



PELICAN GOLF CLUB / RECONSTRUCTION PLAN Project Narrative

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PROJECT CONTACT

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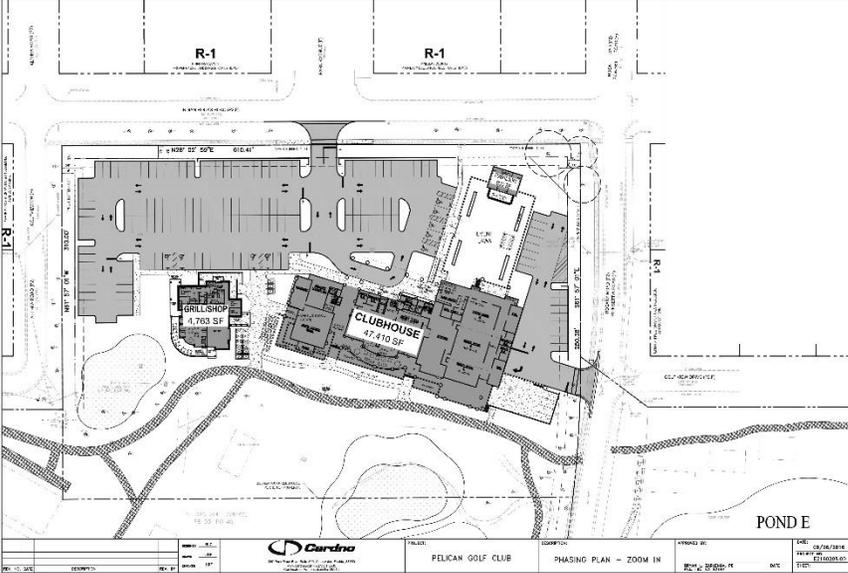
PROJECT DESCRIPTION

The Pelican Golf Club is a redevelopment plan for the Belleview Biltmore Golf Club. The applicant intends to purchase the property from the Town of Belleair and make several site improvements relating to the buildings, landscaping, and the golf course. The applicant is seeking Preliminary Development Plan (PDP) approval; the applicant will seek construction plan and building permit approval as subsequent approvals. The PDP is intended to identify the project programming, preliminary design and general construction methods before seeking more detailed project approvals and individual permits. The project includes two distinct redevelopment areas, the clubhouse area and the golf course.

Clubhouse Redevelopment

The existing clubhouse will be demolished and the area will be completely redeveloped with a new primary building (“Main Clubhouse”), two accessory buildings (“Grill Room/Golf Shop” and “Pavilion”), a surface parking lot, outdoor gathering areas, and landscaping enhancements. The Main Clubhouse will generally include the golf course administration offices, customer locker rooms, lounge and restaurant area, leisure areas, and meeting space. The Grill Room/Golf Shop will include a small grill area and golf shop. The Pavilion will house restrooms and changing areas associated with the Event Lawn. Further details related to the floor plans, layouts, and elevations of the buildings can be found later in this section or in the architecture sheets of the plan submittal.

The proposed surface parking area will provide 175 spaces (including some parking under the Main Clubhouse) and a customer drop-off/loading area will allow access to the main entry of Clubhouse. Additionally, golf cart storage will be located under the Main Clubhouse. All of the mature trees on perimeter of clubhouse parcel will be retained and new landscaping material will be installed between the existing trees to create a refreshed landscaping plan and to satisfy the vegetative buffer requirements (refer to the Landscape Plans in the plan submittal). A wall / wrought iron fence combination with a continuous hedge as shown on the Site Plan in the plan submittal will surround the parking area to screen the view of the parking lot from the surrounding neighborhoods.



Proposed clubhouse site plan (refer to plan submittal for enlarged version)

Golf Course Redevelopment

The intent for the golf course redevelopment is to create a completely revitalized golf experience. The original designer of the golf course, Donald Ross, was a famous designer that worked on many highly regarded courses throughout his career. Many of the principles applied by Ross during the original construction such as strategic bunkering, dramatic green contours, wide corridors to promote playability, and interesting green surrounds will be incorporated into the work. The wide corridors mentioned above are a fundamental criteria for achieving the desired strategy and playability. Golfers tend to spray shots across a wide dispersion so “wider” golf holes are more playable than more narrow golf holes. Wider golf holes also help set up strategy by creating a “reward” (an easier route to the hole) for being on the “proper” side of the hole; so a wider golf hole will help to exaggerate the reward. The site conditions today have considerably more vegetation and mature trees than the era of the original construction and in fact, many edges of golf holes have become overgrown. Recapturing some of the original corridor widths is an important part of the golf course redevelopment and this will help reintroduce the spirit of the original playability and strategy created by Ross.

From a technical standpoint, it is the intent to completely reconstruct all features to meet or exceed modern golf construction standards. This includes the replacement of all infrastructure such as drainage, irrigation, golf features (greens, tees, and bunkers), grass, and cart paths. Further, the proposed lakes have all been redesigned to best accommodate storm events. Most of the golf holes will be rebuilt exactly in place; the minor adjustments that have been proposed will allow the golf course to better accommodate advances in modern golf equipment.

The applicant is sensitive to preserving the vegetation and existing buffer along the project boundaries and adjacent to residential properties. Where perimeter vegetation currently exists between the homes and the golf course, the vegetation will remain undisturbed. In areas that currently have no vegetation between homes and the golf course, trees and shrubs will be added to satisfy the vegetative buffer requirements (refer to the Landscape Plans in the plan submittal). Many of the mature, Florida native trees within the golf course will also be retained. New understory vegetation will be added in some areas between holes to create another layer of texture and color underneath the taller trees.

Other miscellaneous details include: the existing golf cart crossings over Poinsettia Road will remain and restroom structures will be improved using the same architectural themes of the new clubhouse.



Proposed golf course redevelopment area (refer to plan submittal for more detailed golf plans)

PROPOSED BUILDINGS

The Pelican Golf Club redevelopment plan includes three buildings as part of the clubhouse area and two restroom buildings as part of the golf course. All buildings include complementary architecture and construction materials. Elevations, layouts, and floor plans can be found in the architecture sheets in the plan submittal.

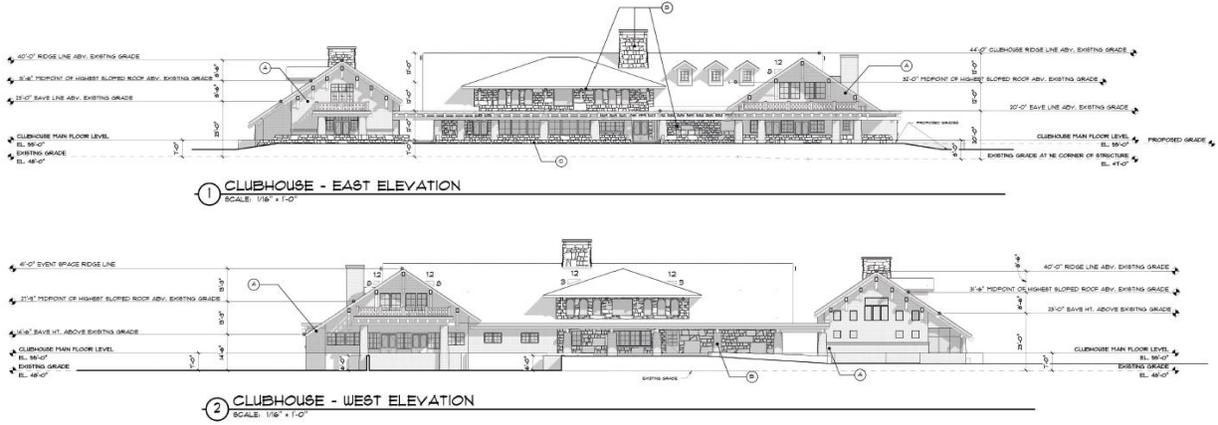
Clubhouse Buildings

The clubhouse portion of the project includes three separate buildings; (i) the Main Clubhouse building, (ii) the Grill Room/Golf shop, and (iii) the Pavilion. These buildings are clustered at the project entry and accessible from the main customer parking lot and via interconnected pedestrian pathways.

Main Clubhouse Building

The Main Clubhouse building is designed with classic Florida vernacular architecture in terms of roof form, porches, breezeways, and window detail. The materials include a mix of white-wash brick, stone with mortar, concrete shingles, and wood accents. Refer to the architecture sheets in the plan submittal for specifics on floor plans of each building.

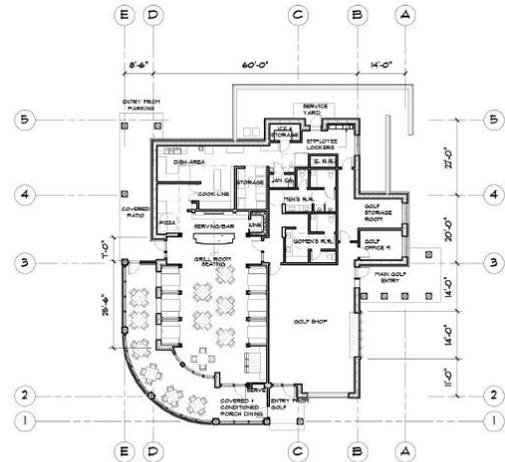
The Main Clubhouse is designed as a three level building consisting of a basement and two stories above grade; the dimension to the midpoint of the highest sloped roof is 32'. The main floor includes the primary reception areas, board room, locker rooms, event space, and kitchen/dining area; also several gathering areas are planned on the porches, breezeways and patios. The second level includes administrative offices and a fitness area. The lower level includes mechanical areas, operational functions, vehicle parking and golf cart storage. The Main Clubhouse building is intended to enhance the experience for the golf course patrons and accommodate administrative functions. The clubhouse also has meeting space to host periodic, private events by invitation only.



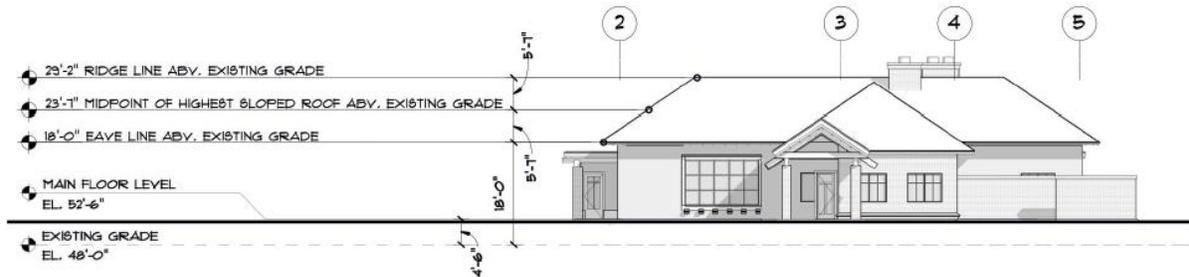
Example elevations and precedent imagery for Main Clubhouse (refer to architecture sheets in plan submittal for all elevations and full size plans)

Grill Room/Golf Shop

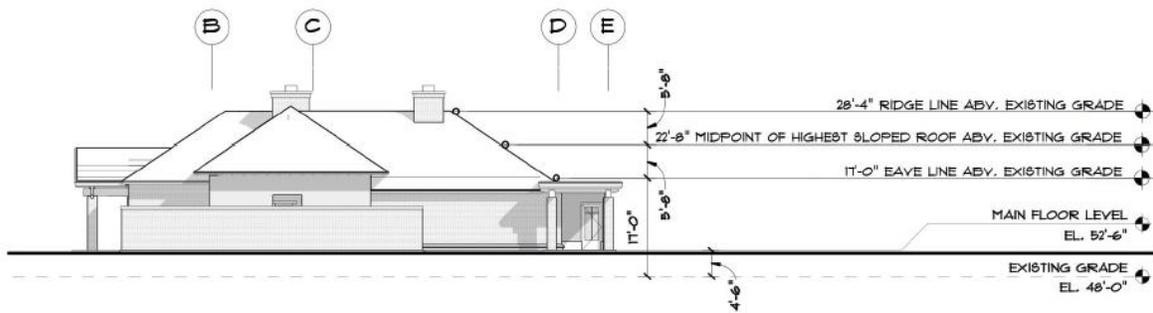
The second building includes a restaurant/grill and a golf shop. The golf shop will serve as the main check-in point for golfers and will sell goods and services that are intended to cater to golf course patrons. The restaurant/grill is a small, full service eatery that is intended to serve golf patrons with relatively quick food options. An inside dining area and outside porch setting is provided for restaurant patrons. The building will complement the clubhouse in terms of architectural style and construction materials. The dimension to the midpoint of the highest sloped roof is 23'7".



1 GOLF SHOP / GRILL FLOOR PLAN
SCALE: 1/16" = 1'-0"



4 EAST GOLF SHOP / GRILL ELEVATION
SCALE: 1/16" = 1'-0"

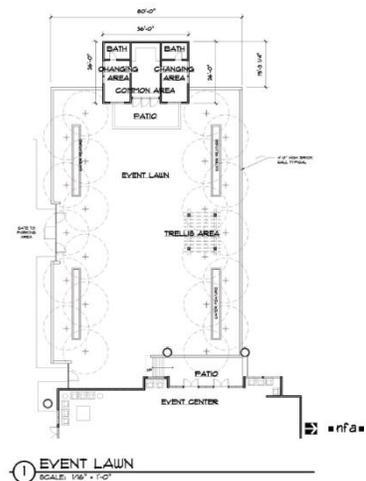
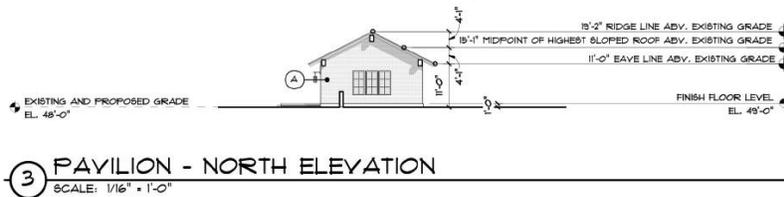


2 NORTH GOLF SHOP / GRILL ELEVATION
SCALE: 1/16" = 1'-0"

Floor plan and example elevations for Grill Room / Golf Shop (refer to architecture sheets in plan submittal for all elevations and full size plans)

Pavilion

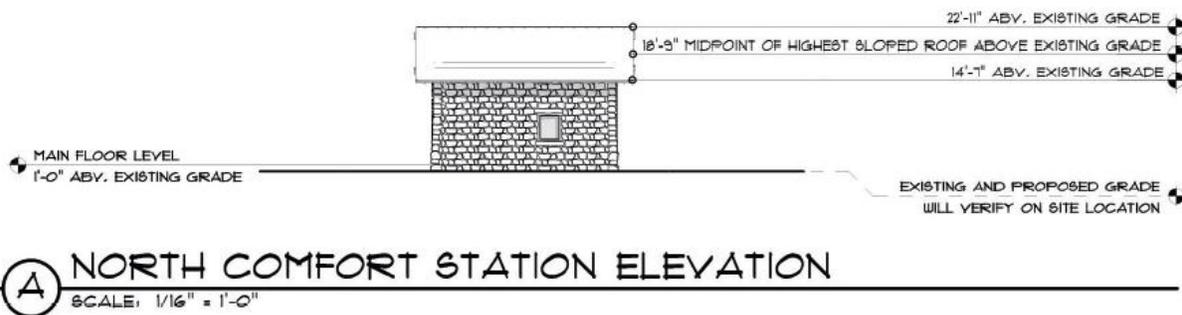
The small Pavilion is located close to the Main Clubhouse and is part of an Event Lawn. The Pavilion includes a small lounge area for changing rooms and restrooms. The Pavilion is designed to architecturally complement the other buildings in the club house portion of the project in terms of style and construction materials. The dimension to the midpoint of the highest sloped roof is 15'1".



Example elevation and floor plan for Pavilion (refer to architecture sheets in plan submittal for all elevations and full size plans)

Golf Course Buildings

The golf course will include two (2) restroom (comfort station) buildings. One restroom building will be placed on each side of Poinsettia Road. These buildings are intended to provide convenience to golf course patrons while playing the holes. The restroom buildings are designed to complement the architectural style and form of the main clubhouse buildings; similar materials are echoed through the project. The dimension to the midpoint of the highest sloped roof is 18'9".



Example elevation for restroom buildings (refer to architecture sheets in plan submittal for all elevations and full size plans)

Signage at Entry

Signage is planned to include the same architectural and material themes found on the proposed buildings. Signs will comply with Town of Belleair standards and will be designed and permitted as part of the construction plan / building permit phases of the project. The applicant will commit to signage designs that incorporate the same quality of materials, colors, and styles as proposed on the project buildings.

Wall and Fence Around Parking Lot

A wall and fence combination is proposed around the parking lot. The intent is to create a visually pleasing entry feature by using a combination of solid brick and wrought iron as depicted on the site plan. The wall will also, in conjunction with a Type-A landscape buffer, create a screen for the parking lot from the surrounding neighborhood. The height of the proposed wall will conform to the height standards outlined in the Town code. The location of the proposed wall is just on the edge of the 15 foot Type-A or Type-B landscape buffer (depending on type of frontage road) and is driven by the need to maximize the area available for the parking lot. This proposed wall location on the edge of the 15 foot landscape buffer is inside the designated "no structure" setback area which is stipulated as 25 feet. Thus, the applicant is requesting a variance to Section 74-287(e) prohibiting the placement of a wall in the front yard setback area and the primary front yard setback area of corner parcels. Refer to Variance Request #1 at the end of this document for the formal request.

Off Street Loading Zones

The proposed clubhouse has been designed to include one service entrance for the receiving of shipments, unloading of delivery vehicles, etc. This is a standard procedure for golf club operations. Delivery times will be closely coordinated by staff and the access to the service entrance will be closely monitored such that there are no conflicts with other neighborhood traffic. Thus, the applicant is requesting a variance for a reduction in the number of off-street loading zones required per Section 74-173 of the Town Code. Refer to Variance Request #2 at the end of this document for the formal request.

