Telecommunications Development Overview

Rogers Proposed Telecommunications Tower Site: C9793 – Beaver Valley

Proposed:	90m Guyed Telecommunications Tower
Coordinates:	44.463581°, -80.418040°
Part of PIN:	37154-0117 (LT)
Municipal Address:	495928 Grey Road 2, Ravenna ON N0H 2E0

This project is a federal essential service undertaking under the Proponent's mandate to provide and/or improve coverage and capacity of the cell network in the region.

Like all areas of the province, your community is experiencing explosive demand for wireless services. As people rely more on wireless devices such as smartphones, tablets and laptops for business and personal use, network improvements are required to ensure high quality voice and data services are available.

The prosperity of Canadians depends on telecommunications services to do their jobs, conduct business, learn new skills and build communities. These services play an important role in the lives of all Canadians, enabling them to participate in today's digital economy and to access health care, education, government, and public safety services.
General information relating to antenna systems is available on ISED Canada's Spectrum Management and Telecommunications website at:
http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf01702.html

Brief Site details:

Proposed:	90m Guyed Telecommunications Tower
Coordinates:	44.463581°, -80.418040°
Part of PIN:	37154-0117 (LT)
Municipal Address:	495928 Grey Road 2, Ravenna ON N0H 2E0

Abutting Municipalities: There are no abutting municipalities within 6x tower height of the proposed site.

Having no viable options for co-location or rooftop siting, the site is a separate stand-alone site. The proposed guyed tower will be enclosed in a 10m x 10m (fenced) secured Compound. This site will be built to accommodate antennas and equipment for future technology services and provide for colocation with other carriers.

The selected site for the tower is located on agricultural land, setback from residential zones, and outside hazard lands, ensuring minimal disruption to nearby residential uses and amenity areas. The closest residential use not owned by the landlord is 292 meters away, providing a substantial buffer that mitigates potential impacts. The site benefits from existing vegetation and mature tree lines, offering natural screening to aid in integrating the compound into the landscape. Positioned within a transportation corridor, the site is accessible while unobtrusive to public roadways, and identified as a preferred location within the local protocol. The site also maintains a significant distance from Areas of Natural and Scientific Interest (ANSI) and Provincially Significant Wetlands (PSW), exceeding six times the tower height, thus protecting sensitive environmental zones.

Moreover, the site is selected for its topographical features, ensuring optimal functionality for RF and TX connections while attempting to preserve long and short-range viewscapes through existing tree and building cover, minimizing visual impact. While there are no rural or commercial uses available withing the search area, the location on the selected agricultural zoned property ensures minimal disruption to arable farmland, aligning with land use priorities. The agreeable landlord facilitates smooth operational logistics, and the location outside the Niagara Escarpment Plan further underscores its suitability. This careful consideration of topographical prominence, viewscapes, and potential off-site impacts makes this site the best choice, balancing operational needs with community and environmental considerations.

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Zoning:
The site is within the transportation corridor. The property zoned as agricultural, setback from residential zones and located outside of hazard lands. Within the search area, the only properties large enough to support a tower are zoned agricultural, hazard, and special agricultural. The closest residential use not owned beneficially by the LL is 292m away from outermost point of guy wire, and the site maintains a setback from ANSI and PSW designations that is greater than 6x tower height.

Protocol:
We have confirmed that The Town of the Blue Mountains does have a locally enacted land use protocol for Wireless Telecommunications Facilities, entitled *The Blue Mountains Protocol for Establishing Telecommunication Facilities*.

Accordingly, **we are required to comply with procedures described in this local protocol,** which are aligned with **ISED Canada 's default protocol CPC-2-0-03 Issue 6 (July 2022)** "*Radiocommunication and Broadcasting Antenna Systems*" and is adapted to include local concerns in the project justification and siting selection. One of the key concerns of this process is that such installations are deployed in a manner that considers the surroundings in exercising the mandate to deploy necessary infrastructure.

- **We note that the approval of this Site and its design is under the exclusive jurisdiction of the Government of Canada through Innovation, Science and Economic Development Canada ("ISED"). The LUA has no jurisdiction in this matter other than as a commenting body to ISED and the Applicant.**

Other Municipal Considerations:
As telecommunication facilities are regulated under federal policy, provincial legislation such as the *Ontario Building Code* and the *Planning Act* including zoning by-laws, provincial conservation authority and site plan control ***do not apply*** to these facilities. The tower is exempt from the application of Clause 2.1.2.1(1)(c) which otherwise requires a designated structure to be designed in accordance with Part 4 of the OBC. As a federal undertaking, the tower structure design falls strictly under ISED's jurisdiction and the standards of CSA S37-01, not the OBC.

Public Notification:
Under local policy Section K, we are to provide formal notice to any property owners within the prescribed distance of six times the tower height of the proposed tower or 500m, whichever is greater. In this case, 6x the tower height is larger. There are thirty-two (32) properties, that fall within 6x tower height, measured from the outermost supporting structure (90m x 6 + tower width adjustment = 612.5m from the tower centre). All property owners within the prescribed distance will be mailed a notification package containing details of the tower, inviting questions and comments, and information regarding the virtual public information session. A sign on the property and a newspaper ad will also be posted containing the required details.

Telecommunications Tower Application

Attached you will find the following documents for Telecom Tower Siting Application:

☒ Telecommunications Application
☒ Site Selection Justification Report, including:
- **☒ Residential Buffer Map**
- **☒ Public Consultation map**
- **☒ Health Canada Attestation**
- **☒ Tower Specifics**
- **☒ Horizontal distance between tower and adjacent property map**

☒ Owner's Authorization
☒ Site Overview PowerPoint
- **☒ Subject Property Photo Rendering**

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- ☒ **Tower Type Justification**

☒ **Site Plan, showing entire tower leasehold property**

☒ **Comment & Response Matrix**

☒ **Tower Height Justification Letter**

☒ **Public Consultation Details:**

- ☒ **Draft Sign**
- ☒ **Draft Newspaper Notice**
- ☒ **Draft Public Information Package for mailing**

Town of The Blue Mountains
Application for Municipal Concurrence for Telecommunication Facilities

Planning Services
Town of The Blue Mountains
P.O. Box 310, 32 Mill Street
Thornbury, Ontario N0H 2P0

Phone: (519) 599-3131 ext. 263
Fax: (519) 599-7723
Email: planning@thebluemountains.ca

The following is required to be completed for the Municipal review of and recommendations for Applications for Municipal Concurrence for Telecommunication Facilities:

- Please complete Parts A, B, C, and E for all applications.
- Applicants ***shall*** consult with Planning Services prior to preparing and submitting an application for municipal concurrence. Pre-consultation is mandatory and provides an opportunity to discuss the proposal with Planning Staff and to determine specific application requirements, including any additional reports/studies that may be required. Pre-consultation application forms can be found on the Town of The Blue Mountains website. Please return the complete form and associated fee to planning@thebluemountains.ca. Please review the current Planning Fees By-law for all related fees.
- Submission requirements, in accordance with the Protocol for Establishing Telecommunication Facilities are as follows:

1. Evidence of completion of Pre-Consultation in the form of a completed Comments-Response Matrix.

2. A completed Application for Municipal Concurrence for Telecommunication Facilities.

3. A cheque payable to the Corporation of the Town of The Blue Mountains for the associated application fee for the amount listed in the current Planning Fees By-law.

4. A Site Selection Report (including documentation outlining the steps taken by the Proponent to investigate all non-support structure and co-location options and a rationale explaining why a new support structure in a particular location is the only viable alternative).

5. A letter of intent by the owner of the subject lands to enter into a lease agreement to permit establishment of a telecommunication facility, as well as a copy of the deed and survey of the property. Note: The Proponent is required to provide the Town with a copy of the lease agreement for the site location once it has been finalized.

6. A colour photograph of the subject property with a superimposed scaled image of the proposed antennae, support structure and facilities.

7. A site plan drawn to a 1:250 metric scale showing the entire property upon which the telecommunication facility will be located, site grading, property lines, existing or proposed buildings, fences, buffering, lighting, existing and proposed landscaping, access, parking, driveways, utilities and services, easements, significant vegetation or wetlands, and the type and height of the proposed support structure. Should the subject lands consist of a significant land area, then two (2) drawings of different scales may be permissible; 1) 1:250 Facility Site Plan and 2) 1:1000 Entire Property.

8. Scaled engineered drawings, stamped, and certified by a professional engineer of the proposed support structure required. These drawings must indicate the construction specifications of the proposed support structure. In the case of antennas and assorted support structures proposed to be mounted on other structures, an engineer's report is also required to address the predicted effects and the safe installation of the facilities on the existing building or structure and confirmation the result of the proposed installation will not jeopardize the structural integrity of the structure or building and will incorporate safety measures to protect the public from harm.

9. A map showing the location of the proposed support structure installation and all adjacent properties within 300 metres or six times the proposed tower height, whichever is greater, of the subject property.

10. Appropriate documentation from the road authority having jurisdiction concerning new entrances.

11. Appropriate documentation as requested by the applicable conservation authority or the NEC for their review of proposals involving construction in a flood plain, filling within regulated areas, alterations to a watercourse, or crossing of a watercourse.

12. Assurance shall be given, in a form that is to the satisfaction of the Town, that appropriate arrangements have been made to completely dismantle and remove the telecommunication facility from the property, by the Proponent or owner of the lands upon the termination of its use.

PART A

APPLICANT INFORMATION

1. Registered Owner Name(s): MCKINLAY, SUSAN JANET; MCKINLAY, DUNCAN ROBERT

Address: 495928 Grey Road 2, Ravenna ON N0H 2E0

Tel: (705) 888-3722 Fax: _____

Date Acquired by Current Owner(s): _____

2. Authorized Applicant/Agent Name: Victoria McKay, acting as an Agent for Rogers Communications

Profession:

- ☐ Planner
- ☐ Lawyer
- ☐ Engineer
- ☐ Architect
- ☐ Surveyor
- ☑ Other (specify): Site Acquisition Contractor

Address: 12317 Funaro Cres Tecumseh ON N9K 1B2

Tel: 519-890-7153 Fax: _____

3. Send all correspondence to:

- ☐ Owner
- ☑ Applicant/Agent

Note:

In all cases, the registered owner(s) of the subject lands is considered the Applicant(s), however, an Authorized Applicant may be designated to submit this application on behalf of the owner(s). A single registered owner is assumed to be the Authorized Applicant, unless otherwise designated under this form. Where there are two or more registered owners, only one Authorized Applicant must be designated to represent all other registered owners for the purposes of correspondence under Part A and the Affidavit under Part C of the Application. An Authorized Applicant may also be a proponent who is not a registered owner, such as a holder of an option to purchase the subject lands, provided this form is completed.

If the application involves two or more separate properties under separate ownership, separate authorization must be provided from each registered owner and be attached.

An Agent is not the Applicant and cannot be designated as an Authorized Applicant. An Agent may only be Authorized to represent the registered owner(s) and/or Authorized Applicant. Where an Authorized Agent is designated by the registered owner(s) for the purposes of correspondence under Part A and the Affidavit under Part C of the Application, it is not necessary to designate an Authorized Applicant.

Applicant Authorization is not required for a signing officer duly authorized by a corporation.

PART B

PROPERTY AND PROPOSAL INFORMATION

4. Location of the Lands Subject to This Application (Subject Lands)

Municipal Address: 495928 Grey Rd 2, Ravenna ON N0H 2E0

Legal Description: PT LT 14-15 CON 9 COLLINGWOOD AD IN Co20429 EXCEPT PART 2 EXPROPRIATIO

5. Description of Entire Property

Lot Frontage (m): 611

Lot Depth (m): 677

Lot Area (m^2): 413647

6. Description of the Area Affected (if only a portion of the property)

Frontage (m): 15

Depth (m): 15

Area (m^2): 4495

7. Official Plan Designation: Agricultural within Transportation C

8. Zoning: Agricultural

9. Proposal Description (including tower height, design, associated buildings/structures, etc.)

90m Guyed telecommunications tower with neutral colouring, unless otherwise requested by Transport Canada

An equipment shelter will also be installed at the base of the proposed tower and the entire site

will be surrounded by a security fence with a locked gated access point.

10. Abutting and Nearby Land Uses

Does the owner of the subject lands or the applicant own or have a legal interest in any lands abutting the subject lands? If yes, describe to what extent.

No. The Applicant (Rogers) has no beneficial interest in the property owners' rest of property. The Subject property forms the entirety of the telecommunications facility Site Plan and includes only the Applicant's exclusive leasehold area, together with non-exclusive lease parts for access and hydro. The Applicant's Site Plan doesn't extend to the property owner's adjacent land outside of the applicant's exclusive leasehold.

Describe the present use on all properties abutting and opposite the subject lands:

North: Agricultural and Hazard

East: Agricultural & Residential to the north east

South: Agricultural and EP

West: Agricultural

11. Environmental Constraints

Indicate whether any of the following environmental constraints apply to the subject lands:

X Hazard Lands, located outside of the subject property (leasehold)

☐ Wetlands

☐ Floodplains

☐ Groundwater and Watershed Management

☐ Wooded Areas and Forest Management

☐ Fisheries, Threatened and Endangered Species and Significant Wildlife

☐ Cultural Heritage Resources

☐ Lands Used for Former Orchard Production

☐ Streams, Ravines, Floodplains, and Lakes

☐ Area of Natural and Scientific Interest (ANSI)

☐ Aggregate Resources

☐ Karst Topography

☐ Solid Waste Management Buffer

☐ Sewage Treatment Plan Buffer

☐ Niagara Escarpment Plan

12. Storm Water Management

Describe any alterations proposed for grading, drainage, and storm water management:

No changes to grade, other than to match existing grades adjacent to the compound & provide positive drainage away from the tower, shelters and hydro pad towards the natural slope of the site

Indicate the type of drainage for the property (sewers, ditches, swales, other):

Existing: Tiled field, Surface drainage only

Proposed: Provide positive drainage away from site, towards natural slope of site

13. Road Access

☐ Provincial Highway

☑ County Road

☐ Open and Maintained Municipal Road Allowance

☐ Non-maintained/Seasonally Maintained Municipal Road Allowance

☐ Private Right-of-way

PART C

AFFIDAVIT

THIS SECTION MUST BE SIGNED IN THE PRESENCE OF A COMMISSIONER OF OATHS

I Victoria Mckay Duckworth of the Town of Bay Roberts in the County / Region of Bay Roberts solemnly declare that all the statements contained in this application and all the information provided is true, and I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the **CANADA EVIDENCE ACT.**

It is understood and agreed that the fee submitted with this application covers only routine processing costs (i.e. review by municipality). It is further understood and agreed that any additional costs or requirements with this application, including any additional information and processing requirements, or as may otherwise be required or incurred and charged to or by the municipality (i.e. Planning, Legal or Engineering Fees, O.M.B. Hearing Costs, Agreements, Special Studies, other Approvals or Applications, and any other related matters), will be my responsibility to provide to and/or reimburse the municipality for same. Failure to pay all associated costs may result in refusal of this application and/or collection by the municipality in like manner as municipal taxes, or any other means legally available to the municipality.

Declared before me in the City of Toronto in the County/Region of Greater Toronto Area this 20th day of June, 20 24.

Signature of Registered Owner or Authorized Applicant/Agent — June 20, 2024 Date

Verified by signNow 06/20/2024 17:18:36 UTC d3b08cfe0c2a466b80aa

Signature of Commissioner of Oaths — June 20, 2024 Date

Verified by signNow 06/20/2024 17:18:21 UTC c7027c3c51e0445d9ff4

Narek Mirzoyan - Licensed Paralegal & Notary Public
Law Society of Ontario Licensee #P12490

Electronically signed & declared via online video before me in Toronto, ON while the Affiant / Declarant was located in Bay Roberts, NL on June 20, 2024, as per Ontario Reg. 431/20 & the Electronic Commerce Act.

Narek Mirzoyan NOTARY PUBLIC ONTARIO

SignNow e-signature ID: fe66e76b57...
06/20/2024 17:16:29 UTC

PART D

PERMISSION TO ENTER

This form can be completed by the registered owner(s), Authorized Applicant, or Authorized Agent.

To: The Mayor and Council
Town of The Blue Mountains
32 Mill Street
P.O. Box 310
Thornbury, Ontario N0H 2P0

I, Victoria McKay, hereby authorize the members of staff of the Town of The Blue Mountains to enter onto the above-noted property for the limited purposes of evaluating the merits of this application.

Date: 06/20/2024 Signature 

Date: _____ Signature _____

PART E

AUTHORIZATION OF APPLICANT/AGENT

Separate Owner's Authorization Attached

This Authorization must be completed:

(a) if the Applicant is other than the registered owner(s) of the subject lands;

(b) if there are two or more registered owner(s);

(c) if an Agent is representing the registered owner(s)

This Authorization does NOT need to be completed if there is a single Registered Owner of the subject lands who is also the Applicant and is not represented by an Agent.

To: The Mayor and Council
Town of The Blue Mountains
32 Mill Street
P.O. Box 310
Thornbury, Ontario N0H 2P0

I/We, _____,

being the registered owner(s) of _____

hereby authorize _____ to act

on my/our behalf as Authorized Applicant/Agent in this Application.

Date:_____Signature _____

Date:_____Signature _____

ROGERS

AUTHORIZATION

RE: ROGERS COMMUNICATIONS INC.

Proposed 90m Guyed Telecommunications Facility

SITE CODE & NAME: C9793 - Beaver Valley

PROPERTY DESCRIPTION:

PIN: 371540117 ARN: 433108001213400

Legal Description: PT LT 14-15 CON 9 COLLINGWOOD AS IN CO20429 EXCEPT PT 2 EXPROP PL 854; THE BLUE MOUNTAINS
Municipal Address: 495928 Grey Road 2, Ravenna ON N0H 2E0

MUNICIPALITY:

In accordance with a lease agreement between Rogers and the Owner(s), Rogers is authorized to bring application to the local land use authority on its own behalf for the purposes of fulfilling its review and municipal concurrence duties under the governing protocol for telecommunications tower siting.

This letter is my/our authorization to allow Rogers Communications Inc. or their agents, full access to commence municipal approvals for the construction of a telecommunications site on the subject premises.

Rogers Communications Inc. has my/our permission to act as my/our Agent to obtain permits or any other documentation, including copies of all building drawings from the municipality, or any architect or engineer, required to obtain any necessary municipal approvals for this site. This authorization also applies to all Ministry of Transportation Approvals

This is only an agreement for Rogers Communications Inc. to obtain municipal and other approvals for the above-mentioned site at Rogers Communications Inc.'s cost and risk.

OWNER / COMPANY NAME: MCKINLAY, SUSAN JANET; MCKINLAY, DUNCAN ROBERT

Aug 7, 2023 Aug 7/23

Name: Duncan Robert McKinlay Date: Name: Susan Janet McKinlay Date:

If the property owner is other than an individual, I/we have authority to bind the Owner

Rogers Site C9793 – Beaver Valley

Site Selection/Justification Report – Wireless Communications Site

Prepared for: Town of The Blue Mountains
Carter Triana, Intermediate Planner
(519) 599-3131 ext. 262 ctriana@thebluemountains.ca

Proposed: 90m Guyed Tower
Coordinates: 44.463484°, -80.417842°
PIN: 37154-0117 (LT) ARN: 424200000714200

Rogers Communications Inc. | 8200 Dixie Road | Brampton ON L6T 0C1
Victoria McKay (Contractor) | Municipal Relations | 519-890-7153 | j_mckay@rogers.com

Contents

Introduction

Like all areas of the province, your community is experiencing an explosive demand for wireless services. As people rely more on wireless devices such as smartphones, tablets and laptops for business and personal use, network improvements are required to ensure high quality voice and data services are available.

This document outlines the site selection process in accordance with the requirements of Innovation, Science and Economic Development Canada's (ISED) Spectrum Management and Telecommunications Policy, CPC-2-0-03, Issue 6 (CPC) updated July 2022, and provides a description of the system associated with the proposed wireless communication installation on property owned by ***MCKINLAY, SUSAN JANET; MCKINLAY, DUNCAN ROBERT,*** known municipally as:

495928 Grey Road 2, Ravenna ON N0H 2E0
PIN: 37154-0117 (LT) ARN: 424200000714200
Legal Description: PT LT 14-15 CON 9 COLLINGWOOD AS IN CO20429 EXCEPT PT 2 EXPROP PL 854; THE BLUE MOUNTAINS, *The Land Titles Division for Grey Land Registry Office (No. 16)*

The prosperity of Canadians depends on telecommunications services to do their jobs, conduct business, learn new skills and build communities. These services play an important role in the lives of all Canadians, enabling them to participate in today's digital economy and to access health care, education, government, and public safety services.

As a Tier 1 Carrier, Rogers' federal mandate is to fill coverage gaps such that all residents have access to wireless high speed broadband services.

Background and Coverage Requirement

A wireless telecommunications facility is a puzzle piece in a very complex radio network, whether that site is situated in an urban, suburban or rural setting. Customer demand and sound engineering principles direct where sites are required to be located. As people rely more on wireless devices such as smartphones, tablets and laptops for business and personal use, network improvements are required to ensure high quality voice and data services are available. For a wireless network to be reliable, an operator must provide "seamless" coverage so that gaps in the network are avoided. Gaps create dropped calls and overall poor service to customers. Rogers is committed and mandated by its license to ensure the best coverage and service to the public and private sectors.

The proposed site at *the above-noted location* will achieve the necessary engineering coverage objectives for our network. The location will also have the ability to provide much relied upon communication services in the area such as EMS Response, Police and Fire; improved wireless signal quality for area residents, those traveling along the major roads, as well as providing local subscribers with Rogers's 4G/5G wireless network coverage and capacity for products and services such as iPhones, smartphones, tablets and wireless internet through surrounding area.

Rationale for New Telecommunication Infrastructure

In identifying a potential new tower location and design, Rogers examined the surrounding area, assessed the visibility of the structure and considered possible host sitings. Rogers evaluated the best location for a new facility in compliance with protocol-established procedures, based on the following criteria:

Coverage Objectives

ROGERS WIRELESS RADIO ENGINEERING DEPARTMENT

ABBREVIATED SEARCH MAP

SITE NAME: **Beaver Valley Rd**	LOCATION CODE: **C9793**
RF PLANNER: **Daniel Ayele**	TELEPHONE #: **(343) 558-0806**
DATE: **2023-05-03**	

Proposed Search Map Centre:	**Lat: 44.468941**	**Long: -80.422833**

SITE DESCRIPTION: This will be a 6 sectored LTE/5G site. It will also accommodate antennas and equipment for future technology services.

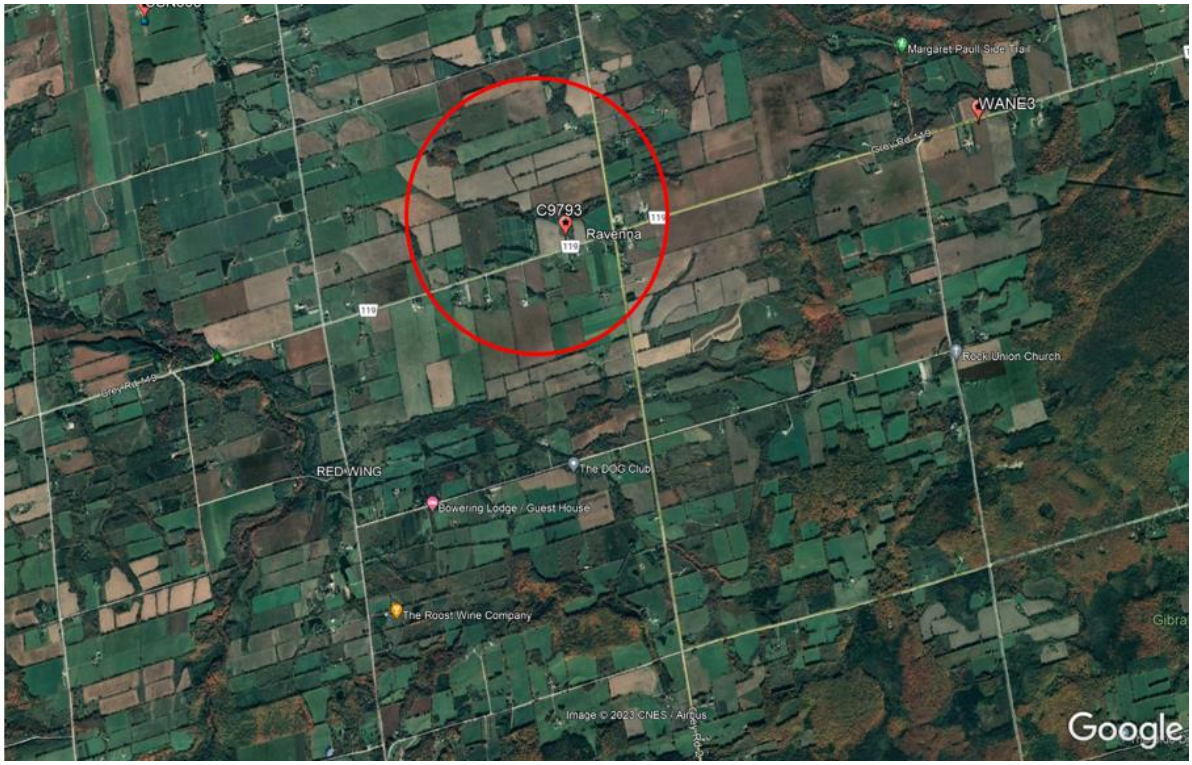
Proposed Antenna Mounting Height: 90m Guyed tower

Candidates: the attached search map shows the limits of the proposed candidate.

Co-locates: NA

Special Comments: NA

Candidate Search Area



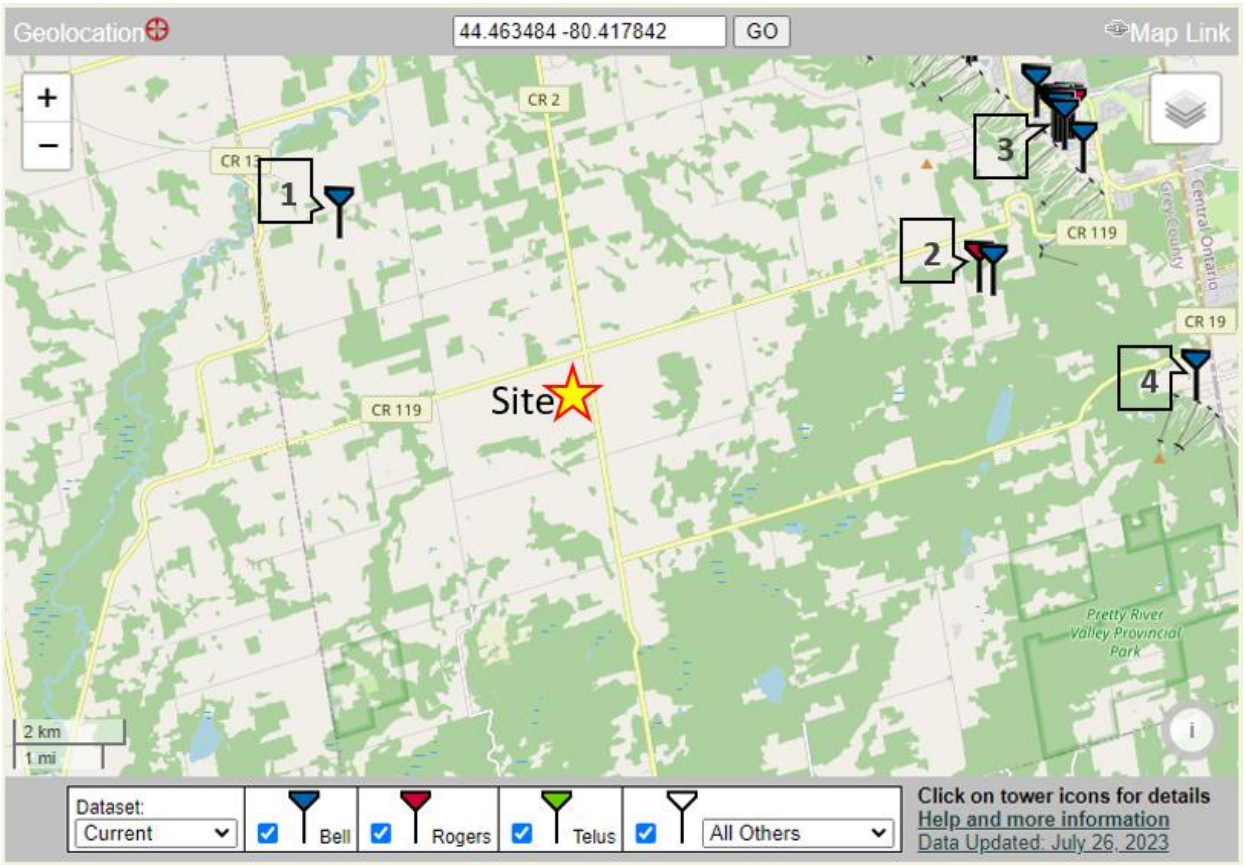
Candidate Search Process

Before building a new antenna-supporting structure the proponent is required to first consider:

- Sharing an existing antenna system, modifying or replacing a structure, if necessary.
- Locate, analyze, and attempt to use any feasible existing infrastructure such as high-rise rooftops, water towers, etc.

Co-location opportunities on existing area carrier structures

- The following local coverage map depicts the local tower inventory of all carriers within a 10km radius of the Search Centre.



Closest structures evaluated:

Structure	Location	Distance	Reason for disqualification
Bell tower	N44.4875 W80.4719	5.1km	Rejected because the tower is not tall enough to satisfy coverage requirements; outside of search area
Bell/Rogers tower	N44.478869 W80.3301	7.2km	Rejected because Rogers' equipment is already installed on this tower; outside of the search area
Bell/Rogers Cluser	N44.5036 W80.3114	9.6km	Rejected because all structures in this cluster are small-cell towers, too small to support Rogers' antennas
Bell tower	N44.461842 W80.281933	10.8km	Rejected because tower is too small to support Rogers' antennas

There are no existing antenna structures in the area which may be utilized for co-location within two kilometers of the proposed site and a new structure must be erected to address the coverage deficiency. In particular, the closest existing tower is 5.1km away from the proposed site, too far to satisfy coverage requirements.

Evaluation of Other Local Existing Structures / Rooftops

After disqualifying any colocation opportunities, the proponent next evaluates existing structures that are located within the specific geographical area offering the required height and that may be available to support new equipment or to use for co-location.

Existing Structure Notes:

During the site selection process for this proposed, Rogers determined that no other existing infrastructure opportunity was available in our target area that was suitable for our network.

Consideration of municipal surplus properties

Within the Proponent search area, the Proponent sought to identify any surplus municipal properties that may have been satisfactory to meet the coverage objectives.

☒ No suitable municipal properties were found

☐ Suitable municipal properties were identified:

The Ravenna Community and Memorial Park was considered but was disqualified due to space and inadequate setbacks.

Aeronautical Issues

The proposed site is 20.7km west of Collingwood Airport (CNY3) and 8.9km southwest from the closest heliport – Collingwood/Alta Heliport (CWD2). Accordingly, it is well outside of any airport zoning or safety restrictions.

Private Candidate Review Process

Having identified an initial, qualified candidate from the preceding exercise, secondary candidates are then evaluated. Private candidates are reviewed starting with the center of the search area and moving out in a radial pattern until a large enough commercial, industrial or agricultural property option was available that could mitigate public concern to the greatest extent possible within the technical coverage limitations.

In every case, of all candidates reviewed that were determined to fall within the necessary search area for technical coverage requirements, 9 candidate properties were short-listed for detailed study.
Of these candidates, each was reviewed and scored to determine which mitigated all defined factors of public concern to the greatest extent possible within the following primary constraints:

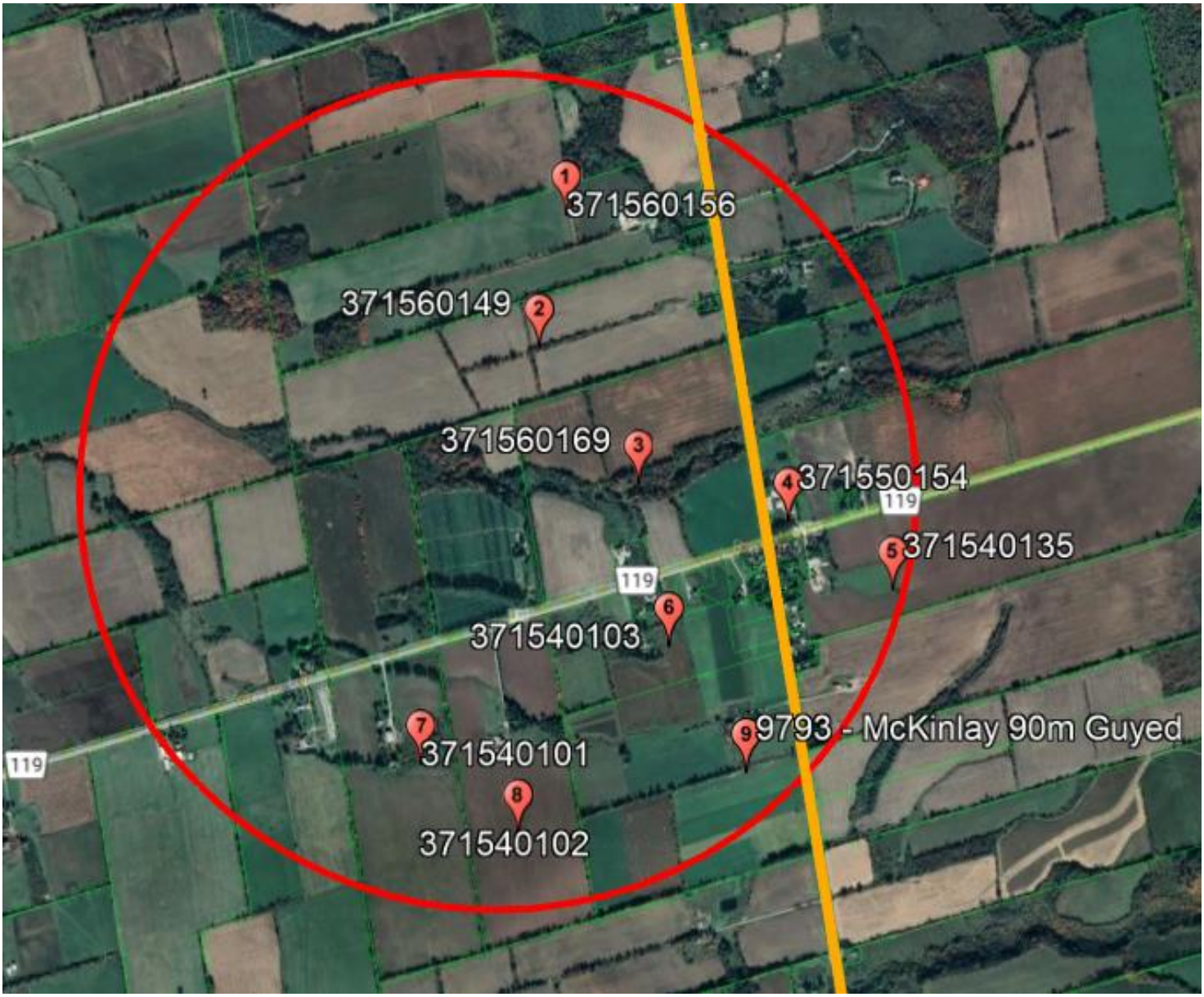
a) proximity to Search Nominal coordinates and optimization of ground elevation
b) RF and Transmission Qualification to meet the federal coverage mandate
c) Civil scoring and qualification, assessing soils, access, utilities and land availability

d) Willing landlord and clearance of property title issues
e) Compliance to the greatest extent possible with Land Use Authority Planning objectives within the restraints of technical coverage
f) optimization of the above to mitigate all factors of public concern to the greatest extent possible within the technical restraints of the combined local environment.

The selected candidate site is defended as the candidate property most suitable to minimize the local impact of necessary infrastructure to the greatest extent reasonably possible, in view of the mitigative measures available and undertaken for the stipulated factors of good siting methodology.

There are extremely limited property options with the footprint required to support a guyed tower in this area.
Each of the private candidate sites were disqualified/qualified for the following reasons:

1	371560156	Over 50m lower elevation, requiring much taller tower; utilizes arable farmland; Zoned Special Agricultural, inadequate hydro; disqualified
2	371560149	Much lower elevation; all arable farmland; zoned agricultural; not setback from Hazard zone; inadequate access and hydro; disqualified
3	371560169	Doesn't setback residential uses to greatest extent; within hazard lands; new access from road required; 30m lower elevation; disqualified
4	371550154	Ravenna Community and Memorial Park - Does not have enough space on property for guyed tower while remaining out of the way; doesn't setback residential uses to greatest extent; disqualified
5	371540135	Slightly higher elevation; zoned agricultural; doesn't mitigate residential uses to greatest extent possible; no visual mitigation from residents; inadequate access, crossing over arable farmland and access would be in the way; disqualified
6	371540103	Zoned agricultural; does not setback residential uses to greatest extent possible; 15m lower elevation; disqualified
7	371540101	Over 50m lower elevation; not in transportation corridor; zoned agricultural; inadequate hydro; less visual mitigation; disqualified
8	371540102	30m lower elevation; not in transportation corridor; zoned agricultural; inadequate hydro and access; less visual mitigation; uses arable farmland; disqualified
9	371540117	Within transportation corridor, zoned agricultural; mitigates residential uses to greatest extent possible, provides RF and TX connection, agreeable landlord, utilizes existing access and tree cover for visual mitigation, impacts least amount of arable farmland as possible; outside of NEC; selected candidate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371560156
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371540101
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9793 - McKinlay 90m Guyed
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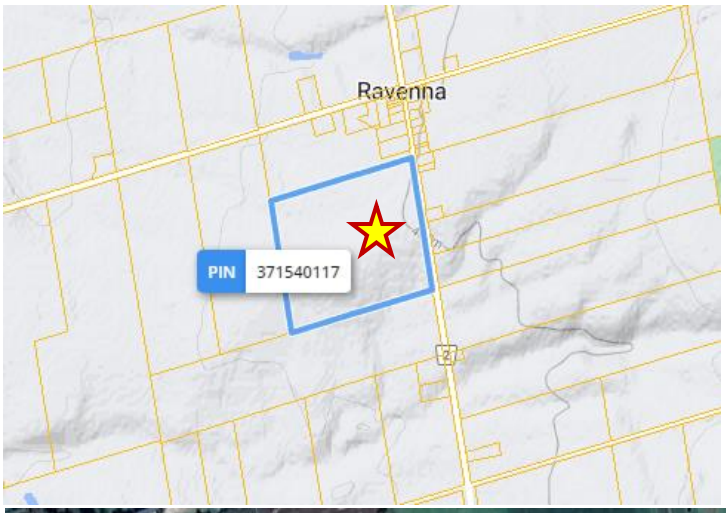
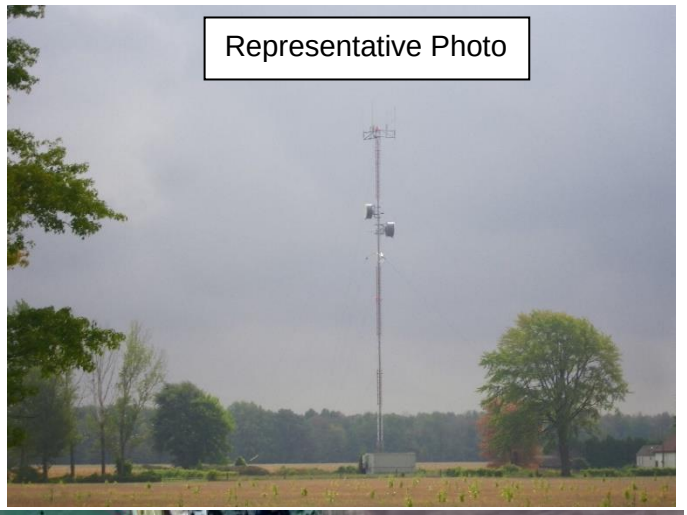
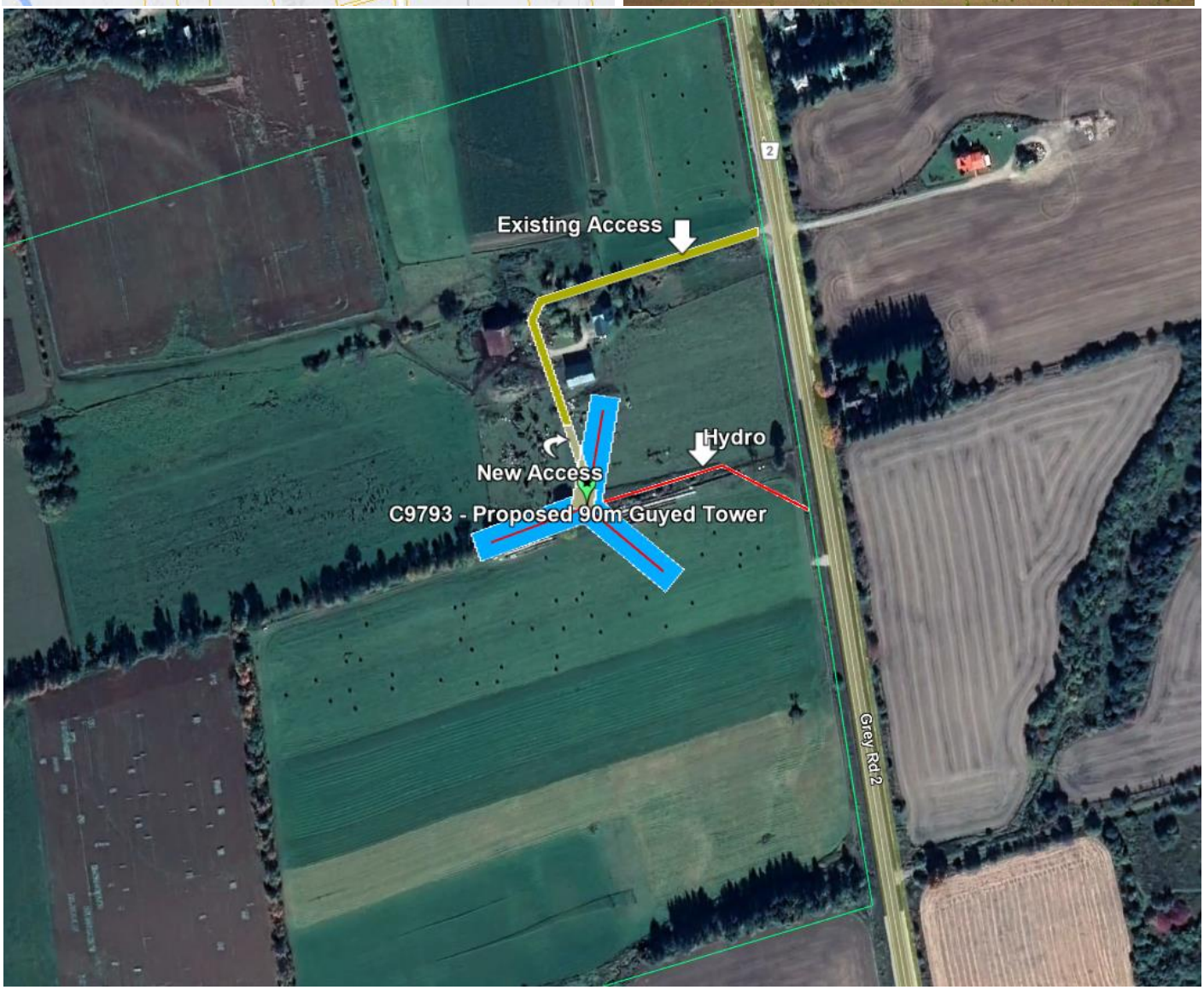
371540102

Proposed Facility Location and Site Sketch

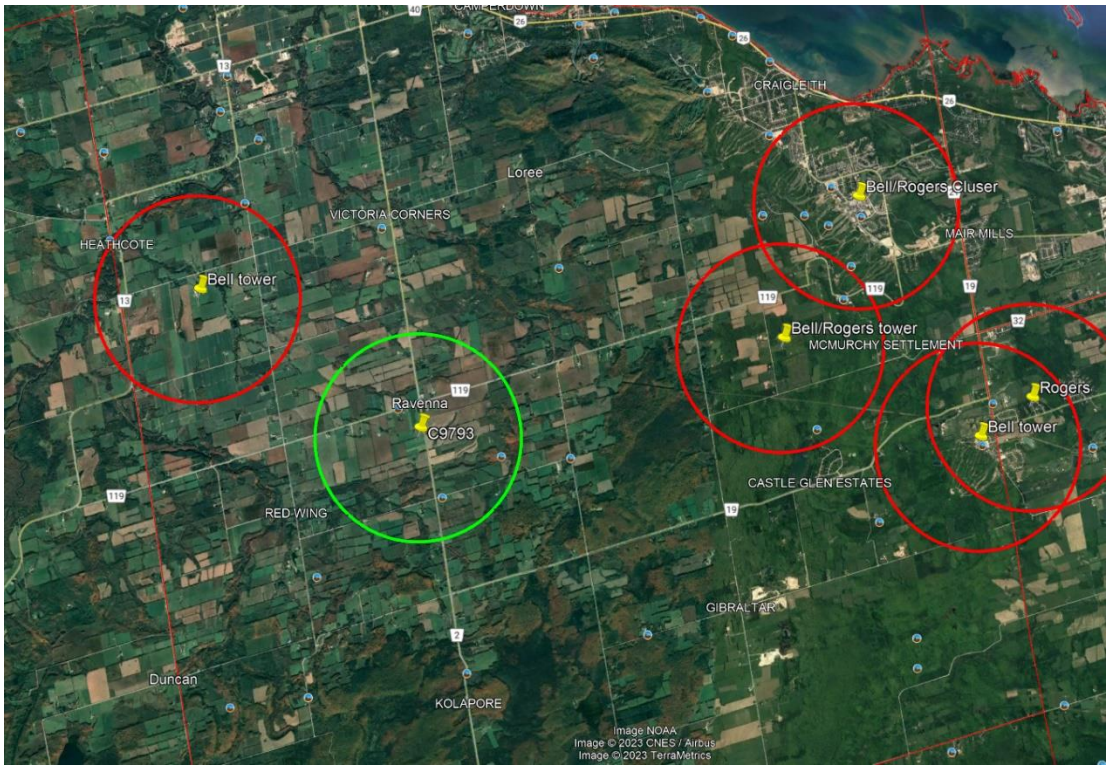






Coverage Map

The coverage map below depicts the general “4G/5G Good Coverage Radius” for the selected candidate, together with other local neighbouring carrier facilities.



As evidenced on above map, any existing towers are too far away to satisfy coverage requirements and a new tower must be erected to address the coverage deficiency.

Residential Use Setback Map

Compliance with Zoning Intent

Although federal undertakings are exempt from the application of zoning bylaws, sitings consider the intent of locating on non-residential properties with optimal (>1x tower height) setbacks from residential use.

Within the search area, the only properties large enough to support a tower are zoned agricultural, hazard, and special agricultural. The other zones within the search area are residential, commercial, and public use, all of which are small properties and none of which have enough space to support a guyed tower. The closest rural zoned properties are outside of the transportation corridor and are too far away to satisfy the coverage requirements for this proposed tower. Any other land in the area is under NEC, which has been avoided.

This siting is located on A - Agricultural zoned land and abutted on all sides by A zoned properties, with H - Hazard nearby. The proposed tower is setback away from the hazard lands on the property.

The site candidate fully complies in all respects with good siting design tenets and guidelines, and in particular, all optimum design criteria of the CPC.

Local Properties in Notification Radius (32 properties identified)

There are thirty-two (32) private-owned properties that fall within the local protocol's stipulated notification radius of six times tower height, measured from the outermost guy wire (90m x 6 + tower width adjustment = 612.5m). Accordingly, direct (mailing) notice of the proposal is required to be circulated to these property owners.

The facility **is not** located within 3x tower height from a neighbouring municipality. Accordingly, notice of the proposal is not required to be circulated to additional LUAs.

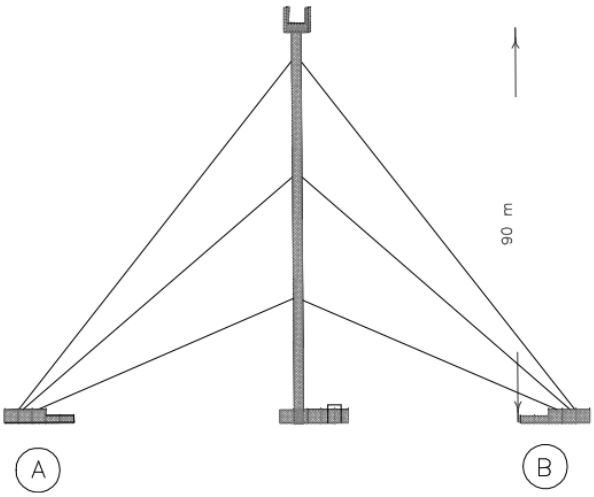
Description of Proposed Tower:

Specifics:

90m Guyed Tower enclosed in a 10m x 10m (fenced) secured Compound. This site will be built to accommodate antennas and equipment for future technology services and provide for colocation with other carriers.

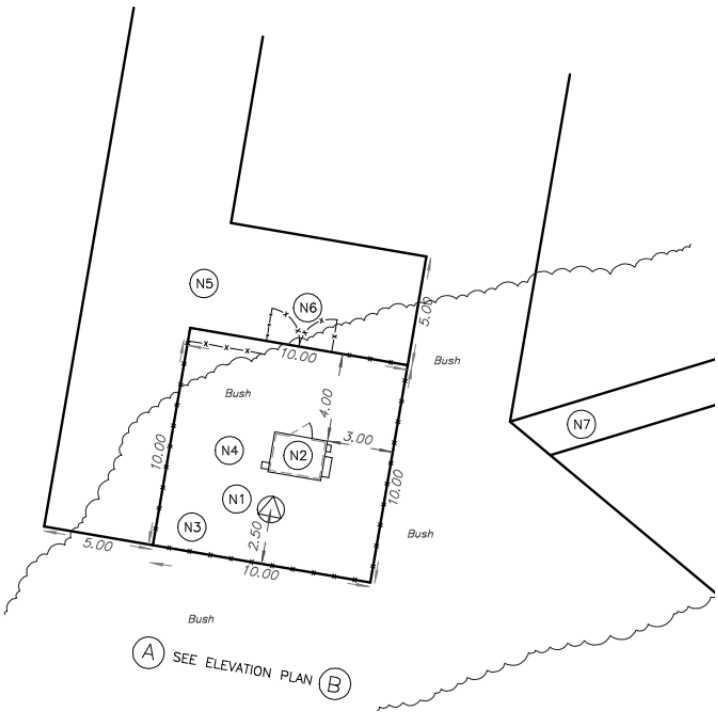
ELEVATION PLAN

NOT TO SCALE



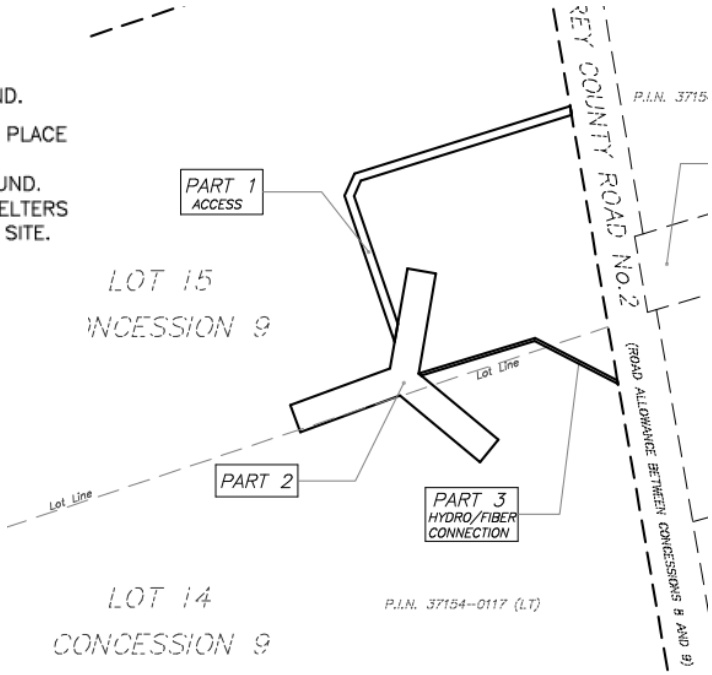
PROPOSED COMPOUND LAYOUT PLAN

SCALE 1:200



NOTES

- (N1) PROPOSED STEEL GUYED TOWER. PAINT COLOUR SUBJECT TO NAV CANADA REQUIREMENTS. ANTENNA NUMBER AND LOCATIONS TO BE DETERMINED. FOUNDATION DESIGN PENDING SOIL REPORT.
- (N2) PROPOSED RADIO EQUIPMENT SHELTER ON REINFORCED CONCRETE SLAB.
- (N3) PROPOSED 2.4 m HIGH CHAIN LINK SECURITY FENCE TOPPED WITH BARBED WIRE SURROUNDING THE COMPOUND.
- (N4) REMOVE EXISTING TOPSOIL, PROOF ROLL SUBGRADE AND PLACE 300 mm GRANULAR ACROSS COMPOUND AREA. MATCH INTO EXISTING GRADES ADJACENT TO THE COMPOUND. PROVIDE POSITIVE DRAINAGE AWAY FROM THE TOWER, SHELTERS AND HYDRO PAD TOWARDS THE NATURAL SLOPE OF THE SITE. REINSTATE ALL DISTURBED AREAS.
- (N5) PROPOSED GRAVEL ACCESS WAY.
- (N6) PROPOSED CHAIN LINK GATE.
- (N7) PROPOSED HYDRO/FIBER CONNECTION.



Protocol

The Town of the Blue Mountains does have a locally enacted protocol entitled *ATT 1 PDS.21.021 The Blue Mountains Protocol for Establishing Telecommunication Facilities* which adapts ISED Canada's default protocol CPC-2-0-03 Issue 6 (July 2022) "*Radiocommunication and Broadcasting Antenna Systems*" to address issues in the local environment. Accordingly, the Proponent is required to follow the terms of the local protocol as well as the default federal CPC in addressing general and specific requirements. One of the key concerns of this process is that such installations are deployed in a manner that considers the surroundings in exercising the mandate to deploy necessary infrastructure.

CPC Protocol i5: https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08777.html

The policy outlines the land use consultation process relevant to evaluating federally mandated wireless communication installations. In accordance with the *local protocol,* proponents must provide a notification package to the local public (including nearby residences, community gathering areas, public institutions, schools, etc.), neighbouring land-use authorities, businesses, and property owners, etc. located within a radius of 6-times tower height (612.5m from tower centre). **In this case, there are thirty-two (32) other public properties outside of the beneficial ownership of the Landlord that fall within the Blue Mountains' 6x tower height radius, requiring direct notice.**

Other Municipal Considerations

As we are regulated under federal policy, provincial legislation such as the Ontario Building Code and the Planning Act including zoning by-laws and site plan control do not apply to these facilities.

Additional Public Consultation Obligations

Pursuant to local protocol section K, the Proponent is required to place a Public Notice in the local community newspaper, inviting comments about this proposal from the public, and participation in the stipulated Public Comment and Reply process.

The proponent will also place a sign along the street frontage of the property notifying the public of the proposal to establish a telecommunication facility on the site and hold a virtual public information meeting.

Compliance with Environmental Obligations

Canadian Impact Assessment Act

We note that pending updates to the ISED (formerly Industry Canada) CPC 2-0-03 protocol have not yet been formalized, and such updates will recognize that, among other changes, the CEAA(2012) was repealed in 2019 and superseded by the Impact Assessment Act (S.C. 2019, c. 28, s. 1).
ISED requires that the installation and modification of antenna systems be done in a manner that complies with appropriate environmental legislation. This includes the Canadian Impact Assessment Act, 2019 (CIAA 2019), where the antenna system is incidental to a physical activity or project designated under CIAA 2019 or is located on federal lands.

In addition, notices under ISED's default public consultation process require written confirmation of the project's status under CIAA 2019 (e.g., whether it is incidental to a designated project or, if not, whether it is on federal lands).

- **Rogers Communications Inc. attests** that the radio antenna system as proposed for this site is not located within federal lands or forms part of or incidental to projects that are designated by the *Regulations Designating Physical Activities* or otherwise designated by the Minister of the Environment as requiring an environmental assessment. **In accordance with the Canadian Impact Assessment Act, 2019, this installation is excluded from assessment.** For additional detailed information, please consult the Canadian Impact Assessment Act. https://laws.justice.gc.ca/eng/acts/I-2.75/index.html

Species at Risk and Migratory Birds Convention Act

In addition to CIAA requirements, proponents are responsible to ensure that antenna systems are installed and operated in a manner that respects the local environment and that comply with other statutory requirements, such as those under the *…Migratory Birds Convention Act, 1994*, and the *Species at Risk Act*, as applicable.

ISED CPC-2-0-03 Section 4.2 requires that
"…the steps the proponent took to ensure compliance with the general requirements of this document including the *Impact Assessment Act* (CIAA), Safety Code 6, etc." be addressed by the proponent in Public Reply Comments relating to this matter.

