

# City of Surrey PLANNING & DEVELOPMENT REPORT Application No.: 7920-0209-00

Planning Report Date: April 26, 2021

#### **PROPOSAL:**

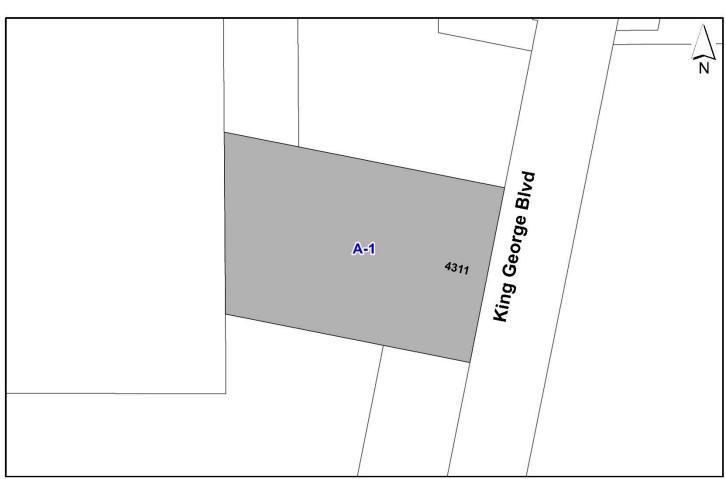
# • Development Variance Permit

to increase the maximum height of a free-standing telecommunications antenna system from 12 metres to 41 metres.

LOCATION: 4311 - King George Boulevard

**ZONING:** A-1

**OCP DESIGNATION:** Agricultural



#### **RECOMMENDATION SUMMARY**

• Approval for Development Variance Permit to proceed to Public Notification.

#### DEVIATION FROM PLANS, POLICIES OR REGULATIONS

Proposing to increase the maximum height for a free-standing antenna system under Part 4
 General Provisions of the Zoning Bylaw.

#### RATIONALE OF RECOMMENDATION

- The proposal complies with a majority of the criteria identified in the City's Antenna System Siting Policy (No. O-62).
- The applicant has provided information indicating that there are no existing structures of sufficient height that are suitable to mount an antenna system within a 500-metre (1,640 ft.) radius of the subject site.
- The public consultation process for the proposal generated one (1) response from the adjacent properties and mailing addresses within 123 metres of the proposed antenna system.
- The proposed location of the antenna system is in the centre of a parcel within the Agricultural Land Reserve (ALR) operating as a garden centre and stonework business. The base of the antenna system is approximately 100 metres from the road frontage of King George Boulevard and over 50 metres from the southern property line.
- The applicant has provided documentation which indicates that there is a demonstrated coverage gap in the area, which the wireless carriers would like to resolve to provide better service to existing and potentially new customers.

#### RECOMMENDATION

The Planning & Development Department recommends that Council approve Development Variance Permit No. 7920-0209-00 (Appendix II), to vary Part 4 General Provisions of the Zoning By-law to increase the maximum height of a free-standing antenna system tower from 12 metres to 41 metres, to proceed to Public Notification.

#### SITE CONTEXT & BACKGROUND

Direction	Existing Use	OCP Designation	<b>Existing Zone</b>
Subject Site	Art Knapp Garden Centre/Bedrock Natural Stone	Agricultural	A-1
North:	Art Knapp Garden Centre	Agricultural	A-1
East (Across King George Boulevard):	Active Farmland	Agricultural	A-1
South:	Peace Arch Nurseries/Vacant Parcel	Agricultural	A-1
West:	Active Farmland	Agricultural	A-1

