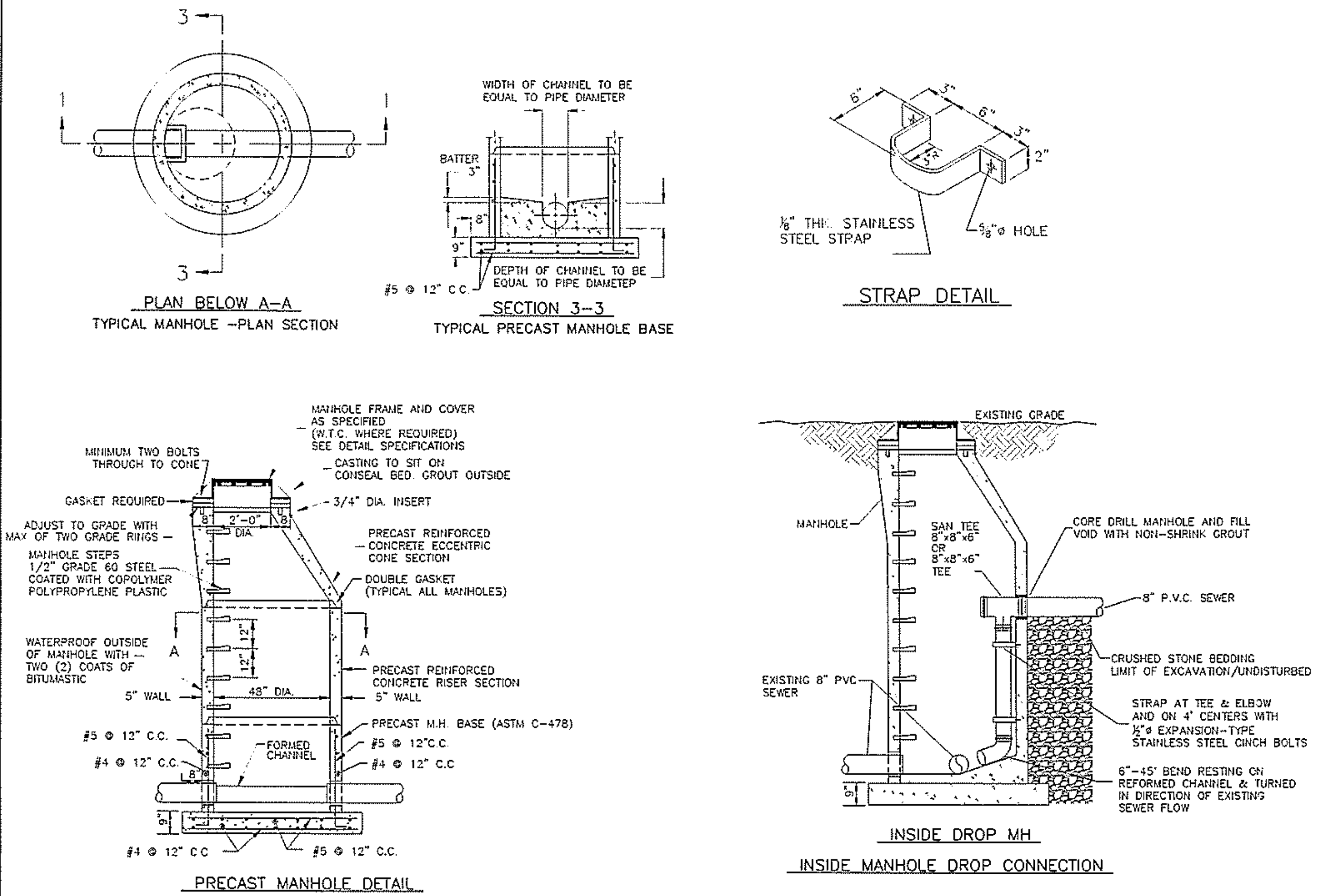

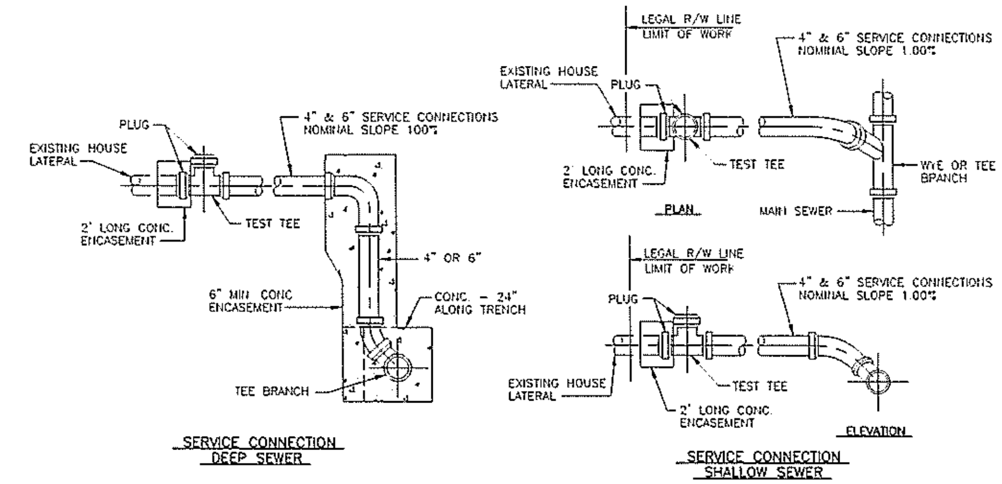

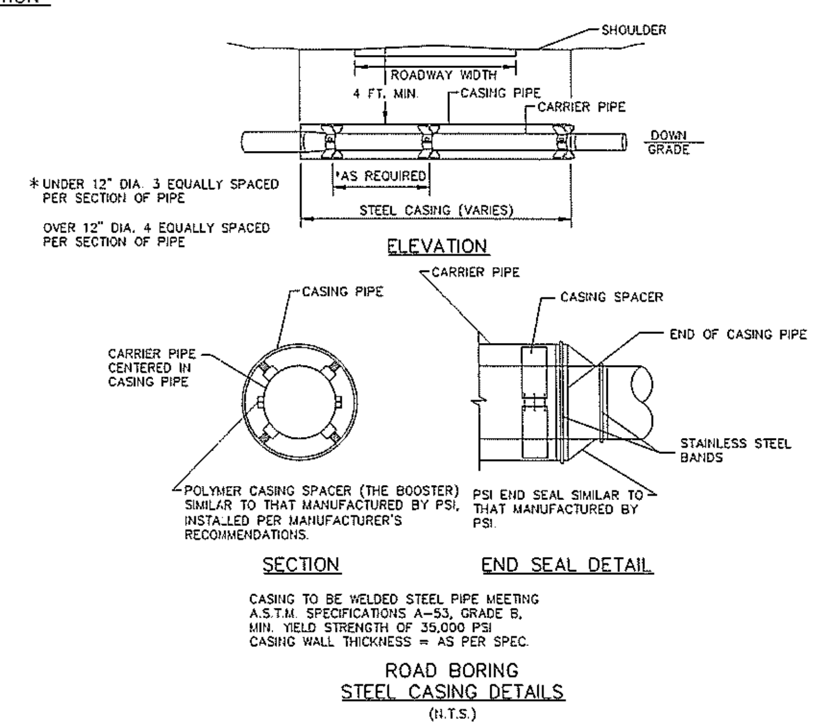

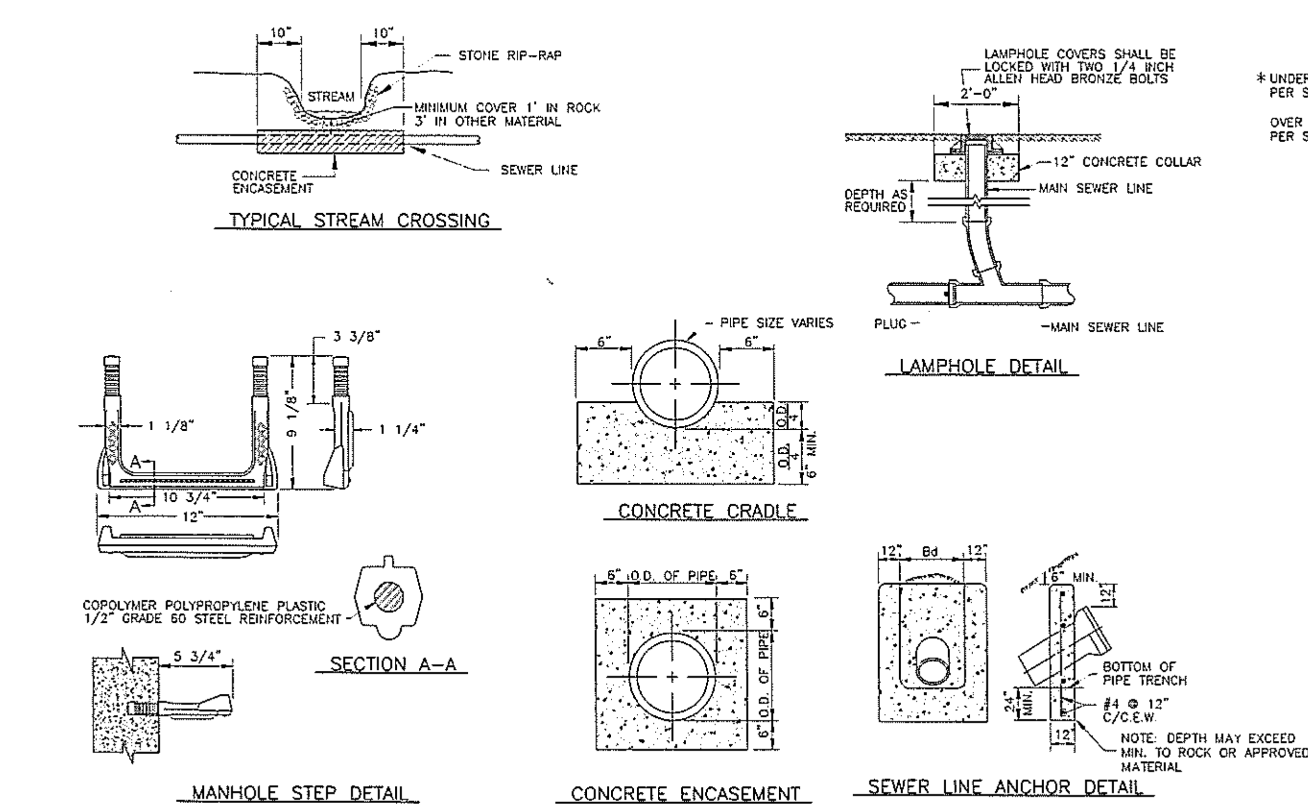

Sewers in relation to water mains

28.3 Relation to Water Mains
28.31 Horizontal Separation – Whenever possible, sewers should be laid at least 10 feet, horizontally, from any existing or proposed water mains. Should local conditions prevent a lateral separation of 10 feet, a sewer may be laid closer than 10 feet to a water main if:
a. it is laid in a separate trench; or if
b. it is laid in the same trench, with the water main located at one side of a bench of undisturbed earth; and if
c. in either case the elevation of the top (crown) of the sewer is at least 18 inches below the bottom (invert) of the water main.
