

PLAN SHOWING SURVEY OF PAD SITE FOR

GXO 1A-17 HZ WARNER 1-16-3-18

GXO 1B-17 HZ WARNER 4-18-3-18

HORIZONTALLY DRILLED FROM WITHIN L.S.1 SEC.17 TWP.3 RGE.18 W.4 M.
COUNTY of WARNER No.5 – ALBERTA

LEGEND

- Survey Monuments found are shown thus ●
 - Iron Bars Found are shown thus ◆
 - Iron Spikes shown thus..... Found.....▲ Placed △
 - Computed Positions shown thus ☒
 - Well Head shown thus..... ☒ Sub-Surface Target..... ☒
 - Portions referred to shown thus..... —△—
- Distances are ground and shown in metres and decimals thereof.
Bearings on Plan are Assumed from TWP. PLAN 3-17-W.4 M.

GEO-REFERENCING DATA

Geo-Reference Point is shown thus RP ○

Geo-Referenced point is Sta.100 in the S.E. 17-3-18-4, with coordinates derived by G.P.S. (P.P.P.) UTM NAD83 (C.S.R.S. 2002) Zone 12: 5451021.86 N. 399218.57 E.

Grid Bearings are UTM NAD83 (Original): derived from ATS v4.1 coordinates between N.E. 5-3-18-4 & N.E. 8-3-18-4

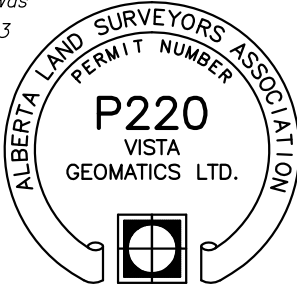
A Combined Scale Factor of 0.99953 is used to scale ground distances to grid distances.

SURVEYOR'S AFFIDAVIT

I, JOHN LOHNES, Alberta Land Surveyor, of the City of Calgary, Alberta, certify that the survey represented by this plan is true and correct to the best of my knowledge, has been carried out in accordance with the Alberta Land Surveyor's Association Manual of Standard Practice and the field survey was performed between the dates of June 9th, 2013 and October 5th, 2014.

John Lohnes
Alberta Land Surveyor, December 15th, 2016

Witness – Burghard Winkel



LANDOWNER AGREEMENT

I / We agree to the location of the Pad Site and have no objections to the A.E.R. issuing a license for same.

Owner / Occupant _____ Date _____

Owner / Occupant _____ Date _____

Owner / Occupant _____ Date _____

LICENSEE

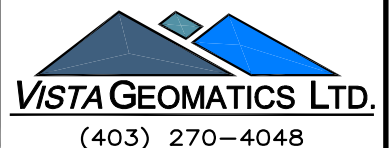


A.E.R. LICENSING INFORMATION:

The Proposed Well Centres are a minimum of:

- 1.5km from the Corporate limits of a City, Town, Village or Hamlet. Yes No
- 100m from any occupied dwelling, permanent building, school, church, or military building. Yes No
- 100m from any stream or water body, dry or wet, intermittent or permanent. Yes No
- 200m from any water well. Yes No
- 100m from any surface improvements. Yes No
- 40m from any Surveyed Road or Road Allowance. Yes No
- 5.0km from a Lighted Aerodrome as described in the Oil and Gas Regulations. Yes No
- 1.6km from an Unlighted Aerodrome as described in the Oil and Gas Regulations. Yes No
- The Proposed Wells are outside any potential Coal Development Area. Yes No
- The Proposed Wells satisfies Land Reclamation Guidelines for Elevation and Drainage. Yes No
- The Proposed Well requires Historical Resources Act Clearance. Yes No (HRV 5, Cat.a,p)
- Distance to the Nearest Urban Centre (VILLAGE of WARNER) is ±14.0km.
- Distance to the Nearest Surface Development / Residence is ±3.6km in the N.E.1/4 19-3-17-W.4 M. to the best of our knowledge.