Steps taken to address concerns

The Ministry of Natural Resources and Forestry (MNRF), The Natural Heritage Information Centre (NHIC), manages a list of over 17,000 records associated to Natural Heritage Areas in Ontario. EORN and Rogers tower site locations are overlayed with national heritage areas in Ontario and presented in a table and map format.

A study is prepared for each tower location's surrounding natural areas contained within the 1km x 1km grid from Natural Heritage Information Centre (NHIC) data which includes:

- Ontario's rare species
- plant communities
- wildlife concentration areas
- natural heritage areas

The data in this table means that sometime in the last 50 years - someone reported seeing the species within the grid.

This study demonstrates that:

- **The proposed site is not within 120m from ANSI designations**
- **The proposed site is not within 120m from PSW designations**
- Within the greater local environment of 1km, *Eastern Meadowlark* and *Bobolink* are noted as threatened species. These species are reported frequently through out Eastern Ontario on the SAR table, but are not provided suitable habitat within the tower field.
- As it relates to migratory bird strikes, the available evidence recognizes the minimal impact from structures lower than 100m in height.

While the environmental impact is insufficient to preclude the installation of a tower at this location, the Proponent nonetheless recognizes these natural heritage concerns and takes additional steps in advising construction teams that they need to look for nesting animals prior to the start of ground clearing. Appropriate remedies are deployed which may include delaying construction until nesting season ends, at which point any impact is eliminated.

Environmental Reporting By Tower Location

Tower Information			Maps	Environmental Parameters			
Tower Name	Tower Type	Site Type		ANSI (120m)	PSW (120m)	Species at Risk	Federal lands
C9793 – Beaver Valley	Guyed	New		N	N	See table below	N

OGF ID	Element Type	Common Name	Specific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT
948197	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17NK4623
948197	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	THR	17NK4623

Federal Requirement: Attestations

In addition to the requirements for consultation with municipal authorities and the public, Rogers must also fulfill other important obligations including the following:

Canadian Impact Assessment Act

ISED requires that the installation and modification of antenna systems be done in a manner that complies with appropriate environmental legislation. This includes the Impact Assessment Act, 2019 (IAA 2019), where the antenna system is incidental to a physical activity or project designated under CIAA 2019 or is located on federal lands.

- ***Rogers Communications Inc. attests*** *that the radio antenna system as proposed for this site is not located within federal lands or forms part of or incidental to projects that are designated by the Regulations Designating Physical Activities or otherwise designated by the Minister of the Environment as requiring an environmental assessment.* ***In accordance with the Canadian Impact Assessment Act, 2019, this installation is excluded from assessment.*** *For additional detailed information, please consult the Canadian Environmental Assessment Act https://laws.justice.gc.ca/eng/acts/I-2.75/index.html*

Transport Canada's Aeronautical Obstruction Marking Requirements

Aerodrome safety is under the exclusive jurisdiction of NAV Canada and Transport Canada. An important obligation of Rogers' installations is to comply with Transport Canada / NAV CANADA aeronautical safety requirements. Transport Canada will assess the proposal with respect to potential hazards to air navigation and notify Rogers of any painting and/or lighting requirements for the antenna system.

- ***Rogers Communications Inc. attests*** that the radio antenna system described in this notification package will comply with Transport Canada / NAV Canada aeronautical safety requirements.

For additional detailed information, please consult Transport Canada.
https://tc.canada.ca/en/corporate-services/acts-regulations/list-regulations/canadian-aviation-regulations-sor-96-433

Engineering Practices:

- ***Rogers Communications Inc. attests*** that the radio antenna system as proposed for this site will be constructed in compliance with the National Building Code and The Canadian Standard Association and comply with good engineering practices including structural adequacy.

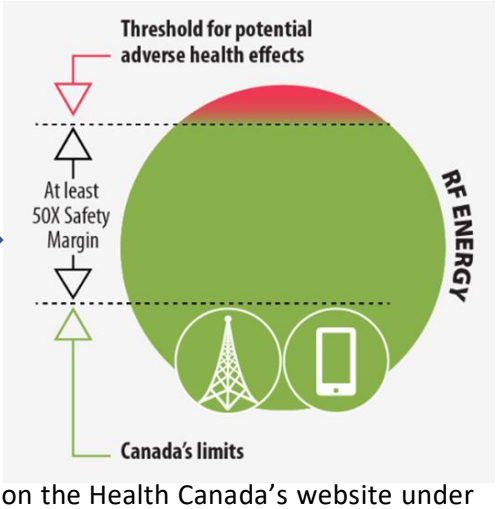
Health Canada's Safety Code 6 Compliance

Health Canada is responsible for research and investigation to determine and promulgate the health protection limits for Exposure to the RF electromagnetic energy. Accordingly, Health Canada has developed a guideline entitled "Limits of Human Exposure to Radiofrequency Electromagnetic Field in the Frequency Range from 3kHz to 300 GHz – Safety Code 6".

The exposure limits specified in Safety Code 6 were established from the results of hundreds of studies over the past several decades where the effects of RF energy on biological organisms were examined. Radiocommunication, including technical aspects related to broadcasting, is under responsibility of the Ministry of Industry (Innovation, Science and Economic Development Canada), which has the power to establish standards, rules, policies and procedures. ISED, under this authority, has adopted Safety Code 6 for the protection of the general public. As such, ISED requires that all proponents and operators ensure that their installations and apparatus comply with the Safety Code 6 at all times.

- ***Rogers Communications Inc. attests*** that the radio antenna system described in this notification package will at all times comply with Health Canada's Safety Code 6 limits, as may be amended from time to time, for the protection of the general public including any combined effects of additional carrier co-locations and nearby installations within the local radio environment.

This figure shows the Canadian limits that incorporate a safety margin of at least 50-fold from the threshold for possible adverse health effects:



More information in the area of RF exposure and health is available on the Health Canada's website under Health Canada's Radiofrequency Exposure Guidelines.
https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/radiation/safety-code-6-health-canada-radiofrequency-exposure-guidelines-environmental-workplace-health-health-canada.html

https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11467.html

Proponent Contact Information

Rogers Communications Inc.
c/o Simpson-McKay Inc.
12317 Funaro Cres, Tecumseh ON N9K 1B2

Attn: Victoria McKay, Public & Municipal Relations Coordinator
(519) 890-7153 j_mckay@rogers.com

Conclusion

Reliable wireless communication services are a key enabler of economic and social development across Canada. They facilitate the growth of local economies by providing easy access to information, and connectivity for residents and business alike.
The infrastructure proposed is suitable for the development over the long term and protects public health and safety.

In response to this growing demand for wireless services, Rogers has worked to find the most suitable location for a new telecommunications structure in our efforts to provide improved wireless services to residents, businesses and the traveling public.

In addition to meeting consumer needs, technological upgrades are also critical to ensuring the accessibility of emergency services such as fire, police and ambulance. Wireless communications products and services used daily by police, EMS, firefighters and other first responders, are an integral part of Canada's safety infrastructure.

Rogers feels that the proposed site is well situated to provide improved wireless voice and data services in the targeted area and designed to have minimal impact on surrounding land uses and meets the intent of the governing protocol.

Rogers looks forward to working with the Town to
provide improved wireless services to the community.

Should you have any further questions or comments, please feel free to contact me via email at j_mckay@rogers.com, or via phone at (519) 890-7153.

Yours truly,

Victoria McKay
Public & Municipal Relations Coordinator
Contractor: Rogers Communications Inc.
☎ **Cell: (519) 890-7153**
✉ **eMail: j_mckay@rogers.com**

ROGERS

AUTHORIZATION

RE: ROGERS COMMUNICATIONS INC.

Proposed 90m Guyed Telecommunications Facility

SITE CODE & NAME: C9793 - Beaver Valley

PROPERTY DESCRIPTION:

PIN: 371540117 ARN: 433108001213400

Legal Description: PT LT 14-15 CON 9 COLLINGWOOD AS IN CO20429 EXCEPT PT 2 EXPROP PL 854; THE BLUE MOUNTAINS
Municipal Address: 495928 Grey Road 2, Ravenna ON N0H 2E0

MUNICIPALITY:

In accordance with a lease agreement between Rogers and the Owner(s), Rogers is authorized to bring application to the local land use authority on its own behalf for the purposes of fulfilling its review and municipal concurrence duties under the governing protocol for telecommunications tower siting.

This letter is my/our authorization to allow Rogers Communications Inc. or their agents, full access to commence municipal approvals for the construction of a telecommunications site on the subject premises.

Rogers Communications Inc. has my/our permission to act as my/our Agent to obtain permits or any other documentation, including copies of all building drawings from the municipality, or any architect or engineer, required to obtain any necessary municipal approvals for this site. This authorization also applies to all Ministry of Transportation Approvals

This is only an agreement for Rogers Communications Inc. to obtain municipal and other approvals for the above-mentioned site at Rogers Communications Inc.'s cost and risk.

OWNER / COMPANY NAME: MCKINLAY, SUSAN JANET; MCKINLAY, DUNCAN ROBERT

Aug 7, 2023 Aug 7/23

Name: Duncan Robert McKinlay Date: Name: Susan Janet McKinlay Date:

If the property owner is other than an individual, I/we have authority to bind the Owner

Rogers Site C9793

PROPOSED 90M GUYED TOWER

TOWN OF THE BLUE MOUNTAINS

Why do we need towers?

- Wireless telecom facilities are like a puzzle piece in a very complex radio network, working together to fill gaps and spread signal without overlapping
- As people rely more on wireless devices network improvements are required to ensure high quality voice and data services are available.

Benefits of the telecom towers include:

- Closing coverage gaps
  - Improve areas with low/no signal strength (no/low bars) to enhance connectivity for users
- Increased capacity on networks
  - Enhance areas with existing signal but poor call quality or slow data speeds to ensure seamless communication and browsing
    - Fixing areas you have bars, but cannot make a call/lack speeds and connection
- Increased public safety
  - Enable more reliable and widespread emergency services, including the ability for EMS to remotely assess and assist patients in transit using advanced 5G technologies.
- Improved municipal services & tourism experience
  - Boost local tourism by enabling visitors to share their experiences instantly on social media, attracting more tourists and promoting the area.
  - Facilitate efficient municipal operations with 5G-enabled services for online applications, virtual council meetings, and real-time event notifications to residents.
- Allows future development and new technology
  - Deploying 5G towers designed to accommodate both current and future technologies, enabling scalable network growth without significant infrastructure expansion.

Search Area of proposed tower

Rogers RF engineers determined a new 90m guyed tower would be required to satisfy coverage requirements in this area.

The defined search area surrounds Grey Rd 2 & Grey Rd 119. The primary area of concern for the tower to cover is Ravenna, and to take out roaming traffic data.

ROGERS WIRELESS — RADIO ENGINEERING DEPARTMENT

ABBREVIATED SEARCH MAP

SITE NAME: Beaver Valley Rd	**LOCATION CODE:** C9793
RF PLANNER: [redacted]	**TELEPHONE #:** [redacted]
DATE: 2023-05-03	

Proposed Search Map Centre: **Lat:** 44.468941 **Long:** -80.422833

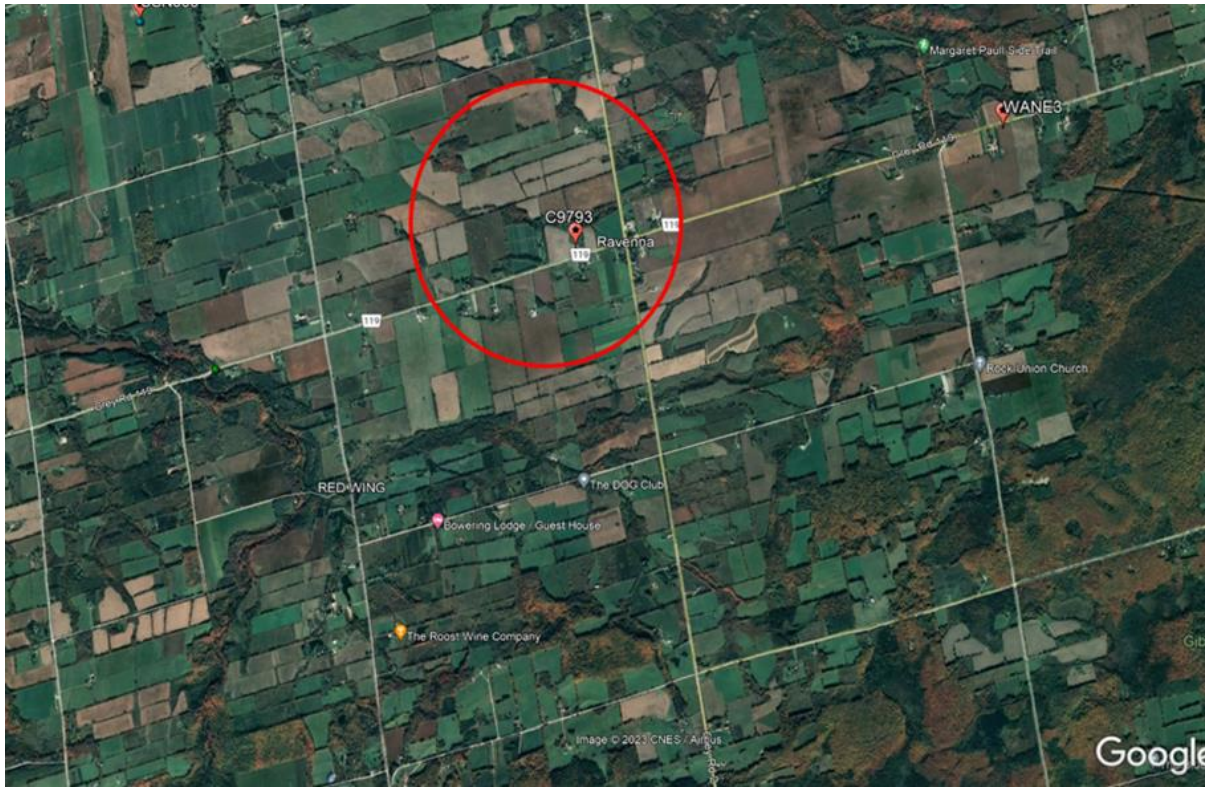
SITE DESCRIPTION: This will be a 6 sectored LTE/5G site. It will also accommodate antennas and equipment for future technology services.

Proposed Antenna Mounting Height: 90m Guyed tower

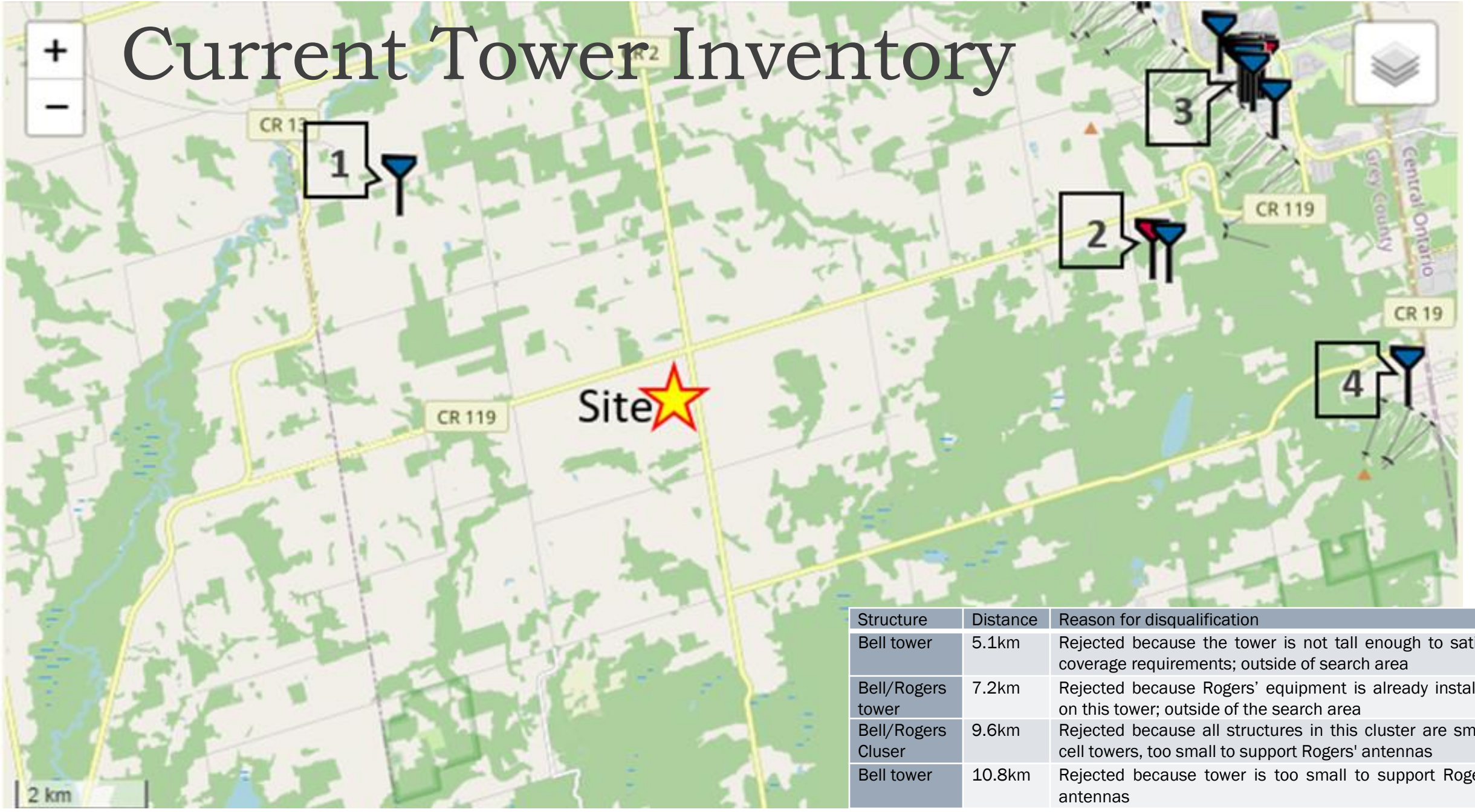
Candidates: the attached search map shows the limits of the proposed candidate.

Co-locates: NA

Special Comments: NA



Current Tower Inventory



Structure	Distance	Reason for disqualification
Bell tower	5.1km	Rejected because the tower is not tall enough to satisfy coverage requirements; outside of search area
Bell/Rogers tower	7.2km	Rejected because Rogers' equipment is already installed on this tower; outside of the search area
Bell/Rogers Cluser	9.6km	Rejected because all structures in this cluster are small-cell towers, too small to support Rogers' antennas
Bell tower	10.8km	Rejected because tower is too small to support Rogers' antennas

There are no existing towers which may be used for co-location within 2km and a new structure must be built to address the coverage deficiency.

Site Selection Considerations

- Technical Compliance: The proposed candidate meets all technical requirements for radio frequency and transmission specifications. It offers the optimal conditions for maintaining reliable wireless voice and data services in the targeted area.
- Environmental Considerations: The location of the proposed candidate minimizes its impact on environmentally sensitive areas such as the Long Point Region Conservation Authority (LPRCA) and Provincially Significant Wetlands (PSW). By maintaining required setbacks and distances, the proposed tower respects environmental regulations and preserves natural habitats.
- Residential Mitigation: Our priority was to mitigate the impact on nearby residential areas. The proposed candidate achieves this by minimizing the number of properties within the specified separation distance guidelines. This strategic placement ensures that only a limited number of private properties are within proximity to the tower, reducing visual and environmental disruptions.
- Operational Viability: Shifting the tower to other locations on the property or to alternative properties would not only compromise technical requirements but also disrupt daily farming operations on the property. The proposed candidate strikes a balance between operational viability and regulatory compliance.
- Community Impact: Placing the tower further back in the field or in alternative locations would not necessarily alleviate concerns but could instead create new challenges. The current proposed location optimizes coverage while mitigating impacts to the greatest extent possible.
- Visibility Considerations: We understand the landscape's limitations and have implemented measures to address visual concerns. Dense treed areas and forests to the north and west of the proposed site provide substantial visual mitigation. Additionally, existing hydro lines are utilized, and the tower's design blends with similar infrastructure, aligning with principles of visual mitigation.
- Agreeable Landlord: Notwithstanding all the considerations and constraints, we must have an agreeable landlord, and find a location on their property they agree to.

Tower Selection

Self Support Tower

- Available Heights: 40m-60m
- Compound Space Required: 25 x 25m

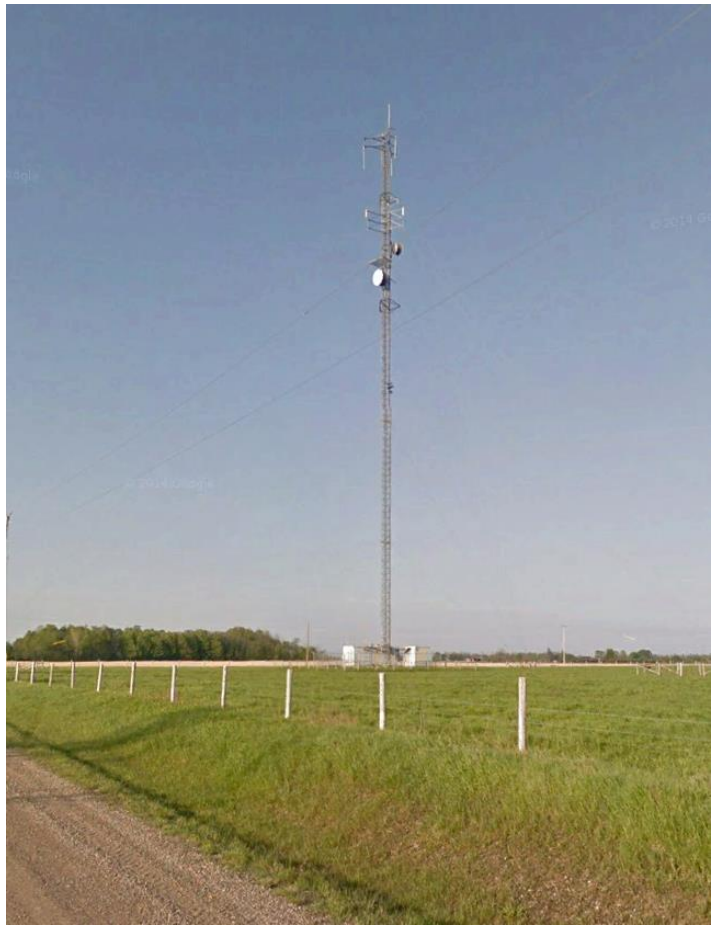
Typical Site Conditions:

- Rural & Urban zoned higher elevation areas
- Industrial properties
- Heavy forests
- Farmlands with limited space

Site Notes:

- Self-support tower does not offer required height
- Self-support tower requires much larger compound space
- Self support tower would use less farmland overall
- Self-support tower offers less visual mitigation strategies between the increased tower structure supports and the enlarged compound size

Disqualified



Guyed Tower

- Available Heights: 70m-125m
- Compound Space Required: 15 x 15m

Typical Site Conditions:

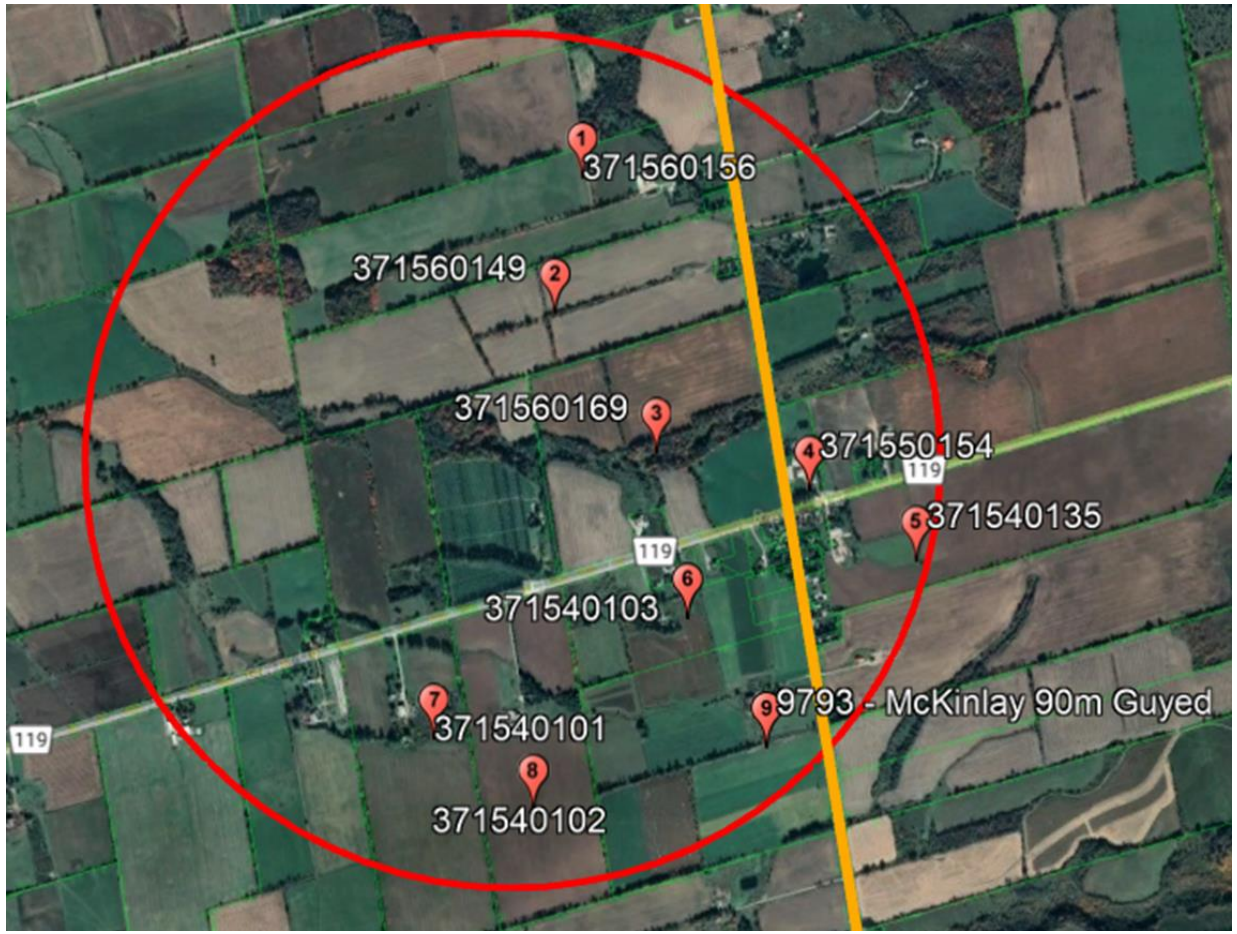
- Rural & Urban zoned areas
- Farmlands
- Forests
- Industrial properties
- Properties where land-size permits

Site Notes:

- Guyed tower allows for required height
- Guyed tower requires less compound space
- Guy wires allows landlord to safely maneuver farming equipment around and under guy wires
- Guyed tower offers greater visual mitigation opportunities with the tower being a much narrower structure that because much less visible as the distance from tower increases, and with smaller compound space required

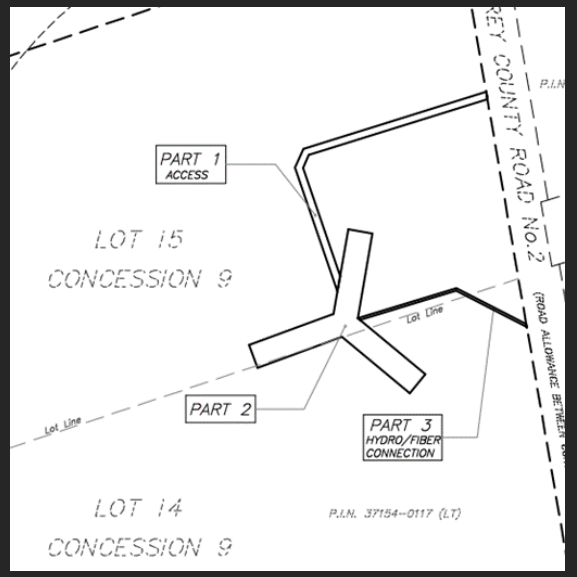
Qualified

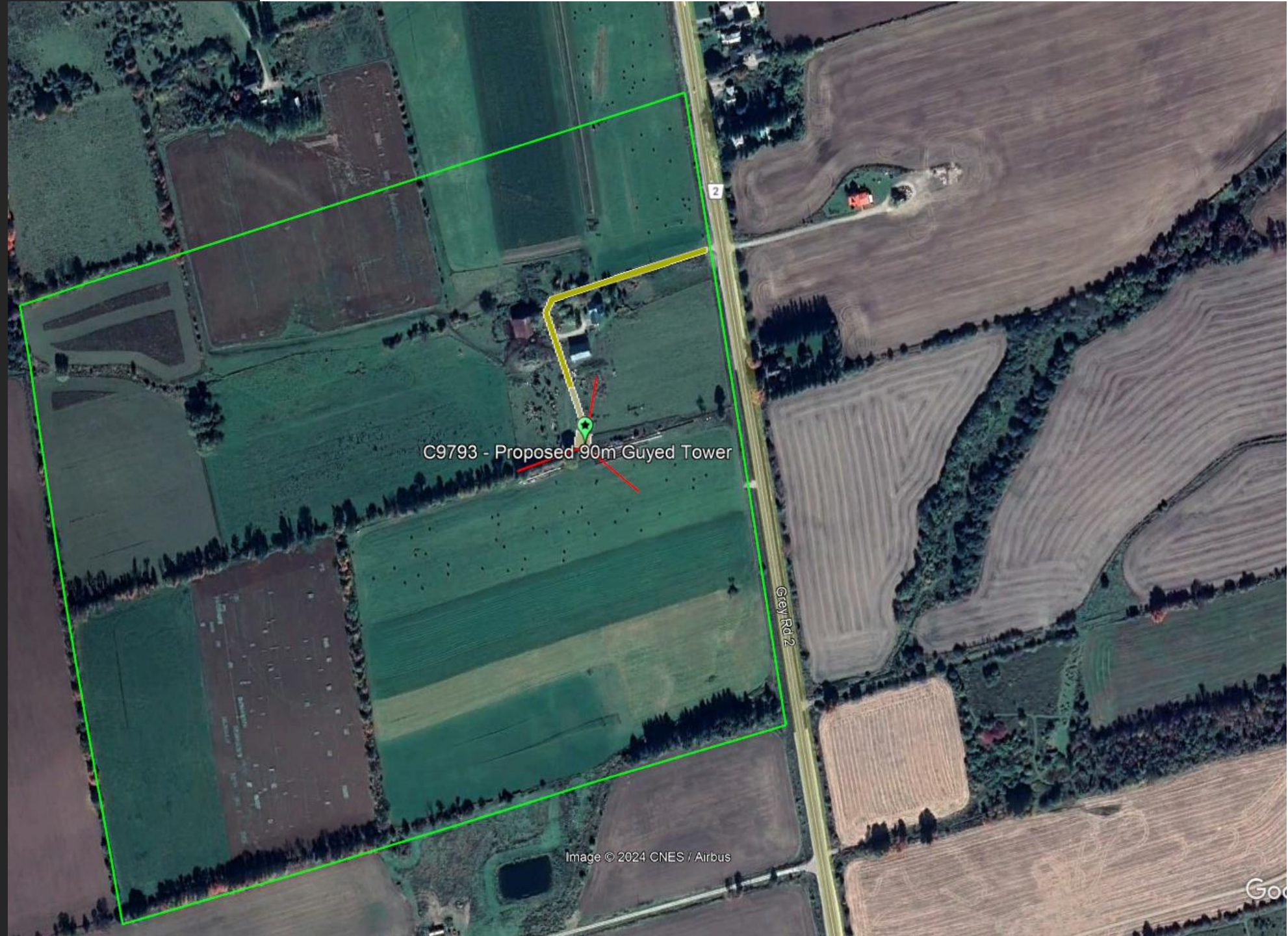
Candidate Selection



#	Candidate Review
1	Over 50m lower elevation, requiring much taller tower; utilizes arable farmland; Zoned Special Agricultural, inadequate hydro; disqualified
2	Much lower elevation; all arable farmland; zoned agricultural; not setback from Hazard zone; inadequate access and hydro; disqualified
3	Doesn't setback residential uses to greatest extent; within hazard lands; new access from road required; 30m lower elevation; disqualified
4	Ravenna Community and Memorial Park - Does not have enough space on property for guyed tower while remaining out of the way; doesn't setback residential uses to greatest extent; disqualified
5	Slightly higher elevation; zoned agricultural; doesn't mitigate residential uses to greatest extent possible; no visual mitigation from residents; inadequate access, crossing over arable farmland and access would be in the way; disqualified
6	Zoned agricultural; does not setback residential uses to greatest extent possible; 15m lower elevation; disqualified
7	Over 50m lower elevation; not in transportation corridor; zoned agricultural; inadequate hydro; less visual mitigation; disqualified
8	30m lower elevation; not in transportation corridor; zoned agricultural; inadequate hydro and access; less visual mitigation; uses arable farmland; disqualified
9	Within transportation corridor, zoned agricultural; mitigates residential uses to greatest extent possible, provides RF and TX connection, agreeable landlord, utilizes existing access and tree cover for visual mitigation, impacts least amount of arable farmland as possible; outside of NEC; selected candidate

Aerial of proposed tower location





Site Plan and Details

90m Guyed Tower

Municipal Address:

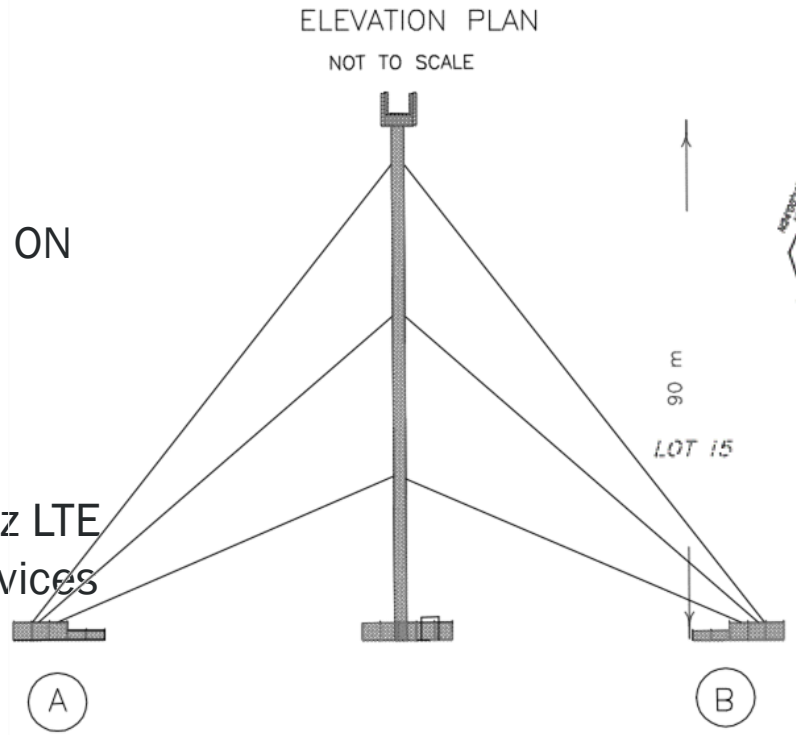
495928 Grey Road 2, Ravenna ON

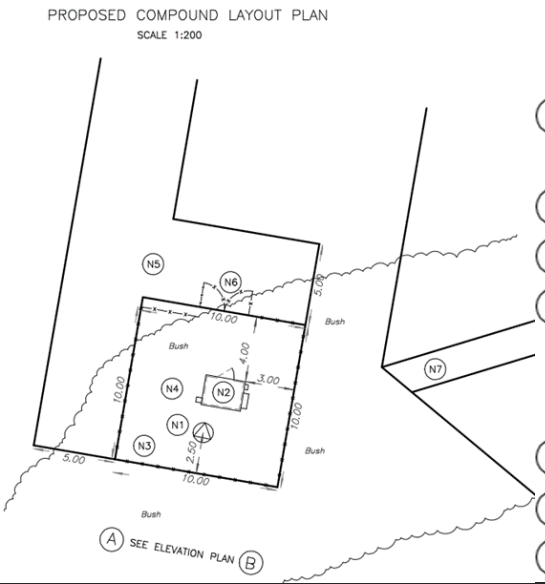
GPS Coordinates:

44.463581°, -80.418040°

Technology: 3-sectored LTE 700/2100 MHz, DSS 600MHz LTE & NR, and 5G NR 3.5GHz services

Allows future Co-location? Yes





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PAINT COLOUR SUBJECT TO NAV CANADA REQUIREMENTS.
ANTENNA NUMBER AND LOCATIONS TO BE DETERMINED.
FOUNDATION DESIGN PENDING SOIL REPORT.

(N2) PROPOSED RADIO EQUIPMENT SHELTER ON REINFORCED CONCRETE SLAB.

(N3) PROPOSED 2.4 m HIGH CHAIN LINK SECURITY FENCE TOPPED WITH BARBED WIRE SURROUNDING THE COMPOUND.

(N4) REMOVE EXISTING TOPSOIL, PROOF ROLL SUBGRADE AND PLACE 300 mm GRANULAR ACROSS COMPOUND AREA.
MATCH INTO EXISTING GRADES ADJACENT TO THE COMPOUND.
PROVIDE POSITIVE DRAINAGE AWAY FROM THE TOWER, SHELTERS AND HYDRO PAD TOWARDS THE NATURAL SLOPE OF THE SITE.
REINSTATE ALL DISTURBED AREAS.

(N5) PROPOSED GRAVEL ACCESS WAY.

(N6) PROPOSED CHAIN LINK GATE.

(N7) PROPOSED HYDRO/FIBER CONNECTION.

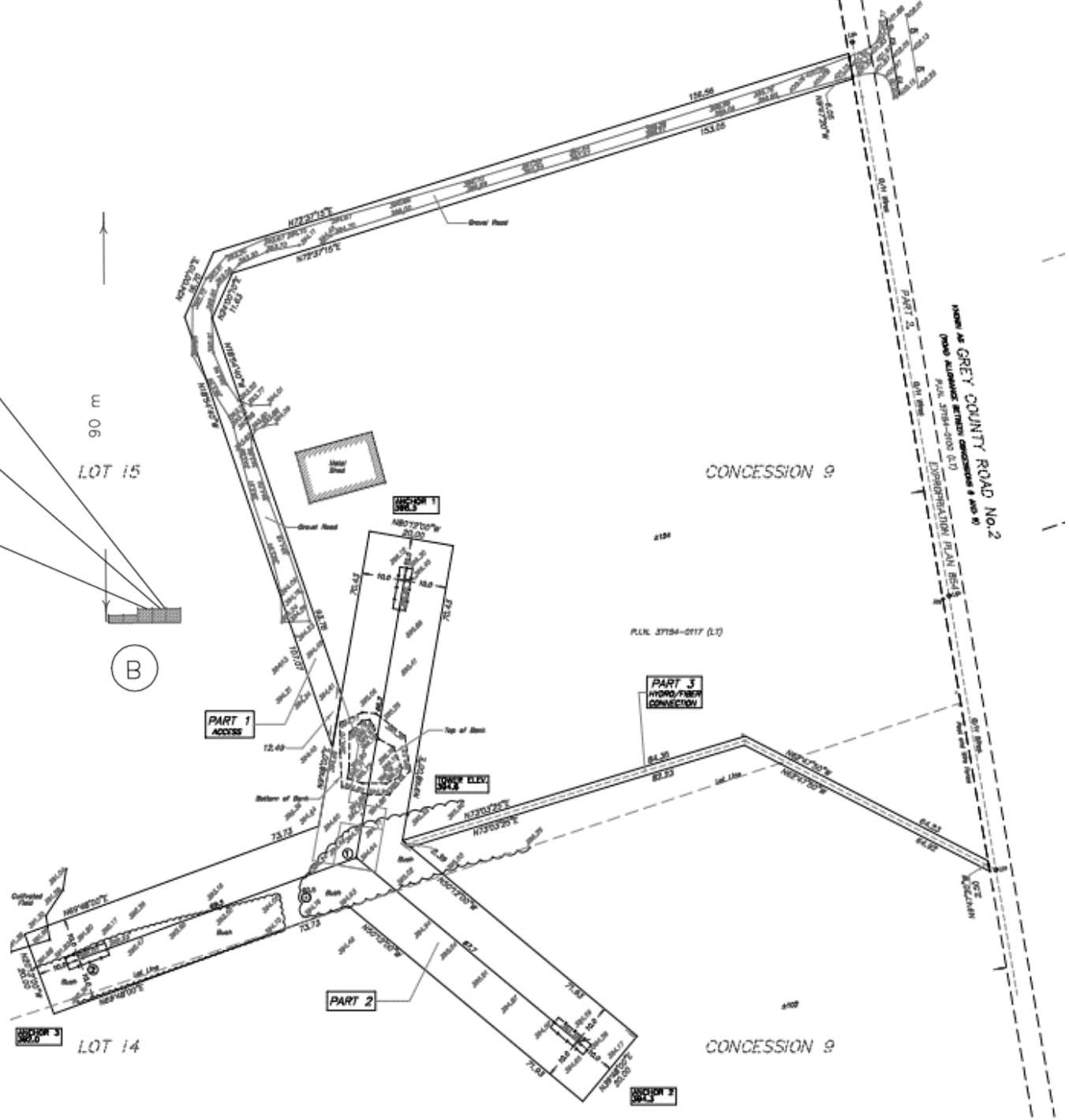


Photo Simulations

Long & Short Range

Please note: The following drawings are an artistic interpretation of the design. While considered as accurate as possible, these are an artist's interpretation only and subject to changes.

Photo Simulation Key Map

Subject Property

Please note: The following drawings are an artistic interpretation of the design. While considered as accurate as possible, these are an artist's interpretation only and subject to changes.

BEFORE

Image 1: Taken on Grey County Rd 2, directly in front of proposed site

El: 402

Image 1: Taken on Grey County Rd 2, directly in front of proposed site

El: 402

Short Range

Less than 1 km from Site

Please note: The following drawings are an artistic interpretation of the design. While considered as accurate as possible, these are an artist's interpretation only and subject to changes.

Image 2: Taken from Grey County Rd 2 north corner of landlord's property looking south, approximately 350m from proposed site

EI: 397

Image 2: Taken from Grey County Rd 2 north corner of landlord's property looking south, approximately 350m from proposed site

EI: 397

Image 3: Taken on Grey County Rd 2, North of Grey County Rd 119 at 496003 Grey County Rd 2 looking south, approximately 800m from proposed site.

EI: 389

Image 3: Taken on Grey County Rd 2, North of Grey County Rd 119 at 496003 Grey County Rd 2 looking south, approximately 800m from proposed site.

Long Range

Greater than 1 km from Site

BEFOR

Image 4: Taken on Grey Rd 119 at 628162 Grey County Rd 119 Looking East, approximately 1.2km from proposed site.

El: 336

Image 4: Taken on Grey Rd 119 at 628162 Grey County Rd 119 Looking East, approximately 1.2km from proposed site.

El: 336

Image 5: Taken from Grey County Rd 2 North of 12th Side Rd Looking North, approximately 1km from proposed site.

El: 372

Image 5: Taken from Grey County Rd 2 North of 12th Side Rd Looking North, approximately 1km from proposed site.

El: 372

Image 6: Taken from 10th Line, south of Grey Rd 119, looking East, approximately 2.6km from proposed site.

El: 317

BEFORE

Image 6: Taken from 10th Line, south of Grey Rd 119, looking East, approximately 2.6km from proposed site.

EI: 317

BEFORE

Image 7: Taken from 6th Line, south of Grey Rd 119, looking west, approximately 3km from proposed site.

El: 471

Image 7: Taken from 6th Line, south of Grey Rd 119, looking west, approximately 3km from proposed site.

El: 471

Lighting

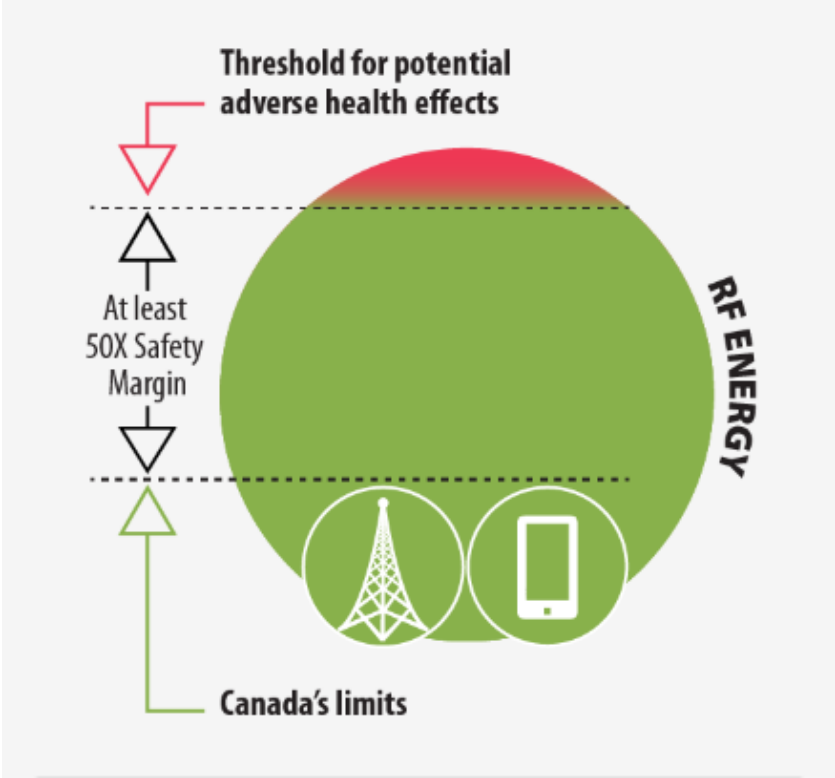
Our obligation as a Proponent is to comply with the regulations of Transport Canada and NAV Canada in this respect, which we do.

- If lighting is required, “Community Friendly Lighting System” will be utilized
- White in daylight (90 watts) and red during the night (25 watts)
- Downlighting and ground scatter are minimized
- Safety is the number one requirement

Health & Safety

The federal government dictates what is considered relevant and not relevant to the public consultation process.

- It is the federal government's responsibility to ensure the health of all Canadians by establishing appropriate limits.
- Our obligation is limited to one of compliance with the governing regulations of Safety Code 6, which we do.



HTTPS://WWW.CANADA.CA/EN/HEALTH-CANADA/SERVICES/VIDEO/5G-TECHNOLOGY-SAFETY.HTML

The Canadian limits incorporate a safety margin of at least 50-fold from the threshold for possible adverse health effects.

Environmental Considerations

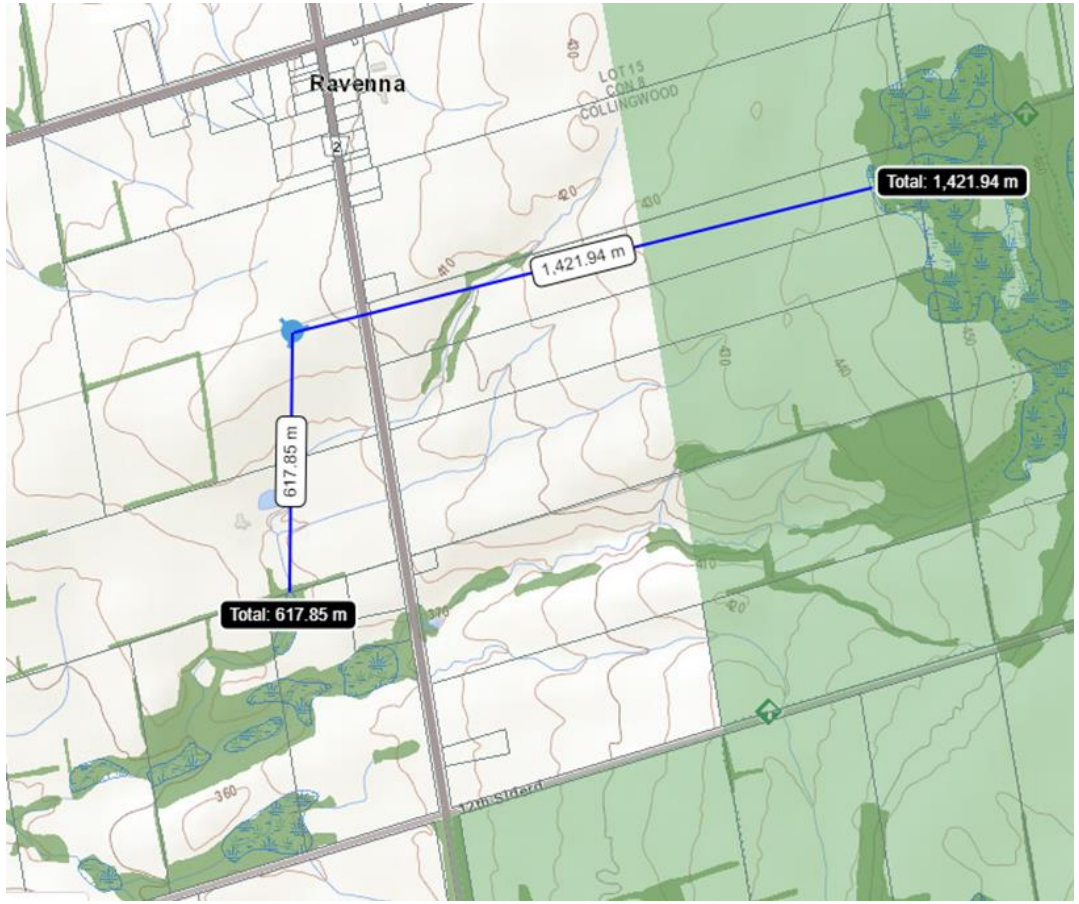
The federal government recognizes the immaterial impact on wildlife and natural heritage features of telecommunications towers and accordingly exempts them from EA intake and review. In respect of issues related to wildlife, birds, insects, plants, ground water and the like, this undertaking complies with all regulatory requirements. Questions whether governing legislation, procedures or processes are valid or should be reformed are not relevant to this process.

Nonetheless, a study is prepared for each tower location's surrounding natural areas contained within the 1km x 1km grid from Natural Heritage Information Centre (NHIC) data which includes:

- Ontario's rare species
- plant communities
- wildlife concentration areas
- natural heritage areas

In this case, the only noted rare species, species at risk, rare plant communities, or wildlife concentration areas reported in this grid over the last 50 years is a snapping turtle, which is not provided suitable habitat within the tower location, away from the water.

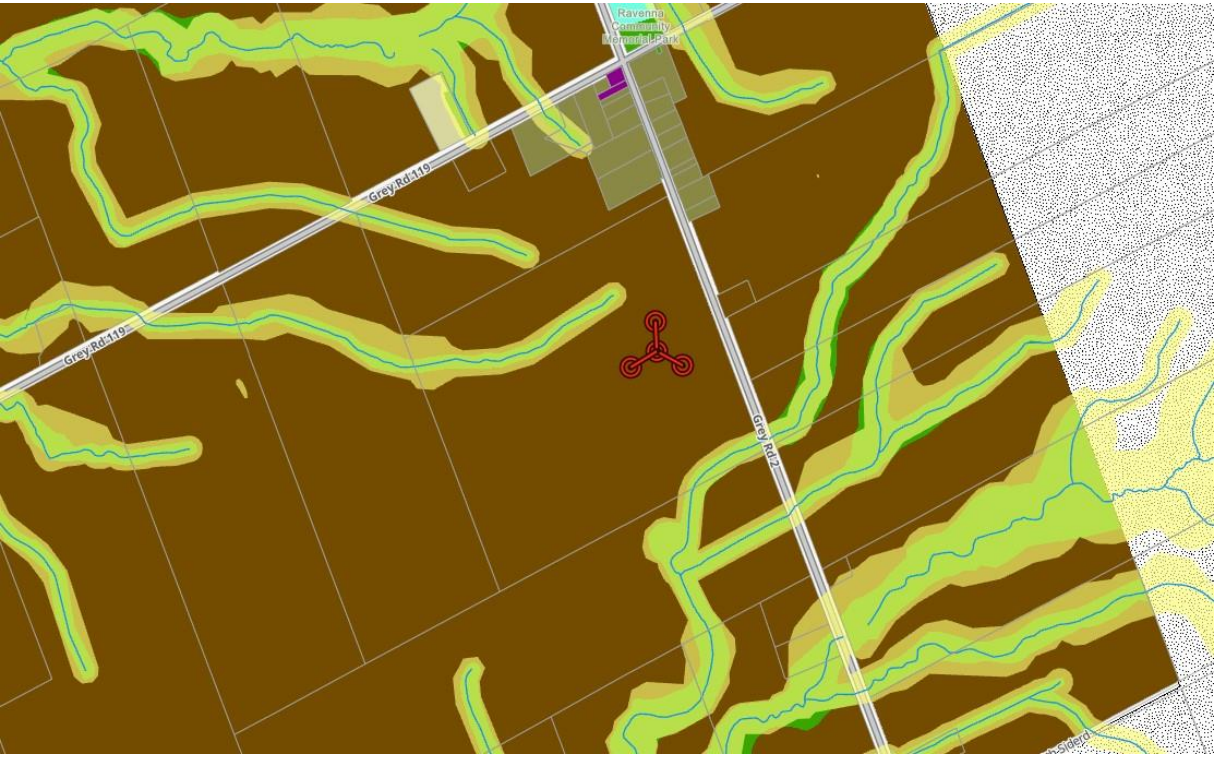
OGF ID	Element Type	Common Name	Specific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT
948197	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17NK4623
948197	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	THR	17NK4623



Assessment Parcel
Assessment Parcel
ANSI
ANSI
Earth Science Provincially Significant/sciences de la terre d'importance provinciale
Earth Science Regionally Significant/sciences de la terre d'importance régionale
Life Science Provincially Significant/sciences de la vie d'importance provinciale
Life Science Regionally Significant/sciences de la vie d'importance régionale
Wetland
Evaluated Wetland
Provincially Significant/considérée d'importance provinciale
Non-Provincially Significant/non considérée d'importance provinciale
Unevaluated Wetland
Woodland
Woodland
Conservation Reserve
Conservation Reserve
Provincial Park
Provincial Park
Natural Heritage System
Natural Heritage System

Conservation & Natural Heritage

THE PROPOSED SITE IS LOCATED OUTSIDE OF GSCA REGULATION LIMITS



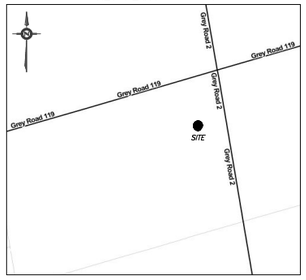
THE PROPOSED SITE IS LOCATED OUTSIDE OF THE NIAGARA ESCARPMENT PLAN AREA

Further Questions?

