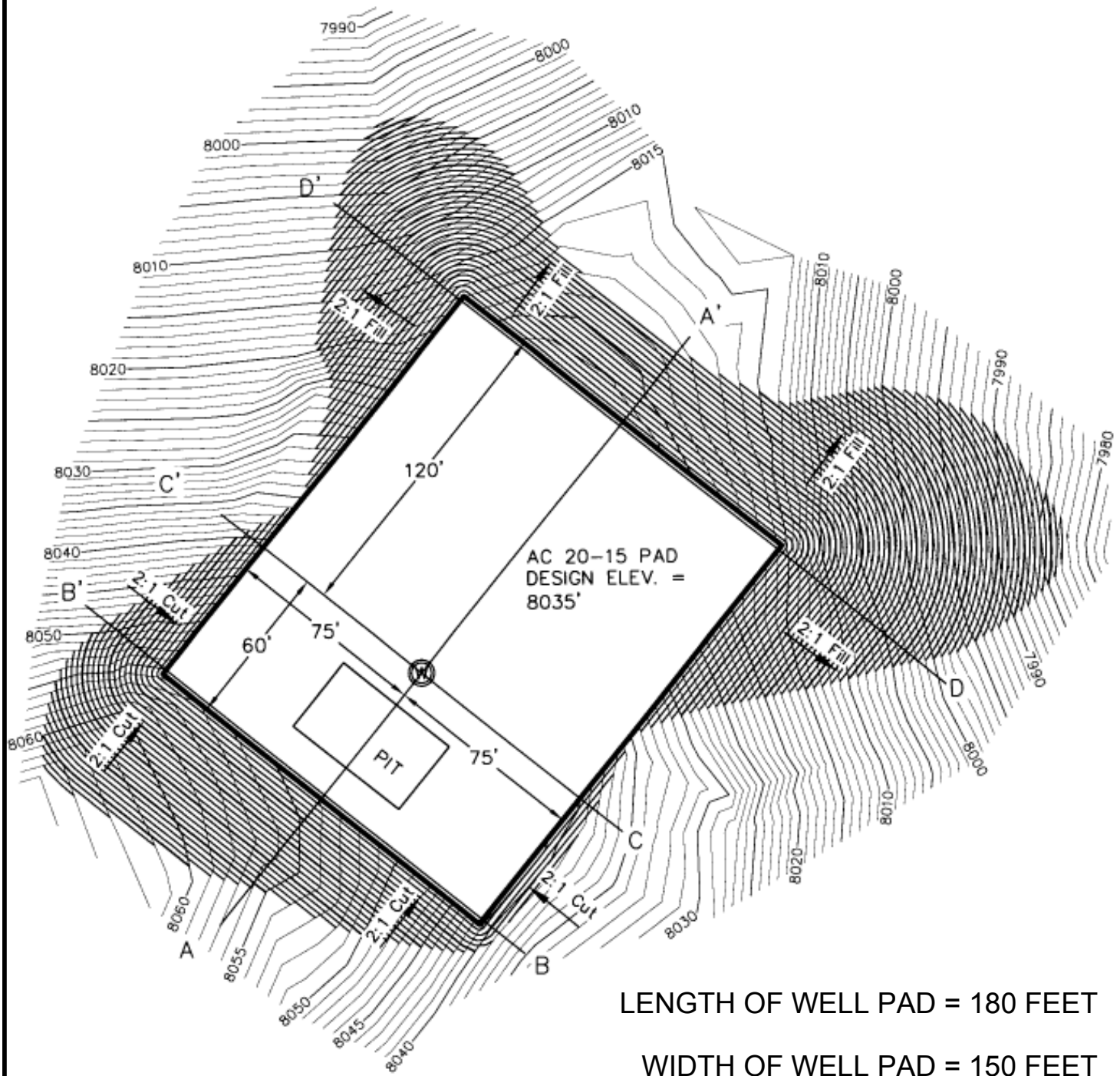
ELEVATIONS AND DIMENSIONS OF WELL PAD

SITE MAP



LENGTH OF WELL PAD = 180 FEET

WIDTH OF WELL PAD = 150 FEET

B.M.P. IMPLEMENTATION DURING CLEARING AND WELL PAD/ACCESS ROAD DEVELOPMENT

UNDISTURBED NATURAL VEGETATION SHALL BE PRESERVED OUTSIDE OF THE BOUNDARY OF DISTURBANCE, REDUCING SEDIMENT AND EROSION PROBLEMS.

