

Town Administrator Report
September 11, 2018

The following is a summary of the major activities of the Office of the Town Administrator for the previous week.

- 1. Capital Improvement Program** -On Wednesday, September 5 I distributed to Town Departments materials for the preparation of requests for the fiscal year 2020 Capital Improvement Program (CIP). Attached is a copy of the materials distributed to Departments. Board members may be particularly interested in the accompanying letter which lays out a little of our process. With September barely upon us, this officially kicks off the FY 2020 budget process. The capital planning process is one of the most important financial planning exercises on our calendar. Every year basically represents a complete remake of the plan and gives the Town an opportunity to fine tune its priorities and to develop new projects for inclusion in the plan. The CIP is a six-year plan which consists of a capital budget for the next fiscal year, along with a plan of priority projects over the following five years for a six-year plan altogether. Projects in the five-year planning period are recommendations only to give the Town adequate time to prepare and reflect on proposed priorities. Each year is an opportunity to refine and rethink projects as well as to plan for funding needs to make projects happen. Although the plan is for six years, the financial planning and analysis behind it reach out much further to the horizon of all existing and proposed debt service for the Town. By having this planning in place, the Town can stabilize its tax rate at planned levels by timing major projects to take on new debt as older debt is retired. It should be noted given our update this year of the Master Plan that the CIP serves as a critical financial management tool to implement the goals of the plan. It will be an important step to link the CIP to the plan's goals to help accomplish the identified priorities.
- 2. Electric Supply Bid for Municipal/Government Rate Accounts.** –The Town purchases its electricity through a Municipal Competitive Electric Supply Agreement (MCESA) which is bid out through the Cape Light Compact through an RFP process. While the Town is not obligated to execute an agreement pursuant to the bid, previous competitive agreements have proven to be very valuable in providing the Town with the best rates for electric power. The agreements are usually for thirty-six months, and we are currently preparing to issue a new power supply RFP this fall to renew the MCESA. The new agreement will have a term of between twelve and thirty-six months, with fixed pricing for each contract year and will allow the Towns the opportunity to select the best available rate for the full contract period. I am looking forward to the RFP process as the best possible means of getting a competitive rate for our electricity needs. Through this process we will be able to compare our proposed rates with existing retail rates to calculate our exact savings when the bids come in.

- 3. School Roof Update** -Design development through the firm, David Sisson Architects, has been completed for the Oak Bluffs School Roof project. The firm is in the process of finalizing the bid documents to put the project out to bid this week. The game plan is to have hard bids in hand in advance of the November Special Town Meeting so that the exact project costs will be known at the time of appropriation. The schedule of the project is to appropriate funds in November to issue a contract and have the work commence as soon as the school year closes in June of 2019. The construction time-frame is very tight, calling for all work to be completed by the start of school in September. The construction contract will contain liquidated damages if any work is not completed by the start of school. The project scope calls for the replacement of the 24-year-old roof surface as well as some of the HVAC equipment and controls that were installed as part of the original construction project. The advanced age of the roof-mounted units makes their replacement an essential component of the overall roof replacement to avoid the high cost and problems associated with cutting into the roof for a later replacement. Additionally, the upgrade and recommissioning of the building's mechanical control system is a critical issue in maintaining building indoor air quality.

- 4. ICMA Conference**—From September 23-26 I will be in attendance at the 104th Annual Conference of the International City/County Management Association (ICMA) to be held in Baltimore, Md. This conference represents the year's single most important professional development opportunity for local government managers to learn about state-of-the-art problem solving in local government, as well as to network and discuss key management issues. Conference keynote addresses, educational sessions, workshops and field demonstrations provide attendees with the best available opportunities for acquiring new tools and techniques to address the problems facing communities and local government today. I never fail to learn a great deal at the IMCA conference, or to bring back new ideas, inspiration and energy to help our Town.



TOWN OF OAK BLUFFS

Post Office Box 1327 • Oak Bluffs, MA 02557
Telephone 508-693-3554 • Fax 508-696-7736

Board of Selectmen

Gail M. Barmakian, *Chairman*
Jason Balboni
Gregory A. Coogan
Brian C. Packish
Michael J. Santoro

DATE: September 5, 2018

TO: All Department Heads

FROM: Robert Whritenour, Town Administrator

Robert L. Whritenour, Jr.
Town Administrator

RE: FY 2020 CAPITAL IMPROVEMENT PROGRAM - PREPARATION OF CAPITAL REQUESTS

Now that September is finally here and the fishing derby is about to start, for us it's the Capital Improvement Program season to chart out all of our capital needs over the next several years. Our annual goal is to get this update accomplished before we move into next year's operating budget process. Attached please find the following materials necessary for the preparation of your Capital Improvement Program requests for fiscal year 2020, along with an update of the plan for the ensuing five-year period from fiscal year 2021 through fiscal year 2025:

1. A copy of the Town's Capital Planning Policy
2. The project summary spreadsheet showing all projects currently in the plan
3. Project Request Forms (3)
4. Capital Improvement Program Summary Form

As in previous years, we will be updating our plan to reflect any capital items that you feel will be needed *over the next six years*. This requires evaluating and updating the existing projects contained in last year's plan as well as identifying any new projects which should be added to the plan. I think that everyone understands by now that the Capital Improvement planning process is critical to the financial health of our Town. Just as we work hard on the annual budget process to fund direct services, the capital planning process allows us to keep up the condition of our buildings, vehicles and equipment that enable us to perform these services. The two budgets go hand in hand to enable each Department to be as effective as possible. It has been proven over and over that the lack of a sound capital plan leads to a deterioration of the quality and condition of our capital resources, and ultimately to financial problems from an overwhelming backlog of capital needs. Here in Oak Bluffs you have done a great job in highlighting our needs to give us adequate time to prepare and accomplish many of our most-needed projects. Please keep up the strong attention to your capital needs to enable the Town to fully anticipate what needs to be done to keep our infrastructure up to date.

This year I'm asking Department Heads to take special care to analyze your needs and communicate them strongly. We are in somewhat of a transitional year in that we have new members and new leadership on the Capital Program Committee, through which you will have to go the extra mile to make sure they fully understand your needs. Additionally, we have a new budget presentation document that conforms to the Government Finance Officer's Association's (GFOA) criteria for a distinguished budget presentation. This document elevates the CIP into a major part of our budget presentation and links both capital and operating spending to Town-wide and Departmental goals and priorities. The goal here is to think strategically and to develop a capital and operating spending programs that can be directly linked to your stated service goals.

Last year Departments did a great job of giving the Capital Program Committee detailed reports on the progress and status of all of the projects previously approved under the plan. This is a great practice to keep up, and it greatly helps to generate positive support for your projects, so if you have been funded in the past, please provide a status report for each project including completion dates and total amounts spent vs. budget.

Please note that your CIP Project Requests and Summary Sheets are due back to me on Friday September 28, 2018. If you have any special circumstances that will prevent you from meeting this date, please let me know and I will work with you.

Please remember that you must submit a capital request for all capital outlays, even those, which were approved under last year's program, but still require funding. A "capital outlay" is the acquisition of land or any purchase of \$10,000 or more for anything, which has a useful life of at least three years. A separate Project Request Form is required for each capital outlay, and a single Summary Form is required to list all projects requested. As an example, if you are requesting three separate capital outlays, you should submit three individual Project Request Forms and one single Summary Form. please spend an adequate amount of time researching and preparing your Project Request Forms. Please also try to provide as complete a justification of each individual project as possible. Attach additional explanatory material to the Project Request Form as necessary to help the Capital Program Committee better understand your request.

As always, I invite you to see me any time for assistance or to review budget issues and concerns. Please, also, try to be as complete as possible and do not leave out projects which you feel will be required for the Town. It is very important our decisions are based on an understanding of all of the Town's needs.

Thank you in advance for your hard work and commitment to the capital planning process. Making a good case for our needs is a critical step to keeping up our strong progress. I look forward to working with all of you on the CIP.

cc: Selectmen
Finance Committee
Capital Program Committee

Town Of Oak Bluffs

CAPITAL IMPROVEMENT BUDGET POLICIES

- **The town will make all capital improvements in accordance with an adopted capital improvement program.**
- **The town will develop a multi-year plan for capital improvements and update it annually.**
- **The town will enact an annual capital budget based on the multi-year capital improvement plan. Future capital expenditures necessitated by aging infrastructure, environmental needs or changes in demographics or in development patterns within the Town will be calculated and included in capital budget projections.**
- **The town will coordinate development of the capital improvement budget with development of the operating budget. Future operating costs associated with new capital improvement will be projected and included in operating budget forecasts.**
- **The town will use intergovernmental assistance to finance only those capital improvements that are consistent with the capital improvement plan and priorities, and whose operating and maintenance costs have been included in operating budget forecasts.**
- **The town will maintain all its assets at a level adequate to protect the town's capital investment and to minimize future maintenance and replacement costs.**
- **The town, as part of its capital planning process, will project its equipment replacement and maintenance needs for the next several years and will update this projection each year. From this projection, a maintenance and replacement schedule will be developed and followed.**
- **The town will identify the estimated costs and potential funding sources for each capital project proposal before it is submitted to Town Meeting for approval.**
- **The town will determine the least costly financing method for all new projects.**

**TOWN OF OAK BLUFFS
CAPITAL IMPROVEMENT PROGRAM FY 2019-2024 REQUESTS**

| | Prior | Budget | Proposed | | | | | Funds Req'd |
|---------------------------------------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|
| | Appropriation | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | After 2024 |
| 1. PROPOSED PROJECTS | | | | | | | | |
| 1. Assessing | | | | | | | | |
| Replace Vehicle | \$10,000 | | | | | | | |
| 2. Building Maintenance | | | | | | | | |
| Replace Library Carpet | \$30,000 | | | | | | | |
| Police Renovations | | \$25,000 | | | | | | |
| Library Exterior Painting | | \$30,000 | | | | | | |
| Harbor Bathhouse | | \$30,000 | | | | | | |
| Police Exterior Painting | | | \$30,000 | | | | | |
| COA Exterior Paint | | | \$30,000 | | | | | |
| 3. Council On Aging | | | | | | | | |
| Replace COA Van | | \$30,000 | | | | | | |
| 4. Fire-EMS Department | | | | | | | | |
| Refurbish Rescue | \$68,000 | | | | | | | |
| Purchase Turnout Gear and Scott Packs | \$85,000 | | | | | | | |
| Rad-57 CO Mon | \$4,200 | | | | | | | |
| Auto CPR System | | \$17,500 | | | | | | |
| Replace Radio System | | \$100,000 | | | | \$100,000 | | |
| Replace Fire Hose | | \$30,000 | | | | \$40,000 | | |
| New Engine for Rescue Boat | | \$15,500 | | | | | | |
| New Intercept Vehicle | | | \$52,000 | | | | | |
| Recondition Fire Truck | | | \$390,000 | | | | | |
| Purchase New Ambulance | | | | \$275,000 | | | | |
| Fire Rehab Unit | | | | | \$75,000 | | | |
| Replace Turnout Gear | | | | | \$125,000 | | | |
| Purchase Scott Air Packs | | | | | | \$185,000 | | |
| Replace Fire Truck | | | | | | | \$750,000 | |

