CITY OF ST. PETERSBURG, FLORIDA
PLANNING AND DEVELOPMENT SERVICES DEPARTMENT
URBAN PLANNING AND HISTORIC PRESERVATION DIVISION

STAFF REPORT

Community Planning and Preservation Commission
Certificate of Appropriateness Request

Report to the Community Planning and Preservation Commission from the Urban Planning and Historic Preservation Division, Planning and Development Services Department, for Public Hearing and Executive Action **Tuesday, January 12, 2021, beginning at 2:00 p.m.**, in Council Chambers of City Hall, 175 Fifth St. N., St. Petersburg, Florida. Everyone is encouraged to view the meetings on TV or online at www.stpete.org/meetings.

UPDATE: COVID-19

Procedures will be implemented to comply with the CDC guidelines during the Public Hearing, including mandatory face coverings and social distancing, with limitations on the number of attendees within Council Chambers. The City's Planning and Development Services Department requests that you visit the City website at www.stpete.org/meetings and contact the case planner for up-to-date information pertaining to this case.

According to Planning and Development Services Department records, no member of the Community Planning and Preservation Commission resides or has a place of business within 2,000 feet of the subject property. All other possible conflicts should be declared upon the announcement of the item.

AGENDA ITEM:	CITY FILE NO.: 20-90200120
REQUEST:	Review of a Certificate of Appropriateness for the rehabilitation of historic buildings and structures at Sunken Gardens, an individually listed landmark of the St. Petersburg Register of Historic Places (98-03)
OWNERS:	City of St. Petersburg
PARCEL ID NO.:	18-31-17-86581-001-0010
ADDRESS:	1951 4th St. N. (aka 1825 4th St. N.)
LEGAL DESCRIPTION:	SUNKEN GARDENS BLK 1, LOT 1
ZONING:	CCT-1

Figure 1: Postcard of Entrance Building (south elevation) circa 1950

Historic Significance

(Excerpted from City of St. Petersburg, Florida Cultural Landscape Report of Sunken Gardens, August 8, 2011, by the City of St. Petersburg, Le-Huu Partners, David Sacks RLA, and Fishkind & Associates)

> For nearly 100 years, the Turner family of St. Petersburg, Florida, through three generations, owned and operated the site that would come to be known as 'Turner's Sunken Gardens' (later, simply 'Sunken Gardens'), an enterprise that would entertain, educate and delight many millions of visitors with the natural phenomena of plants, water and animals, and with the personal, often whimsical touches of the Turners' own styles of design and construction, as well as of marketing and publicity. Ultimately, this 5-acre, family-run roadside attraction would help define both the city of St. Petersburg and the state of Florida in the 20th century.
>
> Not long prior to George T. Turner's purchase of this land in 1903, the area was pioneer country. This part of Florida, in the 19th century, was very sparsely settle by Americans, and the prior occupants – Native American tribes – had been all but eliminated from the area….
>
> The site had a large pond, surrounded by a marshy fringe, and was said to be a nuisance to neighbors whose horses and cows were frequently mired in the soft muck. Turner, a plumber, installed a pipe system and drained the pond, and set about growing fruits, vegetables, flowers and some ornamental plants, in the rich mucky flats as well as the sandier uplands around them. He built his young family a home on the site in c. 1910… Roadside attractions proliferated in Florida from the 1930s to the 1960s…Turner's Sunken Gardens was one of the earliest, most successful, and longest-lived examples of this phenomenon…
>
> Turner hit upon the idea of a garden attraction around 1930, as a way to survive [the Great Depression] … He and his son Ralph spent much of the next six years building and planting the garden. (His other son, George Turner, Jr., would also soon join the enterprise.)

> Sunken Gardens opened officially for the winter season in December 1936. It features winding concrete paths that led visitors through the royal palm grove to a central open lawn – soon known as the Wedding Chapel (the present Wedding Lawn) – edged by masses of flowering shrubs, especially gardenias, mixed with a wide assortment of tropical foliage and flowering plants, trees, palms, cacti and others….
>
> The Turners made almost continual changes and improvements to Sunken Gardens. By the 1940s, the gardens' territory was largely developed, with paths and terraces, pools and plantings throughout, and a new Mediterranean Revival entrance building and sales shop on 18th Avenue North. With no space for new gardens, they enhanced what had already been established. Ralph and George, Jr. were taking on more responsibility; in 1952, George St. retired, and a new, larger entrance and gift shop was built facing 4th Street. The old Turner house was torn down to make room… By the mid 1970s Sunken Gardens would…come to feature some two dozen pens, aviaries and other enclosures on site, inhabited by everything from toucans to vultures to Australian wallabies and African pygmy goats – and, of course, Florida alligators.
>
> Most of these exhibits were constructed by the Turners' staff using a custom technique they had developed, beginning in 1967, to make faux stone structures, spraying a gunite-like cement mixture over a hand-formed steel and mesh frame…
>
> The Turner family sold Sunken Gardens to the City of St. Petersburg in 1999. Since then, it has operated as a municipally owned and run botanical garden. A small contingent of birds, including a handful of flamingos, remains, but the other animals are gone – with the exception of one large alligator snapping turtle – and more of the faux stone pens have been filled in with plantings. The City has made a number of changes to the property, removing the cave and waterfall rockwork on the Main Building, demolishing the 1952 entrance building and removing some of the animal enclosures, and has shifted the focus somewhat back towards plants and nature – in a non-commercial, more education-oriented way…With all its changes, however, the site retains integrity, and still speaks of the mystery an beauty of an old Florida garden, and of the vision of the people who made it.

The proposed project aims to rehabilitate and heighten visibility of and accessibility to the 1940 entrance house, several of the "gunite-like" faux rock structures, and historic pathways throughout the garden. Given the fact that the original Turner residence, 1952 entrance building, and several faux rock structures have been demolished in recent decades, these three physical elements remain among the most historic and character-defining manmade resources at the site.

The Unique Significance of Sunken Gardens as a Historic Landscape and Collection of Resources

Historically designated properties can include a number of types of tangible reminders of significant past activity: districts, buildings, sites, structures, or objects. In the case of Sunken Gardens, a locally designated historic site, a number of resources exist throughout. These include contributing, or historic, resources, and non-contributing resources. The proposed project will largely affect contributing resources, meaning that they are historic to the site and not later additions nor highly altered.

The proposal will affect several types of resources, including buildings (the Entrance Building and Restrooms), structures (pathways, animal enclosures, and site walls), and the designed landscape of Sunken Gardens as a whole. It is important to note that these contributing resources are significant and historic elements of Sunken Gardens as a local historic landmark. Because the majority of local historic landmarks are individual buildings or districts, COAs typically focus primarily on particular buildings. Sunken Gardens is unique in that it is classified as an individual landmark, but the site as a whole is of greater importance than any individual building located within its boundaries.

Further, it is worth noting that the proposal will include both elements of rehabilitation, meaning that a property is being altered or added to in order to meet contemporary needs while maintaining historic character, and of restoration, which is bringing a property back to its appearance at certain period in time.

Project Description and Review

Project Description

The application (Appendix A) proposes rehabilitation of a historic Entrance Building that has more recently been used to house animals overnight into a museum exhibit space, the rehabilitation of a restroom building, the rehabilitation of several faux-stone animal enclosures, and sitework including repairs to pathways and the Orchid Garden, which sits between the Entrance Building and restrooms to be updated. The application includes information on interior work, which is not subject to COA review. This COA application includes the following aspects of work:

1. 1940 Entrance Building ("Building A," or proposed museum location, per application):
    - Removal and replacement of knee walls surrounding original building;
    - Removal of non-historic metal awning structure at south elevation (historic façade);
    - Stucco repair;
    - Installation of site walls at southeastern corner to house vending machines;
    - Window replacement with aluminum or vinyl windows; and
    - Door replacement.
2. Restroom/Nursing Room ("Building B" per application):
    - Removal of shingle roof; replacement with clay barrel tile;
    - Removal and relocation of door;
    - Replacement of existing window on west elevation with door;
    - Replacement of window at east elevation.
3. Pathways and Orchid Garden
    - Removal of historic walkways in Orchid Garden;
    - Additional paving in various locations to improve stormwater runoff and ADA accessibility by modifying slope of current;
    - Since there are pathways dating to numerous times within the site's period of significance existing throughout Sunken Gardens, staff suggests that this COA approval include guidelines for the restoration of historic paths and construction of new pathways with an extended approval period under which projects can be administratively approved for several years.
4. Animal exhibits:
    - Repair or replacement of deteriorated doors;
    - New door openings with stainless steel doors and frames;
    - Repair to faux rocks at animal exhibits as needed.
5. Park site wall and fencing:
    - Creation of two openings at south site wall facing 18th Ave. N., to be 7.25 feet and 5 feet in width and feature aluminum gates;
    - A proposed curb cut facing 18th Ave. N. is within the City's Right of Way and will require review by the City's Engineering Department.

General Criteria for Granting Certificates of Appropriateness and Staff Findings

1. *The effect of the proposed work on the landmark or the property upon which such work is to be done.*

Consistent As a whole, this proposal will have a positive effect on Sunken Gardens as a historic site by rehabilitating some of its most significant contributing buildings and structures.

In particular, the historic feeling of the site will be improved by the restoration of the historic appearance of the 1940 entrance house, which has been largely obscured from the visitor experience for several decades. Reintroducing it into visitor circulation through the site will serve as a tangible reminder of Sunken Gardens' origin as a pre-World War II-era roadside attraction operated for many years by the Turner family.

Although interior improvements are out of the realm of consideration during COA review, staff finds the restored Entrance Building's proposed use as a museum space to be worth noting, as it will further patrons' understanding of the site's history.

Likewise, proposed changes to the Restroom/Nursing Room, animal enclosures, and pathways throughout are intended to improve accessibility to the historic site. In general, the proposal's aim is to increase the visibility of the site's historic evolution. With historic rehabilitations there will always be a necessary balancing between historic integrity and contemporary needs. Staff finds the proposal to constitute an overall improvement to historic integrity.

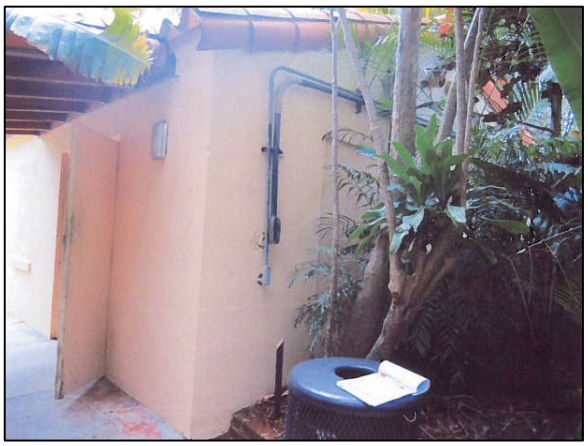


Figure 2: Present appearance of 1940 Entrance Building from pathway along north elevation

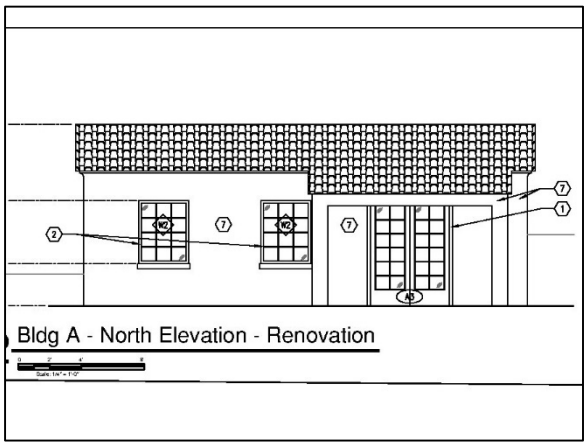


Figure 3: Proposed north elevation of Entrance Building

Figure 4: South elevation of Entrance House, which historically served as main building entry

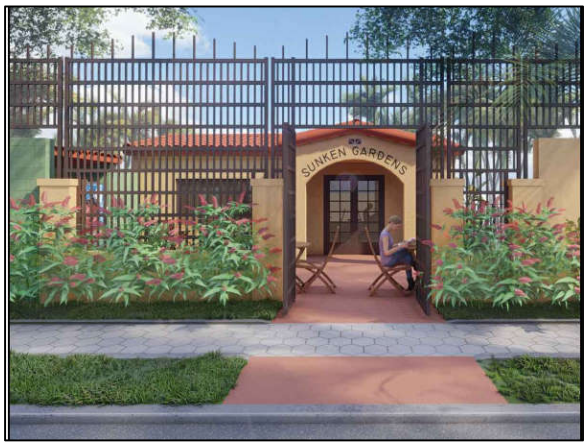


Figure 5: Rendering of proposed south elevation of Entrance Building, from 18th Ave. N.

2. *The relationship between such work and other structures on the landmark site or other property in the historic district.*

Consistent The proposed project will partially restore the site's historic circulation by reintroducing the Entrance Building. Although the primary entrance will continue to be located at the northwest corner of the site (through the building that was originally the Sanitary Public Market), the increased visibility of the 1940 Entrance Building and its interpretation to visitors will be an important restoration.

3. *The extent to which the historic, architectural, or archaeological significance, architectural style, design, arrangement, texture and materials of the local landmark or the property will be affected.*

Consistent Overall, the proposal will constitute an improvement to the historic site's integrity for reasons discussed above.

There are two elements of the proposal that staff finds would negatively impact the integrity of resources within the larger site.

4. *Whether the denial of a Certificate of Appropriateness would deprive the property owner of reasonable beneficial use of his or her property.*

Consistent Overall, the proposed changes will increase accessibility to Sunken Gardens as a public attraction and facilitate continued use.

5. *Whether the plans may be reasonably carried out by the applicant.*

Consistent There is no indication that the applicant cannot carry out the proposal. The proposal is being partially funded by a grant from the State of Florida's Division of Historical Resources.

6. *A COA for a noncontributing structure in a historic district shall be reviewed to determine whether the proposed work would negatively impact a contributing structure or the historic integrity of the district. Approval of a COA shall include any conditions necessary to mitigate or eliminate negative impacts.*

Not applicable Affected resources are contributing to the site's history.

Additional Guidelines for Alterations

1. *A local landmark should be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.*

Consistent Sunken Gardens has been in continuous use as a botanical attraction for nearly a century, and its use will not change.

The Entrance Building, originally a gateway into the park and gift shop, has not served as the primary entrance to the park since another entrance was constructed in 1952. Due to its location facing 18th Ave. N., a primarily residential street, its use as the site's main entrance would no longer be appropriate. Adaptive reuse as a museum space will encourage interpretation of the site's growth and evolution throughout the twentieth century and is certainly a more appropriate use than its current use as a storage and preparatory building.

The proposed changes to the animal enclosures will allow for them to be put back into the use for which they were originally intended, restoring an element of the park's historic attraction.

2. *The distinguishing historic qualities or character of a building, structure, or site and its environment shall be preserved. The removal or alteration of any historic material or distinctive architectural features shall be avoided when reasonable.*

Partially consistent

The project as proposed will generally preserve character-defining elements of the historic site. There are two elements of the proposal, however, that staff finds worthy of careful consideration as part of this application.

The first historic element worth discussing is the windows at the Entrance Building. The proposed window replacement is certainly less desirable than the restoration of existing windows. Two sets of the building's original paired French doors at the north and south elevations have been removed and replaced with unglazed wooden doors in the same opening, so staff supports the proposal to replace those with French doors that generally replicate those historically present, as proposed. One additional new opening on the west elevation is proposed to feature a matching pair of French doors, to be aluminum construction with bronze finish.

The current condition of the windows throughout the building, however, is unknown. Window openings have been encapsulated during the period that the building has been used for storage and utility. Prior evaluations of the site, including the Local Historic Landmark Designation (City File HPC 98-03) indicate that it was then believed that the original windows had been left in place. If this is the case and restoration of the original steel window frames is at all feasible, staff recommends recommendation over replacement.

The second historic element that staff finds to warrant note is the proposed addition of new pavement to the Orchid Garden between the Entrance Building and Restroom (Figure 6). As shown in Figure 7, the sidewalks throughout the site with their iconic scalloped "cobblestone" designs were constructed using several techniques throughout the attraction's Period of Significance, and even supplemented with brick pavers.

Figure 6: Rendered site plan showing Entrance Building (left), Orchid Garden (center), and Restroom/Nursing Room (right). Arrow indicates North.

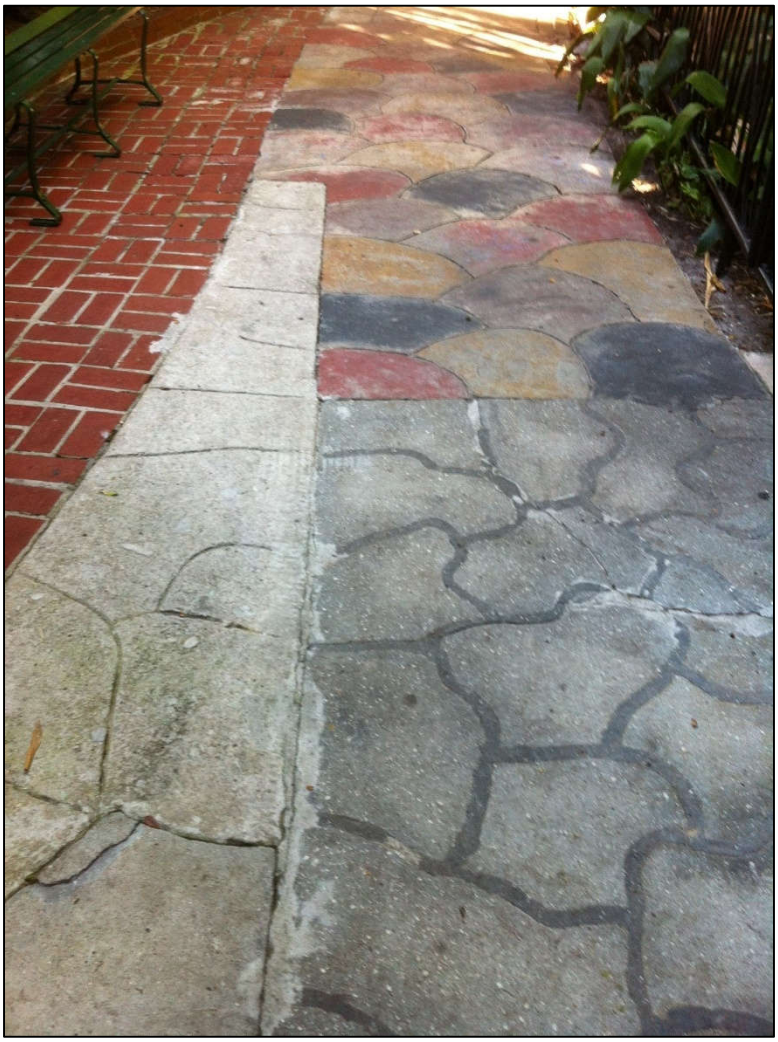


Figure 7: Image from within site showing several generations of paving techniques abutting

This variation provides an interesting portrayal of the site's continuing expansion and evolution. It also, however, creates ADA compliance and design challenges when alterations are necessary.

Perhaps it would seem that the simplest and most visually seamless approach would be to remove all historic pathways in areas of rehabilitation and replace them with contemporary concrete. However, as a designed landscape, the manmade pathways through Sunken Gardens, and the routes of circulation through the exhibits that they facilitate, are among the most fundamental of the landmark's resources. In no small part, the paths define the experience of visiting the site. The existing patchwork brings attention to its generations-long development and provide an opportunity for interpretation of the several periods that shaped the site.

Figure 8: Walkway in Orchid Garden shortly after restoration in 2017

Figure 9: Undated photographs from Sunken Gardens brochure (circa 1960s) showing multicolored paths with faded coloring

In the 2012 Cultural Landscape Report of the site, several recommendations pertaining to the pathways were made, with approaches that should vary based on the condition of specific areas of walkway. Preservation was recommended for sections in good condition and meeting accessibility criteria, repair and restoration was recommended for sections with moderate condition issues, and restoration of the multicolored effect of the fish-scale pattern was also suggested. Where pavement requires replacement or addition, the Cultural Landscape Report suggests construction of "compatible but distinct" new paving, such as pavement scored with a simpler fish-scale pattern or one-foot grid.

The report further highlights the significance of the historic hierarchy of pathways, where the primary route through the site took precedence over secondary paths to enhance wayfinding.

In the case of the proposed project, the applicant proposes the removal of pathways and paved areas adjacent to the Entrance Building in order to address drainage issues. These walkways, as well as additional patio space surrounding the Entrance Building, are proposed to be paved

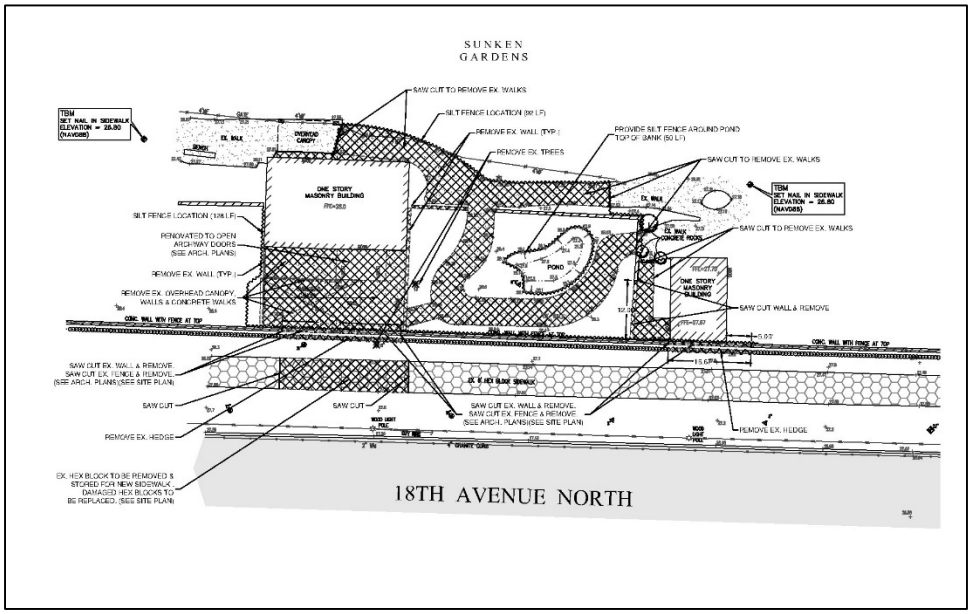


Figure 10: Demolition plan for walkways and Orchid Garden

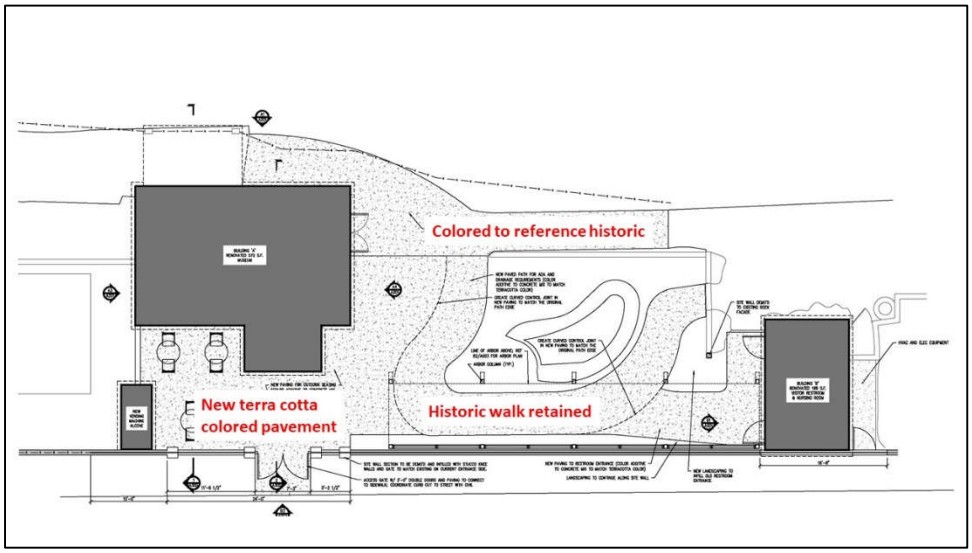


Figure 11: Proposed paving with hierarchy created by retaining multicolored pattern along primary walkway, as recommended by staff.

Staff recommends the walkways be differentiated to distinguish the coloring at the main circulation walk from the Orchid Garden/patio space and retain the restored historic path around the Orchid Garden pond as shown above. This is in keeping with the Cultural Landscape Report's recommendations and staff agrees that it is a good approach to distinguish the new patio/plaza space from the original, vegetated garden.

As seen in the historic postcard on the cover of this report, the Entrance Building is historically depicted to have been rather tightly surrounded by lush plantings. Paving much of the Orchid Garden and space between the Entrance Building and Site Wall for outdoor dining space will diminish this effect. However, when considering the goal of increasing the building's use and adding historic interpretation to the site, staff considers it appropriate as part of the overall rehabilitation of this section of Sunken Gardens.

3. *Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings without sufficient documentary evidence, shall not be undertaken.*

   Consistent

4. *Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved, as appropriate.*

   Consistent This project includes the rehabilitation and restoration of contributing resources from the 1940s through the 1960s.

5. *Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.*

   Consistent

6. *Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, texture, and other visual qualities and, where reasonable, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.*

   Partially consistent As noted, the present condition (or even existence) of the historic steel windows within the boarded openings of the Entrance Building is not known. Staff recommends restoration of any remaining windows at that building if at all possible.

7. *Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.*

   Consistent No harsh treatments have been proposed or observed.

8. *Significant archaeological resources affected by a project shall be protected and preserved if designated pursuant to this section. If such resources must be disturbed, mitigation measures shall be undertaken.*

Not applicable The subject property is not located within a known archaeological sensitivity area.

Additional Guidelines for Window Replacement

The City's historic preservation office, State of Florida Division of Historic Resources, and U.S. Department of Interior Technical Preservation Services can provide additional information relating to window repair and replacement for individual landmark buildings and properties within local historic districts. While preservation and repair of historic windows is often preferable, property owners may replace windows provided that each replacement window meets the following criteria:

1. *Impact resistance. The replacement window and glass shall be impact resistant;*

Consistent

2. *Energy performance. The replacement window shall be Energy Star qualified for southern climate zones;*

Consistent

3. *Depth in wall. The replacement window shall be setback into the wall the same distance as the historic window;*

Consistent

4. *Frame size, shape and exterior trim. The replacement window shall be the same size and shape as the historic window and opening. Historic openings shall not be altered in size. Existing, exterior trim shall be retained, where practicable;*

Consistent The project proposes no change to the window opening sizes and arrangement.

5. *Configuration. The replacement window shall have the same light configuration as the historic window. If the historic window configuration cannot be determined, the replacement window configuration shall be appropriate to the architectural style of the subject building;*

Partially consistent The configuration of the proposed windows will feature grids creating the appearance of relatively square panes. The proposed windows are to be fixed. Although precise details of the historic windows is not known, they are thought to have been steel casement windows. The proposal will constitute a change in operation.

6. *Proportions. The replacement window shall have the same visual qualities of the historic window, where commercially reasonable:*
    a. *Muntins and mullions. Where provided, muntins and mullions shall have the same dimensions and profile of the historic muntins and mullions.*
    b. *Stiles. For hung windows, stiles shall align vertically and be the same width at the upper and lower sashes.*
    c. *Top, meeting and bottom rails, and blind stop. The top, meeting and bottom rails of a hung window, including the corresponding blind stop, shall have the same dimensions and profile of the historic window.*

    Consistent

7. *Finish. The finished surface and appearance shall match the historic window, where practicable.*

    Inconsistent The proposal states that the replacement windows will be aluminum with bronze finish. The historic windows appear to have been painted steel.

Summary of Findings

Staff evaluation yields a finding of the following criteria being met by the proposed project:

- General Criteria for Granting Certificates of Appropriateness: 5 of 5 relevant criteria met.
- Additional Guidelines for Alterations: 7 of 7 relevant criteria fully or partially met.
- Additional Guidelines for Window Replacement: 6 of 7 criteria fully or partially met.

Staff Recommendation and Conditions of Approval

Based on a determination of general consistency with Chapter 16, City Code of Ordinances, staff recommends that the Community Planning and Preservation Commission **approve with conditions** the Certificate of Appropriateness request for the proposed alterations at Sunken Gardens. Staff recommends the following conditions:

1. A window conditions assessment be submitted to staff when the infill at the historic window openings is removed. If restoration of any or all of the existing historic windows is feasible, they will be retained and restored. If the historic windows are beyond repair, replacement windows will be installed as proposed. They will be recessed in the wall plane approximately 2 to 3 inches and feature exterior, three-dimensional muntins.
2. Pathways replacing the historic primary circulation route running to the north of the Entrance Building and Orchid Garden will feature a multicolored, "fish scale" pattern to reference the historic path.
3. New pavement surrounding the Entrance Building and Orchid Garden will feature a terra cotta "fish scale" pattern to provide differentiation from the historic path.
4. All other necessary permits shall be obtained. Any additional work shall be presented to staff for determination of the necessity of additional COA approval.
5. This approval will be valid for 24 months beginning on the date of revocation of the local Emergency Declaration.

Appendix A:

Application No. 20-90200120 and Submittals

st.petersburg
www.stpete.org

CERTIFICATE OF APPROPRIATENESS

APPLICATION

All applications are to be filled out completely and correctly. The application shall be submitted to the City of St. Petersburg's Planning and Development Services Department, located on the 8th floor of the Municipal Services Building, One Fourth Street North, St. Petersburg, Florida. Laura Duvekot, Historic Preservationist II, (727) 892-5451 or Laura.Duvekot@stpete.org

GENERAL INFORMATION

1825 4th street north St. Petersburg, FL	
Property Address	Parcel Identification No.
Sunken Gardens	
Historic District / Landmark Name	Corresponding Permit Nos.
City of St. Petersburg	727-551-3148
Owner's Name	Property Owner's Daytime Phone No.
1825 4th street north St. Petersburg, FL	dwayne.biggs@stpete.org
Owner's Address, City, State, Zip Code	Owner's Email
Dwayne Biggs, Sunken Gardens Supervisor	850-775-6779
Authorized Representative (Name & Title), if applicable	Representative's Daytime Phone No.
1825 4th street north St. Petersburg, FL	dwayne.biggs@stpete.org
Owner's Address, City, State, Zip Code	Representative's Email

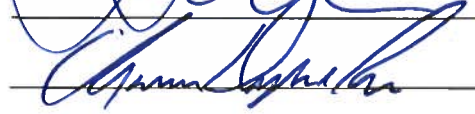
APPLICATION TYPE (Check applicable)				TYPE OF WORK (Check applicable)	
	Addition		Window Replacement		Repair Only
	New Construction	✔	Door Replacement		In-Kind Replacement
	Demolition		Roof Replacement		New Installation
	Relocation		Mechanical (e.g. solar)		Other:
	Other:Animal exhibits modifications doors replacement				

AUTHORIZATION

By signing this application, the applicant affirms that all information contained within this application packet has been read and that the information on this application represents an accurate description of the proposed work. The applicant certifies that the project described in this application, as detailed by the plans and specifications enclosed, will be constructed in exact accordance with aforesaid plans and specifications. Further, the applicant agrees to conform to all conditions of approval. It is understood that approval of this application by the Community Planning and Preservation Commission in no way constitutes approval of a building permit or other required City permit approvals. Filing an application does not guarantee approval.

NOTES: 1) It is incumbent upon the applicant to submit correct information. Any misleading, deceptive, incomplete or incorrect information may invalidate your approval.
2) To accept an agent's signature, a notarized letter of authorization from the property owner must accompany the application.

Signature of Owner:  Date: 10.22.2020

Signature of Representative:  Date: 10/22/2020

st.petersburg
www.stpete.org

CERTIFICATE OF APPROPRIATENESS

APPLICATION

COA #

All applications are to be filled out completely and correctly. The application shall be submitted to the City of St. Petersburg's Planning and Development Services Department by emailing directly to Historic Preservationists Laura Duvekot (Laura.Duvekot@stpete.org) or Kelly Perkins (Kelly.Perkins@stpete.org).

PROPOSED SCOPE OF WORK

Please provide a detailed description of the proposed work, organized according to the COA Matrix. Include information such as materials, location, square footage, etc. as applicable. Attach supplementary material as needed.

Building or Site Feature	Photo No.	Proposed Work
Sunken Gardens Animal Exhibits	1	Animal exhibit doors are in need of repairs and replacement. Doors do not meet standards and guidelines for safe access and transfer of animal collection.
	2	New door openings will be cut into gunite and repairs made to exhibit rock work and rebar structures. Existing doors will be resized to 36"x84" and new stainless steal doors and frames installed.

Laura Duvekot

From: Lauren Kleinfeld
Sent: Monday, October 5, 2020 4:36 PM
To: Laura Duvekot
Cc: Dwayne Biggs; Patrick Green; Jennifer Tyson
Subject: COA Sunken Gardens - Scope of Work Outline

Follow Up Flag: Follow up
Flag Status: Completed

Good afternoon Laura –
Thank you for visiting with us at Sunken Gardens and touring the site for the 1940's Building Renovation Project, soon to be History Center.

We are working on the COA for the future History Center Renovations……

1. Do City Departments pay an Application Fee and if so, which one do you think applies to our project?
2. Did you say you thought the Turner House part of the project does not need a COA as it is not included in the "Historic" part of Sunken Gardens and it just needs a Commercial Zoning Review?
3. Would it be acceptable to attach the below Scope of Work information that we received from the architects to the application page marked PROPOSED SCOPE OF WORK as it does say to "Attach supplementary material as needed" – rather then filling in on the actual application?

As always, thank you for your assistance and direction.

-Lauren

Lauren Kleinfeld, Manager
Sunken Gardens
727.434.9883 mobile

Please see scope of work outline below:

<u>Building 'A' – Museum</u>

- Exterior Demolition Work to include:
  - Removing site walls surrounding the original building.
  - Removing metal roofing with wood framing that was not part of the original construction.
  - Cut slab to south of building which was not part of original construction.
  - Patch and repair exterior walls where demo has occurred/cause damage.
  - Remove portion of site wall to the south of building.
- Interior Demolition Work to include:
  - Replace doors and windows
  - Remove HVAC wall unit.
  - Relocate and replace electrical panel with new as required by code.
  - Open walls where original windows were closed in.
  - Flooring VCT finish to be removed.
  - Trench floor for new floor box power supply.
  - Open original archways at south entrance where they were closed up.
- Exterior New Work to include:

- New site wall to the southwest for vending machines and division between employee-area and public area.
- New site wall where portion was removed. New to match low wall on West side of the gardens near the parking lot with alum fencing above to give sight-lines back to original renovated entrance.
- Refresh paint on exterior.
- Paint "Sunken Gardens" lettering over entrance to match original signage.
- New patio lighting and spot lighting on entrance.
- New paving on south patio per civil drawings for required water drainage.

- Interior New Work to include:
  - Build out interior walls for insulation/acoustical value/blocking in wall for future exhibit requirements.
  - New power throughout.
  - New HVAC throughout.
  - New finishes throughout.
  - New windows to match original grille layout – but material will need to be aluminum or vinyl to meet code requirements.
  - New doors to be French-style 12-lite doors to match similar grille layout as windows.
  - New lighting throughout.

Building 'B' – Restroom/Nursing Room

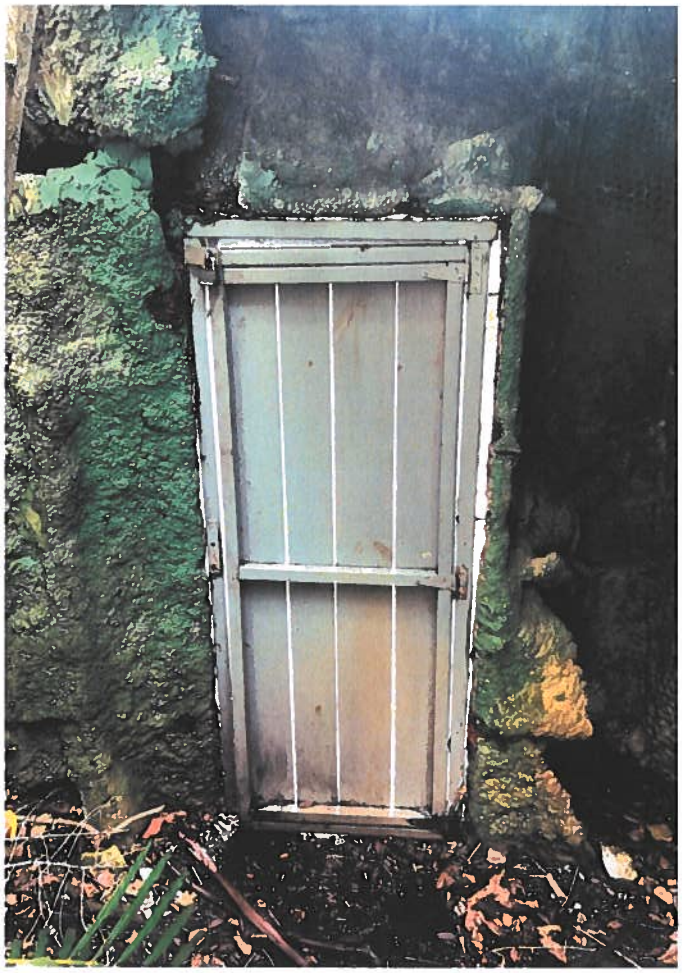
- Demolition Work to include:
  - Remove portion of site wall on south side – as this is currently not a structural wall and has significant damage/cracking.
  - Removing shingle roofing and roof framing.
  - Remove framed walls above CMU walls.
  - Patch and repair exterior CMU walls where demo has occurred/cause damage.
  - Remove door and infill where removed on the East side of building.
  - Remove door on West side of building to be relocated on wall and replaced.
  - Remove window on East side of building and demo wall for new door opening.
  - Remove window on West wide of building to be replaced.
  - Trench floor as required for new plumbing.
- New Work to include:
  - New site wall where portion was removed. New wall to include alum fencing above continued from Garden scope of work.
  - Refresh paint on exterior.
  - New wall framing above existing CMU walls.
  - New Mission Barrel clay tile roofing to match Building 'A'.
  - New raised slab on interior to accommodate for Garden scope of work.
  - Build out interior walls for insulation/acoustical value/blocking in wall for plumbing lines and fixtures.
  - New power throughout.
  - New plumbing throughout.
  - New finishes throughout.
  - New window on East side replace old window.
  - New HM painted doors on West side of building.
  - New HVAC throughout.
  - New lighting throughout.

Orchid Garden

- Demolition Work to include:

    - Removal of walkways as shown on civil drawings. This is to redirect storm water away from buildings – to keep the original Building ‘A’ intact with minimal demolition work to the building itself.
    - Chainlink fencing above existing site walls to be removed.
    - Portions of site walls to be removed and rebuilt as indicated under Building ‘A’ and ‘B’ scopes of work.
    - Landscaping to be coordinated directly by the Sunken Gardens staff.
- New Work to include:
    - New paving for redirected storm water and ADA slope requirements.
    - New landscaping as coordinated directly by Sunken Gardens staff.
    - New aluminum fencing above site walls to match the existing aluminum fencing along the West side of the gardens near the parking lot – tying directly into the same alum fencing as outlined under Building ‘A’ and ‘B’ scope of work.
    - New aluminum frame with wood slat arbor design for added shade in garden and to allow for planting to be hung for a ‘green’ wall.


Coming Soon!



APPROVED FOR BID

DATE

BREJESH PRAYMAN, P.E.

ENGINEERING DIRECTOR

SUNKEN GARDENS RENOVATION CITY OF ST. PETERSBURG

PROJECT NO. 19219-019

DRAWING INDEX

ARCHITECTURAL

19219-1	A000	COVER SHEET
19219-2	A001	SITE PLAN & PROJECT NOTES
19219-3	A002	ARCHITECTURAL SITE PLAN
19219-4	A003	SITE DETAILS & RENDERINGS
19219-5	A101	DEMOLITION & RENOVATION FLOOR PLANS
19219-6	A102	DEMOLITION & RENOVATION REFLECTED CEILING PLANS
19219-7	A103	DEMOLITION & RENOVATION ROOF PLANS
19219-8	A104	FF&E AND FINISH FLOOR PLANS
19219-9	A201	DEMOLITION & RENOVATION EXTERIOR ELEVATIONS - MUSEUM
19219-10	A202	DEMOLITION & RENOVATION EXTERIOR ELEVATIONS AND SECTION - RESTROOM
19219-11	A401	INTERIOR ELEVATIONS
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STRUCTURAL

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MECHANICAL

19219-17	M000	MECHANICAL NOTES & SCHEDULES
19219-18	M100	MECHANICAL RENOVATION FLOOR PLANS & DETAILS

PLUMBING

19219-19	P000	PLUMBING COVER SHEET
19219-20	P100	PLUMBING RENOVATION FLOOR PLANS
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ELECTRICAL

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19219-23	E100	ELECTRICAL PLAN
19219-24	E101	LOAD SUMMARY AND POWER RISER SHEET
19219-25	E201	ELECTRICAL SPECIFICATIONS

CIVIL

19219-26	C1	GENERAL NOTES & SPECIFICATIONS
19219-27	C2	EXISTING CONDITIONS / DEMOLITION PLAN
19219-28	C3	SITE PLAN
19219-29	C4	GRADING & DRAINAGE PLAN
19219-30	C5	CIVIL DETAILS
19219-31	C6	UTILITY PLAN
19219-32	C7	UTILITY DETAILS

PROJECT ADDRESS: 1825 4TH STREET NORTH, ST. PETERSBURG FLORIDA 33704

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG, FL.

ARC3 architecture
6699 13th Avenue North, Suite 4A
St. Petersburg, FL 33710
(727) 381-5220
(727) 381-0052 fax

Firm Registration AA-26000510
Steven J. Vinci, AIA AR-0017036

Signature Date

COPY No. _____

DATE: August 12th, 2020

DRAWING No. 19219-1
A000 COVER SHEET

GRAPHIC SYMBOLS

WINDOW IDENTIFICATION (SEE WINDOW SCHEDULE)

ROOM IDENTIFICATION (SEE FINISH SCHEDULE)

DOOR IDENTIFICATION (SEE DOOR SCHEDULE)

HARDWARE TYPE NUMBER

DOOR TYPE NUMBER

TYPICAL DIMENSION

MTL STUD WALL

8" CONC MASONRY UNIT WALL

SECTION TAG

EXTERIOR ELEVATION TAG

INTERIOR ELEVATION TAG

ELEVATION NUMBER

DETAIL NUMBER

SHEET NUMBER

PLAN DETAIL TAG

DETAIL NUMBER

SHEET NUMBER

ELEVATION IDENTIFICATION (REFERENCE 0'-0" = FINISHED SLAB)

KEYED NOTES

KEYED COLOR

REVISION CLOUD AND NUMBER

COLUMN GRID

PARTITION TAG

KEY NOTE FOR RESTROOM ACCESSORIES AND PLUMBING FIXTURES; REF SCHEDULE ON A400

Owner
Engineering and Capital Improvements Department
City of St. Petersburg
One 4th Street North
St. Petersburg, Florida 33701
(727) 893-7171

Civil
Vickstrom Engineering Services, Inc.
505 20th Aveune NE
St. Petersburg, Florida 33704
(727) 894-0404

Architect
ARC3 Architecture, Inc.
6699 13th Avenue North, Suite 4A
St. Petersburg, Florida 33710
(727) 381-5220

Structural
ACG Professional Engineering, Inc.
16912 Melissa Ann Dr.
Lutz, Florida 33558
(813) 963-1906

Mechanical/Plumbing/Electrical
Griner Engineering, Inc.
1628 1st Aveune North
St. Petersburg, Florida 33713
(727) 822-2335

PLAN REVIEW DATA - BLDG A

THE SCOPE OF THE PROJECT INCLUDES RENOVATION OF A 572 SF BUILDING (A), A 188 SF BUILDING (B), AND THE ADDITION OF AN ARBOR IN THE GARDEN.

PROJECT CRITERIA – 2017 FLORIDA BUILDING CODE – EXISTING BUILDING

BUILDING (A): 572 SF, WILL INCLUDE NEW ELECTRICAL, HVAC, SITE WALLS, INTERIOR FURRED WALLS, FIXTURES AND FINISHES.

CLASSIFICATION BY OCCUPANCY:	ASSEMBLY (GROUP A-3)
TYPE OF CONSTRUCTION:	V (B) UNSPRINKELED
TYPE OF RENOVATION:	ALTERATION LEVEL 3 (CHAPTER 6)

ALLOWABLE HEIGHT AND BUILDING AREA PER FBC CHAPTER 5

GROUP A-3	CONSTRUCTION TYPE V (B)	
	ALLOWABLE	EXISTING TO REMAIN
STORIES	1	1
HEIGHT	40'-0"	11'-6"
AREA	6,000 SF	572 SF

FIRE-RESISTANCE RATING REQUIREMENTS FOR BLDG ELEMENTS PER FBC CHAPTER 6

BUILDING ELEMENT	HOURS
STRUCTURAL FRAME	0
BEARING WALLS	
EXTERIOR	0
INTERIOR	0
NONBEARING WALLS	
INTERIOR	0
FLOOR CONSTRUCTION	0
ROOF CONSTRUCTION	0

OCCUPANT LOAD PER FBC CHAPTER 10

ASSEMBLY (GROUP A-3) SF PER OCCUPANT = 30 NET

572 SF / 30 NET = 19 OCCUPANTS

EGRESS REQUIREMENTS PER FBC CHAPTER 10

EGRESS COMPONENT	REQ/MAX	PROVIDED
MIN EXITS PER OCCUPANT LOAD	1	2
EXIT ACCESS TRAVEL DISTANCE	75'-0"	25'-0"

PLUMBING FIXTURES PER FBC EXISTING BUILDING CHAP 8 SECTION 810 PLUMBING

OCCUPANY LOAD HAS NOT INCREASED BY 20%

PLAN REVIEW DATA - BLDG B

PROJECT CRITERIA – 2017 FLORIDA BUILDING CODE – EXISTING BUILDING

BUILDING (B): 188 SF, WILL INCLUDE NEW ELECTRICAL, PLUMBING, HVAC, SITE WALLS, ROOF, INTERIOR FURRED WALLS, FIXTURES, AND FINISHES.

CLASSIFICATION BY OCCUPANCY:	BUSINESS (GROUP B)
TYPE OF CONSTRUCTION:	V (B) UNSPRINKELED
TYPE OF RENOVATION:	ALTERATION LEVEL 3 (CHAPTER 6)

ALLOWABLE HEIGHT AND BUILDING AREA PER FBC CHAPTER 5

GROUP B	CONSTRUCTION TYPE V (B)	
	ALLOWABLE	PROVIDED
STORIES	2	1
HEIGHT	40'-0"	12'-5"
AREA	9,000 SF	188 SF

FIRE-RESISTANCE RATING REQUIREMENTS FOR BLDG ELEMENTS PER FBC CHAPTER 6

BUILDING ELEMENT	HOURS
STRUCTURAL FRAME	0
BEARING WALLS	
EXTERIOR	0
INTERIOR	0
NONBEARING WALLS	
INTERIOR	0
FLOOR CONSTRUCTION	0
ROOF CONSTRUCTION	0

OCCUPANT LOAD PER FBC CHAPTER 10

BUSINESS (GROUP B) SF PER OCCUPANT = 100 GROSS

188 SF / 100 GROSS = 2 OCCUPANTS

EGRESS REQUIREMENTS PER FBC CHAPTER 10

EGRESS COMPONENT	REQ/MAX	PROVIDED
MIN EXITS PER OCCUPANT LOAD	1	2
EXIT ACCESS TRAVEL DISTANCE	100'-0"	0'-0"

PLUMBING FIXTURES PER FBC EXISTING BUILDING CHAP 8 SECTION 810 PLUMBING

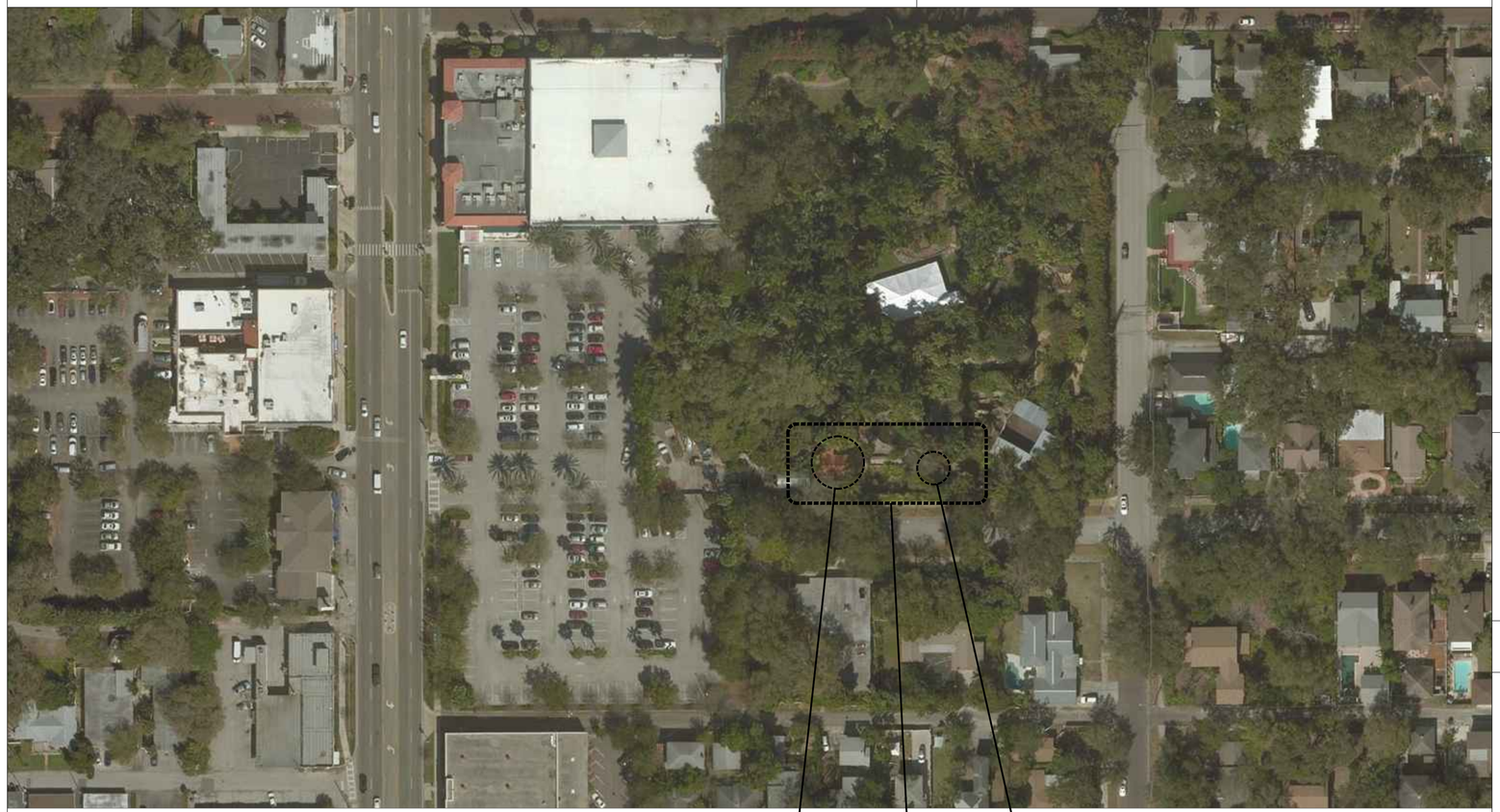
OCCUPANY LOAD HAS NOT INCREASED BY 20%

CODES

2017 FLORIDA BUILDING CODE: BUILDING
2017 FLORIDA BUILDING CODE: EXISTING BUILDING
2017 FLORIDA BUILDING CODE: MECHANICAL
2017 FLORIDA BUILDING CODE: PLUMBING
2017 FLORIDA BUILDING CODE: FUEL GAS
2017 FLORIDA BUILDING CODE: ACCESSIBILITY
2017 FLORIDA BUILDING CODE: ENERGY CONSERVATION
2017 FLORIDA BUILDING CODE: TEST PROTOCOLS
2017 FLORIDA FIRE PREVENTION CODE (NFPA 101, NFPA 1, FL 44 RULES, FSS 633)
2014 NEC NFPA 70 NATIONAL ELECTRIC CODE

WIND LOAD DATA PER FBC CHAPTER 16

ULTIMATE DESIGN WIND SPEED = 145 MPH
WIND RISK CATEGORY = II
WIND EXPOSURE = C



N

A1 Site Plan
SCALE: N.T.S.

GENERAL NOTES

1. ALL WORK LISTED, SHOWN OR IMPLIED ON ANY OF THE CONTRACT DOCUMENTS SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR EXCEPT WHERE NOTED. THE CONTRACTOR SHALL CLOSELY COORDINATE WORK WITH THAT OF OTHER SUBCONTRACTORS OR VENDORS TO ASSURE THAT ALL SCHEDULES ARE MET AND ALL WORK IS DONE IN CONFORMANCE WITH THE MANUFACTURERS REQUIREMENTS OF GOVERNING AUTHORITIES HAVING JURISDICTION OVER THE PROJECT.
2. CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY ALL DIMENSIONS BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF EXISTING CONDITIONS AND COORDINATION OF ALL WORK TO ENSURE COMPLETE COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS. REPORT ANY DISCREPANCIES OR POTENTIAL PROBLEMS TO THE ARCHITECT IN WRITING PRIOR TO PROCEEDING WITH WORK. FAILURE TO DO SO SHALL CONSTITUTE ACCEPTANCE OF EXISTING CONDITIONS. IN THE EVENT THAT THERE ARE DISCREPANCIES OR AMBIGUITIES IN, OR OMISSIONS FROM, THE DRAWINGS OR SPECIFICATIONS, OR SHOULD THERE BE DOUBT AS TO THEIR MEANING AND INTENT, THE ARCHITECT SHALL BE NOTIFIED TO PROVIDE A WRITTEN CLARIFICATION.
3. ALL WORK UNDER THE CONTRACT IS TO BE PERFORMED TO PROVIDE A COMPLETE AND FINISHED PRODUCT, AND SHALL BE WARRANTIED FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE AGAINST ANY DEFECTS OR DEFICIENCIES.
4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING THE EXECUTION OF WORK. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY BARRIERS, LIGHTING, COVERINGS, FIRE PROTECTION AND OTHER EQUIPMENT TO PROTECT THE SAFETY OF ALL PERSONS AND THE PROPERTY THROUGHOUT THE ENTIRE PERIOD OF CONSTRUCTION.
5. THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ADEQUATE PROTECTION OF ALL WORK FROM DAMAGE AND SHALL PROTECT THE ADJACENT PROPERTIES FROM INJURY OR LOSS ARISING IN CONNECTION WITH WORK. EXTREME CARE SHALL BE EXERCISED TO PREVENT DAMAGE TO NEW AND EXISTING EQUIPMENT, STRUCTURES AND SERVICES.
6. THE CONTRACTOR SHALL MAINTAIN THE SITE IN GOOD, CLEAN CONDITION AND SHALL BE RESPONSIBLE FOR CONTINUOUS CLEAN UP OF ALL DEBRIS.
7. THE DESIGN, ADEQUACY AND SAFETY OF ERECTING ANY BRACING, SHORING OR TEMPORARY SUPPORTS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE PRIOR TO THE APPLICATION OF FINISH MATERIALS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS, METHODS, PROCEDURES AND SEQUENCES OF THE PROJECT.
8. THE CONTRACTOR SHALL RETAIN A CURRENT AND COMPLETE SET OF THE CONTRACT DOCUMENTS AT THE JOBSITE DURING ALL PHASES OF THE WORK. ALL REVISIONS SHALL BE RECORDED BY THE CONTRACTOR TO ESTABLISH A RECORD SET OF DOCUMENTS FOR THE PROJECT.
9. FBC SECTION 110.3.4 TERMITES.
   BUILDING COMPONENTS AND BUILDING SURROUNDINGS REQUIRED TO BE PROTECTED FROM TERMITE DAMAGE IN ACCORDANCE WITH SECTION 1503.7, SECTION 2304.13 OR SECTION 2304.11.6, SPECIFICALLY REQUIRED TO BE INSPECTED FOR TERMITES IN ACCORDANCE WITH SECTION 2114, OR REQUIRED TO HAVE CHEMICAL SOIL TREATMENT IN ACCORDANCE WITH SECTION 1816 SHALL NOT BE COVERED OR CONCEALED UNTIL THE RELEASE FROM THE BUILDING OFFICIAL HAS BEEN RECEIVED.