Summary

The following table summarizes some details of the proposed buildings. All other information related to conceptual building architecture can be found on the architecture sheets of the plan submittal.

| Building | Area | Midpoint of Highest Sloped Roof |
|--|-------------------|---------------------------------|
| Primary Clubhouse Building | 46,914 -sf | 32' |
| <i>Main Floor</i> | <i>20,185 -sf</i> | |
| <i>Second Floor</i> | <i>7,074 -sf</i> | |
| <i>Lower Level</i> | <i>19,655 -sf</i> | |
| Grill Room / Golf Shop | 5,257 -sf | 23'7" |
| Pavilion (Sitting Lounge) | 844-sf | 15'1" |
| Course Restrooms | 876-sf | 18'9" |
| <i>Restroom 1</i> | <i>438-sf</i> | |
| <i>Restroom 2</i> | <i>438-sf</i> | |
| Total Building Area | 53,891-sf | |
| Proposed Floor Area Ratio (FAR) | 0.010 | |

PARKING

SUMMARY

The Pelican Golf Club redevelopment plan includes new parking facilities at the clubhouse portion of the project. The proposed plan includes 175 parking spaces provided in a surface parking lot and under the Main Clubhouse. The main parking lot has 145 spaces (including 9 ADA spaces), the side lot has 20 spaces, and an additional 10 spaces are located under the Main Clubhouse. A strict interpretation of the parking requirements in Section 74-172 of the Town code suggests a total of 392 parking spaces are needed (see table below for calculation). Thus the applicant is seeking a variance to reduce the amount of parking required. Refer to Variance Request #3 at the end of this document for the formal request. The following components of this section explain why the parking requirements stipulated in the code should not be applied literally to this project and why 175 spaces will be sufficient based on:

- the intent of on-site uses and their peak hours of operation
- a study of parking comparables at other similar golf course facilities
- the ability to utilize the body of the practice range for overflow parking as needed during occasional special events (another possible 236 spaces)

| Parking | Use | Standard | Number/Size | Required |
|---|---|---|--------------|------------|
| Sec. 74-172(a)16. | Golf Course | 6 per hole | 18 holes | 108 |
| Sec. 74-172(a)15. | Driving Range | 1 space per tee | 5 tees | 5 |
| Sec. 74-172(a)9. | Main Restaurant at Clubhouse* | 1 per 75 sf up to 6000 GFA then 1 per 55 sf over 6000 GFA | 6,352 sf | 86 |
| Sec. 74-172(a)9. | Grill Room at Golf Shop* | 1 per 75 sf up to 6000 GFA then 1 per 55 sf over 6000 GFA | 2,464 sf | 45 |
| Sec. 74-172(a)19. | Fitness Center | 1 per 150 sf GFA | 3,257 sf | 22 |
| Sec. 74-172(a)20. | Public Assembly / Conference Facility (non fixed seats) | 1 per 35 sf GFA | 4,091 sf | 117 |
| Sec. 74-172(e) ¹ | Special Parking (ADA) | §316.1955 F.S | 401-500 | 9 |
| | | | Total | 392 |
| *Requirement calculated based on 8,816 sf TOTAL of restaurant | | | | |
| <i>Gross Square Footage per Revised Architectural Plans</i> | | | | |
| Restaurants (areas in sf) | | | | |
| Main Building | Lower Level | <i>Kitchen and Prep Area</i> | 1,043 | |
| | Main Level | <i>Lounge + Bar</i> | 1,288 | |
| | | <i>Open Dining</i> | 1,602 | |
| | | <i>Kitchen</i> | 2,419 | 6,352 |
| Grill Room at Golf Shop | | <i>Dining (In and Out)</i> | 1,572 | |
| | | <i>Service Bar</i> | 227 | |
| | | <i>Kitchen</i> | 665 | 2,464 |
| | | | 8,816 | |
| Other (areas in sf) | | | | |
| | | <i>Event Space (assembly)</i> | 4,091 | |
| | Upper Level | <i>Fitness Center</i> | 3,257 | |

Onsite Uses and Peak Hours of Operations

The proposed buildings, and the corresponding uses in the proposed buildings such as grill room, restaurant, fitness center, driving range and pro shop, primarily exist to support the golf course operations. The proposed uses for the buildings are not typical “stand alone” uses; in fact, most of the proposed uses will be used by golfers on property who may visit the golf course, driving range, pro shop, grill room, and fitness center during one visit. Section 74-172 of the Town code only provides for “stand alone” uses, but there should be a mechanism to allow for the sharing of parking between several uses on one property.

Further, some brief details about how the various uses will be operated:

- Golf course tee times are expected to be 10 minute to 12 minute intervals; thus it is programmed that only 1 group will be on a hole at a time (corresponding to 4 cars / hole)
- The restaurant in the main clubhouse will be closed during lunch hours; thus, peak time at the restaurant (evening / night) will predominantly correspond with the golf course being closed.
- The main use for the grill room will be to serve food to golfers already on site to play golf; it is not intended that this space will be marketed as a separate destination. Also, it is expected that the Grill will operate from 8 AM to 4 PM and thus will not provide dinner service.
- The pro shop will act as the main point of check-in and check-out for golfers who are already on site to play golf and thus additional spaces are also not needed solely for the pro shop.
- The driving range will primarily support golfers and it will not be marketed to attract golfers only interested in practicing
- The intent for the meeting space is that it will be operated as a convertible type space that could be divided into 3 small rooms, 2 slightly larger rooms or 1 large room. It will be used for various types and sizes of meetings or parties held by professional associations, private functions, family events, etc. that are by invitation only. These events will happen on an irregular schedule and are not expected to occur on a daily basis. At peak times, the applicant is prepared to provide overflow parking as necessary on the body of the driving range.

The following table depicts how it is expected that each element will be used during an average day.

| Expected Parking During Average Day Based on Operations | | | | | | | | |
|---|----------------------------------|----------------------|--------------------------------|-----------------------|------------------------------|--------------------------------|--|---|
| | <i>Golf Course and Golf Shop</i> | <i>Driving Range</i> | <i>Grill Room at Golf Shop</i> | <i>Fitness Center</i> | <i>Restaurant and Lounge</i> | <i>Clubhouse Meeting Rooms</i> | <i>Projected Number of Spaces Used</i> | <i>Projected Number of Spaces Available (not including 9 ADA)</i> |
| 6 AM - 7 AM | 10 | 0 | 0 | 22 | 0 | 0 | 32 | 134 |
| 7 AM - 8 AM | 30 | 0 | 5 | 22 | 0 | 0 | 57 | 109 |
| 8 AM - 9 AM | 45 | 3 | 5 | 22 | 0 | 0 | 75 | 91 |
| 9 AM - 10 AM | 72 | 3 | 5 | 22 | 0 | 0 | 102 | 64 |
| 10 AM - 11 AM | 72 | 5 | 5 | 12 | 0 | 0 | 94 | 72 |
| 11 AM - 12 PM | 72 | 5 | 5 | 12 | 0 | 0 | 94 | 72 |
| 12 PM - 1 PM | 72 | 5 | 10 | 12 | 0 | 0 | 99 | 67 |
| 1 PM - 2 PM | 72 | 5 | 10 | 12 | 0 | 0 | 99 | 67 |
| 2 PM - 3 PM | 72 | 5 | 5 | 7 | 0 | 0 | 89 | 77 |
| 3 PM - 4 PM | 50 | 5 | 5 | 7 | 0 | 0 | 67 | 99 |
| 4 PM - 5 PM | 20 | 5 | 0 | 22 | 0 | 0 | 47 | 119 |
| 5 PM - 6 PM | 15 | 0 | 0 | 22 | 40 | 0 | 77 | 89 |
| 6 PM - 7 PM | 10 | 0 | 0 | 10 | 86 | 0 | 106 | 60 |
| 7 PM - 8 PM | 5 | 0 | 0 | 3 | 86 | 0 | 94 | 72 |
| 8 PM - 9 PM | 0 | 0 | 0 | 2 | 86 | 0 | 88 | 78 |
| 9 PM - 10 PM | 0 | 0 | 0 | 2 | 50 | 0 | 52 | 114 |
| Assumptions | | | | | | | | |
| 1. 166 Total Parking Spaces (Not Including 9 ADA Spaces) | | | | | | | | |
| 2. Peak Golf Course Use is 9 AM - 3 PM; Golf Course Parking Peaks at 4 Cars / Hole = 72 Total Spaces | | | | | | | | |
| 3. Driving Range Hours of Operation are 8 AM - 5 PM with Peak Between 10 AM - 5 PM; Parking Peaks at 5 Spaces per Town Code | | | | | | | | |
| 4. Golf Shop Hours of Operation are 8 AM - 6 PM and ONLY Used by Golfers | | | | | | | | |
| 5. Grill Room at Golf Shop Hours of Operation are 8 AM - 4 PM and ONLY Used by Golfers Except for Small Group of Lunch Customers from 12 PM - 2 PM (10 Cars) | | | | | | | | |
| 6. Fitness Center Hours of Operation are 6 AM - 10 PM with Peak Uses from 6 AM - 10 AM and 4 PM - 6 PM; Fitness Center Parking Peaks at 22 Spaces per Town Code | | | | | | | | |
| 7. Restaurant and Lounge Hours of Operation are 5 PM - 10 PM with Peak Use from 6 PM - 9 PM; Parking Peaks at 86 Spaces per Town Code | | | | | | | | |

Since the meeting rooms will not be programmed to be used every day, this use was not addressed in the table above. But the table demonstrates that, between the hours of 9 AM – 5 PM, there is an adequate surplus of parking spaces available that will accommodate the occasional special events that will occur in the meeting rooms.

Comparables of Parking at Other Golf Courses

Literal interpretation of the provisions of this Code would treat each proposed use on the property as “stand alone” uses and would require 392 parking spaces. This amount of parking would be a tremendous outlier in the world of operating golf courses. To create a “real world” baseline for how other golf courses in the area operate, several local golf clubs were analyzed. These numbers are also consistent with national standards where 18 hole golf courses routinely operate at less than 200 parking spaces. As shown in the table depicted below, the 175 parking spaces proposed at Pelican Golf Club would be more than the average parking available at several local golf courses.

| Golf Course | Number of Holes | Estimated Number of Spaces |
|-------------------------------|------------------------|-----------------------------------|
| Bellair Country Club | 36 | 250 |
| Olde Memorial Golf Club | 18 | 197 |
| Westchase Golf Club | 18 | 194 |
| Avila Golf and Country Club | 18 | 140 |
| Cheval Golf and Athletic Club | 18 | 128 |
| TPC Tampa Bay | 18 | 214 |
| Average Per 18 Holes | | 143 |

Overflow Parking During Occasional Special Events

During extreme special events, the applicant has agreed to use the body of the practice range as a designated area for overflow parking if necessary. See below for a diagram showing 236 available overflow parking spaces. It is the intent that this overflow area will only be accessed by valet staff specifically trained in how the area should be used with regard to access and traffic flow. Also, as shown on the diagram, the overflow spaces have been carefully laid out to remain in higher areas and avoid elements such as possible low wet areas, greens, bunkers, etc. Further, if the overflow parking area is being used for car parking, the practice range will be closed to users and no golf cart traffic will be allowed in the area to eliminate potential conflicts between golf carts and cars.



Conclusion

It has been demonstrated that the hours of peak demand for parking associated with the different uses do not normally overlap and would not require 392 spaces on site as stipulated by the Town code. It has also been demonstrated that 175 parking spaces would be sufficient based on a comparable study of available parking at other golf clubs with similar programming in the area. Further, the applicant has identified an area for overflow parking that might be needed during occasional special events. Thus, the applicant's request for a reduction in the number of parking spaces required per the Town Code should be granted allowing for 175 on-site spaces. Refer to Variance Request #3 at the end of this document for the formal request.

LANDSCAPING

Summary

The applicant intends to preserve all vegetation along the project boundaries and adjacent to residential properties. Within the golf course property, trees have been proposed to be removed to allow for necessary construction activities. Removal of trees in some areas and cleaning up (pruning, removal of dead wood, etc.) of the remaining trees will create the foundation for the additional landscaping to be planted as shown on the Landscape Plans. The end result of the Landscaping Plan, both along the edges and within the golf course, is to have large trees and understory trees accented with pockets of colorful shrub-type plantings.

Within the property, the trees that are proposed to be removed are associated with various construction activities such as: grading for the new lake system, grading to improve drainage, removing of several open ditches (by adding pipe and grading), adjustments that will allow the new holes to better accommodate modern equipment, building of the new clubhouse, and a general widening of the most narrow of the existing golf corridors to create a more playable golf experience. It is the intent that all cleared trees will be chipped on site and reused on site as mulch. It is also important to note again that none of the perimeter trees between golf course and existing residences are proposed for removal.

The construction improvements associated with drainage and the new lake system are a critical part of the proposed work as the golf course currently has many areas that lack surface drainage, lack drainage pipe, or utilize open ditches that are unsightly and a hazard for golfers. Insufficient drainage can also cause tremendous daily challenges for the golf maintenance team and compromise their ability to maintain healthy turf.

The information shown on the Landscaping Plans in the plan submittal includes:

- detailed list of all trees identified for removal
- indication of which of the trees to be removed require mitigation as identified by the Town
- list of type, size, quantity, and species of material to be replanted
- location of material to be replanted

As outlined in the following “Details” section, the amount of proposed replanting does not meet the amount of proposed replanting suggested by the Town code. Thus, the applicant is requesting a variance to the replanting requirements stipulated in the Town code. Further information in support of the variance request can be found in this Landscaping section, while the specifics for the variance request can be found in Variance Request #4 at the end of this document.

With regard to buffer application, it is the intent that this project will be screened by vegetation as much as possible from adjacent roads and residences.

At the clubhouse area, Type-A and Type-B buffer requirements will be met as depicted on the plans. In addition, a continuous hedge and a combination wall of brick and wrought iron will be planted to surround the parking area to screen the view from the surrounding neighborhoods. Most of the internal landscaping that is located around the existing clubhouse building and within the existing parking areas will be removed; new landscaping will be placed around the new buildings, within courtyards, and within the new parking areas. The large trees on the edges of the clubhouse parcel will remain and they will be enhanced with understory plantings.

Regarding landscape buffer application on the golf course perimeter, the Type-A buffer or Type-B buffer will be met at critical interfaces where the golf course is currently exposed (little to no existing vegetation) to surrounding roads and houses, such as:

- Along Golf View Drive and Poinsettia Road
- Behind #1 Green and Behind #2 Green, for example

In areas along the remainder of the golf course perimeter where a buffer of mature trees and shrubs already exist, it is the intent that the existing vegetation will remain as is. Although there is very definitely an existing buffer of mature vegetation in these areas, they may not technically conform to the buffer requirements listed in the Town code. Thus, the applicant is requesting a variance to the buffer required along the perimeter of the golf course in areas where mature vegetation already exists. Refer to Variance Request #5 at the end of this document for the formal request.

Details of Tree Removal and Replanting

The tree survey performed for the entire site including the golf course area and clubhouse area counted 2,340 trees. The total number of trees proposed to be removed is 863 trees which corresponds to 13,248". This would still leave 1,477 mature trees on property. The table below provides an overview of some of the trees proposed to be removed. Thus, of the 863 trees proposed to be removed, 558 trees (65%) fall into the categories listed in the table below. A detailed list of the 863 trees (13,248") proposed to be removed was sent to the Town and the Town (Ricky Allison) has designated that 5,281" must be mitigated. This list, along with the designations, can be found on the Tree Removal Plans in the plan submittal.

| | Number of Trees |
|--|-----------------|
| Trees to be Removed Between Golf Holes and Adjacent Housing | 0 |
| Trees to be Removed to Accommodate Lake Expansion | 170 |
| Trees to be Removed to Accommodate Filling of Ditch Between Hole 10 Tees and 17 Green | 97 |
| Trees to be Removed to Accommodate New Hole 11 Green Location | 118 |
| Oleander Trees (hedge) to be Removed to Accommodate Creation of "Wider" Practice Range | 105 |
| Trees to be Removed that are Crape Myrtle, Bottle Brush, or Camphor; Considered to be Category 1 Invasive Species in Florida | 68 |
| | 558 |

The Landscape Plan demonstrates that 400 trees and 10,500 shrubs will be replanted throughout the golf course and clubhouse area. The 400 trees to be planted adds up to 2,239.5" of trees. The following table shows a breakdown of type and size of the 400 trees to be planted. The 10,500 shrubs will be planted over a 3.9 acre area. The exact locations of the trees and shrubs are shown on the Landscape Plans in the plan submittal.

| Type of Tree | Common Name | Caliper | Number of Trees | Inches |
|---|-------------------|-----------------|-----------------|-----------------|
| <i>Quercus virginiana</i> | Live Oak | 18"+ | 20 | 360.00 |
| | | 9"-10" | 29 | 275.50 |
| | | 6" | 81 | 486.00 |
| | | Subtotal | 130 | |
| <i>Acer Rubrem- Florida Flame (Improved Fall Color)</i> | Red Maple | 3" | 50 | 150.00 |
| | | Subtotal | 50 | |
| <i>Pinus Ellioti "Densa"</i> | Densa Pine | 6" | 64 | 384.00 |
| | | 4" | 66 | 264.00 |
| | | Subtotal | 130 | |
| <i>Magnolia grandiflora</i> | Southern Magnolia | 6" | 30 | 180.00 |
| | | Subtotal | 30 | |
| <i>Holly (Dahoon / Eagleston)</i> | Holly | 3" | 20 | 60.00 |
| | | Subtotal | 20 | |
| <i>Bottle Brush</i> | | 2" | 20 | 40.00 |
| | | Subtotal | 20 | |
| <i>Crape Myrtle</i> | | 2" | 20 | 40.00 |
| | | Subtotal | 20 | |
| | | TOTAL | 400 | 2,239.50 |

The scope of the proposed replanting also includes installation of underground irrigation for watering of the planted materials, staking of trees / plants as necessary for support, and mulching of the landscaped areas.

Conclusion

The size and scale of this approximately 135 acre property make a strict application of the replanting requirements in the code challenging. Even after the removal of the proposed 863 trees, there will be 1,477 mature trees remaining. Then, an additional 400 trees and 10,500 shrubs will be replanted. From a big picture perspective, the end result will still be a large green space (the golf course) containing a large amount of mature trees and vegetation.

The applicant has also committed a significant amount of resources to the irrigating, planting, and mulching of the items shown on the Landscaping Plan. Additional requirements imposed on landscaping could put an undue financial burden on the project.

Further, a major intent of the golf course redevelopment is to recapture the playability and strategy elements found in the original Donald Ross design. The fundamental drivers of these elements are width and play space. There has been almost 100 years of tree growth (with minimal removal through the years as seen from periodic aerial photos) on the site since original construction and thus some tree removal is necessary to reestablish corridors more like the original corridors.

Given the scale of this property, the significant resources associated with the proposed Landscaping Plan as is, and the intent to recapture some of the original corridor widths in the manner of Ross, the applicant requests a variance to the tree replacement conditions stipulated in Section 74-383(b)(1), Section 74-383(b)(2), and Section 74-383(b)(3) allowing the project to proceed with the tree removal and replanting detailed above and indicated on the plans. See Variance Request #4 for the formal request.

Regarding the perimeter landscape buffer requirements, the Landscape Plans demonstrate that the Type-A buffer or Type-B buffer will be achieved around the perimeter of the Clubhouse parcel and areas of the

golf course perimeter that are currently exposed to surrounding elements (such as along Golf View Drive, Poinsettia Road, behind #1 green, and behind #2 green to name a few). The remainder of the golf course perimeter has large trees and shrubs which already effectively serve the purpose of creating a buffer. Further, as pointed out by the Town in previous correspondence, it may not be “practical or feasible” to create the required buffer around the entire perimeter of the golf course. For these reasons, the applicant requests a variance to the buffer requirements set forth in Section 74-232(b). See Variance Request #5 for the formal request.

STORMWATER SUMMARY

Existing Condition

The Pelican Golf Club is located on the upper limit of the Belleair Creek / Rattlesnake Creek basin. Stormwater runoff generally sheet flows from south to north to the existing depressed areas within the golf course and eventually discharges to the existing ponds and ditches.

There are seven existing ponds within the project limits; four of them are located south of Poinsettia Road and the other three are on the north side. The four existing ponds that are located south of the Poinsettia Road are interconnected by an open conveyance system; which discharges to the north via a closed conveyance system across the Poinsettia Road (between the residential properties).

Proposed Condition

The proposed stormwater facilities including collection, conveyance and storage facilities mimics the existing condition. There are seven proposed ponds which are located in the same general locations as what exists.

The stormwater runoff from the proposed club house and the parking area will be collected and conveyed to Pond D for treatment and attenuation. The hydrology and hydraulic for existing and proposed conditions are modeled in ICPR to ensure the proposed project would not have any adverse impact on the adjacent properties.

Southwest Florida Water Management District criteria is used to analyze the hydrology and hydraulics for the existing and proposed conditions. The project site is located with an open drainage basin. Therefore, the 25-year storm event proposed construction flow rate will be equal to or less than the existing condition.

The following drainage criteria and assumptions were used in the development of the drainage design:

- > Curve Number Calculation:
 - Based on SCS "Urban Hydrology for Small Watersheds"
 - (TR-55) Table 2.2a.
- > Pipe Materials:
 - Pipe material is optional however, the maximum Manning's "N" Coefficient of the pipe is 0.012
- > Minimum Time of Concentration, $T_c=10$ minutes.

The stormwater analyses are included in Appendix A.

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for Pinellas County and Incorporated Areas Panel 12103C0116H show that the project area is above the 100-year flood elevation. Therefore the proposed project will have no floodplain impact. The plan sheets include detailed design relating to stormwater management.

CULTURAL AND WELLHEAD SUMMARY

The project includes a cultural resource and wellhead analysis. This analysis is displayed on separate plan sheets. The project is expected to have no impact on these existing features in and around the projects.

