

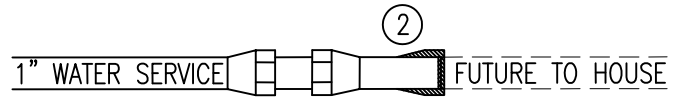
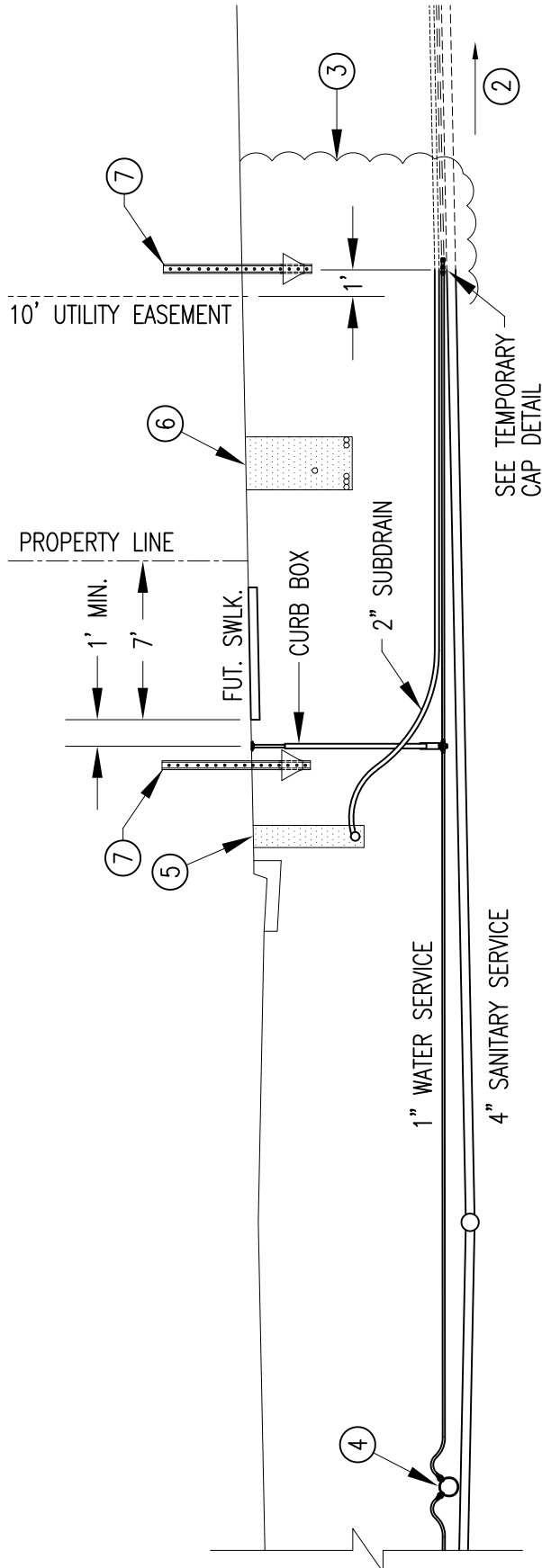
NOTES

1. FINAL RECORD OF SERVICE LOCATIONS: END OF SEWER, WATER & SUBDRAIN SERVICES SHALL BE REFERRED TO LOT CORNER AND PROPERTY LINE. SHOW INVERT ELEVATION AND FINISHED GRADE OF SEWER AND UNDERGROUND SERVICES AND DISTANCE FROM LOT CORNER TO SEWER SERVICE. ALSO SHOW DIMENSIONS BETWEEN END OF SEWER SERVICE AND ENDS OF WATER AND UNDERGROUND DRAIN SERVICE.
- ② PLUG END OF UNDERGROUND SERVICES. PLACE 4"x4" WOOD POST, EXTENDING ONE FOOT ABOVE GRADE.
- ③ FUTURE EXTENSION OF SERVICES BY OTHERS
- ④ WHEN INSTALLED IN SOLID ROCK, BLAST 4' BEYOND END OF PIPE FOR FUTURE CONNECTION.
- ⑤ REFER TO S.D.P. 4-01 SHEET 2 FOR WATER SERVICE TEMPORARY CAP DETAIL.
- ⑥ REFER TO S.D.P. 6-11 FOR ADDITIONAL WATER SERVICE DETAIL
- ⑦ REFER TO S.D.P. 1-08 FOR ADDITIONAL SUBDRAIN DETAIL
- ⑧ SEWER SERVICE CONNECTIONS ON SAME SIDE AS WATERMAIN SHOULD BE PLACED BELOW WATERMAIN.

