



PUBLIC TRANSPORT CORPORATION

Infrastructure Division

**Doc. No. TRM200-
WI223**

VERSION 4.0

**TRAM TRACK MAINTENANCE DEPARTMENT
STUD MARKING**

STUD MARKING DETAILS

0.41CK5 -



**TRAM TRACK MAINTENANCE DEPARTMENT
STUD MARKING**

1. TRAM PRIORITY STUDS (See exhibit 1 & 2):

- 100mm × 100mm Orange squares 3 No.

2. AUTOMATIC POINTS:(See exhibit 3 for collins points & exhibit 4 for Hanning & Kahl points)

- 150mm Ø white round studs
- Cut off mark: 1 No. white round stud in the centre on the travelling direction of the track.
- Cut on mark: 2 No. white round studs in the centre on the travelling direction of the track.
- Stopping mark: 3 No. white round studs in the centre on the travelling direction of the track. (Note : The tram must stop at this point to check the display signal prior to proceeding forward)
- Compulsory Mark See compulsory stopping studs

3. SECTION INSULATORS INCLUDING H- CROSSINGS: (See exhibit 5a & 5b)

- 150mm Ø round yellow studs (Normal approach for "B", "A", "Z" class and all pole trams).
- 150 × 150 × 150 mm yellow triangles studs (For A and Z Pantograph Trams on leading ends).
- Cut off mark: 1 stud (round or triangle) in the centre of the track.
- Cut on mark: 2 studs (round or triangle) in the centre of the track.

4. CROSS OVERS - SHUNTS (See exhibit 6):

- A-Z-W trams half width yellow bar from left rail 100 × 700mm.
- B Class two half width yellow bars from left rail 100 × 700mm.



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5. FOULING MARKS:

- One full width yellow bar 100 × 1400mm.(Termini, Cross overs and Depots).

6. COMPULSORY STOPS:

- All trams - two full width yellow bars 100 × 1400mm at facing points. (Except at The following locations where the yellow bars are set back to stopline:

- 1) Camberwell Junction
- 2) Simpson Street
- 3) Sturt Street at Kingsway
- 4) Nicholson Street at Victoria Pde

- All trams - an orange reflective strip on the flag at compulsory tram stop locations.

- Full white bar 75mtrs or 3 pole lengths prior to automatic points and all facing points.

7. TRAM TERMINI (See exhibit 7):

- Two full width yellow bars at end (compulsory stop).
- One half yellow bar for A-Z-W trams from left rail.
- Two half yellow bars for B class from left rail.

