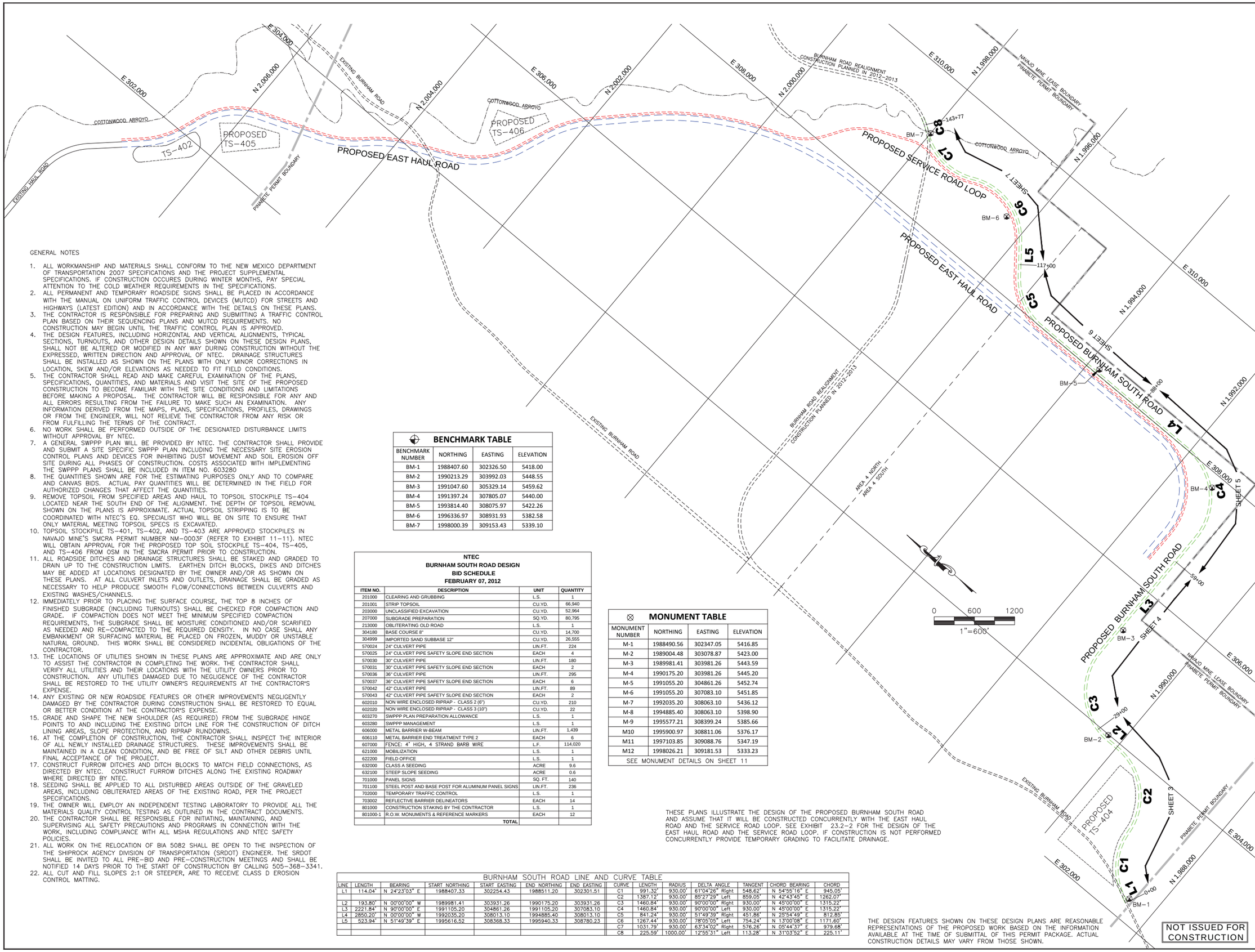


GENERAL NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE NEW MEXICO DEPARTMENT OF TRANSPORTATION 2007 SPECIFICATIONS AND THE PROJECT SUPPLEMENTAL SPECIFICATIONS. IF CONSTRUCTION OCCURES DURING WINTER MONTHS, PAY SPECIAL ATTENTION TO THE COLD WEATHER REQUIREMENTS IN THE SPECIFICATIONS.
2. ALL PERMANENT AND TEMPORARY ROADSIDE SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS (LATEST EDITION) AND IN ACCORDANCE WITH THE DETAILS ON THESE PLANS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PREPARING AND SUBMITTING A TRAFFIC CONTROL PLAN BASED ON THEIR SEQUENCING PLANS AND MUTCD REQUIREMENTS. NO CONSTRUCTION MAY BEGIN UNTIL THE TRAFFIC CONTROL PLAN IS APPROVED.
4. THE DESIGN FEATURES, INCLUDING HORIZONTAL AND VERTICAL ALIGNMENTS, TYPICAL SECTIONS, TURNOUTS, AND OTHER DESIGN DETAILS SHOWN ON THESE DESIGN PLANS, SHALL NOT BE ALTERED OR MODIFIED IN ANY WAY DURING CONSTRUCTION WITHOUT THE EXPRESSED, WRITTEN DIRECTION AND APPROVAL OF NTEC. DRAINAGE STRUCTURES SHALL BE INSTALLED AS SHOWN ON THE PLANS WITH ONLY MINOR CORRECTIONS IN LOCATION, SKEW AND/OR ELEVATIONS AS NEEDED TO FIT FIELD CONDITIONS.
5. THE CONTRACTOR SHALL READ AND MAKE CAREFUL EXAMINATION OF THE PLANS, SPECIFICATIONS, QUANTITIES, AND MATERIALS AND VISIT THE SITE OF THE PROPOSED CONSTRUCTION TO BECOME FAMILIAR WITH THE SITE CONDITIONS AND LIMITATIONS BEFORE MAKING A PROPOSAL. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL ERRORS RESULTING FROM THE FAILURE TO MAKE SUCH AN EXAMINATION. ANY INFORMATION DERIVED FROM THE MAPS, PLANS, SPECIFICATIONS, PROFILES, DRAWINGS OR FROM THE ENGINEER, WILL NOT RELIEVE THE CONTRACTOR FROM ANY RISK OR FROM FULFILLING THE TERMS OF THE CONTRACT.
6. NO WORK SHALL BE PERFORMED OUTSIDE OF THE DESIGNATED DISTURBANCE LIMITS WITHOUT APPROVAL BY NTEC.
