

AGENDA
Town of Indialantic
Local Planning Agency/Zoning and Planning Board
216 Fifth Avenue, Indialantic, FL 32903, Council Chamber
Tuesday, February 28, 2023 at 5:30 p.m.

A. Call to Order:

Rick Bertel, Chair
Ed Mackiewicz, Vice Chair
Dan Sullivan, Member
Michael Lentini, Member
Alan King, Member
Jeanne Allen, 1st Alternate
Erin Trauger, 2nd Alternate
(Vacant), School Board Representative

B. Election of Chair and Vice Chair:

C. Approval of Prior Meeting Minutes:

January 24, 2023 Regular Meeting Minutes

D. New Business:

1. Site Plan

Address: 101 S. Miramar Ave. also known as Indialantic by the Sea Lots 1 - 3, & 24 - 28, Block 38
Applicant: 101 S. Miramar, LLC (Gilad Ovakinin)
Owner: 101 S. Miramar, LLC
Authorized representative: Zev Cohen & Assoc., Inc.
Project Description: 13, 612 sq. ft. building with associated parking, utilities, and storm water management

E. Reports – Building Official

F. Adjourn:

NOTICE: Pursuant to Section 286.0105, Florida Statutes, the Town hereby advises the public that if a person decides to appeal a decision made by this Board with respect to any matter considered at its meeting or hearing, he or she will need a record of the proceedings and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes testimony and evidence upon which the appeal is to be based, as the Town does not provide one. Americans with Disabilities Act: Persons planning to attend the meeting who require special assistance must notify the Office of the Town Clerk at 321-723-2242 no later than 48 hours prior to the meeting.

Meeting Minutes
Town of Indialantic
Local Planning Agency / Zoning and Planning Board
216 Fifth Avenue, Indialantic, FL, Council Chamber
Tuesday, Jan. 24, 2023 at 5:30 p.m.

A. Call to order:

A regular meeting of the Indialantic Local Planning Agency/Zoning and Planning Board was called to order by Vice Chair Mackiewicz at 5:37 p.m. with the following members present:

Ed Mackiewicz, Vice Chair
Jeanne Allen, 1st Alternate Member
Erin Trauger, 2nd Alternate Member

Also present:

Michael Casey, Town Manager
Paul Gougelman, Town Attorney
Cliff Stokes, Building Official
Rebekah Raddon, Town Clerk

B. Election of Chair and Vice Chair:

Vice Chair Mackiewicz asked for this item to be placed on next month's agenda.

C. Approval of Prior Meeting Minutes: October 25, 2022

Motion by Member Trauger, seconded by Member Allen, and vote unanimous to approve the meeting minutes. Motion carried 3-0.

D. Site Plan Modification:

Address: 215 Fifth Avenue, also described as Indialantic by the Sea Lots 8 & 9, Block 21
Applicant: Antonio Francesco Savoia
Owner: Kiran Patel
Project Description: Remodel for a deli take-out business

Building Official Stokes explained that the site plan meets all of the town's requirements except for the masonry wall shown running north and south on the eastern side of the property, which should be removed.

Antonio Francesco Savoia, Applicant, 931 Niagara St NW, Palm Bay FL 32907, spoke.

Mr. Savoia advised that he is a tenant with a contract to purchase, and is authorized by the owner to apply for the site plan modification. He described the proposed remodel and the

business which will feature made on premise Italian foods aimed mostly for take-out customers to comply with the towns parking requirements per number of seats. The business will be named Italian Eats. He agreed to remove the masonry wall.

Paul Rufo, 9380 S Tropical Trl., Merritt Island, FL 32952, real estate agent/broker, introduced himself and spoke briefly.

Motion by Member Trauger, seconded by Member Allen, and vote unanimous to approve the site plan modification contingent upon the removal of the masonry wall shown on the eastern side of the property. Motion carried 3-0.

E. Reports – Building Official

Mr. Stokes provided an update regarding projects that are underway and advised that the Surfstyle location nearest to the beach has submitted a site plan and will be on next month's agenda.

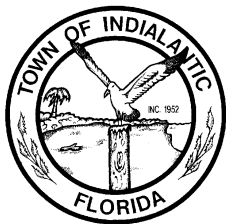
F. Adjourn

Motion by Member Trauger, seconded by Member Allen, and vote unanimous to adjourn to meeting at 5:52 p.m.

Rick Bertel, Chair

Attested by:

Rebekah Raddon, CMC, Town Clerk



APPLICATION FOR SITE PLAN REVIEW

This application must be completed and returned with all enclosures referred to herein to the office of the Building Official of the Town of Indialantic, Florida. This application will be referred to the Zoning and Planning Board for their study and recommendation. You will be advised of the date and time of the meeting before the Zoning and Planning Board. You may appear at the meeting in person or be represented by an authorized agent. If you cannot attend the meeting, you should make arrangements to have an authorized representative appear on your behalf as the application can be acted upon by the Board even in your absence.

1. Applicant: 101 S. MIRAMAR AVE., LLC.
2. Site Address: 101 S. MIRAMAR AVE. INDIALANTIC, FL 32903
3. Contact's Name: 101 S. MIRAMAR AVE. INDIALANTIC, FL 32903
4. Contact's Phone: (954)926-6666
5. Contact's Mailing Address: 4100 N. 28TH TERRACE, HOLLYWOOD, FL 33020
6. Contact's Email Address GILAD@SURF-STYLE.COM
7. Legal Description Of Property Covered by This Application (Including Subdivision, Block and Lot(s): LOTS 1, 1, 3, 24, 26, 27, AND 28, BLOCK 38, INDIALANTIC
BY THE SEA, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT
BOOK 3, PAGE 35, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA
8. Zoning District: C-2 COMMERCIAL
9. Property Owner, If Different Than Applicant (Owner Authorization Required):
10. Property Owner's Mailing Address:

11. Description of Project: CONSTRUCTION OF A 13,612 S.F. BUILDING WITH
ASSOCIATED PARKING, UTILITIES, & STORMWATER MANAGEMENT

New Site Plan / Site Plan Modification (Circle One)

PROCEDURES FOR OBTAINING SITE PLAN APPROVAL SHALL BE AS FOLLOWS:

- (1) **PREAPPLICATION CONFERENCE:** The applicant shall meet with the Building Official to discuss basic site plan requirements, consider preliminary features of the site and the proposed development, and determine if the proposed use conforms to the zoning requirements of the district.
- (2) **SITE PLAN CHECKLIST:** The applicant shall properly fill out a checklist provided by the Building Official. This checklist will summarize the site plan and it will be used as a guide for site plan evaluation.
- (3) **PRELIMINARY SITE PLAN:** Following the pre-application conference, 12 copies of a preliminary site plan prepared by a registered civil engineer or architect showing the proposed general layout, and a vicinity map showing the location of abutting streets, existing and proposed utilities, and storm drainage systems in accordance with the site plan requirements shall be submitted to the Building Department.
- (4) **REVIEW AND RECOMMENDATIONS:** Applications for site plan approval shall be submitted to the Building Official, who shall forward copies of the proposed plans to the Fire Department for its written recommendations regarding health, safety and welfare.

Upon completion of the above four steps and receipt of the recommendation from the Fire Department, the Zoning and Planning Board shall review the site plan and any recommendations at their next regular meeting.

Per Indialantic Code Section 113-27, Site Plan Review:

The zoning board shall not approve such plan unless it finds that such site plan conforms to all applicable provisions of the Town Code of Ordinances, that adequate off-street parking and loading facilities are provided for owners, tenants, visitors, and employees, and that adequate protection and separation are provided for contiguous and nearby residential property.

The zoning board may attach to its approval of a site plan any reasonable conditions, limitations or requirements which are found necessary in its judgment to effectuate the purpose of this section and carry out the spirit and purpose of the zoning ordinance.

Modification of site plan. Any change in use of buildings, structures, land or water, or institution of new uses, or alteration of or addition to buildings or structures shall be in accordance with a new or modified site plan conforming and approved pursuant to this section.

Approval time limit. The site plan approval shall terminate 540 days (18 months) thereafter if construction has not been started. Two extensions of up to 180 days (6 months) may be made by the zoning and planning board at its discretion for good cause shown, such as but not limited to delays in obtaining development permits from other governmental agencies or project financing delays.

(Code 1962, 28-98A; Ord. No. 217, 1, 10-18-77; Ord. No. 89-11 2, 4-18-89, Ord. No. 2019-12, 11-13-19)

SITE PLAN CHECK LIST

In reviewing such site plan the zoning board shall consider the location, size, height, spacing, appearance, character and utilization of any building, structure or use and their appurtenances, access and circulation of vehicles and pedestrians, streets, parking area, yards and open spaces, landscaping, and relationship to adjacent property.

A site plan shall include, but not necessarily be limited to the following:

- _____ (a) Site plan with grades or contours.
- _____ (b) Elevations, floor plans and uses of all buildings and structures.
- _____ (c) Location and character of all outside utilities.
- _____ (d) All curb cuts, driveways, parking areas, loading areas, and surfacing materials of same.
- _____ (e) All pedestrian walks, malls, yards, and open spaces.
- _____ (f) Location, size, character, height and orientation of all signs.
- _____ (g) Location, height and general character of walls and fences.
- _____ (h) Location and general character of landscaped areas and the common and botanical name of all trees, shrubs, and plants, with the number and size of each category or individual item, and the proposed watering and continued care in order to maintain the landscaping in accordance with approved site plan.
- _____ (i) All buildings constructed in those areas designated as special hazard areas on the current flood hazard boundary maps published by the Department of Housing and Urban Development, Federal Insurance Administration, shall have all finished floor elevations related to Coast and Geodetic Survey mean sea level datum.
- _____ (j) Storm Drainage System.

OWNER AUTHORIZATION
Site Plan Submittal

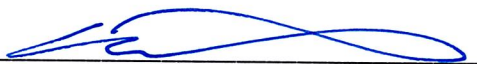
I, 101 S MIRAMAR AVE, LLC., owner of the following property:

1, 2, 3, 24,

Lot(s) 26, 27 & 28 Block 38

Street Address: 101 S. MIRAMAR AVE., Indialantic, Florida, 32903

do hereby authorize ZEV COHEN & ASSOCATES, INC to submit a site plan
application on my behalf.


Signature (Owner)

GILAD OVAKNIN
Printed Name (Owner)

State of Florida

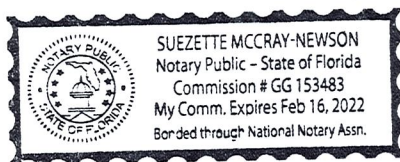
Broward County

The foregoing Owner Authorization was acknowledged before me by means of:

[] physical presence or [] online notarization, this 13th day of October, 20 21, by
Gilad Ovakinin (owner).

Notary Seal:


(Signature of Notary Public – State of Florida)



Personally Known ☒ OR Produced Identification: _____

business which will feature made on premise Italian foods aimed mostly for take-out customers to comply with the towns parking requirements per number of seats. The business will be named Italian Eats. He agreed to remove the masonry wall.

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Motion by Member Trauger, seconded by Member Allen, and vote unanimous to approve the site plan modification contingent upon the removal of the masonry wall shown on the eastern side of the property. Motion carried 3-0.

E. Reports – Building Official

Mr. Stokes provided an update regarding projects that are underway and advised that the Surfstyle location nearest to the beach has submitted a site plan and will be on next month's agenda.

F. Adjourn

Motion by Member Trauger, seconded by Member Allen, and vote unanimous to adjourn to meeting at 5:52 p.m.

Rick Bertel, Chair

Attested by:

Rebekah Raddon, CMC, Town Clerk

SURF STYLE AT INDIALANTIC

TOWN OF INDIALANTIC - BREVARD COUNTY, FL

FINAL ENGINEERING PLANS

OWNER:

GILAD OVAKNIN
SURFSYLE MANAGEMENT
4100 N. 28TH TERRACE
HOLLYWOOD, FLORIDA 33020
(954) 926-6666

CONTACT PERSON: GILAD OVAKNIN

e-mail: gilad@surf-style.com

ARCHITECT:

DAG ARCHITECTS
1223 AIRPORT ROAD
DESTIN, FLORIDA 32541
(850)502-8770
(850)837-8152

CONTACT PERSON: CARL STEUER A.I.A.

email: csteuer@dagarchitects.com

CIVIL ENGINEER:

ZEY COHEN & ASSOCIATES, INC
300 INTERCHANGE BLVD, SUITE C
ORMOND BEACH, FL 32174
(386) 677-2482
(386) 677-2505 (FAX)

CONTACT PERSON: HALUK KILIC, P.E.

e-mail: hkilic@zevcohen.com

SURVEYOR:

KANE SURVEYING, INC
505 DISTRIBUTION DRIVE
MELBOURNE, FLORIDA 32904
(321) 676-0427
(321) 984-1448 (FAX)

CONTACT PERSON: JOEL SEYMOUR, P.L.S

e-mail: terriecarlson@bellsouth.net

GEOTECHNICAL ENGINEER:

UNIVERSAL ENGINEERING SCIENCES
820 BREVARD AVENUE,
ROCKLEDGE, FLORIDA 32955
(321) 638-0808
(321) 987-2152 (FAX)

CONTACT PERSON: ROBERT SMITH, P.E. PMP

e-mail: rlsmith@universalengineering.com

LANDSCAPE ARCHITECT:

ZEY COHEN & ASSOCIATES
300 INTERCHANGE BLVD, SUITE C
ORMOND BEACH, FL 32174
(386) 677-2482
(386) 677-2505 (FAX)

CONTACT PERSON: JAKE STEHR, P.L.A.

e-mail: jstehr@zevcohen.com

PROJECT DESCRIPTION:

THIS PROJECT INCLUDES THE CONSTRUCTION OF AN 13,612 S.F. BUILDING WITH 11,042 SF RETAIL SPACE, ASSOCIATED PARKING, UTILITIES & STORMWATER MANAGEMENT SYSTEMS.

SITE INFORMATION:

SITE ADDRESS:	101 S. MIRAMAR AVE. , INDIATLANTIC, FL 32903
PROJECT AREA:	0.94 AC
TAX PARCEL I.D. #:	27-38-31-E0-38-1 (LOTS 1,2 BLK 38)
	27-38-31-E0-38-3 (LOTS 3,24,25,26 BLK 38)
	27-38-31-E0-38-27 (LOTS 27,28 BLK 38)
EXISTING ZONING:	C-2 COMMERCIAL
PROPOSED ZONING:	C-2 COMMERCIAL
EXISTING LAND USE:	1100 - RETAIL STORE (LOTS 1,2)
	1222 - COMMERCIAL RELATED AMENITIES (LOTS 3, 24-28)
PROPOSED LAND USE:	COMMERCIAL
EXISTING FUTURE LAND USE:	COMMERCIAL
SETBACKS:	
FRONT:	15 FT
WEST SIDE:	52 FT (SOUTH MIRAMAR AVE)
EAST SIDE:	50 FT (WAVE CREST STREET)
MAXIMUM BUILDING HEIGHT	35 FT
UTILITIES:	PROVIDED BY BREVARD COUNTY UTILITY SERVICES: SOUTH BEACHES SEWER & MELBOURNE WATER

LAND USE TABLE:		
	ACREAGE	PERCENTAGE
EXISTING CONDITIONS:		
WETLAND AREA	0.0 AC	0.0%
UPLAND AREA	0.94 AC	100.0%
PROPOSED IMPROVEMENTS:		
BUILDING(S)	0.302 AC	32.13%
PAVEMENT & SIDEWALK	0.470 AC	50.00%
POND AREA(S)	0.0 AC	0.00%
LANDSCAPE/OPEN SPACE	0.168 AC	17.87%
TOTAL PERVIOUS	0.168 AC	17.87%
TOTAL IMPERVIOUS	0.772 AC	82.13%

PARKING CALCULATIONS:			
USE	PARKING REQUIREMENT	SF/UNITS	SPACES REQUIRED
GENERAL RETAIL	COMMERCIAL: 2 SPACES FOR THE FIRST 500 SF + 1 PER 500 SF	2 + (11,205-500)/500	24
PARKING SPACES PROVIDED:		28	
HANDICAP PARKING REQUIRED:		2	
HANDICAP PARKING PROVIDED:		2	



VICINITY MAP

SCALE: 1" = 1,000'



SOILS MAP

SCALE: 1" = 400'

THE SITE LIES WITHIN THE FOLLOWING BREVARD COUNTY SOIL CLASSIFICATIONS:
25 CANAVERAL-PALM BEACH-URBAN LAND COMPLE
14 BEACHES



ZONING MAP

SCALE: 1" = 400'

CURRENT ZONING FOR THIS SITE IS: C-2 COMMERCIAL



FLOOD ZONE MAP

SCALE: 1" = 400'

THE PROPERTY LIES IN:
FLOOD ZONE X - AN AREA OUTSIDE THE 1% AND 2% ANNUAL CHANCE OF FLOODING
PER FEMA MAPS 12009C0604H

SHEET INDEX:

C1	COVER SHEET
C2-C3	CONSTRUCTION NOTES
C4	DEMOLITION & EROSION CONTROL PLAN
C5	GEOMETRY, SIGNAGE & STRIPING PLAN
C6	PAVING, GRADING & DRAINAGE PLAN
C7	DEP DIMENSIONING PLAN
C8	DEP CROSS-SECTIONS
C9	FDOT PLAN & CROSS-SECTIONS
C10	UTILITY PLAN
C11-C18	CONSTRUCTION DETAILS
CF1	DEP CUT-FILL EXHIBIT
CC1	COASTAL CONSTRUCTION CONTROL LINE EXHIBIT
LA1-LA2	LANDSCAPE PLAN & DETAILS
IR1-IR2	IRRIGATION PLAN

LEGAL DESCRIPTION:

LOTS 1,2,3,24,25,26,27 AND 28, BLOCK 38, INDIATLANTIC BY THE SEA, ACCORDING TO THE PLAT THEROF, AS RECORDED IN PLAT BOOK 3, PAGE 35, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.



CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION

NO.	DATE	BY	SUBMITTALS/REVISIONS
1	10/21/21	HK/AMM	COVER SHEET AND FDOT SUBMITTAL
2	10/21/21	HK/AMM	PER TOWN OF INDIALANTIC COMMENTS
3	11/04/21	HK/AMM	PER TOWN OF INDIALANTIC AND FDOT COMMENTS
4	11/09/22	HK	PER FDOT COMMENTS DATED 11-02-22
5	11/21/22	HK	SUBMITTAL TO FDOT AND TOWN OF INDIALANTIC
6	11/30/22	HK	PER FDOT COMMENTS DATED 11-28-22
7	01/26/23	HK/AMM	PER TOWN OF INDIALANTIC COMMENTS

SURF STYLE AT INDIALANTIC FINAL ENGINEERING PLANS COVER SHEET

PROJECT NO: ZC 21043
DESIGNED BY: HK/AMM
DRAFTED BY: AMM/CMJL
CHECKED BY: HK
DRAWING FILE: 01-21043COV
XREFS: XXXXX.DWG
XREFS: XXXXX.DWG

HALUK KILIC, P.E. NO. 84244
NOT VALID WITHOUT SEAL

SHEET: C1 OF 18

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

GENERAL NOTES

1. ALL CONSTRUCTION, DRAINAGE STRUCTURES AND OTHER SITE IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITIONS OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR THE BREVARD COUNTY LAND DEVELOPMENT CODE REQUIREMENTS, STANDARD CONSTRUCTION DETAILS & STANDARD SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.
2. SHOP DRAWINGS AND CERTIFICATIONS FOR ALL MATERIALS AND STRUCTURES ARE REQUIRED. THE CONTRACTOR SHALL REVIEW AND SIGN SHOP DRAWINGS. THE CONTRACTOR SHALL SUBMIT REVIEWED SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING THE MATERIALS REQUIRED FOR CONSTRUCTION.
3. CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL REQUIRED PERMITS. THE CONTRACTOR SHALL MAINTAIN COPIES OF ALL RELEVANT PERMITS AND CONSTRUCTION DOCUMENTS AVAILABLE ON THE JOB SITE AT ALL TIMES.
4. CONTRACTOR TO MAINTAIN THE SITE IN A SAFE AND SECURE MANNER TO PROTECT PUBLIC SAFETY AND THE CONDITIONS OF THE IMPROVEMENTS.
5. THE CONTRACTOR SHALL MAINTAIN, AT THE JOB SITE, A RECORD COPY OF ALL CONSTRUCTION DRAWINGS AND SPECIFICATIONS ON WHICH ALL FIELD CHANGES ARE TO BE SHOWN. THESE CHANGES ARE TO BE INCORPORATED IN THE "AS-BUILT" SURVEY FURNISHED TO THE ENGINEER.
6. SHOULD CONDITIONS VARY FROM THOSE SHOWN ON THESE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD PRIOR TO CONTINUING CONSTRUCTION.
7. ANY FIELD MODIFICATIONS OR DEVIATIONS TO THESE CONSTRUCTION PLANS REQUIRES APPROVAL BY BOTH THE ENGINEER OF RECORD AND THE TOWN OF INDIANTLANTIC PRIOR TO PERFORMING THE WORK.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AN "AS-BUILT" SURVEY OF THE COMPLETED CONSTRUCTION. THE "AS-BUILT" SURVEY SHALL BE PREPARED IN ACCORDANCE WITH APPROPRIATE GOVERNMENTAL REGULATIONS AND ZCA REQUIREMENTS. THE "AS-BUILT" SURVEY SHALL BE PREPARED ON ZCA'S DESIGN/PERMITTED PLANS. ELECTRONIC AND PAPER COPIES OF THE AS-BUILT SURVEY SHALL BE PROVIDED TO THE ENGINEER OF RECORD. THE "AS-BUILT" SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL LAND SURVEYOR.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING VEHICULAR AND PEDESTRIAN TRAFFIC SAFELY THROUGH THE WORK ZONE AT ALL TIMES, IF APPLICABLE. ANY SIDEWALK, LANE OR ROAD CLOSURE REQUIRES REVIEW AND APPROVAL IN ADVANCE AND A SEVEN (7) DAY MINIMUM NOTICE TO THE BREVARD COUNTY TRAFFIC OPERATIONS (321) 633-2077. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REQUIRED COORDINATION.
10. MAINTENANCE OF TRAFFIC WILL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS AND THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS, LATEST EDITIONS.
11. CONTRACTOR TO NOTIFY THE REGULATORY AGENCIES FORTY EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL SEND COPIES OF ALL TESTING REPORTS TO THE REGULATORY AGENCIES AND THE ENGINEER OF RECORD.
12. SURVEY INFORMATION PROVIDED BY KANE SURVEYING, INC DATED 03-15-2021. ALL ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29) / NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND ARE SHOWN IN FEET. STATE PLANE COORDINATES ARE BASED UPON NAD 83.
13. ALL PUBLIC LAND CORNERS AND MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE PROTECTED. THE CONTRACTOR SHALL EMPLOY A SURVEYOR, REGISTERED IN THE STATE OF FLORIDA, TO REPLACE/RESTORE ANY PROPERTY OR LAND MARKERS DISTURBED BY CONSTRUCTION ACTIVITIES.
14. NO LAND SHALL BE CLEARED, EXCAVATED OR FILLED AND NO STRUCTURES SHALL BE ERRECTED, REPAIRED OR DEMOLISHED WITHOUT PROPER PERMIT(S).
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS AS WELL AS THE REQUIREMENTS OF ST. JOHNS RIVER WATER MANAGEMENT DISTRICT AND E.P.A. (NPDES). CONTRACTOR SHALL ESTABLISH BEST MANAGEMENT PRACTICES AND EROSION CONTROL METHODS PRIOR TO COMMENCING ANY SITE CLEARING OR DEMOLITION AND SHALL MAINTAIN THOSE BARRIERS UNTIL FINAL ACCEPTANCE OF THE PROJECT.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROJECT'S NPDES PERMITTING, INSPECTION AND REPORTING, IF APPLICABLE.
17. THE EROSION, SEDIMENT AND TURBIDITY CONTROL MEASURES DELINEATED HEREON ARE THE MINIMUM REQUIRED. ADDITIONAL CONTROLS MAY BE NEEDED, DEPENDING UPON THE ACTUAL SITE CONDITIONS. JURISDICTIONAL AGENCY PERMIT REQUIREMENTS AND CONSTRUCTION OPERATIONS. STAKED SILT FENCE SHALL BE UTILIZED TO CONTROL EROSION AND RELEASE OF SUSPENDED SOLIDS. SEDIMENT TRACKING CONTROL DEVICES SHALL BE USED TO PREVENT THE OFFSITE TRANSPORT OF SEDIMENT BY MOTORIZED VEHICLES. IF CONTROL MEASURES DO NOT PROVE SATISFACTORY, WORK SHALL CEASE UNTIL NEW MEASURES ARE ADOPTED WITH SATISFACTORY RESULTS.
18. ALL EROSION AND SEDIMENT TRACKING CONTROL DEVICES SHALL BE INSPECTED DAILY AND IMMEDIATELY FOLLOWING A RAINFALL EVENT. REFER TO PROJECT'S STORMWATER POLLUTION PREVENT PLAN (SWPPP). ANY DEFICIENCIES FOUND IN THE EROSION CONTROL MEASURES SHALL BE REPAIRED IMMEDIATELY. THE CONTRACTOR SHALL KEEP A LOG BOOK DOCUMENTING THESE DAILY INSPECTIONS, DEFICIENCIES AND REMEDIAL ACTIONS.
19. ALL UNSUITABLE SOILS AND UNSUITABLE MATERIALS (SUCH AS CLAY, ORGANICS, ROCK, CEMENTED COQUINA, DEBRIS, ETC.) SHALL BE REMOVED, DISPOSED OF IN A LEGAL MANNER AND REPLACED WITH DRY COMPACTED GRANULAR MATERIAL SATISFACTORY TO THE TOWN OF INDIANTLANTIC. THE COST OF ALL WORK AND MATERIALS IS TO BE INCLUDED IN THE UNIT PRICE OF THE ASSOCIATED CONSTRUCTION ITEMS UNLESS OTHERWISE SHOWN IN THE PLANS.
20. IN THE EVENT THAT WATER IS ENCOUNTERED DURING CONSTRUCTION, DEWATERING SHALL BE PERFORMED AS NEEDED. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, PERMITTING, INSTALLATION, OPERATION AND SUBSEQUENT REMOVAL OF DEWATERING SYSTEMS AND THEIR SAFETY AND CONFORMITY WITH APPLICABLE CODES AND REGULATIONS.
21. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE ELECTRIC, TELEPHONE, GAS, CABLE, TELEVISION, COMMUNICATIONS, ETC. COMPANIES TO DETERMINE THE TYPE AND LOCATION OF ALL UNDERGROUND UTILITIES IN THE AREA OF CONSTRUCTION.
22. ALL UNDERGROUND UTILITIES HAVE BEEN LOCATED HORIZONTALLY AND VERTICALLY BASED ON THE BEST INFORMATION AVAILABLE. APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER RESPONSIBILITY FOR LOCATING AND VERIFYING ALL ELEVATIONS OF EXISTING UTILITIES (PUBLIC AND PRIVATE) SHOWN OR NOT SHOWN PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE VARIOUS UTILITY COMPANIES TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION, DISRUPTION OF SERVICE OR CLARIFICATION OF ACTIVITY REGARDING SAID UTILITY. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING NEAR OR CROSSING A UTILITY, WHETHER SHOWN ON THESE PLANS OR FIELD LOCATED. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND OBTAIN THE UTILITY COMPANY'S PERMISSION TO RELOCATE, DISRUPT OR CROSS ANY UTILITY DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO PAY FOR ANY REPAIR, RELOCATION OR TEMPORARY MEASURES NEEDED FOR EXISTING OR PROPOSED UTILITIES.
23. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND AVOID ALL UTILITIES, OTHER STRUCTURES AND OBSTRUCTIONS BOTH ABOVE AND BELOW GROUND. ALL DAMAGE RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
24. THE CONTRACTOR SHALL NOTIFY ALL UTILITY PROVIDERS AT LEAST TWO (2) BUSINESS DAYS PRIOR TO ANY CONSTRUCTION.
25. THE CONTRACTOR SHALL MAINTAIN UNINTERRUPTED SERVICE AT ALL SERVICE CONNECTIONS. THE MANNER IN WHICH THIS IS ACCOMPLISHED SHALL BE LEFT TO THE DISCRETION OF THE CONTRACTOR, SUBJECT TO THE REQUIREMENTS OF THE CONTRACT SPECIFICATIONS.
26. ALL EXISTING DRAINAGE STRUCTURES AND UTILITIES WITHIN THE CONSTRUCTION LIMITS SHALL REMAIN, UNLESS OTHERWISE NOTED IN PLANS.
27. ALL STATIONS AND OFFSETS REFER TO CENTERLINE CONSTRUCTION UNLESS OTHERWISE NOTED IN PLANS.
28. THE LENGTH OF ALL DRAINAGE PIPES AND LOCATION OF ALL DRAINAGE STRUCTURES ARE APPROXIMATE. THE LOCATION OF THE DRAINAGE STRUCTURE SHALL DETERMINE THE LENGTH OF PIPE.
29. THE TOP OF CASTING ELEVATIONS (TO) OF ALL STRUCTURES ARE SHOWN. HOWEVER, THE CONTRACTOR SHALL INSTALL ALL FRAMES SO AS TO PROVIDE A SMOOTH SURFACE FOR VEHICULAR AND/OR PEDESTRIAN TRAFFIC.
30. CONTRACTOR SHALL CONFIRM PROPOSED TOP OF CASTING (TO) ELEVATIONS WILL ALLOW POSITIVE DRAINAGE TO PROPOSED INLETS. IF POSITIVE DRAINAGE DOES NOT EXIST, CONTRACTOR TO COORDINATE WITH ENGINEER OF RECORD FOR SOLUTION AND ADJUST PROPOSED INLETS AS NECESSARY AT NO COST.
31. CONTRACTOR SHALL CONFIRM ELEVATION OF EXISTING GRADE PRIOR TO PLACING DRAINAGE OUTFALL STRUCTURES. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD OF EXISTING GRADE PRIOR TO ANY PROPOSED OUTFALL INVERT. CONTRACTOR SHALL ADJUST OUTFALL STRUCTURE INVERT AND/OR STRUCTURE LOCATION AS DIRECTED BY ENGINEER OF RECORD AT NO COST.
32. ANY DRAINAGE PROBLEMS CREATED BY CONSTRUCTION, OR EXISTING BEFORE CONSTRUCTION AND NOT ALLEVIATED, SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD AT THE TIME OF DISCOVERY.
33. ALL STORMWATER PIPES AND INLETS SHALL BE CLEARED OF DEBRIS AND ERODED MATERIALS AT LAST STAGES OF AND PRIOR TO COMPLETION OF CONSTRUCTION.
34. SPECIAL ATTENTION IS DIRECTED TO THE FACT THAT PORTIONS OF SOME DRAINAGE STRUCTURES MAY EXTEND INTO THE STABILIZED PORTION OF THE ROADBED. EXTREME CAUTION WILL BE NECESSARY DURING CONSTRUCTION AND STABILIZATION OPERATIONS AT THESE LOCATIONS TO AVOID DAMAGE AND ACHIEVE THE REQUIRED COMPACTION.

GENERAL NOTES CONT'D

35. DURING CONSTRUCTION, AN ALL-WEATHER ACCESSIBLE ROADWAY SHALL BE MAINTAINED AT ALL TIMES FOR FIRE ACCESS.
36. ALL REQUIRED FIRE LINES & HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL & STATE REQUIREMENTS AND OPERATIONAL PRIOR TO THE START OF VERTICAL CONSTRUCTION.
37. NONE OF THE EXISTING LIMEROCK BASE THAT IS REMOVED IS TO BE USED IN THE CONSTRUCTION OF THE NEW LIMEROCK BASE UNLESS OTHERWISE NOTED ON PLANS.
38. EXISTING DRIVEWAYS WITHIN THE LIMITS OF THIS PROJECT ARE TO BE REPLACED AT THE SAME LOCATION AND WIDTH WITH THE SAME TYPE OF MATERIAL, UNLESS OTHERWISE SHOWN IN THE PLANS.
39. ALL RAMPS, SIDEWALKS AND ACCESSIBLE ROUTES ARE TO BE IN COMPLIANCE WITH CURRENT A.D.A. REQUIREMENTS.
40. SIGNS THAT ARE REMOVED AND ARE TO BE RELOCATED SHALL BE STOCK PILED BY THE CONTRACTOR. ANY EXISTING SIGNS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS COST.
41. ROADWAY AND PARKING SIGNAGE AND MARKINGS SHALL BE IN CONFORMANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
42. UNLESS OTHERWISE NOTED, PROPOSED GRADES SHOWN ARE FINISHED GRADES.
43. OPERATION AND MAINTENANCE OF THE STORMWATER SYSTEM WILL BE PROVIDED BY THE OWNER OF PROPERTY. MAINTENANCE IS TO INCLUDE BI-WEEKLY MOWING OF SLOPES FOR VEGETATION CONTROL AND MONTHLY INSPECTION/CLEANING OF CULVERTS & STORM SYSTEMS.
44. ALL DISTURBED AREAS SHALL BE SOODED, UNLESS OTHERWISE SHOWN, AND SHALL HAVE SOD/ VEGETATED COVER ESTABLISHED PRIOR TO THE INSPECTION FOR THE CERTIFICATE OF OCCUPANCY.
45. INSTALLATION OF THE REQUIRED STREET SIGNS, TRAFFIC SIGNS, PAVEMENT STRIPING, STREET LIGHTS AND SIDEWALKS ALONG WITH THE PAINTING OF THE FIRE HYDRANTS MUST BE COMPLETED PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF COMPLETION.
46. CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND PRE-TESTING PRIOR TO SCHEDULING A TEST OR WALK-THROUGH WITH THE UTILITY REPRESENTATIVES, MUNICIPAL REPRESENTATIVE AND ENGINEER OF RECORD. ANY COST ASSOCIATED WITH RETESTING SHALL BE PAID FOR BY THE CONTRACTOR.
47. THE ENGINEER OF RECORD AND LOCAL UTILITY SHALL BE GIVEN SEVENTY-TWO (72) HOURS NOTICE OF ALL REQUESTED MEETINGS AND/OR TESTING MEASURES.
48. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE REGULATORY REPRESENTATIVES TO DETERMINE THE INSPECTIONS NEEDED FOR THE PROJECT. CONTRACTOR SHALL PROVIDE PROPER NOTIFICATION TO INSPECTING AUTHORITIES BEFORE AND DURING CONSTRUCTION.
49. ZEV COHEN AND ASSOCIATES, INC (ZCA) LIABILITY SHALL BE LIMITED TO THE COMPANY'S DESIGN OF SPECIFIC IMPROVEMENTS AS DEPICTED ON THE SITE INFRASTRUCTURE CONSTRUCTION DOCUMENTS.

EROSION & SEDIMENT CONTROL NOTES

1. ALL DEMOLITION AND CONSTRUCTION ACTIVITIES SHALL INCORPORATE APPROPRIATE BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT EROSION, OFFSITE SEDIMENTATION, AND THE POTENTIAL FOR DOWNSTREAM WATER QUALITY IMPACTS.
2. THE SITE WORK/GRADING AND UTILITIES CONTRACTOR SHALL AT A MINIMUM, ENSURE IMPLEMENTATION OF AN APPROVED EROSION PREVENTION AND SEDIMENT CONTROL PLAN IN ACCORDANCE WITH FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) CONSTRUCTION ACTIVITY GUIDELINES.
3. STANDARD PLANS, SPECIFICATIONS AND UTILITY CONTRACTOR SHALL MINIMIZE DISTURBANCES OF EXISTING WETLANDS, VEGETATION AND DRAINAGE PATTERNS ON ADJACENT PROPERTIES TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES.
4. STORMWATER RETENTION, DETENTION, STORAGE AND CONVEYANCE SYSTEMS MUST BE EXCAVATED TO ROUGH GRADE PRIOR TO BUILDING CONSTRUCTION OR PLACEMENT OF IMPERVIOUS SURFACE WITHIN THE AREA SERVED BY THOSE SYSTEMS. ADEQUATE BMP'S MUST BE IMPLEMENTED TO PREVENT SILTATION OF THESE TREATMENT SYSTEMS AND CONTROL STRUCTURES DURING CONSTRUCTION. SILTATION MUST BE REMOVED FROM THE STORMWATER SYSTEM WHEN HALF FULL AND IMMEDIATELY PRIOR TO FINAL GRADING AND STABILIZATION OF THE PROJECT.
5. DURING CONSTRUCTION, THE SITE WORK/GRADING AND UTILITIES CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES REQUIRED TO PREVENT VIOLATIONS OF WATER QUALITY STANDARDS AND PROJECT SPECIFIC PERMIT REQUIREMENTS. BEST MANAGEMENT PRACTICES INSTALLED MUST NOT BE IN PLACE AT LEAST ONE SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT THAT IS 0.50 INCHES OR GREATER (EVEN IF IT RAINS ON THE WEEKEND OR HOLIDAY). THE SITE SHALL BE INSPECTED BY A QUALIFIED INSPECTOR AND CORRECTIVE ACTION TAKEN AS NECESSARY.
6. THE SITE WORK/GRADING AND UTILITIES CONTRACTOR SHALL INITIATE STABILIZATION MEASURES WITHIN SEVEN CALENDAR DAYS AFTER CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED FOR ANY PORTION OF THE PROJECT. FINAL STABILIZATION IS DEFINED AS A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF GROWTH OF AT LEAST 70% OR GREATER.
7. THE SITE WORK/GRADING AND UTILITIES CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE PROJECT LIMITS IN COMPLIANCE WITH ALL JURISDICTIONAL PERMITS AND THE TOWN OF INDIANTLANTIC LAND DEVELOPMENT CODE REQUIREMENTS.
10. FOR ANY LAND DISTURBANCES OF ONE ACRE OR MORE, THE CONTRACTOR SHALL SUBMIT A COMPLETED NPDES CONSTRUCTION GENERAL PERMIT (CGP) NOTICE OF INTENT (NOI) TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AT LEAST 2 CALENDAR DAYS PRIOR TO COMMENCEMENT OF CLEARING, GRADING, DEMOLITION, OR OTHER CONSTRUCTION RELATED LAND DISTURBANCE ACTIVITIES.

SITE CLEARING & GRADING NOTES

THE FOLLOWING REPRESENTS MINIMUM STANDARDS TO BE ADHERED TO BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION OF PROJECT. THE TOWN OF INDIANTLANTIC RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO BE EMPLOYED WHEN WARRANTED BY THE SEVERE CONDITIONS AND/OR THE FAILURE OF THE CONTRACTOR TO EMPLOY THE APPROPRIATE EROSION CONTROL BEST MANAGEMENT PRACTICES. FAILURE TO COMPLY WITH THESE PROVISIONS SHALL RESULT IN THE ISSUANCE OF A "STOP WORK ORDER".

