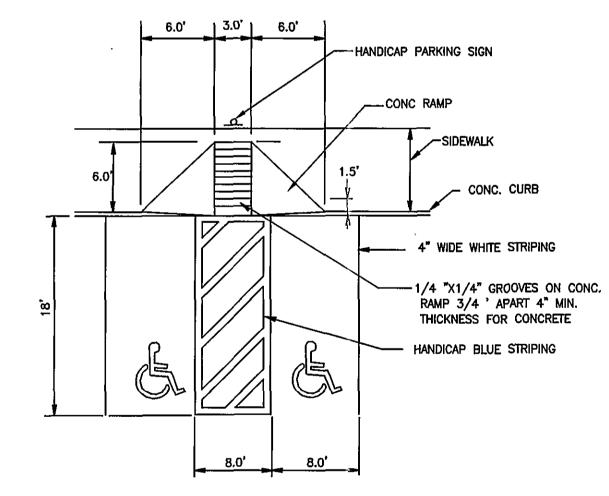
GENERAL NOTES

- 1. PROVIDE NEW MATERIALS AND WORKMANSHIP IN CONFORMANCE WITH ALL APPLICABLE CODES, STATE AND FEDERAL LAWS, LOCAL ORDINANCES, INDUSTRY STANDARDS, AND OTHER CRITERIA WHICH WOULD NORMALLY APPLY TO WORK OF THIS NATURE. NOTIFY THE ENGINEER IMMEDIATELY UPON DISCOVERING A CONFLICT IN CODES, ORDINANCES, STANDARDS, OR OTHER CRITERIA. APPLICABLE CODES AND STANDARDS INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, THE FOLLOWING:
 - a. BOCA BASIC CODES
- ROANOKE COUNTY

PAY REQUIRED FEES.