#### Context & Background

- The 1.6 hectare subject site is located within the Agricultural Land Reserve (ALR), designated "Agricultural" in the Official Community Plan (OCP), and zoned "General Agricultural Zone (A-1)".
- The Art Knapp Garden Centre and Bedrock Natural Stone currently operate on the subject site in conjunction with the neighbouring lots to the North, 14418 and 14448 King George Boulevard.
- The surrounding properties to the north, south, east and west are designated "Agricultural" in the Official Community Plan (OCP), zoned "General Agriculture Zone (A-1)" and located within the Agricultural Land Reserve (ALR).
- In 2011, a 44 metre (145 ft.) tall free-standing antenna system was proposed by Mobilicity and Wind Mobile under Development Application No. 7911-0141-00 on a site two properties to the south of the subject site under this application. Development Application No. 7911-0141-00 ultimately resulted in a denial from Council on March 12, 2012 and was subsequently closed due to a significant amount of public opposition from residents in the nearby manufactured home park to the southeast.
- The outcome of Development Application No. 7911-0141-00 was considered by the applicant when identifying a suitable site under the subject application.

#### **DEVELOPMENT PROPOSAL**

#### **Planning Considerations**

- Cypress Land Services Ltd. on behalf of Freedom Mobile is proposing to erect a 41-metre tall
  multi-carrier free-standing antenna system and equipment compound located in the centre of
  the subject site.
- The Zoning By-law allows for 12 metre tall free-standing antenna system in all zones.
- The applicant is proposing a Development Variance Permit to increase the maximum height of a free-standing antenna system from 12 metres to 41 metres.

#### **Referrals**

Engineering: The Engineering Department has no objection to the project.

Agriculture, Environment, and Investment Advisory Committee (AEIAC):

The proposal was referred to the AEIAC for information purposes. The AEIAC members had concerns on the potential impact of the proposed free-standing antenna system on nearby air traffic. In response, the applicant supplied the applications submitted to Nav Canada and Transport Canada confirming that lighting and markings would not be required.

#### **Natural Area Considerations**

• The applicant retained a Qualified Environmental Professional (QEP) to visit the site and advise on the proposed location of the antenna system relative to adjacent watercourses. The antenna system is greater than 50 metres from any watercourse. The QEP confirmed that two Class AO ditches shown in COSMOS within the interior site are not present.

#### **POLICY & BY-LAW CONSIDERATIONS**

- Staff have conveyed to telecommunication companies the importance of a comprehensive strategy to ensure adequate coverage for all carriers while minimizing the number of singular user installations. Staff have also emphasized the importance of keeping the height of installations to a minimum without compromising the existing policy guidelines, especially antenna systems proximity to residential areas and to ensure that an appropriate design is being considered.
- Improving high speed wireless service supports the growing high technology sector, high tech education, emergency services and broadens community consultation opportunities through social media.
- The proposed free-standing antenna system is required for current and future network capacity upgrades. This proposal will provide increased service to the surrounding area. Many residents and businesses use wireless service as their primary means of communication and have come to expect it as an essential utility.

- The proposed location for the free-standing antenna system is in the middle of the lot adjacent to existing farm buildings. This location should have minimal impact on agricultural land and current operations occurring on site.
- The proposed free-standing antenna system supports the City of Surrey's vision for building a strong economy.

#### City's Antenna System Siting Policy

- On February 22, 2021, Council approved the City's Antenna System Siting Policy (No. O-62), which replaced Policy No. O-49 Telecommunication Towers. Policy No. O-62 was developed by City staff in coordination with industry representatives to ensure that development of antenna systems throughout Surrey meet the needs of residents and conform to telecommunication industry best practices. The policy provides parameters on how freestanding antenna systems should be sited and designed.
- The subject application generally complies with the current Antenna System Siting Policy No. O-62 and is therefore being presented for Council's consideration.
- The following is an evaluation of the current proposal in relation to applicable components of Policy No. O-62:

#### Co-Location

Co-location will generally result in taller and wider Towers, more antennas on each structure
and physical limitations on how many antennas a single Antenna Supporting Structure can
structurally support. The City recognizes that the objective of promoting Co-location and the
objective of making Antenna Systems less noticeable may sometimes come into conflict.

