





Overview

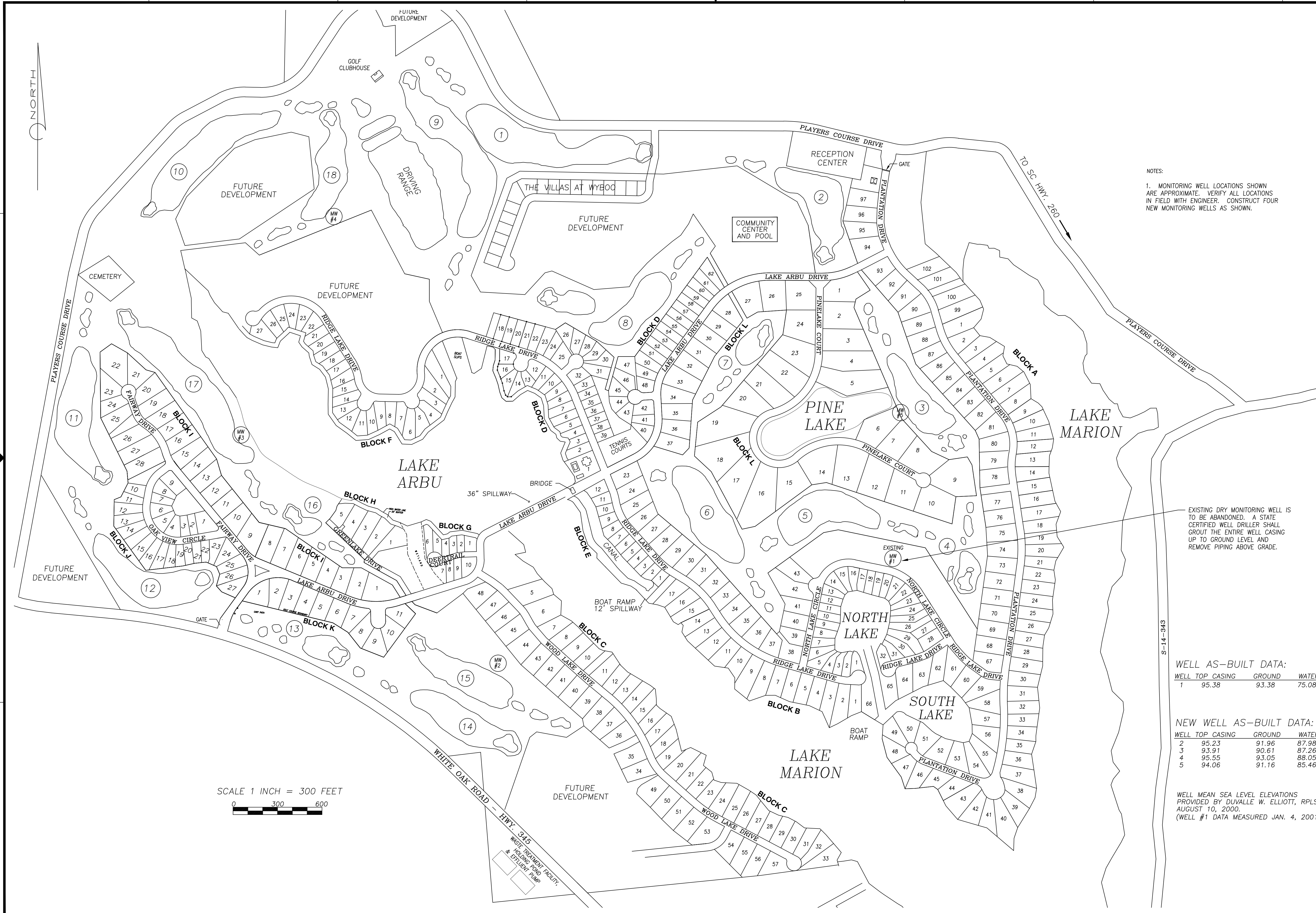


Legend

-  Parcels
-  Roads

Date created: 1/28/2025
Last Data Uploaded: 1/27/2025 8:26:54 PM

Developed by  SCHNEIDER
GEOSPATIAL



NOTES:
 1. MONITORING WELL LOCATIONS SHOWN ARE APPROXIMATE. VERIFY ALL LOCATIONS IN FIELD WITH ENGINEER. CONSTRUCT FOUR NEW MONITORING WELLS AS SHOWN.