DEPARTMENT OF PUBLIC WORKS CITY OF ROCHESTER, MINNESOTA			
SERVICE CONNECTIONS STUBBED INTO PROPERTY			
<i>Donald Nelson</i> ASST. CITY ENGINEER		<i>Reed W. Friend</i> DIRECTOR	
SHT 1 OF 2 SHTS	DATE REVISED 1/20/17	PLATE NO. 4-01	REV. G

NOTES

1. TO DETERMINE ELEVATION OF END OF SEWER SERVICE: USING TOP OF INSIDE OF MAIN AT WYE, BEGIN 2% GRADE (APPROX. 1/4" PER FT.) IF DEPTH OF INVERT AT END OF SERVICE IS GREATER THAN 8.5' BELOW FINISH BOULEVARD GRADE, INCREASE GRADIENT. FINAL DEPTH OF SEWER SERVICE LESS THAN 8' BELOW FINISH BOULEVARD GRADE SHALL BE REVIEWED AND APPROVED BY CITY ENGINEER.
- ② FUTURE EXTENSION OF SERVICES BY OTHERS.
- ③ WHEN INSTALLED IN SOLID ROCK, BLAST 4' BEYOND END OF PIPE FOR FUTURE CONNECTION.
- ④ REFER TO S.D.P. 6-11 FOR ADDITIONAL WATER SERVICE DETAIL.
- ⑤ REFER TO S.D.P. 1-08 FOR ADDITIONAL SUBDRAIN DETAIL.
- ⑥ REFER TO S.D.P. 4-03 FOR ADDITIONAL UTILITY SERVICE DETAIL.
- ⑦ INSTALL EITHER 4"x4" WOOD POST OR METAL SIGN POST MIN. ONE FOOT ABOVE GRADE TO MARK AND PROTECT LOCATION.



TEMPORARY CAP DETAIL

1. INSTALL COMPRESSION COUPLER AND CAP. TEST MAIN WITH CURB STOP IN OPEN POSITION.
- ② TEMPORARY CAP ASSEMBLY CONSISTS OF 1" SOLDER BUSHING, COPPER DISC, AND 3" COPPER TUBE.
3. REMOVE TEMPORARY CAP AND CONNECT INTO COUPLER WHEN HOUSE CONNECTION IS MADE.

