PROJECT TEAM:

OWNER: AutoNation

200 Southwest First A Le. 14th Floor Fort Lauderdale, FL, 33301 Contact: tel: (954) 769-4068 email: serrad□ autonation.com

STRUCTURAL ENGINEER Rochell Engineering INC.

205 Santillane A ⊡e. Coral Ga les, FL, 33134 Alexander Rochell tel: (305) 649-4049

email: alex□ structuralpartners.com

MEP ENGINEER P&G Engineering Design Group Corp.

21 SW 102TH CT Miami, FL, 33174 Contact: Luis O. Pere□ tel: (786) 747-5018 email: lpere □ pgengineeringdesign.com ARCHITECT SOL-ARCH

6780 SW 80TH Street Miami, FL, 33143 Contact: **Dulce Conde** tel: (305) 740-0723 email: d□ sol-arch.com CIVIL ENGINEER: THE BETA JONES GROUP

email: luis□ □eta ones.com

801 Bric⊑ell A⊡enue Suite 900 Miami, FL, 33131 Contact: Luis A. Betallelus tel: (786) 284-8828

BUILDING & STRUCTURAL INFORMATION

- a. Interior Remodeling & Addition□ Pre-Engineered Metal Building Type c. Occupancy: Business & Storage
- Ris□Category: II
- Building Height: 46'-6" Construction Type: III B
- g. Zoning Designation: M-1 Light Industrial



CODES IN USE:

Florida Building Code (2017)
Florida Fire Pre ention Code (2017) - Sixth Edition
NFPA 101 Life Safety Code (2015) with Florida
Amendments -Fifth Edition NFPA 1 Uniform Fire Code (2015) with Florida Amendments- Fifth Edition 2017 ADA Standards for Accessi⊟e Design

MAY 22TH, 2019

AUTONATION MARGATE COLLISION CENTER

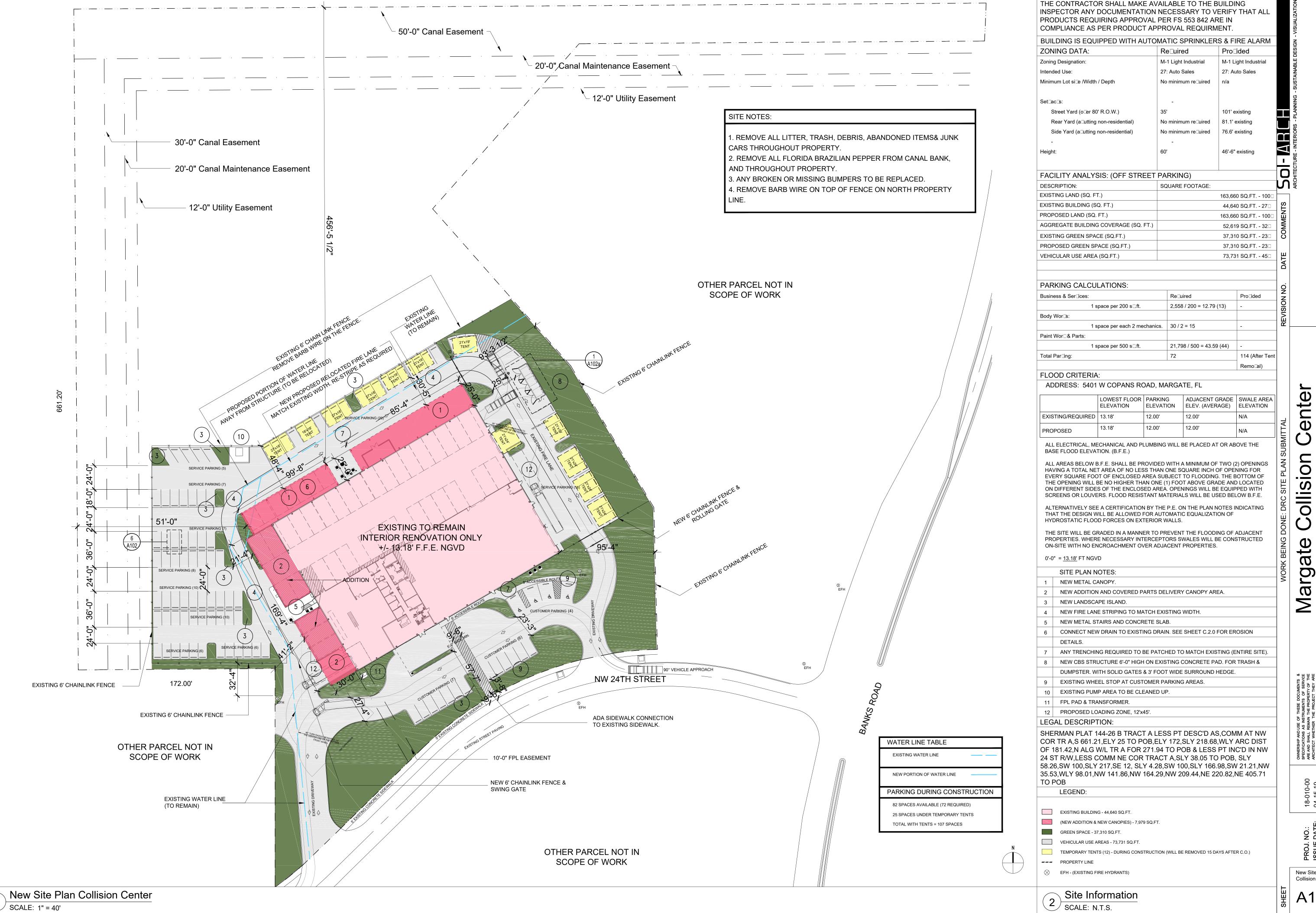
5355 NW 24TH ST, MARGATE, FL 33063 DRC SITE PLAN SUBMITTAL

DEFERRED SUBMITTAL:

- Fire Alarm Shop Drawings
- Sprin ☐ers Shop Drawings
- NOA Metal Building
 NOA for Doors and Windows
- NOA for Roof
- Signage

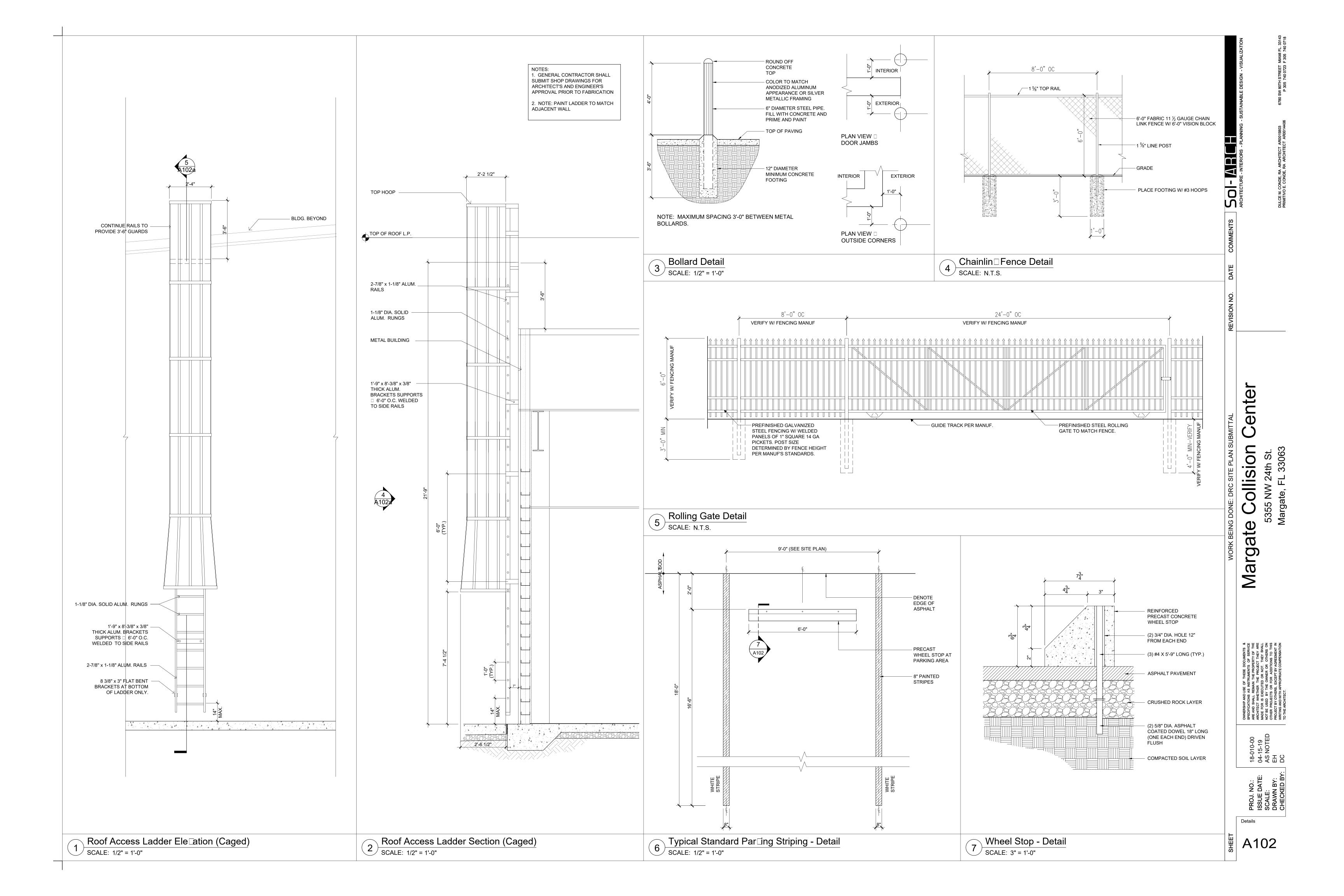


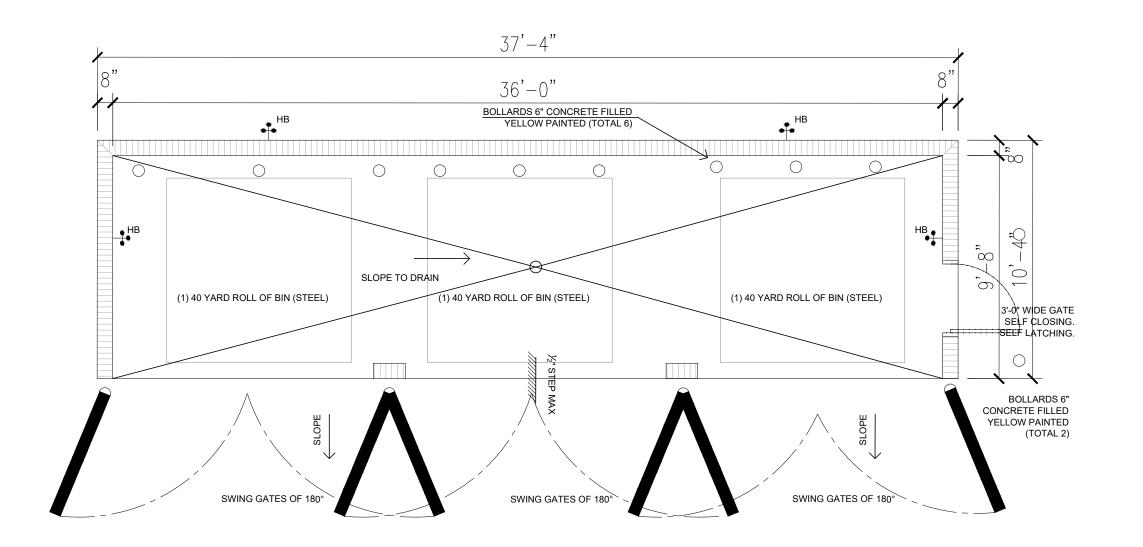


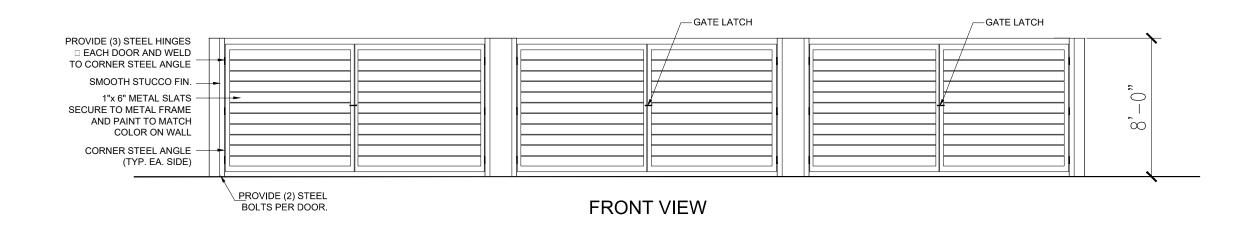


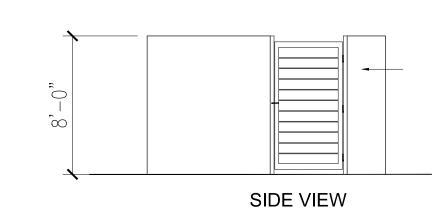
New Site Plan Collision Center

A101









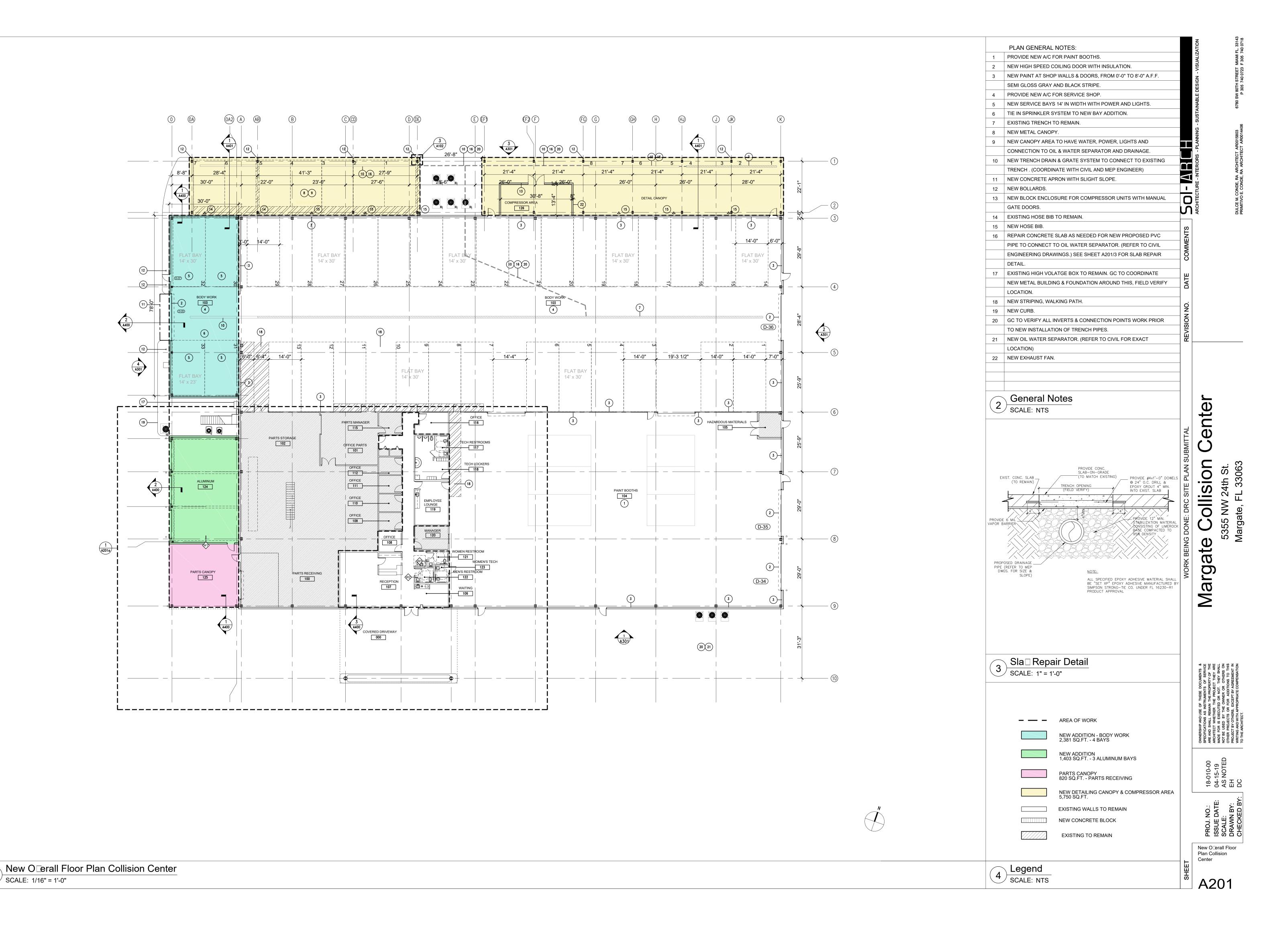
Dumpster Pad SCALE: N.T.S.