NOTE : FOR OVERALL DETAILS REFER TO PLAN NO. TS1802 ATTACHED

STOPPING MARKER

2. Termini

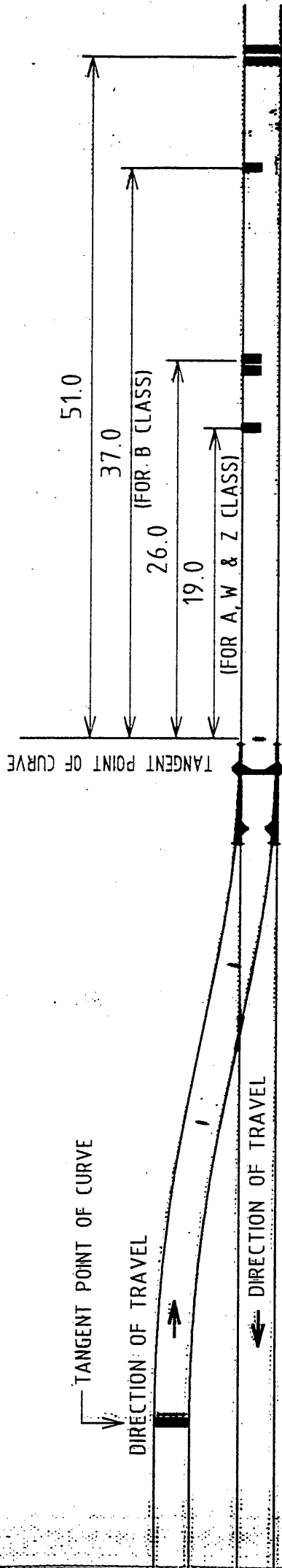


EXHIBIT 7

STOPPING MARKER

1. Crossovers