The applicant has confirmed TELUS has agreed to the proposed co-location on the proposed free-standing antenna system with Freedom Mobile. A total of 8 flush-mounted antennas are proposed with the possibility of 4 additional antennas to be added in the future.

## **Location Preferences**

• It is preferable that new free-standing antenna systems be sited in non-residential locations and preferably outside of agricultural areas unless other options are exhausted. If free-standing antenna systems are proposed on agricultural land, the proposal should ensure siting avoids farmland, and ensures maximum potential for farming on remainder of site.

The applicant was asked to explore siting antennas on the BC Hydro transmission towers to the west along Highway No. 99. The applicant confirmed the BC Hydro transmission towers would not be feasible to locate antennas as the cost to upgrade the towers to modern structural requirements would be prohibitive and a new free-standing antenna system will be necessary.

The proposed location is within an agricultural area and is approximately 160 metres away from the nearest existing agricultural dwelling to the south. An in-stream Development Permit application (no. 7920-0192-00) proposes a new single family dwelling at 4253 – King George Boulevard which could result in an agricultural dwelling being located approximately 100 metres from the base of the proposed free-standing antenna system.

The applicant has indicated that they require a 41-metre high structure in order to achieve an expanded infill coverage area as shown in Appendix III.

The subject site is utilized as a garden centre and stone masonry business. The proposed free-standing antenna system will not negatively impact the site operations or agricultural productivity on the property.

#### **Design Preferences**

• The appropriate type of telecommunication Antenna Supporting Structure for each situation should be selected with the goal of making best efforts to blend with the nearby surroundings and minimizing the visual aesthetic impacts of the Antenna System on the community. The use of monopoles is strongly encouraged.

The applicant proposes a monopole design with flush mounted antennas which is considered appropriate for this situation.

• The City prefers that Towers be a maximum of 15 metres in height, except in industrial, mixed employment, commercial and agricultural areas. The City will consider increased height for a Tower when located in an Industrial or Mixed Employment Area, and preferably at a distance at least six times the height of the Antenna Supporting Structure away from Residential Areas.

The applicant has advised the increased height of the proposed tower is necessary to fill coverage gaps in the area. The proposed free-standing antenna system does include two carriers willing to co-locate, which often results in the need for a higher structure.

Application no. 7911-0141-00 proposed a 44 metre tall free-standing antenna system at 4121 - King George Boulevard, which is two properties to the south of the subject site. That application was ultimately denied by Council on March 12, 2012 due to a number of factors, including public opposition from the nearby manufactured home park to the east at 14601 – 40 Avenue.

The subject application proposes a free-standing antenna system further north with the intension of limiting visual impact on the manufactured home park to the southeast. The manufactured home park is located approximately 450 metres away from the base of the proposed free-standing antenna system, which is a distance of greater than six times the height of the free-standing antenna system.

Landscaping shall be appropriately placed around telecommunication towers and ancillary
facilities, such as equipment shelters, to minimize their visual impact on the neighbourhood.
In all instances, the Proponent should mitigate negative visual impacts through the use of
appropriate landscaping, screening, stealth design techniques. The design of Antenna Systems
should generally be unobtrusive and consistent with area guidelines. Towers and
communication equipment should have a non-glare surface.

No landscaping is proposed for screening as the tower and compound are located in the centre of the property adjacent to existing farm buildings and setback approximately 100 metres from the road frontage. The base of the free-standing antenna system will be obscured from view from King George Boulevard by the existing buildings and structures located on site. The proposed free-standing antenna system meets all applicable setback requirements under the A-1 Zone.

There a several trees located on the property boundary with 4253 – King George Boulevard to the South. These existing trees will offer some level of screening for the future single family dwelling proposed on the neighbouring property. The base on the free-standing tower is anticipated to be approximately 100 metres away from any future home located at 4253 – King George Boulevard.

