

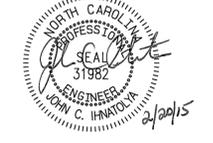
- GENERAL UTILITY NOTES:**
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF PITTSBORO STANDARD SPECIFICATIONS AND DETAILS, LATEST REVISION JANUARY 1, 2007.
 2. ALL CONSTRUCTION WITHIN THE NCDOT PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE LATEST NCDOT STANDARD SPECIFICATIONS.
 3. ALL RESIDENTIAL SEWER SERVICES SHALL BE 4" SCHEDULE 40 PVC. ALL RESIDENTIAL WATER SERVICES SHALL BE 3/4" TYPE K COPPER.
 4. ALL STORM DRAINAGE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED.
 5. ALL UTILITY LINES SHALL HAVE 20" EASEMENTS CENTERED ON THE LINES UNLESS LOCATED COMPLETELY IN ROAD R/W.
 6. WATERLINE SHALL BE 2' MINIMUM OFF EDGE OF CURB UNLESS SHOWN OTHERWISE. ALL WATER LINES SHALL BE DUCTILE IRON PIPE.
 7. WATERLINES SHALL BE LAID AT A MINIMUM OF 10 FEET LATERALLY MEASURED OUTSIDE EDGE TO OUTSIDE EDGE FROM EXISTING OR PROPOSED SANITARY SEWERS UNLESS THE SEWER IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER WITH A HORIZONTAL SEPARATION OF AT LEAST 3 FEET.
 8. WHEN A WATER MAIN MUST CROSS OVER A SEWER MAIN, THE BOTTOM OF THE WATER MAIN SHALL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER MAIN. IF THIS SEPARATION CANNOT BE OBTAINED WHILE MAINTAINING THE REQUIRED COVER, BOTH THE WATER AND SEWER MAINS SHALL BE DUCTILE PIPE WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS, FOR 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. A JOINT OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.
 9. WHEN A WATER MAIN MUST CROSS UNDER A SEWER MAIN, BOTH THE WATER AND SEWER MAINS SHALL BE DUCTILE IRON PIPE WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS, FOR 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING. VERTICAL SEPARATION BETWEEN THE TOP OF THE WATER MAIN AND THE BOTTOM OF THE SEWER MAIN SHALL BE MINIMUM 12 INCHES.
 10. WHEN A WATER MAIN PIPE CROSSES OVER OR UNDER A STORM SEWER, VERTICAL SEPARATION BETWEEN THE PIPES SHALL BE MINIMUM 18 INCHES UNLESS BOTH PIPES ARE DUCTILE IRON OR ENCASED IN CONCRETE FOR 10 FEET EITHER SIDE OF THE CROSSING.
 11. SANITARY SEWER MAINS SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 24 INCHES BETWEEN STORM SEWERS WHEN THE HORIZONTAL SEPARATION IS 3 FEET OR LESS. WHERE SANITARY AND STORM SEWERS CROSS WITH A VERTICAL SEPARATION LESS THAN 24 INCHES THE SANITARY SEWER PIPE SHALL BE DUCTILE IRON PIPE WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS. A SECTION OF SANITARY SEWER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.
 12. CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHOWN ON PLANS IS BASED ON BEST AVAILABLE INFORMATION BUT CAN BE CONSIDERED ONLY AS APPROXIMATE.
 13. WHERE THE STATIC WATER PRESSURE IS IN EXCESS OF 80 PSI, A PRESSURE REDUCING VALVE SHALL BE PROVIDED INSIDE THE BUILDING IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLUMBING CODE.
 14. SEWER LINES AND SERVICES INSTALLED WITH A DEPTH OF COVER LESS THAN 3' OR OVER 20 FEET SHALL REQUIRE DUCTILE IRON PIPE FOR THE ENTIRE RUN BETWEEN MANHOLES OR CLEANOUTS.
 15. MINIMUM SLOPE FOR FOUR INCH SANITARY SEWER SERVICES SHALL BE 1%. CLEANOUTS SHALL BE PROVIDED AS SHOWN ON THE PLANS BUT SHALL BE SPACED AT NO GREATER THAN 75 LF FOR 4" SERVICES. ALL CLEANOUTS SHALL EXTEND A MINIMUM OF 6 INCHES ABOVE FINISH GRADE OR MEET THE OPTIONAL CLEANOUT REQUIREMENT METHODS.
 16. ALL MANHOLES LOCATED OUTSIDE OF PAVED AREAS SHALL BE INSTALLED BETWEEN 2 AND 3 FEET ABOVE FINISHED GRADE. MANHOLES TALLER THAN 3 FEET ABOVE FINISHED GRADE SHALL BE CONSTRUCTED WITH STEPS CAST INTO THE EXTERIOR OF THE MANHOLE.
 17. FOR 8"-12" SEWER LINES, 4' DIA MANHOLES SHALL BE USED FOR DEPTHS UP TO 12', 5' DIA MANHOLES FOR DEPTH FROM 12' TO 20', AND 6' DIA MANHOLES FOR DEPTHS GREATER THAN 20'.

EMERGENCY ACCESS NOTE:
WHILE CONSTRUCTION IS GOING ON IN MILBROOK DRIVE FOR THE THREE OPEN CUTS TO PROVIDE SIX WATER MAIN TAPS (LOTS 48-53), ONE LANE OF MILBROOK DRIVE WILL BE REQUIRED TO BE KEPT OPEN FOR INGRESS AND EGRESS. IF ONE LANE CANNOT BE MAINTAINED OPEN THEN A REVERSED TRAFFIC PATTERN MUST BE APPROVED BY THE FIRE DEPARTMENT PRIOR TO CONSTRUCTION.

PHASE 2E UTILITY TAKEOFFS:

LF OF 8" DIP WATERLINE:	1,463 LF
LF OF 6" DIP WATERLINE:	48 LF
LF OF 8" SEWER LINE:	1,586 LF

**PRELIMINARY PLAN
NOT APPROVED FOR CONSTRUCTION**



No.	Revision	Date	By
1	TOP 1st REVIEW COMMENTS	02/20/15	JCI

Designer: WBR
Scale: SEE SHEET
Drawn by: JCI
Date: 02/20/15
Checked by: JCI
Job No.: 020503512

POWELL PLACE - PHASE 2E
TOWN OF PITTSBORO CHATHAM COUNTY NORTH CAROLINA

UTILITY PLAN

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