

GRADING SPECIFICATIONS

THE SITE SHALL BE GRADED TO A GRADE 1" BELOW THE CONTOURS SHOWN. THE SQUARES LISTED REFLECT THIS GRADE.

THE CONTRACTOR SHALL NOT BE REQUIRED TO STRIP AND STOCKPILE TOPSOIL IN THE AREA OF THIS PROJECT.

THE CONTRACTOR SHALL PERFORM THE GRADING OPERATIONS. THE EXCAVATION SHALL BE MADE TO 10" BELOW THE LINES AND GRADES SHOWN. THIS WILL BE THE SURFACE ELEVATION. THE EXCAVATED MATERIAL SHALL THEN BE PLACED IN THE EXCAVATIONS AS SHOWN. THE EXCAVATIONS SHALL BE COMPACTED TO PROVIDE THE MOISTURE CONTENT AND DEGREE OF COMPACTION AS SHOWN BELOW.

SOIL TYPE MOISTURE CONTENT % OF COMPACTION

CONCRETE 30-35 ABOVE MIN. OF SIZE OF MAX. DRY DENSITY

WORKABLE MIN. OF SIZE OF MAX. DRY DENSITY

MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT SHALL BE DETERMINED BY MOISTURE TOWER.

THE EXCAVATION AND EMBANKMENT PLACEMENT MAY BE ACCOMPLISHED WITH ANY TYPE OF EQUIPMENT WHICH WILL GIVE UNIFORM SATISFACTORY RESULTS.

TESTING WILL BE PERFORMED BY THE OWNER TO VERIFY COMPACTION RESULTS.

EMBANKMENT MATERIALS SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING A LAJSE THICKNESS OF 8" (NOT MORE THAN 10") AND SHALL BE COMPACTED AS SPECIFIED BEFORE THE NEXT LAYER IS PLACED.

EXCAVATION EMBANKMENT

BASE VOLUMES 16,250 15,091

(CU YDS)

SPRINKLE (1" IN) 2,714

NET (CU YDS) 18,964 12,377

SPREAD AREA 204,096 173,250

(SQ FT)

AVERAGE DEPTH 2.337 2.788

(FEET)

PRODUCED SALVAGED TOPSOIL WILL BE SPREAD BY THE CONTRACTOR AFTER THE COMPLETION OF THE STREET AND UTILITY CONSTRUCTION. THE TOPSOIL SHALL BE 4" THICK AND CONSIST OF 2000 CU YD YARDS.

THE EXCAVATION AND EMBANKMENTS FOR THE SITE GRADING SHALL BE PROVIDED TO A FINISH AND UNIFORM SURFACE WITHIN 600 FEET OF THE PROJECT BOUNDARY.

ANY CARBAGE, CONSTRUCTION DEBRIS, OR LIQUID WASTE ENCOUNTERED SHALL BE REMOVED FROM THE SITE AND DEPOSITED BY THE CONTRACTOR IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS AT NO ADDITIONAL COST TO OWNER.

ALL CONSTRUCTION AND TESTING SHALL BE IN STRICT ACCORDANCE WITH THE CURRENT EROSION CONTROL AND THE RAPID CITY STANDARD SPECIFICATIONS FOR CONSTRUCTION.