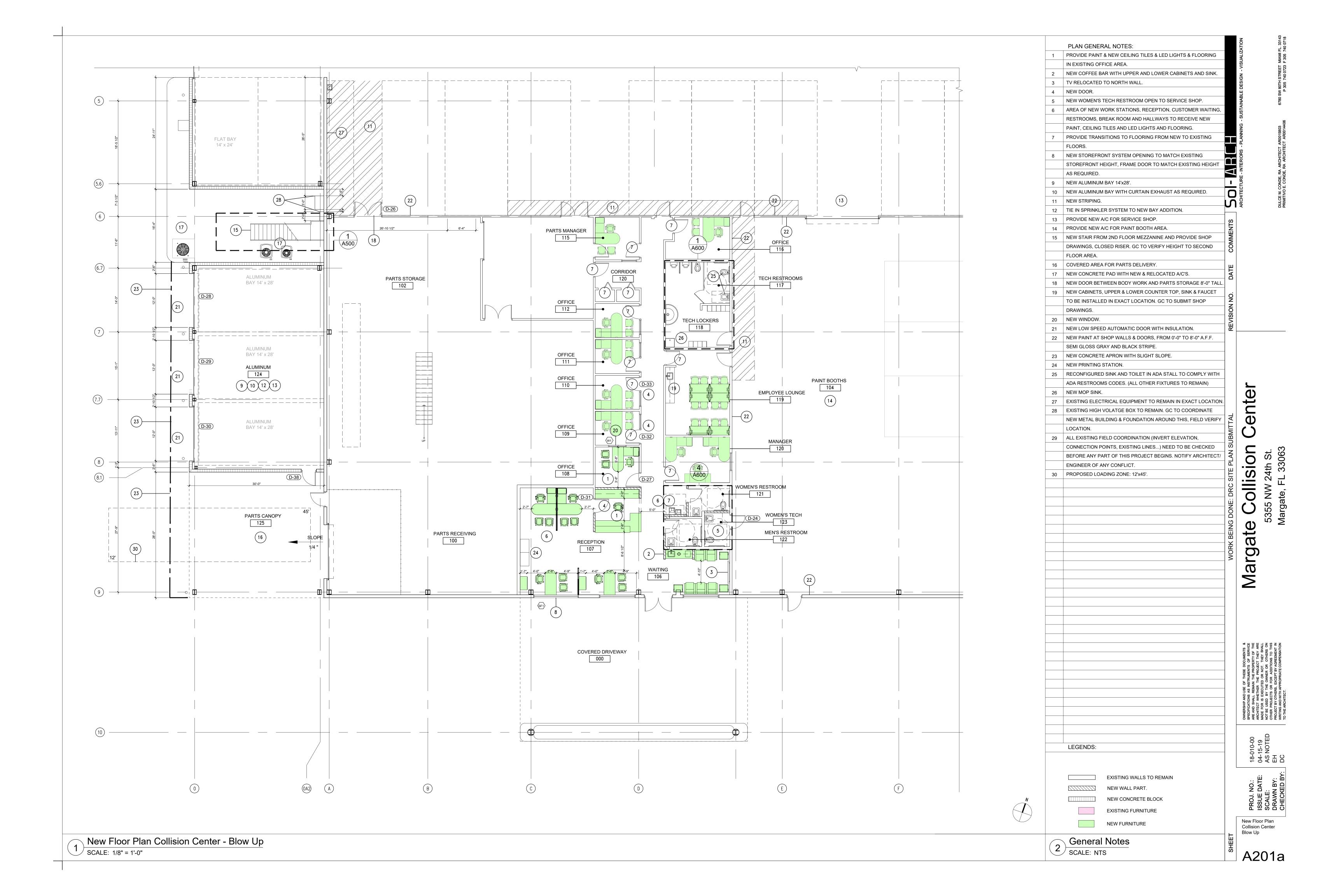
Center WORK BEING DONE: DRC SITE PLAN SUE

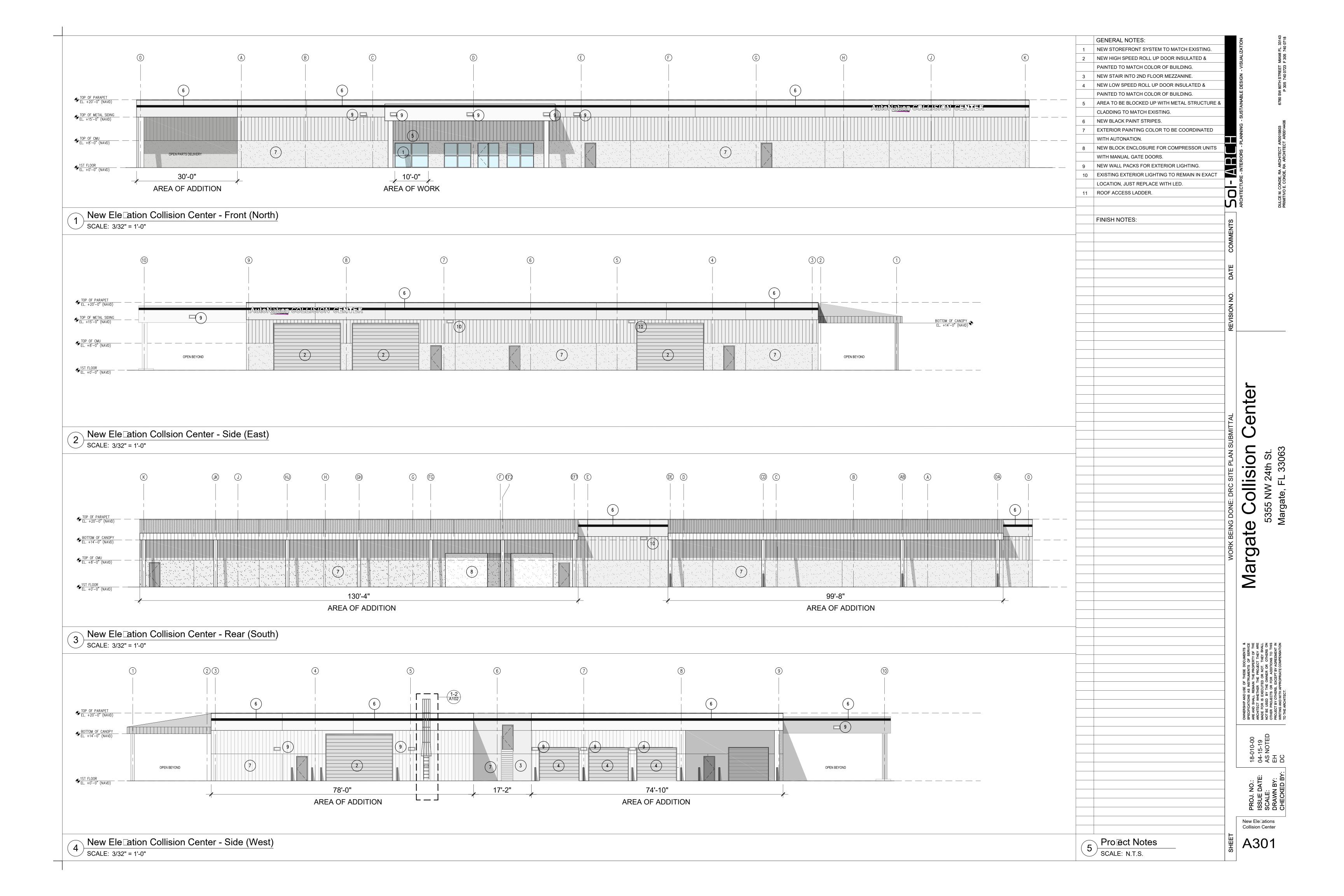
Margate, FL 33063 On

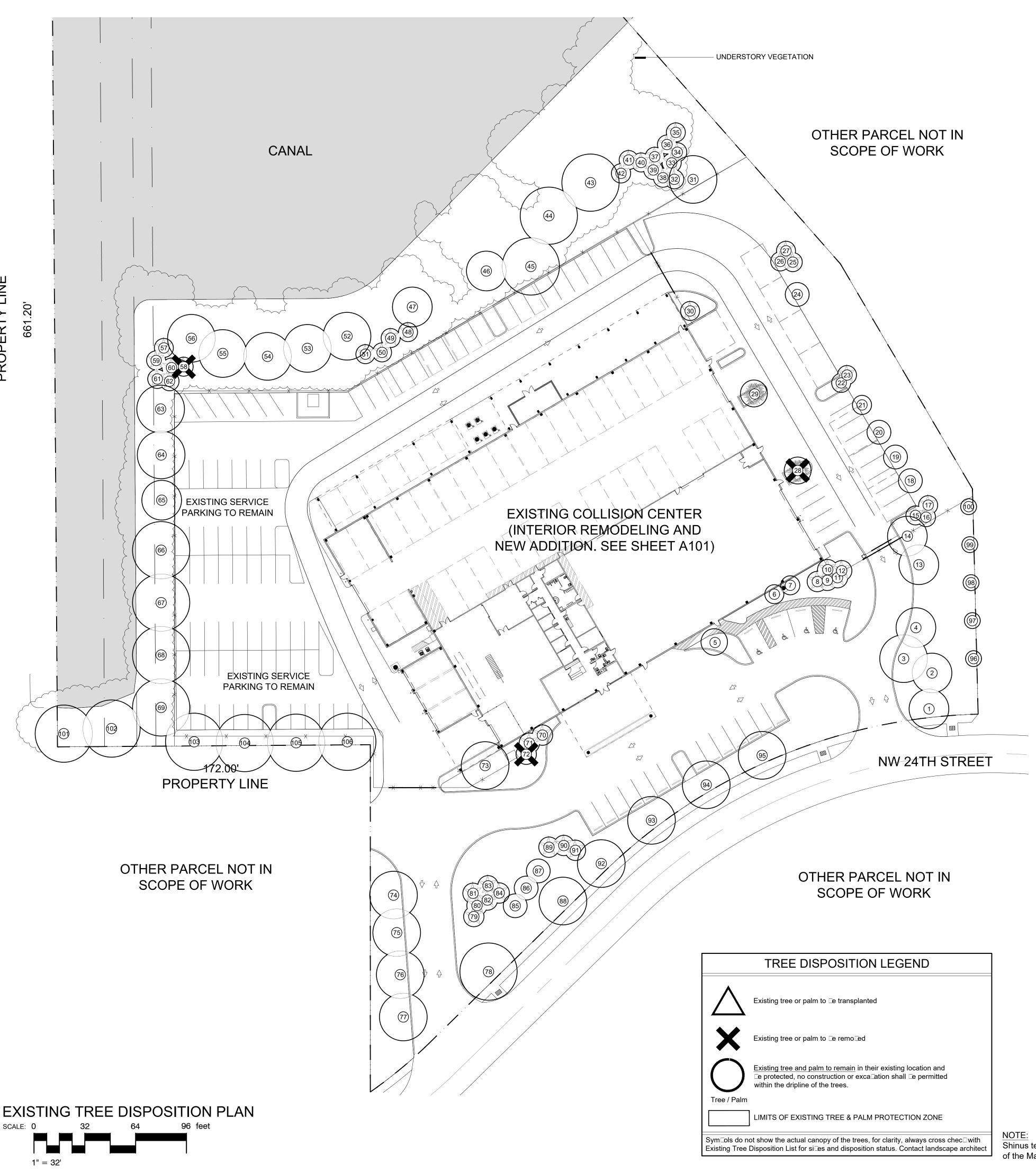
SOI- AREIORS - PLAN

병 A102a









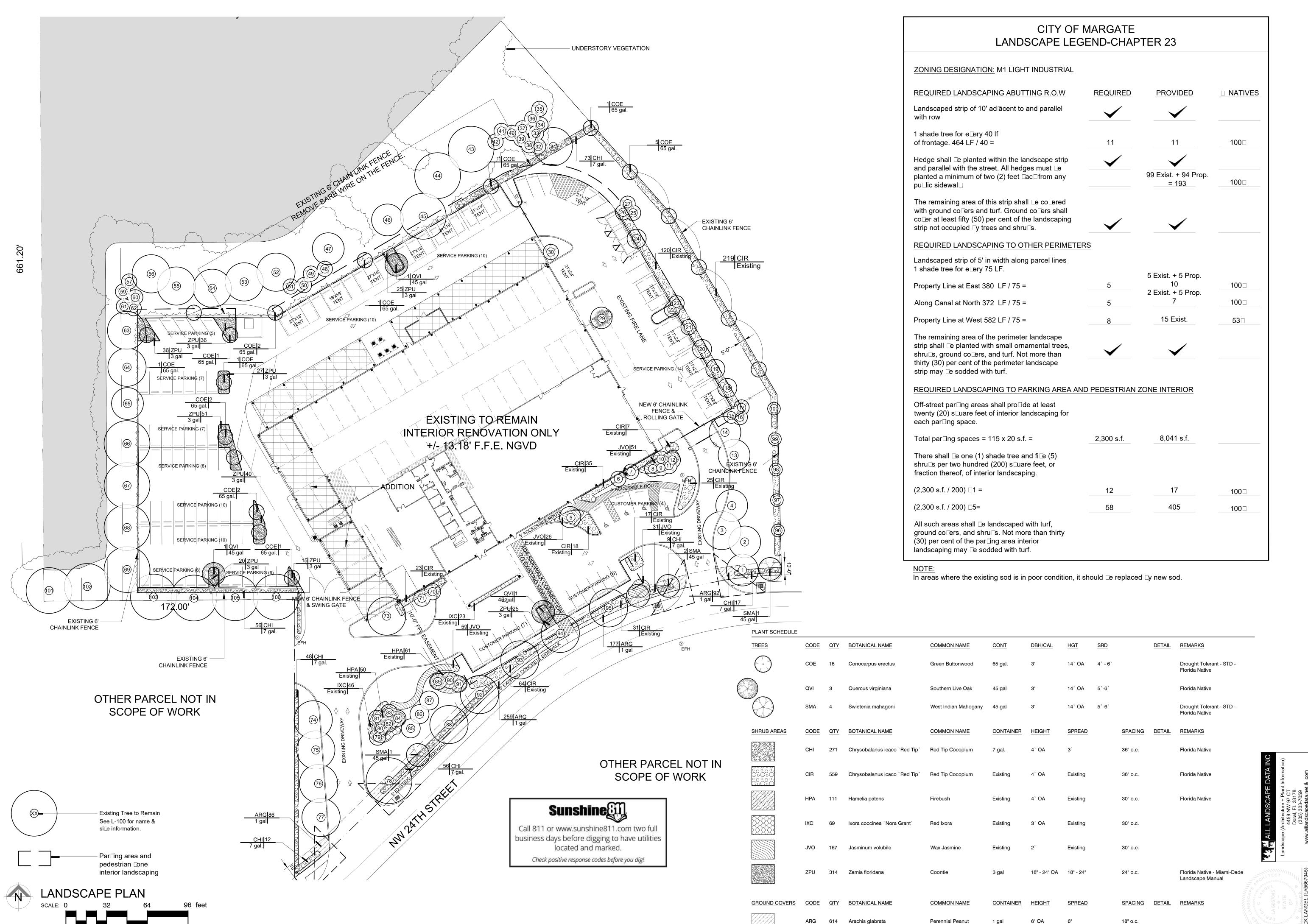
JMBER	BOTANICAL NAME	COMMON NAME	HEIGHT (FT)	SPREAD (FT)	DBH (INCHES)	TREE	CONDITION	DISPOSITION	
1	Swietenia mahagani	Mahogany	35	25	24	(SQ.FT)	Fair	Remain	
3	Quercus virginiana Quercus virginiana	Live Oak Live Oak	30 30	25 30	16 12		Fair Fair	Remain Remain	
4	Quercus virginiana	Live Oak	30	25	16		Fair	Remain	
5 6	Ptychosperma elegans	Alexander Palm - Double	22 16	12 12	5+5 8		Fair Fair	Remain Remain	
7	Lagerstroemia indica 'Natchez' Lagerstroemia indica 'Natchez'	Natchez Crape Myrtle Natchez Crape Myrtle	16	12	8		Fair	Remain	
8	Syagrus romanzoffiana	Queen Palm	24	12	5		Fair	Remain	
9	Syagrus romanzoffiana Syagrus romanzoffiana	Queen Palm Queen Palm	28	12 12	7 6		Fair Fair	Remain Remain	
11	Syagrus romanzoffiana	Queen Palm	24	12	6		Fair	Remain	
12 13	Syagrus romanzoffiana Quercus virginiana	Queen Palm Live Oak	26 5	12 30	6 20		Fair Fair	Remain Remain	
14	Quercus virginiana	Live Oak	25	20	13		Fair	Remain	
15 16	Sabal palmetto Sabal palmetto	Sabal Palm Sabal Palm	24	8	10 9		Fair Fair	Remain Remain	
17	Sabal palmetto	Sabal Palm	20	8	10		Fair	Remain	
18 19	Conocarpus erectus	Green Buttonwood Green Buttonwood	22	15 15	15 20		Fair Fair	Remain Remain	
20	Conocarpus erectus Conocarpus erectus	Green Buttonwood	20	15	20		Fair	Remain	
21 22	Conocarpus erectus	Green Buttonwood	12 20	10 8	9		Fair to Poor Fair	Remain	
23	Sabal palmetto Sabal palmetto	Sabal Palm Sabal Palm	20	8	10		Fair	Remain Remain	
24	Conocarpus erectus	Green Buttonwood	18	15	12		Fair	Remain	
25 26	Sabal palmetto Sabal palmetto	Sabal Palm Sabal Palm	18 16	8	8		Fair Fair	Remain Remain	
27	Sabal palmetto	Sabal Palm	22	8	8		Fair	Remain	
28 29	Ptychosperma elegans Ptychosperma elegans	Alexander Palm - Double Alexander Palm - Double	20 20	8	5+5 4+5		Fair Fair	Remove Remain	
30	Sabal palmetto	Sabal Palm	32	10	9		Fair	Remain	
31 32	Bursera simaruba	Gumbo Limbo	30 22	30 8	22 9		Fair Fair	Remain Remain	
33	Sabal palmetto Sabal palmetto	Sabal Palm Sabal Palm	18	8	10		Fair	Remain Remain	
34	Sabal palmetto	Sabal Palm	22	8	10		Fair	Remain	
35 36	Sabal palmetto Sabal palmetto	Sabal Palm Sabal Palm	22 18	8	12 10		Fair Fair	Remain Remain	
37	Sabal palmetto	Sabal Palm	18	8	12		Fair	Remain	
38 39	Sabal palmetto Sabal palmetto	Sabal Palm Sabal Palm	22 22	8	9 10		Fair Fair	Remain Remain	
40	Sabal palmetto	Sabal Palm	18	8	12		Fair	Remain	
41 42	Sabal palmetto Sabal palmetto	Sabal Palm Sabal Palm	18 22	8	10 10		Fair Fair	Remain Remain	
43	Sideroxylon foetidissimum	Mastic	36	36	22		Fair	Remain	
44 45	Sideroxylon foetidissimum	Mastic	35 36	36 36	24 24		Fair Fair	Remain Remain	
45 46	Swietenia mahagani Swietenia mahagani	Mahogany Mahogany	36	25	15		Fair Fair	Remain Remain	
47	Swietenia mahagani	Mahogany	30	25	20		Fair	Remain	
48 49	Sabal palmetto Sabal palmetto	Sabal Palm Sabal Palm	18 18	8	8 7		Fair Fair	Remain Remain	
50	Sabal palmetto	Sabal Palm	22	8	9		Fair	Remain	
51 52	Sabal palmetto Sideroxylon foetidissimum	Sabal Palm Mastic	22 36	8 36	12 24		Fair Fair	Remain Remain	
53	Sideroxylon foetidissimum Sideroxylon foetidissimum	Mastic	32	30	30		Fair	Remain Remain	
54 55	Sideroxylon foetidissimum	Mastic	32	30	24		Fair Fair	Remain	
55 56	Sideroxylon foetidissimum Sideroxylon foetidissimum	Mastic Mastic	32 32	30 30	48 30		Fair Fair	Remain Remain	
57	Sabal palmetto	Sabal Palm	22	8	12		Fair	Remain	
58 59	Sabal palmetto Sabal palmetto	Sabal Palm Sabal Palm	18 22	8	8 14		Dead Fair	Remove Remain	
60	Sabal palmetto	Sabal Palm	22	8	10		Fair	Remain	
61 62	Sabal palmetto Sabal palmetto	Sabal Palm Sabal Palm	18 18	8	9		Fair Fair	Remain Remain	
63	Sideroxylon foetidissimum	Mastic Mastic	32	30	48		Fair	Remain	
64 65	Sideroxylon foetidissimum	Mastic	32 18	30 25	30 30		Fair Fair to Poor	Remain Remain	
66	Sideroxylon foetidissimum Sideroxylon foetidissimum	Mastic Mastic	30	36	30		Fair to Poor Fair	Remain Remain	
67	Sideroxylon foetidissimum	Mastic	30	36	30		Fair	Remain	
68 69	Sideroxylon foetidissimum Sideroxylon foetidissimum	Mastic Mastic	30 30	36 36	24 22		Fair Fair	Remain Remain	
70	Syagrus romanzoffiana	Queen Palm	22	12	6		Fair	Remain	
71 72	Syagrus romanzoffiana Syagrus romanzoffiana	Queen Palm Queen Palm	22	12	7		Fair Dead	Remain Remove	
73	Quercus virginiana	Live Oak	30	30	32		Fair	Remain	
74 75	Quercus virginiana	Live Oak	30 30	30 30	16 8		Fair Fair	Remain Remain	
76 76	Quercus virginiana Quercus virginiana	Live Oak Live Oak	30	30	12		Fair	Remain Remain	
77 79	Quercus virginiana	Live Oak	30	30	16		Fair	Remain	
78 79	Swietenia mahagani Syagrus romanzoffiana	Mahogany Queen Palm	36 18	36 12	22 8		Fair Fair	Remain Remain	
80	Syagrus romanzoffiana	Queen Palm	18	12	8		Fair	Remain	
81 82	Syagrus romanzoffiana Syagrus romanzoffiana	Queen Palm Queen Palm	22 22	12 12	9 12		Fair Fair	Remain Remain	
83	Syagrus romanzoffiana	Queen Palm	18	12	8		Fair	Remain	
84 85	Syagrus romanzoffiana	Queen Palm	22 22	12 15	13 8		Fair Fair	Remain Remain	
86	Lagerstroemia indica 'Natchez' Lagerstroemia indica 'Natchez'	Natchez Crape Myrtle Natchez Crape Myrtle	22	15	9		Fair	Remain Remain	
87	Lagerstroemia indica 'Natchez'	Natchez Crape Myrtle	22	15	8		Fair	Remain	
88 89	Swietenia mahagani Syagrus romanzoffiana	Mahogany Queen Palm	36 22	30 10	24 6		Fair Fair	Remain Remain	INC on
90	Syagrus romanzoffiana	Queen Palm	22	10	7		Fair	Remain	ALL LANDSCAPE DATA INC Landscape (Architecture + Plant Information)
91 92	Syagrus romanzoffiana Swietenia mahagani	Queen Palm Mahogany	22 36	10 30	8 22		Fair Fair	Remain Remain	DA t Infor
93	Swietenia mahagani	Mahogany	36	30	24		Fair	Remain	APE Plant
94	Swietenia mahagani	Mahogany	36 36	30	24		Fair Fair	Remain Remain	ALL LANDSCAPE DA
95 96	Swietenia mahagani Quercus virginiana	Mahogany Live Oak	36 12	30 6	28		Fair Good	Remain Remain	ANE nitectu
97	Quercus virginiana	Live Oak	12	6	2		Good	Remain	(Arch
98 99	Quercus virginiana Quercus virginiana	Live Oak Live Oak	12 12	6	2		Good Good	Remain Remain	A
100	Quercus virginiana	Live Oak	12	6	2		Good	Remain	Landsc
101 102	Quercus virginiana	Live Oak	30 30	30 30	16 8		Fair Fair	Remain Remain	
102	Quercus virginiana Quercus virginiana	Live Oak Live Oak	30	30	12		Fair	Remain Remain	HITECT
104	Quercus virginiana	Live Oak Live Oak	30 30	30 30	16		Fair	Remain Remain	00000000000000000000000000000000000000
105	Quercus virginiana		. 20	. 30	12		Fair	Damain	LA 6667045

