CONSTRUCTION PLANS

FOR

Howey Self Storage

S.R. 19
HOWEY IN THE HILLS, FLORIDA

LAND DESCRIPTION (EAGLES LANDING AT OCOEE, INC. PARCEL)(VILLAGE 4 OF THE RESERVE AT HOWEY IN THE HILLS)

COMMENCE AT THE EAST 1/4 CORNER OF SECTION 35, TOWNSHIP 20 SOUTH, RANGE 25 EAST, LAKE COUNTY FLORIDA; THENCE RUN N89°21'35"W ALONG THE SOUTH LINE OF THE NORTHEAST 1/4 OF SAID SECTION 35, 1487.79 FEET TO A POINT ON THE NORTHWESTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 19; THENCE RUN N52°07'27"E ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, 673.75 FEET TO THE POINT OF BEGENNING; THENCE RUN N37°53'02"W, 1008.88 FEET; THENCE RUN N00°35'47"E, 116.78 FEET TO A POINT ON THE NORTH LINE OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 35; THENCE RUN S89°24'13"E ALONG SAID NORTH LINE, 270.08 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 35; THENCE RUN N00°35'58"E ALONG SAID WEST LINE, 256.12 FEET TO A POINT ON THE SOUTH LINE OF THE RESIDENCE OF DON WHITE; THENCE RUN S89°24'13"E ALONG SAID SOUTH LINE, 418.17 FEET; THENCE RUN S00°35'47"W, 709.10 FEET; THENCE RUN S37°52'33"E, 317.47 FEET TO A POINT ON SAID NORTHWESTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 19; THENCE RUN S52°07'27"W ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, 329.54 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL OF LAND CONTAINS 11.978 ACRES MORE OR LESS.

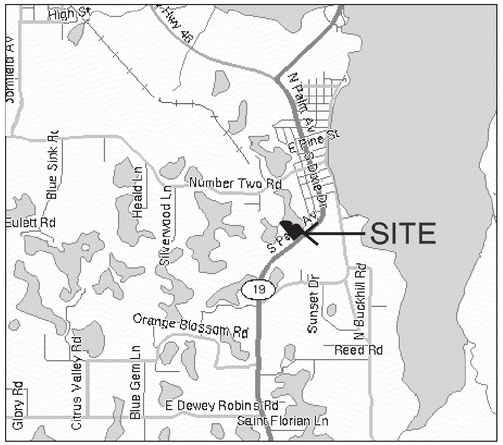
LAND DESCRIPTION (HOWEY IN THE HILLS, LTD. PARCEL)

HOWEY FROM E 1/4 COR OF SEC 35-20-25 RUN N 89-21-35 W 1487.79 FT TO NW'LY R/W LINE OF SR 19, N 52-07-27 E ALONG SAID NW'LY R/W LINE 1003.29 FT FOR POB, RUN N 37-52-33 W 317.47 FT, N 0-35-47 E 709.10 FT, S 89-24-13 E TO NW COR OF LOT 1 BLK D-14 OF PALM GARDENS SUB, SE'LY ALONG SAID W'LY LINE OF BLK D-14 OF PALM GARDENS SUB TO NW'LY LINE OF SR 19, SW'LY ALONG SAID R/W LINE TO POB ORB 3003 PG 1362 ORB 3446 PG 103

THE ABOVE DESCRIBED PARCEL OF LAND CONTAINS 11.00 ACRES MORE OR LESS.

DEVELOPER:	HOWEY SELF STORAGE C/O P.O. BOX 770609 WINTER GARDEN, FL. 34777-0609	(407) 905-8180
ENGINEER:	JUNE ENGINEERING CONSULTANTS P.O. BOX 770609 WINTER GARDEN, FL. 34777-0609	(407) 905-8180
SURVEYOR:	BISHMAN SURVEYING & MAPPING 13610 GRANVILLE AVENUE CLERMONT, FL. 34711	(407) 905-8877
GEOTECHNICAL ENGINEER:	YOVAISH ENGINEERING SCIENCES, INC. 953 SUNSHINE LANE ALTAMONTE SPRINGS, FL. 32714	(407) 774-9383
ENVIRONMENTAL CONSULTANT:	BIO-TECH CONSULTING, INC. 2002 EAST ROBINSON STREET ORLANDO, FL. 32803	(407) 894-5969

UTILITIES	Water	Town of Howey in the Hills
	Sewer	Town of Howey in the Hills
	Telephone	Centurylink
	Electric	Duke Energy



Location Map

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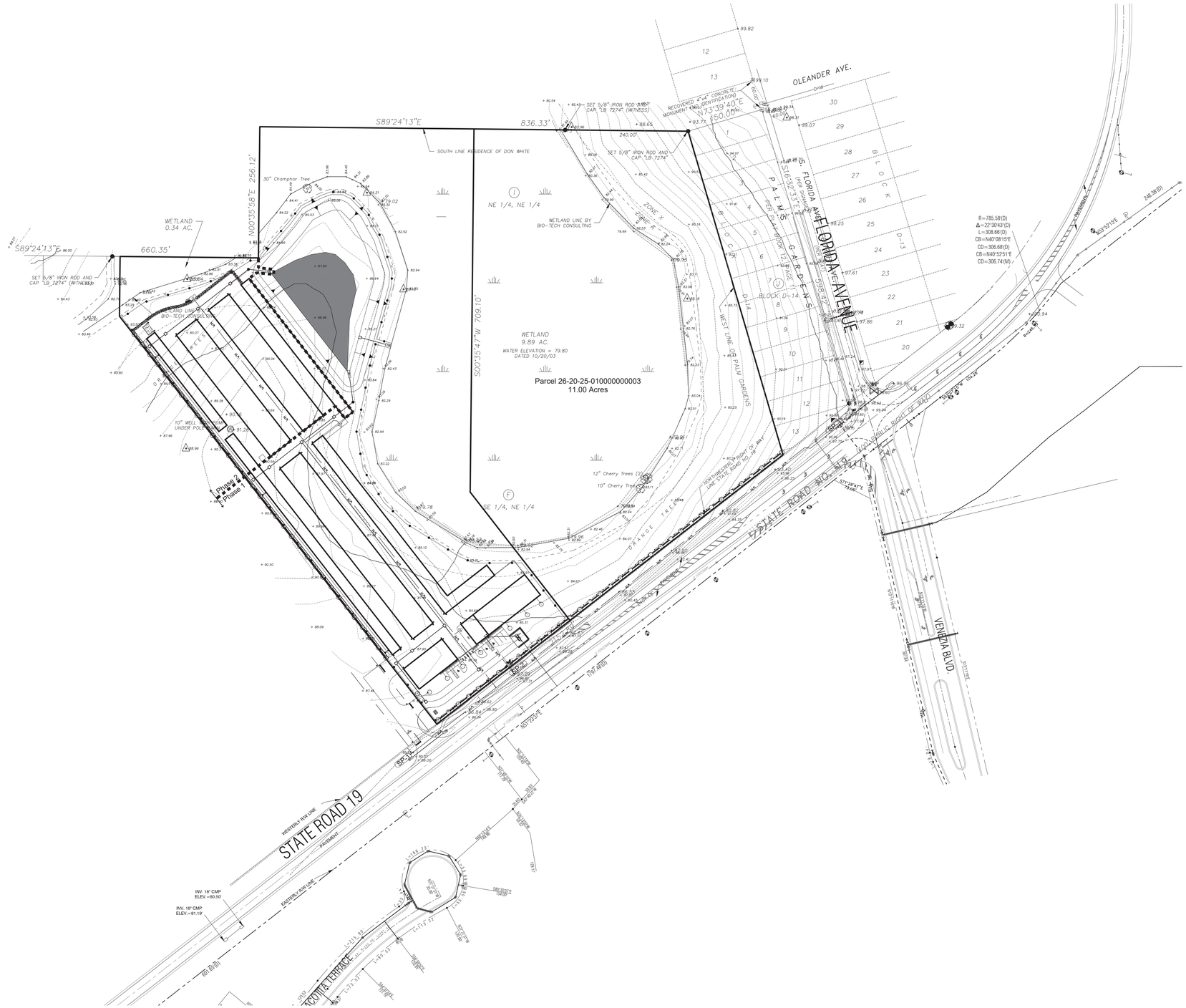
GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE TOWN OF HOWEY-IN-THE HILLS STANDARDS AND SPECIFICATIONS AND TO THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, MOST RECENT EDITIONS.
2. ALL DISTURBED AREAS SHALL BE GRASSED UPON COMPLETION OF CONSTRUCTION.
3. ALL LANDSCAPING SHALL CONFORM TO THE TOWN OF HOWEY-IN-THE HILLS LANDSCAPE CODE, MOST RECENT ADDITION.
4. ALL PROPOSED GRADES SHOWN ARE FINISHED GRADES.
5. THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE OF THE SITE TO THE SPILLWAYS AS INDICATED BY GRADES AND FLOW ARROWS.
6. UTILITIES SHOWN WERE LOCATED FROM BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION ALL UTILITY COMPANIES AND FOR THE LOCATION AND PROTECTION OF ALL UTILITIES THAT MAY EXIST.
7. EXISTING ZONING OF THE SUBJECT SITE IS PCD.
8. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE EROSION AND SEDIMENT CONTROL THROUGHOUT THE CONSTRUCTION PHASE WHICH SHALL INCLUDE, BUT NOT LIMITED TO THE PLACEMENT OF SILT FENCES, STACKED HAY BALES OR OTHER SIMILAR STRUCTURES ALONG THE PERIMETER OF THE SITE. THIS WORK SHALL CONFORM TO THE REQUIREMENTS OF THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT AND THE FLORIDA DEPARTMENT OF TRANSPORTATION AS OUTLINED IN F.D.O.T. STANDARD INDEX #102 & CITY CODE. THE CONTRACTOR SHALL PROVIDE AN EROSION PROTECTION PLAN, PRIOR TO PRE-CONSTRUCTION MEETING.
9. REMOVE ALL STRIPPINGS AND UNCLASSIFIED MATERIALS OFFSITE AND DISPOSE OF IN LEGAL MANNER.
10. FILL TO BE PLACED AND COMPACTED TO A MINIMUM 95% MAXIMUM DENSITY (PER AASHTO T-180)
11. JUNE ENGINEERING CONSULTANTS, INC. SHALL BE NOTIFIED IMMEDIATELY OF ANY PROBLEMS REQUIRING DEVIATION FROM THESE PLANS AND SPECIFICATIONS.
12. ALL PAVEMENT SHALL BE GRADED TO OBTAIN A MINIMUM GRADE OF 0.50% AND SHALL DRAIN POSITIVELY TO ALL INLETS OR SPILLWAYS.
13. CONTRACTOR SHALL PROVIDE AND COORDINATE PLACEMENT OF ANY REQUIRED UNDERGROUND CONDUITS NECESSARY FOR PLACEMENT OF UTILITIES (TELEPHONE, ELECTRIC, CABLE.. ETC.) AND THE SPRINKLER SYSTEM.
14. CONTRACTOR SHALL PROVIDE JUNE ENGINEERING CONSULTANTS WITH AS-BUILT INFORMATION ON THE FOLLOWING: LOCATIONS AND INVERTS OF ALL UTILITIES AND STORM STRUCTURES; PAVEMENT LOCATIONS AND GRADES; AND POND GRADES SHOWN ON PLANS.
15. THE CONTRACTOR IS RESPONSIBLE FOR THE NOTIFICATION, LOCATION & PROTECTION OF ALL UTILITIES THAT MAY EXIST. WITHIN THE PROJECT LIMITS.

February 4, 2008
Revised June 1, 2022

JEC june engineering consultants, inc.
23 W. Joiner Street
Winter Garden, FL. 34787
Ph. 407-905-8180
Fax 407-905-6232
Certificate of Authorization #00031567

JEFFREY A. SEDLOFF
PE# 51506



LEGEND	
Existing Contours	
Lot Number	(12)
Direction of Flow	
Existing Grade	x 79.3
Proposed Grade	100.2
Water Main	8" WM
Sanitary Sewer	S
Stormpipe	
Fire Hydrant	
Storm Inlet	
Concrete	
Gate Valve	
Water Blowoff	

DATE	REVISION
11/17/09	FDOT / Town Comments
6/21/21	Town Comments
8/23/21	Town Comments
2/16/22	Town Comments
6/1/22	Town/FDOT Comments

Site Plan – Overall

Howey Self Storage

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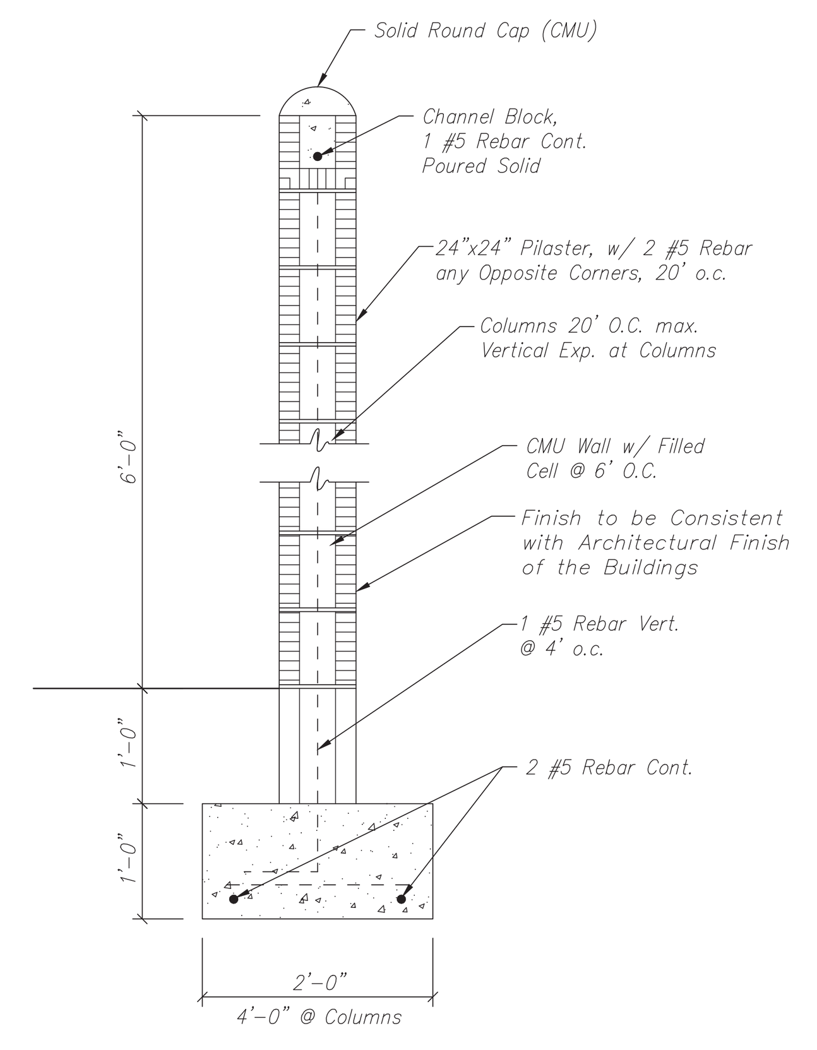
Fax 407-905-6232
Certificate of Authorization #00008507

DRAWN BY: CLK DATE: 2/4/08 | CHECKED BY: RAJ DATE: 2/4/08 | SCALE 1" = 100'

JEFFREY A. SEDLOFF PE# 51506

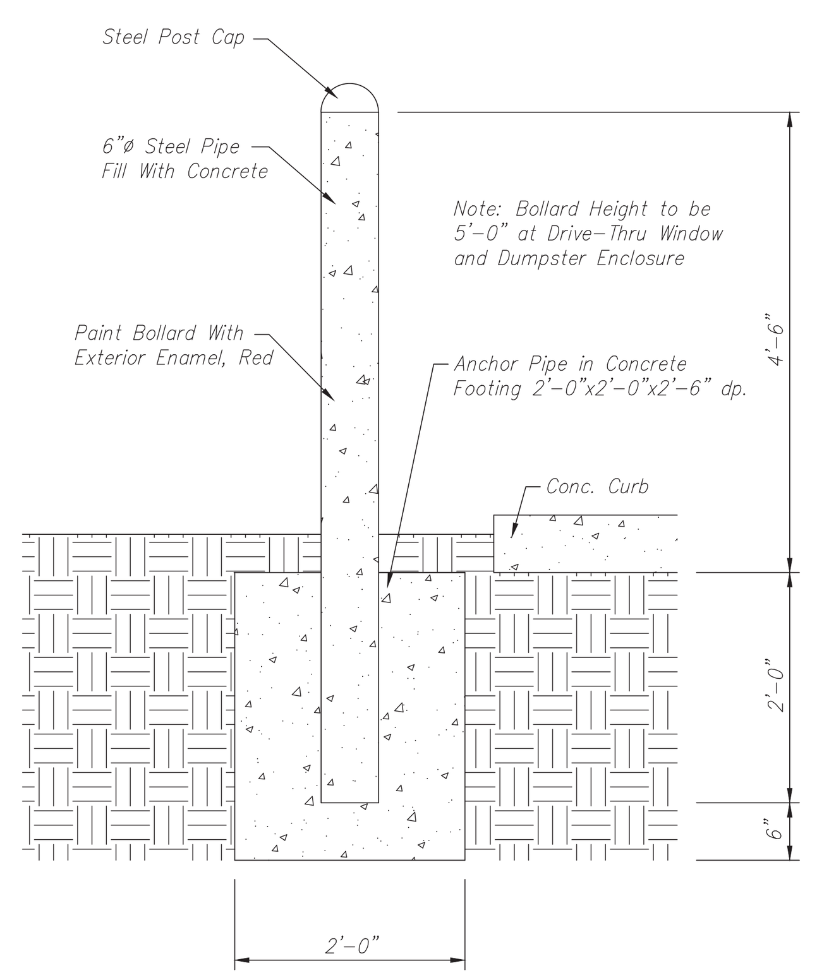
JOB NO. 07-0398

SHEET 2 OF 10



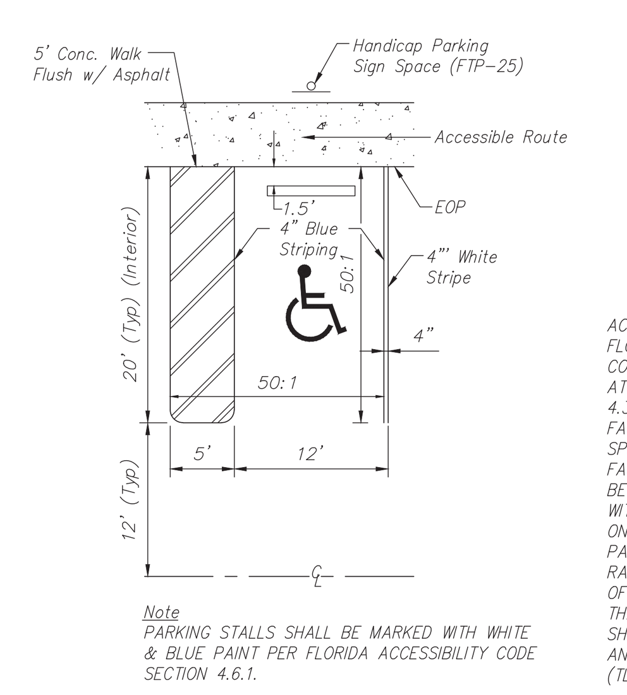
TYPICAL WALL SECTION

N.T.S.



STEEL PIPE BOLLARD DETAIL

N.T.S.

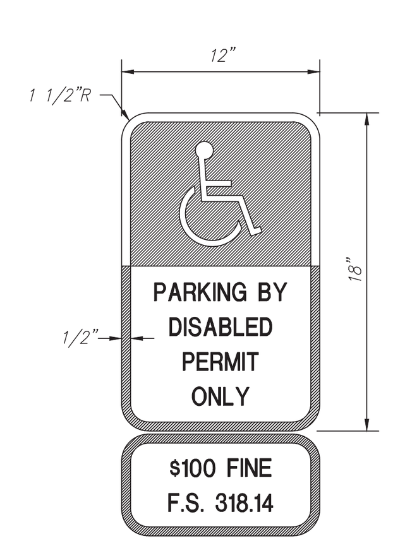


Note
PARKING STALLS SHALL BE MARKED WITH WHITE & BLUE PAINT PER FLORIDA ACCESSIBILITY CODE SECTION 4.6.1.

ACCESSIBILITY: A) IN ACCORDANCE WITH THE FLORIDA ACCESSIBILITY CODE FOR BUIDING CONSTRUCTION, 4.1.3 SECTION (1), DATED OCT. 1996, AT LEAST ONE ACCESSIBLE ROUTE COMPLYING WITH 4.3 SHALL CONNECT ACCESSIBLE BUILDING OR FACILITY ENTRANCES WITH ALL ACCESSIBLE SPACES AND ELEMENTS WITHIN THE BUILDING OR FACILITY, DOOR ACCESSING THE BUILDING MUST BE DEPICTED ON SITE PLAN. RAMP DETAILS WITH SLOPE INFORMATION SHALL BE DEPICTED ON SITE PLAN. B) THE LOCATION OF HANDICAPPED PARKING STALLS , LOADING ZONES , SIDEWALKS AND RAMPS ON SITE SHALL MEET CHAPTER 316.1955 OF THE FLORIDA STATUES AND SECTION 4.1.3 OF THE FLORIDA ACCESSIBILITY CODE. CURB RAMPS SHALL NOT EXCEED 12:1 SLOPES PARKING SPACE AND AISLE SHALL NOT EXCEED 50:1 CROSS-SLOPE. (TLO 11-26-96) 12-11-96

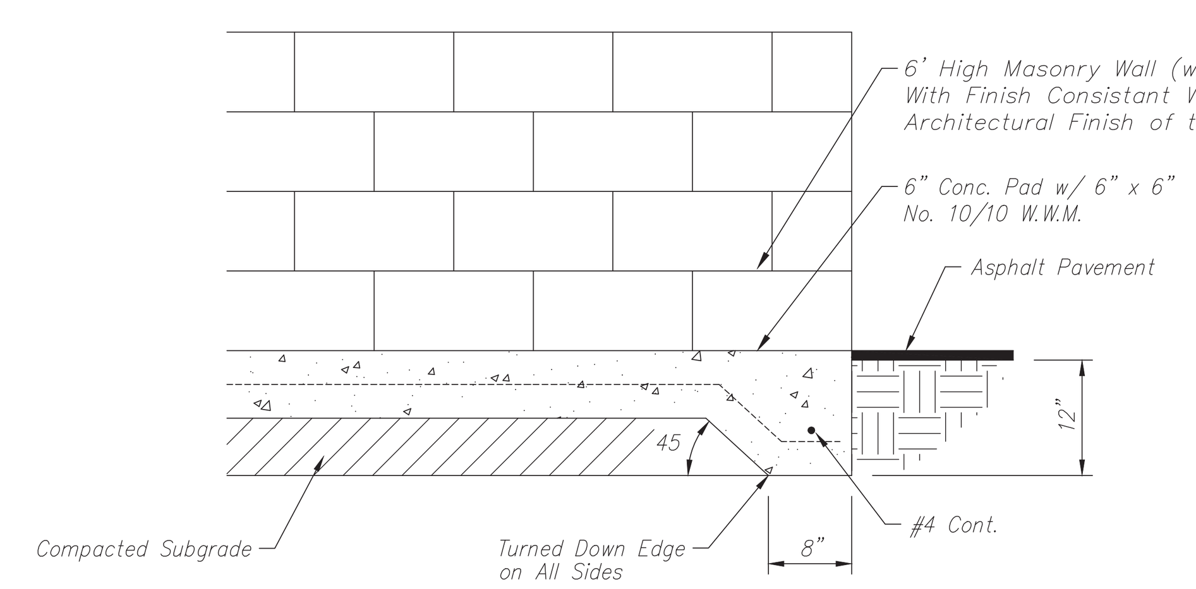
NOTE: (HANDICAP SIGN ONLY)

1. ALL LETTERS SHALL BE BLACK AND SHALL CONFORM TO FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS".
2. TOP PORTION OF SIGN SHALL HAVE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK BORDER.
4. ONE SIGN REQUIRED FOR EACH PARKING SPACE.
5. HEIGHT OF SIGN SHALL BE 7' ABOVE GROUND IN ACCORDANCE WITH FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS".



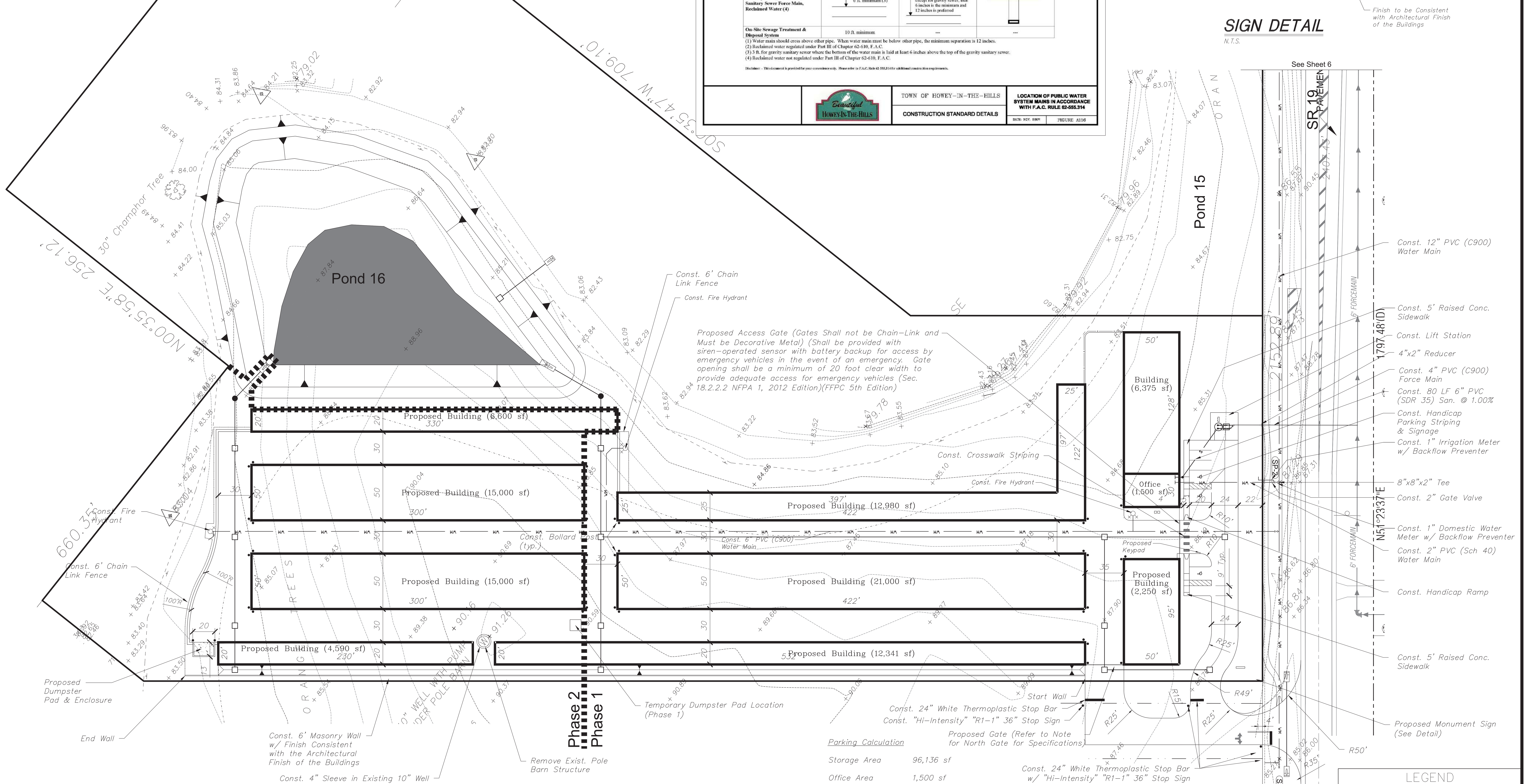
HANDICAP SYMBOL & SIGN

N.T.S.



DUMPSTER PAD

N.T.S.

