

CORRECTIONAL SERVICE CANADA PACIFIC REGION PERIMETER FENCE UPGRADES

DRAWING LIST - STRUCTURAL

Phase	Sheet Number	Sheet Name
0	000	TITLE SHEET AND DRAWING LIST
0	001	GATE SCHEDULE & GENERAL NOTES
0	002	KEY PLANS - KENT, MISSION & MOUNTAIN INSTITUTIONS
0	003	KEY PLANS - MATSQUI & PACIFIC INSTITUTIONS
0	201	STRUCTURAL GENERAL NOTES
0	202	STRUCTURAL TYPICAL DETAILS
0	601	TYPICAL SINGLE AND DOUBLE GATE DETAILS
0	602	TYPICAL GATE DETAILS
0	603	TYPICAL GATE ELEVATIONS
0	604	TYPICAL VEHICLE/EMERGENCY SWING GATE PHOTOS (REFERENCE ONLY)
0	605	TYPICAL TEMPORARY SECURITY FENCING PLANS
0	606	TYPICAL TEMPORARY INNER & OUTER SECURITY FENCE GENERAL NOTES AND ELEVATIONS
0	607	TYPICAL PERIMETER FENCE & TEMPORARY SECURITY INNER & OUTER FENCING SECTIONS
1	KT-101	KENT INSTITUTION GATE 1 & 2 - OVERALL DEMOLITION & NEW PLANS & PHOTOS
1	KT-102	KENT INSTITUTION GATE 4 - DEMOLITION & NEW PLANS & PHOTOS
1	KT-S201	KENT INSTITUTION GATE 1 PLAN & DETAILS
1	KT-S202	KENT INSTITUTION GATE 2 PLAN & DETAILS
1	KT-S203	KENT INSTITUTION GATE 4 PLAN & DETAILS
2	MO-101	MOUNTAIN INSTITUTION GATE 7 - DEMOLITION & NEW PLANS & PHOTOS
2	MO-102	MOUNTAIN INSTITUTION GATE 8 - DEMOLITION & NEW PLANS & PHOTOS
2	MO-103	MOUNTAIN INSTITUTION GATE 9 & 10 - PHOTOS & KEY PLAN
2	MO-104	MOUNTAIN INSTITUTION GATE 9 & 10 - DEMOLITION & NEW PLANS & PHOTO
2	MO-S201	MOUNTAIN INSTITUTION GATE 7 PLAN & DETAILS
2	MO-S202	MOUNTAIN INSTITUTION GATE 8 PLAN & DETAILS
2	MO-S203	MOUNTAIN INSTITUTION GATE 9 PLAN & DETAILS
2	MO-S204	MOUNTAIN INSTITUTION GATE 10 PLAN & DETAILS
3	MI-101	MISSION MEDIUM INSTITUTION GATE 12 & EXISTING GATES - DEMOLITION PLANS & PHOTOS
3	MI-102	MISSION MEDIUM INSTITUTION GATE 13 & 14 NEW PLANS & PHOTOS
3	MI-103	MISSION MEDIUM INSTITUTION GATE 12, 13 & 14 - NEW PLANS
3	MI-S201	MISSION MEDIUM INSTITUTION GATE 12 PLAN & DETAILS
3	MI-S202	MISSION MEDIUM INSTITUTION GATE 13 PLAN & DETAILS
3	MI-S203	MISSION MEDIUM INSTITUTION GATE 14 PLAN & DETAILS
4	MA-101	MATSQUI INSTITUTION GATE 20, 23 & 24 - DEMOLITION PLANS & EXISTING PHOTOS
4	MA-102	MATSQUI INSTITUTION GATE 20, 23 & 24 - NEW PLANS
4	MA-S201	MATSQUI INSTITUTION GATE 20 PLAN & DETAILS
4	MA-S202	MATSQUI INSTITUTION GATE 23 PLAN & DETAILS
4	MA-S203	MATSQUI INSTITUTION GATE 24 PLAN & DETAILS
5	PA-101	PACIFIC INSTITUTION GATE 17 & 18 - DEMOLITION PLAN & PHOTOS
5	PA-102	PACIFIC INSTITUTION GATE 17 & 18 - NEW PLANS
5	PA-S202	PACIFIC INSTITUTION GATE 17 PLAN & DETAILS
5	PA-S203	PACIFIC INSTITUTION GATE 18 PLAN & DETAILS
Grand total: 41		

DRAWING LIST - ELECTRICAL

Phase	Sheet Number	Sheet Name
0	E-0	ELECTRICAL NOTES AND DETAILS
1	KT-E1	KENT INSTITUTION - SITE PLAN
1	KT-E2	KENT INSTITUTION - GATE 2 FENCE ELEVATIONS
2	MO-E1	MOUNTAIN INSTITUTION - SITE PLAN
2	MO-E2	MOUNTAIN INSTITUTION - GATE 9 & 10 FENCE ELEVATIONS
3	MI-E1	MISSION MEDIUM INSTITUTION - SITE PLAN
3	MI-E2	MISSION MEDIUM INSTITUTION - GATE 14 & 14A FENCE ELEVATIONS
4	MA-E1	MATSQUI INSTITUTION - SITE PLAN
4	MA-E2	MATSQUI INSTITUTION - GATE 23 FENCE ELEVATIONS
5	PA-E1	PACIFIC INSTITUTION - SITE PLAN
5	PA-E2	PACIFIC INSTITUTION - GATE 17 & 18 PLAN AND ELEVATIONS
Grand total: 11		

DRAWING LIST - CIVIL

Phase	Sheet Number	Sheet Name
1	KT-C301	KENT INSTITUTION GATE 1 & 2
1	KT-C302	KENT INSTITUTION GATE 4
2	MO-C301	MOUNTAIN INSTITUTION GATE 7
2	MO-C302	MOUNTAIN INSTITUTION GATE 8
2	MO-C303	MOUNTAIN INSTITUTION GATE 9 & 10
3	MI-C301	MISSION MEDIUM INSTITUTION GATE 12
3	MI-C302	MISSION MEDIUM INSTITUTION GATE 13 & 14
4	MA-C301	MATSQUI INSTITUTION GATE 20 & 21
4	MA-C302	MATSQUI INSTITUTION GATE 23 & 24
5	PA-C301	PACIFIC INSTITUTION GATE 17 & 18
Grand total: 10		

LIST OF CONSULTANTS:

STRUCTURAL ENGINEER: CWMM CONSULTING ENGINEERS LTD
 ELECTRICAL ENGINEER: PSPC
 CIVIL ENGINEER: ISL ENGINEERING AND LAND SERVICES

Revision / Revision	Description / Description	Date / Date
2	ISSUE FOR TENDER	2020/11/06
1	ISSUE FOR TENDER REVIEW	2020/06/30

Client/client
CORRECTIONAL SERVICE CANADA

Project title/Titre du projet
PACIFIC REGION PERIMETER FENCE UPGRADES

Consultant Approval Box Only
 Designed by/Concept par
 L.L.
 Drawn by/Dessiné par
 CAD
 PWGSC Project Manager/Administrateur de Projets TPSGC
 DARYL SINCLAIR / TONY TANG
 PWGSC - Regional Manager, Architectural and Engineering Services / Gestionnaire régionale, Services d'architecture et de génie, TPSGC
 PREETIPAL PAUL

Drawing title/Titre du dessin
TITLE SHEET AND DRAWING LIST

Project No./No. du projet	Sheet/feuille	Revision no./Lo Révision no.
R.071529.001	000	3

NEW GATE SCHEDULE								
Phase	Location	Gate No.	New Clear Width (min)	New Clear Height (min)	New Gate Type	Existing Opening Width (+/-)	Existing Opening Height (+/-)	Remark
1	KT	1	5000	4627	E			No existing gate
1	KT	2	5000	4627	E			MOCK UP GATE. No existing gate
1	KT	4	2600	2827	M	4800	4400	Existing: swing gate
2	MO	7	2600	2827	M	3670	4430	Existing: swing gate
2	MO	8	2600	2827	M	3100	4350	Existing: swing gate
2	MO	9	5000	4627	E			No existing gate
2	MO	10	5000	4627	E	5000		Existing: sliding gate & pedestrian gate
3	MI	12	2600	2827	M			No existing gate
3	MI	13	5000	4627	E	6480	4890	Existing: swing gate
3	MI	14	5000	4627	E	6480	4700	Existing: swing gate
4	MA	20	2600	2827	M			No existing gate
4	MA	23	5000	4627	E	6730	4900	Existing: swing gate
4	MA	24	5000	4627	E	6730	4900	Existing: swing gate
5	PA	17	5000	4627	E	4320	4240	Existing: swing gate
5	PA	18	5000	4627	E	4860	4200	Existing: sliding gate & pedestrian gate
Grand total: 15								

LEGEND

KT KENT INSTITUTION
MA MATSQUI INSTITUTION
MI MISSION INSTITUTION
MO MOUNTAIN INSTITUTION
PA PACIFIC INSTITUTION

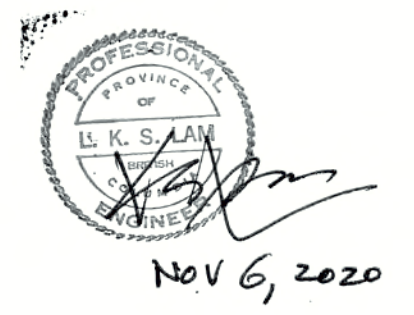
E VEHICULE / EMERGENCY GATE
M MAINTENANCE GATE
P PEDESTRIAN GATE

NEW GATE SCHEDULE NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS (mm). CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE.
- MATSQUI INSTITUTION VEHICLE/EMERGENCY SWING GATE (DOUBLE GATE) NO. 21 (REFERENCE GATE) IS COMPLETED AND NOT INCLUDED IN CONTRACT (N.I.C.). SEE PHOTOS FOR REFERENCE.
- REFER TO STRUCTURAL DRAWINGS FOR MINIMUM CLEAR WIDTH AND HEIGHT.
- PROPOSED CONSTRUCTION PHASING (SEE SPECIFICATION 01 01 50)

 PHASE 0 DRAWINGS APPLY TO ALL PHASES 1 TO 5
 PHASE 1 KENT INSTITUTION
 COMPLETE MOCK UP GATE NO. 2 AND OBTAIN APPROVAL TO PROCEED

 PHASE 2 MOUNTAIN INSTITUTION
 PHASE 3 MISSION MEDIUM INSTITUTION
 PHASE 4 MATSQUI INSTITUTION
 PHASE 5 PACIFIC INSTITUTION
- INSPECTION AND APPROVAL FROM DEPARTMENTAL REPRESENTATIVE IS REQUIRED UPON COMPLETION OF EACH NEW GATE.
- NO MAN ZONE IS SECURED SIDE (SS), OPPOSITE TO SECURED SIDE IS ATTACK SIDE (AS) UNLESS NOTED OTHERWISE.
- INSTALL FABRIC/MESH ON ATTACK SIDE (AS).
- ENSURE CENTER LINE OF NEW VEHICULAR GATE OPENINGS TO MATCH CENTER LINE OF EXISTING / NEW ROADS UNLESS NOTED OTHERWISE.
- HYDROVACUUM EXCAVATION TO BE USED FOR EXCAVATION WORK OF UNDERGROUND GRADE BEAMS AND CRASH BEAM FOUNDATION TO AVOID DAMAGE TO THE UNDERGROUND UTILITIES. ALL SERVICES TO REMAIN OPERATIONAL DURING CONSTRUCTION UNLESS NOTED OTHERWISE. THERE ARE EXISTING UNDERGROUND SERVICES IN THE VICINITY OF THE WORK AREAS. WHERE UNDERGROUND UTILITIES WILL PASS THROUGH THE NEW CONCRETE FOUNDATIONS AND AFTER THE AREA HAS BEEN HYDROVAC EXCAVATED, ARRANGE FOR A MEETING ON-SITE WITH DEPARTMENTAL REPRESENTATIVE AND ENGINEERS TO REVIEW TYPICAL DETAIL AND DETERMINE IF SITE-SPECIFIC SOLUTION IS REQUIRED.
- ALL TEMPORARY EXCAVATION TO BE COVERED BY STEEL PLATES AT END OF WORK DAY TO ALLOW ACCESS OF EMERGENCY VEHICLES.
- TYPICAL TEMPORARY SECURITY FENCING WITH LOCKABLE SWING GATES IS REQUIRED EXCEPT AS NOTED. GENERAL INSPECTION AND APPROVAL OF TEMPORARY SECURITY FENCING BY DEPARTMENTAL REPRESENTATIVE IS REQUIRED BEFORE COMMENCEMENT OF ANY WORK AND COMPLETION OF WORK BEFORE DISMANTLE. SEE NOTES FOR TEMPORARY SECURITY FENCING FOR DETAILS.
- ALL NEW FENCE POSTS INCLUDING TEMPORARY SECURITY FENCING POSTS SHALL BE SPACED A MAXIMUM OF 2400MM APART (CENTRE OF POST TO CENTRE). REFER TO SPECIFICATION FOR FENCE POST REQUIREMENTS.
- NO GAP SHALL EXCEED 125MM, FOR EXAMPLE BETWEEN POSTS OR FABRIC, BOTTOM RAIL AND GROUND ETC.
- SEE TYPICAL "NO DIGGING ZONE" TO PROTECT MDS AT NO MAN ZONE. NOTE 'NO DIGGING ZONE' ON DRAWING (TYPICAL 1000MM BOTH SIDES FROM MDS). MDS REMAINS OPERATIONAL DURING CONSTRUCTION.
- DURING CONSTRUCTION, FDS AND MDS SECTORS WILL BE 'MASKED' DURING CONSTRUCTION WORK HOURS AND THEN RE-INSTATED AFTER CONSTRUCTION WORK ENDS FOR THE DAY.
- FINAL REVIEW AND APPROVAL FROM DEPARTMENTAL REPRESENTATIVE IS REQUIRED BEFORE DISMANTLE OF TEMPORARY INNER AND OUTER SECURITY FENCING, GATES AND FDS PRIOR TO COMMENCEMENT OF CIVIL WORK.
- DUE TO EXISTING OPERATIONAL MDS IN "NO DIGGING ZONE", NEW CIVIL WORK ON TOP OF "NO DIGGING ZONE" SHOULD BE CARRIED OUT WITH CARE. SEE SPECIFICATION.



2	ISSUE FOR TENDER	2020/11/06
1	ISSUE FOR TENDER REVIEW	JUN 22, 2020
Revision/Revision	Description/Description	Date/Date

Client/client

CORRECTIONAL SERVICE CANADA

Project title/Titre du projet

PACIFIC REGION PERIMETER FENCE UPGRADES

Consultant Approval Box Only

Designed by/Concept par
DD

Drawn by/Dessiné par
DD

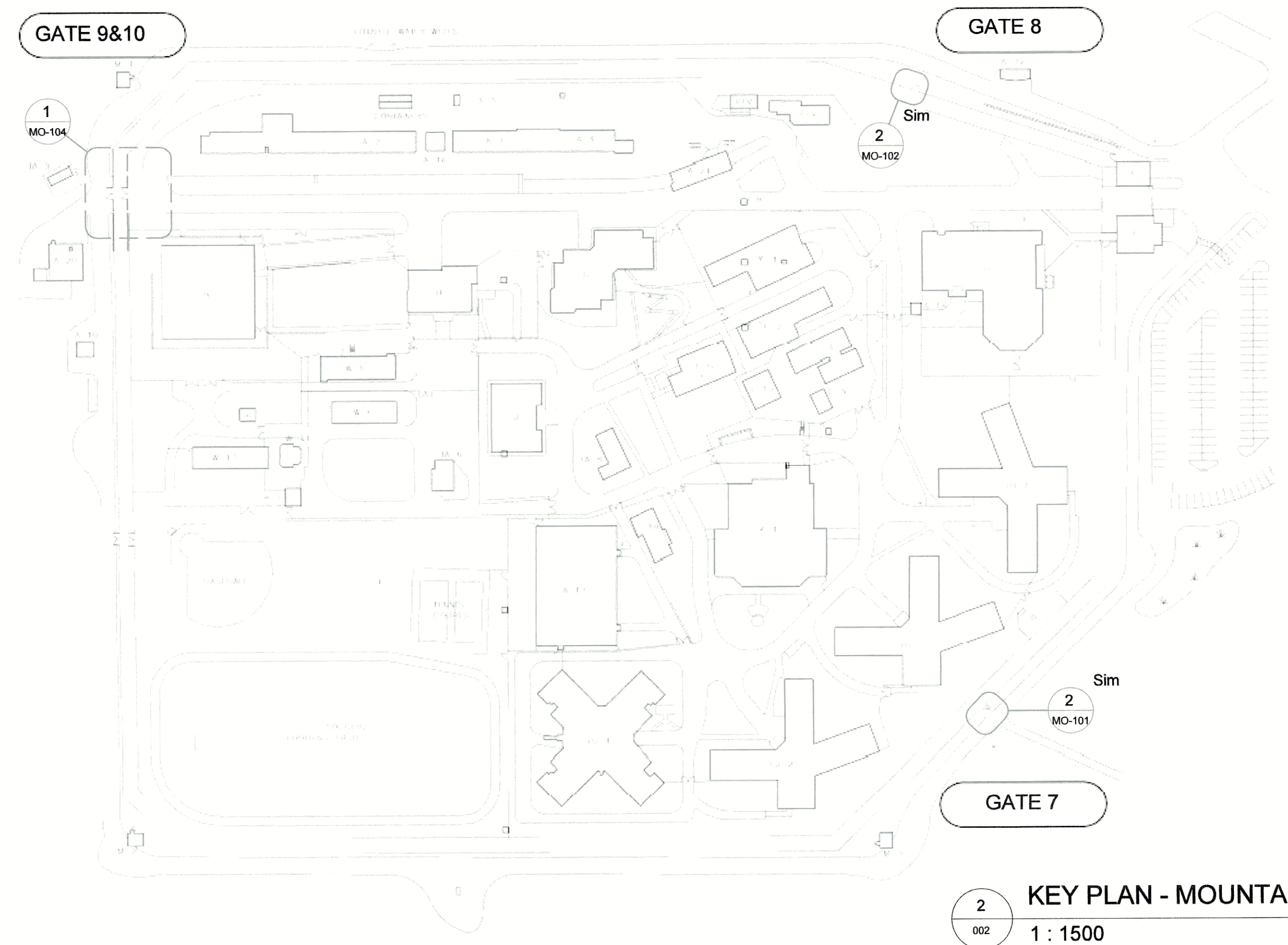
PWSC Project Manager/Administrateur de Projets TPSGC
DARYL SINCLAIR / TONY TANG

PWSC, Regional Manager, Architectural and Engineering Services/
Gestionnaire régionale, Services d'architecture et de génie, TPSGC
PREETIPAL PAUL

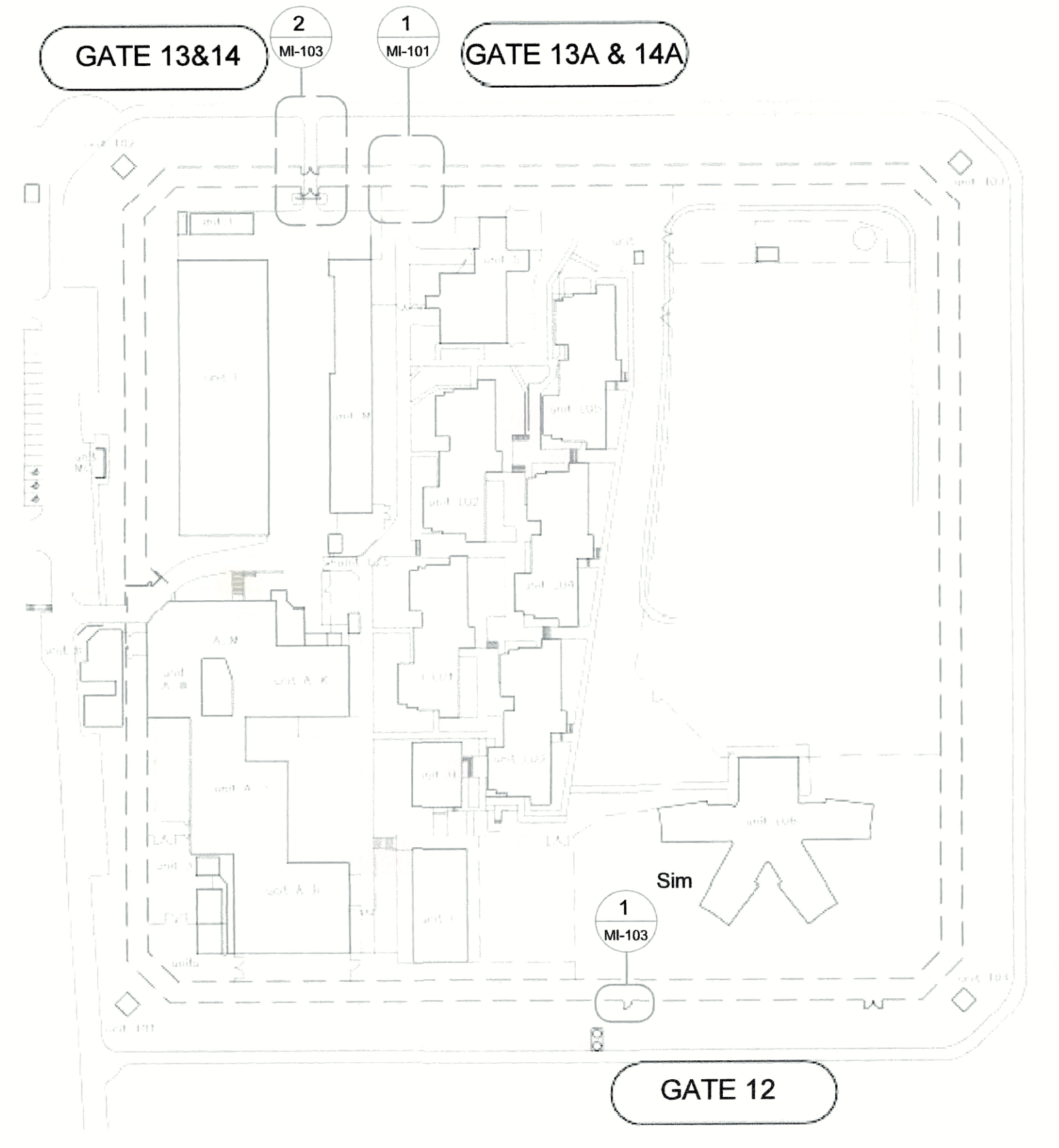
Drawing title/Titre du dessin

GATE SCHEDULE & GENERAL NOTES

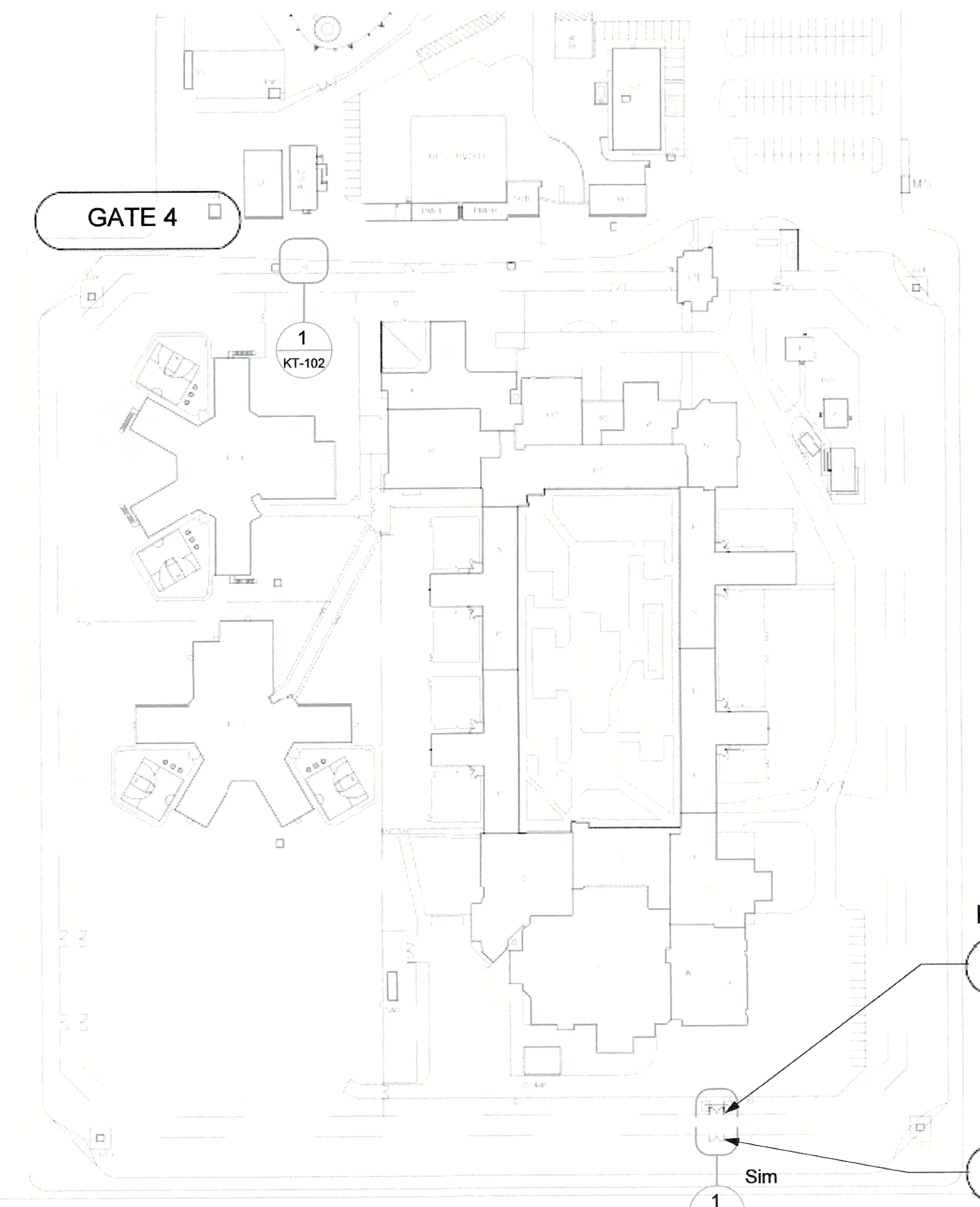
Project No./No. du projet R.071529.001	Sheet/ Feuille 001	Revision no./ La Révision no.
--	------------------------------	--