**TOWN OF OAK BLUFFS
CAPITAL IMPROVEMENT PROGRAM FY 2019-2024 REQUESTS**

| | Prior | Budget | Proposed | | | | | Funds Req'd |
|-------------------------------------|---------------|-----------|----------|-------------|-----------|-----------|-----------|-------------|
| | Appropriation | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | After 2024 |
| 5. Highway Department | | | | | | | | |
| | \$138,000 | \$35,000 | | | | | | |
| Replace Front End Loader | \$50,000 | | | | | | | |
| Replace Tractor (over 20 yrs old) | \$20,000 | | | | | | | |
| Replace Diesel Tank | \$86,000 | \$43,000 | \$43,000 | \$43,000 | | | | |
| Replace Street Sweeper | | \$43,000 | \$43,000 | | \$45,000 | \$55,000 | | |
| Replace Pickup Trucks (2) | | \$40,000 | | | | | | |
| Replace Wood Chipper | | \$12,000 | | | | | | |
| Replace Mower for Cemetery | | | | \$12,000 | | | | |
| Replace Loader Tires | | | | | \$70,000 | \$80,000 | | |
| Replace Small Dump Truck (2) | | | | | \$100,000 | \$125,000 | | |
| Replace Full Size Dump Truck | | | | | | | \$125,000 | |
| Replace Rubbish Truck | | | | | | | | |
| 6. Information Technology | | | | | | | | |
| | \$13,500 | \$13,500 | | | | | | |
| Conference Rooms | | \$19,000 | \$19,000 | \$19,000 | \$19,000 | \$19,000 | \$19,000 | \$76,000 |
| Municipal Fiber Network Upgrade | | | | | | | | |
| 7. Marina | | | | | | | | |
| | \$80,000 | \$45,000 | | | | | | |
| Electricity Repairs | | \$100,000 | | | | | | |
| Expand Harbormaster Office | | | \$75,000 | | | | | |
| East Chop Landing Wall | | | \$30,000 | | | | | |
| Harbor Jetty Extension Design | | | | \$1,500,000 | | | | |
| Harbor Jetty Extension Construction | | | | | | | | |
| 8. Parks Department | | | | | | | | |
| | | \$30,000 | | | | | | |
| Replace Bayview Stairs | | \$27,620 | | | | | | |
| Jet Ski and Rescue Board | | | | | | | | |

**TOWN OF OAK BLUFFS
CAPITAL IMPROVEMENT PROGRAM FY 2019-2024 REQUESTS**

| | Prior | Budget | Proposed | | | | | Funds Req'd |
|-----------------------------------|---------------|-------------|----------|-----------|-----------|-----------|-----------|-------------|
| | Appropriation | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | After 2024 |
| 9. Police Department | | \$45,000 | \$42,000 | | | | | |
| Replace 2012 Suoervisor Vehicle | | | \$42,000 | | | | | |
| Replace 2012 Unmarked Cruiser Lt. | | | | \$140,000 | | | | |
| Replace 2016 Marked Cruisers | | | | \$42,000 | | | | |
| Replace 2015 Unmarked Cruiser (1) | | | | | \$42,000 | | | |
| Replace Unmarked Cruiser (1) | | | | | \$19,000 | | | |
| Replace Body Armor | | | | | | | | |
| 10. Sailing Camp | \$25,000 | | | | | | | |
| Cottage Repairs | | \$25,000 | | | | | | |
| Sailing Camp Electrical Repairs | | | | \$50,000 | | | | |
| Sailing Camp Renovate Lower Level | | | | | | | | |
| 11. School Department | \$50,000 | \$2,500,000 | | | | | | |
| Roof Replacement | | \$1,500,000 | | | | | | |
| HVAC System Replacement | | \$68,000 | | | | | | |
| Security System | | \$40,000 | | | | | | |
| Intercom | | \$150,000 | | | | | | |
| Fire Alarm | | | \$36,000 | | | | | |
| Telecommunications | | | | \$90,000 | | | | |
| Replace Carpets | | | | | \$30,000 | | | |
| Exterior Painting | | | | | | \$100,000 | | |
| Boiler Replacement | | | | | | | | |
| 12. Selectmen | \$335,500 | | | | | | | |
| Town Hall Architectural Study | \$9,880,753 | \$30,000 | \$30,000 | \$790,400 | \$775,580 | \$760,760 | \$745,940 | \$9,919,520 |
| Town Hall Construction | | | | | | | | |

**TOWN OF OAK BLUFFS
CAPITAL IMPROVEMENT PROGRAM FY 2019-2024 REQUESTS**

| | Prior | | Budget | | Proposed | | FY 2023 | FY 2024 | Funds Req'd After 2024 |
|--|---------------------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------------|
| | Appropriation | FY 2019 | FY 2020 | FY 2021 | FY 2022 | | | | |
| 2. SOURCES OF FUNDS | | | | | | | | | |
| | \$157,200 | \$208,000 | \$484,000 | \$457,000 | \$261,000 | \$325,000 | \$750,000 | \$0 | |
| Ambulance Reserve Fund | \$384,500 | \$419,620 | \$221,000 | \$224,000 | \$264,000 | \$379,000 | \$144,000 | \$76,000 | |
| Available Funds | \$10,266,253 | \$5,288,000 | \$25,330,000 | \$790,400 | \$5,775,580 | \$760,760 | \$5,745,940 | \$9,919,520 | |
| Bonded Debt - Excluded from Prop 2 1/2 | | | | | | | | | |
| Bonded Debt - Not Excluded from Prop 2 1/2 | | | | | | | | | |
| Bonded Debt - Revenue Based | \$80,000 | \$145,000 | \$105,000 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Waterways Fund | | | | | | | | | |
| Community Preservation Funds | \$0 | \$12,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Cemetery Reserve | \$470,000 | \$40,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Wastewater Enterprise | \$6,780,000 | \$17,650,000 | \$1,500,000 | \$1,500,000 | \$0 | \$0 | \$0 | \$0 | |
| State and Federal Grants | | | | | | | | | |
| TOTAL | \$18,137,953 | \$23,762,620 | \$27,640,000 | \$2,971,400 | \$6,300,580 | \$1,464,760 | \$6,639,940 | \$9,995,520 | |

TOWN OF OAK BLUFFS
Capital Improvement Program

Project Request Form
(Please Type All Responses)

Date: _____

Project No. _____

1. Department: _____
2. Project or Equipment (Short Title): _____
3. Description and Purpose of Project or Equipment: _____

4. Justification of Project: (Why is it necessary to complete this project? What is the benefit to the Town?)

5. **STATUS OF PROJECT OR EQUIPMENT:** Estimate life of project or equipment _____ Years

SITE: Secured Not Secured Not Required

SURVEY OF NEED: Under Study Completed Not Required

PRELIMINARY PLANS
OR SPECIFICATIONS: Under Study Completed Not Required

FINAL PLANS OR
SPECIFICATIONS: Under Study Completed Not Required

6. **PRIORITY** Urgent Necessary Desirable

7. **COST ESTIMATES** Preliminary Final

Land Cost \$ _____

Construction Cost \$ _____

Equipment Cost \$ _____

Other Cost \$ _____

Total Cost \$ _____

8. **EFFECT ON ANNUAL OPERATING BUDGET:**

Operational (+)(-) \$ _____

Maintenance (+)(-) \$ _____

Total (+)(-) \$ _____

Revenue From Project \$ _____ /YR

New Personnel Required \$ _____

9. **SOURCE OF FUNDS:**

Current Revenue \$ _____

Bond Issue \$ _____ Years _____

Short Term Note \$ _____ Years _____

Other (describe) _____

10. **YEAR PROPOSED FOR CONSTRUCTION OR ACQUISITION: FY _____**

11 **ADDITIONAL COMMENTS AND JUSTIFICATION** (Please attach a sheet or use this space to describe need in more detail, including any costs associated with not completing this project):

12 **SIGNATURE** _____

TITLE _____

TOWN OF OAK BLUFFS
Capital Improvement Program

Project Request Form
(Please Type All Responses)

Date: _____

Project No. _____

1. Department: _____
2. Project or Equipment (Short Title): _____
3. Description and Purpose of Project or Equipment: _____

4. Justification of Project: (Why is it necessary to complete this project? What is the benefit to the Town?)

5. **STATUS OF PROJECT OR EQUIPMENT:** Estimate life of project or equipment _____ Years

- SITE: Secured Not Secured Not Required
- SURVEY OF NEED: Under Study Completed Not Required
- PRELIMINARY PLANS
OR SPECIFICATIONS: Under Study Completed Not Required
- FINAL PLANS OR
SPECIFICATIONS: Under Study Completed Not Required

6. **PRIORITY** Urgent Necessary Desirable

7. **COST ESTIMATES** Preliminary Final

- Land Cost \$ _____
- Construction Cost \$ _____
- Equipment Cost \$ _____
- Other Cost \$ _____
- Total Cost \$ _____

8. **EFFECT ON ANNUAL OPERATING BUDGET:**

- Operational (+)(-) \$ _____
- Maintenance (+)(-) \$ _____
- Total (+)(-) \$ _____
- Revenue From Project \$ _____/YR
- New Personnel Required \$ _____

9. **SOURCE OF FUNDS:**

- Current Revenue \$ _____
- Bond Issue \$ _____ Years _____
- Short Term Note \$ _____ Years _____
- Other (describe) _____

10. **YEAR PROPOSED FOR CONSTRUCTION OR ACQUISITION: FY _____**

11 **ADDITIONAL COMMENTS AND JUSTIFICATION** (Please attach a sheet or use this space to describe need in more detail, including any costs associated with not completing this project):

12 **SIGNATURE** _____

TITLE _____

TOWN OF OAK BLUFFS
Capital Improvement Program

Project Request Form
(Please Type All Responses)

Date: _____

Project No. _____

1. Department: _____
2. Project or Equipment (Short Title): _____
3. Description and Purpose of Project or Equipment: _____

4. Justification of Project: (Why is it necessary to complete this project? What is the benefit to the Town?)
- _____
- _____

5. **STATUS OF PROJECT OR EQUIPMENT:** Estimate life of project or equipment _____ Years

SITE: Secured Not Secured Not Required

SURVEY OF NEED: Under Study Completed Not Required

PRELIMINARY PLANS
OR SPECIFICATIONS: Under Study Completed Not Required

FINAL PLANS OR
SPECIFICATIONS: Under Study Completed Not Required

6. **PRIORITY** Urgent Necessary Desirable

7. **COST ESTIMATES** Preliminary Final

Land Cost \$ _____

Construction Cost \$ _____

Equipment Cost \$ _____

Other Cost \$ _____

Total Cost \$ _____

8. **EFFECT ON ANNUAL OPERATING BUDGET:**

Operational (+)(-) \$ _____

Maintenance (+)(-) \$ _____

Total (+)(-) \$ _____

Revenue From Project \$ _____/YR

New Personnel Required \$ _____

9. **SOURCE OF FUNDS:**

Current Revenue \$ _____

Bond Issue \$ _____ Years _____

Short Term Note \$ _____ Years _____

Other (describe) _____

10. **YEAR PROPOSED FOR CONSTRUCTION OR ACQUISITION: FY _____**

11 **ADDITIONAL COMMENTS AND JUSTIFICATION** (Please attach a sheet or use this space to describe need in more detail, including any costs associated with not completing this project):

12 **SIGNATURE** _____

TITLE _____



Cape Light Compact JPE
261 Whites Path, Unit 4, South Yarmouth, MA 02664
Energy Efficiency 1.800.797.6699 | Power Supply 1.800.381.9192
Fax: 774.330.3018 | capelightcompact.org

[Month] [xx], 2018

Dear [Insert Public Entity Contact Name, e.g., John Smith]:

[Insert Public Entity Name Here, e.g., Town of Barnstable] (“Participant”) has indicated an interest in participating in the Cape Light Compact JPE Request for Proposals for All-Requirements Retail Electric Power Supply for Municipal/Government Rate Accounts (the “RFP”). The RFP will be issued by the Cape Light Compact JPE (“Compact”) on behalf of participating Compact members and other governmental entities with municipal and governmental accounts located within the Compact’s member municipalities.

