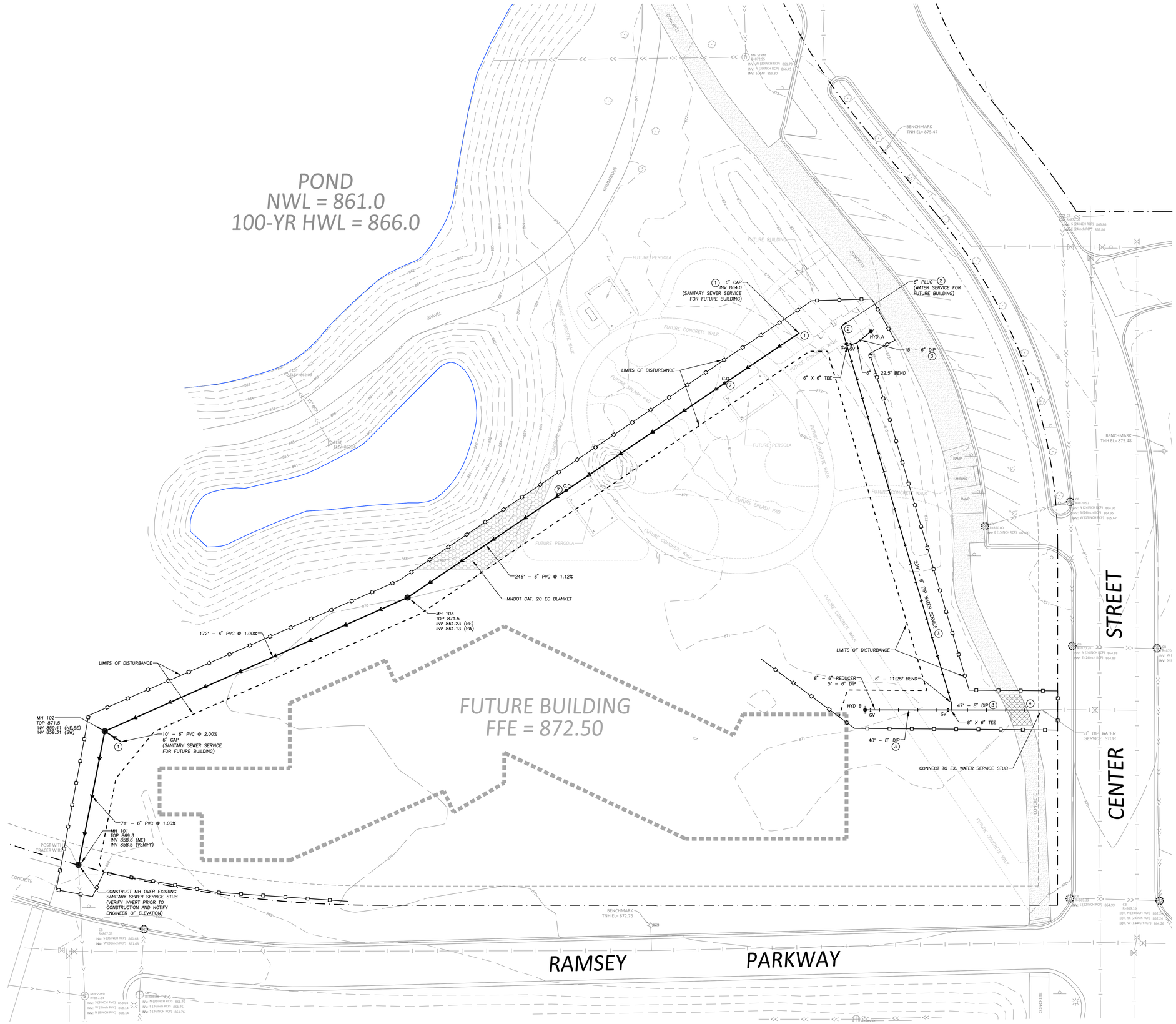


CODE COMPLIANCE:

1. *WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LAWS, CODES & REQUIREMENTS OF REGULATORY AGENCIES HAVING JURISDICTION.*
2. *NOTIFY THE OWNER'S ENGINEER OF DISCREPANCIES BETWEEN THE WORK AND APPLICABLE CODES. DO NOT WORK IN AN AFFECTED AREA UNTIL THE DISCREPANCY HAS BEEN RESOLVED.*
3. *VERIFY CODES IN EFFECT AT THE TIME OF THE NOTICE TO PROCEED AND STAY CURRENT WITH CODE CHANGES WHICH AFFECT THE WORK UNTIL SUBSTANTIAL COMPLETION.*