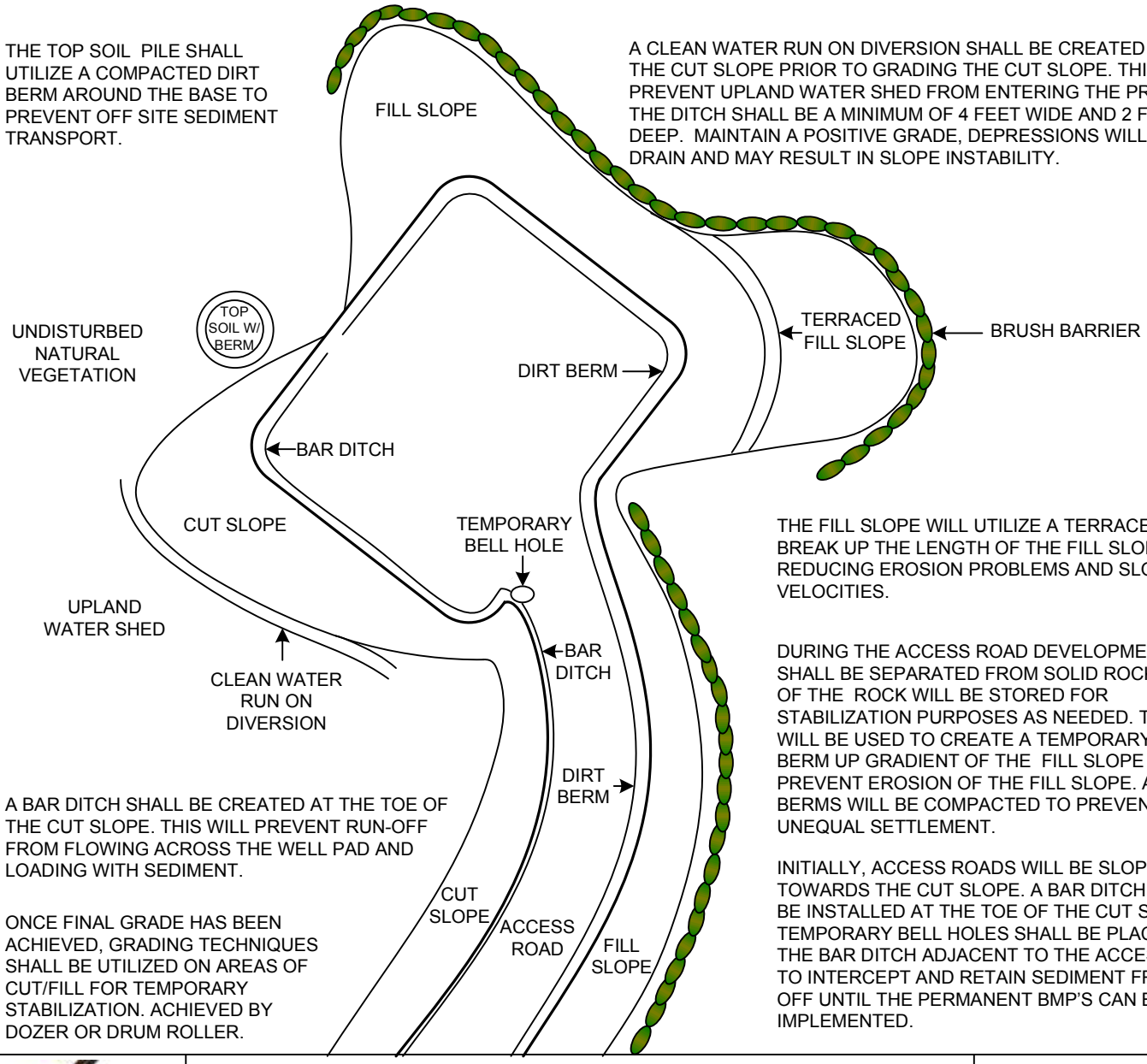
DURING THE CLEARING OPERATION A BRUSH BARRIER WILL BE PLACED DOWN GRADIENT OF THE PROPOSED DISTURBANCE TO INTERCEPT AND RETAIN SEDIMENT. ONCE EARTH DISTURBING ACTIVITIES BEGIN, THE BRUSH BARRIER NEEDS TO BE MAINTAINED UNTIL A PERMANENT DIRT BERM CAN BE ESTABLISHED. ALL TREE STUMPS WILL BE BURIED IN FILL SLOPE AWAY FROM PIPELINE (ROW). IF ADEQUATE TREE CUTTINGS ARE NOT AVAILABLE, A PERMANENT, COMPACTED DIRT BERM SHALL BE UTILIZED BELOW THE TOE OF THE FILL SLOPE.