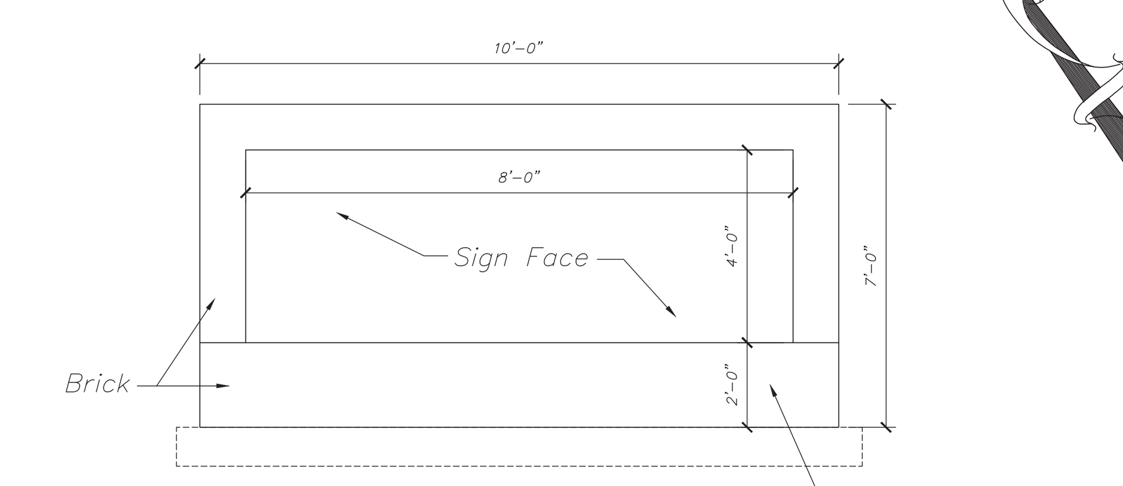


Other Pipe	Horizontal Separation	Crossings (1)	Joint Spacing @ Crossings (Full Joint Centered)
Storm Sewer, Stormwater Force Main, Reclaimed Water (2)	Water Main 3 ft. minimum	Water Main 12 inches is the minimum, except for storm sewer, then 6 inches is the minimum and 12 inches is preferred	Alternate 3 ft. minimum Water Main
Vacuum Sanitary Sewer	Water Main 10 ft. preferred 3 ft. minimum	Water Main 12 inches preferred 6 inches minimum	Alternate 3 ft. minimum Water Main
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water (4)	Water Main 10 ft. preferred 6 ft. minimum (3)	Water Main 12 inches is the minimum, except for gravity sewer, then 6 inches is the minimum and 12 inches is preferred	Alternate 6 ft. minimum Water Main
On-Site Sewage Treatment & Disposal System	10 ft. minimum	---	---

(1) Water main should cross above other pipe. When water main must be below other pipe, the minimum separation is 12 inches.
(2) Reclaimed water regulated under Part III of Chapter 62-610, F.A.C.
(3) 3 ft. for gravity sanitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer.
(4) Reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

Disclaimer – This document is provided for your convenience only. Please refer to F.A.C. Rule 62-555.314 for additional construction requirements.

TOWN OF HOWEY-IN-THE-HILLS
CONSTRUCTION STANDARD DETAILS
LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314
DATE: NOV. 2007 FIGURE A116



SIGN DETAIL

N.T.S.

Utility Separation Notes

New or relocated, underground water mains shall be laid to provide a horizontal distance of at least six feet, and preferably ten feet, between the outside of the water main and the outside of any existing or proposed gravity- or pressure-type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C. The minimum horizontal separation distance between water mains and gravity-type sanitary sewers shall be reduced to three feet where the bottom of the water main is laid at least six inches above the top of the sewer. New or relocated, underground water mains crossing any existing or proposed gravity- or vacuum-type sanitary sewer shall be laid so the outside of the water main is at least six inches, and preferably 12 inches, above or at least 12 inches below the outside of the other pipeline. However, it is preferable to lay the water main above the other pipeline.

At the utility crossings described above, one full length of water main pipe shall be centered above or below the other pipeline so the water main joints will be as far as possible from the other pipeline. Alternatively, at such crossings, the pipes shall be arranged so that all water main joints are at least three feet from all joints in vacuum-type sanitary sewers, or pipelines conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C., and at least six feet from all joints in gravity- or pressure-type sanitary sewers, wastewater force mains, or pipelines conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

Parking Calculation

Storage Area 96,136 sf
Office Area 1,500 sf
Spaces Required 1 space/10 units x 732 Units = 74 spaces
Spaces Provided 1 space per each 22' along proposed storage building x 4,525 LF. = 205 spaces
Spaces in front of office = 7
Total spaces provided = 212 spaces

Traffic Calculation

96,136 SF x 1.51 TPD/1,000 SF = 145 TPD (as per ITE ISI – Mini Warehousing
AM Peak Hour = 19 Trips PM Peak Hour = 19 Trips
Water Demand 1 ERU = 350 gpd Solid Waster: 16.7 PPP
Sewer Demand 1 ERU = 300 gpd Stormwater: Provided on site

Village 4	
Setbacks:	
Front	25'
South Side	10'
North Side	10'
Rear	10'
SR 19	75' from old R/W

LEGEND	
Existing Contours	
Lot Number	12
Direction of Flow	
Existing Grade	×79.3
Proposed Grade	102.2
Water Main	—8" WM—
Sanitary Sewer	—S—
Stormpipe	
Fire Hydrant	
Storm Inlet	
Concrete	
Gate Valve	⋈
Water Blowoff	⬡

DATE	REVISION
7/22/09	City / SJRWMD Comments
11/17/09	FDOT / Town Comments
6/21/21	Town Comments
2/16/22	Town Comments
6/1/22	Town/FDOT Comments

Site Plan – Utilities

Howey Self Storage

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SCALE 1" = 50'

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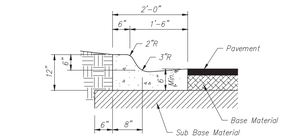
PE# 51506

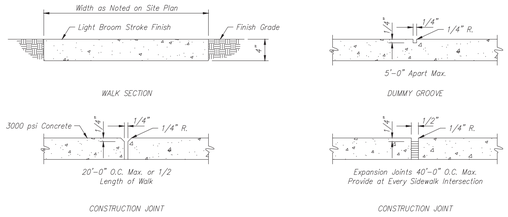
JOB NO. 07-0398

SHEET 3 OF 10

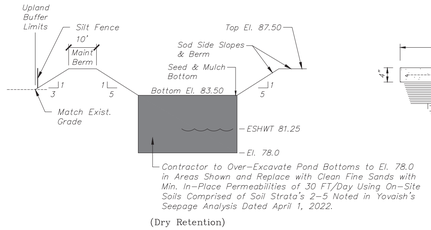


Note: When Used on High Side of Roadways, The Cross Slope of the Gutter Shall Match the Cross Slope of the Adjacent Pavement and the Thickness of the Lip Shall be 6", Unless Otherwise Shown on Plans.

TYPE "F" CURB & GUTTER
N.T.S.



SIDEWALK DETAILS
N.T.S.



TYPICAL POND SECTION
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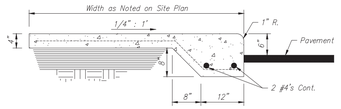
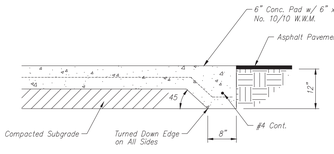
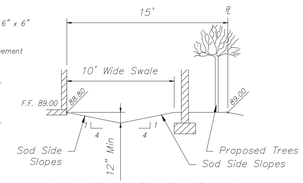


RAISED SIDEWALK
N.T.S.



DUMPSTER PAD
N.T.S.



TYPICAL SECTION A
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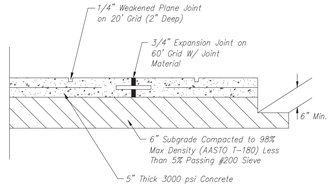
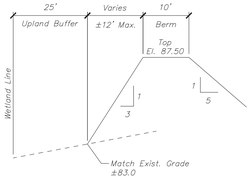


Option "A"

TYPICAL PAVEMENT SECTION
N.T.S.



TYPICAL SECTION "D"
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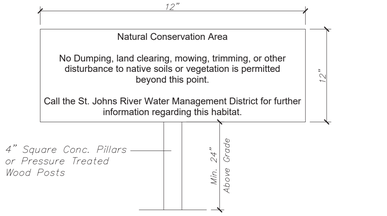
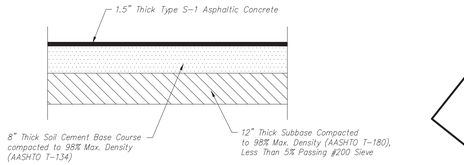


TYPICAL "CONSERVATION AREA" SIGNAGE
N.T.S.



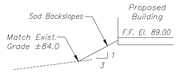
Asphaltic Prime Coat Applied at 0.15 gal/sq. yd.

*Alternative
8" Limerock Base Course Compacted to 95% Max. Density (AASHTO T-180), Asphaltic Prime Coat Applied at 0.15gal./sf

12" Subgrade Compacted to 98% Max. Density (AASHTO T-180), Less Than 5% Passing #200 Sieve, Top 6" Stabilized to 50 psi FBV, Min.

Option "B"

PAVEMENT DETAIL
N.T.S.



TYPICAL SECTION B
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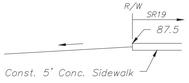
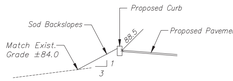


TYPICAL SECTION E
N.T.S.



TYPICAL SECTION C
N.T.S.

LEGEND	
Existing Contours	
Lot Number	(12)
Direction of Flow	
Existing Grade	×79.3
Proposed Grade	108.2
Water Main	—8" WM—
Sanitary Sewer	—S—
Stormpipe	
Fire Hydrant	
Storm Inlet	
Concrete	
Gate Valve	
Water Blowoff	

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DATE:	2/4/08	DATE:	2/4/08		

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SHEET 4 OF 10

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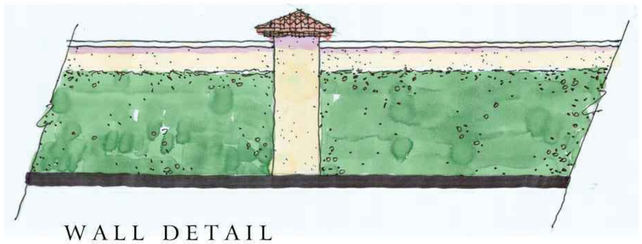
Site Plan - Paving & Drainage
Howey Self Storage

THE RESERVE
AT HOWEY IN THE HILLS

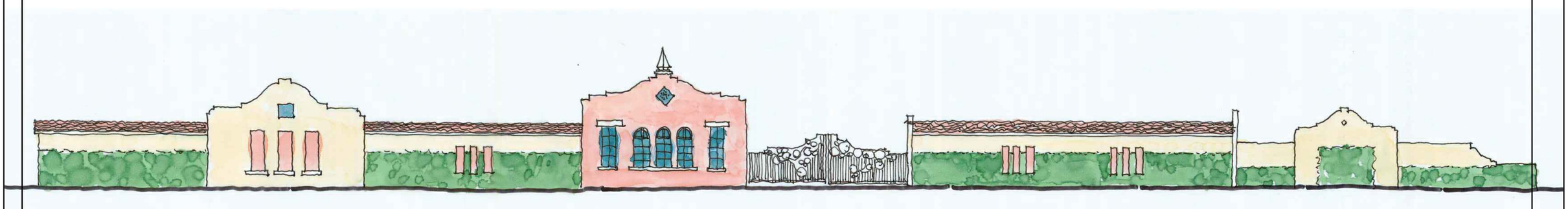
SELF STORAGE FACILITY

The street frontage buildings of the facility will be modeled in the same fashion as the Village Center. The interior buildings will be low profile single story structures surrounded by the architecture on the street and a wall along the residential areas.



WALL DETAIL

AREA PLAN



BUILDING ELEVATIONS

MORRISSEY DESIGN STUDIO

DATE	REVISION
6/21/21	Town Comments

Design Requirements

Howey Self Storage

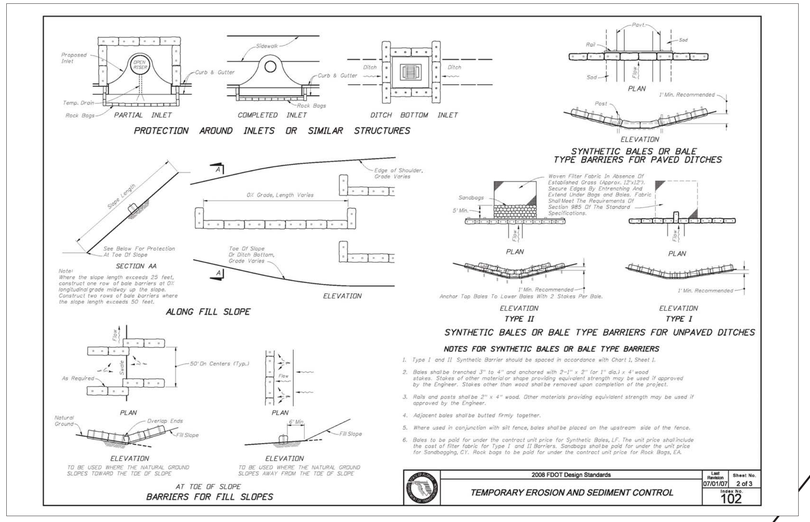
june engineering consultants, inc.
23 W. Joiner Street
Winter Garden, FL. 34787
Ph. 407-905-8180
Fax 407-905-6232
Certificate of Authorization #00008507

DRAWN BY: CLK DATE: 2/4/08 | CHECKED BY: RAJ DATE: 2/4/08 | SCALE 1" = 50'

JEFFREY A. SEDLOFF
PE# 51506

JOB NO. 07-0398

SHEET 4a OF 10



Project Name: Howey Self Storage
FDEP Project ID # FLR 10GL81

Site Area: The total site is approximately 10.5 acres of which 10.5 will be disturbed by construction activities.

Owner Name: Howey Self Storage, LLC
132 W. Plant Street, Suite 200
Winter Garden, FL 34787

Contractor Name:

Project Description: Construct infrastructure associated with an self storage facility. Clearing and Grubbing; installing a stabilized construction entrance; perimeter and other erosion and sediment controls; grading; excavation for the stormwater ponds, storm sewer, utilities and building foundations; construction of roads, curbing, sidewalks; preparation for final planting and seeding.

Construction Sequence:
1. Install stabilized construction entrance.
2. Clear and Grub for silt fence installation.
3. Install Silt fence
4. Construct Retention ponds/Mass Site Grading
5. Install infrastructure - (Storm Sewer, Utilities, Roads, etc.)
6. Complete final grading and install permanent seeding and plantings.
7. Remove any accumulated sediment from basin.
8. When construction activity is complete and the site is stabilized, remove silt fence and reseed/resod any areas disturbed by their removal.

Soil Type: Site is primarily underlain with USDA-SCS Type "A" Soils
(Candler & Tavares Fine Sands)

Runoff Coefficient: The final runoff coefficient for the site will be C=0.76

Dewatering Methods: Point well

Receiving Water
Body: Adjacent Wetlands

CONTROLS (BMP's)

Erosion and Sediment Controls
Stabilization Practices
Temporary Stabilization - Top stock piles and disturbed portions of the site where construction activity temporarily ceases for at least 7 days will be stabilized with temporary seed and mulch.

Permanent Stabilization - Disturbed portions of the site where construction activities permanently ceases shall be stabilized with permanent seed and mulch and/or sod no later than 30 days after the last construction activity..

Structural Practices
Silt Fencing - Will be constructed around the perimeter of the site as indicated on the overall plans of the construction plans.

Retention Pond/
Sediment Basin - Will be constructed with the site grading. Once construction activities are nearly complete, the accumulated sediment will be removed from the basin.

Other Controls
Waste Disposal
Waste Materials - All waste materials will be collected and stored in a dumpster or as required by the City of Ocoee. All trash and debris from the site will be stored in the dumpster.

Hazardous Waste - All hazardous waste materials will be disposed of in the manner specified by local or state regulation or by the manufacturer.

Sanitary Waste - All sanitary waste will be collected from the portable units as per the requirement of the City of Ocoee.

Offsite Vehicle Tracking
A stabilized construction entrance has been provided to help reduce vehicle tracking of sediments. The paved street adjacent to the site entrance will be swept as necessary to remove any excess mud, dirt or rock tracked from the site. Dump trucks hauling material from the construction site will be covered with a tarpaulin.

TIMING OF CONTROLS/MEASURES

As indicated in the Sequence of Major Activities, the silt fence, stabilized construction entrance will be constructed prior to clearing or grading of any other portions of the site. Areas where construction activity temporarily ceases for more than 7 days will be stabilized with a temporary seed and mulch. Once construction activity ceases permanently in an area, that area will be stabilized with permanent seed and mulch and/or sod. After the entire site is stabilized, the accumulated sediment will be removed from the retention ponds and along the silt fence.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

The storm water pollution prevention plan reflects the Town of Howey in the Hills, Lake County, St. Johns River Water Management District, Florida Department of Environmental Protection and the U.S. Environmental Protection Agency requirements for storm water management and erosion and sediment control.

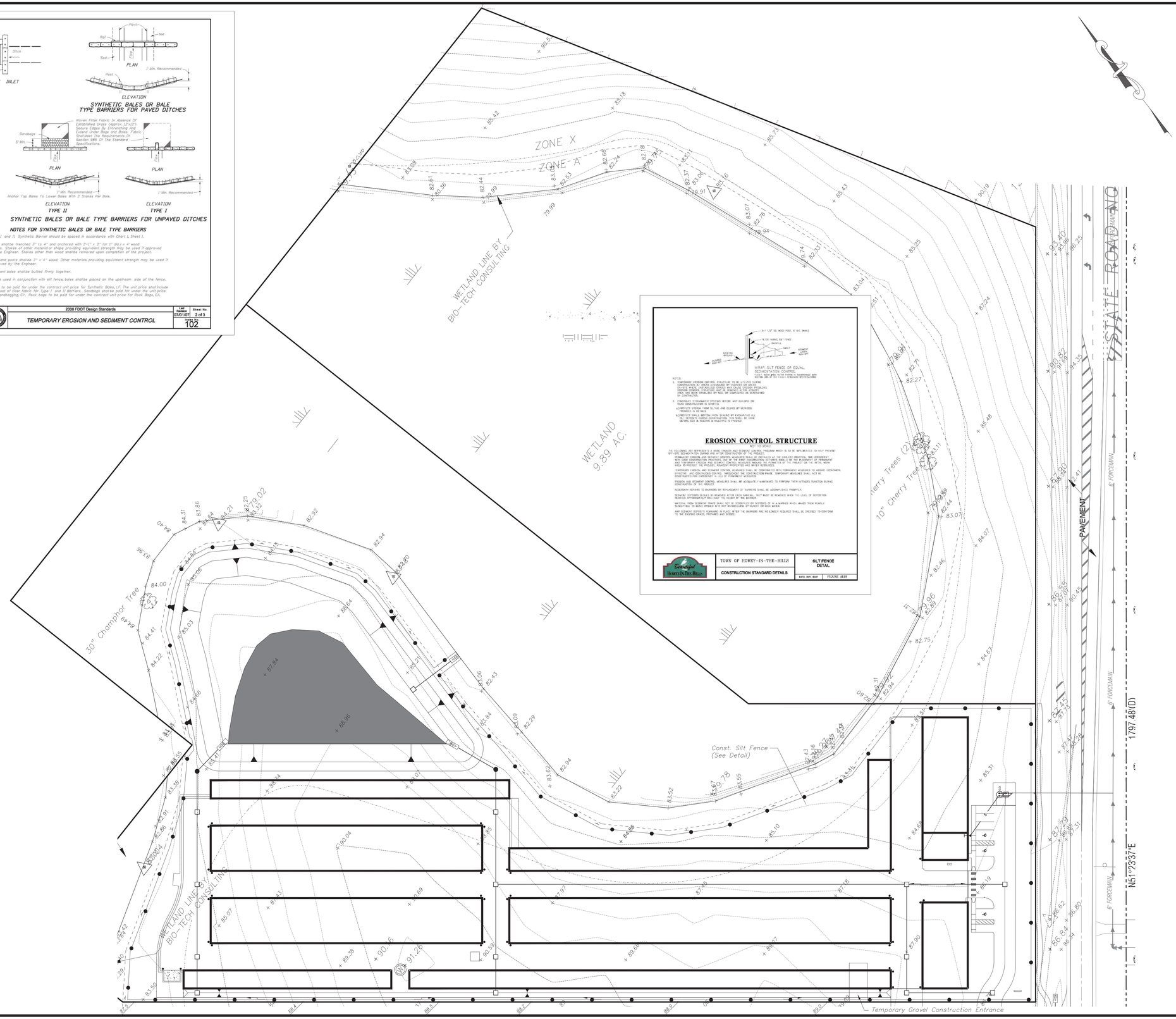
MAINTENANCE/INSPECTION PROCEDURES

These are the inspection and maintenance practices that will be used to maintain erosion and sediment controls.
· All control measures will be inspected at least once each week and following any storm event of 0.5 inches or greater. A rain gauge will be on site to measure rainfall amounts.
· All measures will be maintained in good working order; if repair is necessary, it will be initiated within 24 hours of the report.
· Built up sediment will be removed from silt fence when it has reached one-third the height of the fence.
· Silt fence will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
· The retention ponds/sediment basins will be inspected, and sediment will be removed at the end of the job.
· Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.

It is expected that the following non-stormwater discharges will occur from the site during construction:
· Water from flushing of the water lines.
· Water from the washing of the pavement (where no spills or leaks of toxic or hazardous materials have occurred).
· Uncontaminated groundwater (from dewatering excavation)
All non-storm water discharges will be directed to the sediment basin prior to discharge.

INVENTORY FOR POLLUTION PREVENTION PLAN

The materials or substances listed below are expected to be present onsite during construction:
· Concrete
· Asphalt
· Wood
· Masonry Block
· Roofing Shingles
· Petroleum Based Products
· Fertilizers
· Cleaning Solvents
· Paints (Enamel and Latex)
· Metal Studs
· Detergents
CONTRACTOR IS RESPONSIBLE FOR INSTALLING ANY ADDITIONAL EROSION CONTROL IF IT BECOMES NECESSARY TO MEET STATE AND LOCAL STANDARDS.



JOB NO. 07-0398	SHEET 5 OF 10

JEFFREY A. SEDLOFF
PE# 51506

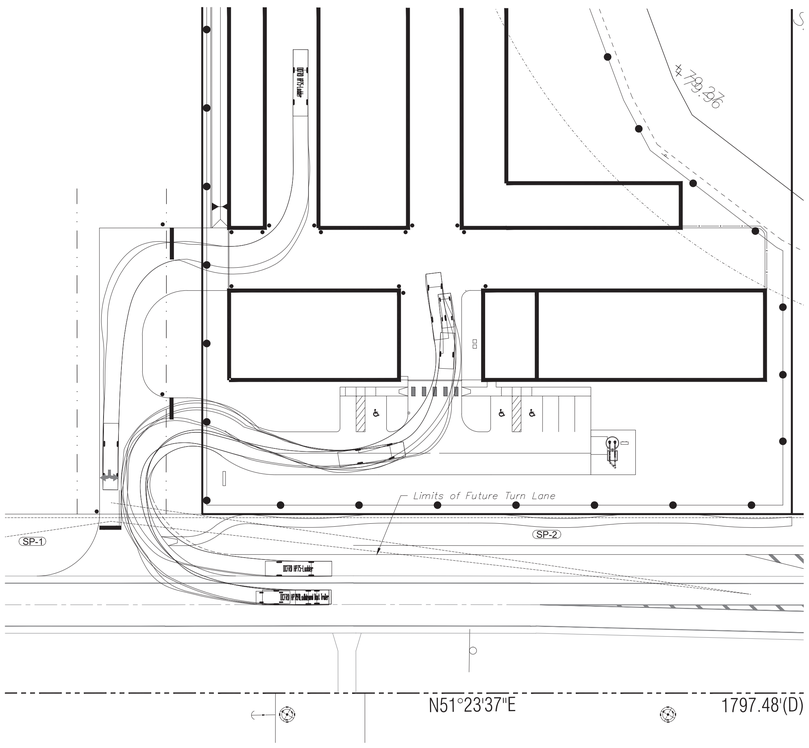
JEC
June engineering consultants, inc.
23 W. Joiner Street
Winter Garden, FL 34787
Ph. 407-905-8180
Fax 407-905-8232
Certificate of Authorization #00008507

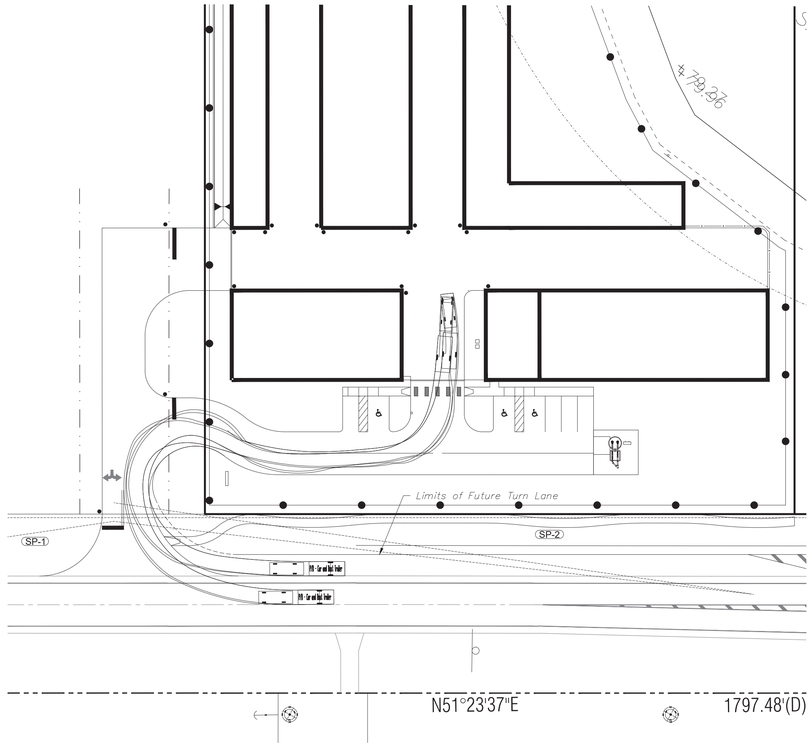
DRAWN BY: CJK	CHECKED BY: RAJ	SCALE 1" = 50'
DATE: 2/4/08	DATE: 2/4/08	

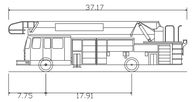
Stormwater Pollution Prevention Plan

Howey Self Storage

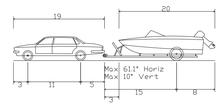
DATE	REVISION
7/22/09	City / SJRWMD Comments
11/17/09	FDOT / Town Comments
6/1/22	Town/FDOT Comments







CFRD HP75-Ladder	
Overall Length	37.170ft
Overall Width	8.330ft
Overall Body Height	10.489ft
Min Body Ground Clearance	0.920ft
Track Width	8.330ft
Lock-to-lock time	6.00s
Max Wheel Angle	31.80°



P/B - Car and Boat Trailer	
Overall Length	42.000ft
Overall Width	8.000ft
Overall Body Height	6.305ft
Min Body Ground Clearance	0.681ft
Max Track Width	8.000ft
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	24.000ft

LEGEND	
Existing Contours	
Lot Number	(12)
Direction of Flow	
Existing Grade	x 79.3
Proposed Grade	108.2
Water Main	—8" WM—
Sanitary Sewer	—S—
Stormpipe	
Fire Hydrant	
Storm Inlet	
Concrete	
Gate Valve	
Water Blowoff	

DATE	REVISION

Truck Turn Radius Plan

Howey Self Storage

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JEFFREY A. SEDLOFF
PE# 51506

JOB NO. 07-0398
SHEET 5a OF 10

LAND DESCRIPTION (EAGLES LANDING AT OCOEE, INC. PARCEL)(VILLAGE 4 OF THE RESERVE AT HOWEY IN THE HILLS)

COMMENCE AT THE EAST 1/4 CORNER OF SECTION 35, TOWNSHIP 20 SOUTH, RANGE 25 EAST, LAKE COUNTY FLORIDA; THENCE RUN N89°21'35"W ALONG THE SOUTH LINE OF THE NORTHEAST 1/4 OF SAID SECTION 35, 1487.79 FEET TO A POINT ON THE NORTHWESTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 19; THENCE RUN N52°07'27"E ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, 673.75 FEET TO THE POINT OF BEGENNING; THENCE RUN N37°53'02"W, 1008.88 FEET; THENCE RUN N00°35'47"E, 116.78 FEET TO A POINT ON THE NORTH LINE OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 35; THENCE RUN S89°24'13"E ALONG SAID NORTH LINE, 270.08 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 35; THENCE RUN N00°35'58"E ALONG SAID WEST LINE, 256.12 FEET TO A POINT ON THE SOUTH LINE OF THE RESIDENCE OF DON WHITE; THENCE RUN S89°24'13"E ALONG SAID SOUTH LINE, 418.17 FEET; THENCE RUN S00°35'47"W, 709.10 FEET; THENCE RUN S37°52'33"E, 317.47 FEET TO A POINT ON SAID NORTHWESTERLY RIGHT-OF-WAY LINE OF STATE ROAD NO. 19; THENCE RUN S52°07'27"W ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, 329.54 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL OF LAND CONTAINS 11.978 ACRES MORE OR LESS.

LAND DESCRIPTION (HOWEY IN THE HILLS, LTD. PARCEL)

HOWEY FROM E 1/4 COR OF SEC 35-20-25 RUN N 89-21-35 W 1487.79 FT TO NW'LY R/W LINE OF SR 19, N 52-07-27 E ALONG SAID NW'LY R/W LINE 1003.29 FT FOR POB, RUN N 37-52-33 W 317.47 FT, N 0-35-47 E 709.10 FT, S 89-24-13 E TO NW COR OF LOT 1 BLK D-14 OF PALM GARDENS SUB, SE'LY ALONG SAID W'LY LINE OF BLK D-14 OF PALM GARDENS SUB TO NW'LY LINE OF SR 19, SW'LY ALONG SAID R/W LINE TO POB ORB 3003 PG 1362 ORB 3446 PG 103

THE ABOVE DESCRIBED PARCEL OF LAND CONTAINS 11.00 ACRES MORE OR LESS.

