

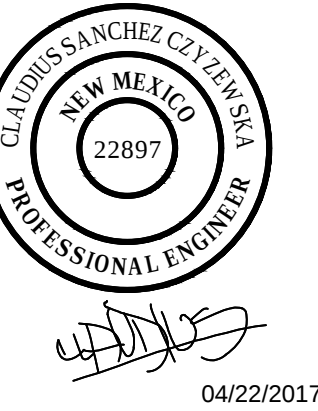


Appendices

Appendix 4 – Sand Dunes - Recycling Containment #1 Engineering Drawings

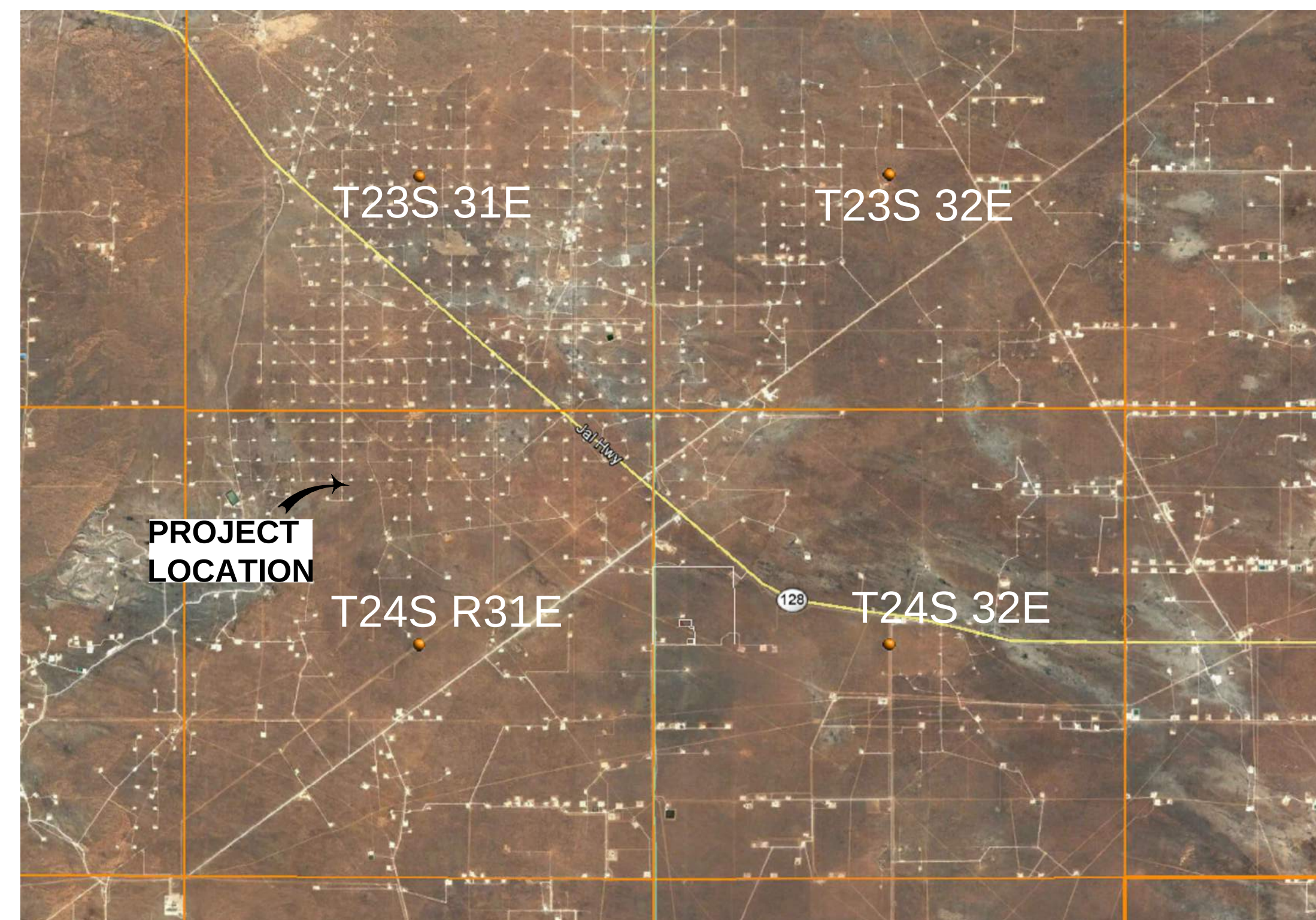
OXY U.S.A. INC.
EDDY COUNTY, NEW MEXICO
S9 T24S R31E

C-001 - COVER SHEET
CS-101 - SITE GRADING PLAN AND GENERAL NOTES
CS-201 - SEDIMENT CONTROL AND EROSION PROTECTION PLAN
CS-301 - SECTIONS
CS-501 - DETAILS

[illegible]

SHEET:

C-001



CONTACTS

CIVIL ENGINEERING
PETTIGREW & ASSOCIATES, P.A.
100 E NAVAJO DRIVE, SUITE 100
HOBBS, NM 88240
(575) 393-9827
CLAUDIUS SANCHEZ CZYZEWSKA, PE