HYDRANT SCHEDULE

HYDRANT NO.	BREAKOFF FLANGE
HYD A	872.4
HYD B	871.0

MANHOLE SCHEDULE

STRUCTURE NO.	BARREL SIZE	NEENAH CASTING NO.
MH 101	48"	R–1733
MH 102	48"	R–1733
MH 103	48"	R–1733

LEGEND

- PROPOSED MANHOLE
- PROPOSED GATE VALVE
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- SILT FENCE
- INLET PROTECTION DEVICE
- PROPOSED EC BLANKET CATEGORY 20 (MNDOT 3885)
- BOUNDARY/ROW/BLOCK LINE
- EASEMENT
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER

N

0 10 20 40 60

Scale in Feet

Boundary & Topographical information was provided by the Bolton & Menk, Inc. This information has not been verified as to its accuracy or completeness by Rehder & Associates, Inc.

EROSION CONTROL NOTES

1. *Contractor is responsible for all notifications and inspections required by General Storm Water Permit.*
2. *All erosion control measures shown shall be installed prior to grading operations and maintained until all areas disturbed have been restored.*
3. *Sweep paved public streets as necessary where construction sediment has been deposited.*
4. *Each area disturbed by construction shall be restored within 7 days after the construction activity in that portion of the site has temporarily or permanently ceased.*
5. *Temporary soil stockpiles must have silt fence around them and cannot be placed in surface waters, including storm water conveyances such as curb and gutter systems, or conduits and ditches.*
6. *Excess concrete/water from concrete trucks shall be disposed of in portable washout concrete basin or disposed of in a contained area.*

RESTORATION NOTES

1. *All disturbed areas shall be restored with a minimum of 4" of topsoil, MnDOT Mesic Inslope (MI) seed mix @ 65 lbs/acre, MnDOT Type 3 Fertilzer @ 350 lbs/acre and MnDOT Type 1 mulch @ 1.5 tons/acre.*
2. *All disturbed areas shall be restored to match existing conditions.*

UTILITY NOTES

1. *Plug sanitary sewer service and mark by installing a 4" x 4" wood post from the plugged end to 4 feet out of the ground.*
2. *Plug water service and mark by installing a 4" x 4" wood post from the plugged end to 4 feet out of the ground.*
3. *All watermain to have a minimum of 8' of cover.*
4. *Remove & replace existing sidewalk per City Standard Plate STR–3.*
5. *All watermain 6" or small shall be Class 53. All watermain 8" or larger shall be Class 52.*
6. *All PVC sanitary sewer piping shall be SDR 35 unless otherwise noted.*
7. *Mark locations of cleanouts with a 4" x 4" wood post painted pink and extending 4' out of the ground.*

City of RAMSEY

WATERFRONT WATERPLAY PARK UTILITY IMPROVEMENTS

RAMSEY, MINNESOTA

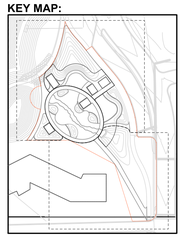
DF/ DAMON FARBER LANDSCAPE ARCHITECTS

CITY OF RAMSEY = Owner
Contact: Mark Riverblood
mriverblood@cityoframsey.com
p 763.433.9853

Landscape Architecture = L
DF/ LANDSCAPE ARCHITECTS
Contact: Chuck Evens
cevens@damonfarber.com
p 612.332.7522

Civil Engineer (Site) = C
REHDER & ASSOCIATES, INC.
Contact: Nick Adam
nadam@rehder.com
p 651.452.5051

KEY MAP:



CONSTRUCTION DOCUMENTS

September 3, 2025

I hereby certify that this document was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota,