LEGEND	
Existing Contours	
Lot Number	(12)
Direction of Flow	
Existing Grade	x 79.3
Proposed Grade	x 102.3
Water Main	—8" WM—
Sanitary Sewer	—S—
Stormpipe	
Fire Hydrant	
Storm Inlet	
Concrete	
Gate Valve	
Water Blowoff	

DATE	REVISION

Survey – Boundary & Topo

Howey Self Storage

june engineering consultants, inc.
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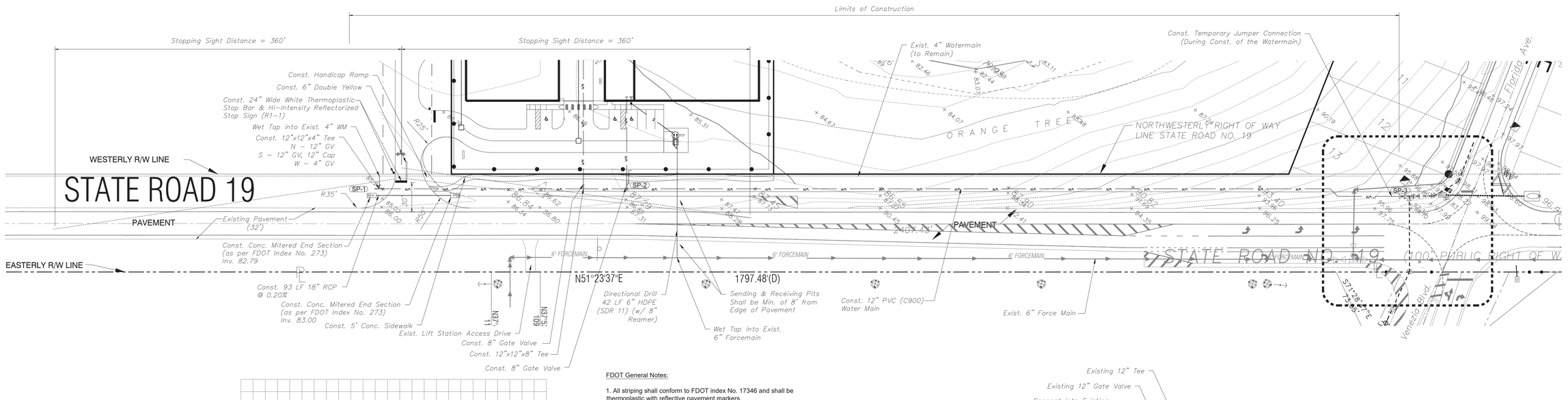
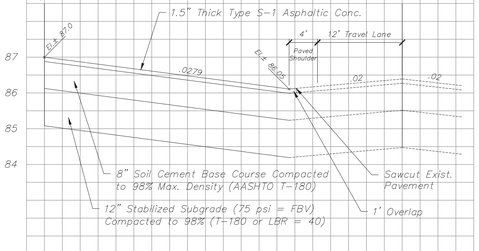
DRAWN BY: CLK DATE: 2/4/08 | CHECKED BY: RAJ DATE: 2/4/08 | SCALE 1" = 100'

JEFFREY A. SEDLOFF PE# 51506

JOB NO. 07-0398

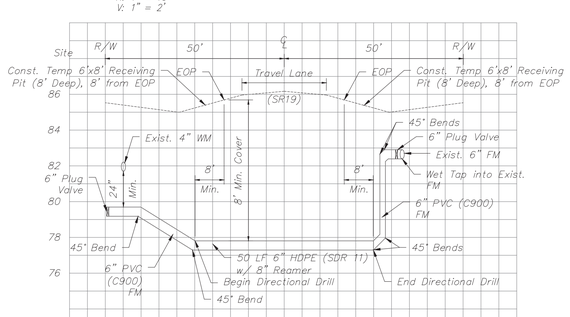
SHEET 5b OF 10





TYPICAL DRIVEWAY SECTION

H: 1" = 10'
V: 1" = 2'



TYPICAL SECTION - DIRECTIONAL DRILL

H: 1" = 20'
V: 1" = 4'

FDOT General Notes:

1. All striping shall conform to FDOT index No. 17346 and shall be thermoplastic with reflective pavement markers.

2. Turn lanes were designed based on a design speed of 55mph.

3. Use FDOT Index 526, Sheet 2 of 8 for roadway transitions, design speed = 45mph, center widening.

4. Use FDOT Index 301 for turn lanes, design speed = 45mph.

5. The contractor shall locate the exact location of the existing utilities within FDOT R/W, prior to construction.

6. All construction in the FDOT ROW shall conform to the latest editions of the FDOT Design Standards (Indexes), the FDOT Standard Specifications for Road and Bridge Construction, and the FDOT Utility Accommodation Manual.

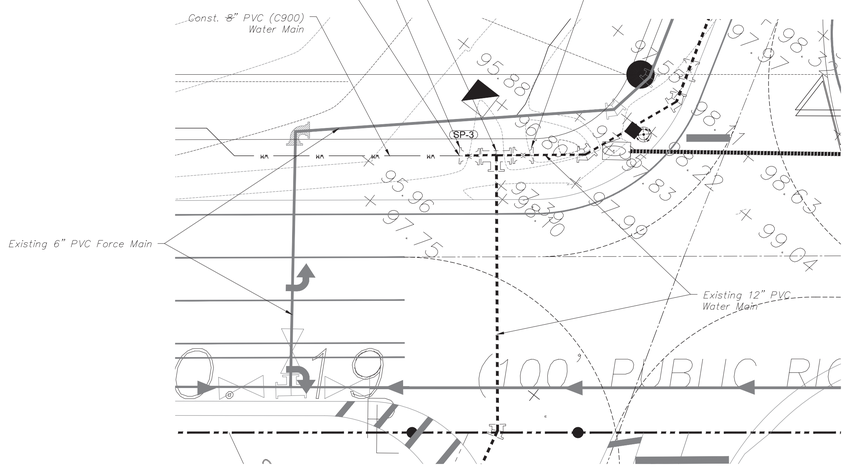
7. All disturbed area within the Department's Right of Way shall be graded and sodded with Argetine Bahia sod.

8. All striping within the Department's Right of Way shall be lead-free thermoplastic.

9. All maintenance of traffic shall adhere to the requirements of the Design Standards 600 indexes.

10. Paved shoulders need to be saw cut and removed prior to construction.

11. All sidewalks, ramps, and crosswalks shall be constructed and inspected to meet most current ADA Standards.



UTILITY CONNECTION DETAIL

Scale: 1" = 20'

Note:
Weld on MJ Fittings Shall be Used for all Directional Bore Piping

LEGEND	
Existing Contours	
Lot Number	(12)
Direction of Flow	
Existing Grade	x79.3
Proposed Grade	10.2
Water Main	—8" WM—
Sanitary Sewer	—S—
Stormpipe	
Fire Hydrant	
Storm Inlet	
Concrete	
Gate Valve	
Water Blowoff	

DATE	REVISION
11/17/09	FDOT / Town Comments
6/21/21	Town Comments
2/16/22	Town Comments
6/1/22	Town/FDOT Comments
6/23/22	Town Comments

Offsite Improvements

Howey Self Storage

JEC june engineering consultants, inc.
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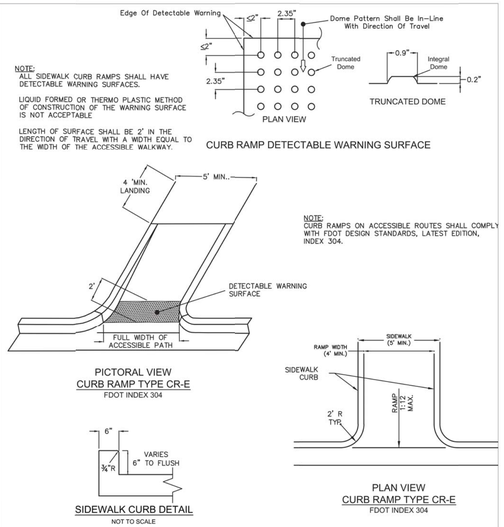
JEFFREY A. SEDLOFF PE# 51506

JOB NO. 07-0398

SHEET 6 OF 10



SIDEWALK CURB RAMP (N.T.S.)

Howey-in-the-Hills Standard Details	DATE: FEB 2022
	DETAIL R-15

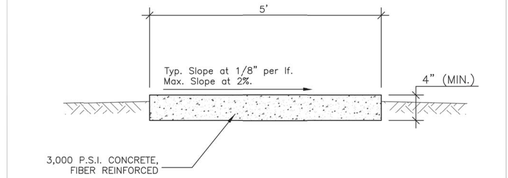
CURB RAMP – GENERAL NOTES

ALL REFERENCES TO FDOT AND ADA STANDARDS SHALL MEAN THE LATEST EDITION

1. Public sidewalk curb ramps shall be constructed in the public right of way at locations that will provide continuous unobstructed pedestrian circulation paths to pedestrian areas, elements and facilities in the public right of way and to accessible pedestrian routes on adjacent sites. Curbed facilities with sidewalks and those without sidewalks are to have curb ramps constructed at all street intersections and at turnouts that have curbed returns. Partial curb returns shall extend to the limit prescribed by FDOT Index No. 515 to accommodate curb ramps. Ramps constructed at locations without sidewalks shall have a 5' x 5' landing constructed at the top of each ramp.
2. The location of curb ramps shall be as shown in the plans, but shall conform to F.D.O.T. standard details. All ramps, landings and curbs shall be constructed with minimum 3000 psi, Class A concrete and shall have minimum thickness of 6 inches. All concrete for pedestrian areas shall have a medium broom finish and standard color, unless specifically required by the plans.
3. Curb ramp running slopes at unrestrained sites shall not be steeper than 1 : 12 and cross slope shall not be steeper than 2%. Transition slopes shall not be steeper than 1 : 12. When altering existing pedestrian facilities where existing site development precludes the accommodation of a ramp slope of 1 : 12, a running slope between 1 : 12 and 1 : 10 is permitted for a rise of 6" maximum and a running slope of between 1 : 10 and 1 : 8 is permitted for a rise of 3" maximum.
4. If a curb ramp is located where pedestrians must walk across the ramp, then the walk shall have transitions with a maximum longitudinal slope of 1 : 12. and a 2% cross-slope. Ramps with curb returns may be used to provide guidance, avoid an obstacle, or when R/W limitations prohibit fixes. Improvements for directional guidance are required whenever necessary to guide or re-direct the pedestrian towards the receiving ramp.
5. All curb ramps shall have detectable warning surfaces that extend the full width of the ramp and 24" from the back of curb in the direction of travel. Detectable warning surfaces shall be constructed in conformance with A.D.A. Standards For Accessible Design, A.D.A. Accessibility Guidelines, Section 4.29.2, Transition slopes are not to have detectable warnings. Dome pattern shall be in-line with direction of travel.
6. The color requirement for detectable warnings is to provide a dark-on-light visual contrast between the detectable warning surface and the adjacent walking surface. Where adjacent walking surfaces are dark colored and/or constructed with materials other than standard Class I Portland Cement Concrete in accordance with the Standard Specifications, the Contractor must provide a detectable warning surface color that provides the necessary contrast, with the adjacent concrete. The standard color is dark red brick or yellow colored detectable warning tile with standard concrete unless otherwise noted.
7. Where a curb ramp is constructed within existing curb, curb and gutter or sidewalk, the existing concrete shall be removed to the nearest joint beyond the transition slope so that no remaining section of concrete is less than 5' long. The existing sidewalk shall be removed to the nearest joint beyond the transition slope, if the ramp must extend into the sidewalk.
8. Expansion joints shall be placed at all perimeter edges abutting concrete, but no joints shall be made in the ramp itself.

SIDEWALK CURB RAMP GENERAL NOTES

Howey-in-the-Hills Standard Details	DATE: FEB 2022
	DETAIL R-15A



SIDEWALK (N.T.S.)

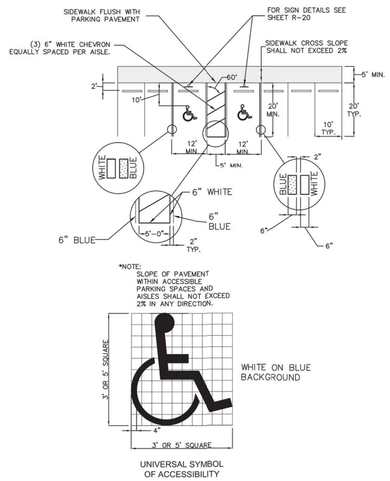
Howey-in-the-Hills Standard Details	DATE: FEB 2022
	DETAIL R-16

SIDEWALK CONSTRUCTION- GENERAL NOTES

1. SIDEWALKS, BIKE PATHS, RAMPS, AND DRIVEWAY APRONS SHALL BE CONSTRUCTED OF PLAIN PORTLAND CEMENT CONCRETE WITH A MAXIMUM SLUMP OF 3 INCHES, A MINIMUM DEVELOPED COMPRESSIVE STRENGTH OF 3,000 P.S.I. IN 28 DAYS, AND A MINIMUM UNIFORM THICKNESS OF 4 INCHES WHERE INTENDED SOLELY FOR PEDESTRIAN TRAFFIC, AND 6 INCHES THICK WHERE MOTOR VEHICLES ARE LIKELY TO CROSS.
2. SIDEWALKS AND BIKE PATHS SHALL BE PLACED PARALLEL TO, AND ONE FOOT WITHIN THE RIGHT-OF-WAY LINE EXCEPT THAT THE CITY MAY APPROVE DEVIATIONS TO SAVE SPECIMEN TREES PROVIDED THAT THE PAVEMENT REMAINS WITHIN THE RIGHT-OF-WAY, OR ADJACENT EASEMENT DEDICATED FOR SIDEWALK USE, IS NOT DIMINISHED IN WIDTH, AND REMAINS AT LEAST 3 FEET FROM THE EDGE OF THE STREET PAVEMENT, UNLESS OTHERWISE APPROVED BY THE CITY.
3. THE TOP OF THE CONCRETE SHALL BE AT AN ELEVATION NO LOWER THAN THE CROWN OF THE ADJACENT ROADWAY, AND NO HIGHER THAN 6 INCHES ABOVE THE CROWN UNLESS APPROVED BY THE CITY TO MAKE A MORE NATURAL TRANSITION WITH THE ADJACENT LAND. UNDER NO CIRCUMSTANCES WILL THE SIDEWALK EXCEED ADA MAXIMUM GRADES.
4. ISOLATION JOINTS (TYPE A JOINTS) SHALL BE PROVIDED BETWEEN EXISTING SLABS OR STRUCTURES AND FRESH CONCRETE, TO SEPARATE PEDESTRIAN SECTIONS FROM SECTIONS WHICH WILL ENCOUNTER VEHICLE TRAFFIC, TO SEPARATE FRESH PLACEMENT FROM CONCRETE WHICH HAS SET FOR MORE THAN 60 MINUTES, AND NO FARTHER APART THAN 120 FEET IN SIDEWALKS AND BIKE PATHS. JOINT MATERIAL SHALL BE AS SPECIFIED IN FDOT STANDARDS AND SPECIFICATIONS AND SHALL BE RUBBER, PLASTIC OR OTHER APPROVED NON-BIODEGRADABLE ELASTOMERIC MATERIAL. WOOD IS PROHIBITED.
5. CONTROL JOINTS (TYPE B JOINTS) SHALL BE TOOLED INTO THE FRESH CONCRETE, OR SAW-CUT WITHIN 24 HOURS OF PLACEMENT, TO A DEPTH EQUAL TO 1/4 THE SLAB THICKNESS AND SPACED APART A DISTANCE EQUAL TO THE WIDTH OF THE SLAB OR 5 FEET, WHICHEVER IS GREATEST.
6. THE SLAB SURFACE SHALL BE BROOM FINISHED TO BE SLIP RESISTANT, AND SHALL MATCH AS CLOSELY AS POSSIBLE THE FINISH OF EXISTING ADJACENT SLABS AND ALL EDGES SHALL BE TOOLED TO ELIMINATE SHARP CORNERS.
7. THE BEARING SUBSURFACE SHALL HAVE ALL ORGANIC, LOOSE, AND DELETERIOUS MATTER REMOVED, AND THE REMAINING CLEAN SOIL SHALL BE SMOOTH, SOUND, AND SOLID. ANY FILL MATERIAL SHALL BE COMPACTED WITH A VIBRATORY OR IMPACT COMPACTION MACHINE IN MAXIMUM 12 INCH LIFTS OR COMPACTED WITH A HAND TAMPER IN MAXIMUM 4 INCH LIFTS. THE CITY SHALL REQUIRE A COMPACTION TEST FOR EACH LIFT IF THE TOTAL FILLED SECTION IS MORE THEN 12 INCHES DEEP OR IF THE SUBSURFACE HAS BEEN DISTURBED MORE THAN 12 INCHES DEEP. WHERE SUCH TEST IS REQUIRED, THE RESULTS SHALL SHOW A MINIMUM PROCTOR FIELD DENSITY OF 95 PERCENT.
8. ALL CONCRETE WORK IN THE RIGHT-OF-WAY SHALL BE INSPECTED BY THE CITY AFTER THE SUBSOIL IS PREPARED AND THE FORMS ARE SET, BUT BEFORE THE CONCRETE PLACEMENT BEGINS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE FINISHED SLAB FROM ALL DAMAGE AND VANDALISM UNTIL THE CITY ACCEPTS OR APPROVES THE SLAB.
10. SIDEWALKS LOCATED WITHIN THE RIGHT-OF-WAY SHALL NOT BE TINTED, STAINED, COLORED, OR COATED, UNLESS APPROVED BY THE CITY ENGINEER.
11. ALL FORMS SHALL BE REMOVED PRIOR TO ACCEPTANCE OR APPROVAL AND THE DISTURBED GROUND SHALL BE BACK-FILLED, RE-GRADED, AND SODDED SO THAT THE WEAR SURFACE OF THE CONCRETE IS REASONABLY FLUSH WITH THE ADJACENT GRADE.
12. THE CITY MAY REQUIRE ADDITIONAL JOINTS AROUND UTILITY STRUCTURES LOCATED WITHIN THE SIDEWALK.

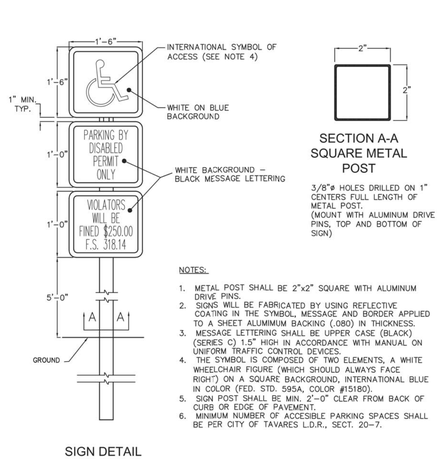
SIDEWALK - GENERAL NOTES

Howey-in-the-Hills Standard Details	DATE: FEB 2022
	DETAIL R-16A



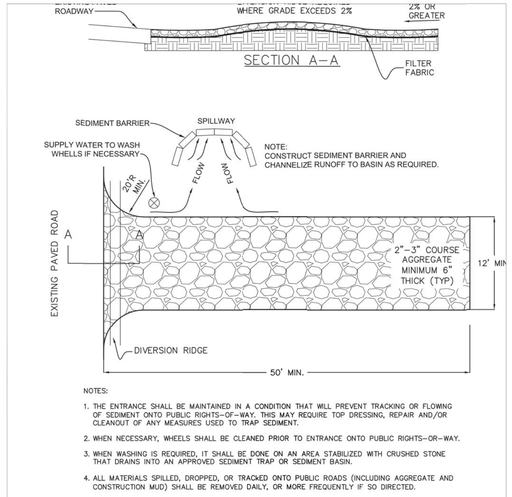
ACCESSIBLE PARKING (N.T.S.)

Howey-in-the-Hills Standard Details	DATE: FEB 2022
	DETAIL R-18



ACCESSIBLE PARKING SIGN (N.T.S.)

Howey-in-the-Hills Standard Details	DATE: FEB 2022
	DETAIL R-19



TEMPORARY CONSTRUCTION ENTRANCE (N.T.S.)

Howey-in-the-Hills Standard Details	DATE: FEB 2022
	DETAIL R-23

DATE	REVISION
7/22/09	City / SJRWMD Comments
11/17/09	FDOT / Town Comments
6/21/21	Town Comments
6/1/22	Town/FDOT Comments

Standard Details

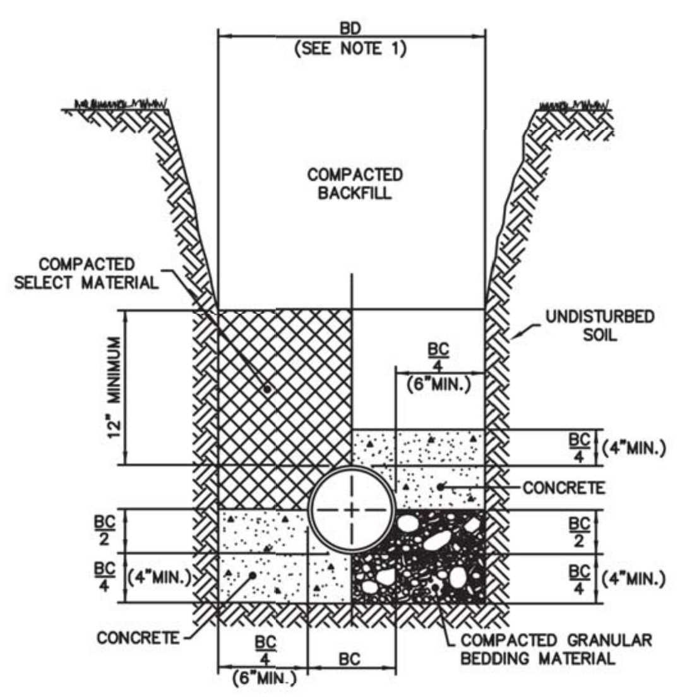
Howey Self Storage

june engineering consultants, inc.
23 W. Joiner Street
Winter Garden, FL. 34787
Ph. 407-905-8180
Fax 407-905-6232
Certificate of Authorization #00008507

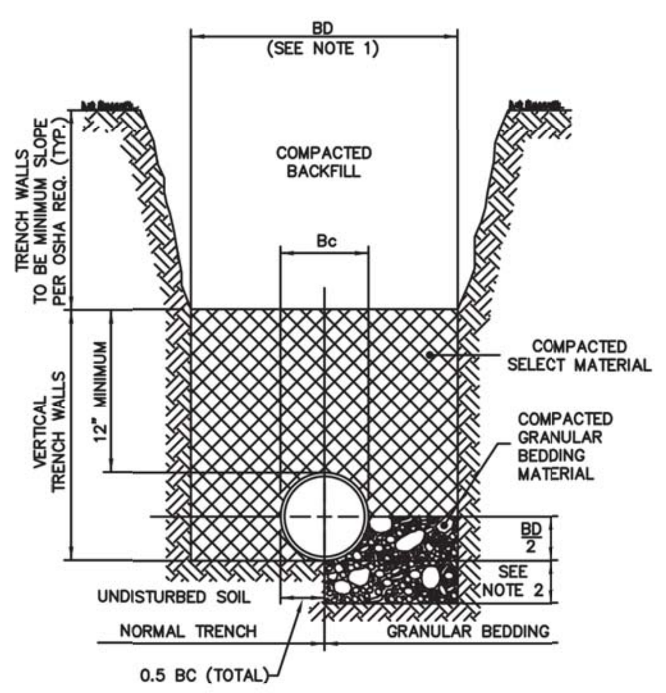
DRAWN BY: CLK | CHECKED BY: RAJ | SCALE
DATE: 2/4/08 | DATE: 2/4/08 | 1" = 50'

JEFFREY A. SEDLOFF
PE# 51506

JOB NO. 07-0398
SHEET 7 OF 10



CLASS "A" BEDDING
SPECIAL CONDITIONS



CLASS "B" BEDDING
NORMAL CONDITIONS

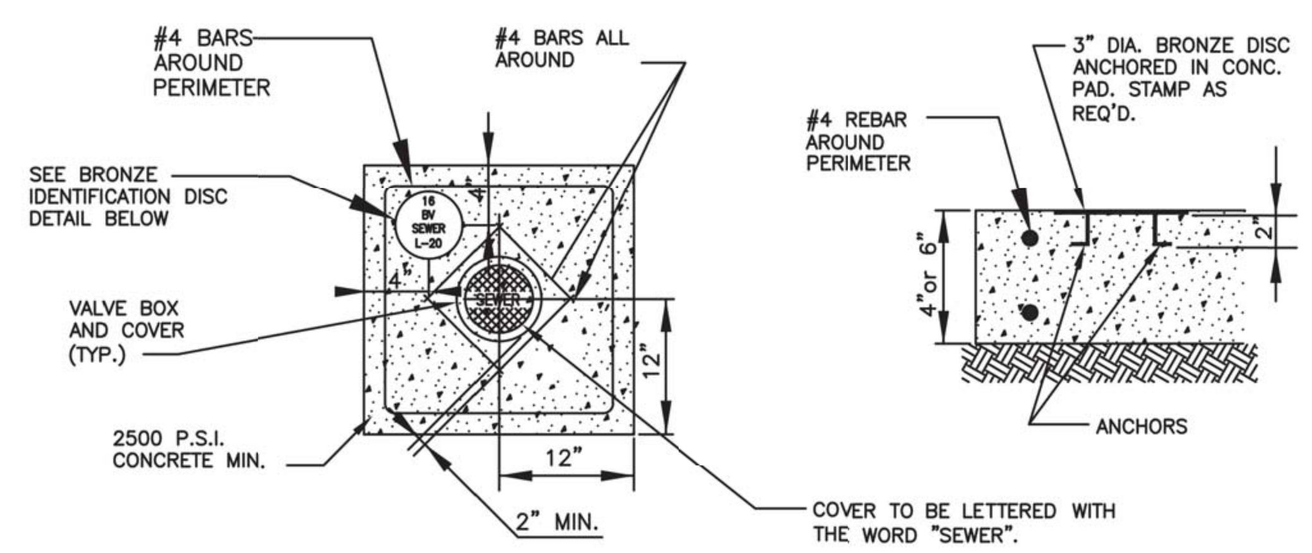
NOTES: FOR BEDDING AND TRENCHING

1. DIMENSION BC = PIPE O.D.
   DIMENSION BD = TRENCH WIDTH AT TOP OF PIPE
   MAXIMUM BD = BC + 30"
   MINIMUM BD = MAXIMUM DIMENSION OF BELL + 8" (UNSHEETED TRENCH)
2. DEPTH FOR REMOVAL FOR UNSUITABLE MATERIAL SHALL BE AS REQUIRED TO REACH SUITABLE FOUNDATION. FOR ROCK OR OTHER NON–CUSHIONING MATERIAL, DEPTH SHALL BE 6" BELOW BOTTOM OF UTILITY.
3. ALL BACKFILL AND SELECT MATERIAL UNDER ALL ROADWAYS, DRIVES (INCLUDING DIRT DRIVES), AND PARKING AREAS SHALL BE COMPACTED TO 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. (AASHTO T–180). BACKFILL AND SELECT MATERIAL UNDER ALL OTHER AREAS SHALL BE COMPACTED AS FOLLOWS: FROM BOTTOM OF TRENCH TO 12" ABOVE TOP OF PIPE – 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T–180). FROM 12" ABOVE TOP OF PIPE TO TOP OF BACKFILL – 90% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T–180)

TRENCHING AND BEDDING

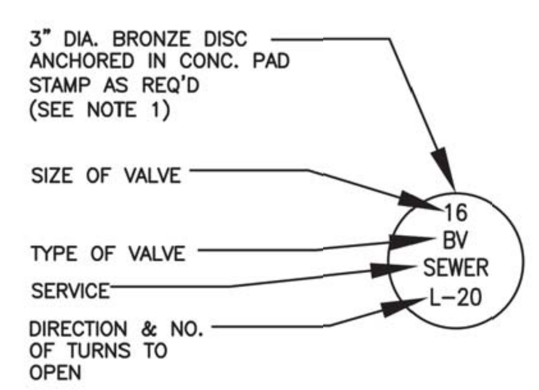
NOT TO SCALE

	Howey–in–the–Hills Standard Details	DATE: FEB 2022 DETAIL PW–2



NOTE:

1. BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES.
2. 6" THICK CONCRETE PAD IN ROADWAY OR PAVED AREAS.



BRONZE IDENTIFICATION DISC DETAIL

VALVE COLLAR

NOT TO SCALE

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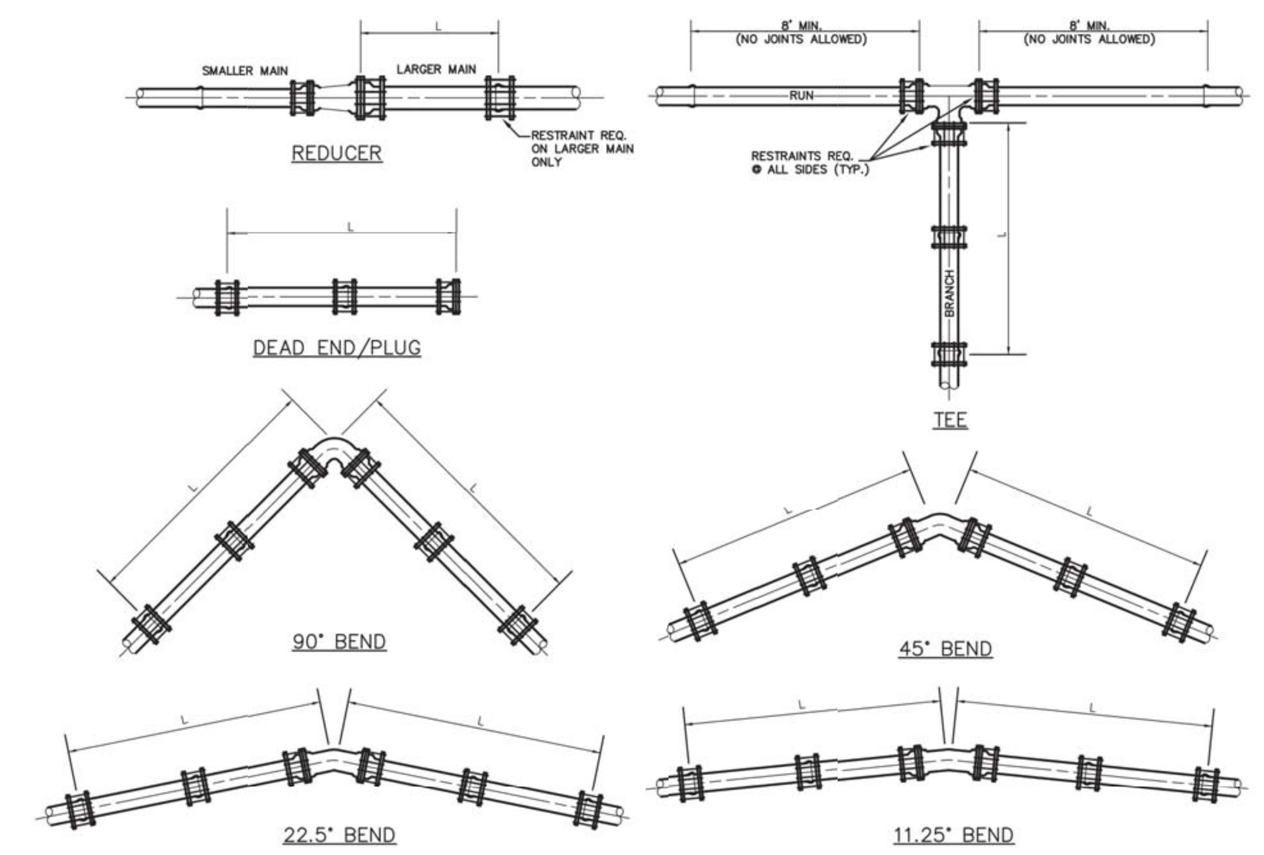


