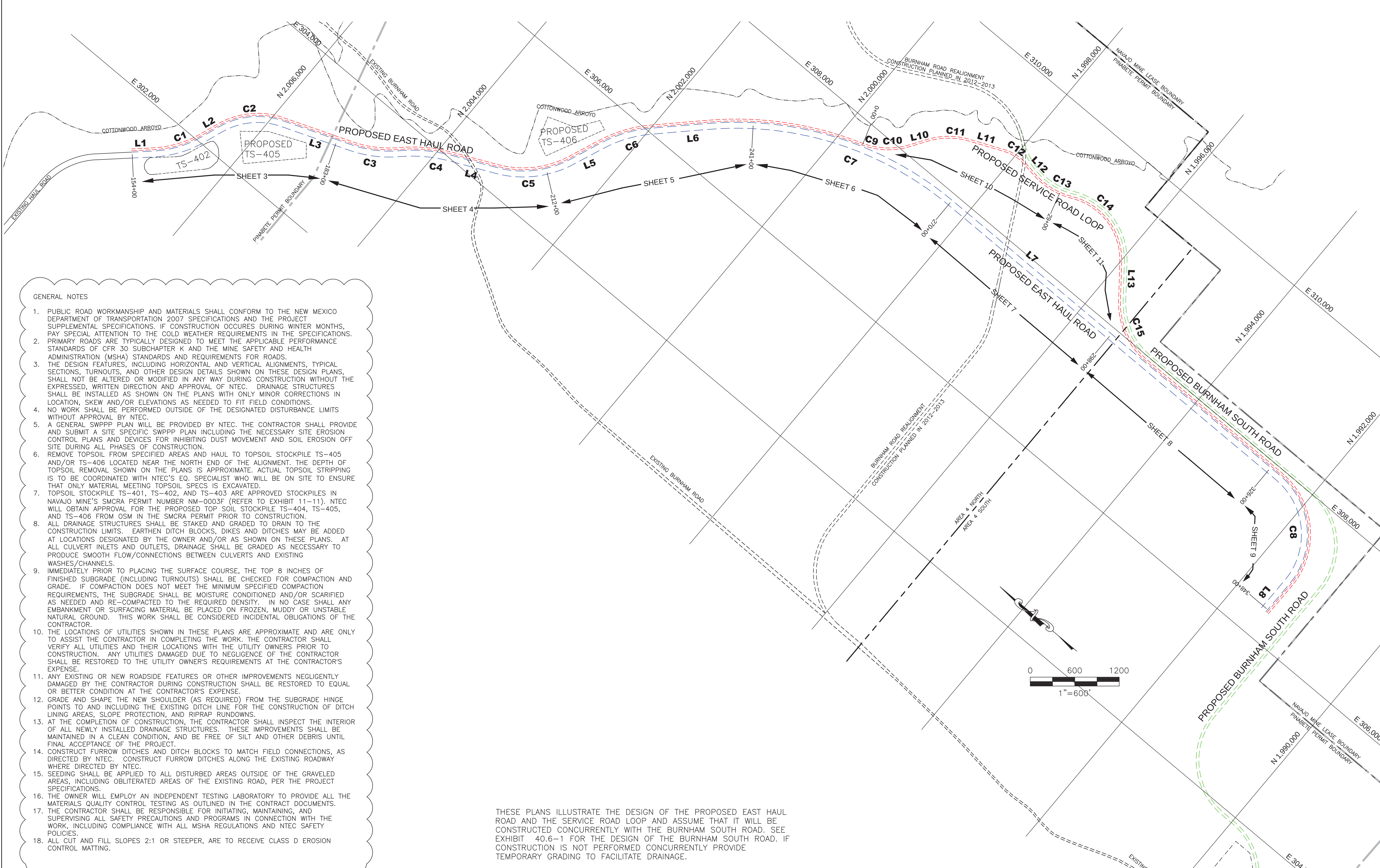

GENERAL NOTES

1. PUBLIC ROAD 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. PRIMARY ROADS ARE TYPICALLY DESIGNED TO MEET THE APPLICABLE PERFORMANCE STANDARDS OF CFR 30 SUBCHAPTER K AND THE MINE SAFETY AND HEALTH ADMINISTRATION (MSHA) STANDARDS AND REQUIREMENTS FOR ROADS.
3. 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.
4. NO WORK SHALL BE PERFORMED OUTSIDE OF THE DESIGNATED DISTURBANCE LIMITS WITHOUT APPROVAL BY NTEC.
5. 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.
6. REMOVE TOPSOIL FROM SPECIFIED AREAS AND HAUL TO TOPSOIL STOCKPILE TS–405 AND/OR TS–406 LOCATED NEAR THE NORTH 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.
7. 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.
8. ALL DRAINAGE STRUCTURES SHALL BE STAKED AND GRADED TO DRAIN 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 PRODUCE SMOOTH FLOW/CONNECTIONS BETWEEN CULVERTS AND EXISTING WASHES/CHANNELS.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
14. 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.
15. SEEDING SHALL BE APPLIED TO ALL DISTURBED AREAS OUTSIDE OF THE GRAVELED AREAS, INCLUDING OBLITERATED AREAS OF THE EXISTING ROAD, PER THE PROJECT SPECIFICATIONS.
16. THE OWNER WILL EMPLOY AN INDEPENDENT TESTING LABORATORY TO PROVIDE ALL THE MATERIALS QUALITY CONTROL TESTING AS OUTLINED IN THE CONTRACT DOCUMENTS.
17. 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.
18. ALL CUT AND FILL SLOPES 2:1 OR STEEPER, ARE TO RECEIVE CLASS D EROSION CONTROL MATTING.

