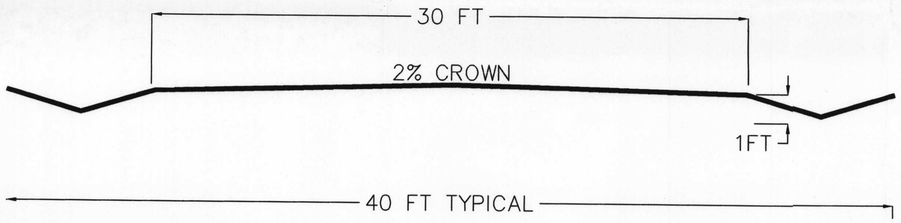
MAIN ACCESS ROADS

TYPICAL CROSS SECTION



DITCH SLOPES 3:1 OR FLATTER
SLOPE VARIES TO MATCH TOPOGRAPHY

TYPICAL R.O.W. 60 FT

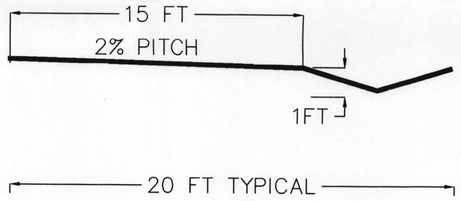
ROAD DESIGN CRITERIA

DESIGN USE	TWO-WAY TRAFFIC, INCLUDING HEAVY TRUCK TRAFFIC.
MAXIMUM SPEED	40 MPH MAXIMUM, REDUCE SPEEDS FOR AREAS OF LIMITED VISIBILITY AND ROAD JUNCTIONS.
MAXIMUM GRADE	8 % FOR NO MORE THAN 2,000 FEET; 6 % OVERALL FOR NORMAL TERRAIN CONDITIONS.
ROADWAY WIDTH	30 FOOT RUNNING SURFACE WITHIN 60 FOOT RIGHT OF WAY.
MINIMUM CROWN	2 % FROM CENTERLINE
MINIMUM CURVE	MINIMUM CURVE RADIUS 500 FEET WITH A 5 DEGREE CENTRAL ANGLE.
ROAD DITCH	MINIMUM 1 FOOT DEPTH, 3:1 (h:v) SIDE SLOPES, AT 2 TO 4 % GRADES, VARY TO MATCH TOPO.
CULVERT DESIGN	25 YEAR DESIGN, MINIMUM SIZE 18 INCHES.
SURFACING	NO SURFACING FOR SP, SW, GC, GM, GP, GW – ALL OTHERS SOILS 4 INCHES GRAVEL SURFACING
MAINTENANCE	GRADING TO MAINTAIN CROWN, DITCHING, AND SURFACING.

NOT TO SCALE

SECONDARY ACCESS ROADS

TYPICAL CROSS SECTION



DITCH SLOPES 3:1 OR FLATTER
SLOPE VARIES TO MATCH TOPOGRAPHY

TYPICAL R.O.W. 40 FT

ROAD DESIGN CRITERIA

DESIGN USE	ONE-WAY TRAFFIC, INCLUDING LIGHT TRUCK TRAFFIC.
MAXIMUM SPEED	30 MPH MAXIMUM, REDUCE SPEEDS FOR AREAS OF LIMITED VISIBILITY AND ROAD JUNCTIONS.
MAXIMUM GRADE	8 % OVERALL FOR NORMAL TERRAIN CONDITIONS.
ROADWAY WIDTH	15 FOOT RUNNING SURFACE WITHIN 40 FOOT RIGHT OF WAY; TURNOUTS EVERY 1,000 FT.
MINIMUM PITCH	2 % FROM UPHILL SIDE OF ROAD.
MINIMUM CURVE	MINIMUM CURVE RADIUS 200 FEET.
ROAD DITCH	MINIMUM 1 FOOT DEPTH, 3:1 (h:v) SIDE SLOPES, AT 2 TO 4 % GRADES, VARY TO MATCH TOPO.
CULVERT DESIGN	10 YEAR DESIGN, MINIMUM SIZE 18 INCHES.
SURFACING	NO SURFACING MOST AREAS; REQUIRED ONLY IN AREAS OF POOR DRAINAGE AND SOILS.
MAINTENANCE	GRADING TO MAINTAIN PITCH, DITCHING, AND SURFACE.

NOT TO SCALE

NOTES

1. MAIN ACCESS ROADS WILL BE ESTABLISHED AND MAINTAINED FROM THE GAS HILLS ROAD TO ALL SATELLITE FACILITIES.
2. SECONDARY ACCESS ROADS WILL BE ESTABLISHED AND MAINTAINED IN ALL ACTIVE WELL FIELDS.
3. TO THE EXTENT PRACTICAL, ALL PIPELINES AND UTILITIES WILL BE LOCATED WITHIN THE MAIN AND SECONDARY ACCESS ROAD R.O.W.
4. WHERE REQUIRED, GRAVEL SURFACING SHALL BE 3 INCH MINUS PIT RUN OF THE FOLLOWING SOIL TYPES: SW, SP, GP, GW.
5. WATERING FOR DUST CONTROL WILL BE USED AS NECESSARY
6. WATER USED FOR DUST CONTROL SHALL BE FROM AN APPROVED AND PERMITTED SOURCE.
7. ROAD SIGNAGE SHALL MEET UNIFORM TRAFFIC CONTROL STANDARDS INCLUDING SIGNAGE FOR SPEED LIMIT, EQUIPMENT CROSSING, AND STOP AND/OR YIELD AT ALL INTERSECTIONS.
8. TOPSOIL DISTURBED ALONG THE MAIN ACCESS ROAD WILL BE STRIPPED AND STOCKPILED FOR FUTURE RECLAMATION IN A MANNER WHICH PROTECTS THE TOPSOIL RESOURCE FROM CONTAMINATION AND/OR EROSION.
9. TOPSOIL ALONG SECONDARY ACCESS ROADS (WITHIN WELL FIELD AREAS) WILL BE STRIPPED TO AN AVERAGE DEPTH OF 6 INCHES UNLESS SOILS HAVE BEEN DEMONSTRATED TO BE UNSUITABLE AS A PLANT GROWTH MEDIUM. SALVAGED TOPSOIL WILL BE STOCKPILED IN A MANNER WHICH PROTECTS THE TOPSOIL RESOURCE FROM CONTAMINATION AND/OR EROSION UNTIL USED FOR FINAL RECLAMATION.
10. WHERE POSSIBLE UTILITIES INCLUDING POWER LINES AND PIPELINES WILL BE LOCATED WITHIN THE RIGHT-OF-WAY ON EITHER SIDE OF THE MAIN AND SECONDARY ACCESS ROADS.

D-03

NO.	REVISION	DATE	BY	ISSUED FOR	DATE	BY

POWER RESOURCES, INC.

SCALE: NOT TO SCALE	DATE	DWG. NO.	REV.
DRAWN BY: BRS	12/29/97	PLATE 3-3	
CHECKED:			
APPROVED:			

GAS HILLS PROJECT
TYPICAL ROAD CONSTRUCTION
FREMONT AND NATRONA COUNTIES, WY

REVISION DATE: 3/98
LAST PLOT DATE: NONE
CAD FILENAME: NRCPL3-3