PRODUCT APPROVAL INFORMATION

PRODUCT CATEGORY	SUBCATEGORY	MANUFACTURER	APPROVAL NUMBER	DATE APPROVED
ROOFING	ROOFING TILES	SANTEFE TILE CORP	FL2019.1-R12	09/14/2018
EXTERIOR DOORS	SWINGING EXTERIOR DOOR ASSEMBLIES	SCHLAGE LOCK COMPANY, LLC / ALLEGION	FL12400.3-R10	2/18/2020
EXTERIOR DOORS	SWINGING EXTERIOR DOOR ASSEMBLIES	PGT INDUSTRIES	FL253.6-R20	2/12/2020
WINDOWS	FIXED	PGT INDUSTRIES	FL243.6-R22	2/28/2020

DESIGNED BY: KT DATE: 8/12/20
DRAWN BY: KT DATE: 8/12/20
CHECKED BY: RB DATE: 8/10/20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

APPROVED BY:
ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

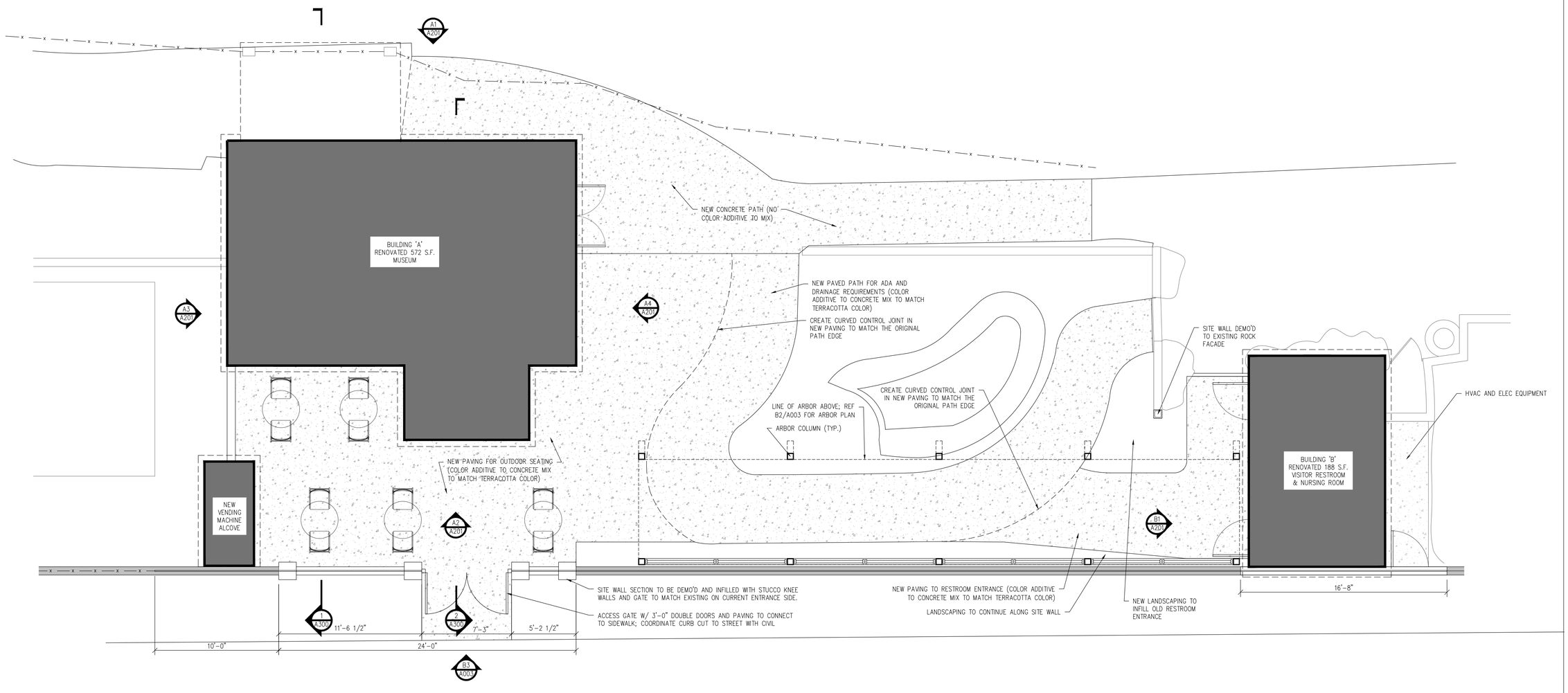
ARC3 architecture
6699 13th Avenue North, Suite 4A
St. Petersburg, FL 33710
(727) 381-5220
(727) 381-0052 fax

Firm Registration AA-26000510
Steven J. Vinci, AIA AR-0017036

Signature Date

DATE: August 12th, 2020
SCALE: N.T.S.
DRAWING No. 19219-2 A001

Site Plan & Project Notes



N

A1 Architectural Site Plan

0 2' 4' 8'
Scale: 1/4" = 1'-0"

DESIGNED BY: KT DATE: 8/12/20
DRAWN BY: KT DATE: 8/12/20
CHECKED BY: RB DATE: 8/10/20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

APPROVED BY:

ARC3 architecture
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(727) 381-0052 fax

Firm Registration AA-26000510
Steven J. Vinci, AIA AR-0017036

Signature Date

DATE: August 12th, 2020
SCALE: 1/4" = 1'-0"
DRAWING No. 19219-3 A002
Architectural Site Plan

N

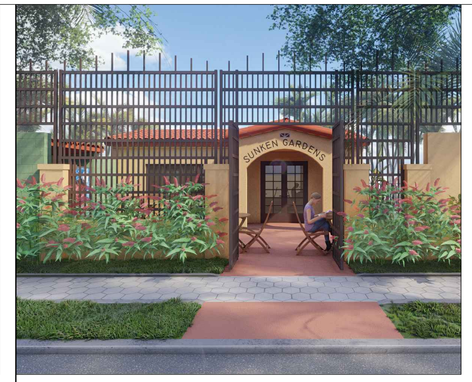
C1 Rendered Architectural Site Plan without Canopy

SCALE: NTS

N

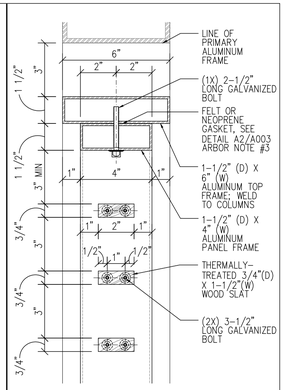
C2 Rendered Architectural Site Plan with Canopy

SCALE: NTS



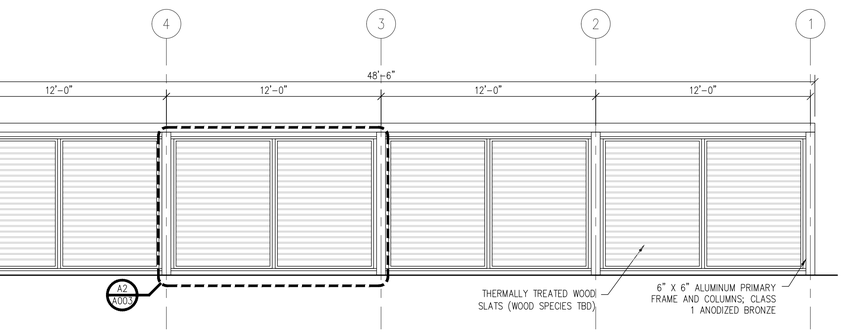
C3 Rendering from 18th Ave N

SCALE: NTS



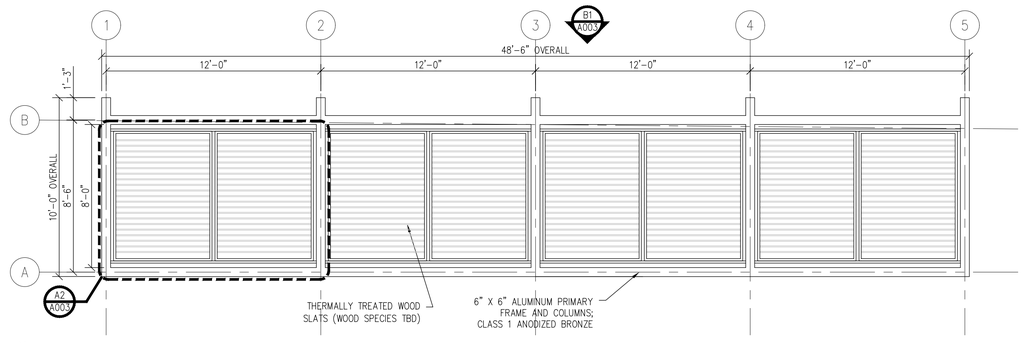
C4 Arbor Detail

Scale: 3" = 1'-0"



B1 Arbor Elevation

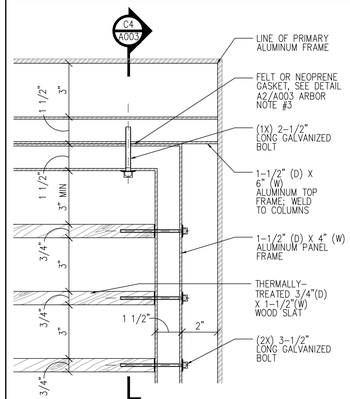
Scale: 1/4" = 1'-0"



N

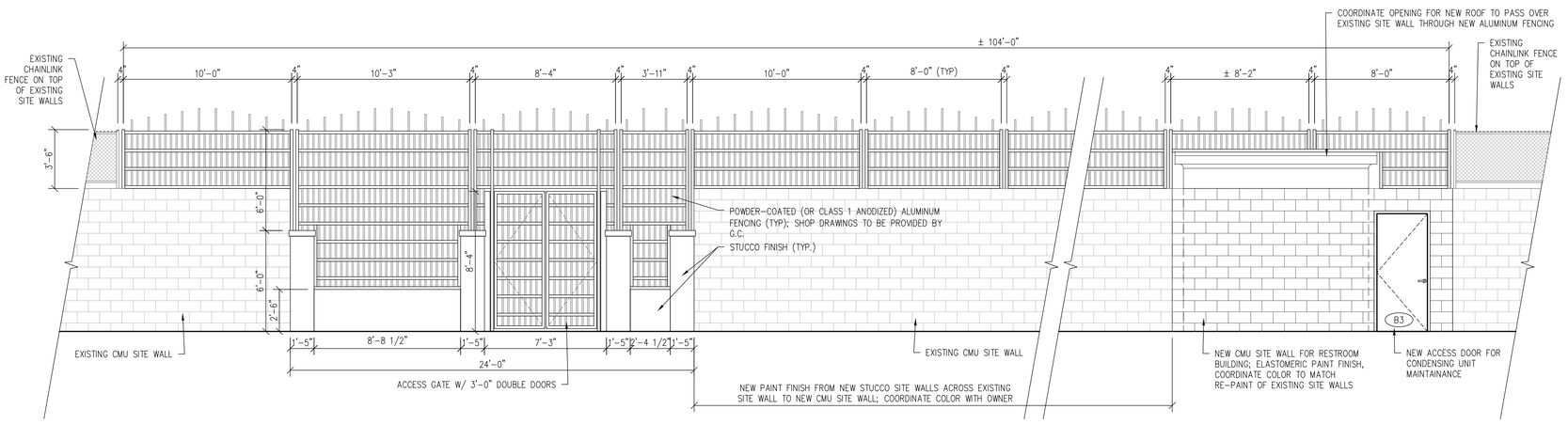
B2 Arbor Top Plan

Scale: 1/4" = 1'-0"



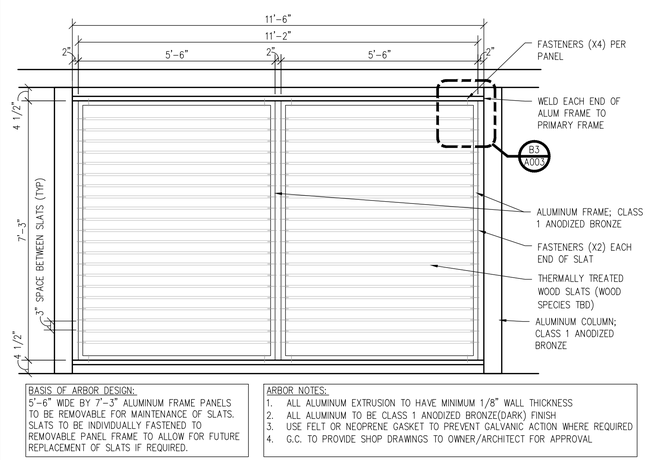
B3 Arbor Detail

Scale: 3" = 1'-0"



A1 Gate Elevation

Scale: 1/4" = 1'-0"



BASIS OF ARBOR DESIGN:
5'-6" WIDE BY 7'-3" ALUMINUM FRAME PANELS TO BE REMOVABLE FOR MAINTENANCE OF SLATS. SLATS TO BE INDIVIDUALLY FASTENED TO REMOVABLE PANEL FRAME TO ALLOW FOR FUTURE REPLACEMENT OF SLATS IF REQUIRED.

ARBOR NOTES:
1. ALL ALUMINUM EXTRUSION TO HAVE MINIMUM 1/8" WALL THICKNESS
2. ALL ALUMINUM TO BE CLASS 1 ANODIZED BRONZE(DARK) FINISH
3. USE FELT OR NEOPRENE GASKET TO PREVENT GALVANIC ACTION WHERE REQUIRED
4. G.C. TO PROVIDE SHOP DRAWINGS TO OWNER/ARCHITECT FOR APPROVAL

A2 Arbor Panel Enlarged Elevation

Scale: 1/2" = 1'-0"

DESIGNED BY: KT DATE: 8/12/20
DRAWN BY: KT DATE: 8/12/20
CHECKED BY: RB DATE: 8/10/20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

APPROVED BY:

ARC3 architecture
6699 13th Avenue North, Suite 4A
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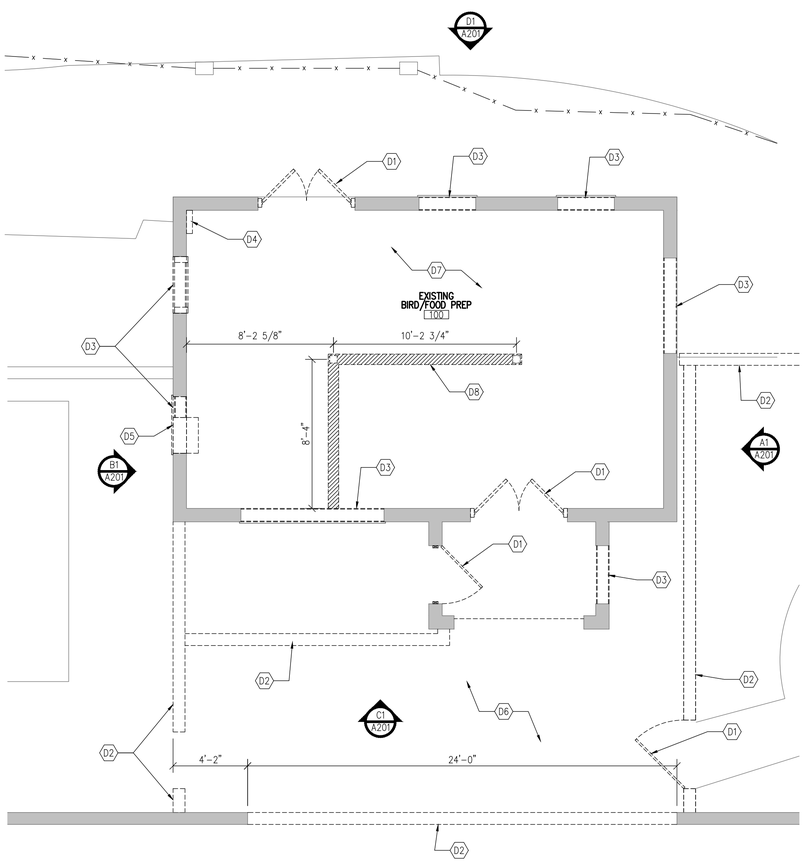
(727) 381-5220
(727) 381-0052 fax

Firm Registration AA-26000510
Steven J. Vinci, AIA AR-0017036

Signature Date

DATE: August 12th, 2020
SCALE: Varies
DRAWING No. 19219-4 A003
Site Details & Renderings



N **B1** Bldg A - Demolition Floor Plan - Museum

Scale: 1/4" = 1'-0"

GENERAL DEMOLITION NOTES

1. THE DEMOLITION DRAWINGS HAVE BEEN DEVELOPED FROM SITE INVESTIGATION AND EXISTING DRAWINGS AND THEY MAY NOT REFLECT ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF THESE DRAWINGS WITH EXISTING FIELD CONDITIONS; AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF INCONSISTENCIES BETWEEN THESE DRAWINGS AND ACTUAL CONDITIONS BEFORE PROCEEDING WITH CONSTRUCTION.
2. SPECIFIC DEMOLITION ITEMS IDENTIFIED BY KEYNOTES REPRESENT MAJOR ITEMS AND ARE NOT TO BE CONSTRUED TO REPRESENT THE FULL SCOPE OF REQUIRED DEMOLITION.
3. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE FULL EXTENT OF MISCELLANEOUS DEMOLITION NECESSARY FOR COMPLETE REMOVAL OF ALL IMPROVEMENTS LISTED NECESSARY TO PROVIDE A CLEAN SUBSTRATE FOR RE-ROOFING.
4. GENERAL CONTRACTOR AND SUB-CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATORY AGENCIES AND THEIR CODES AND REGULATIONS FOR NEW CONSTRUCTION AND DEMOLITION WORK.
5. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY IF ANY WORK INDICATED IN THE CONSTRUCTION DOCUMENTS CANNOT BE PERFORMED DUE TO EXISTING FIELD CONDITIONS.
6. THE CONTRACTOR SHALL BRACE ALL EXISTING STRUCTURES AND ALL STRUCTURAL ELEMENTS AS NECESSARY DURING DEMOLITION.
7. THE CONTRACTOR SHALL NOT CUT STRUCTURAL WORK IN A MANNER RESULTING IN A REDUCTION OF LOAD CARRYING CAPACITY OR LOAD/DEFLECTION RATIO. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ALL STRUCTURAL CUTS PRIOR TO EXECUTION SO THAT APPROVAL CAN BE OBTAINED FROM THE ARCHITECT AND STRUCTURAL ENGINEER.
8. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR ALL RUBBLE AND DEBRIS CAUSED BY DEMOLITION TO BE REMOVED FROM THE SITE AND DISPOSED OF IN A PROPER MANNER.
9. CONTACT OWNER IF ANY FOREIGN CONSTRUCTION BUILDING MATERIALS ARE UNCOVERED DURING DEMOLITION.

KEYED DEMOLITION NOTES

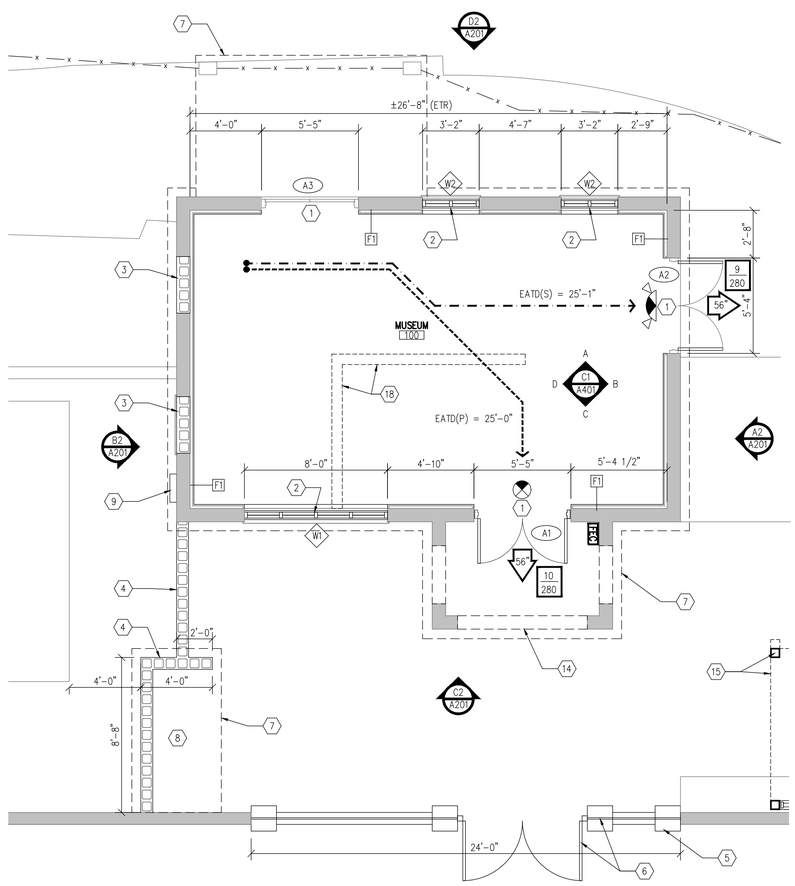
- D1 DEMOLISH DOOR(S), DOOR HARDWARE, AND FRAME(S)
- D2 DEMOLISH WALL
- D3 REMOVE INFILL FROM EXISTING ORIGINAL WINDOW OR DOOR OPENINGS
- D4 REMOVE ELECTRICAL PANEL TO BE RELOCATED TO EXTERIOR
- D5 REMOVE AIR CONDITIONING UNIT
- D6 EXTERIOR CONCRETE SLAB TO BE CUT OUT AND GRADE LEVELED FOR FUTURE SLAB TO MATCH EXISTING INTERIOR BUILDING FLOOR ELEVATION; REFERENCE CIVIL DRAWINGS
- D7 REMOVE ALL VCT FLOORING AND ADHESIVE
- D8 TRENCH FOR POWER TO NEW ELECTRICAL FLOOR BOXES

LIFE SAFETY LEGEND

- XX" EXIT CLEAR OPENING WIDTH
- EXIT SIGN
- EMERGENCY EXIT LIGHT/SIGN
- FEC FIRE EXTINGUISHER CABINET
- EATD(P) = XX'-X" TRAVEL DISTANCE TO EXIT - PRIMARY
- EATD(S) = XX'-X" TRAVEL DISTANCE TO EXIT - SECONDARY
- XX / XXX NUMBER OF OCCUPANTS MOVING THROUGH EGRESS DOOR OR STAIR; MAX. NUMBER OF OCCUPANTS ALLOWED THROUGH EGRESS DOOR (0.2" PER OCCUPANT) OR STAIR AT (0.3" PER OCCUPANT)

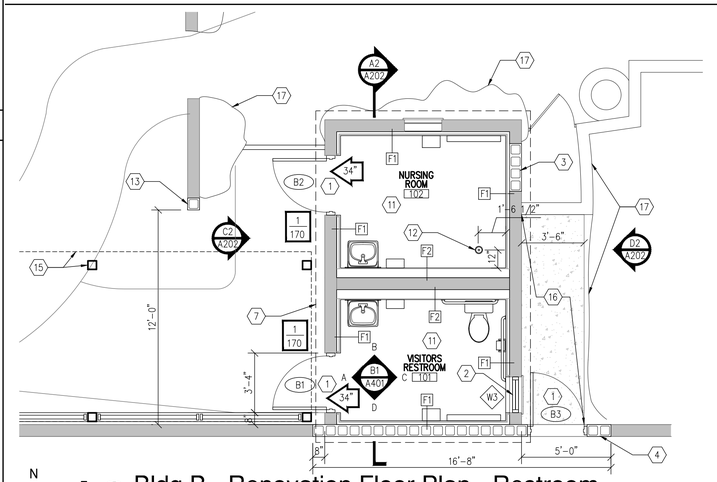
N **A1** Bldg B - Demolition Floor Plan - Restroom

Scale: 1/4" = 1'-0"



N **B2** Bldg A - Renovation Floor Plan - Museum

Scale: 1/4" = 1'-0"



N **A2** Bldg B - Renovation Floor Plan - Restroom

Scale: 1/4" = 1'-0"

GENERAL RENOVATION SCOPE

NOTE: OUTLINE LISTS MAJOR SCOPE TASKS AND IS NOT INTENDED TO BE A COMPREHENSIVE LISTING OF ALL TASKS NECESSARY TO COMPLETE THE WORK.

BUILDING 'A'

A. INSTALLATION OF NEW INTERIOR FURRED WALLS
B. INSTALLATION OF NEW POWER/DATA
C. REMOVAL AND REINSTALLATION OF ELECTRICAL PANEL, CONDUITS AND JUNCTION BOXES TO ACCOMMODATE DEMOLITION AND NEW CONSTRUCTION.
D. INSTALLATION OF NEW FIXED WINDOWS TO MATCH ORIGINAL BUILDING WINDOW DESIGN.
E. INSTALLATION OF NEW FRENCH-STYLE 12-LITE DOORS.
F. INSTALLATION OF ALUMINUM FRAME ARBOR IN GARDEN.
G. NEW PATIO TO BE LEVELED TO MATCH FLOOR LEVEL OF EXISTING BUILDING.
H. INSTALLATION OF EXTERIOR LIGHTING
I. NEW SITE WALL, FENCING AND GATES
J. NEW SITE WALLS FOR VENDING MACHINE ALCOVE WITH NEW CLAY TILE ROOF
K. INSTALLATION OF NEW INTERIOR LIGHTING, FANS, HVAC
L. INSTALLATION OF NEW FINISHES THROUGHOUT

BUILDING 'B'

A. INSTALLATION OF NEW SITE WALL
B. INSTALLATION OF NEW FURRED INTERIOR WALLS
C. INSTALLATION OF NEW PLUMBING FIXTURES AND ACCESSORIES FOR ADA COMPLIANT RESTROOM
D. INSTALLATION OF NEW FRAMED WALLS ABOVE EXISTING CMU WALLS
E. INSTALLATION OF NEW CLAY TILE ROOF AND ROOF STRUCTURAL
F. INSTALLATION OF NEW INTERIOR LIGHTING, FANS, HVAC
G. INSTALLATION OF NEW FINISHES

GARDEN

A. INSTALLATION OF NEW ALUMINUM FRAME ARBOR WITH WOOD SLAT INFILL
B. COLOR REMOVED FROM GARDEN PATH
C. NEW CONCRETE POURED FOR PATIO AND NEW PATH TO BUILDING 'B'
D. LANDSCAPING REQUIREMENTS TO BE COMPLETED BY OWNER

KEYED RENOVATION NOTES

1. INSTALL DOOR AS SCHEDULED
2. INSTALL FIXED WINDOW AS SCHEDULED
3. 8" CMU WALL INFILL WITH STUCCO FINISH EXTERIOR TO MATCH EXISTING
4. 8" CMU SITE WALL WITH PAINT FINISH AS SCHEDULED
5. 8" CMU SITE WALL AND PILASTERS WITH STUCCO FINISH TO MATCH BUILDING
6. ALUMINUM GATE AND DOORS (TO MATCH EXISTING SITE GATE); COORDINATE PRODUCT WITH CIVIL
7. OUTLINE OF ROOF ABOVE
8. NEW VENDING MACHINE ALCOVE; REF ELECTRICAL DWGS FOR POWER SUPPLY
9. RELOCATED ELECTRICAL PANEL
10. NEW MINI-SPLIT AC UNIT IN CEILING OVERHEAD
11. NEW ADA FIXTURES; REF FF&E PLAN
12. STUB UP SANITARY LINE FOR FUTURE TOILET
13. PROVIDE NEW CMU BLOCK END TO FINISH ENDS OF EXPOSED CMU WALL FROM DEMO WORK
14. NEW LETTERING PAINTED ON FACADE TO MATCH HISTORIC ORIGINAL "SUNKEN GARDENS"
15. ARBOR OVERHEAD AND ARBOR COLUMN; REF ARCHITECTURAL SITE PLAN
16. NEW 4" CONCRETE PAD FOR MECHANICAL CONDENSING UNITS
17. EXISTING HISTORIC WALLS TO REMAIN
18. PATCH FLOOR WHERE TRENCHED FOR POWER PRIOR TO INSTALL OF NEW FLOORING

DESIGNED BY: KT DATE: 8/12/20
DRAWN BY: KT DATE: 8/12/20
CHECKED BY: RB DATE: 8/10/20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

APPROVED BY:

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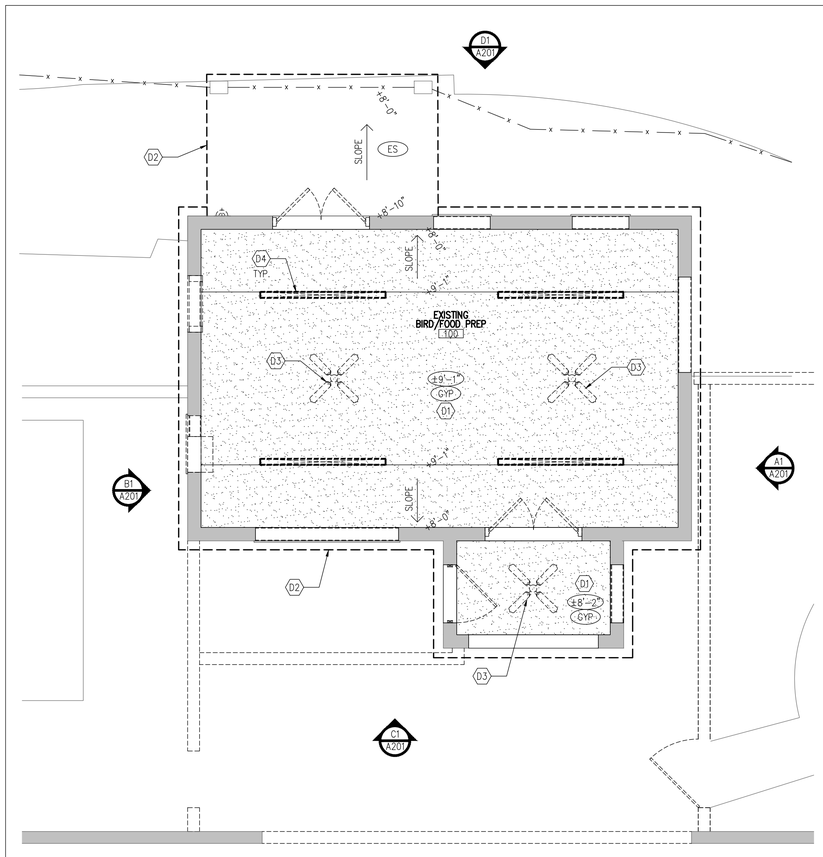
Firm Registration AA-26000510
Steven J. Vinci, AIA AR-0017036

Signature Date

DATE: August 12th, 2020
SCALE: 1/4" = 1'-0"
DRAWING No. 19219-5 A101

Demolition & Renovation Floor Plans



B1 Bldg A - Demolition Reflected Ceiling Plan - Museum

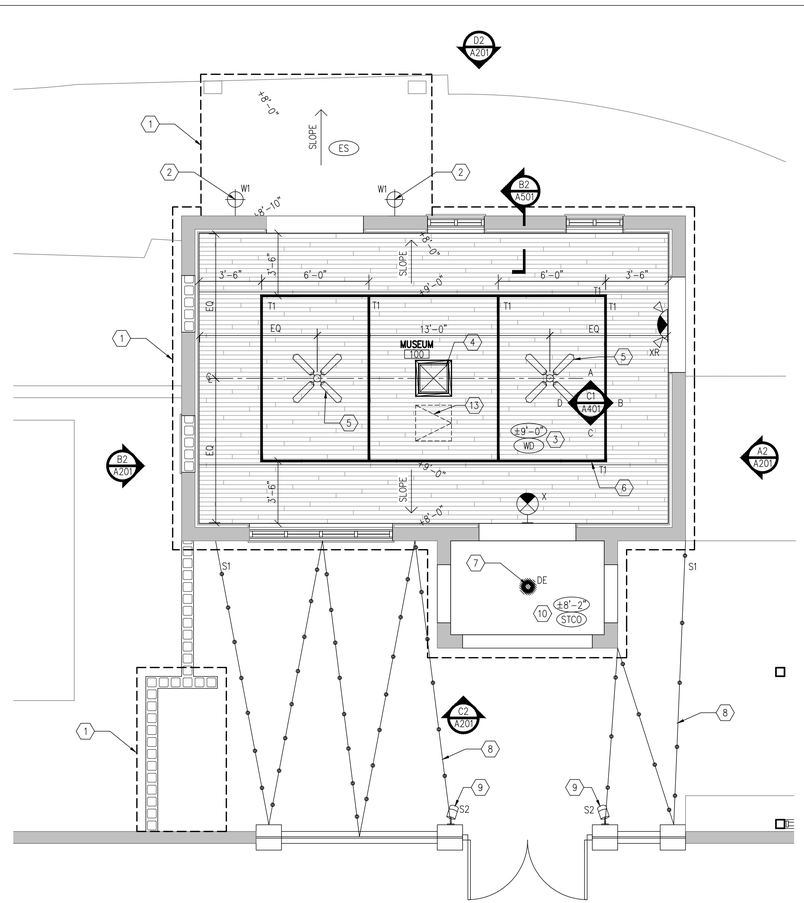
Scale: 1/4" = 1'-0"

KEYED DEMOLITION RCP NOTES

- D1 GYPSUM CEILING TO REMAIN
- D2 LINE OF ROOF OVERHEAD
- D3 REMOVE CEILING FANS
- D4 REMOVE LINEAR LIGHT FIXTURES

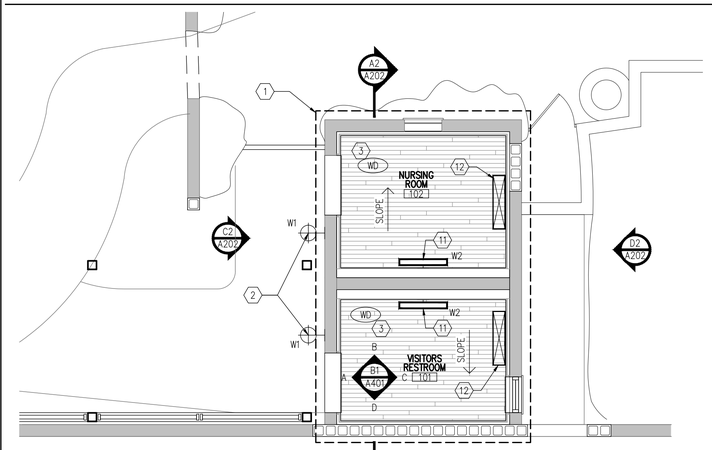
A1 Bldg B - Demolition Reflected Ceiling Plan - Restroom

Scale: 1/4" = 1'-0"



B2 Bldg A - Renovation Reflected Ceiling Plan - Museum

Scale: 1/4" = 1'-0"



A2 Bldg B - Renovation Reflected Ceiling Plan - Restroom

Scale: 1/4" = 1'-0"

KEYED RENOVATION RCP NOTES

1. LINE OF ROOF OVERHEAD
2. NEW WALL SCONCES
3. INSTALL TONGUE AND GROOVE WOOD PLANT OVER EXISTING GYP CEILING
4. NEW CEILING CASSETTE HVAC SYSTEM
5. INSTALL NEW CEILING FAN
6. NEW TRACK LIGHTING
7. NEW DOWNLIGHT CAN FIXTURE, WET-LOCATION LISTED
8. NEW OVERHEAD STRING PATIO LIGHTS, G.C. TO COORDINATE INSTALL LOCATIONS WITH OWNER
9. NEW SPOTLIGHT FIXTURES MOUNTED ON GATE PILASTERS, LIGHT TO BE AIMED AT BUILDING ENTRANCE
10. NEW STUCCO FINISH CEILING TO MATCH EXTERIOR IN ENTRYWAY
11. NEW LINEAR WALL MOUNT LIGHT FIXTURE
12. NEW MINI-SPLIT HVAC SYSTEM
13. PROVIDE CONCEALED ACCESS PANEL IN CEILING; REF DETAIL B3/A501

REFLECTED CEILING PLAN LEGEND

	D	6" DIAMETER LED DOWN LIGHT, WET LOCATION LISTED
	DE	SAME AS TYPE 'D', EXCEPT W/ EMERGENCY BATTERY PACK
	T1	TRACK LIGHT, WAC LIGHTING 22W EXTERMINATOR II – MODEL #1023 LED –BRUSHED NICKEL
	W1	LED WALL LIGHT
	W2	4' LED LINEAR WALL LIGHT
	S1	STRING OVERHEAD PATIO LIGHTS, EXTERIOR, WET LOCATION LISTED
	S2	SPOT LIGHTING WALL-MOUNT, EXTERIOR, WET LOCATION LISTED
	X	LED EXIT SIGN W/ BATTERY BACKUP
	XR	COMBO TWIN HEAD EMERGENCY LIGHT / LED EXIT SIGN W/ BATTERY BACKUP W/ REMOTE TWIN HEAD
		HVAC MINI-SPLIT WALL-MOUNT
		HVAC CEILING CASSETTE
		GYPSUM CEILING
		TONGUE-AND-GROOVE WOOD PLANK CEILING

DESIGNED BY: KT DATE: 8/12/20
DRAWN BY: KT DATE: 8/12/20
CHECKED BY: RB DATE: 8/10/20

MUSEUM, ARBOR, AND RESTROOMS
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SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

APPROVED BY:

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CITY of ST. PETERSBURG

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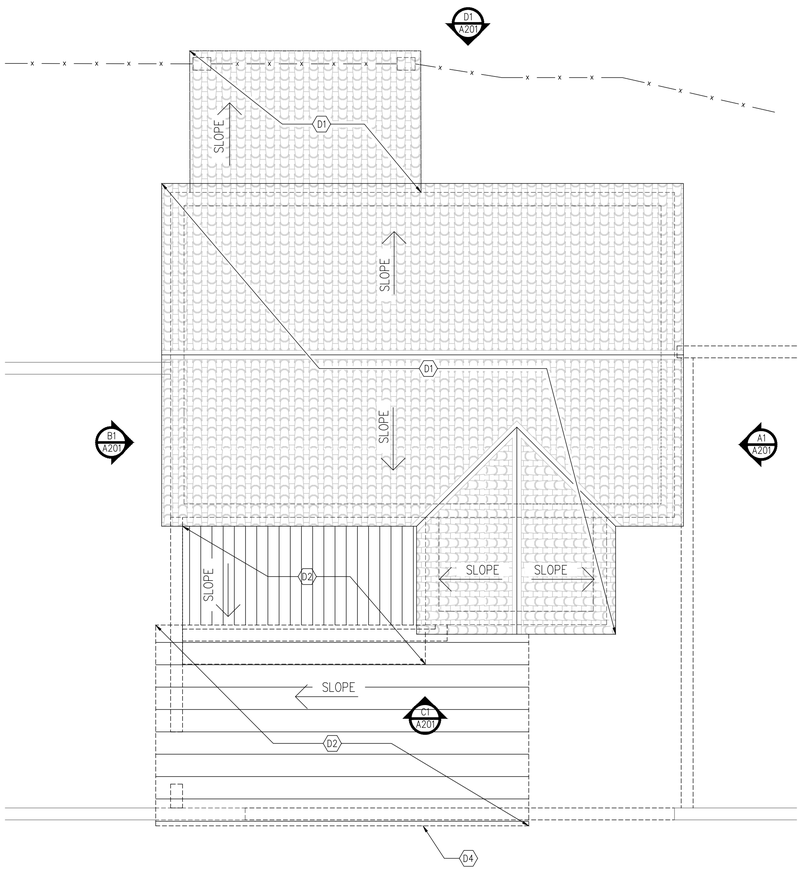
Firm Registration AA-26000510
Steven J. Vinci, AIA AR-0017036

Signature Date

DATE: August 12th, 2020
SCALE: 1/4" = 1'-0"
DRAWING No. 19219-6 A102

Demolition & Renovation Reflected Ceiling Plans



N **B1** Bldg A - Demolition Roof Plan - Museum

Scale: 1/4" = 1'-0"

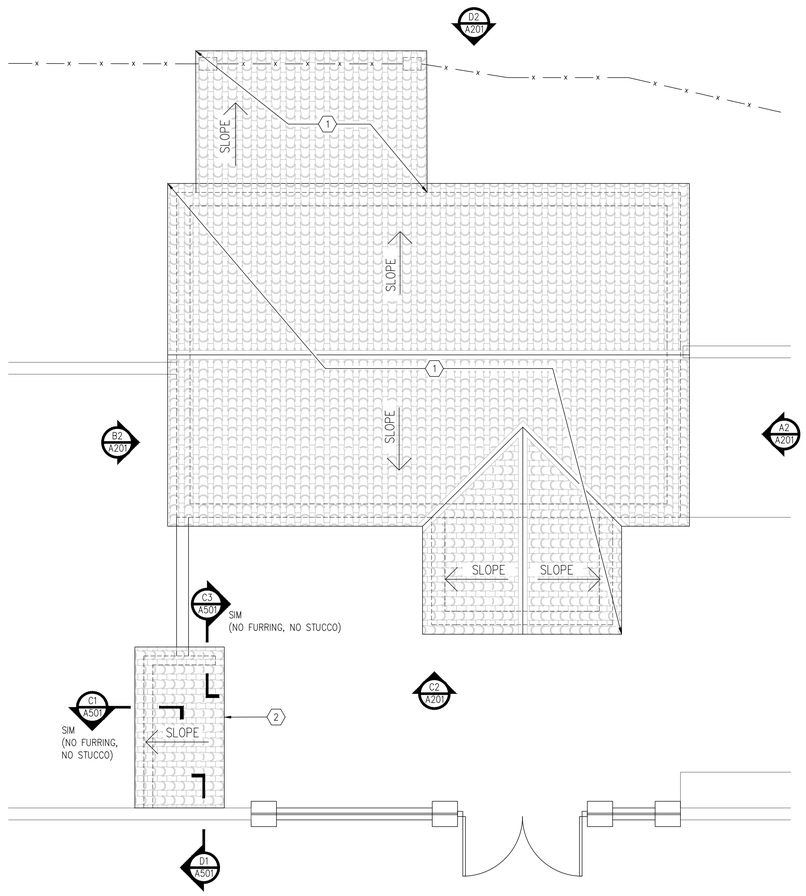
KEYED DEMOLITION ROOF NOTES

D1 EXISTING ROOF TO REMAIN

D2 DEMOLISH METAL ROOF AND ROOF STRUCTURE IN ITS ENTIRETY

D3 DEMOLISH SHINGLE ROOF AND ROOF STRUCTURE IN ITS ENTIRETY

D4 REMOVE ROOF FLASHING



N **B2** Bldg A - Renovation Roof Plan - Museum

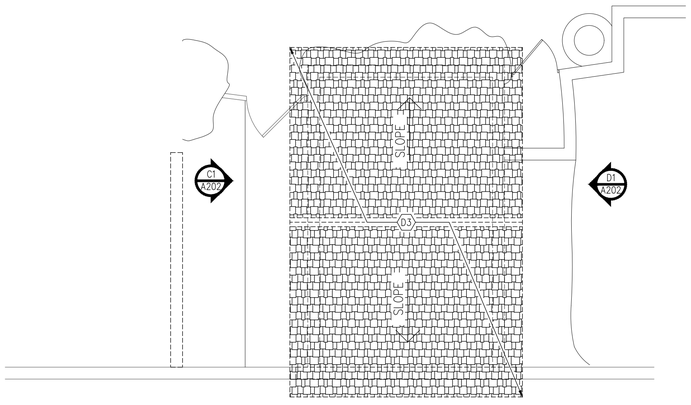
Scale: 1/4" = 1'-0"

KEYED RENOVATION ROOF NOTES

1 EXISTING TILE ROOF TO REMAIN

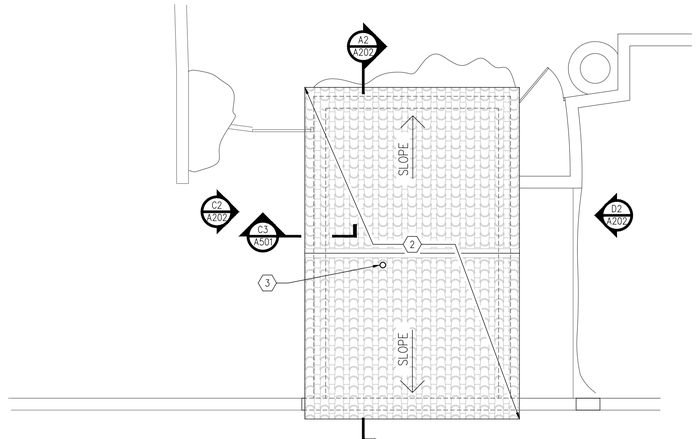
2 NEW TILE ROOF
- A. BASIS OF DESIGN: SANTAFE TILE CORPORATION, MISSION BARREL ROOF CLAY TILE, RED
- B. REFERENCE ROOF DETAILS ON SHEET A501

3 EXHAUST VENT THROUGH ROOF; REF FLASHING DETAIL D2/A501; REF PLUMBING DWGS FOR ADD'L INFORMATION



N **A1** Bldg B - Demolition Roof Plan - Restroom

Scale: 1/4" = 1'-0"



N **A2** Bldg B - Renovation Roof Plan - Restroom

Scale: 1/4" = 1'-0"

DESIGNED BY:	KT	DATE:	8/12/20
DRAWN BY:	KT	DATE:	8/12/20
CHECKED BY:	RB	DATE:	8/10/20

MUSEUM, ARBOR, AND RESTROOMS
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SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
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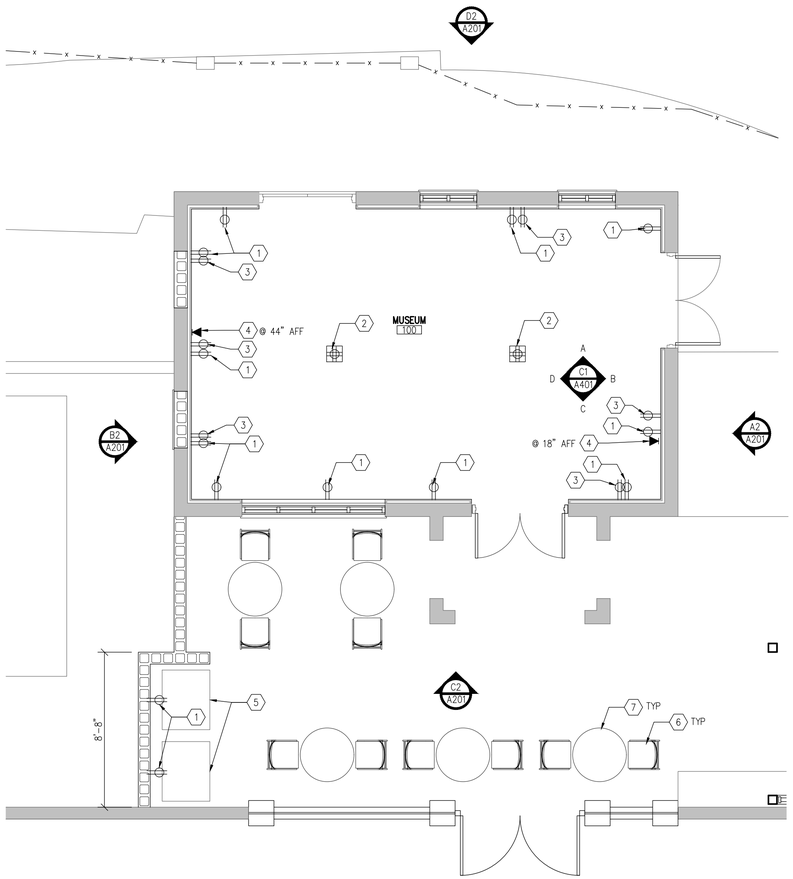
Signature Date

DATE: August 12th, 2020
SCALE: 1/4" = 1'-0"
DRAWING No. 19219-7 A103
Demolition & Renovation Roof Plans



B1 Bldg A - FF&E Plan - Museum

Scale: 1/4" = 1'-0"

KEYED RENOVATION FF&E NOTES

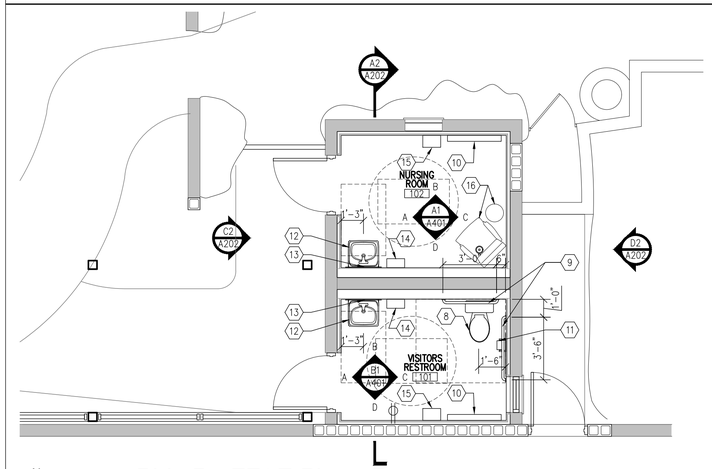
1. DUPLEX POWER @ 18" AFF
2. QUAD POWER RECESSED FLOOR BOX WITH COVER; TRENCH FOR POWER AS REQUIRED
3. DUPLEX POWER @ 44" AFF
4. DATA PORT DIRECTLY CONNECTED TO OPPOSITE WALL DATA PORT, CABLING TO RUN ABOVE CEILING
5. VENDING MACHINE
6. OUTDOOR PATIO CHAIRS BY OWNER
7. OUTDOOR PATIO TABLES BY OWNER
8. ADA TOILET
9. ADA GRAB BARS
10. ADA ACCESSIBLE DIAPER CHANGING STATION
11. TOILET PAPER HOLDER ACCESSORY
12. ADA WALL MOUNTED SINK
13. MIRROR
14. HAND DRYER
15. TRASH CAN
16. NURSING ROOM CHAIR AND SIDE TABLE BY OWNER

FF&E LEGEND

DUPLEX POWER OUTLET

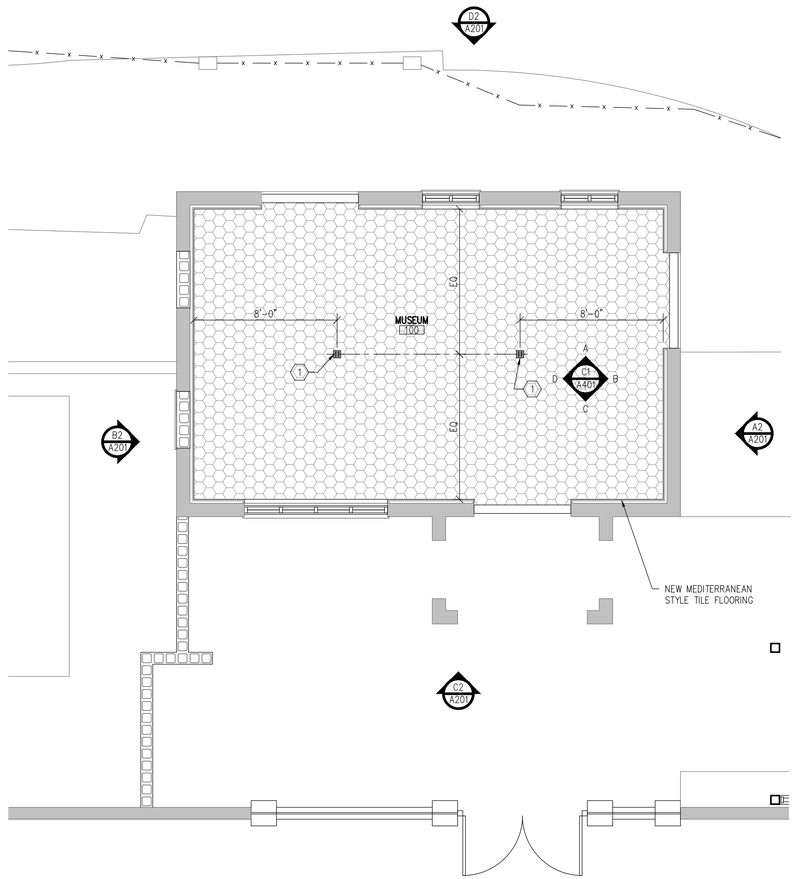
DATA PORT

FLOOR BOX QUAD POWER



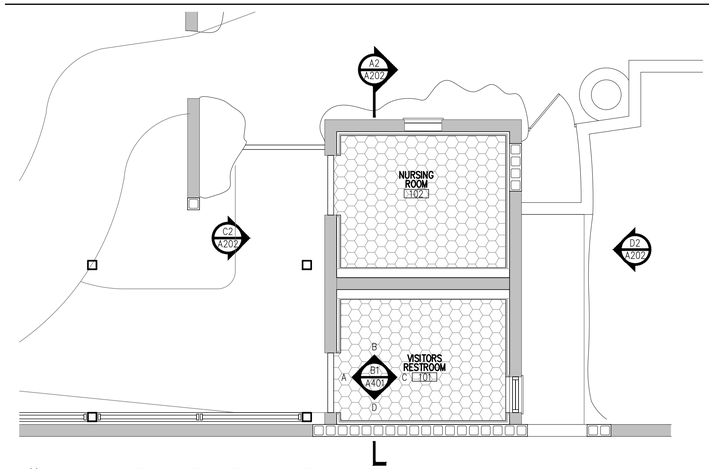
A1 Bldg B - FF&E Plan - Restroom

Scale: 1/4" = 1'-0"



B2 Bldg A - Finish Plan - Museum

Scale: 1/4" = 1'-0"



A2 Bldg B - Finish Plan - Restroom

Scale: 1/4" = 1'-0"

KEYED RENOVATION FINISH NOTES

1. RECESSED FLOOR BOX WITH COVER; REF DETAIL D3/A501

FINISH LEGEND

FLOOR TILE
CT-1: REF SCHEDULES ON A601

DESIGNED BY:	KT	DATE:	8/12/20
DRAWN BY:	KT	DATE:	8/12/20
CHECKED BY:	RB	DATE:	8/10/20

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SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

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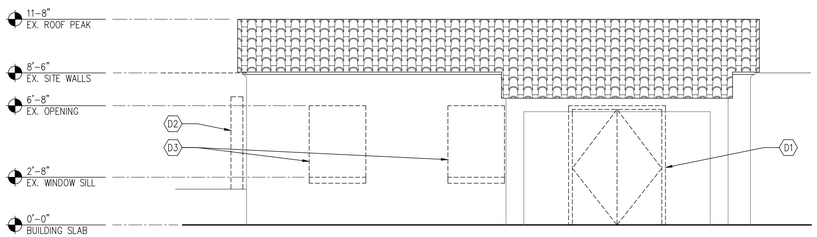
Firm Registration AA-26000510
Steven J. Vinci, AIA AR-0017036

Signature Date

DATE: August 12th, 2020
SCALE: 1/4" = 1'-0"
DRAWING No. 19219-8
A104

FF&E and Finish
Floor Plans

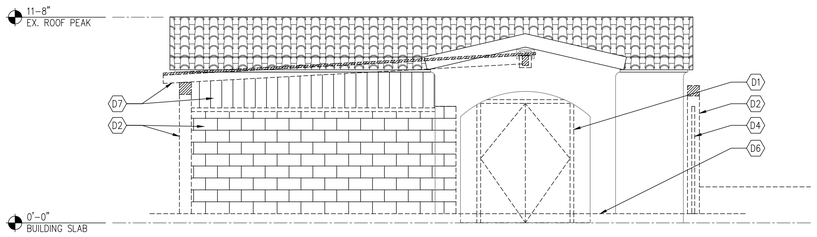


D1 Bldg A - North Elevation - Demolition

Scale: 1/4" = 1'-0"

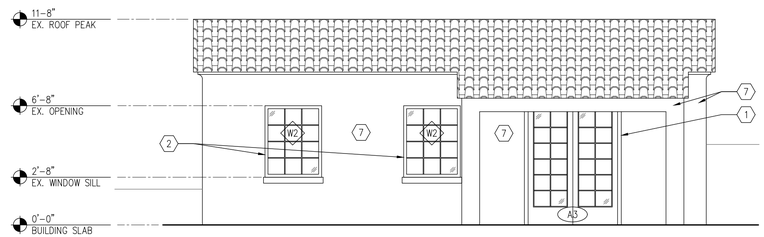
KEYED DEMO ELEVATION NOTES

- D1 DEMOLISH DOOR(S), DOOR HARDWARE, AND FRAME(S)
- D2 DEMOLISH WALL
- D3 REMOVE INFILL FROM EXISTING ORIGINAL WINDOW OR DOOR OPENINGS
- D4 REMOVE GATE AND GATE HARDWARE
- D5 REMOVE AIR CONDITIONING UNIT
- D6 EXTERIOR CONCRETE SLAB TO BE CUT OUT AND GRADE LEVELED FOR FUTURE SLAB TO MATCH EXISTING INTERIOR BUILDING FLOOR ELEVATION; REFERENCE CIVIL DRAWINGS
- D7 REMOVE ROOF IN ITS ENTIRETY; REFERENCE ROOF PLAN



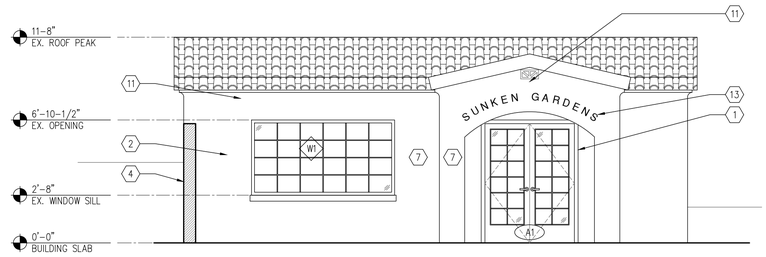
C1 Bldg A - South Elevation - Demolition

Scale: 1/4" = 1'-0"



D2 Bldg A - North Elevation - Renovation

Scale: 1/4" = 1'-0"

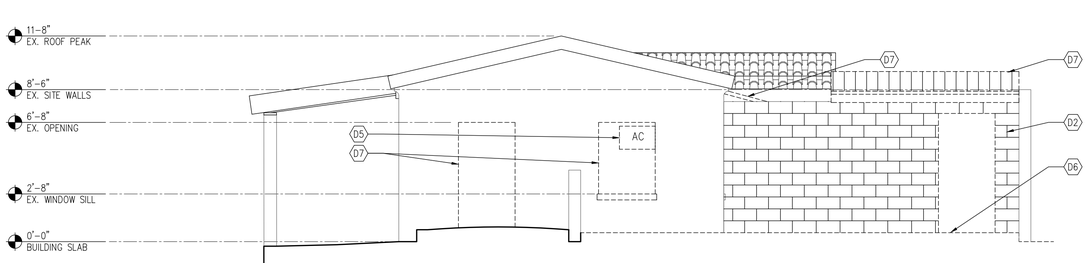


C2 Bldg A - South Elevation - Renovation

Scale: 1/4" = 1'-0"

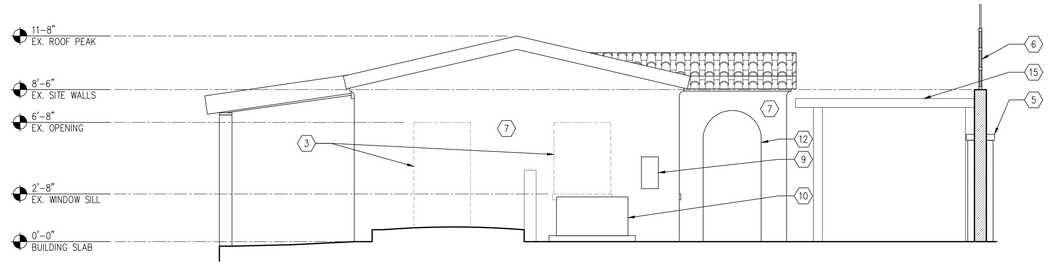
KEYED RENO ELEVATION NOTES

1. INSTALL DOOR AS SCHEDULED
2. INSTALL FIXED WINDOW AS SCHEDULED
3. 8" CMU WALL INFILL WITH STUCCO FINISH EXTERIOR TO MATCH EXISTING
4. 8" CMU SITE WALL WITH PAINT FINISH AS SCHEDULED
5. 8" CMU SITE WALL AND PILASTERS WITH STUCCO FINISH TO MATCH BUILDING
6. ALUMINUM GATE AND DOORS (TO MATCH EXISTING SITE GATE); COORDINATE PRODUCT WITH CIVIL
7. PAINT EXISTING EXTERIOR STUCCO FACADE (PNT-3)
8. NEW VENDING MACHINE ALCOVE; REF ELECTRICAL DWGS FOR POWER SUPPLY
9. RELOCATED ELECTRICAL PANEL
10. CONDENSING UNIT
11. PATCH AND REPAIR STUCCO WHERE ROOF STRUCTURE WAS REMOVED
12. PATCH AND REPAIR ORIGINAL STUCCO ARCHED DOORWAY FROM INFILL DEMO
13. NEW LETTERING PAINTED ON FACADE TO MATCH HISTORIC ORIGINAL "SUNKEN GARDENS"
14. NEW CLAY TILE ROOF; REFERENCE ROOF PLAN
15. GARDEN ARBOR (BEYOND); REFERENCE SHEET A003 FOR ADDITIONAL INFORMATION



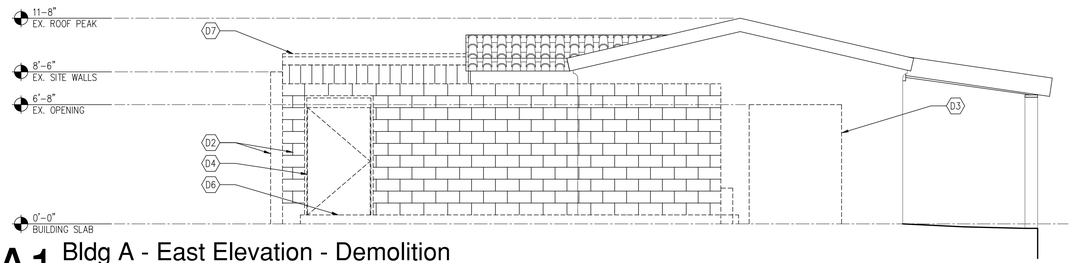
B1 Bldg A - West Elevation - Demolition

Scale: 1/4" = 1'-0"



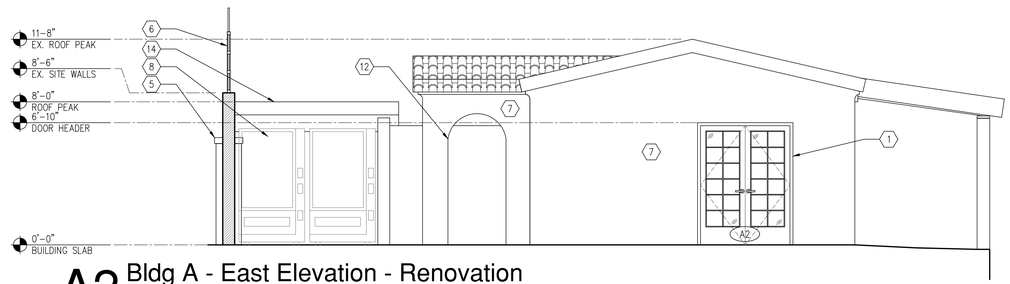
B2 Bldg A - West Elevation - Renovation

Scale: 1/4" = 1'-0"



A1 Bldg A - East Elevation - Demolition

Scale: 1/4" = 1'-0"



A2 Bldg A - East Elevation - Renovation

Scale: 1/4" = 1'-0"

DESIGNED BY: KT DATE: 8/12/20
DRAWN BY: KT DATE: 8/12/20
CHECKED BY: RB DATE: 8/10/20

MUSEUM, ARBOR, AND RESTROOMS
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REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

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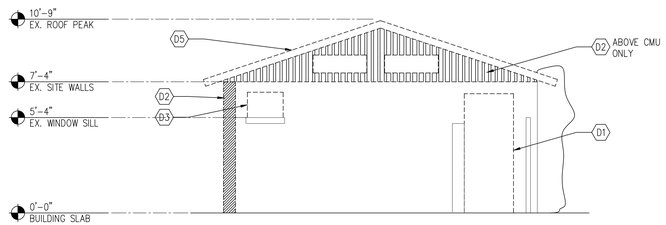
Steven J. Vinci, AIA AR-0017036

Signature Date

DATE: August 12th, 2020
SCALE: 1/4" = 1'-0"
DRAWING No. 19219-9 A201

Demolition & Renovation
Exterior Elevations - Museum

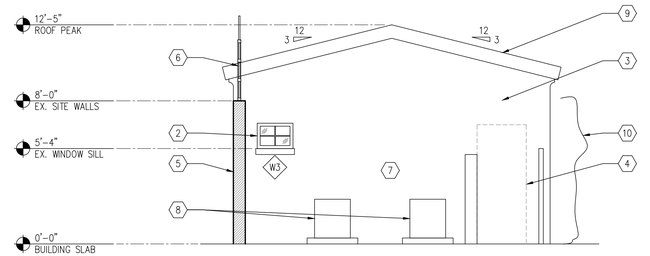


D1 Bldg B - West Elevation - Demolition

Scale: 1/4" = 1'-0"

KEYED DEMO ELEVATION NOTES

- D1 DEMOLISH DOOR(S), DOOR HARDWARE, AND FRAME(S)
- D2 DEMOLISH WALL
- D3 REMOVE INFILL FROM EXISTING ORIGINAL WINDOW OR DOOR OPENINGS
- D4 REMOVE GATE AND GATE HARDWARE
- D5 REMOVE ROOF IN ITS ENTIRETY; REFERENCE ROOF PLAN

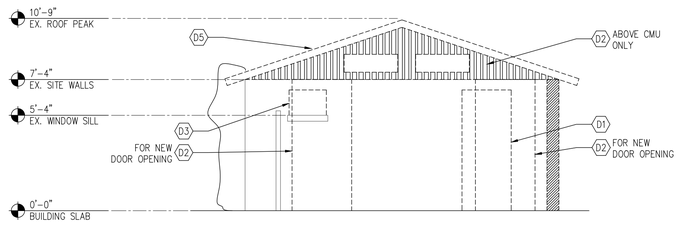


D2 Bldg B - West Elevation - Renovation

Scale: 1/4" = 1'-0"

