OASIS @ CAPE CORAL PHASE 2

SITE DEVELOPMENT PLANS

PART OF SECTION 28, TOWNSHIP 44 SOUTH, RANGE 23 EAST
CITY OF CAPE CORAL, FLORIDA

PREPARED FOR: ZP NO 339, LLC

PARCEL ZONING

PUD (ORDINANCE 31-21)

PARCEL STRAP NUMBER

28-44-23-C4-05916.0000

PARCEL BOUNDARY

±19.89 AC.

FLOOD ZONE DESIGNATION

AE-EL7 & AE-EL8 (NAVD88)

FIRE NOTE:

THE FIRE MARSHAL HAS REQUIRED, PER CODE, THAT A THIRD PARTY WILL VERIFY BEFORE (AT BUILDING PLAN REVIEW AS A MODEL) OR AFTER (PRIOR TO FIRE FINAL INSPECTION) CONSTRUCTION THAT THE BUILDING MEETS THE REQUIREMENTS OF NFAP 72 FOR RADIO SIGNAL STRENGTH. IF THE BUILDING IS NON-COMPLIANT, THE OWNER AND/OR THE CONTRACTOR IS RESPONSIBLE TO MEET THE CODE REQUIREMENTS, PER NFPA 1221, PRIOR TO THE FIRE FINAL INSPECTION.

IF THE BUILDING(S) IS NON-COMPLIANT, THE OWNER AND/OR THE CONTRACTOR IS RESPONSIBLE TO MEET THE CODE REQUIREMENTS, PER NFPA 1221, PRIOR TO THE FIRE FINAL INSPECTION.

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CONSTRUCTION INFORMATION

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SITE PERMIT PLAN SET

CERTIFICATION BY ENGINEER

THIS DOCUMENT IS SIGNED AND SEALED TO SECURE THE DATA IN THE PERMIT APPLICATION AND ANY REFERENCED SHEETS THAT WERE SUBMITTED ELECTRONICALLY AS DESCRIBED IN FLORIDA ADMINISTRATIVE CODE (PROCEDURES FOR SIGNING AND SEALING ELECTRONICALLY TRANSMITTED PLANS, SPECIFICATIONS, REPORTS OR OTHER DOCUMENTS) FOR THE APPLICABLE REGISTERED PROFESSIONAL REGULATORY BOARD.
SHEETS INCLUDE: C-01 - C-03, C-05 - C-15, C-17, C-18 AND C-22

Jason E Tomassetti

Digitally signed by Jason E Tomassetti
DN: CN=Jason E Tomassetti, OU=Authority/A01410D0000017A8C9CCBA200008EF7, O=Florida, C=US
Date: 2021.11.01 17:27:12-04'00'

THE SEAL APPEARING ON THIS DOCUMENT IS AUTHORIZED BY:

REGISTERED PROFESSIONAL:	JASON E. TOMASSETTI
LICENSE:	66263
DATE:	10-28-21
REGISTERED PROFESSIONAL COMPANY:	ENSITE, INC.

DEWATERING ACTIVITIES WILL NOT BE ALLOWED WITHOUT THE REQUIRED PERMITS.

ensite
2401 FIRST STREET, SUITE 201
FORT MYERS, FLORIDA 33901
PH: (239)-226-0024
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ZIMMER DEVELOPMENT COMPANY
CLIENT NAME AND ADDRESS

OASIS @ CAPE CORAL PHASE 2
CITY OF CAPE CORAL, FLORIDA
PROJECT NAME AND LOCATION

JASON E. TOMASSETTI, PE
FL License No. 66263

NO.	REVISION	DATE
R1	PER CITY COMMENTS	10-28-21

REVISIONS DESCRIPTION

DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03 COV.dwg
SCALE:	AS SHOWN

COVER SHEET, VICINITY MAP & INDEX
SHEET TITLE

C-01
SHEET NUMBER

GENERAL NOTES:

1. THE SURVEY SHOWS EXISTING EASEMENTS, IF ANY, THAT WERE PROVIDED.
2. THIS PROPERTY IS LOCATED WITHIN FLOOD ZONES: AE-EL7 & AE-EL8 PER F.I.R.M. PANEL 0385, MAP NUMBER 12071C0385F, DATED 08-28-08.
3. PROPOSED AND EXISTING ELEVATIONS ARE BASED ON NGVD29.
4. THIS SITE IS LOCATED IN A FLOODWAY OR COASTAL ZONE.
5. THIS SITE CAN BE USED SAFELY FOR BUILDING PURPOSES WITHOUT UNDUE DANGER FROM FLOOD OR ADVERSE SOIL OR FOUNDATION CONDITIONS CONTINGENT UPON SOIL BORINGS AND DESIGN FOR EACH STRUCTURE BY THE BUILDING ARCHITECT TO ACCOMMODATE SUBSOIL CONDITIONS. THIS STATEMENT DOES NOT INCLUDE SINKHOLES.
6. THE LOCATION OF EXISTING UTILITIES, PAVEMENT, VEGETATION, AND MISCELLANEOUS IMPROVEMENTS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
7. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHOULD NOTIFY THE OWNER/ENGINEER WITHOUT DELAY.
8. EXISTING FACILITIES SHALL BE RESTORED TO A CONDITION EQUIVALENT TO THAT WHICH EXISTED PRIOR TO COMMENCING CONSTRUCTION, AT NO ADDITIONAL COST TO OWNER.
9. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, ROADWAY AND TRAFFIC DESIGN STANDARDS, (LATEST EDITION). AND CITY OF CAPE CORAL STANDARDS, DETAILS, AND SPECIFICATIONS.
10. LOCATIONS OF INLETS AND STORM DRAINS MAY BE FIELD ADJUSTED TO PRESERVE EXISTING VEGETATION.
11. THE CONTRACTOR IS REQUIRED TO ADJUST ALL VALVE BOXES, MANHOLE RIMS, GRATES, FIRE HYDRANTS, ETC. AS NECESSARY TO MATCH PROPOSED GRADES.
12. CONTRACTOR SHALL NOTIFY CITY OF CAPE CORAL A MINIMUM OF 72 HOURS PRIOR TO ALL REQUIRED INSPECTIONS.
13. CONTRACTOR TO PROVIDE AND MAINTAIN SILT FENCE AND OTHER APPROPRIATE MEASURES TO EFFECT THE FILTRATION OF SURFACE WATER FLOWS AND TO PROVIDE EROSION PROTECTION DURING CONSTRUCTION ACTIVITIES. PROTECTION IS TO BE MAINTAINED DURING THE CONSTRUCTION PERIOD UNTIL DISTURBED SOILS HAVE BEEN STABILIZED WITH GRASS OR SUITABLE EROSION PROTECTION TREATMENT.
14. PROPOSED ROADWAYS SHOWN ARE PRIVATE AND SHALL BE PRIVATELY MAINTAINED.
15. ALL UNPAVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED AND MULCHED UNLESS NOTED OTHERWISE.
16. EXISTING OFF-SITE DRAINAGE PATTERNS SHALL BE MAINTAINED DURING CONSTRUCTION.
17. CONTRACTOR SHALL RETAIN, ON THE WORK SITE, COPIES OF ANY PERMITS NECESSARY FOR CONSTRUCTION.
18. CONTRACTOR SHALL PROMPTLY REPORT ALL FIELD CHANGES TO THE ENGINEER.
19. CONTRACTOR SHALL CLEAR ALL EXCAVATION AND FILL AREAS; ACTUAL LIMITS OF CLEARING SHALL BE DETERMINED IN THE FIELD BY OWNER OR ENGINEER.
20. CONTRACTOR SHALL REMOVE ALL MUCK AND OTHER UNSUITABLE MATERIAL FROM FILL AREAS PRIOR TO PLACEMENT OF FILL. ALL MUCK AND OTHER UNSUITABLE MATERIAL EXCAVATED FROM LAKES OR REMOVED FROM Fall AREAS SHALL BE STOCKPILED AT THE PROPOSED PROJECT AS DETERMINED BY THE OWNER.
21. SITE GRADES MAY BE ADJUSTED IN FIELD BY ENGINEER.
22. LOCATION OF STORM DRAINAGE END TREATMENTS ARE SUBJECT TO MODIFICATION IN THE FIELD BY OWNER OR ENGINEER TO PRESERVE EXISTING VEGETATION.
23. CONTRACTOR SHALL USE DESIGNATED CONSTRUCTION ENTRANCES FOR EMPLOYEES AND DELIVERY OF MATERIALS.
24. THE LOCATIONS OF EXISTING UTILITIES AND STORM SEWERS SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM RECORD DRAWINGS AND FIELD INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXACT LOCATION PRIOR TO CONSTRUCTION AND PROVIDE IN WRITING ANY DISCREPANCIES TO THE ENGINEER.
25. DURING CONSTRUCTION, GRATE INLET AND JUNCTION BOX OPENINGS SHALL BE COVERED WITH FILTER FABRIC (MIRAFI 140N OR APPROVED EQUAL) TO PREVENT DEBRIS AND FILL FROM FALLING INTO THE INLET.
26. THE CONTRACTOR SHALL ACCURATELY PLOT THE LOCATIONS AND DEPTHS OF ALL IMPROVEMENTS INSTALLED ON A FINAL SET OF RECORDED DRAWINGS WHICH SHALL BE DELIVERED TO THE ENGINEER.
27. CONTRACTOR IS REQUIRED TO OBTAIN FROM THE ENGINEER AND OWNER WRITTEN APPROVAL FOR ANY DEVIATIONS FROM THE PLANS AND/OR SPECIFICATIONS.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC AND USAGE OF THE EXISTING STREETS ADJACENT TO THE PROJECT. ALL TRAFFIC MAINTENANCE CONTROL SHALL BE IN ACCORDANCE WITH THE FLORIDA MANUAL OF TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS.

CAPE CORAL UTILITY NOTES:

1. THE CONTRACTOR OR OWNER'S REPRESENTATIVE WILL BE RESPONSIBLE FOR OBTAINING AN APPROPRIATELY SIZED TEMPORARY JUMPER ASSEMBLY WITH METER FROM THE CITY OF CAPE CORALS UTILITY COLLECTION AND DISTRIBUTION DEPARTMENT AT 574_0852 PRIOR TO RECEIVING CITY WATER FOR CONSTRUCTION AND/OR TYING INTO ANY EXISTING POTABLE WATER MAIN LINES. A BILLING ACCOUNT MUST BE SET UP THROUGH THE CITY'S CUSTOMER BILLING DEPARTMENT PRIOR TO INSTALLATION. A REPRESENTATIVE FROM THE CITY OF CAPE CORAL'S DEVELOPMENT SERVICES AT 239_826_1569 MUST BE NOTIFIED 48 HOURS IN ADVANCE OF INSTALLATION AND BE PRESENT TO WITNESS AND RECORD THE INSTALLATION PROCESS. ACCOUNT DOCUMENTATION MUST BE SUBMITTED TO THE SITE DEVELOPMENT AND REVIEW INSPECTOR AT THE TIME OF METER INSTALLATION. AFTER CONSTRUCTION IS COMPLETE AND BEFORE THE TEMPORARY JUMPER AND METER IS REMOVED ALL POTABLE WATER MAINS SHALL BE FLUSHED AND PRESSURE TESTED PER AWWA SECTION C_600 AND DISINFECTED PER AWWA C_651.

2. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE CITY OF CAPE CORAL'S UTILITIES COLLECTION/DISTRIBUTION DIVISION AT 574_0852 A MINIMUM OF 7 DAYS PRIOR TO ANY SHUT DOWN OR DIVERSION OF AN EXISTING WATER MAIN. A 48_HOUR NOTICE IS REQUIRED FOR A PRESSURE TEST, HOT TAP, OR TIE INTO EXISTING UTILITY MAIN, AND PRIOR TO BEGINNING ANY UTILITY CONSTRUCTION. ALSO, THE CONTRACTOR WILL DISTRIBUTE ANY INTERRUPTION OF SERVICES NOTICES TO ALL AFFECTED PARTIES AND THE CITY WILL DISTRIBUTE ALL BOIL WATER AND RESCISSION NOTICES.

3. IF ANY UTILITY WORK (WATER, SEWER AND IRRIGATION) IS PERFORMED AFTER HOURS (SCHEDULED OR UNSCHEDULED) AND THE UTILITY WORK REQUIRES THE PRESENCE OF A CITY OF CAPE CORAL UTILITY INSPECTOR THE SUBJECT OVERTIME WILL BE REQUIRED TO BE PAID FOR BY THE CONTRACTOR. A BILL WILL BE CREATED AND ATTACHED TO THE APPROPRIATE PERMIT AND PAYMENT WILL BE REQUIRED BEFORE THE WATER FINAL INSPECTION IS COMPLETED.

4. ALL UTILITY MAIN EXTENSIONS AND UTILITY MAIN REPLACEMENTS ARE REQUIRED TO BE A MINIMUM 6" MAIN. ALL SERVICE LATERALS 3" AND LARGER WILL REQUIRE A MINIMUM 6" TAP WITH 6" GATE VALVE AT THE CONNECTION POINT TO THE UTILITY MAIN WITH THE EXCEPTION OF TAPS ON MAINS SMALLER THAN 6".

5. THE CONTRACTOR IS PROHIBITED FROM TURNING OFF ANY EXISTING MAIN LINE VALVES. THESE WILL BE TURNED OFF BY A REPRESENTATIVE OF THE CITY OF CAPE CORAL'S UTILITY DEPARTMENT AT THE CONTRACTORS ARRANGED TIME AND DATE.

6. ALL EXISTING UTILITY SERVICE CONNECTIONS THAT WILL NOT BE UTILIZED FOR THIS PROJECT SHALL BE ABANDONED AT THE MAIN OR POINT AGREED UPON BY THE UTILITY INSPECTOR, PER CITY OF CAPE CORAL SPECIFICATIONS. WATER AND IRRIGATION SERVICES MUST BE ABANDONED AT THE MAIN. SEWER LATERALS MUST BE CAPPED AT THE ROW WITH AN APPROVED LOCATOR INSTALLED. A VISUAL INSPECTION MUST BE COMPLETED BY A CITY OF CAPE CORAL UTILITIES INSPECTOR.

7. THE ENGINEERS ESTIMATED FLOW DEMANDS FOR POTABLE WATER, IRRIGATION WATER AND SANITARY SEWER MUST BE PROVIDED ON THE UTILITY PAGE OF THE SITE PLANS.

8. THE CONTRACTOR WILL NEED TO ADJUST THE EXISTING UTILITIES AFFECTED BY THE NEWLY PROPOSED FINISHED GRADE AT THEIR EXPENSE. THESE ITEMS INCLUDE BUT NOT LIMITED TO; VALVE BOXES, VALVE PADS, VALVE STEM EXTENSIONS, SERVICE CONNECTIONS AND ACCESSORIES, BACKFLOW PREVENTION DEVICES, METER BOXES, FIRE HYDRANTS, MANHOLE COVERS AND/OR ADJUSTMENT RINGS. IT IS THE CONTRACTORS' RESPONSIBILITY TO VERIFY THAT ADEQUATE DEPTHS AND CLEARANCES EXIST TO MAKE THE SYSTEM HYDRAULICS WORK PROPERLY. ANY CHANGES TO EXISTING UTILITIES MUST MEET THE CITY OF CAPE CORAL SPECIFICATIONS. DISINFECTION AND RE_SAMPLING WILL BE REQUIRED WHEN ANY EXISTING POTABLE WATER MAIN OR SERVICE IS DISTURBED AND IS THE RESPONSIBILITY OF THE CONTRACTOR AT HIS EXPENSE.

9. ALL FIRE LINES AND PRIVATE HYDRANTS WILL REQUIRE THE INSTALLATION OF AN APPROVED DDCV ASSEMBLY INSTALLED AS CLOSE TO THE ROW AS POSSIBLE WITHIN THE PUE. A FIRE HYDRANT RESPONSIBILITY AGREEMENT WILL BE REQUIRED FOR ALL PRIVATE FIRE HYDRANTS. ALL ABOVE GROUND ASSEMBLIES, PIPE, AND FITTINGS MUST BE PAINTED PER CITY OF CAPE CORAL TECHNICAL SPECIFICATIONS PROTECTIVE COATINGS SECTION 09800.

10. ALL BACKFLOW CERTIFICATIONS MUST BE EMAILED TO UCDINSP@CAPECORAL.GOV AND TO THE ASSIGNED UTILITY INSPECTOR.

11. ANY WORK OR MATERIALS WHICH DO NOT CONFORM TO THE CITY OF CAPE CORAL'S SPECIFICATIONS OR ANY WORK PERFORMED WITHOUT THE KNOWLEDGE OF THE CITY OF CAPE CORAL UTILITY INSPECTORS OR REPRESENTATIVES IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

12. THE STANDARD MINIMUM COVER FOR A WATER, IRRIGATION OR FORCE MAIN, WHICH IS NOT UNDER PAVEMENT, IS 30" BELOW FINISHED GRADE, OR 42" BELOW THE EDGE OF PAVEMENT. THE MINIMUM COVER FOR WATER MAINS PLACED UNDER PAVEMENT IS 36". PLEASE DEFER TO THE UTILITY DESIGN PROCEDURES MANUAL SECTION 4.1.5.

13. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO DEWATER TRENCH AND SECURE EXCAVATIONS. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS ASSOCIATED WITH THE CITY OF CAPE CORALS UTILITY DESIGN PROCEDURES MANUAL TECHNICAL SPECIFICATIONS SECTION 02140. ALL DEWATERING SHALL COMPLY WITH THE REGULATIONS OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT AND ANY AGENCY WITH JURISDICTION.

14. THE CONTRACTOR SHALL LOCATE AND VERIFY THE SIZE, LOCATION, AND DEPTH OF ALL EXISTING UTILITIES ON SITE. THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR. THE CONTRACTOR HAS SOLE RESPONSIBILITY TO LOCATE AND PROTECT UNDERGROUND UTILITIES IN THE PROJECT AREA. THE CONTRACTOR SHALL HAVE ALL UTILITIES IDENTIFIED AND MARKED PRIOR TO BEGINNING CONSTRUCTION.

15. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN THE AREA BEFORE BEGINNING CONSTRUCTION AND BE RESPONSIBLE FOR PROTECTION OF ON_SITE UTILITIES INCLUDING LOCATES DURING CONSTRUCTION. ANY UTILITIES THAT ARE DISTURBED OR DAMAGED BY THE CONTRACTOR SHALL BE IMMEDIATELY REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE USING CITY APPROVED MATERIALS AND MUST BE REPORTED TO THE CITY OF CAPE CORAL UTILITIES COLLECTION/ DISTRIBUTION DEPARTMENT (574_0852). ALL REPAIRS MUST BE INSPECTED BY A CITY UTILITIES INSPECTOR PRIOR TO BACKFILL AND RESTORATION. IF THE CONTRACTOR IS UNABLE TO MAKE THE NECESSARY REPAIRS, THE CONTRACTOR WILL BE HELD LIABLE FOR COSTS ASSOCIATED WITH THE REPAIRS BY CITY PERSONNEL.

16. THE CONTRACTOR SHALL ADJUST (AS REQUIRED) PIPELINE ALIGNMENTS HORIZONTALLY AND/OR VERTICALLY TO AVOID CONFLICTS WITH ACTUAL FIELD CONDITIONS AS UNCOVERED DURING CONSTRUCTION. HORIZONTAL AND VERTICAL SEPARATION SHALL CONFORM TO THE CITY OF CAPE CORAL DESIGN PROCEDURES MANUAL SECTIONS 1.5.1 AND 1.5.2.

17. "IN ACCORDANCE WITH THE CITY LAND DEVELOPMENT CODE SECTION 5.1.6, PROTECTION OF EASEMENTS (FKA LUDR SECTION 3.14), ANY IMPROVEMENTS PERMITTED TO BE INSTALLED IN ANY EASEMENT ON THE PROPERTY ARE SUBJECT TO REMOVAL, REPLACEMENT AND RESTORATION BY THE LANDOWNER SHOULD A UTILITY REQUIRE ACCESS TO THE SUBJECT EASEMENT FOR ANY PURPOSE. THE CITY WILL PROVIDE THE PROPERTY OWNER WITH ADVANCE NOTICE IF THE CITY REQUIRES ACCESS TO THE SUBJECT EASEMENTS FOR INSTALLATION OR MAINTENANCE PURPOSES EXCEPT IN EMERGENCY SITUATIONS."

18. THE CONTRACTOR SHALL MAINTAIN A CURRENT AND UPDATED SET OF AS_BUILT DRAWINGS AT ALL TIMES AND PROVIDE ONE COPY TO THE ENGINEER UPON COMPLETION OF CONSTRUCTION. ACCEPTANCE OF THE COMPLETED UTILITY SYSTEM WILL NOT BE GIVEN FINAL APPROVAL BY THE UTILITIES DEPARTMENT UNTIL AS_BUILT PLANS HAVE BEEN SUBMITTED AND APPROVED BY THE ENGINEER OF RECORD.

