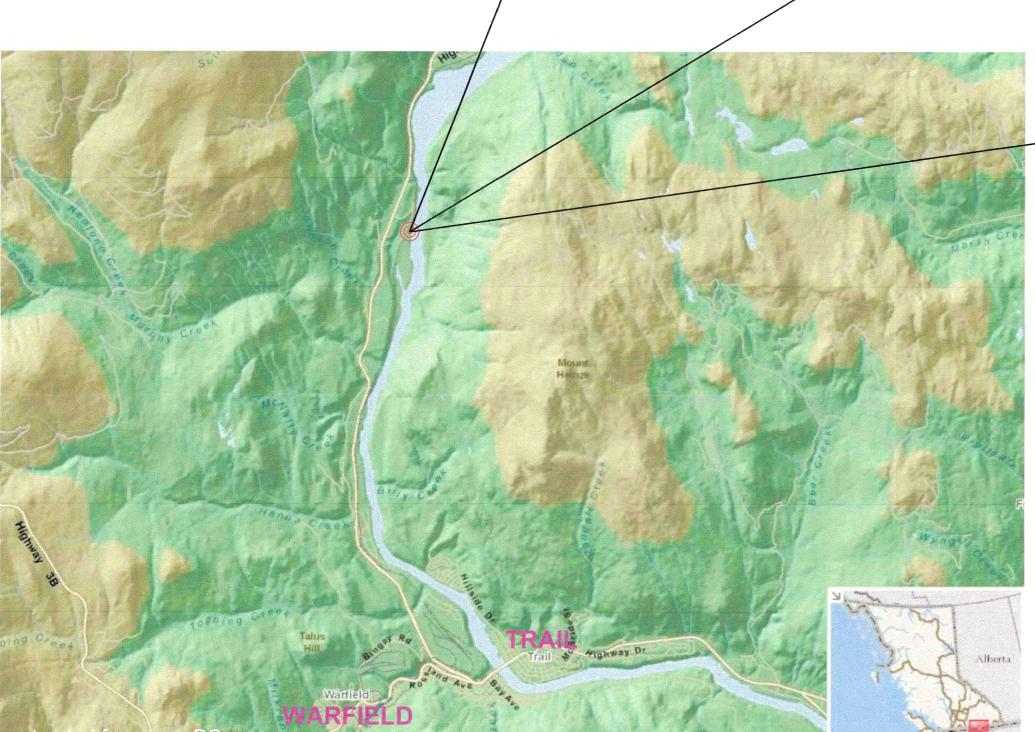
# CABLEWAY DECONSTRUCTION AND SIVE REHABILIVATION - BIRCHBANK SIVE

TRAIL, BC



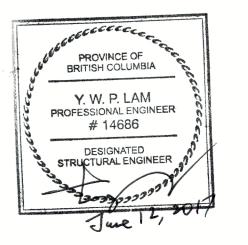


	DRAWING LIST
S1	BIRCHBANK SITE COVER SHEET & LOCATION PLAN
<b>S2</b>	BIRCHBANK SITE PHOTOS OF EXISTING SITE SHEET-1
S3	BIRCHBANK SITE PHOTOS OF EXISTING SITE SHEET-2
S4	BIRCHBANK SITE - GENERAL NOTES, EXISTING CABLEWAY PLAN & CROSS SECTION A-A
<b>S</b> 5	BIRCHBANK SITE SECTIONS & DETAILS

**KEY MAP** 

etaBC, Province of British Columbia 2013 I Government of British Columbia, Dat

SERVICES IMMOBILIERS



	Revision/ Revision	Description/Description	Date/Date
	0	ISSUED FOR TENDER	JUN. 12 2017
	1		
	2	:	
NOVIDENCE	3		
	4		
	5		-