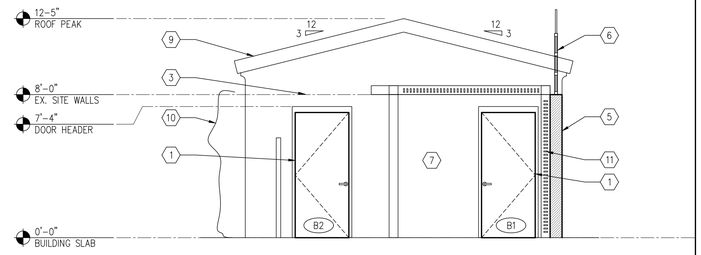
KEYED RENO ELEVATION NOTES

- 1 INSTALL DOOR AS SCHEDULED
- 2 INSTALL FIXED WINDOW AS SCHEDULED
- 3 WOOD FRAMED WALL INFILL WITH STUCCO FINISH EXTERIOR TO MATCH EXISTING
- 4 8" CMU WALL INFILL WITH STUCCO FINISH EXTERIOR TO MATCH EXISTING
- 5 8" CMU SITE WALL WITH PAINT FINISH AS SCHEDULED
- 6 ALUMINUM GATE AND DOORS (TO MATCH EXISTING SITE GATE); COORDINATE PRODUCT WITH CIVIL; REFERENCE SHEET A003 FOR ADDITIONAL INFORMATION
- 7 PAINT EXISTING EXTERIOR STUCCO FACADE (PNT-3)
- 8 CONDENSING UNIT
- 9 NEW CLAY TILE ROOF; REFERENCE ROOF PLAN
- 10 EXISTING HISTORIC 'ROCK' TO REMAIN
- 11 GARDEN ARBOR; REFERENCE SHEET A003 FOR ADDITIONAL INFORMATION



C1 Bldg B - East Elevation - Demolition

Scale: 1/4" = 1'-0"

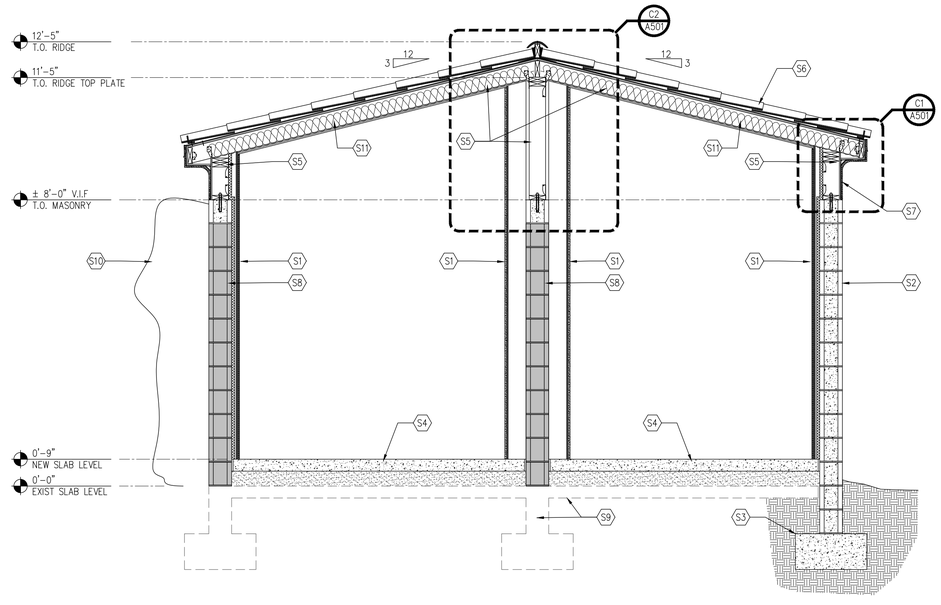


C2 Bldg B - East Elevation - Renovation

Scale: 1/4" = 1'-0"

KEYED RENO SECTION NOTES

- S1 NEW INTERIOR PARTITION; REFERENCE FLOOR PLAN AND WALL TYPES
- S2 NEW 8" CMU SITE WALL WITH ELASTOMERIC PAINT FINISH AS SCHEDULED
- S3 NEW SITE WALL FOOTING; REF STRUCTURAL
- S4 NEW 4" CONCRETE SLAB-ON-GRADE ON 5" SAND/FILL W/ VAPER BARRIER OVER EXISTING SLAB TO REMAIN; REF STRUCTURAL
- S5 2X6 P.T. WOOD FRAMING; REF STRUCTURAL
- S6 NEW CLAY TILE ROOF; REFERENCE ROOF PLAN
- S7 SMOOTH STUCCO FINISH
- S8 EXISTING CMU WALL TO REMAIN
- S9 EXISTING SLAB AND FOOTING TO REMAIN
- S10 EXISTING HISTORIC 'ROCK' TO REMAIN
- S11 ROOF BATT INSULATION (R-38)



A2 Bldg B - Building Section

Scale: 1/2" = 1'-0"

DESIGNED BY:	KT	DATE:	8/12/20
DRAWN BY:	KT	DATE:	8/12/20
CHECKED BY:	RB	DATE:	8/10/20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

APPROVED BY:

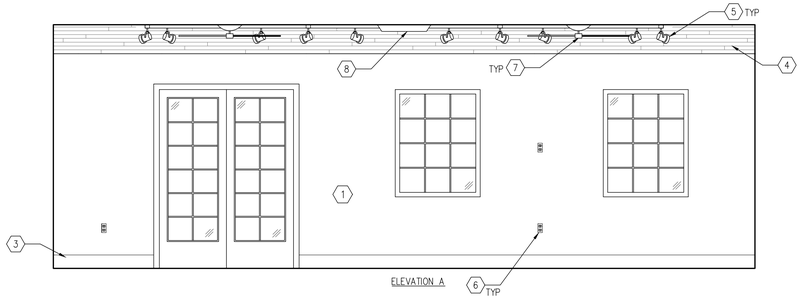
ARC3 architecture
6699 13th Avenue North, Suite 4A
St. Petersburg, FL 33710
(727) 381-5220
(727) 381-0052 fax

Firm Registration AA-26000510
Steven J. Vinci, AIA AR-0017036

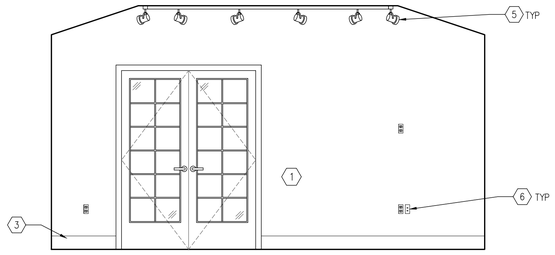
Signature Date

DATE: August 12th, 2020
SCALE: Varies
DRAWING No. 19219-10 A202

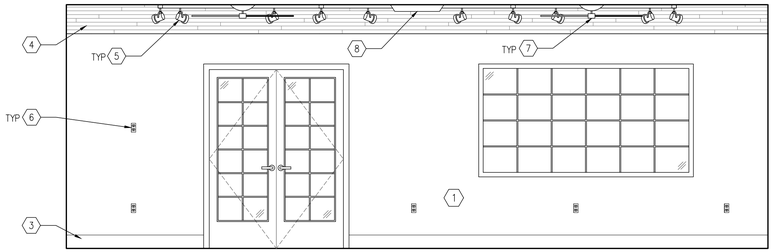
Demolition & Renovation
Exterior Elevations - Restroom



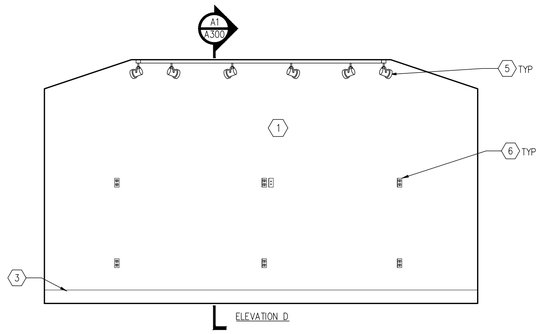
ELEVATION A



ELEVATION B



ELEVATION C



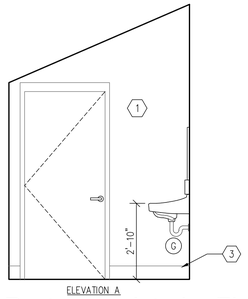
ELEVATION D

C1 Bldg A - Museum - Interior Elevations

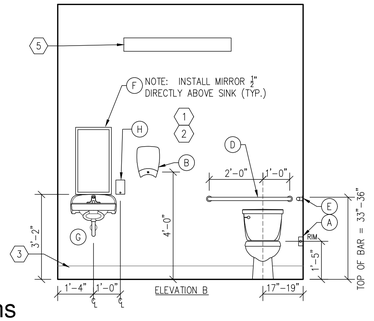
Scale: 3/8" = 1'-0"

KEYED INTERIOR ELEV NOTES

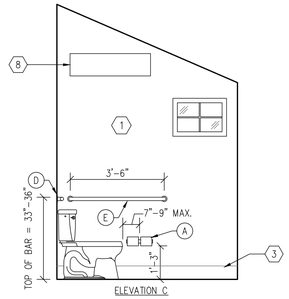
1. WALL PAINT AS SCHEDULED
2. INSTALL MOISTURE-RESISTANT GWB FOR PLUMBING WALL
3. WALL BASE AS SCHEDULED
4. WOOD TONGUE-AND-GROOVE CEILING AS SCHEDULED
5. LIGHTING AS SCHEDULED; REF ELECTRICAL FOR ADDITIONAL INFORMATION
6. ELECTRICAL POWER/DATA; REF ELECTRICAL FOR ADDITIONAL INFORMATION
7. CEILING FAN, LOW PROFILE, SPEC TBD
8. HVAC; REF MECHANICAL FOR ADDITIONAL INFORMATION



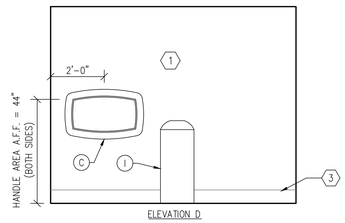
ELEVATION A



ELEVATION B



ELEVATION C



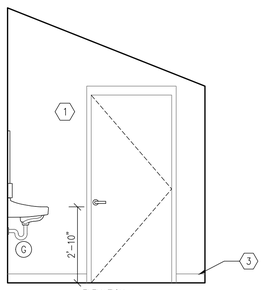
ELEVATION D

B1 Bldg B - Visitor's Restroom - Interior Elevations

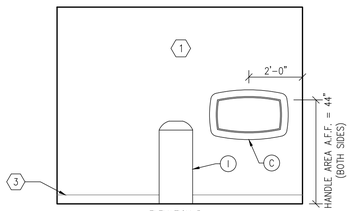
Scale: 3/8" = 1'-0"

KEYED PLUMBING FIXTURE NOTES

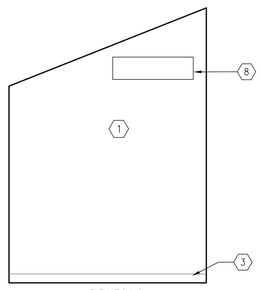
- (A) DOUBLE-ROLL TOILET TISSUE DISPENSER - BOBRICK #B-697
- (B) SURFACE MOUNTED HAND AIR DRYER - BOBRICK #B-7180
- (C) BABY CHANGING TABLE, HORIZONTAL WALL-MOUNTED - KOALA KARE #KB200, GREY (01)
- (D) GRAB BAR - BOBRICK #5806. 99 X 36 PEENED GRIP
- (E) GRAB BAR - BOBRICK #5806.99 X 42 PEENED GRIP
- (F) MIRRORS - BOBRICK #B-1658-16" X 30" TEMPERED GLASS MIRROR
- (G) USE PRE-FORMED INSULATION ON ALL EXPOSED WATER PIPING AND DRAINS ON ALL SINKS
- (H) SOAP DISPENSER - BOBRICK #B-2111 SUPPLY SOAP FOR ALL DISPENSERS
- (I) WASTE RECEPTACLE - BOBRICK #B-2300



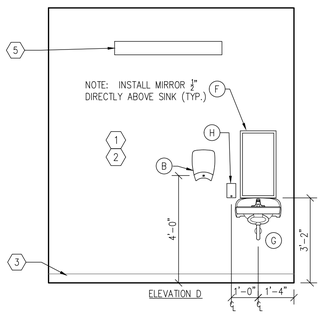
ELEVATION A



ELEVATION B



ELEVATION C



ELEVATION D

A1 Bldg B - Nursing Room - Interior Elevations

Scale: 3/8" = 1'-0"

DESIGNED BY:	KT	DATE:	8/12/20
DRAWN BY:	KT	DATE:	8/12/20
CHECKED BY:	RB	DATE:	8/10/20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

APPROVED BY:

ARC3 architecture
6699 13th Avenue North, Suite 4A
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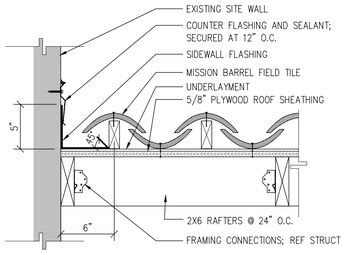
Firm Registration AA-26000510
Steven J. Vinci, AIA AR-0017036

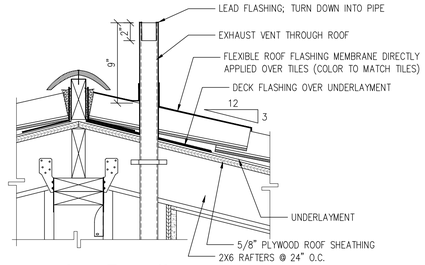
Signature Date

DATE: August 12th, 2020
SCALE: 3/8" = 1'-0"
DRAWING No. 19219-11 A401
Interior Elevations



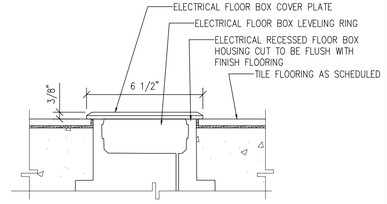
D1 Roof Detail

Scale: 1 1/2" = 1'-0"



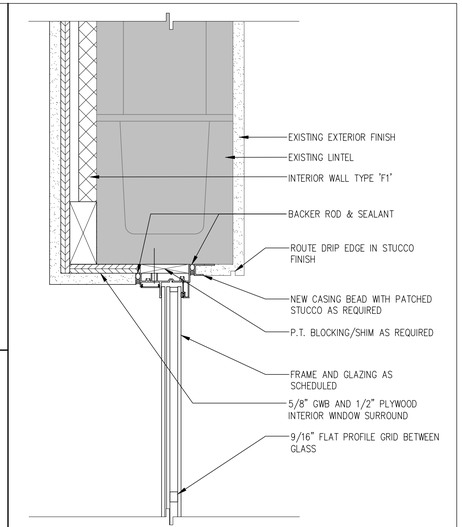
D2 Roof Penetration Detail

Scale: 1 1/2" = 1'-0"



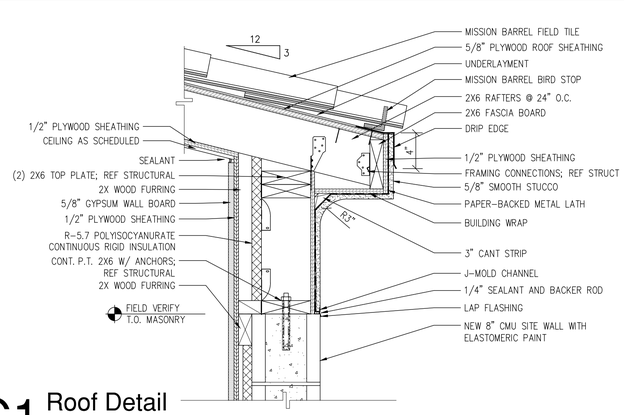
D3 Floor Box Detail

Scale: 3" = 1'-0"



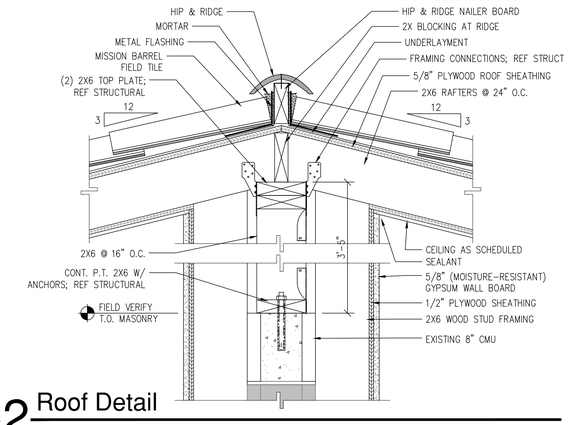
C4 Window Head/Jamb Detail

Scale: 3" = 1'-0"



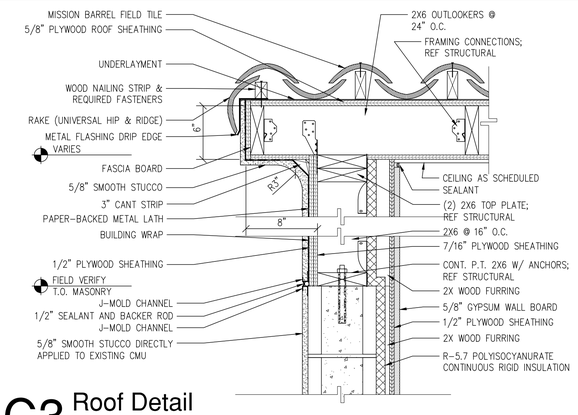
C1 Roof Detail

Scale: 1 1/2" = 1'-0"



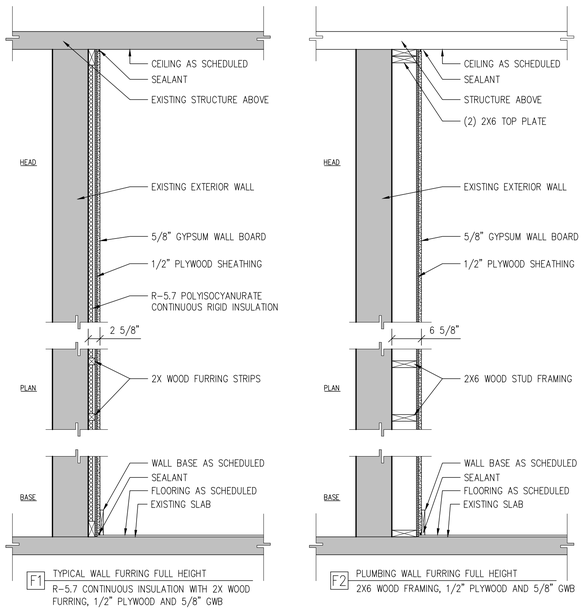
C2 Roof Detail

Scale: 1 1/2" = 1'-0"



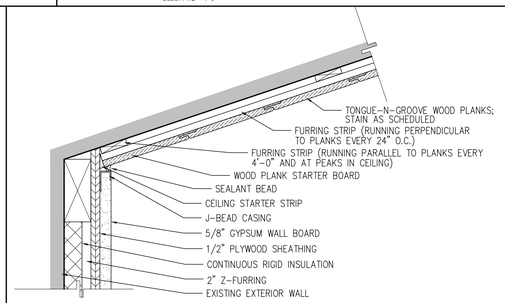
C3 Roof Detail

Scale: 1 1/2" = 1'-0"



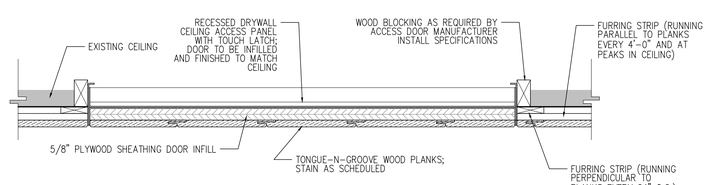
A1 Wall Types

Scale: 3/4" = 1'-0"



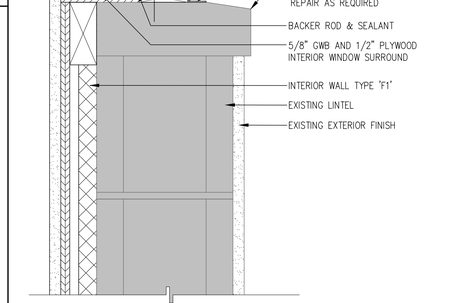
B2 Ceiling Detail

Scale: 3" = 1'-0"



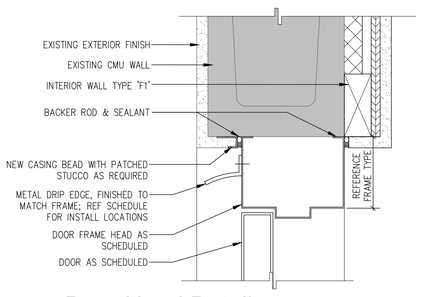
B3 Ceiling Access Panel Detail

Scale: 3" = 1'-0"



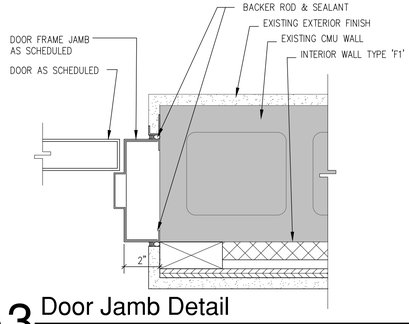
B4 Window Sill Detail

Scale: 3" = 1'-0"



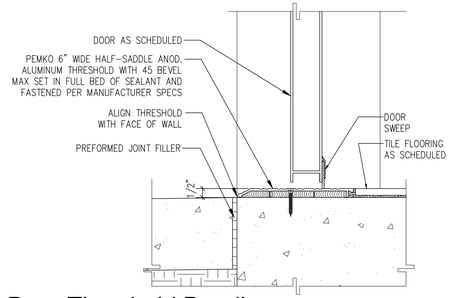
A2 Door Head Detail

Scale: 3" = 1'-0"



A3 Door Jamb Detail

Scale: 3" = 1'-0"



A4 Door Threshold Detail

Scale: 3" = 1'-0"

DESIGNED BY:	KT	DATE:	8/12/20
DRAWN BY:	KT	DATE:	8/12/20
CHECKED BY:	RB	DATE:	8/10/20

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100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
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ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
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APPROVED BY:

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(727) 381-5220
(727) 381-0052 fax

Firm Registration AA-26000510
Steven J. Vinci, AIA AR-0017036

Signature Date

DATE: August 12th, 2020
SCALE: Varies
DRAWING No. 19219-12 A501
Details

DOOR SCHEDULE

DOOR NUMBER	DOOR							FRAME					HARDWARE SET	FIRE RATING LABEL	REMARKS
	DOOR TYPE	SIZE			MATERIAL	UNDER CUT	GLASS	FRAME TYPE	MATERIAL	DETAILS					
		WIDTH	HEIGHT	THICK						HEAD	JAMB	SILL			
A1	12-LITE_02	5'-4"	6'-8"	1-3/4"	MTL/GLA	–	12-LITE	FRAME_02	MTL	A2/A501	A3/A501	A4/A501	ENTRY-01		BRONZE FINISH
A2	12-LITE_02	5'-4"	6'-8"	1-3/4"	MTL/GLA	–	12-LITE	FRAME_02	MTL	A2/A501	A3/A501	A4/A501	ENTRY-01		BRONZE FINISH; INCLUDE METAL DRIP EDGE INSTALLATION
A3	12-LITE_01	5'-4"	6'-8"	1-3/4"	MTL/GLA	–	12-LITE	FRAME_02	MTL	A2/A501	A3/A501	A4/A501	ENTRY-02		BRONZE FINISH; NOT FOR EGRESS; NON-OPERABLE
B1	FLUSH_01	3'-0"	7'-0"	1-3/4"	MTL	–	–	FRAME_02	MTL	A2/A501	A3/A501	A4/A501	PRIVACY-01		
B2	FLUSH_01	3'-0"	7'-0"	1-3/4"	MTL	–	–	FRAME_02	MTL	A2/A501	A3/A501	A4/A501	PRIVACY-01		INCLUDE METAL DRIP EDGE INSTALLATION
B3	FLUSH_01	3'-0"	7'-0"	1-3/4"	MTL	–	–	FRAME_02	MTL	A2/A501	A3/A501	A4/A501	STOREROOM-01		EXTERIOR TO EXTERIOR ACCESS – NO WEATHERPROOFING NEEDED

WINDOW SCHEDULE

MARK	LOCATION	SIZE		TYPE	DETAILS			MATERIAL	NOTES
		WIDTH	HEIGHT		HEAD	JAMB	SILL		
W1	MUSEUM (RM 100)	8'-0"	4'-2 1/2"	FIXED	C4/A501	C4/A501	B4/A501	ALUMINUM FRAME	BRONZE FRAME FINISH
W2	MUSEUM (RM 100) (X2)	3'-2"	4'-0"	FIXED	C4/A501	C4/A501	B4/A501	ALUMINUM FRAME	BRONZE FRAME FINISH
W3	VISITOR RESTROOM (RM 101)	2'-0"	1'-5"	FIXED	C4/A501	C4/A501	B4/A501	ALUMINUM FRAME	BRONZE FRAME FINISH

FINISH + COLOR SCHEDULE

SPACE		FLOOR	BASE		WALLS								CEILING		REMARKS
NUMBER	NAME	MATERIAL	MATERIAL	COLOR	NORTH		SOUTH		EAST		WEST		MATERIAL	COLOR	
					MATERIAL	COLOR	MATERIAL	COLOR	MATERIAL	COLOR	MATERIAL	COLOR			
100	MUSEUM	CT-1	WB-1	PNT-2 / C	PNT-1	A	PNT-1	A	PNT-1	A	PNT-1	B	WD-1	–	SOUTH ENTRANCE EXTERIOR CEILING TO BE REFINISHED WITH STCO-1/PNT-2/COLOR "C"
101	VISITOR RESTROOM	CT-1	WB-1	PNT-2 / C	PNT-1	B	PNT-1	A	PNT-1	A	PNT-1	A	WD-1	–	
102	NURSING ROOM	CT-1	WB-1	PNT-2 / C	PNT-1	A	PNT-1	B	PNT-1	A	PNT-1	A	WD-1	–	

MATERIAL FINISH SCHEDULE

LOCATION	CODE	MATERIAL	COLOR + MATERIAL SPEC	MANUFACTURER/SUPPLIER	ADDITIONAL INFORMATION
CEILING	WD-1	WOOD PLANK	WOODHAVEN PLANKS – 5" X 84" (MDF) TONGUE & GROOVE CEILING PLANKS, NATURAL CHERRY	ARMSTRONG	
	STCO-1	PAINTED SMOOTH STUCCO FINISH	FLAT FINISH, EXTERIOR PAINT, REFERENCE SCHEDULE FOR COLOR SELECTION	SHERWIN WILLIAMS	
FLOOR	CT-1	CERAMIC TILE	STYLE: 1741 DI MARCA CORONA, TERRA – HEXAGON / COLORS (RANDOM MIX): 0089 AVORIO, 0090 OCRA & 0401 FLOREALE VERS. C	GARDEN STATE TILE	
WALLS	PNT-1	WALL PAINT	EGSHELL FINISH, INTERIOR PAINT, REFERENCE SCHEDULE FOR COLOR SELECTION	SHERWIN WILLIAMS	
	PNT-2	TRIM PAINT	SEMI-GLOSS FINISH, TRIM PAINT (DOORS, WINDOWS, OPENINGS, WALL BASE), COLOR "C"	SHERWIN WILLIAMS	
	PNT-3	EXTERIOR WALL PAINT	EXTERIOR PAINT, COLOR AND PRODUCT TO BE COORDINATED WITH OWNER TO MATCH CURRENT ENTRANCE BUILDING PAINT/COLOR	TBD	

PAINT COLOR KEY

A	FIELD, SW-6189 "OPALINE"
B	ACCENT, SW-6192 "COASTAL PLAIN"
C	TRIM, SW-7004 "SNOWBOUND"

*PAINT COLORS SUBJECT TO CHANGE PER OWNER SELECTION

FINISH AND COLOR NOTES

1. CONTRACTOR SHALL CAREFULLY STUDY AND COMPARE THE CONTRACT DOCUMENTS, THE FINISH SCHEDULE AND FINISH PLAN AND REPORT ANY ERRORS, INCONSISTENCY OR OMISSIONS THAT MAY BE DISCOVERED.
2. UNLESS INDICATED OTHERWISE, ALL FLOOR MATERIAL CHANGES SHALL OCCUR AT THE CENTERLINE OF THE DOOR.

MATERIAL LEGEND

ACT	ACOUSTICAL CEILING TILE	EXP	EXPOSED	SV	SHEET VINYL
CB	CARPET BASE	EPX	EPOXY	STCO	STUCCO
CPT	CARPET	GRT	GROUT	VB	VINYL BASE
CT	CERAMIC TILE	GYP	PAINTED GYPSUM BOARD	VCT	VINYL COMPOSITION TILE
CTB	CERAMIC TILE BASE	PLM	PLASTIC LAMINATE	VWC	VINYL WALL COVERING
CWT	CERAMIC WALL TILE	PNT	PAINT	WD	WOOD
DP	DECORATIVE PANEL	ETR	EXISTING TO REMAIN		

HARDWARE SET – ENTRY-01

QTY	DESCRIPTION
1	SARGENT ADA ENTRANCE LOCKSET; COORD. MODEL/FINISH W/ BLDG STD.
1	CYLINDER; COORDINATE KEYING WITH OWNER
6	BB HINGES
6	SILENCERS
2	DOOR SWEEPS
1	ADA SADDLE THRESHOLD – REF DETAIL
1	WALL STOPS/HOLDERS
1	GASKETING (JAMB AND HEAD)

HARDWARE SET – ENTRY-02

QTY	DESCRIPTION
1	DEADBOLT (EXTERIOR KEY/INTERIOR THUMB-TURN); COORDINATE KEYING WITH OWNER
6	BB HINGES
6	SILENCERS
2	DOOR SWEEPS
1	ADA SADDLE THRESHOLD – REF DETAIL
1	WALL STOPS/HOLDERS
1	GASKETING (JAMB AND HEAD)
	*NON-OPERABLE DOOR

HARDWARE SET – PRIVACY-01

QTY	DESCRIPTION
1	SARGENT ADA PRIVACY LOCKSET; COORD. MODEL/FINISH W/ BLDG STD.
1	DEADBOLT (EXTERIOR LOCKING ONLY); COORDINATE KEYING WITH OWNER
3	BB HINGES
3	SILENCERS
1	DOOR SWEEP
1	ADA SADDLE THRESHOLD – REF DETAIL
1	MOP PLATES – INTERIOR SIDE ONLY
1	GASKETING (JAMB AND HEAD)

HARDWARE SET – STOREROOM-01

QTY	DESCRIPTION
1	SARGENT ADA STOREROOM LOCKSET; COORD. MODEL/FINISH W/ BLDG STD.
1	CYLINDER; COORDINATE KEYING WITH OWNER
3	BB HINGES

GENERAL DOOR/FRAME NOTES:

1. THE CONTRACTOR SHALL CAREFULLY STUDY AND COMPARE THE CONTRACT DOCUMENTS AND THIS SCHEDULE AND SHALL AT ONCE REPORT IN WRITING TO THE ARCHITECT ANY ERROR, INCONSISTENCY OR OMISSION THAT S/HE MAY DISCOVER.
2. ALL FRAMES SHALL BE CAULKED CONTINUOUSLY TO THE WALL ON BOTH SIDES.
3. WHEREVER THERE IS A CRACK BETWEEN THE BOTTOM OF THE DOOR FRAME AND THE FINISH FLOOR, THE CONTRACTOR SHALL PROVIDE A 'PENCIL-LINE CAULK' TO SEAL (EXCEPT WHERE CARPET HIDES CRACK).
4. DOOR SCHEDULED TO HAVE A FIRE RATING LABEL SHALL HAVE A METAL LABEL PERMANENTLY AFFIXED TO BOTH THE DOOR AND TO THE FRAME (VINYL IS NOT ACCEPTABLE).
5. ALL 20 MINUTE DOORS SHALL HAVE LESS THAN 1296 SQ INCHES OF WIRE GLASS WITH A MAXIMUM VERTICAL HEIGHT OF 54".
6. UNLESS INDICATED OTHERWISE, ALL FLOOR MATERIAL CHANGES SHALL OCCUR AT THE CENTERLINE OF A DOOR.
7. EXTERIOR DOORS SHALL HAVE FLORIDA PRODUCT APPROVAL TO MATCH WIND DESIGN CRITERIA ASSOCIATED WITH BUILDING.
8. DOOR DIMENSIONS ARE APPROXIMATE MEASUREMENTS FROM THE EXISTING DOOR CONDITIONS – G.C. TO FIELD VERIFY ALL OPENING DIMENSIONS

DOOR LEGEND

GLA	GLASS
LMI	LARGE MISSILE IMPACT
MTL	METAL
SMI	SMALL MISSILE IMPACT
SPAN	SPANDREL
TEMP	TEMPERED
VIS	VISION
WD	WOOD

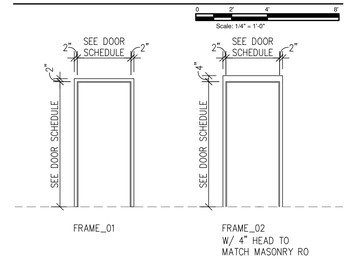
DOOR HARDWARE NOTES:

1. ALL HINGES TO BE BALL BEARING [BB] AND MATCH HANDLE FINISH

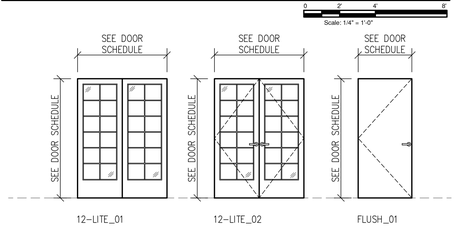
WINDOW NOTES:

1. WINDOW DIMENSIONS ARE APPROXIMATE MEASUREMENTS FROM THE EXISTING CLOSED WINDOW CONDITIONS – G.C. TO FIELD VERIFY ALL OPENING DIMENSIONS
2. SHOP DRAWINGS TO BE SUBMITTED FOR ARCHITECT AND OWNER REVIEW.
3. BASIS OF DESIGN: PGT INDUSTRIES VINYL FIXED CASEMENT WINDOW
4. EQUAL ALTERNATES MAY BE SUBMITTED FOR ARCHITECT AND OWNER REVIEW

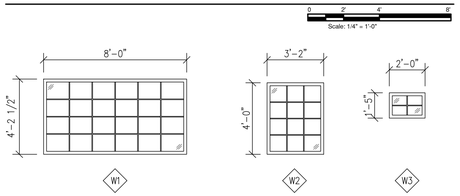
FRAME TYPES:



DOOR TYPES



WINDOW TYPES



DESIGNED BY: KT DATE: 8/12/20
DRAWN BY: KT DATE: 8/12/20
CHECKED BY: RB DATE: 8/10/20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

APPROVED BY:

ARC3 architecture
6699 13th Avenue North, Suite 4A
St. Petersburg, FL 33710
(727) 381-5220
(727) 381-0052 fax

Firm Registration AA-26000510
Steven J. Vinci, AIA AR-0017036

Signature Date

DATE: August 12th, 2020
SCALE: 1/4" = 1'-0"
DRAWING No. 19219-13 A601
Schedules

STRUCTURAL SPECIFICATIONS

MISCELLANEOUS

1. THE STRUCTURAL SYSTEM IS UNSTABLE UNTIL ALL CONNECTIONS HAVE BEEN MADE AND ALL CONCRETE HAS REACHED ITS MINIMUM DESIGN STRENGTH, AS SHOWN IN THE STRUCTURAL DOCUMENTS.

2. THE STRUCTURAL DOCUMENTS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES AND SEQUENCES.

3. CONTRACTOR TO SUPPORT, BRACE AND SECURE EXISTING STRUCTURE AS REQUIRED. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF THE BUILDING DURING CONSTRUCTION.

4. APPLICABLE BUILDING CODE: FLORIDA BUILDING CODE 6TH EDITION (2017).

5. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 6TH EDITION (2017).

6. DESIGN GRAVITY LOADS:

AREA	SUPERIMPOSED LIVE LOAD (FBC, TABLE 1607.1)
ROOF	20 PSF
FLOOR	100 PSF (SLAB-ON-GROUN

AREA	DEAD LOAD
ROOF	20 PSF

7. ULTIMATE DESIGN WIND SPEED = 145 MPH (FBC, FIGURE 1609.3.1)
ASD NOMINAL DESIGN WND SPEED = 112 MPH (FBC, TABLE 1609.3.1)
RISK CATEGORY II (FBC, TABLE 1604.5)
REFER TO 1/S100 FOR WIND PRESSURES AND MORE INFO.

8. COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. DO NOT SCALE DRAWINGS.

9. CONTACT ENGINEER WITH ANY QUESTIONS OR DISCREPANCIES FOUND ON DRAWINGS.

10. NO CHANGE IN SIZE OR DIMENSION OF STRUCTURAL MEMBERS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE PROFESSIONAL OF RECORD.

11. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED UPON STRUCTURAL FRAMING. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE IMPOSED.

12. THE CONTRACTOR SHALL INFORM THE PROFESSIONAL OF RECORD IN WRITING OF ANY DEVIATION FROM THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE RELIEVED OF THE RESPONSIBILITY OF SUCH DEVIATION BY THE PROFESSIONAL OF RECORD'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED THE PROFESSIONAL OF RECORD OF SUCH DEVIATION AT THE TIME OF SUBMISSION, AND THE PROFESSIONAL OF RECORD HAS GIVEN WRITTEN APPROVAL TO THE SPECIFIC DEVIATION.

MATERIAL AND SHOP DRAWING SUBMITTALS

1. SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR AND MARKED "APPROVED" PRIOR TO SUBMITTING TO THE ARCHITECT. NON-CONFORMING SUBMITTALS WILL BE RETURNED WITHOUT REVIEW.

2. SUBMIT SHOP DRAWINGS AS REQUIRED HEREIN IN DIGITAL PDF FORMAT WITH A HIGH-RESOLUTION. ALLOW FOR TWO WEEKS REVIEW TIME AFTER RECEIPT OF SUBMITTALS BY THIS FIRM. ALL SUBMITTALS SHALL BE SIGNED/SEALED BY THE SPECIALTY OR DELEGATED ENGINEER, AS NOTED BELOW. REFER TO THE SPECIFIC SECTION ON THIS SHEET FOR MORE INFORMATION REGARDING THE SHOP DRAWING SUBMITTAL.
   A) CONCRETE MIX DESIGN
   B) CONCRETE REINFORCING STEEL
   C) MASONRY REINFORCING STEEL
   D) PRECAST CONCRETE MASONRY

3. CONTRACTOR SHALL NOT BE RELIEVED FROM RESPONSIBILITY FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS OR MIX DESIGNS BY THE ENGINEER'S REVIEW THEREOF.

4. SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT OF THE CONTRACT DOCUMENTS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY COMPLIANCE WITH THE CONTRACT DOCUMENTS AS TO QUANTITY, LENGTHS, DIMENSIONS, ETC.

5. SHOP DRAWING REVIEW COMMENTS BY THIS FIRM SHALL BE TRANSMITTED TO THE ARCHITECT OF RECORD ONLY FOR THEIR REVIEW. THE ARCHITECT WILL TRANSMIT AN ELECTRONIC COPY OF ALL REVIEWED SUBMITTALS TO THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR DISTRIBUTING THE REVIEWED SHOP DRAWINGS TO THE IMPACTED TRADES OR SUBCONTRACTORS.

6. CHANGES AND ADDITIONS MADE ON SHOP DRAWING RE-SUBMITTALS SHALL BE CLEARLY FLAGGED AND NOTED AS SUCH. THE PURPOSE OF THE RE-SUBMITTAL SHALL BE NOTED IN THE SUBMITTAL OR ON A TRANSMITTAL ATTACHED TO THE SHOP DRAWINGS. A RE-REVIEW OF THE REVISED SHOP DRAWING SUBMITTAL WILL BE LIMITED TO THOSE ITEMS CAUSING THE RE-SUBMITTAL. THE CONTRACTOR IS RESPONSIBLE FOR THE COSTS ASSOCIATED WITH RE-SUBMITTING MULTIPLE (MORE THAN ONE) SHOP DRAWING SUBMITTALS AT THE ENGINEER OF RECORD'S HOURLY RATES.

EXISTING BUILDINGS

1. EXISTING INFORMATION DOES NOT NECESSARILY REFLECT AS-BUILT CONDITIONS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION SHOWN ON THESE PLANS AND NOTIFY THE ENGINEER OF ANY VARIATION.

SITE WORK

1. A SUBSURFACE INVESTIGATION AND REPORT SHALL BE PROVIDED BY THE OWNER PRIOR TO COMMENCEMENT OF WORK TO VERIFY ASSUMED SOIL BEARING PRESSURE. ALL SITE PREPARATION SHALL BE DONE IN STRICT ACCORDANCE WITH THE GEOTECHNICAL REPORT.

2. ASSUMED SOIL BEARING PRESSURE = 2,000 PSF.

3. TESTING MAY INCLUDE, BUT IS NOT LIMITED TO, DENSITY TESTS, AUGER BORINGS, OR STANDARD PENETRATION BORINGS.

4. A COPY OF ALL TEST REPORTS SHALL BE SENT DIRECTLY TO OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR.

5. THE TESTING LABORATORY SHALL SPECIFY SOIL PREPARATION PROCEDURES AND COMPACTION REQUIREMENTS NECESSARY TO OBTAIN THE DESIGN SOIL BEARING PRESSURE.

6. FOUNDATION WALLS THAT RETAIN EARTH SHALL BE BRACED AGAINST BACKFILLING PRESSURES UNTIL FLOOR SLABS AT TOP AND BOTTOM ARE IN PLACE.

7. THE SIDES OF FOOTINGS MAY BE EARTH-FORMED IF THE EXCAVATION CAN BE KEPT VERTICAL, CLEAN, AND STABLE; OTHERWISE, PLYWOOD FORMS MUST BE USED.

CAST IN PLACE CONCRETE

1. CONCRETE TO BE NORMAL WEIGHT WITH THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS:
   A) FOOTINGS, SLAB-ON-GRADE.....3000 PSI

2. CONCRETE SHALL BE READYMIX PER ASTM C94:
   A) PORTLAND CEMENT - ASTM C 150
   B) AGGREGATES - ASTM C33 (3/4" MAX.)
   C) NO CALCIUM CHLORIDE
   D) AIR ENTRAINING - ASTM C260
   E) WATER REDUCING - ASTM C494
   F) FLYASH - ASTM C618 CLASS F (20% MAXIMUM BY WEIGHT)
   G) WATER - CLEAN AND POTABLE

3. REINFORCING STEEL: ASTM A615 GRADE 60.

4. REQUIRED SLUMP RANGE = 3" TO 5".

5. WELDED WIRE FABRIC: ASTM A-185. FURNISH IN SHEETS, NOT ROLLS.

6. MOISTURE/VAPOR RETARDER: 10 MIL POLYETHYLENE. LAP 6" AND TAPE ALL JOINTS.

7. CODES AND STANDARDS: (CURRENT EDITION)
   ACI 301 "SPEC FOR STRUCTURAL CONCRETE FOR BUILDINGS."
   ACI 305 "RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING."
   ACI 318 "BLDG. CODE REQUIREMENTS FOR REINF. CONCRETE."
   ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT."

8. MINIMUM LAP SPLICE = 30 BAR DIAMETERS UNLESS NOTED OTHERWISE.

9. PROVIDE PROPERLY TIED SPACERS, CHAIRS, BOLSTERS, ETC, AS REQUIRED AND NECESSARY TO ASSEMBLE, PLACE AND SUPPORT ALL REINFORCING IN PLACE. USE WIRE BAR TYPE SUPPORTS COMPLYING WITH CRSI RECOMMENDATIONS. USE PLASTIC TIP LEGS ON ALL EXPOSED SURFACES.

10. CONTRACTOR SHALL VERIFY EMBEDDED ITEMS, INCLUDING BUT NOT LIMITED TO ANCHOR BOLTS, BOLT CLUSTERS, WELD PLATES, ETC..., BEFORE PLACING CONCRETE. NOTIFY ENGINEER OF ANY CONFLICTS WITH REBAR.

11. SEE ARCHITECTURAL DRAWINGS FOR REQUIRED CONCRETE FINISHES.

12. ALL CONCRETE SHALL BE CURED IMMEDIATELY AFTER FINISHING OPERATIONS IN ACCORDANCE WITH ONE OF THE FOLLOWING METHODS:
   A) APPLY A 30% SOLIDS LIQUID MEMBRANE FORMING CHEMICAL CURING COMPOUND IN ACCORDANCE WITH ASTM C-309.
   B) PROVIDE CONTINUOUS MOISTURE TO CONCRETE IN ACCORDANCE WITH ACI 301.

13. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE PROPER DESIGN AND CONSTRUCTION OF ALL FORMWORK, SHORING, AND RESHORING.

14. A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO PERFORM THE FOLLOWING CONCRETE TESTS ON SITE.
   A) CYLINDER STRENGTH TESTS - ASTM C39; ONE SET OF FOUR CYLINDERS FOR EACH 50 CUBIC YARDS OR FRACTION THEREOF. TEST ONE CYLINDER AT 7 DAYS AND TWO AT 28 DAYS. HOLD THE FINAL CYLINDER IN RESERVE.
   B) SLUMP TESTS - ASTM C143

15. ONE COPY OF ALL TEST REPORTS SHALL BE SENT DIRECTLY TO OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR.

16. RESTRICT THE ADDITION OF MIX WATER AT THE JOB SITE. DO NOT ADD WATER WITHOUT THE APPROVAL OF THE GENERAL CONTRACTOR AND DO NOT EXCEED SLUMP LIMITATIONS OR TOTAL ALLOWABLE WATER TO CEMENT RATIO. USE COLD WATER FROM THE TRUCK TANK AND REMIX TO ACHIEVE CONSISTENCY. TEST REPORTS SHALL INDICATE QUANTITY OF WATER ADDED AT THE JOB SITE. ALL TESTS SHALL BE PREPARED AFTER THE ADDITION OF WATER TO THE MIX.

17. MAXIMUM WATER TO CEMENT RATIO WHEN NO BACK-UP DATA IS AVAILABLE:
   A) 3000 PSI, 28-DAY COMPRESSIVE STRENGTH; W/C RATIO, 0.58 MAXIMUM (NON-AIR-ENTRAINED), 0.47 MAXIMUM (AIR-ENTRAINED).

18. REINFORCING BAR COVER:
   A) FOOTINGS 3"
   B) SLABS 3/4" (INTERIOR) 1-1/2" (EXTERIOR)

19. CONCRETE SHALL BE PLACED WITHIN 90 MINUTES OF BATCH TIME.

20. WHERE BAR LENGTHS ARE GIVEN ON DRAWINGS, LENGTH OF HOOK, IF REQUIRED, IS NOT INCLUDED.

21. PROVIDE COMMERCIAL FORM COATING COMPOUNDS THAT WILL NOT BOND, STAIN, OR ADVERSELY AFFECT CONCRETE SURFACES. WET FORMS BEFORE PLACING CONCRETE.

22. ALL CONCRETE SHALL BE CONSOLIDATED IN PLACE USING INTERNAL VIBRATORS.

23. REPAIR AND PATCH DEFECTIVE AREAS WITH CEMENT MORTAR IMMEDIATELY AFTER REMOVAL OF FORMS, EXCEPT WHERE REINFORCING IS VISIBLE. CONTACT STRUCTURAL ENGINEER FOR EVALUATION OF EXPOSED REINFORCING.

24. PROVIDE CORNER BARS AT ALL BEAM AND WALL FOOTING CORNERS TO MATCH HORIZONTAL BARS.

25. SUBMITTALS:
   A) SUBMIT PROPOSED CONCRETE MIX DESIGN PRIOR TO CONSTRUCTION, INCLUDING BACKUP DATA IN ACCORDANCE WITH ACI 301-99 CHAPTER 4, SECTION 4.2.3, EXCLUDING SECTION 4.2.3.4B, INDICATING WHERE CONCRETE IS TO PLACED WITHIN THE STRUCTURE.
   B) SUBMIT DETAILED SHOP DRAWINGS OF REINFORCING BARS SHOWING NUMBER, SIZE, AND LOCATION. INCLUDE BAR LISTS AND BEND DIAGRAMS.
   C) SUBMIT FORMWORK AND SHORING DRAWINGS TO LOCAL BUILDING DEPARTMENT WHEN REQUIRED BY FLORIDA THRESHOLD LAW.

26. ALL BUILDING AND SITE SLABS-ON-GRADE SHALL BE AT LEAST 4" THICK, REINFORCED WITH 6X6-W1.4 X W1.4 W.W.F., ON 10 MIL VAPOR BARRIER, WITH SAW-CUT CONTROL JOINTS 20'-0" O.C. EACH WAY INCLUDING HOUSEKEEPING PADS AS REQUIRED. SEE PLANS FOR OTHER CONDITIONS.

27. STEP AND SLOPE ALL WALKWAYS AWAY FROM THE BUILDING.

MASONRY

1. MASONRY INSPECTION SHALL BE PROVIDED BY A QUALIFIED AGENT IN ACCORDANCE WITH ACI 530.1-1.6. INSPECTION SERVICES SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE WORK IN PROGRESS AS WELL AS MATERIALS, EQUIPMENT, AND PROCEDURES.

2. HOLLOW LOAD BEARING UNITS SHALL CONFORM TO ASTM C90, NORMAL WEIGHT, TYPE II. MINIMUM NET COMPRESSIVE UNIT STRENGTH = 1900 PSI. (NET AREA COMPRESSIVE MASONRY STRENGTH F'M = 1500 PSI).

3. MORTAR SHALL BE TYPE M OR S AND CONFORM TO ASTM C270 (PROPORTION OR PROPERTY SPECIFICATION).

4. COARSE GROUT SHALL CONFORM TO ASTM C476:
   A) 3000 PSI AT 28 DAYS.
   B) 1/4" MAXIMUM AGGREGATE.
   C) 8" - 11" SLUMP.

5. CODES AND STANDARDS:
   ACI 530/ASCE 5 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES"
   ACI 530.1/ASCE 6 "SPECIFICATIONS FOR MASONRY STRUCTURES"

6. PLACE ALL MASONRY IN RUNNING BOND WITH 3/8" MORTAR JOINTS. PROVIDE COMPLETE COVERAGE FACE SHELL MORTAR BEDDING, HORIZONTAL AND VERTICAL. FULLY MORTAR WEBS IN ALL COURSES OF PIERS, COLUMNS, AND PILASTERS AND ADJACENT TO GROUTED CELLS.

7. VERTICAL BARS SHALL BE HELD IN POSITION AT THE TOP AND BOTTOM OF BAR AND AT 8'-0" O.C. MAXIMUM WITH A MINIMUM CLEARANCE OF 1/2" FROM MASONRY. THE CLEAR DISTANCE BETWEEN BARS SHALL NOT BE LESS THAN ONE BAR DIAMETER, NOR LESS THAN 1". CENTER BARS IN WALLS U.N.O.

8. VERTICAL REINFORCING SHALL BE AS SHOWN ON THE DRAWINGS. FILL CELLS WITH COARSE GROUT AS SPECIFIED. PROVIDE ACI 90 DEGREE STANDARD HOOKS INTO FOOTING AND ROOF TIE BEAM. LAP SPLICE VERTICAL REINFORCEMENT ABOVE FOOTING AND ABOVE EACH FLOOR LEVEL UNLESS NOTED OTHERWISE. MAINTAIN VERTICAL REINFORCING SHOWN ON PLANS ABOVE AND BELOW MASONRY OPENINGS EXCEEDING 10'-0" CLEAR. CONTINUE FOUNDATION DOWELS BELOW ALL MASONRY OPENINGS.

9. ALL REINFORCED FILL CELLS ARE TO BE CLEAN AND FREE OF ANY FOREIGN MATERIAL OR DEBRIS. REMOVE ANY FOREIGN MATERIAL FROM FILL CELLS, INCLUDING POLYSTYRENE INSULATING INSERTS, PRIOR TO GROUT POUR.

10. REINFORCING BARS SHALL BE STRAIGHT EXCEPT FOR BENDS AROUND CORNERS AND WHERE BENDS OR HOOKS ARE DETAILED ON THE PLANS.

11. WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL CORE, IT SHALL NOT BE SLOPED MORE THAN ONE HORIZONTAL IN SIX VERTICALS. DOWELS SHALL BE GROUTED INTO A CORE IN VERTICAL ALIGNMENT, EVEN THOUGH IT IS IN AN ADJACENT CELL TO THE VERTICAL WALL REINFORCEMENT.

12. PROVIDE CONTINUOUS HORIZONTAL WALL REINFORCING 9 GA. GALVANIZED LADDER TYPE DUR-O-WALL (OR EQUIVALENT) AT 16" O.C.

13. PROVIDE HORIZONTAL JOINT REINFORCEMENT AT DOORS AND WINDOWS FOR FIRST AND SECOND BLOCK COURSE ABOVE AND BELOW APERTURES. RUN REINFORCING CONTINUOUS OR EXTEND TWO FEET FROM APERTURE EDGE.

14. WIRE REINFORCEMENT SHALL BE LAPPED AT LEAST 6" AT SPLICES AND SHALL CONTAIN AT LEAST ONE CROSS WIRE OF EACH PIECE OF REINFORCEMENT IN THE LAPPED DISTANCE.

15. CLEANOUTS SHALL BE PROVIDED IN THE BOTTOM COURSE OF MASONRY IN EACH GROUT POUR WHEN THE POUR HEIGHT EXCEEDS 5'. CLEANOUTS TO BE SAW-CUT 3" X 3".

16. GROUT POUR HEIGHT SHALL NOT EXCEED 24'. PLACE GROUT IN 8' MAX. LIFTS HEIGHTS.

17. CONSOLIDATE GROUT POURS AT THE TIME OF PLACEMENT BY MECHANICAL MEANS AND RECONSOLIDATE AFTER INITIAL WATER LOSS AND SETTLEMENT.

18. SUBMITTALS:
   A) SUBMIT PROPOSED GROUT MIX DESIGN PRIOR TO CONSTRUCTION.
   B) SUBMIT PROPOSED MORTAR MIX DESIGN PRIOR TO CONSTRUCTION.
   C) SUBMIT DETAILED SHOP DRAWINGS OF REINFORCING BARS SHOWING NUMBER, SIZE, AND LOCATION. INCLUDE BAR LISTS AND BEND DIAGRAMS.
   D) SUBMIT COMPRESSIVE STRENGTH TESTS OF PROPOSED MASONRY UNITS PRIOR TO CONSTRUCTION. MASONRY UNITS ARE TO BE TESTED IN ACCORDANCE WITH ASTM C140.

19. A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO PERFORM THE FOLLOWING TESTS:
   A) SAMPLE AND TEST GROUT IN ACCORDANCE WITH ASTM C1019 FOR EACH 5000 SQ. FT. OF MASONRY.
   B) SLUMP TESTS - ASTM C143.

20. PROVIDE 8" DEEP PRECAST REINFORCED CONCRETE LINTELS OVER ALL MASONRY OPENINGS NOT SHOWN TO HAVE A STRUCTURAL BEAM. MINIMUM END BEARING = 8". LINTEL WIDTH TO MATCH MASONRY WIDTH.

POST INSTALLED ANCHORS

1. ADHESIVE ANCHORAGES, WHERE SPECIFIED ON THE DRAWINGS, SHALL CONFORM TO THE FOLLOWING -
   CONCRETE ADHESIVE ANCHORS:
   HILTI HIT-RE 500-V3 ESR-3814
   HILTI HIT-HY270

2. DRILLING SHALL BE PERFORMED WITH A ROTARY HAMMER DRILL AND CARBIDE TIPPED DRILL BIT IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE APPLICABLE ICC EVALUATION REPORT.

3. BORE HOLE CLEANING PROCEDURES MUST COMPLY WITH THE MANUFACTURER'S INSTRUCTIONS AND THE APPLICABLE ICC EVALUATION REPORT IN ORDER TO PRODUCE A DRY, DUST-FREE HOLE.

4. INJECTION OF ADHESIVE SHALL BE PERFORMED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND THE APPLICABLE ICC EVALUATION REPORT IN ORDER TO PRODUCE AN AIR-VOID FREE INJECTION.

5. SPECIAL CONDITIONS SUCH AS WATER SATURATED CONCRETE, WATER-FILLED HOLES, UNDERWATER AND OVERHEAD INSTALLATIONS MUST BE APPROVED BY THE ENGINEER OF RECORD AND COMPLY WITH THE APPLICABLE ICC-ES REPORT.

6. STEEL ANCHORING ELEMENTS SHALL BE THE SIZE AND GRADE SHOWN ON THE DRAWINGS AND MUST BE CLEAN, DRY AND FREE OF ANY OIL OR CONTAMINANTS.

7. SUBSTITUTIONS FOR ANCHOR SYSTEMS MUST BE APPROVED BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO INSTALLATION AND SHALL HAVE A VALID ICC-ES EVALUATION IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE.

8. ALL ANCHOR EMBED DEPTHS SPECIFIED ON THESE DRAWINGS ARE EFFECTIVE EMBEDMENT DEPTHS. ADDITIONAL ANCHOR LENGTH AND OR HOLE DEPTH SHALL BE PROVIDED AS REQUIRED BY THE ANCHOR MANUFACTURER AND ASSOCIATED CODE APPROVALS.

CARPENTRY

1. DIMENSIONED LUMBER SHALL BE DRESSED S4S, AND SHALL BEAR THE GRADE STAMP OF THE MANUFACTURER'S ASSOCIATION.

2. ALL LUMBER SHALL BE SOUND, SEASONED, AND FREE FROM WARP.

3. ALL LUMBER SHALL BE SOUTHERN PINE NO. 2 GRADE OR BETTER; WITH 19% MAXIMUM MOISTURE CONTENT, U.N.O. ON THE PLANS.

4. ALL LUMBER IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED.

5. PRESSURE TREATED LUMBER SHALL BE IMPREGNATED WITH A CCA SALT TREATMENT IN ACCORDANCE WITH F.S. TT-W-571 AND BEAR THE AMERICAN WOOD PRESERVERS INSTITUTE QUALITY MARK LP-2.

6. PLYWOOD WALL AND ROOF SHEATHING SHALL BE APA RATED SHEATHING, EXPOSURE 1 DURABILITY CLASSIFICATION.

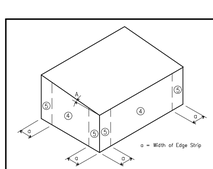
7. ROOF SHEATHING TO BE INSTALLED WITH ONE PLYWOOD CLIP PER SPAN BETWEEN PANEL EDGES UNLESS NOTED OTHERWISE. FOR PANEL WIDTHS LESS THAN 24" WIDE, INSTALL SOLID 2X BLOCKING AT EACH PANEL EDGE. INSTALL SOLID 2X BLOCKING BETWEEN SUPPORTS AT ALL HIPS, RIDGES, VALLEYS, AND CHANGES IN ROOF SLOPE.

8. INSTALL BRIDGING IN ALL FLOOR OR ROOF JOISTS AT 8'-0" O.C. MAXIMUM. INSTALL BLOCKING IN ALL WALL STUDS @ 4'-0" O.C. MAXIMUM, LOCATED AT SHEATHING PANEL EDGES.

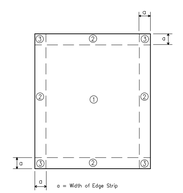
9. ALL NAILING AND BOLTING SHALL COMPLY WITH AMERICAN INSTITUTE OF TIMBER CONSTRUCTION REQUIREMENTS.

10. ALL CONNECTION HARDWARE SHALL BE GALVANIZED AND SUPPLIED BY SIMPSON STRONG-TIE CO. OR EQUIVALENT. SUBMIT CUT SHEETS FOR ALL CONNECTION HARDWARE TO ENGINEER FOR APPROVAL.

11. ALL CONNECTION HARDWARE IS TO BE FULLY FASTENED PER MANUFACTURERS REQUIREMENTS UNLESS NOTED OTHERWISE.



WALL PRESSURE ZONES
(ISOMETRIC VIEW)



ROOF PRESSURE ZONES
(PLAN VIEW)

BUILDING DATA

ULTIMATE WIND SPEED (mph): (FIGURE 1609)	145	INTERNAL PRESSURE COEFFICIENT: (Partially Enclosed Building per ASCE 7-10)	+/- 0.18
WIND LOAD FACTOR:	0.6	WIDTH OF EDGE STRIP (Feet):	3.0
RISK CATEGORY: (TABLE 1604.5)	II	WIND EXPOSURE CATEGORY:	C
ROOF ANGLE (A) (Degrees)	A<7.0	DEAD LOAD RESISTING UPLIFT (psf):	10.0

DESIGN WIND LOADS - COMPONENTS & CLADDING (Values per ASD)

ROOF					WALL			
ZONE	AREA (sf)	DESIGN PRESSURE (psf)			ZONE	AREA (sf)	DESIGN PRESSURE (psf)	
		Positive	Negative	Net Uplift			Positive	Negative
1	10.0	15.80	-25.10	-15.10	4	10.0	27.42	-29.74
1	20.0	14.40	-24.40	-14.40	4	20.0	26.19	-28.51
1	50.0	12.55	-23.47	-13.47	4	50.0	24.55	-26.88
1	100.0	11.15	-22.77	-12.77	4	100.0	23.32	-25.64
2	10.0	15.80	-43.69	-33.69	5	10.0	27.42	-36.72
2	20.0	14.40	-40.19	-30.19	5	20.0	26.19	-34.25
2	50.0	12.55	-35.57	-25.57	5	50.0	24.55	-30.98
2	100.0	11.15	-32.07	-22.07	5	100.0	23.32	-28.51
3	10.0	15.80	-64.60	-54.60				
3	20.0	14.40	-60.40	-50.40				
3	50.0	12.55	-54.86	-44.86				
3	100.0	11.15	-50.66	-40.66				

Notes:
1) For effective areas between those given above the load may be interpolated, otherwise use the load associated with the lower effective area.
2) Plus and minus signs signify pressures acting toward and away from the building surfaces, respectively.
3) See pressure zone diagrams above for corresponding zones.

