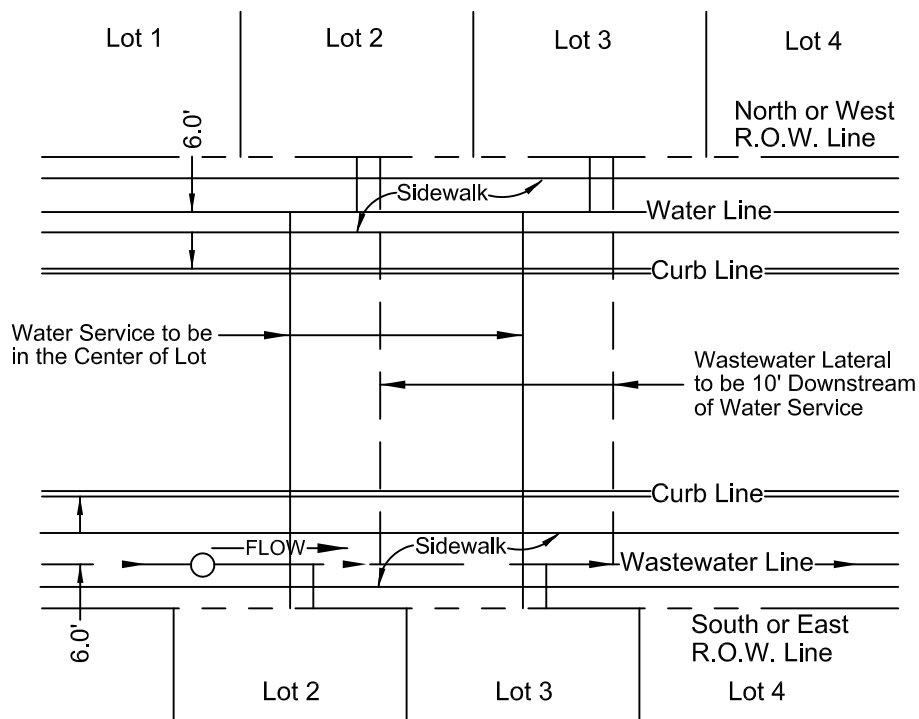



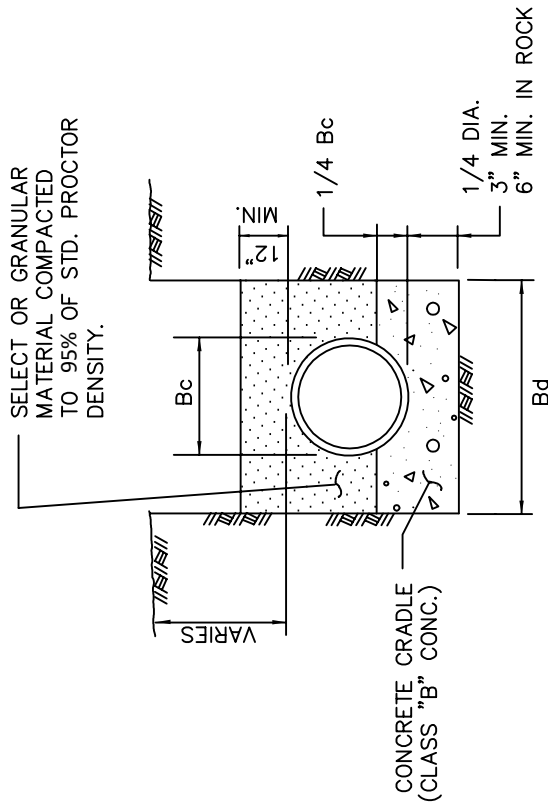
NOTE:

1. If wastewater line has a cover greater than ten feet (10') than pipe shall be minimum SDR 26 and no services allowed.
2. If cover is two (2) feet or less than Class IV RCP is required.
3. Horizontal location of storm sewer for divided roads to be determined by design engineer. Not to be placed in the parkway.



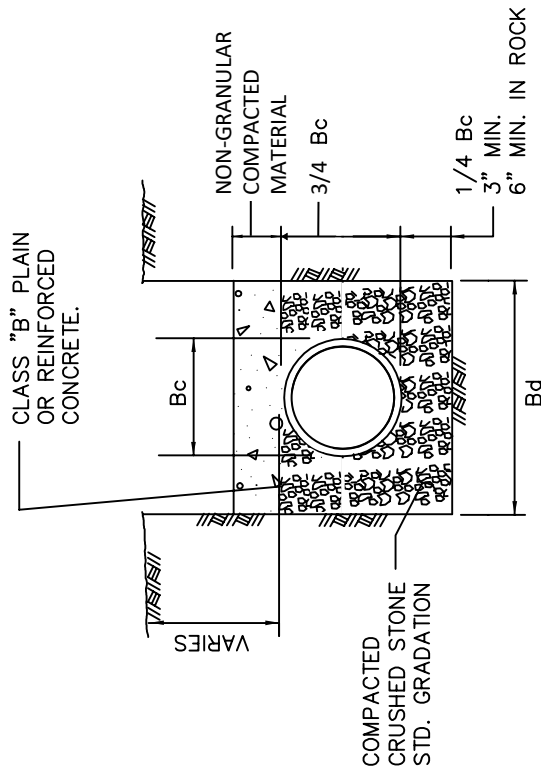
UTILITY SERVICE DETAIL

GENERAL UNDERGROUND CONDUIT	CITY OF ROCKWALL		
UTILITIES LOCATION DETAIL		DATE OCT. '17	DRAWING NO. R-3000



CLASS "A"

CLASS "B" CONCRETE GRADE
 PLAIN CONC. LF 2.8
 REINF. CONC. LF 3.4 P=0.4%
 N.T.S.



