

**WSP-3 SITE – GATES/SALLY PORT****1. SCOPE**

This section outlines requirements for vehicle and pedestrian access and egress control for Women's institutions with a secure perimeter.

Access and egress control for open minimum security units outside the perimeter fence involves signage and reporting to a 24 hr open control post but does not include fencing and gates. Refer to type 'D' control post under chapter A-12 Control posts for functional requirements as well as the CSC Accommodation Guidelines.

**2. RELATED SECTIONS****2.1 Technical Criteria Document sections:**

WSP-1 – Site Development

WSP-2 – Fences

TCD A-6 – Hardware

TCD A-10 – Contraband Control Systems

TCD A-12 – Control Posts and Dedicated Security Routes

**2.2 National Master Specification Section**

01 35 13.16 – Special Project Procedures for Detention Facilities

08 34 56 – Security Gates

32 31 13 – Chain Link Fences and Gates

32 31 13.53 – High-Security Chain Link Fences and Gates

34 1 13 – Vehicle Barriers

**3. ACCESS CONTROL SECURITY REQUIREMENTS**

- 3.1** Women's institutions shall have a co-located entrance point for pedestrian and vehicle traffic. Where impractical, a vehicle dedicated access shall be located in close proximity to the Principle entrance. The 24 hour Principle Entrance Control Post (PECP), supervises all traffic by eye or assisted by CCTV and controls all pedestrian and vehicle gates.
- 3.2** Because the Principle entrance may malfunction or be inoperable, one Emergency Vehicle Entrance shall be provided, to be located at a point convenient for vehicle access. This Emergency Vehicle Entrance shall be manually operated and be either a Sliding Gate (Section 5.1) or a Swing Gate (Section 5.2).
- 3.3** Vehicles shall access a fenced sally port with a gate at each end. The sally port is where in-coming and out-going vehicles will be inspected by a dispatched officer.

## **4. MAIN ENTRANCE**

### **4.1 Definition**

The Principle Entrance controls all traffic into and out of the institution. This involves the screening and recording of all movement and the control of all gates and doors through the secure perimeter. The PECP performs all entrance functions from an open reception station and is supported by a closed security office for the Shift Supervisor. Traffic in and out of the institution shall meet the following criteria:

- 4.1.1 A vehicle sally port, which gives access into a vehicle fenced compound accommodating multiple functions shall be equipped with sliding gates. The sliding gates shall be remote controlled from the PECP and be interlocked to prevent simultaneous unlocking. The sliding gates control must provide for the opening of one gate at a time and only when the other gate is in its latched position. Both gates shall be also capable of manual unlocking and opening.
- 4.1.2 A vehicle sally port shall be sized to include an inspection area to facilitate a thorough inspection of vehicles. It shall be capable of holding two van type trucks astride (8.5 m min.) and hold one semi trailer truck in length (23 m min). There shall be no sentry station in the sally port as an officer is called to perform inspections as required. As such, a pedestrian gate is also required for access from the interior side of the compound.
- 4.1.3 In order to prevent forced drive through of vehicles, the exterior gate of the vehicle sally port shall be equipped with a crash barrier (see section 4.4 and Plates WSP-3-6 to WSP-3-8). The width of the sally port shall be sized to accommodate the crash barrier in the open position.
- 4.1.4 The vehicle compound with buildings, situated on the edge of the perimeter, shall also be equipped with a vehicle and pedestrian gates for access into the main institution for servicing needs. The vehicle gate shall be sliding and of similar type to the sally port gates. The pedestrian gate shall be swing type. Both gates shall be remote controlled with the aid of CCTV from the PECP.
- 4.1.5 All Principal Entrance pedestrian traffic shall be physically separated from vehicular traffic.
- 4.1.6 All pedestrian traffic shall enter directly into an Principle entrance building reception area for processing / screening by the PECP. This building may accommodate other functions and be integrated with the Fenced perimeter. The initial point of access shall be through a vestibule with both doors remote controlled.
- 4.1.7 See Plate WSP-3-1 for a typical Principal Entrance layout.

### **4.2 Crash Barriers**

- 4.2.1 A crash barrier for the sally port shall be connected to the interior side of the exterior gate or the rack and pinion rail depending on the gate operator type and shall be operated simultaneously with the remote operation of the gate.
- 4.2.2 In order to resist vehicle impact, crash barriers shall be made of a steel I-beam or rectangular tubing supported on anti friction rollers on heavy uprights. In a

test equivalent to the US Department of State K4 certification<sup>10</sup> (6 804 kg @ 48.3 km/hr or 15,000 lbs @ 30 mph) the vehicle must be inoperable after hitting the crash bar; disabling the vehicle being the main purpose.