EXISTING DRY MONITORING WELL IS TO BE ABANDONED. A STATE CERTIFIED WELL DRILLER SHALL GROUT THE ENTIRE WELL CASING UP TO GROUND LEVEL AND REMOVE PIPING ABOVE GRADE.

WELL AS-BUILT DATA:

WELL	TOP CASING	GROUND	WATER
1	95.38	93.38	75.08

NEW WELL AS-BUILT DATA:

WELL	TOP CASING	GROUND	WATER
2	95.23	91.96	87.98
3	93.91	90.61	87.26
4	95.55	93.05	88.05
5	94.06	91.16	85.46

WELL MEAN SEA LEVEL ELEVATIONS PROVIDED BY DUVALLE W. ELLIOTT, RPLS AUGUST 10, 2000.
 (WELL #1 DATA MEASURED JAN. 4, 2001)

**MONITORING WELLS
 SITE PLAN**



ZONE	REV	DESCRIPTION	DATE	APPROVED
1	AS-BUILT ELEVATIONS ADDED	8/11/00	WAT	
2	ADDED EXISTING WELL DATA	1/5/01	WAT	

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WYBOO UTILITIES, INC.

DATE	12/15/99	DATE	9926-D-01
DESIGN	WAT	APPROVED	WAT
DRAWN	WAT	SCALE	AS SHOWN
SHEET	1	OF	2

SECTION 02750
MONITORING WELL CONSTRUCTION
PART I - GENERAL

1.1 DESCRIPTION. THE WORK UNDER THIS SECTION CONSISTS OF FURNISHING ALL LABOR, MATERIALS, EQUIPMENT AND ALL OTHER ITEMS NECESSARY FOR THE COMPLETE AND APPROVED CONSTRUCTION OF MONITORING WELLS SHOWN ON THE DRAWINGS.
1.2 QUALITY ASSURANCE. WORK SHALL BE PERFORMED BY A QUALIFIED AND SCDHEC LICENSED WELL DRILLER, WHO IS COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK OF THIS SECTION. CONTRACTOR SHALL GUARANTEE WELL FUNCTION AND MATERIALS FOR A PERIOD OF ONE YEAR FROM ACCEPTANCE BY OWNER. ALL MATERIALS USED SHALL BE NEW AND REMAIN PACKAGED OR OTHERWISE PROTECTED FROM THE WEATHER AND CONTAMINATION UNTIL USED.
1.3 SUBMITTALS. CONTRACTOR SHALL PROVIDE 3 COPIES OF WELL LOG AND WELL TEST RECORD AS REQUIRED BY SCDHEC.