CLASS "A-1"

CLASS "B" CONCRETE CAP
 PLAIN CONC. LF 2.8
 REINF. CONC. LF 3.4 P=0.4%
 REINF. CONC. LF 4.8 P=1.0%
 N.T.S.

NOTES:

1. LF. = LOAD FACTOR TO BE USED TO DETERMINE 3 EDGE BEARING BASED ON TYPE OF EMBEDMENT.
2. FREE-FALL OF CONCRETE NOT TO EXCEED 5 FT. MAXIMUM.
3. P = Rho FOR STEEL %
4. Bc = OUTSIDE DIAMETER OF PIPE
5. Bd = TRENCH WIDTH

STANDARD DRAWING NO.
 3010

EMBEDMENT

CLASS "A" & "A-1"

CITY OF ROCKWALL



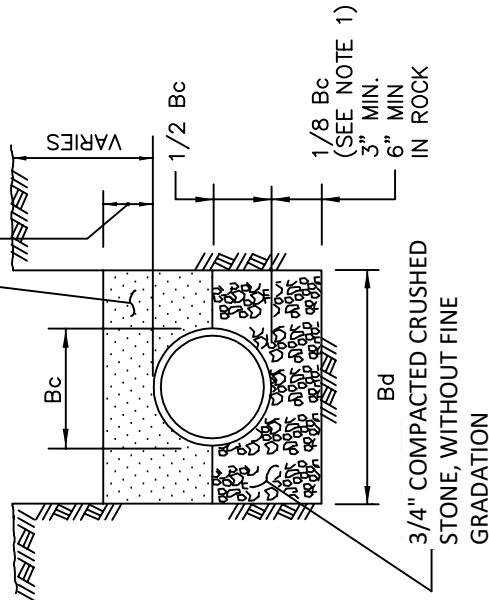
STANDARD SPECIFICATION REFERENCE
 504.5

DATE
 Mar. 2018
 STANDARD DRAWING NO.
 R-3010

SELECT OR NON-GRANULAR MATERIAL COMPACTED TO 95% OF STD. PROCTOR DENSITY

AS SHOWN ON PLANS

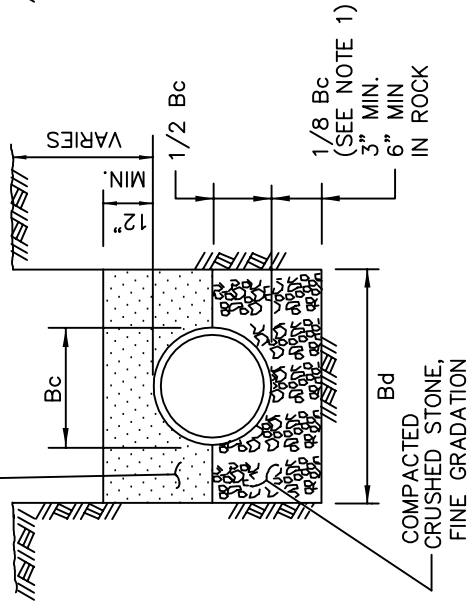
GRANULAR MATERIAL COMPACTED TO 95% OF STD. PROCTOR DENSITY



CLASS "B"

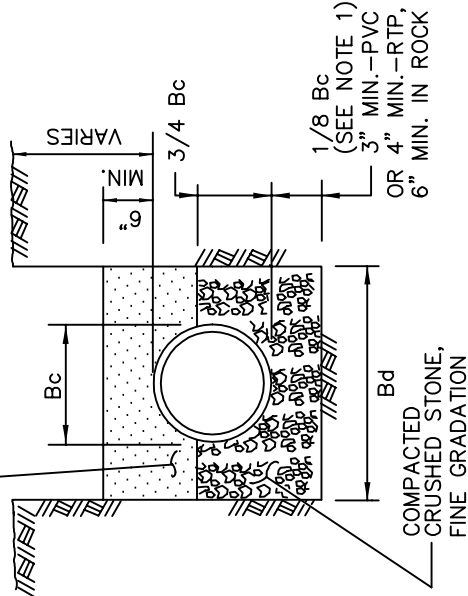
N.T.S.

(TO BE USED FOR RCP STORM SEWER PIPE)



CLASS "B+"

N.T.S.



CLASS "B-1"

N.T.S.