By signing this letter, Participant hereby authorizes the Compact, effective as of [insert date of letter execution], to act as agent on its behalf in issuing the RFP, reviewing proposals from bidders, negotiating the form of municipal competitive electric supply agreement (“MCESA”) with bidders, evaluating, with assistance from expert consultants and legal counsel, the proposals and terms of the modified MCESA, recommending a contract award, notifying the winning bidder on behalf of participants in the RFP and taking other actions which are convenient or reasonably necessary in carrying out the foregoing tasks. The Participant has designated the accounts set forth in Attachment A to be included in this authorization. This letter agreement does not constitute a binding obligation of any kind by the Participant or the Compact to award a contract to a competitive supplier if the bids, in the Compact’s judgment, are not favorable or in the best interest of the Participant and other participants taking part in the RFP, nor does it obligate the Participant to execute an MCESA. Participant understands that if it elects to execute the MCESA recommended by the Compact, or provides the Compact the right to execute the MCESA on its behalf via a separate authorization, the MCESA will have a term anywhere from 12 months to 36 months, will have pricing fixed for each contract year and will commit the Participant to purchase all of the generation for the electricity accounts it designates for participation in the RFP from the chosen competitive supplier for such term, without any right to opt-out during such term.

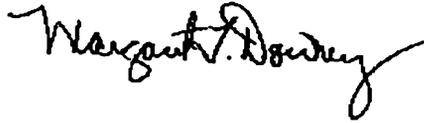
This letter may be executed in counterparts, each of which, when executed, will be deemed to be an original, but all of which together will constitute one and the same instrument. The parties agree that a scanned or electronically reproduced copy or image of this letter bearing the signatures of the parties hereto will be deemed an original.

The Compact is enthusiastic about moving forward on this RFP and looks forward to working with you. ***If you are in agreement with the foregoing, please sign and scan your signature page to this letter and return it to Margaret T. Downey at mdowney@capelightcompact.org.***

Working Together Toward A Smarter Energy Future

Aquinnah | Barnstable | Bourne | Brewster | Chatham | Chilmark | Dennis | Dukes County | Eastham | Edgartown | Falmouth
Harwich | Mashpee | Oak Bluffs | Orleans | Provincetown | Sandwich | Tisbury | Truro | Wellfleet | West Tisbury | Yarmouth

Very truly yours,



Margaret T. Downey
Compact Administrator and Chief Procurement Officer

AGREED AND ACCEPTED THIS [XX] DAY OF [MONTH], 2018 BY ITS DULY
AUTHORIZED OFFICER:

[INSERT SIGNATORY NAME]
[INSERT PUBLIC ENTITY NAME]

By: _____
Name: _____
Title: _____

[Place on Public Entity Letterhead]

[Month] [Day], 2018

Margaret T. Downey
Cape Light Compact JPE, Chief Procurement Officer
261 Whites Path, Suite 4
S. Yarmouth, MA 02664

RE: *Authorization to Execute Municipal Competitive Electric Supply*

Dear Ms. Downey,

I understand that the Cape Light Compact JPE (the "Compact") issued a Request for Proposals ("RFP") for municipal and other governmental electric accounts for all requirements power supply starting in July 2019 meter read dates and extending up to three years. The Compact issued this RFP for municipal accounts at the request of the municipalities to maximize the benefits of negotiating electricity prices as a single entity with a diverse electric load profile.

I recognize that the bids are due Thursday, October 25, 2018 and in order to avoid any premiums being included in the bid price the price for electricity is valid only until 4:00PM that day. I understand that prior to accepting the most responsive bid, the Compact will have reviewed and vetted the contract terms and conditions with both its outside technical consultant and legal counsel. The term of the contract will be anywhere from 12 months to 36 months and will commit the municipality/governmental entity to purchase all of the generation for the provided electricity accounts from the chosen competitive supplier for such term, without any right to opt-out.

I am unable to attend in person and execute the recommended contract on Thursday, October 25, 2018 and as a result I am authorizing Margaret T. Downey, Compact Administrator and Chief Procurement Officer, to act as my agent and execute the contract recommended by you on behalf of the municipality or other governmental entity set forth below. I further attest that I have been duly authorized to undertake this action on behalf of my Town and/or other governmental entity set forth below.

Signed: _____

Name:

Title:

Organization:

Date:

Roof and HVAC replacement / upgrades feasibility study

OAK BLUFFS ELEMENTARY SCHOOL

50 Tradewinds Road

Oak Bluffs, MA 02557

David Sisson Architecture PC project number: 16111

Executive Summary-roofing

Oak Bluffs Elementary School was designed in 1992 and constructed in 1993. This school is home to grades K through 5, and serves approximately 400 students. It is a two story building, with some portions being “double height” such as the gym and cafeteria. The design of this school is sympathetic to the vernacular design found on Martha’s Vineyard, and contains many “post modern” design elements which were popular in the late 1980s and early 1990s.

From the ground level, the school appears to be roofed mostly with sloped residential style asphalt shingles. In fact, the design cleverly hides a large flat roof – which is almost invisible from the ground level. The combination of these two roof systems – sloped asphalt shingle and low slope membrane – form the entire roof of the building.

Completing this roof system is a combination of different waterproofing details, the majority of which are constructed from lead-coated copper.

This roofing system is now approximately 23 years old. The building is experiencing many active leaks throughout the school, including active leaks within the classrooms. These leaks are damaging the interior building materials and will eventually damage the structure of the building.

The low slope roofing membrane was originally designed with a 10 year warranty. This membrane roof has failed. The sloped asphalt shingles were designed for a 30 year warranty, but are clearly approaching the end of their lives.

The lead coated copper does not appear to have failed, but has surface corrosion and pitting typical of aged lead coated copper in a coastal environment. This patina, while not an issue from a performance standpoint, has created an unattractive look to the exterior of the school. Some of these metal details have physical damage, especially the gutters.

There are several areas where the original design seems poorly thought through in terms of roofing and waterproofing details. Some of these locations channel and focus water to a single location, which creates a higher chance of leaks and damage. Other locations were constructed differently or incorrectly from what was shown on the original drawings.

Since the roof was constructed, there have been improvements in the requirements for rooftop insulation. When the roof was constructed, it was designed to an average R-value of 20. Current energy codes require a minimum R-value of 30.

This document will outline improvements – where possible – in the design of the entire roofing and insulation system. It will also offer alternatives – where possible – along with opinions of probable costs.

Executive Summary-HVAC

Executive Summary-HVAC

The HVAC equipment and building controls currently serving the Oak Bluffs Elementary School were installed as part of the original building construction, and experienced minimal replacement and/or upgrade. The level of wear and degradation observed on the equipment is commensurate with the period of time that it has been in service. A minimum though not preferred level of level of scheduled maintenance appears to have been performed on the equipment. Maintenance of the building control system is severely deficient. A comprehensive recommissioning of all HVAC equipment and building controls, with an increase in scheduled maintenance (relative to current levels) should ensure that the majority of the HVAC equipment remains in service for the duration of original expected equipment lifecycle.

The exhaustive nature of the required roof repair and replacement provides justification to replace and/or upgrade all roof-mounted equipment concurrently. The replacement of this equipment does represent a higher immediate cost, as compared to the temporary removal and reinstallation of the same equipment, but the expected replacement of this equipment following individual failure as it comes to the end of expected life will generate a greater overall cost for the operation and maintenance of the school.

In addition, the scheduled phase-out of R-22 refrigerants and the outdated technology of the existing building control system will pose an annually increasing financial burden to the school in order to maintain these systems.

The operating cost of the school could also be reduced by replacing the existing boiler plant. The condition of the existing boilers, and the forecasted costs for heating oil do not provide economic justification for a retrofit with a high performance burner package, as the ROI period for the burner package would be longer than the expected remaining life of the primary boiler components. The replacement of the boiler plant is not required at this time, though the expected requirement to replace the system within 10 years may provide justification for inclusion in near term building renovations.

The replacement of all roof-mounted HVAC equipment is an essential component of the overall roof replacement. The upgrade and recommissioning of the building's mechanical control system is a critical issue in order to maintain building indoor air quality for students, faculty and

staff that should be addressed concurrently with the replacement of the roofing system, but it is functionally independent from the replacement of the roof.

Project Narrative-Roof Replacement

The scope of construction includes removal and replacement of the existing roofing system and associated HVAC rooftop equipment. Options for design of roofing and HVAC equipment will be outlined in this document and in the attached Opinion of Probably Costs for both base and alternate designs.

David Sisson Architecture PC (DS Arch) and Creative Environment Corp (CEC) conducted on-site visits on 6-20-2017 and 8-31-17. These field visits did not include destructive testing of the roofing, but we have also included photographs (see photos LL and MM) from a previous destructive test performed by the Oak Bluffs Elementary School. We additionally reviewed the original 1992 Construction Drawings and Specifications as well as the marked up Construction Drawings that appear to have been used during construction of the building. These drawings and specifications were valuable for understanding the original design of the building and identifying conditions that were not built according to the original design or were problematic from the beginning.

On October 3, 2017 IR Analyzers visited and performed infrared testing on the flat roofed portions of the school. This testing can determine if the layers below the flat membrane roof are wet. This testing revealed that approximately 5% of the insulation is wet and needs to be fully replaced. Full results of this testing can be seen in Appendix D.

There are two distinct roofing systems present on the building: (RS-1) "flat" PVC roofing and (RS-2) sloped asphalt shingles. The flat roof is comprised of 48 mil white PVC membrane (class "A" fire rated), reinforced with prepunched metal bar fasteners which fasten to the roof deck for wind uplift resistance. This membrane is fully adhered to a "nailboard" insulation, which is comprised of a 7/16" layer of OSB (wood) adhered to approximately 3" of polyisocyanurate foam insulation. This nailboard insulation lays over an additional layer of tapered insulation, which provides a 1/8" per 12" slope to the roof. The tapered insulation lays over a vapor barrier. Below the vapor barrier is a layer of 5/8" thick "Dens-Deck type X" gypsum panel, which provides a fire rating to the roof. This layer of gypsum panel is adhered to a 1-1/2" thick steel roof deck, which forms the structural base to the roofing system. This roof system was originally designed to have a 10 year warranty. The roof is now 23 years old and has begun to fail.

The design for the insulation was for an average R value of 20.

(RS-2) The shingle roofing system is constructed in the same manner as RS-1, except the membrane roofing is replaced with asphalt shingles over a layer of 15 pound felt underlayment. Additionally, the layer of tapered insulation is not present in the RS-2 shingled roofing system,

because the structural deck is sloped at 30 degrees (approximately 7" in 12" of slope) which provides positive drainage to the shingles. This roofing system was designed for a warranty of 30 years. It is now 23 years old and is exhibiting signs of failure.