19. SEWER LATERAL REMOVAL AND EXISTING UNUSED MANHOLE CORE REPAIR PROCEDURE: THE EXISTING 8" SEWER STUB AND BOOT IS TO BE REMOVED AND THE OLD CORE FILLED BY DOWELING IN EPOXY COATED RE_BAR, FILLING THE VOID WITH POLY_RESIN CONCRETE AND INSTALLING THE REQUIRED PROTECTIVE COATING PER TECHNICAL SPECIFICATION SECTION 09800. THE UTILITY DEPARTMENTS PREFERRED CONTRACTOR FOR THE MANHOLE CORE REPAIR IS PAINTS AND COATINGS OR RESTORATION & PROTECTIVE SOLUTIONS. THE REMOVAL OF THE 8" SEWER STUB AND MANHOLE CORE REPAIR IS REQUIRED TO BE COMPLETED AND CURED PRIOR TO THE NEW CORE BEING DRILLED.

GENERAL UTILITY NOTES:

1. CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN ON THE PLANS. IF ANY DISCREPANCIES IN QUANTITIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER.
2. IN THE EVENT THAT HARD LIMESTONE FORMATION IS ENCOUNTERED, MAKING IT IMPOSSIBLE TO EXCAVATE TO THE DEPTH REQUIRED UNDER THIS CONTRACT, THE CONTRACTOR MAY BE ALLOWED TO REDUCE THE PIPE COVER TO NOT LESS THAN TWO (2) FEET WHILE MAINTAINING THE CITY OF CAPE CORAL REQUIRED THICKNESS OF BEDDING UNDER THE PIPE. SUCH DEVIATION FROM THE PLANS MUST BE FIRST BE APPROVED BY CITY OF CAPE CORAL AND THE ENGINEER PRIOR TO THE PIPE LAYING. IF TWO FEET OF COVER OR MORE CAN NOT BE ATTAINED, THE CONTRACTOR SHALL PROVIDE OTHER METHOD OF CONSTRUCTION OR PIPE PROTECTION WHICH SHALL FIRST BE APPROVED BY CITY OF CAPE CORAL AND THE ENGINEER, AT NO ADDITIONAL COST TO THE COUNTY.
3. THE CONTRACTOR SHALL CONTACT THE ENGINEER AND CITY OF CAPE CORAL IMMEDIATELY CONCERNING ANY CONFLICTS WITH CITY OF CAPE CORAL UTILITIES/STRUCTURES ARISING DURING CONSTRUCTION OF ANY FACILITIES SHOWN ON THESE DRAWINGS.
4. THE CONTRACTOR SHALL REPLACE ALL PAVEMENT, CURBS, DRIVEWAYS, SIDEWALKS, FENCES, ETC., WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL RESTORE ALL AREAS AFFECTED BY THE CONSTRUCTION TO ITS ORIGINAL CONDITION, OR BETTER.
5. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITION WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSION REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
6. LOCATIONS OF PROPOSED UTILITY LINES ARE SUBJECT TO MODIFICATION TO PRESERVE EXISTING VEGETATION AS DETERMINED BY THE ENGINEER.
7. CONTRACTOR TO PROVIDE UTILITY RECORD DRAWINGS TO OWNER PRIOR TO FINAL PAYMENT REQUEST.
8. CONTRACTOR SHALL PROVIDE A MINIMUM OF 10' HORIZONTAL AND 12" VERTICAL SEPARATION BETWEEN SANITARY SEWER AND POTABLE WATER LINES. WHERE IT IS NOT PRACTICAL TO MAINTAIN THIS SEPARATION, THE WATER MAIN (OR REUSE LINE) AND SEWER LINE SHALL BE LAID IN SEPARATED TRENCHES SO THAT AT LEAST 12" SEPARATION BETWEEN THE INVERT OF THE UPPER PIPE (WATER OR REUSE LINE) AND THE CROWN OF THE LOWER PIPE (SEWER LINE) IS MAINTAINED. ALTERNATELY, THE SEWER LINE OR THE WATER MAIN (OR REUSE LINE) MAY BE PLACED IN A SLEEVE TO OBTAIN THE EQUIVALENT OF THE 10' SEPARATION.
9. SEWER LINES AND POTABLE WATERLINES (OR REUSE LINES) SHALL BE INSTALLED TO PROVIDE A MINIMUM VERTICAL SEPARATION OF 12" BETWEEN THE INVERT OF THE UPPER PIPE AND CROWN OF THE LOWER PIPE AT CROSSINGS. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER MAIN AND WATER MAIN (OR REUSE LINE) JOINTS ARE AN EQUAL DISTANCE FROM THE POINT OF CROSSING WITH NO LESS THAN 10' BETWEEN ANY TWO JOINTS. ALTERNATELY, THE SEWER MAIN OR THE WATER MAIN (OR REUSE LINE) MAY BE PLACED IN A SLEEVE TO OBTAIN THE EQUIVALENT OF THE REQUIRED SEPARATION.
10. EXERCISE CARE TO PROTECT THE ROOTS OF TREES TO REMAIN. WITHIN THE BRANCH SPREAD OF SUCH TREES, PERFORM ALL TRENCHING BY HAND. OPEN THE TRENCH ONLY WHEN UTILITIES CAN BE INSTALLED IMMEDIATELY. PRUNE INJURED ROOTS CLEANLY AND BACKFILL AS SOON AS POSSIBLE.
11. CONTRACTOR SHALL NOT EXCEED 80% OF THE MANUFACTURERS RECOMMENDED MAXIMUM DEFLECTION WHEN DEFLECTING PIPE. ENGINEER WILL DETERMINE MAXIMUM DEFLECTION AFTER PIPE MANUFACTURER IS SELECTED.

PAVING, GRADING AND DRAINAGE NOTES:

1. THIS SITE CAN BE UTILIZED SAFELY FOR BUILDING PURPOSES WITHOUT UNDUE DANGER FROM FLOODING OR ADVERSE SOIL CONDITIONS.
2. LENGTH OF STORM DRAIN PIPES ARE APPROXIMATE AND ARE MEASURED FROM CENTER OF STRUCTURE.
3. CONTRACTOR SHALL NOTIFY CITY OF CAPE CORAL A MINIMUM OF 72 HOURS PRIOR TO ALL REQUIRED INSPECTIONS.
4. CONTRACTOR SHALL NOTIFY THE OWNER AND CONTACT ALL UTILITY COMPANIES FOR LOCATIONS OF EXISTING UTILITIES IN THE AREA 72 HOURS (MIN) PRIOR TO COMMENCING CONSTRUCTION.
5. PLACE 200 S.F. OF SOD AROUND ALL INLETS, HEADWALLS, AND CONTROL STRUCTURES IN OPEN SPACE AREAS UNLESS SPECIFIC LANDSCAPING HAS BEEN PROVIDED. USE ARGENTINE BAHIA AND CONFORM TO FDOT SECTION 575.
6. PLACE 18" OF SOD CONTINUOUS ALONG EDGES OF PAVEMENT OF ALL ROADS AND/OR CURB, LAYING PARALLEL WITH THE ROAD MAINTAINING 1" BELOW FINISHED PAVEMENT GRADE.

WATER LINE NOTES:

1. THE ENDS OF ALL CAPPED IRRIGATION AND POTABLE WATERLINES SHALL BE MARKED WITH ELECTRONIC MARKERS AND 2'X4' STAKES 5' IN LENGTH WITH 2' ABOVE GROUND.
2. ALL POTABLE AND IRRIGATION WATERLINES SHALL BE AWWA C-900, DR18, CLASS 150 PVC UNLESS OTHERWISE NOTED. POTABLE WATERLINES LOCATED UNDER PROPOSED PAVEMENT SHALL BE AWWA C-900, DR 14 PVC.
3. ALL WATERLINES SHALL HAVE A MINIMUM COVER OF 30" AND A MAXIMUM OF 48" BELOW FINISHED GRADE.
4. CONTRACTOR SHALL USE 45° BENDS WITH MEGALUGS AT CONFLICTS.
5. NOT ALL PROPOSED BENDS ARE SHOWN IN WATERLINE. ADDITIONAL FITTINGS MAY BE REQUIRED TO BEND WATERLINE AS SHOWN.
6. THE CONTRACTOR SHALL PLACE PROPOSED VALVES AS SHOWN. THE VALVE BOX SHALL NOT BE LOCATED IN PAVEMENT OR DRIVEWAY AREAS.
7. PROPOSED FIRE HYDRANTS SHALL BE LOCATED AS SHOWN ON UTILITY DETAIL SHEETS. THE CONTRACTOR SHALL PROVIDE AND INSTALL REFLECTIVE PAVEMENT MARKERS AS REQUIRED NEAR PROPOSED FIRE HYDRANTS.
8. WATER MAIN TO BE 5' MINIMUM CLEARANCE DISTANCE FROM BACK OF CURB.

SANITARY SEWER / FORCE MAIN NOTES:

1. ALL PIPE LENGTHS ARE APPROXIMATE AND ARE MEASURED FROM CENTER OF STRUCTURE OR FITTINGS.
2. ALL GRAVITY SEWER LINES SHALL BE PVC (SDR-26) UNLESS NOTED OTHERWISE.
3. CLEANOUT TOP ELEVATIONS ARE APPROXIMATE AND SHOULD BE ADJUSTED TO FINAL ELEVATION.
4. ALL SANITARY SEWER SERVICE INVERTS TO BE PLACED 36" BELOW BACK OF CURB (MIN. 1% SLOPE) TYPICAL UNLESS IN CONFLICT WITH WATERLINE.
5. U.S. FOUNDRY CLEAN OUT RING AND COVER IS REQUIRED IN ALL AREAS, INCLUDING GREEN AREAS.

SIGNING AND PAVEMENT MARKING NOTES:

1. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH FDOT STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION), "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION)", AND CITY OF CAPE CORAL REQUIREMENTS.
2. MATCH EXISTING PAVEMENT MARKINGS AT EXISTING ROADS.
3. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION).
4. CONTRACTOR SHALL SET ROADWAY GROUND MOUNT SIGNS AT PROPER DEFLECTION ANGLE TO THE ROADWAY IN ACCORDANCE WITH FDOT INDEX NUMBER 17302.

TESTING AND INSPECTION REQUIREMENTS:

1. THE STORM DRAINAGE PIPING AND FILTRATION SYSTEM SHALL BE SUBJECTED TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION.
2. THE CONTRACTOR SHALL MAINTAIN THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE STORM SYSTEM WILL BE INSPECTED BY THE OWNER'S ENGINEER PRIOR TO FINAL ACCEPTANCE.

CLEARING AND SITE PREPARATION NOTES:

1. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS

LANDSCAPE NOTE:

1. SEE LANDSCAPE PLAN FOR PLANTING REQUIREMENTS, LOCATIONS & SPECIFICATIONS.

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ZIMMER DEVELOPMENT COMPANY
CLIENT NAME AND ADDRESS

OASIS @ CAPE CORAL PHASE 2
CITY OF CAPE CORAL, FLORIDA
PROJECT NAME AND LOCATION

JASON E. TOMASSETTI, PE
FL License No. 66263

NO.	REVISION	DATE
R1	PER CITY COMMENTS	10-28-21

REVISIONS DESCRIPTION

DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03 NOTE.dwg
SCALE:	AS SHOWN

GENERAL NOTES
SHEET TITLE

C-02
SHEET NUMBER



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ZIMMER DEVELOPMENT COMPANY

CLIENT NAME AND ADDRESS

OASIS @ CAPE CORAL PHASE 2
CITY OF CAPE CORAL, FLORIDA

PROJECT NAME AND LOCATION

JASON E. TOMASSETTI, PE
FL License No. 66263

NO.	REVISION	DATE
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REVISIONS DESCRIPTION

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FILE NO.	1364-01 AER.dwg
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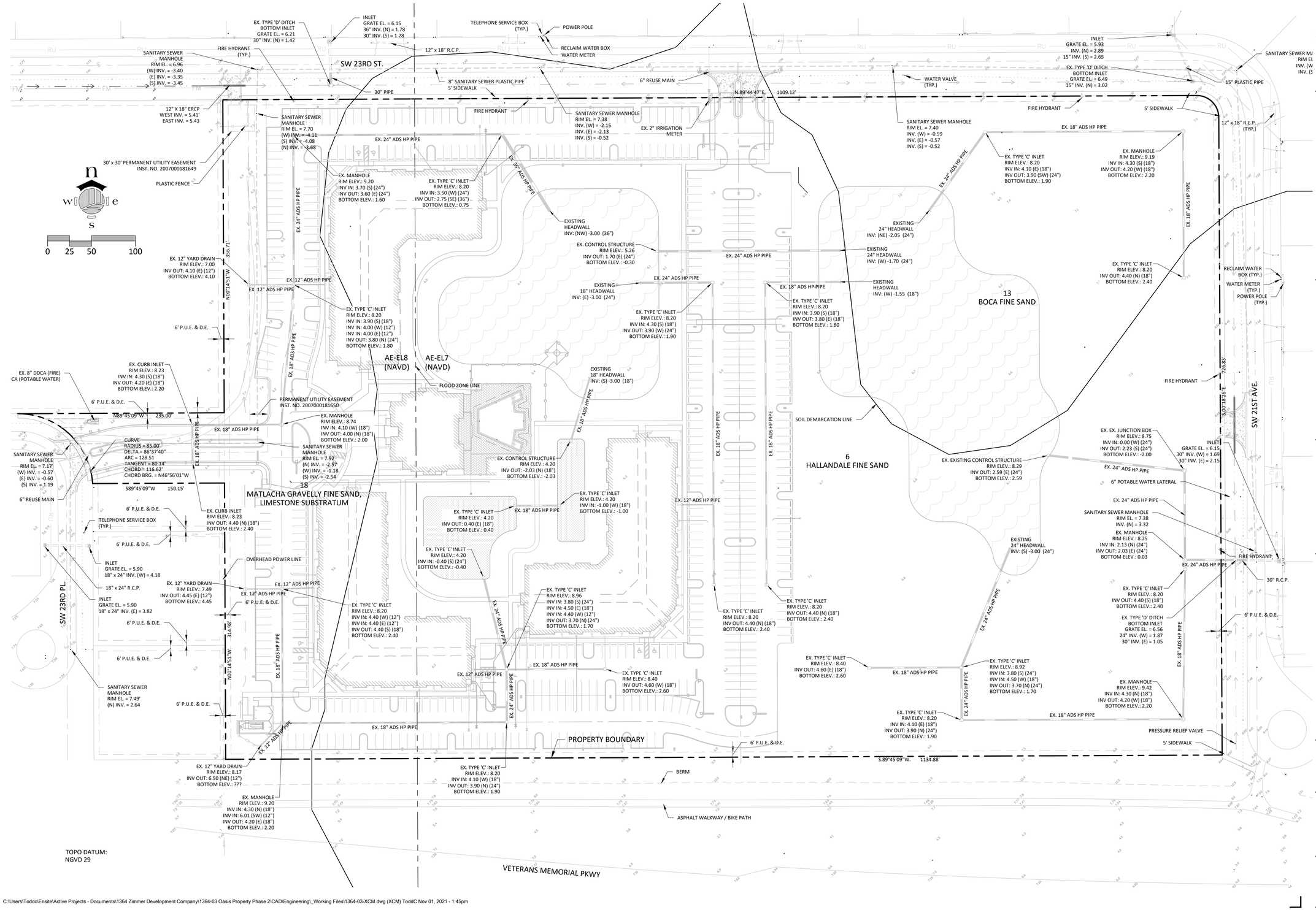
AERIAL MAP

SHEET TITLE

C-03

SHEET NUMBER

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R1	PER CITY COMMENTS	10-28-21

REVISIONS DESCRIPTION

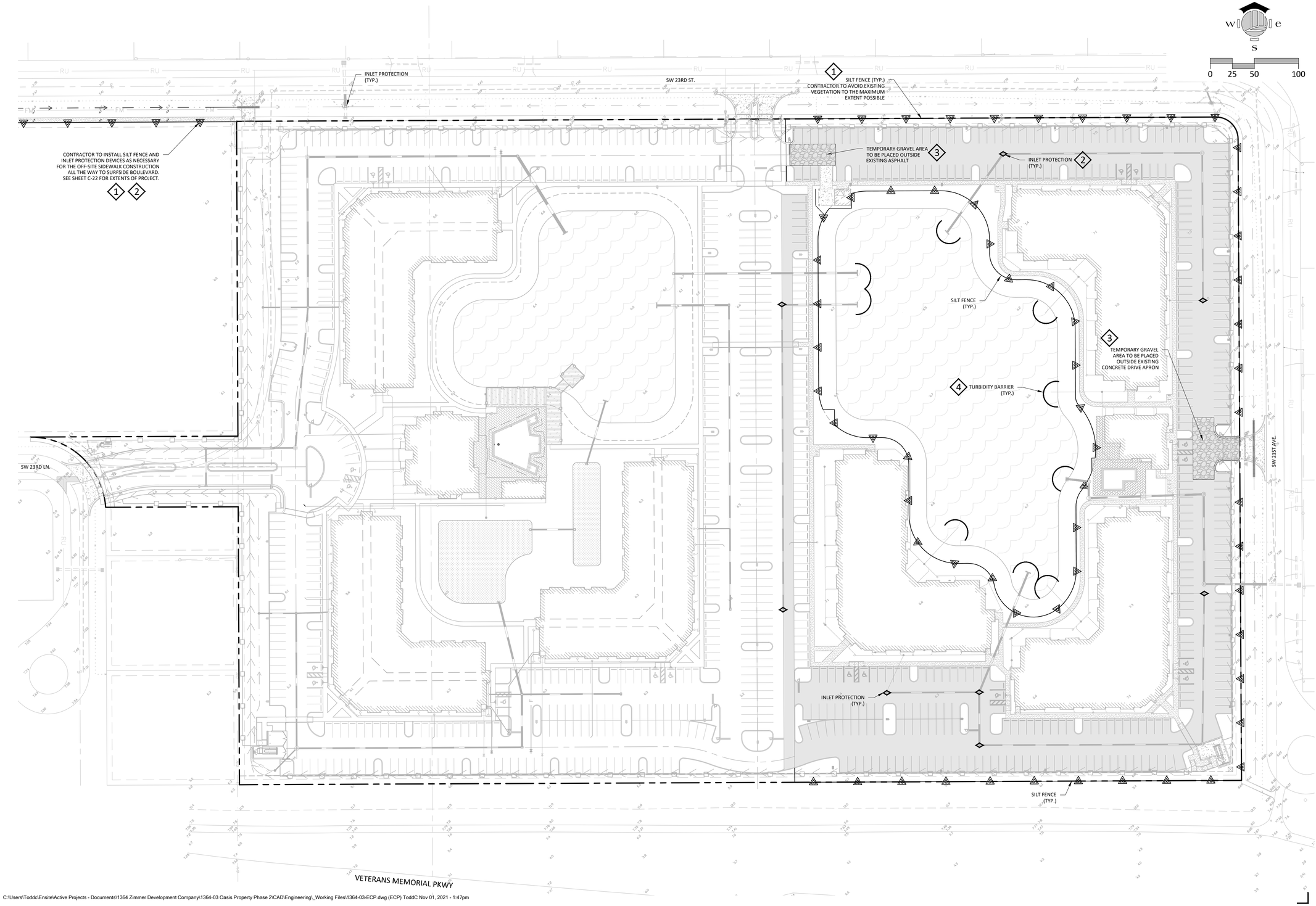
DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03 XCM.dwg
SCALE:	AS SHOWN

SOILS & EXISTING CONDITIONS MAP

SHEET TITLE

C-04

SHEET NUMBER



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PROJECT NAME AND LOCATION

OASIS @ CAPE CORAL PHASE 2
CITY OF CAPE CORAL, FLORIDA

JASON E. TOMASSETTI, PE
FL License No. 66263

NO.	REVISION	DATE	REVISIONS DESCRIPTION
R1	PER CITY COMMENTS	10-28-21	

DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03 ECP.dwg
SCALE:	AS SHOWN

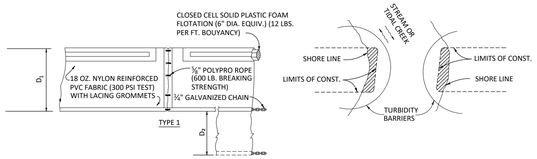
EROSION & SEDIMENT CONTROL PLAN

SHEET TITLE

C-05

SHEET NUMBER

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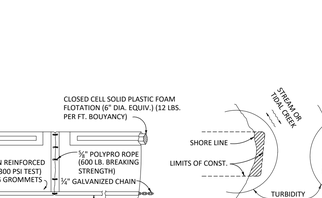
D_1 = 5' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS).
D_2 = 5' STD. (ADDITIONAL PANEL FOR DEPTHS GREATER THAN 5').
CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10'. TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10' UNLESS SPECIAL DEPTHS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

NOTE:
TURBIDITY BARRIERS FOR THE FLOWING STREAMS AND TIDAL CREEKS MAY BE EITHER FLOATING, OR STAKED TYPES OR ANY COMBINATIONS OF TYPES THAT WILL SUIT SITE CONDITIONS AND MEET EROSION CONTROL AND WATER QUALITY REQUIREMENTS . THE BARRIER TYPE(S) WILL BE AT THE CONTRACTORS OPTION UNLESS OTHERWISE SPECIFIED IN THE PLANS, HOWEVER PAYMENT WILL BE UNDER THE PAY ITEM(S) ESTABLISHED IN THE PLANS FOR FLOATING TURBIDITY BARRIER AND/OR STAKED TURBIDITY BARRIER. POSTS IN STAKED TURBIDITY BARRIERS TO BE INSTALLED IN VERTICAL POSITION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

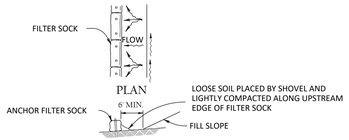
FLOATING TURBIDITY BARRIES

NOTES:
1. TURBIDITY BARRIERS ARE TO BE USED IN ALL PERMANENT BODIES OF WATER REGARDLESS OF WATER DEPTH.
2. NUMBER AND SPACING OF ANCHORS DEPENDENT ON CURRENT VELOCITIES.
3. FOR ADDITIONAL INFORMATION SEE SECTION 104 OF THE FDOT STANDARD SPECIFICATIONS.
4. FLOATING TURBIDITY BARRIERS ARE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR FLOATING TURBIDITY BARRIER , LF .
5. STAKED TURBIDITY BARRIERS ARE TO BE PAID UNDER THE CONTRACT UNIT PRICE FOR STAKED TURBIDITY BARRIER, LF.