S1 Design Wind Criteria (ASD Design)
NOT TO SCALE

SHEET INDEX

DESIGNED BY: ACG DATE: 08/12/20
DRAWN BY: MAK DATE: 08/12/20
CHECKED BY: ACG DATE: -

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

APPROVED BY:

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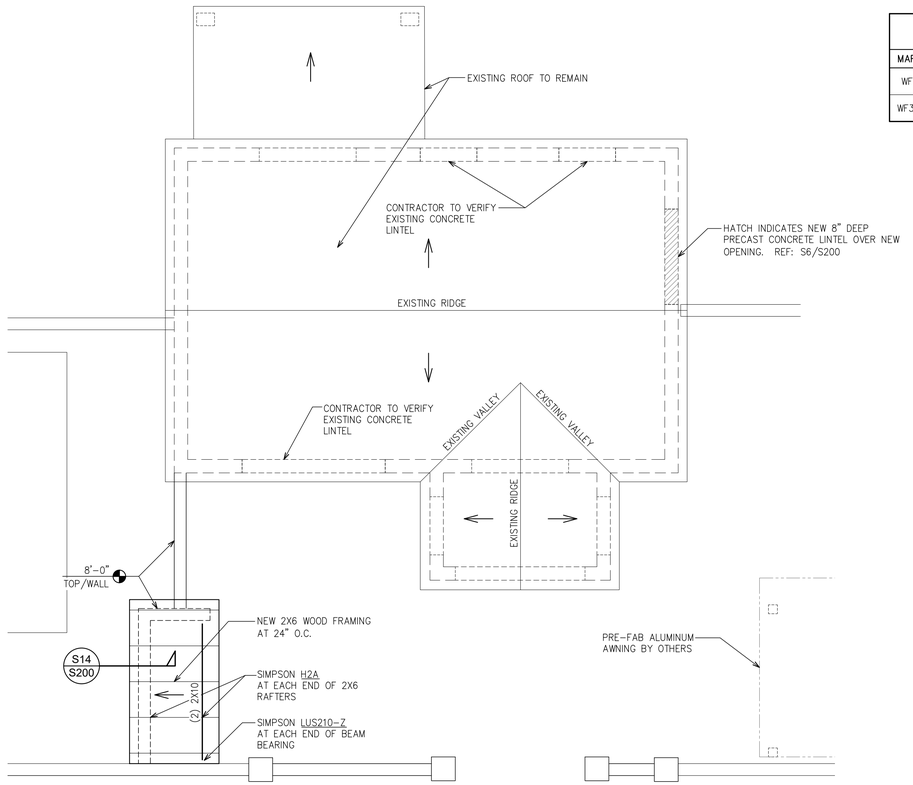
DATE: August 12th, 2020
SCALE: No Scale
DRAWING No. 19219-14 S100
Structural Notes



NORTH

S2 Bldg A - Roof Framing Plan - Museum

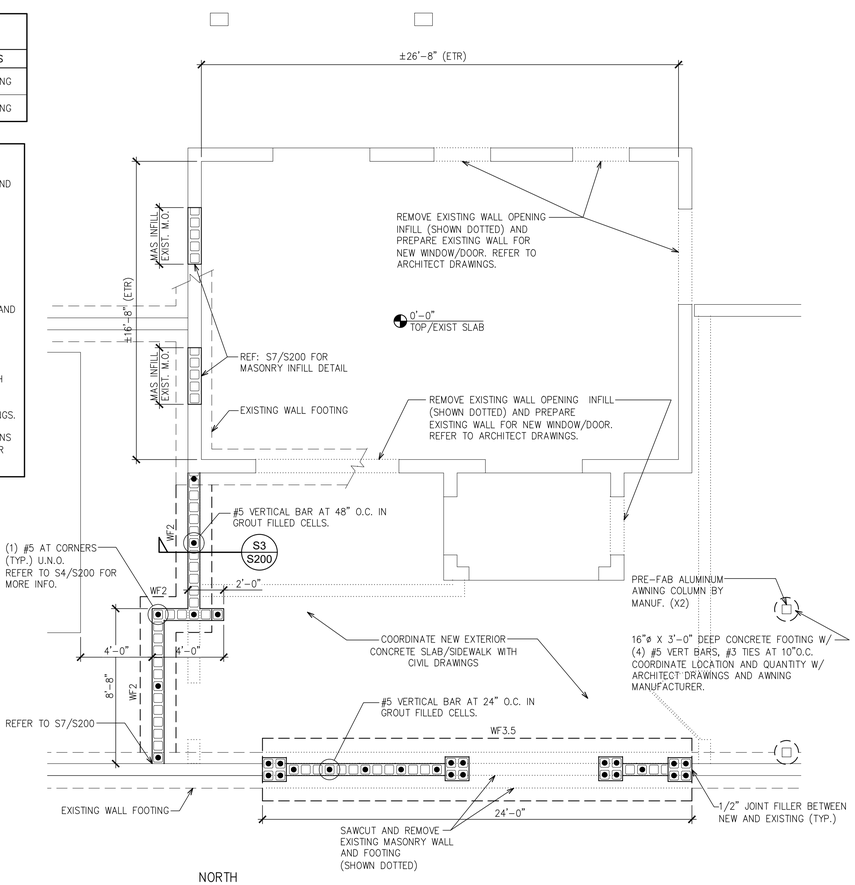
Scale: 1/4" = 1'-0"

FOOTING SCHEDULE

MARK	SIZE	DEPTH	REINFORCING	COMMENTS
WF2	2'-0" WIDE X CONT.	1'-0"	(3) #5 CONT. W/ #5 TRANSV. AT 48" O.C. BOTTOM	WALL FOOTING
WF3.5	3'-6" WIDE X CONT.	1'-0"	(4) #5 CONT. W/ #5 TRANSV. AT 24" O.C. BOTTOM	WALL FOOTING

FOUNDATION PLAN NOTES:

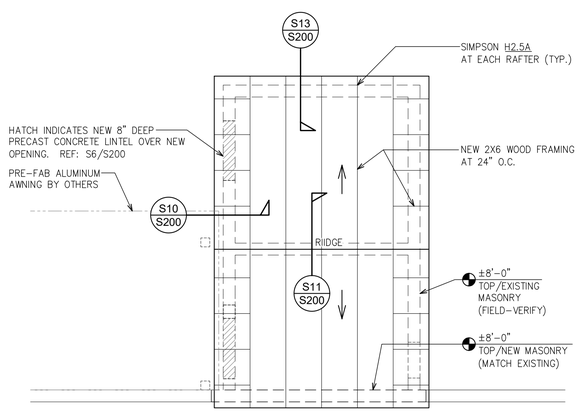
1. CONTRACTOR TO FIELD-VERIFY ALL EXISTING DIMENSIONS AND ELEVATIONS AS REQUIRED FOR CONSTRUCTION. NOTIFY ARCHITECT/ ENGINEER OF ANY DISCREPANCIES.
2. REFER TO ARCHITECTURAL DRAWINGS FOR DEMOLITION PLANS. SHORE EXISTING CONSTRUCTION AS REQUIRED PRIOR TO DEMOLITION.
3. TOP OF NEW SLAB ELEVATION = 0'-0" (MATCH EXISTING). TOP OF NEW FOOTING ELEVATION = MATCH EXISTING
4. REFER TO ARCHITECTURAL DRAWINGS FOR EXTERIOR SLAB AND SIDEWALK INFORMATION.
5. REFER TO ARCHITECTURAL/PLUMBING DRAWINGS FOR FIXTURE/DRAIN LOCATIONS AND REQUIREMENTS.
6. VERIFY INTERIOR SLAB RECESSES, STEPS, AND SLOPES WITH ARCHITECTURAL/PLUMBING DRAWINGS.
7. VERIFY ALL DIMENSIONS SHOWN w/ ARCHITECTURAL DRAWINGS.
11. PROVIDE CORNER BARS AT ALL CORNERS AND INTERSECTIONS OF CONTINUOUS FOOTINGS. REFER TO DETAIL S1/S200 FOR MORE INFO.



NORTH

S1 Bldg A - Foundation Plan - Museum

Scale: 1/4" = 1'-0"



NORTH

S4 Bldg B - Roof Framing Plan - Restroom

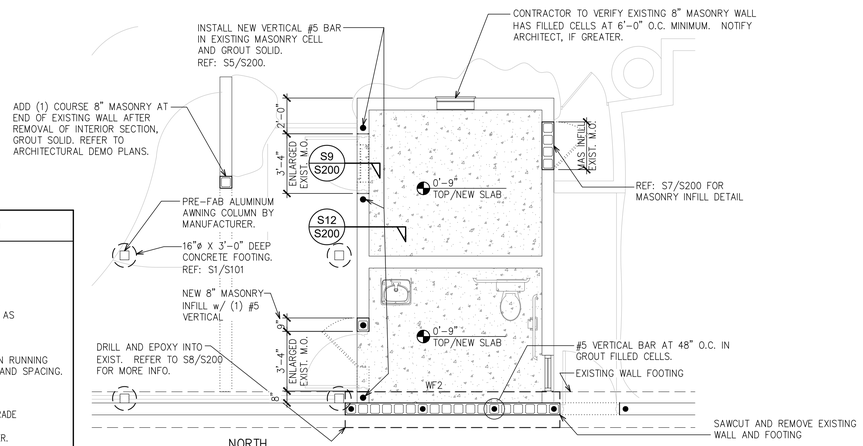
Scale: 1/4" = 1'-0"

ROOF FRAMING PLAN NOTES:

1. CONTRACTOR/ERECTOR IS RESPONSIBLE FOR ALL TEMPORARY BRACING.
2. ROOF SLOPE = 3 : 12 (MATCH EXISTING)
3. ROOF SHEATHING TO BE 5/8" EXTERIOR GRADE PLYWOOD. FASTEN SHEATHING TO WOOD FRAMING w/ 8d NAILS AT 6" O.C. MAX. AT PANEL EDGE AND INTERIOR SUPPORTS.
4. _____ INDICATES MODEL NUMBER OF STEEL CONNECTION HARDWARE BY SIMPSON STRONG-TIE CO., OR EQUIVALENT U.N.O. ALL CONNECTORS TO BE FULLY NAILED. CONTRACTOR TO VERIFY NET WIND UPLIFT REACTIONS FROM TRUSS MFR. WITH SPECIFIED CONNECTORS AND REPORT ANY DISCREPANCIES TO ARCHITECT/ENGINEER.

FOUNDATION PLAN LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- EXISTING CONSTRUCTION TO BE REMOVED. COOR'D. w/ ARCH. DEMO. PLAN. SHORE AS REQ'D. PRIOR TO DEMO.
- NEW 8" MASONRY WALL AND/OR INFILL IN RUNNING BOND. SEE PLAN FOR REINFORCING BAR AND SPACING.
- EXTENT OF NEW 4" THICK CONC. SLAB-ON-GRADE OVER EXISTING SLAB ON 5" SAND/FILL w/ 6x6 - W1.4xW1.4 W.W.F. 10 MIL VAPOR BARRIER. COOR'D. w/ ARCHITECT DRAWINGS.
- EXTENT OF EXISTING SLAB-ON-GRADE TO REMAIN.



NORTH

S3 Bldg B - Foundation Plan - Restroom

Scale: 1/4" = 1'-0"

DESIGNED BY:	ACG
DRAWN BY:	MAK
CHECKED BY:	ACG
DATE:	08/12/20
DATE:	08/12/20
DATE:	-

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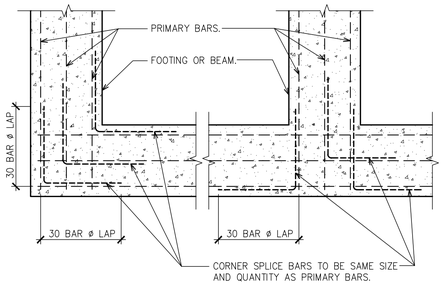
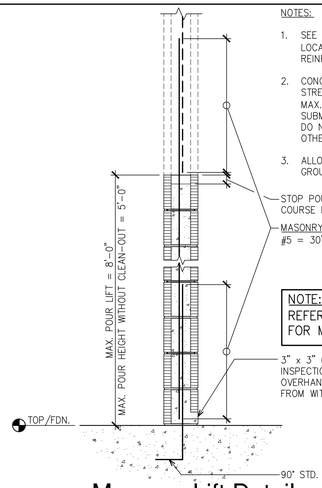
DATE: August 12th, 2020
SCALE:
DRAWING No. 19219-15 S101
Foundation and Roof Framing Plans



TYPICAL INTERSECTION OF CORNER BARS AT WALLS, BEAMS, AND FOOTINGS

S1 Corner Bar Detail

NOT TO SCALE



NOTES:

1. SEE PLANS, SECTIONS AND NOTES FOR LOCATION(S) OF FILLED CELLS AND FOR REINFORCING.
2. CONCRETE FOR FILLED CELLS: STRENGTH = 3,000 PSI MIN. AT 28 DAYS MAX. AGGREGATE SIZE = 3/8" (PEA GRAVEL) SUBMIT MIX DESIGN FOR REVIEW BY THE ENGINEER. DO NOT USE THE SAME MIX AS DESIGNED FOR OTHER CAST-IN-PLACE CONCRETE.
3. ALLOW MORTAR TO SET PRIOR TO COMMENCING GROUTING.

STOP POUR 2" BELOW COURSE LINE

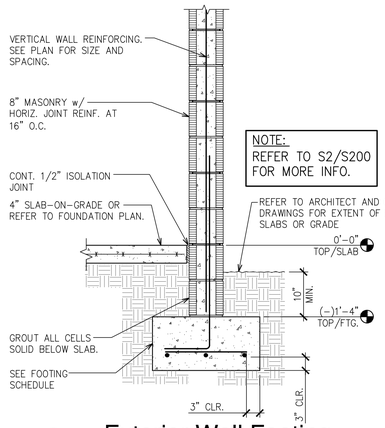
MASONRY REINFORCEMENT LAP REQUIREMENTS:
#5 = 30"

NOTE:
REFER TO S3/S200 FOR MORE INFO.

3" x 3" (MIN.) CLEAN-OUT AND INSPECTION HOLE. REMOVE ALL OVERHANG MORTAR AND DEBRIS FROM WITHIN CELL TO BE FILLED.

S2 Masonry Lift Detail

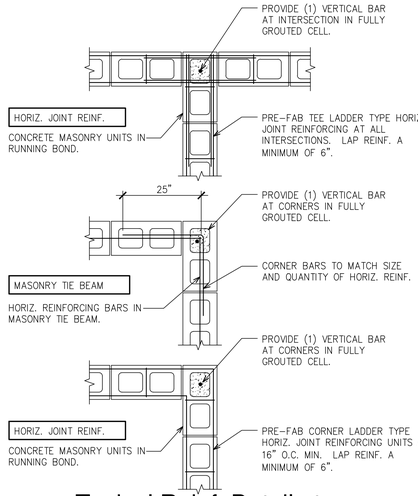
Scale: 3/4" = 1'-0"



NOTE:
REFER TO S2/S200 FOR MORE INFO.

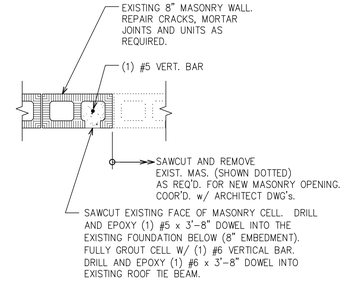
S3 Exterior Wall Footing

Scale: 3/4" = 1'-0"



S4 Typical Reinf. Detail at Corners and Intersections

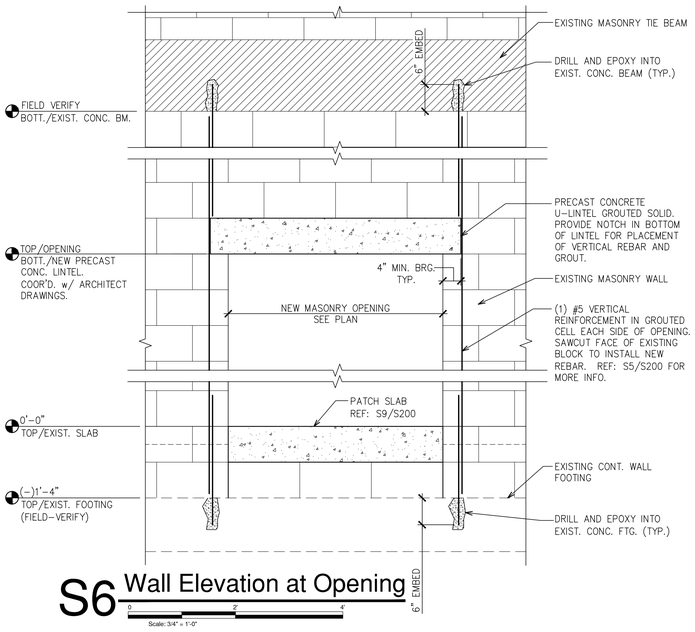
NOT TO SCALE



N O T E :
CONTRACTOR SHALL FIELD VERIFY EXISTING FILLED CELL LOCATIONS IN EXISTING MASONRY WALLS. IF EXISTING FILLED CELLS ARE NOT AT NEW MASONRY JAMBS, THEN INSTALL (1) #6 VERTICAL BAR PER THIS DETAIL AND S6/S200.

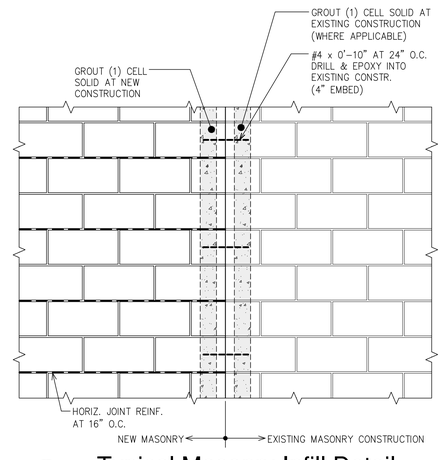
S5 Detail

NOT TO SCALE



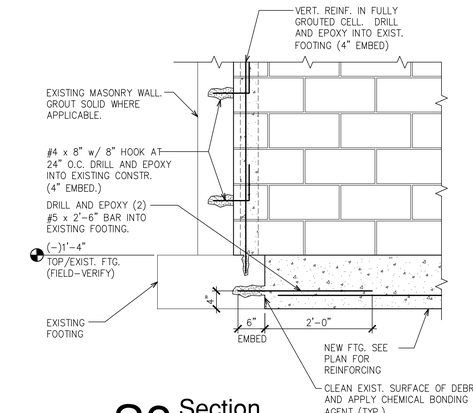
S6 Wall Elevation at Opening

Scale: 3/4" = 1'-0"



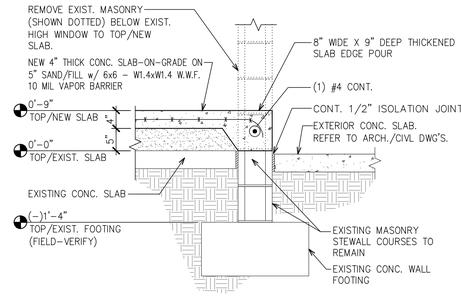
S7 Typical Masonry Infill Detail

Scale: 3/4" = 1'-0"



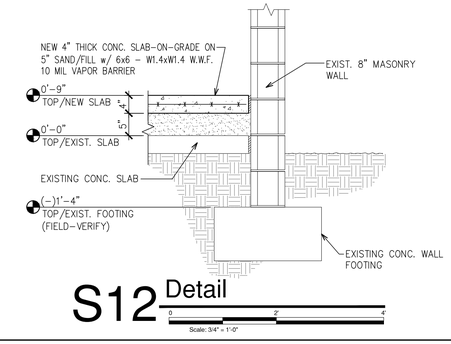
S8 Section

Scale: 3/4" = 1'-0"



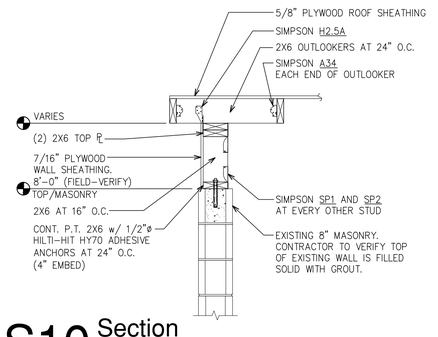
S9 Detail

Scale: 3/4" = 1'-0"



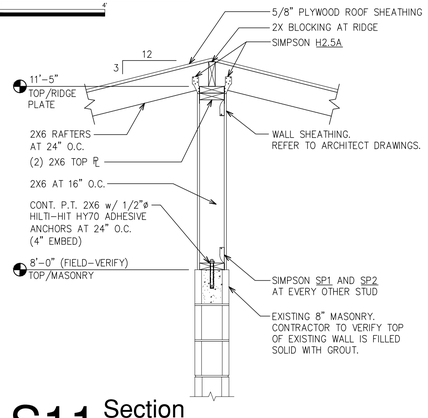
S12 Detail

Scale: 3/4" = 1'-0"



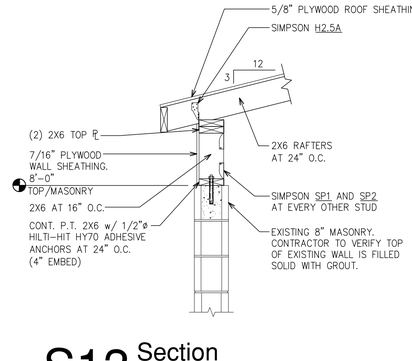
S10 Section

Scale: 3/4" = 1'-0"



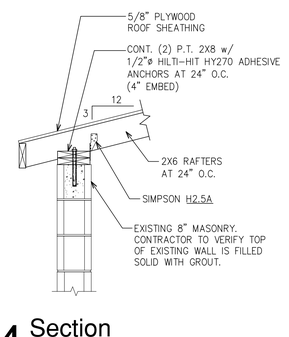
S11 Section

Scale: 3/4" = 1'-0"



S13 Section

Scale: 3/4" = 1'-0"



S14 Section

Scale: 3/4" = 1'-0"

DESIGNED BY: ACG	DATE: 08/12/20	
DRAWN BY: MAK	DATE: 08/12/20	
CHECKED BY: ACG	DATE: -	

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SUNKEN GARDENS RENOVATIONS
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Alan C. Guenther, P.E. #53308 / C.A. #26813

DATE: August 12th, 2020
SCALE:
DRAWING No. 19219-16 S200
Sections and Details

HVAC SYMBOL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
18X12	EXISTING DUCTWORK TO REMAIN SIZE IN INCHES (PLAN DIM. FIRST)		ROUND DUCT DOWN
	EXISTING DUCTWORK/EQUIPMENT TO BE REMOVED		ROUND DUCT UP
18X12	NEW DUCTWORK SIZE IN INCHES (PLAN DIM. FIRST)		GOOSENECK
	NEW FLEXIBLE DUCT		ROOF MOUNTED EXHAUST FAN
	NEW DUCTSOX DUCTWORK		DRYWELL
	NESTED SQUARE/RECTANGULAR BRANCH TAKE OFF	AD AD	DUCT ACCESS DOOR
	SPIN-IN FITTING WITH VOLUME DAMPER	FSD	COMBINATION FIRE/SMOKE DAMPER (VERTICAL POSITION)
	SPIN-IN FITTING WITHOUT VOLUME DAMPER	FD	FIRE DAMPER (VERTICAL POSITION)
	DUCT TRANSITION (RECTANGLE TO RECTANGLE)	FD	FIRE DAMPER (HORIZONTAL POSITION)
	DUCT TRANSITION (RECTANGLE TO ROUND)		MOTORIZED VOLUME DAMPER IN DUCTWORK
	DUCT TEE WITH TURNING VANES	VD	MANUAL VOLUME DAMPER IN DUCTWORK
	DUCT ELBOW UP	SD	DUCT MOUNTED SMOKE DETECTOR
	DUCT ELBOW DOWN		SIDEWALL RETURN GRILLE
	90° ELBOW WITH TURNING VANES		SIDEWALL SUPPLY GRILLE
W R	90° RADIUS ELBOW (R=1.5W)	FC	FLEXIBLE DUCT CONNECTOR
VD	45° BRANCH TAKE-OFF WITH VOLUME DAMPER	S.A. R.A. EXH.	CEILING DIFFUSER (SUPPLY, RETURN, & EXHAUST)
EDH-?	ELECTRIC DUCT HEATER	S.A. R.A. EXH.	EXISTING CEILING DIFFUSER (SUPPLY, RETURN, & EXHAUST)
UC ??	UNDER CUT DOOR (INCHES GIVEN)	AD-? ??? ?x?	AIR DEVICE IDENTIFICATION AIRFLOW NECK SIZE
	SUPPLY AIRFLOW DIRECTION		EXHAUST/RETURN AIRFLOW DIRECTION
	NEW CONNECTION TO EXISTING	?	KEYED NOTE
T	THERMOSTAT (MTD. 4'-0" AFF)	H	HUMIDISTAT
S	SENSOR (MTD. 4'-0" AFF)	C	HVAC EQUIPMENT CONTROL
HD	HEAT DETECTOR	SP	STATIC PRESSURE SENSOR
CO	CARBON MONOXIDE SENSOR	CO2	CARBON DIOXIDE SENSOR

NOTE:
SOME SYMBOLS AND ABBREVIATIONS SHOWN MAY NOT PERTAIN TO THIS PROJECT.

HVAC GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2017 – MECHANICAL, NATIONAL ELECTRIC CODE, NFPA AND ALL LOCAL ORDINANCES.
2. ALL WORK SHALL BE COORDINATED WITH ARCHITECTURAL, CIVIL, STRUCTURAL AND ELECTRICAL DRAWINGS.
3. REFER TO ARCHITECTURAL PLANS FOR EXACT CEILING GRID AND DIFFUSER LOCATIONS.
4. PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL HAVE STUDIED AND COMPARED THE CONTRACT DOCUMENTS WITH EXISTING/PROPOSED CONDITIONS AND NOT LATER THAN TEN (10) DAYS PRIOR TO THE BID OPENING SHALL REPORT TO THE ENGINEER ANY ERROR, INCONSISTENCY, OR OMISSION IN THE CONTRACT DOCUMENTS.
5. PROVIDE FLEXIBLE CONNECTION FROM EACH DUCTWORK CONNECTION AIR MOVING EQUIPMENT.
6. ALL DUCTS SHOWN ARE INSIDE CLEAR DIMENSIONS.
7. LOCATE ALL SENSORS 48" AFF UNLESS OTHERWISE NOTED. EXACT LOCATION OF ALL THERMOSTATS SHALL BE APPROVED BY THE ARCHITECT AND THE ENGINEER AND OWNER'S REPRESENTATIVE.
8. CONTRACTOR SHALL CLEAN ALL COILS AND REPLACE ALL FILTERS AND BELTS AT SUBSTANTIAL COMPLETION.
9. AIR CONDITIONING EQUIPMENT SHALL BE AS SPECIFIED. ARCHITECT AND ENGINEER WILL REVIEW ANY SUBSTITUTION FOR COMPATIBILITY.
10. DUCT SIZES AND EQUIPMENT OPENINGS THRU ROOFS, SLABS AND WALL PARTITIONS SHALL SUIT EQUIPMENT FURNISHED. SEE SHOP DRAWINGS FOR EQUIPMENT DIMENSIONS.
11. PROVIDE "P" TRAP AT PACKAGED ROOFTOP UNITS PER MANUFACTURER'S SPECIFICATIONS.
12. SLEEVE AND SEAL ALL PIPING PASSING THROUGH WALLS, FLOORS AND ROOF UNLESS NOTED OTHERWISE.
13. ALL CUTTING, PATCHING AND REPAIR WORK SHALL BE THE RESPONSIBILITY OF THE TRADE INVOLVED.
14. THE MAXIMUM ALLOWABLE LEAKAGE FOR THE DUCTWORK IS 2%.
15. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND SUBMITTALS FOR HVAC EQUIPMENT AND DUCTWORK SHOWN ON THE PLANS AND SPECIFICATIONS FOR THE ENGINEERS APPROVAL. THE ENGINEER MAY REQUIRE THE CONTRACTOR TO REDO ANY WORK, WHICH WAS NOT APPROVED, OR THE ENGINEER MAY REQUIRE A CREDIT TO THE OWNER. PROVIDE A SET OF AS-BUILTS AFTER THE JOB IS COMPLETED. THIS SET SHALL BE CONTINUOUSLY UPDATED DURING CONSTRUCTION.
16. PROVIDE AIR TURNING VANES AT ALL 90-DEGREE ELBOWS. PROVIDE VOLUME DAMPERS AT EACH BRANCH TAKEOFF AS INDICATED IN THE SMACNA "HVAC DUCT CONSTRUCTION STANDARDS".
17. PROVIDE FILTER RACKS WHICH ARE ACCESSIBLE FOR MAINTENANCE AND SEALED AIR TIGHT.
18. CONTRACTOR SHALL INSTALL HVAC SYSTEMS AS REQUIRED BY THE MANUFACTURER AND ENGINEER TO INSURE QUIET OPERATION. NO UNDUE VIBRATION OR SOUND SHALL BE TRANSMITTED TO BUILDING STRUCTURE AND OCCUPIED AREAS. IF THE EQUIPMENT INSTALLED HAS A HIGHER SOUND PRESSURE LEVEL THAN THE EQUIPMENT SPECIFIED, THEN IT WILL BE THE CONTRACTORS AND THE MANUFACTURES RESPONSIBILITY TO ELIMINATE ANY ADDITIONAL NOISE TRANSMISSION.

MECHANICAL DRAWING INDEX

SPLIT SYSTEM DX AIR HANDLER UNIT SCHEDULE

AIR HANDLER No.		FCU-1	FCU-2	FCU-3
MANUFACTURER		DAIKIN	DAIKIN	DAIKIN
AIR HANDLER MODEL No.		FCQ18TAVJU	FTKB09AXVJU	FTKB09AXVJU
REFRIGERANT		R-410A	R-410A	R-410A
NOMINAL CAPACITY	TONS	1.5	.75	.75
AIRFLOW	CFM (HI/MED/LO)	742/618/477	330/272/215	330/272/215
OUTSIDE AIRFLOW	CFM	30	0	0
EXTERNAL STATIC PRESSURE	IN. H_2O	.5	.5	.5
COOLING CAPACITY	MBH	18	8.8	8.8
HEATING CAPACITY	MBH	20	–	–
ELECTRIC	V/ø/HZ	208/1/60	208/1/60	208/1/60
MCA/MOCP	AMPS	.6/15.0	POWER BY CU-2	POWER BY CU-3
WEIGHT	LBS	63	20	20
NOTES		1-5	1-5	1-5

NOTES:

1. PROVIDE WITH PROGRAMMABLE T-STAT.
2. PROVIDE SECONDARY DRAIN PAN WITH FLOAT SWITCH.
3. FURNISH WITH THERMAL EXPANSION VALVE.
4. REFRIGERANT PIPE SIZED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR PIPE LENGTHS.
5. PROVIDE WITH SINGLE POINT POWER CONNECTION.

HEAT PUMP SCHEDULE

CONDENSING UNIT No.		CU-1	CU-2	CU-3
MANUFACTURER		DAIKIN	DAIKIN	DAIKIN
MODEL No.		RZQ18TAVJU	RKB09AXVJU	RKB09AXVJU
AMBIENT TEMPERATURE	DB°F	95	95	95
COMPRESSORS	No.	1	1	1
STEPS OF CAPACITY	No.	1	1	1
CIRCUITS	No.	1	1	1
ELECTRIC	V/ø/HZ	208/1/60	208/1/60	208/1/60
COMPRESSOR AMPERAGE (RLA)	AMPS	–	6.75	6.75
FAN MOTOR (FLA)	AMPS	–	.19	.19
MCA/MOCP	AMPS	16.5/25.0	6.95/15.0	6.95/15.0
HSPF		10.1	–	–
SEER		18.6	17	17
WEIGHT	LBS.	172	53	53
NOTES		–	–	–

NOTES:

ASHRAE 62.1 OUTSIDE AIR CALCULATION COMMERCIAL

SPACE	OCCUPIABLE AREA (SF)	OCCUPANTS (#)	VENTILATION AIR CFM PER SF²	VENTILATION AIR CFM PER PERSON	VENTILATION AIR CFM REQUIRED	VENTILATION AIR CFM SPECIFIED	EXHAUST CFM REQUIRED	EXHAUST CFM SPECIFIED	BUILDING PRESSURIZATION
100 VISITOR CENTER	122	4	.06	5	27	30			
101 VISITOR RESTROOM	62	0	0	0	0	0	70	70	
102 STORAGE	67	0	.12	0	8	0	0	70	
				TOTAL	35	30	70	140	1260

FAN SCHEDULE

MARK		EF-1	EF-2
SERVICE		EXHAUST	EXHAUST
MANUFACTURER		COOK	COOK
MODEL		GC-148	GC-148
AIR QUANTITY	CFM	70	70
EXT. STATIC PRESSURE	IN. H_2O	.5	.5
FAN SPEED	RPM	902	902
DRIVE		DIRECT	DIRECT
SONES		2	2
MOTOR	HP OR W	36W	36W
ELECTRICAL	V/ø/HZ	115/1/60	115/1/60
NOTES		1-4	1-4

1. OPERATES WITH WALL SWITCH. SEE ELECTRICAL PLANS.
2. PROVIDE WITH INTERNAL OVERLOAD PROTECTION.
3. PROVIDE WITH INTEGRAL DISCONNECT MEANS (TOGGLE SWITCH OR CORD AND PLUG).
4. PROVIDE WITH INTEGRAL SOLID STATE FAN SPEED CONTROLLER.

DESIGNED BY: JL DATE: 8/12/20
DRAWN BY: JL DATE: 8/12/20
CHECKED BY: JHG DATE: 8/12/20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
City of ST. PETERSBURG

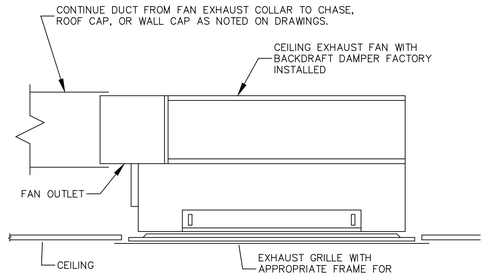
APPROVED BY:

GRINER ENGINEERING, INC.
3125 Fifth Ave. N.,Suite 300
St. Petersburg, Florida 33713
Phone: (727)-822-2335
Fax: (727)-821-3361
Certificate of Authorization # 3173

Firm Registration 3173
Joseph H. Griner III, P.E. 39491

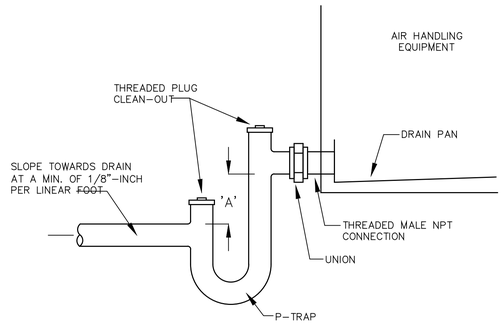
Signature Date

DATE: August 12th, 2020
SCALE: N.T.S.
DRAWING No. 19219-17 M000
Mechanical Notes & Schedules



CEILING MOUNTED EXHAUST FAN DETAIL

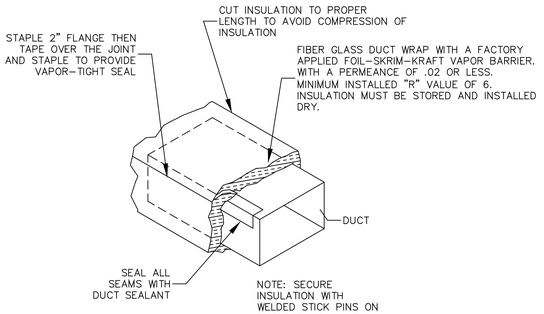
NOT TO SCALE



NOTES:
1. CONDENSATE PIPE SIZE SHALL BE FULL SIZE OF UNIT DRAIN CONNECTION, MIN. SIZE OF 3/4-INCH.
2. STEM HEIGHT 'A' SHALL BE A MINIMUM OF 1-INCH GREATER THAN FAN SUCTION PRESSURE. MINIMUM HEIGHT SHALL BE 3-INCHES.

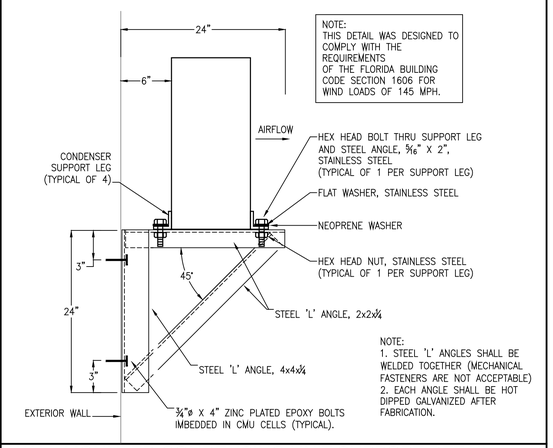
CONDENSATE DRAIN TRAP DETAIL

NOT TO SCALE



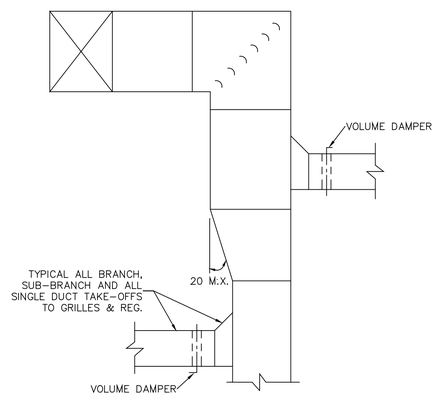
FIBERGLASS BLANKET DUCT INSULATION DETAIL

NOT TO SCALE



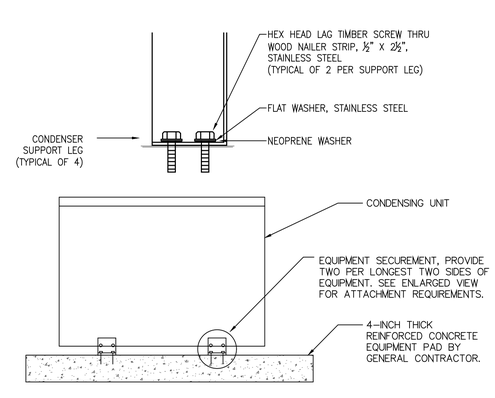
WALL MOUNTED CONDENSING UNIT SUPPORT DETAIL

NOT TO SCALE



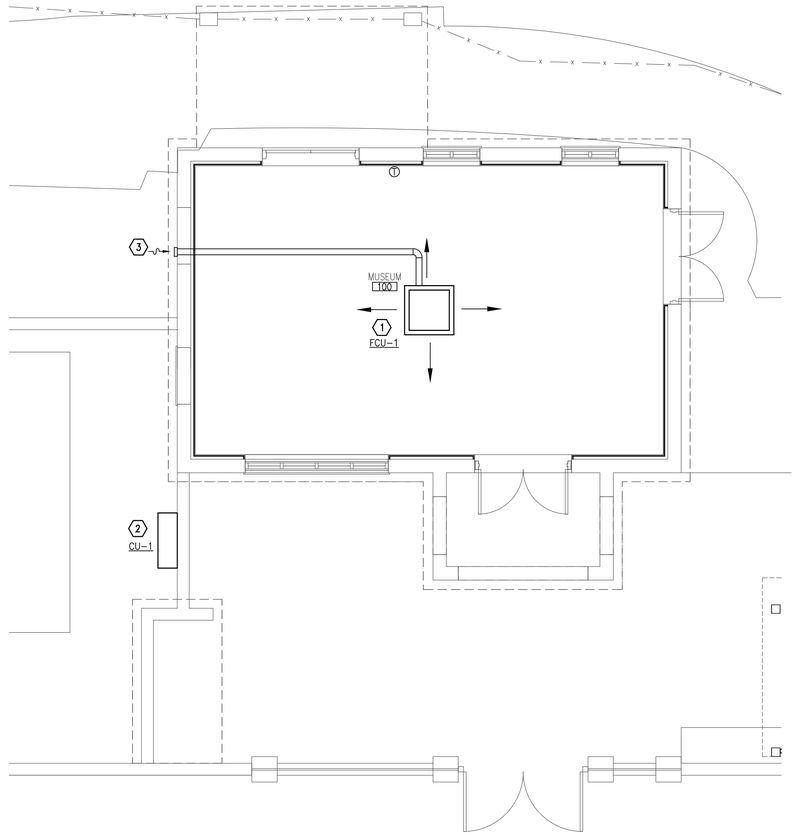
DUCTWORK FITTINGS DETAIL

NOT TO SCALE



CONDENSING UNIT TIE DOWN DETAIL

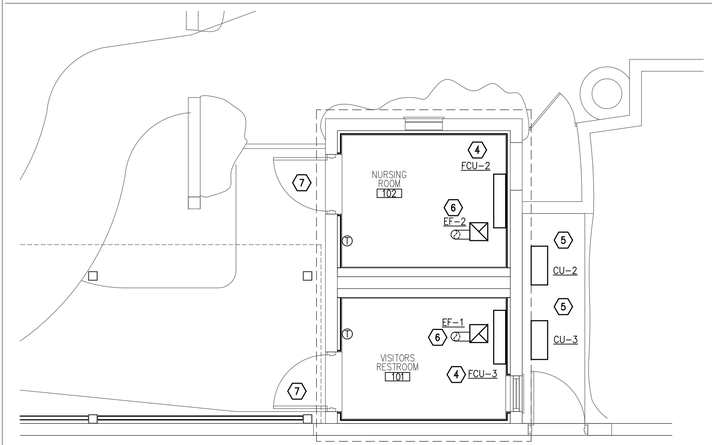
NOT TO SCALE



N

M1 Bldg A - Mechanical Reno Floor Plan - Museum

Scale: 1/4" = 1'-0"



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M2 Bldg B - Mechanical Reno Floor Plan - Restroom

Scale: 1/4" = 1'-0"

GENERAL RENOVATION SCOPE

1. CONTRACTOR TO INSTALL DUCTLESS MINI-SPLITS PER MANUFACTURER RECOMMENDATIONS.
2. ALL EXHAUST TO BE A MINIMUM OF 10' FROM ALL OPENING AND FRESH AIR INTAKES.
3. CONTRACTOR TO ROUTE AND SLOPE CONDENSATE ¼" PER FOOT TO SPILL ONTO GRASSY AREA OR SPLASH BLOCK.
4. ALL EXISTING HVAC EQUIPMENT TO BE REMOVED.
5. CONTRACTOR TO NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES BETWEEN THE MECHANICAL PLANS AND EXISTING FIELD CONDITIONS.

KEYED RENOVATION NOTES

1. NEW CEILING CASSETTE INDOOR UNIT, FCU-1.
2. OUTDOOR UNIT, CU-1, TO BE WALL MOUNTED. REFER TO MECHANICAL DETAILS.
3. 4" OUTSIDE AIR DUCT TO TERMINATE AT WALL CAP.
4. NEW WALL MOUNTED INDOOR UNIT.
5. OUTDOOR UNIT TO BE SUPPORTED ON CONCRETE PAD. REFER TO MECHANICAL DETAILS.
6. NEW RESTROOM EXHAUST FAN. 6" ROUND EXHAUST DUCT TO TERMINATE AT ROOF WITH ROOF CAP.
7. UNDERCUT DOOR 1".

DESIGNED BY: JL DATE: 8/12/20
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Mechanical Renovation
Floor Plans & Details

PLUMBING SPECIFICATION

PART 1: GENERAL

1.01 GENERAL DOCUMENTS

A. THE REQUIREMENTS OF THE GENERAL CONDITIONS & APPLICABLE SECTIONS SHALL APPLY TO ALL PLUMBING WORK. INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT BUILDING CODE –PLUMBING.

B. THE PLUMBING WORK SHALL INCLUDE FURNISHING ALL LABOR, EQUIPMENT, MATERIALS AND SERVICE NECESSARY FOR AND REASONABLY INCIDENTAL TO THE PROPER COMPLETION OF ALL PLUMBING WORK SHOWN ON THE DRAWINGS AND AS SPECIFIED. ALL MATERIAL SHALL BE NEW.

C. ALL MATERIALS AND EQUIPMENT SHALL BE THE STANDARD CATALOGED PRODUCT OF A REPUTABLE MANUFACTURER REGULARLY MANUFACTURING THE PARTICULAR ITEM, FREE FROM DEFECTS AND IN NEW CONDITION.

1.02 SUBMITTALS A. MATERIALS OR PRODUCTS SPECIFIED HEREIN AND/OR INDICATED ON DRAWINGS BY TRADE NAME, MANUFACTURER'S NAME OR CATALOG NUMBERS SHALL BE INTERPRETED AS ESTABLISHING A STANDARD OF QUALITY AND DESIGN. SUBSTITUTIONS SHALL NOT BE ALLOWED UNLESS THEY ARE SUBMITTED FOR REVIEW AND APPROVED BY BID DATE.

1.03 WORK BY OTHERS

A. THE FOLLOWING SYSTEMS AND/OR EQUIPMENT ARE NOT A PART OF THIS SECTION, BUT SHALL BE PROPERLY CONNECTED WITH ALL PLUMBING SERVICES:
– ELECTRICAL POWER WIRING BY ELECTRICAL SUB–CONTRACTOR.
– FIRE PROTECTION SYSTEM

1.04 SHOP DRAWINGS FURNISH SIX (6) COPIES OF SHOP DRAWINGS OF EQUIPMENT OR FIXTURES FOR APPROVAL PRIOR TO PURCHASING.

1.05 RECORD DRAWINGS

A. AFTER COMPLETION OF ALL WORK THE PLUMBING CONTRACTOR SHALL PROVIDE THE OWNER WITH AS BUILT RECORD DRAWINGS AS OUTLINED IN SPECIFICATIONS.

PART 2: PRODUCTS

2.01 PIPING

A. SOIL, WASTE, VENT PIPING & STORM DRAINAGE PIPING: ABOVE FLOOR AND BELOW SLAB: INTERIOR ABOVE FIRST FLOOR SLAB SHALL BE PVC–DWV SCHEDULE 40 PIPE AND FITTING BELOW AND ABOVE SLAB EXCEPT ANY PIPING LOCATED WITHIN PLENUM SPACES OR FIRE RATED WALLS SHALL BE SERVICE WEIGHT CAST IRON, NO HUB, WITH STAINLESS STEEL CLAMPS AND SHIELDS WITH NEOPRENE SEALING SLEEVES.

B. DOMESTIC WATER PIPING: INTERIOR COLD, HOT AND HOT WATER RECIRCULATING PIPING ABOVE SLAB: DOMESTIC WATER PIPING SHALL BE TYPE L COPPER TUBING WITH LEAD FREE SOLDER JOINTS OR APPROVED PVC PIPING & FITTING. PVC PRESSURE TYPE PIPE & FITTINGS MAY BE USED ONLY IF APPROVED BY OWNER & LOCAL PLUMBING AUTHORITY.

2.02 VALVES

A. EQUAL TO NIBCO, CRANE OR WALWORTH. ALL BRONZE 150 PSI. BALL OR GATE VALVES WITH RISING STEMS.

2.03 SPECIALTIES

A. PIPE PROTECTIVE COATING: FOR STEEL OR COPPER PIPE, PERMACEL OR SCOTCHWRAP VINYL TAPE APPLIED OVER PIPE TO A TOTAL MINIMUM THICKNESS OF 20 MILS. APPLY TO ALL WATER PIPE IN CONTACT WITH MASONRY OR CONCRETE.

B. PIPE HANGERS: HANGERS FOR BARE COPPER PIPE THROUGH 4 INCH (4") DIAMETER OR SMALLER SHALL BE ADJUSTABLE RING TYPE, PLASTIC COATED EQUAL TO MICHIGAN 102A, FOR STEEL PIPE MICHIGAN 100. ALL PIPE HANGERS IN AREA'S EXPOSED TO SALT ATMOSPHERE SHALL BE CORROSION RESISTANT. ALL WATER, SANITATION, STORM AND CONDENSATE STACKS SHALL HAVE A STACK CLAMP AT ALTERNATE FLOORS. HORIZONTAL & VERTICAL PIPE SUPPORT SHALL BE AS PER SCHEDULE BELOW:

PIPE HANGER SPACING TABLE

PIPE MATERIAL	PIPE SIZES (INCHES)	HORIZONTAL PIPE MAX. HANGER DISTANCE (FEET)	VERTICAL PIPE MAX. HANGER DISTANCE (FEET)
COPPER & COPPER ALLOY TUBING	1¼" & SMALLER	6	10
COPPER & COPPER ALLOY TUBING	1½" & LARGER	10	10
COPPER & COPPER ALLOY PIPE	ALL	12	10
CAST IRON PIPE	ALL	4 *	15
STEEL PIPE	ALL	12	15
STAINLESS STEEL DRAINAGE SYSTEM	ALL	10	10 **
CPVC & PVC PIPE	ALL	4	10 **

NOTES:

* MAXIMUM HORIZONTAL SPACING OF CAST IRON PIPE HANGERS SHALL BE INCREASED TO TEN FEET WHERE 10' LENGTHS OF PIPE ARE USED.

** MIDSTORY GUIDE FOR SIZES 2" AND SMALLER

*** NOT ALL PIPE MATERIALS ON THIS TABLE WILL PERTAIN TO THIS PROJECT

C. DRAINS AND CLEANOUTS: SEE SCHEDULE ON DRAWINGS.

D. DIELECTRIC UNIONS: EBCO OR CAPITOL AT ALL POINTS OF CONNECTION BETWEEN DISSIMILAR PIPE METALS.

E. FLASHING AND VENT STACKS: ALL VENTS EXTENDING THROUGH THE ROOF SHALL BE PROVIDED WITH FOUR POUND SHEET LEAD FLASHING EXTENDING UPWARD AROUND THE PIPE AND TURNED DOWN INSIDE THE PIPE OR AS OTHERWISE SHOWN ON THE DRAWINGS. THE ROOF FLASHING SHALL BE INSTALLED BY LICENSED & INSURED ROOFING CONTRACTOR. ALL FLASHING IN METAL ROOF SHALL BE BY THE ROOF MANUFACTURER. MINIMUM DISTANCE FROM ANY FRESH AIR INTAKE SHALL BE 10'–0".

F. AIR CHAMBERS: AT EACH FIXTURE GROUP PROVIDE "SA" AS SPECIFIED IN SPECIALTIES SCHEDULE AND ELSEWHERE AS REQUIRED, AND IN ALL CONNECTIONS TO EQUIPMENT WITH SOLENOID VALVE INSTALLED ON WATER SUPPLY LINE PROVIDE ACCESS FOR WATER HAMMER ARRESTORS. THE WATER HAMMER ARRESTORS SHALL BE SIZED AND INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS.

G. ESCUTCHEONS AND SLEEVES: WHERE PIPES PIERCE EXPOSED PARTITIONS, FLOORS, WALLS OR CEILINGS, PROVIDE CHROME PLATED ESCUTCHEONS TO COVER THE RAW EDGE.

H. SLEEVES SHALL BE PROVIDED AT RATED WALL ALL PIPE PENETRATIONS OF MASONRY, BAY WALL, CONCRETE WALLS AND FLOORS.

I. PROVIDE UL LISTED FIRE STOPPING PIPE PENETRATION ASSEMBLIES AT ALL PIPING THROUGH RATED WALLS AND ASSEMBLIES. SEE DETAILS ON THE DRAWING.

2.04 FIXTURES AND TRIM

A. ALL EXPOSED METAL TO BE CHROME PLATED. PROVIDE STOPS AND UNIONS AT ALL SUPPLIES AND CAST BRASS 'P' TRAPS WITH CLEANOUT ON ALL WASTE.

B. FIXTURES BY AMERICAN STANDARD, KOHLER, ELJER, STERLING OR APPROVED EQUAL.

PART 3: EXECUTION

3.01. INSTALLATION

A. INSTALL PIPE ABOVE GROUND PLUMB AND SQUARE WITH BUILDING LINES, ADEQUATELY SUPPORTED WITHOUT SAGS OR HIGH POINTS. CONCEAL PIPING IN OCCUPIED AREAS AND MAINTAIN HEAD ROOM AND ACCESS SPACE IN UNFINISHED AREAS. SLEEVE PIPING THROUGH ALL WALLS, SLABS OR PARTITIONS WITH ESCUTCHEONS AT ALL FINISHED SURFACE. PROVIDE UNIONS AT ALL FINAL CONNECTIONS AND STOPS ON ALL SUPPLIES. ALL PIPE OPENINGS SHALL BE PLUGGED DURING INSTALLATION.

B. SANITARY DRAINAGE PIPING 3" & LARGER SHALL BE INSTALLED WITH A MINIMUM ⅛" PER FOOT SLOPE UNLESS NOTED OTHERWISE. ALL DRAINAGE PIPING 2½" AND SMALLER SHALL BE INSTALLED WITH A MINIMUM OF ¼" PITCH PER FOOT.

C. ALL FIXTURES AND TRIM FOR HANDICAPPED SHALL BE INSTALLED IN COMPLIANCE WITH ADA CODE.

D. INSTALL ALL PIPING TO ALLOW FOR EXPANSION.

E. SEE RISER DIAGRAMS FOR ALL DRAINAGE & VENT PIPE SIZING FOR THE PLUMBING SYSTEMS. REFER TO PLUMBING FLOOR PLAN (WATER SYSTEM) & SCHEDULES FOR ALL WATER PIPING SYSTEM SIZING.

F. ALL EXPOSED TO VIEW PIPING AND FITTINGS SHALL BE POLISHED CHROME FINISH.

G. ALL WORK HANDICAPPED TOILETS SHALL COMPLY WITH ADA REQUIREMENTS. & BUILDING CODE – CHAPTER 11 ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION.

H. FINAL CONNECTIONS TO DRAINAGE AND WATER SERVICE LINES TO EXISTING OR NEW AT 5'–0" FROM THE BUILDING WALLS SHALL BE BY THE PLUMBING CONTRACTOR.

3.02. DISINFECTING OF POTABLE WATER SYSTEM:

A. THE SYSTEM SHALL BE FILLED WITH A SOLUTION CONTAINING 50 PARTS PER MILLION OF AVAILABLE CHLORINE AND ALLOWED TO STAND SIX HOURS BEFORE FLUSHING AND RETURNING TO SERVICE. DISINFECTION PROCEDURE AND RESULT SHALL BE SUBJECT TO THE APPROVAL OF THE LOCAL PLUMBING INSPECTOR.

3.03. TESTS

A. ALL PLUMBING SYSTEMS SHALL BE TESTED IN ACCORDANCE WITH THE BUILDING CODE–PLUMBING. ALL TESTS SHALL BE APPROVED BY THE LOCAL PLUMBING INSPECTOR AND SHALL BE OBSERVED BY A REPRESENTATIVE OF THE ARCHITECT.

3.04. SYSTEM IDENTIFICATION

A. THE PLUMBING CONTRACTOR SHALL PROVIDE IDENTIFICATION TAGS FOR ALL PIPING AND VALVES IN THE BUILDING AS PER OWNER ACCEPTED STANDARDS. THE PIPE MARKS SHALL INCLUDE PIPING SYSTEM IDENTIFICATION AND DIRECTIONS OF FLOW.

3.05 SPECIFICATIONS AND DRAWINGS

A. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE SANITARY, STORM AND DOMESTIC WATER PIPING SYSTEMS: INCLUDING ALL ASSOCIATED DEVICES, EQUIPMENT, CONTROLS, AND CONNECTIONS TO NEW SERVICES, SUPPORTS, AND HARDWARE REQUIRED FOR THE SATISFACTORY OPERATION OF THE SYSTEMS, WHETHER SPECIFICALLY SHOWN OR NOT ON THE DRAWINGS.

B. THE PLANS SHOW THE LOCATION OF ALL FIXTURES AND EQUIPMENT AND ARE INTENDED TO DEPICT THE GENERAL INTENT OF THE WORK IN SCOPE, LAYOUT AND QUALITY OF WORKMANSHIP. THEY ARE NOT INTENDED TO SHOW IN MINUTE DETAIL EVERY AND ALL ACCESSORIES INTENDED FOR THE PURPOSE OF EXECUTION OF THE WORK, BUT IT SHALL BE UNDERSTOOD THAT SUCH DETAILS WILL BE PART OF THIS WORK.

C. WHERE DRAWINGS AND SPECIFICATIONS CONFLICT, IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO BRING SUCH CONFLICT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.

D. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL PLUMBING FIXTURES.

E. CONTRACTOR SHALL KEEP A RECORD OF THE LOCATIONS OF ALL CONCEALED WORK AND, UPON COMPLETION OF THE JOB, SHALL SUPPLY AS–BUILT DRAWINGS SHOWING IN COLORED PENCIL ON BLACK LINE PRINTS ANY DEVIATION FROM THE ORIGINAL DRAWINGS. THESE DRAWINGS SHALL INDICATE DIMENSIONS OF BURIED UTILITY LINES FROM BUILDING WALLS.

F. ALL DOCUMENTS, TEST REPORTS & AS–BUILTS DRAWINGS SHALL BE ATTACHED TO THE CLOSING DOCUMENT OF THE PROJECT.

3.06 WARRANTY:

A. THE PLUMBING CONTRACTOR SHALL WARRANT HIS WORK TO BE FREE FROM DEFECTS IN MATERIALS AND AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE OF ALL WORK.

3.07 COORDINATION

A. THE CONTRACTOR DOING THE SHEET METAL SHOP DRAWINGS AND THE PLUMBING, FIRE PROTECTION, AND HVAC FOREMAN AND GENERAL CONTRACTOR PROJECT MANAGER SHALL INSPECT & REVIEW THE CONDITIONS, AND SHALL COORDINATE THEIR WORK SO AS TO PROVIDE ADEQUATE SPACE ALLOWANCE ABOVE CEILING FOR ALL TRADES. ALL GRAVITY WASTE PIPING IN THE CEILING SPACE SHALL BE INSTALLED FIRST.

B. VERIFY LOCATIONS, SIZES, AND INVERT ELEVATIONS OF SANITARY DRAIN, AND DOMESTIC WATER PIPING CONNECTIONS WITH CIVIL ENGINEERING DRAWINGS PRIOR TO PROCEEDING WITH THE INSTALLATION OF ANY NEW WORK. SHOULD ANY DISCREPANCIES BE DISCOVERED CONTRACTOR SHALL OBTAIN DIRECTION FROM THE ENGINEER BEFORE PROCEEDING.

C. COORDINATE WITH ARCHITECTURAL DRAWINGS WALL AND PARTITION CONSTRUCTION AND THICKNESS WHERE PLUMBING PIPING, FIXTURES CARRIERS OR EQUIPMENT IS INDICATED. BEFORE PLUMBING PIPING ROUGH–IN.

D. COORDINATE EXACT LOCATION, ELEVATIONS AND SIZES OF ALL SLEEVES IN NEW STRUCTURE WITH STRUCTURAL AND ARCHITECTURAL DRAWINGS.

3.08 PERMITS

A. PLUMBING CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AT HIS EXPENSE.

PLUMBING GENERAL NOTES:

1. THE PLUMBING CONTRACTOR SHALL VERIFY THESE DRAWINGS WITH EXISTING FIELD CONDITIONS AND SHALL COORDINATE WITH CIVIL ENGINEER LOCATIONS AND ELEVATIONS OF PLUMBING SERVICE LINES BEFORE PROCEEDING WITH CONSTRUCTION. THE WATER, SANITARY SEWER, STORM & GAS SERVICE LINES SHOWN ON THE DRAWINGS ARE FOR REFERENCE & BUILDING PERMIT ONLY. REFER TO CIVIL ENGINEERS DRAWINGS FOR DRAINAGE & WATER SERVICE LINES LAY–OUT & DETAILS
2. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE SANITARY AND DOMESTIC WATER PIPING SYSTEMS; INCLUDING ALL ASSOCIATED DEVICES, EQUIPMENT, CONTROLS, CONNECTIONS TO BUILDING SERVICE LINES, SUPPORTS, AND HARDWARE REQUIRED FOR THE SATISFACTORY OPERATION OF THE SYSTEMS.
3. PLUMBING CONTRACTOR SHALL PROVIDE ROUTING AND OFFSETS NECESSARY TO AVOID CONFLICT WITH STRUCTURE, FINISHES AND WORK OF OTHER TRADES AS REQUIRED.
4. PIPING SYSTEMS SHOWN ARE DIAGRAMATIC AND ARE NOT INTENDED TO INDICATE EXACT INSTALLED LOCATIONS OR CONFIGURATIONS.
5. COORDINATE EXACT LOCATION, SIZE AND ELEVATIONS OF ANY REQUIRED PIPE SLEEVES IN NEW STRUCTURE WITH STRUCTURAL ENGINEER.
6. BAND IRON, TIE WIRE, METAL STRAPPING OR WIRE STRAPPING SHALL NOT BE PERMITTED TO SUPPORT PIPING OR EQUIPMENT.
7. INSTALL ALL PIPING TO ALLOW FOR FUTURE EXPANSION.
8. PROVIDE ACCESS PANELS AT ALL PLACES WHERE EQUIPMENT AND DEVICES REQUIRING SERVICE ARE CONCEALED BEHIND INACCESSIBLE CEILINGS AND WALLS. SUCH DEVICES INCLUDE, BUT ARE NOT LIMITED TO, CLEANOUTS, WATER HAMMER ARRESTORS AND VALVES. COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH–IN.
9. ALL PIPING AND FITTINGS EXPOSED TO VIEW SHALL HAVE A POLISHED CHROME FINISH UNLESS OTHERWISE NOTED.
10. ALL PLUMBING WORK SHALL COMPLY WITH FLORIDA BUILDING CODES –BUILDING, –PLUMBING, – MECHANICAL, AND –FUEL GAS CODE; 2017 EDITION WITH LATEST AMENDMENTS (INCLUDING LOCAL) AND ALL OTHER CODES RECENTLY ADAPTED BY STATE FIRE MARSHALL'S RULE.