 Where Transport Canada and/or NAV Canada requires a structure to be lit, the lighting should be limited to the minimum number of lights and the lowest illumination allowable, and any required strobe lightning should be set to the maximum strobe interval allowed by Transport Canada

The applicant submitted confirmation that no lighting or markings are required by NAV Canada or Transport Canada for the proposed free-standing antenna system.

#### **Public Consultation Process**

In accordance with policy No. O-62, the applicant sent out 19 notification packages on March 5, 2021 to the neighbouring property owners and mailing addresses within a notification area of 123 metres, which is approximately three times the height of the proposed tower.

One (1) response in opposition was received by the applicant concerning the proposed tower and staff did not receive any responses as a result of the notifications. The neighbour at 4253 – King George Boulevard submitted their opposition to the applicant stating they planned to build a single family dwelling on their property in the future and did not want to live adjacent to the proposed free-standing antenna system.

There a several trees located on the property boundary with 4253 – King George Boulevard to the South. These existing trees will offer some level of screening for the future single family dwelling proposed on the neighbouring property. The base on the free-standing tower will be screened by the existing buildings located at 4311 – King George Boulevard. It is anticipated that any future single family dwelling proposed at 4253 – King George Boulevard will be located approximately 100 metres away from the base of the free-standing antenna system.

#### **Zoning By-law**

- The applicant is requesting the following variance:
  - o to vary Part 4 General Provisions of the Zoning By-law to increase the maximum height of a free-standing antenna system from 12 metres to 41 metres.
- The proposed free-standing antenna system and cabinet locations are compliant with the accessory building setbacks of the A-1 Zone.

- As the free-standing antenna system and equipment compound are setback more than 100
  metres from the nearest public road and more than 50 metres from the south property line,
  no landscaping or screening is proposed.
- Staff support the requested variance to proceed for consideration.

#### **TREES**

• No trees are proposed to be removed to accommodate either the compound or monopole.

#### INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I. Site Plan and Elevations

Appendix II. Development Variance Permit No. 7920-0209-00

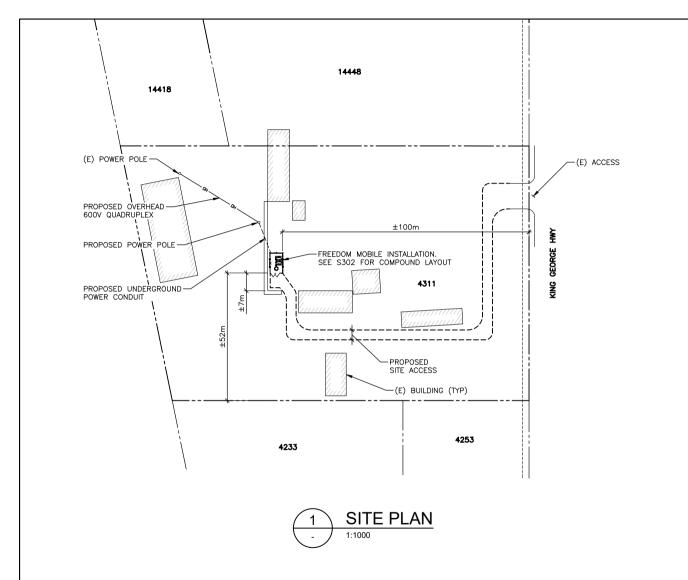
Appendix III. Coverage Maps
Appendix IV. Photo Renderings

approved by Shawn Low

Jean Lamontagne General Manager Planning and Development

WS/cm

Appendix I



This plan and design are, and at all times remain the exclusive property of CS Sayers Engineering Ltd. and cannot be used or reproduced without written consent. Written dimensions shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job and this office shall be informed of any variations from the dimensions that the contractors are the conditions on the job and this office shall be informed of any variations from the dimensions.

Sketches may be issued which augment or alter the information presented on this drawing. It is the responsibility of parties usi this drawing to ensure that they are in possession of all such sketches.

#### **NOTES:**

APPROXIMATE

1. SITE PLAN INFORMATION OBTAINED FROM THE CITY OF SURREY ONLINE GIS. THIS DRAWING DOES NOT REPRESENT A SURVEY AND IS APPROXIMATE ONLY.

