**Comexico LLC (wholly owned subsidiary of)**

New World COBALT

November 04, 2019

Mr. Larry Gore
Forest Geologist
Forest Service
Santa Fe national Forest
P.O. Box 120
Cuba, NM 87013

**RE: Jones Hill (Tererro) Exploration Project Access – Road Maintenance Plan**

Larry**,**

Please accept this letter and attached figures as a road maintenance plan to repair the damaged road sections proposed for use to access the Jones Hill (Tererro) Exploration Project west of the Pecos Canyon, via Indian Creek.

**Proposal summary**

Comexico LLC (Comexico) proposes road maintenance work on ~1,900 m of existing low-volume Maintenance Level 2 Forest Road (FR) within the Pecos-Las Vegas District of the Santa Fe National Forest (Forest Service). Generally, road maintenance is needed so that Comexico can access its unpatented mining claims (claims), some of which have been active since 1970. Maintenance is proposed in conjunction with ongoing and proposed exploration activities to mitigate potential impacts to surface water resources caused by current road conditions and proposed increased vehicle use.

Comexico is claimant to 216 claims and controls another 20 claims via private agreements – of the total 236 claims controlled by Comexico, 171 are accessible by the route proposed for maintenance (see Figure 1). Comexico was authorized by the Forest Service to use existing Forest Service roads accessible via an easement along Indian Creek. Two access authorizations were granted to Comexico from the Forest Service in the Spring of 2019:

1) Acknowledgement Letter Dated April 15, 2019 to use roads accessible via the Indian Creek easement
2) Acknowledgement Letter dated May 17, 2019 to undertake geophysical exploration

On June 5, 2019 Comexico submitted a Plan of Operations to the Forest Service proposing to undertake exploration drilling activities at drill pads accessible from the Indian Creek easement and Forest Roads. On July 30 and August 1, 2019, Comexico led site inspections with Forest Service personnel to review the proposed drill pads and soon thereafter road maintenance work was discussed as likely to be required to mitigate potential effects to surface water resources from vehicular access use in conjunction with the proposed drilling.

Average daily traffic related to Comexico activity is less than 1 vehicle since the Forest Service authorized use in the spring of 2019.

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**Access Summary**

More than 70 km of existing low-level Maintenance Level 2 Forest Service roads are vehicle-accessible to the west of New Mexico Highway 63 via three access points: Macho Canyon, Sawyer Canyon, and Indian Creek (Macho-Indian roads). Authorized motorized vehicle use of the Macho-Indian roads is currently limited to the Forest Service, Forest Service-authorized use, and those exemptions identified in 36 CFR 261.13.

The southeastern portion of FR 192 - Indian Creek, and the northeastern portion of FR 120 – Macho Canyon to Indian, are proposed for use by Comexico to access to the proposed drill pad area beginning at the Indian Creek easement – portions of these two roads are proposed for maintenance (see Figure 2). Additional Forest System roads Comexico has proposed to use during drilling operations include FR 120L, 120K, 120KA, 120KB, 120KBA, 120KC, 120KD, 120KDA, and 120KE; no maintenance is proposed for these Forest Service roads.

Comexico records indicate that regular and significant access associated with exploration activities took place on Macho-Indian roads starting in the early 1970s and tapered off by around 2004. Regular access since 2004 has been limited to the Macho Grazing Allotment rancher, one of the private party claimants, and apparent use by the public. It is apparent that the Macho-Indian roads have always been low-volume roads.

The roads are currently passable by high clearance 4x4 pickup trucks which are the primary vehicle proposed to access the project area. Maximum average daily traffic upon the access roads would be 10-12 vehicles per day (5-6 up access and 5-6 down access).

Project area climate data from the years 1946 to 1961 is available from Tererro, New Mexico and outlined in Table 1, below. Tererro is located about 2.5 miles northeast of the proposed road maintenance area. Average annual precipitation totals more than 17.5 inches with the majority falling as rain in the months of July and August. Snowfall generally occurs from November through April and the area averages more than 42.5 inches annually.

## TERERRO, NEW MEXICO (298788)

**Period of Record Monthly Climate Summary**

**Period of Record : 05/01/1946 to 05/31/1961**

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Max. Temperature (F) | 44.4 | 45.7 | 48.7 | 57.7 | 65.7 | 76.8 | 78.4 | 76.3 | 73.3 | 63.6 | 53.7 | 47.5 | 61.0 |
| Average Min. Temperature (F) | 11.6 | 12.7 | 17.5 | 23.2 | 29.1 | 36.9 | 42.8 | 42.3 | 33.9 | 25.9 | 16.6 | 12.3 | 25.4 |
| Average Total Precipitation (in.) | 1.01 | 0.83 | 1.25 | 1.11 | 1.20 | 1.08 | 3.28 | 3.75 | 0.84 | 1.72 | 0.79 | 0.72 | 17.57 |
| Average Total SnowFall (in.) | 9.9 | 8.6 | 7.8 | 3.6 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 6.0 | 5.1 | 42.6 |
| Average Snow Depth (in.) | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Percent of possible observations for period of record.
Max. Temp.: 88.8% Min. Temp.: 88.6% Precipitation: 95% Snowfall: 83.9% Snow Depth: 61.9%
Check Station Metadata or Metadata graphics for more detail about data completeness.

*Western Regional Climate Center, wrcc@dri.edu*

Table 1: Project Area Climate: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?nm8788

**Access Condition**

Comexico personnel documented the access conditions on the ground (see photos 1-8), evaluated publicly available remote sensing data, and referenced internal information from past exploration operators in the proposed drill pad area.

A general description of the access from its easternmost point to the "old drill camp and water well location" is as follows:

- 4,082 m length at an 8.6 % average grade
- Entire road route is located in the lowest 1/3 of the hill slope – majority of road drainage is related to hill slope drainage
- From the access beginning to the FR 190/120 junction, road damage consists of minor debris flow and steep roads not shedding water flow, causing ruts and rills
- Culverts serve as road creek crossings along Indian Creek and are all in good condition east of the FR190/120 junction
- Road steepens west of FR 192/120 junction
- Portions of the road were blasted by former operators
- Cut slopes are near vertical and in bedrock in places
- Shoulder ditches intermittently feed hillslope drainage into culverts west of FR 190/120 junction
- Culverts are plugged, partially or completely, west of FR 192/120 junction
- Plugged culverts correlate with road erosion - where a culvert is blocked off, water meant to be diverted through that culvert is instead running down the road and incising the surface with ruts and rills
- 24 culverts identified with an access-average spacing of 170 m
- Culverts function as cross-drains for the shoulder ditches west of FR 190/120 junction (18 identified)
- It is probable that additional culverts exist west of the FR 192/120 junction but have not yet been identified – they could be buried and/or concealed by vegetation
- A geotextile material exists between a native crushed aggregate and native ground surface west of FR 192/120 junction
- Road muck from blasting operations are documented as being crushed and used as road metal
- Ditches feeding culverts are filled with native debris and host grasses, shrubs, and/or rip rap from rock faces
- Vegetation on both sides of the roadbed is typically in good condition and may require minor thinning for visibility
- Additional cross drain features which may have existed are not identifiable
- Lack of non-drivable waterbars at road junctions:
    - Blocking FR 192 uphill from the junction with FR 120
    - Blocking FR 120N at junction with FR 120
    - Blocking FR 120M at junction with FR 120
    - Blocking FR 120H at junction with FR 120L