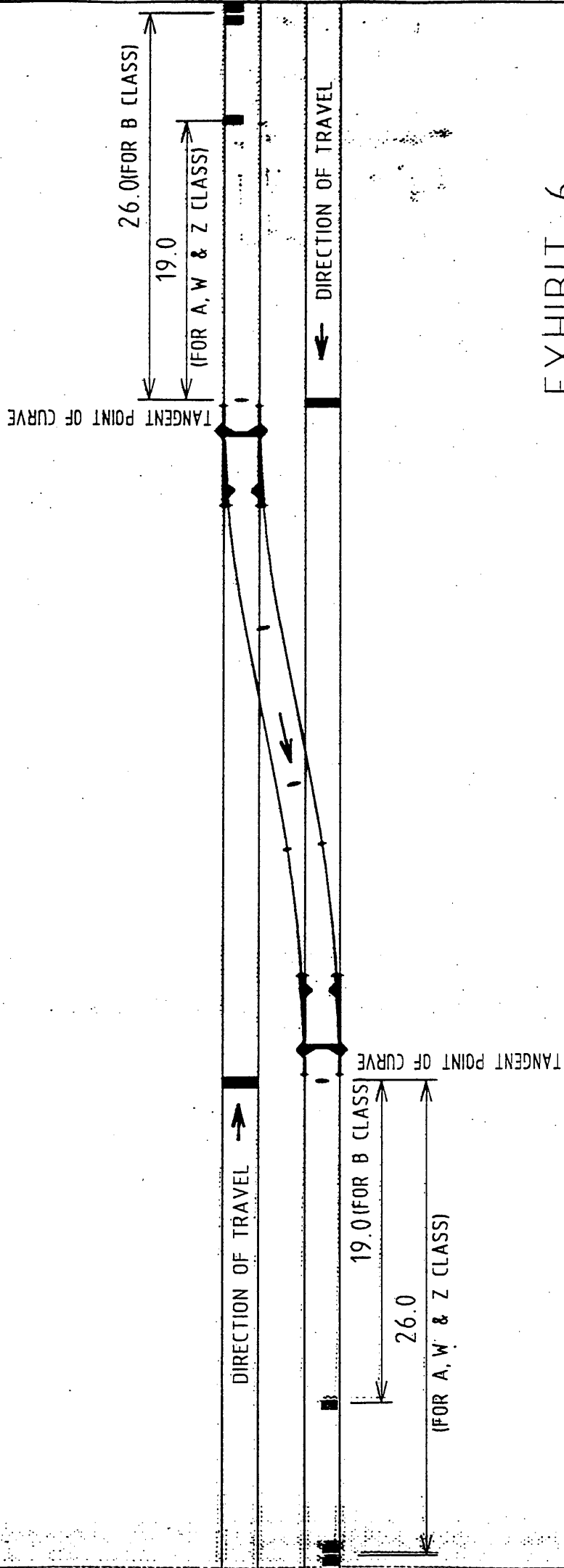


EXHIBIT 6

SECTION INSULATORS

2. H-Crossing

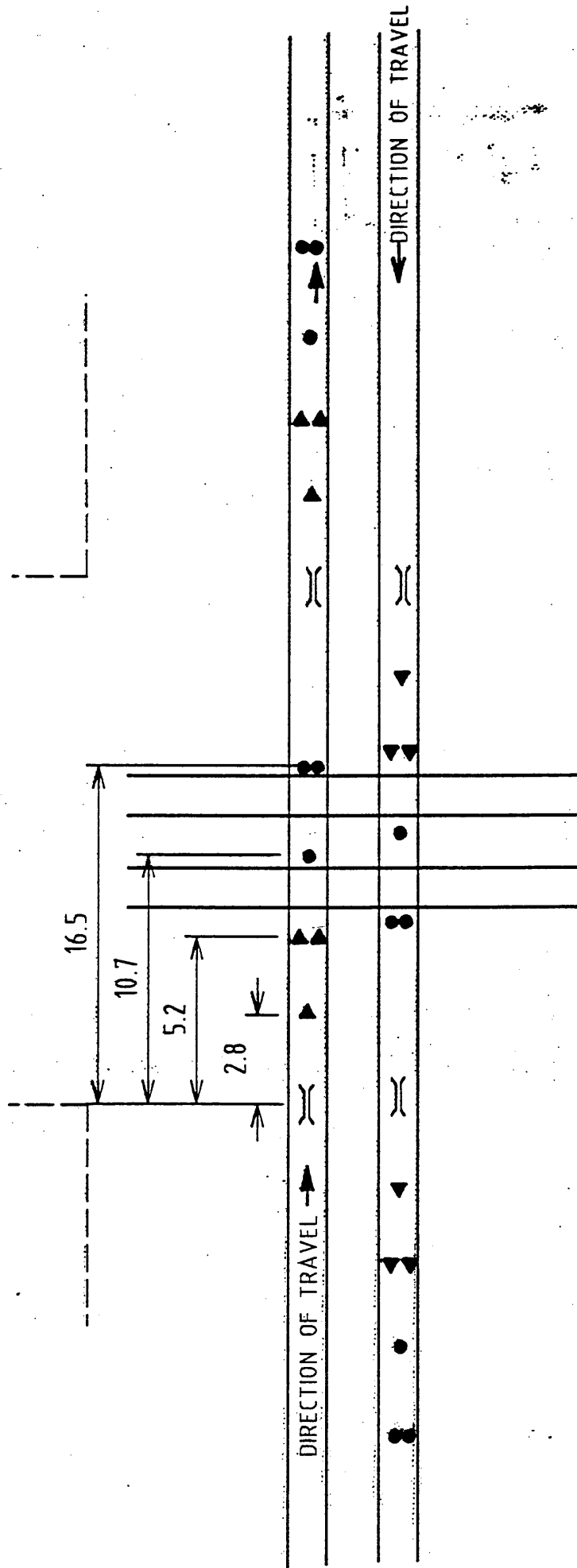
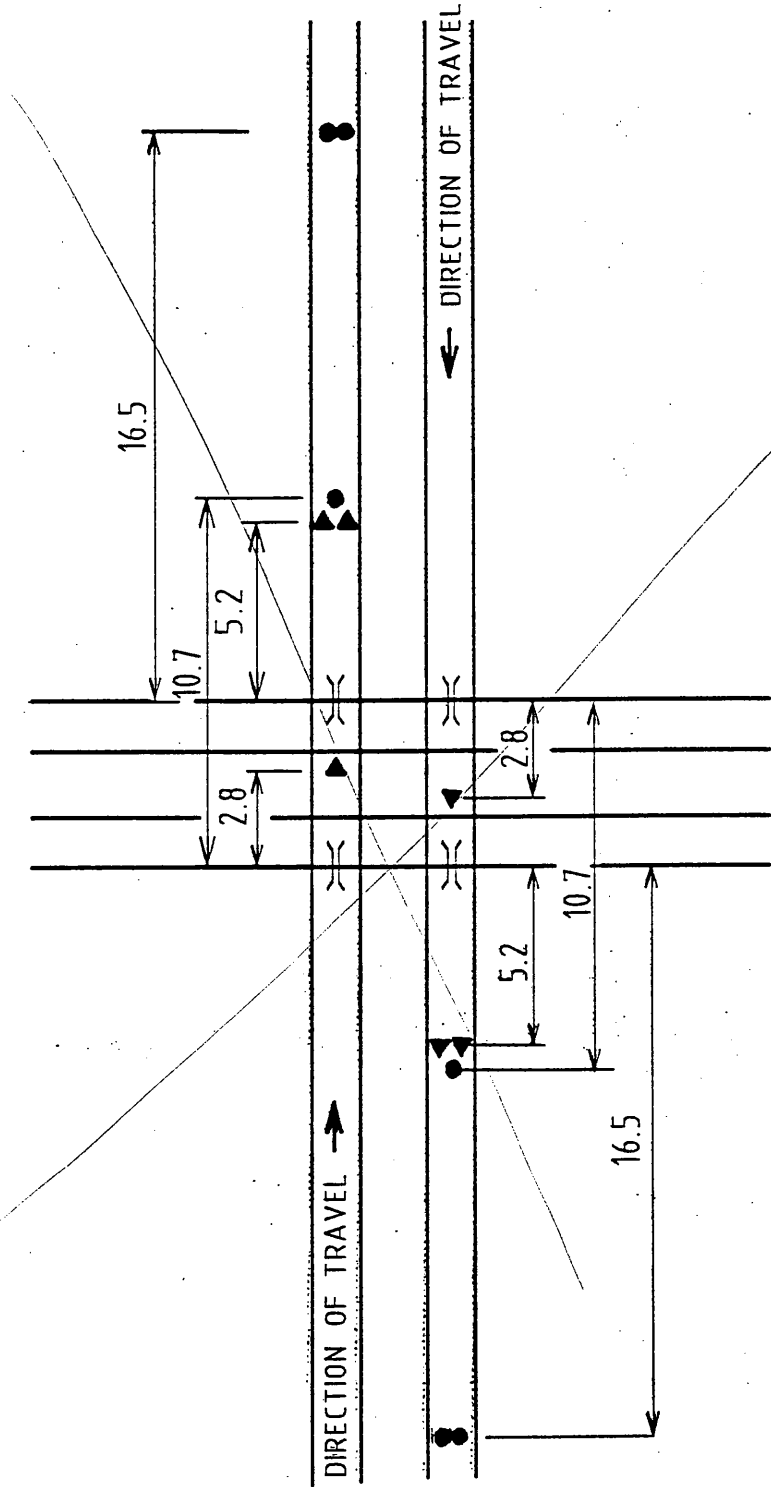