A detail number

Client/client

**ENVIRONMENT AND CLIMATE** CHANGE CANADA

Project title/Titre du projet

CABLEWAY DECONSTRUCTION AND SITE REHABILITATION **BIRCHBANK SITE** TRAIL, BC

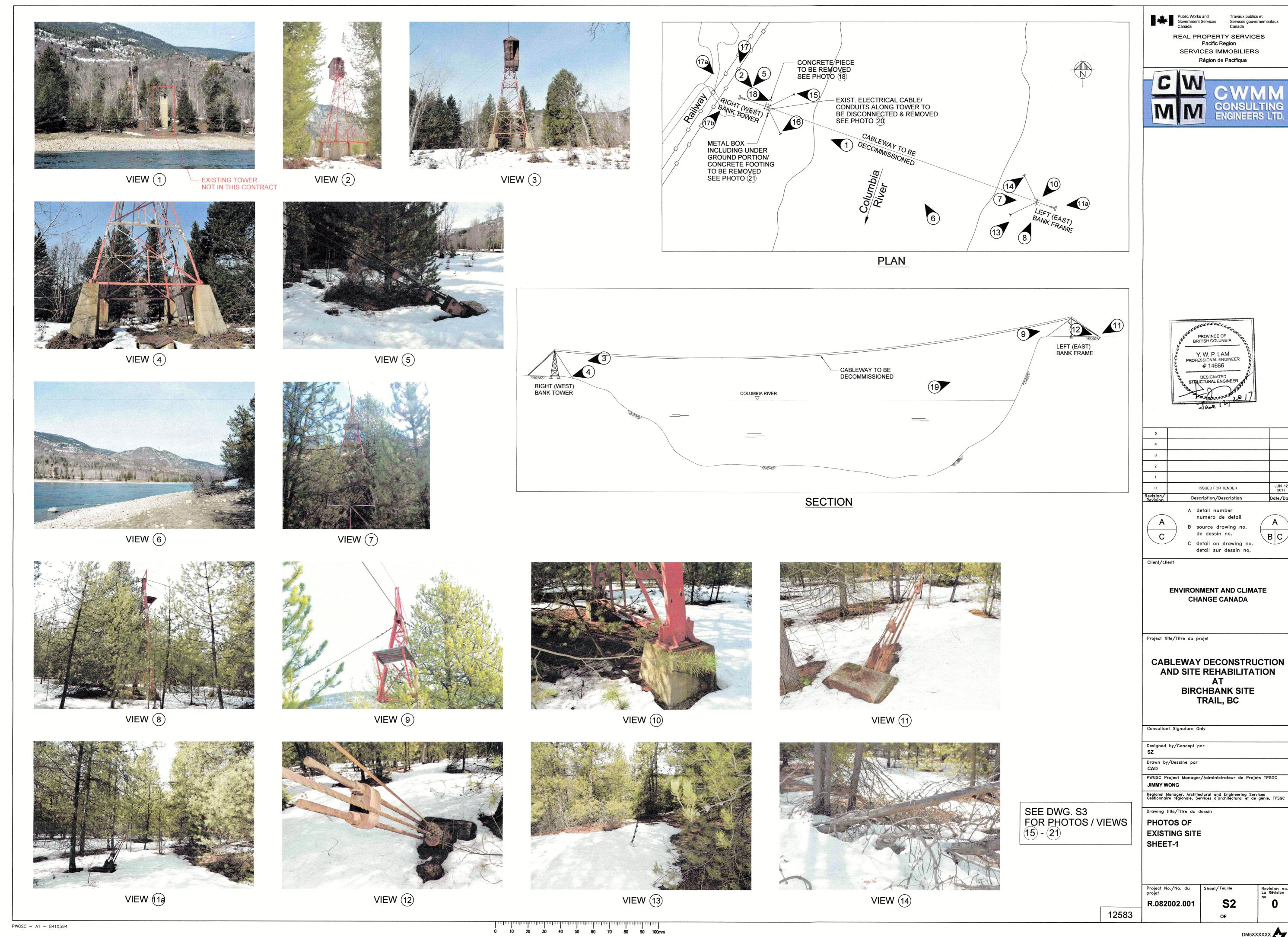
Consultant Signature Only

Drawing title/Titre du dessin COVER SHEET

& LOCATION PLAN

**S1** R.082002.001

12583









VIEW (16)

VIEW (18)



VIEW (17)



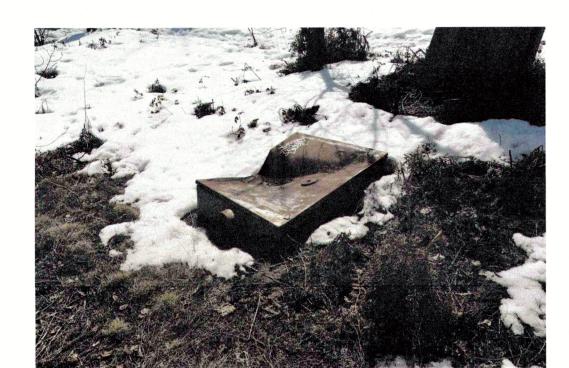
VIEW (17a)



VIEW (19)

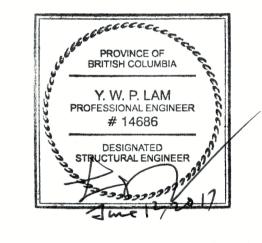


VIEW 20



VIEW (17b)

VIEW (21)

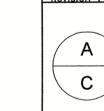


Public Works and Government Services Services gouvernementaux Canada Canada

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Région de Pacifique

5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	JUN. 12 2017



A detail number numéro de detail B source drawing no.

Description/Description

C detail on drawing no.

Date/Date

detail sur dessin no.