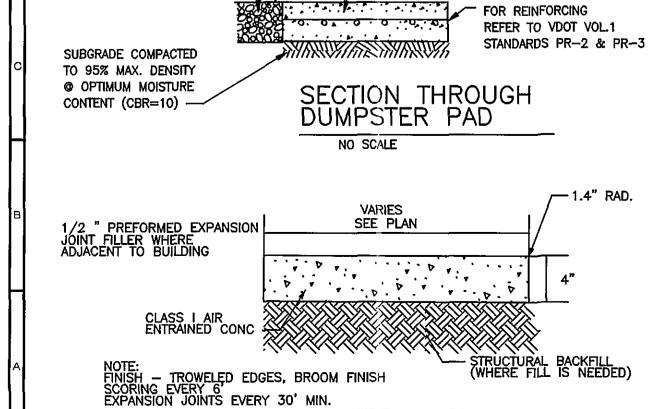
- c. VDOT VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS
- VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS AND HANDBOOK,
- e. OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
- f. ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS
- MAINTAIN A SET OF APPROVED PLANS ON SITE AT ALL, TIMES DURING CONSTRUCTION.
- 3. OBTAIN EACH REQUIRED PERMIT PRIOR TO COMMENCING THAT PART OF THE WORK.
- 4. NOTIFY THE ENGINEER IMMEDIATELY UPON DISCOVERY OF CONDITIONS WHICH DIFFER FROM THOSE SHOWN ON THE PLANS.
- 5. COMPLY WITH LOCAL ORDINANCES FOR BURNING OF WASTE. TRANSPORT WASTE
- MATERIALS AND UNSUITABLE MATERIALS FROM OWNER'S PROPERTY.
- 6. COORDINATE BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS.
- 7. A PRECONSTRUCTION MEETING MUST TAKE PLACE PRIOR TO COMMENCING WORK. AS A MINIMUM, THE CONTRACTOR, OWNER'S AGENT AND COUNTY'S AGENT MUST ATTEND.
- 8. VERIFY THE LOCATION AND ELEVATION OF EACH EXISTING UNDERGROUND UTILITY IN AREAS OF CONSTRUCTION PRIOR TO COMMENCEMENT OF WORK. CONTACT ENGINEER IMMEDIATELY IF THERE APPEARS TO BE A CONFLICT, UPON DISCOVERY OF A UTILITY WHICH IS NOT SHOWN, AND UPON DISCOVERY OF A LOCATION OR ELEVATION WHICH DIFFERS FROM THAT SHOWN. TO LOCATE UTILITIES, CALL "MISS UTILITY", 1-800-552-7001. UTILITY LOCATIONS SHOWN ARE THE RESULT OF A COMBINATION OF FIELD LOCATION AND EXISTING INFORMATION. LOCATIONS ARE APPROXIMATE.
- 9. REPAIR ALL DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, CAUSED AS A RESULT OF CONSTRUCTION ACTIVITIES, AT NO ADDITIONAL COST TO OWNER.
- 10. NOTIFY OWNERS OF UTILITIES IN AREAS OF CONSTRUCTION PRIOR TO COMMENCEMENT
- 11. SIGNAGE SHALL COMPLY WITH THE APPLICABLE REGULATIONS OF THE COUNTY. A SEPARATE PERMIT IS REQUIRED. A MINIMUM 15.0' SETBACK IS REQUIRED FOR A FREE standing sign, the maximum allowable signage for this site is 239.5 square feet-
- 12. SITE LIGHTING SHALL CONFORM TO THE APPLICABLE REGULATIONS OF THE COUNTY. ALL EXTERIOR LIGHTING FIXTURES SHALL BE DESIGNED, LOCATED AND ARRANGED SO AS NOT TO DIRECT GLARE ON ADJOINING STREETS OR RESIDENTIAL PROPERTIES. THE INTENSITY AT ADJOINING STREETS OR RESIDENTIAL PROPERTIES SHALL NOT EXCEED 0.5 FOOT CANDLES.
- 13. SCREEN ALL TRANSFORMERS, HEAT PUMPS, AND OTHER MECHANICAL EQUIPMENT. MECHANICAL UNITS LOCATED TO THE REAR OF BUILDINGS MUST BE VISUALLY AND ACOUSTICALLY SCREENED FROM ADJOINING PROPERTIES.
- 14. SCREEN TRASH DUMPSTERS AND CONTAINERS USED FOR RECYCLING WITH
- ARCHITECTURAL SCREENING ON ALL SIDES (6' HEIGHT, MINIMUM). 15. THIS PROPERTY DOES NOT LIE WITHIN THE LIMITS OF THE F.E.M.A. DEFINED
- 16. ANY SITE DEVELOPMENT OUTSIDE OF THE SCOPE OF THIS PLAN WILL REQUIRE SITE PLAN REVIEW.



HANDICAP PARKING DETAIL

2" BIT. SURFACE (S-5)

6" AGGREGATE (21A)



