

AUG 26
2017

Town of Surfside Beach Fishing Pier



Presented by:

COLLINS
ENGINEERS^{PC}

LS3P

HAGERTY

Where we are

- **We're here today to present to council and the public where we are on the pier project**
- **We will be asking council to make one decision today**
 - Replace, in kind, with wood or ...
 - Replace with a concrete substructure, incorporating hazard mitigation elements
- **This will enable the engineers to move forward with the design and specifications for the construction bids documents**

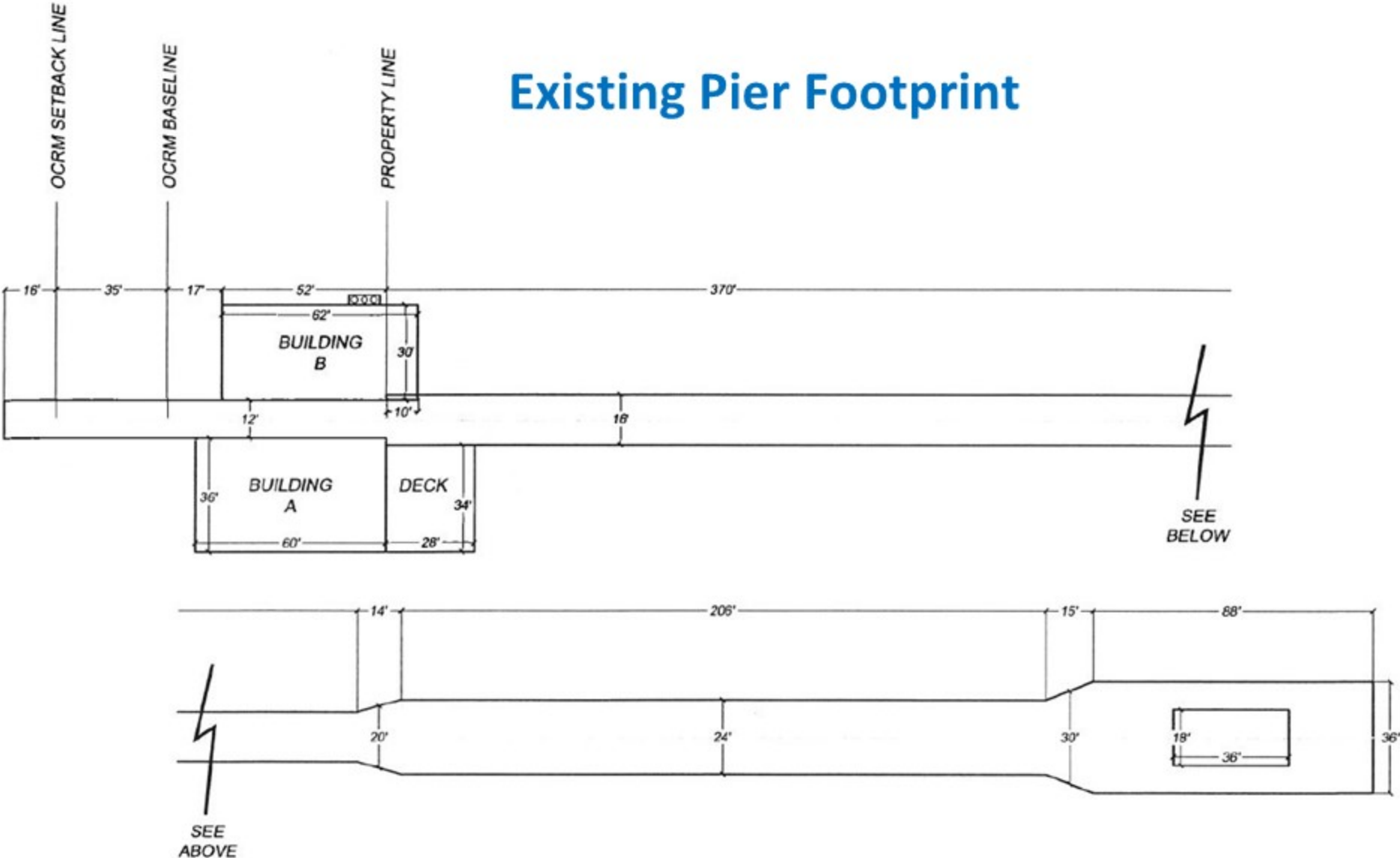
The FEMA Public Assistance (PA) Program

- **The FEMA reimbursement grant value is based on the eligible damages to restore the facility to pre-storm condition**
 - “In-Kind” repair to restore facility design, function, and capacity
 - Same shape, size, materials, etc. (for example, repair wood with wood - No improvements)
- **Use of FEMA funding requires the entire project to be compliant with Federal laws, regulations, and policies**
 - These reviews and requirements may add time and cost to the project:
 - Federal procurement requirements may be more stringent and time consuming
 - Federal Environmental and Historic Preservation considerations must be complied with
 - Failure to comply with these requirements may jeopardize FEMA funding
- **All project options will require FEMA review and final approval**

Town of Surfside's FEMA Reimbursement Status

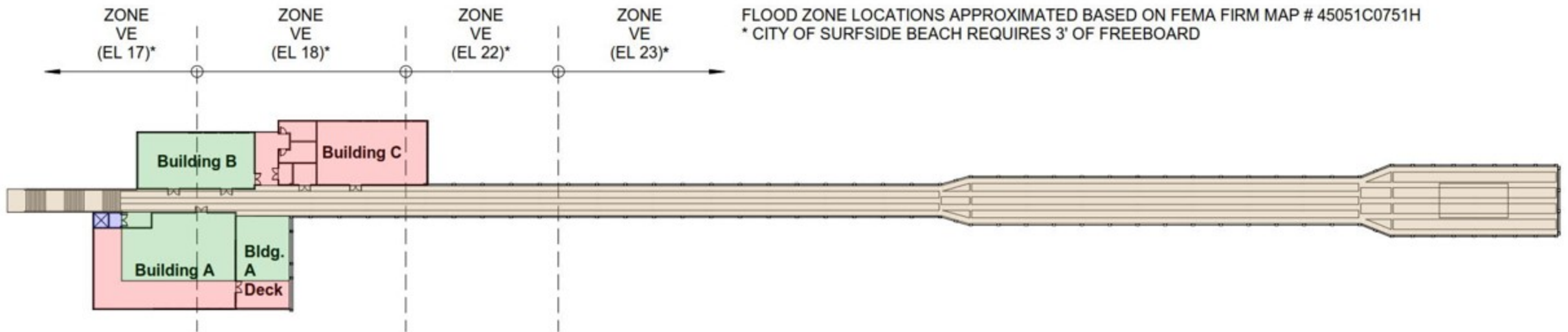
- The original FEMA grant estimate was ~\$92k.
- The current FEMA grant estimate is ~\$5.6M (Increase of over 6000%).