Client/client

ENVIRONMENT AND CLIMATE **CHANGE CANADA** 

Project title/Titre du projet

CABLEWAY DECONSTRUCTION AND SITE REHABILITATION AT BIRCHBANK SITE TRAIL, BC

Consultant Signature Only

Designed by/Concept par

Drawn by/Dessine par **CAD** 

PWGSC Project Manager/Administrateur de Projets TPSGC JIMMY WONG

Regional Manager, Architectural and Engineering Services Gestionnaire régionale, Services d'architectural et de génie, TPSGC

Drawing title/Titre du dessin

PHOTOS OF EXISTING SITE

SHEET-2

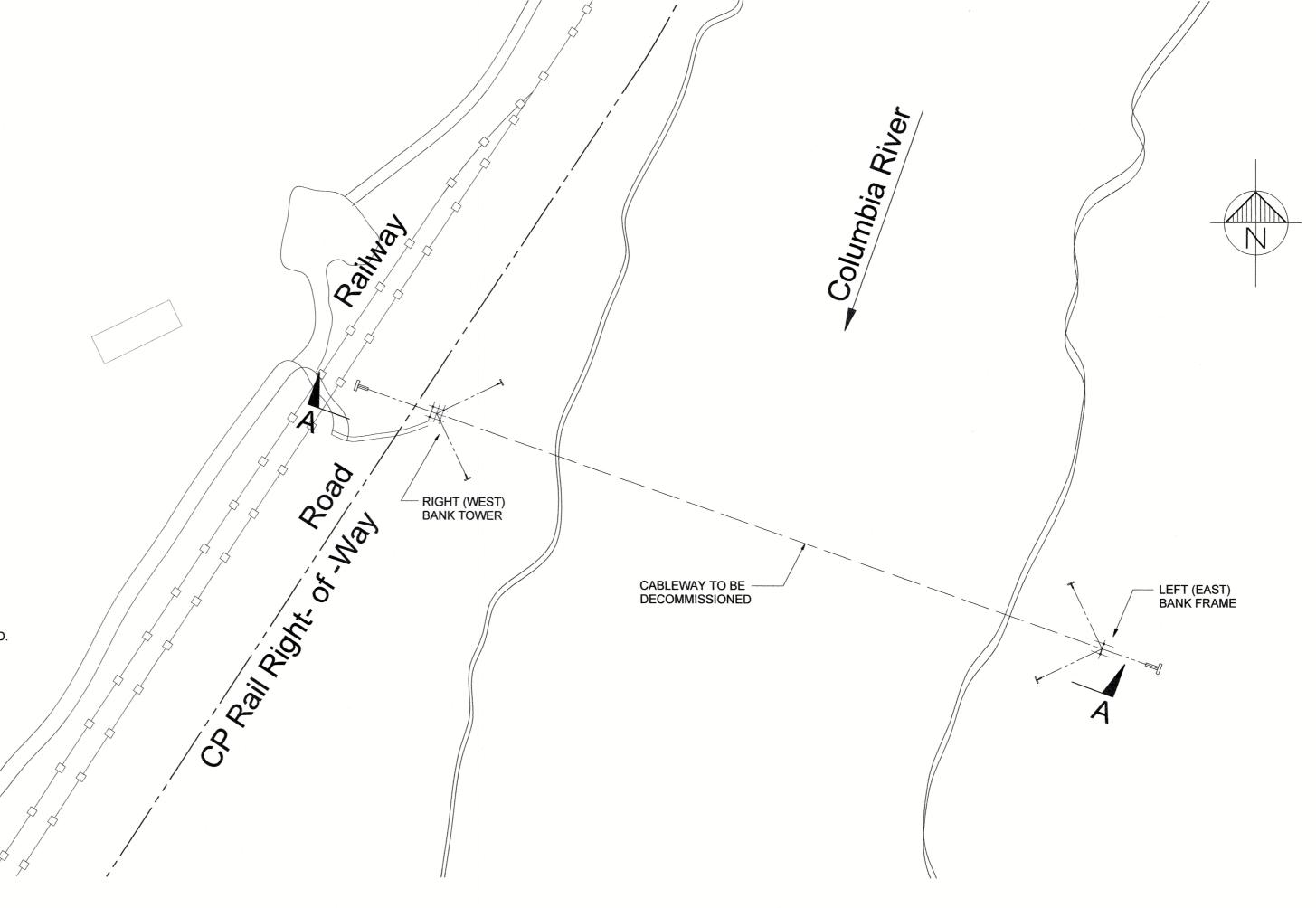
Project No./No. du Sheet/Feuille projet

**S**3

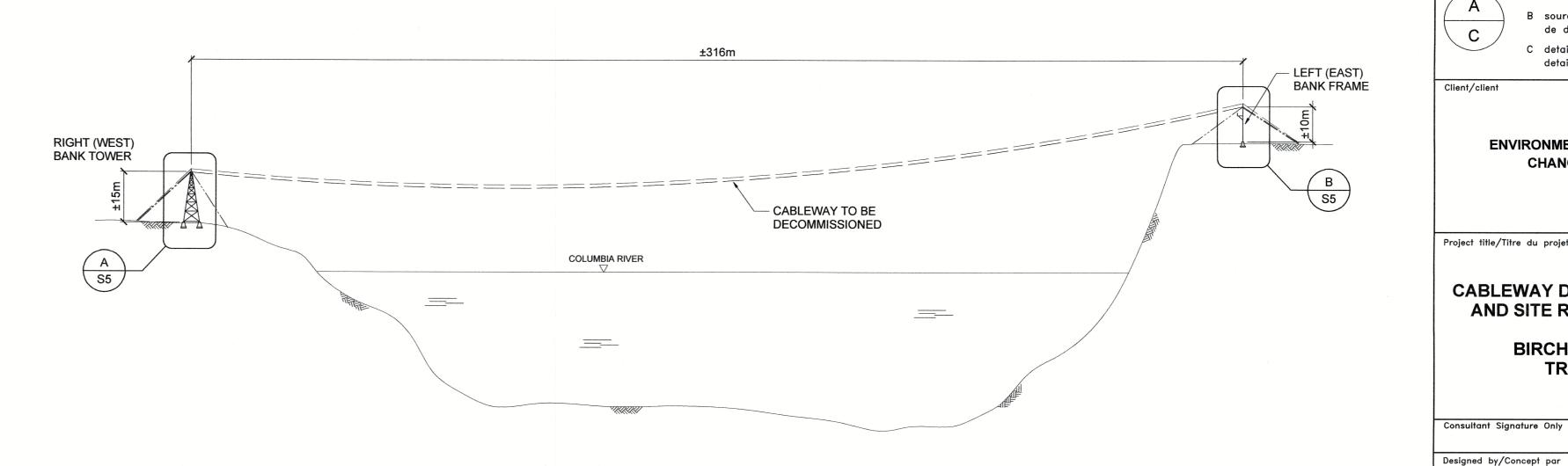
R.082002.001

### **GENERAL NOTES:**

- THE SCOPE OF THIS DECONSTRUCTION IS TO DECONSTRUCT AND REMOVE OFF SITE ALL EXISTING CABLES INCLUDING MAIN CABLE, AIRCRAFT WARNING MARKER CABLE, BACK STAY CABLES & SIDE GUY CABLES, SUPPORTING STEEL FRAMES INCLUDING ACCESSORIES, AND THE SUPPORT CONCRETE FOOTINGS AT BASE AS SHOWN, AS WELL AS TO PROVIDE SUBSEQUENT SITE REHABILITATION TO ITS EXISTING NATURAL CONDITION.
- 2. THIS SET OF DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATIONS. ANY DISCREPANCIES NOTED SHALL BE REPORTED IMMEDIATELY TO THE DEPARTMENTAL REPRESENTATIVE FOR CLARIFICATIONS.
- 3. THIS SET OF DRAWINGS SHOWS THE INTENT OF DECONSTRUCTION WORK AND DOES NOT SHOW WORK WHICH MAY BE REQUIRED FOR SAFETY DURING DECONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR GENERAL SAFETY ON AND ABOUT THE JOB SITE DURING THE DECONSTRUCTION PERIOD AND FOR DESIGN AND ERECTION OF ALL FALSEWORK, SHORING, TEMPORARY BRACING AND TEMPORARY STRENGTHENING OF THE DECONSTRUCTED COMPONENT ETC. TO ENSURE THE SAFETY TO ALL DECONSTRUCTION TEMPORARY LOADS AND TO COMPLETE THE DECONSTRUCTION WORK. ALL TEMPORARY WORKS BRACING, SHORING AND STRENGTHENING ETC. SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN BRITISH COLUMBIA. ADHERE STRICTLY TO ALL REQUIREMENTS OF THE WORK SAFE BC.