Name Nicholas P. Adam

Registration# 43856

09.03.2025
Signature Date

City of Ramsey Project # 25 - 61

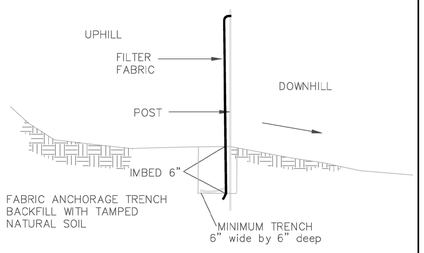
Scale AS NOTED

Drawn - Checked

ISSUED	DATE

UTILITY& EROSION CONTROL PLAN

C100

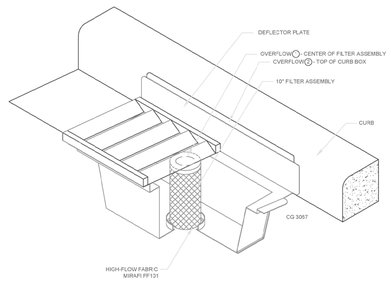


INSTALL AS PER FILTER FABRIC MANUFACTURER'S RECOMMENDATIONS

SILT FENCE DETAIL

NO SCALE

APPROVED: 1 – 2016 | City of RAMSEY | STANDARD DETAILS: SILT FENCE | CITY PLATE No. ERO–1

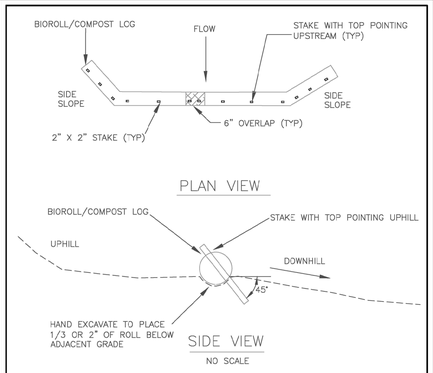


INLET PROTECTION – WIMCO OR EQUAL

N.T.S.

NOTE:
THIS INLET PROTECTION SHALL BE USED IMMEDIATELY FOLLOWING CURB & GUTTER CONSTRUCTION. INLET PROTECTION SHALL REMAIN INSTALLED AND MAINTAINTED UNTIL ALL HOME CONSTRUCTION IS COMPLETE.

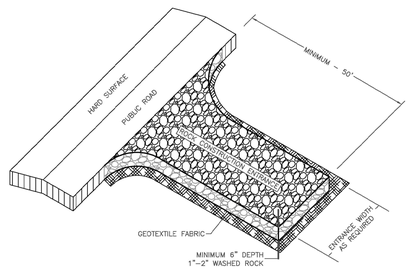
APPROVED: 1 – 2016 | City of RAMSEY | STANDARD DETAILS: INLET PROTECTION | CITY PLATE No. ERO–2



NO SCALE

NOTE:
STAKE INTO GROUND WITH WOOD STAKES DRIVING STAKE 6" INTO GROUND AND PROTRUDING 2" ABOVE LOG
WOOD STAKES ARE A MINIMUM 0.5" X 2" X 16" AND PLACED EVERY 1' UNLESS PRECLUDED BY A ROCK
WHEN MORE THAN 1 BIOROLL/COMPOST LOG IS NEEDED, OVERLAP ENDS A MINIMUM OF 6" AND STAKE
WOOD STAKES ARE DRIVEN THROUGH BACK HALF OF BIOROLL OR COMPOST LOG AT 45° ANGLE WITH TOP OF STAKE POINTING UPHILL

APPROVED: 3 – 2016 | City of RAMSEY | STANDARD DETAILS: BIO ROLL (COMPOST LOG) | CITY PLATE No. ERO–4



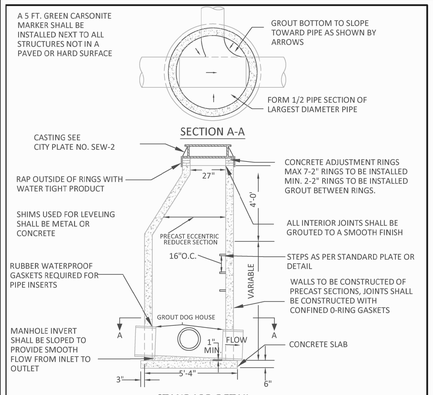
NOTE:
1. MINIMUM CONSTRUCTION ENTRANCE WIDTH EQUAL TO PROPOSED ROADWAY WIDTH.
2. WIDTH OF RADIUS AS REQUIRED TO ENSURE VEHICLES DO NOT TRACK ONTO PUBLIC ROAD.
3. MAINTAINENCE AS REQUIRED TO PREVENT TRACKING ONTO PUBLIC ROADS. THIS MAY REQUIRE TOP DRESSING WITH ADDITIONAL ROCK OR REMOVAL AND REINSTALLATION OF THE ENTRANCE AS NEEDED.