#### **LEGAL DESCRIPTION:**

LOT 3 DISTRICT LOT 161 PLAN NWP10071 NWD

#### LEGEND:



- INDICATES PARTICULAR ATTENTION SHOULD BE GIVEN TO WHAT IS NOTED ON THE DRAWING

(E) - DENOTES EXISTING

(TYP) - DENOTES TYPICAL

--- - DENOTES SUBJECT PROPERTY LINE

----- DENOTES R/W LINE

No ·		CLIENT REVIEW  Description:
	2020.04.20	ISSUED FOR CLIENT REVIEW ISSUED FOR
		ISSUED FOR CLIENT REVIEW

Date:

Revisions:

MAR 2020 Drawing:

Scale: 1:1000

Drawn: RS Checked: GF

Project: 219206

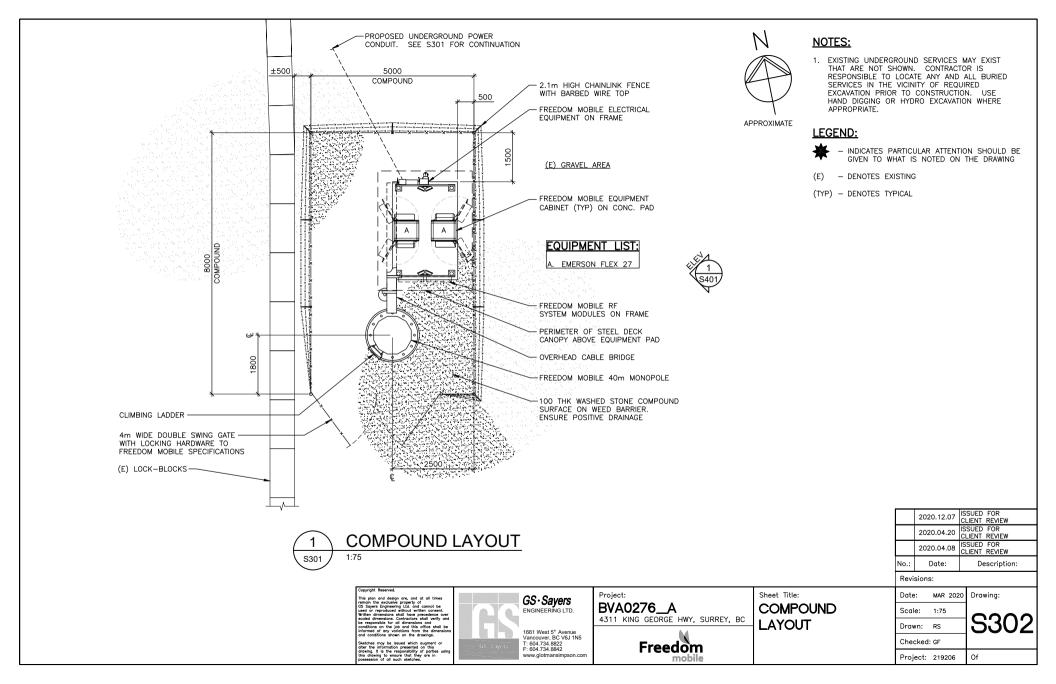
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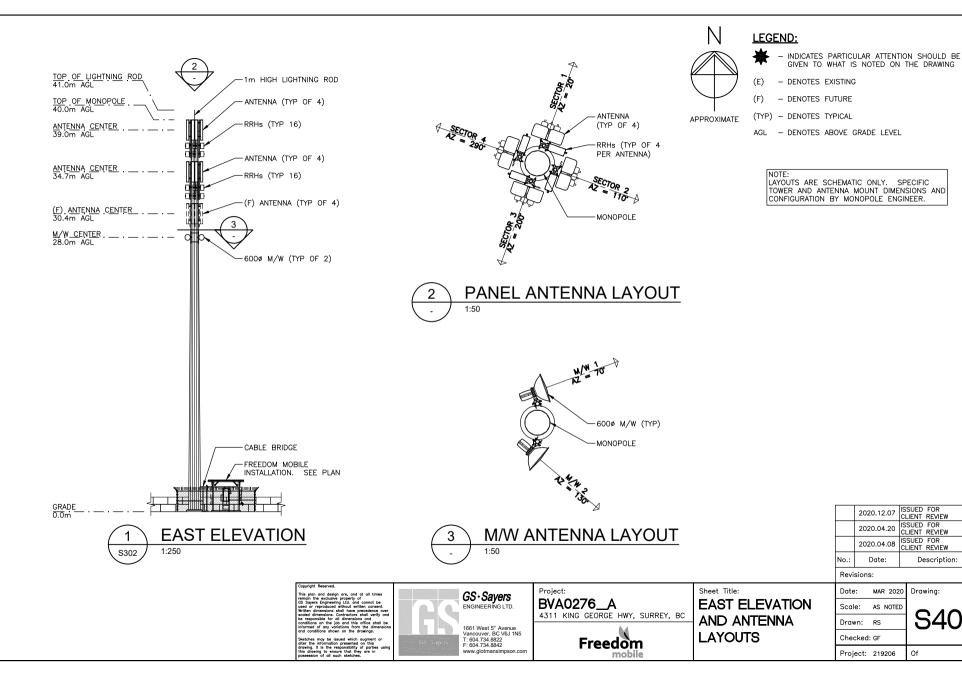
Freedom