1. NO DISTURBANCE OF EXISTING OR PROPOSED CONSERVATION EASEMENTS, NATURAL BUFFERS, OR WATER BODIES IS PERMITTED WITHOUT PRIOR APPROVAL FROM THE TOWN OF INDIANTLANTIC. THE CONTRACTOR SHALL LOCATE THESE AREAS ON SITE AND BARRICADE THEM TO AVOID ANY UNAUTHORIZED CLEARING, BARRICADES AND OTHER PROHIBITED ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING ALL ELEVATIONS OF EXISTING UTILITIES (PUBLIC AND PRIVATE) SHOWN OR NOT SHOWN PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE VARIOUS UTILITY COMPANIES TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION, DISRUPTION OF SERVICE OR CLARIFICATION OF ACTIVITY REGARDING SAID UTILITY. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING NEAR OR CROSSING A UTILITY, WHETHER SHOWN ON THESE PLANS OR FIELD LOCATED. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND OBTAIN THE UTILITY COMPANY'S PERMISSION TO RELOCATE, DISRUPT OR CROSS ANY UTILITY DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO PAY FOR ANY REPAIR, RELOCATION OR TEMPORARY MEASURES NEEDED FOR EXISTING OR PROPOSED UTILITIES.
2. WHERE A CHANGE OF GRADE OCCURS AT THE DRIP LINE OF A SPECIMEN TREE, SILT FENCE WILL BE REQUIRED. DURING CONSTRUCTION AND RETAINING WALLS MUST BE INSTALLED PRIOR TO FINAL ACCEPTANCE BY THE TOWN OF INDIANTLANTIC.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL PROTECTIVE VEGETATION BARRICADES AND EROSION CONTROL STRUCTURES INSTALLED PRIOR TO THE START OF ANY AREA EARTHWORK, INCLUDING PRELIMINARY GRUBBING. THESE MEASURES INCLUDE, BUT ARE NOT LIMITED TO, TEMPORARY CONSTRUCTION FENCES, SYNTHETIC JUTE BALES, SILT FENCES, AND FLOATING TURBIDITY BARRIERS. FURTHER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION CONTROL DEVICES THROUGHOUT THE DURATION OF THE ENTIRE PROJECT. MAINTENANCE SHALL INCLUDE PERIODIC INSPECTION AND REMOVAL OF DEBRIS ABUTTING EROSION CONTROL DEVICES IN ACCORDANCE WITH THE UTILITY DEPARTMENT STANDARDS.
5. PRIOR TO THE INSTALLATION OF ANY FILL MATERIAL ON SUBJECT SITE, SILT FENCE SHALL BE INSTALLED:
- a. ALONG SUBJECT SITE BOUNDARY AND PROPERTY LINES.
- b. AT THE EDGE OF CONSERVATION EASEMENTS AND WETLANDS.
- c. ADJACENT TO NATURAL LANDSCAPE BUFFERS.
- d. AROUND THE PERIMETER OF EXISTING STORM WATER TREATMENT FACILITIES.
- e. AT ANY ADDITIONAL AREAS THAT THE TOWN OF INDIANTLANTIC DEEMS NECESSARY TO BE PROTECTED FROM POTENTIAL EROSION IMPACTS DURING CONSTRUCTION. THESE CONDITIONS SHALL APPLY IN ALL INSTANCES WHERE FILL MATERIAL IS BEING INSTALLED WITHIN 25 FEET OF ANY OF THE AFOREMENTIONED LOCATIONS. WHILE THESE LINES REPRESENT THE MINIMUM REQUIREMENTS, THE TOWN OF INDIANTLANTIC RESERVES THE RIGHT TO IMPOSE ADDITIONAL PROTECTIVE MEASURES, AS DETERMINED DURING ACTUAL SITE VISITS CONDUCTED AS PART OF THE STANDARD REVIEW OF THE SITE-SPECIFIC CLEARING PERMIT AND THROUGHOUT PROJECT CONSTRUCTION.
6. WHERE FILL MATERIAL IS INTENDED TO BE INSTALLED ADJACENT TO EXISTING VEGETATION WHICH IS INTENDED TO REMAIN NATURAL, THE CONTRACTOR MAY INSTALL SILT FENCING AS A TREE PROTECTION MEASURE, IN LIEU OF INSTALLING EITHER WOOD BRACING OR ORANGE MESH FENCING. THIS PRACTICE IS ENCOURAGED. IF THE SILT FENCE FAILS TO PROVIDE ADEQUATE PROTECTION FROM EROSION, THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR OR REPLACE THE FENCING OR WOOD BRACING SHALL BE REQUIRED.
7. AT A MINIMUM, THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS. GRASS COVERAGE IS TO BE ESTABLISHED WITHIN THIRTY DAYS.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THROUGH SCHEDULING, TO MINIMIZE THE DISTURBANCE OF SITE AREAS THAT HAVE BEEN BROUGHT TO THEIR PROPOSED FINAL GRADE, WITHIN TWENTY DAYS OF BRINGING A SUBJECT AREA TO ITS FINAL GRADE. THE CONTRACTOR SHALL INSTALL SEED AND MULCH OR SOD AND WATERING, AS REQUIRED.
9. FOR INDIVIDUAL CONSTRUCTION PROJECTS INVOLVING MULTIPLE PHASES, UPON COMPLETION OF EACH PHASE OF THE PROJECT, SEEDING AND MULCHING AND OR/ SODDING IS TO BE PERFORMED PRIOR TO COMMENCING THE NEXT PHASE OF CONSTRUCTION.
10. ONCE AN AREA IS SEEDD OR SODDED, IT MUST BE MAINTAINED, INCLUDING WATERING AND TRIMMING BY THE CONTRACTOR TO ALLOW THE GRASS TO BECOME ESTABLISHED.
11. ALL BURNING OF CLEARED MATERIALS MUST BE APPROVED AND PERMITTED THROUGH THE FL FOREST SERVICE.
12. ABSOLUTELY NO BURNING OF CLEARED & CRUSHED MATERIALS IS PERMITTED.
13. THE REMOVAL OF ALL VEGETATION AND TOPSOIL ON THE FUTURE ROADWAY, PARKING AND BUILDING LOT AREAS IS REQUIRED TO BE COMPLETED PRIOR TO THE PLACEMENT OF FILL ON THOSE AREAS. THE TOPSOIL MAY BE TEMPORARILY STOCKPILED AND USED AS TOPSOIL OVER PROPOSED GREEN AREAS SUCH AS PLANT BEDS, SODDED AREAS, AND WHERE TREES ARE TO BE INSTALLED OR RELOCATED. TEMPORARY STOCKPILE SLOPES SHALL NOT EXCEED 4:1 (H:V).
14. FILL MATERIAL IS TO BE PLACED IN ONE FOOT LIFTS AND COMPACTED TO THE APPROPRIATE DENSITY (98% FOR PAVED AREAS AND 95% FOR BUILDING PADS AND ALL OTHER AREAS AS PER MODIFIED AASHTO T-180).
15. IF ANY MUD OR UNDESIRABLE MATERIAL IS DISCOVERED UNDER THE FILL, IT SHALL BE REMOVED AND REPLACED WITH A SUITABLE MATERIAL THAT IS PROPERLY BACKFILLED, COMPACTED AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.

SITE CLEARING & GRADING NOTES (CONT'D)

16. SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION AND THE IMPACT TO NEIGHBORING COMMUNITIES. ADEQUATE WATERING METHODS SHOULD BE EMPLOYED TO ALLOW DAILY COVERAGE OF ALL AREAS TO BE STABILIZED. IF A SLOW DRY OUT DOES NOT HAVE AN ESTABLISHED VEGETATIVE COVER, METHODS TO BE EMPLOYED INCLUDE, BUT ARE NOT LIMITED TO, WATER TRUCKS, PERMANENT IRRIGATION SYSTEMS, TEMPORARY SPRINKLER SYSTEMS OPERATED BY PUMPING UNITS CONNECTED TO WET RETENTION PONDS, WATERING SYSTEMS, TEMPORARY IRRIGATION SYSTEMS MOUNTED ATOP STOCKPILE AREAS, AND OTHER METHODS AS DEEMED NECESSARY.
17. ALL FILL MATERIALS LOCATED BENEATH STRUCTURES AND PAVEMENT SHALL CONSIST OF CLEAN GRANULAR SAND FREE FROM ORGANICS AND SIMILAR MATERIAL THAT COULD DECOMPOSE.
18. ALL FILL TO BE PLACED IN LANDSCAPED AREAS SHALL HAVE A RANGE BETWEEN 5.5 AND 7.5, BE ORGANIC IN NATURE, FREE OF ROCKS AND DEBRIS, OR MATCH NATIVE EXISTING SOILS.
19. STORM INLETS, MANHOLES, AND CATCH BASINS SHALL BE FIRST CONCRETE EITHER POURED IN PLACE OR PRECAST REINFORCED CONCRETE STRUCTURES ARE REQUIRED AT EACH CHANGE OF PIPE SIZE OR CHANGE IN PIPE DIRECTION. ALL STRUCTURES SHALL COMPLY WITH ASTM C-478 AND SHALL HAVE 6" THICK WALLS. THINNER WALLS MAY BE PERMITTED PROVIDING THE DESIGN IS IN ACCORDANCE WITH FDOT STANDARD PLANS. THE SITE WORK/GRADING AND UTILITIES CONTRACTOR SHALL MAINTAIN AND AS-BUILT PLANS. STRUCTURES PLACED IN HIGH TRAFFIC AREAS SHALL BE OF TRAFFIC BEARING CONSTRUCTION IN ACCORDANCE WITH FDOT STANDARDS.
14. STORM INLETS SHALL BE SPACED IN SUCH A MANNER AS TO ACCEPT ONE HUNDRED PERCENT OF THE DESIGN STORM RUNOFF WITHOUT IMPEDING THE FLOW OF TRAFFIC. FOR ROADWAY SECTIONS WITH DESIGN SPEEDS OF 45 MPH AND LESS AND WITHOUT FULL WIDTH SHOULDERS, SPREAD RESULTING FROM A RAINFALL INTENSITY OF FOUR INCHES PER HOUR SHALL NOT EXCEED ONE-HALF OF THE ROADWAY WIDTH. FOR OTHER ROADWAY SECTIONS, SPREAD SHALL NOT EXCEED ONE-HALF OF THE ROADWAY WIDTH. ACCEPT ONE HUNDRED PERCENT OF THE RUNOFF FROM A RAINFALL INTENSITY OF FOUR INCHES (4") PER HOUR WITHOUT RESULTING IN PONDING OF WATER BEHIND THE INLET.
15. FOR CONNECTIONS BETWEEN INLETS WITH DIFFERENT SIZES, THE MAXIMUM DISTANCES BETWEEN INLETS AND/OR CLEAN-OUT JUNCTION BOXES SHALL BE 300 FEET. CULVERTS SHALL BE SLOPED TO MAINTAIN A MINIMUM SELF-CLEANING VELOCITY OF 2.5 FEET PER SECOND USING A MANNING'S 'N' OF 0.012. SPACING FOR CLEAN-OUTS AND INLETS FOR SMALLER PIPING SHALL BE REDUCED AND EVALUATED ON A CASE BY CASE BASIS.
16. ALL STORMWATER INLETS SHALL MEET THE REQUIREMENTS OF THE FDOT DESIGN STANDARD LATEST EDITION.
17. ALL GASKETS SHALL BE LUBRICATED BEFORE BEING INSTALLED.
18. ALL FITTINGS SHALL MEET THE MINIMUM RESTRAINED REQUIREMENTS PER ANSI/AWWA/EBAA, AND ALL PRESSURE PIPES UNDER THE ROADWAY SHALL BE RESTRAINED.

SANITARY SEWER CONSTRUCTION & DESIGN NOTES

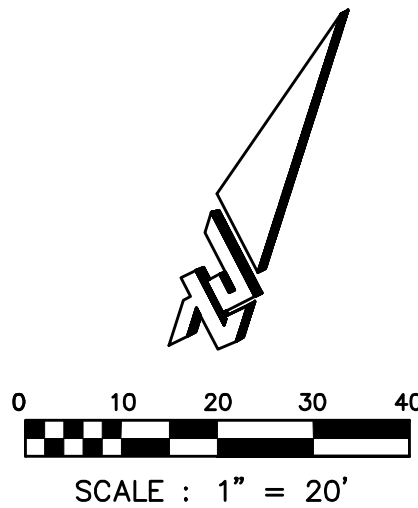
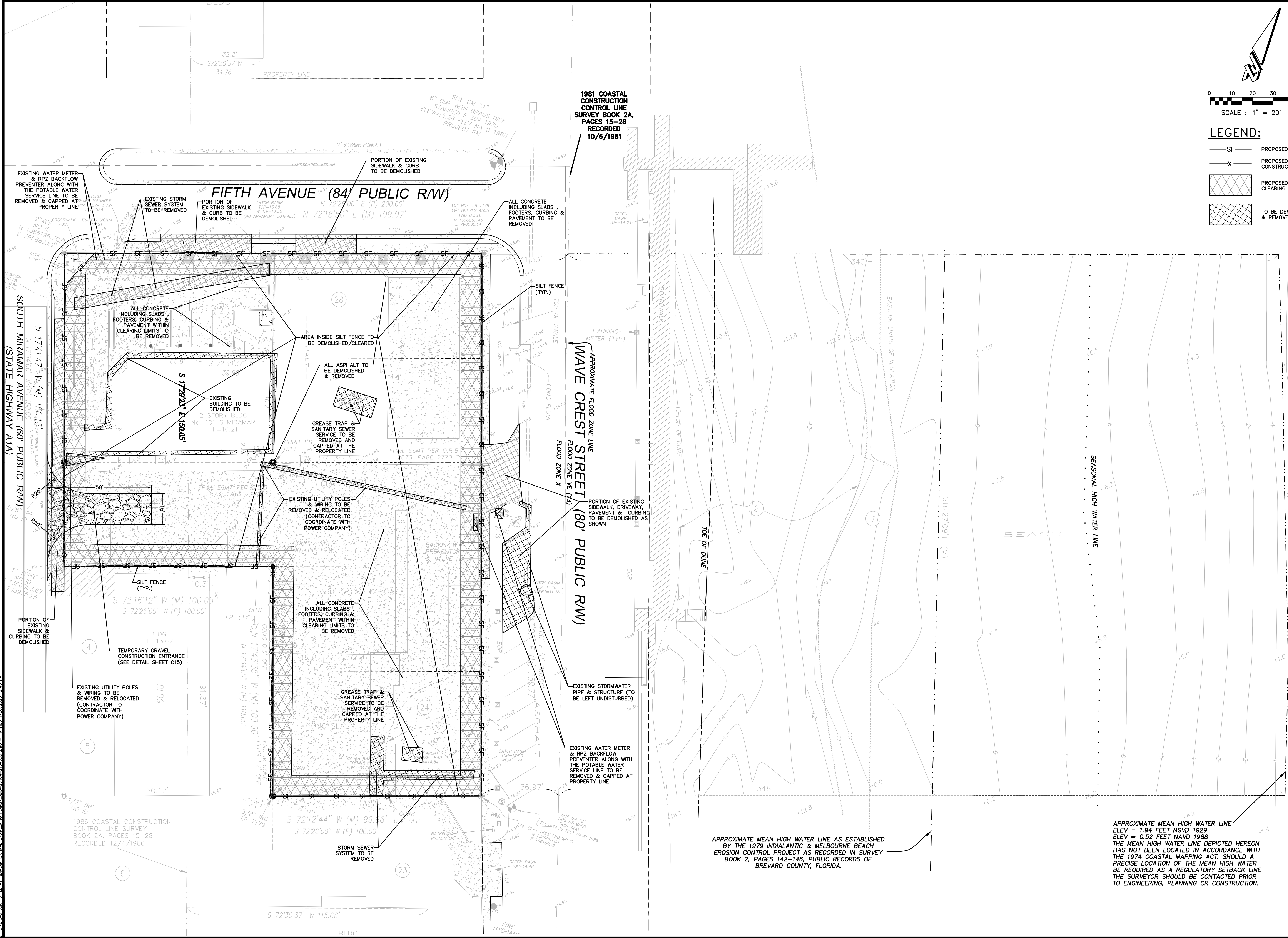
1. ALL WORK ON SANITARY SEWER FACILITIES OWNED OR PROPOSED TO BE OWNED BY THE CITY SHALL BE PERFORMED BY AN UNDERGROUND UTILITY CONTRACTOR OR GENERAL CONTRACTOR LICENSED IN THE STATE OF FLORIDA AND REGISTERED WITH THE CITY.
2. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THAT THE SYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AS-BUILTS ARE PROVIDED TO THE UTILITIES DEPARTMENT PRIOR TO ANY USE OF THE SYSTEM.
3. PLANS SHALL DIMENSION THE LOCATION OF ALL FORCE MAINS, VALVES, MANHOLES & LATERALS FROM THE BASELINE OF CONSTRUCTION AND FROM THE RIGHT-OF-WAY LINE.
4. LANDSCAPE PLANS SHALL CLEARLY DEPICT THE LOCATION OF PLANTINGS RELATIVE TO THE LOCATION OF PUBLIC UTILITIES AND STORM WATER INFRASTRUCTURE.
5. ALL GRAVITY SANITARY SEWER MAINS SHALL BE A MINIMUM OF 8" DIAMETER. COMMERCIAL SERVICE LATERALS SHALL BE GREEN AND A MINIMUM OF 6" IN DIAMETER, OR LARGER. ALL SINGLE FAMILY RESIDENTIAL SERVICE LATERALS SHALL BE 6" SINGLE SERVICE LATERALS. ALL LATERALS SHALL BE 6" SINGLE SERVICE LATERALS. ALL LATERALS SHALL BE 6" SINGLE SERVICE LATERALS.
6. ALL GRAVITY SANITARY SEWER MAINS SHALL BE GREEN PVC SDR-26, ASTM D-3034, OR C-900 DR-18 MINIMUM PRESSURE CLASS 150, IN PLACES WHERE A MINIMUM COVER OF 4 FEET CANNOT BE MAINTAINED OR IN DEPTHS OF 10 FEET OR GREATER (CUT TO INVERT) MAINS SHALL BE C-900 DR-18.
7. FORCE MAINS LESS THAN 18" MAY USE PVC C900 OR POLY-VINYL CHLORIDE (PVC) 9000, OR LARGER SHALL BE DUCTILE IRON PIPE (D.I.P.), CLASS 350, EPOXY LINED. ALL NON DUCTILE IRON PIPE HORIZONTAL DIRECTIONAL DRILL FORCE MAINS SHALL HAVE A MINIMUM WORKING PRESSURE OF 160 PSI. THE CITY MAY REQUIRE A HIGHER PRESSURE RATING DEPENDING ON SITE CONDITIONS. INSIDE DIAMETER OF NON D.I.P. HORIZONTAL DIRECTIONAL DRILL PIPE SHALL MATCH THE INSIDE DIAMETER OF CONNECTING PIPES. DIRECTIONAL DRILLS SHALL HAVE FUSED MJ ADAPTERS.
8. ALL FITTINGS, VALVES, ETC. SHALL BE DUCTILE IRON (MJ OR FLANGED) AND RESTRAINED. ALL FORCE MAINS SHALL USE THRUST RESTRAINT AS CALCULATED BY A PROGRAM AVAILABLE AT (EBAA.COM). THE RESTRAINED LARGER SIZES SHALL BE DUCTILE IRON (MJ OR FLANGED) AND RESTRAINED. ALL FORCE MAINS SHALL BE DUCTILE IRON PIPE (D.I.P.), CLASS 350, EPOXY LINED. ALL NON DUCTILE IRON PIPE HORIZONTAL DIRECTIONAL DRILL FORCE MAINS SHALL HAVE A MINIMUM WORKING PRESSURE OF 160 PSI. THE CITY MAY REQUIRE A HIGHER PRESSURE RATING DEPENDING ON SITE CONDITIONS. INSIDE DIAMETER OF NON D.I.P. HORIZONTAL DIRECTIONAL DRILL PIPE SHALL MATCH THE INSIDE DIAMETER OF CONNECTING PIPES. DIRECTIONAL DRILLS SHALL HAVE FUSED MJ ADAPTERS.
9. ALL RESTRAINED PIPE BELL JOINTS SHALL USE BELL RESTRAINTS OR GRIPPER TYPE GASKETS CAN BE USED FOR DUCTILE IRON PIPE JOINTS. CONCRETE THRUST BLOCKS ARE NOT PERMITTED.
10. ALL IN-LINE SANITARY SEWER SERVICE LATERALS SHALL BE 6" IN DIAMETER UNLESS OTHERWISE NOTED. VALVES SHALL BE INSTALLED AT EACH END OF THE FORCE MAIN AND ON STUB OUTS.
11. ALL C-900 PVC DR-18 PIPE REQUIREMENTS REFERENCE THE C-900 STANDARDS. DR UPGRADES FOR BURST PROTECTION MAY BE REQUIRED WHEN USING THE C-900 STANDARDS.
12. MINIMUM GRAVITY SANITARY SEWER SLOPES ARE AS FOLLOWS: 8" PIPE 0.40%, 10" PIPE 0.28%, 12" PIPE 0.22%, 15" PIPE 0.15%, OR OTHERWISE NOTED BY UTILITIES DEPT.
13. GRAVITY SANITARY SEWER LINES SHALL BE INSTALLED WHENEVER POSSIBLE UNDER PAVED AREAS WITHIN PUBLIC RIGHT-OF-WAYS. UTILITY EASEMENTS SHALL BE PROVIDED WHENEVER PUBLICLY-OWNED SEWER LINES ARE CONSTRUCTED OUTSIDE OF A PUBLIC RIGHT-OF-WAY.
14. DURING PIPE INSTALLATION DEWATER THE GROUND SUFFICIENTLY TO KEEP THE GROUNDWATER ELEVATION A MINIMUM OF 6" BELOW THE PIPE BEING INSTALLED WITHIN THE AREA OF THE TRENCH.
15. ALL PIPES SHALL BE INSTALLED ON A FIRM FOUNDATION. SOFT OR SPONGY BEDDING FOR PIPES IS NOT ACCEPTABLE. ANY UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH A DRY, COMPACTED, GRANULAR MATERIAL SATISFACTORY TO THE CITY.
16. ON ALL EXCAVATION AND BACKFILLING THE CONTRACTOR SHALL PROVIDE ADEQUATE SHEETING AND BRACING IN ORDER TO PROVIDE A SAFE WORKING ENVIRONMENT.
17. ALL TRENCHES SHALL BE BACKFILLED WITH ACCEPTABLE MATERIAL AND COMPACTED TO THE SPECIFIED MINIMUM COMPACTION (95% IN UNPAVED AREAS AND 98% IN PAVED AREAS) AND THE OPTIMUM DENSITY BASED ON THE AASHTO T-180 MODIFIED PROCTOR TEST.
18. ALL GASKETS SHALL BE LUBRICATED BEFORE INSTALLATION.
19. THE CONTRACTOR SHALL INSTALL A #12-GAUGE MINIMUM COPPER TRACER WIRE TAPED TO THE TOP OF THE PIPE AT INTERVALS NO GREATER THAN 4-FEET. COPPER WIRE SHALL HAVE A MIN. TENSILE STRENGTH/BREAK LOAD OF 452 LBS. ANNUAL VIBRATION REQUIREMENTS APPROVED BY THE CITY FOR THE FULL LENGTH OF ALL SEWER MAINS. THE PIPE LOCATOR TAPE SHALL BE INSTALLED BETWEEN 15" AND 24" BELOW FINISHED GRADE OR AS DIRECTED BY THE MANUFACTURER. TAPE SHALL BE COLOR CODED GREEN FOR FORCE MAINS. LOCATOR WIRE SHALL TERMINATE AT A LOCATION AND IN A MANNER CONVENIENT FOR CITY LOCATOR STAFF.
20. ALL SEWER LINES CONSTRUCTED OUTSIDE OF PUBLIC RIGHT-OF-WAYS WITHIN SIDE YARDS, BACKYARDS, AND OTHER POORLY ACCESSIBLE AREAS SHALL BE CONSTRUCTED OF GREEN C-900 PVC.
21. ALL LOCAL COLLECTION SANITARY SEWER MANHOLES SHALL BE PRECAST WITH A MINIMUM INSIDE DIAMETER OF 4 FEET. MANHOLES OVER 6 FEET DEEP SHALL HAVE A MINIMUM 4 FT TALL PRE-CAST BOTTOM SECTION.
22. STANDARD MANHOLES SHALL BE 4 FEET IN DIAMETER AND 4 FEET DEEP.
23. MANHOLE RIMS SHALL BE FLUSH WITH THE FINISH GRADE ELEVATION IN PAVED AREAS AND A MINIMUM OF 0.5 FEET AND MAXIMUM OF 1.0 FOOT ABOVE GRADE IN UNPAVED AREAS.
24. THE CONTRACTOR SHALL CONSTRUCT SANITARY SEWER MANHOLES IN SUCH A WAY THAT SEWER LINES DO NOT INTERSECT SEALED JOINTS BETWEEN SECTIONS OF THE MANHOLE.
25. INDIVIDUAL SANITARY SERVICES SHALL NOT BE CONNECTED DIRECTLY INTO MANHOLES AND MUST BE CONNECTED TO SEWER MAINS BY USE OF WYE CONNECTIONS UNLESS OTHERWISE APPROVED.
26. SANITARY SEWER DROP MANHOLES SHALL ONLY BE USED UNDER SPECIAL CONDITIONS. DROPS LESS THAN 3.0' ARE NOT ALLOWED. INSIDE DROPS ARE NOT ALLOWED.
27. SANITARY SEWER MANHOLES WITH SEWER FORCE MAINS DISCHARGING DIRECTLY INTO THEM SHALL BE FIBERGLASS OR POLY-ETHYLENE LINED. RETRO-FITTING OF EXISTING MANHOLES WITH LINERS IS REQUIRED. WHEN FIBERGLASS ARE MADE, FIBERGLASS SHALL BE A MINIMUM 1/2" THICK UNLESS APPROVED OTHERWISE BY THE CITY. OTHER LINING METHODS AND MATERIALS MAY BE CONSIDERED ON A CASE BY CASE BASIS. UNDER CIRCUMSTANCES WHERE HYDROGEN SULFIDE IS A SIGNIFICANT CONCERN, MANHOLES UPSTREAM AND/OR DOWNSTREAM OF THE FORCE MAIN TE-IN MAY BE REQUIRED TO HAVE LINERS. LINERS SHALL BE INSTALLED TO THE TOP OF THE FORCE MAIN.
28. EZ-WRAP PLASTIC, AS MANUFACTURED BY PRESS SEAL GASKET CORPORATION, SHALL BE USED ON THE OUTSIDE OF ALL MANHOLE AND WETWELL JOINTS. APPLY ONE LAYER OF 9" WRAP CENTERED ON EACH JOINT.

POTABLE WATER CONSTRUCTION & DESIGN NOTES

1. A PERMIT SHALL BE REQUIRED PRIOR TO ENGAGING IN ANY DEWATERING OR CONSTRUCTION ACTIVITY THAT INVOLVES THE REMOVAL OF GROUNDWATER. THE MAJOR ACTIVITIES INCLUDE THE REMOVAL OF GROUNDWATER FROM A CONSTRUCTION SITE, ENCLOSED VAULT, COFFERDAM, OR TRENCHES, ALLOWING CONSTRUCTION OR MAINTENANCE IN A DRY ENVIRONMENT.
3. ALL WORK PERFORMED ON POTABLE WATER FACILITIES OWNED OR PROPOSED TO BE OWNED BY THE TOWN OF INDIANTLANTIC SHALL BE CONSTRUCTED BY AN UNDERGROUND UTILITY CONTRACTOR OR GENERAL CONTRACTOR LICENSED IN THE STATE OF FLORIDA.
4. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THAT THE SYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE DEPARTMENT OF HEALTH, AND THAT TOWN OF INDIANTLANTIC REQUIREMENTS ARE PROVIDED TO THE TOWN OF INDIANTLANTIC AND ACCEPTED PRIOR TO ANY USE OF THE SYSTEM.
5. THE WATER DISTRIBUTION SYSTEM SHALL BE DESIGNED TO COMPLY WITH THE TOWN OF INDIANTLANTIC'S FIRE (FIRE) FLOW CODE.
6. EACH WATER SERVICE TERMINATION SHALL BE MARKED WITH 2" X 4" PRESSURE TREATED LUMBER EXTENDING 4' ABOVE GRADE DIRECTLY IN FRONT OF THE METER BOX WITH 2' OF ENDOTRACHE POLY-TUBE OR APPROVED EQUIV COILED AND CAPPED WITH AN ELSTER HYDROSET CAP INSIDE EACH METER BOX.
7. ALL WATER SERVICES SHALL BE MARKED WITH A "X" SAW CUT INTO THE CURB.
8. ALL INSURE VALVES SHALL BE MARKED WITH AN "X" SAW CUT INTO THE CURB.
9. THE PLANS SHALL INCLUDE RIGHT OF WAY LINES AND STATIONING AND OFFSETS FROM THE CENTER LINE OF CONSTRUCTION.
10. DEWATERING ACTIVITIES SHALL KEEP THE GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW THE WATER MAIN BEING INSTALLED.
11. ALL WATER MAINS SHALL BE INSTALLED ON A FIRM UNYIELDING FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.
12. TRENCHES SHALL BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE CITY WITH A MINIMUM COMPACTION OF 98% IN PAVED AREAS AND 95% IN UNPAVED AREAS IN ACCORDANCE WITH AASHTO-180 MODIFIED PROCTOR TEST.
13. WHERE POTABLE WATER AND SANITARY SEWER MAINS CROSS WITH LESS THAN SIX (6) INCHES OF VERTICAL CLEARANCE OR WHERE THE SEWER MAIN IS ABOVE THE WATER MAIN, MEDIATION MUST BE REVIEWED AND APPROVED BY FDOT AND THE CITY.
14. WATER MAINS SHALL BE CONSTRUCTED A MINIMUM OF 4 FEET BEHIND THE BACK OF CURB OR THE EDGE OF ROADWAY PAVEMENT, WHICHEVER IS GREATER, AS MEASURED FROM OUTSIDE WALL OF THE WATER MAIN.
15. 3 INCH METALLIZED PIPE LOCATION TAPE SHALL BE LOCATED 15 INCHES TO 24 INCHES BELOW FINISHED GRADE OR AS SPECIFIED BY THE MANUFACTURER FOR ALL WATER LINES. BLUE TRACER WIRE SHALL BE ATTACHED TO ALL PIPES. WIRE RUNS SHALL BE CONNECTED WITH SILICONE FILLED WIRE CONNECTORS. SERVICES SHALL BE CONNECTED TO THE MAIN WIRE WITH SILICONE FILLED WIRE CONNECTORS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE WIRE RUNS AT ALL TIMES. THE WIRE RUNS SHALL NOT BE WITHIN 200 FEET OF A VALVE AND VALVE BOX. AN ADDITIONAL VALVE BOX FOR TRACER WIRE IS REQUIRED.
16. SINGLE RESIDENTIAL WATER SERVICES SHALL BE A MINIMUM 1-INCH ENDOT, ENDOTRACHE OR APPROVED EQUAL POLY-TUBE (MEETING THE SPECIFICATIONS OF NSF-14, AND AWWA C901).
17. ALL WATER MAINS SHALL BE NSF-APPROVED FOR POTABLE WATER USE AND HAVE A MINIMUM COVER OF 36-INCHES.
18. WATER MAINS LESS THAN 18" MAY USE POLY-VINYL CHLORIDE (PVC) C900, OR C905, SHALL MEET AWWA REQUIREMENTS AND HAVE A MINIMUM DIMENSION RATIO (DR-18) PRESSURE CLASS 150. WATER MAINS 18" AND LARGER SHALL BE DUCTILE IRON PIPE (D.I.P.), CLASS 350, EPOXY LINED. ALL NON-DUCTILE IRON PIPE HORIZONTAL DIRECTIONAL DRILL WATER MAINS SHALL HAVE A MINIMUM WORKING PRESSURE OF 160 PSI.
19. DIRECTIONAL DRILLS SHALL HAVE FUSED MJ ADAPTERS.
20. ALL POTABLE WATER MAINS SHALL USE THRUST RESTRAINT AS CALCULATED BY A PROGRAM AVAILABLE AT EBAA.COM. THE RESTRAINED JOINT LENGTHS SHALL BE SHOWN ON PLANS PROVIDED BY THE CONTRACTOR.
21. ALL FITTINGS, VALVES, ETC. SHALL BE DUCTILE IRON CEMENT LINED (MJ OR FLANGED) AND SHALL BE RESTRAINED.
22. ALL RESTRAINED PIPE BELL JOINTS SHALL USE BELL RESTRAINTS OR GRIPPER TYPE GASKETS CAN BE USED FOR DUCTILE IRON PIPE JOINTS. CONCRETE THRUST BLOCKS ARE NOT PERMITTED.
23. WATER VALVES SHALL BE INSTALLED AT ALL STREET INTERSECTIONS AND AT A MAXIMUM SPACING OF 750 FEET.
24. VALVES SHALL BE INSTALLED ON ALL LEGS OF WATER MAIN TEES EXCEPT ONE.
25. STORM INLETS, MANHOLES, AND CATCH BASINS SHALL BE FIRST CONCRETE EITHER POURED IN PLACE OR PRECAST REINFORCED CONCRETE STRUCTURES ARE REQUIRED AT EACH CHANGE OF PIPE SIZE OR CHANGE IN PIPE DIRECTION. ALL STRUCTURES SHALL COMPLY WITH ASTM C-478 AND SHALL HAVE 6" THICK WALLS. THINNER WALLS MAY BE PERMITTED PROVIDING THE DESIGN IS IN ACCORDANCE WITH FDOT STANDARD PLANS. THE SITE WORK/GRADING AND UTILITIES CONTRACTOR SHALL MAINTAIN AND AS-BUILT PLANS. STRUCTURES PLACED IN HIGH TRAFFIC AREAS SHALL BE OF TRAFFIC BEARING CONSTRUCTION IN ACCORDANCE WITH FDOT STANDARDS.
26. METER LENGTHS REQUIRED FOR WATER METERS INSTALLATION ARE AS FOLLOWS: 3/4" TO 2" METER REQUIRES 6", 4" METER REQUIRES 12", 6" AND 8" METER REQUIRES 14", AND A 10" METER REQUIRES 20".
27. ALL WATER METER VALVES SHALL BE ADJUSTABLE. INDIANTLANTIC SHALL PROVIDE A CONCRETE COLLAR TO FINISHED GRADE. VALVE BOX LIDS SHALL BE PAINTED BLUE TO MAKE THEM CLEARLY VISIBLE.
28. UPON FINAL ACCEPTANCE OF NEW WATER SYSTEMS, WATER VALVES SHALL BE COMPLETELY OPENED BY UTILITIES PERSONNEL. THE CONTRACTOR SHALL NOT OPERATE ANY EXISTING VALVES WITHOUT A UTILITIES REPRESENTATIVE PRESENT.
29. ALL VALVES 2 INCHES AND SMALLER SHALL BE CURB STOPS. VALVES LARGER THAN 2 INCHES SHALL BE GATE VALVES.
30. A MINIMUM OF ONE FIRE HYDRANT SHALL BE LOCATED AT EVERY INTERSECTION. OTHER FIRE HYDRANTS SHALL BE LOCATED TO PRODUCE A MAXIMUM 500 FOOT RADIUS OF COVERAGE. ALL FIRE HYDRANTS SHALL BE INSTALLED IN EASILY ACCESSIBLE LOCATIONS FOR FIRE PERSONNEL. THE PRIMARY HYDRANT PORT SHALL FACE THE STREET.
31. THE CONTRACTOR SHALL FIG ALL PIPES 6 INCHES OR LARGER IN DIAMETER. LAUNCHING AND EXTRACTION POINTS SHALL BE DETERMINED BY THE CITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF PIGGING OF LINES 14" OR LARGER AT THE UTILITY'S DIRECTION AND BE DIRECTLY DISCHARGED TO A SANITARY CONNECTION, APPROVED BY THE TOWN OF INDIANTLANTIC.
32. FOR PIPE FLUSHING, PIGGING, TESTING, AND TIE-IN CONNECTIONS, THE TOWN OF INDIANTLANTIC RESERVES THE RIGHT TO REQUIRE THE CONTRACTOR TO PROVIDE A DRAINAGE PLAN (MIDNIGHT TO 5 A.M.) TO THE CITY. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY'S REPRESENTATIVE AND WATER PLANT OPERATIONS TO SCHEDULE THE DATE AND TIME FOR THESE ACTIVITIES.
33. THE TOWN OF INDIANTLANTIC RESERVES THE RIGHT TO PERFORM THE SAMPLING AND ANALYSIS FOR BACTERIOLOGICAL CLEARANCE OF THE WATER MAIN. ANY RETESTING WILL BE AT THE CONTRACTOR'S EXPENSE.
34. POTABLE WATER LINES SHALL NOT BE USED OR PLACED INTO SERVICE UNTIL CLEARANCE IS ACCEPTED BY BREVARD COUNTY HEALTH DEPARTMENT AND THE TOWN OF INDIANTLANTIC.
35. BACKFLOW PREVENTERS (BFP) SHALL BE PLACED ON ALL POTABLE AND FIRE LINES SERVING COMMERCIAL AND RESIDENTIAL PROPERTIES. THE TYPE OF BACKFLOW PREVENTERS REQUIRED ARE AS FOLLOWS:
- POTABLE WATER SERVICE: REDUCED PRESSURE ZONE (RPZ)(BFP)
- FIRE LINE SERVING A FIRE SPRINKLER SYSTEM AND/OR PRIVATE FIRE HYDRANT: DOUBLE CHECK VALVE ASSEMBLY
- FIRE LINE SERVING A DOUBLE CHECK VALVE ASSEMBLY
- IN CASES WHERE A WATER LINE SERVES BOTH DOMESTIC AND FIRE SERVICES, A REDUCED PRESSURE ZONE BFP IS REQUIRED.