THE OPERATOR SHALL SEPARATE AND STORE TOPSOIL IN ACCORDANCE WITH RULE 1002(b)(c).

DURING INITIAL WELL PAD DEVELOPMENT THE BRUSH BARRIER SHALL BE PULLED BACK INTO THE FILL SLOPE AND A PERMANENT COMPACTED DIRT BERM SHALL BE IMPLEMENTED AT THE TOE. THIS WILL INTERCEPT AND RETAIN SEDIMENT. DURING CONSTRUCTION OF THE WELL PAD A TEMPORARY DIRT BERM SHALL BE PLACE UP GRADIENT OF FILL SLOPE. ONCE FINAL GRADE OF THE FILL SLOPE HAS BEEN ACHIEVED, A PERMANENT, COMPACTED DIRT BERM SHALL BE UTILIZED TO PREVENT EROSION OF THE FILL SLOPE AND DIRECT RUN OFF TO A DESIRED LOCATION. THE BERMS WILL ALSO HELP TO PREVENT ANY ACCIDENTAL LEAKS OR SPILLS THAT MAY OCCUR, FROM LEAVING LOCATION THROUGH THE CONSTRUCTION, DRILLING AND PRODUCTION OPERATIONS.

THE TOP SOIL PILE SHALL UTILIZE A COMPACTED DIRT BERM AROUND THE BASE TO PREVENT OFF SITE SEDIMENT TRANSPORT.

A CLEAN WATER RUN ON DIVERSION SHALL BE CREATED ABOVE THE CUT SLOPE PRIOR TO GRADING THE CUT SLOPE. THIS WILL PREVENT UPLAND WATER SHED FROM ENTERING THE PROJECT. THE DITCH SHALL BE A MINIMUM OF 4 FEET WIDE AND 2 FOOT DEEP. MAINTAIN A POSITIVE GRADE, DEPRESSIONS WILL NOT DRAIN AND MAY RESULT IN SLOPE INSTABILITY.



THE FILL SLOPE WILL UTILIZE A TERRACE TO BREAK UP THE LENGTH OF THE FILL SLOPE REDUCING EROSION PROBLEMS AND SLOWING VELOCITIES.

DURING THE ACCESS ROAD DEVELOPMENT SOIL SHALL BE SEPARATED FROM SOLID ROCK. SOME OF THE ROCK WILL BE STORED FOR STABILIZATION PURPOSES AS NEEDED. THE SOIL WILL BE USED TO CREATE A TEMPORARY DIRT BERM UP GRADIENT OF THE FILL SLOPE TO PREVENT EROSION OF THE FILL SLOPE. ALL DIRT BERMS WILL BE COMPACTED TO PREVENT UNEQUAL SETTLEMENT.

A BAR DITCH SHALL BE CREATED AT THE TOE OF THE CUT SLOPE. THIS WILL PREVENT RUN-OFF FROM FLOWING ACROSS THE WELL PAD AND LOADING WITH SEDIMENT.

ONCE FINAL GRADE HAS BEEN ACHIEVED, GRADING TECHNIQUES SHALL BE UTILIZED ON AREAS OF CUT/FILL FOR TEMPORARY STABILIZATION. ACHIEVED BY DOZER OR DRUM ROLLER.

INITIALLY, ACCESS ROADS WILL BE SLOPED TOWARDS THE CUT SLOPE. A BAR DITCH SHALL BE INSTALLED AT THE TOE OF THE CUT SLOPE. TEMPORARY BELL HOLES SHALL BE PLACED IN THE BAR DITCH ADJACENT TO THE ACCESS ROAD TO INTERCEPT AND RETAIN SEDIMENT FROM RUN OFF UNTIL THE PERMANENT BMP'S CAN BE IMPLEMENTED.