6" CONCRETE

<u>SIDEWALK DETAIL</u>

GENERAL UTILITY NOTES

- SUPPLY AND INSTALL ALL MATERIALS AND METHODS FOR WATERLINES, SANITARY SEWERS AND STORM DRAINAGE IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS OF ROANOKE COUNTY AND THE VIRGINIA DEPARTMENT OF TRANSPORTATION "ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS", LATEST EDITION.
- 2. OBTAIN ALL REQUIRED PERMITS AND NOTIFY APPROPRIATE OFFICIALS 48 HOURS PRIOR TO COMMENCEMENT OF WORK. OBTAIN INFORMATION FROM ROANOKE COUNTY CONCERNING PERMITS AND CONNECTIONS TO EXISTING LINES.
- 3. ALL WORK SHALL BE SUBJECT TO INSPECTION BY ROANOKE COUNTY. NOTIFY APPROPRIATE OFFICIALS PRIOR TO COMMENCEMENT OF WORK
- 4. SITE SHALL BE TO SUB GRADE PRIOR TO INSTALLATION OF UTILITIES. ALL UTILITIES
- SHALL BE IN PLACE PRIOR TO PLACEMENT OF PAVEMENT BASE MATERIAL. 5. USE SELECT MATERIAL FREE FROM FROST, LARGE CLODS, STONES, AND DEBRIS FOR BACK FILL FROM THE BOTTOM OF THE TRENCH TO TWELVE (12) INCHES ABOVE THE
- MINIMIZE ANY DISTURBANCE TO EXISTING WATER SERVICE. SEWER LINES OR ANY OTHER UTILITY DURING CONSTRUCTION AND PROVIDE QUALITY WORKMANSHIP.
- MAKE ALL PIPE JOINTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE COUNTY'S SPECIFICATIONS. MAKE JOINTS BETWEEN DIFFERENT PIPE MATERIALS WITH STANDARD FITTINGS MANUFACTURED FOR THE PURPOSE.
- 8. MAINTAIN ALL WATER LINES AT TEN (10) FEET HORIZONTAL SEPARATION FROM SEWER LINES AND MANHOLES; MEASURE THE DISTANCE EDGE—TO—EDGE. WHEN LOCAL CONDITIONS PREVENT THE DESIRED HORIZONTAL SEPARATION, THE WATERLINE MAY BE LAID CLOSER TO THE SEWER OR MANHOLE PROVIDED THAT THE BOTTOM OF THE WATERLINE SHALL BE AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF THE SEWER. WHERE THIS VERTICAL SEPARATION CANNOT BE OBTAINED, CONSTRUCT THE SEWER OF AWWA APPROVED WATER PIPE AND PRESSURE TREAT IN PLACE PRIOR TO BACKFILLING. THE SEWER MANHOLE SHALL BE OF WATERTIGHT CONSTRUCTION TESTED IN PLACE.
- SEWER AND WATER TAPS SHALL BE LOCATED BY THE CONTRACTOR AND MADE BY THE COUNTY AT THE DEVELOPER'S EXPENSE.
- 10. LOCATE AND UNCOVER VALVE VAULTS AND MANHOLES AFTER PAVING AND ADJUST TO FINAL GRADE, IF NECESSARY.
- 11. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS WHERE UTILITIES ENTER THE BUILDING.
- 12. VERIFY THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON THE PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT THE ENGINEER IMMEDIATELY IF:

ANY LOCATION OR ELEVATION IS DIFFERENT FORM THAT SHOWN ON THE PLANS.

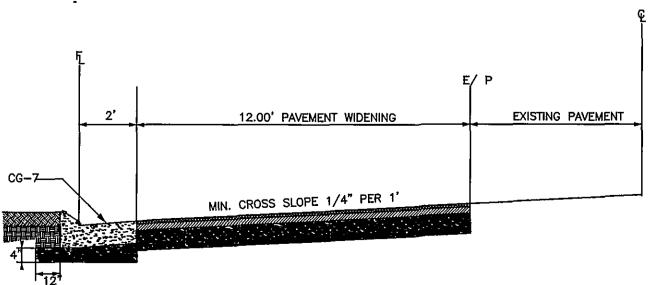
IF THERE APPEARS TO BE ANY CONFLICT.

UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THE PLANS.

TO MISS UTILITIES. CALL "MISS UTILITY" OF VIRGINIA (TOLL FREE 1-800-552-7001) 48 HOURS BEFORE YOU DIG. THE CONTRACTOR IS RESPONSIBLE FOR ALL

DAMAGE CAUSED TO ANY UTILITY, PUBLIC OR PRIVATE, AS A RESULT OF THIS WORK. EXISTING UTILITY LOCATIONS SHOWN ARE A RESULT OF A COMBINATION OF EXISTING INFORMATION AND FIELD LOCATION OF SURFACE FEATURES. LOCATIONS ARE APPROXIMATE.

