

UTILITY NOTES:

1. ALL WASTEWATER UTILITIES WORKS SHALL BE IN STRICT ACCORDANCE WITH SEMINOLE COUNTY LAND DEVELOPMENT CODE FOR WASTEWATER AND WATER MAIN CONSTRUCTION. SEMINOLE COUNTY UTILITY IS THE SERVICE PROVIDER FOR WASTEWATER AND RAW WATER SERVICES.
2. ALL POTABLE WATER UTILITIES WORK AND ONSITE ODDA SHALL BE IN STRICT ACCORDANCE WITH SEMINOLE COUNTY FOR WATER MAIN CONSTRUCTION. SEMINOLE COUNTY IS THE SERVICE PROVIDER FOR POTABLE WATER SERVICE.
3. ALL ON SITE UTILITY CONSTRUCTION TO POINT OF SERVICE CONNECTIONS SHALL BE PERFORMED BY AN UNDERGROUND UTILITY CONTRACTOR LICENSED BY THE STATE OF FLORIDA.
4. ALL ON SITE UTILITY SERVICES FROM THE POINT OF SERVICE CONNECTION & INCLUDING ALL BUILDING PLUMBING, SHALL BE PERFORMED BY A PLUMBER LICENSED BY THE STATE OF FLORIDA.
5. THE LICENSED UNDERGROUND UTILITY CONTRACTOR AND PLUMBING CONTRACTOR SHALL COORDINATE FULLY WITH SEMINOLE COUNTY FOR THE REQUIREMENT OF THEIR WORK, INCLUDING NECESSARY PERMITS, INSPECTIONS AND APPROVALS.
6. ALL NEW AND RELOCATED WATER MAIN PIPE, FITTINGS, VALVE, FIRE HYDRANTS, AND RELATED PRODUCTS THAT WILL COME INTO CONTACT WITH DRINKING WATER SHALL BE IN CONFORMANCE WITH AMERICAN NATIONAL STANDARDS INSTITUTE/NSF INTERNATIONAL STANDARD 61.
7. ALL NEW AND RELOCATED WATER MAIN PIPE, FITTINGS, VALVE, AND FIRE HYDRANTS SHALL BE IN CONFORMANCE WITH APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS. ALL NEW AND RELOCATED WATER MAIN PIPE AND FITTINGS SHALL CONTAIN NO MORE THAN EIGHT PERCENT LEAD, AND ALL PACKING AND JOINTING MATERIALS USED IN THE JOINTS OF NEW OR RELOCATED WATER MAIN PIPE SHALL BE IN CONFORMANCE WITH APPLICABLE AWWA STANDARDS.
8. ROCK AND UNSUITABLE SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS AND/OR THE PIPE MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES FOR NEW AND RELOCATED WATER MAIN PIPE SHALL BE REMOVED TO A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF THE PIPE, AND CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED IN TRENCHES FOR NEW AND RELOCATED WATER MAIN PIPE. BACKFILL MATERIAL SHALL BE TAMPED IN LAYERS AROUND NEW AND RELOCATED WATER MAIN PIPE TO A SUFFICIENT HEIGHT ABOVE IT TO ADEQUATELY SUPPORT AND PROTECT THE PIPE.
9. ALL TEES, BENDS, PLUGS, AND HYDRANTS IN NEW AND RELOCATED WATER MAINS SHALL BE PROVIDED WITH THRUST REACTION BLOCKING, OR MECHANICALLY RESTRAINED JOINTS, TO PREVENT MOVEMENT OR SEPARATION OF THE PIPE AND ITS APPURTENANCES.
10. ALL NEW AND RELOCATED WATER MAINS SHALL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C600.
11. ALL NEW AND RELOCATED WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C651 AND RULE 62-555.345, F.A.C.
12. WHERE ANY NEW OR RELOCATED WATER MAINS CROSS ANY SANITARY SEWERS, STORM SEWERS, FORCE MAINS, OR RECLAIMED WATER LINES, THE WATER MAINS CROSS ABOVE SUCH PIPELINES WITH A MINIMUM VERTICAL DISTANCE OF 12 INCHES BETWEEN THE OUTSIDE OF THE WATER MAINS AND THE OUTSIDE OF SUCH PIPELINES, OR SUCH CROSSINGS ARE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE (3) FEET FROM ALL JOINTS IN STORM SEWER AND RECLAIM WATER MAIN COVERED UNDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST SIX (6) FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAIN, OR RECLAIM WATER NOT COVERED UNDER PART III OF CHAPTER 62-610, F.A.C.
13. BACKFLOW-PREVENTION ASSEMBLIES/DEVICES SHALL BE PROVIDED IN ACCORDANCE WITH RULE 62-555.360, F.A.C., AND THE AWWA MANUAL M14, RECOMMENDED PRACTICE FOR BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL.
14. ALL NEW AND RELOCATED WATER SERVICES SHALL BE IN CONFORMANCE WITH THE STATE PLUMBING CODE, AND ALL PIPE AND PIPE FITTINGS FOR NEW AND RELOCATED WATER SERVICES SHALL CONTAIN NO MORE THAN EIGHT PERCENT LEAD, AND ALL SOLDER AND FLUX FOR NEW AND RELOCATED WATER SERVICES SHALL CONTAIN NO MORE THAN 0.2 PERCENT LEAD.
15. EXISTING UTILITIES AT ALL CONNECTION POINTS AND CROSSINGS MUST BE FIELD VERIFIED.
16. AN ACCESS EASEMENT HAS BEEN GRANTED TO THE SOUTH SEMINOLE NORTH ORANGE COUNTY WASTEWATER TRANSMISSION AUTHORITY FOR ACCESS TO THE EXISTING FLOW METER.

