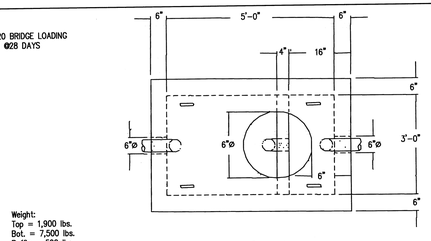
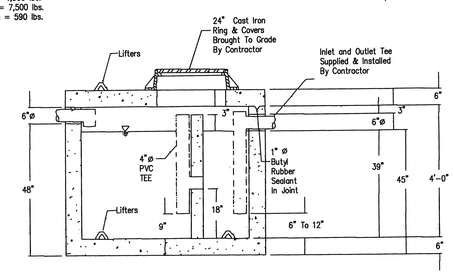
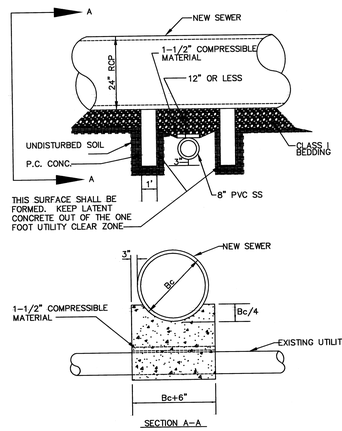
NOTES:
1. REINFORCEMENT: H-20 BRIDGE LOADING
2. CONCRETE: 4000 PSI @28 DAYS



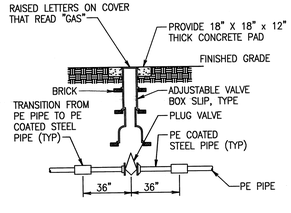
Weight:
Top = 1,900 lbs.
Bot. = 7,500 lbs.
Baffle = 590 lbs.



300 GALLON UNDERGROUND GREASE TRAP DETAIL
NOT TO SCALE



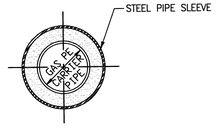
SEWER PIPE BRIDGING DETAIL
NOT TO SCALE



VALVE BOX SCHEDULE		
PIT NO	PIPE SIZE	VALVE SIZE
VB-1	4"	4"
VB-2	1-1/2"	1-1/2"
VB-3	1-1/2"	1-1/2"
VB-4	1-1/2"	1-1/2"
VB-5	1 1/2"	1 1/2"
✳VB-6	3"	3"
VB-7	1-1/2"	1-1/2"

✳ PROVIDE BLIND FLANGE ON PLUG VALVE AND SEALED SLEEVE FOR FUTURE CONNECTION.

TYPICAL GAS SLEEVE AND BOX DETAIL
NOT TO SCALE



NOTES:
1. USE STEEL CASING TWICE THE DIA OF CARRIER PIPE. PIPE (MIN. WALL THICHNESS 0.23")
2. CASING PIPE SHALL BE IN ACCORDANCE WITH ASTM A-53. GRADE B.
3. EACH END ENCASEMENT TO BE PLUGGED WITH WELDED STEEL & SILICONE SEALANT.
4. UP TO TOTAL OF 0.5" ALLOWED IN VARIATION OF INVERT ELEVATIONS BETWEEN ENDS OF CASING.
5. PROVIDE CASING VENT SAME SIZE AS PIPE, EXTEND TO 12" ABV FINISH GRADE & TURN DN WITH INSECT SREEN. VENT SHALL BE AT LEAST 6' FROM SHOULDER OF ROADWAY OR 20' FROM EDGE OF BUILDING.

GAS PIPE SLEEVE DETAIL
NOT TO SCALE

TYPICAL GAS SLEEVE DETAILS
NOT TO SCALE

SANITARY SEWER UTILITY - GENERAL NOTES

1. MIN. CONCRETE COMPRESSIVE STRENGTH SHALL BE 4000 PSI.
2. CONNECTIONS TO EXISTING MANHOLES SHALL BE BY CORING MANHOLE AND FIELD INSTALLING A FLEX BOOT CONNECTOR. DO NOT ALLOW DEBRIS TO ENTER SYSTEM
3. MORTAR SHALL BE QUICK SETTING. NON-SHRINK GROUT MIXED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
4. VERTICAL DROPS BETWEEN THE INFLOW PIPES AND OUTFLOW PIPES SHALL REQUIRE THE FOLLOWING.
   A. GREATER THAN 2.5' SEE DROP STRUCTURE DETAIL (MIN 5' DIA M.H. REQ'D)
   B. 1' TO 2.5' SEE PIPE SLIDE DETAIL
   C LESS THAN 1' SEE SLIDE DETAIL
5. MANHOLE RING AND COVER AND DROP STRUCTURE SHALL BE IN ACCORDANCE W/PWC STANDARDS SEE APPLICABLE DETAIL.
6. INVERT ON PLANS IS TO M.H. CL.
7. CLEANOUT ELEVATIONS AND/OR LOCATIONS MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER WHEN NECESSARY. CLEANOUT STACK TOP ELEVATION IS DETERMINED BY INTERPOLATING FIELD DATA AND MAY NOT BE EXACT. CLEANOUT ELEVATION TOP SHALL BE SET IN ACCORDANCE WITH THE BJWSA TYPICAL DETAIL (NO SEPERATE PAYMENT)
8. THE TRENCH SHALL BE SHORED ADEQUATELY TO PREVENT ANY SLOUGHING OF THE SIDE SLOPES. SUITABLE BACK FILL SHALL BE PLACED IN THE TRENCH. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT AND FOLLOW RECOMMENDATIONS. CONSTRUCTION METHODS AND MEASURES SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND RECOMMENDATIONS. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR REPAIR OF STRUCTURES, FOUNDATIONS, FOOTINGS, ETC. DAMAGED DUE TO CONSTRUCTION.
9. SANITARY SEWER MANHOLE DEFLECTION ANGLES ARE 180 DEGREES UNLESS NOTED OTHERWISE.