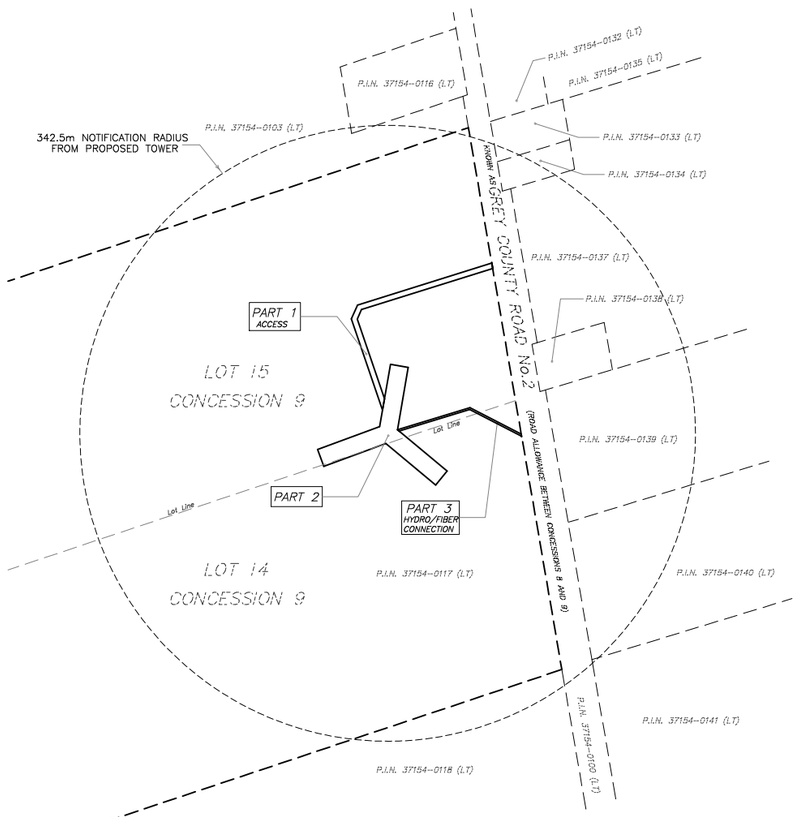
- Facts about towers
  - www.ic.gc.ca/antenna
- Radiofrequency Energy and Safety
  - ised-isde.canada.ca/site/spectrum-management-telecommunications/en/safety-and-compliance/facts-about-towers/radiofrequency-energy-and-safety
- Canada.ca Safety of 5G Technology Video
  - https://www.canada.ca/en/health-canada/services/video/5g-technology-safety.html
- CPC-2-0-03 — Radiocommunication and Broadcasting Antenna Systems (Antenna Tower Siting Procedures)
  - https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08777.html
- Local ISED Office:
  - 2 Queen Street East
    Sault Ste. Marie ON P6A 1Y3
    Telephone: 1-855-465-6307
    Fax: 705-941-4607
    Email: spectrumenod-spectredeno@ised-isde.gc.ca

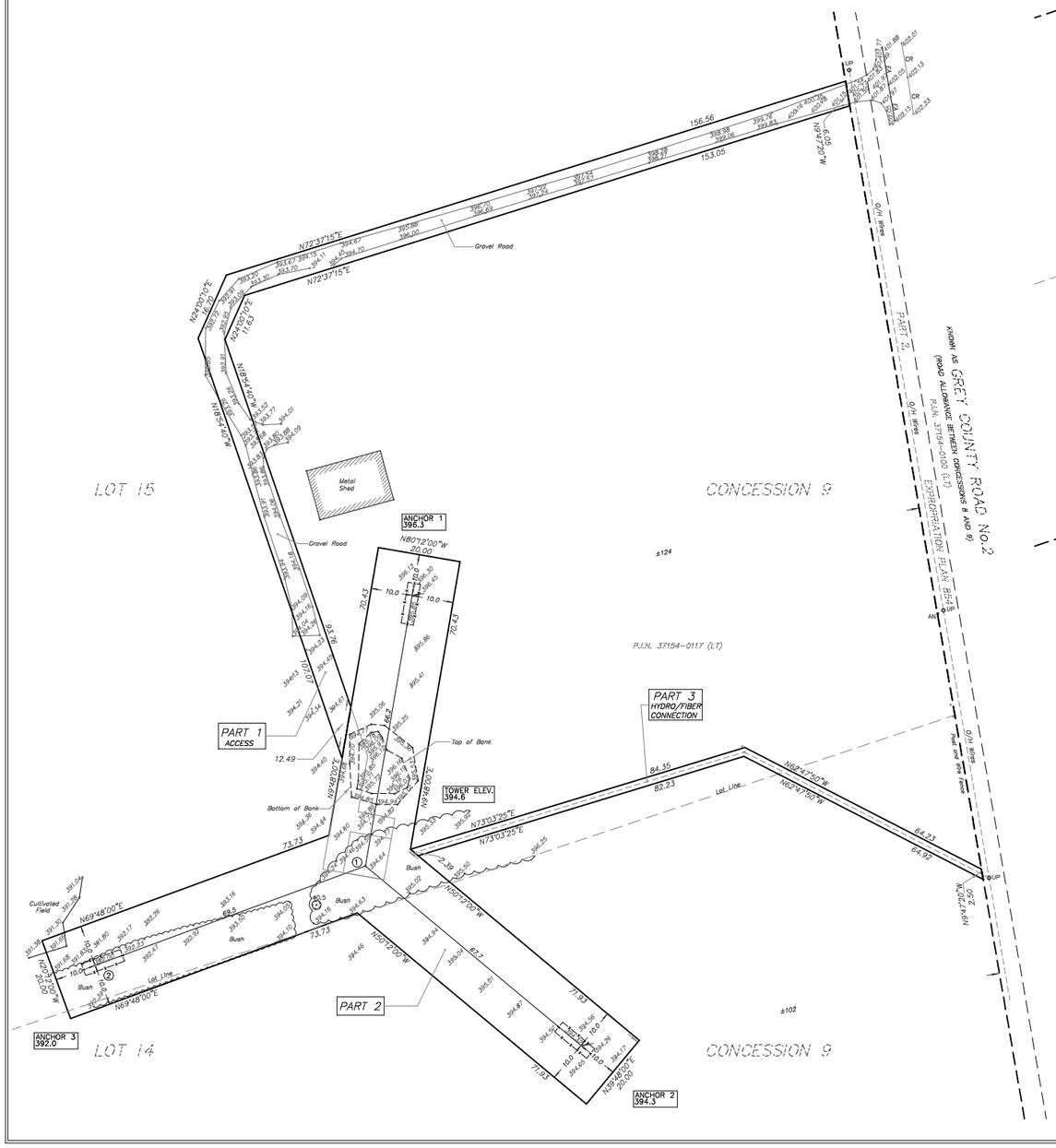
SITE DATA	EXISTING	PROPOSED
PROPERTY AREA	±41.2ha	
AREA LEASED ACCESS (PART 1) (PART 2) HYDRO/FIBER CONNECTION (PART 3) TOTAL		1616 sq.m. 4495 sq.m. 296 sq.m. 6407 sq.m.
UNITS		1 PROPOSED RADIO EQUIPMENT SHELTER 1 PROPOSED STEEL GUYED TOWER
HEIGHT OF TOWER		90.00m
SETBACKS		
PROPOSED STEEL GUYED TOWER FRONT (GREY ROAD 2)		±146 m
PROPOSED RADIO EQUIPMENT SHELTER FRONT (GREY ROAD 2)		±143 m

KEY PLAN (NOT TO SCALE)

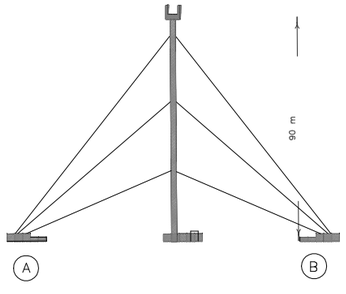


NOTIFICATION RADIUS PLAN
SCALE 1:3000

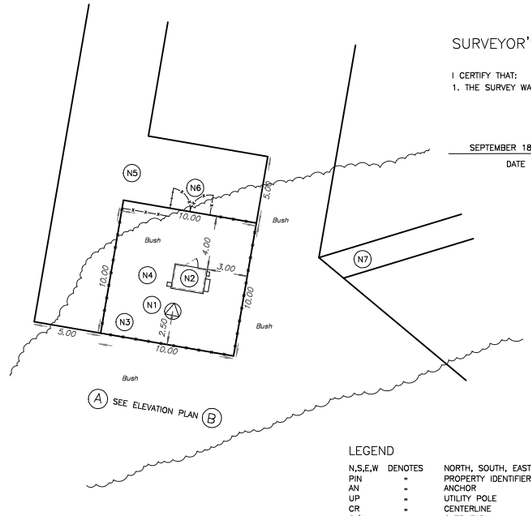




ELEVATION PLAN
NOT TO SCALE



PROPOSED COMPOUND LAYOUT PLAN
SCALE 1:200



NOTES

(N1) PROPOSED STEEL GUYED TOWER.
PAINT COLOUR SUBJECT TO NAV CANADA REQUIREMENTS.
ANTENNA NUMBER AND LOCATIONS TO BE DETERMINED.
FOUNDATION DESIGN PENDING SOIL REPORT.

(N2) PROPOSED RADIO EQUIPMENT SHELTER ON REINFORCED CONCRETE SLAB.

(N3) PROPOSED 2.4 m HIGH CHAIN LINK SECURITY FENCE TOPPED WITH BARBED WIRE SURROUNDING THE COMPOUND.

(N4) REMOVE EXISTING TOPSOIL, PROOF ROLL SUBGRADE AND PLACE 300 mm GRANULAR ACROSS COMPOUND AREA.
MATCH INTO EXISTING GRADES ADJACENT TO THE COMPOUND.
PROVIDE POSITIVE DRAINAGE AWAY FROM THE TOWER, SHELTERS AND HYDRO PAD TOWARDS THE NATURAL SLOPE OF THE SITE.
REINSTATE ALL DISTURBED AREAS.

(N5) PROPOSED GRAVEL ACCESS WAY.

(N6) PROPOSED CHAIN LINK GATE.

(N7) PROPOSED HYDRO/FIBER CONNECTION.

LEGEND

N,S,E,W	DENOTES	NORTH, SOUTH, EAST, WEST
PIN	-	PROPERTY IDENTIFIER NUMBER
AN	-	ANCHOR
UP	-	UTILITY POLE
CR	-	CENTERLINE
O/H	-	OVERHEAD
EA	-	EDGE OF ASPHALT
ø	-	DIAMETER
	-	DECIDUOUS TREE

SITE PLAN
PROPOSED
TELECOMMUNICATION INSTALLATION
495928 GREY ROAD 2

PART OF LOTS 14 AND 15
CONCESSION 9
(GEOGRAPHIC TOWNSHIP OF COLLINGWOOD)
TOWN OF THE BLUE MOUNTAINS
COUNTY OF GREY

SCALE 1 : 600

10 5 0 10 20 30 40 50 metres

ALEX MARTON LTD.
ONTARIO LAND SURVEYORS

METRIC
DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

SCHEDULE

PART	LOT	CONCESSION	P.I.N.	AREA sq.m
1	PART OF 15	9	37154-0117 (LT)	1616
2	PART OF 14 AND 15			4495
3				296

INTEGRATION NOTE

BEARINGS SHOWN ARE GRID BEARINGS AND ARE DERIVED FROM OBSERVED REFERENCE POINTS (ORP'S) 1 AND 2 BY REAL TIME NETWORK OBSERVATIONS, UTM ZONE 17, NAD 83 (CSRS) (2010.0 EPOCH).

DISTANCES SHOWN ON THIS PLAN ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996.

INTEGRATION DATA

OBSERVED REFERENCE POINTS (ORP's) DERIVED FROM GPS REAL TIME NETWORK OBSERVATIONS AND ARE REFERRED TO UTM ZONE 17, NAD 83 (CSRS) (2010.0). COORDINATE VALUES ARE TO URBAN ACCURACY PER SECTION 14 (2) OF O. REG 216/10

POINT ID	NORTHING	EASTING
ORP 1	4923528.54	546293.21
ORP 2	4923504.54	546227.98

COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.

ELEVATION NOTE

ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE DERIVED FROM GPS OBSERVATIONS USING REAL TIME NETWORK OBSERVATIONS.

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:
1. THE SURVEY WAS COMPLETED ON THE 11TH DAY OF SEPTEMBER, 2023.

SEPTEMBER 18, 2023
DATE

A. MARTON
ONTARIO LAND SURVEYOR

AMENDMENTS

No.	DESCRIPTION	DATE

Rogers™

LATITUDE N44°27'48.9" 44.463581
LONGITUDE W80°25'04.9" -80.418040
ELEVATION 394.6

SITE NAME: Beaver Valley Rd
SITE CODE: (C9793)

ALEX MARTON LIMITED
ONTARIO LAND SURVEYORS
160 APPLEWOOD CRESCENT, UNIT 8,
CONCORD, ONTARIO, L4K 4H2
PHONE: 905-879-9889 FAX: 905-879-9770
E-MAIL: alex@amsurveying.ca
WEBSITE: www.amsurveying.ca

PARTY CHIEF : F.V.W.	FILE NAME: 2023-239(C9793).DWG
DRAWN : Z.Y.	PLOT SCALE: 1:600
CHECKED : A.M.	PROJECT No. 2023-239

MICROWAVE ENGINEERING
SITE QUALIFICATION

TO: TSD

The qualification for the following site has been completed by Microwave Engineering Department. The site qualification details are as follows:

PROJECT: Beaver Valley Rd Project#: 3506-793

SITE NAME: BEAVER VALLEY RD CODE: C9793
COORDINATES: Lat: 44 27 48.54 N, Long 080 25 04.23 W (NAD 83, SCIP)
ELEVATION: 397.72m

	YES	NO
SITE VISITED:	☐	☒

LOS CONFIRMED BY: Thomas A.

	YES	NO
SITE ACCEPTED:	☒	☐

	YES	NO
CONDITIONS:	☒	☐

(If yes, details must be provided)

DETAILS: Line-of-sight was confirmed between the proposed BEAVER VALLEY RD(C9793) and the preferred tie-in site, BERKLEY (C0145), using 8GHz.
The minimum required antenna heights at BEAVER VALLEY RD and BERKLEY are **85m** (AGL) and **87m** (AGL), respectively.

Regards,

Thomas Akweke
OCT 31, 2023

INSTALLATION DRAWINGS			
TRYLON DWG. NO.	DRAWING NAME	TRYLON DWG. NO.	DRAWING NAME
232766.030.0103	TITLE PAGE	232766.030.2701	MW MOUNT @ 36.0M & 38.0M
232766.030.0301	TOWER PROFILE	232766.030.2702	HD (4-1/2"x72") 18" RT-S/O
232766.030.0302	DESIGN ANTENNA LOADING CHART	232766.030.2703	FIXED CROSSOVER ASSEMBLY
232766.030.0303	ANTENNA LOADING CHART	232766.030.2704	DISH MOUNT TIE BACK KIT
232766.030.0304	Tx-LINE LAYOUT	232766.030.2705	DISH MOUNT TIE BACK KIT
232766.030.0401	SITE LAYOUT	232766.030.3001	CELL MOUNT AT 90.2M
232766.030.0402	COMPOUND LAYOUT	232766.030.3002	6-PIPE AWG PINWHEEL ASS'Y
232766.030.0601	TOWER FOUNDATION	232766.030.3003	MEDIUM BACKING 'B' ASS'Y
232766.030.0602	ANCHOR FOUNDATION	232766.030.3004	FIXED CROSSOVER ASS'Y
232766.030.0603	SHELTER FOUNDATION	232766.030.3005	FIXED CROSSOVER ASS'Y
232766.030.0604	225 kip NON-PIVOT ANCHOR KITS	232766.030.3006	ERICSSON RRU ADAPTER KIT
232766.030.0605	REBAR CHART	232766.030.3007	DC BOX & GATOR BOX MOUNT
232766.030.0606	FOUNDATION NOTES	232766.030.3601	3000AW ANTI-CLIMBER
232766.030.0607	GENERIC ANODE INSTALLATION	232766.030.3901	CABLE TRAY KIT
232766.030.1201	GROUNDING DETAIL	232766.030.4201	DIALIGHT E1 LIGHTING SYSTEM
232766.030.1202	GROUNDING DETAILS	232766.030.4202	JUNCTION BOX MOUNTING
232766.030.1203	GROUNDING DETAILS	232766.030.4203	DIALIGHT E1 MOUNTING PROFILE
232766.030.1204	GROUNDING DETAILS	232766.030.4204	LIGHT FIXTURE MOUNT 'A' KIT
232766.030.1205	GROUND WIRE CUTTING CHART	232766.030.4205	FIXTURE EXTENSION KIT
232766.030.1206	GROUNDING NOTES	232766.030.4206	LIGHT FIXTURE ICEGUARD
232766.030.1207	LIGHTNING ROD ASS'Y	232766.030.6301	BASE SIGN DETAIL
232766.030.1208	BUSS BAR INSTALLATION	232766.030.7201	GENERAL TOWER ASSY NOTES
232766.030.1501	GUY ASSEMBLY CHART		
232766.030.1502	BOLT-ON ATTACHMENT KITS		
232766.030.1503	GUY GUARD INSTALLATION	(FILE)	PULSE CHART
232766.030.1504	ICE BREAK INSTALLATION	(FILE)	GUY REELING SCHEDULE
232766.030.2101	13' TORSION RESISTOR	(FILE)	BOM

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

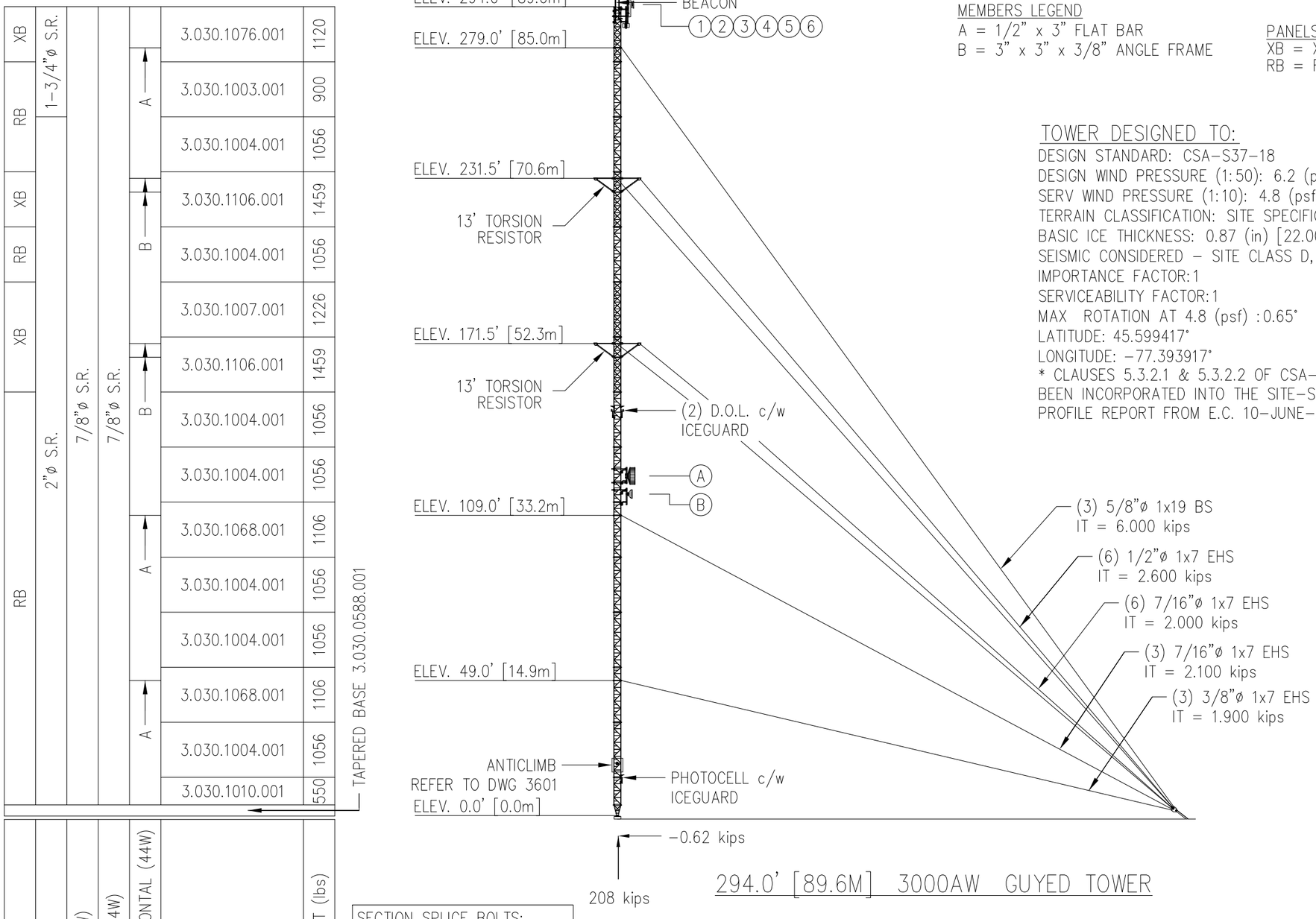
JOB DESCRIPTION: 294.0' [89.6M] 3000AWG TOWER
SITE NAME: KRANZ RD & MARTHAS RD, ON

TRYLON JOB NO.: 232766
CUSTOMER: ROGERS
SITE CODE: C8512
LATITUDE: 45.599417°
LONGITUDE: -77.393917°

NOTE: PROFESSIONAL ENGINEERING STAMP APPLIES ONLY TO THE DRAWINGS INCLUDED HEREIN.

Trylon

IN CASE OF EMERGENCY CALL:
519-669-5421 (DAYS)
1-877-572-9995 (EVENINGS AND WEEKENDS)



294.0' [89.6M] 3000AW GUYED TOWER

MEMBERS LEGEND
A = 1/2" x 3" FLAT BAR
B = 3" x 3" x 3/8" ANGLE FRAME

PANELS TYPE LEGEND
XB = X-BRACED
RB = REGULAR BRACED

TOWER DESIGNED TO:

DESIGN STANDARD: CSA-S37-18
DESIGN WIND PRESSURE (1:50): 6.2 (psf) [296 (Pa)]
SERV WIND PRESSURE (1:10): 4.8 (psf) [230 (Pa)]
TERRAIN CLASSIFICATION: SITE SPECIFIC
BASIC ICE THICKNESS: 0.87 (in) [22.00 (mm)]
SEISMIC CONSIDERED - SITE CLASS D, GROUND ACC TO NBCC
IMPORTANCE FACTOR:1
SERVICEABILITY FACTOR:1
MAX ROTATION AT 4.8 (psf) :0.65°
LATITUDE: 45.599417°
LONGITUDE: -77.393917°
* CLAUSES 5.3.2.1 & 5.3.2.2 OF CSA-S37-18 STANDARD HAVE BEEN INCORPORATED INTO THE SITE-SPECIFIC WIND PRESSURE PROFILE REPORT FROM E.C. 10-JUNE-2022.

PANEL TYPE	LEG (50W)	DIAGONAL (44W)	HORIZONTAL (44W)	SPECIAL HORIZONTAL (44W)	SECTION NUMBER	SECTION WEIGHT (lbs)
XB	2"ø S.R.	7/8"ø S.R.	7/8"ø S.R.	A	3.030.1076.001	1120
RB	1-3/4"ø S.R.			A	3.030.1003.001	900
					3.030.1004.001	1056
XB				B	3.030.1106.001	1459
RB					3.030.1004.001	1056
XB				B	3.030.1007.001	1226
					3.030.1106.001	1459
					3.030.1004.001	1056
RB				A	3.030.1004.001	1056
					3.030.1068.001	1106
					3.030.1004.001	1056
					3.030.1004.001	1056
				A	3.030.1068.001	1106
					3.030.1004.001	1056
					3.030.1010.001	550

SECTION SPLICE BOLTS:
(3) 5/8" x 2-3/4" A325 BOLT ASS'Y PER LEG U/N
BASE SECTION SPLICE BOLTS:
(3) 5/8" x 3-1/2" A325 BOLT ASS'Y PER LEG

ORIGINAL TOWER FROM "S220041804 - 90m 500Pa, 25mm"
THE PUBLISHED FND LOADS ARE FROM ORIGINAL TOWER DESIGN CRITERIA

ANCHOR DETAILS & FACTORED FOUNDATION LOADS

No	Radius (ft)	Azimuth (°TN)	Offset (ft)	Hor (Kips)	Vert (Kips)	Axial (Kips)	Axial Angle
1	210	100	-0.7	67.7	53.7	86.1	39.7
2	210	220	0.4	69.8	55.4	89.1	39.3
3	210	340	0	69.3	54.9	88.5	39.5

NOTES:
1) FOUNDATION LOADS ARE FACTORED.
2) ANTENNA WEIGHTS ARE NOT INCLUDED IN THE TOWER SECTION WEIGHTS.
3) REFER TO DWG 0302 FOR DESIGN ANTENNA LOADING CHART.
4) REFER TO DWG 0303 FOR SITE SPECIFIC ANTENNA LOADING CHART.
5) REFER TO DWG 0304 FOR Tx-LINE LAYOUT.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23
B	IB	PS	REVISED AS PER CLIENT REQUIREMENTS	07 DEC 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER
0302	
0303	
0304	

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.0301

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	500.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
TOWER PROFILE

DESIGN ANTENNA/LINE LOADING CHART						
Description	Qty	Elev. (m)	Elev. (ft)	Azimuth (°TN)	TX Line IN 3-ROWS	Qty
Lightning Rod	1	91.4	300	120	Riser	1
Light	1	89.9	295	0	Teck	1
Panel (2700x510x210mm)	6	88.3	289.6	0	DC-Rogers	4
RRU	24	88.3	289.6	0	FO-Rogers	4
StandOff 1.5mT	3	88.3	289.6	0		
Air (850x520x210mm)	3	85.4	280.2	0	DC-Rogers	1
RRU	3	85.4	280.2	0	FO-Rogers	1
Flush Leg Mounts	3	85.4	280.2	0		
Air (850x520x210mm)	3	83.4	273.6	0	DC-Rogers	1
RRU	3	83.4	273.6	0	FO-Rogers	1
Flush Leg Mounts	3	83.4	273.6	0		
HP8	1	67.2	220.5	60	LDF4P-50A	4
HP8	1	67.2	220.5	185	LDF4P-50A	4
HP10 +IG	1	58.2	191.1	60	LDF4P-50A	4
HP10 +IG	1	58.2	191.1	185	LDF4P-50A	4
Anti-Climb	1	4.6	15	0		
Cant WGB	1	3	10	60		

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.0302

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
DESIGN ANTENNA LOADING CHART

ROGERS CELLULAR LOADING CHART

ITEM No.	ANTENNA ID		ROGERS CELLULAR LOADING CHART						MET°/RET°				SPACE DIV (m)	JUMPER TYPE	JUMPER LENGTH (m)	QTY OF RRU's		Tx LINE QTY/TYPE	INSTALL (I) FUTURE (F) REMOVE (RM) RELOCATE (RL)
	TECHNOLOGY	LABEL	QTY	ANTENNA MODEL No.	POS	ELEVATION (m AGL)	AZIMUTH (°TN)	MDT (°)	850/700	2100	1900	2600				TOWER LOADING	INITIAL INSTALL		
1	LTE/5G	1N1&1L1/1O1&1M1/ 1N2&1L2/1O2&1M2/ 4L1/4M1/4L2/4M2	1	T2008L6R034V03	UP	90.2	100	0	7	5	N/A	N/A	1	PFHS	~5	4	2	(2) DC TRUNK (2) FO TRUNK	I
2	LTE/5G	2N1&2L1/2O1&2M1/ 2N2&2L2/2O2&2M2/ 5L1/5M1/5L2/5M2	1	T2008L6R034V03	UP		220	0	7	5	N/A	N/A	1	PFHS	~5	4	2		I
3	LTE/5G	3N1&3L1/3O1&3M1/ 3N2&3L2/3O2&3M2/ 6L1/6M1/6L2/6M2	1	T2008L6R034V03	UP		340	0	7	5	N/A	N/A	1	PFHS	~5	4	2		I
4	5G	XN	1	AIR 3258	UP		100	0	N/A	N/A	N/A	N/A	1	N/A	N/A	N/A	TBD		I
5	5G	YN	1	AIR 3258	UP		220	0	N/A	N/A	N/A	N/A	1	N/A	N/A	N/A	TBD		I
6	5G	ZN	1	AIR 3258	UP		340	0	N/A	N/A	N/A	N/A	1	N/A	N/A	N/A	TBD		I
7	GPS	GPS	1	GPS	UP	ABOVE SHELTER	OMNI	–	–	–	–	–	–	–	–	–	–	LDF4	I

ROGERS M/W LOADING CHART

ITEM No.	QTY	ANTENNA MODEL No.	ELEVATION (m AGL)	AZIMUTH (°TN)	VERT ANG (°)	POLARIZATION	TIE-IN SITE	RADIO EQP	Tx LINE QTY/TYPE		INSTALL (I) FUTURE (F) REMOVE (RM) RELOCATE (RL)
									TOWER LOADING	INITIAL INSTALL	
A	1	ANT3 C 1.8 18 HPX (TR)	38.0	189.65	0.05	HORIZONTAL	KILLALOE C3437	2 ML6365 ODU's	4 LDF4-50	2 LDF4-50	I
B	1	ANT3 C 0.9 32 HPX (TR)	36.0	189.65	0.05	HORIZONTAL	KILLALOE C3437	2 ML6365 ODU's	4 LDF4-50	2 LDF4-50	I

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

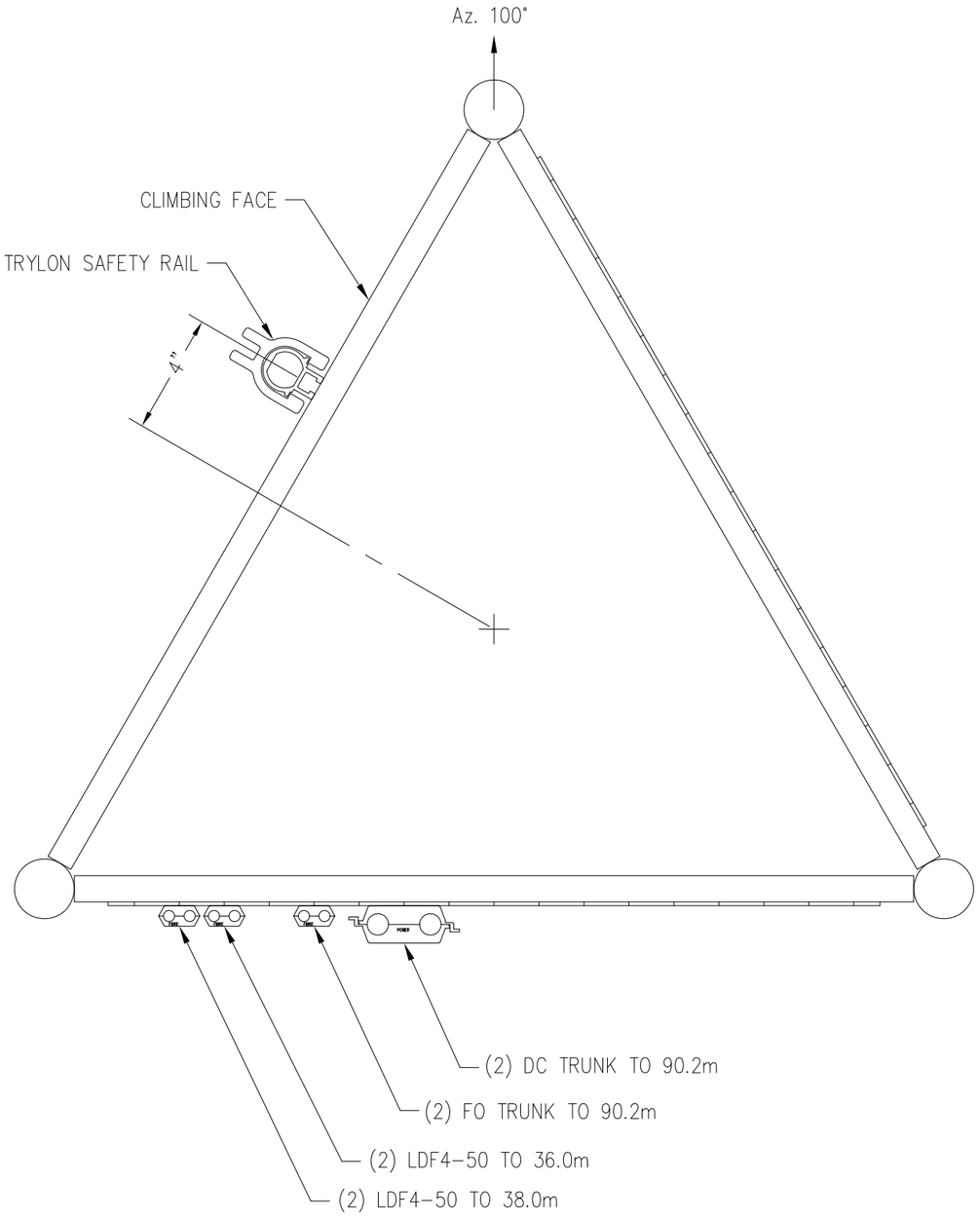
Trylon

DRAWING NO.
232766.030.0303

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
ANTENNA LOADING CHART



REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

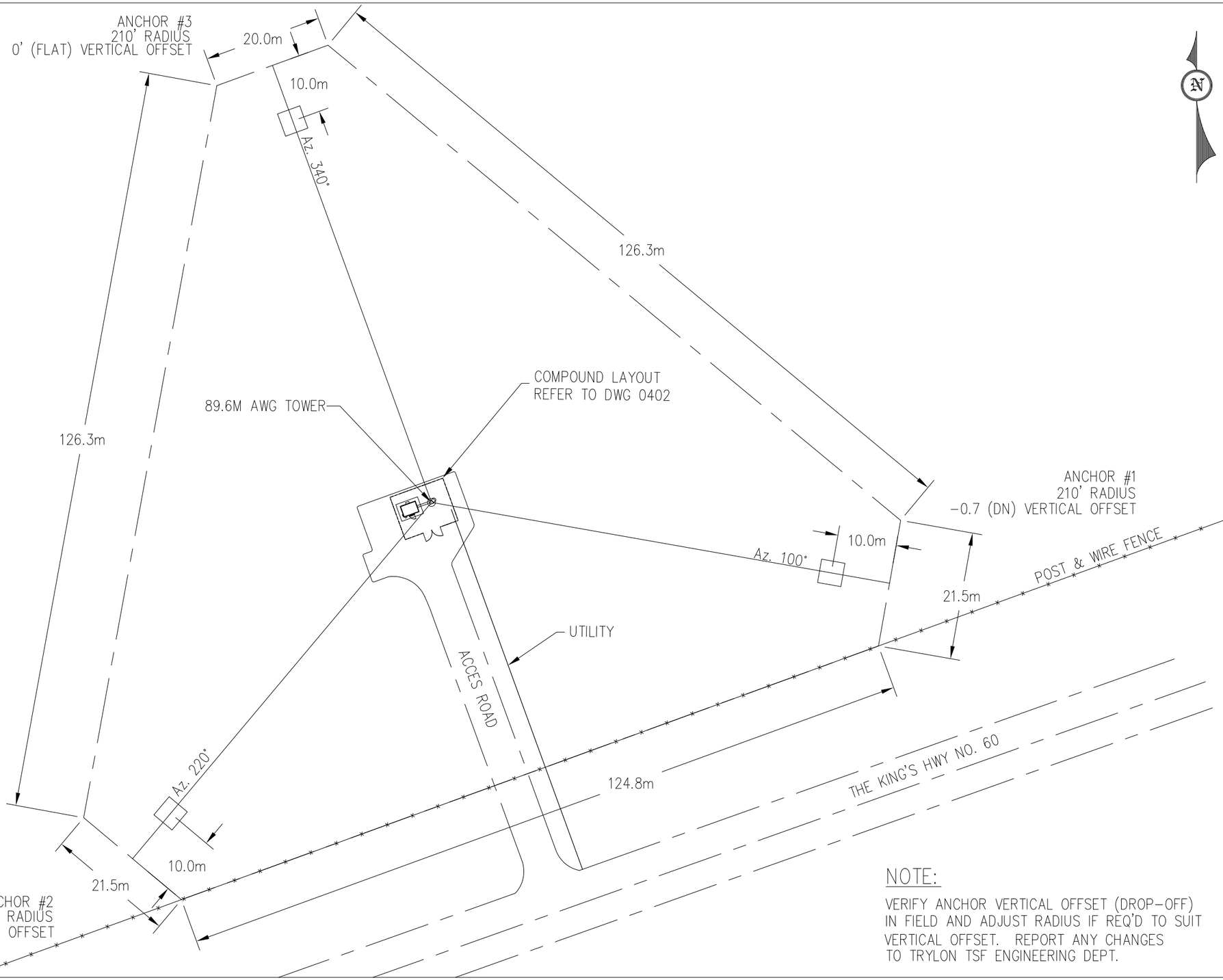
DRAWING NO.
232766.030.0304

NOTES:

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	5.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
Tx-LINE LAYOUT



NOTE:

VERIFY ANCHOR VERTICAL OFFSET (DROP-OFF) IN FIELD AND ADJUST RADIUS IF REQ'D TO SUIT VERTICAL OFFSET. REPORT ANY CHANGES TO TRYLON TSF ENGINEERING DEPT.

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23
B	IB	PS	REVISED AS PER CLIENT REQUIREMENTS	07 DEC 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER
0302	
0303	
0304	
3601	

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

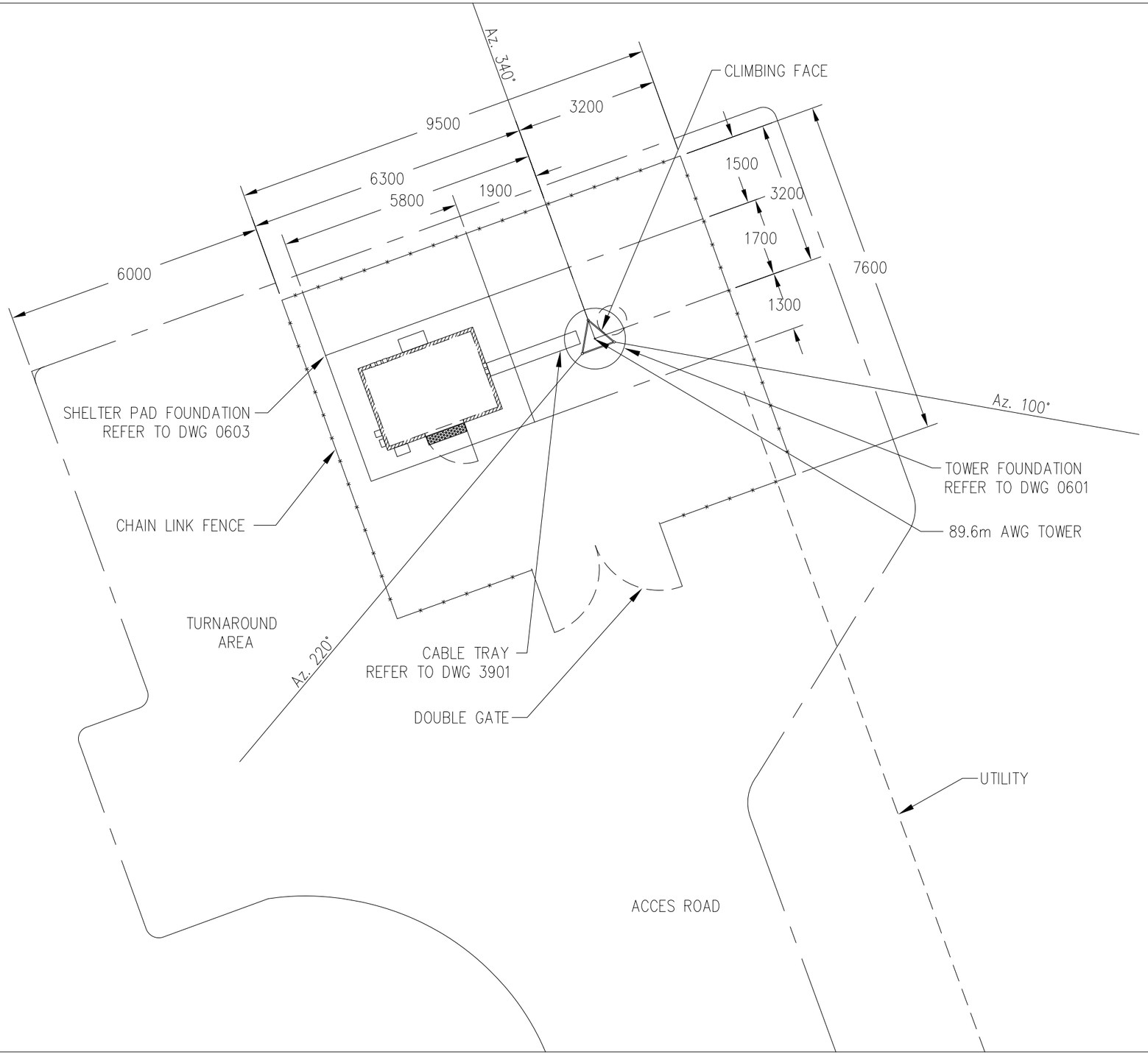
Trylon

DRAWING NO.
232766.030.0401

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	700.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
SITE PLAN



NOTES: 1) ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER
0601	
0603	
3901	

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

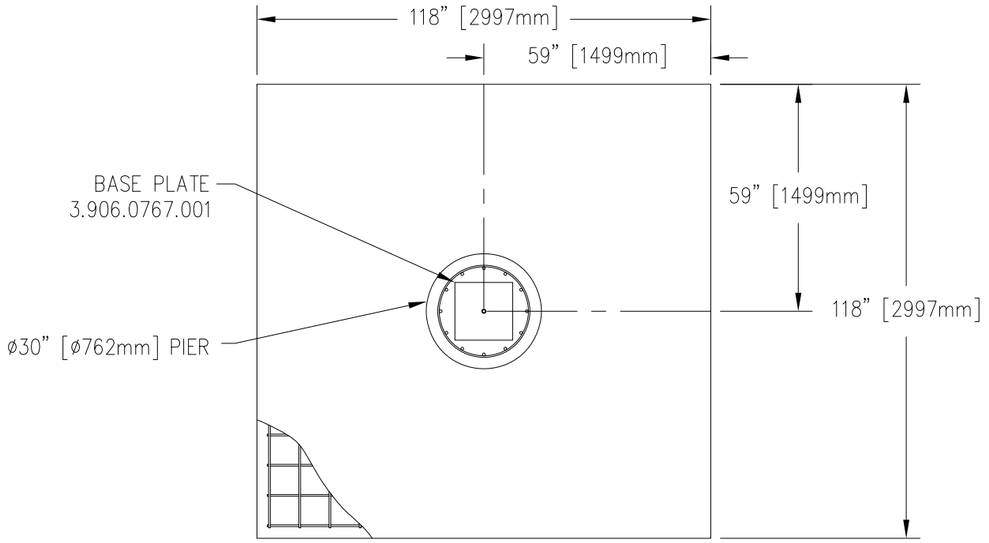
Trylon

DRAWING NO.
232766.030.0402

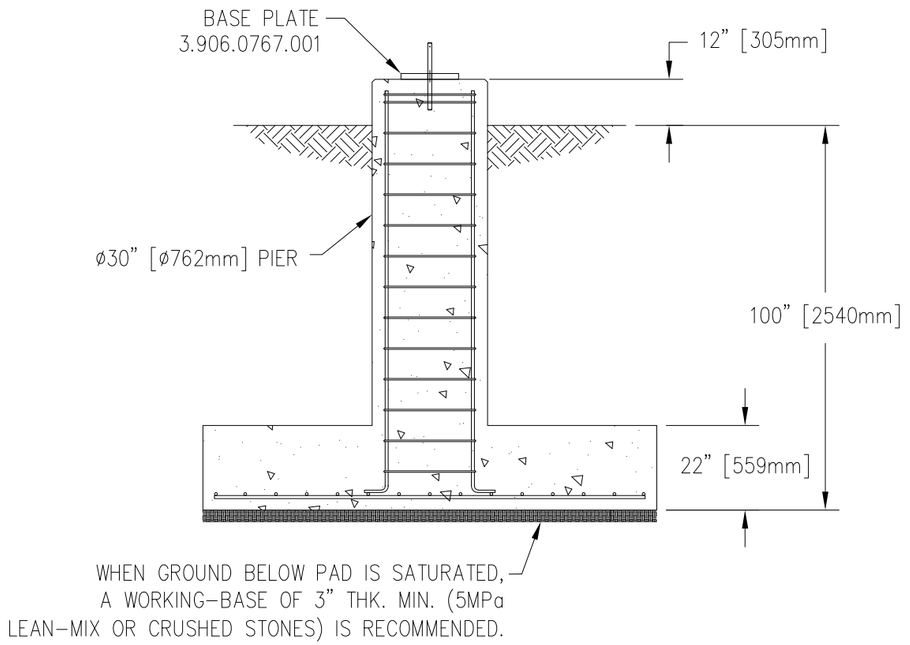
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	100.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
COMPOUND LAYOUT



FOUNDATION DESIGNED WITH 20% ADDITIONAL CAPACITY; THE RATIO OF FORCE/RESISTANCE<= 83.3%



BASE FOUNDATION RE-BAR/TIE SCHEDULE

PIER DETAILS				PAD DETAILS			
QTY	SIZE	TYPE	SPACING	QTY	SIZE	TYPE	SPACING
12	20M	⌐	EQUAL	15	20M	—	*
2	10M	○	2"				
12	10M	○	8"				

NOTES:

1) QUANTITIES LISTED REPRESENTS THE QUANTITY FOR ONE FOUNDATION ONLY.
2) '*' – 30 BARS REQUIRED IN TOTAL, EQUALLY SPACED EACH WAY, APPROXIMATE SPACING IS 8" .
3) REFER TO REBAR DRAWING 232766.030.0605 FOR CUTTING LENGTHS AND FABRICATION DETAILS.

BASE FOUNDATION

(1) REQUIRED

NOTES:

1) THE FOUNDATIONS SHALL BE INSPECTED AT ALL CRITICAL STAGES OF THE WORK BY AN ENGINEER OR A QUALIFIED PERSON REPORTING TO THE ENGINEER.
2) REFER TO 0606 DWG FOR FOUNDATION NOTES.
3) – WHEN BASE PLATE IS INSTALLED WHILE CONCRETE IS SOFT, ENSURE THE BASE PLATE IS LEVEL.
   – ALTERNATE INSTALLATION DRILL HOLE IN PIER, EPOXY EMBED THE PIN USING HY-200 & USE GROUT TO LEVEL BASE PLATE.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER
0605	
0606	

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.0601

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	40.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

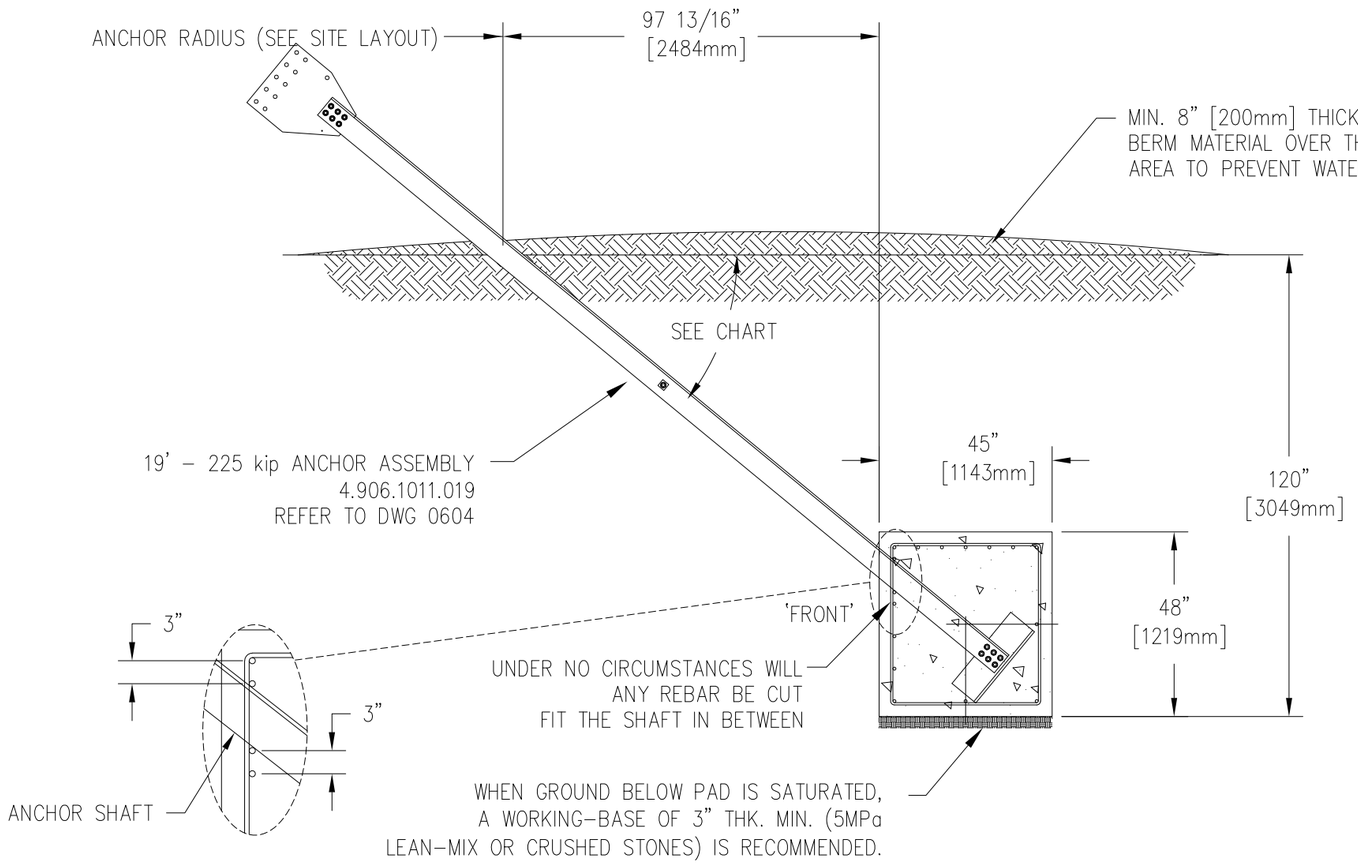
TITLE:
TOWER FOUNDATION

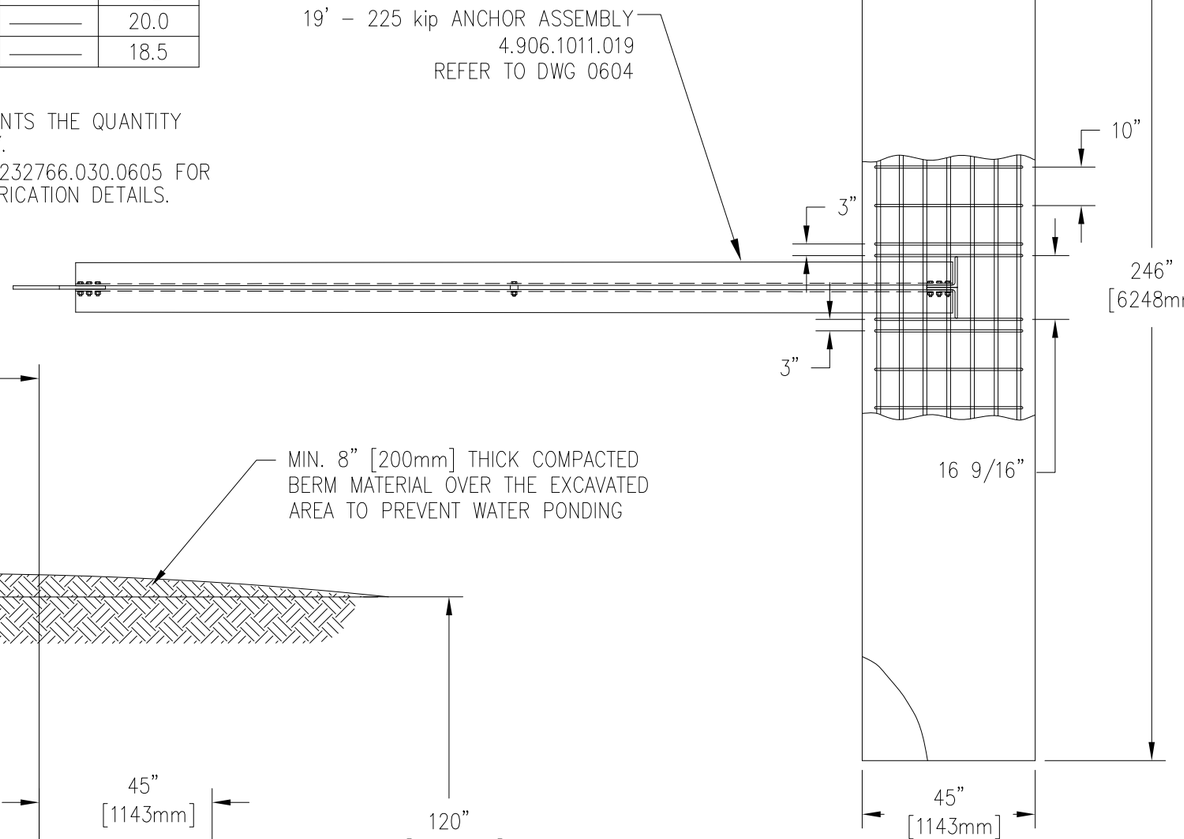
ANCHOR	ANCHOR ANGLE	AXIAL ANGLE
ANCHOR 1	100°	39.7°
ANCHOR 2	220°	39.3°
ANCHOR 3	340°	39.5°

GUY FOUNDATION RE-BAR/TIE SCHEDULE				
LOCATION	QTY	SIZE	TYPE	SPACING
N/A	26	15M	□	10
FRONT	7	25M (16) TOTAL	———	7
TOP	7		———	6.2
BACK	3		———	20.0
BOTTOM	3		———	18.5

NOTES:

1) QUANTITIES LISTED REPRESENTS THE QUANTITY FOR ONE FOUNDATION ONLY.
2) REFER TO REBAR DRAWING 232766.030.0605 FOR CUTTING LENGTHS AND FABRICATION DETAILS.





ANCHOR FOUNDATION
(3) REQUIRED

NOTES:
1) THE ANCHOR-BLOCK MUST BE INSTALLED PERPENDICULAR TO THE GUY-LINE AZIMUTH.
2) THE ANCHOR SHAFT MUST BE INSTALLED ALIGNED WITH THE GUY-LINE AZIMUTHS.
3) THE ANCHOR SHAFT MUST BE INSTALLED AT THE CORRECT AXIAL ANGLE.
4) THE ANCHOR HEAD MUST BE INSTALLED VERTICAL, NOT TILTED.
5) REFER TO DWG 0606 FOR FOUNDATION NOTES.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23
B	PS	PS	REVISED RADIUS	07 DEC 23

FOUNDATION DESIGNED WITH 20% ADDITIONAL CAPACITY; THE RATIO OF FORCE/RESISTANCE<= 83.3%

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER
0604	
0605	
0606	

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

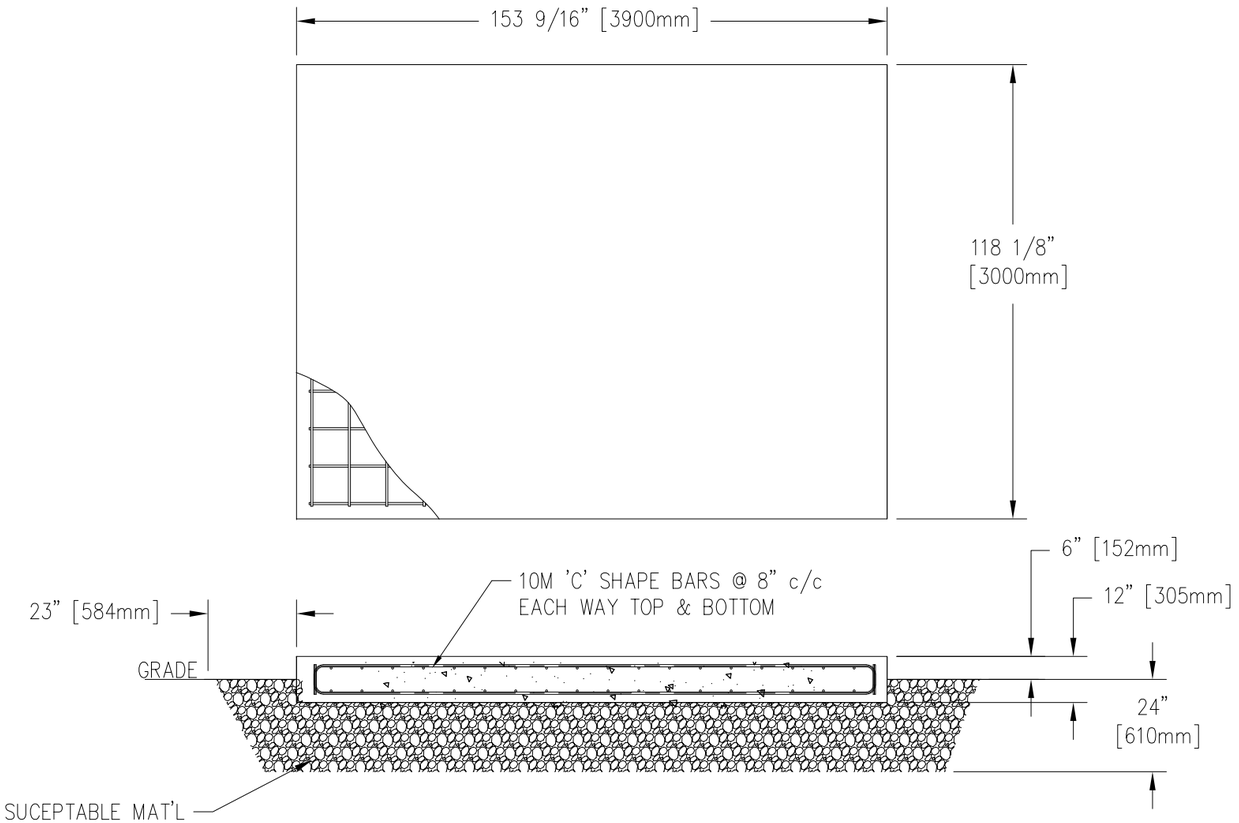
Trylon

DRAWING NO.
232766.030.0602

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	40.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
ANCHOR FOUNDATION



WIC FOUNDATION

WIC FOUNDATION RE-BAR/TIE SCHEDULE			
PAD DETAILS			
QTY	SIZE	TYPE	SPACING
40	10M	⌐¬	*
30	10M	⌐¬	*

NOTES:

1) QUANTITIES LISTED REPRESENTS THE QUANTITY FOR ONE FOUNDATION ONLY.
2) '*' – 70 BARS REQUIRED IN TOTAL, EQUALLY SPACED EACH WAY, APPROXIMATE SPACING IS 8".
3) REFER TO REBAR DRAWING 232766.030.0605 FOR CUTTING LENGTHS AND FABRICATION DETAILS.