| REV. | DATE: (YYY-MM-DD) | SURVEYED BY: | DRAWN BY: | CHECKED BY: | REVISIONS: |
|------|----------------------|--------------|-------------|-------------|--------------------|
| 0 | 2014-09-12 | R.H. & D.T. | J.H. / K.H. | B.W.W. | ORIGINAL PLAN |
| 1 | 2014-10-07 | R.H. & D.T. | B.W. | L.C.Y. | MOVED LEASE & WC's |
| 2 | 2015-05-21 | | B.W. | J.L. | CLIENT NAME CHANGE |
| 3 | 2016-12-15 | | B.W. | J.L. | PLAN UPDATE |



| | | | | | | | |
|--|-------------------------------------|--|----------------------------------|---|-------------------------------------|----------------------------------|--|
| FILE: | | GXO 1A-17 HZ WARNER 1-16-3-18 (W.4 M.) | | | | AFE: 14-03-096 | |
| SURFACE | | | | | | | |
| LOCAL COORDINATES (Bdy. of Sec.17 3-18-W.4 M.) | CALCULATED 1/4 LINE COORDINATES | NAD 27 DATUM - UTM ZONE 12 | | NAD 83 - UTM ZONE 12 | | | |
| | | GEOGRAPHIC | U.T.M. | GEOGRAPHIC | | U.T.M. | |
| 306.1 N. of S. 376.0 W. of E. | 504.8 S. of N. 431.0 E. of W. | (49°12'20.7" N) (112°23'11.1" W) | North 5451035.2 East 399009.9 | Lat: 49.205751 Long: -112.387329 | (49°12'20.7" N) (112°23'14.4" W) | North 5451254.8 East 398947.3 | |
| ELEVATIONS <i>Well Centre 1246.18 (Ground)</i> | | | | | | | |
| N.W. Cor: SEE | | N.E. Cor: DETAIL | | Datum: Geo-Reference Point (RP) Sta.100 | | | |
| S.W. Cor: LEASE | | S.E. Cor: DETAIL | | Elev. = 1249.67m (G.N.S.S. P.P.P) | | | |
| SUB-SURFACE (CASING POINT - I.C.P.) | | | | | | | |
| LOCAL COORDINATES (Bdy. of Sec.17 3-18-W.4 M.) | NAD 27 - UTM ZONE 12 | | | NAD 83 - UTM ZONE 12 | | | |
| | GEOGRAPHIC | | U.T.M. | GEOGRAPHIC | | U.T.M. | |
| 314.0 N. of S. 336.0 W. of E. | Lat: 49.205827 Long: -112.385877 | (49°12'21.0" N) (112°23'09.2" W) | North 5451042.4 East 399050.0 | Lat: 49.205822 Long: -112.386780 | (49°12'21.0" N) (112°23'12.4" W) | North 5451262.0 East 398987.4 | |
| BOTTOM HOLE | | | | | | | |
| LOCAL COORDINATES (Bdy. of Sec.16 3-18-W.4 M.) | NAD 27 - UTM ZONE 12 | | | NAD 83 - UTM ZONE 12 | | | |
| | GEOGRAPHIC | | U.T.M. | GEOGRAPHIC | | U.T.M. | |
| 200.9 N. of S. 200.1 W. of E. | Lat: 49.204811 Long: -112.361589 | (49°12'17.3" N) (112°21'41.7" W) | North 5450897.3 East 400817.1 | Lat: 49.204806 Long: -112.362492 | (49°12'17.3" N) (112°21'45.0" W) | North 5451116.9 East 400754.5 | |