Failures of both roof systems (both from age and design) will be discussed later in this document.

Completing the design of the roofing system is a series of formed metal waterproofing details. The majority of these details are constructed from lead coated copper. At the transition from RS-1 to RS-2, there is a metal detail that appears to be constructed from coil coated aluminum. Both of these materials are excellent choices for longevity in a coastal environment such as Martha's Vineyard, however, the lead coated copper has an unsightly appearance as it has oxidized significantly. This oxidation is a normal process for this environment and does not indicate a failure of the material, but it does not create an attractive look to the school, particularly where it's easily visible from the ground level.

There is one large skylight – over the library – on this roof. This skylight is also approaching the end of its life.

Over the green house, there is a "Kalwal" roofing system. This roofing system is designed to let light into the greenhouse. Although no leaks were reported from this roof, it is also reaching the end of its life.

On top of the flat roof are many HVAC components. These components will need to be removed in order to facilitate the replacement of the flat roof. Replacement or repair of these components will be discussed in the project narrative for HVAC.

The entire roof drains to an underground (piped) drainage system and these pipes run to approximately 11 leaching basins distributed around the site (see appendix C). These pipes should be inspected (with a camera), cleaned out, and repaired (if necessary). Additionally, the leaching basins should be opened and cleaned out. These leaching basins allow rainwater to percolate into the site.

A rainwater collection system was considered for this project – to allow the rainwater to be reused for site irrigation. Generally, these systems are not cost effective for irrigation water, and removal of the leaching basins means that less groundwater is entering the site, removing water from deep rooted plants. Ultimately, this system was not considered for this project.

A rooftop mounted solar system is being considered for this project. It appears that a system of approximately 150 to 170 KW solar system could be mounted to either the flat or sloped roofs, or both. Design of this system is still in development, and will be attached as an addendum to this report. If this system is installed to the school, its construction would need to occur after the roof is replaced.

Code Analysis & proposed replacements-roofing

Applicable Codes:

780 CMR, Massachusetts State Building Code:

- MA State Building Code 9TH Edition (International Building Code 2015 w/MA Amendments) (Referred to as "IBC 2015")
- Existing Building Code of Massachusetts (2015 International Existing Building Code (IEBC) with MA chapter 34 amendments) (Referred to as "IEBC 2015")
- 2015 International Energy Conservation Code (IECC) w/MA Amendments (780 CMR AA) (Referred to as "IECC 2015")

Use Group: Educational E

Year Built: 1992/93

Building Construction Classification:

1992 Massachusetts State Building Code 5th Edition Type 2C Noncombustible / Unprotected equipped throughout by a fully automatic Fire Suppression System based on 780 CMR Massachusetts State Building Code 5th Edition.

Building Construction Classification: 2015 IBC Equivalent: Type 2B

Fire Rating of Roof Assembly: Non-rated (NOTE: 780 CMR 5th Ed required a thermal barrier below foam insulation in 2002.2, hence the requirement for 5/8" type X densdeck below the insulation)

IEBC 2015: Level 1 and 2 Alterations per Chapters 6, 7, and 8 (removal & replacement of existing materials and reconfiguration)

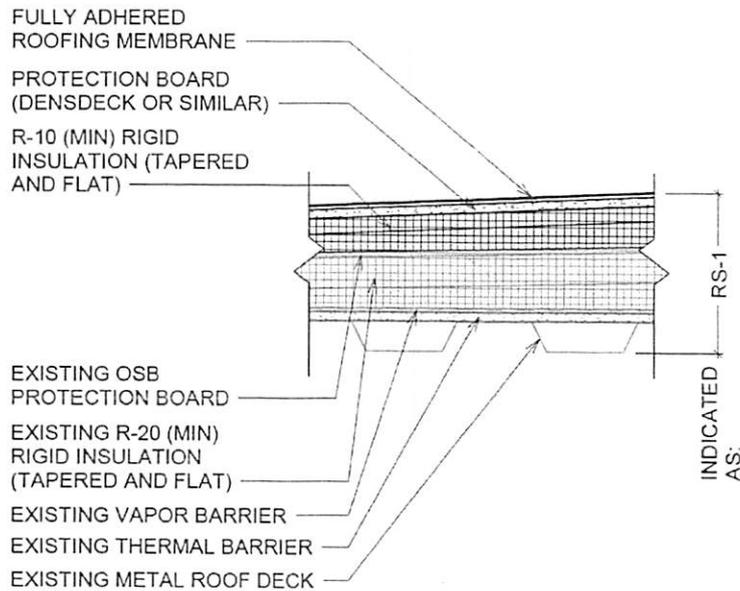
IEBC 2015 section 503: this project qualifies as a "Level 1 Alteration" because the proposed work (roof replacement) which allows replacement with "like or same materials". This work will need to conform with the requirements in IEBC 2015 chapters 6 (repairs) & 7 (Level 1 alterations). Because the project proposes reconfiguring a portion of the roof, the project also qualifies as a "Level 2 Alteration" per section 504. This requires that the project additionally conform with chapter 8 (Level 2 alterations). Additionally, this project will use the "Work Area Compliance Method" as outlined in IEBC 2015 section 301.1.2.

IEBC 2015 Chapter 7 allows the replacement of roof coverings without structural modifications if a structural evaluation determines that the existing structural system is capable of supporting the proposed roof covering system and any other rooftop mounted equipment. We believe the existing system can support the proposed system. (Section 706.2) The existing school building has a similar roof system; therefore the

recommended roof system will not create additional dead loads beyond the allowable limits prescribed by the code. Note that if a solar system is designed for the roof that a structural engineer must evaluate the roof structure and determine if it can support the added load of a solar system.

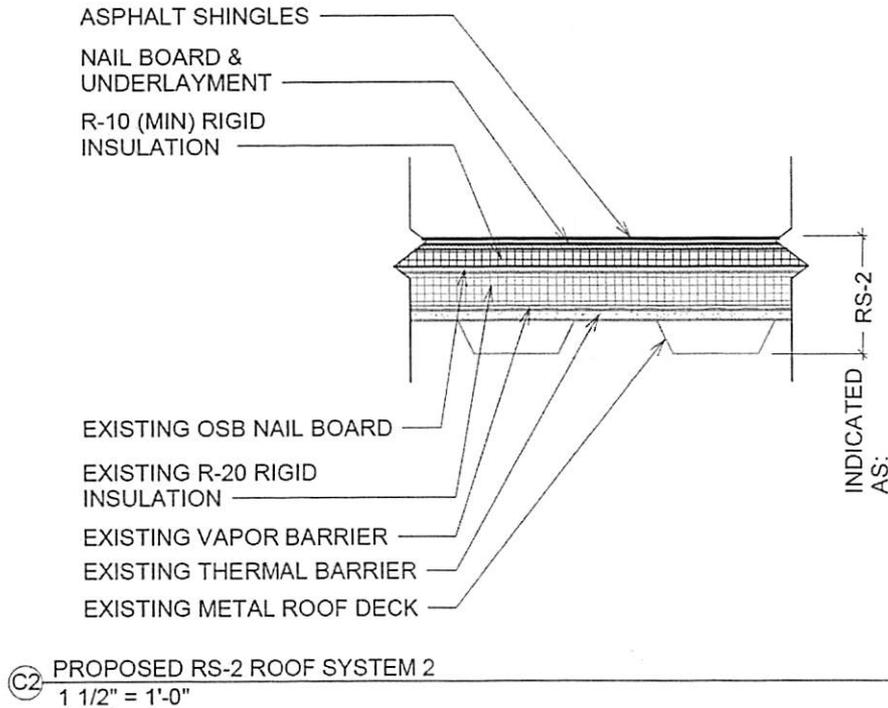
IBC 2015 Section 1504 Performance Requirements:

Roof material performance and installation will be designed and installed in accordance with Chapter 15. For the low slope roofs (Type RS-1) we propose to use a fully adhered single-ply PVC or TPO membrane roof system. Per Section 1504.7 low sloped roofs must resist impact damage based on the results of test conducted in accordance with ASTM D 3746, ASTM D 4272 or the "Resistance to Foot Traffic Test" in Section 5.5 of FM 4470. The roofing manufactures will be required to meet the performance and the wind uplift requirements of the code for winds up to 150 MPH per 1609.3. This means that the system will need to conform to the Factory Mutual (FM) requirement of FM 1-120 or better. This system should use a cover board under the waterproofing membrane.



(C1) PROPOSED RS-1 ROOF SYSTEM 1
1 1/2" = 1'-0"

For the sloped roofs (Types RS-2) we propose to use an asphalt shingle roof system. Roof shingles shall also comply with ASTM D 3462 and must be attached to a solidly sheathed deck. As with the single-ply membrane roof system, the asphalt shingle roof system manufacturers will also be required to meet the performance and the wind uplift requirements of the code for winds up to 150 MPH.



IBC 2015 Section 1505 Fire Classification

Table 1505.1 requires a minimum fire resistance classification rating of B for Type 2B buildings, as tested in accordance with ASTM E 108 or UL 790. The existing roof has a fire resistance classification of A. Generally, an A rating is easily available in the market and an A rating is recommended for the new roof systems.

For the low slope roofs we propose to use a fully adhered single ply membrane roof system with a class A rating. The following roofing manufacturers offer class A roofing material: Sika Sarnafil, Carlisle, Johns Manville, and Firestone.

For the sloped roofs we propose to use an asphalt shingle roof system with a class A rating. The following roofing manufacturers offer class A roofing material: GAF, CertainTeed, and Owens-Corning,

IBC 2015 Section 1506 Materials

Per Section 1506.2 of the Building Code, roof covering materials must conform with the requirements of chapter 15. 1506.3 requires that the materials be labeled to indicate that they conform with appropriate testing agencies.

Roof drains will be designed and installed in accordance with Massachusetts plumbing code.

IBC 2015 Section 1507 Requirements for Coverings

Section 1507 requires a design roof slope of $\frac{1}{4}$ " per foot, however there is an exception to this requirement. Section 1511.1 allows any design slope providing positive drainage can be achieved when reroofing. However, the existing roof has a slope of $\frac{1}{8}$ " per 12" and this slope has proven to be inadequate to drain the roof, and has contributed to the current leaks present at the school. We are proposing adding additional tapered insulation to achieve a minimum slope of $\frac{1}{4}$ " per 12" wherever possible. Section 1503.5 requires crickets on the ridge side of roof-top penetrations greater than 30 inches wide.

Section 1507.2 concerns specific requirements to Asphalt Shingles and integral system components. Per 1507.2.3, roofing underlayment shall conform to ASTM D 226, D1970, D4869 AND D6757. Fasteners and methods of attachments shall also comply with Sections 1507.2.5 and 1507.2.6. Shingles must be fastened to a solid deck per 1507.2.1

IBC 2015 Section 1508 Roof Insulation

Flat Roof Type RS-1: We propose to reuse the existing R-20 polyisocyanurate insulation wherever possible. (Where the insulation is soaked with water, it must be completely removed and replaced.) The insulation must be increased to R-30 everywhere, except where we are allowed to reduce the R-value to R-24 (reduce by 1" of thickness) per IECC 2015 C402.2.2 exceptions 1 & 2. Additionally, we will add $\frac{1}{8}$ "/12" or $\frac{1}{4}$ "/12" tapered insulation in order to increase overall slope of the roof to a minimum of $\frac{1}{4}$ " per 12". Likely, the thickness reduction will be taken at the low point roof edges, in order to reduce the requirement for adding wood blocking / roof edge at these locations.