Comexico identified 10 segments of the access for maintenance (see figure 3); the total length of which is ~1,900 m:

<u>East of FR 192/120 junction (no cross-drain culverts)</u>

A. 31 m segment of road, 4.5 m ave width, nearly flat (1 %), affected by minor debris slide from the south
B. 80 m segment of road, 4.5 m ave width, steep grade (12.5 %), minor ruts and rills
C. 55 m segment of road, 6.5 m ave width, steep grade (10.7 %), minor ruts and rills
D. 108 m segment of road, 5 m ave width, steep grade (11.1 %), minor ruts and rills

West of FR 192/120 junction (cross-drain culverts present)

E. 833 m segment of road, 7.75 m ave width, steep grade (13.6 %), full bench cut in outcropping rock, rip rap at base of steep cut slope, exposed bedrock on road surface, plugged culverts, filled and vegetated ditches, ruts and rills on roadbed, 6 identified cross-drain culverts
F. 193 m segment of road, 6.5 m ave width, moderate grade (5.7 %), on-road water damage from damaged road/stream junction and culvert, plugged culverts, filled and vegetated ditches, ruts/rills, 2 identified cross-drain culverts
G. 82 m segment of road, 5 m ave width, steep grade (12.8 %), ruts and rills, no identified cross-drain culverts
H. 135 m segment of road, 5.5 m ave width, steep grade (10.2 %), plugged culverts, filled and vegetated ditches, ruts and rills, 2 identified cross-drain culverts
I. 278 m segment of road, 5 m ave width, steep grade (13.3 %), plugged culverts, filled and vegetated ditches, ruts and rills, 4 identified cross-drain culverts
J. 84 m segment of road, 5 m ave width, steep grade (13.3 %), plugged culvert, filled and vegetated ditches, ruts and rills, 1 identified cross-drain culvert

**Access Maintenance Work Proposed**

General maintenance activities proposed for each section of the access:

- All equipment used for road maintenance work would be cleaned and weed-free prior to entering Forest Roads
- No road maintenance work would be undertaken on segments of road passing through or adjacent to archaeology sites
- Search for additional culverts – if identified, rehab and add to the cross-drain feature road design
- Clean cross-drain culverts – consider use of this material on road
- Clear minor brush and overgrowth on shoulders, leaving grasses, for visibility/safety
- Clean/grade shoulder ditches leading to the culverts for a minimum of 15 m up-hill from the inlets – consider use of material on road
- Favor outsloping of road where possible; transition to crown shape 20 m up ditch from culvert inlets; transition back to outsloped road shape where possible until next culvert transition. Outsloped and crown shape guidelines are included in Figure 4.
- Harden and re-protect the culvert inlets and outlets from future erosion using native rip rap and erosion resistant materials
- Motorgrader maintenance of ruts and rills from the damaged road and favor an outsloped shape where there are no cross-drain culverts
- If aggregate is present, scrape and stockpile prior to grading, replace after shaping is complete; remove geotextile in process
- Construction of cross-drain features, typically drivable waterbars and armored lead-off ditches (see Figure 5, Figure 6, and Figure 7), is proposed to occur within identified road maintenance areas; spacing of new cross-drain features account for existing culverts and would not exceed the frequency outlined in Table 2:

  **Table 2**: Modified from Modified from Drains Dips, Waterbars, Diverters, and Open-Top Culverts - Surface Water Drainage of Low-Volume Roads, USDA, December 2014

| Road Grade % | Surface Drain Type | Low-Erosive Soils (1) (ft) | Erosive Soils (2) (ft) |
|---|---|---|---|
| 0-3 | All | 400 | 150 |
| 4-6 | All | 325 | 125 |
| 7-9 | All | 250 | 100 |
| 10-12 | All | 200 | 75 |
| 12-15 | All except drain dips | 150 | 65 |
| 16-20 | All except drain dips | 115 | 50 |

Adapted from Packer and Christensen 1964 and Copstead et al. 1998.
Note:
(1) Low-erosive soils = coarse rocky soils, gravel, and clay.
(2) Erosive soils = fine friable soils, silt, and fine sands.

- Avoid and prevent side casting of material from the roadway into the valley bottoms during culvert cleaning, ditch cleaning, and road grading/shaping
- Construct non-drivable waterbars at junctions between the access route and those roads which Comexico does not proposed to use, or at those which Comexico have committed to refrain from using (ie FR 192 northwest of FR 120 junction)
- Grade, cover and compact native road material over exposed culverts
- No road widening
- Regularly inspect roadway for indications of erosion, ditch debris, and culvert plugging, particularly after storms
- Undertake any required maintenance at the beginning of and prior the end of the less-than-12-month mechanized operation period
- Regulate traffic during wet periods

All culverts west of the FR 192/120 junction will be cleaned and have their shoulder ditches cleaned for a minimum of 15 m uphill. Limiting ditch cleaning will maintain established grasses and brush growing in the cutslopes. Culvert cleaning will be accomplished by use of culvert cleaner attachment for an excavator/backhoe, or by hand. No material from culvert cleaning will be sidecast down the fillslope. Culvert inlets and outlets will be hardened with native erosion resistant material such as rip rap from the cleaned ditches.

Non-drivable waterbars, or features restricting vehicle access, will be constructed at identified road junctions.

Drivable waterbars and armored lead-off ditches are the primary proposed cross-drain feature for this road maintenance. Sag-crest waterbars may be considered as alternatives in segments A-D or G-J.

No aggregate material is planned to be hauled in from offsite.

**Segment Specific Maintenance**

Segments A through D (Figure 8) are each proposed for motorgrading to rid the roadbed of ruts, rills, and debris flow material. Road grading will favor an outsloped shape of the road where possible.

Cross-drain drivable waterbars and armored leadoff ditches are proposed to frequently direct hillslope waterflow off of the road.

