

**Project Observation Minutes & Recommendations from Martin Aquatic
Holland Park IWF - Palm Coast**

Project:	Holland Park IWF		
Location:	Palm Coast, FL		
Report By:	Jonathan "JT" Toavs & Ken Martin		
Attendees:	JT, Ken, Mackenzie, and Drew from Martin Aquatic		
Issue Date:	2022.08.18	Revised Date:	
Subject:	IWF existing conditions Observation		
Weather:	Partly Cloudy		

Summary

1. The following observations are provided per the City's request to help determine potential next steps in resolving operational difficulties at the IWF.
2. The City mentioned difficulties maintaining sufficient water in the system's collector tank to keep it operational and reports excess water loss during the day.
3. The City mentioned finish material failures and safety concerns with the finish material challenges and failures.
4. Florida Building Code (FBC) violations were observed; however, we recognize a Variance approval from the Florida Department of Health was obtained by BBI (on behalf of the City) that appears to allow, with qualifications, the Special Qualified Use of the porous No-Fault deck finishes.

Site Related matters

Item #	Subject Item	Remarks by Martin Aquatic
A1	Inadequate Wet-Deck Slopes and Drainage around IWF basin perimeter	<ol style="list-style-type: none"> 1. The Florida Building Code requires the wet-decking around the IWF feature to slope (at a minimum of 2% and a maximum of 4% for the first 4-feet) to deck drains or away from the IWF. 2. With the current No-Fault finish materials in place (on top of the concrete sub-deck below), we are unable to ascertain if such a wet-deck slope exists on the concrete sub-deck at the 2%to 4% slope toward the edge of the deck (such as to a planting area), to deck drains that are perhaps obscured by the No-Fault porous deck finish surfaces, or to an authorized outfall.

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3. The existing bench wall obstructs large areas of the IWF perimeter and thus appears to prevent proper wet-deck drainage due to the locations of the adjacent seat walls.

4. Martin Aquatic Comments:

- a. When the wet-deck does not appear to drain to deck grates or sheet flow to the edge of the deck, problematic algae and other undesirable bio-organisms may begin to form, resulting in a potential bather safety issue; consequently, these wet-deck areas appear not to be code compliant with the FBC Chapter 454.1.
- b. Destructive removal of the existing No-Fault porous finish materials is necessary to allow further consideration.
- c. A Certified Survey to establish the presence of minimum slopes on the wet-deck portions of the surfaces located beneath the No-Fault finishes and the slopes on the IWF sub-deck surface elevations, including the elevations of deck edge at the junctures of the wet-deck and the Reservoir tank deck-drains.
- d. The previously-granted variance does not address this potential code issue.

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1. Several areas around the IWF feature perimeter appear to not have the required 4-ft wide Wet-deck (sloping away from the IWF surfaces at 2% to 4%).
 - a. The FBC allows up to 50% of the perimeter of the IWF to have less than 4-feet of wet-deck or no wet-deck at all.
 - b. The juncture of the IWF surface and the wet-deck typically incorporates a "high ridge elevation" of sorts, where:
 - i. the IWF sub-deck surface is sloped toward the Reservoir Tank deck drains
 - ii. and the Wet-deck slopes away from the IWF to sheet flow from the wet-deck or drains to an authorized outfall to waste
 - iii. There are no current discernible ridge-type elevations causing Martin Aquatic concerns that the sub-deck slopes are not directing the IWF spray water toward the Reservoir Tank.
 - iv. The FBC requires the IWF's sub-deck with impervious deck finishes to slope toward the drains

A2

Lack of a wet deck around portions of the IWF feature

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- at a minimum of 1 foot per 60 feet (and a maximum of 1-foot per every 10-feet).
- v. Since the granted variance appears to allow an exception to the impervious requirement, the importance of the IWF sub-deck to slope toward the Reservoir Tank drain locations is critical. The code identifies such slopes to allow the re-capture of the IWF spray water and direct it to the Reservoir Tank via the installed deck drains.
2. When IWF spray water is allowed to strike portions of the IWF sub-deck that:
 - a. Does not slope toward reservoir tank drains, or it might have an improperly sloped sub-deck, causing IWF spray water to perhaps run toward the wet-deck (which by code must slope away from the IWF feature drains), causing a loss of the IWF spray water.
 - b. Currently, Martin Aquatic has a suspicion of inconsistent slopes on the IWF sub-deck, which can cause puddling on top of the sub-deck, possibly causing IWF spray water not to be returned to the reservoir tank rapidly, thus potentially causing excessive draw-downs inside the Reservoir Tank, and an excessive water-make-up and corresponding chemical loss.
 3. Martin Aquatic shall re-evaluate the code-required minimums that a minimum of 50% of the IWF perimeter has wet-deck slopes away from the IWF surface.
 - a. The above requested Destructive removal of the No-Fault porous finish materials (see A1, item 4b) is necessary to evaluate this potential code issue further.
 - b. The aforementioned requested survey (see A1, item 4c) is mandatory to assist in resolving this suspected potential Code violation relating to the amount of Wet-deck present.

IWF Related matters

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Item #	Subject Item	Remarks by Martin Aquatic
B1	IWF and Wet-Deck No-Fault deck finish surfaces	<ol style="list-style-type: none">1. The existing No-Fault deck finish material appears to have NO National Sanitation Foundation (NSF) approvals and is not certified as complying with the NSF-Standard 50.2. However, a Variance approval was obtained by BBI (on behalf of the City) that appears to allow, with qualifications, the Use of the porous No-Fault deck finish.3. In addition, Martin Aquatic observed large areas of loose, soft, crumbling (perhaps hazardous), disintegrating, porous material covering a thickened layer of No-Fault black-color porous materials that have excessively degraded and appear to potentially not be acting as a sanitary product subject to near constant exposure to recirculated IWF water having a high chlorine content.<ol style="list-style-type: none">a. The No-Fault deck finish material is moving and appears "bunched into locations that may cause potential tripping hazards to the bathers while numerous locations appear to be ripped and torn.b. Martin Aquatic observed that the No-Fault materials' particles appear not to maintain a chemical bond.c. However, Martin Aquatic acknowledges that the Health Department granted a variance for the No-Fault Use.4. The IWF Spray water passing through the No-Fault deck finish materials appears to take on a "less-than-clear" appearance causing us concern as to what water seepage contaminants and deleterious material properties are being transferred, which may allow children and bathers to swallow or ingest the water spray, and allow it to enter their eyes and nose. Eventually, the IWF spray water passes through the underground, existing piping systems to finally arrive at the Reservoir Tank.

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5. The No-Fault deck finish materials appear not to be adhering to the structural deck (located below the No-Fault deck finish materials).
6. Based upon the on-site observations, Martin Aquatic deems the No-Fault deck finish material as exhibiting evidence of poor quality, with numerous locations failing.
 - a. Per the requirements of the granted DOH Variance that allowed the Use of the Porous No-Fault deck finish materials, the Owner (City Palm Coast) must replace or repair the faulty locations as they occur.
7. Martin Aquatic recommends that the No-Fault porous deck finishes be entirely removed and replaced with an NSF-Standard 50 Listed impervious, non-slip deck surface in a color scheme to please the City of Palm Coast.

B3	Deck Finish Surface is porous but appears to have been approved via a State Variance procedure	<ol style="list-style-type: none"> 1. The finished wet-deck surface is porous. 2. The FBC does not allow for a porous deck surface material, but the City was approved for its qualified Use of the No-Fault deck finish materials' variance.
B4	Deck Finish Surface and Subsurface are each absorbing water	<ol style="list-style-type: none"> 1. Due to the upper No-Fault Deck Finish Surface being porous and the lower layer of No-Fault sub-surface material also being porous (but used to create the thickened floor areas) is saturated with water, causing the No-Fault wet-deck system to hold, retain, for an unknown time, and absorb significant portions of spray water during and after the IWF feature's operation. 2. The City reported to Martin Aquatic that some of the IWF spray water retained by the No-Fault deck finish material seeps back into the Reservoir Tank overnight or perhaps even longer.
B5	Spray direction and flow	<ol style="list-style-type: none"> 1. Several features spray water directly out of the feature boundaries or onto the wet deck area that is regrettably sloping away from the existing deck drain grates.

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2. The singular and the combination of these above-noted design & product-related deficiencies result in large water loss from the IWF system and lower operating water levels within the reservoir tanks.
3. Additionally, the decreased operating water level within the Reservoir tank is excessive and has caused the City to install an additional 2.5-inch water supply pipe at the Reservoir tank as a temporary fix.

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1. There are several locations where the No-Fault Deck Finish Surface of the wet-deck is at a higher elevation than the adjacent IWF spray nozzles or the water feature elements surrounding the No-Fault Deck Finished Surfaces.
 2. Numerous areas where the No-Fault deck finish materials appear to have been installed to be quite thick seem to be holding, retaining, or slowing the passage of IWF spray water and not adequately allowing water to flow quickly to the remote deck drains leading to the Reservoir Tank.

B6 The slope on the surface
 of the wet-deck features

- a. Martin Aquatic observed that after only a few minutes of IWF Spray Water from the pumps' operation, it appeared that the IWF Spray Water became retained, slowed, or trapped in the suspected faulty No-Fault deck finish materials or perhaps some of the IWF spray water is draining away to the surrounding earth/soil or turf areas at the deck's edge.
- b. The water-in-transit appears to become absorbed into the faulty wet-deck materials and slowly drains off through an observed seepage through the No-Fault subsurface materials to reach a deck drain ultimately.
- c. The slow water movement through the No-Fault deck finish materials and some water being allowed to sheet flow/drain away from the Wet-

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deck is causing operational problems with the prescribed operation at the Reservoir Tank.

3. The slow return of the IWF spray water to the Reservoir Tanks is an unsatisfactory installation and will not operate per the FBC requirements, causing additional corrections to be implemented.