TABLE OF THRUST RESTRAINT LENGTHS															
PIPE SIZE (Inches)	90° BEND		45° BEND		22 1/2° BEND		11 1/4" BEND		TEES		DEAD END & PLUG		REDUCER		
	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	PIPE SIZES	P.V.C. (L)	DUCTILE IRON (L)
4	20'	16'	8'	7'	4'	3'	2'	2'	15'	10'	45'	29'	6"x4"	33'	21'
6	28'	22'	12'	9'	6'	4'	3'	2'	33'	21'	63'	40'	8"x6"	34'	22'
8	36'	29'	15'	12'	7'	6'	4'	3'	52'	33'	82'	52'	10"x8"	33'	21'
10	43'	34'	18'	14'	9'	7'	4'	3'	68'	43'	98'	63'	12"x10"	34'	22'
12	50'	40'	21'	17'	10'	8'	5'	4'	84'	54'	116'	74'	16"x12"	63'	40'
16	63'	51'	26'	21'	13'	10'	6'	5'	116'	74'	148'	94'	18"x16"	33'	21'
18	70,	56'	29'	23'	14'	11'	7'	6'	131'	83'	163'	103'	20"x18"	33'	21'
20	75'	61'	31'	25'	15'	12'	7'	6'	145'	92'	178'	113'	20"x20"	62'	39'
24	86'	70'	36'	29'	17'	14'	9'	7'	173'	110'	207'	132'			

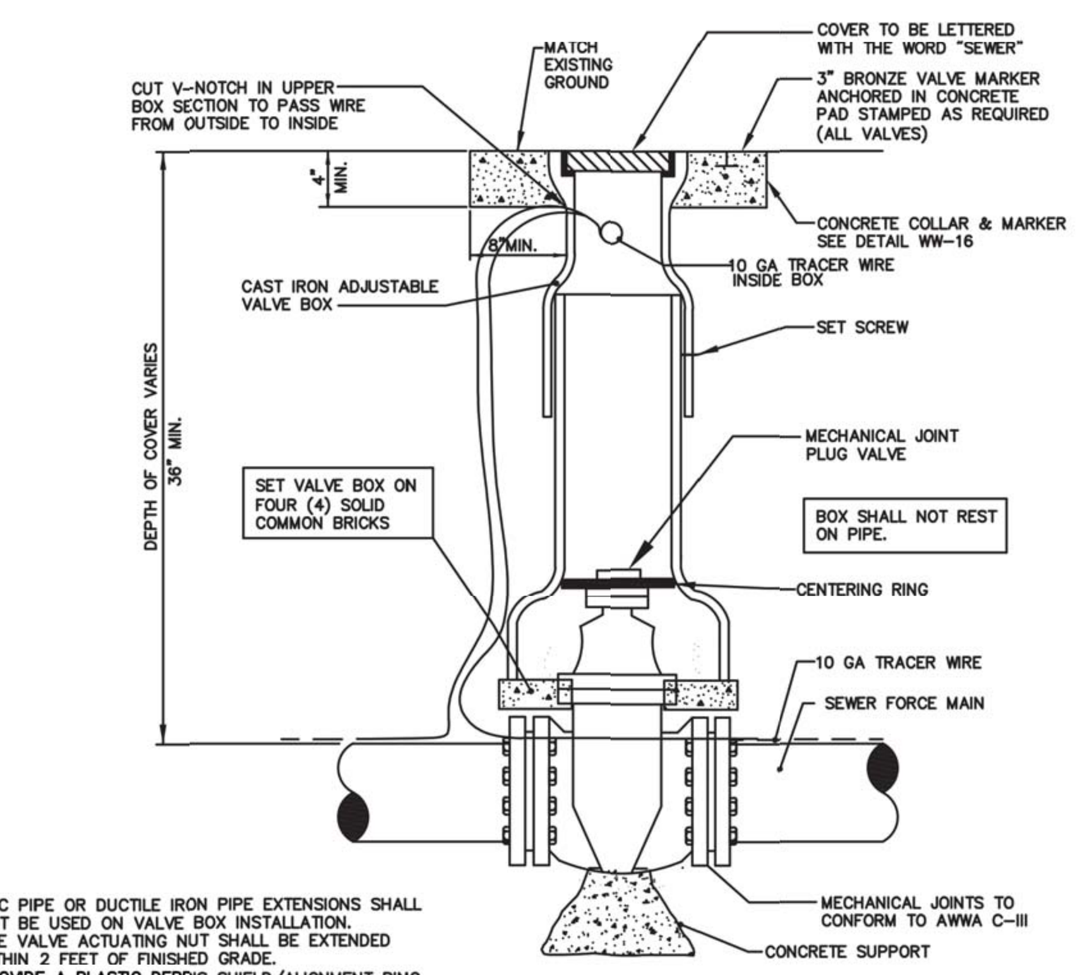
THRUST RESTRAINT DESIGN NOTES

1. RESTRAINT JOINTS, FITTINGS, & VALVE REQUIREMENTS CALCULATED BY THE THRUST RESTRAINT DESIGN PROGRAM PROVIDED BY EBBA IRON SALES, INC.
2. DATA BASED ON MAX. PRESSURE OF 150 p.s.i., THE UNIFIED SOILS CLASSIFICATION SYSTEM (SOIL TYPE SP), THE PIPE BEDDED IN NATIVE SOIL w/ A MINIMUM OF 2.5' COMPACTED FILL OVER THE PIPE, AND USING A SAFETY FACTOR OF 1.5 FOR THE DATA.
3. ALL FITTINGS & VALVES SHALL HAVE RESTRAINED WITH "MEGA–LUG' RESTRAINTS, & ALL BELL & SPIGOT JOINTS TO BE RESTRAINED WITH A RESTRAINING HARNESS WITHIN THE REQUIRED LENGTH OF RESTRAINED PIPE (L).

THRUST RESTRAINT

NOT TO SCALE

	Howey–in–the–Hills Standard Details	DATE: FEB 2022 DETAIL PW–7



NOTES

1. PVC PIPE OR DUCTILE IRON PIPE EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE VALVE ACTUATING NUT SHALL BE EXTENDED WITHIN 2 FEET OF FINISHED GRADE.
3. PROVIDE A PLASTIC DEBRIS SHIELD/ALIGNMENT RING WHICH INSTALLS BELOW THE VALVE ACTUATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE ACTUATING NUT AND MINIMIZE INFILTRATION.
4. FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDRANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS.
5. VALVE BOX SHALL BE A TWO PIECE SCREW TYPE.

PLUG VALVE AND BOX

NOT TO SCALE

	Howey–in–the–Hills Standard Details	DATE: FEB 2022 DETAIL WW–13

DATE	REVISION
7/22/09	City / SJRWMD Comments
11/17/09	FDOT / Town Comments
6/21/21	Town Comments
6/1/22	Town/FDOT Comments

Standard Details

Howey Self Storage

june engineering consultants, inc.
23 W. Joiner Street
Winter Garden, FL. 34787
Ph. 407-905-8180
Fax 407-905-6232
Certificate of Authorization #00008507

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JEFFREY A. SEDLOFF
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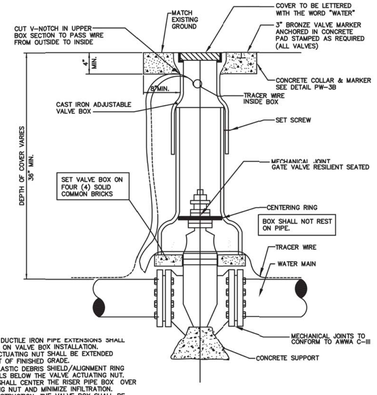
SHEET 8 OF 10



NOTES

1. PVC PIPE OR DUCTILE IRON PIPE EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE VALVE ACTUATING NUT SHALL BE EXTENDED WITHIN 2 FEET OF FINISHED GRADE.
3. PROVIDE A PLASTIC DEBRIS SHIELD/ALIGNMENT RING WHICH INSTALLS BELOW THE VALVE ACTUATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE ACTUATING NUT AND MINIMIZE INFILTRATION.
4. FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDRANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS.
5. VALVE BOX SHALL BE A TWO PIECE SCREW TYPE.

GATE VALVE AND BOX

NOT TO SCALE

Howey-in-the-Hills

Standard Details

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DETAIL PW-3A

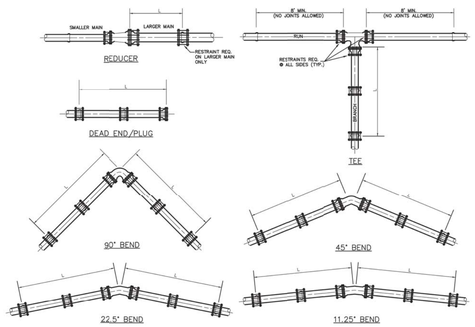

TABLE OF THRUST RESTRAINT LENGTHS

PIPE SIZE (inches)	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		TEES		DEAD END & PLUG		REDUCER	
	P.V.C. DJ	DUCTILE IRON PUSH-ON	P.V.C. DJ	DUCTILE IRON PUSH-ON	P.V.C. DJ	DUCTILE IRON PUSH-ON	P.V.C. DJ	DUCTILE IRON PUSH-ON	P.V.C. DJ	DUCTILE IRON PUSH-ON	P.V.C. DJ	DUCTILE IRON PUSH-ON	PIPE SIZES	P.V.C. DJ
4	20'	16'	9'	7'	4'	3'	2'	2'	15'	10'	45'	29'	6"x4"	33'
6	28'	22'	12'	9'	6'	4'	3'	2'	33'	21'	63'	40'	8"x6"	34'
8	36'	29'	15'	12'	7'	6'	4'	3'	52'	33'	82'	52'	10"x8"	33'
10	43'	34'	18'	14'	9'	7'	4'	3'	68'	43'	98'	63'	12"x10"	34'
12	50'	40'	21'	17'	10'	8'	5'	4'	84'	54'	116'	74'	16"x12"	63'
16	63'	51'	26'	21'	13'	10'	6'	5'	116'	74'	148'	94'	18"x16"	33'
18	70'	56'	29'	23'	14'	11'	7'	6'	131'	83'	163'	103'	20"x18"	33'
20	75'	61'	31'	25'	15'	12'	7'	6'	145'	92'	178'	113'	20"x20"	62'
24	88'	70'	36'	29'	17'	14'	9'	7'	173'	110'	207'	132'		

THRUST RESTRAINT DESIGN NOTES

1. RESTRAINT JOINTS, FITTINGS, & VALVE REQUIREMENTS CALCULATED BY THE THRUST RESTRAINT DESIGN PROGRAM PROVIDED BY EBBA IRON SALES, INC.
2. DATA BASED ON MAX. PRESSURE OF 150 p.s.i., THE UNIFIED SOILS CLASSIFICATION SYSTEM (SOIL TYPE SP), THE PIPE BEDDED IN NATIVE SOIL w/ A MINIMUM OF 2.5' COMPACTED FILL OVER THE PIPE, AND USING A SAFETY FACTOR OF 1.5 FOR THE DATA.
3. ALL FITTINGS & VALVES SHALL HAVE RESTRAINED WITH "MEGA-LUG" RESTRAINTS, & ALL BELL & SPIGOT JOINTS TO BE RESTRAINED WITH A RESTRAINING HARNESS WITHIN THE REQUIRED LENGTH OF RESTRAINED PIPE (L).

THRUST RESTRAINT

NOT TO SCALE

Howey-in-the-Hills

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GENERAL WATER NOTES

1. WATER SYSTEM COMPONENTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND REGULATIONS, CLEANED, DISINFECTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND CHAPTER 62-555 FLORIDA ADMINISTRATIVE CODE.
2. ALL PIPING SHALL BEAR THE "NSF" SEAL FOR POTABLE WATER.
3. WATER MAINS SHALL BE PVC CONFORMING TO AWWA C-900, DR 18 FOR PIPE SIZES 4"-12". PIPES 14" OR LARGER SHALL BE AWWA C-905, DR 18. ALL COUPLINGS, CLEANING COMPOUNDS, SOLVENTS, LUBRICANTS, AND PIPE PREPARATION, FOR LAYING, SHALL BE IN ACCORDANCE WITH THE PIPE MANUFACTURER'S LATEST RECOMMENDATIONS.
4. DEPTH OF WATER LINES TO BE 36" MINIMUM COVER FROM FINISH GRADE.
5. WATER MAINS TO BE LOCATED 5' FROM BACK OF CURB OR EDGE OF PAVEMENT' UNLESS OTHERWISE NOTED.
6. ALL WATER MAINS UNDER PAVEMENT SHALL BE DUCTILE IRON.
7. ALL CASINGS UNDER PAVEMENT SHALL EXTEND 5' BEYOND THE BACK OF CURB.
8. DISINFECTING: FOLLOWING THE PRESSURE TESTING, THE CONTRACTOR SHALL DISINFECT ALL SECTIONS OF THE NEW WATER DISTRIBUTION SYSTEM. DISINFECTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF AWWA STANDARD C651 "DISINFECTING WATER MAINS", AND ALL APPROPRIATE AGENCY APPROVAL.
9. ALL HYDROSTATIC TESTS SHALL BE IN ACCORDANCE WITH AWWA C600 FOR DUCTILE IRON PIPE AND C605/M23 FOR PVC PIPE.
10. ALL WATER MAINS SHALL BE INSTALLED, PRESSURE AND LEAK TESTED IN ACCORDANCE WITH AWWA C600, (62-555.320(21)B)1 AND 62-555.330, F.A.C. ALL INSTALLATION, TESTING AND FIELD PROCEDURES MUST BE PROVIDED AND MUST CONFORM TO THE APPLICABLE AWWA STANDARDS.
11. ALL PIPING MATERIALS AND SPECIFICATIONS COVERING PIPES, JOINTS AND PACKING MATERIALS, INTERNAL COATING AND LININGS, FITTINGS, SPECIALS AND APPURTENANCES SHALL ALL BE IN ACCORDANCE WITH THE CORRESPONDING AWWA STANDARDS AND BE CONFORMING TO NSF REQUIREMENTS, AS MAY BE APPLICABLE, WITH EXCEPTIONS ALLOWED ONLY IF DOCUMENTATION AND ASSURANCES ARE PROVIDED IN COMPLIANCE WITH PARAGRAPHS 62-555.320(3) (D), 622-555.320 (3) (B), AND 62-555.320 (21) (C), F.A.C. THE LEAD USE PROHIBITION IN RULE 62-555.322, F.A.C. SHALL ALSO APPLY. POLYETHYLENE TUBING SHALL BE PER AWWA C901. UNDERGROUND SERVICE LINES AND VALVES SHALL BE PER AWWA C800.

COLOR CODING

ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)B)3, F.A.C., USING BLUE AS A PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE WILL BE SOLID-WALL BLUE PIPE, WILL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR WILL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE WILL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE WILL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT WILL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPE WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT WILL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE WILL BE PAINTED BLUE OR WILL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.) [FAC 62/CELL 555.320(21)(B)3]

UNLESS DESCRIBED IN THE CITY CSM ELSEWHERE, ALL WATER MAINS SHALL BE INSTALLED IN ACCORDANCE WITH **CHAPTER 62-555.314, F.A.C.,** AND ANY UPDATES TO THE F.A.C., AND IN CONFORMANCE WITH ALL SEPARATION REQUIREMENTS AS FOUND THEREIN.

62-555.314 LOCATION OF PUBLIC WATER SYSTEM MAINS.

FOR THE PURPOSE OF THIS SECTION, THE PHRASE "WATER MAINS" SHALL MEAN MAINS, INCLUDING TREATMENT PLANT PROCESS PIPING, CONVEYING EITHER RAW, PARTIALLY TREATED, OR FINISHED DRINKING WATER; FIRE HYDRANT LEADS; AND SERVICE LINES THAT ARE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER.

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

(A) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C

(B) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.

(C) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.

Howey-in-the-Hills

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GENERAL WATER NOTES

(D) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS AND RECLAIMED WATER PIPELINES.

(A) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

(3) SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES:

(A) NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.

(B) EFFECTIVE AUGUST 28, 2003, WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE. WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH THIS REQUIREMENT (I.E., WHERE THERE IS A CONFLICT IN THE ROUTING OF A WATER MAIN AND A STORM SEWER AND WHERE ALTERNATIVE ROUTING OF THE WATER MAIN OR THE STORM SEWER IS NOT TECHNICALLY FEASIBLE OR IS NOT ECONOMICALLY SENSIBLE), THE DEPARTMENT SHALL ALLOW EXCEPTIONS TO THIS REQUIREMENT (I.E., THE DEPARTMENT SHALL ALLOW CONSTRUCTION OF CONFLICT MANHOLES), BUT SUPPLIERS OF WATER OR PERSONS PROPOSING TO CONSTRUCT CONFLICT MANHOLES MUST FIRST OBTAIN A SPECIFIC PERMIT FROM THE DEPARTMENT AND MUST PROVIDE IN THE PRELIMINARY DESIGN REPORT OR DRAWINGS, SPECIFICATIONS, AND DESIGN DATA ACCOMPANYING THEIR PERMIT APPLICATION THE FOLLOWING INFORMATION:

1. TECHNICAL OR ECONOMIC JUSTIFICATION FOR EACH CONFLICT MANHOLE.
2. A STATEMENT IDENTIFYING THE PARTY RESPONSIBLE FOR MAINTAINING EACH CONFLICT MANHOLE.
3. ASSURANCE OF COMPLIANCE WITH THE DESIGN AND CONSTRUCTION REQUIREMENTS IN SUB-PARAGRAPHS A. THROUGH D. BELOW. - 361
   - A. EACH WATER MAIN PASSING THROUGH A CONFLICT MANHOLE SHALL HAVE A FLEXIBLE, WATERTIGHT JOINT ON EACH SIDE OF THE MANHOLE TO ACCOMMODATE DIFFERENTIAL SETTLING BETWEEN THE MAIN AND THE MANHOLE.
   - B. WITHIN EACH CONFLICT MANHOLE, THE WATER MAIN PASSING THROUGH THE MANHOLE SHALL BE INSTALLED IN A WATERTIGHT CASING PIPE HAVING HIGH IMPACT STRENGTH (I.E., HAVING IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE).
   - C. EACH CONFLICT MANHOLE SHALL HAVE AN ACCESS OPENING, AND SHALL BE SIZED, TO ALLOW FOR EASY CLEANING OF THE MANHOLE.
   - D. GRATINGS SHALL BE INSTALLED AT ALL STORM SEWER INLETS UPSTREAM OF EACH CONFLICT MANHOLE TO PREVENT LARGE OBJECTS FROM ENTERING THE MANHOLE.

(4) SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

(A) NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

Howey-in-the-Hills

Standard Details

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GENERAL WATER NOTES

(5) EXCEPTIONS. WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH THE REQUIREMENTS IN SUBSECTION (1) OR (2) ABOVE, THE DEPARTMENT SHALL ALLOW EXCEPTIONS TO THESE REQUIREMENTS IF SUPPLIERS OF WATER OR CONSTRUCTION PERMIT APPLICANTS PROVIDE TECHNICAL OR ECONOMIC JUSTIFICATION FOR EACH EXCEPTION AND PROVIDE ALTERNATIVE CONSTRUCTION FEATURES THAT AFFORD A SIMILAR LEVEL OF RELIABILITY AND PUBLIC HEALTH PROTECTION. ACCEPTABLE ALTERNATIVE CONSTRUCTION FEATURES INCLUDE THE FOLLOWING:

(A) WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THE REQUIRED MINIMUM HORIZONTAL DISTANCE FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND JOINTS IN THE WATER MAIN ARE BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCE FROM JOINTS IN THE OTHER PIPELINE:

1. USE OF PRESSURE-RATED PIPE CONFORMING TO THE AMERICAN WATER WORKS ASSOCIATION STANDARDS INCORPORATED INTO RULE 62-555.330, F.A.C., FOR THE OTHER PIPELINE IF IT IS A GRAVITY- OR VACUUM-TYPE PIPELINE;
2. USE OF WELDED, FUSED, OR OTHERWISE RESTRAINED JOINTS FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE; OR
3. USE OF WATERTIGHT CASING PIPE OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE.

(B) WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THREE FEET HORIZONTALLY FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND IS BEING LAID LESS THAN THE REQUIRED MINIMUM VERTICAL DISTANCE FROM THE OTHER PIPELINE:

1. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE WATER MAIN; AND
2. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE OTHER PIPELINE IF IT IS NEW AND IS CONVEYING WASTEWATER OR RECLAIMED WATER.

Howey-in-the-Hills

Standard Details

DATE: FEB 2022

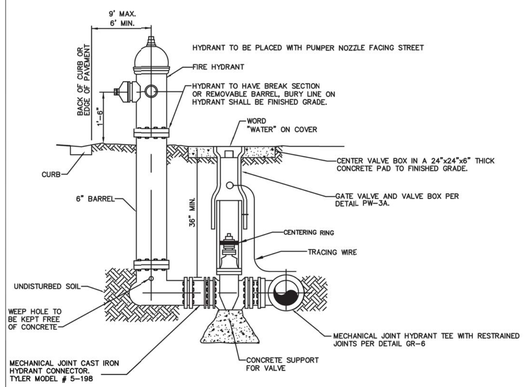
DETAIL PW-11E

PAINTING

1. APPLY TWO COATS OF OSHA SAFETY INDUSTRIAL RED PAINT TO HYDRANT BARREL.
2. APPLY TWO COATS OF OSHA SAFETY INDUSTRIAL ENAMEL PAINT TO THE BONNET AND NOZZLE CAPS. THE UTILITY DEPARTMENT INSPECTOR WILL DETERMINE THE COLOR TO PAINT THE HYDRANT BONNET AND NOZZLE CAPS BY FLOW TESTING HYDRANT.
   - BLUE 1500 GPM OR MORE (SHERWIN WILLIAMS #SW4086)
   - GREEN 1000 GPM TO 1499 GPM (SHERWIN WILLIAMS #B54614)
   - ORANGE 500 GPM TO 999 GPM (SHERWIN WILLIAMS #B54E39)
   - RED 499 GPM OR LESS (SHERWIN WILLIAMS #B54R38)
   - RED HYDRANT BARREL (SHERWIN WILLIAMS #B54R38)

SPECIFICATIONS

1. AWWA SPECIFICATIONS C-502
2. TWO 2-1/2" HOSE NOZZLE DISCHARGE
3. ONE 4-1/2" PUMPER NOZZLE DISCHARGE
4. ONE 1-1/2" OPERATING NUT, LEFT
5. ALL HYDRANTS SHALL BE EQUIPPED WITH FITTINGS TO ALLOW FOR ELEVATION ADJUSTMENTS.
6. 5¼" MAIN VALVE OPENING
7. RESTRAINED JOINTS OR ALL THREADED ROD REQUIRED TO SECURE PIPE, RISER AND VALVE IN THE FIRE HYDRANT ASSEMBLY TO THE MAIN



FIRE HYDRANT WITH VALVE

NOT TO SCALE

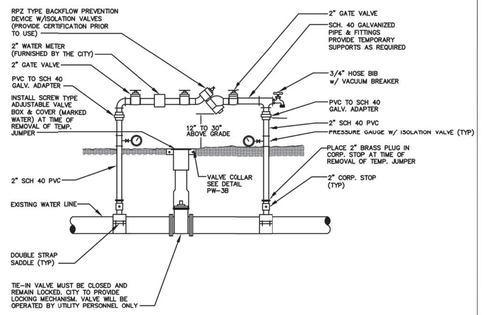
(STANDARD FIRE HYDRANT ASSEMBLY)

Howey-in-the-Hills

Standard Details

DATE: FEB 2022

DETAIL PW-18



TEMPORARY JUMPER CONNECTION

NOT TO SCALE

NOTE: LOCATION TO BE DETERMINED AT TIME OF PRECONSTRUCTION CONFERENCE W/ CITY.

Howey-in-the-Hills

Standard Details

DATE: FEB 2022

DETAIL PW-6A

DATE	REVISION
7/22/09	City / SJRWMD Comments
11/17/09	FDOT / Town Comments
6/21/21	Town Comments
6/1/22	Town/FDOT Comments

Standard Details

Howey Self Storage

june engineering consultants, inc.
23 W. Joiner Street
Winter Garden, FL. 34787
Ph. 407-905-8180
Fax 407-905-6232
Certificate of Authorization #00008507

DRAWN BY: CLK DATE: 2/4/08 | CHECKED BY: RAJ DATE: 2/4/08 | SCALE 1" = 50'

JEFFREY A. SEDLOFF PE# 51506

JOB NO. 07-0398

SHEET 9 OF 10

RILEY & Company, Inc. (H-20 GP)

w/ BATTERY BACK-UP FOR AUDIO AND VISUAL ALARMS

SCOPE: Supply one complete H-20 GP Pre-Fab Lift Station, per design.

Pumps shall be capable of grinding and pumping domestic & commercial sewage.

Complete system shall be supplied by:

RILEY & Company, Inc.
Sanford, FL 32773 (Ph. 407-265-9963)

NO SUBSTITUTIONS - NO ALTERNATES

The H-20 Load Rated Fiberglass Wetwell Must Be Warranted For 20 Years And Manufactured By L.F. Manufacturing, Giddings, Texas.

After the H-20 load rated wetwell has been installed, the ASTM Certification Number and Serial Tracking Number must be visible.

PUMPS: Submersible grinder pumps shall be HOMA Model GRP. The pumps shall be installed in the H-20 GP FRP wetwell utilizing a dual slide rail system. The grinder unit shall be capable of macerating materials normally found in domestic and commersial sewage into a fine slurry which will pass through the pump and the Sch.80 PVC discharge piping.

Stator winding shall be open type with Class F insulation and shall be heat-shrink fitted into the stator housing. The use of pins, bolts, or other fastening devices is not acceptable.

A heat sensor theromstat shall be attached to the top end of the motor winding and shall be connected in series with the magnetic contactor coil in the control panel to stop motor if winding temperature exceeds 140 C., but shall automatically reset when the winding temperature returns to normal. Two heat sensor thermostats shall be used on three phase motors.

The pump motor grinder shaft shall be AISI 430F SS threaded to take the pump impeller and the grinder impeller. Upper & lower mechanical seals shall be Silicon Carbide vs Silicon Carbide.

DUPLEX CONTROL PANEL:

Control panel shall be assembled and built by a TUV (UL508A CERTIFIED) manufacturing facility.

The Enclosure shall be NEMA 4X, minimum 30" high x 30" wide x 10" deep fiberglass with padlockable draw latches.

The enclosure shall have external mounting feet to allow for wall mounting.

The following components shall be mounted through the enclosure:
1- ea. Red Alarm Beacon (Light)
1- ea. Alarm Horn
1- ea. Generator Receptacle w/ weatherproof cover
1- ea. Alarm Silence Pushbutton

The backpanel shall be fabricated from .125, 5052-H32 marine alloy aluminum. All components shall be mounted by machined stainless steel screws.

The following components shall be mounted to backpanel:
2- ea. Motor Contactors
1- ea. Volt Monitor (Single Phase) Phase Monitor (Three Phase)
1- ea. Control Transformer (480 Volt Only)
1- ea. Silence Relay
1- ea. Duplex Alternator
1- ea. Model BOAC5AH Battery Back-Up w/ Smart Charger
20- ea. Terminals For Field Connections
6- ea. Terminals For Motor Connections (Single Phase Only)
3- ea. Grounding Lugs

The innerdoor shall be fabricated from .080, 5052-H32 marine alloy aluminum. The innerdoor shall have a continuous aluminum piano hinge.