- 4.2.3 Three heavy engineered uprights support the crash barrier and as well serve as bollards protecting the adjacent fence and gate posts. In either open or closed gate position, the crash barrier is supported by 2 uprights.
- 4.2.4 If crash barriers are used for emergency gates on the perimeter, they shall be made of a simple beam or rectangular tubing with a counter weight mechanically lifted and lockable in closed position with the use of a security padlock.
- 4.2.5 Gates having integrated crash bar or crash cables system are acceptable if they meet M30 designation of *ASTM F2656-07*<sup>11</sup>, K4 certification of the US Department of State (see footnote 1) or the European equivalent.
- 4.2.6 See Plates WSP-3-3 to WSP-3-5 for typical sally port crash barriers.

## 5. FENCE GATES

### 5.1 *Vehicle Sliding Gates*

- 5.1.1 The size of each gate shall provide for a 4 m wide x 2.4 m high clear opening.
- 5.1.2 Sliding gates which match the fixed fence shall be topped with 600 mm upright stands with three strands of barbed wire. The fixed fence along the travel of the gate shall be similarly topped. (See section SP-2, Fences).
- 5.1.3 Gate framing members shall be 73 mm O.D. pipe weighing 8.6 kg/m welded and drained.
- 5.1.4 Motorized gates shall be capable of moving at a speed of 150 mm/s.
- 5.1.5 Gate shall have three point locking (top, bottom and middle) or be locked by way of rack and pinion mechanism and a vertical channel to clasp the gate.
- 5.1.6 Locking column shall be equipped with an emergency manual control mechanism located for easy access.
- 5.1.7 Operator and track shall be protected and electrically heated to ensure all weather operation. In rack and pinion system (or “drive rail” operator) the teeth of the rack can be unprotected provided that they are on the lower side of the rack and visible to the operator.
- 5.1.8 Outer perimeter gates with connected crash beams shall be designed to take the additional weight into account.
- 5.1.9 For gates operated by an overhead chain drive system, a guide shall be provided at the bottom of the gate running in a channel.
- 5.1.10 Motors shall be located low to the ground to facilitate maintenance
- 5.1.11 All gate components shall be galvanized.

<sup>10</sup> US Department of State SD–STD–02.01, Revision A , March 2003, Test Method for Vehicle Crash Gate Testing of Perimeter Barriers and Gates

<sup>11</sup> ASTM F2656–07, Standard Test Method for Vehicle Crash Testing of Perimeter Barriers, M30 Designation: Medium-duty truck (M) 6800 kg @ 50 km/h

5.1.12 All security hardware shall be in accordance with chapter A-6, Hardware of the present document. All other components shall be in accordance with the Fences section of this criterion.

5.1.13 See Plates WSP-3-2 and WSP-3-3 for a typical gate installation.

## **5.2 Vehicle Swing Gates (Perimeter and Internal Fences)**

5.2.1 Gates shall consist of a pair of 2 m wide by 2.4 m high sections, for an opening of 4 m wide X 2.4 m high, except where municipal by law or sufficient height and width for local emergency vehicles (fire trucks) dictate otherwise<sup>12</sup>.

5.2.2 The swing direction of gates shall be based on road access design and snow removal constraints.

5.2.3 Any gap between the bottom rail of a gate and the ground shall not exceed 125 mm. Where gates are located on a fence equipped with a ground barrier, this barrier shall be continuous.

5.2.4 The chain link fabric for gates shall match that of the fence (see section SP-2, Fences).

5.2.5 Gate framing shall be as per item 5.1.3 above.

5.2.6 There shall be three gate hinges and they shall be of standard quality. Foot, mid height, and top locking shall be accomplished with Southern Folger detention grade locks or equivalent.