Equipment Room Related Matters

Item #	Subject Item	Remarks by Martin Aquatic
C1	Tank water levels	<ol style="list-style-type: none"> 1. Our review of the drawings did not identify the target water levels within the collector tank's original design drawings, nor could we locate as-builts or shop drawings identifying the water level tank targets. 2. These are critical water levels without which the operators cannot adequately maintain and operate the IWF systems. <ol style="list-style-type: none"> 1. The following minimum water levels should be identified: Overflow water level. <ol style="list-style-type: none"> a. (Currently set by the level of the overflow standpipe) 2. The static water level <ol style="list-style-type: none"> b. (Currently set by the water level float) 3. The operational water level – FILTERS ONLY <ol style="list-style-type: none"> a. (When the feature is in filter operational mode only with no water going through any features) 4. The operational water level – ALL PUMPS ON <ol style="list-style-type: none"> a. (When the feature is in full operating mode and spraying water through the numerous nozzles and statuary)
C2	Autofill/water fill issues	<ol style="list-style-type: none"> 1. Since the originally-designed 1" water-fill pipe, in a full-on mode, was inadequate to maintain an operational water level in the Reservoir Tanks, The City installed an additional 2.5" water fill line in the Reservoir Tank system to seemingly allow the operator to add water throughout the day to keep up with the perceived water loss issue.

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2. We assume that the water absorption at the faulty No-Fault deck finish materials is a probable cause; however, we cannot yet confirm that there are sufficient remote deck drains throughout the IWF wet-deck locations.
 - a. Once the Certified Survey is completed (after the No-Fault deck finish materials are removed), the elevations & operation of the existing deck drains, and the related water pipe systems (as they route the water back to the Reservoir Tank system) must be evaluated to allow the final correction of any system not properly working or operating.
3. These are very unusual activities and observations that are seldom ever encountered by our firm. Therefore, Martin Aquatic believes such inadequacies or operational issues should never occur in a properly designed and constructed IWF.

C3 Excessive Waste Water issues due to Delayed Draining of the Fault No-Faulty deck finish surfaces

1. The City's Operators reported visible water in the normally-dry retention pond on the days immediately after feature operation.
2. We suspect that during the previous evening, most of the IWF Spray water possibly entrapped in the faulty No-Fault finish deck surface materials finally returned to the Reservoir Tank causing the Reservoir Tank's overflow pipe to dump that chemically-treated water to waste (in the dry retention location).
3. These occurrences are highly irregular and result in excessive water loss and chemical loss since the IWF's water is highly chlorinated as per the Florida Building Code.

C4 Pump Self-Priming Difficulties and related Operation Issues

1. During our observation, the recirculating pumps required an excessive time to self-prime before the pumps started to pump water to the feature nozzles and tank.

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2. There was visible water leakage at the flange of the UV sanitizer unit, which could contribute to an air leak in the system when the pumps are de-activated and possibly contribute to these self-priming difficulties.
3. Adding an air relief valve at the highest point of the discharge piping along with a hose bibb connection on the downstream side of the pump may reduce or eliminate the labor required during daily startup. In addition, this would be addressed if Martin Aquatic is authorized to perform re-engineering.
4. Most filtration systems are operated 24/hours/day, 7 days/week, and 365/days/year, reducing work for the startup but bearing operational costs.
5. The FBC requires the filtration and chemical systems to operate a minimum of 3 hours before bathers are allowed access to the IWF if not operated 24/7 365.

Conclusion – Based Upon This Observation

1. Our professional opinion is that the water fill and water loss issues identified above are connected and directly related to the porous nature of the No-Fault deck finish materials and the accompanying built-up thickness of No-Fault lower materials resting on the concrete sub-base of the IWF basin and wet-deck.
2. The No-Fault top finish surface and the lower No-Fault sub-surface materials are acting similar to a giant sponge, soaking up undetermined volumes of water during IWF's Spray Water's operation and perhaps significantly slowing down/delaying the return of the IWF Spray water to the Reservoir Tanks to prevent the pumping and filtration systems from operating as designed.
3. We observed water loss in the system due to the improper directionality of some of the feature sprays, along with several deck slope deficiencies allowing IWF spray water to run off the deck surface. Some of those deficiencies might be corrected in a new design; however, several potential corrections will require the actual water feature statuary to be re-targeted and possibly need the substitution with alternate spray nozzles.

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4. The No-Fault deck finish surfaces and accompanying No-Fault decking subsurface (installed on the IWF concrete sub-deck) are recommended to be removed and replaced with an alternate NSF-Standard 50 Listed non-porous, code-compliant, impervious non-slip deck surface to help mitigate the current flow-related issues. Replacing the IWF finish deck surface will also reduce, if not eliminate, the deck finish failures and the noted safety concerns. However, the apparent Variance approvals require the Owner to repair portions of the No-Fault finish surfaces' torn and failing deck finishes; however, we do not recommend that such repairs be attempted vs. replacing the failing No-Fault materials.

5. If the replacement of the deck finish surface materials is authorized by the Owner (City of Palm Coast), any deficient spray nozzles, existing deck drains, and feature statuary within the areas/locations of the excessive, additional built-up safety surfacing should be elevated and re-installed properly to allow for proper surface drainage.

6. Martin Aquatic recommends that a Certified Elevation Survey be made of the as-built IWF to determine if there are unknown elevation deficiencies that may not comply with the FBC requirements relating to sloping sub-deck surfaces.

Until all the deficient No-Fault deck finish surfaces are removed and a new elevation survey is conducted, we cannot ascertain if any additional deck drains may be needed or if the installed piping systems are not obstructed or clogged with unknown debris.

7. Additional testing is required once the deficient No-Fault deck finish surfaces are removed,

- a. The City is recommended to retain/secure a testing specialist to explore the existing subterranean piping system via a camera exploration. Additionally, Martin Aquatic can be retained as the Design Professional if the City desires.
 - i. It is necessary that a search for piping debris that might perhaps be trapped within the underground piping be determined. For example, there might be obstructions from the deficient and failed deck finish surfaces that might obstruct proper water flows in the pipes, which can cause some of the operational problems observed by Martin Aquatic.
 - ii. Then a complete water-pressure test is recommended to determine the integrity of the below-deck piping systems.
- b. A 1 to 2-day operational test operation of the IWF water feature is recommended to prove that the water can be returned to the Reservoir Tanks sufficiently to prevent them from running dry or experiencing a decrease in water volume when the IWF systems are in operation.
- c. Lastly, we will need to evaluate whether additional IWF deck drains might be required.

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8. If Martin Aquatic is authorized to become the Engineering Firm of Record, meetings with the Florida Department of Health representatives will be necessary to inform them of the repairs or replacement of the existing deck surfaces.

9. Additional engineering and piping hydraulic testing must occur due to the on-site self-priming deficiencies. When such pumps are this new, there should never be a priming issue. Hence, some additional testing and searching for potential related causes are needed.

a. A potential correction may require replacing the existing pumps or adding priming-assist systems - pending the success of the numerous required tests recommended.

10. The existing seat walls, which prevent proper wet-deck drainage, will be further evaluated if the City allows installing the recommended additional deck drains.

Martin Aquatic Notes to Readers

Expected date for next observation:	None are scheduled
If there are critical correcting remarks concerning these reported items, then contact:	JT Toavs: E: jt@martinaquatic.com Ken Martin: E: ken@martinaquatic.com
Total pages contained in this report:	11
Total Pages in Exhibit A (the Plan Grid Report)	110
Total Pages in Exhibit B – A proposal for the Professional Services from Martin Aquatic to become the Engineering firm of Record and re-design/re-engineer the known and suspected corrections required.	2

PlanGrid Task Report - Jul 23, 2022

Prepared by Martin Aquatic Design & Engineering

Jul 23, 2022

Description

57 tasks in this report.

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2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



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18 Florida Park Drive North, Palm Coast, Florida

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#1 Finishes

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ca@martinaquatic.com

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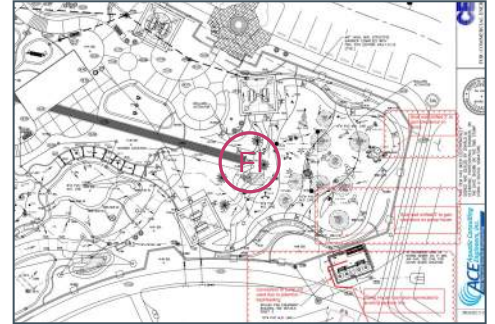
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Issue

Last Updated
Jul 1, 2022 3:42 PM

Location
IWF

Description

Overview of features - DRY and lack of decking adjacent features.



Photos



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2238



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#2 Finishes

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Type

Issue

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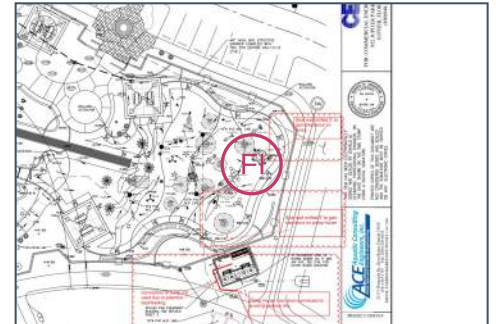
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Location

IWF

Description

Areas of slope and drainage concern.



Photos



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#3 Finishes

Status
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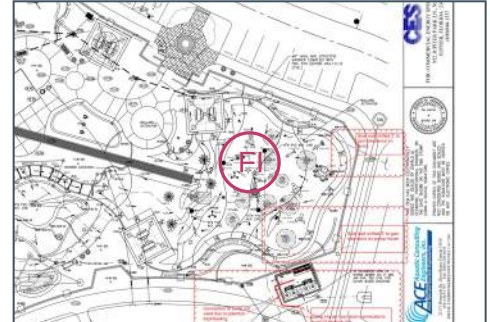
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Type
Issue

Last Updated
Jul 1, 2022 3:42 PM

Location
IWF

Description
Areas of slope and drainage concern.