Depending on final selection of roof warranty, durability, and wind uplift requirements, an underlayment of "protection board" of either OSB or a gypsum panel product may be required. The existing roof has a layer of OSB underlayment ("nail board") which was used to provide a substrate to adhere the roofing membrane to. We recommend a layer of protection board for durability and wind uplift resistance.

We propose a polyisocyanurate system of both flat and tapered insulation to a minimum of R-30 as required by code. This insulation should be topped by a protection board. The following roofing manufacturers offer these materials: Sika Sarnafil, Carlisle, Johns Manville. and Firestone.

Sloped Roof Type RS-2: We propose a nailable insulation system with a minimum continuous insulation R-value of 30 to meet IECC 2015 Code requirements of Table C402.1.3. The assumption is that the majority of the existing R-20 insulation is acceptable for re-use, so the intention is to add a layer of 2-1/2" nail board polyisocyanurate (R-12) insulation to achieve the minimum R-30 requirements. In the case that existing insulation is damaged due to water, the insulation will need to be removed to the roof deck and replaced with a minimum R-30 nail base insulation panel. The following roofing manufacturers offer these materials: GAF, CertainTeed and Owens Corning.

IECC 2015 C503.3.1:

Roof replacements shall comply with Table C402.1.3 or C402.1.4

Table C402.1.3 OPAQUE THERMAL ENVELOPE INSULATION COMPONENT MINIMUM REQUIREMENTS, R-VALUE METHOD

Insulation entirely above deck: R-30

C402.2.2 exceptions 1 & 2 allows variation of 1" or less in insulation thickness, as long as the deficit is made up elsewhere on the roof. In practice, this means that the low point of tapered insulation is allowed to be approximately R-24 (with Polyiso insulation, R-6 per inch) as long as the high point is at least R-36. This exception should be used for this project, especially at roof edges.

IECC 2015 Table C402.4 BUILDING ENVELOPE FENESTRATION MAXIMUM U-FACTOR AND SHGC REQUIREMENTS

Skylights: maximum U-0.50, SHGC 0.40

Operable fenestration: maximum U-0.45, SHGC varies by orientation

Note: per IBC 2015 chapter 16, the school is a "Risk Category III" building (typical for any school.

Note: per IBC 2015 chapter 2, the school is located in both a "hurricane-prone region" and a "wind-borne debris region" with a basic wind speed (V) of 150 MPH (per 1609.3).

Note: per IBC 2015 chapter 16, (1609.4.2 and 1609.4.3) we are considering the building to have "surface roughness C" and "exposure C" due to the school's proximity to the ocean and it's relative height compared to surrounding buildings and trees.

Design & failures of existing roofing, proposed design changes

RS-1: The existing flat roofed system was designed with a 10 warranty. This system is comprised of the following layers, from top to bottom:

- 1) 48 mil white PVC membrane (class "A" fire rated), reinforced with prepunched metal bar fasteners which fasten to the roof deck for wind uplift resistance. This membrane is fully adhered to...
- 2) ..."nailboard" insulation, which is comprised of a 7/16" layer of OSB (wood) adhered to approximately 3" of polyisocyanurate foam insulation (R-20)
- 3) Tapered polyisocyanurate foam insulation, which provides 1/8" in 12" slope to this roof assembly.
- 4) A liquid applied vapor barrier on top of...
- 5) ...A 5/8" thick Dens-Deck type X" gypsum panel, which provides a fire rating to the roof, which is adhered to...
- 6) ... a 1-1/2" thick steel roof deck, which forms the structural base to the roofing system

This is an excellent design for a code compliant roofing system for its era (1992), and was designed for a coastal environment and high wind zone. However, there are several areas where this design is deficient:

- 1) The warranty of this system is only 10 years. Ideally, a system for a public school should be 20 plus years. (Note: various warranty lengths are available from different manufacturers. The longest warranties require complete removal of the roofing and insulation. Due to cost, we recommend not removing existing insulation that is acceptable to remain. Many manufacturers will allow you to purchase an extension to a warranty (IE: add 5 years to a 20 year warranty). Because the warranties are pro-rated, and cover roofing material only, it's recommended to purchase a quality membrane and roofing system, rather than focusing on the length of a warranty. Because of this, we recommend a design for at least a 20 year warranty, but focus on the actual longevity of the system rather than the warranty length.)
- 2) The slope of this roof is only 1/8" per 12". This is too low – both in terms of current code requirements (1/4" per 12" minimum) and practicality – the "bumps" built into this system from the adhered reinforcing bars (see photos EE and HH) and also from sealant of laps of roofing membrane – can be higher than 1/8" and create pockets of ponding – where water sits on the roof rather than sheeting off. The new roof will be designed with a minimum of 1/4" per 12" of slope.
- 3) The flat roof membrane is heavily worn. See photos EE and HH.
- 4) The R-value of the original insulation is R-20. Today's requirement is R-30. Insulation will need to be added to achieve this requirement. In some locations on the existing roof, conditions make it challenging to add insulation. These locations – both challenges and solutions – are discussed later in this document.

The flat roofs RS-1 have failed and allowed water to enter the building's structure. Oak Bluffs Elementary took a core sample of this roof, which verified the layers of the roof & also showed significant soaking of the roof layers. See photos LL and MM. During re-

roofing, any wet or damp materials below the roofing membrane must be removed and replaced. The water intrusions into the building have damaged interior building elements and have even intruded as liquid water into classrooms, the library, and service spaces throughout the school, including spaces on levels 2 and 1. See photos NN, OO, PP and QQ. The school moderates these intrusions by replacing damaged materials (generally acoustical ceiling tile) and by capturing liquid water in buckets. Continued water intrusion will result in damage to the building's structure.

The results of the infrared testing revealed that 4.6 percent of the insulation has been soaked by water intrusion. This testing method will not reveal water that is deep in the system, and also cannot analyze insulation that is beneath the sloped asphalt shingle system, so we are estimating the removal and replacement of an additional 10.4 percent of the insulation, for a total of 15 percent replacement.

RS-2: The existing sloped roofed system was designed with a 30 warranty. This system is comprised of the following layers, from top to bottom:

- 1) Asphalt shingles over...
- 2) ...a layer of 15 pound felt underlayment. The shingles and underlayment are nailed to...
- 3) ..."nailboard" insulation, which is comprised of a 7/16" layer of OSB (wood) adhered to approximately 3" of polyisocyanurate foam insulation (R-20)
- 4) A liquid applied vapor barrier on top of...
- 5) ...A 5/8" thick Dens-Deck type X" gypsum panel, which provides a fire rating to the roof, which is adhered to...
- 6) ... a 1-1/2" thick steel roof deck, which forms the structural base to the roofing system. This deck has a 30 degree pitch (approximately 7" in 12") as it is on top of sloped structure.

This is an excellent design for a code compliant roofing system for its era (1992), and was designed for a coastal environment and high wind zone. However, there are several areas where this design is deficient:

- 1) This roof is warrantied for 30 years. It is not yet 30 years old, but is showing signs of failure such as:
 - a. Missing shingles (see photo EE)
 - b. Shingles showing signs of damage (cuts) (see photo E)
 - c. Significant asphalt granule degradation, as is seen with granule debris in gutters and on top of flat roofs. (see photo X and Y)
- 2) The R-value of the original insulation is R-20. Today's requirement is R-30. Insulation will need to be added to achieve this requirement. In some locations on the existing roof, conditions make it challenging to add insulation. These locations – both challenges and solutions – are discussed later in this document.

- 3) Possible water intrusion through wind driven rain, snow, or overloading of water channeled from higher roof surfaces. These locations – both challenges and solutions – are discussed later in this document.
- 4) It is recommended that this roof be replaced at the same time as the flat roof, in order to insure compatibility between the two roofing systems and eliminate leaks.
- 5) We recommend installing a heavyweight architectural style shingles of at least 240 pounds per square. Ideally this roofing system should have a minimum 30 year warranty.

Metal roof flashing, soffits, gutters, rain leaders, etc: The existing metal components are largely constructed of lead coated copper, except for edge transition flashing between the flat roofs and sloped roofs, which appears to be constructed from coil coated aluminum. Both of these are excellent choices for longevity in a coastal environment and both have performed well, although the lead coated copper has typical corrosion and patina and does not look good. (See photos FF & GG) Lead coated copper is considered a premium choice, especially for a harsh environment. Coated aluminum is often chosen for a mixture of performance and affordability. The coated aluminum is in good physical condition.

In terms of the aluminum, there are several areas where it is deficient. The aluminum flashing was designed and installed to provide a transition from the flat roofing membrane to the sloped asphalt shingles:

- 1) There seems to be a discrepancy in the height of the flat membrane to the metal flashing. This appears to be a result in a differing height of the roof edge blocking (solid wood – (2) 2x_ members) and the height of the insulation. The height of the flashing exacerbates this. The result is as small bump that prevents all water from flowing off this edge. Increasing the slope of the flat roof will help with this, as will better detailing of this area. See photo HH
- 2) The aluminum transition flashing should cover at least 1 shingle, to prevent wind-driven rain from entering the roofing system from under the flashing. This means that this flashing should be at least 12” wide. The existing flashing is only approximately 4” wide. This is a likely location for wind driven rain to enter the building, and possibly has caused leaks. See photo HH.

In terms of the lead coated copper (LCC) (which is much more prevalent on the building), there are also several areas where it is deficient:

- 1) Lead coated copper is chosen for its longevity and ease of installation. It is chosen over uncoated copper, because uncoated copper can stain surrounding masonry and other building materials green. The LCC has less staining, and tends to stain materials gray, which does not appear as unsightly.
- 2) The most obvious deficiency is in terms of the look of the LCC. This material has weathered to a gray finish, with streaking of dark gray, light gray, and dull red (that appears slightly rusty). (See photos FF & GG.) All of these are typical

weathering for a LCC in this environment. The dull red is due to red oxide staining, which is a result of reduced sulfur in our atmosphere – due to stricter environmental regulations. The most visible LCC – at the gutters and fascia – is quite visibly patinaed, and is not attractive.

- 3) The LCC gutters have received much physical damage over the years, likely as a result of maintenance (ladders being leaned against the gutters) (see photo II for one example) or from snow build up on the gutters. Gutters and rain leaders also have become clogged, and some gutters are overflowing and forcing water into the roofing system.
- 4) Lead is an environmental concern, especially with young children. Given the user group of this building (elementary age school children) we would recommend removing lead coated copper from this building – wherever possible.
- 5) Ideally, all lead coated copper should be removed from the building and replaced with aluminum, however, the through wall flashing (where metal flashing enters the masonry wall system) is also lead coated copper, and cannot be replaced without significant expense.

Our recommendation is to remove all lead coated copper – wherever possible – and replace with coil coated aluminum. This aluminum should be coated with a 70% PVDF (Kynar) finish and all cut edges should be touched up with automotive paint to match the coil coated finish. This should include all roof transitions, fascias, gravel stop type edges, gutters, rain leaders, and other metal details. At locations where removal of the lead coated copper is not feasible, it should be cleaned with a TSP solution and painted with a “direct to metal” paint. This would improve the look of the lead coated copper (for the 10-15 year lifespan of the paint) and also limit the lead run off from the lead coated copper.