28.32 Vertical Separation – Whenever sewers must cross under water mains, the sewer shall be laid at such an elevation that the top of the sewer is at least 18 inches below the bottom of the water main. When the elevation of the sewer cannot be varied to meet the above requirements, the water main shall be relocated to provide this separation, for a distance of 10 feet extending on each side of the sewer. If possible, one full length of water main should be centered over the sewer so that both joints will be as far from the sewer as possible. The water main should be constructed of slip-on or mechanical-joint cast-iron pipe, PVC pipe, or pre-stressed concrete cylinder pipe and the sewer constructed of mechanical-joint cast-iron pipe for any portion within 10 feet of the water main. Both services shall be pressure tested to assure watertightness prior to backfilling. Where less than an 18" vertical separation exists between the water and sewer line, the sewer line may be concrete encased 10 feet on either side of the water main.
If possible, sewers crossing water mains shall be constructed so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to prevent damage to the water main.

DATE	REVISED BY	REVISION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — DANIEL F. SCHMITT — ENGINEER No. 041837-E

/DCDBA Nike Site_SewerExt-GT13092.dwg

DATE	SCALE	FIELD BOOK / VOL. / PAGE	FILE	DRAWING NO.	DRAWN BY	CHECKED BY
2-20-2014	1"=50'		GT-13092 DR-30	GT-13092	MSK	

SHEET 5 OF 8

STANDARD DETAILS

SR 0910
SEWERLINE EXTENSION
CONTRACT 1/2013
FOR THE
DEER CREEK DRAINAGE BASIN AUTHORITY
ALLEGHENY COUNTY, PENNSYLVANIA

GIBSON THOMAS ENGINEERING COMPANY