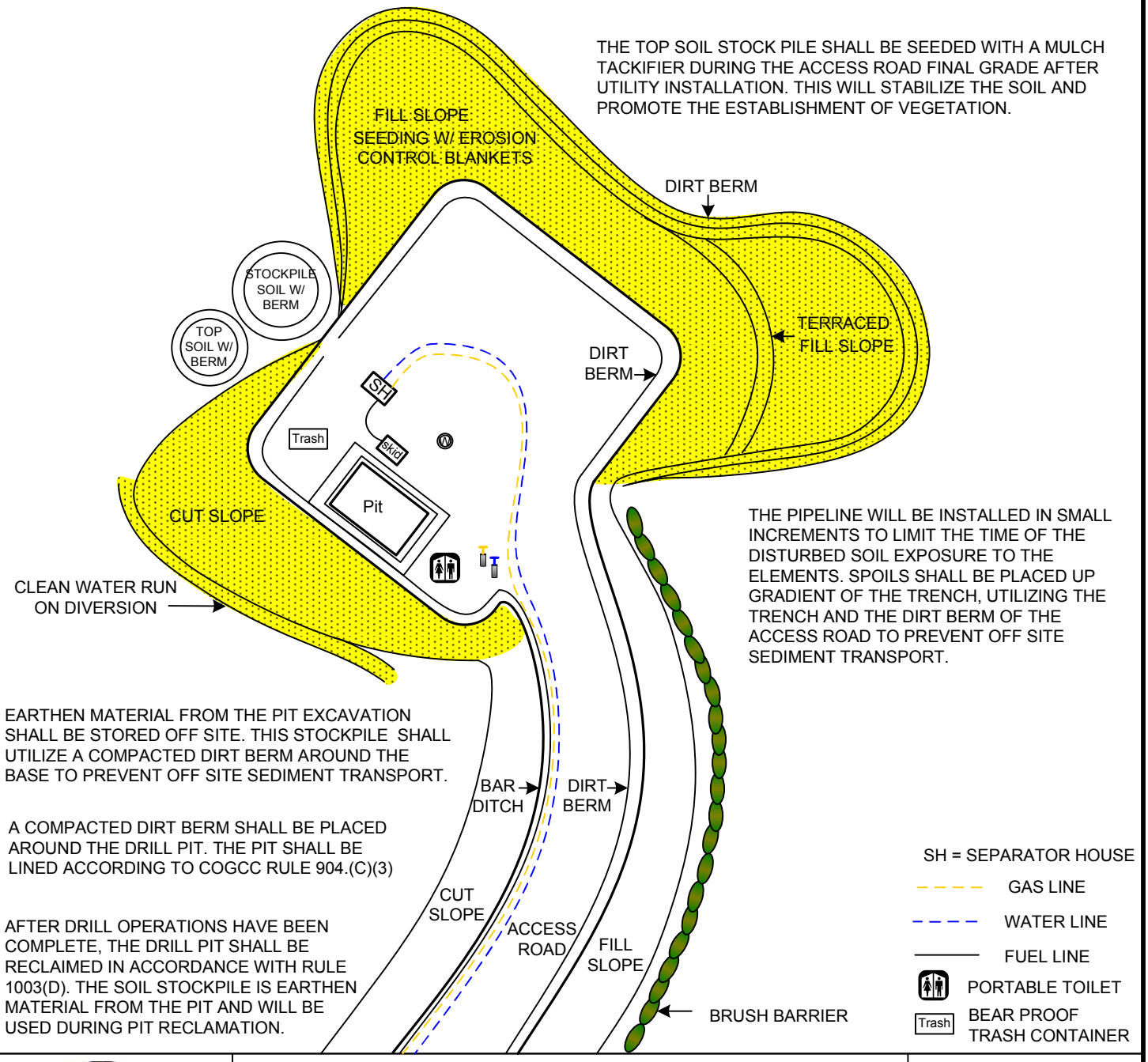
B.M.P. IMPLEMENTATION DURING UTILITY INSTALLATION. BEGIN FINAL GRADE/STABILIZATION

PORTABLE TOILETS SHALL BE SECURED TO TRAILERS AND PLACED AWAY FROM DRAINAGE AREAS, TRAFFIC FLOW AND FILL SLOPES.

BEAR PROOF TRASH CONTAINERS SHALL BE PROVIDED DURING THE DRILLING OPERATION ONLY. THEY WILL BE PLACED AWAY FROM DRAINAGE AREAS, TRAFFIC FLOW AND FILL SLOPES.

