

# SUSSEX COUNTY COMMUNITY EXCHANGE

*FLOOD MITIGATION: HOME ELEVATION*

TOWN OF FENWICK ISLAND, DELAWARE

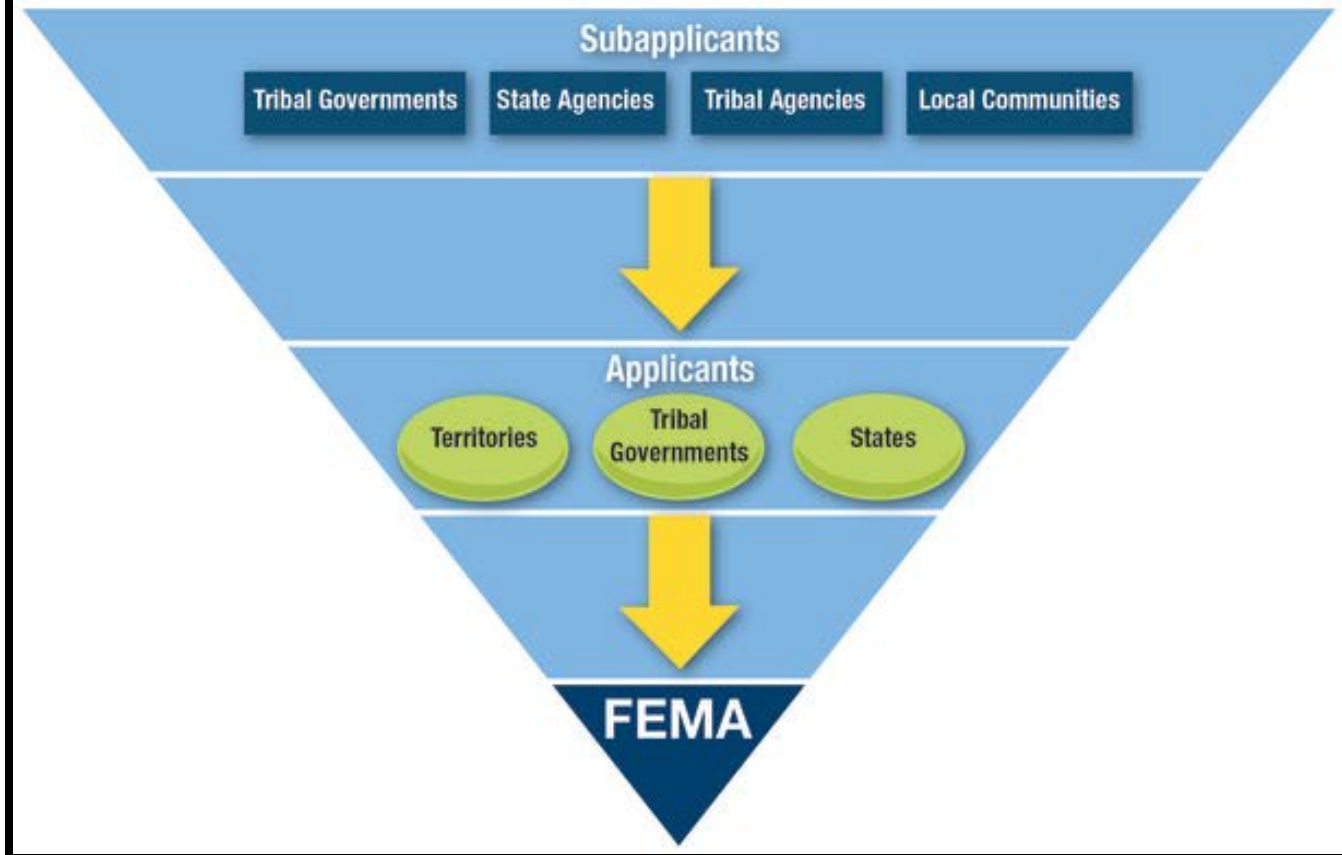
# HOME ELEVATION

## TECHNICAL OVERVIEW AND COMMUNITY IMPLEMENTATION

# FEMA PRE-DISASTER MITIGATION PROGRAM

The Pre-Disaster Mitigation (PDM) program provides funds for hazard mitigation planning and projects on an annual basis. The PDM program was put in place to reduce overall risk to people and structures, while at the same time, also reducing reliance on federal funding if an actual disaster were to occur.

**Individual homeowners and businesses may apply for funding through eligible subapplicants**



# GRANT PROCESS

The Town of Fenwick Island, with the assistance of DEMA, applied to FEMA's Pre-Disaster Mitigation Program for grant funds to elevate three Fenwick Island homes severely damaged most recently by Hurricane Sandy.