| | | | | | | | |
|--|-------------------------------------|--|----------------------------------|---|-------------------------------------|----------------------------------|--|
| FILE: | | GXO 1B-17 HZ WARNER 4-18-3-18 (W.4 M.) | | | | AFE: 14-03-098 | |
| SURFACE | | | | | | | |
| LOCAL COORDINATES (Bdy. of Sec.17 3-18-W.4 M.) | CALCULATED 1/4 LINE COORDINATES | NAD 27 DATUM - UTM ZONE 12 | | NAD 83 - UTM ZONE 12 | | | |
| | | GEOGRAPHIC | U.T.M. | GEOGRAPHIC | | U.T.M. | |
| 330.1 N. of S. 383.3 W. of E. | 480.8 S. of N. 423.7 E. of W. | (49°12'21.5" N) (112°23'11.5" W) | North 5451059.3 East 399003.0 | Lat: 49.205967 Long: -112.387430 | (49°12'21.5" N) (112°23'14.7" W) | North 5451279.0 East 398940.4 | |
| ELEVATIONS <i>Well Centre 1245.86 (Ground)</i> | | | | | | | |
| N.W. Cor: SEE | | N.E. Cor: DETAIL | | Datum: Geo-Reference Point (RP) Sta.100 | | | |
| S.W. Cor: LEASE | | S.E. Cor: DETAIL | | Elev. = 1249.67m (G.N.S.S. P.P.P) | | | |
| SUB-SURFACE (CASING POINT - I.C.P.) | | | | | | | |
| LOCAL COORDINATES (Bdy. of Sec.17 3-18-W.4 M.) | NAD 27 - UTM ZONE 12 | | | NAD 83 - UTM ZONE 12 | | | |
| | GEOGRAPHIC | | U.T.M. | GEOGRAPHIC | | U.T.M. | |
| 295.0 N. of S. 583.0 W. of E. | Lat: 49.205654 Long: -112.389266 | (49°12'20.4" N) (112°23'21.4" W) | North 5451027.7 East 398802.8 | Lat: 49.205650 Long: -112.390170 | (49°12'20.3" N) (112°23'24.6" W) | North 5451247.4 East 398740.2 | |
| BOTTOM HOLE | | | | | | | |
| LOCAL COORDINATES (Bdy. of Sec.18 3-18-W.4 M.) | NAD 27 - UTM ZONE 12 | | | NAD 83 - UTM ZONE 12 | | | |
| | GEOGRAPHIC | | U.T.M. | GEOGRAPHIC | | U.T.M. | |
| 200.7 N. of S. 202.2 E. of W. | Lat: 49.204812 Long: -112.423032 | (49°12'17.3" N) (112°25'22.9" W) | North 5450979.7 East 396341.5 | Lat: 49.204806 Long: -112.423938 | (49°12'17.3" N) (112°25'26.2" W) | North 5451199.4 East 396278.8 | |

| AREAS | | |
|------------|-------|------|
| | ha | Ac. |
| Well Site: | 1.690 | 4.18 |

| LIST OF CROSSINGS & NOTIFICATIONS | |
|-----------------------------------|--|
| No. | DESCRIPTION |
| 1 | OWNER(S): CROWN - C. of T. 45029A - as to S.E.1/4, 17-3-18-W.4 M. |
| 2 | GRL 32283 - HARLEY CHARLES EARL & JOAN MURIEL EARL & AUDREY D. TAYLOR |
| 3 | PNT 080034, 090085 & 930113 - DEPT. OF SUSTAINABLE RESOURCES |
| 4 | COUNTY OF WARNER |

| LIST OF PROXIMITIES | |
|---------------------|--|
| No. | DESCRIPTION |
| 1 | ±3.6km to Nearest Residence in the S.E.1/4 32-3-17-W.4 M. |

17
3-18-4

L.S. 7

L.S. 8

E.1/4 17
Fd. No Mk.
Est. Pos.
Left No Mk.

S.E. 1/4, 17-3-18-W.4 M.
AREA REQUIRED: 0.903 ha (2.23 Ac.)
 OWNER(S): CROWN C.O.T. 45029A
 GRL 32283 - HARLEY CHARLES EARL
 JOAN MURIEL EARL
 AUDREY D TAYLOR
 PNT 080034 - DEPT. OF SUSTAINABLE RESOURCES
 PNT 090085 - DEPT. OF SUSTAINABLE RESOURCES
 PNT 930113 - DEPT. OF SUSTAINABLE RESOURCES

7.00m COUNTY ROAD
(DLO Bdy. defined
by E Trail)

20.12m GOVERNMENT ROAD ALLOWANCE

20.12m GOVERNMENT ROAD ALLOWANCE

Undeveloped Road

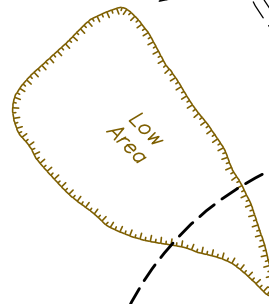
Undeveloped Road

Rolling Cultivated Grassland

Rolling Cultivated Grassland

Slough

SEE LEASE
DETAIL



Rolling Cultivated Grassland

Rolling Cultivated Grassland

PROPOSED SURFACE
LOCATION FOR:
1B-17 HZ 4-18

PROPOSED SURFACE
LOCATION FOR:
1A-17 HZ 1-16

± 3m Trail

200.0m

100.0m

1251.56
257°18'30"