NOTES:

1. FOR MAINS 42" DIAMETER AND LARGER LARGER, 1/8 Bc SHALL BE TAKEN AS 6".
2. Bc = OUTSIDE DIAMETER OF PIPE
3. Bd = TRENCH WIDTH

STANDARD DRAWING NO. R-3020

EMBEDMENT

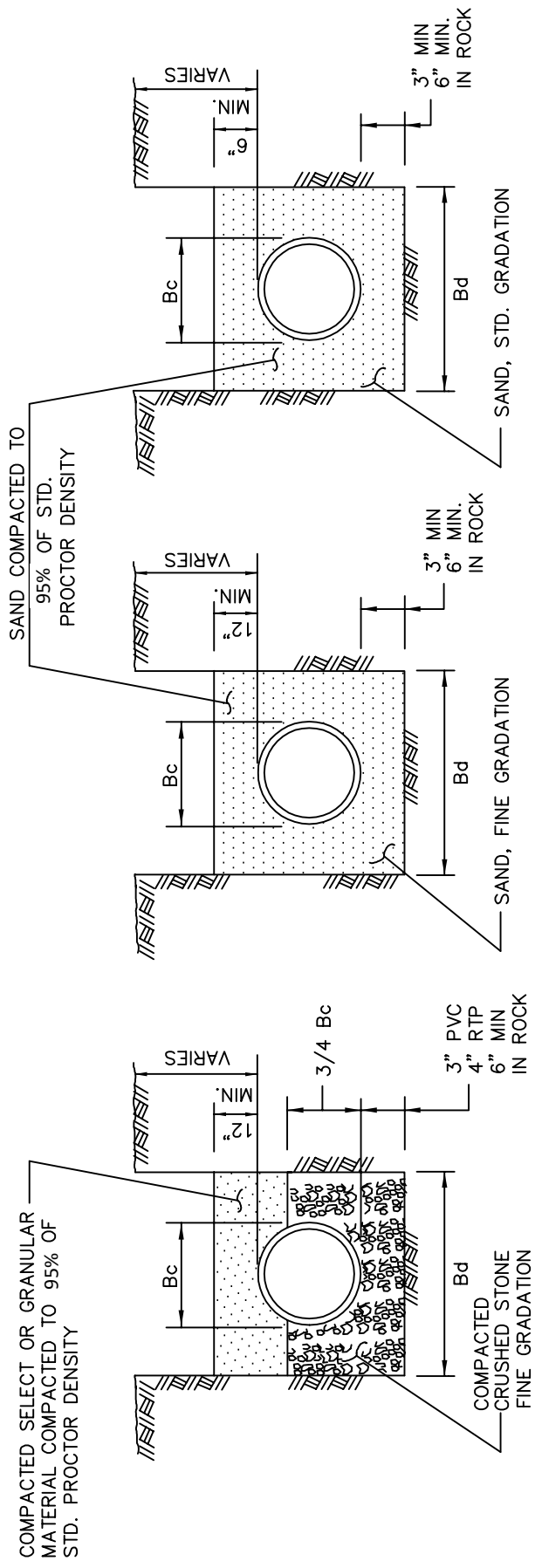
CLASS "B", "B+", & "B-1"

CITY OF ROCKWALL



STANDARD SPECIFICATION REFERENCE 504.5

DATE Mar. 2018
STANDARD DRAWING NO. R-3020



CLASS "B-2"

N.T.S.

CLASS "B-3"

N.T.S.

CLASS "B-4"

N.T.S.

(TO BE USED FOR PVC WATER PIPE AND
PVC WASTE WATER FORCE MAIN PIPE)

NOTES:

1. Bc = OUTSIDE DIAMETER OF PIPE
2. Bd = TRENCH WIDTH
3. NO GRANULAR MATERIAL ABOVE
ROCK OR STONE EMBEDMENT

STANDARD DRAWING NO.
3030

EMBEDMENT

CLASS "B-2", "B-3", & "B-4"