Project: GS · Sayers BVA0276\_A ENGINEERING LTD.

1661 West 5th Avenue Vancouver, BC V6J 1N5 T: 604.734.8822 F: 604.734.8842

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Description:

#### **CITY OF SURREY**

(the "City")

#### **DEVELOPMENT VARIANCE PERMIT**

		NO.: 7920-0209-00
Issued To:		
	("the Owner")	
Address of Owner:		

- 1. This development variance permit is issued subject to compliance by the Owner with all statutes, by-laws, orders, regulations or agreements, except as specifically varied by this development variance permit.
- 2. This development variance permit applies to that real property including land with or without improvements located within the City of Surrey, with the legal description and civic address as follows:

Parcel Identifier: 009-236-635 Lot 3 District Lot 161 Group 2 New Westminster District Plan 10071 4311 - King George Boulevard

(the "Land")

- 3. Surrey Zoning By-law, 1993, No. 12000, as amended is varied as follows:
  - (a) In Sub-section A.1(a)ii.b. of Part 4 General Provisions, in the case of Antenna Systems that are free-standing (affixed directly onto the ground, rather than on a building) the height is increased from 12 metres to 41 metres.
- 4. The siting of buildings and structures shall be in accordance with the drawings numbered 7920-0209-00(A) through to and including 7920-0209-00(C) (the "Drawings") which are attached hereto and form part of this development variance permit.
- 5. This development variance permit applies to only that portion of the buildings and structures on the Land shown on Schedule A which is attached hereto and forms part of this development variance permit. This development variance permit does not apply to additions to, or replacement of, any of the existing buildings shown on attached Schedule A, which is attached hereto and forms part of this development variance permit.

	provisions of this development variance permit.
7.	This development variance permit shall lapse if the Owner does not substantially start are construction with respect to which this development variance permit is issued, within tw (2) years after the date this development variance permit is issued.
8.	The terms of this development variance permit or any amendment to it, are binding on a persons who acquire an interest in the Land.
9.	This development variance permit is not a building permit.
AUT	HORIZING RESOLUTION PASSED BY THE COUNCIL, THE DAY OF , 20 .
ISSU	ED THIS DAY OF , 20 .
ISSU	ED THIS DAY OF , 20 .  Mayor - Doug McCallum

# **Schedule A** 7920-0209-00 (A)



APPROXIMATE

Sheet Title:

SITE PLAN

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(E) - DENOTES EXISTING

(TYP) - DENOTES TYPICAL

--- - DENOTES SUBJECT PROPERTY LINE

----- DENOTES R/W LINE



-(E) ACCESS

S S S



14448

±100m

PROPOSED SITE ACCESS

4311

-(E) BUILDING (TYP)

FREEDOM MOBILE INSTALLATION. SEE S302 FOR COMPOUND LAYOUT

14418

(E) POWER POLE -

PROPOSED OVERHEAD 600V QUADRUPLEX

PROPOSED POWER POLE

PROPOSED UNDERGROUND -POWER CONDUIT

±7m

4233

2020.12.07 ISSUED FOR CLIENT REVIEW ISSUED FOR 2020.04.20 CLIENT REVIEW ISSUED FOR 2020.04.08 ISSUED FOR CLIENT REVIEW No.: Date: Description:

Revisions:

MAR 2020 Drawing:

Date: Scale: 1:1000

Drawn: RS Checked: GF

Project: 219206

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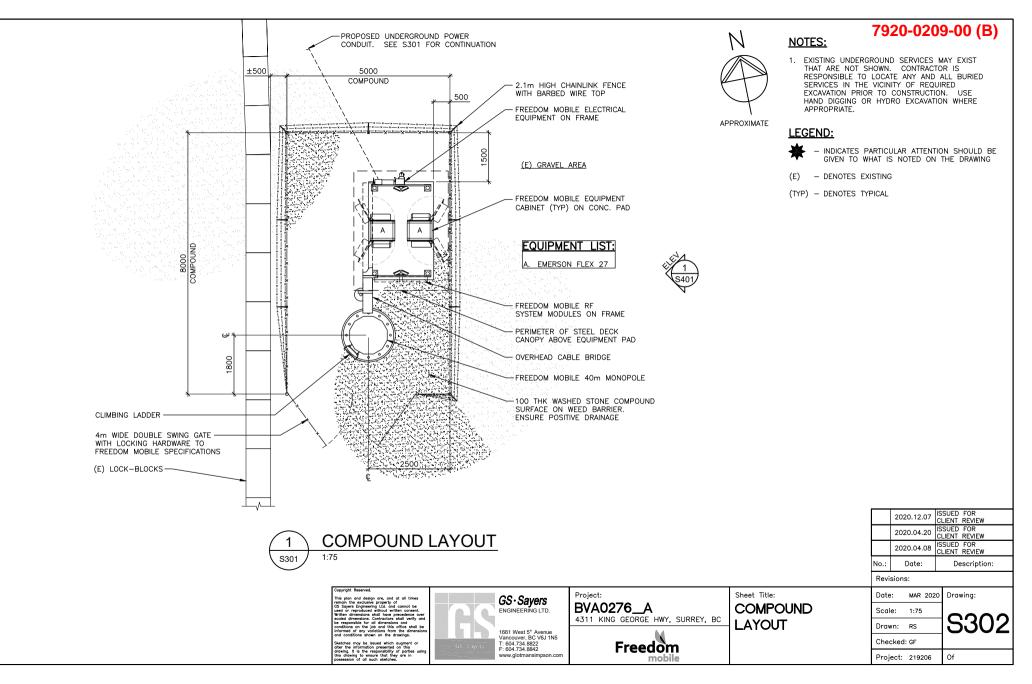
4253

