

# Saint Mark Greek Orthodox Church Master Plan

Interim Report

# Saint Mark Greek Orthodox Church Master Plan

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## Summary

As part of the Parish Council goal setting held in April 2015 the following goal was established:

*“Hire an architect-engineer to conduct a master planning and feasibility analysis for the long term (LT) goals including parking, improvements to the hall, kitchen, administrative offices and classrooms by end of second quarter 2015”.*

As a result, a *Committee* was set up to procure an architect to help develop a master plan for the Saint Mark campus – focused primarily on improvements to the fellowship hall and kitchen, administration building, education and classrooms and parking. Since then, the *Committee*, made up of a diverse group of Saint Mark parishioners, have been working diligently to procure and work with a local architect (API) to develop a master plan for these four areas of our Saint Mark campus.

The master planning process first started with assessment of our current facilities and activities, and through several meetings with parishioners and ministry leaders developed a comprehensive list. From this list the same parishioners and ministry leaders were queried regarding the issues and needs with respect to future improvements.

In addition, a simple growth projection analysis was done examining the number of stewards for the past four years and extrapolating the data for an additional ten year. Assuming continued growth, albeit at a slower pace, it appears that we could have as many as 675 stewards by 2025. Also, candle sales and actual observation of attendance helped us to assess the current and future number of parishioners attending church. Because the church is somewhat limited by occupancy in the sanctuary and parking, it expected that as many as 700-750, with obviously more during Pascha.

From the issues and needs assessment and growth projections, programming of the future facilities was created, along with a relationship and spatial analysis.

The existing facilities, activities, issues and needs are all listed in Appendix A and the subsequent programming and relationship analyses are included in Appendices B and C, respectively.

This information was then used as the basis for developing a concept plan layout of the Saint Mark campus (Concept 1) that addressed the majority of the issues and needs and projected growth. The new concept provides more than twice the overall square footage of the current buildings.

After closely reviewing the first concept, revisions were requested by the *Committee* and made by API. This resulted in three additional iterations of the concept plan, all with similar square footages.

All four concepts (Appendix D) were reviewed carefully by the *Committee* and a list of benefits (pros) and constraints (cons) were developed. The benefits and constraints were they weighed

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against each other for the four concepts and one concept as providing the greatest number of benefits with the least number of constraints (Concept 2). After it was agreed Concept 2 was *Committee's* choice, the PC was briefed and the Committee was given the authorization to proceed with the Schematic Design of Concept 2.

Schematic design is an initial design scheme that seeks to further define the general scope and design of the approved concept including scale and relationships between building components. At the end of the schematic design phase the architect's drawings provide an opportunity to verify that the architect has correctly interpreted our desired functional relationships between various activities. The schematic design also provides a general indication of the exterior design elements. Finally, schematic design also is the research phase of the project, when zoning requirements or jurisdictional restrictions are discovered and addressed. The schematic design drawings are included in Appendix E and conceptual three-dimensional sketches are found in Appendix F.

An opinion of capital costs were also estimated from the schematic design based on overall project square footages. Concept 2 had an opinion of cost of a little over \$10 million. Average costs per square foot developed for both renovation and new construction for Concept 2 were used to estimate the capital costs for the other three concepts. Although lower, all three of the other concepts were within 14-percent or less of Concept 2; and thus due to the rough nature of the cost estimates, the difference is considered negligible. Appendix G contains a breakdown of the opinion of capital cost estimates.

Although the new facilities will have cost effective and efficient design, equipment and appliances, since the square footage is over twice the amount as the current facilities, annual operating costs will also increase. An analysis of the current operating costs was conducted and a projected annual increase \$75,000-\$80,000 was calculated. Appendix H includes the basis for the estimated increased operational costs.

To support the capital and additional operational expenditures, a funding plan will need to be developed. This plan should include a strategy for a new capital campaign fund raising effort and soliciting major donations, as well examining options for debt service and what we would consider affordable in the long term. This effort should be initiated and get underway as soon the project is approved by the PC and the parish.

As a preliminary analysis, the growth projections of the number of stewards was applied to the stewardship income and candle sales. And based on the current projections, it appears that Saint Mark should more than enough additional income in these two items alone to cover the future operational costs.

After the schematic design was presented to the PC, authorization was given to proceed with the final step in the master planning process – site plan approval. This step resulted in presenting the schematic design and architectural and engineering calculations to the City of

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Boca Raton. After a meeting with all the City Departments in March, a series of questions and comments were received from the City. API has held off on submitting responses to those comments until the issues and questions raised by the PC (Appendix I) were resolved.

An opportunity to ask additional clarifying questions will be available when the PC meets with the committee the evening of August 30, 2016.