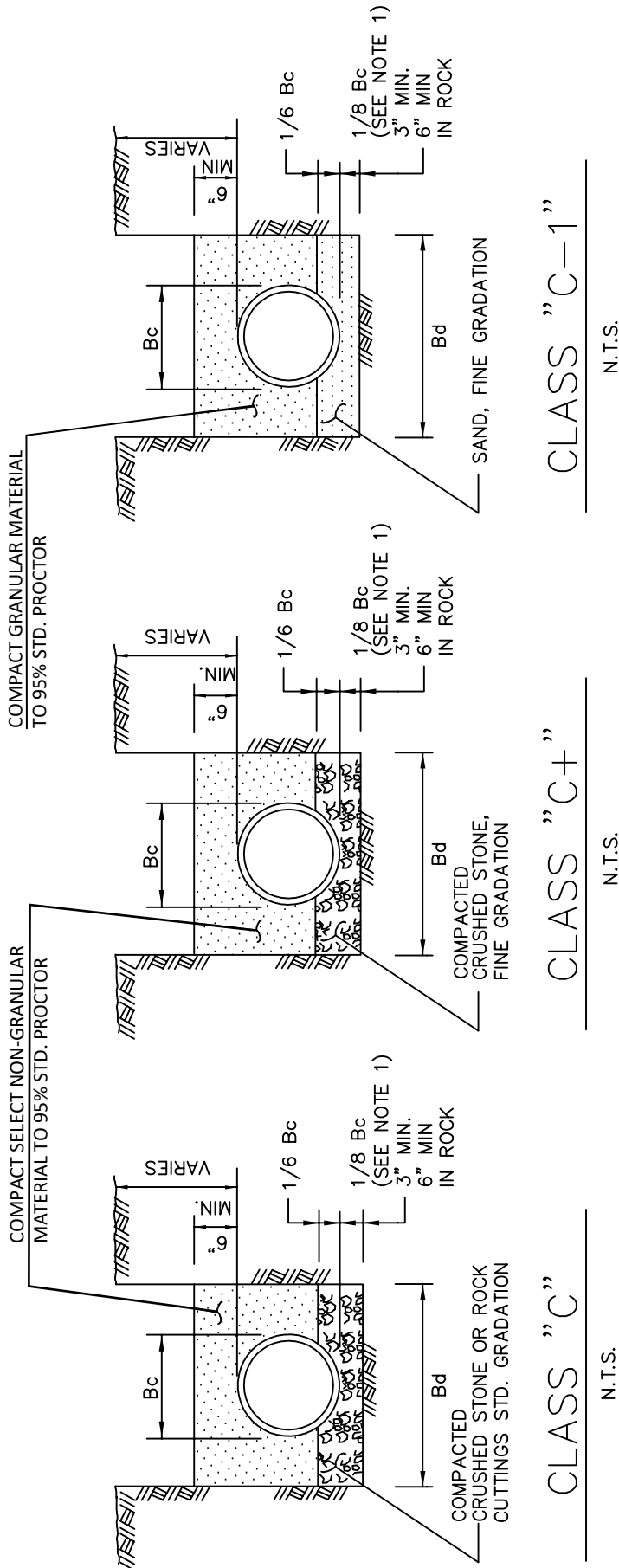
CITY OF ROCKWALL



STANDARD SPECIFICATION REFERENCE
504.5

DATE
AUG. '19

STANDARD DRAWING NO.
R-3030



NOTES:

1. FOR MAINS 42" DIAMETER AND LARGER, 1/8 Bc SHALL BE TAKEN AS 6".
2. Bc = OUTSIDE DIAMETER OF PIPE
3. Bd = TRENCH WIDTH

STANDARD DRAWING NO.
R-3040

STANDARD SPECIFICATION REFERENCE
504.5

DATE
Mar. 2018

STANDARD DRAWING NO.
R-3040

CITY OF ROCKWALL



EMBEDMENT

CLASS "C", "C+", & "C-1"

CLASS "C-1"

N.T.S.

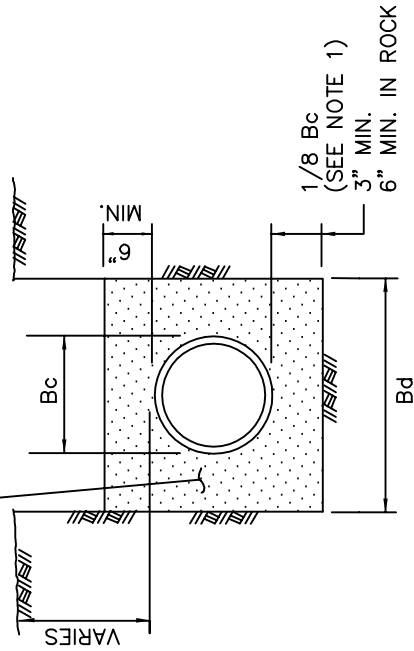
CLASS "C+"

N.T.S.

CLASS "C"

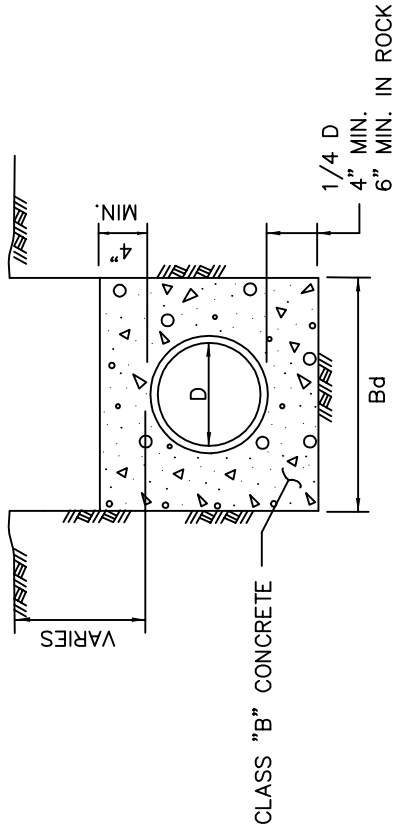
N.T.S.

SELECT MATERIAL
COMPACTED TO 95%
STD. PROCTOR DENSITY.



CLASS "D+"

N.T.S.



CLASS "G"

N.T.S.

