

**PROPOSAL:**

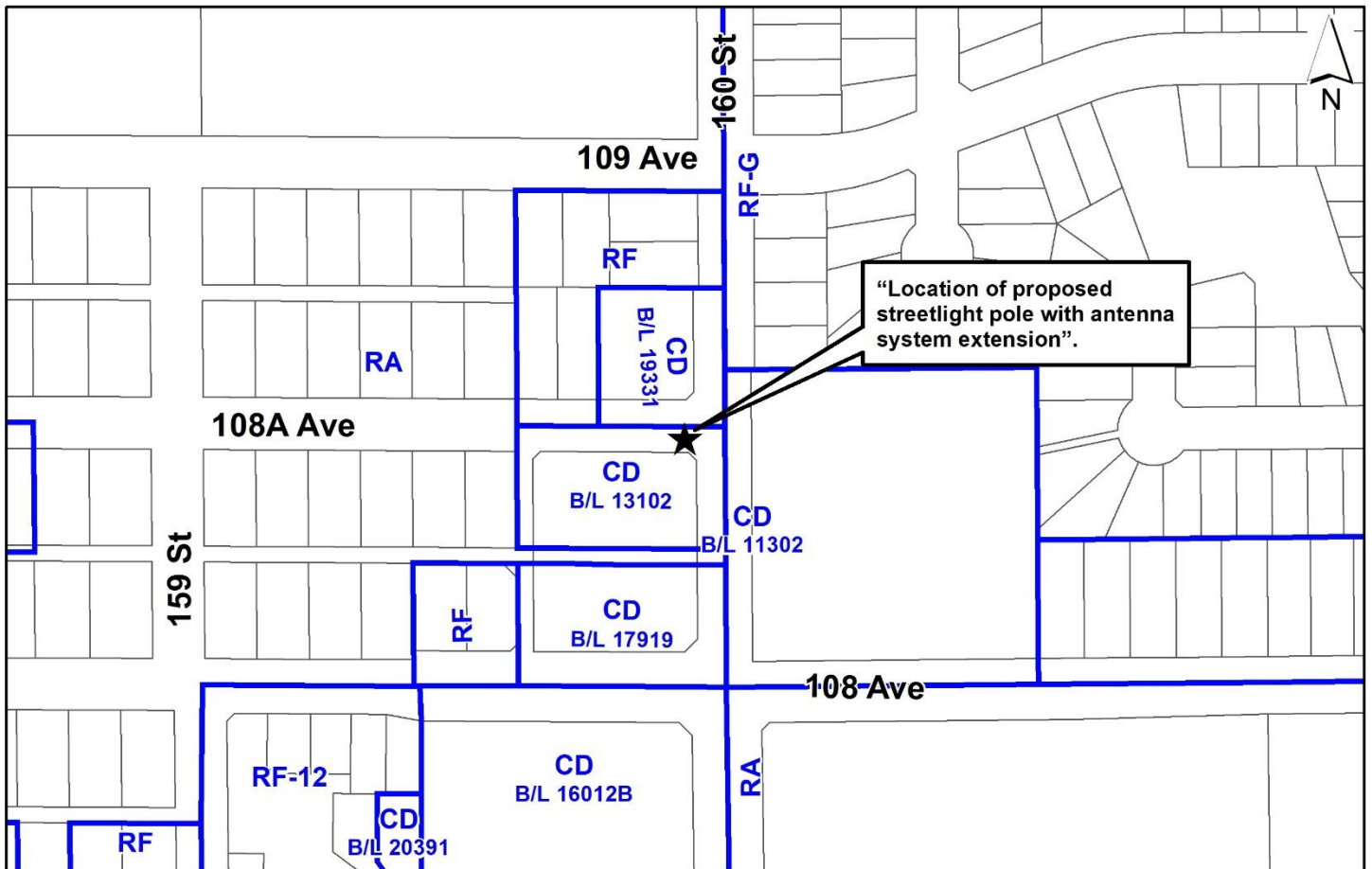
- **Development Variance Permit**

to increase the maximum height of a free-standing antenna system from 12 metres to 14.9 metres, in order to replace an existing streetlight pole with a streetlight pole with antenna system extension.