Cultural Resources

There are several Florida Master Site File of Historical Resources and Locally Designated Resources within a 1,000-ft buffer from the project. These historic features/structures are depicted on the Locally Designated Resources sheet; all are located within the surrounding neighborhoods. The proposed uses, structures, and site modifications are expected to have no negative impacts on these resources.

Wellhead Protection

There are several wells within a 1,000-ft buffer from the project. These wells are depicted on the Wellhead Protect Area plan sheets. The project is not expected to negatively impact any existing wells located on adjacent properties. The site includes an existing and replacement well located within the golf course portion of the project.

The existing well will be abandoned in accordance with all applicable SWFWMD regulations. The proposed replacement well will replace the existing deep well and will be constructed into the Floridian aquifer, same as the existing well. The replacement well will be located within 300 ft. of the existing well and located centrally and internally within the Pelican Golf Club boundary. There will be no direct connection to the surficial aquifer or water table. Also, a revised reclaimed water agreement is being negotiated which will allow the Town to supply two hundred ninety thousand (290,000) gallons of reclaimed water per day to the Pelican Golf Club or more to the extent larger quantities are available. Further analysis and design detail will be provided as part of the construction plan/building permit phase of the project.

VARIANCE REQUEST #1: Request for Variance to Location of Fence and Fence Walls, pursuant to Section 74-287(e) of Town Code.

JUSTIFICATIONS (per Section 66-253(b)(1) of Town Code):

1. Special conditions and circumstances exist which are peculiar to the land, structure or buildings involved.

The applicant would like to create an aesthetic wall feature that would act as an entry statement for the golf course clubhouse and, in combination with the proposed landscaping buffer along the wall, create visual and physical separation between the parking lot and surrounding neighborhood. The intent is that the wall structure would be a combination of solid brick and wrought iron as depicted on the plan. To maximize the size of the parking lot, it is necessary to push the wall toward the outer perimeter of the clubhouse parcel as much as possible. Thus, the proposed wall location is on the edge of the 15 foot landscape buffer (from property line) and is inside the designated “no structure” setback area which is stipulated as 25 feet from property line. It is important to note that the proposed parking lot edge has moved away from Indian Rocks Road as compared to the existing parking lot edge which is approximately only 10 feet from the property line and does not allow enough room for the 15 foot landscape buffer as stipulated by Town code. Thus, although the proposed wall location requires a variance, there will be room for the required landscape buffer that does not currently exist.

2. The special conditions and circumstances do not result from actions of the applicant.

The need for the proposed wall location is a function of trying to maximize the size of the parking lot which has been driven by the applicant’s attempt to meet the Town’s parking code. Further, the proposed location of the wall will still allow the required 15’ landscape buffer to be achieved which “fixes” the current parking lot layout’s inability to have the required landscape buffer.

3. Literal interpretation of the provisions of this Code would work unnecessary and undue hardship on the applicant.

Literal interpretation of the provisions of this Code would reduce the amount of parking spaces on the site and/or reduce the amount of space available for the greenspace (golf course).

4. The variance, if granted, is the minimum variance that will make possible the reasonable use of the land, structure or building.

The applicant understands the importance of the need for a 15 foot landscaping buffer and thus it was not considered to propose a wall within the landscape buffer. The variance requested is the absolute minimum needed in order to create a functional and aesthetically pleasing entry sequence for the proposed project.

5. A grant of variance will be in harmony with the general intent and purpose of this Code, and that such variance will not be injurious to the zoning district involved or otherwise detrimental to the public interest.

The intent of the code is to allow reasonable and appropriate development with the Town and the granting of this variance will not be injurious to the zoning district or otherwise detrimental to the public interest. The end result of this wall will be an aesthetically pleasing wall and landscaping combination.

6. A grant of variance will not result in any land use not specifically provided for in the schedule of district regulations (section 74-82 of this Code) for the zoning district in which the property is located.

The granting of this variance will not result in any adverse land use.

Please refer to the letter at end of this section authorizing the applicant to submit variance requests.



TOWN OF BELLEAIR
901 Ponce de Leon Blvd.
Belleair, Florida 33756-1096
Phone: (727) 588-3769 ext. 215
Fax: (727) 588-3768

DATE January 10, 2017

To the Town Commission of the Town of Belleair, Florida

1. The undersigned, Dan Doyle, Jr., owner of Lot*
Block* _____, Subdivision Refer to Legal Description or Plat/Block/Block/Block Survey prepared by FDC after 11.22.10, property
Commission of the Town of Belleair for a variance on the above-described property.
2. The property is presently zoned Golf Course.
3. The present land use on the property is Recreation / Open Space.
4. The decision involves Article III Section 74-173(C) of the Belleair Land
Development Code.
5. The Commissions power arises under Article V, Section 66.253 of the Belleair Land Development
Code.
6. The Relief prayed by the applicant is: Permission to decrease the number of loading spaces provided
from 2 spaces to 1.
7. The Justification for the request is (requests for the variances must demonstrate the practical
difficulty or unnecessary hardship which justifies the variance): The applicant provides an adequate amount
of loading space for the uses on the site that have the need. Any additional loading spaces would decrease the parking area.
Refer to Variance Request #2 for further details.
8. Attached is a non-refundable fee to defray expenses incurred by the Town of Belleair in processing
this application (** Note: All costs incurred by the Town of Belleair, above and beyond the
variance application fee, will be the responsibility of the applicant regardless of approval or denial
of the request**)
9. I am aware that this request will be voided should I or my representative fail to appear at the public
hearings scheduled to consider this request.
10. I am aware that any variance that may be granted will automatically expire twelve months after
approval by the Town Commission unless a building permit is produced from the Town with
respect to the improvements contemplated by this application for variance within said twelve
month period unless the construction of said improvements is promptly commenced pursuant to
the building permit and diligently pursued to completion thereafter.

FEE: \$300.00

Paid: _____

Dan Doyle, Jr.
Owner
c/o Tom Nash, PO Box 1669, Clearwater, FL 33756
Address
727-441-8966
Telephone Number

VARIANCE REQUEST #2: Request for Variance a reduction in the number of off-street loading zones required per Section 74-173 of the Town Code.

JUSTIFICATIONS (per Section 66-253(b)(1) of Town Code):

1. Special conditions and circumstances exist which are peculiar to the land, structure or buildings involved.

Strict application of the code would suggest that 16,164 SF (same total area used for calculation of required parking spaces) of the clubhouse area would generate the need for two loading zones per 74-173(b)(3). Of that total 16,164 SF, the Restaurant at the Clubhouse (6,352 SF) and the Grill Room at the Golf Shop (2,464 SF) are the main uses that will be requiring loading space. Together these uses total 8,816 SF; thus per Section 74-173(3), the applicant requests that only 1 loading space be required for the first 5,000 SF and then no more be required as there is not an additional 10,000 SF of space.

2. The special conditions and circumstances do not result from actions of the applicant.

The proposed uses for the new project will not materially change from the existing uses on the property. The existing uses include a golf course with pro shop, restaurant and meeting space and the site is currently served adequately by 1 loading zone.

3. Literal interpretation of the provisions of this Code would work unnecessary and undue hardship on the applicant.

Literal interpretation of the provisions of the Code would require 2 loading zones based on the total square footage of the buildings on site (16,164 sf). If 2 spaces were to be used, there would be a decrease in the number of on-site parking stalls that could be provided and there would be an inordinate amount of space for this type of project dedicated to loading zones.

4. The variance, if granted, is the minimum variance that will make possible the reasonable use of the land, structure or building.

This request is the minimum variance and will provide adequate loading access for the site. On occasion when there is an event that would require more than one delivery truck at a time, staff will coordinate deliveries to eliminate potential conflicts in the side parking lot.

5. A grant of variance will be in harmony with the general intent and purpose of this Code, and that such variance will not be injurious to the zoning district involved or otherwise detrimental to the public interest.

The granting of this variance will not be injurious to the GC, Golf Course zoning district or otherwise detrimental to the public interest. In fact, by only having 1 loading zone, the number of trucks going in and out of the surrounding residential area will be reduced thus serving the public interest.

6. A grant of variance will not result in any land use not specifically provided for in the schedule of district regulations (section 74-82 of this Code) for the zoning district in which the property is located.

Granting this variance will not result in any land use not specifically provided for with the GC, Golf Course District as stated in Section 74-82 of the Town Code. A loading zone is a necessary facility for this use and is a permitted use in the district.

Please refer to the letter at end of this section authorizing the applicant to submit variance requests.



TOWN OF BELLEAIR
901 Ponce de Leon Blvd.
Belleair, Florida 33756-1096
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Fax: (727) 588-3768

DATE January 10, 2017

To the Town Commission of the Town of Belleair, Florida

1. The undersigned, Dan Doyle, Jr., owner of Lot # _____, Block _____, Subdivision None to Legal Description or the attached Boundary Survey prepared by FDC estate 11.22.16, property Commission of the Town of Belleair for a variance on the above-described property.
2. The property is presently zoned Golf Course.
3. The present land use on the property is Recreation / Open Space.
4. The decision involves Article III Section 74-172(g) of the Belleair Land Development Code.
5. The Commissions power arises under Article V, Section 66.253 of the Belleair Land Development Code.
6. The Relief prayed by the applicant is: Request permission for reduction for mixed or joint use of parking spaces.
7. The Justification for the request is (requests for the variances must demonstrate the practical difficulty or unnecessary hardship which justifies the variance): The proposed uses & the proposed buildings that comprise the clubhouse are not "stand alone" uses. Refer to the expected peak parking hours data included in the Project Narrative and Variance Request #3 for more information.
8. Attached is a non-refundable fee to defray expenses incurred by the Town of Belleair in processing this application (** Note: All costs incurred by the Town of Belleair, above and beyond the variance application fee, will be the responsibility of the applicant regardless of approval or denial of the request**)
9. I am aware that this request will be voided should I or my representative fail to appear at the public hearings scheduled to consider this request.
10. I am aware that any variance that may be granted will automatically expire twelve months after approval by the Town Commission unless a building permit is produced from the Town with respect to the improvements contemplated by this application for variance within said twelve month period unless the construction of said improvements is promptly commenced pursuant to the building permit and diligently pursued to completion thereafter.

FEE: \$300.00

Paid: _____

Dan Doyle, Jr.
Owner
c/o Tom Nash, PO Box 1669, Clearwater, FL 33756
Address
727-441-8966
Telephone Number

VARIANCE REQUEST #3: Request for Reduction for Mixed or Joint Use of Parking Spaces, pursuant to Section 74-172(g) of Town Code.

JUSTIFICATIONS (per Section 66-253(b)(1) of Town Code):

1. Special conditions and circumstances exist which are peculiar to the land, structure or buildings involved.

Most of the proposed uses for this project such as golf course, driving range, grill room, pro shop, restaurant, and fitness center, exist to support the golf course operations. The proposed uses for the buildings are not typical “stand alone” uses; in fact, most of the proposed uses will be shared via golfers on property who may use the golf course, grill room, fitness center, and pro shop during one visit. Application of Section 74-172 of the Town code only provides for “stand alone” uses, but there should be a mechanism to allow for the sharing of parking between several uses on one property. The “Expected Parking” table shows the peak times of operations and the corresponding parking needs to demonstrate the overlapping users.

2. The special conditions and circumstances do not result from actions of the applicant.

The proposed uses for the new project will not materially change from the existing uses on the property. The existing uses include a golf course with pro shop, restaurant and meeting space. The existing parking lot contains 140 parking spaces and 2 ADA spaces and adequately serves the current uses.

3. Literal interpretation of the provisions of this Code would work unnecessary and undue hardship on the applicant.

Literal interpretation of the provisions of this Code would create an unnecessary and undue hardship on the applicant because the size of the clubhouse parcel and the desire to preserve green space make the required parking impossible to accomplish. Literal interpretation of the provisions of this Code treating each proposed use on the property as “stand alone” uses unnecessarily triggers a requirement of 392 parking spaces. This amount of parking would be a tremendous outlier in the world of operating golf courses and is inconsistent with the parking code requirements of other communities with golf course developments. Other comparable 18 hole golf courses in the same region routinely operate at less than 200 parking spaces as demonstrated in the table that lists several local golf courses.

4. The variance, if granted, is the minimum variance that will make possible the reasonable use of the land, structure or building.

Every possible alternative to maximize parking on the site has been considered. The applicant has also agreed to use the body of the Practice Range as a designated area for overflow parking during extreme special events. So all parking needs for operation, even during special events, will be accommodated on site. The variance requested is the absolute minimum needed in order to complete the development.

5. A grant of variance will be in harmony with the general intent and purpose of this Code, and that such variance will not be injurious to the zoning district involved or otherwise detrimental to the public interest.

The intent of the code is to allow reasonable and appropriate development with the Town and the granting of this variance will not be injurious to the zoning district or otherwise detrimental to the public interest.

6. A grant of variance will not result in any land use not specifically provided for in the schedule of district regulations (section 74-82 of this Code) for the zoning district in which the property is located.

The granting of this variance will not result in any adverse land use

Please refer to the letter at end of this section authorizing the applicant to submit variance requests.



TOWN OF BELLEAIR
901 Ponce de Leon Blvd.
Belleair, Florida 33756-1096
Phone: (727) 588-3769 ext. 215
Fax: (727) 588-3768

DATE January 10, 2017

To the Town Commission of the Town of Belleair, Florida

1. The undersigned, Dan Doyle, Jr., owner of Lot*
Block* _____, Subdivision Water & Land Developer of the Pelican Barracks Subdivision prepared by FDC order 11.22.16, property
Commission of the Town of Belleair for a variance on the above-described property.
2. The property is presently zoned Golf Course.
3. The present land use on the property is Recreation / Open Space.
4. The decision involves Article VI Section 74-383(b) of the Belleair Land
Development Code.
5. The Commissions power arises under Article V, Section 66.253 of the Belleair Land Development
Code.
6. The Relief prayed by the applicant is: Request for permission to replant trees as described in Project Narrative and as shown
on Landscape Plans. Refer to Variance Request #4 for further details.
7. The Justification for the request is (requests for the variances must demonstrate the practical
difficulty or unnecessary hardship which justifies the variance): Literal interpretation of the provisions of this Code would
require the applicant to plant 5,281' worth of trees (amount of trees to be mitigated as designated by the Town). This could correspond to more than 1,000 trees to be
replanted which would not be feasible.
8. Attached is a non-refundable fee to defray expenses incurred by the Town of Belleair in processing
this application (** Note: All costs incurred by the Town of Belleair, above and beyond the
variance application fee, will be the responsibility of the applicant regardless of approval or denial
of the request**)
9. I am aware that this request will be voided should I or my representative fail to appear at the public
hearings scheduled to consider this request.
10. I am aware that any variance that may be granted will automatically expire twelve months after
approval by the Town Commission unless a building permit is produced from the Town with
respect to the improvements contemplated by this application for variance within said twelve
month period unless the construction of said improvements is promptly commenced pursuant to
the building permit and diligently pursued to completion thereafter.

FEE: \$300.00

Paid: _____

Dan Doyle, Jr.
Owner
c/o Tom Nash, PO Box 1669, Clearwater, FL 33756
Address
727-441-8966
Telephone Number

VARIANCE REQUEST #4: Request for Variance to Tree Replacement pursuant to Section 74-383(b)(1), Section 74-383(b)(2), and Section 74-383(b)(3)

JUSTIFICATIONS (per Section 66-253(b)(1) of Town Code):

1. Special conditions and circumstances exist which are peculiar to the land, structure or buildings involved.

The Town code governing tree replacement is difficult to apply literally to a project of this scale: a 135 acre golf course. The original Donald Ross design made use of a relatively wide-open site where there was plenty of width or play space for golfers. Decades of minimal tree removal (documented by aerial photos through the years) have caused the present condition of the golf course to become overgrown throughout the interior of the property. Also, there are significant issues with failing infrastructure on the site such as drainage and lake storage. Fixing these issues require clearing of trees in some areas and regrading. Finally, the intent of the Landscape Plans demonstrates that, even with the proposed tree clearing, the applicant has committed significant resources to creating an end result of large specimen trees accented by pockets of colorful shrub-type plantings on the “inside” of the property and a buffer of mature trees along the perimeter of the property.

2. The special conditions and circumstances do not result from actions of the applicant.

The applicant is taking over a golf course that has several elements of deferred maintenance including the overgrown condition of the trees and drainage challenges. The applicant is committed to the enhancement of the beauty of the golf course in general as depicted by the replanting shown on the Landscape Plans.

3. Literal interpretation of the provisions of this Code would work unnecessary and undue hardship on the applicant.

Literal interpretation of the provisions of this Code would require the applicant to plant 5,281” worth of trees (amount of trees to be mitigated as designated by the Town). This could correspond to more than 1,000 trees to be replanted which would not be financially feasible.

4. The variance, if granted, is the minimum variance that will make possible the reasonable use of the land, structure or building.

The proposed removal of trees is necessary to improve the overall presentation of the golf course (reduce the “overgrown” feel and fix drainage / infrastructure issues). The applicant has committed substantial resources to the execution of a thorough Landscape Plan that will further enhance the beauty of the golf course as a greenspace.

5. A grant of variance will be in harmony with the general intent and purpose of this Code, and that such variance will not be injurious to the zoning district involved or otherwise detrimental to the public interest.

The intent of the code is to allow reasonable and appropriate development with the Town and the granting of this variance will not be injurious to the zoning district or otherwise detrimental to the public interest.

6. A grant of variance will not result in any land use not specifically provided for in the schedule of district regulations (section 74-82 of this Code) for the zoning district in which the property is located.

The granting of this variance will not result in any adverse land use.

Please refer to the letter at end of this section authorizing the applicant to submit variance requests.



TOWN OF BELLEAIR
901 Ponce de Leon Blvd.
Belleair, Florida 33756-1096
Phone: (727) 588-3769 ext. 215
Fax: (727) 588-3768

DATE January 10, 2017

To the Town Commission of the Town of Belleair, Florida

1. The undersigned, Dan Doyle, Jr., owner of Lot # _____, Block _____, Subdivision None to Legal Description or the attached Boundary Survey prepared by FDC estate 11.22.16, property Commission of the Town of Belleair for a variance on the above-described property.
2. The property is presently zoned Golf Course.
3. The present land use on the property is Recreation / Open Space.
4. The decision involves Article III Section 74-232(b) of the Belleair Land Development Code.
5. The Commissions power arises under Article V, Section 66.253 of the Belleair Land Development Code.
6. The Relief prayed by the applicant is: Request to utilize existing vegetation as the required buffer along the perimeter of the golf course. In areas along the perimeter that do not have existing vegetation, the required buffer will be achieved as shown on the Landscape Plans.
7. The Justification for the request is (requests for the variances must demonstrate the practical difficulty or unnecessary hardship which justifies the variance): The intent of the Type-A buffer is already achieved utilizing the existing vegetation. In addition, the ground disturbance activity required to plant new trees in the areas of existing trees may cause harm to the health of the existing trees.
8. Attached is a non-refundable fee to defray expenses incurred by the Town of Belleair in processing this application (** Note: All costs incurred by the Town of Belleair, above and beyond the variance application fee, will be the responsibility of the applicant regardless of approval or denial of the request**)
9. I am aware that this request will be voided should I or my representative fail to appear at the public hearings scheduled to consider this request.
10. I am aware that any variance that may be granted will automatically expire twelve months after approval by the Town Commission unless a building permit is produced from the Town with respect to the improvements contemplated by this application for variance within said twelve month period unless the construction of said improvements is promptly commenced pursuant to the building permit and diligently pursued to completion thereafter.

FEE: \$300.00

Paid: _____

Dan Doyle, Jr.
Owner
c/o Tom Nash, PO Box 1669, Clearwater, FL 33756
Address
727-441-8966
Telephone Number

VARIANCE REQUEST #5: Request for Variance to Required Landscaping in Buffer Zone of Golf Course, pursuant to Section 74-232(b)(4) of Town Code.