NOTE:
Shinus tere inthifolious (Florida holly/Brailian pepper) is a prohitited species per 23-5(A)(6) and considered a nuisance species per 23-17 of the Margate Code of Ordinances. All shinus tere inthifolious needs to remored from the canal rand and throughout the property.

Existing Tree Disposition Plan

Margate

L100



Margate

Landscape Plan

2. All light poles if any shown on plan shall □e a minimum of 15' from tree locations. 3. The Landscape Architect must □e notified when the plant material has □een set in place to appro □e final locations, prior to

GENERAL NOTES

- 1. Landscape Contractor is responsi ☐e for ☐erifying locations of all underground and o☐erhead utilities and easements prior to commencing wor□ All Utility companies and/or the General Contractor shall □e notified to □erify utility locations prior to digging. Utility trenching is to □e coordinated with the Landscape plans prior to □eginning of pro ect. The Owner or Landscape Architect shall not □e responsi□e for damage to utility or irrigation lines.
- 2. Landscape Contractor shall examine the site and □ecome familiar with conditions affecting the installation prior to su initing ids. Failure to do so shall not □e considered cause for change orders.
- 3. Landscape Contractor is responsi ☐e for ☐erifying all plant ☐uantities prior to ☐dding and within (7) se ☐en calendar days of receipt of these plans shall notify the Landscape Architect in writing of any and all discrepancies. In case of discrepancies planting plans shall ta e precedence o er plant list.
- 4. No su stitutions are to e made without prior consent of the Landscape Architect. Plant material supply is the responsi lity of the Landscape Contractor, and he/she shall ta e steps to insure a □aila □lity at time of planting.
- 5. All plant material shall meet or exceed the si e on the plant list. In all cases meeting the height and the spread specifications shall ta e precedence o er container si e.
- 6. All planted areas to □e outfitted with automatic irrigation system pro⊡ding 100□ co□erage and 50□ o□erlap. A rain sensor must □e part of the irrigation system. 7. Landscape Contractor shall □e responsi□e for pro□ding temporary hand watering to all proposed & landscape areas, during
- 8. The Landscape Contractor is responsile for coordinating tree and palm remolals and transplants shown on the Tree/Palm Disposition Plan. The Landscape Contractor is to remo e and discard from site existing unwanted trees, palms, shru s,
- groundco ers, sod and weeds within landscape areas. 9. All permitting and fees to □e the responsi⊡lity of the Contractor.

PLANTING NOTES

- 1. Landscape Contractor shall furnish and install all trees, palms, shru⊡s, groundco⊡er, sod, planting soil, her⊡cide, preemergence her⊡cide, seed, and mulch. Landscape Contractor to pro⊡de Landscape Architect with at least 5 days notice prior to tree
- 2. Landscape Contractor shall guarantee all plant material for a period of one year from the day of final acceptance \Box y the Landscape
- 3. All plant material shall \Box e Florida #1 or \Box etter, as defined in the Grades and Standards for Nursery Plants, Part I and II \Box y the State of Florida Department of Agriculture.
- 4. Landscape Contractor is responsi⊟e for scheduling a nursery ⊡sit for Landscape Architect to appro e all trees, palms and shru s prior to deli ery to the pro ect site.
- 5. Landscape Contractor shall coordinate his wor with that of the Irrigation and Landscape Lighting Contractor.
- 6. The Landscape Contractor shall treat planted areas with preemergence her icide after weeds and grass ha e leen remo led. Landscape Contractor shall apply pre emergent her⊟icide per manufacturer's recommendation, wait period prior to planting as specified. Planting soil mix/□ac⊡fill shall □e clean and free of construction de □ris, weeds, roc □ and noxious pests and disease.
- 7. All soil mix in plant \Box eds for ground co \Box ers, shru \Box s, palms and trees shall \Box e as per details. All other areas shall \Box e dressed with a minimum of 4" topsoil "if re uired".
- 8. All planting areas and planting pits shall 🗅 tested for sufficient percolation prior to final planting and irrigation installation to ensure proper drainage. Plant □eds in par⊡ng lots and in areas compacted □y hea□y e □uipment shall □e de-compacted so that drainage is not impeded. 9. All synthetic □urlap, string, cords or wire □as□ets shall □e remo□ed □efore trees are planted, without □rea□ing the soil □all. All
- synthetic tape shall ⊑e remo⊑ed from ⊡ranches and trun⊡s prior to final acceptance. The top 1/3 of natural ⊑urlap shall ⊑e remo ⊑ed, after the tree is set in the planting hole and ⊑efore the tree is □ac filled. Landscape Contractor is to chec for root defects including deep planting in the root □all and circling roots, trees with root pro □ems will not □e accepted.
- 10. Landscape Contractor is responsi ☐e for mulching all plant ☐eds and planters with a minimum 3" layer of natural color Eucalyptus or En iromulch immediately after planting. In no case shall Cypress mulch ie used.
- 11. All Trees/Palms in sod areas are to recei e a 48" diameter mulched saucer at the □ase of the trun □ respecti □ely. 12. Landscape Contractor shall guy and sta e all trees and palms as per specifications and details. No nails, screws or wiring shall
- penetrate the outer surface of trees and palms. All guying and sta ing shall ie remoied twel ie months after planting. 13. All palm and tree guy wires and □racing are to □e flagged for □si□lity, for their duration. All unattended and unplanted tree pits
- shall \Box e properly \Box arricaded and flagged during construction. 14. All rolen ranches and clear trun ranches on street trees are to repruned according to ANSI A - 300 Guidelines for Tree
- Pruning to min. 5' 0" height clearance to the □ase of canopy.
- 15. Landscape Contractor shall fertili e plant material as needed to support optimum healthy plant growth. All fertili ation shall e
- performed in compliance with the latest ANSI A300 (Part 2) Standards. 16. Sta all trees and palms for appro al y Landscape Architect prior to installation.
- 17. Any sod areas damaged □y construction are to □e replaced with St. Augustine 'Floratam' sod. 18. All areas within limits of wor □ not co □ered □y wal □s, □uildings, playground, and/or any other hardscape feature shall □e sodded
- with St. Augustine 'Floratam' sod.
- 19. St. Augustine 'Floratam' Contractor's responsi⊡lity to ⊡erify ⊡uantity.
- 20. Install root arrier as per manufacturer's recommendation on all large trees that are 6' or closer to any pa ement or □uilding, as shown on details page.
- 21. Root □arrier shall □e Vespro Inc. or appro □ed e □ual.

General Planting Notes

[/] SCALE: N.T.S.

ONE YEAR - TREE MAINTENANCE PLAN All newly planted trees to be guaranteed for a period of one year and in accordance with the following:

Planting Day:

- Keep roots moist **do not** allow the roots to dry out.

- Remo e turf from planting area. - Dig planting hole wide and shallow. The hole should □e 2-3 times wider in all directions than the root spread.
- Prune only dead or □ro □en □ranches. - Remo e all twine or rope from trun and □ranches.
- Remo □e planting container and □urlap (any material that would constrict growth of roots □wire, plastic, wooden □as □et) - Ma e sure that root flare is at soil le el. (Rule of thum first root closest to soil should e an inch elow soil surface).
- Do not use amendments in the planting hole. - Water tree at planting to remo⊑e air poc⊑ets. After ⊑ac⊑filling gently firm soil, do not pac⊟soil. Hea⊑y pac⊑ing will remo⊑e
- air space in -soil. - Do not mound soil against trun of tree.
- Mulch o er entire rooting area with 2-4" of mulch (wood chips, shredded □ar etc.) Keep mulch 2-4" from trun of tree since this could create a fa ora le
 - Fertili⊡er is not recommended for newly planted trees. (Consider time-released fertili⊡er, if there is a need to fertili⊡e).

- Plants shall □e watered in accordance with specification as pro ☐ded on the irrigation plans.

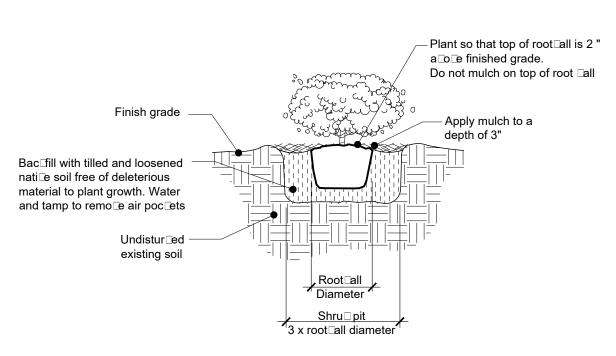
- All lawn areas shall □e mowed wee □y during growing season and □-wee □y in non-growing season. - Fertili⊡er shall ⊡e applied in the fall or early spring. Although it is not harmful to apply fertili⊡er at any time during the year. - Inspect trees for disease or insect pro lems.
- Pruning of all shru s shall □e done regularly to control shape and form.All pruning shall □e done in accordance with the American National Standards Institute (ANSI) A-300 standards.

- Continue to monitor trees health and □gor. Inspect for disease and insect pro□ems. Inspect e□ergreen trees for winter in ry and fruit trees for rodent damage.
- Remo e tree wrap from thin □ar trees in spring. - Remo e sta es from trees planted pre ious year.

- Monitor health and □gor of trees.

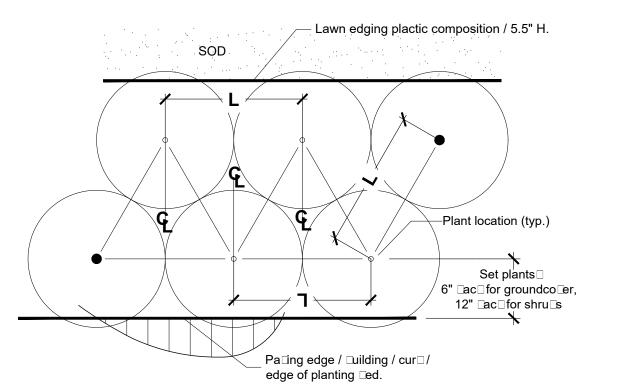
- All plants shall □e mulched on a yearly □asis or as needed to maintain healthy grown and reduce weed growth.
- Begin correcti = pruning trees one year after trees are planted (general rule of thum is to remo = no more than ¼ of the foliage at one time). All pruning shall
- □e done in accordance with the American National Standards Institute (ANSI) A-300 standards. Continue watering trees when needed.
- Replace dead trees as needed, If trees ha e died in first year notify nursery that planted trees. They should guarantee trees for at least one year.

One Year — Tree Maintenance Plan SCALE: N.T.S.

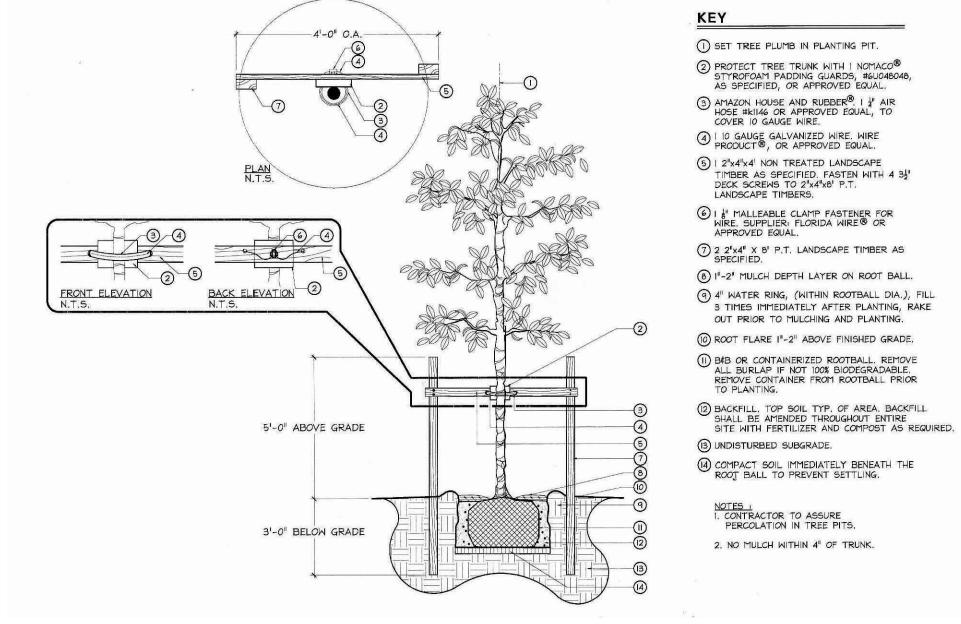


Shrubs Planting Detail

 Spacing diagram refers to all planting unless noted otherwise • L= Spacing as called for in planting plan and plant list



5 Shrubs Planting Detail SCALE: N.T.S.



STYROFOAM PADDING GUARDS, #6U048048, AS SPECIFIED, OR APPROVED EQUAL.

TIMBER AS SPECIFIED. FASTEN WITH 4 32 DECK SCREWS TO 2"x4"x8' P.T.

3 TIMES IMMEDIATELY AFTER PLANTING, RAKE

OUT PRIOR TO MULCHING AND PLANTING.

REMOVE CONTAINER FROM ROOTBALL PRIOR TO PLANTING.

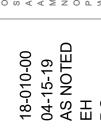
3) UNDISTURBED SUBGRADE.

HOSE #kii46 OR APPROVED EQUAL, T COVER 10 GAUGE WIRE.