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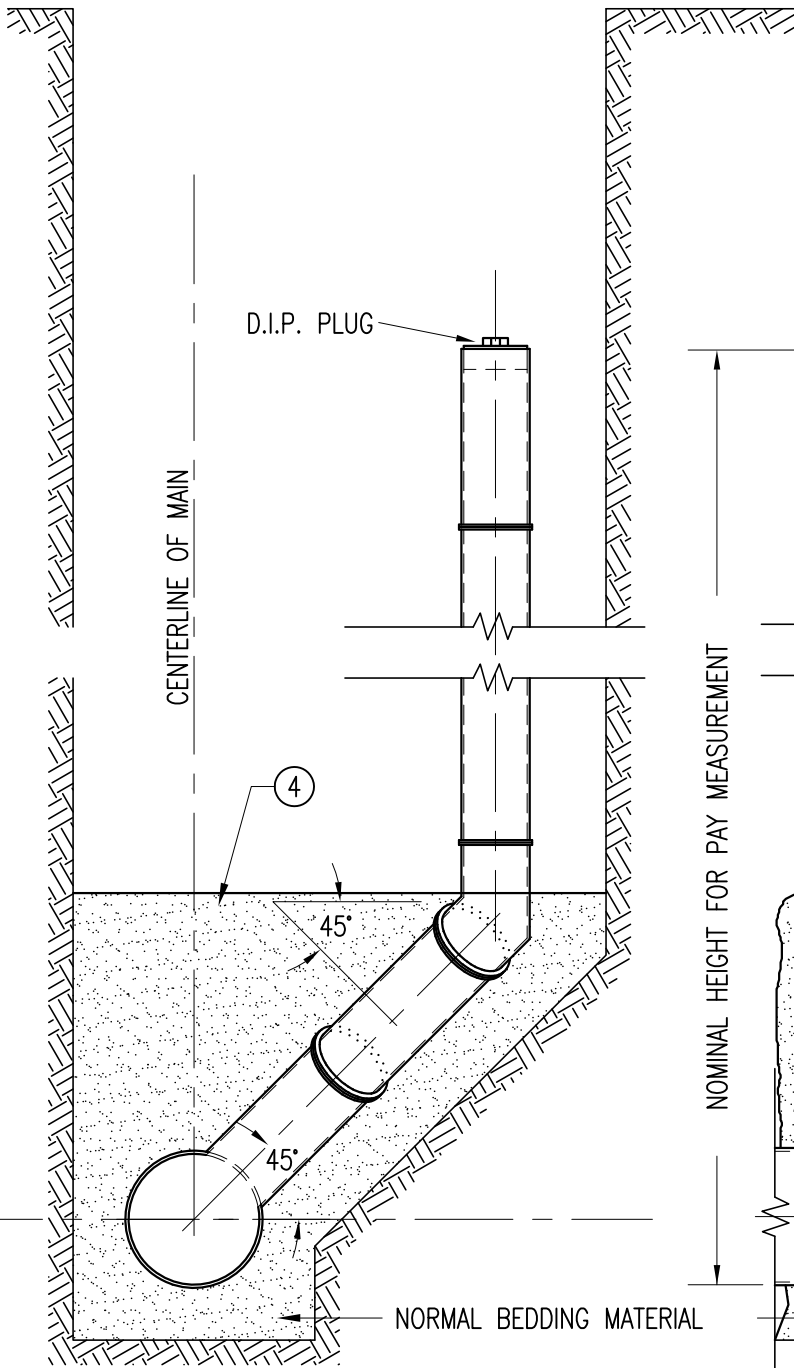
SECTION A-A SERVICE CONNECTIONS

Donald Nelson ASST. CITY ENGINEER *Reed W. Friend* DIRECTOR

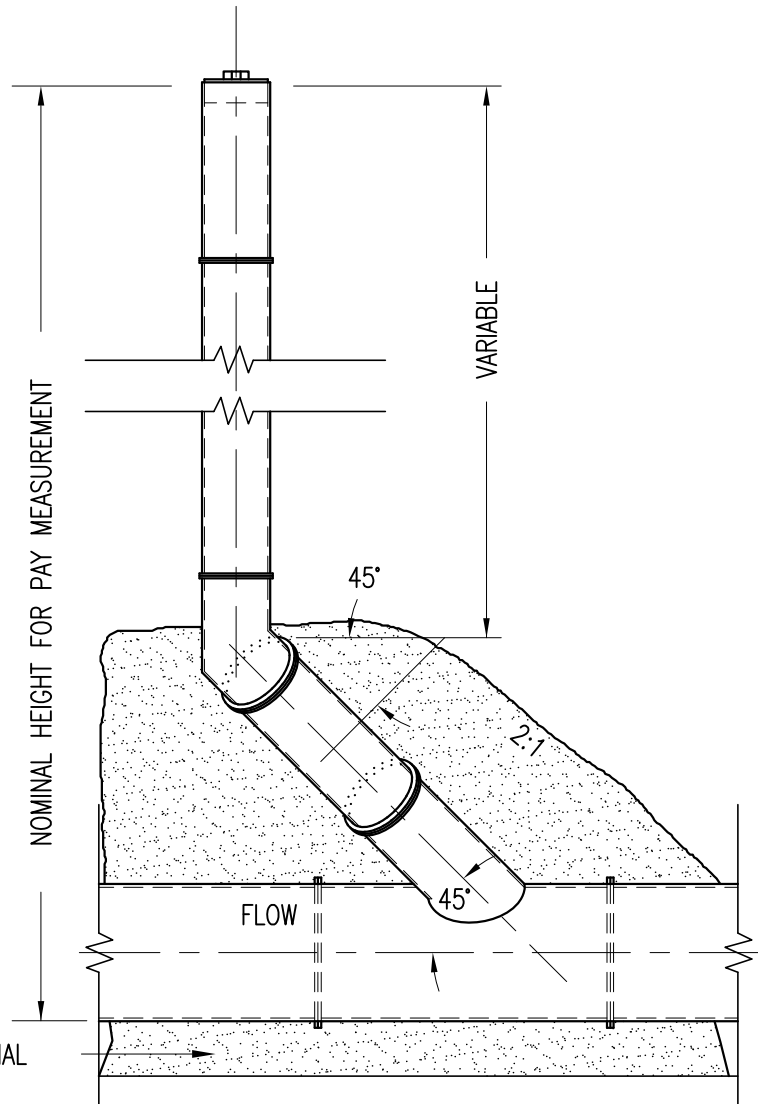
SHT 2 OF 2 SHTS	DATE REVISED 1/20/17	PLATE NO. 4-01	REV. G
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NOTES