319°11'45"

276.92
147.12

RP
Sta. 100

315°28'40"

L.S. 2

L.S. 1

20.12m GOVERNMENT ROAD ALLOWANCE

Undeveloped Road

20.12m GOVERNMENT ROAD ALLOWANCE

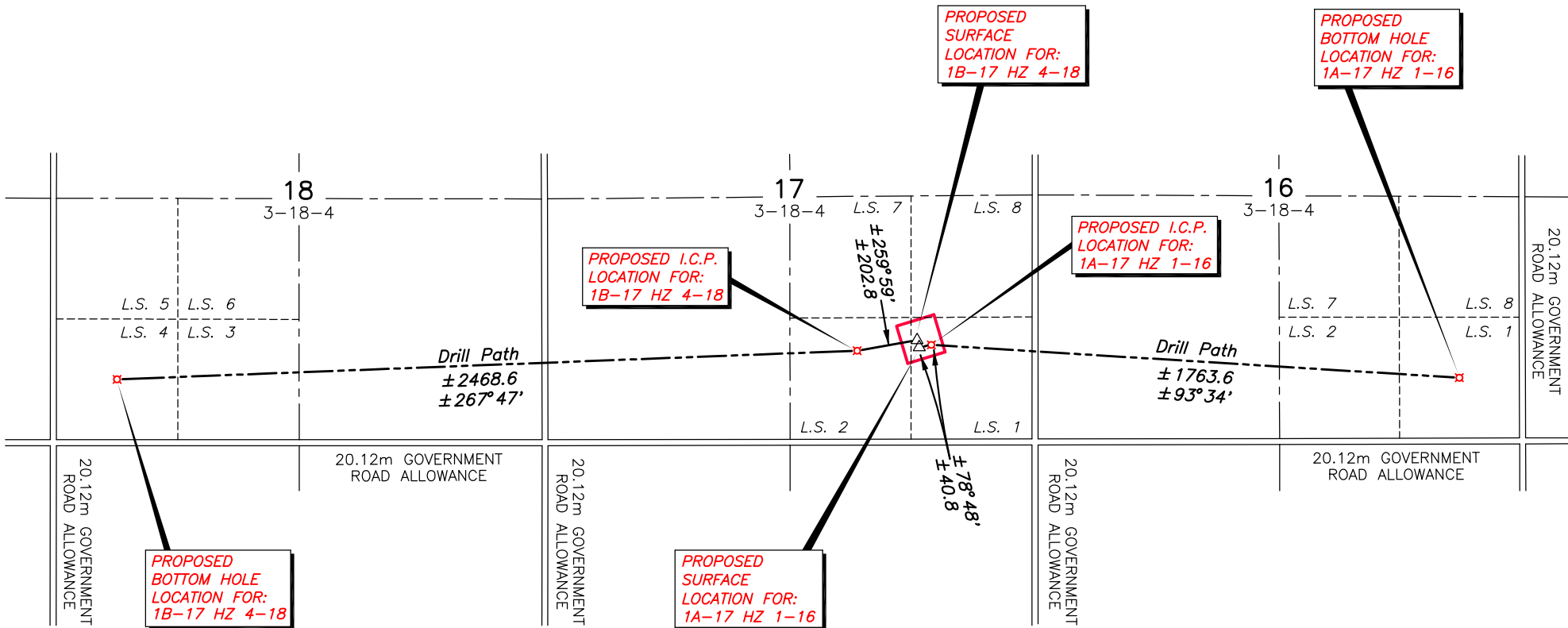
Undeveloped Road

N.E.7
Fd.l.

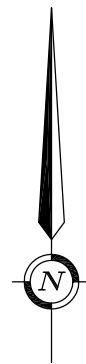
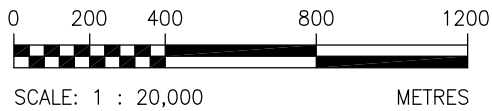
1633.05
269°54'55"

