# DRC SUBMITTAL SET

# THE ICEBOX CAFE AND CULINARY CENTER

# HALLANDALE BEACH, FLORIDA



BUS STOP LOCATION MAP

# PROJECT DATA

# SCOPE OF WORK PROPOSED COMMISSARY / RESTAURANT / GREENHOUSE

# ARCHITECT

RJS ARCHITECTS 11019 NW 19TH STREET CORAL SPRINGS, FL 33071 TEL: (954) 753-0018 FAX: (954) 755-8277

# LANDSCAPE ARCHITECT

ARCHITECTURAL ALLIANCE LANDSCAPE 612 SW 4TH AVENUE FORT LAUDERDALE, FL 33315 TEL: (954) 764-8858 FAX: (954) 764-0731

# CIVIL ENGINEER

BOTEK THURLOW ENGINEERING, INC. 3409 NW 9TH AVENUE, SUITE 1102 FORT LAUDERDALE, FL 33309 TEL: (954) 568-0888

# INDEX SHEETS

C-100 COVER SHEET

# **SURVEY**

SURVEY SURVEY SURVEY SURVEY

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L-100 SITE PLAN

TREE DISPOSITION PLAN

LANDSCAPE PLAN L-301 LANDSCAPE DETAILS

L-400 LIGHTING PLAN

LIGHTING CUT SHEETS

# **ARCHITECTURAL**

A130.1 PRELIMINARY FLOOR PLAN

A190.1 PRELIMINARY ROOF PLAN

A200.1 PRELIMINARY EXTERIOR ELEVATIONS

A200.1 FUTURE EXTERIOR ELEVATIONS

A300.1 SECTIONS

# CIVIL ENGINEERING

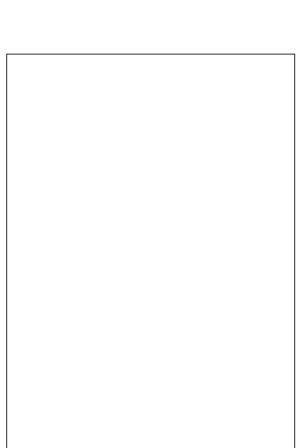
PAVING GRADING & DRAINAGE PLAN WATER & SANITARY SEWER PLAN **POLLUTION & EROSION CONTROL** 

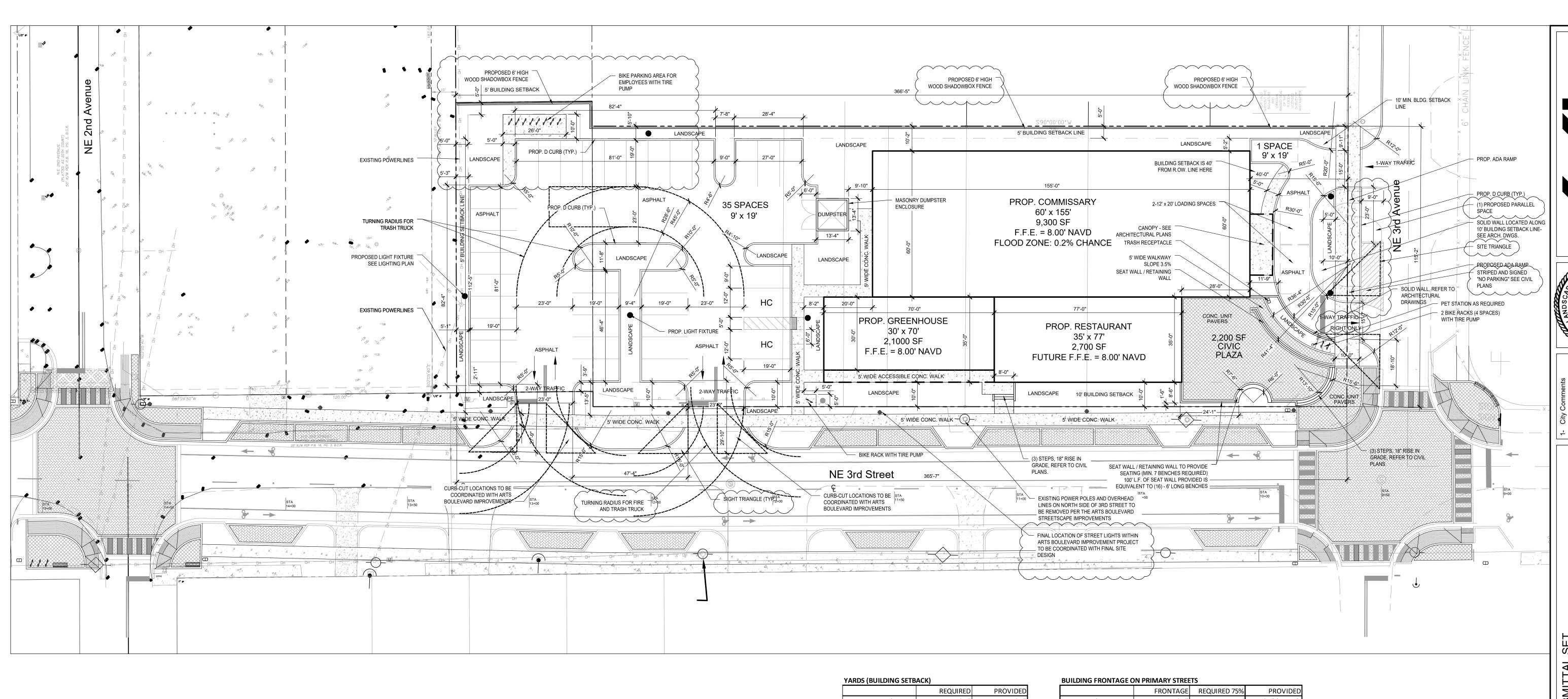
Revision 1: City Comments DRC Resubmit 08-17-16

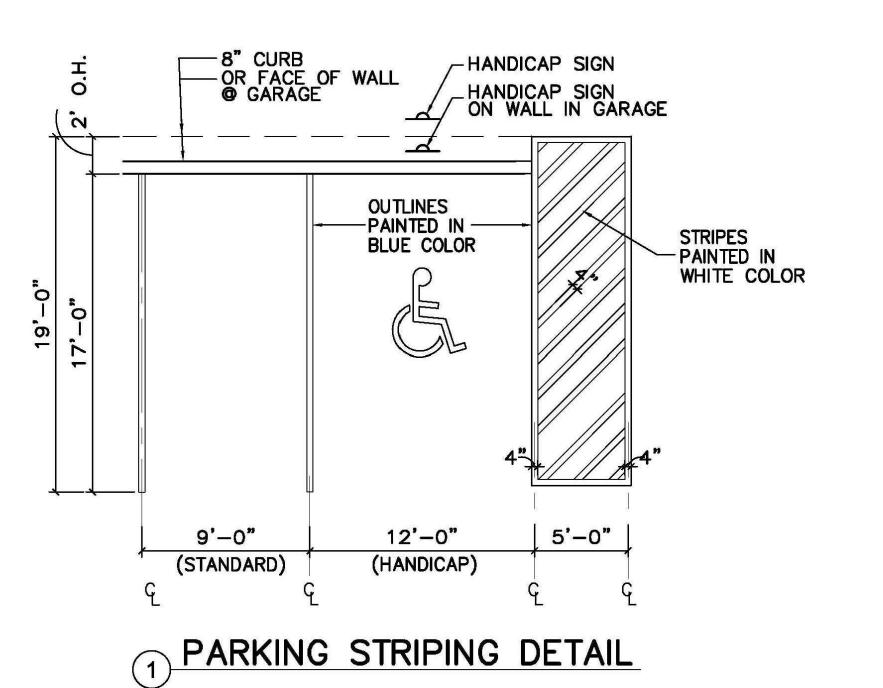
Revision 2: City Comments DRC Resubmit 09-07-16

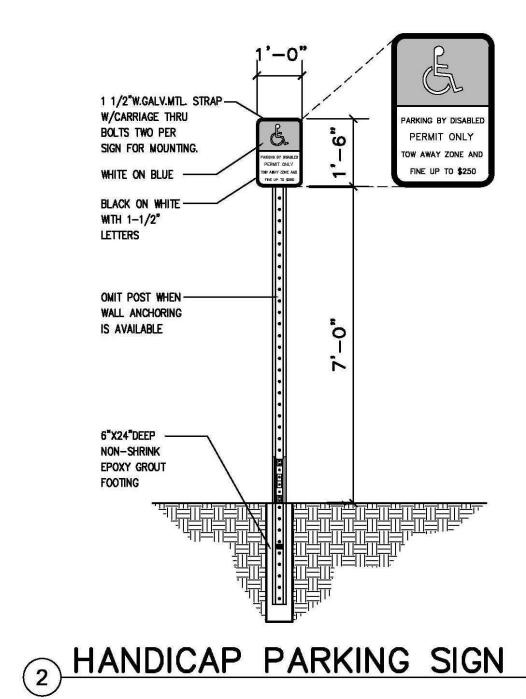












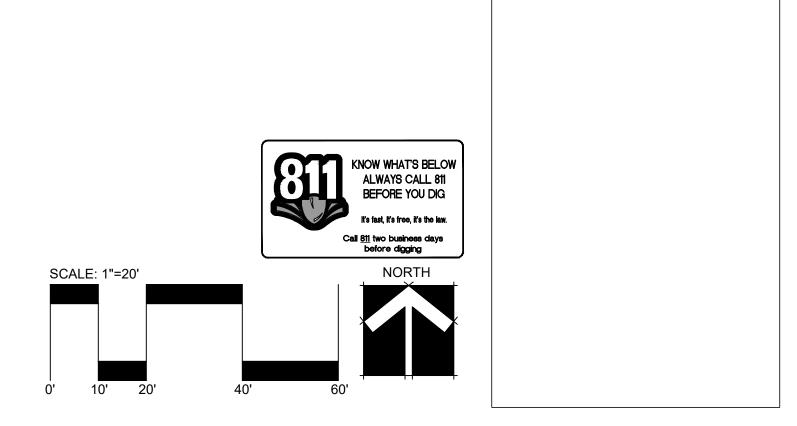
| YARDS (BUILDING SETBACK) |          |          |  |  |  |
|--------------------------|----------|----------|--|--|--|
|                          | REQUIRED | PROVIDED |  |  |  |
| FRONT - NE 3rd Street    | 10'-0"   | 10'-0''  |  |  |  |
| SIDE - NE 3rd Avenue     | 10'-0"   | 40'-0''  |  |  |  |
| SIDE - West Prop. Line   | 5'-0"    | 150'-11" |  |  |  |
| REAR - North Prop. Line  | 5'-0"    | 10'-0"   |  |  |  |

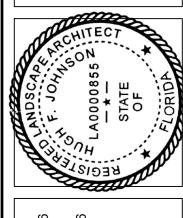
|   | SITE PLAN INFORMATION                  |                          |
|---|--|--------------------------|
|   |  |                          |
|   | CURRENT USE OF PROPERTY                | Residential              |
|   | CURRENT LAND USE DESIGNATION           | RM-HD-2                  |
|   | CURRENT ZONING DESIGNATION             | Central RAC              |
|   | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | Transit Core Subdistrict |
|   | TOTAL SITE AREA                        | 42,382 SF / 0.97 AC.     |
|   |  |                          |
|   | TOTAL LANDSCAPE AREA                   | 9,008 SF                 |
| ` | ŦÔŦAĹŦMPERŶŀĠÛŚ-AŘEA`                  | 33,374SF                 |
|   | BUILDING COVERAGE                      | 14,100 SF                |
|   | PEDESTRIAN WALKS                       | 2,262 SF                 |
|   | CIVIC PLAZA                            | 2,200 SF                 |
|   | VEHICULAR USE AREA                     | 14,460 SF                |
|   |  |                          |
|   | TOTAL BUILDING S.F.                    | 14,100 SF                |
|   |  |                          |
|   | BUILDING HEIGHT - COMMISSARY           | 20'-6"                   |
|   | NUMBER OF STORIES                      | 1                        |
|   | BUILDING WIDTH AND LENGTH              | 60' x 155'               |
|   | BUILDING SF                            | 9,300 SF                 |
|   |  |                          |
|   | BUILDING HEIGHT - RESTAURANT           | 20'-6''                  |
|   | NUMBER OF STORIES                      | 1                        |
|   | BUILDING WIDTH AND LENGTH              | 35' x 77'                |
|   | BUILDING SF                            | 2,700 SF                 |
|   |  |                          |
|   | BUILDING HEIGHT - GREENHOUSE           | 20'-6''                  |
|   | NUMBER OF STORIES                      | 1                        |
|   | BUILDING WIDTH AND LENGTH              | 30' x 70'                |
|   | BUILDING SF                            | 2,100 SF                 |

| BUILDING FRONTAGE ON PRIMARY STREETS |          |              |                 |  |  |  |
|--------------------------------------|----------|--------------|-----------------|--|--|--|
|                                      | FRONTAGE | REQUIRED 75% | PROVIDED        |  |  |  |
| NE 3rd Street                        | 365'-6"  | 274'         | 170'-6" (46.6%) |  |  |  |
| NE 3rd Avenue                        | 115'     | 86'-3"       | 95' (82.6%)     |  |  |  |
|                                      |          |              |                 |  |  |  |

| SITE PLAN INFORMATION               |                          | PARKING DATA (2       |
|-------------------------------------|--------------------------|-----------------------|
|                                     |                          | RAC DISTRICT          |
| CURRENT USE OF PROPERTY             | Residential              | Commissary (bldg. 1)  |
| <b>CURRENT LAND USE DESIGNATION</b> | RM-HD-2                  | Restaurant (bldg #2)  |
| CURRENT ZONING DESIGNATION          | Central RAC              | Greenhouse (bldg. #3) |
|                                     | Transit Core Subdistrict | TOTAL PARKING REQUIRE |
| TOTAL SITE AREA                     | 42,382 SF / 0.97 AC.     | TOTAL PARKING (WITH W |
|                                     |                          | * MINUS 10% REDUCTION |
| TOTAL LANDSCAPE AREA                | 9,008 SF                 | <i></i>               |
| TÔTAĹ IMPERVIOUS AREA               | 33,374SF                 |                       |
| BUILDING COVERAGE                   | 14,100 SF                |                       |
| PEDESTRIAN WALKS                    | 2,262 SF                 |                       |
| CIVIC PLAZA                         | 2,200 SF                 |                       |
| VEHICULAR USE AREA                  | 14,460 SF                |                       |
|                                     |                          |                       |
| TOTAL BUILDING S.F.                 | 14,100 SF                |                       |
|                                     |                          |                       |
| BUILDING HEIGHT - COMMISSARY        | 20'-6"                   |                       |
| NUMBER OF STORIES                   | 1                        |                       |
| BUILDING WIDTH AND LENGTH           | 60' x 155'               |                       |
| BUILDING SF                         | 9,300 SF                 |                       |
|                                     |                          |                       |
| BUILDING HEIGHT - RESTAURANT        | 20'-6"                   |                       |
| NUMBER OF STORIES                   | 1                        |                       |
| BUILDING WIDTH AND LENGTH           | 35' x 77'                |                       |
| BUILDING SF                         | 2,700 SF                 |                       |
|                                     |                          |                       |
| BUILDING HEIGHT - GREENHOUSE        | 20'-6"                   |                       |
| NUMBER OF STORIES                   | 1                        |                       |
| BUILDING WIDTH AND LENGTH           | 30' x 70'                |                       |
| BUILDING SF                         | 2,100 SF                 |                       |

| PARKING DATA                        | (2 HANDICAP SPA | 2 HANDICAP SPACES PROVIDED PER ADA REQUIRMENTS) |          |          |  |  |
|-------------------------------------|-----------------|---|----------|----------|--|--|
| RAC DISTRICT                        | SF              | RATIO   | REQUIRED | PROVIDED |  |  |
| Commissary (bldg. 1)                | 9,300           | 1 space per 300                                 | 31       | 28       |  |  |
| Restaurant (bldg #2)                | 2,700           | 1 space per 300                                 | 9        | 8        |  |  |
| Greenhouse (bldg. #3)               | 2,100           | 1 space per 300                                 | 7        | (        |  |  |
| TOTAL PARKING REQUI                 | RED             |   | 47       |          |  |  |
| TOTAL PARKING (WITH WAIVER FOR GREE |                 | NHOUSE REQ.)                                    | 40*      |          |  |  |
| * MINUS 10% REDUCTION               |                 |   | 36       | 36       |  |  |





AFE AND CULINAMALLE BEACH, FL

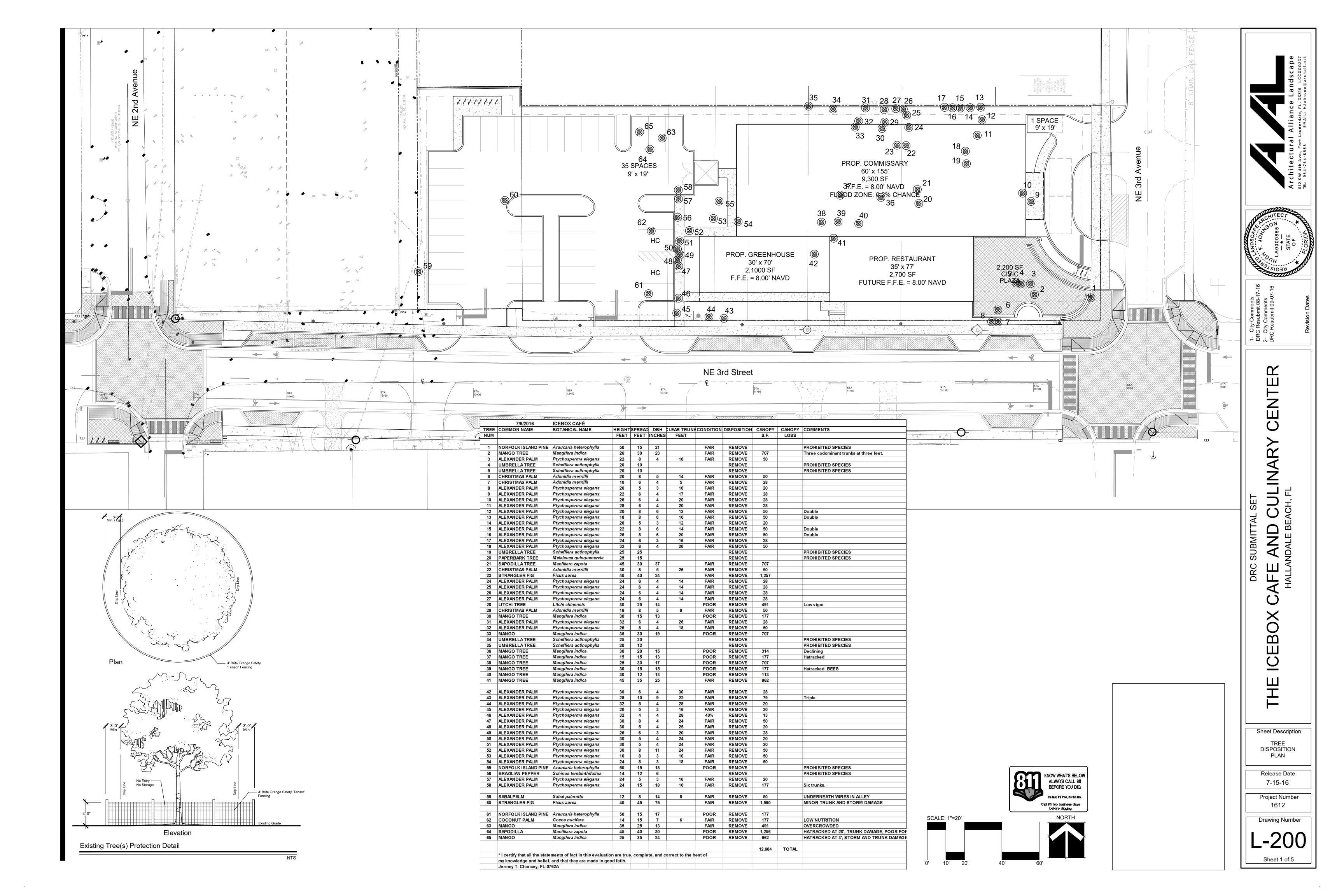
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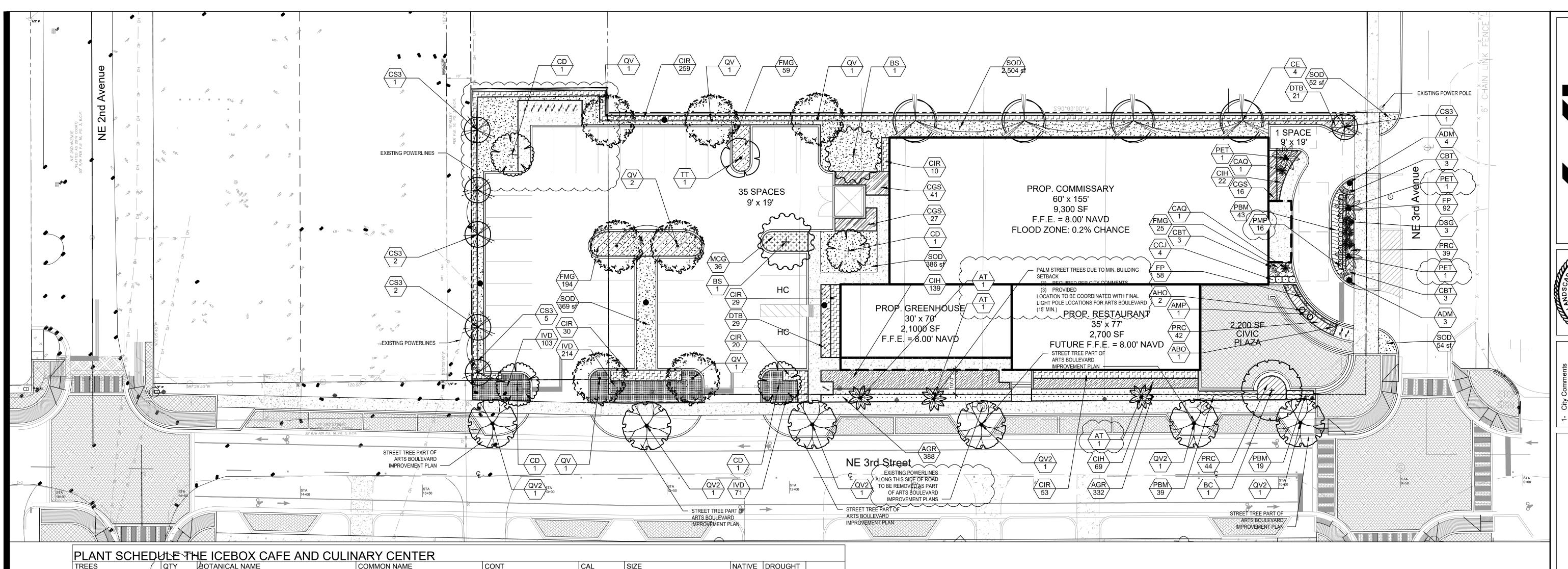
Release Date 7-15-16 Project Number

PLAN

1612 Drawing Number

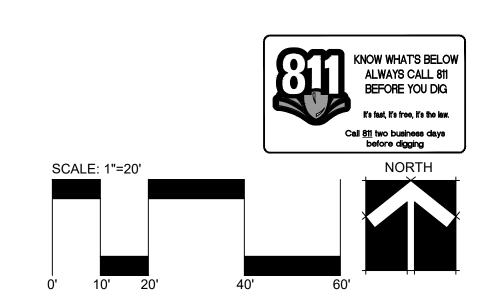
L-100 Sheet 1 of 5



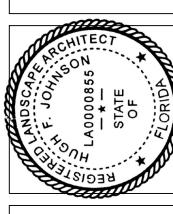


| PLANT SCHED        | WLET     | HE ICEBOX CAFE AND CULIN  | NARY CENTER                   |                      |             |                                |        |           |            |
|--------------------|----------|---|-------------------------------|----------------------|-------------|--------------------------------|--------|-----------|------------|
| TREES (            | QTY      | BOTANICAL NAME  | COMMON NAME                   | CONT                 | CAL         | SIZE                           | NATIVE | DROUGHT   |            |
| BC                 | 1        | BOMBAX CEIBA  | KAPOK TREE                    | 100 GAL              | 10"-12" CAL | 25`-30` OA                     | NO     | MEDIUM    |            |
| BS                 | 2        | BURSERA SIMARUBA  | GUMBO LIMBO                   | FG/B&B               | 3"CAL       | 15` HT. X 5` SPD. X 6` MIN. CT | YES    | HIGH      |            |
| CD                 | 4        | COCCOLOBA DIVERSIFOLIA  | PIGEON PLUM                   | FG/B&B               | 3"CAL       | 15` HT. X 5` SPD. X 6` MIN. CT | YES    | HIGH      |            |
| CE                 | 4        | CONOCARPUS ERECTUS  | BUTTONWOOD                    | FG/B&B               | 3"CAL       | 15' HT. X 5' SPD. X 6' MIN. CT | YES    | HIGH      |            |
| CS3                | 6        | CONOCARPUS ERECTUS 'SERICEUS'   | SILVER BUTTONWOOD             | FG/B&B               | 3"CAL       | 15` HT. X 5` SPD. X 6` MIN. CT | YES    | HIGH      |            |
| QV                 | 7        | QUERCUS VIRGINIANA  | LIVE OAK                      | FG/B&B               | 3"CAL       | 15` HT. X 5` SPD. X 6` MIN. CT | YES    | HIGH      |            |
| >                  |          |   |                               |                      | •           |                                | •      |           |            |
| FLOWERING TREES    | QTY      | BOTANICAL NAME  | COMMON NAME                   | CONT                 | CAL         | SIZE                           | NATIVE | DROUGHT   |            |
| TT                 | 1        | TABEBUIA HETEROPHYLLA   | PINK TRUMPET TREE             | FG/B&B               | 3"CAL       | 15` HT. X 5` SPD. X 6` MIN. CT | NO     | MEDIUM    |            |
| >                  |          |   |                               |                      | •           |                                | •      | •         |            |
| PALM TREES         | QTY      | BOTANICAL NAME  | COMMON NAME                   | CONT                 | CAL         | SIZE                           | NATIVE | DROUGHT   |            |
| PET                | 3        | PTYCHOSPERMA ELEGANS  | ALEXANDER PALM                | FG/B&B               |             | 16`-18`-20` TRIPLE TRUNK       | NO     | HIGH      |            |
|                    |          |   |                               |                      |             |                                |        |           |            |
| STREET TREES       | QTY      | BOTANICAL NAME  | COMMON NAME                   | CONT                 | ČAL         | SIZE                           | NATIVE | DROUGHT   |            |
| AT                 | 3        | ADONIDIA MERRILLII  | ADONIDIA PALM                 | B&B FIELD GROWN      |             | 12-14` OA TRIPLE TRUNK         | NO     | HIGH      |            |
| QV2                | 6        | QUERCUS VIRGINIANA  | SOUTHERN LIVE OAK             | ARTS BOULEVARD PLANS |             |                                |        |           |            |
|                    | I        | 1   | 1                             | I.                   | I           | I                              | 1      | 1         |            |
| SHRUBS             | QTY      | BOTANICAL NAME  | COMMON NAME                   | CONT                 | CAL         | SIZE                           | NATIVE | DROUGHT   | SPACING    |
| ABO                | 2        | AECHMEA BLANCHETIANA  | `BURNT ORANGE` BROMELIAD      | 3 GAL                |             | SPECIMEN                       | NO     | MEDIUM    | 36" o.c.   |
| AHO                | 2        | AECHMEA BLANCHETIANA 'HACIENDA'   | BURNT ORANGE BROMELIAD        | 3 GAL                |             | 20"X20" OA.                    | NO     | HIGH      | 30" o.c.   |
| AMP                | 1        | AECHMEA MALVA   | PURPLE VASE BROMELIAD         | 3 GAL                |             | 20"X20" OA.                    | NO     | HIGH      | 30" o.c.   |
| CCJ                | 4        | CAPPARIS CYNOPHALLOPHORA  | JAMAICA CAPER                 | 7 GAL                |             | 4` OA., CONE FULL TO BASE      | YES    | HIGH      | 36" o.c.   |
| CBT                | 9        | CORDYLINE FRUTICOSA 'BOLERO'  | BOLERO TI PLANT               | 3 GAL                |             | 24-28" OA                      | NO     | MEDIUM    | 24" o.c.   |
| CAQ                | 2        | CRINUM AUGUSTUM 'QUEEN EMMA'  | `QUEEN EMMA` CRINUM           | 7 GAL.               |             | 4` OA., FULL                   | NO     | HIGH      | 48" o.c.   |
| DSG                | 3        | DIOON SPINULOSUM  | CYCAD                         | 15 GAL               |             | 30-36" OA                      | NO     | HIGH      | 60" o.c.   |
| PMP                | 17       | PODOCARPUS MACROPHYLLUS   | PODOCARPUS                    | 3 GAL.,              |             | 30"HT X 24"SPR                 | NO     | HIGH      | 24" o.c.   |
|                    |          |   |                               |                      |             |                                |        |           |            |
| SHRUB AREAS        | QTY      | BOTANICAL NAME  | COMMON NAME                   | CONT                 | CAL         | SIZE                           | NATIVE | DROUGHT   | SPACING    |
| CIR                | 401      | CHRYSOBALANUS ICACO 'REDTIP'  | RED TIP COCOPLUM              | 3 GAL.,              |             | 24"HT X 24"SPR                 | YES    | MEDIUM    | 24" o.c.   |
| CGS                | 84       | CLUSIA GUTTIFERA  | SMALL-LEAF CLUSIA             | 3 GAL.,              |             | 24"HT X 24"SPR                 | NO     | HIGH      | 24" o.c.   |
| FMG                | 278      | FICUS MICROCARPA 'GREEN ISLAND'   | GREEN ISLAND FICUS            | 3 GAL.,              |             | 14" HT. X 16" SPR.,            | NO     | HIGH      | 18" o.c.   |
| IVD                | 388      | ILEX VOMITORIA `STOKES DWARF`   | DWARF YAUPON HOLLY            | 3 GAL                |             | 12"HT X 12"SPR                 | YES    | HIGH      | 18" o.c.   |
| PBM                | 101      | PHILODENDRON X `BURLE MARX`   | PHILODENDRON                  | 3 GAL.,              |             | 18"HT X 18"SPR                 | NO     | MEDIUM    | 18" o.c.   |
| PRC                | 125      | PHILODENDRON X 'ROJO CONGO'   | ROJO CONGO PHILODENDRON       | 3 GAL.,              |             | 18"HT X 18"SPR                 | NO     | MEDIUM    | 18" o.c.   |
|                    |          |   |                               | ,                    |             |                                |        |           |            |
| GROUND COVERS      | QTY      | BOTANICAL NAME  | COMMON NAME                   | CONT                 | CAL         | SIZE                           | NATIVE | DROUGHT   | SPACING    |
| AGR                | 720      | ARACHIS GLABRATA  | PERENNIAL PEANUT 'LARGE LEAF' | 1 GAL.,              |             | 6"HT X 12"SPR @                | NO     | HIGH      | 12" o.c.   |
| ADM                | 7        | ASPARAGUS DENSIFLORUS `MYERS`   | MYERS ASPARAGUS               | 3 GAL                |             | 18"HT X 18"SPR @               | NO     | MEDIUM    | 24" o.c.   |
| CIH                | 230      | CHRYSOBALANUS ICACO 'HORIZONTALIS'  | HORIZONTAL COCOPLUM           | 3 GAL.,              |             | 12"HT X 16"SPR @               | YES    | HIGH      | 24" o.c.   |
| DTB                | 50       | DIANELLA TASMANICA  | BLUEBERRY FLAX LILY           | 3 GAL                |             | 16" HT X 16" SPR @             | NO     | MEDIUM    | 24" o.c.   |
| FP                 | 150      | FICUS PUMILA  | CREEPING FIG                  | 1 GAL.               |             | 4" HT. X 12" SPR.              | NO     | HIGH      | 8" o.c.    |
|                    | 1.55     | 1   |                               | . 5, 12.             |             |                                | 1      | 1         | 15 5.5.    |
| SOD/SEED           | QTY      | BOTANICAL NAME  | COMMON NAME                   | CONT                 | CAL         | SIZE                           | NATIVE | DROUGHT   | SPACING    |
| SOD                | 3,365 SF | STENOTAPHRUM SECUNDATUM `FLORITAM`  | `FLORITAM` ST. AUGUSTINE SOD  | SOD                  | J, (L       |                                |        | 2.1000111 | 5. 7.01140 |
|                    | 0,000 01 | O LING I A FIRE WIND COOK DATE OF THE PARTY | 1 LONG TIME OF THE GOD        |                      |             |                                |        |           |            |
| TALL GROUND COVERS | QTY      | BOTANICAL NAME  | COMMON NAME                   | CONT                 | CAL         | SIZE                           | NATIVE | DROUGHT   | SPACING    |
|                    | 36       | MUHLENBERGIA CAPILLARIS   | PINK MUHLY GRASS              |                      | UAL         | 24" HT. X 24" SPR.             | ļ      | HIGH      | 24" o.c.   |
| MCG                | 30       | WIUNLENDERGIA CAPILLARIS  | FINN WURLT GRASS              | 3 GAL.,              |             | 24 NI. A 24 SPK.               | YES    | пісп      | 24 O.C.    |