2 KEY PLAN - MOUNTAIN (MO)
002 1 : 1500



3 KEY PLAN - MISSION (MI)
002 1 : 1500



1 KEY PLAN - KENT (KT)
002 1 : 1500

2	ISSUE FOR TENDER	2020/11/06
1	ISSUE FOR TENDER REVIEW	JUN 22, 2020
Revision/Revision	Description/Description	Date/Date

Client/client
CORRECTIONAL SERVICE CANADA

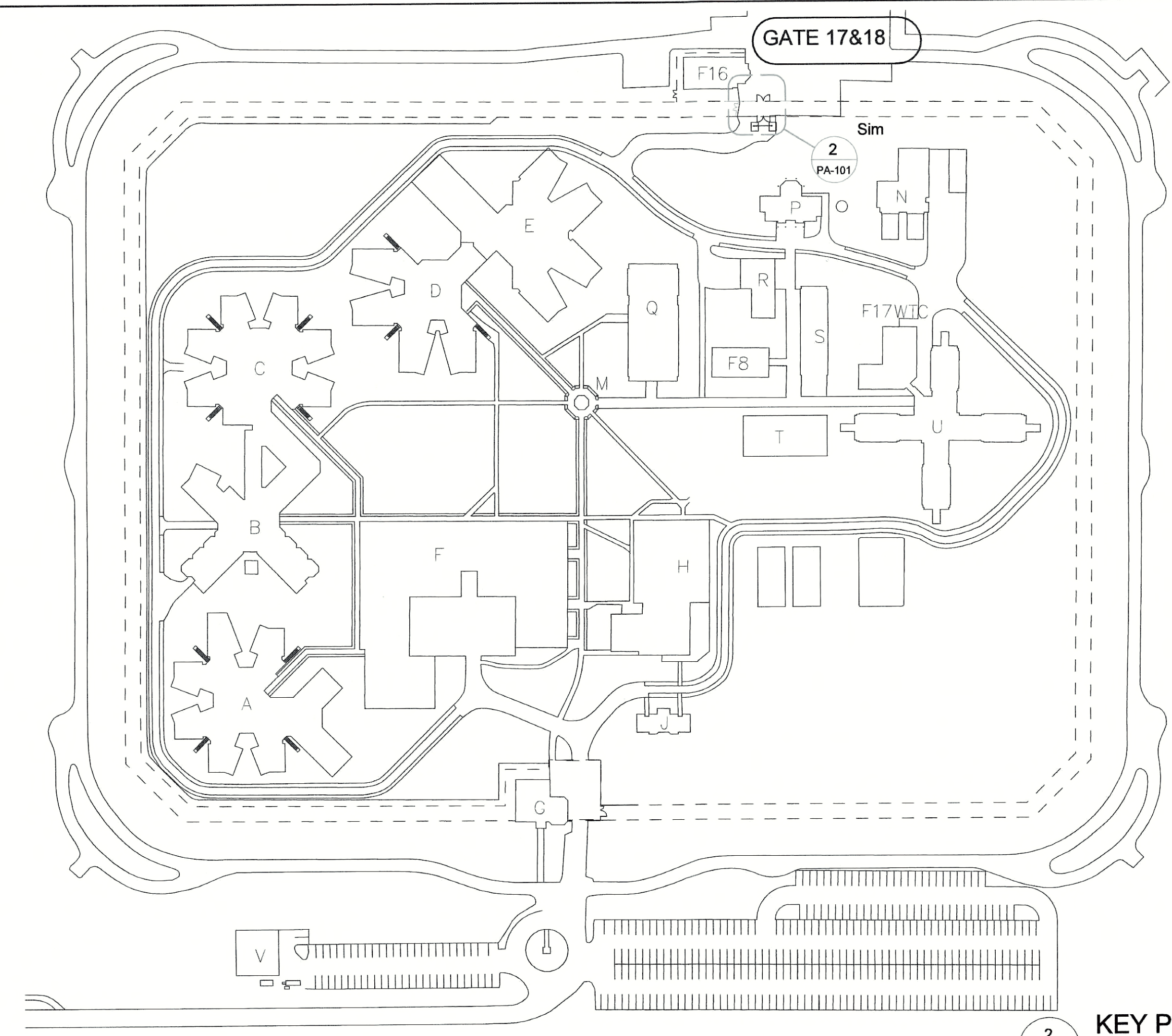
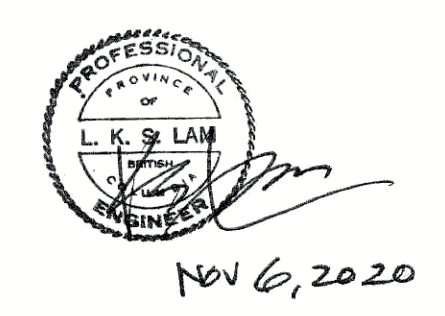
Project title/Titre du projet
PACIFIC REGION PERIMETER FENCE UPGRADES

Consultant Approval Box Only
Designed by/Concept par DD
Drawn by/Dessine par DD
PWGSC Project Manager/Administrateur de Projets TP5GC
DARYL SINCLAIR / TONY TANG
PWGSC, Regional Manager, Architectural and Engineering Services/
Gestionnaire régionale, Services d'architectural et de génie, TP5GC
PREETIPAL PAUL

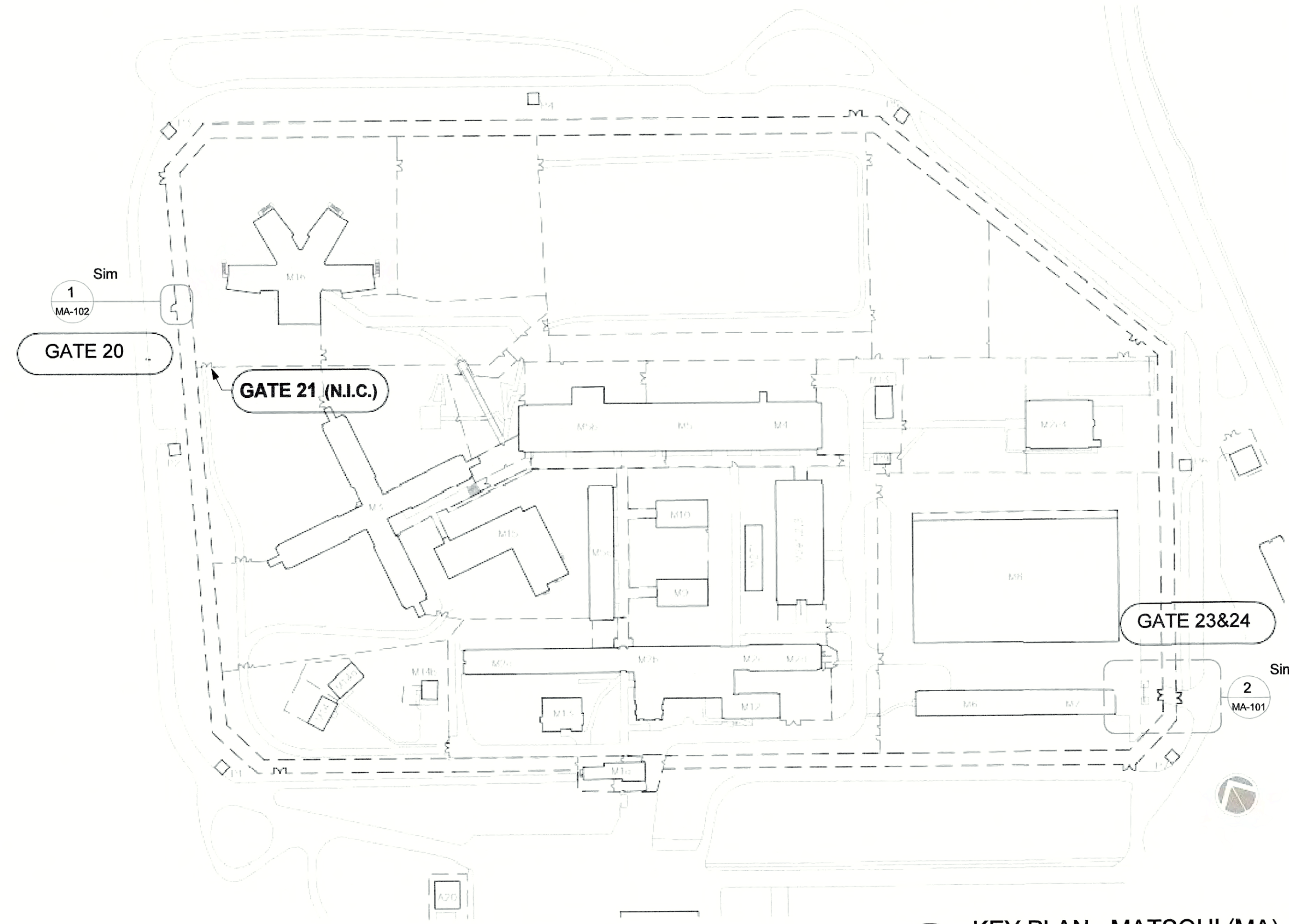
Drawing title/Titre du dessin
KEY PLANS - KENT, MISSION & MOUNTAIN INSTITUTIONS

Project No./No. du projet R.071529.001	Sheet/ Feuille 002	Revision no./ La Révision no.
--	------------------------------	----------------------------------





2
003
KEY PLAN - PACIFIC (PA)
1 : 1500



1
003
KEY PLAN - MATSQUI (MA)
1 : 1500

Revision/Revision	Description/Description	Date/Date
2	ISSUE FOR TENDER	2020/11/08
1	ISSUE FOR TENDER REVIEW	JUN 22, 2020

Client/client
CORRECTIONAL SERVICE CANADA

Project title/Titre du projet
PACIFIC REGION PERIMETER FENCE UPGRADES

Designed by/Concept par
DD
Drawn by/Dessine par
DD

PWGSC Project Manager/Administrateur de Projets TPSGC
DARYL SINCLAIR / TONY TANG

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

Drawing title/Titre du dessin
KEY PLANS - MATSQUI & PACIFIC INSTITUTIONS

Project No./No. du projet R.071529.001	Sheet/ Feuille 003	Revision no./ La Révision no. 1
--	------------------------------	--



GENERAL

- THIS SET OF DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE STRUCTURAL SPECIFICATIONS AND WITH THE DRAWINGS AND SPECIFICATIONS FROM ALL OTHER CONSULTANTS. ANY DISCREPANCIES NOTED SHALL BE REPORTED IMMEDIATELY FOR CLARIFICATION.
- THIS SET OF DRAWINGS SHOWS THE COMPLETED STRUCTURE AND DOES NOT SHOW WORK WHICH MAY BE REQUIRED FOR SAFETY DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR GENERAL SAFETY ON AND ABOUT THE JOB SITE DURING THE CONSTRUCTION PERIOD AND FOR DESIGN AND ERECTION OF ALL FALSEWORK, SHORING, BRACING ETC. TO ENSURE THE SAFETY OF ALL CONSTRUCTION TEMPORARY LOADS AND TO COMPLETE THE WORK. ALL TEMPORARY WORKS AND SHORING ETC. SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN BRITISH COLUMBIA. ADHERE STRICTLY TO ALL REQUIREMENTS OF THE WORKSAFE BRITISH COLUMBIA.
- ALL CODE REFERENCES ARE TO LATEST EDITIONS AS REFERENCED IN THE NBC 2015.

FIELD REVIEW:

- DEPARTMENTAL REPRESENTATIVE PROVIDES FIELD REVIEW FOR THE WORK SHOWN ON THE STRUCTURAL DRAWINGS PREPARED BY DEPARTMENTAL REPRESENTATIVE. THIS REVIEW IS A PERIODIC REVIEW AT THE PROFESSIONAL JUDGMENT OF DEPARTMENTAL REPRESENTATIVE. THE PURPOSE IS TO ASCERTAIN THAT THE WORK IS IN GENERAL CONFORMANCE WITH THE PLANS AND SUPPORTING DOCUMENTS PREPARED BY DEPARTMENTAL REPRESENTATIVE AND TO FULFILL THE REQUIREMENTS FOR THE COMPLETION OF LETTERS OF ASSURANCE REQUIRED BY THE APPLICABLE BUILDING CODE.
- ALL NON-CONFORMING WORKS THAT REQUIRE REMEDIAL ACTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ANY EXTRA TIME OR COST INCURRED TO DEPARTMENTAL REPRESENTATIVE TO ASSIST OR ADVISE THE CONTRACTOR IN RECTIFYING THE WORK SHALL BE BORNE BY THE CONTRACTOR.
- ENSURE THAT WORK TO BE INSPECTED IS COMPLETE AT THE TIME OF INSPECTION AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ADDITIONAL INSPECTIONS REQUIRED DUE TO THE INCOMPLETE WORK OR POORLY EXECUTED WORK, AS JUDGED BY DEPARTMENTAL REPRESENTATIVE, AS WELL AS ADDITIONAL DESIGN OR REMEDIAL WORK CAUSED BY DEVIATIONS FROM THESE DRAWINGS MAY BE CHARGED TO THE GENERAL CONTRACTOR AT THE DISCRETION OF DEPARTMENTAL REPRESENTATIVE.
- A MINIMUM 48 HOURS NOTICE SHALL BE GIVEN BY THE CONTRACTOR FOR ANY INSPECTION TO BE CARRIED OUT BY DEPARTMENTAL REPRESENTATIVE.

SHOP DRAWINGS:

- DESIGNERS & MANUFACTURERS OF ALL STRUCTURAL ELEMENTS/COMPONENTS/CONNECTIONS SHALL SUBMIT COMPLETE SHOP DRAWINGS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF BRITISH COLUMBIA TO THE DEPARTMENTAL REPRESENTATIVE FOR REVIEW PRIOR TO FABRICATION. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH SPECIFICATIONS AND TO ALLOW MINIMUM TWO WEEKS FOR REVIEW. THIS SUBMISSION OR ITS REVIEW SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY FOR PROVIDING PROPER ENGINEERING DESIGN, METHODS, EQUIPMENT, WORKMANSHIP, SAFETY PRECAUTION AND PRIOR REVIEW OF THESE ELEMENTS. THE PROFESSIONAL ENGINEER SEALING THE SHOP DRAWINGS SHALL BE RESPONSIBLE FOR INSPECTION OF HIS DESIGN COMPONENTS FOR CONFORMANCE WITH HIS DESIGN AND SHOP DRAWINGS.
- THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL CONFIRM AND COORDINATE DIMENSIONS, LOCATIONS AND NUMBER OF THE STRUCTURAL ELEMENTS FOR WHICH SHOP DRAWINGS ARE TO BE PRODUCED.

DESIGN LOADS:

- THIS STRUCTURE HAS BEEN DESIGNED FOR SNOW, WIND AND SEISMIC FORCES IN SUBSTANTIAL COMPLIANCE WITH THE PROVISIONS SET FORTH IN THE NATIONAL BUILDING CODE 2015. IMPORTANT CATEGORY=NORMAL. (AS PER OWNER'S REQUIREMENT).

KENT INSTITUTION

GROUND SNOW: RAIN LOAD:	Ss = 2.4 kPa Sr = 0.7 kPa
IMPORTANCE FACTORS FOR SNOW	Is = 1.0 FOR STRENGTH Is = 0.9 FOR SERVICEABILITY
WIND LOAD:	PROBABILITY 1/10 = 0.36 kPa PROBABILITY 1/50 = 0.47 kPa
IMPORTANCE FACTORS FOR WIND	Iw = 1.0 FOR STRENGTH Iw = 0.75 FOR SERVICEABILITY

Sa(0.2)	Sa(0.5)	Sa(1.0)	Sa(2.0)	Sa(5.0)	Sa(10.0)	PGA
0.486	0.409	0.257	0.164	0.060	0.020	0.218

$I_E = 1.0$ FOR STRENGTH
 $I_E = 1.0$ FOR SERVICEABILITY
(CLAUSE 4.1.8.5 FOR SERVICEABILITY)
 $F_a = 1.44$ $F_v = 1.94$
 $R_d = 1.5$ $R_o = 1.3$

SITE CLASS E

MOUNTAIN INSTITUTION IN AGASSIZ

GROUND SNOW: RAIN LOAD:	Ss = 2.4 kPa Sr = 0.7 kPa
IMPORTANCE FACTORS FOR SNOW	Is = 1.0 FOR STRENGTH Is = 0.9 FOR SERVICEABILITY
WIND LOAD:	PROBABILITY 1/10 = 0.36 kPa PROBABILITY 1/50 = 0.47 kPa
IMPORTANCE FACTORS FOR WIND	Iw = 1.0 FOR STRENGTH Iw = 0.75 FOR SERVICEABILITY

Sa(0.2)	Sa(0.5)	Sa(1.0)	Sa(2.0)	Sa(5.0)	Sa(10.0)	PGA
0.465	0.390	0.248	0.158	0.058	0.020	0.209

$I_E = 1.0$ FOR STRENGTH
 $I_E = 1.0$ FOR SERVICEABILITY
(CLAUSE 4.1.8.5 FOR SERVICEABILITY)
 $F_a = 1.5$ $F_v = 1.95$
 $R_d = 1.5$ $R_o = 1.3$

SITE CLASS E

MISSION INSTITUTION IN MISSION

GROUND SNOW: RAIN LOAD:	Ss = 2.4 kPa Sr = 0.3 kPa
IMPORTANCE FACTORS FOR SNOW	Is = 1.0 FOR STRENGTH Is = 0.9 FOR SERVICEABILITY
WIND LOAD:	PROBABILITY 1/10 = 0.33 kPa PROBABILITY 1/50 = 0.43 kPa
IMPORTANCE FACTORS FOR WIND	Iw = 1.0 FOR STRENGTH Iw = 0.75 FOR SERVICEABILITY

Sa(0.2)	Sa(0.5)	Sa(1.0)	Sa(2.0)	Sa(5.0)	Sa(10.0)	PGA
0.634	0.541	0.323	0.201	0.068	0.024	0.279

$I_E = 1.0$ FOR STRENGTH
 $I_E = 1.0$ FOR SERVICEABILITY
(CLAUSE 4.1.8.5 FOR SERVICEABILITY)
 $F_a = 1.24$ $F_v = 1.89$
 $R_d = 1.5$ $R_o = 1.3$

SITE CLASS E

PACIFIC INSTITUTION

GROUND SNOW: RAIN LOAD:	Ss = 2.0 kPa Sr = 0.3 kPa
IMPORTANCE FACTORS FOR SNOW	Is = 1.0 FOR STRENGTH Is = 0.9 FOR SERVICEABILITY
WIND LOAD:	PROBABILITY 1/10 = 0.34 kPa PROBABILITY 1/50 = 0.44 kPa
IMPORTANCE FACTORS FOR WIND	Iw = 1.0 FOR STRENGTH Iw = 0.75 FOR SERVICEABILITY

Sa(0.2)	Sa(0.5)	Sa(1.0)	Sa(2.0)	Sa(5.0)	Sa(10.0)	PGA
0.706	0.598	0.350	0.214	0.072	0.025	0.310

$I_E = 1.0$ FOR STRENGTH
 $I_E = 1.0$ FOR SERVICEABILITY
(CLAUSE 4.1.8.5 FOR SERVICEABILITY)
 $F_a = 1.12$ $F_v = 1.15$
 $R_d = 1.5$ $R_o = 1.3$

SITE CLASS D

FRASER VALLEY INSTITUTION

GROUND SNOW: RAIN LOAD:	Ss = 2.0 kPa Sr = 0.3 kPa
IMPORTANCE FACTORS FOR SNOW	Is = 1.0 FOR STRENGTH Is = 0.9 FOR SERVICEABILITY
WIND LOAD:	PROBABILITY 1/10 = 0.34 kPa PROBABILITY 1/50 = 0.44 kPa
IMPORTANCE FACTORS FOR WIND	Iw = 1.0 FOR STRENGTH Iw = 0.75 FOR SERVICEABILITY

Sa(0.2)	Sa(0.5)	Sa(1.0)	Sa(2.0)	Sa(5.0)	Sa(10.0)	PGA
0.703	0.596	0.349	0.214	0.072	0.025	0.308

$I_E = 1.0$ FOR STRENGTH
 $I_E = 1.0$ FOR SERVICEABILITY
(CLAUSE 4.1.8.5 FOR SERVICEABILITY)
 $F_a = 1.12$ $F_v = 1.15$
 $R_d = 1.5$ $R_o = 1.3$

SITE CLASS D

MATSQUI INSTITUTION IN ABTTSFORD

GROUND SNOW: RAIN LOAD:	Ss = 2.0 kPa Sr = 0.3 kPa
IMPORTANCE FACTORS FOR SNOW	Is = 1.0 FOR STRENGTH Is = 0.9 FOR SERVICEABILITY
WIND LOAD:	PROBABILITY 1/10 = 0.34 kPa PROBABILITY 1/50 = 0.44 kPa
IMPORTANCE FACTORS FOR WIND	Iw = 1.0 FOR STRENGTH Iw = 0.75 FOR SERVICEABILITY

Sa(0.2)	Sa(0.5)	Sa(1.0)	Sa(2.0)	Sa(5.0)	Sa(10.0)	PGA
0.702	0.569	0.349	0.214	0.072	0.025	0.308

$I_E = 1.0$ FOR STRENGTH
 $I_E = 1.0$ FOR SERVICEABILITY
(CLAUSE 4.1.8.5 FOR SERVICEABILITY)
 $F_a = 1.12$ $F_v = 1.15$
 $R_d = 1.5$ $R_o = 1.3$

SITE CLASS D

- SPECIFIED UNIFORM LIVE LOADS ON GRADE:
DRIVE WAY 12 kPa
- DESIGN SPECIFIED CONCENTRATED LIVE LOADS ON GRADE:
DRIVE WAY 54 kN
- WORST CASE OF UNIFORM OR CONCENTRATED LIVE LOADS WILL BE USED FOR DESIGN OF STRUCTURAL MEMBERS.
- SPECIFIC TRAFFIC LOADS PER CANADIAN HIGHWAY BRIDGE DESIGN CODE 2014.
MAINTENANCE GATE MAINTENANCE VEHICLE LOAD
VEHICLE/EMERGENCY GATE BCL-625 TRUCK LOAD
- DESIGN IMPACT FORCE FOR CRASH BEAM: EQUIVALENT TO US DEPARTMENT OF STATE
K4 CERTIFICATION 10 6804 kg @ 48.3 KPH

CONSTRUCTION LOADS:

- SHORING DESIGN BY CONTRACTOR. INFORM DEPARTMENTAL REPRESENTATION PRIOR TO LOAD APPLICATION.