- 4. REFER TO SPECIFICATIONS FOR ENVIRONMENTAL PROTECTION PROCEDURES, SITE ACCESSIBILITY, LEAD BASE PAINT ABATEMENT AND OTHER REQUIREMENTS. FOLLOW RECOMMENDATIONS OF ENVIRONMENTAL MONITOR FOR REQUIREMENTS ON TREE PROTECTION AND ROOT PROTECTION.
- 5. REFER TO SPECIFICATIONS FOR BACKFILL MATERIALS & COMPACTION REQUIREMENTS.
- 6. IT IS ANTICIPATED THAT THERE IS HIGH POTENTIAL THAT SOME FEATURES, ARTIFACTS AND RESOURCES COULD BE ENCOUNTERED AT THE LOCATIONS OF TWO TOWERS. REFER TO SPECIFICATIONS FOR ARCHEOLOGY PRECAUTION, MONITORING AND MITIGATION REQUIREMENTS. AREAS OF TRENCH OR BULK EXCAVATION AROUND TOWERS MAY HAVE HIGHER POTENTIAL FOR INTACT SEDIMENTS WITHIN PROJECT FOOTPRINT.
- 7. BIRCHBANK TOWER AT EAST SIDE IS SITUATED WITHIN AN OPEN UNDERSTOREY AND NO RE-VEGETATION IS ANTICIPATED TO BE REQUIRED. ON THE WEST SIDE, SALVAGE / TEMPORARILY RELOCATED EXISTING SHRUBS WITHIN THE PATH OF EQUIPMENT AND EXCAVATION EXTENT AND RE-PLANT SHRUBS TO MATCH THEIR EXISTING NATURAL CONDITION. AVOID USING SEED MIXES FOR SITE REHABILITATION.
- 8. THE CONTRACTOR SHALL CARRY DUE CARE TO PROTECT EXISTING SERVICES, ADJACENT PROPERTIES AND STRUCTURES, TREES AND ETC. THE CONTRACTOR SHALL AT HIS OWN EXPENSE REPAIR AND MAKE GOOD ANY DAMAGE TO THE EXISTING STRUCTURES AND/OR GROUND SURFACE, TURF CAUSED BY THE DECONSTRUCTION ACTIVITIES SHALL BE REPAIRED OR RE-INSTATED TO THE SATISFACTION OF THE DEPARTMENTAL REPRESENTATIVE.
- 9. ALL DECONSTRUCTED MATERIAL AND DEBRIS TO BE REMOVED PROMPTLY FROM SITE AND DISPOSED OF IN A LEGAL MANNER.
- 10. COMPLY WITH ALL FEDERAL, PROVINCIAL & LOCAL BYLAWS AND ACQUIRED ALL NECESSARY PERMIT FOR THE DECONSTRUCTION WORK AS REQUIRED.
- 11. COMPLY WITH ALL SAFEWORK BRITISH COLUMBIA ACCIDENT PREVENTION REGULATIONS.
- 12. TEMPORARY CHAIN LINK FENCE, HOARDING & TREE PROTECTION BARRIER MUST BE COMPLETED PRIOR TO COMMENCEMENT OF DECONSTRUCTION WORK AS REQUIRED.