## Purpose

Now that the Saint Mark sanctuary has been completed and consecrated, the purpose of the *Saint Mark Master Plan* is to continue on with the previous efforts of looking to the future, assessing our growth and needs, and developing a plan for improvements with respect to the fellowship hall, kitchen, administration, education and classrooms, and parking.

## Background

Saint Mark Greek Orthodox Church of Boca Raton was organized in 1980 and in October of that year the first Divine Liturgy was conducted at Advent Lutheran. Our current property was purchased in May 1983; our church fellowship hall was built and the opening of the doors (Thyranoixia) was performed by Bishop John of Atlanta in November 1985. The fellowship hall was used for liturgical services until the new sanctuary was completed in 1997. The first service in the new sanctuary was held on Palm Sunday, April 20th. Since then, we have completed the iconography and officially consecrated the church in February 2014.

Prior to building the current sanctuary, years of effort went into planning and fund raising for the new sanctuary. The original master plan, as displayed in the library, was a long-term endeavor to determine what would be the best solution of our ever-growing parish. The process took years, and with the consecration and more recently the complete pay off of our mortgage, we now have the opportunity to again look to the future.

Although our current fellowship hall, administration building and education and classroom areas have served us well, during the Parish Council's (PC) annual goal setting held in February 2015, it was decided that it was time to look at possible improvements to other areas of the Saint Mark campus. Specifically, the goal established by the PC was to *"Hire an architect-engineer to conduct a master planning and feasibility analysis for the long term (LT) goals including parking, improvements to the hall, kitchen, administrative offices and classrooms by end of second quarter 2015"*.

In April 2015, the *Grow and Planning Committee (Committee)* took the initiative to begin procuring the services of a professional architect to help with the master planning process. Three local pre-qualified architects were selected to submit proposals and after evaluating their proposals were asked to make presentations to the Committee. After much deliberation, API was selected as the architect to conduct the master planning.

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After meeting with API to review the scope of work and negotiate the fee, a presentation was made to the PC in September 2015 to obtain approval to enter into a contract with API. After receiving PC approval, the *Committee* moved forward to begin working with API in developing a master plan for the Saint Mark fellowship hall, administration, education and classrooms and parking.

### Committee

The *Committee* is made up of a diverse number of parishioners with varying backgrounds and experience.

Pat Sourlis	Maria Spiliopoulos	Lynn Athan	Rick Kontos
Tim Sharp	Tony Nicolaidis	Joanne Scheller	Charlie Zacharias
Girard Mitchel	Pat Anthony	Jim Dovas	Richard Economou
Fr. Mark Leondis			

Pat Sourlis served as the chairman and Tim Sharp was the project manager for the master plan implementation.

### Master Planning Process

The master planning process was divided into four steps:

- Step 1: Identify Current Facilities, Activities, Issues, Needs and Projected Growth
- Step 2: Programming and Concept Development
- Step 3: Schematic Design
- Step 4: Site Plan Approval

Following each step, a brief presentation was made to the PC to review the process, present results, address questions, and ultimately request approval to move forward with the next step.

### Current Facilities and Activities

Our current facilities, outside of the sanctuary, have been in place for the better part of over 30 years. Much of the facilities are in need of major repair, are outdated and/or inefficient, and in some areas, the buildings themselves are laid out poorly, and finally the parking is insufficient.

The *Committee* met with the parish in a meeting with over 60 parishioners in the fellowship hall in September 2015 to review our current facilities, request input on current activities and to discuss issues and needs associated with these facilities. In addition, some key members of the various church ministries were approached individually to assess their specific input.

The following summarizes each of the four areas of the Saint Mark campus, along with their current approximate square footages/quantities.

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Area	Area/Quantity
<b>Fellowship Hall, Kitchen &amp; Storage</b>	<b>7,661 SF</b>
Fellowship Hall	5,141 SF
Seating Capacity	~ 250
Kitchen	1,227 SF
Storage( 700 SF On Site; 320 SF in 2 Containers)	1,020 SF
<b>Administration Building</b>	<b>1,934 SF</b>
<b>Education &amp; Classrooms</b>	<b>3,519 SF</b>
Fellowship Hall Classrooms	1,637 SF
Sanctuary, 2nd Floor Storage Rooms - these are "technically" not permitted for classroom use (storage)	1,392 SF
Administration Library (included in current Administration Building SF)	490 SF
<b>Parking</b>	214 + 7 Handicap <b>= 221 spaces</b>

A complete listing of the current facilities and the associated activities for each of the four areas are included in Appendix A.

### Growth Projections

The following provides an explanation of current and projected growth at Saint Mark Greek Orthodox Church.