| LANDSCAPE CALCULATIONS   |               |                |
|--|---------------|----------------|
| SITE AREA  | 42,382 SF     | 0.97 AC        |
|  | REQUIRED      | PROVIDED       |
| SEC. 32-384 (a) Landscaping Requirements   |               |                |
| TOTAL LANDSCAPE AREA   | 6,358 SF      | 9,008 SF       |
| RAC (15%) MIN.   | 15% MIN.      | 21%            |
| Sod max. 70% of landscape area 9,008 sf x .70 = 6305.6 sf max.                                       | 6305 SF MAX   | 3365 SF        |
| Street Trees- 9 required @ 25' O.C. = 9 Total Required   | 9             | 9              |
| (6 Provided on Arts Boulevard Improvement Plan) 3 additonal Req'd.                                   | 3             | 3              |
| SEC. 32-384(c) Min. On Site Tree Requirements  |               |                |
| 1 TREE PER 1,500 SF OF PLOT AREA   |               |                |
| 41,827 SF / 1,500 SF = 28 Trees  | 28 Trees      | 28 Trees       |
| NATIVE TREES / DROUGHT TOLERANT (50% Min.)   | 14 Trees      | 23 Native Tree |
| MAX (50%) PALMS  | 14 Palms Max. | 3 Palms        |
| NATIVE/DROUGHT TOLERANT MATERIALS LISTED ARE BASED<br>ON <i>WATERWISE - SOUTH FLORIDA LANDSCAPES</i> |               |                |
| ALL SOD AND LANDSCAPE AREAS TO RECEIVE 100% COVERA   | GE FROM AN AU | TOMATIC        |
| IRRIGATION SYSTEM USING AN APPROVED WATER SOURCE.  |               |                |







AFE AND CULINAMALE BEACH, FL  $\Box$ 

Sheet Description

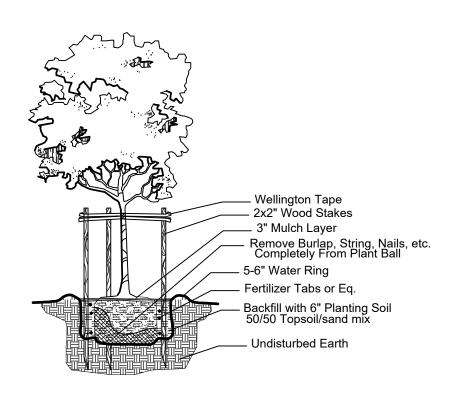
LANDSCAPE PLAN

Release Date 7-15-16

Project Number 1612

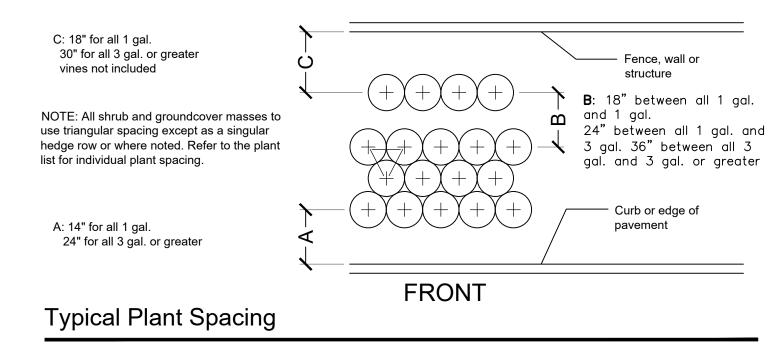
Drawing Number

NTS



Small Tree Planting Detail

NTS



NOTE:
PROVIDE ROOT BARRIERS AS REQUIRED ON ALL TREES IN CONFLICT WITH MINIMUM CLEARANCE WITH UTILITIES.
MINIMUM CLEARANCE OF 5' FT FOR PALMS AND SMALL TREES AND 10' FT FOR LARGE TREES WITH INTRUSIVE
ROOT SYSTEMS PER CITY OF FORT LAUDERDALE REQUIREMENTS. SEE TYPICAL DETAIL BELOW.

ROOT BARRIER
(SEE NOTES BELOW)

ROOT BARRIER
(SEE NOTES BELOW)

COVER PER CITY REQUIREMENTS

CITY FACILITIES
(MAINS, SERVICES, ETC.)

THE INSTALLATION OF ROOT BARRIERS SHALL BE COORDINATED WITH CITY AND INSPECTED BY CITY PRIOR TO BACKFILLING. ALL ROOT BARRIERS SHALL EXTEND UP TO FINISHED GRADE.

2. ROOT BARRIERS SHALL HAVE MINIMUM DEEP PER CITY REQUIREMENTS. APPROVED PRODUCTS INCLUDE "DEEP ROOT" AND "ROOT SOLUTIONS". FLEXIBLE BARRIERS SHALL BE 36" PANELS

3. ALL ROOT BARRIERS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS

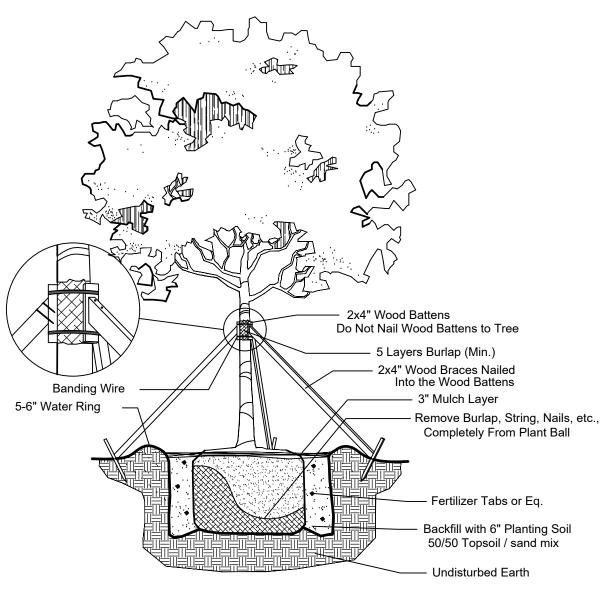
# Typical Root Barrier Detail

MANUFACTURED BY BIOBARRIER.

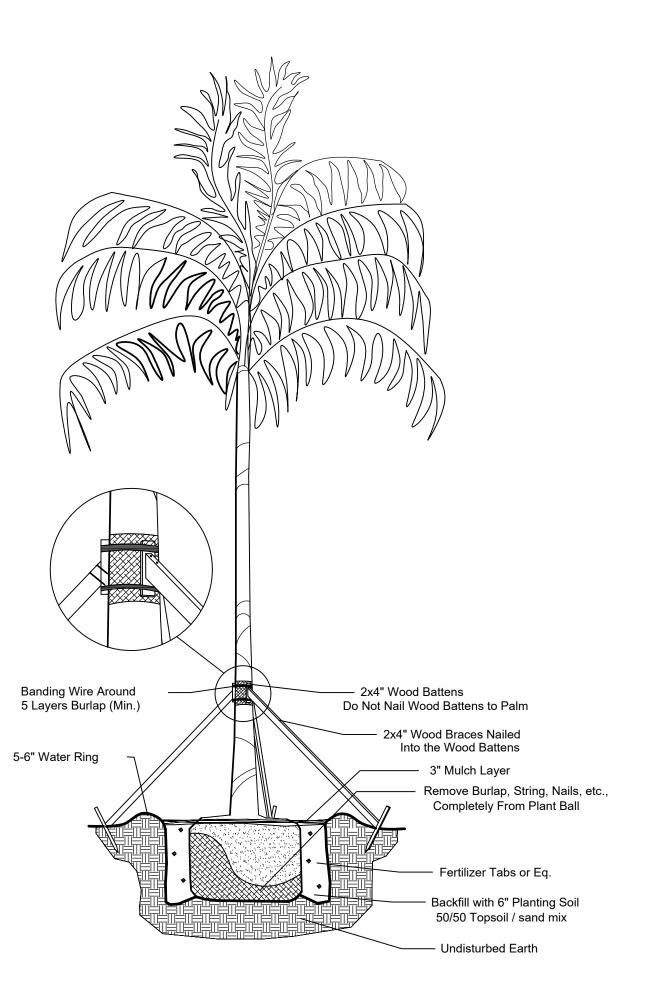
NTS

# NOTES:

- 1. ALL SOD AND LANDSCAPE RECEIVE 100% COVERAGE FROM AN AUTOMATIC IRRIGATION SYSTEM USING AN APPROVED WATER SOURCE.
- 2. IRRIGATION SYSTEM SHALL ALSO BE EQUIPPED WITH RAIN SENSOR
- 3. SEE SHEETS L-300 THROUGH L-304 FOR THE PLANTING PLANS
- 4. ALL PLANTED MATERIAL ADJACENT TO CURBING SHALL BE PLANTED 3' BACK OF SAID CURB.
- 5. A PRE-PLANTING MEETING SHALL BE SCHEDULED WITH THE CITY FORESTER OR LANDSCAPE INSPECTOR AND THE LANDSCAPE CONTRACTOR PRIOR TO ANY INSTALLATION ON THE SITE.
- 6. ALL SHADE AND MEDIUM TREES INSTALLED WITHIN 6' OF A PUBLIC INFRASTRUCTURE SHALL UTILIZE A ROOT BARRIER SYSTEM.
- 7. All IRRIGATION PIPE SHALL BE 'PURPLE PIPE' AS REQUIRED BY THE CITY OF HALLANDALE.



Large Tree Planting Detail



Palm Planting Detail

NTO

# GENERAL PLANTING REQUIREMENTS

All sizes shown for plant material on the plans are to be considered Minimum. All plant material must meet or exceed these minimum requirements for both height and spread. Any other requirements for specific shape or effect as noted on the plan(s) will also be required for final acceptance.

All plant material furnished by the landscape contractor shall be Florida #1 or better as established by "Grades and Standards for Florida Nursery Plants" and "Grades and Standards for Florida Nursery Trees". All material shall be installed as per CSI specifications.

All plant material as included herein shall be warrantied by the landscape contractor for a minimum period as follows: All trees and palms for 12 months, all shrubs, vines, groundcovers and miscellaneous planting materials for 90 days, and all lawn areas for 60 days after final acceptance by the owner or owner's representative.

All plant material shall be planted in planting soil that is delivered to the site in a clean loose and friable condition. All soil shall have a well drained characteristic. Soil must be free of all rocks, sticks, and objectionable material including weeds and weed seeds as per CSI specifications.

Twelve inches (12") of planting soil 50/50 sand/topsoil mix is required around and beneath the root ball of all trees and palms, and 1 cubic yard per 50 bedding or groundcover plants.

All landscape areas shall be covered with Eucalyptus or sterilized seed free Melaleuca mulch to a minimum depth of three inches (3") of cover when settled. A four-inch clear space must be left for air between plant bases and the mulch. Cypress bark mulch shall not be used.

All plant material shall be thoroughly watered in at the time of planting; no dry planting permitted. All plant materials shall be planted such that the top of the plant ball is flush with the surrounding grade.

All landscape and lawn areas shall be irrigated by a fully automatic sprinkler system adjusted to provide 100% coverage of all landscape areas. All heads shall be adjusted to 100% overlap as per manufacturers specifications and performance standards utilizing a rust free water source. Each system shall be installed with a rain sensor.

It is the sole responsibility of the landscape contractor to insure that all new plantings receive adequate water during the installation and during all plant warranty periods. Deep watering of all new trees and palms and any supplemental watering that may be required to augment natural rainfall and site irrigation is mandatory to insure proper plant development and shall be provided as a part of this contract.

All plant material shall be installed with fertilizer, which shall be State approved as a complete fertilizer containing the required minimum of trace elements in addition to N-P-K, of which 50% of the nitrogen shall be derived from an organic source as per CSI specifications.

Contractors are responsible for coordinating with the owners and appropriate public agencies to assist in locating and verifying all underground utilities prior to excavation.

All ideas, designs and plans indicated or represented by this drawing are owned by and are the exclusive property of Architectural Alliance.

The plan takes precedence over the plant list.

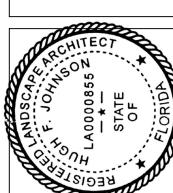
# SPECIAL INSTRUCTIONS

General site and berm grading to +/- 1 inch (1") shall be provided by the general contractor. All finished site grading and final decorative berm shaping shall be provided by the landscape contractor.

All sod areas as indicated on the planting plan shall receive Stenotaphrum secundatum, St. Augustine 'Palmetto' solid sod. It shall be the responsibility of the landscape contractor to include in the bid, the repair of any sod which may be damaged from the landscape installation operations.







In City CommentsORC Resubmit 08-17-16City CommentsORC Resubmit 09-07-16

DRC SUBMITTAL SET

THE ICEBOX CAFE AND CULINARY CENTE

HALLANDALE BEACH, FL

Sheet Description

LANDSCAPE

DETAILS AND

NOTES

Release Date

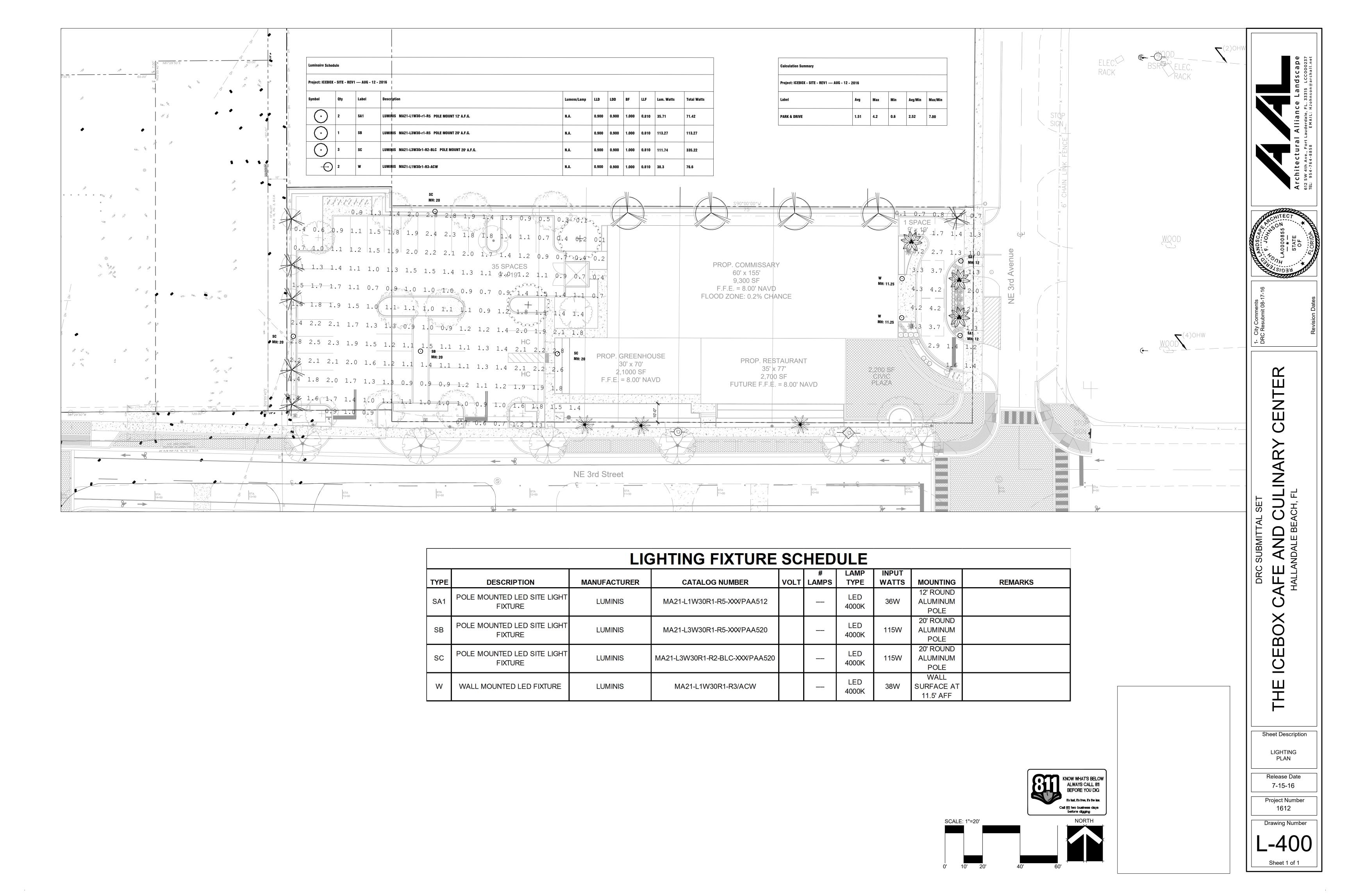
7-15-16

1612

Drawing Number

**Project Number** 

**L-301**Sheet 1 of 5



☐ MA21-L1W30r1-R2

☐ MA21-L2W30r1-R2

☐ MA21-L3W46r0-R2

☐ MA21-L1W30r1-R3

☐ MA21-L2W30r1-R3

☐ MA21-L3W30r1-R3

MA21-L3W46r0-R3

☐ MA21-L1W30r1-R4

☐ MA21-L2W30r1-R4

☐ MA21-L3W30r1-R4

☐ MA21-L1W30r1-R5

☐ MA21-L2W30r1-R5

☐ MA21-L3W30r1-R5

☐ MA21-L3W46r0-R5

☐ MA21-LIW18K2A

☐ MA21-L2W18K2A

☐ MA21-L3W18K2A

MA21-L3W30r1-R2

1" X 3" (25X76) extruded aluminum extended

standard natural stainless steel rod support.

arm pole mounting adaptor designed to

fit with 4 to 5" dia. poles. 1/2" dia. X 45

MATCHING POLE SELECTION

Ø 4"= 102mm Ø5"= 127mm

Ø 4" Ø 5" Ø 4" Tapered Ø 4" Height

PAA410 PAA510 PST10 ----- PSB10 10 Ft. (3 M)

PAA414 PAA514 PST14 ----- PSB14 14 Ft. (4,2 M)

PAA416 PAA516 PST16 PTA16 PSB16 16 Ft. (4,8 M)

PAA418 PAA518 ----- PTA18 PSB18 18 Ft. (5,5 M)

PAA420 PAA520 ----- PTA20 PSB20 20 Ft. (6,0 M)

------ PTA25 ----- 25 Ft. (7,6 M)

For additional pole details, please refer to separate pole specification sheet.

Pole

EC8P (Applicable for MA20 and MA21) Set of (2) 1" X 3" (25X76) extruded aluminum side pole straight mounting. Pole mounting adaptor fits with 4 to 5" dia, poles. (EPA:

**POLE MOUNTINGS** 

EC8PS (Applicable for MA20 only) Set of (2) 1" X 3" (25X76) extruded aluminum side pole straight mounting. Pole mounting adaptor fits with 4 to 5" dia. poles. (EPA: 0.72)

NOTE 1: PST Pole with AC8 attachment requires a 30" (762) tenon extension over pole nominal height. EC8P and EC8PS require an 18" tenon extension.



REMARKS

Sheet Description LIGHTING

**CUT SHEETS** Release Date

7-15-16 Project Number

1612 **Drawing Number** 

Sheet 1 of 1

MA20/MA21 SERIES FIXTURE WATTAGE VOLTAGE FINISH OPTION OPTION OPTION OPTION



LUMINIS.

1- Cast aluminum LED heat sink. Optical system assembly. 3- Set of two cast aluminum supporting 4- Removable cast aluminum cover for easy

access to electrical components and 5- LED driver housing. 6- Lower cast aluminum housing to fit with 4" (102) or 5" (127) ).D pole. 6" (152) O.D available on request.

7- 30" Diameter hard aluminum shade (MA2I

MATERIALS MayaLED is made of corrosion resistant 356 aluminum alloy with a copper

(CU) content of less than 0.1%. COB LED is assembled on a thick pad housing chamber designed with a heat sink pattern to optimize heat dissipation and luminaire efficacy. The power supply is enclosed in an isolated chamber allowing a quick access for electrical maintenance without disturbing the optical light chamber. COB LED is removable and replaceable for ease of maintenance or lighting

# ELECTRICAL

POWER SUPPLY Standard driver is 0-10V dimming-ready (dims to 10%) with: 120-277 multi-volt compatibility (50-60Hz), operating temperature range of +30 C/-22 F to 60 C/140 F, output over voltage protection, output over current protection and

output short circuit protection with auto-recovery. Type II, III, IV or V light distribution via high performance optical lenses. Standard 4000K/80CRI. Optional 2700K. 3000K, 3500K and 5000K

# 125,000hrs (L<sub>70</sub>B<sub>60</sub>) based on LM-80 report for lumen maintenance.

Five-stage preparation process includes preheating of cast aluminum parts for air extraction. Polyester powder coating is applied through an

electrostatic process, and oven cured for long term finish.

## MOUNTING

Maximum weight: 26lbs (12kg) MayaLED is designed for ease of access and installation. Designed for wall or pole mount to fit with a 4" (102) or 5" (127) pole. 6" (152) available on request. Alternate poles or wall attachments are available to meet multiple installation conditions. (Refer to page 3)

EC8W (Applicable for MA20 and MA21)

Set of (2) 1" X 3" (25X76) extruded aluminum

wall mount arms with cast aluminum wall plate.

CERTIFICATION Tested to UL1598 and CSA22.2 #250. ETL listed for wet location. Photometric testing performed by an independent laboratory in accordance with IES LM-79-08 standards at 25 C/77 F. Lumen depreciation in accordance with IESNA LM80 standards. CE Certification on request.



2- Fuse and photocell options are normally installed with poles when specified with Luminis luminaires. (Except for other types of mounting.)

Lumen output will remain constant.

LUMINAIRE SELECTION

INPUT DELIVERED

☐ MA20-L1W30r1-R2

☐ MA20-L2W30r1-R2

MA20-L3W30r1-R2

☐ MA20-L1W30r1-R3

☐ MA20-L2W30r1-R3
☐ MA20-L3W30r1-R3

☐ MA20-L3W46r0-R3

☐ MA20-L1W30r1-R4

☐ MA20-L2W30r1-R4

☐ MA20-L3W30r1-R4

☐ MA20-L1W30r1-R5

☐ MA20-L2W30r1-R5

☐ MA20-L1W18K2A

☐ MA20-L2W18K2A

☐ MA20-L3W18K2A

☐ MA20-L3W30r1-R5

☐ MA20-L3W46r0-R5

□ MA20-L3W46r0-R4 □ MA21-L3W46r0-R4

☐ MA20-L3W46r0-R2

WATTS LUMENS 34W 4170

69W 7994

112W 11029

| 38W 4395

38W 4493

135W 12378

36W 4243

113W 11274

34W 776

51W 1164

NOTE: Above wattage values are based on 277V, tested at 25 C/ 77 F ambient temperature.

3- 3" tenon pole adaptor only required for 3" O.D. poles by others.

**LUMINIS** | Toll free: 866.586.4647 Fax: 514.683.8872 Email: info@luminis.com

260 Labrosse, Pointe-Claire (QC) Canada H9R 5L5

Wattage may vary by approx, +/- 10% for other voltages, or due to changes in ambient temperature.

AMBER LED LIGHT SELECTION INPUT DELIVERED WATTS LUMENS 17W 388

Type III 76W 8697 111W 11177

75W 8482

Type V 69W 7937

**OPTIONS** ELECTRICAL MOUNTING □ PH Photocell<sup>2</sup> ☐ AC8 Pole mount attachment with 45 Alternate CCT K LED (LCF: Lumen conversion ☐ FS Fuse<sup>2</sup> support □ SP Surge protector 10KV ☐ ACW Wall mount attachment with 45 ☐ K27 2700K CCT 80 CRI (LCF: 0.91) ☐ K3 3000K CCT 80 CRI (LCF: 0.94) ☐ EC8P Pole mounted attachment with ☐ K35 3500K CCT 80 CRI (LCF: 0.983) stacked arm ☐ K5 5000K CCT 80 CRI (LCF: 1.01) ☐ EC8PS Pole mounted attachment with short ACCESSORIES stacked arm (MA20 only) NOTE: Other CCT & higher CRI available, ☐ BLC Back light control please consult factory. ☐ EC8W Wall mount attachment with stacked arm

☐ EC8WS Wall mount attachment with short

stacked arm (MA20 only)

☐ TN3 3" Tenon pole adaptor<sup>3</sup> 1- If no voltage is specified, luminaires are factory prewired by default for 120V. For other voltages, please specify with catalog number, or consult

LUMINIS.COM

STANDARD COLORS

☐ WHT Snow white

☐ MST Matte silver

☐ DGT Gun metal

☐ CHT Champagne

OPTIONAL COLORS

CS Custom color

☐ RAL RAL# color

(Refer to color chart)

☐ SGT Steel Gray

☐ GRT Titanium gray

☐ BKT Jet black

☐ BZT Bronze

DESCRIPTION

POLE MOUNTED LED SITE LIGHT

**FIXTURE** 

POLE MOUNTED LED SITE LIGHT

**FIXTURE** 

POLE MOUNTED LED SITE LIGHT

**FIXTURE** 

WALL MOUNTED LED FIXTURE

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MANUFACTURER

LUMINIS

**LUMINIS** 

**LUMINIS** 

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LIGHTING FIXTURE SCHEDULE

**CATALOG NUMBER** 

MA21-L1W30R1-R5-XXX/PAA512

MA21-L3W30R1-R5-XXX/PAA520

MA21-L3W30R1-R2-BLC-XXX/PAA520

MA21-L1W30R1-R3/ACW

LUMINIS.COM

Pole series Pole series Pole series

# LAMP INPUT
VOLT LAMPS TYPE WATTS MOUNTING

4000K

LED

4000K

LED

4000K

LED

4000K

115W

ALUMINUM

POLE

20' ROUND

ALUMINUM

POLE

20' ROUND

ALUMINUM

POLE WALL

SURFACE AT

11.5' AFF

LUMINIS | Toll free: 866.586.4647 Fax: 514.683.8872 Email: info@luminis.com LUMINIS.COM 260 Labrosse, Pointe-Claire (QC) Canada H9R 5L5

MA20/MA21 SERIES MAYA - LED

EC8WS (Applicable for MA20 only)

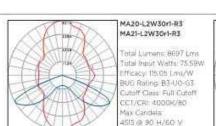
Set of (2) 1" X 3" (25X76) extruded aluminum

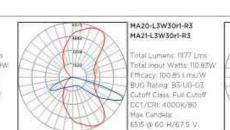
wall mount arms with cast aluminum wall plate.