TRAFFIC CONTROL NOTES

1. CONTRACTOR SHALL PROVIDE FDOT W/ DETAILED MOT PLAN FOR REVIEW & APPROVAL PRIOR TO CONSTRUCTION OF OFFSITE IMPROVEMENTS.
2. CONTRACTOR SHALL PERFORM ALL PROJECT WORK IN ACCORDANCE WITH FDOT DESIGN STANDARDS, LATEST EDITION. NO LANE CLOSURES ARE PERMITTED BETWEEN THE HOURS OF 7 A.M. AND 7 P.M. NIGHT WORK MAY BE SCHEDULED TO LESSEN TRAFFIC IMPACT & CONVENIENCE TO GENERAL PUBLIC AND MUST BE APPROVED BY CITY ENGINEER PRIOR TO COMMENCEMENT OF WORK.
3. CONTRACTOR SHALL OBTAIN PRIOR APPROVAL OF THEIR MAINTENANCE OF TRAFFIC (MOT) PLANS FOR ANY LANE CLOSURES FROM THE TOWN OF INDIANTLANTIC TRAFFIC ENGINEERING DIVISION AT LEAST TWO (2) WEEKS IN ADVANCE OF ANY LANE CLOSURES.
4. EXISTING SIGNING AND PAVEMENT MARKINGS TO BE MAINTAINED UNLESS SHOWN OTHERWISE IN THESE PLANS.
5. TWO (2) WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES THROUGHOUT ENTIRE LENGTH OF PROJECT.
6. TWO (2) WAY ACCESS TO BUSINESSES AND PRIVATE DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES. TEMPORARY DRIVEWAY CLOSURES MAY BE AUTHORIZED BY THE CITY ENGINEER IF WRITTEN AUTHORIZATION IS OBTAINED FROM THE PROPERTY OWNER IS PROVIDED TO THE TOWN OF INDIANTLANTIC PRIOR TO COMMENCEMENT OF WORK ACTIVITIES.
7. VARIABLE MESSAGE BOARDS SHALL BE INSTALLED 48 HOURS PRIOR TO LANE CLOSURES. CONTRACTOR IS RESPONSIBLE FOR ADEQUATE NUMBER OF BOARDS AND LOCATIONS, TO BE VERIFIED PRIOR TO COMMENCEMENT OF WORK.
8. ALL TRAFFIC CONTROL SIGN AND PAVEMENT MARKINGS SHALL COMPLY WITH THE F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
9. CONTRACTOR TO MAINTAIN TRAFFIC AND PROPER DROP



- LEGEND:**
- SF — PROPOSED SILT FENCE
 - X — PROPOSED TEMPORARY CONSTRUCTION FENCE
 - [Hatched Box] PROPOSED DEMOLITION / CLEARING AREA
 - [Cross-hatched Box] TO BE DEMOLISHED & REMOVED



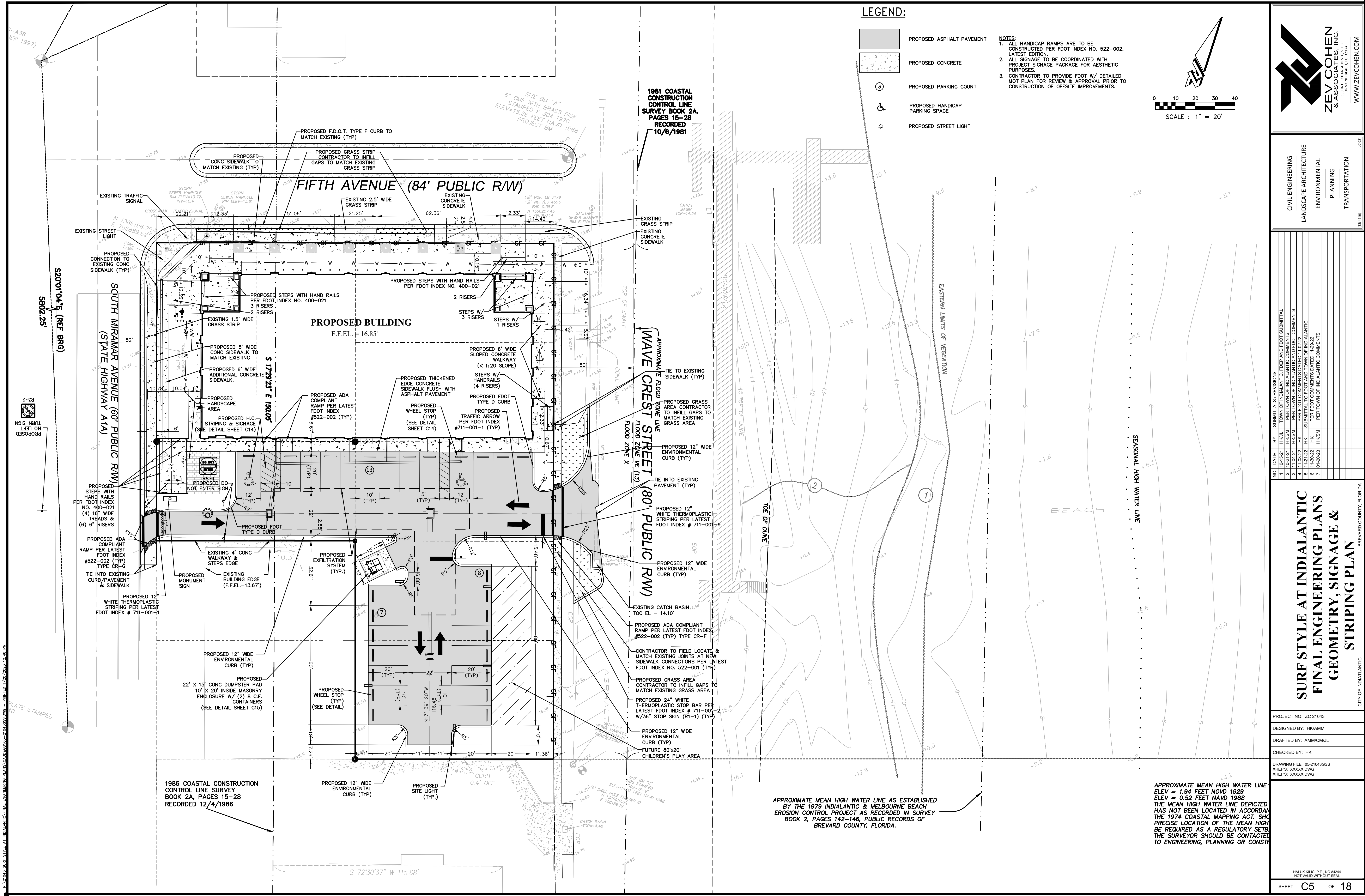
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	11-04-21	HK/AMM	PER TOWN OF INDIANLANTIC COMMENTS
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6	11-04-21	HK/AMM	PER TOWN OF INDIANLANTIC COMMENTS
7	11-04-21	HK/AMM	PER TOWN OF INDIANLANTIC COMMENTS

**SURF STYLE AT INDIANLANTIC
FINAL ENGINEERING PLANS
DEMOLITION & EROSION
CONTROL PLAN**

PROJECT NO.: ZC 21043
DESIGNED BY: HK/AMM
DRAFTED BY: AMM/CMJL
CHECKED BY: HK
DRAWING FILE: 04-21043CEP
XREFS: 21043-BAS.DWG
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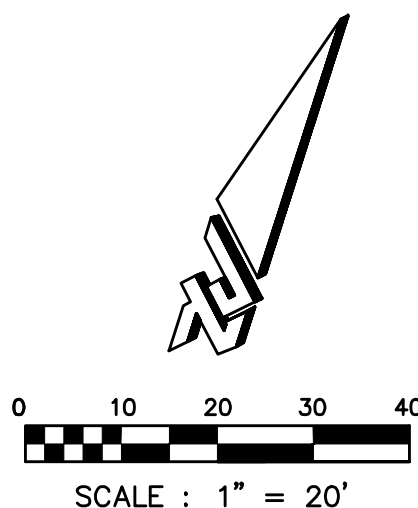
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LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE
- PROPOSED PARKING COUNT
- PROPOSED HANDICAP PARKING SPACE
- PROPOSED STREET LIGHT

NOTES:
1. ALL HANDICAP RAMPS ARE TO BE CONSTRUCTED PER FDOT INDEX NO. 522-002, LATEST EDITION.
2. ALL SIGNAGE TO BE COORDINATED WITH PROJECT SIGNAGE PACKAGE FOR AESTHETIC PURPOSES.
3. CONTRACTOR TO PROVIDE FDOT W/ DETAILED NOT PLAN FOR REVIEW & APPROVAL PRIOR TO CONSTRUCTION OF OFFSITE IMPROVEMENTS.



ZEV COHEN & ASSOCIATES, INC.
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL PLANNING
TRANSPORTATION

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7	10/20/23	HK/AMM	PER TOWN OF INDIAN LANTIC COMMENTS

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SURF STYLE AT INDIAN LANTIC
FINAL ENGINEERING PLANS
GEOMETRY, SIGNAGE & STRIPING PLAN

PROJECT NO: ZC 21043
DESIGNED BY: HK/AMM
DRAFTED BY: AMM/CML
CHECKED BY: HK

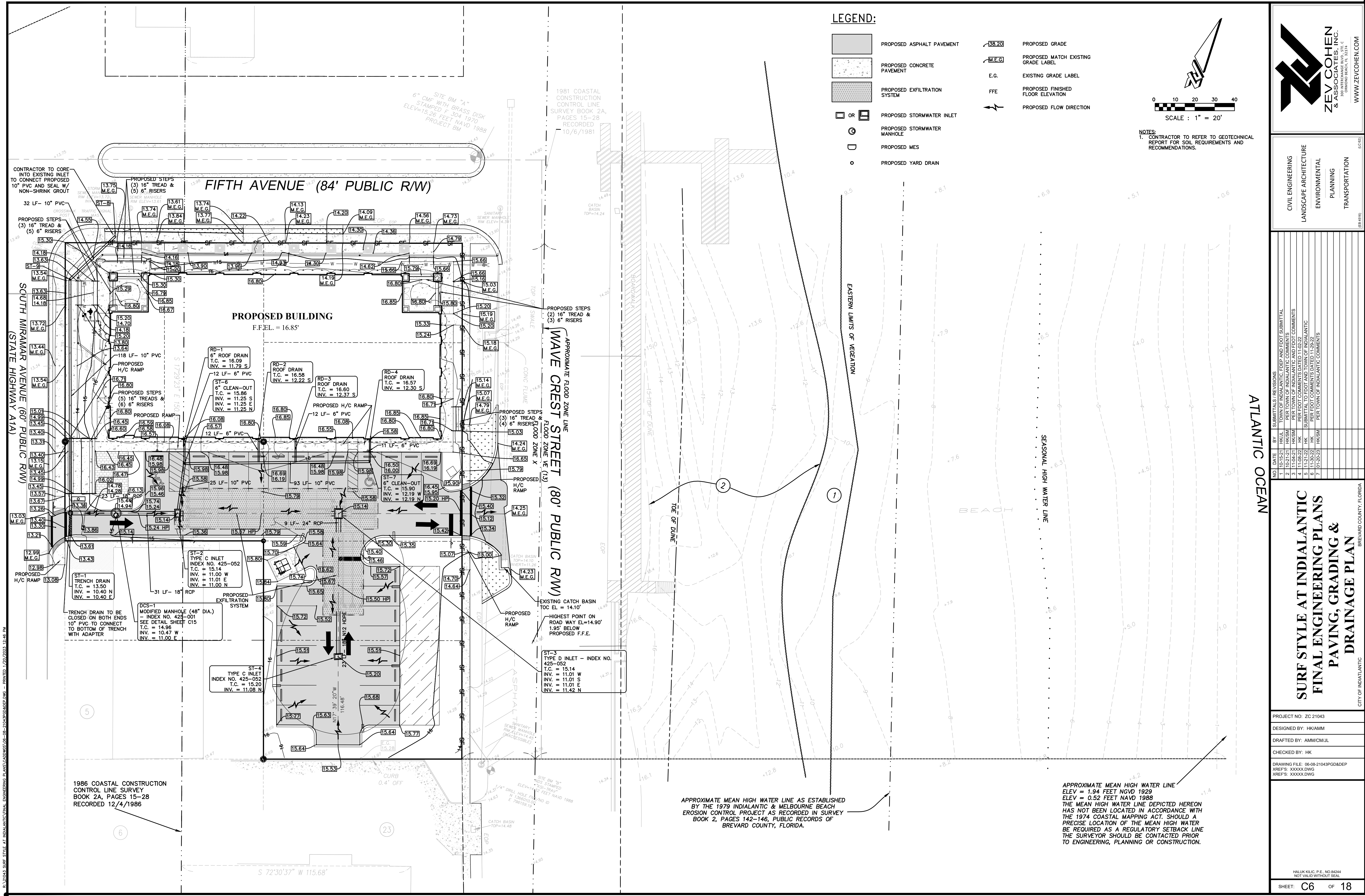
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SHEET: C5 OF 18

APPROXIMATE MEAN HIGH WATER LINE
ELEV = 1.94 FEET NGVD 1929
ELEV = 0.52 FEET NAVD 1988
THE MEAN HIGH WATER LINE DEPICTED
HAS NOT BEEN LOCATED IN ACCORDANCE
WITH THE 1974 COASTAL MAPPING ACT. SHO
PRECISE LOCATION OF THE MEAN HIGH
BE REQUIRED AS A REGULATORY SETB
THE SURVEYOR SHOULD BE CONTACTED
TO ENGINEERING, PLANNING OR CONSTR

APPROXIMATE MEAN HIGH WATER LINE AS ESTABLISHED
BY THE 1979 INDIAN LANTIC & MELBOURNE BEACH
EROSION CONTROL PROJECT AS RECORDED IN SURVEY
BOOK 2, PAGES 142-146, PUBLIC RECORDS OF
BREVARD COUNTY, FLORIDA.

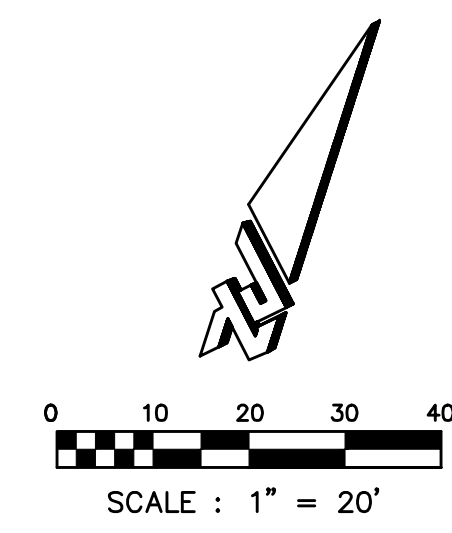
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LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED EXFILTRATION SYSTEM
- PROPOSED STORMWATER INLET
- PROPOSED STORMWATER MANHOLE
- PROPOSED MES
- PROPOSED YARD DRAIN
- PROPOSED GRADE
- PROPOSED MATCH EXISTING GRADE LABEL
- E.G. EXISTING GRADE LABEL
- PROPOSED FINISHED FLOOR ELEVATION
- PROPOSED FLOW DIRECTION



NOTES:
1. CONTRACTOR TO REFER TO GEOTECHNICAL REPORT FOR SOIL REQUIREMENTS AND RECOMMENDATIONS.

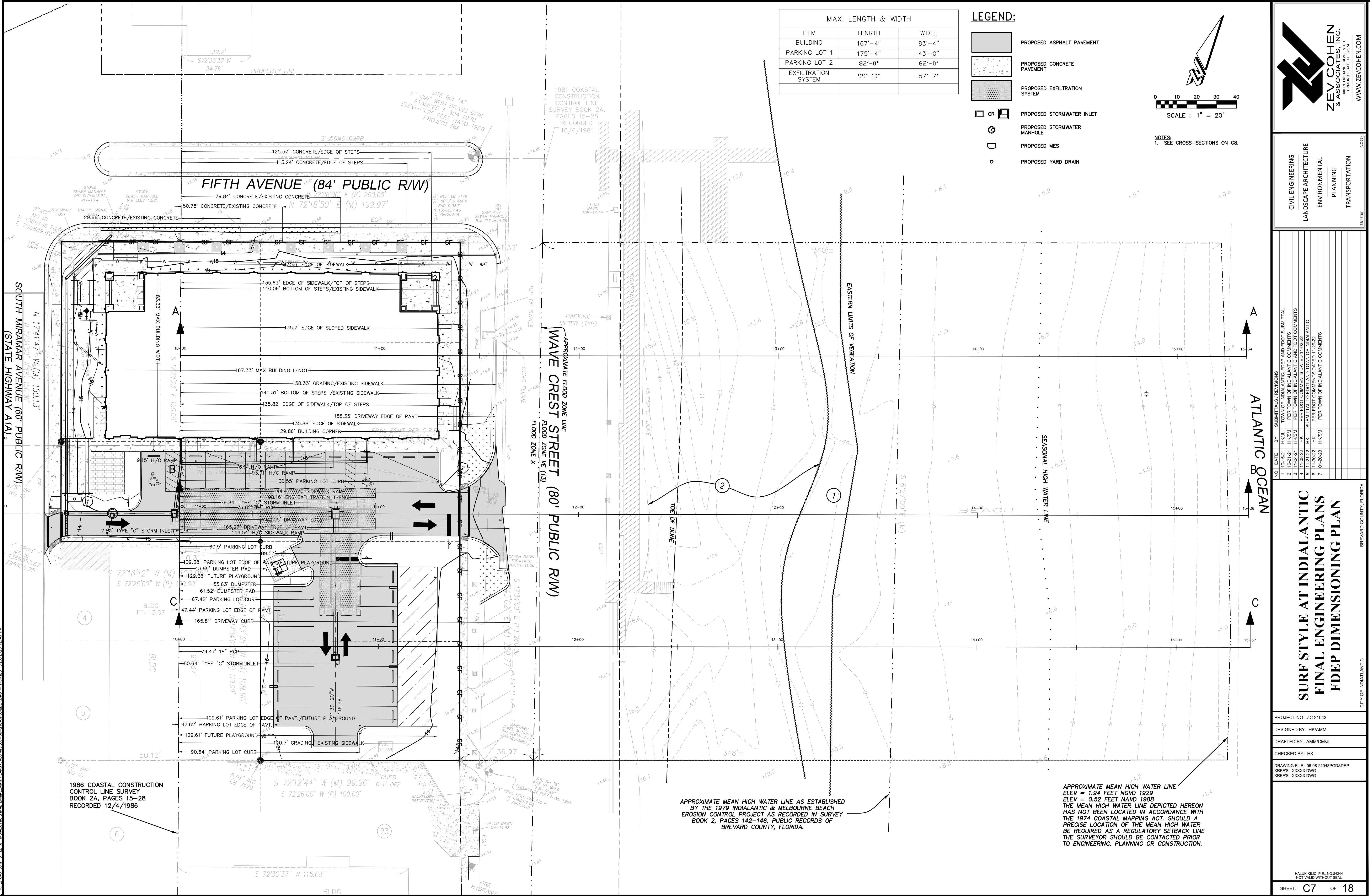


CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION

NO.	DATE	BY	REVISIONS
1	10-21-21	HK/SM	PER TOWN OF INDIANTLANTIC COMMENTS
2	10-21-21	HK/SM	PER TOWN OF INDIANTLANTIC COMMENTS
3	11-04-21	HK/SM	PER TOWN OF INDIANTLANTIC COMMENTS
4	11-09-22	HK	PER FOOT COMMENTS DATED 11-02-22
5	11-21-22	HK	SUBMITTAL TO FOOT AND TOWN OF INDIANTLANTIC
6	11-30-22	HK	PER FOOT COMMENTS DATED 11-28-22
7	01-20-23	TR/SM	PER TOWN OF INDIANTLANTIC COMMENTS

SURF STYLE AT INDIANTLANTIC
FINAL ENGINEERING PLANS
PAVING, GRADING &
DRAINAGE PLAN

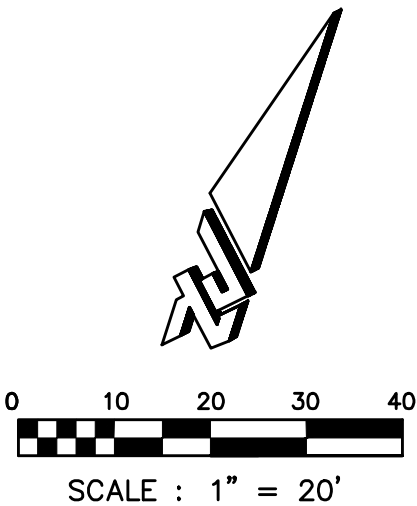
PROJECT NO.: ZC 21043
DESIGNED BY: HK/AMM
DRAFTED BY: AMM/CMJL
CHECKED BY: HK
DRAWING FILE: 06-08-21043PGD&DEP
XREFS: XXXXX.DWG
XREFS: XXXXX.DWG



MAX. LENGTH & WIDTH		
ITEM	LENGTH	WIDTH
BUILDING	167'-4"	83'-4"
PARKING LOT 1	175'-4"	43'-0"
PARKING LOT 2	82'-0"	62'-0"
EXFILTRATION SYSTEM	99'-10"	57'-7"

LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED EXFILTRATION SYSTEM
- PROPOSED STORMWATER INLET
- PROPOSED STORMWATER MANHOLE
- PROPOSED MES
- PROPOSED YARD DRAIN



NOTES:
1. SEE CROSS-SECTIONS ON C8.

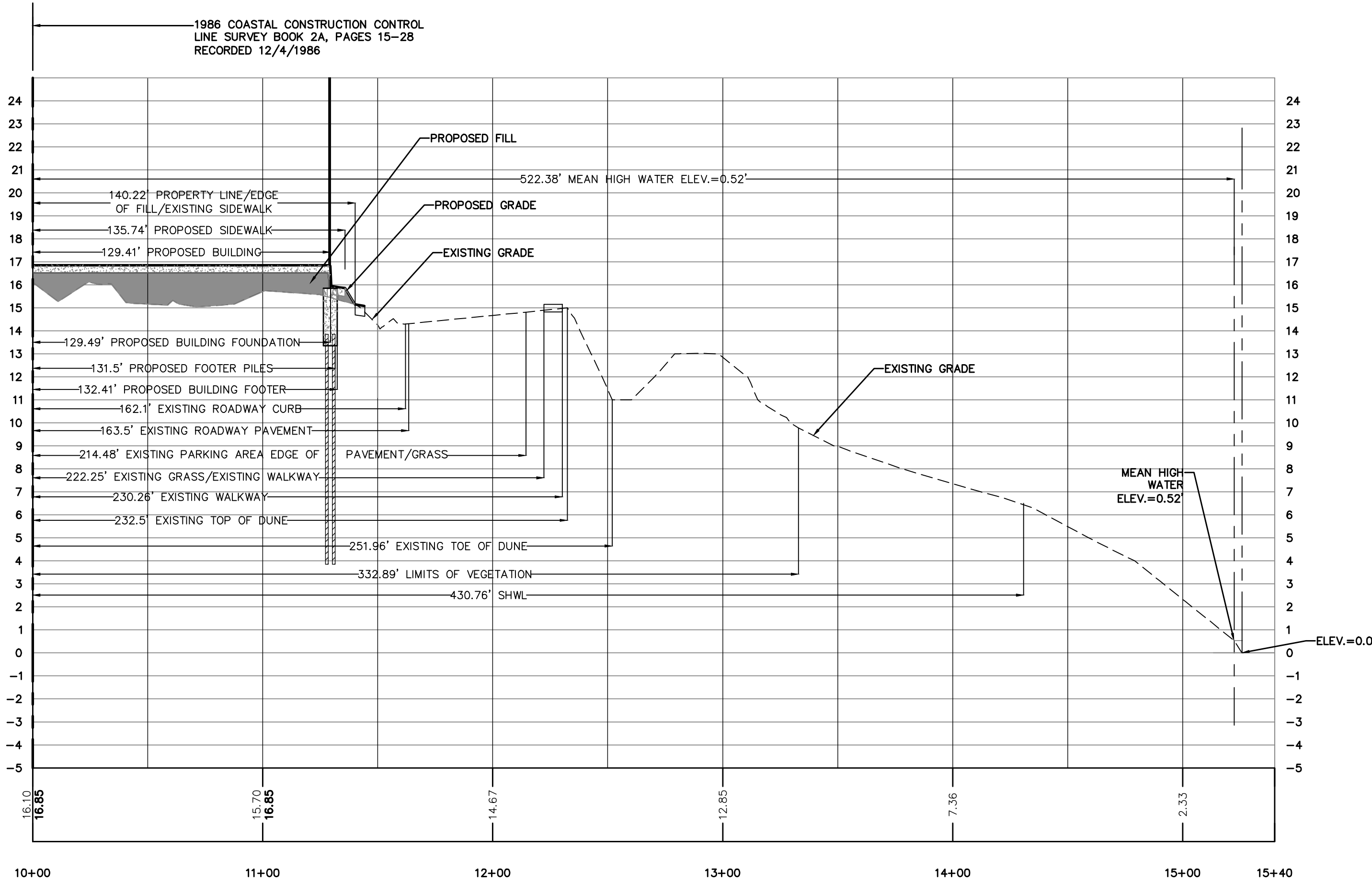


CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10/21/21	HK/AMM	PER TOWN OF INDIALANTIC COMMENTS
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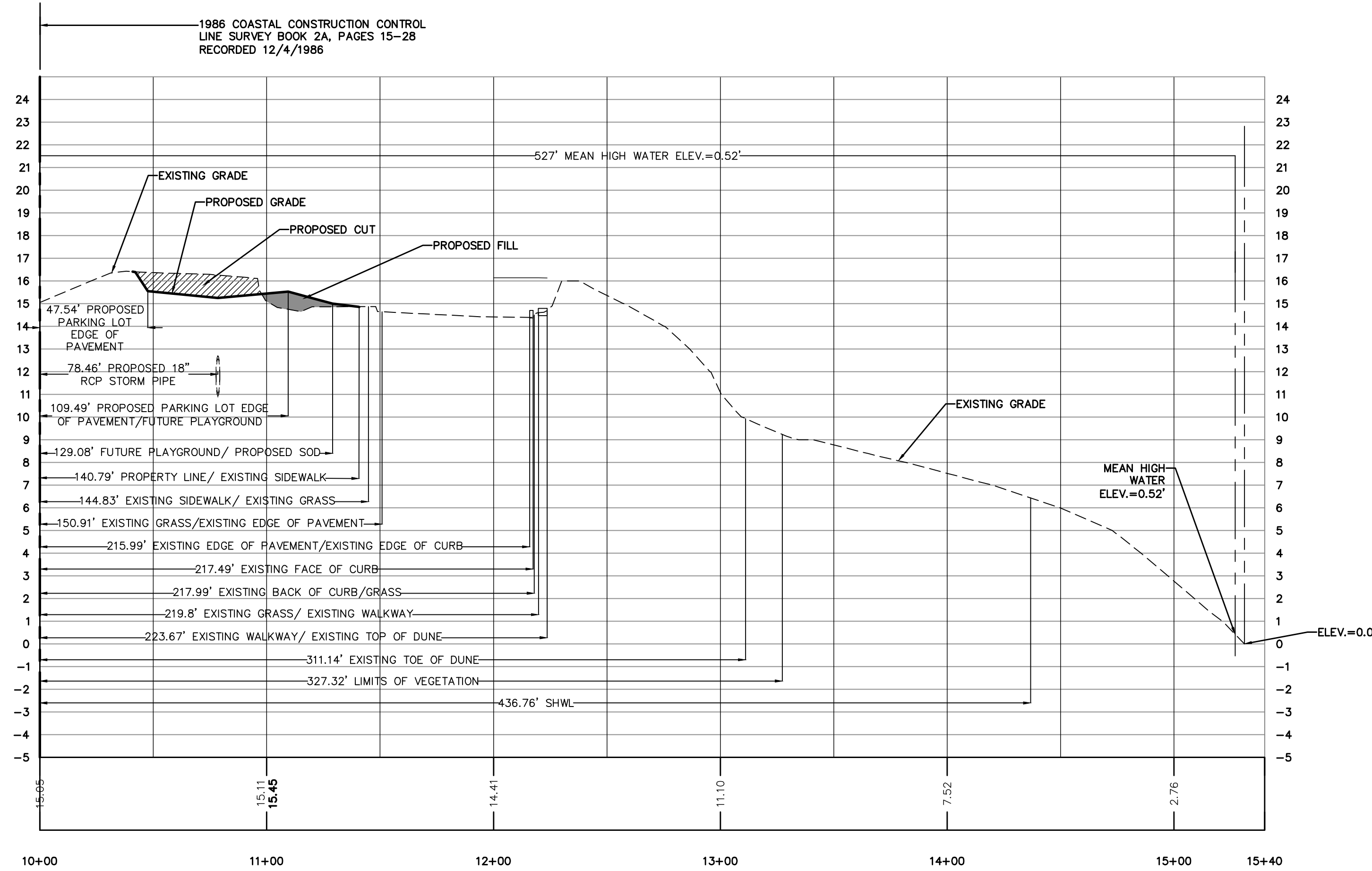
SURF STYLE AT INDIALANTIC
FINAL ENGINEERING PLANS
FDEP DIMENSIONING PLAN

PROJECT NO.: ZC 21043
DESIGNED BY: HK/AMM
DRAFTED BY: AMM/CMJL
CHECKED BY: HK
DRAWING FILE: 06-08-21043PGD&DEP
XREFS: XXXXX.DWG
XREFS: XXXXX.DWG



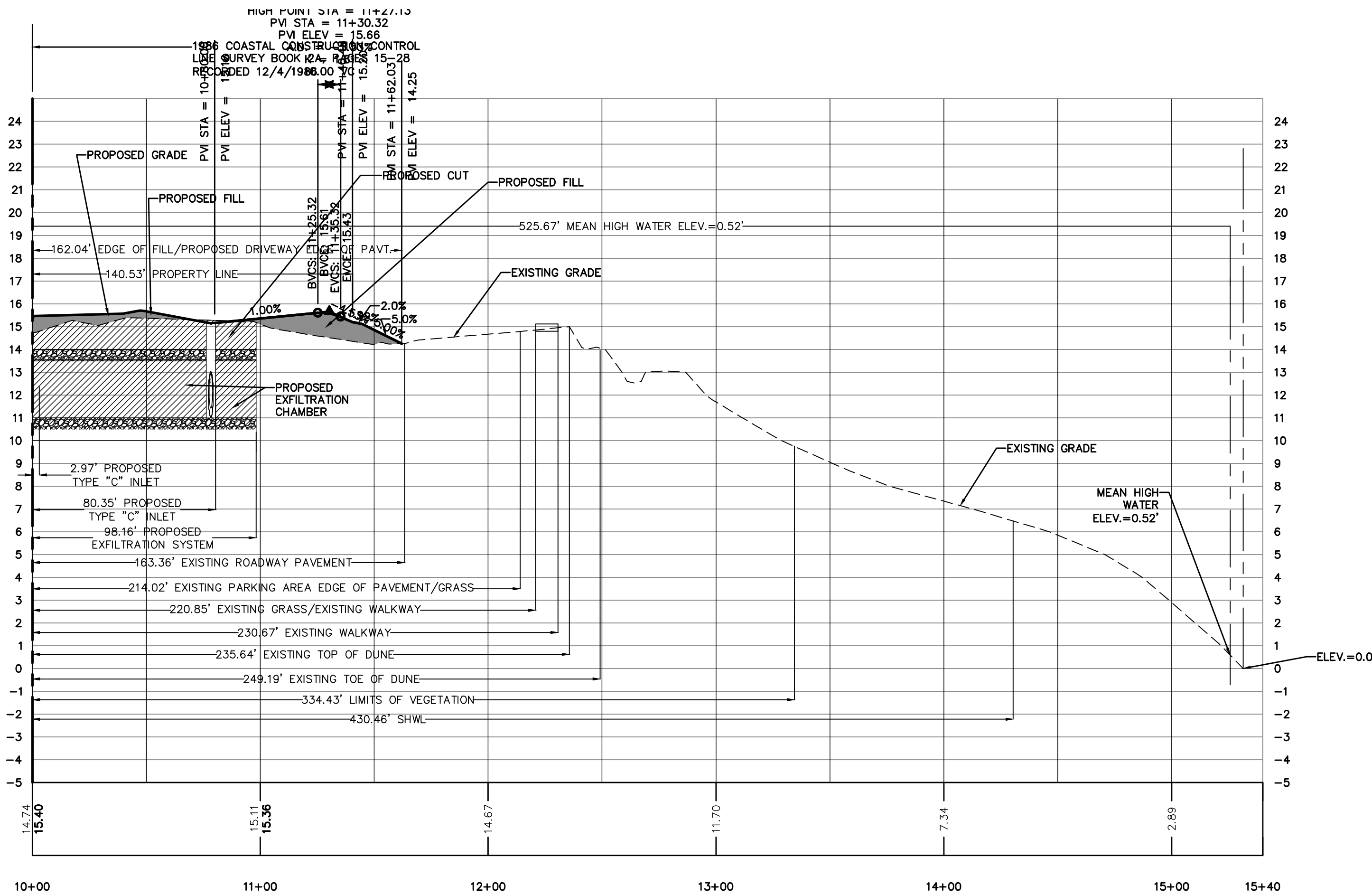
Section - A-A

SCALE: HORIZ.: 1"=40'
VERT.: 1"=4'



Section - C-C

SCALE: HORIZ.: 1"=40'
VERT.: 1"=4'



Section - B-B

SCALE: HORIZ.: 1"=40'
VERT.: 1"=4'



CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION

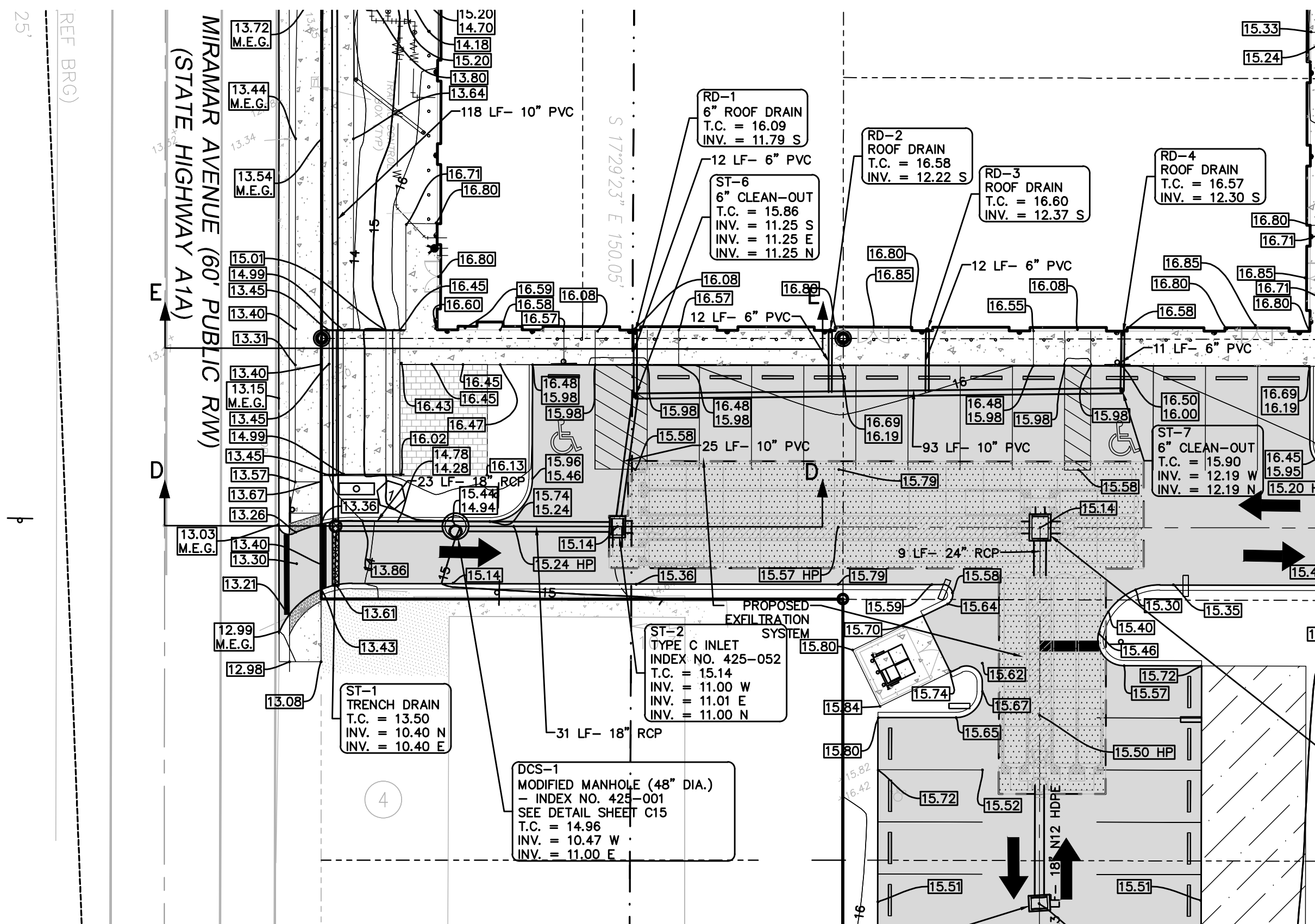
NO.	DATE	BY	SUBMITTALS / REVISIONS
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7	10-20-23	HK/AMM	PER TOWN OF INDIAN LANTIC COMMENTS

SURF STYLE AT INDIAN LANTIC
FINAL ENGINEERING PLANS
DEP CROSS-SECTIONS

CITY OF INDIAN LANTIC
BREVARD COUNTY, FLORIDA

PROJECT NO: ZC 21043
DESIGNED BY: HK/AMM
DRAFTED BY: AMM/CMJL
CHECKED BY: HK
DRAWING FILE: 06-08-21043PGD&DEP XREFS: 21043-BAS.DWG XREFS: 21043-SURV.DWG

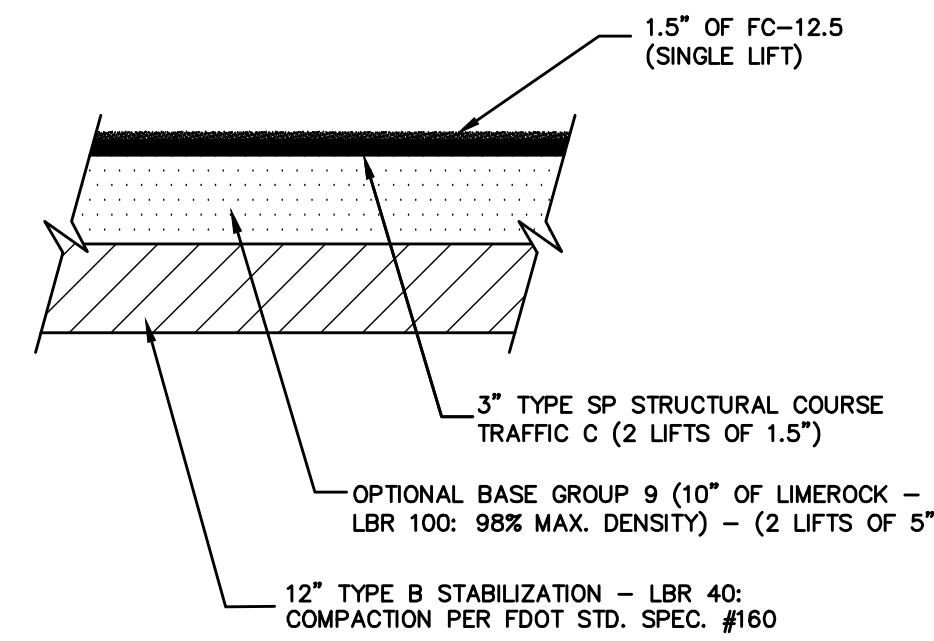
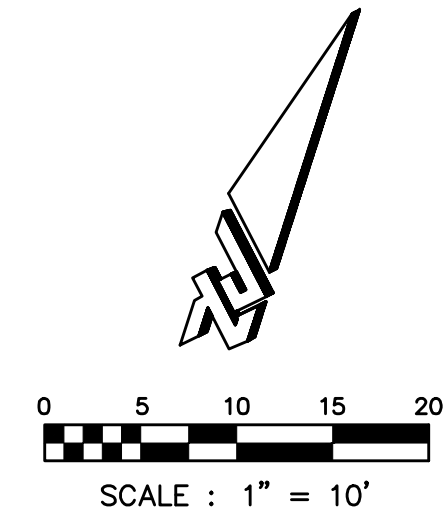
HALUK KILIC, P.E., NO. 84244
NOT VALID WITHOUT SEAL



LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED EXFILTRATION SYSTEM
- PROPOSED STORMWATER INLET
- PROPOSED STORMWATER MANHOLE
- PROPOSED MES
- PROPOSED YARD DRAIN