- 13. REPAIR ALL DAMAGE CAUSED TO ANY UTILITY, PUBLIC OR PRIVATE, AS A RESULT OF THIS WORK AT NO ADDITIONAL COST TO OWNER.
- 14. PROVIDE A CONTINUOUS AND UNIFORM BEDDING IN THE TRENCH FOR ALL PIPE. REMOVE STONES AND ROCKS FOUND IN THE TRENCH FOR A DEPTH OF AT LEAST SIX (6) INCHES BELOW THE BOTTOM OF THE PIPE AND TAMP SELECT FILL BEDDING PROVIDED. AFTER THE PIPE HAS BEEN PLACED IN THE TRENCH, BACK FILL THE TRENCH WITH SELECT MATERIAL, THOROUGHLY COMPACT TO 90% (95% UNDER PAVEMENT OR CONCRETE SLAB) OF THE STANDARD PROCTOR (ASTM D-698) USING CARE NOT TO DAMAGE THE PIPE. USE VDOT STANDARD PB-1 TRENCH FOR STORM SEWER AND UB-1 FOR SANITARY SEWER AND WATER.
- 15. PLACE BACK FILL FOR ALL UTILITIES IN ACCORDANCE WITH THE COUNTY'S SPECIFICATIONS, AND THE FOLLOWING CRITERIA:
 - (1) BACK FILL NO TRENCH UNTIL AUTHORIZED BY THE COUNTY. MATERIALS USED FOR BACK FILL FROM THE BOTTOM OF THE TRENCH TO TOP OF THE PIPE SHALL BE CRUSHER RUN, OR APPROVED EQUAL MATERIAL THOROUGHLY AND CAREFULLY COMPACT THE BACK FILL MATERIAL.
 - (2) COMPACT BACK FILL BY MECHANICAL TAMPING THROUGHOUT THE DEPTH OF THE TRENCH TO INSURE A SUITABLE SUBBASE ACCEPTABLE TO THE ROAD ENGINEER. IF THE MATERIAL TAKEN FROM THE DITCH IS NOT SUITABLE FOR BACK FILLING, REMOVE IT AND USE AN ACCEPTABLE MATERIAL FOR BACK FILLING THE TRENCH.
- 16. IN AREAS OF WATER LINE CONSTRUCTION, GRADES SHALL BE WITHIN SIX (6) INCHES OF FINISHED SUB GRADE PRIOR TO THE COMMENCEMENT OF THIS WORK.
- 17. MINIMUM COVER OVER WATER AND SANITARY SEWER LINES SHALL BE THREE (3) FEET.
- 18. THE COUNTY OF ROANOKE COUNTY SHALL MAKE ALL CONNECTIONS TO EXISTING WATER MAINS.
- 19. THE CONTRACTOR SHALL INSTALL ALL WATER SERVICE CONNECTIONS AND METER BOXES. 20. PIPES AND FITTINGS SHALL BE POLYVINYL.
- 21. CONNECT PIPE TO MANHOLES THROUGH PRE CAST OPENINGS AND JOIN WITH EITHER A FLEXIBLE BOOT ADAPTER OR A PIPE SEAL GASKET.
- 22. REFERENCE THE ROANOKE COUNTY UTILITY DEPARTMENT WATER AND SEWER REGULATIONS,
- LATEST EDITION. 23. DO NOT INSTALL SECURITY GATES IN ANY PUBLIC EASEMENT OR BLOCK ACCESS TO THE METER VAULT.



TURN LANE CROSS SECTION

-CURB & GUTTER SHALL HAVE A STONE BASE MIN. 4" DEPTH EXTENDED 12" BEHIND BACK OF CURB. CURB & GUTTER SHALL BE CHECKED BY V.D.O.T. PRIOR TO PAVING OF BACKFILLING. -MATCH CROSS SLOPE AND PAYEMENT DESIGN OF EXISTING ROADWAY. USE PAYEMENT OVERLAY TO CENTERLINE OF ROAD

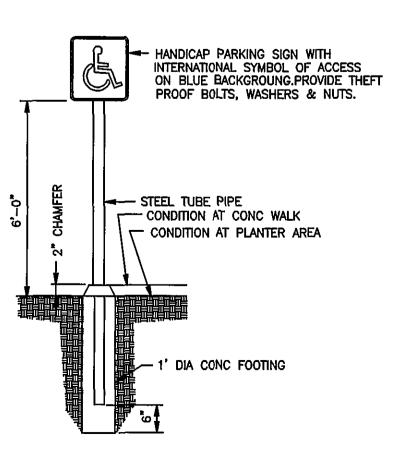
AS REQUIRED TO ENSURE A UNIFORM TYPICAL SECTION, POSITIVE DRAINAGE AND SEALING OF ABUTTING PAYEMENTS.