NOTES:

1. FOR MAINS 42" DIAMETER AND LARGER, 1/8 Bc SHALL BE TAKEN AS 6".
2. Bc = OUTSIDE DIAMETER OF PIPE
3. Bd = TRENCH WIDTH
4. D = INSIDE DIAMETER OF PIPE

STANDARD DRAWING NO.
R-3050

EMBEDMENT

CLASS "D+" & "G"

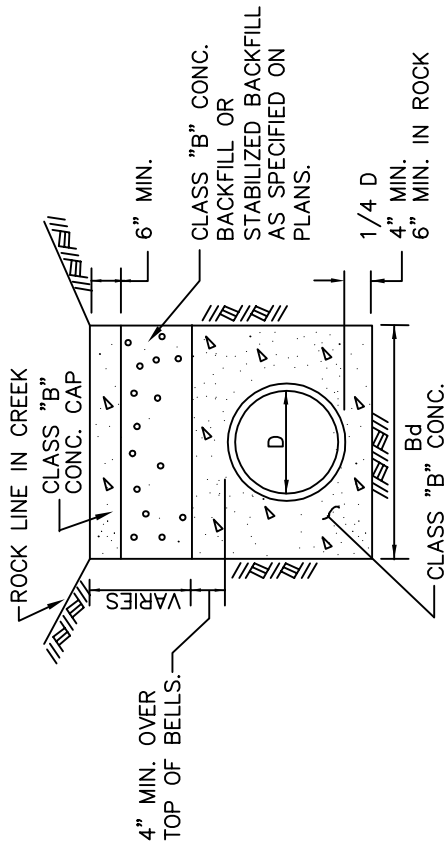
CITY OF ROCKWALL



STANDARD SPECIFICATION REFERENCE
504.5

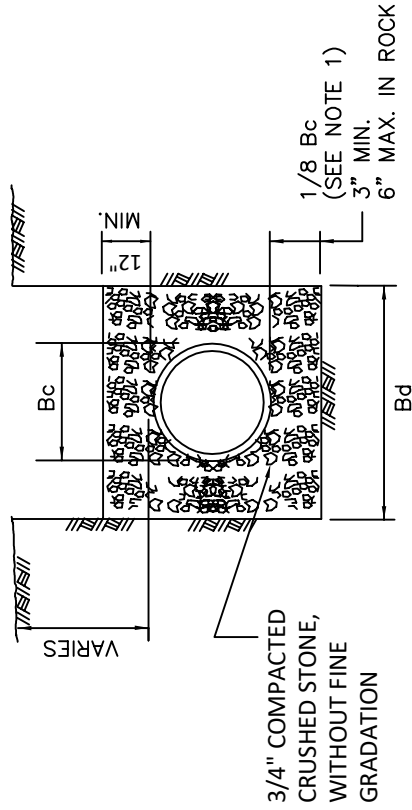
DATE
Mar. 2018

STANDARD DRAWING NO.
R-3050



CLASS "G-1"

(FOR ROCK DITCHES IN CREEKS)
N.T.S.



CLASS "H"

N.T.S.

(TO BE USED FOR PVC WASTEWATER PIPE)

NOTES:

1. FOR MAINS 42" DIAMETER AND LARGER, 1/8 Bc SHALL BE TAKEN AS 6".
2. Bd = TRENCH WIDTH
3. Bc = OUTSIDE DIAMETER OF PIPE
4. D = INSIDE DIAMETER OF PIPE

STANDARD DRAWING NO.
R-3060

EMBEDMENT

CLASS "G-1" & "H"