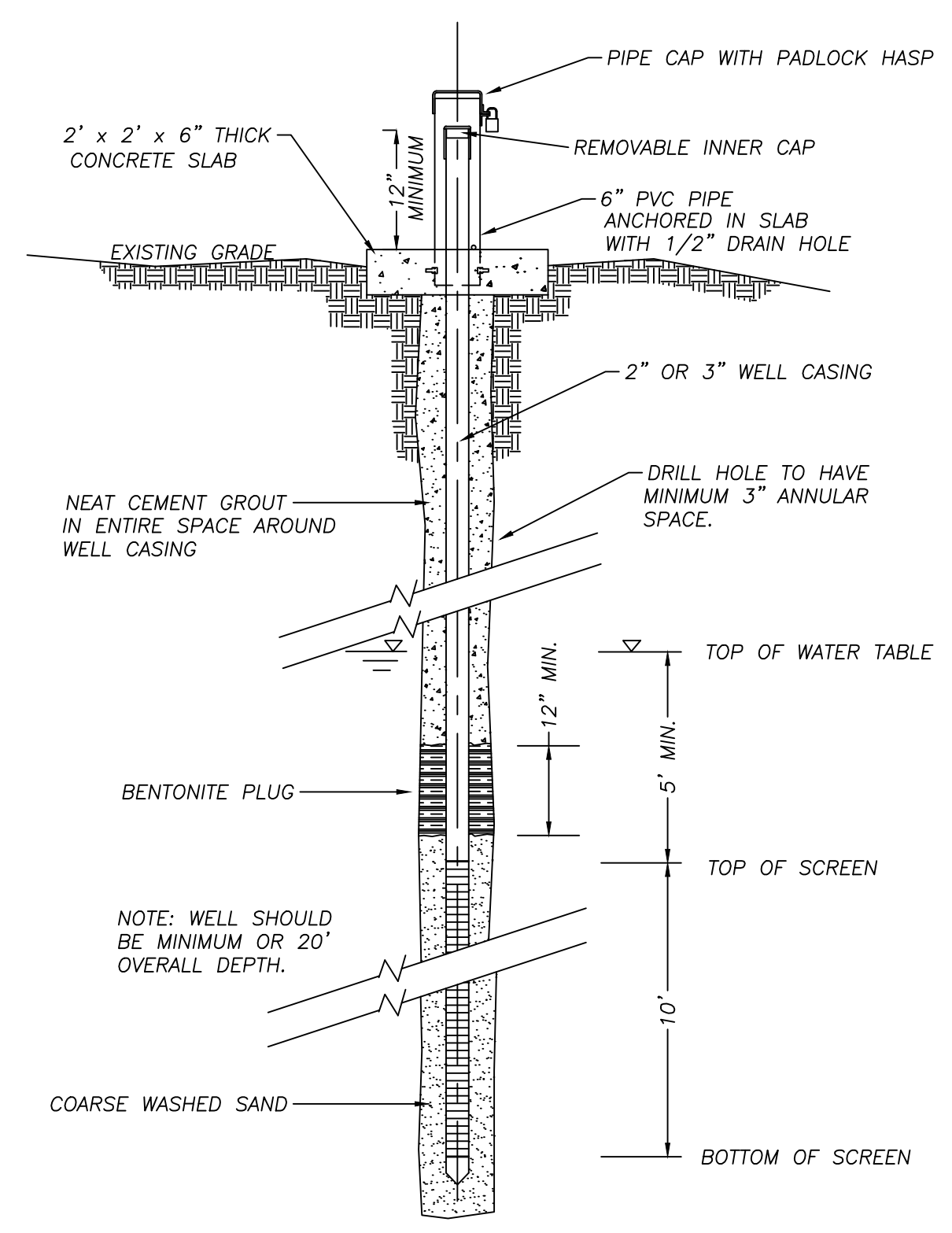