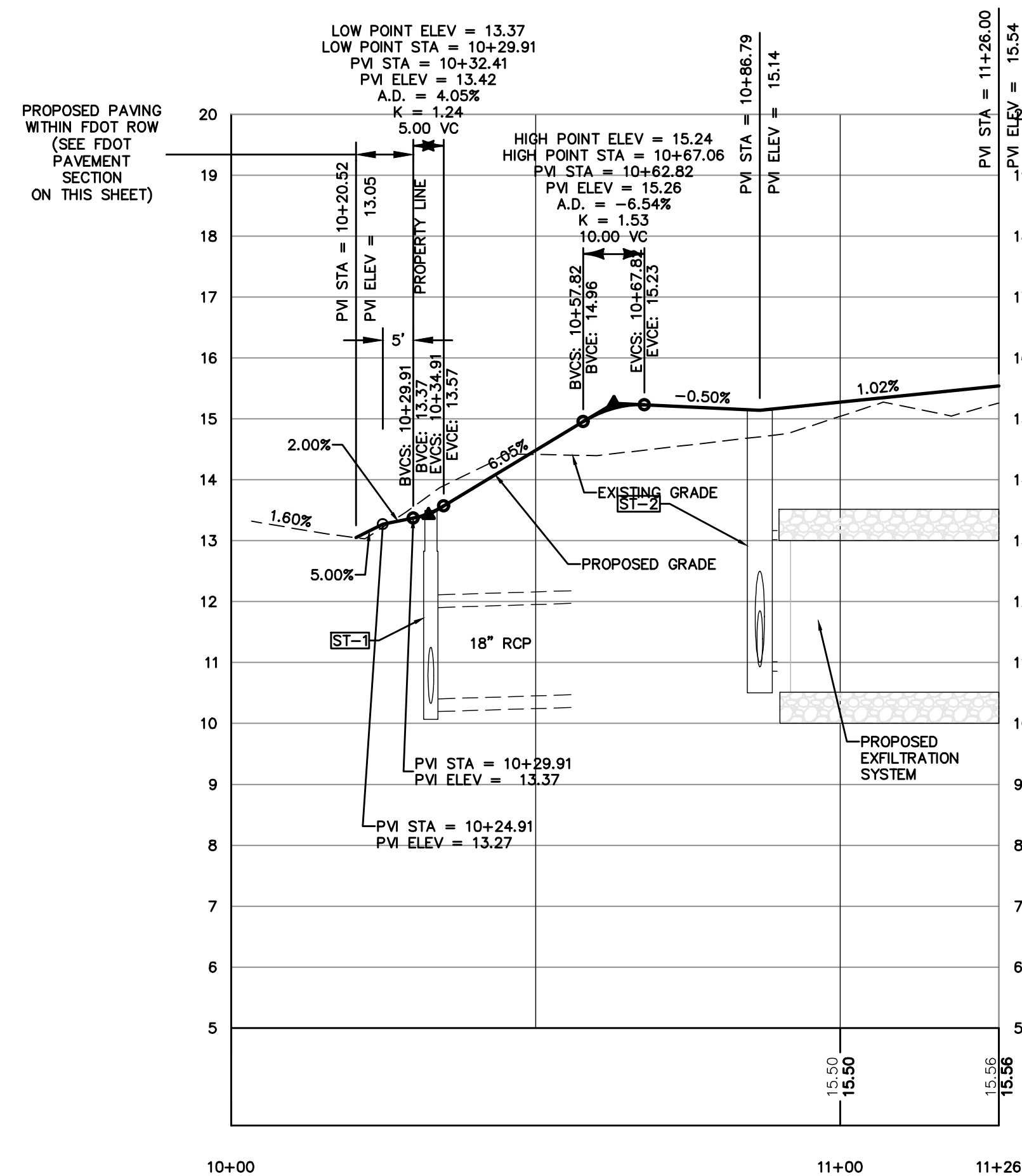
- PROPOSED GRADE
- PROPOSED MATCH EXISTING GRADE LABEL
- E.G.
- EXISTING GRADE LABEL
- PROPOSED FINISHED FLOOR ELEVATION
- PROPOSED FLOW DIRECTION



**FDOT PAVEMENT SECTION
(FOR S. MIRAMAR AVE.
UP TO PROPERTY LINE)**
N.T.S.

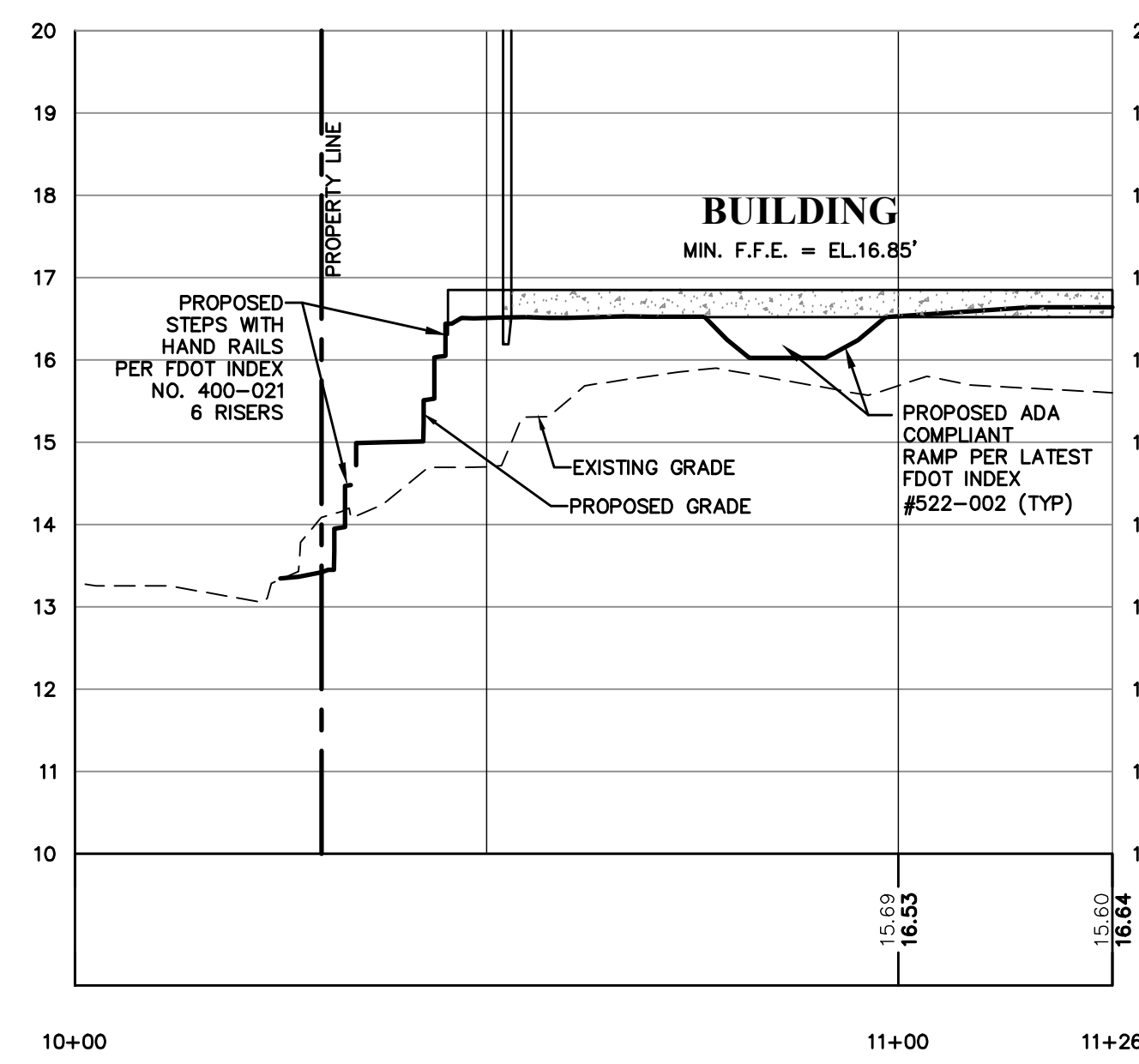
FDOT NOTES:

- ALL WORK PERFORMED WITHIN THE FDOT RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LATEST EDITION OF THE FDOT STANDARDS PLANS FOR ROAD AND BRIDGE CONSTRUCTION, 2021 SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE 2017 UTILITY ACCOMMODATION MANUAL.
- ALL PAVEMENT MARKINGS PERTAINING TO FDOT PROPOSED DRIVEWAY CONNECTION SHALL BE THERMOPLASTIC.
- ALL RAISED PAVEMENT MARKERS(RPM) INSTALLED WITHIN THE FDOT RIGHT-OF-WAY AND PROPOSED DRIVEWAY CONNECTION SHALL BE IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX #706-001.
- ALL EXCAVATIONS WITHIN TEN(10) FEET OF THE TRAVEL LANES AND GREATER THAN THREE(3) INCHES DEEP MUST BE FILLED IN OR HAVE A SHOULDER TREATMENT PLACED AT THE DROP-OFF PER INDEX #102-600 OF FDOT STANDARDS PLANS INDEXES AT THE END OF THE WORK DAY.
- CONTRACTOR SHALL CONTACT FDOT TWO WEEKS IN ADVANCE AND SET UP A PRE-CONSTRUCTION MEETING PRIOR TO STARTING ANY WORK IN FDOT RIGHT OF WAY.
- ALL TRAFFIC CONTROL DEVICES MUST BE IN PLACE BEFORE WORK CAN START.
- MAINTENANCE OF TRAFFIC TO BE SUPERVISED BY A FDOT CERTIFIED WORK TRAFFIC SUPERVISOR.
- ENGINEER'S CERTIFICATIONS TOGETHER WITH AS-BUILT PLANS ARE REQUIRED TO BE SUBMITTED WITHIN 30 DAYS OF COMPLETION WORK WITHIN FDOT RIGHT-OF-WAY.
- IT WILL BE THE RESPONSIBILITY OF THE PERMITTEE TO REPAIR ANY DAMAGE TO FDOT FACILITIES CAUSED BY CONSTRUCTION OF THE PROJECT.
- PERMITTEE SHALL NOT BEGIN THE WORK WITHIN THE FDOT RIGHT-OF-WAY UNTIL A FDOT INSPECTOR IS PRESENT AT THE JOB SITE AND AGREES THAT PROPER PREPARATIONS HAVE BEEN MADE.
- SOD ALL UNPAVED AREAS WITHIN FDOT RIGHT OF WAY THAT ARE DISTURBED BY CONSTRUCTION PER FDOT STANDARDS PLANS INDEX #570-010.
- ALL SIDEWALKS TO BE REMOVED AND REPLACED FROM JOINT TO JOINT AND HAVE 1/2" EXPANSION JOINTS (PREFORMED JOINT FILLER) PLACED BETWEEN OLD AND NEW SIDEWALK.
- ALL AFFECTED SIDEWALKS, RAMPS, AND CROSSWALKS, WILL BE BUILT AND INSPECTED TO MEET CURRENT ADA REQUIREMENTS.



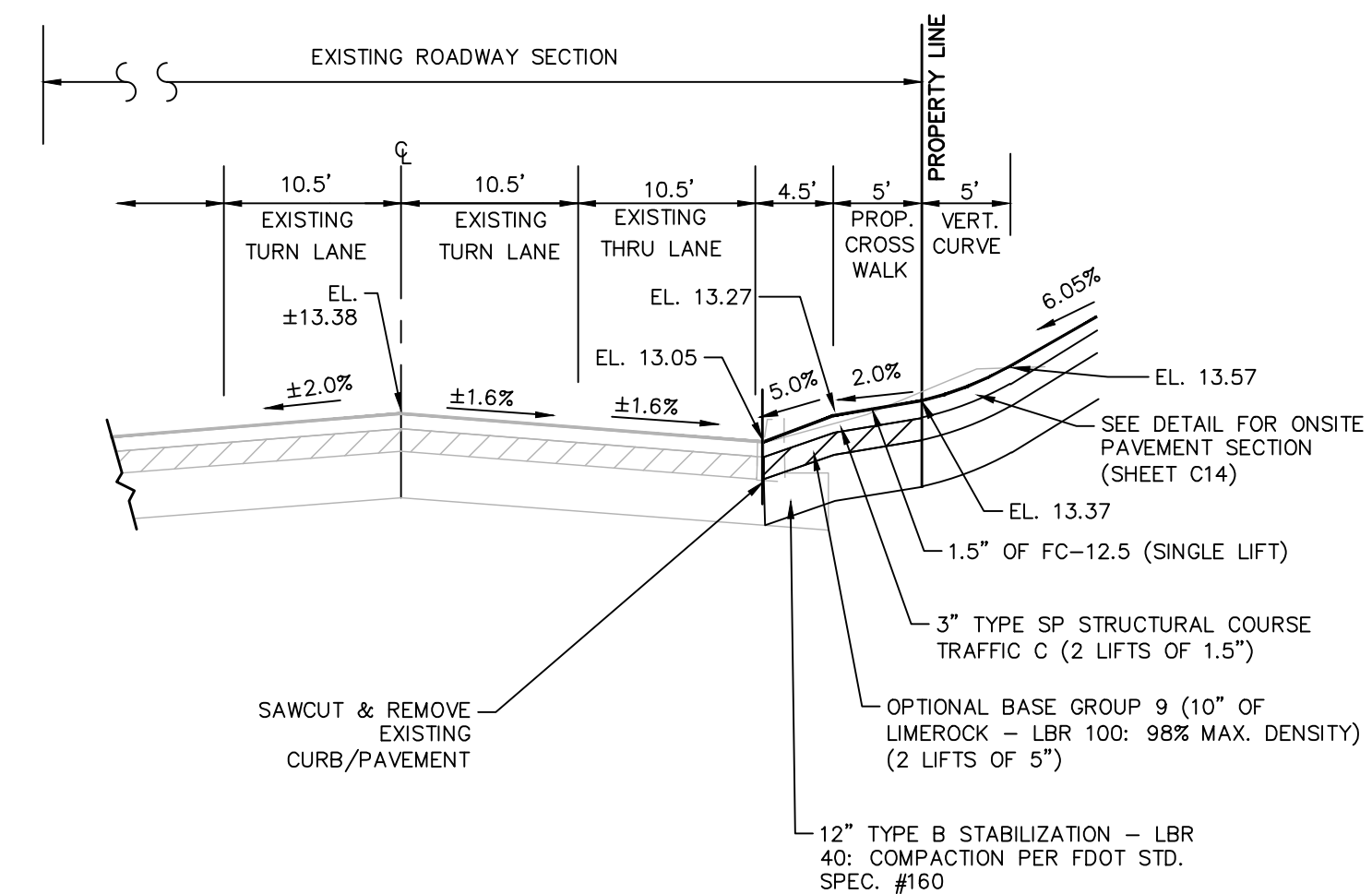
Section D-D

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VERT.: 1"=4'



Section E-E

SCALE: HORIZ.: 1"=40'
VERT.: 1"=4'

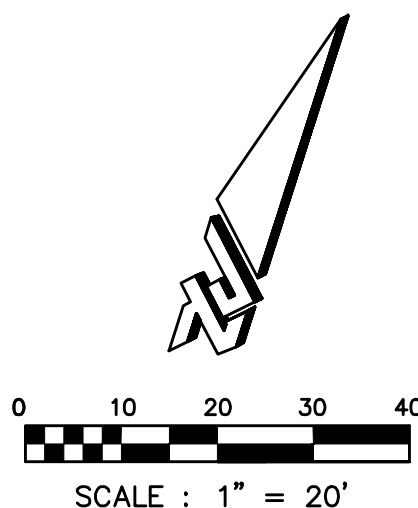
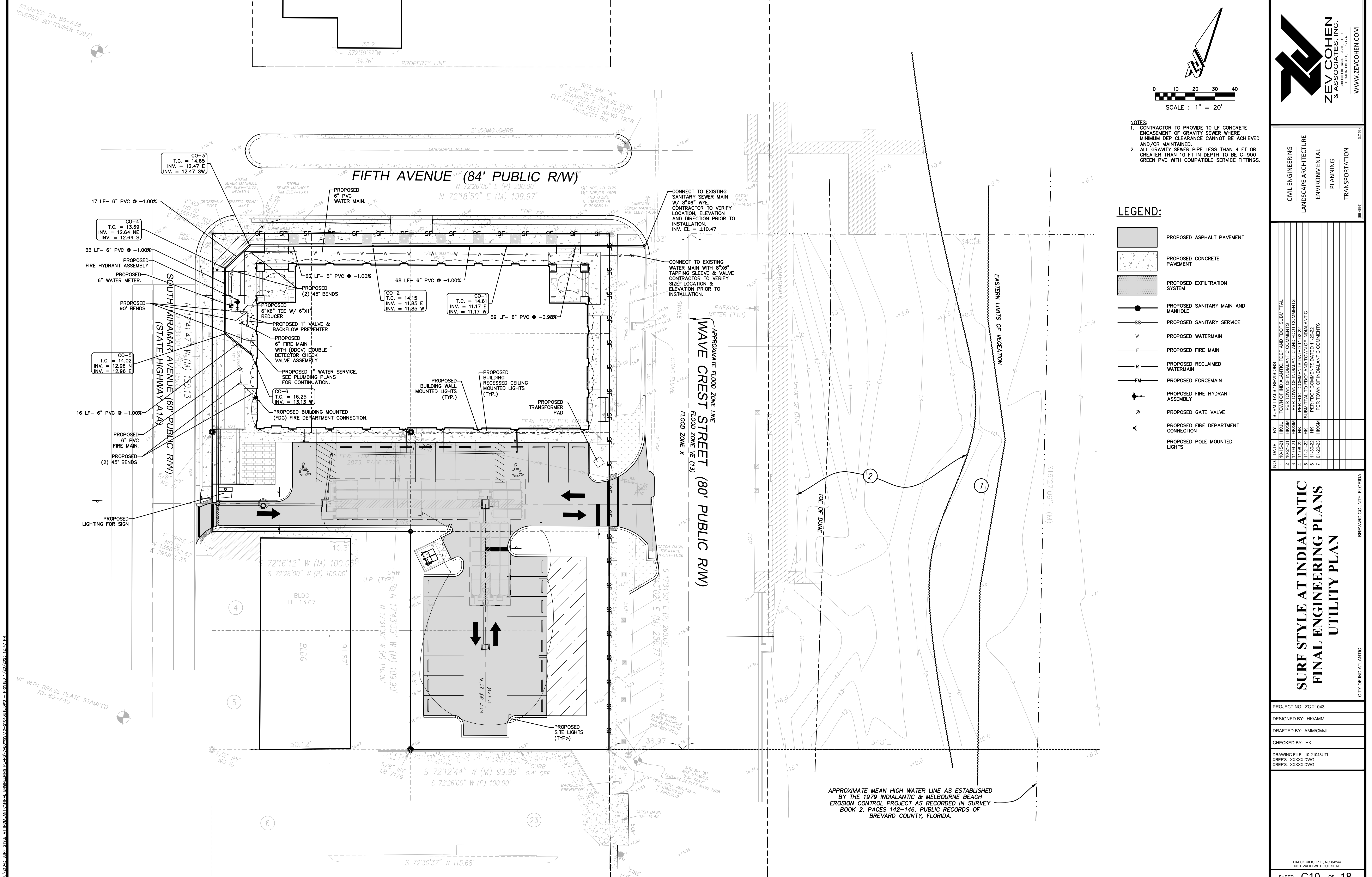


SECTION D-D (FDOT ROW SECTION)

N.T.S.

SURF STYLE AT INDIALANTIC FINAL ENGINEERING PLANS FDOT PLAN & SECTIONS

PROJECT NO.: ZC 21043
DESIGNED BY: HK/AMM
DRAFTED BY: AMM/CMJL
CHECKED BY: HK
DRAWING FILE: 06-08-21043PGD&DEP
XREFS: 21043-BAS.DWG
XREFS: 21043-SURV.DWG



- NOTES:
1. CONTRACTOR TO PROVIDE 10 LF CONCRETE ENCASUREMENT OF GRAVITY SEWER WHERE MINIMUM DEP. CLEARANCE CANNOT BE ACHIEVED AND/OR MAINTAINED.
 2. ALL GRAVITY SEWER PIPE LESS THAN 4 FT OR GREATER THAN 10 FT IN DEPTH TO BE C-900 GREEN PVC WITH COMPATIBLE SERVICE FITTINGS.

LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED EXFILTRATION SYSTEM
- PROPOSED SANITARY MAIN AND MANHOLE
- SS PROPOSED SANITARY SERVICE
- W PROPOSED WATERMAIN
- F PROPOSED FIRE MAIN
- R PROPOSED RECLAIMED WATERMAIN
- FM PROPOSED FORCEMAIN
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED GATE VALVE
- PROPOSED FIRE DEPARTMENT CONNECTION
- PROPOSED POLE MOUNTED LIGHTS



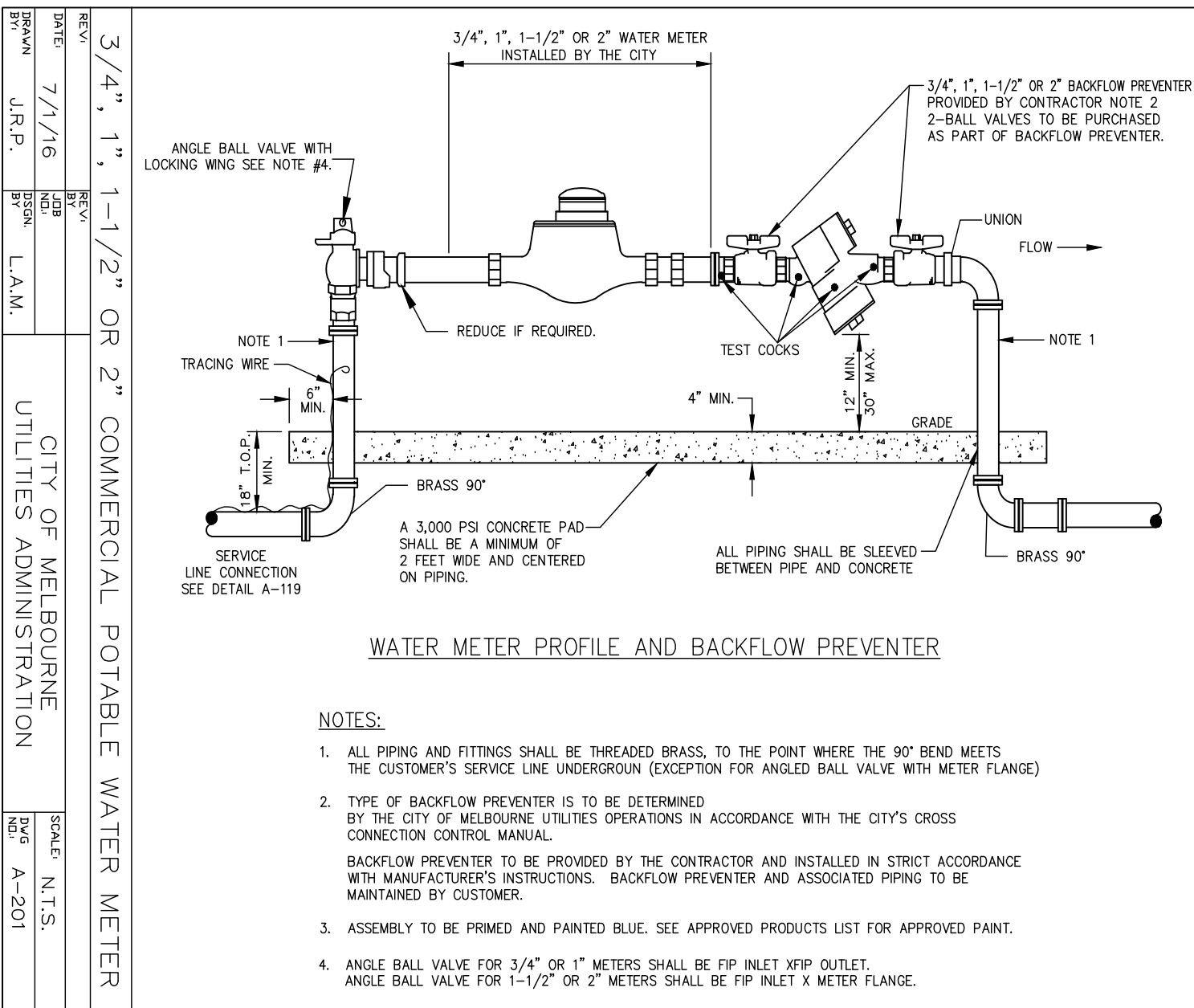
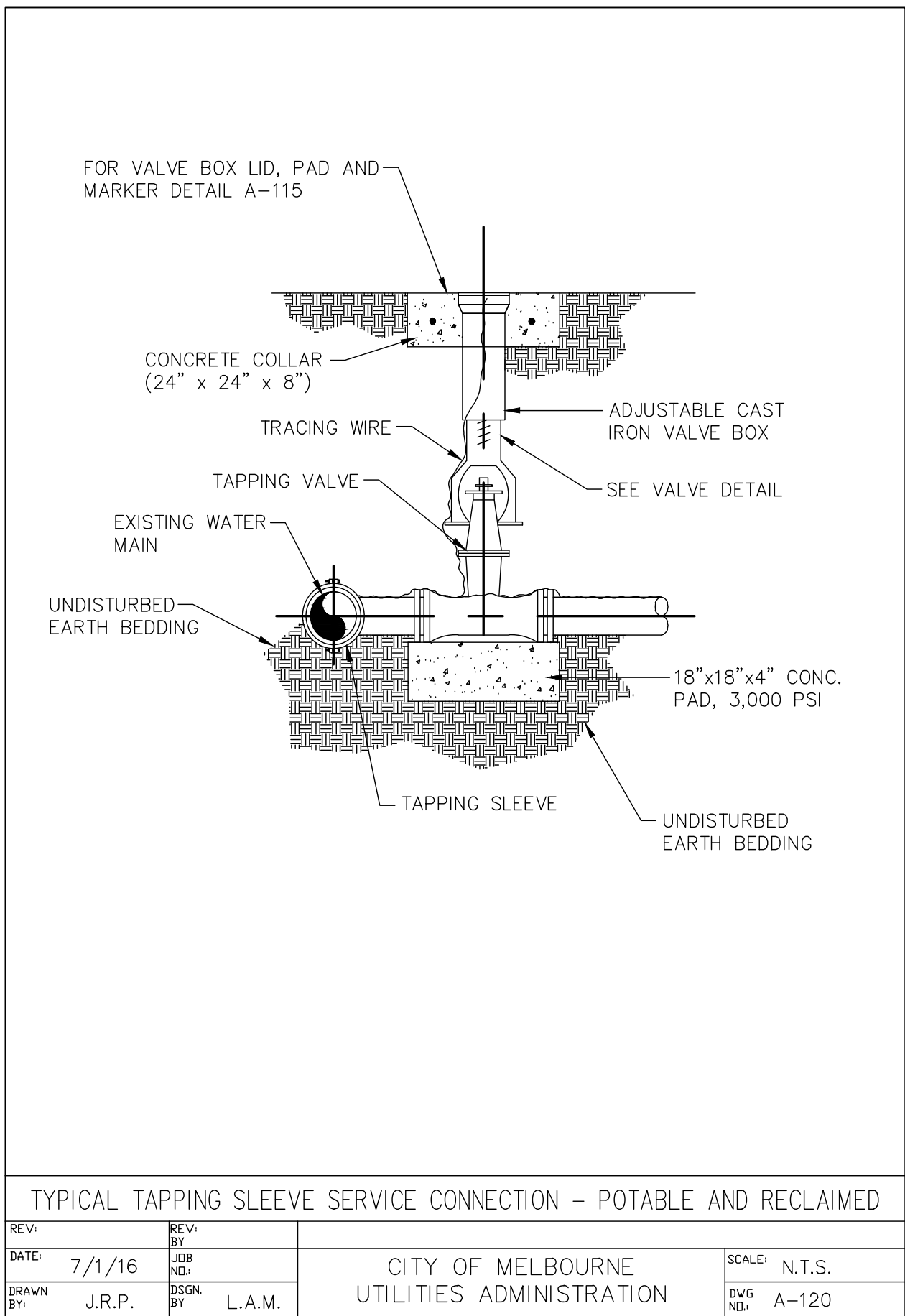
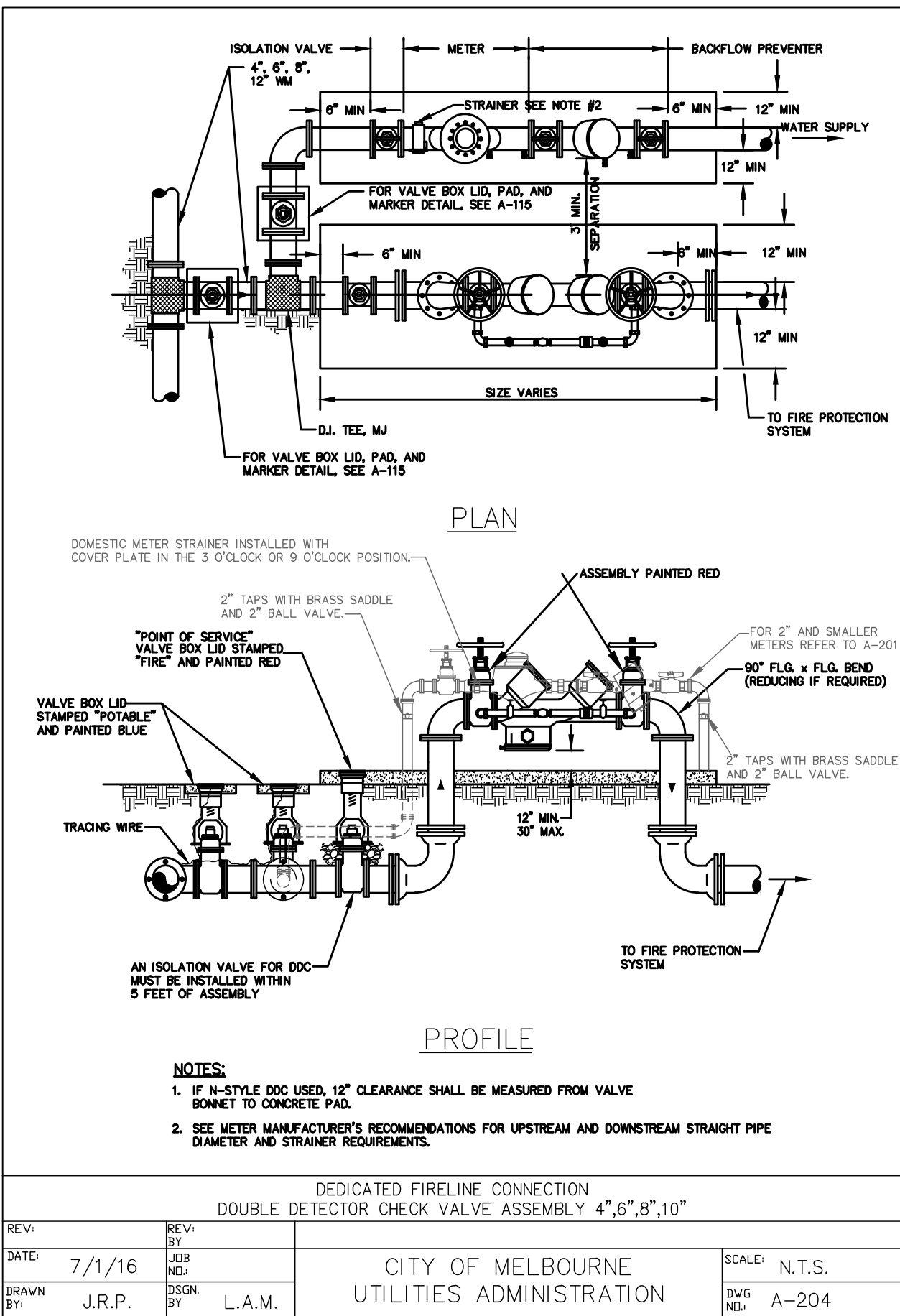
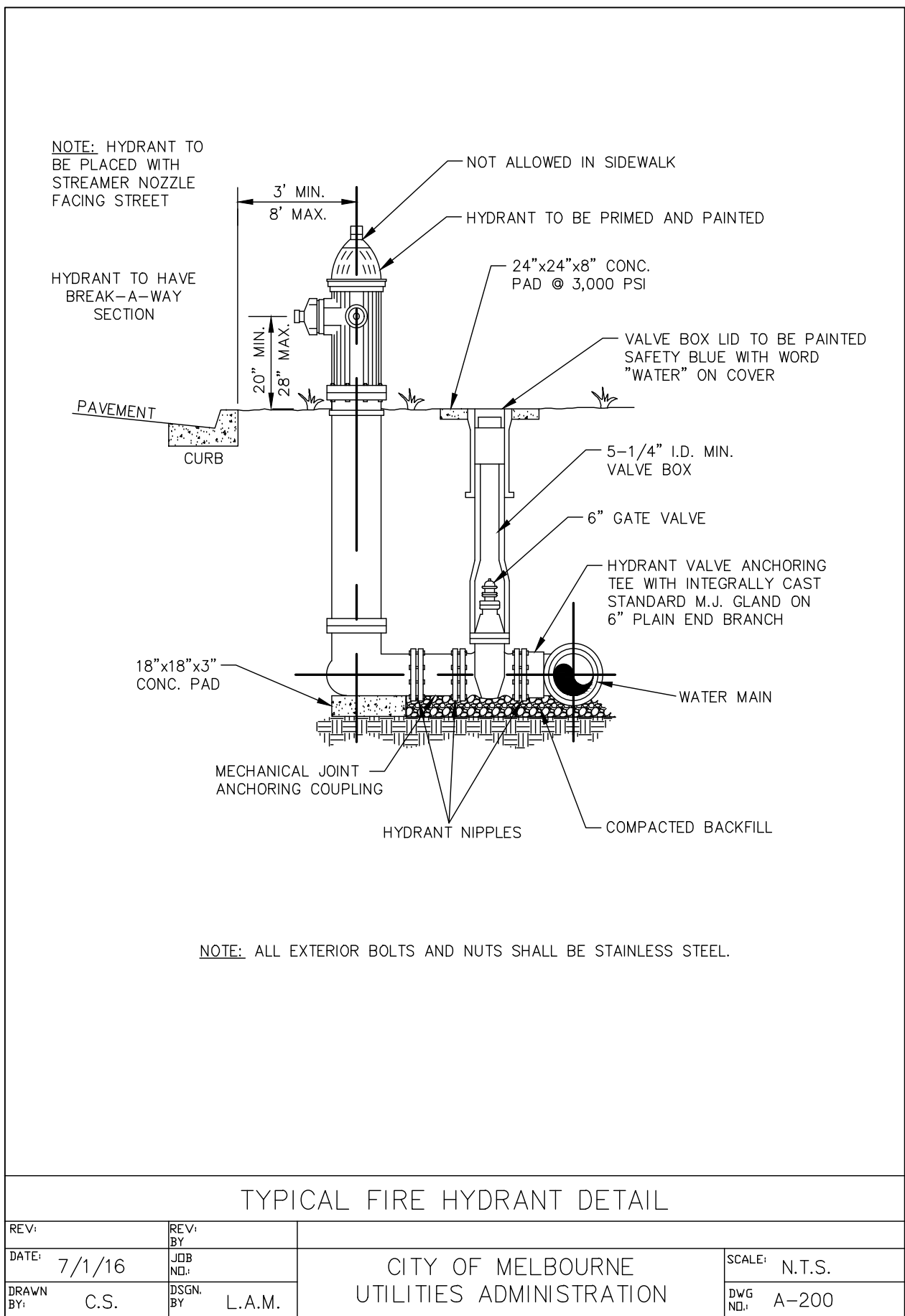
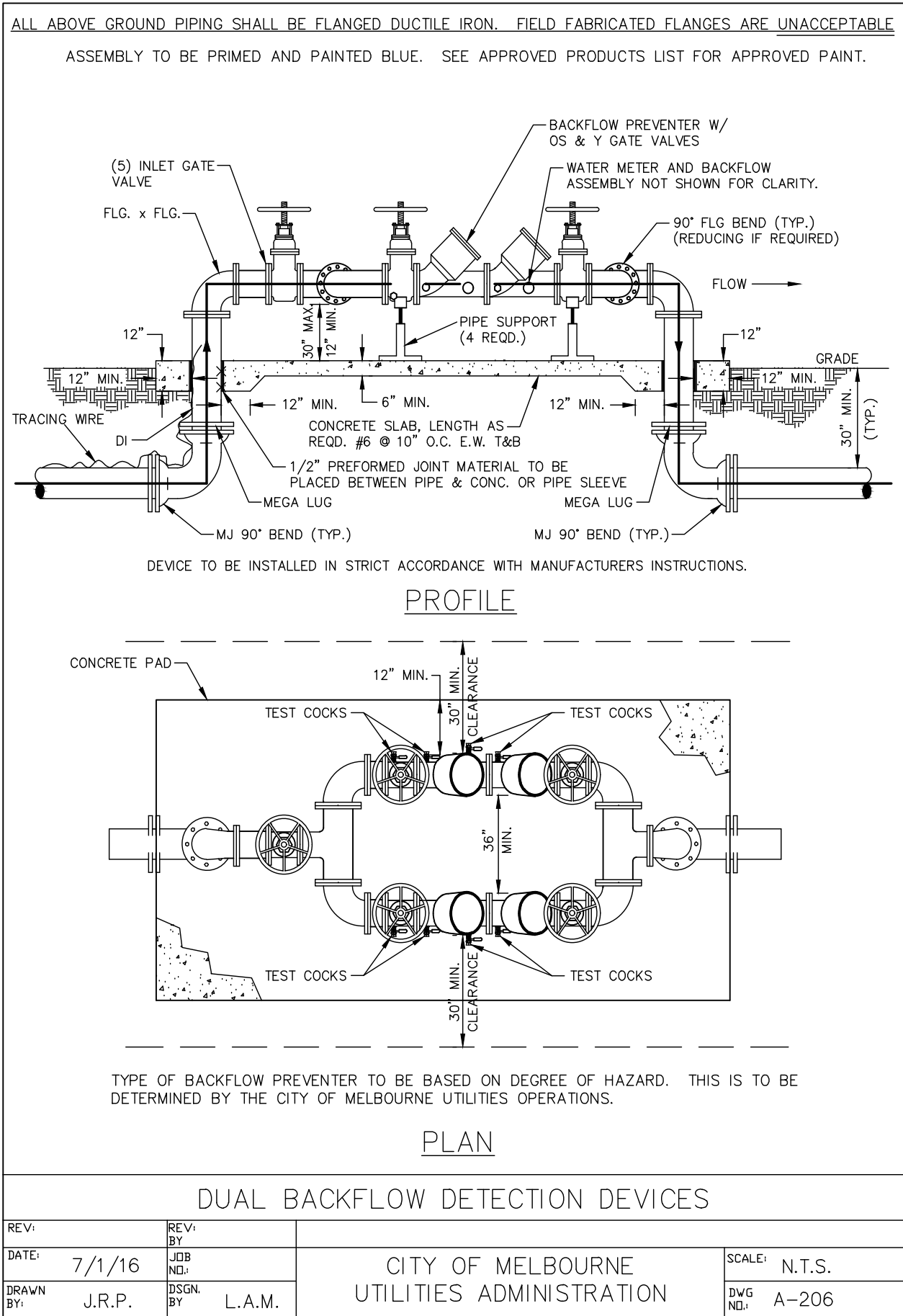
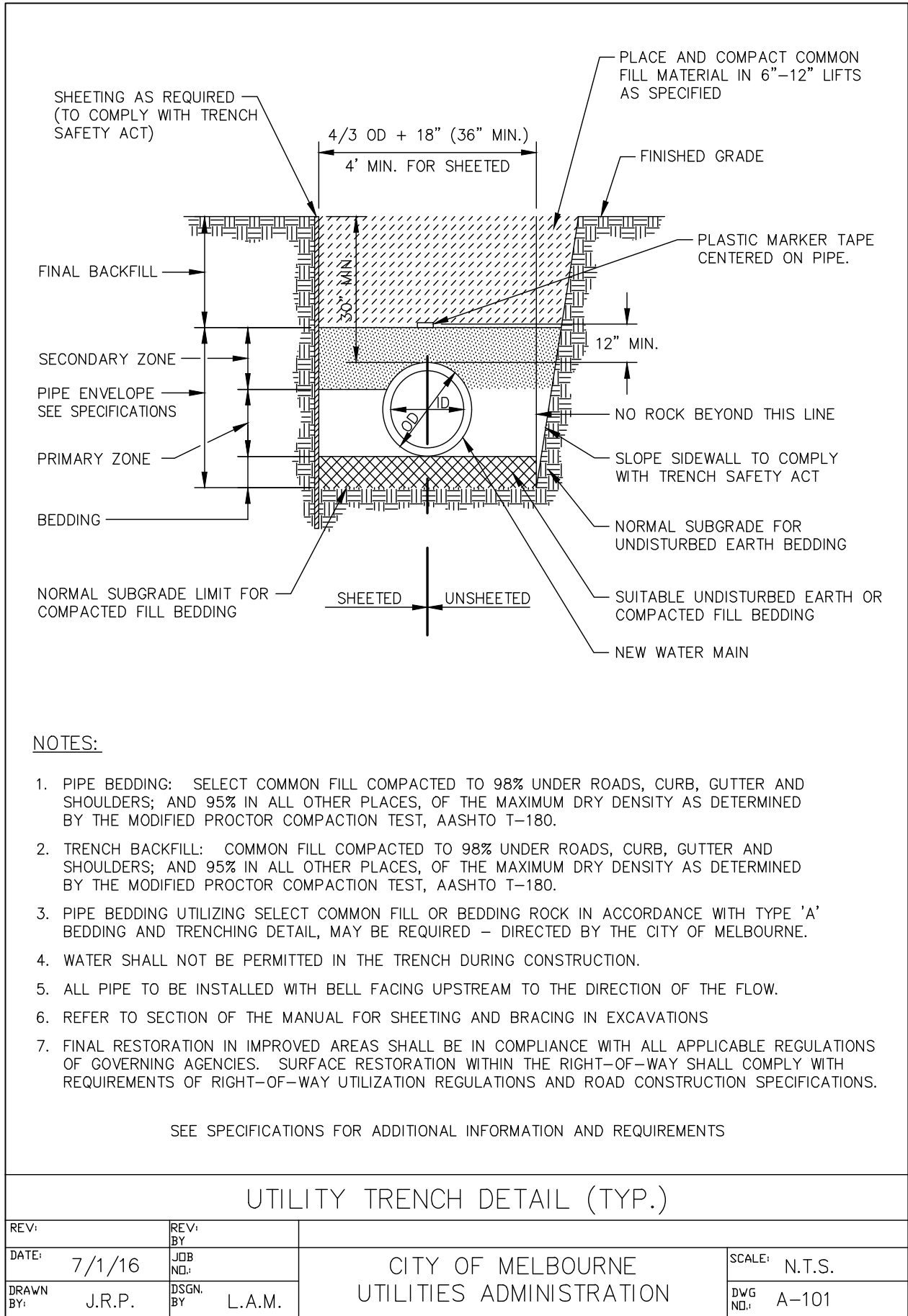
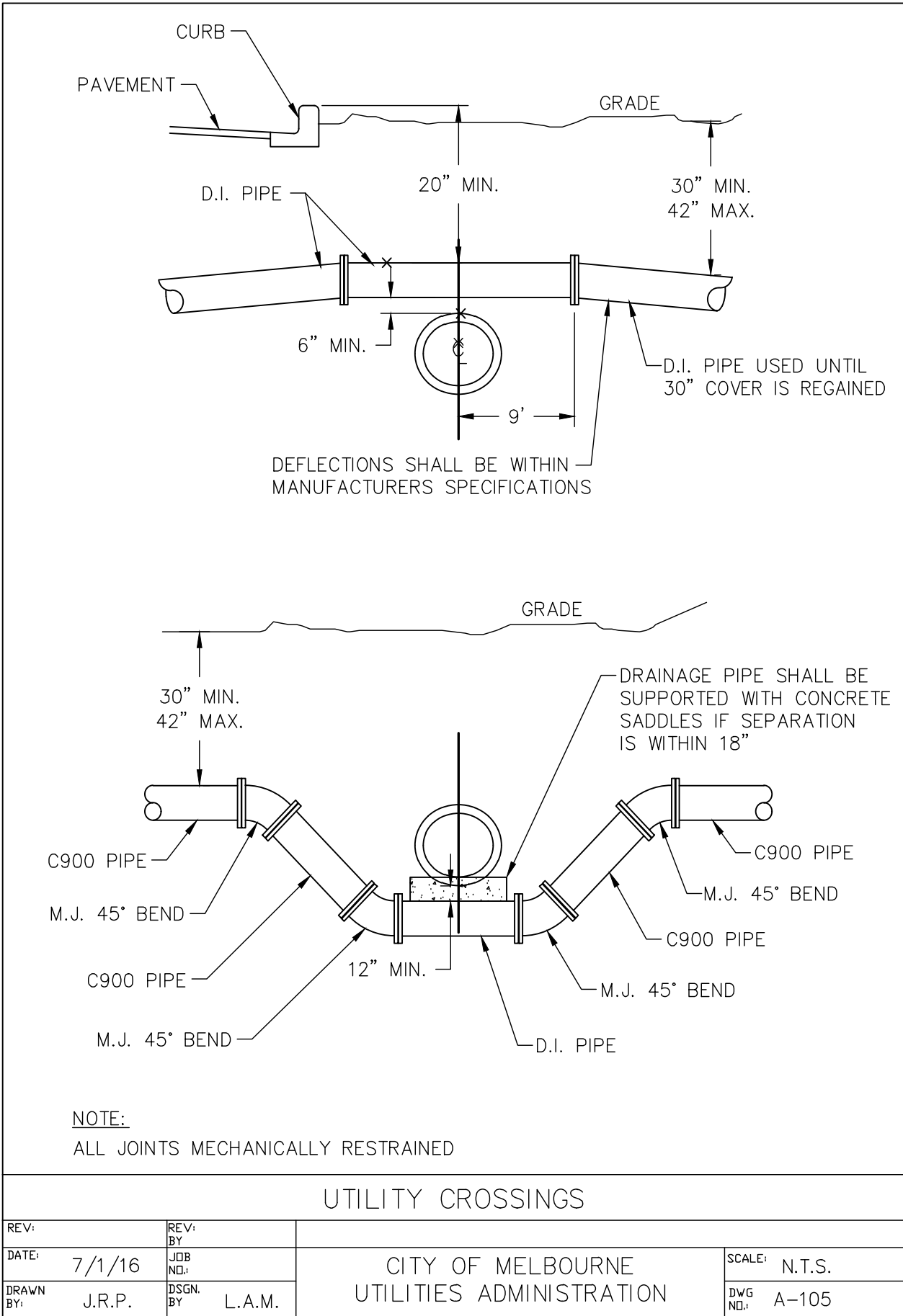
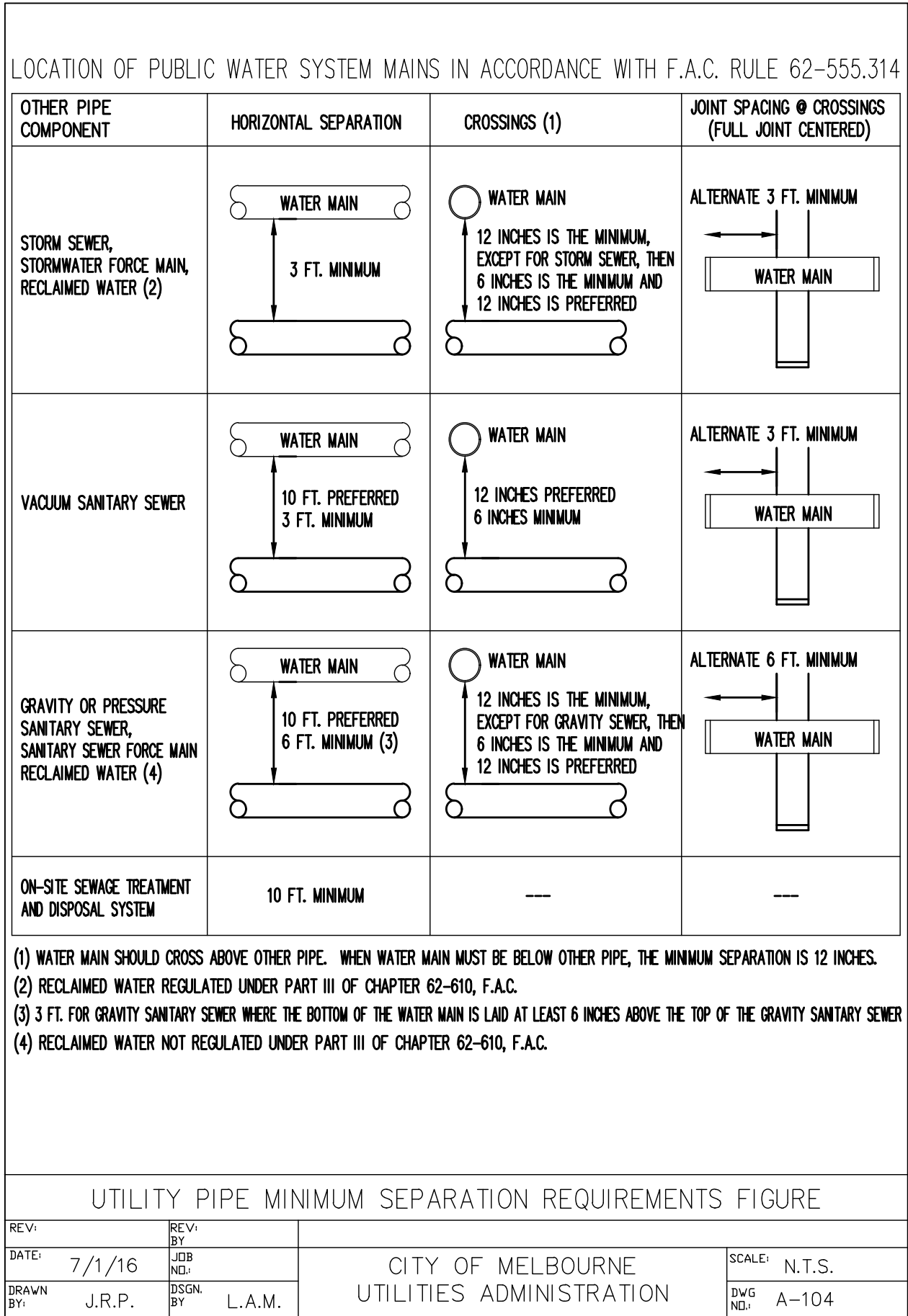
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION

NO.	DATE	BY	REVISIONS
1	10-21-21	HK/AMM	PER TOWN OF INDIANLANTIC COMMENTS
2	11-04-21	HK/AMM	PER TOWN OF INDIANLANTIC COMMENTS
3	11-04-21	HK/AMM	PER TOWN OF INDIANLANTIC COMMENTS
4	11-04-21	HK/AMM	PER TOWN OF INDIANLANTIC COMMENTS
5	11-21-22	HK/AMM	PER TOWN OF INDIANLANTIC COMMENTS
6	11-21-22	HK/AMM	PER TOWN OF INDIANLANTIC COMMENTS
7	10-20-23	HK/AMM	PER TOWN OF INDIANLANTIC COMMENTS

SURF STYLE AT INDIANLANTIC
FINAL ENGINEERING PLANS
UTILITY PLAN

PROJECT NO.: ZC 21043
DESIGNED BY: HK/AMM
DRAFTED BY: AMM/CMJL
CHECKED BY: HK
DRAWING FILE: 10-21043UTL
XREFS: XXXXX.DWG
XREFS: XXXXX.DWG

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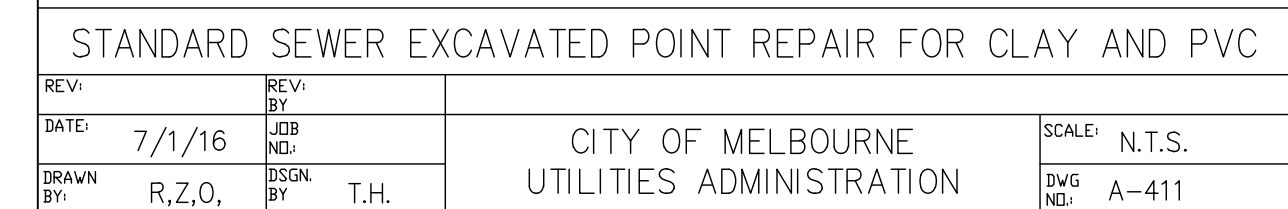
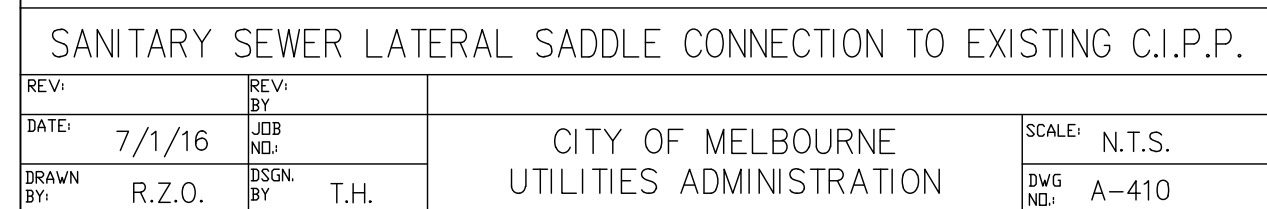
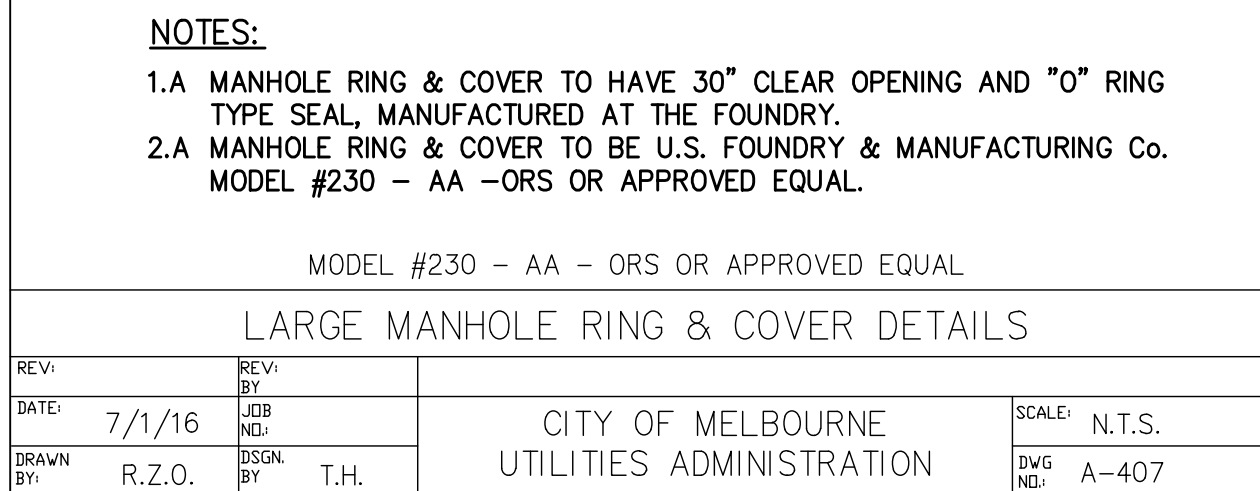
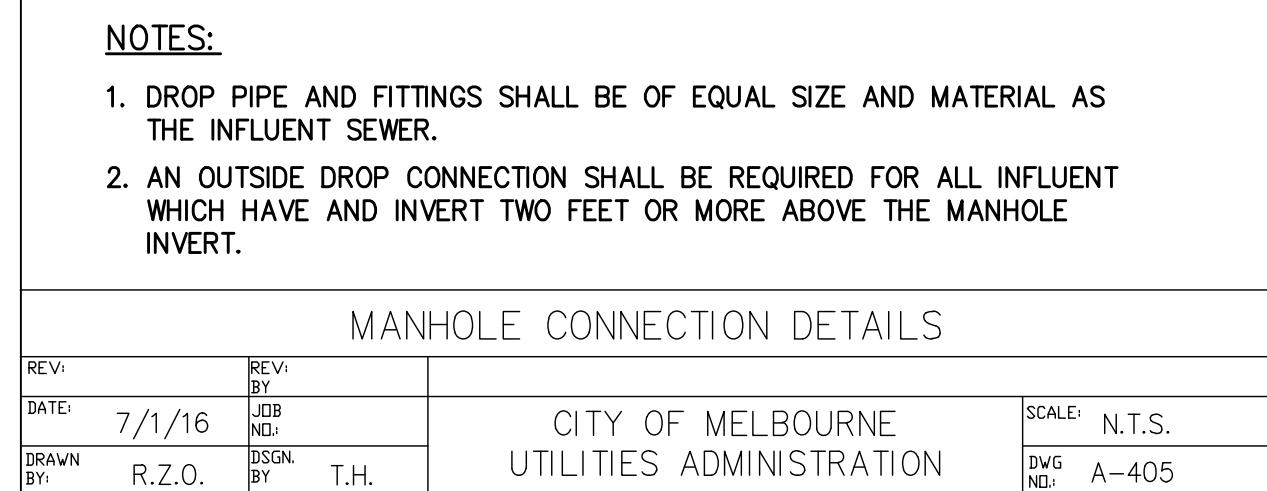
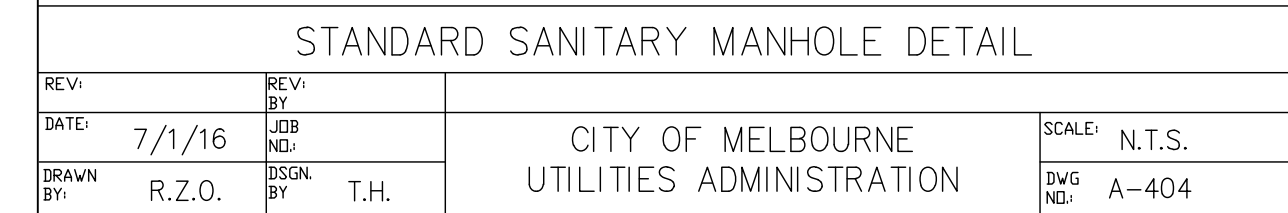
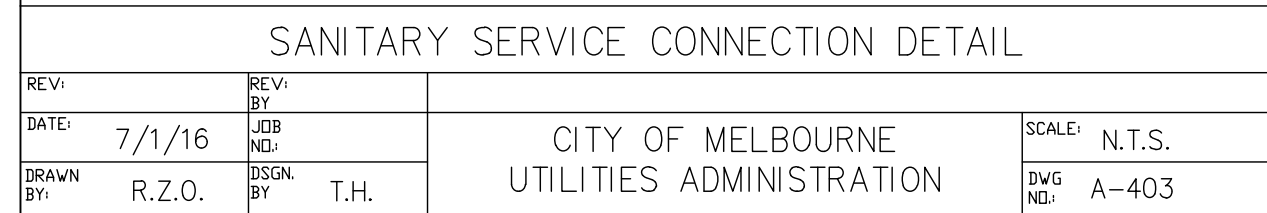
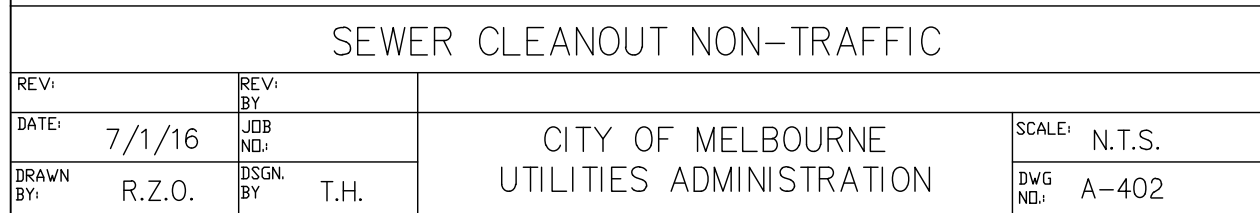
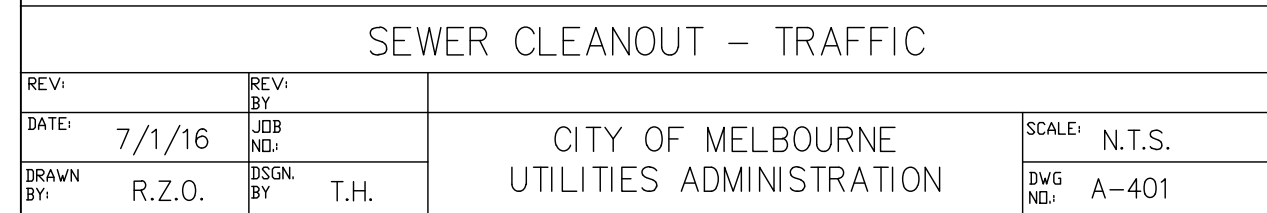
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-21-21	HK/AMM	FOR REVIEW AND FOOT SUBMITTAL
2	10-21-21	HK/AMM	PER TOWN OF INDIALANTIC COMMENTS
3	11-04-21	HK/AMM	PER TOWN OF INDIALANTIC COMMENTS
4	11-09-22	HK	PER FOOT COMMENTS DATED 11-02-22
5	11-21-22	HK	SUBMITTAL TO FOOT AND TOWN OF INDIALANTIC
6	11-30-22	HK	PER FOOT COMMENTS DATED 11-25-22
7	01-25-23	HK/AMM	PER TOWN OF INDIALANTIC COMMENTS

SURF STYLE AT INDIALANTIC FINAL ENGINEERING PLANS CONSTRUCTION DETAILS

PROJECT NO.: ZC 21043
DESIGNED BY: HK/AMM
DRAFTED BY: AMM/CMJL
CHECKED BY: HK

DRAWING FILE: 11-17-21043DET
XREF'S: 21043-BAS.DWG
XREF'S: 21043-SURV.DWG



SHEET: C13 OF 18

N.T.S.

N.T.S.

N.T.S.

(FDOT TYPE R1-1)

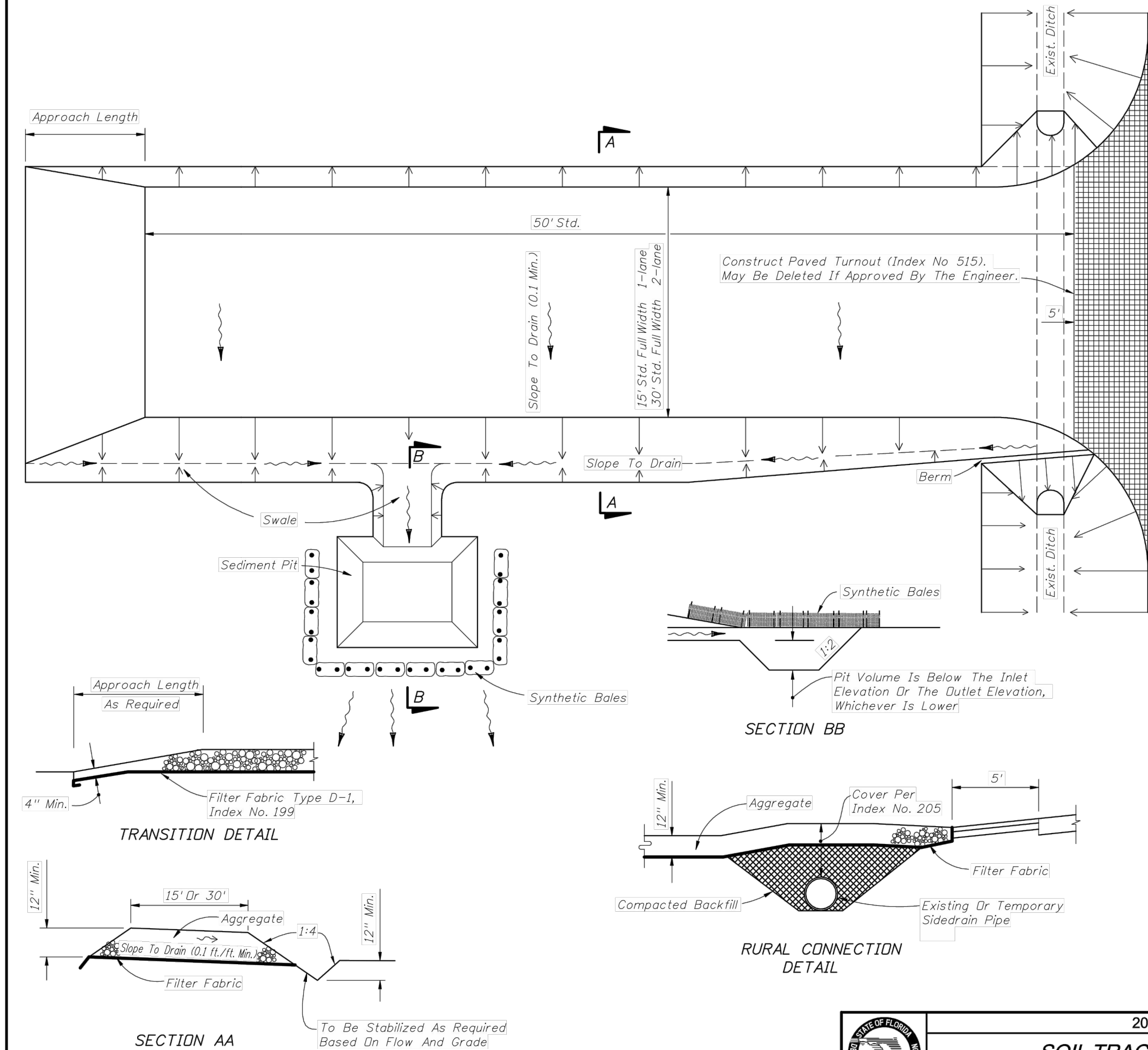
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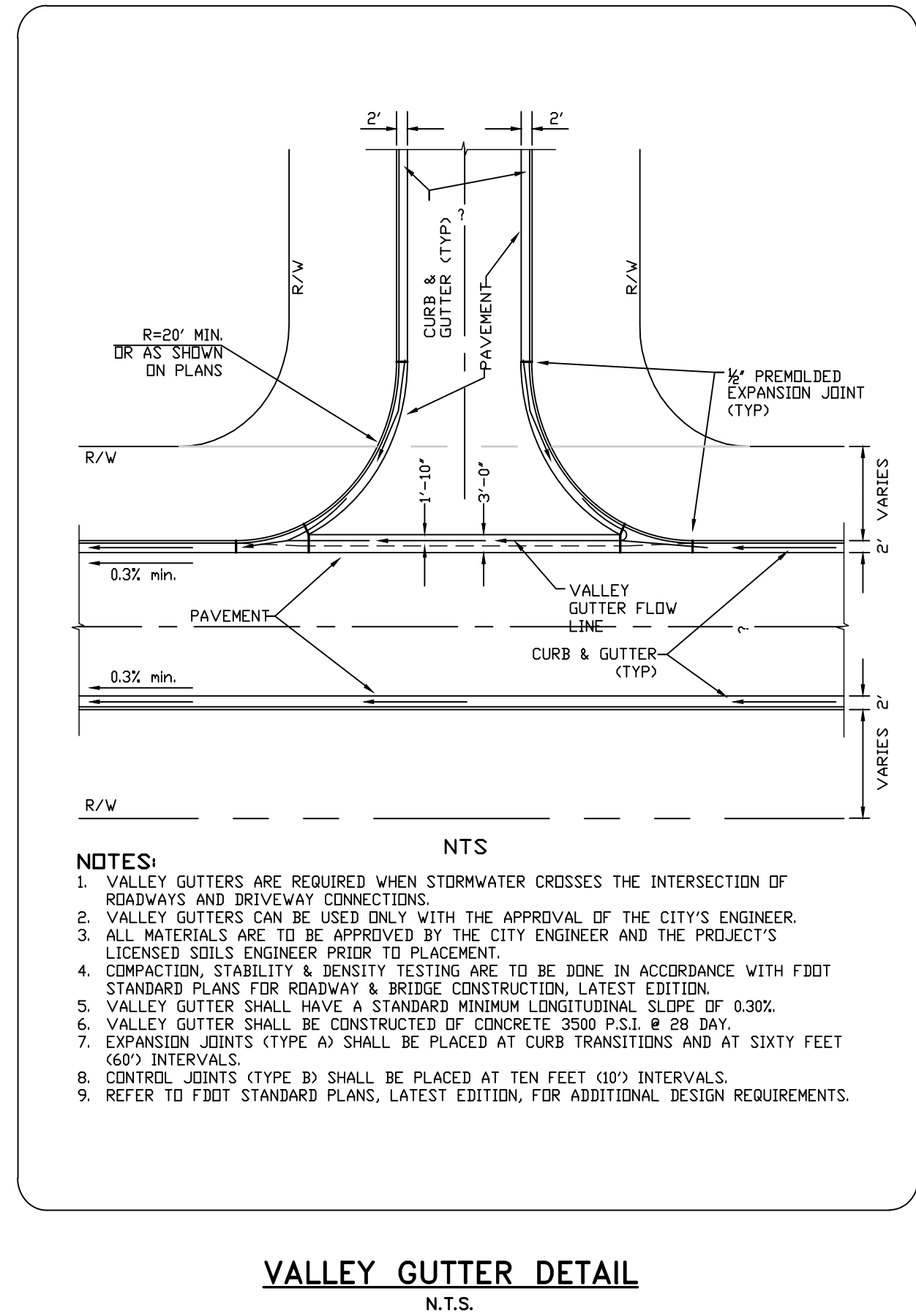


- GENERAL NOTES**
1. A Soil Tracking Prevention Device (STPD) shall be constructed at locations designated by the engineer for points of egress from unstabilized areas of the project to public roads where off-site tracking of mud could occur. Traffic from unstabilized areas of the construction project shall be directed thru a STPD. Barriers, flagging, or other positive means shall be used as required to limit and direct vehicular egress across the STPD.
 2. The Contractor may propose an alternative technique to minimize off-site tracking of sediment. The alternative must be reviewed and approved by the Engineer prior to its use.
 3. All materials spilled, dropped, or tracked onto public roads (including the STPD aggregate and construction mud) shall be removed daily, or more frequently if so directed by the Engineer.
 4. Aggregates shall be as described in Section 901 excluding 901-2.3. Aggregates shall be FDOT size #1. If this size is not available, the next available smaller size aggregate may be substituted with the approval of the Engineer. Sizes containing excessive small aggregate will track off the project and are unsuitable.
 5. The sediment pit should provide a retention volume of 3600 cubic feet/acre of surface area draining to the pit. When the STPD is isolated from other drainage areas, the following pit volumes will satisfy this requirement:
15' x 50' x 100 ft.³ 30' x 50' x 200 ft.³
As an option to the sediment pit, the width of the swale bottom can be increased to obtain the volume. When the sediment pit or swale volume has been reduced to one half, it shall be cleaned. When a swale is used, synthetic bales or silt fence shall be placed along the entire length.
 6. The swale ditch draining the STPD shall have a 0.02% minimum and a 1.0% maximum grade along the STPD and to the sediment pit.
 7. Mitered end sections are not required when the sidedrain pipe satisfies the clear zone requirements.
 8. The STPD shall be maintained in a condition that will allow it to perform its function. To prevent off-site tracking, the STPD shall be rinsed daily when in use to move accumulated mud downward thru the stone. Additional stabilization of the vehicular route leading to the STPD may be required to limit the mud tracked.
 9. A STPD shall be paid for under the contract unit price for Soil Tracking Prevention Device, EA. The unit price shall constitute full compensation for construction, maintenance, replacement of materials, removal, and restoration of the area utilized for the STPD; including but not limited to excavation, grading, temporary pipe (including MES when required), filter fabric, aggregate, paved turnout (including asphalt and base construction), ditch stabilization, approach route stabilization, sediment removal and disposal, water, rinsing and cleaning of the STPD and cleaning of public roads, grassing and sod. Synthetic Bale or Bale Type Barrier shall be paid for under the contract unit price for Synthetic Bales, LF. Silt fence shall be paid for under the contract unit price for Staked Silt Fence, LF.
 10. The nominal size of a standard STPD is 15' x 50' unless otherwise shown in the plans. If the volume of entering and existing vehicles warrant, a 30' width STPD may be used if approved by the Engineer. When a double width (30') STPD is used, the pay quantity shall be 2 for each location.



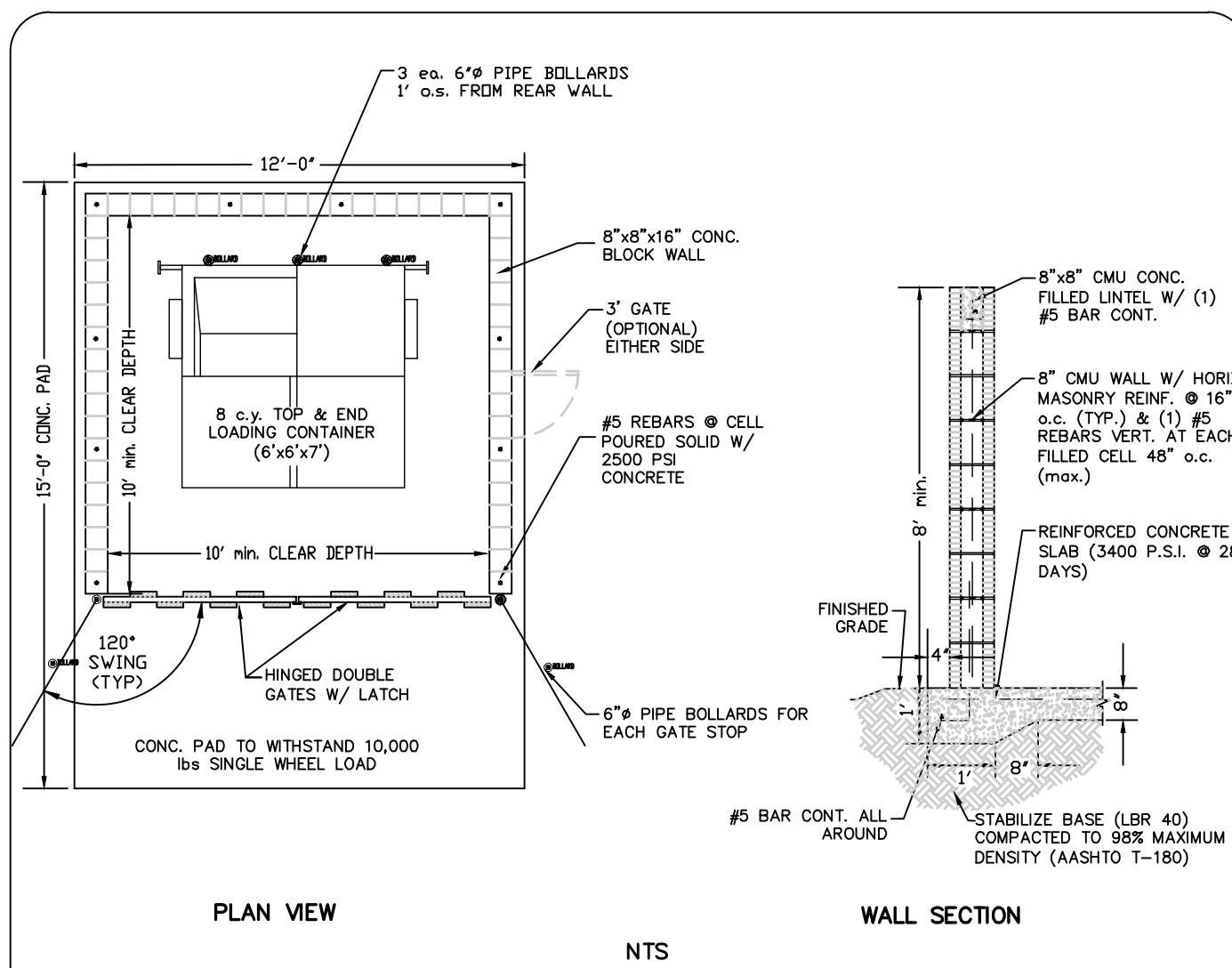
2010 FDOT Design Standards
**SOIL TRACKING PREVENTION DEVICE
TYPE A**

Last Revision
07/01/07
Sheet No.
1 of 1
Index No.
106



VALLEY GUTTER DETAIL
N.T.S.

- NOTES:**
1. VALLEY GUTTERS ARE REQUIRED WHEN STORMWATER CROSSES THE INTERSECTION OF ROADWAYS AND DRIVEWAY CONNECTIONS.
 2. VALLEY GUTTERS CAN BE USED ONLY WITH THE APPROVAL OF THE CITY'S ENGINEER.
 3. ALL MATERIALS ARE TO BE APPROVED BY THE CITY ENGINEER AND THE PROJECT'S LICENSED SOILS ENGINEER PRIOR TO PLACEMENT.
 4. COMPACTION, STABILITY & DENSITY TESTING ARE TO BE DONE IN ACCORDANCE WITH FDOT STANDARD PLANS FOR ROADWAY & BRIDGE CONSTRUCTION, LATEST EDITION.
 5. VALLEY GUTTER SHALL HAVE A STANDARD MINIMUM LONGITUDINAL SLOPE OF 0.30%.
 6. VALLEY GUTTER SHALL BE CONSTRUCTED OF CONCRETE 3500 P.S.I. # 28 DAY.
 7. EXPANSION JOINTS (TYPE A) SHALL BE PLACED AT CURB TRANSITIONS AND AT SIXTY FEET (60') INTERVALS.
 8. CONTROL JOINTS (TYPE B) SHALL BE PLACED AT TEN FEET (10') INTERVALS.
 9. REFER TO FDOT STANDARD PLANS, LATEST EDITION, FOR ADDITIONAL DESIGN REQUIREMENTS.



- NOTES:**
1. THE CONCRETE PAD BASE SHALL BE COMPACTED AND TESTED TO 98% WITH MINIMUM L.B.R. 40 BASED ON ASHTO T-180 MODIFIED PROCTOR TEST.
 2. EXTERIOR BLOCK WALL SHALL BE FINISHED WITH PAINT, STUCCO OR BRICK VENEER TO MATCH PROJECT SPECIFICATION OR ASSOCIATED BUILDING DESIGN.
 3. GATES SHALL BE CONSTRUCTED OF PVC PANELS, PLASTIC COATED CLF WITH SCREENING STRIPS, PRESSURE TREATED WOOD OR APPROVED EQUAL PANELS.
 4. BOLLARDS TO BE 6" STEEL PIPE, CONCRETE FILLED SET IN CONCRETE 3" BELOW FINISHED GRADE. BOLLARDS SHALL BE PAINTED OSHA YELLOW.

DUMPSTER ENCLOSURE DETAIL
N.T.S.

Sec. 26-32. - Dumpsters.
(a) Commercial garbage and trash shall be contained in a dumpster and shall be collected from an area designated by the user who shall provide that such area is accessible to the commercial collector's vehicle. Dumpsters shall be of sufficient size to accommodate the amount of garbage and trash generated by the user and all garbage and trash shall be deposited within the dumpster. All dumpsters placed within the town relating to the collection of garbage and every day trash shall be located, concealed, and maintained in conformance with the standards and criteria of this section. (b) It is the responsibility of the proposed user to identify the number, size, and type of all trash containers and enclosures, either known or generally estimated, on the site plans submitted to the town for building permits. (c) Dumpsters shall be placed within property lines and shall be located in a position convenient to pick up by front and rear loaders. (d) Enclosures shall shield all four sides of dumpsters except for dumpsters used while construction is in progress. The enclosures shall be in place, for any activity that requires the use of a dumpster, upon completion of new structures, or remodeling of existing structures, or upon request for a business tax receipt or upon renewal of a business tax receipt. Enclosures shall comply with the following standards: (1) All dumpsters shall be required to be shielded by solid wooden walls and solid gates. Stuccoed masonry or vinyl walls may be used, provided the vinyl is of a strength equal to or exceeding that of wood. (2) The height of the walls and gates shall be as follows: a. Up to six cubic yard containers: Six feet high. b. Up to eight cubic yard containers: Eight feet high. (3) The minimum inside dimensions of the enclosures shall be three feet wider than the width of the dumpster and two feet deeper than the depth. If the size of the dumpster is unknown, then the minimum size of a proposed enclosure shall be ten feet by ten feet (inside dimensions) with eight-foot-high walls. Upon written approval of the sanitation contractor, the depth can be adjusted. (4) The gates of the enclosure shall have no panel wider than six feet and shall be constructed of a material of sufficient strength to withstand normal daily use of trash disposal and pickup. Chain link gates with slats are not permitted. Gates shall have cone bolts to secure the gates in the open and closed positions. Cone bolts shall be mounted six inches from the edge of the door. (5) The base of the enclosure is to be concrete with a minimum of four inches in depth. (6) Gates should be closed at all times except during pickup. Employees of the sanitation contractor shall be responsible for opening and closing the gates to the enclosure. (7) The sanitation contractor will be responsible for any damage incurred to the enclosure, provided that the enclosure is otherwise in compliance with this code.



CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION

NO.	DATE	BY	SUBMITTALS/REVISIONS
1	11-04-21	HK/AMM	PER TOWN OF INDIALANTIC COMMENTS
2	11-04-21	HK/AMM	PER TOWN OF INDIALANTIC COMMENTS
3	11-04-21	HK/AMM	PER TOWN OF INDIALANTIC COMMENTS
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6	11-04-21	HK/AMM	PER TOWN OF INDIALANTIC COMMENTS
7	11-04-21	HK/AMM	PER TOWN OF INDIALANTIC COMMENTS

**SURF STYLE AT INDIALANTIC
FINAL ENGINEERING PLANS
CONSTRUCTION DETAILS**

PROJECT NO.: ZC 21043

DESIGNED BY: HK/AMM

DRAFTED BY: AMM/CMJL

CHECKED BY: HK

DRAWING FILE: 11-17-21043DET
XREFS: 21043-BAS.DWG
XREFS: 21043-SURV.DWG

HALIK KILIC, P.E., NO. 84244
NOT VALID WITHOUT SEAL

SHEET: **C15** OF **18**



NOTES:

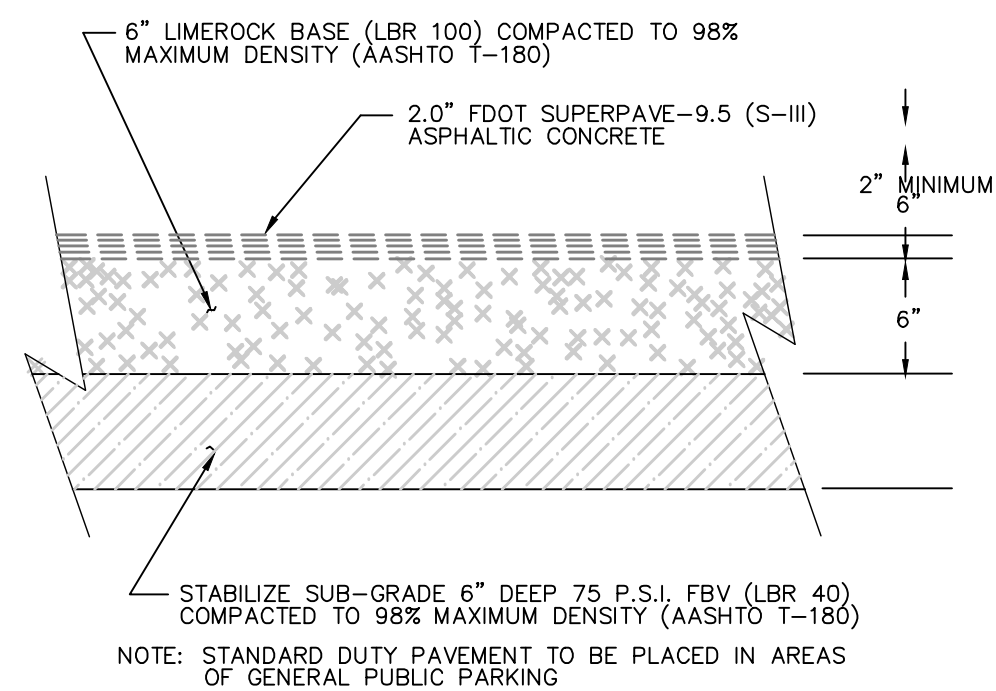
1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, J.U. 2011 UPDATE.

2. CONTRACTOR SHALL PROVIDE AND MAINTAIN SITE SPECIFIC EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES TO TREAT ALL STORMWATER DISCHARGES DURING CONSTRUCTION, DEPENDING UPON FLOW VELOCITIES AND VOLUME, ADDITIONAL MEASURES MAY BE REQUIRED.

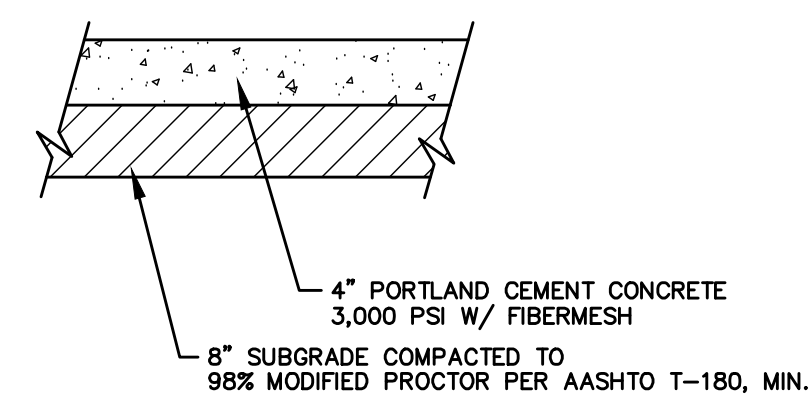
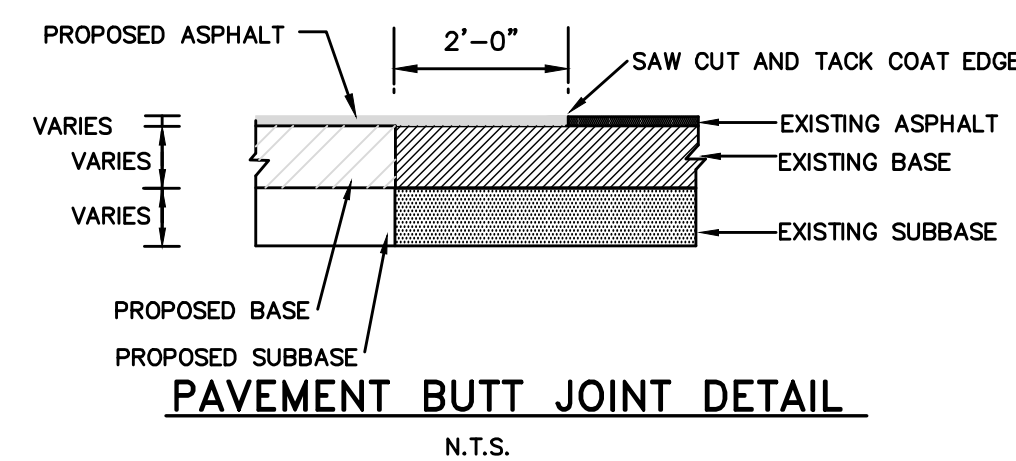
3. CONTRACTOR SHALL ROUGH GRADE STORMWATER SWALES AND RETENTION AREAS IN COMPLIANCE WITH BEST MANAGEMENT PRACTICES PRIOR TO CONSTRUCTION OF RETAINMENTS.

4. CONTRACTOR SHALL MEET ALL PERMIT CONDITIONS AS ESTABLISHED BY THE TOWN OF INDIANLANT AND ALL OTHER APPLICABLE AGENCIES, INCLUDING BUT NOT LIMITED TO COUNTY, FDOT, STATE, FEDERAL, AND THE SURVMD.

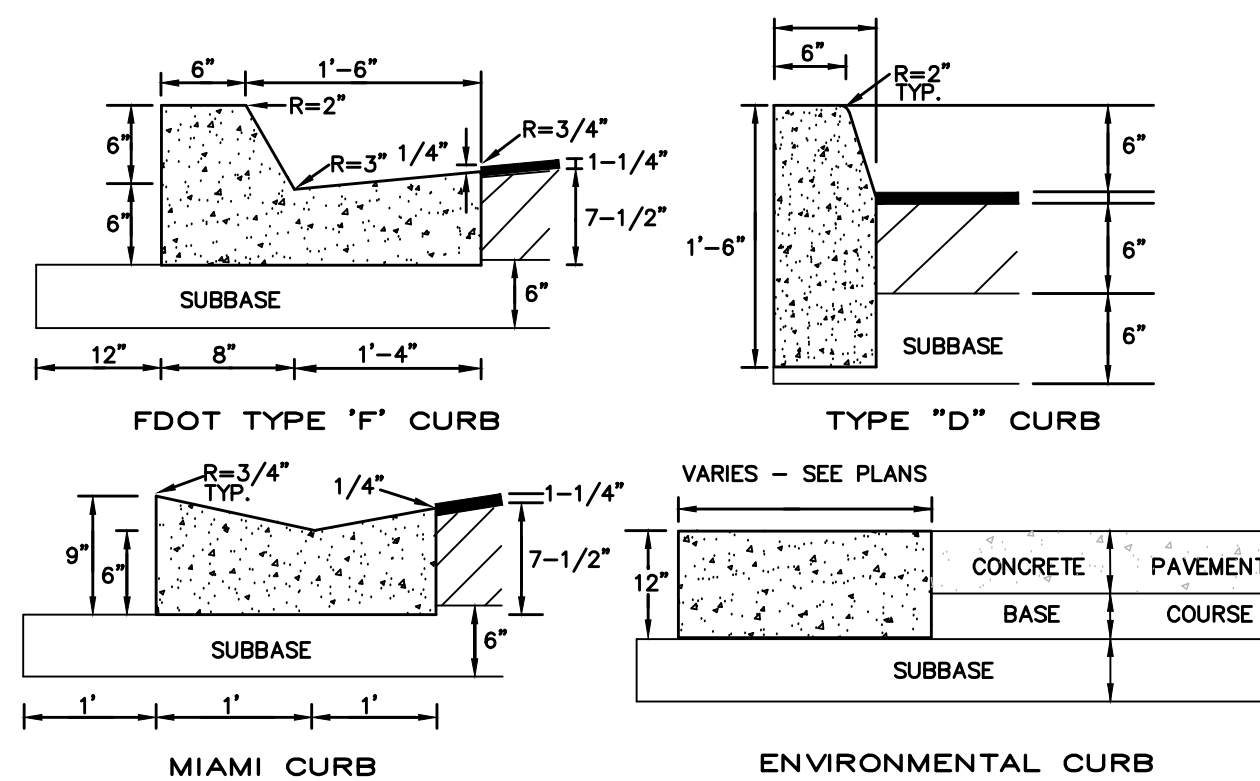
STAKED SILT FENCE DETAIL
N.T.S.



STANDARD PAVING SECTION DETAIL
NTS



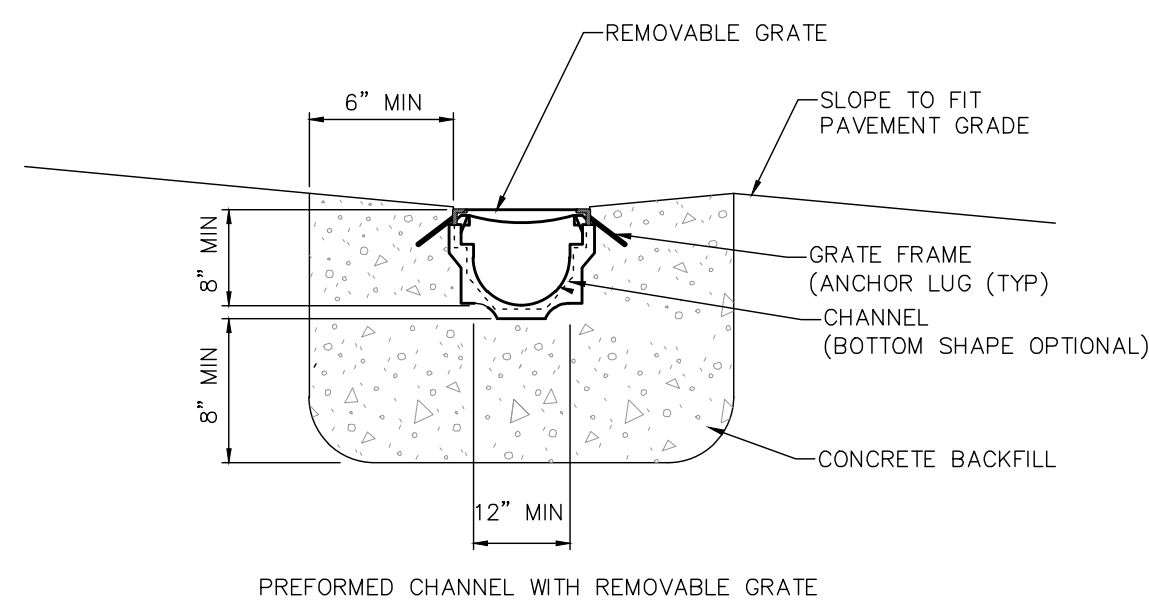
CONCRETE SIDEWALK SECTION
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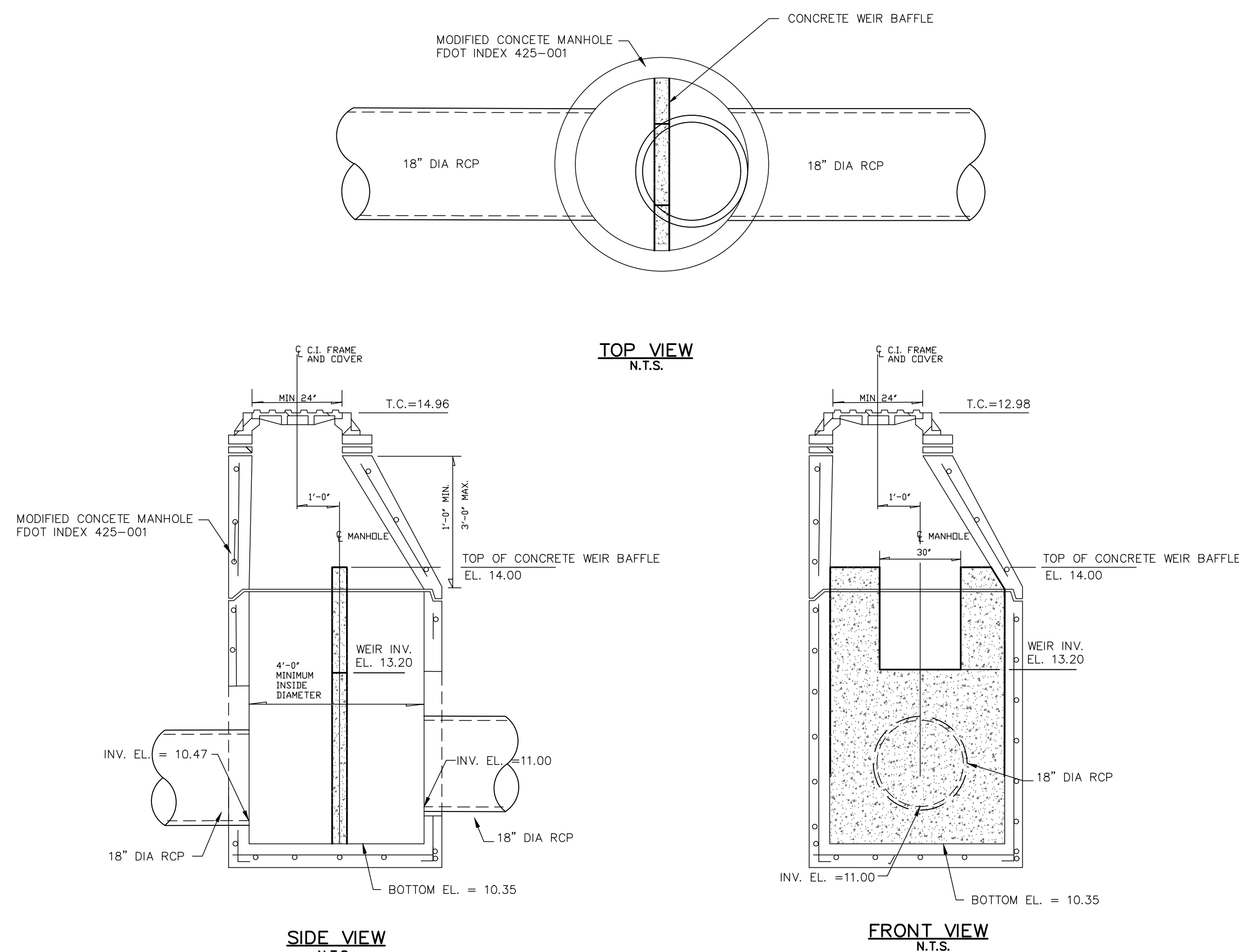
NOTES:

1. ALL CURBS TO BE CONSTRUCTED OF 28 DAY, 3000 P.S.I. CONCRETE
2. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED EVERY 500', CONSTRUCTION JOINT REQUIRED EVERY 10' MAXIMUM (4' MINIMUM).
3. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED AT EACH SIDE OF ALL STORM INLET STRUCTURES AND AT ALL RADIIUS POINTS.
4. 6" SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST AND SHALL BE STABILIZED TO A MINIMUM LL.B.R. 40.
5. EXPANSION JOINT MATERIAL MUST COVER THE ENTIRE CROSS SECTION OF CURB.
6. IN NO INSTANCE SHALL EXTRUDED CURBS (DEFINED AS HEADER-TYPE CURBS INSTALLED DIRECTLY ON TOP OF PAVEMENT) BE PERMITTED.
7. ALL ASPHALT AND/OR PAVE DRIVEWAY APRONS LOCATED IN PUBLIC RIGHTS-OF-WAY, SHALL INCLUDE CURBING.

ROADWAY CURB CONSTRUCTION DETAIL
N.T.S.



TRENCH DRAIN DETAIL
N.T.S.



DCS-1 STRUCTURE DETAIL
N.T.S.



CIVIL ENGINEERING

LANDSCAPE ARCHITECTURE

ENVIRONMENTAL

PLANNING

TRANSPORTATION

NO.	DATE	BY	SUBMITTALS & REVISIONS
1	10-12-21	HK/LJ	TOWN OF INDIANLANTIC, DEPT AND FOOT SUBMITTAL
2	10-21-21	HK/SJM	PER TOWN OF INDIANLANTIC COMMENTS
3	11-04-21	HK/SJM	PER TOWN OF INDIANLANTIC AND DEPT COMMENTS
4	11-08-22	HK	PER FOOT COMMENTS DATED 11-02-22
5	11-08-22	HK	SUBMITTALS DATED 11-02-22
6	11-30-22	HK	PER FOOT COMMENTS DATED 11-29-22
7	01-20-23	HK/SJM	PER TOWN OF INDIANLANTIC COMMENTS

SURF STYLE AT INDIALANTIC FINAL ENGINEERING PLANS CONSTRUCTION DETAILS

BREVARD COUNTY FLORIDA

CITY OF INDIANAPOLIS

PROJECT NO: ZC 21043
DESIGNED BY: HK/AMM
DRAFTED BY: AMM/CM/JL
CHECKED BY: HK
DRAWING FILE: 11-17-21043DET XREF'S: 21043-BAS.DWG XREF'S: 21043-SUPV.DWG

HALUK KILIC, P.E., NO.8424
NOT VALID WITHOUT SEAL

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PROJECT INFORMATION	
ENGINEERED	ERIC HENRY
PRODUCT MANAGER	407-615-1659 ERIC.HENRY@ADS-PIPE.COM
ADS SALES REP	ALLAN HASH 321-353-4881 ALLAN.HASH@ADS-PIPE.COM
PROJECT NO.	S261751



SURF STYLE AT INDIALANTIC

INDIALANTIC, FL

SC-740 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH SC-740.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPIDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM

- STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER TIERED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

PROPOSED LAYOUT

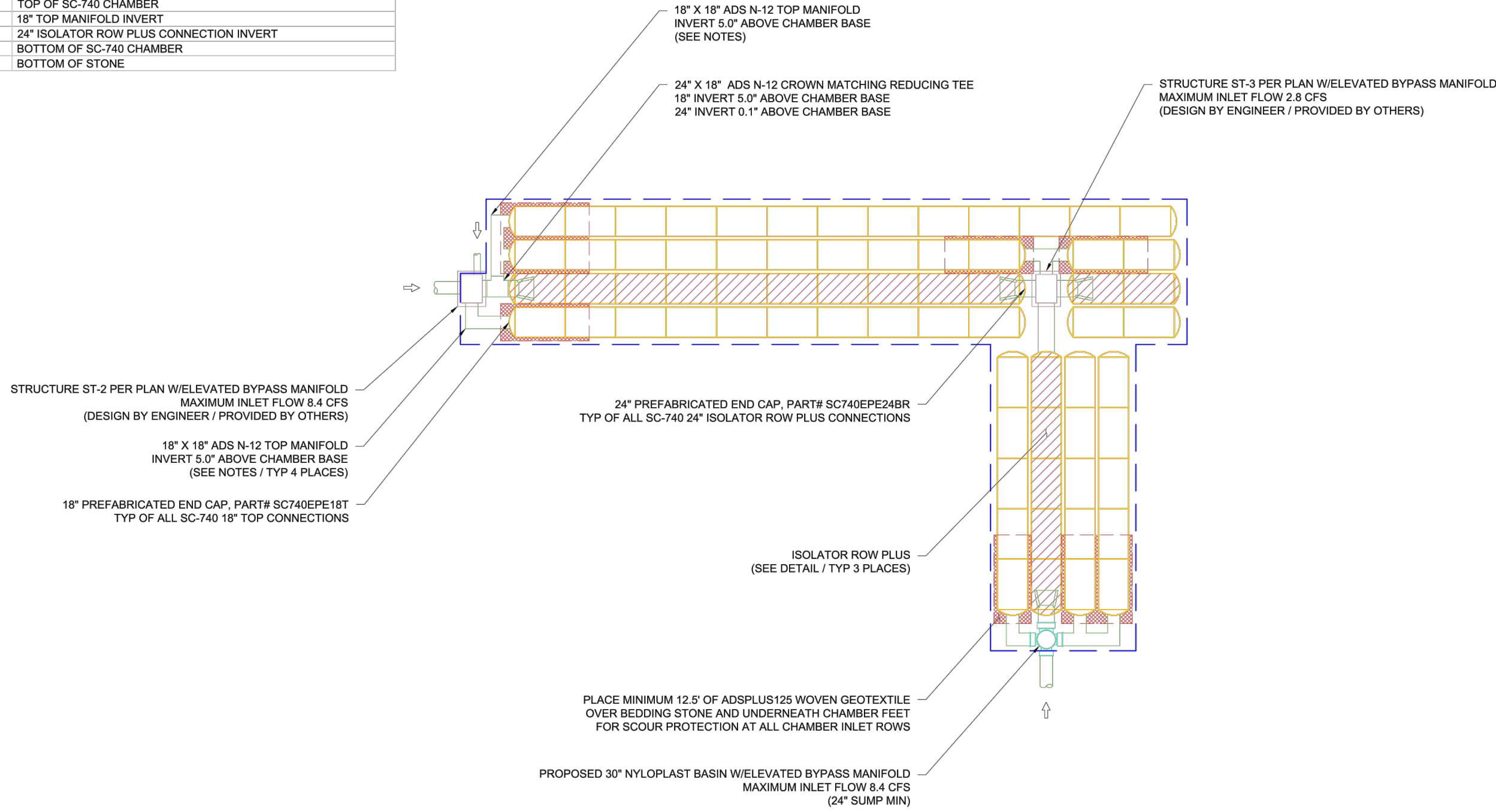
69	STORMTECH SC-740 CHAMBERS
22	STORMTECH SC-740 END CAPS
6	STONE ABOVE (in)
6	STONE BELOW (in)
40	% STONE VOID
2,949	SYSTEM AREA (ft ²)
332	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS

21.50	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
15.50	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
15.00	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
15.00	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
15.00	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
14.00	TOP OF STONE
13.50	TOP OF SC-740 CHAMBER
11.42	18" TOP MANIFOLD INVERT
11.01	24" ISOLATOR ROW PLUS CONNECTION INVERT
11.00	BOTTOM OF SC-740 CHAMBER
10.50	BOTTOM OF STONE

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.

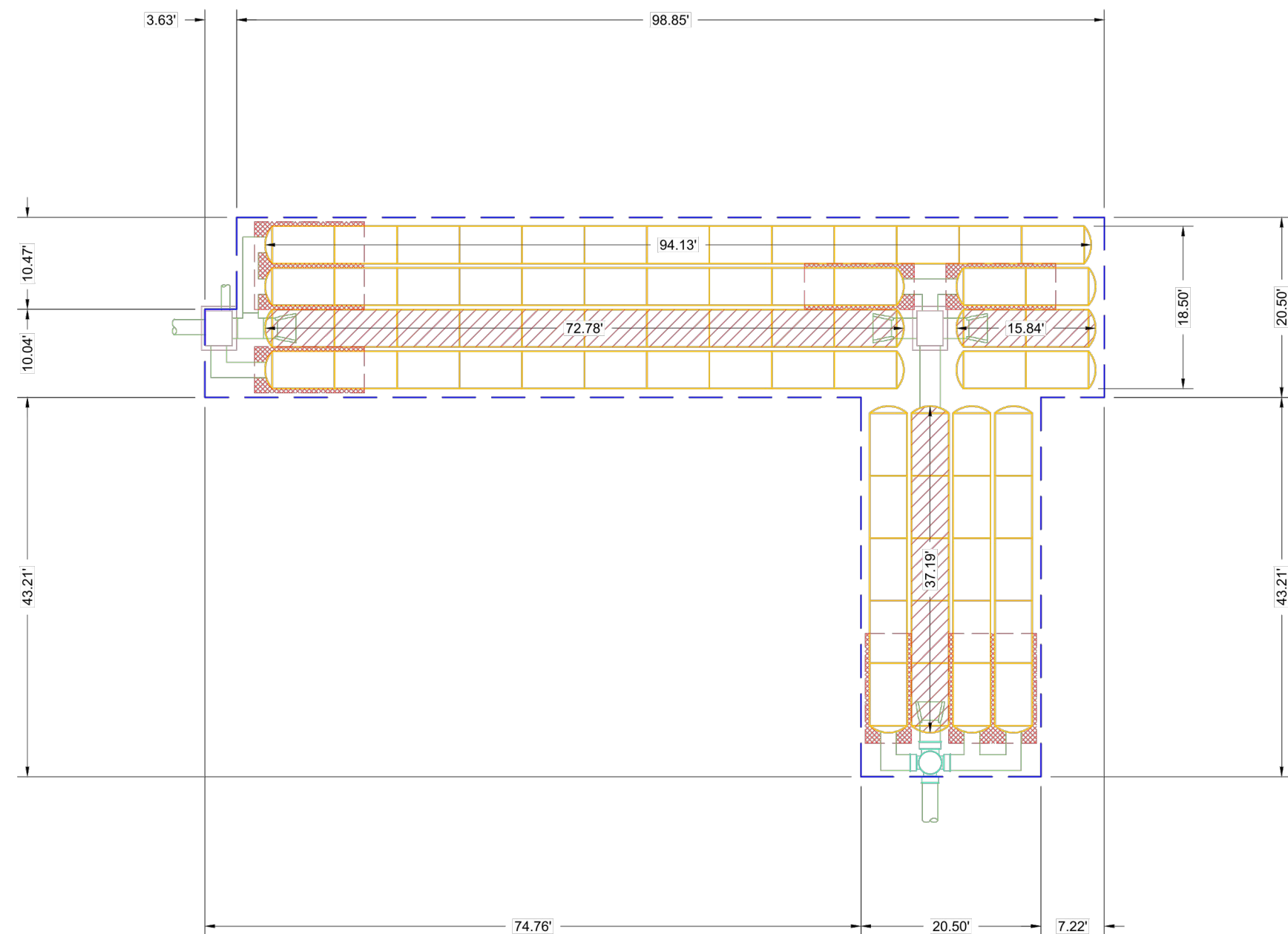


SURF STYLE		StormTech® Chamber System		ADS	
AT INDIALANTIC	INDIALANTIC, FL	4640 TRUEMAN BLVD HILLIARD, OH 43026	2	4640 TRUEMAN BLVD HILLIARD, OH 43026	6
DATE:	10/27/21	DATE:	10/27/21	DATE:	10/27/21
PROJECT #:	S261751	PROJECT #:	S261751	PROJECT #:	S261751
CHECKED:	JPR	CHECKED:	JPR	CHECKED:	JPR



CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-21-21	HK	PER TOWN OF INDIALANTIC AND FOOT COMMENTS
2	10-21-21	HK	PER TOWN OF INDIALANTIC AND FOOT COMMENTS
3	11-04-21	HK	PER TOWN OF INDIALANTIC AND FOOT COMMENTS
4	11-09-22	HK	PER FOOT COMMENTS DATED 11-02-22
5	11-21-22	HK	SUBMITTAL TO FOOT AND TOWN OF INDIALANTIC
6	11-30-22	HK	PER FOOT COMMENTS DATED 11-25-22
7	01-20-23	HK	PER TOWN OF INDIALANTIC COMMENTS

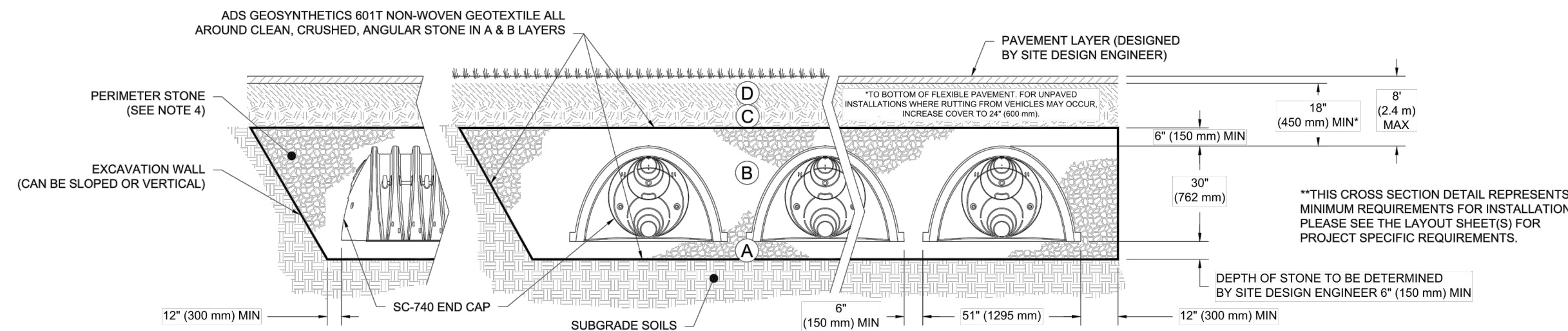


SURF STYLE		StormTech® Chamber System		ADS	
AT INDIALANTIC	INDIALANTIC, FL	4640 TRUEMAN BLVD HILLIARD, OH 43026	3	4640 TRUEMAN BLVD HILLIARD, OH 43026	6
DATE:	10/27/21	DATE:	10/27/21	DATE:	10/27/21
PROJECT #:	S261751	PROJECT #:	S261751	PROJECT #:	S261751
CHECKED:	JPR	CHECKED:	JPR	CHECKED:	JPR

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 5, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 98% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbf (89 kN).
B EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

SURF STYLE		StormTech® Chamber System		ADS	
AT INDIALANTIC	INDIALANTIC, FL	4640 TRUEMAN BLVD HILLIARD, OH 43026	4	4640 TRUEMAN BLVD HILLIARD, OH 43026	6
DATE:	10/27/21	DATE:	10/27/21	DATE:	10/27/21
PROJECT #:	S261751	PROJECT #:	S261751	PROJECT #:	S261751
CHECKED:	JPR	CHECKED:	JPR	CHECKED:	JPR

SURF STYLE AT INDIALANTIC

FINAL ENGINEERING PLANS

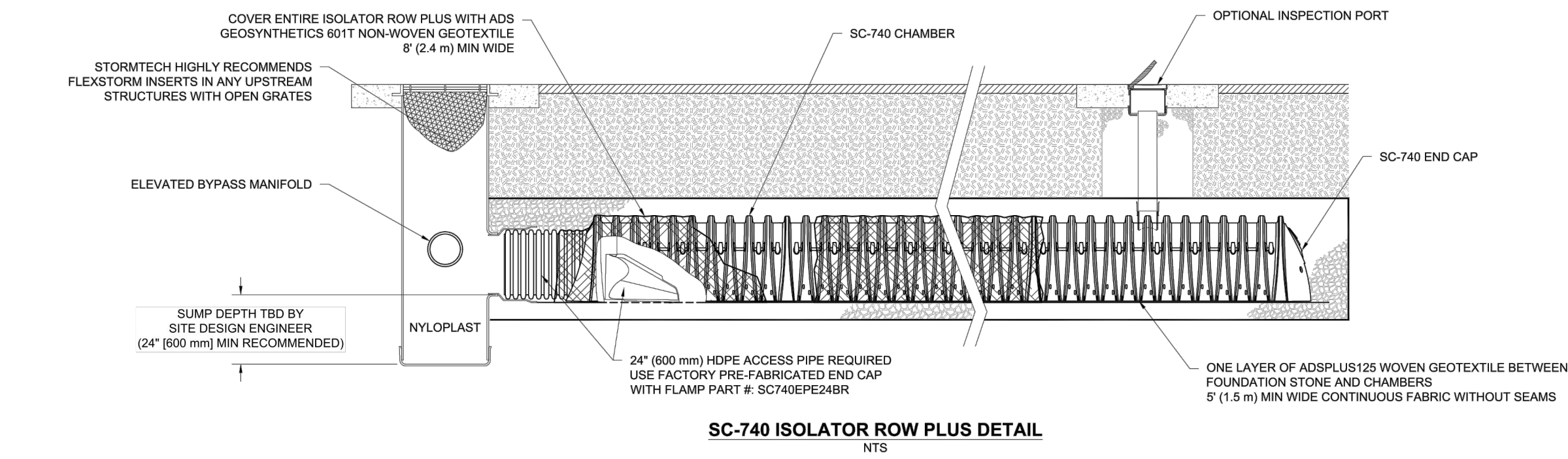
CONSTRUCTION DETAILS

PROJECT NO.: ZC 21043
DESIGNED BY: HK/AMM
DRAFTED BY: AMM/CMJ/L
CHECKED BY: HK

DRAWING FILE: 11-17-21043DET
XREF'S: 21043-BAS.DWG
XREF'S: 21043-SURV.DWG

HALIK KILIC, P.E., NO. 84244
NOT VALID WITHOUT SEAL

SHEET: C17 OF 18



STEP 1. INSPECT ISOLATOR ROW PLUS FOR SEDIMENT

- A. INSPECTION POINTS (IF PRESENT)
 - 1. REMOVE GREEN LID ON NYLOPLAST NULINE DRAIN
 - 2. REMOVE AND CLEAN FLEXFORM FILTER IF INSTALLED
 - 3. USING A FLASHLIGHT, INSPECT DOWNSTREAM FOR DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - 4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
- A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

ISOLATOR ROW PLUS NEWS

- 1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
- 2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
- 3. MIRRORS OR POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - i) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - ii) IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

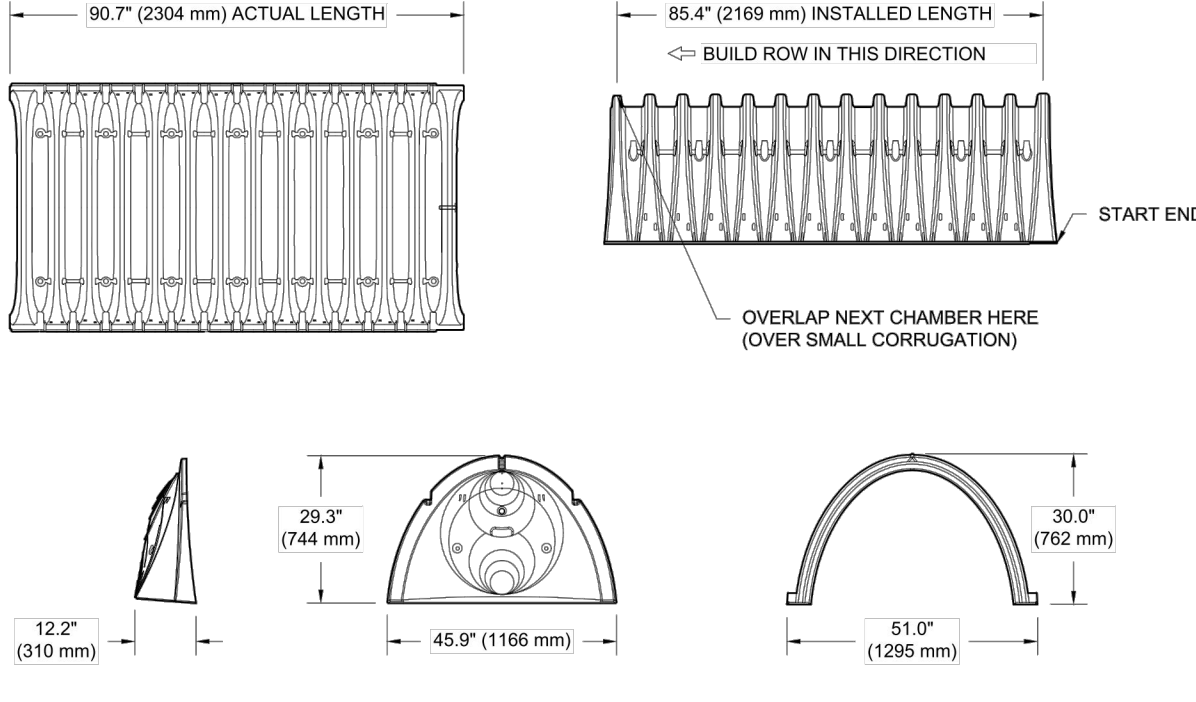
STEP 2.5. CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS

- A. FIXED CULTIVATED SPRAY NOZZLE WITH AN FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLOW WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3. REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4. INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTENCH SYSTEM.

