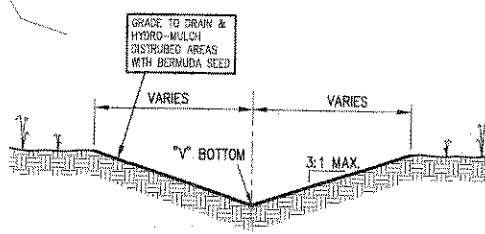


CONSTRUCT 40 SQ.FT. GROUTED RIP-RAP ~ 12' DEEP x MEDIUM SIZE RIP-RAP (SEE NOTES THIS SHEET)

256 LF. EARTHEN CHANNEL BOTTOM WITH 3:1 SIDE SLOPES @ 0.50% GRADE TO DRAIN (SEE XSECTION THIS SHEET)



**GRADING NOTES**

1. PRIOR TO PLACING ANY FILL MATERIAL, ALL EXISTING TREES, STUMPS, BRUSH, ROOTS, VEGETATION, RUBBISH AND ANY OTHER UNDESIRABLE MATTER SHALL BE PROPERLY REMOVED AND DISPOSED OF. ALL VEGETATION SHALL BE REMOVED TO A DEPTH OF 6" INCHES AND THE EXPOSED SURFACE SHALL BE SCARIFIED TO AN ADDITIONAL DEPTH OF 6" INCHES. AFTER SCARIFYING THE AREA TO BE FILLED, IT SHOULD BE FLOW DISCED OR BLADED UNTIL IT IS UNIFORM, BROUGHT TO A MOISTURE CONTENT BETWEEN OPTIMUM AND 5% ABOVE THE OPTIMUM MOISTURE VALUE AND COMPACTED TO NOT LESS THAN 95% NOT MORE THAN 103% OF THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D698.
2. FILL MATERIALS SHOULD BE APPROVED BY THE SOILS ENGINEER. THERE SHOULD NOT BE ROOTS, VEGETATION OR ANY OTHER UNDESIRABLE MATTER IN THE SOIL AND NO ROCKS OR SANDSTONE LARGER THAN 6-INCHES IN DIAMETER. THE FILL MATERIAL SHOULD BE PLACED IN LEVEL, UNIFORM LAYERS NOT TO EXCEED 8-INCHES IN THICKNESS, SHOULD BE THOROUGHLY MIXED AND COMPACTED AS SPECIFIED IN NOTE 1. DENSITY TESTS SHOULD BE MADE BY THE SOILS ENGINEER OR HIS REPRESENTATIVE. IF THE MATERIAL FAILS TO MEET THE DENSITY SPECIFIED, THE COURSE SHALL BE REWORKED AS NECESSARY.
3. EMBANKMENT SLOPES WITHIN SUBJECT PROPERTY SHOULD NOT EXCEED RATIO OF 3:1 SLOPE FOR EITHER CUT OR FILL.
4. ALL DISTURBED AREAS ARE TO BE SEEDED OR SOODED AND GRASS ESTABLISHED 75% TO 85% COVERAGE 1" HIGH.

**GROUTED RIP-RAP GENERAL NOTES**

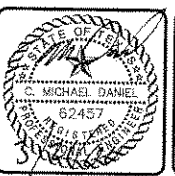
1. GROUTED MEDIUM SIZE RIP-RAP IS TO BE USED AT HEADWALL OUTFALL. MEDIUM SIZES RANGE 6-INCHES TO 12-INCHES IN DIAMETER.
2. STONES USED IN THIS TYPE OF RIP-RAP SHALL WEIGH BETWEEN 40 AND 150 POUNDS (18.2kg TO 68.1kg) EACH.
3. THE STONES SHALL BE PLACED IN A SINGLE LAYER WITH CLOSE JOINTS. THE UPRIGHT AXIS OF THE STONES SHALL MAKE AN ANGLE OF APPROXIMATELY 90 DEGREES WITH THE EMBANKMENT SLOPE. CARE SHALL BE TAKEN TO PREVENT EARTH OR SAND FROM FILLING THE SPACES BETWEEN THE STONES.
4. THE COURSES SHALL BE PLACED FROM THE BOTTOM OF THE EMBANKMENT UPWARDLY, THE LARGER STONES BEING PLACED IN THE LOWER COURSES.
5. OPEN JOINTS SHALL BE FILLED WITH SPALLS.
6. STONES THAT PROJECT MORE THAN THE ALLOWABLE AMOUNT IN THE FINISHED WORK SHALL BE REPLACED, EMBEDDED DEEPER OR CHIPPED.
7. AFTER THE STONES ARE IN PLACE, THE STONES SHALL BE WETTED THOROUGHLY AND THE SPACES BETWEEN THE STONES SHALL BE COMPLETELY FILLED WITH GROUT.
8. THE SURFACE OF THE RIP-RAP SHALL BE SWEEPED WITH A STIFF BROOM AFTER GROUTING.
9. NO RIP-RAP SHALL BE GROUTED IN FREEZING WEATHER. THE WORK SHALL BE PROTECTED FROM THE SUN AND KEPT MOIST FOR AT LEAST THREE (3) DAYS AFTER GROUTING.
10. GROUT SHALL HAVE THE CONSISTENCY SUCH THAT IT SHALL FLOW INTO AND COMPLETELY FILL ALL JOINTS.
11. REFER TO THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS STANDARDS SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION FOR ADDITIONAL INFORMATION.

**GRADING LEGEND**

- 565 — EXISTING CONTOUR
- 65 — PROPOSED CONTOUR
- 165.20 — PROPOSED GUTTER SHOT
- + 595.20 — EXISTING SPOT ELEVATION
- — FLOW ARROW

Contractor shall contact underground utility locator service no earlier than 14 days and no later 48 hours prior to any excavation exceeding a depth of 16 inches.  
**1-800-DIG-TESS**

Benchmark...  
City of Rockwall Brass Disk Monument set in Concrete  
City of Rockwall Monument # R017.  
Elevation = 549.46



revision	date

**NDM**  
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Dallas, Texas 75231 / (214) 739-4741

GRADING PLAN				
WALGREENS - STORE # 5827 F.M. 740 AND F.M. 3097 ROCKWALL, ROCKWALL COUNTY, TEXAS				
design	drawn	scale	date	notes
NDM/CE	NDM/CE	NOTED	Mar. 27, 2000	

sheet no.  
**3**  
**13**  
job number  
9975057