EXHIBIT 5b

SECTION INSULATORS

1. H-Crossing (K & M Fitting Only)



AUTO POINTS
2. Hanning & Kahl Type

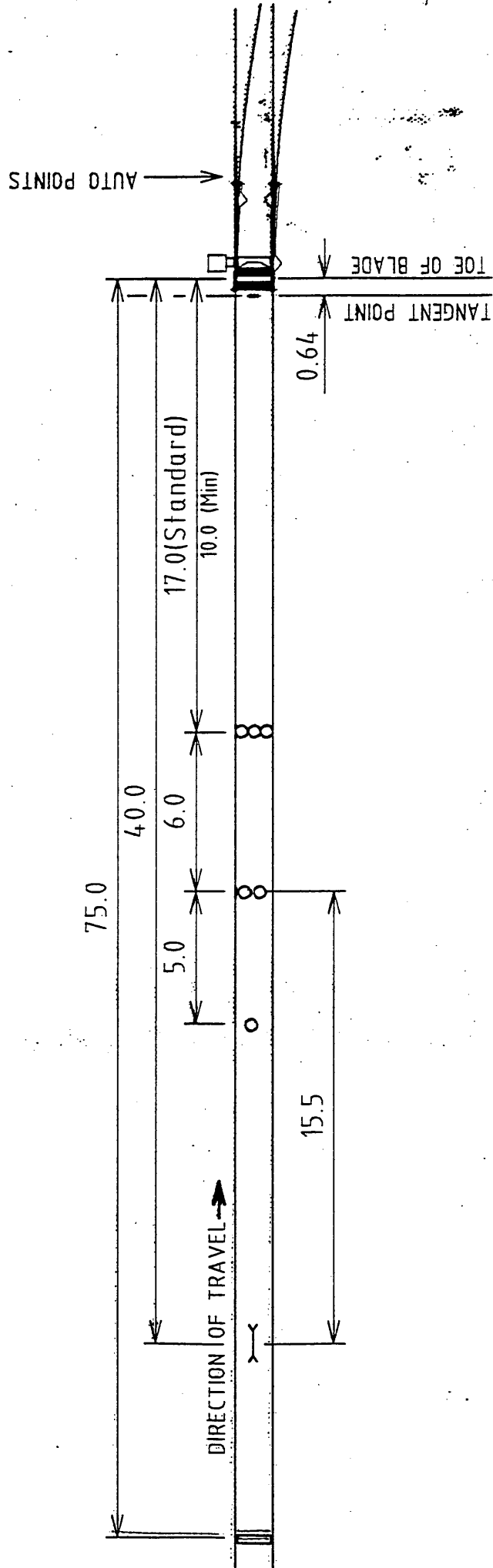


EXHIBIT 4

AUTO POINTS

1. Collins Type