Photos



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Jun 30, 2022 9:44 AM

#4 Finishes

Status

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SP-1

Type

Issue

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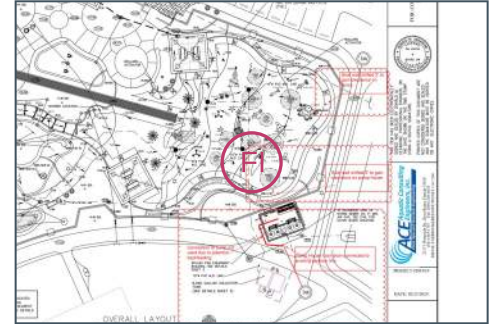
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Location

IWF

Description

Areas of slope and drainage concern.



Photos



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Jun 30, 2022 9:45 AM

#5 Finishes

Status

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Type

Issue

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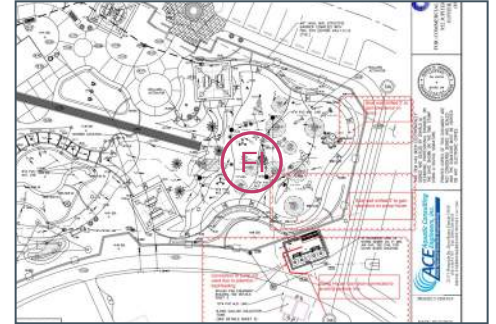
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Location

IWF

Description

Areas of slope and drainage concern.



Photos



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#6 Finishes

Status

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SP-1

Type

Issue

Last Updated

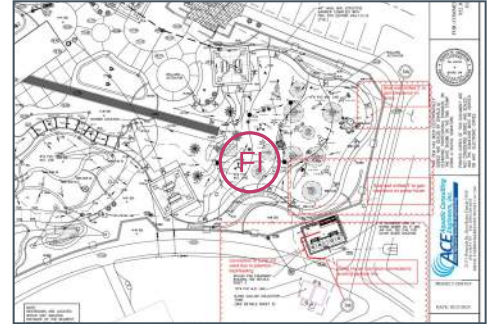
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Location

IWF

Description

Surface failure and sample location.



Photos



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Jun 30, 2022 9:46 AM

#7 Finishes

Status

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Issue

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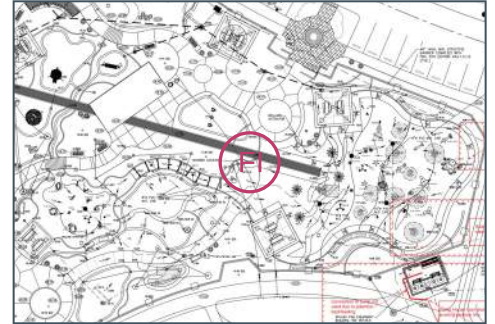
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Location

IWF

Description

Deck shower location.



Photos



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Jun 30, 2022 9:47 AM

#8 Finishes

Status
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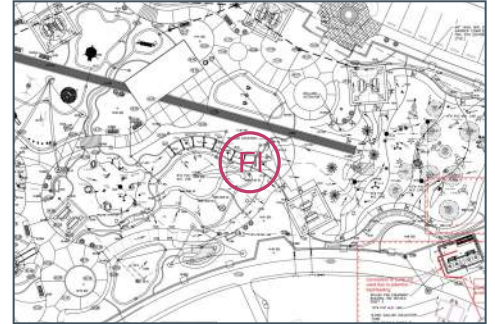
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Type
Issue

Last Updated
Jul 1, 2022 3:42 PM

Location
IWF



Description

Multiple surface failures and lack of decking adjacent feature.

Photos



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Martin Aquatic Design & Engineering
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#9 Finishes

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Type

Issue

Last Updated

Jul 1, 2022 3:42 PM

Location

IWF

Description

Areas of slope and drainage concern.



Photos



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#10 Finishes

Status

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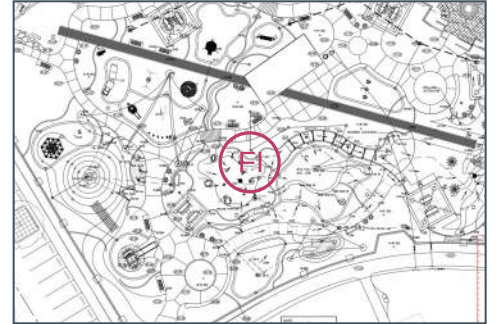
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Last Updated

Jul 1, 2022 3:42 PM

Location

IWF



Description

Area of slope and drainage concern and surface failures.

Photos



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Jun 30, 2022 9:49 AM



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Jun 30, 2022 9:49 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



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#11 Electrical

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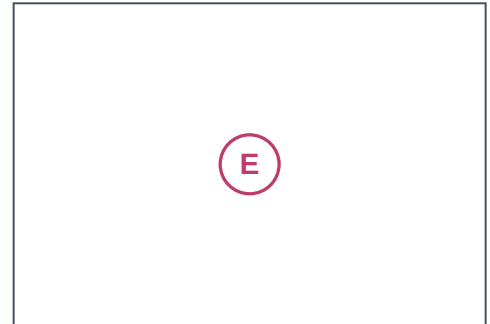
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SP-3

Type
Issue

Last Updated
Jul 1, 2022 3:42 PM

Location
Pool Mechanical Room

Description
Electrical supply panel.



Photos



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Martin Aquatic Design & Engineering

Jun 30, 2022 9:56 AM



20220630_095632_photo

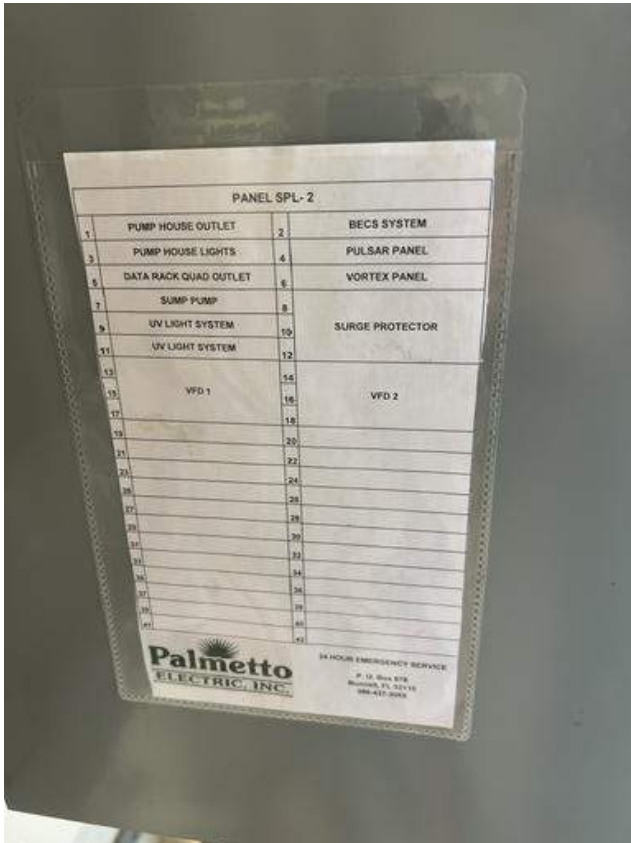
Martin Aquatic Design & Engineering

Jun 30, 2022 9:56 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220630_095641_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 9:56 AM

#12 General

Status

Open

Created

Jun 30, 2022 9:57 AM
ca@martinaquatic.com

Sheet

SP-3

Type

Issue

Last Updated

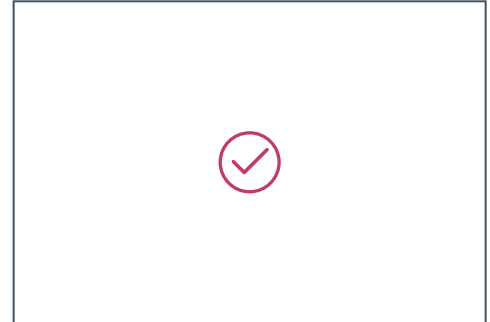
Jul 1, 2022 3:42 PM

Location

Pool Mechanical Room

Description

Valve chart



Photos



20220630_095719_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 9:57 AM

#13 Chemical

Status

Open

Created

Jun 30, 2022 9:57 AM
ca@martinaquatic.com

Sheet

SP-3

Type

Issue

Last Updated

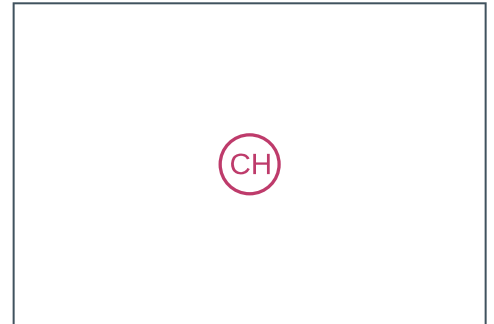
Jul 1, 2022 3:42 PM

Location

Pool Mechanical Room

Description

Erosion chlorinator.

**Photos**

20220630_095805_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 9:58 AM

#14 Chemical

Status

Open

Created

Jun 30, 2022 9:58 AM
ca@martinaquatic.com

Sheet

SP-3

Type

Issue

Last Updated

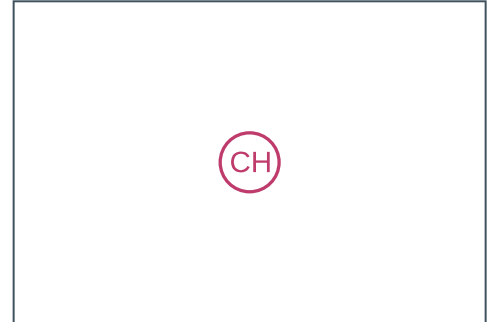
Jul 1, 2022 3:42 PM

Location

Pool Mechanical Room

Description

Chemical controller, Pulsar control and tabs.