NOT TO SCALE

APPROVED: 1 – 2016 | City of RAMSEY | STANDARD DETAILS: ROCK CONSTRUCTION ENTRANCE | CITY PLATE No. ERO–5

Notes:
1. INSTALLATION OF 4" OF TOPSOIL REQUIRED ACROSS ALL DISTURBED AREAS.
2. TOPSOIL IS DEFINED AS BLACK DIRT COMPOSED OF UNCONSOLIDATED MATERIAL, LARGELY UNDECOMPOSED ORGANIC MATTER WHICH IS SUITABLE FOUNDATION FOR VEGETATIVE GROWTH.
3. THE COMPOSITION OF TOPSOIL SHOULD CONTAIN NO MORE THAN THIRTY-FIVE PERCENT (35%) SAND CONTENT.

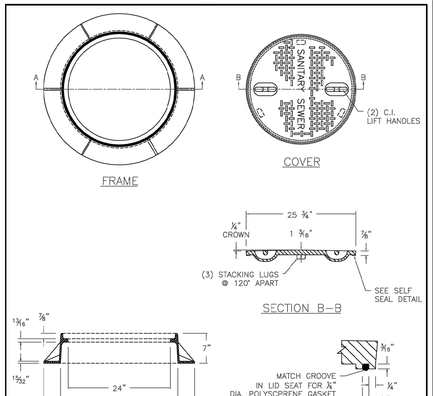
APPROVED: 7 – 2019 | City of RAMSEY | STANDARD DETAILS: TOPSOIL REQUIREMENTS | CITY PLATE No. ERO–6



STANDARD DETAIL

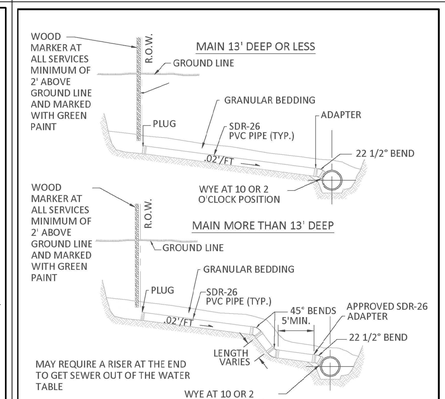
NOTES:
1. 12 GAUGE COPPER CLAD STEEL TRACER WIRE IS REQUIRED WITH ALL SEWER LINES (FOR DETAILED INFO. REFER TO MINNESOTA RURAL WATER ASSOCIATION TRACER WIRE SPECIFICATION AT WWW.MRWA.COM)
2. 6" BASE FOR ALL MANHOLES LESS THAN 14 FT. OF DEPTH, INCREASE BASE THICKNESS 2" PER 6 FT. OF DEPTH BEYOND 14 FT
3. 5" PRECAST BASE MAY BE USED FOR MANHOLES LESS THAN 14 FT. DEEP
4. ALL INVERTS TO BE 0.10' ABOVE OUTLET