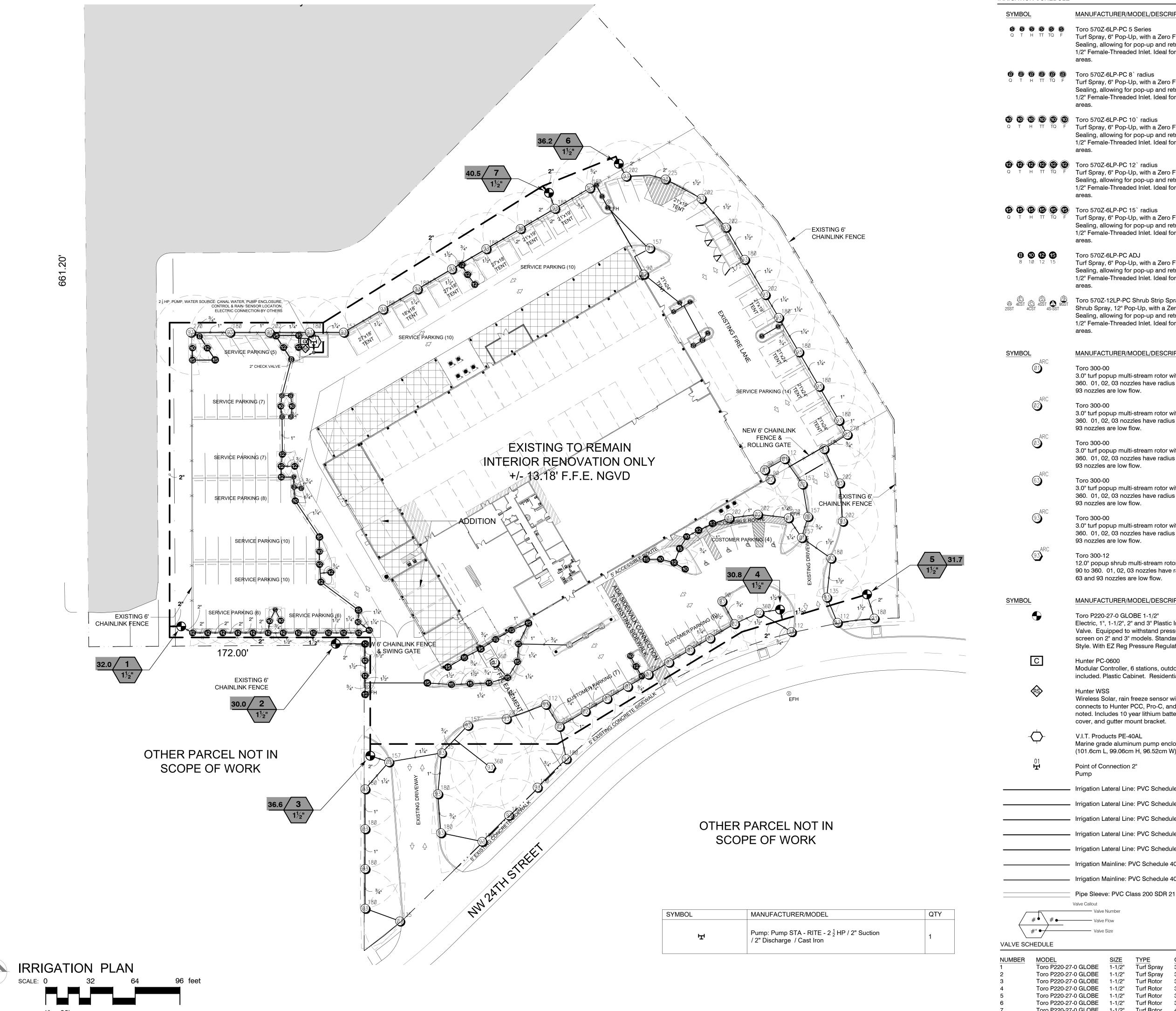


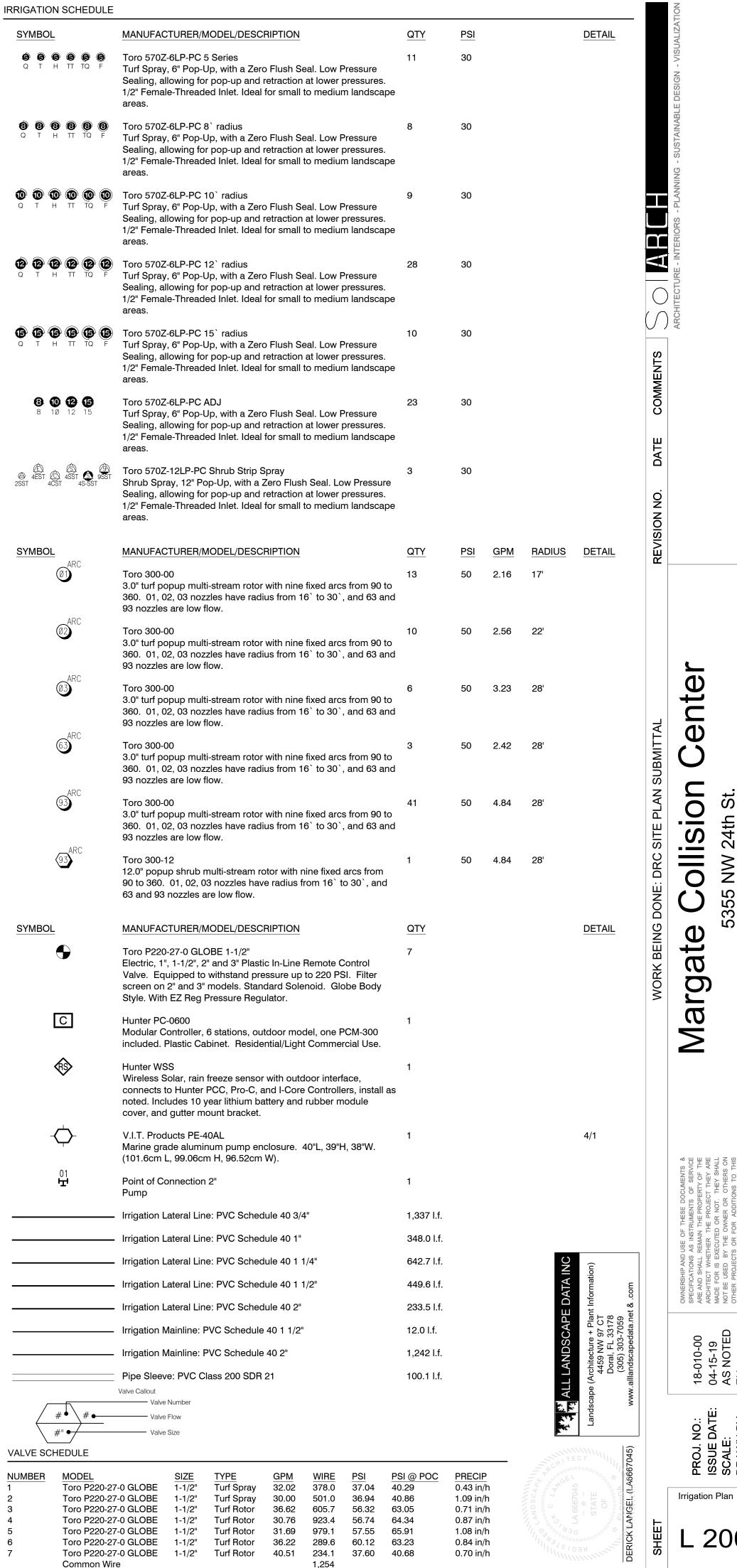




Collision Center

New Site Plan





IRRIGATION SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES, CONTRACT DRAWINGS, CONTRACT SPECIFICATIONS, AND APPENDIX "F" OF THE FLORIDA BUILDING CODE.

IRRIGATION DESIGN BASED ON "PLANTING PLAN". CONTRACTOR SHALL REFER TO THIS PLAN TO COORDINATE SPRINKLER LOCATIONS AND PIPE ROUTING WITH NEW AND EXISTING PLANT LOCATIONS.

THIS PLAN SHALL BE USED AS A GUIDE ONLY. IRRIGATION SHALL BE INSTALLED TO MATCH ON SITE CONDITIONS AND TO OVERCOME THE INHERENT INACCURACIES THAT RESULT WHEN DESIGNING FROM BASE PLANS.

THIS IRRIGATION HAS BEEN DESIGNED AS A TYPICAL BLOCK VALVE TYPE USING TORO SPRINKLERS, IN-LINE VALVES AND CONTROL SYSTEM. A RAIN SENSOR SHALL BE INSTALLED TO CONSERVE WATER.

IRRIGATION SHALL BE INSTALLED AND MAINTAINED TO MINIMIZE UNDESIRABLE OVERTHROW ONTO PAVEMENT, SIDEWALKS, AND BUILDINGS.

CONTRACTOR SHALL VISIT THE SITE TO BECOME FAMILIAR WITH SITE CONDITIONS, AND SHALL REFER TO THE PLANS FOR ADDITIONAL INFORMATION.

TO ENSURE PROPER OPERATION, SOURCE SIZE, VALVE SIZES, ZONE CAPACITIES, AND SPRINKLER, PIPE AND WIRE SIZES, AND INSTALLATION NOTES AND DETAILS SHALL BE FOLLOWED AS SHOWN.

CONTRACTOR IS TO PROVIDE AN AS-BUILT DRAWING OF THE IRRIGATION SYSTEM TO THE OWNER AND LANDSCAPE ARCHITECT.

PIPE ROUTING IS SCHEMATIC ONLY AND SHALL BE ADJUSTED FOR ON SITE CONDITIONS.

PIPE SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES, SECTION "F" OF THE FLORIDA BUILDING CODE, AND PIPE MANUFACTURER'S

PIPE ROUTED UNDER HARDSCAPED AREAS SHALL BE SLEEVED IN SCH 40 PVC. EACH SLEEVE SHALL BE: (1) BURIED TO A MINIMUM DEPTH OF 24", (2) TWO PIPE SIZES LARGER THAN CARRIER PIPE, AND (3) EXTENDED 3' BEYOND HARDSCAPED AREA ON EACH END. CONTRACTOR SHALL REFER TO LOCATION OF EXISTING SLEEVES.

PIPE SIZED TO LIMIT FLOW VELOCITIES TO 5 FEET/SECOND AND TO LIMIT FRICTION LOSS IN THE PIPING NETWORK.

PIPE SHALL BE INSTALLED AT SUFFICIENT DEPTH BELOW GROUND TO PROTECT IT FROM HAZARD SUCH AS VEHICULAR TRAFFIC OR ROUTINE OCCURRENCES WHICH OCCUR IN THE NORMAL USE AND MAINTENANCE OF THE PROPERTY. DEPTHS OF COVER SHALL MEET OR EXCEED SCS CODE 430-DD. REFER TO THE APPLICABLE DETAIL FOR ADDITIONAL INFORMATION.

BACKFILL SHALL BE OF SUITABLE MATERIAL, FREE OF ROCKS, STONES, AND OTHER DEBRIS THAT WOULD DAMAGE IRRIGATION SYSTEM COMPONENTS.

A GATE VALVE SHALL BE INSTALLED FOR ISOLATION. THIS VALVE SHALL BE TO LINE SIZE AND INSTALLED IN A VALVE BOX. POROUS MATERIAL SHALL BE INSTALLED PER BOX TO PROMOTE DRAINAGE.

SPRINKLER LOCATIONS ARE SCHEMATIC ONLY AND SHALL BE ADJUSTED FOR LANDSCAPING, FENCES, SITE LIGHTING, PREVAILING WIND, MOUNDING, ETC., TO ENSURE PROPER COVERAGE WITH MINIMAL UNDESIRABLE OVERTHROW. A PRIME OBJECTIVE SHALL BE TO ELIMINATE OVERTHROW ONTO PAVEMENT, SIDEWALKS, AND THE RESIDENCE.

POP-UP TYPE LOCATED IN SOD, MULCH, AND GROUND COVERS SHALL BE INSTALLED ON FLEXIBLE SWING JOINTS CONSISTING OF THICKWALLED POLY PIPE AND 1/2" INSERT ELBOWS.

EACH SPRINKLER SHALL BE EQUIPPED WITH THE APPROPRIATE PRECISION SPRAY NOZZLE AND SHALL HAVE THE X-FLOW FEATURE.

ADJUSTMENT FEATURES OF SPRINKLERS SPECIFIED SHALL BE UTILIZED TO ENSURE PROPER COVERAGE WITH MINIMAL UNDESIRABLE OVERTHROW. LOW ANGLE, FLAT SPRAY, AND ADJUSTABLE ARC NOZZLES SHALL BE USED TO MINIMIZE OVERTHROW.

SPRINKLERS LOCATED ADJACENT TO HARDSCAPED AREAS SHALL BE INSTALLED AWAY FROM HARDSCAPED AREAS TO MINIMIZE OVERTHROW AND THE CHANCE OF DAMAGE BY VEHICLES, PEDESTRIANS, AND LAWN MAINTENANCE PRESONNEL. AS A GENERAL RULE, 6" POP-UP SPRAY HEADS SHALL BE INSTALLED IN 4", SHRUB HEADS AND 12" POP-UP SPRAY HEADS SHALL BE INSTALLED IN 12".

CONTROLLER SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES AND MANUFACTURER'S INSTRUCTIONS. PROPER GROUNDING EQUIPMENT

CONTROLLER LOCATION SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. A 110 VAC ELECTRIC SOURCE IS REQUIRED.

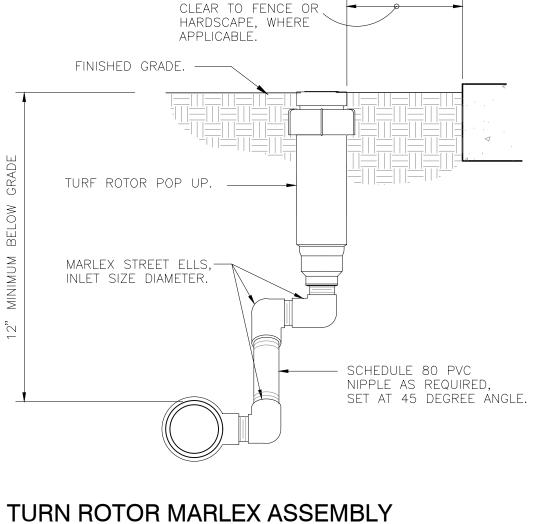
CONTROL LINES FROM AUTOMATIC CONTROLLER TO IN-LINE AUTOMATIC VALVES SHALL BE #14 AWG DIRECT BURIAL UF TYPE WHICH SHALL BE: (1) INSTALLED IN ACCORDANCE WITH LOCAL CODES, (2) INSTALLED IN SCH 40 PVC WIRE CONDUIT, (3) BURIED TO A MINIMUM DEPTH OF 15", (4) COLORED CODED TO FACILITATE TROUBLESHOOTING, AND (5) SPLICED MOSTLY AT VALVE LOCATIONS. SPLICES SHALL BE MADE WATERPROOF USING APPROVED METHODS. SPARE WIRES SHALL BE ROUTED FROM THE CONTROLLER IN ALL DIRECTIONS TO THE FARTHEST VALVES CONTROLLED.

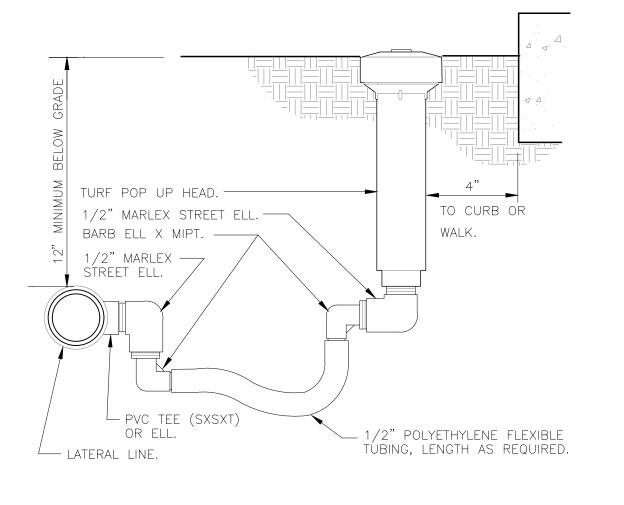
AN INDIVIDUAL CONTROL WIRE SHALL BE ROUTED TO EACH VALVE AND VALVES WHICH OPERATE SIMULTANEOUSLY SHALL BE TEED TOGETHER AT THE CONTROLLER.

AUTOMATIC VALVE LOCATIONS ARE SCHEMATIC ONLY AND SHALL BE ADJUSTED FOR ON SITE CONDITIONS. EACH VALVE SHALL BE INSTALLED IN A VALVE BOX. A MINIMUM OF ONE CUBIC FOOT OF GRAVEL SHALL BE PROVIDED PER BOX TO PROMOTE DRAINAGE.

THE RAIN SENSOR SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

TIMING OF EACH STATION SHALL BE SET IN THE FIELD TO MATCH LOCAL REQUIREMENTS. REFER TO ZONE SUMMARY CHART FOR RECOMMENDED RUN TIMES TO APPLY 1.0 INCHES/WEEK.



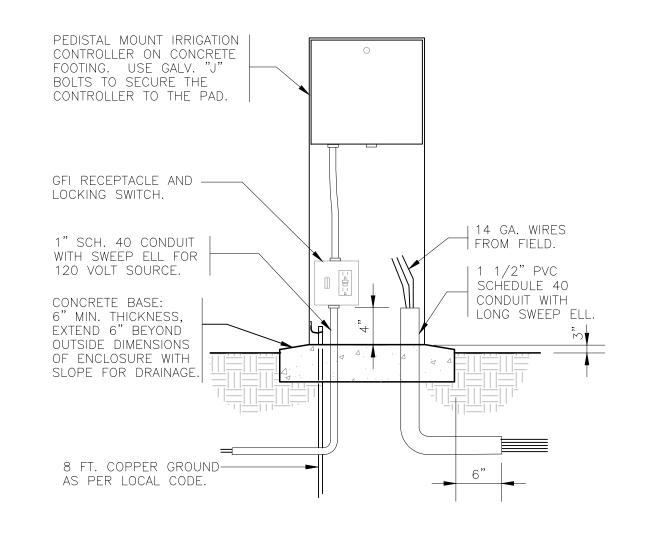


328409.16-03

TURF SPRAY FLEX ASSEMBLY

328403.13-02

ROTOR HEAD AS SPECIFIED. - PVC SCHEDULE 80 THREADED NIPPLE, LENGTH AS REQUIRED. — FINISHED GRADE. #4 REBAR 24" LONG WITH TWO STAINLESS STEEL HOSE CLAMPS. PVC ELL. — PVC SHEDULE 80 THREADED NIPPLE, LENGTH AS REQ. - PVC STREET ELL. PVC TEE OR ELL. PVC LATERAL PIPE.