5.2.7 Plate SP-3-7 illustrates a typical design for vehicle swing gate.

## **5.3 Pedestrian Gates (Perimeter and Internal Fences)**

5.3.1 The size of each swing gate shall provide for a 1.2 m wide x 2.1 m high clear opening.

5.3.2 Items 5.2.2, 5.2.3 and 5.2.4 noted above for vehicle swing gates shall apply.

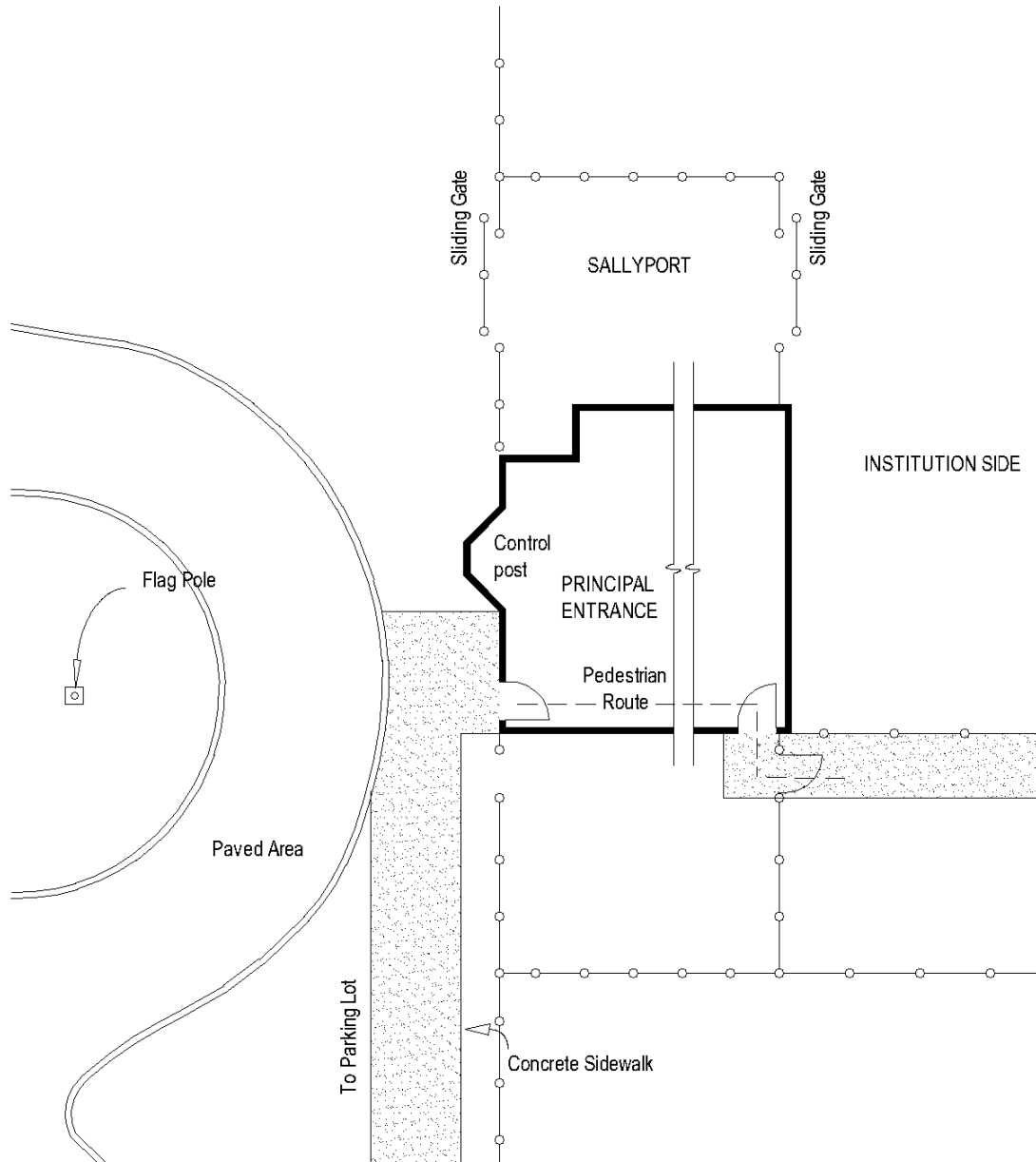
5.3.3 Swing gate framing members shall be 43 mm O.D. pipe weighing 3.4 kg/m.

5.3.4 Swing gates shall be manually operated with security key locks when gates are used daily. Infrequently used gates shall be security padlocked.