At locations where through wall flashing must be replaced, we recommend using asphaltic coated copper sheets. Copper is an excellent choice for metal flashing in contact with masonry, and can also be in contact with lead coated copper (if required). The asphaltic coating offers additional protection.

Additional challenges: there are several areas on the building that were built incorrectly (not according to the original construction drawings), were altered during construction, or are challenging based on the required changes for re-roofing (mostly due to the required addition of insulation). Some of these conditions are problematic for all three reasons. These include:

- 1) At locations 1 and 2 (see Appendix A – key plans and key elevations) flat roofs transition to vertical masonry (concrete block) walls. At these locations, the roofing membrane turns vertically where it intersects the vertical wall. This membrane runs up the wall and terminates under through-wall lead coated copper flashing. It is recommended that the minimum height of vertical membrane, from the surface of the roof to the metal flashing, be 8”. At locations 1 and 2, this height is as little as 2” or 3”, which means it was incorrectly installed originally (original drawings show a minimum of 8”). Once we add additional

insulation thickness, this will be reduced to zero or less. The only “fix” to this situation is to remove masonry wall, redo the through wall flashing at a higher level, rebuild the wall, and install the new roof. At other locations, the existing flashing is 8” to 12” above the existing roof, which will be acceptable for reroofing without alteration of the masonry wall. See photos A and B (appendix B).

- 2) During construction, a firewall was designed and installed at locations 3 & 4 (see Appendix A). This was very likely done as a code requirement, in order to split the building into two fire areas. However, this created a penetration through the roof, at the low point of a sloped roof. The original architect designed a fix for this location, essentially a large gutter channeling water both north and south on the building. While this appears to be a good solution, this created several problems that have caused leaks and damage to the building:
 - a. These large gutters create excellent places for snow to drift and accumulate. This can lead to water intrusion from ice damming under the shingles.
 - b. These large gutters collect large amounts of water running off adjacent roof areas. This water is focused and collected into single locations on the roof, and have overloaded these portions of the roof, causing physical damage and leaks. See photos C through L and KK.
 - c. We recommend overbuilding this location, so the water runs out on the lower roof and spreads to multiple drain locations, rather than concentrating in the gutter. This would include repair of the damaged areas.
- 3) At the base of the tower, the flat roofing membrane transitions vertically as it connects to the vertical tower walls. This membrane is only 4” tall – existing, and should be at least 8” tall. This is one of the locations that is experiencing significant leaks. Once insulation is added, to achieve code required insulation levels as well as increase the slope of the roof, this transition will reduce to less than zero. The only fix for this location is to remove the existing windows and install windows with a shorter height, allowing the membrane to have 8” of vertical transition minimum. See photos CC and DD.
- 4) Skylight – the existing skylight is showing signs of wear, especially at the seals, which are failing. The skylight should be replaced. See photo M.
- 5) Walkable deck – there is a walkable roof deck at the 2nd floor level, outside the library. This deck is a wood-look product (Trex or similar) over a membrane roof system – the same system as the flat roofs. Although we could not investigate this roof (because the walkable roof deck is atop it), it should also be replaced as part of this project. It is very likely that it is also leaking. The replacement of this surface is challenging, because insulation cannot be added to this location – adding thickness here would result in the surface being higher than the interior floor surface. This would not be allowed by various applicable accessibility codes. A variance from the insulation requirements should be sought in for this location. See photo N.

- 6) Transition sloped roof to vertical (2 locations, see photos G and O. Through wall flashing exists at locations where vertical walls transition to sloped roofing. This through wall flashing is approximately 3" above the height of the asphalt shingles. See photo O. Although the roof surface will be raised, this area can be detailed to not require removal and replacement of the through wall flashing. This flashing is visible, and could be painted to freshen its look. At another location, (see photo G), above the kindergarten classroom the through wall flashing has been "repaired" with roofing cement. This roofing cement has probably not fixed anything, but has probably clogged the weep holes at the bottom of this wall. If this roofing cement cannot be cleaned off this area, the masonry should be removed and the through wall flashing and weep holes replaced.
- 7) Through-wall step flashing. See photo P for an example. Through-wall step flashing occurs in 10 locations around the building. When insulation is added and the roof system is thicker, some of this step flashing will not be high enough to prevent water intrusion. The masonry walls will need to be modified at these locations and new step flashing installed.
- 8) Greenhouse roof. The greenhouse roof is constructed from "Kalwall" material – which is an insulated fiberglass panel. Leaks are not reported from this material, however, it's reported lifespan is 25 years and this material is approximately 23 years old. We recommend replacing this material in-kind as part of this project. Additionally, there are wires entering through the roof surface at this location and appear to be unsealed. This is a location where water will enter the structure. See photo Q
- 9) Rain leaders. Existing rain leaders (constructed from lead-coated copper) discharge onto lower roofs in some locations. At some of these locations, the rain leaders discharge very high above the roof surface, which causes soaking of the wall, and possibly leaks. See photo P. At other locations, these discharge directly onto the roof surface. Ideally, all rain leaders discharge onto the roof surface, with concrete splash blocks beneath them, to protect the surrounding roof surface and help slow and focus water towards drains. This will be designed into the re-roofing project.
- 10) Area adjacent to main entry. This area forms a valley, which has been roofed with what appears to be an EPDM roof and asphalt shingle. See photo R. This area likely collects significant snow during the winter. The design of this area appears to be acceptable, but should be investigated closely during the design and construction processes. New EPDM should be as thick as possible and should extend as far below the asphalt shingles as possible. Water appears to collect in a small gutter at the low side of this roof. A new gutter, as large as possible, should be installed. Additionally, at this location through wall step flashing is not installed at the low end. This flashing should be installed during the re-roofing process, which will require removal & replacement of masonry.
- 11) Chimney – the base of the chimney is flashed with lead coated copper step flashing, which is counterflashed with a reglet. The design of this flashing is

acceptable, but should be replaced in-kind as part of this project. The top of the chimney is comprised of a masonry chimney cap. These blocks have lost their mortar. See photo S. These blocks should be removed and reinstalled with new mortar.

- 12) Gutters. As was previously mentioned, lead coated copper was originally utilized to construct the gutters. These gutters were divided at multiple locations with expansion joints. See photo T. The expansion joints are required to resist thermal buckling of the material, but the effect is to send water towards the rain leaders that serve only a portion of the gutters. Some of these rain leaders are clogged and the gutters are overflowing, pushing water back into the roof and into the building. See photos U and V. In the short term, rain leaders and gutters should be cleaned to allow free flow of water.
- 13) Roof drains. There are existing roof drains at multiple locations on the flat roof. Many of these drains are missing their protective domes. See photo W. Because the domes are missing, debris can enter and possibly clog the drainage system. We noted multiple tennis balls on the roof, (see photos X, Z) it's possible that tennis balls have entered and clogged the drainage system. We also noted significant quantities of asphalt granules from the sloped roofing system. See photos X, Y. It's possible that quantities of these granules have entered the drainage system and clogged it. These roof drains should be replaced as part of the re-roofing project and high quality baskets installed. Additionally, the drain lines should be inspected (by camera) and snaked if necessary. These roof drains flow to leaching basins that are located in approximately 11 locations around the property. These leaching basins should be opened and cleaned if necessary. Please see appendix C, which shows locations of the leaching basins and the design for the leaching basins.
- 14) Pitch pockets. Lines for existing rooftop HVAC units enter the roofing system through existing pitch pockets. See photos Z and AA. A pitch pocket is a round penetration of the roof (a pipe) that allows another pipe, or groups of lines, to enter the roof. The annular space of this is filled with a flowable mastic material (traditionally pitch) that seals the pitch pocket. While not the best way of accomplishing this task, pitch pockets can work well. In the case of the school, pitch pockets should be removed wherever possible, and rebuilt if they must remain.
- 15) Roof curbs. Existing rooftop mounted HVAC equipment (mostly fans) are mounted on approximately 12" high curbs. These curbs should be acceptable, even when insulation thickness is added to the roof. In some cases, the curbs may need to be replaced or raised in order to provide a minimum of 8" clearance from the roof surface to the top of the curb. See photo BB.
- 16) Valley flashing. Valley flashing was constructed of plain copper. In some locations, this copper flashing has visibly split (see photo X) and was repaired with roofing cement. Roofing cement is not an effective repair method, and water is entering the building beneath the roofing cement. This valley material should be replaced as part of the re-roofing project.

17) At location 15 (see photo JJ) aluminum flashing and membrane roofing is incorrectly installed. This is a leak location that will be rectified in the re-roofing project.

Project Narrative-HVAC

Building Cooling Equipment

Existing Conditions: Cooling is provided to the administrative offices of the school, and the library/media areas only. A total of 18 rooftop mounted condensing units provide a total capacity of 55 tons of cooling to these areas. Individual units range in size from 1-1/2 tons to 5 tons, and all are equipped with the refrigerant R-22. All of the units were observed to be operating, though unit housings exhibited a fair degree of corrosion. The internal components of the units were not inspected. The refrigerant lines for all units were uninsulated.

Discussion & Recommended Action: There is not an effective way to recondition these units and significantly increase their expected remaining operating life, and all of the existing systems are beyond their expected lifecycle. The units cannot be replaced one for one, as new units with R-22 are no longer available for purchase and installation. Since a different refrigerant must be used with new equipment, the failure of an indoor or outdoor component of each split system will require the replacement of both components, and it is likely that the refrigerant piping will also require replacement.

The scope of work for the replacement of the roof should include the demolition of these existing units, and the installation of Variable Refrigerant Flow systems to replace the majority of the split systems, though practical installation considerations may still require several traditional heat pump systems. With the installation of new equipment, the indoor units, and the associated refrigerant piping would be also be replaced.

The administrative offices of the building do not have mechanically provided ventilation. Replacement of the cooling systems and revision of building codes will require continuous ventilation to these spaces during occupied hours. We recommend the installation of an energy recovery ventilator to meet this requirement.

In addition, the cooling load for the building will be slightly increased, as a dedicated split system should be installed to maintain the IT room and department offices.

The existing electrical distribution within the building will require modification at applicable distribution panels, but ample power is available for the new units.

Kitchen Refrigeration Equipment

Existing Conditions: The walk-in cooler and freezer for the kitchen are equipped with two Trenton refrigeration units that were operating, but in poor condition. The condition of the evaporator coils within the walk-in units was not assessed. The units use R404A for their refrigerant cycle.

Proposed Conditions: We recommend the replacement of these units given their age, condition, and critical nature of their use. The existing evaporators within the kitchen walk-in units might be reusable though their replacement and upgrade may also be required.

Rooftop Intake and Exhaust Devices

Existing Conditions: In general, the sheet metal housings of the exhaust fans and ventilation hoods are intact. The mechanical components of these devices, and accessories to prevent entry into the building by vermin are worn/degraded and will require increasing levels of maintenance and repair to remain in service. The condition of equipment curbs was not observable. The sheet metal goosenecks providing relief from the locker rooms have maintained their physical integrity, but show obvious deterioration due to the composition of air being exhausted. The condition of the existing equipment curbs cannot be determined until they are exposed during the roofing replacement. It should be planned that all roof curbs will be replaced.