NOTES: 1) THE FOUNDATIONS SHALL BE INSPECTED AT ALL CRITICAL STAGES OF THE WORK BY AN ENGINEER OR A QUALIFIED PERSON REPORTING TO THE ENGINEER.
2) REFER TO DWG 0606 FOR CONCRETE CONSTRUCTION NOTES.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER
0402	
0605	
0606	

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

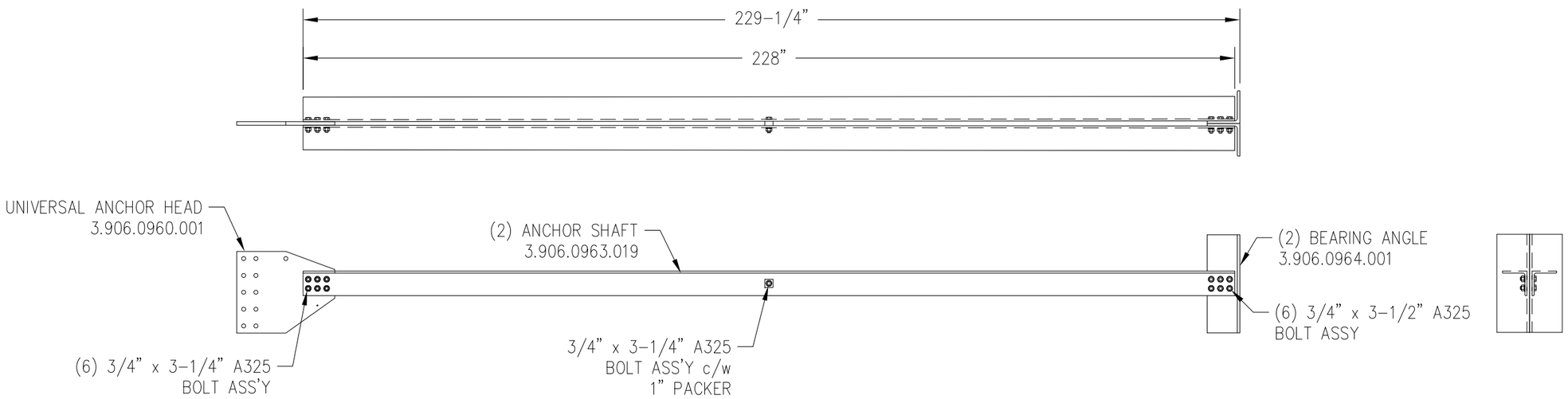
Trylon

DRAWING NO.
232766.030.0603

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	30.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
SHELTER FOUNDATION



19' – 225 kip ANCHOR ASSY

4.906.1011.019

(FOR USE ON DEADMAN BETWEEN 10' AND 12' DEEP)

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.0604

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	30.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
225 kip NON-PIVOT ANCHOR KITS

BAR LIST FOR REINFORCING STEEL

BAR LOCATION	BAR SIZE	TYPE	TOTAL LENGTH OF BAR (inch)	BENDING DIAGRAM DIM. 'A'	BENDING DIAGRAM DIM. 'B'	BENDING DIAGRAM	QTY. REQ'D	TOTAL BAR WT.
ANCHOR	15M	STIRRUP	170–1/8"	39"	42"	'B' 'A' 135° HOOKS BOTH ENDS	78	1167
SHELTER	10M	'C' SHAPE	157–3/8"	6"	147–1/2"	'A' 'B'	30	208
SHELTER	10M		122"	6"	112–1/8"		40	214
TOWER	20M	BENT	114–7/8"	104–1/2"		'A'	12	182
TOWER	10M	HOOK TIE	88–1/8"	24"		6" 'A' 135° HOOKS BOTH ENDS 6" OVERLAP (SEE NOTE 3)	14	54
		LAP TIE				'A' (SEE NOTE 4)		
		STIRRUP				'A' SQUARE 135° HOOKS BOTH ENDS		
TOWER	20M	STRAIGHT	112"				30	443
ANCHOR	25M	STRAIGHT	240"				48	2532
						TOTAL BAR WEIGHT (lbs)		4800

SIZES & WEIGHTS	
SIZE	WT. (lbs/ft)
10M	0.53
15M	1.06
20M	1.58
25M	2.64
30M	3.69
35M	5.28
45M	7.91
55M	13.19

NOTES:
1) REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING WITH CSA STANDARD G30.18:21 GR 400W.
2) REJECT BARS WITH KINKS OR BENDS NOT SHOWN ON THIS DRAWING.
3) HOOK TIES MUST HAVE A MINIMUM OVERLAP OF (2) VERTICAL BARS (MIN 6 INCHES).
4) LAP TIES MUST BE INSTALLED AS ROTATED 90° EVERY LAYER. OVERLAP LENGTH IS 25" FOR 10M, 30" FOR 15M AND 36" FOR 20M.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.0605

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
REBAR CHART

FOUNDATION NOTES:

GENERAL:

1) THE CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS AND DETAILS BEFORE PROCEEDING WITH THE WORK.
2) ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL STANDARDS. WHEN GROUND BELOW PAD IS SATURATED, A WORKING-BASE OF 3" THK. MIN. (5MPa LEAN-MIX OR 3/4" CRUSHED STONES) IS RECOMMENDED.
3) FOUNDATIONS DESIGNED IN ACCORDANCE WITH
   COMPANY NAME: ENGLOBE CORP.
   SOILS REPORT: 02301247.000
   DATED: 26-JULY-2023
4) THE TOWER BASE PAD, THE ANCHOR BOTTOM AND THE FRONT (TOWER SIDE) FACE OF THE ANCHORS SHALL BE PLACED AGAINST UNDISTURBED SOIL.
5) ALL GALVANIZED STEEL IN CONTACT WITH SOIL IS TO BE COATED WITH ROOF PATCH.

CONCRETE:

1) CONCRETE CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF CSA STANDARD A23.3.
2) CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF NOT LESS THAN 4350 psi (30 MPa).
3) CONCRETE SHALL CONTAIN AN AIR ENTRAINING AGENT. TOTAL AIR CONTENT TO BE 5% TO 7% AS SPECIFIED IN CSA STANDARD A23, FOR THE PARTICULAR SIZE OF AGGREGATE BEING USED. THE AIR ENTRAINING AGENT SHALL BE COMPATIBLE WITH THE WATER REDUCING AGENT.
4) THE MAXIMUM SIZE OF COARSE AGGREGATE SHALL BE 3/4 in., SLUMP SHALL BE 3 in +/- 1 in.
5) THE USE OF CALCIUM CHLORIDE OR ACCELERATING ADMIXTURES IS PROHIBITED.
6) SLUMP SHALL BE 75 mm +/- 25 mm.
7) IF THE AIR TEMPERATURE IS 5 DEGREES C OR LESS, THE TEMPERATURE OF THE CONCRETE AT TIME OF PLACING, SHALL BE BETWEEN 15 AND 30 DEGREES C.
8) CHAMFER EXPOSED CORNERS OF CONCRETE (APPROX 20 mm).
9) PROVIDE EFFECTIVE MEANS OF MAINTAINING THE TEMPERATURE OF CONCRETE IN PLACE AT A MINIMUM OF 10 DEGREES C AND A MAXIMUM OF 30 DEGREES C FOR THREE DAYS AFTER PLACING. WHEN THE MEAN DAILY AIR TEMPERATURE IS LESS THAN 5 DEGREES C PROVIDE PROTECTION FOR NEWLY PLACED CONCRETE BY MEANS OF SUITABLE ENCLOSURES OR RAISED COVERINGS, HEAT AND INSULATION.
10) ALL GROUT SHALL BE NON-FERROUS AND NON SHRINK WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 psi (35 MPa) AT 28 DAYS, EDGES GROUT SHALL BE TAPERED OFF AT 45°.
11) ALL CONCRETE TO BE TYPE 10 NORMAL PORTLAND CEMENT.

REINFORCEMENT:

1) CLEAN REINFORCEMENT OF ANY LOOSE SCALE, DIRT OR OTHER COATINGS WHICH WOULD DESTROY OR REDUCE BONDING. REJECT BARS WITH KINKS OR BENDS NOT SHOWN ON FOUNDATION DRAWINGS.
2) ALL REINFORCEMENT SHALL HAVE A MINIMUM OF 3 in CONCRETE COVER.
3) REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING WITH A MINIMUM YIELD OF 60 ksi.

BACKFILLING:

1) BACKFILL SHALL BE PLACED IN THIN LIFTS (MAXIMUM 6 in) AND COMPACTED TO A MINIMUM OF 95 PERCENT OF STANDARD PROCTOR MAXIMUM DRY DENSITY. IN THE EVENT THAT EXCAVATED MATERIALS ARE NOT SUITABLE FOR BACKFILL, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPLY AND COMPACT SUITABLE CLEAN MATERIAL TO MEET THAT REQUIREMENT.

STANDARDS:

1) FOUNDATIONS AND ANCHORS DESIGNED IN ACCORDANCE WITH CSA-S37.
2) CONCRETE WORK IN ACCORDANCE WITH CSA A23.1/A23.2.
3) REINFORCEMENT FOR CONCRETE IN ACCORDANCE WITH CSA A23.1.

INSPECTION:

1) THE FOUNDATIONS AND ANCHORAGES SHALL BE INSPECTED AT ALL CRITICAL STAGES OF THE WORK BY AN ENGINEER OR A QUALIFIED PERSON REPORTING TO THE ENGINEER.

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.0606

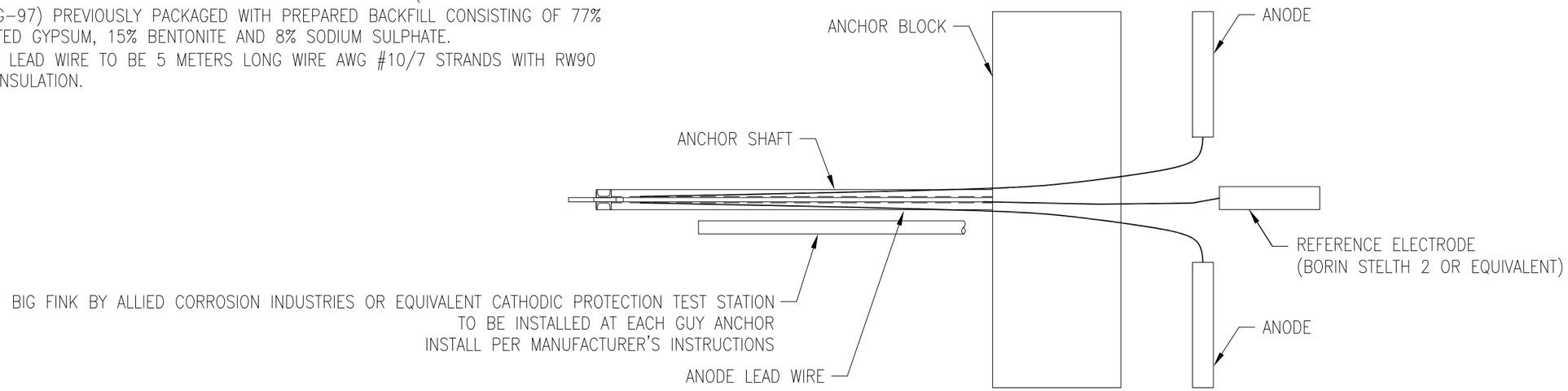
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

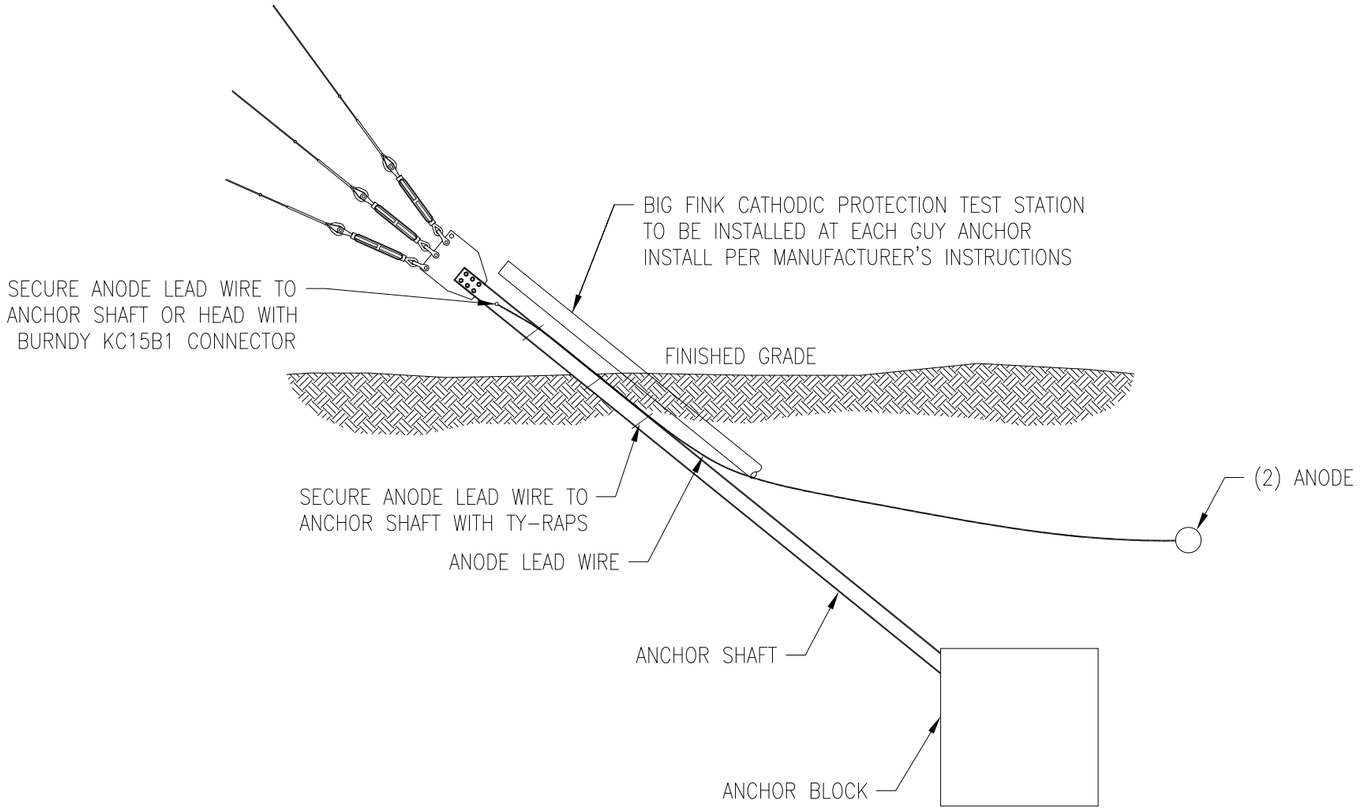
DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
FOUNDATION NOTES

ANODE NOTES:

1. ALL ANODES TO BE HIGH POTENTIAL MAGNESIUM OF 17lbs (TESTED ACCORDING TO ASTM G-97) PREVIOUSLY PACKAGED WITH PREPARED BACKFILL CONSISTING OF 77% HYDRATED GYPSUM, 15% BENTONITE AND 8% SODIUM SULPHATE.
2. ANODE LEAD WIRE TO BE 5 METERS LONG WIRE AWG #10/7 STRANDS WITH RW90 BLUE INSULATION.





NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

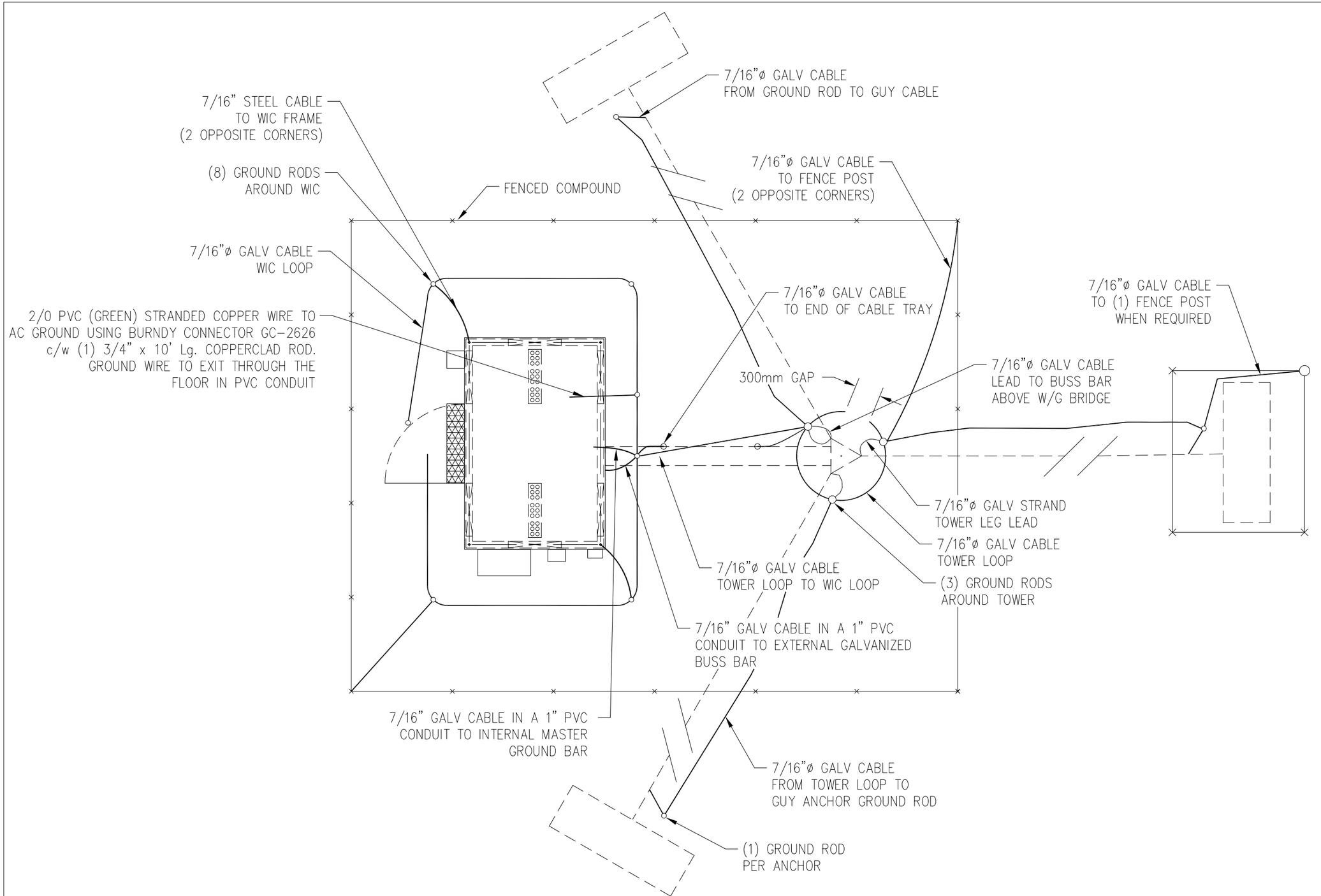
Trylon

DRAWING NO.
232766.030.0607

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	30.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
GENERIC ANODE INSTALLATION



REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER
1202	
1203	
1204	
1205	
1206	
1207	
1208	

Trylon

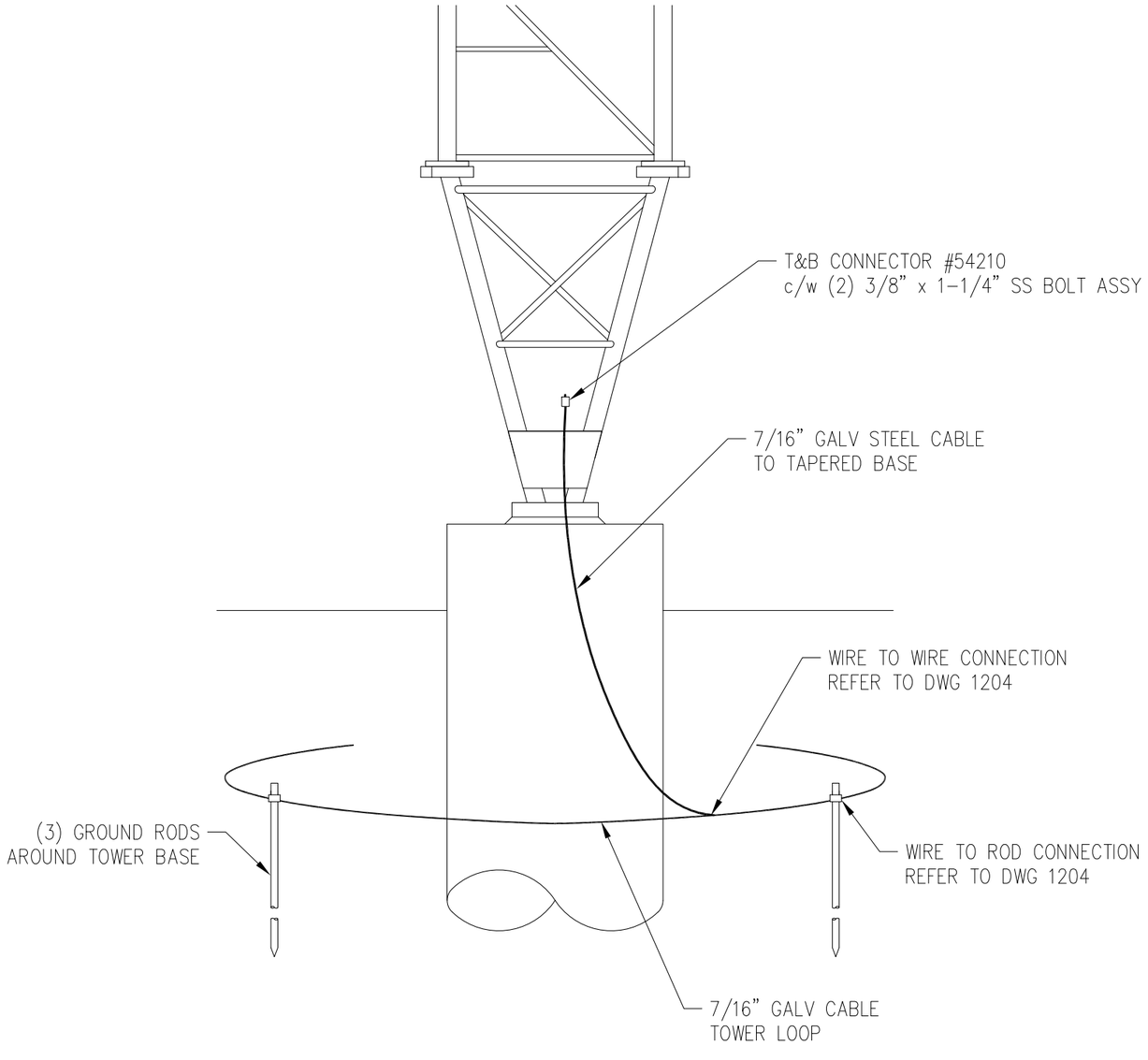
DRAWING NO.
232766.030.1201

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	25.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
GROUNDING DETAILS

NOTES:
1) REFER TO DWG 1202 FOR AWG TOWER ELEVATION VIEW AND 1203 FOR GUY ANCHOR ELEVATION VIEW.
2) REFER TO DWG 1204 FOR GENERAL GROUNDING DETAILS.
3) REFER TO DWG 1206 FOR GROUNDING NOTES.
4) INSTALL A GALV STEEL BUSS BAR ABOVE THE W/G BRIDGE. REFER TO DWG 1208.
5) WHEN REQUIRED, INSTALL A LIGHTNING ROD AT TOP OF TOWER. REFER TO DWG 1207 FOR DETAILS.



REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER
1204	

NOTES:

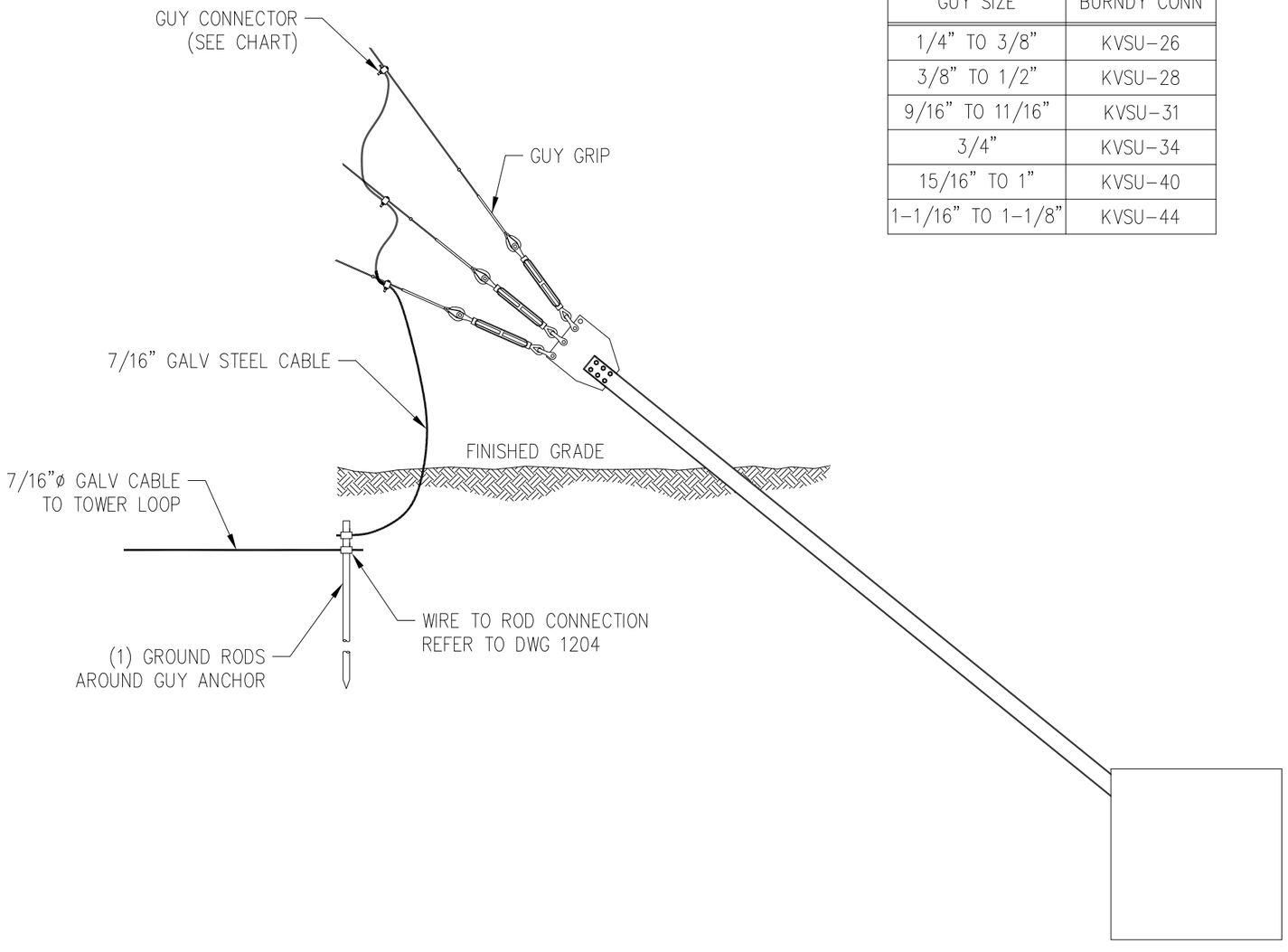
Trylon

DRAWING NO.
232766.030.1202

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	20.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
GROUNDING DETAILS



GUY CONNECTOR

GUY SIZE	BURNDY CONN
1/4" TO 3/8"	KVSU-26
3/8" TO 1/2"	KVSU-28
9/16" TO 11/16"	KVSU-31
3/4"	KVSU-34
15/16" TO 1"	KVSU-40
1-1/16" TO 1-1/8"	KVSU-44

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

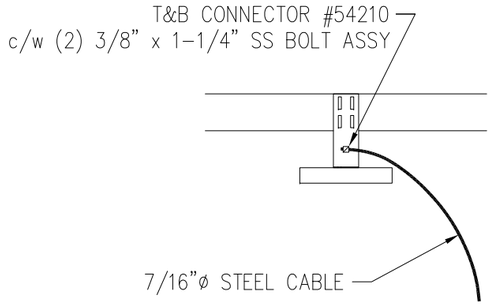
Trylon

DRAWING NO.
232766.030.1203

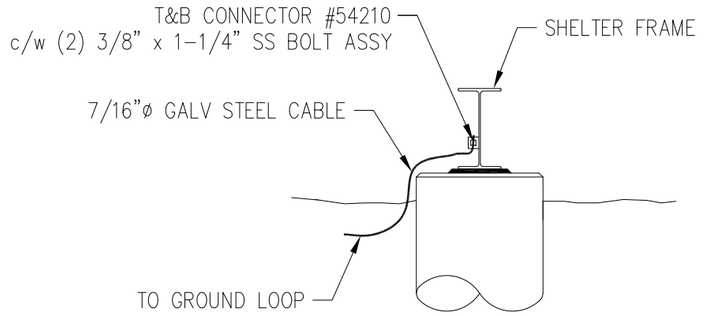
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	20.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

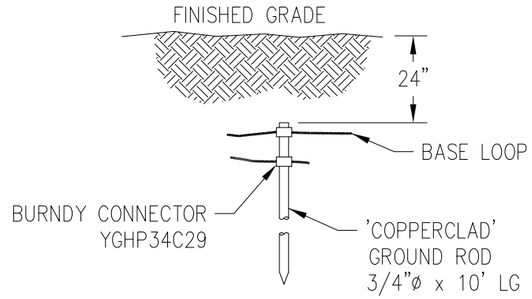
TITLE:
GROUNDING DETAILS



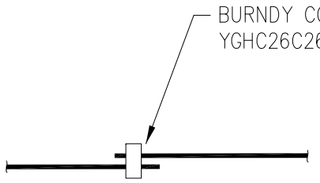
TYPICAL CABLE TRAY



TYPICAL SHELTER FRAME GROUNDING

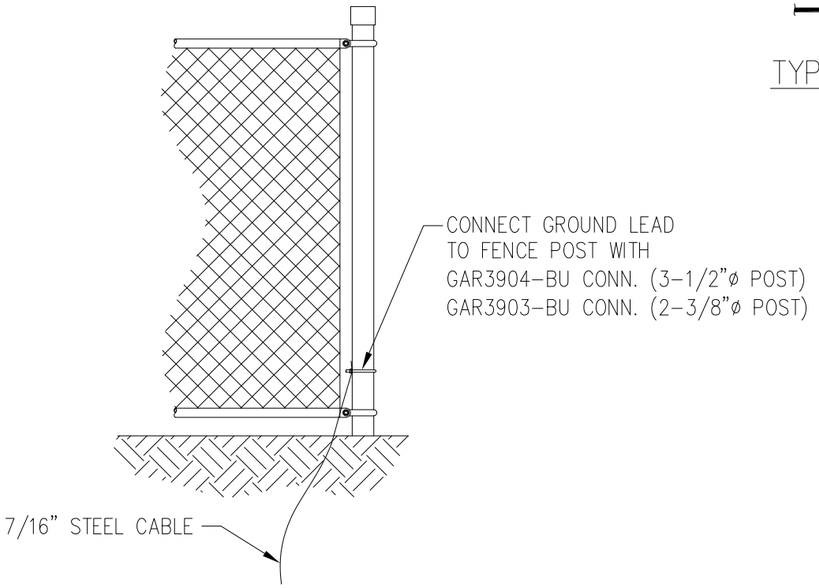


TYPICAL GROUND ROD

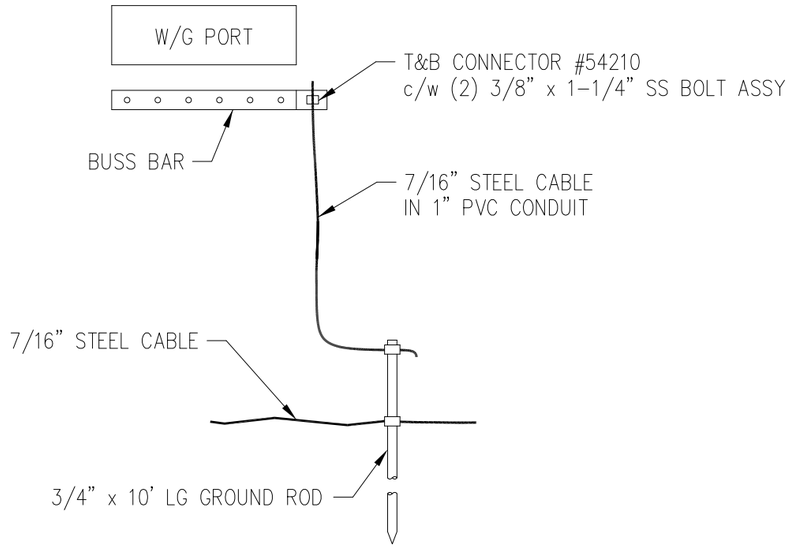


TYPICAL WIRE/WIRE SPLICE

IF REQUIRED



TYP. FENCE POST GROUNDING



W/G GROUNDING @ PORT

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

Trylon

DRAWING NO.
232766.030.1204

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	20.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:

GROUNDING DETAILS

LOCATION	FORMULA	LENGTH	
		7/16" GALV	2/0 PVC
TOWER LOOP	(PIER DIA. + 10') x 3.1415 (BASED ON 60"ø PIER)	47'	
SHELTER LOOP	BASED ON 10' x 12' SHELTER	82'	
GUY ANCHOR LOOP	((LENGTH + 10') x 2) + ((WIDTH + 10') x 2) (BASED ON 5'x30' DEADMAN)	330'	
TOWER LOOP TO SHELTER LOOP	(30')	30'	
TOWER LOOP TO ANCHOR LOOP	SEE CHART BELOW	SEE CHART	
GUY WIRE LEAD	30' x 3 ANCHORS	90'	
TOWER LEAD	15' x 3 LOCATIONS	45'	
WGB/CABLE TRAY LEAD	15' x 3 LOCATIONS (ASSUMED 20' WGB)	45'	
FENCE LEAD	(30' x 2 LOCATIONS) + (30' PER ANCHOR)	150'	
SHELTER FRAME	20' x 2 LOCATIONS	40'	
SHELTER BUSS BAR	EXT. 20' x 1 LOCATION INT. 20' x 1 LOCATIONS	40'	
SHELTER STEP	20'	20'	
AC GROUND	30'		30'
SUB TOTAL		SEE CHART	30'
GRAND TOTAL (ADD 5% TO SUB TOTAL)		SEE CHART	32' [10M]

ANCHOR RADIUS	FORMULA	LENGTH OF 7/16" GALV		
		(3) RADIALS	SUB TOTAL	GRAND TOTAL
UP TO 100'	RADIUS + 10'	330'	1249'	1312' [400M]
100' TO 200'	RADIUS + 10'	630'	1549'	1627' [496M]
200' TO 300'	RADIUS + 10'	930'	1849'	1942' [592M]

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

Trylon

DRAWING NO.
232766.030.1205

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
GROUND WIRE CUTTING CHART

GROUNDING NOTES:

1. CONNECT 7/16" STEEL GALV CABLE TO TOWER GALV BUSS BAR.
2. CONNECTION OF GROUNDING KIT FOR FEEDER TO BUSS BAR BY ANTENNA INSTALLER.
3. LENGTH OF TAIL REQUIRED TO CONNECT COPPER WIRE TO TOWER IS TO BE DETERMINED BY TOWER MANUFACTURER.
4. FOR ROUND MEMBER, WRAPLOCK PVC COVERED COPPER WIRE TO LEG. FOR ANGLE MEMBER, ATTACH WIRE TO LEG WITH ANGLE ADAPTERS.
5. GROUNDING KIT STRAP OF FEEDER TO TOWER COPPER BUSS BAR WITH 3/8" S.S. BOLT AND GROUNDING LUG. CONNECTION BY ANTENNA INSTALLER.
6. IN ROCK CONDITIONS, CONTRACTOR TO SUPPLY 300mm OF OVERBURDEN FOR EXPOSED COPPER WIRE WHEREVER POSSIBLE.
7. BOLT DOWN COPPER WIRE TO THE ROCK AT 3'-3" INTERVALS, WHERE APPLICABLE.
8. ALL BURNDY CONNECTORS AND CONNECTING WIRE OR CABLE PARTS THAT WILL COME IN CONTACT WITH THE BURNDY CONNECTOR SHALL BE CLEANED OF ALL RUST, OXIDE OR DIRT AND THEN GIVEN A LIBERAL APPLICATION OF "NO-OX-ID A" SPECIAL SEALING COMPOUND PRIOR TO COMPLETING THE CONNECTIONS. (ABOVE GROUND ONLY)
9. GROUND RODS WHICH CANNOT BE PROPERLY DRIVEN INTO THE OVERBURDEN VERTICALLY SHALL BE PLACED IN A 76mm (3") DIAMETER DRILLED HOLE FILLED WITH A BENTONITE AND WATER MIXTURE.
10. PROCEDURE FOR PLACING GROUND ROD IN BENTONITE:
    A) DRILL 76mm (3") DIAMETER HOLE IN ROCK 3m (10') DEEP. CLEAN OUT HOLE.
    B) POUR WATER APPROX. 1/3 OF THE WAY UP HOLE.
    C) INSERT GROUND ROD.
    D) ADD BENTONITE POWDER IN HOLE ALTERNATING WITH WATER UNTIL HOLE IS FILLED.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING SUFFICIENT LENGTH OF COPPER CABLE AND HARDWARE.
12. THE CONTRACTOR SHALL MEASURE THE PARAMETERS, ACCORDING TO SECTION 5 IN THE MAIN PART OF THE ROGERS NETWORK STANDARD 4001, AND RECORD THE TEST RESULTS ON A COPY OF THE TEST 16 NOV 23 SHEET FOUND IN APPENDIX 4.
13. GROUNDING KIT STRAP OF FEEDER TO WIC BUSS BAR WITH 3/8" S.S.

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A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

Trylon

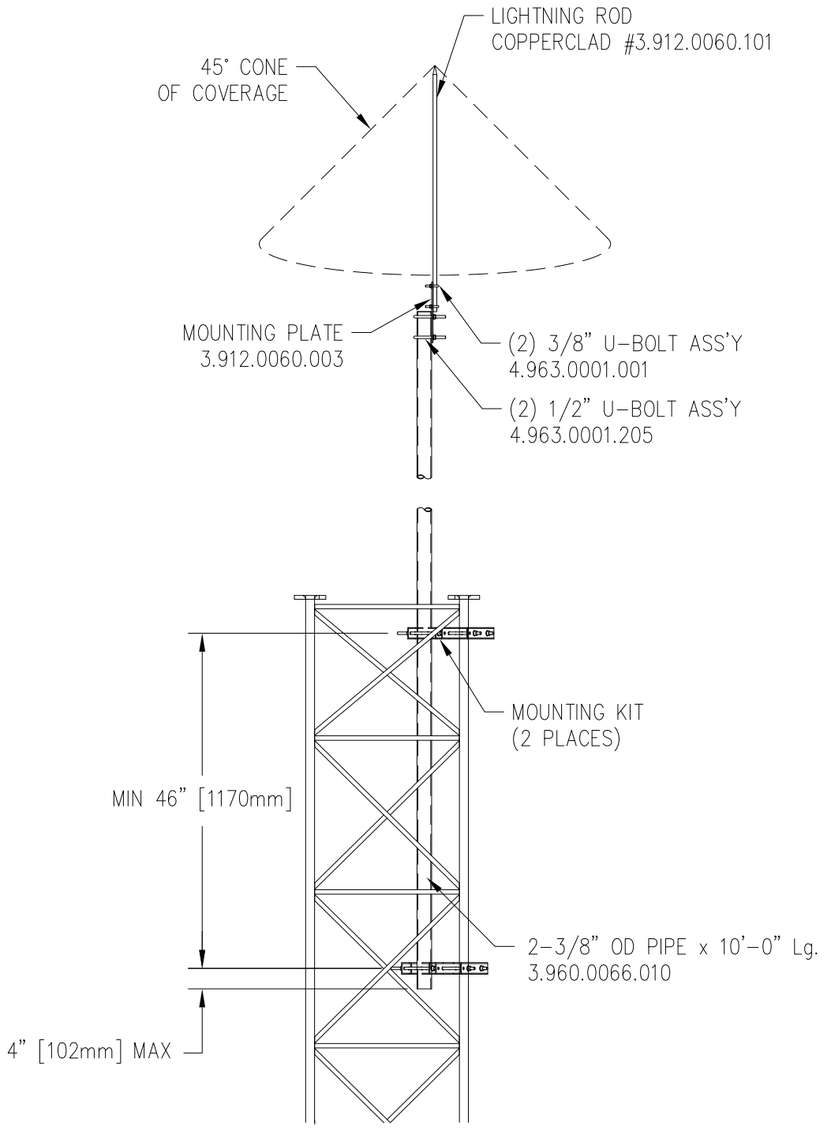
DRAWING NO.
232766.030.1206

NOTES:

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	25.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

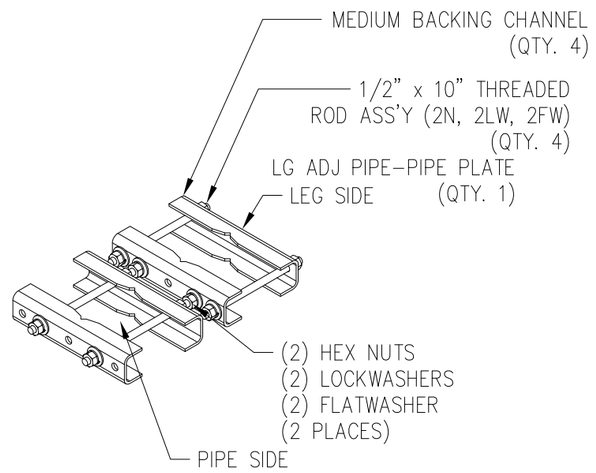
TITLE:
GROUNDING NOTES



LIGHTNING ROD DETAIL

(MOUNTING TO INSIDE OF TOWER LEG)
KIT WILL MOUNT TO 60° ANGLE LEGS TO V6"
AND 90° ANGLE LEGS TO 5"
AND ROUND LEGS UP TO 5" OD
(ANGLE LEG SHOWN)

MOUNTING KIT



MOUNTING KIT

(4)	3.963.0209.001	MEDIUM BACKING CHANNEL
(4)	4.963.0019.210	1/2" x 10" THD ROD ASSY
(4)	1201120	1/2" GR.5 HEX NUT
(4)	1201121	1/2" GR.5 LOCKWASHER
(4)	1201122	1/2" GR.5 FLATWASHER

KIT NUMBER	LIGHTNING ROD
4.912.1012.001	COPPERCLAD

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

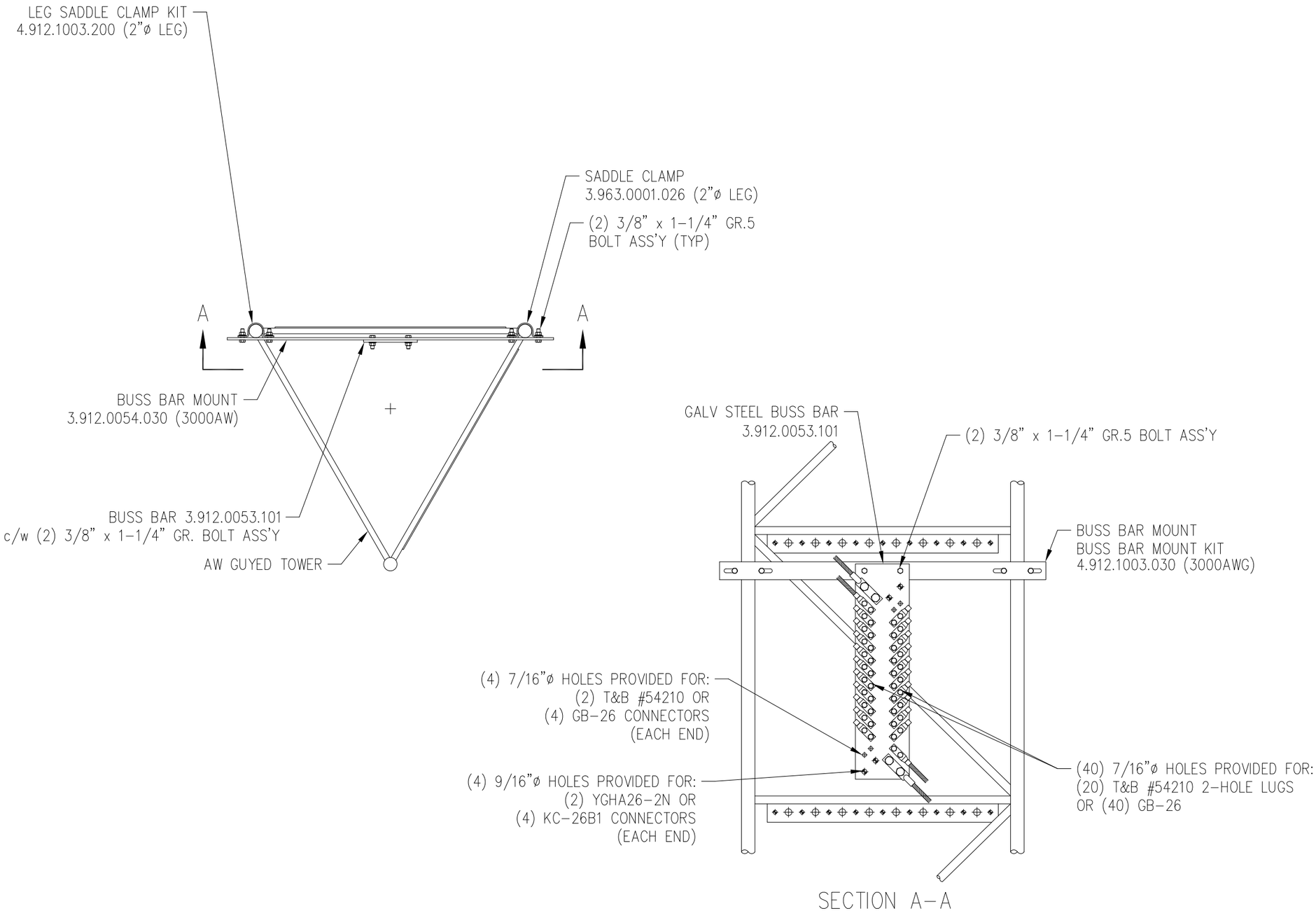
Trylon

DRAWING NO.
232766.030.1207

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	30.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
UNIVERSAL LIGHTNING ROD KIT



SECTION A-A

NOTES: 1) BUSS BAR CAN BE MOUNTED ON ANY FACE OR ON MULTIPLE FACES DEPENDING ON Tx LINE LOCATION.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.1208

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	12.000

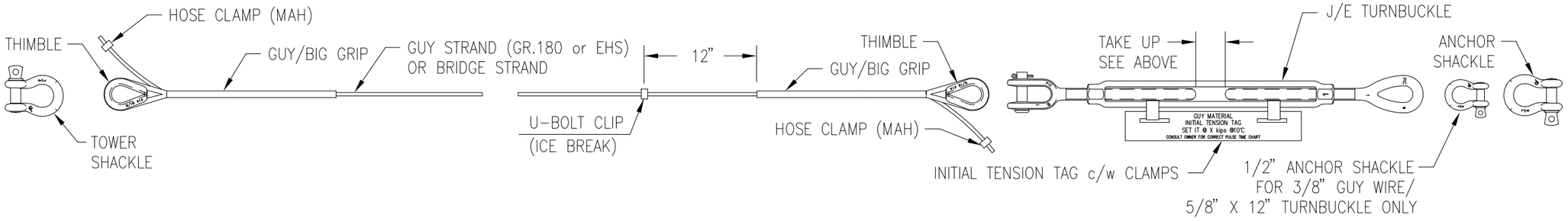
DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
BUSS BAR INSTALLATION

AS PER CAN/CSA-S37-18, CLAUSE 12.5, FOR INITIAL INSTALLATIONS, THE MINIMUM TAKE-UP ADJUSTMENT AVAILABLE AFTER THE STRUCTURE IS PLUMB AND THE GUY TENSIONS ARE SET SHOULD BE:

A) 6" FOR GUYS WITH NOMINAL DIAMETER OF 1/2" AND SMALLER: AND

B) 10" FOR GUYS WITH NOMINAL DIAMETER GREATER THAN 1/2".



GUY ASSEMBLY CHART – EXTRA HIGH STRENGTH GUY STRAND

TOWER SHACKLE (S.P.)			THIMBLE	GUY	EXTRA HIGH STRENGTH GUY STRAND (EHS) (LEFT-HAND LAY)				HOSE	U-BOLT CLIP	GUY GRIPS			THIMBLE	J/E TURNBUCKLE		ANCHOR SHACKLE (S.P.)			
SIZE	PIN ø	T. ULT.		TERMINATION	SIZE	CONSTR'	T ULT.	WEIGHT # / FT.	CLAMP	(ICE BREAK)	SIZE	GUY GRIP PART NO.	HOLDING STRENGTH		SIZE	T. ULT.	SIZE	SIZE	PIN ø	T. ULT.
5/8"	3/4"	42.99 K	7/16" H	3/8" BG-2147	3/8"	1 x 7	15.40 K	.274	MAH-6	5/16"	3/8"	BG-2147	100 %	7/16" H	5/8" x 12"	17.5 K	1/2"	5/8"	3/4"	42.99 K
5/8"	3/4"	42.99 K	1/2" H	7/16" BG-2148	7/16"	1 x 7	20.80 K	.389	MAH-6	3/8"	7/16"	BG-2148	100 %	1/2" H	3/4" x 18"	26 K	N/R	5/8"	3/4"	42.99 K
5/8"	3/4"	42.99 K	9/16" H	1/2" BG-2115	1/2"	1 x 7	26.90 K	.511	MAH-6	1/2"	1/2"	BG-2115	100 %	9/16" H	3/4" x 18"	26 K	N/R	5/8"	3/4"	42.99 K
3/4"	7/8"	62.83 K	3/4" H	5/8" BG-MS-6446	5/8"	1 x 19	48.0 K	.819	MAH-6	5/8"	5/8"	BG-MS-6446	100 %	3/4" H	1" x 18"	50 K	N/R	3/4"	7/8"	62.83 K

1/2" ANCHOR SHACKLE FOR 3/8" GUY WIRE/ 5/8" X 12" TURNBUCKLE ONLY

				GUY CUTTING LENGTH		
	ELEVATION	GUY SIZE	GUY CONSTR	AZ. = 100°	AZ. = 220°	AZ. = 340°
	49.0'	3/8"	1 x 7	251'	251'	251'
	109.0'	7/16"	1 x 7	271'	270'	271'
T/R	171.5'	7/16"	1 x 7	304'	303'	303'
T/R	231.5'	1/2"	1 x 7	344'	343'	343'
	279.0'	5/8"	1 x 19	379'	379'	379'

NOTE: AN EXTRA 20 FEET HAS BEEN ADDED TO EACH GUY LENGTH. VERIFY GUY LENGTH IN FIELD BEFORE CUTTING.