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

[illegible]

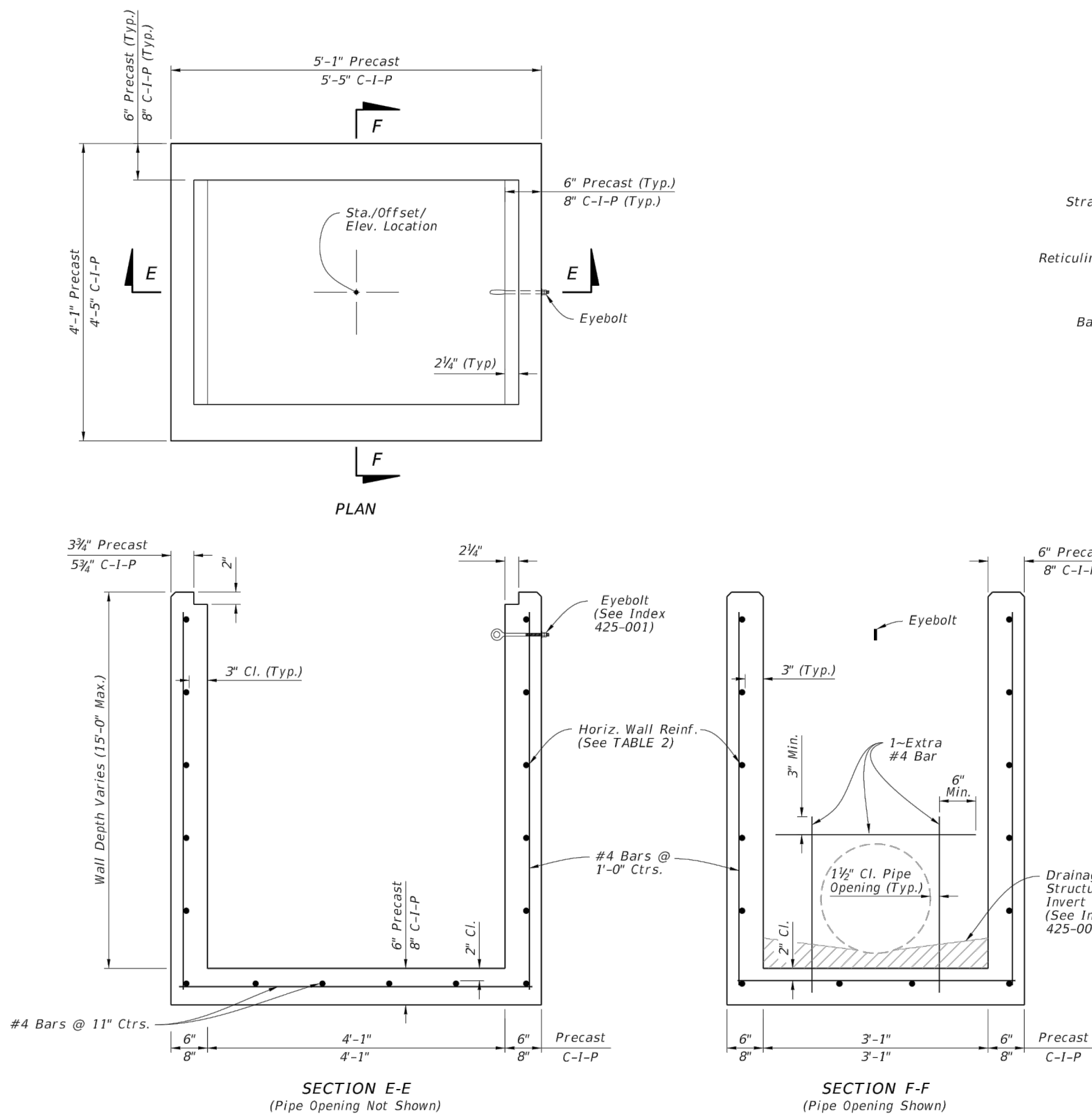
PART #	STUB	A	B	C
SC740E06P1 / SC740E06P1PC	6" (150 mm)	0.9" (227 mm)	18.5" (470 mm)	—
SC740E06P2 / SC740E06P2PC	6" (150 mm)	—	—	0.9" (13 mm)
SC740E08P1 / SC740E08P1PC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	—
SC740E08P2 / SC740E08P2PC	8" (200 mm)	—	—	0.8" (18 mm)
SC740E10P1 / SC740E10P1PC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	—
SC740E10P2 / SC740E10P2PC	10" (250 mm)	—	—	0.7" (18 mm)
SC740E12P1 / SC740E12P1PC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	—
SC740E12P2 / SC740E12P2PC	12" (300 mm)	—	—	1.2" (30 mm)
SC740E16P1 / SC740E16P1PC	16" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	—
SC740E16P2 / SC740E16P2PC	16" (375 mm)	—	—	1.3" (33 mm)
SC740E18P1 / SC740E18P1PC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	—
SC740E24P1 / SC740E24P1PC	24" (600 mm)	18.5" (470 mm)	—	0.7" (41 mm)
SC740E24P2 / SC740E24P2PC	24" (600 mm)	18.5" (470 mm)	—	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EP24B/SC740EP24BR ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

FOR THE SC740EP24B/SC740EP24BR THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

A	PART #	GRATE/SOLID COVER OPTIONS		
8" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
15" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
18" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
24" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
30" (750 mm)	2830AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20

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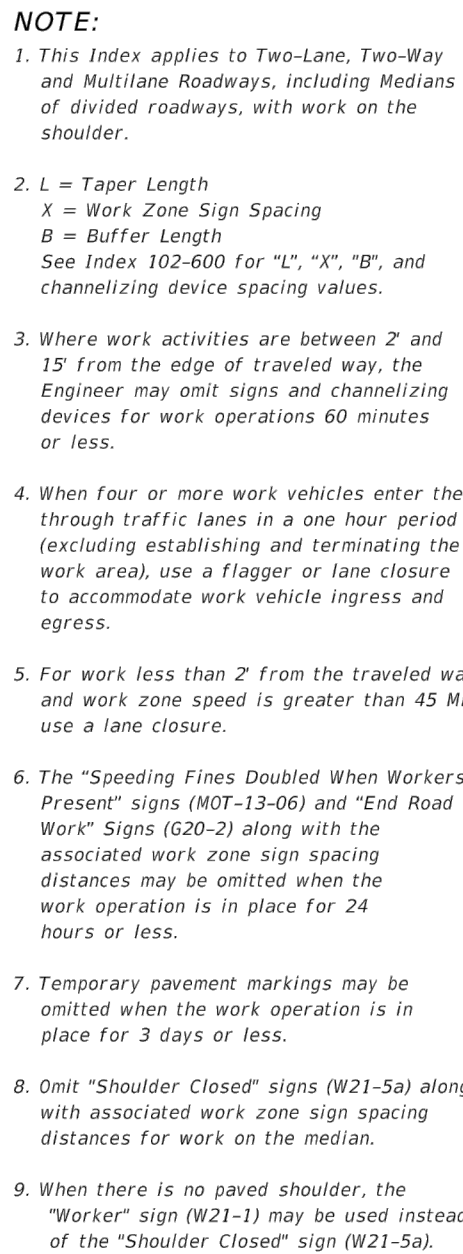
WALL DEPTH	SCHEDULE	AREA (in. ² /ft.)	MAX. SPACING	
			BARS	WWR
0' - 6'	A12	0.20	12"	8"
6' - 10'	A6	0.20	6"	5"
10' - 13'	A4	0.20	4"	3"
10' - 15'	B5.5	0.24	5½"	5"

NOTES:

1. *Grate, Concrete Apron, and Sod not shown on structure details.*
2. *See Sheet 8, 9, and 10 for Concrete Apron and Sodded Area details.*

TYPE D - DIMENSIONAL, REINFORCING, AND STEEL GRATE DETAILS

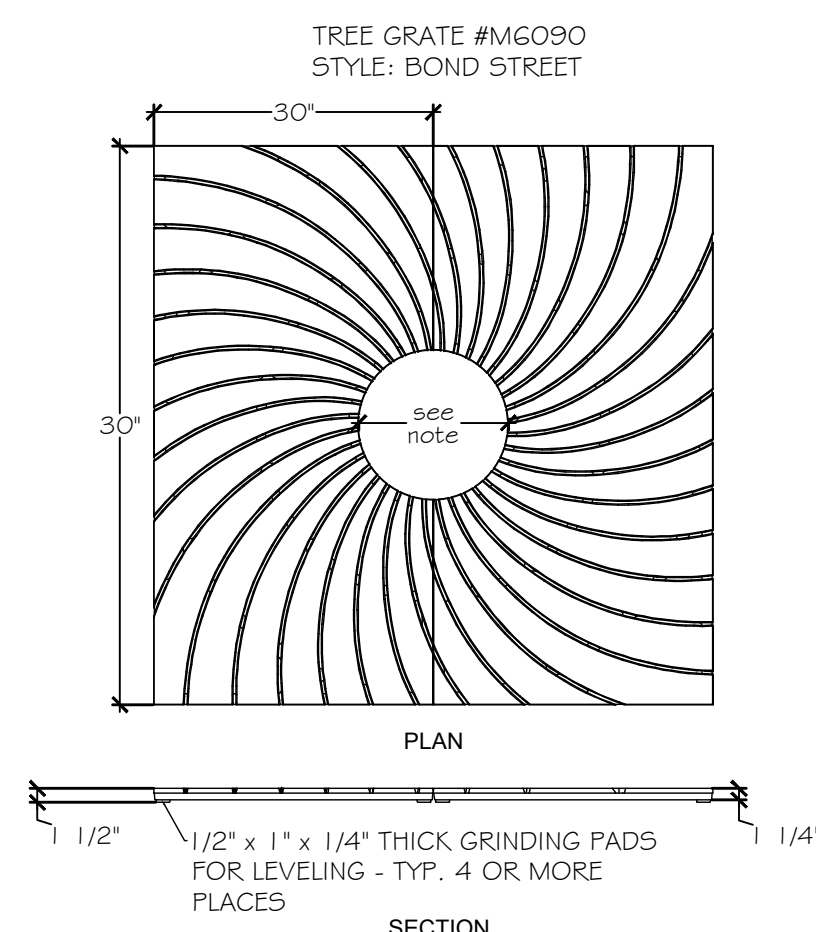
LAST REVISION 11/01/20	DESCRIPTION:	 FY 2022-23 STANDARD PLANS	DITCH BOTTOM INLET TYPE C, D, E, AND H	INDEX	SHEET
				425-052	3 of 14



 Work Area
 Channelizing Device (See Index 102-600)
 Work Zone Sign
 Lane Identification and Direction of Traffic

LAST REVISION 11/01/21	DESCRIPTION:	 FY 2022-23 STANDARD PLANS	TWO-LANE AND MULTILANE, WORK ON SHOULDER	INDEX 102-602	SHEET 1 of 2
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CONTRACTOR TO FIELD VERIFY THE
EXISTING UTILITY LINE HEIGHT
AROUND THE PERIMETER OF THE
PROPERTY & COORDINATE WITH THE
LANDSCAPE ARCHITECT TO CONFIRM
THAT IT DOES NOT CONFLICT WITH
THE PROPOSED LANDSAPING



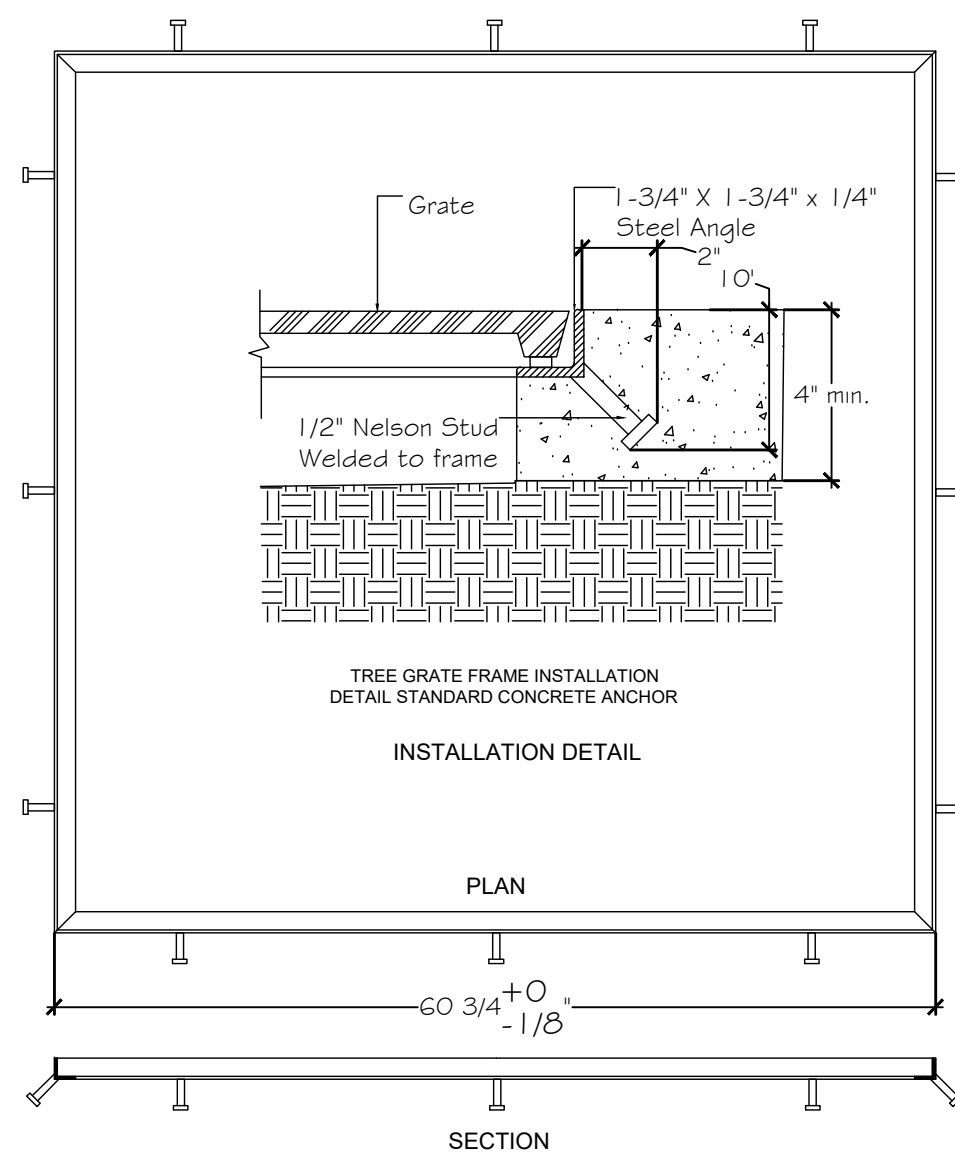
NOTES:
Slot width is 1/4" Maximum, Meets ADA Compliance.
Grate cast from gray iron or aluminum
Tree opening size: 16"
Steel angle frame required
For installation use model #MG000F (see detail 2, this sheet)
Outer frame dimension: 3/4" ± 1/8" greater than grate.

This drawing embodies a confidential proprietary design of IRONSMITH, INC., Palm Desert, Ca. All design, manufacturing, reproduction, use, sale, and other rights regarding the same are expressly reserved. This drawing is submitted under confidential relationship for a specific purpose and the recipient agrees by accepting this drawing not to supply or disclose any information regarding it to any unauthorized person or to incorporate any special feature peculiar to this design in other projects. The information in this drawing may be covered completely or in part by patents pending.

6090 BOND STREET TREE GRATE 60" x 60" Tree grate in two sections. 1/2" Maximum slot opening for pedestrian safety and A.D.A. Compliance. Cast from 100% recycled Aluminum for pedestrian loads only. Tree opening: 16" Grates can be ordered with or later expanded to these openings. * Specify when ordering. Finish: Black dip # Powder coat Use frame model: 6000F Weight: Aluminum = 185 lbs/lbs Kg	IRONSMITH 41-701 Corporate Way #3 Palm Desert, CA 92260 800.338.4766
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1 TREE GRATE DETAIL

SCALE: N.T.S.



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M6000F
SQUARE TREE GRATE
FRAME

FOR USE IN NEW CONCRETE

Frame Jig Welded from 1-3/4" x 1-3/4" x 1/4" steel angle per ASTM A36

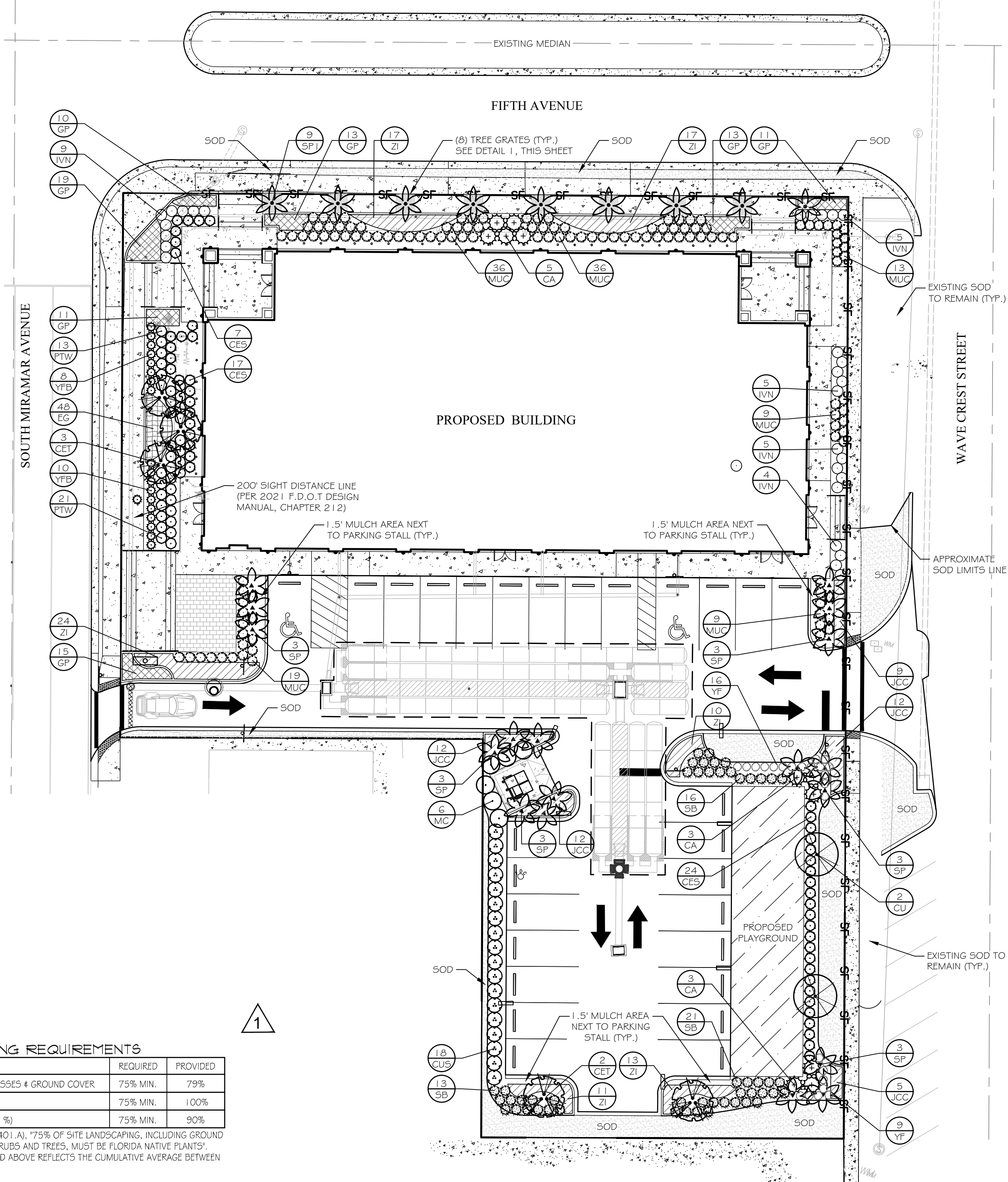
1/2" x 2" nelson anchors shop welded to frame

Frames to be hot dipped galvanized to match tree grates

Other installation configurations available

IRONSMITH
41-701 Corporate Way #3
Palm Desert, CA 92260

SCALE: N.T.S.



2 TREE GRATE FRAME DETAIL

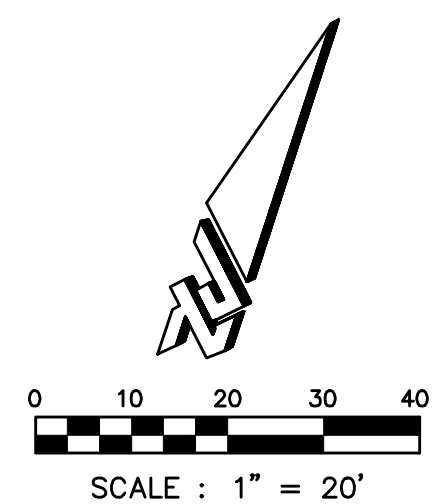
SCALE: N.T.S.

NATIVE PLANTING REQUIREMENTS

CATEGORY	REQUIRED	PROVIDED
TREES, PALMS, SHRUBS, GRASSES & GROUND COVER	75% MIN.	79%
SOD	75% MIN.	100%
TOTAL: (COLLECTIVE AVERAGE %)	75% MIN.	90%

PER I.D.C (ART.VII, SEC. 113-401.A), "75% OF SITE LANDSCAPING, INCLUDING GROUND COVER, GRASSES, VINES, SHRUBS AND TREES, MUST BE FLORIDA NATIVE PLANTS". THE TOTAL PERCENTAGE LISTED ABOVE REFLECTS THE CUMULATIVE AVERAGE BETWEEN THE TWO CATEGORIES.

PLANT SCHEDULE									
NATIVE	TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS		
• • • •	CU	2	COCOLOBIA UVIFERA	SEA GRAPE	2" CAL., 8' HT., MIN.	CONTAINER	M.T. TREE FORM		
	CET	5	CONOCARPUS ERECTUS SERICEUS	SILVER BUTTONWOOD - TREE FORM	8' - 10' H.T., O.A		M.T., 2' C.T. PRUNED		
	MC	6	MYRICA CERIFERA	WAX MYRTLE	5'-6" O.A.		TO GROUND		
• • •	PALM TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS		
	SP1	9	SABAL PALMETTO	CABBAGE PALMETTO	10" C.T. MATCHED	CONTAINER	REMOVE BOOTS 6'		
	SP	18	SABAL PALMETTO	CABBAGE PALMETTO	VARY C.T. HT. 8'-16'		REMOVE BOOTS 6'		
• • • • • • • •	SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	REMARKS	
	CUS	18	COCOLOBIA UVIFERA	SEA GRAPE	24" HT. X 24" SP.	7 GAL.	48" o.c.		
	CES	48	CONOCARPUS ERECTUS SERICEUS	SILVER BUTTONWOOD	30" HT. X 30" SP.	3 GAL.	36" o.c.		
	CA	11	CRINUM ASIATICUM	SPIDER LILY	36" -48" O.A	10 GAL.	60" o.c.		
	DN	29	ILEX NORTONIA 'NANA'	DWARF YALPOON HOLLY	15" HT. X 15" SP.	3 GAL.	36" o.c.		
	PW	34	PITTOSPORUM TOBIRA 'WHEELER'S DWARF'	DWARF PITTOSPORUM	18-24" HT. X 18-24" SP.	7 GAL.	36" o.c.		
	YF	25	YUCCA FILAMENTOSA	ADAM'S NEEDLE	8-10" HT. X 8-10" SP.	3 GAL.	30" o.c.		
	YFB	19	YUCCA FILAMENTOSA 'BRIGHT EDGE'	BRIGHT EDGE ADAM'S NEEDLE	8-10" HT. X 8-10" SP.	3 GAL.	30" o.c.		
• • •	GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	REMARKS	
	MB	122	MULLENBERGIA CAPILLARIS	MULTLY GRASS	12" HT. X 12" SP.	3 GAL.	36" o.c.		
	SB	50	SFARTINA BAKERI	SAND CORD GRASS	18" HT. X 18" SP.	3 GAL.	36" o.c.	FULL	
• • • • •	GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	REMARKS	
	PG	48	EVOLVULIS GLOMERATUS 'BLUE DAZE'	BRAZILIAN DWARF MORNING GLORY	8-10" HT. X 8-10" SP.	1 GAL.	18" o.c.		
	EC	91	GAILLARDIA PULCHELLA	BLANKETFLOWER	10" HT. X 10" SP.	1 GAL.	24" o.c.		
	JCC	50	JUNIFERUS CONFERTA 'COMPACTA'	SHORE JUNIPER	12"HT. X12"SP.	1 GAL.	30" o.c.	FULL	
	ZI	92	ZAMIA INTEGRIFOLIA	COONTIE	15" HT. X 15" SP.	3 GAL.	30" o.c.		
• •	SOD	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	REMARKS	
	PVA	2,849 SF	PASPALUM VAGINATUM 'ALOHA'	SEASHORE PASPALUM	---	---	---		



CIVIL ENGINEERING

LANDSCAPE ARCHITECTURE

ENVIRONMENTAL

PLANNING

TRANSPORTATION

NO	DATE	BY	SUBMITTALS / REVISIONS
1	10-15-22	HWSN	TOWN OF INDIAN LAKE PDOT AND PDOT SUBMITTAL
2	11-03-22	HWSN	PER TOWN OF INDIAN LAKE PDOT COMMENTS
3	11-04-22	HWSN	PER TOWN OF INDIAN LAKE AND PDOT COMMENTS
4	11-08-22	HK	PER PDOT COMMENTS DATED 11-02-22
5	11-21-22	HK	SUBMITTAL TO PDOT AND TOWN OF INDIAN LAKE
6	11-30-22	HK	PER PDOT COMMENTS DATED 11-29-22
7	01-20-23	HWSN	PER TOWN OF INDIAN LAKE COMMENTS

SURF STYLE AT INDIANLANTIC FINAL ENGINEERING PLANS LANDSCAPE PLAN & DETAILS

BREVARD COUNTY, FLORIDA

CITY OF INDIANATLANTIC

PROJECT NO: ZC 21043

DESIGNED BY: SMG

DRAFTED BY: SMG

CHECKED BY: JES

DRAWING FILE: 21043 LA
XREF'S: 21043-BAS.DWG
XREF'S: 21043-SURV.DWG

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1. *Journal of Management Studies*, 1996, 33, 1, 1-14.

10. *Journal of the American Medical Association*, 2000; 284: 1039-1044.

10. *Journal of the American Medical Association*, 2000; 284: 1039-1044.

1. *Journal of Management Studies*, 1996, 33, 1, 1-14.

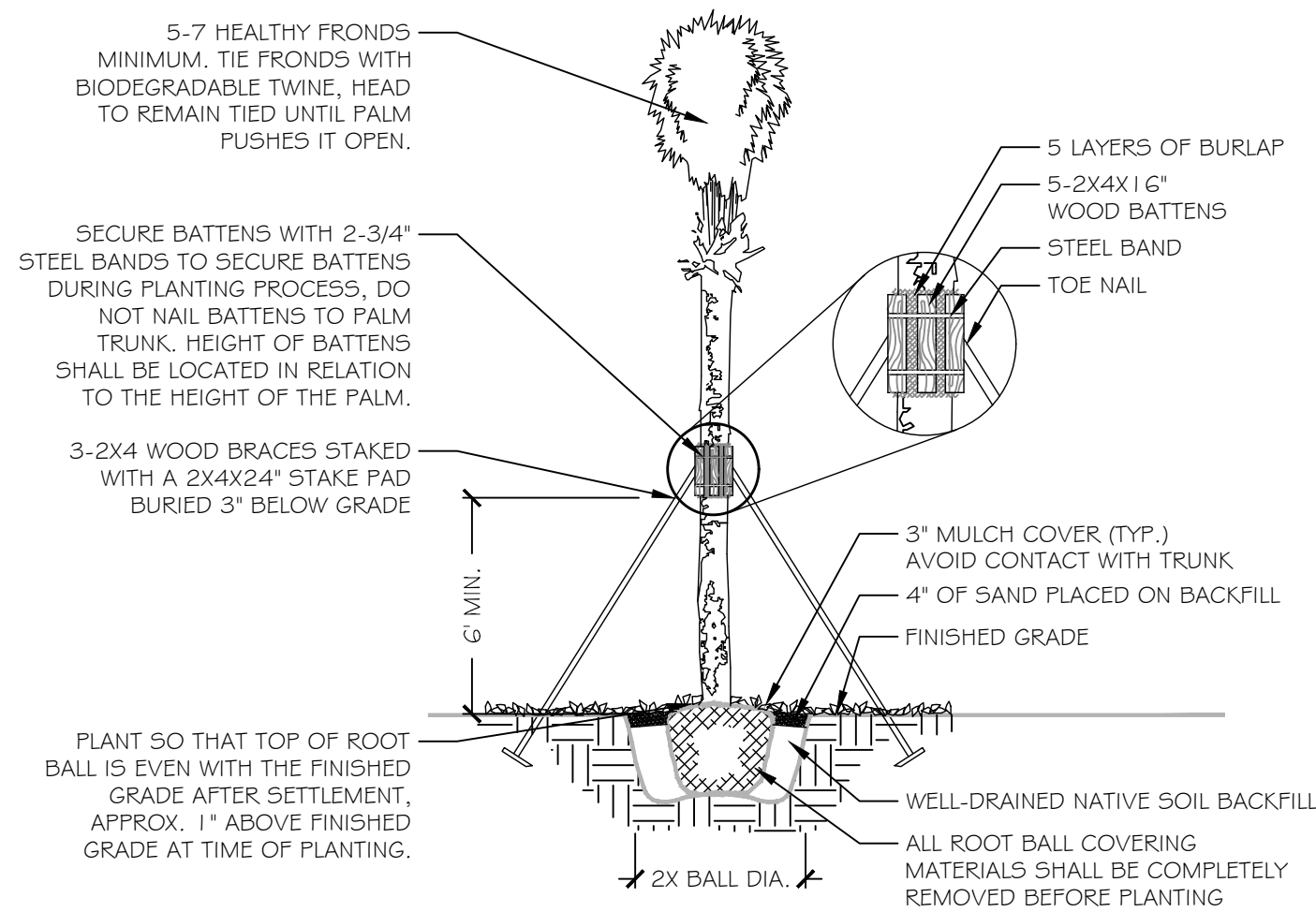
10. *Journal of the American Medical Association*, 2000; 284: 1039-1044.

1. *Journal of Management Studies*, 1996, 33, 1, 1-14.

JAKE STEHR, RLA
NOT VALID WITHOUT

SHEET: LA1 OF 2

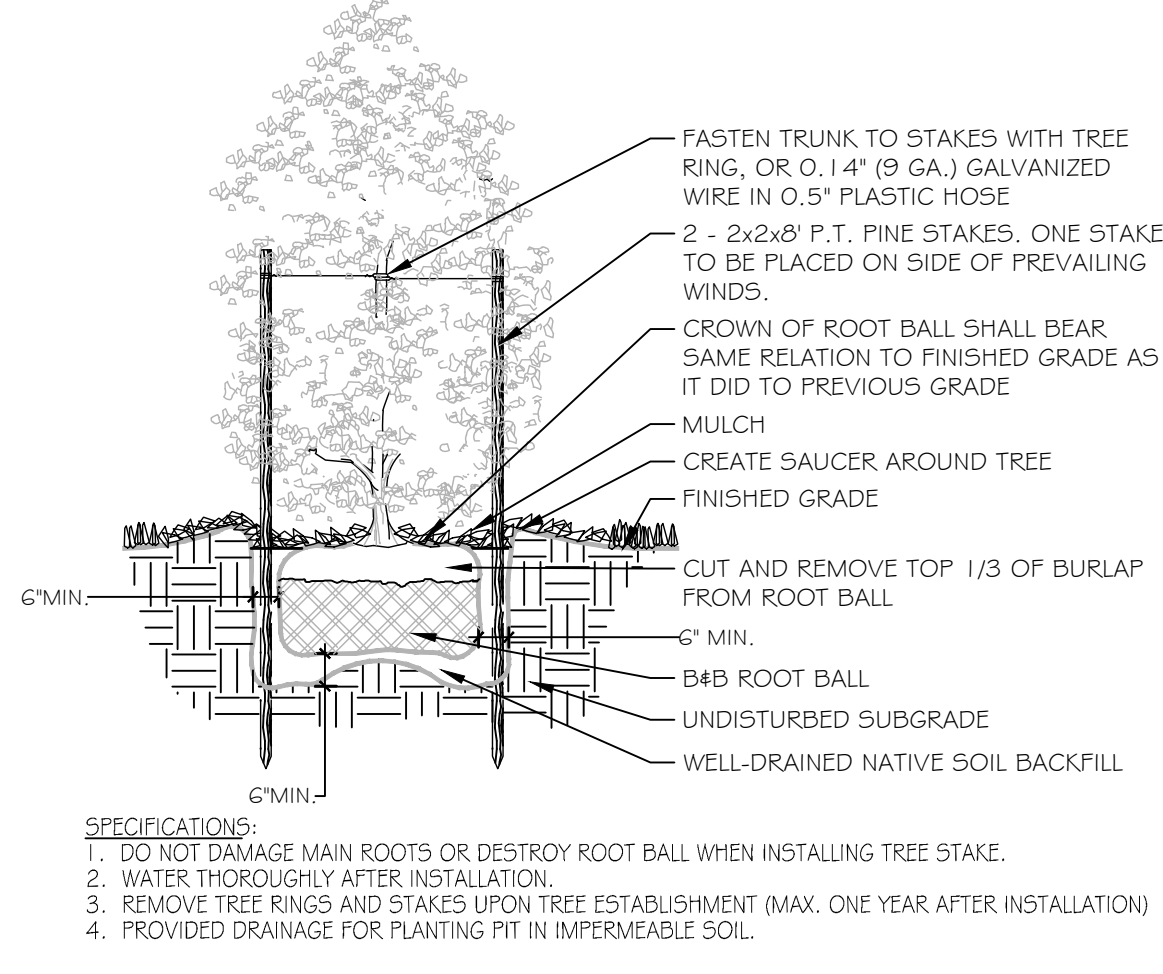
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1 PALM PLANTING DETAIL

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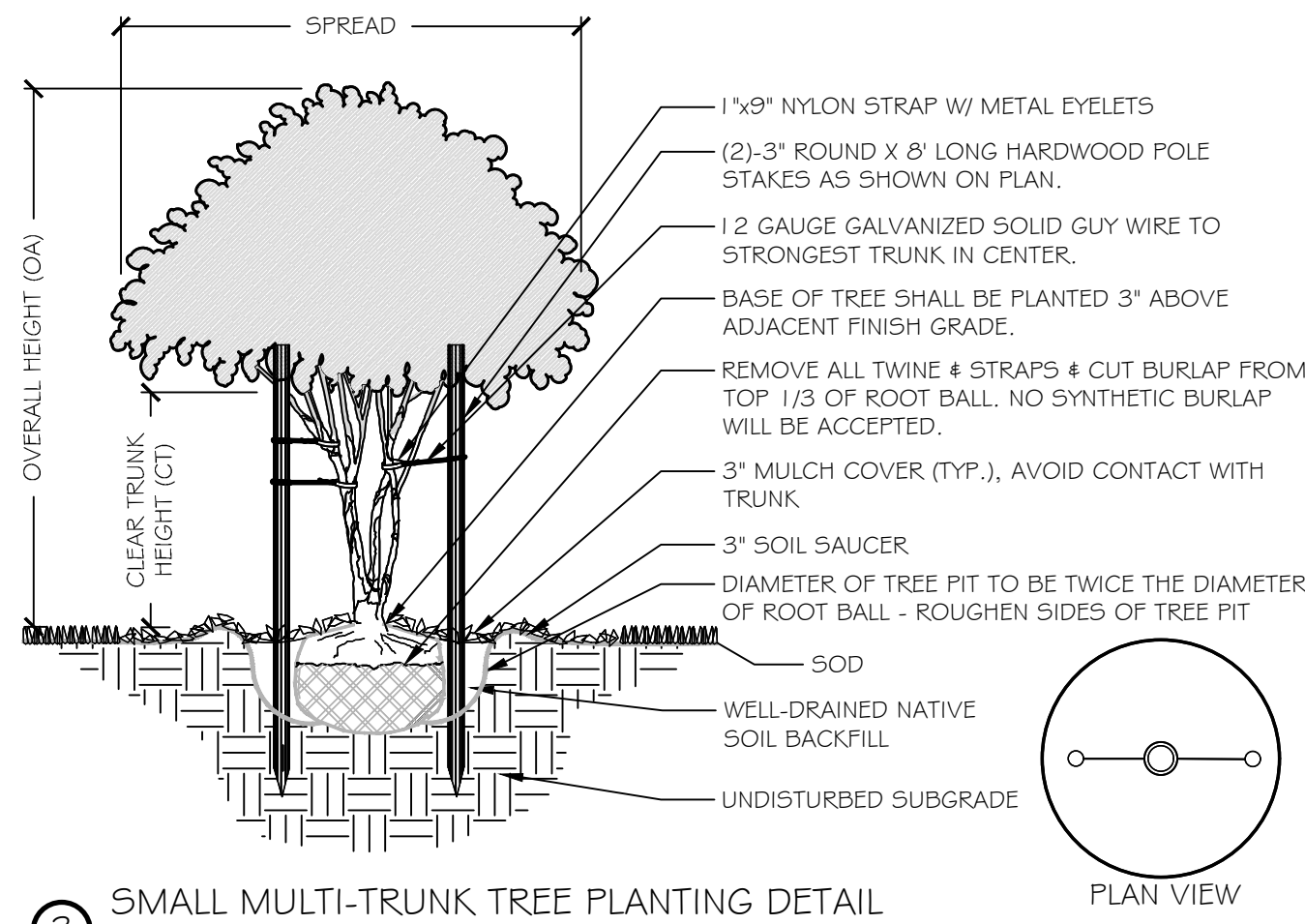
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2 FULL TO GROUND TREE PLANTING DETAIL

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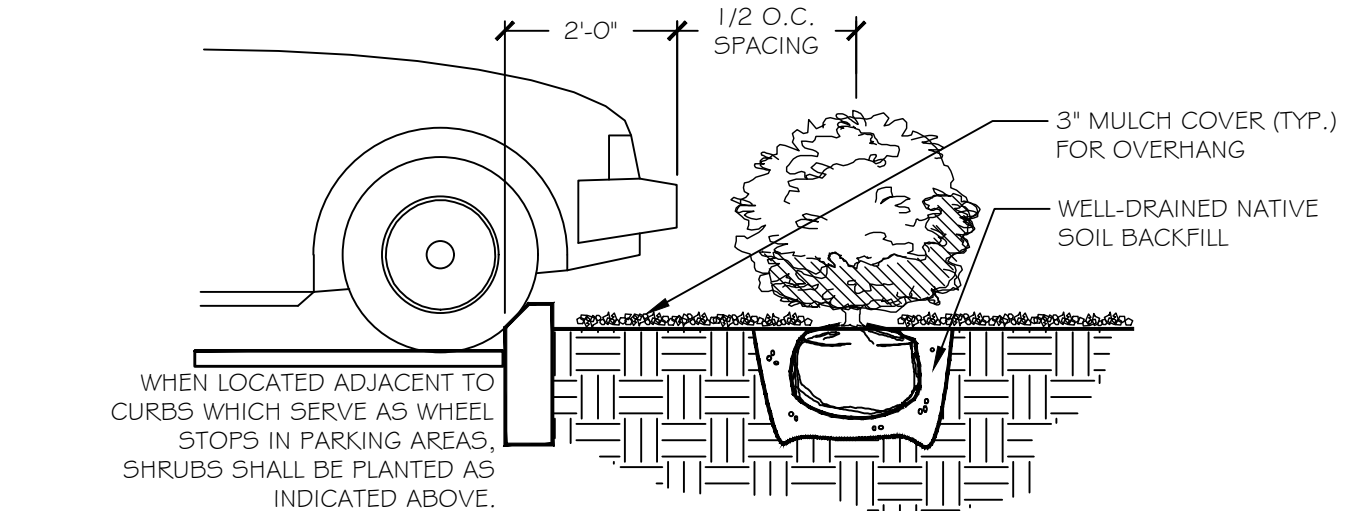
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3 SMALL MULTI-TRUNK TREE PLANTING DETAIL

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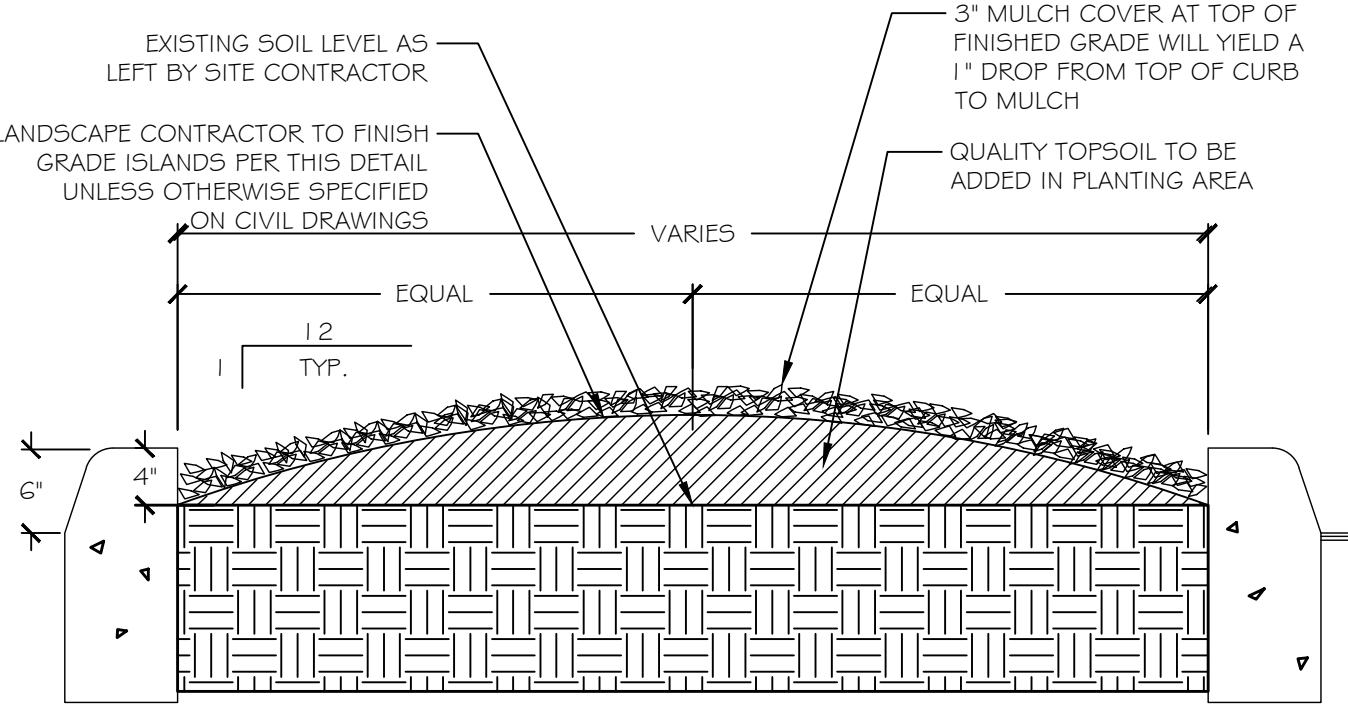
P-LA-TRE1-04