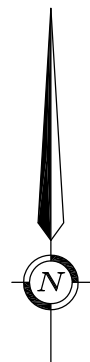
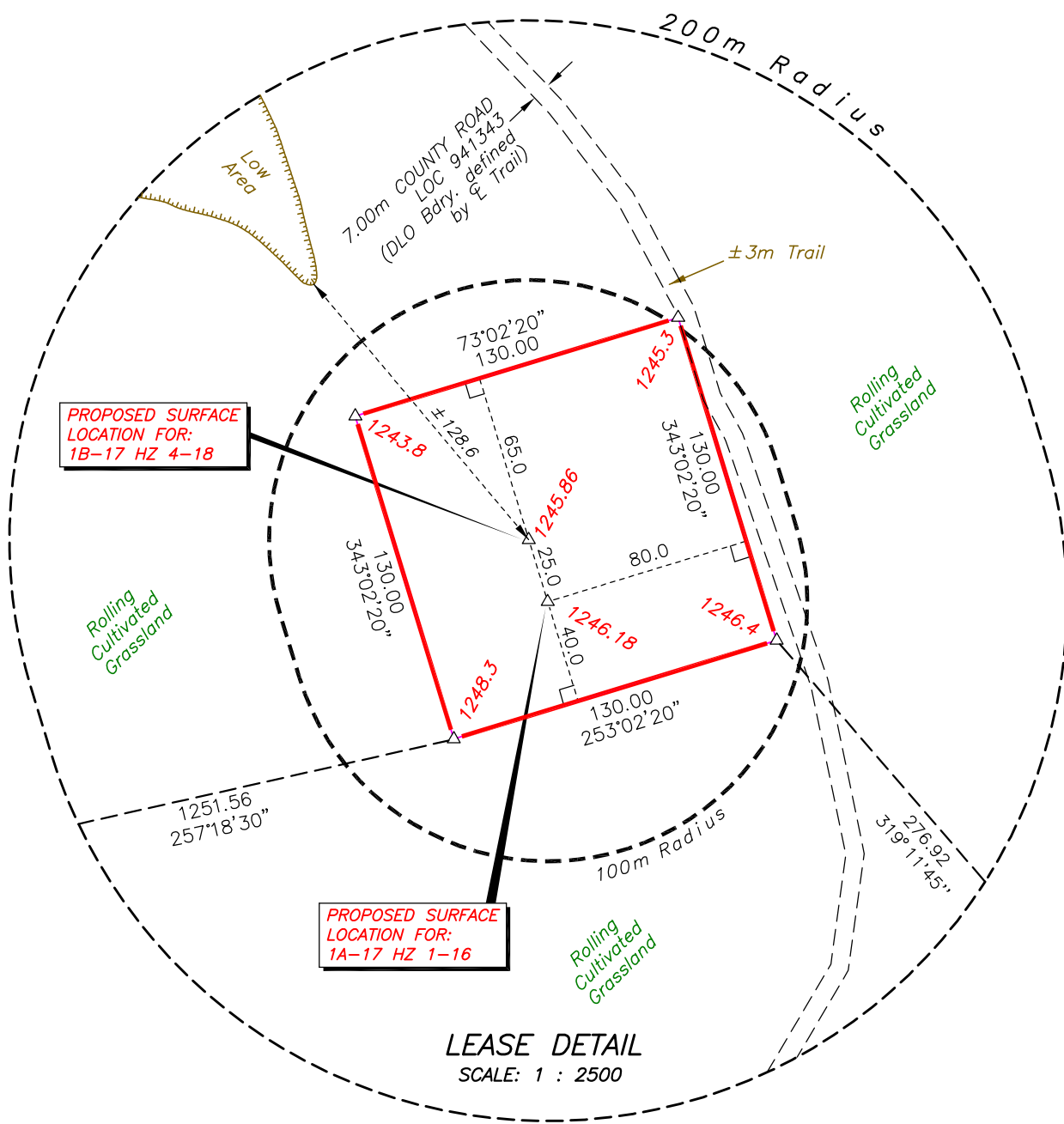
N.E.8
Fd.l.