# FY 2014 PRE-DISASTER FLOOD MITIGATION GRANT PROGRAM

- \* NOV. 2012: PRE-FIRM HOMES FLOODED
- \* 2012 / 2013: OWNERS CONTACTED ABOUT GRANT PROGRAM
- \* Aug. 2013 HMA PRE-APPLICATION SUBMITTED FOR MULTIPLE PROPERTY OWNERS
- \* Feb. 2014: ACKNOWLEDGEMENT OF CONDITIONS FILLED OUT
- \* JULY 2014: OBTAIN ELEVATION CERTIFICATES (OWNER PAYS)
- \* SEPT. 2014: SUBMIT APPLICATIONS TO FEMA (DEMA REVIEW)
- \* FALL 2014: REQUEST FUNDS COMMITMENT LETTERS FROM OWNERS
- \* DEC. 2014: GRANT AWARD

# GRANT PROCESS

All three homes are pre-FIRM construction which are affected by the adopted FIRM map changes which will become effective on March 16, 2015, as well as the Biggert Waters Act with increasing flood insurance rates. These homes, which are already well below the current base flood elevations, have the potential of more flooding considering the concerns with sea level rise and climate change.



# GRANT PROCESS

The Town hired an engineering firm to design the foundations, develop the bid packages and perform inspections.

Construction: The projects include two houses in AE-zone elevations that will be block foundations and one VE-zone elevation that will involve a helical pier foundation.

# 1510 BAY STREET





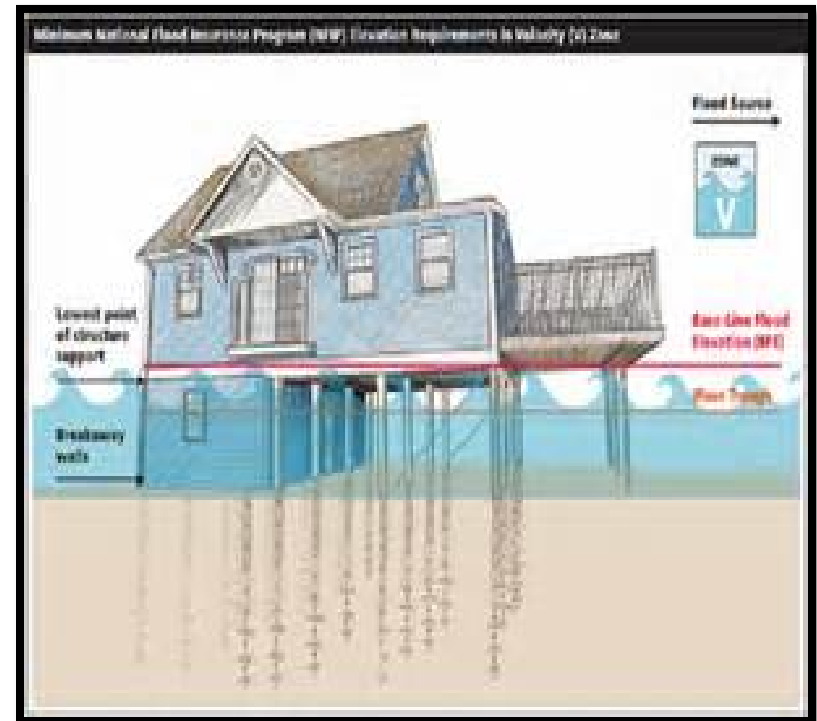
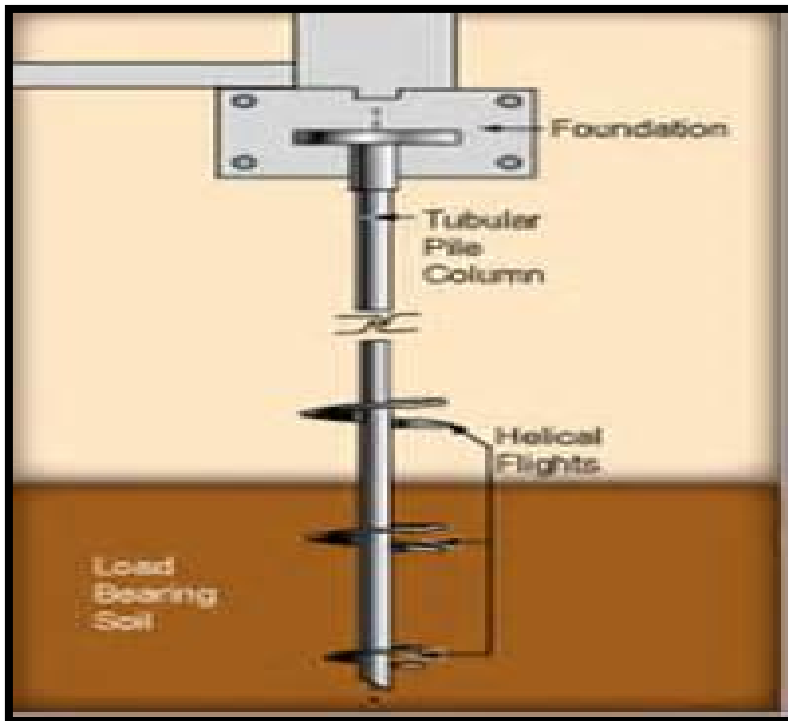
JDT 2012