WATER:

1. ALL WATER DISTRIBUTION SYSTEM PRESSURE PIPE SHALL HAVE A MINIMUM OF THIRTY-SIX (36) INCHES OF COVER.
2. ALL PVC WATER DISTRIBUTION SYSTEM PRESSURE PIPE TO BEAR NSF LOGO FOR POTABLE WATER USE. ALL PVC PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900 (LATEST EDITION). THE PVC PIPE SHALL HAVE A MINIMUM WORKING PRESSURE RATING OF 150 PSI AND SHALL HAVE A DIMENSION RATIO (DR) OF 18 FOR PIPE OF NOMINAL DIAMETER FOUR (4) INCHES THROUGH TWELVE (12) INCHES.
3. THE CONTRACTOR SHALL TAKE ADEQUATE MEASURES TO ENSURE THE PROTECTION OF EXISTING ACTIVE MAINS FROM BACKFLOW CONTAMINATION DURING FILLING, FLUSHING, TESTING AND MAINTAINING A PRESSURE IN THE PIPING UNTIL A LETTER OF CLEARANCE IS OBTAINED FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
4. HYDROSTATIC TESTS SHALL BE PERFORMED ON THE NEWLY INSTALLED POTABLE WATER DISTRIBUTION SYSTEM PRESSURE PIPE AND APPURTENANCES IN ACCORDANCE WITH ANSI/AWWA C600-93 SECTION 4.
5. WATER DISTRIBUTION LINES AND SERVICES ARE SHOWN SCHEMATICALLY. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT THE SYSTEM WITH THE NECESSARY FITTINGS, JOINTS, AND BENDS TO ALIGN THE SYSTEM IN COMPLIANCE WITH DEP PERMIT REQUIREMENTS, AND THE SEMINOLE COUNTY STANDARDS AND ACCEPTANCE.
6. IN THE EVENT THAT THE POTABLE WATER SYSTEM IS CONTAMINATED (I.E. WATER DOES NOT MEET FEDERAL AND STATE REQUIREMENTS) DUE TO CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL BE RESPONSIBLE, UNDER THE DIRECTION OF THE OWNER, OR STATE AND LOCAL REGULATORY AGENCY FOR CORRECTING ANY SUCH CONTAMINATION PROBLEM INCLUDING DISINFECTION, TESTING, AND OTHER CORRECTIVE ACTION AT CONTRACTOR'S EXPENSE.
7. STABILIZED ROADBEDS AND A SUITABLE WATER SUPPLY SHALL BE PROVIDED ON THE PROJECT WHEN AND IF COMBUSTIBLE MATERIALS ARE BROUGHT ONTO THE CONSTRUCTION SITE IN QUANTITIES DEEMED TO BE HAZARDOUS PER 602.6.1 SFC (94' ED.)