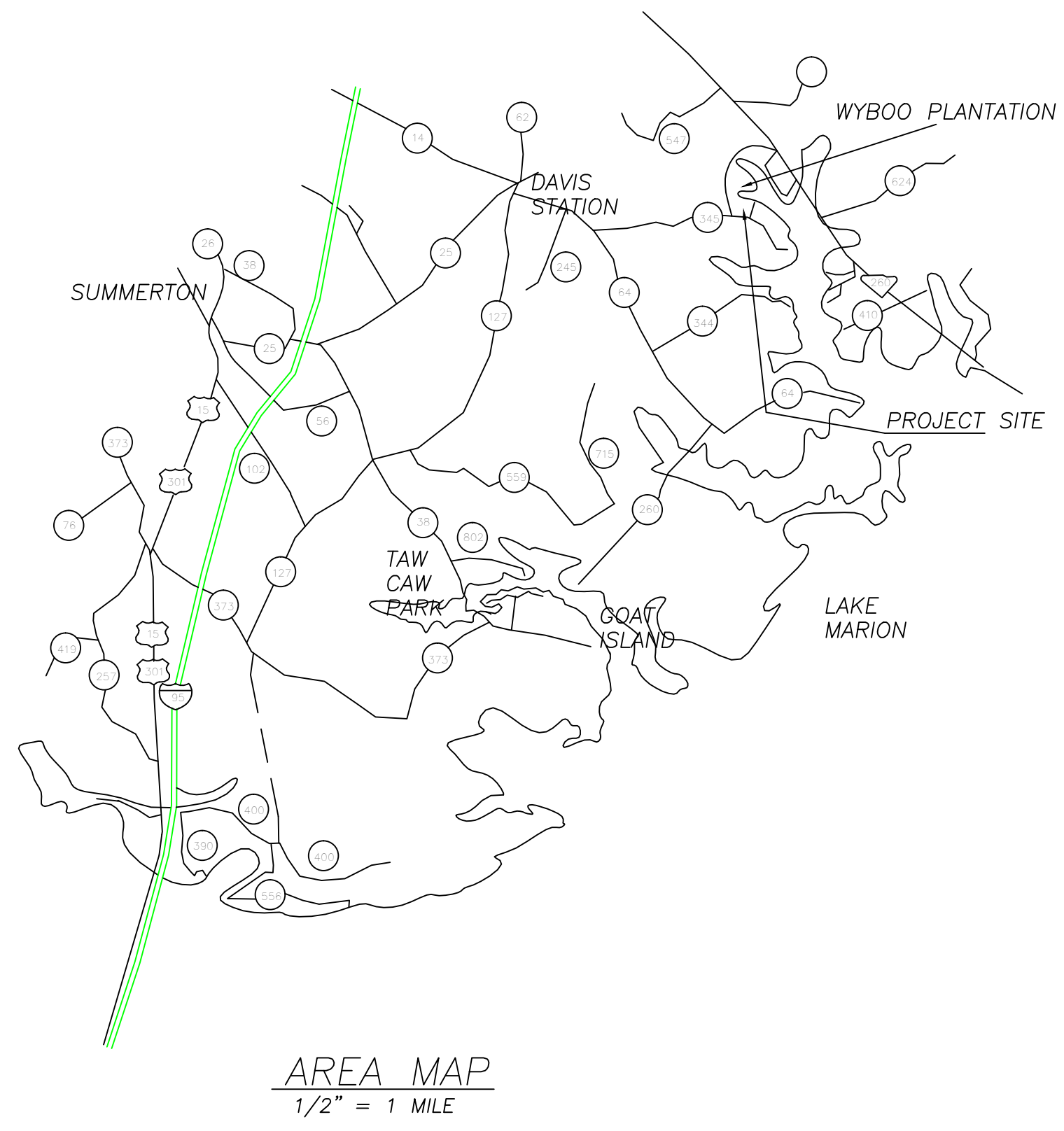
PART II - PRODUCTS