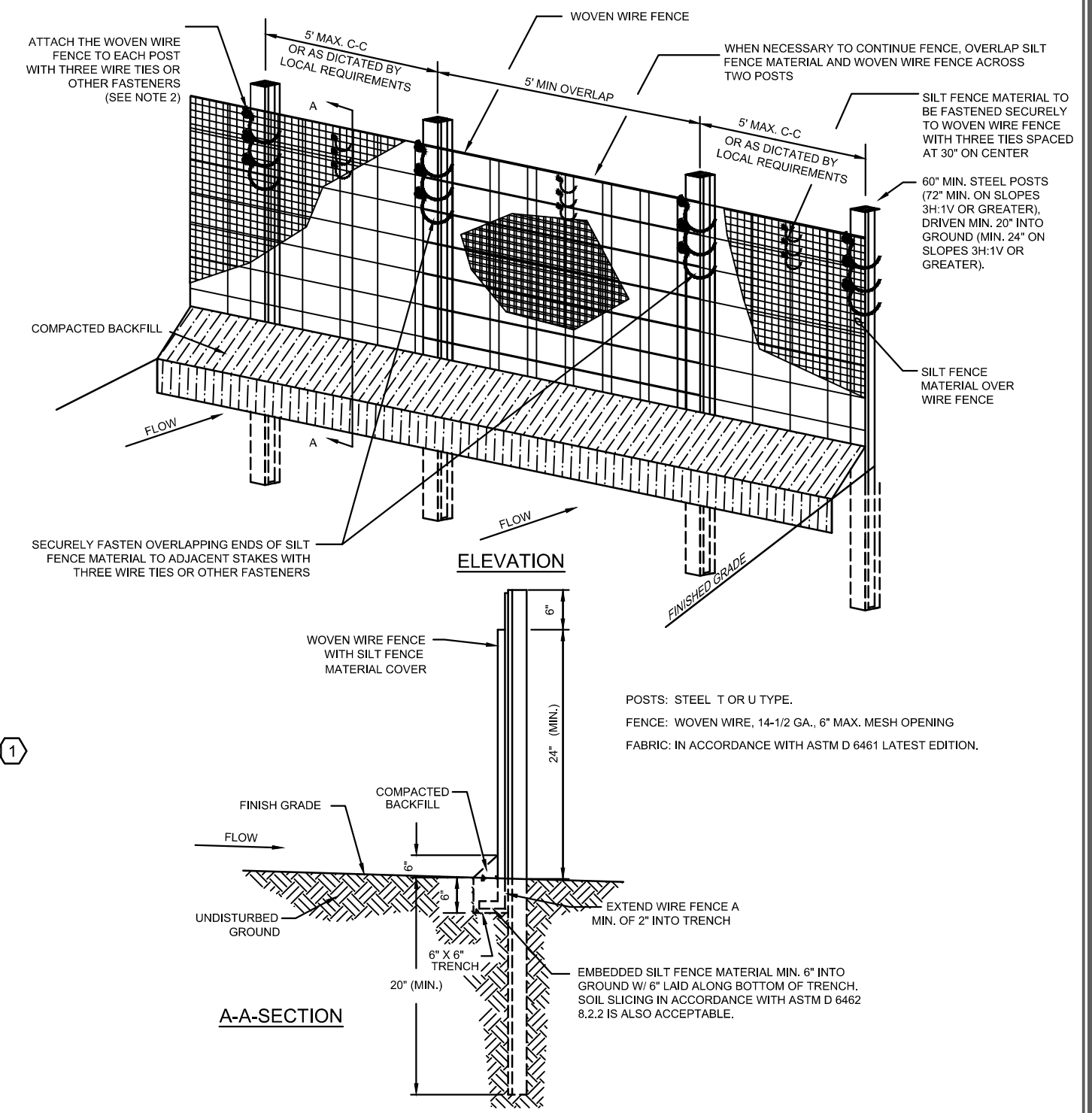
BENCHMARKS				
POINT	NORTH (FT)	EAST (FT)	ELEVATION (FT)	DESCRIPTION
1001	451651.51	709786.28	3428.0	CONTROL POINT
1002	450634.03	7097836.68	3442.0	CONTROL POINT

THESE COORDINATES ARE SHOWN IN STATE PLANE NM-EAST FOOT NAD 83 COORDINATE SYSTEM.

THESE COORDINATES ARE SHOWN IN STATE PLANE NM-EAST FOOT NAD 83 COORDINATE SYSTEM.

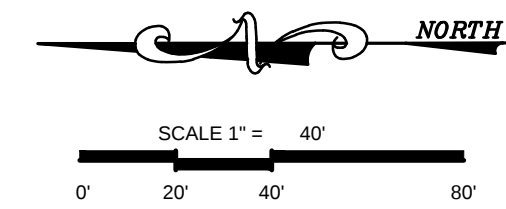
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

THIS PROJECT IS LOCATED IN A ZONE X CORRESPONDING TO FEMA FIRM PANEL 35015C1650D

SILT FENCE NOTES

1. INSTALLATION SHALL COMPLY WITH ASTM D 6462 LATEST EDITION.
2. ATTACH THE WOVEN WIRE FENCE TO EACH POST AND THE GEOTEXTILE TO THE WOVEN WIRE FENCE (SPACED EVERY 30") WITH THREE WIRE TIES OR OTHER FASTENERS, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC WITH EACH FASTENER AT LEAST 1" VERTICALLY APART ALSO, EACH TIE PLACED ON A POST SHOULD BE POSITIONED TO HANG ON A POST NIPPLE WHEN TIGHTENED TO PREVENT SAGGING.
3. WHEN TWO SECTIONS OF SILT FENCE MATERIAL ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED A MINIMUM OF 60" ACROSS TWO POSTS, AS SHOWN.
4. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE SWPPP, DEPTH OF ACCUMULATED SEDIMENTS MAY NOT EXCEED ONE-HALF THE HEIGHT OF THE FENCE. MAINTENANCE CLEANGUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ONE-HALF THE HEIGHT OF THE SILT FENCE MATERIAL ABOVE GRADE.
5. ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT UNLESS THE STATIC SLICING EQUIPMENT IS UTILIZED TO INSTALL THE FENCE.
6. WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
7. COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQ. INCH. COMPACT THE UPSTREAM SIDE FIRST, COMPACT EACH SIDE TWICE FOR A TOTAL OF FOUR TRIPS.
8. ADD POST CAPS AS NEEDED BASED ON SITE CONDITIONS AND APPLICABLE AGENCY REQUIREMENTS.