- No road maintenance work is proposed on existing Indian Creek culverts

Segment E (Figure 9) is proposed for careful use of motorgrading and drivable waterbar with armored leadoff ditch construction. The roadbed on this segment is generally composed of an aggregate overlying a geotextile which covers the native subgrade and there are several rough roadbed sections with outcropping rock. Prior to motorgrading, all aggregate will be scraped and stockpiled and the geotextile will be removed. The native subgrade will then be graded to shape a generally outsloped roadbed, regularly spaced driveable waterbars, and armored leadoff ditches. The scraped aggregate will be replaced atop the roadbed after grade shaping is complete. There may be points through this segment where the rock outcrop nature of the roadbed prohibits construction of a drivable waterbar – if an instance of prohibited waterbar construction occurs, the operator would attempt to be crown the road and a clear a cutslope shoulder ditch until the next culvert or cross-drain feature. An alternative would be to install fillslope siltation control such as wattles or silt fencing if these instances occur. Ditch cleaning, brush clearing, and culvert cleaning will be required for this segment and material generated during these proposed maintenance activities may be used for roadbed shaping, armoring culvert inlets/outlets, armoring leadoff ditches, non-drivable waterbars, as fillslope brush barriers throughout the other maintenance segments, or as cover for exposed culverts in roadbed. The eastern most portion of this segment would have cross-drain features and ditches located on the southeast side of the access road due to the sharp road U-turn and confluence with Indian Creek.

Segments F through J (see Figure 10 and Figure 11) are proposed for motorgrading and drivable waterbar construction. Like segment E, there is a geotextile separating an aggregate layer from the native subgrade for a majority of these segments. Prior to roadbed shaping, the aggregate will be scraped and the geotextile will be removed and disposed of offsite. After roadbed shaping and drivable waterbar with armored leadoff ditch construction is complete, the scraped aggregate will be replaced. Segment F has water on the roadbed from a damaged road junction which will be blocked via non-drivable waterbar. Blocking the water source and re-directing it through its intended culvert will be accomplished early in the maintenance of the access road, so that by the time the other segment F work begins, the road will have had time to dry.

**Conclusions**

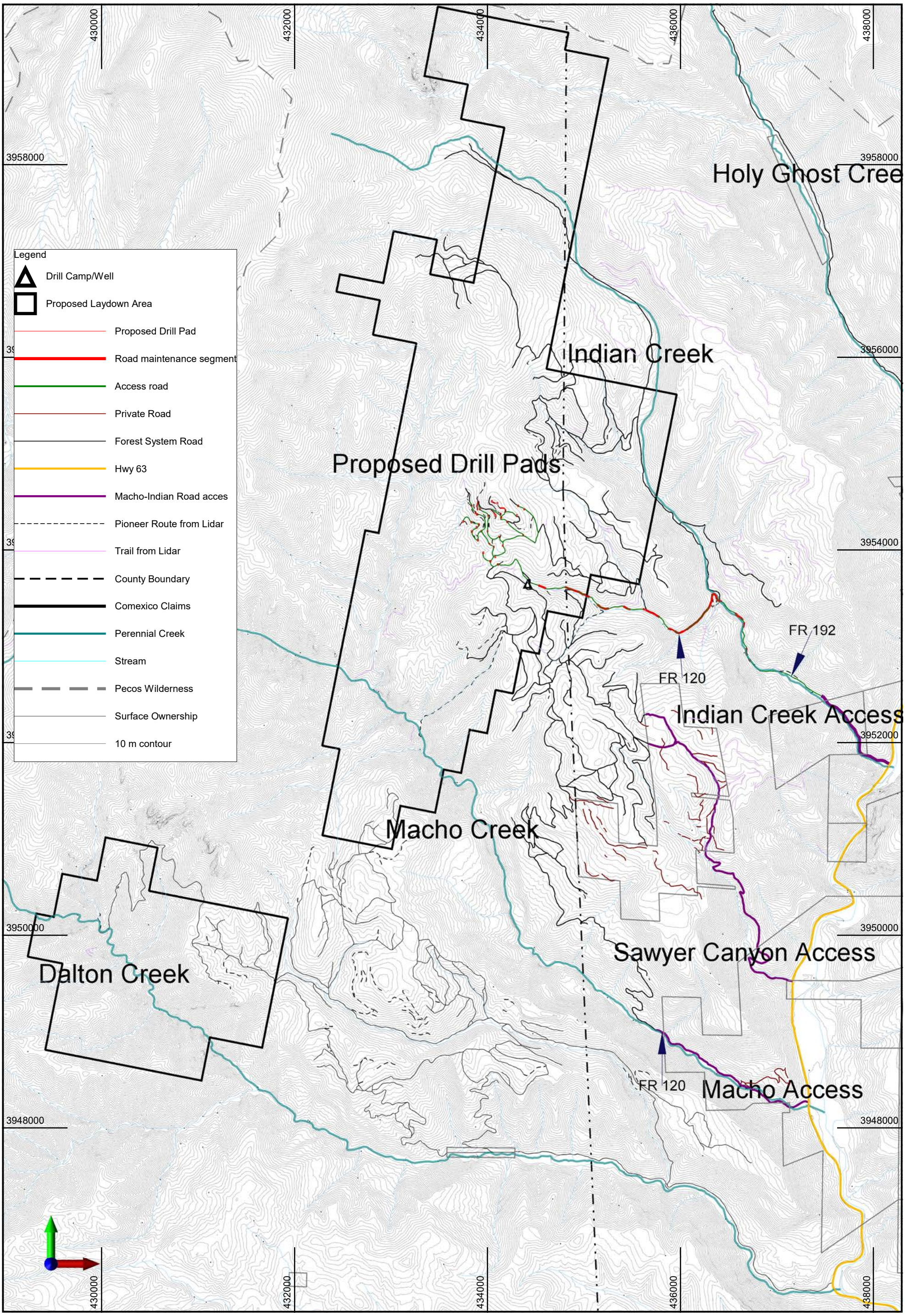
Comexico proposes maintenance on ~1,900 m of existing low-volume Maintenance Level 2 Forest System road to access mining claims dating back to as early as 1970. The road has not been travelled upon significantly since as recent as about 2004. Proposed maintenance includes motorgrading of roadbed which has been subject to erosion in the past 15 years, construction of drivable waterbars and armored leadoff ditches to more regularly cross-drain water from the road surface, culvert and ditch cleaning, culvert inlet and outlet armoring minor brushing, and road outsloping and crowning to mitigate potential impacts to surface water resources. Vehicle use would remain low-volume for the duration of the proposed exploration activities – pickup trucks will be the primary vehicle used.

Road maintenance will mitigate potential impacts to surface resources from the unmaintained roads themselves and ensure that the roadbeds continue to cross-drain hillslope water.