GRADING NOTES

- 1. REFER TO BUILDING PLAN BY STRUCTURES, INC. FOR SUBGRADE AND UTILITY TRENCHES WITHIN 5' OF BUILDING ENVELOPE.
- 2. REMOVE TREES, SHRUBS, GRASS, AND OTHER VEGETATION, IMPROVEMENTS OR OBSTRUCTIONS AS REQUIRED TO PERMIT INSTALLATION OF NEW CONSTRUCTION. REMOVE TREES AND OTHER VEGETATION, INCLUDING STUMPS AND ROOTS. COMPLETELY IN AREAS REQUIRED FOR SUBSEQUENT SEEDING. CUT OFF TREES AND STUMPS IN AREAS TO RECEIVE FILL MORE THAN THREE FEET IN DEPTH TO WITHIN EIGHT INCHES OF THE ORIGINAL GROUND SURFACE.
- BARRICADE OPEN EXCAVATIONS OCCURRING AS PART OF THIS WORK AND OPERATE WARNING LIGHTS AS RECOMMENDED BY AUTHORITIES HAVING JURISDICTION,
- 4. EXCAVATION FOR STRUCTURES:
 - CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN WITHIN A TOLERANCE OF PLUS OR MINUS 0.10 FOOT.
 - PROVIDE TRUE AND STRAIGHT FOOTING EXCAVATIONS WITH UNIFORM LEVEL BOTTOMS OF THE WIDTH INDICATED TO ENSURE PROPER PLACEMENT AND COVER OF ALL REINFORCEMENT
 - c. REMOVE ALL LOOSE MATERIALS FROM THE EXCAVATION PRIOR TO PLACEMENT OF CONCRETE.
 - PROVIDE A MINIMUM OF 2'-0" FROM FINISHED GRADE TO TOP OF ALL EXTERIOR
 - e. FOOTINGS WHICH SUPPORT CONCRETE MASONRY UNITS MAY BE STEPPED PROVIDED THE VERTICAL STEP DOES NOT EXCEED ONE HALF OF THE HORIZONTAL DISTANCE BETWEEN STEPS AND HORIZONTAL DISTANCE BETWEEN STEPS IS NOT LESS THAN TWO FEET.
 - f. IF ROCK IS ENCOUNTERED IN A FOOTING EXCAVATION, UNDERCUT IT A MINIMUM OF 12" BELOW THE BOTTOM OF THE FOOTINGS AND FILL THE RESULTING OVER-Excavation with controlled fill
- CUT SURFACE UNDER PAVEMENTS TO COMPLY WITH CROSS SECTIONS. ELEVATIONS. AND GRADES AS INDICATED.
- 6. EXCAVATE TRENCHES TO UNIFORM WIDTH CONFORMING TO VDOT STANDARD PB-1 FOR STORM DRAINAGE PIPING. BACKFILL TRENCHES WITH CONTROLLED FILL.
- PREVENT SURFACE WATER AND SUBSURFACE OR GROUND WATER FROM FLOWING INTO EXCAVATIONS AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. DO NOT ALLOW WATER TO ACCUMULATE IN EXCAVATIONS. REMOVE WATER TO PREVENT SOFTENING OF FOUNDATION BOTTOMS, UNDERCUTTING FOOTINGS, AND SOIL CHANGES DETRIMENTAL TO STABILITY OF SUBGRADES AND FOUNDATIONS. CONVEY WATER REMOVED FROM EXCAVATIONS AND RAIN WATER TO COLLECTING OR RUNOFF AREAS. ESTABLISH AND MAINTAIN TEMPORARY DRAINAGE DITCHES AND OTHER DIVERSIONS OUTSIDE EXCAVATION LIMITS FOR EACH STRUCTURE. DO NOT USE TRENCH EXCAVATIONS AS TEMPORARY DITCHES.