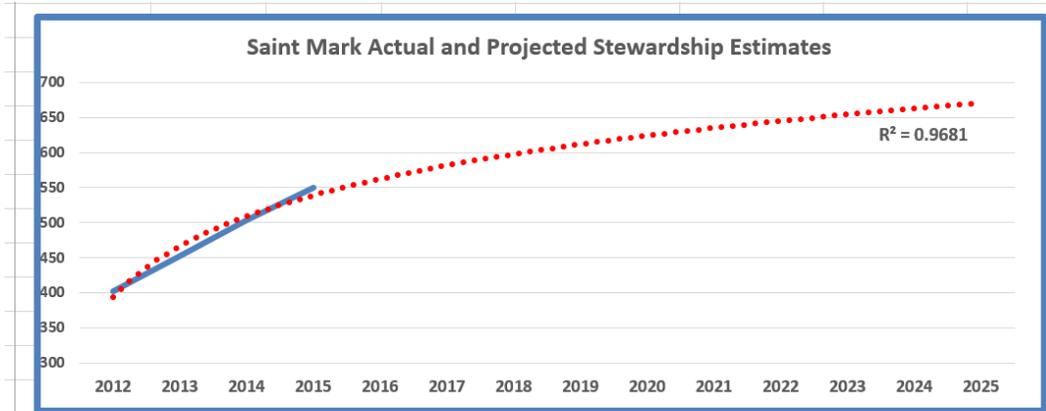
#### Stewardship

The church has grown its stewardship between 2012 and 2015 by 37% in the number of stewards and 47% in the amount pledged, with an average annual increase of 11% (stewards) to 15% (pledged). Although the annual percentage is decreasing, overall it does continue to increase during these four years (see table below).

<b>Saint Mark Stewardship Statistics</b>							
Year	No. Stewards	Annual Increase	Cumulative Increase	Total Pedges	Annual Increase	Cumulative Increase	Pledge/ Steward
2012	402			\$ 367,233			\$ 914
2013	453	13%	13%	\$ 424,590	16%	16%	\$ 937
2014	504	11%	25%	\$ 481,948	14%	31%	\$ 956
2015	550	9%	37%	\$ 539,305	16%	47%	\$ 981
<b>Average</b>	<b>477</b>	<b>11%</b>		<b>\$ 453,269</b>	<b>15%</b>		<b>\$ 947</b>
	Indicates data is interpolated.						

By applying a logarithmic regression line to the four-year trend, it shows that although the trend is flattening, we still reach approximately 675 stewards by 2025. The graph below depicts this trend.

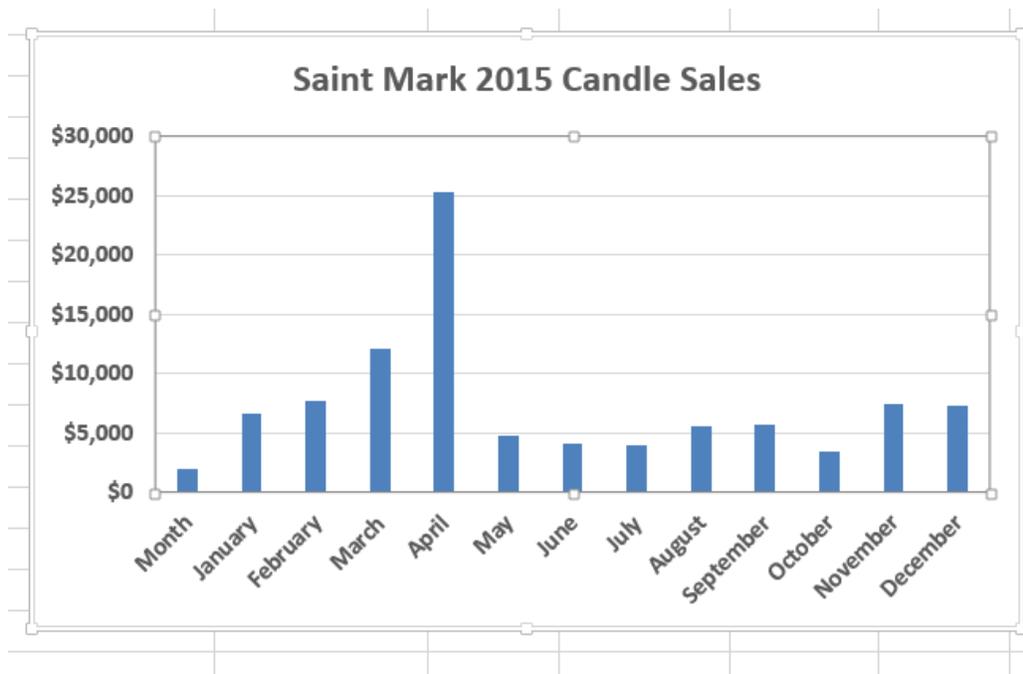
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Projection is based on a logarithmic formula ( $y = 104.62\ln(x) + 394.13$ ) with an  $R^2$  value of 0.9681.  $R^2$  is a statistical measure of how close the data are to the fitted regression line.

