



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
OFFICE OF THE SECRETARY
MANILA

097.13 DFWH
11-03-2010

OCT 29 2010

DEPARTMENT ORDER)
No. 58)
Series of 2010 NKBA 11-03-10)


SUBJECT : REVISED GUIDELINES IN THE
DESIGN AND LOCATION OF
TURNOUTS (LOADING AND
UNLOADING BAYS) ALONG
NATIONAL ROADS

In line with the Department's continuing process of upgrading our road safety standards, the guidelines in the design and location of turnouts (loading/unloading bays) as set forth in Department Order No. 44, Series of 2010, are hereby amended, as follows:

1. Turnouts shall be placed outside the carriageway of our national roads and should be sufficiently long to accommodate the maximum number of vehicles expected to occupy the space at one time. The desirable minimum length including transition taper is 60.0 meters but not longer than 185.0 meters to avoid its use as a passing lane, (Figure 1);
2. The required length of the turnout shall be determined considering a length of 15.0 meters for each bus;
3. Turnouts shall have a minimum width of 3.60 meters to accommodate all types of vehicle, (Figure 1B);
4. Turnouts shall not be placed on or adjacent to horizontal and vertical curves that limit the sight distance in either direction;
5. The specific location of turnout shall be determined taking into consideration the following conditions:
 - 5.1 Turnouts shall be placed at locations/poblacions where pedestrians are normally concentrated;
 - 5.2 A turnout may be placed at least 50.0 meters after a road intersection, (Figure 2);
 - 5.3 Minimum distance between two consecutive turnouts in one direction shall not be less than 500.0 meters in cities/urban centers. In other areas, the minimum distance shall not be less than 1.0 kilometer;

- 5.4 Turnouts shall not be placed opposite each other but shall be placed not less than 30.0 meters apart, (Figure 2);
6. The pavement type of turnout shall be the same as the existing pavement of the carriageway, (Figure 2);
 7. The pavement thickness of turnout shall in no case be less than 100mm for asphalt and 230mm for concrete with supporting base layers, (Figure 3);
 8. Pedestrian sidewalk or platform (minimum width of 2.0 meters) shall be provided alongside the turnout and in no case shall be lower than the existing sidewalk;
 9. In areas involving high embankment or excavation, coco fiber or geotextile net shall be used for the slope protection;
 10. For adequate drainage of surface run-off, drainage facilities such as curb and gutter, inlets and storm sewer shall be provided within the turnout. The following shall be observed:
 - a. The cross slope of the turnout shall be 0.50% steeper than the cross slope of the adjacent lane of the existing carriageway;
 - b. The gutter alongside the turnout shall have the same slope as the existing carriageway;
 - c. On carriageway with existing storm sewer, the turnout shall be provided with inlets (spacing of 20.0 meters) and connecting pipes to the existing sewer;
 - d. On level carriageways with no existing storm sewer, the gutter alongside the turnout shall be sloped to 0.30%.
 11. Adequate signages and pavement markings shall be installed to maximize usage and safe operation, (Figure 2);

This Order supersedes Department Order No. 44, series of 2010 and shall take effect immediately.