**LOCATION:** City Road Right-of-Way at southwest corner of 160 Street and 108A Avenue

**ZONING:** CD (By-law No. 13102)

**OCP DESIGNATION:** Urban



**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 By-law.

**RATIONALE OF RECOMMENDATION**

- The proposal conforms to the criteria and best practices identified in the City's Antenna System Siting Policy (No. O-62).
- The proposal will result in minimal visual disruption in the area, as the proposed 14.9 metre streetlight pole with an antenna system extension will be replacing an existing 7.6 metre tall streetlight pole.
- The applicant has provided documentation which indicates that there is a demonstrated coverage gap in the area, which the wireless carriers would like to address to provide better service to existing and potential new customers.
- Staff have not received any objections from nearby residents to the proposal.

## RECOMMENDATION

The Planning & Development Department recommends that Council approve Development Variance Permit No. 7923-0058-00 (Appendix I), 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 14.9 metres, to proceed to Public Notification.

## SITE CONTEXT & BACKGROUND

| Direction                   | Existing Use   | OCP Designation      | Existing Zone                |
|-----------------------------|--|----------------------|------------------------------|
| Subject Site                | City road right-of-way adjacent to a multi-unit commercial building. | Urban                | CD (By-law No. 13102)        |
| North (Across 108A Avenue): | Parking lot and vacant single family lots.                           | Urban                | CD (By-law No. 19331) and RF |
| East (Across 160 Street):   | Fraser Heights Village Centre shopping plaza.                        | Commercial           | CD (By-law No. 11302)        |
| South:                      | Multi-unit commercial building.                                      | Commercial and Urban | CD (By-law No. 17919)        |
| West:                       | Single family dwelling.  | Urban                | RA                           |

## DEVELOPMENT PROPOSAL

### Planning Considerations

- The proposed streetlight pole replacement with an antenna system extension is to be located on City road right-of-way adjacent to the property at 10833 – 160 street. This comprises a narrow piece of land immediately adjacent to the southwest corner of 108A Avenue and 160 Street. The site is designated as "Urban" in the Official Community Plan (OCP).
- The telecommunication company (Rogers Mobile) has an agreement with the City to site the equipment cabinet required for the antenna system approximately 2 metres to the south of the proposed antenna system across the existing sidewalk.
- The proposed antenna system will be atop a streetlight pole which is replacing an existing streetlight pole in the same location.

### Referrals

Engineering: The Engineering Department supports this proposal with no further comments.

## 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 and not compromising existing policy guidelines, especially antenna systems either near or within 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 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 to be an essential utility.
- 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 free-standing 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.

### **Location Preferences**

- It is preferable that new antenna systems proposed on streetlights be sited along arterial and collector roads. These types of roadways are the preferred locations for poles that are taller than existing streetlight poles.

*The applicant has proposed a streetlight pole replacement at the southwest corner of 108A Avenue and 160 Street, which is a collector roadway. The proposed streetlight pole with an antenna system extension will be 14.9 metres in height, replacing a 7.6-metre tall existing streetlight pole. As this antenna system will be sited along a collector roadway and within a commercial area, it is considered to be a preferred location.*

### ***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 minimize the visual aesthetic impacts of the Antenna System on the community. Antennas that extend above the top of a streetlight should appear to be a natural extension of the pole.

*The applicant proposes a streetlight pole with an antenna system extension that will match the existing colour of the existing streetlight pole. The antenna system will have a circumference that aligns with the proposed streetlight pole to allow for what appears as a natural extension of the streetlight pole.*

- Sight line considerations: poles and cabinets should consider stopping sight distance for posted speed limits on the roadway. Proposals are to follow the Transportation Association of Canada (TAC) guidelines for stopping sight distance requirements or as otherwise specified by the City Engineering Department.

*The streetlight pole replacement will be at the same location as the existing pole. The proposed electrical equipment cabinet for the proposed antenna system will be located 2 metres to the south across the sidewalk.*

### ***Public Consultation Process***

- In accordance with policy No. O-62, the applicant sent out 49 notification packages on April 20, 2023, to the nearby property owners and mailing addresses within a notification area of 45 metres, which is three times the height of the proposed antenna system which is required within policy No. O-62.
- The applicant and staff received a response from one (1) business owner expressing opposition to the proposal. Concerns are summarized as follows (staff comments in italics):
  - Prefer alternate locations such as rooftops or adjacent to highways or parks. Roger's can site elsewhere as other carriers are located on buildings at 16033 - 108 Avenue (across 160 Street to the east) and 10833 - 160 Street (immediately south).