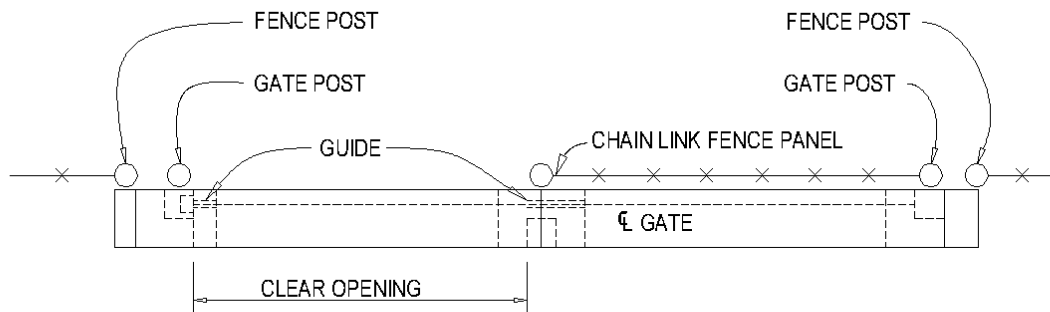
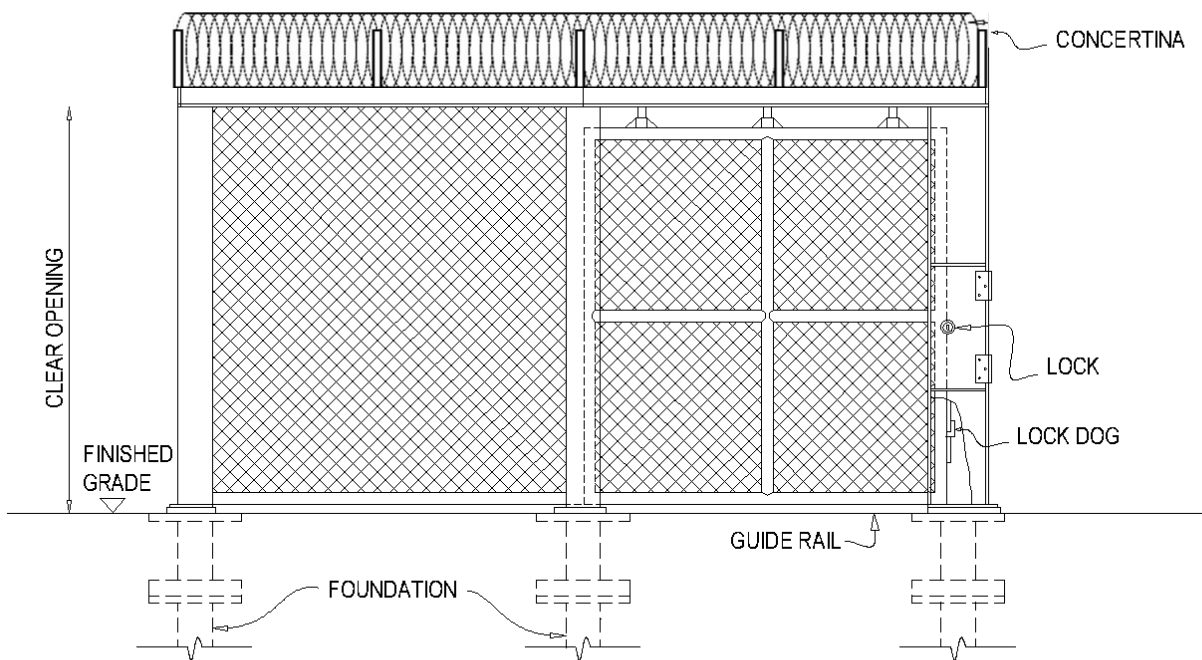
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<sup>12</sup>

