

# GRADING NOTES

- REFER TO BUILDING PLAN BY OTHERS FOR SUBGRADE AND UTILITY TRENCHES WITHIN 5' OF BUILDING ENVELOPE.
- 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.
- 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.
  - 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 WALL FOOTINGS.
  - 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.
  - 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.
- EXCAVATE TRENCHES TO UNIFORM WIDTH CONFORMING TO VDOT STANDARD PB-1 FOR STORM DRAINAGE PIPING AND UB-1 FOR SANITARY SEWER AND WATER. 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 95% 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 DEBRIS.
- 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 PONDING.
- 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 ELEVATION.
- 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.
- 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.
- 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 ICE.
  - COMPACT SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D 698 (STANDARD PROCTOR):
    - 95% UNDER FOUNDATIONS, SLABS, WALKS, AND PAVEMENTS
    - 85% UNDER LAWN OR UNPAVED AREAS

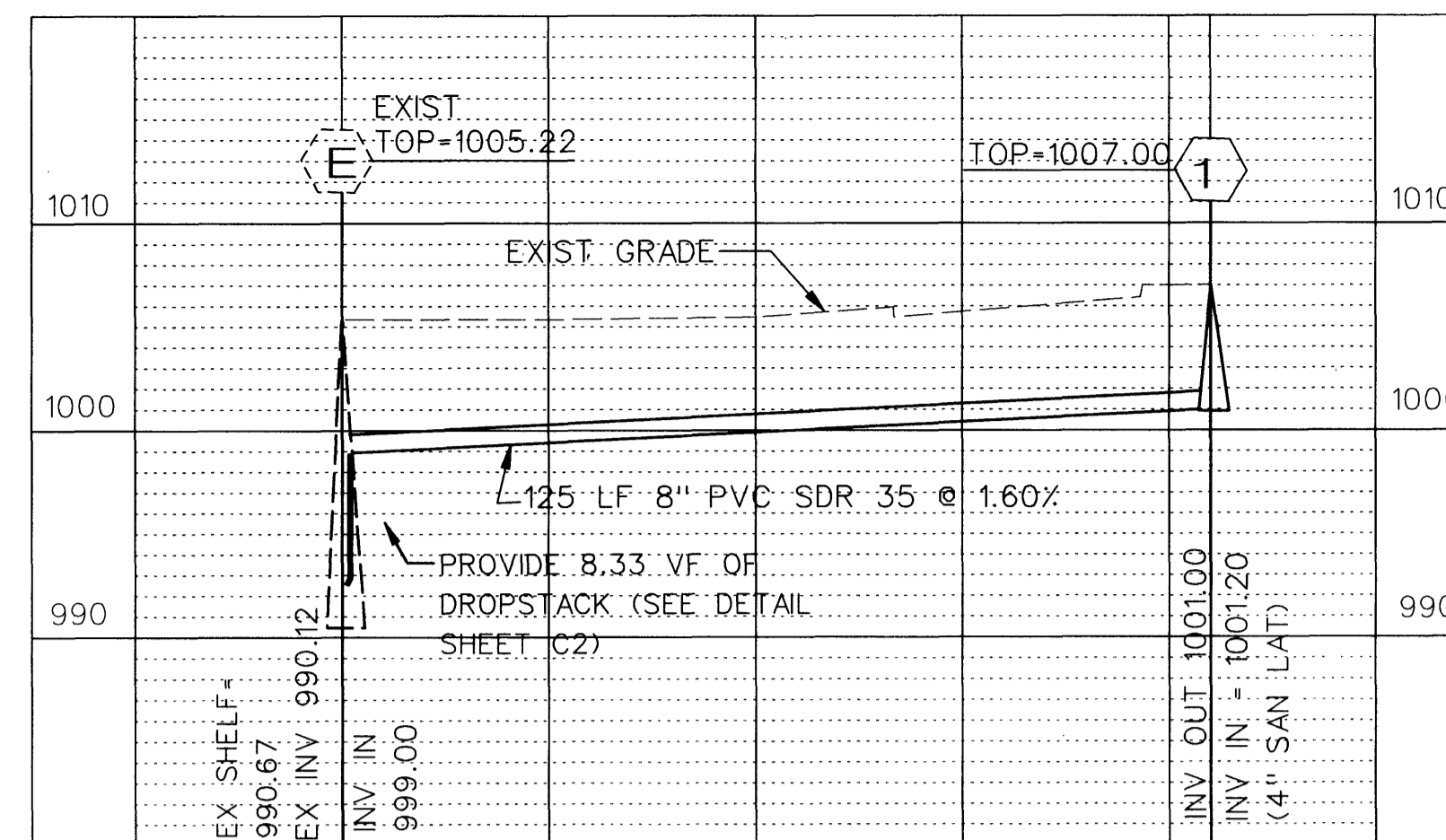
- SPREAD TOPSOIL TO A DEPTH OF 4" OVER ALL DISTURBED AREAS NOT RECEIVING WALKS, PAVEMENT, WALLS OR BUILDING, INCLUDING TRENCHES. IMMEDIATELY FOLLOWING PLACEMENT OF TOPSOIL, DISK THE ENTIRE TOPSOILED AREA AND RAKE FREE OF STONES AND DEBRIS OVER 1/2" IN ANY DIMENSION. PROVIDE A FINISHED SURFACE FREE OF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