Sincerely,

Patrick Siglin
Exploration Manager, North America
720.258.6329

# Figures and Photos

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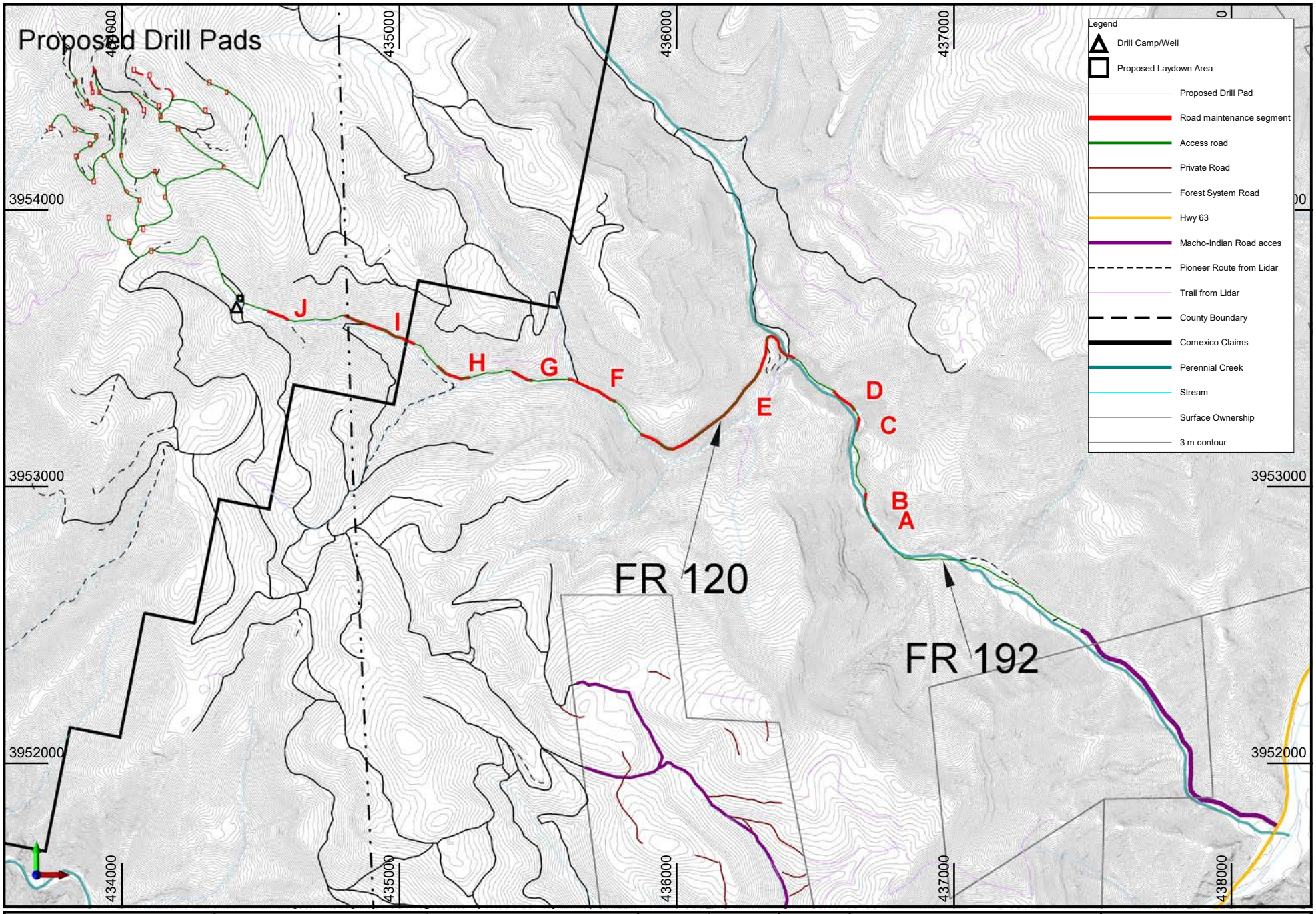
|---|---|---|---|---|---|---|
| New World COBALT | Figure 1: Claim Access Overview | Grid: UTM NAD 83 Zone 13 | Scale is Approximate | Plot Date 23-Oct-2019 / Sheet 1 of 1 / Plot File: Vizex | **Tererro Exploration Project Jones Hill Access Maintenance** | Comexico LLC |

500 0 500m

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| New World COBALT | Figure 2: Local Access Overview | Grid: UTM NAD 83 Zone 13 | Scale is Approximate<br>Plot Date 23-Oct-2019<br>Sheet 1 of 1<br>Plot File: Vizex<br>200 0 200m | **Tererro Exploration Project Jones Hill Access Maintenance** | Comexico LLC |

Photo 1: General condition of project access. Roadbed width average of ~5 m, cutslope and fillslope shoulders vegetated with saplings, grass and brush. Road condition is consistent with low-volume, high-clearance and 4x4 only Maintenance Level 2 Forest System roads.

Photo 2: General condition of proposed maintenance segment between FR 192/120 junction and old camp. Roadbed width average of ~5 m, cutslope and fillslope shoulders host healthy vegetation. Ruts and rills, caused by plugged culvert, expose old geotextile beneath aggregate lift.


Photo 3: Exposed culvert cross-draining through the roadbed from the out of view cutslope ditch to the fillslope in the distance roadbed.

Photo 4: Example of one of 24 identified culvert inlets, nearly completely burried. Culvert lip is about 6 inches below the base of the GPS unit.

Photo 5: Rock cutslope, vegetated shoulders, rock debris and possible source of riprap.

Photo 6: Typical condition of road in proposed maintenance segment E. Rutted road with aggregate lift and cobbly subgrade. Vegetated shoulders, sub-vertical outcropping rock cutstlope, large rock outcrop in center of roadbed in the distance.

Photo 7: Rough road section, example of common rock outcrop roadbed in proposed maintenance segment E. Gravel aggregate on either side of roadbed outcrop.

Photo 8: Water causing rutting on roadbed in proposed maintenance segment F. Two distinct types of aggregate apparent in bottom left rut.