## Parishioners Attending Church

Although we know that not all the parishioner attending church are stewards, we do know that our church attendance does fluctuate throughout the year. To estimate the fluctuation, we first examined the candle sales in 2015 (see below).



These candle sales empirically indicate the broad range of attendance throughout the year, with the “off season” generally between May and October, with the “season” occurring between November and April; peaking with Lent and Pascha.

Also, by witnessing recent church services during the current “off season” it appears that we still reach anywhere from 80% to 90% of the approximately 650-person capacity of the church.

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Assuming say 85%, this represents an average of about 552 parishioners during the “off season”.

Since this number is the about same as the 2015 number of stewards, a similar trend line could be applied which would result in potentially as many as 675 parishioners attending church on the average by 2025. Although the emperical data from the candle sales would technically indicate even higher numbers, due to the limitations on parking and even the sanctuary itself, it is not expected that even during the peak period we would have over 700-750 parishioners attending at one time - except possibly Pascha.

## Issues and Needs Assessment

Issues and needs related to our current facilities and projected needs were initially addressed with the parish as part of the above-mentioned parish meeting in the fellowship hall. After the initial input was received and recorded, separate subcommittees were set up to conduct subsequent more refined reviews of the issues and needs for the four areas of the Saint Mark campus.

Prior each of these separate meetings, guided tours were conducted of each of the areas to point out some of the key issues and needs related to those areas. Following the brief tour, the groups were engaged in a more refined facilitated discussion of the issues and needs of the four areas. In addition to addressing these issues and needs, the groups provided some suggested programming requirements that could help to alleviate these issues and needs. A listing of those issues, needs and preliminary programming requirements are included in Appendix A.

## Programming and Relationship Analysis

The *Committee* and API met several times to review the results of the issues and needs assessment and suggested preliminary programming to develop an initial program and relationship analysis for each of the four areas. A complete listing of programming for each of the areas is included in Appendix B.

Following the initial programming a relationship analysis was conducted. Relationship analysis examined the spatial relationship between the areas within each of the three building areas and are shown in Appendix C. In addition, a separate analysis of the current and projected storage areas was conducted and is also included in Appendix C.

## Concept Development

The final programming requirements and spatial analyses were then used to develop a concept plan for improvements to the fellowship hall, administration, education and classrooms and parking.

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## Concept 1

An initial concept plan (Concept Plan 1) was developed with the following key features:

- Build new fellowship hall, kitchen and storage – 16,358 SF
- Combine current administration building and fellowship hall classrooms to create a new Administration Building, which includes two (2) classrooms – 5,115 SF
- Move playground towards south end of existing greenspace
- Renovate old hall to accommodate ten (10) classrooms – 8,171 SF
- Parking – 240 + 18 HC = 258 spaces

A copy of the Concept 1 plan is included in Appendix D.

With respect to our current facilities, the following provides a comparison with the Concept 1 plan.

Area	Current Area	Concept 1 Area	Change (X/%)
Administration Building	1,934 SF	5,115 SF	+3,181 SF (2.6X)
Fellowship Hall, Kitchen & Storage	7,661 SF	16,358 SF	+8,697 SF (2.1X)
Education & Classrooms	3,519 SF	8,171 SF	+4,652 SF (2.3X)
<b>Totals</b>	<b>13,668 SF</b>	<b>29,644 SF</b>	<b>+15,956 (2.2X)</b>
Parking	214 + 7 HC = <b>221 Spaces</b>	240 + 18 HC = <b>258 spaces</b>	<b>+37 Spaces (17%)</b>

Total building area is a little over twice as much as today with a 17% increase in parking spaces (37 spaces).

## Concept 2

After the first concept plan was reviewed by the Committee, changes were requested and a second concept plan was developed which included the following key features:

- New fellowship hall, kitchen and storage (16,000 SF) combined with twelve (12) second floor classrooms (11,400 SF)
- Combine current administration building and fellowship hall classrooms to create a new Administration Building – 4,526 SF
- Demolish old fellowship hall and create new fenced green space to include pavilion and playground
- Parking – 232 + 20 HC = 252 spaces

A copy of the Concept 2 plan is included in Appendix D.

With respect to our current facilities, the following provides a comparison with the Concept 2 plan.

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Area	Current Area	Concept 2 Area	Change (X/%)
Administration Building	1,934 SF	4,526 SF	+2,592 SF (2.3X)
Fellowship Hall, Kitchen & Storage	7,661 SF	16,000 SF	+8,339 SF (2.1X)
Education & Classrooms	3,519 SF	11,400 SF	+7,881 SF (3.2X)
<b>Totals</b>	<b>13,668 SF</b>	<b>31,926 SF</b>	<b>+18,258 SF (2.3X)</b>
Parking	214 + 7 HC = <b>221 Spaces</b>	232 + 20 HC = <b>252 Spaces</b>	<b>+31 Spaces (14%)</b>

Similar to Concept 1, total building area is a little over twice as much as today with a 14% increase in parking spaces (31 spaces).