The following components shall be mounted through the innerdoor:
1- ea. Main Circuit Breaker
1- ea. Emergency Circuit Breaker
1- ea. Mechanical Interlock For Emergency And Main Breakers
2- ea. Short Circuit Protectors
1- ea. Control Circuit Breaker
2- ea. Seal Failure Indicator Lights
1- ea. Hand-Off-Auto Selector Switches
2- ea. Pump Run Pilot Lights
1- ea. Power On Pilot Light
2- ea. Elapse Time Meters (Non-Resetable)
1- ea. GFI Duplex Convenience Outlet

COMPONENT SPECIFICATIONS:
All circuit breakers shall be molded thermal magnetic. The mechanical interlock shall prevent the normal and emergency main breakers being energized at the same time.
An emergency generator receptacle shall be supplied in accordance with DEP standards. The generator receptacle shall be adequately sized to meet the equipment operating conditions.

NEUTRAL TO BE SUPPLIED FOR BOTH 230V 3PHASE OR 230V SINGLE PHASE POWER

All motor short circuit protection devices must provide for undervoltage release and class 10 overload protection on all three phases. Visable trip indication, test, and reset capability must be provided without opening inner door.
Open frame, across the line, contactors shall be rated per IEC standards and properly sized per the motor requirements.
Contactors shall provide for safe touch power and control terminals.
Lightning Arrestor shall meet or exceed the requirements of ANSI/IEEE Std. C62.21-1984 section 8.6.1. and 8.7.3 shall be supplied by electrician and mounted on the bottom side of the switch disconnect ahead of the pump control panel.
A voltage monitor shall be supplied for single phase service.
A phase monitor shall be supplied for (3) phase service.
A green pilot light shall be supplied for each motor. The pilot light shall illuminate each time the motor is called to run.
Each pump shall have an Elapse Time Meter to record the accumulated run time. The ETM shall be 2" diameter, non-resettable, six digit, totally encapsulated unit.
A Red pilot light shall be supplied for control power. The pilot light shall illuminate when the control power is available inside the control panel.
Relays shall be ice-cube plug in type. Relay contacts shall be rated 10 amp minimum, DPDT.
Twenty (20) terminals shall be supplied for field connections. The terminals shall be rated 25 amps minimum.
Each motors over-temperature contact shall be connected to the terminal strip and shall open a contact to de-energize the appropriate motor upon a high temperature within the motor.
A 15 Amp GFI duplex receptacle shall be supplied and mounted on the innerdoor.
Ground lugs shall be supplied and appropriately sized for each motor and for service entrance.
Nameplates for the innerdoor and back panel shall be of a graphic design, specifically depicting the intent for each device.

MISCELLANEOUS: All wiring on the backpanel shall be containted within the wiring duct. All wiring between the innerdoor and the backpanel shall be contained with in a plastic spiral wrap.
Each wire shall have a wire number at each end to correspond to the as built drawing for field troubleshooting.
The control panel shall be assembled by a TUV (UL508A Certified) manufacturing facility.

PUMP DATA		ELEVATIONS	
PRIMARY PUMP CAPACITY	118.0 GPM	TOP OF WETWELL	88.25
PRIMARY TDH	45.1 'TDH	INLET INVERT	83.25
PUMP MANUFACTURER	HOMA	HIGH LEVEL ALARM	83.00
PUMP MODEL #	GRP34/1/C	2nd PUMP ON	82.50
R.P.M.	3450	1st PUMP ON	82.00
HORSEPOWER	4.0	PUMPS OFF	81.00
ELECTRICAL/ VOLTS / PHASE	230/1	BOTTOM OF WETWELL	79.00
PUMP DISCHARGE SIZE	2"	WETWELL DIAMETER	48"
IMPELLER DIAMETER	5 7/8"		

*** ELECTRICIAN NOTES:**

1. DRAWING NOT TO SCALE
* 2. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES
* 3. ELECTRICIAN SHALL SEAL OFF CONDUIT RUNS
* 4. ELECTRICIAN TO MOUNT LIGHTNING ARRESTOR AT SWITCH DISCONNECT
* 5. CONTRACTOR SHALL VERIFY POWER SOURCE PRIOR TO ORDERING EQUIPMENT
* 6. NEUTRAL TO BE SUPPLIED FOR 23OV-3 PHASE OR 230V-SINGLE PHASE POWER.

RILEY & CO. / H-20 GP 06-19-08

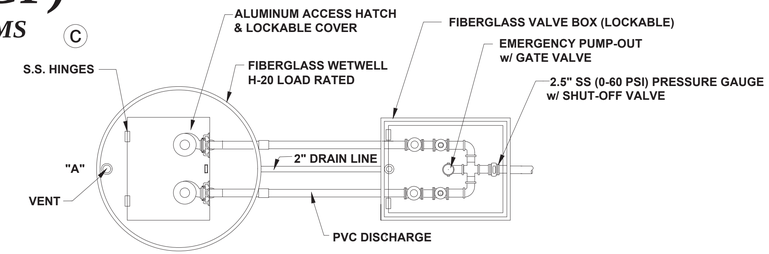
FASTNERS & APPURTANCES: All fasternes, lifting cables, float cable bracket, hinges, and appurtances shall be made of AISI 304SS.
A 304SS slide/latch assembly shall be provided tor holding the doors open on the wetwell and valve box.
Slide rails shall be made of SCH.40 AISI 304SS pipe.
Pump lifting cables shall be made of AISI 304 SS.
Pump lifting bales shall be made of AISI 304 SS.

H-20 LOAD RATED WETWELL WITH LIFTING LUGS:
The fiberglass wetwell must be H-20 load rated with integral lifting lugs, fiberglass slope in bottom of wetwell and valve box.
Certification of the H-20 load rating must be supplied at the time of submittals to Engineer.
The wetwell shall be manufactured of fiberglass reinforced polyester (FRP) of depth and diameter as shown on the lift station elevation detail. The wall thickness shall be adequate for the depth of the wetwell to maintain the H-20 LOAD RATING.

EXECUTION:
Installation shall be in strict accordance with the manufacturer's recommendations in the locations shown on the drawing.

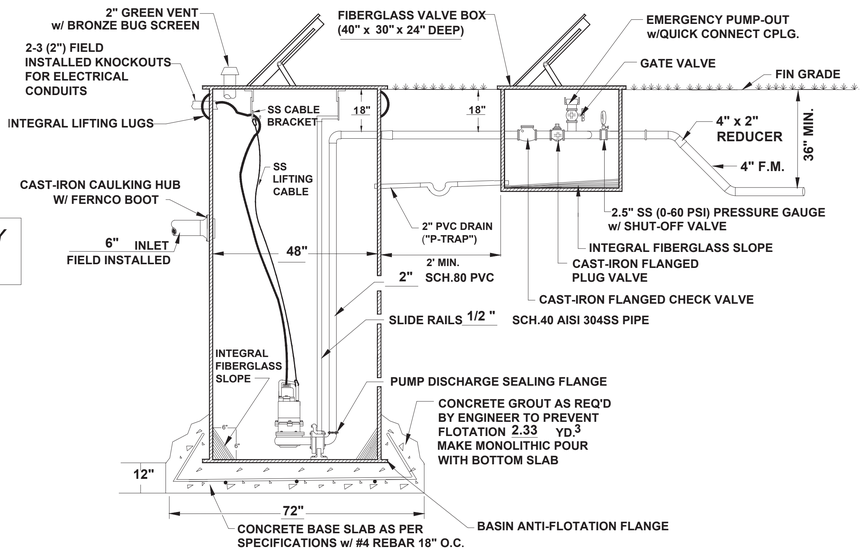
INSPECTION & TESTING: A factory representative shall be provide for a one (1) time start-up and shall have complete knowledge of the proper operation and maintenance of complete system.
Megger the motors. The pump motors shall be megged out prior to the start-up to ensure that the insulation of the pump motor/cable is intact.
The pump controls and pumps shall be checked for mechanical reliability and proper operation.

LIFT STATION SHALL BE PRIVATELY OWNED AND MAINTAINED.

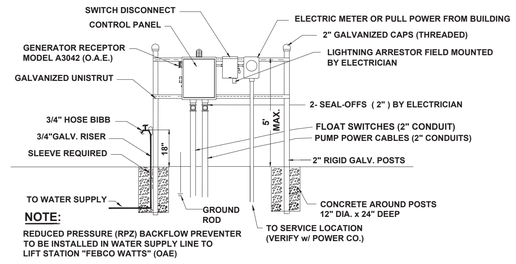


NOTE: PUMP CONTROL PANEL SHALL BE LOCATED 3 FEET FROM WETWELL PERIMETER AT POINT "A"

LIFT STATION PLAN



LIFT STATION SECTION

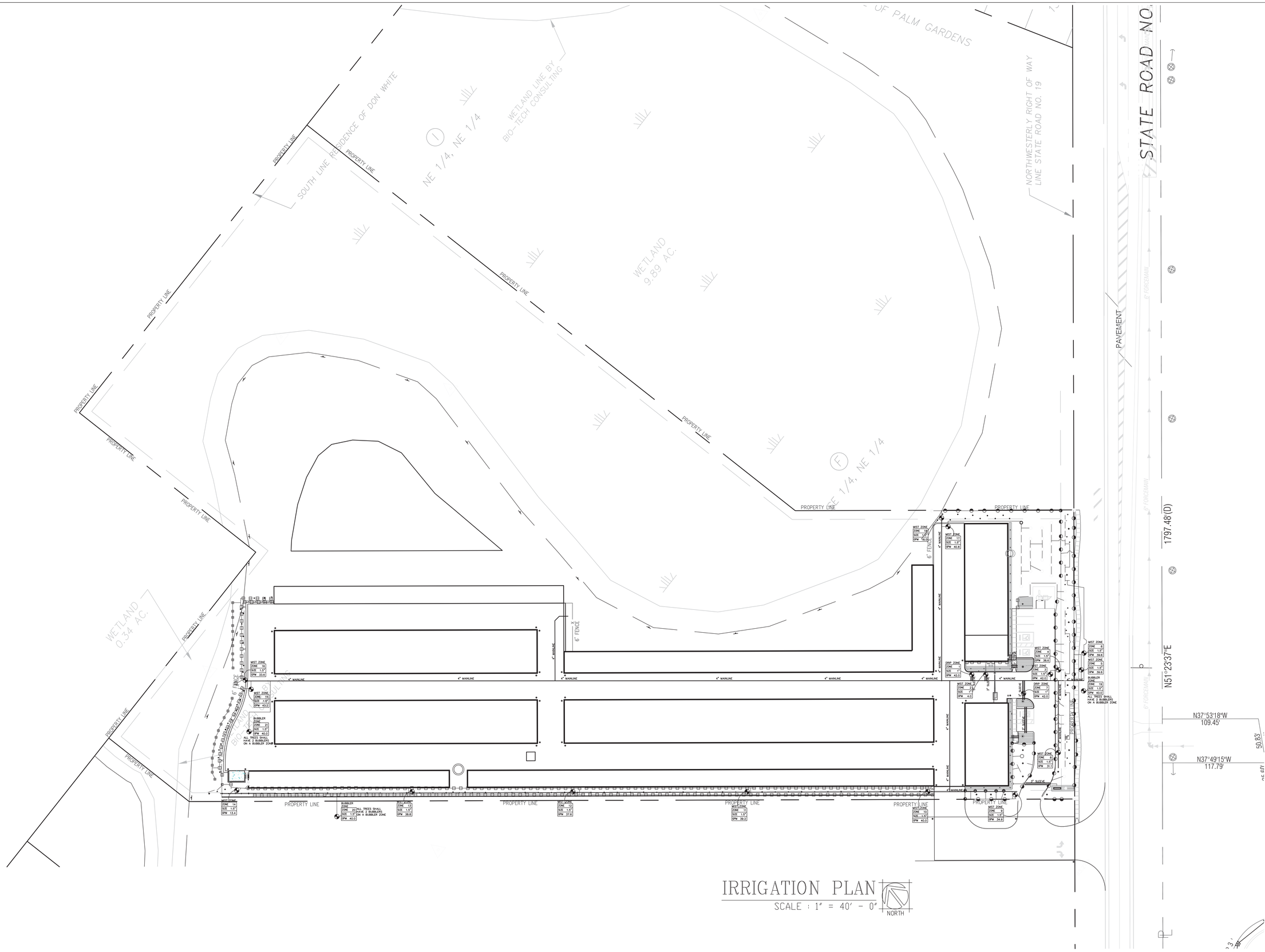


ELECTRICAL RISER

REVISIONS	BY

RILEY & Company, Inc.
5491 Benchmark Lane
Sanford, FL 32773
PH. 407-265-9963

DRAWN	
CHECKED	
DATE	
SCALE	
JOB NO.	



Project Name
HOWEY SELF STORAGE
S. PALM AVENUE, S.R. 19, HOWEY IN THE HILLS FLORIDA

Drawing Title
IRRIGATION PLAN

No.	REVISIONS	Date
2.	PER COUNTY COMMENT	05/19/21

FLORIDA IRRIGATION DESIGN.COM
FLORIDAIRRIGATIONDESIGN@GMAIL.COM
407-912-9083

754 ELLWOOD AVENUE
ORLANDO FLORIDA, 32804
407-912-9083
FLORIDAIRRIGATIONDESIGN@GMAIL.COM
WWW.FLORIDAIRRIGATIONDESIGN.COM

Digitally signed by Randall S. Baker
DN: cn=Randall S. Baker, o=Land Art Landscape Architecture, ou=Florida RLA 0001760, email=Randall@LandArtLA.com, c=US
Date: 2022.08.24 20:36:25 -04'00'
Adobe Acrobat Reader version: 2022.002.20191

PROFESSIONAL ENGINEER SEAL

RSB

22038.00

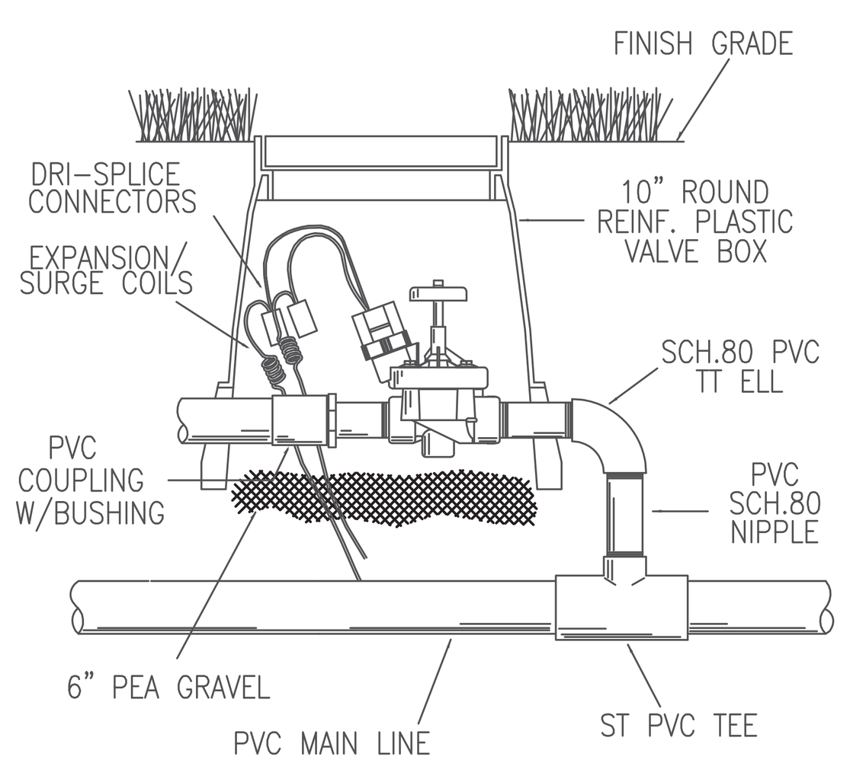
DATE: 08/23/22

Drawing No.

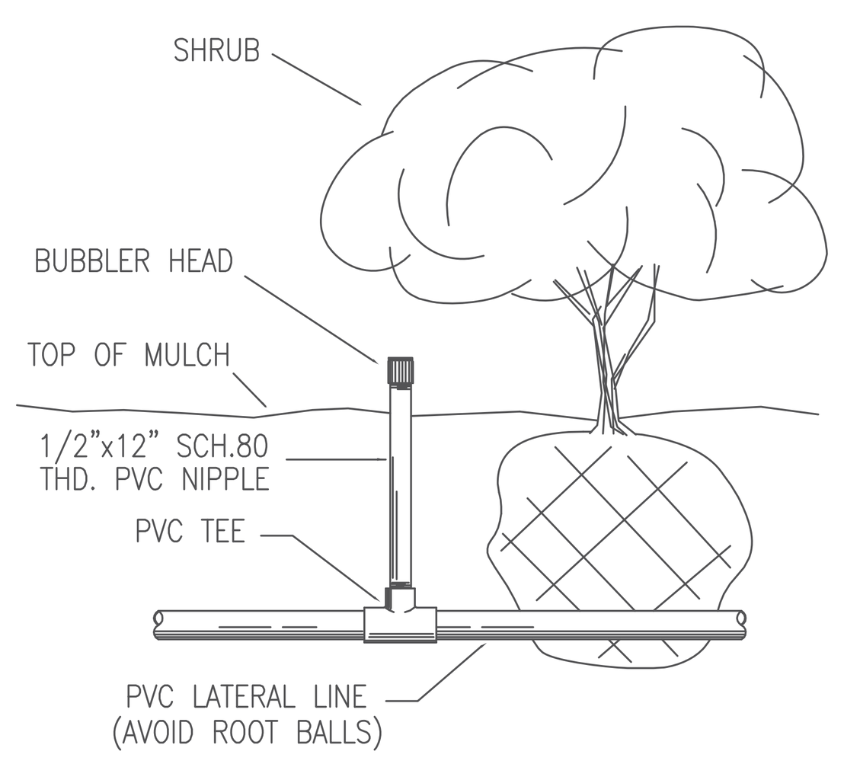
IR-1

ISSUED FOR PERMIT

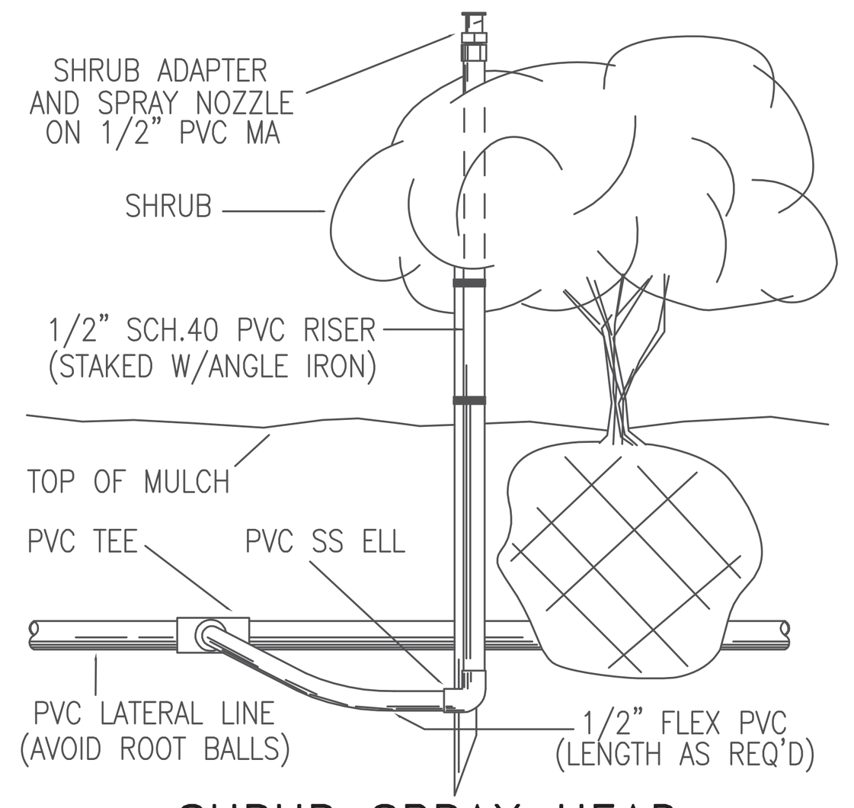
CITY / COUNTY PROJECT NUMBER



ELECTRIC CONTROL VALVE



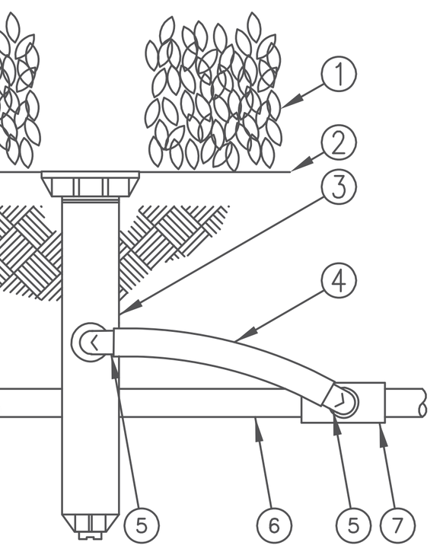
SHRUB BUBBLER HEAD



SHRUB SPRAY HEAD

INSET HEADS INTO PLANTS FROM WALLS, WALKS, CURBS, ETC.
(PAINT RISER AND STAKE APPROVED COLOR – HEIGHT PER PLANTING)

1. PLANT MATERIAL / SOD
2. FINISH GRADE/TOP OF MULCH
3. POP-UP SPRAY SPRINKLER: RAIN BIRD 1806 W/SPECIFIED NOZZLE
4. SWING PIPE, 12-INCH LENGTH: RAIN BIRD MODEL SP-100
5. 1/2-INCH MALE NPT x .490 INCH BARB ELBOW: RAIN BIRD MODEL SBE-050
6. PVC LATERAL PIPE
7. PVC SCH 40 TEE OR ELL

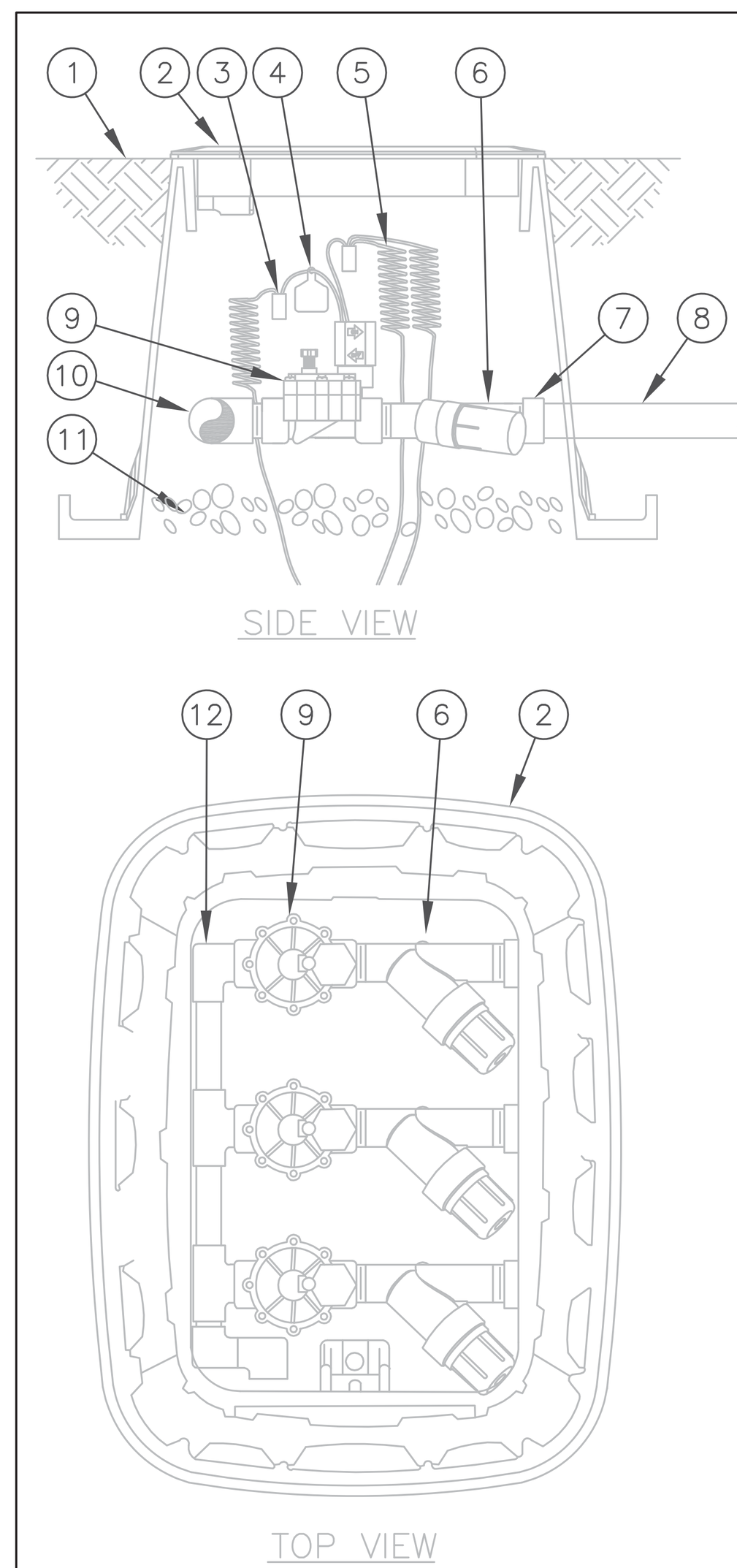


6" POP UP MIST SPRAY HEAD

USED WITH VARIOUS NOZZLES, SEE PLAN

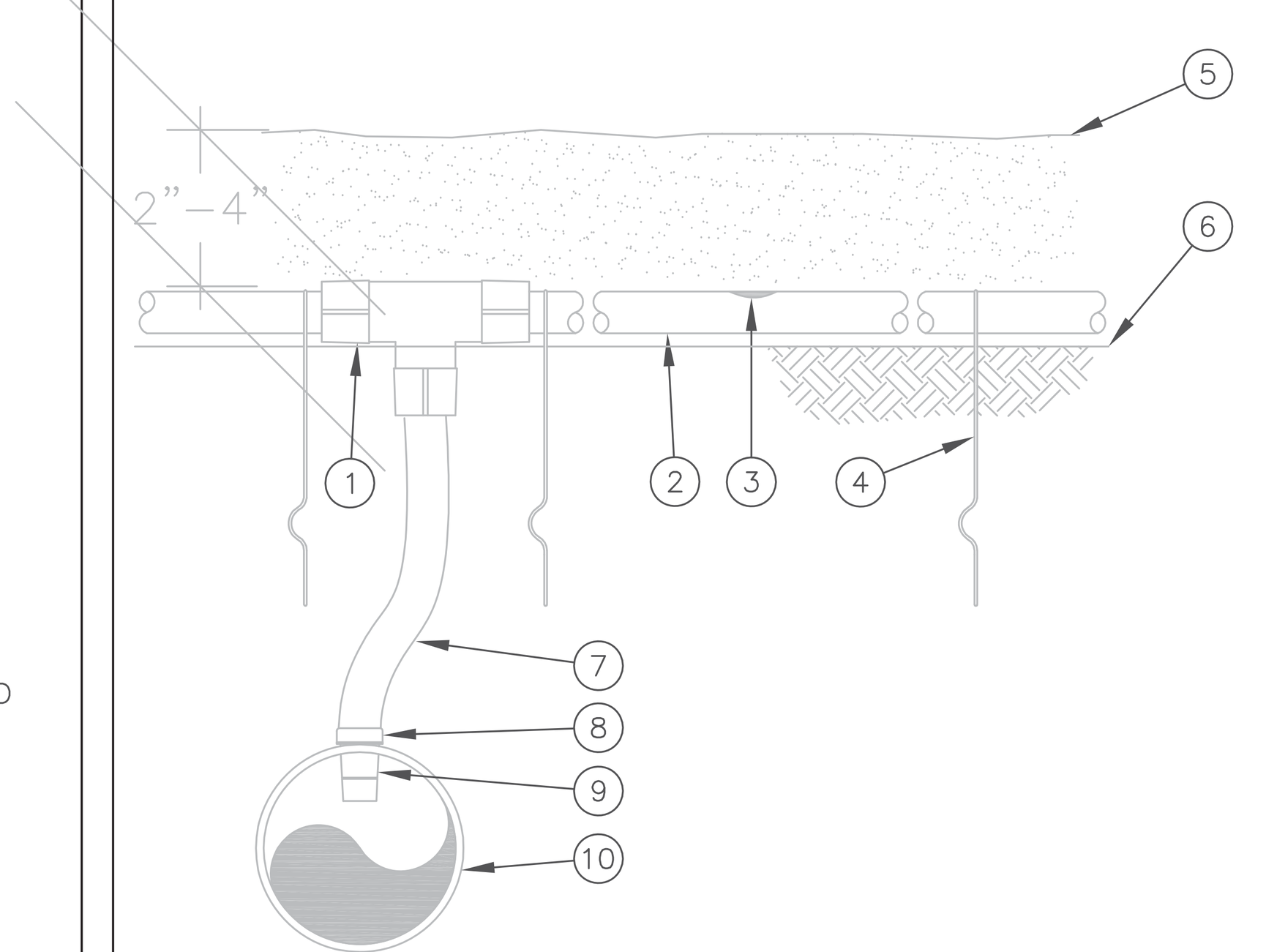
MATERIALS LIST – IRRIG. LEGEND SPEC'S

SYMBOL	QTY	SPECIFICATION
	9	6" POP UP MIST HEAD 90 DEGREE NOZZLE 8' THROW
	8	6" POP UP MIST HEAD 180 DEGREE NOZZLE 8' THROW
	1	6" POP UP MIST HEAD 360 DEGREE NOZZLE 8' THROW
	3	6" POP UP MIST HEAD 90 DEGREE NOZZLE 10' THROW
	2	6" POP UP MIST HEAD 90 DEGREE NOZZLE 15' THROW
	1	6" POP UP MIST HEAD 180 DEGREE NOZZLE 10' THROW
	3	5H-BUBBLER HEAD 25' RUBBER FLEX PIPE
	2	PEB SERIES VALVE
LFV	2	LOW FLOW VALVE
	1	RAIN SENSOR
H20 FLOW	1	1" BACKFLOW PREVENTER
	1	IRRIGATION CLOCK
	1	WIRELESS MODULE
	1	2" PVC SLEEVE
	750'	DRIPLINE 12" EMITTERS 12" SPACING
	AS NEEDED	2" MAINLINE (SEE NOTES)
	AS NEEDED	SERVICE LINES (SEE NOTES) VARYING DIAMETER
M 1"	1	1" SPECIAL IRRIG. METER O.U.C. 407-434-2535 1" = 25 G.P.M.
	1	1" BALL VALVE
VB	1	10" CIRC. VALVE BOX SEE NOTES
VB	1	20X14X12 VALVE BOX SEE NOTES
HB	1	SPEAKMAN ½" NPTF BRASS HOSE BIB VALVE, POLISHED CHROME