2.1 ARTIFICIAL FILTER MATERIAL. CLEAN WELL-ROUNDED QUARTZ PARTICLES FREE OF LIMESTONE, CLAY, ORGANIC MATTER OR OTHER UNSUITABLE MATERIALS SHALL BE USED. THE FILTER GRAIN SIZE SHALL BE FROM 3 TO 5 TIMES LARGER THAN THE 50 PERCENT GRAIN SIZE OF THE NATURAL FORMATION.
2.2 SCREENS. SCREENS MAY BE OF THERMOPLASTIC, BRONZE, OR STAINLESS STEEL CONSTRUCTION AS MANUFACTURED BY JOHNSON SCREEN. SCREEN SHALL HAVE CONTROLLED UNIFORM SLOT SIZE. SCREEN APERTURE SHALL BE OF SUCH SIZE AS TO RETAIN AT LEAST 90 PERCENT OF FILTER MATERIAL.
2.3 CASING. THERMOPLASTIC CASING AND COUPLINGS WHICH MEET ASTM F-480 AND WHICH ARE APPROVED BY THE NATIONAL SANITATION FOUNDATION SHALL BE USED.
2.4 GROUTING MATERIALS. THE WELL SHALL BE GROUTED WITH A MINIMUM OF SAND-CEMENT, BENTONITE-CEMENT MIXTURE OR NEAT CEMENT AS SHOWN ON DRAWINGS. SAND-CEMENT OR NEAT CEMENT MIXTURE SHALL BE COMPOSED OF NOT MORE THAN TWO PARTS BY WEIGHT OF SAND TO ONE PART PURE PORTLAND CEMENT WITH NOT MORE THAN SEVEN GALLONS OF CLEAN WATER PER BAG (ONE CUBIC FOOT OR 94 POUNDS) OF CEMENT. BENTONITE-CEMENT MIXTURE SHALL BE COMPOSED OF THREE TO FIVE POUNDS OF BENTONITE MIXED WITH SEVEN GALLONS OF CLEAN WATER PER BAG (ONE CUBIC FOOT OR 94 POUNDS) OF CEMENT.
2.5 DRILLING FLUID. DRILLING WATER SHALL BE DISINFECTED AND MEET CURRENT DRINKING WATER STANDARDS. ALL OTHER DRILLING FLUIDS AND ADDITIVES SHALL COMPLY WITH RECOGNIZED INDUSTRY STANDARDS AND PRACTICES AND SHALL BE USED ONLY AS PRESCRIBED BY MANUFACTURER.
2.6 DISINFECTANTS. THE QUANTITY OF CHLORINE COMPOUNDS USED FOR DISINFECTION SHALL BE SUFFICIENT TO PRODUCE A MINIMUM OF 50 MG/L AVAILABLE CHLORINE IN SOLUTION WHEN MIXED WITH THE WATER IN THE WELL.