### Concept 3

After the second concept plan was reviewed by the Committee, additional changes were requested and a third concept plan was developed which included the following key features:

- Combine current administration building and fellowship hall classrooms to create a new Administration Building, which includes two (2) classrooms – 5,115 SF
- Renovate and expend current fellowship hall, kitchen & storage – 17,500 SF
- New education & classroom building, with the playground moved, but in the same general area – 8,000 SF
- Parking – 231 + 16 HC = 247 spaces

A copy of the Concept 3 plan is included in Appendix D.

With respect to our current facilities, the following provides a comparison with the Concept 3 plan.

Area	Current Area	Concept 3 Area	Change (X/%)
Administration Building	1,934 SF	5,115 SF	+3,181 SF (2.6X)
Fellowship Hall, Kitchen & Storage	7,661 SF	17,500 SF	+9,839 SF (2.3X)
Education & Classrooms	3,519 SF	8,800 SF	+5,281 SF (2.5X)
<b>Totals</b>	<b>13,668 SF</b>	<b>30,615 SF</b>	<b>+16,947 SF (2.2X)</b>
Parking	214 + 7 HC = <b>221 Spaces</b>	231 + 16 HC = <b>247 Spaces</b>	<b>+26 Spaces (12%)</b>

Total building area is a little over twice as much as today with a 12% increase in parking spaces (26 spaces).

### Concept 4

Finally, after the third concept plan was reviewed by the Committee, one more round of changes were requested and a fourth concept plan was developed which included the following key features:

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- Combine current administration building and fellowship hall classrooms to create a new Administration Building, which includes two (2) classrooms – 5,115 SF
- Renovate and expend current fellowship hall, kitchen & storage (17,500 SF) and build twelve (12) second floor classrooms above the new administration and the fellowship hall storage areas – 9,500 SF
- Playground stays in the same general area
- Parking – 241 + 16 HC = 257 spaces

A copy of the Concept 4 plan is included in Appendix D.

With respect to our current facilities, the following provides a comparison with the Concept 4 plan.

Area	Current Area	Concept 4 Area	Change (X/%)
Administration Building	1,934 SF	5,115 SF	+3,181 SF (2.6X)
Fellowship Hall, Kitchen & Storage	7,661 SF	17,500 SF	+9,839 SF (2.3X)
Education & Classrooms	3,519 SF	9,500 SF	+5,981 SF (2.7X)
<b>Totals</b>	<b>13,668 SF</b>	<b>32,115 SF</b>	<b>+18,447 SF (2.3X)</b>
Parking	214 + 7 HC = <b>221 Spaces</b>	241 + 16 HC = <b>257 Spaces</b>	<b>+36 Spaces (16%)</b>

Total building area is a little over twice as much as today with a 16% increase in parking spaces (36 spaces).

### All Concepts

For all four of the concepts the following features have been included:

- Over twice the square footage as today's facilities
- A porte cochere in front of the church to shelter parishioners and guests from the rain; existing pillars are moved to the front of new administration building
- Basketball court can be moved indoors to the new fellowship hall
- A pavilion is added for additional shelter
- Improved vehicular circulation and ingress/egress
- Parking is increased, including more handicapped parking
- Playground is moved and preserved
- Improved flow between the church, administration and fellowship hall
- Twelve (12) new classrooms are created in one area
- Fellowship Hall has potential for retractable walls to partition the space
- More storage area is created

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## Benefits and Constraints

To help decide the best conceptual plan for further refinement in the Schematic Design step, the Committee conducted an extensive benefits (pros) and constraints (cons) analysis of each concept.

The benefits (pros) of each of the four concept plans are presented below.

<b>Concept 1</b>	<b>Concept 2</b>
Central entrance Handicapped parking near church and hall 37 new parking spaces Central toilet location for education and hall Good drop-off lanes for administration, classrooms, church and hall Consolidated and convenient location for kitchen, maintenance and service Internal circulation from church to classrooms and hall Salvaging hall foundation, existing walls and superstructure AC unites can remain in place Possible rental of classrooms Fellowship hall and bridge club remain in place	Central entrance Handicapped parking near church and hall New parking spaces - 31 Good drop off lanes for church, administration and hall Consolidated and convenient location for kitchen, maintenance and service Internal circulation from church to classrooms and hall Two centralized and protected green areas and playground More greenspace and could possible add more parking More opportunities for festival layout Fellowship hall and bridge club remain in place
<b>Concept 3</b>	<b>Concept 4</b>
Internal circulation from all areas Handicapped parking near church and hall 26 new parking spaces Central toilet location for classrooms and hall Consolidated and convenient location for kitchen, maintenance and service Two "green" areas with playground near classrooms	Handicapped parking near church and hall 36 new parking spaces Two "green" areas with playground near education Internal circulation from church to classrooms and hall Facilitates possible connection with second floor of sanctuary Best use of space and least footprint Fellowship hall and bridge club remain in place