- 13. EXCAVATOR AND EQUIPMENT FOR DECONSTRUCTION WORK MUST BE CLEAN AND FREE OF LEAKS AND SHOULD BE PRESSURE-WASHED / STEAM-CLEANED TO ENSURE NO INVASIVE VEGETATION IS BROUGHT ON SITE.
- 14. PRIOR TO THE DECONSTRUCTION WORK, THE CONTRACTOR SHALL CARRY OUT A PRE-WORK SURVEY FOR WILDLIFE OR BIRDS / NESTS AND RAPTORS PRIOR TO THE ONSET OF WORK AND SUBMIT THE SURVEY TO THE DEPARTMENTAL REPRESENTATIVE FOR RECORDS.
- 15. AFTER THE DECONSTRUCTION WORK THE CONTRACTOR SHALL CARRY OUT A POST-DECONSTRUCTION SITE SURVEY, TIE-IN TO A GEODETIC MARKER, SHOWING THE LOCATIONS OF EXISTING CONCRETE FOOTING LEFT IN PLACE, IF ANY, THAT ARE ACCEPTED BY THE DEPARTMENTAL REPRESENTATIVE.
- 16. IT IS CONTRACTOR'S RESPONSIBILITY TO OBTAIN ACCESS/AUTHORIZATION AS NEEDED TO ACCESS THE SITE AND WORK AT THE SITE, INCLUDING THE STAGING AREAS, WHERE THE CONTRACTOR ALLOWS TO USE FOR TEMPORARY STORAGE AND DECONSTRUCTION. THE STAGING AREA SHALL BE REINSTATED TO ITS ORIGINAL CONDITION UPON COMPLETION OF THE DECONSTRUCTION.
- 17. THE ARCHAEOLOGICAL MONITORING SHALL BE PROVIDED BY QUALIFIED PERSONNEL DURING THE EXCAVATION. CONTRACTOR TO HIRE LOCAL FN CULTURAL OBSERVERS OR AN ARCHAEOLOGICAL FIRM TO BE PRESENT DURING ANY EXCAVATION.



**EXISTING CABLEWAY PLAN** 



EXISTING CABLEWAY CROSS SECTION A - A

1:1000

REAL PROPERTY SERVICES Pacific Region SERVICES IMMOBILIERS Région de Pacifique

BRITISH COLUMBIA

Y. W. P. LAM

**PROFESSIONAL ENGINEER** # 14686

Description/Description

numéro de detail

B source drawing no. de dessin no.

C detail on drawing no.

**ENVIRONMENT AND CLIMATE** 

**CHANGE CANADA** 

CABLEWAY DECONSTRUCTION

AND SITE REHABILITATION

AT

**BIRCHBANK SITE** TRAIL, BC

PWGSC Project Manager/Administrateur de Projets TPSGC

**EXISTING CABLEWAY PLAN** 

& CROSS SECTION A - A

Regional Manager, Architectural and Engineering Services Gestionnaire r間ionale, Services d'architectural et de g閾ie, TPSGC

detail sur dessin no.

