GRADING AND UTILITY PLAN

UTILITY NOTES:

1. WATER AND SANITARY SEWER FOR NEW ADDITION SHALL TIE INTO EXISTING SERVICE LATERALS.

- 2. CONTRACTOR SHALL COORDINATE WITH PLUMBING PLANS FOR EXACT CONNECTION POINTS.
- 3. THE LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON IS BASED ON AVAILABLE RECORDS, FIELD SURVEYS, AND AS LOCATED BY THE UNDERGROUND LOCATOR SERVICE. ALL LINES MAY NOT BE SHOWN, OR MAY NOT BE SHOWN IN THE EXACT LOCATION.

COMPACTION NOTES

SUBGRADE UNDER NEW BUILDINGS AND PAVEMENT SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR (ASTM D698) GRASS AND LANDSCAPE AREAS SHALL BE COMPACTED TO A MINIMUM OF 80% OF STANDARD PROCTOR (ASTM D698).

FIRE HYDRANT NOTE

THERE IS A FIRE HYDRANT LOCATED 104' FROM SOUTHWEST PROPERTY CORNER ALONG STARKEY RD. THE FIRE HYDRANT IS KNOWN AS 5656 STARKEY RD. AND WAS TESTED IN 2001 WITH AND HAVING AN AVAILABLE FIRE FLOW OF 1500 GPM AND A STATIC PRESSURE OF 110 PSI. THE FIRE HYDRANT INFORMATION WAS PROVIDED BY FIRE MARSHALS OFFICE.

1. QUALITY CONTROL

ALL WORK DONE IN THE PROPOSED, OR EXISTING RIGHT OF WAY, INCLUDING BUT NOT LIMITED TO STREET GRADING, STREET PAYING AND ALL CONSTRUCTION OF ALL STRUCTURAL COMPONENTS, SHALL BE DONE IN ACCORDANCE WITH CURRENT VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS. ALL MATERIALS USED SHALL BE TESTED IN ACCORDANCE WITH VDOT STANDARD POLICIES. THE DEVELOPER SHALL CONTACT THE OFFICE OF THE RESIDENT ENGINEER, PRIOR TO BEGINNING ANY CONSTRUCTION WITHIN THE PROPOSED OR EXISTING RIGHT OF WAY. AT THAT TIME, THE RESIDENT ENGINEER SHALL PREPARE AN INSPECTION AND TESTING SCHEDULE. THE DEVELOPER WILL PRODUCE TEST REPORTS FROM APPROVED INDEPENDENT LABORATORIES AT THE DEVELOPER'S EXPENSE.

THE PAVEMENT DESIGNS SHOWN ARE BASED ON A SUB-GRADE CBR VALUE OF 10 OR GREATER. THE SUB-GRADE SOIL IS TO BE TESTED BY AN INDEPENDENT LABORATORY AND THE RESULTS SUBMITTED TO THE VIRGINIA DEPARTMENT OF TRANSPORTATION PRIOR TO BASE CONSTRUCTION. SHOULD THE SUB-GRADE CBR VALUES BE LESS THAN 10, ADDITIONAL BASE MATERIAL WILL BE REQUIRED IN

THE SUB-GRADE SHALL BE APPROVED BY THE DEPARTMENT PRIOR TO PLACEMENT OF THE BASE. BASE SHALL BE APPROVED BY THE VIRGINIA DEPARTMENT OF TRANSPORTATION FOR DEPTH, TEMPLATE AND COMPACTION BEFORE SURFACE IS

2. UTILITIES

ALL NECESSARY UTILITY LATERALS ALONG WITH PROVISIONS FOR CONDUITS (I.E. WATER, SEWER, STORM, GAS AND TELEPHONE) WILL BE CONSTRUCTED PRIOR TO PLACEMENT OF BASE MATERIAL.

PAVEMENT OR SHOULDER ELEMENT (BACK CURB TO BACK OF CURB) OF THIS THE PAVEMENT BY INSIDE THE RIGHT-OF-WAY WILL BE CONSTRUCTED IN CONFORMITY WITH ASA B 31.8 SPECIFICATIONS AND SAFETY REGULATIONS. DISTRIBUTION LINES WITH PRESSURES LESS THAN 120 LBS. ARE UNAFFECTED BY

PERMITS WILL BE REQUIRED FOR ALL UTILITIES WITHIN STREET RIGHT-OF-WAY GRANTED TO A UTILITY COMPANY FOR PLACEMENT OF POWER, TELEPHONE, ETC. SHALL BE RELEASED PRIOR TO ACCEPTANCE.

MUD FROM DAMAGING ADJACENT PROPERTY, CLOGGING DITCHES, TRACKING PUBLIC STREETS AND OTHER-WISE CREATING A PUBLIC OR PRIVATE NUISANCE TO SURROUNDING AREAS.