ROGELIO L. SINGSON
Secretary



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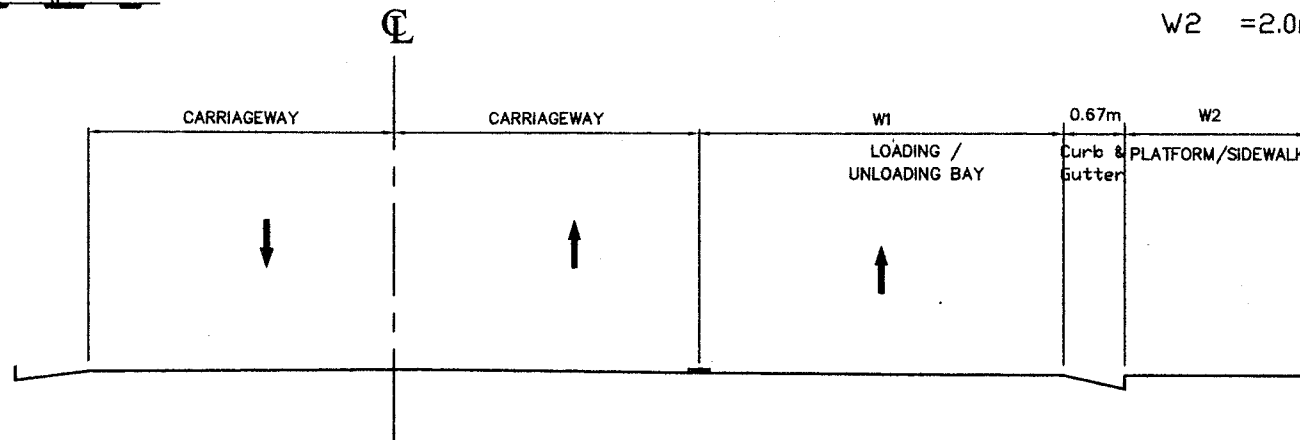