Photos



20220630_095834_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 9:58 AM



20220630_095855_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 9:58 AM

#15 Electrical

Status

Open

Created

Jun 30, 2022 9:59 AM
ca@martinaquatic.com

Sheet

SP-3

Type

Issue

Last Updated

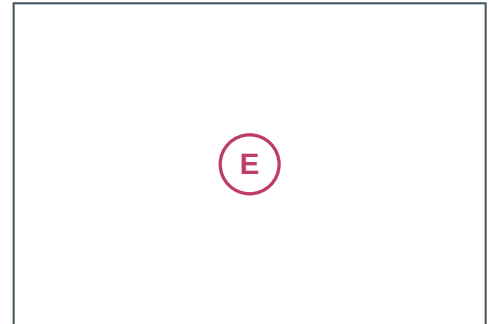
Jul 1, 2022 3:42 PM

Location

Pool Mechanical Room

Description

Filter / feature pump VFD's

**Photos**

20220630_095928_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 9:59 AM

#16 Electrical

Status

Open

Created

Jun 30, 2022 9:59 AM
ca@martinaquatic.com

Sheet

SP-3

Type

Issue

Last Updated

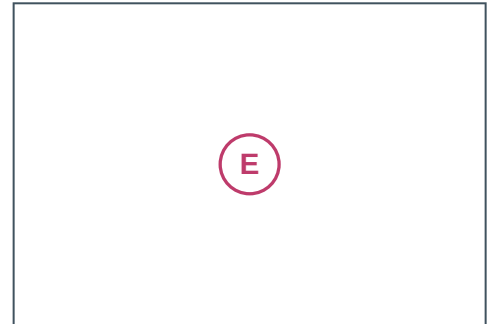
Jul 1, 2022 3:42 PM

Location

Pool Mechanical Room

Description

Vortex controller.



Photos



20220630_095956_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 10:00 AM

#17 Mechanical

Status
Open

Created
Jun 30, 2022 10:01 AM
ca@martinaquatic.com

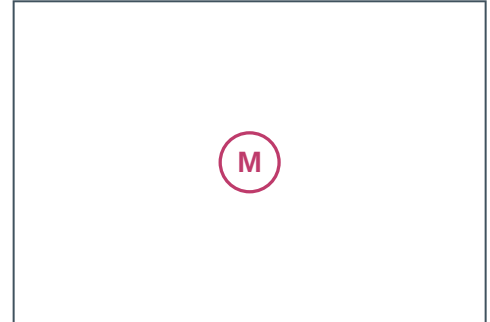
Sheet
SP-3

Type
Issue

Last Updated
Jul 1, 2022 3:42 PM

Location
Pool Mechanical Room

Description
Filter/Feature pump
assembly #1



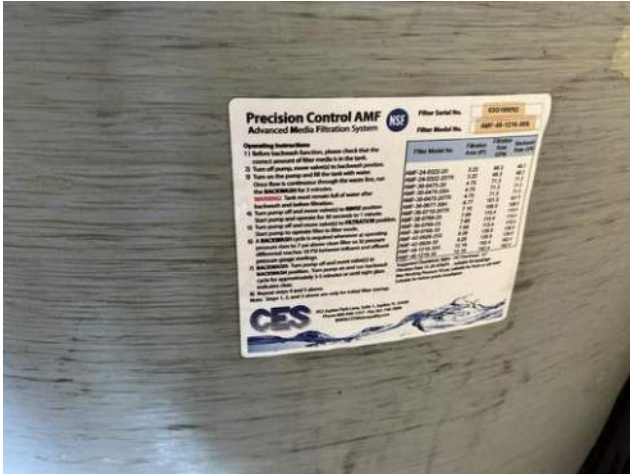
Photos



20220630_100129_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 10:01 AM



20220630_100149_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 10:01 AM



20220630_100204_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 10:02 AM



20220630_100218_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 10:02 AM

#18 Mechanical

Status

Open

Created

Jun 30, 2022 10:02 AM
ca@martinaquatic.com

Sheet

SP-3

Type

Issue

Last Updated

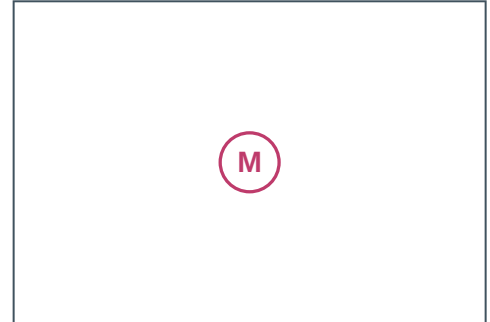
Jul 1, 2022 3:42 PM

Location

Pool Mechanical Room

Description

Filter/Feature pump
assembly #2



Photos



20220630_100250_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 10:02 AM



20220630_100307_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 10:03 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220630_100325_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 10:03 AM

#19 Mechanical

Status

Open

Created

Jun 30, 2022 10:03 AM
ca@martinaquatic.com

Sheet

SP-3

Type

Issue

Last Updated

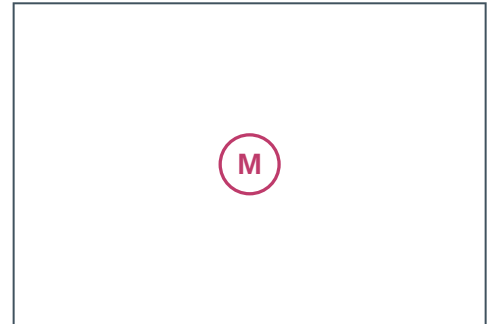
Jul 1, 2022 3:59 PM

Location

Pool Mechanical Room

Description

Pulsar erosion chlorinator
booster pump.



Photos



20220630_100351_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 10:03 AM

#20 Chemical

Status
Open

Created
Jun 30, 2022 10:04 AM
ca@martinaquatic.com

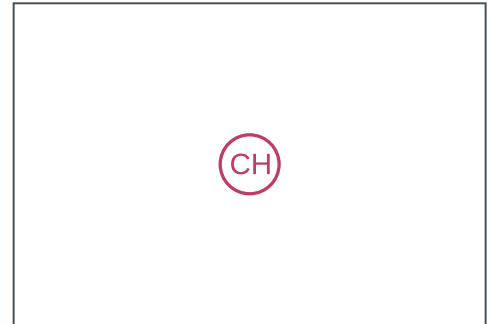
Sheet
SP-3

Type
Issue

Last Updated
Jul 1, 2022 3:42 PM

Location
Pool Mechanical Room

Description
UV Unit / full flow



Photos



20220630_100418_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 10:04 AM



20220630_100430_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 10:04 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220630_100450_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 10:04 AM

#21 Mechanical

Status

Open

Created

Jun 30, 2022 10:05 AM
ca@martinaquatic.com

Sheet

SP-3

Type

Issue

Last Updated

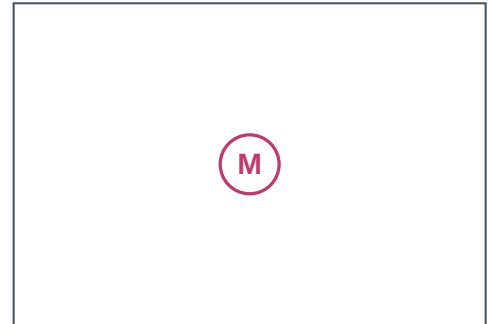
Jul 1, 2022 3:42 PM

Location

Pool Mechanical Room

Description

Valve manifold assembly.



Photos



20220630_100518_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 10:05 AM



20220630_100530_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 10:05 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220630_100551_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 10:05 AM

#22 General

Status

Open

Created

Jun 30, 2022 10:06 AM
ca@martinaquatic.com

Sheet

SP-3

Type

Issue

Last Updated

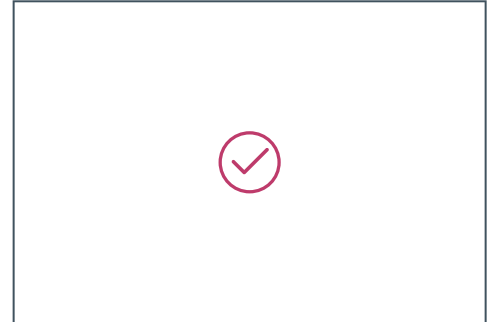
Jul 1, 2022 3:42 PM

Location

Pool Mechanical Room

Description

Operating Permit



Photos



20220630_100646_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 10:06 AM

#23 Mechanical

Status

Open

Created

Jun 30, 2022 10:07 AM
ca@martinaquatic.com

Sheet

SP-3

Type

Issue

Last Updated

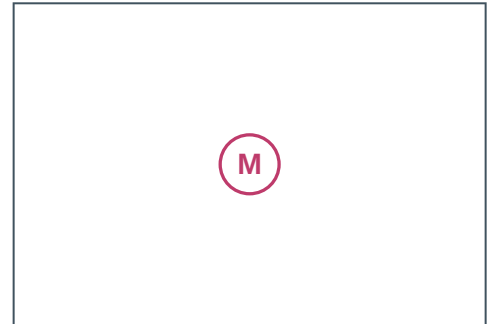
Jul 1, 2022 3:42 PM

Location

Pool Mechanical Room

Description

Surge tank - Water samples
at static water level, not in
operation.