## EROSION & SEDIMENT CONTROL NOTES

- PROVIDE CONSTRUCTION MATERIALS AND METHODS IN ACORDANCE WITH ALL STATE AND LOCAL REGULATIONS, INCLUDING THE STANDARDS AND SPECIFICATIONS OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK", LATEST EDITION. REFER TO THIS HANDBOOK FOR DETAILS AND SPECIFICATIONS OF EROSION CONTROL DEVICES.
- SCHEDULE A PRECONSTRUCTION MEETING INVOLVING THE ENGINEER, DEVELOPER'S REPRESENTATIVE AND SELECTED CONTRACTOR ON SITE PRIOR TO BEGINNING CONSTRUCTION.
- ADHERE TO THE EROSION AND SEDIMENT CONTROL NARRATIVE AS PART OF THIS CONTRACT. INSTALL EROSION CONTROL DEVICES AS PER THE NARRATIVE/PLAN.
- NOTIFY THE PROJECT ENGINEER WHEN THE LOCAL GOVERNING OFFICIAL HAS INSPECTED AND APPROVED ALL IN-PLACE EROSION AND SEDIMENT CONTROL DEVICES, REQUIRED BY LOCAL ORDINANCES TO BE IN PLACE PRIOR TO LAND DISTURBANCE.
- NOTIFY THE PROJECT ENGINEER 24 HOURS IN ADVANCE OF BEGINNING CLEARING AND GRADING OPERATIONS.
- REMOVE ALL EXCESS EXCAVATION, ORGANIC MATTER DEMOLISHED MATERIALS, ETC. FROM THE PROJECT SITE AND DISPOSED OF IN AN ACCEPTABLE LOCATION.
- SEED AND MULCH OR TEMPORARILY STABILIZE ALL DENUDEED AREAS WITHIN SEVEN DAYS OF DISTURBANCE. SEED TRENCHES IMMEDIATELY FOLLOWING BACKFILL.
- INSPECT ESC MEASURES WEEKLY AND AFTER EACH RAINFALL TO INSURE PROPER FUNCTIONING.
- AVOID CONSTRUCTION TRAFFIC IN NATURAL STREAMS AND DRAINAGE WAYS WHENEVER POSSIBLE.
- REMOVE ALL SILT FROM STREAMS AND DRAINAGE WAYS PRIOR TO BOND RELEASE.
- PROVIDE ONE (1) CONSTRUCTION ENTRANCE TO SITE AT EITHER LOCATION SHOWN ON PLANS TO MOST ADEQUATELY MEET FIELD CONDITIONS.