FOUNDATION AND SITE WORK

- REFER TO GEOTECHNICAL REPORT PREPARED BY JECTH CONSULTANTS INC. DATED NOV 9, 2018, NOV 29, 2018, NOV 30, 2018 RESPECTIVELY FOR SITES.
a. FRASER VALLEY INSTITUTION, MATSQUI INSTITUTION AND PACIFIC INSTITUTION AT ABBOTSFORD, BC.
b. KENT INSTITUTION AT AGASSIZ, BC.
c. MOUNTAIN INSTITUTION AT AGASSIZ, BC AND MISSION INSTITUTION AT MISSION, BC.
AND ALL ITS SUPPLEMENTS AND AMENDMENTS FOR EXCAVATION, BACKFILLING, FILL MATERIALS, COMPACTION, FROST PROTECTION AND OTHER SITE PREPARATION REQUIREMENTS NOT SHOWN ON THESE DRAWINGS.
- ASSUMED DESIGN ALLOWABLE SOIL BEARING CAPACITIES:

KENT INSTITUTION IN AGASSIZ

PAD FOOTINGS	SLS=100 kPa ULS=150 kPa ULS=200 kPa (SEISMIC) SUBGRADE MODULUS=10000 kN/m ³
--------------	---

MOUNTAIN INSTITUTION IN AGASSIZ

PAD FOOTINGS	SLS=75 kPa ULS=120 kPa ULS=160 kPa (SEISMIC) SUBGRADE MODULUS=8000 kN/m ³
--------------	---

MISSION INSTITUTION IN MISSION

PAD FOOTINGS	SLS=50 kPa ULS=75 kPa ULS=100 kPa (SEISMIC) SUBGRADE MODULUS=4500 kN/m ³
--------------	--

PACIFIC INSTITUTION / FRASER VALLEY INSTITUTION / MATSQUI INSTITUTION IN ABTTSFORD

PAD FOOTINGS	SLS=100 kPa ULS=150 kPa ULS=200 kPa (SEISMIC) SUBGRADE MODULUS=10000 kN/m ³
--------------	---

- ANY FOOTING ELEVATIONS INDICATED ON THE DRAWINGS ARE GENERAL AND SHALL BE USED FOR ESTIMATING AND BIDDING PURPOSES. FOOTINGS MAY HAVE TO BE PLACED AT DIFFERENT ELEVATIONS AS A RESULT OF LOCAL SOILS CONDITIONS. UNDERGROUND SERVICES AND TO ACCOMMODATE OTHER MECHANICAL AND ELECTRICAL SERVICES. FOLLOW TYPICAL DETAILS SHOWN ON THESE DRAWINGS FOR FOOTING PLACEMENT RELATIVE TO ADJACENT FOOTINGS, SUMP AND OTHER EXCAVATED STRUCTURES AND LOCATE AS DIRECTED BY GEOTECHNICAL ENGINEER. ALL EXISTING UNDERGROUND UTILITIES LOCATIONS SHOWN ON CIVIL AND ELECTRICAL PLANS ARE APPROXIMATE AND MUST BE CONFIRMED BY CONTRACTOR ON SITE.
- THE BASES OF FOUNDATIONS SHALL BE PROTECTED FROM RAIN, SNOW AND ANY WATER INFILTRATION.
- NO FOUNDATIONS MAY BE POURED BEFORE THE BEARING MATERIAL HAS BEEN INSPECTED BY THE GEOTECHNICAL ENGINEER. NOTIFY THE GEOTECHNICAL ENGINEER MINIMUM 48 HOURS BEFORE INSTALLATION OF FOOTING REINFORCEMENT.
- IMMEDIATELY AFTER INSPECTION AND APPROVAL BY THE GEOTECHNICAL ENGINEER, OR OTHERWISE AS DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE, THE BEARING SURFACE SHALL BE COVERED BY LAYER OF GRAVEL.
- COORDINATE CONSTRUCTION WITH UNDERSLAB SERVICES AS SHOWN ON MECHANICAL, ELECTRICAL, ARCHITECTURAL AND LANDSCAPING DRAWINGS.
- REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SITE DRAINAGE, GROUND ELEVATIONS AND DRAINAGE SLOPES.
- CENTRE ALL FOOTINGS UNDER COLUMNS OR WALLS UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TEMPORARY SUPPORT OF THE ADJACENT STRUCTURE DURING CONSTRUCTION. UNDERPINNING OR BRACING SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL ENGINEER, REGISTERED IN BRITISH COLUMBIA. SUBMIT 4 COPIES OF DESIGN DRAWINGS, SEALED BY A PROFESSIONAL ENGINEER, TO DEPARTMENTAL REPRESENTATIVE FOR REVIEW OF CONFORMANCE WITH GENERAL DESIGN CRITERIA. (REFER TO DWG 5603,5604 & 5607 FOR PERMANENT UNDERPINNING.)

REINFORCED CONCRETE

- REFER TO SPECIFICATIONS FOR CONCRETE STRENGTH, EXPOSURE CLASS & OTHER REQUIREMENTS.
- REINFORCING BARS $f_y \geq 400$ mPa. ALL DOWELS ANCHOR BOLTS AND INSERTS SHALL BE PLACED BEFORE THE CONCRETE IS POURED.
- MINIMUM CLEAR COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE.

	EXPOSURE CONDITION			UP TO 1 1/2 hrs. FIRE RATING	2 hrs. FIRE RATING
	N	EARTH OR WEATHER F-1, F-2	CHLORIDE C-1		
CAST AGAINST EARTH	-	75	75	75	75
CAST AGAINST FORMWORK	-	50	50	50	50
FOOTINGS - TOP REINF.	-	50	50	50	50

- TRANSVERSE REINFORCEMENT INCLUDES TIES, STIRRUPS AND SPIRALS.
- THE RATIO OF THE COVER TO THE MAXIMUM AGGREGATE SIZE AND THE RATIO OF COVER TO NOMINAL BAR DIAMETER SHALL BE AT LEAST 1.0 FOR N CLASS EXPOSURE, 1.5 FOR EXPOSED SURFACES F-1, F-2 CLASSES AND 2.0 FOR C-1, C-3 CLASSES
- THE COVER FOR BUNDLED BARS SHALL BE THE SAME AS THAT FOR A SINGLE BAR WITH EQUIVALENT AREA.
- CONFIRM WITH ARCHITECT FOR FIRE RATING REQUIREMENT.

- MINIMUM SPLICE LENGTH SHALL BE CLASS B AS FOLLOWS, UNLESS NOTED OTHERWISE:

BAR	COMPRESSION SPLICE		TENSION SPLICE	
	40MPa	50MPa	40MPa	50MPa
10M	350	400	400	450
15M	500	550	550	600
20M	600	650	650	700
25M	750	800	800	850

- ALL SPLICES SHALL BE TENSION SPLICES, EXCEPT SPLICES FOR COLUMNS WHICH SHALL BE COMPRESSION SPLICES UNLESS NOTED ON DRAWINGS.
- INCREASE LENGTHS BY 33% FOR BOTTOM BARS IN BEAMS WITHOUT STIRRUPS.
- INCREASE LENGTHS BY 30% FOR BARS WITH DEPTH OF CONCRETE CAST BELOW GREATER THAN 300mm (TOP BARS).
- INCREASE LENGTHS BY 50% FOR EPOXY COATED BARS.
- ALL INCREASES ABOVE ARE CUMULATIVE.

STRUCTURAL STEEL

- REFER TO SPECIFICATIONS FOR STEEL WORK, DESIGN CODE REFERENCES AND OTHER REQUIREMENTS.
- DRAWINGS FROM ALL CONSULTANTS SHALL BE EXAMINED FOR EXACT LOCATIONS, DIMENSIONS AND ELEVATIONS.
- STEEL FABRICATORS AND CONTRACTOR SHALL CONFIRM ALL LOCATIONS, DIMENSIONS AND ELEVATIONS WITH ACTUAL SITE MEASUREMENTS BEFORE FABRICATION. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY FABRICATION AND WORK DONE PRIOR TO REVIEW AND APPROVAL OF THE SHOP DRAWINGS.

ABBREVIATIONS

A.BOLT	ANCHOR BOLT
ALT.	ALTERNATE
ARCH. BLDG.	ARCHITECTURAL BUILDING
BOT.	BOTTOM
BTW.	BETWEEN
C/C	CENTER TO CENTER
C/W	COMPLETE WITH
CL.	CLEAR
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
DL	DEAD LOAD
DN	DOWN
DO.	DIITTO
DP.	DEEP
DWG.	DRAWING
E/W.	EACH WAY
L.V.	LENGTH VARIES
LG.	LONG
LL	LOW LEVEL
LLV	LONG LEG VERTICAL
LLH	LONG LEG HORIZONTAL
LONG.	LONGITUDINAL
MAX.	MAXIMUM
MECH.	MECHANICAL
MIN.	MINIMUM
N/A	NOT AVAILABLE
N.S.	NEAR SIDE
N.STUD	NELSON STUD
N.T.S.	NOT TO SCALE
O/C	ON CENTRES
OPP.	OPPOSITE HAND
PL	PLATE
PLY.	PLYWOOD
PROJ.	PROJECTION

REAL PROPERTY SERVICES Pacific Region SERVICES IMMOBILIERS Région de Pacifique



Revision/	Description/Description	Date/Date
2	ISSUE FOR TENDER	2020/11/06
1	ISSUE FOR TENDER REVIEW	2020/06/30

Client/client

CORRECTIONAL SERVICE CANADA

Project title/Titre du projet

PACIFIC REGION PERIMETER FENCE UPGRADES

Consultant Approval Box Only

Designed by/Concept par

LL

Drawn by/Dessiné par

CAD

PWGSC Project Manager/Administrateur de Projets TPSCG

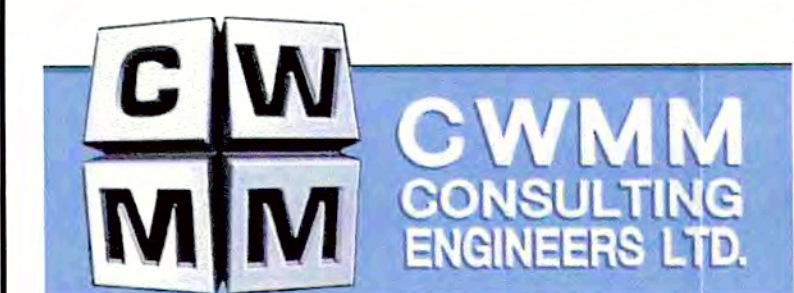
DARYL SINCLAIR / TONY TANG

PWGSC, Regional Manager, Architectural and Engineering Services /
Gestionnaire régional, Services d'architecture et de génie, TPSCG
PREETIPAL PAUL

Drawing title/Titre du dessin

STRUCTURAL GENERAL NOTES

Project No./No. du projet	Sheet/Feuille	Revision no./ La Révision no.
R.071529.001	201	3



Revision / Révision	Description / Description	Date / Date
2	ISSUE FOR TENDER	2020/11/06
1	ISSUE FOR TENDER REVIEW	2020/06/30

Client/client
CORRECTIONAL SERVICE CANADA

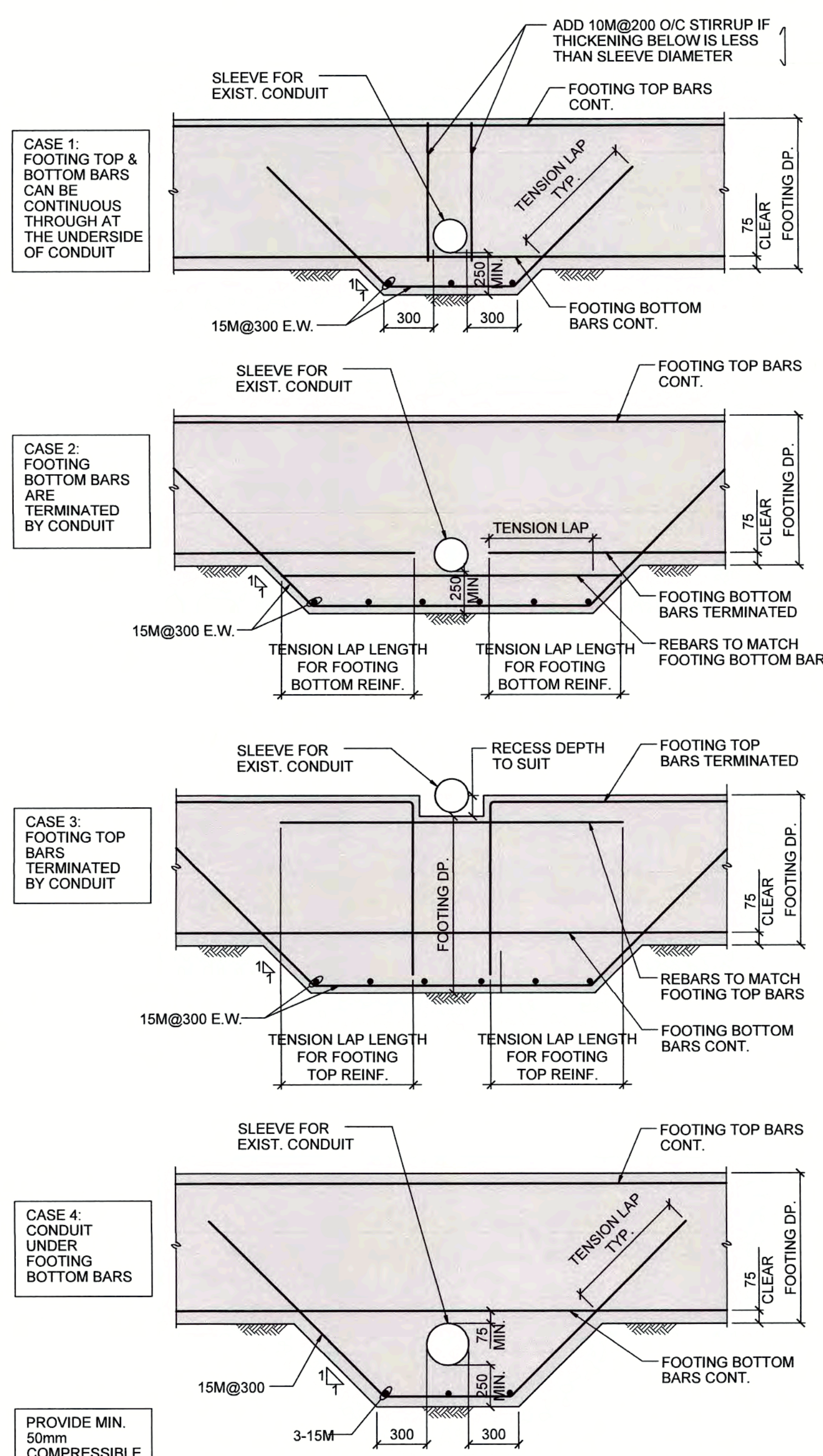
Project title/Titre du projet
PACIFIC REGION PERIMETER FENCE UPGRADES

Consultant Approval Box Only
Designed by/Concept par
L.L.
Drawn by/Dessiné par
CAD
PWGSC Project Manager/Administrateur de Projets TPSGC
DARYL SINCLAIR / TONY TANG

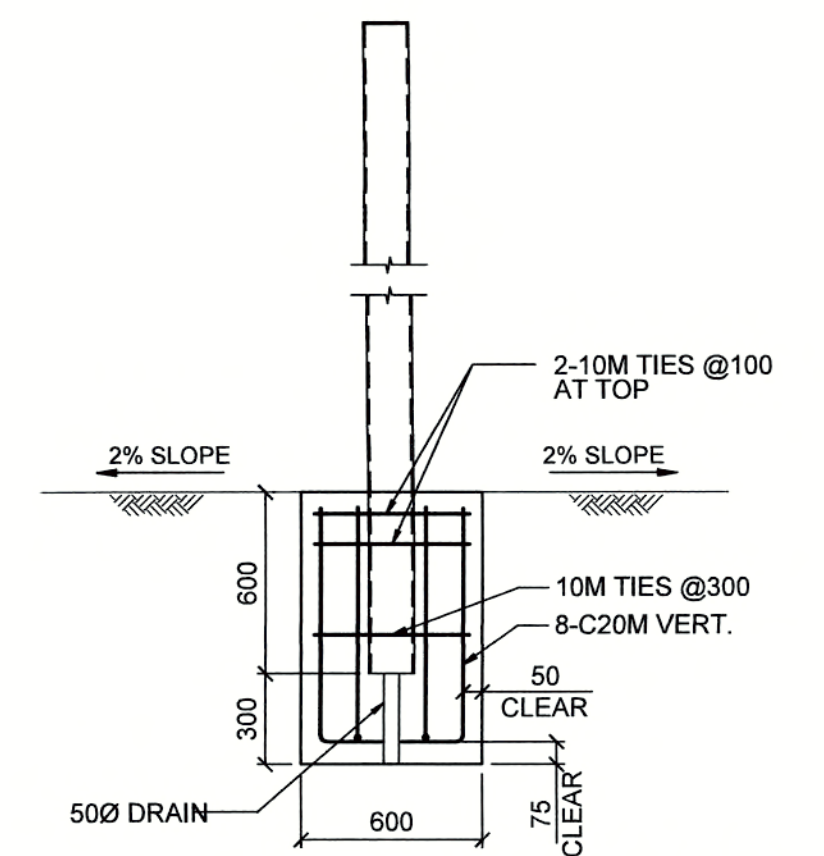
PWGSC, Regional Manager, Architectural and Engineering Services/
Gestionnaire régionale, Services d'architecture et de génie, TPSGC
PREETIPAL PAUL
Drawing title/Titre du dessin

STRUCTURAL TYPICAL DETAILS

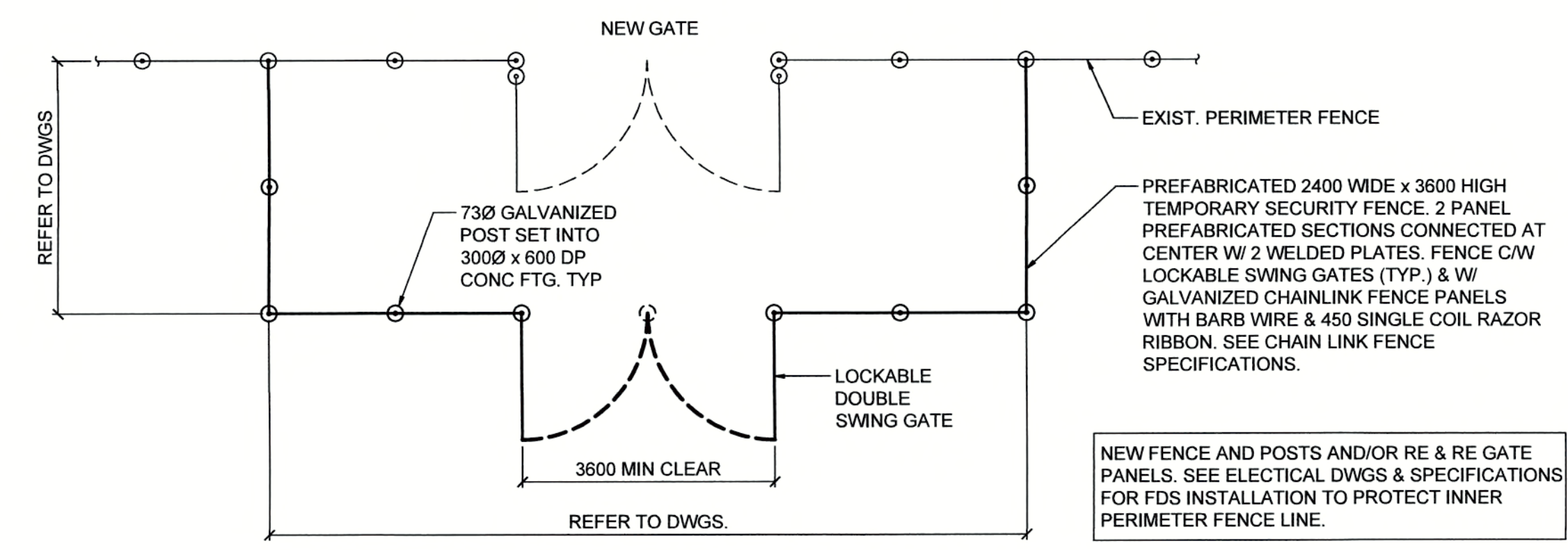
Project No./No. du projet R.071529.001	Sheet/Feuille 202	Revision no./ La Révision no. 3
--	-----------------------------	--



TYPICAL DETAIL FOR DUCTS / SLEEVES RUNS PERPENDICULAR THROUGH FOOTING
1:25 FOOTING TRANSVERSE REINF. / TIES NOT SHOWN FOR CLARITY

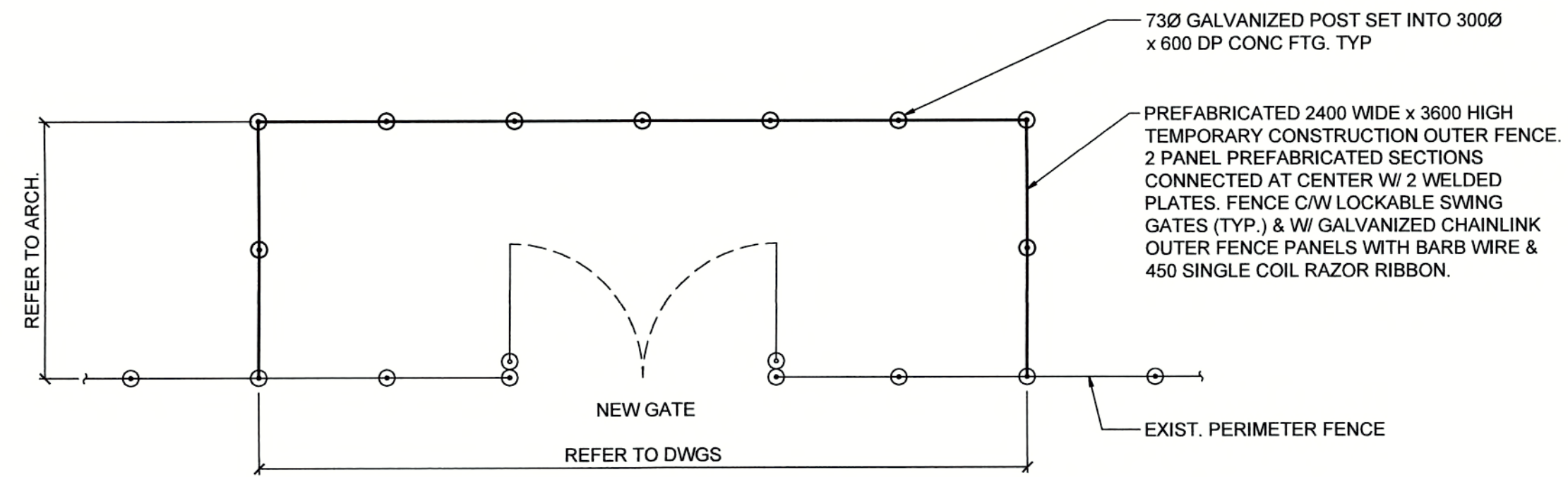


TYPICAL NEW FENCE POST DETAIL
1:25



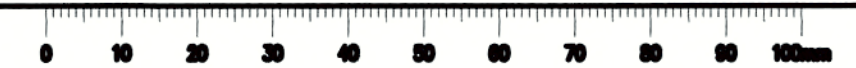
TYPICAL TEMPORARY SECURITY FENCE
NTS

NEW FENCE AND POSTS AND/OR RE & RE GATE PANELS. SEE ELECTRICAL DWGS & SPECIFICATIONS FOR FDS INSTALLATION TO PROTECT INNER PERIMETER FENCE LINE.