Photos



20220630_100742_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 10:07 AM



20220630_100804_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 10:08 AM

#24 General

Status
Open

Created
Jun 30, 2022 10:21 AM
ca@martinaquatic.com

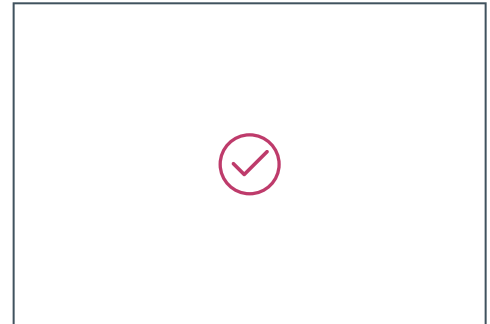
Sheet
SP-3

Type
Issue

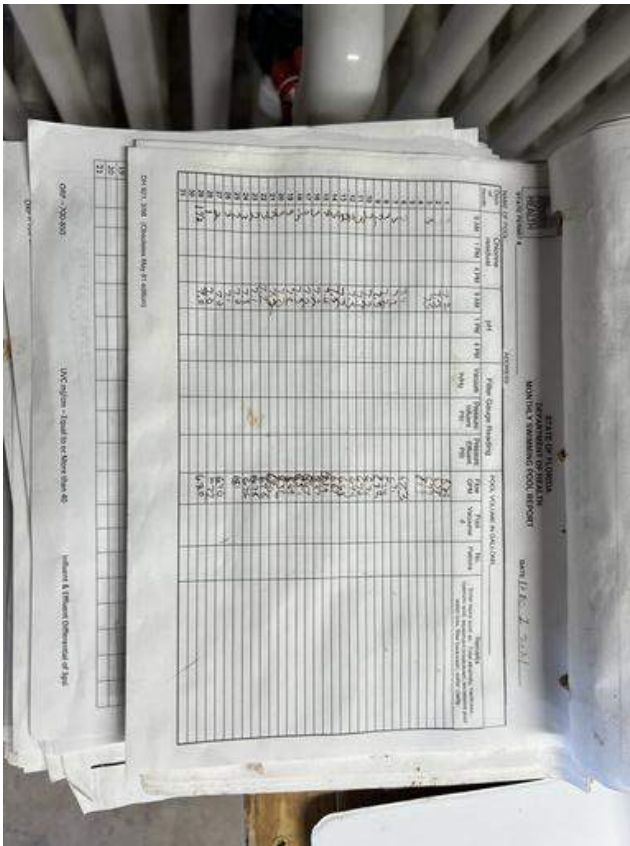
Last Updated
Jul 1, 2022 3:42 PM

Location
Pool Mechanical Room

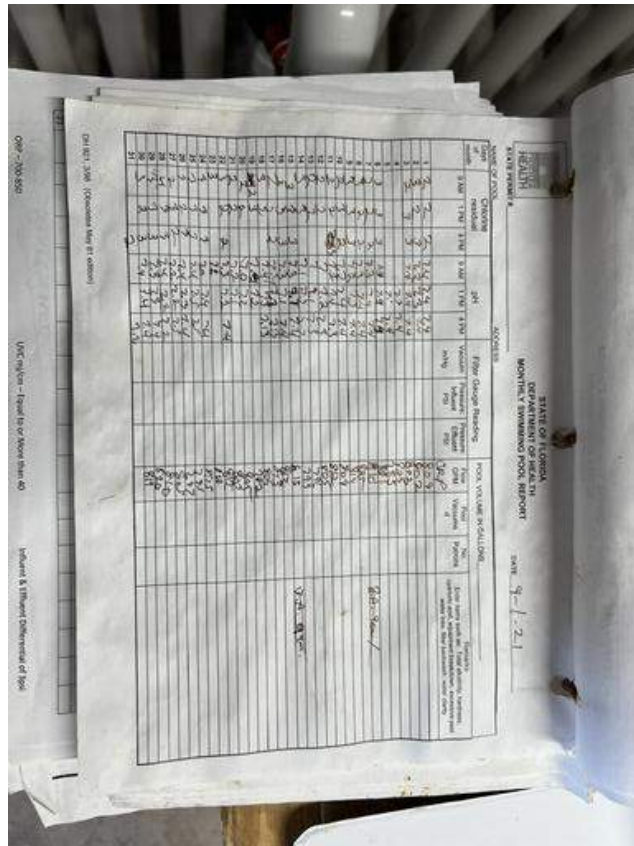
Description
Maintenance logs. typical.



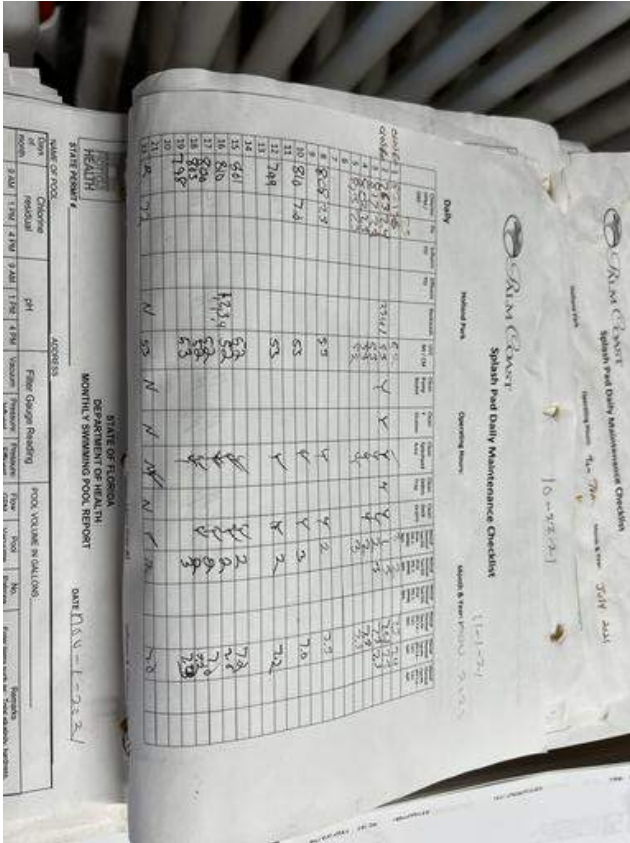
Photos



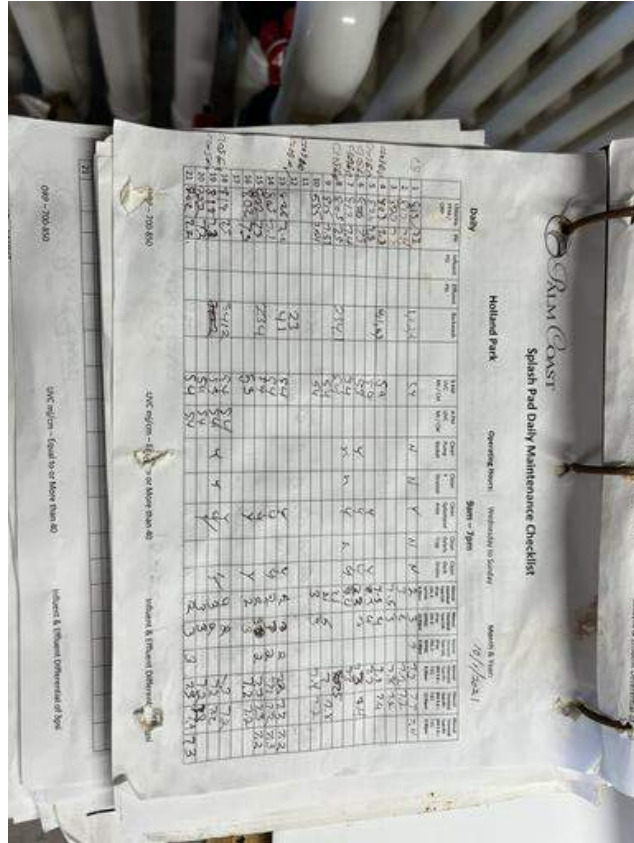
20220630_102156_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 10:22 AM



20220630_102211_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 10:23 AM



20220630_102322_photo
 Martin Aquatic Design & Engineering
 Jun 30, 2022 10:23 AM



20220630_102401_photo
 Martin Aquatic Design & Engineering
 Jun 30, 2022 10:24 AM

#25 Chemical

Status

Open

Created

Jun 30, 2022 10:24 AM
ca@martinaquatic.com

Sheet

SP-3

Type

Issue

Last Updated

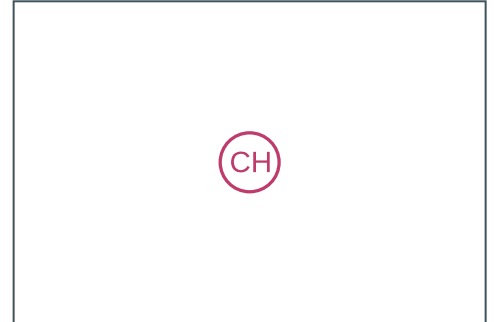
Jul 1, 2022 3:42 PM

Location

Pool Mechanical Room

Description

Dechlorination unit for
wastewater.

**Photos**

20220630_102458_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 10:25 AM



20220630_102508_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 10:25 AM

#26 Water

Status

Open

Created

Jun 30, 2022 12:25 PM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

Jul 1, 2022 3:47 PM

Location

IWF

Description

Area of slope and drainage concern and surface failures.



Photos



20220630_122551_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 12:25 PM

#27 Water

Status
Open

Created
Jun 30, 2022 12:26 PM
ca@martinaquatic.com

Sheet
SP-1

Type
Issue

Last Updated
Jul 1, 2022 3:47 PM

Location
IWF



Description

Area of overspray out of IWF feature boundary, at the area with no wet deck.

Photos



20220630_122645_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 12:26 PM



20220630_122654_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 12:27 PM

#28 Water

Status
Open

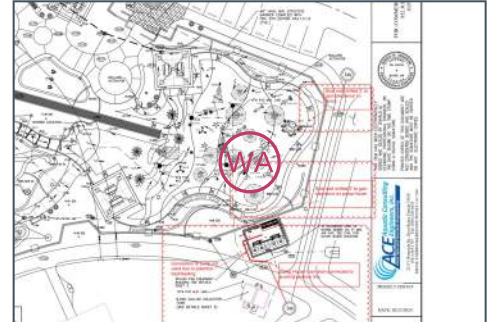
Created
Jun 30, 2022 12:27 PM
ca@martinaquatic.com

Sheet
SP-1

Type
Issue

Last Updated
Jul 1, 2022 3:47 PM

Location
IWF



Description

Area of slope and drainage concern and surface failures.