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

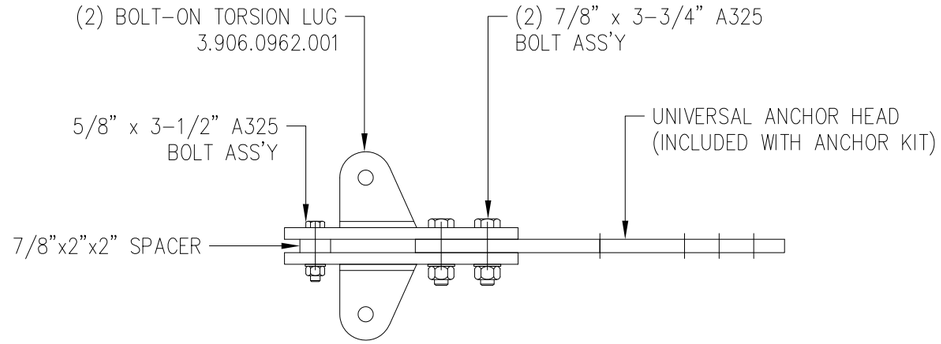
Trylon

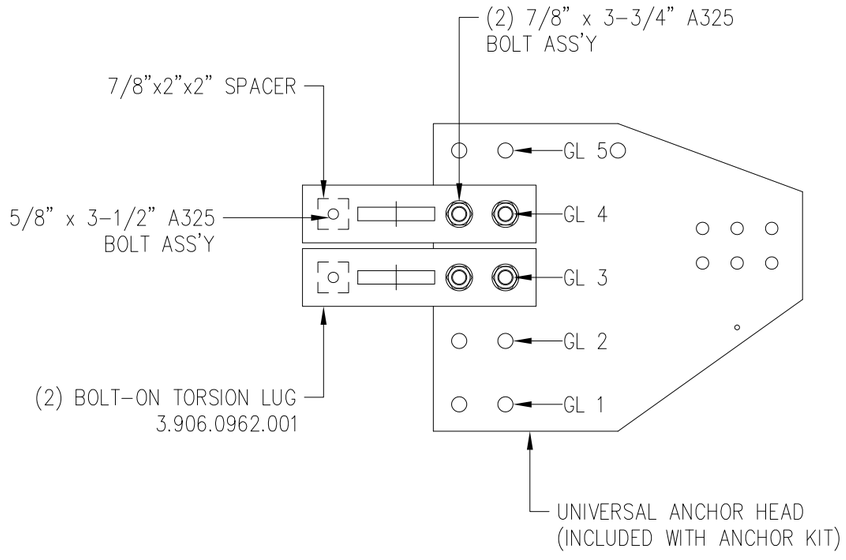
DRAWING NO.
232766.030.1501

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
GUY ASSEMBLY CHART





BOLT ON TORSION ATTACHMENT KIT
KIT #4.906.1012.002 (ONE PER LEVEL)

NOTES: 1) WHENEVER VARI-GRIPS ARE USED, DO NOT USE UNIVERSAL ANCHOR HEAD.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

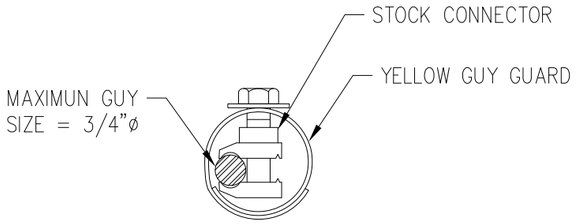
Trylon

DRAWING NO.
232766.030.1502

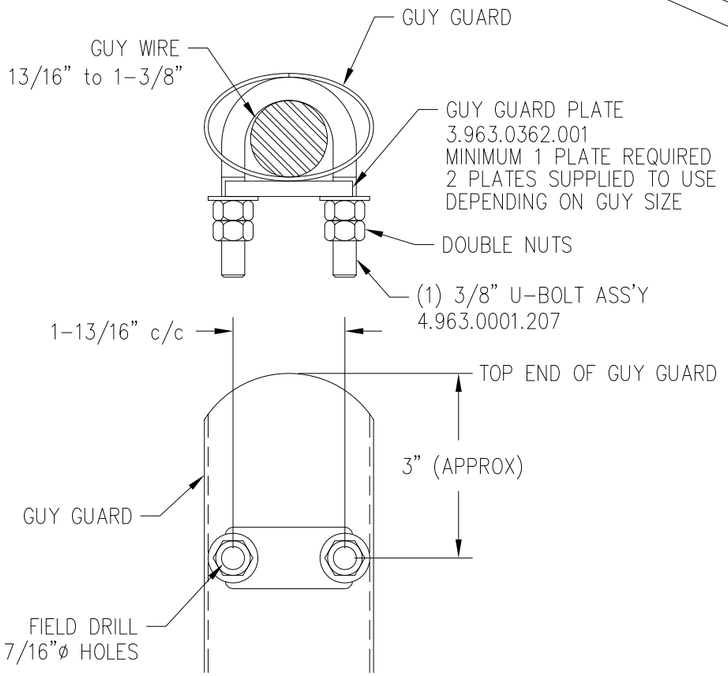
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	10.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

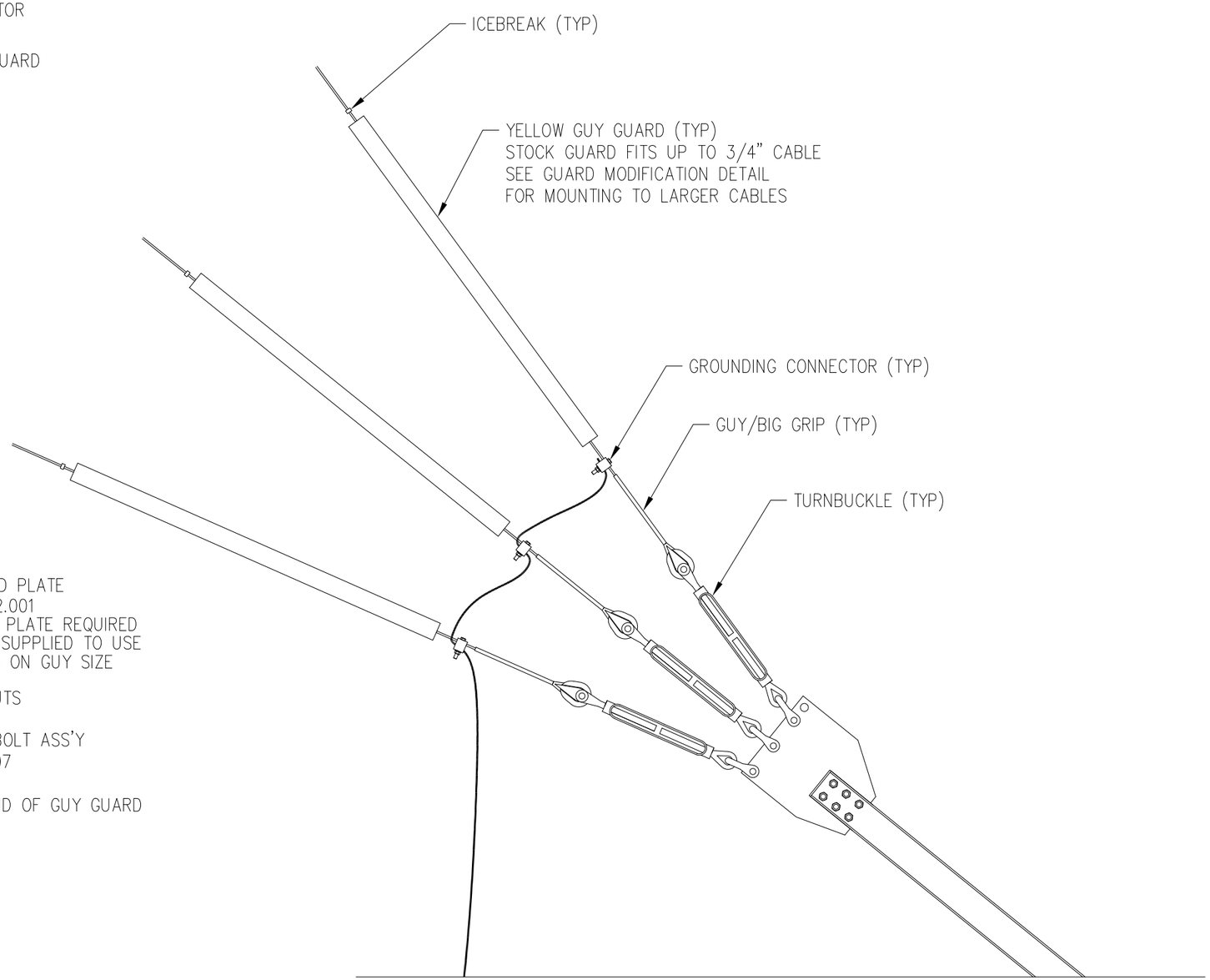
TITLE:
BOLT-ON ATTACHMENT KITS



STOCK GUY GUARD END VIEW



MODIFIED GUY GUARD



ELEVATION VIEW

KIT NUMBER: 4.915.0027.001
(CONTAINS MATERIAL FOR ONE GUY GUARD)

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

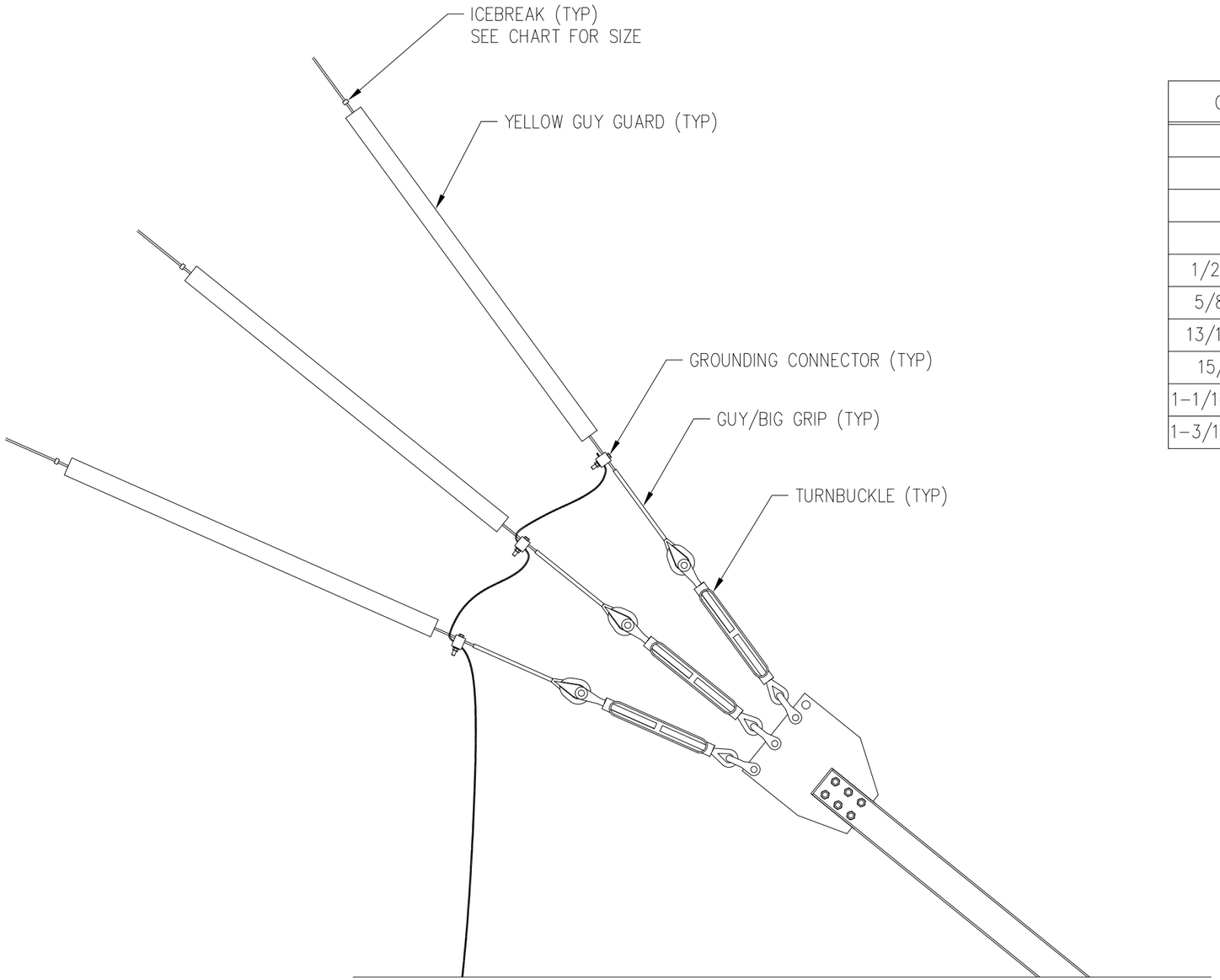
Trylon

DRAWING NO.
232766.030.1503

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	10.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
GUY GUARD INSTALLATION



ELEVATION VIEW

ICE BREAKS

GUY SIZE	U-BOLT CLIP
1/4"	3/16"
5/16"	1/4"
3/8"	5/16"
7/16"	3/8"
1/2" TO 9/16"	1/2"
5/8" TO 3/4"	5/8"
13/16" TO 7/8"	3/4"
15/16" TO 1"	7/8"
1-1/16" TO 1-1/8"	1"
1-3/16" TO 1-1/4"	1-1/8"

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

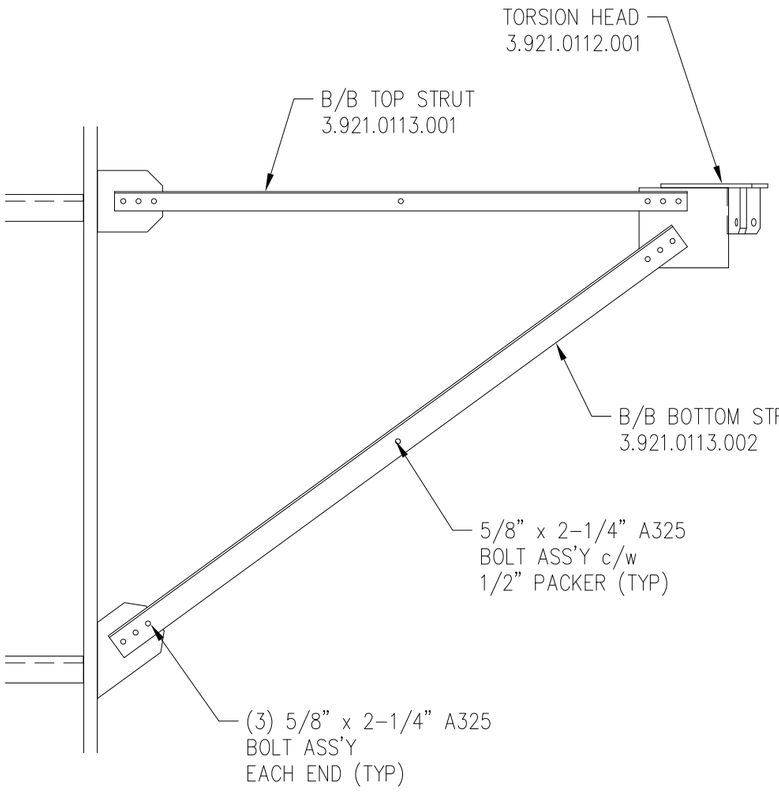
Trylon

DRAWING NO.
232766.030.1504

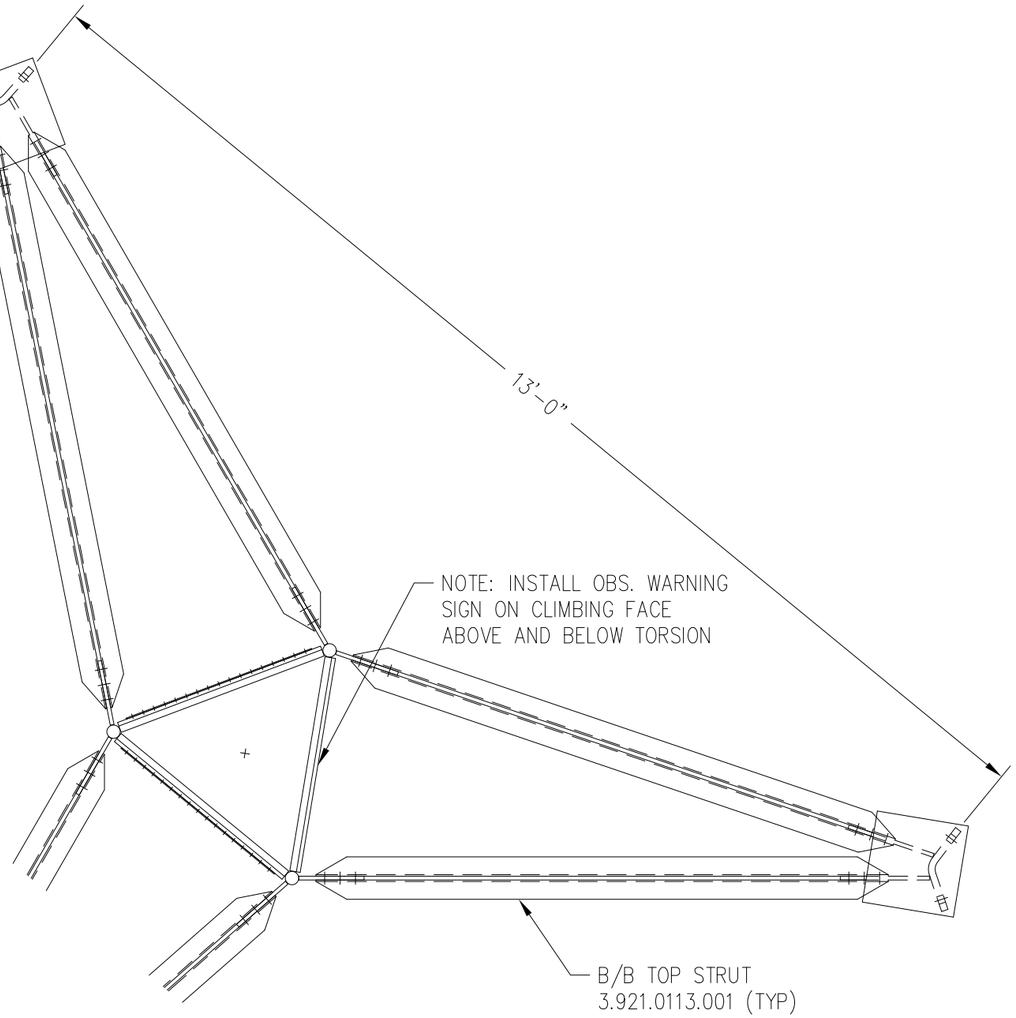
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	10.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
ICE BREAK INSTALLATION



ELEVATION VIEW



PLAN VIEW

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

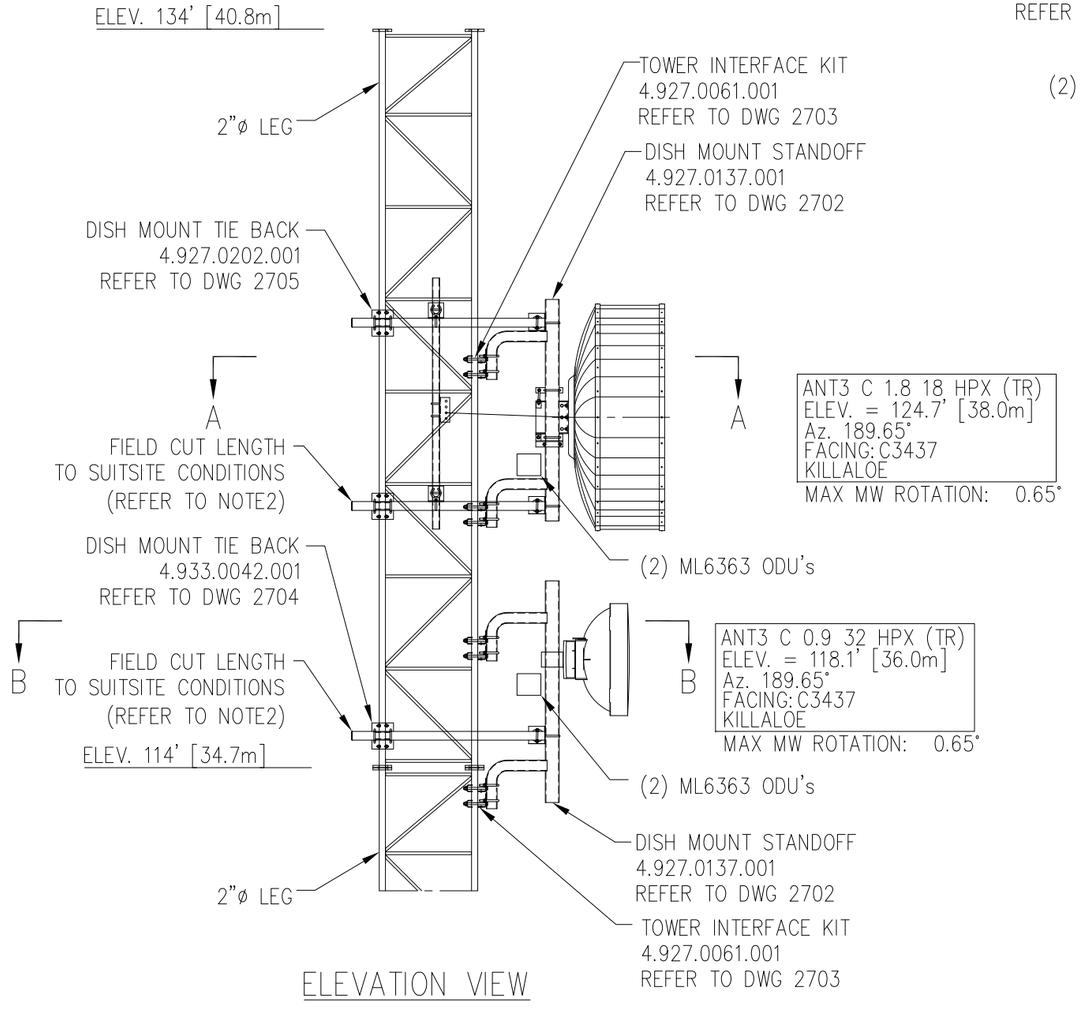
Trylon

DRAWING NO.
232766.030.2101

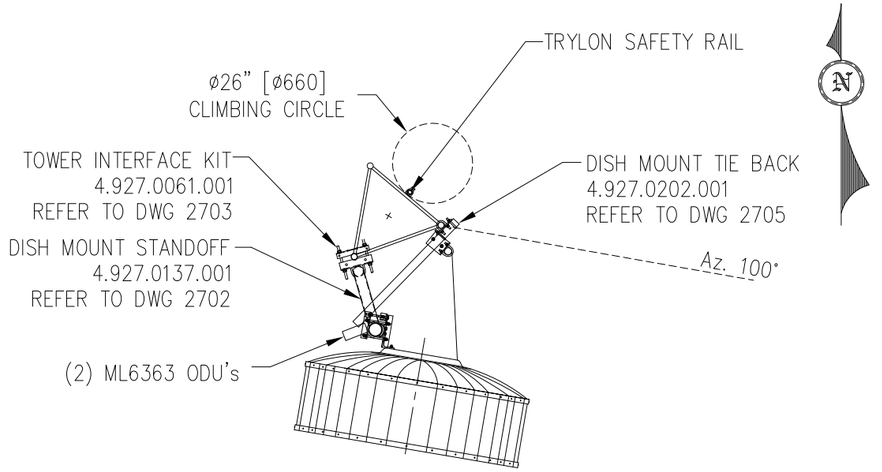
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	20.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

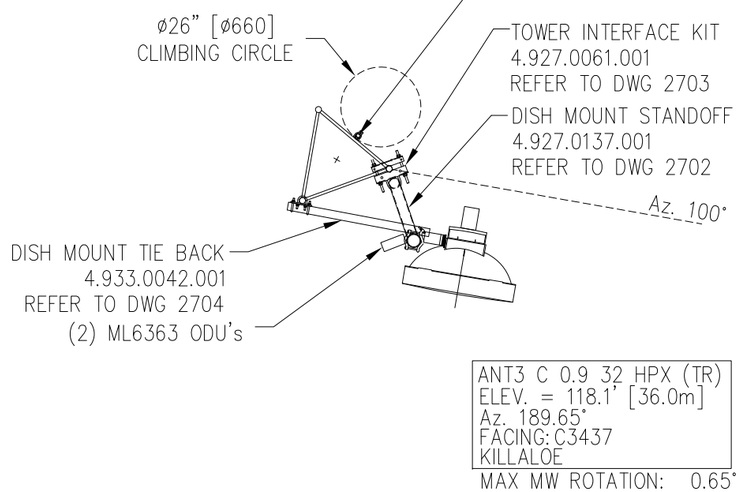
TITLE:
13' TORSION RESISTOR



ELEVATION VIEW



SECTION A–A



SECTION B–B

NOTES: 1) PLACE ALL MOUNTS AS CLOSE TO PANEL POINTS AS POSSIBLE.
2) APPLY TWO COATS OF GALVICON TO ALL FIELD CUT OR DRILLED EDGES.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION: 146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER
2702	
2703	
2704	
2705	

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.2701

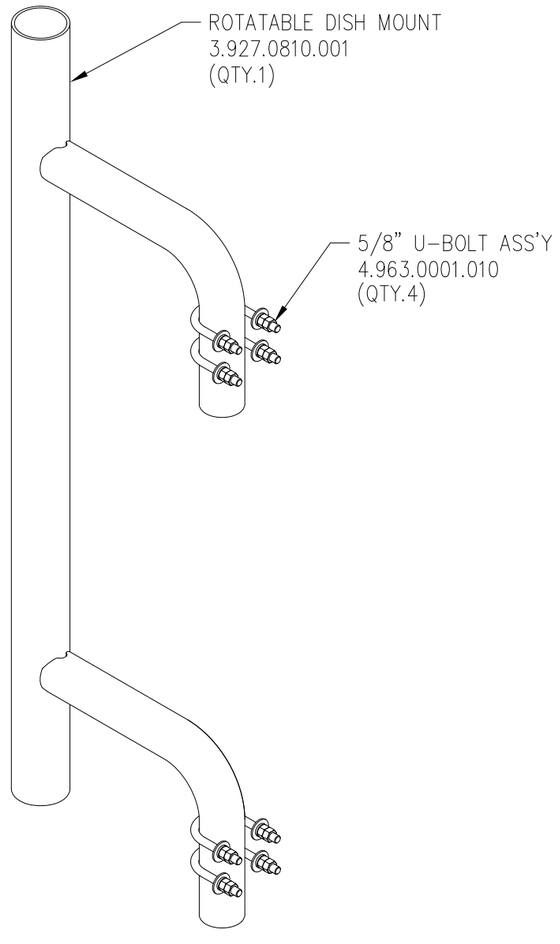
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	40.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
MW ANTENNA @36.0m & 38.0m

HD (4-1/2"x72") 18" RT-S/O

KIT NUMBER 4.927.0137.001



HD (4-1/2"x72") 18" RT-S/O (4.927.0137.001)

QUANTITY	PART NUMBER	DESCRIPTION
1	3.927.0810.001	ROTATABLE DISH MOUNT
4	4.963.0001.010	5/8" U-BOLT ASS'Y (3-1/2" OD)

NOTES: 1) PLACE ALL MOUNTING ANGLES AS CLOSE TO PANEL POINTS AS POSSIBLE.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.2702

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

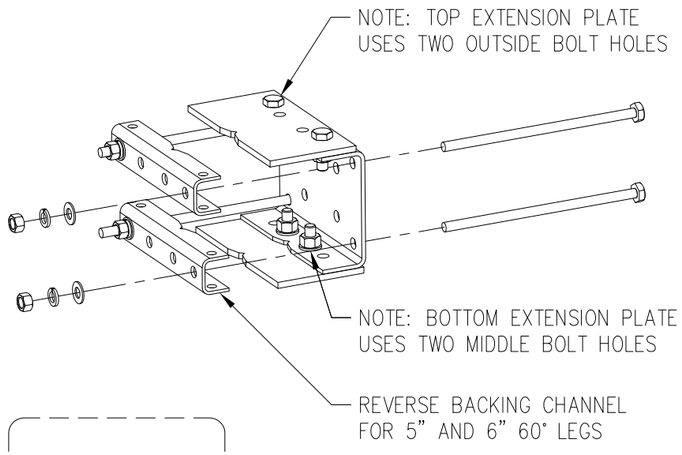
DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
HD (4-1/2"x72") 18" RT-S/O

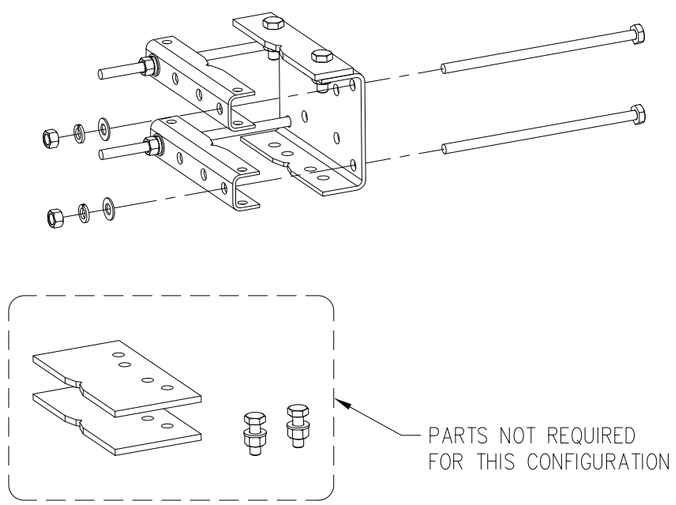
TOWER INTERFACE KIT

KIT NUMBER 4.927.0061.001

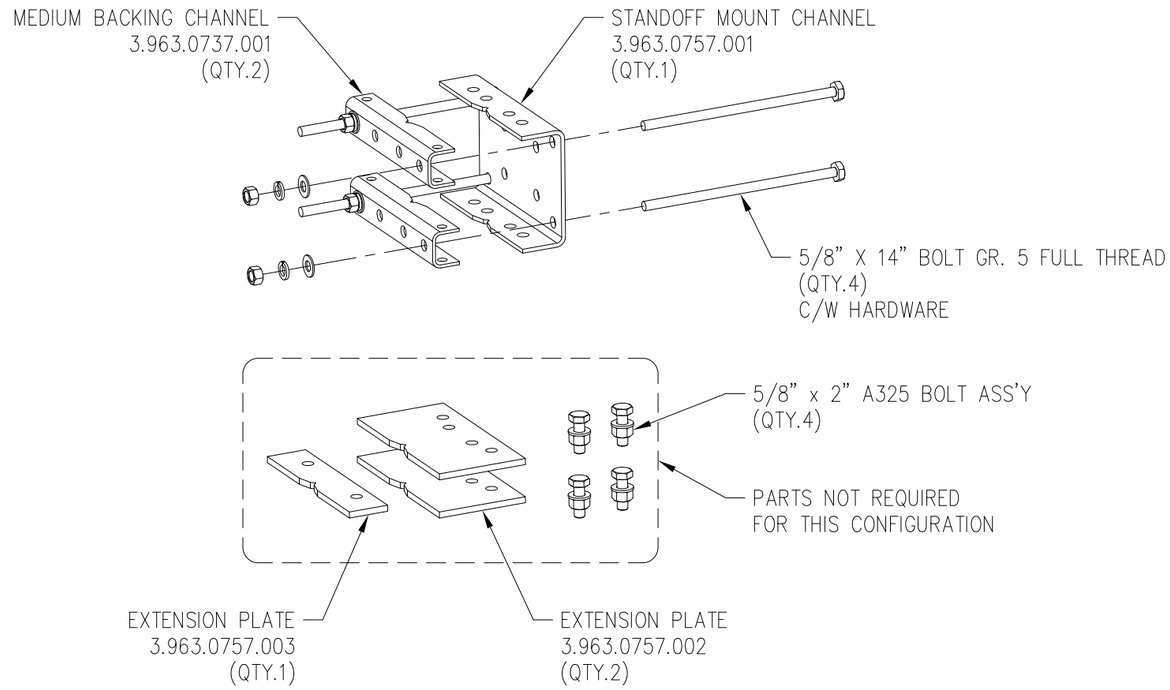
TAPERED TOWER – UPPER MOUNT CONFIGURATION



TAPERED TOWER – LOWER MOUNT CONFIGURATION



STRAIGHT TOWER – TYPICAL MOUNT CONFIGURATION



TOWER INTERFACE KIT (4.927.0061.001)

QUANTITY	PART NUMBER	DESCRIPTION
1	3.963.0757.001	STANDOFF MOUNT CHANNEL
2	3.963.0737.001	MEDIUM BACKING CHANNEL
2	3.963.0757.002	EXTENSION PLATE
1	3.963.0757.003	EXTENSION PLATE
4	1201211	5/8" x 14" GR.5 BOLT (FULL THREAD)
4	1201160	5/8" GR.5 HEX NUT
4	1201161	5/8" GR.5 LOCK WASHER
4	1201162	5/8" GR.5 FLAT WASHER
4	1202043	5/8" x 2" A325 BOLT ASS'Y

NOTES: 1) MAXIMUM LEG SIZE IS 6" x 60° OR 5" x 90°.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.2703

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

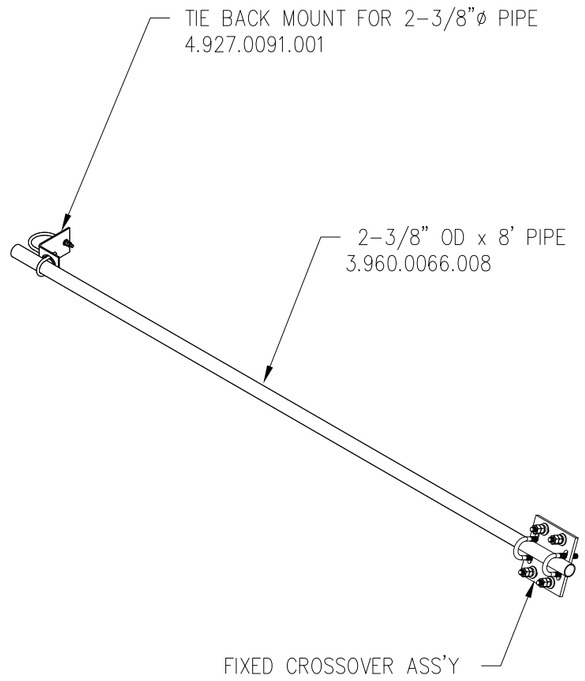
DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
TOWER INTERFACE KIT

2-3/8" x 8' LG ICE GUARD MOUNT TIE BACK KIT (2"ø LEG)

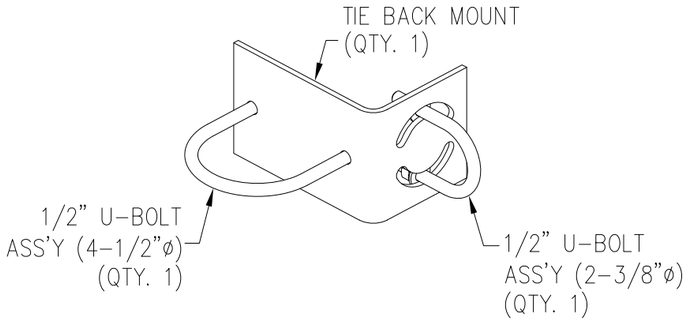
KIT NUMBER: 4.933.0042.001

QUANTITY	PART NUMBER	DESCRIPTION
1	4.927.0091.001	TIE BACK MOUNT FOR 2-3/8"ø PIPE
1	3.960.0066.008	2-3/8" OD PIPE x 8' Lg
1	3.930.0338.004	PIPE-PIPE CONN. PLATE
2	4.963.0001.006	1/2" U-BOLT ASS'Y
2	4.963.0001.205	1/2" U-BOLT ASS'Y



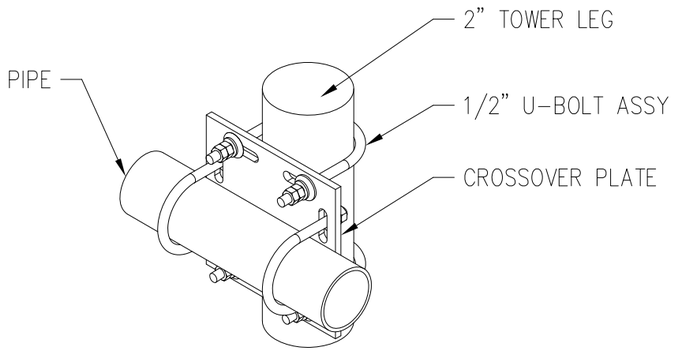
TIE BACK MOUNT FOR 2-3/8" OD PIPE

KIT NUMBER 4.927.0091.001



TIE BACK MOUNT FOR 2-3/8" OD PIPE (4.927.0091.001)

QUANTITY	PART NUMBER	DESCRIPTION
1	3.927.0652.002	TIE BACK MOUNT (4-1/2"ø)
1	4.963.0001.207	1/2" U-BOLT ASS'Y (4-1/2" OD)
1	4.963.0001.205	1/2" U-BOLT ASS'Y (2-3/8" OD)



FIXED CROSSOVER ASSEMBLY 2-3/8" TO 2" LEG

QUANTITY	PART NUMBER	DESCRIPTION
1	3.930.0338.004	PIPE-PIPE CONN PLATE
2	4.963.0001.205	1/2" U-BOLT ASS'Y (2-3/8"ø)
2	4.963.0001.006	1/2" U-BOLT ASS'Y (2"ø)

NOTES: 1) FOR USE ON AWG TOWERS ONLY.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.2704

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

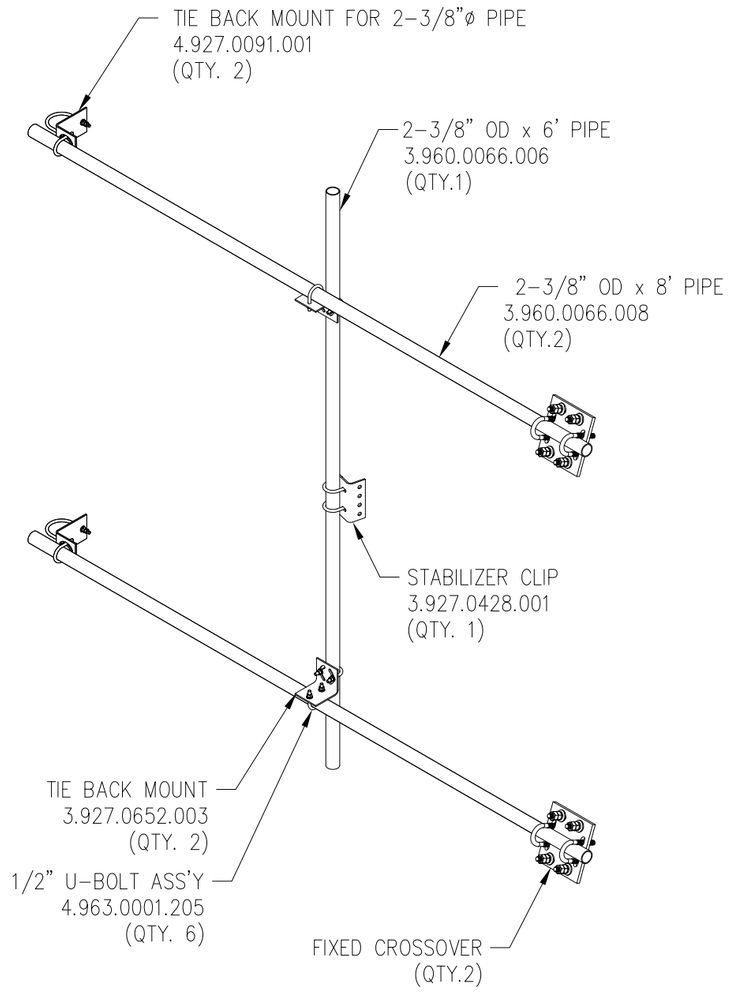
DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

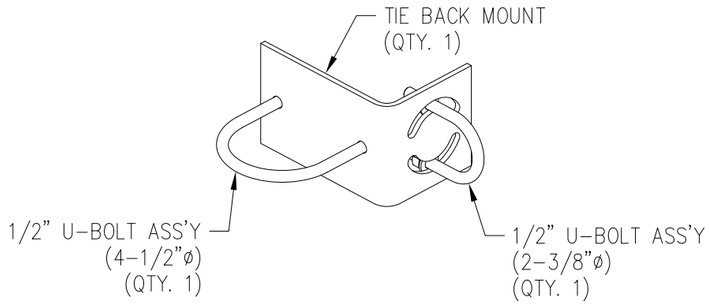
TITLE:
DISH MOUNT TIE BACK KIT

2-3/8" x 8' LG DISH MOUNT TIE BACK KIT (2"ø LEG)

KIT NUMBER: 4.927.0202.001

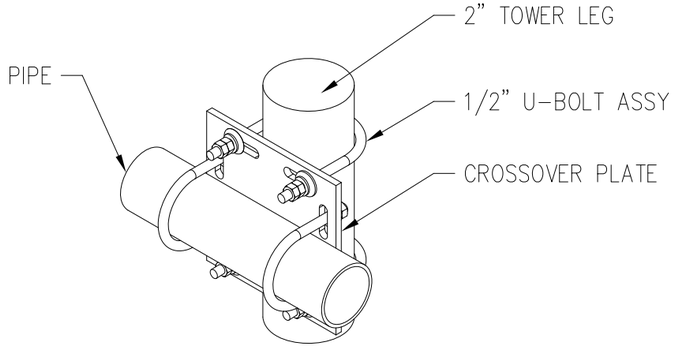
QUANTITY	PART NUMBER	DESCRIPTION
2	4.927.0091.001	TIE BACK MOUNT FOR 2-3/8"ø PIPE
2	3.960.0066.008	2-3/8" OD PIPE x 8' Lg
1	3.960.0066.006	2-3/8" OD PIPE x 6' Lg
2	3.927.0652.003	TIE BACK MOUNT
1	3.927.0428.001	STABILIZER CLIP
2	3.930.0338.004	PIPE-PIPE CONN. PLATE
4	4.963.0001.006	1/2" U-BOLT ASS'Y
10	4.963.0001.205	1/2" U-BOLT ASS'Y





TIE BACK MOUNT FOR 2-3/8"ø PIPE (4.927.0091.001)

QUANTITY	PART NUMBER	DESCRIPTION
1	3.927.0652.002	TIE BACK MOUNT (4-1/2"ø)
1	4.963.0001.207	1/2" U-BOLT ASS'Y (4-1/2"ø)
1	4.963.0001.205	1/2" U-BOLT ASS'Y (2-3/8"ø)



FIXED CROSSOVER ASSEMBLY 2-3/8" TO 2" LEG

QUANTITY	PART NUMBER	DESCRIPTION
1	3.930.0338.004	PIPE-PIPE CONN PLATE
2	4.963.0001.205	1/2" U-BOLT ASS'Y (2-3/8"ø)
2	4.963.0001.006	1/2" U-BOLT ASS'Y (2"ø)

NOTES: 1) FOR USE ON AWG TOWERS ONLY.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

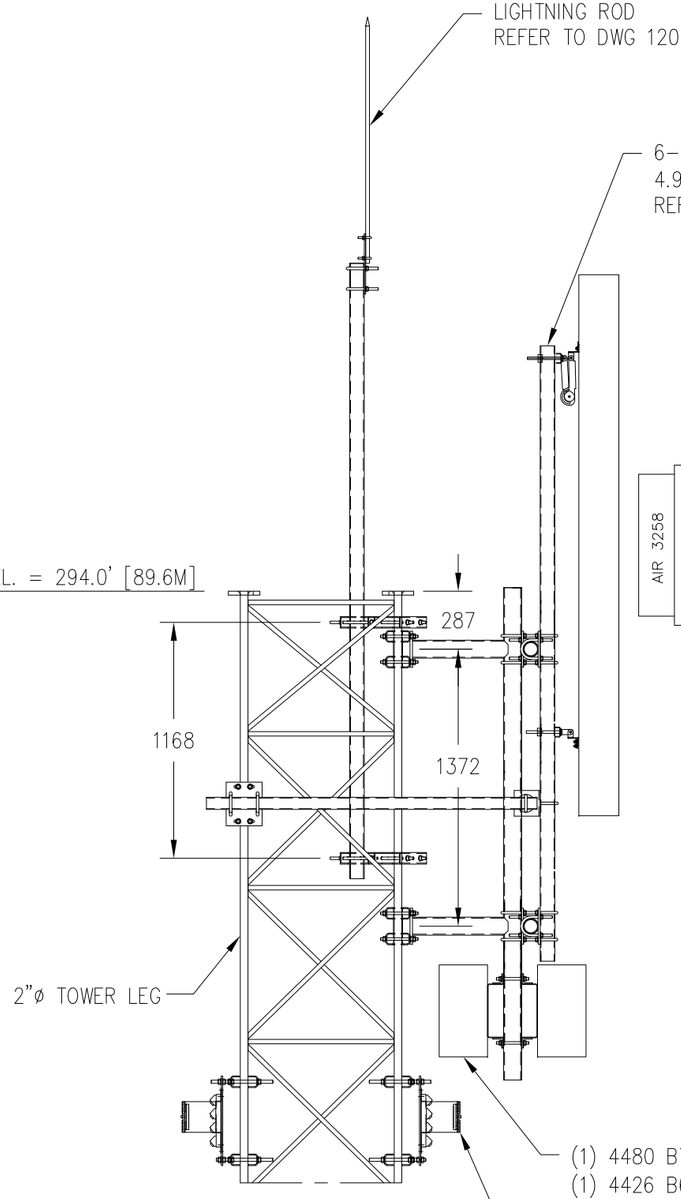
Trylon

DRAWING NO.
232766.030.2705

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

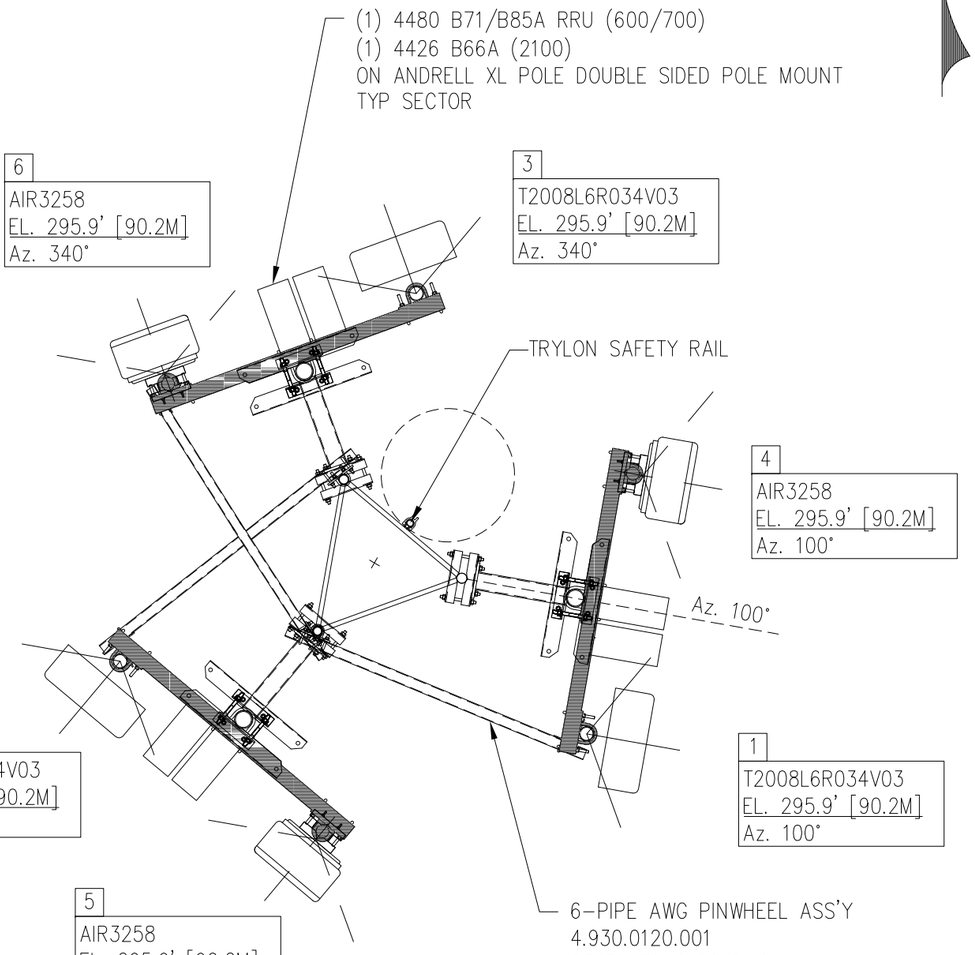
TITLE:
DISH MOUNT TIE BACK KIT



ELEVATION VIEW

(3) INITIAL
T2008L6R034V03
EL. 295.9' [90.2M]
Az. 100/220/340°

(3) INITIAL
AIR3258
EL. 295.9' [90.2M]
Az. 100/220/340°



6
AIR3258
EL. 295.9' [90.2M]
Az. 340°

3
T2008L6R034V03
EL. 295.9' [90.2M]
Az. 340°

4
AIR3258
EL. 295.9' [90.2M]
Az. 100°

2
T2008L6R034V03
EL. 295.9' [90.2M]
Az. 220°

1
T2008L6R034V03
EL. 295.9' [90.2M]
Az. 100°

5
AIR3258
EL. 295.9' [90.2M]
Az. 220°

PLAN VIEW

NOTES: 1) APPLY TWO COATS OF GALVICON TO ALL FIELD CUT OR DRILLED EDGES.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER
1207	
3002	
3007	

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.3001

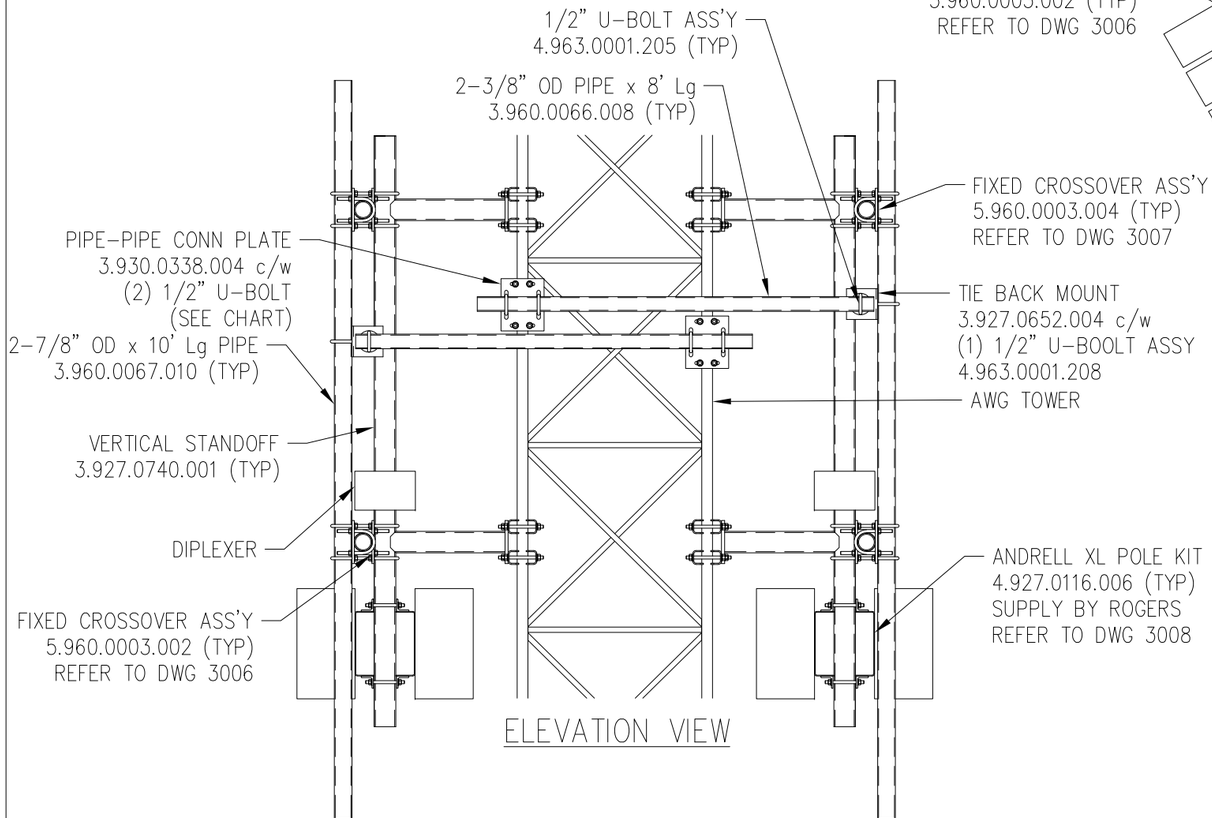
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	30.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

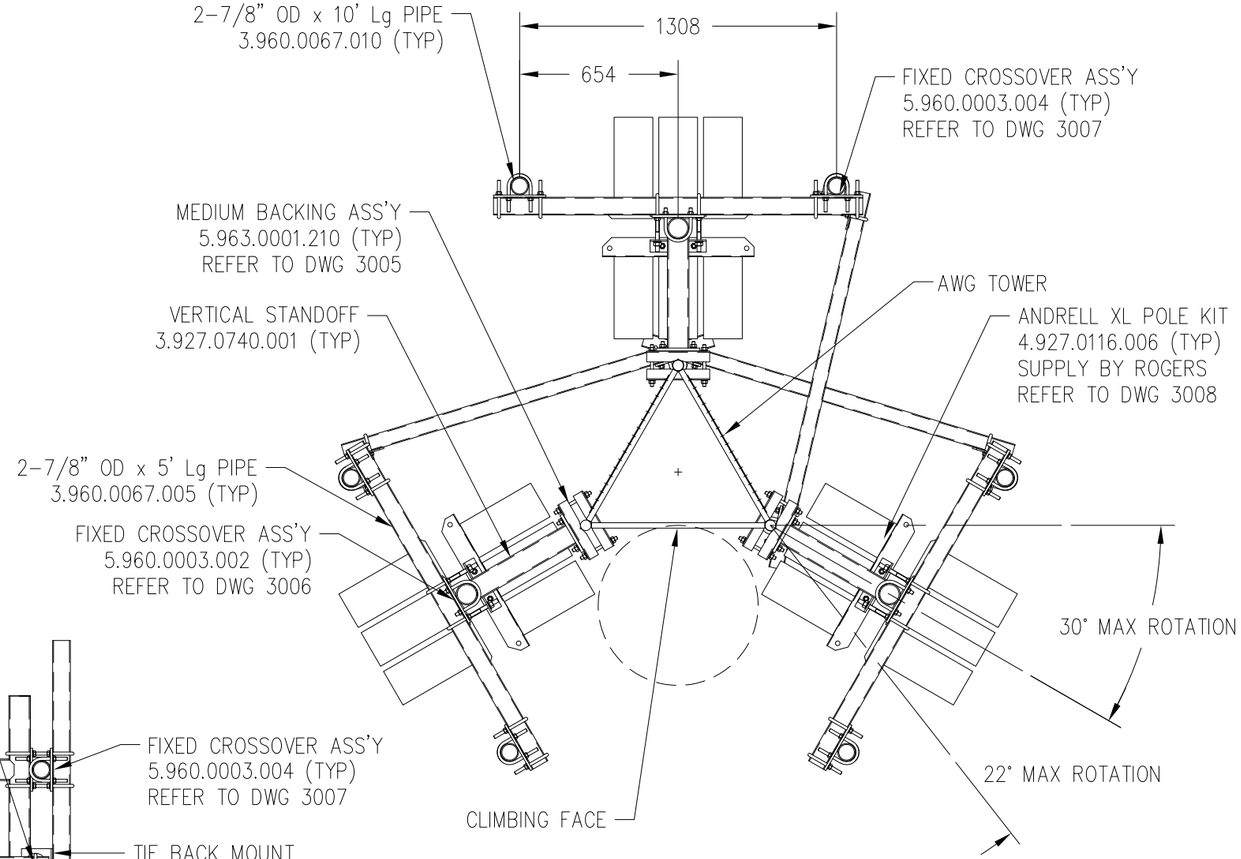
TITLE:
CELL MOUNT @90.2m

LEG U-BOLT CHART

LEG DIAMETER	U-BOLT NUMBER
1-1/2"	4.963.0001.004
1-3/4"	4.963.0001.005
2"	4.963.0001.006
2-1/4"	4.963.0001.007



ELEVATION VIEW



PLAN VIEW

KIT NUMBER: 4.930.0120.001
(CONTAINS MATERIAL FOR ONE COMPLETE PINWHEEL)

NOTES: 1) PLACE ALL MOUNTS AS CLOSE TO PANEL POINTS AS POSSIBLE.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER
3005	
3006	
3007	
3008	

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.3002

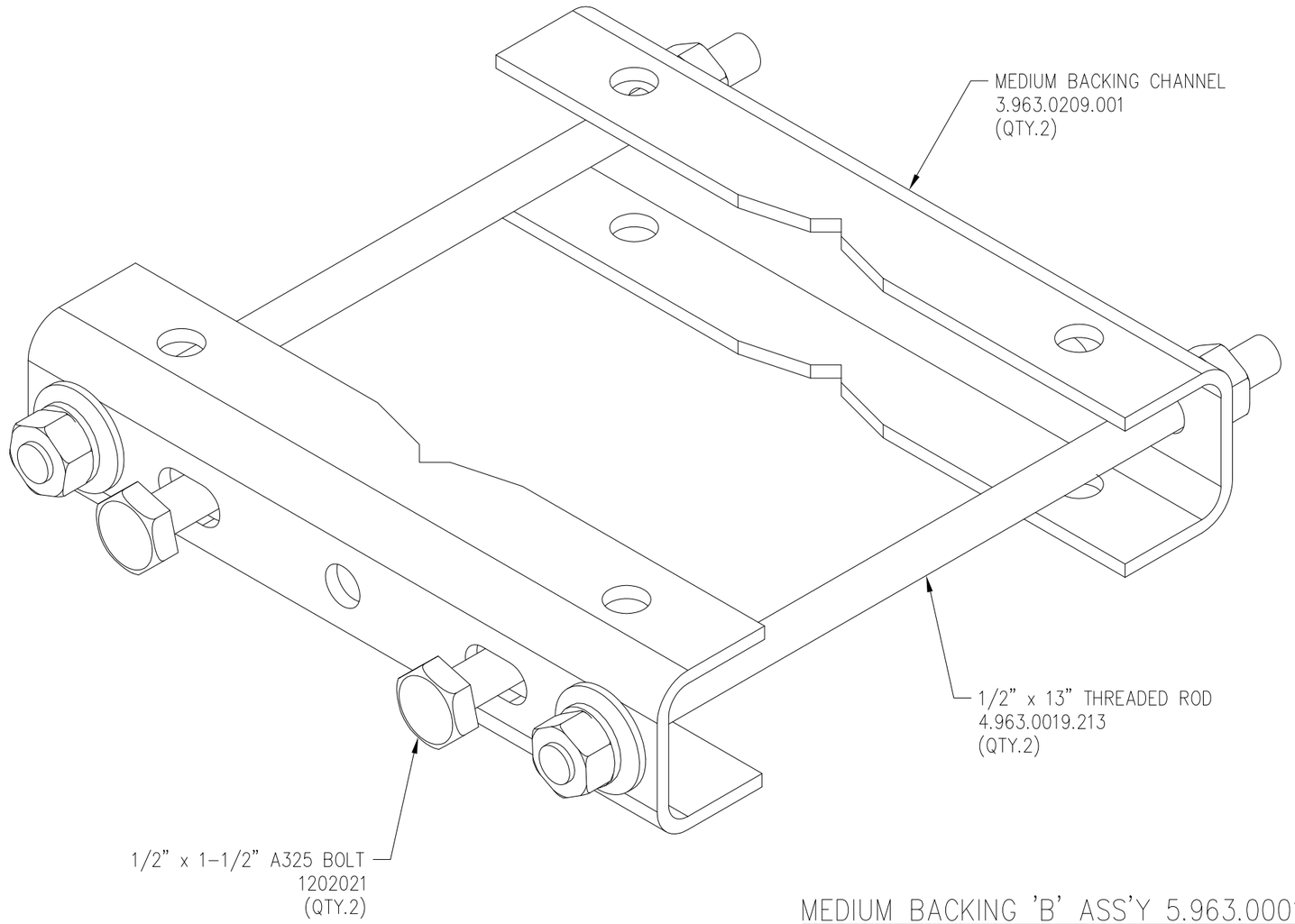
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	25.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
6-PIPE AWG PINWHEEL ASS'Y

MEDIUM BACKING 'B' ASSEMBLY

KIT NUMBER 5.963.0001.210



MEDIUM BACKING 'B' ASS'Y 5.963.0001.210

QTY.	PART NUMBER	DESCRIPTION
2	3.963.0209.001	MEDIUM BACKING CHANNEL
2	4.963.0019.213	1/2" x 13" THREADED ROD ASSY
2	1202021	1/2" x 1-1/2" A325 BOLT ASSY

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.3003

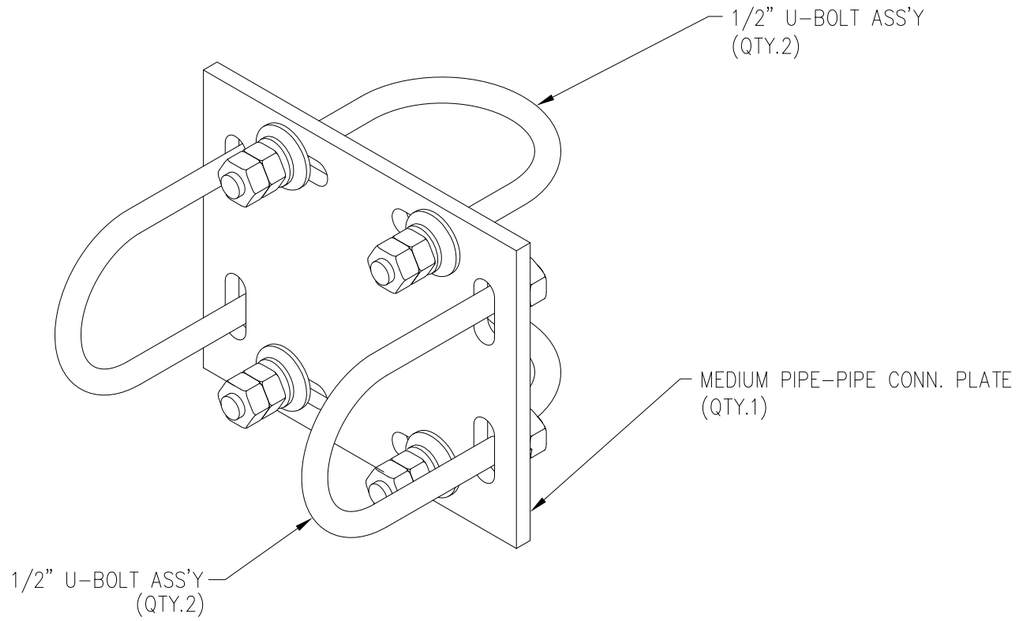
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
MEDIUM BACKING 'B' ASSY