7. A GENERAL SWPPP PLAN WILL BE PROVIDED BY NTEC. THE CONTRACTOR SHALL PROVIDE AND SUBMIT A SITE SPECIFIC SWPPP PLAN INCLUDING THE NECESSARY SITE EROSION CONTROL PLANS AND DEVICES FOR INHIBITING DUST MOVEMENT AND SOIL EROSION OFF SITE DURING ALL PHASES OF CONSTRUCTION. COSTS ASSOCIATED WITH IMPLEMENTING THE SWPPP PLANS SHALL BE INCLUDED IN ITEM NO. 603280
8. THE QUANTITIES SHOWN ARE FOR THE ESTIMATING PURPOSES ONLY AND TO COMPARE AND CANVAS BIDS. ACTUAL PAY QUANTITIES WILL BE DETERMINED IN THE FIELD FOR AUTHORIZED CHANGES THAT AFFECT THE QUANTITIES.
9. REMOVE TOPSOIL FROM SPECIFIED AREAS AND HAUL TO TOPSOIL STOCKPILE TS-404 LOCATED NEAR THE SOUTH END OF THE ALIGNMENT. THE DEPTH OF TOPSOIL REMOVAL SHOWN ON THE PLANS IS APPROXIMATE. ACTUAL TOPSOIL STRIPPING IS TO BE COORDINATED WITH NTEC'S EQ. SPECIALIST WHO WILL BE ON SITE TO ENSURE THAT ONLY MATERIAL MEETING TOPSOIL SPECS IS EXCAVATED.
10. TOPSOIL STOCKPILE TS-401, TS-402, AND TS-403 ARE APPROVED STOCKPILES IN NAVAJO MINE'S SMCRA PERMIT NUMBER NM-0003F (REFER TO EXHIBIT 11-11). NTEC WILL OBTAIN APPROVAL FOR THE PROPOSED TOP SOIL STOCKPILE TS-404, TS-405, AND TS-406 FROM OSM IN THE SMCRA PERMIT PRIOR TO CONSTRUCTION.
11. ALL ROADSIDE DITCHES AND DRAINAGE STRUCTURES SHALL BE STAKED AND GRADED TO DRAIN UP TO THE CONSTRUCTION LIMITS. EARTHEN DITCH BLOCKS, DIKES AND DITCHES MAY BE ADDED AT LOCATIONS DESIGNATED BY THE OWNER AND/OR AS SHOWN ON THESE PLANS. AT ALL CULVERT INLETS AND OUTLETS, DRAINAGE SHALL BE GRADED AS NECESSARY TO HELP PRODUCE SMOOTH FLOW/CONNECTIONS BETWEEN CULVERTS AND EXISTING WASHES/CHANNELS.
12. IMMEDIATELY PRIOR TO PLACING THE SURFACE COURSE, THE TOP 8 INCHES OF FINISHED SUBGRADE (INCLUDING TURNOUTS) SHALL BE CHECKED FOR COMPACTION AND GRADE. IF COMPACTION DOES NOT MEET THE MINIMUM SPECIFIED COMPACTION REQUIREMENTS, THE SUBGRADE SHALL BE MOISTURE CONDITIONED AND/OR SCARIFIED AS NEEDED AND RE-COMPACTED TO THE REQUIRED DENSITY. IN NO CASE SHALL ANY EMBANKMENT OR SURFACING MATERIAL BE PLACED ON FROZEN, MUDDY OR UNSTABLE NATURAL GROUND. THIS WORK SHALL BE CONSIDERED INCIDENTAL OBLIGATIONS OF THE CONTRACTOR.