THE ENTIRE CONSTRUCTION AREA INCLUDING DITCHES, CHANNELS, BACK OF CURBS AND/OR PAVEMENT IS TO BE BACKFILLED AND SEEDED AT THE EARLIEST POSSIBLE TIME AFTER FINAL GRADING.

CONNECTIONS WITH EXISTING STATE-MAINTAINED ROADS FROM CRITICAL REVIEW AT THE TIME PERMIT APPLICATIONS ARE MADE. THIS IS NECESSARY IN ORDER THAT THE PREVAILING CONDITIONS BE TAKEN INTO CONSIDERATION REGARDING SAFETY ACCOMPANIMENTS SUCH AS TURNING LANES.

FIELD REVIEW WILL BE MADE DURING CONSTRUCTION TO DETERMINE THE NEED AND LIMITS OF PAVED DITCHÉS AND/OR DITCH STABILIZATION TREATMENTS, AND TO DETERMINE THE NEED AND LIMITS OF ADDITIONAL DRAINAGE EASEMENTS. ALL DRAINAGE EASEMENTS SHALL BE CUT AND MADE TO FUNCTION TO A NATURAL WATERCOURSE. ANY EROSION PROBLEMS ENCOUNTERED IN AN EASEMENT SHALL BE CORRECTED BY WHATEVER MEANS NECESSARY PRIOR TO SUBDIVISION ACCEPTANCE.

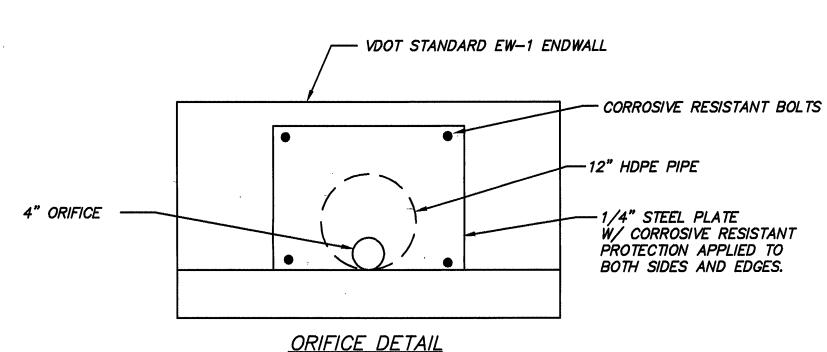
DEPARTMENT OF TRANSPORTATION'S RIGHT-OF-WAY RESIDENT ENGINEER PRIOR TO CONSTRUCTION.

7. INSPECTION

INSPECTIONS, THE ABOVE MENTIONED FIELD REVIEWS AND CHECKING FOR TO GUARANTEE THE WORK IN THE RIGHT-OF-WAY FREE OF DEFECTS FOR ONE YEAR AFTER ACCEPTANCE BY THE DEPARTMENT OF TRANSPORTATION.

CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON THE PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK BY CONTACTING MISS UTILITY. CONTACT SITE ENGINEER IMMEDIATELY IF THIS PLAN, CALL "MISS UTILITY" OF CENTRAL VIRGINIA AT 1-800-552-7001.

GRAPHIC SCALE



VIRGINIA DEPARTMENT OF TRANSPORTATION NOTES:

ACCORDANCE WITH DEPARTMENTAL SPECIFICATIONS.

APPLIED.

GAS OR PETROLEUM TRANSMISSION LINES WILL NOT BE PERMITTED WITHIN THE DEVELOPMENT. SERVICE LATERALS CROSSING AND PIPE LINES LOCATED OUTSIDE