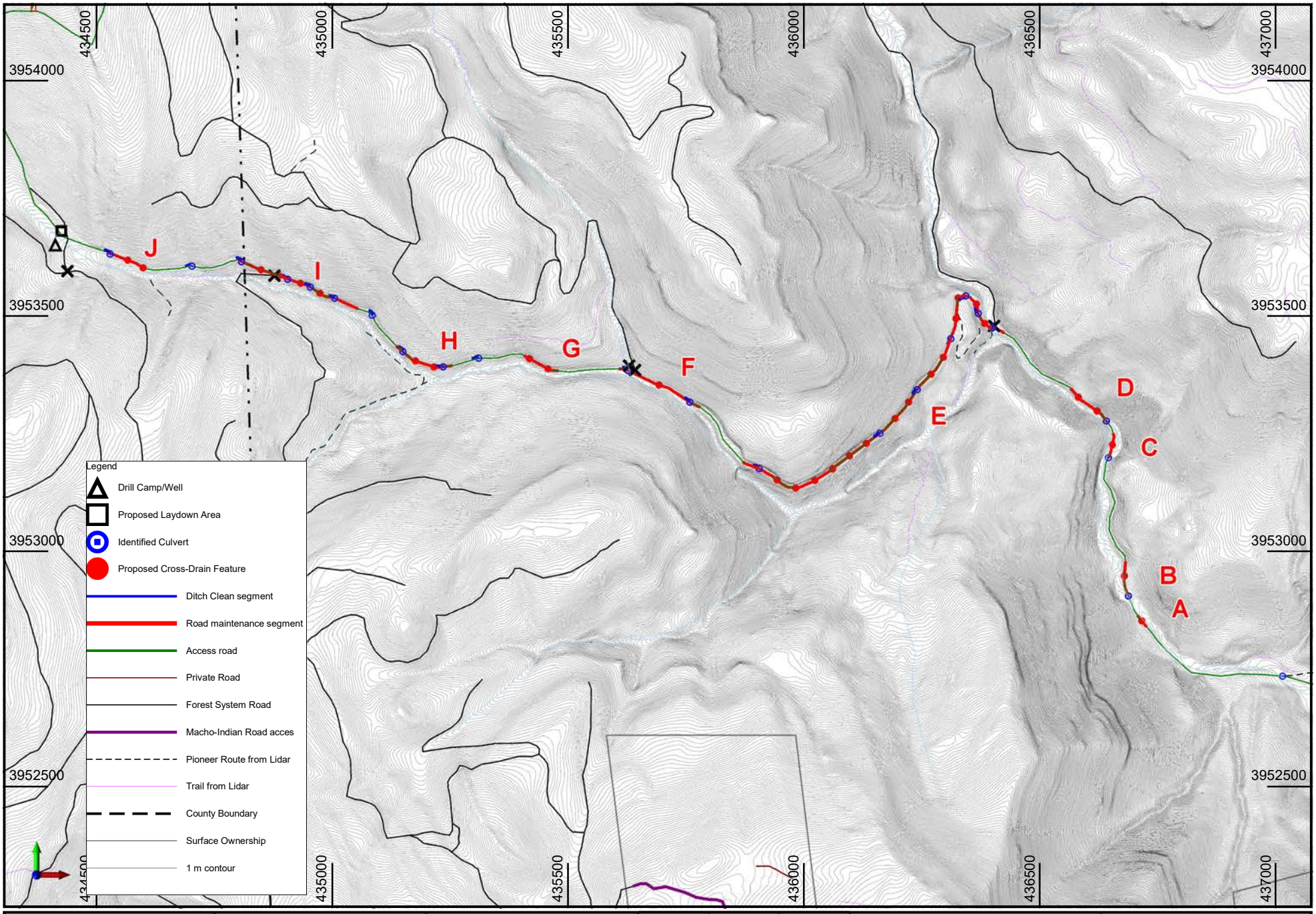


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Figure 3: Access Mantenance Overview

Grid:
UTM NAD 83
Zone 13

Scale is Approximate

Plot Date 23-Oct-2019

Sheet 1 of 1

Plot File: Vizex

100 0 100m

**Tererro Exploration Project**
**Jones Hill Access Maintenance**

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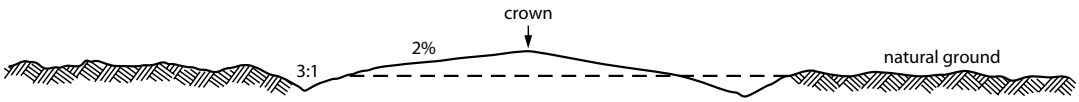
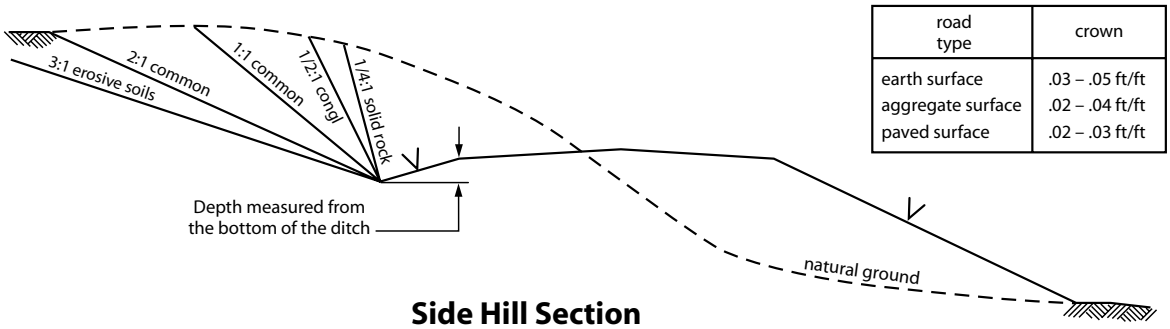
**Figure 4. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.**
**Modified from page 20 of Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development, The Gold Book, Fourth Edition - Revised 2007, Page 20**
**https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/operations-and-production/the-gold-book**

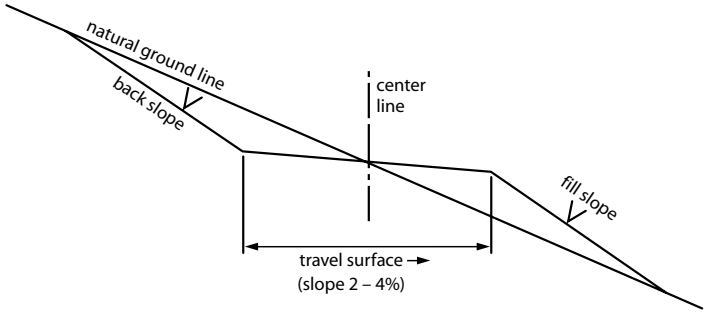



**Level Ground Section**




| road type | crown |
|---|---|
| earth surface | .03 – .05 ft/ft |
| aggregate surface | .02 – .04 ft/ft |
| paved surface | .02 – .03 ft/ft |

**Side Hill Section**




**Typical Outsloped Section**

*Figure 5 - Typical drivable waterbar.*

Modified from Drains Dips, Waterbars, Diverters, and Open- op Culverts - Surface Water Drainage of Low-Volume Roads, SDA, December 2014