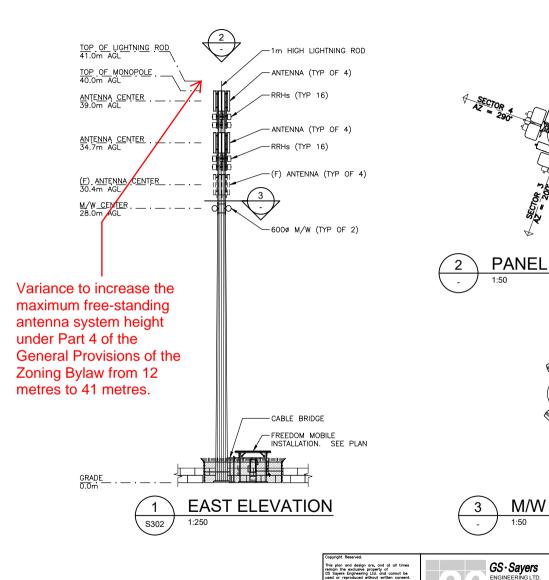
BVA0276\_A 4311 KING GEORGE HWY, SURREY, BC

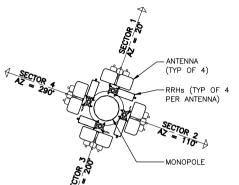
Project:

Freedom

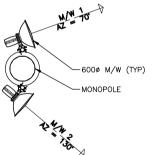
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PANEL ANTENNA LAYOUT



M/W ANTENNA LAYOUT

Project:

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#### LEGEND:



APPROXIMATE

- INDICATES PARTICULAR ATTENTION SHOULD BE GIVEN TO WHAT IS NOTED ON THE DRAWING

7920-0209-00 (C)

- DENOTES EXISTING

- DENOTES FUTURE

(TYP) - DENOTES TYPICAL

AGL - DENOTES ABOVE GRADE LEVEL

LAYOUTS ARE SCHEMATIC ONLY. SPECIFIC TOWER AND ANTENNA MOUNT DIMENSIONS AND CONFIGURATION BY MONOPOLE ENGINEER.

> ISSUED FOR CLIENT REVIEW 2020.12.07 ISSUED FOR 2020.04.20 CLIENT REVIEW ISSUED FOR CLIENT REVIEW 2020.04.08 No.: Description:

Revisions:

Date:

Project: 219206

MAR 2020 Drawing:

AS NOTED Scale: S401 Drawn: RS Checked: GF

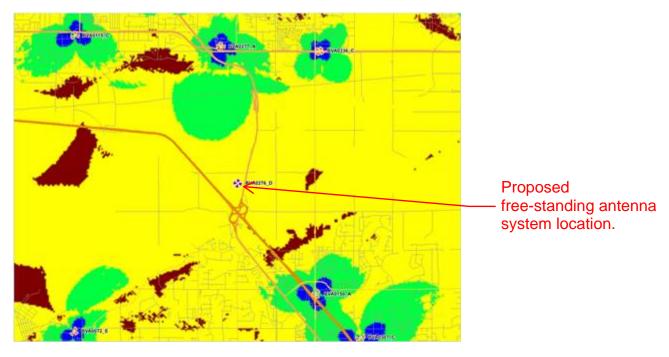
BVA0276 A 4311 KING GEORGE HWY, SURREY, BC **EAST ELEVATION** AND ANTENNA **LAYOUTS** 

Sheet Title:

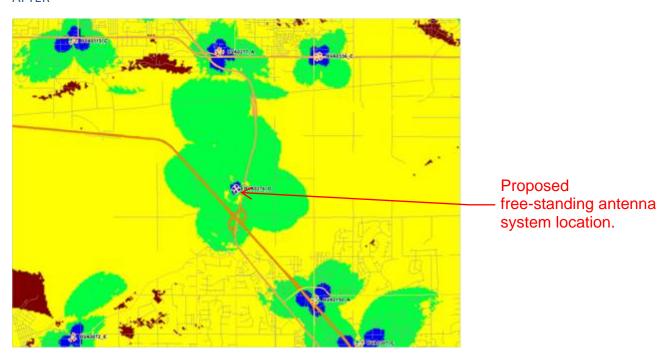
Freedom

#### BVA0276

#### **BEFORE**



## AFTER



<sup>\*\*</sup>Anything other than Blue/Green is poor to no coverage. "Milind Raval (Freedom Mobile)"

# SCHEDULE C PHOTO-SIMULATION

# Before



After

