

FILED

Date: 3/19/2008 By: JP

This survey consists of: \_\_\_\_\_

Map: \_\_\_\_\_

Narrative: \_\_\_\_\_

Corner Rpt: \_\_\_\_\_

DOUGLAS COUNTY  
SURVEYOR

1. ALL WATER SYSTEM WORK SHALL BE IN CONFORMANCE WITH ROBERT'S CREEK WATER DISTRICT RULES AND REGULATIONS. IN CASES OF CONFLICT ROBERT'S CREEK SPECIFICATIONS SHALL TAKE PRECEDENCE OVER THE STANDARD SPECIFICATION. DEVELOPER OR CONTRACTOR SHALL WARRANTY WATERLINE FOR 2 YEARS AFTER FINAL ACCEPTANCE.
2. ALL PIPE FOR WATER MAINLINES SHALL BE, AWWA C-900 CLASS 150 PVC PIPE; OR DUCTILE IRON CLASS 50, EXCEPT 4" SHALL BE CLASS 52 AND 6" SHALL BE CLASS 51.
3. THE CONTRACTOR SHALL FLUSH, HYDROSTATICALLY TEST AND CHLORINATE ALL NEW WATER MAINLINES INSTALLED. THE ENGINEER AND ROBERT'S CREEK WATER DISTRICT SHALL WITNESS ALL TESTS MADE BY THE CONTRACTOR TO INSURE THEY ARE PERFORMED PROPERLY. COMPLETED WATERLINES SHALL BE CHLORINATED AND BACTERIOLOGICALLY TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF ORS 333.61050 (11).
4. ALL CONSTRUCTION IS SUBJECT TO INSPECTION BY ROBERT'S CREEK WATER DISTRICT. THE CONTRACTOR SHALL GIVE THE DISTRICT 48 HOURS NOTICE PRIOR TO BEGINNING CONSTRUCTION. ALL SEGMENTS OF THE WATER LINE SHALL BE INSPECTED BY THE DISTRICTS INSPECTOR, BEFORE THE CONTRACTOR COVERS THE PIPE.
5. NO OTHER MAJOR UTILITIES SHALL RUN PARALLEL WITHIN 5 FEET OF THE NEW WATER MAIN.
6. THRUST BLOCKS SHALL BE INSTALLED AT ALL BENDS AND FITTINGS AS PER STANDARD DRAWING.
7. WATER SERVICE SHALL BE 1" POLYETHYLENE PER ROBERT'S CREEK STANDARD DETAIL. CONTRACTOR TO INSTALL ALL ROAD SERVICE CROSSINGS IN (1 1/2" MIN.) SCH 40 PVC CONDUIT.
8. ALL MJ FITTINGS SHALL HAVE MEGA LUG RESTRAINT RINGS IN ADDITION TO THRUST BLOCKS.
9. PIPE BEDDING SHALL BE REJECT SAND PER ROBERT'S CREEK WATER DISTRICT SPECIFICATIONS (OR APPROVED).
10. CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE, COUNTY AND LOCAL REGULATIONS REGARDING THE CONSTRUCTION OF THIS PROJECT. NO WATER LINE CONSTRUCTION SHALL BEGIN UNTIL WRITTEN APPROVAL OF THE CONSTRUCTION PLANS IS RECEIVED FROM THE OREGON HEALTH DIVISION. UNLESS IT EXISTS ON THE APPROVED DISTRICT MASTER PLAN.
11. VALVES SHALL BE RESILIENT SEAT GATE VALVES, PER AWWA C-509 MUELLER, KENNEDY, CLOW, OR APPROVED.
12. FITTINGS SHALL BE DUCTILE IRON PER AWWA C-110, 250 P.S.I. RATING, WITH MECHANICAL JOINT OR FLANGED ENDS, AS DETAILED.