Photos



20220630_122738_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 12:27 PM



20220630_122802_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 12:28 PM

#29 Water

Status
Open

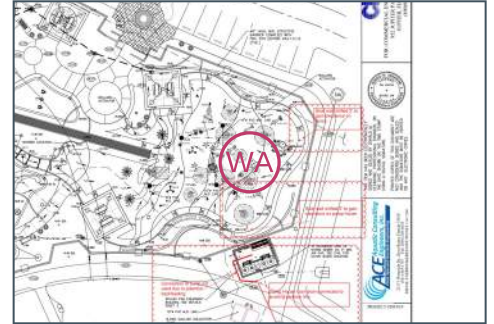
Created
Jun 30, 2022 12:28 PM
ca@martinaquatic.com

Sheet
SP-1

Type
Issue

Last Updated
Jul 1, 2022 3:47 PM

Location
IWF



Description

Area of slope and drainage concern and surface failures.

Photos



20220630_122852_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 12:28 PM



20220630_122905_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 12:29 PM

#30 Water

Status

Open

Created

Jun 30, 2022 12:29 PM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

Jul 1, 2022 3:47 PM

Location

IWF



Description

Area of slope and drainage concern and surface failures.

Photos



20220630_122926_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 12:29 PM



20220630_122935_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 12:29 PM

#31 Water

Status
Open

Created
Jun 30, 2022 12:30 PM
ca@martinaquatic.com

Sheet
SP-1

Type
Issue

Last Updated
Jul 1, 2022 3:47 PM

Location
IWF



Description

Area of slope and drainage concern and surface failures.

Photos



20220630_123023_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 12:30 PM



20220630_123040_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 12:30 PM

#32 Water

Status

Open

Created

Jun 30, 2022 12:31 PM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

Jul 1, 2022 3:47 PM

Location

IWF

Description

Area of slope and drainage concern and surface failures.



Photos



20220630_123119_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 12:31 PM



20220630_123130_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 12:31 PM

#33 Water

Status

Open

Created

Jun 30, 2022 12:31 PM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

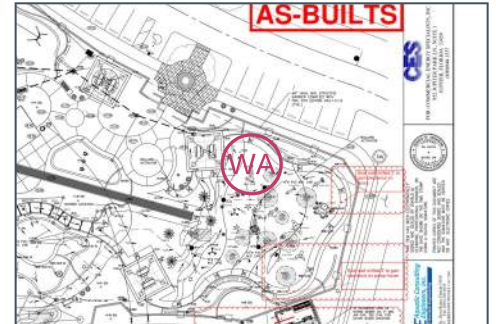
Jul 1, 2022 3:47 PM

Location

IWF

Description

Area of slope and drainage concern and surface failures.



Photos



20220630_123159_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 12:32 PM



20220630_123216_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 12:32 PM

#34 Water

Status
Open

Created
Jun 30, 2022 12:32 PM
ca@martinaquatic.com

Sheet
SP-1

Type
Issue

Last Updated
Jul 1, 2022 3:47 PM

Location
IWF

Description

Area of slope and drainage concern and surface failures.



Photos



20220630_123247_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 12:33 PM

#35 Water

Status
Open

Created
Jun 30, 2022 12:36 PM
ca@martinaquatic.com

Sheet
SP-1

Type
Issue

Last Updated
Jul 8, 2022 7:29 AM

Location
IWF



Description

Area of slope and drainage concern and surface failures.

Photos



20220630_123638_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 12:36 PM



20220630_123657_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 12:36 PM



20220630_123704_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 12:37 PM



20220630_123714_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 12:37 PM



20220630_123720_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 12:37 PM



20220630_123729_photo
Martin Aquatic Design & Engineering
Jun 30, 2022 12:37 PM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220630_123756_photo

Martin Aquatic Design & Engineering

Jun 30, 2022 12:37 PM

#36 General

Status

Open

Created

Jul 8, 2022 7:44 AM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

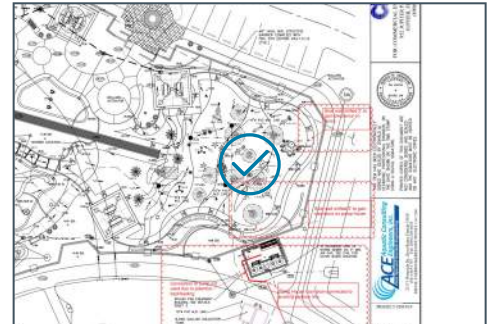
Jul 23, 2022 3:45 PM

Location

IWF

Description

The slope for the record. The flat areas in the feature are capturing water. Insufficient slope per code.



Photos

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_074414_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:44 AM



20220708_074423_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:44 AM

#37 General

Status

Open

Created

Jul 8, 2022 7:44 AM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

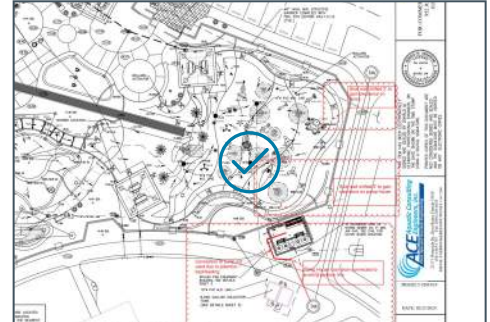
Jul 23, 2022 3:45 PM

Location

IWF

Description

Slope at the drain for the record. The slope at thickened floor area creates trip hazards, typical at all raised floor edge conditions.



Photos

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_074614_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:46 AM



20220708_074625_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:46 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_074641_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:46 AM



20220708_074654_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:46 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_074720_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:47 AM



20220708_074730_photo

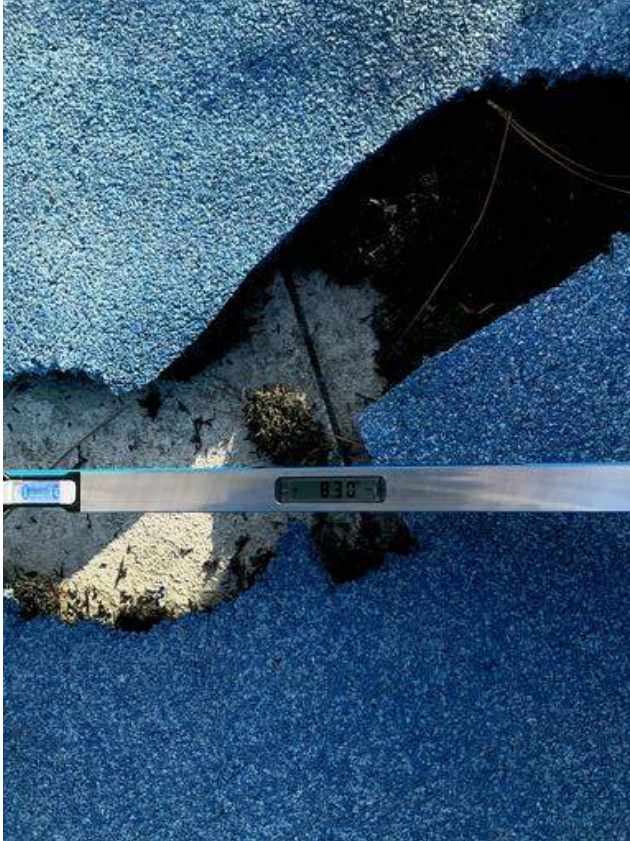
Martin Aquatic Design & Engineering

Jul 8, 2022 7:47 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_074803_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:48 AM



20220708_074817_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:48 AM

#38 General

Status

Open

Created

Jul 8, 2022 7:49 AM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

Jul 23, 2022 3:45 PM

Location

IWF

Description

Perimeter decking is required to slope to drain at 2-4%. Slopes are inconsistent and the area does not slope away to drain. Insufficient slop to drain.

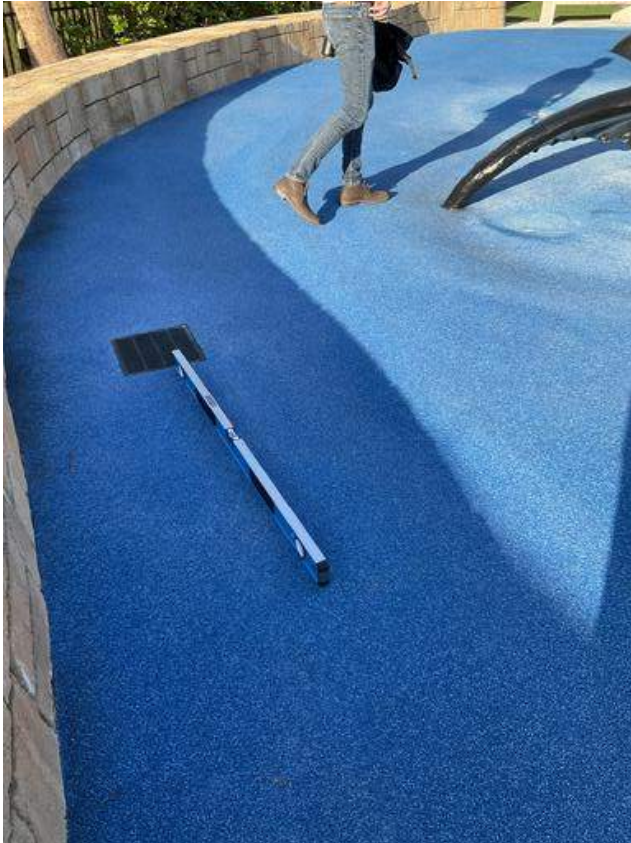
Photos



2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_074931_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:49 AM



20220708_074939_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:49 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_074947_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:49 AM



20220708_075025_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:50 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_075034_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:50 AM



20220708_075111_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:51 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_075131_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:51 AM

#39 General

Status

Open

Created

Jul 8, 2022 7:53 AM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

Jul 23, 2022 3:45 PM

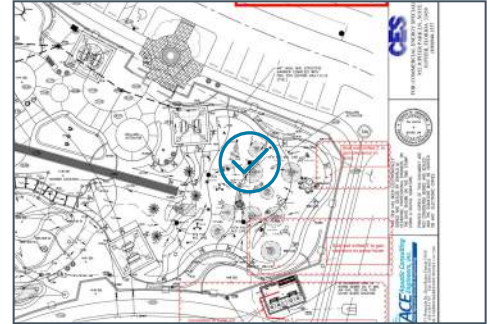
Location

IWF

Description

Slope at the drain for the record. The slope at thickened floor area exceeds allowable deck slope.