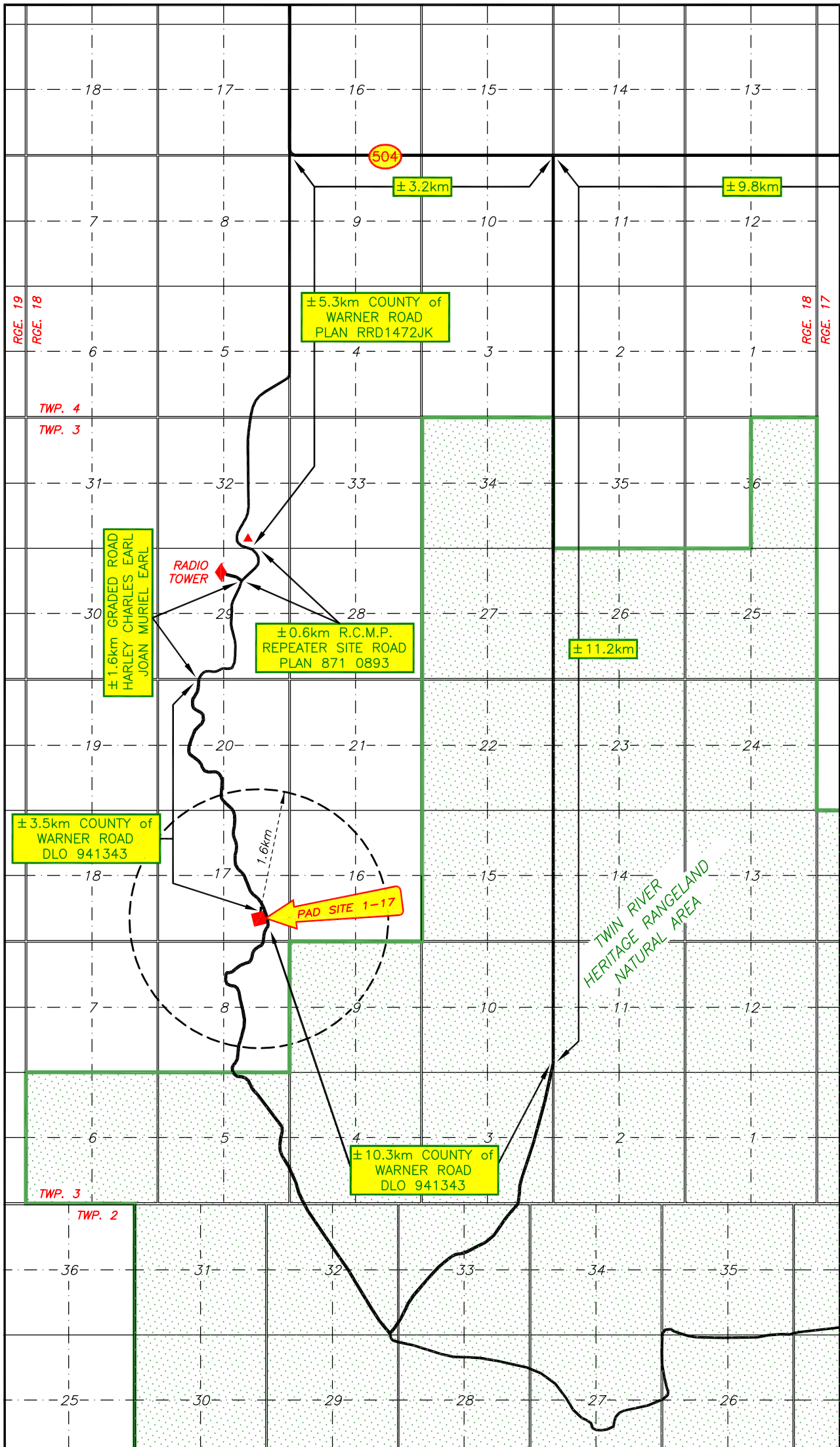
Gate



DRILL PATH DETAIL







TO INTERSECTION
WITH HIGHWAY 4
AT TOWN OF WARNER



RESIDENCE & ACCESS SKETCH OPTION 'A'