*(Both properties, listed above, have infrastructure from Freedom and Telus. Roger's has tried to site antennas on these properties with no success. Other streetlights were explored but the proposed site best met City Policy in regard to being located in a commercial area and along a collector road.)*

- Negative property value due to the installation in front of property and could hinder the redevelopment of the property.

*(The proposed installation falls outside the property on City road right-of-way and will not impact redevelopment of the property.)*

- Signage associated with the installation will have a negative impact on the existing businesses in the area.

*(No signage is proposed as part of the installation.)*

- Privacy and security concerns from the antennas.

*(The antenna system is being installed to enhance coverage. Rogers always follows Safety Code 6 for radio emissions.)*

- What is Roger's expansion plans for additional antennas/capacity in the area?

*(As demand for wireless services grow, the existing coverage gap will also grow unless an antenna is installed.)*

- Concerned about maintenance schedule on the proposed antenna system.

*(Roger's will only need to access the site a few times a year for routine maintenance.)*

### **Zoning By-law**

- The applicant is requesting the following variance:
  - 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 14.9 metres.
- The proposed antenna system will have limited visual impact as it will be attached to the top of a replacement streetlight pole. The proposed location along a collector road and on City-owned property is preferred under policy No. O-62.
- Staff support the requested variance to proceed for consideration.

**INFORMATION ATTACHED TO THIS REPORT**

The following information is attached to this Report:

Appendix I      Development Variance Permit No. 7923-0056-00 (includes Site Plan, Elevations and Perspective)

*approved by Ron Gill*

Don Luymes  
General Manager  
Planning and Development

JS/ar

(the "City")

DEVELOPMENT VARIANCE PERMIT

NO.: 7923-0058-00

Issued To: City of Surrey  
(the Owner)

Address of Owner: 13450 - 104 Avenue  
Surrey, BC V3T 1V8

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:

City of Surrey light pole # 159-12 located within the south side of  
108A Avenue road allowance directly west of 160 Street

(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 14.9 metres.

4. The siting of buildings and structures shall be in accordance with the drawings numbered 7923-0058-00(A) through to and including 7923-0058-00(E) (the "Drawings") which are attached hereto and form part of this development variance permit.

5. This development variance permit applies to only the 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.



6. The Land shall be developed strictly in accordance with the terms and conditions and provisions of this development variance permit.
7. This development variance permit shall lapse if the Owner does not substantially start any construction with respect to which this development variance permit is issued, within two (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 all persons who acquire an interest in the Land.
9. This development variance permit is not a building permit.

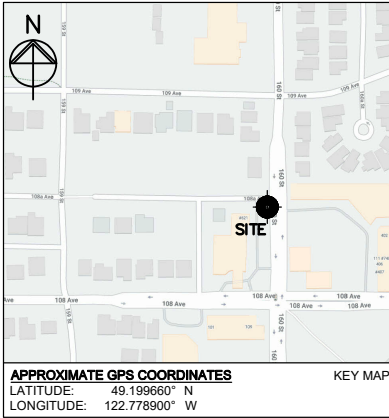
AUTHORIZING RESOLUTION PASSED BY THE COUNCIL, THE      DAY OF      , 20 .  
ISSUED THIS      DAY OF      , 20 .

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Mayor – Brenda Locke

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City Clerk – Jennifer Ficocelli



Schedule A  
 7923-0058-00(A)

**SITE NAME: FRASER HEIGHTS CENTRE**

**SITE ID: W4900**

**LOCATION: 160 ST AND 108A AVE  
 SURREY, BC**

**SITE TYPE: LIGHT POLE EXTENSION WITH  
 EQUIPMENT ON GRADE**

**DRAWING LIST:**  
 S101 TITLE PAGE  
 S203 CELLULAR LOADING SPECIFICATIONS  
 S301 SITE PLAN  
 S302 PARTIAL SITE PLAN  
 S401 NORTH AND EAST ELEVATIONS