Photos



2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_075324_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:53 AM



20220708_075343_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:53 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_075355_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:53 AM



20220708_075435_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:54 AM

#40 General

Status

Open

Created

Jul 8, 2022 7:55 AM
ca@martinaquatic.com

Sheet

SP-1

Type

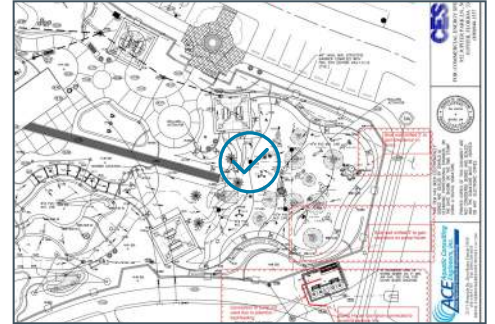
Issue

Last Updated

Jul 23, 2022 3:45 PM

Location

IWF



Description

Slope at the drain for the record.

Photos



20220708_075519_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:55 AM



20220708_075533_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:55 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_075544_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:55 AM



20220708_075558_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:56 AM

#41 General

Status
Open

Created
Jul 8, 2022 7:56 AM
ca@martinaquatic.com

Sheet
SP-1

Type
Issue

Last Updated
Jul 23, 2022 3:45 PM

Location
IWF



Description

Slope at the drain for the record.

Photos



20220708_075627_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 7:56 AM



20220708_075643_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 7:56 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_075655_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 7:56 AM



20220708_075759_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 7:58 AM

#42 General

Status
Open

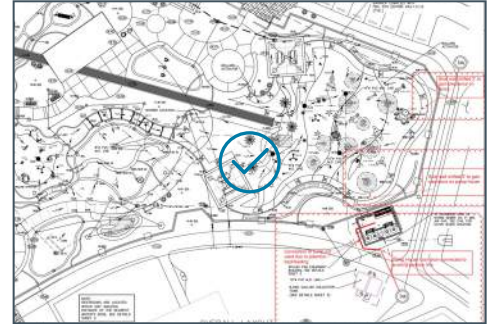
Created
Jul 8, 2022 7:59 AM
ca@martinaquatic.com

Sheet
SP-1

Type
Issue

Last Updated
Jul 23, 2022 3:45 PM

Location
IWF



Description
The slope for the record.

Photos



20220708_075934_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 7:59 AM



20220708_080014_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:00 AM

#43 General

Status

Open

Created

Jul 8, 2022 8:04 AM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

Jul 23, 2022 3:45 PM

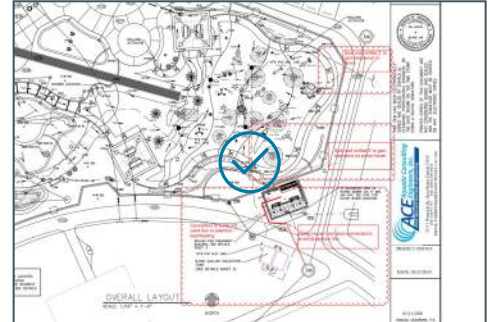
Location

IWF

Description

Perimeter decking is required to slope to drain at 2-4%. The area does not slope away to drain.

Photos



2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_080449_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:04 AM

#44 General

Status

Open

Created

Jul 8, 2022 8:05 AM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

Jul 23, 2022 3:45 PM

Location

IWF

Description

Perimeter decking is required to slope to drain at 2-4%. The area does not slope away to drain.

Photos



2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_080538_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:05 AM



20220708_080552_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:05 AM

#45 General

Status

Open

Created

Jul 8, 2022 8:06 AM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

Jul 23, 2022 3:45 PM

Location

IWF

Description

Perimeter decking is required to slope to drain at 2-4%. The area does not slope away to drain.

Photos



2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_080655_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:06 AM



20220708_080705_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:07 AM

#46 General

Status

Open

Created

Jul 8, 2022 8:07 AM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

Jul 23, 2022 3:45 PM

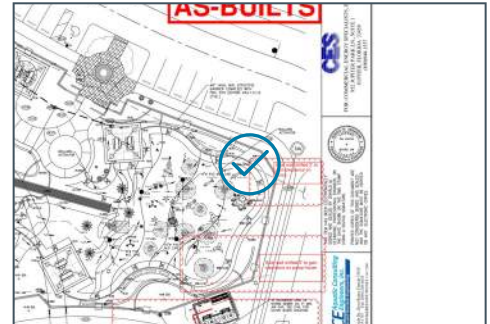
Location

IWF

Description

Perimeter decking is required to slope to drain at 2-4%. The area does not slope away to drain.

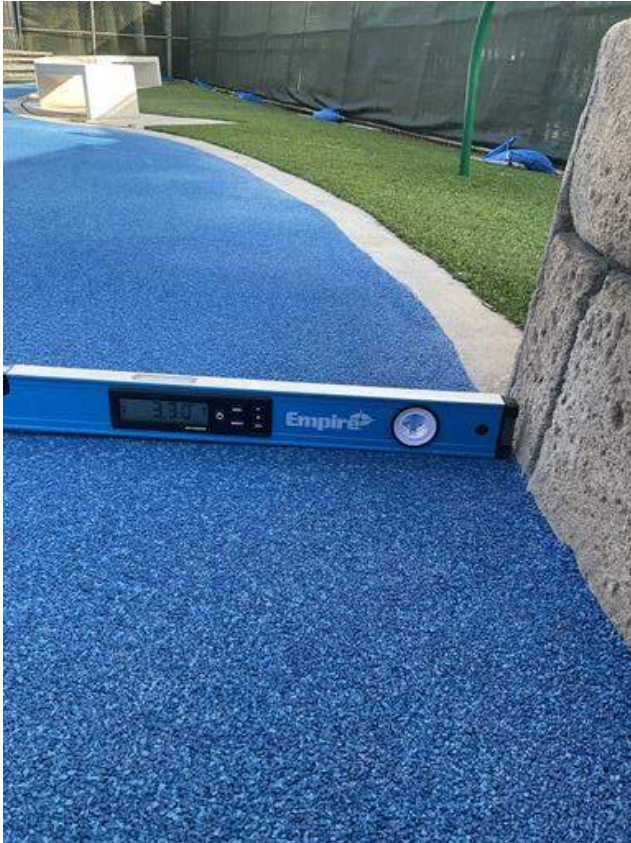
Photos



2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_080806_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:08 AM

#47 General

Status

Open

Created

Jul 8, 2022 8:08 AM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

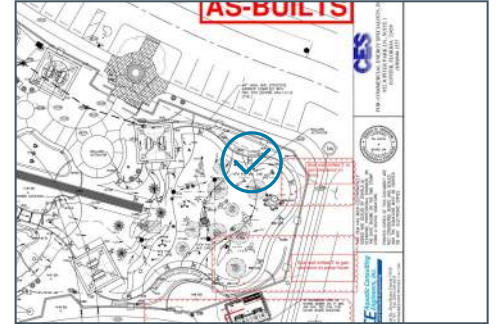
Jul 23, 2022 3:45 PM

Location

IWF

Description

The slope for the record.



Photos



20220708_080907_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:09 AM

#48 General

Status
Open

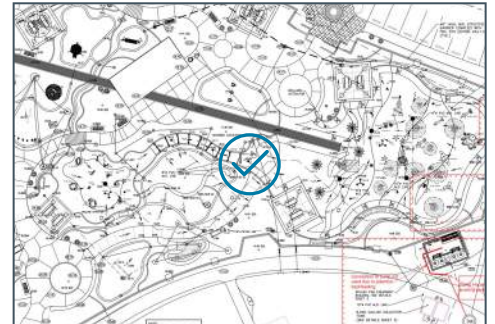
Created
Jul 8, 2022 8:10 AM
ca@martinaquatic.com

Sheet
SP-1

Type
Issue

Last Updated
Jul 23, 2022 3:45 PM

Location
IWF



Description

The slope for the record.

Photos



20220708_081030_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:10 AM



20220708_081051_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:10 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_081108_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:11 AM



20220708_081156_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:11 AM

#49 General

Status

Open

Created

Jul 8, 2022 8:12 AM
ca@martinaquatic.com

Sheet

SP-1

Type

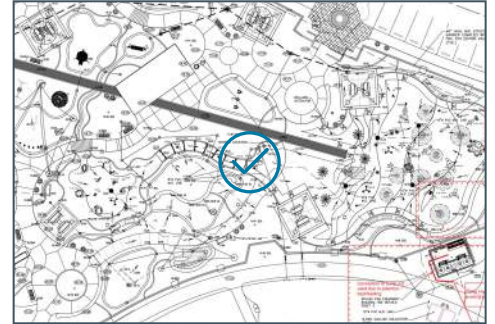
Issue

Last Updated

Jul 23, 2022 3:45 PM

Location

IWF



Description

Area of feature with no deck around it, area floods with run-off from the feature.

Photos



20220708_081218_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:12 AM

#50 General

Status

Open

Created

Jul 8, 2022 8:12 AM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

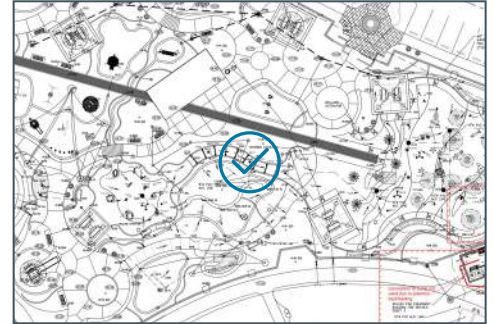
Jul 23, 2022 3:45 PM

Location

IWF

Description

The slope for the record.
There is one area with less
than the code minimum
present.