APPROVED: 1 - 2024 | City of RAMSEY | STANDARD DETAILS: SANITARY MANHOLE | CITY PLATE No. SEW-1



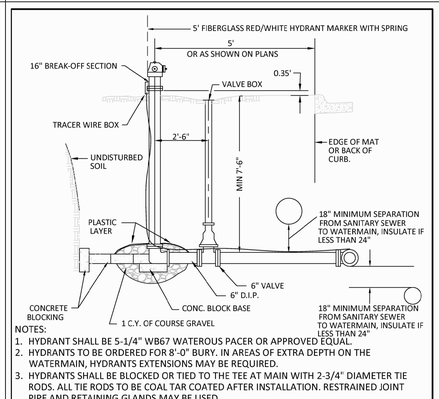
NOTE: NOT TO SCALE

APPROVED: 11 – 2015 | City of RAMSEY | STANDARD DETAILS: WATER TIGHT CASTING | CITY PLATE No. SEW–2



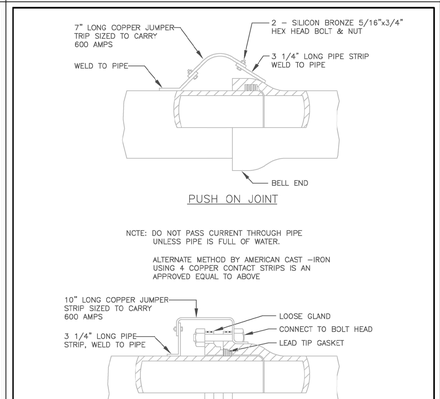
NOTES:
1. 12 GAUGE COPPER CLAD STEEL TRACER WIRE IS REQUIRED WITH ALL SEWER LINES (FOR DETAILED INFO. REFER TO MINNESOTA RURAL WATER ASSOCIATION TRACER WIRE SPECIFICATION AT WWW.MRWA.COM)

APPROVED: 1 - 2024 | City of RAMSEY | STANDARD DETAILS: SANITARY SEWER SERVICE | CITY PLATE No. SEW-3

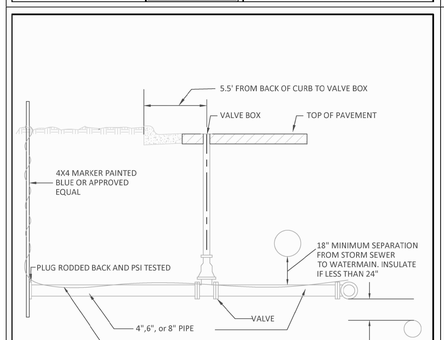


NOTES:
1. HYDRANT SHALL BE 5-1/4" WB67 WATEROUS PACER OR APPROVED EQUAL.
2. HYDRANTS TO BE ORDERED FOR 8'-0" BURY. IN AREAS OF EXTRA DEPTH ON THE WATERMAIN, HYDRANTS EXTENSIONS MAY BE REQUIRED.
3. HYDRANTS SHALL BE BLOCKED OR TIED TO THE TEE AT MAIN WITH 2-3/4" DIAMETER TIE RODS. ALL TIE RODS TO BE COAL TAR COATED AFTER INSTALLATION. RESTRAINED JOINT PIPE AND RETAINING GLANDS MAY BE USED.
4. TOP NUT OF HYDRANT 2.5' ABOVE TOP BACK OF CURB OR BITUMINOUS SURFACE.
5. HYDRANTS BURIED BELOW WATER TABLE, DRAIN HOLES NEED TO BE PLUGGED AND HYDRANT MARKED BY PAINTING 5" CAP YELLOW.
6. BRUSH PAINT ALL HYDRANTS AFTER INSTALLATION IS COMPLETE.
7. PUMPER NOZZLE .5.75" O.D. X 4 T.P.I, HOSE NOZZLE 3.06" O.D. X 7 T.P.I.
8. 12 GAUGE COPPER CLAD STEEL TRACER WIRE IS REQUIRED WITH ALL WATER LINES (FOR DETAILED INFO. REFER TO MINNESOTA RURAL WATER ASSOCIATION TRACER WIRE SPECIFICATION AT WWW.MRWA.COM)

APPROVED: 1 - 2024 | City of RAMSEY | STANDARD DETAILS: HYDRANT | CITY PLATE No. WAT-1

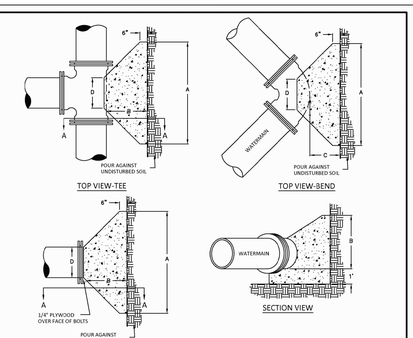


APPROVED: 1 – 2016 | City of RAMSEY | STANDARD DETAILS: JOINT CONNECTION | CITY PLATE No. WAT–4



NOTES:
1. SHALL BE BLOCKED OR TIED TO THE MAIN WITH 2-3/4" DIAMETER TIE RODS. ALL TIE RODS TO BE COAL TAR COATED AFTER INSTALLATION. RESTRAINED JOINT PIPE AND RETAINING GLANDS MAY BE USED.
2. 12 GAUGE COPPER CLAD STEEL TRACER WIRE IS REQUIRED WITH ALL WATER LINES (FOR DETAILED INFO. REFER TO MINNESOTA RURAL WATER ASSOCIATION TRACER WIRE SPECIFICATION AT WWW.MRWA.COM)