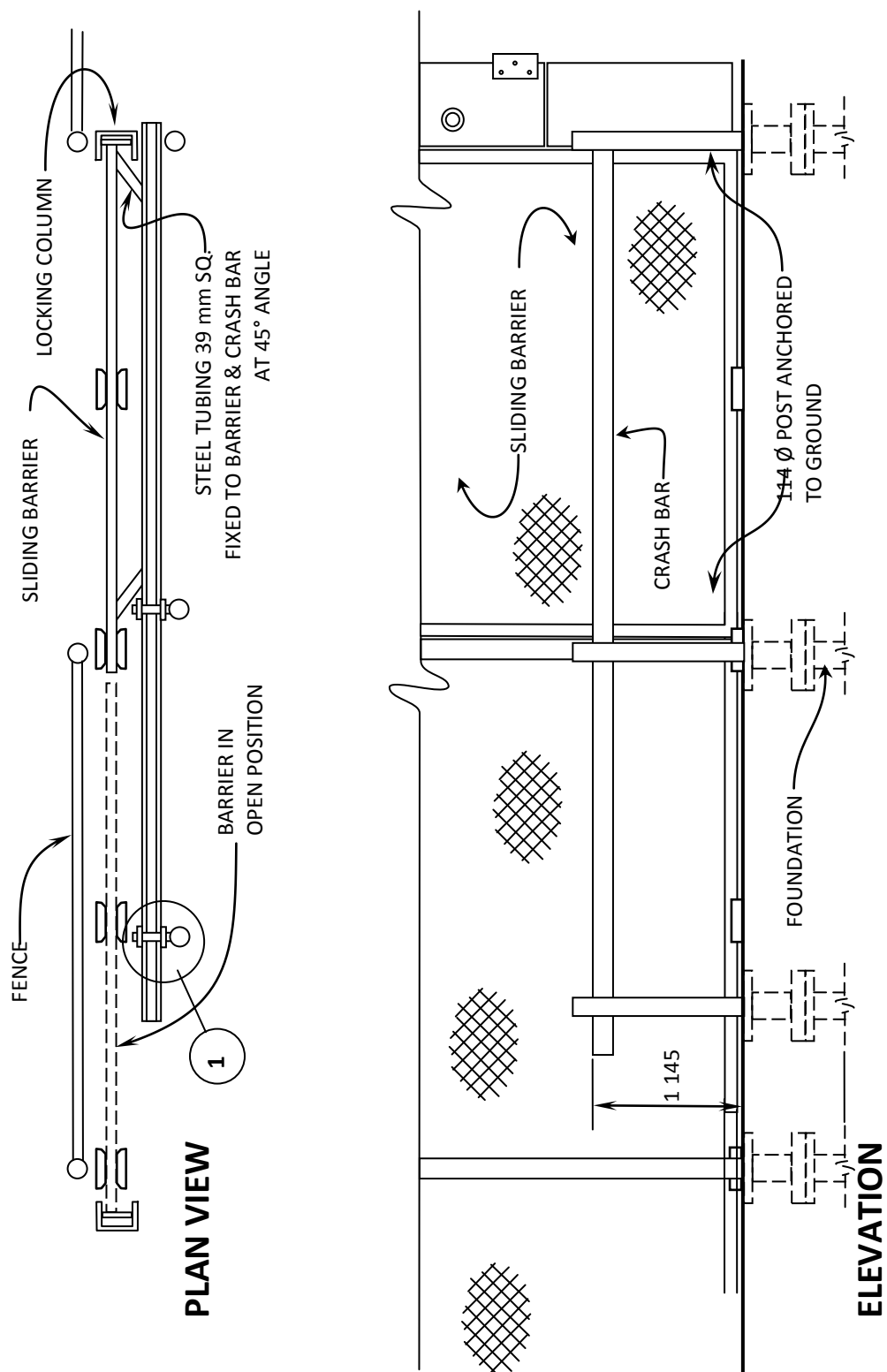
For example, in Ontario the *Highway Traffic Act* Section 109 stipulate a maximum height of 4.15 m by a width of 2.6 