DOMESTIC WATER PIPING NOTES:

1. BELOW GROUND WATER PIPING SHALL BE TYPE "K" COPPER WITH VINYL SLEEVE FOR CORROSION PROTECTION WITH WROUGHT COPPER FITTINGS AND LEAD FREE 95–5 SOLDERED JOINTS.
2. ABOVE GROUND WATER PIPING SHALL BE TYPE "L" COPPER. COMPLY WITH BUILDING CODE.
3. THE SITE SUBCONTRACTOR SHALL PROVIDE THE BACKFLOW PREVENTOR AND THE WATER METER.
4. PROVIDE EACH FIXTURE WITH STOPS AND SUPPLIES. EXPOSED STOPS AND SUPPLIES SHALL BE CHROME PLATED WITH A CHROME PLATED ESCUTCHEON PLATE.
5. PROVIDE UNIONS FOR ALL CONNECTIONS TO EQUIPMENT. PROVIDE DIELECTRIC TYPE WHERE DISSIMILAR METALS ARE CONNECTED.
6. PROVIDE VACUUM BREAKERS AS REQUIRED BY CODE.
7. PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS AS REQUIRED BY CODE.
8. TEST ALL WATER PIPING AT 100 PSI FOR TWENTY FOUR HOURS AS REQUIRED BY CODE.
9. STERILIZE ALL WATER PIPING IN ACCORDANCE WITH HEALTH DEPARTMENT REGULATIONS AND AMERICAN WATER WORKS SPECIFICATIONS.
10. SUPPORT ALL WATER PIPING WITH PIPE HANGERS BY GRINNELL OR APPROVED EQUAL.
11. PROVIDE ACCESS PANELS FOR ANY VALVES CONCEALED IN WALLS OR CEILING SPACE.

SANITARY WASTE & VENT PIPING NOTES:

1. SANITARY WASTE AND VENT PIPING SHALL BE SCHEDULE 40 PVC (ASTM–2665) WITH APPROVED PVC SOLVENT WELDED FITTINGS. PVC PIPING SHALL NOT BE RUN IN RETURN AIR PLENUMS OR FIRE RATED ASSEMBLIES.
2. ALL SANITARY WASTE PIPING UP TO 2 1/2" IN SIZE SHALL BE SLOPED AT ¼" PER FOOT SLOPE. ALL LARGER SANITARY WASTE PIPING SHALL BE SLOPED AT ⅛" PER FOOT SLOPE.
3. TEST SANITARY WASTE AND VENT PIPING BY MEANS OF A 5' WATER COLUMN FOR 15 MINUTES OR AS REQUIRED BY THE LOCAL AUTHORITY.

PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION
	BALL VALVE
	VALVE IN UNDERGROUND BOX
	BACKWATER VALVE
	BACKWATER VALVE BELOW GRADE WITH EXTENSION
	BACKWATER VALVE IN UNDERGROUND BOX
	SUPPLY VALVE
	POINT OF NEW CONNECTION
	PIPE DOWN
	PIPE UP
	CAPPED PIPE
	DIRECTION OF FLOW

PLUMBING LINETYPE LEGEND

LINETYPE	DESCRIPTION
	EXISTING SANITARY SEWER PIPING
	EXISTING DOMESTIC COLD WATER PIPING
	VENT PIPING (ABOVE GROUND)
	SANITARY SEWER PIPING (BELOW GROUND)
	DOMESTIC COLD WATER PIPING

PLUMBING DRAWING INDEX

DESIGNED BY: JL DATE: 8/12/20
DRAWN BY: JL DATE: 8/12/20
CHECKED BY: JHG DATE: 8/12/20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

APPROVED BY:

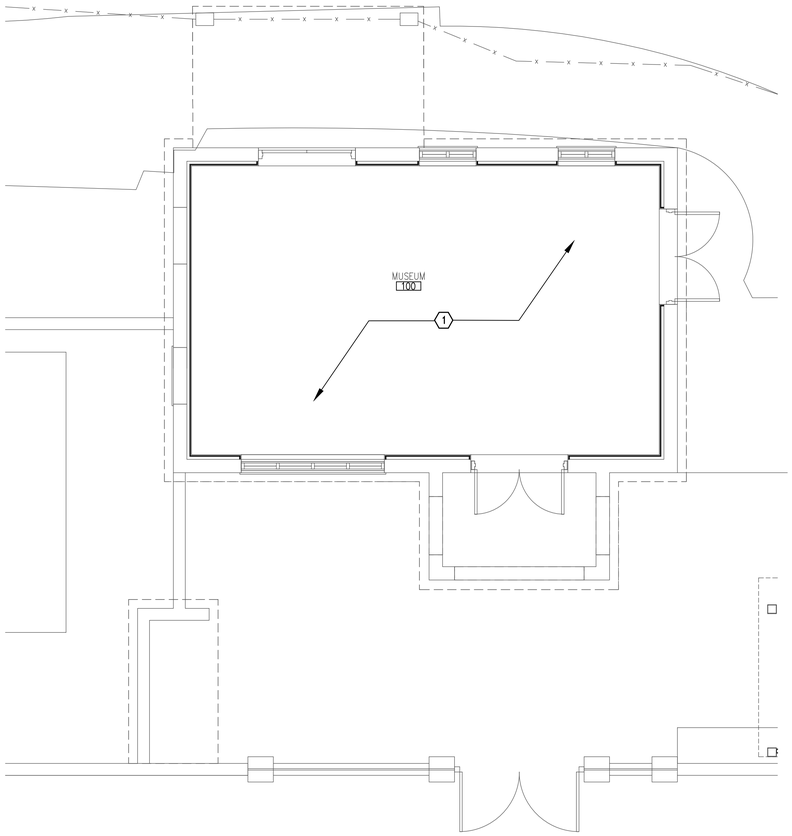
GRINER ENGINEERING, INC.
3125 Fifth Ave. N.,Suite 300
St. Petersburg, Florida 33713
Phone: (727)-822-2335
Fax: (727)-821-3361
Certificate of Authorization # 3173

Firm Registration 3173
Joseph H. Griner III, P.E. 39491

Signature Date

DATE: August 12th, 2020
SCALE: N.T.S.
DRAWING No. 19219-19 P000

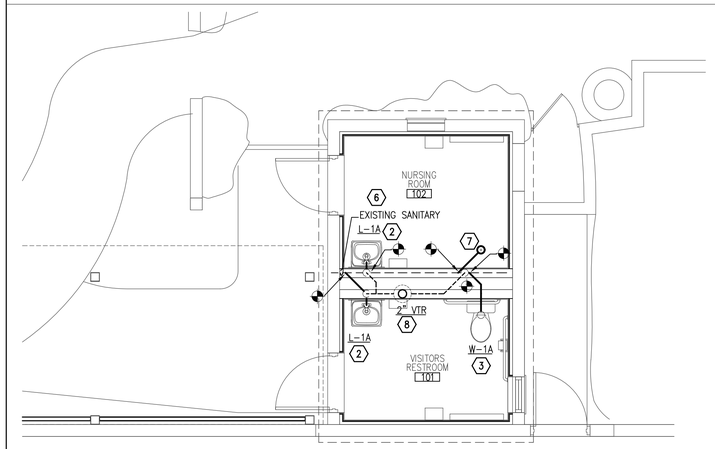
Plumbing Cover Sheet



N

P1 Bldg A - Plumbing Reno Floor Plan - Museum

Scale: 1/4" = 1'-0"



N

P2 Bldg B - Sanitary Floor Plan - Restroom

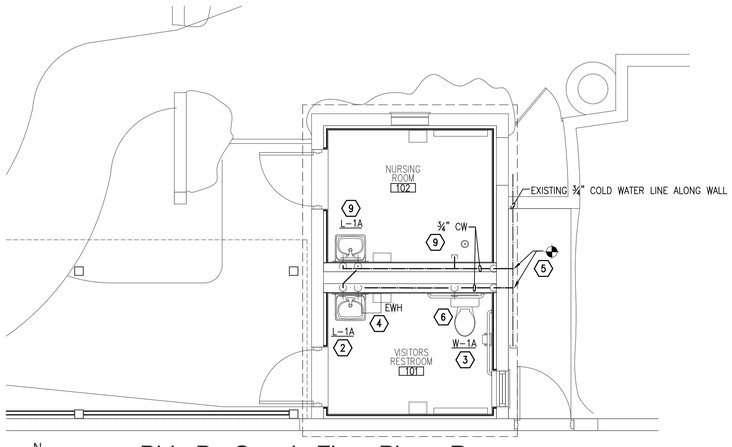
Scale: 1/4" = 1'-0"

GENERAL RENOVATION SCOPE

1. CONTRACTOR TO CONFIRM AND VERIFY EXACT LOCATIONS OF EXISTING PLUMBING SUPPLY, WASTE AND VENT SYSTEM FOR RECONNECTION.
2. CONTRACTOR TO NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES BETWEEN THE MECHANICAL PLANS AND EXISTING FIELD CONDITIONS.

KEYED RENOVATION NOTES

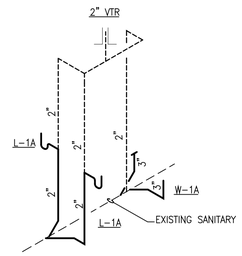
1. NO PLUMBING WORK IN THIS AREA.
2. NEW WALL MOUNTED LAVATORY, REFER TO PLUMBING FIXTURE SCHEDULES.
3. NEW FLOOR MOUNTED WATER CLOSET, REFER TO PLUMBING FIXTURE SCHEDULES.
4. NEW ELECTRIC MINI TANK WATER HEATER MOUNTED BELOW LAVATORY. REFER TO DETAILS. MINI TANK WATER HEATER TO SERVE THE TWO NEW LAVATORIES.
5. CONNECT TO EXISTING ¾" COLD WATER LINE IN THIS AREA.
6. CONNECT TO EXISTING SANITARY LINE IN THIS AREA. CONTRACTOR TO CONFIRM EXISTING SANITARY LINE IS A MINIMUM OF 4" IN DIAMETER FOR CONNECTION.
7. 4" SANITARY STUB UP FOR FUTURE WATER CLOSET. CONTRACTOR TO CONFIRM EXISTING SANITARY LINE IS A MINIMUM OF 4" IN DIAMETER FOR CONNECTION.
8. NEW 2" VENT TO ROOF.
9. NEW WALL MOUNTED LAVATORY, REFER TO PLUMBING FIXTURE SCHEDULES. HOT WATER TO BE PROVIDED BY NEW INSTAHOT LOCATED IN 101 VISITORS RESTROOM.
10. PROVIDE ½" CAPPED COLD WATER LINE FOR FUTURE WATER CLOSET.



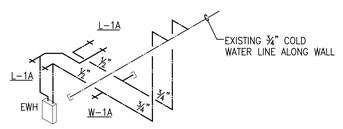
N

P3 Bldg B - Supply Floor Plan - Restroom

Scale: 1/4" = 1'-0"



P4 Sanitary Riser Diagram



P5 Supply Riser Diagram

DESIGNED BY:		DATE: 8/12/20
DRAWN BY:	JL	DATE: 8/12/20
CHECKED BY:	JHG	DATE: 8/12/20

MUSEUM, ARBOR, AND RESTROOMS
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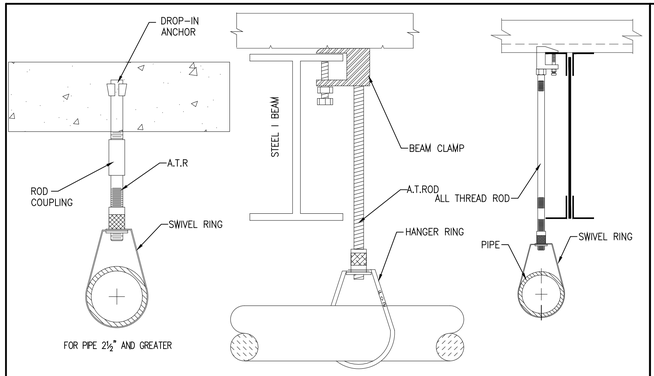
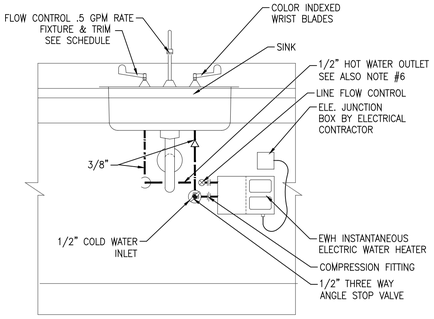
DRAWING No. 19219-20 P100

Plumbing Renovation
Floor Plans



PIPE HANGERS ASSEMBLY

NOT TO SCALE

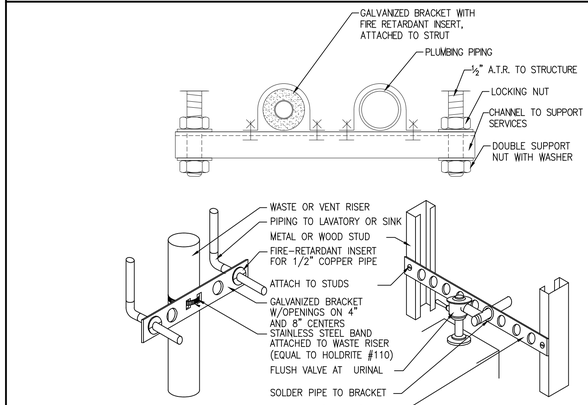


NOTES:

1. COORDINATE WITH ELECTRICAL CONTRACTOR ALL ELECTRICAL SERVICE REQUIREMENT.
2. SEE SCHEDULE FOR INSTANTANEOUS WATER HEATER DATA.
3. PROVIDE FLOW CONTROL FITTINGS.
4. PROVIDE COMPRESSION FITTINGS FOR EASY INSTALLATION.
5. THE HEATER SHALL BE SET ON A MAXIMUM 120° F HOT WATER TEMPERATURE OUTPUT BY EQUIPMENT MANUFACTURER.
6. PROVIDE TEE IF FOR ADDITIONAL SINK OR LAVATORY CONNECTION.

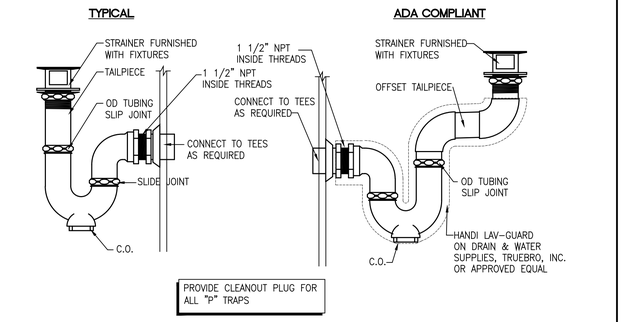
DETAIL INSTANTANEOUS WATER HEATER

NOT TO SCALE



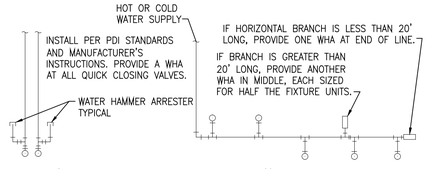
WATER PIPING SUPPORT DETAIL

NOT TO SCALE



"P" TRAP WITH CLEANOUT

NOT TO SCALE



SINGLE/DOUBLE FIXTURE

PDI SIZE	PIPE SIZE	FIXTURE UNIT LOAD
A	1/2"	1-11
B	3/4"	12-32
C	1"	33-60
D	1-1/4"	61-113
E	1-1/2"	114-154
F	2"	154-330

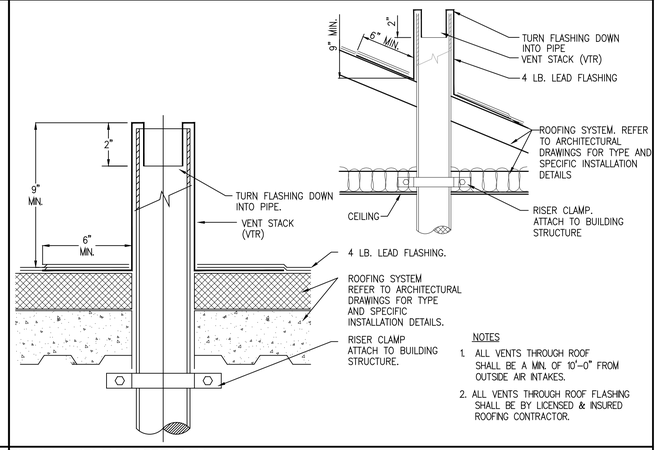
MULTIPLE FIXTURES

FIXTURE UNIT TABULATION		
FIXTURE	COLD	HOT
VALVE WATER CLOSET	10	--
TANK WATER CLOSET	5	--
URINAL	5	--
LAVATORY/SINK	1.5	1.5
JANITOR'S SINK	3	3
SHOWER/BATHTUB	2	2

FOR BATTERIES OF FIXTURES, PROVIDE WATER HAMMER ARRESTERS BY SIOUX CHIEF, PRECISION PLUMBING PRODUCTS, WATTS OR APPROVED EQUIVALENT WITH PISTON AND O-RING CONSTRUCTION, HAVING PDI #WH-201, ASSE #1010 AND ANSI #A112.26.1M CERTIFICATION. INSTALL IN HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDE DOWN. INSTALL IN LINE WITH WATER FLOW DIRECTION. SIZE THE UNITS AS SHOWN ON THE TABLES ABOVE. PROVIDE ACCESSIBILITY TO WHA WHERE REQUIRED BY LOCAL CODE.

WATER HAMMER ARRESTERS DETAIL

NOT TO SCALE



NOTES

1. ALL VENTS THROUGH ROOF SHALL BE A MIN. OF 10'-0" FROM OUTSIDE AIR INTAKES.
2. ALL VENTS THROUGH ROOF FLASHING SHALL BE BY LICENSED & INSURED ROOFING CONTRACTOR.

VENT THROUGH ROOF

NOT TO SCALE

WATER HEATER SCHEDULE

MARK	MAKE & MODEL	TYPE	DIMENSIONS	STORAGE (GALLONS)	EFFICIENCY	RECOVERY RATE	INPUT (BTUH)	FLUE (INCHES)	ELECTRICAL				
									NUM OF ELEMENTS	KW EA	KW TOTAL	VOLTAGE	PHASE
EWH	EEMAX MINI TANK	ELECTRIC TANK	12.76"X12.27"X 18.03"	--	--	24 MINUTES @ 60°F	--	--	1	1.4	1.4	120	1

NOTES:

1. PROVIDE FACTORY INSTALLED HEAVY DUTY ELECTRICAL JUNCTION BOX, CONTROLS, WITH T-STATS SET ON 105°F.
2. INSTALL WATER HEATER IN ACCORDANCE TO FPC, FMC CODES, NEC, AND APPLICABLE STANDARDS AND MANUFACTURERS RECOMMENDATIONS.
3. CONTACT MANUFACTURERS REPRESENTATIVE FOR HEATERS ELECTRICAL DATA BEFORE FINAL ORDER IS MADE.
4. INSTALL WATER HEATER IN ACCORDANCE WITH BUILDING CODE – PLUMBING & MECHANICAL (WITH LATEST AMENDMENTS) CODES, ENERGY CODE, AND APPLICABLE STANDARDS AND MANUFACTURERS RECOMMENDATIONS.
5. PROVIDE BRASS DRAIN VALVE, & ALL REQUIRED OPTIONS TO COMPLETE THE INSTALLATION.
6. PROVIDED WITH INTEGRATED MIXING VALVE THAT MEETS ASSE 1070 STANDARDS.

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE, MODEL NUMBER AND DESCRIPTION	ROUGH-IN			
		WASTE	VENT	CW	HW
L-1A	LAVATORY, ADA COMPLIANT, WALL HUNG, ZURN Z1231 CARRIER, AMERICAN STANDARD #9140.047 WHITE, 1 HOLE PUNCH, DELTA #590TP1120 HIGH RISE PROXIMITY SENSOR OPERATED FAUCET. PROFLO M155A 1¼" CHROME PLATED DRAIN. PROVIDE TRAP, SUPPLIES, STOPS, MIXING VALVE, ETC FOR COMPLETE INSTALLATION.	2"	2"	½"	½"
W-1A	WATER CLOSET, FLOOR MOUNTED TANK TYPE, AMERICAN STANDARD #2467.016 WHITE ELONGATED BOWL, VITREOUS CHINA, CENTOCO 1500CCSSWH OPEN FRONT SEAT LESS COVER. PROVIDE ALL ITEMS NEEDED FOR COMPLETE INSTALLATION.	3"	2"	½"	--

NOTES:

1. LAVATORY SUPPLY SHALL BE BRASS W/ BRASS ANGLE STOPS FOR ½" WATER SUPPLY LINES, W/ LOOSE KEY (W/CAP), AND WALL FLANGE. ALL COMPONENTS SHALL BE POLISHED CHROME FINISH. MANUFACTURER: BRASS CRAFT OR APPROVED EQUAL.
2. CAST BODY "P" TRAP 1¼" x 1¼" WITH HEAVY CAST J-BEND & FLAT CLEANOUT PLUG, SLIP NUTS AND WALL FLANGE. ALL COMPONENTS SHALL BE POLISHED CHROME FINISH. MANUFACTURER: BRASS CRAFT OR APPROVED EQUAL.
3. STRAINERS SHALL BE FURNISHED WITH FIXTURES AS REQUIRED. FOR H/C LAVATORY OR SINKS PROVIDE OFFSET TAILPIECE.
4. PROVIDE TRUEBRO MODEL 103 (WHITE), ANTIMICROBAL HANDI LAV-GUARDS INSTALLATION KIT FOR ALL WHEELCHAIR LAVATORY & SINKS FOR WATER SUPPLIES & WASTE LINE.
5. THE PLUMBING FIXTURES VENDOR SHALL COORDINATE WITH THE PLUMBING AND GENERAL CONTRACTOR ALL PLUMBING FIXTURES ROUGH IN DIMENSIONS BEFORE CONSTRUCTION BEGIN.
6. UNLESS SHOWN ABOVE, PLUMBING FIXTURES MANUFACTURER, TRIM COLOR AND FINISH SHALL BE FURNISHED AS DIRECTED BY OWNER/ARCHITECT.

PLUMBING SPECIALTIES SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL/PART NUMBER	DETAILED DESCRIPTION
SA	WATER HAMMER ARRESTOR	ZURN	Z1700	ALL STAINLESS STEEL CONSTRUCTION, ¾" & 1", SIZE PER MANUFACTURER'S RECOMMENDATIONS

DESIGNED BY: JL DATE: 8/12/20
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DRAWING No. 19219-21 P200

Plumbing Details & Schedules

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	MOUNTING
G	2 X 2 FLUORESCENT FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
A	2 X 4 FLUORESCENT FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
NL	SHADING DENOTES FIXTURE WITH EM BATTERY PACK. 'NL' DENOTES FIXTURE UNSWITCHED FOR NIGHT LIGHT	SEE FIXTURE SCHEDULE
E	2 X 4 FLUORESCENT FIXTURE (LETTER INDICATES TYPE) SHADING DENOTES FIXTURE FED FROM EMERGENCY SUPPLY	SEE FIXTURE SCHEDULE
K	FLUORESCENT STRIP FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
C	FLUORESCENT WALL BRACKET FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
L	RECESSED DOWNLIGHT LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
Z	EXTERIOR DOWNLIGHT FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
W	EXTERIOR WALL MOUNTED FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
	INTERIOR PENDANT FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
	EXTERIOR SURFACE MOUNT FIXTURE LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
	EXTERIOR BOLLARD	SEE FIXTURE SCHEDULE
	WALL LOW MOUNTED FIXTURE	SEE FIXTURE SCHEDULE
	CEILING FAN	SEE FIXTURE SCHEDULE
EX	EXIT–SHADING DENOTES FACEPLATE LOCATION. LETTER INDICATES TYPE. PROVIDE ARROWS AS REQUIRED.	SEE FIXTURE SCHEDULE
X1	DENOTES EMERGENCY WALL PACK. LETTER INDICATES TYPE.	SEE FIXTURE SCHEDULE
	DENOTES TRACK LIGTHING. LETTER INDICATES TYPE.	SEE FIXTURE SCHEDULE
S S3 D	SINGLE POLE SWITCH (20A–120/277) '3' DENOTES 3–WAY 'D' DENOTES DIMMER	48" AFF OR AS NOTED
SPR	'T' DENOTES TOGGLE SWITCH	ABOVE CEILING
OS	OCCUPANCY SENSOR	48" AFF OR AS NOTED
LVS	LOW VOLTAGE LIGHTING SWITCH	48" AFF OR AS NOTED
IG	DUPLEX RECEPTACLE, 125V, 20A 'IG' DENOTES ISOLATED GROUND	18" AFF OR AS NOTED
	DUPLEX RECEPTACLE, 125V, 20A	18" AFF OR AS NOTED
	DUPLEX RECEPTACLE, 125V, 20A	48" AFF OR AS NOTED
	QUAD RECEPTACLE, 125V, 20A	18" AFF OR AS NOTED
	SINGLE RECEPTACLE, 208V OR 240V	18" AFF OR AS NOTED
	CEILING MOUNTED COILED REEL EXTENSION RECEPT.	CEILING MOUNTED
	FLOOR BOX WITH QUAD RECEPTACLE.	
JB	JUNCTION BOX	SEE DETAIL OR AS NOTED
	POWER/TELEPHONE POLE	SEE DETAIL OR AS NOTED
	OUTLET BOX OR J–BOX FOR POWER AND DATA SUPPLY TO FURNITURE SYSTEMS	18" AFF OR AS NOTED
	FLOOR BOX WITH 20A DUPLEX RECP. AND DATA OUTLET.	SEE DETAIL OR AS NOTED
	COMBINATION VOICE/DATA OUTLET	18" AFF OR AS NOTED
	DATA OUTLET	18" AFF OR AS NOTED
	VOICE OUTLET	18" AFF OR AS NOTED
	FAX OUTLET	18" AFF OR AS NOTED
CR	CARD READER	COORIDANE WITH SECURITY INSTALLER
SC	SURVEILLANCE CAMERA	COORIDANE WITH SECURITY INSTALLER
TV	T.V. OUTLET	18" AFF OR AS NOTED
	PANELBOARD 120/208V	SEE PANEL SCHEDULE
	PANELBOARD 277/480V	SEE PANEL SCHEDULE
	RACEWAY CONCEALED IN WALL OR ABOVE CEILING	SEE SPECIFICATIONS
	UNDERGROUND OR UNDER FLOOR CONDUIT	SEE SPECIFICATIONS
	HOMERUN TO PANEL. LETTERS INDICATE PANEL, NUMBERS INDICATE CIRCUIT. NOTE: HASH MARKS INDICATES THE NUMBER OF WIRES EXCLUDING THE REQUIRED EQUIPMENT GROUND.	SEE SPECIFICATIONS
S	MOTOR, NUMERAL INDICATES HORSEPOWER	AS NOTED
$	MOTOR RATED SWITCH WITH OVERLOAD RELAYS AS REQUIRED.	MOUNTED ADJACENT TO EQUIPMENT
	NON–FUSIBLE SAFETY SWITCH–SIZE AS NOTED	SEE SPECIFICATIONS
	FUSIBLE SAFETY SWITCH–SIZE AS NOTED	SEE SPECIFICATIONS

*NOTE – ALL SYMBOLS SHOWN MAY NOT BE USED.

ABBREVIATIONS:

AFF	– ABOVE FINISHED FLOOR	HVAC	– HEATING, VENTILATING, AIR CONDITIONING
AHU	– AIR HANDLING UNIT	JB	– JUNCTION BOX
BFG	– BELOW FINISHED GRADE	LRA	– LOCKED ROTOR AMPERES
C	– CONDUIT	MCB	– MAIN CIRCUIT BREAKER
CW	– COOL WHITE	MLO	– MAIN LUGS ONLY
DACP	– DOOR ALARM CONTROL PANEL	N	– NEUTRAL
DN	– FEED DOWNWARD	NL	– NIGHT LIGHT
EF	– EXHAUST FAN	OB	– OUTLET BOX
EG	– EQUIPMENT GROUND	PB	– PULL BOX, PUSH–BUTTON
ENCL	– ENCLOSURE	PS	– PAY STATION
EWC	– ELECTRIC WATER COOLER	SF	– SUPPLY FAN
EWH	– ELECTRIC WATER HEATER	SPEC	– SPECIFICATIONS
WX	– EXPLOSION PROOF	SW	– SHOW WINDOW
FCU	– FAN COIL UNIT	TL	– TWISTLOCK
FHP	– FRACTIONAL HORSEPOWER	TTB	– TELEPHONE TERMINAL BOARD
FLA	– FULL LOAD AMPERES	TVTB	– TELEVISION TERMINAL BOARD
G	– GROUND	UNO	– UNLESS NOTED OTHERWISE
GFI	– GROUND FAULT INTERRUPTER	UP	– FEED UPWARD
HID	– HIGH INTENSITY DISCHARGE	VERT	– VERTICAL
HORIZ	– HORIZONTAL	WM	– WATT MISER
IG	– ISOLATED GROUND	WP	– WEATHERPROOF
LW	– LIGHT WHITE	WW	– WARM WHITE
HP	– HORSEPOWER, HEAT PUMP	XFMR	– TRANSFORMER

NATIONAL ELECTRIC CODE NOTES:

ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF NFPA 70 – 2014 NATIONAL ELECTRIC CODE

ELECTRICAL SUBMITTAL NOTES:

SUBMIT ALL ELECTRICAL SYSTEMS SUBMITTALS AT ONE (1) TIME IN ONE (1) INTEGRAL GROUP. PIECE–BY–PIECE SUBMISSION OF INDIVIDUAL ITEMS WILL NOT BE ACCEPTABLE. ENGINEER MAY CHECK CONTENTS OF EACH SUBMITTAL SET UPON INITIAL DELIVERY; IF NOT COMPLETE AS SET FORTH HEREIN, SUBMITTAL SETS MAY BE RETURNED TO CONTRACTOR WITHOUT REVIEW AND APPROVAL AND WILL NOT BE ACCEPTED UNTIL MADE COMPLETE. SHOP DRAWINGS WILL BE REVIEWED MAXIMUM TWICE AS PART OF THIS CONTRACT. ADDITIONAL SHOP DRAWING REVIEWS SHALL BE INVOICED AT $85.00 PER HOUR, BILLABLE TO THE SUB–CONTRACTOR.

NOTE:

1. ALL MOUNTING HEIGHTS SHOWN ARE TO THE TOP OF THE DEVICE UNLESS NOTED OTHERWISE.
2. NOT ALL SYMBOLS APPEAR ON PLANS.

PROJECT SUMMARY

1. THE ELECTRICAL SERVICE AND SERVICE FEEDERS SHALL BE NEW. REFER TO THE RISER DIAGRAM NOTES ON SHEET E101 FOR DETAILS
2. ADD NEW LIGHTING FIXTURES ACCORDING TO THE PROPOSED FLOOR PLANS OF BOTH BUILDING 'A' AND 'B'.
3. ADD NEW POWER & DATA OUTLETS ACCORDING TO THE PROPOSED FLOOR PLANS OF BOTH THE BUILDINGS.
4. EACH BUILDING SHALL HAVE A SEPARATE NEW PANEL AS SHOWN ON THE PLANS. BOTH THE NEW PANELS SHALL HAVE A MAIN BREAKER THAT ACTS AS A MEANS OF DISCONNECT. REFER TO THE RISER DIAGRAM NOTES ON SHEET E101 FOR DETAILS.
5. FIRE ALARM SYSTEM WILL BE BY OTHERS (IF NEEDED).

THIS SUMMARY PROVIDES THE SCOPE OF WORK TO BE PERFORMED. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL NECESSARY EQUIPMENT, HARDWARE AND SOFTWARE FOR A COMPLETE WORK DELIVERY.

DRAWING INDEX

ELECTRICAL GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2017 – NATIONAL ELECTRIC CODE 2014, NFPA 70. NFPA 101 & NFPA 72 (CURRENT ADOPTED EDITIONS). ANY OTHER APPLICABLE CODE REFERENCES AND ALL LOCAL ORDINANCES.
2. BIDDERS ARE TO VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND SATISFY THEMSELVES AS TO THE NATURE AND SCOPE OF WORK AND THE EXTENT OF DEMOLITION. THE SUBMISSION OF A BID WILL BE EVIDENCED THAT SUCH AN EXAMINATION HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED, OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN HAD AN EXAMINATION BEEN MADE, WILL NOT BE ALLOWED.
3. ELECTRICAL CONTRACTOR SHALL BE EXPERIENCED IN PERFORMING AND INSTALLATION OF WORK SIMILAR TO THAT REQUIRED FOR THIS PROJECT. THE CONTRACTOR SHALL SUBMIT A LIST OF AT LEAST FIVE PROJECTS THAT THEY BEEN CONTRACTED AND COMPLETED CONSTRUCTION WITH SIMILAR PROJECT SCOPE OF WORK.
4. PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL HAVE STUDIED AND COMPARED THE CONTRACT DOCUMENTS WITH EXISTING/PROPOSED CONDITIONS AND NOT LATER THAN TEN (10) DAYS PRIOR TO THE BID OPENING SHALL REPORT TO THE ENGINEER ANY ERROR, INCONSISTENCY, OR OMISSION IN THE CONTRACT DOCUMENTS.
5. ELECTRICAL EQUIPMENT SHALL BE AS SPECIFIED. ARCHITECT AND ENGINEER WILL REVIEW ANY SUBSTITUTION FOR COMPATIBILITY.
6. ALL CUTTING, PATCHING AND REPAIR WORK SHALL BE THE RESPONSIBILITY OF THE TRADE INVOLVED.
7. PROTECT ELECTRICAL EQUIPMENT AND INSTALLATIONS AS NECESSARY. IF DAMAGED OR DISTURBED IN THE COURSE OF THE WORK, REMOVE DAMAGED PORTIONS AND INSTALL NEW PRODUCTS OF EQUAL CAPACITY, QUALITY, AND FUNCTIONALITY.
8. THE CONTRACTOR SHALL INCLUDE WITHIN THE BID ALL REQUIRED OFF HOUR, OVERTIME, AND NON–BUSINESS HOUR WORK AS REQUIRED.
9. ALL WORK SHALL BE COORDINATE WITH OTHER TRADES FOR ITEMS IN THEIR SCOPE OF WORK WHICH WOULD REQUIRE ELECTRICAL WORK (DISCONNECTION/RECONNECTION ETC.) AND ARE NOT INDICATED ON THE ELECTRICAL PLANS. ALL SUBCONTRACTORS ARE REQUIRED TO COORDINATE THEIR WORK WITH OTHER TRADES. LACK OF THIS COORDINATION RESULTING IN ADDED COST TO THE CONTRACT WILL BE BORNE BY THE SUBCONTRACTOR.
10. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND SUBMITTALS FOR ELECTRICAL EQUIPMENT SHOWN ON THE PLANS AND SPECIFICATIONS FOR THE ENGINEERS APPROVAL. THE ENGINEER MAY REQUIRE THE CONTRACTOR TO REDO ANY WORK, WHICH WAS NOT APPROVED, OR THE ENGINEER MAY REQUIRE A CREDIT TO THE OWNER. PROVIDE A SET OF AS BUILTS AFTER THE JOB IS COMPLETED. THIS SET SHALL BE CONTINUOUSLY UPDATED DURING CONSTRUCTION.
11. PROVIDE IDENTIFICATION FOR ALL LIGHT FIXTURES AND ALL ELECTRICAL COVER PLATES WITH PERMANENT MARKER ON A SELF–ADHERING TAG INDICATING PANEL AND CIRCUIT NUMBER. TYPICAL FOR ALL LIGHTING AND POWER DEVICES.
12. ALL WORK SHALL BE PERFORMED DURING TIME PERIODS ACCEPTABLE TO THE OWNER. SCHEDULE ALL WORK WITH THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING.
13. THE CONTRACTOR SHALL PERFORM ALL TEMPORARY WORK NECESSARY TO MAINTAIN CONTINUITY OF ELECTRICAL SERVICE (LIKE SAWPOLE SERVICE) WHEN CONNECTION IS MADE. THIS SERVICE SHALL NOT BE INTERRUPTED WITHOUT PRIOR CONSENT OF THE OWNER'S REPRESENTATIVE AND MAY BE INTERRUPTED ONLY AT AND FOR THE SPECIFIED TIME DESIGNATED BY OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE GUIDED BY THE OWNER'S REPRESENTATIVE AT ALL TIMES IN MATTERS AFFECTING THE FACILITIES.
14. THE CONTRACTOR SHALL COORDINATE ALL PHASING OF ELECTRICAL WORK AS REQUIRED AND INDICATED ON THE ELECTRICAL DRAWINGS.
15. THE OWNER PROJECT REPRESENTATIVE SHALL BE NOTIFIED PRIOR TO CUTTING OF ANY STRUCTURAL ITEM (I.E. CONCRETE FLOOR, MASONRY, WALL, ETC.) WITHIN THE EXISTING BUILDING. METHOD OF CUTTING SHALL BE APPROVED BY THE OWNER PROJECT REPRESENTATIVE.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE BUILDING WATERTIGHT DURING CONSTRUCTION.
17. ALL WIRING IN CEILING SPACE OR IN AIR HANDLING PLENUMS NOT IN CONDUIT SHALL BE UL LISTED AS SUITABLE FOR PLENUM USE.
18. ALL JUNCTION BOXES AND COVER PLATES SHALL BE PAINTED AND LABELED.
19. ALL RECEPTACLES WITHIN (6) FEET OF PLUMBING FIXTURES SHALL BE PROVIDED WITH 5 MILLIAMP GROUND FAULT INTERRUPTERS. (GFCI RECEPTACLES)
20. EXIT SIGNS AND ALL EMERGENCY LIGHTING SHALL BE WIRED AHEAD OF ANY SWITCHING OR CONTACTORS. DO NOT SWITCH EXIT SIGNS OR EMERGENCY NIGHT LIGHTS. CONTRACTOR SHALL PROVIDE AN UNSWITCHED HOT TO BYPASS ANY SWITCHING AND/OR CONTRACTORS FOR ALL SWITCHED EMERGENCY LIGHTING.
21. EDGE OF LIGHT SWITCH WALL PLATE SHALL BE NOT MORE THAN 4" AWAY FROM METAL/WOOD DOOR FRAME. TYPICAL FOR SINGLE OR MULTIPLE WALL SWITCHES.
22. CONFIRM MOUNTING HEIGHTS AND COORDINATE LOCATION OF ALL OUTLETS, SWITCHES, AND OTHER DEVICES WITH ARCHITECTURAL ELEVATIONS (FURNITURE LAYOUT) PRIOR TO ROUGH–IN.
23. PROVIDE SEAL FOR PENETRATION OF FIRE RATED WALLS BY CONDUIT.
24. BACK TO BACK RECEPTACLES IN ALL ONE HOUR FIRE RATED WALLS SHALL BE LOCATED A MINIMUM OF 24" ON CENTER.
25. BRANCH CIRCUIT CONDUCTORS SHALL NOT BE SMALLER THAN NO. 12 AND WHERE BRANCH CIRCUIT CONDUCTOR RUNS FROM SOURCE (PANEL) TO THE LAST DEVICE ON THE CIRCUIT EXCEEDS 75 FT. IN LENGTH, THE CONDUCTORS SHALL BE NO. 10 MINIMUM AND FOR THE ENTIRE LENGTH OF THE CIRCUIT. FOR RUNS OVER 150 FT. IN LENGTH THE CONDUCTOR SHALL BE NO. 8 MINIMUM AND FOR THE ENTIRE LENGTH OF THE CIRCUIT. THE ABOVE APPLIES TO 120 VOLT CIRCUITS ONLY.
26. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER THE REMOVAL AND DISPOSAL OF ALL ELECTRICAL MATERIAL WHICH IS NOT TO BE USED ON THE PROJECT. CONTRACTOR SHALL REMOVE AND STORE ANY ELECTRICAL MATERIAL IF SO DIRECTED BY OWNER. PATCH AND PAINT WALLS AND CEILINGS AS REQUIRED THE CONTRACTOR SHALL COORDINATE INSTALLATION OF NEW LIGHTING FIXTURES, RECEPTACLES, PANEL BOARDS, ETC. WITH EXISTING STRUCTURE, PIPING, ETC. AND MAKE ADJUSTMENTS AS REQUIRED.
27. REFER TO ELECTRICAL SPECIFICATIONS SHEET FOR REQUIREMENTS.
28. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL INSURE THAT ALL SYSTEMS OPERATE AS DESIGNED AND REQUIRED AND SHALL REVIEW THEIR OPERATION WITH THE OWNER AND PROVIDE TRAINING OF THE MAINTENANCE PERSONNEL. COMPLETE SET OF AS–BUILT DRAWINGS SHALL BE COMPILED (BY THE CONTRACTOR) AND ISSUED (1 EACH) TO THE ARCHITECT AND BUILDING MAINTENANCE PERSONNEL UPON COMPLETION OF CONSTRUCTION AND TESTING..
29. ALL FEEDERS SIZING (BRANCH AND SERVICE ENTRANCE CONDUCTORS) BASED IN AMPACITY OF COPPER THHW CONDUCTORS (NEC 2014 TABLE 310.15(B)(16)) UNLESS OTHERWISE NOTED.

DESIGNED BY: SK DATE: 8/12/20
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REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

APPROVED BY:

GRINER ENGINEERING, INC.
3125 Fifth Ave. N.,Suite 300
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Phone: (727)-822-2335
Fax: (727)-821-3361
Certificate of Authorization # 3173

Firm Registration 3173
Jose A Rosario, P.E. 74457

Signature Date

DATE: August 12th, 2020
SCALE: N.T.S.
DRAWING No. 19219-22 E000

Electrical
Cover Sheet

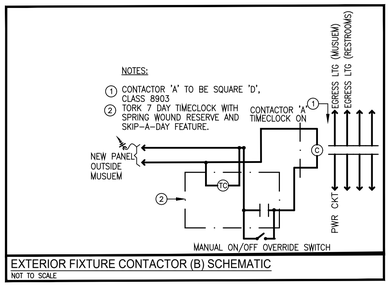
LIGHTING FIXTURE SCHEDULE

#	MANUFACTURER	CAT.#	DESCRIPTION	LAMPS	WATTS	VOLTS	MOUNTING
DE	HALO COMMERCIAL	HC420D010REM7-HM412840-41WDC	4" RECESSED CAN LIGHT FIXTURE. THIS FIXTURE SHALL HAVE EMERGENCY BATTERY PACK.	LED	20	UNV	RECESSED
T1	WAC LIGHTING OR EQUALS BY TBL	EXTERMINATOR II- MODEL #1023 LED	LED SUSPENDED TRACK FIXTURES HUNG AT HEIGHT DIRECTED BY OWNER/ARCHITECT	LED	22W/LAMP HEAD	120	SUSPENDED
W1	CREATIVE SYSTEMS LIGHTING	LWXX-30-35-10-BK-2-S XX- U5 (UP) OR D5 (DOWN)	5" WALL MOUNT CYLINDER- UP/DOWN LIGHT.	LED	30W	UNV	WALL
S2	LUMARK	NFFLD-C40-E-UNV-66-S-BK-7030	NIGHT FALCON SPOTLIGHTS	LED	128W	UNV	WALL
S1	TO BE SELECTED BY OWNER/ARCH OR EQUALS BY TBL	TO BE DETERMINED	OVERHEAD STRING PATIO LIGHTS	LED	MAX3W /LAMP	120	SUSPENDED
W2	METALUX	4BCLED-LD4-32SL-F-UNV-L835-CD1-U	WALL BRACKET LED LIGHTS	LED	32W	UNV	WALL
X	SURE-LITES	APX7GBK	LED EXIT LIGHTING- GREEN. THIS FIXTURE SHALL EMERGENCY BATTERY PACK	LED	1.33W	120	CEILING/WALL
XR	SURE-LITES	APC7RSQ	EMERGENCY EXIT COMBO. THIS FIXTURE SHALL HAVE EMERGENCY BATTERY PACK.	LED	3.7W	120	CEILING/END

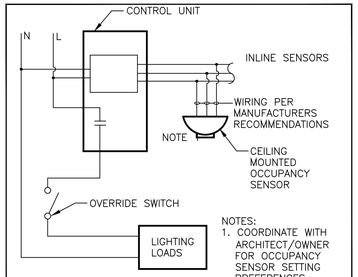
* ALL FIXTURES END WITH 'E' NOMENCLATURE DENOTES EMERGENCY FIXTURES (NFPA 101 COMPLIANT)
TBL- TAMPA BAY LIGHTING

CONTACT INFORMATION OF LIGHTING VENDOR

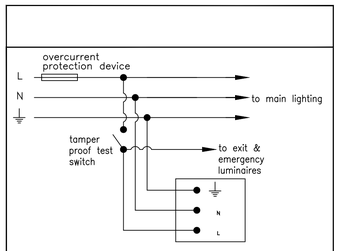
FOR FIXTURES SELECTION & MORE INFORMATION PLEASE CONTACT JEFFREY BUCHANAN
FROM TAMPA BAY LIGHTING
CONTACT NAME: JEFFREY BUCHANAN
PHONE: 813-451-2234
E-MAIL: jeffrey@tampabaylighting.com



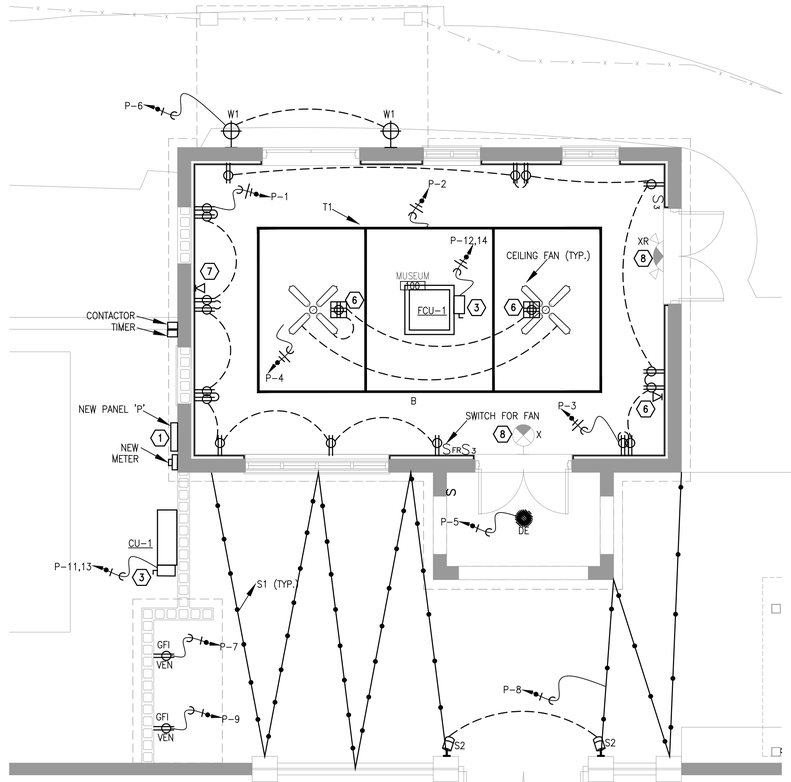
EXTERIOR FIXTURE CONTACTOR (B) SCHEMATIC
NOT TO SCALE



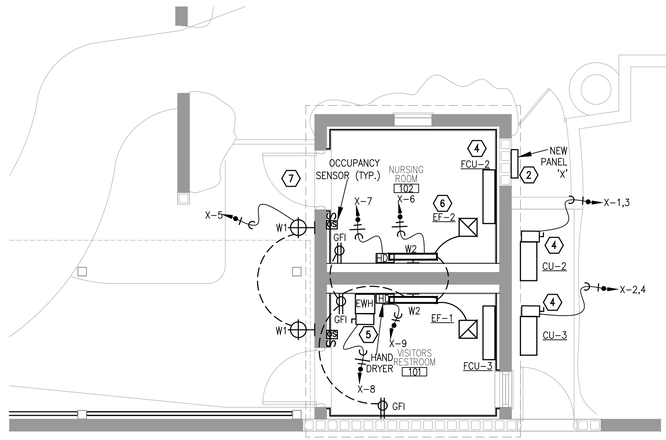
TYPICAL OCCUPANCY SENSOR DIAGRAM
NOT TO SCALE



EMERGENCY LUMINARIES WIRING DETAIL
NOT TO SCALE



N
E1 Bldg A- Electrical Plan - Museum
Scale: 1/4" = 1'-0"



N
E2 Bldg B- Electrical Plan - Restroom
Scale: 1/4" = 1'-0"

ELECTRICAL GENERAL NOTES:

1. COORDINATE EXACT OUTLETS AND EQUIPMENT LOCATIONS WITH ARCHITECT, OWNER, AND GENERAL CONTRACTOR PRIOR TO ROUGH-IN.
2. ELECTRICAL CONTRACTOR SHALL TRACK EXISTING CIRCUITS AND UPDATE THE PANEL SCHEDULE ACCORDINGLY.
3. ALL POWER/LOW VOLTAGE OUTLETS SHALL BE LABELED WITH PANEL AND CIRCUIT NUMBER.
4. COORDINATE ALL COVER PLATES FINISHES WITH ARCHITECT AND OWNER.
5. EVERY CIRCUIT AND CIRCUIT MODIFICATION SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE, NOT LIMITED TO LIGHTS AND RECEPTACLES.
6. WHEREVER THE WORD "PROVIDE" IS USED, IT SHALL MEAN "FURNISH AND INSTALL COMPLETE AND READY FOR USE."
7. NEW BRANCH CIRCUIT SHALL BE MINIMUM 2 #12 AND 1#12 E.G IN 3/4" C UNLESS OTHERWISE NOTED.
8. ELECTRICAL CONTRACTOR SHALL REQUEST THE DRAWINGS OF ALL OTHER DISCIPLINES APPLICABLE TO THIS SCOPE OF WORK AND CAREFULLY REVIEW ALL DRAWINGS BEFORE WORK COMMENCEMENT OR BID SUBMITTAL.IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO PROVIDE ANY ADDITIONAL DEVICE REQUIRED BY THE CODE AND/OR AHJ FOR A COMPLETE AND FULLY FUNCTIONAL WORK OF SCOPE THAT IS NOT COVERED ON THESE DRAWINGS. COORDINATE ALL NEW ELECTRICAL WORK WITH CONTRACTORS OF ALL TRADES AND OWNER.

ELECTRICAL KEY NOTES:

1. NEW SINGLE PHASE ELECTRICAL SERVICE BY UTILITY. NEW METER AND NEW 150 AMP PANEL WITH A MAIN BREAKER SHALL BE PROVIDED AS SHOWN ON THESE DRAWINGS. REFER TO RISER DIAGRAM NOTES ON SHEET E101 FOR DETAILS.
2. FURNISH AND INSTALL NEW 60 AMP SINGLE PHASE PANEL WITH A MAIN BREAKER OUTSIDE THE NURSING ROOM & VISITORS RESTROOM AREA. RUN APPROPRIATE SIZED PVC CONDUITS FROM THE 150 AMP MAIN PANEL 'P' TO PANEL 'X', REFER TO RISER DIAGRAM NOTES ON SHEET E101 FOR DETAILS.
3. FURNISH AND INSTALL NEW 30 A 1P/ NEMA 3R FUSIBLE DISCONNECTS EACH FOR CU-1 & FCU-1, FURNISHED BY MECHANICAL. RUN NEW 3 #10, 1# 10 EG-1" AND CONNECT TO UNIT VIA FLEX CONDUITS.
4. FURNISH AND INSTALL NEW 30 A 1P/ NEMA 3R FUSIBLE DISCONNECT FOR CU-2 & CU-3, FURNISHED BY MECHANICAL. RUN NEW 3 #10, 1# 10 EG-1" AND CONNECT TO UNIT VIA FLEX CONDUITS. INDOOR UNITS FCU-2 & FCU-3 ARE EXPECTED TO BE POWERED BY OUTDOOR UNITS CU-2 & CU-3 RESPECTIVELY THROUGH CONTROL WIRE/S
5. FURNISH AND INSTALL NEW 30 A 1P/ NEMA 1R FUSIBLE DISCONNECT FOR INSTA HOT WATER HEATER IWH, FURNISHED BY MECHANICAL. RUN NEW 3 #8, 1# 10 EG-1" AND CONNECT TO UNIT VIA FLEX CONDUITS.
6. FURNISH & INSTALL NEW FLOOR BOX, HUBBELL SYSTEM ONE OR SIMILAR WITH QUAD OUTLETS AS SHOWN. CONTRACTOR SHALL VERIFY WITH THE MANUFACTURER REQUIREMENT PRIOR TO ROUGH IN. CONTRACTOR SHALL PROVIDE METHODS AND MATERIALS THAT ALLOWS A SINGLE CIRCUIT TO FEED THE WALL RECEPTACLE AS WELL AS THE FLOOR RECEPTACLE. A JUNCTION BOX SHALL BE PERMISSIBLE TO USE.
7. RUN EMPTY 3/4 " CONDUIT STUBBED ABOVE CEILING FOR EACH WAP/DATA/VOICE TO THE IT ROOM. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO ROUGH IN.
8. ALL EMERGENCY FIXTURES SHALL BE CONNECTED TO THE LOCAL UNSWITCH CIRCUIT LEG. REFER TO EMERGENCY & EXIT LUMINIARE WIRING DETAIL FOR ADDITIONAL DETAILS.

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CITY of ST. PETERSBURG

APPROVED BY:

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Certificate of Authorization # 3173

Firm Registration 3173
Jose A Rosario, P.E. 74457

Signature Date

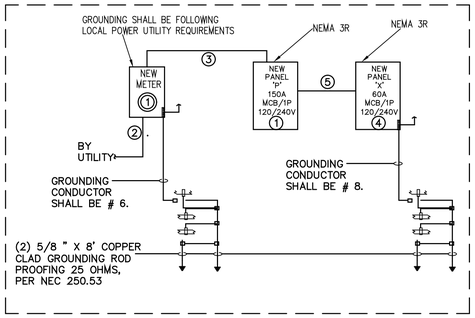
DATE: August 12th, 2020
SCALE: 1/4" = 1'-0"
DRAWING No. 19219-23 E100
Electrical Plan

NEW PANEL 'P'		SURFACE MOUNTED 120/240 VOLT 1 PHASE 3 WIRE WITH GROUND												150A MCB NEMA 3R AIC 22,000 A		
NOTES	CKT. NO.	DESCRIPTION	BREAKER TRIP	POLE	VOLT	A		B		BREAKER VOLT	POLE	TRIP	DESCRIPTION	CKT. NO.	NOTES
2	1	POWER OUTLETS	20	1	120	1620	500			120	1	20	TRACK LIGHTS	2	1
2	3	POWER OUTLETS	20	1	120			1620	1100	120	1	20	FAN AND QUAD OUTLET	4	2
1	5	RECESSED LIGHT	20	1	120	50	100			120	1	20	WALL MOUNT LIGHTS	6	1
2	7	VENDING MACHINE	20	1	120			1440	500	120	1	20	STRING & SPOT LGTS	8	1
2	9	VENDING MACHINE	20	1	120	1440	200			120	1	20	TIMER	10	5
3	11	CU-1	25	2	240			1980	72	15	2	240	FCU-1	12	4
3	13					1980	72							14	4
5	15	PANEL 'X'	60	2	240			3560						16	
5	17					3560								18	
	19													20	
	21													22	
	23													24	
	25													26	
	27													28	
	29													30	
		CONNECTED VA				9522		10272					NOTES ( )		
		SYSTEM VOLTS				120/240V, 1 PHASE									
		PHASE AMPS				79		86							

NOTES	LOAD TYPE		CONNECTED	NEC DEMAND	DEMAND LOAD
1	LIGHTING		1150	1.25	1438 VA
2	RECEPTACLES		7220	1	7220 VA
3	AIR CONDITIONING	IS LARGER	3960	1	3960 VA
4	HEATING		144	0	0 VA
5	MISC. NON-CONTINUOUS		7320	1	7320 VA
6	CONTINUOUS		0	1.25	0 VA
7	KITCHEN		0	0.65	0 VA
				TOTAL	19938 VA
			120/240V, 1 PHASE		84 AMPS

NEW PANEL X		SURFACE MOUNTED 120/240 VOLT 1 PHASE 3 WIRE WITH GROUND												60A MCB NEMA 3R AIC 22,000 A		
NOTES	CKT. NO.	DESCRIPTION	BREAKER TRIP	POLE	VOLT	A		B		BREAKER VOLT	POLE	TRIP	DESCRIPTION	CKT. NO.	NOTES
3	1	CU-2	15	2	240	834	834			240	2	15	CU-3	2	3
3	3							834	834					4	3
1	5	EXTERIOR LIGHTS	20	1	120	100	200			120	1	20	RESTRM LGTS, E/F & REC	6	1
5	7	HAND DRYER	20	1	120			1000	1400	120	1	20	EWH	8	5
5	9	HAND DRYER	20	1	120	1000				120	1	20		10	
	11													12	
	13													14	
	15													16	
		CONNECTED VA				2968		4068					NOTES ( )		
		SYSTEM VOLTS				120/240V, 1 PHASE									
		PHASE AMPS				25		34							

NOTES	LOAD TYPE		CONNECTED	NEC DEMAND	DEMAND LOAD
1	LIGHTING		300	1.25	375 VA
2	RECEPTACLES		0	1	0 VA
3	AIR CONDITIONING	IS LARGER	3336	1	3336 VA
4	HEATING		0	0	0 VA
5	MISC. NON-CONTINUOUS		3400	1	3400 VA
6	CONTINUOUS		0	1.25	0 VA
7	KITCHEN		0	0.65	0 VA
				TOTAL	7111 VA
			120/240V, 1 PHASE		30 AMPS



E1 Power Riser Diagram

Scale: 1/8" = 1'-0"

RISER DIAGRAM NOTES:

1. NEW 150 AMP ELECTRICAL SERVICE BY UTILITY. PROVIDE NEW METER AND NEW 150 AMP PANEL LABELED AS 'P' WITH A MAIN BREAKER AND CONNECT AS SHOWN. REFER TO SHEET E100 FOR LOCATION OF THE METER & THE MAIN PANEL.
2. FURNISH AND INSTALL NEW (1) SET 3# 2/0 IN 2" CONDUIT AND CONNECT AS SHOWN.
3. FURNISH AND INSTALL NEW (1) SET 3# 2/0, 1# 6 GND IN 2" CONDUIT AND CONNECT AS SHOWN.
4. PROVIDE NEW 60 AMP PANEL LABELED AS 'X' WITH A MAIN BREAKER AND AND CONNECT AS SHOWN. REFER TO SHEET E100 FOR LOCATION OF PANEL 'X'.
5. FURNISH AND INSTALL NEW (1) SET 3# 4, 1# 8 GND IN 1-1/4" PVC CONDUIT AND CONNECT AS SHOWN.

SERVICE VOLTAGE DROP

ESTIMATED SERVICE ENTRANCE FEEDER VOLTAGE DROP IS 1.4% (BASED ON A 100 FEET RUN, (1) SET OF # 2/0 A.W.G COPPER CONDUCTOR SERVICE ENTRANCE FEEDER (120/240V 1 PH) AND AMPERAGE PER PANEL "MAIN DISCONNECT" RATED LOAD CAPACITY.

BRANCH CIRCUITS LOADED PER NEC AMPACITY WITH RUNS LESS THAT 75 FEET SHOULD PROVIDE ACCEPTABLE VOLTAGE DROPS PER FBC 2017 6TH EDITION CHAPTER 407.3. CONTRACTOR SHALL INCREASE THE SIZE BY 1 NOMINAL SIZE PER EACH 50 FEET OF WIRING AND INCREASE CONDUIT SIZE ACCORDINGLY.

GENERAL INTERNATIONAL BUILDING CODE NOTES:

ALL ELECTRICAL WORK SHALL COMPLY WITH INTERNATIONAL BUILDING CODE

C405.6.3 VOLTAGE DROP

THE CONDUCTORS FOR FEEDERS AND BRANCH CIRCUITS COMBINED SHALL BE SIZED FOR A MAXIMUM OF 5 PERCENT VOLTAGE DROP TOTAL.