1 SILT FENCE DETAIL
SCALE: N.T.S.

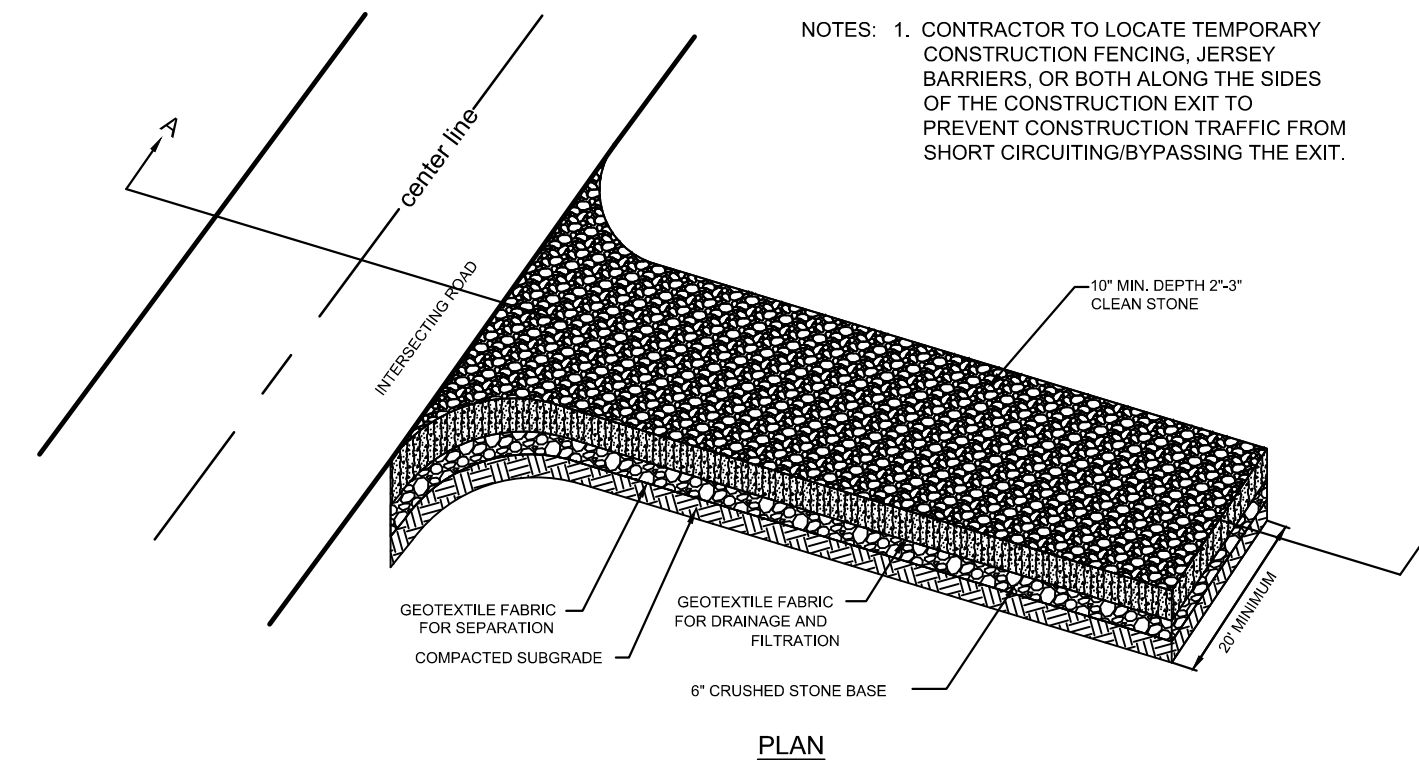


SWPPP GENERAL NOTES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DEVELOP AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT (CGP) OF THE EPA. THE STORM WATER POLLUTION PREVENTION PLAN SHALL INCLUDE DEVELOPING, PERMITTING, INSTALLING AND MAINTAINING SWPPP BMP'S AS WELL AS PERMANENT SEEDING WHEN THE PROJECT IS COMPLETED.
2. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO OTHER PROPERTY BY CONSTRUCTING TEMPORARY EROSION CONTROL BERM'S OR INSTALLING SILT FENCES AT THE PROPERTY LINES AS INDICATED ON THE APPROVED SWPPP.
3. THE CONTRACTOR SHALL MITIGATE EROSION OF TEMPORARY OR PERMANENT DIRT SWALES BY INSTALLING CHECK DAMS IN THE SWALES PERPENDICULAR TO THE DIRECTION OF FLOW, AND AT INTERVALS SPECIFIED ON THE SWPPP.
4. THE CONTRACTOR SHALL PREPARE AND MAINTAIN A COPY OF THE SWPPP ON-SITE AT ALL TIMES, AND SHALL COMPLY WITH THE REQUIREMENTS INDICATED ON THAT PLAN. COST IS INCIDENTAL TO CONSTRUCTION.
5. ALL DRAINAGE INFORMATION NEEDED TO COMPLETE THE NOTICE OF INTENT (NOI) ARE PROVIDED IN THIS PLAN.
6. BEST MANAGEMENT PRACTICES (BMP'S) SHOWN ON TSCC ARE DETERMINED USING THE EQUATIONS SHON ON THIS SHEET AND OTHER HYDROLOGICAL MODELS AS SPECIFIED IN THE DEPARTMENT'S DRAINAGE MANUALS LATEST EDITION. BMP'S CONTROL SEDIMENT SO THAT NO ADDITIONAL SEDIMENT RESULTING FROM CONSTRUCTION ACTIVITIES DISCHARGE TO WATERWAYS.
7. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST AND EROSION CONTROL REGULATIONS. THE CONTRACTOR SHALL PREPARE AND OBTAIN ANY NECESSARY DUST OR EROSION CONTROL PERMITS FROM REGULATORY AGENCIES.
8. THE CONTRACTOR SHALL PROMPTLY REMOVE ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY TO KEEP IT FROM WASHING OFF THE PROJECT SITE.

KEYED NOTES

- 1 INSTALL APPROXIMATELY 3,000 FEET OF SILT FENCE PER DETAIL 1 ON THIS SHEET
- 2 INSTALL STABILIZED CONSTRUCTION ENTRANCE PER DETAIL 2 ON THIS SHEET