- While not guaranteed, the projected FEMA grant amount may be ~\$7.5M.
 - FEMA pays 75% and the State of South Carolina pays 25% of final agreed upon amount.
- **NOTE – THE FEMA PW GRANT AND PROJECT COST ESTIMATES ARE PRELIMINARY AND DO NOT INCLUDE FINAL FEMA APPROVAL, GEOTECHNICAL INFORMATION, ETC. WHILE THE ESTIMATES PRESENTED ARE THE BEST AVAILABLE AT THIS TIME, THEY ARE SUBJECT TO CHANGE BASED ON FEDERAL OBLIGATIONS, MARKET CONDITIONS, AND OTHER VARIABLES BEYOND CONTROL.**

Existing Pier Footprint



Pier/Building Replacement General Information

- Replacement pier footprint to match existing
 - Pier footprint must remain the same (length and width may not change under current permit)
- Building footprints will match existing or be expanded to already-permitted size
- Replacement pier elevation must be ~10' above existing pier
 - Buildings must be elevated per FEMA V-Zone maps
 - Town of Surfside has 3-ft freeboard requirement to lowest structural member



Pier Design Alternative 1: In-Kind Timber Construction



Estimated Pier Construction Cost - \$3,500,000



Pier Design Alternative 1: In-Kind Timber Construction



- Estimated service life – 20 years with 3% of replacement cost in maintenance per year thereafter
- Initial maintenance – 10 years
- Expected maintenance Items:
 - Pile jacketing
 - Hardware replacement
 - Timber deck replacement
 - Rail replacement
- Impact damage and abrasion likely
- No increased resiliency to future storms

Pier Design Alternative 1: In-Kind Timber Construction



Pros

- Similar to existing pier appearance
- Cost is significantly less than concrete option

