ROGERS™

Rogers Communications Inc
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Burnaby, British Columbia
V5H 4W4

Mayor and Council
District of West Vancouver

Introduction

Rogers Communications Inc. (Rogers) is pleased to submit this one of three applications for Type 3 cell towers on the Ministry of Transportation and Highways Right of Way in the District of West Vancouver. The proposed infrastructure will address significant coverage gaps and meet rapidly growing demand for wireless service in residential neighbourhoods north and south of the Upper Levels Highway.

Rogers would like to thank the District of West Vancouver for its guidance on this project. We believe the creative solution that emerged from this process – one that engaged architects, urban designers, engineers, network planners from Rogers and the other wireless providers along with input from West Vancouver staff – is a first for the wireless industry in Canada.

Background

Over two years ago, Rogers proposed several wireless telecommunications structures, including one in West Vancouver at Taylor Way and Highway 1, which raised community and local government concerns. In response to these concerns, the Ministry of Transportation and Infrastructure (MoTI) convened meetings with Rogers, the District of West Vancouver and Industry Canada, and asked Rogers to work with local governments to develop a corridor plan for the north shore. The objective was to facilitate more orderly and predicable installation of wireless infrastructure to serve these communities over the mid to long-term and address concerns about proliferation of towers along the right-of-way by accommodating multiple carriers.
Rogers was also challenged to address aesthetic and urban design issues in the belief that more could be done to improve the appearance of the towers in the community and minimize the visual impact.

Process

In response, Rogers' senior management approved a significant pilot project to seek solutions to these community challenges. Rogers engaged Design DIALOG to develop tower and urban design (tower siting) concepts. Senior radio frequency engineers and other technical land use specialists worked with DIALOG to develop the preliminary concepts. These were shared with the District of West Vancouver in late June last year and presented subsequently to the District's Design Review Committee for their consideration and feedback.

Result

This collaborative approach has been a very positive experience for Rogers and has produced significant innovations in both process and tower design. A diverse group of stakeholders worked together to meet multiple objectives and the outcome reflects hundreds of hours of work and a significant financial investment. To our knowledge this is the first time in Canada that a tower design incorporates the required radio equipment inside the base, reducing the need for multiple exterior cabinets. Also innovative is the shape of the tower. Cell towers are typically round (monopole) or lattice style. This design, a blade shape, allows the structure to be oriented such that the visual impact is reduced. The team was also able to accommodate three levels of antennas meeting the request to accommodate multiple carriers.

Next Steps

This proposal identifies three sites to meet the immediate and medium-term needs of West Vancouver residents in the surrounding neighbourhoods. The towers are proposed for Taylor Way, 15th and 26th Avenues. All wireless companies were invited to share this tower and Rogers is pleased to report that TELUS has expressed strong interest in co-locating on all three of the proposed structures.

The heavily residential character, terrain and tall trees of West Vancouver create a real challenge for wireless providers as cellular technology relies on line-of-sight to transmit and receive signals.

These unique characteristics of West Vancouver have resulted in wireless installations being concentrated in commercial areas along Marine Drive and at higher elevations, with mid-levels of West Vancouver being served primarily by cell sites in Vancouver, which are increasingly running at near maximum capacity serving the customers closest to them in Vancouver. These sites will soon be unable to serve West Vancouver as the demands on them from Vancouver users increases.

The three sites proposed in these applications will not fix or address all coverage problems in the District of West Vancouver, but will go a long way to addressing the most significant current coverage gaps that have been created by rapidly increasing demand in residential areas north and south of the highway.

In closing, Rogers would like to acknowledge and thank the District of West Vancouver for the opportunity to work together so productively over the past two years.

Sincerely,

Leon Leroux
Director, Network Implementation, Western Canada
Rogers Communications Inc.