1. FINISH GRADE
2. STANDARD VALVE BOX WITH COVER: RAIN BIRD VB-STD
3. WATERPROOF CONNECTION: RAIN BIRD DB SERIES
4. VALVE ID TAG
5. 30-INCH LINEAR LENGTH OF WIRE, COILED
6. PRESSURE REGULATING FILTER: RAIN BIRD PRF-075-RBY (INCLUDED IN XCZ-075-PRF KIT)
7. PVC SCH 40 FEMALE ADAPTOR
8. LATERAL PIPE
9. REMOTE CONTROL VALVE: RAIN BIRD LVF-075 (INCLUDED IN XCZ-075-PRF KIT)
10. PVC SCH 40 TEE OR ELL TO MANIFOLD
11. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
12. MANIFOLD PIPE AND FITTINGS

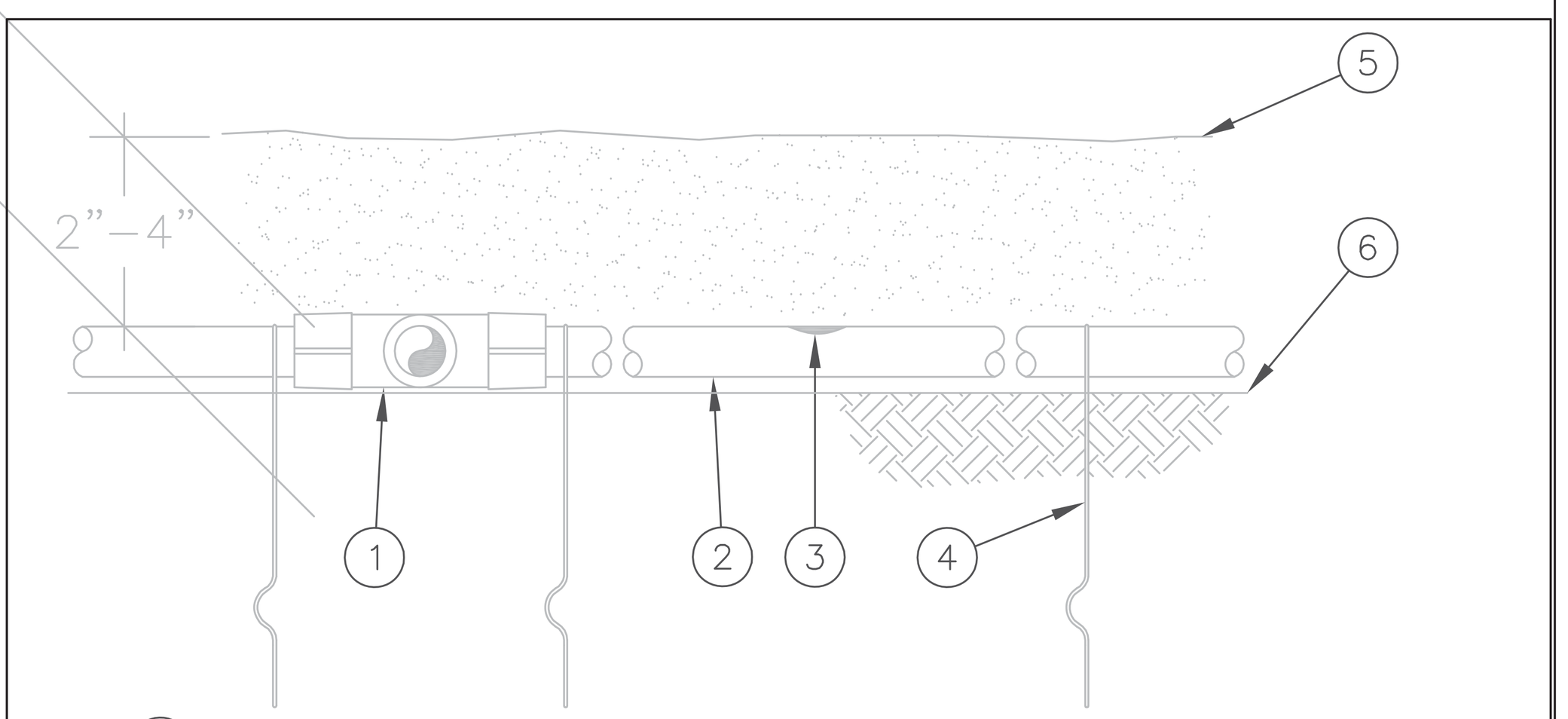
XCZ-075-PRF 3/4" CONTROL ZONE KIT IN SQUARE VALVE BOX



1. EASY FIT COMPRESSION TEE: RAIN BIRD MDDFTEE
2. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFCV DRIPLINE
3. INLINE DRIP EMITTER OUTLET
4. TIE DOWN STAKE: RAIN BIRD TDS-050 WITH BEND (TYPICAL)
5. MULCH
6. FINISH GRADE
7. ½" POLYETHYLENE TUBING: RAIN BIRD XF SERIES BLANK TUBING
8. RATCHET CLAMP (INCLUDED WITH ADAPTER)
9. INSERT ADAPTER FOR PVC PIPE: RAIN BIRD XFD-INVPC
10. PVC LATERAL PIPE MINIMUM 1" IN DIAMETER

NOTES:
1. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

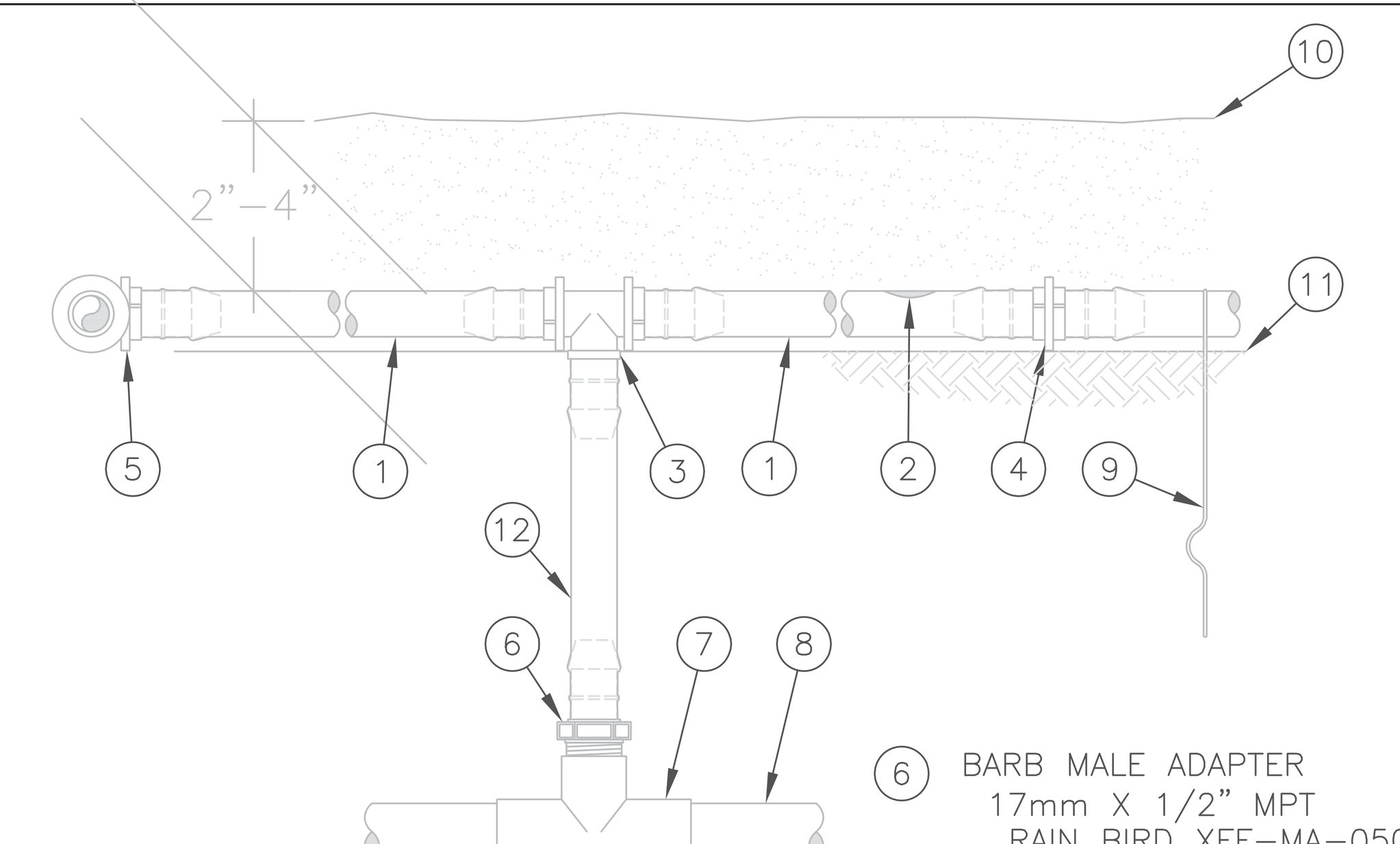
XFCV ON-SURFACE DRIPLINE INSERT ADAPTER FOR 1" OR LARGER PVC



1. EASY FIT COMPRESSION TEE: RAIN BIRD MDCFTEE
2. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFCV DRIPLINE
3. INLINE DRIP EMITTER OUTLET
4. TIE DOWN STAKE: RAIN BIRD TDS-050 WITH BEND (TYPICAL)
5. MULCH
6. FINISH GRADE

NOTES:
1. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

XFCV ON-SURFACE DRIPLINE AT GRADE



1. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFCV DRIPLINE
2. INLINE DRIP EMITTER OUTLET, SEE PLANS FOR DRIPLINE OUTLET SPACING.
3. BARB TEE 17x17x17mm RAIN BIRD XFF-TEE
4. BARB COUPLING 17x17mm RAIN BIRD XFF-COUP
5. BARB ELBOW 17x17mm RAIN BIRD XFF-ELBOW
6. BARB MALE ADAPTER 17mm X 1/2" MPT RAIN BIRD XFF-MA-050 17mm X 3/4" MPT RAIN BIRD XFF-MA-075
7. PVC TEE SxSxT
8. PVC LATERAL SUPPLY HEADER
9. TIE DOWN STAKE: RAIN BIRD TDS-050 WITH BEND (TYPICAL)
10. MULCH
11. FINISH GRADE
12. RAIN BIRD XF SERIES BLANK TUBING LENGTH AS REQUIRED

NOTES:
1. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.
3. SAVE YOUR HANDS. USE THE RAIN BIRD FITTINS-TOOL XF INSERTION TOOL FOR FITTING ASSEMBLY.

XFCV ON-SURFACE DRIPLINE RISER ASSEMBLY

IRRIGATION INSTALLATION NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL MATERIAL REQUIRED TO MAKE THE SYSTEM FUNCTION PROPERLY. ALL IRRIGATION SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND ALSO STATE AND/OR LOCAL CODES.
2. IRRIGATION PLANS ARE SCHEMATIC AND DRAWN FOR GRAPHIC CLARITY. ALL PIPING BELOW PAVEMENT SHALL BE SLEEVED. LAYOUT OF IRRIGATION SYSTEM SHALL BE COORDINATED WITH CORRESPONDING LANDSCAPE PLAN.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING LOCAL UNDERGROUND UTILITIES TO VERIFY LOCATIONS. THE CONTRACTOR SHOULD VISIT THE SITE PRIOR TO INSTALLATION AND BECOME FAMILIAR WITH EXISTING CONDITIONS.
CALL 811 FOR A UTILITY LOCATE BEFORE YOU DIG
4. VALVE LOCATIONS ARE SCHEMATIC ONLY AND WILL BE ADJUSTED FOR SITE CONDITIONS. EACH VALVE SHALL BE INSTALLED IN A AMETEK OR CARSON VALVE BOX. THE FLOW ADJUSTMENT FEATURE WILL BE USED TO BALANCE PRESSURE THROUGHOUT THE SYSTEM.
5. PIPING SHALL BE SIZED TO MINIMIZE FRICTION LOSS AND MAINTAIN FLOW VELOCITY BELOW 5 FPS.
6. THE IRRIGATION CONTROLLER SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS. PROPER GROUNDING EQUIPMENT AND SURGE PROTECTION SHALL BE PROVIDED. A RAIN SENSOR SHALL BE INSTALLED TO OVER-RIDE THE CONTROLLER.
7. ALL HEADS ON RISERS SHALL BE SET AT THE HEIGHT OF ADJACENT PLANT MATERIAL.
8. SPRINKLER LOCATIONS ADJACENT TO PAVEMENT, STRUCTURES, FENCES, ETC. SHALL BE OFFSET AS FOLLOWS: 12" MIN FOR POP-UP MIST HEADS, 18" FOR SHRUB RISERS, 18" FOR ROTOR HEADS, AND TYPICALLY 5 FEET FOR ROTORS ALONG UNCURBED ROADWAYS.
9. ALL SLEEVING SHALL BE SCH 40 PVC TO SIZE INDICATED ON PLAN, OR IF NOT INDICATED, A MIN. OF 2 PIPE SIZES LARGER THAN SUPPLY LINE CONTAINED. ALL SLEEVES SHALL BE INSTALLED A MIN. OF 12" BELOW FINISH GRADE.
10. CONTROL WIRES SHALL BE UL APPROVED PE IRRIGATION CONTROL WIRE. USE 14 GAGE CONTROL WIRE AND 12 GAGE GROUND WIRE. WIRE SHALL BE BUNDLED AND ATTACHED TO THE MAIN LINE IN TRENCH OR THROUGH WIRE SLEEVES AT PAVEMENT CROSSINGS 24" BELOW FIN. GRADE. ALL SPLICES SHALL BE MADE WITH WATERPROOF DIRECT-BURIAL SPLICE KITS AND CONTAINED IN VALVE BOXES. TWO EXTRA CONTROL WIRES SHALL BE INSTALLED TO THE FURTHEST VALVES IN EACH DIRECTION FROM THE CONTROLLER.
11. PIPING IN NARROW PLANTING AREAS, PARKING ISLANDS AND PLANTERS SHALL BE SET TO ONE SIDE TO ALLOW ROOM FOR ROOT BALLS. PIPE AS INDICATED ON PLAN IS SCHEMATIC AND SHOULD BE ADJUSTED FOR FIELD CONDITIONS.
12. ALL GLUE JOINTS SHALL BE CLEANED, SANDED, AND TREATED WITH A COLORED HIGH ETCH PRIMER AND JOINED USING A SOLVENT CONFORMING WITH ASTM D2564.
13. SYSTEM PIPE SIZE 3/4" SHALL BE CLASS 200 PVC; SYSTEM PIPE SIZE 1" OR GREATER SHALL BE CLASS 160 PVC. SYSTEM MAIN WILL BE SCH. 40 PVC TO SIZE INDICATED ON PLAN. ALL FITTINGS WILL BE SOLVENT WELD SCH 40 PVC. MAIN LINE SHALL HAVE 24" MINIMUM COVER; ALL OTHER PIPING WILL HAVE 12" MIN. COVER. ALL BACKFILL FOR PIPE TRENCHES SHALL BE CLEAN AND FREE OF FOREIGN DEBRIS AND SHARP OBJECTS; BACKFILLED TRENCHES SHALL BE PROPERLY COMPACTED. ALL MAIN LINES WILL BE INSTALLED A MIN. OF 3' FROM ANY TREE OR PALM.
14. AS-BUILT DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR AND GIVEN TO THE OWNER PRIOR TO FINAL ACCEPTANCE.
15. WATERING TIME PER STATION WILL BE DETERMINED IN THE FIELD AND PER LOCAL REQUIREMENTS. REFER TO MANUFACTURER'S INSTRUCTIONS FOR PRECIPITATION RATES OF SPRINKLERS SPECIFIED.
16. IRRIGATION SYSTEM TO PROVIDE 100% COVERAGE WITH 50% OVERLAP MINIMUM.
17. SLEEVES SHALL EXTEND 6" BEYOND PAVEMENT AND BE TEMPORARILY CAPPED TO PREVENT SOIL INTRUSION.

IRRIGATION LEGEND

FULL / THREE-QTR. / HALF / QUARTER

MIST HEADS

RAINBIRD 1812 6" or 12" POP-UP MIST HEAD WITH THE FOLLOWING NOZZLES:

- ○ ◐ ◒ ◕ 15' SERIES NOZZLE.
- ⊕ ⊕ ⊖ ⏀ 10' SERIES NOZZLE.
- ⊞ ⊞ ⊟ ⊡ 8' SERIES NOZZLE.
- 15SST
- 15EST

ROTORS

- 35' SERIES ROTOR
- 20' SERIES ROTOR
- 10' SERIES ROTOR
- 36' SERIES ROTOR

BUBBLER NOZZLES

RAINBIRD BUBBLER NOZZLE ON FIXED RISER 3" ABOVE FINISH GRADE AS FOLLOWS:
- 5H-B 1.0 GPM
- ● 1502-SBH .5 GPM

VALVES

- RAINBIRD PEB SERIES ELECTRIC GLOBE VALVE, SIZE AS NOTED ON PLAN, IN AMETEK OR CARSON 12"x18" VALVE BOX
- LFV RAINBIRD 3/4" INLINE DRIP CONTROL KIT LFV (LOW FLOW VALVE)
- AMES BRASS GATE VALVE, SAME SIZE AS MAIN LINE, IN 6" SCH 40 PVC COLLAR EXTENSION AND VALVE BOX.
- RAINBIRD ESP SERIES CONTROLLERS LOCATION (TM-2)
- RAIN BIRD LINK WIFI MODULE
- RAINBIRD RSDBDX RAIN SENSOR

SLEEVES

SLEEVES: SCH 40 PVC OR RATED EQUAL CLASS. SLEEVES TO BE MIN. 24"- MAX. 36" DEEP

DRIPLINE (ON SURFACE, BELOW MULCH):

RAIN BIRD XFD DRIP LINE, 12" EMITTERS, .9 GPH EMITTERS XFD-09-12-100, XFD-09-12-250, XFD-09-12-500

BID NOTES

1.) MIST IRRIGATION SYSTEM IS DESIGNED AS A PERMANENT UNDERGROUND SYSTEM. DRIP SYSTEM IS DESIGNED TO BE ON SURFACE.

2.) RECLAIMED WATER IS AVAILABLE, THIS IS A RECLAIMED GRAY WATER SYSTEM. ALL PIPING AND PARTS SHALL BE PURPLE COLOR FOR IDENTIFICAITON OF RECLAIMED.

3.) RECLAIMED WATER PIPE IS INSTALLED AT THE NEIGHBORING PROPERTY, THE SIZE OF THIS SERVICE LINE SHALL BE MATCHED TO THE EXISTING SOURCE WHICH IS STUBBED AND CAPPED FOR EASY CONNECTION. PROVICE A SERVICE LINE EXTENSION WITH CAP AT THE OTHER SIDE OF PROPERTY FOR EASE OF SUPPLY EXTENSION IN THE FUTURE.

4.) IRRIGATION SYSTEM IS DESIGNED IN ACCORDANCE WITH SEC. 24-6 AND SEC. 24-7 AND THE SYSTEM IS DESIGNED TO CONFORM TO CH. 37, SECTIONS 601-613 OF THE ORANGE COUNTY LAND DEVELOPMENT CODE.

5.) PROVIDE THREE BUBBLERS FOR EACH TREE, AS SHOWN ON PLAN . TREE BUBBLERS MAY BE PLACED ON A ON A SEPERATE ZONE.

6.) CONTACT FLORIDA IRRIGATION SUPPLY FOR MATERIALS PURCHASE.
FIS – ORLANDO
2400 POSEO AVENUE
ORLANDO, FLORIDA 32805
407-425-6669

7.) PROVIDE AS BUILT DRAWINGS UPON COMPLETION OF INSTALLATION.

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	WIRE	PSI	PSI @ POC	GPM	PRECIP
1	Rain Bird PEB	1-1/2"	Shrub Spray	156.4	40.04	56.27	42.89	1.73 in/h
2	Rain Bird PEB	1-1/2"	Shrub Spray	145.4	35.44	52.26	44.76	1.70 in/h
3	Rain Bird PEB	1-1/2"	Shrub Spray	130.1	35.46	50.37	31.13	1.65 in/h
4	Rain Bird PEB	1-1/2"	Shrub Spray	240.3	34.81	52.55	40.12	1.63 in/h
5	Rain Bird PEB	1-1/2"	Turf Spray	162.9	34.46	50.21	36.95	1.73 in/h
6	Rain Bird PEB	1-1/2"	Turf Spray	20.4	35.23	51.61	41.82	1.81 in/h
7	Rain Bird PEB	1-1/2"	Turf Spray	141.8	35.49	52.27	43.56	1.71 in/h
8	Rain Bird PEB	1"	Shrub Rotor	219.8	43.98	56.95	14.40	0.19 in/h
9	Rain Bird PEB	1-1/2"	Shrub Rotor	219.9	47.29	61.48	25.20	0.53 in/h
10	Rain Bird PEB	1-1/2"	Shrub Rotor	266.9	50.14	67.78	46.00	0.45 in/h
11	Rain Bird PEB	1-1/2"	Shrub Rotary	307.4	45.38	61.50	21.47	0.41 in/h
12	Rain Bird PEB	1-1/2"	Turf Rotor	245.5	57.84	77.76	55.00	0.82 in/h
13	Rain Bird PEB	1-1/2"	Turf Rotor	141.8	57.65	77.05	55.00	0.79 in/h
14	Rain Bird PEB	1-1/2"	Turf Rotor	116.2	56.76	73.33	44.00	0.37 in/h
15	Rain Bird PEB	1-1/2"	Turf Rotor	163.0	56.76	73.48	44.00	0.38 in/h
16	Rain Bird PEB	1-1/2"	Turf Rotor	210.1	56.76	73.64	44.00	0.38 in/h
17	Rain Bird PEB	1-1/2"	Turf Rotor	256.8	56.76	73.79	44.00	0.38 in/h
18	Rain Bird PEB	1-1/2"	Turf Rotor	266.6	56.05	75.84	55.00	0.81 in/h
19	Rain Bird PEB	1-1/2"	Turf Rotor	303.6	56.76	73.95	44.00	0.38 in/h
20	Rain Bird PEB	1-1/2"	Turf Rotor	350.7	56.76	74.10	44.00	0.38 in/h
21	Rain Bird PEB	1-1/2"	Turf Rotor	384.2	64.04	81.49	44.00	1.65 in/h
22	Rain Bird PEB	1-1/2"	Turf Rotor	395.5	58.77	79.21	55.00	0.81 in/h
23	Rain Bird PEB	1-1/2"	Turf Rotary	204.7	46.47	61.98	32.85	0.48 in/h
	Common Wire			1,398				

No.	REVISIONS	Date
2.	PER COUNTY COMMENT	05/19/21

Project Name
HOWEY SELF STORAGE
S. PALM AVENUE, S.R. 19, HOWEY IN THE HILLS FLORIDA

Drawing Title
Irrigation Details, Notes

FLORIDA IRRIGATION DESIGN.COM
FLORIDAIRRIGATIONDESIGN@GMAIL.COM
407-912-9083

754 ELLWOOD AVENUE
ORLANDO FLORIDA, 32804
407-912-9083
FLORIDAIRRIGATIONDESIGN@GMAIL.COM
WWW.FLORIDAIRRIGATIONDESIGN.COM

Digitally signed by Randall S. Baker
DN: cn=Randall S. Baker, o=Land Art Landscape Architecture, ou=Florida RLA 0001760, email=Randall@LandArtLA.com, c=US
Date: 2022.08.24 20:37:14 -04'00'
Adobe Acrobat Reader version: 2022.002.20191

PROFESSIONAL REGISTRATION

RSB

22038.00

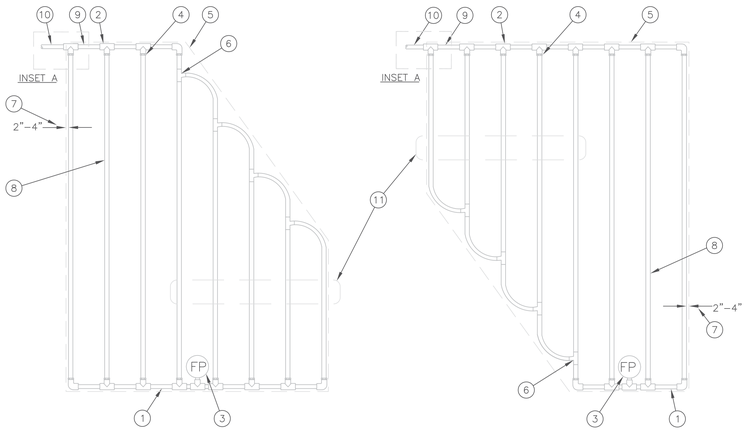
DATE: 08/23/22

Drawing No.

IR-2

ISSUED FOR PERMIT

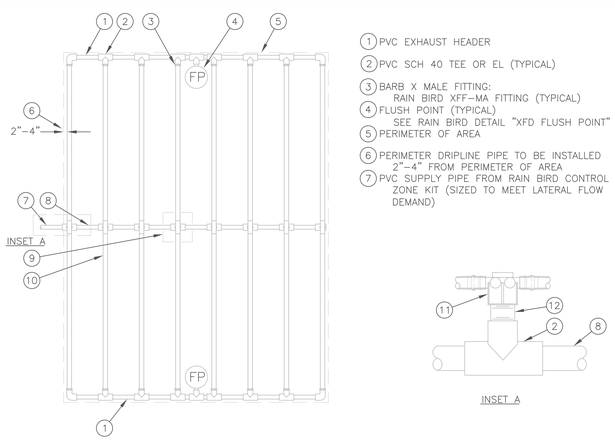
COUNTY PROJECT NUMBER



1. PVC EXHAUST HEADER
2. PVC SCH 40 TEE OR EL (TYPICAL)
3. FLUSH POINT (TYPICAL)
   SEE RAIN BIRD DETAIL "XFC FLUSH POINT
4. BARB X MALE FITTING:
   RAIN BIRD XFF–MA FITTING (TYPICAL)
5. PERIMETER OF AREA
6. BARB X BARB INSERT TEE OR CROSS:
   RAIN BIRD XFF–TEE OR
   RAIN BIRD XFD–CROSS (TYPICAL)
7. PERIMETER DRIPLINE PIPE TO BE INSTALLED
   2"–4" FROM PERIMETER OF AREA
8. ON–SURFACE DRIPLINE:
   RAIN BIRD XF SERIES DRIPLINE (TYPICAL)
   POTABLE: XFCV DRIPLINE
9. PVC SUPPLY MANIFOLD
10. PVC SUPPLY PIPE FROM RAIN BIRD CONTROL
    ZONE KIT (SIZED TO MEET LATERAL FLOW
    DEMAND)
11. TOTAL LENGTH OF SELECTED DRIPLINE SHOULD
    NOT EXCEED LENGTH SHOWN IN TABLE
12. PVC SCH 40 RISER PIPE

NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE INSTALLATION SPECIFICATIONS ON RAIN BIRD WEB SITE (WWW.RAINBIRD.COM) FOR SUGGESTED SPACING.
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING SHOWN IN THE ACCOMPANYING TABLE.
3. WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.

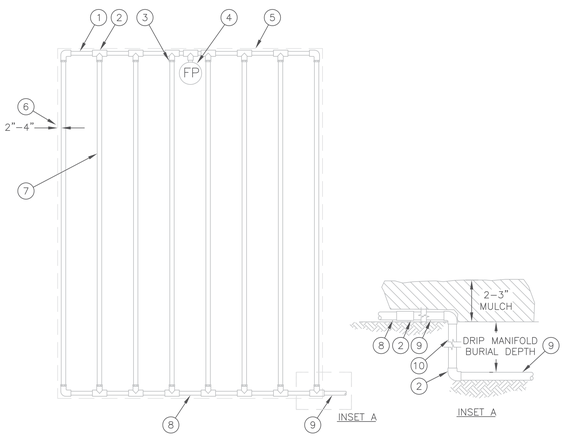
XFCV ON–SURFACE DRIPLINE IRREGULAR SHAPED LAYOUT



1. PVC EXHAUST HEADER
2. PVC SCH 40 TEE OR EL (TYPICAL)
3. BARB X MALE FITTING:
   RAIN BIRD XFF–MA FITTING (TYPICAL)
4. FLUSH POINT (TYPICAL)
   SEE RAIN BIRD DETAIL "XFD FLUSH POINT"
5. PERIMETER OF AREA
6. PERIMETER DRIPLINE PIPE TO BE INSTALLED
   2"–4" FROM PERIMETER OF AREA
7. PVC SUPPLY PIPE FROM RAIN BIRD CONTROL
   ZONE KIT (SIZED TO MEET LATERAL FLOW
   DEMAND)
8. PVC SUPPLY MANIFOLD
9. CONNECTION FROM SUPPLY MANIFOLD TO
   DRIPLINE (TYPICAL)– SEE INSET A
10. ON–SURFACE DRIPLINE:
    RAIN BIRD XF SERIES DRIPLINE (TYPICAL)
    POTABLE: XFCV DRIPLINE
11. BARB X FEMALE FITTING:
    RAIN BIRD XFD–TFA–075 FITTING
12. ¾" PVC NIPPLE, LENGTH AS NECESSARY

NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE INSTALLATION SPECIFICATIONS ON RAIN BIRD WEB SITE (WWW.RAINBIRD.COM) FOR SUGGESTED SPACING.
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING SHOWN IN THE ACCOMPANYING TABLE.
3. WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.