UTILITY SEPARATION NOTES:

1. WATER MAINS SHALL HAVE A HORIZONTAL DISTANCE OF AT LEAST SIX (6) FEET, AND PREFERABLY TEN (10) FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN OR RECLAIMED WATER MAIN NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. WHERE SIX (6) FEET HORIZONTAL DISTANCE IS NOT ACHIEVABLE, HORIZONTAL SEPARATION BETWEEN WATER MAIN AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE (3) FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX (6) INCHES, AND PREFERABLY TWELVE (12) INCHES ABOVE OR AT LEAST TWELVE (12) INCHES BELOW THE OUTSIDE OF THE OTHER PIPE.
2. AT THE UTILITY CROSSINGS DESCRIBED ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AS SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE (3) FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CH. 62-610, F.A.C., AND AT LEAST SIX (6) FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III CH. 62-610, F.A.C.

UTILITY CROSSINGS

- C-01 STORM INV= 71.86 (15" RCP)
WATER INV= 74.25 (1-1/2" PVC)
- C-02 SANITARY INV= 74.11 (6" PVC)
STORM INV= 71.81 (15" RCP)

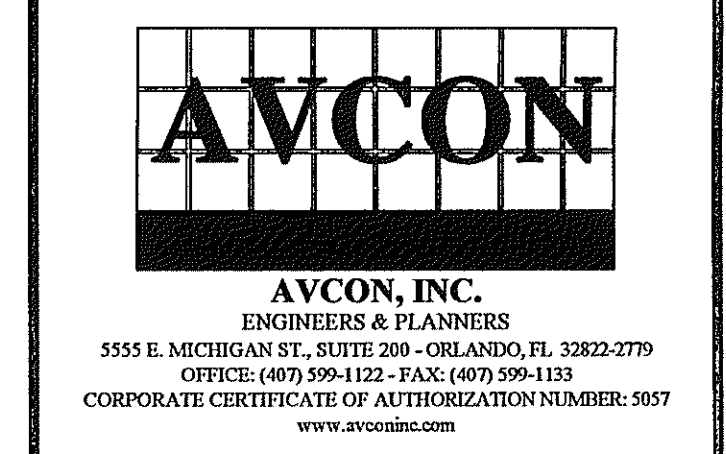
PROPERTY APPRAISAL ID NUMBER: 31-21-31-520-0000-0020

SEMINOLE COUNTY
APPROVED FOR CONSTRUCTION

THIS APPROVAL IS SUBJECT TO SPECIFIC CONFORMANCE TO THE SEMINOLE COUNTY LAND DEVELOPMENT CODE AND ANY SPECIAL REQUIREMENTS OF THE BOARD OF COUNTY COMMISSIONERS. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO CORRECT ANY DEFECTS IN THE PLANS OR THE FACILITY AS CONSTRUCTED WHICH RESULTS IN A FAILURE TO MEET APPLICABLE CODE REQUIREMENTS. ADMINISTRATIVE ACCEPTANCE OF THE DEVELOPER'S PLANS DOES NOT CONSTITUTE A WAIVER OF ANY CODE REQUIREMENTS NOR DOES IT RELIEVE THE DEVELOPER OF RESPONSIBILITY TO MEET THOSE REQUIREMENTS. THIS SPECIFIC APPROVAL IS VALID FOR A PERIOD OF ONE YEAR FROM THE DATE BELOW.

APPROVED: _____
SEMINOLE COUNTY DEVELOPMENT REVIEW DEPARTMENT

DATE: _____



JAN 12 2010
RICK V. BALDOCCHI
P.E. #38092

BANK FIRST
ALOMA WALK BRANCH
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OVIEDO, FL 32765

UTILITY PLAN

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SCALE: **AS NOTED**

REVISIONS:			
NO.	DATE	BY	DESCRIPTION
▲	12-03-09	MK	DRC COMMENTS
▲	01-13-10	MK	DRC COMMENTS

DESIGNED BY: M.K.
DRAWN BY: C.S.
CHECKED BY: M.K.
APPROVED BY: R.V.B.
DATE: 09/09/09

PROJECT NO. 2009.099.06

SHEET NUMBER
C-400