8/17/99

PROJECT REFERENCE NO.	SHEET NO.
I-2102	UC-6

DESIGNED BY: MRB
DRAWN BY: MRB
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

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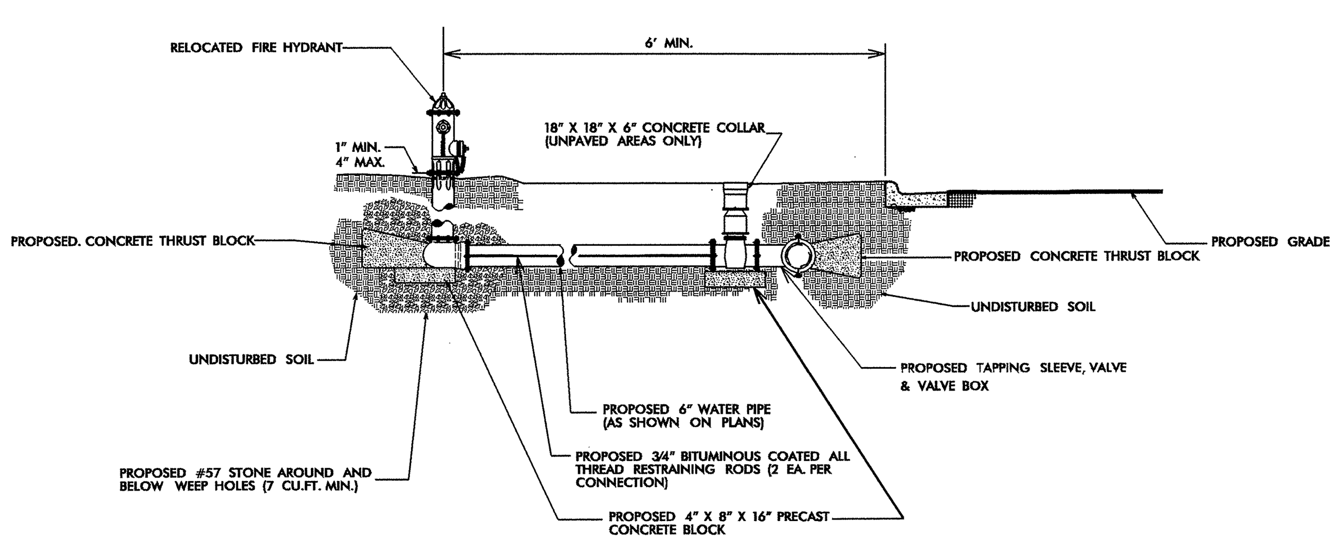
NORTH CAROLINA PROFESSIONAL SEAL 10157 ENGINEER RONALD B. WILKINS 5/4/04

UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

GENERAL NOTES:

1. RELOCATED FIRE HYDRANTS SHALL BE PLACED A MINIMUM DISTANCE OF 6 FEET BACK OF CURB IN CURB AND GUTTER SECTIONS AND 6 FEET BACK OF DITCH IN ROADWAY SECTIONS. WHERE THERE IS NO DITCH, THE HYDRANT SHALL BE PLACED AS FAR AS POSSIBLE FROM THE PAVEMENT EDGE WITHIN RIGHT OF WAY OUTER LIMITS. PUMPER NOZZLE SHALL BE PERPENDICULAR TO ROADWAY.
2. SWIVEL (LOCKED JOINTS) FITTINGS MAY BE USED IN LIEU OF 3/4" RESTRAINING RODS.
3. ALL CONCRETE SHALL BE CLASS "B".
4. HYDRANT BRANCH LINE SHALL HAVE THE SAME COVER AS THE MAIN (36" MIN).



RELOCATED FIRE HYDRANT INSTALLATION DETAIL

GENERAL NOTES:

1. FIRE HYDRANTS SHALL BE PLACED A MINIMUM DISTANCE OF 6 FEET BACK OF CURB IN CURB AND GUTTER SECTIONS AND 6 FEET BACK OF DITCH IN ROADWAY SECTIONS. WHERE THERE IS NO DITCH, THE HYDRANT SHALL BE PLACED AS FAR AS POSSIBLE FROM THE PAVEMENT EDGE WITHIN RIGHT OF WAY OUTER LIMITS. PUMPER NOZZLE SHALL BE PERPENDICULAR TO ROADWAY.
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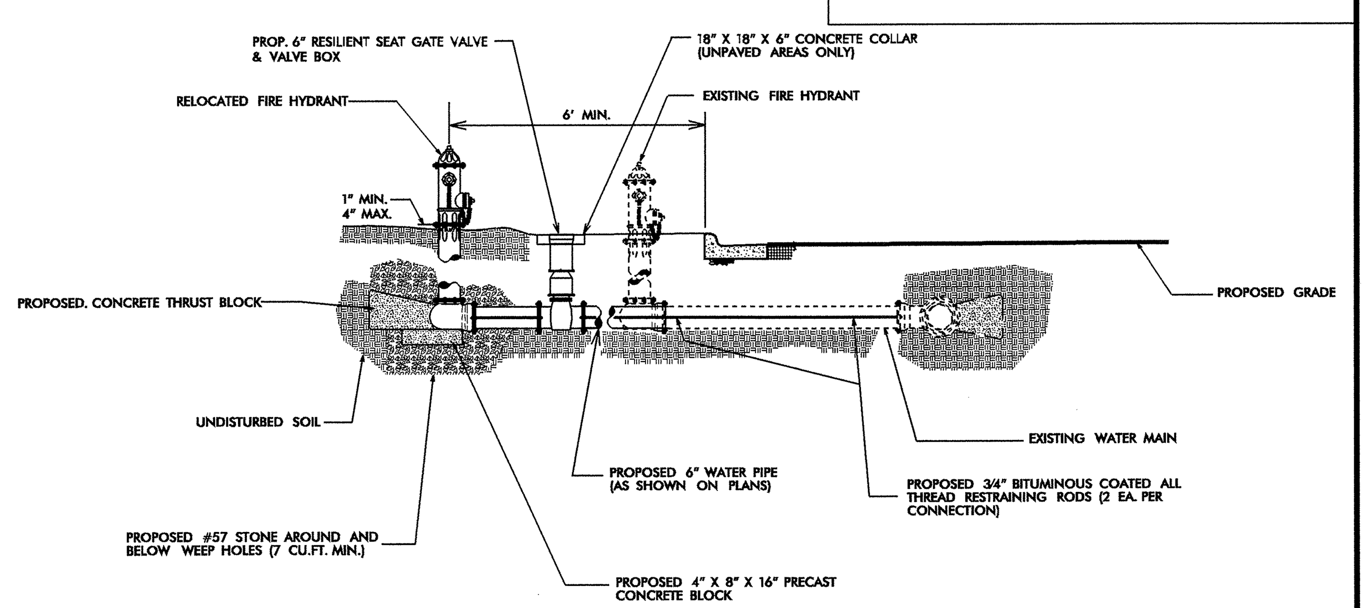
3. ALL CONCRETE SHALL BE CLASS "B".
4. HYDRANT BRANCH LINE SHALL HAVE THE SAME COVER AS THE MAIN (36" MINIMUM).



FIRE HYDRANT RELOCATION DETAIL

GENERAL NOTES:

1. RELOCATED FIRE HYDRANTS SHALL BE PLACED A MINIMUM DISTANCE OF 6 FEET BACK OF CURB IN CURB AND GUTTER SECTIONS AND 6 FEET BACK OF DITCH IN ROADWAY SECTIONS. WHERE THERE IS NO DITCH, THE HYDRANT SHALL BE PLACED AS FAR AS POSSIBLE FROM THE PAVEMENT EDGE WITHIN RIGHT OF WAY OUTER LIMITS. PUMPER NOZZLE SHALL BE PERPENDICULAR TO ROADWAY.
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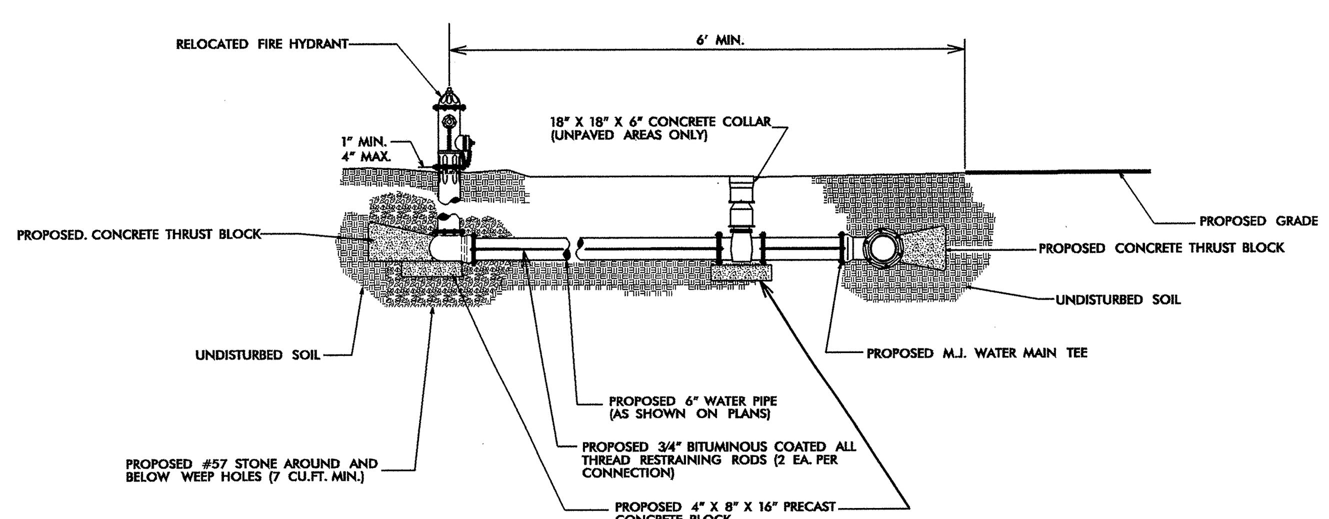
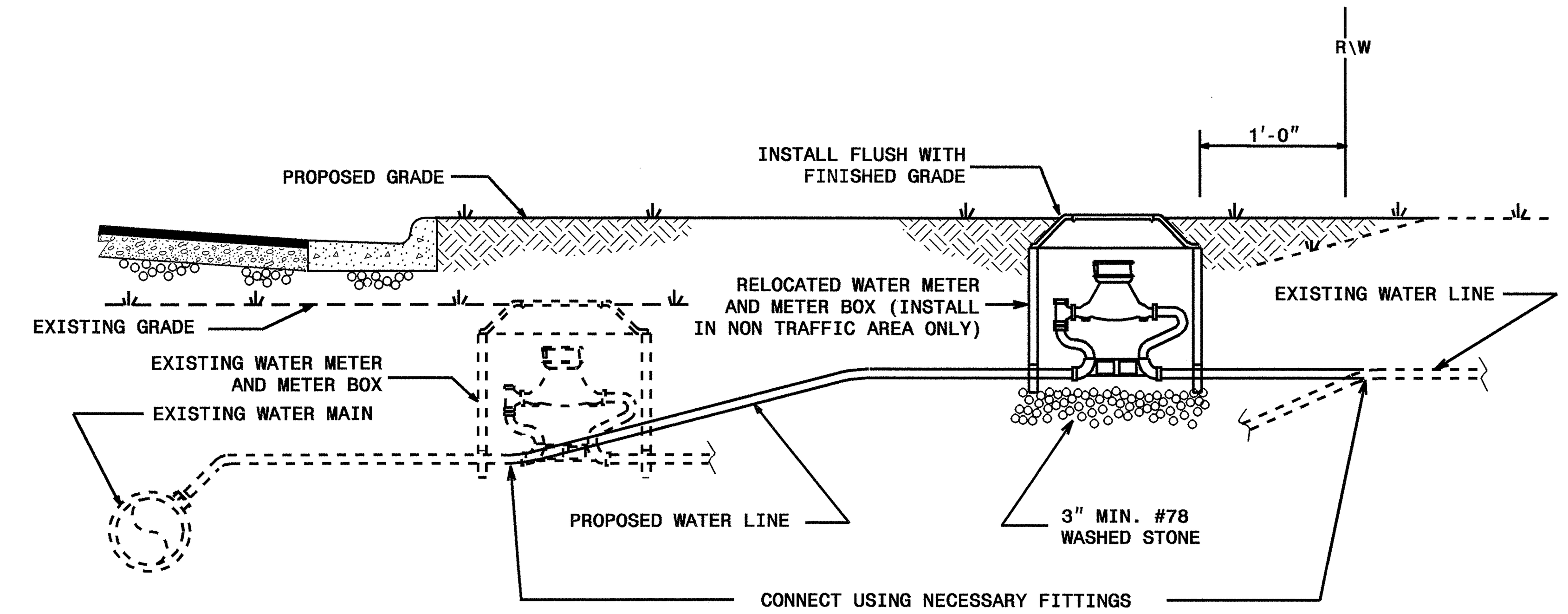


RELOCATED FIRE HYDRANT INSTALLATION DETAIL



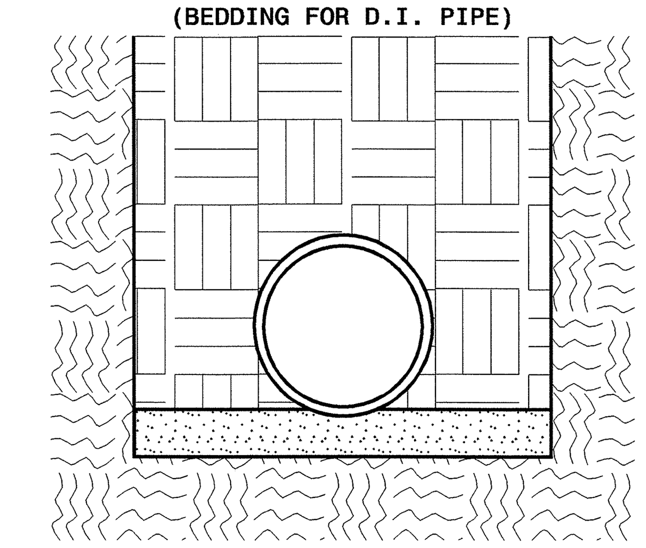
NOTES:

1. RELOCATION SHALL INCLUDE THE REMOVAL AND INSTALLATION AT THE APPROPRIATE LOCATION OF THE WATER METER, METER SETTER AND YOKE, METER VALVES, AND METER BOX WITH LID.
2. THE NEW WATER SERVICE LINE SHALL BE OF THE SAME TYPE AND GRADE AS THE EXISTING WATER SERVICE LINE UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER.
3. THE NEW WATER SERVICE LINE SHALL BE INSTALLED WITH A MINIMUN OF 36" COVER BELOW FINISHED GRADE.

WATER METER RELOCATION DETAIL

TYPE "3"

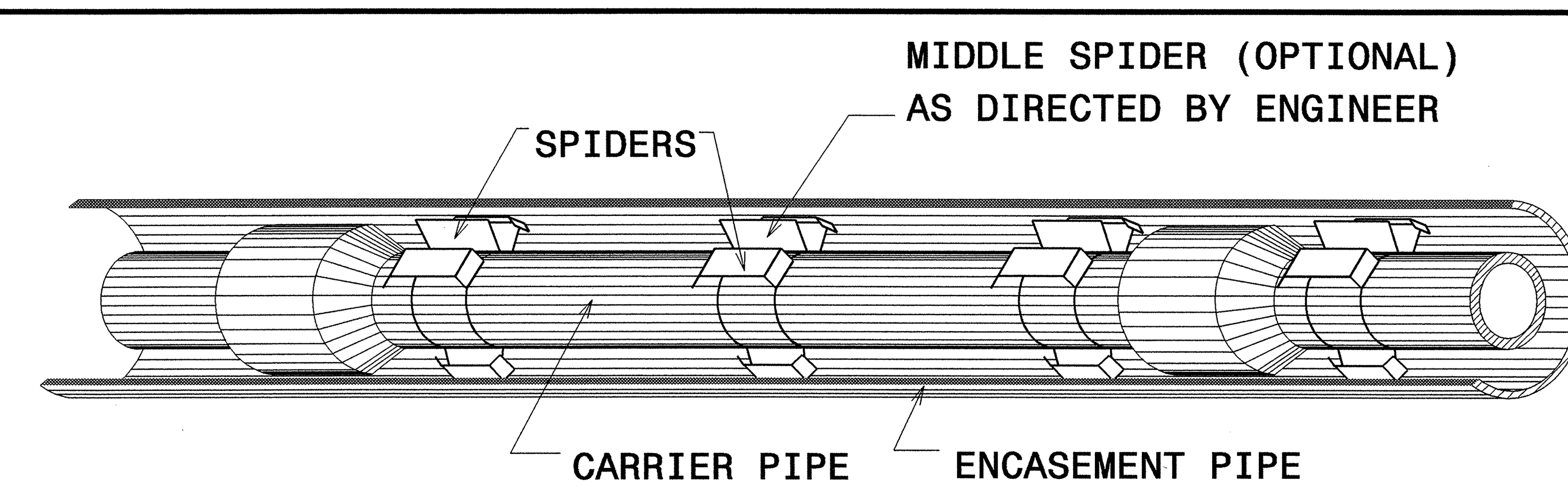
(BEDDING FOR D.I. PIPE)



PIPE BEDDED IN 4" MINIMUM LOOSE SOIL. TRENCH BACKFILLED IN LOOSE 6" LAYERS COMPACTED TO TOP OF TRENCH USING LOCAL EXCAVATED MATERIAL, IF APPROVED BY THE ENGINEER, OR SELECT MATERIAL. ALL MATERIAL SHALL BE FREE OF ROCKS, FOREIGN MATERIAL, AND FROZEN EARTH. COMPACTION SHALL BE TO APPROX. 95% DENSITY IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY THE DEPARTMENT OF TRANSPORTATION.

MAXIMUM TRENCH WIDTH AT TOP OF PIPE

NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)	NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)
4	28	20	44
6	30	24	48
8	32	30	54
10	34	36	60
12	36	42	66
14	38	48	72
16	40	54	78
18	42		



NOTES:
1 - NORMAL SPACING FOR SPIDERS IS 3 PER 18 FEET LENGTH OF PIPE, ONE SUPPORT AT EACH END AND A SUPPORT AT 9 FOOT CENTER.
2 - ENTIRE SPIDER ASSEMBLY TO BE BITUMINOUS COATED AFTER FABRICATION.
3 - FIELD MODIFY AS REQUIRED TO PROVIDE SLOPE IN CARRIER PIPE.

PROPOSED STEEL PIPE ENCASEMENT DETAIL

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