ALL DIMENSIONS IN MILLIMETERS  
 UNLESS NOTED OTHERWISE

|            |            |                             |
|------------|------------|-----------------------------|
|            | 2022.07.15 | ISSUED FOR<br>CLIENT REVIEW |
| No.:       | Date:      | Description:                |
| Revisions: |            |                             |
| Date:      | JUL 2022   | Drawing:                    |
| Scale:     | NA         | <b>S101</b>                 |
| Drawn:     | RS         |                             |
| Checked:   | GF         |                             |
| Project:   | 222279     | Of                          |

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Project: Site ID: **W4900**  
**FRASER HEIGHTS CENTRE**  
 160 ST AND 108A AVE, SURREY, BC



EGBC Permit To Practice: 1003171

Sheet Title:  
**TITLE PAGE**

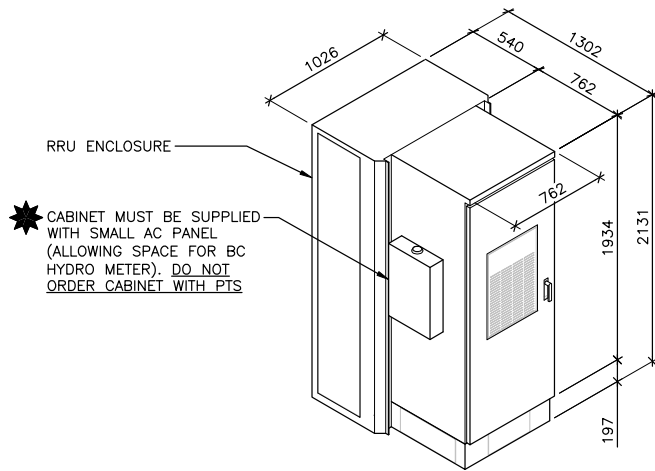
# ANTENNA TABLE

7923-0058-00(B)

| ANT. POS. No. | ANTENNA ID |       | MOUNT HEIGHT AGL(m) | ANTENNA MOUNT (UP/DOWN) | ANTENNA TYPE                        | MDT (°) | MET (°) |                | AZIMUTH (°) | JUMPER/LINE TYPE | No. OF RRU's | STATUS  |
|---------------|------------|-------|---------------------|-------------------------|-------------------------------------|---------|---------|----------------|-------------|------------------|--------------|---------|
|               | TECHNOLOGY | LABEL |                     |                         |                                     |         | 700/850 | 1900/2100/2600 |             |                  |              |         |
| 1-1           | LTE        | LTE-1 | 15.0                | UP                      | TTS-608014/D172715/D333815DEI-65FT4 | NA      | NA      | NA             | 20          | 8-LDF4-50A       | 9            | INITIAL |
| 1-2           | LTE        | LTE-2 |                     | UP                      |                                     | NA      | NA      | NA             | 140         | 8-LDF4-50A       |              |         |
| 1-3           | LTE        | LTE-3 |                     | UP                      |                                     | NA      | NA      | NA             | 260         | 8-LDF4-50A       |              |         |
| 2             | GPS        | GPS-1 | 13.4                | UP                      | KRE1012395/2                        | -       | -       | -              | -           | TBD              | -            | INITIAL |

**NOTES:** 1. TABLE CONTENTS TO BE CONFIRMED WITH ROGERS.  
 2. CABLE BEND RADIUS AS PER MANUFACTURER'S RECOMMENDATIONS.  
 3. ANTENNA HEIGHT TO TOP OF ANTENNAS.

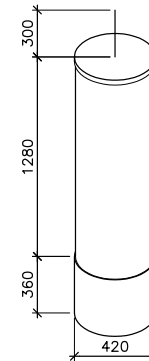
★ RRU's AND DIFLEXERS/TRIPLEXERS TO BE LOCATED IN CABINETS



★ CABINET MUST BE SUPPLIED WITH SMALL AC PANEL (ALLOWING SPACE FOR BC HYDRO METER). DO NOT ORDER CABINET WITH PTS



MANUFACTURER: ERICSSON  
 MODEL: KRE1012395/2  
 HEIGHT: 74mm  
 DIAMETER: 77mm  
 WEIGHT: 0.3kg



ANT. TYPE: TONGYU  
 MODEL: TTS-608014/D172715/D333815DEI-65FT4  
 HEIGHT: 1280mm + 360mm  
 DIAMETER: 420mm  
 WEIGHT: 34.0kg