SEWER SERVICE LATERAL NOTES

1. CONTRACTOR SHALL MAKE UP STACK AND SUBMIT TO ENGINEER FOR APPROVAL.
2. LATERAL SHALL CONFORM TO ASTM SPECS. D-3034 SDR-26 UNLESS OTHERWISE INDICATED AS DUCTILE IRON.
3. ALL PIPE AND FITTINGS SHALL BE 4" UNLESS OTHERWISE SPECIFIED.
4. ALL DUCTILE IRON PIPE SHALL HAVE AN INTERIOR LINING OF CERAMIC EPOXY OR FUSED CALCIUM ALUMINATE CEMENT WITH FUSED CALCIUM ALLUMINATE AGGREGATES. THE ENTIRE DUCTILE IRON LATERAL SHALL BE COMPRISED OF DUCTILE IRON PIPE AND MECHANICAL JOINT FITTINGS.
5. ALL CONNECTIONS SHALL HAVE RUBBER GASKET SEALS INSTALLED.
6. SANITARY SEWER SERVICE CLEANOUT STACK SHALL BE LOCATED 18" FROM WATER SERVICE LOCK VALVE WHEN IN SAME DITCH.
7. PVC WYES SHALL BE ONE PIECE MOLDED OR FABRICATED. TEE WYES AND TWO PIECE TEES ARE NOT ACCEPTABLE.
8. INSTALLATION OTHER THAN AS SHOWN MUST BE PRE-APPROVED BY ENGINEER.
9. SLOPE AND DEPTH OF THE SERVICE LATERAL SHALL BE DETERMINED BY THE TOPOGRAPHY OF THE LOT AS APPROVED BY THE ENGINEER OR AS INDICATED ON THE DRAWINGS.
10. LATERAL SHALL CONFORM TO THE ¼" PER FOOT MINIMUM SLOPE. MAXIMUM CLEAN OUT SPACING FOR 4" PIPES 75' 6" PIPES 100'.
11. ENTIRE SEWER LATERAL ASSEMBLY SHALL BE AIR TESTED CONCURRENTLY WITH SEWER MAIN.
12. INDIVIDUAL LATERALS SHALL BE CLEANED AND FLUSHED PRIOR TO FLUSHING SANITARY SEWER MAINS.
13. LATERALS SHALL NOT BE BACK-FILLED UNTIL INSPECTED BY THE BJWSA PROJECT COORDINATOR.
14. WYE CONNECTIONS SHALL NOT BE USED TO TIE LATERALS INTO A MANHOLE, UNLESS OTHERWISE APPROVED BY BJWSA.
15. IF BENDS ARE APPROVED BY THE PROJECT COORDINATOR, STONE BEDDING IS REQUIRED TO BE INSTALLED FROM UNDISTURBED SOIL TO BOTTOM OF BEND.

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KCI ASSOCIATES OF NORTH CAROLINA, PA

KCI PROJECT NO. : 12082908

ISSUED FOR CONSTRUCTION

100% DESIGN COMPLETE
04 SEPT 2009

US ARMY CORPS OF ENGINEERS

SYMBOL	DESCRIPTION	DATE	BY
3	100% DESIGN COMPLETE	04 SEPT 09	BB
2	DESIGN COMPLETE	16 JULY 09	BB
1	100% FINAL SITE DESIGN	22 JUNE 09	BB

DESIGNED BY: BB
DRWN BY: MAL
SUBMITTED BY: KCI ASSOCIATES OF NC
FILE NAME: SEC2JS04.DGN
SIZE: ANSI D
DATE: 04 SEPT 2009
SOLICITATION NO.: W912DY-08-R-0029
CONTRACT NO.: W912DY-09-C-0033
CATEGORY CODE: 730-10-01
PLOT DATE: 04 SEPT 2009
PLOT SCALE: AS INDICATED

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
HUNTSVILLE CENTER

TEAM Construction, LLC

15th STREET FIRE STATION
FORT STEWART, GEORGIA

SANITARY SEWER AND NATURAL GAS DETAILS

PLATE REFERENCE NUMBER
CU504
SHEET 26 OF 117

$$DGNSPEC$$
$$SYSTIME$$
$$USERNAME$$

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