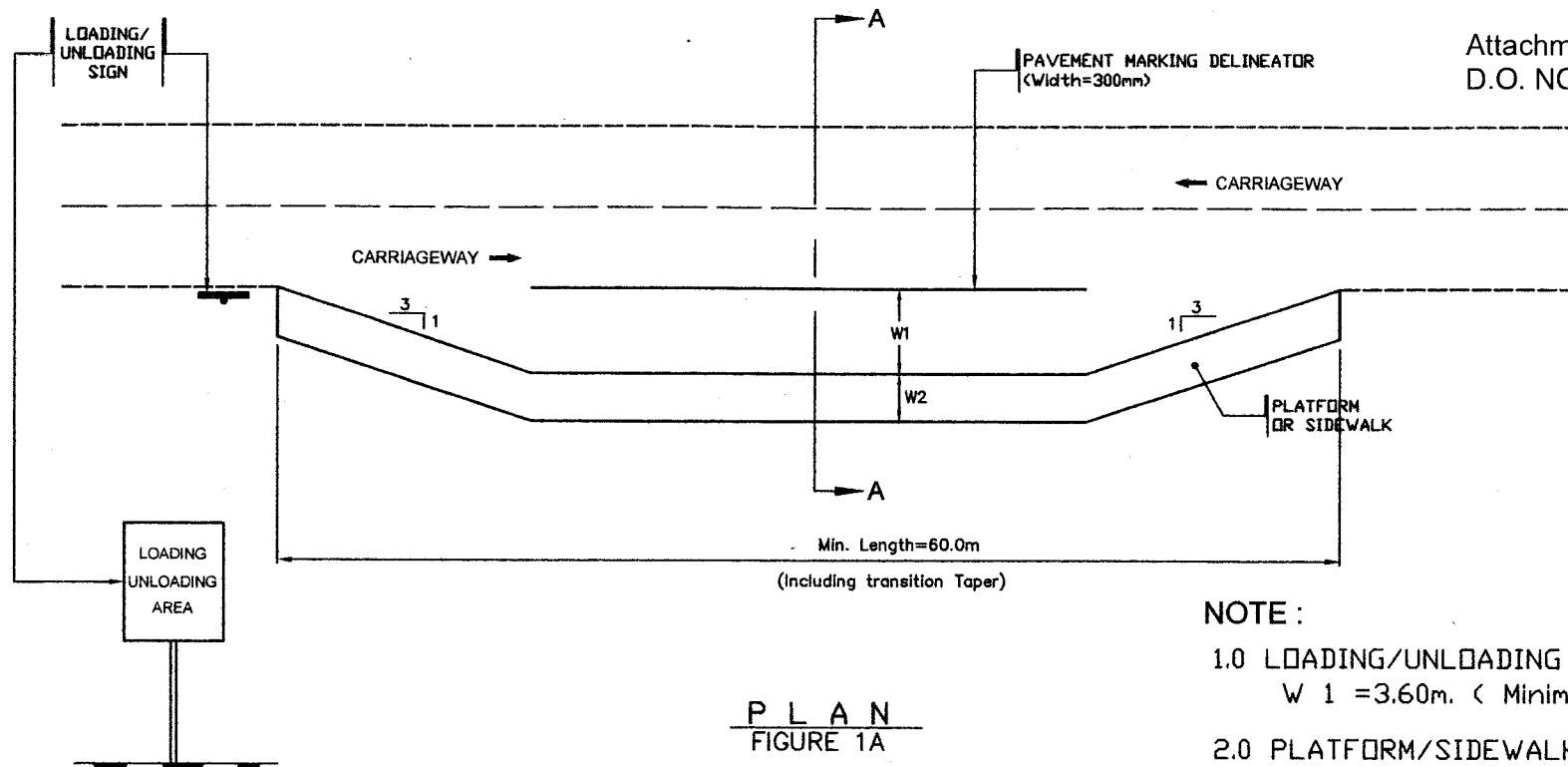
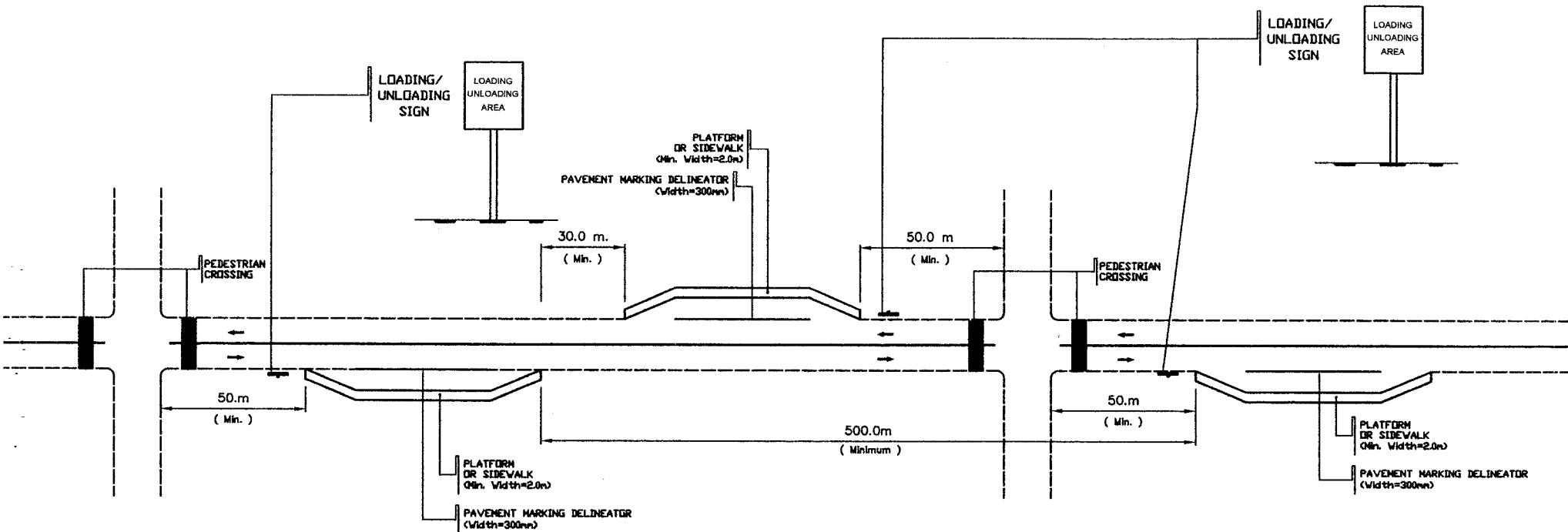
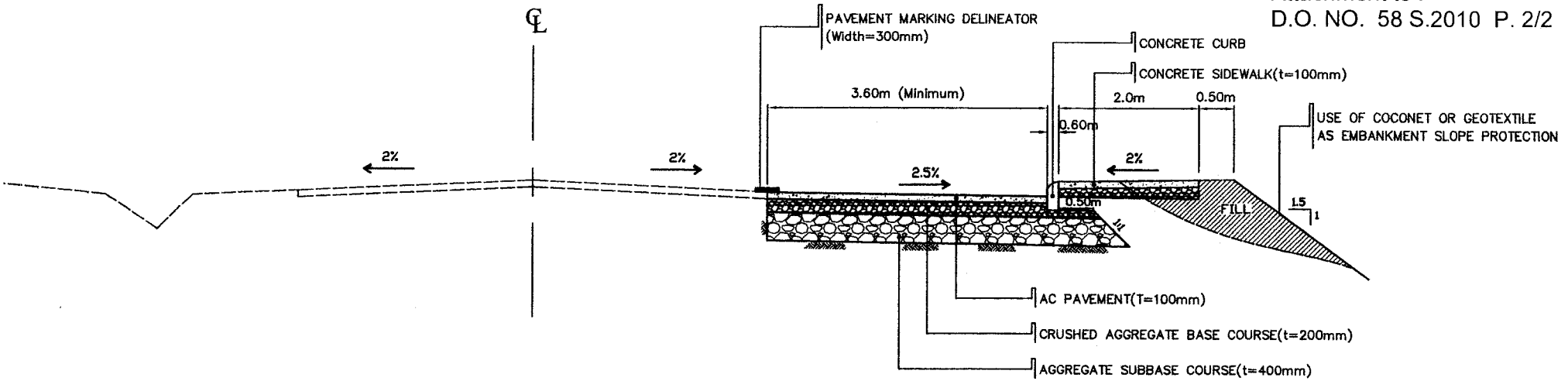


