

Revised Net-Fill Analysis
Floodway & Flood Fringe

Fackler Road Pump Station Project

NJDEP File No.: 1107-25-0004.1
NJDEP Activity Number: LUP250001

Arcadis US, Inc.
April 20th, 2026

Jerry R. Mitchell, PE

FLOODWAY PROPOSED EARTHWORK

Name	2d Area(Sq. Ft.)	Cut(adjusted)(Cu. Yd.)	Fill(adjusted)(Cu. Yd.)	Net(adjusted)(Cu. Yd.)	Net Graph
..... ☒ Existing Grade vs Proposed Grade	2908.23	65.02	0.04	64.98<Cut>	

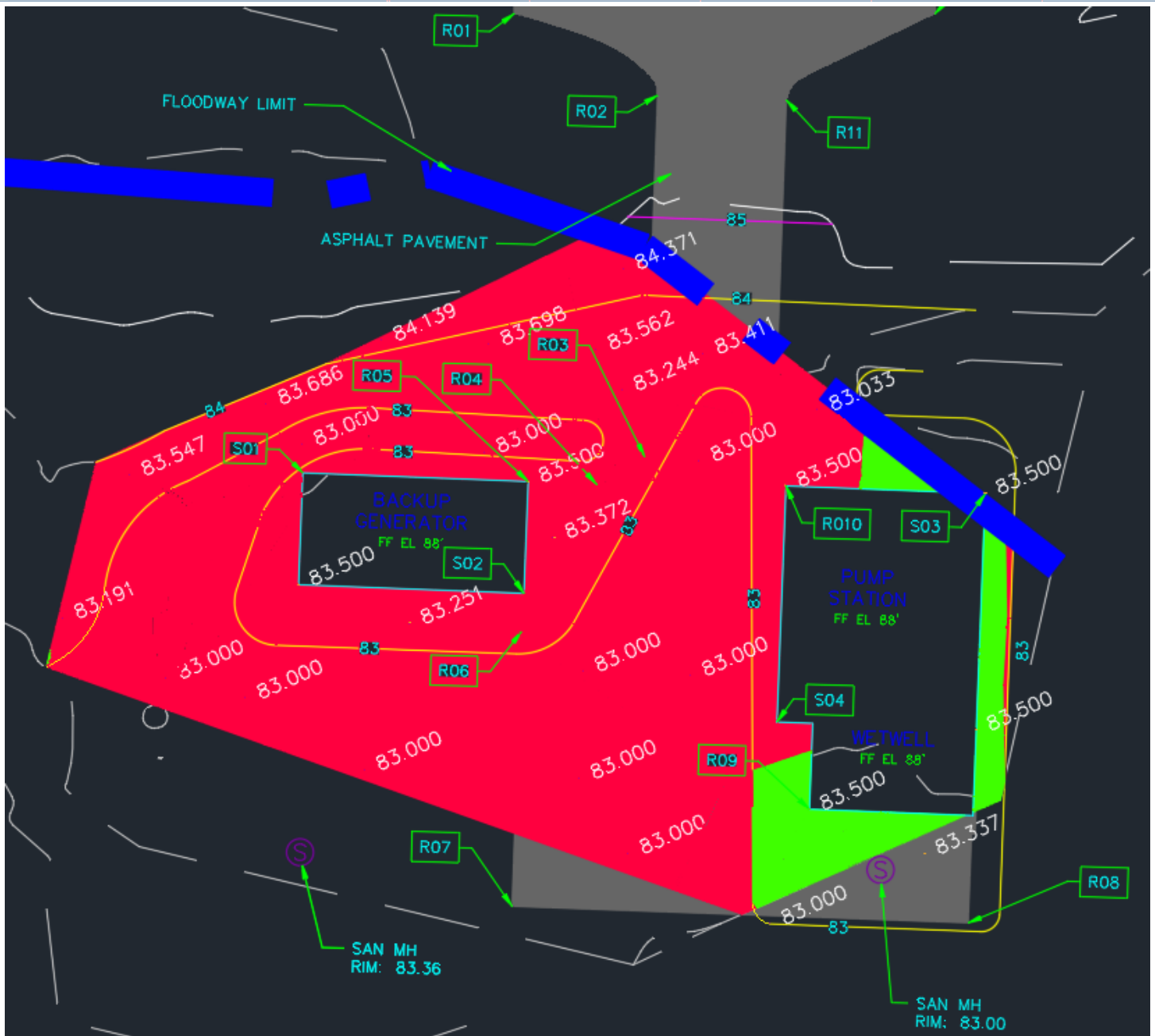


TABLE 1 - NET-FILL CALCULATIONS EXISTING CONDITIONS

FLOODWAY ANALYSIS

Fackler Road Pump Station Replacement Project

[illegible]