4 HEDGE PLANTING ADJACENT TO PARKING

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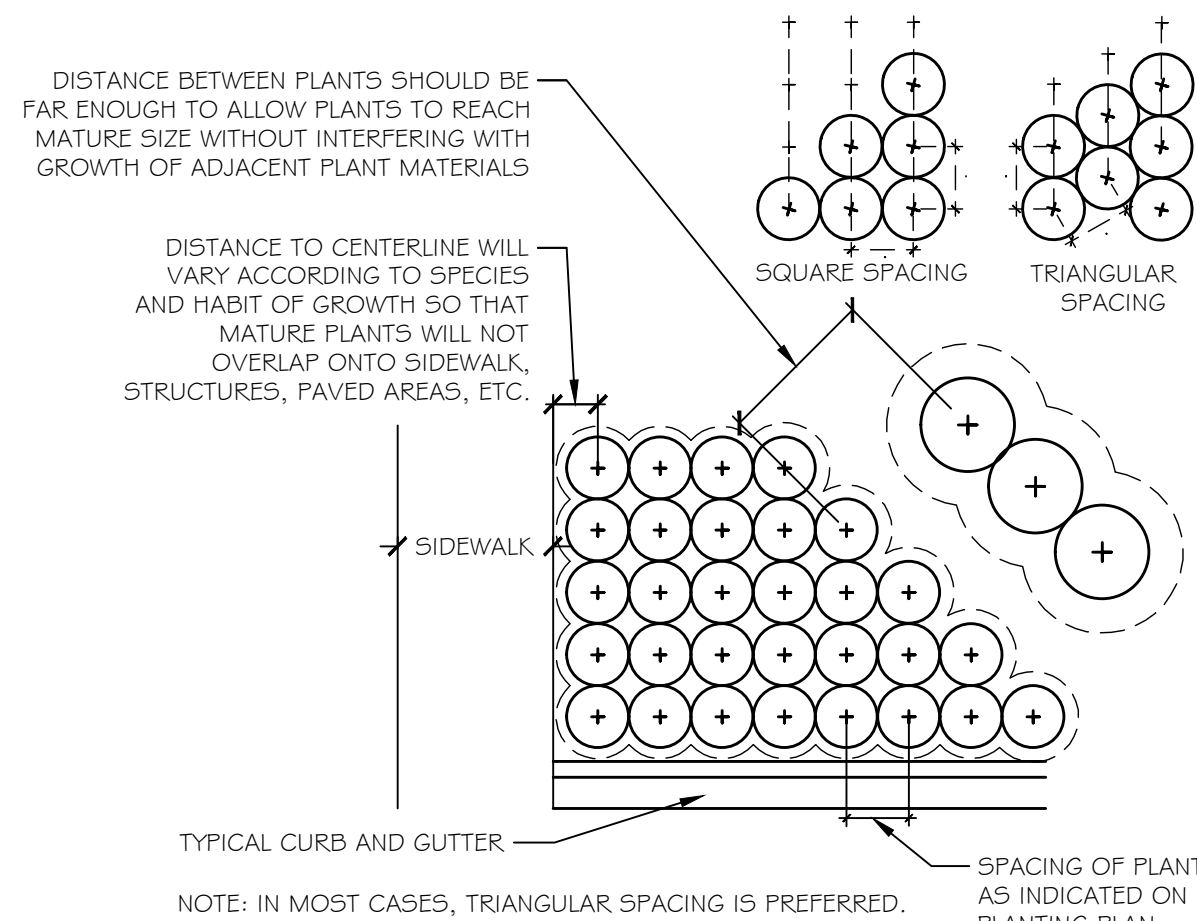
P-LA-SHR-HEDG-01



5 INTERIOR CURB ISLAND GRADING DETAIL

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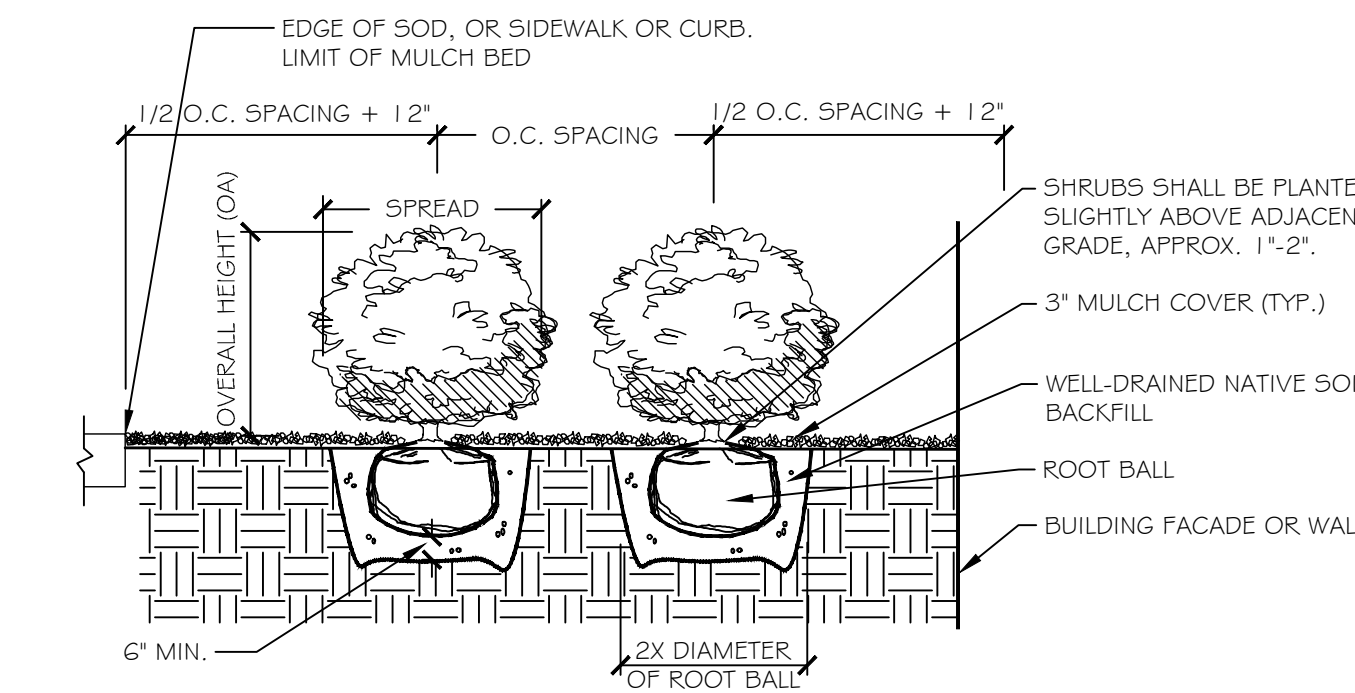
P-LA-SHR-INTE-01



6 PLANT SPACING DETAIL

N.T.S.

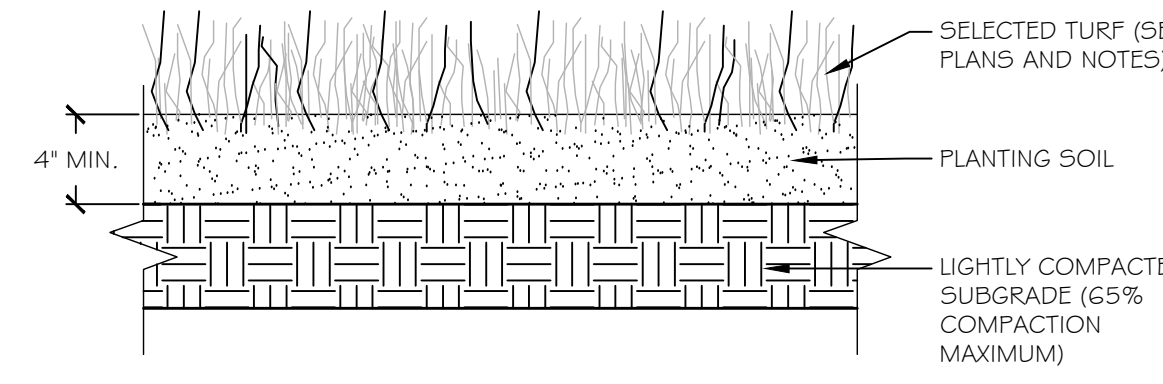
P-LA-SHR-PLAN-01



7 SHRUB PLANTING DETAIL

N.T.S.

P-LA-SHR-SHRU-02



8 TURF PLANTING DETAIL

N.T.S.

P-LA-SOD-01

LANDSCAPE SPECIFICATIONS

- FLORIDA #1:** ALL PLANT MATERIAL SHALL BE GRADE FLORIDA NO. 1 OR BETTER IN QUALITY AS DESIGNATED IN THE MOST RECENT PUBLICATION OF "GRADES AND STANDARDS FOR NURSERY PLANTS", PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.
- EXISTING PLANTS:** IF EXISTING LANDSCAPING INTERFERES WITH PROPOSED PLANTINGS SHOWN ON PLAN, THE EXISTING LANDSCAPING IS TO BE REMOVED IN FAVOR OF THE NEW PLANTINGS, UNLESS OTHERWISE INDICATED. IF THE EXISTING VEGETATION IS INTENDED TO REMAIN, THE PROPOSED LANDSCAPING SHALL BE LOCATED AS CLOSE AS POSSIBLE TO ITS INTENDED LOCATION.
- MULCH:** ALL PLANTING BEDS SHALL BE TOP DRESSED WITH A MINIMUM OF 3" PINE BARK MULCH, GRADE "B" OR APPROVED EQUAL. ALL TREES NOT IN BEDS SHALL HAVE A 5" DIAMETER MULCH RING. ALL PALMS NOT IN BEDS SHALL HAVE A 3" DIAMETER MULCH RING UNLESS OTHERWISE NOTED ON PLANS.
- SOD:** SOD SHALL BE SEASHORE PASPALUM 'ALOHA' SOD. ALL SOD SHALL BE ROLLED UPON INSTALLATION. CONTRACTOR TO SOD ALL AREAS THAT ARE DISTURBED BY CONSTRUCTION RELATED ACTIVITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE SOD IS FREE OF WEEDS & INSECTS UPON INSTALLATION AND FOR THE DURATION OF THE 90 DAY MAINTENANCE PERIOD. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE NO GAPS BETWEEN SOD. SOD QUANTITY TAKEOFFS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- QUANTITIES:** IN THE EVENT OF A VARIATION BETWEEN THE QUANTITIES SHOWN ON THE PLANT LIST AND THE QUANTITIES OF PLANTS SHOWN ON THE PLAN, THE PLAN SHALL CONTROL.
- UNFORESEEN CONFLICTS:** CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY PORTION OF THE LANDSCAPE PLAN AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNFORESEEN OBSTRUCTIONS, GRADE DIFFERENCES, STANDING WATER, SOIL CONDITIONS OR OTHER CONFLICTS EXIST. SUCH UNFORESEEN CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- SUBSTITUTIONS:** NO SUBSTITUTIONS OR VARIATIONS OF ANY PLANT MATERIAL OR ITS INSTALLED LOCATION SHALL BE PERMITTED WITHOUT THE PRIOR CONSENT OF THE LANDSCAPE ARCHITECT.
- CONTAINERS:** IF GALLONAGE FOR PLANTS OR TREES IS SHOWN THEY SHALL BE CONTAINER GROWN AND THE SIZE SHOWN SHALL REPRESENT THE MINIMUM ALLOWABLE GALLONAGE. IN ALL CASES THE PLANT SPECIFIED SIZE SHALL GOVERN OVER THE GALLONAGE INDICATED.
- PLANTING SOIL:** CONTRACTOR SHALL VERIFY THAT SOIL CONDITIONS ARE SUITABLE TO THE PLANT SPECIES SPECIFIED. IF SOIL CONDITIONS ARE DEEMED UNSUITABLE FOR PROPER PLANT HEALTH, CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT AND PROPER SUBSTITUTIONS SHALL BE SPECIFIED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. THE CONTRACTOR SHALL REMOVE LIME ROCK, CONCRETE AND OTHER DELETERIOUS DEBRIS FROM PLANTING BEDS. IF DEBRIS IS INTEGRATED IN THE SOIL, THE SOIL MUST BE EXCAVATED AND REPLACED WITH ACCEPTABLE SOIL. ALL FILL TO BE PLACED IN LANDSCAPE AREAS MUST HAVE A pH RANGE BETWEEN 5.8 AND 7.5, BE ORGANIC IN NATURE, AND BE FREE OF ROCKS AND DEBRIS.
- TOPSOIL:** TOPSOIL MATERIAL SHALL BE FREE FROM ALL HARD CLODS, WEEDS, STONES OVER 1" IN DIAMETER, CLAY, HARD PAN, NOXIOUS OR OTHER UNDESIRABLE PLANTS, SOD, INSECTS, SEEDS, OR MATERIAL WHICH MAY BE HARMFUL FOR GROWTH.
- WEEDS:** IF PRESENT, THE CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ANY WEEDS FROM PLANTING AND SOD AREAS PRIOR TO THE INSTALLATION OF PROPOSED PLANT MATERIAL AND MULCH COVER. CONTRACTOR SHALL BE RESPONSIBLE TO KEEP BEDS AND SOD FREE OF WEEDS FOR THE DURATION OF THE 90 DAY MAINTENANCE PERIOD.
- GRADING:** UNLESS OTHERWISE STATED ON THESE PLANS, THE LANDSCAPE CONTRACTOR SHALL FINE GRADE ALL AREAS TO BE PLANTED AND SODDED IN ORDER TO ELIMINATE BUMPS AND DEPRESSIONS. FINE GRADING SHALL BE DEFINED AS THE FINAL 2" OF GRADE TO BE ACHIEVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND RE-GRADING WASHOUT AREAS CAUSED BY EROSION UNTIL FINAL ACCEPTANCE OF THE PROJECT.
- STAKING:** ALL TREES AND PALMS ARE TO BE STAKED ACCORDING TO THE DETAILS IN THESE PLANS. IF THE CONTRACTOR PREFERENCES TO USE OTHER STAKING METHODS THAN SHOWN IN THE DETAILS, HE OR SHE MUST SUBMIT PROPOSED STAKING DETAILS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. THE LANDSCAPE CONTRACTOR SHALL STRAIGHTEN, REPAIR, AND/OR REPLACE ANY PLANTS DAMAGED BY FAILURE TO PROPERLY STAKE OR GUY ANY TREES & PALMS ON SITE, AT THEIR OWN EXPENSE.
- BED LINES:** CONTRACTOR TO ENSURE CURVILINEAR LANDSCAPE BEDS ARE TO BE EDGED WITH SMOOTH FLOWING CURVES. STRAIGHT-LINE LANDSCAPE BEDS ARE TO BE EDGED IN A STRAIGHT LINE PARALLEL TO ADJACENT STRUCTURES UNLESS DESIGNED OTHERWISE.
- FERTILIZER:** OSMOCOTE SLOW RELEASE FERTILIZER OR EQUIVALENT SHALL BE APPLIED TO ALL TREE, SHRUB, AND GROUNDCOVER PLANTING AREAS AT THE RATE OF THREE (3) TABLESPOONS PER 2 S.F. OF PLANTING AREA.
- DRAINAGE:** THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT THIS WORK DOES NOT INTERRUPT EXISTING OR PROPOSED DRAINAGE PATTERNS AND SHALL NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY SHALL A CONFLICT ARISE. CONTRACTOR IS RESPONSIBLE FOR ALL LANDSCAPE/SOD AREAS TO PROPERLY DRAIN AWAY FROM BUILDINGS/STRUCTURES.
- SPECIFICATIONS:** THE LANDSCAPE ARCHITECT SHALL BE PERMITTED THE RIGHT DURING INSTALLATION, TO REJECT ANY AND ALL PLANT MATERIAL AND WORKMANSHIP WHICH IN HIS OR HER OPINION DOES NOT MEET THE REQUIREMENTS OF THESE SPECIFICATIONS.
- PLANT SELECTION:** THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF THE NURSERY PLANT SOURCE LOCATION A MINIMUM OF 72 HOURS PRIOR TO PURCHASING THE MATERIAL. THE LANDSCAPE ARCHITECT SHALL ACCOMPANY THE CONTRACTOR AND THEIR DESIGNATED LANDSCAPE CONTRACTOR TO THE NURSERY TO REVIEW THE PLANT MATERIAL TAGGED BY THE CONTRACTOR. THE LANDSCAPE ARCHITECT WILL REVIEW THE TAGGED MATERIAL TO BE PURCHASED TO GENERALLY CONFIRM IT MEETS THE SPECIFICATION STANDARDS (STATED IN NOTE #1). THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE QUALITY, SPECIFICATION, INSTALLATION, AND SURVIVORSHIP OF THE PLANT MATERIAL.
- TURNOVER:** CONTRACTOR SHALL CONTACT OWNERS REPRESENTATIVE FOR A TURNOVER DATE TO INCLUDE A WALK-THROUGH AND ACCEPTANCE OF WORK BY THE LANDSCAPE ARCHITECT OR OWNER. ANY WORK DEEMED UNACCEPTABLE SHALL BE CORRECTED IMMEDIATELY AND RE-INSPECTED AS SCHEDULED.
- MAINTENANCE:** CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE TO BEGIN AFTER EACH PLANT HAS BEEN INSTALLED AND SHALL CONTINUE 90 DAYS AFTER FINAL WRITTEN ACCEPTANCE BY THE OWNER. MAINTENANCE SHALL INCLUDE WATERING, PRUNING, WEEDING, MULCHING, MOWING, REPLACEMENT OF SICK OR DEAD PLANTS, AND ANY OTHER CARE NECESSARY IN ORDER TO MAINTAIN PROPER PLANT HEALTH AND SOIL MOISTURE CONTENT.
- GUARANTEE:** CONTRACTOR SHALL GUARANTEE AND REPLACE ALL INSTALLED PLANT MATERIAL FOR ONE (1) CALENDAR YEAR STARTING FROM THE TURNOVER DATE FOR WORK FOUND ACCEPTABLE. ANY CORRECTED WORK SHALL HAVE A PROPORTIONAL EXTENSION OF WARRANTY ONCE APPROVED. ANY SICK OR DEAD MATERIAL SHALL BE REPLACED IMMEDIATELY. THE LANDSCAPE CONTRACTOR SHALL NOT BE RESPONSIBLE TO HONOR ANY WARRANTY FOR THE LOSS OF ANY PLANT MATERIAL CAUSED BY FLOODING, FIRE, ABNORMAL FREEZING TEMPERATURES, WINDS OVER 50 MPH, LIGHTNING, ANY OTHER NATURAL DISASTER, OR ANY LOSS/DAMAGE CAUSED BY VANDALISM OR NEGLIGENCE ON THE PART OF THE OWNER.
- CALL BEFORE YOU DIG:** CONTRACTOR SHALL NOTIFY SUNSHINE 811 AND HAVE UTILITIES LOCATED, PRIOR TO DIGGING, BY CALLING 811. CONTRACTOR SHALL NOT PLANT TREES WITHIN 3' OF AN UNDERGROUND UTILITY, EITHER AS LOCATED OR AS SHOWN ON THE PLAN, WITHOUT FIRST OBTAINING WRITTEN PERMISSION FROM OWNER'S REPRESENTATIVE.
- RECORD DRAWINGS:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT 'REDLINED' MARK-UPS OF THE LANDSCAPE AND IRRIGATION IMPROVEMENTS. THESE AS-BUILT 'REDLINES' SHALL BE REPRESENTED ON ZEV COHEN & ASSOCIATES, INC. PLAN SHEETS AND PROVIDED TO THE LANDSCAPE ARCHITECT.

IRRIGATION NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING REDLINED MARK-UPS OF THE IRRIGATION IMPROVEMENTS AND PROVIDE TO THE LANDSCAPE ARCHITECT.
- AN AUTOMATIC TIME CONTROLLED IRRIGATION SYSTEM WITH A RAIN SENSOR SHALL BE INSTALLED TO PROVIDE 100% HEAD TO HEAD COVERAGE OF ALL NEW PLANTINGS. IRRIGATION PLAN SHALL BE PROVIDED UPON SUBSTANTIAL SITE PLAN APPROVAL.



CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION

NO.	DATE	BY	REVISIONS	DESCRIPTION
1	10/21/21	HK	PER TOWN OF INDIALANTIC COMMENTS	PER TOWN OF INDIALANTIC COMMENTS
2	11/04/21	HK	PER TOWN OF INDIALANTIC COMMENTS	PER TOWN OF INDIALANTIC COMMENTS
3	11/04/21	HK	PER TOWN OF INDIALANTIC COMMENTS	PER TOWN OF INDIALANTIC COMMENTS
4	11/04/21	HK	PER TOWN OF INDIALANTIC COMMENTS	PER TOWN OF INDIALANTIC COMMENTS
5	11/21/21	HK	PER TOWN OF INDIALANTIC COMMENTS	PER TOWN OF INDIALANTIC COMMENTS
6	11/21/21	HK	PER TOWN OF INDIALANTIC COMMENTS	PER TOWN OF INDIALANTIC COMMENTS
7	01/20/22	HK	PER TOWN OF INDIALANTIC COMMENTS	PER TOWN OF INDIALANTIC COMMENTS

SURF STYLE AT INDIALANTIC
FINAL ENGINEERING PLANS
LANDSCAPE PLAN & DETAILS

BREVARD COUNTY, FLORIDA

PROJECT NO: ZC 21043

DESIGNED BY: SMG

DRAFTED BY: SMG

CHECKED BY: JES

DRAWING FILE: 21043 LA
XREFS: 21043-BAS.DWG
XREFS: 21043-SURV.DWG

JAKE STEHR, RLA 6667462
NOT VALID WITHOUT SEAL

SHEET: LA2 OF 2

Exterior lighting fixtures and lamps must be selected to meet established criteria which minimizes impacts to marine turtles. FWC recommendation of this fixture table does not relieve the applicant from the responsibility of meeting the established criteria once construction has occurred. Upon installation, if the criteria are not met, the fixtures, bulbs and/or lamps must be shielded, replaced, realigned, or otherwise modified to meet the criteria. All site lighting installed under a DEP permit must be fully compliant with local lighting regulations, where applicable, and must not cause a disorientation or take of a marine turtle as defined under the Federal Endangered Species Act.

Project Name: Surf Style Retail
DEP File Numbers:

Submitted by: Elliott Steen
Submitted Date: 4/22/2022
Drawing/Plan Date:

FWC Reviewer:
FWC Stamp Date:

Note: It is recommended that this document be printed on legal size paper. Column/row sizes or print area can be adjusted as necessary.

Note: The last three (gray) columns will be completed by FWC staff.

Fixture Label	Fixture Quantity	Fixture/Mounting Type	Fixture Mounting Height	Manufacturer and Catalog No.	Lamp Type, Color and Wattage	Structure Level ¹ Each structure level must be on a separate row.	Location of Fixture ²	Drawing Sheet Number	Labeled Cut Sheet Provided (Y/N)	Recommended by FWC (Y/N)	Reason Not Recommended ³ and/or Comments
WL	8	Wall Light	8'	GENERATION LIGHTING OL8600RSZ/T	LED, Amber 7W	Ground	B, L, S	ES101	Y		
WC	6	Wall Light, Surface Mount	8'	LITON WD1360-BZ-TAM-LVR	LED, Amber 23W	Ground	B, L, S	ES101	Y		
SF	24	RECESSED	10'	L-016-F-FR-5W-A-NFL-FIN-BK	LED, Amber, 5W	Ground	B, L, S	ES101	Y		
SF2	2	RECESSED	30'	LITON CH628UE-D10/CR6L22B8F-TAM	LED, Amber, 28W	Tower	B, L, S	ES101	Y		
PL4-HS	4	Pole Lights	12'	VISIONAIRE VSX-II-T4-48LC-5-TS-UNV-AM-BZ-HSS	LED, Amber, 78W	Parking Lot	S	ES101	Y		
PL5-HS	3	Pole Lights	12'	VISIONAIRE VSX-II-T5-48LC-5-TS-UNV-AM-BZ-HSS	LED, Amber, 78W	Parking Lot	S	ES101	Y		

- ### GENERAL NOTES
- ALL CONDUIT RUN BELOW BUILDING SHALL BE AT 48" BELOW SLAB.
 - COORDINATE ALL SERVICE CONNECTIONS WITH LOCAL UTILITIES.
 - CONDUIT RUNS TO SHARE COMMON TRENCH WHERE POSSIBLE.
 - ALL CONDUIT ROUTED UNDERGROUND SHALL BE A MINIMUM OF 3/4" AND SHALL BE BURIED A MINIMUM OF 30" BELOW FINISHED GRADE.
 - PROVIDE HANDHOLES AND PULLBOXES AS REQUIRED.
 - COORDINATE ALL SITE WORK WITH UTILITY COMPANIES AND CIVIL SITE PLANS/ENGINEER.
 - INSTALL PLASTIC WARNING TAPE 12" B.F.G. DIRECTLY ABOVE ALL BURIED ELECTRICAL CONDUITS.
 - COORDINATE TRANSFORMER LOCATIONS, SIZES, AND QUANTITIES WITH UTILITY COMPANY AND CIVIL ENGINEER.
 - PROVIDE PRESTRESSED SPUN CONCRETE POLES FOR SITE LIGHT FIXTURES. POLES SHALL BE PROVIDED AND DESIGNED COMPLETE BY POLE MANUFACTURER SUITABLE FOR INSTALLATION SHOWN. POLES SHALL BE OF SUFFICIENT HEIGHT TO ACCOMMODATE LIGHT FIXTURE MOUNTING HEIGHT AS INDICATED.

- ### KEYNOTES
- PROVIDE JUNCTION BOX FOR MONUMENT SIGNAGE. USE 3/4" CONDUIT.
 - PROPOSED LOCATION OF TRANSFORMER.

SITE LUMINAIRE SCHEDULE								
TAG	TYPE	MANUFACTURER	CATALOG NUMBER	VOLT	LAMP	TOTAL WATTS	INSTALLATION	REMARKS
PL4-HS	POLE LIGHT WITH SHIELD	VISIONAIRE LIGHTING	VSX-II-T4-48LC-5-TS-UNV-AM-BZ-HSS	120	LED, AMBER	78	POLE MOUNT @ 12'	1,3
PL5-HS	POLE LIGHT WITH SHIELD	VISIONAIRE LIGHTING	VSX-II-T5-48LC-5-TS-UNV-AM-BZ-HSS	120	LED, AMBER	78	POLE MOUNT @ 12'	2,3
SF	DOWNLIGHT	BEACHSIDE LIGHTING	L-016-F-FR-5W-A-NFL-FIN-BK	120	LED, AMBER	5	RECESSED CEILING	3,4
SF2	DOWNLIGHT	LITON LIGHTING	CH628UE-D10/CR6L22B8F-TAM	120	LED, AMBER	28	RECESSED CEILING	3,4
WC	CYLINDRICAL WALL LIGHT	LITON LIGHTING	WD1360-BZ-TAM-LVR	120	LED, AMBER	23	WALL MOUNT @ 11' 8"	3
WL	GOOSENECK WALL LIGHT	GENERATION LIGHTING	OL8600RSZ/T	120	LED, AMBER	7	WALL MOUNT @ 11' 4"	3

- #### GENERAL NOTES, LUMINAIRE SCHEDULE
- MODEL IS GIVEN FOR QUALITY ONLY, SUBSTITUTE LIGHT FIXTURES SHALL BE OF EQUAL OR GREATER QUALITY AND MATCH THE DESIGN INTENT OF THE ENGINEER/LIGHTING SYSTEM DESIGNER.
 - ALL FIXTURES TO BE PROVIDED WITH LAMPS INSTALLED. ALL LAMPING TO BE ENERGY EFFICIENT LED OR COMPACT FLUORESCENT.
 - ALL FIXTURES TO BE PROVIDED WITH REQUIRED MOUNTING HARDWARE FOR INSTALLATION TYPE SHOWN. VERIFY FINAL CEILING TYPES WITH ARCHITECTURAL PLANS PRIOR TO ORDERING.
 - ANY SITE LIGHTING SUBSTITUTIONS SHALL BE ACCOMPANIED BY COMPLETE POINT-BY-POINT SITE PHOTOMETRICS AND SHALL MEET DESIGNED LIGHT LEVELS AND CUT-OFFS. ANY SUBSTITUTIONS SUBMITTED WITHOUT CALCULATIONS WILL BE REJECTED.
 - ALL FINISHES AND COLORS SHALL BE VERIFIED WITH THE OWNER/ARCHITECT PRIOR TO ORDERING.
 - PROVIDE ALL REQUIRED CONTROL WIRING, FIXTURE MODULES, DEVICES, ETC. TO ACCOMMODATE CONTROLS AS INDICATED ON FLOOR PLANS, INCLUDING, BUT NOT LIMITED TO: DIMMING, AUTOMATIC ON/OFF, DAYLIGHT HARVESTING, ETC.
- #### REMARKS, LUMINAIRE SCHEDULE
- FIXTURE WITH TYPE IV DISTRIBUTION.
 - FIXTURE WITH TYPE V DISTRIBUTION.
 - FIXTURE TO BE PROVIDED WITH AMBER LIGHTING.
 - FIXTURE TO BE PROVIDED WITH 360° SHIELDING.

DAG Architects, AAC000745
1223 Airport Road Destin, Florida 32541
850.837.8152 www.dagarchitects.com



New Construction for:
Surf Style Retail
101 S. Miramar Avenue
INDIALANTIC, FL 32903



100% CD
ISSUE

No.	Description	Date
1	Revision 1	10/22/21
2	FWC RESPONSE 2	04/22/21
3	ADDENDUM 2	12/19/22
4	ADDENDUM 2 REVISED	01/04/23

SITE PLAN

Project number: 19008
Date: 09.22.2021
PIC: DS
PM: ES

ES101



ARCHITECTS

DAG Architects, AAC000745
1223 Airport Road Destin, Florida 32541
850.837.8152 www.dagarchitects.com



Surf Style Retail

101 S. Miramar Avenue
INDIALANTIC, FL 32903



100% CD
ISSUE

No.	Description	Date
2	FWC RESPONSE 2	04/22/21
4	ADDENDUM 2 REVISED	01/04/23

DIAGRAMS & SCHEDULES

Project number: 19008
Date: 09.22.2021
PIC DS
PM ES

E604

PANELBOARD MDP SCHEDULE																			
VOLTAGE: 208Y/120V		BUS RATING: 800A		LOCATION: STOCKROOM		MOUNTING: SURFACE		ISO. GROUND: N		TVSS: N									
PHASE: 3Ø		WIRE: 4W		MAIN BREAKER: 800A															
AIC RATING: SEE RISER				NEUTRAL SIZE: 100%															
NOTE	TYPE	LOAD	DESCRIPTION	BRANCH C/B	P	#	Ø	W	C/B	P	#	Ø	W	C/B	P	DESCRIPTION	LOAD	TYPE	NOTE
E 17364	PANEL 'A'			200	3	1	A	2	200	3						PANEL 'B'			
E 17364						3	B	4									14122	E	
E 17364						5	C	6									14122	E	
	SPACE					1	7	A	8							SPACE			
	SPACE					1	9	B	10							SPACE			
	SPACE					1	11	C	12							SPACE			
	SPACE					1	13	A	14							SPACE			
	SPACE					1	15	B	16							SPACE			
	SPACE					1	17	C	18							SPACE			
	SPACE					1	19	A	20							SPACE			
	SPACE					1	21	B	22							SPACE			
	SPACE					1	23	C	24							SPACE			
	SPACE					1	25	A	26	60	3					RTU-1			6240 E
	SPACE					1	27	B	28							SPACE			6240 E
	SPACE					1	29	C	30							SPACE			6240 E
E 6240	RTU-2			60	3	31	A	32	60	3						RTU-3			6240 E
E 6240						33	B	34											6240 E
E 6240						35	C	36											6240 E
E 6240	RTU-4			60	3	37	A	38	80	3						RTU-5			8646 E
E 6240						39	B	40											8646 E
E 6240						41	C	42											8646 E
		TYPE	CONNECTED LOAD (VA)	NEC DEMAND FACTOR		NEC DEMAND LOAD (VA)													
R		RECEPTACLES ≤ 10KVA	-	1.00		-		PHASE A LOAD = 65091 VA											
		RECEPTACLES > 10KVA	-	0.50		-		PHASE B LOAD = 65091 VA											
L		LIGHTING	-	1.25		-		PHASE C LOAD = 65091 VA											
M		LARGEST MOTOR	-	1.25		-													
		REMAINING MOTORS	-	1.00		-													
H		HEATING (RESISTIVE)	-	1.25		-		NEC DEMAND LOAD = 542 A											
E		EQUIPMENT	195274	1.00		195274		SPARE CAPACITY = 258 A											
K		KITCHEN EQUIPMENT	195274	0.95		-		TOTAL AVAILABLE = 800 A											
		TOTAL	195274			195274													
NOTES:																			
1. PROVIDE GFCI-PROTECTED CIRCUIT BREAKER.																			
2. PROVIDE LOCK-ON TYPE BREAKER, RED IN COLOR.																			

PANELBOARD A SCHEDULE																			
VOLTAGE: 208Y/120V		BUS RATING: 200A		LOCATION: STOCKROOM		MOUNTING: SURFACE		ISO. GROUND: N											
PHASE: 3Ø		WIRE: 4W		MAIN BREAKER: 200A		NEUTRAL SIZE: 100%		TVSS: Y											
AIC RATING: SEE RISER																			
NOTE	TYPE	LOAD	DESCRIPTION	BRANCH C/B	P	#	Ø	W	C/B	P	#	Ø	W	C/B	P	DESCRIPTION	LOAD	TYPE	NOTE
1	L	1190	LIGHTING - SALES BACK ENTRY	20	1	1	A	2	20	1						LIGHTING - SALES RM	1190	L	1
1	L	1190	LIGHTING - SALES RM	20	1	3	B	4	20	1						LIGHTING - SALES RM	1190	L	1
1	L	1190	LIGHTING - SALES RM	20	1	5	C	6	20	1						LIGHTING - SALES RM	1190	L	1
1	L	1190	LIGHTING - SALES RM	20	1	7	A	8	20	1						LIGHTING - SALES RM	1190	L	1
1	L	1190	LIGHTING - SALES RM	20	1	9	B	10	20	1						LIGHTING - SALES RM	1190	L	1
1	L	1190	LIGHTING - SALES RM	20	1	11	C	12	20	1						LIGHTING - SALES RM	1190	L	1
1	L	952	LIGHTING - SALES FRONT/POS	20	1	13	A	14	20	1						LIGHTING - FITTING/STOCK	816	L	1
1	L	517	LIGHTING - EXTERIOR WALL	20	1	15	B	16	20	1						LIGHTING - EXTERIOR WALL	359	L	1
1	L	1000	LIGHTING - EXTERIOR SIGN	20	1	17	C	18	20	1						LIGHTING - EXTERIOR SIGN	1000	L	1
1	L	1000	LIGHTING - EXTERIOR SIGN	20	1	19	A	20	20	1						LIGHTING - EXTERIOR SIGN	1000	L	1
1,2	L	546	LIGHTING - PARKING LOT	20	1	21	B	22	20	1						LIGHTING - RESTROOM AREA	125	L	1
R	L	500	LIGHTING - WINDOW LED	20	1	23	C	24	20	1						LIGHTING - WINDOW LED	500	L	
L	L	500	LIGHTING - WINDOW LED	20	1	25	A	26	20	1						LIGHTING - WINDOW LED	500	L	
L	L	500	LIGHTING - WINDOW LED	20	1	27	B	28	20	1						LIGHTING - WINDOW LED	500	L	
L	L	500	LIGHTING - WINDOW LED	20	1	29	C	30	20	1						LIGHTING - WINDOW LED	500	L	
L	L	500	LIGHTING - WINDOW LED	20	1	31	A	32	20	1						LIGHTING - WINDOW LED	500	L	
L	L	500	LIGHTING - WINDOW LED	20	1	33	B	34	20	1						LIGHTING - WINDOW LED	500	L	
R	R	900	RECEPTS - EXTERIOR	20	1	35	C	36	20	1						RECEPTS - GENERAL	540	R	
R	R	900	RECEPTS - GENERAL	20	1	37	A	38	20	1						RECEPTS - GENERAL	900	R	
R	R	900	RECEPTS - GENERAL	20	1	39	B	40	20	1						RECEPTS - ABOVE DOOR	500	R	
R	R	900	RECEPTS - ABOVE DOOR	20	1	41	C	42	20	1						RECEPTS - ABOVE DOOR	500	R	
R	R	900	RECEPTS - ABOVE DOOR	20	1	43	A	44	20	1						RECEPTS - ABOVE DOOR	500	R	
E	E	1200	DOOR ALARM	20	1	45	B	46	20	1						ROLL-UP DOOR	1000	E	
E	E	360	RECEPTS - TELECOM	20	1	47	C	48	20	1						RECEPTS - TELECOM	360	E	
R	R	180	RECEPTS - MAIN FLOOR	20	1	49	A	50	20	1						RECEPTS - MAIN FLOOR	180	R	
R	R	180	RECEPTS - MAIN FLOOR	20	1	51	B	52	20	1						RECEPTS - MAIN FLOOR	180	R	
R	R	180	RECEPTS - MAIN FLOOR	20	1	53	C	54	20	1						RECEPTS - MAIN FLOOR	180	R	
R	R	180	RECEPTS - MAIN FLOOR	20	1	55	A	56	20	1						RECEPTS - MAIN FLOOR	180	R	
R	R	180	RECEPTS - Q-LINE FLOOR	20	1	57	B	58	20	1						RECEPTS - Q-LINE FLOOR	180	R	
R	R	180	RECEPTS - Q-LINE FLOOR	20	1	59	C	60	20	1						RECEPTS - Q-LINE FLOOR	180	R	
R	R	180	RECEPTS - Q-LINE FLOOR	20	1	61	A	62	20	1						RECEPTS - POS	360	R	
R	R	360	RECEPTS - POS	20	1	63	B	64	20	1						RECEPTS - POS	360	R	
R	R	360	RECEPTS - POS	20	1	65	C	66	20	1						RECEPTS - POS	360	R	
3	E	500	FACP	20	1	67	A	68	20	1						ATM	1200	E	
R	R	3600	RECEPTS - RESTROOMS	20	1	69	B	70	20	1						ICE MACHINE	1200	R	
R	R	1000	EW-1	20	1	71	C	72	20	1						MONUMENT SIGNAGE	1000	L	
		SPARE		20	1	73	A	74	20	1						SPARE			
		SPARE		20	1	75	B	76	20	1						SPARE			
		SPARE		20	1	77	C	78	20	1						SPARE			
		SPARE		20	1	79	A	80	20	1						SPARE			
		SPARE		20	1	81	B	82	20	1						SPARE			
		SPARE		20	1	83	C	84	20	1						SPARE			