NORTH SHORE CORRIDOR CONCEPT

CELLULAR INDUSTRY SOLUTION

0 m 50 m 100 m

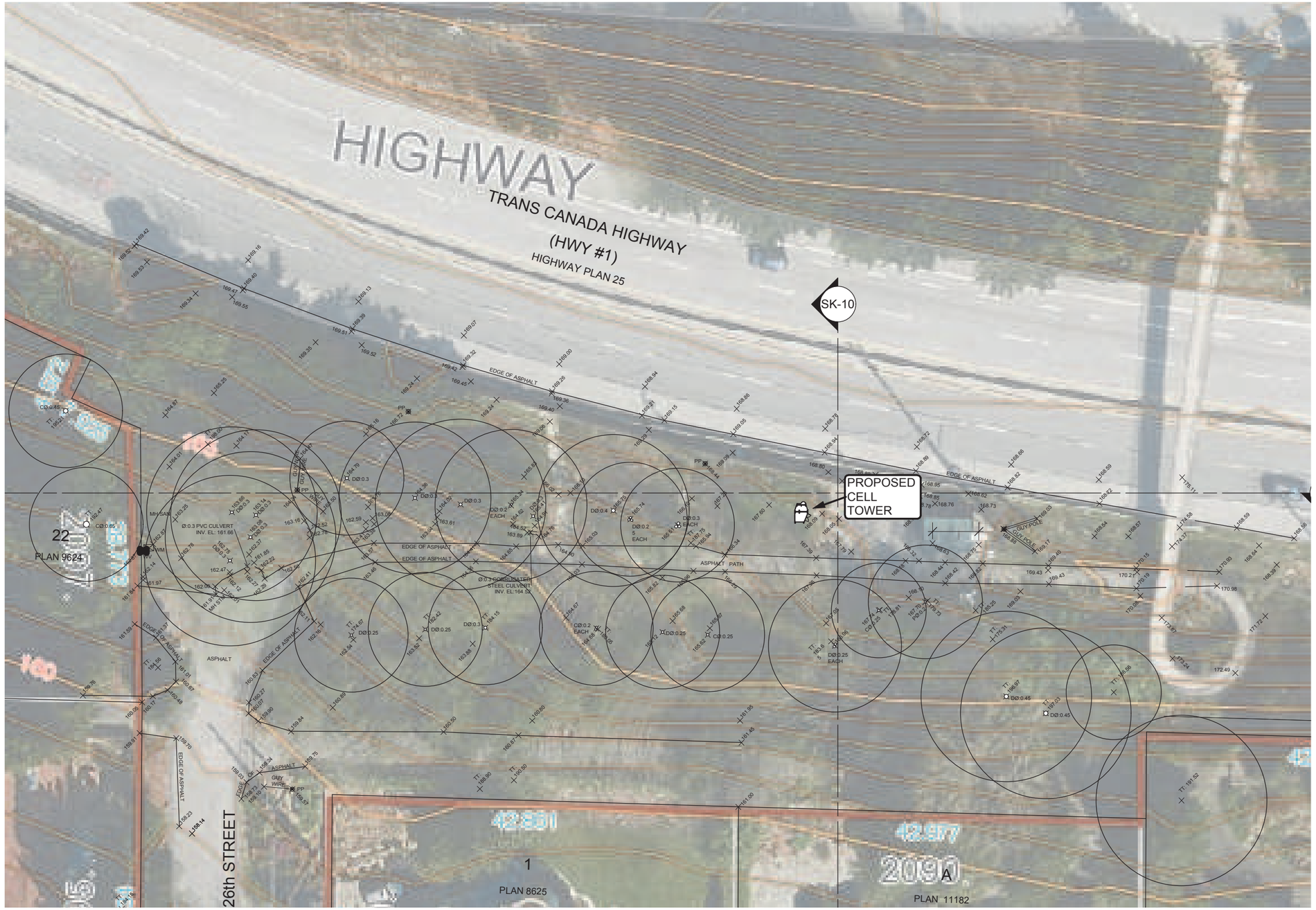
CELLULAR INFRASTRUCTURE

NORTH SHORE CORRIDOR PROPOSAL

26th STREET

NORTH SHORE CORRIDOR CONCEPT

CELLULAR INDUSTRY SOLUTION