JUSTIFICATIONS (per Section 66-253(b)(1) of Town Code):

1. Special conditions and circumstances exist which are peculiar to the land, structure or buildings involved.

Around the Clubhouse parcel, the applicant has agreed to meet the standard required by the Type-A and or Type-B buffer. In areas of the golf course perimeter where there is little to no existing vegetation, the applicant has also agreed to meet the standard required by the Type-A and Type-B buffer. The variance request specifically pertains to the remaining golf course perimeter where existing groves of mature vegetation already exist. These large trees and shrubs already effectively meet the intent of the buffer requirements.

2. The special conditions and circumstances do not result from actions of the applicant.

The special condition is that there is already mature vegetation in place along most of the golf course perimeter that achieves the intent of the buffer requirements. The applicant intends to leave all trees and vegetation on the perimeter of the golf course. In fact, generally the intent of the Landscaping Plan is to create a visual and physical buffer between the golf course and surrounding uses.

3. Literal interpretation of the provisions of this Code would work unnecessary and undue hardship on the applicant.

Literal interpretation of the provisions of this Code would require the applicant to attempt to plant trees in the many areas along the golf course perimeter that already have large trees. This type of ground disturbance activity in groves of mature trees could jeopardize the health of the existing trees. There would also be survivability concerns for any new, smaller trees planted in the canopies of the mature groves of trees as competition for sunlight would be a challenge.

4. The variance, if granted, is the minimum variance that will make possible the reasonable use of the land, structure or building.

The Landscape Plans demonstrate that the applicant is meeting the intent of the landscape buffer on all perimeters of the property.

5. A grant of variance will be in harmony with the general intent and purpose of this Code, and that such variance will not be injurious to the zoning district involved or otherwise detrimental to the public interest.

The intent of the code is to allow reasonable and appropriate development with the Town and the granting of this variance will not be injurious to the zoning district or otherwise detrimental to the public interest.

6. A grant of variance will not result in any land use not specifically provided for in the schedule of district regulations (section 74-82 of this Code) for the zoning district in which the property is located.

The granting of this variance will not result in any adverse land use.

Letter of Authorization

MACFARLANE FERGUSON & McMULLEN

ATTORNEYS AND COUNSELORS AT LAW

ONE TAMPA CITY CENTER, SUITE 2000
201 NORTH FRANKLIN STREET
P.O. BOX 1531 (ZIP 33601)
TAMPA, FLORIDA 33602
 (813) 273-4200 FAX (813) 273-4396

www.mfmlegal.com
EMAIL: info@mfmlegal.com

625 COURT STREET
P.O. BOX 1669 (ZIP 33757)
CLEARWATER, FLORIDA 33756
(727) 441-8966 FAX (727) 442-8470

IN REPLY REFER TO:

Clearwater

July 19, 2016

ATTN: Micah Maxwell
Town of Belleair
901 Ponce de Leon Boulevard
Belleair, FL 33756

RE: Tow of Belleair sale of 1501 Indian Rocks Road to Pelican Golf LLC and
Clubhouse Property (the "Property")

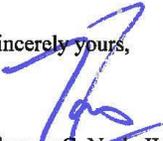
Dear Micah:

This letter is being sent to you in my capacity as counsel for Pelican Golf LLC as the purchaser of the above-referenced Property.

As you know pursuant to Purchaser's proposed development plans, a development application is scheduled to be filed next month. This is a unique situation since the applicant does not yet own the property. Therefore please allow this letter to serve as a formal request to your office and the Town Commission that Pelican Golf LLC be authorized to file the development application as the contract vendee, on behalf of the Town of Belleair, as the owner and contract vendor.

Thank you for your cooperation in this regard

Sincerely yours,


Thomas C. Nash, II

TCN:koh

HYDROLOGY & HYDRAULICS
ICPR Model

EXISTING CONDITION



EXISTING DRAINAGE BASIN DATA

| | | | |
|---|---|--------------------------------|---|
| <p>PROJECT NAME: Pelican Golf Club</p> <p>PROJECT NUMBER:</p> <p>COUNTY: Pinellas</p> <p>Date: December 2, 2016</p> | <p>LAND COVER</p> | <p>CN</p> | <p>CN Values from FDOT Hydrology Handbook (Table T-7)</p> |
| | <p>PAVEMENT</p> <p>GRASS</p> <p>WATER</p> | <p>98</p> <p>39</p> <p>100</p> | |

| BASIN | AREA (AC) | | | TOTAL AREA (AC) | WEIGHTED CN |
|-----------|-----------|-------|-------|-----------------|-------------|
| | PAVED | WATER | GRASS | | |
| Ex_B_BBGP | 2.20 | 1.00 | 6.39 | 9.59 | 58.9 |

J:\E2160\E2160208.00\doc\calcs\[Basin.xls]pondvol

| | |
|----------------------------|----------------------------------|
| Rainfall Amount(in): 0.000 | Time of Conc(min): 27.00 |
| Area(ac): 26.100 | Time Shift(hrs): 0.00 |
| Curve Number: 60.40 | Max Allowable Q(cfs): 999999.000 |
| DCIA(%): 0.00 | |

| | | |
|-----------------|------------------------------|----------------|
| Name: Ex_B_GVDN | Node: Ex_N-17 | Status: Onsite |
| Group: BASE | Type: SCS Unit Hydrograph CN | |

| | |
|----------------------------|----------------------------------|
| Unit Hydrograph: Uh256 | Peaking Factor: 256.0 |
| Rainfall File: | Storm Duration(hrs): 0.00 |
| Rainfall Amount(in): 0.000 | Time of Conc(min): 10.00 |
| Area(ac): 3.020 | Time Shift(hrs): 0.00 |
| Curve Number: 61.60 | Max Allowable Q(cfs): 999999.000 |
| DCIA(%): 0.00 | |

| | | |
|-----------------|------------------------------|----------------|
| Name: Ex_B_GVDS | Node: Ex_N-1 | Status: Onsite |
| Group: BASE | Type: SCS Unit Hydrograph CN | |

| | |
|----------------------------|----------------------------------|
| Unit Hydrograph: Uh256 | Peaking Factor: 256.0 |
| Rainfall File: | Storm Duration(hrs): 0.00 |
| Rainfall Amount(in): 0.000 | Time of Conc(min): 22.00 |
| Area(ac): 22.540 | Time Shift(hrs): 0.00 |
| Curve Number: 61.30 | Max Allowable Q(cfs): 999999.000 |
| DCIA(%): 0.00 | |

| | | |
|-----------------|------------------------------|----------------|
| Name: Ex_B_HiRd | Node: Ex_N-15 | Status: Onsite |
| Group: BASE | Type: SCS Unit Hydrograph CN | |

| | |
|----------------------------|----------------------------------|
| Unit Hydrograph: Uh256 | Peaking Factor: 256.0 |
| Rainfall File: | Storm Duration(hrs): 0.00 |
| Rainfall Amount(in): 0.000 | Time of Conc(min): 16.00 |
| Area(ac): 4.400 | Time Shift(hrs): 0.00 |
| Curve Number: 62.70 | Max Allowable Q(cfs): 999999.000 |
| DCIA(%): 0.00 | |

| | | |
|--------------|------------------------------|----------------|
| Name: Ex_B_K | Node: E_Outfall_Ditch | Status: Onsite |
| Group: BASE | Type: SCS Unit Hydrograph CN | |

| | |
|----------------------------|----------------------------------|
| Unit Hydrograph: Uh256 | Peaking Factor: 256.0 |
| Rainfall File: | Storm Duration(hrs): 0.00 |
| Rainfall Amount(in): 0.000 | Time of Conc(min): 12.00 |
| Area(ac): 2.310 | Time Shift(hrs): 0.00 |
| Curve Number: 41.90 | Max Allowable Q(cfs): 999999.000 |
| DCIA(%): 0.00 | |

| | | |
|------------------|------------------------------|----------------|
| Name: Ex_B_Maint | Node: Ex_Pond-F | Status: Onsite |
| Group: BASE | Type: SCS Unit Hydrograph CN | |

| | |
|----------------------------|----------------------------------|
| Unit Hydrograph: Uh256 | Peaking Factor: 256.0 |
| Rainfall File: | Storm Duration(hrs): 0.00 |
| Rainfall Amount(in): 0.000 | Time of Conc(min): 20.00 |
| Area(ac): 24.700 | Time Shift(hrs): 0.00 |
| Curve Number: 40.90 | Max Allowable Q(cfs): 999999.000 |
| DCIA(%): 0.00 | |

| | | |
|-----------------|------------------------------|----------------|
| Name: Ex_B_PoRd | Node: Ex_N-10 | Status: Onsite |
| Group: BASE | Type: SCS Unit Hydrograph CN | |

| | |
|----------------------------|----------------------------------|
| Unit Hydrograph: Uh256 | Peaking Factor: 256.0 |
| Rainfall File: | Storm Duration(hrs): 0.00 |
| Rainfall Amount(in): 0.000 | Time of Conc(min): 15.00 |
| Area(ac): 7.040 | Time Shift(hrs): 0.00 |
| Curve Number: 65.40 | Max Allowable Q(cfs): 999999.000 |
| DCIA(%): 0.00 | |

Name: Ex_B_PrRange Node: Ex_Pond-C Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

| | |
|----------------------------|----------------------------------|
| Unit Hydrograph: Uh256 | Peaking Factor: 256.0 |
| Rainfall File: | Storm Duration(hrs): 0.00 |
| Rainfall Amount(in): 0.000 | Time of Conc(min): 21.00 |
| Area(ac): 24.170 | Time Shift(hrs): 0.00 |
| Curve Number: 40.20 | Max Allowable Q(cfs): 999999.000 |
| DCIA(%): 0.00 | |

==== Nodes =====

Name: E_Outfall_Ditch Base Flow(cfs): 0.000 Init Stage(ft): 35.080
Group: BASE Warn Stage(ft): 42.000
Type: Stage/Area

Initial Stage = FL of the outfall pipe

| Stage(ft) | Area(ac) |
|-----------|----------|
| 35.000 | 0.0200 |
| 36.000 | 0.0600 |
| 37.000 | 0.0800 |
| 38.000 | 0.1100 |
| 39.000 | 0.1500 |
| 40.000 | 0.2000 |
| 41.000 | 0.2700 |
| 42.000 | 0.4400 |

Name: Ex-N-5 Base Flow(cfs): 0.000 Init Stage(ft): 38.020
Group: BASE Warn Stage(ft): 43.000
Type: Stage/Area

| Stage(ft) | Area(ac) |
|-----------|----------|
| 35.500 | 0.0010 |
| 37.000 | 0.0060 |
| 38.000 | 0.0500 |
| 39.000 | 0.0800 |
| 40.000 | 0.1100 |
| 41.000 | 0.1500 |
| 42.000 | 0.2700 |
| 43.000 | 0.7400 |

Name: Ex-N-1 Base Flow(cfs): 0.000 Init Stage(ft): 38.550
Group: BASE Warn Stage(ft): 46.000
Type: Stage/Area

| Stage(ft) | Area(ac) |
|-----------|----------|
| 38.550 | 0.0010 |
| 45.000 | 3.7200 |
| 46.000 | 12.6700 |

```

Name: Ex_N-10          Base Flow(cfs): 0.000      Init Stage(ft): 38.020
Group: BASE           Warn Stage(ft): 44.000
Type: Stage/Area
    
```

Initial Stage = Initial Stage of Downstream Pond

| Stage(ft) | Area(ac) |
|-----------|----------|
| 37.580 | 0.0010 |
| 42.620 | 0.0010 |
| 43.000 | 0.2100 |
| 44.000 | 1.0700 |

```

Name: Ex_N-11          Base Flow(cfs): 0.000      Init Stage(ft): 38.020
Group: BASE           Warn Stage(ft): 42.000
Type: Stage/Area
    
```

Initial Stage = Initial Stage of Downstream Pond

| Stage(ft) | Area(ac) |
|-----------|----------|
| 35.700 | 0.0010 |
| 37.000 | 0.0500 |
| 38.000 | 0.1100 |
| 39.000 | 0.1500 |
| 40.000 | 0.2000 |
| 41.000 | 0.4000 |
| 42.000 | 0.7000 |

```

Name: Ex_N-12          Base Flow(cfs): 0.000      Init Stage(ft): 39.430
Group: BASE           Warn Stage(ft): 46.000
Type: Stage/Area
    
```

| Stage(ft) | Area(ac) |
|-----------|----------|
| 39.430 | 0.0010 |
| 42.900 | 0.0010 |
| 43.000 | 0.1200 |
| 44.000 | 0.6200 |
| 45.000 | 1.3600 |
| 46.000 | 2.7100 |

```

Name: Ex_N-13          Base Flow(cfs): 0.000      Init Stage(ft): 38.020
Group: BASE           Warn Stage(ft): 42.000
Type: Stage/Area
    
```

Initial Stage = Initial Stage of Downstream Pond

| Stage(ft) | Area(ac) |
|-----------|----------|
| 36.000 | 0.0090 |
| 37.000 | 0.0500 |
| 38.000 | 0.1200 |
| 39.000 | 0.2000 |
| 40.000 | 0.3000 |
| 41.000 | 0.3500 |
| 42.000 | 0.4600 |

```

Name: Ex_N-15          Base Flow(cfs): 0.000      Init Stage(ft): 39.490
Group: BASE           Warn Stage(ft): 43.000
Type: Stage/Area
    
```

| Stage(ft) | Area(ac) |
|-----------|----------|
| 39.490 | 0.0010 |
| 42.000 | 0.2200 |

| | |
|--------|--------|
| 39.000 | 0.6600 |
| 40.000 | 0.7500 |
| 41.000 | 0.9800 |
| 42.000 | 1.2000 |

```
-----
Name: Ex_Pond-G          Base Flow(cfs): 0.000          Init Stage(ft): 38.020
Group: BASE              Warn Stage(ft): 42.000
Type: Stage/Area
```

| Stage(ft) | Area(ac) |
|-----------|----------|
| 28.000 | 0.0300 |
| 29.000 | 0.2200 |
| 30.000 | 0.6300 |
| 31.000 | 0.8900 |
| 32.000 | 1.1400 |
| 33.000 | 1.3100 |
| 34.000 | 1.4900 |
| 35.000 | 1.7000 |
| 36.000 | 1.9300 |
| 37.000 | 2.1700 |
| 38.000 | 2.3000 |
| 39.000 | 2.5000 |
| 40.000 | 3.1000 |
| 41.000 | 3.8300 |
| 42.000 | 4.4400 |

==== Cross Sections =====

```
Name: wier_lake_g          Group: BASE
Encroachment: No
```

| Station(ft) | Elevation(ft) | Manning's N |
|-------------|---------------|-------------|
| 0.000 | 42.000 | 0.020000 |
| 9.930 | 41.000 | 0.020000 |
| 67.250 | 40.000 | 0.020000 |
| 69.950 | 39.000 | 0.020000 |
| 70.770 | 38.020 | 0.020000 |
| 89.070 | 38.020 | 0.012000 |
| 90.160 | 39.000 | 0.020000 |
| 92.450 | 40.000 | 0.020000 |
| 135.730 | 41.000 | 0.020000 |
| 186.600 | 42.000 | 0.020000 |

==== Pipes =====

```
Name: Ex_P-1          From Node: Ex_N-1          Length(ft): 157.00
Group: BASE           To Node: Ex_Pond-A          Count: 1
                        Friction Equation: Automatic
                        Solution Algorithm: Most Restrictive
                        Flow: Both
UPSTREAM              DOWNSTREAM
Geometry: Circular   Circular
Span(in): 36.00      36.00
Rise(in): 36.00      36.00
Invert(ft): 38.550   38.060
Manning's N: 0.012000 0.012000
Top Clip(in): 0.000  0.000
Bot Clip(in): 0.000  0.000
Entrance Loss Coef: 0.00
Exit Loss Coef: 1.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dc
Stabilizer Option: None
```

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

RCP

Name: Ex_P-10 From Node: Ex_N-11 Length(ft): 21.00
Group: BASE To Node: Ex_Pond-G Count: 1
 UPSTREAM DOWNSTREAM Friction Equation: Automatic
Geometry: Horz Ellipse Horz Ellipse Solution Algorithm: Most Restrictive
Span(in): 72.00 72.00 Flow: Both
Rise(in): 44.00 44.00 Entrance Loss Coef: 0.00
Invert(ft): 35.700 35.600 Exit Loss Coef: 1.00
Manning's N: 0.012000 0.012000 Bend Loss Coef: 0.00
Top Clip(in): 0.000 0.000 Outlet Ctrl Spec: Use dc or tw
Bot Clip(in): 0.000 0.000 Inlet Ctrl Spec: Use dc
 Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

ECMP

Name: Ex_P-12 From Node: Ex_Pond-E Length(ft): 465.00
Group: BASE To Node: Ex_N-19 Count: 1
 UPSTREAM DOWNSTREAM Friction Equation: Automatic
Geometry: Circular Circular Solution Algorithm: Most Restrictive
Span(in): 24.00 24.00 Flow: Both
Rise(in): 24.00 24.00 Entrance Loss Coef: 0.00
Invert(ft): 42.970 39.460 Exit Loss Coef: 1.00
Manning's N: 0.012000 0.012000 Bend Loss Coef: 0.00
Top Clip(in): 0.000 0.000 Outlet Ctrl Spec: Use dc or tw
Bot Clip(in): 0.000 0.000 Inlet Ctrl Spec: Use dc
 Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

CPP

Name: Ex_P-13 From Node: Ex_N-19 Length(ft): 627.00
Group: BASE To Node: Ex_Pond-F Count: 1
 UPSTREAM DOWNSTREAM Friction Equation: Automatic
Geometry: Circular Circular Solution Algorithm: Most Restrictive
Span(in): 24.00 24.00 Flow: Both
Rise(in): 24.00 24.00 Entrance Loss Coef: 0.00
Invert(ft): 39.460 37.930 Exit Loss Coef: 1.00
Manning's N: 0.012000 0.012000 Bend Loss Coef: 0.00
Top Clip(in): 0.000 0.000 Outlet Ctrl Spec: Use dc or tw
Bot Clip(in): 0.000 0.000 Inlet Ctrl Spec: Use dc
 Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

CPP

Name: Ex_P-14 From Node: Ex_N-16 Length(ft): 41.00
Group: BASE To Node: Ex_Pond-F Count: 1

| | | | |
|---------------|----------|------------|--------------------------------------|
| | UPSTREAM | DOWNSTREAM | Friction Equation: Automatic |
| Geometry: | Circular | Circular | Solution Algorithm: Most Restrictive |
| Span(in): | 48.00 | 48.00 | Flow: Both |
| Rise(in): | 48.00 | 48.00 | Entrance Loss Coef: 0.00 |
| Invert(ft): | 37.850 | 37.780 | Exit Loss Coef: 1.00 |
| Manning's N: | 0.012000 | 0.012000 | Bend Loss Coef: 0.00 |
| Top Clip(in): | 0.000 | 0.000 | Outlet Ctrl Spec: Use dc or tw |
| Bot Clip(in): | 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| | | | Stabilizer Option: None |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

CPP

| | | | | | |
|---------------|----------|------------|--------------------------------------|-------------|--------|
| Name: | Ex_P-15 | From Node: | Ex_Pond-F | Length(ft): | 185.00 |
| Group: | BASE | To Node: | E_Outfall_Ditch | Count: | 1 |
| | UPSTREAM | DOWNSTREAM | Friction Equation: Automatic | | |
| Geometry: | Circular | Circular | Solution Algorithm: Most Restrictive | | |
| Span(in): | 48.00 | 48.00 | Flow: Both | | |
| Rise(in): | 48.00 | 48.00 | Entrance Loss Coef: 0.00 | | |
| Invert(ft): | 36.260 | 35.340 | Exit Loss Coef: 1.00 | | |
| Manning's N: | 0.012000 | 0.012000 | Bend Loss Coef: 0.00 | | |
| Top Clip(in): | 0.000 | 0.000 | Outlet Ctrl Spec: Use dc or tw | | |
| Bot Clip(in): | 0.000 | 0.000 | Inlet Ctrl Spec: Use dc | | |
| | | | Stabilizer Option: None | | |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