PART III - EXECUTION

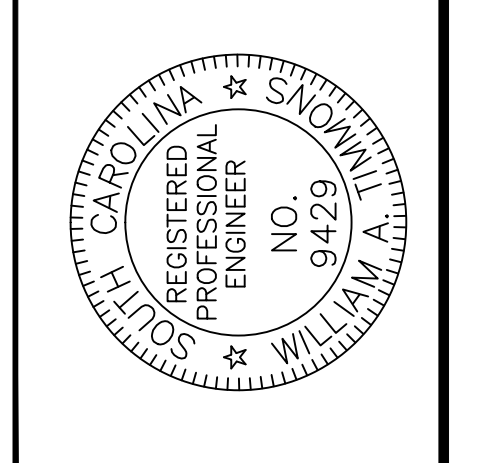
3.1 DRILLING. USE ANY SCDHEC APPROVED DRILLING METHOD. DRILL TO THE DEPTH SHOWN. DRILL HOLE DIAMETER SHALL BE NOT LESS THAN CASING O.D. PLUS 6" NOR MORE THAN CASING O.D. PLUS 16". USING CENTERING GUIDES TO PLUMB CASING STRING WITHIN 1" PER 100'.
3.2 CASING AND SCREEN INSTALLATION. LOWER THE CASING STRING INTO THE PREDRILLED HOLE WITHOUT ANY DAMAGE TO THE SCREEN OR CASING. CASING AND SCREENS SHALL BE IN ALIGNMENT AND MADE WATERTIGHT. JOINTS SHALL HAVE SAME STRUCTURAL INTEGRITY AS CASING. THREADED AND COUPLED SHALL BE API OR EQUIVALENT FIRMLY OR SECURELY SEATED. PVC SOLVENT AND BELL END OR COUPLED JOINTS SHALL MEET ASTM STANDARD SPECIFICATIONS.
3.3 SANITARY PROTECTION OF WELL. PROTECT WELL AT ALL TIMES DURING CONSTRUCTION. SEAL WITH WATERTIGHT CAP AND PROTECT FROM VANDALISM PRIOR TO COMPLETION. SEAL WITH AN APPROVED FLANGED, THREADED OR WELDED CAP OR COMPRESSION SEAL AFTER COMPLETION.
3.4 GRAVEL PACK INSTALLATION. THE GRAVEL PACK MATERIAL SHALL BE PLACED BY TREMIE PIPE AT A MINIMUM THICKNESS OF 3" AND MAXIMUM OF 8". THE MATERIAL SHALL BE PLACED IN SLURRY FORM WITH DISINFECTED WATER.
3.5 GROUTING. PLACE GROUT MATERIAL BY TREMIE PIPE, EITHER BY POURING OR FORCED INJECTION. AFTER WATER OR OTHER DRILLING FLUID HAS BEEN CIRCULATED IN THE ANNULAR SPACE SUFFICIENTLY TO CLEAR ALL OBSTRUCTIONS. BEGIN GROUTING AT THE BOTTOM OF ZONE TO BE GROUTED AND RAISED SLOWLY AS GROUT IS INTRODUCED. THE TREMIE PIPE SHALL BE KEPT FULL DURING PROCEDURE AND DISCHARGE END CONTINUOUSLY SUBMERGED IN THE GROUT UNTIL ZONE IS COMPLETELY FILLED. ALLOW GROUT TO PROPERLY CURE BEFORE RESUMING CONSTRUCTION.
3.6 WELL IDENTIFICATION PLATE. PROVIDE WEATHERPROOF METAL IDENTIFICATION PLATE SECURELY ATTACHED TO CASING OR CONCRETE PAD WITH PERMANENT MARKING OF DRILLER NAME AND NUMBER, DATE COMPLETED, TOTAL DEPTH IN FEET, CASING DEPTH AND DIAMETER, SCREEN INTERVAL, FILTER PACK INTERVAL, STATIC WATER LEVEL AND DATE MEASURED.
3.7 WELL DEVELOPMENT. AFTER COMPLETION THE WELL SHALL BE THOROUGHLY CLEANED TO REMOVE ALL SAND AND FOREIGN MATERIAL. THE DEVELOPMENT EQUIPMENT SHALL DEVELOP THE FORMATION TO ITS MAXIMUM CAPACITY. THE DEVELOPMENT PROCESS WILL START SLOWLY AND GENTLY AND INCREASED IN VIGOR AS FINES ARE REMOVED AND WELL IS DEVELOPED. THE COMPLETED WELL SHALL NOT DISPLAY ANY VISIBLE TURBIDITY, BE FREE OF SUSPENDED SOLIDS AND SHALL PROVIDE A SATISFACTORY SAMPLE OF THE FORMATION GROUND WATER.
3.9 WELL DISINFECTION. DISINFECT THE WELL UTILIZING CHLORINE DISINFECTANT SOLUTION SPECIFIED. AFTER THE CONTACT PERIOD, THE WELL SHALL BE PUMPED TO CLEAR IT COMPLETELY OF THE DISINFECTANT PRIOR TO SAMPLING AND USE. PROTECT AQUATIC LIFE AND VEGETATION IN THE DISPOSAL AREA.

END OF SECTION



MONITORING WELLS
PLAN AND DETAILS

DATE	12/15/99	SCALE	AS SHOWN
WAT. DESIGN		DATE	12/15/99
WAT. APPROVED		WAT. NO.	9926-D-01
REV		SHEET	2 OF 2



REVISIONS	DATE	APPROVED
ZONE	REV	DESCRIPTION

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