CABLE TRANSITION SECTION

1 CABINET ISOMETRIC  
 NTS (DCI 6500-E-r)

2 ANTENNA DETAILS  
 NTS

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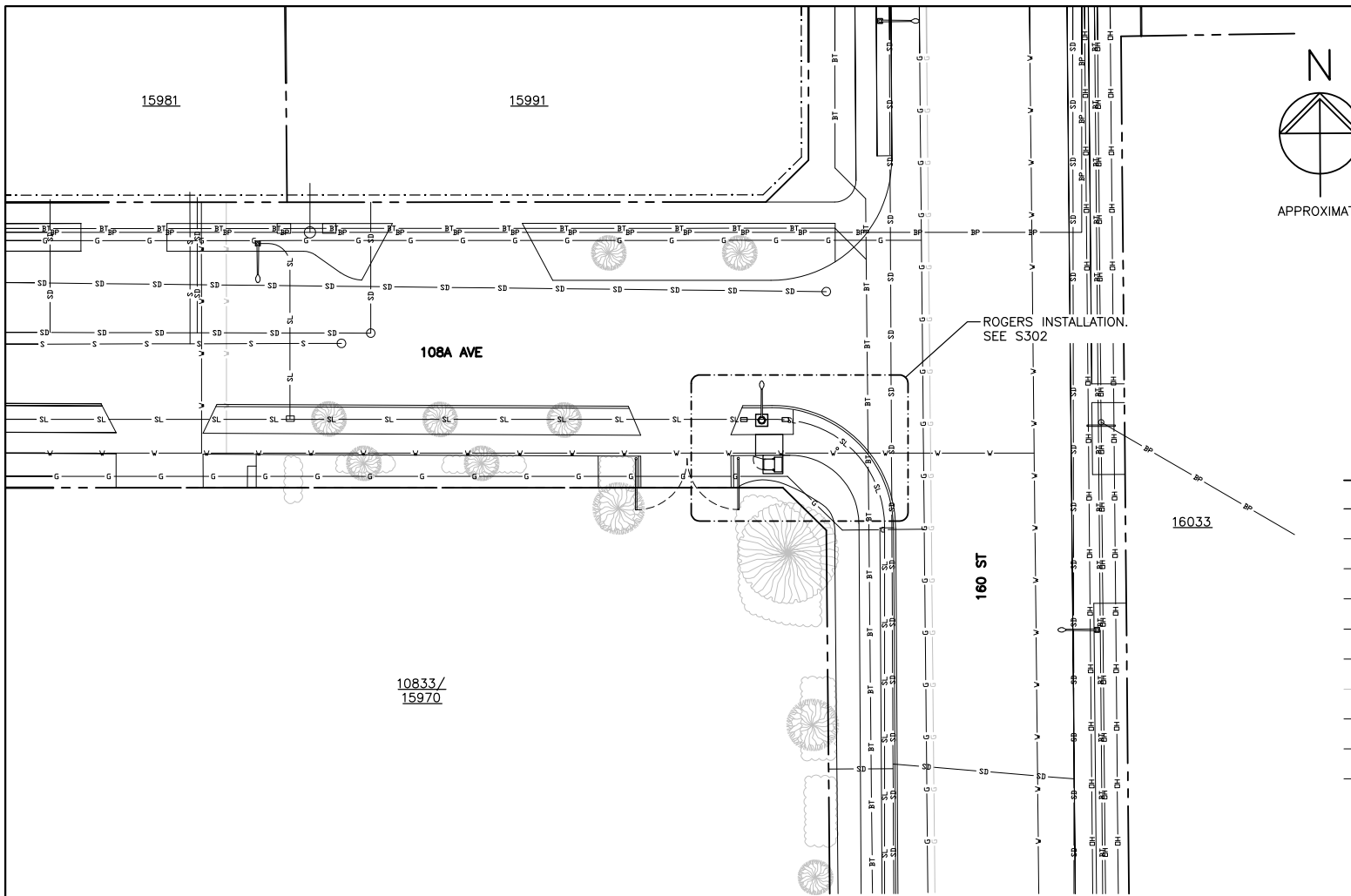
Project: Site ID: **W4900**  
**FRASER HEIGHTS CENTRE**  
 160 ST AND 108A AVE, SURREY, BC