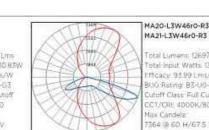
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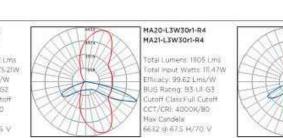
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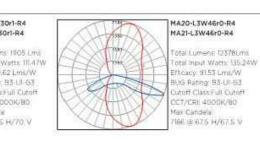


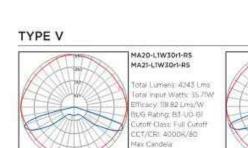


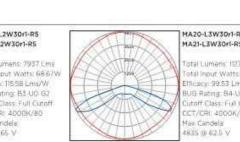


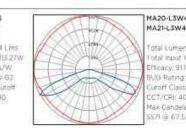












Please visit our web site www.luminis.com for complete I.E.S formatted download data:

All published photometric data are executed and certified by an independent testing laboratory

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# LUMINIS

WALL MOUNT

1" X 3" (25X76) extruded aluminum

natural stainless steel rod support.

extended arm wall mounting adaptor with

cast aluminum covers and galvanized steel

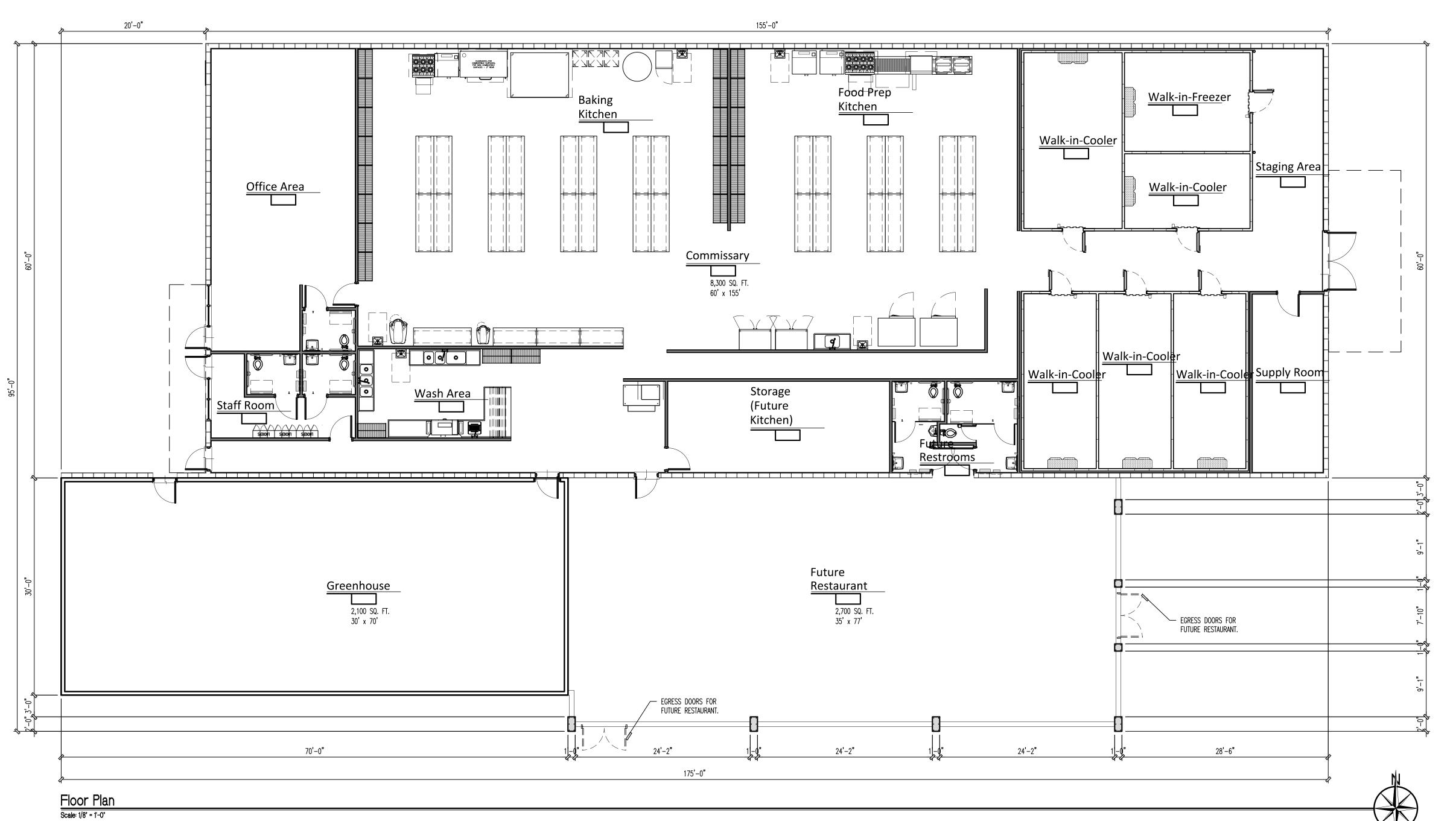
mounting plates. 1/2" dia. X 45 standard

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Corp Lic: AA-26001293
Robert Jordan Sopourn III
Arch Lic: AR-0017057

C: 954.753.0018
F: 954.346.7723
E: jordy@rjsarchitects.com

A DRC Submittal for:
The IceBox Cafe
and Culinary Center

Hallandale Beach, Florida 33009

THE FIRST PHASE OF CONSTRUCTION SHALL BE 'B'
OCCUPANCY. THIS PORTION OF WORK SHALL NOT
REQUIRE A FIRE SPRINKLER OR FIRE ALARM
SYSTEM.
THE SECOND PHASE OF CONSTRUCTION FOR THE
RESTAURANT SHALL BE 'A-2' OCCUPANCY. THIS
PORTION OF WORK WILL REQUIRE A FIRE SPRINKLER
IF THE OCCUPANCY LOADS EXCEEDS 100
OCCUPANTS. NO FIRE ALARM SHALL BE REQUIRED.

ISSUANCE OF DOCUMENTATION:

Description:

Date:

PRELIMINARY DESIGN 8.12.2016

CLIENT APPROVAL

LANDLORD APPROVAL

LANDLORD APPROVAL

DESCRIPTION OF THE PROPER SHORT OF THE PROPER SHORT

REVISIONS:
Number: Date: Description:

PRELIMINARY FLOOR PLAN

Project Number: Principal: RJS

Project Manager: RJS

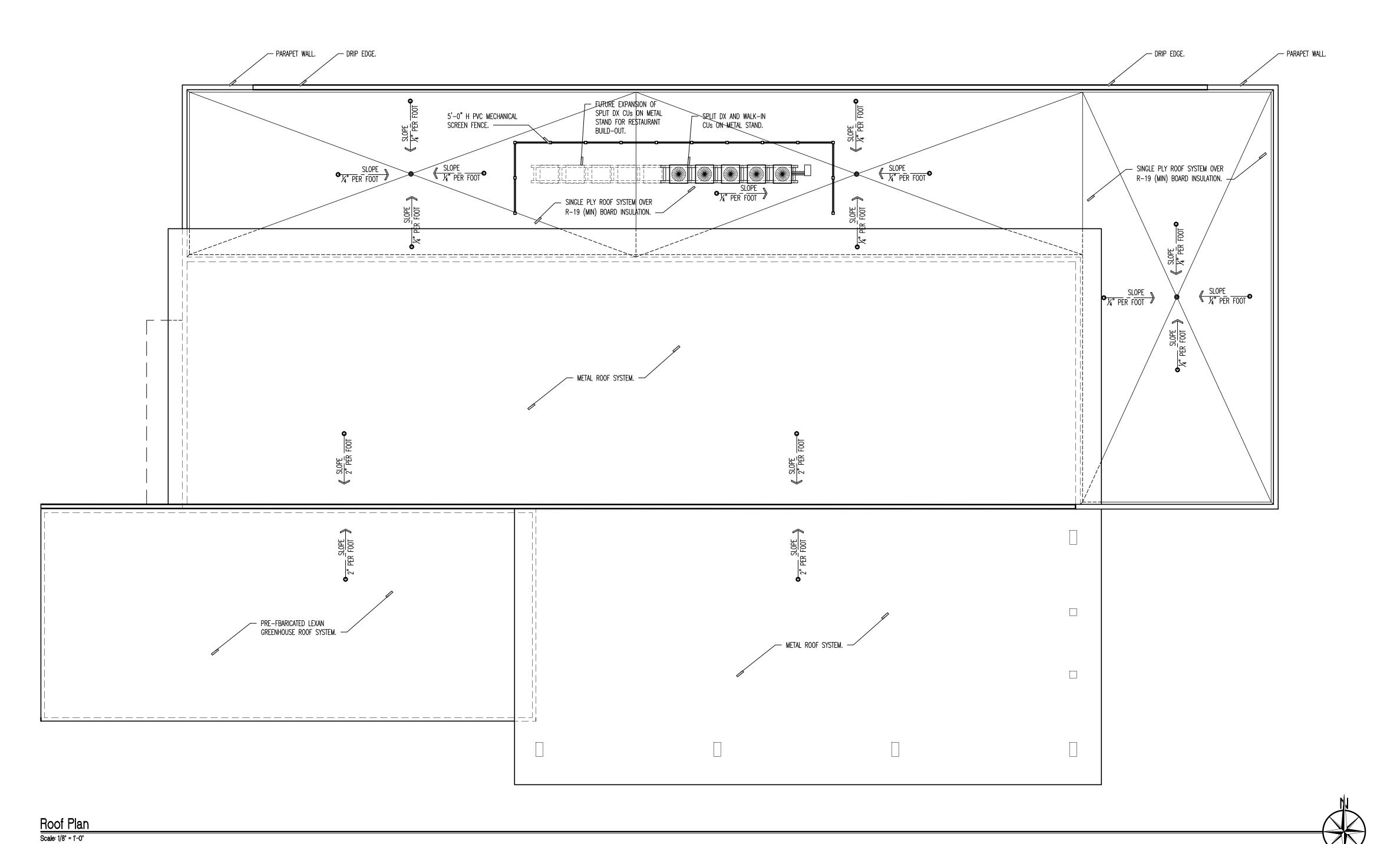
Drawn by: RJS

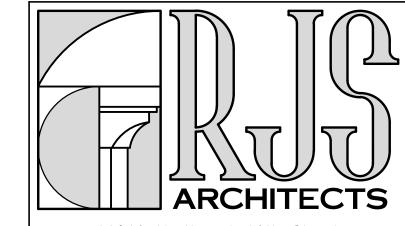
Robert Jordan Sopourn III Architect — AR—0017057

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**Architecture** 



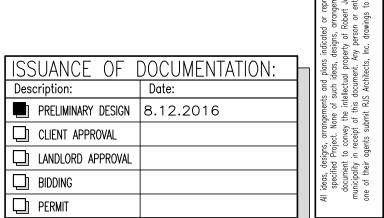


11019 Northwest 19th Street Coral Springs, Florida 33071

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Robert Jordan Sopourn III F: 954.346.7723
Arch Lic: AR-0017057 E: jordy@rjsarchitects.com

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PRELIMINARY ROOF PLAN

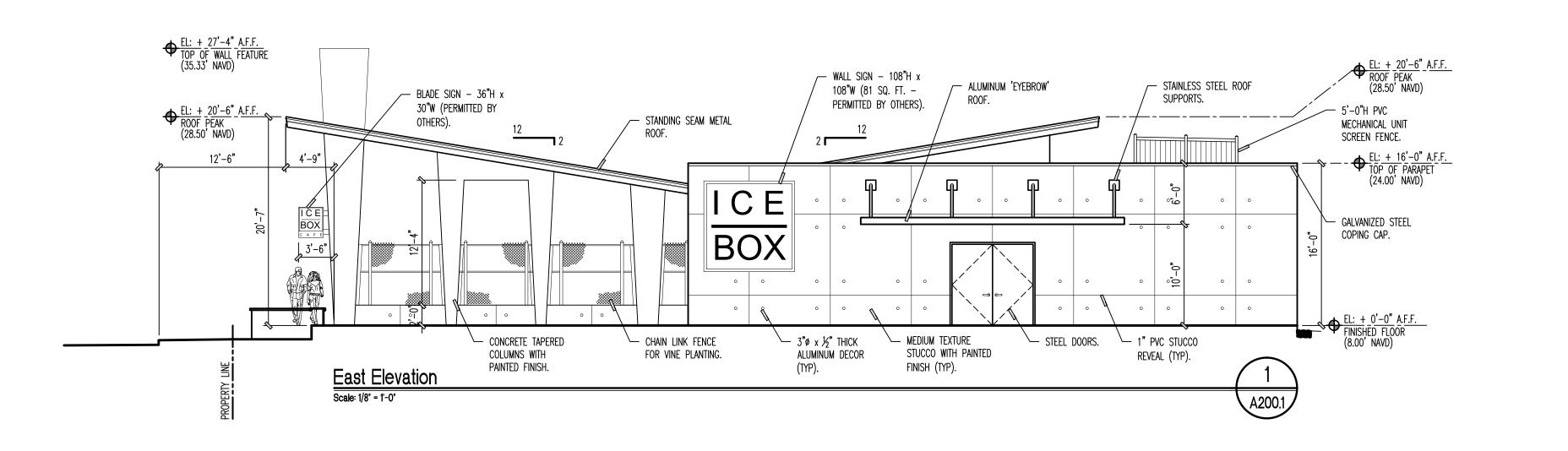
|   | Project Number: | Principal:       | RJS |
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|   | 16033           | Project Manager: | RJS |
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Robert Jordan Sopourn III
Architect - AR-0017057

Architecture

Architecture

Total Sheets: 7



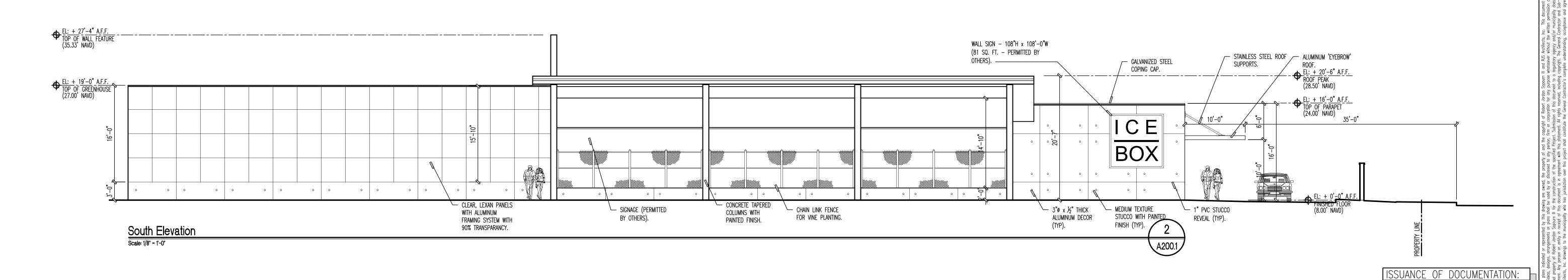


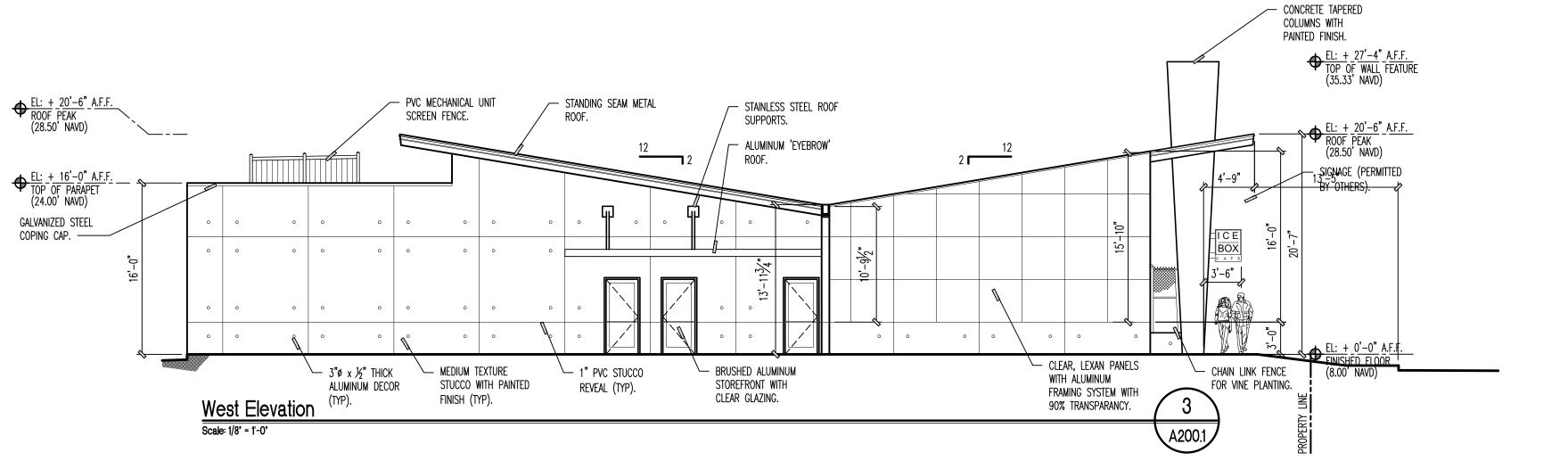
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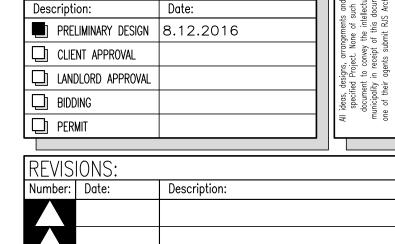
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PRELIMINARY EXTERIOR ELEVATIONS

Project Number: Principal: RJS

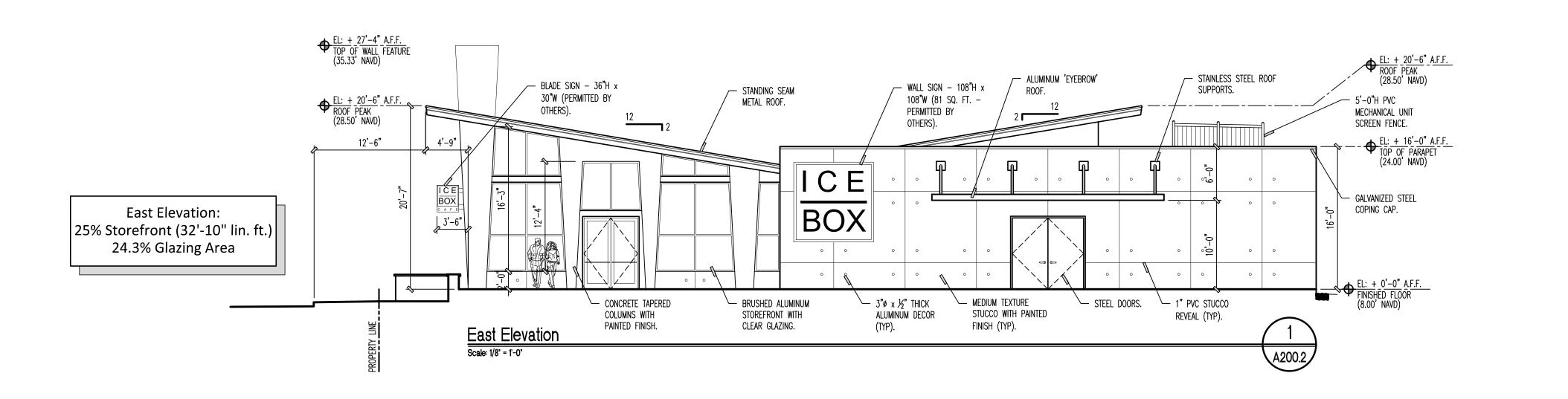
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| Robert Jordan Sopourn III | Architectu                  | re         |

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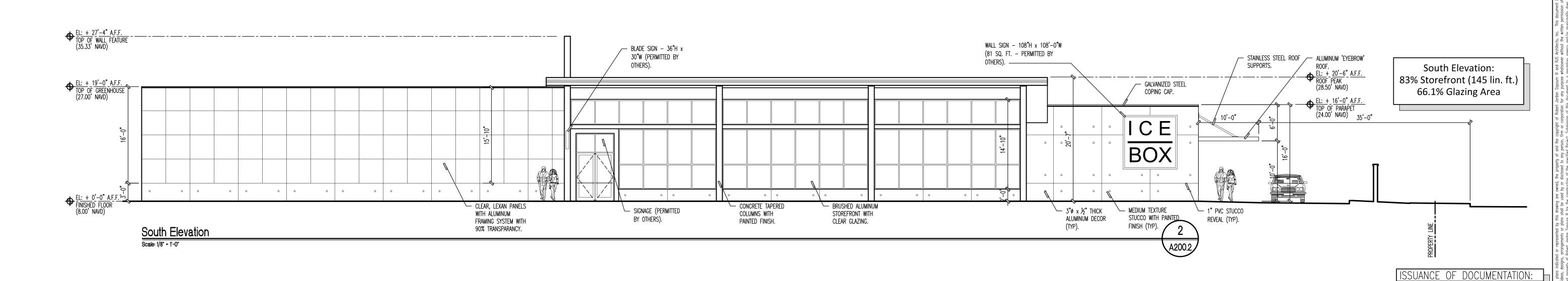




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CLIENT APPROVAL LANDLORD APPROVAL BIDDING ☐ PERMIT Number: Date: Description: FUTURE RESTAURANT

Date:

PRELIMINARY DESIGN 8.12.2016

Description:

PRELIMINARY EXTERIOR ELEVATIONS

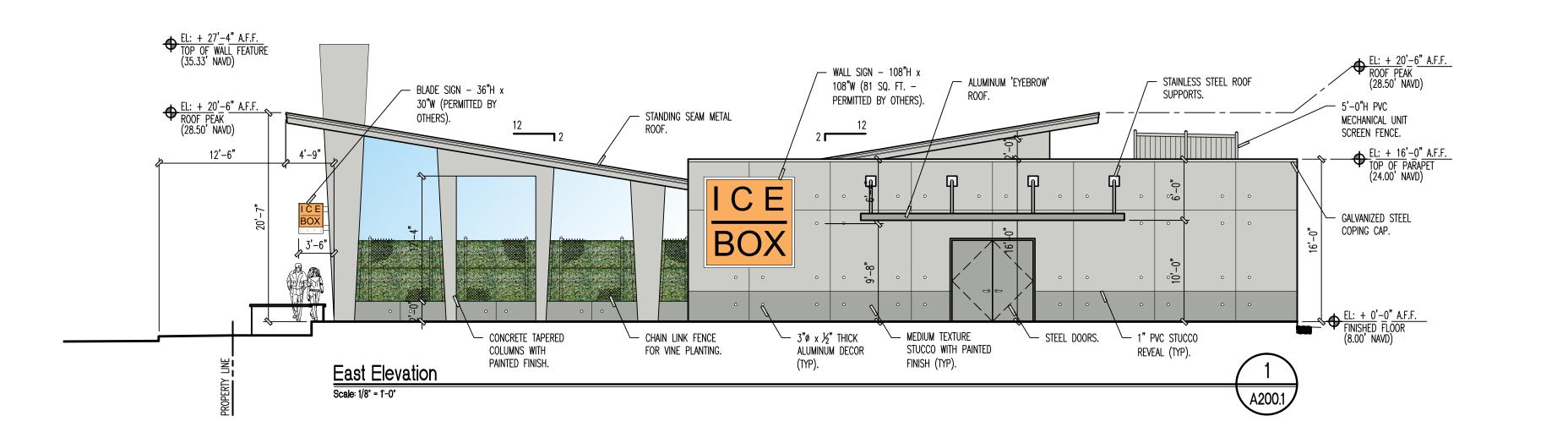
Project Number: Principal: Project Manager: Drawn by:

Robert Jordan Sopourn III Architect — AR—0017057

Date: 9/7/2016 11:18:54 AM

Architecture Total Sheets:

|  |   | CONCRETE TAPERED COLUMNS WITH PAINTED FINISH.                  |
|--|---|--|
|  |   | EL: + 27'-4" A.F.F. TOP OF WALL FEATURE (35.33' NAVD)          |
| ◆ EL: + 20'-6" A.F.F.  ROOF PEAK (28.50' NAVD)   | PVC MECHANICAL UNIT STANDING SEAM METAL STAINLESS STEEL ROOF SUPPORTS.  | EL: + 20'-6" A.F.F.  |
|  | 12 ALUMINUM 'EYEBROW' 12 ROOF. 2  | EL: + 20'-6" A.F.F.  ROOF PEAK (28.50' NAVD)                   |
| EL: + 16'-0" A.F.F. TOP OF PARAPET (24.00' NAVD) |   | 4'-9" +3BL\$DE SIGN - 36"H x<br>30"W (PERMITTED BY<br>OTHERS). |
| GALVANIZED STEEL<br>COPING CAP.                  |   |  |
| 16'-0"   |   | 3'-6"  |
|  |   |  |
| 4  | O O O O O O O O O O O O O O O O O O O   | EL: + 0'-0" A.F.F.   |
|  | 3" x ½" THICK MEDIUM TEXTURE 1" PVC STUCCO ALUMINUM DECOR STUCCO WITH PAINTED REVEAL (TYP).  WITH ALUMINUM STOREFRONT WITH CLEAR GLAZING.  WITH ALUMINUM FRAMING SYSTEM 90% TRANSPARANG | WITH CLEAR GLAZING.  |
|  | Scale: 1/8" = 1'-0"   | A200.2   |



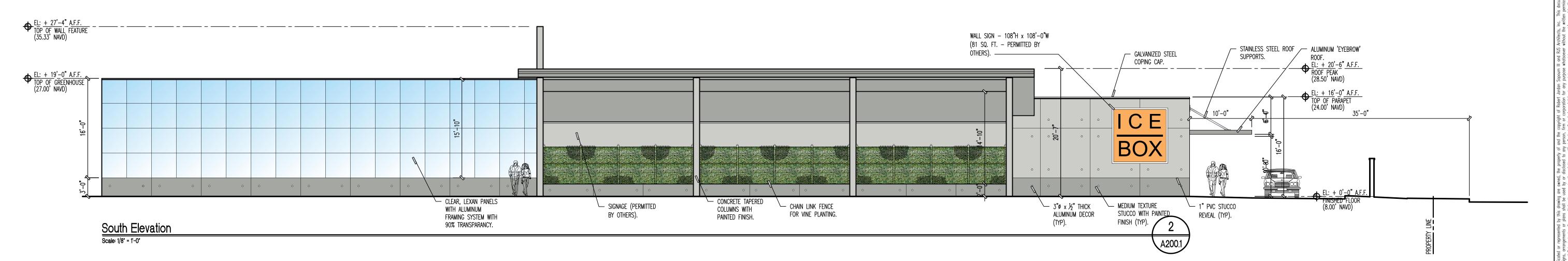


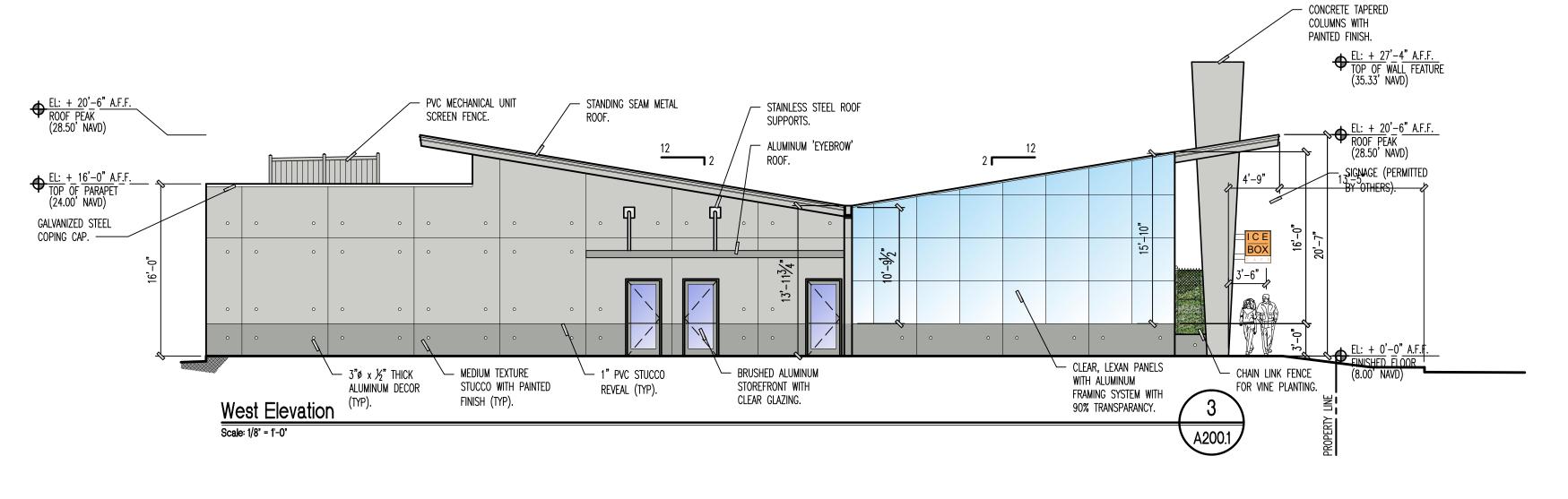
Corp Lic: AA-26001293
Robert Jordan Sopourn III
Arch Lic: AR-0017057