13. 12 GA. SOLID COPPER TONING WIRE, BLUE INSULATED FOR IN GROUND USE SHALL BE INSTALLED DIRECTLY OVER ALL WATER MAIN AND SERVICE LINE INSTALLATIONS. WIRE SHALL BE BROUGHT TO THE SURFACE AT ALL VALVES, HYDRANTS AND METER BOXES. SPLICES FROM MAIN LINE TO SERVICE LINE TONING WIRE SHALL BE MADE WITH 3M-DIRECT BURY SPLICE KITS DESIGNED FOR IN GROUND USE.
14. FIRE HYDRANTS SHALL BE KENNEDY GUARDIAN OR 500F MUELLER "CENTURION". HYDRANT SHALL HAVE TWO 2 1/2" PORTS AND ONE 4" THREADED PUMPER NOZZLE. PUMPER NOZZLE SHALL BE ORIENTED STREET SIDE OR TOWARD BUILDING IN PARKING LOTS. HYDRANT VALVE SHALL BE 5 1/4" COMPRESSION TYPE. HYDRANT SHALL BE MECHANICAL JOINT OR PER PLANS.
15. METER LOCATION TO BE MARKED FOR HORIZONTAL AND VERTICAL ALIGNMENT.
16. ALL WATER MAIN LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF 36".
17. IN PLACES WHERE THE INSTALLATION OF NEW WATER LINES CROSS A SANITARY SEWER MAIN OR LATERAL, THE CURRENT EDITION OF THE CONSTRUCTION STANDARDS FOR THE OREGON HEALTH DIVISION. OREGON ADMINISTRATIVE RULES, CHAPTER 333, SECTION 333-61-050 (10), SHALL BE COMPLIED WITH.
18. ROBERT'S CREEK WATER EMPLOYEES SHALL OPERATE ALL VALVES ON EXISTING SYSTEM. SCHEDULED SHUT DOWNS WILL REQUIRE 48-HOUR NOTIFICATION TO THE DISTRICT SO THAT ADEQUATE NOTICE CAN BE GIVEN TO THE DISTRICT CUSTOMERS AFFECTED.
19. BACK-FLOW DEVICE SHALL CONFORM TO THE CURRENT EDITION OF THE OREGON HEALTH DIVISION DRINKING WATER PROGRAM, OREGON ADMINISTRATIVE RULES CHAPTER 333, FOR BACK-FLOW INSTALLATION.
20. MAIN LINE SHALL BE 5 FEET FROM FRONT EDGE OF CURB
21. NO FUTURE SHALL BE HIGHER THAN THE DISTRICT'S SERVICE ELEVATION OF 686 FEET, UNLESS OTHERWISE SPECIFIED.
22. COMBINATION AIR VACUUM RELEASE VALVES SHALL BE PLACED AT HIGH AND LOW AREAS.
23. BORES 2" AND ABOVE SHALL BE HORIZONTALLY AND VERTICALLY ON LINE WITH EXISTING MAINS.
24. NO WATER SERVICE CROSSING SHALL BE LOCATED WHERE A POWER BOX, TRANSFORMER OR JUNCTION WILL BE LOCATED.
25. PLANS SUBMITTED TO ROBERT'S CREEK WATER DISTRICT SHALL INCLUDE THE DISTRICT'S STANDARD WATER CONSTRUCTION DETAILS SHOWN HEREIN. THE CONTRACTOR SHALL KEEP A COMPLETE SET OF THESE DETAILS ON CONSTRUCTION PREMISES AT ALL TIMES.
26. EASEMENTS SHALL BE AN UNOBSTRUCTED 15' WIDE AND SHALL BE 15' OF 1"-0 CRUSHED ROCK OVER GEOTEXTILE FABRIC. EASEMENT SHALL BE RECORDED AT OWNER'S EXPENSE PRIOR TO ACCEPTANCE OF PROJECT.
27. THE DISTRICT RESERVES THE RIGHT TO CHANGE METER LOCATIONS.
28. TONE WIRE SHALL BE TESTED PRIOR TO AND AFTER TRENCH IS BACK-FILLED. FAULTY TONE WIRE SHALL BE REPAIRED PRIOR TO ACCEPTANCE OF PROJECT.