m, which is similar to the 13'-6" (4.12 m) by 8 (2.43 m) in USA.



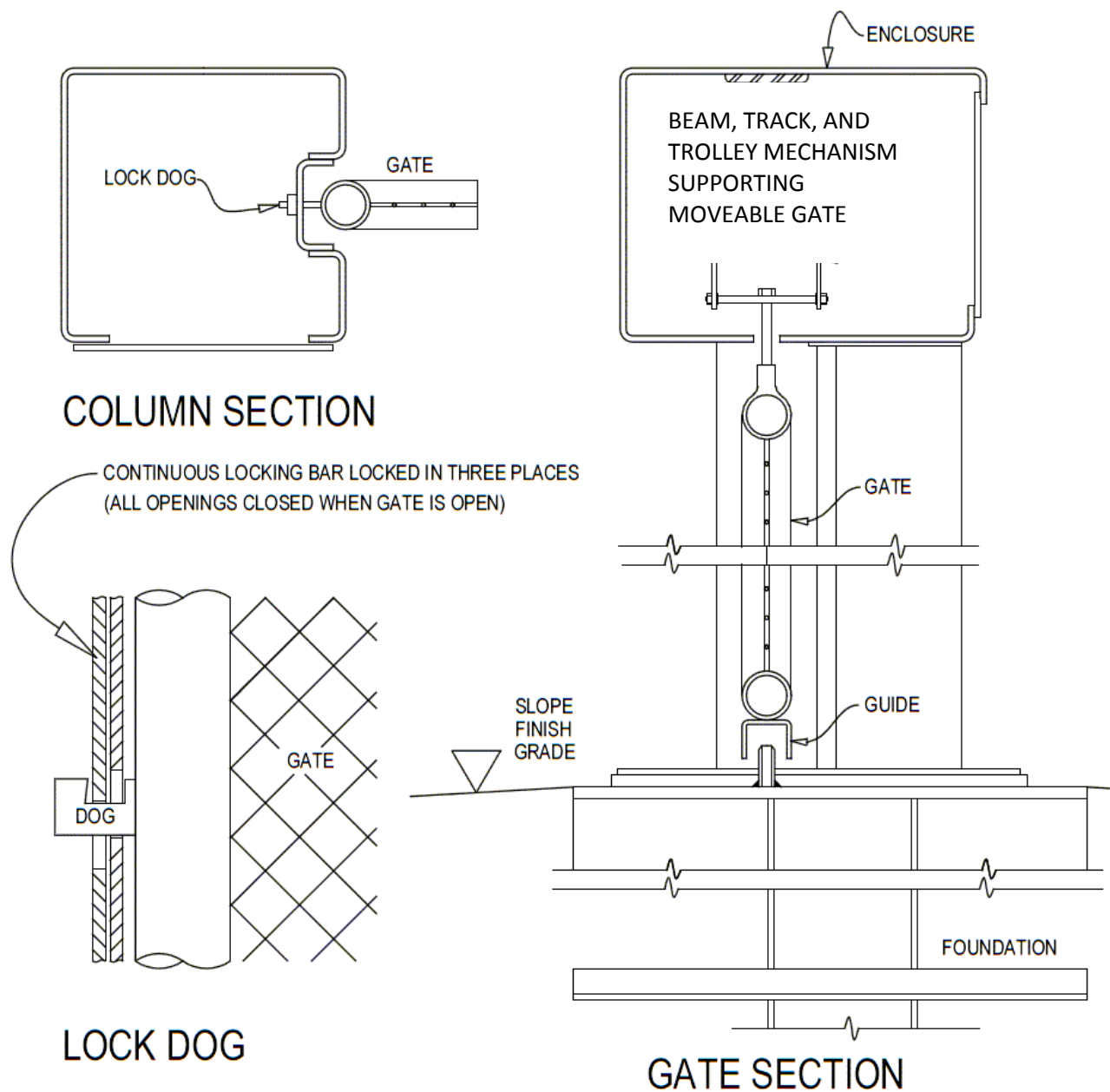
**PLATE WSP-3-1 – TYPICAL SALLY PORT ARRANGEMENT**

