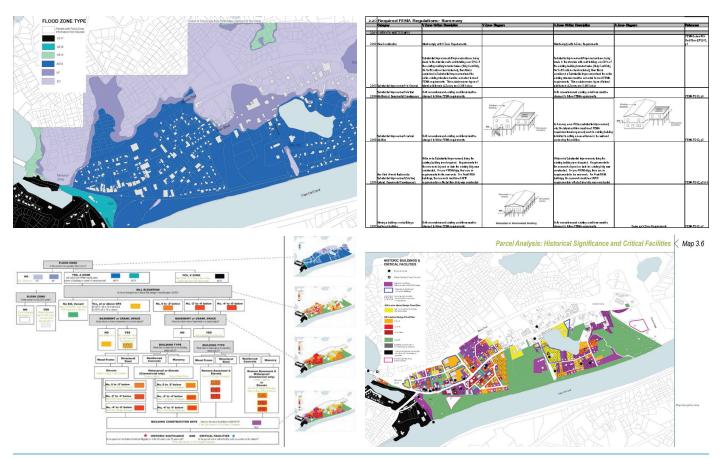
## FLOOD HAZARD MITIGATION PLANNING AND DESIGN STUDY

Town of Bourne, MA

Coastal Engineering Co. in association with Kennen Landscape Architecture, Ocean-US Architects, and Daley Witten, conducted a detailed study to illustrate the potential flood susceptibility of Buzzards Bay and make recommendations on flood hazard mitigation strategies to assist in the re-development of Main Street Business District located in a FEMA flood zone. Using GIS analysis, the study inventoried the existing structures to assess their compliance with floodplain construction standards. Following the analysis, each parcel was placed in a Category corresponding to a set of applicable mitigation strategies, which were considered on two scales. First, parcel-scale strategies were articulated to help property owners and the Town understand how existing buildings could be retrofitted to mitigate flood damage. Secondly, comprehensive village-scale design ideas, including relocating the downtown core, were suggested. The findings were illustrated by color-coded matrixes, flow charts, and maps that corresponded to levels of flood susceptibility in the village and keyed in a series of flood mitigation strategies. This complex investigation was described to town stakeholders through a series of public meetings. The final document has been praised for its easy-to-read layout and simple explanation of what property owners could do to floodproof their parcels.

## SERVICES

- Research and creation of Flood Analysis Matrix including State Building Code, FEMA, and Coastal Construction Manual regulatory requirements as applicable
- Provide recommendations for design opportunities by categories as derived in the Matrix
- Meet with The Town to codify a list of potential strategies to help mitigate flood risk
- Prepare final report that incorporates the findings and recommendations developed
- Public meeting to present findings



COASTAL engineering co