A detail number

Client/client

Project title/Titre du projet

Drawn by/Dessine par

Drawing title/Titre du dessin **GENERAL NOTES** 

JIMMY WONG

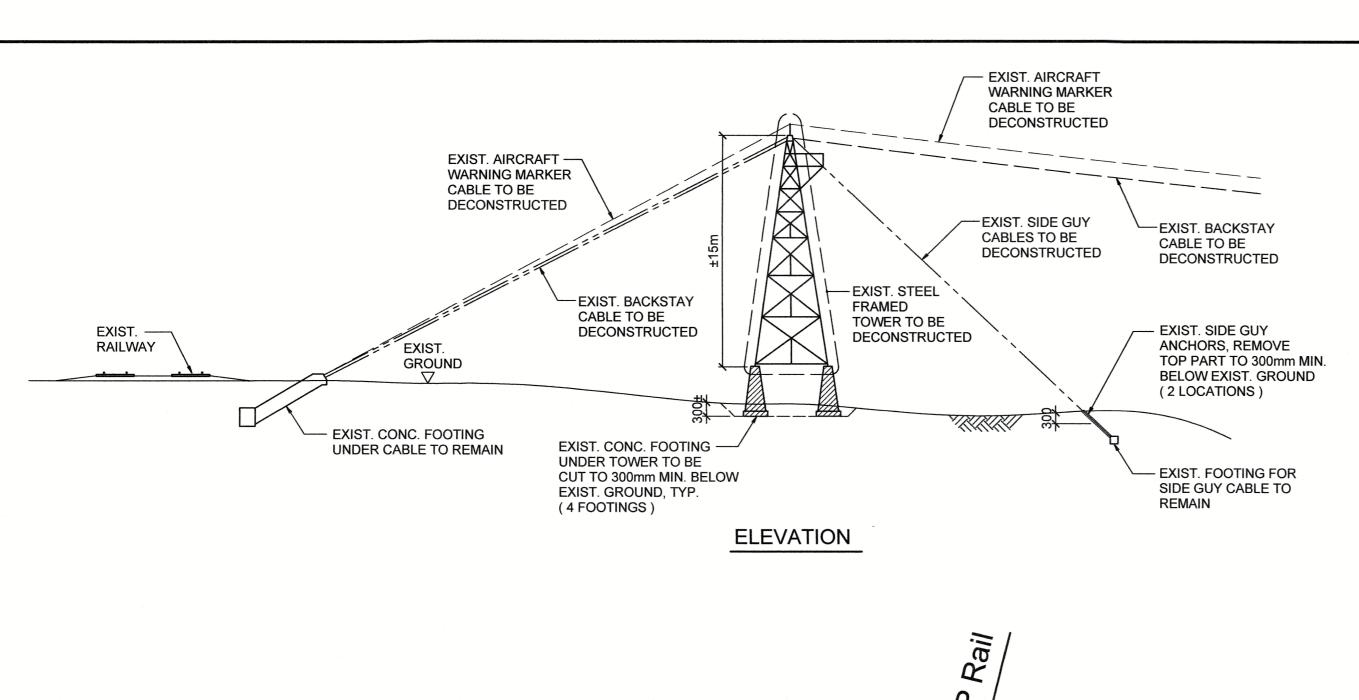
CAD

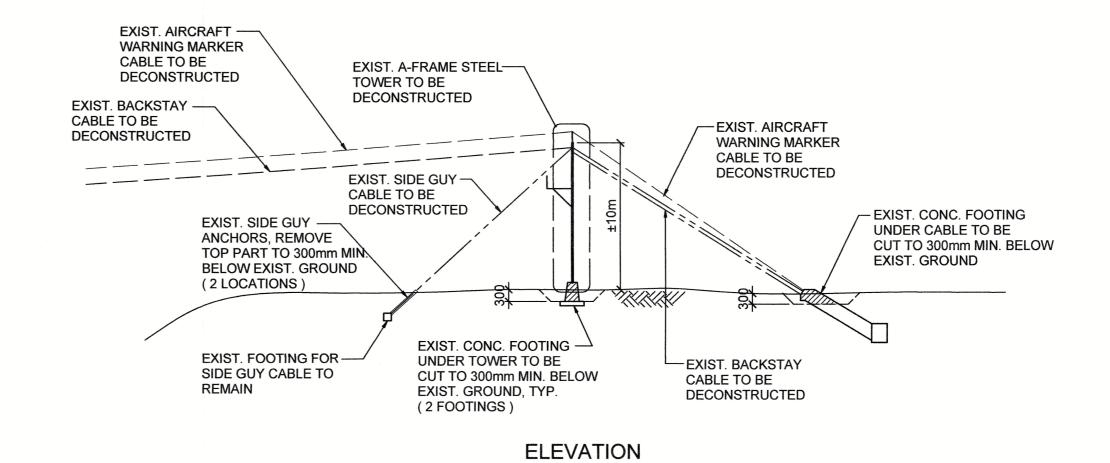
Revision no./ La R関ision **S4** 

R.082002.001

12583

DM5XXXXXX





#### EXIST. FOOTING FOR SIDE GUY CABLE TO - EXIST. SIDE GUY REMAIN CABLE TO BE DECONSTRUCTED EXIST. SIDE GUY -ANCHORS, REMOVE TOP PART TO 300mm MIN. BELOW EXIST. GROUND UNDER CABLE TO BE CUT TO 300mm MIN. BELOW EXIST. GROUND EXIST. A-FRAME STEEL TOWER TO BE DECONSTRUCTED - EXIST. BACKSTAY CABLE TO BE DECONSTRUCTED EXIST. SIDE GUY ----EXIST. CONC. FOOTING ANCHORS, REMOVE UNDER TOWER TO BE TOP PART TO 300mm MIN. CUT TO 300mm MIN. BELOW BELOW EXIST. GROUND EXIST. GROUND, TYP. (2 FOOTINGS) EXIST. FOOTING FOR SIDE GUY CABLE TO **PLAN VIEW**

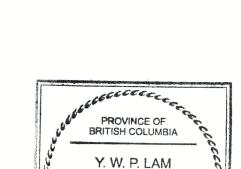
REMAIN

LEFT (EAST) BANK TOWER

EXIST. SIDE GUY — EXIST. FOOTING FOR ANCHORS, REMOVE SIDE GUY CABLE TO TOP PART TO 300mm MIN. BELOW EXIST. GROUND EXIST. SIDE GUY 30500± CABLE TO BE DECONSTRUCTED EXIST. BACKSTAY CABLE TO BE DECONSTRUCTED EXIST. CONC. FOOTING UNDER TOWER TO BE CUT TO 300mm MIN. BELOW EXIST. GROUND, TYP. (4 FOOTINGS) - EXIST. CONC. FOOTING UNDER CABLE TO REMAIN FRAMED TOWER DECONSTRUCTED EXIST. SIDE GUY CABLE TO BE DECONSTRUCTED EXIST. SIDE GUY ANCHORS, REMOVE TOP PART TO 300mm MIN. BELOW EXIST. GROUND EXIST. FOOTING FOR SIDE GUY CABLE TO REMAIN PLAN VIEW

## METHODOLOGY OF DECONSTRUCTION:

- REMOVE THE CABLE CAR TO RELEASE IMPOSED LOADING ON THE MAIN CABLE. TIGHTEN ALL EXISTING BACKSTAY AND SIDE GUY CABLES.
- DISCONNECT THE MAIN CABLE FROM THE SUPPORT OF THE TOWERS BY LOWERING THE MAIN CABLE GRADUALLY TO THE GROUND & CUT IT AFTER. PROVIDE TEMPORARY SUPPORT AND SPOOLING EQUIPMENT TO ALLOW LOWERING OF THE CABLES. THE MAIN CABLE IS PERMITTED TO SINK INTO THE RIVER TEMPORARILY AND MUST BE REMOVED FROM THE RIVER AS SOON AS POSSIBLE TO MINIMIZE IMPACTS/DISTURBANCE TO THE RIVER BED FROM DRAGGING OF THE CABLE FROM THE RIVER.
- DISCONNECT EXISTING AIRCRAFT WARNING MARKER CABLE SIMILAR TO ABOVE DISCONNECTION METHODOLOGY FOR THE MAIN CABLE.