CMP

| | | | | | |
|---------------|----------|------------|--------------------------------------|-------------|--------|
| Name: | Ex_P-16 | From Node: | Ex_N-17 | Length(ft): | 202.00 |
| Group: | BASE | To Node: | Ex_Pond-E | Count: | 1 |
| | UPSTREAM | DOWNSTREAM | Friction Equation: Automatic | | |
| Geometry: | Circular | Circular | Solution Algorithm: Most Restrictive | | |
| Span(in): | 18.00 | 18.00 | Flow: Both | | |
| Rise(in): | 18.00 | 18.00 | Entrance Loss Coef: 0.00 | | |
| Invert(ft): | 44.870 | 43.160 | Exit Loss Coef: 1.00 | | |
| Manning's N: | 0.012000 | 0.012000 | Bend Loss Coef: 0.00 | | |
| Top Clip(in): | 0.000 | 0.000 | Outlet Ctrl Spec: Use dc or tw | | |
| Bot Clip(in): | 0.000 | 0.000 | Inlet Ctrl Spec: Use dc | | |
| | | | Stabilizer Option: None | | |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

CPP

| | | | | | |
|-------------|----------|------------|--------------------------------------|-------------|--------|
| Name: | Ex_P-17 | From Node: | Ex_N-12 | Length(ft): | 450.00 |
| Group: | BASE | To Node: | Ex_N-13 | Count: | 1 |
| | UPSTREAM | DOWNSTREAM | Friction Equation: Automatic | | |
| Geometry: | Circular | Circular | Solution Algorithm: Most Restrictive | | |
| Span(in): | 36.00 | 36.00 | Flow: Both | | |
| Rise(in): | 36.00 | 36.00 | Entrance Loss Coef: 0.00 | | |
| Invert(ft): | 39.430 | 37.880 | Exit Loss Coef: 1.00 | | |
| | | | Bend Loss Coef: 0.00 | | |

Pelican Golf Club
Existing Condition

| | | |
|-----------------------|----------|--------------------------------|
| Manning's N: 0.012000 | 0.012000 | Outlet Ctrl Spec: Use dc or tw |
| Top Clip(in): 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| Bot Clip(in): 0.000 | 0.000 | Stabilizer Option: None |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

RCP

| | | |
|-----------------------|--------------------|--------------------------------------|
| Name: Ex_P-18 | From Node: Ex_N-13 | Length(ft): 21.00 |
| Group: BASE | To Node: Ex_Pond-G | Count: 1 |
| | | Friction Equation: Automatic |
| | | Solution Algorithm: Most Restrictive |
| | | Flow: Both |
| UPSTREAM | DOWNSTREAM | Entrance Loss Coef: 0.00 |
| Geometry: Circular | Circular | Exit Loss Coef: 1.00 |
| Span(in): 48.00 | 48.00 | Bend Loss Coef: 0.00 |
| Rise(in): 48.00 | 48.00 | Outlet Ctrl Spec: Use dc or tw |
| Invert(ft): 36.690 | 36.300 | Inlet Ctrl Spec: Use dc |
| Manning's N: 0.012000 | 0.012000 | Stabilizer Option: None |
| Top Clip(in): 0.000 | 0.000 | |
| Bot Clip(in): 0.000 | 0.000 | |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

VERIFY PIPE SIZE

| | | |
|-----------------------|--------------------|--------------------------------------|
| Name: Ex_P-19 | From Node: Ex_N-15 | Length(ft): 181.00 |
| Group: BASE | To Node: Ex_N-16 | Count: 1 |
| | | Friction Equation: Automatic |
| | | Solution Algorithm: Most Restrictive |
| | | Flow: Both |
| UPSTREAM | DOWNSTREAM | Entrance Loss Coef: 0.00 |
| Geometry: Circular | Circular | Exit Loss Coef: 1.00 |
| Span(in): 15.00 | 15.00 | Bend Loss Coef: 0.00 |
| Rise(in): 15.00 | 15.00 | Outlet Ctrl Spec: Use dc or tw |
| Invert(ft): 39.490 | 38.410 | Inlet Ctrl Spec: Use dc |
| Manning's N: 0.012000 | 0.012000 | Stabilizer Option: None |
| Top Clip(in): 0.000 | 0.000 | |
| Bot Clip(in): 0.000 | 0.000 | |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

PVC

| | | |
|-----------------------|----------------------------|--------------------------------------|
| Name: Ex_P-22 | From Node: E_Outfall_Ditch | Length(ft): 870.00 |
| Group: BASE | To Node: Ex_Outfall | Count: 1 |
| | | Friction Equation: Automatic |
| | | Solution Algorithm: Most Restrictive |
| | | Flow: Both |
| UPSTREAM | DOWNSTREAM | Entrance Loss Coef: 0.00 |
| Geometry: Circular | Circular | Exit Loss Coef: 1.00 |
| Span(in): 36.00 | 36.00 | Bend Loss Coef: 0.00 |
| Rise(in): 36.00 | 36.00 | Outlet Ctrl Spec: Use dc or tw |
| Invert(ft): 35.080 | 33.330 | Inlet Ctrl Spec: Use dc |
| Manning's N: 0.012000 | 0.012000 | Stabilizer Option: None |
| Top Clip(in): 0.000 | 0.000 | |
| Bot Clip(in): 0.000 | 0.000 | |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

| | | |
|-----------------------|-------------------|--------------------------------------|
| Name: Ex_P-3 | From Node: Ex_N-3 | Length(ft): 544.00 |
| Group: BASE | To Node: Ex-N-5 | Count: 1 |
| UPSTREAM | DOWNSTREAM | Friction Equation: Automatic |
| Geometry: Circular | Circular | Solution Algorithm: Most Restrictive |
| Span(in): 24.00 | 24.00 | Flow: Both |
| Rise(in): 24.00 | 24.00 | Entrance Loss Coef: 0.00 |
| Invert(ft): 38.650 | 35.500 | Exit Loss Coef: 1.00 |
| Manning's N: 0.012000 | 0.012000 | Bend Loss Coef: 0.00 |
| Top Clip(in): 0.000 | 0.000 | Outlet Ctrl Spec: Use dc or tw |
| Bot Clip(in): 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| | | Stabilizer Option: None |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

CPP

| | | |
|-----------------------|--------------------|--------------------------------------|
| Name: Ex_P-6 | From Node: Ex_N-7 | Length(ft): 25.00 |
| Group: BASE | To Node: Ex_Pond-C | Count: 1 |
| UPSTREAM | DOWNSTREAM | Friction Equation: Automatic |
| Geometry: Circular | Circular | Solution Algorithm: Most Restrictive |
| Span(in): 12.00 | 15.00 | Flow: Both |
| Rise(in): 12.00 | 15.00 | Entrance Loss Coef: 0.00 |
| Invert(ft): 38.660 | 38.660 | Exit Loss Coef: 1.00 |
| Manning's N: 0.012000 | 0.012000 | Bend Loss Coef: 0.00 |
| Top Clip(in): 0.000 | 0.000 | Outlet Ctrl Spec: Use dc or tw |
| Bot Clip(in): 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| | | Stabilizer Option: None |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

PVC
CHANGE OF SIZE

| | | |
|-----------------------|--------------------|--------------------------------------|
| Name: Ex_P-7 | From Node: Ex-N-5 | Length(ft): 21.00 |
| Group: BASE | To Node: Ex_Pond-C | Count: 1 |
| UPSTREAM | DOWNSTREAM | Friction Equation: Automatic |
| Geometry: Circular | Circular | Solution Algorithm: Most Restrictive |
| Span(in): 48.00 | 48.00 | Flow: Both |
| Rise(in): 48.00 | 48.00 | Entrance Loss Coef: 0.00 |
| Invert(ft): 36.550 | 35.790 | Exit Loss Coef: 1.00 |
| Manning's N: 0.012000 | 0.012000 | Bend Loss Coef: 0.00 |
| Top Clip(in): 0.000 | 0.000 | Outlet Ctrl Spec: Use dc or tw |
| Bot Clip(in): 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| | | Stabilizer Option: None |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

CMP

Name: Ex_P-8B From Node: Ex_N-9 Length(ft): 32.00
Group: BASE To Node: Ex_N-10 Count: 1
 UPSTREAM DOWNSTREAM Friction Equation: Automatic
Geometry: Horz Ellipse Horz Ellipse Solution Algorithm: Most Restrictive
Span(in): 68.00 68.00 Flow: Both
Rise(in): 43.00 43.00 Entrance Loss Coef: 0.00
Invert(ft): 37.400 37.800 Exit Loss Coef: 1.00
Manning's N: 0.012000 0.012000 Bend Loss Coef: 0.00
Top Clip(in): 0.000 0.000 Outlet Ctrl Spec: Use dc or tw
Bot Clip(in): 0.000 0.000 Inlet Ctrl Spec: Use dc
 Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

ERCP

Name: Ex_P-9 From Node: Ex_N-10 Length(ft): 161.00
Group: BASE To Node: Ex_N-11 Count: 1
 UPSTREAM DOWNSTREAM Friction Equation: Automatic
Geometry: Horz Ellipse Horz Ellipse Solution Algorithm: Most Restrictive
Span(in): 68.00 68.00 Flow: Both
Rise(in): 43.00 43.00 Entrance Loss Coef: 0.00
Invert(ft): 37.580 37.020 Exit Loss Coef: 1.00
Manning's N: 0.012000 0.012000 Bend Loss Coef: 0.00
Top Clip(in): 0.000 0.000 Outlet Ctrl Spec: Use dc or tw
Bot Clip(in): 0.000 0.000 Inlet Ctrl Spec: Use dc
 Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

ERCP

Name: Ex_P2 From Node: Ex_Pond-A Length(ft): 79.00
Group: BASE To Node: Ex_N-3 Count: 1
 UPSTREAM DOWNSTREAM Friction Equation: Automatic
Geometry: Circular Circular Solution Algorithm: Most Restrictive
Span(in): 24.00 24.00 Flow: Both
Rise(in): 24.00 24.00 Entrance Loss Coef: 0.00
Invert(ft): 39.610 39.270 Exit Loss Coef: 1.00
Manning's N: 0.012000 0.012000 Bend Loss Coef: 0.00
Top Clip(in): 0.000 0.000 Outlet Ctrl Spec: Use dc or tw
Bot Clip(in): 0.000 0.000 Inlet Ctrl Spec: Use dc
 Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

CPP - Corrugated Polyethylene Pipe

=====
==== Drop Structures =====
=====

Name: Ex_DS-11 From Node: Ex_N-21 Length(ft): 21.00
Group: BASE To Node: Ex_N-16 Count: 1

| | | |
|-----------------------|------------|--------------------------------------|
| UPSTREAM | DOWNSTREAM | Friction Equation: Automatic |
| Geometry: Circular | Circular | Solution Algorithm: Most Restrictive |
| Span(in): 48.00 | 48.00 | Flow: Both |
| Rise(in): 48.00 | 48.00 | Entrance Loss Coef: 0.000 |
| Invert(ft): 37.120 | 36.870 | Exit Loss Coef: 1.000 |
| Manning's N: 0.012000 | 0.012000 | Outlet Ctrl Spec: Use dc or tw |
| Top Clip(in): 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| Bot Clip(in): 0.000 | 0.000 | Solution Incs: 10 |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 5 for Drop Structure Ex_DS-11 ***

| | | |
|-----------------------|--------------------------|-------|
| Count: 1 | Bottom Clip(in): 0.000 | TABLE |
| Type: Horizontal | Top Clip(in): 0.000 | |
| Flow: Both | Weir Disc Coef: 3.200 | |
| Geometry: Rectangular | Orifice Disc Coef: 0.600 | |
| Span(in): 51.60 | Invert(ft): 41.700 | |
| Rise(in): 39.60 | Control Elev(ft): 41.700 | |

*** Weir 2 of 5 for Drop Structure Ex_DS-11 ***

| | | |
|-----------------------|--------------------------|-------|
| Count: 1 | Bottom Clip(in): 0.000 | TABLE |
| Type: Vertical: Mavis | Top Clip(in): 0.000 | |
| Flow: Both | Weir Disc Coef: 3.200 | |
| Geometry: Rectangular | Orifice Disc Coef: 0.600 | |
| Span(in): 25.20 | Invert(ft): 40.800 | |
| Rise(in): 9.28 | Control Elev(ft): 40.800 | |

*** Weir 3 of 5 for Drop Structure Ex_DS-11 ***

| | | |
|-----------------------|--------------------------|-------|
| Count: 1 | Bottom Clip(in): 0.000 | TABLE |
| Type: Vertical: Mavis | Top Clip(in): 0.000 | |
| Flow: Both | Weir Disc Coef: 3.200 | |
| Geometry: Rectangular | Orifice Disc Coef: 0.600 | |
| Span(in): 37.20 | Invert(ft): 40.550 | |
| Rise(in): 12.30 | Control Elev(ft): 40.550 | |

*** Weir 4 of 5 for Drop Structure Ex_DS-11 ***

| | | |
|-----------------------|--------------------------|-------|
| Count: 1 | Bottom Clip(in): 0.000 | TABLE |
| Type: Vertical: Mavis | Top Clip(in): 0.000 | |
| Flow: Both | Weir Disc Coef: 3.200 | |
| Geometry: Rectangular | Orifice Disc Coef: 0.600 | |
| Span(in): 25.20 | Invert(ft): 40.730 | |
| Rise(in): 10.12 | Control Elev(ft): 40.730 | |

*** Weir 5 of 5 for Drop Structure Ex_DS-11 ***

| | | |
|-----------------------|--------------------------|-------|
| Count: 1 | Bottom Clip(in): 0.000 | TABLE |
| Type: Vertical: Mavis | Top Clip(in): 0.000 | |
| Flow: Both | Weir Disc Coef: 3.200 | |
| Geometry: Rectangular | Orifice Disc Coef: 0.600 | |
| Span(in): 7.20 | Invert(ft): 36.850 | |
| Rise(in): 44.40 | Control Elev(ft): 36.850 | |

Name: Ex_DS-4 From Node: Ex_Pond-B Length(ft): 31.00
Group: BASE To Node: Ex-N-5 Count: 1

| | | | |
|---------------|----------|------------|--------------------------------------|
| | UPSTREAM | DOWNSTREAM | Friction Equation: Automatic |
| Geometry: | Circular | Circular | Solution Algorithm: Most Restrictive |
| Span(in): | 18.00 | 18.00 | Flow: Both |
| Rise(in): | 18.00 | 18.00 | Entrance Loss Coef: 0.000 |
| Invert(ft): | 38.590 | 38.550 | Exit Loss Coef: 1.000 |
| Manning's N: | 0.012000 | 0.012000 | Outlet Ctrl Spec: Use dc or tw |
| Top Clip(in): | 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| Bot Clip(in): | 0.000 | 0.000 | Solution Incs: 10 |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 5 for Drop Structure Ex_DS-4 ***

| | | | |
|-----------|-------------|--------------------|--------|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Horizontal | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Rectangular | Orifice Disc Coef: | 0.600 |
| Span(in): | 48.00 | Invert(ft): | 41.730 |
| Rise(in): | 36.00 | Control Elev(ft): | 41.730 |

TABLE

*** Weir 2 of 5 for Drop Structure Ex_DS-4 ***

| | | | |
|-----------|-----------------|--------------------|--------|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Vertical: Mavis | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Rectangular | Orifice Disc Coef: | 0.600 |
| Span(in): | 15.60 | Invert(ft): | 40.900 |
| Rise(in): | 7.96 | Control Elev(ft): | 40.900 |

TABLE

*** Weir 3 of 5 for Drop Structure Ex_DS-4 ***

| | | | |
|-----------|-----------------|--------------------|--------|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Vertical: Mavis | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Rectangular | Orifice Disc Coef: | 0.600 |
| Span(in): | 15.60 | Invert(ft): | 40.960 |
| Rise(in): | 7.24 | Control Elev(ft): | 40.960 |

TABLE

*** Weir 4 of 5 for Drop Structure Ex_DS-4 ***

| | | | |
|-----------|-----------------|--------------------|--------|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Vertical: Mavis | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Rectangular | Orifice Disc Coef: | 0.600 |
| Span(in): | 26.40 | Invert(ft): | 40.790 |
| Rise(in): | 9.28 | Control Elev(ft): | 40.790 |

TABLE

*** Weir 5 of 5 for Drop Structure Ex_DS-4 ***

| | | | |
|-----------|-----------------|--------------------|--------|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Vertical: Mavis | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Rectangular | Orifice Disc Coef: | 0.600 |
| Span(in): | 4.80 | Invert(ft): | 38.860 |
| Rise(in): | 22.80 | Control Elev(ft): | 38.860 |

TABLE

| | | | | | |
|--------|---------|------------|-----------|-------------|-------|
| Name: | Ex_DS-5 | From Node: | Ex_Pond-D | Length(ft): | 26.00 |
| Group: | BASE | To Node: | Ex_N-7 | Count: | 1 |

| | | | |
|-----------|--------------|--------------|--------------------------------------|
| | UPSTREAM | DOWNSTREAM | Friction Equation: Automatic |
| Geometry: | Horz Ellipse | Horz Ellipse | Solution Algorithm: Most Restrictive |

| | | |
|-----------------------|----------|--------------------------------|
| Span(in): 30.00 | 30.00 | Flow: Both |
| Rise(in): 19.00 | 19.00 | Entrance Loss Coef: 0.000 |
| Invert(ft): 44.220 | 43.240 | Exit Loss Coef: 1.000 |
| Manning's N: 0.012000 | 0.012000 | Outlet Ctrl Spec: Use dc or tw |
| Top Clip(in): 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| Bot Clip(in): 0.000 | 0.000 | Solution Incs: 10 |

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

*** Weir 1 of 2 for Drop Structure Ex_DS-5 ***

TABLE

| | |
|-----------------------|--------------------------|
| Count: 1 | Bottom Clip(in): 0.000 |
| Type: Horizontal | Top Clip(in): 0.000 |
| Flow: Both | Weir Disc Coef: 3.200 |
| Geometry: Rectangular | Orifice Disc Coef: 0.600 |
| Span(in): 42.00 | Invert(ft): 44.700 |
| Rise(in): 60.00 | Control Elev(ft): 44.700 |

*** Weir 2 of 2 for Drop Structure Ex_DS-5 ***

TABLE

| | |
|--------------------|--------------------------|
| Count: 1 | Bottom Clip(in): 0.000 |
| Type: Horizontal | Top Clip(in): 0.000 |
| Flow: Both | Weir Disc Coef: 3.200 |
| Geometry: Circular | Orifice Disc Coef: 0.600 |
| Span(in): 2.00 | Invert(ft): 44.080 |
| Rise(in): 2.00 | Control Elev(ft): 44.080 |

Name: Ex_DS-8A From Node: Ex_Pond-C Length(ft): 171.00
Group: BASE To Node: Ex_N-9 Count: 1

| | | |
|------------------------|--------------|--------------------------------------|
| UPSTREAM | DOWNSTREAM | Friction Equation: Automatic |
| Geometry: Horz Ellipse | Horz Ellipse | Solution Algorithm: Most Restrictive |
| Span(in): 68.00 | 68.00 | Flow: Both |
| Rise(in): 43.00 | 43.00 | Entrance Loss Coef: 0.000 |
| Invert(ft): 37.400 | 37.610 | Exit Loss Coef: 1.000 |
| Manning's N: 0.012000 | 0.012000 | Outlet Ctrl Spec: Use dc or tw |
| Top Clip(in): 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| Bot Clip(in): 0.000 | 0.000 | Solution Incs: 10 |

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

*** Weir 1 of 5 for Drop Structure Ex_DS-8A ***

TABLE

| | |
|-----------------------|--------------------------|
| Count: 1 | Bottom Clip(in): 0.000 |
| Type: Horizontal | Top Clip(in): 0.000 |
| Flow: Both | Weir Disc Coef: 3.200 |
| Geometry: Rectangular | Orifice Disc Coef: 0.600 |
| Span(in): 96.00 | Invert(ft): 41.720 |
| Rise(in): 48.00 | Control Elev(ft): 41.720 |