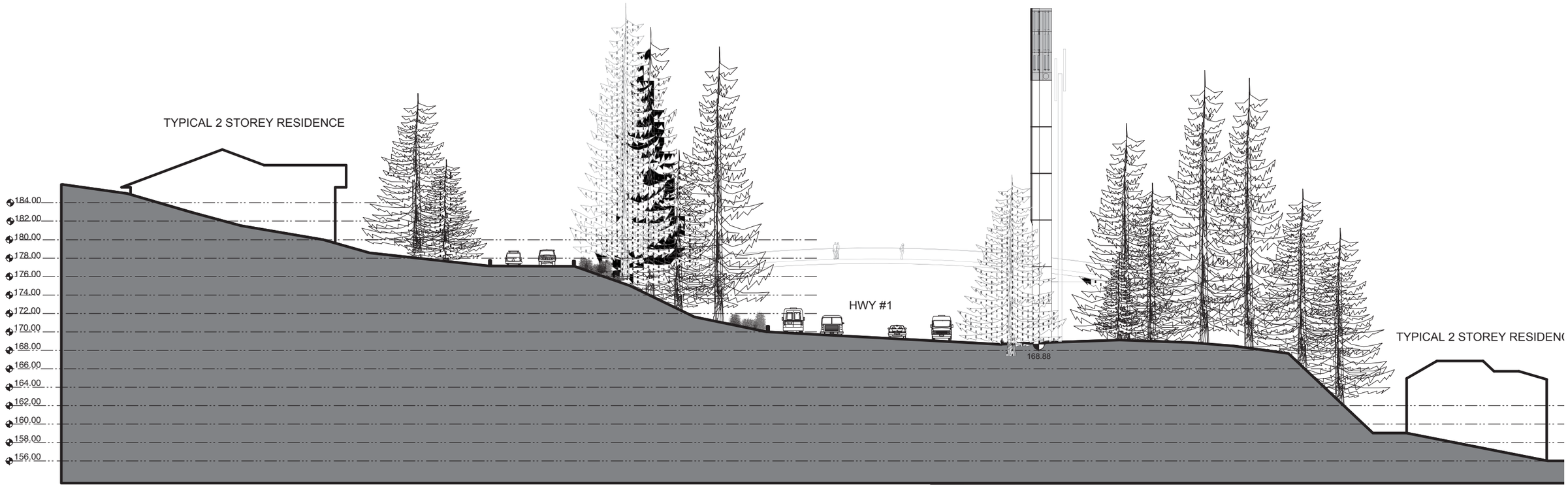


LEGEND

× 142.65	INDICATES SPOT ELEVATION
CB	INDICATES CATCH BASIN
EB	INDICATES ELECTRICAL BOX
LS	INDICATES LAMP STANDARD
MH	INDICATES MANHOLE
S	INDICATES SIGN
UB	INDICATES UTILITY BOX
TT	INDICATES TOP OF TREE
▲ HUB	INDICATES HUB SET