TURBIDITY BARRIER APPLICATIONS 4
N.T.S.

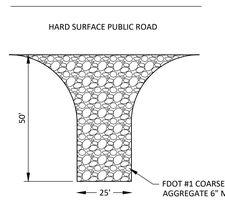


ELEVATION
TO BE USED AT SELECTED SITES WHERE THE NATURAL GROUND SLOPES TOWARD THE TOE OF SLOPE

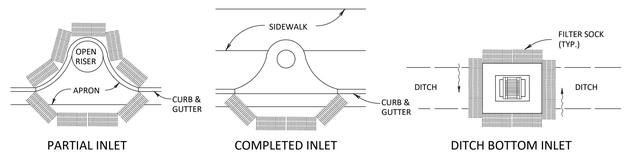


ELEVATION
TO BE USED AT SELECTED SITES WHERE THE NATURAL GROUND SLOPES TOWARD THE TOE OF SLOPE

BARRIERS FOR FILL SLOPES
N.T.S.

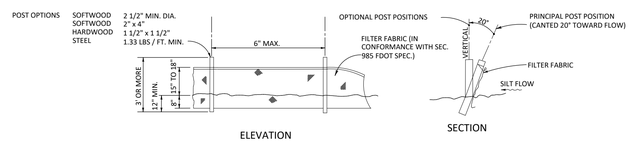


TEMPORARY GRAVEL CONST. ENTRANCE 3
N.T.S.



PARTIAL INLET | COMPLETED INLET | DITCH BOTTOM INLET

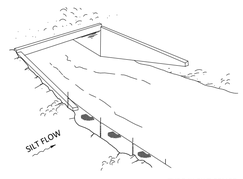
PROTECTION AROUND INLETS OR SIMILAR STRUCTURES 2
N.T.S.



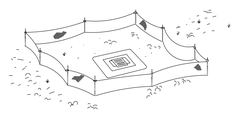
ELEVATION | SECTION

NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF)

TYPE III SILT FENCE
N.T.S.



TYPE III SILT FENCE



TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS



NOTE: SPACING FOR TYPE III FENCE TO BE IN ACCORDANCE WITH CHART I, SHEET 1 OF 3 AND DITCH INSTALLATIONS AT DRAINAGE STRUCTURES SHEET 2 OF 3
TYPE III SILT FENCE

DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

SILT FENCE APPLICATIONS
N.T.S.

FILTER SOCK OR SILT FENCE 1
PER F.D.O.T. INDEX 102
N.T.S.

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CITY OF CAPE CORAL, FLORIDA

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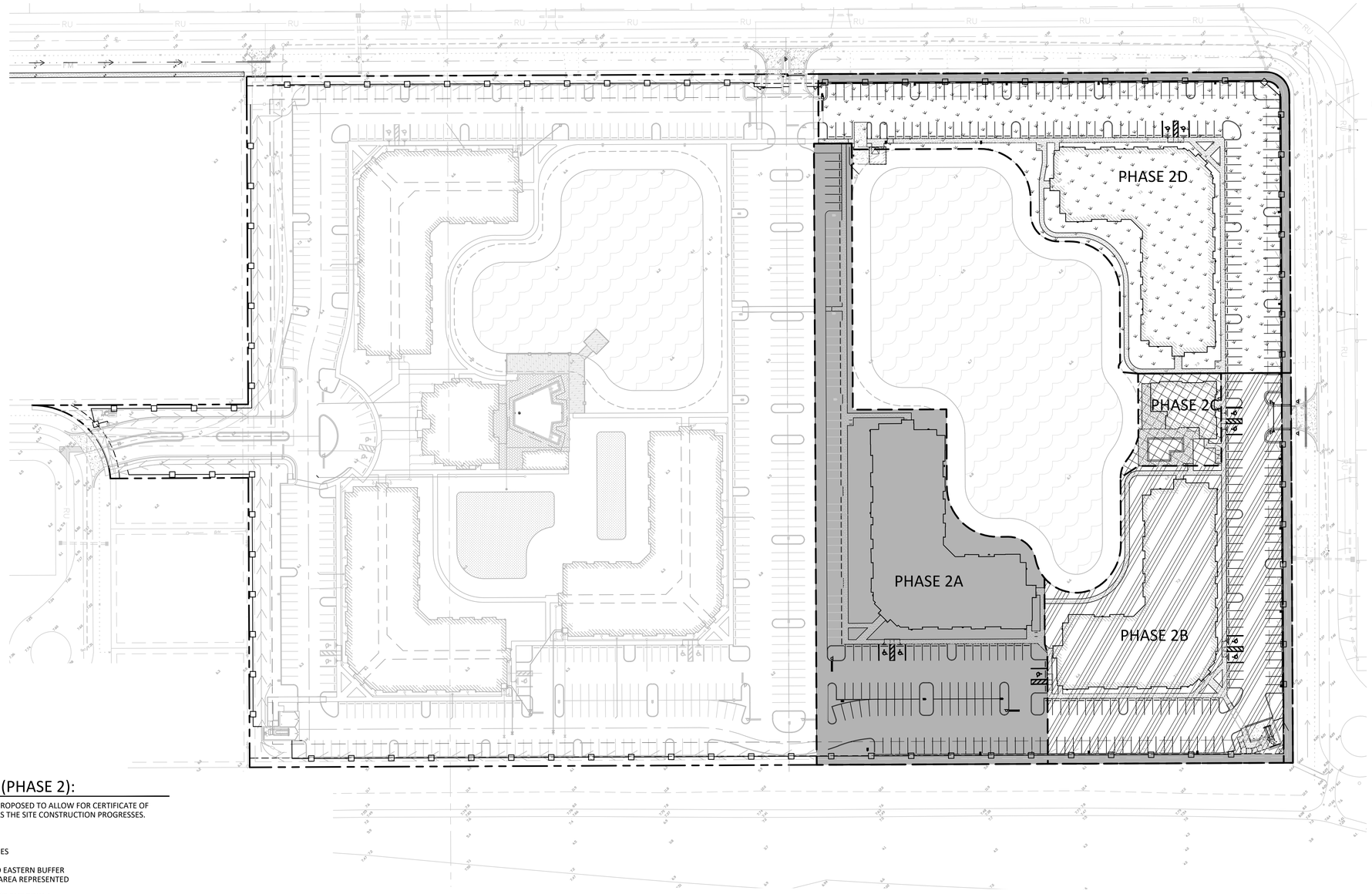
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PROJECT NO.	1364-03
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SCALE:	AS SHOWN

EROSION & SEDIMENT CONTROL PLAN
SHEET TITLE

C-06
SHEET NUMBER



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PHASING PLAN (PHASE 2):

THE FOLLOWING PHASING IS PROPOSED TO ALLOW FOR CERTIFICATE OF OCCUPANCY FOR BUILDINGS AS THE SITE CONSTRUCTION PROGRESSES.

PHASE 2A:
ALL INFRASTRUCTURE - UTILITIES
PERIMETER FENCE
ACCENT TREES TO NORTH AND EASTERN BUFFER
INTERNAL LANDSCAPING FOR AREA REPRESENTED
BUILDING 4
PARKING AND DRIVE TO SERVICE BUILDING 4
SIDEWALK ALONG PARKING LOT
MAINTENANCE BUILDING AND CAR WASH

PHASE 2B:
BUILDING 5
TRASH COMPACTOR
INTERNAL WALKWAYS
INTERNAL LANDSCAPING FOR AREAS REPRESENTED
PARKING AND DRIVE AREAS REPRESENTED
CHANGE TO CONTROL STRUCTURE LOCATION AND CONNECTION
OFF-SITE SIDEWALK ALONG SW 23RD STREET

PHASE 2C:
CLUBHOUSE AREA
INTERNAL WALKWAYS
LANDSCAPING FOR AREAS REPRESENTED

PHASE 2D:
BUILDING 6
INTERNAL WALKWAYS
INTERNAL LANDSCAPING FOR AREAS REPRESENTED
FINALIZE PARKING LOT AND CONNECTIONS
RESIDENTIAL GATE AND EMERGENCY ACCESS GATE

PHASING PLAN (PHASE 2-PARKING):

TOTAL UNITS = 204 (MULTI-FAMILY)
TOTAL BEDROOMS
1 BEDROOM (48) = 1.5 STALLS PER = 72 STALLS REQ'D
2 BEDROOMS (108) = 2.0 STALLS PER = 216 STALLS REQ'D
3 BEDROOMS (48) = 2.0 STALLS PER = 96 STALLS REQ'D
TOTAL = 423 STALLS REQ'D (INCLUDES 10% FOR GUESTS)
= 9 HANDICAP REQ'D

PROVIDED:
PHASE 2A = 92 EXISTING PARKING STALLS BUILT IN PHASE 1
= 78 PROPOSED (3 HANDICAP)

PHASE 2B = 107 PROPOSED (4 HANDICAP)

PHASE 2C = 0 PROPOSED

PHASE 2D = 146 PROPOSED (2 HANDICAP)

PHASING NOTES (PHASE 2):

1. SIDEWALKS LOCATED ADJACENT TO THE LAKES/WATER MANAGEMENT AREAS MAY BE BUILT IN LATER PHASES, HOWEVER AREAS SUBJECT TO C.O. REQUEST MUST HAVE SOIL STABILIZATION.
2. SOUTHEAST CORNER MONUMENT SIGN CAN BE INSTALLED IN ANY PHASE AS THEY REQUIRE A SEPARATE PERMIT AND DO NOT AFFECT SITE WORK.

PHASING LEGEND

- PHASE 2A
- PHASE 2B
- PHASE 2C
- PHASE 2D

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OASIS @ CAPE CORAL PHASE 2
CITY OF CAPE CORAL, FLORIDA
PROJECT NAME AND LOCATION

JASON E. TOMASSETTI, PE
FL License No. 66263

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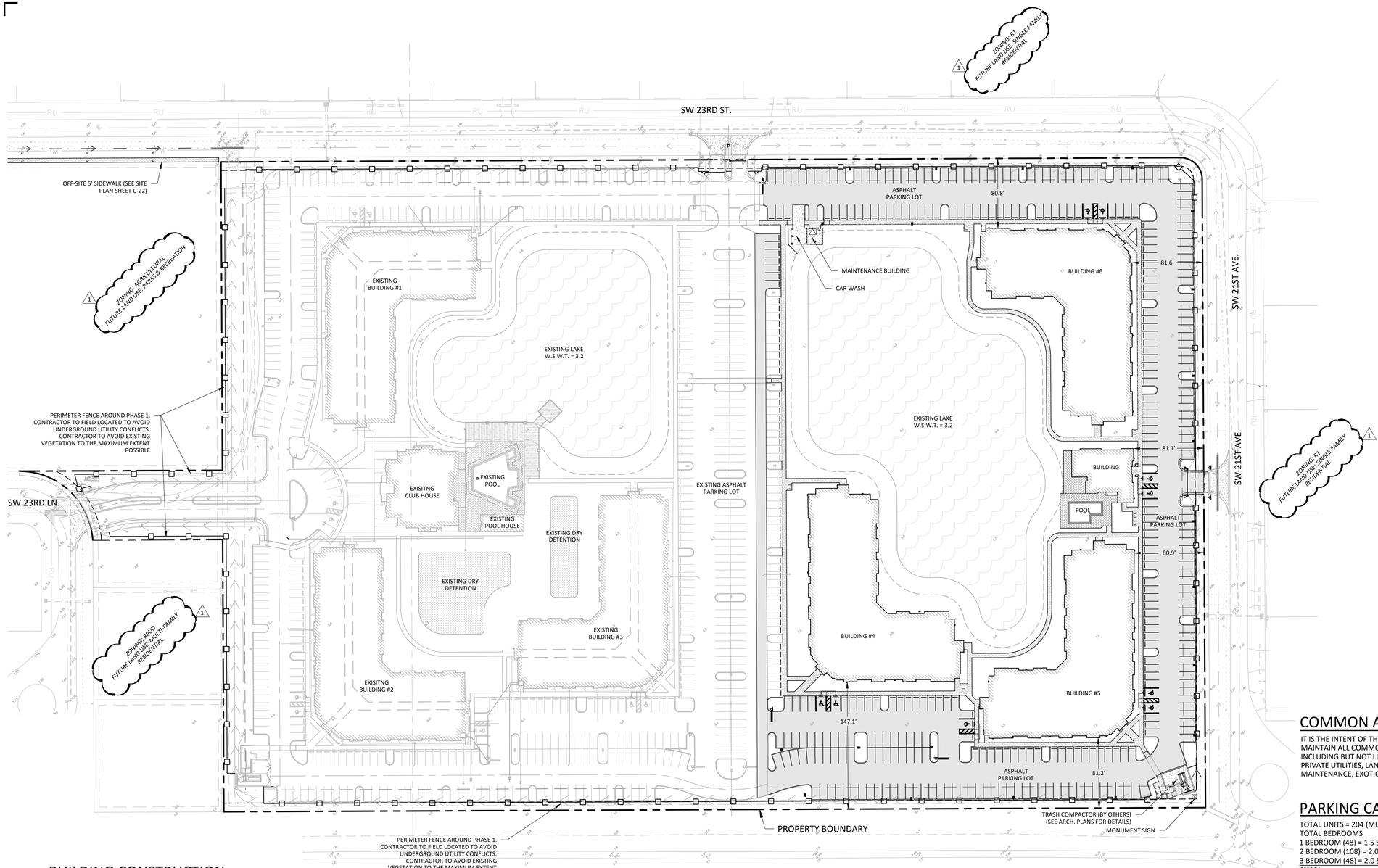
REVISIONS DESCRIPTION

DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03 PHASING.dwg
SCALE:	AS SHOWN

PHASING PLAN
SHEET TITLE

C-07
SHEET NUMBER

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BUILDING CONSTRUCTION:

BUILDINGS 4-6, (TYPE V-A SPRINKLERED)
CLUB HOUSE (TYPE V-B NON-SPRINKLERED)
MAINTENANCE BUILDING (TYPE V-B NON-SPRINKLERED)

BUILDING HEIGHT:

55' (ABOVE GRADE) ALLOWED PER ORDINANCE 31-21
BUILDINGS 4 -6 STORIES (47'-9" TO TOP OF A PARAPET)
CLUBHOUSE (24'-0" TO PEAK OF ROOF)
MAINTENANCE (15'-9" TO PEAK OF ROOF)
COMPACTOR ENCLOSURE (9'-8")

DENSITY: (ORDINANCE 31-21)

23 DU / AC. = 23 X 19.89 = 456
PHASE 1 (EXISTING) = 228 UNITS
PHASE 2 (PROPOSED) = 204 UNITS

TOTAL UNITS = 432

LIVING AREA SIZES:

MIN. 1-BEDROOM SIZE = 650 S.F.
MIN. 2-BEDROOM SIZE = 800 S.F.
MIN. 3-BEDROOM SIZE = 950 S.F.

PROVIDED:
1-BEDROOM SIZE RANGE = 844 S.F.
2-BEDROOM SIZE = 1,170 S.F.
3-BEDROOM SIZE = 1,449 S.F.

SITE DATA TABLE: (PHASE I-EXISTING)

LAND USE TABLE:	EXISTING	PERCENT %
BUILDING	1.90 AC.	14%
PAVEMENT	5.05 AC.	36%
OPEN SPACE	3.94 AC.	28%
LAKE	2.76 AC.	20%
DRY DETENTION	0.27 AC.	2%
TOTAL	13.92 AC.	100%

SITE DATA TABLE: (PHASE II)

LAND USE TABLE:	PROPOSED	PERCENT %
BUILDING	1.75 AC.	30%
PAVEMENT	2.74 AC.	46%
OPEN SPACE	1.48AC.	24%
LAKE	0 AC.	0%
DRY DETENTION	0 AC.	0%
TOTAL	5.97 AC.	100%

SITE DATA TABLE: (SITE BUILD-OUT)

LAND USE TABLE:	PROPOSED	PERCENT %
BUILDING	3.65 AC.	19%
PAVEMENT	7.79 AC.	39%
OPEN SPACE	5.42 AC.	27%
LAKE	2.76 AC.	14%
DRY DETENTION	0.27 AC.	1%
TOTAL	19.89 AC.	100%

1 PER ORDINANCE 31 - 21:
25% OPEN SPACE REQUIRED = 4.97 ACRES
PROVIDED OPEN SPACE (OPEN SPACE + LAKE + DRY DETENTION) = 8.45 ACRES (42%)

SETBACKS (PER ORDINANCE 31-21):

	REQUIRED	PROVIDED
FRONT (WEST)	80'	+80'
SIDE (NORTH)	80'	80.8'
SIDE (SOUTH)	80'	81.2'
REAR (EAST)	80'	80.9'

COMMON AREA MAINTENANCE:

IT IS THE INTENT OF THE OWNER, ZP NO 339, LLC, TO OWN AND MAINTAIN ALL COMMON AREAS ON THE SUBJECT PROPERTY, INCLUDING BUT NOT LIMITED TO STORM WATER FACILITIES, PRIVATE UTILITIES, LANDSCAPING, IRRIGATION, LAKE MAINTENANCE, EXOTIC CONTROL, ETC.