1. THE 2002 EDITION OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION PREPARED BY THE OREGON DEPARTMENT OF TRANSPORTATION AND THE AMERICAN PUBLIC WORKS ASSOCIATION OREGON CHAPTER WILL BE CONSIDERED THE STANDARD SPECIFICATIONS
2. TRENCH BACK FILL SHALL BE CLASS B (3/4"-0" CRUSHED ROCK) UNDER ALL STREETS AND PARKING LOTS, AND CLASS A (SUITABLE EXCAVATED MATERIAL) ELSEWHERE, UNLESS SHOWN DIFFERENT ON TRENCH DETAIL OR IN SPECIFICATIONS. ALL TRENCHES WILL BE COMPACTED WITH HAND-OPERATED PNEUMATIC COMPACTOR.
3. THE CONTRACTOR SHALL REPLACE ANY AND ALL SURVEY MONUMENTS WHICH ARE AFFECTED BY THE CONSTRUCTION. ALL MONUMENTS WILL BE RESET BY A LICENSED LAND SURVEYOR.
4. LOCATIONS SHOWN ON ENGINEERING DRAWINGS ARE APPROXIMATE. THE EXACT LOCATION WILL BE STAKED IN THE FIELD BY THE ENGINEER. CONTRACTOR TO GIVE SEVEN (7) DAYS NOTICE TO ENGINEER FOR STAKES.
5. CONTRACTOR SHALL MAINTAIN A MINIMUM HORIZONTAL SEPARATION OF TEN (10) FEET BETWEEN WATER MAINS AND SEWER MAINS MEASURED EDGE TO EDGE.
6. INSULATED COPPER TONING WIRE APPROVED FOR DIRECT BURY SHALL BE PLACED IN ALL TRENCHES WHERE PIPE HAS BEEN LAID. ALL TONE WIRE SHALL BE TESTED PRIOR TO ACCEPTANCE.
7. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES FOR LOCATIONS OF MAINLINE AND SERVICE LINE LOCATIONS PRIOR TO DIGGING. CONTRACTOR TO CONTACT ONE-CALL AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AT 1-800-332-2344.  
ATTENTION:  
OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN THE OAR 952-001-0010 THROUGH OAR 952-001-0090, AND OREGON LAWS 1995, CHAPTER 691, SECTION 7. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER.
8. ENGINEER AND COUNTY TO BE NOTIFIED FOR INSPECTION AS SHOWN ON SCHEDULE OR AS SPECIFIED IN "GENERAL NOTES" FOR THAT SPECIFIC CONSTRUCTION ITEM.
9. CONTRACTOR TO FIELD VERIFY TYPE, LOCATION, AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF NEW PIPING.
10. CONTRACTOR RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR WORKING IN PUBLIC RIGHT OF WAYS. (i.e. ODOT, CITY, COUNTY).
11. COMPACTION TESTS SHALL BE REQUIRED ON ALL MAINLINE TRENCHES AND ON SUB GRADE MATERIAL. ALL TESTING SHALL BE AT THE APPLICANT/DEVELOPER'S COST.

DOUGLAS COUNTY SHALL BE NOTIFIED FOR INSPECTION AT LEAST 24 HOURS PRIOR TO THE ACCOMPLISHMENT OF THE FOLLOWING STAGES OF CONSTRUCTION. PHONE: 440-4481

1. ANY STORM SEWER CONSTRUCTION (INCLUDING STRUCTURES)
2. FINISH SUB-GRADE. (PRIOR TO FABRIC INSTALLATION)
3. SOIL STABILIZATION FABRIC INSTALLATION
4. ANY CONCRETE WORK
5. FINISH BASE COURSE GRADE
6. PAVING

NONE OF THE ABOVE ITEMS OF WORK IN COUNTY SHALL BE COVERED UNTIL INSPECTED BY DOUGLAS COUNTY.