*** Weir 2 of 5 for Drop Structure Ex_DS-8A ***

TABLE

| | |
|-----------------------|--------------------------|
| Count: 1 | Bottom Clip(in): 0.000 |
| Type: Vertical: Mavis | Top Clip(in): 0.000 |
| Flow: Both | Weir Disc Coef: 3.200 |
| Geometry: Rectangular | Orifice Disc Coef: 0.600 |
| Span(in): 22.80 | Invert(ft): 40.550 |

Rise(in): 12.00 Control Elev(ft): 40.550

*** Weir 3 of 5 for Drop Structure Ex_DS-8A ***

TABLE

Count: 1 Bottom Clip(in): 0.000
Type: Vertical: Mavis Top Clip(in): 0.000
Flow: Both Weir Disc Coef: 3.200
Geometry: Rectangular Orifice Disc Coef: 0.600
Span(in): 60.00 Invert(ft): 40.450
Rise(in): 13.24 Control Elev(ft): 40.450

*** Weir 4 of 5 for Drop Structure Ex_DS-8A ***

TABLE

Count: 1 Bottom Clip(in): 0.000
Type: Vertical: Mavis Top Clip(in): 0.000
Flow: Both Weir Disc Coef: 3.200
Geometry: Rectangular Orifice Disc Coef: 0.600
Span(in): 4.80 Invert(ft): 37.400
Rise(in): 37.20 Control Elev(ft): 37.400

*** Weir 5 of 5 for Drop Structure Ex_DS-8A ***

TABLE

Count: 1 Bottom Clip(in): 0.000
Type: Vertical: Mavis Top Clip(in): 0.000
Flow: Both Weir Disc Coef: 3.200
Geometry: Rectangular Orifice Disc Coef: 0.600
Span(in): 24.00 Invert(ft): 40.600
Rise(in): 11.44 Control Elev(ft): 40.600

=====
===== Weirs =====
=====

Name: Ex_W-1 From Node: Ex_Pond-G
Group: BASE To Node: Ex_N-21
Flow: Both Count: 1
Type: Vertical: Mavis Geometry: Irregular

XSec: wier_lake_g
Invert(ft): 38.020
Control Elevation(ft): 38.020
Struct Opening Dim(ft): 9999.00
TABLE
Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

Name: Ex_W-10 From Node: Ex_N-11
Group: BASE To Node: Ex_Pond-G
Flow: Both Count: 1
Type: Vertical: Mavis Geometry: Trapezoidal

Bottom Width(ft): 34.65
Left Side Slope(h/v): 22.64
Right Side Slope(h/v): 14.16
Invert(ft): 40.200
Control Elevation(ft): 42.000
Struct Opening Dim(ft): 9999.00
TABLE
Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

Name: Ex_W-14 From Node: Ex_N-16
Group: BASE To Node: Ex_Pond-F
Flow: Both Count: 1
Type: Vertical: Mavis Geometry: Trapezoidal

Bottom Width(ft): 4.80
Left Side Slope(h/v): 40.75
Right Side Slope(h/v): 39.75
 Invert(ft): 41.800
Control Elevation(ft): 42.000
Struct Opening Dim(ft): 9999.00

TABLE

Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

Name: Ex_W-15 From Node: Ex_Pond-F
Group: BASE To Node: E_Outfall_Ditch
Flow: Both Count: 1
Type: Vertical: Mavis Geometry: Trapezoidal

Bottom Width(ft): 29.20
Left Side Slope(h/v): 26.36
Right Side Slope(h/v): 97.96
 Invert(ft): 40.400
Control Elevation(ft): 42.000
Struct Opening Dim(ft): 9999.00

TABLE

Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

Name: Ex_W-18 From Node: Ex_N-13
Group: BASE To Node: Ex_Pond-G
Flow: Both Count: 1
Type: Vertical: Mavis Geometry: Trapezoidal

Bottom Width(ft): 13.45
Left Side Slope(h/v): 20.88
Right Side Slope(h/v): 23.88
 Invert(ft): 41.200
Control Elevation(ft): 42.000
Struct Opening Dim(ft): 9999.00

TABLE

Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

Name: Ex_W-5 From Node: Ex_Pond-D
Group: BASE To Node: Ex_N-7
Flow: Both Count: 1
Type: Vertical: Mavis Geometry: Trapezoidal

Bottom Width(ft): 8.00
Left Side Slope(h/v): 50.00
Right Side Slope(h/v): 80.00
 Invert(ft): 45.200
Control Elevation(ft): 45.500
Struct Opening Dim(ft): 9999.00

TABLE

Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200

Orifice Discharge Coef: 0.600

Name: Ex_W-6 From Node: Ex_N-7
Group: BASE To Node: Ex_Pond-C
Flow: Both Count: 1
Type: Vertical: Mavis Geometry: Trapezoidal

Bottom Width(ft): 7.00
Left Side Slope(h/v): 120.00
Right Side Slope(h/v): 45.00
 Invert(ft): 44.100
Control Elevation(ft): 44.500
Struct Opening Dim(ft): 9999.00

TABLE

Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

Name: Ex_W-7 From Node: Ex-N-5
Group: BASE To Node: Ex_Pond-C
Flow: Both Count: 1
Type: Vertical: Mavis Geometry: Trapezoidal

Bottom Width(ft): 31.20
Left Side Slope(h/v): 100.00
Right Side Slope(h/v): 35.00
 Invert(ft): 41.400
Control Elevation(ft): 43.000
Struct Opening Dim(ft): 9999.00

TABLE

Bottom Clip(ft): 0.000
Top Clip(ft): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

==== Hydrology Simulations =====

Name: Ex_WM_100Y_24H
Filename: J:\E2160\E2160208.00\modeling\icpr\EXISTING\Ex_WM_100Y_24H.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
 Rainfall File: Flmod
Rainfall Amount(in): 12.00

| Time(hrs) | Print Inc(min) |
|-----------|----------------|
| 36.000 | 5.00 |

Name: Ex_WM_25Y_24H
Filename: J:\E2160\E2160208.00\modeling\icpr\EXISTING\Ex_WM_25Y_24H.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
 Rainfall File: Flmod
Rainfall Amount(in): 9.00

| Time(hrs) | Print Inc(min) |
|-----------|----------------|
| 36.000 | 5.00 |

==== Routing Simulations =====

J:\E2160\E2160208.00\modeling\icpr\EXISTING\EXISTING.ICP 12/2/2016 3:47:02 PM

=====

Name: Ex_WM_100Y_24H Hydrology Sim: Ex_WM_100Y_24H
Filename: J:\E2160\E2160208.00\modeling\icpr\EXISTING\Ex_WM_100Y_24H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 24.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

| Time(hrs) | Print Inc(min) |
|-----------|----------------|
| 999.000 | 15.000 |
| Group | Run |
| BASE | Yes |

Name: Ex_WM_25Y_24H Hydrology Sim: Ex_WM_25Y_24H
Filename: J:\E2160\E2160208.00\modeling\icpr\EXISTING\Ex_WM_25Y_24H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 24.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

| Time(hrs) | Print Inc(min) |
|-----------|----------------|
| 999.000 | 15.000 |
| Group | Run |
| BASE | Yes |

Pelican Golf Club
Existing Condition

| Name | Group | Simulation | Max Time Stage hrs | Max Stage ft | Warning Stage ft | Max Delta Stage ft | Max Surf Area ft2 | Max Time Inflow hrs | Max Inflow cfs | Max Time Outflow hrs | Max Outflow cfs |
|-----------------|-------|---------------|--------------------------|--------------------|------------------------|--------------------------|-------------------------|---------------------------|----------------------|----------------------------|-----------------------|
| E_Outfall_Ditch | BASE | Ex_WM_25Y_24H | 13.50 | 37.59 | 42.00 | 0.0035 | 5634 | 13.39 | 27.21 | 13.49 | 27.14 |
| Ex-N-5 | BASE | Ex_WM_25Y_24H | 18.85 | 41.32 | 43.00 | 0.0016 | 8213 | 21.36 | 8.32 | 21.35 | 8.49 |
| Ex_N-1 | BASE | Ex_WM_25Y_24H | 15.18 | 41.94 | 46.00 | 0.0061 | 85285 | 12.17 | 46.07 | 12.23 | 13.67 |
| Ex_N-10 | BASE | Ex_WM_25Y_24H | 16.19 | 41.22 | 44.00 | 0.0145 | 167 | 12.08 | 22.51 | 14.76 | 27.93 |
| Ex_N-11 | BASE | Ex_WM_25Y_24H | 16.19 | 41.15 | 42.00 | 0.0032 | 19413 | 14.76 | 27.93 | 12.09 | 14.06 |
| Ex_N-12 | BASE | Ex_WM_25Y_24H | 12.44 | 43.35 | 46.00 | -0.0114 | 12951 | 12.25 | 46.71 | 12.44 | 43.80 |
| Ex_N-13 | BASE | Ex_WM_25Y_24H | 16.17 | 41.15 | 42.00 | 0.0025 | 16148 | 12.44 | 43.80 | 12.48 | 37.70 |
| Ex_N-15 | BASE | Ex_WM_25Y_24H | 12.59 | 41.85 | 43.00 | 0.0028 | 9040 | 12.08 | 10.96 | 12.59 | 6.80 |
| Ex_N-16 | BASE | Ex_WM_25Y_24H | 16.20 | 39.92 | 42.00 | 0.0011 | 11269 | 16.04 | 19.46 | 16.20 | 19.45 |
| Ex_N-17 | BASE | Ex_WM_25Y_24H | 12.31 | 46.43 | 47.00 | 0.0050 | 13977 | 12.08 | 8.90 | 12.31 | 6.56 |
| Ex_N-19 | BASE | Ex_WM_25Y_24H | 13.41 | 40.56 | 45.00 | 0.0008 | 1180 | 13.34 | 4.93 | 13.41 | 4.93 |
| Ex_N-21 | BASE | Ex_WM_25Y_24H | 16.20 | 41.14 | 42.00 | 0.0014 | 3566 | 16.15 | 18.62 | 16.20 | 18.62 |
| Ex_N-3 | BASE | Ex_WM_25Y_24H | 15.60 | 41.79 | 45.00 | 0.0009 | 8810 | 12.96 | 11.82 | 13.96 | 7.38 |
| Ex_N-7 | BASE | Ex_WM_25Y_24H | 15.68 | 41.34 | 44.00 | 0.0011 | 1361 | 13.25 | 5.47 | 13.52 | 5.38 |
| Ex_N-9 | BASE | Ex_WM_25Y_24H | 16.19 | 41.19 | 42.61 | 0.0158 | 127 | 21.18 | 13.08 | 21.18 | 12.84 |
| Ex_Outfall | BASE | Ex_WM_25Y_24H | 0.00 | 36.21 | 36.21 | 0.0000 | 651 | 13.49 | 27.14 | 0.00 | 0.00 |
| Ex_Pond-A | BASE | Ex_WM_25Y_24H | 15.25 | 41.93 | 45.00 | 0.0016 | 35883 | 12.25 | 23.91 | 12.96 | 11.82 |
| Ex_Pond-B | BASE | Ex_WM_25Y_24H | 20.68 | 41.39 | 43.00 | 0.0007 | 148234 | 12.25 | 35.74 | 24.00 | 3.27 |
| Ex_Pond-C | BASE | Ex_WM_25Y_24H | 18.82 | 41.31 | 43.00 | 0.0016 | 50025 | 12.42 | 18.75 | 21.18 | 13.08 |
| Ex_Pond-D | BASE | Ex_WM_25Y_24H | 13.25 | 45.21 | 45.50 | 0.0009 | 77007 | 12.08 | 21.03 | 13.25 | 5.47 |
| Ex_Pond-E | BASE | Ex_WM_25Y_24H | 13.37 | 44.06 | 45.00 | 0.0009 | 65044 | 12.17 | 20.44 | 13.34 | 4.93 |
| Ex_Pond-F | BASE | Ex_WM_25Y_24H | 13.41 | 38.39 | 42.00 | -0.0030 | 28219 | 12.89 | 27.99 | 13.40 | 26.68 |
| Ex_Pond-G | BASE | Ex_WM_25Y_24H | 16.20 | 41.15 | 42.00 | 0.0014 | 170697 | 12.22 | 76.16 | 16.15 | 18.62 |

PROPOSED CONDITION



PROPOSED DRAINAGE BASIN DATA

| | | | |
|--|-------------------|-----------|--|
| PROJECT NAME: Pelican Golf Club | LAND COVER | CN | |
| FPID: 0 | PAVEMENT | 98 | CN Values from FDOT Hydrology Handbook (Table T-7) |
| COUNTY: Pinellas | GRASS | 39 | |
| Date: December 2, 2016 | WATER | 100 | |

| BASIN | AREA (AC) | | | TOTAL AREA (AC) | WEIGHTED CN (Area to Pond) |
|-------------|-----------|-------|-------|-----------------|-------------------------------|
| | PAVED | WATER | GRASS | | |
| Pr_B_POND-D | 2.70 | 0.86 | 3.84 | 7.40 | 68 |



TREATMENT VOLUME CALCULATION

PROJECT NAME: Pelican Golf Club

FPID: 0

COUNTY: Pinellas

Date: December 2, 2016

| BASIN | Treatment Facility | PAVEMENT AREA (AC) | | TOTAL BASIN AREA (AC) | TREATMENT VOLUME (AC-FT) | |
|-------------|--------------------|--------------------|----------|-----------------------|------------------------------------|-------------------|
| | | EXISTING | PROPOSED | | BASED ON 1" RUNOFF FROM PAVED AREA | REQUIRED IN AC-FT |
| Pr_B_POND-D | Pond D | 2.20 | 2.70 | 7.40 | 0.23 | 0.23 |

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POND STAGE VOLUME

PROJECT NAME: Pelican Golf Club

FPID: 0

COUNTY: Pinellas

Date: December 2, 2016

| POND | AT SHW / POND BOTTOM / INITIAL STAGE | | ABOVE THE WEIR | | WEIR ELEVATION (ft) | AREA (AC) | ACTUAL QUALITY VOLUME (AC-FT) |
|--------|--------------------------------------|-----------|----------------|-----------|---------------------|-----------|-------------------------------|
| | ELEVATION | AREA (AC) | ELEVATION | AREA (AC) | | | |
| Pond D | 43.50 | 0.85 | 45.00 | 0.98 | 43.78 | 0.87 | 0.24 |



ORIFICE CALCULATIONS

PROJECT NAME: Pelican Golf Club

FPID: 0

COUNTY: Pinellas

Date: December 2, 2016

Time (hr) 60

Cd 0.6

2g 64.4

| POND | ELEVATION (ft) | | POND SURFACE AREA (AC) | | | ORIFICE | |
|--------|----------------|---------|------------------------|-----------|---------|-----------|---------------|
| | WEIR | ORIFICE | AT WEIR | AT ORFICE | AVERAGE | AREA (SF) | DIAMETER (IN) |
| Pond D | 43.78 | 43.50 | 0.87 | 0.85 | 0.86 | 0.0079 | 1.20 |

=====
Basins
=====

Name: PR_B_BeFor Node: PR_N_BeFor Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 27.00
Area(ac): 26.100 Time Shift(hrs): 0.00
Curve Number: 60.40 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PR_B_GVDN Node: Pr_N-GVDN Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 3.140 Time Shift(hrs): 0.00
Curve Number: 60.70 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PR_B_GVDS Node: PR_N_GVDS Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 22.00
Area(ac): 22.690 Time Shift(hrs): 0.00
Curve Number: 61.30 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PR_B_HiRd Node: Pr_N_HiRd Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 16.00
Area(ac): 4.400 Time Shift(hrs): 0.00
Curve Number: 62.70 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PR_B_MAIN Node: PR_N_MAIN Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 8.310 Time Shift(hrs): 0.00
Curve Number: 46.50 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PR_B_Pond-A Node: Pond-A Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 18.00

Area(ac): 10.940 Time Shift(hrs): 0.00
Curve Number: 43.50 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PR_B_Pond-B Node: Pond-B Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 13.00
Area(ac): 8.690 Time Shift(hrs): 0.00
Curve Number: 48.80 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PR_B_Pond-C Node: Pond-C Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 39.00
Area(ac): 57.360 Time Shift(hrs): 0.00
Curve Number: 40.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PR_B_Pond-D Node: Pond-D Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 13.00
Area(ac): 7.400 Time Shift(hrs): 0.00
Curve Number: 68.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PR_B_Pond-E Node: Pond-E Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 6.380 Time Shift(hrs): 0.00
Curve Number: 54.40 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PR_B_Pond-F Node: Pond-F Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 22.00
Area(ac): 22.740 Time Shift(hrs): 0.00
Curve Number: 42.10 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PR_B_Pond-G Node: Pond-G Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0

| | |
|----------------------------|----------------------------------|
| Rainfall File: | Storm Duration(hrs): 0.00 |
| Rainfall Amount(in): 0.000 | Time of Conc(min): 25.00 |
| Area(ac): 32.220 | Time Shift(hrs): 0.00 |
| Curve Number: 43.00 | Max Allowable Q(cfs): 999999.000 |
| DCIA(%): 0.00 | |

| | | |
|-----------------|------------------------------|----------------|
| Name: PR_B_PoRd | Node: PR_N_PoRd | Status: Onsite |
| Group: BASE | Type: SCS Unit Hydrograph CN | |

| | |
|----------------------------|----------------------------------|
| Unit Hydrograph: Uh256 | Peaking Factor: 256.0 |
| Rainfall File: | Storm Duration(hrs): 0.00 |
| Rainfall Amount(in): 0.000 | Time of Conc(min): 15.00 |
| Area(ac): 7.950 | Time Shift(hrs): 0.00 |
| Curve Number: 62.30 | Max Allowable Q(cfs): 999999.000 |
| DCIA(%): 0.00 | |

==== Nodes =====

| | | |
|------------------|-----------------------|------------------------|
| Name: DN_A | Base Flow(cfs): 0.000 | Init Stage(ft): 39.000 |
| Group: BASE | | Warn Stage(ft): 44.000 |
| Type: Stage/Area | | |

| Stage(ft) | Area(ac) |
|-----------|----------|
| 39.000 | 0.0010 |
| 44.000 | 0.0010 |

| | | |
|------------------|-----------------------|------------------------|
| Name: DN_A2 | Base Flow(cfs): 0.000 | Init Stage(ft): 35.000 |
| Group: BASE | | Warn Stage(ft): 44.000 |
| Type: Stage/Area | | |

| Stage(ft) | Area(ac) |
|-----------|----------|
| 35.000 | 0.0010 |
| 44.000 | 0.0010 |

| | | |
|------------------|-----------------------|------------------------|
| Name: DN_BeFor | Base Flow(cfs): 0.000 | Init Stage(ft): 35.000 |
| Group: BASE | | Warn Stage(ft): 45.000 |
| Type: Stage/Area | | |

| Stage(ft) | Area(ac) |
|-----------|----------|
| 35.000 | 0.0010 |
| 45.000 | 0.0010 |

| | | |
|------------------|-----------------------|------------------------|
| Name: DN_C | Base Flow(cfs): 0.000 | Init Stage(ft): 35.000 |
| Group: BASE | | Warn Stage(ft): 43.000 |
| Type: Stage/Area | | |

| Stage(ft) | Area(ac) |
|-----------|----------|
| 30.000 | 0.0010 |
| 45.000 | 0.0010 |

| | | |
|------------------|-----------------------|------------------------|
| Name: DN_D | Base Flow(cfs): 0.000 | Init Stage(ft): 35.000 |
| Group: BASE | | Warn Stage(ft): 46.000 |
| Type: Stage/Area | | |

| Stage(ft) | Area(ac) |
|-----------|----------|
| 30.000 | 0.0010 |
| 46.000 | 0.0010 |

Name: DN_E Base Flow(cfs): 0.000 Init Stage(ft): 35.000
Group: BASE Warn Stage(ft): 44.000
Type: Stage/Area

| Stage(ft) | Area(ac) |
|-----------|----------|
| 35.000 | 0.0010 |
| 45.000 | 0.0010 |