FIXED CROSSOVER ASSEMBLY

KIT NUMBER 5.960.0003.002



FIXED CROSSOVER ASSEMBLY 2-7/8" to 3-1/2" (5.960.0003.002)

QTY.	PART NUMBER	DESCRIPTION
2	4.963.0001.206	U-BOLT ASSY (FOR 3-1/2" PIPE)
2	4.963.0001.208	U-BOLT ASSY (FOR 3" PIPE)
1	3.930.0338.002	MEDIUM PIPE-PIPE CONN PLATE

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.3004

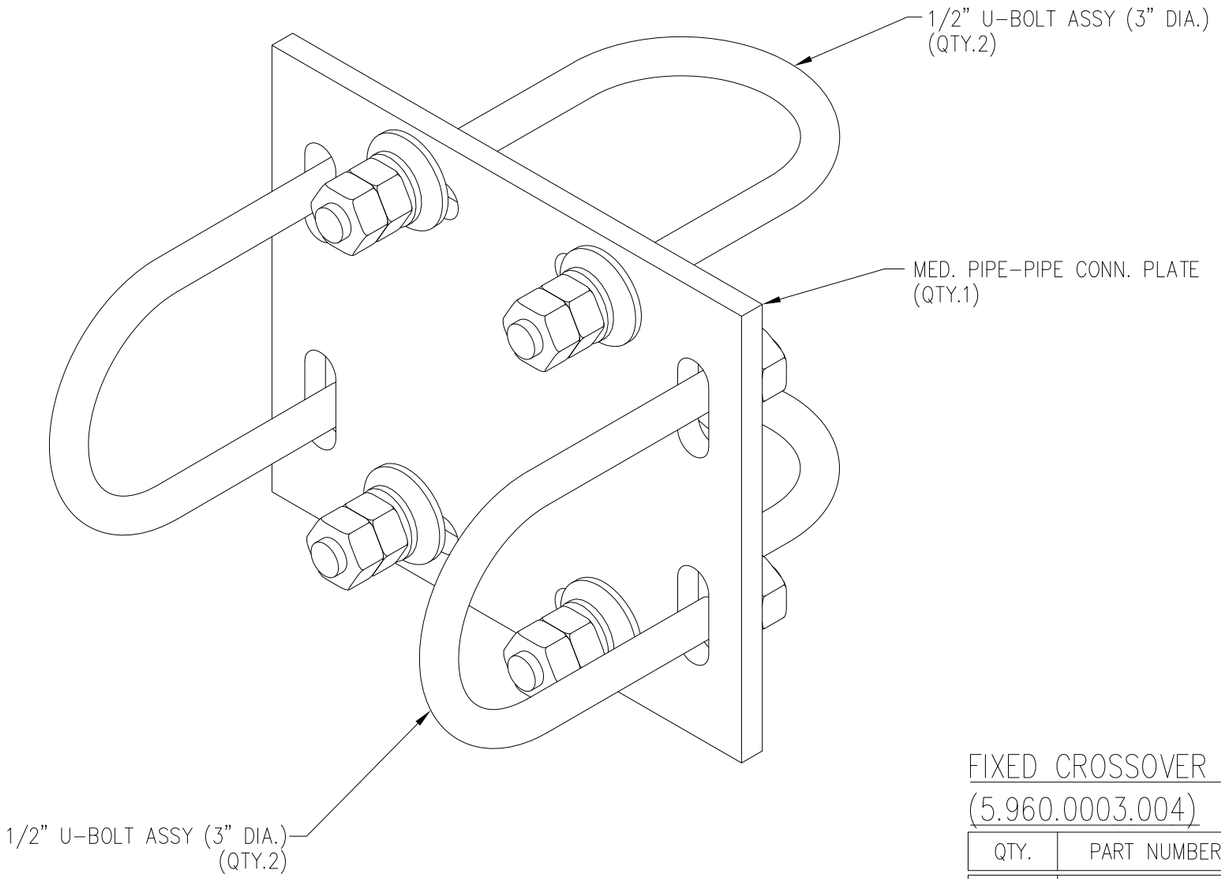
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
FIXED CROSSOVER ASS'Y

FIXED CROSSOVER ASSEMBLY

KIT NUMBER 5.960.0003.004



FIXED CROSSOVER ASSEMBLY 2-7/8" to 2-7/8" (5.960.0003.004)

QTY.	PART NUMBER	DESCRIPTION
2	4.963.0001.208	U-BOLT ASSY (FOR 3" PIPE)
1	3.930.0338.002	MEDIUM PIPE-PIPE CONN PLATE

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

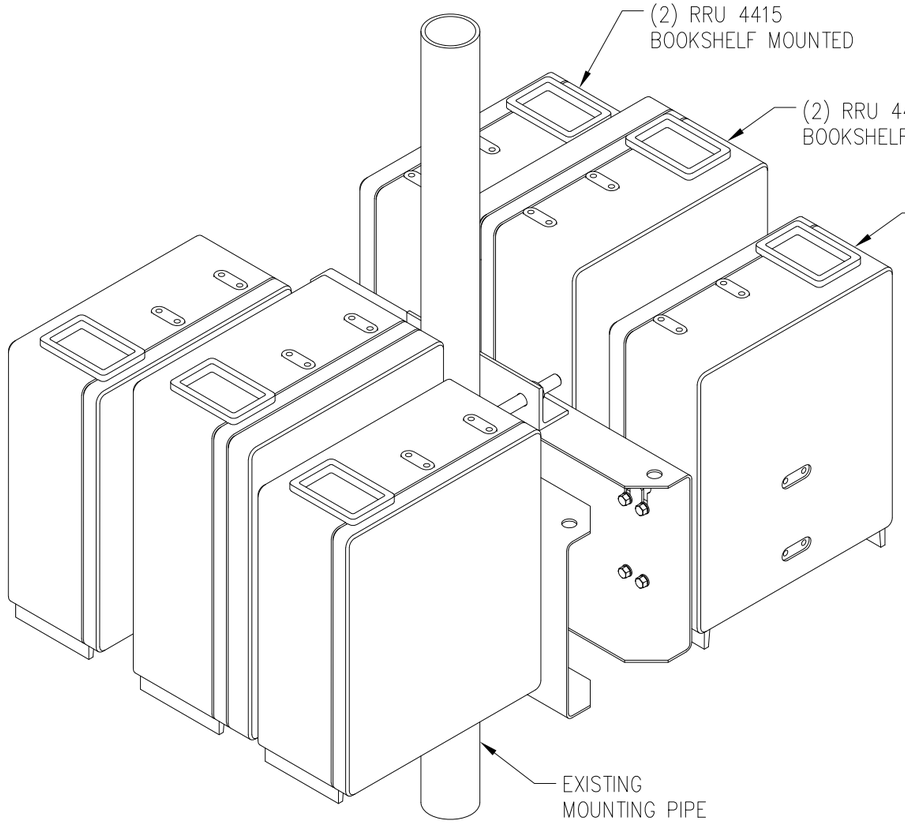
DRAWING NO.
232766.030.3005

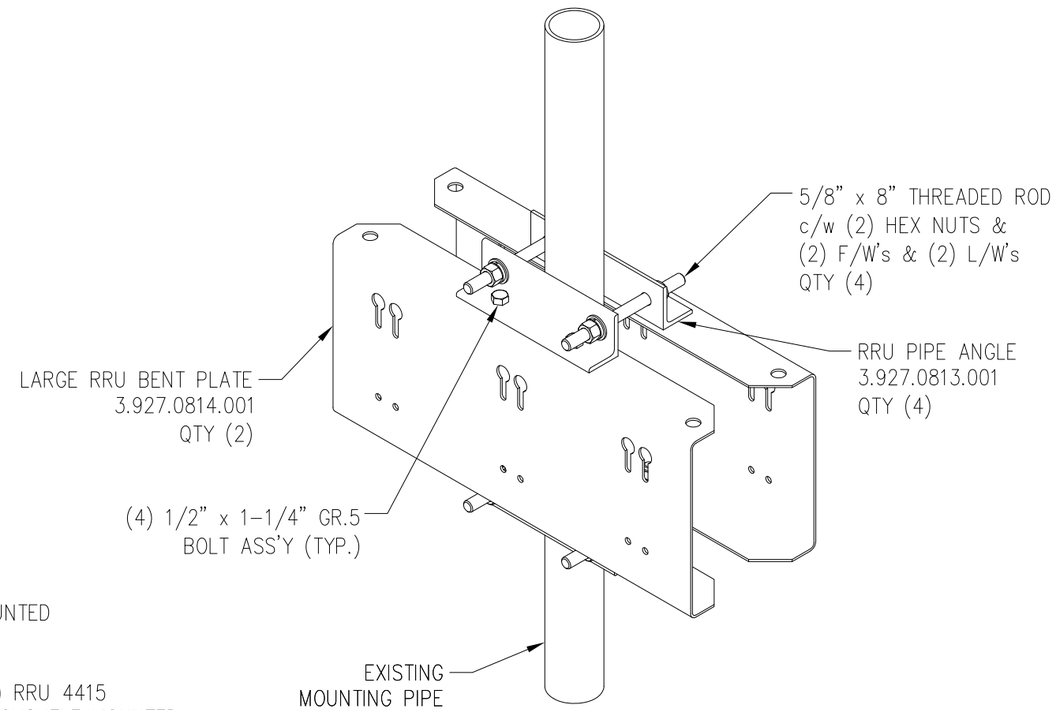
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
FIXED CROSSOVER ASS'Y

ANDRELL XL POLE KIT "V2" – DOUBLE SIDED (4.927.0116.006)		
QTY	PART NUMBER	DESCRIPTION
2	3.927.0814.001	LARGE RRU BENT PLATE
4	3.927.0813.001	RRU PIPE ANGLE
4	4.963.0019.308	5/8" x 8" GALV THREAD ROD ASS'Y
8	4.963.0023.125	1/2" x 1–1/4" GR.5 BOLT ASS'Y
24	1207070	M8 X 20 S.S CAP SCREW – DIN933
24	1207071	M8 S.S. FLAT WASHER – DIN125





ISO VIEWS

NOTES:

USE FOR 4415 RRUs–HIGH BAND (1900/2100/2600).
AND FOR 4478 RRUs–LOW BAND (850).

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

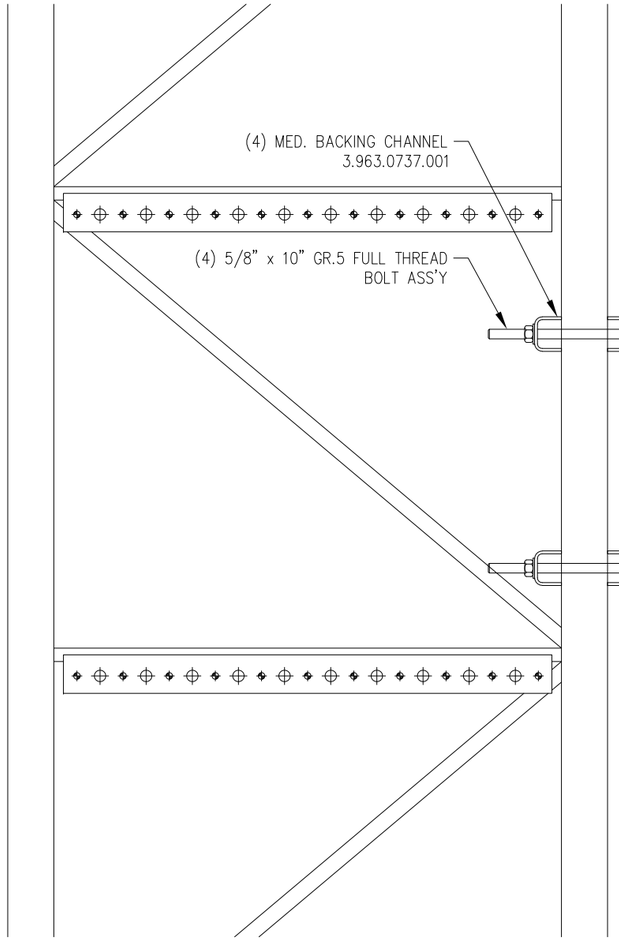
Trylon

DRAWING NO.
232766.030.3006

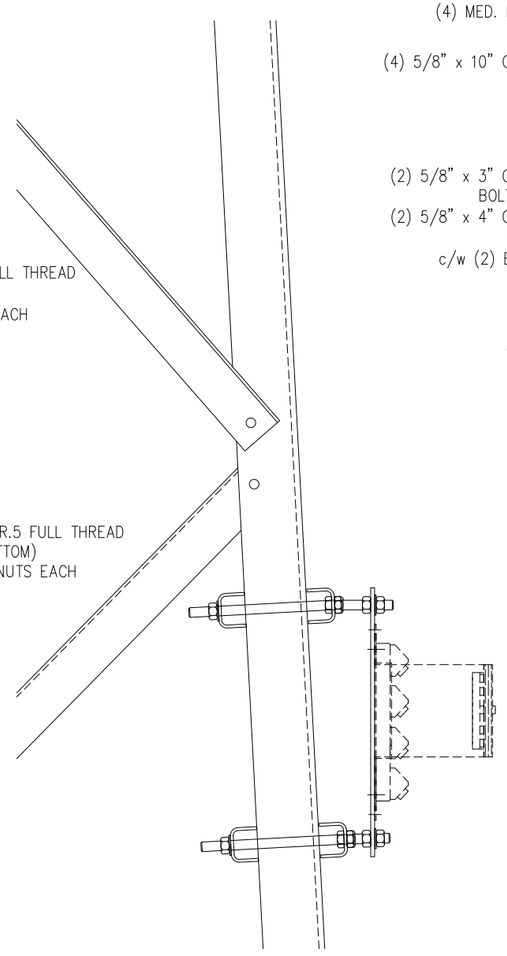
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	4.500

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
ERICSSON RRU ADAPTER KIT



STRAIGHT



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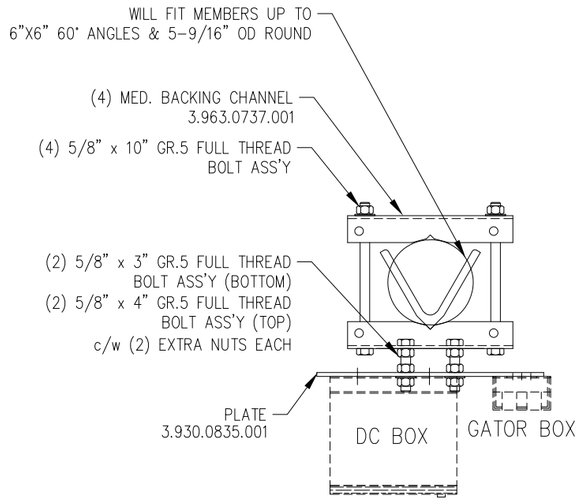
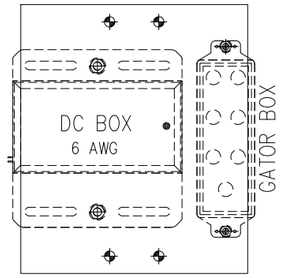




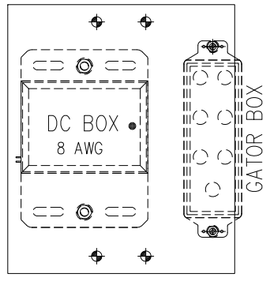


PLATE WILL FIT EITHER DC BOX (6 AWG OR 8 AWG)

DC BOX & GATOR BOX MOUNT–4.930.0106.001(NOT SUPPLIED)

(4) 3.963.0737.001 MED. BACKING CHANNEL
(1) 3.930.0835.001 PLATE
(4) 5/8" X 10" GR.5 FULL THREAD BOLT
(2) 5/8" X 3" GR.5 FULL THREAD BOLT
(2) 5/8" X 4" GR.5 FULL THREAD BOLT
(16) 5/8" GR.5 NUTS
(8) 5/8" GR.5 FLAT WASHERS

UP TO 6"X6" 60° LEG – 5-9/16"ø ROUND

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

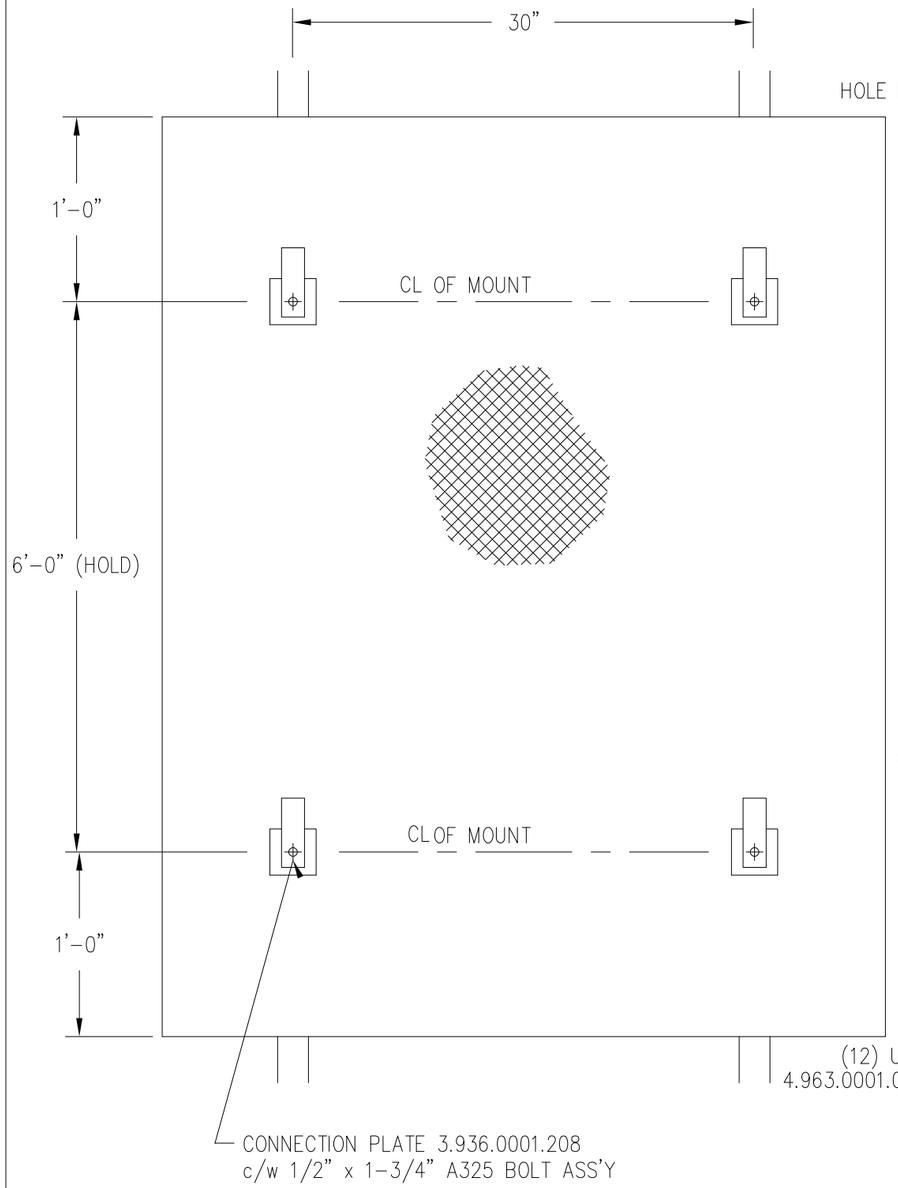
Trylon

DRAWING NO.
232766.030.3007

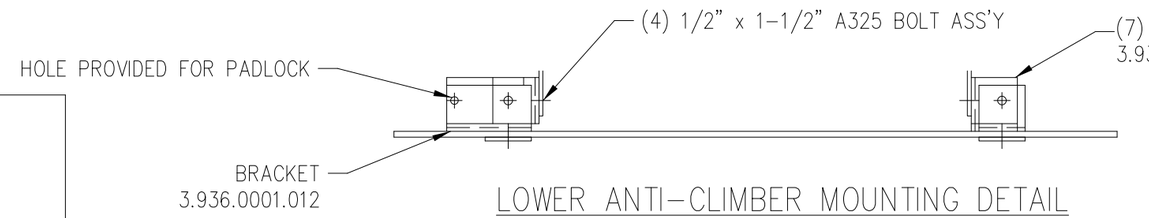
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	10.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

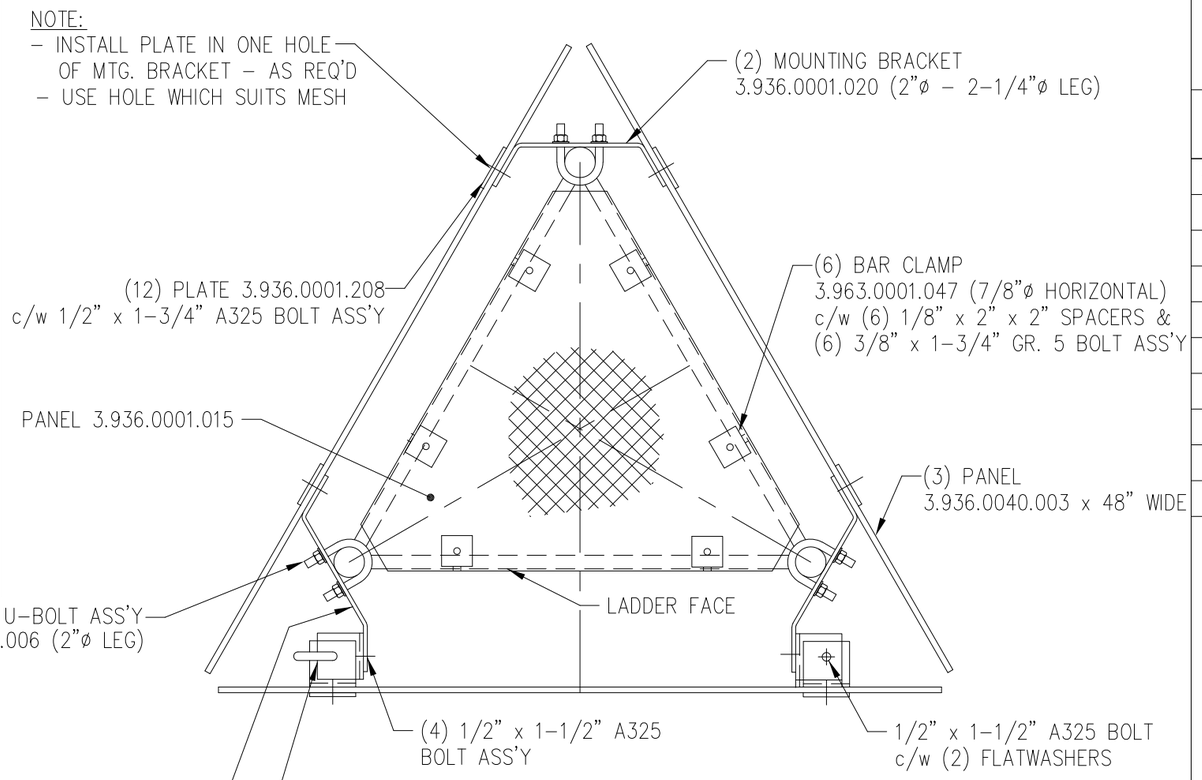
TITLE:
DC BOX & GATOR BOX MOUNT



INSTALLATION PROFILE
(NOT TO SCALE)



LOWER ANTI–CLIMBER MOUNTING DETAIL



TOP ANTI–CLIMBER MOUNTING DETAIL

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.3601

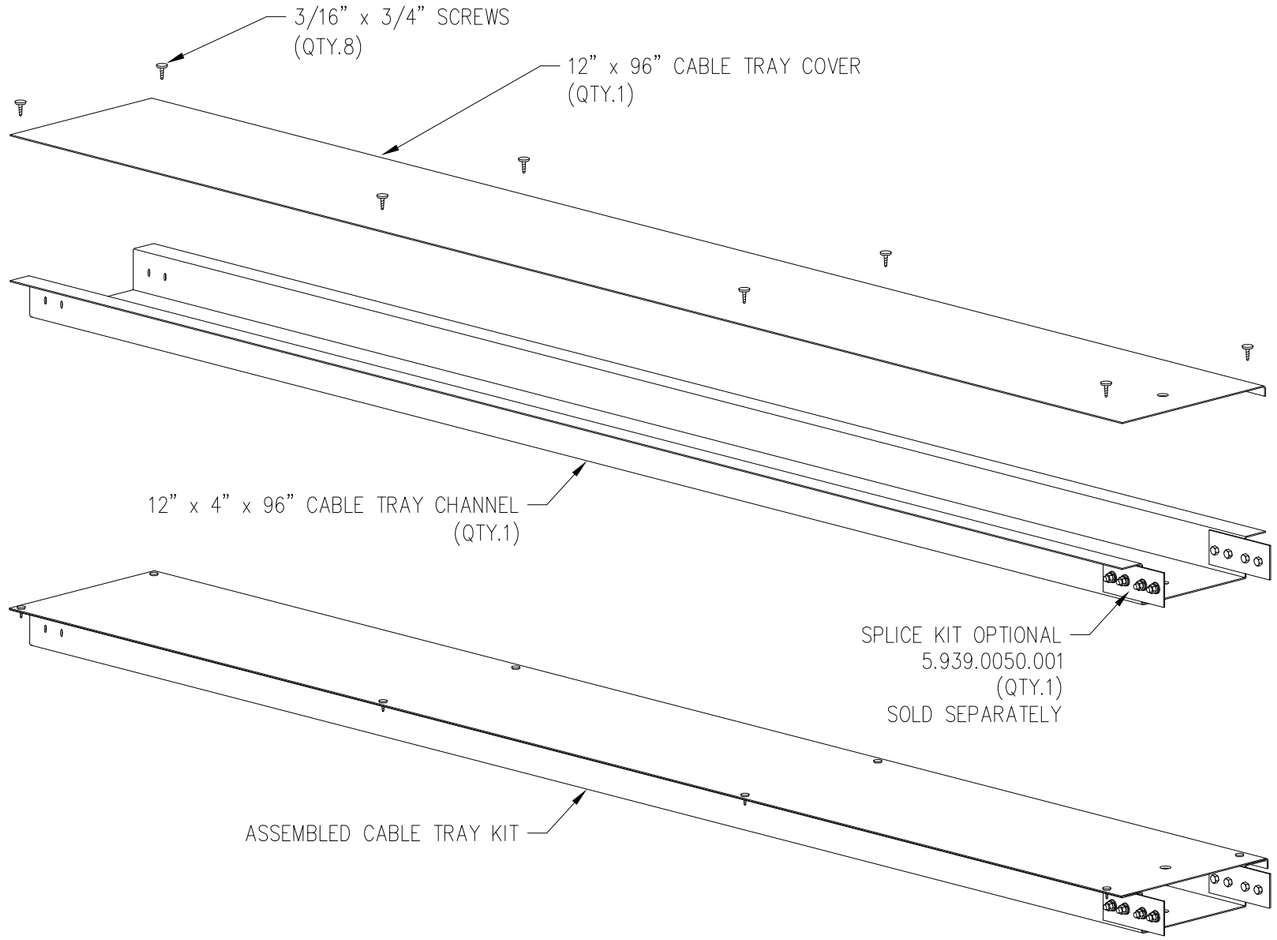
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	10.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
3000AW ANTI–CLIMBER

12" x 96" CABLE TRAY ASSEMBLY

KIT NUMBER 5.939.0051.012



12" x 96" CABLE TRAY ASSEMBLY (5.939.0051.012)

QTY.	PART NUMBER	DESCRIPTION
1	3.939.0178.112	12" x 96" CABLE TRAY COVER
1	3.939.0178.012	12" x 4" x 96" CABLE TRAY CHANNEL
8	1209110	3/16" x 3/4" SCREWS

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.3901

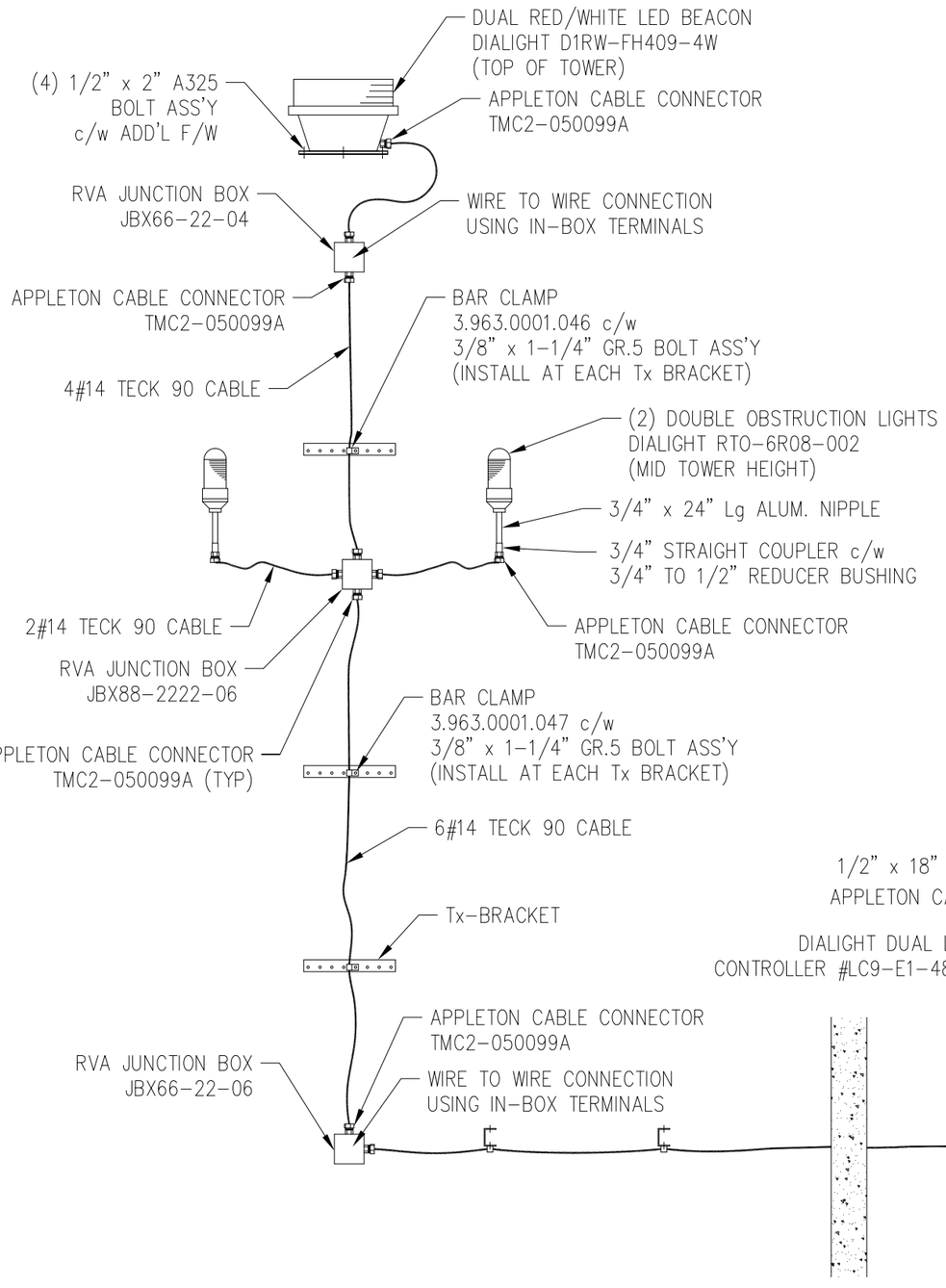
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
12" x 96" CABLE TRAY KIT

KIT NUMBER	DESCRIPTION
4.942.1315.003	COMMON DIALIGHT E1 FIXTURE KIT
4.942.1306.300	E1 ELECTRICAL KIT – MAX. 300' TOWER

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23



48VDC KITS

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER
4202	

NOTES: 1) REFER TO DWG 4202 FOR JUNCTION BOX MOUNTING.

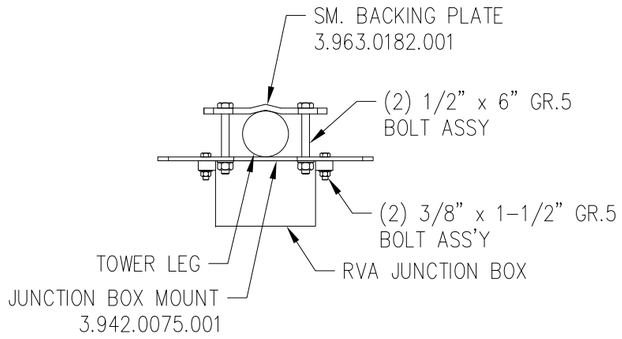
Trylon

DRAWING NO.
232766.030.4201

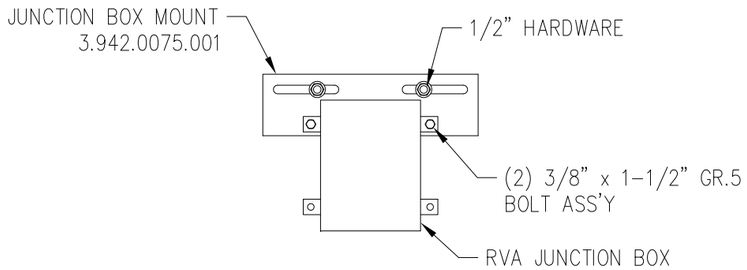
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	25.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

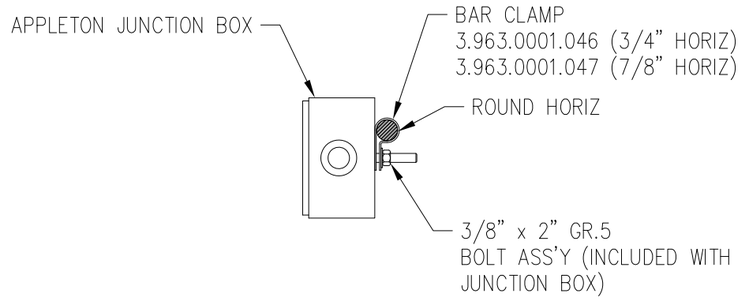
TITLE:
DIALIGHT E1 LIGHTING SYSTEM

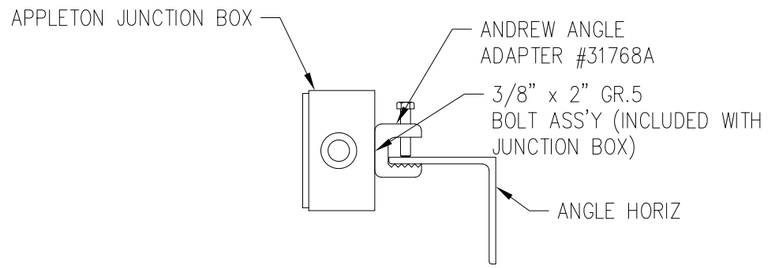


SOLID ROUND LEG MOUNT
(UP TO 4" DIAMETER)



RVA JUNCTION BOX MOUNT





APPLETON JUNCTION BOX MOUNT
(WHERE MOUNTING TO Tx BRACKET IS NOT PRACTICAL)

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

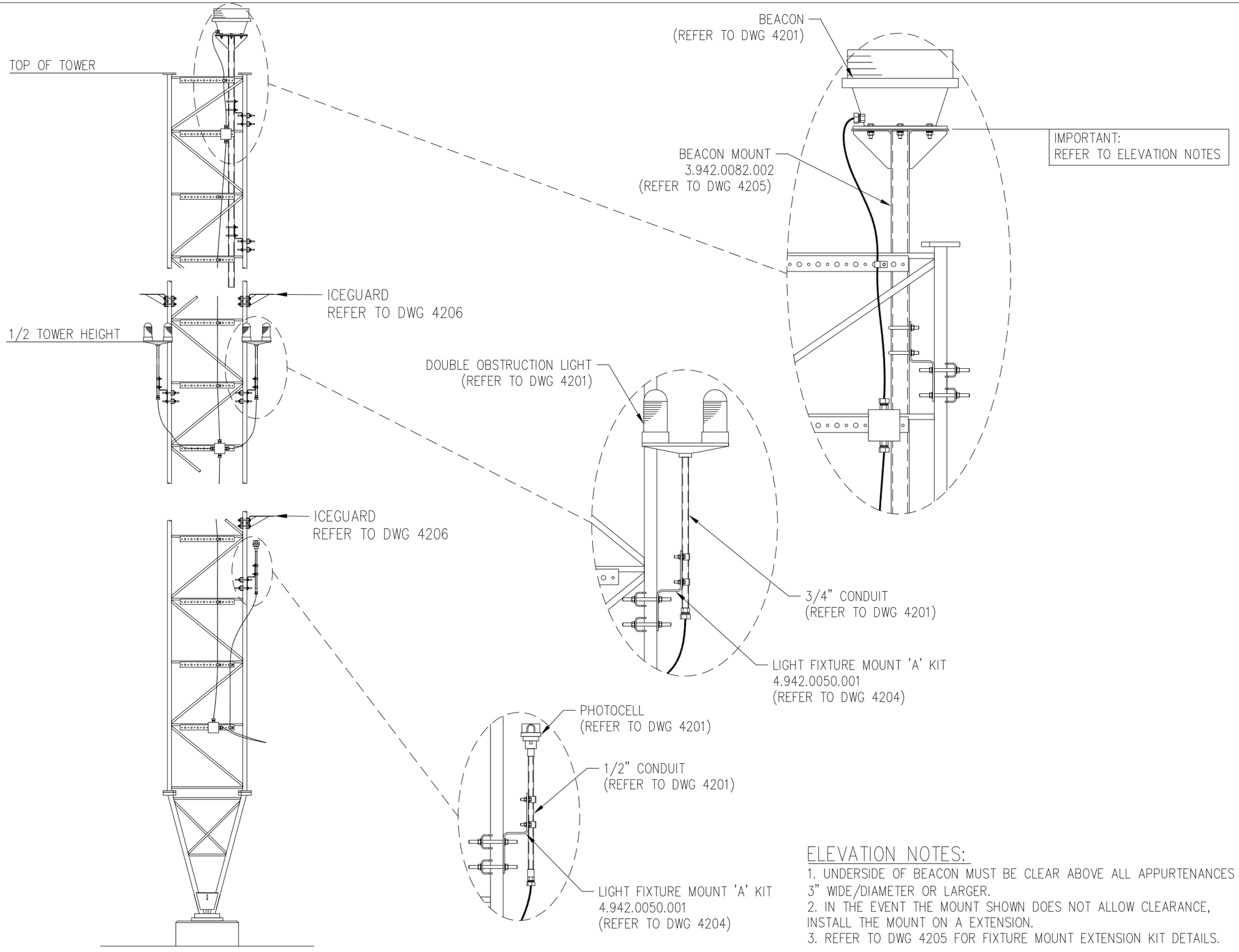
Trylon

DRAWING NO.
232766.030.4202

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	10.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
JUNCTION BOX MOUNTING



ELEVATION NOTES:

1. UNDERSIDE OF BEACON MUST BE CLEAR ABOVE ALL APPURTENANCES 3" WIDE/DIAMETER OR LARGER.
2. IN THE EVENT THE MOUNT SHOWN DOES NOT ALLOW CLEARANCE, INSTALL THE MOUNT ON A EXTENSION.
3. REFER TO DWG 4205 FOR FIXTURE MOUNT EXTENSION KIT DETAILS.

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER
4201	
4204	
4205	
4206	

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

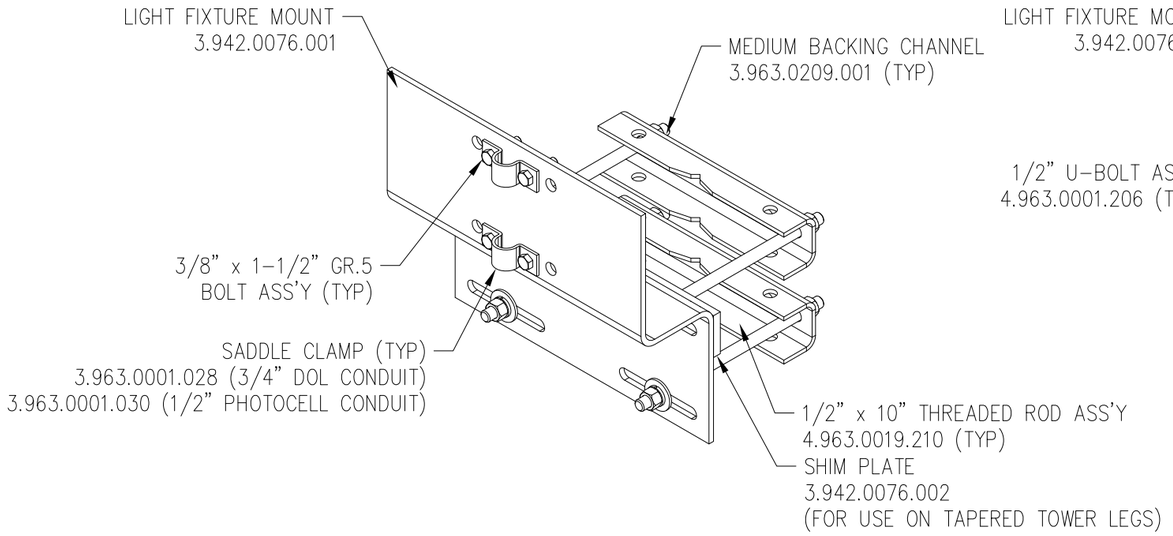
Trylon

DRAWING NO.
232766.030.4203

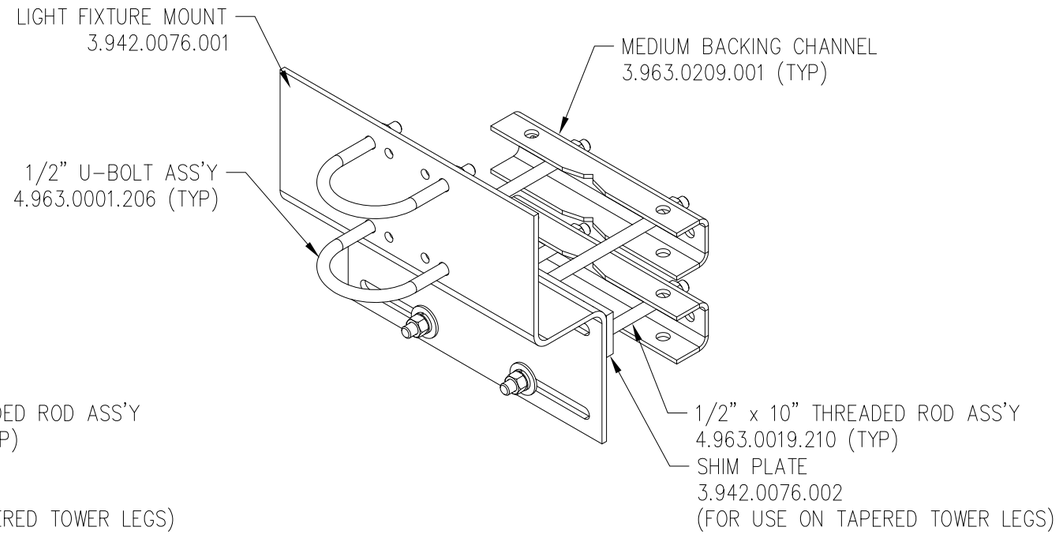
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	45.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
DIALIGHT E1 MOUNTING PROFILE



DOL/PHOTOCELL MOUNTING



BEACON MOUNTING

MOUNTING TO AWG ROUND LEG AND KD V4" THRU V6" LEG

LIGHT FIXTURE MOUNT 'A' KIT 4.942.0050.001

QTY.	PART NUMBER	DESCRIPTION
1	3.942.0076.001	LIGHT FIXTURE MOUNT
2	3.963.0209.001	MEDIUM BACKING CHANNEL
4	4.963.0019.210	1/2" x 10" THREADED ROD ASS'Y
2	4.963.0001.206	1/2" U-BOLT ASS'Y (3-1/2")
2	3.963.0001.028	SADDLE CLAMP (3/4" CONDUIT)
2	3.963.0001.030	SADDLE CLAMP (1/2" CONDUIT)
4	4.963.0022.150	3/8" x 1-1/2" GR.5 BOLT ASS'Y
1	3.942.0076.002	SHIM PLATE

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

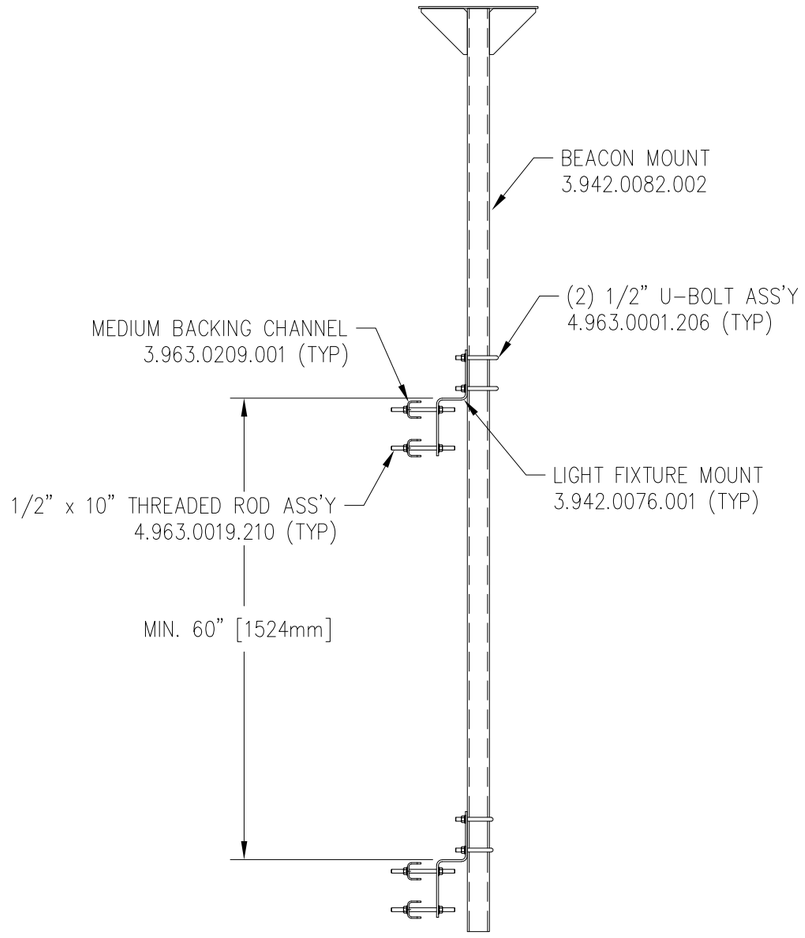
Trylon

DRAWING NO.
232766.030.4204

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
LIGHT FIXTURE MOUNT 'A' KIT



TOWER LEG MOUNTED

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.4205

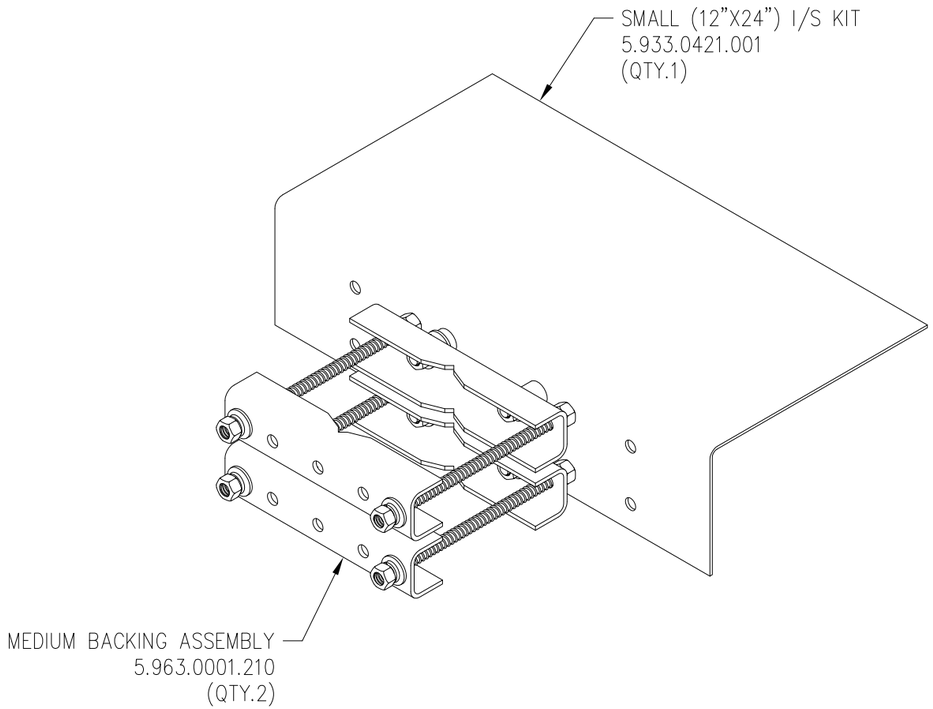
CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	20.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

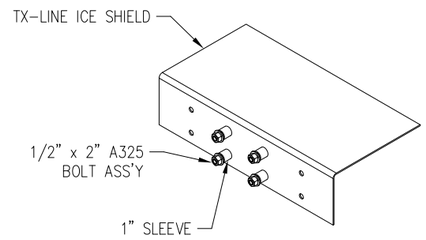
TITLE:
FIXTURE EXTENSION KIT

SMALL (12"x24") ICE SHIELD w/ MEDIUM BACKING KITS

KIT NUMBER: 5.933.0422.001



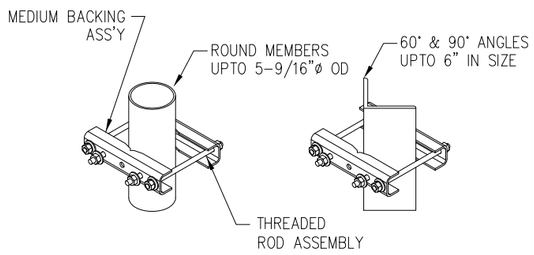
SMALL (12" x 24") ICE SHIELD KIT



SMALL (12" X 24") ICE SHIELD KIT (5.933.0421.001)

(1)	3.933.0049.001	TX-LINE ICE SHIELD
(4)	3.963.0507.004	1" SLEEVE
(4)	1202023	1/2" x 2" A325 ASS'Y

MEDIUM BACKING ASSEMBLY



MEDIUM BACKING ASSEMBLY (5.963.0001.210)

(2)	3.963.0209.001	MEDIUM BACKING CHANNEL C 2-1/4"x1-3/4"x3/16"x10-1/4" LG.
(2)	4.963.0019.213	1/2" x 13" THREADED ROD ASSY
(2)	1202021	1/2" x 1-1/2" BOLT ASS'Y

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.4206

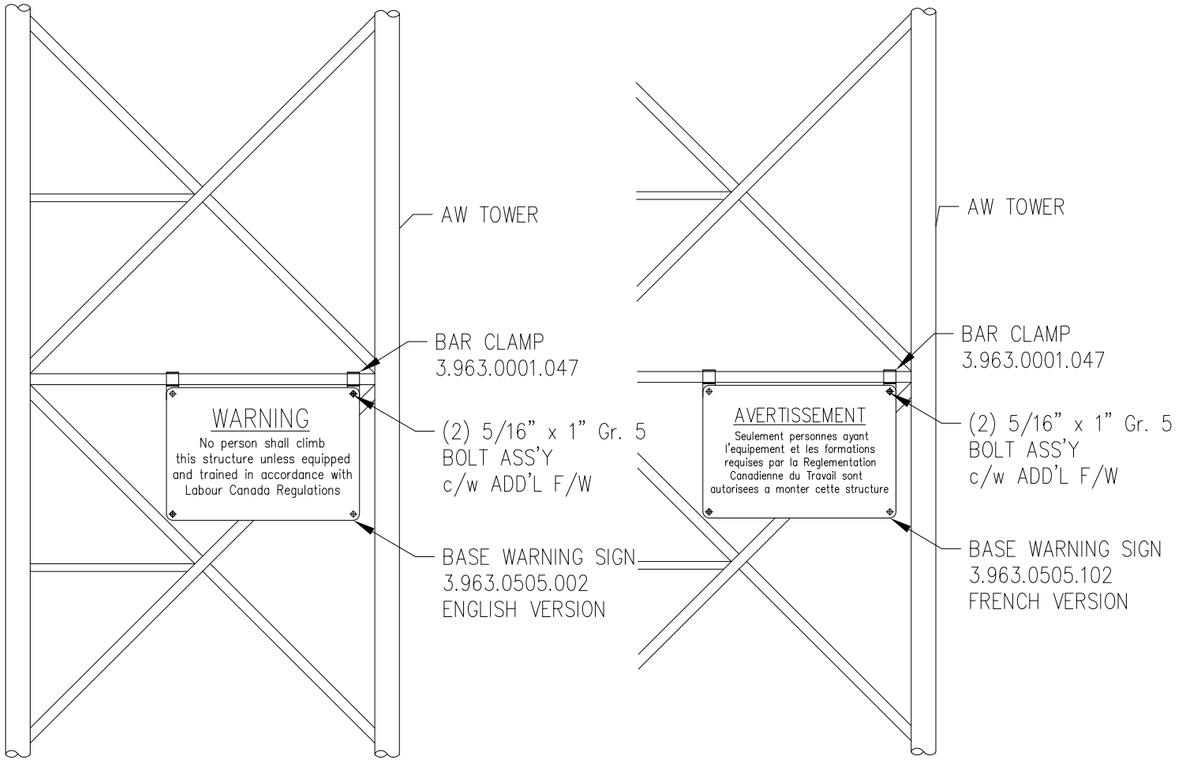
NOTES:

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:

LIGHT FIXTURE ICEGUARD



BASE SIGN DETAIL

TO BE PLACED AT TOWER BASE

NOTES:

REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.6301

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	25.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
BASE SIGN DETAIL

GENERAL ASSEMBLY NOTES:

1) ALL TOWER BRACING AND LEG SPLICE BOLTS SHALL BE A325 (UNLESS NOTED OTHERWISE).
2) ALL A325 BOLT ASSEMBLIES SHALL BE IN FULL BEARING.
3) WHERE EXTRA FLAT WASHERS ARE USED TO ACHIEVE FULL BEARING, ON BRACING MEMBERS, THE FLAT WASHERS SHALL BE INSTALLED UNDER THE NUT.
4) BOLT ASSEMBLIES SHALL BE INSTALLED WITH NUTS AND WASHERS TO THE "OUTSIDE" OF THE TOWER.
5) TOWER MEMBERS ARE IDENTICAL ON ALL (3) FACES (UNLESS NOTED OTHERWISE).
6) TOWER SECTION SHOULD BE ASSEMBLED ON A LEVEL SURFACE i.e.. LEVELED TIMBERS OR EQUAL.
7) ALL SPACERS ARE 2" x 2" x THICKNESS NOTED.
8) WHERE SUFFIX (') FOLLOWS BOLT DESCRIPTION AN ADDITIONAL FLAT WASHER IS REQUIRED.
9) WHERE SUFFIX (') FOLLOWS SPACER DESCRIPTION THE HOLE SIZE IS 9/16"ø.
10) WHERE SUFFIX (") FOLLOWS SPACER DESCRIPTION THE HOLE SIZE IS 13/16"ø.
11) PART NUMBER SHOWN IN (BRACKETS) TO BE INSTALLED ON "INSIDE" OF THE TOWER.
12) TYPICAL END DISTANCES: 1/2" BOLT = 1" U/N
    5/8" BOLT = 1-1/8" U/N
    3/4" BOLT = 1-5/16" U/N
13) TYPICAL BOLT PITCH DISTANCES: 1/2" BOLT = 1-1/2" U/N
    5/8" BOLT = 1-7/8" U/N
    3/4" BOLT = 2-1/4" U/N
14) GAUGE DISTANCE EQUALS CENTRE OF ANGL U/N (EXAMPLE: 3" ANGLE, GAUGE EQUALS 1-1/2")
15) ALL MATERIALS GRADES TO CSA G40.21 U/N: ANGLE (LEGS): 50W
    ANGLE (BRACING): 44W
    PIPE: A500 Gr C
    PLATE: 44W

TURN-OF-NUT TIGHTENING

1. AFTER ALIGNING THE HOLES IN A JOINT, SUFFICIENT BOLTS SHALL BE PLACED AND BROUGHT TO A SNUG-TIGHT CONDITION TO ENSURE THAT THE PARTS OF THE JOINT ARE BROUGHT INTO FULL CONTACT WITH EACH OTHER. "SNUG-TIGHT" IS THE TIGHTNESS ATTAINED BY A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF A PERSON USING A SPUD WRENCH.
2. FOLLOWING THE INITIAL SNUGGING OPERATION, BOLTS SHALL BE PLACED IN ANY REMAINING OPEN HOLES AND BROUGHT TO SNUG-TIGHTNESS. RE-SNUGGING MAY BE NECESSARY IN LARGE JOINTS.
3. WHEN ALL BOLTS ARE SNUG-TIGHT, EACH BOLT IN THE JOINT SHALL THEN BE TIGHTENED ADDITIONALLY BY THE APPLICABLE AMOUNT OF RELATIVE ROTATION GIVEN IN THE CHART BELOW, WITH TIGHTENING PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID PART OF THE JOINT TO IT'S FREE EDGES. DURING THIS OPERATION THERE SHALL BE NO ROTATION OF THE PART NOT TURNED BY THE WRENCH, UNLESS THE BOLT AND NUT ARE MATCH-MARKED TO ENABLE THE AMOUNT OF RELATIVE ROTATION TO BE DETERMINED.
4. ANY BOLT THAT IS LOOSENED AFTER INITIAL TENSION NEEDS TO BE REPLACED.

