

STORM WATER MANAGEMENT FACILITIES PLAN

FOR

**BLOCK 190, LOTS 1, 2.01, 2.03 & 2.09-2.12 (Expanded
parking)**

BLOCK 170, LOT 3.02 (Expanded church & parking)

CAVALRY BAPTIST CHURCH

**TOWNSHIP OF LITTLE EGG HARBOR
OCEAN COUNTY, NEW JERSEY**

PREPARED BY:

**SCHAEFFER NASSAR SCHEIDEGG
CONSULTING ENGINEERS, LLC
1425 CANTILLON BLVD
MAYS LANDING, NEW JERSEY 08330
(609) 625-7400**



ANDREW F. SCHAEFFER, PE DATE 6-1-26
NJPE No. 32883

Proj. No. 06-439

The property owner:

Cavalry Baptist Church
850 Railroad Drive
Little Egg Harbor Twp., NJ
08087
609-296-4606

Project Lot(s): 170, Lots 3, 3.01 & 4
Project Lot(s): Blk 190 Lots 1, 2.01, 2.03 & 2.09-2.12
Basin Longitude: See Storm water Mgt
Basin Latitude: Plan Sheet.

as well as any and all future property owners are responsible for basin maintenance both during and after construction and shall comply with the following:

Special Instructions For Maintenance Plan:

- 1) A copy of this maintenance plan must be filed with the operator and owner of the facility and the municipality. All reviewing agencies will receive this maintenance plan as part of their review of these storm water calculations. Accompanying this maintenance plan, site construction plans depicting all **as-built** storm water management facilities must also be filed with the operator and owner of the facility as well as the municipality. Additionally, the owner must file annually with the municipality updated maintenance plans as well as maintenance, inspection and repair reports.
- 2) The owner operator shall secure the services of a licensed professional engineer to make a determination as to whether this maintenance plan is effective for this particular facility on an annual basis.
- 3) The site owner shall maintain a maintenance log of all preventative and corrective actions taken with this basin. At the time maintenance responsibilities are handed from one owner to another, the maintenance log shall also be transferred. Further, these maintenance logs must be accessible by any public agency requesting to see them.

Inspection Schedule:

- 1) The storm water catch basins or inlets shall be inspected on a quarterly basis. **If more than 3" of sediment has collected in the bottom area of the inlet, it shall be removed. All trash or debris shall be removed at every inspection.**
- 2) Each storm water structure shall be inspected for structural integrity, cracking, subsidence, spalling, erosion and deterioration at least on an annual basis.
- 3) The water level in the above ground system shall be determined within 24-hours after each major storm event of 1 or more inches of rainfall. If it is determined that the storage system holds water longer than 72-hours, corrective measures, as specified, shall be taken.
- 4) The storm water basin shall be inspected on a quarterly basis to check for unexpected settlement and siltation of the sand in the basin bottom.

Scheduled Maintenance:

- 1) The grassed swales shall be mowed on a monthly basis from April until June and from June to October, every two weeks. From October until December, the mowing shall take place on a monthly basis. The grass clippings created during the mowing operation must be removed and legally disposed of off site.
- 2) The basin area property shall be mowed on a monthly basis from April until June and from June to October, every two weeks. From October until December, the mowing shall take place on a monthly basis. The grass clippings created during the mowing operation must be removed and legally disposed of off site.

Equipment and personnel required for inspections and maintenance:

- 1) For inspections, a qualified person working under the direction of a professional licensed engineer shall carry out the inspections and make appropriate log entries.
- 2) For mowing of grassed swales and storm water basin, contractor must provide equipment that can safely perform the necessary cutting of grass and removal of clippings.
- 3) Equipment needed for cleaning the inlet boxes is hand shovels or a vac truck. The sediment shall be disposed of in a legally appropriate manner in also appropriate receiving facilities.

- 4) For effecting corrective measures on the above ground storm water basins, a backhoe / front end loader with a rake will be required.

Corrective measures:

- 1) If inlet boxes are found to be damaged or deteriorated, the engineer that is directing the inspector shall make a determination if the inlet box shall be replaced or repaired and the method of repair.
- 2) If pipes are found to be damaged or deteriorated, the engineer that is directing the inspector shall make a determination if the pipe shall be replaced or repaired and the method of repair.
- 3) If the above ground storm water basin is holding water longer than the permissible 72-hours, the basin bottom sand layer shall have the top two inches of sand removed or scraped off and removed from the site. Then, the remaining sand shall be inspected for siltation. If silt still remains, an additional two inches of existing sand must be removed from the site. Sand thickness removed shall be replaced with a coarse sand of K-4 designation or coarser.

Maintenance of bio-retention and infiltration basin area bottom:

- 1) At least four times annually, the basin sand bottom shall be inspected for clogging, excessive debris and particularly for sediment accumulation. This inspection shall also be carried out after each rain event of one inch or more. This inspection must be carried out when the basin bottom is dry. If the basin is holding water, the basin must either be pumped dry or emptied via a positive discharge if one exists.
- 2) The inspections shall be carried out by a professional engineer.
- 3) If the rate of basin infiltration has noticeably slowed, or a sediment layer 1/8 inch thick or more has accumulated, the sediment shall be scraped from the basin bottom and removed from the project site. The silt removed from the site shall be disposed of in accordance with all applicable laws and regulations.
- 4) Once all of the silt has been successfully removed from the basin bottom, the remaining sand shall be brought back up to design grades with "K4" sands and then tilled to a minimum depth of 6 inches below grade.
- 5) If and when the above action is found to be required, the details of such shall be entered into the basin maintenance log and forwarded to the municipal engineer.

Cost to provide maintenance and inspections:

ITEM #	ITEM	QUANTITY	UNIT COST	TOTAL ANNUAL COST
1	MONTHLY MOWING OF BASIN / BIO-RET GRASS	8 EA/YEAR	\$ 250.00	\$ 2,000.00
2	CLEANING OF 2 1/2" DIA CULVERTS	1 EA/YEAR	\$ 250.00	\$ 250.00
3	INSPECTION BY PROF ENGINEER	3 EA/YEAR	\$ 800.00	\$ 2,400.00
	TOTAL			\$ 4,650.00


 ANDREW F. SCHAEFFER, PE
 NJPE No. 32883
 12-18-24



Sample Inspection **Log Sheet:**

Date: _____ Inspection by: _____

Project Address: _____

Project Owner and Address: _____

Inlet Boxes:

Average amount of sediment in inlet box bottoms: _____ inches

Inlet box condition: Sound concrete, not more
than hairline cracks _____ NO _____ Yes

1/4" or larger cracks _____ NO _____ Yes

Box appears plumb _____ NO _____ Yes

Conveyance Pipes:

Sediment collecting or clogging pipes ? _____ NO _____ Yes

Cracks larger than hair line ? _____ NO _____ Yes

Basin:

Average depth of sediment in basin bottom: _____ inches

Water retained in basin longer than 72-hours ? _____ NO _____ Yes

Un-stable soils generating siltation ? _____ NO _____ Yes

Corrective Measures Made: _____