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THESE PLANS ILLUSTRATE THE DESIGN OF THE PROPOSED EAST HAUL ROAD AND THE SERVICE ROAD LOOP AND ASSUME THAT IT WILL BE CONSTRUCTED CONCURRENTLY WITH THE BURNHAM SOUTH ROAD. SEE EXHIBIT 40.6–1 FOR THE DESIGN OF THE BURNHAM SOUTH ROAD. IF CONSTRUCTION IS NOT PERFORMED CONCURRENTLY PROVIDE TEMPORARY GRADING TO FACILITATE DRAINAGE.

EAST HAUL ROAD LINE AND CURVE TABLE

LINE	LENGTH	BEARING	START NORTHING	START EASTING	END NORTHING	END EASTING	CURVE	LENGTH	RADIUS	DELTA ANGLE	TANGENT	CHORD BEARING	CHORD
L1	290.22'	S 42°49'57" E	2007120.31	301281.31	2006907.48	301478.62	C1	716.29'	1500.00'	27°21'36" Left	365.11'	S 56°30'45" E	709.50'
L2	254.18'	S 70°11'34" E	2006516.01	302070.35	2006429.88	302309.50	C2	863.70'	1000.00'	49°29'10" Right	460.86'	S 45°26'59" E	837.10'
L3	970.75'	S 20°42'24" E	2005842.62	302906.04	2004934.58	303249.28	C3	676.57'	1600.00'	24°13'40" Left	343.42'	S 32°49'14" E	671.54'
							C4	700.64'	2000.00'	20°04'18" Right	353.95'	S 34°53'54" E	697.06'
L4	624.22'	S 24°51'45" E	2003798.53	304012.07	2003232.16	304274.52	C5	1055.08'	1400.00'	43°10'47" Left	554.01'	S 46°27'09" E	1030.29'
L5	464.88'	S 68°02'33" E	2002522.33	305021.28	2002348.50	305452.44	C6	690.19'	1700.00'	23°15'42" Right	349.91'	S 56°24'41" E	685.46'
L6	776.38'	S 44°46'50" E	2001969.29	306023.45	2001418.21	306570.33	C7	3517.07'	4500.00'	44°46'50" Right	1853.88'	S 22°23'25" E	3428.23'
L7	5743.03'	S 00°00'00" E	1998248.43	307876.19	1992505.40	307876.19	C8	1577.37'	1000.00'	0°22'36" Right	1006.60'	S 45°11'18" W	1418.85'
L8	479.43'	N 89°37'24" W	1991505.42	306869.61	1991508.57	306390.20							