GENERAL NOTES:

1. ELECTRICAL CONTRACTOR TO VERIFY EXISTING CONDITIONS AND TO REPORT TO GENERAL CONTRACTOR, OWNER AND ENGINEER ANY DISCREPANCY FROM THAT SHOWN ON DRAWINGS.
2. COORDINATE ALL NEW ELECTRICAL WORK WITH MECHANICAL CONTRACTOR AND OWNER.
3. PANELS ARE REQUIRED TO HAVE AN PANELBOARD NAMEPLATE PER NEC 408.4(B) SEE TYPICAL PANELBOARD NAMEPLATE DETAILS SHEET E300 FOR MORE INFORMATION

UTILITY CONTACT INFORMATION

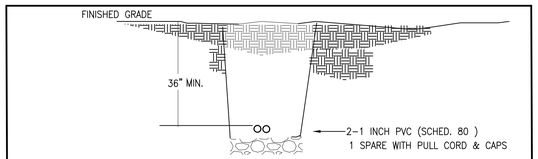
FOR COORDINATION, CONTACT UTILITY COMPANY "DUKE ENERGY"
CONTACT NAME: HELENE MAKO, OFFICE PHONE: 727(209)-7233,
E-MAIL "HELENE.MAKO@DUKE-ENERGY.COM"

FAULT CURRENT ANALYSIS

UTILITY TRANSFORMER VOLTAGE		120/240V 1 PH
NEW POLEMOUNT TRANSFORMER SIZE		25KVA
AFC AT TRANSFORMER		10,400 AMPS
BUS	FAULT CURRENT	MINIMUM AIC & SCCR
PANEL 'P'	10,122 AMPS	22,000 AMPS
PANEL 'X'	9,662 AMPS	22,000 AMPS

* LOAD CONTRIBUTION HAS BEEN ALLOCATED TO TOTAL FAULT CURRENT
AIC – AMPERAGE INTERRUPTING CAPACITY
SCCR – SHORT CIRCUIT CURRENT RATING

1. IN ANY CASE CONFLICTING INFORMATION WERE ENCOUNTERED ON THE ELECTRICAL DRAWINGS "FAULT CURRENT ANALYSIS" TABLE TAKES PRECEDENCE.

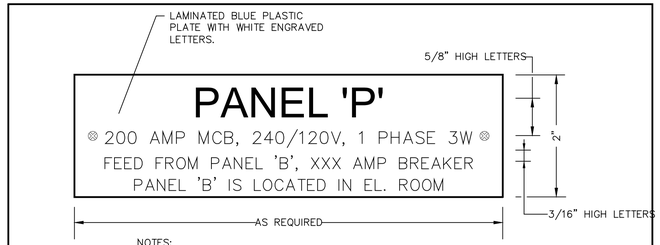


SERVICE TRENCHING NOTES:

1. CONTRACTOR SHALL TRENCH AND INSTALL UNDERGROUND SERVICE AS SHOWN, AS REQUIRED BY UTILITY. CONTRACTOR SHALL HAVE THE LOCATED BY A LOCAL SERVICE, OR THE UTILITY, PRIOR TO ANY DIGGING, ENTIRE TRENCH ROUTE AS INTENDED.

TYPICAL SERVICE TRENCH CONFIGURATION

NOT TO SCALE

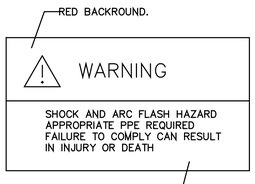


NOTES:

1. NEW NAMEPLATES MUST BE INSTALLED ON ALL ELECTRICAL PANELS ~~TEM~~PORARY NAMEPLATES ARE NOT ACCEPTABLE.
2. THE AMPERAGE RATING ENGRAVED ON THE NAMEPLATE SHALL BE THE RATING OF THE MAIN OVERCURRENT PROTECTION DEVICE, OR ITS TRIP DEVICE SETTING, OR DESIGN BUS CAPACITY IN THE ABSENCE OF A MAIN OVER CURRENT DEVICE, NOT THE SWITCHBOARD OR PANELBOARD BUS RATING.

TYPICAL PANELBOARD NAMEPLATE DETAIL

NOT TO SCALE

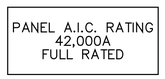


(FLASH PROTECTION DECAL – EXAMPLE)

NOTE:
CONTRACTOR SHALL PROVIDE DECAL 1-1/2" x 2-1/2" WITH 3/16" LETTERING STATING THE ABOVE. DECAL SHALL BE LOCATED ON THE OUTSIDE OF ALL SWITCHBOARDS, PANEL BOARDS AND DISCONNECT SWITCHES. DECAL SHALL BE RED AND YELLOW BACKGROUND WITH BLACK LETTERING WITH A CLEAR PLASTIC LAMINATE TOP COVER OVER DECAL.

FLASH PROTECTION DECAL

NOT TO SCALE



(A.I.C. DECAL – EXAMPLE)

NOTE:
CONTRACTOR SHALL PROVIDE DECAL 1-1/2" x 2-1/2" WITH 3/16" LETTERING STATING THE A.I.C. RATING OF EACH PANEL. THIS DECAL SHALL BE LOCATED ON THE INSIDE OF PANEL DOOR. DECAL SHALL BE WHITE BACKGROUND WITH BLACK LETTERING WITH A CLEAR PLASTIC LAMINATE TOP COVER OVER DECAL.

A.I.C. IDENTIFICATION DECAL

NOT TO SCALE

NOTE: WRITTEN LETTER STATING THE AIC AT THE TRANSFORMER SHALL BE OBTAINED BY THE CONTACTOR FROM THE LOCAL ELECTRIC UTILITY. DATE OF LETTER WILL BE PLACED ON THE DECAL.

DESIGNED BY: SK DATE: 8/12/20
DRAWN BY: SK DATE: 8/12/20
CHECKED BY: JAR DATE: 8/12/20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012.01

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

APPROVED BY:

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Signature Date

DATE: August 12th, 2020
SCALE: N.T.S.
DRAWING No. 19219-24 E101
Load Summary & Power Riser Sheet

ELECTRICAL SPECIFICATION:

INTRODUCTION:

A. THE WORK, APPARATUS AND MATERIALS WHICH SHALL BE FURNISHED UNDER THESE SPECIFICATIONS AND ACCOMPANYING DRAWINGS SHALL INCLUDE ALL ITEMS SPECIFIED HEREINAFTER AND SHOWN ON THE DRAWINGS. ALL OTHER MATERIALS NECESSARY FOR THE COMPLETE INSTALLATION SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR TO PROVIDE COMPLETE ELECTRICAL SYSTEMS AS INDICATED ON THE DRAWINGS AND AS SPECIFIED HEREIN.

B. THE CONTRACTOR SHALL EXTEND THE SERVICE FROM THE POINT OF SERVICE ATTACHMENT FURNISHING ALL PROTECTIVE DEVICES, CONDUCTORS, SUPPORTS, RACEWAYS, ETC. TO PROVIDE COMPLETE INTERIOR ELECTRICAL SYSTEMS TO SERVE MOTOR LOADS, LIGHTING LOADS AND MISCELLANEOUS ELECTRICAL LOADS, AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREINAFTER. THE WORK SHALL INCLUDE COMPLETE TESTING OF ALL EQUIPMENT AND WIRING AT THE COMPLETION OF THE WORK AND MAKING ANY MINOR CONNECTION CHANGES OR ADJUSTMENTS NECESSARY FOR THE PROPER FUNCTIONING OF THE SYSTEM AND EQUIPMENT. ALL WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY AND NO SUBSTANDARD WORK WILL BE ACCEPTED.

C. VERIFY CONDITIONS AT THE FIELD PRIOR TO PRICING THE JOB. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL DETAILS OF THE WORK AND EXISTING CONDITIONS.

D. CONTRACTOR SHALL COORDINATE THE EXACT MOUNTING HEIGHTS AND/OR LOCATIONS OF ALL LIGHTING FIXTURE SWITCHES, OUTLETS AND WIRING DEVICES AND SHALL PERFORM ALL WORK NOTED ON PLANS, IN NOTES OR IN DETAILS RELATED TO THE INSTALLATION. THE OWNER RESERVES THE RIGHT TO RELOCATE ANY DEVICE PRIOR TO ROUGH-IN 10' WITHOUT REVISION TO THE CONTRACT.

E. CONTRACTOR SHALL PAY FOR ALL PERMITS, FEE INSPECTIONS AND TESTING.

F. ALL REQUIRED INSURANCE TO BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY OF PROPERTY DAMAGE FOR DURATION OF THE WORK.

G. ELECTRICAL INSTALLATION TO MEET ALL STANDARD REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE COMPANIES. ELECTRICAL CONTRACTOR SHALL CONTACT LOCAL POWER AND TELEPHONE COMPANY PRIOR TO BID AND START OF CONSTRUCTION.

ELECTRICAL CODES

A. THE WORK UNDER THE REQUIREMENTS OF THESE SPECIFICATIONS SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE. THE INSTALLATION SHALL ALSO COMPLY WITH ALL APPLICABLE RULES AND REGULATIONS OF LOCAL AND STATE LAWS AND ORDINANCES.

INTERFERENCES

A. THE PLANS ARE GENERALLY DIAGRAMMATIC AND THE CONTRACTOR SHALL COORDINATE THE WORK WITH THE DIFFERENT TRADES SO THAT INTERFERENCES BETWEEN CONDUITS. PIPING, EQUIPMENT, ARCHITECTURAL AND STRUCTURAL WORK WILL BE AVOIDED. ALL NECESSARY OFFSETS IN RACEWAYS, FITTINGS, ETC. REQUIRED TO PROPERLY INSTALL THE WORK SHALL BE FURNISHED SO AS TO TAKE UP MINIMUM SPACE, AND ALL MATERIALS REQUIRED TO ACCOMPLISH THIS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR WITHOUT ADDITIONAL EXPENSE TO THE OWNER. IN CASE INTERFERENCE DEVELOPS, THE OWNER'S AUTHORIZED REPRESENTATIVE WILL DECIDE WHICH EQUIPMENT. PIPING, ETC., MUST BE RELOCATED, REGARDLESS OF WHICH WAS INSTALLED FIRST.

MATERIALS

A. IN GENERAL, MATERIALS AND APPARATUS SHALL COMPLY WITH ALL APPLICABLE TESTS, RATINGS, SPECIFICATIONS, AND REQUIREMENTS OF THE IEEE AND NEMA AND SHALL BEAR THE APPROVED DEVICE LABEL OF THE UNDERWRITERS' LABORATORIES, INC. OR OTHER TESTING LABORATORY APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION.

B. THE CONTRACTOR SHALL SUBMIT A LIST OF PRINCIPAL MATERIAL ITEMS, GIVING MANUFACTURER'S NAMES AND CATALOG NUMBERS. APPROVAL OF THE LIST SHALL BE OBTAINED FROM THE OWNER BEFORE ORDERS ARE PLACED.

GUARANTEE

A. CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM DATE OF SUBSTANTIAL COMPLETION. CONTRACTOR SHALL RECTIFY ANY DEFECTS DUE TO FAULTY MATERIALS OR WORKMANSHIP AND PAY FOR ANY DAMAGE TO OTHER WORK RESULTING THEREFROM WITHIN SAID PERIOD. THE OWNER WILL GIVE NOTICE OF DEFECTS WITH REASONABLE PROMPTNESS.

IDENTIFICATION OF EQUIPMENT

A. IDENTIFICATION OF EQUIPMENT SHALL BE PROVIDED FOR ALL ELECTRICAL EQUIPMENT INSTALLED BY THE CONTRACTOR. ENGRAVED LAMINATED PLASTIC NAMEPLATES SHALL BE PROVIDED AND IDENTIFICATION SHALL CLEARLY DESCRIBE THE EQUIPMENT AND FUNCTION. COORDINATE NAMES ABBREVIATIONS AND OTHER DESIGNATIONS USED IN ELECTRICAL IDENTIFICATION WORK WITH CORRESPONDING DESIGNATIONS SHOWN, SPECIFIED OR SCHEDULED. PROVIDE NUMBERS, LETTERS AND WORDING AS INDICATED OR IF NOT OTHERWISE INDICATED, AS RECOMMENDED BY MANUFACTURER OR AS REQUIRED FOR PROPER IDENTIFICATION AND MAINTENANCE OF ELECTRICAL SYSTEMS AND EQUIPMENT.

B. INSTALL LABEL TAGS ON ALL WIRE AND CABLE IN JUNCTION BOXES, WIREWAYS AND WIRING GUTTERS OF PANELS. TAGS SHALL IDENTIFY WIRE OR CABLE CIRCUIT NUMBER AND/OR EQUIPMENT SERVED AS SHOWN ON DRAWINGS.

C. ALL JUNCTION BOXES TO BE DESIGNATED WITH PERMANENT MARKER INDICATING PANELBOARD AND CIRCUIT NUMBERS OF BRANCH CIRCUIT WIRING CONTAINED WITHIN.

D. PANELBOARD DIRECTORIES SHALL BE UPDATED/TYPEWRITTEN WITH ACCURATE AND CURRENT INFORMATION BY THE CONTRACTOR AT THE END OF CONSTRUCTION. DIRECTORIES SHALL REFLECT EXISTING UNCHANGED AND NEW RECORD CONDITIONS AND INCLUDE CIRCUIT NUMBER, TENANT NAME, TYPE AND LOCATION OF LOAD.

RACEWAYS AND FITTINGS

A. HOMERUNS SHALL BE A MINIMUM SIZE OF HALF-INCH (1/2"), UNLESS OTHERWISE SPECIFIED. PROVIDE A MINIMUM OF HALF-INCH (1/2") FOR FLEXIBLE CONNECTIONS TO EQUIPMENT.

B. UNDERGROUND INSTALLATIONS:
1. USE THICKWALL NONMETALLIC CONDUIT, SCHEDULE 40 PVC.
2. IN OR UNDER SLAB-ON-GRADE: USE SCHEDULE 40 PVC OR GRAY HDPE PIPE, PER NEC REQUIREMENTS. USE ONLY UL LISTED AND APPROVED FITTINGS FOR COUPLING AND CHANGE-OVER TO DIFFERENT TYPE RACEWAYS.
3. MINIMUM SIZE: 3/4".
4. INSTALL RIGID STEEL, LONG RADIUS ELBOWS FOR CONDUITS LARGER THAN ONE INCH (1").
5. UNDER SLAB CONDUIT OR POURED-IN CONCRETE CONDUIT SHALL BE PAINTED WITH A COAT OF BITUMASTIC. THE BITUMASTIC SHALL BE CONTINUOUS AND CONTINUE UP THROUGH PENETRATION OF CONCRETE SLABS, UP TO 12" A.F.G. CORROSION TAPE IS ACCEPTABLE.

C. OUTDOOR LOCATIONS, ABOVE GRADE: USE RIGID AND LIQUIDTIGHT FLEXIBLE METAL CONDUIT WITH ENHANCED CORROSION. PROVIDE COMPLETELY COATED OF THE RIGID CONDUIT WITH An ALKALI AND RUST RESISTANT BITUMASTIC PAINT, KOPPER # 50.

D. WET AND DAMP LOCATIONS: USE RIGID STEEL, INTERMEDIATE, AND LIQUIDTIGHT FLEXIBLE METAL CONDUIT.

E. DRY LOCATIONS:

1. CONCEALED: ELECTRICAL METALLIC TUBING.
2. EXPOSED:
   A)EXTERIOR-RIGID STEEL ONLY.
   B)INTERIOR-RIGID STEEL TO 2'0" A.F.G., THENELECTRICAL METALLIC TUBING.

F. METAL CONDUIT
1. RIGID STEEL AND INTERMEDIATE METAL CONDUIT: ANSI C80.1.
2. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; ALL STEEL FITTINGS.
3. RIGID STEEL CONDUIT SHALL BE UNDERWRITERS' APPROVED HOT-DIP GALVANIZED WITH ENHANCED CORROSION PROTECTION. ZINC METALIZED OR SHERADIZED. THE THREADED ENDS OF THE CONDUIT SHALL BE ZINC COATED AND SHALL BE THREADED TYPE WITH ENHANCED CORROSION PROTECTION.
4. ALL CONDUIT SHALL BE MADE UP TIGHT AND NO RUNNING THREADS WILL BE PERMITTED, "ERICSON" COUPLINGS BEING USED WHERE NECESSARY.

G. FLEXIBLE METAL CONDUIT
1. DESCRIPTION: FOR EXPOSED LOCATIONS, INTERLOCKED STEEL CONSTRUCTION. FOR CONCEALED LOCATIONS- INTERLOCKED STEEL CONSTRUCTION.
2. FITTINGS: ANSI/NEMA FB 1.
3. FLEXIBLE METALLIC CONDUIT IN DRY LOCATIONS SHALL BE UNDERWRITERS' APPROVED, ZINC COATED, SINGLE STRIP TYPE. FITTINGS SHALL BE AS MANUFACTURED BY THOMAS AND BETTS "TITE-BITE", STRAIGHT OR ANGLE CONNECTORS OR APPROVED EQUAL.

H. LIQUIDTIGHT FLEXIBLE METAL CONDUIT
1. DESCRIPTION: INTERLOCKED STEEL CONSTRUCTION WITH PVC JACKET.
2. FITTINGS: ANSI/NEMA FB 1.
3. FLEXIBLE CONDUIT IN DAMP OR WET LOCATIONS SHALL BE UNDERWRITERS' APPROVED FLEXIBLE, LIQUID-TIGHT METAL CONDUIT. FITTINGS SHALL BE AS MANUFACTURED BY APPLETON, CROUSE-HINDS OR THOMAS AND BETTS.

I. ELECTRICAL METALLIC TUBING (EMT)
1. DESCRIPTION: ANSI C80.3; GALVANIZED TUBING.
2. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; STEEL SET SCREW OR STEEL COMPRESSION COUPLING OR CONNECTORS. ALL CONNECTORS SHALL BE INSULATED THROAT, UP TO ONE INCH.
3. THIN WALL CONDUIT SHALL BE UNDERWRITERS' APPROVED GALVANIZED ELECTRICAL METALLIC TUBING. COUPLINGS AND CONNECTORS FOR CONDUIT SHALL BE STEEL HEX-NUT, ZINC OR CADMIUM PLATED SET SCREW TYPE FITTING

J. NONMETALLIC CONDUIT
1. DESCRIPTION: NEMA TC 2; SCHEDULE 40 PVC.
2. FITTINGS AND CONDUIT BODIES: NEMA TC 3.

K. TYPE MC CABLE
1. MC CABLE MAY BE USED WHERE CONCEALED IN WALLS. SECURE IN NO MORE THAN 3' INTERVALS AND WITHIN 6" OF OUTLET.

L. UNDERGROUND SERVICE CONDUITS/RACEWAY ENTERING THE BUILDING OR STRUCTURE FROM OUTSIDE SHALL BE SEALED, INCLUDING SPARE CONDUITS. SEALANT SHALL BE SUITABLE FOR THIS USE.

M. ALL UNDERGROUND PVC CONDUIT RUNS SHALL HAVE RIGID STEEL ELBOWS AND RIGID SECTIONS AT SLAB PENETRATIONS WHERE SUBJECT TO POSSIBLE DAMAGE.

N. ALL CONDUITS SHALL BE PROPERLY ALIGNED, GROUPED AND SUPPORTED. EXPOSED CONDUIT SHALL BE INSTALLED AT RIGHT ANGLES TO OR PARALLEL TO THE PRINCIPAL STRUCTURAL MEMBERS. ALL CONDUITS SHALL BE SUPPORTED AT INTERVALS NOT EXCEEDING 8 FEET. PROVIDE SUPPORT A MINIMUM OF 18" FROM BENDS AND OUTLET BOXES AND ON INTERVALS NOT TO EXCEED 8'-0". CONDUIT IS NOT TO SPAN ANY SPACE UNSUPPORTED. ALL CONDUITS SHALL BE SUPPORTED FROM STRUCTURE AND NOT FROM CEILING SUPPORT SYSTEM.

O. PROVIDE NYLON PULL CORD AND LEAVE IN PLACE IN EACH EMPTY CONDUIT. LABEL EACH END OF THE PULL CORD WITH LOCATION OF THE OPPOSITE END.

BOXES

A. ALL BOXES SHALL BE RIGIDLY MOUNTED AND SHALL BE EQUIPPED WITH SUITABLE SCREW FASTENED COVERS. OPEN KNOCK-OUTS OR HOLES IN BOXES SHALL BE PLUGGED WITH A SUITABLE BLANKING DEVICE.

B. OUTLET BOXES FOR EXPOSED WALL MOUNTING, AND OUTDOOR INSTALLATIONS SHALL BE CAST WITH THREADED HUB TYPE WITH SUITABLE COVERS. WEATHERPROOF RECEPTACLE COVERS SHALL BE "IN USE" TYPE AND HAVE METAL SPRING HINGE LIDS.

CONDUCTORS

A. UNLESS OTHERWISE INDICATED, ALL BRANCH CIRCUIT CONDUCTORS SHALL BE #12 AWG. BRANCH CIRCUITS RUN OVER 75 FEET IN LENGTH. MEASURING ONE WAY FROM THE FIRST OUTLET OF THE CIRCUIT TO THE PANEL, SHALL BE #10 AWG FOR THE ENTIRE CIRCUIT.

B. SPLICES, TAPS AND ATTACHMENT FITTINGS AND LUGS SHALL BE ELECTRICALLY AND MECHANICALLY SECURE AND SOLDERLESS FOR CONDUCTORS SIZES #8 AWG AND LARGER. THERE SHALL BE PLENTY OF SLACK CABLE IN BOXES, OUTLETS AND CABINETS TO INSURE THAT THERE IS NO BINDING AT THE BUSHINGS. ALL LUGS SHALL BE OF THE CORRECT SIZES FOR THE CONDUCTORS JOINED AND IN NO CASE SHALL STRANDS BE CUT FROM A CONDUCTOR IN ORDER TO FIT THE CONDUCTOR INTO A LUG. TAPING OF JOINTS SHALL BE WITH VINYL PLASTIC ELECTRICAL TAPE TO SECURE INSULATION STRENGTH EQUAL TO THAT OF THE CONDUCTORS JOINED.

C. ALL CONDUCTORS SHALL BE COPPER. CONDUCTOR INSULATION SHALL BE DUAL TYPE THHN/THWN 75° C. (167°F.) FOR DRY, DAMP & WET LOCATIONS. CONDUCTOR INSULATION WITH SINGLE TYPE MARKING THHN 90° C. (194° F.) MAY BE USED FOR DRY LOCATIONS ONLY. ALL CONDUCTORS SHALL BE COLOR CODED AS REQUIRED BY NEC AND FURTHER IDENTIFIED AND CODED AS SPECIFIED HEREINAFTER. COLOR CODING SHALL BE BY MEANS OF COLORED INSULATING MATERIAL, COLORED BRAID OR JACKET OVER THE INSULATION OR BY MEANS OF SUITABLE COLORED, PERMANENT, NON-AGING, INSULATING TAPE APPLIED TO CONDUCTORS AT EACH CABINET OR JUNCTION POINT. THE COLOR CODING SHALL BE ACCOMPLISHED AS THE CONDUCTORS ARE INSTALLED. THE FOLLOWING SYSTEMS OF COLOR CODING SHALL BE STRICTLY ADHERED TO:
1. ISOLATED GROUND LEADS: GREEN AND YELLOW.
2. GROUND LEADS: GREEN
3. GROUNDED NEUTRAL LEADS: WHITE
4. 120/240 VOLT, UNGROUNDED PHASE WIRES: BLACK AND RED.

THE COLOR CODE ASSIGNED TO EACH PHASE WIRE SHALL BE CONSISTENTLY FOLLOWED THROUGHOUT. NOTE: WHERE EXISTING BASE BUILDING COLOR CODING DIFFERS FROM COLOR CODING ASSIGNED HERE-IN, CONTRACTOR SHALL USE EXISTING COLOR CODING AS REQUIRED TO MAINTAIN CONSISTENCY. ADVISE ENGINEER (IN WRITING) OF COLOR CODING TO BE USED.

D. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR AND MAKE ALL REQUIRED CONNECTIONS TO SERVE MECHANICAL EQUIPMENT FURNISHED.

E. ALL CONDUITS AND WIRING PENETRATING RATED FLOORS, CEILINGS AND WALLS SHALL BE SEALED TO MAINTAIN FIRE RATING AND INTEGRITY OF SEPARATION. PENETRATION SHALL BE PER UL ASSEMBLY STANDARDS.

F. WHEN MAIN ELECTRICAL SERVICE CONDUCTOR HAS A WIREWAY, E.C. SHALL TAP OFF ALL SERVICE ENTRANCE FEEDERS (PARALLEL CONDUCTORS) FOR TOTAL AMPACITY & BALANCING.

GROUNDING

A. THE INTERIOR ELECTRICAL SYSTEMS SHALL BE COMPLETELY AND EFFECTIVELY GROUNDED AS REQUIRED BY THE NEC AND AS SPECIFIED HEREINAFTER.

B. ALL METALLIC RACEWAYS SHALL BE MECHANICALLY AND ELECTRICALLY SECURE AT ALL JOINTS AND AT ALL BOXES, CABINETS, FITTINGS, AND EQUIPMENT. METALLIC RACEWAYS SHALL BE CONNECTED TO A DIRECT GROUND AT THE POINT OF ELECTRICAL SERVICE ENTRANCE AND SHALL BE ELECTRICALLY CONTINUOUS THROUGHOUT THE ENTIRE SYSTEM.

C. ALL GROUND CONDUCTORS SHALL BE INSULATED COPPER UNLESS OTHERWISE NOTED.

D. ALL RACEWAYS WITH #10 OR 12 AWG PHASE CONDUCTORS FOR RECEPTACLES, LIGHTING FIXTURES AND SIMILAR CIRCUITS (NEW BRANCH CIRCUITS) SHALL BE PROVIDED WITH A PARITY SIZED GREEN EQUIPMENT GROUND CONDUCTOR. GROUND CONDUCTOR SHALL BE INSTALLED IN ENTIRE RACEWAY SYSTEM INCLUDING WALL SWITCHES AND FLEXIBLE CONDUIT TO LIGHT FIXTURES. EQUIPMENT GROUND CONDUCTOR SIZES FOR CIRCUITS WITH PHASE CONDUCTORS LARGER THAN #10 AWG ARE INDICATED ON DRAWINGS. GROUND CONDUCTORS SHALL BE CONNECTED TO GROUND BUS IN PANELBOARDS.

E. TERMINATE FEEDER AND BRANCH CIRCUIT INSULATED EQUIPMENT GROUNDING CONDUCTORS WITH GROUNDING LUG, BUS, OR BUSHING. CONDUCTORS LOOPED UNDER SCREW OR BOLT HEADS WILL NOT BE PERMITTED.

F. INSTALL CLAMP-ON CONNECTORS ON CLEAN METAL CONTACT SURFACES TO ENSURE ELECTRICAL CONDUCTIVITY AND CIRCUIT INTEGRITY.

G. PROVIDE GROUNDING BUSHING AND A CONTINUOUS COPPER BONDING JUMPER FROM THE BUSHING TO THE EQUIPMENT GROUND BUS IN ALL FEEDERS. THE BONDING JUMPER SHALL BE THE SAME SIZE AS THE EQUIPMENT GROUND CONDUCTOR.

H. GROUND SHALL BE 5/8" DIAMETER, TEN (10) FEET LONG COPPER-CLAD STEEL. OBTAIN TWENTY FIVE (25) OHMS MAXIMUM RESISTANCE AS READ WITH AN OHM METER, USING TWO REFERENCE RODS. IF TWENTY FIVE (25) OHMS CANNOT BE ACHIEVED, CONTRACTOR SHALL PROVIDE ADDITIONAL RODS, UNTIL TWENTY FIVE FIVE (25) HAS BEEN OBTAIN.

CIRCUIT PROTECTIVE DEVICES

A. GENERAL:

1. UNLESS OTHERWISE INDICATED, PROTECTIVE DEVICES SHALL BE MOUNTED WITH TOP OF CABINET OR ENCLOSURE 6'- 6" ABOVE FINISHED FLOOR, SHALL BE PROPERLY ALIGNED, AND SHALL BE ADEQUATELY SUPPORTED INDEPENDENTLY OF THE CONNECTING RACEWAYS. ALL STEEL SHAPES, ETC., NECESSARY FOR THE SUPPORT OF THE EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. UNLESS OTHERWISE INDICATED, ALL BRANCH CIRCUIT PROTECTIVE DEVICES ENCLOSURES SHALL BE NEMA TYPE 1, GENERAL PURPOSE TYPE. CIRCUIT PROTECTIVE DEVICES INSTALLED OUTDOORS OR EXPOSED TO THE WEATHER SHALL HAVE WEATHERPROOF ENCLOSURES, NEMA TYPE 4X STAINLESS STEEL 316.

2. INSTALL DISCONNECT SWITCHES FOR USE WITH MOTOR-DRIVEN APPLIANCES, AND MOTORS AND CONTROLLERS WITHIN SIGHT OF CONTROLLER POSITION UNLESS OTHERWISE INDICATED.

B. SAFETY SWITCHES:

1. ALL SAFETY SWITCHES SHALL BE HEAVY DUTY TYPE. SWITCH MECHANISM SHALL BE QUICK-MAKE, QUICK-BREAK. COVER SHALL BE INTERLOCKED WITH MECHANISM TO PREVENT OPENING UNLESS SWITCH IS IN THE "OFF" POSITION. ALL ENCLOSURES SHALL BE PRIMED AND FINISHED TO RESIST RUSTING AND CORROSION. SWITCHES SHALL BE ITE, GENERAL ELECTRIC, SQUARE-D, OR CUTLER-HAMMER. (MATCH BUILDING STANDARD WHERE APPLICABLE)

C. FUSES:

1. ALL FUSES FOR SWITCHES SHALL BE DUAL ELEMENT, CARTRIDGE TYPE. FUSES SHALL BE BUSSMAN "FUSETRON" OR CHASE SHAWMUT "TRIONIC". THE CONTRACTOR SHALL FURNISH AND INSTALL PROPER SIZE FUSES WHERE REQUIRED FOR ALL FUSIBLE EQUIPMENT AND SHALL FURNISH TO THE OWNER A DUPLICATE CARTRIDGE FOR EACH FUSE TYPE INSTALLED.

2. FUSES FOR HVAC EQUIPMENT (ROOF TOP UNITS, CONDENSING AND AIR HANDLING UNITS) SHALL BE RK5 TYPE, TYPICAL UNLESS OTHERWISE NOTED. CONFIRM WITH HVAC EQUIPMENT NAME PLATE FOR SPECIFIC FUSE REQUIREMENTS.

PANELBOARDS:

A. PANELBOARDS SHALL BE CONNECTED DISTRIBUTED PHASE WITH CIRCUIT NUMBERING AS INDICATED ON THE DRAWINGS. PANELBOARDS SHALL HAVE CIRCUIT DIRECTORY CARDS AND SHALL BE COMPLETED WITH A TYPEWRITER BY THE CONTRACTOR TO INDICATE NEW AND EXISTING AREAS AND/OR DEVICES SERVED BY EACH CIRCUIT.

B. CIRCUIT BREAKERS FOR MOUNTING IN NEW PANELBOARDS OR DISTRIBUTION SECTION OF SWITCHBOARD SHALL BE MOLDED PLASTIC CASE, AIR CIRCUIT BREAKER TYPE. BREAKERS SHALL HAVE THERMAL-MAGNETIC TRIP UNITS AND MULTI-POLE BREAKERS SHALL HAVE A COMMON TRIP BAR SO THAT THE TRIPPING OF ONE POLE WILL AUTOMATICALLY TRIP ALL POLES OF THE BREAKER. BREAKERS SHALL BE TRIP FREE AND TRIP-INDICATING AND SHALL HAVE QUICK-MAKE, QUICK BREAK CONTACTS.

C. PANELBOARDS SHALL BE INSTALLED COMPLETE WITH CONNECTORS AND ASSOCIATED HARDWARE FOR ALL CIRCUIT BREAKERS AND SPACES LISTED IN THE PANELBOARD SCHEDULE.

D. PANELBOARDS TO BE DEADFRONT TYPE, WITH ALUMINMUM/COPPER BUS BARS, WITH BOLT-ON TYPE BRANCH CIRCUIT BREAKERS EQUAL TO SQUARE-D TYPE NQOD, NF, OR I-LINE AS APPLICABLE. ALL CIRCUIT BREAKERS SHALL BE CONCEALED BEHIND A HINGED, LOCKABLE DOOR INSTALLED ON THE FRONT PANELBOARD COVER.

E. ALL PANELBOARDS TO BE IDENTIFIED WITH ENGRAVED PLASTIC LAMINATE SIGNS. COORDINATE NAMES USED FOR IDENTIFICATION WITH CORRESPONDING DESIGNATIONS SHOWN, SPECIFIED OR SCHEDULED. FASTEN WITH SELF TAPPING STAINLESS STEEL SCREWS, OR CONTACT TYPE PERMANENT ADHESIVE WHERE SCREWS CAN NOT OR SHOULD NOT PENETRATE SUBSTRATE. INDICATE PANEL NAME, LOCATION, FEEDER, VOLTAGE, PHASE, WIRES, AND AMPERAGE.

F. INSTALL PANELBOARDS AND ENCLOSURES AS INDICATED, IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS, APPLICABLE REQUIREMENTS OF NEC STANDARDS AND NECA'S "STANDARDS OF INSTALLATION", AND IN COMPLIANCE WITH RECOGNIZED INDUSTRY PRACTICES TO ENSURE THAT PRODUCTS FULFILL REQUIREMENTS.

G. PANEL LOAD DATA IS BASED ON INFORMATION GIVEN TO ENGINEER AT THE TIME OF DESIGN. VERIFY ALL EQUIPMENT NAMEPLATE RATING BEFORE ORDERING.

H. TYPEWRITTEN CIRCUIT PANEL DIRECTORY SHALL BE PROVIDED INSIDE OF EACH PANELBOARD DOOR. CLEARLY IDENTIFY AREA AND TYPE OF LOAD SERVED BY EACH BRANCH CIRCUIT PROTECTIVE DEVICE, INCLUDING SPARES. HAND PRINTED WILL NOT BE ACCEPTED.

I. THE PANEL BREAKERS SHALL BE FULLY RATED. SERIES RATING IS NOT ACCEPTABLE.

RECEPTACLES

A. ALL RECEPTACLES SHALL BE THE GROUNDING TYPE WITH GROUND CONNECTION MADE THROUGH AN EXTRA POLE WHICH SHALL BE PERMANENTLY CONNECTED TO GROUND CONDUCTOR.

B. RECEPTACLES FOR 20 AMPERE, 120V SERVICE SHALL BE THREE-WIRE, TWO POLE RECEPTACLES RATED 20 AMPERES AT 120 VOLTS. 15 AMPERE RECEPTACLES WILL BE ACCEPTABLE ON MULTI-OUTLET CIRCUITS. ALL NEW RECEPTACLES SHALL BE THAT OF LEVITON OR HUBBELL OR PRE-APPROVED EQUAL.

C. WALLPLATES: PROVIDE WALLPLATES FOR SINGLE AND COMBINATION WIRING DEVICES, OF TYPES, SIZES, AND WITH GANGING AND CUTOUTS AS INDICATED. SELECT PLATES WHICH MATE AND MATCH WIRING DEVICES TO WHICH ATTACHED. CONSTRUCT WITH METAL SCREWS FOR SECURING PLATES TO DEVICES; SCREW HEADS COLORED TO MATCH FINISH OF PLATES, WALLPLATES COLORED TO MATCH WIRING DEVICES AND ADJACENT WALL SURFACES. PROVIDE STAINLESS STEEL PLATES IN BREAK ROOM, FOOD SERVICE AND COUNTER AREAS.

D. ELECTRICAL CONTRACTOR SHALL CONFIRM RECEPTACLE CONFIGURATION, VOLTAGE, PHASE AND AMPERAGE FOR ALL EQUIPMENT FURNISHED AND INSTALLED FOR THIS WORK. ADVICE ENGINEER IF REQUIRED.

ALL REQUIRED DEVICES SHALL MATCH IN COLOR AND STYLE.
COLOR OF DEVICES AND PLATES SHALL BE DICTATED BY ARCHITECT AND OWNER.

MOTOR STARTERS:

A. MANUAL MOTOR STARTERS FOR 115V, 1Ø MOTORS (1) HORSEPOWER AND SMALLER, SHALL BE SINGLE POLE, HORSEPOWER RATED SWITCHES WITH THERMAL OVERLOAD UNITS AND HEATERS. STARTERS SHALL BE SQUARE-D CLASS 2510, WITH STAINLESS STEEL COVER PLATES.

LIGHTING FIXTURES:

A. THE CONTRACTOR SHALL FURNISH AND INSTALL, COMPLETE IN ALL RESPECTS, ALL LIGHTING FIXTURES SHOWN ON THE PLANS.

B. SHOP DRAWINGS: SUBMIT FIXTURE SHOP DRAWINGS MINIMUM (6) COPIES IN BOOKLET FORM, WITH SEPARATE SHEET FOR EACH FIXTURE ASSEMBLED IN "LUMINAIRE TYPE" ALPHABETICAL OR NUMERICAL ORDER, WITH PROPOSED FIXTURE, LIGHTING PHOTOMETRIC, INPUT WATTS, AND ACCESSORIES CLEARLY INDICATED ON EACH SHEET. SUBMIT DETAILS INDICATING COMPATIBILITY WITH CEILING GRID SYSTEM.

C. BALLASTS FOR FLUORESCENT LAMPS SHALL BE HIGH FREQUENCY ELECTRONIC FOR USE WITH OTIC TYPE (265MA) LAMPS. THE TOTAL HARMONIC DISTORTION (%THD) SHALL BE LESS THAN 10. POWER FACTOR SHALL BE 95 OR HIGHER. ELECTRONIC BALLASTS FOR FLUORESCENT LAMPS SHALL BE OSRAM SYLVANIA, QUICKTRONIC. ALL BALLASTS SHALL BE INDIVIDUALLY FUSED ON THE LINE SIDE OF THE BALLAST. ALL BALLASTS SHALL BE ENERGY SAVING, HIGH POWER FACTOR TYPE AND SHALL BEAR ETL/CBM AND UL LABELS.

D. T-8 AND T-5 FLUORESCENT, COMPACT FLUORESCENT LAMPS SHALL BE AS SPECIFIED ON LIGHTING FIXTURE SCHEDULE OR AS NOTED. INCANDESCENT LAMPS SHALL BE 120V. GENERAL PURPOSE TYPE. UNLESS OTHERWISE NOTED ALL LAMPS SHALL BE TCLP COMPLIANT AND MANUFACTURED BY OSRAM SYLVANIA. U-SHAPED LAMPS SHALL HAVE 6" SPACING BETWEEN ENDS.

E. ALL FIXTURES SHALL BE PROPERLY AND CAREFULLY SUPPORTED AND ALIGNED, AND THE CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY STEEL SHAPES, ETC., FOR SUPPORT OF FIXTURES AS REQUIRED AND DETAILED ON THE DRAWINGS. LIGHTING FIXTURES SHALL BE CLEAN AND NON-OPERATING LAMPS REPLACED WITH NEW LAMPS AT THE TIME OF FINAL INSPECTION.

F. LED FIXTURES SHALL BE FURNISHED TO MATCH THE REQUIREMENTS FOR THE PARTICULAR APPLICATION. COLOR (CRI) SHALL BE 3500K, 4100K OR AS DIRECTED. LED LIGHT INTENSITY SHALL BE MINIMUM OF 20MA AND POSSESS AT LEAST L70% LUMEN MAINTENANCE FACTOR (LESS THAN 30% REDUCTION IN LIGHT OUTPUT OVER 50,000HR LIFE). PARTICULAR ATTENTION SHOULD BE PAID TO LUMEN OUTPUT OF THE FIXTURE BEING SUBSTITUTED, WHICH SHOULD NOT BE LESS THAN THE FLUORESCENT FIXTURE IT REPLACES. ATTENTION SHOULD BE PAID TO OUTPUT PATTERN AS WELL.

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Certificate of Authorization # 3173

Firm Registration 3173
Jose A Rosario, P.E. 74457

Signature Date

DATE: August 12th, 2020
SCALE: N.T.S.
DRAWING No. 19219-25 E201

Electrical Specifications

PRE-BID SUBMITTAL

THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO BIDDING TO FAMILIARIZE HIMSELF WITH THE CONDITIONS FOR CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL OBTAIN FROM THE OWNER A WRITTEN LIST OF ALL PERMITS AND COPIES THEREOF, AND CAREFULLY REVIEW ALL PLANS, SPECIFICATIONS, AND PERMITS PREVIOUSLY SECURED ON BEHALF OF THE OWNER. IN CASE OF ANY DISCREPANCY EITHER IN PERMIT DOCUMENTS, PLANS, DRAWINGS, OR SPECIFICATIONS, THE CONTRACTOR MUST PROMPTLY SUBMIT A "WRITTEN CLARIFICATION REQUEST" TO THE OWNER, WHO WILL PROMPTLY FORWARD SAME TO THE ENGINEER WHO WILL MAKE A DETERMINATION IN WRITING. THE CONTRACTOR MUST VERIFY EXISTING FACILITY INFORMATION, AND ALL DESIGN/PERMIT DATA REQUIRED FOR WORK THAT IS TO CONNECT WITH EXISTING FACILITIES. ANY DISCREPANCIES BETWEEN THE CONTRACT REQUIREMENTS AND THE EXISTING CONDITIONS MUST BE REFERRED TO THE OWNER, IN WRITING, FOR AN ENGINEERING DETERMINATION. ANY FURTHER ADJUSTMENT DUE TO FAILURE BY THE CONTRACTOR TO IDENTIFY THE RELATED DISCREPANCY, WILL BE AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY LICENSES AND ADDITIONAL PERMITS AND FOR COMPLYING WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, CODES, AND REGULATIONS IN CONNECTION WITH THE PERFORMANCE OF THE WORK.

CONSTRUCTION SAFETY AND LIABILITY

THE CONTRACTOR MUST TAKE PROPER SAFETY AND HEALTH PRECAUTIONS TO PROTECT THE WORK, THE WORKERS, THE PUBLIC, AND THE PROPERTY OF OTHERS. THE CONTRACTOR IS RESPONSIBLE FOR ALL MATERIALS DELIVERED AND WORK PERFORMED UNTIL COMPLETION AND ALL ACCEPTANCES HAVE BEEN OBTAINED. THE CONTRACTOR SHALL MAINTAIN TRAFFIC DURING CONSTRUCTION IN ACCORDANCE WITH "THE STATE OF FLORIDA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. " THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO PERSONS OR PROPERTY THAT OCCURS AS A RESULT OF HIS NEGLIGENCE. THE CONTRACTOR MUST SAVE HARMLESS AND INDEMNIFY THE OWNER AND VICKSTROM ENGINEERING SERVICES, INC., ITS OFFICERS, REPRESENTATIVES, AND EMPLOYEES FROM ALL CLAIMS, LOSS, DAMAGE, ACTIONS, CAUSES OF ACTION, AND/OR EXPENSES RESULTING FROM, BROUGHT FOR, OR ON ACCOUNT OF ANY PERSONAL INJURY OR PROPERTY DAMAGE RECEIVED OR SUSTAINED BY ANY PERSONS OR PROPERTY GROWING OUT OF, OCCURRING, OR ATTRIBUTABLE TO ANY WORK PERFORMED UNDER OR RELATED TO THIS CONTRACT, RESULTING IN WHOLE OR IN PART FROM THE NEGLIGENT ACTS OR OMISSIONS OF THE CONTRACTOR, ANY SUBCONTRACTOR, OR ANY EMPLOYEE, AGENT, OR REPRESENTATIVE OF THE CONTRACTOR OR ANY SUBCONTRACTOR.

PRE-CONSTRUCTION

THE OWNER SHALL SECURE PRIOR TO CONSTRUCTION A PROFESSIONAL LAND SURVEYOR TO PERFORM AN "AS-BUILT" SURVEY OF ALL COMPLETED IMPROVEMENTS. THE OWNER SHALL ALSO SECURE PRIOR TO CONSTRUCTION A PROFESSIONAL ENGINEER TO PROVIDE THE APPROPRIATE SERVICES NEEDED IN ORDER TO CERTIFY TO ALL APPLICABLE REGULATORY AGENCIES THAT THE IMPROVEMENTS WERE CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH ALL APPLICABLE PERMITS AND APPROVALS. THE OWNER SHALL COORDINATE A PRE-CONSTRUCTION MEETING WITH THE ENGINEER, SURVEYOR, CONTRACTOR, TESTING LAB, UTILITY COMPANIES, AND APPROPRIATE REGULATORY AGENCIES. THE CONTRACTOR SHALL PROVIDE A SHOP DRAWING SUBMISSION SCHEDULE FOR ALL PROJECT MATERIALS AND COMPONENTS. THE CONTRACTOR SHALL NOT INITIATE CONSTRUCTION OF ANY PORTION OF THE IMPROVEMENTS UNTIL THE SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED FOR THAT PORTION BY THE ENGINEER. THE OWNER, CONTRACTOR, ENGINEER AND UTILITY COMPANY SHALL ALSO DISCUSS ALL DOCUMENTATION REQUIRED FOR CONTRIBUTED FACILITIES TRANSFER FROM THE OWNER/DEVELOPER TO THE UTILITY COMPANY UPON PROJECT COMPLETION.
UNLESS OTHERWISE SPECIFIED BY THE UTILITY COMPANY, THE FOLLOWING DOCUMENTS SHALL BE PROVIDED:
DOCUMENTS REQUIRED FOR CONTRIBUTED FACILITIES FROM DEVELOPER TO UTILITY COMPANY:

1. UTILITY EASEMENT(S): MUST BE RECORDED AT COUNTY CLERK OF COURT OFFICE BEFORE SUBMITTING TO UTILITY.
2. EASEMENT ACKNOWLEDGMENT.
3. AFFIDAVIT.
4. RELEASE OF LIEN.
5. BILL OF SALE.
6. ASSIGNMENT OF RIGHTS UNDER UTILITY AGREEMENT: WHEN PROPERTY HAS BEEN TRANSFERRED TO A NEW OWNER.
7. DESCRIPTION OF FACILITIES: A SHORT EXPLANATION DEPICTING WHAT HAS BEEN CONSTRUCTED.
8. DETAILED COST OF CONSTRUCTION; MUST INCLUDE INDIVIDUAL ITEMS OR APPURTENANCES, UNIT COST AND TOTAL COST OF EACH. DO NOT INCLUDE WATER SERVICE LINES OR SEWER LATERALS.
9. RECORD DRAWINGS (AS-BUILT): MUST BE SIGNED AND SEALED BY ENGINEER OF RECORD. SUBMIT A PDF, CAD DRAWING FILE AND TWO COPIES OF PRINTS.
10. F.D.E.P. APPLICATION(S).
11. INSPECTION REPORT(S).
12. PRESSURE TEST REPORT(S).
13. INFILTRATION-EXFILTRATION TEST REPORT(S), INCLUDING VIDEO TAPES AND LAMPING REPORTS.
14. LIFT STATION INSPECTION (START-UP) REPORT(S) AND EQUIPMENT SHOP DRAWINGS.
15. BACTERIOLOGICAL TEST REPORT(S).
16. ENGINEER'S CERTIFICATE OF SUBSTANTIAL COMPLETION TO F.D.E.P.
17. SYSTEM(S) ACCEPTANCE LETTER(S) FROM F.D.E.P.

ITEMS 1-8 TO BE SUPPLIED BY OWNER.
ITEMS 9-17 TO BE SUPPLIED BY ENGINEER OF RECORD.
UNLESS OTHERWISE SPECIFIED BY THE UTILITY, THE CONTRACTOR SHALL NOTIFY THE SUPERINTENDENTS OF THE WATER, GAS, SEWER, TELEPHONE, AND POWER COMPANIES, 10 DAYS IN ADVANCE, THAT HE INTENDS TO START WORK IN A SPECIFIC AREA. THE OWNER AND ENGINEER DISCLAIM ANY RESPONSIBILITY FOR THE SUPPORT AND PROTECTION OF SEWERS, DRAINS, WATER LINES, GAS LINES, CONDUITS OF ANY KIND, UTILITIES OR OTHER STRUCTURES OWNED BY THE CITY, COUNTY, STATE OR BY PRIVATE OR PUBLIC UTILITIES LEGALLY OCCUPYING ANY STREET, ALLEY, PUBLIC PLACE, RIGHT-OF-WAY, OR EASEMENT.

ENVIRONMENTAL PROTECTION DURING CONSTRUCTION

PROTECTION OF LAND RESOURCES - EXCEPT IN AREAS IDENTIFIED ON THE PLANS TO BE CLEARED, THE CONTRACTOR MUST NOT DEFACE, INJURE, OR DESTROY TREES OR SHRUBS OR REMOVE OR CUT THEM WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER. IN THE ABSENCE OF A CLEARING PLAN, AREAS SHOWN FOR IMPROVEMENTS SHALL BE CLEARED UNLESS NOTED OTHERWISE.
PROTECTION OF WATER RESOURCES - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INVESTIGATE AND COMPLY WITH ALL APPLICABLE FEDERAL, STATE, REGIONAL, COUNTY, AND MUNICIPAL LAWS CONCERNING POLLUTION OF WATER RESOURCES. ALL WORK MUST BE PERFORMED IN SUCH A MANNER THAT OBJECTIONABLE CONDITIONS WILL NOT BE CREATED IN PUBLIC WATERS RUNNING THROUGH, OR ADJACENT TO THE PROJECT AREA.
EROSION AND SEDIMENT CONTROL - ALL PRACTICABLE AND NECESSARY EFFORT SHOULD BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND THE TRANSPORT OF SEDIMENT TO SURFACE DRAINS, SURFACE WATER, OR ONTO OTHER PROPERTY BY ANY OR ALL OF THE FOLLOWING METHODS:

1. STORMWATER FACILITIES ARE TO BE BUILT AS EARLY IN THE CONSTRUCTION PHASE AS POSSIBLE TO ENSURE THE TREATMENT OF STORMWATER RUNOFF. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES, HOWEVER, SUCH AS BERMS, SEDIMENT BASINS, GRASSING, SODDING, SAND BAGGING, BALED HAY OR STRAW, FLOATING SILT BARRIERS, STACKED SILT BARRIERS, ETC. MUST BE PROVIDED AND MAINTAINED UNTIL THE PERMANENT FACILITIES ARE COMPLETED AND OPERATIONAL.
2. RE-VEGETATION AND STABILIZATION OF DISTURBED GROUND SURFACES SHOULD BE ACCOMPLISHED AS SOON AS POSSIBLE.
3. FULL COMPACTION OF ANY FILL MATERIAL PLACED AROUND NEWLY INSTALLED STRUCTURES.
4. PROHIBIT THE USE OF ANY CONSTRUCTION EQUIPMENT THAT LEAKS EXCESSIVE AMOUNTS OF FUEL, OIL, OR HYDRAULIC FLUID.

ALL DISTURBED AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE, EXCEPT RETENTION AREAS, AND SHALL BE STABILIZED BY SODDING, EXCEPT WHERE SEEDING AND MULCHING ARE CALLED FOR ON THE PLANS. THE LATEST VERSION OF THE F.D.O.T. ROAD & BRIDGE SPECIFICATIONS SHALL BE USED, UNLESS MORE RESTRICTIVE LOCAL SPECIFICATIONS EXIST.

PROTECTION OF FISH AND WILDLIFE

THE CONTRACTOR MUST AT ALL TIMES PERFORM ALL WORK IN A WAY AND TAKE SUCH STEPS AS REQUIRED TO PREVENT ANY INTERFERENCE WITH OR DISTURBANCE TO FISH AND WILDLIFE. THE CONTRACTOR SHALL NOT ALTER WATER FLOWS OR OTHERWISE DISTURB NATIVE HABITATS AND JURISDICTIONAL WETLANDS LOCATED WITHIN AND/OR ADJACENT TO THE PROJECT AREA.

RECORDING AND PRESERVING HISTORICAL AND ARCHEOLOGICAL FINDS

ALL ITEMS HAVING ANY APPARENT HISTORICAL OR ARCHEOLOGICAL INTEREST THAT ARE DISCOVERED IN THE COURSE OF ANY CONSTRUCTION ACTIVITIES MUST BE CAREFULLY PRESERVED. THE CONTRACTOR MUST LEAVE THE ARCHEOLOGICAL FIND UNDISTURBED AND MUST IMMEDIATELY REPORT THE FIND TO THE OWNER SO THAT THE PROPER AUTHORITY MAY BE NOTIFIED.

1. EARTHWORK

GENERAL

1-01 SUBMITTALS

A. EROSION AND CONTROL MEASURES
B. COMPACTION TESTS
C. SOILS CLASSIFICATION TESTS
D. PRESERVATION PLANS

1-02 SITE EXAMINATION

BEFORE SUBMITTING BIDS, CONTRACTORS SHALL INFORM THEMSELVES AS TO LOCATION AND NATURE OF THE WORK, CHARACTER OF EQUIPMENT AND FACILITIES NEEDED FOR PERFORMANCE OF THE WORK, GENERAL AND LOCAL CONDITIONS PREVAILING AT THE SITE, AND OTHER MATTERS WHICH MAY, IN ANY WAY, AFFECT THE WORK UNDER CONTRACT.
EXAMINE SOURCES OF INFORMATION CONCERNING GROUND WATER LEVEL, WHETHER SURFACE OR SUBSURFACE. EACH BIDDER TO DRAW HIS OWN CONCLUSION CONCERNING GROUND WATER LEVELS AND HOW WATER AFFECTS HIS WORK.

1-02A SITE EXAMINATION - WELLS

ANY WELLS, WHETHER KNOWN AT THE TIME OF CONSTRUCTION OR FOUND DURING CONSTRUCTION, SHALL BE PLUGGED AND ABANDONED BY A LICENSED WELL CONTRACTOR IN CONFORMANCE WITH 40D-3.531, F.A.C, OR CURRENT STATE REGULATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING FAMILIAR WITH THE SITE AND DETERMINING, THROUGH VISUAL INSPECTION, IF ANY WELLS EXIST WITHIN THE CONSTRUCTION AREA.

1-03 SUBSURFACE INVESTIGATIONS

SUBSURFACE DATA, INCLUDING GROUND WATER ELEVATIONS OR CONDITIONS, IF SHOWN ON THE DRAWINGS OR ATTACHED TO THESE SPECIFICATIONS, ARE PRESENTED ONLY AS INFORMATION THAT IS AVAILABLE WHICH INDICATED CERTAIN CONDITIONS FOUND AND LIMITED TO THE EXACT LOCATIONS, SHALL NOT BE INTERPRETED AS AN INDICATION OF CONDITIONS THAT MAY ACTUALLY BE DEVELOPED THROUGH THE PERIOD OF CONSTRUCTION. BIDDERS SHALL EXAMINE THE SITE OF THE WORK AND MAKE THEIR OWN DETERMINATION OF THE CHARACTER OF MATERIALS AND THE CONDITIONS TO BE ENCOUNTERED ON THE WORK, AND THEIR PROPOSAL SHALL BE BASED UPON THEIR OWN INVESTIGATIONS. THE OWNER AND ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR VARIATIONS FOUND TO EXIST BETWEEN THE ATTACHED DATA ABOVE REFERRED TO AND ACTUAL FIELD CONDITIONS THAT DEVELOP THROUGH THE PERIOD OF CONSTRUCTION. WHERE EXISTING GRADES, UTILITY LINES AND SUBSTRUCTURES ARE SHOWN ON THE DRAWINGS, THE OWNER AND ENGINEER ASSUME NO RESPONSIBILITY FOR CORRECTNESS OF EXISTING CONDITIONS INDICATED. THE CONTRACTOR SHALL ASCERTAIN EXACT LOCATIONS OF UTILITIES AND SUBSTRUCTURES THAT MAY BE AFFECTED BY THIS PROJECT, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE OR INJURY THAT MAY RESULT FROM WORKING ON OR NEAR THOSE UTILITIES, SUBSTRUCTURES WHICH ARE NOT TO BE REMOVED OR DEMOLISHED. THE CONTRACTOR SHALL MAKE HIS OWN DEDUCTIONS OF THE SUBSURFACE CONDITIONS WHICH MAY AFFECT METHODS OR COST OF CONSTRUCTION AND HE AGREES THAT HE WILL MAKE NO CLAIM FOR DAMAGES OR OTHER COMPENSATION, EXCEPT SUCH AS ARE PROVIDED FOR IN THE AGREEMENT, SHOULD HE FIND CONDITIONS DURING THE PROGRESS OF THE WORK DIFFERENT FROM THOSE AS CALCULATED OR ANTICIPATED BY HIM.

1-04 BENCH MARKS AND MONUMENTS

MAINTAIN CAREFULLY EXISTING BENCH MARKS, MONUMENTS, AND OTHER REFERENCE POINTS. IF DISTURBED OR DESTROYED, REPLACE AS DIRECTED.

1-05 JOB CONDITIONS

CONDITION OF PREMISES: ACCEPT SITE AS FOUND AND EXCAVATE, FILL, COMPACT, AND BACKFILL SITE AS HEREINAFTER SPECIFIED.
PROTECTION:
EXISTING STRUCTURES AND PROPERTY - TAKE PRECAUTIONS TO GUARD AGAINST MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES AND FACILITIES; PROVIDE AND REPLACE BRACING OR SHORING AS NECESSARY OR PROPER IN CONNECTION THEREWITH; BE RESPONSIBLE FOR SAFETY AND SUPPORT OF SUCH STRUCTURES; BE LIABLE FOR ANY MOVEMENT OR SETTLEMENT, ANY DAMAGE OR INJURY CAUSED THEREBY OR RESULTING THEREFROM. IF AT ANY TIME SAFETY OR ANY ADJACENT STRUCTURES APPEARS TO BE ENDANGERED, CEASE OPERATION, TAKE PRECAUTIONS TO SUPPORT SUCH STRUCTURES AND NOTIFY THE OWNER. RESUME OPERATIONS ONLY AFTER PERMISSION HAS BEEN GRANTED BY THE OWNER.
SIDEWALKS AND STREETS - TAKE PRECAUTIONS TO GUARD AGAINST MOVEMENT, SETTLEMENT OR COLLAPSE OF ANY SIDEWALKS, CURBS OR STREET PASSAGES ON ADJOINING SITE; BE LIABLE FOR ANY SUCH MOVEMENT, SETTLEMENT OR COLLAPSE; REPAIR PROMPTLY SUCH DAMAGE WHEN SO ORDERED. INSTALL SUCH SHORING, INCLUDING SHEET PILING, AS MAY BE REQUIRED DURING EXCAVATION, TO PROTECT BANKS, ADJACENT PAVING, STRUCTURES AND UTILITIES.
RESPONSIBILITY - BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING STRUCTURES OR TO EQUIPMENT AND FURNISHINGS HOUSED THEREIN WHICH ARE DUE DIRECTLY OR INDIRECTLY TO CONSTRUCTION OPERATIONS. EXCEPT WHERE REMOVAL IS NECESSITATED BY SITE GRADING OR LOCATION OF NEW BUILDING, USE EVERY POSSIBLE PRECAUTION TO PREVENT INJURIES TO LANDSCAPING, DRIVES, CURBS, AND WALKS ON OR ADJACENT TO SITE OF THE WORK AND REPLACE, AT NO EXPENSE TO OWNER, ANY OF SUCH THAT ARE DESTROYED.

2. EXECUTION

2-01 GENERAL

ACCOMPLISH IN A MANNER THAT PROVIDES FOR THE SAFETY OF THE PUBLIC AND WORKMEN AND PROVIDE FOR THE PROTECTION OF ALL PROPERTY.
CONSTRUCTION - DO NOT CLOSE, OBSTRUCT OR STORE MATERIAL OR EQUIPMENT IN STREETS, SIDEWALKS, ALLEYS OR PASSAGEWAYS WITHOUT A PERMIT IN ACCORDANCE WITH LOCAL LOCAL ORDINANCES, REGULATIONS, AND CODES.
INTERFERENCE - CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE WITH ROADS, STREETS, DRIVEWAYS, ALLEYS, SIDEWALKS AND OTHER FACILITIES.
PNEUMATIC TOOLS - WORK WITH PNEUMATIC OR VIBRATORY TOOLS WILL BE PERMITTED ONLY IN A MANNER WHICH CAUSES NO RELATED DAMAGES.
REMOVAL - UNLESS OTHERWISE NOTED OR SPECIFIED TO BE RELOCATED OR STORED, ALL MATERIALS REMOVED BECOME THE PROPERTY OF THE CONTRACTOR AND ARE TO BE REMOVED COMPLETELY AWAY FROM THE SITE BY HIM. DO NOT STORE OR PERMIT DEBRIS TO ACCUMULATE ON THE SITE.
TEMPORARY STRUCTURES - REMOVE ALL TEMPORARY STRUCTURES WHEN THEY ARE NO LONGER REQUIRED.
REPAIR - CLEAN UP, REPAIR OR REPLACE AT NO COST TO OWNER ALL PROPERTY DAMAGED BY REASON OF REQUIRED WORK. ALL PATCH WORK SHALL MATCH EXISTING AND BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER BY CRAFTSMEN SKILLED IN THE TRADE INVOLVED.
IN NEWLY GRADED AREAS TAKE EVERY PRECAUTION AND TEMPORARY MEASURE NECESSARY TO PREVENT DAMAGE FROM EROSION OF FRESHLY GRADED AREAS. WHERE ANY SETTLEMENT OR WASHING MAY OCCUR PRIOR TO ACCEPTANCE OF THE WORK, REPAIR AND RE-ESTABLISH GRADES TO THE REQUIRED ELEVATIONS AND SLOPES AT NO ADDITIONAL COST TO THE OWNER. THIS APPLIES TO DAMAGE TO THE NEWLY GRADED AREAS WITHIN THE CONSTRUCTION LIMITS AND DAMAGE TO ADJACENT PROPERTIES BY ERODED MATERIAL.

2-02 LOCATIONS AND ELEVATIONS

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURVEYS, MEASUREMENTS AND LAYOUTS REQUIRED FOR PROPER EXECUTION OF THE WORK. LAY OUT LINES AND GRADES FROM EXISTING SURVEY CONTROL SYSTEM AND AS SHOWN ON DRAWINGS.