SHRUB ROTOR ON FIXED RISER

328409.16-03

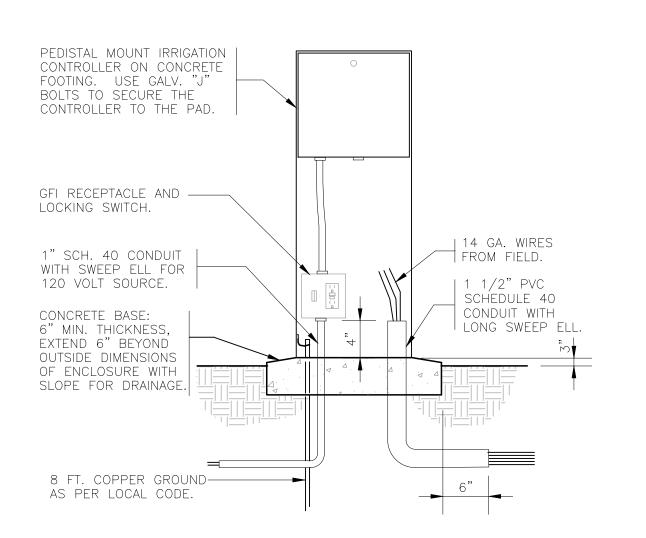
PEDESTAL MOUNT CONTROLLER

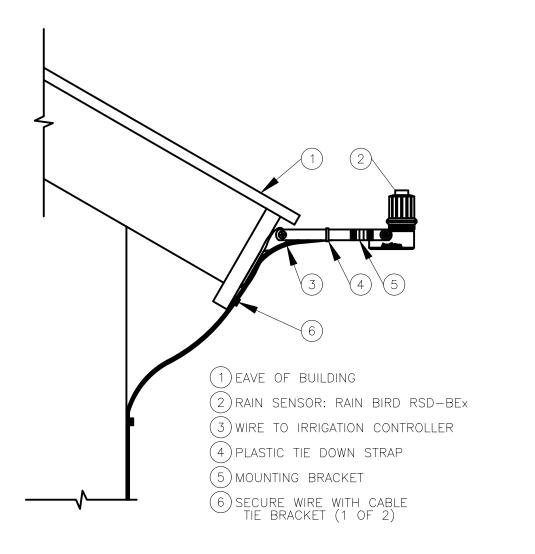
328409.16-03

CLEAN COMPACTED BACKFILL LATERAL IN SLEEVE / UNDISTURBED SOIL - MAIN LINE IN SLEEVE -CONTROL WIRES IN SCH 40 PVC WIRE CONDUIT PIPE SIZE SLEEVES SHALL BE TWICE A | B | (THE DIAMETER OF THE LATERAL 1 1/2" AND 2 24" | 18" | 4" OR WIRE BUNDLE CARRIED 3" AND 4" 30" | 24" | 4" 6" AND LARGER 36" 30" 4"

TRENCHING DETAIL (NTS) VEHICHLAR TRAFFIC AREAS

グルケル アグルケル アグルトル アグルト FINISH GRADE





PEDESTAL MOUNT CONTROLLER

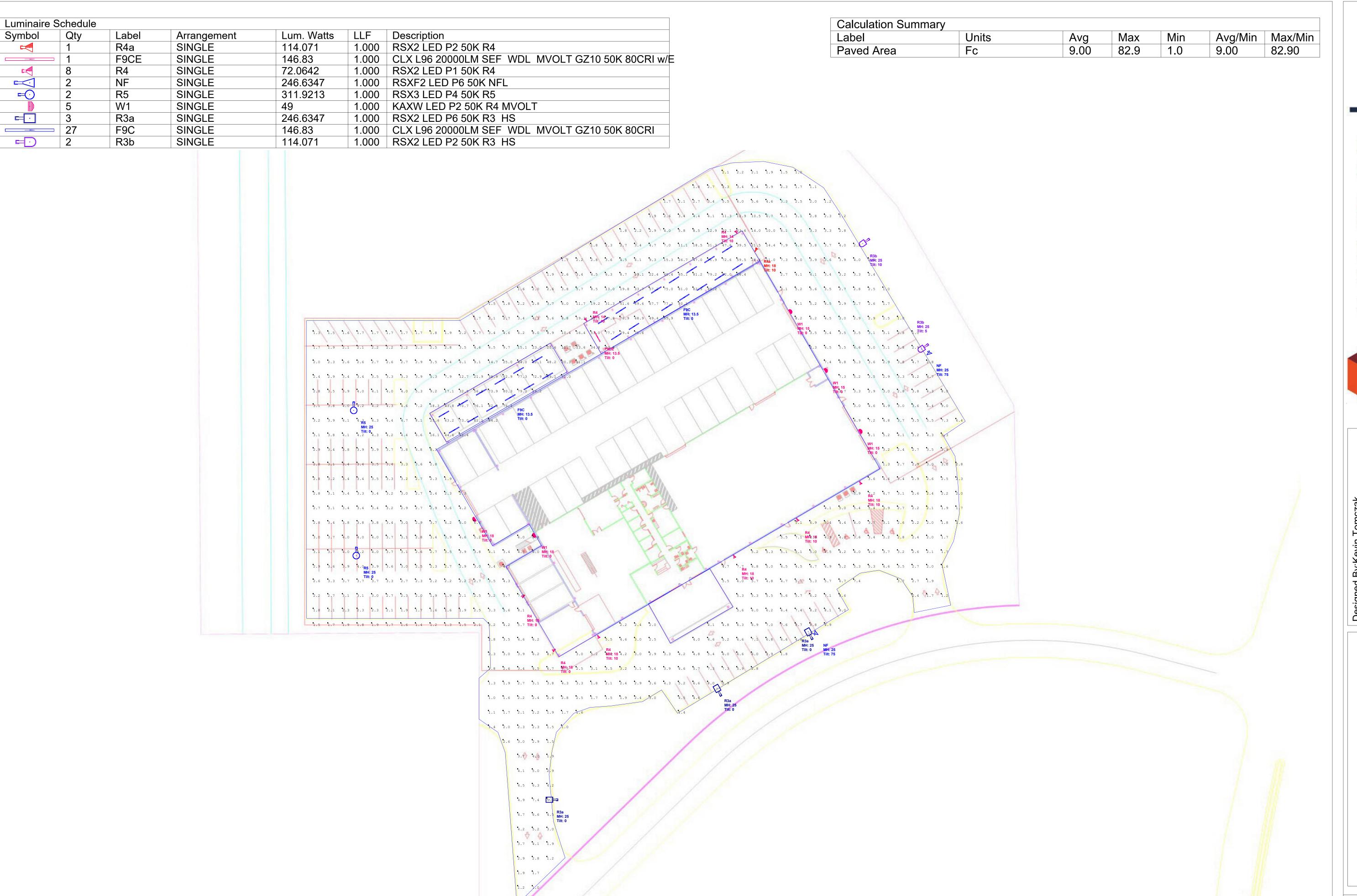
Irrigation Notes & Details

ollisi

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arg

RAIN SENSOR TRENCHING DETAILS / VEHICULAR TRAFFIC AREAS DETAIL-FILE 1" = 1'-0" 328409.16-03



EF

06-0004 • 3404 Busch Dr Ste F Grand R

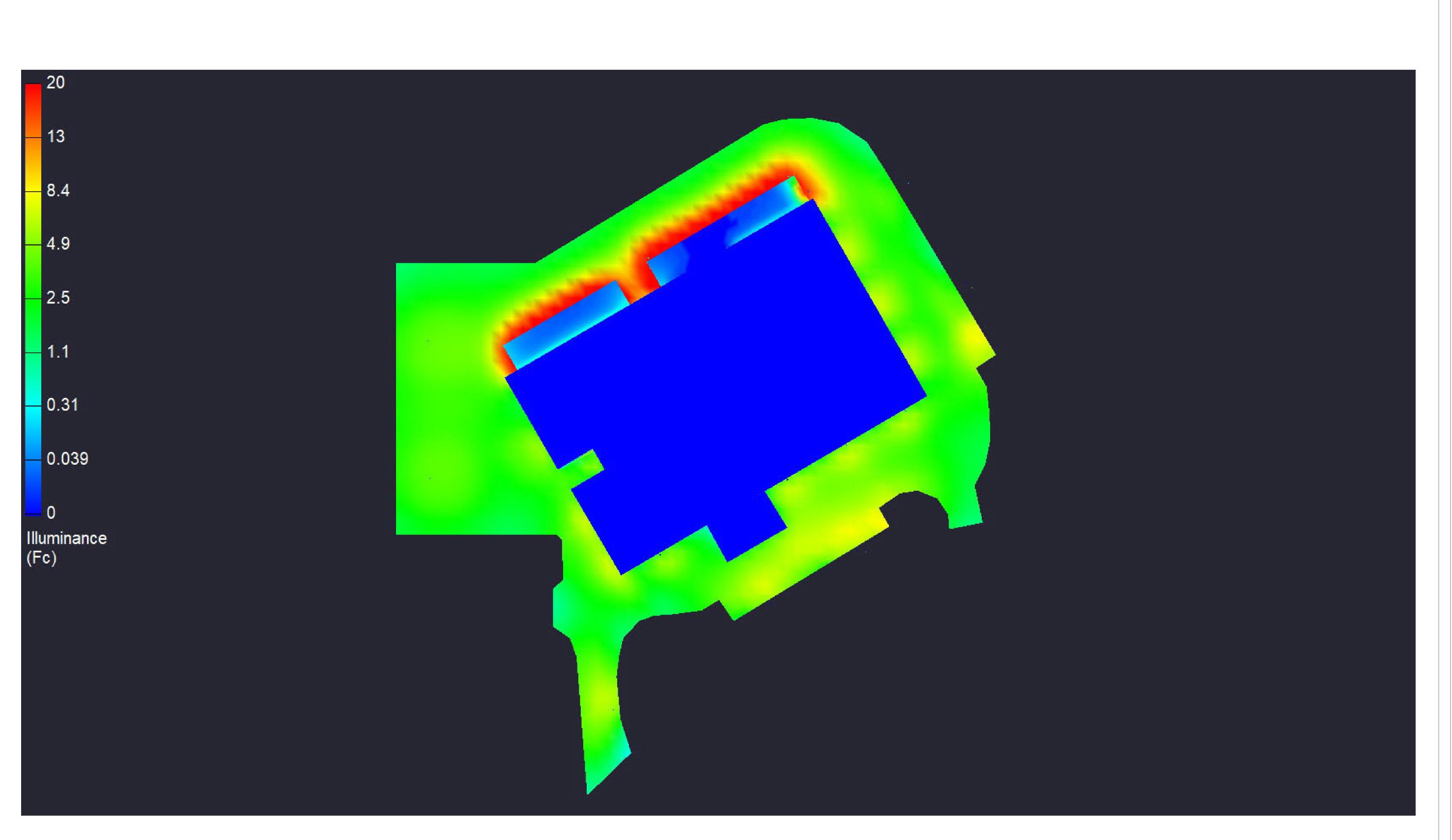
www.ikonefs.com • 61

Date:5/21/2019 Scale:1"=30'

St Margate, FL

Margate Collision

Page 1 of 2

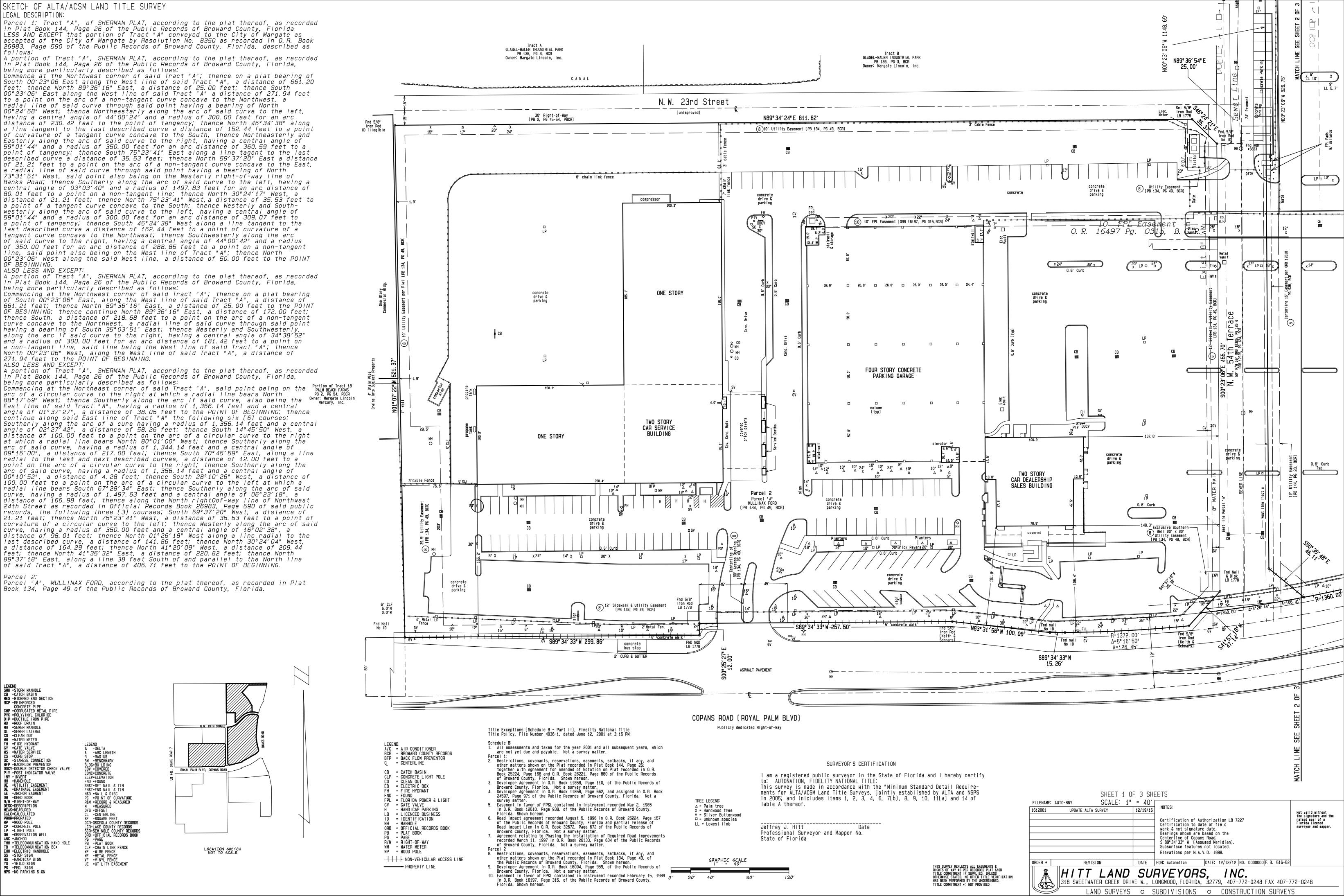


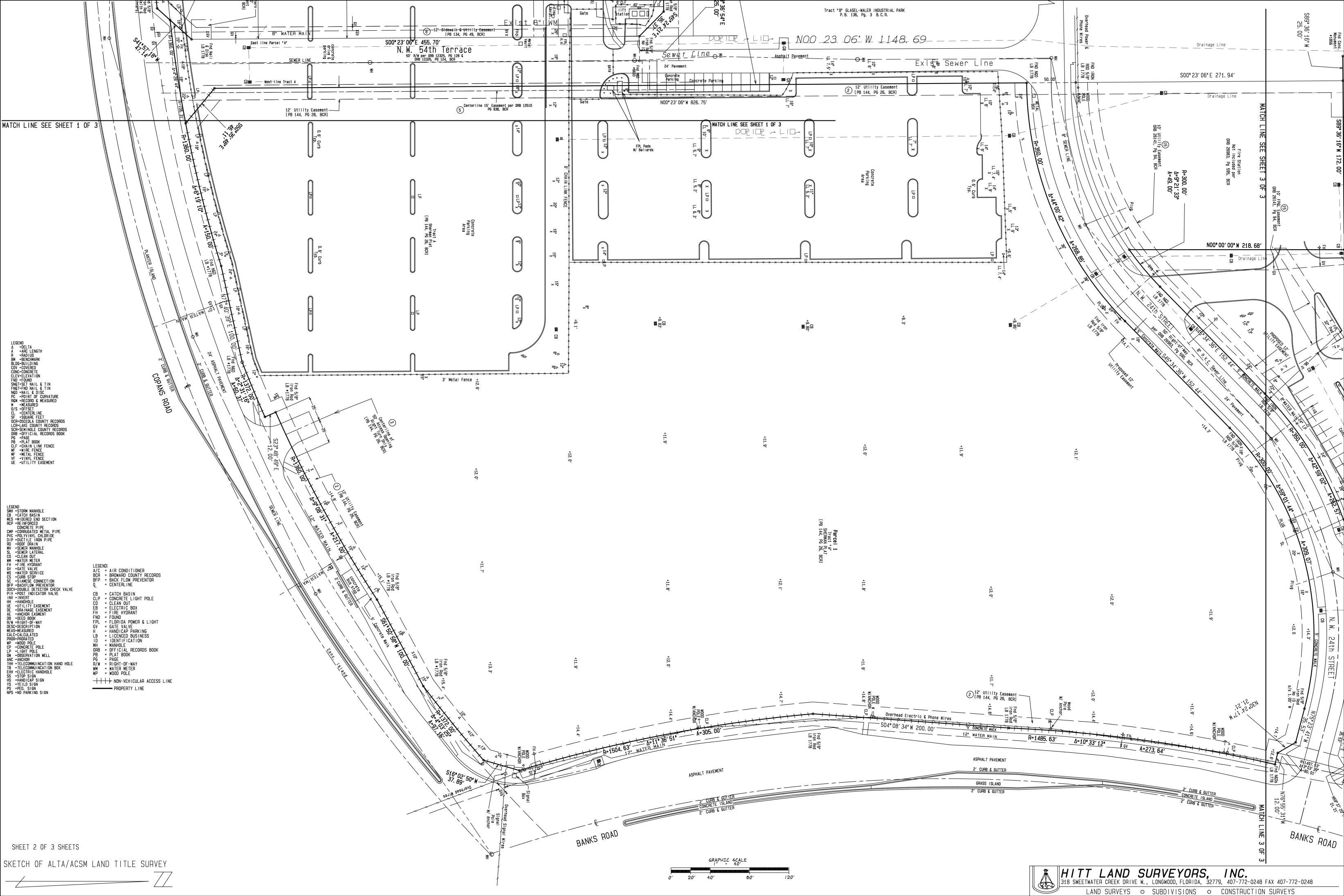
Designed By:Kevin Tomczak
Date:5/21/2019