PARKING CALCULATIONS: (PHASE II)

TOTAL UNITS = 204 (MULTI-FAMILY)
TOTAL BEDROOMS
1 BEDROOM (48) = 1.5 STALLS PER = 72 STALLS REQ'D
2 BEDROOM (108) = 2.0 STALLS PER = 216 STALLS REQ'D
3 BEDROOM (48) = 2.0 STALLS PER = 96 STALLS REQ'D
TOTAL = 384 STALLS REQ'D
+ 10% FOR GUESTS UP TO 50 = 39 REQ'D
TOTAL PARKING REQUIRED = 423 REQ'D (9 HANDICAP REQ'D)

TOTAL PARKING PROVIDED = 423 (9 HANDICAP)

LEGEND

- ASPHALT
- BRICK PAVERS
- 4" THICK CONCRETE SIDEWALK
- EXISTING 6" THICK CONCRETE SIDEWALK
- EXISITNG 6" THICK CONCRETE PAVEMENT
- EXISTING LAKE
- (D) TYPE D CURB
- (F) TYPE F CURB

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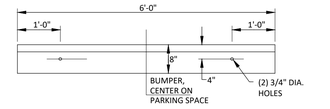
OVERALL SITE PLAN

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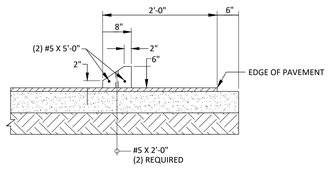
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PLAN VIEW

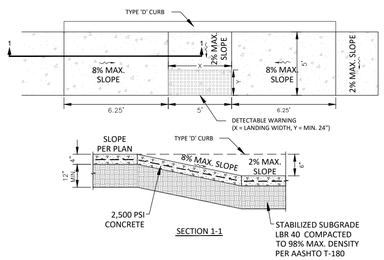


CROSS SECTION

NOTE: RUBBER EQUIVALENT IS ACCEPTABLE

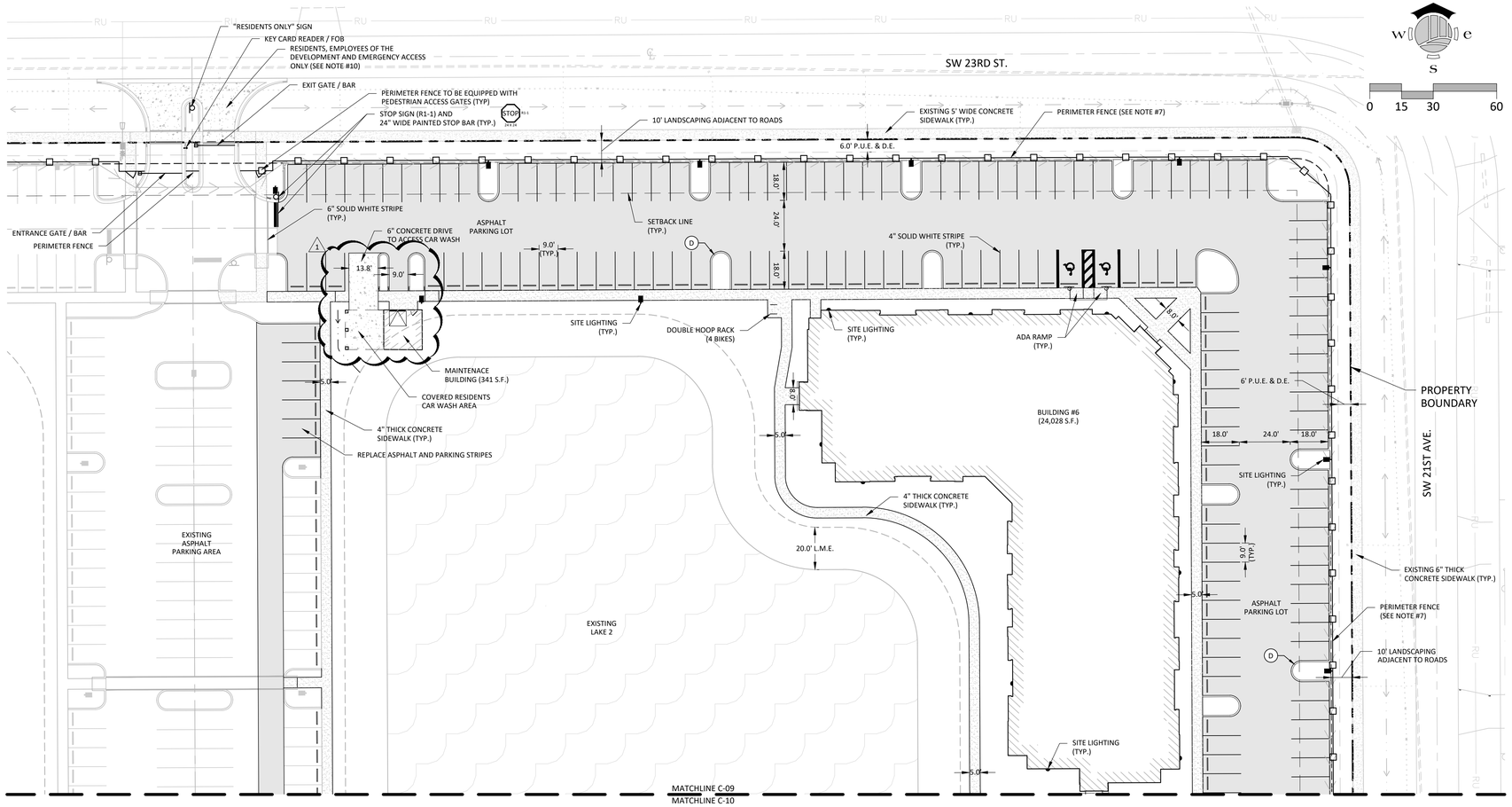
PARKING BUMPER DETAIL

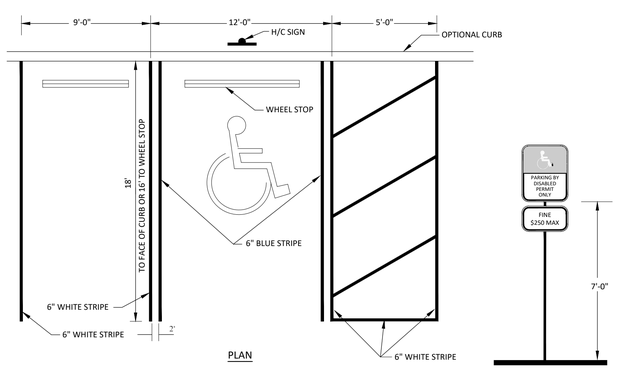
N.T.S.



HANDICAP RAMP DETAIL (PARALLEL CURB RAMP)

NTS





TYPICAL PARKING & HANDICAP SPACE

N.T.S.

HANDICAP SIGN DETAIL (PER FDOT INDEX 700-102-1)

NOTES:

1. ALL RADII ARE 5' UNLESS OTHERWISE SHOWN.
2. ON-SITE SIGNS (MONUMENT, IDENTIFICATION, ETC) REQUIRE SEPARATE REVIEW AND PERMITS.
3. ANY ROOFTOP EQUIPMENT SHALL BE SCREENED ON ALL FOUR SIDES.
4. ALL ON-SITE UTILITIES (TELEPHONE, ELECTRICITY, CABLE AND OTHER WIRES SHALL BE PLACED UNDERGROUND.
5. ELECTRIC METERS AND SIMILAR PANELS SHALL BE SCREENED FROM PROPERTY LINE ABUTTING A PUBLIC STREET. THIS SCREENING MAY CONSIST OF A WALL, FENCE, LANDSCAPING OR A COMBINATION OF. IN LIEU OF SCREENING, THE EQUIPMENT MAY BE PAINTED TO MATCH THE COLOR OF THE BUILDING.
6. CONTRACTOR TO INSTALL 6" SOLID WHITE THERMOPLASTIC EDGE STRIPING ALONG ANY NEW EDGE OF PAVEMENT ON SW 5TH ST, SW 14TH PL AND SW 15TH PL. DRIVEWAY OPENINGS MAY BE SKIPPED.
7. PER ORDINANCE 31-21 A PERIMETER FENCE SHALL BE CONSTRUCTED ALONG THE ENTIRE PERIMETER OF THE PROPERTY. HEIGHT SHALL NOT EXCEED 6', HOWEVER ARCHITECTURE FEATURES CAN EXTEND 6" ABOVE 6'. FENCE MATERIAL SHALL BE OR A COMBINATION OF; WROUGHT IRON, ALUMINUM, CONCRETE BLOCK WITH STUCCO, TEXTURED CONCRETE BLOCK, STONE, BRICK AND FORMED, DECORATIVE OR PRECAST CONCRETE.
8. DECORATIVE SIGN/IDENTIFICATION SIGN ON SOUTHEAST PORTION OF THE PROPERTY MAY ACHIEVE A MAXIMUM HEIGHT OF 24'.
9. ACCESS DRIVE FROM SW 21ST AVENUE SHALL BE USED AS AN EMERGENCY ACCESS DRIVEWAY ONLY. IT SHALL BE FITTED WITH THE NECESSARY EQUIPMENT FOR ALLOWING ACCESS TO EMERGENCY PERSONNEL.

1

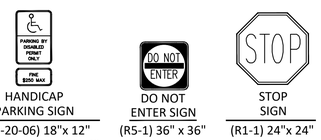
10. ACCESS DRIVE FROM SW 23RD STREET SHALL BE ACCESSIBLE ONLY VIA KEY CARD/FOB READER ISSUED TO RESIDENTS, EMPLOYEES OF THE DEVELOPMENT. AN EVAC SYSTEM WILL BE INSTALLED FOR EMERGENCY PERSONNEL. THIS ACCESS SHALL BE FITTED WITH BARS THAT SHALL FUNCTION AS AUTOMATICALLY OPENING GATES UPON APPROACH AND EXIT OF A VEHICLE.
11. OWNER/DEVELOPER MAY OPTION TO PLACE SOME OF THE REQUIRED BICYCLE RACKS WITHIN PHASE 1.

SIGNING AND PAVEMENT MARKING NOTES:

1. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH FDOT STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION), "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION)," AND THE CURRENT LCDOT AND CITY OF FORT MYERS DEPARTMENT OF TRANSPORTATION REQUIREMENTS.
2. MATCH EXISTING PAVEMENT MARKINGS AT EXISTING ROADS.
3. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION).
4. CONTRACTOR SHALL SET ROADWAY GROUND MOUNT SIGNS AT PROPER DEFLECTION ANGLE TO THE ROADWAY IN ACCORDANCE WITH FDOT INDEX NUMBER 17302.
5. SEE FDOT INDEX NUMBERS 17346 AND 17352 FOR ADDITIONAL DETAILS.

COMMON AREA MAINTENANCE:

IT IS THE INTENT OF THE OWNER, ZP NO 339, LLC, OR ITS SUCCESSORS, TO OWN AND MAINTAIN COMMON AREAS ON THE SUBJECT PROPERTY, INCLUDING BUT NOT LIMITED TO STORM WATER FACILITIES, PRIVATE UTILITIES, LANDSCAPING, IRRIGATION, EXOTIC CONTROL, ETC.



HANDICAP PARKING SIGN (FTP-20-06) 18"x 12" (FTP-22-04-250) 12"x 6"

DO NOT ENTER SIGN (R5-1) 36" x 36"

STOP SIGN (R1-1) 24"x 24"

ROAD SIGNS

N.T.S.

LEGEND

- ASPHALT
- 4" THICK CONCRETE SIDEWALK
- 6" THICK CONCRETE PAVEMENT
- EXISITNG 6" THICK CONCRETE PAVEMENT
- BRICK PAVERS
- EXISTING 6" THICK CONCRETE SIDEWALK
- EXISTING LAKE
- (D) TYPE D CURB
- (F) TYPE F CURB

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2401 FIRST STREET, SUITE 201
FORT MYERS, FLORIDA 33901
PH: (239)-226-0024
EB-26544 CA-LC26000374

ZIMMER DEVELOPMENT COMPANY

CLIENT NAME AND ADDRESS

OASIS @ CAPE CORAL PHASE 2
CITY OF CAPE CORAL, FLORIDA

PROJECT NAME AND LOCATION

JASON E. TOMASSETTI, PE
FL License No. 66263

NO.	REVISION	DATE
R1	PER CITY COMMENTS	10-28-21

REVISIONS DESCRIPTION

DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03 SITE.dwg
SCALE:	AS SHOWN

SITE PLAN

SHEET TITLE

C-09

SHEET NUMBER

SIGNING AND PAVEMENT MARKING NOTES:

1. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH FDOT STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION), "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION)," AND THE CURRENT LCDOT AND CITY OF FORT MYERS DEPARTMENT OF TRANSPORTATION REQUIREMENTS.
2. MATCH EXISTING PAVEMENT MARKINGS AT EXISTING ROADS.
3. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION).
4. CONTRACTOR SHALL SET ROADWAY GROUND MOUNT SIGNS AT PROPER DEFLECTION ANGLE TO THE ROADWAY IN ACCORDANCE WITH FDOT INDEX NUMBER 17302.
5. SEE FDOT INDEX NUMBERS 17346 AND 17352 FOR ADDITIONAL DETAILS.

NOTES:

1. ALL RADII ARE 5' UNLESS OTHERWISE SHOWN.
2. ON-SITE SIGNS (MONUMENT, IDENTIFICATION, ETC) REQUIRE SEPARATE REVIEW AND PERMITS.
3. ANY ROOFTOP EQUIPMENT SHALL BE SCREENED ON ALL FOUR SIDES.
4. ALL ON-SITE UTILITIES (TELEPHONE, ELECTRICITY, CABLE AND OTHER WIRES SHALL BE PLACED UNDERGROUND.
5. ELECTRIC METERS AND SIMILAR PANELS SHALL BE SCREENED FROM PROPERTY LINE ABUTTING A PUBLIC STREET. THIS SCREENING MAY CONSIST OF A WALL, FENCE, LANDSCAPING OR A COMBINATION OF. IN LIEU OF SCREENING, THE EQUIPMENT MAY BE PAINTED TO MATCH THE COLOR OF THE BUILDING.
6. CONTRACTOR TO INSTALL 6" SOLID WHITE THERMOPLASTIC EDGE STRIPING ALONG ANY NEW EDGE OF PAVEMENT ON SW 5TH ST, SW 14TH PL AND SW 15TH PL. DRIVEWAY OPENINGS MAY BE SKIPPED.
7. PER ORDINANCE 31-21 A PERIMETER FENCE SHALL BE CONSTRUCTED ALONG THE ENTIRE PERIMETER OF THE PROPERTY. HEIGHT SHALL NOT EXCEED 6', HOWEVER ARCHITECTURE FEATURES CAN EXTEND 6" ABOVE 6'. FENCE MATERIAL SHALL BE OR A COMBINATION OF; WROUGHT IRON, ALUMINUM, CONCRETE BLOCK WITH STUCCO, TEXTURED CONCRETE BLOCK, STONE, BRICK AND FORMED, DECORATIVE OR PRECAST CONCRETE.
8. DECORATIVE SIGN/IDENTIFICATION SIGN ON SOUTHEAST PORTION OF THE PROPERTY MAY ACHIEVE A MAXIMUM HEIGHT OF 24'.
9. ACCESS DRIVE FROM SW 21ST AVENUE SHALL BE USED AS AN EMERGENCY ACCESS DRIVEWAY ONLY. IT SHALL BE FITTED WITH THE NECESSARY EQUIPMENT FOR ALLOWING ACCESS TO EMERGENCY PERSONNEL.
10. ACCESS DRIVE FROM SW 23RD STREET SHALL BE ACCESSIBLE ONLY VIA KEY CARD/FOB READER ISSUED TO RESIDENTS, EMPLOYEES OF THE DEVELOPMENT. AN EVAC SYSTEM WILL BE INSTALLED FOR EMERGENCY PERSONNEL. THIS ACCESS SHALL BE FITTED WITH BARS THAT SHALL FUNCTION AS AUTOMATICALLY OPENING GATES UPON APPROACH AND EXIT OF A VEHICLE.
11. OWNER/DEVELOPER MAY OPTION TO PLACE SOME OF THE REQUIRED BICYCLE RACKS WITHIN PHASE 1.

COMMON AREA MAINTENANCE:

IT IS THE INTENT OF THE OWNER, ZP NO 339, LLC, OR ITS SUCCESSORS, TO OWN AND MAINTAIN COMMON AREAS ON THE SUBJECT PROPERTY, INCLUDING BUT NOT LIMITED TO STORM WATER FACILITIES, PRIVATE UTILITIES, LANDSCAPING, IRRIGATION, EXOTIC CONTROL, ETC.

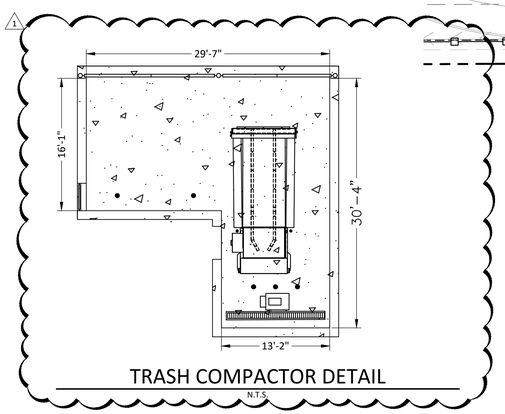
HANDICAP PARKING SIGN (FTP-20-06) 18"x 12" (FTP-22-04-250) 12"x 6"

DO NOT ENTER SIGN (R5-1) 36" x 36"

STOP SIGN (R1-1) 24"x 24"

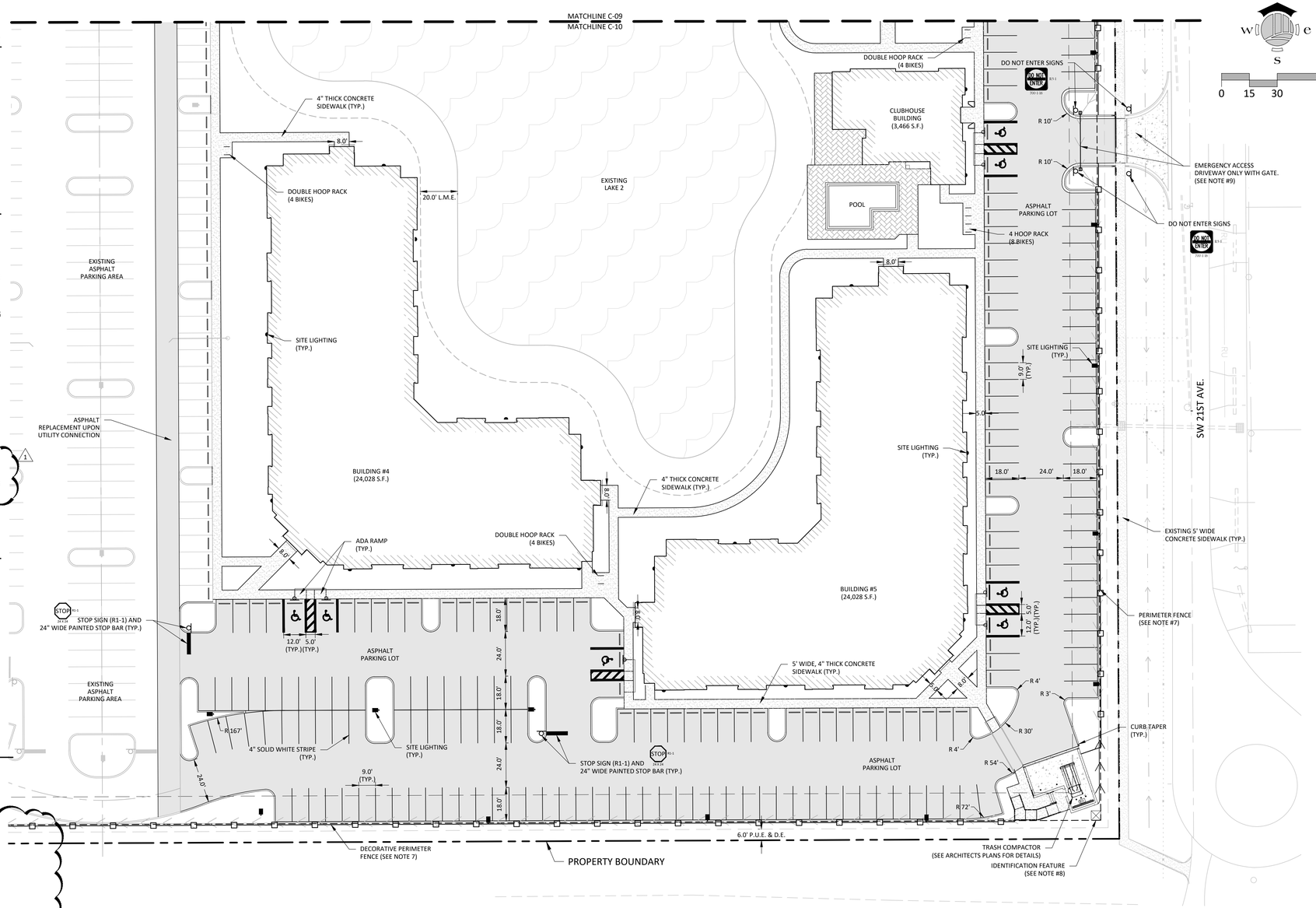
ROAD SIGNS

N.T.S.