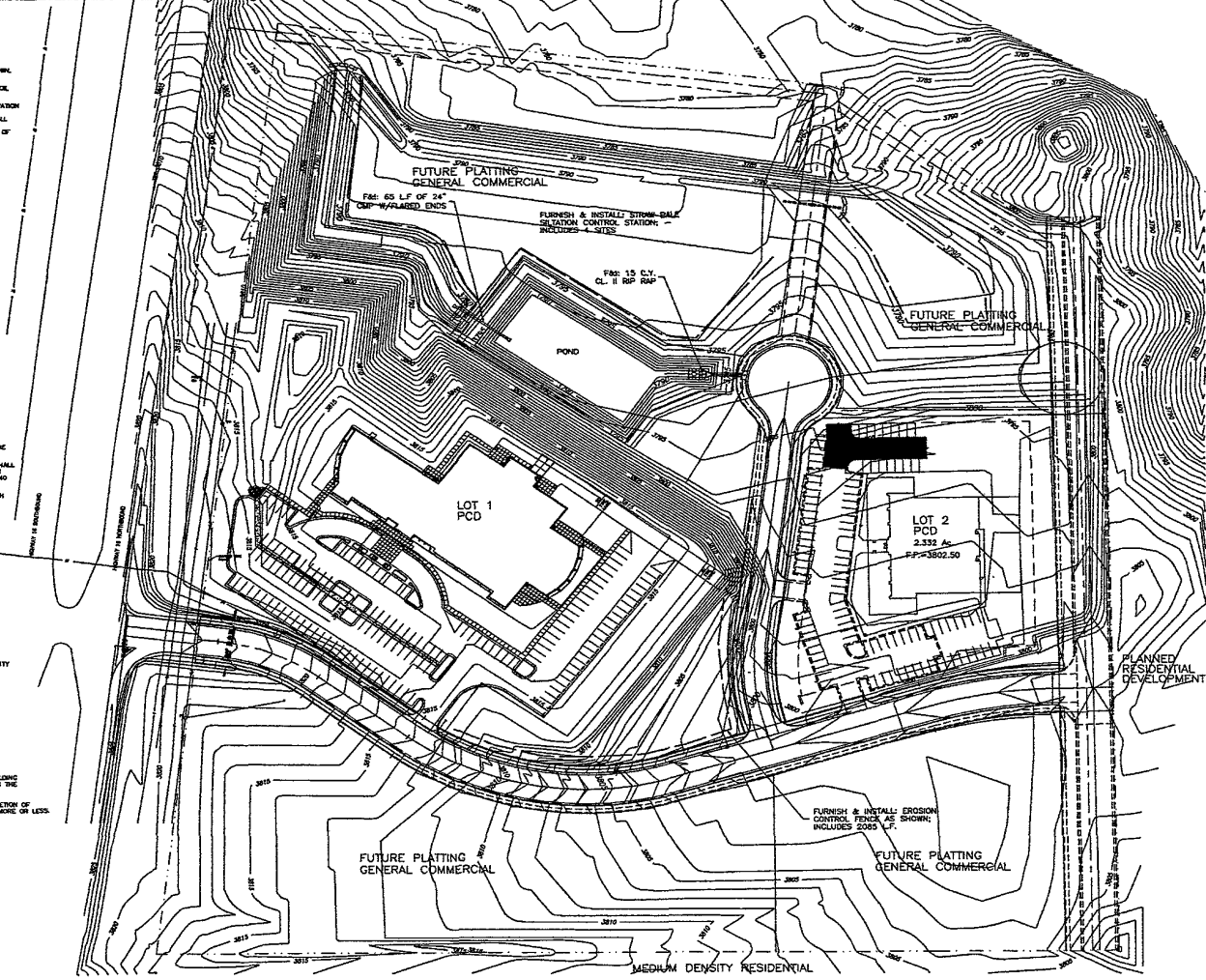
RE-SEEDING SPECIFICATIONS

THE AREAS RECEIVING TOPSOIL SHALL BE RE-SEED AS PER RAPID CITY GRADING SPECIFICATIONS. SEED, FERTILIZER, AND APPLICATION RATES FOR SEED, FERTILIZER, AND MULCH SHALL BE AS FOLLOWS:

SEED MIXTURE:	SPECIES	APPLICATION (LBS)
WESTERN BLUEGRASS	10	12/ACRE
RED BERMUDA	10	12/ACRE
SWITCHGRASS	7	12/ACRE
SEEDS OF GRAMA	10	12/ACRE
PERENNIAL PRAIRIES	10	12/ACRE
ANNUAL PRAIRIES	10	12/ACRE
FERTILIZER:	200	12/ACRE
MULCH	2	12/ACRE

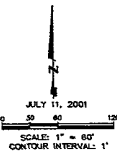
SEE SLOPES AND OTHER DISTURBED AREAS NOT WITHIN LIMITS OF GRADING AND PARKING LOT SHALL BE SEED, FERTILIZED, AND MULCHED USING THE SAME MATERIALS AS SPECIFIED FOR ROADWAY AREAS.

SHADING DIVOTED AREA TO BE RE-SEED IMMEDIATELY UPON COMPLETION OF THE GRADING. THE AREA TO BE RE-SEED SHALL BE 150,000 SF, MORE OR LESS.



DATE DRAWN: 08/01/01
 DRAWN BY: J. J. JENSEN
 CHECKED BY: J. J. JENSEN
 DATE: 08/01/01

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY ENGINEERING DIVISION AND THE CITY ENGINEERING DIVISION SHALL BE RESPONSIBLE FOR REVIEWING AND APPROVING THE GRADING PLAN AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY ENGINEERING DIVISION AND THE CITY ENGINEERING DIVISION SHALL BE RESPONSIBLE FOR REVIEWING AND APPROVING THE GRADING PLAN AND SPECIFICATIONS.



REVIEWED BY CITY ENGINEERING DIVISION

DATE:	08/01/01
DESIGNED BY:	J. J. JENSEN
DRAWN BY:	J. J. JENSEN
CHECKED BY:	J. J. JENSEN
DATE:	08/01/01

COMMENTS:

Contractor shall be responsible for obtaining all necessary permits from the City Engineering Division and the City Engineering Division shall be responsible for reviewing and approving the grading plan and specifications.

PREPARED FOR:
WILLIAMS & ASSOCIATES
 1225 E. COLORADO BLVD., SUITE 2A
 SPEARFISH, SD 57783
 (605) 642-2009

LOCATION:
 LOT 1
 OF OLD RODEO SUBDIVISION
 LOCATED IN THE NB OF THE SW
 SECTION 26, T1N, R7E, B1M
 RAPID CITY, PENNINGTON COUNTY, SOUTH DAKOTA

PREPARED BY:

Renner & Sperlch Engineering Co.
 616 Sixth St. • Rapid City, SD 57701 • 605/342-1191
 FAX: 605/342-1405 • E-MAIL: RSE@RSPENGINET.COM

REVISIONS	
DATE	REASON
8/16/01	PLAN REVISIONS
8/16/01	PLAN REVISIONS
10/19/01	PLAN REVISIONS

PROJECT:
**GRADING PLAN & SPECIFICATIONS
 DRAINAGE AND EROSION CONTROL**

DESIGNED BY:	J. J. JENSEN
DRAWN BY:	J. J. JENSEN
CHECKED BY:	J. J. JENSEN
DATE:	08/01/01
JOB NO.:	1440

SHEET	3
OF	07
	9