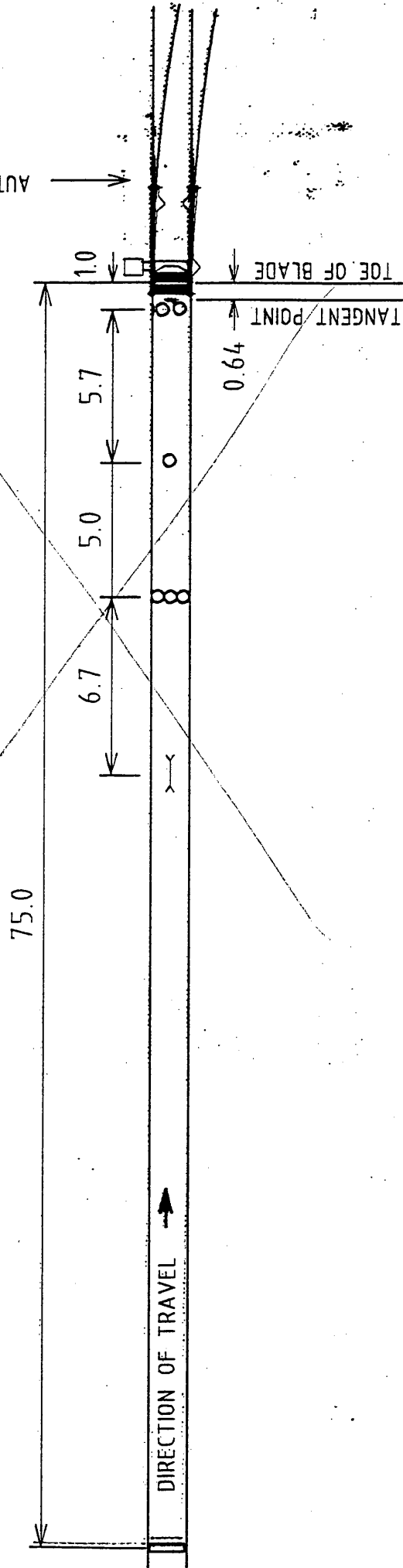


EXHIBIT 3

PRIORITY STOP MARKERS (at Intersection)

2. For Exclusive Tram Lane

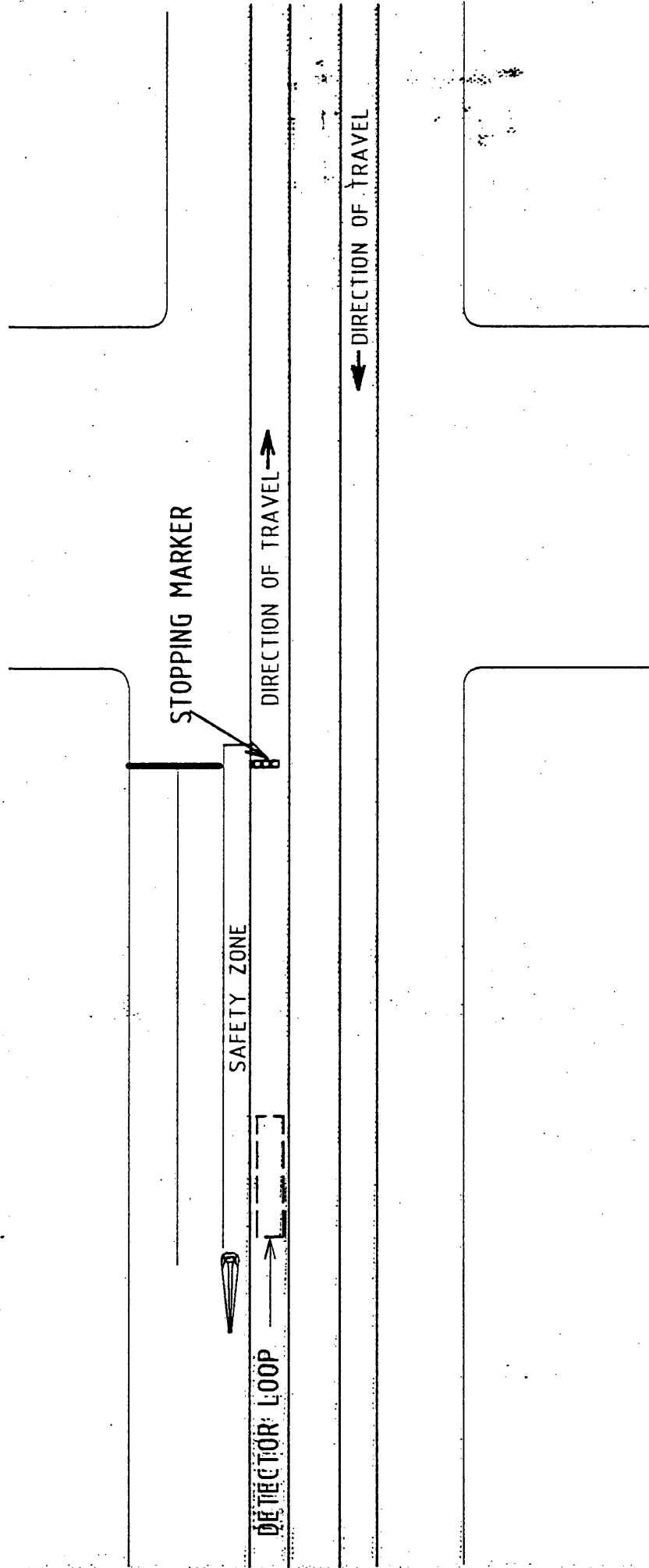


EXHIBIT 2

PRIORITY STOP MARKERS (at Intersection)