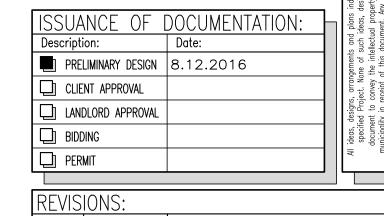
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F: 954.753.0018
F: 954.346.7723
E: jordy@rjsarchitects.com

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| Description: |
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COLORED EXTERIOR ELEVATIONS

Project Number: Principal: RJS

Project Manager: RJS

| 16033   | Project Manager: RJS Drawn by: RJS |
|---|------------------------------------|
| Robert Jordan Sopourn III<br>Architect — AR—0017057 | Architecture                       |

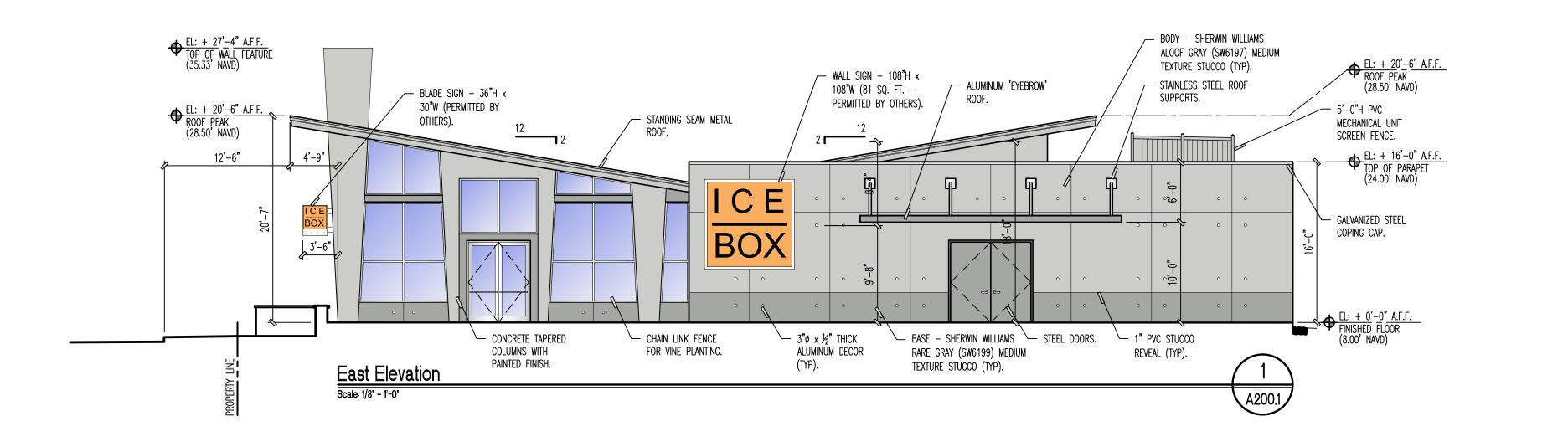
hitect - AR-0017057

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Date: 9/7/2016 11:18:19 AM

Total Sheets:



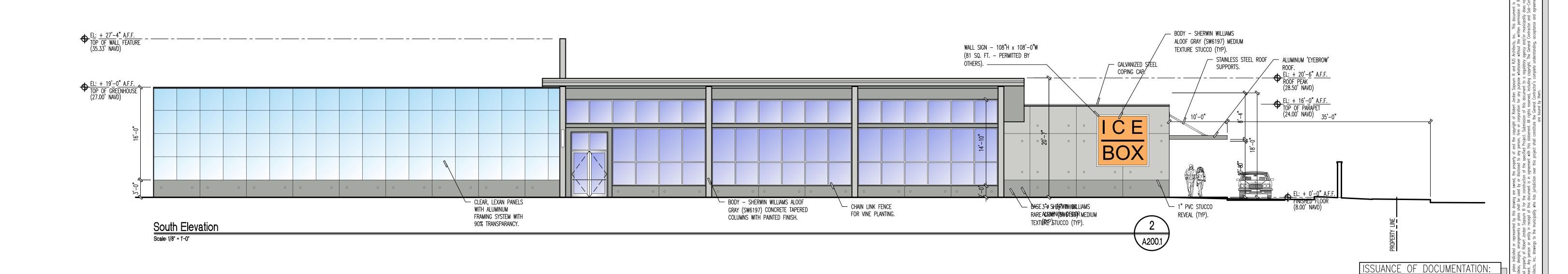


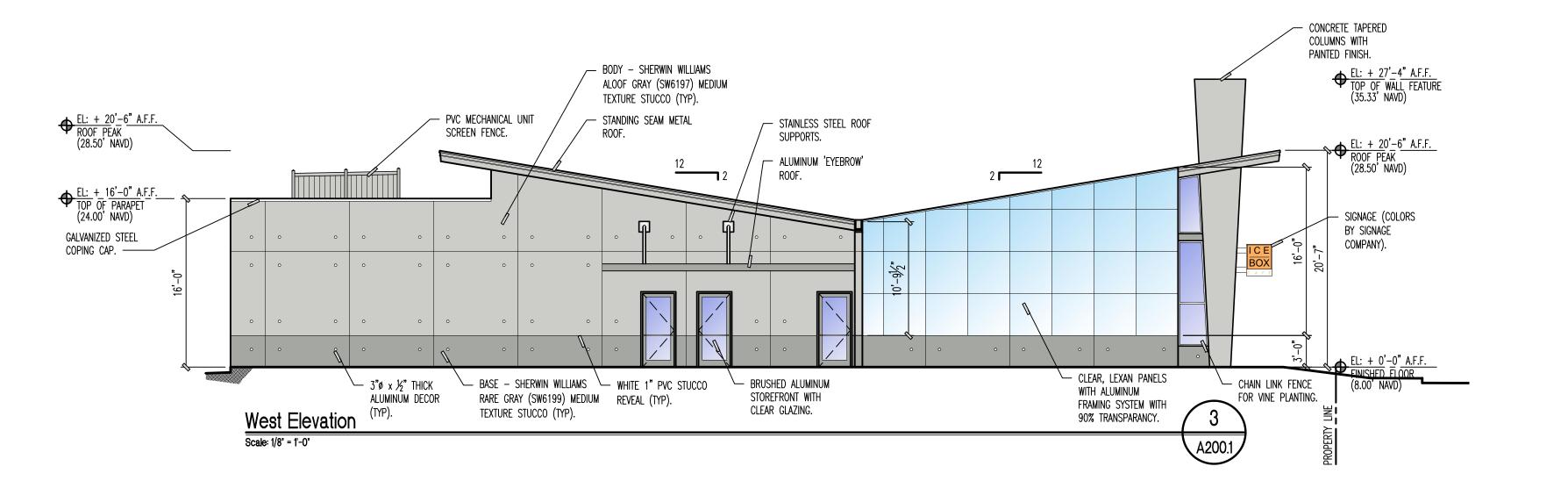
Corp Lic: AA-26001293
Robert Jordan Sopourn III
Arch Lic: AR-0017057

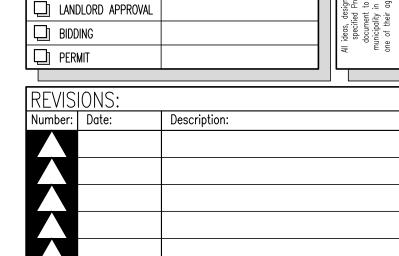
Corp Lic: AA-26001293
F: 954.753.0018
F: 954.346.7723
E: jordy@rjsarchitects.com

A DRC Submittal for:
The IceBox Cafe
and Culinary Center

Hallandale Beach, Florida 33009







Description:

CLIENT APPROVAL

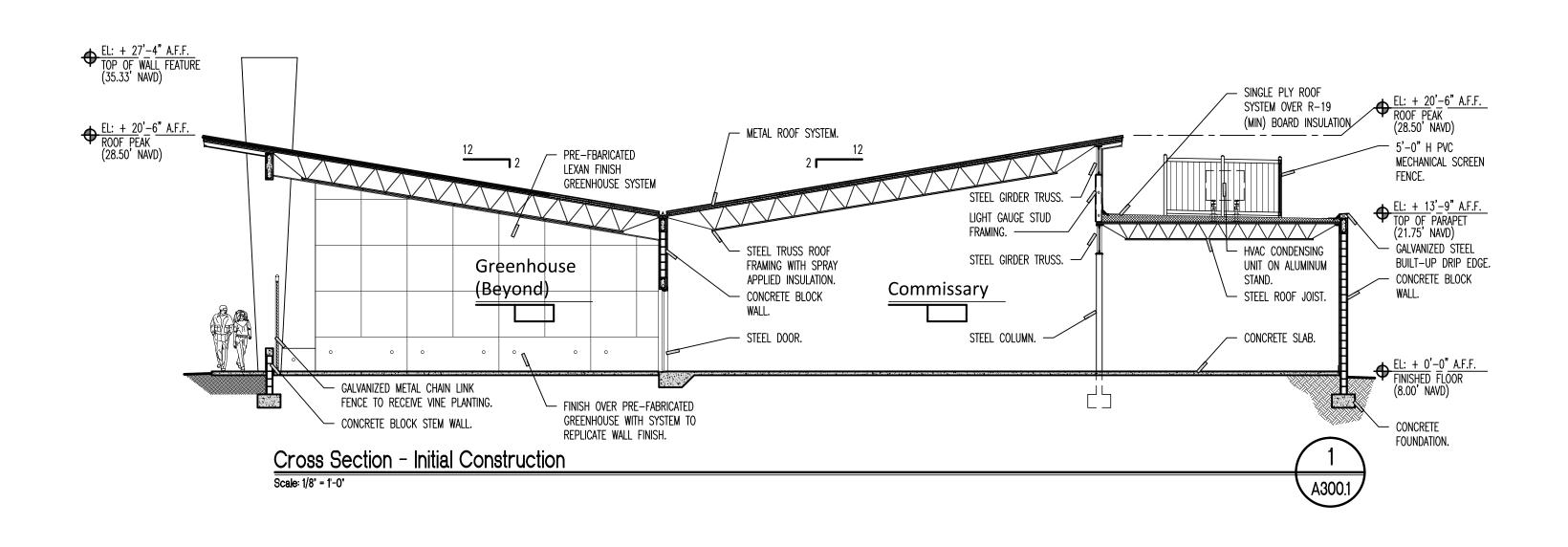
PRELIMINARY DESIGN 8.12.2016

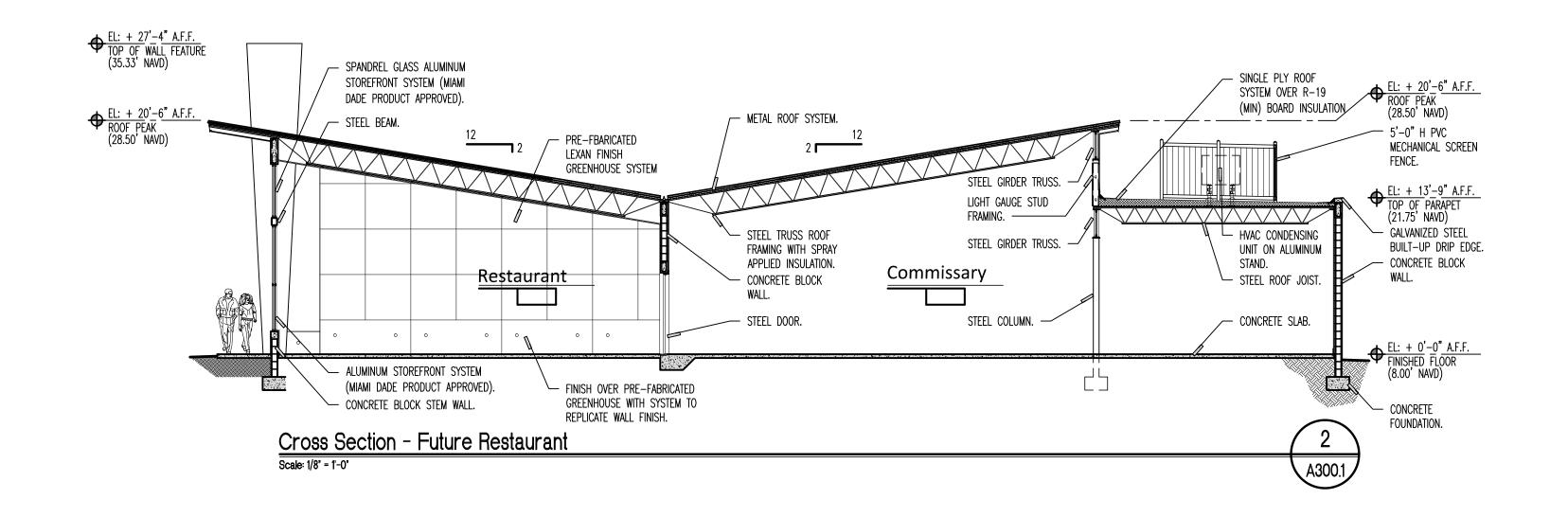
COLORED EXTERIOR ELEVATIONS

FUTURE RESTAURANT

| Project Number: | Principal:       | RJS |
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| 1 46055         | Project Manager: | RJS |
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| Robert Jordan Sopourn III<br>Architect — AR—0017057 | 1 | Architecture |         |  |
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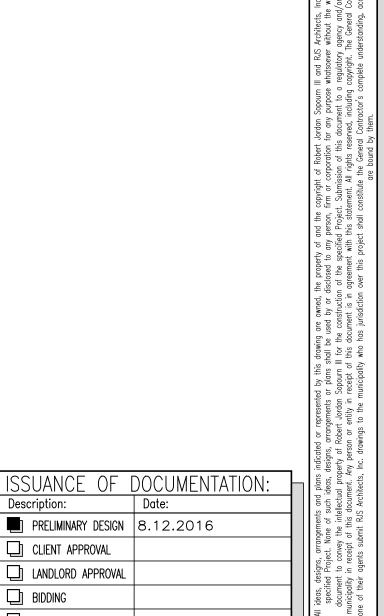




0: 954.753.0018 F: 954.346.7723 Corp Lic: AA—26001293 Robert Jordan Sopourn III Arch Lic: AR—0017057 : jordy@rjsarchitects.com

> A DRC Submittal for: The IceBox Cafe and Culinary Center

Hallandale Beach, Florida 33009



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Description:

BIDDING

PERMIT

CLIENT APPROVAL

LANDLORD APPROVAL

PRELIMINARY SECTIONS

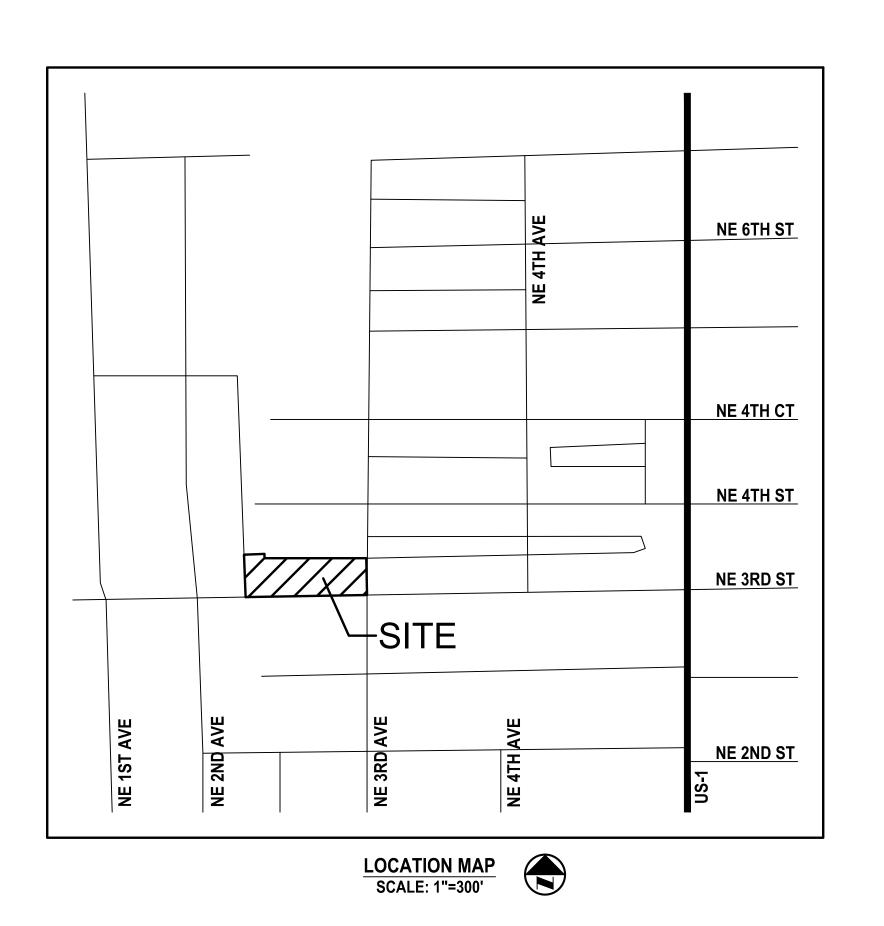
| Project Number: | Principal:       | RJS |
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| 16055           | Project Manager: | RJS |
| ПИЛИЛИПО        | Drawn by:        | RJS |
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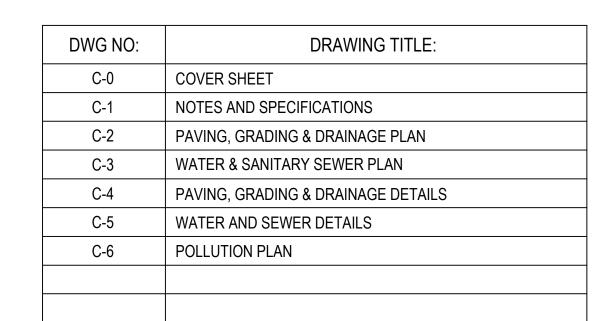
Robert Jordan Sopourn III Architect — AR—0017057 Architecture Total Sheets: Date: 9/7/2016 11:17:57 AM

# CIVIL ENGINEERING PLANS

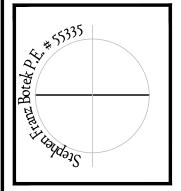
**FOR** 

# THE ICEBOX CAFE AND CULINARY CENTER HALLANDALE BEACH, FL SEC. 22, TWN. 51, RANGE 42





# DATE REVISIONS
7.18.16 DRC SET
A 8.17.16 DRC RESUB SET
B 9.7.16 SP REVIEW SUBMIT



E ICEBOX CAFE AND CULINARY
CENTER
NE 3rd St
Hallandale Beach, FL

Botek Thurlow

Engineering, Inc.
3409 NW 9th Avenue, Suite 1102, Ft. Lauderdale, FL 33309
www.botekthurlow-eng.com p: 954-568-0888 f: 954-568-0757

BTE PROJECT #: 16-0410

DATE: 07-08-16

SHEET #:

C-0

LEGAL DESCRIPTION

LOT 5 AND THE WEST 1/2 OF LOT 4, OF HALLANDALE HEIGHTS, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 23, PAGE 19 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

ANE

THE SOUTH 119.1 FEET OF BLOCK G OF RE—SUBDIVISION OF A PART OF BEN—MEL BY THE SEA, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 16, PAGE 3, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

## GENERAL NOTE

THIS CONSTRUCTION PROJECT MAY OR MAY NOT INCLUDE ALL ITEMS COVERED BY THESE NOTES AND SPECIFICATIONS IF PAVING GRADING DRAINAGE LINES WATER LINES, OR SANITARY SEWER LINES, SEE PLANS FOR DETAILED PROJECT SCOPE, NOTES AND SPECIFICATIONS ON THIS SHEET REFER TO PAVING GRADING DRAINAGE WATER AND SANITARY SEWER. AND ARE INTENDED FOR THIS PROJECTS SCOPE OF WORK AND FOR REFERENCE PURPOSES FOR OTHER WORK ITEMS THAT MAY BE REQUIRED DO TO UNFORESEEN EXISTING CONDITIONS OR REQUIRED REMEDIAL WORK

- "CITY" IN THESE NOTES REFERS TO THE CITY OF HALLANDALE BEACH "COUNTY" IN THESE NOTES REFERS TO BROWARD COUNT "STATE" IN THESE NOTES REFERS TO THE STATE OF FLORIDA
- ALL ELEVATIONS ON THE PLANS OR REFERENCED IN THE SPECIFICATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 NAVD), UNLESS OTHERWISE NOTED, SURVEYS PERFORMED BY CALVIN GIORDANO & ASSOCIATES AND GIBBS LAND SURVEYORS
- ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY, COUNTY AND ALL OTHER LOCAL, STATE AND NATIONAL CODES WHERE APPLICABLE.
- IN THE EVENT OF A CONFLICT BETWEEN THE GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS IN THESE PLANS, AND THE CONTRACT DOCUMENTS AND SPECIFICATIONS IN THE SPECIFICATION BOOKLET, THE CONTRACT DOCUMENTS AND SPECIFICATIONS IN THE SPECIFICATION BOOKLET SHALL GOVERN. IN THE EVENT OF A CONFLICT BETWEEN THESE CONTRACT DOCUMENTS AND THE CITY SPECIFICATIONS, THE CITY SPECIFICATIONS
- ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER AND IN STRICT COMPLIANCE WITH ALL THE REQUIREMENTS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND ALL STATE AND LOCAL SAFETY AND HEALTH REGULATIONS.
- THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH THE LAWS OF FLORIDA, AND THE CITY AND COUNTY CODES.
- ALL HANDICAP ACCESSIBLE AREAS TO CONFORM WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT, LATEST EDITION OR THE FLORIDA BUILDING CODE. THE STRICTER OF THE TWO WILL GOVERN.
- . ALL TRENCH EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 90-96 OF THE LAWS OF FLORIDA (THE TRENCH SAFETY ACT) 2. ALL TRENCH EXCAVATION IN EXCESS OF 5 FEET IN DEPTH SHALL BE UNDERTAKEN IN
- ACCORDANCE WITH O.S.H.A. STANDARD 29 CFR. SECTION 1926.650 SUBPART P. THE CONTRACTOR SHALL SUBMIT WITH HIS CONTRACT A COMPLETED, SIGNED, AND NOTARIZED COPY OF THE TRENCH SAFETY ACT COMPLIANCE STATEMENT, THE CONTRACTOR SHALL ALSO SUBMIT A SEPARATE COST ITEM IDENTIFYING THE COST OF
- COMPLIANCE WITH THE APPLICABLE TRENCH SAFETY CODES 4. A TRENCH SAFETY SYSTEM, IF REQUIRED, SHALL BE DESIGNED BY THE CONTRACTOR
- ASBESTOS CEMENT PIPE (ACP), AND TRANSIT PIPE, CONTAIN ASBESTOS MATERIAL. ALL ASBESTOS CONTAINING MATERIALS SHALL BE HANDLED AND DISPOSED OF IN ACCORDANCE WITH THE CURRENT LOCAL. STATE AND FEDERAL REGULATIONS. THIS INCLUDES THE CUTTING, PLUGGING AND DISPOSAL OF EXISTING ACP OR TRANSITE WATER
- PRECONSTRUCTION RESPONSIBILITIES
- UPON THE RECEIPT OF THE "NOTICE TO PROCEED". THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD AND ARRANGE A PRECONSTRUCTION CONFERENCE TO INCLUDE ALL INVOLVED GOVERNMENTAL AGENCIES, UTILITY OWNERS AND THE ENGINEER
- THE CONTRACTOR SHALL NOTIFY AND OBTAIN AN UNDERGROUND CLEARANCE FROM AL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES AT LEAST 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN A SUNSHINE STATI ONE CALL OF FLORIDA, INC. CERTIFICATION CLEARANCE NUMBER AND FIELD MARKINGS AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION. CALL 1-800-432-4770 (FPL 305-347-3900) . CLEARANCE SHALL BE FOR ALL UTILITIES INCLUDING GAS, ELECTRIC TELEPHONE. CABLE TELEVISION. WATER. AND SEWER. TRAFFIC LIGHT COMMUNICATION CABLES, ETC. ON BOTH PUBLIC AND PRIVATE PROPERTY IN THE VICINITY OF THE CONSTRUCTION PROJECT. INCLUDING THE FOLLOWING UTILITY COMPANIES. WHERE

## FLORIDA POWER AND LIGHT COMPANY

- LOCAL GAS COMPANY-LOCAL WATER AND SEWER UTILITY COMPANY(S)-
- LOCAL CABLE TELEVISION COMPANY(S)-CITY OF FORT LAUDERDALE ENGINEERING DEPARTMENT. BROWARD COUNTY ENGINEERING DEPARTMENT-
- BROWARD COUNTY TRAFFIC ENGINEERING DEPARTMENT-FLORIDA DEPARTMENT OF TRANSPORTATION-SUNSHINE STATE ONE CALL OF FLORIDA (1-800-432-4770)
- FOR STREET EXCAVATION OR CLOSING OR FOR ALTERATION OF ACCESS TO PUBLIC OR OCAL POLICE TRAFFIC SERGEAN LOCAL FIRE DEPARTMENT DISPATCH
- THE CONTRACTOR SHALL LISE EXTREME CALITION WORKING LINDER OVER AND AROUND EXISTING ELECTRIC LINES. THE CONTRACTOR SHALL CONTACT THE ELECTRIC SUPPLY COMPANY TO VERIFY LOCATIONS, VOLTAGE AND REQUIRED CLEARANCES, ONSITE, IN RIGHT-OF-WAYS AND IN EASEMENTS, PRIOR TO ANY CONSTRUCTION IN THE VICINITY OF
- ALL UTILITY / ACCESS EASEMENTS TO BE SECURED PRIOR TO CONSTRUCTION.
- LOCATION AND SIZE OF ALL EXISTING UTILITIES AND TOPOGRAPHY (FACILITIES) AS SHOWN ON CONSTRUCTION DRAWINGS ARE DRAWN FROM AVAILABLE RECORDS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE FACILITIES SHOWN OR FOR ANY FACILITY NOT SHOWN IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION (VERTICAL & HORIZONTAL) OF ANY EXISTING UTILITIES AND TOPOGRAPHY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY TH ELEVATIONS AND LOCATIONS OF ALL EXISTING FACILITIES, BY ELECTRONIC METHODS, VACUUM EXCAVATION. TEST HOLES AND BY HAND EXCAVATIONS AS REQUIRED. IN COORDINATION WITH ALL UTILITY COMPANIES. PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED. IF AN EXISTING FACILITY IS FOUND TO CONFLICT WITH THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD SO THAT APPROPRIATE MEASURES CAN BE TAKEN TO RESOLVE THE CONFLICT
- NO CONSTRUCTION MAY COMMENCE UNTIL THE APPROPRIATE PERMITS HAVE BEEN OBTAINED FROM ALL LOCAL, STATE, AND FEDERAL AGENCIES.
- ALL REQUIRED GOVERNMENTAL AGENCY BUILDING PERMITS TO BE OBTAINED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL BI RESPONSIBLE TO PAY ALL ASSOCIATED PERMIT FEES INCLUDING WATER AND SEWER CONNECTION AND METER FEES. THE CONTRACTOR SHALL PROVIDE THE OWNER COPIES OF THE MAIN BUILDING PERMIT FEES. THE WATER AND SEWER CONNECTION AND METER FEES TO THE BUILDINGS AND THE FPL CONNECTION AND METER FEES TO THE BUILDINGS THE OWNER WILL PAY AND WRITE CHECKS DIRECTLY TO THE CITY. COUNTY OR FPL FOR THE EXACT AMOUNTS ONLY, ALL TEMPORARY PERMITS FOR TRAILERS, WATER. ELECTRIC ETC. WILL BE PAID FOR BY THE CONTRACTOR, SUBCONTRACTOR PERMITS WILL BE PAID FOR BY THE SUBCONTRACTORS.
- CONTRACTOR TO COORDINATE CONSTRUCTION SCHEDULING FOR CONNECTION TO THE EXISTING WATER AND SEWER LINES WITH THE UTILITY DEPARTMENT THAT OWNS AND/OR MAINTAINS THE WATER AND SEWER LINES.
- THE CONTRACTOR SHALL COORDINATE THE WORK WITH OTHER CONTRACTORS IN THE AREA AND ANY OTHER UNDERGROUND CONDUIT REQUIRED FOR FP&L BELL SOUTH IRRIGATION SYSTEM, ETC., PRIOR TO BEGINNING SUBGRADE, THE CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING UTILITIES WITH APPLICABLE UTILITY
- AT LEAST TWO (2) DAYS PRIOR TO THE START OF CONSTRUCTION, THE OWNER SHALL SUBMIT A CGP "NOTICE OF INTENT (N.O.I.) TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES THAT DISTURB ONE OR MORE ACRES OF LAND" FORM (DEP FORM 62-621.300(4)(B)) TO FDEP NOTICES CENTER AS WELL AS A COPY TO THE CITY OF FT. LAUDERDALE. THE CONTRACTOR WILL BE RESPONSIBLE FOR (1) IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) THA WAS REQUIRED TO BE DEVELOPED PRIOR TO NOI SUBMITTAL, AND (2) RETENTION OF RECORDS REQUIRED BY THE PERMIT. INCLUDING RETENTION OF A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL SITE STABILIZATION. A "NOTICE OF TERMINATION (N.O.T.) OF GENERIC PERMIT COVERAGE" FORM (DEP FORM 62-621.300(6)) MUST BE SUBMITTED TO FDEP TO DISCONTINUE PERMIT COVERAGE. SUBSEQUENT TO COMPLETION OF CONSTRUCTION. FOR ADDITIONAL INFORMATION SEE FDEP WEBSITE: http://www.dep.state.fl.us/water/stormwater/npdes/index.htm
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ALL ACTIVITIES RELATED TO DEWATERING PERMITS, INCLUDING DESIGN PLANS.