2-03 CLEARING AND GRUBBING

WITHIN LIMITS OF AREAS DESIGNATED FOR GRADING AND SITE CONSTRUCTION WORK, REMOVE TREES, BRUSH, STUMPS, WOOD DEBRIS AND OTHER DELETERIOUS MATERIALS NOT REQUIRED TO REMAIN AS PART OF THE FINISHED WORK.
REMOVE ALL GRASS, PLANTS, VEGETATION AND ORGANIC MATERIAL FROM SAME AREA.

2-04 STRIPPING

STRIP ALL TOPSOIL, ORGANIC MATERIAL, SURFACE LITTER, RUBBLE, AND OVERBURDEN FOR ENTIRE DEPTH OF ROOT SYSTEM OF GRASS OR OTHER VEGETATION OVER THE LIMITS OF CONSTRUCTION. STOCKPILE TOPSOIL ON SITE WHERE DIRECTED.

2-05 EXECUTION

BEGIN EXCAVATION AFTER STRIPPING, CLEARING AND GRUBBING WHERE APPLICABLE, HAS BEEN COMPLETED. EXCAVATE TO GRADES REQUIRED TO ACCOMMODATE THE PROPOSED CONSTRUCTION; DE-WATER AS NEEDED. REMOVE UNSATISFACTORY MATERIALS ENCOUNTERED FROM THE BUILDING AREAS, AND OTHER NON-LANDSCAPED AREAS, AND OTHER NON-LANDSCAPED AREAS. EXCAVATE IN SUCH A MANNER THAT QUICK AND EFFICIENT DRAINAGE OF STORMWATER WILL BE AFFECTED. CLASSIFY EXCAVATED MATERIALS AND STOCKPILE SEPARATELY SUITABLE SOILS FOR USE AS BACKFILL MATERIALS. IF SUFFICIENT QUANTITIES OF EXCAVATED MATERIALS MEETING REQUIREMENTS FOR BACKFILL ARE NOT AVAILABLE ON-SITE, PROVIDE MATERIALS MEETING THESE REQUIREMENTS. STOCKPILE EXCAVATED MATERIAL SUITABLE FOR USE AS FILL AND BACKFILL.

2-06 FILLING, BACKFILLING, AND COMPACTING

THE WORK CONSISTS OF COMPACTION OF EXISTING EARTH (EXCLUDES ROCK), SURFACES AFTER EXCAVATION, FILLING AND COMPACTION OF SAID AREA TO LEVELS REQUIRED WITH SUITABLE BACKFILL MATERIAL.
MATERIALS - SATISFACTORY FILL MATERIALS, AASHTO CLASSIFICATION A-3 OR BETTER, SHALL BE USED IN FILLS AND BACKFILLS.
FILLING AND BACKFILLING - PLACE SATISFACTORY FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING SIX (6") INCHES IN LOOSE DEPTH. COMPACT AS SPECIFIED HEREIN. NO MATERIAL SHALL BE PLACED ON SURFACES THAT ARE MUDDY.
COMPACTION - COMPACTION SHALL BE WITH EQUIPMENT SUITED TO SOIL BEING COMPACTED. MOISTEN OR AERATE MATERIAL, AS NECESSARY, TO PROVIDE MOISTURE CONTENT THAT WILL READILY FACILITATE OBTAINING SPECIFIED COMPACTION WITH EQUIPMENT USED. COMPACT EACH LAYER TO NOT LESS THAN PERCENTAGE OF MAXIMUM DENSITY SPECIFIED BELOW, DETERMINED IN ACCORDANCE WITH AASHTO T-180. INSURE THAT THE COMPACTION OF PREVIOUSLY PREPARED FILL AREAS HAS BEEN MAINTAINED PRIOR TO PLACING NEW LAYERS.
RECONDITIONING OF SUBGRADE - WHERE APPROVED COMPACTED SUBGRADES ARE DISTURBED BY THE CONTRACTOR'S SUBSEQUENT OPERATIONS OR ADVERSE WEATHER, SUBGRADE SHALL BE SCARIFIED AND COMPACTED AS SPECIFIED HEREINBEFORE TO REQUIRED DENSITY PRIOR TO FURTHER CONSTRUCTION THEREON. RE-COMPACTION OVER UNDERGROUND UTILITIES SHALL BE BY POWER-DRIVEN HAND TAMPERS.
COMPACTION REQUIREMENTS:
A. FILL UNDER LAWNS AND PLANTED AREAS: 95%
B. BELOW SLABS ON GRADE AND CONCRETE WALKS: 98%
C. UNDER PAVING AND PARKING AREAS: 98%

2-07 TESTING

THE CONTRACTOR WILL PROVIDE THE SERVICES OF A TESTING LABORATORY TO PERFORM SPECIFIED TESTS, INSPECTIONS, INSTRUMENTATION AND INSPECTION OF THE WORK. TESTS OF MATERIALS SHALL BE AS FOLLOWS:

A. SOIL CLASSIFICATION - ONE TEST FROM EACH TYPE OF MATERIAL ENCOUNTERED AND/OR PROPOSED TO BE USED.
B. LABORATORY TESTS FOR MOISTURE-CONTENT AND DENSITY ACCORDING TO AASHTO T-180 - ONE TEST FOR EACH MATERIAL ENCOUNTERED AND/OR PROPOSED TO BE USED.
C. FIELD TESTS FOR MOISTURE CONTENT AND DENSITY - ONE TEST PER LAYER OF FILL PER 5,000 SQUARE FEET OF AREA.

ONE COPY OF ALL TEST REPORTS, SIGNED AND SEALED BY TESTING LABORATORY ARE TO BE PROVIDED TO THE ENGINEER.

SUPPLEMENTAL SPECIFICATIONS

GENERAL

THE CONTRACTOR SHALL BECOME FAMILIAR WITH AND ADHERE TO THE SPECIFICATIONS AND STANDARDS OF THE UTILITY COMPANIES WHICH ARE SERVING THE PROJECT SITE. THE CONTRACTOR SHALL BECOME FAMILIAR WITH AND COMPLY WITH ALL SITE DEVELOPMENT STANDARDS AND CODES OF THE REGULATORY AGENCIES ASSOCIATED WITH THIS PROJECT.
THE LATEST VERSION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE CONSTRUCTION STANDARD SPECIFICATIONS THE LATEST FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS SHALL BE INCLUDED WITHIN THE PROJECT SPECIFICATIONS. UNLESS OTHERWISE NOTED, EITHER ON THE PLANS OR WITHIN THE SPECIFICATIONS, THE APPLICABLE SECTIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND THE LATEST FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS SHALL APPLY INCLUDING REFERENCES THEREIN. THE GENERAL DESCRIPTION OF THE NATURE OF THE WORK SHALL BE SUFFICIENT CORRELATION TO THE FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, EXACT ITEM DESCRIPTION IS NOT REQUIRED. IN THE EVENT THERE ARE CONFLICTS BETWEEN SPECIFICATIONS OR REQUIREMENTS, THE MOST RESTRICTIVE (CONSERVATIVE) SPECIFICATION OR REQUIREMENT SHALL BE USED.

POTABLE WATER DISTRIBUTION/WASTEWATER COLLECTION INSTALLATION

UNLESS OTHERWISE NOTED ON THE PLANS, THE STANDARDS AND SPECIFICATIONS OF THE ASSOCIATED UTILITY COMPANY SERVING THE PROJECT SITE SHALL BE ADHERED TO FOR ALL MATERIALS, INSTALLATION, TESTING, AND CERTIFICATION ACTIVITIES FOR ALL PUMP STATIONS, MAIN LINES, SERVICES, AND APPURTENANCES. IF STANDARDS AND SPECIFICATIONS ARE NOT AVAILABLE, THE CONTRACTOR SHALL CONFORM TO THE LATEST STANDARDS AND SPECIFICATIONS ADOPTED BY LOCAL UTILITIES, LOCAL GOVERNMENTAL REGULATIONS, OR THE MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES, WHICHEVER IS SPECIFICALLY THE MOST RESTRICTIVE.

STORMWATER PIPE INSTALLATION AND MISCELLANEOUS EXCAVATIONS

UNLESS OTHERWISE NOTED ON THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL PERFORM THE EXCAVATION, BEDDING, JOINTS, AND BACKFILLING OPERATIONS IN ACCORDANCE WITH THE POTABLE WATER/WASTEWATER INSTALLATION SPECIFICATIONS, LOCAL GOVERNMENTAL REGULATIONS OR STANDARDS, F.D.O.T. STANDARDS AND SPECIFICATIONS, OR MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES, WHICHEVER IS SPECIFICALLY THE MOST RESTRICTIVE.

UNSUITABLE MATERIALS

IF UNSUITABLE MATERIAL IS ENCOUNTERED WITHIN THE ROADWAY AREA AND/OR UTILITY AREAS IT SHALL BE REMOVED TO A DEPTH OF THREE (3.0') FEET BELOW THE SUB-BASE OR TRENCH BOTTOM AND SHALL BE BACKFILLED WITH A-3 MATERIAL OR BETTER WITH PLACEMENT AND COMPACTION METHODS IN ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, OR AS OTHERWISE NOTED ON THE PLANS. UNSUITABLE MATERIALS SHALL BE REMOVED FROM THE SITE, UNLESS THE ENGINEER APPROVES USE WITHIN LANDSCAPED AREAS.

3. DE-WATERING

3-01 GENERAL

DE-WATERING CONSISTS OF PERFORMING ALL WORK NECESSARY TO REMOVE SURFACE WATER AND/OR CONTROL THE GROUND WATER LEVELS AND HYDROSTATIC PRESSURES IN ORDER TO PERMIT ALL EXCAVATION AND CONSTRUCTION UNDER THIS CONTRACT TO BE PERFORMED IN THE DRY. WORK OF THIS SECTION INCLUDES INSTALLATION, OPERATIONS, MAINTENANCE, SUPERVISION, SUPPLY, DISMANTLING, AND REMOVAL FROM THE SITE OF THE DE-WATERING EQUIPMENT. THE CONTRACTOR MUST FAMILIARIZE HIMSELF WITH THE POTENTIAL FOR EXCESSIVE RAINFALL, THE GROUND CONDITIONS, AND THE GROUND WATER CONDITIONS. GROUND WATER ELEVATION CAN FLUCTUATE. IT IS ANTICIPATED THAT ANY EXCAVATIONS MAY ENCOUNTER THE GROUND WATER TABLE.
DRAINAGE OF THE SITE - AT ALL TIMES THE CONTRACTOR SHALL MAINTAIN AND OPERATE ADEQUATE SURFACE AND SUBSURFACE DRAINAGE METHODS IN ORDER TO KEEP THE CONSTRUCTION SITE DRY AND IN SUCH CONDITION THAT PLACEMENT AND COMPACTION OF FILL MAY PROCEED UNHINDERED BY SATURATION OF THE AREA. DURING CONSTRUCTION, THE SURFACE OF THE BACKFILL AREA SHALL BE LEFT IN SUCH CONDITION THAT PRECIPITATION AND/ OR SURFACE WATER WILL RUN OFF WITHOUT PONDING.

3-02 METHOD

THE CONTROL OF ALL SURFACE AND SUBSURFACE WATER IS PART OF THE DE-WATERING REQUIREMENTS. MAINTAIN ADEQUATE CONTROL SO THAT THE STABILITY OF EXCAVATED AND CONSTRUCTION SLOPES IS NOT ADVERSELY AFFECTED BY WATER, THAT EROSION IS CONTROLLED, AND THE FLOODING OF EXCAVATIONS OR DAMAGE TO STRUCTURES DOES NOT OCCUR. DRAIN SURFACE WATER AWAY FROM THE EXCAVATION. DISPOSE OF ALL WATER REMOVED FROM THE EXCAVATION IN A MANNER THAT WILL NOT ENDANGER PUBLIC HEALTH, PROPERTY, OR PORTIONS OF THE WORK UNDER CONSTRUCTION OR COMPLETED. DISPOSE OF WATER IN A MANNER THAT WILL CAUSE NO INCONVENIENCE WHATSOEVER TO THE OWNER OR TO OTHERS ENGAGED IN WORK AT THE SITE. DISPOSE OF WATER RESULTING FROM DE-WATERING OPERATIONS IN ACCORDANCE WITH CITY, COUNTY, STATE AND FEDERAL REGULATIONS. CONDUCT OPERATIONS SO THAT STORMWATER RUNOFF SEDIMENT IS NOT DISCHARGED TO THE ADJACENT WATER BODIES, SEWERS, STREETS AND ADJACENT PROPERTIES. DE-WATERING SYSTEM SHALL BE SO DESIGNED AS TO PREVENT REMOVAL OF SOIL FINES FROM THE SITE DURING THE DE-WATERING OPERATION.

4. PORTLAND CEMENT CONCRETE PAVING

4-01 QUALITY ASSURANCE

COMPLY WITH ACI STANDARDS "RECOMMENDED PRACTICES FOR CONSTRUCTION OF CONCRETE PAVEMENTS AND CONCRETE BASES" (ACI316, LATEST EDITION).

4-02 REFERENCE STANDARDS

THE FOLLOWING REFERENCE STANDARDS OF THE ISSUES LISTED BELOW, BUT REFERRED TO THEREAFTER BY BASIC DESIGNATION ONLY, FORM A PART OF THIS SPECIFICATION TO THE EXTENT INDICATED BY THE REFERENCES THERETO. TESTS SHALL BE PERFORMED IN ACCORDANCE WITH HEREINAFTER SPECIFIED STANDARDS.
A. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
B. AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) STANDARD
C. FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS & SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION)
SECTION 350 "CEMENT CONCRETE PAVEMENT".
D. T-180 MOISTURE-DENSITY RELATIONS OF SOILS

4-03 SUBMITTALS

THE CONTRACTOR SHALL SUBMIT TWO COPIES OF TEST REPORTS PREPARED BY AN INDEPENDENT TESTING LABORATORY AND CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED TO PRACTICE IN THE STATE OF FLORIDA. THESE REPORTS SHALL INDICATE ALL TESTS PERFORMED AND SHALL INCLUDE A CERTIFICATION STATEMENT OF COMPLIANCE WITH THE PROJECT SPECIFICATION. TESTS SHALL BE PERFORMED AS SPECIFIED UNDER THIS SECTION.
SUBMIT FOR REVIEW THE FOLLOWING:

A. CONCRETE DESIGN MIX AND PROVING FLEXURAL STRENGTH (MODULUS OF RUPTURE) TESTS
B. EXPANSION JOINT FILLER DATA
C. JOINT SEALER DATA
D. "PROPOSED PAVING CONSTRUCTION PLAN" WHICH SHALL SHOW THE CONCRETE PAVING JOINT TYPES AND LOCATIONS AND SHALL INCLUDE A STATEMENT OF PROPOSED SEQUENCE AND SCHEDULE OF PAVING OPERATIONS
E. RESULTS OF CONCRETE TESTS
F. RESULTS OF FIELD TESTS OF LBR AND COMPACTION OF STABILIZED SUBGRADE

4-04 MATERIALS

STABILIZED SUBGRADE - PROVIDE 12 INCH STABILIZED SUBGRADE (LBR 40 MIN) COMPACTED TO A MINIMUM DENSITY OF 98% AS DETERMINED BY AASHTO T-180.
CONCRETE - CONCRETE FOR CONCRETE PAVEMENT SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, A SLUMP RANGE BETWEEN 2 TO 4 INCHES AND A 28-DAY MODULUS OF RUPTURE OF 650 PSI AS DETERMINED BY THE REQUIREMENTS OF PARAGRAPH TESTING SPECIFIED HEREINAFTER.
JOINT SEALER - JOINT SEALING SHALL CONFORM TO FEDERAL SPECIFICATIONS SS-S1401 OR SS-S-200d (COLD APPLIED).
PRE-MOLDED EXPANSION JOINT FILLER - PRE-MOLDED EXPANSION JOINT FILLER SHALL CONFORM TO ASTM D1751-73.

4-05 EXECUTION

COMPLY WITH ACI STANDARD 316-74 AND SECTION 350, FDOT STANDARDS AND SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED HEREIN.
FINAL GRADING - ALL CONCRETE PAVEMENT SHALL HAVE A MAXIMUM DEVIATION OF 1/8 INCH(+/-) FROM THE SPECIFIED SURFACE PLANE AND PLAN GRADES. THE SURFACE FINISH SHALL BE APPROVED BY THE OWNER OR HIS REPRESENTATIVE. IN GENERAL, THE TEXTURE IS OF A MEDIUM BROOM FINISH AFTER FLOATING.
JOINTS - CONTRACTION JOINTS INDICATED ON DRAWINGS, OR AS REQUIRED, SHALL BE PLACED PERPENDICULAR TO THE FINISH GRADE OF THE CONCRETE. JOINTS SHALL BE CUT TO A DEPTH OF 1/4 OF THE SLAB THICKNESS BY CUTTING WITH AN EDGING TOOL HAVING A 1/4 INCH RADIUS OR BY SAWING WITH A BLADE PRODUCING A CUT NOT LESS THAN 1/8 INCH IN WIDTH. SAW JOINTS WITHIN 4 TO 6 HOURS OF CONCRETE PLACEMENT.
EXPANSION JOINTS SHALL BE PLACED WHERE INDICATED ON DRAWINGS, OR AS REQUIRED, USING 1/2 INCH THICK PREFORMED EXPANSION JOINT MATERIAL. ANCHOR WITH APPROVED DEVICES TO PREVENT DISPLACEMENT DURING PLACEMENT AND FINISHING. EDGES SHALL BE ROUNDED WITH AN EDGING TOOL. JOINTS SHALL BE FULL DEPTH OF CONCRETE EXCEPT THAT TOP EDGES SHALL BE 1/2 INCH BELOW THE FINISH CONCRETE SURFACE. EXPANSION JOINTS SHALL BE SEALED TO THE SURFACE BY FILLING WITH JOINT SEALING COMPOUND. JOINTS SHALL BE CLEANED AND DRY BEFORE SEALING COMPOUND IS PUT IN PLACE. CONSTRUCTION JOINTS ARE TO BE USED AT CONTRACTION JOINT LOCATIONS TO STOP CONCRETE POURS.
CURING - CONCRETE SHALL BE CURED BY PROTECTING IT AGAINST LOSS OF MOISTURE AND MECHANICAL INJURY FOR AT LEAST THREE DAYS AFTER PLACEMENT. A PIGMENTED LIQUID CURING MEMBRANE SHALL BE APPLIED IMMEDIATELY AFTER FINISHING OPERATION AT THE RATE OF ONE GALLON TO NOT MORE THAN 200 SQUARE FEET.
CLEANING AND SEALING JOINTS - JOINTS SHALL BE FILLED WITH JOINT-SEALING MATERIAL NO LESS THAN 8 HOURS AND WITHIN 2 WEEKS AFTER JOINTS ARE CUT. JUST PRIOR TO SEALING, EACH JOINT SHALL BE THOROUGHLY CLEANED OF ALL FOREIGN MATERIAL INCLUDING ANY MEMBRANE CURING COMPOUND.
TESTING - LABORATORY AND FIELD TESTING SHALL BE AT THE CONTRACTOR'S EXPENSE. IN ADDITION, ALL RETESTING SHALL BE DONE AT CONTRACTOR'S EXPENSE. DESIGN MIXES AND TESTING REQUIREMENTS FOR THE CONCRETE PAVEMENT SHALL BE AS FOLLOWS:

A. FLEXURAL STRENGTH TESTS OF CONCRETE AS BASIS FOR DESIGN.
B. SLUMP, MODULUS OF RUPTURE AND 7-DAY AND 28-DAY COMPRESSIVE STRENGTH TESTS SHALL BE PERFORMED ON SAMPLES TAKEN AT THE SITE AT A FREQUENCY OF TWO PER ACRE.
C. WHERE THE FLEXURAL STRENGTH OF THE CONCRETE IS SPECIFIED, MAKE ONE STRENGTH TEST AND ONE FLEXURAL TEST FOLLOWING (ASTM C192 AND ASTM C78) FOR EACH 100 CUBIC YARDS OR FRACTION THEREOF PLACED PER DAY. NUMBER OF CYLINDERS SHALL BE THREE FOR STRENGTH TEST AND THREE FOR FLEXURAL TEST. TEST ONE AT THREE DAYS, ONE AT SEVEN DAYS AND ONE AT 28 DAYS.

5. PAVEMENT MARKING

5-01 QUALITY ASSURANCE

WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS IN A NEAT AND ACCURATE MANNER. ALL EQUIPMENT SHALL BE OF A TYPE AND DESIGN WHICH WILL READILY OBTAIN THE REQUIRED UNIFORMITY OF APPLICATION OF THE PAVEMENT MARKINGS BOTH AS TO THICKNESS OF COATING AND AS TO ALIGNMENT.

5-02 REFERENCE STANDARDS

THE FOLLOWING PUBLICATIONS OF THE ISSUE LISTED BELOW, BUT REFERRED TO THEREAFTER BY BASIC DESIGNATION ONLY, FORM A PART OF THIS SPECIFICATION TO THE EXTENT INDICATED BY THE REFERENCES THERETO:
A. SECTIONS 710 AND 711 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
B. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, LATEST EDITION.

5-03 SUBMITTALS

SUBMIT PAINT TESTS, AS SPECIFIED IN SECTION 971 OF THE FDOT SPECIFICATIONS AND AS APPLICABLE TO HEREINAFTER SPECIFIED MATERIAL.

5-04 MATERIALS AND COLORS

THERMOPLASTIC - IN ACCORDANCE WITH REQUIREMENTS AS SPECIFIED IN SECTION 711 OF THE FDOT SPECIFICATIONS.
PAINT - IN ACCORDANCE WITH REQUIREMENTS AS SPECIFIED IN SECTION 971-12, CODE T-2 OF THE FDOT SPECIFICATIONS, LATEX PAINT ONLY.
COLORS - YELLOW AND WHITE PER FDOT, OR AS INDICATED ON THE DRAWINGS.

5-05 EXECUTION

TIME OF APPLICATION - PAINTING SHALL BE DONE ONLY DURING DAYLIGHT HOURS AND, AS FAR AS PRACTICAL, SHALL BE TERMINATED IN TIME TO PERMIT SUFFICIENT DRYING BY SUNSET.
WEATHER LIMITATIONS - NO PAINT SHALL BE APPLIED WHEN ANY MOISTURE IS PRESENT ON THE SURFACE TO BE PAINTED OR WHEN THE AIR TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT. PAINTING SHALL NOT BE DONE WHEN WINDS ARE SUFFICIENT TO CAUSE SPRAY DUST.
PREPARATION OF SURFACE TO BE PAINTED - THE SURFACE WHICH IS TO BE PAINTED SHALL BE CLEANED, BY COMPRESSED AIR OR OTHER EFFECTIVE MEANS, IMMEDIATELY BEFORE THE START OF PAINTING AND SHALL BE CLEAN AND DRY WHEN THE PAINT IS APPLIED. ANY VEGETATION OR LOOSE SOILS SHALL BE REMOVED FROM THE PAVEMENT BEFORE STRIPING IS BEGUN.
MIXING PAINT - THE PAINT SHALL BE THOROUGHLY MIXED BEFORE IT IS POURED INTO THE PAINTING MACHINE AND NO THINNING OF THE PAINT IN THE MACHINE WILL BE ALLOWED AT ANY TIME. BEFORE THE START OF EACH DAY'S WORK, THE PAINT CONTAINER, CONNECTIONS AND THE SPRAY NOZZLES ON THE MACHINE SHALL BE THOROUGHLY CLEANED WITH PAINT THINNER OR OTHER SUITABLE CLEANER.
PAINT APPLICATION - THE TRAFFIC MARKINGS SHALL BE OF THE SPECIFIED DIMENSIONS WITH CLEAN, TRUE EDGES AND WITHOUT SHARP BREAKS IN THE ALIGNMENT. A UNIFORM COATING OF PAINT SHALL BE OBTAINED AND THE FINISHED MARKINGS SHALL CONTAIN NO LIGHT SPOTS OR PAINT SKIPS. ANY STRIPES WHICH DO NOT HAVE A UNIFORM, SATISFACTORY APPEARANCE, BOTH DAY AND NIGHT, SHALL BE CORRECTED.
RATE OF PAINT APPLICATION - THE MINIMUM RATE OF APPLICATION FOR PAINT SHALL BE AS FOLLOWS:
A. FOUR INCH SOLID: 20 GALLONS PER MILE.
B. HANDICAP LOGO: IN CONFORMANCE TO THE REQUIREMENTS OF THIS SECTION AND LOCAL CODES.
C. ANY OTHER WIDTH STRIPE OR MARKINGS: A DIRECT PROPORTION OF THE ABOVE ITEM A.
D. REQUIRED FILM THICKNESS: THE MINIMUM WET FILM THICKNESS FOR ALL PAINTED AREAS SHALL BE 15 MILS.
E. ALIGNMENT OF STRIPES: WHERE A STRIPE DEVIATES FROM THE CORRECT ALIGNMENT, AS INDICATED BY THE STRING LINE, BY MORE THAN ONE INCH IN ANY 20 FOOT LENGTH, IT SHALL BE OBLITERATED AND THE STRIPE CORRECTED HEREINAFTER AS SPECIFIED IN SECTION 5-08 CORRECTIVE MEASURES.

5-06 PROTECTION OF PAINTED MARKINGS

PROTECTION OF STRIPES - ALL NEWLY PAINTED STRIPES, OR OTHER MARKINGS, SHALL BE PROTECTED UNTIL THE PAINT IS SUFFICIENTLY DRY TO PERMIT VEHICLES TO CROSS THE MARKING WITHOUT DAMAGE FROM THE TIRES.
REPAIR OF DAMAGED AREAS - ANY PORTIONS OF THE STRIPES DAMAGED BY PASSING TRAFFIC OR FROM ANY OTHER CAUSE, SHALL BE REPAINTED AT THE CONTRACTOR'S EXPENSE.

5-07 DIMENSION AND ALIGNMENT TOLERANCE

DIMENSIONS - NO MARKING SHALL BE LESS THAN THE SPECIFIED WIDTH. NO MARKINGS SHALL EXCEED THE SPECIFIED WIDTH BY MORE THAN ONE-HALF INCH. ALIGNMENT TOLERANCES SHALL BE AS SPECIFIED IN SECTION 5-05 EXECUTION (E).
CORRECTION RATES - ANY CORRECTIONS OF VARIATION IN THE WIDTH OF OR IN THE ALIGNMENT OF STRIPES SHALL NOT BE MADE ABRUPTLY BUT THE STRIPES SHALL BE RETURNED TO THE DESIGN WIDTH AT THE RATE OF AT LEAST 10 FEET FOR EACH 1/2 INCH OF CORRECTION.

5-08 CORRECTIVE MEASURES

ALL PAINTED MARKINGS WHICH FAIL TO MEET THE SPECIFICATIONS, INCLUDING THE PERMISSIBLE TOLERANCES AND THE APPEARANCE REQUIREMENTS, OR ARE MARRED OR DAMAGED BY TRAFFIC OR FROM OTHER CAUSES, SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. ALL DRIP AND SPATTERED PAINT SHALL BE REMOVED. WHENEVER IT IS NECESSARY TO REMOVE PAINT, IT SHALL BE DONE BY MEANS WHICH WILL NOT DAMAGE THE UNDERLYING SURFACE OF THE PAVEMENT. WHEN NECESSARY TO CORRECT A DEVIATION WHICH EXCEEDS THE PERMISSIBLE TOLERANCE IN ALIGNMENT, THAT PORTION OF THE STRIPE AFFECTED SHALL BE REMOVED AND REPAINTED IN ACCORDANCE WITH THESE SPECIFICATIONS.
CORRECTIVE DEVICES - MIS-ALIGNMENT, DEFECTIVE SURFACES, ETC, SHALL BE CORRECTED BY CHEMICAL AGENTS, OR BY ANY OTHER TYPE OF MECHANICAL DEVICE, WHICH WILL EFFECTIVELY REMOVE THE PAINT WITHOUT DAMAGE TO THE PAVEMENT SURFACE, OR WHICH WILL NOT PREVENT THE RE-APPLICATION OF MARKINGS.

5-09 SPARE PAINT

PROVIDE THE OWNER WITH A MINIMUM OF FIVE (5) GALLONS OF TRAFFIC PAINT FROM THE SAME BATCH USED IN APPLICATION OF PAVEMENT MARKINGS. ALSO PROVIDE PAINT SPECIFICATIONS AND THE MANUFACTURER'S IDENTIFICATION NUMBER OF THE PAINT USED.

5-10 MARKING TYPE

ANY PAVEMENT MARKINGS LOCATED WITHIN PUBLIC RIGHTS-OF-WAY SHALL BE THERMOPLASTIC UNLESS OTHERWISE INDICATED. ANY PAVEMENT MARKINGS LOCATED ON-SITE SHALL BE PAINT UNLESS OTHERWISE INDICATED.

CONSTRUCTION TOLERANCES

THE FOLLOWING ARE THE ALLOWABLE DEVIATIONS FROM PROJECT DESIGN GRADES AND GRADIENTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONFIRM AND DOCUMENT COMPLIANCE WITH THESE TOLERANCES PRIOR TO PROCEEDING FROM ONE PHASE OF CONSTRUCTION TO THE NEXT:

STORMWATER MANAGEMENT/DRAINAGE FACILITIES

A. PERIMETER CONTAINMENT BERM:
MINIMUM ELEVATION = DESIGN GRADE
MAXIMUM ELEVATION = DESIGN GRADE + 0.10 FOOT
B. WATER CONTROL STRUCTURE:
MINIMUM GRATE ELEVATION = DESIGN GRADE
MAXIMUM GRATE ELEVATION = DESIGN GRADE + 0.10 FOOT
MINIMUM CREST ELEVATION = DESIGN GRADE
MAXIMUM CREST ELEVATION = DESIGN GRADE + 0.05 FOOT
MINIMUM BLEEDER ELEVATION = DESIGN GRADE
MAXIMUM BLEEDER ELEVATION = DESIGN GRADE + 0.05 FOOT
MINIMUM TOP OF FILTER ELEVATION = DESIGN GRADE
MAXIMUM TOP OF FILTER ELEVATION = DESIGN GRADE + 0.05 FOOT
C. CATCH BASINS/INLETS/PIPE INVERTS:
MINIMUM ELEVATION = DESIGN GRADE - 0.05 FOOT
MAXIMUM ELEVATION = DESIGN GRADE + 0.05 FOOT
D. SWALE GRADES/GRADIENTS:
MINIMUM ELEVATION = DESIGN GRADE - 0.10 FOOT
MAXIMUM ELEVATION = DESIGN GRADE + 0.10 FOOT
MINIMUM FLOWLINE GRADIENT = 90% OF DESIGN GRADIENT
E. PAVEMENT GRADES/GRADIENTS:
FLEXIBLE PAVEMENT GRADE:
MINIMUM ELEVATION = DESIGN GRADE - 0.10 FOOT
MAXIMUM ELEVATION = DESIGN GRADE + 0.10 FOOT
FLEXIBLE PAVEMENT GRADIENT = 90% OF DESIGN GRADIENT
(CROSS SLOPE AND LONGITUDINAL SLOPE)
F. RIGID (CONCRETE) PAVEMENT GRADE:
MINIMUM ELEVATION = DESIGN GRADE - 0.05 FOOT
MAXIMUM ELEVATION = DESIGN GRADE + 0.05 FOOT
G. RIGID PAVEMENT GRADIENTS:
MINIMUM GRADIENTS = 90% OF DESIGN GRADIENT
(CROSS SLOPE AND LONGITUDINAL SLOPE)
H. MAXIMUM HANDICAP RAMP = 1:12
(GRADIENT UNLESS OTHERWISE SPECIFIED BY LOCAL CODES)

UNLESS OTHERWISE SPECIFIED BY THE LOCAL UTILITY COMPANIES, THE FOLLOWING ARE THE ALLOWABLE TOLERANCES FOR THESE ACTIVITIES:
I. MANHOLES AND PIPE INVERTS:
MINIMUM ELEVATION = DESIGN GRADE - 0.05 FOOT
MAXIMUM ELEVATION = DESIGN GRADE + 0.05 FOOT
MINIMUM LINE GRADIENT = 90% OF DESIGN GRADIENT
J. ALIGNMENT/LOCATION OF APPURTENANCES:
AS ALLOWED BY THE APPLICABLE UTILITY AND/OR LOCAL GOVERNMENTAL ENTITY. CONTRACTOR SHALL CONFIRM AND DOCUMENT THIS PRIOR TO CONSTRUCTION.

TESTING

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING, COORDINATING, DOCUMENTING, AND PROVIDING THE FOLLOWING MINIMUM TESTING:

WATER DISTRIBUTION - UNLESS OTHERWISE SPECIFIED BY THE UTILITY COMPANY, THE LINES SHALL BE PRESSURE TESTED TO THE RATING OF THE PIPE. THE LINES SHALL BE TESTED IN SEGMENTS BETWEEN MAINLINE VALVES. BACTERIOLOGICAL TEST SAMPLES SHALL BE TAKEN AT ALL BRANCH LINE TERMINATION POINTS OR CONNECTION POINTS, AND ALONG THE MAIN LINES AT DISTANCES NOT TO EXCEED 2,640 FEET. ALL HYDRANTS AND VALVES SHALL BE OPERATED TO TEST PERFORMANCE. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 36 HOURS NOTICE TO THE ENGINEER OF RECORD PRIOR TO TESTING.
WASTEWATER COLLECTION - UNLESS OTHERWISE SPECIFIED BY THE UTILITY COMPANY, THE FORCE MAIN SHALL BE PRESSURE TESTED TO THE RATING OF THE PIPE. VALVES SHALL BE OPERATED TO TEST PERFORMANCE. DEPENDING UPON WATER TABLE CONDITIONS DETERMINED BY THE ENGINEER, THE GRAVITY LINES SHALL BE TESTED FOR EITHER INFILTRATION OR EXFILTRATION AND INFLOW. THERE SHALL BE NO INFILTRATION / EXFILTRATION OR INFLOW ALLOWED. THE CONTRACTOR SHALL SEAL ANY PIPE, FITTING OR MANHOLE AS REQUIRED. THE CONTRACTOR SHALL PROVIDE A VIDEO TAPE OF ALL MAIN GRAVITY LINES ALONG WITH A LOG OF LATERAL LOCATIONS. ALL ELECTRICAL AND MECHANICAL DEVICES AT LIFT STATIONS SHALL BE TESTED TO VERIFY PROPER OPERATIONAL STATUS. THE CONTRACTOR SHALL PROVIDE MAINTENANCE MANUALS TO THE OWNER. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 36 HOURS NOTICE TO THE ENGINEER OF RECORD PRIOR TO TESTING.
PRIVATE ROADWAY/PARKING SUBGRADE - THE SUBGRADE SHALL BE TESTED FOR THE LBR VALUE AT A FREQUENCY OF ONE PER 10,000 SF. DENSITY TESTS SHALL BE PERFORMED AT A FREQUENCY OF TWO PER 10,000 SF. THICKNESS SHALL BE MEASURED AT EACH DENSITY TEST LOCATION. A PROFESSIONAL ENGINEER'S CERTIFICATION OF COMPLIANCE SHALL BE PROVIDED BY THE TESTING LAB.
PRIVATE ROADWAY/PARKING BASE - THE BASE SHALL BE TESTED FOR THE LBR VALUE AT A FREQUENCY OF ONE PER 10,000 SF. DENSITY TESTS SHALL BE PERFORMED AT A FREQUENCY OF TWO PER 10,000 SF. A SIEVE ANALYSIS SHALL BE PERFORMED AT A FREQUENCY OF ONE PER ACRE. THICKNESS SHALL BE MEASURED AT EACH DENSITY TEST LOCATION.
A PROFESSIONAL ENGINEER'S CERTIFICATION OF COMPLIANCE SHALL BE PROVIDED BY THE TESTING LAB.
PRIVATE ASPHALT PAVING - ASPHALTIC CONCRETE SHALL BE TESTED FOR THE FOLLOWING PARAMETERS:
THICKNESS, SIEVE ANALYSIS, MIX TYPE, STABILITY, % BITUMEN, AND DENSITY. THE ASPHALT SHALL BE TESTED AT A FREQUENCY OF TWO PER ACRE. A PROFESSIONAL ENGINEER'S CERTIFICATION OF COMPLIANCE SHALL BE PROVIDED BY THE TESTING LAB.
PUBLIC ROADWAYS - AS REQUIRED BY THE ENTITY HAVING JURISDICTION. THE CONTRACTOR SHALL DETERMINE AND DOCUMENT THESE SPECIFICATIONS PRIOR TO BIDDING.
PORTLAND CEMENT CONCRETE - CONCRETE SHALL BE TESTED FOR THE FOLLOWING PARAMETERS:
SLUMP, MODULUS OF RUPTURE, AND 7 AND 28 DAY COMPRESSIVE STRENGTH. TESTS SHALL BE PERFORMED ON SAMPLES TAKEN AT THE SITE AT A FREQUENCY OF TWO PER ACRE. A PROFESSIONAL ENGINEER'S CERTIFICATION OF COMPLIANCE SHALL BE PROVIDED BY THE TESTING LAB.
RETENTION/DETENTION FACILITIES - IF INCLUDED WITHIN THE PROJECT, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND PERFORM A DRAWDOWN AND CAPACITY TEST OF THE FACILITIES. THE CONTRACTOR SHALL PROVIDE SUFFICIENT WATER AND ACCEPTABLE MEANS TO MEASURE THE WATER VOLUMES PROVIDED, IF REQUIRED BY THE ENGINEER. IF A FILTRATION SYSTEM IS INCLUDED WITHIN THE PROJECT, THE FILTER MEDIA SHALL BE TESTED FOR COMPLIANCE WITH ALL CURRENT SPECIFICATIONS OF THE WATER MANAGEMENT DISTRICT. A PROFESSIONAL ENGINEER'S CERTIFICATION OF COMPLIANCE SHALL BE PROVIDED BY THE TESTING LAB.
IN ADDITION TO THE ENVIRONMENTAL PROTECTION DURING CONSTRUCTION SPECIFICATIONS, THE CONTRACTOR SHALL PERFORM THE FOLLOWING IN THE ORDER LISTED:

A. PRIOR TO COMMENCEMENT, PROVIDE NOTIFICATION TO THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND LOCAL GOVERNMENT.
B. PREPARE AND SUBMIT A NPDES NOTICE OF CONSTRUCTION TO THE FDEP.
C. ERECT A TURBIDITY SCREEN ON ANY DOWNSTREAM SYSTEM WHICH RECEIVES RUNOFF FROM THE PROJECT. INSTALL OUTFALL CONTROL STRUCTURE AND FILTRATION SYSTEM IF INCLUDED.
D. PROVIDE A TEMPORARY FILTER CLOTH COVERED WITH GRAVEL OVER ANY PROPOSED FILTERS.
E. INSTALL A TEMPORARY TURBIDITY SCREEN AT ALL CONTROL STRUCTURES.
F. CONSTRUCT A TEMPORARY PERIMETER BERM AS NECESSARY TO DIRECT ALL RUNOFF WITHIN ANY AREA PLANNED FOR CLEARING.
G. MAINTAIN FILTER DURING CONSTRUCTION TO PROVIDE CONTINUOUS OPERATION.
H. UPON PERFORMING FINAL GRADING, THE CONTRACTOR SHALL REMOVE ALL SILTS, CLAYS AND OTHER DELETERIOUS MATERIAL FROM THE BOTTOM OF ALL STORMWATER MANAGEMENT AREAS PRIOR TO GRASSING.
I. AFTER ACHIEVING A NON-ERODIBLE COVER OF GRASS, REMOVE TEMPORARY FILTER CLOTH AND GRAVEL OVER FILTERS AND REPLACE WITH NEW FILTER CLOTH AND COVER MATERIAL IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
J. NOTIFY THE OWNER FOR FINAL INSPECTION.
K. UPON FINAL APPROVAL FROM THE OWNER, REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL FACILITIES.

OPERATION AND MAINTENANCE OF STORMWATER SYSTEMS

STORMWATER STRUCTURES AND PIPES SHOULD BE INSPECTED AT LEAST ANNUALLY TO DETERMINE IF THEY NEED TO BE CLEANED. TYPICALLY, A CATCH BASIN OR INLET STRUCTURE SHOULD BE CLEANED IF THE DEPTH OF DEPOSITS IS GREATER THAN OR EQUAL TO ONE-THIRD THE DEPTH FROM THE BASIN TO THE INVERT OF THE LOWEST PIPE OR OPENING INTO OR OUT OF THE BASIN. IF THE DEPOSITS SIGNIFICANTLY EXCEEDS THE ONE-THIRD DEPTH STANDARD DURING THE ANNUAL INSPECTION, THEN IT SHOULD BE CLEANED MORE FREQUENTLY. IF WOODY DEBRIS, GRASS CUTTINGS OR TRASH ACCUMULATES IN A CATCH BASIN, THEN IT SHOULD BE CLEANED ON AT LEAST A WEEKLY BASIS. INLET GRATES SHOULD BE INSPECTED AFTER EACH MOWING OPERATION AND ANY CUTTINGS OR DEBRIS SHOULD BE REMOVED.
STORMWATER STRUCTURES AND PIPES CAN BE CLEANED EITHER MANUALLY OR BY BUCKET LOADERS OR VACUUM PUMPS. MATERIAL REMOVED FROM STRUCTURES IS USUALLY DISPOSED IN CONVENTIONAL LANDFILLS. HOWEVER, THIS MATERIAL SHOULD BE TESTED TO ENSURE THAT IT IS NOT HAZARDOUS WASTE (EPA CRITERIA) BEFORE ANY MATERIALS CAN BE DISPOSED.

STORMWATER PONDS

PERIODIC VISUAL INSPECTIONS FOR ANY DEBRIS (PAPER AND PLASTIC TRASH, GRASS CLIPPINGS, ETC.) WITHIN THE STORMWATER POND SHALL BE PERFORMED. ANY DEBRIS FOUND ON TOP OF THE SAND FILTER SHALL BE REMOVED. VEGETATION WITHIN THE STORMWATER MANAGEMENT SYSTEMS (SOD, GRASS, ETC.) SHALL BE MAINTAINED AT A HEIGHT NO GREATER THAN SIX (6") INCHES. ALL GRASS CLIPPINGS SHALL BE REMOVED FROM THE STORMWATER POND. ANY EROSION PROBLEMS ENCOUNTERED WITHIN THE STORMWATER MANAGEMENT SYSTEM (STORMWATER POND, SWALES, GRASSED AREAS, ETC.) SHALL BE FILLED IN AND SODDED. ANY SOD PLACED IN THE STORMWATER POND BOTTOM SHALL BE OF THE SAND (BASE) GROWN VARIETY. IF CATTAILS HAVE PROPAGATED IN ISOLATED AREAS OF THE STORMWATER POND, THEY ARE TO BE REMOVED BY HAND.

SAND FILTERS

IF, AFTER ANY AVERAGE RAINFALL EVENT (1 TO 2 INCHES), THERE IS STANDING WATER IN THE DETENTION POND 36 HOURS (1.5 DAYS) AFTER THE RAINFALL EVENT, THE SAND FILTER WILL BE SUBJECT TO THE FOLLOWING MAINTENANCE PROCEDURES:
A. REMOVE AND TEMPORARILY STOCKPILE ON FILTER CLOTH (OR EQUIVALENT), THE 3"± GRAVEL CAP ON TOP OF THE SAND FILTER.
B. REMOVE AND PROPERLY DISPOSE OF THE FILTER CLOTH FOUND ON TOP OF THE SAND FILTER
C. INSPECT THE TOP OF THE SAND FILTER FOR EVIDENCE OF SEDIMENTS, SILTS, ETC. (I.E., DISCOLORATION, ALGAE, ETC.) FILLING THE VOIDS OF THE SAND MEDIA. IF NO SEDIMENTS, SILTS, ETC. ARE FOUND IN THE SAND FILTER MEDIA, GO TO STEP D BELOW. IF SEDIMENTS, SILTS, ETC. ARE FOUND IN THE SAND MEDIA THE FOLLOWING PROCEDURES SHALL BE IMPLEMENTED:
1. LOCATE THE LIMITS OF THE SAND FILTER. THE PVC LINER ON THE SIDES OF THE SAND FILTER ARE A GOOD INDICATION OF THE LIMITS OF THE SAND FILTER.
2. REMOVE THE TOP SIX (6") INCHES OF SAND FILTER MEDIA. BE CAREFUL NOT TO PUNCTURE THE PVC LINER ON THE SIDES OF THE SAND FILTER.
3. PROPERLY DISPOSE OF THE SPENT FILTER MEDIA.
4. REPLACE THE SPENT SAND FILTER MEDIA WITH SAND FILTER MEDIA MEETING THE FOLLOWING SPECIFICATIONS:
FILTER MATERIAL TO BE OF A FINE GRANULAR MEDIA; TO BE OF A UNIFORM COEFFICIENT OF 1.5 OR GREATER AND HAVE AN EFFECTIVE GRAIN SIZE OF 0.20 TO 0.55 MILLIMETERS. NO LIME ROCK OR SHELL MATERIAL CAN BE USED AS FILTER MEDIA.
5. GO TO STEP D BELOW.
D. REPLACE THE FILTER CLOTH WITH NEW FILTER CLOTH AND INSTALL THE THREE (3") INCH GRAVEL CAP AS ORIGINALLY FOUND.
E. TEMPORARILY BLOCK OFF THE OUTFALL PIPE IN CONTROL STRUCTURE. LOCATE THE CLEAN OUT AT THE BEGINNING OF THE SAND FILTER (END FURTHEST FROM THE CONTROL STRUCTURE). REMOVE THE CLEAN OUT CAP. INSERT A HIGH PRESSURE HOSE INTO THE CLEAN OUT AND FORCE WATER INTO THE SAND FILTER PIPE. MONITOR DISCHARGE FLOWS FROM THE SAND FILTER IN THE CONTROL STRUCTURE FOR SEDIMENTS. CONTINUE TO FORCE WATER INTO THE CLEAN OUT UNTIL THERE ARE NO SEDIMENTS FOUND IN THE DISCHARGED WATER AT THE CONTROL STRUCTURE. REMOVE AND PROPERLY DISPOSE OF ANY SEDIMENTS FOUND IN THE CONTROL STRUCTURE.

IF THESE MAINTENANCE PROCEDURES FAIL TO DRAIN THE STORMWATER WITHIN 36 HOURS, CONTACT THE ENGINEER OF RECORD FOR FURTHER INSTRUCTIONS.

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DESIGNED BY:	DV	DATE:	08-12-20
DRAWN BY:	KS	DATE:	08-12-20
CHECKED BY:	DV	DATE:	08-12-20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

APPROVED BY:

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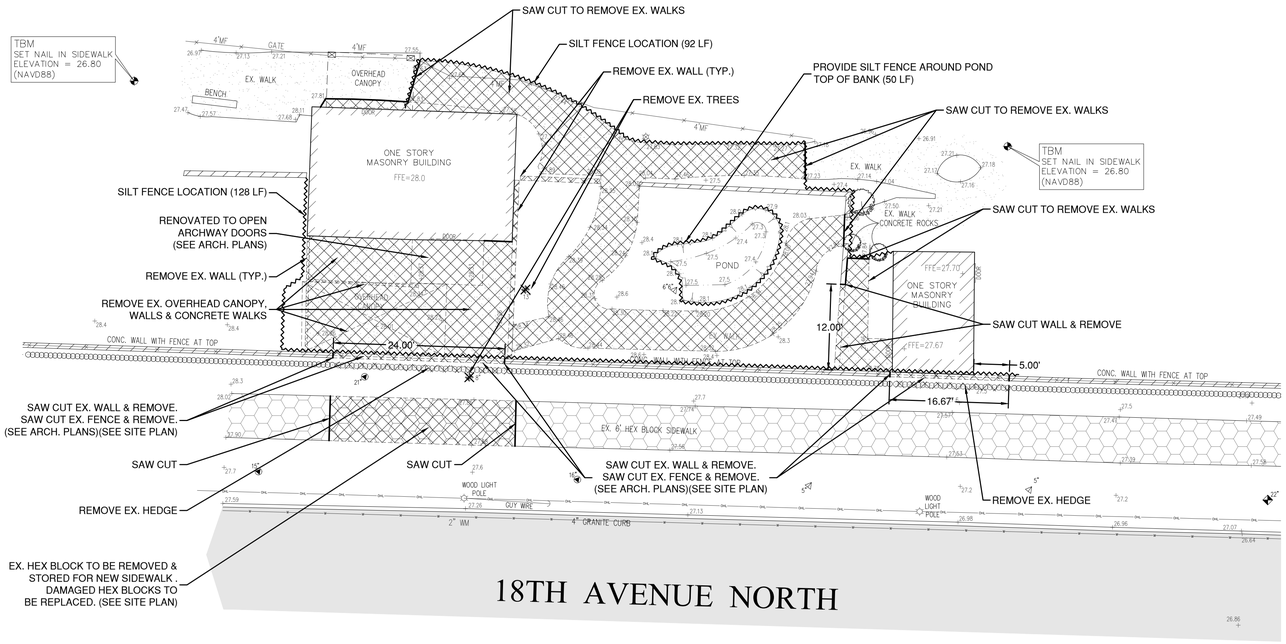
DATE: August 12th, 2020
SCALE: NOT TO SCALE
DRAWING No.
C1
GENERAL NOTES & SPECIFICATIONS



CITY NOTE'S:

A WORK PERMIT ISSUED BY THE ENGINEERING DEPARTMENT MUST BE OBTAINED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WITHIN THE DEDICATED RIGHT-OF-WAY OR PUBLIC EASEMENT. ALL WORK WITHIN RIGHT-OF-WAY OR PUBLIC EASEMENT SHALL BE IN COMPLIANCE WITH CURRENT CITY ENGINEERING STANDARDS AND SPECIFICATIONS AND SHALL BE INSTALLED AT THE APPLICANT'S EXPENSE IN ACCORDANCE WITH THE STANDARDS, SPECIFICATIONS, AND POLICIES ADOPTED BY THE CITY. OBTAIN THE CITY ENGINEERING PERMIT FOR THE REQUIRED RIGHT-OF-WAY WORK. THE PERMIT FEE IS $150.00; THE CONTRACTOR WILL BE REQUIRED TO PROVIDE A PERFORMANCE BOND IN THE AMOUNT OF THE PROPOSED WORK WITHIN THE RIGHT-OF-WAY, SUBMIT AN ENGINEER'S ESTIMATE FOR THE COST OF THE RIGHT-OF-WAY IMPROVEMENTS. SUBMIT A CERTIFICATE OF INSURANCE (WITH THE CITY LISTED AS A CERTIFICATE HOLDER). TO MAKE APPLICATION FOR REQUIRED ENGINEERING PERMIT THE CONTRACTOR SHOULD SUBMIT THREE COPIES OF THE CITY APPROVED CIVIL PLANS SHOWING THE WORK DIRECTLY TO THE CITY ENGINEERING DEPARTMENT WITH A COMPLETED RIGHT-OF-WAY PERMIT APPLICATION (FORM AVAILABLE UPON REQUEST, PHONE 727-893-7238). ALLOW A MINIMUM OF 5 BUSINESS DAYS FOR PERMIT PROCESSING AND ISSUANCE. ALL CONDITIONS OF THE PERMIT MUST BE SATISFIED PRIOR TO THE C.O. BEING ISSUED.

SEPARATE CITY ENGINEERING PERMITS ARE REQUIRED FOR ANY PROPOSED SANITARY SEWER; STORM SEWER CONNECTIONS; AND FOR DRIVEWAY, CURB AND SIDEWALK WORK WITHIN THE CITY PUBLIC RIGHT-OF-WAY. PRIOR TO INITIATING ANY WORK IN THE PUBLIC RIGHT-OF-WAY THE CONTRACTOR MUST SUBMIT 3 SETS OF CITY APPROVED CIVIL PLANS DIRECTLY TO THE CITY ENGINEERING DEPARTMENT. ALLOW A MINIMUM OF 5 BUSINESS DAYS FOR PERMIT PROCESSING AND ISSUANCE. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE A CERTIFICATE OF INSURANCE (PER CURRENT CITY REQUIREMENTS) AND A PERFORMANCE BOND (IN THE AMOUNT OF THE WORK (DETAILED UNIT COST ESTIMATE REQUIRED) OR $15,000, WHICHEVER IS GREATER) PRIOR TO RIGHT-OF-WAY PERMIT ISSUANCE. FOR DEVELOPMENT PERMITS THE FEE IS $150 PLUS THE COST OF REQUIRED CITY TESTING AND INSPECTION OF ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY WHICH WILL BE BILLED TO THE PERMIT APPLICANT MONTHLY. THE RIGHT-OF-WAY PERMIT(S) MUST BE OBTAINED PRIOR TO INITIATING ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY OR A DOUBLE PERMIT FEE WILL APPLY. BE AWARE THAT A CONDITION OF THE ROW PERMIT(S) WILL BE TO MAINTAIN AN OPEN, SAFE, AND USABLE PEDESTRIAN PATHWAY AROUND THE SITE THROUGHOUT CONSTRUCTION. PLEASE DIRECT ALL QUESTIONS TO THE CITY ENGINEERING DEPARTMENT (PHONE 893-7238).

DEMOLITION NOTES FOR CITY RIGHT-OF-WAY:

1. ANY EXISTING SIDEWALKS IN THE CITY RIGHT-OF-WAY, ADJACENT TO THE PROPERTY, IN DISREPAIR OR DAMAGED DURING CONSTRUCTION WILL NEED TO BE REPLACED. AN ENGINEERING ROW PERMIT (PHONE 727-893-7238 OR Martha.Hegenbarth@stpete.org) WILL BE REQUIRED FOR THIS WORK.
2. ALL SIGNS SHALL BE REINSTALLED AT THEIR CURRENT LOCATIONS UPON COMPLETION OF SIDEWALKS.
3. THE CONTRACTOR SELECTED FOR THIS PROJECT WILL BE RESPONSIBLE FOR FILING NPDES NOTICE OF INTENT FOR CONSTRUCTION ACTIVITY.
4. REFER TO GENERAL NOTES & SPECIFICATION (SHEET C1) FOR ADDITIONAL INFORMATION ON SEDIMENT & EROSION CONTROL METHODS.
5. ALL AREAS OF PUBLIC ROADWAYS WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE MILLED AND OVERLAID IN FULL LANE WIDTHS PER CURRENT CITY OF ST. PETERSBURG STANDARDS AND SPECIFICATIONS.
6. THE EXISTING IRRIGATION WELL LOCATED ON SITE SHALL BE ABANDONED PER SWFWMD PROCEDURES.
7. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO PROTECT AND KEEP SAFE FROM THEFT AND/OR DAMAGE ALL GRANITE CURBING AND/OR STREET OR ALLEY BRICK WHICH MAY BE TEMPORARILY REMOVED AND TO PROVIDE FOR ADEQUATE TRAFFIC AND PEDESTRIAN CONTROL WHILE ANY PORTION OF A PUBLIC TRAVEL PATH IS ADVERSELY AFFECTED. THE PERMIT HOLDER AND THE PROPERTY OWNER ARE JOINTLY AND SEVERALLY LIABLE FOR ANY LOSS OF OR DAMAGE TO ANY SUCH MATERIALS THAT MAY BE TEMPORARILY REMOVED.

DATUM NOTES:

ELEVATIONS ARE BASED ON NATIONAL GEODETIC SURVEY
BENCHMARK "BV 263" HAVING AN ELEVATION OF
28.84 NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88).

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Telephone No. (727) 894-0404
CA No. 30184
VES Project No: 13407

DESIGNED BY: DV DATE: 08-12-20
DRAWN BY: KS DATE: 08-12-20
CHECKED BY: DV DATE: 08-12-20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

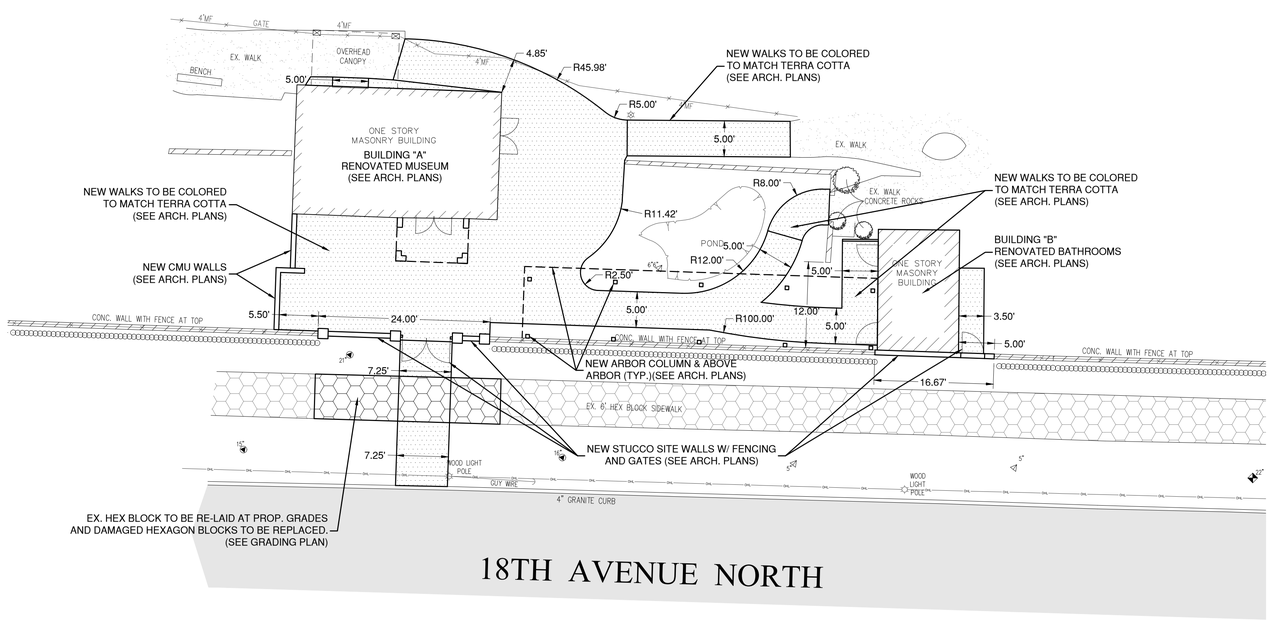
CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012

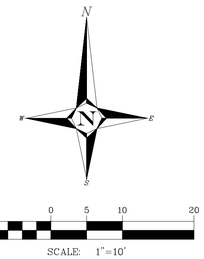
ENGINEERING and CAPITAL
IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

APPROVED BY:

ARC3 architecture
6699 13th Avenue North, Suite 4A
St. Petersburg, FL 33710
(727) 381-5220
(727) 381-0052 fax

DATE: August 12th, 2020
SCALE: 1" = 10'
DRAWING No. C2
EXISTING CONDITIONS / DEMOLITION PLAN





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SITE NOTES FOR CITY RIGHT-OF-WAY:

1. NEW & EXISTING SIDEWALKS SHALL BE MODIFIED AS NECESSARY TO PROVIDE TRUNCATED DOME TACTILE SURFACES AT ALL CORNERS OR INTERSECTIONS WITH ROADWAYS & DRIVEWAYS. CURB-CUT RAMPS FOR THE PHYSICALLY HANDICAPPED SHALL BE PROVIDED IN SIDEWALKS AT ALL CORNERS WHERE SIDEWALKS MEET A STREET OR DRIVEWAY. DETECTABLE WARNING SURFACES SHALL BE CAST IN PLACE, NOT GLUE OR SCREW DOWN, AND OF CONTRASTING COLOR TO THE ADJACENT SIDEWALK (BRICK RED PREFERRED). AN ENGINEERING ROW PERMIT (PHONE 727-893-7238 OR Martha.Hegenbarth@stpete.org) WILL BE REQUIRED FOR THIS WORK.

2. AN ENGINEERING PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE CITY CONTROLLED PUBLIC RIGHT-OF-WAY OF 18TH AVENUE NORTH (SIDEWALK REMOVAL AND SIDEWALK CONSTRUCTION). THE PERMIT FEE WILL BE $150.00 AND THE COST OF REQUIRED CITY TESTING AND INSPECTION WILL BE BILLED TO THE PERMIT APPLICANT MONTHLY. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE A PERFORMANCE BOND (ON THE CITY'S FORM, AMOUNT BASED ON THE VALUE OF THE WORK AS DETERMINED ON THE ENGINEERS UNITS COST ESTIMATE BUT IN NO CASE SHALL BE LESS THAN $15,000.00 AND A CERTIFICATE OF INSURANCE (PER CURRENT CITY REQUIREMENTS) AT PERMIT ISSUANCE. TO MAKE APPLICATION FOR THE REQUIRED ENGINEERING PERMIT THE CONTRACTOR MUST SUBMIT THREE COPIES OF THE CIVIL PLANS SHOWING THE WORK DIRECTLY TO THE ENGINEERING DEPARTMENT WITH A COMPLETED RIGHT OF WAY PERMIT APPLICATION (FORM AVAILABLE UPON REQUEST, PHONE 727-893-7238, EMAIL Martha.Hegenbarth@stpete.org) AND OTHER REQUIRED INFORMATION LISTED ABOVE. ALLOW A MINIMUM OF 5 BUSINESS DAYS FOR PERMIT PROCESSING AND ISSUANCE.