SEE ELECTRICAL DWGS FOR FDS INSTALLATION

TYPICAL TEMPORARY SECURITY FENCE FOR FRASER VALLEY INSTITUTION
NTS



PROFESSIONAL ENGINEER
L. K. S. LIM
NOV 6, 2020

2	ISSUE FOR TENDER	2020/11/06
1	ISSUE FOR TENDER REVIEW	2020-11-08
Revision/	Description/Description	Date/Date
1		

CORRECTIONAL SERVICE CANADA

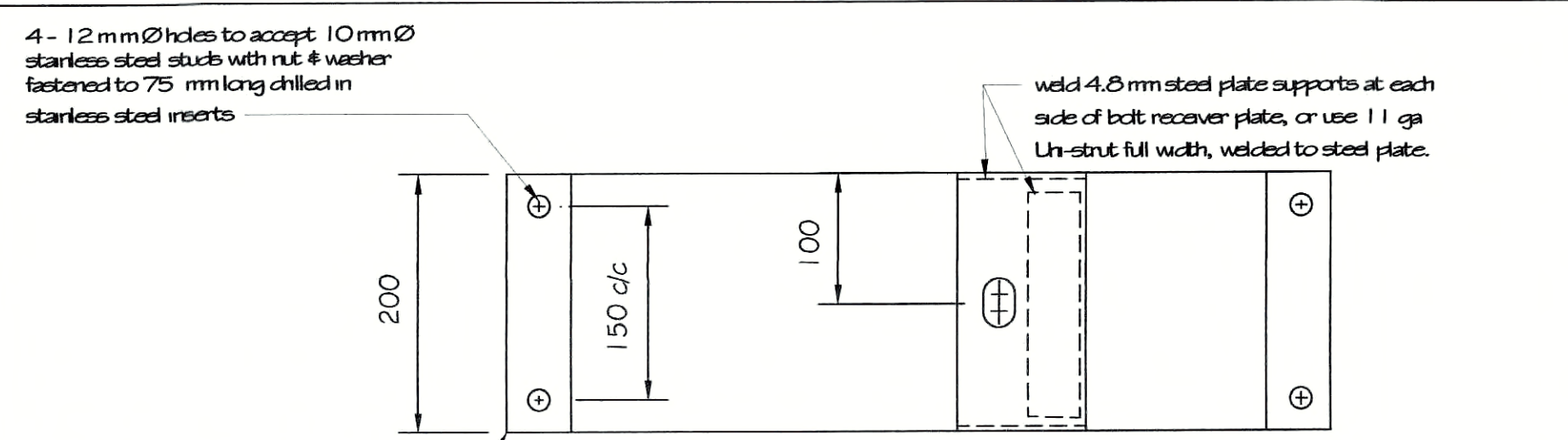
Project Title/Titre du projet
PACIFIC REGION PERIMETER FENCE UPGRADES

Consultant Signature Only
S/S
Designed by/Concept par
Dianne Dy / MIB
Drawn by/Designé par
MIB
PWGSC Project Manager/Administrateur de Projets TPSGC
Tony Tang
Regional Manager, Architectural and Engineering Services
Gestionnaire régionale, Services d'architecture et de génie, TPSGC
Preetipal Paul

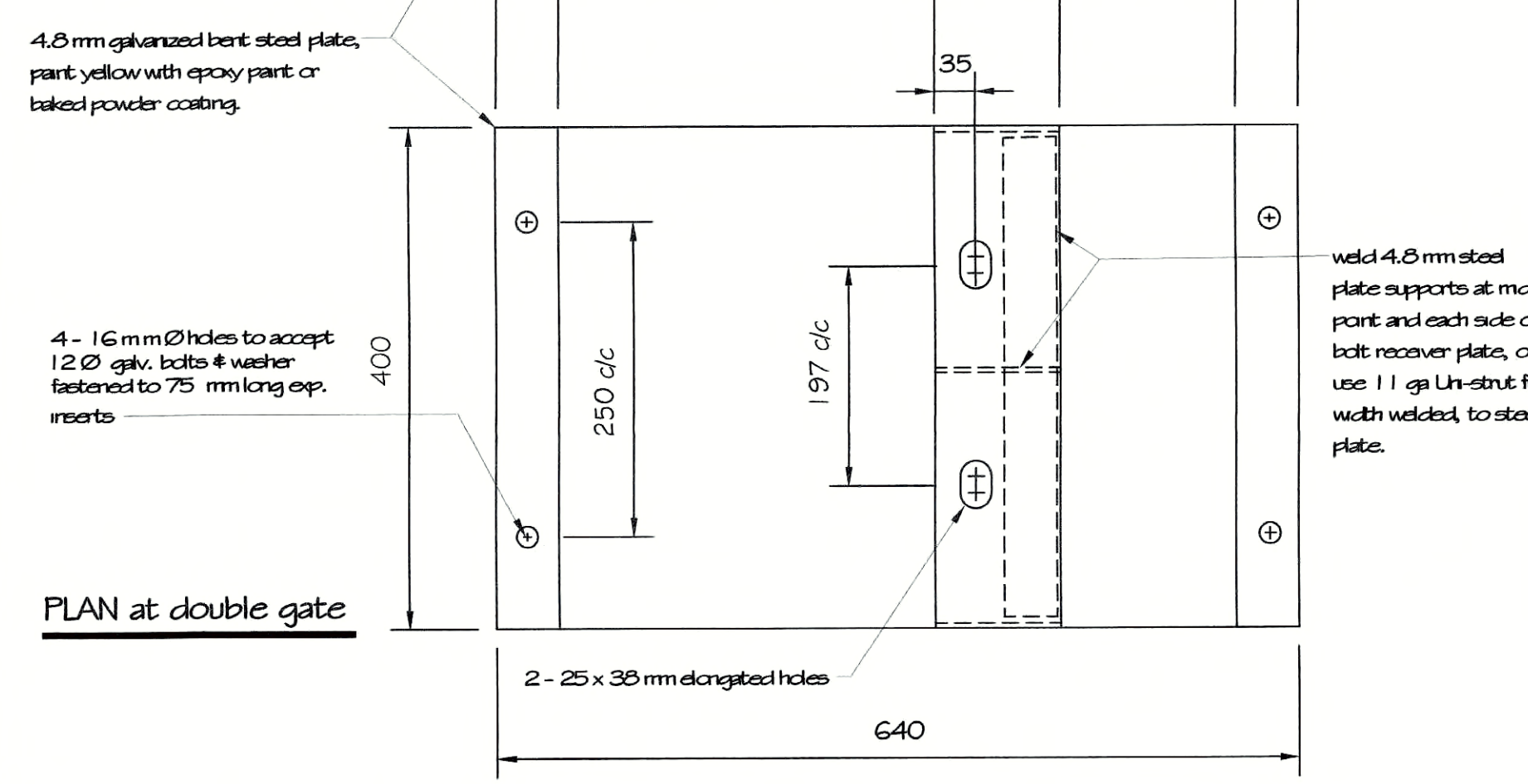
Drawing Title/Titre du dessin
Matsqui Complex, Mission, Mountain & Kent Institution

TYPICAL SINGLE AND DOUBLE GATE DETAILS

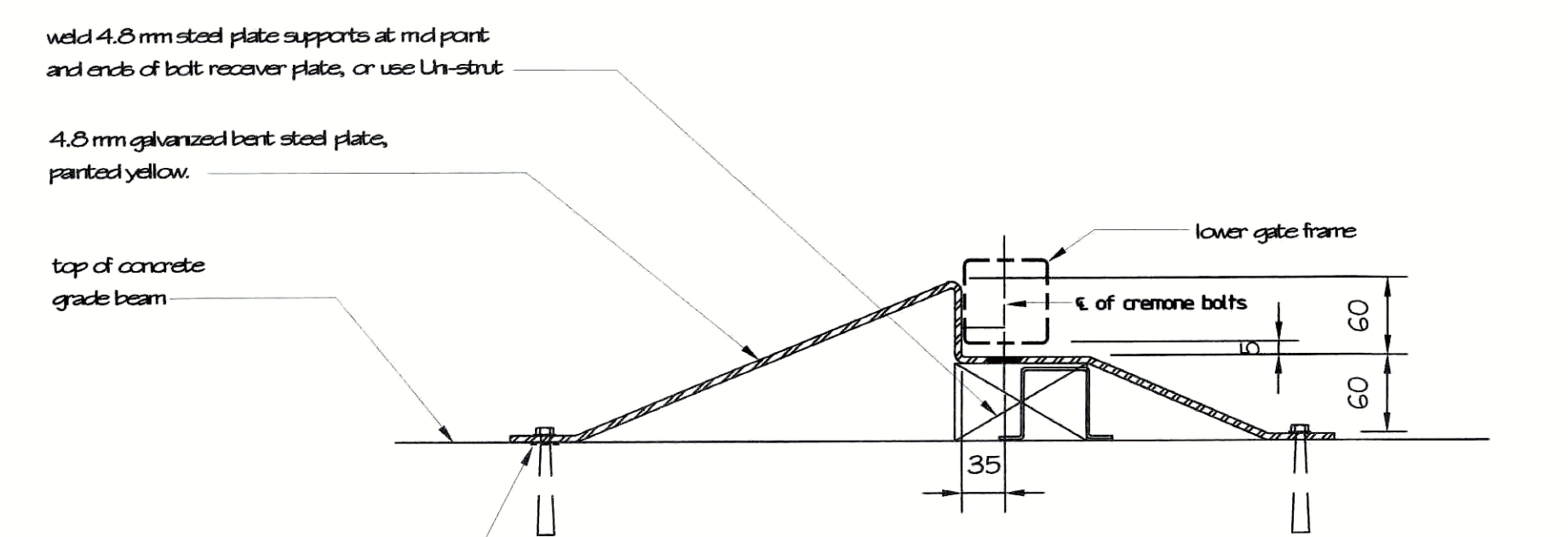
Project No./No. du projet R.071529.001	Sheet/Feuille 601 OF	Revision no./La Révision no. 1
---	-----------------------------------	--



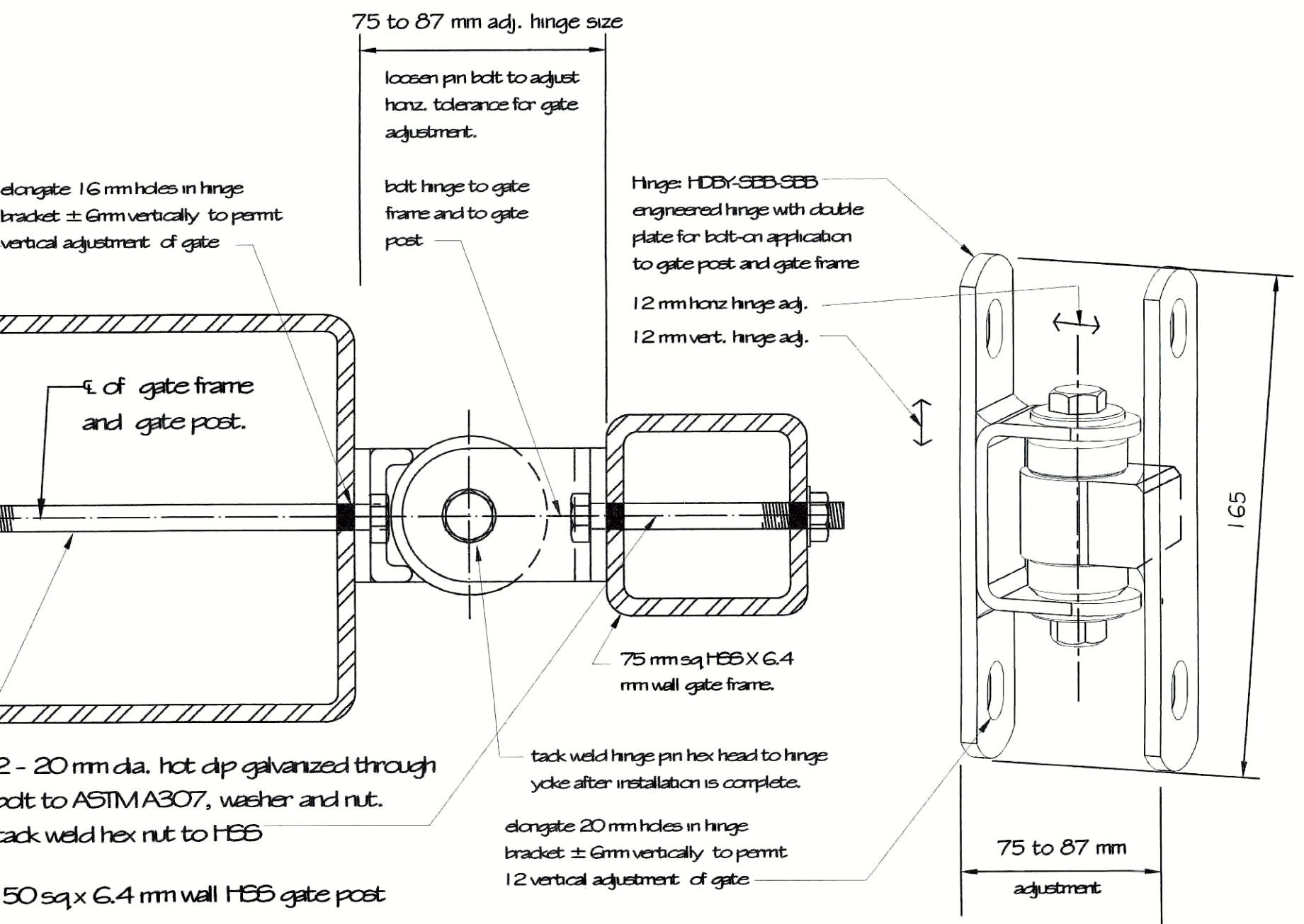
PLAN at single gate



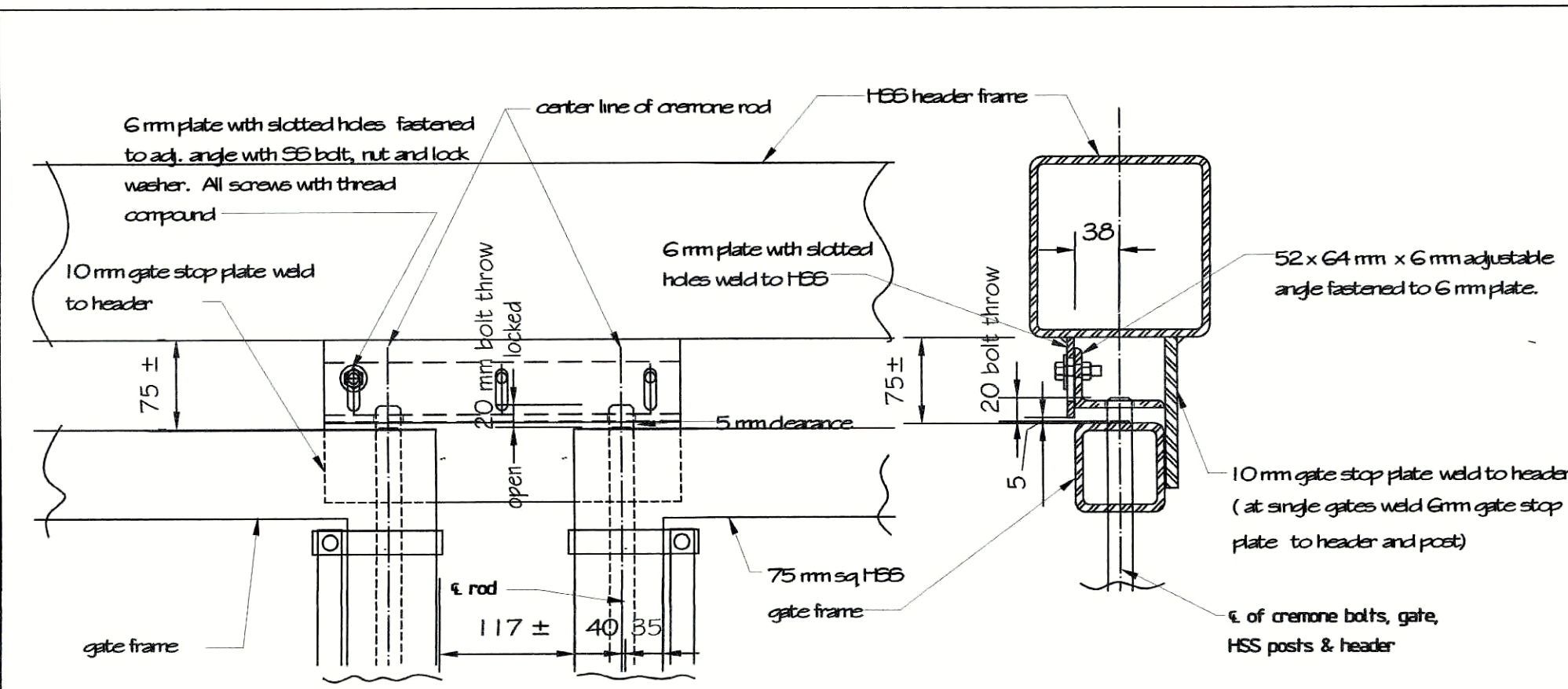
PLAN at double gate



SECTION
gate bottom rod receivers
Scale: 1:5



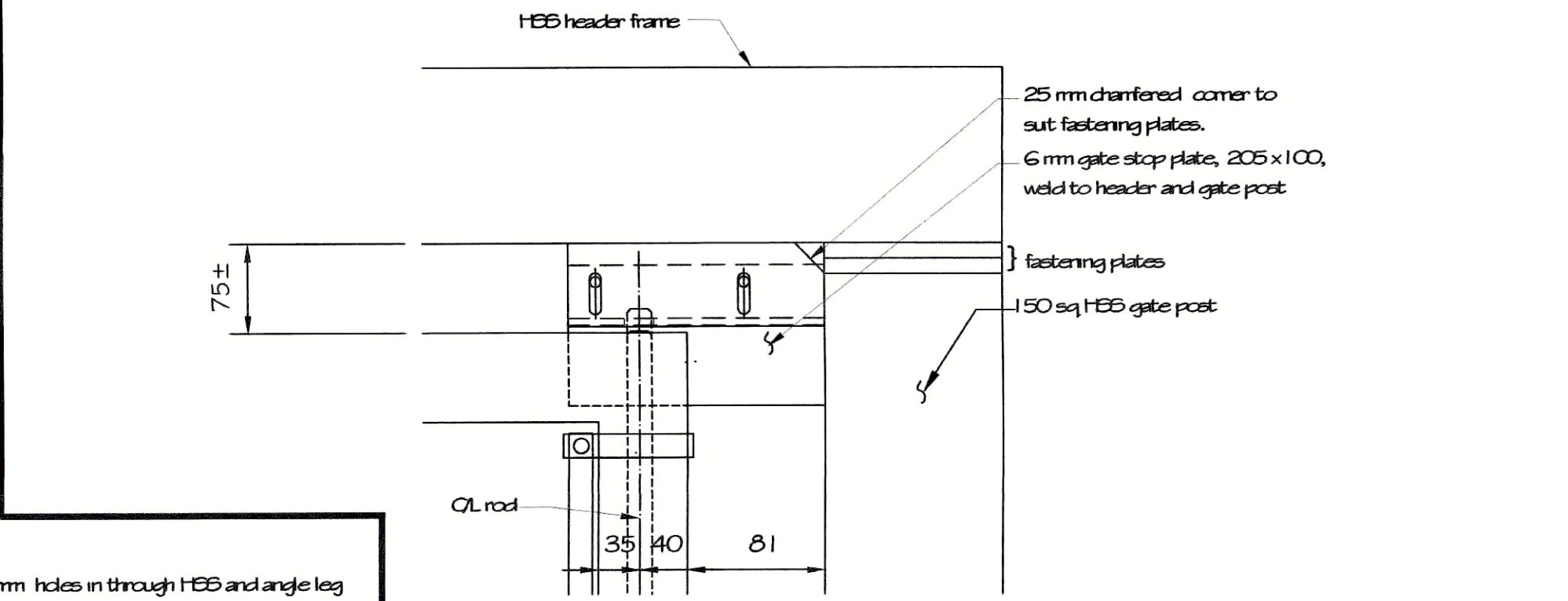
5 strain and gate post, hinge & gate frame orientation
Scale: 1:2



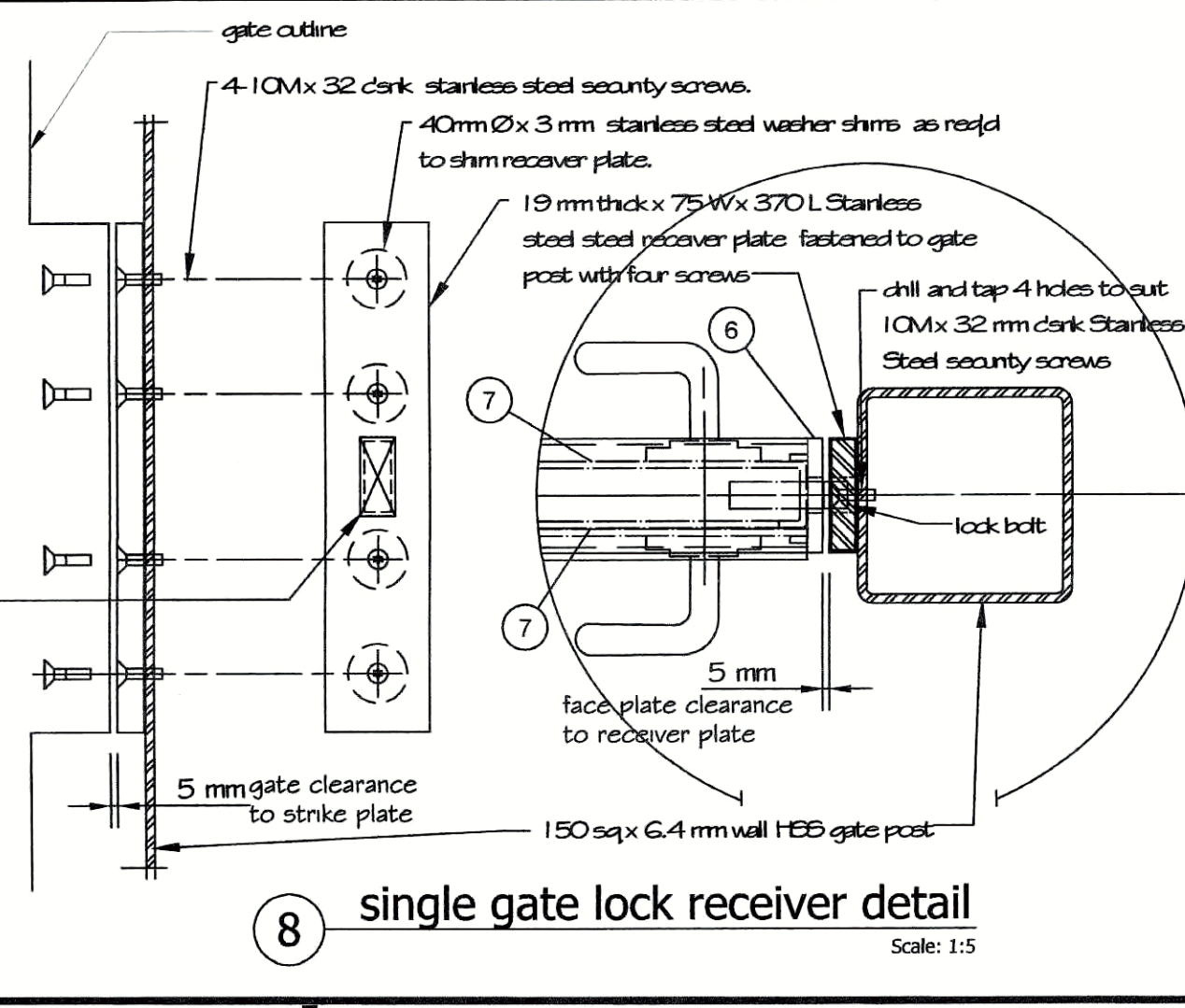
7 double gate top bolt receiver elevation
Scale: 1:5