1. THE BID PRICE TO CONSTRUCT RISER SHALL INCLUDE ALL COSTS AND MATERIALS FOR WYE BRANCH IN MAIN, BEND, RISER PIPE, MORTAR, AND INSTALLATION.
2. DUCTILE IRON PIPE SHALL BE USED FOR ALL RISER CONSTRUCTION.
3. RISER SHALL BE ALLOWED ONLY ON 4" SERVICE LINES.
- ④ FURNISH AND COMPACT BEDDING MATERIAL TO COMPLETELY FILL TRENCH TO THE DEPTH OF THE 45° BEND AS SHOWN.



END ELEVATION



SIDE ELEVATION

DEPARTMENT OF PUBLIC WORKS
CITY OF ROCHESTER, MINNESOTA

STANDARD 4IN. RISER

Douglas Nelson
ASST. CITY ENGINEER

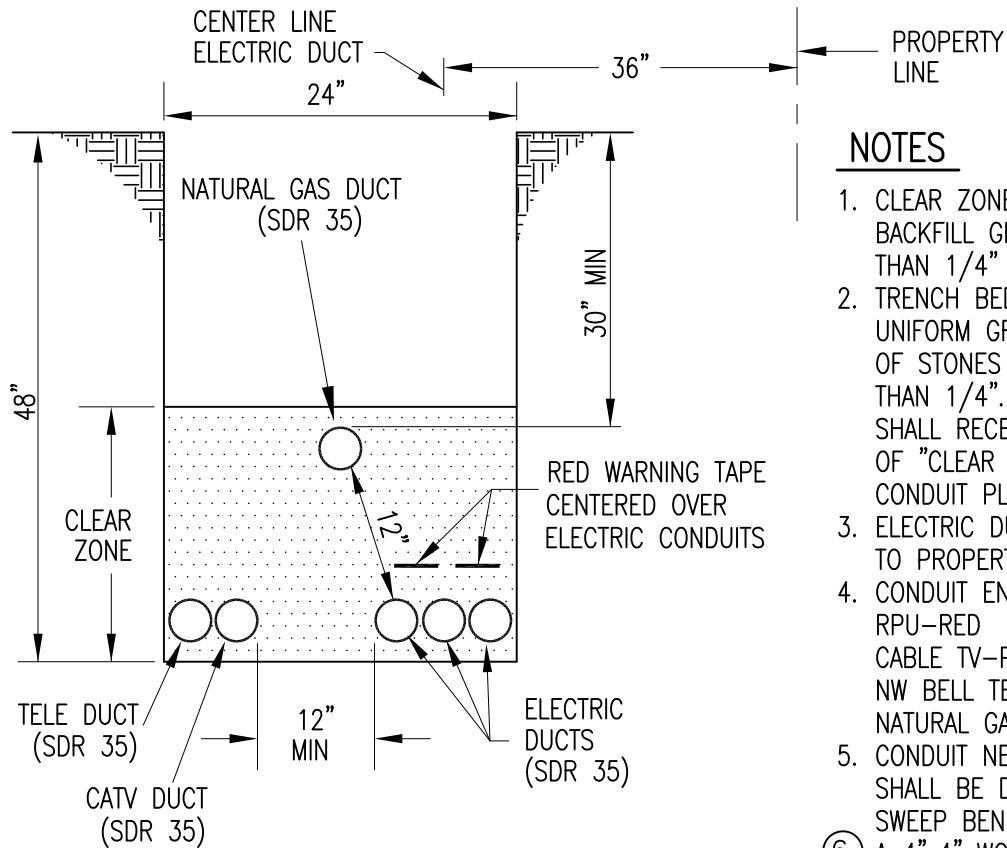
Paul W. Fries
DIRECTOR

SHT 1 OF 1 SHTS

DATE REVISED
1/20/17

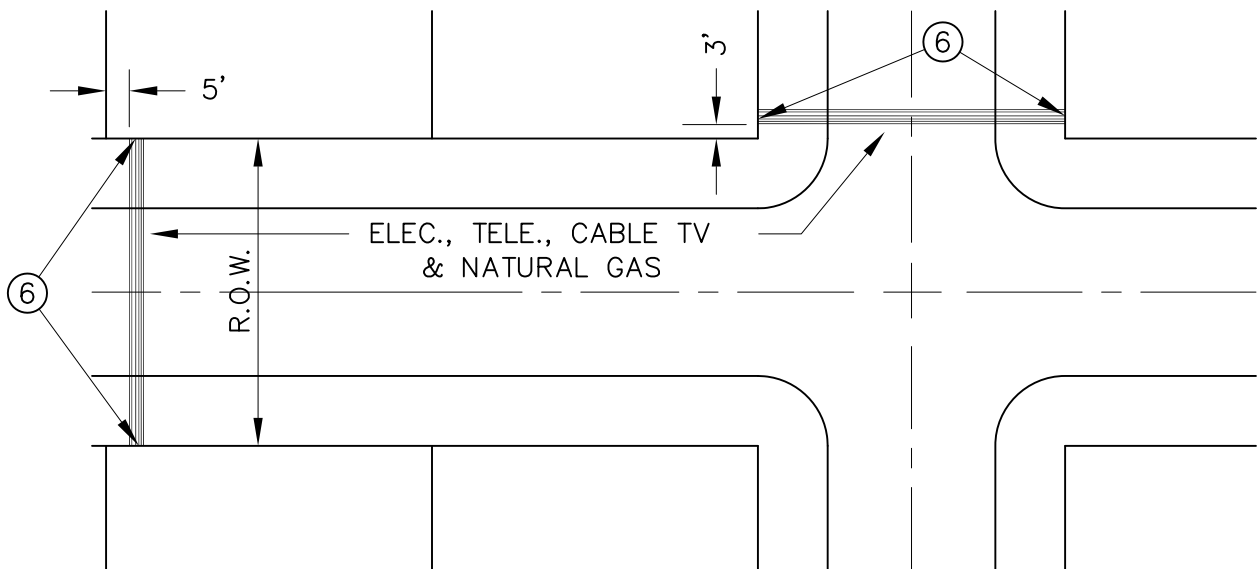
PLATE NO.
4-02

REV.
B



NOTES

1. CLEAR ZONE SHALL NOT CONTAIN BACKFILL GRANULAR MATERIAL LARGER THAN 1/4" IN DIAMETER.