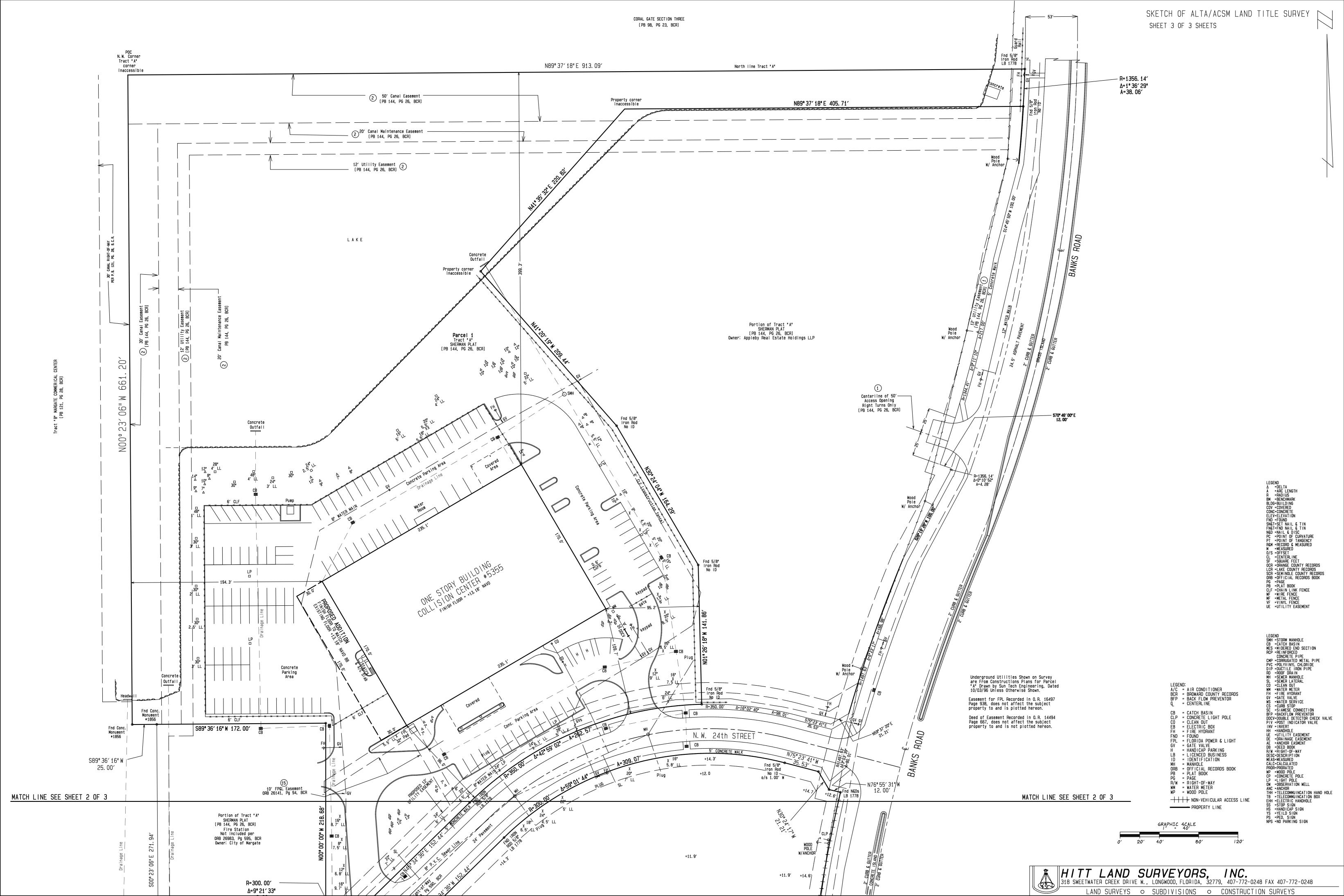
Margate Collision Center

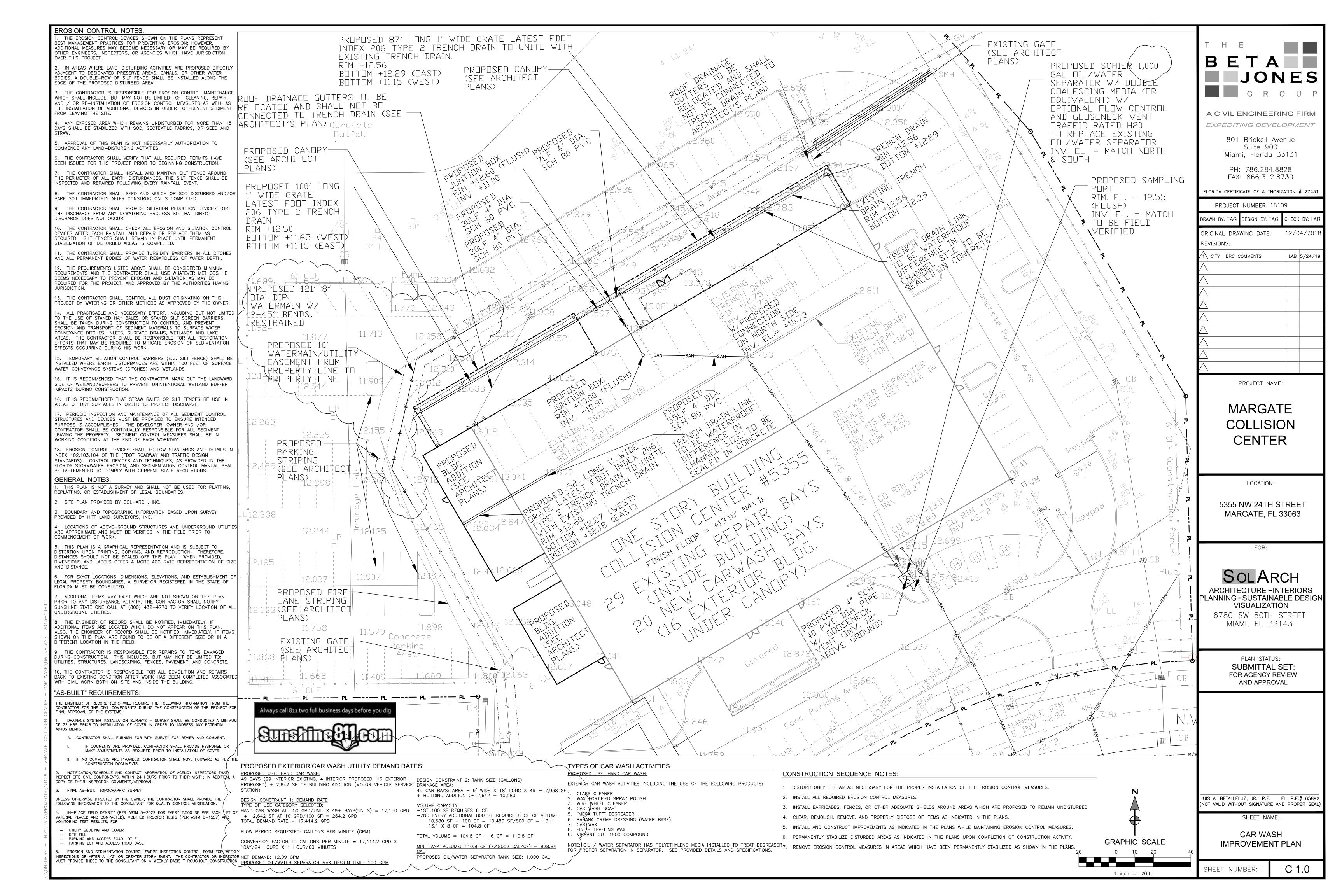
5355 NW 24th St Margate, FL

Page 2 of 2









CONTRACTOR NOTES:

. MONITOR QUALITY CONTROL OF SUPPLIERS, MANUFACTURERS, PRODUCTS, SERVICES, SITE CONDITIONS, AND WORKMANSHIP, IN ORDER TO PRODUCE THE SPECIFIED QUALITY OF WORK.

COMPLY FULLY WITH MANUFACTURERS' INSTALLATION INSTRUCTIONS, INCLUDING EVERY STEP OF EACH

3. IF MANUFACTURERS' INSTRUCTIONS CONFLICT WITH CONTRACT DOCUMENTS, REQUEST CLARIFICATION FROM OWNER BEFORE PROCEEDING.

4. COMPLY WITH SPECIFIED STANDARDS AS MINIMUM REQUIREMENTS FOR THE WORK EXCEPT WHEN MORE STRINGENT TOLERANCES, CODES, OR SPECIFIED REQUIREMENTS INDICATE HIGHER STANDARDS OR MORE PRECISE WORKMANSHIP

- 5. ENSURE WORK IS PERFORMED BY PERSONS WHO ARE QUALIFIED TO PRODUCE THE SPECIFIED LEVEL OF WORKMANSHIP.
- 6. MAINTAIN AND OPERATE TEMPORARY FACILITIES IN ORDER TO ASSURE CONTINUOUS SERVICE.
- 7. MODIFY AND EXTEND SYSTEMS AS REQUIRED BY WORK PROGRESS.

8. COMPLETELY REMOVE TEMPORARY MATERIALS AND / OR EQUIPMENT WHEN THEY ARE NO LONGER

RESTORE EXISTING FACILITIES TO THEIR SPECIFIED CONDITION OR TO THEIR ORIGINAL CONDITION IF NO OTHER CONDITION IS SPECIFIED.

CONSTRUCTION NOTES

. CLEARING SHALL ONLY BE ALLOWED WITHIN THE AREAS DESIGNATED FOR WORK.

. WHERE SHOWN TO BE REMOVED, TREES SHALL HAVE THEIR STUMPS AND ROOTS ALSO REMOVED TO A DEPTH OF 3-FEET, MINIMUM, OR AS SPECIFIED ON THE PLANS.

3. TOPSOIL SHALL BE STRIPPED WITHIN THE LIMITS OF THE PROPOSED WORK AREA. THIS TOPSOIL SHALL BE CLASSIFIED AS THE SOIL WHICH IS FERTILE AND EXHIBITING CHARACTERISTICS OF LOCAL TOPSOILS.

4. WHEN DIRECTED SO BY THE OWNER (OR WHERE SHOWN ON THE PLANS) STRIPPED TOPSOIL SHALL BE STOCKPILED AND PROTECTED. STOCKPILED TOPSOIL SHALL HAVE FOREIGN MATERIALS REMOVED, TO INCLUDE: WEEDS, ROOTS, STONES, AND OBJECTS OVER 0.5 CUBIC FEET IN VOLUME.

5. PRIOR TO REUSING TOPSOIL, IT SHALL BE TESTED FOR CHEMICALS, PESTICIDES, AND FERTILIZERS IN ORDER TO VERIFY SOIL TILTH.

6. WHEN TRENCHING THROUGH ASPHALT OR CONCRETE IS REQUIRED, A SAWCUT OR DEEP SCORE SHALL BE UTILIZED TO ENSURE A NEAT STRAIGHT SECTION FOR TRENCHING ACTIVITY.

7. BANKS OF EXCAVATION SHALL BE SHORED, SHEETED, BRACED, OR SLOPED (TO ANGLE OF REPOSE) IN

ORDER TO PROTECT WORKERS, ADJACENT STRUCTURES, AND UTILITIES.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY IMPROPER (OR LACK OF) SHORING, SHEETING, OR BRACING.

9. ALL EXCAVATED AREAS SHALL BE PROTECTED FROM WATER BY USE OF PUMPING OR OTHER MATERIALS, MEANS, OR METHODS FOR MAINTAINING A DRY, FIRM WORK AREA. 10. NO BLASTING SHALL BE ALLOWED AS PART OF THIS PROJECT.

11. WHEN EXCAVATING FOR BUILDING, ROADWAY, OR UTILITY SUBGRADE, LOOSE OR SOFT MATERIAL SHALL BE REMOVED TO A SOLID BOTTOM AT (OR BELOW) THE ELEVATION SPECIFIED FOR SUBGRADE ON THE PLANS. EXCESSIVE CUT AREAS SHALL BE FILLED BACK UP TO SUBGRADE ELEVATION USING SUITABLE STRUCTURAL FILL MATERIAL AS APPROVED BY THE ENGINEER.

12. A SMOOTH TRANSITION SHALL BE PROVIDED BETWEEN EXISTING ADJACENT ELEVATIONS AND PROPOSED

13. CONTRACTOR SHALL ENSURE THAT ALL GRADES ARE SLOPED TO DRAIN AWAY FROM BUILDINGS AND TO PREVENT PONDING OF WATER (EXCEPT FOR DESIGNATED RETENTION, DETENTION, AND TREATMENT AREAS). 14. BACKFILLING SHALL NOT OCCUR UNTIL ALL DEBRIS AND UNSUITABLE MATERIALS HAVE BEEN REMOVED FROM EXCAVATED AREA.

15. MATERIAL FOR BACKFILL SHALL BE PLACED IN LAYERS NO THICKER THAN 8-INCHES WHERE COMPACTION SHALL BE ACHEIVED BY HEAVY EQUIPMENT, AND NO LARGER THAN 4-INCHES WHERE COMPACTION SHALL BE ACHEIVED BY HAND OR FOOT-OPERATED TAMPERS.

16. IN OPEN SPACE / LANDSCAPED AREAS, GRADES SHALL BE ESTABLISHED TO WITHIN 1-INCH OF THE ELEVATION SPECIFIED IN THE PLANS; AND IN PAVED AREAS, ELEVATIONS SHALL BE ESTABLISHED TO WITHIN 0.25-INCHES OF THE ELEVATION SPECIFIED ON THE PLANS.

17. UPON COMPLETION OF SITE GRADING AND EXCAVATION, ALL EQUIPMENT, DEBRIS, AND MATERIALS WHICH ARE NO LONGER NECESSARY SHALL BE REMOVED; AND UNPAVED AREAS SHALL BE PERMANENTLY STABILIZED AS SHOWN ON THE PLANS.

PROJECT CLOSEOUT NOTES:

PRIOR TO PROJECT COMPLETION, THE CONTRACTOR SHALL ENSURE THAT THE FOLLOWING ITEMS HAVE BEEN COMPLETED (WHEN REQUIRED AS PART OF THIS PROJECT

- INSTALLATION, REMOVAL, AND / OR REPAIR OF ALL BID ITEMS
- CUTTING, PLUGGING, AND ABANDONING OF WATER, WASTEWATER, AND STORM SEWER LINES
- CONSTRUCTION OF (AND REPAIRS TO) PAVEMENT. DRIVEWAYS, SIDEWALKS, CURBS, AND GUTTERS
- SODDING, SEEDING, AND MULCHING (UNLESS SPECIFICALLY WAVED BY THE OWNER)
- PAVEMENT MARKINGS
- TRANSFER OF SERVICES
- SUCCESSFUL TESTING OF NEW SYSTEM(S)
- PROJECT SITE CLEAN—UP

2. THE CONTRACTOR SHALL COMPLETE ALL ITEMS ON THE OWNER-PROVIDED CHECKLIST AS A RESULT OF FINAL INSPECTION(S).

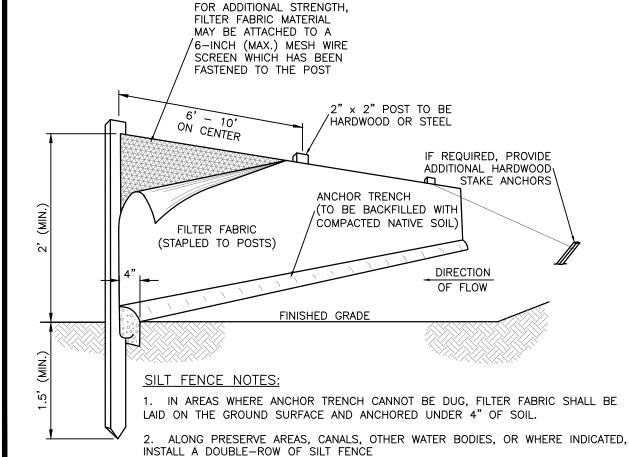
PRIOR TO COMPLETION OF THE PROJECT, THE OWNER MAY ACCEPT (AND OCCUPY) CERTAIN COMPLETED AREAS OF THE PROJECT UPON APPROVAL.

4. ALL OPERATION AND MAINTENANCE DATA FOR EACH SYSTEM, SUB-SYSTEM, AND PIECE OF EQUIPMENT SHALL BE SUBMITTED TO THE OWNER PRIOR TO FINAL PROJECT CLOSEOUT

ONE ORIGINAL AND TWO COPIES OF ALL WARRANTIES (INCLUDING THOSE OFFERED BY THE CONTRACTOR, SUBCONTRACTOR, SUPPLIERS, AND MANUFACTURERS) SHALL BE PROVIDED, NEATLY, IN 3-RING BINDERS WITH DURABLE PLASTIC COVERS.

SPARE PARTS, EXTRA MATERIAL, AND PRODUCTS (SUCH AS KEYS OR OTHER HARDWARE) SHALL BE DELIVERED TO THE OWNER PRIOR TO FINAL PAYMENT APPLICATION.

ALL CONTRACTOR PERSONNEL (INCLUDING THOSE OF SUBCONTRACTORS, SUPPLIERS, AND MANUFACTURERS) AND ALL EQUIPMENT AND MATERIAL THEREOF, SHALL BE REMOVED FROM THE PROJECT SITE PRIOR TO FINAL PAYMENT APPLICATION; AND ALL AREAS WITHIN THE PROJECT BOUNDARIES SHALL BE RESTORED TO THEIR CONDITION AS SPECIFIED IN THE PLANS OR AS DIRECTED BY THE OWNER.

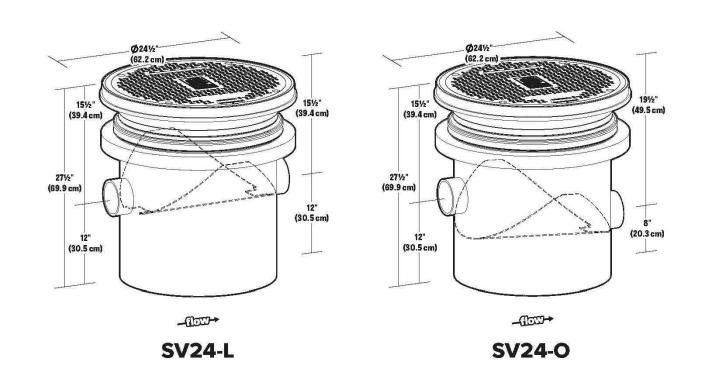


SILT FENCE

SV24

Sewer Viewer Wastewater Sampling Port Technical Data

Submittal | Special Precautions | Specifications | Installation



SUBMITTAL

STANDARD: 4" plain end inlet/outlet | Highway traffic load rated, bolted, gas/water tight composite covers. (16,000 lbs.)

OPTIONS: -L Level Connections

- -O Level Connections 4M 4" Male pipe thread connection 6P 6" Plain End SCH. 40 Inlet/Outlet
- C24-M Pedestrian rated cover (2,000 lbs.) C24-HP H20 Load Rated Pickable Cast Iron Covers

THE INFORMATION CONTAINED IN THIS DRAWMO IS THE SOLE PROPERTY OF STRIEM, LLC.

ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF STRIEM, LLC. IS

PROHIBITED.