# V. <u>INSPECTIONS / TESTING:</u>

- THE CONTRACTOR SHALL NOTIFY IN WRITING THE CITY, THE COUNTY, THE ENGINEER OF RECORD, & ANY OTHER GOVERNMENTAL AGENCIES HAVING JURISDICTION AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO REQUIRED INSPECTIONS OF THE FOLLOWING ITEMS, WHERE APPLICABLE:
- CLEARING AND EARTHWORK STORM DRAINAGE SYSTEMS

- SANITARY SEWER SYSTEMS WATER DISTRIBUTION SYSTEMS
- LIMEROCK BASE
- ASPHALT OR CONCRETE PAVEMENT SIDEWALKS LANDSCAPING

FINAL

- SITE LIGHTING . ELECTRICAL AND COMMUNICATION LINES
- . UTILITY CONDUITS . IRRIGATION
- B. THE OWNER, ENGINEER AND LOCAL PERMITTING AGENCIES MAY MAKE INSPECTIONS OF THE WORK AT ANY TIME. THE CONTRACTOR SHALL COOPERATE FULLY WITH ALL INSPECTIONS
- TESTING ALL TESTING REQUIRED BY THE PLANS AND SPECIFICATIONS SHALL BE PERFORMED BY AN INDEPENDENT LICENSED TESTING COMPANY. ALL TESTING COSTS (SITE CIVIL) SHALL BE PAID FOR BY THE CONTRACTOR (AS SPECIFIED IN THE CONSTRUCTION CONTRACT), EXCEPT THOSE TESTS FAILING TO MEET THE SPECIFIED REQUIREMENTS, WHICH ARE TO BE PAID BY THE CONTRACTOR UNLESS OTHERWISE INDICATED ON THE PLANS OR SPECIFICATIONS, REQUIRED TEST FOR ASPHALT AND LIMEROCK SHALL BE TAKEN AT THE DIRECTION OF THE ENGINEER OR THE LOCAL GOVERNMENTAL AGENCY.
- PRIOR TO CONSTRUCTION OR INSTALLATION, 5 SETS OF SHOP DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD FOR THE FOLLOWING (IF APPLICABLE): LIFT/ PUMP STATION EQUIPMENT, SANITARY MANHOLES, CATCH BASINS, FIRE HYDRANTS, VALVES, PIPE MATERIAL AND ALL REQUIRED ACCESSORIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY APPROVALS IF

## VI. TEMPORARY FACILITIES

- 1. THE CONTRACTOR MUST HAVE A TEMPORARY TRAILER ON SITE FOR AN OFFICE AND TO
- 2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, COMMUNICATIONS AND FLECTRICITY
- B. TRAFFIC REGULATION:
  - MAINTENANCE OF TRAFFIC IN THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.). A MAINTENANCE OF TRAFFIC PLAN MUST BE APPROVED BY THE GOVERNMENTAL ENGINEERING DIVISION HAVING JURISDICTION FOR THE SECTION OF ROADWAY BEFORE STARTING WORK IN THE PUBLIC RIGHT-OF-WAY.
- ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.
- NO TRENCHES OR HOLES NEAR WALKWAYS. IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS, UNLESS IN ACCORDANCE WITH METHODS APPROVED BY THE GOVERNMENTAL ENGINEERING DIVISION HAVING JURISDICTION FOR
- 4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR FOR ANY NECESSARY CONSTRUCTION, PAVEMENT MARKING AND SIGNAGE OR PEDESTRIAN SIGNALIZATION AND/OR SIGNAL MODIFICATION TO ACCOMMODATE AN ALTERNATE SAFE WALK ROUTE.
- 5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE CONTINUOUS ACCESS TO THE ADJACENT SITES DURING CONSTRUCTION.
- CONTRACTOR SHALL CONSTRUCT TEMPORARY FENCING TO SECURE THE SITE AT ALL

THE CONTRACTOR'S ONSITE FOUIPMENT STOCKPILED MATERIAL AND SUPPLIES SHALL

BE KEPT IN A SECURE FENCED AND LOCKED LOCATION WHEN CONTRACTOR IS NOT

# VII. PROJECT PROGRESS AND CLOSEOUT

- 1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER, AND UPON FINAL CLEAN-UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE BROOM SWEPT CLEAN.
- THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED BY THE ENGINEER OF RECORD, ANY PUBLIC OR PRIVATE PROPERTY (HIGHWAY, DRIVEWAY, WALK AND LANDSCAPING. ETC.). DAMAGED BY HIS WORK. EQUIPMENT. OR EMPLOYEES TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.
- WHERE MATERIAL OR DERRIS HAS WASHED OR ELOWED INTO OR HAS REEN PLACED IN WATER COURSES, DITCHES, DRAINS, CATCH BASINS, OR FLISEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS SUCH MATERIAL OR DEBRIS SHALL BE REMOVED. AND SATISFACTORILY DISPOSED OF DURING THE PROGRESS OF THE WORK AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION.
- ALL LAND SURVEY PROPERTY MONUMENTS OR PERMANENT REFERENCE MARKERS, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S
- ALL UNPAYED SURFACES DISTURBED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED BEFORE THE CONSTRUCTION.
- PROJECT RECORD DOCUMENTS:
- DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE EXACT LOCATION, LENGTH, MATERIAL AND ELEVATION OF ANY FACILITY NOT BUILT EXACTLY ACCORDING TO PLANS.
- UPON COMPLETION OF DRAINAGE IMPROVEMENTS AND LIMEROCK BASE CONSTRUCTION (AT LEAST 48 HOURS BEFORE PLACING ASPHALT PAVEMENT) THE CONTRACTOR SHALL FURNISH THE ENGINEER OF RECORD "AS-BUILT" PLANS FOR THESE IMPROVEMENTS. SHOWING THE LOCATIONS AND PERTINENT GRADES OF ALL DRAINAGE INSTALLATIONS AND THE FINISHED ROCK GRADES OF THE ROAD CROWN AND EDGES OF PAVEMENT AT 50 FOOT INTERVALS, INCLUDING LOCATIONS AND
- ELEVATIONS OF ALL HIGH AND LOW POINTS. UPON COMPLETION OF CONSTRUCTION, AND PRIOR TO FINAL PAYMENT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD ONE COMPLETE SET OF ALL "AS-BUILT" CONTRACT DRAWINGS. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES AND DIMENSIONS, LOCATIONS, AND ELEVATIONS
- OF ALL IMPROVEMENTS. AS-BUILTS OF WATER LINES SHALL INCLUDE THE FOLLOWING INFORMATION:
- a. TOP OF PIPE ELEVATIONS EVERY 100 LF. b. LOCATIONS AND ELEVATIONS OF ALL FITTINGS INCLUDING BENDS, TEES, VALVES, DOUBLE DETECTOR CHECK VALVES, FIRE HYDRANTS, ETC. c. ALL TIE INS TO EXISTING LINES SHALL BE AS-BUILT. d. THE TAP AND TERMINAL END AT ALL WATER SERVICES SHALL BE AS-BUILT
- e. AS BUILT DATA SHALL INCLUDE GPS DATA. AS-BUILTS OF ALL GRAVITY SANITARY SEWER LINES SHALL INCLUDE THE FOLLOWING
- a. RIMS, INVERTS AND LENGTH OF PIPING BETWEEN STRUCTURES AS WELL AS SLOPES. b. THE TAP AND STUB ENDS OF ALL SEWER LATERALS SHALL BE LOCATED AND IF THERE ARE ANY CLEANOUTS INSTALLED ON THE SEWER LATERALS THEN THE INVERT ELEVATION OF THESE CLEANOUTS SHALL BE OBTAINED. c. LIFT STATION AS-BUILTS SHALL CONSIST OF TOP OF WET WELL ELEVATION, INVERT ELEVATION OF THE INCOMING LINE, BOTTOM OF THE WET WELL AND AS-BUILTS OF THE COMPOUND AREA
- 5. FORCE MAIN AS-BUILTS SHALL BE PREPARED THE SAME AS THE WATER LINE AS-BUILTS.
- 6. AS-BUILTS OF ALL DRAINAGE LINES SHALL INCLUDE THE FOLLOWING INFORMATION:

d. AS BUILT DATA SHALL INCLUDE GPS DATA.

- a. RIMS, INVERTS AND LENGTH OF PIPING BETWEEN STRUCTURES AND WEIR ELEVATIONS b. THE SIZE OF THE PIPING SHALL BE VERIFIED BY THE SURVEY CREW AT THE TIME OF AS-BUILT. DRAINAGE WELL STRUCTURE AS-BUILTS SHALL INCLUDE. BUT NOT BE LIMITED TO. TOP OF CASING ELEVATION, TOP AND BOTTOM ELEVATIONS OF THE BAFFLE WALLS, RIM ELEVATIONS AND INVERTS OF PIPING.
- 7. ALL ROCK AS-BUILTS FOR PARKING LOT AREAS SHALL CONSIST OF THE FOLLOWING:
- a. ROCK ELEVATIONS AT ALL HIGH AND LOW POINTS, AND AT ENOUGH INTERMEDIATE POINTS TO CONFIRM SLOPE CONSISTENCY. b. ROCK AS-BUILTS SHALL BE TAKEN AT ALL LOCATIONS WHERE THERE IS A FINISH GRADE ELEVATION SHOWN ON THE DESIGN PLANS. c. ALL CATCH BASIN AND MANHOLE RIM ELEVATIONS SHALL BE SHOWN
- d ELEVATIONS AROUND ISLAND AREAS WILL ALSO BE REQUIRED e. WHERE CONCRETE IS TO BE USED AS A FINISHED PRODUCT FOR THE ROADWAY OR PARKING LOT ROCK AS-BUILTS WILL BE REQUIRED AS INDICTED ABOVE AS WELL AS

- AS-BUILTS ON THE FINISHED CONCRETE AT LOCATIONS WHERE THERE IS A FINISH GRADE ELEVATION SHOWN ON THE DESIGN PLANS AS-BUILTS SHALL BE TAKEN ON ALL PAVED AND UNPAVED SWALES. PRIOR TO PLACEMENT OF ASPHALT OR TOPSOIL/SOD, AT ENOUGH INTERMEDIATE POINTS TO
- LAKE AND CANAL BANK AS-BUILTS SHALL INCLUDE A KEY SHEET OF THE LAKE FOR THE LOCATION OF CROSS SECTIONS. LAKE AND CANAL BANK CROSS SECTIONS SHALL BE PLOTTED AT A MINIMUM OF EVERY 100 LF, UNLESS OTHERWISE SPECIFIED. AS-BUILTS SHALL CONSIST OF THE LOCATION AND ELEVATION OF THE TOP OF BANK, EDGE OF WATER AND THE DEEP CUT LINE, WITH THE DISTANCE BETWEEN EACH SHOWN ON THE
- RETENTION AREA AS-BUILT FLEVATIONS SHALL BE TAKEN AT THE BOTTOM OF THE RETENTION AREA AND AT THE TOP OF BANK IF THERE ARE CONTOURS INDICATED ON THE DESIGN PLANS, THEN THEY SHALL BE AS-BUILT AS WELL

CONFIRM SLOPE CONSISTENCY AND CONFORMANCE TO THE PLAN DETAILS.

10. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PREPARE RECORD DRAWINGS. "AS-BUILTS". ON FULL SIZE, 24" X 36" REPRODUCIBLE MATERIAL, ALL RECORD DRAWING. "AS-BUILT". INFORMATION SHALL BE PUT ON THE LATES" ENGINEERING DRAWINGS. ONE (1) SET OF REPRODUCIBLE RECORD DRAWINGS, "AS-BUILTS", SHALL BE SUBMITTED ALONG WITH THREE (3) SETS OF BLUE OR BLACK LINE DRAWINGS THESE DRAWINGS SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL LAND SURVEYOR, ADDITIONALLY, AN ELECTRONIC COPY OF THESE RECORD DRAWINGS. "AS-BUILTS". SHALL BE SUBMITTED TO THE ENGINEER OF RECORD IN AUTOCAD, VERSION 2000.

- IT IS THE INTENT OF THESE SPECIFICATIONS TO DESCRIBE THE MINIMUM ACCEPTABLE TECHNICAL REQUIREMENTS FOR THE MATERIALS AND WORKMANSHIP FOR CONSTRUCTION OF SITE IMPROVEMENTS FOR THIS PROJECT.
- B. IT IS THE INTENT THAT THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION: (CURRENT EDITION) TOGETHER WITH "SUPPLEMENTAL SPECIFICATIONS TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (CURRENT EDITION), AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (CURRENT EDITION) BE USED WHERE APPLICABLE FOR THE VARIOUS WORK, AND THAT WHERE SUCH WORDING THEREIN REFERS TO THE STATE OF FLORIDA AND ITS DEPARTMENT OF TRANSPORTATION AND PERSONNEL. SUCH WORDING IS INTENDED TO BE REPLACED WITH THE WORDING WHICH WOULD PROVIDE PROPER TERMINOLOGY; THEREBY MAKING SUCH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" TOGETHER WITH THE "FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS" AS THE "STANDARD SPECIFICATIONS" FOR THIS PROJECT, IF WITHIN A PARTICULAR SECTION ANOTHER SECTION ARTICLE OR PARAGRAPH IS REFERRED TO IT SHALL BE PART OF THE STANDARD SPECIFICATIONS ALSO THE CONTRACTOR SHALL ARIDE BY ALL LOCAL AND STATE LAWS, REGULATIONS AND BUILDING CODES WHICH HAVE JURISDICTION IN THE AREA.
- THE CONTRACTOR SHALL FURNISH ALL LABOR. MATERIALS AND EQUIPMENT AND PERFORM ALL OPERATIONS REQUIRED TO COMPLETE THE CONSTRUCTION OF SITE DEVELOPMENT INCLUDING PAVING, GRADING, DRAINAGE, WATER AND SANITARY SEWER AS SHOWN ON THE PLANS, SPECIFIED HEREIN, OR BOTH, IT IS THE INTENT TO PROVIDE A COMPLETE AND OPERATING FACILITY IN ACCORDANCE WITH THESE SPECIFICATIONS AND THE CONSTRUCTION DRAWINGS. THE MATERIAL AND EQUIPMENT SHOWN OR SPECIFIED SHALI NOT BE TAKEN TO EXCLUDE ANY OTHER INCIDENTALS NECESSARY TO COMPLETE THE
- ALL LABOR, MATERIALS, AND METHODS OF CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE PLANS AND CONSTRUCTION SPECIFICATIONS AND THE MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS ADOPTED BY THE UNIT OF GOVERNMENT WHICH HAS JURISDICTION AND RESPONSIBILITY FOR THE CONSTRUCTION. WHERE CONFLICTS OR OMISSIONS EXIST, THE JURISDICTIONAL GOVERNMENT ENGINEERING DEPARTMENT'S STANDARDS SHALL GOVERN. SUBSTITUTIONS AND DEVIATIONS FROM PLANS AND SPECIFICATIONS SHALL BE PERMITTED ONLY WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER.
- GUARANTEE ALL MATERIALS AND EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR UNDER THIS CONTRACT, SHALL BE GUARANTEED FOR A PERIOD OF (1) ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE THEREOF, AGAINST DEFECTIVE MATERIALS, DESIGN AND WORKMANSHIP. UPON RECEIPT OF NOTICE FROM THE OWNER OF FAILURE OF ANY PART OF THE GUARANTEED EQUIPMENT OR MATERIALS. DURING THE GUARANTEE PERIOD, THE AFFECTED PART OR MATERIALS SHALL BE REPLACED PROMPTLY WITH NEW PARTS OR MATERIALS BY THE CONTRACTOR, AT NO EXPENSE TO THE OWNER. IN THE EVENT THE CONTRACTOR FAILS TO MAKE NECESSARY REPLACEMENT OR REPAIRS WITHIN (7) SEVEN DAYS AFTER NOTIFICATION BY THE OWNER, THE OWNER MAY ACCOMPLISH THE WORK AT THE EXPENSE OF THE CONTRACTOR.

# IX. <u>EARTHWORK</u>

- ALL AREAS TO BE CONSTRUCTED UPON WITH STRUCTURES, PAVEMENT, CURB, SIDEWALK FENCING ETC. SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTIONS RESTING ON OF PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF 1'. ITEMS DESIGNATED TO REMAIN OR TO BE RELOCATED OR TO BE ADJUSTED SHALL BE PROTECTED FROM THE CONSTRUCTION OPERATION. ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 110 OF THE STANDARD SPECIFICATIONS.
- NONE OF THE EXISTING LIMEROCK MATERIAL FROM DEMOLISHED PAVEMENT IS TO BE INCORPORATED IN THE NEW LIMEROCK BASE. THE EXISTING LIMEROCK MATERIAL FROM DEMOLISHED PAVEMENT MAY BE INCORPORATED INTO THE STABILIZED SUBGRADE / SUBBASE, OR STABILIZED SHOULDER. FILL MATERIAL SHALL BE CLASSIFIED AS A-1, A-3, OR A-2-4 IN ACCORDANCE WITH AASHTO
- N--145 AND SHALL BE FREE FROM VEGETATION AND ORGANIC MATERIAL. NOT MORE THAN 12% BY WEIGHT OF FILL MATERIAL SHALL PASS THE NO. 200 SIEVE. ALL FILL MATERIAL IN AREAS NOT TO BE PAVED SHALL BE COMPACTED TO 95% OF THE
- MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99. ALL MATERIAL AND CONSTRUCTION SHALL BE SUBJECT TO INSPECTION AND TESTING TO ESTABLISH CONFORMANCE WITH THE SPECIFICATIONS AND SUITABLY FOR THE USES INTENDED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO THE TIME HE WILL BE READY FOR AN INSPECTION OR TEST. THE CONTRACTOR SHALL FOLLOW CITY AND COUNTY INSPECTION PROCEDURES. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PHASE OF WORK DEPENDENT ON AN INSPECTION OR TEST OF AN FARIJER PHASE OF WORK PRIOR TO THAT TEST OR INSPECTION PASSING THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS MUST INCLUDE, BUT MAY NOT BE LIMITED TO, DENSITIES
- WHEN ENCOUNTERED, MUCK SHALL BE COMPLETELY REMOVED FROM THE CENTER LINE (10) TEN FEET BEYOND THE EDGE OF PAVEMENT EACH SIDE. ALL SUCH MATERIAL SHALL BE REPLACED BY APPROVED GRANULAR FILL, COMPACTED TO 98% OF MAXIMUM DENSITY (AASHTO T-180).

CONCRETE CYLINDERS, ETC.

ASPHALT PAVING

FOR SUBGRADE AND LIMEROCK, UTILITIES, EXCAVATION, ASPHALT GRADATION REPORTS,

- WHEN ENCOUNTERED WITHIN PROPOSED DRAINAGE SWALES. HARDPAN SHALL BE REMOVED FOR A WIDTH OF (5) FIVE FEET AT THE INVERT AND REPLACED WITH GRANULAR
- ALL UNDERGROUND UTILITIES AND DRAINAGE INSTALLATIONS SHALL BE IN PLACE PRIOR TO SUBGRADE COMPACTION AND PAVEMENT CONSTRUCTION
- PAVEMENT TO ALLOW FOR THE PLACEMENT OF SOD. SITE GRADING ELEVATIONS SHALL BE WITHIN 0.1' OF THE REQUIRED ELEVATION AND ALL AREAS SHALL BE GRADED TO DRAIN WITHOUT PONDING

GROUND ADJACENT TO ROADWAY/PAVEMENT WHERE STORMWATER RUNOFF FLOWS FROM

PAVEMENT TO GROUND, SHALL BE GRADED (2) TWO INCHES LOWER THAN THE EDGE OF

- THE CONTRACTOR SHALL PERFORM ALL EXCAVATION, FILL, EMBANKMENT AND GRADING TO ACHIEVE THE PROPOSED PLAN GRADES INCLUDING TYPICAL ROAD SECTIONS, SIDE SLOPES AND CANAL SECTIONS. ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 120 OF THE STANDARD SPECIFICATIONS. IF FILL MATERIAL IS REQUIRED IN EXCESS OF THAT GENERATED BY THE EXCAVATION, THE CONTRACTOR SHALL SUPPLY THIS MATERIAL AS REQUIRED FROM OFF-SITE.
- NO TRENCHES OR HOLES NEAR WALKWAYS, IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN OVERNIGHT.

WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAW

- CUT TO PROVIDE A STRAIGHT EVEN LINE. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE. ASPHALT PAVING SHALL BE CONSTRUCTED ON A 12" SUBGRADE, COMPACTED TO A MINIMUM DENSITY OF 98% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. THE COMPACTED SUBGRADE SHALL BE CONSTRUCTED TO THE LIMITS OF PAVING SHOWN ON
- ASPHALTIC CONCRETE SURFACE COURSE SHALL BE CONSTRUCTED TO THE LIMITS SHOWN ON THE PLANS. THE SURFACE COURSE SHALL CONSIST OF THE THICKNESS AND TYPE ASPHALTIC CONCRETE AS SPECIFIED IN THE PLANS.

THE PLANS. ALL SUBGRADE SHALL HAVE A MINIMUM LBR OF 40 UNLESS OTHERWISE NOTED.

LIMEROCK BASE SHALL BE PREPARED, COMPACTED AND GRADED AND SHALL BE IN ACCORDANCE WITH SECTION 200 OF THE STANDARD SPECIFICATIONS ALL LIMEROCK SHALL BE COMPACTED TO 98% PER AASHTO T-180 AND HAVE NOT LESS THAN 70% OF CARBONATES OF CALCIUM AND MAGNESIUM UNLESS OTHERWISE DESIGNATED. ALL LIMEROCK SHALL BE PRIMED. THE ENGINEER SHALL INSPECT THE COMPLETED BASE COURSE AND THE CONTRACTOR SHALL CORRECT ANY DEFICIENCIES AND CLEAN THE BASE COURSE PRIOR TO THE PLACEMENT OF THE PRIME COAT. A TACK COAT WILL ALSO BE REQUIRED IF THE ENGINEER FINDS THAT THE PRIMED BASE HAS BECOME EXCESSIVELY DIRTY OR THE PRIME COAT HAS CURED TO THE EXTENT OF LOSING BOUNDING EFFECT PRIOR TO PLACEMENT OF THE ASPHALTIC CONCRETE SURFACE COURSE. THE PRIME AND TACK COATS SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS.

- LIMEROCK BASE MATERIAL SHALL BE PLACED IN MAXIMUM 6" LIFTS BASES GREATER THAN 6" SHALL BE PLACED IN TWO EQUAL LIFTS OR IN ACCORDANCE WITH THE APPLICABLE
- ASPHALT EDGES THAT ARE NOT CURBED SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE TO THE DIMENSIONS SHOWN ON THE HORIZONTAL CONTROL PLAN.

SECTION OF THE STANDARD SPECIFICATIONS.

LONGITUDINAL SLOPE - 0.3%.

- ALL UNDERGROUND UTILITIES SHALL BE COMPLETED PRIOR TO FINISHED GRADING AND COMPACTION OF SUBGRADE EXISTING PAVEMENT, CUT OR DAMAGED BY CONSTRUCTION, SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.
- ALL REPAIRS TO EXISTING PAVEMENT SHALL RECEIVE SAW-CUT EDGES PRIOR TO RELAYING ASPHALT.
- UTILITY PIPING OR WIRING LESS THAN FOUR (4) INCHES IN DIAMETER SHALL BE CONSTRUCTED IN A SCHEDULE 40 PVC CASING PIPE WITH SAND BACKFILLS UNDER PAVED UNLESS OTHERWISE INDICATED ON THE GRADING PLAN, THE MINIMUM SLOPE OF PAVEMENT SECTIONS SHALL BE: TRANSVERSE SLOPE - 2.0% FOR ROADWAYS & 1.0% FOR PARKING AREAS.

# FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEION) AND THE FOLLOWING: IF THERE IS A DISCREPANCY BETWEEN THE PLANS, SPECION)

### PAVEMENT BASE COURSE: SEE PLAN SHEET AND DETAILS FOR LIMEROCK BASE MINIMUM THICKNESS.

PAVEMENT SURFACE COURSE SEE PLAN SHEET AND DETAILS FOR THICKNESS AND TYPE OF ASPHALTIC CONCRETE IF PLANS OR DETAILS CALL FOR ASPHALT TO BE CONSTRUCTED IN TWO LIFTS, A TACK COAT (0.25 GAL./SQ. YD.) SHALL BE APPLIED BETWEEN PAVING COURSES. THE FINAL COURSE OF ASPHALT IS NOT BE APPLIED UNTIL ALL LANDSCAPE CONSTRUCTION, STREET LIGHTING CONSTRUCTION AND ALL SITE AND BUILDING CONSTRUCTION REQUIRING HEAVY EQUIPMENT, THAT MAY DAMAGE THE ASPHALT SURFACE, IS COMPLETE.

- THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN 1/4" FROM THE TEMPLATE. ANY IRREGULARITIES EXCEEDING THIS LIMIT SHALL BE CORRECTE
- DENSITY TESTS SHALL BE TAKEN BY AN INDEPENDENT TESTING LABORATORY CERTIFIED BY THE STATE OF FLORIDA, WHERE DIRECTED BY THE ENGINEER. DENSITY TESTS ON THE STABILIZED SUBGRADE SHALL BE SUPPLIED TO THE ENGINEER OF RECORD, AND APPROVED BEFORE ANY LIMEROCK BASE IS CONSTRUCTED. DENSITY TESTS (EVERY 7000 SOLET.) OF THE BASE AND SUBGRADE, AND AS-BUILTS ON
- THE FINISHED LIMEROCK BASE SHALL BE SUPPLIED TO THE ENGINEER OF RECORD, AND APPROVED BEFORE ANY ASPHALT PAVEMENT IS CONSTRUCTED. PROCTOR DENSITIES SHALL BE PERFORMED ON ALL MATERIAL, SUBGRADE AND BASE OF ANY SUBSEQUENT CHANGES IN MATERIALS. LIMEROCK BEARING RATIOS, SIEVE ANALYSIS AND DENSITIES REQUIRED BY THE CONTRACT DOCUMENTS SHALL BE SUBMITTED TO THE ENGINEER

# XI. CONCRETE CONSTRUCTION

ON COMPACTED SUBGRADE, WITH 1/2" EXPANSION JOINTS PLACED AT A MAXIMUM OF 20' CRACK CONTROL JOINTS SHALL BE 5' ON CENTER. THE BACK OF SIDEWALK ELEVATION SHALL BE 3" HIGHER THAN THE EDGE OF PAVEMENT, UNLESS OTHERWISE SPECIFIED BY LOCAL CODES, OR SHOWN ON THE DRAWINGS. CONCRETE SIDEWALKS THAT CROSS DRIVEWAYS SHALL BE A MINIMUM OF 6" THICK.

CONCRETE SIDEWALK SHALL BE 4" THICK (6" IN A VEHICULAR AREA) AND CONSTRUCTED

- SIDEWALK CURB RAMPS HALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 304.
- CONCRETE CURB SHALL BE CONSTRUCTED TO THE LIMITS SHOWN ON THE PLANS. THE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 P.S.I. AT 28 DAYS AND SHALL BE IN ACCORDANCE WITH SECTION 520 OF THE STANDARD SPECIFICATIONS. CONCRETE CURBING SHALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 300.