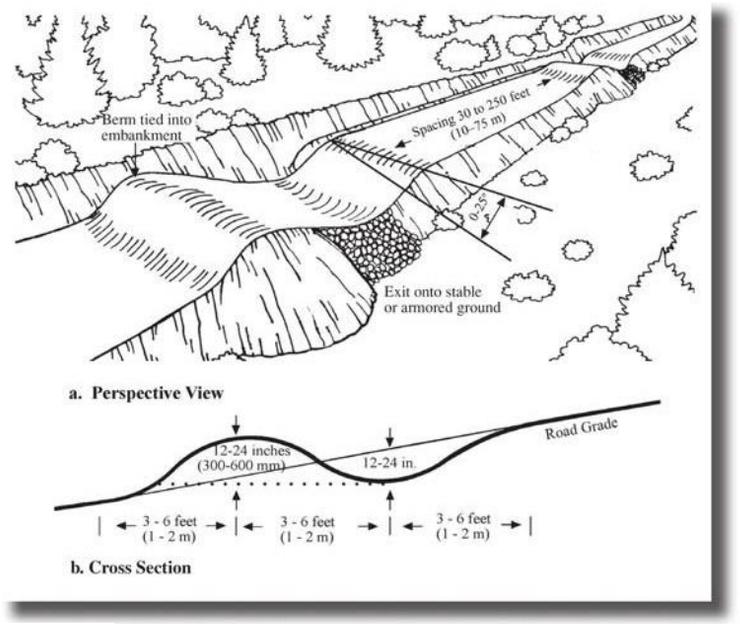



Figure 6 *—Drivable waterbar construction. Adapted from Wisconsin's Forestry Best Management Practices for Water Quality (1995).*

Modified from Stabilization and Rehabilitation Measures for Low-Volume Forest Roads, USDA, December 2011

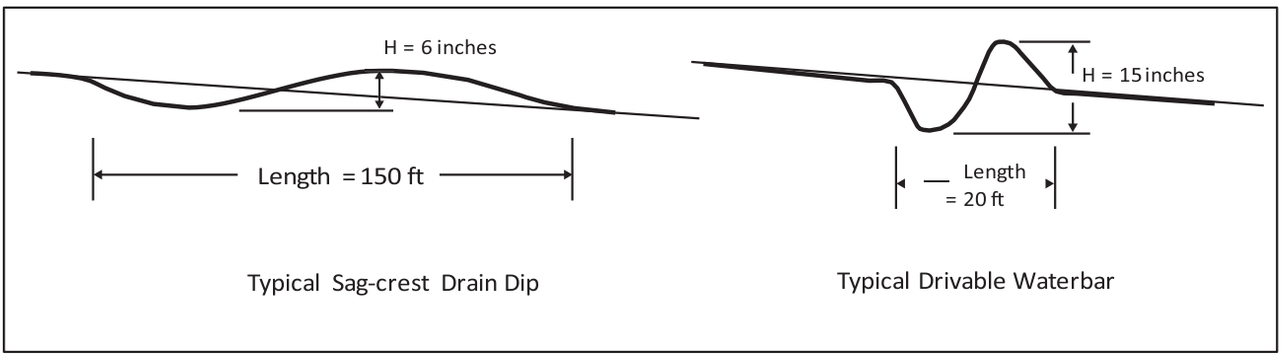
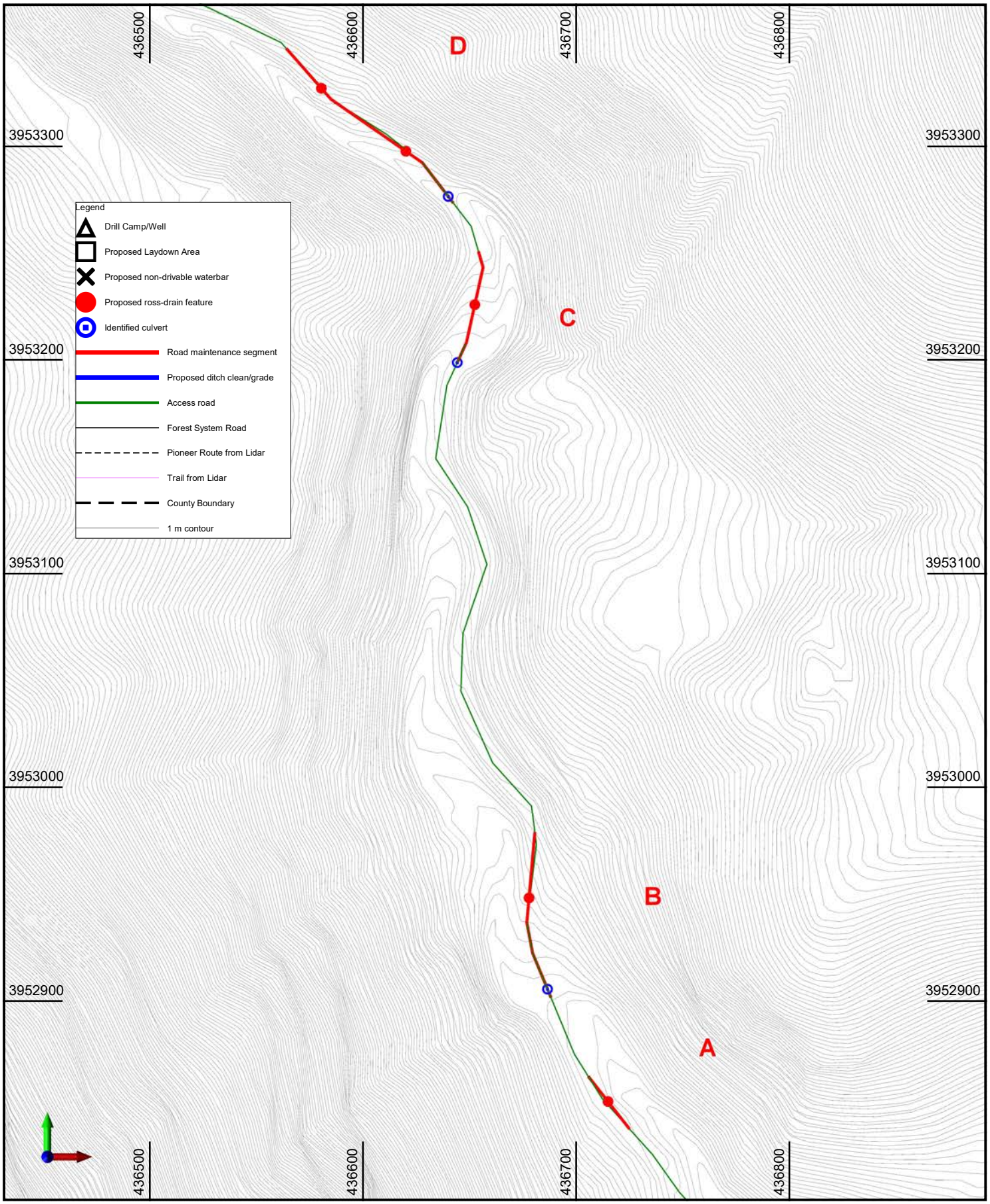