TRASH COMPACTOR DETAIL

N.T.S.



n w e s

0 15 30 60

LEGEND

- ASPHALT
- BRICK PAVERS
- 4" THICK CONCRETE SIDEWALK
- EXISTING 6" THICK CONCRETE SIDEWALK
- 6" THICK CONCRETE PAVEMENT
- EXISTING LAKE
- EXISITNG 6" THICK CONCRETE PAVEMENT
- (D) TYPE D CURB
- (F) TYPE F CURB

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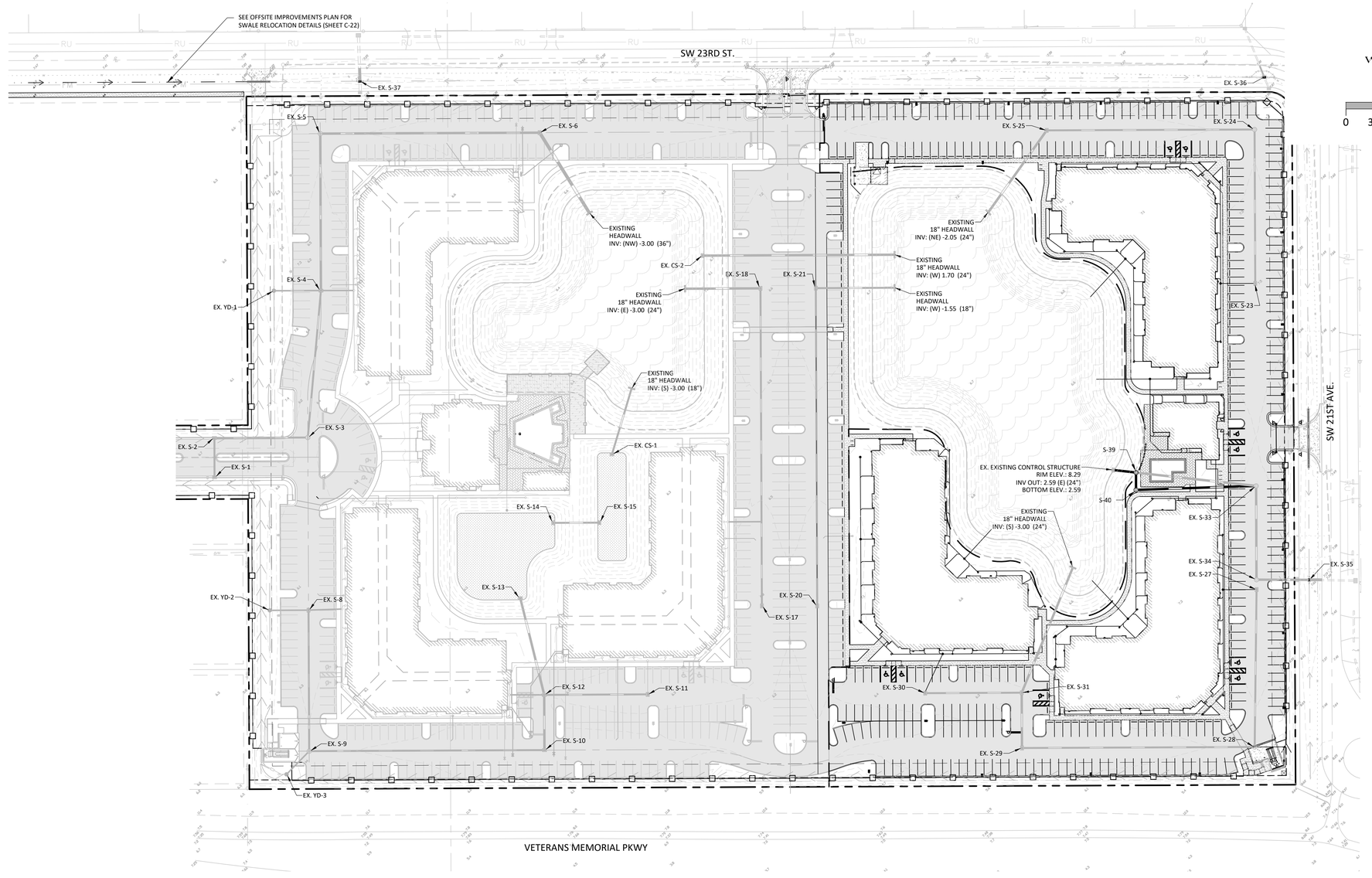
DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03 SITE.dwg
SCALE:	AS SHOWN

SITE PLAN

SHEET TITLE

C-10

SHEET NUMBER



STRUCTURE SCHEDULE:

S-33
EX. JUNCTION BOX
RIM ELEV.: 8.75
INV IN: (W) 0.00 (24")
INV OUT: (S) 2.23 (24")
BOTTOM ELEV.: -2.00

S-39
JUNCTION BOX
RIM ELEV.: 8.31
INV IN: (W) 2.59 (24")
INV OUT: (S) 2.59 (24")
BOTTOM ELEV.: 0.59

S-40
JUNCTION BOX
RIM ELEV.: 8.86
INV IN: (N) 2.50 (24")
INV OUT: (E) 2.40 (24")
BOTTOM ELEV.: 0.40

YD-1
12" ADS INLET
GRATE ELEV.: 9.08
INV. IN: (NW) 5.75 (12")
INV. IN: (SE) 5.75 (12")
INV. OUT: (SW) 5.75 (15")

YD-2
12" ADS INLET
GRATE ELEV.: 9.22
INV. IN: (N) 5.75 (12")
INV. IN: (S) 5.75 (12")
INV. OUT: (SE) 5.75 (15")

YD-3
12" ADS INLET
GRATE ELEV.: 9.43
INV. IN: (E) 5.75 (12")
INV. IN: (S) 5.75 (12")
INV. OUT: (W) 5.75 (15")

YD-4
12" ADS INLET
GRATE ELEV.: 9.46
INV. IN: (N) 5.75 (12")
INV. IN: (S) 5.75 (12")
INV. OUT: (E) 5.75 (15")

YD-5
12" ADS INLET
GRATE ELEV.: 9.39
INV. IN: (NE) 5.75 (12")
INV. IN: (SW) 5.75 (12")
INV. OUT: (NW) 5.75 (15")

YD-6
12" ADS INLET
GRATE ELEV.: 9.11
INV. IN: (S) 5.75 (12")
INV. OUT: (N) 5.75 (12")

YD-7
12" ADS INLET
GRATE ELEV.: 8.7
INV. IN: (S) 5.75 (12")
INV. OUT: (NE) 5.75 (12")

YD-8
12" ADS INLET
GRATE ELEV.: 9.66
INV. IN: (W) 5.75 (12")
INV. IN: (E) 5.75 (12")
INV. OUT: (SW) 5.75 (15")

YD-9
12" ADS INLET
GRATE ELEV.: 9.61
INV. IN: (N) 5.75 (12")
INV. OUT: (SE) 5.75 (12")

YD-10
12" ADS INLET
GRATE ELEV.: 9.64
INV. IN: (N) 5.75 (12")
INV. OUT: (S) 5.75 (12")

YD-11
12" ADS INLET
GRATE ELEV.: 10.0
INV. OUT: (S) 5.75 (12")

YD-12
12" ADS INLET
GRATE ELEV.: 8.95
INV. IN: (NW) 5.75 (12")
INV. IN: (SE) 5.75 (12")
INV. OUT: (NE) 5.75 (15")

WATER MANAGEMENT SUMMARY:

EXISTING WATER MANAGEMENT IN PLACE.

LAKE MAINTENANCE NOTES:

- ZPNO339,LLC. OR ITS SUCCESSORS ARE RESPONSIBLE FOR LAKE MAINTENANCE.
- EXOTICS SHALL BE CONTROLLED AND REMOVED VIA REGULAR MAINTENANCE AND LAKE MAINTENANCE PROGRAM.
- SURFACE WATER RUNNOFF VIA MASTER STORMWATER SYSTEM SHALL PREVENT LAKE BANK EROSION.
- IDENTIFICATION OF THE ENTITY RESPONSIBILITY FOR THE MAINTENANCE OF THE LAKE AREA INCLUDING THE LAKE SHORELINE.
- IDENTIFICATION OF THE METHODS TO REMOVE AND CONTROL EXOTIC AND NUISANCE PLANTS IN PERPETUITY.
- DEMONSTRATION AS TO HOW SURFACE WATER RUNOFF QUANTITIES AND FLOW VELOCITIES WILL BE CONTROLLED TO PREVENT BANK EROSION, INCLUDING BUT NOT LIMITED TO, ROUTING ROOF DRAINS AWAY FROM LAKE SHORELINES.
- REQUIREMENTS THAT EDUCATIONAL MATERIALS BE PROVIDED TO RESIDENTS DESCRIBING THE PURPOSE AND FUNCTION OF THE BANK SLOPE AND LITTORAL AREAS. THE MATERIALS MUST ALSO EXPLAIN THE INDIVIDUAL PROPERTY OWNER'S RESPONSIBILITIES WITH RESPECT TO COMPLIANCE WITH BANK SLOPE AND LITTORAL AREA MANAGEMENT PLANS. EDUCATIONAL MATERIALS MAY TAKE THE FORM OF SIGNS AND BROCHURES.

NOTES:

ON-SITE DRAINAGE MAINTENANCE TO BE PREFORMED BY OWNER, AND OR SUCCESSOR

DESIGN TABLE:

	NGVD
WET SEASON WATER TABLE ELEV.	= 3.2
MINIMUM FINISHED FLOOR ELEV.	= 10.2
MINIMUM PARKING ELEV.	= 8.2
MINIMUM BERM ELEV.	= 8.7

FEMA FLOOD ELEV. - ZONE AE-7.0 & ZONE AE-8 (NAVD)

LEGEND

- ASPHALT
- BRICK PAVERS
- 4" THICK CONCRETE SIDEWALK
- EXISTING 6" THICK CONCRETE SIDEWALK
- EXISITNG 6" THICK CONCRETE PAVEMENT
- EXISTING LAKE
- XX.XX BOC / XX.XX EOP
- (D) TYPE 'D' CURB
- (F) TYPE 'F' CURB

n w e s
0 30 60 120

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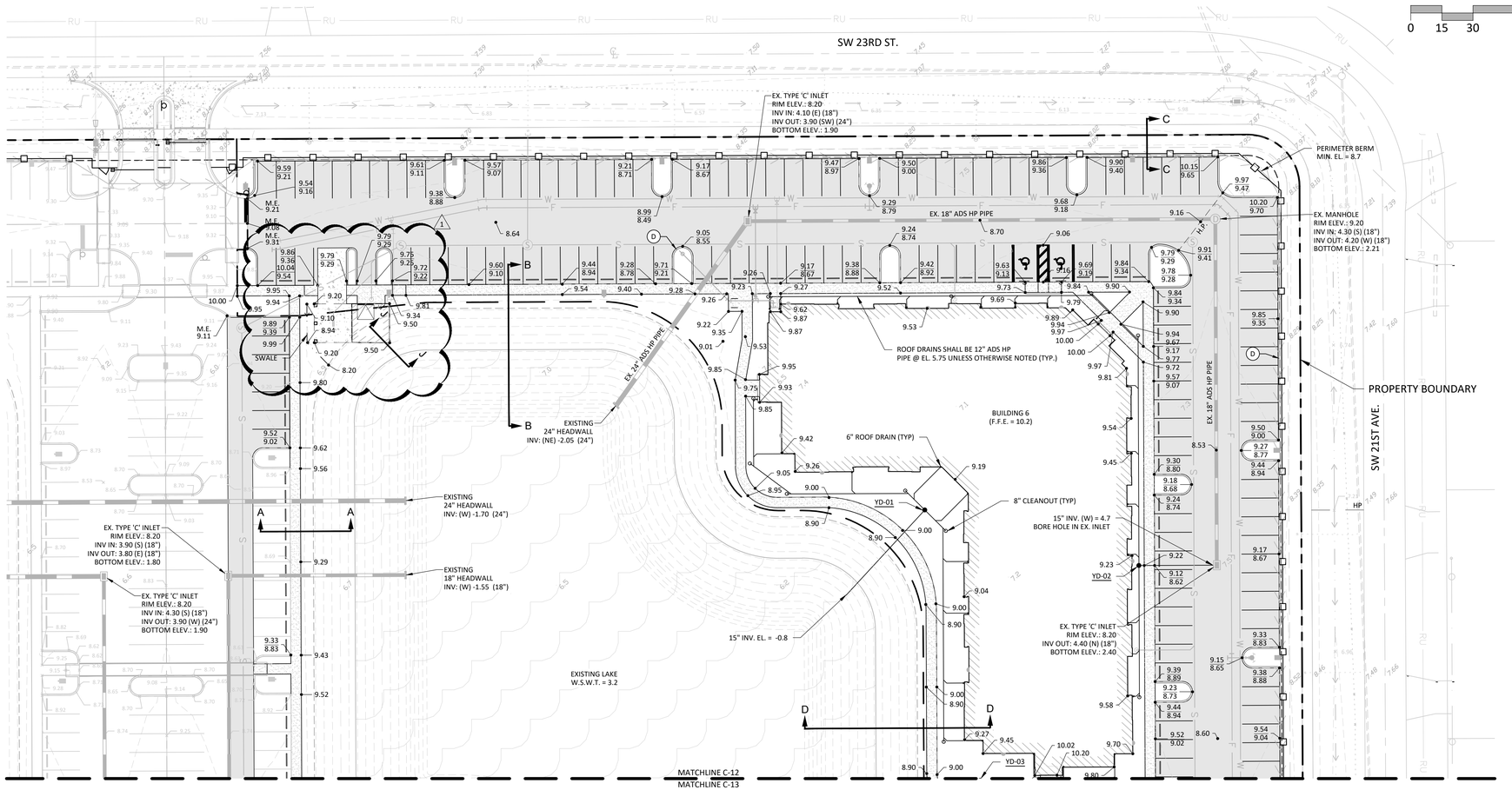
DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03 OPGD.dwg
SCALE:	AS SHOWN

OVERALL PAVING, GRADING & DRAINAGE PLAN

SHEET TITLE

C-11

SHEET NUMBER



n
w e
s
0 15 30 60

STRUCTURE SCHEDULE

YD-1	YD-2
12" ADS INLET	12" ADS INLET
GRATE ELEV.: 9.08	GRATE ELEV.: 9.22
INV. IN: (NW) 5.75 (12")	INV. IN: (N) 5.75 (12")
INV. IN: (SE) 5.75 (12")	INV. IN: (S) 5.75 (12")
INV. OUT: (SW) 5.75 (15")	INV. OUT: (SE) 5.75 (15")

NOTE:

1. ALL PAVEMENT GRADES ARE EDGE OF PAVEMENT GRADES. REFER TO CURB DETAILS FOR BACK OF CURB GRADE.
2. ON-SITE DRAINAGE MAINTENANCE TO BE PREFORMED BY OWNER, AND OR SUCCESSOR.

DESIGN TABLE:

	NGVD
WET SEASON WATER TABLE ELEV.	= 3.2
MINIMUM FINISHED FLOOR ELEV.	= 10.2
MINIMUM PARKING ELEV.	= 8.2
MINIMUM BERM ELEV.	= 8.7

FEMA FLOOD ELEV. - ZONE AE-7.0 & ZONE AE-8 (NAVD)

ROW IMPROVEMENT NOTES:

1. CONTRACTOR TO NEATLY SAW CUT AND REMOVE ADDED ASPHALT AND CURB BACK TO ORIGINAL EDGE OF PAVEMENT. CONTRACTOR TO LEAVE EXISTING BASE TO SUPPORT ROAD EDGE AND SOD UP TO EDGE OF PAVEMENT.
2. CONTRACTOR TO REMOVE CURB AND CURB INLETS AND EXTEND PIPES ACCORDINGLY.
3. CONTRACTOR TO SOD ALL DISTURBED AREAS IN ROW.
4. ANY DAMAGE TO PAVEMENT TO THE PAVEMENT OR PATCHING OF THE ORIGINAL SURFACE WILL NEED TO FOLLOW PUBLIC WORKS MINIMUM GUIDELINES OF 10' ON EITHER SIDE OF THE DAMAGE/PATCH AREA BY FULL LANE WIDTH. NO JOINTS MAY BE PLACED IN FRONT OF A DRIVEWAY.
5. LOW POINTS WITHIN THE SWALE ARE DENOTED ON PLAN AT THE DITCH BOTTOM INLETS.
6. SEE ROW CROSS SECTIONS ON SHEETS C-19 AND C-20.
7. SEE CITY OF CAPE CORAL DETAILS C-1 & C-2 ON SHEET C-21 FOR DITCH BOTTOM INLET SPECIFICATIONS.
8. ALL DITCH BOTTOM INLETS IN RIGHT-OF-WAY SHALL HAVE A 2' SUMP PER CITY OF CAPE CORAL DETAIL C-7, SEE SHEET C-21 FOR DETAIL.

LEGEND

- ASPHALT
- BRICK PAVERS
- 4" THICK CONCRETE SIDEWALK
- EXISTING 6" THICK CONCRETE SIDEWALK
- EXISITNG 6" THICK CONCRETE PAVEMENT
- EXISTING LAKE
- XX.XX BOC / XX.XX EOP
- (D) TYPE 'D' CURB
- (F) TYPE 'F' CURB

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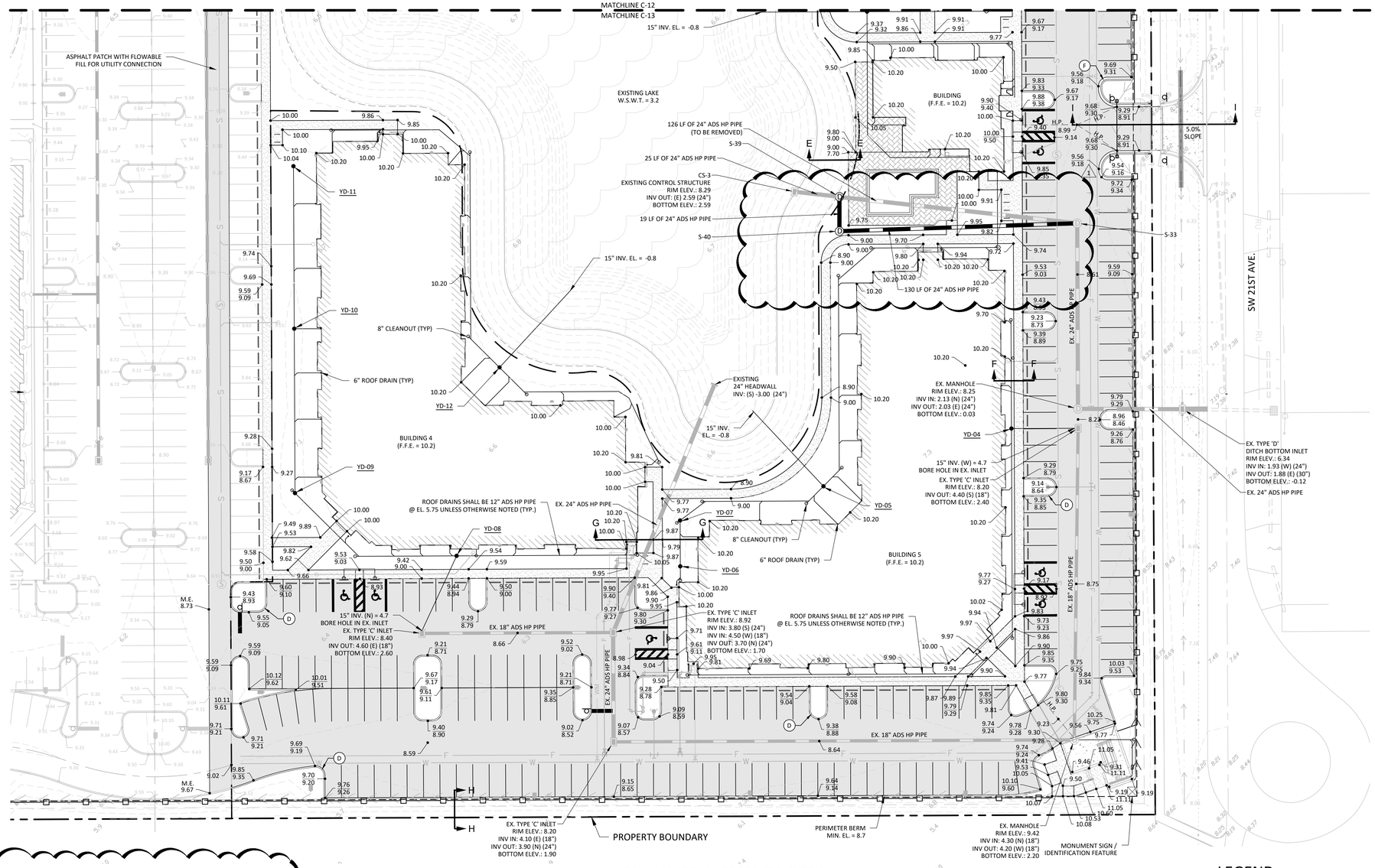
DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03 PGD.dwg
SCALE:	AS SHOWN

PAVING, GRADING & DRAINAGE PLAN

SHEET TITLE

C-12

SHEET NUMBER



STRUCTURE SCHEDULE

S-33
EX. JUNCTION BOX
RIM ELEV.: 8.75
INV IN: (W) 0.00 (24")
INV OUT: (S) 2.23 (24")
BOTTOM ELEV.: -2.00

S-39
JUNCTION BOX
RIM ELEV.: 8.31
INV IN: (W) 2.59 (24")
INV OUT: (S) 2.59 (24")
BOTTOM ELEV.: 0.59

S-40
JUNCTION BOX
RIM ELEV.: 8.86
INV IN: (N) 2.50 (24")
INV OUT: (E) 2.40 (24")
BOTTOM ELEV.: 0.40

YD-3
12" ADS INLET
GRATE ELEV.: 9.43
INV. IN: (E) 5.75 (12")
INV. IN: (S) 5.75 (12")
INV. OUT: (W) 5.75 (15")

YD-4
12" ADS INLET
GRATE ELEV.: 9.46
INV. IN: (N) 5.75 (12")
INV. IN: (S) 5.75 (12")
INV. OUT: (E) 5.75 (15")

YD-5
12" ADS INLET
GRATE ELEV.: 9.39
INV. IN: (NE) 5.75 (12")
INV. IN: (SW) 5.75 (12")
INV. OUT: (NW) 5.75 (15")

YD-6
12" ADS INLET
GRATE ELEV.: 9.11
INV. IN: (S) 5.75 (12")
INV. OUT: (N) 5.75 (12")

YD-7
12" ADS INLET
GRATE ELEV.: 8.7
INV. IN: (S) 5.75 (12")
INV. OUT: (NE) 5.75 (12")

YD-8
12" ADS INLET
GRATE ELEV.: 9.66
INV. IN: (W) 5.75 (12")
INV. IN: (E) 5.75 (12")
INV. OUT: (SW) 5.75 (15")

YD-9
12" ADS INLET
GRATE ELEV.: 9.61
INV. IN: (N) 5.75 (12")
INV. OUT: (SE) 5.75 (12")

YD-10
12" ADS INLET
GRATE ELEV.: 9.64
INV. IN: (N) 5.75 (12")
INV. OUT: (S) 5.75 (12")

YD-11
12" ADS INLET
GRATE ELEV.: 10.0
INV. OUT: (S) 5.75 (12")

YD-12
12" ADS INLET
GRATE ELEV.: 8.95
INV. IN: (NW) 5.75 (12")
INV. IN: (SE) 5.75 (12")
INV. OUT: (NE) 5.75 (15")

DESIGN TABLE:

	NGVD
WET SEASON WATER TABLE ELEV.	= 3.2
MINIMUM FINISHED FLOOR ELEV.	= 10.2
MINIMUM PARKING ELEV.	= 8.2
MINIMUM BERM ELEV.	= 8.7

FEMA FLOOD ELEV. - ZONE AE-7.0 & ZONE AE-8 (NAVD)

NOTE:

1. ALL PAVEMENT GRADES ARE EDGE OF PAVEMENT GRADES. REFER TO CURB DETAILS FOR BACK OF CURB GRADE.
2. ON-SITE DRAINAGE MAINTENANCE TO BE PREFORMED BY OWNER, AND OR SUCCESSOR.