**Photos**

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_081251_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:12 AM



20220708_081306_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:13 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_081329_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:13 AM



20220708_081400_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:14 AM

#51 General

Status

Open

Created

Jul 8, 2022 8:14 AM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

Jul 23, 2022 3:45 PM

Location

IWF



Description

The slope for the record.
There is one area with less
than the code minimum
present.

Photos

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_081439_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:14 AM



20220708_081501_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:15 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_081521_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:15 AM



20220708_081559_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:16 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

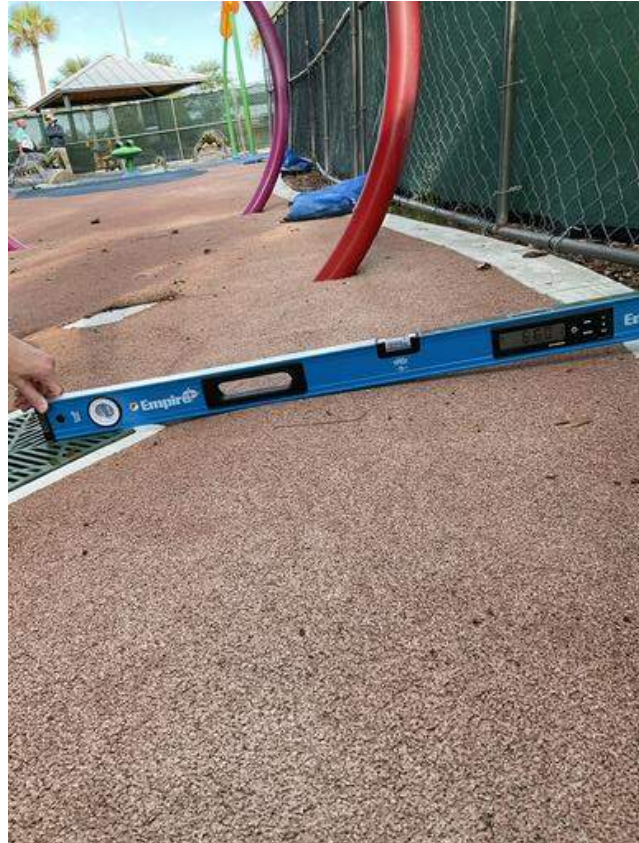
2238



20220708_081618_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:16 AM



20220708_081630_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:16 AM

#52 General

Status

Open

Created

Jul 8, 2022 8:16 AM
ca@martinaquatic.com

Sheet

SP-1

Type

Issue

Last Updated

Jul 23, 2022 3:45 PM

Location

IWF

Description

The slope for the record.
There is one area with less
than the code minimum
present.

**Photos**

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_081733_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:17 AM



20220708_081746_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:17 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_081800_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:18 AM



20220708_081809_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:18 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_081822_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:18 AM



20220708_081830_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:18 AM

#53 General

Status
Open

Created
Jul 8, 2022 8:19 AM
ca@martinaquatic.com

Sheet
SP-1

Type
Issue

Last Updated
Jul 23, 2022 3:45 PM

Location
IWF



Description
The slope for the record.

Photos



20220708_081922_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:19 AM



20220708_081959_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:20 AM

#55 Filter running

Status

Open

Created

Jul 8, 2022 8:24 AM
ca@martinaquatic.com

Sheet

SP-3

Type

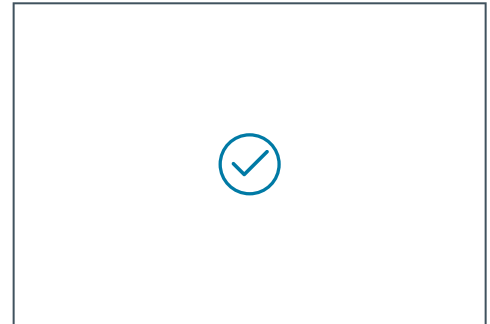
Issue

Last Updated

Jul 23, 2022 3:48 PM

Location

Surge Tank



Description

Started at 24" to determine drawdown in the tank.

Photos



20220708_082505_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 8:25 AM



20220708_082647_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 8:26 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_083436_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:34 AM



20220708_083905_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:39 AM

#56 General

Status

Open

Created

Jul 8, 2022 8:40 AM
ca@martinaquatic.com

Sheet

SP-3

Type

Issue

Last Updated

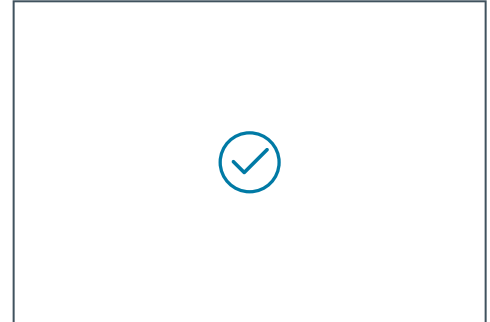
Jul 23, 2022 3:48 PM

Location

Surge Tank

Description

Starting with the filter operating hour 24”(18.5” water level) - 5min increments, we had to increase the overall measurement to 36” after first reading 2x increase 1’ more to 48” second reading

**Photos**

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_084030_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:40 AM



20220708_084859_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 8:49 AM



20220708_085401_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 8:54 AM



20220708_085906_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 8:59 AM



20220708_090407_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:04 AM



20220708_090513_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:05 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_090535_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 9:05 AM

#57 General

Status

Open

Created

Jul 8, 2022 9:06 AM
ca@martinaquatic.com

Sheet

SP-3

Type

Issue

Last Updated

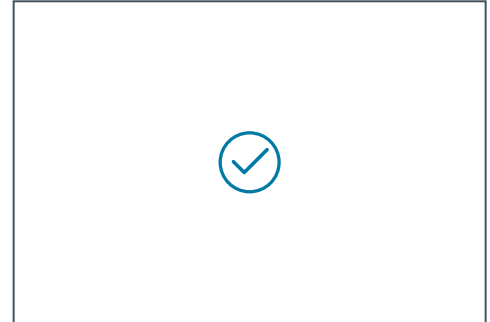
Jul 23, 2022 3:48 PM

Location

Surge Tank

Description

Refill 48" at lip 2min increments



Photos



20220708_090654_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:07 AM



20220708_090846_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:08 AM



20220708_091052_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:11 AM



20220708_091250_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:12 AM



20220708_091453_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:14 AM



20220708_091656_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:17 AM



20220708_091904_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:19 AM



20220708_092109_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:21 AM



20220708_092310_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:23 AM



20220708_092701_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:27 AM

2238 - Palm Coast Holland Park

18 Florida Park Drive North, Palm Coast, Florida

2238



20220708_092716_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 9:27 AM



20220708_092728_photo

Martin Aquatic Design & Engineering

Jul 8, 2022 9:27 AM

#58 General

Status
Open

Created
Jul 8, 2022 9:28 AM
ca@martinaquatic.com

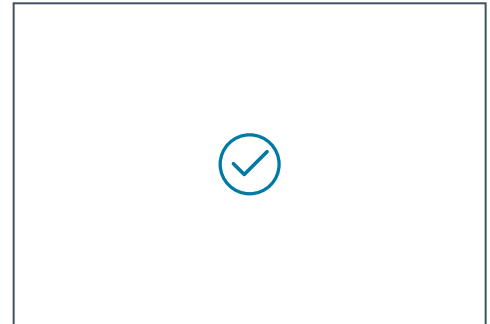
Sheet
SP-3

Type
Issue

Last Updated
Jul 23, 2022 3:49 PM

Location
Surge Tank

Description
Tank dimensions for
confirmation of installed tank
size.



Photos



20220708_092824_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:28 AM



20220708_092848_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:28 AM



20220708_092855_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:28 AM



20220708_093022_photo
Martin Aquatic Design & Engineering
Jul 8, 2022 9:30 AM

18 August 2022

These professional services offered are applicable for the eventuality that portions of the IWF basin and the Wet Deck are required to be re-engineered. Additionally, the engineering for the new engineering services, attendance at meetings with the Florida Department of Health, with the local building officials, meetings with the City Department managers, and all professional engineering services necessary for the corrections at the existing Holland Park for the City of Palm Coast.

Title	USD Hourly Rate	Estimated Hours	Resultant Fees
Founding Principal	\$200.00	60	\$12,000.00
Creative Director	\$200.00	40	\$8,000.00
Studio Director	\$200.00	70	\$14,000.00
Senior Engineer	\$150.00	50	\$7,500.00
Senior Structural Engineer	\$150.00	25	\$3,750.00
Production Director	\$150.00	40	\$6,000.00
Project Engineer	\$150.00	25	\$3,750.00
Design Technologies Director	\$150.00	20	\$3,000.00
Senior Project Manager	\$130.00	40	\$5,200.00
Senior Engineering Coordinator, EIT (FE)	\$150.00	30	\$4,500.00
Engineering Coordinator, EIT (FE)	\$130.00	30	\$3,900.00
Senior Design Coordinator	\$115.00	40	\$4,600.00
Engineering Coordinator	\$130.00	60	\$7,800.00
Production Coordinator	\$115.00	80	\$9,200.00
Design Coordinator	\$115.00	30	\$3,450.00
Research Assistant / Administrator	\$41.00	20	\$820.00
Sub-Totals of the above		660	\$97,470.00
Investigation Services During Demolition & Survey			
Assume 3 Interim Observations		72	\$14,400.00
CA Services			
Assume 15 trips/Interim Observations		360	\$72,000.00
Assume 2 Substantial Completion Events		40	\$8,000.00
Review Submittals and Respond to RFI's		40	\$6,000.00
Reimbursables for each trip:	20 @ \$500.00		\$10,000.00
		Totals of the above	\$207,870.00

Notes:

- For CA trips, assume Founding Principal & Studio Director @
1 10 hours each = 20 hours @ \$200/hour +4 hours for reports and Telephone Meetings

Holland IWF – City of Palm Coast
Exhibit B – Professional Services

- Martin Aquatic shall only invoice trips as they are required.
- 2 Hence, if only 10 trips are necessary, that is the total of the CA trips allowance above