TABLE 2 - NET-FILL CALCULATIONS PROPOSED CONDITIONS

FLOODWAY ANALYSIS

Fackler Road Pump Station Replacement Project

[illegible]

FLOOD FRINGE CHANGE IN STORAGE VOLUME

Name	2d Area(Sq. Ft.)	Cut(adjusted)(Cu. Yd.)	Fill(adjusted)(Cu. Yd.)	Net(adjusted)(Cu. Yd.)	Net Graph
☒ Existing Grade vs El 82.8 (10-yr)	315.30	14.97	0.00	14.97<Cut>	
☒ Proposed Grade vs El 82.8 (10-yr)	315.30	12.04	0.00	12.04<Cut>	
☒ Existing Grade vs El. 87.0 (FHADFE)	315.30	0.00	34.08	34.08<Fill>	
☒ Proposed Grade vs El. 87.0 (FHADFE)	315.30	0.00	37.01	37.01<Fill>	
☒ Existing Grade vs Proposed Grade	315.30	2.53	0.15	2.38<Cut>	



TABLE 1 - NET-FILL CALCULATIONS EXISTING CONDITIONS
FLOOD FRINGE ANALYSIS
Fackler Road Pump Station Replacement Project

Existing Element Description	Existing Element Found on Drawing	Surface Area (SF)	Cubic Yards (CY)	Existing Ground Elevation of Structure in feet (NAVD 88) (FT.)	10% Annual Chance Flood Elevation in feet (NAVD 88) (FT.)	Flood Storage Displacement Volume From Existing ground elevation to 10% Annual Flood Elevation (CY)	New Jersey Flood Hazard Area Design Flood Elevation NJFHADFE in feet (NAVD 88) (FT.)	Flood Storage Displacement Volume From 10% Annual Flood Elevation to NJFHADFE (CY)	Fill Area (CY)
Existing Flood Fringe Site - no structures or features	Boundary & Topographic Survey	0.00	0.000	83.20	82.80	0.000	87.00	0.000	0.000
EXISTING FLOOD STORAGE DISPLACEMENT (NET-FILL) WITHIN THE NJFHADFE									0.000

SOURCE:

Boundary & Topographic Survey
95 Fackler Road - Pump Station Site
Lot 17, Block 5801
Township of Lawrence, Mercer County, New Jersey
Prepared by Neglia Engineering Associates
Dated 07/18/2024

TABLE 2 - NET-FILL CALCULATIONS PROPOSED CONDITIONS
FLOOD FRINGE ANALYSIS
Fackler Road Pump Station Replacement Project

Proposed Element Description	Proposed Element Found on Drawing	Surface Area (SF)	Cubic Yards (CY)	Proposed Ground Elevation of Structure in feet (NAVD 88) (FT.)	10% Annual Chance Flood Elevation in feet (NAVD 88) (FT.)	Flood Storage Displacement Volume From Existing ground elevation to 10% Annual Flood Elevation (CY)	New Jersey Flood Hazard Area Design Flood Elevation NJFHADFE in feet (NAVD 88) (FT.)	Flood Storage Displacement Volume From 10% Annual Flood Elevation to NJFHADFE (CY)	Fill Area (CY)
Pump Station Building (Only a very small portion of the corner of the building is outside of the floodway and within the flood fringe.)	Drawing No. C-FR-03 Grading, Staking, And Paving Plan	2.00	0.259	83.50	82.80	0.000	87.0	0.259	0.259
Pump Station Building Stair Platforms and Concrete Pilings (Only 1 piling is within the flood fringe)	Drawing No. C-FR-03 Grading, Staking, And Paving Plan	0.42	0.054	83.50	82.80	0.000	87.0	0.054	0.054
Grading Onsite Associated with Asphalt Pavement in Flood Fringe Only	Drawing No. C-FR-03 Grading, Staking, And Paving Plan	315.3	-2.382	84.00	82.80	0.000	87.0	-2.382	-2.382
PROPOSED FLOOD STORAGE DISPLACEMENT (NET-FILL) WITHIN THE NJFHADFE									-2.069

SOURCE:

Grading, Staking, And Paving Plan
Fackler Road Pump Station Replacement Project
Prepared by Arcadis U.S., Inc.
Dated September 2025