NORTH SHORE CORRIDOR CONCEPT
CELLULAR INDUSTRY SOLUTION

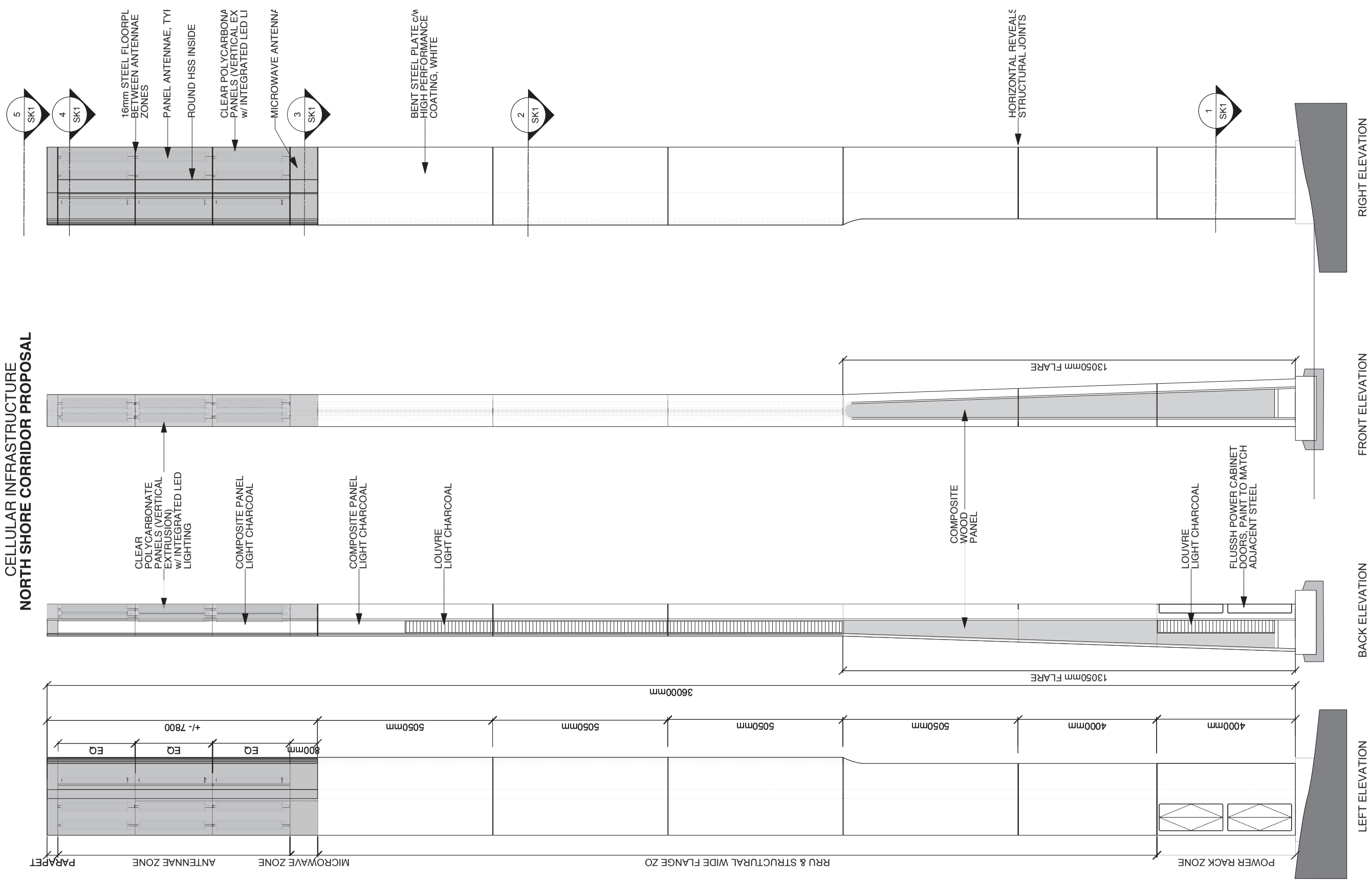
CELLULAR INFRASTRUCTURE
NORTH SHORE CORRIDOR PROPOSAL
26th STREET



SK10 SITE SECTION

NORTH SHORE CORRIDOR CONCEPT

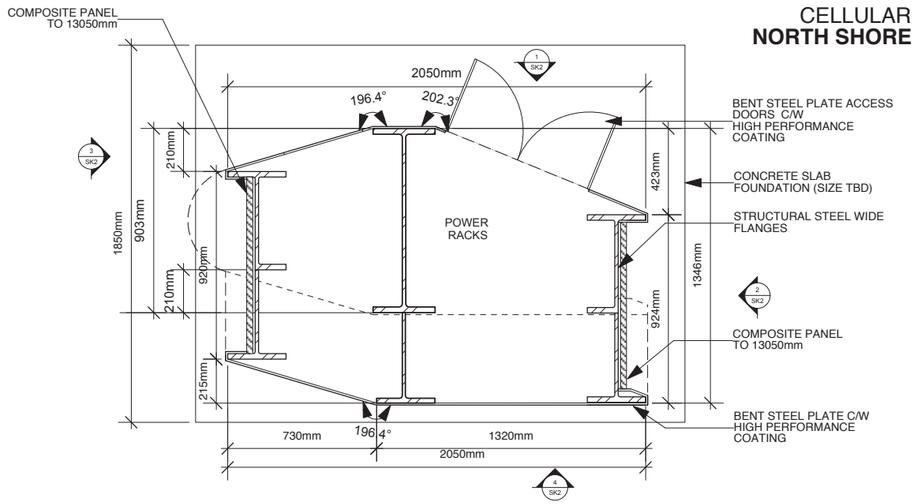
CELLULAR INDUSTRY SOLUTION



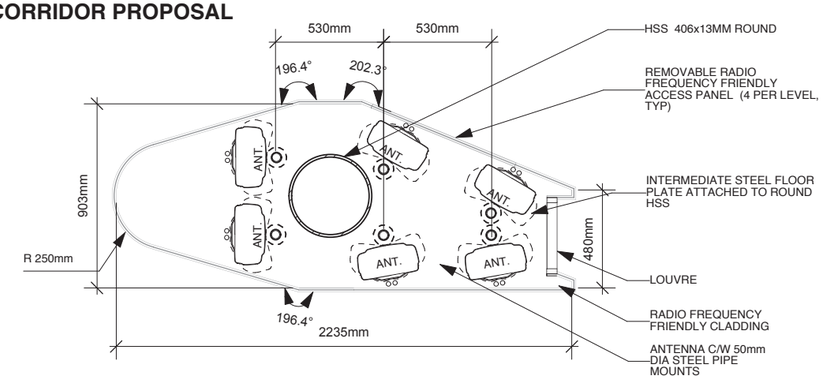