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Similarly the constraints (cons) of each concept are presented below:

<b>Concept 1</b>	<b>Concept 2</b>
<p>Isolated internal classrooms with no windows                      Outdoor play area and remote from classrooms                      Hall further from the church                      One story classrooms take up valuable footprint.                      Addition of another building will significantly reduce the "outdoor" space and could impede the operation of the festival                      Major disruption to the operation of the campus during construction.</p>	<p>Potential noise from fellowship hall into classrooms                      Added cost for additional toilets and janitorial closet on second floor of hall                      Losing the any value there may have been of the existing hall by demolition</p>
<b>Concept 3</b>	<b>Concept 4</b>
<p>No central lobby and remote from administration building                      Drop off at hall difficult                      Reception and lobby are remote from Administration                      Conflict with kitchen and service at hall entrance and drop off area                      Losing the value of the existing hall and kitchen during demolition                      Loss of bridge club income                      Least amount of additional parking</p>	<p>Duplicate toilets and janitor closets                      Hall entry at drop off poor                      Hall entry conflicts with kitchen service and maintenance                      Reception and lobby are remote from Administration                      Possible problem with relocating existing church AC condensing units located on roof of the hall                      Many windowless classrooms                      Complete disruption of current operations for a minimum of 1 to 1-1/2 years                      Loss of Bridge Club income                      Losing value/use of existing hall and kitchen during demolition                      No kitchen-no festival-loss of income</p>

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Finally, a quantitative comparison of the benefits (pros) and constraints (cons) was also prepared and is displayed below:

Benefit	Concept			
	1	2	3	4
Central entrance	X	X		
Handicapped parking near church and hall	X	X	X	X
New parking spaces	X	X	X	X
Good drop off lanes for church, administration and hall	X	X		
Consolidated & convenient location for kitchen, maintenance and service	X	X	X	
Good internal circulation from church to classrooms and hall	X	X	X	X
Two centralized and protected green areas and playground		X		
More greenspace and could possible add more parking		X	X	X
More opportunities for festival layout		X		
Fellowship hall and bridge club remain in place	X	X		X
Salvaging hall foundation, existing walls and superstructure	X			
AC unites can remain in place	X			
Possible rental of classrooms	X	X		
Central toilet location for classrooms and hall			X	
Facilitates possible connection with second floor of sanctuary		X		X
Best use of space and least footprint				X
<b>Totals</b>	<b>10</b>	<b>12</b>	<b>6</b>	<b>7</b>

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Constraints	Concept			
	1	2	3	4
Isolated internal classrooms with a limited number of windows	X			X
Outdoor play area and remote from classrooms	X			
Hall further from the church	X			
Less greenspace	X			
One story classrooms take up valuable footprint	X			
No central lobby and remote from administration building			X	
Drop off at hall challenging			X	X
Conflict with kitchen and service at hall entrance and drop off area			X	
Losing the value of the existing hall and kitchen during demolition		X	X	X
Loss of bridge club income			X	X
Least amount of additional parking			X	
Duplicate toilets and janitor closets				X
Hall entry conflicts with kitchen service and maintenance				X
Possible problem with relocating existing church AC condensing units located on roof of the hall				X
Disruption of current operations for a minimum of 1 to 1-1/2 years			X	X
No kitchen-no festival-loss of income			X	X
Potential noise from fellowship hall into classrooms		X		
Added cost for additional toilets and janitorial closet on second floor of hall		X		
<b>Totals</b>	<b>5</b>	<b>3</b>	<b>8</b>	<b>9</b>

After reviewing both the qualitative and quantitative analyses, the Committee reached consensus that Concept 2 provided the greatest benefits with the least number of constraints. Thus Concept 2 was recommended to the PC in December and the Committee received approval to proceed with the schematic design step.

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## Schematic Design

Schematic design is an initial design scheme that seeks to further define the general scope and design of the approved concept including scale and relationships between building components. At the end of the schematic design phase the architect's drawings provide an opportunity to verify that the architect has correctly interpreted our desired functional relationships between various activities. The schematic design also provides a general indication of the exterior design elements. Finally, schematic design also is the research phase of the project, when zoning requirements or jurisdictional restrictions are discovered and addressed. Construction costs are also estimated based on overall project square footages. *(This definition is paraphrased from the American Institute of Architect's definition and aligns with the scope of our project).*

During this step, API used the Concept 2 drawings and developed more detailed and scaled drawings of the various aspects of the project. This step was also a preview of the project design that will be presented to the Boca Raton Planning & Zoning Department in the next step.