- PROTECT EXCAVATED BOTTOMS OF ALL FOOTINGS AND TRENCHES AGAINST FREEZING WHEN ATMOSPHERIC TEMPERATURE IS LESS THEN 35°F (1°C).
- BACKFILLING:
- COMPACT THE BACKFILL AROUND THE OUTSIDE OF EACH BUILDING TO A MINIMUM OF 85% OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D 698 STANDARD PROCTOR. DO NOT ALLOW HEAVY COMPACTION EQUIPMENT SUCH AS ROLLERS, ETC., CLOSER TO ANY FOOTING THAN THE HORIZONTAL DISTANCE SUBTENDED BY A 45° ANGLE WITH THE TOP EDGE OF THE FOOTINGS AND THE SURFACE OF THE GROUND.
- BACKFILL BEHIND WALLS AFTER PERMANENT CONSTRUCTION WHICH BRACES THE WALL IS IN PLACE OR TEMPORARY BRACING OF THE WALL IS PROPERLY INSTALLED, AND AFTER ACCEPTANCE OF CONSTRUCTION BELOW FINISH GRADE INCLUDING DAMP—PROOFING, REMOVAL OF CONCRETE FORMWORK, AND REMOVAL OF TRASH AND DÉBRIS.
- 10. UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING INCLUDING ADJACENT TRANSITION AREAS. SMOOTH FINISHED SURFACES WITHIN SPECIFIED TOLERANCES, COMPACT WITH UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN, OR BETWEEN SUCH POINTS AND EXISTING GRADES. GRADE AREAS ADJACENT TO BUILDING LINES TO DRAIN AWAY FROM STRUCTURES AND TO PREVENT
- 11. FINISH LAWN AREAS TO WITHIN ONE INCH ABOVE OR BELOW REQUIRED SUBGRADE ELEVATIONS. SHAPE SURFACE UNDER WALKS AND PAVEMENTS TO LINE, GRADE, AND CROSS SECTION, WITH NOT MORE THAN 1/2" ABOVE OR BELOW REQUIRED SUBGRADE
- 12. GRADE SURFACE UNDER BUILDING SLABS SMOOTH AND EVEN, FREE OF VOIDS. PROVIDE FINAL GRADES WITHIN 1/2" OF THOSE INDICATED WHEN TESTED WITH A 10' STRAIGHT EDGE.
- 13. PROTECT GRADED AREAS FROM TRAFFIC AND EROSION. REPAIR AREAS WHICH HAVE SETTLED, ERODED, OR BECOME DAMAGED DUE TO CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO OWNER.
- 14. PLACE ALL FILL AND BACKFILL AS CONTROLLED FILL AS FOLLOWS: ESTABLISH SUITABLE SUBGRADE CONDITIONS PRIOR TO PLACING FILL BY PROOFROLLING, UNDERCUTTING AND COMPACTING AS NECESSARY.
 - PLACE FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH FOR HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4" FOR HAND TAMPERS. PRIOR TO COMPACTION, PROVIDE MOISTURE CONTENT TO WITHIN 3% OF OPTIMUM BY MOISTENING OR AERATING EACH LAYER. DO NOT PLACE FILL MATERIAL ON SURFACES WHICH ARE MUDDY, FROZEN OR CONTAIN FROST OR
 - COMPACT SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D 698 (STANDARD