2. TRENCH BED SHALL BE OF A SMOOTH, UNIFORM GRADE, COMPACTED, AND FREE OF STONES OR PROTRUSIONS LARGER THAN 1/4". UNSUITABLE TRENCH BEDS SHALL RECEIVE A 2" COMPACTED LAYER OF "CLEAR ZONE" BACKFILL PRIOR TO CONDUIT PLACEMENT.
3. ELECTRIC DUCT TO BE NEAREST DUCT TO PROPERTY LINE.
4. CONDUIT END CAP COLORS ARE:
 RPU-RED
 CABLE TV-PINK
 NW BELL TELE-BLAZE ORANGE
 NATURAL GAS-YELLOW
5. CONDUIT NEEDING SURFACE ACCESS SHALL BE DONE SO BY USING LONG SWEEP BENDS.
- ⑥ A 4"x4" WOODEN POST, EXTENDING ONE FOOT ABOVE GRADE, SHALL BE PLACED BY THE UTILITY CROSSING CONDUITS TO MARK THEIR LOCATION.



DEPARTMENT OF PUBLIC WORKS CITY OF ROCHESTER, MINNESOTA STREET CROSSINGS FOR UTILITY CONDUITS			
<i>Douglas L. Nelson</i> ASST. CITY ENGINEER		<i>Richard W. Bremer</i> DIRECTOR	
SHT 1 OF 1 SHTS	DATE REVISED 4/1/04	PLATE NO. 4-03	REV. B