In summary the schematic design includes the following drawings:

-  A1-1 - FLOOR PLANS.pdf
-  A1-2 - PHASE I FLOOR PLANS.pdf
-  A1-3 - PHASE I SECOND FLOOR PLAN.pdf
-  A1-4 - PHASE II FLOOR PLANS.pdf
-  A1-5 - PHASE III FLOOR PLANS.pdf
-  A2-1 - EXTERIOR ELEVATIONS.pdf
-  A3-1 - BUILDING SECTIONS.pdf
-  A3-1 - ST MARK SD 01-04-16.zip
-  A4-1 - ROOF PLAN.pdf
-  A5-1 - PI 1ST FLOOR REFLECTED CEILING PLANS.pdf
-  A5-2 - PI - 2ND FLOOR REFLECTED CEILING PLAN.pdf
-  A5-3 - PI AND PII REFLECTED CEILING PLANS.pdf
-  A6-1 - SCHEDULES.pdf
-  SPA-2 - SITE DEMOLITION.pdf
-  SPA-1 - SITE PLAN APPPROVAL.pdf

These schematic design drawings for Concept 2 are included in Appendix E.

As part of the schematic design API hired a kitchen consultant to help us lay out the kitchen in an efficient manner and equip it with updated kitchen equipment and appliances. A copy of the proposed kitchen layout is included in Appendix E.

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## Phasing

In addition, API provided a suggested phasing plan which is described below:

- **Phase 1** – Construct new fellowship hall and classrooms and majority of the site work (e.g., regrading, paving, drainage, utilities, etc.). This would allow the current fellowship hall to remain in place during construction which would allow continuation of Sunday school, Greek School, the Bridge Club, and other events requiring the space of the hall and use of the kitchen.
- **Phase 2** – Once the new fellowship hall and classrooms are in place and operational, phase 2 would entail the reconfiguration and renovation of the administration building. During this time, administrative and office activities could be moved and conducted in a portion of the new fellowship hall or possibly in the old fellowship hall.
- **Phase 3** – Once the new administration building is completed the old fellowship hall and kitchen would be demolished and the new fenced outdoor courtyard including covered patio, playground and green space would be constructed.
- **Phase 4** – This phase would include potentially an additional 57 parking spaces if an underground water retention system can be designed and permitted for the existing drainage swale at the south end of the property.

Phases can be adjusted and can be spread out over time due to fact that each phase is relatively independent from the others. This can help stretch the funding requirements, but from a practical perspective and with less disruption, building the three phases at one time is the probably the most efficient and cost-effective approach.

Although the project is nowhere near a final design stage, the architect did provide some conceptual three-dimensional views of the new buildings from different perspectives. No attempt was made to provide any architectural features as that would be included in a later stage of the design. Four different perspectives are provided in Appendix F.

## Opinion of Cost

An opinion of cost for this project was prepared for both capital and operations.

### Capital

As part of the schematic design step, an opinion of construction costs were provided by API for Concept 2. The opinion of cost was reviewed and costs per square foot based on the type of construction (i.e., new or renovation) were applied to the other three concepts for relative comparison purposes. In addition, costs for design, permitting, legal, and professional services during construction were also included. Appendix G includes the breakdown of the opinion of cost by area and structure (building) for all four concepts, along with the detailed cost estimate provided by API. Below is a summary of the opinion of cost for the four concepts in 2016

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dollars. Future costs will have to be escalated and considered once the project receives approval to move forward by both Saint Mark and the City.

Concept	Cost Estimate <sup>1</sup>
1 - New Fellowship Hall & Kitchen, Renovate Administration Building & Renovate Old Hall to Accommodate Classrooms	\$8,753,906
2 - New Fellowship Hall & Kitchen with 2nd Floor Classrooms, Renovate Administration Building, Demolish Old Fellowship Hall and Build New Patio/Playground	\$10,164,446
3 - Renovate and Expand Fellowship Hall & Kitchen, Renovate Administration Building & Build New Separate Classrooms	\$9,082,725
4 - Renovate & Expand Fellowship Hall & Administration Building and Build 2nd Floor Classrooms above Administration Building & Hall Storage	\$9,463,950

<sup>1</sup>See Appendix G for more detail on the breakdown of the costs.

Since the capital cost estimate is an “Order of Magnitude” estimate at this stage, the above four capital cost estimates are well within the variance of this level of rough estimate and are considered very close (i.e., within 13%); thus cost does not appear to be a major differentiating factor.

### Operations

Current Saint Mark annual operating costs were reviewed and used to project future operational costs associated with the Concept 2 plan. The following summarizes the projected changes in the costs, along with the estimated amounts and associated assumptions.