**TOP VIEW****FRONT VIEW**

**PLATE WSP-3-2 – FENCE GATE WITH OVERHEAD CHAIN DRIVE**  
**PERIMETER FENCE**

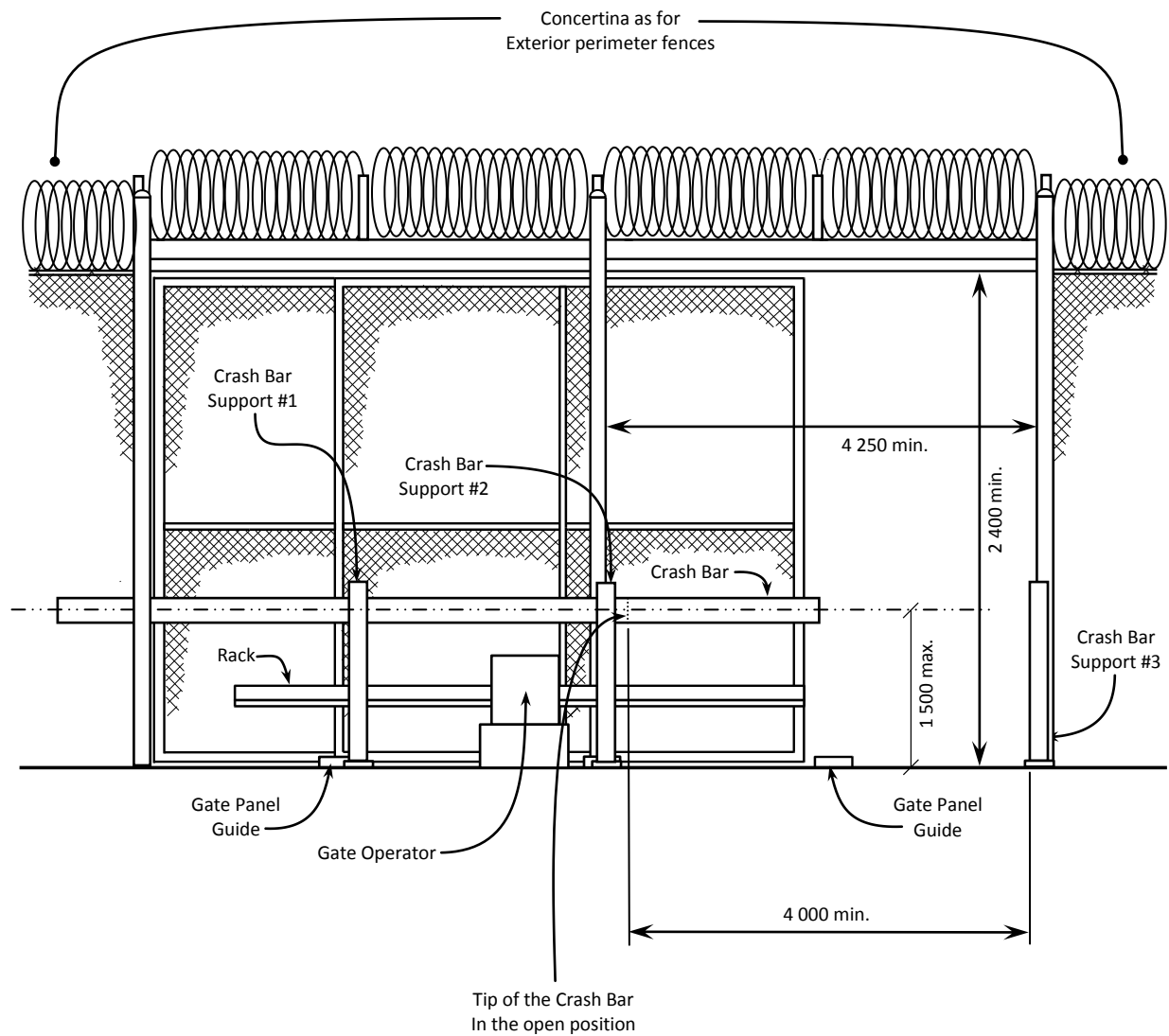


**WSP-3-3 – FENCE GATE WITH OVERHEAD CHAIN DRIVE PERIMETER FENCE**

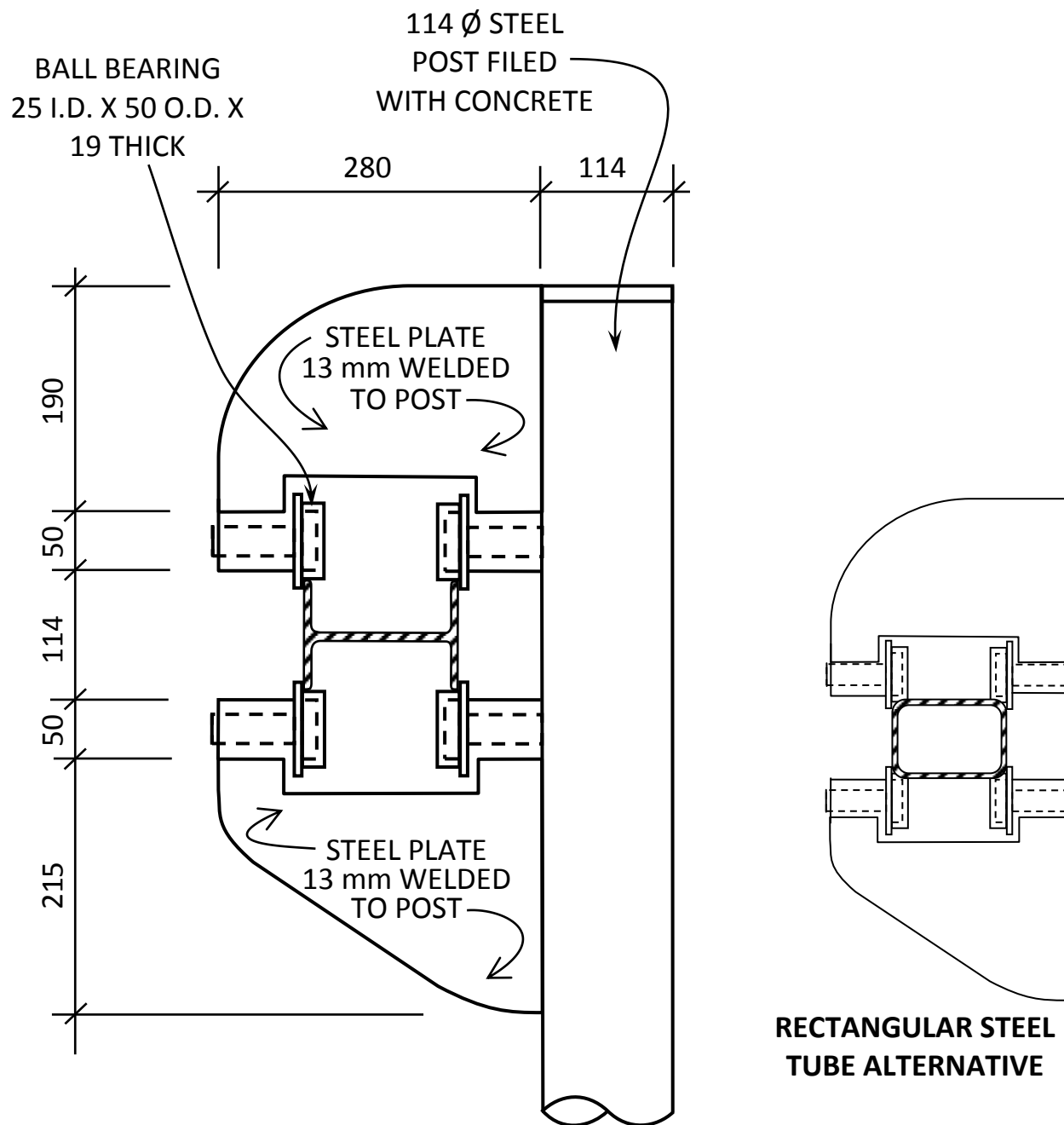