ONCE THE WELL PAD CUT AND FILL SLOPES HAVE ACHIEVED FINAL GRADE, DEPENDING ON SOIL CONTENT AND SEASONAL CONSTRAINTS, SEEDING WITH EROSION CONTROL BLANKETS SHALL BE INSTALLED. THIS WILL CONTROL EROSION AND PROMOTE THE ESTABLISHMENT OF VEGETATION.

FOR SLOPES THAT CONSIST PRIMARILY OF ROCK, SEEDING WITH A MULCH TACKIFIER WILL BE UTILIZED WHICH WILL OCCUR AFTER ACCESS ROAD FINAL GRADE. USED TO ADHERE THE SEED TO THE SOIL AND PROMOTE THE ESTABLISHMENT OF VEGETATION.



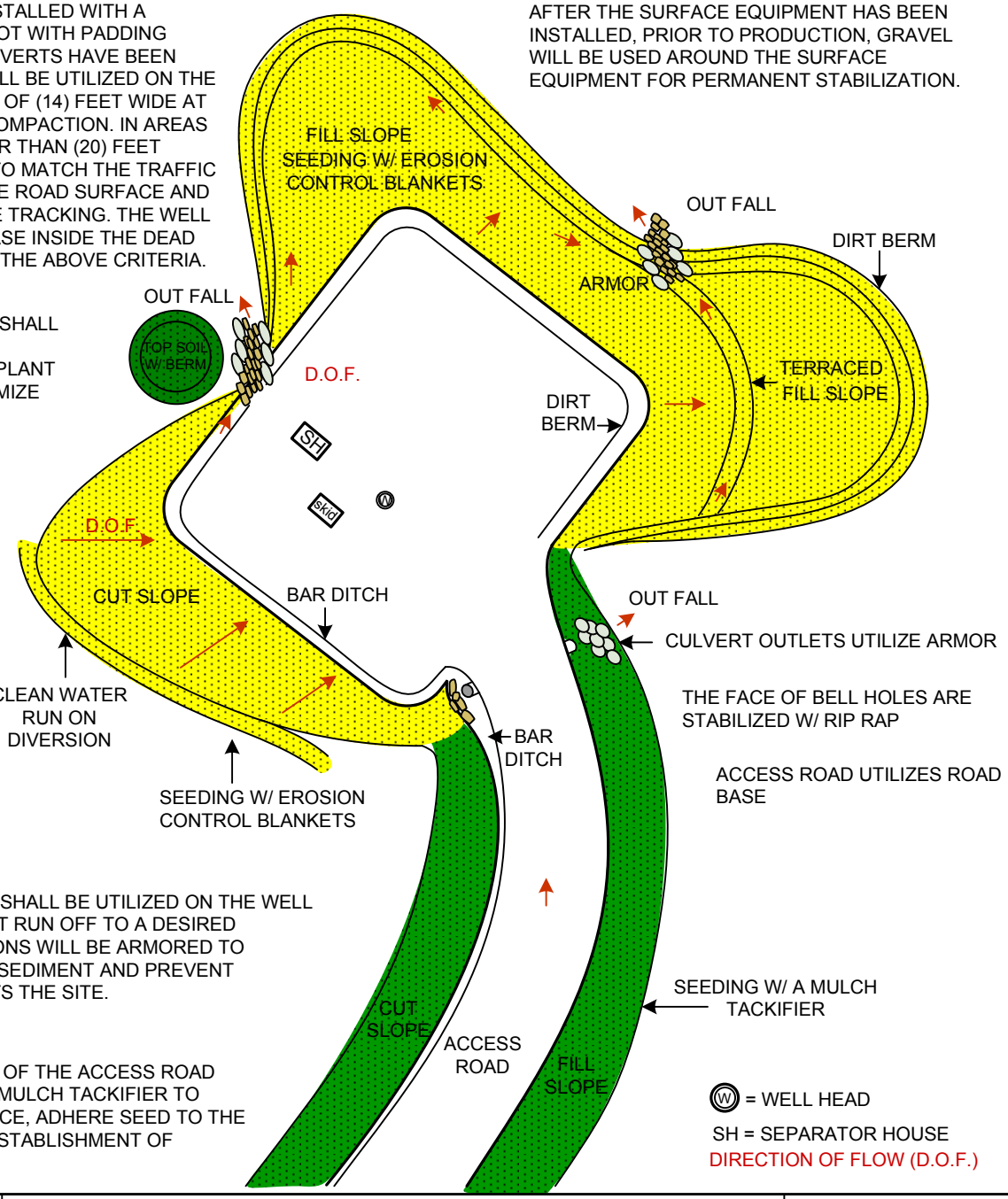
B.M.P. IMPLEMENTATION DURING FINAL STABILIZATION