1. For Shared Tram Lane

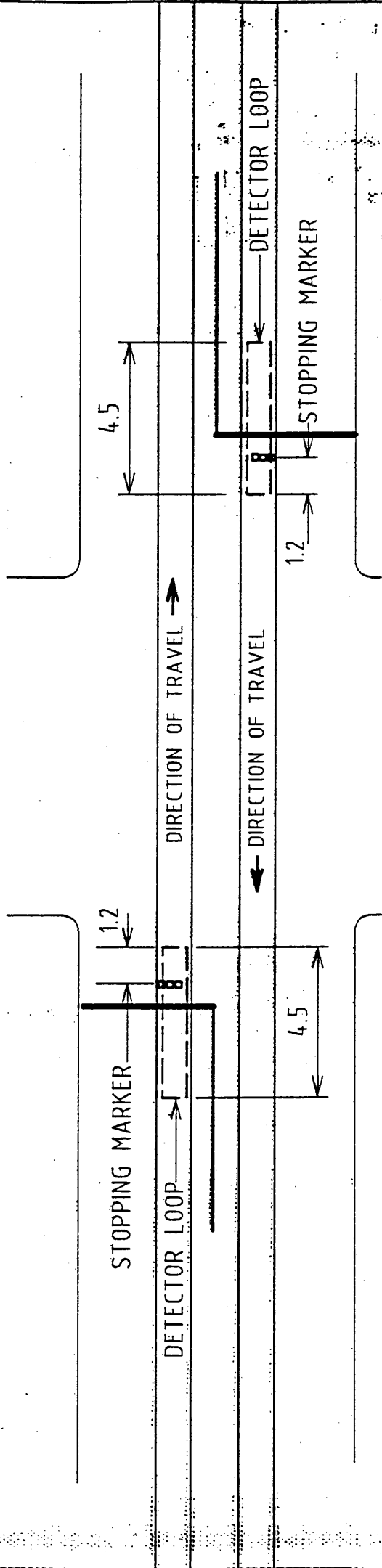


EXHIBIT 1

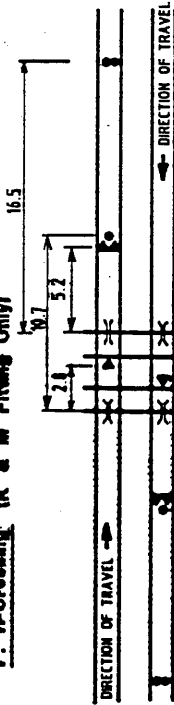
LENGEND



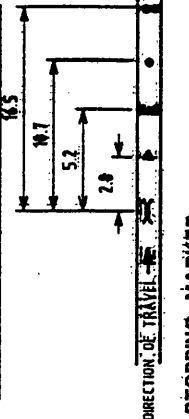
- YELLOW MARKERS - ' CUT-ON/OFF' MARKERS FOR 'A' & 'Z' CLASSES (PANTOGRAPH END ONLY)
- WHITE ROUND MARKERS - ' CUT ON/OFF' MARKERS FOR ALL OTHER TRAMS
- YELLOW ROUND MARKERS - ' CUT ON/OFF' FOR ALL OTHER TRAMS
- YELLOW - TWO HALF BARS, ON LEFT SIDE OF TRACK, STOP MARK FOR 'B'-CLASS TRAMS
- YELLOW - HALF BAR , ON LEFT SIDE OF TRACK, STOP MARK FOR OTHER TRAMS
- YELLOW - FULL WIDTH BAR, ON MIDDLE OF TRACK FOR COMPULSORY STOPS MARKERS
- OVERHEAD SECTION INSULATOR
- LINE CONTACTORS
- WHITE - FULL WIDTH BAR ON MIDDLE OF TRACK, WARNING FOR AUTO POINT AHEAD OR FACING POINTS
- TANGENT POINT OF ARC
- ORANGE SQUARE MARKERS - 3NOS ON LEFT HAND CORNER OF LOOP FOR SIGNAL PRIORITY