CITY OF ROCKWALL

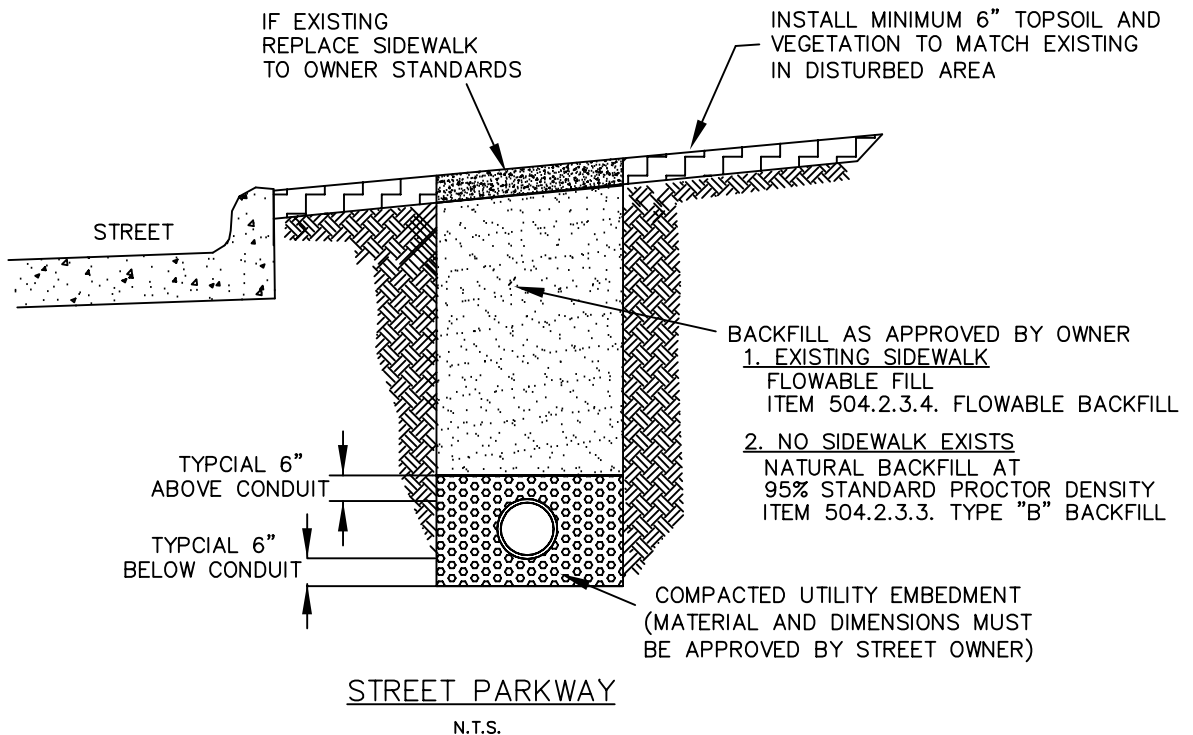
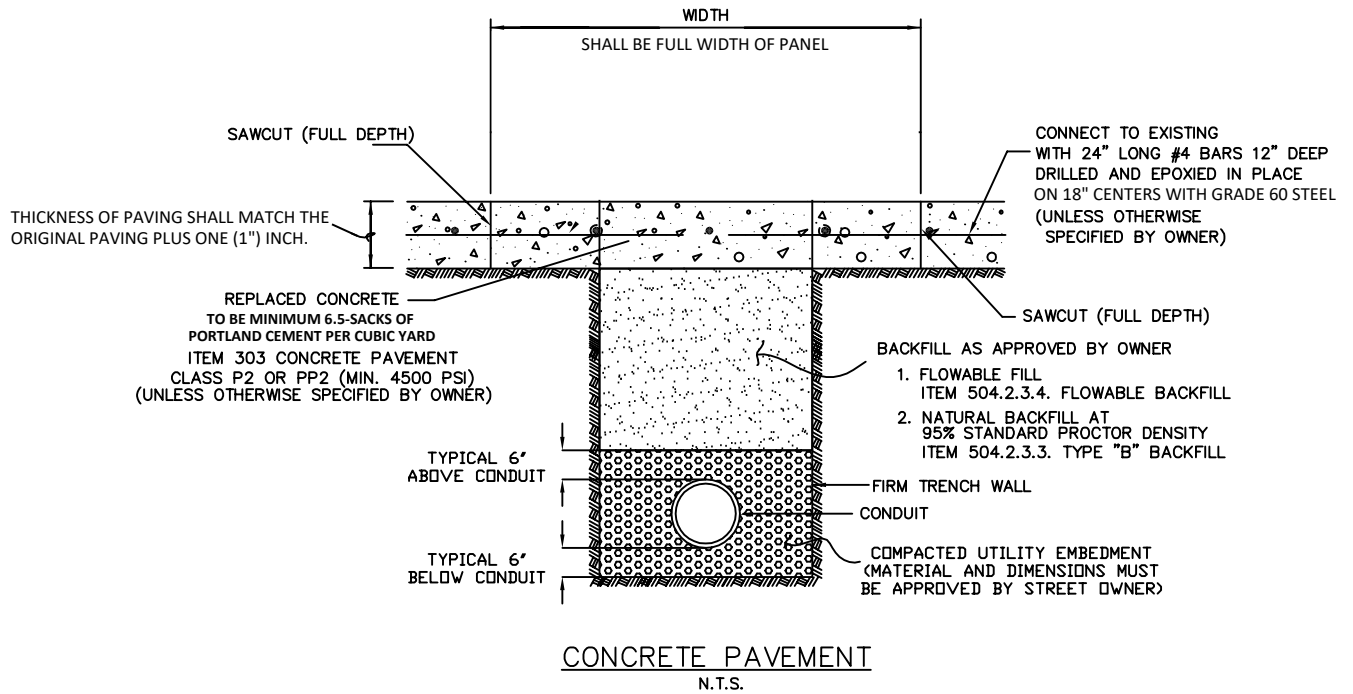