Cons

- Much shorter expected service life compared to concrete replacement
- Susceptible to similar storm damage
- Susceptible to marine borer damage
- Earlier and more frequent maintenance with higher maintenance cost

Pier Design Alternative 2: Concrete Structure with Timber Deck



Estimated Pier Construction Cost - \$9,200,000



Pier Design Alternative 2: Concrete Structure with Timber Deck



- **Estimated service life – 50 years**
- **Initial maintenance – 25 years**
- **Expected maintenance items:**
 - **Isolated timber deck board and rail replacement**
 - **Concrete spalls**
- **Increased resiliency to future storms**

Pier Design Alternative 2: Concrete Structure with Timber Deck



Pros

- Longer expected service life compared to in-kind timber replacement
- Greater resistance to storm damage
- Not susceptible to marine borers
- Less frequent maintenance and lower maintenance cost

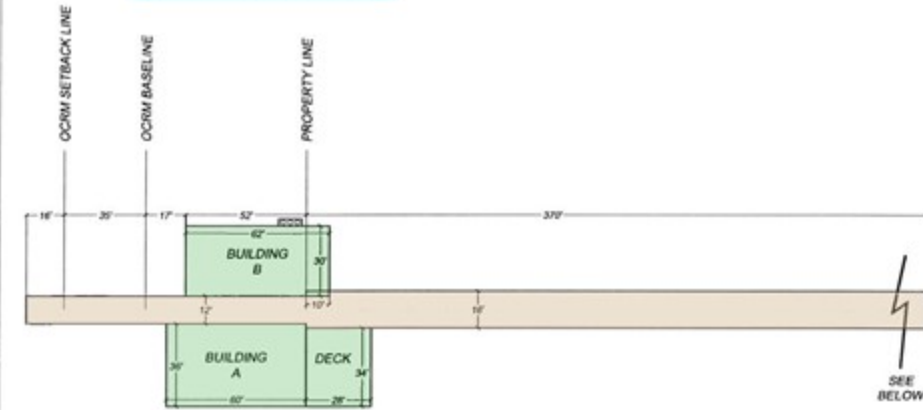
Cons

- Cost is significantly higher than in-kind timber replacement

OCRM Permit (excerpt)

EXISTING PIER FOOTPRINT

NOTE:
THIS DRAWING IS FOR PERMITTING
PURPOSES ONLY AND IS NOT TO BE
USED FOR ENGINEERING DESIGN OR
DETAIL.



DATUM:

OCRM PERMIT # OCRM-09-538-S

APPLICANT: TOWN OF SURFSIDE BEACH

SITE ADDRESS: S OCEAN BOULEVARD
SURFSIDE BEACH, SC

SUBDIVISION: N/A

MUNICIPALITY: TOWN OF SURFSIDE BEACH

COUNTY: Horry COUNTY

TMS #: 195-04-09-001

WATERBODY: ATLANTIC OCEAN

SURFSIDE PIER MODIFICATION

EXISTING SITE LAYOUT

ORIGINAL DATE: 2/2/2016

REVISED DATE:

SCALE: 1" = 50'

SHEET 1R OF 4R

DDC PN: 15133E



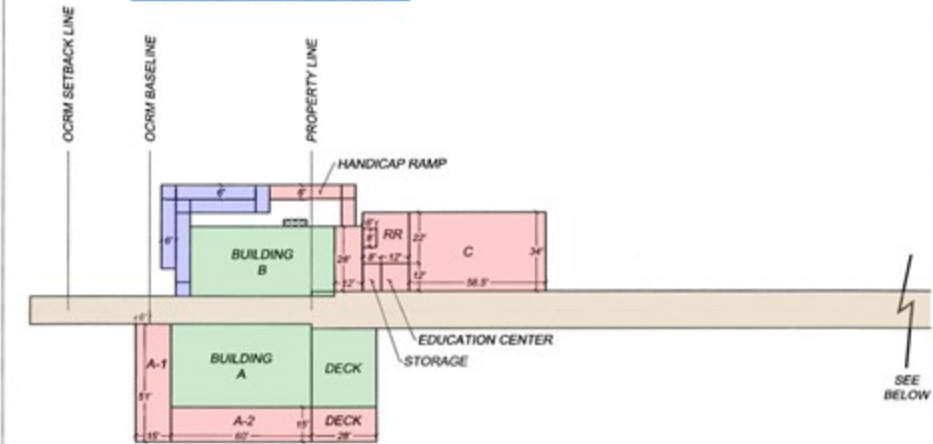
Consulting Engineers, Surveyors, Planners,
Landscape Architects & Environmentalists
220 Professional Dr., Myrtle Beach, SC 29577



