



- GENERAL NOTES - WATER & SEWER**
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT TOWN OF CARY STANDARDS, SPECIFICATIONS AND DETAILS.
 - ALL MANHOLES LOCATED OUTSIDE OF PAVEMENT AREAS SHALL HAVE A RIM ELEVATION 1 FOOT ABOVE FINISHED GRADE.
 - SANITARY SEWER MAINS AND SERVICES SHALL BE INSTALLED WITH A MINIMUM COVER OF 2 FEET IN NON-TRAFFIC AREAS OR PIPES SHALL BE FERROUS MATERIAL.
 - SANITARY SEWER MAINS AND SERVICES SHALL BE PROVIDED WITH A MINIMUM COVER OF 4 FEET BELOW FINISH SURFACE IN TRAFFIC AREAS OR SHALL BE OF FERROUS MATERIAL.
 - SANITARY SEWER MAINS INSTALLED WITH A DEPTH OF COVER OF 14 FEET TO 20 FEET SHALL REQUIRE SPECIAL BEDDING IN ACCORDANCE WITH CARY STANDARD 7.16. SEWER SERVICES INSTALLED WITH A DEPTH OF COVER OF 14 FEET TO 20 FEET SHALL REQUIRE CLASS I BEDDING FROM 4 INCHES BELOW THE SERVICE TO 4 INCHES OVER THE SERVICE LINE. SEWER MAINS AND SERVICES INSTALLED WITH A DEPTH OF COVER OVER 20 FEET SHALL REQUIRE DUCTILE IRON PIPE FOR THE ENTIRE RUN BETWEEN MANHOLES OR CLEANOUTS.
 - MINIMUM SLOPE FOR SANITARY SEWER SERVICES SHALL BE 0.6% FOR 8 INCH SEWER SERVICES. CLEANOUTS SHALL BE PROVIDED AS SHOWN ON THE PLANS BUT SHALL BE SPACED AT NO GREATER THAN 100 LF FOR 8 INCH SERVICES. ALL CLEANOUTS SHALL EXTEND A MINIMUM OF 6 INCHES ABOVE FINISH GRADE OR MEET THE OPTIONAL CLEANOUT REQUIREMENT METHODS AS SPECIFIED IN CARY STANDARD 7.01. CLEANOUTS LOCATED IN PAVED AREAS MUST HAVE CAST IRON RISERS, FITTINGS AND BRASS CAP.
 - WATER MAINS SHALL BE LAID AT LEAST 10 FEET LATERALLY MEASURED EDGE TO EDGE FROM EXISTING OR PROPOSED SANITARY OR STORM SEWER UNLESS THE ELEVATION OF THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER WITH THE HORIZONTAL SEPARATION OF AT LEAST 3 FEET WHERE WATER MAIN AND SANITARY SEWER CROSS, AND THE VERTICAL SEPARATION IS LESS THAN 18 INCHES OR WHERE THE WATERLINE PASSES UNDER THE SANITARY SEWER, THE SEWER MAIN SHALL BE DUCTILE IRON PIPE.
 - ALL WATER MAINS 4 INCHES AND LARGER SHALL BE DUCTILE IRON PIPE. WATER SERVICES 3 INCHES AND LARGER SHALL BE DUCTILE IRON PIPE. WATER SERVICES LESS THAN 3 INCHES SHALL BE TYPE "K" COPPER TUBE SERVICE (CTS) BETWEEN THE MAIN AND THE METER OR END OF THE TOWN MAINTENANCE AS INDICATED BY EASMENTS. WATER SERVICES BETWEEN THE METER OR END OF TOWN MAINTENANCE AND THE POINT OF TERMINATION SHOWN ON THE PLANS SHALL BE AS SPECIFIED ON THE PLANS, WHERE A SERVICE TERMINATES FOR CONTINUATION BY A PLUMBING OR FIRE SERVICE CONTRACTOR, CAPPING SHALL BE PROVIDED IN COORDINATION WITH THE HOST CONTRACTOR SO THAT THE EXTENSIONS CAN BE MADE WITHOUT RETESTING OR RECERTIFICATION.
 - WATER SERVICE IS TO BE TERMINATED 50 OUTSIDE OF BUILDING FOR CONTINUATION BY PLUMBING CONTRACTOR.
 - WATER MAINS SHALL BE INSTALLED WITH A MINIMUM COVER OF 4 FEET MEASURED FROM THE TOP OF THE PIPE TO THE FINISHED SURFACE.
 - 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.
 - CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS IS BASED ON THE BEST AVAILABLE INFORMATION BUT CAN BE CONSIDERED ONLY AS APPROXIMATE.
 - WATERLINE EXTENSION AND SANITARY SEWER LINE EXTENSION PERMITS SHALL BE ISSUED PRIOR TO START OF CONSTRUCTION.
 - THE IRRIGATION SYSTEM WILL CONDUCT TO TOWN'S RECLAIMED WATER SYSTEM. IRRIGATION SYSTEM DESIGN BY OTHERS.
 - ALL WATER LINES SHALL BE DUCTILE IRON.



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- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF CARY STANDARDS, SPECIFICATIONS AND DETAILS.
 - CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
 - THE PURPOSE OF THIS PLAN IS SHOW PHASE 2 CONSTRUCTION ONLY. THE CONTRACTOR SHALL USE THIS PLAN AND REFERENCE IT IN THE CONTRACT DOCUMENTS.
 - CONTRACTOR SHALL MATCH FIXTURES AS USED IN PHASE 1 (I.E. FHS, SIGNAGE, STRIPING, ETC.)



No.	Revision	Date	By	Designer	WRR	Scale	T=30'
1	TOC FIRST REVIEW COMMENTS	02/23/05	WRR				
2	TOC SECOND REVIEW COMMENTS	05/09/05	JM				
3	ADD PARKING AREAS TO COMMENTS	06/03/05	WRR				
4	TOC FINAL COMMENTS	06/30/05	WRR				

THE ARBORETUM
PHASE 2
 WAKE COUNTY
 NORTH CAROLINA

Drawn By: DW
 Checked By: WRR
 Date: 12/05
 Job No.: 20102321

TOWN OF CARY

UTILITY PLAN - PHASE 2 RETAIL

WITHERS & RAVENEL
 ENGINEERS | PLANNERS | SURVEYORS

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