Operational Cost	Increase Amount	Assumptions
Custodial-Outside Services	\$3,500	Assume doubling of costs
Security - Regular	\$3,000	Assume additional security monitoring
Telephone & Internet	\$5,000	Assume add'l lines/numbers may be required/increased wireless coverage for larger campus
Catastrophic Risk Insurance-Windstorm	\$12,000	Assume increase due to addition of more infrastructure/larger campus (20%)
Electric	\$22,215	33% Increase for 64% more space, but more efficient equipment/lighting
Waste Management	\$866	10% increase
Water	\$464	10% increase
Air Conditioning	\$3,000	Assume more \$'s for periodic maintenance
Custodial	\$24,000	Assume one (1) add'l custodian @ \$11.54/hr
Payroll Expenses-Taxes	\$2,400	For above

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Worker's Comp Insurance	\$750	For above
<b>Total</b>	<b>\$76,195</b>	

The basis for the operational cost estimate projections are included in Appendix H. Similar to the capital costs, future operational costs will have to be escalated and considered once the project receives approval to move forward by both Saint Mark and the City.

### Funding

To support the capital and additional operational expenditures, a funding plan will need to be developed. This plan should include a strategy for a new capital campaign fund raising effort and soliciting major donations, as well examining options for debt service and what we would consider affordable in the long term. This effort should be initiated and get underway as soon the project is approved by the PC and the parish.

To assess the potential additional funds from stewardship and candles sales given the recent history, a projection was generated regarding the additional income that could be generated as the parish grows. Based on the actual stewardship and projected growth, the additional stewardship income could be as much as \$268,000 and is show below. Along with the potential increased candle sales, the total additional income could be as much as \$290, 000 annually, which is more than enough to cover the additional estimated operating costs.

Year	No of Stewards	Annual Growth	Candle \$	Stewardship\$	Avg/Stew	Annual Growth
2012	402			\$ 367,233	\$ 914	
2013	453	13%		\$ 424,950	\$ 938	2.7%
2014	504	11%		\$ 481,948	\$ 956	1.9%
2015	550	9%	\$ 93,837	\$ 539,305	\$ 981	2.5%
2016	589	7%	\$100,406	\$ 588,597	\$ 1,000	2.0%
2017	618	5%	\$105,426	\$ 630,388	\$ 1,020	2.0%
2018	630	2%	\$107,534	\$ 655,856	\$ 1,041	2.0%
2019	637	1%	\$108,610	\$ 675,662	\$ 1,061	2.0%
2020	643	1%	\$109,696	\$ 696,067	\$ 1,083	2.0%
2021	649	1%	\$110,793	\$ 717,089	\$ 1,104	2.0%
2022	656	1%	\$111,901	\$ 738,745	\$ 1,126	2.0%
2023	662	1%	\$113,020	\$ 761,055	\$ 1,149	2.0%
2024	669	1%	\$114,150	\$ 784,039	\$ 1,172	2.0%
2025	676	1%	\$115,291	\$ 807,717	\$ 1,195	2.0%
			vs 2015	vs 2015		
			\$ 21,454	\$ 268,412		
			Total Rev/2015			
			\$289,866			

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## Site Plan Approval

Site plan approval is received from the City's Development Services Department prior to a project moving forward with more detailed designs, building permits and eventually construction. Although this project for Saint Mark may be several years away, the overall intent of the site plan approval step was to assess the feasibility of receiving permits in the future. By submitting the schematic design drawings and associated engineering and architectural calculations and analyses to the City, it provides the opportunity to identify and correct any potential "fatal flaws" with the design.

On March 1<sup>st</sup>, the site plan application and associated drawings, calculations and analyses were submitted the City Development Services Department for review and comment. On March 15<sup>th</sup> a meeting was held with the various City departments to review and discuss their comments. API proceeded to make revisions to the design, calculations and analyses in response to the comments and submitted a draft response package to Saint Mark for review. Due to some uncertainty and concerns by the PC, the project was put on hold until some outstanding questions could be addressed.

In April 2016, the PC met to discuss the Master Plan project and submit their questions and concerns to the *Committee*. A copy of the questions raised by the PC are included in Appendix I. In addition, the *Committee* has tried to answer them and are included following each question.

# Saint Mark Greek Orthodox Church Master Plan

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## Appendices

- A. A complete listing of the current facilities and the associated activities for each of the four areas are included in Appendix A.
- B. A complete listing of programming for each of the areas is included in Appendix B.
- C. The relationship analysis examined the spatial relationships between the areas within each of the three buildings and are shown in Appendix C, along with the storage analysis.
- D. A copy of the concept plans are included in Appendix D.
- E. The schematic design drawings, including the proposed kitchen layout, for Concept 2 are included in Appendix E.
- F. Four different 3-dimensional perspectives are provided in Appendix F.
- G. Appendix G includes the breakdown of the opinion of cost by area and structure (building) for all four concepts, along with the detailed cost estimate provided by API.
- H. The basis for the operational cost estimate projections are included in Appendix H.
- I. A copy of the questions raised by the PC are included in Appendix I.