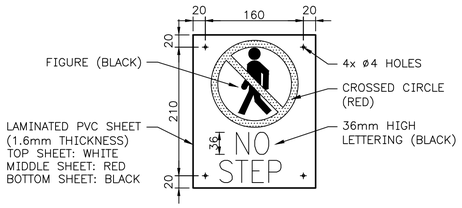
STEP 1 – NOMINAL 200 x 200 HAND ACCESS OPENING SHALL BE POSITIONED CENTRALLY IN GRATING.

STEP 2 – GRATING BAR SPACING SHALL NOT EXCEED 125mm IN ANY DIRECTION.

STEP 3 – POSITION OPENING FOR INLET KNIFE GATE VALVE SPINDLE IN ACCORDANCE WITH INSTALLED VALVE POSITION AS MEASURED (SEE NOTE 4). A TYPICAL EXAMPLE OF AN INSTALLED VALVE (SPINDLE) AND OPENING POSITION IS SHOWN IN DETAIL 3, AS A GUIDE.



DETAIL 3 –
SCALE 1



PLAN
PVC NO STEP WARNING SIGN DETAIL
SCALE 2

GENERAL NOTES

1. THE DETAILS SHOWN ON THE DRAWINGS ARE BASED ON A MAXIMUM 1219mm AND A MINIMUM 762mm RADIAL MOVEMENT ACHIEVABLE BY THE DAVIT SYSTEM.
2. DESIGNER/INSTALLER SHALL DETERMINE AND RECORD ACTUAL IN–SITU OPENING DIMENSIONS, BASED ON THE ESTABLISHED (MEASURED) DIMENSIONS OF THE TOP SLAB, AND OF THE ACCESS COVER/FRAME ASSEMBLY OPENING. GRATING DIMENSIONS 'x' AND 'y' SHALL THEN BE DETERMINED AS FOLLOWS:

$$'x' = \frac{\text{CLEAR MINOR OPENING DIMENSION} - 290}{6}$$

$$'y' = \frac{\text{CLEAR MAJOR OPENING DIMENSION} - 524}{12}$$

3. GUARDRAILING SHALL CONFORM WITH THE PERFORMANCE REQUIREMENTS OF AS1657.
4. GRATINGS SHALL NOT BE FABRICATED UNTIL THE INSTALLED POSITION OF THE INLET KNIFE GATE VALVE AND VALVE SPINDLE HAVE BEEN ESTABLISHED BY SITE MEASUREMENT, FOLLOWING VALVE INSTALLATION. INLET PIPE, KNIFE GATE VALVE AND VALVE SPINDLE POSITIONS ARE SHOWN ON CA01–20–1–1, CA01–20–20–1 (PLAN) AND ON CA01–20–1–2, CA01–20–1–2 (ELEVATION).
5. GRATING BAR SPACING DIMENSIONS SHALL BE RECORDED FOLLOWING INSTALLATION AND ON–SITE MEASUREMENT AND SHALL BE PROVIDED AS PART OF AS–CONSTRUCTED INFORMATION REQUIREMENTS.

REFERENCE DRAWINGS

CA01–20–8–1	TYPE 90 PUMPING STATION – PUMP WELL – TOP SLAB WITH TEMPORARY GUARDRAIL SYSTEM – ARRANGEMENT
CA01–20–8–2	TYPE 90 PUMPING STATION – PUMP WELL – TOP SLAB WITH TEMPORARY GUARDRAIL SYSTEM – REINFORCEMENT
CA01–20–8–3	TYPE 90 PUMPING STATION – PUMP WELL – TOP SLAB WITH PERMANENT GUARDRAIL SYSTEM – ARRANGEMENT
CA01–20–8–4	TYPE 90 PUMPING STATION – PUMP WELL – TOP SLAB WITH PERMANENT GUARDRAIL SYSTEM – REINFORCEMENT
CA01–20–19–2	TYPE 90 PUMPING STATION – PUMP WELL – PREVENTION OF FALLS GRATING DETAILS
CA01–20–19–3	TYPE 90 PUMPING STATION – PUMP WELL – PREVENTION OF FALLS GUARDRAIL DETAILS
CA01–20–1–1	TYPE 90 PUMPING STATION PUMP WELL CAST INSITU – GENERAL ARRANGEMENT – SHEET 1 OF 2
CA01–20–20–1	TYPE 90 PUMPING STATION PUMP WELL PRECAST – GENERAL ARRANGEMENT – SHEET 1 OF 2
CA01–20–1–2	TYPE 90 PUMPING STATION PUMP WELL CAST INSITU – GENERAL ARRANGEMENT – SHEET 2 OF 2
CA01–20–20–2	TYPE 90 PUMPING STATION PUMP WELL PRECAST – GENERAL ARRANGEMENT – SHEET 2 OF 2
IP76–1–1	SAFETY GRATES AND BARRIERS LIFTING TOOL

2 (1:5 AT A1) 100 50 0 100 200 300 mm

1 (1:10 AT A1) 100 50 0 100 200 300 400 500 600 700 mm

FOR COMMON SPECIFICATION NOTES REFER DRAWING CA01–1–3

'Input' Indicates Information Required From Design Engineer

THIS DRAWING IS DERIVED FROM CA01–20–19–1C

ISSUE	DATE	GRID	REVISION	DRN	REC	APPD
C	06/2023		GRATE OPENING SIDE, HAND ACCESS OPENING, CONCRETE SLAB CLEAR OPENING, GENERAL NOTES, REFERENCE DRAWINGS AMENDED. SECURING ARMS ADDED.	ME	CP SJ	KP LP
B	04/2015		DIMENSIONS AMENDED	BJ	JD	DVN

DESIGN SURVEY NONE | VERTICAL DATUM NONE | COORDINATE SYS NONE | ASCON SURVEY NONE | DES REF NONE

DES CALC N/A | DES CHD D. McADIE | DRN F. RACCUIA | Q.C. CHD P. MIRCO

NORTH POINT

'Input' Designers Identification Label

RECOMMENDED 19/12/2011 S SELLATHURAI (SIGNED) SENIOR ENGINEER, WWC & S

APPROVED 19/12/2011 D MCADIE (SIGNED) PRINCIPAL ENGINEER, WWC & S

WATER CORPORATION

WASTEWATER – EXAMPLE DRAWING
WASTEWATER PUMPING STATIONS AND PRESSURE MAINS
TYPE 90 PUMPING STATION – PUMP WELL – PREVENTION OF FALLS GRATING ARRANGEMENT & NOTES

FILE *'Input'* PROJECT *'Input'* PLAN CA01–20–19–1 CAD ISSUE C

ORIGINAL SHEET SIZE A1

MF

566 810

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CAD MANAGEMENT_NOT READ ONLY\WWCS\STANDARD DRAWINGS\PUMP STATIONS\CAD\CA01 – 2021\FOR DMS\CA01–020–019–01C 11:33 29/06/2023 MCGREGKO/WS31939