# XII. SIGNAGE AND PAVEMENT MARKINGS

- THE ROADS AND PARKING AREAS SHALL BE STRIPED IN ACCORDANCE WITH THE PLANS NO STRIPE SHALL BE LESS THAN THE SPECIFIED WIDTH NOR SHALL IT EXCEED THE SPECIFIED WIDTH BY MORE THAN 1/2 INCH, STRIPING SHALL BE IN ACCORDANCE WITH SECTIONS 710 AND 971 OF THE STANDARD SPECIFICATIONS.
- IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL AND MAINTAIN ADEQUATE TRAFFIC CONTROL DEVICES WARNING DEVICES AND BARRIERS FOR THE PURPOSE OF PROTECTING THE TRAVELING PUBLIC. HIS WORKMEN AND THE WORK AREA IN GENERAL. SUCH TRAFFIC CONTROL SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT PERIOD INCLUDING ANY TEMPORARY SUSPENSIONS OF THE WORK MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH SECTION 102 OF THE STANDARD SPECIFICATIONS AND THE STATE OF FLORIDA. MANUAL OF TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION MAINTENANCE AND
- ALL STRIPING WITHIN THE PUBLIC RIGHT-OF-WAY AND AT DRIVEWAY ACCESS POINTS SHALL BE THERMOPLASTIC IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. UNLESS OTHERWISE NOTED ON THE PLANS.

ALL SIGNING AND MARKINGS SHALL CONFORM TO M.U.T.C.D AND BROWARD COUNTY

TRAFFIC ENGINEERING STANDARDS (LATEST EDITION) ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED.

# XIII STORM DRAINAGE

- 1. CATCH BASIN GRATES AND RIM ELEVATIONS AS SHOWN ON PLANS MAY BE ADJUSTED
- TO CONFORM TO NEW OR EXISTING GRADES. DISTANCES AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE CENTER OF STRUCTURES.

# NOTE: WHERE MORE THAN ONE SPECIFIED MATERIAL EXISTS FOR AN ITEM, IT IS THE

- CONTRACTORS OPTION TO USE EITHER MATERIAL REINFORCED CONCRETE PIPE (R.C.P.) SHALL MEET THE REQUIREMENTS OF ASTM C-76, LATEST REVISION. RUBBER GASKETS OR OTHER MANUFACTURER SUPPLIED JOINT
- SEALER SHALL BE USED. HIGH DENSITY POLYETHYLENE PIPE (HDPE) SIZES 12"-36", SHALL BE CORRUGATED TYPE, SMOOTH INTERIOR, CONFORMING TO ASTM F405, ASTM F667, AASHTO M252 AND AASHTO M294 AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC. OR
- CORRUGATED ALUMINUM PIPE (C.A.P.) IS AN ALUMINUM SPIRAL PIPE FORMED FROM COILED ALUMINUM SHEETS AND SHALL CONFORM TO ASTM B745 AND AASHTO M196. AS MANUFACTURED BY KAISER ALUMINUM. INC., OR APPROVED EQUAL, THE CORRUGATION PATTERN AND GAUGE SHALL BE AS FOLLOWS:
- CORRUGATION 12" TO 21" 2 2/3" X 7/16" 24" TO 27" 2 2/3" X 1/2" 2 2/3" X 1/2" 36" TO 54" 3" X 1" 60" TO 78" 3" X 1"
- THE HIGH DENSITY POLYETHYLENE PIPE JOINTS SHALL BE OF A RUBBER OR NEOPRENE GASKET DESIGN TO SECURE A SOIL TIGHT JOINT

PIPE COUPLINGS FOR C.A.P. SHALL BE 12" WIDE (MINIMUM) 24" FOR 60" DIAMETER OR

- LARGER. SPLIT BANDS OF THE SAME ALLOY AS THE PIPE MAY BE ONE GAUGE LIGHTER THAN THE PIPE. POLYURETHANE OR OTHER MANUFACTURER SUPPLIED SEALANT SHALL BE USED WITH THE COUPLINGS. THE RIP RAP HEADWALLS SHALL BE CONSTRUCTED OF SAND/CEMENT WITH A MINIMUM 2000 P.S.I. COMPRESSIVE STRENGTH TO MEET FLORIDA D.O.T. STANDARDS. THE BAGS
- ON TOP OF THE SAND/CEMENT RIP RAP BAGS WITH A MINIMUM 3000 P.S.I. COMPRESSION STRENGTH. ALL DRAINAGE CATCH BASINS AND STRUCTURES SHALL BE PRECAST CONCRETE AS MANUFACTURED BY U.S. PRECAST CORPORATION OR EQUAL, UNLESS OTHERWIS NOTED IN THE PLANS. THE MINIMUM WALL AND SLAB THICKNESS SHALL BE 8 INCHES AND THE MINIMUM REINFORCING SHALL BE NO. 4 BARS AT 12 INCHES EACH WAY

UNLESS OTHERWISE INDICATED. CONCRETE SHALL BE MINIMUM OF FC=4000 P.S.I. AT 28

SHALL BE PERMEABLE BURLAP, CLOTH OR PAPER, A CONCRETE CAP SHALL BE POURED

8. TRENCH DRAIN SHALL BE POLYCAST PRE-SLOPED 600 SERIES OR APPROVED EQUAL

- 1. PIPE SHALL BE PLACED ON A MINIMUM OF 8" STABLE GRANULAR MATERIAL FREE OF ROCK FORMATION AND OTHER FOREIGN FORMATIONS. AND CONSTRUCTED TO A UNIFORM GRADE AND LINE.
- 2. BACKFILL MATERIAL SHALL BE WELL GRADED GRANULAR MATERIAL, WELL TAMPED IN LAYERS NOT TO EXCEED 6 INCHES TO A HEIGHT OF 12 INCHES ABOVE PIPE AS SHOWN
- . PROVIDE A MINIMUM PROTECTIVE COVER OF 18 INCHES OVER STORM SEWER AND AVOID UNNECESSARY CROSSING BY HEAVY CONSTRUCTION VEHICLES DURING
- CONSTRUCTION. 4. THE CONTRACTOR SHALL NOTIFY THE LOCAL ENGINEERING & UTILITIES DEPARTMENT
- AT LEAST 7 DAYS PRIOR TO THE START OF THE CONSTRUCTION. 5. HDPE PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321.

# XIV. WATER DISTRIBUTION / SANITARY FORCE MAINS.

## MATERIALS:

NOTE: WHERE MORE THAN ONE SPECIFIED MATERIAL EXISTS FOR AN ITEM. IT IS THE CONTRACTORS OPTION TO USE EITHER MATERIAL., WHERE THE PLANS DO NOT CALL FOR A PIPE MATERIAL THE MATERIAL SHALL BE EITHER PVC OR DIP AS SPECIFIED BELOW.

- 1. PVC WATERMAINS 4"-12" SHALL BE PLASTIC PRESSURE PIPE WITH INTEGRAL BELL AND SPIGOT JOINTS FOR THE CONVEYANCE OF WATER AND OTHER FLUIDS. THIS PIPE SHALL MEET ALL THE REQUIREMENTS OF AWWA STANDARD C900, POLYVINYL CHLORIDE (PVC WATER DISTRIBUTION PIPE. THE BELL SHALL CONSIST OF AN INTEGRAL WALL SECTION WITH A FACTORY INSTALLED ELASTOMERIC GASKET WHICH MEETS THE REQUIREMENT OF ASTM F477. THE JOINT DESIGN SHALL MEET THE REQUIREMENTS OF ASTM D3139.
- 2. DUCTILE IRON PIPE FOR WATER DISTRIBUTION MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C151/A21 51-02 LATEST REVISION. "DUCTILE IRON PIPE CENTRIFUGALL) CAST IN METAL MOLDS OR SAND-LINED MOLDS" WITH A MINIMUM WALL THICKNESS OF CLASS 51 (PRESSURE CLASS 350) UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DUCTILE IRON PIPE SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSI/AWWA STANDARD C104/A21.4-95 LATEST REVISION. THE PIPE SHALL BE ADAPTED FOR USE WITH CLASS 250 FITTINGS FOR ALL SIZES.
- 3. DUCTILE IRON PIPE FOR SEWAGE FORCE MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C151/A21 51-02 LATEST REVISION. "DUCTILE IRON PIPE CENTRIFUGALLY CAST IN METAL MOLDS OR SAND- LINED MOLDS" WITH A MINIMUM WALL THICKNESS OF CLASS 51 (PRESSURE CLASS 350) UNLESS OTHERWISE DIRECTED BY THE ENGINEER DUCTILE IRON PIPE SHALL BE INTERIOR CERAMIC EPOXY LINED AND EXTERIOR COATED WITH THE MANUFACTURER'S COATING SYSTEM (PROTECTO 401 CERAMIC EPOXY WITH A MINIMUM DRY FILM THICKNESS OF 40 MILS AND AN OUTSIDE COATING OF EITHER COAL TAR EPOXY OR ASPHALT.) IN EITHER CASE. THE ENGINEER'S REVIEW AND APPROVAL IS REQUIRED FOR EITHER ALTERNATIVE PRIOR TO CONSTRUCTION. CEMENT MORTARED LININGS ARE NOT APPROPRIATE FOR THIS APPLICATION.
- 4. DUCTILE IRON FITTINGS FOR WATER DISTRIBUTION MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C110/A21 10-98 LATEST REVISION FITTINGS 4" AND LARGER SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSI/AWWA STANDARD C104/A21.4-95 LATEST REVISION.
- 5. CAST IRON AND DUCTILE IRON FITTINGS FOR SEWAGE FORCE MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C110/A21.10-98 LATEST REVISION. FITTINGS 4" AND LARGER SHALL BE COATED IN ACCORDANCE WITH THE REQUIREMENTS OF DUCTILE IRON PIPE FOR SEWAGE FORCE MAINS.
- PUSH-ON JOINT TO BE RUBBER GASKET COMPRESSION-TYPE. SPECIAL FITTINGS AND JOINTS SHALL BE CONSIDERED FOR SPECIFIC INSTALLATION SUBJECT TO THE APPROVAL OF THE ENGINEER. JOINTS FOR PVC PRESSURE PIPE SHALL BE BELL AND SPIGOT PUSH-ON RUBBER GASKET TYPE ONLY. NO SOLVENT WELD OR THREADED JOINTS WILL BE PERMITTED.

JOINTS FOR BELL AND SPIGOT DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO

ANSI/AWWA STANDARD C111/A21 11-00 LATEST REVISION MECHANICAL JOINT OR

8. WATER DISTRIBUTION SYSTEM RESTRAINT: ALL FITTINGS AND SPECIFIC PIPE JOINTS SHALL BE RESTRAINED AS OUTLINED BELOW: RESTRAINT PUSH-ON P V C EBBA IRON SERIES 2800 HARNESS PUSH-ON D.I.P. TR-FLEX BY U.S. PIPE OR FLEX RING BY AMERICAN

FITTINGS W/ D.I.P

FITTINGS W/ P.V.C.

LENGTH OF RESTRAINED PIPE SHALL BE AS INDICATED ON RESTRAINED JOINT PIPE DETAIL. (SEE WATER & SEWER DETAIL SHEET)

EBBA IRON SERIES 1100 MEGALUG

EBBA IRON SERIES 2000 MEGALUG

EBBA IRON SERIES 1100 MEGALUG

- 9. SEWAGE FORCE MAIN SYSTEM RESTRAINT: ALL FITTINGS AND SPECIFIC PIPE JOINTS SHALL BE RESTRAINED AS OUTLINED BELOW RESTRAINT PUSH-ON P.V.C. EBBA IRON SERIES 2800 HARNESS PUSH-ON D.I.P TR-FLEX BY U.S. PIPE OR FLEX RING BY AMERICAN
- FITTINGS W/ P.V.C. EBBA IRON SERIES 2000 MEGALUG LENGTH OF RESTRAINED PIPE SHALL BE AS INDICATED ON RESTRAINED JOINT PIPE DETAIL. (SEE WATER & SEWER DETAIL SHEET
- 10 WATER DISTRIBUTION VALVES SHALL BE GATE VALVES, IRON BODY, FULLY RESILIENT SEAT BRONZED MOUNTED NON-RISING STEM. RATED AT 200 P.S.I. AND CONFORMING TO ANSI/AWWA C509-01 OR LATEST REVISION. AND SHALL HAVE MECHANICAL JOINTS. a. GATE VALVES 2" AND LARGER SHALL BE MUELLER A-2380-20, AMERICAN 80 LINE OR CLOW F-6100, CONFORMING TO ANSI/AWWA C500-93, OR, IN EITHER CASE, APPROVED
- b. TAPPING VALVES SHALL BE MUELLER H667 OR APPROVED EQUAL. 11. TAPPING SLEEVES SHALL BE MUELLER H615. CLOW F- 2505 OR APPROVED EQUAL.
- 12. VALVE BOXES SHALL BE U.S. FOUNDRY 7500 OR APPROVED EQUAL PAINTED BLUE WITH THE DESIGNATION "WATER". BLUE/WHITE RAISED REFLECTIVE PAVEMENT MARKER SHALL BE USED TO IDENTIFY VALVE BOX LOCATION. 13. RETAINER GLANDS FOR D.I.P. SHALL CONFORM TO ANSI/AWWA C111/A21.11-00 OR LATEST REVISION. ALL GLANDS SHALL BE MANUFACTURED FROM DUCTILE IRON AS
- RATING, CLOW CORPORATION MODEL F-1058, STANDARD FIRE PROTECTION EQUIPMENT COMPANY OR APPROVED EQUAL.

LISTED BY UNDERWRITERS LABORATORIES FOR 250 PSI MINIMUM WATER PRESSURE

- 14. LOCATING WIRE SHALL BE INSTALLED 1 FOOT ABOVE INSTALLED PVC PRESSURE PIPE TO ENSURE THAT PIPE CAN BE LOCATED AFTER BURIAL. 15. DRESSER COUPLINGS SHALL BE REGULAR BLACK COUPLINGS WITH PLAIN GASKETS
- FOR GALVANIZED STEEL PIPE. THEY SHALL BE DRESSER STYLE 90. NO SUBSTITUTIONS ALLOWED. 16. FIRE HYDRANTS SHALL BE MUELLER CENTURION TRAFFIC TYPE A-423 WITH 5 1/4" INTERNAL VALVE OPENING OR APPROVED EQUIVALENT. MAIN VALVE OPENING TO BE DETERMINED BY THE WATER DEPARTMENT, PUMPER NOZZLE TO BE 18" FROM FINISHED GRADE ALL HYDRANTS TO BE INSTALLED WITH CONTROL VALVE RETAINER GLANDS ARE PREFERRED FOR RESTRAINING. FIRE HYDRANT SHALL COMPLY WITH ANSI/AWWA C502-94. FIRE HYDRANTS SHALL BE PAINTED YELLOW IN ACCORDANCE WITH N.F.P.A. #291 OR PER LOCAL/COUNTY STANDARDS HAVING JURISDICTION. BLUE RAISED REFLECTIVE PAVEMENT MARKER (RPM) SHALL BE USED TO IDENTIFY FIRE HYDRANT

LOCATION. THE PLACEMENT OF THE RPM TO BE AT THE CENTERLINE OF THE OUTSIDE

- 17. SEWAGE FORCE MAIN VALVES SHALL BE PLUG VALVES WHICH SHALL BE OF THE NON-LUBRICATED. ECCENTRIC TYPE WITH RESILIENT FACED PLUGS. PORT AREAS FOR VALVES 20 INCHES AND SMALLER SHALL BE AT LEAST 80% OF FULL PIPE AREA. PORT AREA OF VALVES 24 INCHES AND LARGER SHALL BE AT LEAST 70% OF FULL PIPE AREA THE BODY SHALL BE OF SEMI-STEEL (ASTM A-126 C1.B) AND SHALL HAVE BOLTED BONNET WHICH GIVES ACCESS TO THE INTERVALS OF THE VALVE. SEATS SHALL BE WELDED OVERLAY OF HIGH NICKEL CONTENT OR A STAINLESS STEEL PLATE LOCKED IN THE BODY CAVITY. IF A PLATE IS USED, IT SHALL BE REPLACEABLE THROUGH THE BONNET ACCESS. BEARINGS SHALL BE PERMANENTLY LUBRICATED OF STAINLESS STEEL, BRONZE OR TEFLON LINED, FIBER GLASS BACKED DURALON. BEARING AREAS SHALL BE ISOLATED FROM THE FLOW WITH GRIT SEALS. VALVES SHALL HAVE PACKING BONNETS WHERE THE SHAFT PROTRUDES FROM THE VALVE AND THE PACKING SHALL BE SELF-ADJUSTING CHEVRON TYPE WHICH CAN BE REPLACED WITHOUT REMOVING
- THE BONNET. ALL NUTS, BOLTS, SPRINGS AND WASHERS SHALL BE STAINLESS STEEL. 18. PLUG VALVES SHALL BE DESIGNED FOR A WORKING PRESSURE OF 150 P.S.I. THE VALVE AND ACTUATOR SHALL BE CAPABLE OF SATISFACTORY OPERATION IN EITHER DIRECTION OF FLOW AGAINST PRESSURE DROPS UP TO AND INCLUDING 100 P.S.I. (FOR PLUG VALVES OVER 12 INCHES IN DIAMETER). VALVES SHALL BE BUBBLE TIGHT IN BOTH DIRECTIONS AT 100 PSI DIFFERENTIAL. PLUG VALVES SHALL HAVE WORM GEAR OPERATORS. THE OPERATING MECHANISM SHALL BE FOR BURIED SERVICE WITH A 2
- 19. PLUG VALVES ARE TO BE INSTALLED WITH THE SEAT POINTED TOWARDS THE UPSTREAM FLOW, WHEN SPECIFIED. 20. SWING CHECK VALVES FOR WATER, SEWAGE, SLUDGE, AND GENERAL SERVICE SHALL BE OF THE OUTSIDE LEVER AND SPRING OR WEIGHT TYPE, IN ACCORDANCE WITH

ANSI/AWWA C 508-01 SWING-CHECK VALVES FOR WATERWORKS SERVICE, 2 IN.

THROUGH 24 IN. NPS. UNLESS OTHERWISE INDICATED. WITH FULL-OPENING PASSAGES

DESIGNED FOR A WATER-WORKING PRESSURE OF 150 P.S.I. THEY SHALL HAVE A

INCH SQUARE OPERATING NUT

21. COLOR CODING OF PIPING AT DRINKING WATER TREATMENT PLANTS. ALL NEW OR ALTERED, ABOVE GROUND PIPING AT DRINKING WATER TREATMENT PLANTS SHALL BE COLOR CODED AND LABELED AS RECOMMENDED IN SECTION 2.14 OF RECOMMENDED

FLANGED COVER PIECE TO PROVIDE ACCESS TO THE DISC.

STANDARDS FOR WATER WORKS AS INCORPORATED INTO RULE 62-555.330, F.A.C. IN ADDITION ALL LINDERGROUND WATER MAIN PIPE THAT IS INSTALLED AT DRINKING WATER TREATMENT PLANTS ON OR AFTER AUGUST 28, 2003, AND THAT IS CONVEYING FINISHED DRINKING WATER SHALL BE COLOR CODED AS REQUIRED UNDER SUBPARAGRAPH 62-555.320(21)(B)3. F.A.C. THIS SUBSECTION DOES NOT APPLY TO DRINKING WATER TREATMENT PLANT PIPING INSTALLED OR ALTERED UNDER A CONSTRUCTION PERMIT FOR WHICH THE DEPARTMENT RECEIVED A COMPLETE APPLICATION BEFORE AUGUST 28, 2003.

# SERVICE CONNECTION:

30" COVER FOR DIP.

- 1. SERVICE SADDLES SHALL BE EPOXY COATED DUCTILE IRON (ASTM A536) WITH STAINLESS STEEL STRAPS, SADDLES SHALL BE DOUBLE STRAP TYPE
- 2. SERVICE LINES SHALL BE POLYETHYLENE (PE 3408), 200 P.S.I RATED, DR9. PIPE JOINTS SHALL BE OF THE COMPRESSION TYPE TOTALLY CONFINED GRIP SEAL AND COUPLING
- 3. CORPORATION STOPS SHALL BE MANUFACTURED OF BRASS ALLOY IN ACCORDANCE WITH ASTM B-62 WITH THREADED ENDS, AS MANUFACTURED BY FORD BALLCORP,
- CATALOG # 1100 OR APPROVED EQUAL. 4. CURB STOPS SHALL BE FORD V63-44W-1" & OR APPROVED EQUAL
- 5. METER STOPS SHALL BE 900 LOCKWING TYPE AND SHALL BE OF BRONZE CONSTRUCTION IN ACCORDANCE FV63-777W-2" WITH ASTM B-62, METER STOPS SHALL BE CLOSED BOTTOM DESIGN AND RESILIENT "0" RING SEALED AGAINST EXTERNA LEAKAGE AT THE TOP. STOPS SHALL BE EQUIPPED WITH A METER COUPLING NUT ON THE OUTLET SIDES, AS MANUFACTURED BY FORD OR APPROVED EQUAL.
- . WHERE RESTRAINED PIPE JOINTS ARE REQUIRED DUE TO FITTINGS, APPURTENANCES, ETC., PIPE MATERIAL SHALL BE D.I.P.,
- 2. ALL PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE UNI-BELL PLASTIC PIPE ASSOCIATION "GUIDE FOR INSTALLATION OF PVC PRESSURE PIPE FOR MUNICIPAL WATER DISTRIBUTION SYSTEM," AND ANSI/AWWA C605-94 STANDARD
- 3. ALL DIP SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C600-05 OR LATEST 4. ALL WATER MAINS SHALL TYPICALLY BE LAID WITH A MINIMUM 36" COVER FOR PVC AND

5. DETECTO TAPE SHALL BE LAID 18 INCHES ABOVE ALL WATER LINES. A 14 GAUGE

MULTI-STRAND WIRE SHALL BE ATTACHED TO ALL NONCONDUCTIVE WATER MAINS TO

FACILITATE LOCATION. AN EXTRA 4 FEET OF WIRE SHALL BE PROVIDED AT ALL VALVES

BLOW-OFFS, HYDRANTS, ETC. THE WIRE SHALL BE TESTED FOR CONTINUITY AT THE PRESSURE TEST. 6. PIPE DEFLECTION SHALL NOT EXCEED 50% OF THE MAXIMUM DEFLECTION

RECOMMENDED BY THE MANUFACTURER.

- A CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED. BACKFILL MATERIAL SHALL BE TAMPED IN 9" LAYERS AROUND THE PIPE AS SHOWN ON THE PLANS. STONES FOUND IN THE TRENCH SHALL BE REMOVED FOR A DEPTH OF AT LEAST 8" BELOW THE
- 8. ALL VALVES SHALL BE INSTALLED WITH ADJUSTABLE CAST IRON VALVE BOXES WITH THE WORD "WATER", "SEWER", "SERVICE", "FIRE" AS APPLICABLE, CAST IN THE COVER. U.S.F. OR APPROVED EQUAL.
- 9. DETECTO TAPE SHALL BE LAID (18) INCHES BELOW FINAL GRADE ALONG ALL FORCE MAINS. A 14 GAUGE MULTI-STRAND WIRE SHALL BE ATTACHED TO ALL PVC FORCE MAINS TO FACILITATE LOCATION.
- THE ENGINEER, UTILITY OWNER, AND HEALTH DEPARTMENT, HYDROSTATIC TESTING O NEW MAINS SHALL BE PERFORMED AT A MINIMUM STARTING PRESSURE OF 150 P.S.I. FOR TWO HOURS IN ACCORDANCE WITH ANSI/AWWA C600-05 OR LATEST REVISION. THI PRESSURE TEST SHALL NOT VARY MORE THAN 5 P.S.I. DURING THE TEST. THE WATER
- SYSTEM SHALL BE DISINFECTED IN ACCORDANCE WITH THE ANSI/AWWA C651-05. 2. THE PRESSURE TEST SHALL BE WITNESSED BY A REPRESENTATIVE OF THE UTILITY OWNER AND THE ENGINEER OF RECORD.

3 SAMPLING POINTS SHALL BE PROVIDED BY THE CONTRACTOR AT THE LOCATIONS

BEFORE ANY PHYSICAL CONNECTIONS AND ACCEPTANCE FOR OPERATION TO THE

EXISTING WATER MAINS ARE MADE, THE COMPLETE WATER SYSTEM SHALL BE

PRESSURE TESTED AND DISINFECTED COPIES OF PASSING BACTERIOLOGICAL

RESULTS AND PRESSURE TEST RESULTS MUST BE SUBMITTED TO, AND APPROVED BY

- SHOWN ON THE PLANS IF BACTERIOLOGICAL SAMPLES ARE CONDUCTED BY THE UTILITY OWNER THE UTILITY OWNER SHALL BE REIMBURSED BY THE CONTRACTOR 4. BACTERIOLOGICAL TESTING SHALL BE IN ACCORDANCE WITH AWWA/ANSI C651-05. MAXIMUM DISTANCE BETWEEN SAMPLING POINTS SHALL BE AS FOLLOWS:
- 5. THE ALLOWABLE LEAKAGE DURING THE PRESSURE TEST SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FORMULA:

TRANSMISSION MAINS: EVERY 1200 FEET

ISOLATED MAINS < 1000 FEET: 2 SAMPLE POINTS

ISOLATED MAINS > 1000 FEET: 3 SAMPLE POINTS

BRANCH MAINS: EVERY 1000 FEET

 $Q = I D \sqrt{P / 148,000}$ IN WHICH Q EQUALS THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR. L FOLIALS LENGTH OF PIPE (LINEAR FEET) D FOLIALS NOMINAL DIAMETER OF PIPE (INCHES) AND P EQUALS THE AVERAGE TEST PRESSURE (POUNDS PER SQUARE INCH GAUGE). MAXIMUM LENGTH OF TEST PIPE SECTION SHOULD BE 2000 FEET. REPUMPING OF LINE DURING PRESSURE TEST IS NOT ALLOWED 6. SAMPLES ARE TO COMPLY WITH FLORIDA ADMINISTRATIVE CODE CHAPTER 62-555.340(2)

WHICH REQUIRES AT LEAST TWO SAMPLES FOR NEW OR ALTERED TREATMENT OR

STORAGE FACILITES AND WATERMAINS TO BE TAKEN IN TWO CONSECUTIVE DAYS (ONE

PER DAY) AT EACH OF THE LOCATIONS, SAMPLES ARE TO BE ANALYZED FOR TOTAL

RESIDUAL CHIORINE AND FOR THE PRESENCE OF TOTAL COLLEGEM CHAPTER

62-555 340(2) ALSO STATES: "IF ANY SAMPLE CONTAINS MORE THAN FOUR MILLIGRAMS.

PER LITER OF TOTAL CHIORINE THE SAMPLE SHALL BE CONSIDERED INVALID BACTERIOLOGICAL TEST RESULTS SHALL BE CONSIDERED UNACCEPTABLE IF THE TESTS WERE COMPLETED MORE THAN 60 DAYS BEFORE THE DEPARTMENT RECEIVED

CONTRACTORS OPTION TO USE EITHER MATERIAL

# XV. GRAVITY SEWER COLLECTION SYSTEM

- MANHOLE RIM ELEVATIONS AS SHOWN ON PLANS MAY BE ADJUSTED TO CONFORM TO
- NEW OR EXISTING GRADES 2. DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE CENTER OF STRUCTURES.
- NOTE: WHERE MORE THAN ONE SPECIFIED MATERIAL EXISTS FOR AN ITEM, IT IS THE
- (PVC) PIPE CONFORMING TO ASTM D 3034, SDR 35, WITH PUSH-ON RUBBER GASKET 2. DUCTILE IRON PIPE SHALL CONFORM TO ANSI/AWWA C151/A21.51-02 LATEST REVISION, DUCTILE IRON PIPE CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS" WITH WALL THICKNESS CLASS 50 FOR 8" AND ABOVE, CLASS 52 FOR 4" AND 6", UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DUCTILE IRON PIPE SHALL BE EPOXY LINED OR COATED WITH THE MANUFACTURER'S COATING SYSTEM AS APPROVED BY THE ENGINEER OF RECORD AND THE CITY ENGINEER. IN EITHER CASE, THE ENGINEER'S

REVIEW AND APPROVAL IS REQUIRED FOR EITHER ALTERNATIVE PRIOR TO

CONSTRUCTION. CEMENT MORTARED LININGS ARE NOT APPROPRIATE FOR THIS

1. ALL PVC SEWER PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE

- 3. ALL DUCTILE IRON FITTINGS SHALL CONFORM TO ANSI/AWWA STANDARD C110/A21.10-98 LATEST REVISION. ALL FITTINGS AND ACCESSORIES SHALL BE EPOXY LINED AND AS
- 4. MANHOLES SHALL BE PRECAST PER ASTM C 478 WITH 4.000 P.S.I. CONCRETE. 8" MINIMUM WALL THICKNESS AND GRADE 60 STEEL. MONOLITHICALLY POURED BASES ONLY (8" MIN. THICKNESS).

5. MANHOLES ARE TO BE SEALED WITH TYPE II SULPHATE RESISTANT CEMENT OR

MANUFACTURED OR SUPPLIED BY THE PIPE MANUFACTURER OR APPROVED EQUAL.