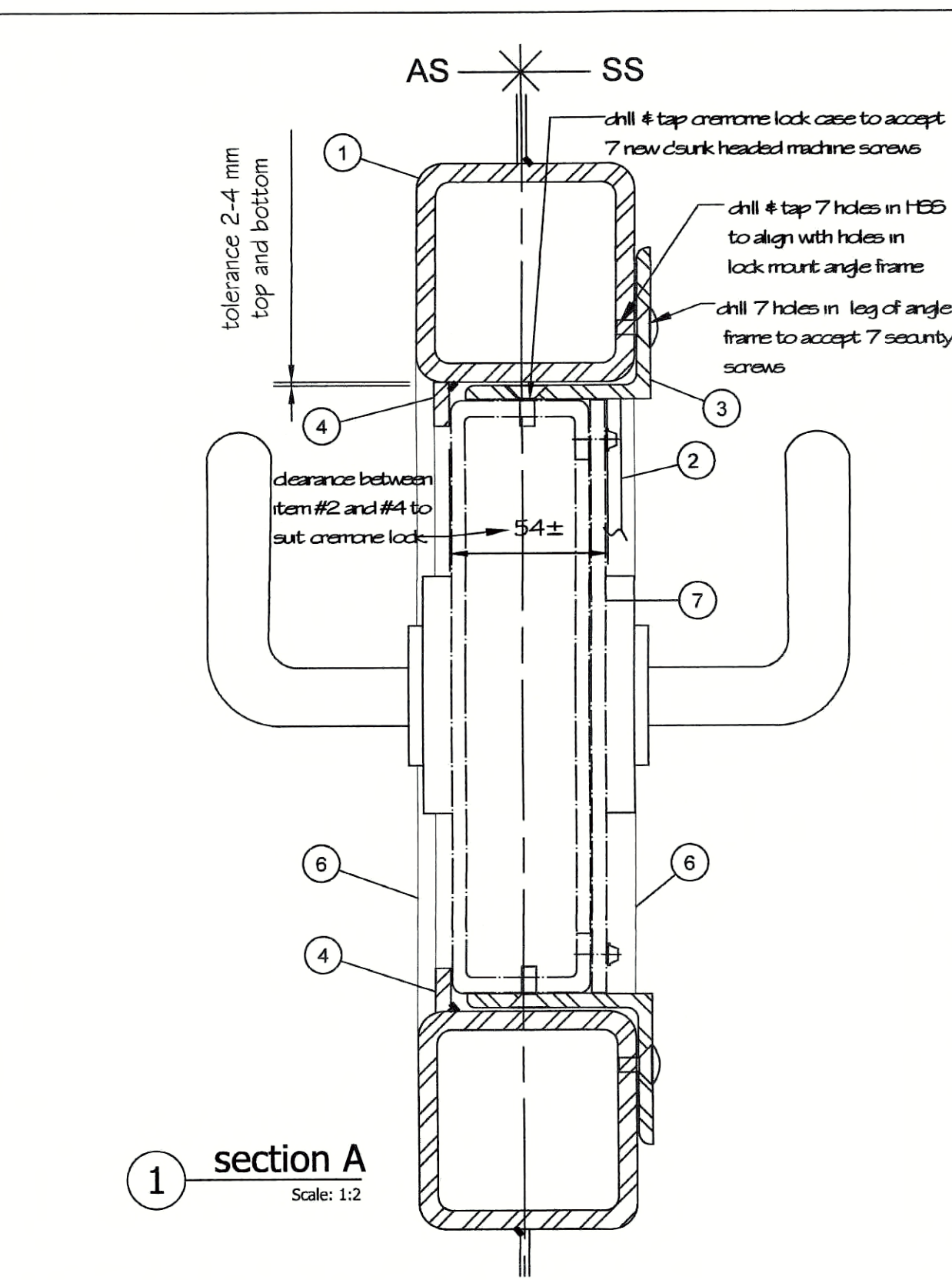
7a section thru top bolt receiver
Scale: 1:5



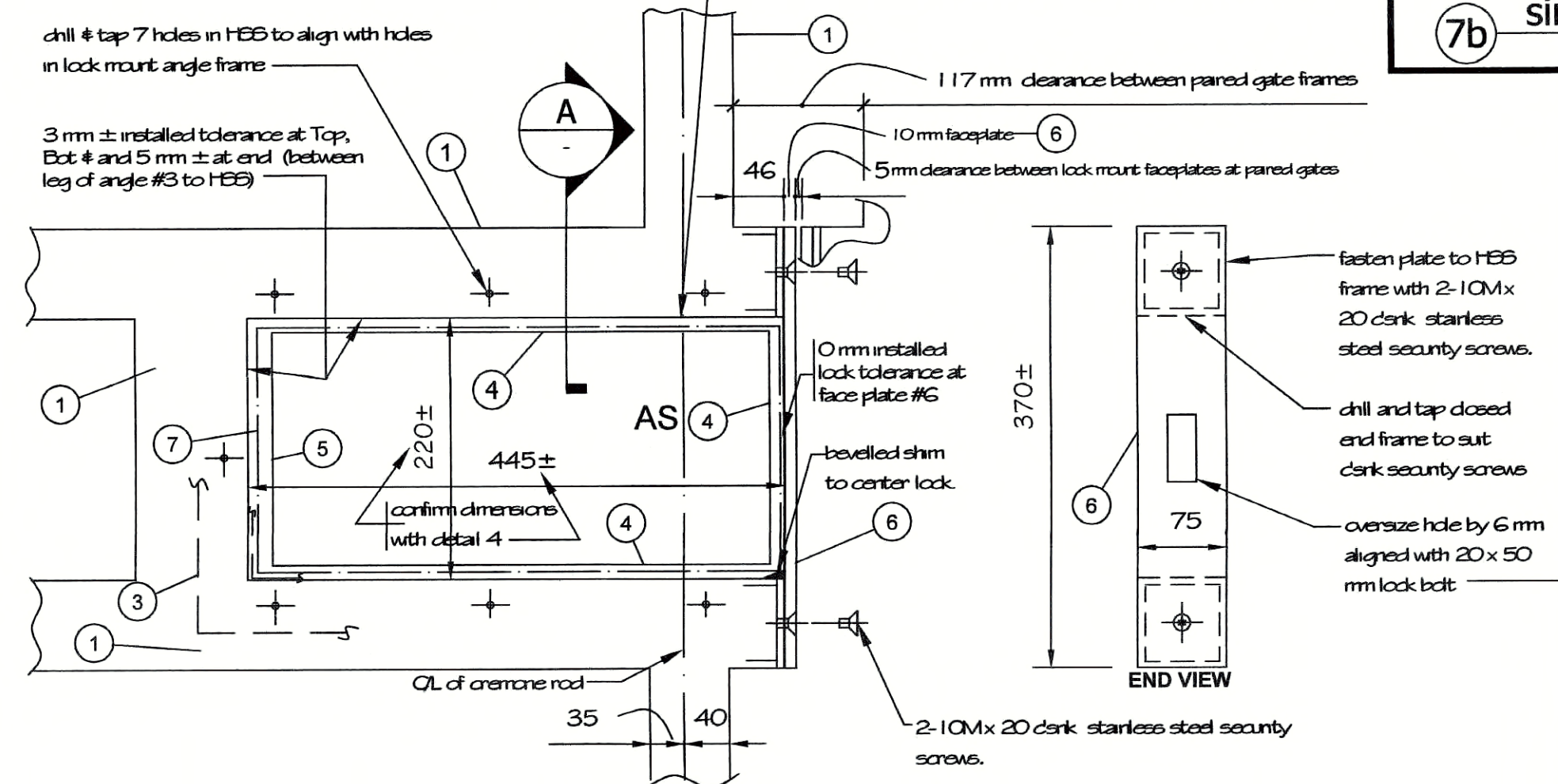
7b single gate top bolt receiver elevation
Scale: 1:5



8 single gate lock receiver detail
Scale: 1:5



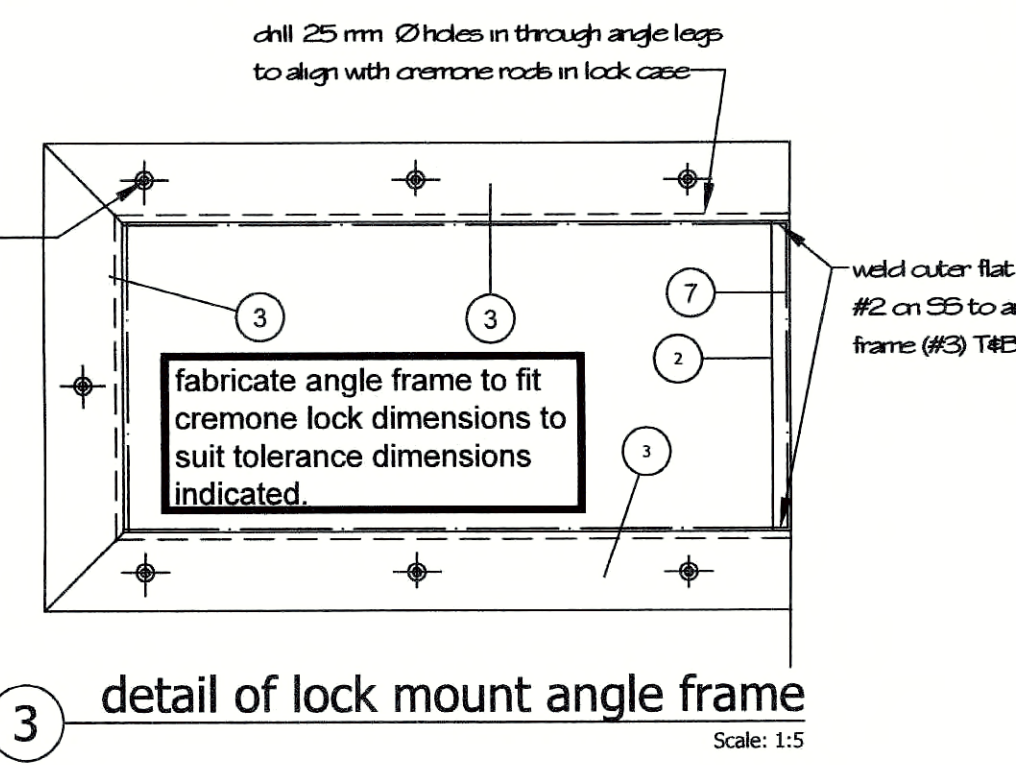
1 section A
Scale: 1:2



2 gate lock pocket detail
Scale: 1:5

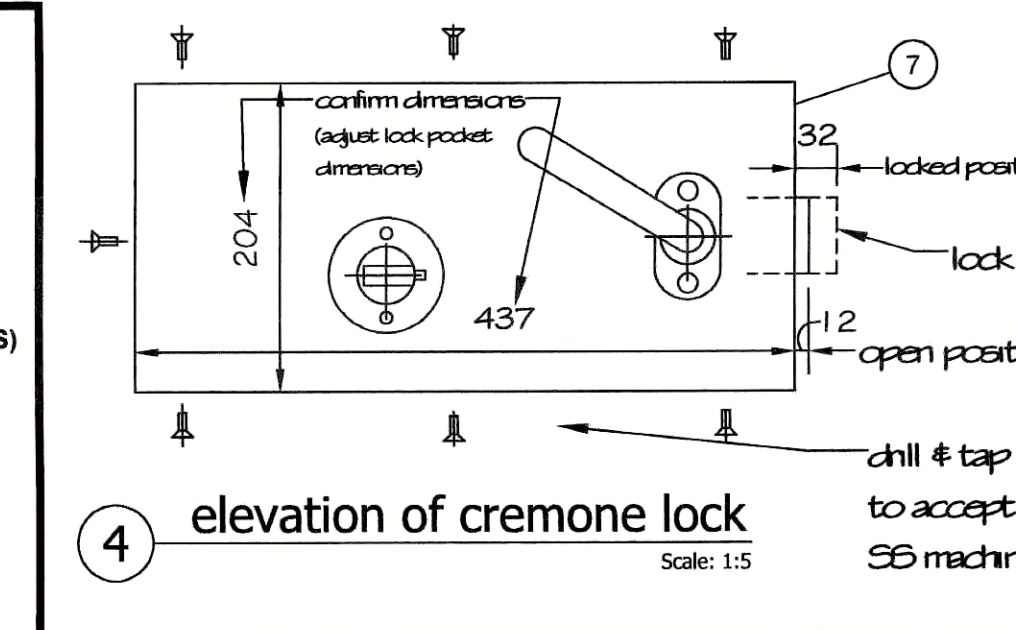
LOCK DETAILS - ARE TYPICAL FOR ALL DOUBLE AND SINGLE GATES AS NOTED.

note: SS - secure side AS - attack side



3 detail of lock mount angle frame
Scale: 1:5

- material notes**
- 1 75 mm sq. HSS gate frame all welded, 6.4 wall thickness.
 - 2 4.8 mm x 12 mm steel bar welded to lock mount angle frame T & B (SS)
 - 3 50 x 64 x 4.8 mm steel angle frame fastened to cremone lock casing with flush screws and assembly fastened to gate pocket HSS frame with exposed security screws. (SS)
 - 4 4.8 mm x 12 mm steel bar stop welded to HSS frame (AS)
 - 5 4.8 mm x 20 mm steel bar stop welded to HSS frame (AS)
 - 6 10 mm thick x 75 mm wide x 360 ± long face plate, with lock bolt hole, screwed to HSS frame.
 - 7 cremone lock



4 elevation of cremone lock
Scale: 1:5



5		
4		
3		
2		
1	ISSUE FOR TENDER	2020/11/06
	ISSUE FOR TENDER REVIEW	2020-11-06
Revision/Revision	Description/Description	Date/Date

CORRECTIONAL SERVICE CANADA

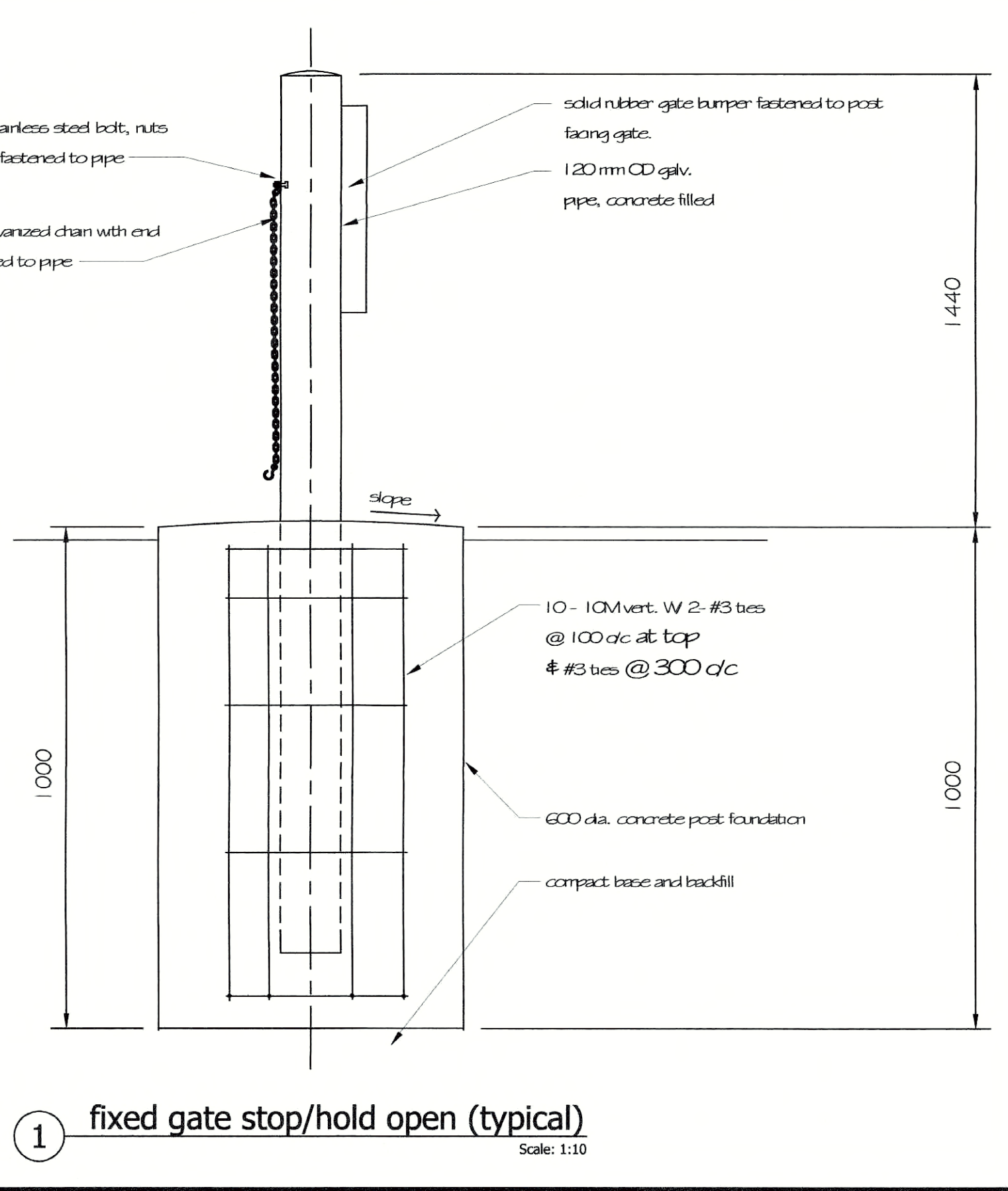
Project title/Titre du projet

PACIFIC REGION PERIMETER FENCE UPGRADES

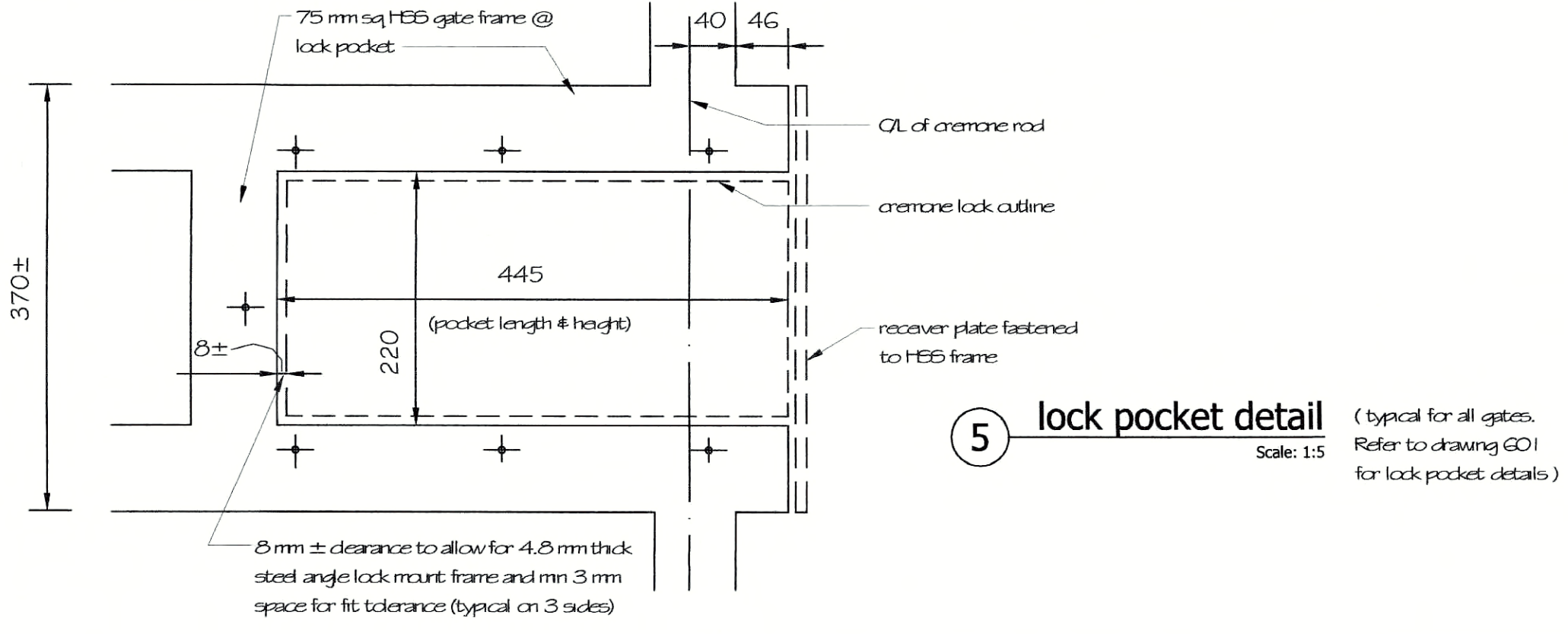
Consultant Signature Only
SRS
Designed by/Concept par
d. dy / m. booth
Drawn by/Dessiné par
m. booth
PWSC Project Manager/Administrateur de Projets TFSGC
Tony Tang
Regional Manager, Architectural and Engineering Services
Gestionnaire régionale, Services d'architectural et de génie, TFSGC
Preetpal Paul
Drawing title/Titre du dessin

TYPICAL GATE DETAILS

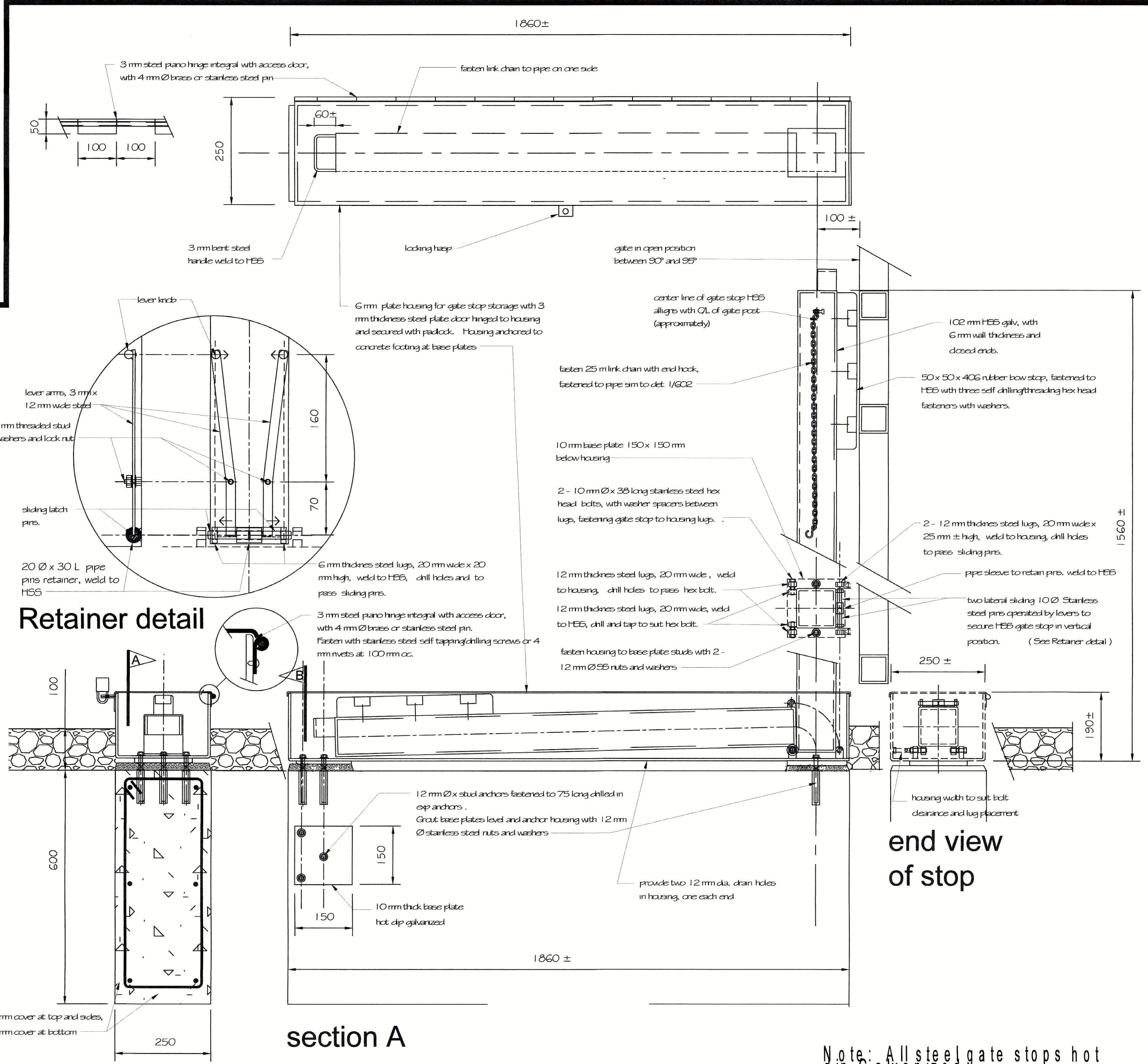
Project No./No. du projet	Sheet/Feuille	Revision no./La Révision no.
R.071529.001	602	1
	OF	



1 fixed gate stop/hold open (typical)
Scale: 1:10



5 lock pocket detail
Scale: 1:5
(typical for all gates. Refer to drawing 601 for lock pocket details.)