SECTION 1. INHIBITORS

1. M-Crossing (K & M Fittings Only)



2. M-Crossing - Normal Section Insulator

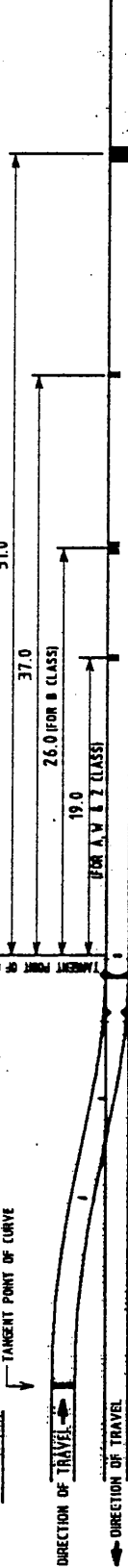


STOPPING MARKER

1. Grid/Obstacle

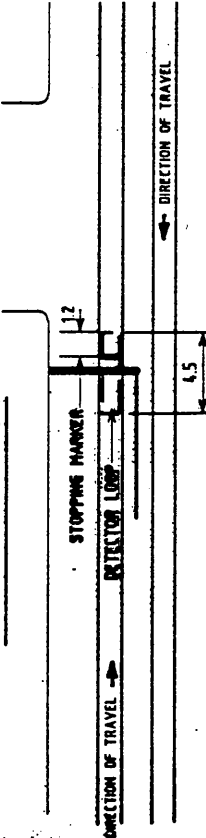


2. Tunnel

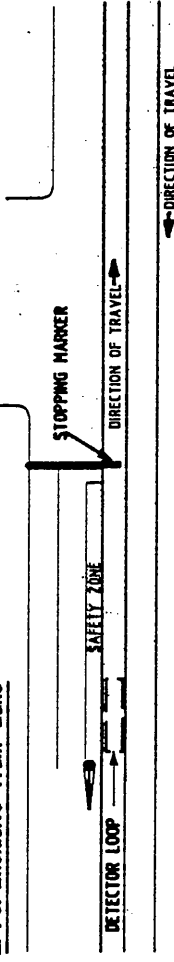


PRIORITY STOP MARKER (At Intersection)

1. For Shared Tram Lane



2. For Exclusive Tram Lane



THIS DRAWING SUPERSEDES P.16842A

NOTES

- 1. YELLOW MARKERS - CUT-ON/OFF MARKERS FOR 'A' & 'Z' CLASSES (PARTOGRAPH END ONLY)
- 2. WHITE ROUND MARKERS - CUT-ON/OFF MARKERS FOR ALL OTHER TRAMS
- 3. YELLOW ROUND MARKERS - CUT-ON/OFF FOR ALL OTHER TRAMS
- 4. YELLOW - TWO HALF BARS, ON LEFT SIDE OF TRACK, STOP MARK FOR 'B'-CLASS TRAMS
- 5. YELLOW - HALF BAR, ON LEFT SIDE OF TRACK, STOP MARK FOR OTHER TRAMS
- 6. YELLOW - FULL WIDTH BAR, ON MIDDLE OF TRACK, STOP MARK FOR COMPULSORY STOP MARKERS
- 7. OPENROAD SECTION INSULATOR
- 8. LOW CONTACTORS
- 9. WHITE - FULL WIDTH BAR ON MIDDLE OF TRACK, WARNING FOR AUTO POINT AHEAD OR FACING POINTS
- 10. FANGERT POINT OF ABC
- 11. ORANGE SQUARE MARKERS - 3INx3 ON LEFT HAND CORNER OF LOOP FOR SIGNAL PRIORITY

AMENDMENTS

REV	DESCRIPTION	DATE	DRAWN	APP'D

PTC		ENGINEERING SERVICES GROUP	
ENGINEER	TRACK ENGINEERING DEPARTMENT	MANAGER	
DESIGNER	J. Chau Feb '97	DATUMS	GDORS MA
SCALE	1:1	LEVELS	MA
		NTB	
		VER	

TRAMWAY STANDARD

LOCATIONS OF MARKERS

TYPICAL ARRANGEMENT & TYPES

INDEX No. F0100

DRAWING No. TS1802