SERVICE ROAD LOOP LINE AND CURVE TABLE

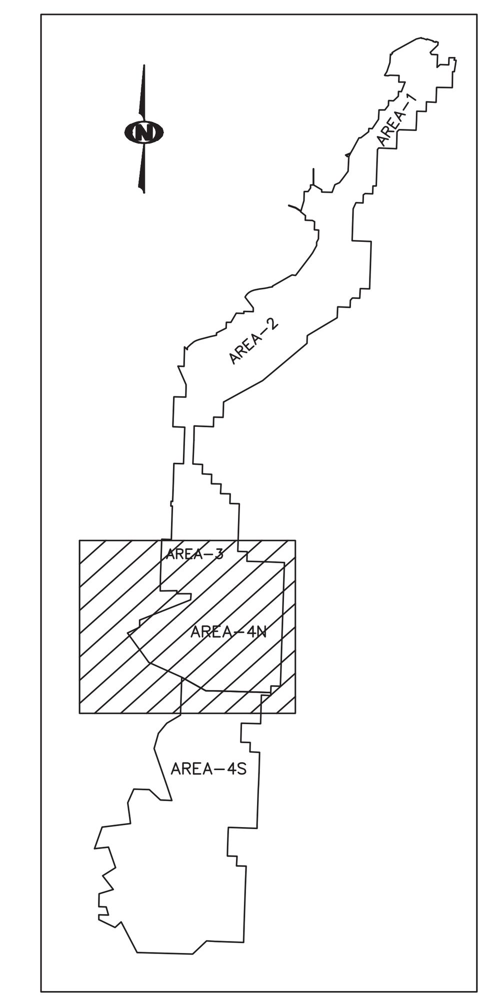
LINE	LENGTH	BEARING	START NORTHING	START EASTING	END NORTHING	END EASTING	CURVE	LENGTH	RADIUS	DELTA ANGLE	TANGENT	CHORD BRG	CHORD
							C9	50.78'	4570.50'	00°38'12" Right	25.39'	S 18°46'57" E	50.78'
							C10	675.00'	1000.00'	38°40'29" Left	350.93'	S 37°48'05" E	662.26'
L10	230.93'	S 57°08'20" E	1999172.68	308117.32	1999047.38	308311.30	C11	587.11'	1000.00'	33°38'21" Right	302.29'	S 40°19'09" E	578.72'
L11	489.30'	S 23°29'59" E	1998606.14	308685.76	1998157.42	308880.86	C12	339.45'	600.00'	32°24'55" Right	174.40'	S 07°17'32" E	334.94'
L12	182.81'	S 08°54'56" W	1997825.19	308923.38	1997644.59	308895.05	C13	607.90'	996.42'	34°57'20" Left	313.74'	S 08°33'44" E	598.52'
							C14	1177.05'	863.58'	78°05'34" Right	700.48'	S 13°00'23" W	1088.03'
L13	524.07'	S 51°49'39" W	1995992.63	308739.28	1995668.73	308327.29	C15	901.32'	996.42'	51°49'39" Left	484.13'	S 25°54'49" W	870.90'

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: 2014.05.23 13:38:51 -06'00'

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

REV. No.	DATE	COMMENT
3	05–15–14	REVISED TITLE BLOCK
2	12–17–13	REVISED PER OSM COMMENT
1	03–15–12	REVISED TITLE & TITLE BLOCK
0	02–07–12	INITIAL PERMIT SUBMITTAL

EXHIBIT 23.2-2

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

EAST HAUL ROAD DESIGN
SITE PLAN, GENERAL NOTES AND CURVE TABLE

SHEET: 2 OF 13

PREPARED BY: BT&PR	DRAWN BY: BT&PR	SCALE: AS SHOWN
APPROVED BY: GM	DATE: 02–07–2012	
GEOMAT PROJECT NO. 112–1434		