PRIOR TO ACCEPTANCE INTO THE SECONDARY HIGHWAY SYSTEM. ANY EASEMENTS

3. EROSION CONTROL AND LANDSCAPING

CARE SHALL BE TAKEN DURING CONSTRUCTION TO PREVENT EROSION, DUST AND

4. CONNECTIONS TO STATE-MAINTAINED ROADS

WHILE THESE PLANS HAVE BEEN APPROVED, SUCH APPROVAL DOES NOT EXEMPT

5. STORM DRAINAGE

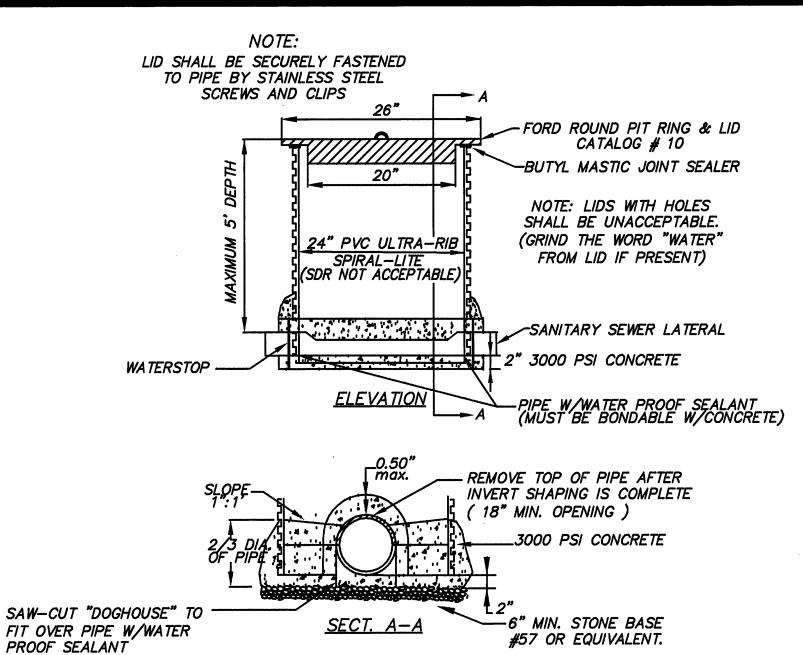
6. ENTRANCE PERMIT

CONTRACTOR SHALL OBTAIN ENTRANCE PERMIT TO THE EXISTING VIRGINIA

AN INSPECTOR WILL NOT BE FURNISHED EXCEPT FOR PERIODIC PROGRESS REQUIRED STONE DEPTHS. THE DEVELOPER WILL BE REQUIRED TO POST A SURETY

8. UNDERGROUND UTILITIES

LOCATION OR ELEVATIONS IS DIFFERENT FROM THAT SHOWN ON THE PLANS. IF THERE APPEARS TO BE A CONFLICT, AND UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON

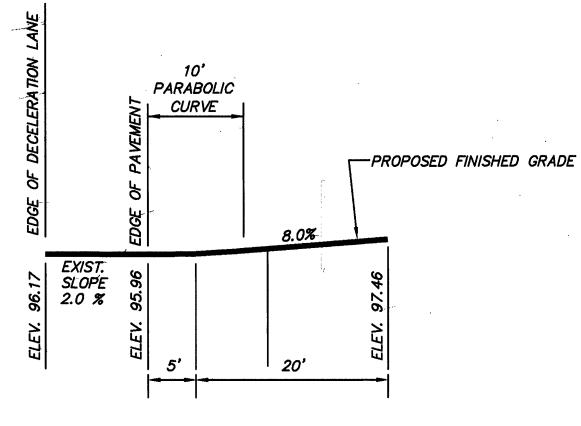


WITHIN 1 HOUR.

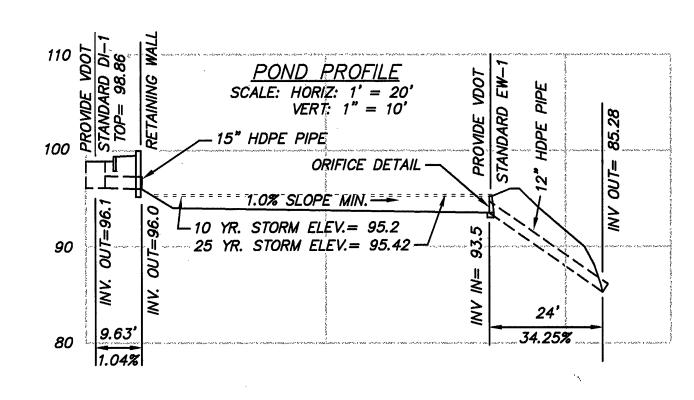
1. NOT ACCEPTABLE FOR USE IN TRAFFIC AREAS OR AREAS SUBJECT TO FLOODING. 2. VACUUM OR EXFILTRATION TESTING SHALL BE USED. VACUUM TESTING SHALL MEET THE SAME STANDARD FOR CONCRETE MANHOLES. EXFILTRATION TESTING SHALL HAVE NO LEAKAGE

3. "AquaBlok" WASTEWATER ACCESS CHAMBERS MAY BE SUBSTITUTED. TRAFFIC BEARING BOXES WILL BE REQUIRED IF INSTALLED IN TRAFFIC AREAS. TESTING OF "AquaBlok" SHALL BE BY APPLICABLE PLUMBING CODE FOR SEWER

4. 2' DIA. CONCRETE WELL CASING 3000 PSI MAY BE SUBSTITUTED FOR ULTRA-RIB PIPE. ANY VERT. JOINTS IN THE CASING PIPE MUST BE BY BELL & SPIGOT CONNECTION WITH MASTIC.



ENTRANCE PROFILE NO SCALE



No. 031787

Construction Managemer

2203 Peters Creek Road, NW Roanoke, Virginia 24017 Phone: 540 562 2345 Fax: 540 562 2344 Email: info@acsdesignllc.com www.acsdesignllc.com

DRAWN BY: DESIGNED BY: M.L.L. CHECKED BY: **DATE:** Aug. 1, 2005 REVISIONS SHEET No.

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