OCRM Permit (excerpt)

PROPOSED PIER FOOTPRINT

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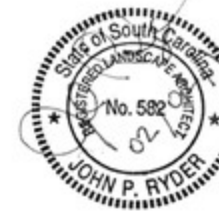
SCALE: 1" = 50'

SHEET 2R OF 4R

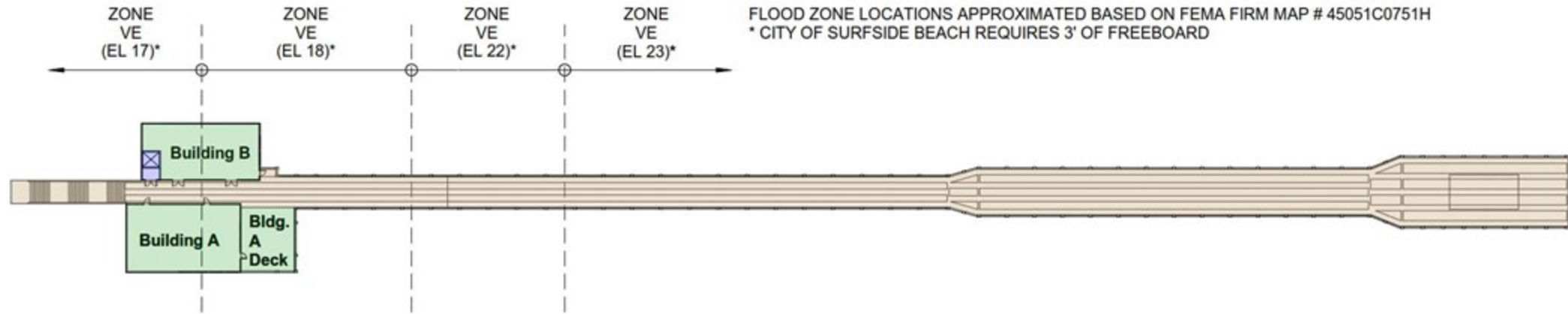
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Building Layout Option 1 (Existing Footprint)



Building A = 3,168 Gross SF

Building B = 1,860 Gross SF

Total Leasable Area = 5,028 SF

Est. Building Construction Cost = \$825,000
(above podium)



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Building Layout Option 1 (Existing Footprint)

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Option 1 Financing Overview

Project Cost

- Estimated FEMA Grant Amount: \$5.6 million
- Estimated Additional Project Cost (Town Share): \$4.4 million
- Total Project Cost: \$10.0 million

Estimated Annual Revenues Available for Debt Service:

- Accommodations Fund: \$50,000
- Hospitality Fund: \$106,000
- Pier Enterprise Fund: \$364,000
- Total: \$520,000

Coverage of Revenues over Debt Service

- Total Revenues Available: \$520,000
- Estimated Debt Service Payment: \$459,000
- Debt Service Coverage: 1.13x

- Town Share (Borrowing Amount): \$4.4 million
- Interest Cost: \$1.6 million
- Total Principal and Interest: \$6.0 million

Revenue Assumptions

- No growth in revenues or expenses over 2016 levels
- No pier fund revenues during construction
- No new pier revenues from new businesses

Debt Assumptions

- Sale Type: Bank Placed
- Term: 15 Years
- Interest Rate: 3.50%

Option 1 Financing Overview

Project Cost

- Estimated FEMA Grant Amount: \$7.5 million
- Estimated Additional Project Cost (Town Share): \$2.5 million
- Total Project Cost: \$10.0 million

Estimated Annual Revenues Available for Debt Service:

- Accommodations Fund: \$50,000
- Hospitality Fund: \$106,000
- Pier Enterprise Fund: \$364,000
- Total: \$520,000

Coverage of Revenues over Debt Service

- Total Revenues Available: \$520,000
- Estimated Debt Service Payment: \$260,000
- Debt Service Coverage: 2.00x

