Index 425-070 Skimmer for Outlet Control Structures

Design Criteria

FDOT Design Manual (FDM) *FDM 308*; ***Drainage Manual (DM)***; ***Structures Design Guidelines (SDG)***

Design Assumptions and Limitations

This skimmer is intended for use on Type C, D, or E Ditch Bottom Inlets that are used as outlet control structures of stormwater management facilities.

To minimize hydraulic losses across the skimmer, the flow area under the skimmer should be three times larger than the flow area of the weir slot. Provide a distance between the pond bottom at the structure and the skimmer of not less than 1 foot.

The configuration of skimmers may be subject to regulatory requirements. Coordinate the outlet control structure details with the permitting agencies.

Modified structures must be designed in accordance with the requirements of ***SDG 3.17***.

Plan Content Requirements

Summary Boxes:

Summarize quantity by location in the *Summary of Drainage Structures* summary box, see ***BOE***, Chapter 8.

In the Roadway Plans:

Specify, in the plans, the skimmer height (dimension H) and the sides where the weir slots and skimmers are located. The skimmer height must be one of the dimensions shown in the ‘Dimensions’ table on ***Index 425-070***. Do not use the skimmer on structure sides with outside dimensions greater than 6'-4".

Where this skimmer is used, reference ***Index 425-070*** with the outlet control structure details. Where a different skimmer design is needed, provide project specific skimmer details in the plans.

Evaluate if a grate is needed for safety reasons. Where a grate is not needed and is not desirable for hydraulic or other reasons, the grate may be omitted by stating so in the outlet control structure details.

Show the configuration of the weir slots in the outlet control structure detail.

Consideration for Approval of Alternative Technical Proposals

Fiberglass skimmers may be approved with concurrence from the District Drainage Engineer. Approval for use shall be contingent on consideration of factors such as the likelihood of the skimmer's being cracked by impacts from mowers and the material's resistance to degradation from UV sunlight exposure. Fiberglass skimmer designs must

be reviewed in accordance with the ***Structures Manual,*** *Volume 4 - Fiber Reinforced Polymer Guidelines* (***FRPG***).

Payment

Item number	Item Description	Unit Measure
425-1-529	INLETS, DT BOT, (Type C), MODIFY	EA
425-1-549	INLETS, DT BOT, (Type D), MODIFY	EA
425-1-559	INLETS, DT BOT, (Type E), MODIFY	EA

See the ***BOE*** and ***Specification 425*** for additional information on payment, pay item use and compensation.