- DISCONNECT THE BACKSTAY AND SIDE GUY CABLES ONLY AFTER THE REMOVAL OF THE MAIN CABLE AND AIRCRAFT WARNING MARKER CABLE ARE COMPLETED.
- PRIOR TO THE REMOVAL OF THE BACKSTAY AND SIDE GUY CABLES FOR THE LEFT BANK A-FRAME TOWER, PROVIDE TEMPORARY SUPPORT TO THE A-FRAME TOWER.
- THE RIGHT BANK TOWER CAN BE ACCESSED FROM THE ACCESS ROAD ADJACENT TO THE CP RAIL AND CAN BE DEMOLISHED BY REVERSAL OF THE ORIGINAL CONSTRUCTION PROCESS OF THE TOWER. DISMANTLE THE TOWERS AND THEIR FITTING FROM THE TOP DOWN PIECE BY PIECE AND REMOVE THE MEMBERS FROM SITE. PAY ATTENTION TO PROTECTING/REMOVAL OF THE LEAD PAINT OF THE ANGLE MEMBERS DURING THE DISMANTLING PROCESS.
- AS AN ALTERNATIVE, THE RIGHT BANK TOWER CAN BE DECONSTRUCTED IN STAGES AND IN SEGMENTS. THE CONTRACTOR CAN CONSIDER TO DISMANTLE THE TOWERS IN ONE ENTIRE SEGMENT OR TWO SEGMENTS AND TRUCK OFF THE SEGMENTS AS ONE PIECES TO A STAGING AREA FOR FURTHER DEMOLITION AND PROCESSING.
- TRANSPORTATION OF EQUIPMENT AND DISPOSAL OF THE DECONSTRUCTED MATERIAL ACROSS THE RAILWAY MUST OBTAIN CP RAIL'S CONSENT AND PERMIT. CONTRACTOR SHALL SEEK CP RAIL AS REQUIRED. CONTRACTOR SHALL INCLUDE AN ALTERNATIVE TRANSPORTATION AND DISPOSAL METHOD IN CASE THAT ACROSS RAILWAY FOR TRANSPORTATION OF EQUIPMENT AND DISPOSAL OF DECONSTRUCTED MATERIAL IS NOT APPROVED
- DUE TO THE POSSIBLE INACCESSIBILITY TO THE LEFT BANK TOWER FOR REMOVAL OF THE TOWER, PARTICULARLY FOR TRANSPORTATION OF EQUIPMENT AND DISPOSED MATERIALS, THE LEFT BANK TOWER CAN BE CONSIDERED TO BE DISMANTLED ON SITE IN SEGMENTS AND AIR-LIFTED BY HELICOPTER TO A STAGING AREA FOR FURTHER DEMOLITION AND PROCESSING.
- EXCAVATE AROUND THE CONCRETE FOUNDATION AND ANCHORS TO REMOVE THE CONCRETE FOUNDATION AS SHOWN, CABLE CONNECTION COMPONENTS AND DISPOSE OFF SITE. PROVIDE ARCHEOLOGY MONITORING. POTENTIAL FOR ANY OTHER GROUND DISTURBANCE DURING DECONSTRUCTION, AND RE-VEGETATION OF PLANTS OR TREES SHOULD BE MONITORED.
- REINSTATE ANY DISTURBED AREA DUE TO EXCAVATION & DECONSTRUCTION ACTIVITIES BY PROPER BACKFILLING AND GROUND REPLACEMENT WITH PLANTS OR TREES AS DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE.