XFCV ON–SURFACE DRIPLINE CENTER FEED LAYOUT



1. PVC EXHAUST HEADER
2. PVC SCH 40 TEE OR EL (TYPICAL)
3. BARB X MALE FITTING:
   RAIN BIRD XFF–MA FITTING (TYPICAL)
4. FLUSH POINT (TYPICAL)
   SEE RAIN BIRD DETAIL "XFC FLUSH POINT"
5. PERIMETER OF AREA
6. PERIMETER DRIPLINE PIPE TO BE INSTALLED
   2"–4" FROM PERIMETER OF AREA
7. ON–SURFACE DRIPLINE:
   RAIN BIRD XF SERIES DRIPLINE (TYPICAL)
   POTABLE: XFCV DRIPLINE
8. PVC SUPPLY HEADER
9. PVC DRIP MANIFOLD FROM RAIN BIRD CONTROL
   ZONE VALVE KIT (SIZED TO MEET LATERAL
   FLOW DEMAND)
10. PVC SCH 40 RISER PIPE

NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE INSTALLATION SPECIFICATIONS ON RAIN BIRD WEB SITE (WWW.RAINBIRD.COM) FOR SUGGESTED SPACING.
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING SHOWN IN THE ACCOMPANYING TABLE.
3. WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.

XFCV ON–SURFACE DRIPLINE END FEED LAYOUT

No.	REVISIONS	Date
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Project Name
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S. PALM AVENUE, S.R. 19, HOWEY IN THE HILLS FLORIDA

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ORLANDO FLORIDA, 32804
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Digitally signed by Randall S. Baker
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PROFESSIONAL REGISTRATION NUMBER

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Drawing No.
IR–3

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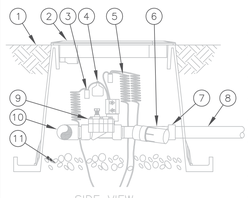
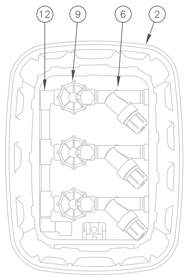


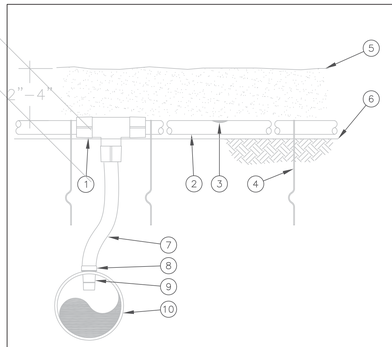
SIDE VIEW



TOP VIEW

1. FINISH GRADE
2. STANDARD VALVE BOX WITH COVER: RAIN BIRD VB–STD
3. WATERPROOF CONNECTION: RAIN BIRD DB SERIES
4. VALVE ID TAG
5. 30–INCH LINEAR LENGTH OF WIRE, COILED
6. PRESSURE REGULATING FILTER: RAIN BIRD PRF–075–RBY (INCLUDED IN XCZ–075–PRF KIT)
7. PVC SCH 40 FEMALE ADAPTOR
8. LATERAL PIPE
9. REMOTE CONTROL VALVE: RAIN BIRD LVF–075 (INCLUDED IN XCZ–075–PRF KIT)
10. PVC SCH 40 TEE OR ELL TO MANIFOLD
11. 3–INCH MINIMUM DEPTH OF 3/4–INCH WASHED GRAVEL
12. MANIFOLD PIPE AND FITTINGS

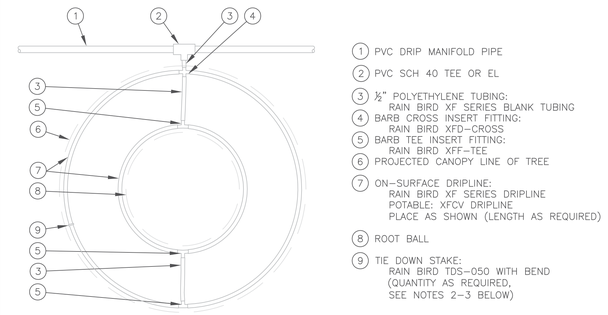
XCZ–075–PRF 3/4" CONTROL ZONE KIT IN SQUARE VALVE BOX



1. EASY FIT COMPRESSION TEE: RAIN BIRD MDDFTEE
2. ON–SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFCV DRIPLINE
3. INLINE DRIP EMITTER OUTLET
4. TIE DOWN STAKE: RAIN BIRD TDS–050 WITH BEND (TYPICAL)
5. MULCH
6. FINISH GRADE
7. ½" POLYETHYLENE TUBING: RAIN BIRD XF SERIES BLANK TUBING
8. RATCHET CLAMP (INCLUDED WITH ADAPTER)
9. INSERT ADAPTER FOR PVC PIPE: RAIN BIRD XFD–INVPC
10. PVC LATERAL PIPE MINIMUM 1" IN DIAMETER

NOTES:
1. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE–DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

XFCV ON–SURFACE DRIPLINE INSERT ADAPTER FOR 1" OR LARGER PVC



1. PVC DRIP MANIFOLD PIPE
2. PVC SCH 40 TEE OR EL
3. ½" POLYETHYLENE TUBING: RAIN BIRD XF SERIES BLANK TUBING
4. BARB CROSS INSERT FITTING: RAIN BIRD XFD–CROSS
5. BARB TEE INSERT FITTING: RAIN BIRD XFF–TEE
6. PROJECTED CANOPY LINE OF TREE
7. ON–SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFCV DRIPLINE PLACE AS SHOWN (LENGTH AS REQUIRED)
8. ROOT BALL
9. TIE DOWN STAKE: RAIN BIRD TDS–050 WITH BEND (QUANTITY AS REQUIRED, SEE NOTES 2–3 BELOW)

NOTES:
1. DISTANCE BETWEEN LATERAL RINGS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, AND TREE CANOPY. SEE INSTALLATION SPECIFICATIONS ON RAIN BIRD WEB SITE (WWW.RAINBIRD.COM) FOR SUGGESTED SPACING.
2. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
3. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE–DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

XFCV ON–SURFACE DRIPLINE AROUND TREE

1. EASY FIT COMPRESSION TEE: RAIN BIRD MDCFTEE
2. ON–SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFCV DRIPLINE
3. INLINE DRIP EMITTER OUTLET
4. TIE DOWN STAKE: RAIN BIRD TDS–050 WITH BEND (TYPICAL)
5. MULCH
6. FINISH GRADE

NOTES:
1. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE–DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

XFCV ON–SURFACE DRIPLINE AT GRADE

1. ON–SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFCV DRIPLINE
2. INLINE DRIP EMITTER OUTLET, SEE PLANS FOR DRIPLINE OUTLET SPACING.
3. BARB TEE 17x17x17mm RAIN BIRD XFF–TEE
4. BARB COUPLING 17x17mm RAIN BIRD XFF–COUP
5. BARB ELBOW 17x17mm RAIN BIRD XFF–ELBOW
6. BARB MALE ADAPTER 17mm X 1/2" MPT RAIN BIRD XFF–MA–050 17mm X 3/4" MPT RAIN BIRD XFF–MA–075
7. PVC TEE SxSxT
8. PVC LATERAL SUPPLY HEADER
9. TIE DOWN STAKE: RAIN BIRD TDS–050 WITH BEND (TYPICAL)
10. MULCH
11. FINISH GRADE
12. RAIN BIRD XF SERIES BLANK TUBING LENGTH AS REQUIRED

NOTES:
1. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE–DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.
3. SAVE YOUR HANDS. USE THE RAIN BIRD FITTINS–TOOL XF INSERTION TOOL FOR FITTING ASSEMBLY.

XFCV ON–SURFACE DRIPLINE RISER ASSEMBLY

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Project Name
HOWEY SELF STORAGE
S. PALM AVENUE, S.R. 19, HOWEY IN THE HILLS FLORIDA

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FLORIDAIRRIGATIONDESIGN@GMAIL.COM
407-912-9083

754 ELLWOOD AVENUE
ORLANDO FLORIDA, 32804
407–912–9083
FLORIDAIRRIGATIONDESIGN@GMAIL.COM
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PROFESSIONAL REGISTRATION

Digitally signed by Randall S. Baker
DN: cn=Randall S. Baker, o=Land Art Landscape Architecture, ou=Florida RLA 0001760, email=Randall@LandArtLA.com, c=US
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Adobe Acrobat Reader version: 2022.002.20191

RSB

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Drawing No.

IR–4

ISSUED FOR PERMIT

COUNTY PROJECT NUMBER

BIKE RACK
1 / L-1

PAVER
1 / L-1

ASH URN
5 / L-1

RECEPTACLE
4 / L-1

BENCH
3 / L-1

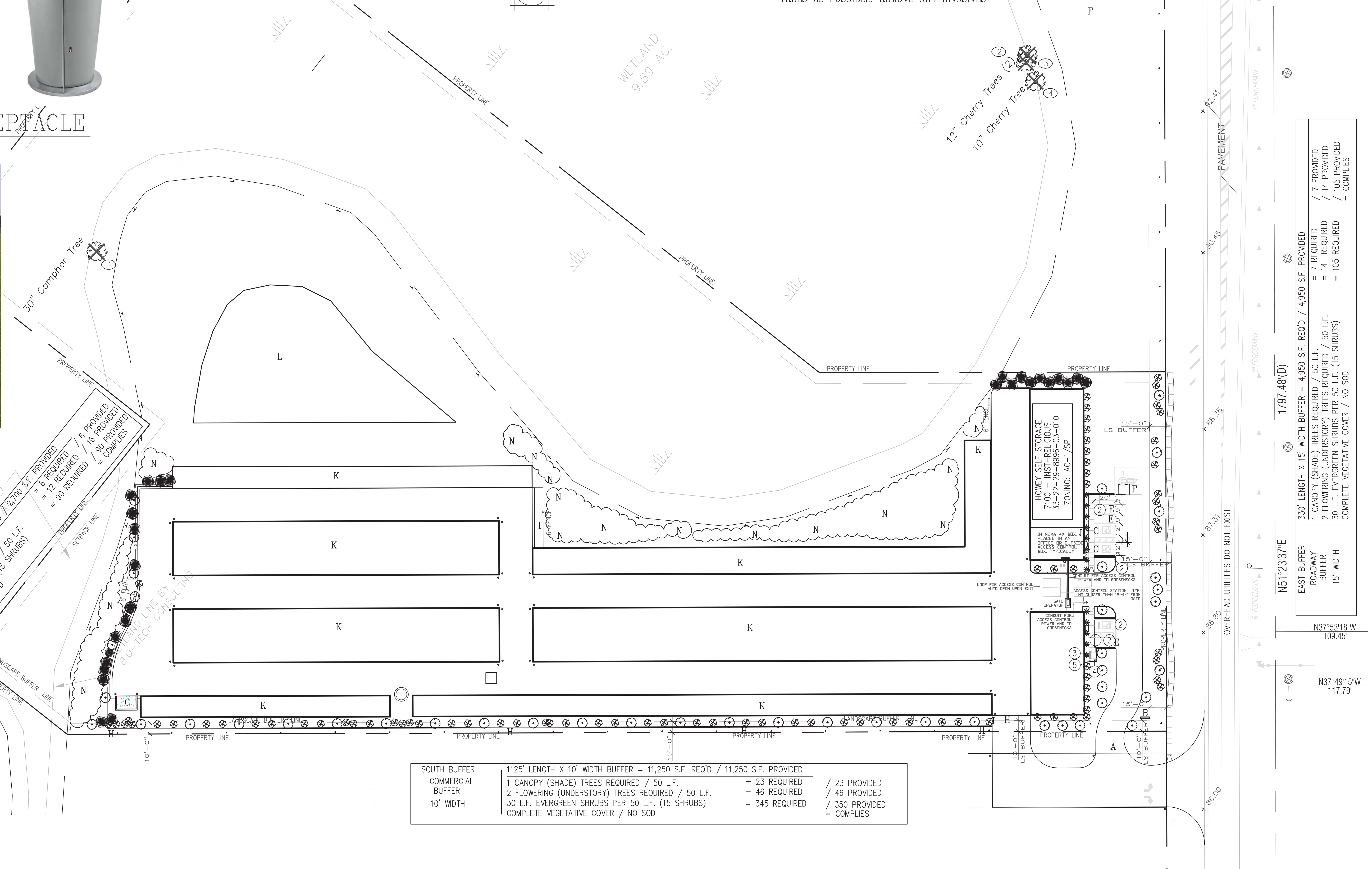
MATERIAL SCHEDULE

SYMBOL	ITEM	DESCRIPTION	QUAN
1	BIKE RACK	RING BY LANDSCAPE FORMS, SILVER, SEE DETAILS THIS SHEET, LANDSCAPEFORMS.COM, 800-430-6209	1 EACH
2	PERVIOUS PAVER	BELGARD TURFSTONE 16" X 24" GREY OLDCASTLE COASTAL ORLANDO – 800-226-9117	160 SF
3	BENCH	PEVO SPORT 7.5' COVERED BENCH, SKY BLUE, NO IMAGE, ROB@PEVOSPORTS.COM, 910-397-9388	1 EA
4	TRASH RECEPTACLE	AUSTIN SIDE OPEN TRASN BIN, SILVER, LANDSCAPEFORMS.COM, 800-430-6209	1 EA.
5	ASH URN	HUMO VERTICAL ASH URN, SILVER, DECK MOUNT, LANDSCAPEFORMS.COM, 800-430-6209	1 EA.
6	VEHICLE GATE	VERTICAL PIVOT LIFT BUCKEYE GATE AND OPERATOR BY AUTOGATE.COM 800-944-4283 CONTACT BILL RODWANCY OR BRIAN FRITZ	2 EA.
7	PEDESTRIAN GATE	BUCKEYE PEDESTRIAN GATE BY AUTOGATE.COM 800-944-4283 CONTACT BILL RODWANCY OR BRIAN FRITZ	2 EA.

MATERIALS LIST
6 / L-1

KEY:
- A PROPOSED ENTRY DRIVE
- B PROPOSED SIGN (UNDER SEPARATE PERMIT)
- C PROPOSED ACCESSIBLE PARKING
- D PROPOSED ACCESSIBLE PARKING SIGNAGE
- E PROPOSED PARKING SPACE
- F PROPOSED LIFT STATION
- G PROPOSED DUMPSTER
- H PROPOSED 6' MASONRY WALL
- I PROPOSED 6' FENCE
- J PROPOSED STORAGE OFFICE
- K PROPOSED STORAGE BUILDING
- L PROPOSED RETENTION
- J PROPOSED CANOPY TREE
- K PROPOSED PALM TREE
- L PROPOSED FLOWERING / UNDERSTORY TREE
- M PROPOSED CONIFER TREE
- N SAVE AS MUCH NATIVE VEGETATION AND TREES AS POSSIBLE. REMOVE ANY INVASIVES

LEGEND
- APPROX. LINE OF TREE CANOPY / LOCATION OF EXISTING TREE / TREE NUMBER
- NEW LOCATION OF MOVED TREES SEE SHEET L12 FOR LOCATIONS
- TREE TO RELOCATE
- TREE TO REMOVE
- TREE TO REMAIN AND PROTECT



EAST BUFFER ROADWAY BUFFER 15' WIDTH	330' LENGTH X 15' WIDTH BUFFER = 4,950 S.F. REQ'D / 4,950 S.F. PROVIDED		
	1 CANOPY (SHADE) TREES REQUIRED / 50 L.F.	= 7 REQUIRED	/ 7 PROVIDED
	2 FLOWERING (UNDERSTORY) TREES REQUIRED / 50 L.F.	= 14 REQUIRED	/ 14 PROVIDED
	30 L.F. EVERGREEN SHRUBS PER 50 L.F. (15 SHRUBS)	= 105 REQUIRED	/ 105 PROVIDED
	COMPLETE VEGETATIVE COVER / NO SOD		= COMPLIES

SOUTH BUFFER COMMERCIAL BUFFER 10' WIDTH	270' LENGTH X 10' WIDTH BUFFER = 2,700 S.F. REQ'D / 2,700 S.F. PROVIDED		
	1 CANOPY (SHADE) TREES REQUIRED / 50 L.F.	= 6 REQUIRED	/ 6 PROVIDED
	2 FLOWERING (UNDERSTORY) TREES REQUIRED / 50 L.F.	= 12 REQUIRED	/ 16 PROVIDED
	30 L.F. EVERGREEN SHRUBS PER 50 L.F. (15 SHRUBS)	= 90 REQUIRED	/ 90 PROVIDED
	COMPLETE VEGETATIVE COVER / NO SOD		= COMPLIES

SOUTH BUFFER COMMERCIAL BUFFER 10' WIDTH	1125' LENGTH X 10' WIDTH BUFFER = 11,250 S.F. REQ'D / 11,250 S.F. PROVIDED		
	1 CANOPY (SHADE) TREES REQUIRED / 50 L.F.	= 23 REQUIRED	/ 23 PROVIDED
	2 FLOWERING (UNDERSTORY) TREES REQUIRED / 50 L.F.	= 46 REQUIRED	/ 46 PROVIDED
	30 L.F. EVERGREEN SHRUBS PER 50 L.F. (15 SHRUBS)	= 345 REQUIRED	/ 350 PROVIDED
	COMPLETE VEGETATIVE COVER / NO SOD		= COMPLIES

LANDSCAPE SITE PLAN
1 / L-1

SCALE : 1" = 40' - 0"

NORTH

PERMIT NUMBER

No.	REVISIONS	Date
2.	PER COUNTY COMMENT	05/19/21

Project Name
HOWEY SELF STORAGE
S. PALM AVENUE, S.R. 19, HOWEY IN THE HILLS FLORIDA

Drawing Title
LANDSCAPE SITE PLAN

L.a.L.a. LANDART LANDSCAPE ARCHITECTURE
754 ELLWOOD AVENUE
ORLANDO FLORIDA, 32804
407-484-6099
PROJECTS@LANDARTLA.COM
WWW.LANDARTLA.COM

RSB

22038.00

DATE: 08/23/22

Drawing No.

L-1

ISSUED FOR PERMIT

TREE #	COMMON NAME	SCIENTIFIC NAME	CAL.	HT.	SPR.	NOTE	ACTION	
1	CAMPHOR	CINNANOMUM CAMPHORA	30"			INVASIVE	REMOVE	
2	CHERRY LAUREL	PRUNUS LAUROCERASUS	12"			INVASIVE	REMOVE	
3	CHERRY LAUREL	PRUNUS LAUROCERASUS	12"			INVASIVE	REMOVE	
4	CHERRY LAUREL	PRUNUS LAUROCERASUS	10"			INVASIVE	REMOVE	
5								
6								
7								
8								
9								
10								

LEGEND

APPROX. LINE OF TREE CANOPY
LOCATION OF EXISTING TREE
TREE NUMBER

NEW LOCATION OF MOVED TREES
SEE SHEET L12 FOR LOCATIONS

TREE TO RELOCATE

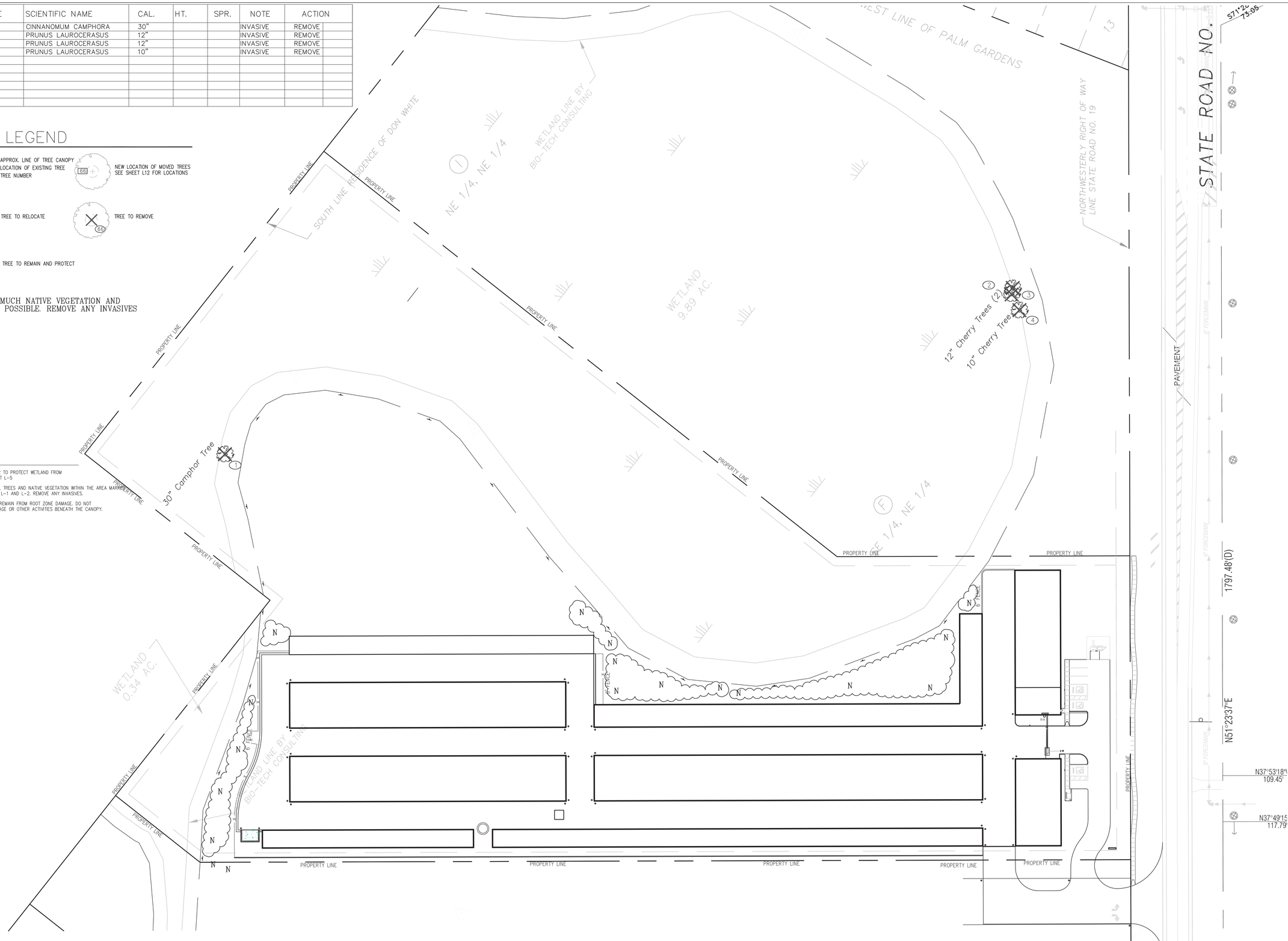
TREE TO REMOVE

TREE TO REMAIN AND PROTECT

N SAVE AS MUCH NATIVE VEGETATION AND TREES AS POSSIBLE. REMOVE ANY INVASIVES

TREE REMOVAL NOTES

1. INSTALL SILT FENCE AT PERIMETER TO PROTECT WETLAND FROM CONSTRUCTION RUNOFF, SEE SHEET L-5
2. MAKE ALL ATTEMPTS TO SAVE ALL TREES AND NATIVE VEGETATION WITHIN THE AREA MARKED AS "N" ON SHEETS L-1 AND L-2. REMOVE ANY INVASIVES.
3. PROTECT ALL EXISTING TREES TO REMAIN FROM ROOT ZONE DAMAGE. DO NOT ALLOW PARKING, MATERIALS STORAGE OR OTHER ACTIVITIES BENEATH THE CANOPY.



TREE REMOVAL PLAN

SCALE : 1" = 40' - 0"

NORTH

CITY / COUNTY PROJECT NUMBER

No.	REVISIONS	DATE
2.	PER COUNTY COMMENT	05/19/21

Project Name
HOWEY SELF STORAGE
S. PALM AVENUE, S.R. 19, HOWEY IN THE HILLS FLORIDA

Drawing Title
TREE REMOVAL PLAN

L.a.L.a. LAND ART LANDSCAPE ARCHITECTURE
754 ELLWOOD AVENUE
ORLANDO, FLORIDA, 32804
407-484-6099
PROJECTS@LANDARTLA.COM
WWW.LANDARTLA.COM

RANDALL S. BAKER LA 0001760 STATE OF FLORIDA

Digitally signed by Randall S. Baker
DN: cn=Randall S. Baker, o=Land Art Landscape Architecture, ou=Florida RLA 0001760, email=Randall@LandArtLA.com, c=US
Date: 2022.08.24 20:33:16 -04'00'
Adobe Acrobat Reader version: 2022.002.20191

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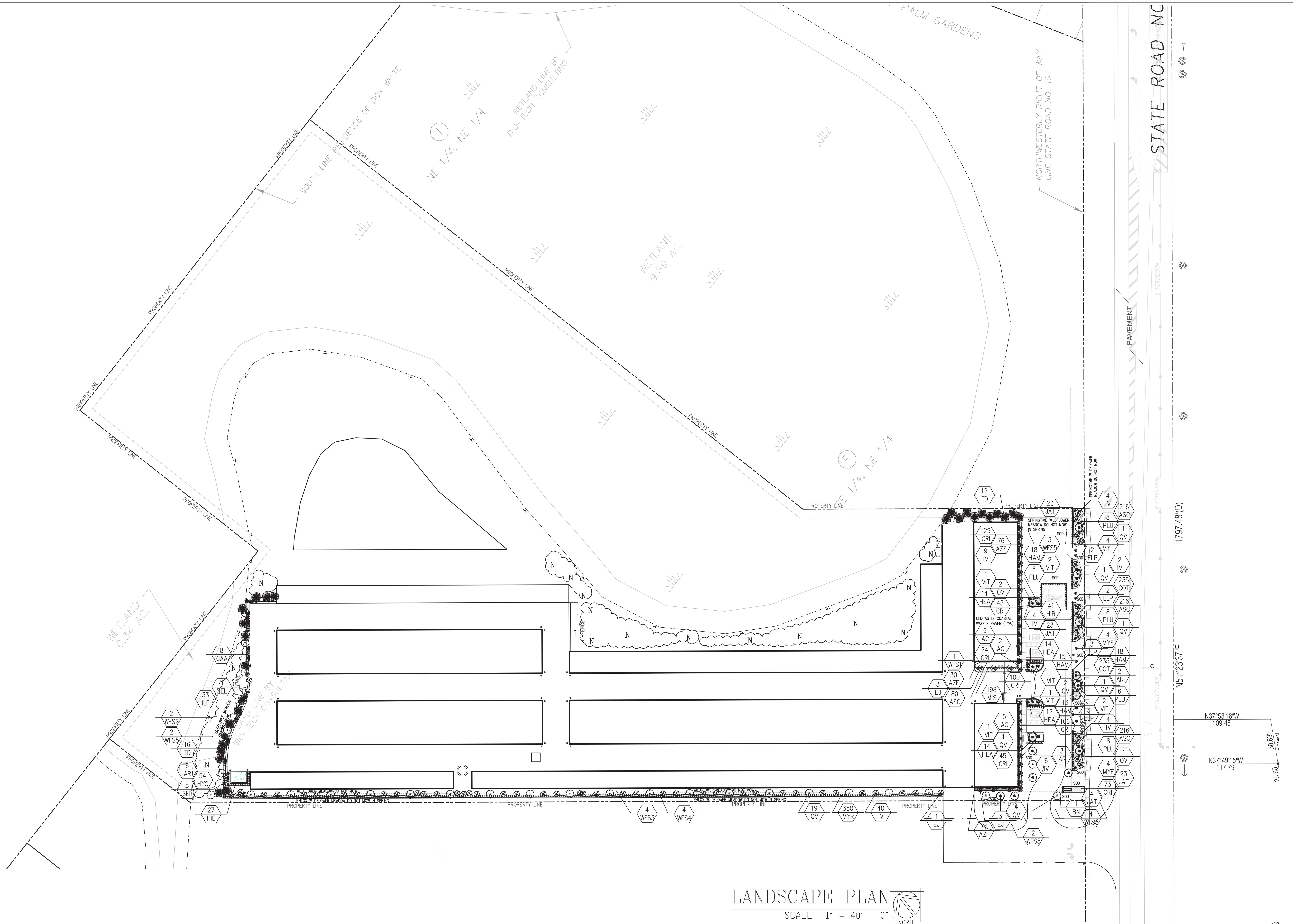
DATE: 08/23/22

Drawing No.
L-2

ISSUED FOR PERMIT



LANDSCAPE PLAN

SCALE : 1" = 40' - 0"

No.	REVISIONS	Date
2.	PER COUNTY COMMENT	05/19/21

Project Name

HOWEY SELF STORAGE

S. PALM AVENUE, S.R. 19, HOWEY IN THE HILLS FLORIDA

Drawing Title

LANDSCAPE PLAN

L.a.L.a. LANDART LANDSCAPE ARCHITECTURE

754 ELLWOOD AVENUE
ORLANDO FLORIDA, 32804
407-484-6099
PROJECTS@LANDARTLA.COM
WWW.LANDARTLA.COM

REGISTERED LANDSCAPE ARCHITECT RANDALL S. BAKER LA 0001760 STATE OF FLORIDA

Randall S. Baker

Digitally signed by Randall S. Baker
DN: cn=Randall S. Baker, o=Land Art Landscape Architecture, ou=Florida RLA 0001760, email=Randall@LandArtLA.com, c=US
Date: 2022.08.24 20:33:55 -04'00'
Adobe Acrobat Reader version: 2022.002.20191

PROFESSIONAL REGISTRATION

RSB

22038.00

DATE: 08/23/22

Drawing No.