Retainer detail

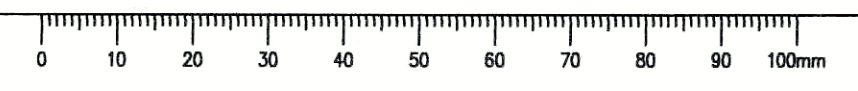
section A

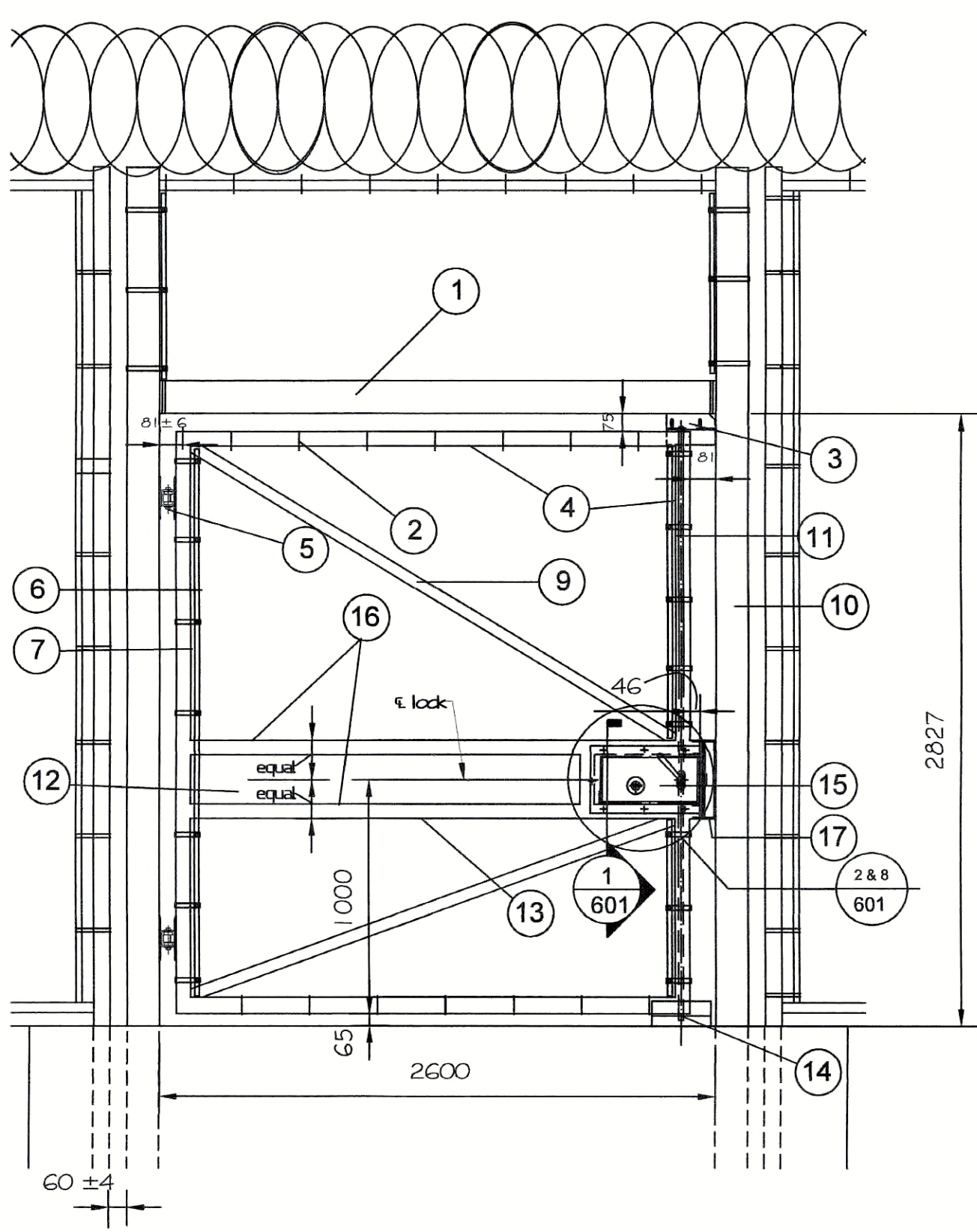
section B

4 hinged gate stop/hold open - section and details
Scale: 1:5

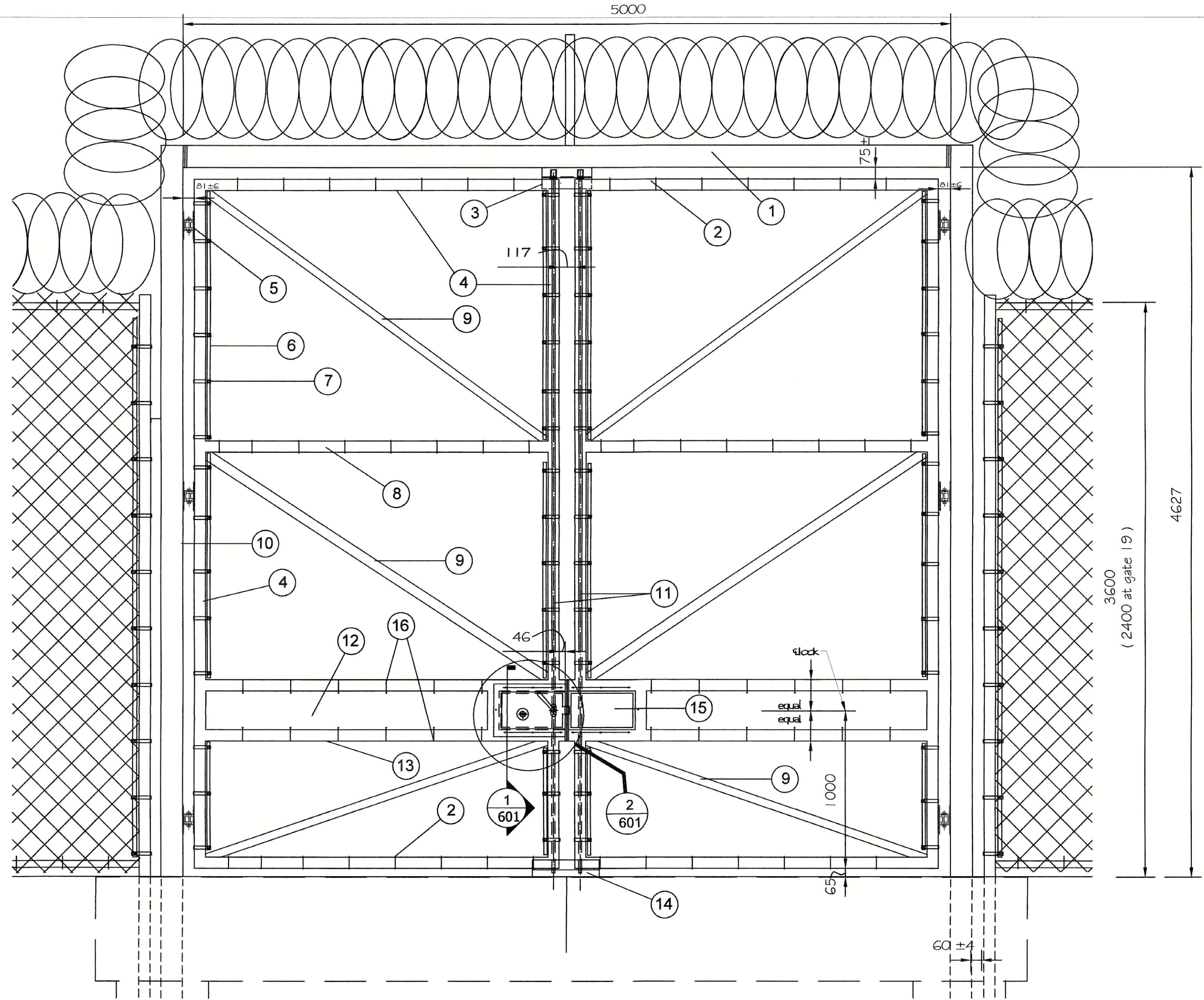
end view of stop

Note: All steel gate stops hot dip Galvanized.





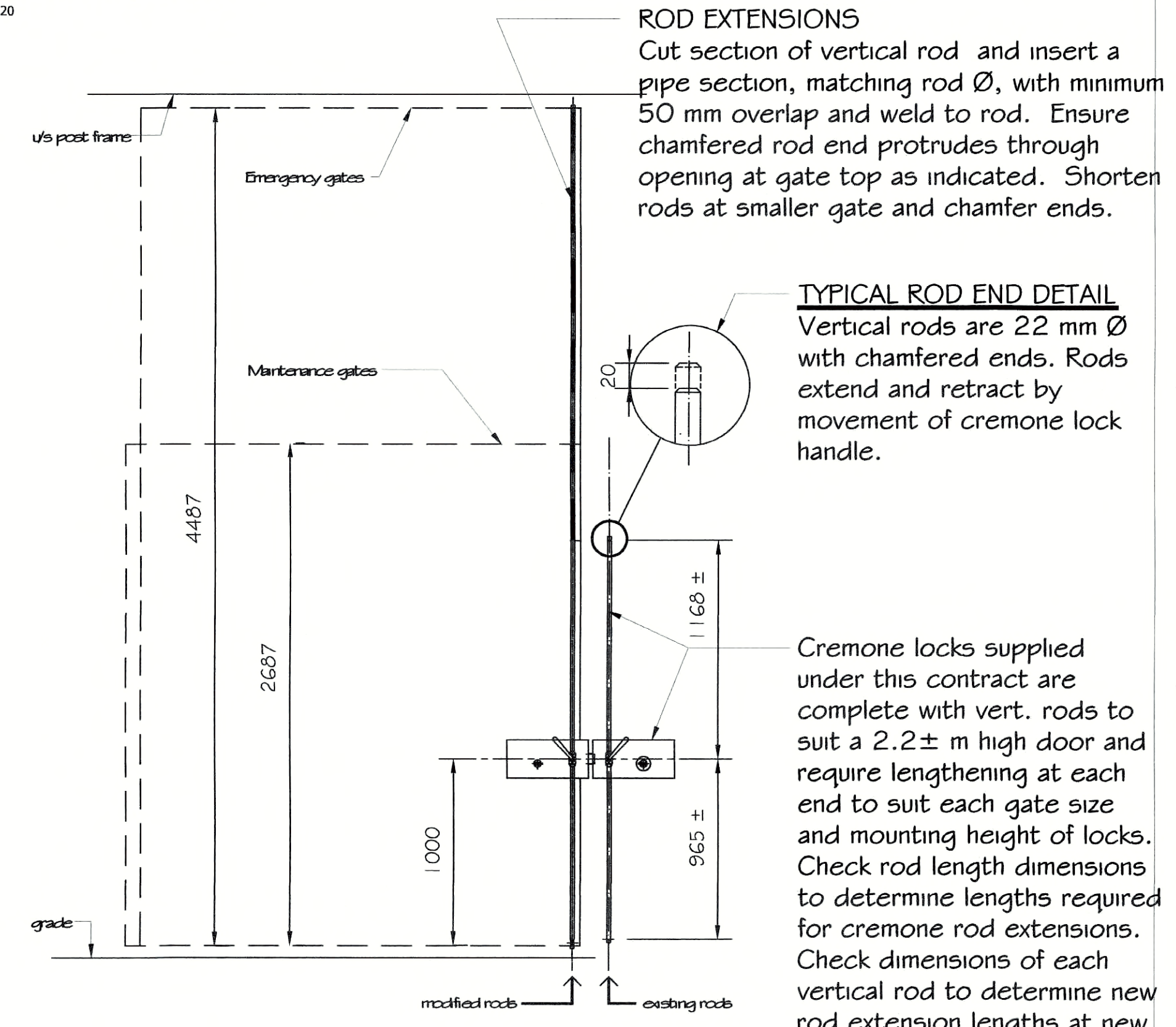
1 maintenance gate elevation (total req'd - five) Scale: 1:20



2 emergency gate elevation (total req'd - 10 pairs) Scale: 1:20

notes legend

- 1 HSS header frame
- 2 3.7 mm Ø tie wires @ 300 oc (CL mesh ties at horizontal rails)
- 3 head bolt keepers & stop pl. see detail 7a / 7b / 601
- 4 75 mm sq HSS horiz. & vert. gate frame
- 5 1-1/2 pair gate hinges per leaf, Supports 1360 kg/pair. Hinges fastened with hex bolts to gate and posts. See Det 5 / 601. 1 pair gate hinges at maintenance gates.
- 6 5 x 20 mm tension bars
- 7 3 x 20 mm tension bar bands @ 300 oc
- 8 rail located at mid point between top rail and upper lock rail
- 9 64 mm sq HSS diagonal brace
- 10 152 mm sq HSS gate posts (new)
- 11 Cremone lock head and foot bolts concealed in gate frame
- 12 single 3 mm steel plate
- 13 double 75 mm sq HSS horiz. gate frame @ lock pocket
- 14 bottom cremone rods receiver/gate rest (see detail 6 / 601)
- 15 lock pocket dimensions See Detail 5 on drawing 602.
- 16 wire ties or spot welds at 300 oc
- 17 single gate, 20 mm thick receiver plate - see Det 8/601



4 Cremone lock rod modifications Scale: 1:25

ROD EXTENSIONS
Cut section of vertical rod and insert a pipe section, matching rod Ø, with minimum 50 mm overlap and weld to rod. Ensure chamfered rod end protrudes through opening at gate top as indicated. Shorten rods at smaller gate and chamfer ends.

TYPICAL ROD END DETAIL
Vertical rods are 22 mm Ø with chamfered ends. Rods extend and retract by movement of cremone lock handle.

Cremone locks supplied under this contract are complete with vert. rods to suit a 2.2± m high door and require lengthening at each end to suit each gate size and mounting height of locks. Check rod length dimensions to determine lengths required for cremone rod extensions. Check dimensions of each vertical rod to determine new rod extension lengths at new paired vehicle gates and at new single maintenance gates.

Revision/Revision	Description/Description	Date/Date
5		
4		
3		
2	ISSUE FOR TENDER	2020-11-06
1	ISSUE_FOR_TENDER_REVIEW	2020-11-06

Revision/Revision	Description/Description	Date/Date
5		
4		
3		
2	ISSUE FOR TENDER	2020-11-06
1	ISSUE_FOR_TENDER_REVIEW	2020-11-06

CORRECTIONAL SERVICE CANADA
Abbotsford BC

Project title/Titre du projet
PACIFIC REGION PERIMETER FENCE UPGRADES

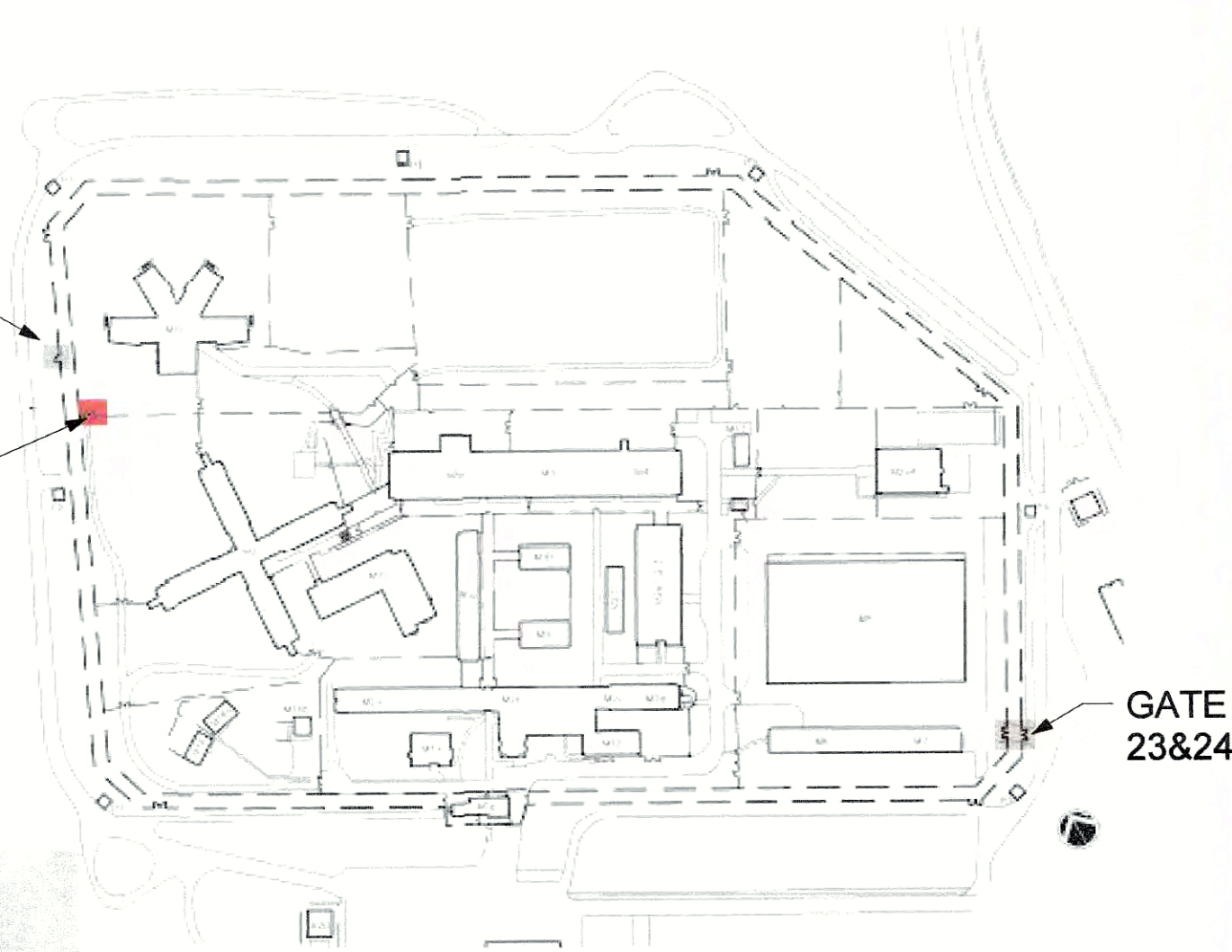
Consultant Signature Only
srs
Designed by/Concept par
Dianne Dy / MIB
Drawn by/Dessiné par
MIB
PWGSC Project Manager/Administrateur de Projets TPSPG
Tony Tang
Regional Manager, Architectural and Engineering Services
Gestionnaire régionale, Services d'architectural et de génie, TPSPG
Pratiquant Paul
Drawing title/Titre du dessin
TYPICAL GATE ELEVATIONS

Project No./No. du projet R.071529.001	Sheet/Fauille 603 OF XX	Revision no./La Révision no. 1
--	--------------------------------------	--

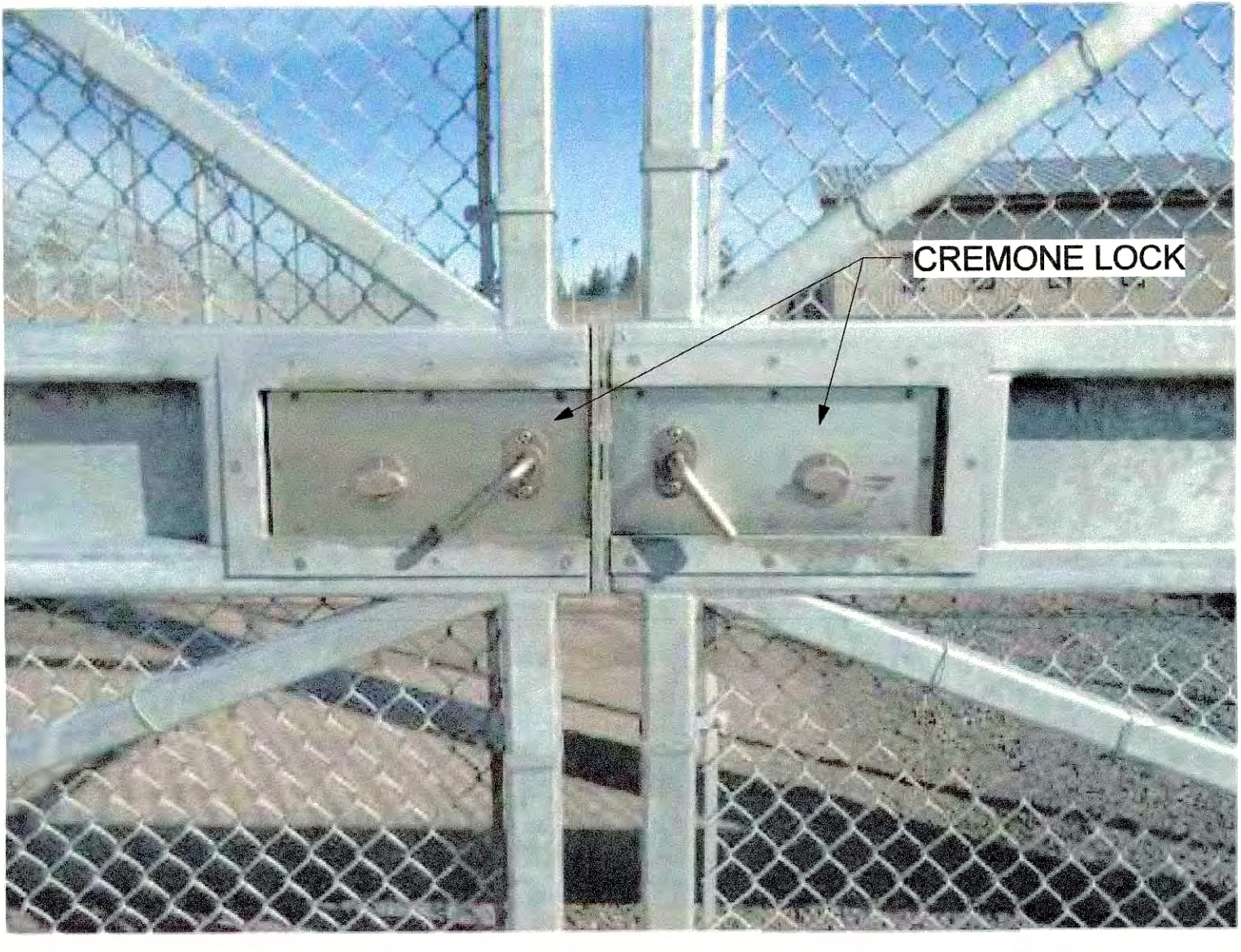
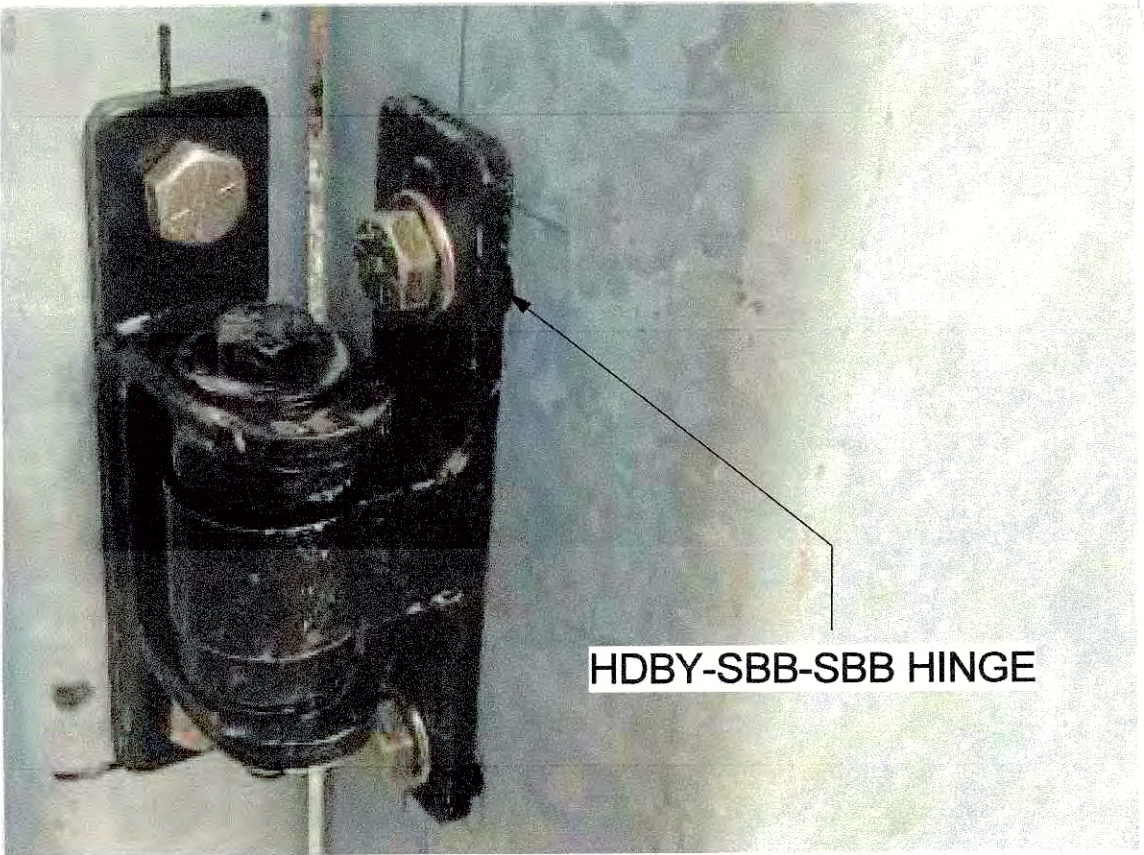
MATSQUI INSTITUTION VEHICLE/EMERGENCY SWING GATE 21 (REFERENCE ONLY)



GATE 20
GATE 21 (N.I.C.)