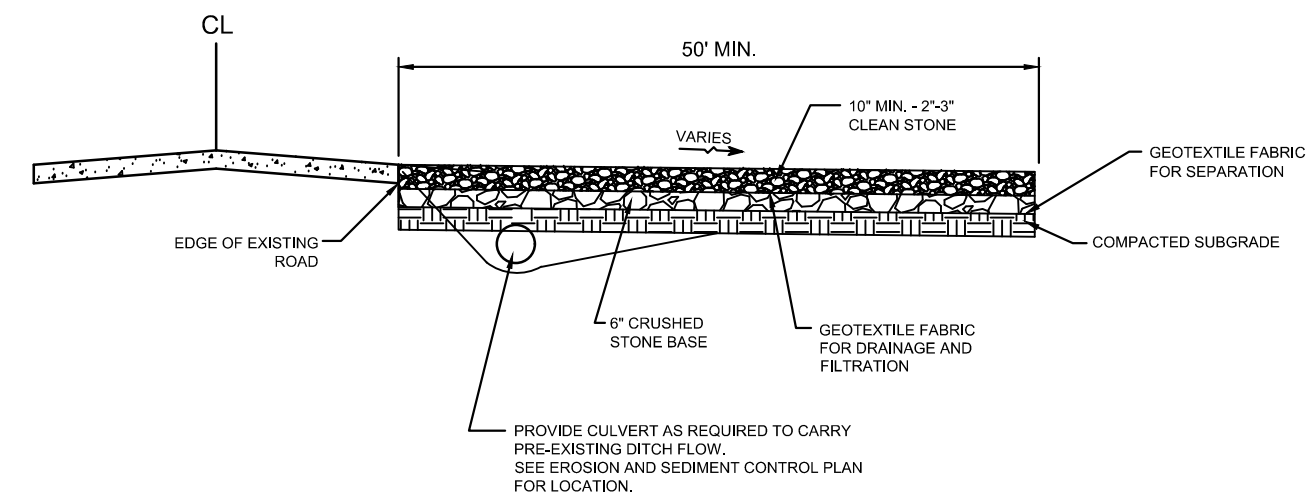


PLAN

CONSTRUCTION ENTRANCE DETAIL

SCALE: N.T.S.

SECTION A-A



4/22/2017

PROJECT ENGINEER: Claudius Sanchez Czyzewska, PE
PROJECT DESIGNER: Claudius Sanchez Czyzewska, PE
DRAWN BY: JCS

LEGEND

- | | |
|---|-----------------------------|
|  | BARBED WIRE PERIMETER FENCE |
|  | EXIST. GRADE 2.0' CONTOUR |
|  | EXIST. GRADE 10.0' CONTOUR |
|  | FINISHED GRADE 1.0' CONTOUR |
|  | FINISHED GRADE 5.0' CONTOUR |
|  | DRIVING SURFACE |
|  | 3' FREEBOARD DEPTH |
|  | CONTAINMENT FENCE |
|  | ANCHOR TRENCH |
|  | DITCH FLOWLINE |
|  | SILT FENCE |

REVISIONS

[illegible]

SEDIMENT CONTROL AND EROSION PROTECTION PLAN

SAND DUNES
RECYCLING
CONTAINMENT
OXY U.S.A. INC.

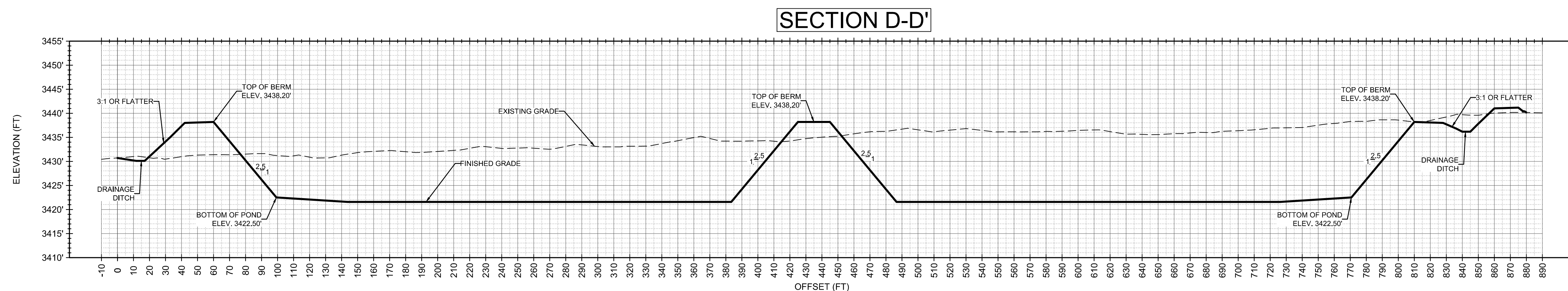
S9 T24S R31E
EDDY COUNTY, NEW MEXICO

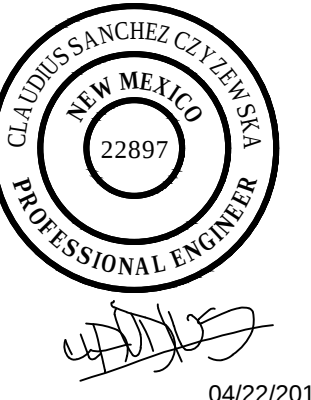
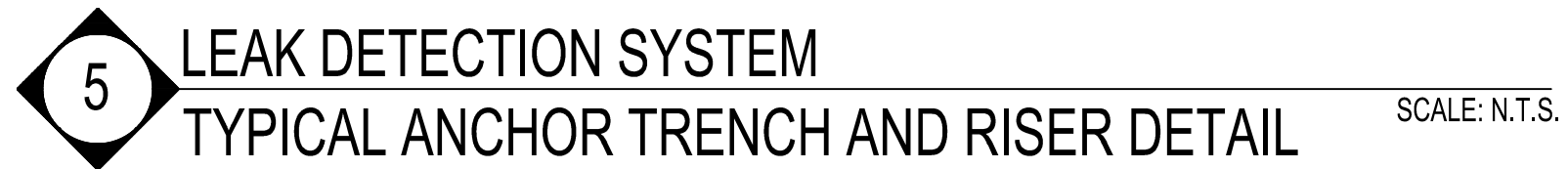
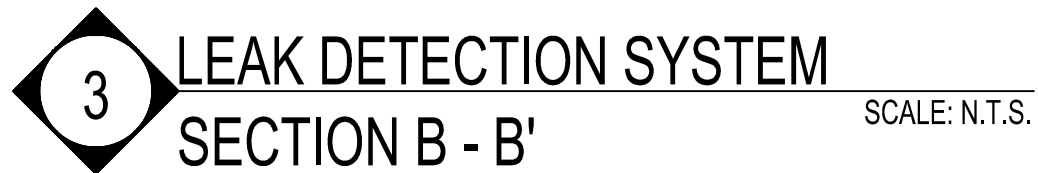
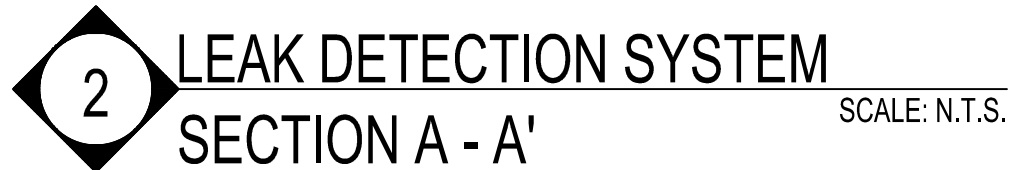
PROJECT NUMBER:
2017.1056