- Town Share (Borrowing Amount): \$2.5 million
- Interest Cost: \$1.0 million
- Total Principal and Interest: \$3.5 million

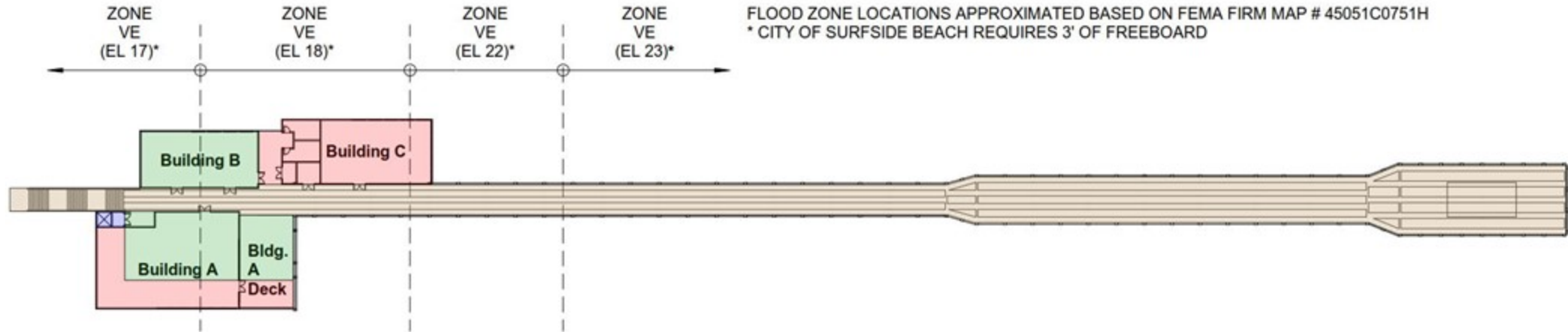
Revenue Assumptions

- No growth in revenues or expenses over 2016 levels
- No pier fund revenues during construction
- No new pier revenues from new businesses

Debt Assumptions

- Sale Type: Bank Placed
- Term: 15 Years
- Interest Rate: 3.50%

Building Layout Option 2 (OCRM Footprint)



Building A = 5,197 Gross SF
Building B = 1,860 Gross SF
Building C = 2,669 Gross SF
Total Leasable Area = 9,726 SF

Est. Building Construction Cost = \$1.51M
(above podium)



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Building Layout Option 2 (OCRM Footprint)

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Building Layout Option 2 (OCRM Footprint)



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Building Layout Option 2 (OCRM Footprint)

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Option 2 Financing Overview

Project Cost

- Estimated FEMA Grant Amount: \$5.6 million
- Estimated Additional Project Cost (Town Share): \$5.1 million
- Total Project Cost: \$10.7 million

Estimated Annual Revenues Available for Debt Service:

- Accommodations Fund: \$50,000
- Hospitality Fund: \$106,000
- Pier Enterprise Fund: \$364,000
- Total: \$520,000

Coverage of Revenues over Debt Service

- Total Revenues Available: \$520,000
- Estimated Debt Service Payment: \$530,000
- Debt Service Coverage: 0.98x

- Town Share (Borrowing Amount): \$5.1 million
- Interest Cost: \$1.9 million
- Total Principal and Interest: \$7.0 million

Revenue Assumptions

- No growth in revenues or expenses over 2016 levels
- No pier fund revenues during construction
- No new pier revenues from new businesses

Debt Assumptions

- Sale Type: Bank Placed
- Term: 15 Years
- Interest Rate: 3.50%

Option 2 Financing Overview

Project Cost

- Estimated FEMA Grant Amount: \$7.5 million
- Estimated Additional Project Cost (Town Share): \$3.2 million
- Total Project Cost: \$10.7 million

Estimated Annual Revenues Available for Debt Service:

- Accommodations Fund: \$50,000
- Hospitality Fund: \$106,000
- Pier Enterprise Fund: \$364,000
- Total: \$520,000

Coverage of Revenues over Debt Service

- Total Revenues Available: \$520,000
- Estimated Debt Service Payment: \$334,000
- Debt Service Coverage: 1.56x

- Town Share (Borrowing Amount): \$3.2 million
- Interest Cost: \$1.2 million
- Total Principal and Interest: \$4.4 million