Name: DN_G Base Flow(cfs): 0.000 Init Stage(ft): 35.000
Group: BASE Warn Stage(ft): 42.000
Type: Stage/Area

| Stage(ft) | Area(ac) |
|-----------|----------|
| 30.000 | 0.0010 |
| 45.000 | 0.0010 |

Name: Pond-A Base Flow(cfs): 0.000 Init Stage(ft): 39.000
Group: BASE Warn Stage(ft): 43.000
Type: Stage/Area

| Stage(ft) | Area(ac) |
|-----------|----------|
| 27.000 | 0.2100 |
| 40.000 | 1.0400 |
| 41.000 | 1.1600 |
| 42.000 | 1.3000 |
| 43.000 | 1.6200 |

Name: Pond-B Base Flow(cfs): 0.000 Init Stage(ft): 38.000
Group: BASE Warn Stage(ft): 43.000
Type: Stage/Area

| Stage(ft) | Area(ac) |
|-----------|----------|
| 28.000 | 0.7500 |
| 40.000 | 1.9200 |
| 41.000 | 2.1200 |
| 42.000 | 2.2900 |

Name: Pond-C Base Flow(cfs): 0.000 Init Stage(ft): 38.000
Group: BASE Warn Stage(ft): 43.000
Type: Stage/Area

| Stage(ft) | Area(ac) |
|-----------|----------|
| 27.000 | 0.5200 |
| 40.000 | 1.5400 |
| 41.000 | 1.6600 |
| 42.000 | 1.9100 |

```

-----
39.430      0.0010
42.900      0.0010
43.000      0.1200
44.000      0.6200
45.000      1.3600
46.000      2.7100
-----

```

```

-----
Name: PR_N_GVDS          Base Flow(cfs): 0.000      Init Stage(ft): 38.550
Group: BASE              Warn Stage(ft): 46.000
Type: Stage/Area
-----

```

```

-----
Stage(ft)      Area(ac)
-----
38.550         0.0010
45.000         3.7200
46.000        12.6700
-----

```

```

-----
Name: Pr_N_HiRd          Base Flow(cfs): 0.000      Init Stage(ft): 39.490
Group: BASE              Warn Stage(ft): 43.000
Type: Stage/Area
-----

```

```

-----
Stage(ft)      Area(ac)
-----
39.490         0.0010
42.000         0.2200
43.000         0.6500
-----

```

```

-----
Name: PR_N_MAIN          Base Flow(cfs): 0.000      Init Stage(ft): 35.080
Group: BASE              Warn Stage(ft): 41.000
Type: Stage/Area
-----

```

```

-----
Stage(ft)      Area(ac)
-----
35.000         0.0010
41.000         0.0010
-----

```

```

-----
Name: PR_N_PoRd          Base Flow(cfs): 0.000      Init Stage(ft): 38.000
Group: BASE              Warn Stage(ft): 44.000
Type: Stage/Area
-----

```

```

-----
Stage(ft)      Area(ac)
-----
37.580         0.0010
42.620         0.0010
43.000         0.2100
44.000         1.0700
-----

```

```

-----
Name: Pr_Outfall         Base Flow(cfs): 0.000      Init Stage(ft): 36.330
Group: BASE              Warn Stage(ft): 36.330
Type: Time/Stage
-----

```

```

-----
Time(hrs)      Stage(ft)
-----
0.00           36.330
999.00         36.330
-----

```

```

=====
=== Pipes =====
=====

```

| | | |
|-----------------------|----------------------|--------------------------------------|
| Name: Outfall_Pipe | From Node: PR_N_MAIN | Length(ft): 870.00 |
| Group: BASE | To Node: Pr_Outfall | Count: 1 |
| | | Friction Equation: Automatic |
| UPSTREAM | DOWNSREAM | Solution Algorithm: Most Restrictive |
| Geometry: Circular | Circular | Flow: Both |
| Span(in): 36.00 | 36.00 | Entrance Loss Coef: 0.00 |
| Rise(in): 36.00 | 36.00 | Exit Loss Coef: 1.00 |
| Invert(ft): 35.080 | 33.330 | Bend Loss Coef: 0.00 |
| Manning's N: 0.012000 | 0.012000 | Outlet Ctrl Spec: Use dc or tw |
| Top Clip(in): 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| Bot Clip(in): 0.000 | 0.000 | Stabilizer Option: None |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

| | | |
|-----------------------|-------------------|--------------------------------------|
| Name: R-Pond-A | From Node: Pond-A | Length(ft): 275.00 |
| Group: BASE | To Node: DN_A | Count: 1 |
| | | Friction Equation: Automatic |
| UPSTREAM | DOWNSREAM | Solution Algorithm: Most Restrictive |
| Geometry: Circular | Circular | Flow: Both |
| Span(in): 30.00 | 30.00 | Entrance Loss Coef: 0.00 |
| Rise(in): 30.00 | 30.00 | Exit Loss Coef: 1.00 |
| Invert(ft): 36.000 | 39.000 | Bend Loss Coef: 0.00 |
| Manning's N: 0.012000 | 0.012000 | Outlet Ctrl Spec: Use dc or tw |
| Top Clip(in): 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| Bot Clip(in): 0.000 | 0.000 | Stabilizer Option: None |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

| | | |
|-----------------------|-----------------|--------------------------------------|
| Name: R-Pond-A_2 | From Node: DN_A | Length(ft): 787.00 |
| Group: BASE | To Node: DN_A2 | Count: 1 |
| | | Friction Equation: Automatic |
| UPSTREAM | DOWNSREAM | Solution Algorithm: Most Restrictive |
| Geometry: Circular | Circular | Flow: Both |
| Span(in): 36.00 | 36.00 | Entrance Loss Coef: 0.00 |
| Rise(in): 36.00 | 36.00 | Exit Loss Coef: 1.00 |
| Invert(ft): 39.000 | 35.000 | Bend Loss Coef: 0.00 |
| Manning's N: 0.012000 | 0.012000 | Outlet Ctrl Spec: Use dc or tw |
| Top Clip(in): 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| Bot Clip(in): 0.000 | 0.000 | Stabilizer Option: None |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

| | | |
|--------------------|------------------|--------------------------------------|
| Name: R-Pond-ABC | From Node: DN_A2 | Length(ft): 105.00 |
| Group: BASE | To Node: Pond-C | Count: 1 |
| | | Friction Equation: Automatic |
| UPSTREAM | DOWNSREAM | Solution Algorithm: Most Restrictive |
| Geometry: Circular | Circular | Flow: Both |
| Span(in): 42.00 | 42.00 | Entrance Loss Coef: 0.00 |
| Rise(in): 42.00 | 42.00 | Exit Loss Coef: 1.00 |

Pelican Golf Club
Proposed Condition

| | | |
|-----------------------|----------|--------------------------------|
| Invert(ft): 35.000 | 34.000 | Bend Loss Coef: 0.00 |
| Manning's N: 0.012000 | 0.012000 | Outlet Ctrl Spec: Use dc or tw |
| Top Clip(in): 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| Bot Clip(in): 0.000 | 0.000 | Stabilizer Option: None |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

| | | |
|-----------------------|-----------------------|--------------------------------------|
| Name: R_BeFor | From Node: PR_N_BeFor | Length(ft): 206.00 |
| Group: BASE | To Node: DN_BeFor | Count: 1 |
| | | Friction Equation: Automatic |
| | | Solution Algorithm: Most Restrictive |
| | | Flow: Both |
| UPSTREAM | DOWNSTREAM | Entrance Loss Coef: 0.00 |
| Geometry: Circular | Circular | Exit Loss Coef: 1.00 |
| Span(in): 36.00 | 36.00 | Bend Loss Coef: 0.00 |
| Rise(in): 36.00 | 36.00 | Outlet Ctrl Spec: Use dc or tw |
| Invert(ft): 39.430 | 38.490 | Inlet Ctrl Spec: Use dc |
| Manning's N: 0.012000 | 0.012000 | Stabilizer Option: None |
| Top Clip(in): 0.000 | 0.000 | |
| Bot Clip(in): 0.000 | 0.000 | |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

| | | |
|------------------------|---------------------|--------------------------------------|
| Name: R_BeFor2 | From Node: DN_BeFor | Length(ft): 680.00 |
| Group: BASE | To Node: DN_G | Count: 1 |
| | | Friction Equation: Automatic |
| | | Solution Algorithm: Most Restrictive |
| | | Flow: Both |
| UPSTREAM | DOWNSTREAM | Entrance Loss Coef: 0.00 |
| Geometry: Horz Ellipse | Horz Ellipse | Exit Loss Coef: 1.00 |
| Span(in): 53.00 | 53.00 | Bend Loss Coef: 0.00 |
| Rise(in): 34.00 | 34.00 | Outlet Ctrl Spec: Use dc or tw |
| Invert(ft): 37.000 | 35.000 | Inlet Ctrl Spec: Use dc |
| Manning's N: 0.012000 | 0.012000 | Stabilizer Option: None |
| Top Clip(in): 0.000 | 0.000 | |
| Bot Clip(in): 0.000 | 0.000 | |

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

| | | |
|------------------------|-----------------|--------------------------------------|
| Name: R_CDG | From Node: DN_G | Length(ft): 166.00 |
| Group: BASE | To Node: Pond-G | Count: 1 |
| | | Friction Equation: Automatic |
| | | Solution Algorithm: Most Restrictive |
| | | Flow: Both |
| UPSTREAM | DOWNSTREAM | Entrance Loss Coef: 0.00 |
| Geometry: Horz Ellipse | Horz Ellipse | Exit Loss Coef: 1.00 |
| Span(in): 68.00 | 68.00 | Bend Loss Coef: 0.00 |
| Rise(in): 43.00 | 43.00 | Outlet Ctrl Spec: Use dc or tw |
| Invert(ft): 35.000 | 34.000 | Inlet Ctrl Spec: Use dc |
| Manning's N: 0.012000 | 0.012000 | Stabilizer Option: None |
| Top Clip(in): 0.000 | 0.000 | |
| Bot Clip(in): 0.000 | 0.000 | |

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

| | | |
|-----------------------|----------------------|--------------------------------------|
| Name: R_GVDN | From Node: Pr_N-GVDN | Length(ft): 226.00 |
| Group: BASE | To Node: Pond-E | Count: 1 |
| | | Friction Equation: Automatic |
| | | Solution Algorithm: Most Restrictive |
| | | Flow: Both |
| UPSTREAM | DOWNSTREAM | Entrance Loss Coef: 0.00 |
| Geometry: Circular | Circular | Exit Loss Coef: 1.00 |
| Span(in): 18.00 | 18.00 | Bend Loss Coef: 0.00 |
| Rise(in): 18.00 | 18.00 | Outlet Ctrl Spec: Use dc or tw |
| Invert(ft): 44.870 | 40.000 | Inlet Ctrl Spec: Use dc |
| Manning's N: 0.012000 | 0.012000 | Stabilizer Option: None |
| Top Clip(in): 0.000 | 0.000 | |
| Bot Clip(in): 0.000 | 0.000 | |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

| | | |
|-----------------------|----------------------|--------------------------------------|
| Name: R_GVDS | From Node: PR_N_GVDS | Length(ft): 218.00 |
| Group: BASE | To Node: Pond-A | Count: 1 |
| | | Friction Equation: Automatic |
| | | Solution Algorithm: Most Restrictive |
| | | Flow: Both |
| UPSTREAM | DOWNSTREAM | Entrance Loss Coef: 0.00 |
| Geometry: Circular | Circular | Exit Loss Coef: 1.00 |
| Span(in): 36.00 | 36.00 | Bend Loss Coef: 0.00 |
| Rise(in): 36.00 | 36.00 | Outlet Ctrl Spec: Use dc or tw |
| Invert(ft): 38.550 | 35.000 | Inlet Ctrl Spec: Use dc |
| Manning's N: 0.012000 | 0.012000 | Stabilizer Option: None |
| Top Clip(in): 0.000 | 0.000 | |
| Bot Clip(in): 0.000 | 0.000 | |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

| | | |
|-----------------------|----------------------|--------------------------------------|
| Name: R_HiRd | From Node: Pr_N_HiRd | Length(ft): 181.00 |
| Group: BASE | To Node: Pond-G | Count: 1 |
| | | Friction Equation: Automatic |
| | | Solution Algorithm: Most Restrictive |
| | | Flow: Both |
| UPSTREAM | DOWNSTREAM | Entrance Loss Coef: 0.00 |
| Geometry: Circular | Circular | Exit Loss Coef: 1.00 |
| Span(in): 15.00 | 15.00 | Bend Loss Coef: 0.00 |
| Rise(in): 15.00 | 15.00 | Outlet Ctrl Spec: Use dc or tw |
| Invert(ft): 39.490 | 38.410 | Inlet Ctrl Spec: Use dc |
| Manning's N: 0.012000 | 0.012000 | Stabilizer Option: None |
| Top Clip(in): 0.000 | 0.000 | |
| Bot Clip(in): 0.000 | 0.000 | |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

| | | |
|-----------------------|-------------------|--------------------------------------|
| Name: R_Pond-B | From Node: Pond-B | Length(ft): 692.00 |
| Group: BASE | To Node: DN_A2 | Count: 1 |
| | | Friction Equation: Automatic |
| | | Solution Algorithm: Most Restrictive |
| | | Flow: Both |
| UPSTREAM | DOWNSTREAM | Entrance Loss Coef: 0.00 |
| Geometry: Circular | Circular | Exit Loss Coef: 1.00 |
| Span(in): 36.00 | 36.00 | Bend Loss Coef: 0.00 |
| Rise(in): 36.00 | 36.00 | Outlet Ctrl Spec: Use dc or tw |
| Invert(ft): 36.000 | 35.000 | Inlet Ctrl Spec: Use dc |
| Manning's N: 0.012000 | 0.012000 | Stabilizer Option: None |
| Top Clip(in): 0.000 | 0.000 | |
| Bot Clip(in): 0.000 | 0.000 | |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

| | | |
|-----------------------|-------------------|--------------------------------------|
| Name: R_Pond-C | From Node: Pond-C | Length(ft): 132.00 |
| Group: BASE | To Node: DN_C | Count: 1 |
| | | Friction Equation: Automatic |
| | | Solution Algorithm: Most Restrictive |
| | | Flow: Both |
| UPSTREAM | DOWNSTREAM | Entrance Loss Coef: 0.00 |
| Geometry: Circular | Circular | Exit Loss Coef: 1.00 |
| Span(in): 42.00 | 42.00 | Bend Loss Coef: 0.00 |
| Rise(in): 42.00 | 42.00 | Outlet Ctrl Spec: Use dc or tw |
| Invert(ft): 36.000 | 35.700 | Inlet Ctrl Spec: Use dc |
| Manning's N: 0.012000 | 0.012000 | Stabilizer Option: None |
| Top Clip(in): 0.000 | 0.000 | |
| Bot Clip(in): 0.000 | 0.000 | |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

| | | |
|-----------------------|-------------------|--------------------------------------|
| Name: R_Pond-D | From Node: Pond-D | Length(ft): 33.00 |
| Group: BASE | To Node: DN_D | Count: 1 |
| | | Friction Equation: Automatic |
| | | Solution Algorithm: Most Restrictive |
| | | Flow: Both |
| UPSTREAM | DOWNSTREAM | Entrance Loss Coef: 0.00 |
| Geometry: Circular | Circular | Exit Loss Coef: 1.00 |
| Span(in): 24.00 | 24.00 | Bend Loss Coef: 0.00 |
| Rise(in): 24.00 | 24.00 | Outlet Ctrl Spec: Use dc or tw |
| Invert(ft): 41.000 | 40.500 | Inlet Ctrl Spec: Use dc |
| Manning's N: 0.012000 | 0.012000 | Stabilizer Option: None |
| Top Clip(in): 0.000 | 0.000 | |
| Bot Clip(in): 0.000 | 0.000 | |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

| | | |
|--------------------|-------------------|--------------------------------------|
| Name: R_Pond-E | From Node: Pond-E | Length(ft): 179.00 |
| Group: BASE | To Node: DN_E | Count: 1 |
| | | Friction Equation: Automatic |
| | | Solution Algorithm: Most Restrictive |
| | | Flow: Both |
| UPSTREAM | DOWNSTREAM | |
| Geometry: Circular | Circular | |

| | | |
|-----------------------|----------|--------------------------------|
| Span(in): 24.00 | 24.00 | Entrance Loss Coef: 0.00 |
| Rise(in): 24.00 | 24.00 | Exit Loss Coef: 1.00 |
| Invert(ft): 39.500 | 39.000 | Bend Loss Coef: 0.00 |
| Manning's N: 0.012000 | 0.012000 | Outlet Ctrl Spec: Use dc or tw |
| Top Clip(in): 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| Bot Clip(in): 0.000 | 0.000 | Stabilizer Option: None |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```

-----
Name: R_PoRd          From Node: PR_N_PoRd      Length(ft): 430.00
Group: BASE          To Node: DN_G             Count: 1
                                     Friction Equation: Automatic
                                     Solution Algorithm: Most Restrictive
                                     Flow: Both
UPSTREAM             DOWNSTREAM
Geometry: Horz Ellipse Horz Ellipse
Span(in): 68.00      68.00
Rise(in): 43.00      43.00
Invert(ft): 37.580   36.000
Manning's N: 0.012000 0.012000
Top Clip(in): 0.000   0.000
Bot Clip(in): 0.000   0.000
Entrance Loss Coef: 0.00
Exit Loss Coef: 1.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dc
Stabilizer Option: None
    
```

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

==== Drop Structures =====

```

Name: CS_Pond-C      From Node: DN_C          Length(ft): 203.00
Group: BASE          To Node: PR_N_PoRd      Count: 1
                                     Friction Equation: Automatic
                                     Solution Algorithm: Most Restrictive
                                     Flow: Both
UPSTREAM             DOWNSTREAM
Geometry: Horz Ellipse Horz Ellipse
Span(in): 68.00      68.00
Rise(in): 43.00      43.00
Invert(ft): 37.400   37.800
Manning's N: 0.012000 0.012000
Top Clip(in): 0.000   0.000
Bot Clip(in): 0.000   0.000
Entrance Loss Coef: 0.000
Exit Loss Coef: 1.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dc
Solution Incs: 10
    