1 KEY PLAN - MA
604 1 : 3000



2	ISSUE FOR TENDER	2020/11/06
1	ISSUE FOR TENDER REVIEW	JUN 22, 2020
Revision/Revision	Description/Description	Date/Date

Client/client
CORRECTIONAL SERVICE CANADA

Project title/Titre du projet
PACIFIC REGION PERIMETER FENCE UPGRADES

Consultant Approval Box Only
Designed by/Concept par DD
Drawn by/Dessine par DD
PWGSC Project Manager/Administrateur de Projets TPSGC
DARYL SINCLAIR / TONY TANG
PWGSC Regional Manager, Architectural and Engineering Services/
Gestionnaire régionale, Services d'architectural et de génie, TPSGC
PREETIPAL PAUL
Drawing title/Titre du dessin

TYPICAL VEHICLE/EMERGENCY SWING GATE PHOTOS (REFERENCE ONLY)

Project No./No. du projet R.071529.001	Sheet/ Feuille 604	Revision no./ La Révision no.
--	------------------------------	----------------------------------



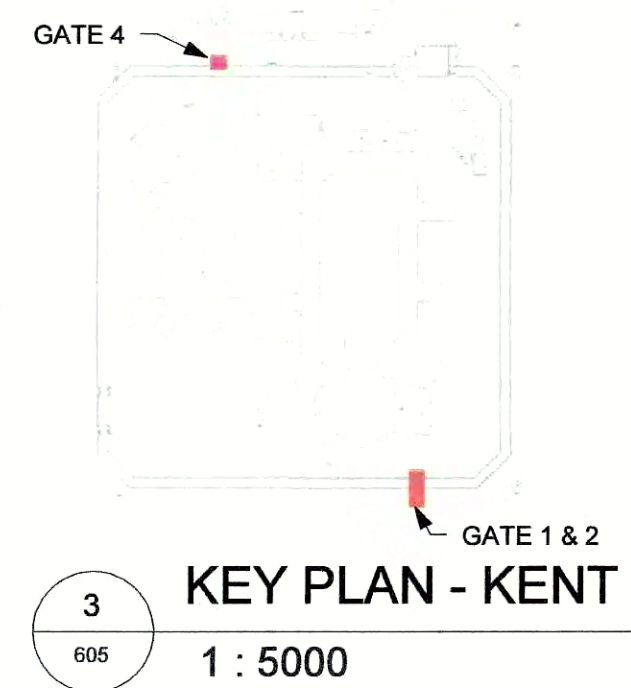


NOTES

- REFER TO CIVIL DRAWINGS FOR:
A) LOCATION OF UNDERGROUND UTILITIES. VERIFY LOCATIONS ON SITE.
B) NEW CONCRETE FOUNDATION ELEVATIONS
C) NEW ROAD WORK & TOPOGRAPHY
- VERIFY ALL EXISTING POSTS LOCATION ON SITE. MAXIMUM DISTANCE BETWEEN CENTRE OF ALL NEW POSTS IS 2400MM. REFER TO SPECIFICATION.
- SEE DRAWINGS 605 TO 608 FOR TYPICAL TEMPORARY INNER AND OUTER SECURITY FENCING PLANS, ELEVATIONS AND SECTIONS

LEGEND

- UNDERGROUND UTILITIES - DRAINAGE
- UNDERGROUND UTILITIES - ELECTRICAL
- UNDERGROUND UTILITIES - GAS
- UNDERGROUND UTILITIES - WATER
- DEMOLITION - GATE, HEADER & RAZOR WIRES
- DEMOLITION - EXISTING POSTS & FENCE MESH INCLUDING BUT NOT LIMITED TO TOP & BOTTOM RAILS, RAZOR WIRES
- POST & FENCE
- EXISTING LIGHT POLE
- EXISTING SIGN
- NO DIGGING ZONE (TYP 1000 MM FROM BOTH SIDES OF MDS)
- ANTI-TUNNELING COMPACTED GRAVEL
- NEW ROAD (GRAVEL OR ASPHALT SEE CIVIL DWG)
- DOOR TAG & NO FOR TEMPORARY



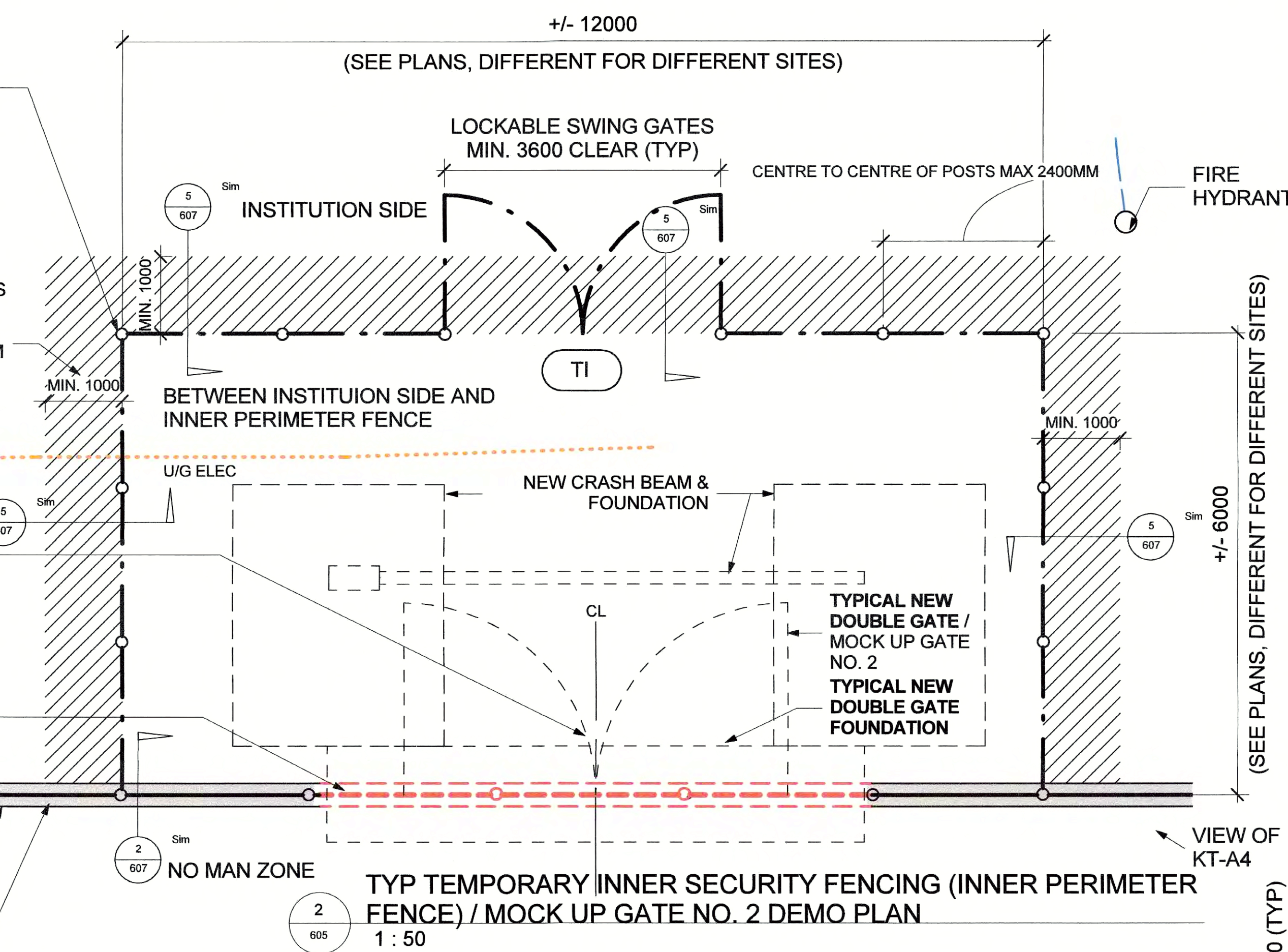
TYPICAL TEMPORARY INNER SECURITY FENCING (INNER PERIMETER FENCE) WITH LOCKABLE SWING GATES & FDS. FENCE FABRIC EXTEND TO MIN 900 MM DEEP FOR ANTI-TUNNELING PURPOSE. SEE TYPICAL FENCE ELEVATION DWG 605.

HATCHED AREA INDICATES ANTI-TUNNELING COMPACTED GRAVEL MIN. 1000 MM WIDE AND 900 MM DEEP FOR INNER PERIMETER FENCE (TYP)

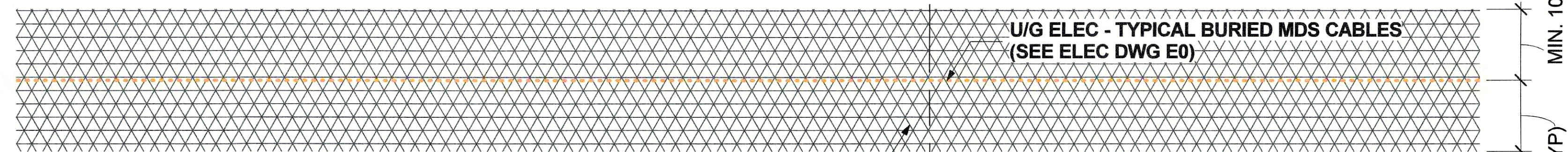
CENTRE OF OPENING OF NEW GATE 1 & 2 TO BE ALIGNED. EXISTING POSTS AT OUTER AND INNER PERIMETER MAY NOT BE ALIGNED. REVIEW LOCATION OF NEW GATE 1 & 2 ON SITE WITH DEPARTMENTAL REPRESENTATIVE ON SITE BEFORE COMMENCEMENT OF WORK.

DEMOLISH PARTIAL EXISTING ANTI-TUNNELING WALL (MIN 900 MM DEPTH) AT INNER PERIMETER FENCE FOR CONSTRUCTION OF NEW GATE FOUNDATION

INNER PERIMETER FENCE
EXISTING ANTI-TUNNELING AT INNER PERIMETER FENCE (TYP)
SHADED AREA INDICATES EXISTING FENCING TO REMAIN



TYP TEMPORARY INNER SECURITY FENCING (INNER PERIMETER FENCE) / MOCK UP GATE NO. 2 DEMO PLAN 1:50

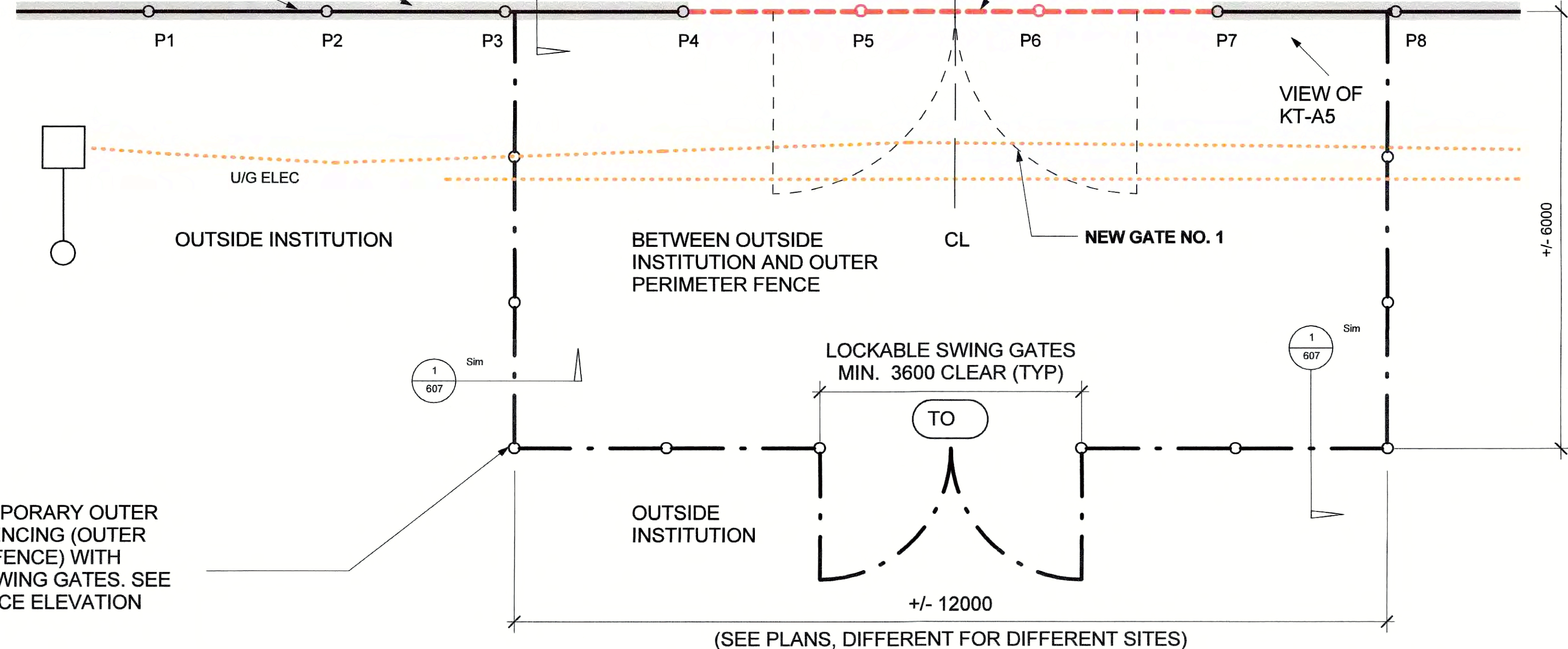


SHADED AREA INDICATES EXISTING FENCING TO REMAIN

OUTER PERIMETER FENCE

NO DIGGING ZONE TO PROTECT OPERATIONAL MDS
NO MAN ZONE

ALIGN CENTRE OF OPENING OF NEW VEHICLE/EMERGENCY GATES U.N.O. CENTRE OF NEW GATE 1 OPENING TO MATCH CENTRE LINE POSTS P5 & P6. REMOVE EXISTING LINE POSTS P5 & P6, FENCE, TOP & BOTTOM RAIL. REVIEW LOCATION ON SITE WITH DEPARTMENTAL REPRESENTATIVE.



TYP TEMPORARY OUTER SECURITY FENCING (OUTER PERIMETER FENCE) 1:50

TYPICAL TEMPORARY OUTER SECURITY FENCING (OUTER PERIMETER FENCE) WITH LOCKABLE SWING GATES. SEE TYPICAL FENCE ELEVATION DWG 605.



EXISTING ANTI-TUNNELING WALL WITH MIN 900 MM DEPTH AT INNER PERIMETER FENCE (TYP)



PHOTO KT-A5 KENT INSTITUTION EXISTING INNER & OUTER PERIMETER FENCE

2	ISSUE FOR TENDER	2020/11/08
1	ISSUE FOR TENDER REVIEW	JUN 22, 2020

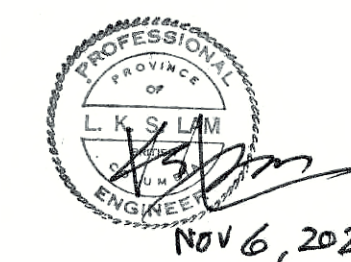
Client/client
CORRECTIONAL SERVICE CANADA

Project title/Titre du projet
PACIFIC REGION PERIMETER FENCE UPGRADES

Consultant Approval Box Only
Designed by/Concept par: DD
Drawn by/Dessiné par: DD
PWGSC Project Manager/Administrateur de Projets TPSGC: DARYL SINCLAIR / TONY TANG
PWGSC, Regional Manager, Architectural and Engineering Services/Gestionnaire régionale, Services d'architecture et de génie, TPSGC: PREETIPAL PAUL

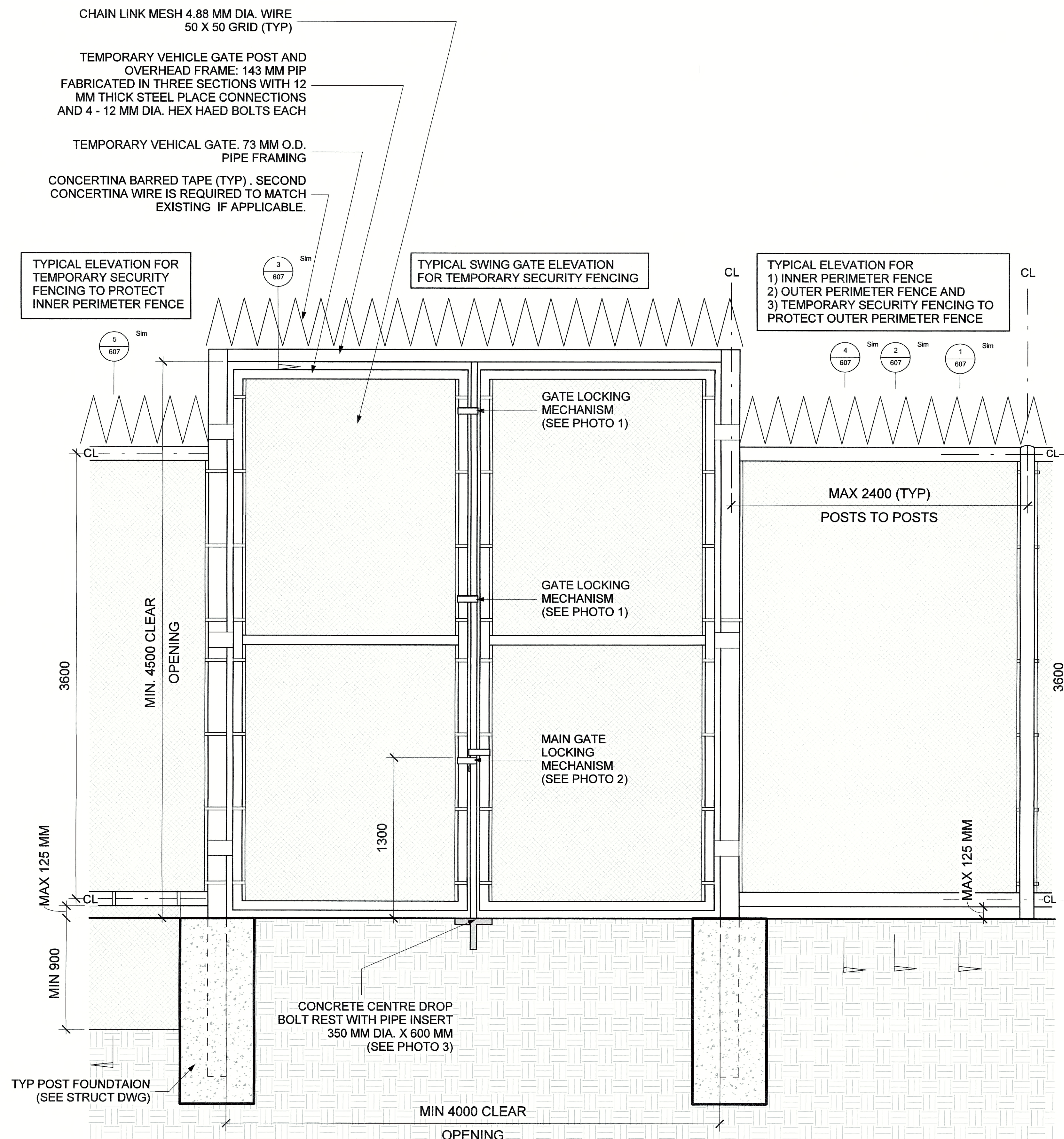
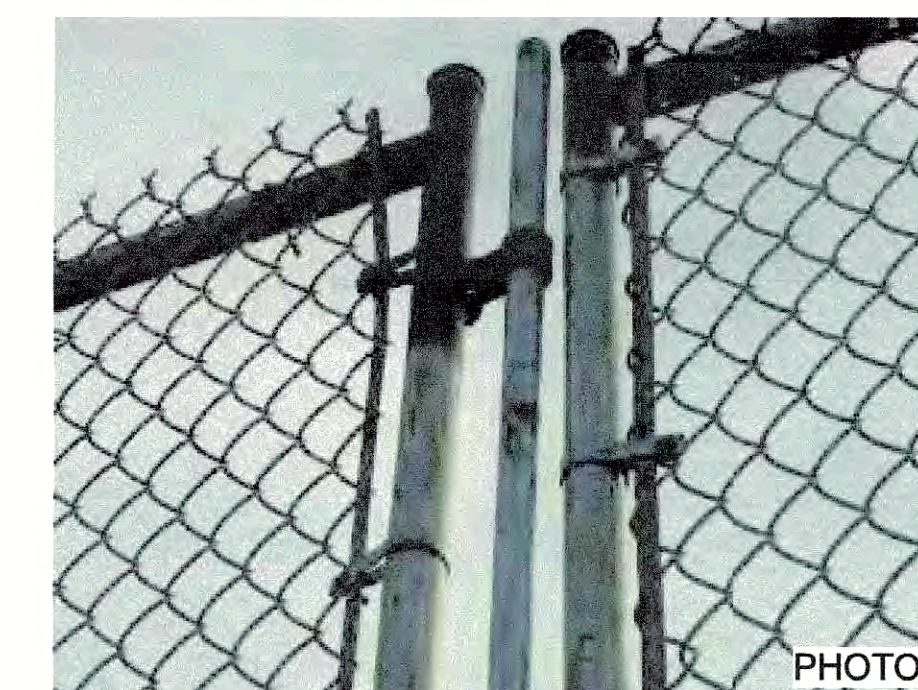
Drawing title/Titre du dessin
TYPICAL TEMPORARY SECURITY FENCING PLANS

Project No./No. du projet R.071529.001	Sheet/ Feuille 605	Revision no./Lo Révision no.
--	------------------------------	------------------------------



TEMPORARY SECURITY FENCING GENERAL NOTES

- 1) TYPICAL TEMPORARY SECURITY FENCING WITH LOCKABLE SWING GATES IS REQUIRED UNLESS NOTED OTHERWISE. IT IS TO PROTECT INNER AND OUTER PERIMETER FENCE. SUBMIT SHOP DRAWING FOR REVIEW AND APPROVAL.
- 2) TEMPORARY SECURITY FENCING TO BE 3600MM HIGH, SECURITY TO BE ENHANCED BY TOPPING IT WITH BARBED TAPE CONCERTINA (BTC) UNLESS NOTED OTHERWISE. REFER TO TYPICAL SECTIONS.
- 3) TEMPORARY SECURITY FENCING TO HAVE SWING TYPE GATE WITH MIN CLEARANCE 3600MM AS INDICATED AND SHALL BE PADLOCKED AFTER HOURS.
- 4) UPON COMPLETE INSTALLATION OR MODIFICATION OF TEMPORARY INNER AND OUTER SECURITY FENCING AND GATES & FDS, DEPARTMENTAL REPRESENTATIVES WILL CONDUCT SITE REVIEW. PROVIDE OPERATIONAL FDS ON ENTIRE LENGTH OF TEMPORARY INNER SECURITY FENCING & GATES PRIOR TO ANY CONSTRUCTION WORK.
- 5) INSPECTION AND APPROVAL OF TEMPORARY SECURITY FENCING BY DEPARTMENTAL REPRESENTATIVE & CSC IS REQUIRED BEFORE COMMENCEMENT OF ANY WORK AND COMPLETION OF WORK BEFORE DISMANTLE.
- 6) DURING CONSTRUCTION, FDS AND MDS SECOTRS WILL BE 'MASKED' DURING CONSTRUCTION WORK HOURS AND THEN RE-INSTATED AFTER CONSTRUCTION WORK ENDS FOR THE DAY.
- 7) FINAL REVIEW AND APPROVAL FROM DEPARTMENTAL REPRESENTATIVE IS REQUIRED BEFORE DISMANTLE OF TEMPORARY SECURITY FENCING, GATES AND FDS PRIOR TO COMMENCEMENT OF CIVIL WORK.
- 8) NOTE 'NO DIGGING ZONE' ON DRAWING (TYPICAL 1000MM BOTH SIDES FROM MDS).
- 9) ALL NEW FENCE POSTS INCLUDING TEMPORARY SECURITY FENCING POSTS SHALL BE SPACED A MAXIMUM OF 2400MM APART (CENTRE OF POST TO CENTRE). REFER TO SPECIFICATION FOR FENCE POST REQUIREMENTS.
- 10) NO GAP SHALL EXCEED 125MM, FOR EXAMPLE BETWEEN POSTS OR FABRIC, BOTTOM RAIL AND GROUND ETC.
- 11) ANTI-TUNNELING WALL OR BARRIER IS REQUIRED TO PROTECT INNER PERIMETER FENCE. SEE SECTIONS FOR INNER PERIMETER FENCE AND TEMPORARY SECURITY FENCING.
- 12) WHEN TEMPORARY SECURITY FENCING AND GATES ARE REMOVED UPON REVIEW AND APPROVAL BY DEPARTMENTAL REPRESENTATIVE, THE COMPACTED GRAVEL CAN BE LEFT IN PLACE EXCEPT WHERE IT INTERFERES WITH NEW WORK SUCH AS NEW FENCING AND GATE FOUNDATIONS AND NEW PAVEMENT/BASE.