**PLATE WSP-3-4 – FENCE GATE WITH OVERHEAD CHAIN DRIVE – DETAILS**

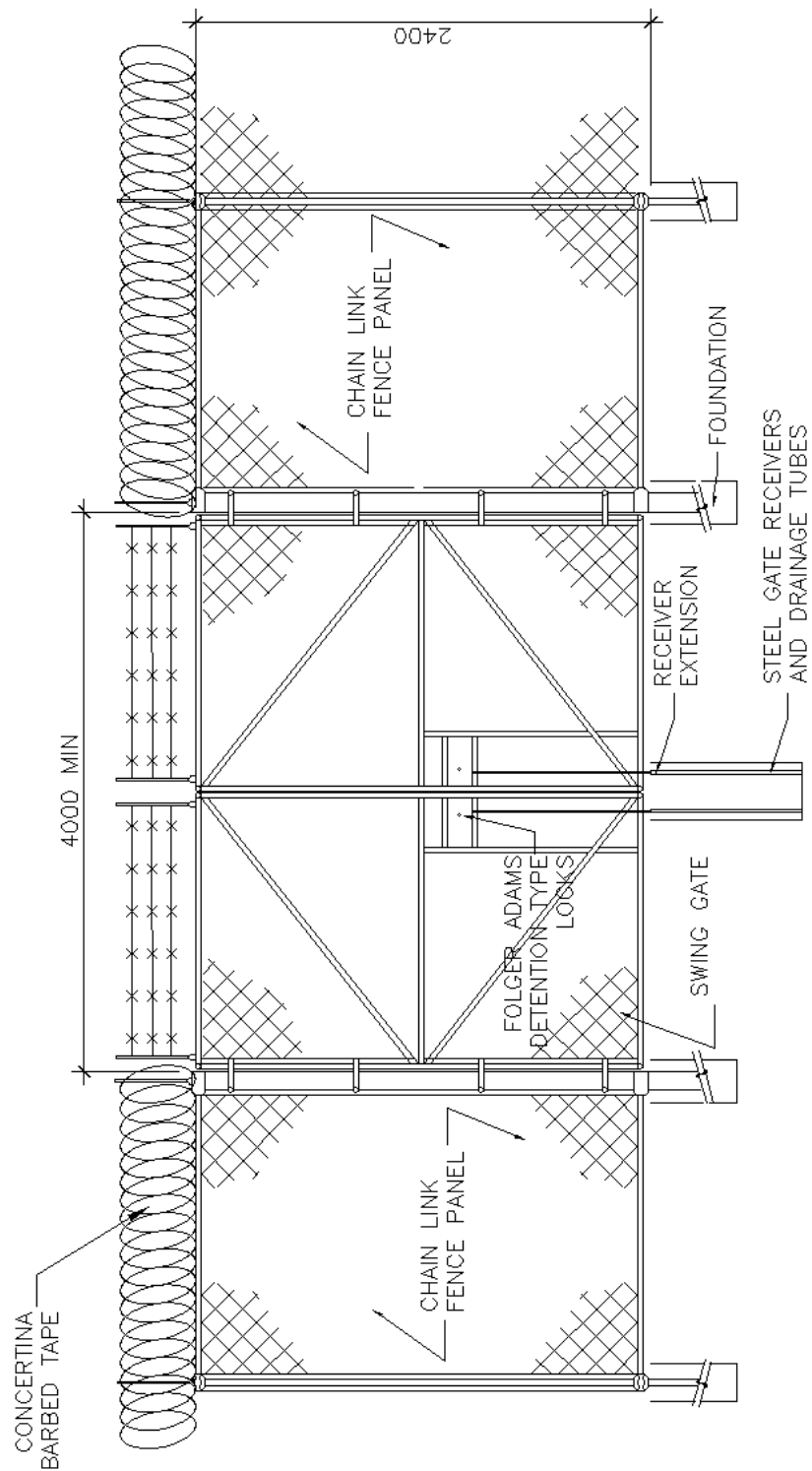




**PLATE WSP-3-5 – FENCE GATE WITH RACK & PINION –**  
**INSIDE ELEVATION PERIMETER FENCE**



**PLATE SP-3-6 – CRASH BAR DETAILS**

**PLATE WSP-3-7 – VEHICLE SWING GATE (EMERGENCY GATE)**