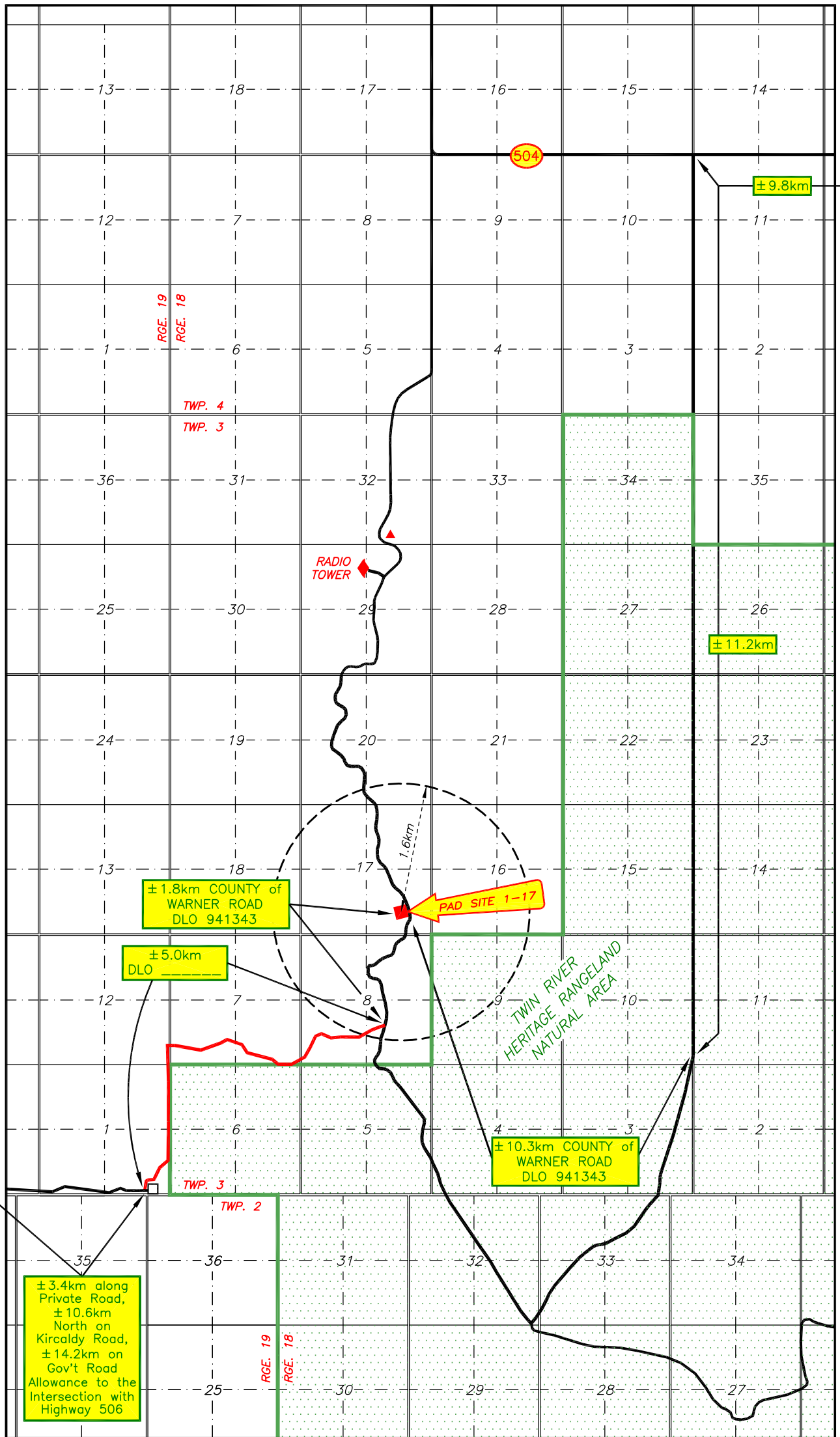
NOTE:
NOT ALL INDIVIDUAL
RESIDENCES OUTSIDE
THE 1.6km RADIUS
HAVE BEEN SHOWN

0 500 1000 2000 3000 4000



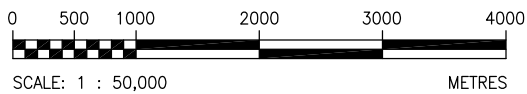
SCALE: 1 : 50,000 METRES

OCCUPIED RESIDENCES are shown as thus.....▲
UNOCCUPIED RESIDENCES are shown as thus.....△