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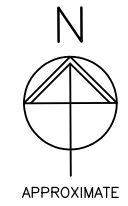
Sheet Title:  
**CELLULAR LOADING SPECIFICATIONS**

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| 2022.07.15 | ISSUED FOR CLIENT REVIEW |              |
| No.:       | Date:                    | Description: |
| Revisions: |                          |              |
| Date:      | JUL 2022                 | Drawing:     |
| Scale:     | NTS                      | <b>S203</b>  |
| Drawn:     | RS                       |              |
| Checked:   | GF                       |              |
| Project:   | 222279                   | Of           |



**NOTES: 7923-0058-00(C)**

1. THE INFORMATION CONTAINED IN THIS DRAWING WAS OBTAINED FROM THE CITY OF SURREY ONLINE GIS, AND A SITE VISIT BY GS SAYERS ON JULY 12, 2022. IT DOES NOT REPRESENT A SURVEY.
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**LEGEND:**

- INDICATES PARTICULAR ATTENTION SHOULD BE GIVEN TO WHAT IS NOTED ON THE DRAWING
- (E) - DENOTES EXISTING
- (F) - DENOTES FUTURE
- (TYP) - DENOTES TYPICAL
- -- - DENOTES PROPERTY LINE
- . - . - DENOTES RIGHT-OF-WAY LINE
- SL — - DENOTES (E) BURIED STREETLIGHT CONDUIT
- V — - DENOTES (E) BURIED WATER LINE
- SD — - DENOTES (E) BURIED STORM DRAIN
- DH — - DENOTES (E) OVERHEAD UTILITY LINE
- G — - DENOTES (E) BURIED GAS LINE
- G — - DENOTES (E) BURIED GAS LINE (ABANDONED)
- BT — - DENOTES (E) BURIED TELUS DUCT
- SL — - DENOTES (E) BURIED STREETLIGHT CONDUIT
- BP — - DENOTES (E) BURIED POWER CONDUIT

**1 SITE PLAN**  
1:300

|      |            |                          |
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| Sheet Title:<br><b>SITE PLAN</b> | Date: JUL 2022  | Drawing:    |
|                                  | Scale: 1:300    | <b>S301</b> |
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Project: Site ID: **W4900**  
**FRASER HEIGHTS CENTRE**  
160 ST AND 108A AVE, SURREY, BC  
**ROGERS**