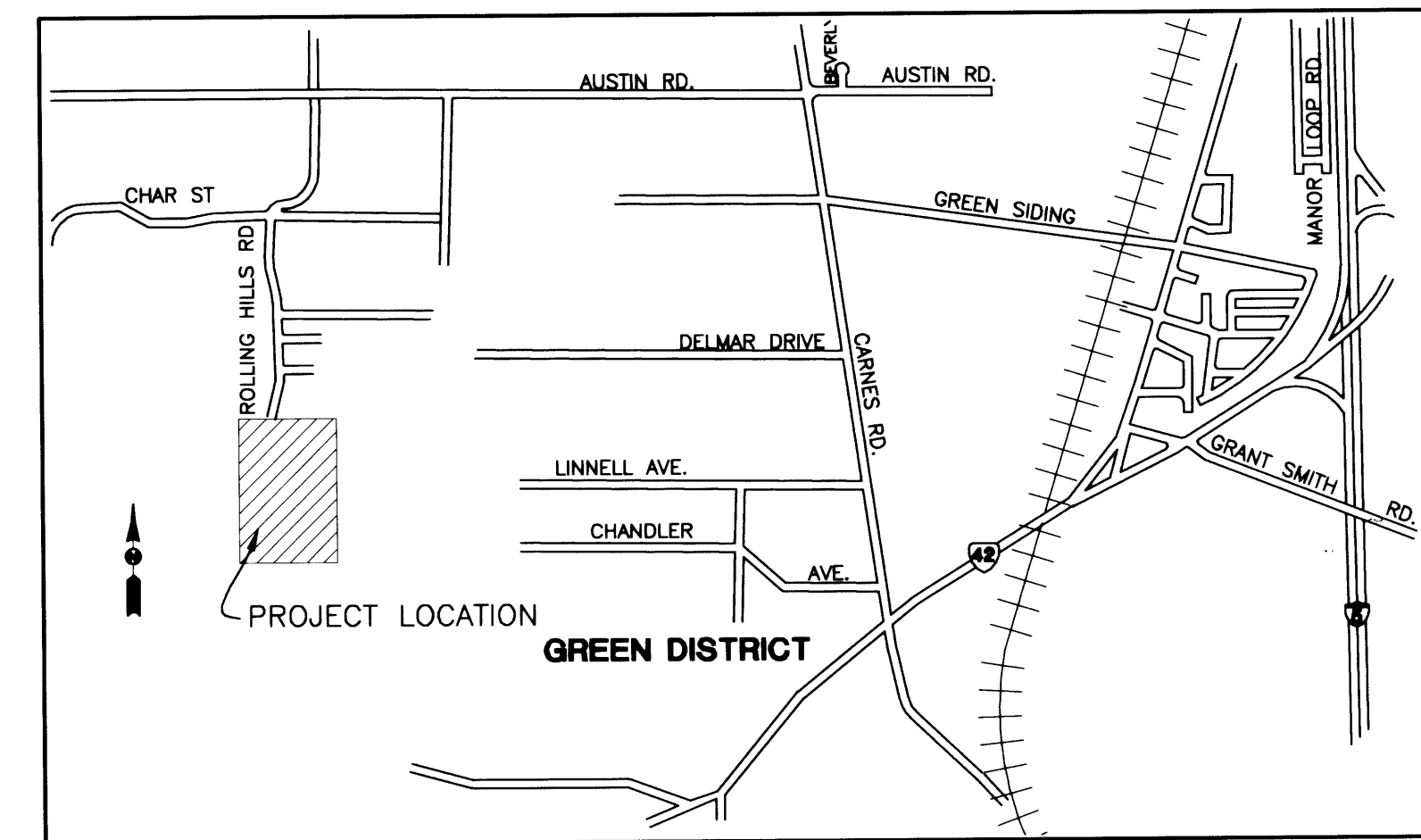
1. ALL STREET IMPROVEMENT WORK SHALL BE IN CONFORMANCE WITH THE LATEST VERSION OF CITY OF ROSEBURG DOUGLAS COUNTY DRAINAGE MANAGEMENT PLAN DESIGN STANDARDS AND ADDENDUM DATED MAY 1990 AND DOUGLAS COUNTY PUBLIC WORKS DEPARTMENT DESIGN STANDARDS AND STANDARD DRAWINGS. IN CASES OF CONFLICT THE DOUGLAS COUNTY STANDARDS SHALL TAKE PRECEDENCE OVER THE STANDARD SPECIFICATIONS.
2. ALL TRENCHES IN DOUGLAS COUNTY ROADWAYS SHALL BE BACK FILL WITH SAND SLURRY.
3. ALL ASPHALT PAVEMENT SHALL BE "C" MIX MEETING OREGON STATE HIGHWAY DEPARTMENT STANDARDS.
4. TWO CURB WEEP HOLES PER LOT SHALL BE PROVIDED AT EITHER END OF FRONTAGE OR AS DESIGNATED BY THE ENGINEER.
5. CONTRACTOR TO INSTALL SIDEWALK ACCESS RAMPS (SAR) PER STANDARD DRAWING. RAMPS SHALL BE POURED MONOLITHICALLY WITH CURB.
6. ENGINEER AND CITY TO BE NOTIFIED FOR INSPECTION AS SHOWN ON SCHEDULE OR AS SPECIFIED IN "GENERAL NOTES" FOR THAT SPECIFIC CONSTRUCTION ITEM.