i. 95% UNDER PAVEMENT ii. 85% UNDER LAWN OR UNPAVED AREAS

- 15. SPREAD TOPSOIL TO A DEPTH OF 4" OVER ALL DISTURBED AREAS NOT RECEIVING WALKS, PAVEMENT, WALLS OR BUILDING, INCLUDING TRENCHES. IMMEDIATELY FOLLOWING PLACEMENT OF TOPSOIL, DISK THE ENTIRE TOPSOILED AREA AND RAKE FREE OF STONES AND DEBRIS OVER 1/2" IN ANY DIMENSION. PROVIDE A FINISHED SURFACE FREE OF DEPRESSIONS OR HIGH SPOTS. SEED IMMEDIATELY
- 16. OWNER (CONTRACTOR) SHALL EMPLOY QUALIFIED SOILS TESTING LABORATORY TO INSPECT EARTHWORK OPERATIONS. NOTIFY LABORATORY PRIOR TO PERFORMING
- 17. CONTRACTOR SHALL OBTAIN ENGINEERING DESIGN FOR ALL WALLS WHERE THE HEIGHT EXCEEDS FOUR FEET.



HANDICAP SIGNPOST DETAIL

<u>VIRGINIA DEPARTMENT OF TRANSPORTATION NOTES:</u>

All work done in the proposed, or existing right of way, including but not limited to street grading, street paving 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 the 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 accordance with Departmental specifications.

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 materials.

Gas or petroleum transmission lines will not be permitted within the pavement or shoulder element (back curb to back of curb) of this development. Service laterals crossing and pipe lines located outside the pavement but 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 the above.

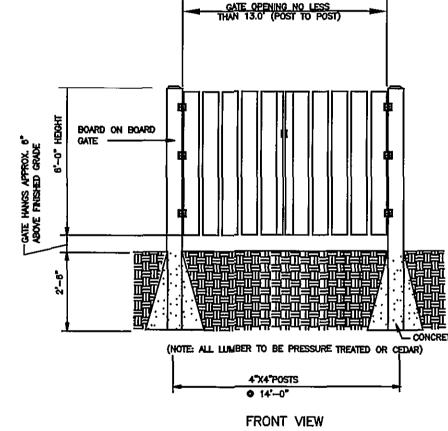
Permits will be required for all utilities within street right-of-way prior to acceptance into the secondary highway system. Any easements granted to a utility company for placement of power, telephone, etc. shall be released prior to acceptance.

Private entrances

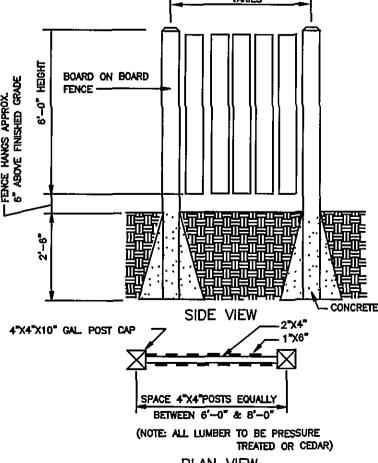
Modified CG-9D gutter will be provided at all entrances to private lots where standard CG-6 curb and gutter is approved for use. A VDOT standard PE-1 is required for private entrances on streets without curb and gutter. It is the developer's responsibility to ensure that all private entrances have either a CG-9D or a PE-1. A street shall not be brought into the system where existing houses (occupied, unoccupied, or under construction) have neither a CG-9D or a PE-1.

Permits will be required for all private entrances constructed on street right-of-way after acceptance into the secondary highway system.

All private entrances within the right-of-way area should not exceed eiaht percent (8%) maximum grade.



BOARD-ON-BOARD GATE SURROUNDING DUMPSTER NO SCALE



4. Erosion control and landscapin

Care shall be taken during construction to prevent erosion, dust and mud from damaging adjacent property, clogging ditches, tracking public streets and otherwise 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 back filled and seeded at the earliest possible time after final grading.

Drainage easements shall be defined by excavated ditched or channels for their full length to well defined existing natural watercourses.

The road will be reviewed during construction for the need of payed ditches. If erosion is encountered in any drainage easement, it will be the responsibility of the developer to sod, rip rap, grout, pave or to do whatever is necessary to correct the problem.

All vegetation and overburden shall be removed from shoulder to shoulder prior to the conditioning (cutting and/or preparation) of the sub-grade.

5. Intersection Pavement Radius

Minimum pavement radius of 25 feet is required at all street intersections.

6. Connections to State Maintained Roads

While these plans have been approved such approval does not exempt 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.

7. <u>Guardrails</u>

Standard guardrails with safety end sections may be required on fills as deemed necessary by the resident engineer. After completion of rough grading operations, the office of the resident engineer, shall be notified so that a field review may be made of the proposed locations.