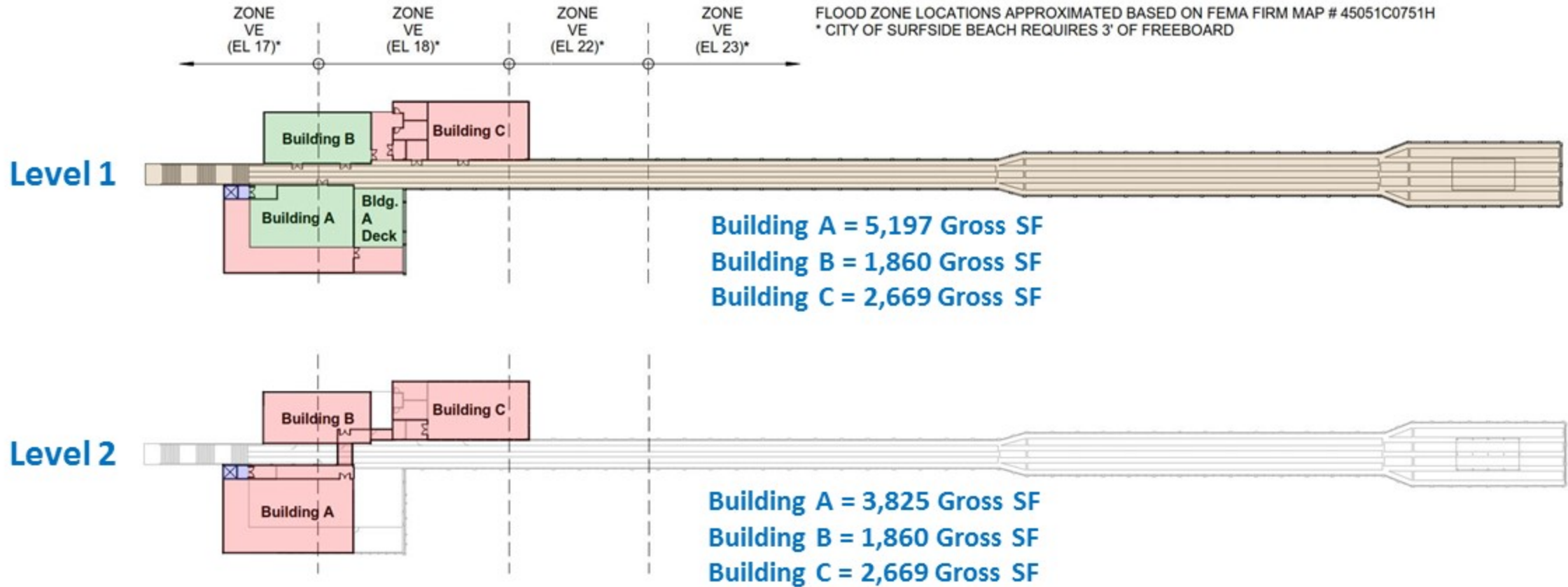
Revenue Assumptions

- No growth in revenues or expenses over 2016 levels
- No pier fund revenues during construction
- No new pier revenues from new businesses

Debt Assumptions

- Sale Type: Bank Placed
- Term: 15 Years
- Interest Rate: 3.50%

Building Layout Option 3 (OCRM Footprint)



Total Leasable Area = 18,080 SF

Est. Building Construction Cost = \$2.65M
(above podium)



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Building Layout Option 3 (OCRM Footprint)

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Building Layout Option 3 (OCRM Footprint)



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Building Layout Option 3 (OCRM Footprint)

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Summary of Building Options

Option 1



5,028 SF
\$825k

Option 2



9,726 SF
\$1.51M

Option 3



18,080 SF
\$2.65M

Option 3 Financing Overview

Project Cost

- Estimated FEMA Grant Amount: \$5.6 million
- Estimated Additional Project Cost (Town Share): \$6.2 million
- Total Project Cost: \$11.8 million

Estimated Annual Revenues Available for Debt Service:

- Accommodations Fund: \$50,000
- Hospitality Fund: \$106,000
- Pier Enterprise Fund: \$364,000
- Total: \$520,000

Coverage of Revenues over Debt Service

- Total Revenues Available: \$520,000
- Estimated Debt Service Payment: \$647,000
- Debt Service Coverage: 0.80x

- Town Share (Borrowing Amount): \$6.2 million
- Interest Cost: \$2.3 million
- Total Principal and Interest: \$8.5 million