*Figure 7. Comparison of sag-crest drain dip and drivable waterbar.*

Modified from Drains Dips, Waterbars, Diverters, and Open-Top Culverts - Surface Water Drainage of Low-Volume Roads, USDA, December 2014

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|---|---|---|---|---|---|---|
| New World COBALT | Figure 8: Access Maintenance Segments A-D | Grid: UTM NAD 83 Zone 13 | Scale is Approximate | Plot Date 23-Oct-2019 | Sheet 1 of 1 | **Tererro Exploration Project Jones Hill Access Maintenance** | Comexico LLC |
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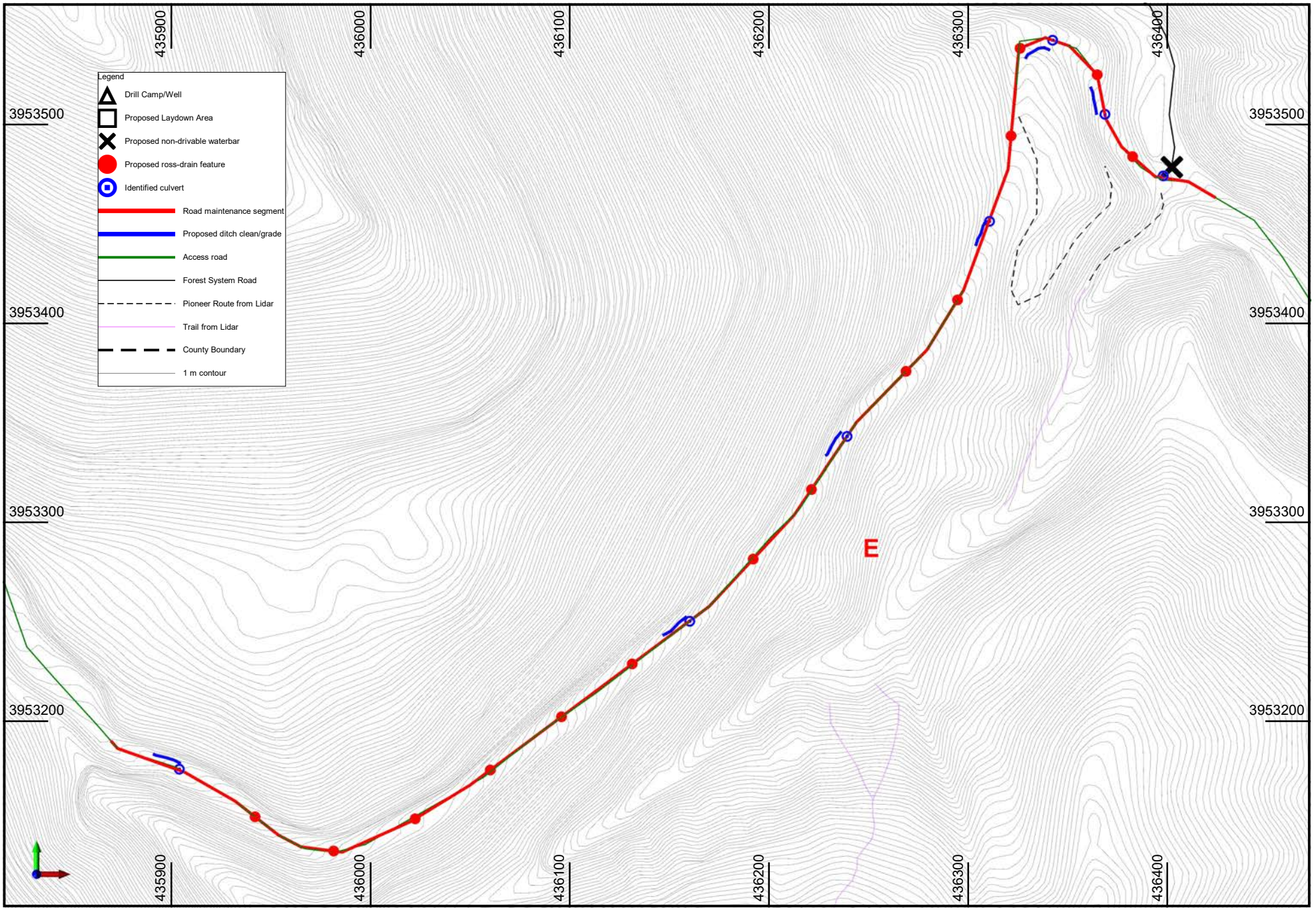


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Figure 9:
Access Maintenance
Segment E