**NOTES:**

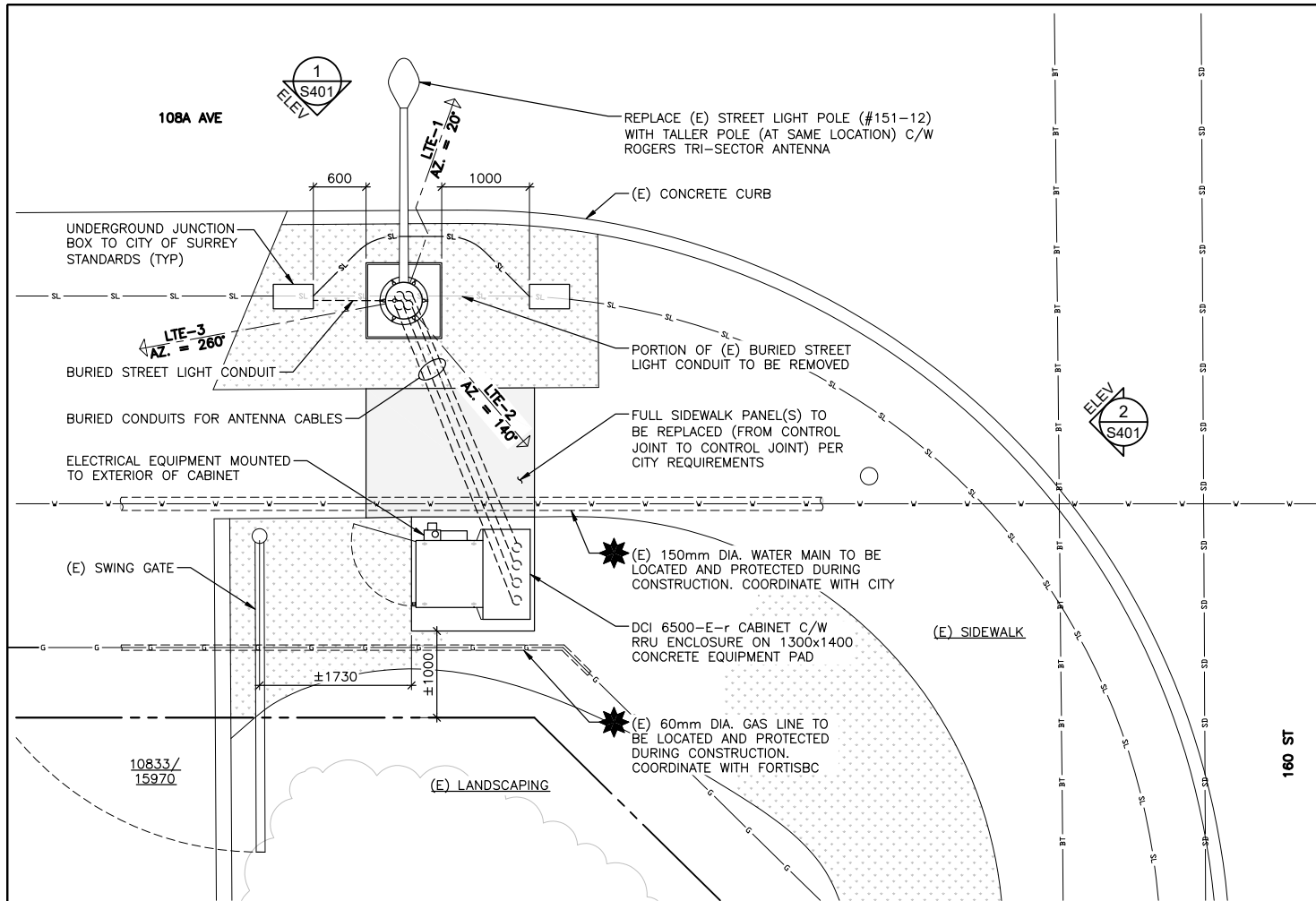
- SEE NOTES ON S301.
- PROVIDE TEMPORARY ROAD LIGHTING DURING CONSTRUCTION.

**LEGEND:**

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- (F) - DENOTES FUTURE
- (TYP) - DENOTES TYPICAL
- - DENOTES PROPERTY LINE
- SL — - DENOTES (E) BURIED STREETLIGHT CONDUIT
- V — - DENOTES (E) BURIED WATER LINE
- SD — - DENOTES (E) BURIED STORM DRAIN
- BT — - DENOTES (E) BURIED TELUS DUCT
- G — - DENOTES (E) BURIED GAS LINE
- SL — - DENOTES PROPOSED BURIED STREET LIGHT CONDUIT



APPROXIMATE



**1 PARTIAL SITE PLAN**  
S301 1:50

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**ROGERS**

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Sheet Title:  
**PARTIAL SITE PLAN**