ROW IMPROVEMENT NOTES:

1. CONTRACTOR TO NEATLY SAW CUT AND REMOVE ADDED ASPHALT AND CURB BACK TO ORIGINAL EDGE OF PAVEMENT. CONTRACTOR TO LEAVE EXISTING BASE TO SUPPORT ROAD EDGE AND SOD UP TO EDGE OF PAVEMENT.
2. CONTRACTOR TO REMOVE CURB AND CURB INLETS AND EXTEND PIPES ACCORDINGLY.
3. CONTRACTOR TO SOD ALL DISTURBED AREAS IN ROW.
4. ANY DAMAGE TO PAVEMENT TO THE PAVEMENT OR PATCHING OF THE ORIGINAL SURFACE WILL NEED TO FOLLOW PUBLIC WORKS MINIMUM GUIDELINES OF 10' ON EITHER SIDE OF THE DAMAGE/PATCH AREA BY FULL LANE WIDTH. NO JOINTS MAY BE PLACED IN FRONT OF A DRIVEWAY.
5. LOW POINTS WITHIN THE SWALE ARE DENOTED ON PLAN AT THE DITCH BOTTOM INLETS.
6. SEE ROW CROSS SECTIONS ON SHEETS C-19 AND C-20.
7. SEE CITY OF CAPE CORAL DETAILS C-1 & C-2 ON SHEET C-21 FOR DITCH BOTTOM INLET SPECIFICATIONS.
8. ALL DITCH BOTTOM INLETS IN RIGHT-OF-WAY SHALL HAVE A 2' SUMP PER CITY OF CAPE CORAL DETAIL C-7, SEE SHEET C-21 FOR DETAIL.

LEGEND

- ASPHALT
- 4" THICK CONCRETE SIDEWALK
- EXISITNG 6" THICK CONCRETE PAVEMENT
- BRICK PAVERS
- EXISTING 6" THICK CONCRETE SIDEWALK
- EXISTING LAKE
- XX.XX BOC / XX.XX EOP
- (D) TYPE 'D' CURB
- (F) TYPE 'F' CURB

n w e s

0 15 30 60

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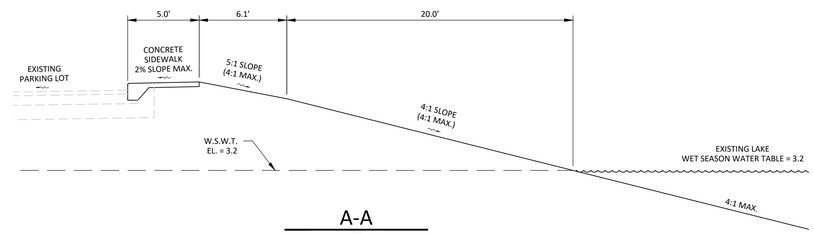
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SCALE:	AS SHOWN

PAVING, GRADING & DRAINAGE PLAN

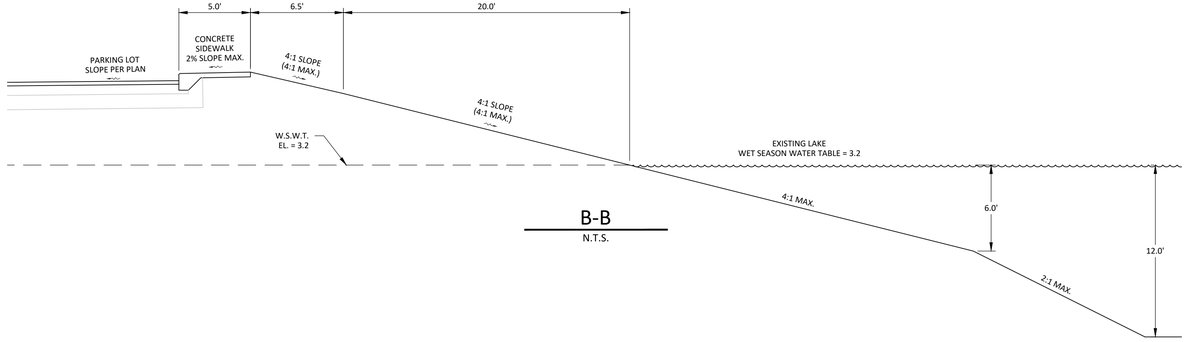
SHEET TITLE

C-13

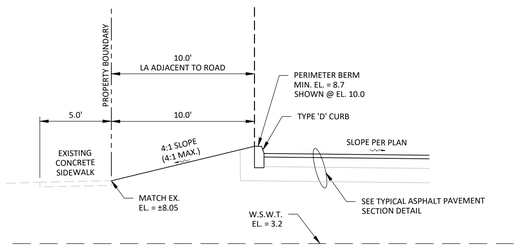
SHEET NUMBER



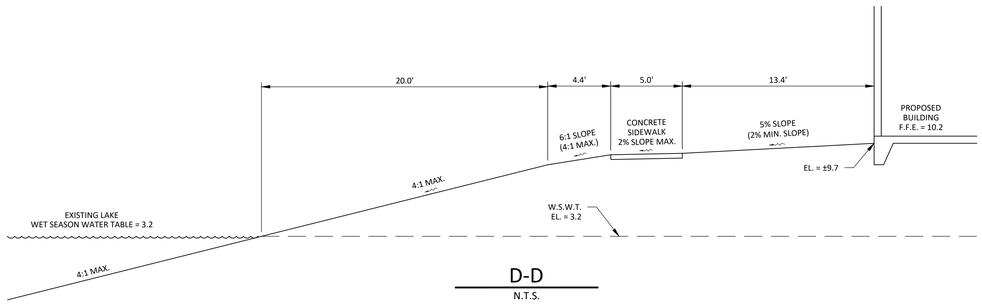
A-A
N.T.S.



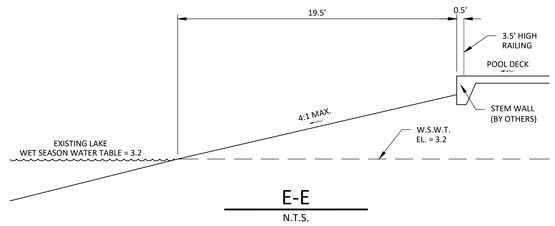
B-B
N.T.S.



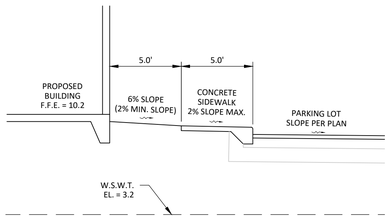
C-C
N.T.S.



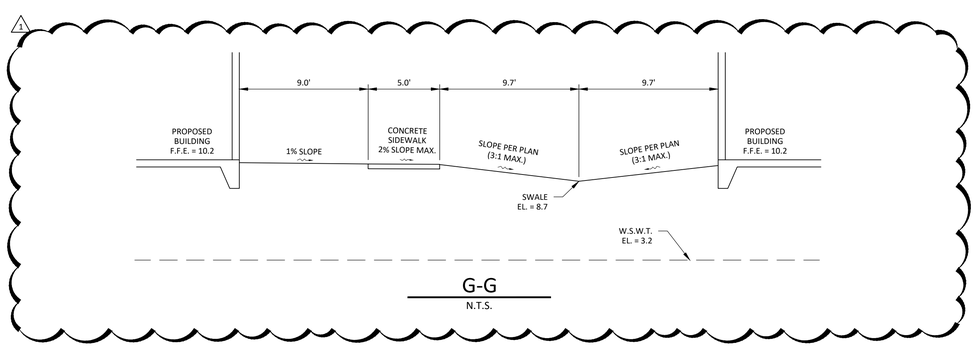
D-D
N.T.S.



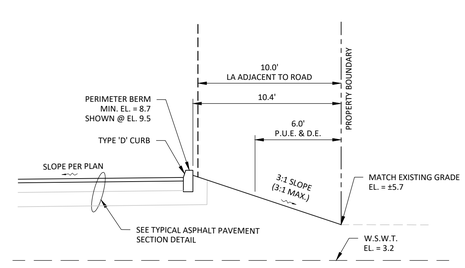
E-E
N.T.S.



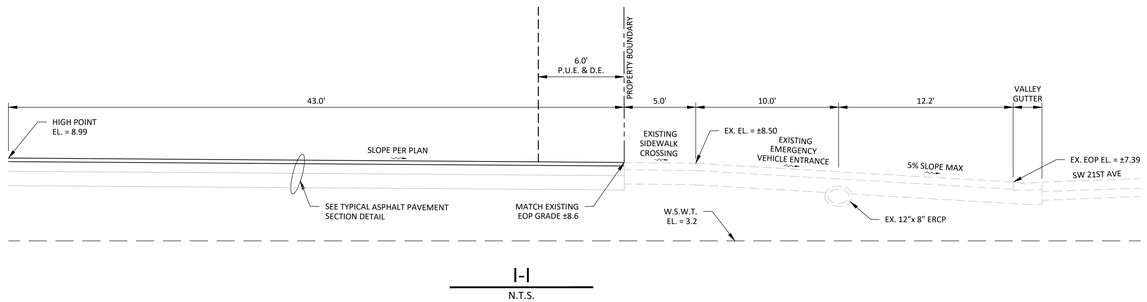
F-F
N.T.S.



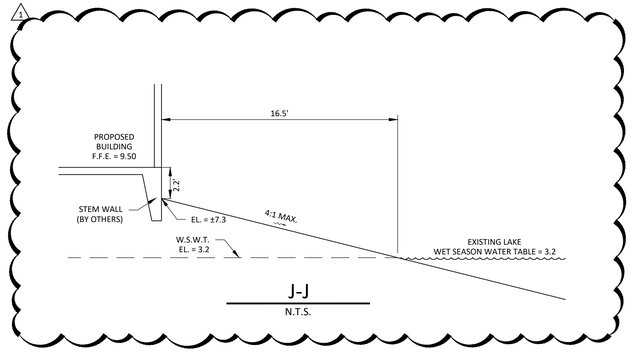
G-G
N.T.S.



H-H
N.T.S.



I-I
N.T.S.



J-J
N.T.S.

ensite
2401 FIRST STREET, SUITE 201
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EB-26544 CA-LC26000374

ZIMMER DEVELOPMENT COMPANY

CLIENT NAME AND ADDRESS

OASIS @ CAPE CORAL PHASE 2
CITY OF CAPE CORAL, FLORIDA

PROJECT NAME AND LOCATION

JASON E. TOMASSETTI, PE
FL License No. 66263

NO.	REVISION	DATE
#1	PER CITY COMMENTS	10-28-21

REVISIONS DESCRIPTION

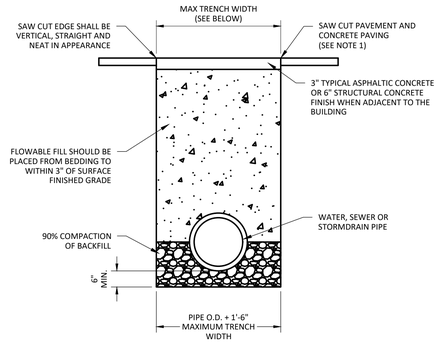
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PROJECT NO.	1364-03
FILE NO.	1364-03 SECT.dwg
SCALE:	AS SHOWN

TYPICAL SECTIONS

SHEET TITLE

C-14

SHEET NUMBER

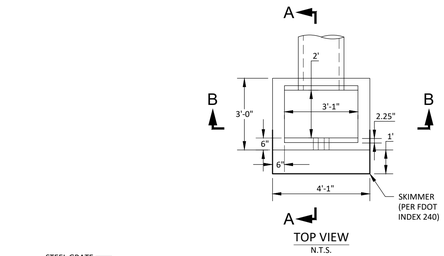


NOTES:

1. WHEN TEMPORARY PATCH IS USED, THE INITIAL WIDTH OF THE SAWCUT SHALL BE NO GREATER THAN THAT NECESSARY TO CONDUCT THE EXCAVATION.
2. THE FINISHED SURFACE OF THE TEMPORARY PATCH SHALL, IN ALL CASES, BE LEVEL WITH, OR NO GREATER THAN 1/2 INCH ABOVE THE ADJACENT GRADE OF THE EXISTING PAVEMENT.
3. A TEMPORARY PATCH WILL BE MONITORED ON A DAILY BASIS AND SHALL BE IMMEDICATELY RESTORED TO STANDARD AS IT COMPACTS.
4. IN NO CASE SHALL A TEMPORARY PATCH BE LEFT WITHOUT PERMANENT REPAIR FOR MORE THAN 30 CALENDAR SAYS. THE PERIOS OF THE TEMPORARY PATCH MAY BE REDUCED AS DETERMINED BY THE ENGINEER.
5. NO ROCKS OR OLD PAVEMENT MAY BE DEPOSITED WITH BACKFILL.
6. FINISH SURFACE SHALL MATCH EXISTING GRADE WITH A TOLERANCE OF 1/4 INCH ABOVE ADJACENT GRADE.
7. PRIOR TO PLACING THE ASPHALT PATCH THE EXISTING PAVEMENT MUST BE SAW CUT NEATLY AT A MINIMUM OF 24" BEYOND THE DISTURBANCE CAUSED BY TRENCHING.

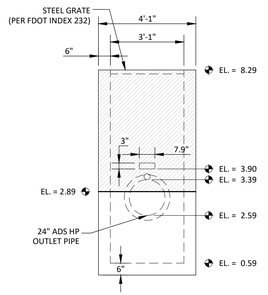
FLOWABLE FILL TRENCH DETAIL

N.T.S.



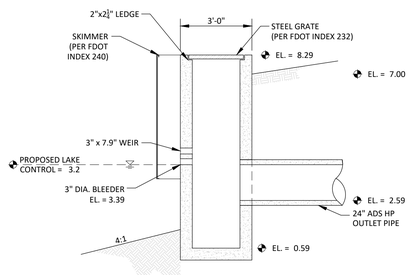
TOP VIEW

N.T.S.



SECTION B

N.T.S.



SECTION A

N.T.S.

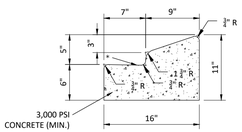
* ALL DIMENSIONS ARE FOR PRECAST. FOR CAST IN PLACE DIMENSION SEE FDOT INDEX 232.

MODIFIED FDOT TYPE "C" INLET

(PER FDOT INDEX 232)

EXISTING CS-3

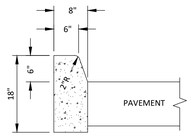
N.T.S.



WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE TO THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.

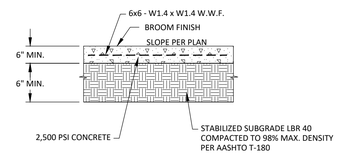
TYPE 'A' CURB

N.T.S.



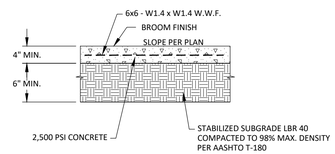
TYPE 'D' CURB

N.T.S.



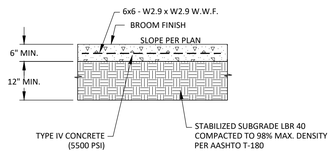
CONCRETE SIDEWALK SECTION OFF-SITE

N.T.S.



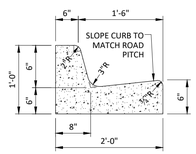
CONCRETE SIDEWALK SECTION ON-SITE

N.T.S.



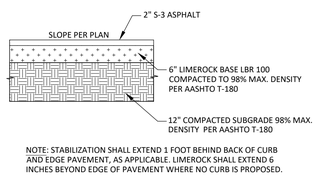
6" CONCRETE PAVEMENT SECTION

N.T.S



TYPE 'F' CURB

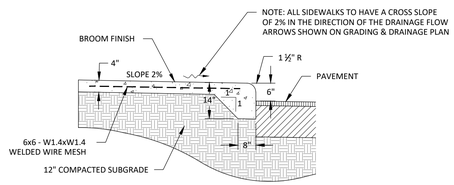
N.T.S.



NOTE: STABILIZATION SHALL EXTEND 1 FOOT BEHIND BACK OF CURB AND EDGE PAVEMENT, AS APPLICABLE. LIMEROCK SHALL EXTEND 6 INCHES BEYOND EDGE OF PAVEMENT WHERE NO CURB IS PROPOSED.

ASPHALT PAVEMENT SECTION

N.T.S.



NOTE: CONCRETE TO BE 3,000 PSI WITH CONTRACTION JOINTS AT 5' INTERVALS.

SIDEWALK SECTION (WHEN ADJACENT TO PAVEMENT)

N.T.S.

ensite
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FORT MYERS, FLORIDA 33901
PH: (239)-226-0024
EB-26544 CA-LC26000374

ZIMMER DEVELOPMENT COMPANY

CLIENT NAME AND ADDRESS

OASIS @ CAPE CORAL PHASE 2
CITY OF CAPE CORAL, FLORIDA

PROJECT NAME AND LOCATION

JASON E. TOMASSETTI, PE
FL License No. 66263

NO.	REVISION	DATE
R1	PER CITY COMMENTS	10-28-21

REVISIONS DESCRIPTION

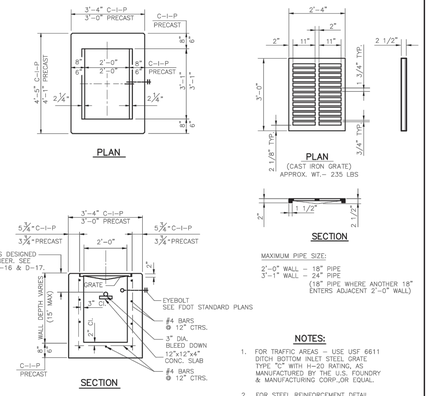
DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03 PGD.dwg
SCALE:	AS SHOWN

PAVING, GRADING & DRAINAGE DETAILS

SHEET TITLE

C-15

SHEET NUMBER



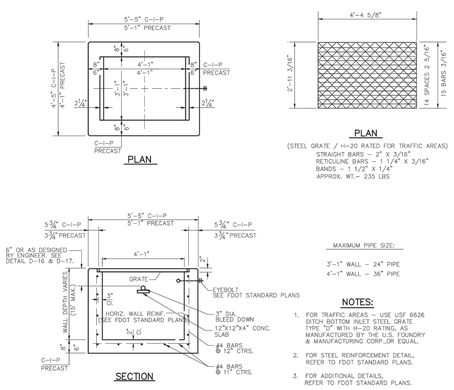
MAXIMUM PIPE SIZE:

2'-0" WALL – 18" PIPE
3'-1" WALL – 24" PIPE
(18" PIPE WHERE ANOTHER 18" ENTERS ADJACENT 2'-0" WALL)

NOTES:

1. FOR TRAFFIC AREAS – USE USF 6611 DITCH BOTTOM INLET STEEL GRATE TYPE "C" WITH H-20 RATING, AS MANUFACTURED BY THE U.S. FOUNDRY & MANUFACTURING CORP.,OR EQUAL.
2. FOR STEEL REINFORCEMENT DETAIL, REFER TO FDOT STANDARD PLANS.
3. FOR ADDITIONAL DETAILS, REFER TO FDOT STANDARD PLANS.
4. PROVIDE 12"X12"X4" CONCRETE SLAB UPSLOPE OF 3" DIA. BLEED DOWN FOR MAINTENANCE.