L-3

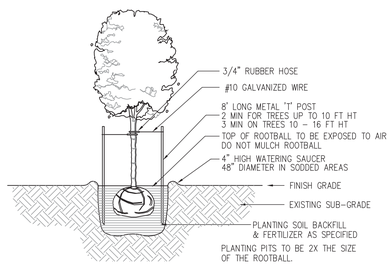
ISSUED FOR PERMIT

CITY / COUNTY PROJECT NUMBER

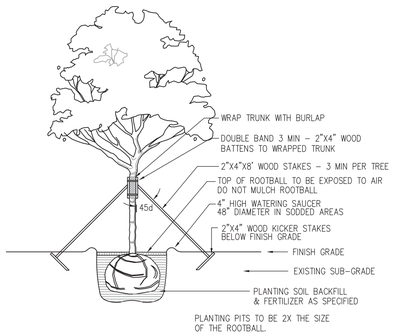
PLANT NOTES

1. ALL PLANTS ARE TO BE FLORIDA NO 1. GRADE OR BETTER.
2. NO SUBSTITUTIONS WILL BE ACCEPTED WITHOUT PRIOR WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT.
3. ALL LANDSCAPE AREAS TO RECEIVE 100% IRRIGATION COVERAGE WITH A MINIMUM 50% OVERLAP BY AN AUTOMATIC IRRIGATION SYSTEM. SYSTEM SHALL INCLUDE A RAIN SENSOR DEVICE. USE OF NONPOTABLE WATER SHALL BE USED FROM A RUST FREE SOURCE WHEN AVAILABLE..
4. QUANTITIES ON PLANT LIST ARE FOR CONVENIENCE ONLY. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL PLANTS SHOWN ON PLANTING PLAN(S). WHEN DISCREPENCIES OCCUR BETWEEN THE PLANT LIST AND PLANTING PLANS, THE PLANS ARE TO OVERIDE THE PLANT LIST IN ALL CASES.
5. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK. DIAL 811 FOR SUNSHINE ONE CALL. ALTERNATE 800-432-4770
6. ALL SHRUB AND GROUNDCOVER BEDS SHALL BE LAID OUT IN A UNIFORM AND CONSISTENT PATTERN; SET IN A PERPENDICULAR LINE WHEN ABUTTING PAVEMENT OR BUILDINGS.
7. ALL TREES AND PALMS TO BE STAKED AND GUYED AS INDICATED ON DETAILS.
8. ALL PLANTING AREAS TO RECIEVE 3" LAYER OF GRADE B SHREDDED EUCALYPTUS MULCH. TOP OF MULCH SHALL BE 2" BELOW ANY ADJACENT PAVEMENT.
9. ALL PLANT MATERIAL TO BE BACKFILLED WITH A LANDSCAPE MIX,, SUBMIT SAMPLE TO LANDSCAPE ARCHITECT FOR APPROVAL.
10. RELOCATE TREES PER TREE RELOCATON PLAN, STAKE AND SECURE PER INDUSTRY STANDARDS.
11. ALL SOD SHALL BE LAID ON 1" DEPTH OF TOPSOIL.
12. ALL EXISTING TREES TO REMAIN SHALL RECEIVE A MIN. 32" MULCH RING. DO NOT DISTURB ROOT STRUCTURE.
13. ALL MECHANICAL EQUIPMENT SHALL BE SCREENED ON THREE SIDES WITH APPROVED HEDGE.
14. ALL TREES SHALL BE PLANTED AT LEAST 10' FROM OVERHEAD POWER LINES.
15. LANDSCAPE SHALL NOT OBSCURE FIRE HYDRANT NOR SPRINKLER/STANDPIPE WYES.
16. ALL EXISTING TREES ON SITE IN THE VICINITY OF NEW CONSTRUCTION SHALL BE PROTECTED AS PER COUNTY / CITY CODE.
17. ALL EXISTING TREES ON SITE TO RECEIVE 3' MULCH RING AND CLEAN CUT BEDLINES.
18. CONTRACTOR TO CONTACT SPECIFIED GROWERS TO OBTAIN SHIPPING INFORMATION PRIOR TO BID.
19. CONTRACTOR TO SUPPLY PHOTOGRAPHS OF ANY SPECIMENS FOR APPROVAL PRIOR TO SECURING THEIR PURCHASE.
20. ALL TREES SHALL BE IRRIGATED BY A DRIP OR BUBBLER ZONE THAT SERVICES TREES ONLY, THIS IS IN ADDITION TO THE SPRAY AND MIST SYSTEM.

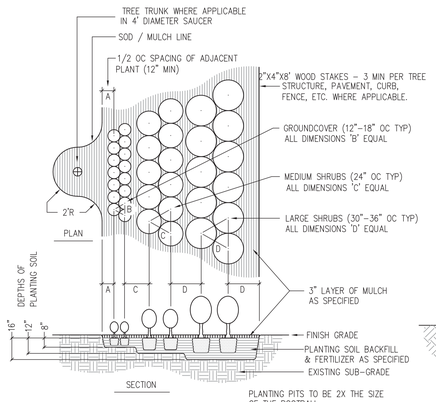
1 / L-4 PLANTING NOTES



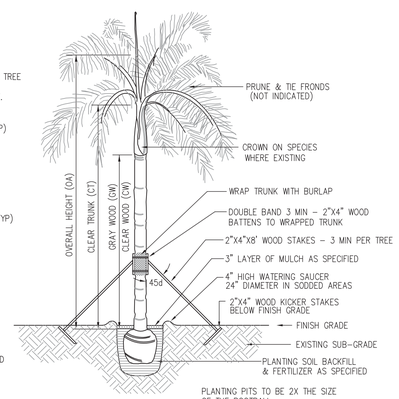
SMALL TREE PLANTING DETAIL



LARGE TREE PLANTING DETAIL



SHRUB PLANTING DETAIL



PALM PLANTING DETAIL

2 / L-4 PLANTING DETAILS

RE-SEEDS	Wet/Dry	Sun/Shd	Native	Quan.	Tag	Plant	Specification
Y	W	SUN/SHD	N	13	AC	Archontophoenix cunninghamiana 'Illawarra'	25 Gal., Singles - Matched
						Illawarra King Palm, Cold Hardy King Palm	Sunscapes East 321-733-4812
Y	W	SUN/SHD	Y	11	AR	Acer rubrum	45 Gal., 3" Cal, 12' o.a. ht. x 5' spr.
						Red Maple	Marion Gardens, 352-429-4151
Y	MOIST/DRY	Sun	N	1	BN	Bismarkia nobilis 'Silver Select'	25 Gal., 9' ht. min, container grown only.
						Silver Bismark palm	Field Grown will be rejected
Y	D	Sun	N	7	EJ	Eriobotrya japonica	15 Gal., 9' ht. x 5' spr.
						Loquat Tree	A Natural Farm 352-536-3112
Y	D	SUN/SHD	Y	69	IV	Ilex vomitoria 'Pendula'	25 Gal., 9' ht. x 2.5' spr.
						Weeping Yaupon Holly	Tropic Traditions 352-472-6084
Y	MOIST/DRY	Sun	Y	33	QV	Quercus virginiana	45 Gal., 12' to 14' ht., 3.0 top 3.25" Cal.
						Live Oak	Natural Habit, Min. prune
							Marion Gardens, 352-429-4151
Y	MOIST/DRY	SUN/SHD	Y	28	TD	Taxodium distichum	30 Gal.,10' ht. x 3' spr. 2" cal.
						Bald Cypress	Tropic Traditions 352-472-6084
Y	MOIST/DRY	Sun	Y	728	ASC	Asclepias spp.	1 gal., 12" ht. x 12" spr., 18" o.c.
						Butterfly Milkweed	Green Dynamix 386-754-0161
Y	W	SUN/SHD	N	182	AZF	Azalea indica `Formosa'	3 gal., 20" ht. x 15" spr., 24" o.c.
						Purple Formosa Azalea	Brantley Nursery, 407-869-6545
Y	MOIST/DRY	PT SHD	Y	8	CAA	Callicarpa americana	7 Gal., 36"ht. x 36" spr.
						American Beautyberry	Tropic Traditions 352-472-6084
Y	MOIST/DRY	SUN	Y	468	COT	Coreopsis tinctoria	1 Gal., 16" ht. x 8" spr. 24" o.c.
						Coreopsis Tickseed	Green Dynamix 386-754-0161
Y	MOIST/DRY	SUN/SHD	N	522	CRI	Crossandra infundibuiformis	3 gal., 18" x 18", 24" o.c.
						Crossandra	Excelsa Gardens 561-790-3789
							Excelsa broker from MSA Nursery
Y	Dry	Sun	N	10	ELP	Eleagnus pungens	3 Gal., 36" x 30"
						Silverthorn	Quality Trees and Shrubs 352-257-2080
Y	W/D	SUN/SHD	Y	64	HAM	Hamelia patens	3 Gal., 24" ht. x 24" spr., 30" o.c.
						Firebush	Brantley Nursery, 407-869-6545
Y	D	Sun/Pt	Y	54	HEA	Heliotropium angiospermum	1 gal., 18" ht. x 18" spr., 24" o.c.
						Scorpion Tail	Green Dynamix 386-754-0161
N	MOIST/DRY	SUN	N	68	HIB	Hibiscus rosa-sinensis 'Snow Queen	3 Gal., 30" ht. x 24" spr. 30" o.c.
						Snow Queen Tropical Hibiscus	Brantley Nursery, 407-869-6545
Y	W	Y	Y	54	HYQ	Hydrangea quercifolia	3 Gal., 16" x 12"
						Oakleaf Hydrangea	Green Dynamix 386-754-0161
Y	W	SUN/SHD	Y	33	ILF	Illicium floridanum	3 Gal.,18" x 18", 24" o.c.
						Florida anise	Green Dynamix 386-754-0161
Y	MOIST/DRY	SUN/SHD	N	73	JAT	Jatropha integerrima	3 Gal., 36' ht. x 24' spr.
						Spicy Jatropha	Excelsa Gardens 561-790-3789
RHI	Dry	Full	Y	198	MIS	Mimosa strigillosa	1 Gal., 6" ht. x 8" spr., 36" o.c.
						Sensitive Plant	All Native LLC, 800-449-2363
							Green Dynamix 386-754-0161
Y	MOIST/DRY	SUN	Y	12	MYF	Myrcianthes fragrans	3 Gal., 24" ht. x 18" spr.
						Simpsons Stopper	Green Dynamix 386-754-0161
N	W/D	FULL SUN/PS	Y	350	MYR	Myrica cerifera	3 gal., 24" ht x 18" spr. , 30" o.c.
						Wax Myrtle	Tropic Traditions 352-472-6084
Y	MOIST/DRY	SUN/SHD	N	0	PET	Petrea volubilis	3 Gal., 36" ht. x 18" spr.
						Queens wreath vine	Green Dynamix 386-754-0161
N	Dry	SUN	N	36	PLU	Plumbago capensis (auriculata)	3 Gal., 24" x 24", 48 o.c.
						Leadwort	Brantley Nursery, 407-869-6545
Y	MOIST/DRY	SUN/SHD	Y	6	SEL	Senna Ligustrina	7 Gal., 5' ht. x 2' spr. 1.5" cal.
						Privet Senna	Green Dynamix 386-754-0161
Y	MOIST/DRY	SUN	N	8	VIT	Vitex agnus-castus	7 Gal., 5' ht. x 2' spr. 1.5" cal.
						Chaste Tree	Green Dynamix 386-754-0161
Y	Y	HIGH	Y	1 LB	WFS1	Wildflower seed Mix 1 (410 s.f.)	WildSeedFarms.com
						Asclepias tuberosa	seed mix (Broadcast Rate: 272 sf. Per ounce)
						Butterfly Milkweed	800-848-0078
Y	Y	HIGH	Y	2 LB	WFS2	Wildflower seed Mix 2 (3203 s.f.)	WildSeedFarms.com
						Southeastern Wildflower Mix	seed mix (Broadcast Rate: 2000 sf. Per pound)
							800-848-0078
Y	Y	HIGH	Y	4 LB	WFS3	Wildflower seed Mix 3 (340 s.f.)	WildSeedFarms.com
						Salvia farinacea	seed mix (Broadcast Rate: 340 sf. Per ounce)
						Texas Sage, Mealy Blue Sage	800-848-0078
Y	Y	HIGH	Y	4 LB	WFS4	Wildflower seed Mix 4 (123 s.f.)	WildSeedFarms.com
						Salvia coccinea	seed mix (Broadcast Rate: 340 sf. Per ounce)
						Scarlet Sage	800-848-0078
Y	Y	HIGH	Y	11 LB	WFS5	Wildflower seed Mix 4 (410 s.f.)	WildSeedFarms.com
						Phlox drummondii	seed mix (Broadcast Rate: 340 sf. Per ounce)
						Purple Phlox	800-848-0078

3 / L-4 PLANT LIST

No.	REVISIONS	Date
2.	PER COUNTY COMMENT	05/19/21

Project Name
HOWEY SELF STORAGE
S. PALM AVENUE, S.R. 19, HOWEY IN THE HILLS FLORIDA
Drawing Title
Plant List, Details, Notes

L.a.L.a. LANDART LANDSCAPE ARCHITECTURE
754 ELLWOOD AVENUE
ORLANDO FLORIDA, 32804
407-484-8099
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PROFESSIONAL REGISTRATION
STATE OF FLORIDA
LA 0001760
Randall S. Baker

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DN: cn=Randall S. Baker, o=Land Art Landscape Architecture, ou=Florida RLA 0001760, email=Randall@LandArtLA.com, c=US
Date: 2022.08.24 20:34:43 -04'00'
Adobe Acrobat Reader version: 2022.002.20191

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22038.00

DATE: 08/23/22

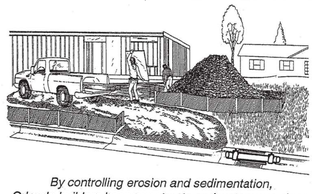
Drawing No.
L-4

ISSUED FOR PERMIT

COUNTY PROJECT NUMBER

CITY OF ORLANDO

EROSION & SEDIMENTATION CONTROL FOR CONSTRUCTION SITES



By controlling erosion and sedimentation, Orlando builders keep our streets and waterways clean.

Erosion Is a Costly Problem

Eroding construction sites are a leading cause of water quality problems in Florida. For every acre under construction, about 1 ½ dump truck loads of soil wash into the stormwater system and into a nearby lake unless builders use proper erosion control measures.

Controlling Erosion Can Be Easy

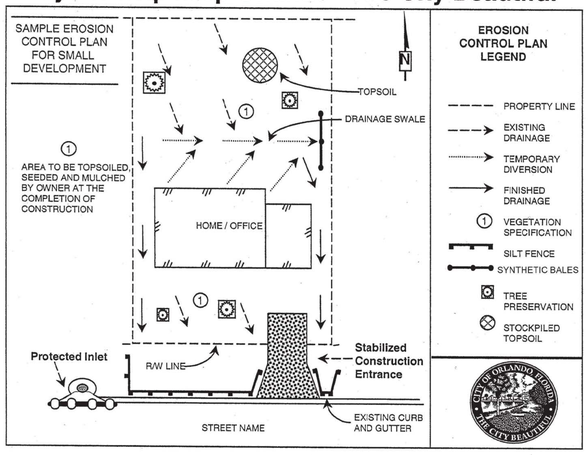
Erosion control is important and necessary for all development sites. The materials needed are easy to find and relatively inexpensive - silt fencing, synthetic bales, stakes, inlet protection, and grass seed. Putting these materials to use is a straightforward process. Maintenance to those Best Management Practices (BMP's) is key to staying in compliance.

This fact sheet includes shows step-by-step instructions that can be used by builders. Additional controls will be needed for sites that are adjacent to lakes, wetlands, and streams, have steep slopes, receive runoff from adjacent land, or are larger than one acre.

When areas are stabilized and not endanger of eroding, the temporary erosion control measures can be removed. BMP's should not be left on finished sites.

For more information on erosion and sediment control issues and how you can help save our lakes, please contact the City of Orlando Streets and Stormwater Hotline at 407-246-2370.

Ways to help keep Orlando "The City Beautiful"



Under the Stormwater Utility Code, Section 31.19, the City prohibits the discharge of pollutants (including sediment and construction debris) into lakes, stormwater drains, or any part of the stormwater conveyance system (ex. streets, gutters, alleyways, ditches, canals, parking lots, and retention/detention ponds, etc.). For more information about erosion and sediment control, refer to the Florida Development Manual: A Guide to Sound Land and Water Management, and the FDEP Erosion, Sediment, and Stormwater Inspector Manual. Violators may be subject to civil penalties, citations, pollution abatement costs, and/or action by the City of Orlando Code Board.

(over)

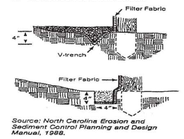
COMMONLY USED EROSION CONTROL MEASURES

PERIMETER CONTROLS

- Examples may include trenched-in silt fence, trenched-in synthetic bales, berms, sod buffers, waddles, turbidity barrier, etc.
- Install within 24 hours of land disturbance.
- Ensure that perimeter controls are installed properly (trenched-in, no gaps, appropriate BMP for conditions) and maintained until area is stabilized.
- Special attention to perimeter controls needs to be taken along sensitive and critical areas such as wetlands, waterbodies, stormwater systems, roads, adjacent parcels, etc.
- Inspect, repair, replace, and remove accumulated sediments weekly and after ½ inch rain event.

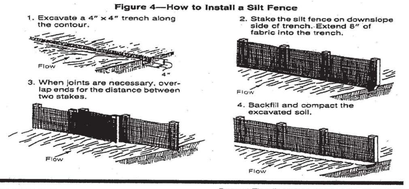
Silt Fences

Figure 3—Cross Sections of Trenches for Silt Fences



Source: North Carolina Erosion and Sediment Control Planning and Design Manual, 1988.

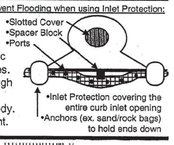
Figure 4—How to Install a Silt Fence



STORMWATER SYSTEM PROTECTION

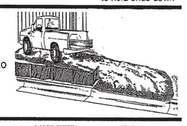
- Examples of stormwater systems may include stormwater inlets and grates, ditches, swales, retention/detention ponds, canals, lakes, etc.
- Method of protecting on-site and off-site stormwater systems include properly installed synthetic bales, silt fence fabric, filter fabric, sock-covered perforated pipe, or other inlet protection devices.
- In problem flood-prone areas (such as streets), ensure that floodwaters can be alleviated through ports and bypasses.
- Floating turbidity curtain may need to be installed for added protection to the receiving waterbody.
- Inspect, repair, replace, and remove accumulated sediments weekly and after ½ inch rain event.

Prevent Flooding when using Inlet Protection:



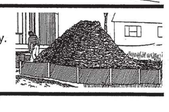
OFFSITE TRACKING

- Prevent offsite tracking of sediment onto streets by stabilizing the site entrance.
- Examples include at least 50 foot of gravel with geo-fabric underlay, tire wash area, etc.
- At the end of each workday, remove sediment by sweeping and scraping up soil tracked onto the street. Frequent sweeping of street and curb line will prevent sediment accumulation.
- Sediment in the streets and curbs can become major safety and environmental hazards for your site. Sediment can impede traffic, cause flooding, and degrade lakes.



SOIL STOCKPILES

- Locate away from any down-slope street, driveway, stream, lake, wetland, ditch, or drainageway.
- If stockpiles are located near a perimeter, cover stockpiles with plastic sheeting.
- Add perimeter controls at the toe of stockpile.
- Wet down exposed soil with a light spray or sprinkler to keep dust and erosion at a minimum.



STABILIZE AREAS

- Wherever possible, preserve existing trees, shrubs, and other vegetation to minimize exposed areas.
- Stabilize exposed areas immediately. Do not wait till end of project.
- Stabilization can be achieved with sod, seeding, mulch, erosion control blankets, etc. Hard armor (ex. rip-rap, netting, concrete, rock, etc.) may be more appropriate in channels, flumes, steep slopes, swift moving water, etc.
- Revegetate exposed areas with seed, sod, or mulch as soon as possible.
- To prevent root damage to existing trees, do not grade, place soil stockpiles, or park near trees marked for preservation.
- Mulch may need to be anchored down by disking, crimping, or nets. Sod may need to be anchored down with staples – especially on side slopes.
- Seed and sod must be watered and maintained to establish effective cover per City Engineering Standards Manual specs.

DEWATERING OPERATIONS

- Dewatering a site to install underground utilities will require a permit through the Water Management District (St Johns River WMD 407-659-4800 or South Florida WMD 407-858-6100).
- Dewatering methods include well-points, sock filters, sump pumps, etc.
- Directing the water offsite will require the discharge to meet FDEP Surface Water Quality Classifications (62-302.530). The water will need to be tested for pollutants.
- Turbidity levels on the discharge water shall not exceed 29 N.T.U.'s above the receiving waterbody. This can be achieved through well-point and sock filter methods, velocity controls, armored spillways, sediment basins, use of chemical clarifiers, etc.
- Floating turbidity curtains should be installed in the receiving waterbody. Curtain must extend to bottom of waterbody and attached to sides of bank.

MAINTENANCE TO BMP's

- Inspect BMP's at least weekly and after ½ inch rain event.
- Remove sediment and repair spots of erosion immediately.
- If site is subject to NPDES permitting (1+ acres disturbed), keep a weekly log of erosion control efforts.

For more information on Erosion and Sediment Control Issues and how you can help save our lakes, please contact the City of Orlando Streets and Stormwater Hotline at 407-246-2370.

1 L-9

EROSION CONTROL (BLUE SHEET)

SCALE : N.T.S.

NOTES

1. THE GUIDELINES FOR EROSION SEDIMENT CONTROL BLUE SHEET WILL SERVE AS A GUIDE FOR THE IMPLEMENTATION OF EROSION SEDIMENT CONTROL MEASURES IF NONE OTHER IS PROVIDED.
2. THE CONTRACTOR SHALL NOT AND PROTECT ALL SUNSHINE ONE CALL UTILITY MARKINGS THROUGHOUT THE PROJECT.
3. THE PROPOSED PROJECT IS DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE AND FLORIDA BUILDING CODE COMMERCIAL, CURRENT EDITION WITH REVISIONS.
4. THE PROPOSED PROJECT CONSTRUCTION IS DESIGNED FOR 140 M.P.H. WIND SPEED.

CITY/COUNTY PROJECT NUMBER

No.	REVISIONS	Date
2.	PER COUNTY COMMENT	05/19/21

Project Name
HOWEY SELF STORAGE
S. PALM AVENUE, S.R. 19, HOWEY IN THE HILLS FLORIDA

Drawing Title
EROSION CONTROL

L.a.L.a. LAND ART LANDSCAPE ARCHITECTURE
754 ELLWOOD AVENUE
ORLANDO FLORIDA, 32804
407--484--6099
PROJECTS@LANDARTLA.COM
WWW.LANDARTLA.COM

PROFESSIONAL REGISTRATION
LA 0001760
STATE OF FLORIDA

Digitally signed by Randall S. Baker
DN: cn=Randall S. Baker, o=Land Art Landscape Architecture, ou=Florida RLA 0001760, email=Randall@LandArtLA.com, c=US
Date: 2022.08.24 20:35:24 -04'00'
Adobe Acrobat Reader version: 2022.002.20191

RSB

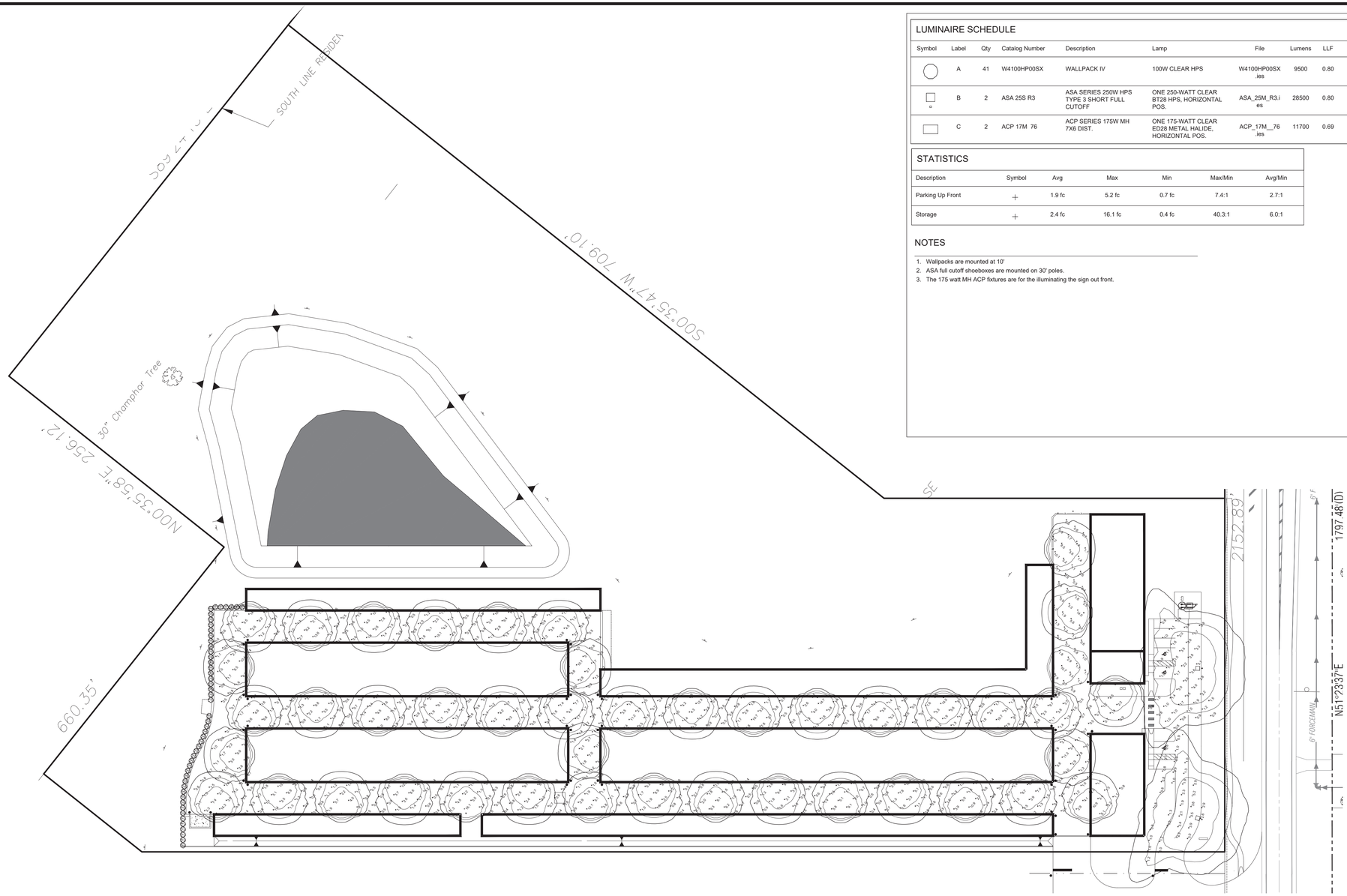
22038.00

DATE: 08/23/22

Drawing No.

L-5

ISSUED FOR PERMIT



LUMINAIRE SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
◯	A	41	W4100HP00SX	WALLPACK IV	100W CLEAR HPS	W4100HP00SX .ies	9500	0.80	128
□ o	B	2	ASA 25S R3	ASA SERIES 250W HPS TYPE 3 SHORT FULL CUTOFF	ONE 250-WATT CLEAR BT28 HPS, HORIZONTAL POS.	ASA_25M_R3.ies	28500	0.80	294
▭	C	2	ACP 17M 76	ACP SERIES 175W MH 7X6 DIST.	ONE 175-WATT CLEAR ED28 METAL HALIDE, HORIZONTAL POS.	ACP_17M__76.ies	11700	0.69	213

STATISTICS

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking Up Front	+	1.9 fc	5.2 fc	0.7 fc	7.4:1	2.7:1
Storage	+	2.4 fc	16.1 fc	0.4 fc	40.3:1	6.0:1

NOTES

1. Wallpacks are mounted at 10'
2. ASA full cutoff shoeboxes are mounted on 30' poles.
3. The 175 watt MH ACP fixtures are for the illuminating the sign out front.

Howey Self Storage
Holophane Wallpacks
AEL ASA Shoeboxes

Designer
Steve Prior

Date
Aug 7 2009

Scale

Drawing No.

1 of 1

DATE	REVISION
6/21/21	Town Comments

Photometric Plan

Howey Self Storage

june engineering consultants, inc.
132 W. Plant Street, Suite 200
Winter Garden, FL. 34787
Ph. 407-905-8180
Fax 407-905-6232
Certificate of Authorization #00008507

DRAWN BY: CLK DATE: 2/4/08 | CHECKED BY: RAJ DATE: 2/4/08 | SCALE 1" = 50'

JEFFREY A. SEDLOFF
PE# 51506

JOB NO. 07-0398
SHEET P-1
OF 10