13. THE LOCATIONS OF UTILITIES SHOWN IN THESE PLANS ARE APPROXIMATE AND ARE ONLY TO ASSIST THE CONTRACTOR IN COMPLETING THE WORK. THE CONTRACTOR SHALL VERIFY ALL UTILITIES AND THEIR LOCATIONS WITH THE UTILITY OWNERS PRIOR TO CONSTRUCTION. ANY UTILITIES DAMAGED DUE TO NEGLIGENCE OF THE CONTRACTOR SHALL BE RESTORED TO THE UTILITY OWNER'S REQUIREMENTS AT THE CONTRACTOR'S EXPENSE.
14. ANY EXISTING OR NEW ROADSIDE FEATURES OR OTHER IMPROVEMENTS NEGLIGENTLY DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED TO EQUAL OR BETTER CONDITION AT THE CONTRACTOR'S EXPENSE.
15. GRADE AND SHAPE THE NEW SHOULDER (AS REQUIRED) FROM THE SUBGRADE HINGE POINTS TO AND INCLUDING THE EXISTING DITCH LINE FOR THE CONSTRUCTION OF DITCH LINING AREAS, SLOPE PROTECTION, AND RIPRAP RUNDOWNS.
16. AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL INSPECT THE INTERIOR OF ALL NEWLY INSTALLED DRAINAGE STRUCTURES. THESE IMPROVEMENTS SHALL BE MAINTAINED IN A CLEAN CONDITION, AND BE FREE OF SILT AND OTHER DEBRIS UNTIL FINAL ACCEPTANCE OF THE PROJECT.
17. CONSTRUCT FURROW DITCHES AND DITCH BLOCKS TO MATCH FIELD CONNECTIONS, AS DIRECTED BY NTEC. CONSTRUCT FURROW DITCHES ALONG THE EXISTING ROADWAY WHERE DIRECTED BY NTEC.
18. SEEDING SHALL BE APPLIED TO ALL DISTURBED AREAS OUTSIDE OF THE GRAVELED AREAS, INCLUDING OBLITERATED AREAS OF THE EXISTING ROAD, PER THE PROJECT SPECIFICATIONS.
19. THE OWNER WILL EMPLOY AN INDEPENDENT TESTING LABORATORY TO PROVIDE ALL THE MATERIALS QUALITY CONTROL TESTING AS OUTLINED IN THE CONTRACT DOCUMENTS.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, INCLUDING COMPLIANCE WITH ALL MSHA REGULATIONS AND NTEC SAFETY POLICIES.
21. ALL WORK ON THE RELOCATION OF BIA 5082 SHALL BE OPEN TO THE INSPECTION OF THE SHIPROCK AGENCY DIVISION OF TRANSPORTATION (SRDOT) ENGINEER. THE SRDOT SHALL BE INVITED TO ALL PRE-BID AND PRE-CONSTRUCTION MEETINGS AND SHALL BE NOTIFIED 14 DAYS PRIOR TO THE START OF CONSTRUCTION BY CALLING 505-368-3341.
22. ALL CUT AND FILL SLOPES 2:1 OR STEEPER, ARE TO RECEIVE CLASS D EROSION CONTROL MATTING.