**PROFESSIONAL ENGINEER** 

# 14686 DESIGNATED STRUCTURAL ENGINEE

Public Works and Government Services Canada

Services gouvernementaux

**REAL PROPERTY SERVICES** 

Pacific Region

SERVICES IMMOBILIERS

Région de Pacifique

Date/Date

Description/Description A detail number

C detail on drawing no. detail sur dessin no.

Client/client

**ENVIRONMENT AND CLIMATE CHANGE CANADA** 

Project title/Titre du projet

CABLE DECONSTRUCTION AND SITE REHABILITATION BIRCHBANK SITE TRAIL, BC

Consultant Signature Only

Designed by/Concept par

Drawn by/Dessine par

JIMMY WONG

Regional Manager, Architectural and Engineering Services
Gestionnaire rillionale, Services d'architectural et de gille, TPSGC

Drawing title/Titre du dessin SECTIONS & DETAILS

**S5** R.082002.001

12583



EXIST. CABLES NOT

- BACKFILL

EXIST. CONC. FOOTING

CUT TO 300mm MIN. BELOW

UNDER CABLE TO BE

EXIST. GROUND

GROUND

# NOTES:

**S4** 

RIGHT (WEST) BANK TOWER

- ALL DIMENSIONS SHOWN ARE APPROXIMATE & SHALL BE CONFIRMED ON SITE BY CONTRACTOR, REFER TO EXIST. DRAWINGS IN SPECIFICATIONS FOR REFERENCE.
- CONTRACTOR TO PROVIDE DETAILED DECONSTRUCTION PROCEDURES SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN BRITISH COLUMBIA AND HAVE HIS ENGINEER ON SITE TO SUPERVISE AND MONITOR THE DROPPING OF THE CABLES.
- CONTRACTOR TO PROVIDE TEMPORARY SUPPORT/PROTECTION TO THE TOWERS AND TEMPORARY STRENGTHENING TO THE EXPOSED CONCRETE FOUNDATION AND ANCHORAGE AS REQUIRED PRIOR TO DECONSTRUCTION OF THE CABLES. ENSURE THAT THE WORKERS DOING THE DE-CONNECTION OF THE MAIN CABLE AND THE SURROUNDING PROPERTIES ARE WELL PROTECTED FROM THE POTENTIAL BREAKAGE OF THE CABLE AROUND THE AREA DUE TO THE SUDDEN RELEASE OF THE TENSILE FORCE FROM DROPPING OF THE MAIN CABLE AND THE MARKER CABLE. ADEQUATE DISTANCE FROM THE BACK AND SIDES OF THE TOWERS AND ALONG EACH SIDE OF THE MAIN CABLE SHALL BE KEPT CLEAR FROM PEOPLE DURING THE DROPPING OF THE MAIN CABLE.
- FOOTPRINT OF THE TRENCH/BULK EXCAVATION MAY BE LARGER THAN THE PREVIOUSLY DISTURBED SEDIMENT FROM CONSTRUCTION. INTACT SEDIMENTS SHOULD BE MONITORED FOR CULTURAL DEPOSITS.