FIGURE 1 : TURNOUT (LOADING / UNLOADING BAY)



P L A N

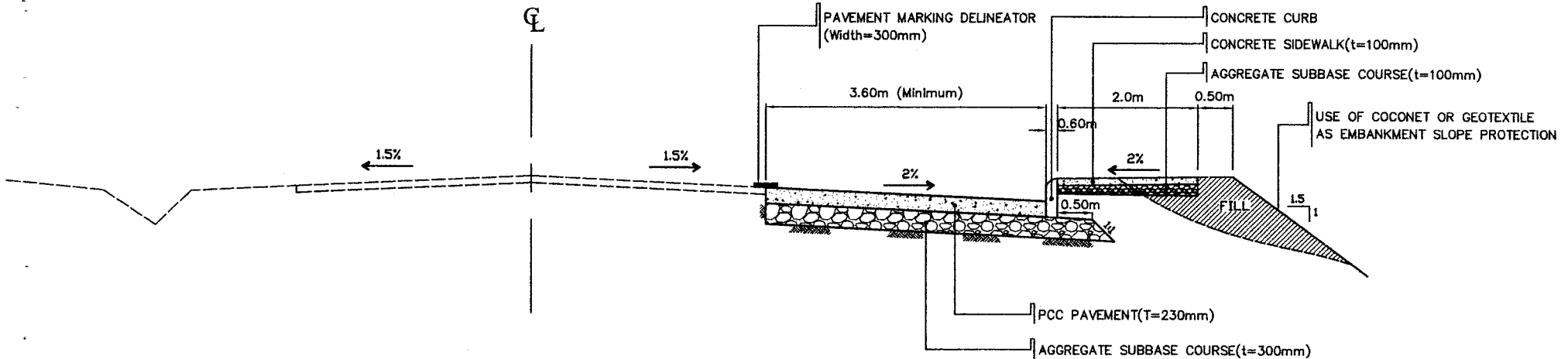
FIGURE 2 : TURNOUT LOCATION



TYPE 1- TYPICAL ROADWAY SECTION
ASPHALT PAVEMENT

NOTE :

THE CROSS SLOPE OF THE TURNOUT SHALL BE 0.50% STEEPER THAN THE CROSS SLOPE OF THE ADJACENT LANE OF THE EXISTING CARRIAGEWAY.



TYPE 2- TYPICAL ROADWAY SECTION
CONCRETE PAVEMENT

FIGURE 3 : TURNOUT TYPICAL SECTIONS