Index 436-001 Trench Drain

Design Criteria

FDOT Design Manual (FDM); ***Drainage Manual (DM)***

Design Assumptions and Limitations

Trench drain is intended for use in gutters and driveways as shown on the typical locations on Sheet 2. Type I is intended for use in Type E, F, and drop curbing, and adjacent to traffic separators and standard barrier walls. The width of the channel grate for Type I Trench Drain should be 1 ¾" throughout varying the depth of the channel neck. Type II may also be used in those locations if an independent laboratory certifies that the grating used has an open area equal to at least 0.27 square feet per linear foot. Type II is primarily intended for use in valley gutter across driveway openings and drop curbing; Type I may also be used in those locations. The width of the channel grate for Type II Trench Drain shall be the same as the width of the channel. The linear slope or gradient for Type II may be manufactured by varying the depth of the channel. Do not place Trench Drain in pedestrian paths unless ADA compliant grates are used.

For trench drains placed adjacent to reinforced concrete barrier, include details in the plans showing the position of the drain relative to the barrier to avoid conflicts with the foundation. See ***Index 521-001***.

Capture efficiency for Type I Trench Drain may be calculated using the equations for slotted drain in FHWA's HEC 12 and 22. Grate Type I and II must have at least 30% open area.

Round pipe alternate is available in 12, 18, 24, and 36 inch.

Type II Preformed Channel with integral anchoring lugs are applicable.

Plan Content Requirements

Plan requirements can be found in the ***Drainage Manual (DM)*** Section 3.9.3.

Payment

Item number	Item Description	Unit Measure
436 - 1- A	Trench Drain	LF

See the ***BOE*** and ***Specification 436*** for additional information on payment, pay item use and compensation.