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SITE LEGEND

DENOTES PROPOSED CONCRETE WALKS/PATHS

DENOTES PROPOSED/RE-LAID HEX BLOCK WALK

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Telephone No. (727) 894-0404
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VES Project No: 13407

DESIGNED BY:	DV	DATE: 08-12-20
DRAWN BY:	KS	DATE: 08-12-20
CHECKED BY:	DV	DATE: 08-12-20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

APPROVED BY:

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(727) 381-5220
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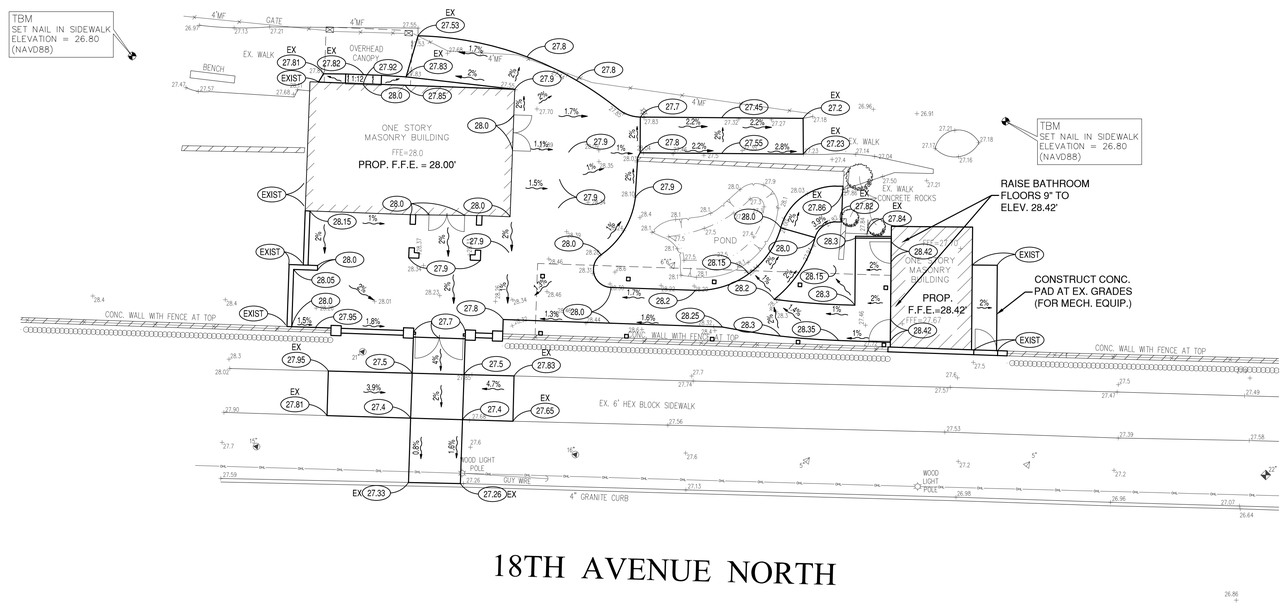
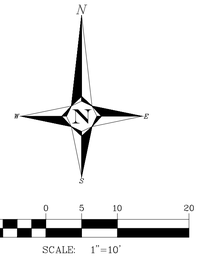
DATE: August 12th, 2020
SCALE: 1" = 10'
DRAWING No. C3
SITE PLAN





GRADING NOTES FOR CITY RIGHT-OF-WAY:

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GRADING LEGEND

+ 27.2	EXISTING GROUND ELEVATION SHOT
←	PROPOSED FLOW DIRECTION ARROW
(ELEV)	PROPOSED ELEVATION
EX	EXISTING ELEVATION

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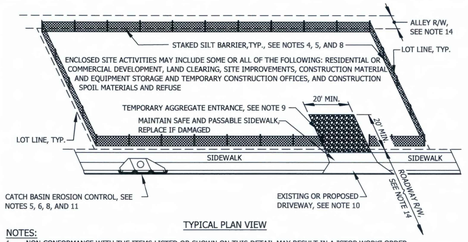
DRAWING No. City Sheet # TBD
C4

GRADING & DRAINAGE PLAN



TYPICAL PLAN VIEW

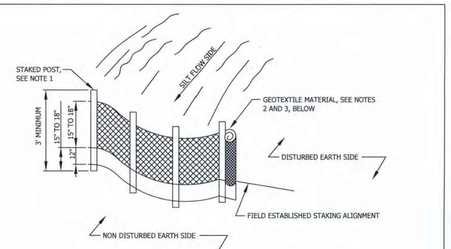
NOTES:

1. NON-CONFORMANCE WITH THE ITEMS LISTED OR SHOWN ON THIS DETAIL MAY RESULT IN A "STOP WORK" ORDER.
2. THE PURPOSE OF THIS DETAIL IS TO ASSIST THE DEVELOPER, BUILDER, AND/OR CONTRACTOR TO MEET THE MINIMUM REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT ISSUED TO THE CITY OF ST. PETERSBURG.
3. THIS DETAIL IS APPLICABLE FOR ALL CONSTRUCTION SITES AS DESCRIBED ABOVE OF LESS THAN ONE (1) ACRE; THOSE SITES GREATER THAN ONE (1) ACRE ALSO MUST OBTAIN COVERAGE UNDER AN NPDES STORM WATER PERMIT.
4. THE SILT BARRIER SHALL BE INSTALLED ONE FOOT INSIDE THE PROPERTY LINE OR TWO FEET FROM THE SIDEWALK AS SHOWN ABOVE. FOR SILT BARRIER REQUIREMENTS AND INSTALLATION REQUIREMENTS, SEE STANDARD DETAIL-STAKED SILT BARRIER; DRAWING NO. S40-60.
5. INSPECT AND MAINTAIN ALL EROSION CONTROL DEVICES DAILY AND/OR AFTER A RAINFALL.
6. FOR CURB INLET FILTER REQUIREMENTS, SEE STANDARD DETAIL-CURB INLET FILTER FOR EROSION CONTROL AT CATCH BASIN; DWG. NO. S40-35, OR FOR SYNTHETIC HAY BALE REQUIREMENTS, SEE STANDARD DETAIL-HAY BALES FOR EROSION CONTROL AT CATCH BASIN; DWG. NO. S40-36.
7. EXISTING GRASS VEGETATION SHALL BE MAINTAINED AT A 10 INCH HEIGHT OR LESS, AS PER CITY CODE, CHAPTER 16; SECTIONS 16-1070 THRU 1076.
8. ALL SOIL EROSION CONTROL DEVICES MUST REMAIN IN PLACE UNTIL NEW VEGETATION IS ESTABLISHED. ALL DISTURBED AREAS SHALL BE SODDED AFTER FINAL GRADING.
9. TEMPORARY AGGREGATE ENTRANCE SHALL BE A MINIMUM 6" THICK OF STANDARD GRADATION SIZE #1 OR #2 RANGE AS PER FDOT SECTION 901, AND SHALL BE COMPACTED. AGGREGATE SHALL BE QUARTZ OR CRUSHED GRANITE. LIMEROCK, DOLOMITE OR SANDSTONE SHALL NOT BE ACCEPTABLE.
10. IF THERE IS NO EXISTING DRIVEWAY OR AN ALTERNATE INGRESS/EGRESS IS TO BE USED DURING CONSTRUCTION, THE METHOD OF ACCESS SHALL CONFORM TO THE "TEMPORARY AGGREGATE ENTRANCE" AS DESCRIBED ABOVE. IF THE AGGREGATE IS DEEMED UNSAFE, THE ALTERNATE INGRESS/EGRESS SHALL BE CONSTRUCTED OF 1" ASPHALTIC CONCRETE OVER 6" OF COMPACTED LIMEROCK BASE.
11. REGULARLY REMOVE COLLECTED SEDIMENT AND DEBRIS FROM THE SILT BARRIERS AND GUTTER FLOW LINE.
12. FOR ALL SAND AND SOIL STOCKPILES DUST/EROSION CONTROL MEASURES SHALL BE IMPLEMENTED.
13. KEEP CONSTRUCTION SITE LITTER/DEBRIS, AND LEAKING CONTAINERS IN ORDERLY CONTAINMENT AREAS.
14. SWEEP ENTRANCE AND ADJACENT ROADWAY WEEKLY TO KEEP FREE OF CONSTRUCTION DEBRIS.
15. SWEEP PAVED SURFACES ONLY. DO NOT WASH DOWN UNTIL SITE IS FINISHED.
16. SINGLE FAMILY INFILL LOTS MAY REQUIRE SILT FENCE AS ORDERED OR DIRECTED BY THE CITY BUILDING OFFICIAL.

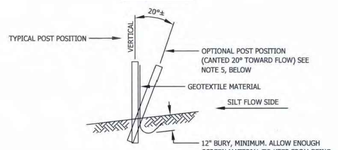
S:_AUTOCAD\2.1 New Standard Details\S10-General Details\S10-20.dwg HAClosels
Fri, 01 Nov 2019 - 10:17am

CITY STANDARDS

REVISIONS		ENGINEERING AND CAPITAL IMPROVEMENT DEPARTMENT CITY of ST. PETERSBURG	SITE DEVELOPMENT AND/OR CONSTRUCTION STAGING SITE EROSION CONTROL DETAIL		
BY	DATE		APPROVED BY: Brijesh Prayman DIRECTOR	DATE: OCT. 2019	
		SCALE: N.T.S.		DWG. No.	S10-20



ELEVATION VIEW



SECTION VIEW

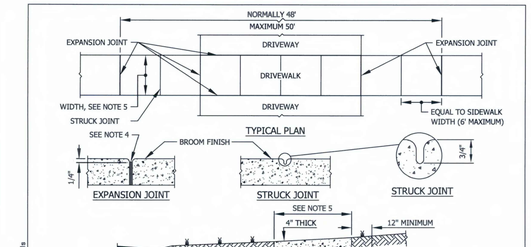
NOTES:

1. POST; 2"X2" WOOD, P.T. OR 2-1/2"ø STEEL AT 6' CENTERS, MAXIMUM.
2. GEOTEXTILE: GRAB TENSILE AT 90 LBS, TRAPEZOIDAL TEAR AT 35 LBS., MULLEN BURST AT 180 PSI.
3. GEOTEXTILE MATERIAL SHALL BE BURIED IN THE GROUND A MINIMUM OF 12" AND BACK FILLED.
4. ALSO SEE FDOT INDEX 199, "GEOTEXTILE CRITERIA", EROSION CLASS.
5. OPTIONAL POST POSITION REQUIRED WHEN SLOPE IS GREATER THAN 1:2.

C:\Users\HAClosels\Desktop\Standard Details Working\S40--70.dwg HAClosels
Thu, 07 Nov 2019 - 4:04pm

CITY STANDARDS

REVISIONS		ENGINEERING AND CAPITAL IMPROVEMENT DEPARTMENT CITY of ST. PETERSBURG	STAKED SILT BARRIER DETAIL		
BY	DATE		APPROVED BY: Brijesh Prayman DIRECTOR	DATE: OCT. 2019	
		SCALE: N.T.S.		DWG. No.	S40-70



TYPICAL PLAN

TYPICAL SIDEWALK SECTION

TYPICAL DRIVEWALK SECTION

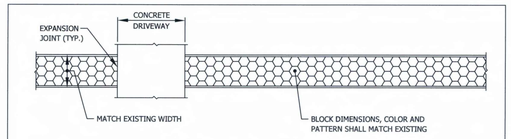
NOTES:

1. SIDEWALKS SHALL BE CONCRETE AND HAVE TOOLED EDGES.
2. RESTORATION AND UTILITY CUTS SHALL BE A MINIMUM FULL PANEL BETWEEN EXISTING JOINTS.
3. EXPANSION JOINTS SHALL BE INSTALLED WHERE SHOWN AND AT 50' MAXIMUM SPACING.
4. EXPANSION JOINTS SHALL CONSIST OF CONTINUOUS 1/2"x6" MINIMUM, BITUMINOUS EXPANSION STRIP.
5. SIDEWALKS SHALL CONFORM TO CITY CODE SECTION 16-857 AS FOLLOWS: SIDEWALKS SHALL BE REQUIRED ON BOTH SIDES OF ALL MAJOR ARTERIAL AND COLLECTOR STREETS; ON THE NORTH AND WEST SIDES OF OF ALL LOCAL STREETS, COMMERCIAL SERVICE STREET; AND LOCAL STREETS LEADING TO SCHOOLS, PARKS, SHOPPING CENTERS, CHURCHES, AND OTHER PUBLIC FACILITIES. SIDEWALK WIDTHS SHALL BE NOT LESS THAN THE FOLLOWING:
   A-6' ALONG ARTERIAL AND COLLECTOR ROADWAYS.
   B-4' ALONG ROADWAYS NOT DESIGNATED ON TRAFFIC CORRIDORS MAP, IN RESIDENTIAL AND INDUSTRIAL ZONES.*
   C-5' ALONG ROADWAYS NOT DESIGNATED ON THE TRAFFIC CORRIDORS MAP, IN COMMERCIAL AND OFFICE ZONES.*
   D-4' FOR PEDESTRIAN CROSSWALKS.
   E-12' FOR PEDESTRIAN/BICYCLE JOINT USE.
   *-ALL SIDEWALKS ABUTTING CURBS SHALL BE 6' WIDE, MININUM.

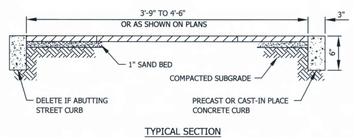
S:_AUTOCAD\2.1 New Standard Details\S20--Roadway Details\S20-32.dwg HAClosels
Tue, 29 Oct 2019 - 5:11pm

CITY STANDARDS

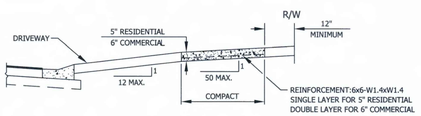
REVISIONS		ENGINEERING AND CAPITAL IMPROVEMENT DEPARTMENT CITY of ST. PETERSBURG	SIDEWALK AND DRIVEWALK CONSTRUCTION DETAIL		
BY	DATE		APPROVED BY: Brijesh Prayman DIRECTOR	DATE: OCT. 2019	
		SCALE: N.T.S.		DWG. No.	S20-32



TYPICAL HEXBLOCK SIDEWALK PLAN



TYPICAL SECTION



TYPICAL SIDEWALK SECTION ACROSS DRIVEWAY

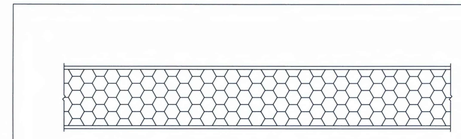
NOTES:

1. BLOCK THICKNESS = 2" MINIMUM. STANDARD HEXBLOCK IS 18" WIDE, EDGE TO EDGE.
2. BLOCK JOINT TOLERANCES: GAP @ 1/4" MAXIMUM, AND 1/8" VERTICAL MAXIMUM.
3. CONSTRUCT CONCRETE DRIVEWALK AT DRIVEWAY CROSSINGS. SEE STANDARD DETAIL-SIDEWALK AND DRIVE- WALK CONSTRUCTION.
4. EXPANSION JOINTS SHALL CONSIST OF CONTINUOUS 1/2" BITUMINOUS EXPANSION STRIP, AS SHOWN.

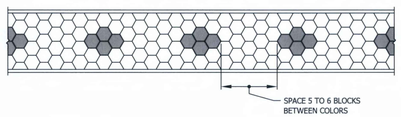
S:_AUTOCAD\2.1 New Standard Details\S20--Roadway Details\S20--35.dwg HAClosels
Tue, 29 Oct 2019 - 5:12pm

CITY STANDARDS

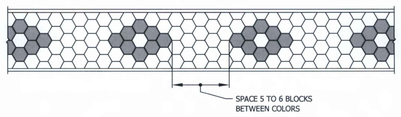
REVISIONS		ENGINEERING AND CAPITAL IMPROVEMENT DEPARTMENT CITY of ST. PETERSBURG	HEXBLOCK SIDEWALK REPLACEMENT DETAIL		
BY	DATE		APPROVED BY: Brijesh Prayman DIRECTOR	DATE: OCT. 2019	
		SCALE: N.T.S.		DWG. No.	S20-35



PLAIN



BLUE, RED, OR CHARCOAL

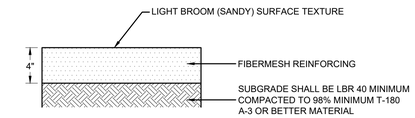


BLUE, RED, OR CHARCOAL

S:_AUTOCAD\2.1 New Standard Details\S20--Roadway Details\S20--36.dwg HAClosels
Tue, 29 Oct 2019 - 5:12pm

CITY STANDARDS

REVISIONS		ENGINEERING AND CAPITAL IMPROVEMENT DEPARTMENT CITY of ST. PETERSBURG	HEXWALK COLOR PATTERNS DETAIL		
BY	DATE		APPROVED BY: Brijesh Prayman DIRECTOR	DATE: OCT. 2019	
		SCALE: N.T.S.		DWG. No.	S20-36



NOTE:

1. CONTROL JOINTS EVERY 5 FEET OF SIDEWALK OR WALKWAY.
2. EXPANSION JOINTS EVERY 20 FEET OF SIDEWALK OR WALKWAY.
3. CONCRETE STRENGTH = 3000 PSI

TYPICAL CONCRETE SIDEWALK DETAIL

NOT TO SCALE

Daniel M. Vickstrom, P.E.
P.E. No. 46090
State of Florida
Vickstrom Engineering
CA No. 30184

VICKSTROM ENGINEERING SERVICES, INC.
505 20th Avenue NE
St. Petersburg, FL 33704
Telephone No. (727) 894-0404
CA No. 30184
VES Project No: 13407

DESIGNED BY: DV DATE: 08-12-20
DRAWN BY: KS DATE: 08-12-20
CHECKED BY: DV DATE: 08-12-20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

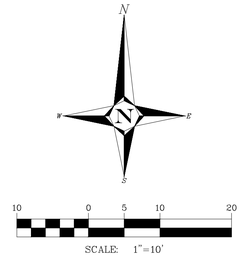
SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012

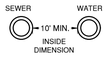
ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT CITY of ST. PETERSBURG
APPROVED BY:

ARC3 architecture
6699 13th Avenue North, Suite 4A
St. Petersburg, FL 33710
(727) 381-5220
(727) 381-0052 fax

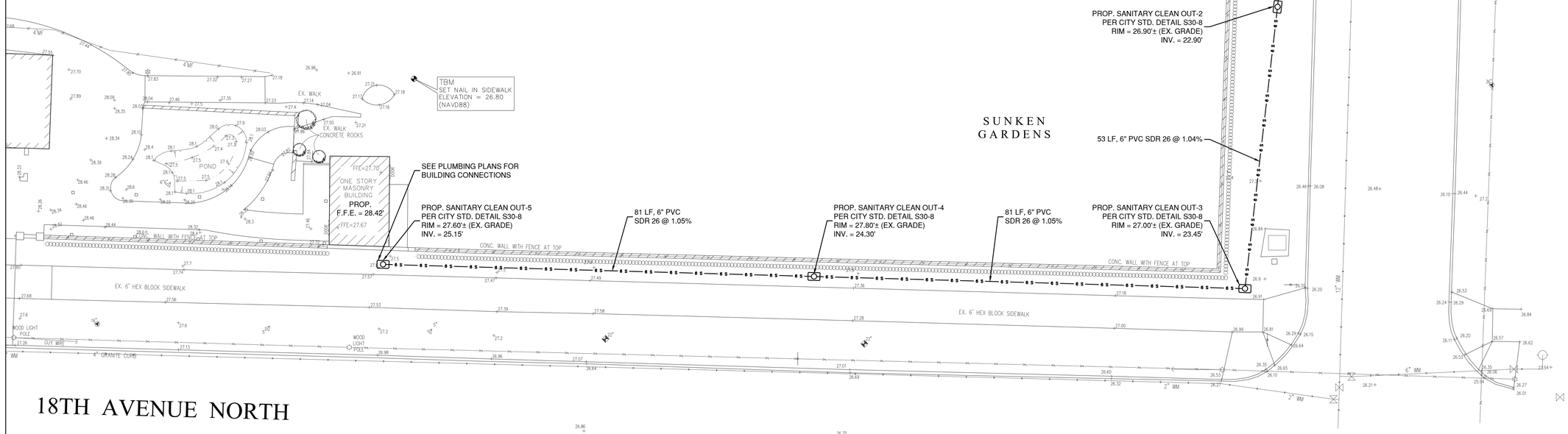
DATE: August 12th, 2020
SCALE: NOT TO SCALE
DRAWING No. C5
CIVIL DETAILS



UTILITY NOTES TO CONTRACTOR:



1. WATER MAINS AND WATER SERVICE LINES SHALL BE LOCATED A MINIMUM OF 10 FEET HORIZONTALLY FROM PIPES CARRYING RAW WASTEWATER OR STORM WATER. THE DISTANCE SHALL BE MEASURED FROM OUTSIDE FACE OF PIPE TO OUTSIDE FACE OF PIPE, AS MEASURED BETWEEN PIPES. SEE DIAGRAM.
2. WATER MAINS AND WATER SERVICE LINES SHALL BE LOCATED A MINIMUM OF 18 INCHES VERTICALLY ABOVE PIPES CARRYING RAW WASTEWATER OR STORM WATER. THE DISTANCE SHALL BE MEASURED FROM BOTTOM OF THE WATER LINE TO THE TOP OF THE SEWER PIPE.
3. AN ENGINEERING PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE CITY CONTROLLED PUBLIC RIGHT-OF-WAY OF 18th AVENUE NORTH AND 2ND STREET NORTH (SANITARY SEWER CONNECTION, SIDEWALK REMOVAL AND SIDEWALK CONSTRUCTION). THE PERMIT FEE WILL BE $150.00 AND THE COST OF REQUIRED CITY TESTING AND INSPECTION WILL BE BILLED TO THE PERMIT APPLICANT MONTHLY. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE A PERFORMANCE BOND (ON THE CITY'S FORM, AMOUNT BASED ON THE VALUE OF THE WORK AS DETERMINED ON THE ENGINEER'S UNIT COST ESTIMATE BUT IN NO CASE SHALL BE LESS THAN $5000.00) AND A CERTIFICATE OF INSURANCE (PER CURRENT CITY REQUIREMENTS) AT PERMIT ISSUANCE. TO MAKE APPLICATION FOR THE REQUIRED ENGINEERING PERMIT THE CONTRACTOR MUST SUBMIT THREE COPIES OF THE CIVIL PLANS SHOWING THE WORK DIRECTLY TO THE ENGINEERING DEPARTMENT WITH A COMPLETED RIGHT OF WAY PERMIT APPLICATION (FORM AVAILABLE UPON REQUEST, PHONE 727-893-7238, EMAIL Martha.Hegenbarth@stpete.org) AND OTHER REQUIRED INFORMATION LISTED ABOVE. ALLOW A MINIMUM OF 10 BUSINESS DAYS FOR PERMIT PROCESSING AND ISSUANCE.
4. CONNECTIONS MADE WHICH DIRECTLY JOIN PIPE MATERIALS SHALL BE MADE USING A RIGID STAINLESS STEEL SHIELDED SEWER COUPLING AS MANUFACTURED BY MISSION RUBBER COMPANY (PER CITY STANDARD DETAIL S30-60). GASKET TO MEET ASTM C-425-91 TABLE 2, 300 SERIES STAINLESS STEEL SHEAR RING WITH A MINIMUM THICKNESS OF 0.012", 316 SERIES STAINLESS STEEL CLAMPS WITH NUT & BOLT TAKE UP, SHEAR RING & CLAMPS TO MEET ALL REQUIREMENTS OF ASTM A-167. TRANSITIONAL SIZES TO UTILIZE A ONE PIECE GASKET. ANY EXISTING CLAY PIPE SHALL BE REMOVED TO UNDISTURBED PIPE BEDDING & REPLACED WITH PVC OR DIP AS APPROVED BY THE CITY. FERNCO FLEXIBLE COUPLINGS WILL NOT BE ACCEPTED WITHIN THE PUBLIC UTILITY EASEMENT.
5. THE FINAL WATER METER LAYOUT MUST BE COORDINATED THROUGH AND APPROVED BY THE WATER RESOURCES DEPARTMENT (CONTACT KELLY DONNELLY @ 727-892-5614 OR kelly.donnelly@stpete.org).
6. CITY FORCES WILL MAKE ALL NECESSARY POTABLE WATER MAIN TAPS AND INSTALL ANY NECESSARY WATER METERS AND BACKFLOW PREVENTION DEVICES AT THE EXPENSE OF THE DEVELOPER.
7. THE CONTRACTOR SHALL NOT OPERATE OR PRESSURE TEST AGAINST ANY CITY INSTALLED VALVES OR FITTINGS.



CITY NOTE:

IT IS THE RESPONSIBILITY OF THE DEVELOPER TO OBTAIN A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER PERMIT AND IMPLEMENT APPROPRIATE POLLUTION PREVENTION TECHNIQUES TO MINIMIZE EROSION AND SEDIMENTATION AND PROPERLY MANAGE STORMWATER **PRIOR** TO DISTURBANCE OF LAND (CLEARING, GRADING, EXCAVATING, ETC.). * A GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (CGP) NOTICE OF INTENT (NOI), DEP FORM 62-621.300(4)(b), MUST BE SUBMITTED TO DEP TO OBTAIN NPDES PERMIT COVERAGE. SUBMIT THE NOI ONLINE USING THE iNOI SYSTEM (www.dep.state.fl.us/water/stormwater/npdes) OR BY SUBMITTING A PAPER NOI TO THE NPDES STORMWATER NOTICES CENTER (FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, 2600 BLAIR STONE ROAD, MS #2500, TALLAHASSEE, FL 32399-2400, PHONE 850-245-7522). FOR MORE INFORMATION ON REQUIREMENTS CONTACT THE FDEP NPDES STORMWATER SECTION, PHONE 850-245-7520, OR VISIT THEIR WEBSITE.
* NOTE THAT FOR CONSTRUCTION SITES ONE ACRE AND LARGER, THE CITY OF ST. PETERSBURG CONSTRUCTION SERVICES AND PERMITTING DIVISION WILL PERFORM EROSION CONTROL INSPECTIONS ON THIS SITE UPON ISSUANCE OF CONSTRUCTION PERMITS WITH FOLLOW UP INSPECTIONS ON DAY 15 AND DAY 30, THEN MONTHLY THROUGH PROJECT COMPLETION.
THE DEVELOPER/CONTRACTOR MUST PRESENT A COPY OF THE CGP PERMIT TO THE CITY DURING THE INITIAL EROSION CONTROL INSPECTION AS VERIFICATION OF THE NPDES STORMWATER COVERAGE.

Two working days before you dig
CALL SUNSHINE
800-432-4770
Underground Cable Locating Service

UTILITY LEGEND

- EXISTING SANITARY SEWER MANHOLE
- EXISTING SANITARY SEWER LINE
- EXISTING WATER LINE
- PROPOSED 6" SANITARY SEWER LINE
- PROPOSED SANITARY SEWER CLEAN OUT

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CA No. 30184
VES Project No: 13407

DESIGNED BY: DV DATE: 08-12-20
DRAWN BY: KS DATE: 08-12-20
CHECKED BY: DV DATE: 08-12-20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG

APPROVED BY:

ARC3 architecture
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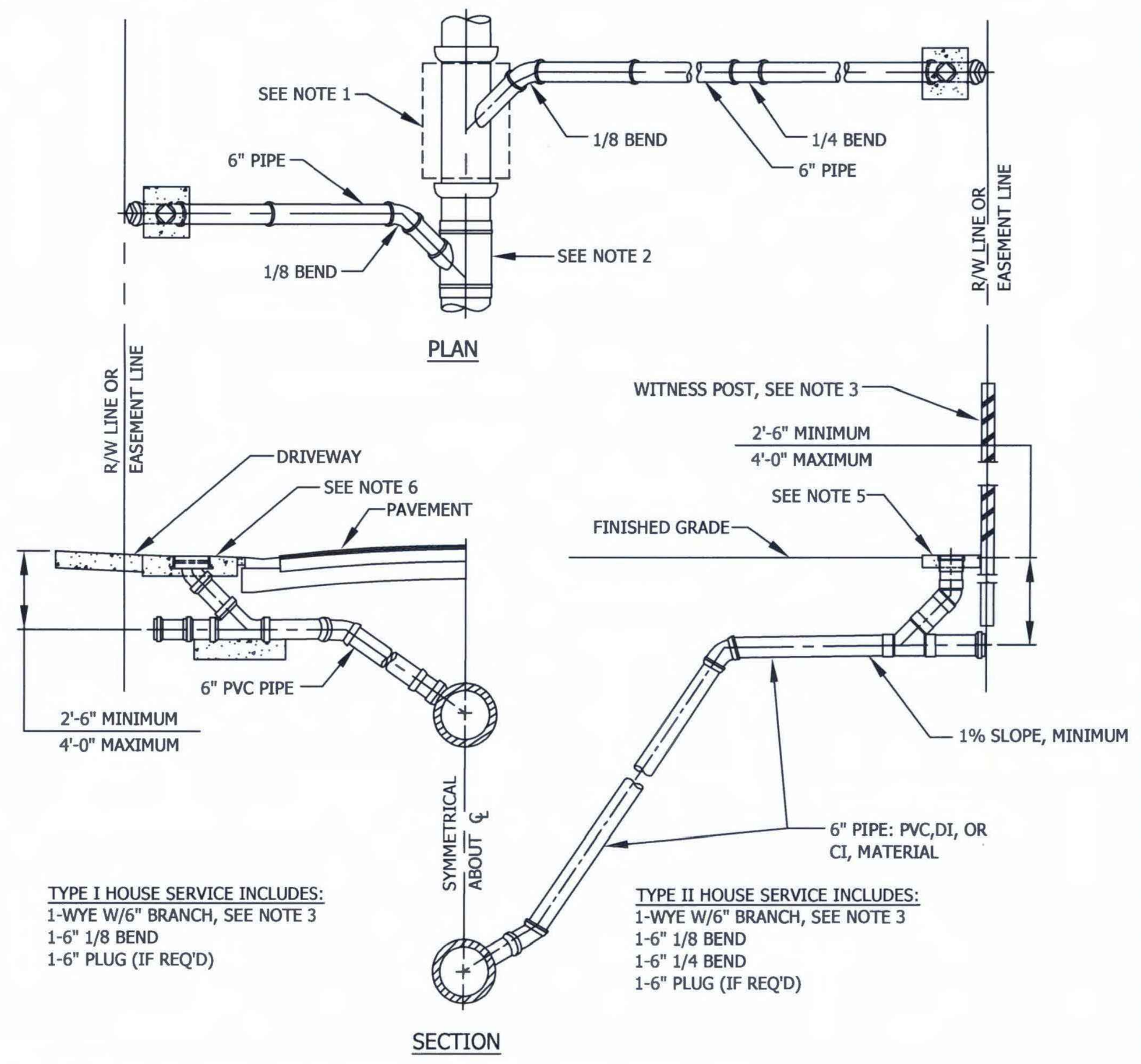
St. Petersburg, FL 33710
(727) 381-5220
(727) 381-0052 fax

Firm Registration AA-26000510
Steven J. Vinci, AIA AR-0017036

Signature Date

DATE: August 12th, 2020
SCALE: 1" = 10'
DRAWING No. C6
UTILITY PLAN

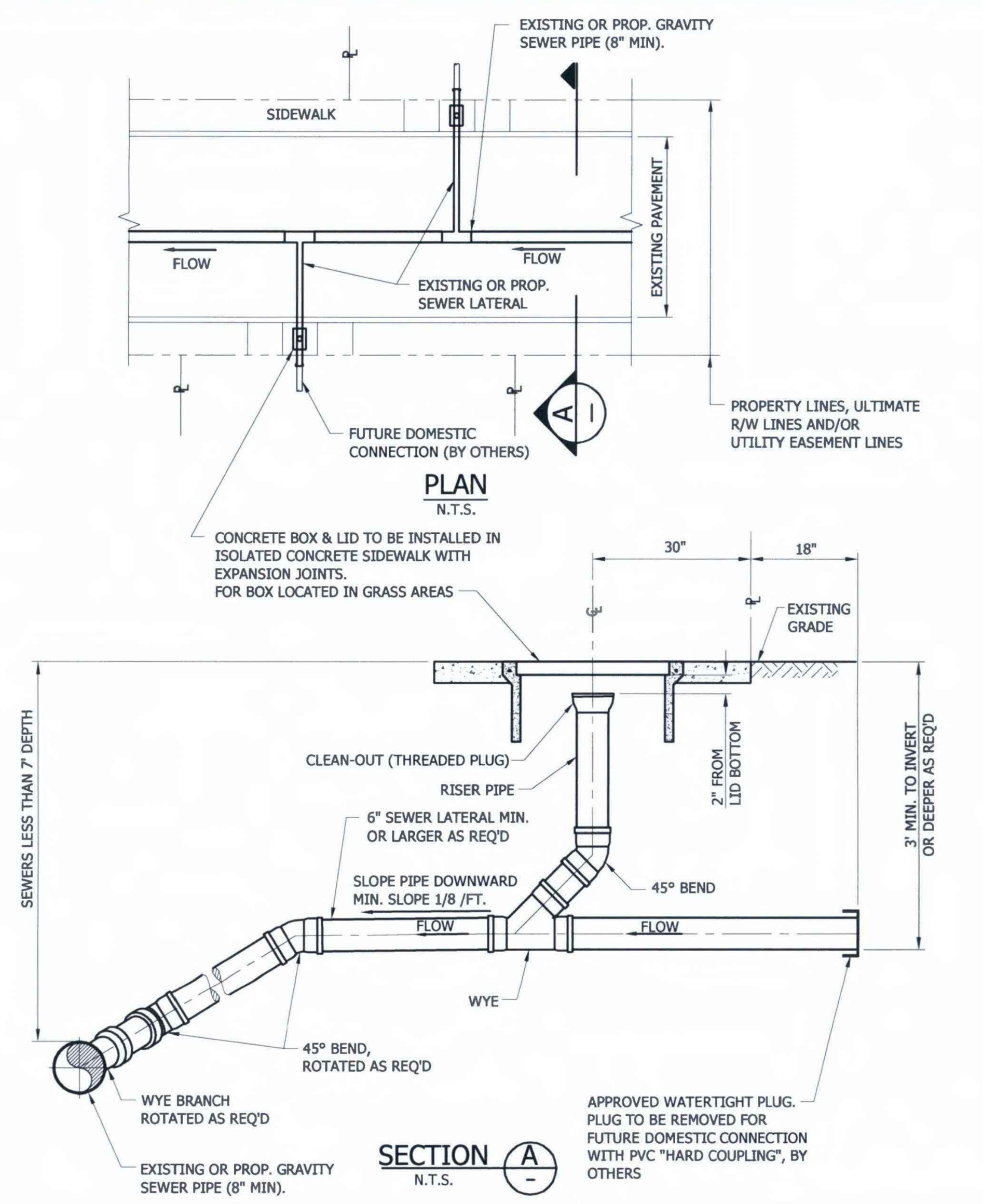


NOTES:
1. ENCASE WYE IN CONCRETE, IF ORDERED. 18" E/W OF LATERAL AND 6" ON ALL SIDES.
2. SADDLE WYE MAY BE USED FOR INSTALLING LATERAL ON AN EXISTING PIPE. SADDLE SHALL BE PVC WITH S.S. STRAPS AND A FLEXIBLE GASKET. HOLE SHALL BE DRILLED.
3. ALL SERVICES FOR FUTURE USE IN NON-VEHICULAR AREAS SHALL HAVE A WITNESS POST. WITNESS POST SHALL BE 4" DIAMETER PVC PIPE FILLED WITH CONCRETE: 4' TO 5' OF THE PIPE SHALL BE EXPOSED AND WRAPPED WITH GREEN TAPE, OR 1" DIAMETER GALVANIZED PIPE, PROTRUDING 1' ABOVE FINISHED GRADE, AS DIRECTED BY THE ENGINEER.
4. ALL DEVELOPMENT AND REDEVELOPMENT SHALL HAVE A SANITARY CLEAN OUT AT THE PROPERTY LINE.
5. SEE STANDARD DETAIL-SANITARY SEWER CLEAN OUT FOR NON TRAFFIC AREAS.
6. SEE STANDARD DETAIL-SANITARY SEWER CLEAN OUT FOR TRAFFIC AREAS.
7. EITHER CLEAN OUT TYPE MAY BE USED IN TYPE I OR TYPE II APPLICATIONS.

Thu, 05 Dec 2019 – 10:11am C:\Users\HACasals\AppData\Local\Temp\AcPublish_13344\S30-4.dwg HACasals

CITY STANDARDS

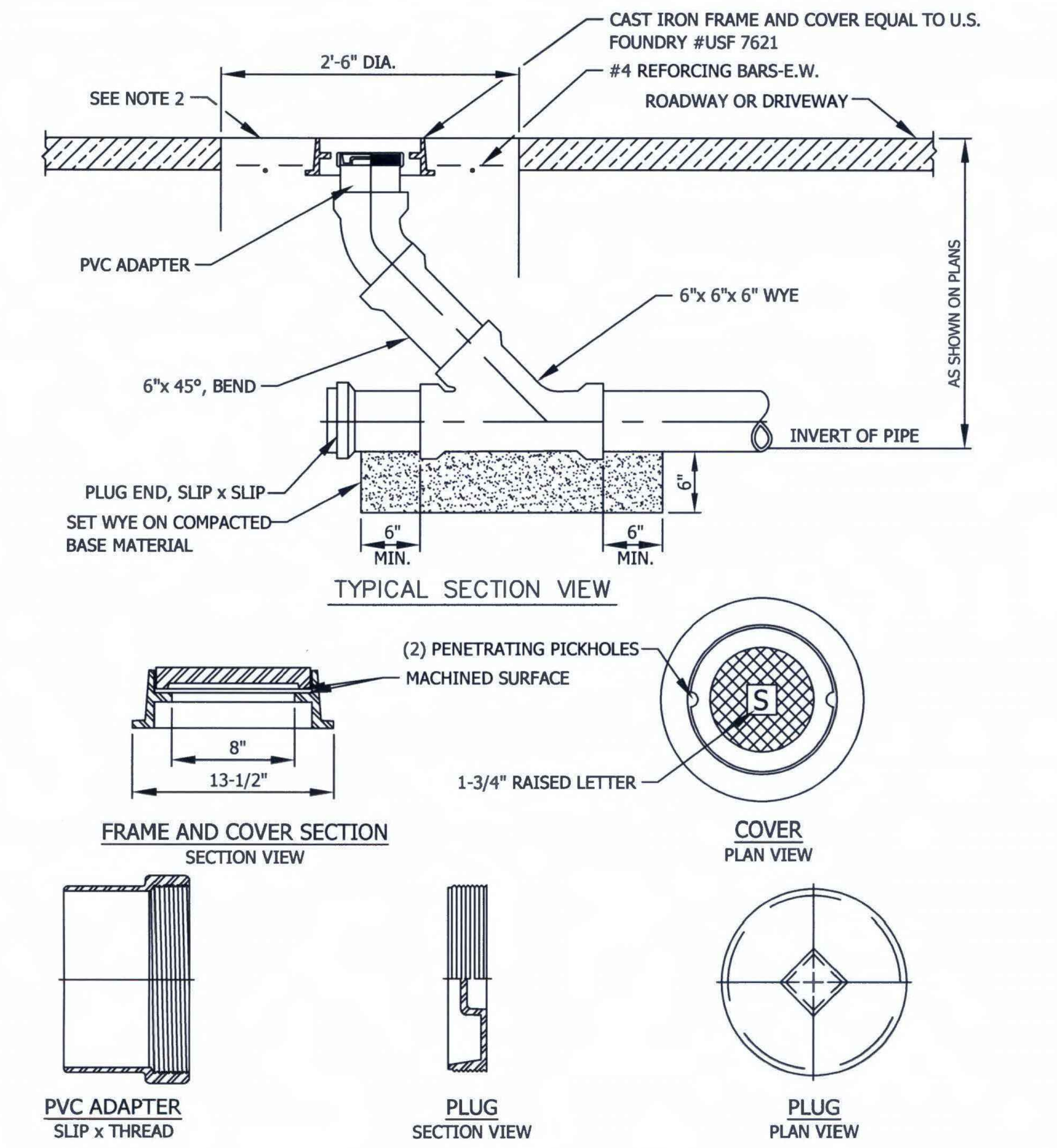
REVISIONS		ENGINEERING AND CAPITAL IMPROVEMENT DEPARTMENT CITY of ST. PETERSBURG	HOUSE SERVICE CONNECTIONS DETAIL	
BY	DATE	SCALE: N.T.S.	APPROVED BY: [illegible] DIRECTOR	DATE: OCT. 2019 DWG. No. S30-4



Thu, 31 Oct 2019 – 4:24pm C:\Users\HACasals\AppData\Local\Temp\AcPublish_8476\S30-5.dwg HACasals

CITY STANDARDS

REVISIONS		ENGINEERING AND CAPITAL IMPROVEMENT DEPARTMENT CITY of ST. PETERSBURG	GRAVITY SEWER SERVICE LATERAL FOR "SHALLOW" SEWERS	
BY	DATE	SCALE: N.T.S.	APPROVED BY: [illegible] DIRECTOR	DATE: OCT. 2019 DWG. No. S30-5

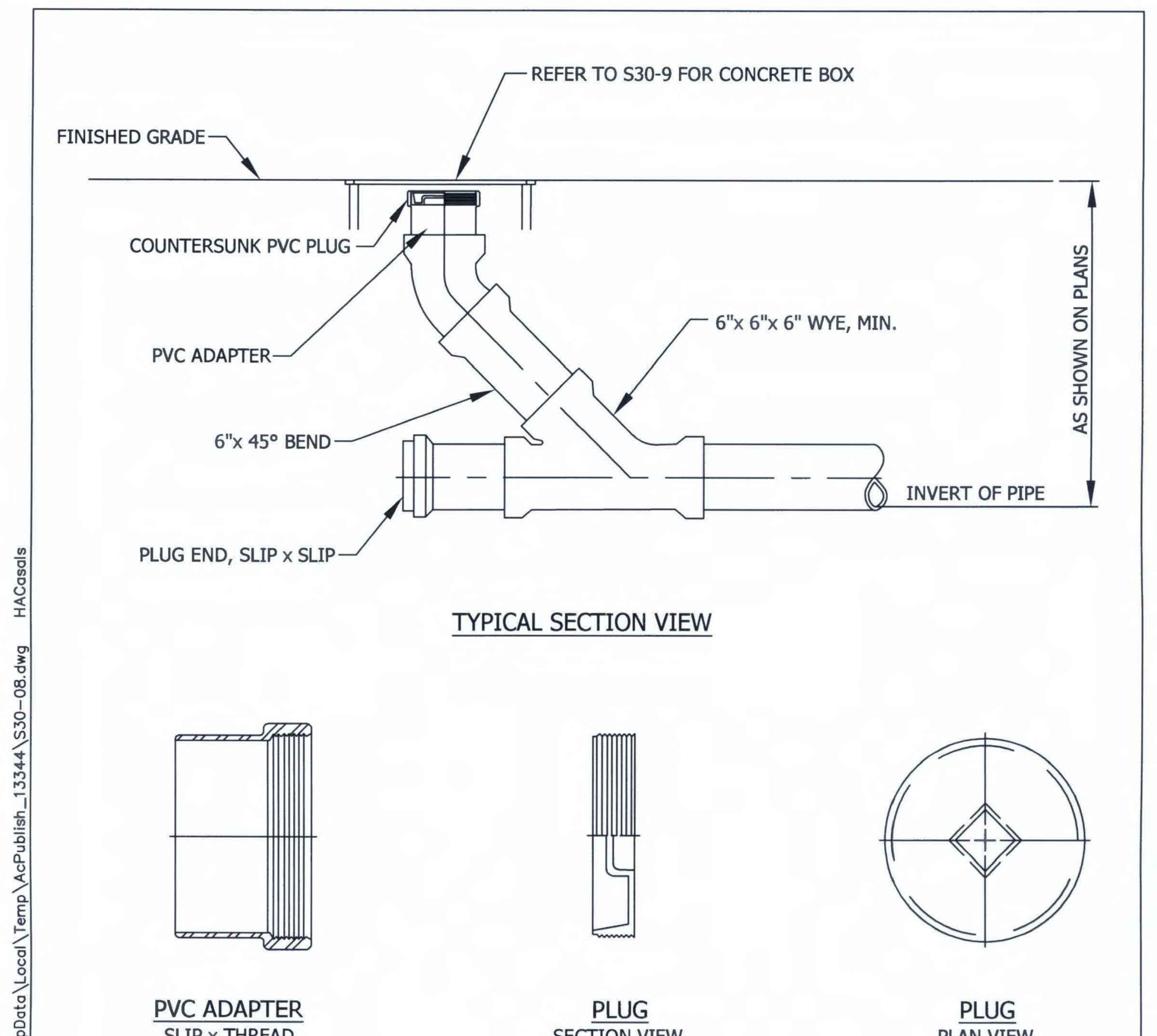


NOTES:
1. THIS SANITARY CLEAN OUT IS TO BE USED IN ALL TRAFFIC AREAS, INCLUDING THE PARKWAY FROM CURB TO PROPERTY LINE OR SIDEWALK
2. IN ASPHALTIC PAVEMENT AREAS CONCRETE COLLAR SHALL BE LOWERED 3" FROM GRADE TO ALLOW FOR THE ASPHALT TO BE AROUND COLLAR. COLLAR IS 5" THICK IN THESE AREAS.
3. PLUG SHALL CONFORM TO THE SPECIFICATIONS AND SHALL HAVE A GASKET.
4. WYE SHALL CONFORM TO ASTM D-3034, & NSF STANDARD #14.

Wed, 27 Nov 2019 – 3:42pm S:\AUTOCAD\2.1 New Standard Details\S30-Sanitary Sewer Details\S30-07.dwg HACasals

CITY STANDARDS

REVISIONS		ENGINEERING AND CAPITAL IMPROVEMENT DEPARTMENT CITY of ST. PETERSBURG	SANITARY SEWER CLEAN OUT FOR TRAFFIC AREAS DETAIL	
BY	DATE	SCALE: N.T.S.	APPROVED BY: [illegible] DIRECTOR	DATE: OCT. 2019 DWG. No. S30-7

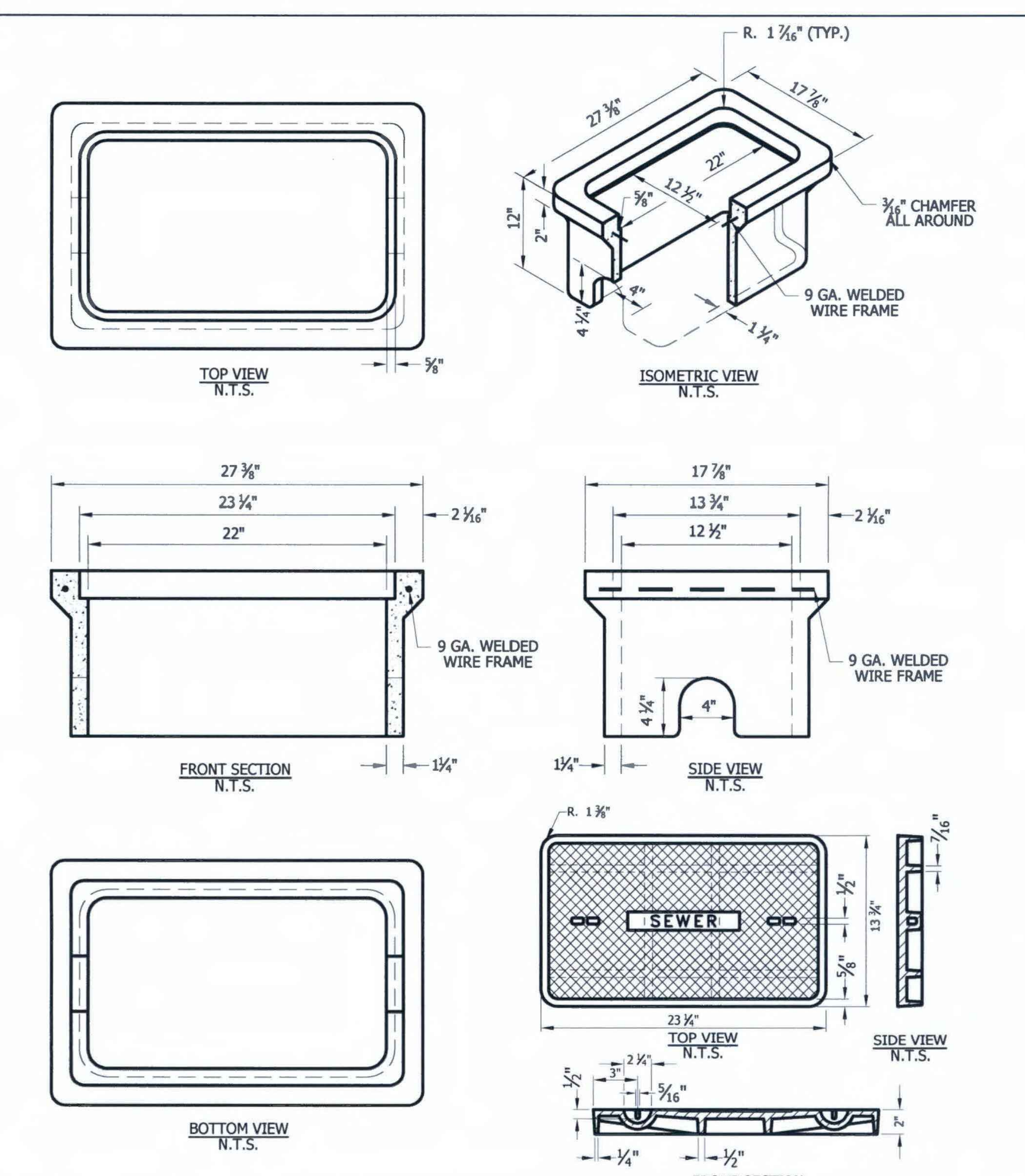


NOTES:
1. THIS SANITARY CLEAN OUT IS TO BE USED IN SODDED AREAS ONLY THAT ARE NOT ACCESSIBLE TO VEHICULAR TRAFFIC.
2. PLUG SHALL CONFORM TO THE SPECIFICATIONS AND SHALL HAVE A GASKET.
3. WYE SHALL CONFORM TO ASTM D-3034, & NSF STANDARD #14.

Thu, 05 Dec 2019 – 10:11am C:\Users\HACasals\AppData\Local\Temp\AcPublish_13344\S30-08.dwg HACasals

CITY STANDARDS

REVISIONS		ENGINEERING AND CAPITAL IMPROVEMENT DEPARTMENT CITY of ST. PETERSBURG	SANITARY SEWER CLEAN OUT FOR NON TRAFFIC AREAS DETAIL	
BY	DATE	SCALE: N.T.S.	APPROVED BY: [illegible] DIRECTOR	DATE: OCT. 2019 DWG. No. S30-8

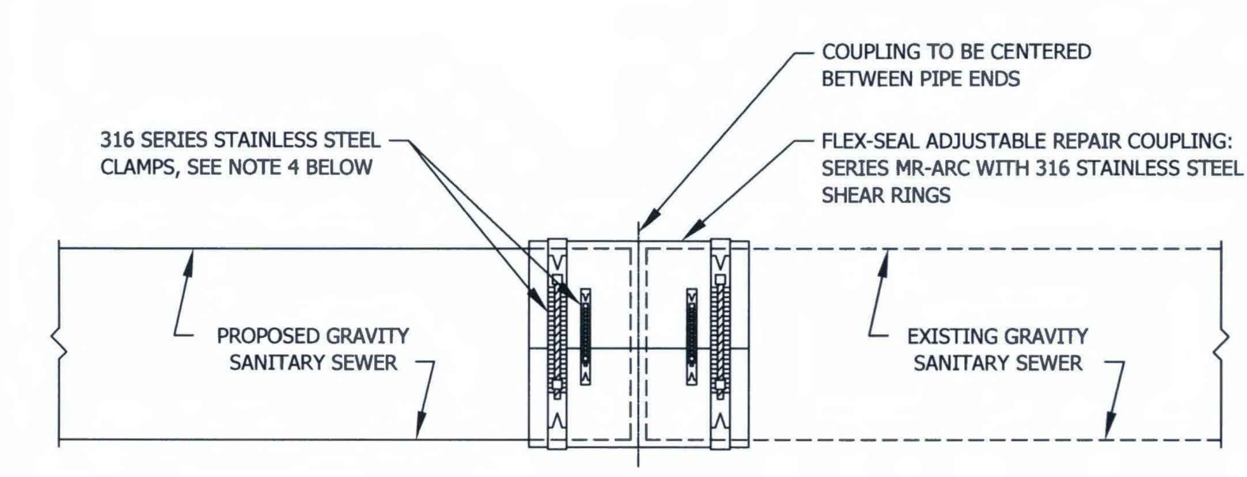


NOTES
1. CAST IRON LID TO BE A MODIFIED VERSION OF USF No. 7715 (OR EQUIVALENT) WITHOUT BOLT HOLES, MARKED "SEWER " AND A.D.A. COMPLIANT FOR USE IN SIDEWALKS. LID WT. APPROX. 55 LBS

Wed, 27 Nov 2019 – 3:44pm S:\AUTOCAD\2.1 New Standard Details\S30-Sanitary Sewer Details\S30-09.dwg HACasals

CITY STANDARDS

REVISIONS		ENGINEERING AND CAPITAL IMPROVEMENT DEPARTMENT CITY of ST. PETERSBURG	SANITARY SEWER CLEAN-OUT CONCRETE BOX DETAIL	
BY	DATE	SCALE: N.T.S.	APPROVED BY: [illegible] DIRECTOR	DATE: OCT. 2019 DWG. No. S30-9



NOTES:
1. THE SPACE BETWEEN PIPE ENDS SHALL NOT EXCEED 1-INCH. PIPE ENDS SHALL BE EVEN AND CLEAN.
2. THE NOMINAL DIAMETER OF THE PROPOSED PIPE SHALL BE EQUAL TO THE NOMINAL DIAMETER OF THE EXISTING PIPE.
3. FLEX-SEAL ADJUSTABLE REPAIR CLAMP SHALL BE MANUFACTURED BY THE MISSION RUBBER COMPANY, OR APPROVED EQUAL.
4. FOR APPLICATIONS OF 24" DIAMETER AND LARGER, USE 316 SERIES, WIDE, T-BOLT CLAMPS.

Thu, 31 Oct 2019 – 4:29pm C:\Users\HACasals\AppData\Local\Temp\AcPublish_8476\S30-50.dwg HACasals

CITY STANDARDS

REVISIONS		ENGINEERING AND CAPITAL IMPROVEMENT DEPARTMENT CITY of ST. PETERSBURG	DISSIMILAR PIPE COUPLING DETAIL	
BY	DATE	SCALE: N.T.S.	APPROVED BY: [illegible] DIRECTOR	DATE: OCT. 2019 DWG. No. S30-50

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505 20th Avenue NE
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CA No. 30184
VES Project No: 13407

DESIGNED BY:	DV	DATE:	08-12-20
DRAWN BY:	KS	DATE:	08-12-20
CHECKED BY:	DV	DATE:	08-12-20

MUSEUM, ARBOR, AND RESTROOMS
100% CONSTRUCTION DOCUMENTS

REVISIONS	BY	DATE

SUNKEN GARDENS RENOVATIONS
CITY OF ST. PETERSBURG

CONSTRUCTION DOCUMENTS
CITY PROJECT NO. 19219-019
ARC3 PROJECT NO. 18012

ENGINEERING and CAPITAL IMPROVEMENTS DEPARTMENT
CITY of ST. PETERSBURG
APPROVED BY:

ARC3
architecture
6699 13th Avenue North, Suite 4A
St. Petersburg, FL 33710
(727) 381-5220
(727) 381-0052 fax

DATE: August 12th, 2020
SCALE: NOT TO SCALE
DRAWING No.
C7
UTILITY DETAILS

Appendix B:

Public Comment

Laura Duvekot

From: rlreed@tampabay.rr.com
Sent: Monday, November 23, 2020 11:13 AM
To: Laura Duvekot
Cc: Lauren Kleinfeld; 'Emily Elwyn'
Subject: Sunken Gardens COAs

Good morning Laura,

As our meeting was cut a bit short, I have attempted a recap of the most important items that we discussed with a few added comments.

If there is no alternative to regrading, what is the best way to deal with the walkways and paving on the east, north and south sides of the building? Everyone agrees that we all want what is best for the Gardens, with a goal of maintaining the historic 'feel' and tropical lushness of the landscape. Would it be helpful to have another engineer take a look at the site? I have a friend who works for Karins Engineering (probably on City contractor list) who might be willing to offer a second opinion pro bono. (It would be helpful going forward if the city had an architect on their preferred list with experience in dealing with historic properties.)

Restore the existing metal windows. Everyone agrees that this would provide an educational opportunity as well as being the most historically appropriate treatment.

Address the 'faux history' concept which has gradually changed somewhat over the last few years. It is my understanding that work considered a repair should adhere to the original and not try to look completely different. (This would suggest that the crazy paving should be recreated as it exists and painted/stained in multi-colors, and should not be dyed with a single color.)

SGFF will invite you (or a preservation staff member) to give a special presentation on recognizing and maintaining the historic character of Sunken Gardens for the benefit of new and current board members. The idea is to nurture a culture of preservation and understanding of this unique Florida Roadside Attraction.

At some point in the not too distant future, you suggested addressing the walkways in general and their importance to the site, speaking to the necessity for maintenance and safety with keeping them colorful, and maintaining their winding character.

Thank you again for your time and thoughts; we know how busy you are!

Robin

Appendix C:

Maps of Subject Property

Community Planning and Preservation Commission

1951 4th St N

AREA TO BE APPROVED,

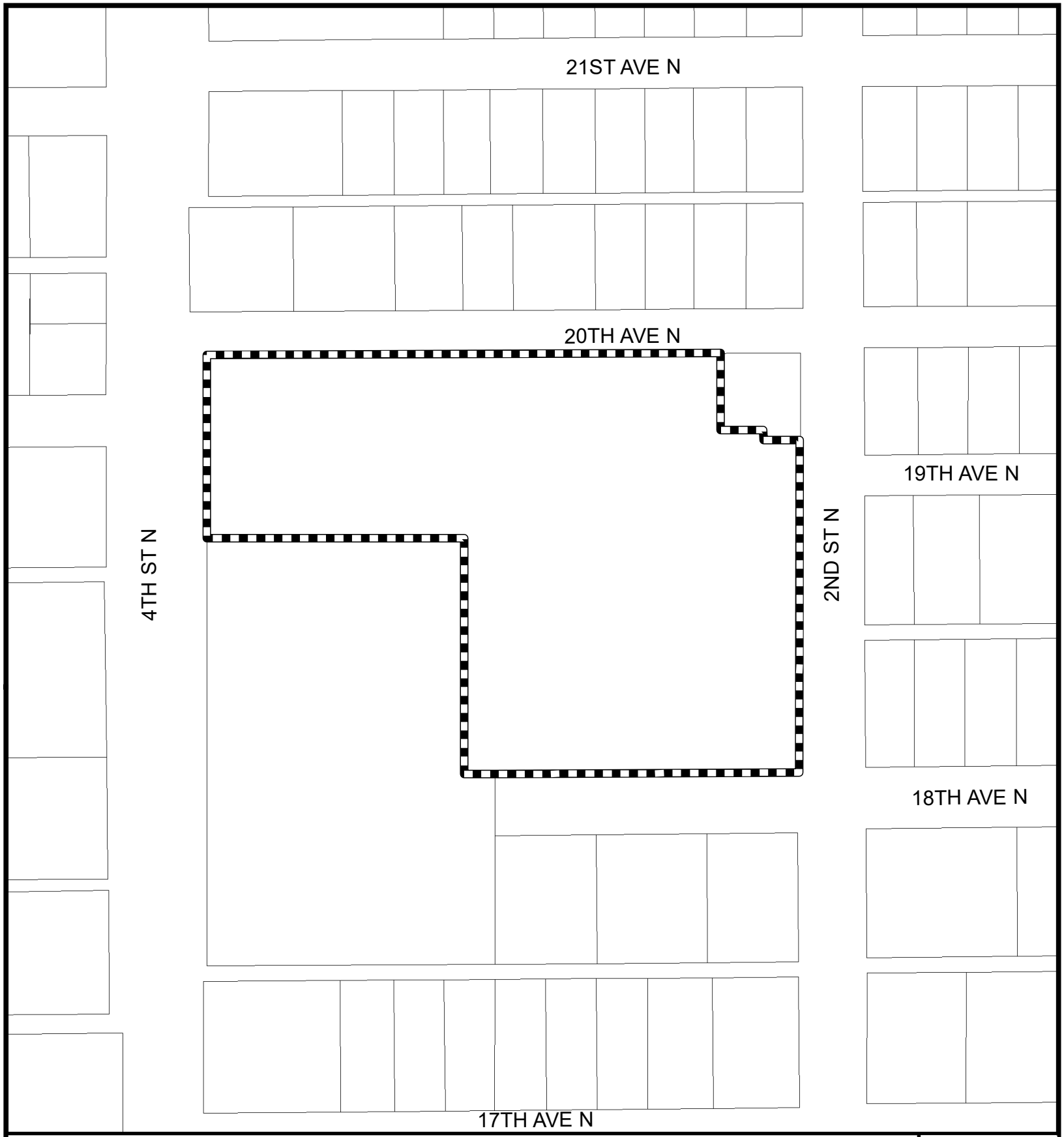
SHOWN IN

CASE NUMBER

20-90200120

N

SCALE:
1 " = 140 '



Community Planning and Preservation Commission

1951 4th St N

AREA TO BE APPROVED,

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20-90200120

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SCALE:
1 " = 140 '