```

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

*** Weir 1 of 1 for Drop Structure CS_Pond-C ***

| | | |
|-----------------------|--------------------------|-------|
| Count: 1 | Bottom Clip(in): 0.000 | TABLE |
| Type: Vertical: Mavis | Top Clip(in): 0.000 | |
| Flow: Both | Weir Disc Coef: 3.200 | |
| Geometry: Rectangular | Orifice Disc Coef: 0.600 | |
| Span(in): 36.00 | Invert(ft): 38.000 | |
| Rise(in): 36.00 | Control Elev(ft): 38.000 | |

| | | |
|-----------------------|-----------------|--------------------------------------|
| Name: CS_Pond-D | From Node: DN_D | Length(ft): 566.00 |
| Group: BASE | To Node: DN_C | Count: 1 |
| UPSTREAM | DOWNSTREAM | Friction Equation: Automatic |
| Geometry: Circular | Circular | Solution Algorithm: Most Restrictive |
| Span(in): 24.00 | 24.00 | Flow: Both |
| Rise(in): 24.00 | 24.00 | Entrance Loss Coef: 0.000 |
| Invert(ft): 39.000 | 37.400 | Exit Loss Coef: 1.000 |
| Manning's N: 0.012000 | 0.012000 | Outlet Ctrl Spec: Use dc or tw |
| Top Clip(in): 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| Bot Clip(in): 0.000 | 0.000 | Solution Incs: 10 |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 2 for Drop Structure CS_Pond-D ***

| | | |
|-----------------------|--------------------------|-------|
| Count: 1 | Bottom Clip(in): 0.000 | TABLE |
| Type: Vertical: Mavis | Top Clip(in): 0.000 | |
| Flow: Both | Weir Disc Coef: 3.200 | |
| Geometry: Circular | Orifice Disc Coef: 0.600 | |
| Span(in): 1.20 | Invert(ft): 43.500 | |
| Rise(in): 1.20 | Control Elev(ft): 43.500 | |

*** Weir 2 of 2 for Drop Structure CS_Pond-D ***

| | | |
|-----------------------|--------------------------|-------|
| Count: 1 | Bottom Clip(in): 0.000 | TABLE |
| Type: Vertical: Mavis | Top Clip(in): 0.000 | |
| Flow: Both | Weir Disc Coef: 3.200 | |
| Geometry: Rectangular | Orifice Disc Coef: 0.600 | |
| Span(in): 18.00 | Invert(ft): 43.780 | |
| Rise(in): 18.00 | Control Elev(ft): 43.780 | |

| | | |
|-----------------------|-----------------|--------------------------------------|
| Name: CS_Pond-E | From Node: DN_E | Length(ft): 1050.00 |
| Group: BASE | To Node: Pond-F | Count: 1 |
| UPSTREAM | DOWNSTREAM | Friction Equation: Automatic |
| Geometry: Circular | Circular | Solution Algorithm: Most Restrictive |
| Span(in): 24.00 | 24.00 | Flow: Both |
| Rise(in): 24.00 | 24.00 | Entrance Loss Coef: 0.000 |
| Invert(ft): 39.960 | 34.000 | Exit Loss Coef: 1.000 |
| Manning's N: 0.012000 | 0.012000 | Outlet Ctrl Spec: Use dc or tw |
| Top Clip(in): 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| Bot Clip(in): 0.000 | 0.000 | Solution Incs: 10 |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 1 for Drop Structure CS_Pond-E ***

| | | |
|-----------------------|--------------------------|-------|
| Count: 1 | Bottom Clip(in): 0.000 | TABLE |
| Type: Vertical: Mavis | Top Clip(in): 0.000 | |
| Flow: Both | Weir Disc Coef: 3.200 | |
| Geometry: Rectangular | Orifice Disc Coef: 0.600 | |
| Span(in): 6.00 | Invert(ft): 42.900 | |
| Rise(in): 12.00 | Control Elev(ft): 42.900 | |

| | | |
|-----------------|--------------------|--------------------|
| Name: CS_Pond-F | From Node: Pond-F | Length(ft): 203.00 |
| Group: BASE | To Node: PR_N_MAIN | Count: 1 |

| | | | |
|---------------|----------|------------|--------------------------------------|
| | UPSTREAM | DOWNSTREAM | Friction Equation: Automatic |
| Geometry: | Circular | Circular | Solution Algorithm: Most Restrictive |
| Span(in): | 48.00 | 48.00 | Flow: Both |
| Rise(in): | 48.00 | 48.00 | Entrance Loss Coef: 0.000 |
| Invert(ft): | 33.500 | 33.000 | Exit Loss Coef: 1.000 |
| Manning's N: | 0.012000 | 0.012000 | Outlet Ctrl Spec: Use dc or tw |
| Top Clip(in): | 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| Bot Clip(in): | 0.000 | 0.000 | Solution Incs: 10 |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 2 for Drop Structure CS_Pond-F ***

TABLE

| | | | |
|-----------|-----------------|--------------------|--------|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Vertical: Mavis | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Rectangular | Orifice Disc Coef: | 0.600 |
| Span(in): | 18.00 | Invert(ft): | 37.620 |
| Rise(in): | 9999.00 | Control Elev(ft): | 37.620 |

*** Weir 2 of 2 for Drop Structure CS_Pond-F ***

TABLE

| | | | |
|-----------|-----------------|--------------------|--------|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Vertical: Mavis | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Rectangular | Orifice Disc Coef: | 0.600 |
| Span(in): | 72.00 | Invert(ft): | 40.500 |
| Rise(in): | 9999.00 | Control Elev(ft): | 40.500 |

| | | | | | |
|--------|-----------|------------|--------|-------------|-------|
| Name: | CS_Pond-G | From Node: | Pond-G | Length(ft): | 23.00 |
| Group: | BASE | To Node: | Pond-F | Count: | 1 |

| | | | |
|---------------|----------|------------|--------------------------------------|
| | UPSTREAM | DOWNSTREAM | Friction Equation: Automatic |
| Geometry: | Circular | Circular | Solution Algorithm: Most Restrictive |
| Span(in): | 60.00 | 60.00 | Flow: Both |
| Rise(in): | 38.00 | 38.00 | Entrance Loss Coef: 0.000 |
| Invert(ft): | 34.700 | 34.400 | Exit Loss Coef: 1.000 |
| Manning's N: | 0.012000 | 0.012000 | Outlet Ctrl Spec: Use dc or tw |
| Top Clip(in): | 0.000 | 0.000 | Inlet Ctrl Spec: Use dc |
| Bot Clip(in): | 0.000 | 0.000 | Solution Incs: 10 |

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 1 for Drop Structure CS_Pond-G ***

TABLE

| | | | |
|-----------|-----------------|--------------------|--------|
| Count: | 1 | Bottom Clip(in): | 0.000 |
| Type: | Vertical: Mavis | Top Clip(in): | 0.000 |
| Flow: | Both | Weir Disc Coef: | 3.200 |
| Geometry: | Rectangular | Orifice Disc Coef: | 0.600 |
| Span(in): | 180.00 | Invert(ft): | 38.000 |
| Rise(in): | 36.00 | Control Elev(ft): | 38.000 |

==== Hydrology Simulations =====

Name: Pr_WM_100Y_24H

Filename: J:\E2160\E2160208.00\modeling\icpr\PROPOSED\Pr_WM_100Y_24H.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 12.00

| Time(hrs) | Print Inc(min) |
|-----------|----------------|
| 36.000 | 5.00 |

Name: Pr_WM_25Y_24H

Filename: J:\E2160\E2160208.00\modeling\icpr\PROPOSED\Pr_WM_25Y_24H.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 9.00

| Time(hrs) | Print Inc(min) |
|-----------|----------------|
| 36.000 | 5.00 |

==== Routing Simulations =====

Name: Pr_WM_100Y_24H Hydrology Sim: Pr_WM_100Y_24H

Filename: J:\E2160\E2160208.00\modeling\icpr\PROPOSED\Pr_WM_100Y_24H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 24.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

| Time(hrs) | Print Inc(min) |
|-----------|----------------|
| 999.000 | 15.000 |

| | |
|-------|-----|
| Group | Run |
| BASE | Yes |

Name: Pr_WM_25Y_24 Hydrology Sim: Pr_WM_25Y_24H

Filename: J:\E2160\E2160208.00\modeling\icpr\PROPOSED\Pr_WM_25Y_24.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 24.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

| Time(hrs) | Print Inc(min) |
|-----------|----------------|
| 999.000 | 15.000 |

| | |
|-------|-----|
| Group | Run |
| BASE | Yes |

Pelican Golf Club
Proposed Condition

| Name | Group | Simulation | Max Time Stage hrs | Max Stage ft | Warning Stage ft | Max Delta Stage ft | Max Surf Area ft2 | Max Time Inflow hrs | Max Inflow cfs | Max Time Outflow hrs | Max Outflow cfs |
|------------|-------|--------------|--------------------------|--------------------|------------------------|--------------------------|-------------------------|---------------------------|----------------------|----------------------------|-----------------------|
| DN_A | BASE | Pr_WM_25Y_24 | 17.32 | 41.06 | 44.00 | 0.0018 | 1149 | 13.61 | 12.55 | 13.63 | 12.39 |
| DN_A2 | BASE | Pr_WM_25Y_24 | 17.74 | 41.01 | 44.00 | 0.0174 | 492 | 0.02 | 18.64 | 21.28 | 6.65 |
| DN_BeFor | BASE | Pr_WM_25Y_24 | 17.71 | 40.77 | 45.00 | 0.0049 | 463 | 12.36 | 45.69 | 12.39 | 45.62 |
| DN_C | BASE | Pr_WM_25Y_24 | 17.59 | 40.97 | 43.00 | 0.0301 | 125 | 0.01 | 20.71 | 17.40 | 13.66 |
| DN_D | BASE | Pr_WM_25Y_24 | 12.90 | 45.07 | 46.00 | 0.0802 | 115 | 0.00 | 19.45 | 12.90 | 7.07 |
| DN_E | BASE | Pr_WM_25Y_24 | 16.15 | 43.87 | 44.00 | 0.0825 | 122 | 0.02 | 21.09 | 16.15 | 1.53 |
| DN_G | BASE | Pr_WM_25Y_24 | 17.83 | 40.76 | 42.00 | 0.0192 | 462 | 12.39 | 56.33 | 12.17 | 54.24 |
| Pond-A | BASE | Pr_WM_25Y_24 | 14.01 | 41.27 | 43.00 | 0.0023 | 52308 | 12.56 | 33.88 | 13.61 | 12.55 |
| Pond-B | BASE | Pr_WM_25Y_24 | 17.79 | 41.01 | 43.00 | 0.0010 | 92483 | 12.08 | 13.61 | 0.02 | 18.64 |
| Pond-C | BASE | Pr_WM_25Y_24 | 17.71 | 41.00 | 43.00 | 0.0020 | 72339 | 12.50 | 18.08 | 0.01 | 20.71 |
| Pond-D | BASE | Pr_WM_25Y_24 | 12.90 | 45.18 | 47.00 | 0.0014 | 43533 | 12.08 | 23.71 | 0.00 | 19.45 |
| Pond-E | BASE | Pr_WM_25Y_24 | 16.15 | 43.88 | 46.00 | 0.0009 | 79428 | 12.08 | 20.78 | 0.02 | 21.09 |
| Pond-F | BASE | Pr_WM_25Y_24 | 17.87 | 40.62 | 42.00 | 0.0028 | 64884 | 12.34 | 47.43 | 17.92 | 25.50 |
| Pond-G | BASE | Pr_WM_25Y_24 | 17.84 | 40.72 | 43.00 | 0.0017 | 143422 | 12.25 | 84.09 | 12.35 | 29.36 |
| Pr_N-GVDN | BASE | Pr_WM_25Y_24 | 12.32 | 46.43 | 47.00 | -0.0045 | 14050 | 12.08 | 9.00 | 12.31 | 6.63 |
| PR_N_BeFor | BASE | Pr_WM_25Y_24 | 12.36 | 43.10 | 46.00 | -0.0050 | 7392 | 12.25 | 46.70 | 12.36 | 45.69 |
| PR_N_GVDS | BASE | Pr_WM_25Y_24 | 13.79 | 41.34 | 46.00 | 0.0019 | 70278 | 12.17 | 46.37 | 12.57 | 25.75 |
| Pr_N_HiRd | BASE | Pr_WM_25Y_24 | 12.59 | 41.85 | 43.00 | 0.0018 | 9040 | 12.08 | 10.96 | 12.78 | 6.93 |
| PR_N_MAIN | BASE | Pr_WM_25Y_24 | 17.59 | 37.62 | 41.00 | 0.0031 | 833 | 17.58 | 26.34 | 17.59 | 26.34 |
| PR_N_PoRd | BASE | Pr_WM_25Y_24 | 17.71 | 40.78 | 44.00 | 0.0047 | 741 | 17.40 | 14.91 | 17.71 | 16.43 |
| Pr_Outfall | BASE | Pr_WM_25Y_24 | 0.00 | 36.33 | 36.33 | 0.0000 | 324 | 17.59 | 26.34 | 0.00 | 0.00 |

SWFWMD
Pre Application Notes

THIS FORM IS INTENDED TO FACILITATE AND GUIDE THE DIALOGUE DURING A PRE-APPLICATION MEETING BY PROVIDING A PARTIAL "PROMPT LIST" OF DISCUSSION SUBJECTS. IT IS NOT A LIST OF REQUIREMENTS FOR SUBMITTAL BY THE APPLICANT.



**SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
RESOURCE REGULATION DIVISION
PRE-APPLICATION MEETING NOTES**

**FILE
NUMBER:
PA 403673**

| | | | |
|----------------------------|---|-------------------------|------------------|
| Date: | 8/30/2016 | | |
| Time: | 10:00 | | |
| Project Name: | Pelican Golf Club | | |
| District Engineer: | Rob McDaniel | | |
| District ES: | Joe Andress | | |
| Attendees: | Hamid Faraji hamid.faraji@cardno.com ; Tim Neldner timothy.neldner@cardno.com (Cardno) | | |
| County: | Pinellas | Sec/Twp/Rge: | 28/29/15 |
| Total Land Acreage: | 136 acres | Project Acreage: | Approx 136 acres |

Prior On-Site/Off-Site Permit Activity:

- 44001562.002 for Belleview Biltmore Golf Course rehabilitation. This permit expired in 2006 and was not transferred to operations.

Project Overview:

- Reconfiguring the golf course, with reshaped/resized wet detention stormwater ponds. Some additional impervious area will be constructed as part of the new clubhouse and parking area.

Environmental Discussion: (Wetlands On-Site, Wetlands on Adjacent Properties, Delineation, T&E species, Easements, Drawdown Issues, Setbacks, Justification, Elimination/Reduction, Permanent/Temporary Impacts, Secondary and Cumulative Impacts, Mitigation Options, SHWL, Upland Habitats, Site Visit, etc.)

- Provide the limits of jurisdictional wetlands which should be top-of-bank of the upland cut ponds and drainage ditches
- Wetland mitigation should not be required as the proposed impacts are to existing upland cut drainage ditches and re-configuration of upland-cut predominantly open water ponds.

Site Information Discussion: (SHW Levels, Floodplain, Tailwater Conditions, Adjacent Off-Site Contributing Sources, Receiving Waterbody, etc.)

- WBIDs need to be independently verified by the consultant - WBID 1614 – Rattlesnake Creek
- Listed as impaired for dissolved oxygen (nutrients) and fecal coliform.
- Any wells on site should be identified and their future use/abandonment must be designated. Water use permits will need to be modified.

Water Quantity Discussions: (Basin Description, Storm Event, Pre/Post Volume, Pre/Post Discharge, etc.)

- Demonstrate that discharges from proposed project area will not cause an adverse impact for a 25-year, 24-hour storm event.
- Demonstrate that site will not impede the conveyance of contributing off-site flows.
- Demonstrate that the project will not increase flood stages up- or down-stream of the project area(s).
- Please be aware that if there is credible historical evidence of past flooding or the physical capacity of the downstream conveyance or receiving waters indicates that the conditions for issuance will not be met without consideration of storm events of different frequency or duration, applicants shall be required to provide additional analyses using storm events of different duration or frequency than the 25-year 24-hour storm event, or to adjust the volume, rate or timing of discharges. [Section 3.0 Applicant's Handbook Volume II]

Water Quality Discussions: (Type of Treatment, Technical Characteristics, Non-presumptive Alternatives, etc.)

- Provide water quality treatment for entire project area and all contributing off-site flows.
- The project discharges to an impaired water body, must provide a net environmental improvement.
- Regarding the new clubhouse and parking area: Applicant must demonstrate a net improvement for the parameters of concern by performing a pre/post pollutant loading analysis based on existing land use and the proposed land use.
- Will acknowledge compensatory treatment to offset pollutant loads associated with portions of the project area that cannot be physically treated.

Sovereign Lands Discussion: (Determining Location, Correct Form of Authorization, Content of Application, Assessment of Fees, Coordination with FDEP)

- N/A

Operation and Maintenance/Legal Information: (Ownership or Perpetual Control, O&M Entity, O&M Instructions, Homeowner Association Documents, Coastal Zone requirements, etc.)

- The permit must be issued to the property owner(s).
- Provide proof of ownership in the form of a deed or contract for sale.
- Provide appropriate O&M instructions.
- Provide detailed construction surface water management plan.

Application Type and Fee Required:

- SWERP Individual, new permit (not a modification) – Sections A, C, and E of the ERP Application.
- Between 100 and 640 acres of project area or between 10 and 50 acres of wetland or surface water impacts - \$3,105.75
- Consult the [fee schedule](#) for different thresholds.

Other: (Future Pre-Application Meetings, Fast Track, Submittal Date, Construction Start Date, Required District Permits – WUP, WOD, Well Construction, etc.)

- In accordance with Section 5.5.2.3 of the Applicant's Handbook Volume I (A.H.V.I), upon receipt by the District of an application for an individual permit to construct or alter a dam, impoundment, reservoir, or appurtenant work, a notice of receipt of the application must be published in a newspaper having general circulation (meeting the requirements of Section 50.031, F.S.) within the affected area in accordance with Sections 373.116, F.S., 373.118(3), 373.146, and 373.413(3), F.S. Please provide documentation that such noticing has been accomplished. Note that the published notices of receipt for an ERP can be in accordance with the language provided in Rule 40D-1.603(10), F.A.C., and receipt of an affidavit establishing proof of this publication will be considered a completeness item of this ERP Application.

40D-1.603(12) – “Applicants required to publish a notice of receipt of application must provide to the District a publisher’s affidavit establishing proof of publication pursuant to Sections 50.041 and 50.051, F.S., before the application will be considered complete and the applicable timeframe for taking agency action on the application will commence.”

- Provide a copy of the legal description (of all applicable parcels within the project area) in one of the following forms:
 - a. Deed with complete Legal Description attachment.
 - b. Plat.
 - c. Boundary survey of the property(ies) with a sketch.
- The plans and drainage report submitted electronically must include the appropriate information required under Rule 61G15-23.005(3)(d), F.A.C. The following text is acceptable to the Florida Board of Professional Engineers (FBPE) to meet this requirement and must appear where the signature would normally appear:

[Licensee] State of Florida, Professional Engineer, License No. X

This item has been electronically signed and sealed by [Licensee, PE] on [DATE] using a SHA-1 authentication code. Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies

- Federal Supplemental Application Form - to be used with the Joint Application form under SWERP 2 (SWERP 2 has not been approved yet). This form will not be incorporated into rule but will be added to the electronic application. The Corps has requested that we begin using this form now to help them gather the information they need to process their permits. This should be provided during any pre-application meeting that proposed work in, on or over wetlands or surface waters.

Disclaimer: The District ERP pre-application meeting process is a service made available to the public to assist interested parties in preparing for submittal of a permit application. Information shared at pre-application meetings is superseded by the actual permit application submittal. District permit decisions are based upon information submitted during the application process and Rules in effect at the time the application is complete.

Hamid Faraji

From: Rob McDaniel <Rob.McDaniel@swfwmd.state.fl.us>
Sent: Wednesday, August 31, 2016 8:11 AM
To: Hamid Faraji
Cc: Tim Neldner
Subject: RE: Pre-application meeting Pelican Golf Club

Hamid,

Treatment will be required for the clubhouse area that is being modified, not the entire 136 acres. Please be sure to maintain any treatment function that is occurring for the clubhouse and parking in the existing conditions and account for any additional areas that will be modified. We are not sure that presumptive criteria will be sufficient; this will need to be demonstrated through the use of pollutant loading calculations.

Thanks,
Rob

From: Hamid Faraji [mailto:Hamid.Faraji@cardno.com]
Sent: Tuesday, August 30, 2016 12:52 PM
To: Rob McDaniel <Rob.McDaniel@swfwmd.state.fl.us>
Cc: Tim Neldner <Timothy.Neldner@cardno.com>
Subject: RE: Pre-application meeting Pelican Golf Club

Hi Rob,

Regarding the first item under the Water Quality Discussion:

It is my understanding to provide treatment (presumptive criteria) for the increased impervious area at club house only, not for the entire 136 ac. Please confirm.

Thanks.

Hamid Faraji PE

TRANSPORTATION DRAINAGE MANAGER
ENGINEERING & ENVIRONMENTAL SERVICES DIVISION
CARDNO

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From: Rob McDaniel [mailto:Rob.McDaniel@swfwmd.state.fl.us]
Sent: Tuesday, August 30, 2016 11:39 AM
To: Hamid Faraji <Hamid.Faraji@cardno.com>; Tim Neldner <Timothy.Neldner@cardno.com>
Subject: Pre-application meeting Pelican Golf Club

Rob McDaniel, P.E.
Sr. Professional Engineer
Environmental Resource Permit Bureau
7601 Highway 301 North
Tampa, FL 33637-6759
813-985-7481 or 800-836-0797 ext. 2039
rob.mcdaniel@swfwmd.state.fl.us

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