BENCHMARK TABLE

BENCHMARK NUMBER	NORTHING	EASTING	ELEVATION
BM-1	1988407.60	302326.50	5418.00
BM-2	1990213.29	303992.03	5448.55
BM-3	1991047.60	305329.14	5459.62
BM-4	1991397.24	307805.07	5440.00
BM-5	1993814.40	308075.97	5422.26
BM-6	1996336.97	308931.93	5382.58
BM-7	1998000.39	309153.43	5339.10

NTEC
BURNHAM SOUTH ROAD DESIGN
BID SCHEDULE
FEBRUARY 07, 2012

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
201000	CLEARING AND GRUBBING	L.S.	1
201001	STRIP TOPSOIL	CU.YD.	66,940
203000	UNCLASSIFIED EXCAVATION	CU.YD.	52,964
207000	SUBGRADE PREPARATION	SQ.YD.	80,795
213000	OBLITERATING OLD ROAD	L.S.	1
304180	BASE COURSE 8"	CU.YD.	14,700
304999	IMPORTED SAND SUBBASE 12"	CU.YD.	26,555
570024	24" CULVERT PIPE	LIN.FT.	224
570025	24" CULVERT PIPE SAFETY SLOPE END SECTION	EACH	4
570030	30" CULVERT PIPE	LIN.FT.	180
570031	30" CULVERT PIPE SAFETY SLOPE END SECTION	EACH	2
570036	36" CULVERT PIPE	LIN.FT.	295
570037	36" CULVERT PIPE SAFETY SLOPE END SECTION	EACH	6
570042	42" CULVERT PIPE	LIN.FT.	89
570043	42" CULVERT PIPE SAFETY SLOPE END SECTION	EACH	2
602010	NON WIRE ENCLOSED RIPRAP - CLASS 2 (6")	CU.YD.	210
602020	NON WIRE ENCLOSED RIPRAP - CLASS 3 (10")	CU.YD.	22
603270	SWPPP PLAN PREPARATION ALLOWANCE	L.S.	1
603280	SWPPP MANAGEMENT	L.S.	1
606000	METAL BARRIER W-BEAM	LIN.FT.	1,439
606110	METAL BARRIER END TREATMENT TYPE 2	EACH	6
607000	FENCE; 4' HIGH, 4 STRAND BARB WIRE	L.F.	114,020
621000	MOBILIZATION	L.S.	1
622200	FIELD OFFICE	L.S.	1
632000	CLASS A SEEDING	ACRE	9.6
632100	STEEP SLOPE SEEDING	ACRE	0.6
701000	PANEL SIGNS	SQ. FT.	140
701100	STEEL POST AND BASE POST FOR ALUMINUM PANEL SIGNS	LIN.FT.	236
702000	TEMPORARY TRAFFIC CONTROL	L.S.	1
703002	REFLECTIVE BARRIER DELINEATORS	EACH	14
801000	CONSTRUCTION STAKING BY THE CONTRACTOR	L.S.	1
801000-1	R.O.W. MONUMENTS & REFERENCE MARKERS	EACH	12
	TOTAL		

MONUMENT TABLE

MONUMENT NUMBER	NORTHING	EASTING	ELEVATION
M-1	1988490.56	302347.05	5416.85
M-2	1989004.48	303078.87	5423.00
M-3	1989981.41	303981.26	5443.59
M-4	1990175.20	303981.26	5445.20
M-5	1991055.20	304861.26	5452.74
M-6	1991055.20	307083.10	5451.85
M-7	1992035.20	308063.10	5436.12
M-8	1994885.40	308063.10	5398.90
M-9	1995577.21	308399.24	5385.66
M10	1995900.97	308811.06	5376.17
M11	1997103.85	309088.76	5347.19
M12	1998026.21	309181.53	5333.23
SEE MONUMENT DETAILS ON SHEET 11			

THESE PLANS ILLUSTRATE THE DESIGN OF THE PROPOSED BURNHAM SOUTH ROAD AND ASSUME THAT IT WILL BE CONSTRUCTED CONCURRENTLY WITH THE EAST HAUL ROAD AND THE SERVICE ROAD LOOP. SEE EXHIBIT 23.2-2 FOR THE DESIGN OF THE EAST HAUL ROAD AND THE SERVICE ROAD LOOP. IF CONSTRUCTION IS NOT PERFORMED CONCURRENTLY PROVIDE TEMPORARY GRADING TO FACILITATE DRAINAGE.