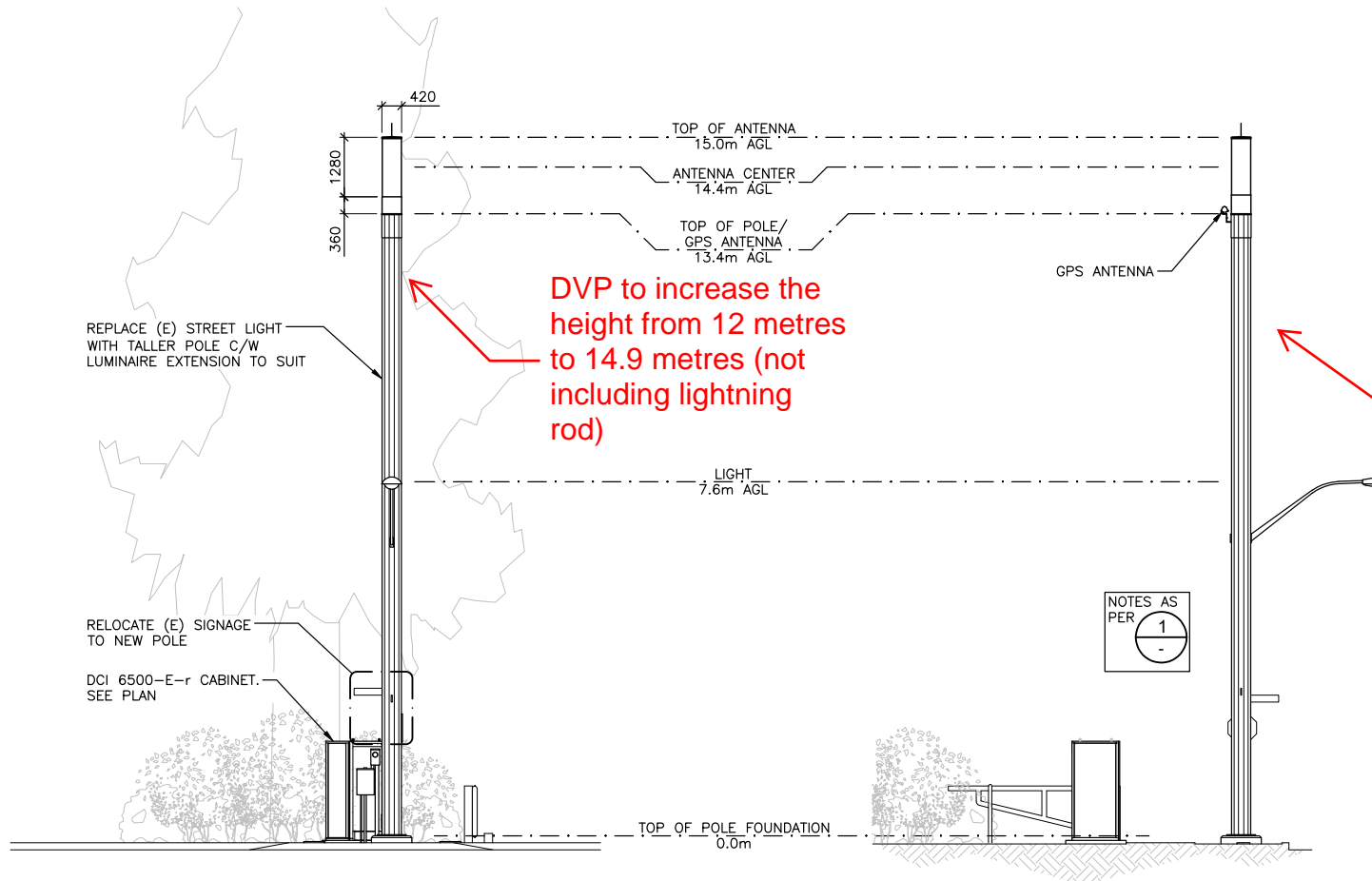
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| Drawn:     | RS       |                          |
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**NOTES:** 7923-0058-00(E)

1. NEW POLE AND TRI-SECTOR ANTENNA COLOUR TO MATCH EXISTING POLE.

**LEGEND:**

- ★ - INDICATES PARTICULAR ATTENTION SHOULD BE GIVEN TO WHAT IS NOTED ON THE DRAWING
- (E) - DENOTES EXISTING
- (TYP) - DENOTES TYPICAL
- AGL - DENOTES ABOVE GRADE LEVEL



**1 NORTH ELEVATION**  
S302 1:100

**2 EAST ELEVATION**  
S302 1:100

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Project: Site ID: **W4900**  
**FRASER HEIGHTS CENTRE**  
160 ST AND 108A AVE, SURREY, BC



EGBC Permit To Practice: 1003171

Sheet Title:  
**NORTH AND EAST ELEVATIONS**

|            |            |                          |
|------------|------------|--------------------------|
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|            | 2022.07.15 | Description:             |
| Revisions: |            |                          |
| Date:      | JUL 2022   | Drawing:                 |
| Scale:     | 1:100      | <b>S401</b>              |
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