NORTH SHORE CORRIDOR CONCEPT

CELLULAR INDUSTRY SOLUTION

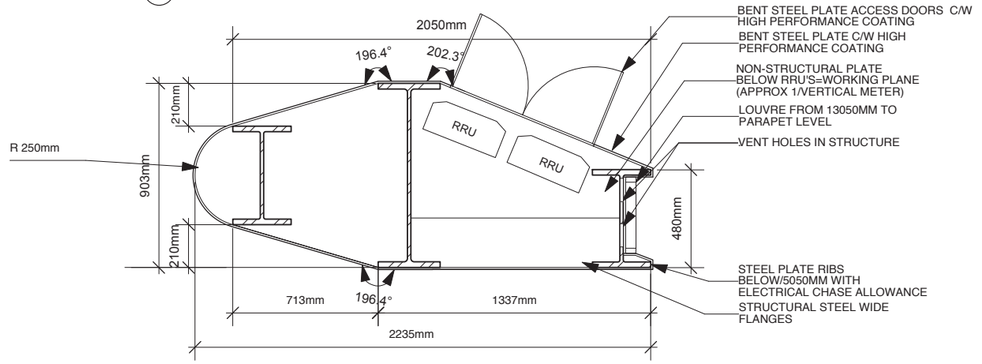
CELLULAR INFRASTRUCTURE
NORTH SHORE CORRIDOR PROPOSAL



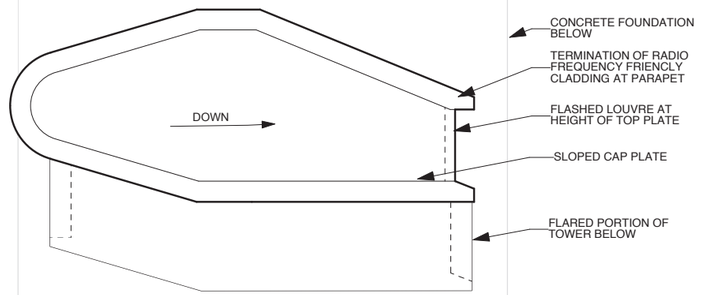
1 PLAN @ SLAB LEVEL



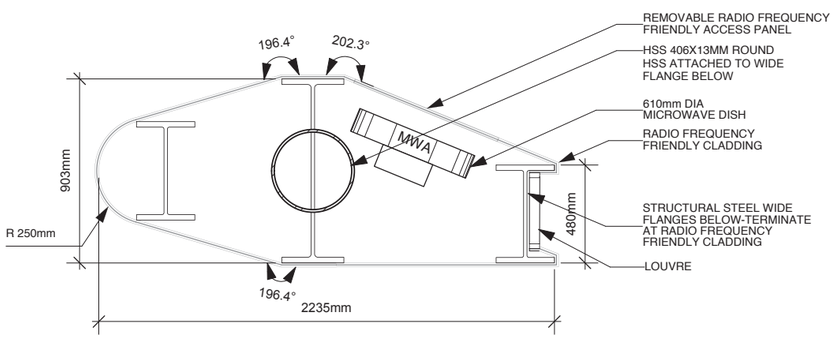
4 PLAN @ ANTENNA LEVEL



2 PLAN @ RRU LEVELS



5 ROOF PLAN

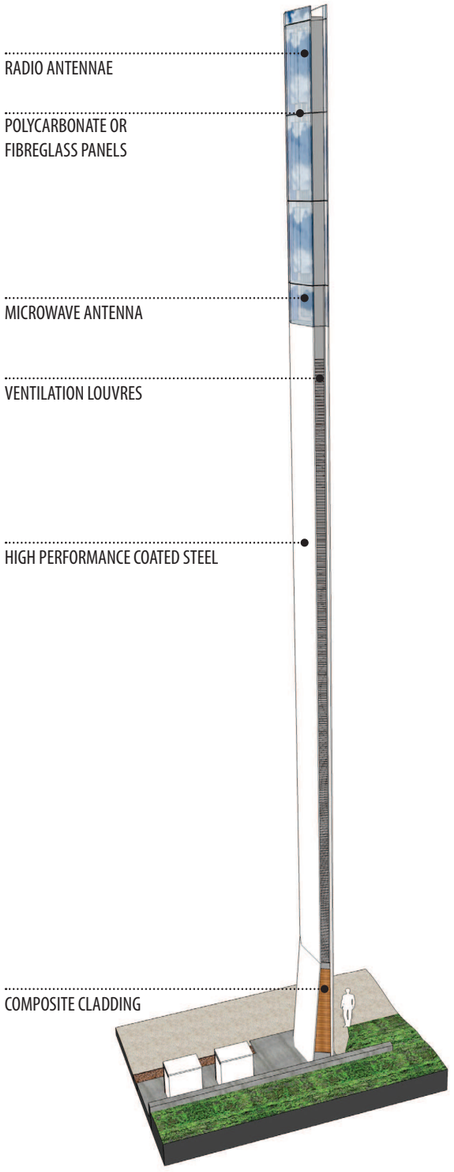