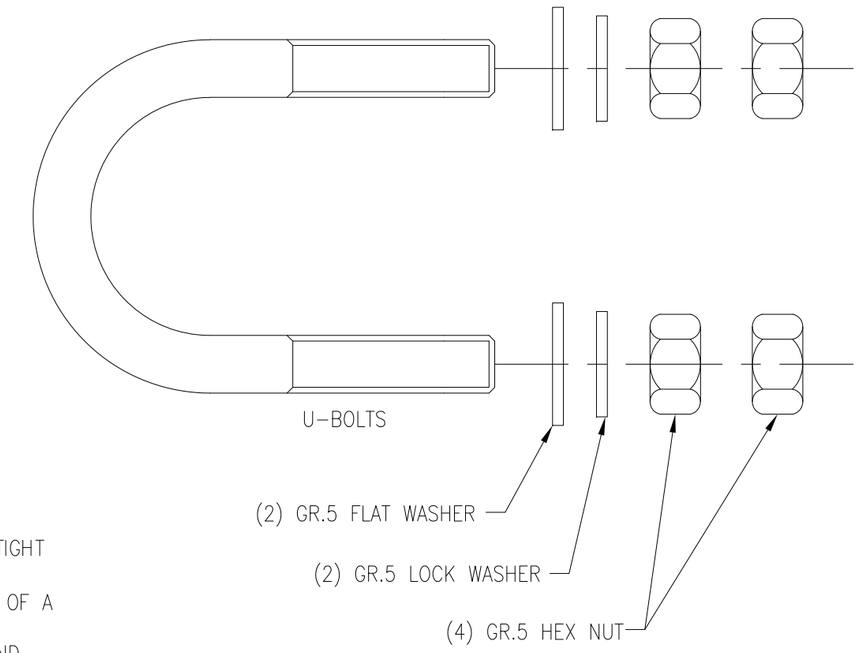
A325 BOLT TIGHTENING CHART

BOLT DIAMETER (INCH)	BOLT LENGTH (INCH)	TURNS BEYOND SNUG TIGHT	BOLT DIAMETER (INCH)	BOLT LENGTH (INCH)	TURNS BEYOND SNUG TIGHT	BOLT DIAMETER (INCH)	BOLT LENGTH (INCH)	TURNS BEYOND SNUG TIGHT
1/2	UP TO 2 INCH	1/3	1/2	OVER 2 UP TO 4 INCH	1/2	1/2	OVER 4 INCH	2/3
5/8	UP TO 2.5 INCH	1/3	5/8	OVER 2.5 UP TO 5 INCH	1/2	5/8	OVER 5 INCH	2/3
3/4	UP TO 3 INCH	1/3	3/4	OVER 3 UP TO 6 INCH	1/2	3/4	OVER 6 INCH	2/3
7/8	UP TO 3.5 INCH	1/3	7/8	OVER 3.5 UP TO 7 INCH	1/2	7/8	OVER 7 INCH	2/3
1	UP TO 4 INCH	1/3	1	OVER 4 UP TO 8 INCH	1/2	1	OVER 8 INCH	2/3
1 1/8	UP TO 4.5 INCH	1/3	1 1/8	OVER 4.5 UP TO 9 INCH	1/2	1 1/8	OVER 9 INCH	2/3
1 1/4	UP TO 5 INCH	1/3	1 1/4	OVER 5 UP TO 10 INCH	1/2	1 1/4	OVER 10 INCH	2/3
1 1/2	UP TO 6 INCH	1/3	1 1/2	OVER 6 UP TO 12 INCH	1/2	1 1/2	OVER 12 INCH	2/3

NOTE: TOLERANCE ON ROTATION = 30° OVER OR UNDER.
NOTE: BOLT LENGTH IS MEASURED FROM THE UNDERSIDE OF THE HEAD TO THE EXTREME END OF POINT.

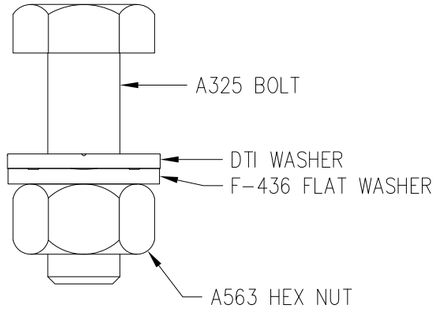
U-BOLT ASSEMBLY

1) INSTALL DOUBLE NUTS FOR ALL U-BOLTS.



A325 SQUIRTER DTI WASHER INSTALLATION

APPLIES TO ALL A325 BOLT ASSEMBLIES



REV.	BY: REV.	BY: CHK.	DESCRIPTION	DATE
A	PD	PS	ISSUE FOR CONSTRUCTION	16 NOV 23

ROGERS

SITE CODE: C8512
LOCATION:146 GRIFFITH WAGNER RD
KILALOE, ON

REFERENCE DRAWINGS:

DRAWING NUMBER	DRAWING NUMBER

LICENSED PROFESSIONAL ENGINEER
R. Z. AHMAR
100023864
11 Apr 2024
PROVINCE OF ONTARIO

Trylon

DRAWING NO.
232766.030.7201

CUSTOMER:	SITE:	SCALE:
ROGERS	KRANZ RD & MARTHAS RD	1.000

DATE:	BY:	CHK:	APP:
10 OCT 23	PD	PS	ZA

TITLE:
GENERAL TOWER ASSEMBLY NOTES

GUY REEL SCHEDULE

PO Number:

Vendor:

Instructions for placing Pieces on reels:

Pieces must be placed onto each reel starting with Piece 3, followed by Piece 2 and Piece 1 last.

	Piece 1	Piece 2	Piece 3
Reel #1	3/8 in 1x7 EHS GS 1602032 Tag With: GUY LEVEL 1 ANCHOR 1 251(ft)	3/8 in 1x7 EHS GS 1602032 Tag With: GUY LEVEL 1 ANCHOR 2 251(ft)	3/8 in 1x7 EHS GS 1602032 Tag With: GUY LEVEL 1 ANCHOR 3 251(ft)
	Piece 1	**Piece 2**	**Piece 3**
Reel #2	7/16 in 1x7 EHS GS 1602033 Tag With: GUY LEVEL 2 ANCHOR 1 271(ft)	7/16 in 1x7 EHS GS 1602033 Tag With: GUY LEVEL 2 ANCHOR 2 270(ft)	7/16 in 1x7 EHS GS 1602033 Tag With: GUY LEVEL 2 ANCHOR 3 271(ft)
	Piece 1 (1 per reel)	**Piece 2 (1 per reel)**	**Piece 3 (1 per reel)**
Reel #3A AND Reel #3B	7/16 in 1x7 EHS GS 1602033 Tag With: GUY LEVEL 3 ANCHOR 1 304(ft)	7/16 in 1x7 EHS GS 1602033 Tag With: GUY LEVEL 3 ANCHOR 2 303(ft)	7/16 in 1x7 EHS GS 1602033 Tag With: GUY LEVEL 3 ANCHOR 3 303(ft)
	Piece 1 (1 per reel)	**Piece 2 (1 per reel)**	**Piece 3 (1 per reel)**
Reel #4A AND Reel #4B	1/2 in 1x7 EHS GS 1602034 Tag With: GUY LEVEL 4 ANCHOR 1 344(ft)	1/2 in 1x7 EHS GS 1602034 Tag With: GUY LEVEL 4 ANCHOR 2 343(ft)	1/2 in 1x7 EHS GS 1602034 Tag With: GUY LEVEL 4 ANCHOR 3 343(ft)
	Piece 1	**Piece 2**	**Piece 3**
Reel #5	5/8 in 1x19 Gr.220 BS 1603012R Tag With: GUY LEVEL 5 ANCHOR 1 379(ft)	5/8 in 1x19 Gr.220 BS 1603012R Tag With: GUY LEVEL 5 ANCHOR 2 379(ft)	5/8 in 1x19 Gr.220 BS 1603012R Tag With: GUY LEVEL 5 ANCHOR 3 379(ft)

Trylon

Job Number: 232766-R1
Site Name: Kranz Rd & Marthas Rd, ON

Tower Height (ft): 294.00
Tower Type: All-Weld

PULSE CHART FOR GUY LEVELS

Guy Level: 1
Guy Height (ft): 49.00
Guy Size: 3/8 in EHS
Initial Tension (kips): 1.900 at design temperature 10 deg. (C)

Guy Length (Anc1) (ft): 214.4
Guy Length (Anc2) (ft): 214.1
Guy Length (Anc3) (ft): 214.2

Tension (Kips):									Temp (C)	3 Pulse Method (Second)								
Anchor 1			Anchor 2			Anchor 3				Anchor 1			Anchor 2			Anchor 3		
Azimuth: 100.00			Azimuth: 220.00			Azimuth: 340.00				Azimuth: 100.00			Azimuth: 220.00			Azimuth: 340.00		
Radius (ft): 210.00			Radius (ft): 210.00			Radius (ft): 210.00				Radius (ft): 210.00			Radius (ft): 210.00			Radius (ft): 210.00		
V.Offset (ft): -0.70(Down)			V.Offset (ft): 0.40(Up)			V.Offset (ft): 0.00(Flat)				V.Offset (ft): -0.70(Down)			V.Offset (ft): 0.40(Up)			V.Offset (ft): 0.00(Flat)		
-5%	**Req'd**	+15%	-5%	**Req'd**	+15%	-5%	**Req'd**	+15%		-5%	**Req'd**	+15%	-5%	**Req'd**	+15%	-5%	**Req'd**	+15%
2.990	**3.147**	3.619	2.991	**3.148**	3.620	2.991	**3.148**	3.620	-40	2.153	**2.098**	1.957	2.150	**2.096**	1.954	2.151	**2.097**	1.955
2.871	**3.022**	3.476	2.872	**3.024**	3.477	2.872	**3.023**	3.477	-35	2.197	**2.141**	1.997	2.194	**2.138**	1.994	2.195	**2.139**	1.995
2.753	**2.898**	3.332	2.754	**2.899**	3.333	2.753	**2.898**	3.333	-30	2.243	**2.187**	2.039	2.240	**2.184**	2.036	2.242	**2.185**	2.037
2.634	**2.773**	3.189	2.635	**2.774**	3.190	2.635	**2.774**	3.190	-25	2.293	**2.235**	2.084	2.290	**2.232**	2.082	2.291	**2.233**	2.083
2.516	**2.648**	3.045	2.517	**2.649**	3.046	2.516	**2.649**	3.046	-20	2.346	**2.287**	2.133	2.343	**2.284**	2.130	2.345	**2.285**	2.131
2.397	**2.524**	2.902	2.398	**2.524**	2.903	2.398	**2.524**	2.903	-15	2.404	**2.343**	2.185	2.401	**2.340**	2.182	2.402	**2.341**	2.183
2.279	**2.399**	2.759	2.279	**2.399**	2.759	2.279	**2.399**	2.759	-10	2.465	**2.403**	2.241	2.462	**2.400**	2.238	2.463	**2.401**	2.239
2.160	**2.274**	2.615	2.161	**2.275**	2.616	2.161	**2.274**	2.616	-5	2.532	**2.468**	2.301	2.529	**2.465**	2.298	2.530	**2.466**	2.299
2.042	**2.149**	2.472	2.042	**2.150**	2.472	2.042	**2.150**	2.472	0	2.604	**2.538**	2.367	2.601	**2.535**	2.364	2.602	**2.536**	2.365
1.923	**2.025**	2.328	1.924	**2.025**	2.329	1.924	**2.025**	2.329	5	2.683	**2.615**	2.438	2.679	**2.612**	2.435	2.681	**2.613**	2.436
1.805	**1.900**	2.185	1.805	**1.900**	2.185	1.805	**1.900**	2.185	10	2.769	**2.699**	2.517	2.766	**2.696**	2.514	2.767	**2.697**	2.515
1.687	**1.775**	2.042	1.686	**1.775**	2.041	1.686	**1.775**	2.041	15	2.864	**2.792**	2.603	2.861	**2.789**	2.600	2.862	**2.790**	2.601
1.568	**1.651**	1.898	1.568	**1.650**	1.898	1.568	**1.650**	1.898	20	2.970	**2.895**	2.699	2.967	**2.892**	2.697	2.968	**2.893**	2.698
1.450	**1.526**	1.755	1.449	**1.525**	1.754	1.449	**1.526**	1.754	25	3.089	**3.010**	2.807	3.086	**3.007**	2.804	3.087	**3.008**	2.805
1.331	**1.401**	1.611	1.331	**1.401**	1.611	1.331	**1.401**	1.611	30	3.223	**3.141**	2.929	3.220	**3.138**	2.926	3.221	**3.139**	2.927
1.213	**1.276**	1.468	1.212	**1.276**	1.467	1.212	**1.276**	1.467	35	3.376	**3.290**	3.068	3.373	**3.287**	3.065	3.374	**3.288**	3.066
1.094	**1.152**	1.325	1.093	**1.151**	1.324	1.094	**1.151**	1.324	40	3.553	**3.463**	3.229	3.550	**3.460**	3.227	3.551	**3.461**	3.227
0.976	**1.027**	1.181	0.975	**1.026**	1.180	0.975	**1.026**	1.180	45	3.761	**3.666**	3.418	3.759	**3.663**	3.416	3.759	**3.664**	3.417

Trylon

Job Number: 232766-R1
Site Name: Kranz Rd & Marthas Rd, ON

Tower Height (ft): 294.00
Tower Type: All-Weld

PULSE CHART FOR GUY LEVELS

Guy Level: 2
Guy Height (ft): 109.00
Guy Size: 7/16 in EHS
Initial Tension (kips): 2.100 at design temperature 10 deg. (C)

Guy Length (Anc1) (ft): 235.6
Guy Length (Anc2) (ft): 235.1
Guy Length (Anc3) (ft): 235.3

Tension (Kips):									Temp (C)	3 Pulse Method (Second)								
Anchor 1			Anchor 2			Anchor 3				Anchor 1			Anchor 2			Anchor 3		
Azimuth: 100.00			Azimuth: 220.00			Azimuth: 340.00				Azimuth: 100.00			Azimuth: 220.00			Azimuth: 340.00		
Radius (ft): 210.00			Radius (ft): 210.00			Radius (ft): 210.00				Radius (ft): 210.00			Radius (ft): 210.00			Radius (ft): 210.00		
V.Offset (ft): -0.70(Down)			V.Offset (ft): 0.40(Up)			V.Offset (ft): 0.00(Flat)				V.Offset (ft): -0.70(Down)			V.Offset (ft): 0.40(Up)			V.Offset (ft): 0.00(Flat)		
-5%	**Req'd**	+15%	-5%	**Req'd**	+15%	-5%	**Req'd**	+15%		-5%	**Req'd**	+15%	-5%	**Req'd**	+15%	-5%	**Req'd**	+15%
3.337	**3.513**	4.040	3.340	**3.515**	4.042	3.339	**3.515**	4.042	-40	2.680	**2.612**	2.435	2.673	**2.605**	2.429	2.675	**2.608**	2.432
3.203	**3.372**	3.878	3.205	**3.374**	3.879	3.204	**3.373**	3.879	-35	2.735	**2.666**	2.486	2.728	**2.659**	2.480	2.731	**2.661**	2.482
3.069	**3.231**	3.715	3.071	**3.232**	3.716	3.070	**3.232**	3.716	-30	2.794	**2.723**	2.539	2.787	**2.716**	2.533	2.789	**2.719**	2.535
2.935	**3.089**	3.553	2.936	**3.091**	3.554	2.936	**3.090**	3.554	-25	2.856	**2.784**	2.596	2.850	**2.777**	2.590	2.852	**2.780**	2.592
2.800	**2.948**	3.390	2.802	**2.949**	3.391	2.801	**2.949**	3.391	-20	2.924	**2.850**	2.657	2.917	**2.843**	2.651	2.919	**2.845**	2.653
2.666	**2.807**	3.228	2.667	**2.808**	3.228	2.667	**2.807**	3.228	-15	2.996	**2.920**	2.723	2.989	**2.913**	2.716	2.991	**2.916**	2.719
2.532	**2.665**	3.065	2.533	**2.666**	3.066	2.533	**2.666**	3.066	-10	3.074	**2.996**	2.794	3.066	**2.989**	2.787	3.069	**2.991**	2.789
2.398	**2.524**	2.903	2.398	**2.525**	2.903	2.398	**2.524**	2.903	-5	3.158	**3.078**	2.870	3.151	**3.071**	2.864	3.153	**3.073**	2.866
2.263	**2.383**	2.740	2.264	**2.383**	2.740	2.264	**2.383**	2.740	0	3.249	**3.167**	2.953	3.242	**3.160**	2.947	3.245	**3.162**	2.949
2.129	**2.241**	2.578	2.129	**2.242**	2.578	2.129	**2.241**	2.578	5	3.349	**3.264**	3.044	3.342	**3.257**	3.037	3.345	**3.260**	3.040
1.995	**2.100**	2.415	1.995	**2.100**	2.415	1.995	**2.100**	2.415	10	3.459	**3.371**	3.144	3.452	**3.364**	3.137	3.454	**3.367**	3.140
1.861	**1.959**	2.252	1.861	**1.958**	2.252	1.861	**1.959**	2.252	15	3.580	**3.490**	3.254	3.573	**3.482**	3.247	3.576	**3.485**	3.250
1.727	**1.817**	2.090	1.726	**1.817**	2.090	1.726	**1.817**	2.090	20	3.715	**3.621**	3.377	3.708	**3.614**	3.370	3.711	**3.617**	3.373
1.592	**1.676**	1.927	1.592	**1.675**	1.927	1.592	**1.676**	1.927	25	3.867	**3.769**	3.515	3.860	**3.762**	3.508	3.862	**3.765**	3.510
1.458	**1.535**	1.765	1.457	**1.534**	1.764	1.457	**1.534**	1.764	30	4.039	**3.937**	3.671	4.032	**3.930**	3.664	4.034	**3.932**	3.667
1.324	**1.393**	1.602	1.323	**1.392**	1.602	1.323	**1.393**	1.602	35	4.236	**4.129**	3.850	4.229	**4.122**	3.843	4.231	**4.124**	3.846
1.190	**1.252**	1.440	1.188	**1.251**	1.439	1.189	**1.251**	1.439	40	4.465	**4.352**	4.058	4.458	**4.345**	4.052	4.461	**4.348**	4.054
1.055	**1.111**	1.277	1.054	**1.109**	1.276	1.054	**1.110**	1.276	45	4.736	**4.616**	4.304	4.729	**4.609**	4.298	4.731	**4.612**	4.300

Trylon

Job Number: 232766-R1
Site Name: Kranz Rd & Marthas Rd, ON

Tower Height (ft): 294.00
Tower Type: All-Weld

PULSE CHART FOR GUY LEVELS

Guy Level: 3
Guy Height (ft): 171.50
Guy Size: 7/16 in EHS
Initial Tension (kips): 2.000 at design temperature 10 deg. (C)

Guy Length (Anc1) (ft): 265.8
Guy Length (Anc2) (ft): 265.1
Guy Length (Anc3) (ft): 265.4

Tension (Kips):									Temp (C)	3 Pulse Method (Second)								
Anchor 1			Anchor 2			Anchor 3				Anchor 1			Anchor 2			Anchor 3		
Azimuth: 100.00			Azimuth: 220.00			Azimuth: 340.00				Azimuth: 100.00			Azimuth: 220.00			Azimuth: 340.00		
Radius (ft): 210.00			Radius (ft): 210.00			Radius (ft): 210.00				Radius (ft): 210.00			Radius (ft): 210.00			Radius (ft): 210.00		
V.Offset (ft): -0.70(Down)			V.Offset (ft): 0.40(Up)			V.Offset (ft): 0.00(Flat)				V.Offset (ft): -0.70(Down)			V.Offset (ft): 0.40(Up)			V.Offset (ft): 0.00(Flat)		
-5%	**Req'd**	+15%	-5%	**Req'd**	+15%	-5%	**Req'd**	+15%		-5%	**Req'd**	+15%	-5%	**Req'd**	+15%	-5%	**Req'd**	+15%
2.894	**3.046**	3.503	2.895	**3.047**	3.504	2.894	**3.047**	3.504	-40	3.238	**3.156**	2.943	3.229	**3.147**	2.935	3.232	**3.151**	2.938
2.794	**2.942**	3.383	2.795	**2.942**	3.383	2.795	**2.942**	3.383	-35	3.295	**3.211**	2.994	3.285	**3.202**	2.986	3.289	**3.205**	2.989
2.695	**2.837**	3.262	2.696	**2.838**	3.263	2.695	**2.837**	3.263	-30	3.354	**3.269**	3.048	3.345	**3.260**	3.040	3.348	**3.263**	3.043
2.596	**2.732**	3.142	2.596	**2.733**	3.143	2.596	**2.733**	3.143	-25	3.417	**3.330**	3.106	3.408	**3.321**	3.097	3.411	**3.325**	3.100
2.496	**2.628**	3.022	2.497	**2.628**	3.022	2.497	**2.628**	3.022	-20	3.483	**3.395**	3.166	3.474	**3.386**	3.157	3.477	**3.389**	3.161
2.397	**2.523**	2.902	2.397	**2.523**	2.902	2.397	**2.523**	2.902	-15	3.554	**3.464**	3.230	3.544	**3.455**	3.221	3.548	**3.458**	3.225
2.298	**2.418**	2.781	2.298	**2.419**	2.781	2.298	**2.419**	2.781	-10	3.629	**3.537**	3.298	3.619	**3.528**	3.289	3.623	**3.531**	3.293
2.198	**2.314**	2.661	2.198	**2.314**	2.661	2.198	**2.314**	2.661	-5	3.709	**3.615**	3.371	3.699	**3.605**	3.362	3.703	**3.609**	3.365
2.099	**2.209**	2.541	2.099	**2.209**	2.541	2.099	**2.209**	2.541	0	3.795	**3.698**	3.449	3.784	**3.689**	3.440	3.788	**3.692**	3.443
1.999	**2.105**	2.420	1.999	**2.105**	2.420	1.999	**2.105**	2.420	5	3.886	**3.788**	3.532	3.876	**3.778**	3.523	3.880	**3.781**	3.526
1.900	**2.000**	2.300	1.900	**2.000**	2.300	1.900	**2.000**	2.300	10	3.985	**3.884**	3.622	3.975	**3.874**	3.612	3.978	**3.878**	3.616
1.801	**1.895**	2.180	1.801	**1.895**	2.180	1.801	**1.895**	2.180	15	4.092	**3.988**	3.719	4.081	**3.978**	3.709	4.085	**3.981**	3.713
1.701	**1.791**	2.059	1.701	**1.791**	2.059	1.701	**1.791**	2.059	20	4.207	**4.101**	3.824	4.197	**4.090**	3.814	4.200	**4.094**	3.818
1.602	**1.686**	1.939	1.602	**1.686**	1.939	1.602	**1.686**	1.939	25	4.334	**4.224**	3.939	4.322	**4.213**	3.929	4.326	**4.217**	3.932
1.502	**1.582**	1.819	1.502	**1.581**	1.819	1.502	**1.581**	1.819	30	4.472	**4.358**	4.064	4.460	**4.348**	4.054	4.465	**4.352**	4.058
1.403	**1.477**	1.698	1.403	**1.477**	1.698	1.403	**1.477**	1.698	35	4.624	**4.507**	4.203	4.613	**4.496**	4.192	4.617	**4.500**	4.196
1.304	**1.372**	1.578	1.303	**1.372**	1.578	1.303	**1.372**	1.578	40	4.793	**4.672**	4.356	4.781	**4.660**	4.346	4.786	**4.664**	4.350
1.204	**1.268**	1.458	1.204	**1.267**	1.457	1.204	**1.267**	1.457	45	4.982	**4.856**	4.528	4.970	**4.844**	4.517	4.975	**4.849**	4.521

Trylon

Job Number: 232766-R1
Site Name: Kranz Rd & Marthas Rd, ON

Tower Height (ft): 294.00
Tower Type: All-Weld

PULSE CHART FOR GUY LEVELS

Guy Level: 4
Guy Height (ft): 231.50
Guy Size: 1/2 in EHS
Initial Tension (kips): 2.600 at design temperature 10 deg. (C)

Guy Length (Anc1) (ft): 308.1
Guy Length (Anc2) (ft): 307.3
Guy Length (Anc3) (ft): 307.6

Tension (Kips):									Temp (C)	3 Pulse Method (Second)								
Anchor 1			Anchor 2			Anchor 3				Anchor 1			Anchor 2			Anchor 3		
Azimuth: 100.00			Azimuth: 220.00			Azimuth: 340.00				Azimuth: 100.00			Azimuth: 220.00			Azimuth: 340.00		
Radius (ft): 210.00			Radius (ft): 210.00			Radius (ft): 210.00				Radius (ft): 210.00			Radius (ft): 210.00			Radius (ft): 210.00		
V.Offset (ft): -0.70(Down)			V.Offset (ft): 0.40(Up)			V.Offset (ft): 0.00(Flat)				V.Offset (ft): -0.70(Down)			V.Offset (ft): 0.40(Up)			V.Offset (ft): 0.00(Flat)		
-5%	**Req'd**	+15%	-5%	**Req'd**	+15%	-5%	**Req'd**	+15%		-5%	**Req'd**	+15%	-5%	**Req'd**	+15%	-5%	**Req'd**	+15%
3.386	**3.565**	4.099	3.386	**3.564**	4.099	3.386	**3.564**	4.099	-40	4.024	**3.922**	3.657	4.013	**3.912**	3.648	4.017	**3.915**	3.651
3.295	**3.468**	3.988	3.294	**3.468**	3.988	3.294	**3.468**	3.988	-35	4.078	**3.975**	3.707	4.068	**3.965**	3.697	4.072	**3.968**	3.701
3.203	**3.372**	3.878	3.203	**3.371**	3.877	3.203	**3.371**	3.877	-30	4.135	**4.030**	3.758	4.124	**4.020**	3.749	4.128	**4.024**	3.752
3.112	**3.275**	3.767	3.111	**3.275**	3.766	3.111	**3.275**	3.766	-25	4.194	**4.088**	3.812	4.184	**4.078**	3.802	4.188	**4.082**	3.806
3.020	**3.179**	3.656	3.019	**3.178**	3.655	3.020	**3.179**	3.655	-20	4.256	**4.149**	3.869	4.245	**4.138**	3.859	4.249	**4.142**	3.862
2.928	**3.082**	3.545	2.928	**3.082**	3.544	2.928	**3.082**	3.544	-15	4.321	**4.212**	3.927	4.310	**4.201**	3.917	4.314	**4.205**	3.921
2.837	**2.986**	3.434	2.836	**2.986**	3.434	2.836	**2.986**	3.434	-10	4.389	**4.278**	3.989	4.378	**4.267**	3.979	4.382	**4.271**	3.983
2.745	**2.889**	3.323	2.745	**2.889**	3.323	2.745	**2.889**	3.323	-5	4.460	**4.347**	4.054	4.449	**4.336**	4.043	4.453	**4.340**	4.047
2.653	**2.793**	3.212	2.653	**2.793**	3.212	2.653	**2.793**	3.212	0	4.535	**4.420**	4.122	4.523	**4.409**	4.111	4.527	**4.413**	4.115
2.562	**2.696**	3.101	2.562	**2.696**	3.101	2.562	**2.696**	3.101	5	4.614	**4.497**	4.193	4.602	**4.485**	4.182	4.606	**4.489**	4.186
2.470	**2.600**	2.990	2.470	**2.600**	2.990	2.470	**2.600**	2.990	10	4.696	**4.578**	4.269	4.684	**4.566**	4.257	4.689	**4.570**	4.261
2.378	**2.504**	2.879	2.378	**2.504**	2.879	2.378	**2.504**	2.879	15	4.784	**4.663**	4.348	4.771	**4.651**	4.337	4.776	**4.655**	4.341
2.287	**2.407**	2.768	2.287	**2.407**	2.768	2.287	**2.407**	2.768	20	4.877	**4.753**	4.432	4.864	**4.740**	4.420	4.868	**4.745**	4.425
2.195	**2.311**	2.657	2.195	**2.311**	2.657	2.195	**2.311**	2.657	25	4.975	**4.849**	4.522	4.961	**4.836**	4.509	4.966	**4.841**	4.514
2.103	**2.214**	2.546	2.104	**2.214**	2.546	2.104	**2.214**	2.546	30	5.079	**4.951**	4.616	5.065	**4.937**	4.604	5.070	**4.942**	4.608
2.012	**2.118**	2.435	2.012	**2.118**	2.436	2.012	**2.118**	2.436	35	5.190	**5.059**	4.717	5.176	**5.045**	4.705	5.181	**5.050**	4.709
1.920	**2.021**	2.324	1.921	**2.022**	2.325	1.920	**2.021**	2.325	40	5.309	**5.175**	4.825	5.295	**5.161**	4.812	5.300	**5.166**	4.817
1.828	**1.925**	2.213	1.829	**1.925**	2.214	1.829	**1.925**	2.214	45	5.437	**5.299**	4.941	5.422	**5.284**	4.928	5.427	**5.290**	4.933

Trylon

Job Number: 232766-R1
Site Name: Kranz Rd & Marthas Rd, ON

Tower Height (ft): 294.00
Tower Type: All-Weld

PULSE CHART FOR GUY LEVELS

Guy Level: 5
Guy Height (ft): 279.00
Guy Size: 5/8 in BS
Initial Tension (kips): 6.000 at design temperature 10 deg. (C)

Guy Length (Anc1) (ft): 348.9
Guy Length (Anc2) (ft): 348.0
Guy Length (Anc3) (ft): 348.3

Tension (Kips):									Temp (C)	3 Pulse Method (Second)								
Anchor 1			Anchor 2			Anchor 3				Anchor 1			Anchor 2			Anchor 3		
Azimuth: 100.00 Radius (ft): 210.00 V.Offset (ft): -0.70(Down)			Azimuth: 220.00 Radius (ft): 210.00 V.Offset (ft): 0.40(Up)			Azimuth: 340.00 Radius (ft): 210.00 V.Offset (ft): 0.00(Flat)				Azimuth: 100.00 Radius (ft): 210.00 V.Offset (ft): -0.70(Down)			Azimuth: 220.00 Radius (ft): 210.00 V.Offset (ft): 0.40(Up)			Azimuth: 340.00 Radius (ft): 210.00 V.Offset (ft): 0.00(Flat)		
-5%	**Req'd**	+15%	-5%	**Req'd**	+15%	-5%	**Req'd**	+15%		-5%	**Req'd**	+15%	-5%	**Req'd**	+15%	-5%	**Req'd**	+15%
6.873	**7.235**	8.320	6.871	**7.232**	8.318	6.872	**7.233**	8.318	-40	3.997	**3.896**	3.633	3.988	**3.887**	3.624	3.991	**3.890**	3.628
6.756	**7.111**	8.178	6.754	**7.109**	8.176	6.754	**7.110**	8.176	-35	4.031	**3.929**	3.664	4.022	**3.920**	3.655	4.025	**3.923**	3.658
6.638	**6.988**	8.036	6.637	**6.986**	8.035	6.637	**6.987**	8.035	-30	4.066	**3.963**	3.696	4.056	**3.954**	3.687	4.060	**3.957**	3.690
6.521	**6.864**	7.894	6.520	**6.863**	7.893	6.520	**6.863**	7.893	-25	4.102	**3.998**	3.728	4.092	**3.988**	3.719	4.096	**3.992**	3.722
6.404	**6.741**	7.752	6.402	**6.739**	7.751	6.403	**6.740**	7.751	-20	4.139	**4.034**	3.761	4.129	**4.024**	3.753	4.132	**4.028**	3.756
6.287	**6.617**	7.610	6.285	**6.616**	7.609	6.286	**6.617**	7.609	-15	4.176	**4.071**	3.796	4.166	**4.061**	3.787	4.170	**4.064**	3.790
6.169	**6.494**	7.468	6.168	**6.493**	7.467	6.169	**6.493**	7.467	-10	4.215	**4.108**	3.831	4.205	**4.098**	3.822	4.209	**4.102**	3.825
6.052	**6.370**	7.326	6.051	**6.370**	7.325	6.051	**6.370**	7.325	-5	4.255	**4.147**	3.867	4.245	**4.137**	3.858	4.248	**4.141**	3.861
5.935	**6.247**	7.184	5.934	**6.246**	7.184	5.934	**6.247**	7.184	0	4.296	**4.187**	3.905	4.286	**4.177**	3.895	4.289	**4.181**	3.899
5.817	**6.123**	7.042	5.817	**6.123**	7.042	5.817	**6.123**	7.042	5	4.338	**4.229**	3.943	4.328	**4.218**	3.933	4.332	**4.222**	3.937
5.700	**6.000**	6.900	5.700	**6.000**	6.900	5.700	**6.000**	6.900	10	4.382	**4.271**	3.983	4.371	**4.260**	3.973	4.375	**4.264**	3.977
5.583	**5.877**	6.758	5.583	**5.877**	6.758	5.583	**5.877**	6.758	15	4.427	**4.315**	4.024	4.416	**4.304**	4.014	4.420	**4.308**	4.017
5.465	**5.753**	6.616	5.466	**5.754**	6.616	5.466	**5.753**	6.616	20	4.473	**4.360**	4.066	4.462	**4.349**	4.055	4.466	**4.353**	4.059
5.348	**5.630**	6.474	5.349	**5.630**	6.475	5.349	**5.630**	6.475	25	4.521	**4.407**	4.109	4.510	**4.395**	4.099	4.514	**4.399**	4.103
5.231	**5.506**	6.332	5.232	**5.507**	6.333	5.231	**5.507**	6.333	30	4.571	**4.455**	4.154	4.559	**4.443**	4.143	4.563	**4.447**	4.147
5.113	**5.383**	6.190	5.115	**5.384**	6.191	5.114	**5.383**	6.191	35	4.622	**4.505**	4.200	4.610	**4.493**	4.190	4.614	**4.497**	4.194
4.996	**5.259**	6.048	4.998	**5.261**	6.049	4.997	**5.260**	6.049	40	4.674	**4.556**	4.248	4.662	**4.544**	4.237	4.667	**4.548**	4.241
4.879	**5.136**	5.906	4.880	**5.137**	5.907	4.880	**5.137**	5.907	45	4.729	**4.609**	4.298	4.716	**4.597**	4.287	4.721	**4.601**	4.291

BILL OF MATERIAL REPORT

Job Number :232766-

LotID	Part ID	Rev	Description		Ext Qty	UM	Ext Weight	UM	L	P
1	**9.906.1**		**BELOW GRADE FOUNDATION MATERIAL**							
	3.906.0767.001	A	3600 AW TAPER BASE PLATE		1	EA	104.60	LB		
	4.906.1012.002		BOLT-ON TORSION ATTACHMENT KIT		2	EA				
			FOR USE WITH UP TO 11/16" BS GUY MAX.							
	3.906.0962.001	A	BOLT-ON TORSION LUG		12	EA	229.20	LB		
	1202049		5/8" X 3-1/2" A325 BOLT ASS'Y - HDG		8	EA	4.34	LB		
	1202108		7/8" X 3-3/4" A325 BOLT ASS'Y - HDG		14	EA	17.23	LB		
	3.963.0700.112	A	7/8" THK 1 HOLE SPACER (11/16" DIA)		8	EA	1.04	LB		
	4.906.0030.001		GUY ANCHOR ANODE KIT		3	EA				
			(1) KIT PER ANCHOR							
	1302109		MAGNESIUM ANODE 5" X 30" C/W 25' #10		6	EA	102.00	LB		
			77% HYDRATED GYPSUM, 15% BENTONIET AND 8% SODIUM SULPHATE *TESTED TO ASTM G-97* *Ships as 1 pc in tube with cable attached. Ship dims: 31x8x5.5in*| *17D3GG* *CARDBOARD TUBE PROTECTED IN A CLEAR PLASTIC BAG.*							
	4.912.0045.002	-	KC15B1 CONNECTOR KIT		6	EA				
	1303075		KC15B1 BURNDY	M	6	EA	3.83	LB		
	1208070		1/4" HEX NUT SILICONE BRONZE	M	6	EA	0.02	LB		
	1208071		1/4" LOCK WASHER SILICONE BRONZE	M	6	EA	0.01	LB		
	1404010		TY-RAP; 1/4" x 14" LG (TY27MX) 63130		30	EA	0.60	LB		
			STD PACKAGES OF 100 *14.5" 50lb Tensile UV Black Nylon 6.6 Power Phase[REG] Locking Cable Tie*							
	4.906.1011.019		19' - 225 kip ANCHOR ASSEMBLY		3	EA				
	3.906.0964.001	B	BEARING ANGLE (225 kip CAP)		6	EA	412.20	LB		
	3.906.0963.019	A	NON-PIVOT ANCHOR SHAFT (225 kip CAP)		6	EA	2346.00	LB		
	3.906.0960.001	B	UNIVERSAL ANCHOR HEAD		3	EA	314.10	LB		
	1202077		3/4" X 3-1/4" A325 BOLT ASS'Y - HDG		24	EA	18.84	LB		
			BBEx acc requirement							
	1202078		3/4" X 3-1/2" A325 BOLT ASS'Y - HDG		21	EA	17.14	LB		
			BBEx acc requirement							
	3.963.0700.213	A	1" THK 1 HOLE SPACER (13/16" DIA)		6	EA	0.78	LB		
	1302224		COTT BIG FINK TEST STATION		3	EA				
			COTT BIG FINK TEST STATION HEAD *(5) S.S. TERMINALS* *6 FT COTTPIPE* *ALLIED CORROSION INDUSTRIES INC* *karen@alliedcorrosion.com*							
	1302225		STELTH 2 SOLID STATE REFERENCE ELECTRODE		3	EA				
			STELTH 2 *MODEL #SRE-007-CUY* *CuCuS04 LONGLIFE REFERENCE ELECTRODE FOR DIREXT BURIAL* *INCLUDES 20 FT #14 RHW-TYPE 2 YELLOW CABLE*							
	1202576	A	5/8" A325 SQUIRTER DTI WASHER - HDG		8	EA		LB		
	1202578	A	7/8" A325 SQUIRTER DTI WASHER - HDG		14	EA		LB		
	1202577	A	3/4" A325 SQUIRTER DTI WASHER - HDG		45	EA		LB		

Page Sub Total Weight (not 5.)	3,571.93
Page Sub Total Weight (5.)	0.00
Page Sub Total Weight	3,571.93

LotID	Part ID	Rev	Description	Ext Qty	UM	Ext Weight	UM	L	P
1	**9.912.1**		**BELOW GRADE GROUNDING MATERIAL**						
	4.912.1207.300		ROGERS STD GROUNDING - BELOW GRADE	1	EA				
			GUYED - ANCHOR RADIUS 200' TO 300'						
	1602001		7/16" 6 X 36 Wire Rope GALV.	1942	FT	776.80	LB		
	1301203		2/0 PVC INS COPPER WIRE (RW-90 GREEN)	10	M	15.00	LB		
	1302012		3/4" X 10 FT COPPERCLAD GROUND ROD	14	EA	239.40	LB		
			QUOTATION NO. # 000118EL084						
			COPPER WEIGHS 556 PCF						
	1303640		YGHP34C29-BURNDY	37	EA	13.69	LB		
			bare copper						
	1303139		YGHC26C26 E-SHAPED HYTAP BURNDY	2	EA	0.28	LB		

Page Sub Total Weight (not 5.)	1,045.17
Page Sub Total Weight (5.)	0.00
Page Sub Total Weight	1,045.17

LotID	Part ID	Rev	Description	Ext Qty	UM	Ext Weight	UM	L	P
2	**9.915.1**		**MAST MATERIAL**						
	3.030.0588.001	A	3000AWG TAPER BASE SECTION	1	EA	328.60	LB		
	3.030.1010.001	A	GA.3010.05.04.1.04.00.00.00.00.0.0.0.0	1	EA	549.50	LB		
	3.030.1004.001	A	GA.3020.05.04.1.04.00.00.00.00.0.0.0.0	7	EA	7394.10	LB		
	3.030.1068.001	A	GA.3020.05.04.1.04.00.00.00.06.3.0.0.0	2	EA	2212.60	LB		
	3.030.1003.001	A	GA.3020.04.04.1.04.00.00.00.00.0.0.0.0	1	EA	900.20	LB		
	3.030.1106.001	B	GA.3020.05.04.2.04.00.07.13.00.0.0.0.0	2	EA	2892.80	LB		
	3.030.1076.001	A	GA.3020.04.04.2.04.00.00.00.02.3.0.0.0	1	EA	1120.20	LB		
	3.030.1007.001	A	GA.3020.05.04.2.04.00.00.00.00.0.0.0.0	1	EA	1226.10	LB		
	4.030.HDWR.001	A	3000AWG BASE HARDWARE KIT *(9) 1202049 - 5/8" x 3-1/2" A325 BOLT ASSY*	1	EA				
	4.030.HDWR.003	A	3000AWG SECTION HARDWARE KIT *(9) 1202045 - 5/8" x 2-3/4" A325 BOLT ASSY* *FOR WORKING WITH EXTRA WASHER*	14	EA				
	1202576	A	5/8" A325 SQUIRTER DTI WASHER - HDG	135	EA		LB		

Page Sub Total Weight (not 5.)	16,692.13
Page Sub Total Weight (5.)	0.00
Page Sub Total Weight	16,692.13

LotID	Part ID	Rev	Description	Ext Qty	UM	Ext Weight	UM	L	P
2	**9.915.2**		**MAST MATERIAL**						
	1602032		3/8" 1 X 7 EHS GUY STRAND GALV.	753	FT	210.84	LB		
			MUST BE ASTM A475 APPROVED, TEST CERTS TO ACCOMPANY SHIPMENT. *MINIMUM BREAKING STRENGTH = 15.4 KIPS.* *EACH PIECE TO BE TAGGED PER GUY REEL SCHEDULE. REFER TO GUY REEL SCHEDULE FOR INDIVIDUAL CUTTING LENGTHS.* *INDIVIDUAL LENGTHS MUST BE CONTINUOUS LENGTH UNLESS OTHERWISE NOTED.*						
	1602033		7/16" 1 X 7 EHS GUY STRAND GALV.	2632	FT	1052.80	LB		
			MUST BE ASTM A475 APPROVED, TEST CERTS TO ACCOMPANY SHIPMENT. *MINIMUM BREAKING STRENGTH = 20.8 KIPS.* *EACH PIECE TO BE TAGGED PER GUY REEL SCHEDULE. REFER TO GUY REEL SCHEDULE FOR INDIVIDUAL CUTTING LENGTHS.* *INDIVIDUAL LENGTHS MUST BE CONTINUOUS LENGTH UNLESS OTHERWISE NOTED.*						
	1602034		1/2" 1 X 7 EHS GUY STRAND GALV.	2060	FT	1071.20	LB		
			MUST BE ASTM A475 APPROVED, TEST CERTS TO ACCOMPANY SHIPMENT. *MINIMUM BREAKING STRENGTH = 26.9 KIPS.* *EACH PIECE TO BE TAGGED PER GUY REEL SCHEDULE. REFER TO GUY REEL SCHEDULE FOR INDIVIDUAL CUTTING LENGTHS.* *INDIVIDUAL LENGTHS MUST BE CONTINUOUS LENGTH UNLESS OTHERWISE NOTED.*						
	1603012R		5/8" 1 X 19 GR. 220 BRIDGE STRAND GALV.	1137	FT	931.20	LB		
			MUST BE ASTM A586 APPROVED, TEST CERTS TO ACCOMPANY SHIPMENT. *MINIMUM BREAKING STRENGTH = 48.0 KIPS.* *EACH PIECE TO BE TAGGED PER GUY REEL SCHEDULE.* *INDIVIDUAL LENGTHS MUST BE CONTINUOUS LENGTH UNLESS OTHERWISE NOTED.*						
	4.915.0028.100		GUY HARDWARE	1	EA				
			ONE KIT PER TOWER						
	2203010		3/16" GR. 30 GALVANIZED CHAIN	60	FT	23.40	LB		
	1201032		5/16" X 1" HEX HEAD BOLT GR 5 HDG KANBAN	3	EA	0.09	LB		
	1201021		5/16" LOCK WASHER GR. 5 - HDG KANBAN	3	EA	0.02	LB		
	1201022		5/16" FLAT WASHER GR. 5 - HDG	6	EA	0.06	LB		
	1201020		5/16" HEX NUT GR. 5 - HDG KANBAN	3	EA	0.03	LB		
	4.915.0028.003		GH0.3750EH	3	EA				
			GUY HARDWARE KIT FOR 3/8" 1x7 EHS						
	1601610		5/8" SHACKLE HDG - OTHER	6	EA	8.28	LB		
			3-1/4 TON *G20910X 5/8¶Screw Pin Shackle ┬ HDG Other*						
	1601655		7/16" H THIMBLE HDG - OTHER	6	EA	2.08	LB		
	1607049		BIG GRIP FOR 3/8" GUY STRAND BG-2147	6	EA	7.32	LB		
			BG-2147						
	1601705		5/8" X 12" J/E HDG - OTHER	3	EA	10.83	LB		
	2204021		MAH 6 S.S. HOSE CLAMP	6	EA	0.08			
			1/2" BANDING *GUY SIZE: 5/16" - 7/8"*						
	1601012		5/16" U-BOLT CLIP - HDG CROSBY	3	EA	0.84	LB		
	1303210	A	MECHANICAL CONNECTOR WITH SPACER BAR	3	EA				
			BURNDY #KVSU26 *T&B #2B20PW*						
	1601605		1/2" SHACKLE HDG - OTHER	3	EA	2.16	LB		
			2 TON						
	4.915.0028.004		GH0.4375EH	9	EA				
			GUY HARDWARE KIT FOR 7/16" 1x7 EHS						
	1601610		5/8" SHACKLE HDG - OTHER	18	EA	24.84	LB		
			3-1/4 TON *G20910X 5/8¶Screw Pin Shackle ┬ HDG Other*						
	1601660		1/2" H THIMBLE HDG - OTHER	18	EA	9.18	LB		
	1607050		BIG GRIP FOR 7/16" GUY STRAND BG-2148	18	EA	34.56	LB		
			BG-2148						

LotID	Part ID	Rev	Description	Ext Qty	UM	Ext Weight	UM	L	P
	1601710		3/4" X 18" J/E HDG - OTHER	9	EA	63.00	LB	__	__
	2204021		MAH 6 S.S. HOSE CLAMP	18	EA	0.25		__	__
			1/2" BANDING						
			GUY SIZE: 5/16" - 7/8"						
	1601013		3/8" U-BOLT CLIP - HDG CROSBY	9	EA	4.32	LB	__	__
	1303211	A	T&B 2B40PW (SUB FOR KVSU28)	9	EA			__	__
			BURNDY #KVSU28						
			T&B #2B40PW						
	4.915.0028.005		GH0.5000EH	6	EA			__	__
			GUY HARDWARE KIT FOR 1/2" 1x7 EHS						
	1601610		5/8" SHACKLE HDG - OTHER	12	EA	16.56	LB	__	__
			3-1/4 TON						
			G20910X 5/8¶Screw Pin Shackle ┬ HDG Other						
	1601665		9/16" H THIMBLE HDG - OTHER	12	EA	6.12	LB	__	__
	1607014		BIG GRIP 1/2" GUY WIRE - BG-2115	12	EA	37.80	LB	__	__
			BG-2115						
	1601710		3/4" X 18" J/E HDG - OTHER	6	EA	42.00	LB	__	__
	2204021		MAH 6 S.S. HOSE CLAMP	12	EA	0.17		__	__
			1/2" BANDING						
			GUY SIZE: 5/16" - 7/8"						
	1303211	A	T&B 2B40PW (SUB FOR KVSU28)	6	EA			__	__
			BURNDY #KVSU28						
			T&B #2B40PW						
	1601015		1/2" U-BOLT CLIP - HDG CROSBY KANBAN	6	EA	4.80	LB	__	__
	4.915.0028.010		GH0.6250BS	3	EA			__	__
			GUY HARDWARE KIT FOR 5/8" 1x19 BS						
	1601615		3/4" SHACKLE HDG - OTHER	6	EA	14.10	LB	__	__
			4-3/4 TON						
	1601675		3/4" H THIMBLE HDG - OTHER	6	EA	9.49	LB	__	__
	1607053		BIG GRIPS FOR 5/8" BR STRAND BGMS-6446	6	EA	46.20	LB	__	__
			BG-MS-6446						
	1601720		1" X 18" J/E HDG - OTHER	3	EA	39.90	LB	__	__
	2204021		MAH 6 S.S. HOSE CLAMP	6	EA	0.08		__	__
			1/2" BANDING						
			GUY SIZE: 5/16" - 7/8"						
	1601017		5/8" U-BOLT CLIP - HDG CROSBY	3	EA	3.30	LB	__	__
	1303212	A	T&B 2B350PW (SUB FOR KVSU31)	3	EA			__	__
			BURNDY #KVSU31						
			T&B #2B350PW						
	1606080		YELLOW GUY GUARD SEPTOR T&B2YG	21	EA	21.00	LB	__	__
			PLEASE SHIP IN BUNDLES OF 6 PIECES						
			6'-7" IN LENGTH						
			T&B 2YG						
	4.963.0363.002		IT TAG 1x7 EHS GUY STRAND	3	EA			__	__
			GUY LEVEL: 1						
			ELEVATION = 49.0 FEET						
			3/8" 1x7 EHS GUY STRAND						
			IT = 1.90 KIPS @ 10 DEGREES C						
			SITE NAME: KRANZ RD & MARTHAS RD						
			SITE CODE: C8512						
	3.963.0363.002		IT TAG 1x7 EHS GUY STRAND	3	EA	0.33	LB	__	__
			PN 9630363 PLATES						
			1.50 X 6.00						
			.025 ALUMINUM						
	2204022		MAH 20 S.S. HOSE CLAMP 5/16" BAND	6	EA	0.10		__	__
			5/16" BANDING						
			GUY SIZE: 5/16" - 7/8"						
	4.963.0363.002		IT TAG 1x7 EHS GUY STRAND	3	EA			__	__
			GUY LEVEL: 2						
			ELEVATION = 109.0 FEET						
			7/16" 1x7 EHS GUY STRAND						
			IT = 2.10 KIPS @ 10 DEGREES C						
			SITE NAME: KRANZ RD & MARTHAS RD						
			SITE CODE: C8512						
	3.963.0363.002		IT TAG 1x7 EHS GUY STRAND	3	EA	0.33	LB	__	__
			PN 9630363 PLATES						
			1.50 X 6.00						
			.025 ALUMINUM						
	2204022		MAH 20 S.S. HOSE CLAMP 5/16" BAND	6	EA	0.10		__	__

LotID	Part ID	Rev	Description	Ext Qty	UM	Ext Weight	UM	L	P
			5/16" BANDING *GUY SIZE: 5/16" - 7/8"*						
	4.963.0363.002		IT TAG 1x7 EHS GUY STRAND *GUY LEVEL: 3* *ELEVATION = 171.5 FEET* *7/16" 1x7 EHS GUY STRAND* *IT = 2.00 KIPS @ 10 DEGREES C* *SITE NAME: KRANZ RD & MARTHAS RD* *SITE CODE: C8512*	6	EA			__	__
	3.963.0363.002		IT TAG 1x7 EHS GUY STRAND *PN 9630363 PLATES* *1.50 X 6.00* *.025 ALUMINUM*	6	EA	0.66	LB	__	__
	2204022		MAH 20 S.S. HOSE CLAMP 5/16" BAND *5/16" BANDING* *GUY SIZE: 5/16" - 7/8"*	12	EA	0.20		__	__
	4.963.0363.002		IT TAG 1x7 EHS GUY STRAND *GUY LEVEL: 4* *ELEVATION = 231.5 FEET* *1/2" 1x7 EHS GUY STRAND* *IT = 2.60 KIPS @ 10 DEGREES C* *SITE NAME: KRANZ RD & MARTHAS RD* *SITE CODE: C8512*	6	EA			__	__
	3.963.0363.002		IT TAG 1x7 EHS GUY STRAND *PN 9630363 PLATES* *1.50 X 6.00* *.025 ALUMINUM*	6	EA	0.66	LB	__	__
	2204022		MAH 20 S.S. HOSE CLAMP 5/16" BAND *5/16" BANDING* *GUY SIZE: 5/16" - 7/8"*	12	EA	0.20		__	__
	4.963.0363.003		IT TAG 1x19 GR.220 BRIDGE STRAND *GUY LEVEL: 5* *ELEVATION = 279.0 FEET* *5/8" 1x19 GR.220 BRIDGE STRAND* *IT = 6.00 KIPS @ 10 DEGREES C* *SITE NAME: KRANZ RD & MARTHAS RD* *SITE CODE: C8512*	3	EA			__	__
	3.963.0363.003		IT TAG 1x19 GR.220 BRIDGE STRAND *PN 9630363 PLATES* *1.50 X 6.00* *.025 ALUMINUM*	3	EA	0.33	LB	__	__
	2204022		MAH 20 S.S. HOSE CLAMP 5/16" BAND *5/16" BANDING* *GUY SIZE: 5/16" - 7/8"*	6	EA	0.10		__	__

Page Sub Total Weight (not 5.)	3,705.06
Page Sub Total Weight (5.)	0.00
Page Sub Total Weight	3,705.06

LotID	Part ID	Rev	Description		Ext Qty	UM	Ext Weight	UM	L	P
2	**9.921.1**		**TORSION RESISTOR MATERIAL**							
	4.921.0131.001		13' TORSION RESISTOR - 3000AWG		2	EA				
	3.921.0112.001	A	TORSION HEAD		6	EA	449.40	LB		
	3.921.0113.001	A	TOP STRUT		24	EA	480.00	LB		
	3.921.0113.002	A	BOTTOM STRUT		24	EA	1104.00	LB		
	1202044		5/8" X 2-1/4" A325 BOLT ASS'Y-HDG PAILS		174	EA	76.04	LB		
	3.963.0700.108	A	1/2" THK 1 HOLE SPACER (11/16" DIA)		26	EA	3.38	LB		
	4.963.0025.002	-	OBSTRUCTION WARNING SIGN KIT		4	EA				
	3.963.0505.001	A	OBS WARNING SIGN	M	4	EA	2.40	LB		
			NOTE: *1) BACKGROUND OF SIGN TO BE WHITE* *2) WARNING LETTERING TO BE RED* *3) UNDERLINE & ALL OTHER TEXT TO BE BLACK*							
	3.963.0505.101	A	OBS WARNING SIGN - FRENCH	M	4	EA	2.40	LB		
			NOTE: *1) BACKGROUND OF SIGN TO BE WHITE* *2) WARNING LETTERING TO BE RED* *3) UNDERLINE & ALL OTHER TEXT TO BE BLACK*							
	1201032		5/16" X 1" HEX HEAD BOLT GR 5 HDG KANBAN	M	16	EA	0.46	LB		
	1201020		5/16" HEX NUT GR. 5 - HDG KANBAN	M	16	EA	0.16	LB		
	1201021		5/16" LOCK WASHER GR. 5 - HDG KANBAN	M	32	EA	0.22	LB		
	1202021		1/2" X 1-1/2" A325 BOLT ASSY-HDG PAILS	M	16	EA	3.39	LB		
	3.963.0725.001	A	WARNING SIGN TAB	M	16	EA	9.60	LB		
	3.963.0001.047	A	7/8" ALUMINUM BAR CLAMP	M	16	EA	1.28	LB		
	1202576	A	5/8" A325 SQUIRTER DTI WASHER - HDG		174	EA		LB		
	1202575	A	1/2" A325 SQUIRTER DTI WASHER - HDG		16	EA		LB		

Page Sub Total Weight (not 5.)	2,132.74
Page Sub Total Weight (5.)	0.00
Page Sub Total Weight	2,132.74