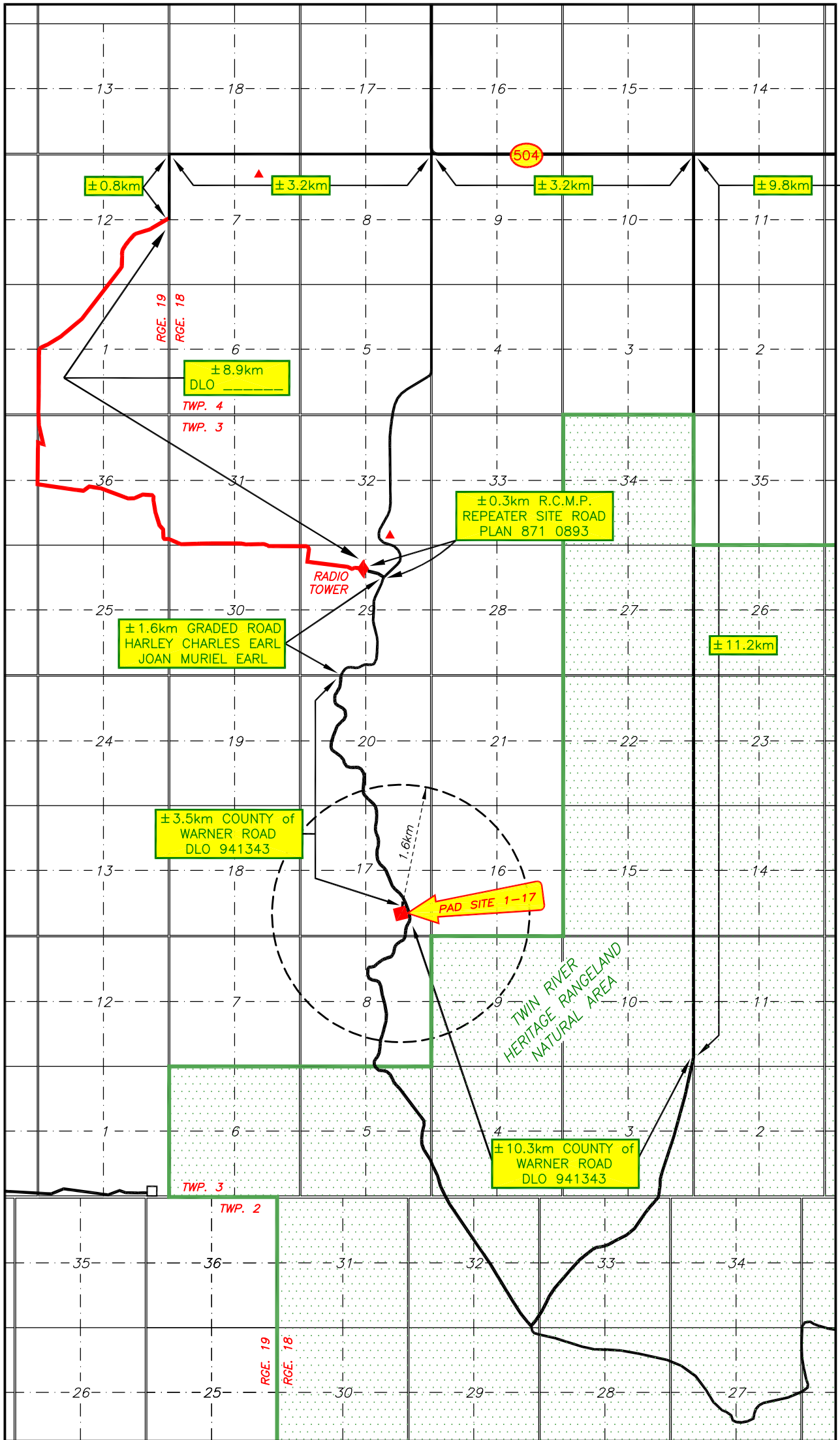


RESIDENCE & ACCESS SKETCH OPTION 'B'

NOTE:
 NOT ALL INDIVIDUAL
 RESIDENCES OUTSIDE
 THE 1.6km RADIUS
 HAVE BEEN SHOWN



OCCUPIED RESIDENCES are shown as thus....▲
 UNOCCUPIED RESIDENCES are shown as thus....△

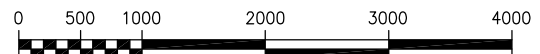


TO INTERSECTION
WITH HIGHWAY 4
AT TOWN OF WARNER



RESIDENCE & ACCESS SKETCH OPTION 'C'

NOTE:
NOT ALL INDIVIDUAL
RESIDENCES OUTSIDE
THE 1.6km RADIUS
HAVE BEEN SHOWN



SCALE: 1 : 50,000 METRES

OCCUPIED RESIDENCES are shown as thus.....▲
UNOCCUPIED RESIDENCES are shown as thus.....△