Grid:
UTM NAD 83
Zone 13

Scale is Approximate

Plot Date 23-Oct-2019

Sheet 1 of 1

Plot File: Vizex

20 0 20m

**Tererro Exploration Project**
**Jones Hill Access Maintenance**

Comexico LLC

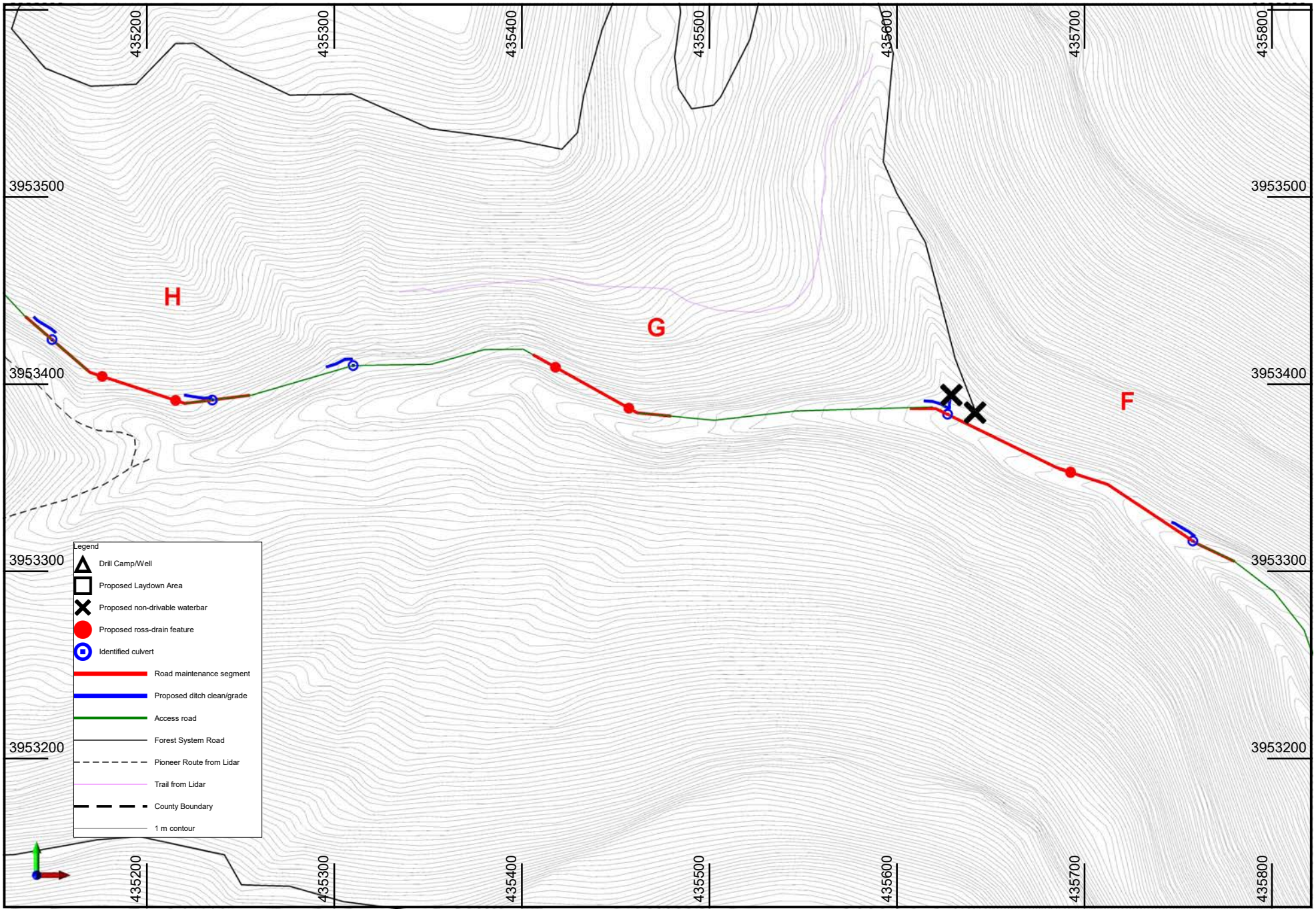


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Figure 10:
Access
Maintenance
Segments F-H

Grid:
UTM NAD 83
Zone 13

Scale is Approximate

Plot Date 23-Oct-2019

Sheet 1 of 1

Plot File: Vizex

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**Tererro Exploration Project**
**Jones Hill Access Maintenance**

Comexico LLC

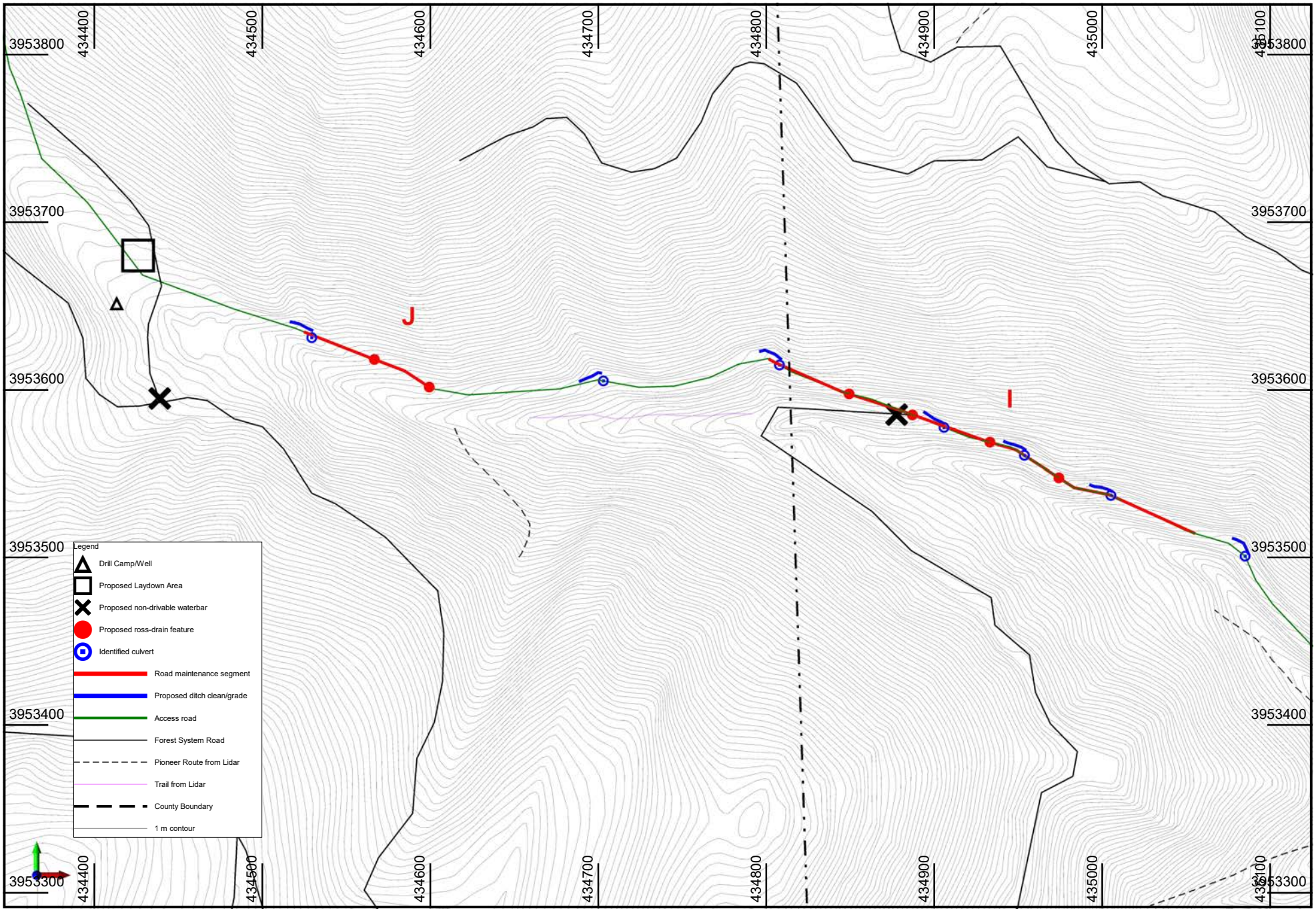


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Figure 11:
Access
Maintenance
Segments I and J

Grid:
UTM NAD 83
Zone 13

Scale is Approximate

Plot Date 23-Oct-2019

Sheet 1 of 1

Plot File: Vizex

20 0 20m

**Tererro Exploration Project**
**Jones Hill Access Maintenance**

Comexico LLC