Discussion and Recommended Action: The existing exhaust fans, goosenecks, and roof curbs should be planned to be replaced in full. Equipment selection to maximize energy efficiency, and with the anticipation of future building control upgrades should be prioritized.

Boiler Burner & Heating Distribution Upgrades

Existing Conditions: The building is equipped with Cleaver Brooks Oil-Fired CB Series boilers. The burner control offers a modulating fire rate with fixed equipment linkages. The boilers are still within their expected life span, but are starting to require significant repair and renovation in order to maintain operation. Replacement parts for these boilers are still readily available, but it should be expected that annual maintenance costs will continue to increase. It is expected that the replacement of the boiler plant will be required within the next 10 years.

Hot water is circulated throughout the building using base mounted close-coupled pumps. The pumps are equipped with standard efficiency motors, and were operational.

Discussion and Recommended Action: The unavailability of natural gas limits the options that are available for the upgrade or replacement of the boiler plant. If a change in fuel source were considered, the only alternative would be the installation of a geothermal system, which is beyond the scope of this assessment. In recent years, the economics of commercial heating have transitioned rapidly with the expanded availability of low-cost natural gas throughout New England. Though natural gas is not available on Martha's Vineyard, market forces have decreased volatility in heating oil prices, and also lowered that commodity price significantly. Executing an upgrade to the burner boilers would require 10-12 years of operation in order to recover costs, and it would be likely that the boilers themselves would require replacement within that period. At the time the boilers would be replaced, the upgraded burners could be potentially mated to the new boilers, but this cannot be guaranteed possible, or cost effective. Though possible, we cannot recommend that the boiler burners be upgraded due to the low potential of recovering the costs of the upgrades.

The entire replacement of the boilers is an option that can be considered in light of the desired scope and outcome for the overall improvement project being considered. Unlike other areas evaluated in this report, the replacement of the roof does not generate any requirements for inclusion of a boiler project. A modest reduction in the total heating demand for the building will coincide with the addition of insulation to the roof assembly, but the existing plant has the ability to modulate to match the reduced load. Given the criticality of providing heat to the building during the school year, forecasting the requirement to replace the boilers within the next 5 years.

If the boiler replacement is not forecasted in the immediate future, the school should proceed with executing the upgrade of the hot water pumps with new motors and variable frequency drives as previously proposed by RISE Engineering.

Building Mechanical Controls

Existing Conditions: The building is equipped with an original Barber Coleman pneumatic control system, other than for the direct operation of the split cooling systems, and the boiler firing controls. Control prints for the building were not able to be located, though an investigation of the existing main controls, and subsidiary devices was made.

The maintenance on the system appears to have been minimal to non-existent in recent years. The primary compressor for the system ran almost continually, indicative of a large volume of air loss through leaks in pneumatic components, tubing, etc... In addition, numerous areas of the building were identified as not being able to maintain temperatures consistent with room temperature set point (for both heating & cooling) indicating that field devices are out of calibration or non-operational.

The ability of the system to schedule areas of the building is limited, and inconsistent operation of building air handlers, exhaust fans, and other components was observed (systems running/not running as expected). Mechanical time clocks were observed without the proper time setting, and controls were operating in "winter" mode rather than "summer." Equipment observed had typical arrangements of pneumatic actuators for valves and dampers, as well as thermostatic controls. All of this equipment is obsolete.

Review of the building's electrical usage for the preceding 12 months shows a pattern of usage that is not consistent with the actual usage of the building. During the summer months when school usage is minimal, the electrical usage of the building maintains a very similar pattern to that of wintertime usage, even when the operation of cooling equipment is factored into the analysis.

Discussion and Recommended Action: By design, building controls are very tolerant of poor maintenance and individual component failures – in most cases the equipment will continue to operate, satisfying the casual observer. In addition, problematic pneumatic devices are typically overridden, rather than corrected, in order to "keep things running." Over time, the ability of a pneumatic system will drift considerably from being able to operate efficiently due to a lack of proper maintenance. The degradation of the system can be slow, and a system will have been operating poorly for some time before conditions demand that it be rectified.

Directly affected are the students and staff in the building. Indoor air quality is reduced, as proper ventilation rates are not maintained, and actual temperatures deviate wildly from desired set points throughout the building. With the challenges facing education professionals today, it is highly desirable to maintain a consistent, comfortable, and healthy environment for students to occupy. A secondary consideration is that the cost of operation for a poorly maintained system increases as energy is wasted by systems that are not operating efficiently, or at the proper times.

The existing system could be recommissioned and repaired, but there are limited professional resources available to provide the annual maintenance that is required to keep the system operating correctly. Therefore, we recommend that the school pursue the full replacement of the pneumatic control system in order to ensure better control of temperature and ventilation within classrooms, and reduce building operational cost.

The installation of a new building control system would include the provision of a new DDC front end to schedule operation of building equipment to match occupied periods, the installation of a new communication network to allow communication with all other digital control equipment, the replacement of individual unit controllers, thermostats, and sensors and actuators. In the event that budget constraints do not allow full replacement of the pneumatic controls, the devices that remain pneumatic would require a thorough service, repair, and recalibration as part of an overall building recommissioning.

Cost Estimates

Final cost estimates can be developed once design for replaced and upgraded components is completed. Order of magnitude costs are provided for discussion and budgeting, and are based on current construction costs.

| <u>Item</u> | <u>Low</u> | <u>High</u> |
|---|--------------------|--------------------|
| Replacement of Roof Mounted Ventilation Equipment | \$175,000 | \$250,000 |
| Replacement of HVAC Cooling | \$550,000 | \$650,000 |
| Replacement of Walk-in Refrigeration Equipment | \$30,000 | \$50,000 |
| Installation of ERV for Administration | \$125,000 | \$160,000 |
| Phased Replacement and Recommissioning of Building Controls | \$420,000 | \$490,000 |
| Replacement of Boiler Plant | \$500,000 | \$600,000 |
| Totals | \$1,800,000 | \$2,200,000 |

10/27/17

Schematic Design

Opinion of Probable Construction Cost

HISTORICAL DATA

Oaks Bluff Roof Replacement

2017 RS Means

Town of Oak Bluffs

Martha's Vineyard

Prepared by: MCS

Reviewed by: DS

This Opinion of Probable Cost assumes a single prime general contractor with competitive bidding. Neither the Architect nor the Owner has control over construction costs and accordingly, the Architect cannot and does not warrant or represent that costs will not vary from the Owner's budget or any opinions of probable costs made by the Architect or its Consultants.

TOTAL GROSS SQUARE FOOTAGE THIS PHASE

97,229

COST/GSF

\$35

TOTAL ESTIMATED CONSTRUCTION COST INCLUDING ESCALATION

\$3,366,000

Assumptions

General Conditions

25.0%

Complexity Factor

10.0%

General Contractor's Overhead and Profit

10.0%

General Contractor's Overhead and Profit for Subcontractors (not applicable to this project)

0.0%

Estimating Design Contingency

15.0%

Escalation - through mid-point of construction

5.0%

1. Line Items are organized in accordance with the Construction Specifications Institute (CSI) 50-Division MasterFormat 2004 system. Unit prices are based upon the most current R.S. Means Construction Costs Estimating Guide, and adjusted if appropriate to reflect recent experience with the selected items.

2. General Conditions are calculated as a percentage of each Line Item. General Conditions may reflect unusual job conditions, historic preservation issues, and/or considerations for overtime, temporary facilities, bonds and equipment rental. General Conditions can range from as low as 5% for large scale new construction to 15% for small renovation projects.

3. Complexity Factor allows for a percentage between 0% and 10% of the construction cost for the potential impact of unknown conditions as well as complexity of design. Such conditions could include the removal of ACM, structural defects, or building conditions that can not be verified or determined until construction is underway.

4. General Contractor's Overhead & Profit is calculated as a percentage of the subtotal of each Line Item plus General Conditions which will have a variable range per Project Total Costs.

5. GC Markup of Mechanical / Electrical / Plumbing Overhead & Profit is calculated as a percentage of the sub-contract totals and is reflected in the appropriate divisional bolded subtotals only.

6. Estimating Design Contingency is calculated as a percentage of the subtotal of the previous items and is intended to reflect a buffer for aspects of the design which have not yet been clarified or identified. Typically, 15% is used at the Schematic Design Phase, 10% at the Design Development Phase and 5% at the end of the Construction Documents Phase.

7. Escalation is based upon the latest Building Cost Index History published monthly by Engineering News Record (ENR). It is used to index our estimate for the period from the beginning of the year through the month posted by ENR closest to the date of this estimate. The percentage escalation is further adjusted to the mid-point of the anticipated construction period pro-rating ENR's Year to Date Fourth Quarterly Cost Report year end forecast with the first quarter Cost Report Index if available. Unit price fluctuation from estimate to estimate will be accounted for by the ENR indexing and will not be reflected in individual line item adjustments. Escalation is shown as a single line item at the end of the estimate.

8. Bolded subtotals shown at each Division heading include General Conditions, Complexity Factor, General Contractors' Overhead and Profit or GC Markup of M/E/P and David Sisson Architecture's Estimating Contingency.

9. Italicized items indicate estimates provided by Consultants.

10. Consultants retained for this project are as follows:

Division 3

Division 5

Division 21-23

Division 26-28

| DESCRIPTION | QTY | UNIT | MATERIAL COSTS | LABOR COSTS | BLDG SUBTOTAL | BLDG TOTAL | DIVISION SUBTOTAL |
|-------------|-----|------|----------------|-------------|---------------|------------|-------------------|
| Division 31 | | | | | | | |
| Division 32 | | | | | | | |
| Division 33 | | | | | | | |

2,760.24

| | | | | | | | |
|--|--------|----|-------|--------|---------|--|--|
| Flat roof removal, including walking deck | 500.32 | SQ | 40.50 | 20263 | 35245 | | |
| Flat roof replacement, including walking deck, 80 mil TPO Membrane only, Fully Adhered | 50032 | SF | 14.00 | 700448 | 1218342 | | |
| Skylight, 10' x 22' | 220 | SF | 15.00 | 3300 | 5740 | | |
| Demo Skylight | 220 | SF | 30.00 | 14300 | 24873 | | |
| Replace Skylight | 220 | SF | 35 | | | | |
| Sloped roof removal | 471.97 | SQ | 80.50 | 37994 | 66085 | | |
| Sloped roof replacement, Asphalt | 47197 | SF | 7.60 | 358697 | 623909 | | |
| Remove wet insulation down to deck | 7504.8 | SF | 0.30 | 2251 | 3916 | | |
| Replace dens deck, vapor barrier, insulation, coverboard where it's been removed to deck | 7504.8 | SF | 8.00 | 60038 | 104429 | | |
| Add flat, tapered insulation, cover board to the balance of the flat roofs | 42527 | SF | 5.00 | 212636 | 369854 | | |
| Add flat insulation, nailboard (OSB cover board) to all sloped roofs | 47197 | SF | 3.75 | 176989 | 307850 | | |