- APPROVED EQUAL NO MOLDING PLASTER. 6. JOINTS FOR BELL AND SPIGOT DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO ANSI/AWWA STANDARD C111/A21.11-00 LATEST REVISION. MECHANICAL JOINT OR PUSH-ON JOINT TO BE RUBBER GSKET COMPRESSION- TYPE. SPECIAL FITTINGS AND
- JOINTS SHALL BE CONSIDERED FOR SPECIFIC INSTALLATION SUBJECT TO THE APPROVAL OF THE ENGINEER. 7. P.V.C. CLEAN-OUTS TO HAVE SCREW TYPE ACCESS PLUG. LONG RADIUS WYE CONNECTIONS AND FITTINGS SHALL BE USED IN ORDER TO ACCESS CLEAN-OUT
- 8. CLEANOUTS SHALL BE INSTALLED AT ALL SEWER SERVICES EXCEEDING 75' IN LENGTH (EVERY 75') WITH A CLEANOUT AT THE PROPERTY LINE, EASEMENT LINE, OR 5' FROM A BUILDING. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF THE BUILDING CLEANOUT AND

- FLEVATION OF THE END OF THE SEWER SERVICE WITH THE BUILDING PLUMBING CONTRACTOR. CLEANOUTS SHALL BE THE SAME SIZE AS THE SERVICE LATERAL IN WHICH THEY ARE INSTALLED.
- 9. CLEANOUTS LOCATED IN ROADWAY ARE TO BE TRAFFIC RATED.
- . PVC SEWER PIPE SHALL BE LAID IN ACCORDANCE WITH ASTM D 2321 AND THE UNI-BEL PLASTIC PIPE ASSOCIATION'S "RECOMMENDED PRACTICE FOR THE INSTALLATION OF
- PVC SEWER PIPE." 2. D.I.P. SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C-600-99 OR LATEST
- REVISION. 3. PIPE TO MANHOLE CONNECTION TO BE FERNCO NEOPRENE BOOT COUPLINGS WITH
- 4. MANHOLES SHALL BE SET PLUMB TO LINE AND GRADE ON FIRM SUBGRADE PROVIDING
- UNIFORM BEARING UNDER THE BASE. ALL OPENINGS AND JOINTS SHALL BE SEALED WATERTIGHT.

STAINLESS STEEL ACCESSORIES OR APPROVED EQUAL.

- 6. TWO COATS OF KOPPERS 300-M. FIRST RED. SECOND ONE BLACK. SHALL BE APPLIED TO THE INSIDE OF ALL MANHOLES AND SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS (16 MILS PER COAT). ONE COAT OF BLACK KOPPERS 300-M SHALL BE APPLIED TO THE OUTSIDE OF THE MANHOLE. THE INTERIOR COATS SHALL BE APPLIED AFTER SEWER LAMPING OF LINES. AFTER THE APPLICATION OF EACH COAT, THE UTILITY OWNER AND SHALL INSPECT THE MANHOLES. THE INSPECTION
- 7. PROVIDE A MINIMUM (6) INCH BED OF 3/4" WASHED ROCK FOR ALL SUB-AQUEOUS GRAVITY SEWER PIPES.

SHALL BE SCHEDULED A MINIMUM OF 48 HOURS PRIOR TO INSPECTION.

- AFTER CONSTRUCTION OF THE SEWER SYSTEM. THE ENGINEER MAY REQUIRE A VISUAL
- INFILTRATION AND/OR EXFILTRATION TEST TO BE PERFORMED ON THE ENTIRE SYSTEM OR ANY PART THEREOF
- 3. MANHOLE LEAKAGE TEST SHALL NOT EXCEED FOUR GALLONS PER DAY PER UNIT. NO VISIBLE LEAKAGE ALLOWED.
- 5. TESTING OF GRAVITY SEWER MAINS AND LATERALS SHALL BE IN ACCORDANCE WITH THE UTILITY OWNER'S MINIMUM DESIGN AND CONSTRUCTION STANDARDS LATEST REVISION.

6. THE INSTALLED SEWERS SHALL UNDERGO TELEVISION INSPECTION AT (2) TIMES. THE

INSPECTED AT NO EXPENSE TO THE CONTRACTOR.

### FIRST SHALL BE PRIOR TO THE FINAL ACCEPTANCE BY THE UTILITY OWNER AND THE OTHER SHALL BE JUST PRIOR TO THE RELEASE OF THE ONE-YEAR MAINTENANCE BOND.

APPROVAL OF THE ENGINEER.

- XVI. <u>SEPARATION OF WATER AND SEWER MAINS</u> SANITARY SEWERS, STORM SEWERS, AND FORCE MAINS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE SANITARY SEWERS, STORM SEWERS, AND FORCE MAINS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE, WHERE SANITARY SEWERS, STORM SEWERS, OR FORCE MAINS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING, SEWER LINES SHALL BE CONSTRUCTED OF PVC-SDR-26. SUFFICIENT LENGTHS OF DIP ANI PVC-SDR-26 MUST BE TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 12 INCHES MUST BE MAINTAINED AT ALL CROSSINGS. ALL CROSSING SHALL BE ARRANGED SO THAT TO SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING). WHERE A NEW PIP CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 18 INCHES VERTICAL CLEARANCE THE NEW PIPE SHALL BE CONSTRUCTED OF DIP, AND THE CROSSING SHALL BE ARRANGED
- TO MEET THE REQUIREMENTS ABOVE. A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPI OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
- IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SLICH AN FLEVATION THAT THE BOTTOM OF THE WATER IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER

WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN PARALLEL

INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SANITARY

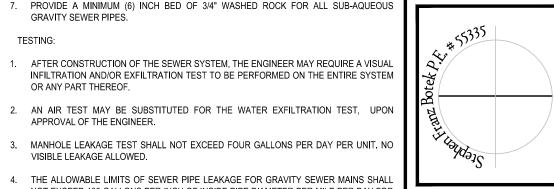
SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP WITH A MINIMUM VERTICAL

DISTANCE OF 12 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS

ALL DIP SHALL BE CLASS 51 OR HIGHER. ADEQUATE PROTECTIVE MEASURES AGAINST

ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN.



SSUE DATE: 9.6.16

NOT EXCEED 100 GALLONS PER INCH OF INSIDE PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION TESTED. NO VISIBLE LEAKAGE SHALL BE ALLOWED AND LINES MAY BE T.V

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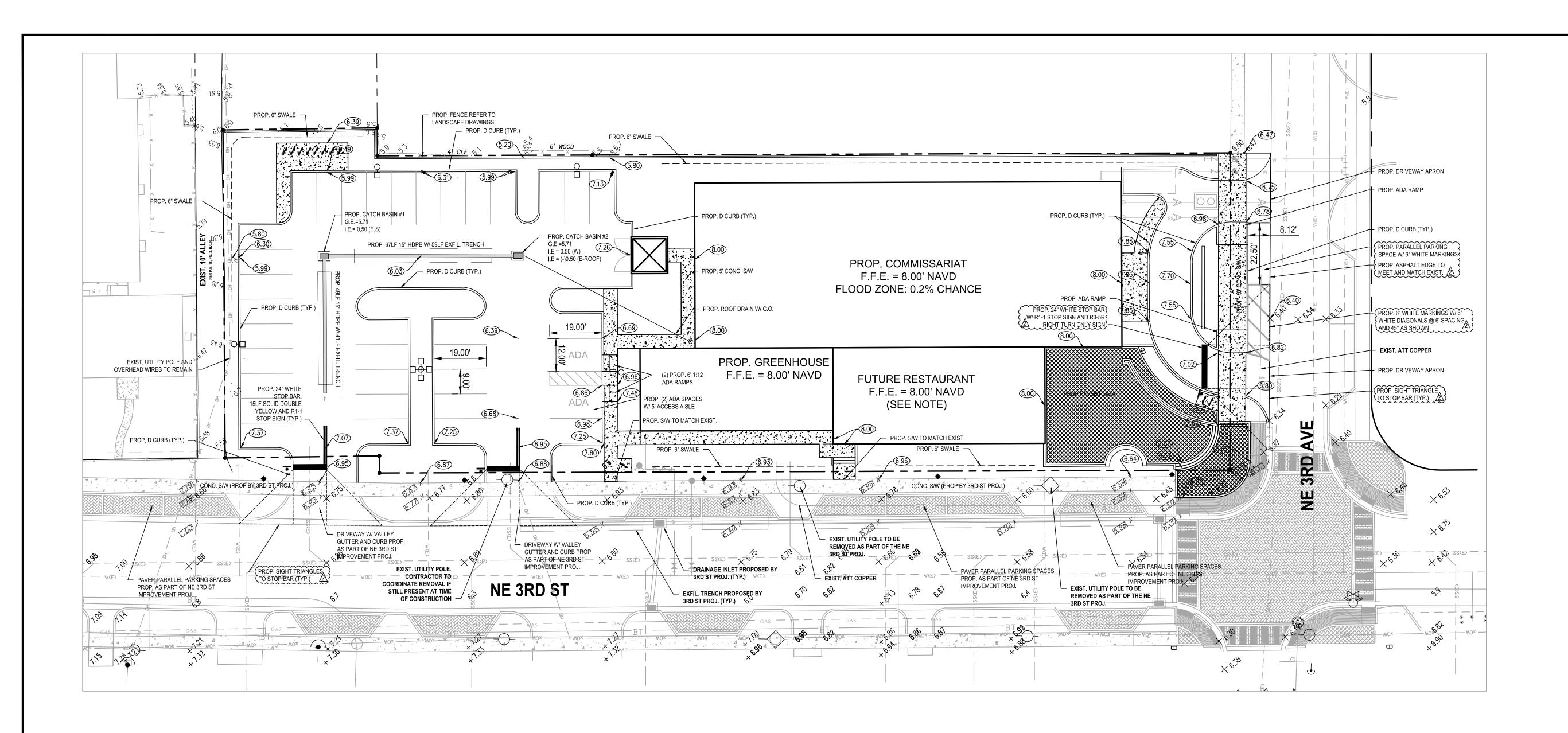
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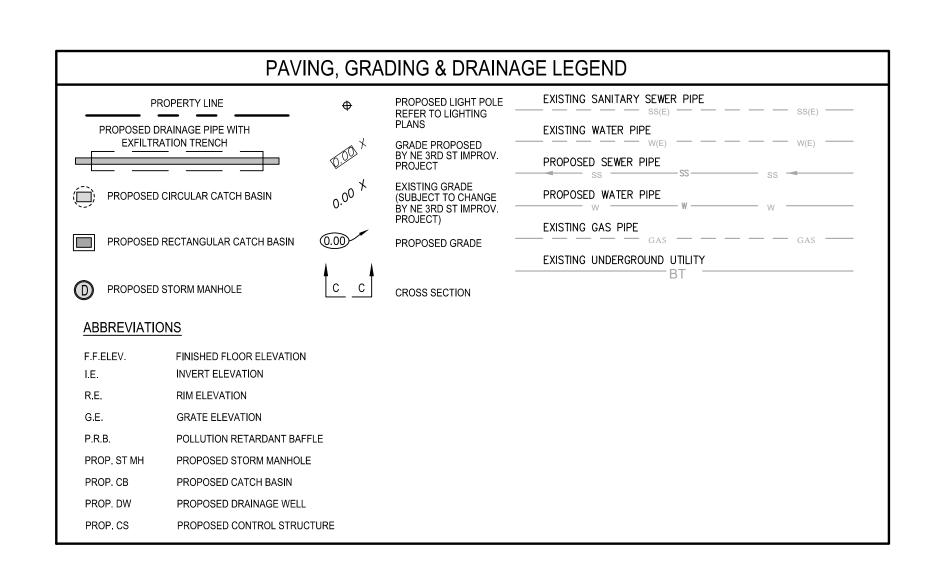
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SHEET #.

BTE PROJECT #. 16-0410





# FLOOD ZONE / F.F.E. NOTES:

- 1. THIS SITE IS WITHIN A 0.2 % ANNUAL CHANCE FLOOD HAZARD ZONE (FLOOD PANEL #
- 2. THE BROWARD COUNTY 100 YEAR FLOOD PLANE ELEV. FOR THIS SITE IS 6.50' NAVD
- THE HIGHEST ADJACENT CROWN OF ROAD IS 6.96' NAVD

  THE HIGHEST ADJACENT CROWN OF ROAD IS 6.96' NAVD

# PAVEMENT MARKING & SIGNAGE NOTES:

- 1. ALL PAVEMENT MARKING & SIGNAGE TO BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND BCTED STANDARDS (LATEST EDITION).
- 2. ALL PAVEMENT MARKINGS ADJACENT TO THE PUBLIC RIGHT OF WAY ARE TO BE REFLECTIVE THERMOPLASTIC.
- 3. ALL SIGNS SHALL USE TYPE XI SHEETING
- 4. ALL PAVEMENT MARKINGS SHALL BE ALKYD BASED THERMOPLASTIC AND FULLY RETROREFLECTORIZED.
- 5. ALL PAVEMENT MARKINGS ON PAVER SYSTEMS SHALL BE 3M 270 ES (WHITE)/270 ES (YELLOW) TAPE AND APPLIED PER MANUFACTURER'S SPECIFICATIONS.
- 6. SEE BCTED STANDARDS FOR PLACEMENT OF RPM's.
- 7. RPM's SHALL BE CLASS "B" OR EQUIVALENT, APPLIED WITH EPOXY OR BITUMINOUS ADHESIVE.
- 8. FDOT APPROVED SEALER SHALL BE USED WHEN APPLYING MARKINGS ON CONCRETE.
- 9. EXISTING MARKINGS SHALL BE REMOVED BY WATER BLASTING OR SANDBLASTING ONLY.
- 10. ALL STOP BARS TO BE 4' BEHIND CROSSWALK OR SIDEWALK.
- 11. PAVEMENT MARKING REFLECTIVITY SHALL BE 250 MILLICANDELLAS FOR WHITE AND 175 MILLICANDELLAS FOR YELLOW.
- 12. ANY PAVEMENT MARKINGS OR SIGNS IN PUBLIC ROW DAMAGED DURING CONSTRUCTION SHALL BE RESTORED ACCORDING TO BROWARD COUNTY TRAFFIC ENGINEERING STANDARDS

# NE 3RD ST IMPROVEMENT PROJECT NOTE:

THERE IS PROPOSED TO BE IMPROVEMENTS TO MODIFY THE EXTENTS AND LAYOUT OF NE 3RD ST. THE NE 3RD ST PROJECT IS EXPECTED TO PRECEDE THE ICEBOX PROJECT AND THEREFORE THIS PLAN REFLECTS THE FUTURE NE 3RD ST LAYOUT. THE CONTRACTOR OF THE ICEBOX PROJECT IS EXPECTED TO COORDINATE WITH THE NE 3RD ST IMPROVEMENTS AND NOTIFY ENGINEER OF RECORD OF ANY COMPLICATIONS.

# FUTURE RESTAURANT NOTE:

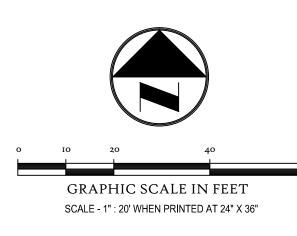
THERE IS PROPOSED TO BE A RESTAURANT CONSTRUCTED ON THIS SITE IN THE AREA SHOWN ON THIS PLAN AS "FUTURE RESTAURANT". THE ROOF OF THE FUTURE RESTAURANT IS PROPOSED TO BE CONSTRUCTED ALONG WITH THE COMMISSARIAT AND GREENHOUSE. AT A FUTURE TIME THE SLAB AND WALLS WILL BE CONSTRUCTED, PLEASE REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS. THE CONTRACTOR IS TO PLACE GRAVEL IN THIS AREA AND ENSURE THAT THE GRADING IS SUCH TO SLOPE AWAY FROM THE PROPOSED GREENHOUSE AND COMMISSARIAT UNTIL WHICH TIME THE CONSTRUCTION OF THE RESTAURANT COMMENCES.

# GENERAL PAVING, GRADING & DRAINAGE NOTES:

DEWATERING PLANS AND OBTAINING DEWATERING PERMITS.

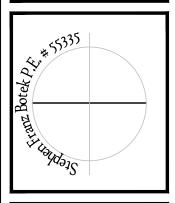
- ALL ROOF DRAINS TO BE CONNECTED TO THE NEAREST STORM DRAINAGE STRUCTURE.
   TYPICAL PAVEMENT SECTION (UNLESS OTHERWISE NOTED):
- 1½" TYPE SP-9.5 (2¾" LIFTS)
   8" LIMEROCK BASE
- 12" STABILIZED SUBGRADE
  CROSSWALKS AND RAMPS TO CONFORM TO ADA W/ DETECTABLE WARNING SURFACE.
  NO FENCES, TREES OR STRUCTURES WITHIN THE PROPOSED SWALE AREAS.
- ALL ELEVATIONS SHOWN HEREON REFER TO NAVD 1988 UNLESS NOTED OTHERWISE.
   DEWATERING IS NOT EXPECTED TO BE REQUIRED DURING CONSTRUCTION. SHOULD DEWATERING BE REQUIRED, THE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF





TE REVISIONS
1.16 DRC SET
1.16 DRC RESUB SET
1.16 SP REVIEW SUBMIT

SSUE DATE: 9.6.16



CEBOX CAFE AND CULINARY
CENTER
NE 3rd St

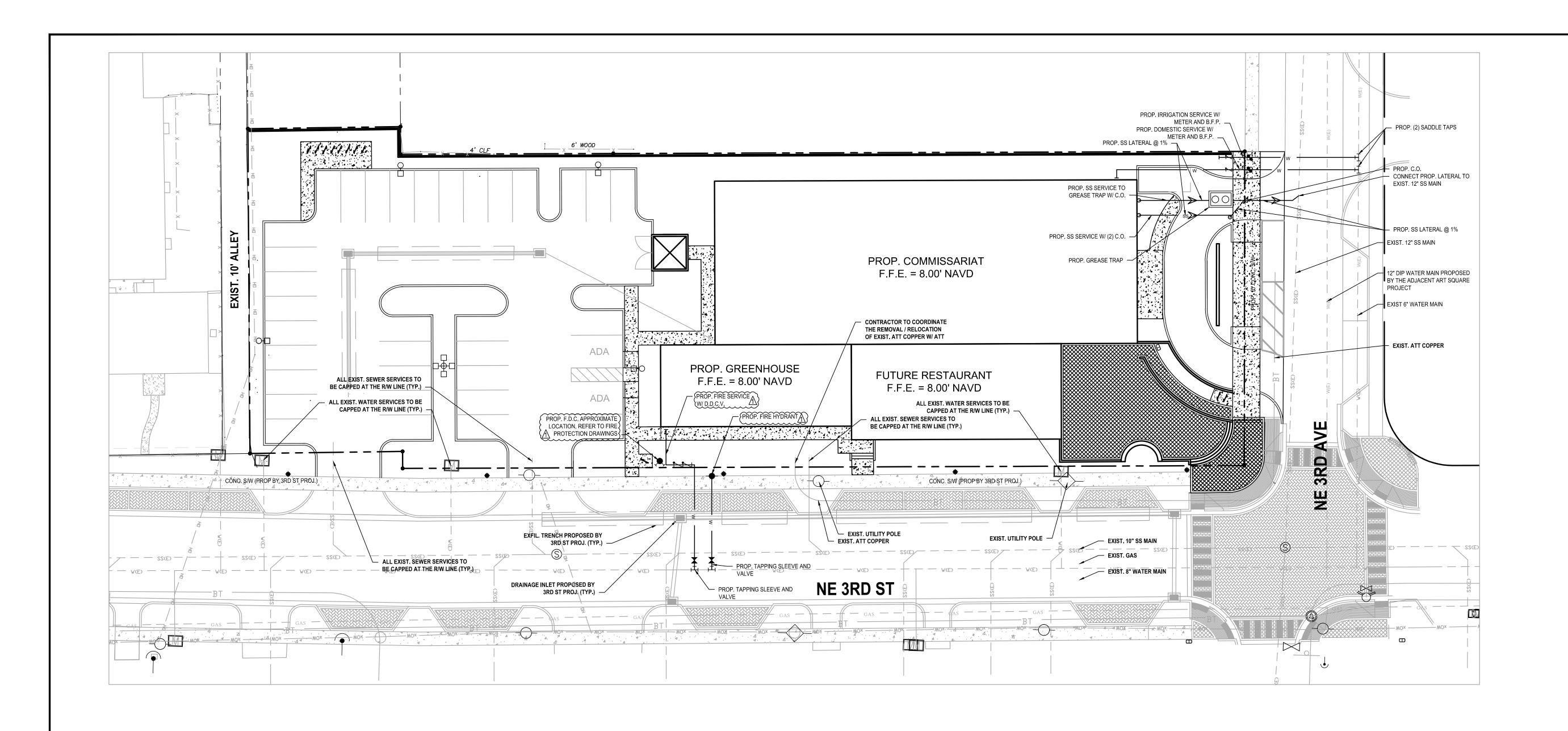
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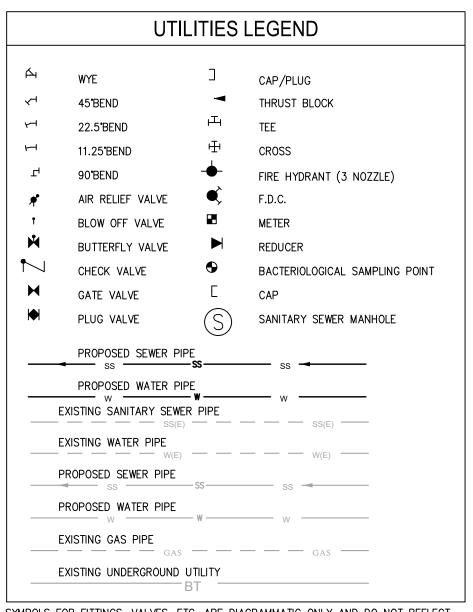
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SYMBOLS FOR FITTINGS, VALVES, ETC. ARE DIAGRAMMATIC ONLY AND DO NOT REFLECT ACTUAL SIZE; FOR ACTUAL DIMENSIONS REFER TO MANUFACTURER'S SPECIFICATIONS.

# FIRE LINE NOTES:

1. ALL PROPOSED FIRE MAINS, SERVICES, "SIAMESE" CONNECTION LINES ETC. MUST BE INSTALLED BY A STATE LICENSED FIRE LINE CONTRACTOR PER FLORIDA STATUTE 633.

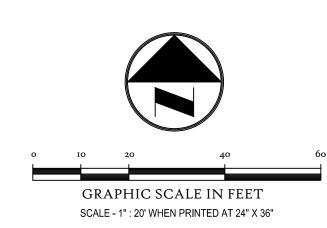
- ALL FIRE LINES ARE TO BE INSPECTED BY CERTIFIED FIRE LINE INSPECTORS PRIOR TO BEING PLACED INTO SERVICE.
- 3. UPON COMPLETION OF REQUIRED TESTING A STATE LICENSED FIRE LINE CONTRACTOR SHALL ISSUE A "LICENSED UNDERGROUND TEST CERTIFICATE". THE CERTIFICATE MUST BE ISSUED AND THE FIRE LINE MUST BE ACCEPTED BY THE BROWARD COUNTY HEALTH DEPT. (WHERE APPLICABLE) PRIOR TO BEING PLACED INTO SERVICE.
- 4. FIRE LINE SYSTEM COMPONENTS (FDC, DDCV, FIRE LINE PIPING, ETC.) SHOWN ON THESE PLANS ARE TO BE COORDINATED WITH THE FIRE PROTECTION DRAWINGS AND DESIGN AND FIRE PROTECTION SHOP DRAWINGS. NOTIFY ENGINEER OF ANY DISCREPANCY PRIOR TO INSTALLATION OF ANY PORTION OF THE FIRE PROTECTION SYSTEM.

# WATER AND SANITARY SEWER NOTES:

1. COORDINATE EXACT LOCATION OF SANITARY SEWER CLEANOUTS WITH PROPOSED LANDSCAPING

\_\_\_\_\_

- 2. ALL ELEVATIONS SHOWN HEREON REFER TO NAVD UNLESS NOTED OTHERWISE.
- 3. EXACT LOCATION OF METERS AND BFPs / DDCVs TO BE COORDINATED IN THE FIELD.
- 4. ALL EXISTING WATER AND SEWER SERVICES ARE TO BE CUT AND CAPPED AT THE PROPERTY LINE IN ACCORDANCE WITH CITY OF CITY STANDARDS UNLESS NOTED OTHERWISE
- 5. ANY EXISTING WATER, FIRE, SEWER AND STORM INFRASTRUCTURE ON SITE SHALL BE REMOVED





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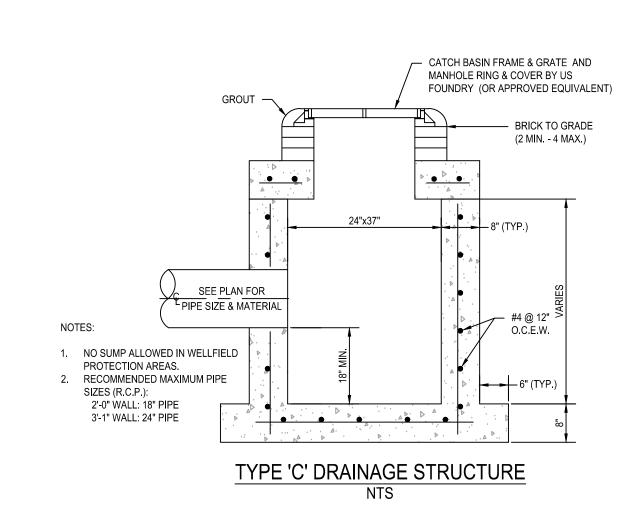
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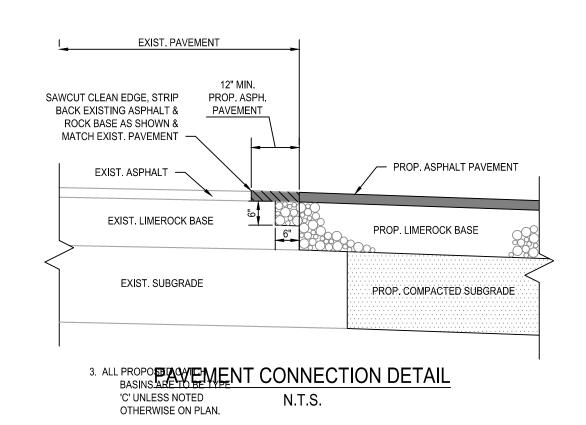
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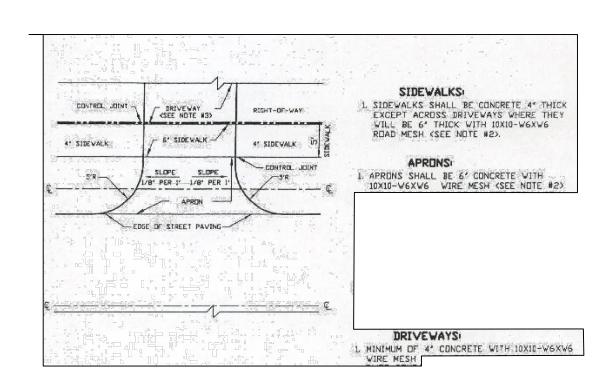
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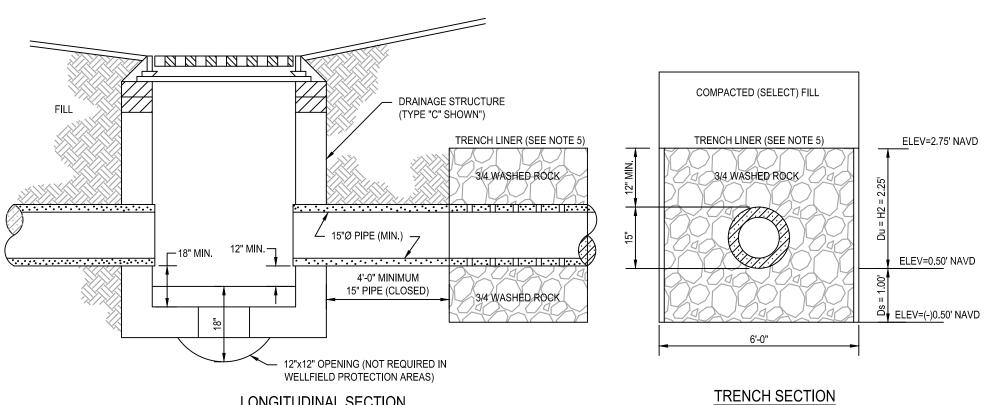






NOTE: ALL CONCRETE TO BE 3000 PSI W/ CONTROL JOINTS @ 20' ON CENTER

DRIVEWAY WITH SIDEWALK DETAIL (MODIFIED CITY STANDARD)



LONGITUDINAL SECTION

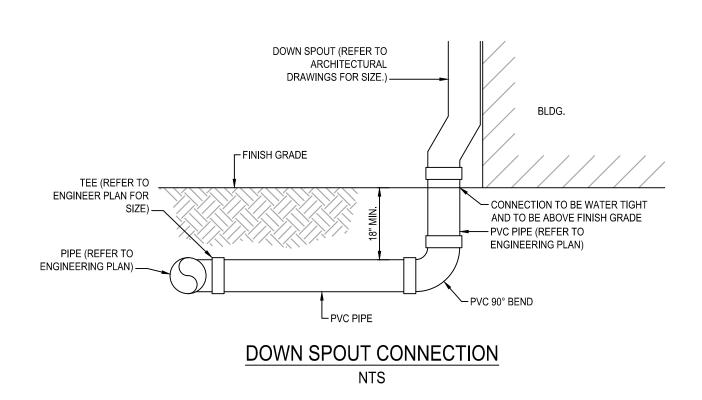
DRAIN FIELD MAY BE OF SLOTTED CONCRETE PIPE.
 PIPES SHALL TERMINATE 2' FROM END OF TRENCH OR CONNECT TO ADDITIONAL CATCH BASINS WITH A MINIMUM OF 4' SEPARATION BETWEEN TRENCH

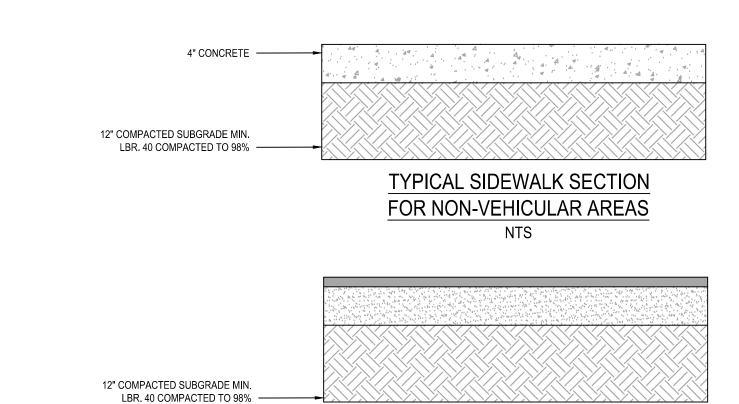
AND CATCH BASIN AS REQUIRED. 3. COVER PIPE ENDS WITH NO. 10 GALVANIZED OR ALUMINUM SCREEN, OPENING NO LARGER THAN ½" ½".
4. BALLAST ROCK SHALL BE FROM FRESH WATER WASHED FREE OF DELETERIOUS MATTER.
5. SIDES AND TOP OF TRENCH TO BE LINED WITH ONE LAYER OF PLASTIC TYPE FILTER CLOTH OR APPROVED EQUAL OVERLAP TRENCH LINING MATERIAL

A MINIMUM OF TWO FEET AT TOP OF TRENCH

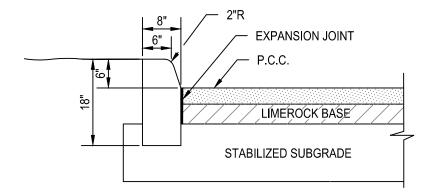
6. FILTER FABRIC TO BE GEOGTEX 351 OR AMOCO 4545 OR EQUIVALENT.