PIPELINE WILL BE LEFT EXPOSED IN LOCATIONS MARKED FOR CULVERT INSTALL BY XTO PERSONEL. AFTER THE PIPELINE HAS BEEN INSTALLED, PADDED AND BACK FILLED, FINAL GRADE AND STABILIZATION WILL BEGIN ALONG THE ACCESS ROAD. WHERE POSSIBLE CUT AND FILL SLOPES SHALL BE SLOPED TO A MINIMUM OF 2.5:1 GRADE. ACCESS ROADS WILL BE LIMITED TO (20) FEET WIDE EXCEPT ON TURNS, CURVES, OR TERRAIN WHERE ENGINEERING REQUIREMENTS REQUIRE SOMETHING GREATER. THE BRUSH BARRIER WILL BE REMOVED FROM THE FILL SLOPE AND DEPENDING ON SOIL CONTENT GRADING TECHNIQUES MAY BE UTILIZED FOR TEMPORARY STABILIZATION AND PREPARE THE OUT SLOPE FOR SEEDING. THE ACCESS ROAD SURFACE WILL BE CROWNED. A BAR DITCH WILL BE ESTABLISHED AT THE TOE OF THE CUT SLOPE TO DIRECT RUN OFF TO A DESIRED LOCATION WHERE CULVERTS WILL BE INSTALLED. CULVERT INLETS WILL UTILIZE BELL HOLES THAT ARE LINED WITH RIP RAP ON THE FACE TO STABILIZE THE INLET. CULVERT OUTLETS WILL UTILIZE ARMOR TO DISSIPATE ENERGY, TRAP SEDIMENT AND PREVENT SCOURING OF THE FILL SLOPE. AS A OPTION IN AREAS DETERMINED BY XTO CONSTRUCTION SUPERVISOR, GABION BASKETS WILL BE INSTALLED AS A SEDIMENT TRAP.

ALL CULVERTS WILL BE INSTALLED WITH A MINIMUM COVER OF (1) FOOT WITH PADDING MATERIAL. AFTER THE CULVERTS HAVE BEEN INSTALLED, ROAD BASE WILL BE UTILIZED ON THE ACCESS ROAD AT A WIDTH OF (14) FEET WIDE AT (4) INCHES THICK AFTER COMPACTION. IN AREAS WHERE THE ROAD IS WIDER THAN (20) FEET GRAVEL WILL BE PLACED TO MATCH THE TRAFFIC PATTERN TO STABILIZE THE ROAD SURFACE AND REDUCE OFF SITE VEHICLE TRACKING. THE WELL PAD WILL UTILIZE ROAD BASE INSIDE THE DEAD MAN ANCHORS MATCHING THE ABOVE CRITERIA.

THE TOP SOIL STOCK PILE SHALL BE SEEDED WITH A MULCH TACKIFIER TO FACILITATE PLANT ESTABLISHMENT AND MINIMIZE SOIL EROSION.

AFTER THE SURFACE EQUIPMENT HAS BEEN INSTALLED, PRIOR TO PRODUCTION, GRAVEL WILL BE USED AROUND THE SURFACE EQUIPMENT FOR PERMANENT STABILIZATION.



A COMPACTED DIRT BERM SHALL BE UTILIZED ON THE WELL PAD PERIMETER TO DIRECT RUN OFF TO A DESIRED LOCATION. THESE LOCATIONS WILL BE ARMORED TO DISSIPATE ENERGY, TRAP SEDIMENT AND PREVENT EROSION AS RUN OFF EXITS THE SITE.

THE CUT AND FILL SLOPES OF THE ACCESS ROAD SHALL BE SEEDED WITH A MULCH TACKIFIER TO STABILIZE THE DISTURBANCE, ADHERE SEED TO THE SOIL AND PROMOTE THE ESTABLISHMENT OF VEGETATION.