LotID	Part ID	Rev	Description		Ext Qty	UM	Ext Weight	UM	L	P
3	**9.912.2**		**ABOVE GRADE GROUNDING MATERIAL**							
	4.912.1207.001		ROGERS STD GROUNDING - ABOVE GRADE		1	EA				
			GUYED							
	1303205	A	GROUND CONNECTOR 2 CABLES TO BAR		1	EA				
			4 AWG (SOL) TO 2/0 AWG (STR), 3/8" STUD, 1/4" THK BAR							
			BURNDY #GC2626							
			T&B #GH2TB							
	1305031		54210 T&B LUG BLACK DIE 45		11	EA	0.95	LB		
	1207064		3/8" X 1-1/4" S.S. HEX HEAD BOLT		23	EA	2.07	LB		
	1207050		3/8" S.S. HEX NUT RACK		23	EA	1.15	LB		
	1207052		3/8" S.S. FLAT WASHER RACK		23	EA	0.37	LB		
	1303201	A	T&B 3904BU (SUB FOR GAR3904BU)		5	EA				
			4 TO 4/0 AWG, 2-1/2" TO 3-1/2" PIPE, 3/8" STUD							
			BURNDY #GAR3904BU							
			T&B #3904BU							
	1303200	A	T&B 3903BU (SUB FOR GAR3903BU)		5	EA				
			4 TO 4/0 AWG, 1-1/4" TO 2" PIPE, 3/8" STUD							
			BURNDY #GAR3903BU							
			T&B #3903BU							
	4.912.1012.001		UNIVERSAL LIGHTNING ROD KIT		1	EA				
			(COPPERCLAD)							
	3.912.0060.101	H	COPPERCLAD LIGHTNING ROD 3/4" x 60"		1	EA	7.50	LB		
	3.912.0060.003	A	MOUNTING PLATE - 2-3/8" PIPE		1	EA	6.90	LB		
	3.960.0066.010	A	2.375" OD x 0.154" WALL x 10' PIPE		1	EA	38.33	LB		
	4.963.0001.001	-	3/8" U-BOLT ASS'Y (3/4"S.R.)		2	EA	0.44	LB		
	4.963.0001.205	-	1/2" U-BOLT ASSEMBLY (2-3/8") KANBAN		2	EA	1.60	LB		
	3.963.0209.001	F	MEDIUM BACKING CHANNEL		8	EA	22.40	LB		
			STAMP PART NUMBER							
	4.963.0019.210	-	1/2" X 10" GALV THREAD ROD ASS'Y		8	EA	6.00	LB		
			2 flat washers, 2 lock washers, 2 nuts							
	4.963.HDWR.004	A	MISC HARDWARE KIT 004		2	EA	0.53	LB		
			(4) 1201120 - 1/2" GR.5 HEX NUT							
			(4) 1201121 - 1/2" GR.5 LOCK WASHER							
			(4) 1201122 - 1/2" GR.5 FLAT WASHER							
	4.912.1003.030		BUSS BAR MOUNT KIT (3000AWG)		1	EA				
			EACH KITS CONTAINS:							
			(1) BUSS BAR, (2) 3/8"x 1-1/4" GR.5 BOLT ASS'Y							
			& (1) BUSS BAR MOUNT							
	3.912.0053.101	A	GALVANIZED BUS BAR; 6"x24"x1/4"		1	EA	10.80	LB		
	3.912.0054.030	B	BUSS BAR MOUNT (3000AW)		1	EA	5.20	LB		
	4.963.0022.125	-	3/8" x 1-1/4" GR.5 BOLT ASS'Y		2	EA	0.14	LB		
			consists of:							
			(1) 1201062							
			(1) 1201050							
			(1) 1201051							
	1201062		3/8" X 1-1/4" HEX HEAD BOLT GR5 HDG RACK	M	2	EA	0.10	LB		
	1201050		3/8" HEX NUT GR. 5 - HDG RACK	M	2	EA	0.04	LB		
	1201051		3/8" LOCK WASHER GR. 5 - HDG RACK	M	2	EA	0.01	LB		
	4.912.1003.200		LEG SADDLE CLAMP KIT (2" LEG)		1	EA				
			EACH KITS CONTAINS:							
			(4) 3/8"x 1-1/4" GR.5 BOLT ASS'Y							
			& (2) SADDLE CLAMPS							
	3.963.0001.026	A	2" ALUMINUM SADDLE CLAMP		2	EA	0.10	LB		
	4.963.0022.125	-	3/8" x 1-1/4" GR.5 BOLT ASS'Y		4	EA	0.28	LB		
			consists of:							
			(1) 1201062							
			(1) 1201050							
			(1) 1201051							
	1201062		3/8" X 1-1/4" HEX HEAD BOLT GR5 HDG RACK	M	4	EA	0.19	LB		
	1201050		3/8" HEX NUT GR. 5 - HDG RACK	M	4	EA	0.08	LB		
	1201051		3/8" LOCK WASHER GR. 5 - HDG RACK	M	4	EA	0.02	LB		
	1201050		3/8" HEX NUT GR. 5 - HDG RACK		4	EA	0.08	LB		

LotID	Part ID	Rev	Description	Ext Qty	UM	Ext Weight	UM	L	P
	1201120		1/2" HEX NUT GR. 5 - HDG RACK	4	EA	0.14	LB		

Page Sub Total Weight (not 5.)	105.41
Page Sub Total Weight (5.)	0.00
Page Sub Total Weight	105.41

LotID	Part ID	Rev	Description		Ext Qty	UM	Ext Weight	UM	L	P
3	**9.927.1**		**ANTENNA MOUNT MATERIAL**							
			ELEV. @36.0m							
	4.927.0137.001		HD (4-1/2"x72") 18" RT-S/O		1	EA				
	3.927.0810.001	A	ROTATABLE DISH MOUNT		1	EA	106.50	LB		
	4.963.0001.010	-	5/8" U-BOLT ASS'Y (3-1/2"S.R.)		4	EA	8.40	LB		
	4.927.0061.001		TOWER INTERFACE KIT		2	EA				
	3.963.0757.001	D	STANDOFF MOUNT CHANNEL		2	EA	19.20	LB		
	3.963.0737.001	C	MEDIUM BACKING CHANNEL		4	EA	12.00	LB		
	3.963.0757.002	D	EXTENSION PLATE		4	EA	27.20	LB		
	3.963.0757.003	D	EXTENSION PLATE		2	EA	6.00	LB		
	1201400		5/8"x14" HCS BOLT GR.5- HDG - FULL THD		8	EA	9.60	LB		
			TAP BOLT (FULLY THREADED)							
	1201160		5/8" HEX NUT GR. 5 - HDG RACK		10	EA	0.70	LB		
	1201161		5/8" LOCK WASHER GR. 5 - HDG RACK		10	EA	0.25	LB		
	1201162		5/8" FLAT WASHER GR. 5 - HDG		10	EA	0.39	LB		
	1202043		5/8" X 2" A325 BOLT ASS'Y - HDG PAILS		10	EA	4.13	LB		
	4.933.0042.001	A	ICEGUARD MOUNT TIE BACK KIT		1	EA				
			AWG TOWERS - 2" LEG							
	4.927.0091.001	A	TIE BACK MOUNT FOR 2-3/8" OD PIPE		1	EA				
			(MOUNTS TO 4-1/2" OD PIPE)							
	3.927.0652.002	B	TIE BACK MOUNT (4-1/2"Ø)	M	1	EA	4.50	LB		
	4.963.0001.207	-	1/2" U-BOLT ASSEMBLY (4-1/2")	M	1	EA	1.10	LB		
			582-5							
	4.963.0001.205	-	1/2" U-BOLT ASSEMBLY (2-3/8") KANBAN	M	1	EA	0.80	LB		
	3.960.0066.008	A	2.375" OD x 0.154" WALL x 8' PIPE		1	EA	30.00	LB		
	3.930.0338.004	G	MEDIUM PIPE-AWLEG CONN PLATE		1	EA	6.00	LB		
	4.963.0001.006	-	1/2" U-BOLT ASS'Y (2"S.R.)		2	EA	1.50	LB		
	4.963.0001.205	-	1/2" U-BOLT ASSEMBLY (2-3/8") KANBAN		2	EA	1.60	LB		
	1201160		5/8" HEX NUT GR. 5 - HDG RACK		8	EA	0.56	LB		
	1201120		1/2" HEX NUT GR. 5 - HDG RACK		12	EA	0.43	LB		
	1202576	A	5/8" A325 SQUIRTER DTI WASHER - HDG		10	EA		LB		

Page Sub Total Weight (not 5.)	241.86
Page Sub Total Weight (5.)	0.00
Page Sub Total Weight	241.86

LotID	Part ID	Rev	Description		Ext Qty	UM	Ext Weight	UM	L	P
3	**9.927.2**		**ANTENNA MOUNT MATERIAL**							
		@ 38.0m								
	4.927.0137.001		HD (4-1/2"x72") 18" RT-S/O		1	EA				
	3.927.0810.001	A	ROTATABLE DISH MOUNT		1	EA	106.50	LB		
	4.963.0001.010	-	5/8" U-BOLT ASS'Y (3-1/2"S.R.)		4	EA	8.40	LB		
	4.927.0061.001		TOWER INTERFACE KIT		2	EA				
	3.963.0757.001	D	STANDOFF MOUNT CHANNEL		2	EA	19.20	LB		
	3.963.0737.001	C	MEDIUM BACKING CHANNEL		4	EA	12.00	LB		
	3.963.0757.002	D	EXTENSION PLATE		4	EA	27.20	LB		
	3.963.0757.003	D	EXTENSION PLATE		2	EA	6.00	LB		
	1201400		5/8"x14" HCS BOLT GR.5- HDG - FULL THD		8	EA	9.60	LB		
			TAP BOLT (FULLY THREADED)							
	1201160		5/8" HEX NUT GR. 5 - HDG RACK		10	EA	0.70	LB		
	1201161		5/8" LOCK WASHER GR. 5 - HDG RACK		10	EA	0.25	LB		
	1201162		5/8" FLAT WASHER GR. 5 - HDG		10	EA	0.39	LB		
	1202043		5/8" X 2" A325 BOLT ASS'Y - HDG PAILS		10	EA	4.13	LB		
	4.927.0202.001	A	DISH MOUNT TIE BACK KIT		1	EA				
			FOR USE ON AWG TOWER WITH 2" LEGS							
	4.927.0091.001	A	TIE BACK MOUNT FOR 2-3/8" OD PIPE		2	EA				
			(MOUNTS TO 4-1/2" OD PIPE)							
	3.927.0652.002	B	TIE BACK MOUNT (4-1/2"Ø)	M	2	EA	9.00	LB		
	4.963.0001.207	-	1/2" U-BOLT ASSEMBLY (4-1/2")	M	2	EA	2.20	LB		
			582-5							
	4.963.0001.205	-	1/2" U-BOLT ASSEMBLY (2-3/8") KANBAN	M	2	EA	1.60	LB		
	3.960.0066.008	A	2.375" OD x 0.154" WALL x 8' PIPE		2	EA	60.00	LB		
	3.960.0066.006	A	2.375" OD x 0.154" WALL x 6' PIPE		1	EA	23.00	LB		
	3.927.0652.003	B	TIE BACK MOUNT (2-3/8"Ø)		2	EA	7.40	LB		
	3.927.0428.001	B	STABILIZER CLIP		1	EA	5.30	LB		
	3.930.0338.004	G	MEDIUM PIPE-AWLEG CONN PLATE		2	EA	12.00	LB		
	4.963.0001.006	-	1/2" U-BOLT ASS'Y (2"S.R.)		4	EA	3.00	LB		
	4.963.0001.205	-	1/2" U-BOLT ASSEMBLY (2-3/8") KANBAN		10	EA	8.00	LB		
	1201160		5/8" HEX NUT GR. 5 - HDG RACK		8	EA	0.56	LB		
	1201120		1/2" HEX NUT GR. 5 - HDG RACK		36	EA	1.29	LB		
	1202576	A	5/8" A325 SQUIRTER DTI WASHER - HDG		10	EA		LB		

Page Sub Total Weight (not 5.)	328.72
Page Sub Total Weight (5.)	0.00
Page Sub Total Weight	328.72

LotID	Part ID	Rev	Description		Ext Qty	UM	Ext Weight	UM	L	P
3	**9.930.1**		**CELL MOUNT MATERIAL**							
			ELEV. @90.2m							
	4.930.0120.001		6-PIPE AWG PINWHEEL KIT - ROGERS		1	EA				
	3.927.0740.001	A	VERTICAL STANDOFF		3	EA	301.80	LB		
	5.963.0001.210		MEDIUM BACKING 'B' ASSEMBLY		12	EA				
	3.963.0209.001	F	MEDIUM BACKING CHANNEL	M	24	EA	67.20	LB		
			STAMP PART NUMBER							
	4.963.0019.213	-	1/2" X 13" GALV THREAD ROD ASS'Y	M	24	EA	21.60	LB		
	1202021		1/2" X 1-1/2" A325 BOLT ASSY-HDG PAILS	M	24	EA	5.09	LB		
	5.960.0003.002		FIXED CROSSOVER ASSEMBLY (2-7/8"-3-1/2")		6	EA				
	3.930.0338.002	G	MEDIUM PIPE-PIPE CONN PLATE	M	6	EA	36.00	LB		
	4.963.0001.208	-	1/2" U-BOLT ASSEMBLY (3") KANBAN	M	12	EA	10.80	LB		
	4.963.0001.206	-	1/2" U-BOLT ASSEMBLY (3-1/2")	M	12	EA	10.80	LB		
	3.960.0067.005	F	2.875" OD x 0.25" WALL x 5' PIPE		6	EA	220.50	LB		
	5.960.0003.004		FIXED CROSSOVER ASSEMBLY (2-7/8"-2-7/8")		12	EA				
	3.930.0338.002	G	MEDIUM PIPE-PIPE CONN PLATE	M	12	EA	72.00	LB		
	4.963.0001.208	-	1/2" U-BOLT ASSEMBLY (3") KANBAN	M	48	EA	43.20	LB		
	3.960.0067.010	F	2.875" OD x 0.25" WALL x 10' PIPE		6	EA	441.00	LB		
	3.927.0652.004	B	TIE BACK MOUNT (3"Ø)		3	EA	11.70	LB		
			SUPPLIER MUST FORM PARTS BEFORE GALVANIZING							
	3.930.0338.004	G	MEDIUM PIPE-AWLEG CONN PLATE		3	EA	18.00	LB		
	3.960.0066.008	A	2.375" OD x 0.154" WALL x 8' PIPE		3	EA	90.00	LB		
	4.963.0001.208	-	1/2" U-BOLT ASSEMBLY (3") KANBAN		3	EA	2.70	LB		
	4.963.0001.205	-	1/2" U-BOLT ASSEMBLY (2-3/8") KANBAN		9	EA	7.20	LB		
	4.963.0001.005	-	1/2" U-BOLT ASS'Y (1-3/4"S.R.)		6	EA	3.84	LB		
	1201120		1/2" HEX NUT GR. 5 - HDG RACK		240	EA	8.62	LB		
	1202575	A	1/2" A325 SQUIRTER DTI WASHER - HDG		24	EA		LB		

Page Sub Total Weight (not 5.)	1,105.36
Page Sub Total Weight (5.)	266.69
Page Sub Total Weight	1,372.04

LotID	Part ID	Rev	Description	Ext Qty	UM	Ext Weight	UM	L	P
3	**9.936.1**		**ANTI-CLIMBER MATERIAL**						
	4.936.0015.003		3000AW ANTI-CLIMBER - 2" DIA. LEG	1	EA				
		8' HIGH PANELS							
	3.936.0001.015	A	PANEL	1	EA	5.67	LB		
	3.936.0001.020	A	MOUNTING BRACKET	2	EA	8.40	LB		
	3.936.0001.024	A	MOUNTING BRACKET	4	EA	16.80	LB		
	3.936.0040.003	A	8' PANEL (3000AW)	3	EA	171.30	LB		
	3.936.0001.011	G	BRACKET	7	EA	11.06	LB		
	3.936.0001.012	G	BRACKET	1	EA	2.84	LB		
	3.936.0001.208	A	PLATE	12	EA	7.56	LB		
	4.963.0001.006	-	1/2" U-BOLT ASS'Y (2"S.R.)	12	EA	9.00	LB		
	3.963.0001.047	A	7/8" ALUMINUM BAR CLAMP	6	EA	0.48	LB		
	3.963.0700.302	A	1/8" THK 1 HOLE SPACER (7/16" DIA)	7	EA	1.05	LB		
	1201064		3/8" X 1-3/4" HEX HEAD BOLT GR. 5 - HDG	7	EA	0.41	LB		
	1201050		3/8" HEX NUT GR. 5 - HDG RACK	7	EA	0.14	LB		
	1201051		3/8" LOCK WASHER GR. 5 - HDG RACK	7	EA	0.04	LB		
	1202021		1/2" X 1-1/2" A325 BOLT ASSY-HDG PAILS	12	EA	2.54	LB		
	1202211		1/2" F-436 FLAT WASHER - HDG RACK	5	EA	0.10	LB		
	1202022		1/2" X 1-3/4" A325 BOLT ASS'Y-HDG PAILS	13	EA	2.93	LB		
	2203031		#3 KALH MASTER PADLOCK	1	EA	0.44	LB		
	3.936.0040.010	A	LATCH ASSEMBLY	1	EA	6.10	LB		
	1202575	A	1/2" A325 SQUIRTER DTI WASHER - HDG	25	EA		LB		
	1201120		1/2" HEX NUT GR. 5 - HDG RACK	24	EA	0.86	LB		

Page Sub Total Weight (not 5.)	247.71
Page Sub Total Weight (5.)	0.00
Page Sub Total Weight	247.71

LotID	Part ID	Rev	Description	Ext Qty	UM	Ext Weight	UM	L	P
3	**9.939.1**		**W/G MATERIAL**						
	5.939.0051.012		12" X 4" X 96" CABLE TRAY ASSEMBLY	3	EA				
	3.939.0178.012	A	12" X 96" CABLE TRAY CHANNEL	3	EA	117.00	LB		
	3.939.0178.112	D	12" X 96" CABLE TRAY COVER	3	EA	82.20	LB		
	1209070		#10 X 3/4" S.S. HX HD SLF DRILL GR5 RACK	24	EA	1.44	LB		
	5.939.0050.001		CABLE TRAY SPLICE ASSEMBLY	2	EA				
	3.939.0178.001	A	3" X 7" SPLICE PLATE - CABLE TRAY	4	EA	1.60	LB		
	1201062		3/8" X 1-1/4" HEX HEAD BOLT GR5 HDG RACK	16	EA	0.77	LB		
	1201050		3/8" HEX NUT GR. 5 - HDG RACK	16	EA	0.32	LB		
	1201053		3/8" FLAT WASHER GR. 5 - HDG RACK	16	EA	0.16	LB		
	1201051		3/8" LOCK WASHER GR. 5 - HDG RACK	16	EA	0.08	LB		

Page Sub Total Weight (not 5.)	0.00
Page Sub Total Weight (5.)	203.57
Page Sub Total Weight	203.57

LotID	Part ID	Rev	Description		Ext Qty	UM	Ext Weight	UM	L	P
3	**9.942.1**		**LIGHTING MATERIAL**							
	4.942.1315.003		DIALIGHT E1 FIXTURE KIT *(48VDC)*		1	EA				
	1404528		DIALIGHT E1 DUAL LED KIT - 48VDC *CONTAINS:* *(1) DIALIGHT D1RW-FH409-4W WHITE/RED LED BEACON c/w PHOTOCELL (1 CARDBOARD BOX 19"x14"x18") (BOX 2)* *(2) DIALIGHT RT0-6R08-002 RED LED DOL (2 CARDBOARD BOXES 13"x19"x7" or 12"x24"x8")* *(1) LC9-E1-48-4W GREENBOX LED LIGHTING CONTROLLER (1 CARDBOARD BOX 24"x22"x11") (BOX 1)*		1	EA				
	1404524		RVA JBX66-22-04 JUNCTION BOX		1	EA		LB		
	3.942.0015.001	A	FDO-2-8-2222 ASSEMBLY *FDO BOX: HOT DIP GALVANIZED*		1	EA	6.00	LB		
	1404192		FS-200G COVER/GASKET/SCREWS *4-1/2" x 4-1/2" Galvanized.* *APPLETON*		1	EA	0.93	LB		
	1403037		TMC 2050099A 1/2" APPLETON CONNECTOR *Replaces TMC 5099 connector* *(Sub.: T&B ST050-464 1/2 STAR-TECK-FITTING 78621071283)*		12	EA	2.76	LB		
	1403036		TMC2-050075A 1/2" APPLETON CONNECTOR *SUITABLE SUB. IS A THOMAS & BETTS ST050-464 AND IBERVILLE CITEK-50-079* *Replaced Appleton connector 5076 (1403035)*		6	EA	0.97	LB		
	1404170		RB-75-50A REDUCER BUSHING		2	EA	0.04	LB		
	1404161		PLG-75RA AEP 3/4" PLUG		2	EA	0.05	LB		
	1404295		1/2" X 18" ALUMINUM CONDUIT *THREADED 0.79" BOTH ENDS* *STANDARD PIPE THREAD*		1	EA	0.42	LB		
	1404051		3/4" ALUMINUM COUPLING		2	EA	0.18	LB		
	1404050		1/2" ALUMINUM COUPLING		1	EA	0.06	LB		
	1403040		#31/331P MARR CONNECTOR		2	EA	0.00	LB		
	1404010		TY-RAP; 1/4" x 14" LG (TY27MX) 63130 *STD PACKAGES OF 100* *14.5" 50lb Tensile UV Black Nylon 6.6 Power Phase[REG] Locking Cable Tie*		20	EA	0.40	LB		
	2205030		NUCO 302CLR80 CLEAR SQUEEZE TUBE		1	EA	0.25	LB		
	1202023		1/2" X 2" A325 BOLT ASS'Y - HDG RACK		5	EA	1.20	LB		
	1202211		1/2" F-436 FLAT WASHER - HDG RACK		5	EA	0.10	LB		
	4.942.1308.001		RVA JUNCTION BOX MOUNT *(CONTAINS PARTS TO MOUNT ONE BOX)*		3	EA				
	3.942.0075.001	B	JUNCTION BOX MOUNT	M	3	EA	12.60	LB		
	3.963.0182.001	C	SMALL BACKING PLATE *FORMED*	M	3	EA	4.80	LB		
	3.963.0183.001	H	LARGE BACKING CHANNEL	M	3	EA	12.60	LB		
	4.963.0022.150		3/8" x 1-1/2" GR.5 BOLT ASS'Y *consists of:* *(1) 1201063* *(1) 1201050* *(1) 1201051*	L	6	EA				
	1201063		3/8" X 1-1/2" HEX HEAD BOLT GR5 HDG RACK *(CONTAINS PARTS TO MOUNT ONE BOX)*		6	EA	1.33	LB		
	1201050		3/8" HEX NUT GR. 5 - HDG RACK *(CONTAINS PARTS TO MOUNT ONE BOX)*		6	EA	0.12	LB		
	1201051		3/8" LOCK WASHER GR. 5 - HDG RACK *(CONTAINS PARTS TO MOUNT ONE BOX)*		6	EA	0.03	LB		
	1201362		1/2"X6"HX HD BOLT GR5 FULL THRD HDG RACK	M	6	EA	2.25	LB		
	4.963.0019.213	-	1/2" X 13" GALV THREAD ROD ASS'Y	M	6	EA	5.40	LB		
	1202021		1/2" X 1-1/2" A325 BOLT ASSY-HDG PAILS	M	9	EA	1.91	LB		
	4.942.1308.002		APPLETON JUNCTION BOX MOUNT		3	EA				

LotID	Part ID	Rev	Description		Ext Qty	UM	Ext Weight	UM	L	P
			(CONTAINS PARTS TO MOUNT ONE BOX)							
	3.963.0001.046	A	3/4" ALUMINUM BAR CLAMP	M	3	EA	0.15	LB		
	3.963.0001.047	A	7/8" ALUMINUM BAR CLAMP	M	3	EA	0.24	LB		
	1213050		*10PK* STANDARD ANGLE ADAPTER (31768A)	M	3	EA	1.05	LB		
			PACKAGED IN BAGS OF 10 *SOLD INDIVIDUALLY* *31768A*							
	1404531		RVA JBX88-2222-04D1S JUNCTION BOX		1	EA		LB		
	1404530		RVA JBX66-22-06 JUNCTION BOX		1	EA		LB		
	1404333	-	3/4" X 24" ALUMINUM NIPPLE		2	EA	1.58	LB		
			THREADED 0.79" BOTH ENDS *STANDARD PIPE THREAD*							
	1404121		FDC-2 AEP BOX		1	EA	2.52	LB		
			HOT DIP GALVANIZED							
	1201300		3/8"X2"HX HD BLT GR5 FULL THRD HDG RACK		1	EA	0.07	LB		
	1201053		3/8" FLAT WASHER GR. 5 - HDG RACK		2	EA	0.02	LB		
	1201051		3/8" LOCK WASHER GR. 5 - HDG RACK		2	EA	0.01	LB		
	1201050		3/8" HEX NUT GR. 5 - HDG RACK		2	EA	0.04	LB		
	4.942.1306.300		DIALIGHT E1 ELECTRICAL KIT (300' TWR)		1	EA				
	1401001R		2#14 TECK 90		6	M				
	1401002		3#14 TECK 90 CHECK LIST		21	M	15.50	LB		
	1401005R		6#14 TECK 90		67	M	69.47	LB		
	3.963.0001.046	A	3/4" ALUMINUM BAR CLAMP		76	EA	3.80	LB		
	3.963.0001.047	A	7/8" ALUMINUM BAR CLAMP		76	EA	6.08	LB		
	4.963.0022.125		3/8" x 1-1/4" GR.5 BOLT ASS'Y		152	EA	10.64	LB		
			consists of: *(1) 1201062* *(1) 1201050* *(1) 1201051*							
	1201062		3/8" X 1-1/4" HEX HEAD BOLT GR5 HDG RACK	M	152	EA	7.30	LB		
	1201050		3/8" HEX NUT GR. 5 - HDG RACK	M	152	EA	3.04	LB		
	1201051		3/8" LOCK WASHER GR. 5 - HDG RACK	M	152	EA	0.76	LB		
	1401003R		4#14 TECK 90		61	M				

Page Sub Total Weight (not 5.)	176.68
Page Sub Total Weight (5.)	0.00
Page Sub Total Weight	176.68

LotID	Part ID	Rev	Description		Ext Qty	UM	Ext Weight	UM	L	P
3	**9.942.2**		**LIGHTING MATERIAL**							
	4.942.0050.001		LIGHT FIXTURE MOUNT 'A' KIT		5	EA				
	3.942.0076.001	A	LIGHT FIXTURE MOUNT		5	EA	101.50	LB		
	3.963.0209.001	F	MEDIUM BACKING CHANNEL		10	EA	28.00	LB		
			STAMP PART NUMBER							
	4.963.0019.210	-	1/2" X 10" GALV THREAD ROD ASS'Y		20	EA	15.00	LB		
			2 flat washers, 2 lock washers, 2 nuts							
	4.963.0001.206	-	1/2" U-BOLT ASSEMBLY (3-1/2")		10	EA	9.00	LB		
	3.963.0001.028	A	3/4" CONDUIT ALUMINUM SADDLE CLAMP		10	EA	0.50	LB		
	3.963.0001.030	A	1/2" CONDUIT ALUMINUM SADDLE CLAMP		10	EA	0.50	LB		
	4.963.0022.150		3/8" x 1-1/2" GR.5 BOLT ASS'Y		20	EA				
			consists of: *(1) 1201063* *(1) 1201050* *(1) 1201051*							
	1201063		3/8" X 1-1/2" HEX HEAD BOLT GR5 HDG RACK	M	20	EA	4.43	LB		
	1201050		3/8" HEX NUT GR. 5 - HDG RACK	M	20	EA	0.40	LB		
	1201051		3/8" LOCK WASHER GR. 5 - HDG RACK	M	20	EA	0.10	LB		
	3.942.0076.002	A	SHIM PLATE		5	EA	10.50	LB		
	3.942.0082.002	B	BEACON MOUNT-10FT		1	EA	94.20	LB		
	5.933.0422.001		SM (12"x24") I/S w/ MD BACKING KITS		3	EA				
	5.933.0421.001	-	SMALL (12"x24") ICE SHIELD KIT		3	EA				
	3.933.0049.001	A	TX-LINE ICE SHIELD	M	3	EA	60.00	LB		
	3.963.0507.004	-	PIPE SLEEVE; 1" LONG	M	12	EA	1.20	LB		
	1202023		1/2" X 2" A325 BOLT ASS'Y - HDG RACK	M	12	EA	2.87	LB		
	5.963.0001.210	-	MEDIUM BACKING 'B' ASSEMBLY		6	EA				
	3.963.0209.001	F	MEDIUM BACKING CHANNEL	M	12	EA	33.60	LB		
			STAMP PART NUMBER							
	4.963.0019.213	-	1/2" X 13" GALV THREAD ROD ASS'Y	M	12	EA	10.80	LB		
	1202021		1/2" X 1-1/2" A325 BOLT ASSY-HDG PAILS	M	12	EA	2.54	LB		
	1202575	A	1/2" A325 SQUIRTER DTI WASHER - HDG		24	EA		LB		
	1201120		1/2" HEX NUT GR. 5 - HDG RACK		20	EA	0.72	LB		

Page Sub Total Weight (not 5.)	264.84
Page Sub Total Weight (5.)	111.01
Page Sub Total Weight	375.86

LotID	Part ID	Rev	Description	Ext Qty	UM	Ext Weight	UM	L	P
3	**9.963.3**		**MISC. MATERIALS - ABOVE GRADE**						
	4.963.0025.001		BASE WARNING SIGN KIT	1	EA				
	3.963.0505.002	A	BASE WARNING SIGN	1	EA	2.90	LB		
			NOTE: *1) BACKGROUND OF SIGN TO BE WHITE* *2) WARNING LETTERING TO BE RED* *3) UNDERLINE & ALL OTHER TEXT TO BE BLACK*						
	3.963.0505.102	A	BASE WARNING SIGN - FRENCH	1	EA	2.90	LB		
			NOTE: *1) BACKGROUND OF SIGN TO BE WHITE* *2) WARNING LETTERING TO BE RED* *3) UNDERLINE & ALL OTHER TEXT TO BE BLACK*						
	1201032		5/16" X 1" HEX HEAD BOLT GR 5 HDG KANBAN	4	EA	0.12	LB		
	1201020		5/16" HEX NUT GR. 5 - HDG KANBAN	4	EA	0.04	LB		
	1201021		5/16" LOCK WASHER GR. 5 - HDG KANBAN	8	EA	0.06	LB		
	3.963.0725.001	A	WARNING SIGN TAB	4	EA	2.40	LB		
	1202021		1/2" X 1-1/2" A325 BOLT ASSY-HDG PAILS	4	EA	0.85	LB		
	3.963.0001.047	A	7/8" ALUMINUM BAR CLAMP	4	EA	0.32	LB		
	4.963.0031.001		NAME PLATE KIT	1	EA				
	1209069		#6 X 3/8" U DRIVE SCREW STN.STL	4	EA				
	2208001	A	NAME PLATE	1	EA	0.02	LB		
			3.00 X 3.00 ALUMINUM .025 *BLACK INK, ONE SIDE* *JOB NO:232766* *HEIGHT:294'* *TYPE:3000 AWG* *STANDARD: CSA-S37-18* *WIND: 296 Pa* *ICE: 22.0 mm* *INSTALLED:2023*						
	1202575	A	1/2" A325 SQUIRTER DTI WASHER - HDG	4	EA		LB		

Page Sub Total Weight (not 5.)	9.60
Page Sub Total Weight (5.)	0.00
Page Sub Total Weight	9.60

LotID	Part ID	Rev	Description		Ext Qty	UM	Ext Weight	UM	L	P
4	**9.957.1**		**SAFETY MATERIAL**							
	4.97.0400.280	-	280' SAFETY RAIL AND SPECIFIC HARDWARE		1	EA				
	4.85.0045.001	-	SAFETY RAIL TOP ASSEMBLY (20')		1	EA		EA		
	3.957.0097.101	A	ALUMINUM TOP SAFETY RAIL (20')	M	1	EA	19.30	LB		
	4.957.HDWR.006	A	SAFETY HARDWARE KIT 006	M	1	EA	0.15	LB		
			(1) 1207069 - 3/8" x 2-1/2" S.S. HEX HEAD BOLT *(1) 1207052 - 3/8" S.S. FLAT WASHER* *(1) 1207050 - 3/8" S.S. HEX NUT*							
	3.85.0012.001	A	RAIL CLAMPING BAR	M	5	EA	1.25	LB		
			REFERENCE TRYLON DRAWING NO. 850012, REVISION B *MOQ 10,000 PC*							
	4.957.HDWR.001	A	SAFETY HARDWARE KIT 001	M	1	EA	1.15	LB		
			(10) 1201300 - 3/8" x 2" GR.5 HEX HEAD BOLT - FULL THREAD *(20) 1201050 - 3/8" GR.5 HEX NUT* *(10) 1201051 - 3/8" GR.5 LOCK WASHER*							
	4.85.0044.001	-	SAFETY RAIL REGULAR ASSEMBLY (20')		13	EA		EA		
	3.957.0097.001	A	ALUMINUM SAFETY RAIL (20' REGULAR)	M	13	EA	251.03	LB		
	3.85.0012.001	A	RAIL CLAMPING BAR	M	65	EA	16.25	LB		
			REFERENCE TRYLON DRAWING NO. 850012, REVISION B *MOQ 10,000 PC*							
	4.957.HDWR.001	A	SAFETY HARDWARE KIT 001	M	13	EA	14.95	LB		
			(10) 1201300 - 3/8" x 2" GR.5 HEX HEAD BOLT - FULL THREAD *(20) 1201050 - 3/8" GR.5 HEX NUT* *(10) 1201051 - 3/8" GR.5 LOCK WASHER*							
	3.957.0090.001	A	COUGAR TROLLEY 3.0 LABEL NK(CSA)		1	EA	0.02	LB		
			USE WITH TROLLEY ASSY 4.957.0042.001 *CSA - Z259.2.4* *20 pt. Styreen with full adhesive*							
	BOX-888		8" X 8" X 8" CORRUGATED BOX		1	EA		LB		
			8"L X 8"W X 8"H							
	1702024	B	SAFETY RAIL METAL LABEL COUGAR		1	EA				
			2.5 X 2.5 *2 SIDES* *.025 NATURAL ALUMINUM.*							
	1404009		TY-RAP; 1/4" x 8" LG BLACK UV		2	EA	0.04	LB		
			STD PACKAGES OF 100 *8" 50lb Tensile UV Resistant Black Nylon 6.6 Power Phase[REG] Locking Cable Tie*							
	4.97.0300.014		14' EXTENSION KIT		1	EA				
	4.85.0044.007	-	SAFETY RAIL EXTENSION ASSEMBLY (14')		1	EA		EA		
	3.957.0097.007	A	ALUMINUM SAFETY RAIL (14' REGULAR)	M	1	EA	13.51	LB		
	3.85.0012.001	A	RAIL CLAMPING BAR	M	4	EA	1.00	LB		
			REFERENCE TRYLON DRAWING NO. 850012, REVISION B *MOQ 10,000 PC*							
	4.957.HDWR.002	A	SAFETY HARDWARE KIT 002	M	1	EA	0.92	LB		
			(8) 1201300 - 3/8" x 2" GR.5 HEX HEAD BOLT - FULL THREAD *(16) 1201050 - 3/8" GR.5 HEX NUT* *(8) 1201051 - 3/8" GR.5 LOCK WASHER*							
	BOX-888		8" X 8" X 8" CORRUGATED BOX		1	EA		LB		
			8"L X 8"W X 8"H							

Page Sub Total Weight (not 5.)	319.57
Page Sub Total Weight (5.)	0.00
Page Sub Total Weight	319.57

PUBLIC CONSULTATION
CONSULTATION DU PUBLIC

Date

Dear sir or madam,

Rogers Communications Inc. (‘’Rogers’’) is expanding its wireless network and would like to share with you its current plan in the Town of The Blue Mountains.

We are consulting residents and businesses of this area regarding this proposed project. Details of this project are included in the present notification file. We invite you to take note of the proposed project and to provide us with any questions or comments in writing by **5pm XX date 2024**, after which we will answer your concerns. You will then have the opportunity to submit further comments if you require additional clarifications.

Madame, Monsieur,

Rogers Communications inc. (« Rogers ») souhaite vous informer que nous prévoyons des investissements majeurs au niveau de notre réseau de communication sans-fil dans la Ville de Blue Mountains.

Nous désirons consulter la population environnante à propos de ce projet. Le détail de celui-ci est joint à la présente sous forme de dossier informatif. Nous vous invitons à en prendre connaissance et à nous faire part de vos questions/commentaires par écrit d’ici 17 heures le **XX mois 2024**, après quoi nous répondrons à vos observations. Vous aurez par la suite l’opportunité d’émettre vos commentaires sur nos réponses dans l’éventualité où de l’information supplémentaire serait requise.

Please send your comments or questions by mail or email to:
Veuillez adresser vos questions/commentaires par la poste ou par courriel à :

Rogers Communications Inc. - Contractor
C9793 – Beaver Valley

Attn: Victoria McKay
12317 Funaro Cres, Tecumseh ON N9K 1B2
Email: j_mckay@rogers.com

PUBLIC NOTIFICATION

Proposed Wireless Telecommunications Installation

1. Purpose of the Proposed Installation

Rogers is proposing to build a new wireless communications installation at 495928 Grey Road 2, Ravenna Ontario (the "**Proposed Installation**") to improve wireless coverage to your community (in Ravenna, just south of Grey Rd 2 and Grey Rd 119) and to meet rising demands for wireless services.

The Proposed Installation will correct the above mentioned and ensure continuous and uninterrupted coverage between existing telecommunications sites and maintain our commitment to provide fast and reliable cellular service, both indoors and outdoors.

2. Evaluation of Existing Structures and Site Selection

Before proposing a new telecommunication infrastructure, Rogers reviews any existing structure or building for colocation opportunities. The following structures and/or buildings were reviewed before proposing a new installation.

List of structures evaluated:

Structure	Location	Distance	Reason for disqualification
Bell tower	N44.4875 W80.4719	5.1km	Rejected because the tower is not tall enough to satisfy coverage requirements; outside of search area
Bell/Rogers tower	N44.478869 W80.3301	7.2km	Rejected because Rogers' equipment is already installed on this tower; outside of the search area
Bell/Rogers Cluser	N44.5036 W80.3114	9.6km	Rejected because all structures in this cluster are small-cell towers, too small to support Rogers' antennas
Bell tower	N44.461842 W80.281933	10.8km	Rejected because tower is too small to support Rogers' antennas

Since Rogers could not install its equipment on the above-mentioned structures, we identified the proposed location as the site of least impact to the community, while enabling Rogers to meet the desired cellular coverage goals and the municipality's requirements.

Furthermore, Rogers accepts to receive and review any colocation and tower sharing requests made by other licensed carriers.

3. Details of the Proposed Installation

Municipal address: 495928 Grey Road 2, Ravenna ON N0H 2E0

Geographic coordinates: Lat. N 44º 27’ 48.9’’ Long. W -80º 25’ 04.9’’

Location on the lot: The proposed tower will utilize existing driveway access. Site will be located to the south of the house on the property, along the tree line.

Zoning: Property is located in an agricultural zone. The Town of the Blue Mountains has adopted a tower siting by-law regarding the installation of towers, which will be followed.

4. Description of the Proposed Antenna System

Type of tower and details: Guyed telecommunication tower

Height: 90 meters, including the antennas, a lightning rod and an obstruction light.

Details: An equipment shelter will also be installed at the base of the proposed tower and the entire site will be surrounded by a security fence with a locked gated access point.

5. Aeronautical obstruction marking requirements and land use specifications

At this time, Rogers has not received any aviation obstruction lighting or clearance specifications from Transport Canada nor from NAV CANADA for the land-use of proposed project. Nevertheless, Rogers believes that the proposed tower may include the following day lighting: one flashing white Type CL-865 beacon (20,000 candela) at the top (no tower paint) whereas the night lighting will include one flashing red Type CL-864 beacon (2,000 candela) at the top and 2 steady burning red CL-810 DOLs (32.5 candela) at mid-point, pursuant to Standard 621 - Obstruction Marking and Lighting - Canadian Aviation Regulations (CARs). Should this information not be accurate, Rogers will inform residents. For additional information: NAV CANADA Land Use Program

https://tc.canada.ca/en/corporate-services/acts-regulations/list-regulations/canadian-aviation-regulations-sor-96-433/standards/standard-621-obstruction-marking-lighting-canadian-aviation-regulations-cars

6. Respect of engineering ethics and code of practice

Rogers attests that the radio antenna system for the Proposed Installation will be constructed in compliance with the *National Building Code* and the structural standards contained in *CSA S37-18 (*Canadian Standard Association), and will respect good engineering practices, including structural adequacy.

7. Health Canada’s Safety Code 6

Rogers attests that the radio antenna system for the Proposed Installation will be installed and operated on an ongoing basis so as to comply with Health Canada’s *Safety Code 6* limits as it may be amended from time to time, for the protection of the general public, including any combined effects of additional carrier co-locations and nearby installations within the local radio environment.

Additional information from the Government of Canada and from other credible sources:
http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11467.html

https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/radiation/understanding-safety-code-6.html

https://www.canada.ca/en/health-canada/services/health-risks-safety/radiation/everyday-things-emit-radiation/cell-phones-towers.html

https://www.who.int/news-room/questions-and-answers/item/radiation-5g-mobile-networks-and-health

8. Environmental assessment - Impact Assessment Act

Rogers attests that the Proposed Installation is not located within federal lands nor is it incidental to, or form part of, projects that are designated under the *Regulations Designating Physical Activities* or by the Minister of the Environment as requiring an environmental assessment. Detailed information on the Impact Assessment Act (S.C. 2019, c. 28, s. 1) can be found at: https://laws-lois.justice.gc.ca/eng/acts/I-2.75/page-1.html

9. Innovation, Science and Economic Development Canada's Regulatory Framework

The telecommunications industry is exclusively regulated under the Federal Radiocommunication Act and administered by Innovation, Science and Economic Development Canada. It has established a clear set of rules that wireless carriers must follow when looking to install or modify a tower or antenna system (*Client Procedures Circulars* - CPC 2-0-03, Radiocommunication and Broadcasting Antenna Systems).

Furthermore, Rogers must consult with representatives of the Town of the Blue Mountains, as the Land-Use Authority, and refer to their applicable local land-use and consultation requirements and any preferences it may have for tower-siting and/or design. General information relating to antenna systems is available on ISED's website: https://ised-isde.canada.ca/site/spectrum-management-telecommunications/en/safety-and-compliance/facts-about-towers

10. Public Consultation and Local Processes

The Town of the Blue Mountains has established its own antenna tower siting protocol entitled ATT 1 PDS.21.021 The Blue Mountains Protocol for Establishing Telecommunication Facilities (the "**Protocol**") which sets out, among other things, the requirements for Rogers to consult with the public about the Proposed Installation. Hence, Rogers will not follow ISED's public consultation process. Instead, Rogers is conducting the public consultation as part of the City's process. We invite citizens to refer to the link below for details of the public consultation process: https://pub-bluemountains.escribemeetings.com/FileStream.ashx?DocumentId=2660

DOSSIER DE NOTIFICATION

Projet d'implantation d'un nouveau site de télécommunication

1. Justification du projet proposé

Rogers propose l'installation d'un nouveau système d'antennes de radiocommunication au 495928 Grey Road 2, Ravenna, Ontario (« **projet proposé** ») afin d'améliorer la couverture cellulaire dans votre secteur (dans Ravenna, juste au sud de Grey Rd 2 et Grey Rd 119) et ainsi répondre à la demande sans cesse croissante pour les services sans fil.

Le projet proposé corrigera cette situation et permettra une couverture continue et ininterrompue entre les sites de télécommunication existants tout en maintenant notre engagement d'offrir un service cellulaire rapide et fiable, tant à l'intérieur qu'à l'extérieur des immeubles.

2. Évaluation des structures existantes et le choix de l'emplacement

Avant de proposer l'installation d'une nouvelle structure de télécommunication, Rogers évalue l'ensemble des structures existantes ou immeubles pour une opportunité de colocation. Les structures ou immeubles suivants ont été évalués avant de proposer l'installation d'une nouvelle structure.

Structures évaluées :

Structure	Location	Distance	Reason for disqualification
Tour de Bell	N44.4875 W80.4719	5.1km	Rejetée car la tour n'est pas assez haute pour répondre aux exigences de couverture et se trouve en dehors de la zone de recherche
Tour de Bell et Rogers	N44.478869 W80.3301	7.2km	Rejetée car Rogers est déjà installée sur cette tour et est trop éloigné pour satisfaire aux exigences de couverture
Regroupement de tours Bell et Rogers	N44.5036 W80.3114	9.6km	Rejetée car toutes les structures de ce groupe sont des tours de petite taille, trop petites pour soutenir les antennes de Rogers.
Tour de Bell	N44.461842 W80.281933	10.8km	Rejetée car la tour est trop petite pour supporter les antennes de Rogers.

Étant donné que Rogers ne pouvait pas installer ses équipements sur les structures mentionnées ici haut, nous avons identifié l'emplacement proposé comme étant le site de moindre impact pour la communauté, tout en répondant aux objectifs de couverture cellulaire recherchés et au règlement municipal.

Enfin, Rogers demeure disposée à recevoir toute demande d'utilisation conjointe de la structure qui pourrait être proposée par une autre entreprise en télécommunication dûment licenciée.

3. Description du système d'antennes proposé

Adresse municipale : 495928 Grey Road 2, Ravenna ON N0H 2E0

Coord. géographiques : Lat. N. 44º 27’ 48.9’’ Long. O. 80º 25’ 04.9’’

Emplacement sur le site : La tour proposée utilisera l'accès existant de l'allée. Le site sera situé au sud de la maison, le long de la lisière des arbres.

Zonage : L'emplacement proposé est situé dans une zone Agricole. La Ville des Blue Mountains a adopté un règlement municipal sur l'implantation de tours en ce qui concerne l'installation de tours, qui sera suivi.

4. Description des équipements et des ouvrages proposés

Type de tour et détails : Tour haubanée

Hauteur : Élévation hors-tout d’environ 90 mètres incluant les antennes, le balisage aérien et le parafoudre.

Autres détails : Un cabinet d’équipements sera aussi aménagé à la base de la tour et l’ensemble du site sera ceinturé d’une clôture de sécurité et d’une entrée verrouillée.

5. Exigences en balisage d’obstacle aérien et pour l’utilisation des terrains

À ce jour, Rogers n'a pas reçu les exigences de Transports Canada en matière de balisage d’obstacle aérien ni celles de NAV Canada concernant l’utilisation du terrain. Néanmoins, Rogers estime que la tour proposée (sans peinture), pourrait inclura les formes d’éclairages suivantes : un phare clignotant blanc de type CL-865 (20 000 chandelles) au sommet de la tour pour le jour, un phare clignotant rouge de type CL-864 (2 000 chandelles) au sommet de la tour pour la nuit et deux phares permanents rouges CL-810 DOL (32,5 chandelles) à mi-hauteur de la tour pour la nuit, et ce, selon les spécifications de la Norme 621 - Balisage et l'éclairage des obstacles - Règlement de l'aviation canadien (RAC). Si ces spécifications sont inexactes, des informations supplémentaires vous seront fournies. Pour plus de détails, veuillez consulter :
www.navcanada.ca/fr/information-aeronautique/programme-dutilisation-de-terrains.aspx

https://tc.canada.ca/fr/services-generaux/lois-reglements/liste-reglements/reglement-aviation-canadien-dors-96-433/normes/norme-621-balisage-eclairage-obstacles-reglement-aviation-canadien-rac

6. Respect des codes et principes de génie

Rogers atteste que tous les ouvrages, installations et structures réalisés et érigés dans le cadre du projet proposé respecteront les codes applicables (Code national du bâtiment et de l'Association canadienne de normalisation – CSA S37-18), et seront conçus selon les principes de génie généralement reconnus, et les méthodes de construction respecteront les règles de l’art, y compris l’intégrité structurelle.

7. Code de sécurité 6 de Santé Canada

Rogers atteste que l’installation radio du projet proposé sera établie et exploitée de façon continue en conformité avec le Code de sécurité 6 de Santé Canada et les modifications qui pourront y être apportées, pour la protection du grand public, y compris tous les effets combinés de la colocation et des installations avoisinantes sur l’environnement radio local.

Pour plus de détails, nous vous invitons à consulter les sites du Gouvernement du Canada et de sources crédibles :
http://www.ic.gc.ca/eic/site/smt-gst.nsf/fra/sf11467.html

https://www.canada.ca/fr/sante-canada/services/securite-et-risque-pour-sante/radiation/exposition-professionelle-reglementation/code-securite-6-lignes-directrices-exposition-radiofrequences.html

https://www.canada.ca/fr/sante-canada/services/securite-et-risque-pour-sante/radiation/sources-rayonnements-quotidien/cellulairs-stations-base.html

https://www.who.int/news-room/q-a-detail/5g-mobile-networks-and-health (anglais seulement)

8. Évaluation environnementale – Loi sur l'évaluation d'impact

Rogers affirme que le projet proposé n'est pas situé sur des terres fédérales et qu'il n'est pas lié à un projet désigné (selon la description dans le *Règlement désignant les activités concrètes*), ou qu'il est autrement expressément désigné par le ministre de l'Environnement, comme nécessitant une évaluation environnementale. Pour plus de détails concernant la Loi sur l'évaluation d'impact (L.C. 2019, ch. 28, art. 1) : https://laws-lois.justice.gc.ca/fra/lois/I-2.75/page-1.html

9. Cadre réglementaire d'Innovation, Science et Développement économique Canada

Le secteur des communications sans fil est une industrie réglementée par la Loi sur la radiocommunication du gouvernement fédéral et celle-ci est appliquée par Innovation, Sciences et Développement économique Canada. ISDE Canada a mis en place une procédure intitulée *Circulaire des procédures concernant les clients* (CPC 2-0-03 — Systèmes d'antennes de radiocommunications et de radiodiffusion) que tout promoteur doit suivre quant au choix d'emplacement ou de modification d'un système d'antennes.

De plus, Rogers est tenu de consulter l'autorité responsable de l'utilisation du sol (ARUS) de la Ville de Blue Mountains afin de déterminer les exigences de consultations et de discuter des préférences locales concernant l'emplacement ou la conception du système d'antennes. De l'information additionnelle se trouve sur le site d'ISDE Canada : https://ised-isde.canada.ca/site/gestion-spectre-telecommunications/fr/securite-conformite/faits-sujet-pylones

10. Consultation publique et le processus local

Comme la Ville de Blue Mountains a adopté son propre processus spécifique aux systèmes d'antennes de radiocommunications (y compris pour la consultation du public) intitulé ATT 1 PDS.21.021 The Blue Mountains Protocol for Establishing Telecommunication Facilities, le processus de consultation publique par défaut d'ISDE Canada ne s'applique pas. Rogers effectue donc la consultation du public selon le processus de la municipalité. Les détails de cette procédure sont disponibles sur le site suivant : https://pub-bluemountains.escribemeetings.com/FileStream.ashx?DocumentId=2660

11. Contact Information / Coordonnées des intervenants

Innovation, Science and Economic Development Canada / Innovation, Science et développement économique Canada

Southwestern Ontario District Office
4475 North Service Road, Suite 100
Burlington, ON L7L 4X7
Telephone: 1-855-465-6307
Fax: 905-639-6551
Email: ic.spectrumswodo-spectrebdsoo.ic@canada.ca

Rogers Communications Inc. - Contractor
Attn: Victoria McKay
12317 Funaro Cres, Tecumseh ON N9K1B2
Email: j_mckay@rogers.com

Land-Use Authority of the Town of the Blue Mountains / L'autorité responsable de l'utilisation du sol de la Ville de the Blue Mountains
Carter Triana
Intermediate Planner
Town of The Blue Mountains
32 Mill Street, P.O. Box 310, Thornbury, ON N0H 2P0
Tel: 519-599-3131 ext. 262| Fax: 519-599-7723
Email: ctriana@thebluemountains.ca

12. Invitation to Submit Feedback / Commentaires

Within the framework of the public consultation, we invite citizens to submit their written comments and concerns **by 5pm on XX 2024 to Rogers Contact below.**

Dans le cadre de la consultation publique, nous invitons les citoyens à soumettre leurs commentaires **écrits et leurs préoccupations d'ici 17 heures le TBD, 2024 à l'adresse de contact de Rogers ci-dessous.**

Tower Installation Project **/** Projet d'installation de communication sans fil
Reference: C9793 – Beaver Valley
Rogers Communications Inc. - Contractor
Attn: Victoria McKay
12317 Funaro Cres, Tecumseh ON N9K1B2
Email: j_mckay@rogers.com

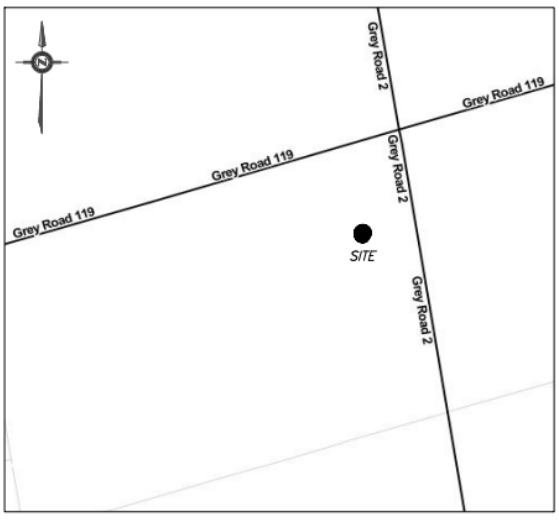
13. Public Information Meeting / Rencontre d'information

The public information meeting will be held online, through Teams on TBD, 2024,from 5:00-6:00pm. Please contact Rogers Representative above to register.

La réunion d'information publique aura lieu en ligne, via Teams le [date à déterminer], 2024, de 17h00 à 18h00. Veuillez contacter le représentant de Rogers ci-dessus pour vous inscrire.

Appendix 1: Location map of the Proposed Installation
Annexe 1 : Carte de localisation du projet propose

KEY PLAN (NOT TO SCALE)



PUBLIC NOTICE & INFORMATION SESSION
NOTIFICATION DU PUBLIC & & RENCONTRE D'INFORMATION

PROPOSED ROGERS 90 METER WIRELESS TELECOMMUNICATIONS GUYED TOWER INSTALLATION

The proposed installation is composed of a 90-meter guyed telecommunications tower, including the antennas, a lightning rod, and an obstruction light.

Location: 495928 Grey Road 2, Ravenna ON N0H 2E0

Objective: To improve wireless coverage to your community (in Ravenna, just south of Grey Rd 2 and Grey Rd 119) and to meet rising demands for wireless services.

Details: An equipment shelter will also be installed at the base of the proposed tower and the entire site will be surrounded by a security fence with a locked gated access point.

The public is invited to provide written comments by 5pm on **XX day, 2024** to the contact information shown below. Please include a return address.

Tower Installation Project
Projet d'installation de communication sans fil

Reference: C9793 – Beaver Valley
Rogers Communications Inc. – Contractor
Victoria McKay
12317 Funaro Cres, Tecumseh ON N9K 1B2
Email: j_mckay@rogers.com

Land Use Authority contact:
Carter Triana
Intermediate Planner
Town of The Blue Mountains
32 Mill Street, P.O. Box 310, Thornbury, ON N0H 2P0
Tel: 519-599-3131 ext. 262| Fax: 519-599-7723
Email: ctriana@thebluemountains.ca

EMPLACEMENT PROPOSÉ PAR ROGERS POUR L'IMPLANTATION D'UNE TOUR HAUBANÉ D'ENVIRON 90 MÈTRES DE HAUTEUR

Le site de télécommunication proposé sera composé d'une tour de type haubané d'une élévation hors-tout d'environ 90 mètres incluant les antennes, le balisage aérien et le parafoudre.

Lieu : 495928 Grey Road 2, Ravenna ON N0H 2E0

Objectif : Améliorer la couverture cellulaire dans votre secteur (dans Ravenna, juste au sud de Grey Rd 2 et Grey Rd 119) et ainsi répondre à la demande sans cesse croissante pour les services sans fil.

Détails : Un cabinet d'équipements sera aussi aménagé à la base de la tour et l'ensemble du site sera ceinturé d'une clôture de sécurité et d'une entrée verrouillée.

Les citoyens sont invités à faire part de leurs commentaires, écrits et leurs préoccupations d'ici 17 heures le **TBD, 2024**, soit à l'adresse indiquée (avec une adresse de retour).

PUBLIC INFORMATION SESSION
RENCONTRE D'INFORMATION
Date: TBD, 2024 at 5:00pm / le TBD 2024 à 15h00
Location /lieu : Teams Online
Please contact Rogers Representative to register.
Veuillez contacter le représentant de Rogers ci-dessus pour vous inscrire.

ROGERS™

Newspaper: TBD

Project: C9793

Publication Date: TBD

ROGERS HAS PROPOSED TO LOCATE A TELECOMMUNICATIONS FACILITY, BEING 90 METRES IN HEIGHT, ON THIS PROPERTY.

PUBLIC COMMENT IS INVITED.

A PUBLIC INFORMATION MEETING WILL BE HELD ON (DATE of MEETING) FROM 5pm to 6pm ONLINE, THROUGH TEAMS.

FOR FURTHER INFORMATION OR TO REGISTER, CONTACT VICTORIA MCKAY AT j_mckay@rogers.com OR THE TOWN'S PLANNING SERVICES DIVISION AT:
(TOLL FREE) (888) 258-6867
OR (519) 599-3131 EXT. 283