# **EXFILTRATION TRENCH DETAIL**



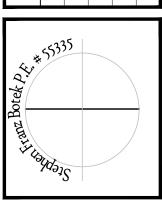


TYPICAL ASPHALT PAVEMENT SECTION



**TYPE "D" CURB DETAIL** SCALE 1/2" = 1'-0"

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PAVING GRADING AND DRAINAGE DETAILS

THE ICEBOX CAFE AND CULINARY

CENTER

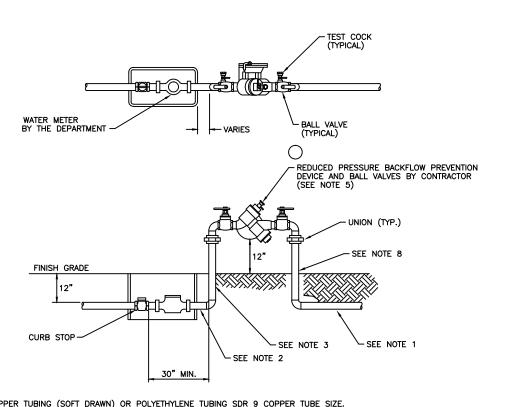
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Engineering, Inc Botek Thurlow

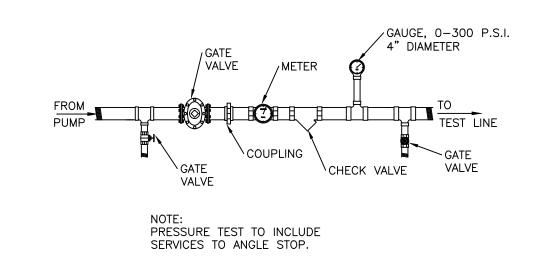
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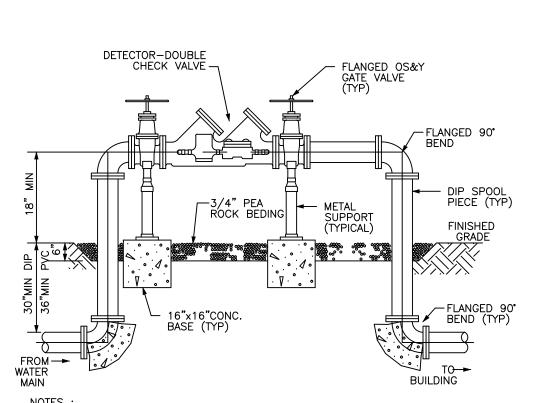
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- 1. TYPE "K" COPPER TUBING (SOFT DRAWN) OR POLYETHYLENE TUBING SDR 9 COPPER TUBE SIZE.
- $\bigstar$  4. BOTH 1 1/2" AND 2" CUSTOM METER SETTERS SHALL BE EQUIPPED WITH LOCK WING BALL VALVES.
- 5. APPROVED BACKFLOW PREVENTION DEVICES PER CITY OF HALLANDALE BEACH 6. WHEN THE DEVICE IS INSTALLED PARALLEL TO A BUILDING WALL THERE SHALL BE A MIN. OF 6" BETWEEN THE EDGE OF THE DEVICE AND THE BUILDING WALL.
- 7. BACKFLOW PREVENTION DEVICE SHALL BE EQUIPPED WITH BALL VALVES IN LIEU OF GATE VALVES.
- 8. BACKFLOW PREVENTION DEVICE SHALL BE SUPPORTED AT BOTH RISERS WITH STAINLESS STEEL UNISTRUT. RISERS TO BE SECURED TO UNISTRUT WITH STAINLESS STEEL (304) MOUNTING HARDWARE AND NEOPRENE INSULATORS BETWEEN ALL DISSIMILAR METALS.
- R.P.Z. DOMESTIC BACKFLOW PREVENTOR DETAIL 3/4" 2"



PRESSURE TEST DETAIL



- 2. 5' CHAIN LINK FENCE TO BE GALVINIZED.
  2. ALL PIPING SHALL BE D.I.P. CL 350 AS APPLICABLE TO MINIMUM STANDARDS. 3. ALL LOW FLOW METER PIPING SHALL BE BRASS OR COPPER.
  4. PIPING & ASSEMBLY SHALL BE PAINTED WITH LINEAR POLYURETHANE SYSTEM.
- 5. CONTROL VALVES TO HAVE TAMPERS IF FIRE ALARM PROVIDED.
  6. CONTROL VALVES OR FENCE TO BE CHAINED AND LOCKED.
- FIRE LINE DOUBLE DETECTOR CHECK VALVE DETAIL

CONCRETE SIDEWALK

PEA ROCK

2. CURVE IN SERVICE LINE SHALL BE AS CLOSE TO METER BOX AS PRACTICAL, WITH A MINIMUM RADIUS SHALL BE 14" FOR 1" TUBING.

3. WHEN SIDEWALKS ARE PRESENT, OR PLANNED FOR IN THE R/W, THE BACK EDGE OF THE METER BOX SHALL LINE UP WITH THE BACK

WATER METER INSTALLATION FOR 1" METER

1" POLYETHYLENE TUBING

(COPPER TUBING SIZE) OR 1" TYPE "K" COPPER TUBING

METER BOX WITH

CHECK VALVE

(SEE NOTE 5)

NOTES:

DUCTILE IRON COVER, SIZE: 14"x16"x12" HIGH

POLYETHYLENE TUBING (COPPER TUBING SIZE) OR TYPE "K" COPPER TUBING

EDGE OF THE SIDEWALK.

1. R/W LINE OR EASEMENT LINE IS THE CUSTOMER'S SIDE OF METER BOX.

4. METER SHALL BE CENTERED IN BOX DIRECTLY UNDER THE ACCESS LID.

5. THE CHECK VALVE IS TO BE INSTALLED 5 FEET BEFORE THE METER BALL VALVE.

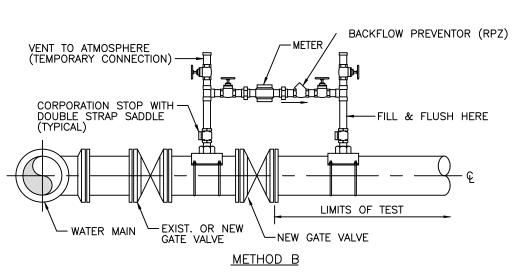
6. WHEN THERE ARE NO SIDEWALKS, CONSTRUCT 6" WIDE x 6" THICK CONCRETE COLLAR AT GRADE.

FER LAYING LENGTH HEIDI

7.5

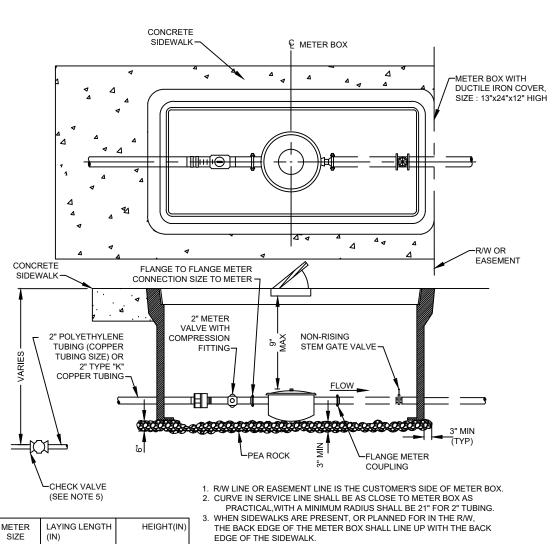
10.75

METER COUPLING

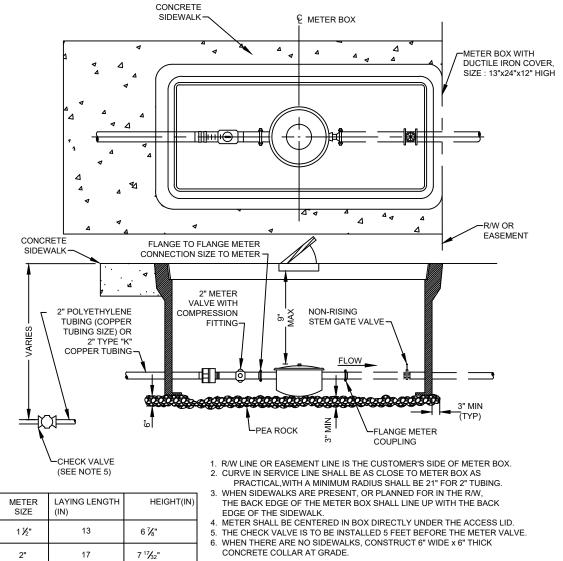


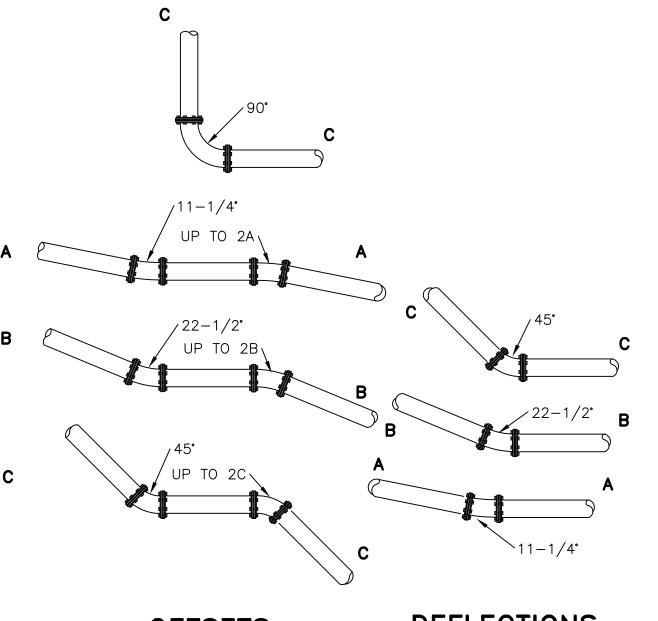
- WATER MAIN TO BE PRESSURE TESTED AND DISINFECTED ACCORDING TO BROWARD COUNTY PUBLIC HEALTH UNIT REGULATIONS, AWWA, AND MUNICIPAL SPECIFICATIONS IN EFFECT.
- BACTERIOLOGICAL TESTS ARE TO BE PERFORMED BY THE CONTRACTOR AND AN APPROVED TESTING LABORATORY.
- REMOVE TEMPORARY CONNECTION AT SADDLE ON NEW MAINS AFTER FILLING AND FLUSHING HAS BEEN COMPLETED AND REPLACE WITH BRASS PLUG.
- 4. PROVIDE ALL NECESSARY THRUST BLOCKS OR OTHER RESTRAINTS.
- FILLING AND FLUSHING LOCATIONS SHALL BE COORDINATED BY THE CONTRACTOR, ENGINEER, AND CITY.
- VENT TO ATMOSPHERE SHALL REMAIN OPEN DURING ALL PHASES OF PRESSURE TESTING.

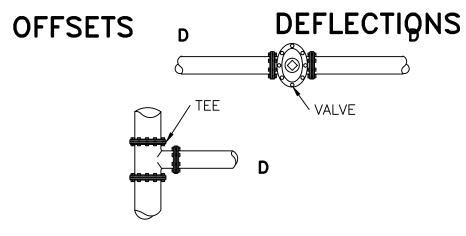
# FILLING AND FLUSHING CONNECTION



| METER INSTALLATION FOR |
|------------------------|
| 2" METERS              |
| NTS                    |





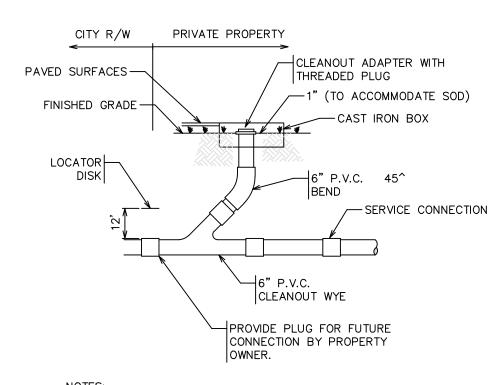


# DEAD ENDS

|      | DISTANCE IN FEET |    |     |  |
|------|------------------|----|-----|--|
| SIZE | A & B            | С  | D   |  |
| 4"   | 18               | 18 | 54  |  |
| 6"   | 18               | 18 | 72  |  |
| 8"   | 18               | 36 | 90  |  |
| 10"  | 18               | 36 | 108 |  |
| 12"  | 18               | 36 | 126 |  |
| 14"  | 18               | 54 | 144 |  |
| 16"  | 18               | 54 | 162 |  |
| 18"  | 18               | 54 | 180 |  |
| 20"  | 18               | 72 | 198 |  |
| 24"  | 18               | 72 | 216 |  |

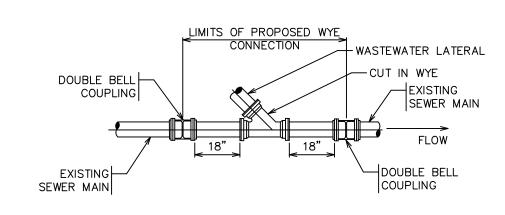
- 1. FOR PIPE SIZE OVER 24" SEE SPECIFICATIONS
- 2. RESTRAIN AS SHOWN ON DRAWINGS.

MINIMUM RESTRAINED JOINT LENGTH FOR PRESSURE MAINS

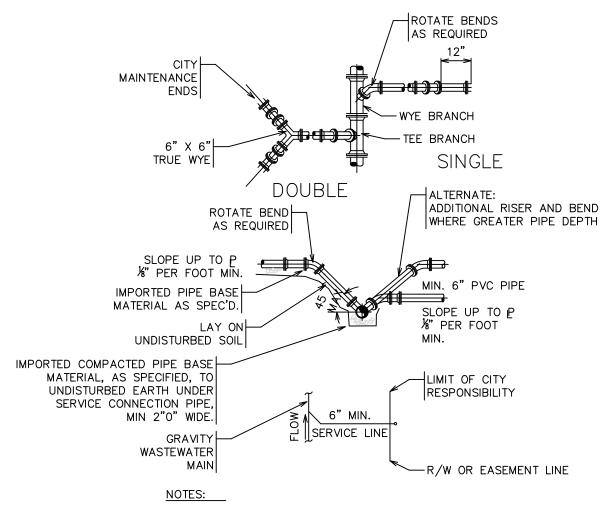


- 1. PROVIDE APPROVED PLUG OR JOINT FOR DISSIMILAR GRAVITY SEWER PIPE FOR SERVICE CONNECTION.
- 2. CLEAN-OUT ASSEMBLY SHALL BE INSTALLED BY PROPERTY OWNER.

TYPICAL CLEANOUT INSTALLATION



NEW LATERAL ON EXISTING GRAVITY WASTEWATER MAIN

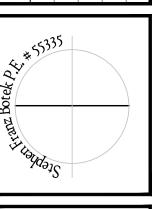


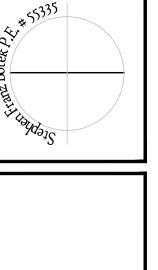
- 1. WASTEWATER MAIN WYE BRANCH TO MATCH MAIN PIPE MATERIAL.
- 2. NO 90° BENDS SHALL BE USED FOR WASTEWATER SERVICE AND CLEANOUT INSTALLATIONS.
- 3. SERVICE LATERALS SHALL TERMINATE AT 12" INSIDE THE PROPERTY LINE AT A DEPTH OF 3 FEET EXCEPT WHERE A DEEPER INVERT IS REQUIRED BY EXISTING BUILDING CONDITIONS.

TYPICAL WASTEWATER SERVICE CONNECTION

| REVISIONS | 7.18.16 DRC SET | 8.17.16 DRC RESUB SET | 9.7.16 SP REVIEW SUBMIT        |  |  |
|-----------|-----------------|-----------------------|--------------------------------|--|--|
| DATE      | 7.18.16         | 8 17 16               | 9.7.16                         |  |  |
| #         |                 | $\forall$             | $\langle \overline{V} \rangle$ |  |  |
|           | 55335           |                       |                                |  |  |

SSUE DATE: 9.6.16





WATER AND SANITARY

THE ICEBOX CAFE A

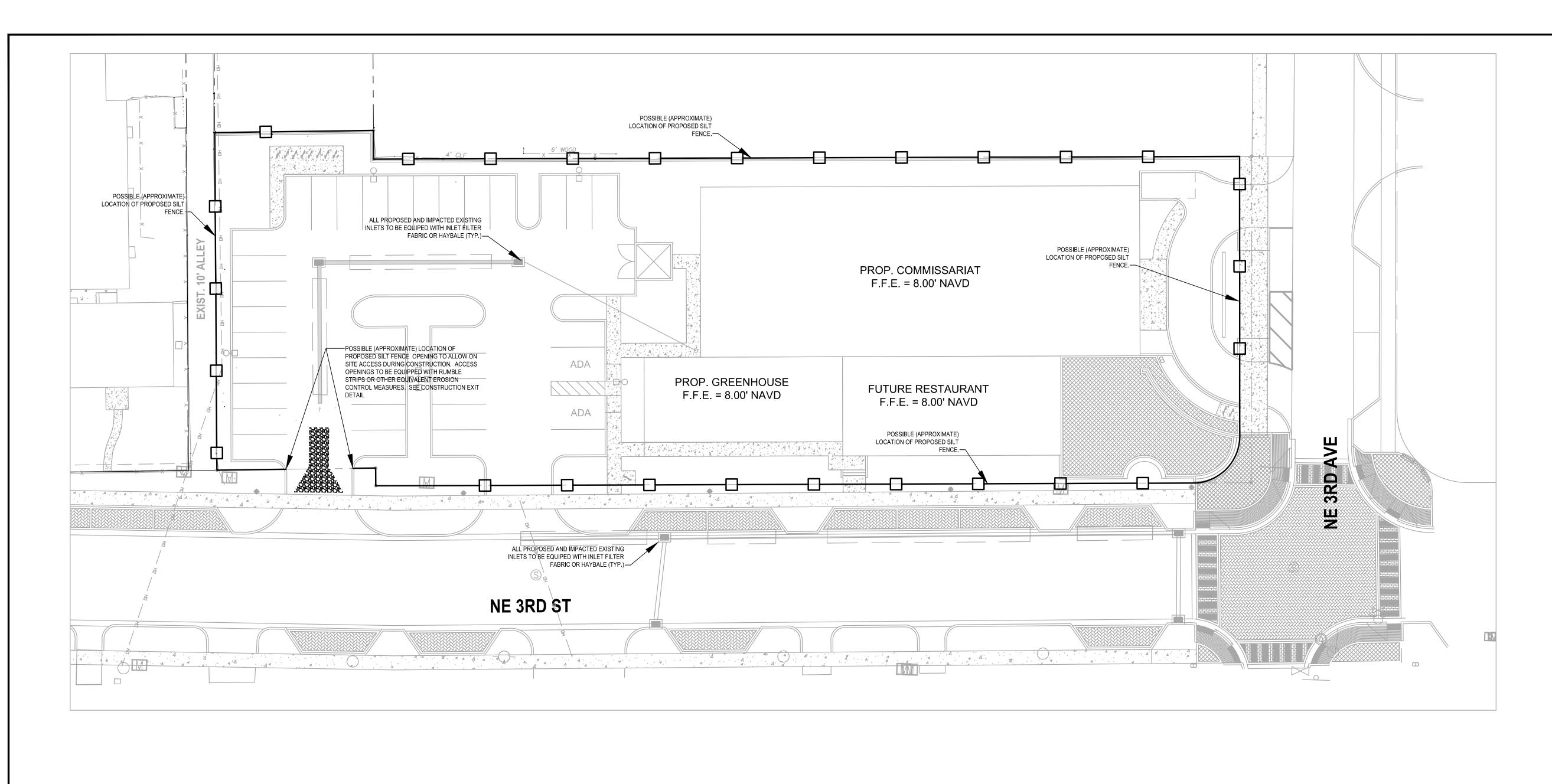
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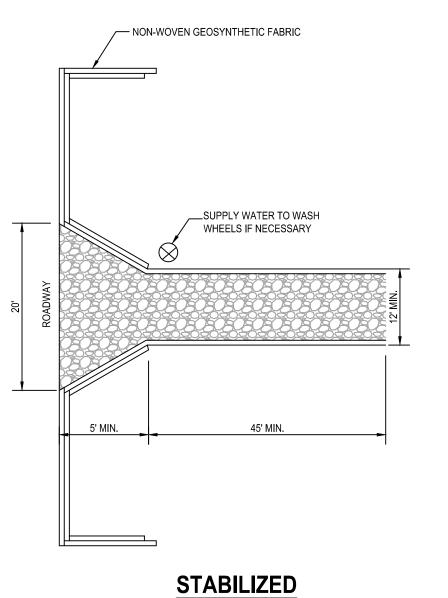
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BTE PROJECT #: 16-0410

DATE: 07-08-16

SHEET #:





# **CONSTRUCTION EXIT**

THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC. NOTES:

1. ROCK OR GRAVEL USED IN THE CONSTRUCTION EXIT IS TO BE AT LEAST 6" DEEP OVER A BASE OF FILTER CLOTH FOR THE ENTIRE LENGTH AND WIDTH OF THE STABALIZED EXIT.

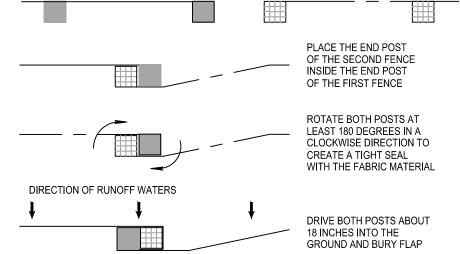
2. TO BE LABOR ENOUGH AS TO NOT BE CARRIED OFF BY CONSTRUCTION VEHICLES 2. ROCK OR GRAVEL TO BE LARGE ENOUGH AS TO NOT BE CARRIED OFF BY CONSTRUCTION VEHICLES. SILT FENCH INSTALLATION DETAIL D 9.1a 3. REFER TO EPA'S CONSTRUCTION ENTRANCE BEST MANAGEMENT PRACTICES FOR MORE INFORMATION.

# STEEL OR WOOD POST -EXTRA STRENGTH FILTER FABRIC NEEDED WITHOUT WIRE MESH SUPPORT -FOR ADDITIONAL STRENGTH FILTER FABRIC MATERIAL CAN BE ATTACHED TO A 6-INCH (MAX.) MESH WIRE SCREEN WHICH HAS BEEN FASTENED TO THE POSTS. 10 FT. MAX. SPACING WITH WIRE SUPPORT FENCE 6 FT. MAX. SPACING WITHOUT WIRE SUPPORT FENCE

- THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES (90 CM). THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO LENGTH OF
- THE BARRIER TO AVOID THE USE OF JOINTS. 3. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET (3 M) APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 12 INCHES (30 CM).
- WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6 FEET (1.8 M). 4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES (10 CM) WIDE AND 4 INCHES (10 CM) DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY
- DUTY WIRE STAPLES AT LEAST 1 INCH (25 MM) LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES (5 CM) AND SHALL NOT EXTEND MORE THAN 36 INCHES (90 CM) ABOVE THE ORIGINAL GROUND SURFACE. 6. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8 INCHES (20 CM) OF THE FILTER FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES (90 CM) ABOVE THE ORIGINAL

# FENCE POST (WOOD OR STEEL) -FABRIC -RUNOFF DIG 4" WIDE & 4" DEEP TRENCH, BURY BOTTOM 8" OF FABRIC, AND ANCHOR WITH COMPACTED BACKFILL MATERIAL —

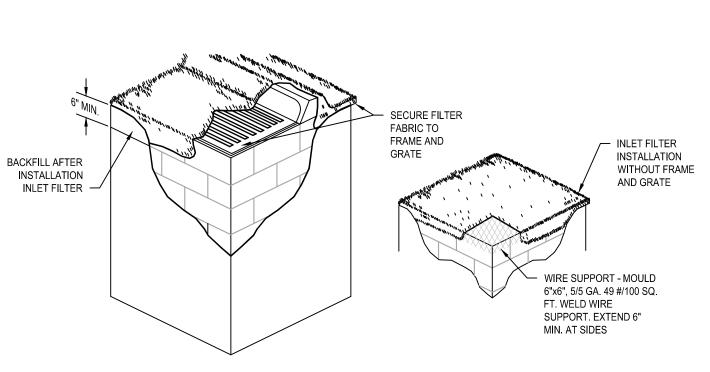
# SILT FENCE SECTION



ATTACHING TWO SILT FENCES
NOT TO SCALE

# **POLLUTION CONTROL NOTES:**

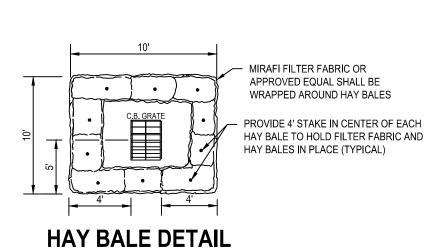
- 1. SILT FENCES SHALL BE INSTALLED AS NECESSARY TO CONTROL OR PREVENT OFF-SITE DISCHARGE OF
- 2. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED WITHIN A REASONABLE PERIOD OF TIME TO ASSURE MINIMUM EROSION OF SOILS.
- 3. CONTRACTOR TO PROVIDE FOR TRUCK WASH DOWN AREA AT ALL TEMPORARY AND PERMANENT ENTRANCES/EXITS DURING CONSTRUCTION.
- 4. CONTRACTOR TO SCHEDULE AN EROSION AND SEDIMENT CONTROL INSPECTION WITH THE CITY PRIOR TO START OF CONSTRUCTION. TO REQUEST INSPECTION CALL (954) 828-5191.
- 5. CONTRACTOR TO ENSURE ALL STORM WATER REMAINS ONSITE DURING CONSTRUCTION.



- NOTES:

  1. CONTRACTOR IS TO CLEAN INLET FILTER AFTER EVERY STORM.
  2. CONTRACTOR TO REMOVE FABRIC JUST PRIOR TO PAVING.
  3. A SEDIMENT TRAP WILL BE EXCAVATED BEHIND THE CURB AT THE INLET. THE BASIN SHALL BE AT LEAST 12 TO 14" IN
- DEPTH. APPROXIMATELY 36" IN WIDTH, AND APPROXIMATELY 7 TO 10 FEET IN LENGTH PARALLEL TO THE CURB. 4. STORM WATE WILL REACH THE SEDIMENT TRAP VIA CURB CUTS ADJACENT TO EACH SIDE OF THE INLET STRUCTURE. THESE OPENINGS SHALL BE AT LEAST 12 INCHES IN LENGTH. STORM WATER MAY ALSO REACH THE BASIN VIA OVERLAND
- FLOW LAND AREA BEHIND THE CURB. THE CURB CUTS SHALL BE REPAIRED WHEN THE SEDIMENT TRAP IS REMOVED. 5. DURING CONSTRUCTION, ALL INLETS ON AND 100' OR CLOSER TO THE PROPERTY SHALL BE PROTECTED WITH FILTER

**INLET FILTER DETAIL** 



BTE PROJECT #:



GRAPHIC SCALE IN FEET SCALE - 1": 20' WHEN PRINTED AT 24" X 36"

SHEET #:

16-0410

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