1
606
TYPICAL TEMPORARY INNER & OUTER FENCE AND LOCKABLE GATE ELEVATION
1 : 20

Revision/Revision	Description/Description	Date/Date
2	ISSUE FOR TENDER	2020/11/06
1	ISSUE FOR TENDER REVIEW	JUN 22, 2020

Client/client
CORRECTIONAL SERVICE CANADA

Project title/Titre du projet
PACIFIC REGION PERIMETER FENCE UPGRADES

Consultant Approval Box Only
Designed by/Concept par: MIB/DD
Drawn by/Dessiné par: DD
PWGSC Project Manager/Administrateur de Projets TPSGC: DARYL SINCLAIR / TONY TANG
PWGSC Regional Manager, Architectural and Engineering Services/Gestionnaire régionale, Services d'architecture et de génie, TPSGC: PREETIPAL PAUL

Drawing title/Titre du dessin
TYPICAL TEMPORARY INNER & OUTER SECURITY FENCE GENERAL NOTES AND ELEVATIONS

Project No./No. du projet R.071529.001	Sheet/ Feuille 606	Revision no./ La Révision no.
--	------------------------------	----------------------------------



2	ISSUE FOR TENDER	2020/11/08
1	ISSUE FOR TENDER REVIEW	8/11/22, 2020
Revision/Revision	Description/Description	Date/Date

Client/client

CORRECTIONAL SERVICE CANADA

Project title/Titre du projet

PACIFIC REGION PERIMETER FENCE UPGRADES

Consultant Approval Box Only

Designed by/Concept par DD

Drawn by/Dessiné par DD

PWGSC Project Manager/Administrateur de Projets TP/SGC
DARYL SINCLAIR / TONY TANG

PWGSC, Regional Manager, Architectural and Engineering Services / Gestionnaire régionale, Services d'architecture et de génie, TP/SGC
PREETIPAL PAUL

Drawing title/Titre du dessin

TYPICAL PERIMETER FENCE & TEMPORARY SECURITY INNER & OUTER FENCING SECTIONS

Project No./No. du projet	Sheet/ Feuille	Revision no./ La Révision no.
R.071529.001	607	

INNER PERIMETER FENCE (3600MM HT)
NOTE: EXISTING FENCE WITH SECOND CONCERTINA TAPE

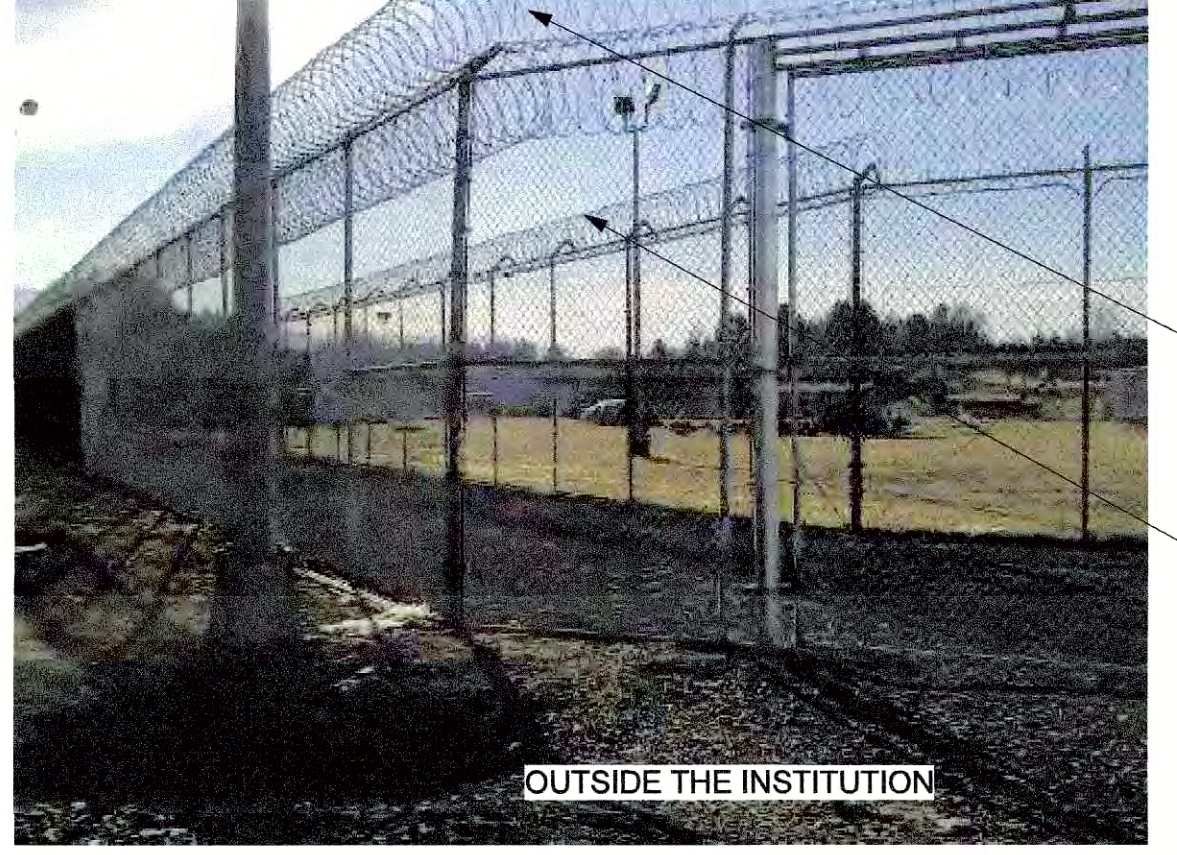


ANTI-TUNNELLING WALL (NON-VISIBLE) MINIMUM 900 MM DEPTH AT INNER PERIMETER FENCE



NO MAN ZONE

ANTI-TUNNELLING WALL (VISIBLE) MINIMUM 900 MM DEPTH AT INNER PERIMETER FENCE



OUTER PERIMETER FENCE (3600MM HT)
NOTE: EXISTING FENCE WITH SECOND CONCERTINA TAPE

INNER PERIMETER FENCE (3600MM HT)

GENERAL NOTE:
1) WHERE EXISTING FENCE HAS A SECOND CONCERTINA WIRE, NEW INNER, OUTER PERIMETER FENCE AND TEMPORARY INNER & OUTER SECURITY FENCING IS REQUIRED TO MATCH EXISTING TO PROVIDE SECOND CONCERTINA TAPE.

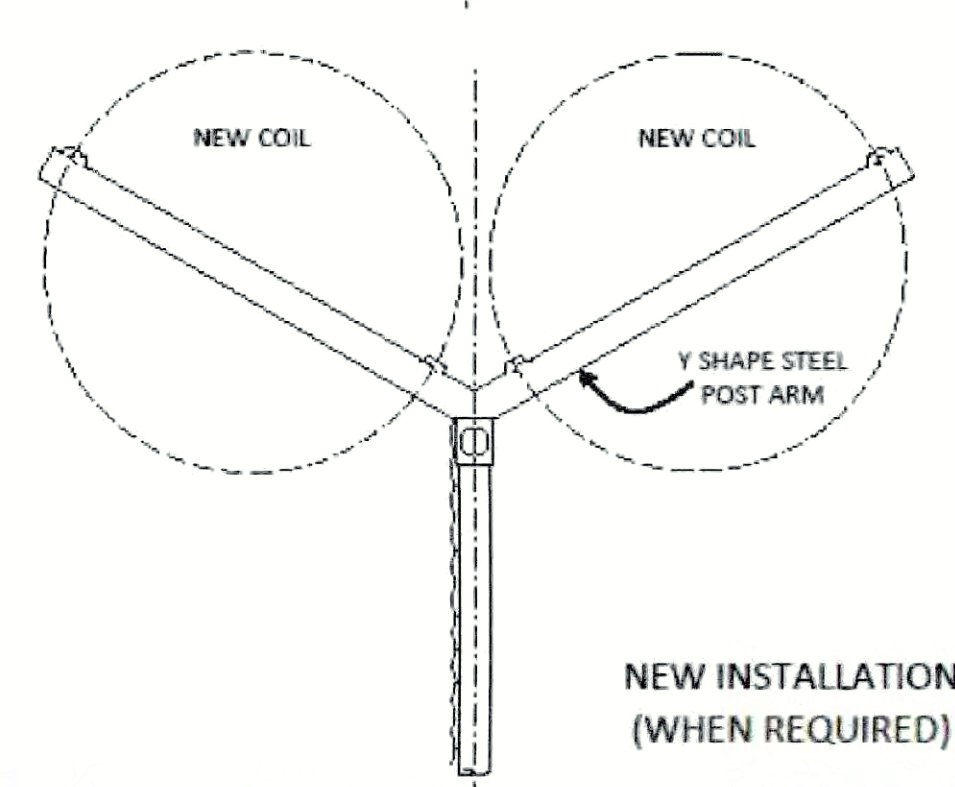
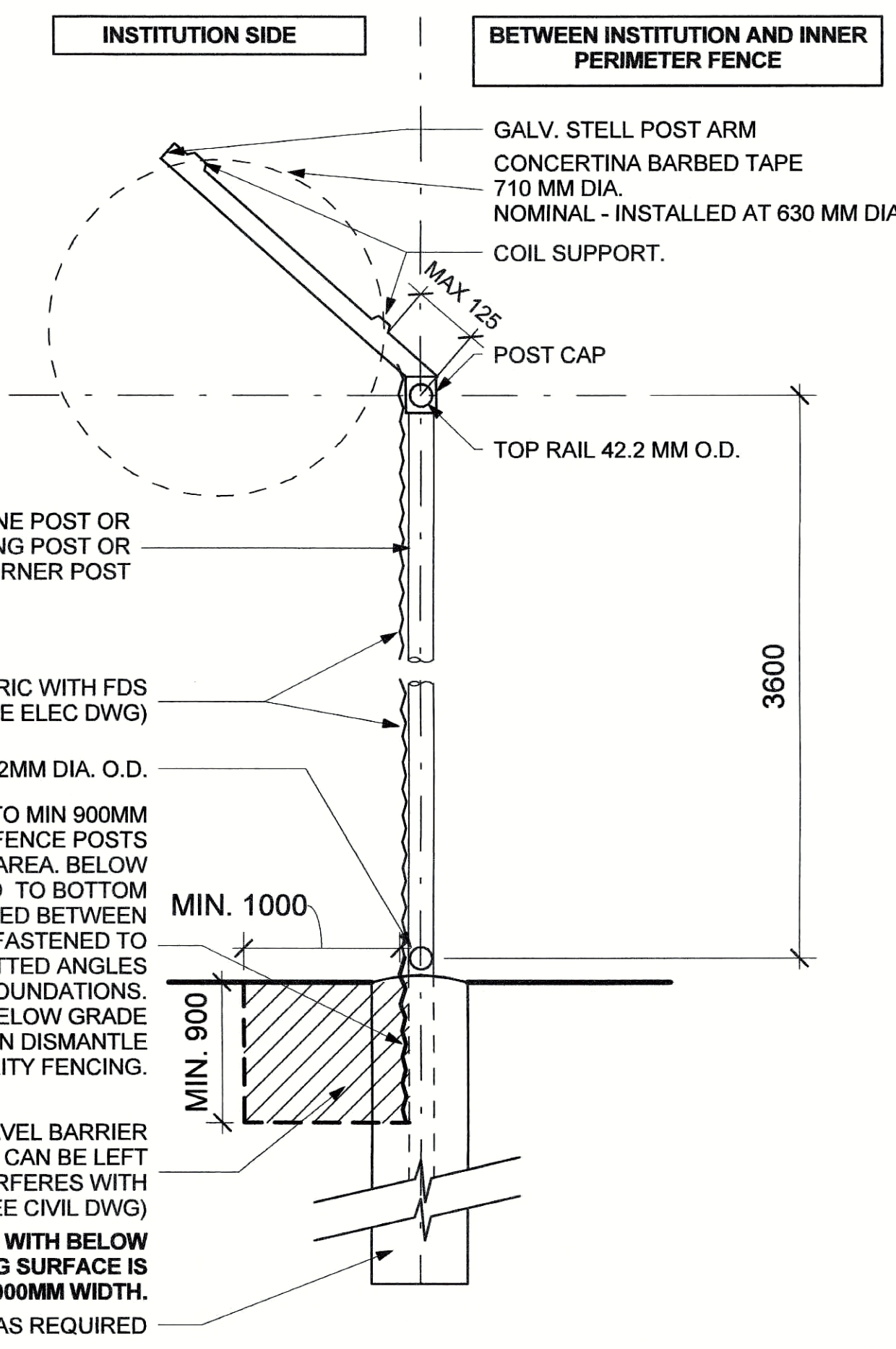


PLATE SP-2-3 - INNER FENCE WITH A SECOND CONCERTINA TAPE
CONCERTINA BARB TAPE: 710 mm Ø NOMINAL - INSTALLED AT 630 mm Ø

3
607
NTS
Correctional Service Canada - Technical Criteria
Page SP-19



5
607
NTS
TYPICAL TEMPORARY INNER SECURITY FENCING SECTION - PROTECT INNER PERIMETER FENCE DURING CONSTRUCTION

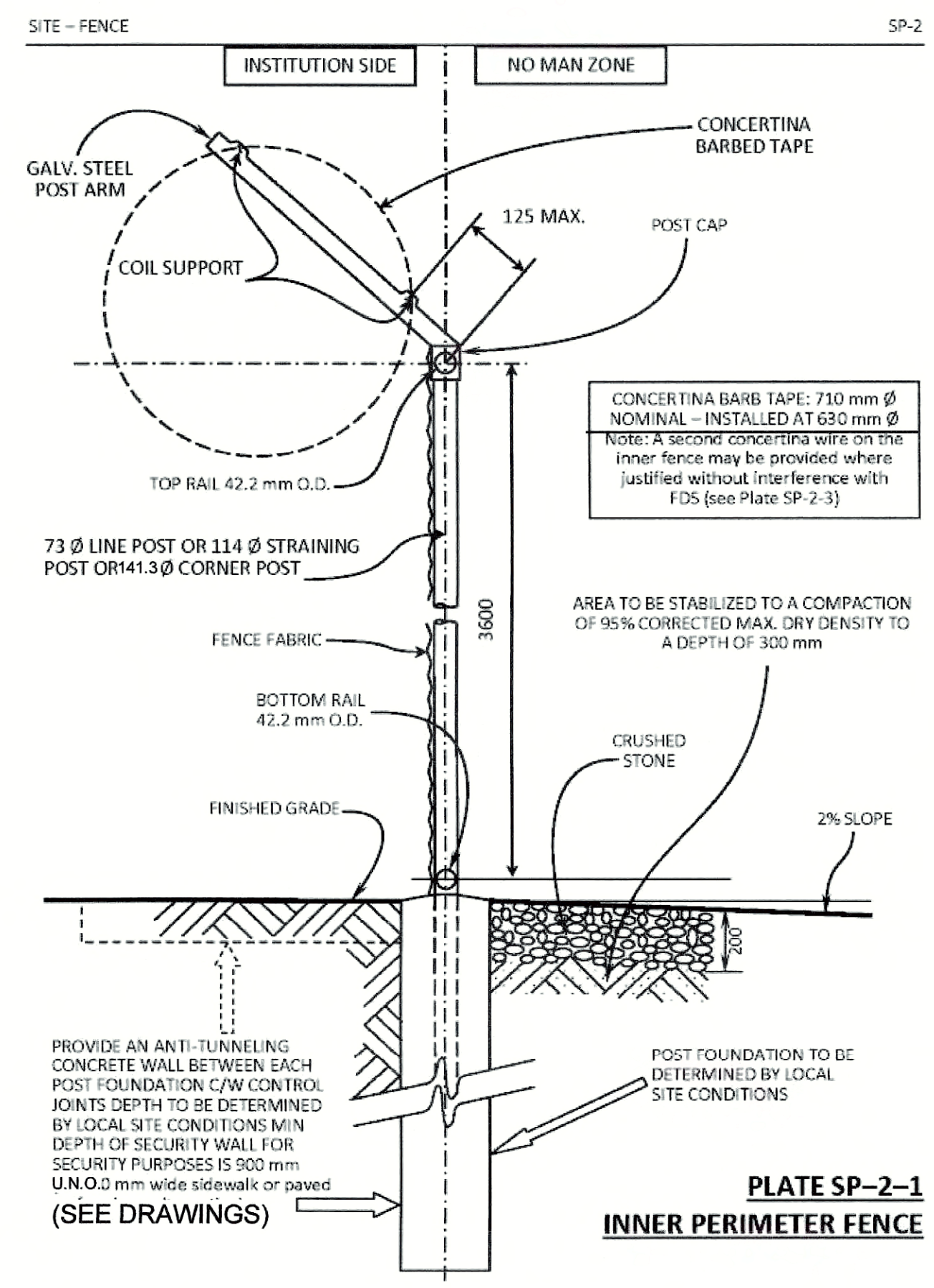
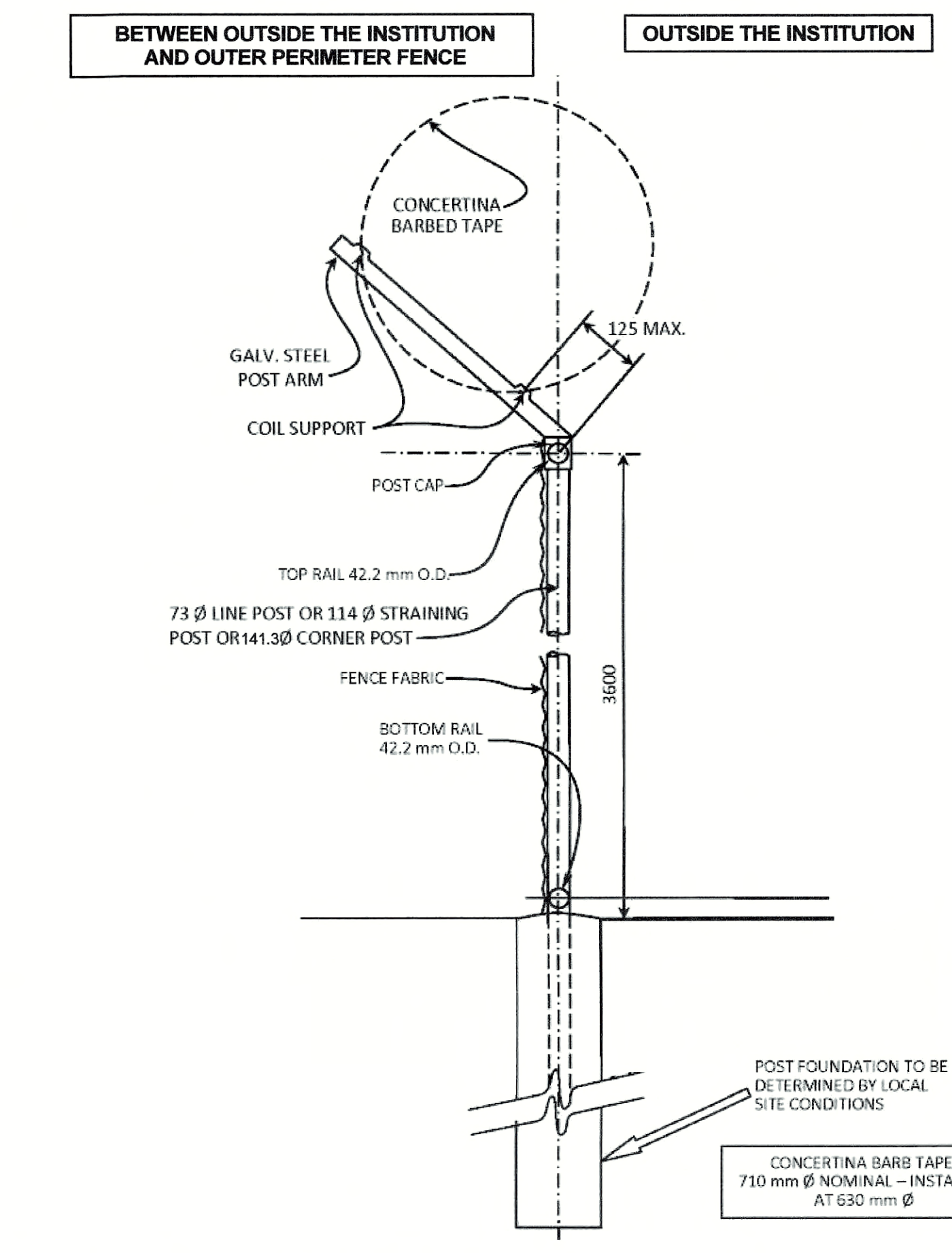


PLATE SP-2-1
INNER PERIMETER FENCE
Correctional Service Canada - Technical Criteria
April 2015
Page SP-17



4
607
NTS
TYPICAL TEMPORARY OUTER SECURITY FENCING SECTION - PROTECT OUTER PERIMETER FENCE DURING CONSTRUCTION

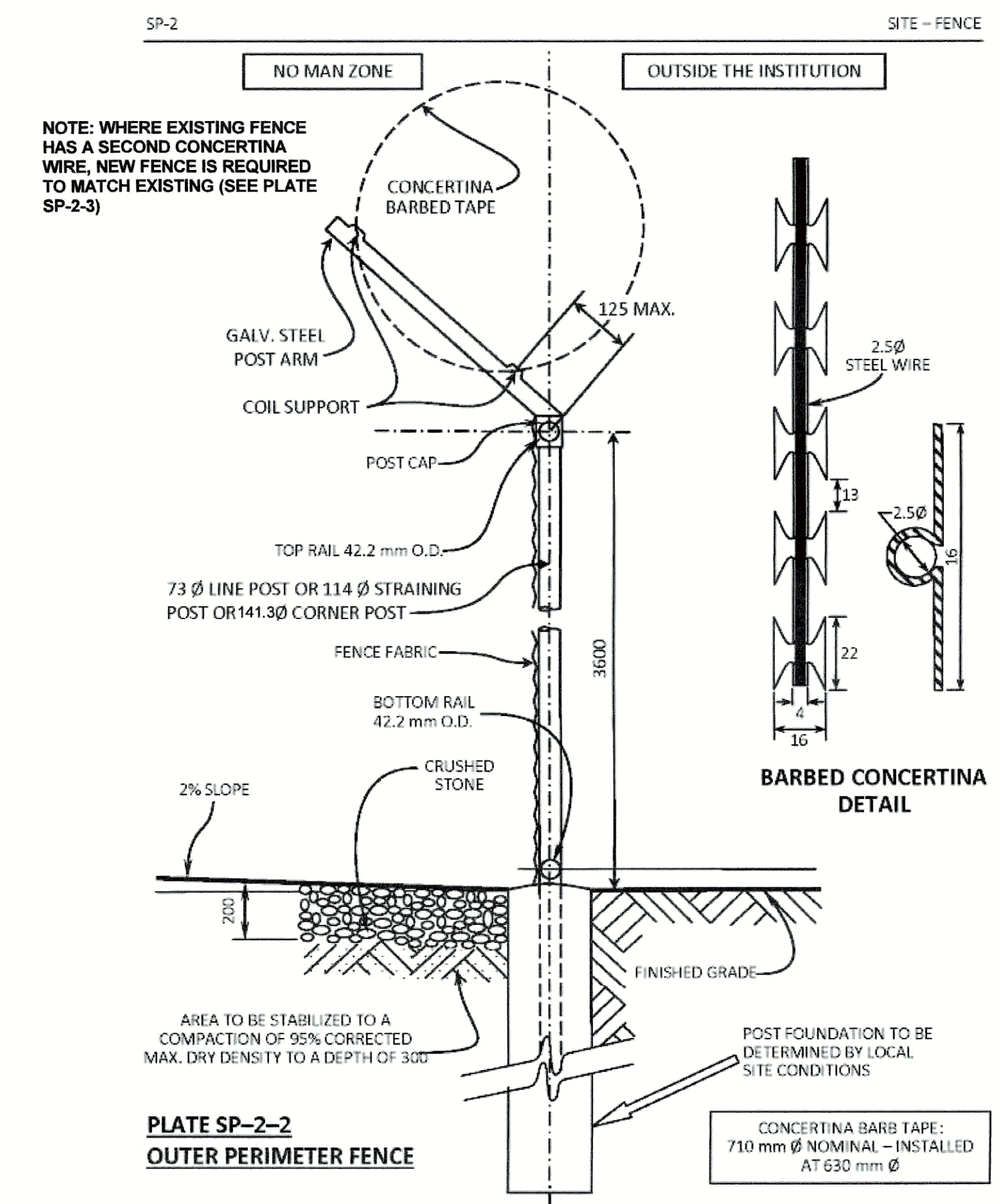


PLATE SP-2-2
OUTER PERIMETER FENCE
Correctional Service Canada - Technical Criteria
April 2015
Page SP-18

1
607
NTS
TYPICAL OUTER PERIMETER FENCE SECTION