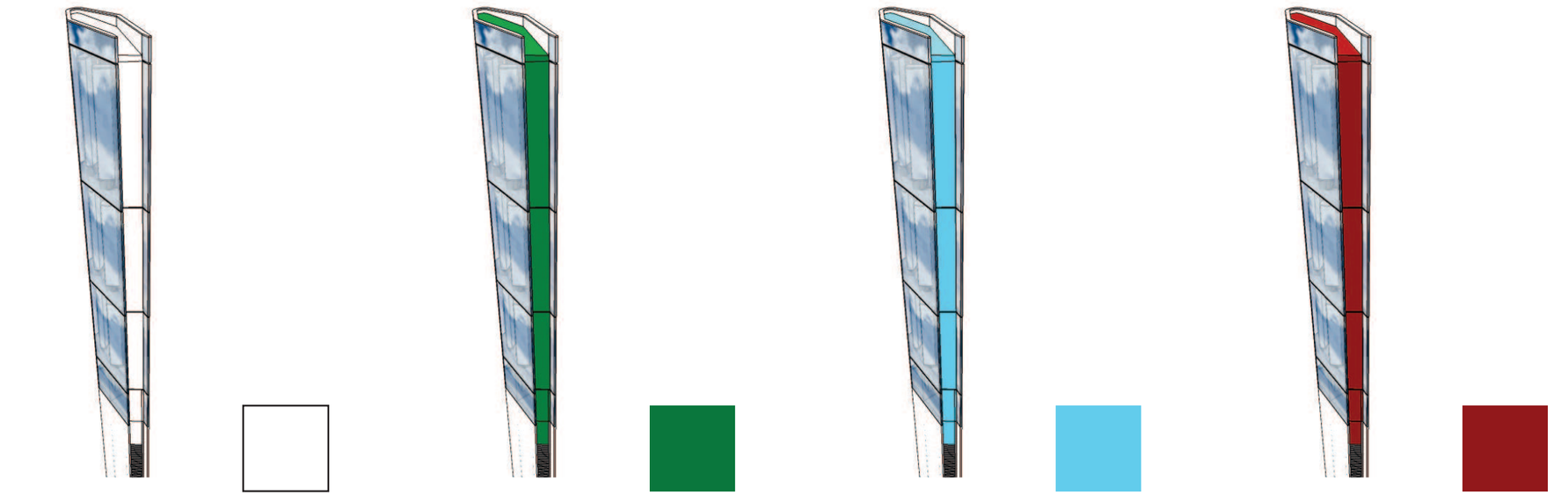
3 PLAN @ MICROWAVE LEVEL

SK1-TOWER PLANS

NORTH SHORE CORRIDOR CONCEPT

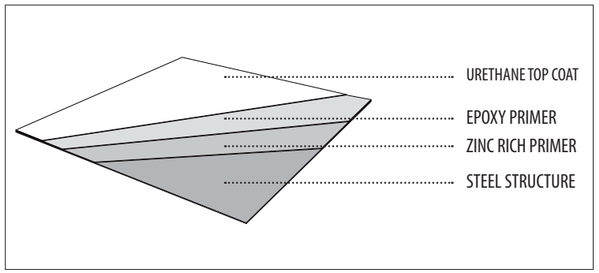
CELLULAR INDUSTRY SOLUTION



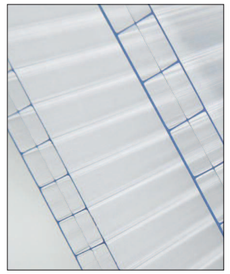


COLOUR FLEXIBILITY

HIGH PERFORMANCE COATED STEEL

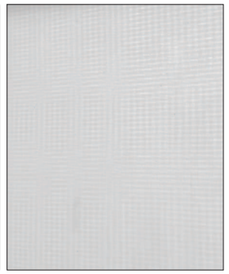


POLY CARBONATE PANELS



OR

FIBRE GLASS PANELS



PAINTED LOUVERS

COMPOSITE PANELS

MATERIAL PALETTE

NORTH SHORE CORRIDOR CONCEPT

CELLULAR INDUSTRY SOLUTION

PHOTO-SIMULATION B

NORTH SHORE CORRIDOR CONCEPT

CELLULAR INDUSTRY SOLUTION

PHOTO-SIMULATION C

NORTH SHORE CORRIDOR CONCEPT

CELLULAR INDUSTRY SOLUTION

PHOTO-SIMULATION D