SHEET:

CS-201

SHEET:
CS-301





PROJECT ENGINEER: Claudius Sanchez Czyzewska, PE
PROJECT DESIGNER: Claudius Sanchez Czyzewska, PE
DRAWN BY: JCS

[illegible]

SHEET:

CS-501



Appendices

Appendix 5 – Mesa Verde - Recycling Containment #2 Engineering Drawings

MESA VERDE
RECYCLING CONTAINMENT
OXY U.S.A. INC.
LEA COUNTY, NEW MEXICO
S18 T24S R32E

INDEX OF DRAWINGS

C-001	- COVER SHEET
CS-101	- SITE GRADING PLAN AND GENERAL NOTES
CS-201	- SEDIMENT CONTROL AND EROSION PROTECTION PLAN
CS-301	- SECTIONS
CS-501	- DETAILS

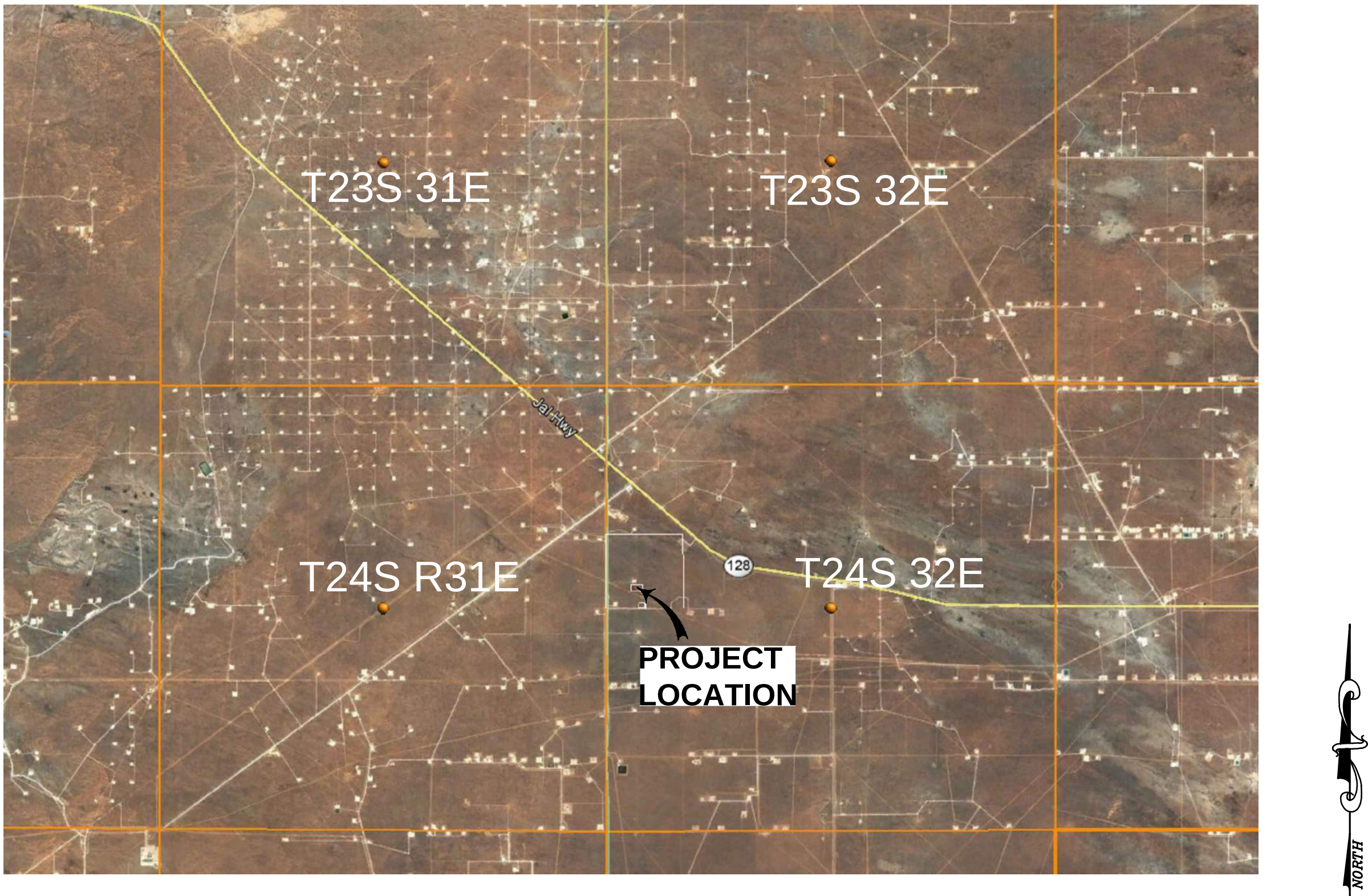
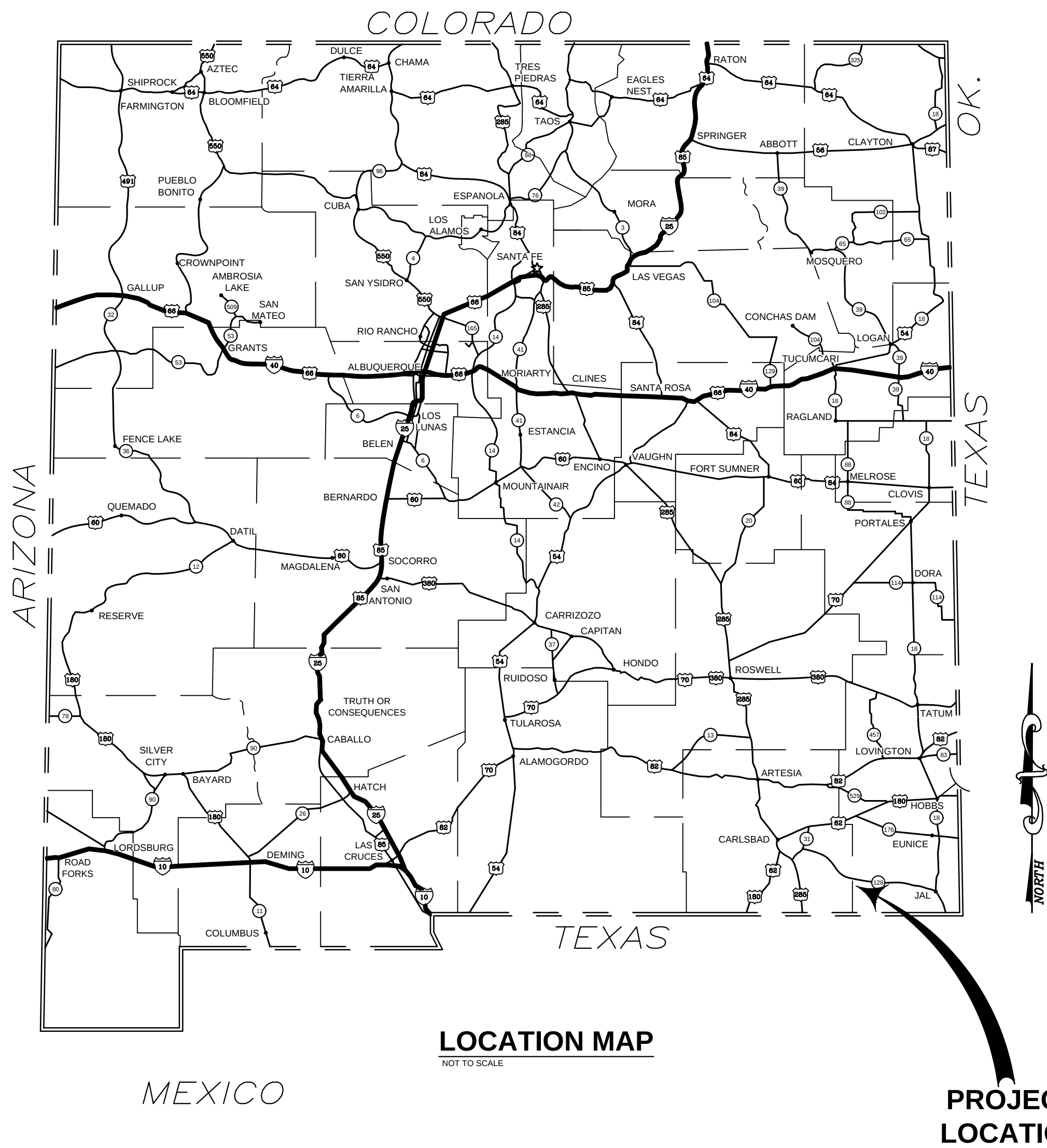