Revenue Assumptions

- No growth in revenues or expenses over 2016 levels
- No pier fund revenues during construction
- No new pier revenues from new businesses

Debt Assumptions

- Sale Type: Bank Placed
- Term: 15 Years
- Interest Rate: 3.50%

Option 3 Financing Overview

Project Cost

- Estimated FEMA Grant Amount: \$7.5 million
- Estimated Additional Project Cost (Town Share): \$4.3 million
- Total Project Cost: \$11.8 million

Estimated Annual Revenues Available for Debt Service:

- Accommodations Fund: \$50,000
- Hospitality Fund: \$106,000
- Pier Enterprise Fund: \$364,000
- Total: \$520,000

Coverage of Revenues over Debt Service

- Total Revenues Available: \$520,000
- Estimated Debt Service Payment: \$449,000
- Debt Service Coverage: 1.16x

- Town Share (Borrowing Amount): \$4.3 million
- Interest Cost: \$1.6 million
- Total Principal and Interest: \$5.9 million

Revenue Assumptions

- No growth in revenues or expenses over 2016 levels
- No pier fund revenues during construction
- No new pier revenues from new businesses

Debt Assumptions

- Sale Type: Bank Placed
- Term: 15 Years
- Interest Rate: 3.50%

Summary of three building options with concrete pier

	Option #1	Option #2	Option #3
<u>Project Cost</u>	Existing Bldgs.	with Bldg. C	A, B & C - Two Story
Estimated FEMA Grant Amount:	\$ 5,600,000	\$ 5,600,000	\$ 5,600,000
Estimated Additional Project Cost (Town Share):	4,400,000	5,100,000	6,200,000
Total Project Cost:	10,000,000	10,700,000	11,800,000
 <u>Estimated Annual Revenues Available for Debt Service:</u>			
Accommodations Fund:	\$ 50,000	\$ 50,000	\$ 50,000
Hospitality Fund:	106,000	106,000	106,000
Pier Enterprise Fund:	364,000	364,000	364,000
Total:	520,000	520,000	520,000
 <u>Coverage of Revenues over Debt Service</u>			
Total Revenues Available:	\$ 520,000	\$ 520,000	\$ 520,000
Estimated Debt Service Payment:	459,000	530,000	647,000
Debt Service Coverage:	1.13	0.98	0.80
Town Share (Borrowing Amount):	\$ 4,400,000	\$ 5,100,000	\$ 6,200,000
Interest Cost:	1,600,000	1,900,000	2,300,000
Total Principal and Interest:	6,000,000	7,000,000	8,500,000

Summary of three building options with concrete pier

	Option #1	Option #2	Option #3
<u>Project Cost</u>	Existing Bldgs.	with Bldg. C	A, B & C - Two Story
Estimated FEMA Grant Amount:	\$ 7,500,000	\$ 7,500,000	\$ 7,500,000
Estimated Additional Project Cost (Town Share):	2,500,000	3,200,000	4,300,000
Total Project Cost:	10,000,000	10,700,000	11,800,000
 <u>Estimated Annual Revenues Available for Debt Service:</u>			
Accommodations Fund:	\$ 50,000	\$ 50,000	\$ 50,000
Hospitality Fund:	106,000	106,000	106,000
Pier Enterprise Fund:	364,000	364,000	364,000
Total:	520,000	520,000	520,000
 <u>Coverage of Revenues over Debt Service</u>			
Total Revenues Available:	\$ 520,000	\$ 520,000	\$ 520,000
Estimated Debt Service Payment:	260,000	334,000	449,000
Debt Service Coverage:	2.00	1.56	1.16
Town Share (Borrowing Amount):	\$ 2,500,000	\$ 3,200,000	\$ 4,300,000
Interest Cost:	1,000,000	1,200,000	1,600,000
Total Principal and Interest:	3,500,000	4,400,000	5,900,000

Action

- **We need a motion from council whether to**
 - Replace, in kind, with wood or ...
 - Replace with a concrete substructure, incorporating hazard mitigation elements
- **Next Steps**
 - **If the council selects replace with a concrete substructure, incorporating hazard mitigation elements**
 - Once FEMA has committed to a final dollar figure it will be brought back to council to then decide on an option
 - This should happen sometime in October which should give the public sufficient time to make their thoughts known to council members concerning the various options