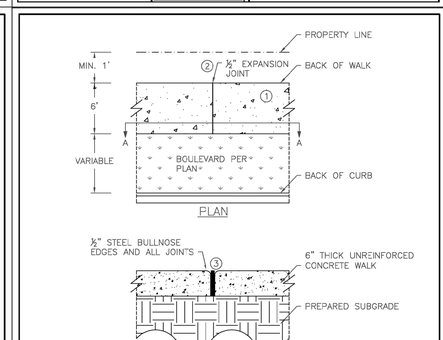
APPROVED: 1 - 2024 | City of RAMSEY | STANDARD DETAILS: COMMERCIAL SERVICE | CITY PLATE No. WAT-5



PIPE SIZE	22 ½ BEND			45% BEND			90% BEND		
	A	B	C	A	B	C	A	B	C
12"	1'-10"	1'-10"	2'-0"	3'-4"	2'-0"	2'-0"	4'-9"	2'-6"	2'-0"
16"	2'-0"	2'-0"	2'-0"	3'-10"	3'-0"	2'-0"	6'-3"	3'-6"	2'-6"
20"	2'-6"	2'-8"	3'-0"	5'-6"	3'-4"	3'-0"	8'-4"	4'-0"	
24"	4'-4"	3'-0"	3'-0"	6'-10"	3'-10"	3'-0"	9'-8"	5'-0"	
30"	--	--	3'-6"	9'-3"	6'-0"	3'-6"	17'-0"	6'-0"	3'-6"

DIMENSION D SHALL BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH MJ BOLTS.
NOTES:
1. BLOCKING TO BE POURED CONCRETE, MNDOT MIX DESIGN 3A32.
2. FITTINGS MUST BE COVERED W/POLY (8 MIL) PRIOR TO POURING CONCRETE
3. KEEP CONCRETE CLEAR OF BOLTS, JOINT AND ACCESSORIES.

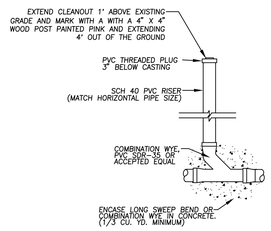
APPROVED: 1 - 2024 | City of RAMSEY | STANDARD DETAILS: THRUST BLOCKS | CITY PLATE No. WAT-8



NOTE:
① BROOM FINISH CONCRETE WALK SURFACE
② MAXIMUM 100 FOOT SPACING BETWEEN EXPANSION JOINTS
③ 1/2" EXPANION JOINT MEETING MNDOT SPEC 3702. PROVIDE ONE PIECE OF FILLER FOR THE ENTIRE DEPTH AND WIDTH OF THE JOINT

NOT TO SCALE

APPROVED: 10 – 2015 | City of RAMSEY | STANDARD DETAILS: CONCRETE SIDEWALK | CITY PLATE No. STR–3



1 / C2 SANITARY SEWER CLEANOUT

NO SCALE

WATERFRONT WATERPLAY PARK UTILITY IMPROVEMENTS

RAMSEY, MINNESOTA

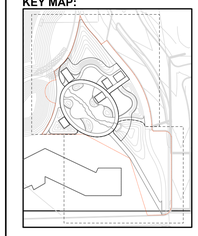
DF/ DAMON FARBER LANDSCAPE ARCHITECTS

CITY OF RAMSEY = Owner
Contact: Mark Riverblood
mriverblood@cityoframsey.com
p 763.433.9853

Landscape Architecture = L
DF/ LANDSCAPE ARCHITECTS
Contact: Chuck Evens
cevens@damonfarber.com
p 612.332.7522

Civil Engineer (Site) = C
REHDER & ASSOCIATES, INC.
Contact: Nick Adam
nadam@rehder.com
p 651.452.5051

KEY MAP:



CONSTRUCTION DOCUMENTS

September 3, 2025

I hereby certify that this document was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.

Name Nicholas P. Adam
Registration# 43856
09.03.2025
Signature Date

City of Ramsey Project # 25 - 61
Scale AS NOTED
Drawn - Checked

ISSUED DATE

DETAILS

C200