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DEFINING QUALITY SINCE 1965
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Pettigrew.us



04/22/2017

PROJECT ENGINEER: Claudius Sanchez Czyzewska, PE
PROJECT DESIGNER: Claudius Sanchez Czyzewska, PE
DRAWN BY: JCS



CONTACTS

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PO BOX 2289
HOUSTON, TX 77252-7680
281-755-8907
FEMI SERRANO

CIVIL ENGINEERING
PETTIGREW & ASSOCIATES, P.A.
100 E NAVAJO DRIVE, SUITE 100
HOBBS, NM 88240
(575) 393-9827
CLAUDIUS SANCHEZ CZYZEWSKA, PE



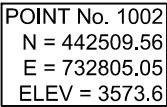
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

FLOOD NOTE

THIS PROJECT IS LOCATED IN AN AREA WITHOUT A PRINTED FLOOD MAP CORRESPONDING TO FEMA FIRM PANEL 35025C1875D

BENCHMARKS				
POINT	NORTH (FT)	EAST (FT)	ELEVATION (FT)	DESCRIPTION
1001	441969.36	731795.55	3581.8	CONTROL POINT
1002	442509.56	732805.05	3573.6	CONTROL POINT

THESE COORDINATES ARE SHOWN IN STATE PLANE NM-EAST FOOT NAD 83 COORDINATE SYSTEM.



ENGINEERING | SURVEYING | TESTING
DEFINING QUALITY SINCE 1965

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88240
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Pettigrew.us



12/22/2017

PROJECT ENGINEER: Claudius Sanchez Czyzewska, PE

PROJECT DESIGNER: Claudius Sanchez Czyzewska, PE

DRAWN BY: JCS

Figure 1: Typical cross-section of a trench. The diagram shows a cross-section of a trench with various layers and dimensions. From top to bottom, the layers are: BARBED WIRE PERIMETER FENCE (indicated by 'x' marks), EXIST. GRADE 2.0' CONTOUR (dashed line), EXIST. GRADE 10.0' CONTOUR (dashed line), FINISHED GRADE 1.0' CONTOUR (dashed line), FINISHED GRADE 5.0' CONTOUR (dashed line), DRIVING SURFACE (hatched area), 3' FREEBOARD DEPTH (wavy line), CONTAINMENT FENCE (line with circles), ANCHOR TRENCH (line with circles), DITCH FLOWLINE (line with circles), and SILT FENCE (line with circles). Dimensions are indicated by arrows and numbers: 10' for the width of the trench, 10' for the width of the driving surface, 3' for the freeboard depth, and 10' for the width of the silt fence.

[illegible]

MESA VERDE
RECYCLING
CONTAINMENT
OXY U.S.A. INC.

S18 T24S R32E
LEA COUNTY, NEW MEXICO

PROJECT NUMBER:

2017.1056

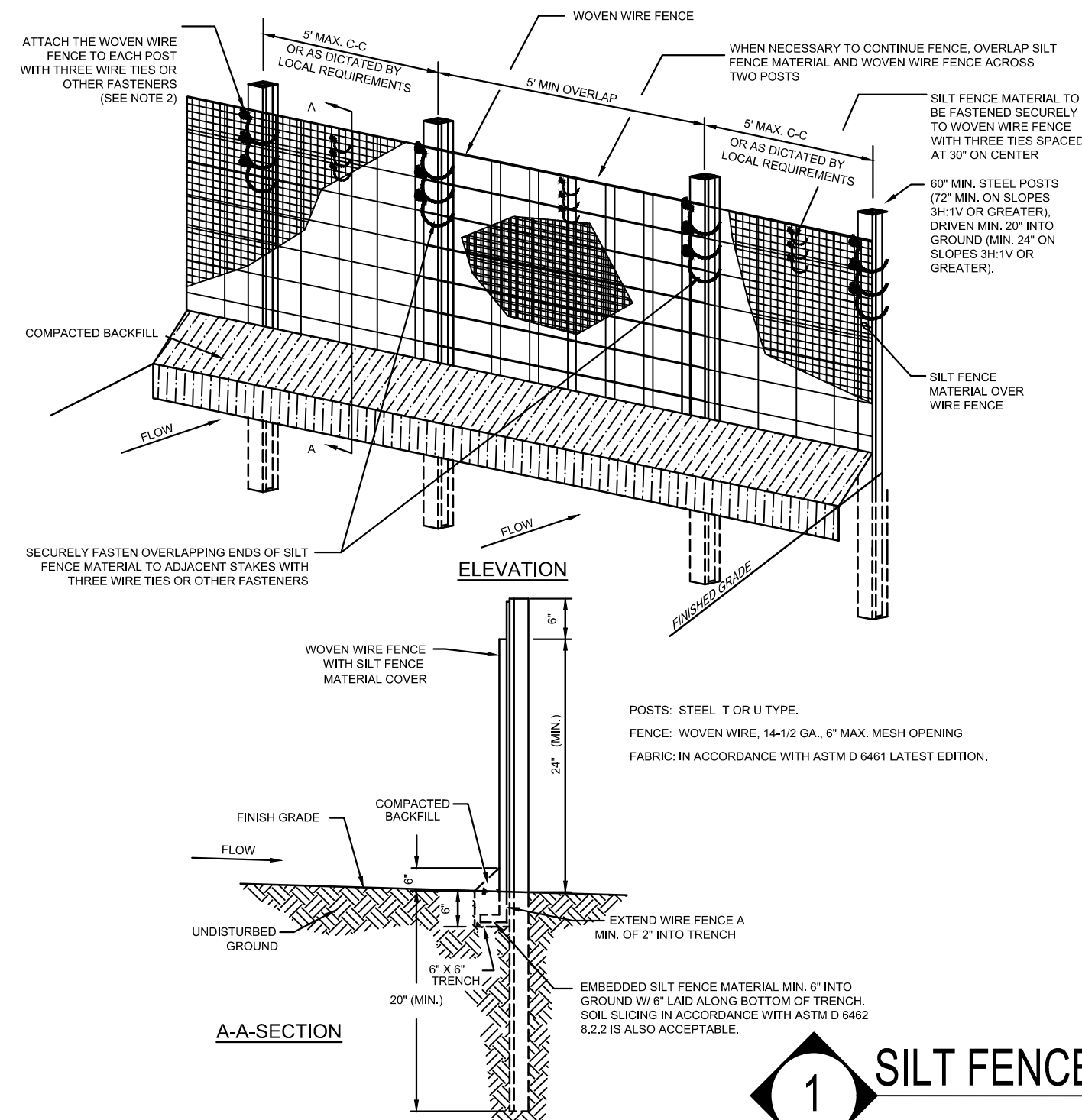
SHEET:

CS-201

- SWPPP GENERAL NOTES**
1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DEVELOP AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT (CGP) OF THE EPA. THE STORM WATER POLLUTION PREVENTION PLAN SHALL INCLUDE DEVELOPING, PERMITTING, INSTALLING AND MAINTAINING SWPPP BMP'S AS WELL AS PERMANENT SEEDING WHEN THE PROJECT IS COMPLETED.
 2. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO OTHER PROPERTY BY CONSTRUCTING TEMPORARY EROSION CONTROL BARRIERS OR INSTALLING SILT FENCES AT THE PROPERTY LINES AS INDICATED ON THE APPROVED SWPPP.
 3. THE CONTRACTOR SHALL MITIGATE EROSION OF TEMPORARY OR PERMANENT DIRT SWALES BY INSTALLING CHECK DAMS IN THE SWALES PERPENDICULAR TO THE DIRECTION OF FLOW, AND AT INTERVALS SPECIFIED ON THE SWPPP.
 4. THE CONTRACTOR SHALL PREPARE AND MAINTAIN A COPY OF THE SWPPP ON-SITE AT ALL TIMES, AND SHALL COMPLY WITH THE REQUIREMENTS INDICATED ON THAT PLAN. COST IS INCIDENTAL TO CONSTRUCTION.
 5. ALL DRAINAGE INFORMATION NEEDED TO COMPLETE THE NOTICE OF INTENT (NOI) ARE PROVIDED IN THIS PLAN.
 6. BEST MANAGEMENT PRACTICES (BMP'S) SHOWN ON TSCSP ARE DETERMINED USING THE EQUATIONS SHOWN ON THIS SHEET AND OTHER APPROPRIATE CRITERIA MODELS AS SPECIFIED IN THE DEPARTMENT'S DRAINAGE MANUALS LATEST EDITION. BMP'S CONTROL SEDIMENT SO THAT NO ADDITIONAL SEDIMENT RESULTING FROM CONSTRUCTION ACTIVITIES DISCHARGE TO WATERWAYS.
 7. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST AND EROSION CONTROL REGULATIONS. THE CONTRACTOR SHALL PREPARE AND OBTAIN ANY NECESSARY DUST OR EROSION CONTROL PERMITS FROM REGULATORY AGENCIES.
 8. THE CONTRACTOR SHALL PROMPTLY REMOVE ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY TO KEEP IT FROM WASHING OFF THE PROJECT SITE.