Where guardrails are to be installed the shoulder width shall be increased in accordance with VDOT road and bridge standards.

8. Storm Drainage

Field review will be made during construction to determine the need and limits of paved ditched 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.

Ditch slopes are to be four to one (4:1) for shoulder widths of six feet (6') or greater and three to one (3:1) for shoulder widths of four feet (4') or five (5'), unless otherwise specified in the plans.

9 Entrance Permit

Contractor shall obtain entrance permit to the existing Virginia Department of Transportation's right-of-way resident engineer prior to road construction.

10. Inspection

An inspector will not be furnished except for periodic progress inspections, the above mentioned field reviews and checking for required stone depths. The developer will be required to post a surety to quarantee the road free of defects for one year after acceptance by the Department of Transportation.

11. Street Maintenance

The streets shall be properly maintained until acceptance. At such time as all requirements have been met for acceptance, another inspection will be made to determine that the street has been properly maintained.

12. Underground Utilities

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 location or elevation is different from that shown on the plans. If there appears to be a conflict, and upon discovery of any utility not shown on this plan, call "Miss Utility" of Central Virginia at 1-800-552-7001.

13. Revisions of specifications and standards

Approval of these plans will be based on specifications and standards in effect at the time of approval and will be subject, until completion of the roadway and acceptance by the Department, to future revisions of the specifications and standards.

14. Traffic Control Devices

The developer shall be responsible for installation of all traffic control devices, STOP SIGNS, YIELD SIGNS, SPEED LIMIT SIGNS, pavement striping, etc., required by the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). The developer shall be responsible of reinstalling and maintaining all traffic control devices required as part of this development until the streets are taken into the Secondary System. All traffic control devices shall be installed according to the

15. <u>General</u>

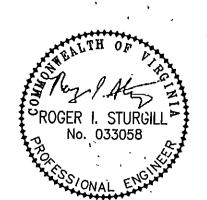
VDOT approval of subdivision road plans does not preclude the right to add additional facilities such as seeding, paving, sediment control items, etc., as may be deemed necessary by the Department prior to the acceptance of the turn lane in order to limit siltation and pollution of nearby lakes, ponds, streams, and adjacent property.

The Department's approval of these plans expires three years from data approval.

All ditches, swales, and natural watercourses downstream of this project need to be field reviewed during and after construction to ensure compliance to DCR MS-19. If erosion or scour is occuring, it will be the developer's responsibility to take the appropriate remedial action.

Installation of all culverts and storm sewer systems located within the VDOT right of way and easements shall conform to the 2001 VDOT

Road and Bridge Standards. The new turn lane must be substantially complete before construction of the site can begin.





REFLECTING TOMORROW www.balzer.cc PLANNERS • ARCHITECTS ENGINEERS • SURVEYORS

1208 Corporate Circle Roanoke, Virginia 24018 Phone: 540/772-9580 FAX: 540/772-8050

501 Branchway Road Richmond, Virginia 23236 Phone 804/794-0571 FAX: 804/794-2635

880 Technology Park Drive Sulte 200 Glen Allen, Virginia 23059 Phone 804/553-0132 FAX 804/553-0133

102 Hubbard Street Blacksburg, Virginia 24060 Phone: 540/961-0961 FAX: 540/961-0962

1557 Commerce Road Suite 201 Verona, Virginia 24482 Phone 540/248-3220 FAX. 540/248-3221

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DRAWN BY: DRB DESIGNED BY: SMH CHECKED BY: RIS DATE: JUNE 9, 2003

REVISIONS:

7-30-03 8-5-03 4-30-04

SHEET NO.

SCALE: AS NOTED

JOB NO.

R0300081.00

PLAN VIEW USE THE SAME MATERIAL AND THE SAME TYPE OF FENCE FOR THE SCREENING SURROUNDING THE DUMPSTER AND THE GATE BOARD-ON-BOARD FENCE SURROUNDING DUMPSTER NO SCALE