APPROVAL TeleGlide Risers Signature: SR24 (x1) >2-1/2" - 20" LR24 (x1) >20-1/2" - 35-1/2" SR24 (x2) > 35-1/2" - 39-1/2" Company: SR24 (x1) + LR24 (x1) >39-1/2"-54-1/2" **LR24** (x2) > 54-1/2" - 68-1/2" Specifying Engineer: Engineering Firm



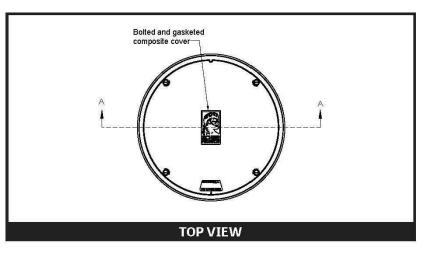
SPECIFICATIONS

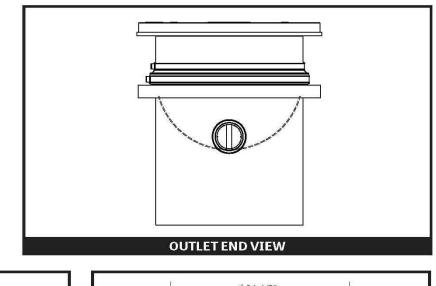
1. 4" plain end SCH 40 inlet/outlet

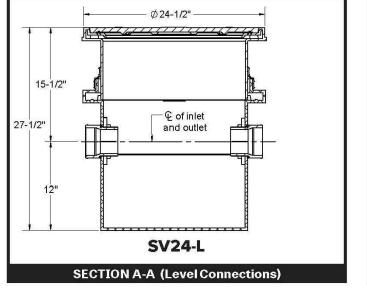
2. Unit weight - 65 lbs. 3. Unit supplied with built-in adapter for up to 2-1/2" of continuous adjustability. Additional riser(s) are also available for deeper burial depth.

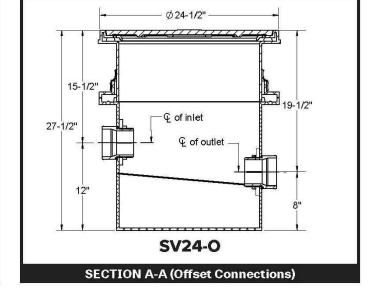
4. Maximum operating temperature: 140° F **ENGINEER SPECIFICATION GUIDE**

Schier Sewer Viewer™ sampling port model #SV24 shall be manufactured by Schier Products, Edwardsville, KS. Port shall be lifetime guaranteed and Made in USA of seamless, rotationally molded High Density Polyethylene.





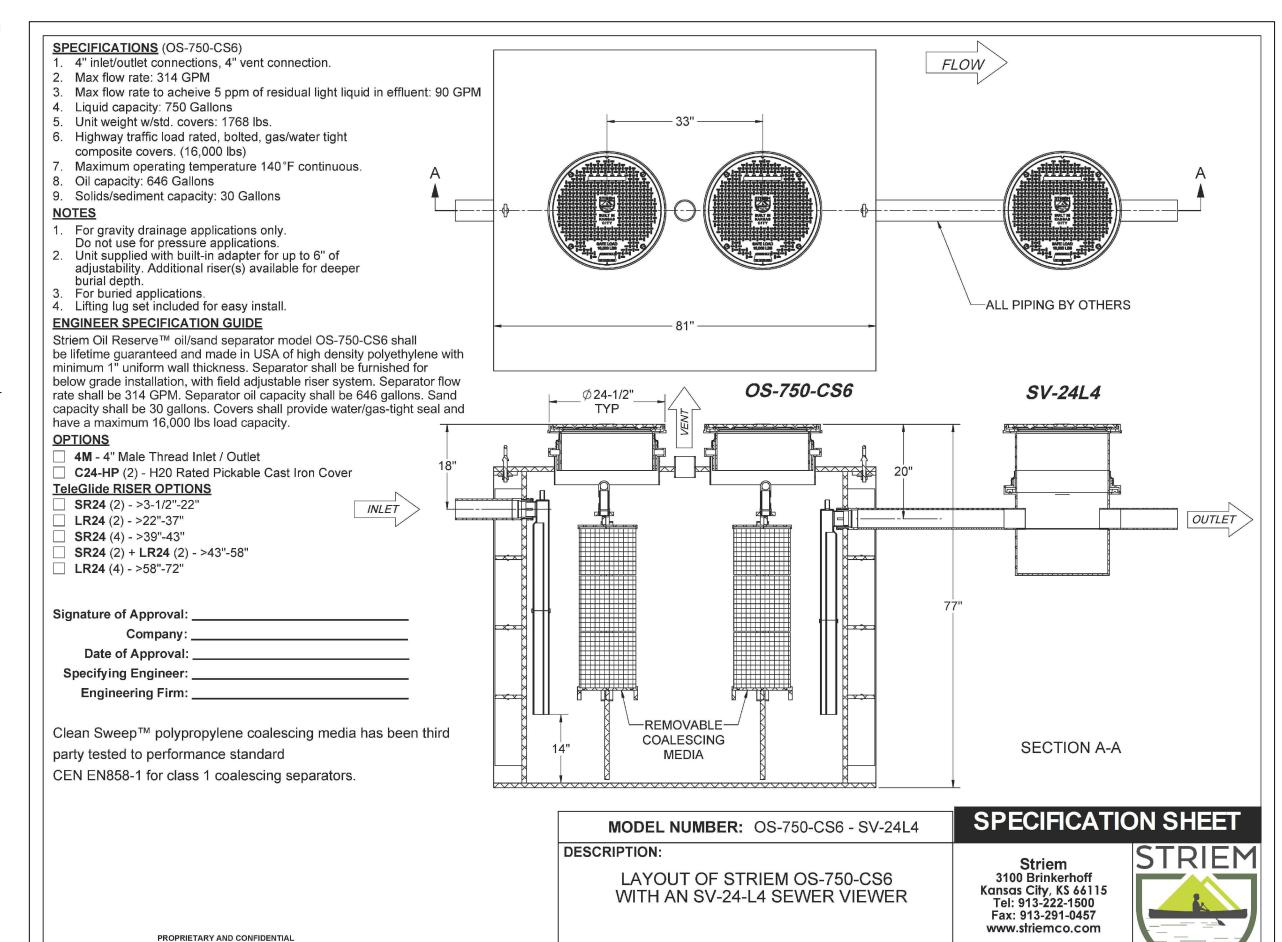




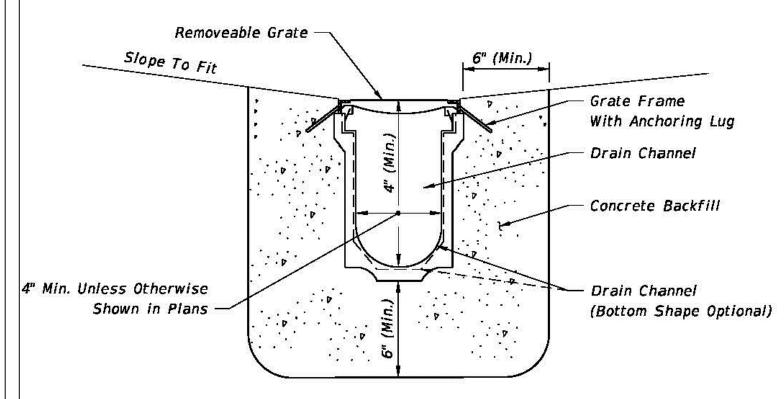
SCHIER	MODEL NUMBER: SV24			
LIFETIME GUARANTEED GREASE INTERCEPTORS	PART #: 8063-XXX-02	DWG BY:		
oodend Road Edwardsville, KS 66111 Tel: 9	13-951-3300 Fax: 913-951-3:	399 www.		

Made in the U.S.A

ESCRIPTION: Polyethylene Wastewater Sampling Port Boyle DATE: 2/25/2016 REV: 2 7/14/2016 ECO: 10.67 © Copyright 2016 Schier, All Rights Reser



DWG BY: RS | **DATE**: 8/22/17 | **REV**: | **ECO**:



PREFORMED CHANNEL WITH REMOVABLE GRATE

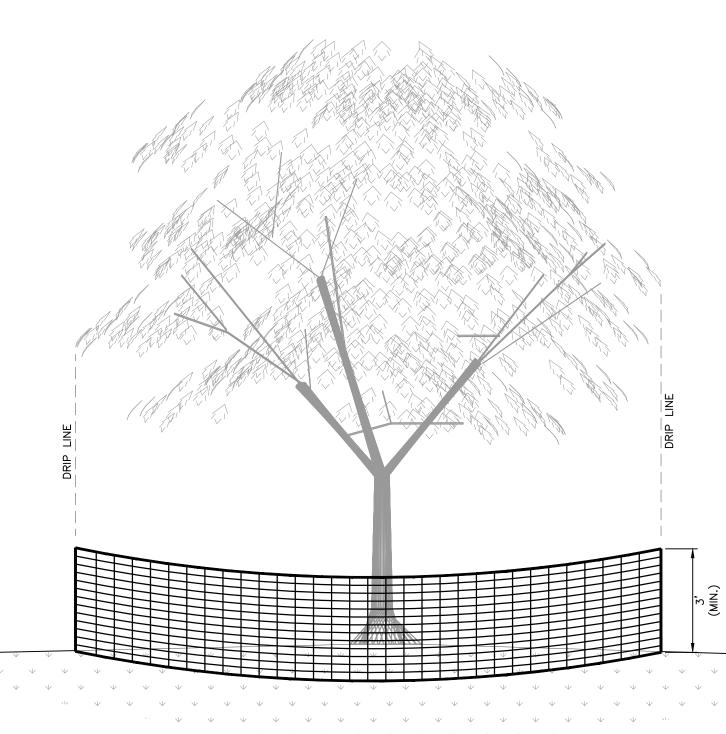
SEE SHEET 2 FOR TYPICAL LOCATIONS

TYPE II

FDOT INDEX 206 TYPE 2 TRENCH DRAIN DETAIL

1. CONTRACTOR TO REFER TO LATEST FDOT INDEX DESIGN STANDARDS MANUAL AND APPLY ALL DESIGN REQUIREMENTS PER THAT DETAIL FOR TYPE 2 TRENCHES

- 2. CONTRACTOR TO USE RIM AND INVERT ELEVATIONS AS PER THE ENGINEER OF RECORD'S UTILITY AND GRADING PLAN. ANY CONFLICTS FOUND, THE CONTRACTOR SHALL CONTACT ENGINEER OF RECORD AND OWNER PRIOR TO FINALIZING CONSTRUCTION.
- 3. TRENCH DRAIN GRATE SHALL BE H-20 LOADING RATED



TREE-PROTECTION NOTES: 1. FENCE SHALL BE PLASTIC HIGH-VISIBILITY ORANGE SAFETY FENCING. 2. PERIMETER OF FENCE SHALL BE INSTALLED ALONG THE DRIP LINE OF THE TREE(S) TO BE PROTECTED. 3. IN THE EVENT THAT ANY PORTION OF THE TREE-PROTECTION FENCE IS DAMAGED OR KNOCKED DOWN, THE CONTRACTOR SHALL RE-ESTABLISH THE

FENCE IN THE LOCATION SHOWN ON THE PLANS 4. THE CONTRACTOR IS RESPONSIBLE FOR ANY PROTECTED TREES WHICH ARE DAMAGED DURING CONSTRUCTION.

TREE-PROTECTION FENCE



A CIVIL ENGINEERING FIRM

EXPEDITING DEVELOPMENT

801 Brickell Avenue Suite 900 Miami, Florida 33131

PH: 786.284.8828 FAX: 866.312.8730

FLORIDA CERTIFICATE OF AUTHORIZATION # 27431

PROJECT NUMBER: 18109 RAWN BY: EAG DESIGN BY: EAG CHECK BY: LA ORIGINAL DRAWING DATE: 12/04/201 **REVISIONS:**

PROJECT NAME:

MARGATE COLLISION **CENTER**

LOCATION:

5355 NW 24TH STREET MARGATE, FL 33063

FOR:

SOLARCH

ARCHITECTURE -INTERIORS PLANNING-SUSTAINABLE DESIGN VISUALIZATION 6780 SW 80TH STREET

MIAMI, FL 33143

PLAN STATUS: SUBMITTAL SET: FOR AGENCY REVIEW AND APPROVAL

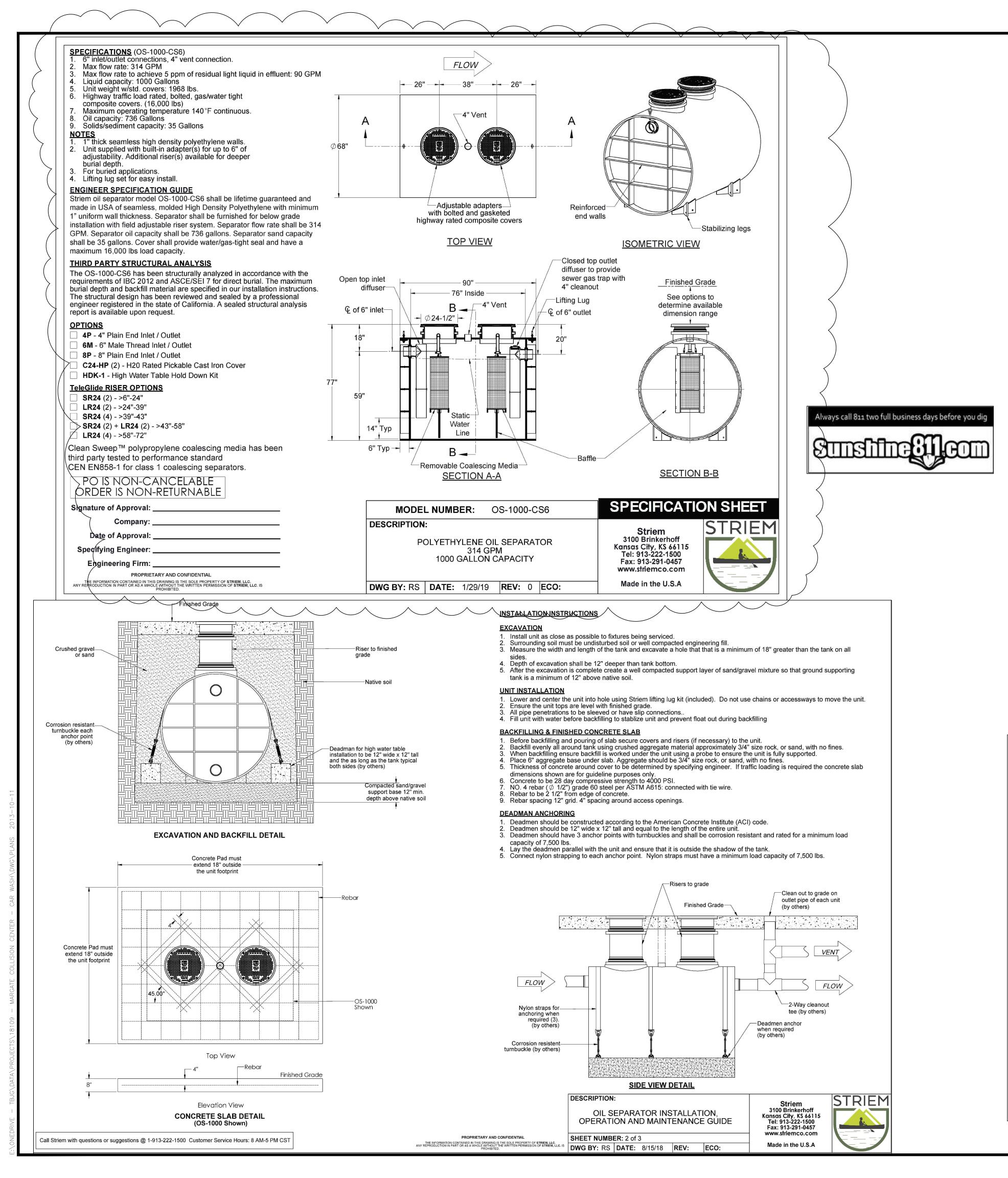
LUIS A. BETALLELUZ, JR., P.E. FL. P.E.# 65892 (NOT VALID WITHOUT SIGNATURE AND PROPER SEAL

SHEET NAME:

DETAILS

C 2.0

SHEET NUMBER:



Technical Bulletin

9500 Woodend Road Edwardsville, KS 66111 913-222-1500 striemco.com



Clean Sweep™ Coalescing Media

Striem oil separators incorporate the patented Diffusion Flow ™ design for better separation and storage of hydrocarbon in a smaller footprint. The calibrated diffusers greatly reduce turbulence allowing the effluent to enter the tank without disturbing existing oil and sediment layers. At the listed flow rate, Striem oil/sand separators remove 92% of all non-emulsified floatable substances with a specific gravity of .87 or less.

Coalescing Media Option

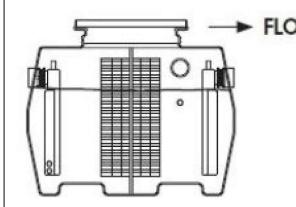
For improved separation performance in applications where influent contains emulsified oils, Striem oil separators can be outfitted with Clean Sweep coalescing media. Coalescing media helps smaller oil droplets to coalesce into larger oil droplets, improving rise rate and separation. Flow pattern is critical to the success of any coalescing separator. Striem oil separators are designed to provide an even, diffused flow through the media.

When installed, Clean Sweep media is placed so that all flow must pass through the media (see Figure 1).

Striem Clean Sweep polypropylene media has been third party tested to the CEN EN 858-1 for class 1 coalescing separators, and can provide a maximum residual light liquid (density of test liquid .85 g/cm3, or roughly that of standard motor oil) of 5 mg/L (5 parts per million) effluent water quality at 15 GPM per cubic foot of media. See Figure 2 below for summary of test results.

Figure 2

Figure 1



CEN EN 858-1 Test for Class 1 Coalescing Separators

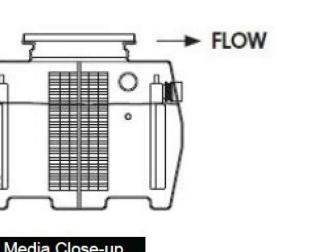
Light Liquid: Density .85 grams/cubic centimeter* Water: potable or purified surface water Solubility of light liquid: nil, unsaponifiable Water Turn Over: minimum of four volumes of test unit Liquid Flux: 25 - 40 cubic meters/square hour-meters (10 -15 GPM/square foot Maximum Residual Light Liquid: 5 mg/L**

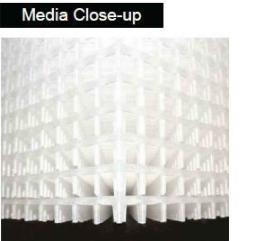
*Fuel oil, per ISO 8217, designation ISO-F-DMA **Hydrocarbon content analysis with prescribed infrared

potable or purified surface water

25 - 40 m³/hr-m² (10 - 15 gpm/ft²)

minimum of four volumes of test unit





Light Liquid:

Liquid Flux

Water Quality:

Water Turn Over.