# 1510 BAY STREET

1510 Bay Ave is 2.12 feet above sea level and has a FFE of 3.9 feet. This home is in the AE-zone in the regulatory Flood Study, but in the VE-Zone in the preliminary Flood Study. The regulatory BFE is 6 feet and the preliminary Flood Study puts the BFE at AE 7 feet.

The proposal is to elevate this home approximately 5.1 feet to Elevation 8 Feet, with a reference of the lowest Horizontal Member, since it will be in the VE-Zone. The foundation will be helical piers.

# HELICAL PIER FOUNDATION





# 29 WEST ATLANTIC



# 29 WEST ATLANTIC

29 West Atlantic St has a current elevation of 2.5 feet and is in an AE-zone. Both the regulatory and preliminary Flood Study puts the Base Flood Elevation at 5 feet. The proposal is to elevate the home 3.5 feet to Elevation AE - 6 feet, NAVD 1988, with a reference of the top of the first floor. Type of construction will be block with flood vents.

# 11 WEST GEORGETOWN





# 11 WEST GEORGETOWN

11 West Georgetown St has a current elevation of 3.5 feet and is in an AE-zone. The Regulatory Flood Study puts the Base Flood Elevation at AE - 6 feet, however the Preliminary Flood Study lowers the BFE to AE - 5 feet. The proposal is to elevate the home 3.5 feet to Elevation AE - 7 feet, NAVD 1988, with a reference of the top of the first floor. Type construction will be block with flood vents.

# HOMEOWNER KICKOFF MEETING

## JANUARY 22, 2015

- \* PROJECT SCOPE OF WORK AND CONSTRUCTION SCHEDULE (19 MONTHS)
- \* PROJECT COSTS: \$228,850, ESCROW REQUIRED
- \* COST SHARE – 75% FEMA; 25% PROPERTY OWNER
- \* REVIEW BUDGET REVISION PROCESS
- \* ASSURANCES
- \* MOVE FORWARD WITH PROJECT

# COST BREAKDOWN BY HOME

| Line Item                  | 1510 Bay St.    | 11 W. Georgetown St. | 29 W. Atlantic St. | Total              |
|----------------------------|-----------------|----------------------|--------------------|--------------------|
| Legal fees                 | \$300           | \$300                | \$300              | \$900              |
| Engineering                | \$13,284        | \$13,284             | \$12,382           | \$38,950           |
| Project Administration     | \$500           | \$500                | \$500.00           | \$1,500            |
| Construction               | \$56,800        | \$86,600             | \$38,100           | \$181,500          |
| Project management         | \$1,000         | \$1,000              | \$1,000            | \$3,000            |
| Pre-Award Elevation Cert.  | \$500           | \$500                | \$500              | \$1,500            |
| Pre-Award application Dev. | \$500           | \$500                | \$500              | \$1,500            |
| <b>Total Cost:</b>         | <b>\$72,884</b> | <b>\$102,684</b>     | <b>\$53,282</b>    | <b>\$228,850</b>   |
| <b>Escrow Requirement:</b> | <b>\$18,221</b> | <b>\$25,671</b>      | <b>\$13,320.50</b> | <b>\$57,212.50</b> |

# EVALUATION

- \* COMMUNICATION WITH PROPERTY OWNERS IS KEY
- \* STATE OF DE ASSISTANCE CRITICAL
- \* NEED EXPERIENCED TOWN PERSONNEL
- \* NEED TOWN COUNCIL SUPPORT
- \* LENGTHY GRANT PROGRAM PROCESS
- \* REQUIRES TOWN RESOURCES
- \* MULTIPLE MEETINGS WITH PROPERTY OWNERS, ENGINEER AND CONTRACTOR

# THANK YOU

Merritt Burke IV, Town Manager

Patricia Schuchman, Building Official

(302) 539-3011

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