ADOPTED BY CITY COUNCIL	CITY OF CAPE CORAL PUBLIC WORKS DEPARTMENT ENGINEERING DESIGN STANDARD	TITLE	SHEET NO.
DRAFT		FDOT TYPE "C" INLET WITH GRATE	C-1
		REVISIONS: 08-31-2020	



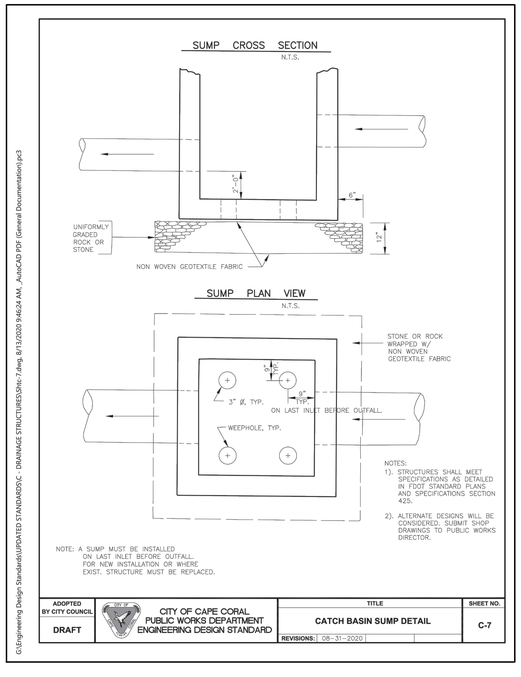
MAXIMUM PIPE SIZE:

3'-1" WALL – 24" PIPE
4'-1" WALL – 36" PIPE

NOTES:

1. FOR TRAFFIC AREAS – USE USF 6626 DITCH BOTTOM INLET STEEL GRATE TYPE "D" WITH H-20 RATING, AS MANUFACTURED BY THE U.S. FOUNDRY & MANUFACTURING CORP.,OR EQUAL.
2. FOR STEEL REINFORCEMENT DETAIL, REFER TO FDOT STANDARD PLANS.
3. FOR ADDITIONAL DETAILS, REFER TO FDOT STANDARD PLANS.
4. PROVIDE 12"x12"x4" CONCRETE SLAB UPSLOPE OF 3" DIA. BLEED DOWN FOR MAINTENANCE.

ADOPTED BY CITY COUNCIL	CITY OF CAPE CORAL PUBLIC WORKS DEPARTMENT ENGINEERING DESIGN STANDARD	TITLE	SHEET NO.
DRAFT		FDOT TYPE "D" INLET WITH GRATE	C-2
		REVISIONS: 08-31-2020	



NOTES:
1). STRUCTURES SHALL MEET SPECIFICATIONS AS DETAILED IN FDOT STANDARD PLANS AND SPECIFICATIONS SECTION 425.
2). ALTERNATE DESIGNS WILL BE CONSIDERED. SUBMIT SHOP DRAWINGS TO PUBLIC WORKS DIRECTOR.

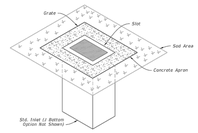
NOTE: A SUMP MUST BE INSTALLED ON LAST INLET BEFORE OUTFALL. FOR NEW INSTALLATION, OR WHERE EXIST. STRUCTURE MUST BE REPLACED.

ADOPTED BY CITY COUNCIL	CITY OF CAPE CORAL PUBLIC WORKS DEPARTMENT ENGINEERING DESIGN STANDARD	TITLE	SHEET NO.
DRAFT		CATCH BASIN SUMP DETAIL	C-7
		REVISIONS: 08-31-2020	

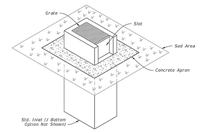
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GENERAL NOTES:

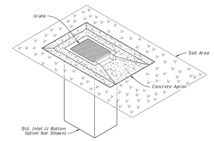
1. Work this Index with Index 425-001 and Index 425-010.
2. Chamfer all exposed edges and corners ¾" chamfer or tooled to ½" radius.
3. All reinforcing is Grade 60 bars with 2" minimum cover unless otherwise noted. Cut or bend bars for 1½" clearance around pipe opening. Provide one additional #4 bar above and at each side of pipe opening.
4. Use Concrete Apron on inlets without slots and inlets with non-traversable slots only when called for in the Plans.
5. Quantities are for informational and estimating purposes only.



DITCH BOTTOM INLET TYPE C TRAVERSABLE
(Without Slot – Type D, E, and H Similar, Pipe Connection Not Shown)



DITCH BOTTOM INLET TYPE C NON-TRAVERSABLE
(Slot > 7" Shown – Type D, E, and H Similar, Pipe Connection Not Shown)



DITCH BOTTOM INLET TYPE C TRAVERSABLE
(Single Slot < 7" Shown, Double Slot, Type D, and E Similar, Pipe Connection Not Shown)

TABLE OF CONTENTS:

Sheet	Description
1	General Notes and Contents
2	Type C – Dimensional, Reinforcing, and Grate Details
3	Type D – Dimensional, Reinforcing, and Grate Details
4	Type E – Dimensional, Reinforcing, and Grate Details
5	Type H (2 & 3 Grate) – Dimensional, Reinforcing, and Steel Grate Details
6	Type H (4 Grate) – Dimensional, Reinforcing, and Steel Grate Details
7	Cast Iron Grate Details
8	Non-Traversable Inlet Details
9	Traversable Inlet Without Slot Details
10	Traversable Inlet With Slot Details
11	Case 1 – Add Traversable Slots to Existing Inlets
12	Case 2 – Add Traversable Slots (Partial) to Existing Inlets
13	Case 3 – Add Traversable Slots (Partial) to Existing Inlets and Ditch Block
14	Alternate A Structure Bottom – Top Slab Details

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	DITCH BOTTOM INLET TYPE C, D, E, AND H	INDEX 425-052	SHEET 1 of 14

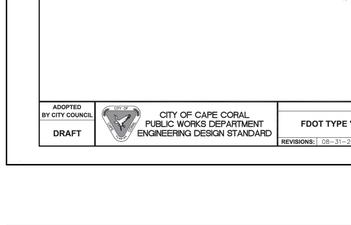


TABLE 1
HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING BARS	MAX. SPACING WWF
0' – 15"	A12	0.20	12"	8"

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

DIMENSIONAL AND REINFORCING DETAILS
TYPE C - DIMENSIONAL, REINFORCING, AND STEEL GRATE DETAILS

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	DITCH BOTTOM INLET TYPE C, D, E, AND H	INDEX 425-052	SHEET 2 of 14

TABLE 2
HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING BARS	MAX. SPACING WWF
0' – 8"	A12	0.20	12"	8"
8" – 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.
3. Cast Iron Grate is not permitted on inlet Type D.

DIMENSIONAL AND REINFORCING DETAILS
TYPE D - DIMENSIONAL, REINFORCING, AND STEEL GRATE DETAILS

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	DITCH BOTTOM INLET TYPE C, D, E, AND H	INDEX 425-052	SHEET 3 of 14

C:\Users\ToddC\Ensite\Active Projects - Documents\1364 Zimmer Development Company\1364-03 Oasis Property Phase 2\CAD\Engineering_Working Files\1364-03-PGD.dwg (DET 2) ToddC Oct 30, 2021 - 4:45pm

ensite
2401 FIRST STREET, SUITE 201
FORT MYERS, FLORIDA 33901
PH: (239)-226-0024
EB-26544 CA-LC26000374

ZIMMER DEVELOPMENT COMPANY

CLIENT NAME AND ADDRESS

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CITY OF CAPE CORAL, FLORIDA

PROJECT NAME AND LOCATION

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FL License No. 66263

NO.	REVISION	DATE
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REVISIONS DESCRIPTION

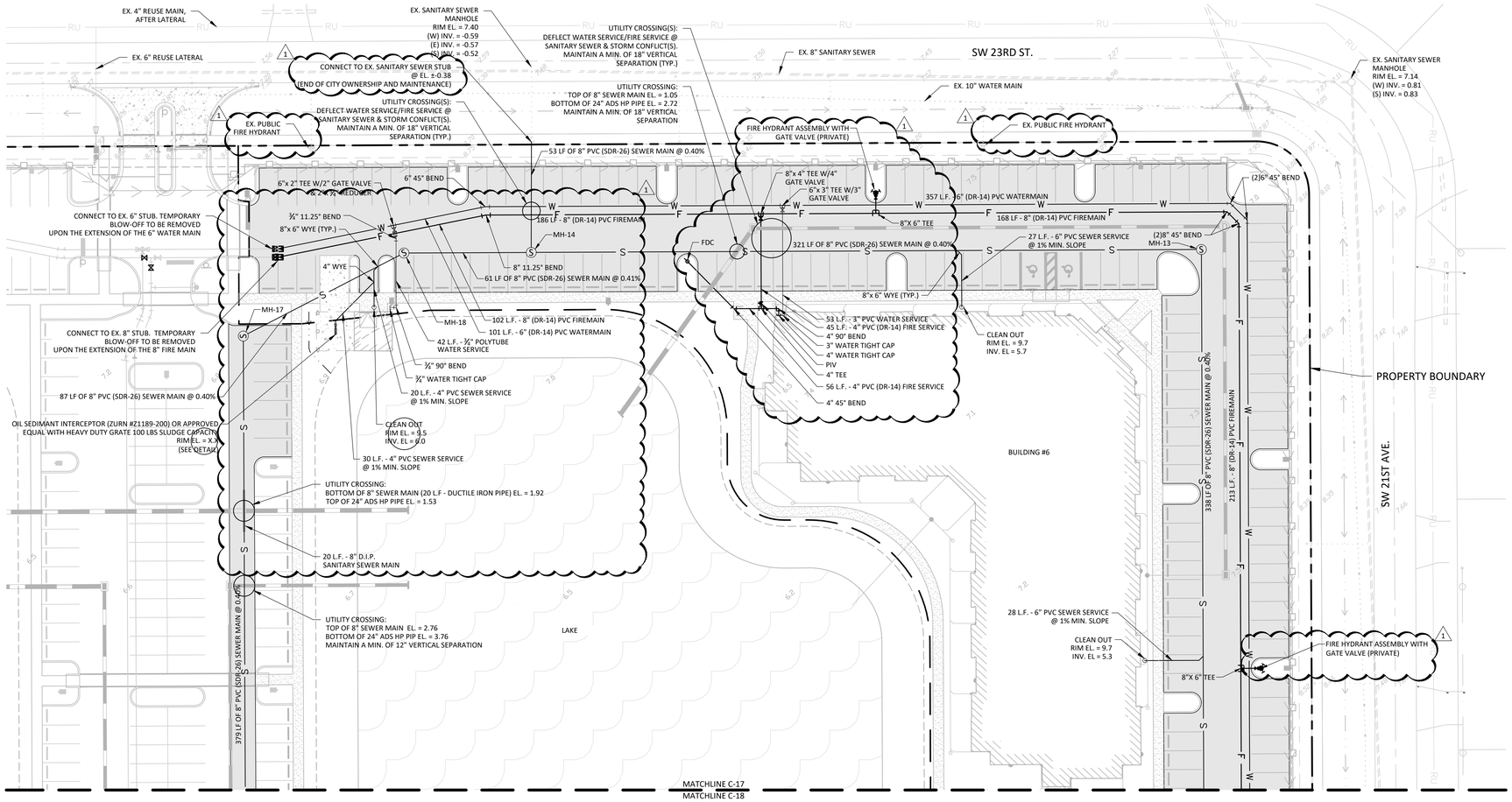
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PROJECT NO. 1364-03
FILE NO. 1364-03 PGD.dwg
SCALE: AS SHOWN

FDOT DETAILS

SHEET TITLE

C-16

SHEET NUMBER



PROJECT ANTICIPATED FLOW DEMANDS:

PER FAC 64E

200 GPD PER UNIT = 200 X 204 = 40,800 GPD

TOTAL GPD = 40,800 GPD FOR WATER AND SEWER

BUILDING FIRE FLOW REQUIREMENT:

PER NFPA:

BUILDINGS 4-6, (TYPE V-A SPRINKLERED)

24,300 S.F. x 4 FLOORS = 97,200 S.F. = 5,500 GPM REQUIRED

75% REDUCTION FOR SPRINKLERS = 5,500 x 0.25 = 1,375 GPM REQUIRED FOR EACH BUILDING

CLUB HOUSE (TYPE V-B NON-SPRINKLERED)

3,465 S.F. = 1,500 GPM REQUIRED

MAINTENANCE BUILDING (TYPE V-B NON-SPRINKLERED)

341 S.F. = 1,500 GPM REQUIRED

STRUCTURE SCHEDULE:

MH-13	MH-14	MH-17	MH-18
SANITARY MANHOLE	SANITARY MANHOLE	SANITARY MANHOLE	SANITARY MANHOLE
RIM ELEV.: 9.30	RIM ELEV.: 8.74	RIM ELEV.: 9.13	RIM ELEV.: 9.00
INV IN: (S) 1.31 (8")	INV IN: (E) -0.07 (8")	INV IN: (S) 1.58 (8")	INV IN: (SW) 1.13 (8")
INV OUT: (W) 1.21 (8")	INV IN: (W) 0.78 (8")	INV OUT: (NE) 1.48 (8")	INV OUT: (E) 1.03 (8")
BOTTOM ELEV.: 1.21	INV OUT: (N) -0.17 (8") BOTTOM ELEV.: -0.24	BOTTOM ELEV.: 1.48	BOTTOM ELEV.: 1.00

SITE IRRIGATION CALCULATIONS

ANTICIPATED IRRIGATED AREA - 64,469 SQUARE FEET

ETO X PF X SF X 0.62 / IE

0.2 X .80 X 64,469 X 0.62 / 0.75 = 8,527 GPD

ETO = EVAPOTRANSPIRATION DATA
PF = PLANT FACTOR
SF = AREA IN SQUARE FEET
0.62 = CONSTANT VALUE FOR CONVERSION
IE = IRRIGATION EFFICIENCY

NOTES:

1. ALL ON-SITE UTILITIES (SANITARY, POTABLE WATER, FIRE & IRRIGATION) ARE PRIVATE AND WILL BE MAINTAINED BY THE PROPERTY OWNER OR MASTER ASSOCIATION.
2. ALL WATER STUBS BEING REMOVED SHALL HAVE THE VALVE BOXES REMOVED AND A LOCATOR INSTALLED ON THE REMAINING GATE VALVES.
3. NOTE TO CONTRACTOR / OWNER: PER 2018 NFPA 1-11.10, TWO-WAY RADIO COMMUNICATION ENHANCEMENT SYSTEMS SHALL COMPLY AT THE CONCLUSION OF CONSTRUCTION (NFPA 72-24.5.2).I
4. NOTE TO CONTRACTOR / OWNER: A THIRD PARTY WILL VERIFY BEFORE (AT BUILDING PLAN REVIEW AS A MODEL) OR AFTER (PRIOR TO FIRE FINAL INSPECTION) CONSTRUCTION THAT THE BUILDING MEETS THE REQUIREMENTS OF NFP 72 FOR RADIO SIGNAL STRENGTH.

LEGEND

- ASPHALT
- BRICK PAVERS
- 4" THICK CONCRETE SIDEWALK
- EXISTING 6" THICK CONCRETE SIDEWALK
- EXISITNG 6" THICK CONCRETE PAVEMENT
- EXISTING LAKE

n w e s

0 15 30 60

ensite
2401 FIRST STREET, SUITE 201
FORT MYERS, FLORIDA 33901
PH: (239)-226-0024
EB-26544 CA-LC26000374

ZIMMER DEVELOPMENT COMPANY

CLIENT NAME AND ADDRESS

OASIS @ CAPE CORAL PHASE 2
CITY OF CAPE CORAL, FLORIDA

PROJECT NAME AND LOCATION

JASON E. TOMASSETTI, PE
FL License No. 66263

NO.	REVISION	DATE	REVISIONS DESCRIPTION
R1	PER CITY COMMENTS	10-28-21	

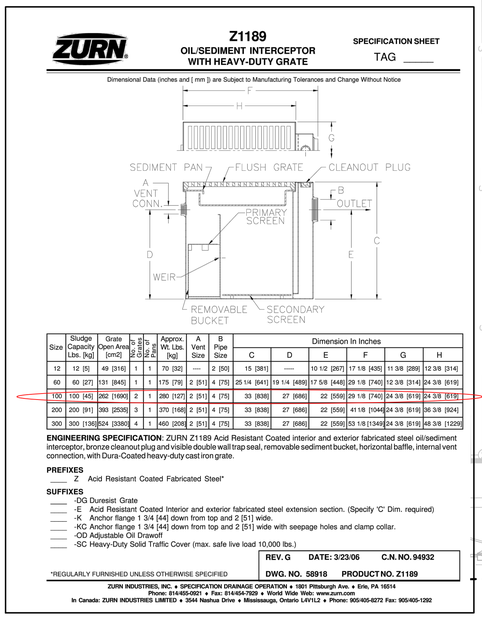
DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03 UTIL.dwg
SCALE:	AS SHOWN

UTILITY PLAN

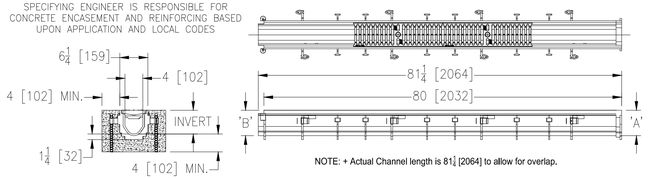
SHEET TITLE

C-17

SHEET NUMBER



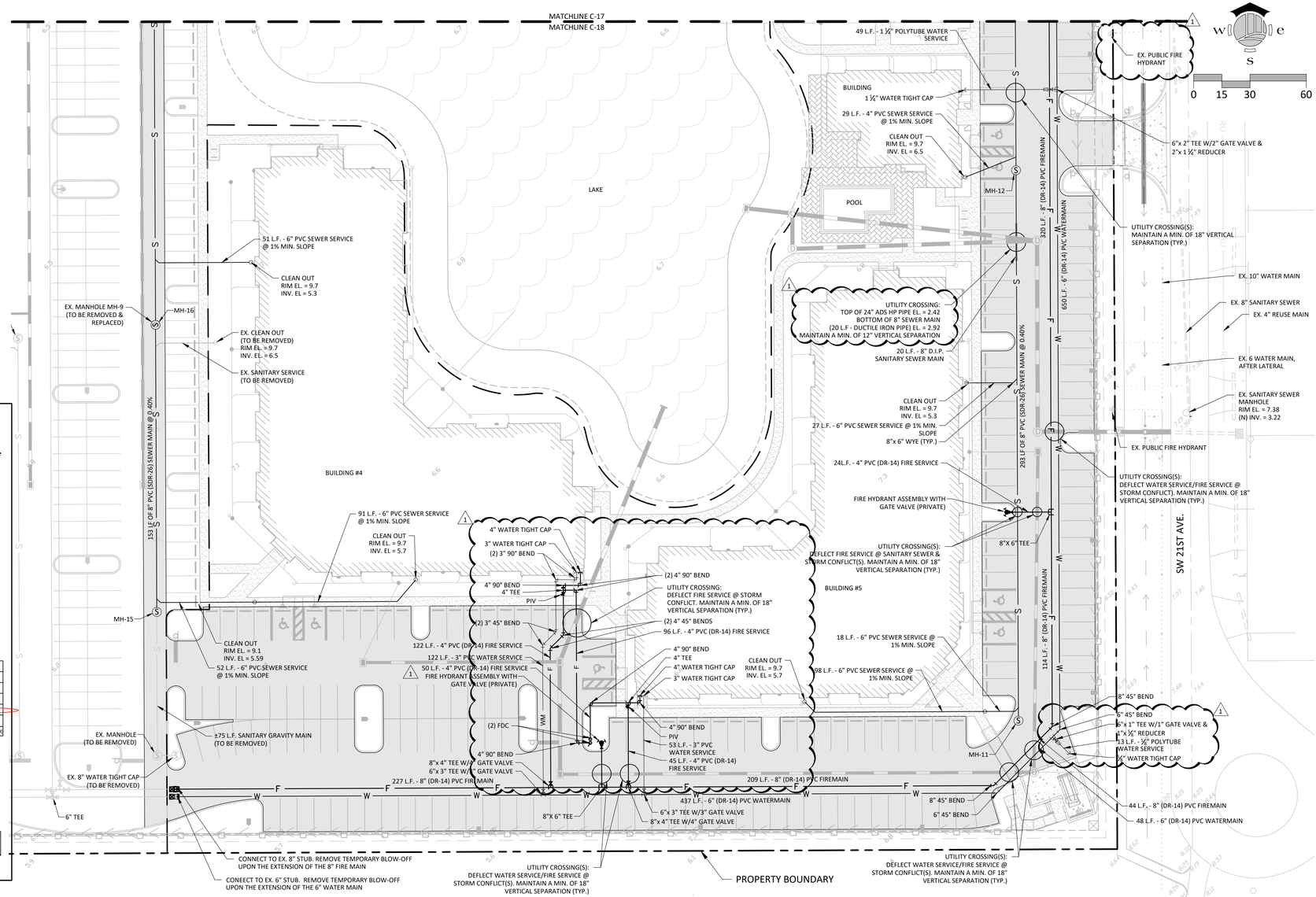
Size	Sludge Capacity Lbs. [kg]	Grate Open Area [cm2]	No. of Gr. Sl.	No. of Gr. Rd.	Approx. Wt. Lbs. [kg]	A Vent Size	B Pipe Size	Dimension In Inches C	D	E	F	G	H
12	12 [5]	49 [316]	1	1	70 [32]	—	2 [50]	15 [381]	—	10 1/2 [267]	17 1/8 [435]	11 3/8 [289]	12 3/8 [314]
60	60 [27]	131 [845]	1	1	175 [79]	2 [51]	4 [75]	25 1/4 [641]	19 1/4 [489]	17 5/8 [448]	29 1/8 [740]	12 3/8 [314]	24 3/8 [619]
100	100 [45]	262 [1690]	2	1	280 [127]	2 [51]	4 [75]	33 [838]	27 [686]	22 [559]	29 1/8 [740]	24 3/8 [619]	24 3/8 [619]
200	200 [91]	393 [2535]	3	1	370 [168]	2 [51]	4 [75]	33 [838]	27 [686]	22 [559]	41 1/8 [1044]	24 3/8 [619]	36 3/8 [924]
300	300 [136]	524 [3380]	4	1	460 [208]	2 [51]	4 [75]	33 [838]	27 [686]	22 [559]	53 1/8 [1349]	24 3/8 [619]	48 3/8 [1229]



NOTE: + Actual Channel length is 81¼ [2064] to allow for overlap.