INSTALL POST OFFICE LOCK BOX PEDESTAL WHERE SHOWN ON PLANS PER STANDARD DETAIL. LOCK BOXES WILL BE SUPPLIED BY THE CONTRACTOR. CONTRACTOR TO COORDINATE WITH LOCAL POST MASTER FOR SIZE, MODEL #, & LOCATION PRIOR TO INSTALLATION.

THE ENGINEER SHALL BE NOTIFIED FOR INSPECTION AT LEAST 24 HOURS PRIOR TO THE ACCOMPLISHMENT OF THE FOLLOWING STAGES OF CONSTRUCTION. PHONE: 673-0168 FAX: 440-9392.

1. ANY STORM SEWER CONSTRUCTION (INCLUDING STRUCTURES)
2. FINISH SUB-GRADE. (PRIOR TO FABRIC INSTALLATION)
3. SOIL STABILIZATION FABRIC INSTALLATION
4. ANY CONCRETE WORK
5. FINISH BASE COURSE GRADE
6. PAVING

NONE OF THE ABOVE ITEMS OF WORK SHALL BE COVERED UNTIL INSPECTED BY THE ENGINEER.



|         |                                    |                                                                                       |                           |
|---------|------------------------------------|---------------------------------------------------------------------------------------|---------------------------|
| (ELEV.) | EXISTING ELEV.                     |  | EXISTING CURB INLET (CI)  |
| ELEV.   | NEW ELEV.                          |  | NEW CURB INLET (CI)       |
| ---     | SAW CUT                            |  | EXISTING CATCH BASIN (CB) |
| ---     | EXISTING CABLE TV                  |  | NEW CATCH BASIN (CB)      |
| TV      | EXISTING EDGE OF AC OR GRAVEL      |  | CLEAN OUT                 |
| ---     | EXISTING POWER (OVERHEAD)          |  | GUY WIRE                  |
| ---     | EXISTING POWER (UNDERGROUND)       |  | GAS METER                 |
| PGH     | NEW UNDERGROUND (TV, POWER, PHONE) |  | EXISTING FIRE HYDRANT     |
| PGC     | EXISTING GAS                       |  | NEW FIRE HYDRANT          |
| ---     | EXISTING RIGHT-OF-WAY              |  | LANDSCAPING               |
| UGU     | NEW RIGHT-OF-WAY                   |  | EXISTING VALVE            |
| ---     | EXISTING FENCE                     |  | NEW VALVE                 |
| GAS     | NEW FENCE                          |  | EXISTING MANHOLE (MH)     |
| ---     | EXISTING WATER                     |  | NEW MANHOLE (MH)          |
| R/W     | EXISTING WATER MAIN                |  | POWER POLE                |
| ---     | NEW WATER                          |  | PHONE PED                 |
| X       | EXISTING STORM SEWER (STS)         |  | EXISTING LIGHT POLE       |
| ---     | NEW STORM SEWER (STS)              |  | NEW LIGHT POLE            |
| V       | EXISTING SANITARY SEWER (SS)       |  | MAIL BOX                  |
| ---     | NEW SANITARY SEWER (SS)            |  | EXISTING WATER SERVICE    |
| VM      | EXISTING PRESSURE SEWER (PS)       |  | NEW WATER SERVICE         |
| W       | NEW PRESSURE SEWER (PS)            |  | BLOW OFF                  |
| ---     | EXISTING FORCE MAIN (FM)           |  | CABLE TV PED (TV)         |
| STS     | NEW FORCE MAIN (FM)                |                                                                                       |                           |
| SS      | SILT FENCE (S-F)                   |                                                                                       |                           |
| PS      | NEW ELECTRICAL CONDUIT             |                                                                                       |                           |
| ---     | TOP OF CURB                        |                                                                                       |                           |
| FM      | ASPHALT                            |                                                                                       |                           |
| S-F     | BACK OF WALK                       |                                                                                       |                           |
| ---     | FINISH GRADE                       |                                                                                       |                           |
| C       | FINISH FLOOR                       |                                                                                       |                           |
| TC      | ORIGINAL GROUND                    |                                                                                       |                           |
| AC      | TOP OF WALK                        |                                                                                       |                           |
| BW      |                                    |                                                                                       |                           |
| FG      |                                    |                                                                                       |                           |
| FF      |                                    |                                                                                       |                           |
| OG      |                                    |                                                                                       |                           |
| TW      |                                    |                                                                                       |                           |