BURNHAM SOUTH ROAD LINE AND CURVE TABLE

LINE	LENGTH	BEARING	START NORTHING	START EASTING	END NORTHING	END EASTING
L1	114.04'	N 24°23'03" E	1988407.33	302254.43	1988511.20	302301.51
L2	193.80'	N 00°00'00" W	1989981.41	303931.26	1990175.20	303931.26
L3	2221.84'	N 00°00'00" E	1991105.20	304861.26	1993105.20	307083.10
L4	2850.20'	N 00°00'00" W	1992035.20	308013.10	1994885.40	308013.10
L5	523.94'	N 51°49'39" E	1995616.52	308368.33	1995940.33	308780.23

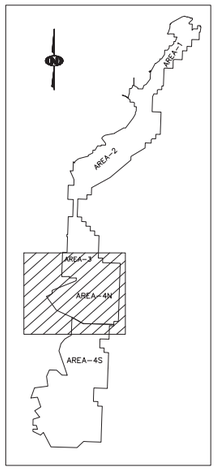
CURVE	LENGTH	RADIUS	DELTA ANGLE	TANGENT	CHORD BEARING	CHORD
C1	991.32'	930.00'	61°04'26" Right	548.62'	N 54°55'16" E	945.05'
C2	1387.12'	930.00'	85°27'29" Left	859.05'	N 42°43'45" E	1262.07'
C3	1460.84'	930.00'	90°00'00" Right	930.00'	N 45°00'00" E	1315.22'
C4	1460.84'	930.00'	90°00'00" Left	930.00'	N 45°00'00" E	1315.22'
C5	841.24'	930.00'	51°49'39" Right	451.86'	N 25°54'49" E	812.85'
C6	1267.44'	930.00'	78°05'05" Left	754.24'	N 13°00'08" E	1171.60'
C7	1031.79'	930.00'	63°34'02" Right	576.26'	N 05°44'37" E	979.68'
C8	225.59'	1000.00'	12°55'31" Left	113.28'	N 31°03'52" E	225.11'

THE DESIGN FEATURES SHOWN ON THESE DESIGN PLANS ARE REASONABLE REPRESENTATIONS OF THE PROPOSED WORK BASED ON THE INFORMATION AVAILABLE AT THE TIME OF SUBMITTAL OF THIS PERMIT PACKAGE. ACTUAL CONSTRUCTION DETAILS MAY VARY FROM THOSE SHOWN.

NOT ISSUED FOR CONSTRUCTION

LEGEND

- BURNHAM SOUTH ROAD
- EAST HAUL ROAD
- SERVICE ROAD & SERVICE ROAD LOOP
- PAVED ROAD
- DIRT ROAD
- TRAIL
- BUILDING
- FENCE
- IRRIGATION LINE
- CULVERT
- LOW SPOT ELEVATION
- DRAINAGE
- RAILROAD
- TREES
- POWERLINE
- × 5338.5 SPOT ELEVATION
- 5300 INDEX CONTOUR
- INTERMEDIATE CONTOUR
- 218 5422.45 HORIZ. & VERT. CONTROL
- L-30 LEASE CORNER
- LEASE BOUNDARY
- PERMIT BOUNDARY



CERTIFICATION STATEMENT
I, GEORGE A. MADRID, P.E., HEREBY CERTIFY THAT THIS DRAWING WAS REVIEWED BY ME AND THAT THE INFORMATION SHOWN IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

GEORGE A. MADRID NEW MEXICO 9110 REGISTERED PROFESSIONAL ENGINEER

George A. Madrid

Digitally signed by George A. Madrid
DN: cn=George A. Madrid, o=GEOMAT Inc., ou=Engineering, email=george.madrid@geomatengineering.com, c=US
Date: 2014.05.27 08:09:05 -06'00'

GEOMAT INC.
915 Malta Avenue ◆ Farmington, NM 87401 ◆ (505) 327-7928

REV. No.	DATE	COMMENT
2	05-23-14	REVISED TITLE BLOCK
1	03-15-12	REVISED TITLE & TITLE BLOCK
0	02-07-12	INITIAL PERMIT SUBMITTAL

EXHIBIT 40.6-1

NTEC
Navajo Transitional Energy Company, LLC

Navajo Mine
P.O. Box 1717
Fruitland, New Mexico, 87416
Phone: 505-598-4200
Fax: 505-568-3361

PINABETE PERMIT

BURNHAM SOUTH ROAD DESIGN
SITE PLAN, GENERAL NOTES, QUANTITIES AND CURVE TABLE

SHEET: 2 OF 11

PREPARED BY: BT&PR	DRAWN BY: BT&PR	SCALE: AS SHOWN
APPROVED BY: GM	DATE: 02-07-2012	

GEOMAT PROJECT NO. 112-1434