| | | | | | | | |
|---|--------|----|-------|----------|--------|--|--|
| Type 1, Transition from flat to slopped | 3166.5 | SF | 0.45 | 1425 | 2478 | | |
| Remove flashing | 3166.5 | SF | | | | | |
| Blocking | 3166.5 | LF | 1 | | 11015 | | |
| Aluminum flashing .05" thick | 4749.8 | SF | 3.85 | 320 | 58244 | | |
| Type 2, roof edge with Fascia | 2901 | LF | 1.65 | 4787 | 8326 | | |
| Fascia Removal | 2901 | LF | | | | | |
| Aluminum Fascia, .05" thick | 7252.5 | SF | 4.35 | 58745 | 102180 | | |
| Gutter | 2300 | LF | 2.86 | 372 | 26324 | | |
| Rain Leaders | 1200 | LF | 3.59 | 320 | 14172 | | |
| Touch up painting of all exposed edges | 1 | LS | | 2,000.00 | 3479 | | |
| Type 3, Replacement of Through wall and Step Flashing | 275 | LF | 2.08 | 572 | 995 | | |
| Removal of Through wall flashing | 275 | LF | | | | | |
| Masonry Removal | 1308 | SF | 3.50 | 4578 | 7963 | | |
| Removal of step flashing | 52 | LF | 2.08 | 108 | 188 | | |
| Through wall flashing | 275 | LF | 3.6 | 2021 | 3516 | | |
| T.W. Masonry | 1100 | SF | 13.50 | 23650 | 41136 | | |
| Step Flashing | 52 | LF | 3.75 | 382 | 665 | | |
| S.F Masonry | 208 | SF | 3.6 | 382 | 778 | | |
| Insulation, waterproofing | 1308 | SF | 13.50 | 4472 | 12058 | | |
| Touch up painting of all exposed edges | 1 | LS | | 2,000.00 | 3479 | | |

| | | | | | | | |
|---------------------------------------|-------|----|------|----------|-------|-------|--|
| Misc Items | 120 | LF | 15 | 7.00 | 2640 | 4592 | |
| Valley Flashing | 120 | LF | | | | | |
| Cap | 1 | EA | 1500 | 350.00 | 1850 | 3218 | |
| Drip Edge | 279 | LF | 2.25 | 2.99 | 1462 | 2543 | |
| Chimney and masonry repair | 1 | LS | 500 | 1,200.00 | 1700 | 2957 | |
| Roof Overbuild | 800 | SF | 14 | 15.00 | 23200 | 40354 | |
| wall support for roof overbuild | 237.5 | SF | 5 | 6.00 | 2613 | 4544 | |
| Remove windows | 16 | EA | | 35.00 | 560 | 974 | |
| Replace windows | 16 | EA | 350 | 195.00 | 8720 | 15167 | |
| Re-build wall at smaller windows | 32 | SF | 15 | 12.00 | 864 | 1503 | |
| Interior repair at window replacement | 32 | SF | 7 | 8.00 | 480 | 835 | |

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|---|-----|----|------|------|-----|------|--|
| Painting of any existing lead coated copper through wall flashing that remains. | 225 | LF | 0.85 | 2.50 | 754 | 1311 | |
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Project Schedule - tentative

October 27, 2017 – Draft report is presented to the Town of Oak Bluffs

**** 1 week ****

November 2, 2017 – On site meeting with Town of Oak Bluffs to review draft report

**** 7 weeks ****

December 22, 2017 – Final report is presented to the Town of Oak Bluffs

**** 16 weeks ****

April 12, 2018 – town meeting. Request funding for architectural and engineering design of project.

**** 1 week ****

April 13, 2018 – Begin design of roof and HVAC replacement project

**** 5 weeks ****

May 17, 2018 – approximate 25% design check in

**** 6 weeks ****

June 28, 2018 – approximate 50% check in. Hold meeting with Town

**** 6 weeks ****

August 9, 2018 – approximate 75% design check in

**** 6 weeks ****

September 20, 2018 – Approximate 100% design check in. Drawings and specifications ready for bidding

**** 1 week ****

September 27, 2018 – Project released for bidding

**** 2 weeks ****

October 11, 2018 – Walkthrough with interested contractors

**** 2 weeks ****

October 25, 2018 – Bids due

October 29, 2018 – Review bids, hold contractor interviews

**** 2 weeks ****

November 13, 2018 – Town meeting. Present bids to town. Request funds to fund construction.

**** 2 weeks ****

November 15, 2018 – Sign contract with contractor

**** 28 weeks ****

May 28, 2019 – Contractor begins mobilizing, moving equipment and supplies to the job site

**** 3 weeks ****

June 18, 2019 – Last day of school

June 19, 2019 – Contractor begins

**** 10 weeks **** (Note: complete construction schedule to be issued later)

August 30, 2019 – Contractor is complete / final completion

September 2, 2019 – Labor Day

September 3, 2019 – School begins

NOTE: if the project includes solar, the installation will need to happen after the roof is complete, which would be fall 2019, or summer 2020.



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ICMAtv PROGRAMMING



ICMAtv made its debut at the 2006 Annual Conference in San Antonio, featuring a wrap up of each day's conference events and reports on local government issues from around the world. Again this year, ICMA will partner with WebsEdge, a global film and broadcasting company based in Washington, D.C., and London, to produce ICMA TV, a daily television program that will air during the 103rd ICMA Annual Conference in San Antonio/Bexar County, Texas, October 22-25. The four days of programming will feature interviews with key speakers and leaders, news and color commentary from the conference floor, thought leadership films from private and federal government organizations, and prerecorded films highlighting innovative communities. Episodes will be screened throughout the Henry B. González Convention Center, as well as in select guest hotels and online.

ICMAtv Executive Producer Stephen Horn has worked through the United States and the United Kingdom, notably as a producer for the BBC. Says Horn, "We are very excited about ICMA TV. The shows are an opportunity to bring delegates closer to the issues that affect them and enhance their conference experience."

In addition to being featured in the daily ICMA TV conference programs aired onsite, on ICMATV.com, and on the ICMA YouTube channel, communities that chose to develop a pre-recorded segment find that the final films make outstanding promotional or informational pieces that can be used to showcase their community or for outreach, fundraising or partnership proposals, marketing, recruitment, and other purposes.

If you are interested in creating a film segment, contact Sallie Nelson at WebsEdge at sally@websedge.com. If you have any questions about ICMA's partnership with WebsEdge, contact Michele Frisby at ICMA, mfrisby@icma.org.

Designing a More Sustainable Annual Conference.

ICMA continues to reduce the carbon footprint of the Annual Conference. The hotels, convention center, show decorator, and other vendors with whom ICMA contracts services each maintain an ongoing commitment to sustainable practices. ICMA's printed materials, signage, and decorations are recycled or recyclable, and session handouts are distributed

electronically.

AICP-CM Credits

ICMA has registered with the American Planning Association's professional institute, the American Institute of Certified Planners (AICP), to be a provider of Certification Management (CM) credits. AICP members will be able to earn CM credits for approved programs at ICMA's Annual Conference. A note will appear in the session description if the session has been approved by AICP.



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Q Privatization



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Q International Development



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Q Code of Ethics

Q Elected Officials

Q Equity & Inclusion

Q Ethics

Q Form of Government

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Q Leadership



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Q Contracts

Q High Performance Organizations

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Q Public Policy

Q Risk Management

Q Strategic Planning

Q Town & Gown

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- Q Fire & EMS
- Q Gun Violence
- Q Police



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- Q Utilities
- Q Water & Wastewater



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777 North Capitol Street, NE
Suite 500
Washington, DC 20002-4201
800.745.8780 | 202.962.3680
202.962.3500 (Fax)

**CONTACT
US**

The ICMA Future of Professional Management fund is dedicated to advocating for ethical, efficient, and effective local government through professional management.

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Educational Session Overview

In addition to sessions offered by ICMA’s projects, affiliates, and partners, this year’s conference will feature educational sessions addressing the challenges facing local government managers in six theme tracks developed by the 2018 Conference Planning Committee:

- Creating Communities That Last
- Equity and Social Inclusion
- Not Your Grandparents' Workforce
- Redefining Community Engagement: From the Couch to Town Hall Meetings
- Smart Communities: What Are They?
- The Challenges--and Responsibilities--of Putting Your Well-Being First

The conference program also includes career tracks of educational sessions designed specifically for:

- Assistant Managers
- Senior and Credentialed Managers
- Small Community Managers
- County Managers

Sessions have also been developed by various stakeholders and affiliates:

- Alliance for Innovation
- Eldon Fields Colloquium
- Ethics
- Local Government 101

Keynote Breakouts

Cigna

ICMA-RC

Other conference professional development opportunities include:

Cigna Health & Wellness Zone

As a leader in helping local governments improve the health of employees, retirees, and their families, Cigna is proud to be a premier-level ICMA Strategic Partner and exclusive health care sponsor of ICMA's 104th Annual Conference, September 23-26, 2018, in Baltimore, Maryland.

Featured Speakers

Featured speakers are noted for their presentation skills and will speak on topics directly related to the conference themes.

Field Demonstrations

The opportunities for professional growth and networking will extend beyond the meeting rooms of the Baltimore Convention Center to include a series of educational field demonstrations and site visits highlighting the most innovative projects in area local governments.

ICMA University Forums

ICMA University Forums are a hybrid of the traditional conference educational sessions and the ICMA University workshops. Because they are designed to be highly interactive and skill building in nature, the forums are limited in enrollment to 250 participants. Although there is no fee to participate in a forum beyond the main conference registration fee, preregistration is required because of the ceiling on enrollment, and early registration is recommended. ICMA University Practice Group numbers (noted in italics after the description) are attributed to each forum.

ICMA University Workshops

ICMA University workshops offer interactive, intensive training designed to develop skills and enhance knowledge. They support ICMA members' commitment to career-long learning by addressing the ICMA Practices for Effective Local Government Leadership. Instructors are selected for their knowledge of the topic, understanding of local government issues, and proven ability to effectively teach adults. Workshop Fees, Registration, and Location Because workshops are not supported by conference registration fees and must be self-supporting, there is an additional registration fee (\$195) for each half-day workshop unless otherwise noted. This fee covers the cost of handouts and certificates; audiovisual equipment rental; refreshments; instructor travel, lodging, and honoraria; and any other costs specific to the workshops. Preregistration is required, and early registration is recommended as enrollment in each

workshop is limited to between 30 and 50 participants to allow for maximum interaction with the instructor and other participants. All workshops will take place on Saturday and Sunday at the Hilton Baltimore.

Learning Lab Sessions

Don't feel like attending a 75-minute session? Then stop by the conference's Learning Lab and join a small audience at your choice of short, interactive presentations on the focused topics that will stir your curiosity. The lounge will host an Experts Bar, where you can get one-on-one advice from in-the-know colleagues.

Roundtable Discussions

The conference's popular series of roundtable discussions offers attendees an opportunity to meet face-to-face and share ideas, opinions, and solutions on a variety of issues important to professional managers. Each discussion will be facilitated by an ICMA member or other expert with a strong interest or expertise in these nuts-and-bolts issues. Please check back as roundtables are added over the summer.

Solutions Track Sessions

Three theater venues in the exhibit hall will host the Solutions Track sessions, which present case studies of local governments that have overcome challenges through innovative public-private partnerships. Session topics were selected by a committee of Conference Planning Committee members and Strategic Partners, with emphasis on showcasing ideas that are practical and new for local governments.

AICP CM CREDITS

ICMA has registered with the American Planning Association's professional institute, the American Institute of Certified Planners (AICP), to be a provider of Certification Maintenance (CM) credits. AICP members will be able to earn CM credits for approved programs at ICMA's Annual Conference. A note appears at the end of each conference offering that has been approved through AICP's review process.