SHT 1 - COVER  
SHT 2 - PHASE 1, 2, & 3 TOPOGRAPHY  
SHT 3 - PHASE 1, 2, & 3 GRADING W/EROSION CONTROL  
SHT 4 - PHASE 1 - OVERALL  
SHT 5 - DETENTION POND W/DETAILS  
SHT 6 - PLAN & PROFILE CALLAHAN DRIVE  
SHT 7 - PLAN & PROFILE OTHELLO  
SHT 8 - PLAN & PROFILE ROLLING HILLS  
SHT 9 - PLAN & PROFILE CAMERON AVENUE  
SHT 10 - PLAN & PROFILE CAMERON AVENUE  
SHT 11 - PLAN & PROFILE ROWAN & ALYSSA  
SHT 12 - PLAN & PROFILE GRAYSON  
SHT 13 - PLAN & PROFILE GRAYSON & QUINCY  
SHT 14 - DETAILS  
SHT 15 - DETAILS  
SHT 16 - EROSION CONTROL DETAILS  
SHT 17 - GREEN SANITARY DETAILS

***i.e.***  
ENGINEERING  
505 SE Main Street  
Roseburg, Oregon 97470  
PHONE (541) 673-0166  
FAX (541) 440-9392  
iemail@ieengineering.com  
Project Name:

|                                                                                       |      |         |     |                   |                               |                        |
|---------------------------------------------------------------------------------------|------|---------|-----|-------------------|-------------------------------|------------------------|
|  | Rev. | Date    | Dwg | Description       | RIVER CREST ESTATES 2 PHASE 1 |                        |
|                                                                                       | 1    | 7/1/05  | JDL | AGENCY REVIEW     | Title:                        |                        |
|                                                                                       | 2    | 4/13/06 | JDL | AS-BUILT PHASE 1A | COVER SHEET                   |                        |
|                                                                                       | 3    | 8/9/06  | NRJ | AS-BUILT PHASE 1B | DES DMA                       | PROJECT NO. 1944--Q3t2 |
|                                                                                       |      |         |     |                   | DWG JDL                       | DATE: MAY 20, 2005     |
|                                                                                       |      |         |     |                   | CHK SNL                       | SCALE: AS SHOWN        |
| EXPIRES: 12/31/2006                                                                   |      |         |     |                   | APP SNL                       | SHEET: 1 OF 18         |

DO NOT DUPLICATE

**TITLE SHEET CO. RDS 366 375J 375N  
3750 288B 288C 288D**

375NO288