STANDARD SPECIFICATION REFERENCE
504.5

DATE
AUG. '19

STANDARD DRAWING NO.
R-3060

GENERAL NOTE: CHECK WITH STREET OWNER FOR SPECIFIC REQUIREMENTS NOT CONTAINED HEREIN



PAVEMENT CUT AND REPAIR
CONCRETE AND PARKWAY

CITY OF ROCKWALL



STANDARD SPECIFICATION REFERENCE

402

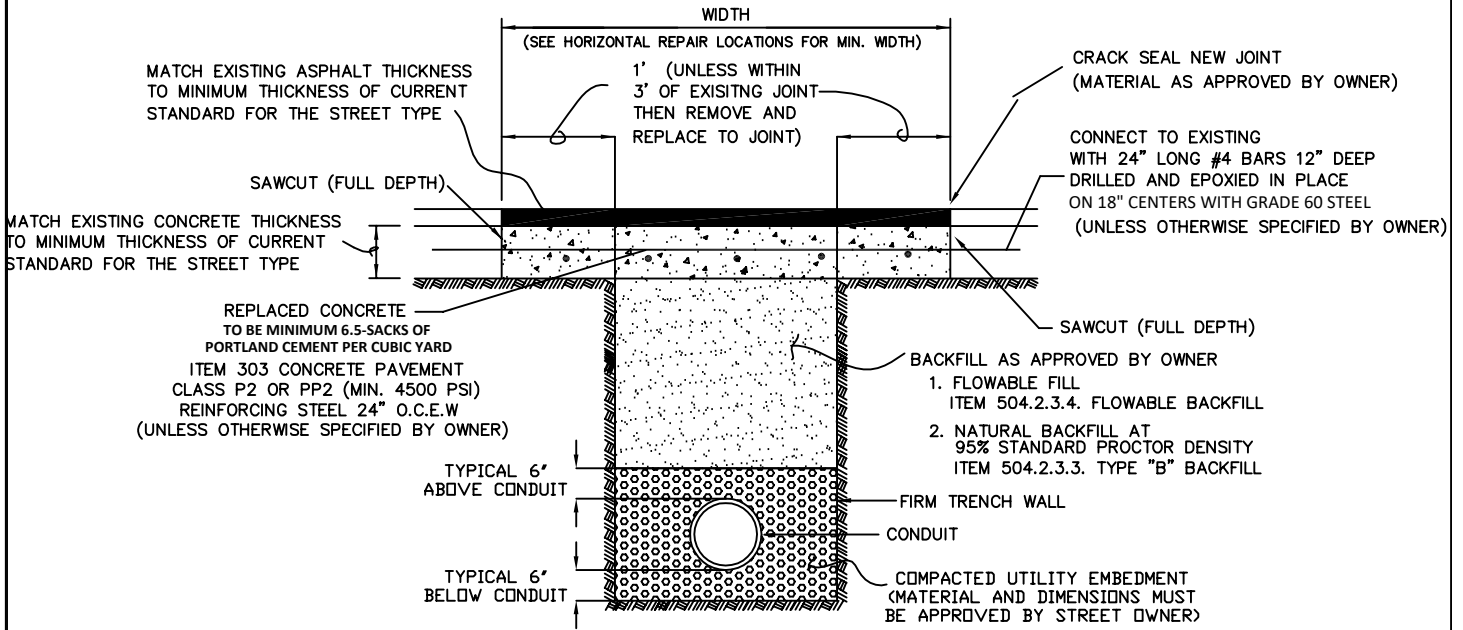
DATE

Mar. 2018

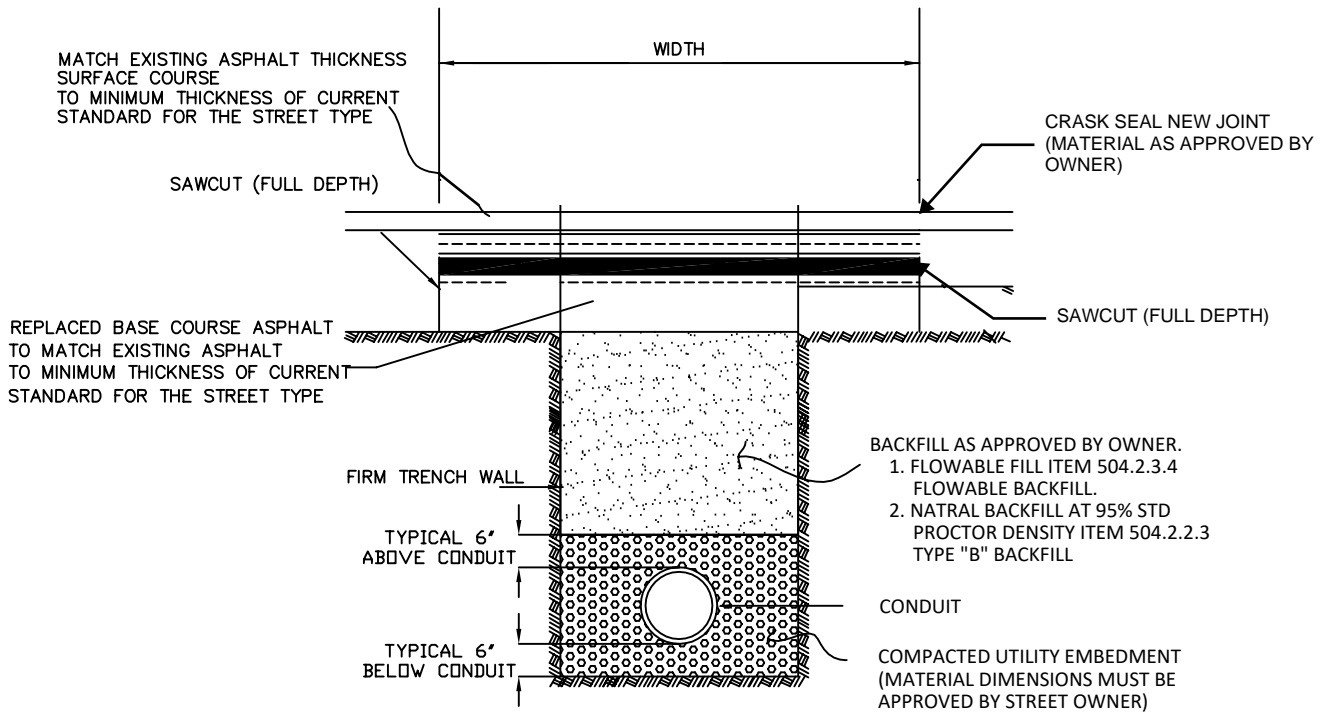
STANDARD DRAWING NO.