## SITE REQUIREMENTS

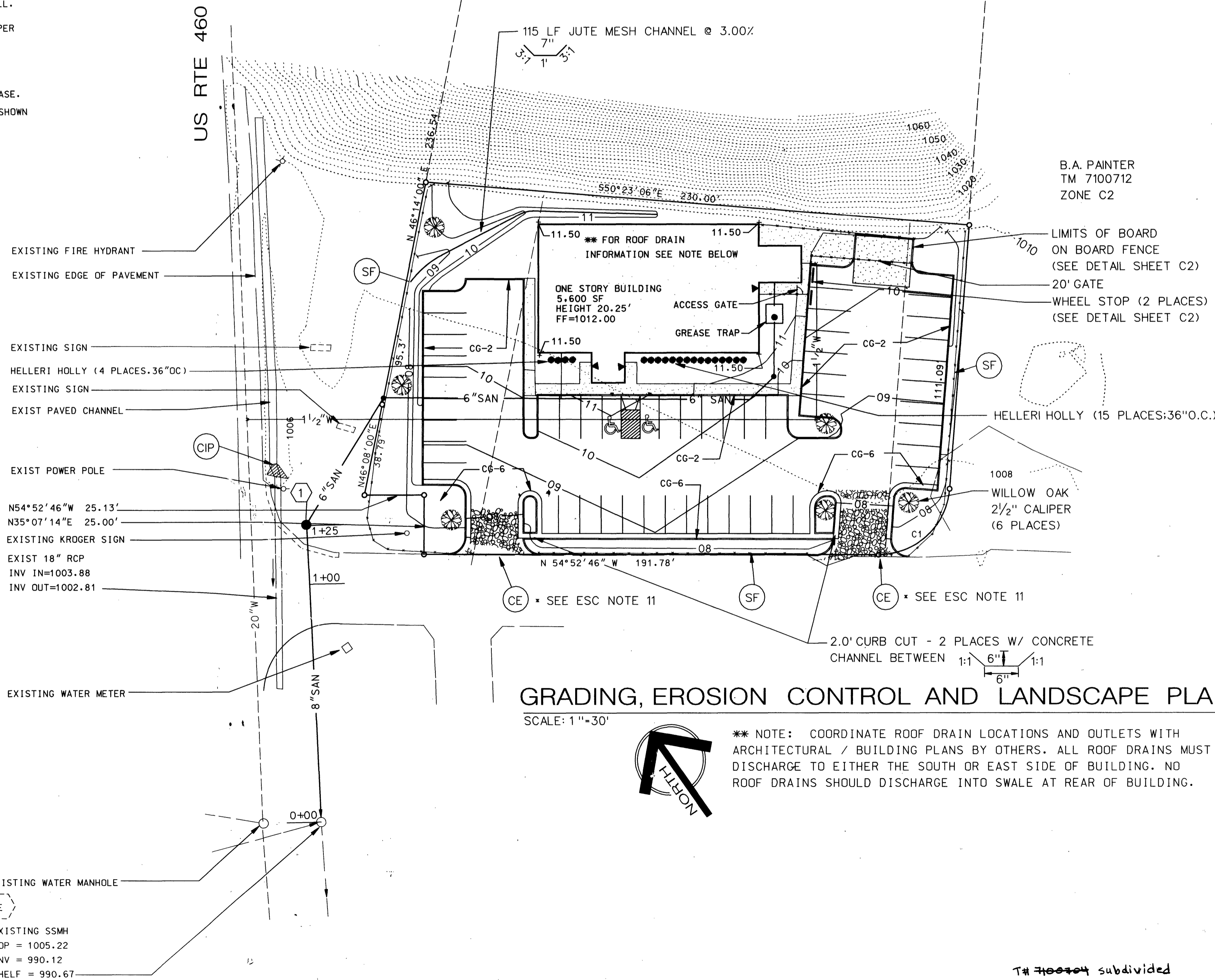
MIN LOT FRONTAGE: 75'  
 LOT FRONTAGE PROVIDED: 161'  
 MAX. BUILDING COVERAGE: 60% (20,804 SF)  
 BUILDING COVERAGE PROVIDED: 16% (3,329 SF)  
 MIN YARD REQUIREMENTS: FRONT-25'  
 SIDE-0' (UNLESS ABUTTING RESIDENTIAL, THEN 20')  
 REAR-25'  
 MAX. BUILDING HEIGHT: 45'  
 BUILDING HEIGHT PROVIDED: 20.25'  
 OPEN SPACE REQUIRED: 10% (3,467 SF)  
 OPEN SPACE PROVIDED: 30% (10,402 SF)  
 INTERIOR LANDSCAPING REQUIRED: 5% (887 SF)  
 INTERIOR LANDSCAPING PROVIDED: 5.1% (911 SF)  
 PARKING REQUIRED: 43 SPACES  
 PARKING PROVIDED: 50 SPACES (INCLUDING 2 HANDICAPPED)



## SANITARY SEWER PROFILE

SCALE: 1"=10' VERT  
 1"=30' HORZ

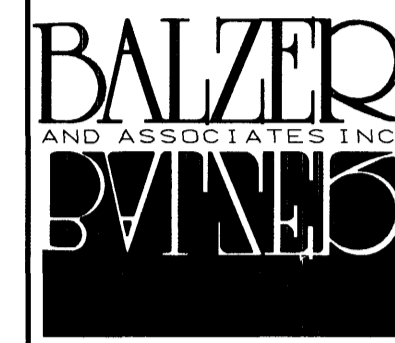
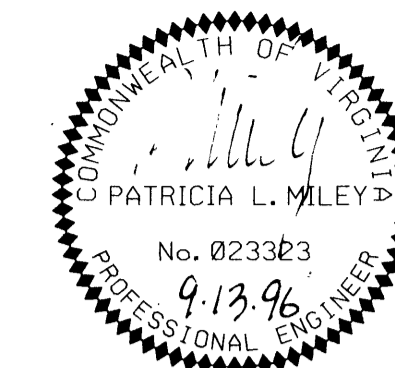
RAYMOND JOHNS  
 VERNICE LAW  
 TM 7100705  
 ZONE RS3



## GRADING, EROSION CONTROL AND LANDSCAPE PLAN

SCALE: 1"=30'

\*\* NOTE: COORDINATE ROOF DRAIN LOCATIONS AND OUTLETS WITH ARCHITECTURAL / BUILDING PLANS BY OTHERS. ALL ROOF DRAINS MUST DISCHARGE TO EITHER THE SOUTH OR EAST SIDE OF BUILDING. NO ROOF DRAINS SHOULD DISCHARGE INTO SWALE AT REAR OF BUILDING.



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GRADING, EROSION CONTROL  
 AND LANDSCAPE PLAN  
 DENNY'S RESTAURANT  
 ROANOKE, VIRGINIA

DRAWN BY DRB

DESIGNED BY PLM

CHECKED BY PLM

DATE JULY 25, 1996

## REVISIONS

- AUGUST 23, 1996
- SEPT. 13, 1996

SCALE AS NOTED

SHEET NO.

C4  
 OF 5

JOB NO. R96121

T# 7100705 subdivided  
 T# 7100714  
 3429 Orange Ave., N.E.