KEYED NOTES

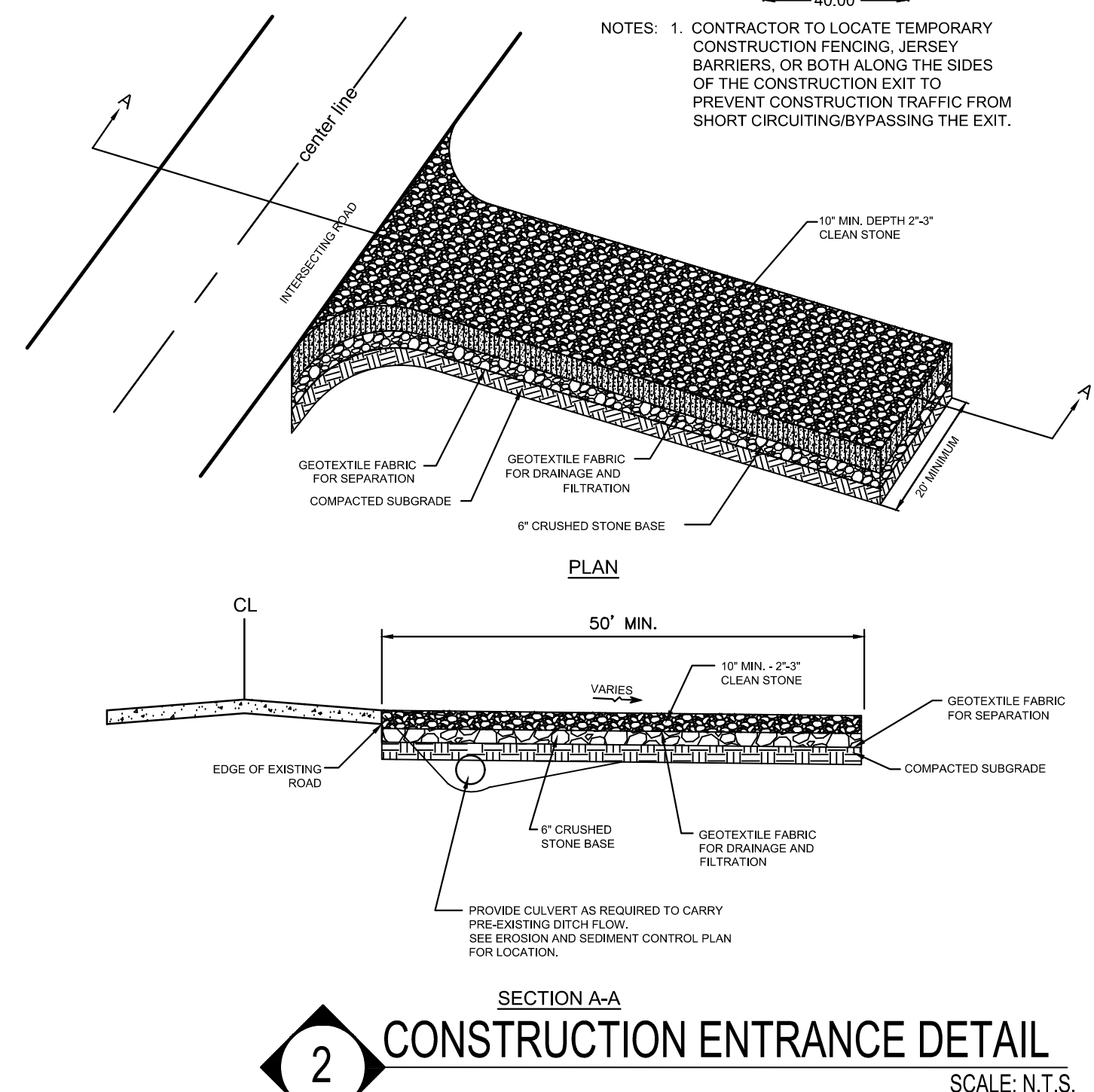
1. INSTALL APPROXIMATELY 3, 200 FT OF SILT FENCE PER DETAIL 1 ON THIS SHEET
 2. INSTALL STABILIZED CONSTRUCTION ENTRANCE PER DETAIL 2 ON THIS SHEET



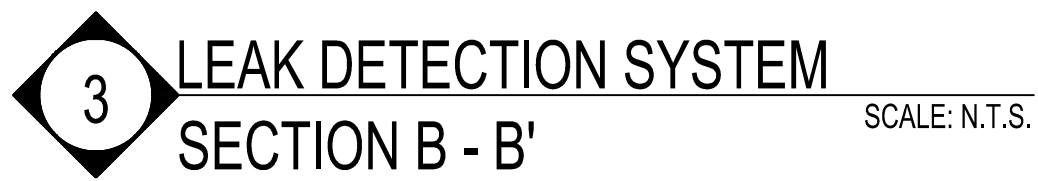
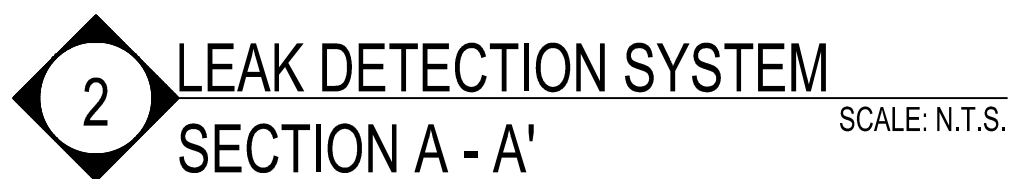
1. INSTALLATION SHALL COMPLY WITH ASTM D 6462 LATEST EDITION.
2. ATTACH THE WOVEN WIRE FENCE TO EACH POST AND THE GEOTEXTILE TO THE WOVEN WIRE FENCE (SPACED EVERY 30") WITH THREE WIRE TIES OR OTHER FASTENERS, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH THE DIAGONALLY 45 DEGREES THROUGHOUT THE LENGTH OF EACH STRUCTURE AT LEAST 1" VERTICALLY APART. ALSO, EACH THE PLACED ON A POST SHOULD BE POSITIONED TO HANG ON A POST NIPPLE WHEN TIGHTENED TO PREVENT SAGGING.
3. WHEN TWO SECTIONS OF SILT FENCE MATERIAL ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED A MINIMUM OF 60" ACROSS TWO POSTS, AS SHOWN.
4. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE SWPPP. DEPTH OF ACCUMULATED SEDIMENTS MAY NOT EXCEED ONE-HALF THE HEIGHT OF THE SILT FENCE. MAINTENANCE CLEAUNT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ONE-HALF THE HEIGHT OF THE SILT FENCE MATERIAL ABOVE GRADE.
5. ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT UNLESS THE STATIC SLICING EQUIPMENT IS UTILIZED TO INSTALL THE FENCE.
6. WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
7. COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQ. INCH. COMPACT THE UPDRIVE SIDE FIRST. COMPACT EACH SIDE TWICE FOR A TOTAL OF FOUR TRIPS.
8. ADD POST CAPS AS NEEDED BASED ON SITE CONDITIONS AND APPLICABLE AGENCY REQUIREMENTS.

1 SILT FENCE DETAIL

SCALE: N.T.S.



SCALE: N.T.S.



REVISIONS

[illegible]

SHEET:

CS-501