R-3070A

GENERAL NOTE: CHECK WITH STREET OWNER FOR SPECIFIC REQUIREMENTS NOT CONTAINED HEREIN



CONCRETE PAVEMENT WITH ASPHALT OVERLAY
N.T.S.



FULL DEPTH ASPHALT PAVEMENT
N.T.S.

PAVEMENT CUT AND REPAIR

CITY OF ROCKWALL

STANDARD SPECIFICATION REFERENCE

402

ASPHALT

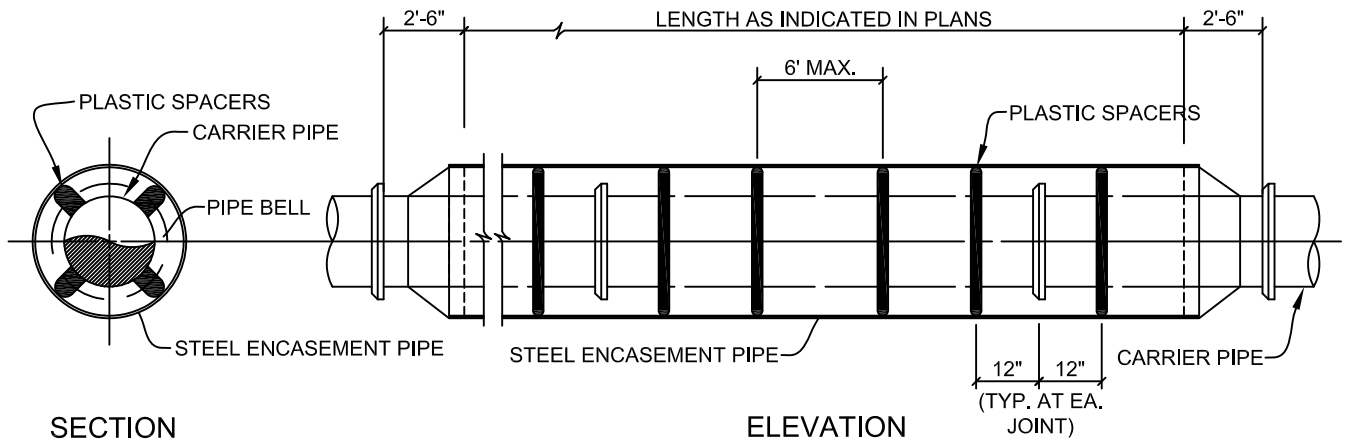


DATE

Mar. 2018

STANDARD DRAWING NO.


R-3070B



ENCASED ROAD BORE
NO SCALE

NOTES:

- 1) ALL BORES BY CONTRACTOR SHALL BE DRY BORES.
- 2) PREFABRICATED PLASTIC SPACERS SHALL BE RACI NORTH AMERICA OR APPROVED EQUAL, FOR THE SPECIFIC APPLICATION AS RECOMMENDED BY THE MANUFACTURER.
- 3) CONTRACTOR SHALL PROVIDE SUPPORT UNDER CARRIER PIPE TO HAVE A MIN. 1" CLEARANCE BETWEEN PIPE BELL AND ENCASEMENT PIPE.
- 4) ENDS OF ENCASEMENT PIPE SHALL HAVE END SEALS INSTALLED PER MANUFACTURER'S REQUIREMENTS. END SEALS SHALL BE CCI MODEL ESW WRAP-AROUND BY CCI PIPELINE SYSTEMS OR APPROVED EQUAL.
- 5) THE DESIGN ENGINEER SHALL DESIGN THE MINIMUM THICKNESS OF THE ENCASEMENT PIPE. DESIGN WILL NEED TO INCLUDE DEAD LOADING BASED ON THE HEIGHT OF COVER AND HS-20 LOADINGS FOR ROADWAY CROSSINGS AND E-80 LOADINGS FOR RAILROAD CROSSINGS.
- 6) STEEL ENCASEMENT PIPE SHALL CONFORM TO AWWA C-200. PIPE SHALL BE FABRICATED IN ACCORDANCE WITH ASTM A-570 FROM STEEL PLATES HAVING MINIMUM YIELD STRENGTH 36,000 PSI.
- 7) STEEL ENCASEMENT PIPE SHALL BE PAINTED INSIDE AND OUTSIDE WITH TWO COATS OF TNEMEC, HB TNEMECOL, SERIES 46+465 COAL TAR, OR CITY APPROVED EQUIVALENT PRIOR TO DELIVERY TO THE JOB SITE. MINIMUM COATING INSIDE AND OUTSIDE SHALL BE 12+MILS DRY FILM THICKNESS (DFT) PER EACH COAT.
- 8) ENCASEMENT PIPE SHALL BE FIELD WELDED IN ACCORDANCE WITH AWWA C-206. WELDED JOINTS SHALL BE WIRE BRUSHED AND PAINTED WITH ONE COAT OF TNEMEC, OMNITHANE SERIES 530, 2.5-MILS DRY FILM THICKNESS (DFT) OR CITY APPROVED EQUIVALENT.

UNDERGROUND CONDUIT	CITY OF ROCKWALL		
STEEL ENCASED BORE		DATE OCT. '17	DRAWING NO. R-3090