Solubility of Light Liquid:

BETA

A CIVIL ENGINEERING FIRM

EXPEDITING DEVELOPMENT

801 Brickell Avenue

Suite 900

Miami, Florida 33131

PH: 786.284.8828

FAX: 866.312.8730

FLORIDA CERTIFICATE OF AUTHORIZATION # 27431

DRAWN BY: EAG DESIGN BY: EAG CHECK BY: LAE

PROJECT NAME:

MARGATE

COLLISION

CENTER

LOCATION:

5355 NW 24TH STREET

MARGATE, FL 33063

12/04/201

LAB 5/24/1

PROJECT NUMBER: 18109

ORIGINAL DRAWING DATE:

1\ CITY DRC COMMENTS

REVISIONS:

PLANNING-SUSTAINABLE DESIGN **VISUALIZATION** 6780 SW 80TH STREET MIAMI, FL 33143

> PLAN STATUS: SUBMITTAL SET:

Maximum Residual Light Liquid: 5 mg/L**

Results using HD Q-PAC at Danish Institute of Technology

EN 858-1 Test Procedure

density 0.85 g/cm3*

nil, unsaponifiable

Spectroscopy procedure.

610 mm (24 inches) Depth HD Q-PAC:

Inlet Oil Concentration: 4250 mg/L

31.1 m3/hr-m2 (12.7 gpm/ft2) Liquid Flux:

Outlet Oil Concentration: 0.98 mg/L*** Oil Droplets > 20 ± none observed

* Fuel oil, per ISO 8217, designation ISO-F-DMA

** Hydrocarbon content analysis with prescribed Infrared Spectroscopy procedure.

*** Average of five repetitions, data range 0.9 - 1.1 mg/L

CARWASH WASTEWATER EFFLUENT CHEMICAL **INFORMATION**

FOR: SOLARCH

ARCHITECTURE -INTERIORS

FOR AGENCY REVIEW AND APPROVAL

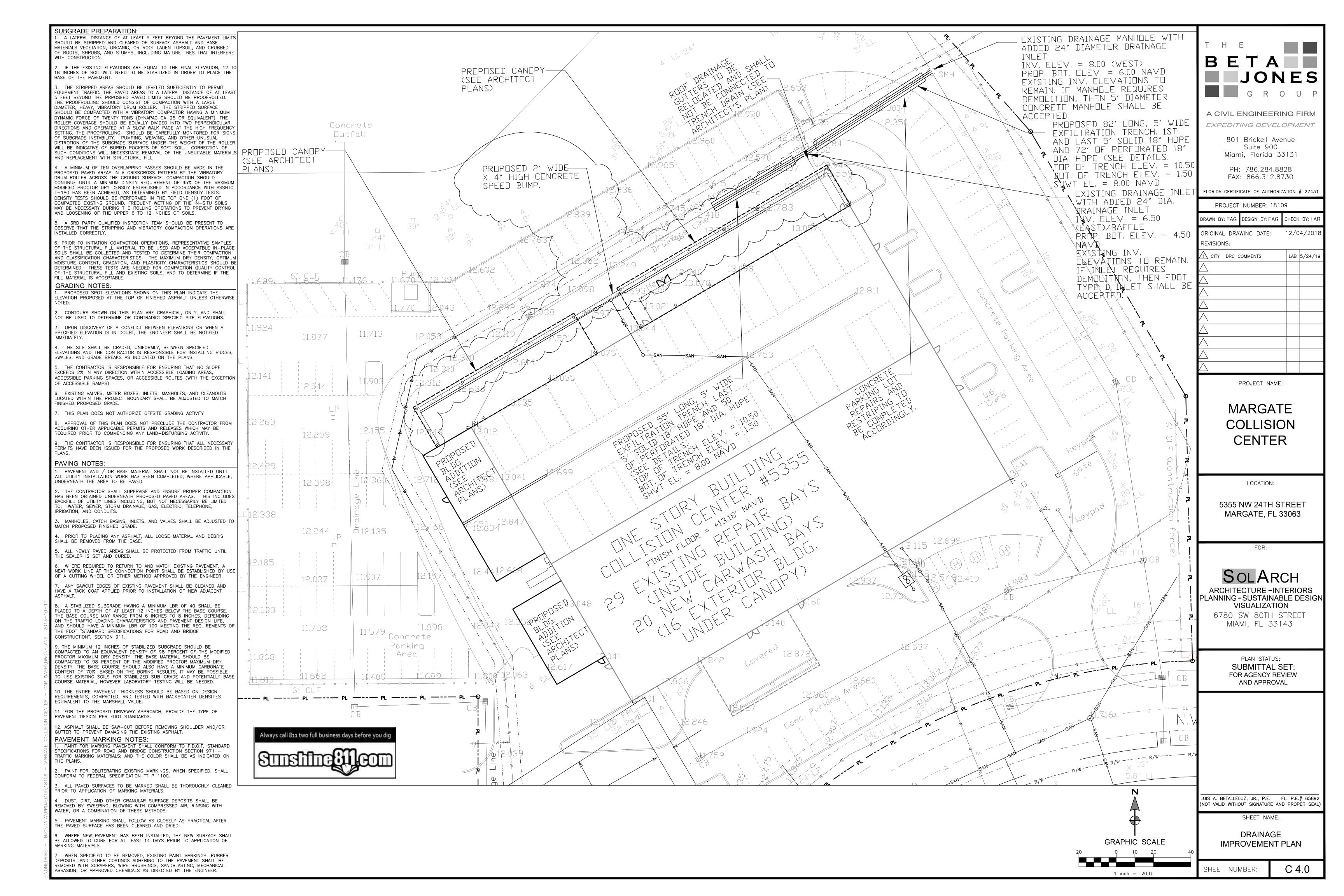
LUIS A. BETALLELUZ, JR., P.E. FL. P.E.# 65892 (NOT VALID WITHOUT SIGNATURE AND PROPER SEAL

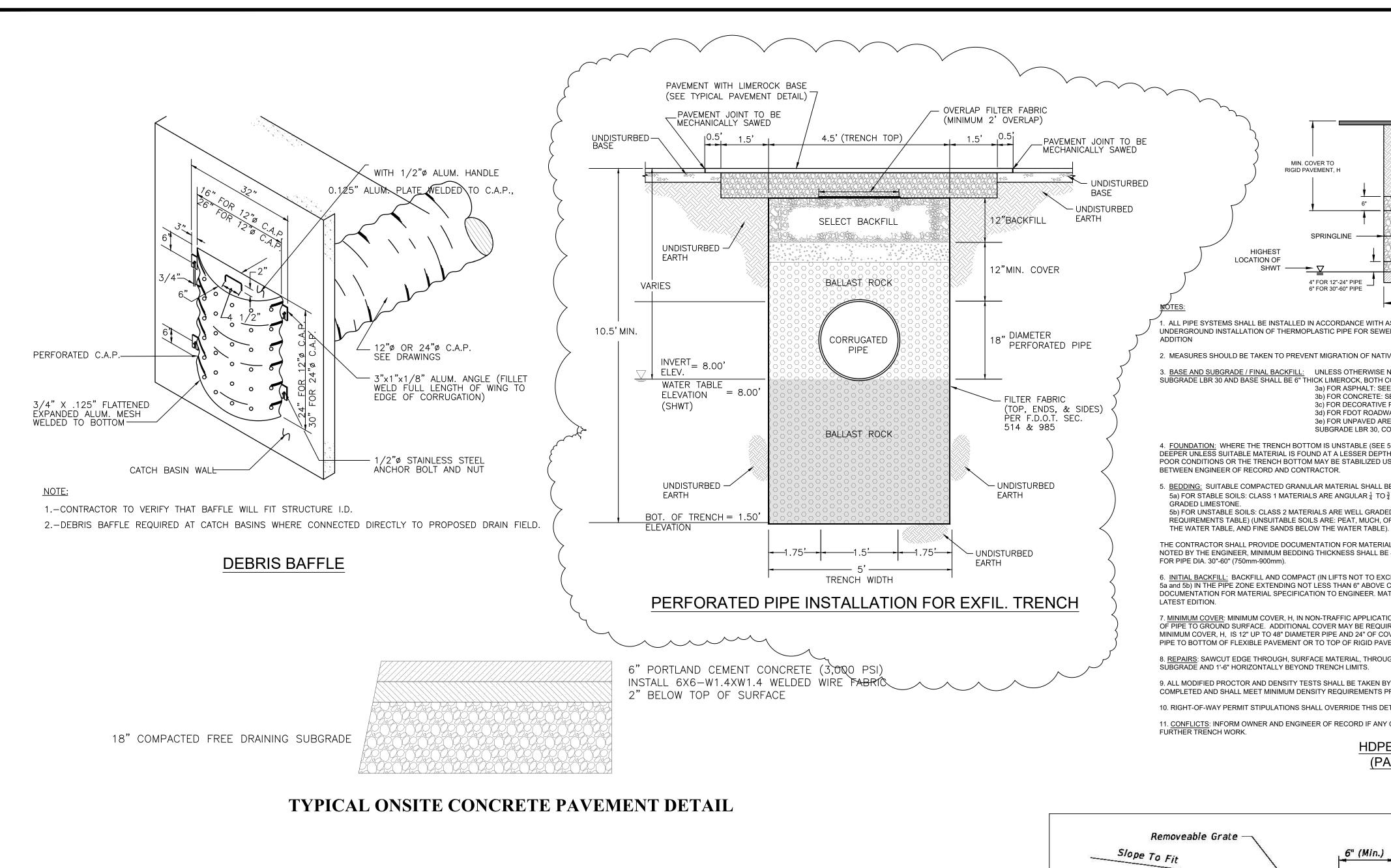
O/W SEPARATOR

SHEET NAME:

DETAILS

C 3.0 SHEET NUMBER:





4" HIGH X 2' WIDE

PARABOLIC CROWN TRAFFIC

RATED CONCRETE SPEED

BUMP

FDOT SPECIFICATIONS

4" HIGH CONCRETE SPEED BUMP (BERM) DETAIL

TO BE INSTALLED PER

FINAL
BACKFILL MIN. COVER TO MIN. COVER TO RIGID PAVEMENT, H FLEXIBLE PAVEMENT, H BACKFILL HIGHEST LOCATION OF 4" FOR 12"-24" PIPE 6" FOR 30"-60" PIPE MIN. TRENCH WIDTH FOUNDATION (SEE TABLE)

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

3. <u>BASE AND SUBGRADE / FINAL BACKFILL:</u> UNLESS OTHERWISE NOTED, FINAL BACKFILL SHALL BE 12" THICK (MINIMUM) SUBGRADE LBR 30 AND BASE SHALL BE 6" THICK LIMEROCK, BOTH COMPACTED TO 98% OF MODIFIED PROCTOR DENSITY 3a) FOR ASPHALT: SEE ASPHALT PAVEMENT DETAIL 3b) FOR CONCRETE: SEE CONCRETE PAVEMENT DETAIL 3c) FOR DECORATIVE PAVERS BY OTHERS: SEE OTHER DESIGNER'S DETAIL 3d) FOR FDOT ROADWAYS AND/OR ROW: SEE FDOT DETAIL

4. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE (SEE 5b), THE CONTRACTOR SHALL EXCAVATE TO AT LEAST 2' DEEPER UNLESS SUITABLE MATERIAL IS FOUND AT A LESSER DEPTH. GREATER DEPTHS MAY BE REQUIRED FOR EXTREMELY POOR CONDITIONS OR THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL WITH COORDINATION BETWEEN ENGINEER OF RECORD AND CONTRACTOR.

SUBGRADE LBR 30, COMPACTED TO 98% OF MODIFIED PROCTOR DENSITY.

5. <u>BEDDING:</u> SUITABLE COMPACTED GRANULAR MATERIAL SHALL BE: $\overline{5a}$) FOR STABLE SOILS: CLASS 1 MATERIALS ARE ANGULAR $\frac{1}{4}$ TO $\frac{3}{4}$ INCH WELL GRADED STONE INCLUDING WASHED AND 5b) FOR UNSTABLE SOILS: CLASS 2 MATERIALS ARE WELL GRADED COURSE SANDS AND GRAVEL (SEE GRADATION REQUIREMENTS TABLE) (UNSUITABLE SOILS ARE: PEAT, MUCH, OR OTHER ORGANIC SOILS, ELASTIC SILT AND CLAYS BELOW

THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR PIPE DIA. 4"-24" (100mm-600mm); 6" (150mm)

6. INITIAL BACKFILL: BACKFILL AND COMPACT (IN LIFTS NOT TO EXCEED 6". SUITABLE MATERIAL SHALL BE CLASS I OR II (SEE 5a and 5b) IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321,

7. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

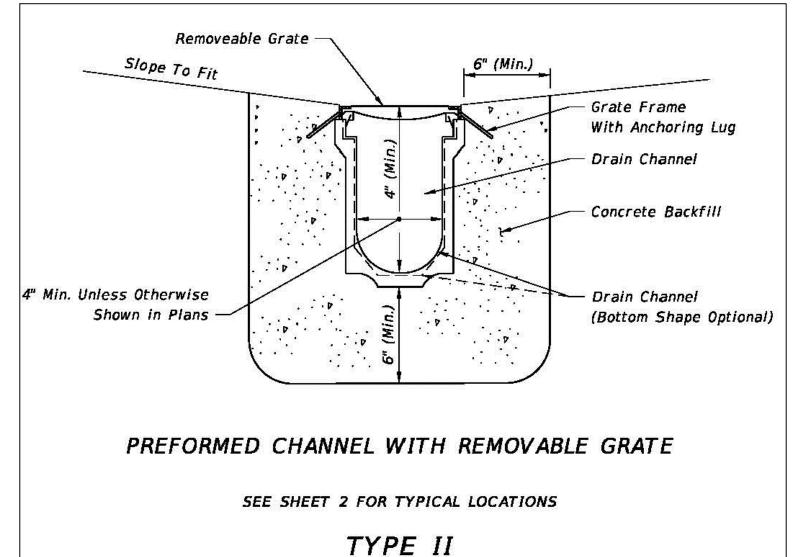
8. REPAIRS: SAWCUT EDGE THROUGH, SURFACE MATERIAL, THROUGH BASE, DOWN TO 4" BELOW BASE ELEVATION INTO SUBGRADE AND 1'-6" HORIZONTALLY BEYOND TRENCH LIMITS.

9. ALL MODIFIED PROCTOR AND DENSITY TESTS SHALL BE TAKEN BY A CERTIFIED LABORATORY. ALL TESTS SHALL BE COMPLETED AND SHALL MEET MINIMUM DENSITY REQUIREMENTS PRIOR TO ADDITIONAL BACKFILLING.

10. RIGHT-OF-WAY PERMIT STIPULATIONS SHALL OVERRIDE THIS DETAIL WHERE SUCH STIPULATIONS ARE MORE STRICT.

11. <u>CONFLICTS</u>: INFORM OWNER AND ENGINEER OF RECORD IF ANY CONFLICTS ARE FOUND PRIOR TO CONTINUATION OF FURTHER TRENCH WORK.

HDPE (SOLID) DRAINAGE PIPE TRENCH BACK FILL (PAVERS AND BASE X-SECTION - BY OTHERS)



FDOT INDEX 206 TYPE 2 TRENCH DRAIN DETAIL

NOTES:

1. CONTRACTOR TO REFER TO LATEST FDOT INDEX DESIGN STANDARDS MANUAL AND APPLY ALL DESIGN REQUIREMENTS PER THAT DETAIL FOR TYPE 2 TRENCHES

2. CONTRACTOR TO USE RIM AND INVERT ELEVATIONS AS PER THE ENGINEER OF RECORD'S UTILITY AND GRADING PLAN. ANY CONFLICTS FOUND, THE CONTRACTOR SHALL CONTACT ENGINEER OF RECORD AND OWNER PRIOR TO FINALIZING CONSTRUCTION.

3. TRENCH DRAIN GRATE SHALL BE H-20 LOADING RATED.



RECOMMENDED MINIMUM TRENCH WIDTHS					
	PIPE DIAM.	MIN. TRENCH WIDTH			
	4"	21"			
	6"	23"			
	8"	26"			
	10"	28"			
	12"	30"			
	15"	34"			
	18"	39"			
	24"	48"			
	30"	56"			
	36"	64"			
	42"	72"			
	48"	80"			
	54"	88"			
	60"	96"			

MINIMUM RECOMMENDED COVER BASED ON VECHICLE LOADING CONDITIONS

	SURFACE LIVE LOADING CONDITION			
IPE DIAM.	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD) *		
12" - 48"	12"	48"		
54" - 60"	24"	60"		

3e) FOR UNPAVED AREA SURFACE, FINAL BACKFILL SHALL BE 12" THICK (MINIMUM)* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER MINIMUM RECOMMENDED COVER BASED

ON RAILWAY LOADING CONDITIONS

	PIPE DIAM.	COOPER E-80**			
	UP TO 24"	24"			
	30"-36"	36"			
	42"-60"	48"			

** COVER IS MEASURED FROM TOP OF PIPE TO BOTTOM OF RAILWAY TIE. *** E-80 COVER REQUIREMENTS, ARE ONLY APPLICABLE TO ASTM F 2306 PIPE.

GRADATION TABLE

SIEVE SIZE	PERCENT PASSII BY WEIGHT
3/4"	100
3/8"	85-100
#8	40-60
#30	5-30

MARGATE COLLISION **CENTER**

PROJECT NAME:

A CIVIL ENGINEERING FIRM

EXPEDITING DEVELOPMENT

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FLORIDA CERTIFICATE OF AUTHORIZATION # 27431

RAWN BY: EAG DESIGN BY: EAG CHECK BY: LAE

12/04/201

LAB 5/24/1

PROJECT NUMBER: 18109

ORIGINAL DRAWING DATE:

1\ CITY DRC COMMENTS

REVISIONS:

LOCATION:

5355 NW 24TH STREET MARGATE, FL 33063

FOR:

SOLARCH

ARCHITECTURE -INTERIORS PLANNING-SUSTAINABLE DESIGN

VISUALIZATION 6780 SW 80TH STREET MIAMI, FL 33143

> PLAN STATUS: SUBMITTAL SET: FOR AGENCY REVIEW AND APPROVAL

LUIS A. BETALLELUZ, JR., P.E. FL. P.E.# 65892 (NOT VALID WITHOUT SIGNATURE AND PROPER SEAL)

SHEET NAME:

DRAINAGE DETAILS

SHEET NUMBER:

C 5.0