6" ZURN Z886 TRENCH DRAIN

N.T.S.



STRUCTURE SCHEDULE:

MH-11	MH-12	MH-15
SANITARY MANHOLE	SANITARY MANHOLE	SANITARY MANHOLE
RIM ELEV.: 9.22	RIM ELEV.: 9.08	RIM ELEV.: 8.78
INV OUT: (N) 3.92 (8")	INV IN: (S) 2.76 (8")	INV OUT: (N) 3.81 (8")
BOTTOM ELEV.: 3.92	INV OUT: (N) 2.66 (8")	BOTTOM ELEV.: 3.55
	BOTTOM ELEV.: 2.66	

NOTES:

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3. NOTE TO CONTRACTOR / OWNER: PER 2018 NFPA 1-11.10, TWO-WAY RADIO COMMUNICATION ENHANCEMENT SYSTEMS SHALL COMPLY AT THE CONCLUSION OF CONSTRUCTION (NFPA 72-24.5.2).|
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PROJECT NAME AND LOCATION

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NO.	REVISION	DATE
R1	PER CITY COMMENTS	10-20-21

REVISIONS DESCRIPTION

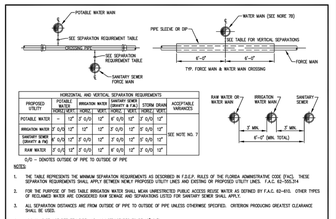
DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03 UTIL.dwg
SCALE:	AS SHOWN

UTILITY PLAN

SHEET TITLE

C-18

SHEET NUMBER



HORIZONTAL AND VERTICAL SEPARATION REQUIREMENTS

PROPOSED UTILITY	POTABLE WATER HORIZ.	POTABLE WATER VERT.	IRRIGATION WATER HORIZ.	IRRIGATION WATER VERT.	SANITARY SEWER (GRAVITY & F.M.) HORIZ.	SANITARY SEWER (GRAVITY & F.M.) VERT.	STORM DRAIN HORIZ.	STORM DRAIN VERT.	ACCEPTABLE VARIANCES
POTABLE WATER	–	12" [7.5]	12"	6" [4.5]	10"	6" [4.5]	10"	6" [4.5]	SEE NOTE NO. 7
IRRIGATION WATER	6" [4.5]	12"	12"	6" [4.5]	10"	6" [4.5]	10"	6" [4.5]	
SANITARY SEWER (GRAVITY & FM)	6" [4.5]	12" [7.5]	12"	6" [4.5]	10"	6" [4.5]	10"	6" [4.5]	
RAW WATER	6" [4.5]	12" [7.5]	12"	6" [4.5]	10"	6" [4.5]	10"	6" [4.5]	

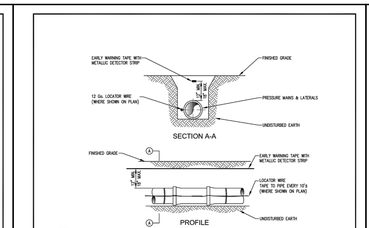
[ ] = DENOTES OUTSIDE OF PIPE TO OUTSIDE OF PIPE

NOTES

1. THE TABLE REPRESENTS THE MINIMUM SEPARATION REQUIREMENTS AS DESCRIBED IN F.D.E.P. RULES OF THE FLORIDA ADMINISTRATIVE CODE (FAC). THESE SEPARATION REQUIREMENTS SHALL APPLY BETWEEN NEWLY PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES. F.A.C. 62-555.314
2. FOR THE PURPOSE OF THIS TABLE IRRIGATION WATER SHALL MEAN UNRESTRICTED PUBLIC ACCESS REUSE WATER AS DEFINED BY F.A.C. 62-610. OTHER TYPES OF RECLAIMED WATER ARE CONSIDERED RAW SEWAGE AND SEPARATIONS LISTED FOR SANITARY SEWER SHALL APPLY.
3. ALL SEPARATION DISTANCES ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE UNLESS OTHERWISE SPECIFIED. CRITERION PRODUCING GREATEST CLEARANCE SHALL BE USED.
4. MINIMUM DISTANCE BETWEEN PIPE AND ANY STRUCTURES TO BE 12" O/O.
5. FOR VERTICAL SEPARATIONS ON WATER MAINS, 12" IS REQUIRED, HOWEVER, 6" IS ACCEPTABLE IF THE WATER MAIN IS ABOVE THE GRAVITY SANITARY SEWER OR STORM DRAIN, UPON RECEIVING PRIOR APPROVAL FROM THE CITY OF CAPE CORAL.
6. FOR SEPARATIONS NOT INVOLVING WATER MAINS, 12" IS REQUIRED, HOWEVER, 6" IS ACCEPTABLE UPON RECEIVING PRIOR APPROVAL FROM CONSTRUCTION MANAGER.
7. ACCEPTABLE VARIANCES:
   A. WHERE HORIZONTAL SEPARATION IS NOT ATTAINABLE, DUCTILE IRON PIPE OR PVC ENCASEMENT MUST BE USED UNTIL MINIMUM CLEARANCE IS ACHIEVED. IN NO CASE SHALL THE WATER MAIN BE LESS THAN 6' FROM THE SANITARY SEWER. ENCASEMENT SHALL BE EXTENDED 10' BEYOND WATER MAIN JOINTS, 22.5° IF BETWEEN RAW AND GRAVITY SANITARY SEWER, SANITARY FORCE MAINS, SANITARY SEWER AND NON-POTABLE RECLAIMED WATER MAINS.
   B. ALL SANITARY SEWERS OR STORM DRAINS CROSSING UNDER WATER MAINS WHERE 6" MINIMUM VERTICAL SEPARATION IS NOT ATTAINABLE, FOR IRRIGATION AND FORCE MAINS, USE ONE FULL LENGTH OF PVC ENCASED PIPE CENTERED AT THE POINT OF CROSSING, AND FOR THE WATER MAIN, USE ONE FULL LENGTH OF PIPE CENTERED AT THE POINT OF CROSSING WITH NO LESS THAN 6' BETWEEN ANY TWO JOINTS.
   C. IF MINIMUM DEPTH OF COVER IS NOT MAINTAINED, SPECIAL PROTECTION OR PIPE MATERIAL UPGRADE MAY BE REQUIRED PER CITY OF CAPE CORAL REGULATIONS.
   D. WHERE HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS & GRAVITY-TYPE SEWER MAY BE REDUCED TO 3' WHERE BOTTOM OF WATER MAIN IS 6" ABOVE TOP OF SEWER.
8. FOR SANITARY SEWERS CROSSING OVER WATER MAINS, A MINIMUM VERTICAL DISTANCE OF 12 INCHES AND THE CRITERIA FOR MINIMUM SEPARATION OF JOINTS IN 7(D) ABOVE MUST BE MAINTAINED.
9. NO WATER PIPE SHALL PASS THROUGH, OR COME IN CONTACT WITH, ANY PART OF A SANITARY MANHOLE OR STRUCTURE.
10. A MINIMUM VERTICAL SEPARATION OF 6" SHALL BE KEPT BETWEEN SANITARY SEWER SERVICES AND MAIN LINE PIPES.
11. UTILITY LINES SHALL HAVE A MINIMUM 3' VERTICAL AND HORIZONTAL SEPARATION FROM ELECTRICAL AND FIBER OPTIC LINES. WHEN FACILITY/UTILITY LINES WILL CROSS ELECTRICAL OR FIBER OPTIC LINES, HAND DIGGING SHALL BE REQUIRED TO LOCATE THESE LINES.

W-102 UTILITY SEPERATION REQUIREMENTS
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-21-2017		UTILITY SEPERATION REQUIREMENTS	W-102
ADOPTION DATE 08-01-2017			



NOTES

1. ALL MAINS SHALL HAVE AN EARLY WARNING PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ALIGNMENT. THE PROTECTION TAPE SHALL BE AS REQUIRED BY THE SPECIFICATIONS. TAPES SHALL BE INSTALLED DURING BACKFILLING 12" - 18" DIRECTLY ABOVE THE PIPE. THE TAPE SHALL BE INSTALLED AT A DEPTH OF 1/2 THE DEPTH OF COVER, BUT NOT LESS THAN 18" BELOW FINISHED GRADE. WHERE THE WATER MAIN RUNS BELOW THE TAPE SHALL HAVE A METALLIC DETECTABLE STRIP INCLUDED AND COLOR CODED AS FOLLOWS:

   BLUE ---------- POTABLE WATER
   GREEN ---------- GRAVITY SEWER
   GREEN ---------- SANITARY SEWER FORCE MAIN
   LAVENDER ---------- IRRIGATION/RECLAIMED WATER

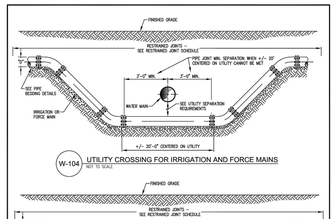
2. PVC MAINS SHALL BE A SOLID COLOR AND PERMANENTLY MARKED WITH THE MANUFACTURER'S NAME, PIPE SIZE AND/OR PRESSURE RATING.
3. ELECTRONIC MARKERS SHALL BE PLACED AT ALL CHANGES OF DIRECTION, START AND END OF VERTICAL DEFLECTIONS, AND SERVICES AT THE CORPORATION STOP OR SEWER SERVICE WYE. DO NOT INSTALL ELECTRONIC MARKER FOR CORPORATION STOPS UNLESS LOCATED UNDER PAVEMENT. MARKERS SHALL BE LOCATED AT A MAXIMUM DEPTH OF 4 FEET. THE MARKERS SHALL NOT BE PLACED IN CONTACT WITH DIP FITTINGS. THE MARKERS SHALL BE:

   POTABLE WATER ---------- COLOR BLUE
   SANITARY SEWER ---------- COLOR GREEN
   STORM DRAIN ---------- COLOR ORANGE
   IRRIGATION/RECLAIMED WATER ---------- COLOR LAVENDER

4. PLACE ONLY POTABLE WATER MARKER AT POTABLE & IRRIGATION SERVICES WHEN TOGETHER. PLACE IRRIGATION MARKER AT LONE IRRIGATION SERVICE WHEN THERE ARE NO POTABLE SERVICES IN THE VICINITY.
5. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
6. RECORD DRAWINGS SHALL INCLUDE STATIC PLANE COORDINATES AND ELEVATION FOR EACH ELECTRONIC MARKER.

W-103 PIPE LOCATION TAPE, STRIPING AND MARKERS
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-21-2017		PIPE LOCATION TAPE, STRIPING AND MARKERS	W-103
ADOPTION DATE 08-01-2017			



NOTES

1. ELECTRONIC MARKERS SHALL BE PLACED AT ALL CHANGES OF DIRECTION, START AND END OF VERTICAL DEFLECTIONS, AND SERVICES AT THE CORPORATION STOP OR SEWER SERVICE WYE. MARKERS SHALL BE LOCATED AT A MAXIMUM DEPTH OF 4 FEET. THE MARKERS SHALL NOT BE PLACED IN CONTACT WITH DIP FITTINGS. THE MARKERS SHALL BE:

   POTABLE WATER ---------- COLOR BLUE
   SANITARY SEWERS ---------- COLOR GREEN
   SANITARY SEWER FORCE MAIN ---------- COLOR GREEN
   IRRIGATION/RECLAIM WATER ---------- COLOR LAVENDER

2. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
3. ALL DIVERSIONS SHALL BE CONSTRUCTED USING DUCTILE IRON PIPE.

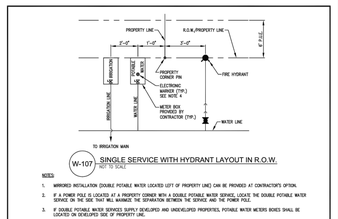
REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-21-2017		UTILITY CROSSING FOR IRRIGATION AND FORCE MAINS UTILITY CROSSING FOR WATER MAINS	W-104
ADOPTION DATE 08-01-2017			

PIPE SIZE (INCHES)	RESTRAINED LENGTH EACH SIDE OF RESTRAINED FITTING (FEET) DIP 90°	DIP 45°	DIP 22-1/2°	DIP 11-1/4°	PVC 90°	PVC 45°	PVC 22-1/2°	PVC 11-1/4°	RESTRAINED LENGTH FOR REDUCERS 2	4	6	8	10	12	16	20	24	30	36	
4	20	15	10	5	55	25	15	10	40	–	–	–	–	–	–	–	–	–	–	PVC
6	55	25	10	5	80	35	20	10	50	45	–	–	–	–	–	–	–	–	–	PVC
8	65	30	15	10	80	40	20	10	75	70	40	–	–	–	–	–	–	–	–	PVC
10	80	35	20	10	110	50	25	15	95	90	70	40	–	–	–	–	–	–	–	PVC
12	95	40	20	10	130	55	30	15	120	115	100	75	40	–	–	–	–	–	–	PVC
16	135	50	25	15	165	70	35	20	160	155	140	125	100	70	–	–	–	–	–	PVC
20	150	65	30	15	200	85	40	20	200	195	185	170	150	130	75	–	–	–	–	PVC
24	160	75	35	20	210	90	45	25	190	185	180	170	160	135	130	90	50	–	–	PVC
30	190	80	40	20	250	105	50	25	185	190	185	180	170	160	135	105	70	–	–	DIP
36	220	95	45	25	–	–	–	–	225	220	215	210	205	195	190	150	125	70	–	DIP
42	245	105	50	25	–	–	–	–	245	240	235	230	225	220	205	190	155	105	50	DIP
48	280	120	60	30	–	–	–	–	255	250	245	240	235	230	215	195	175	125	70	DIP

RESTRAINED LENGTHS FOR DEAD ENDS, BRANCHES AND WYES TO THE TERMINATING SHALL BE THE SAME AS FOR REDUCERS. TEST PRESSURE 150 PSI. RESTRAINED LENGTHS FOR TEES SHALL BE AS FOR 90° BENDS. RESTRAINED LENGTHS FOR REDUCERS SHALL BE RESTRAINED 20' EACH SIDE OF THE VALVE. IF A JOINT FALLS WITHIN THE MINIMUM DISTANCE, IT SHALL BE RESTRAINED. TABLE BASED ON DUCTILE IRON FITTINGS. TEST PRESSURE 150 PSI.

W-105 RESTRAINED JOINT SCHEDULE
NOT TO SCALE

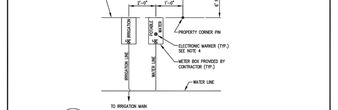
REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-21-2017		RESTRAINED JOINT SCHEDULE	W-105
ADOPTION DATE 08-01-2017			



W-107 SINGLE SERVICE WITH HYDRANT LAYOUT IN R.O.W.
NOT TO SCALE

NOTES

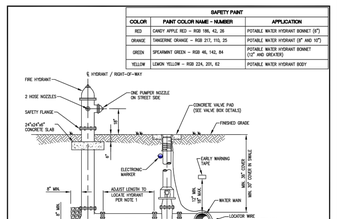
1. MARKERED INSTALLATION (DOUBLE POTABLE METER LOCATED LEFT OF PROPERTY LINE) CAN BE PROVIDED AT CONTRACTOR'S OPTION.
2. IF A POWER POLE IS LOCATED AT A PROPERTY CORNER WITH A DOUBLE POTABLE WATER SERVICE, LOCATE THE DOUBLE POTABLE WATER SERVICE ON THE SIDE THAT WILL MAXIMIZE THE SEPARATION BETWEEN THIS SERVICE AND THE POWER POLE.
3. IF DOUBLE POTABLE WATER SERVICES SUPPLY DEVELOPED AND UNDEVELOPED PROPERTIES, POTABLE WATER METERS BOXES SHALL BE LOCATED ON DEVELOPED SIDE OF PROPERTY LINE.
4. PROVIDE ELECTRONIC MARKERS FOR ALL POTABLE WATER METER BOX LOCATIONS FOR SPECIFICATIONS AND APPLICABLE SERVICE CONNECTION DETAILS.
5. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.



W-107 SINGLE SERVICE WITHOUT HYDRANT LAYOUT IN R.O.W.
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-21-2017		SINGLE SERVICE WITH HYDRANT SINGLE SERVICE WITHOUT HYDRANT (IN RIGHT-OF-WAY)	W-107
ADOPTION DATE 08-01-2017			

SAFETY PAINT		
COLOR	PAINT COLOR NAME – NUMBER	APPLICATION
RED	CANDY APPLE RED – RGB 196, 43, 28	POTABLE WATER HYDRANT BONNET (B")
ORANGE	TANGERINE ORANGE – RGB 217, 113, 25	POTABLE WATER HYDRANT (2" AND 4")
GREEN	SPEARMINT GREEN – RGB 46, 142, 64	POTABLE WATER HYDRANT BONNET (12" AND GREATER)
YELLOW	LEMON YELLOW – RGB 254, 205, 62	POTABLE WATER HYDRANT BODY

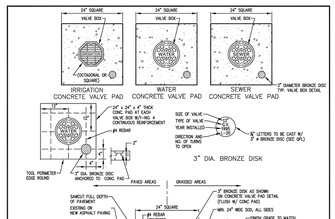


NOTES

1. SET HYDRANT IN UTILITY EASEMENT ON THE RIGHT-OF-WAY LINE. HYDRANT LOCATION TO BE APPROVED BY THE CITY OF CAPE CORAL.
2. DO NOT PLACE HYDRANT VALVE AND VALVE BOX IN SWALE.
3. PIPE TO HAVE A MINIMUM 30' COVER IN SWALE.
4. RESTRAIN ALL CONNECTIONS.
5. PAINT TO BE APPLIED IN FACTORY BY MANUFACTURER.
   POTABLE = YELLOW BODY (BONNETS = 6"= RED, 8" & 10"= ORANGE, 12" AND ABOVE = GREEN)
6. PROVIDE A RAISED BLUE PAVEMENT MARKER IN PAVEMENT PERPENDICULAR TO THE FIRE HYDRANT FIVE FEET OFF THE EDGE OF PAVEMENT.
7. NO HYDRANTS AT POWER POLES UNLESS THERE ARE POLES AT EVERY PROPERTY CORNER. MINIMUM CLEARANCE BETWEEN AN OBSTRUCTIONS AND HYDRANTS SHALL BE 5 FEET.
8. CAUTION SHOULD BE TAKEN NOT TO ALLOW ANY MATERIAL TO FALL INTO THE VALVE BOX CYLINDER. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING ANY AND ALL MATERIAL RESULTING FROM THEIR VALVE BOX INSTALLATION AND/OR ADJUSTMENT OPERATION.
9. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
10. INSTALL EARLY WARNING TAPE PER MANUFACTURER'S INSTRUCTIONS.
11. IF NECESSARY, USE OFFSET FITTING AND ROTATE OFFSET FITTING TO ACHIEVE REQUIRED NOZZLE HEIGHT ABOVE FINISHED GRADE.

W-201 HYDRANT ASSEMBLY
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-21-2017		HYDRANT ASSEMBLY	W-201
ADOPTION DATE 08-01-2017			

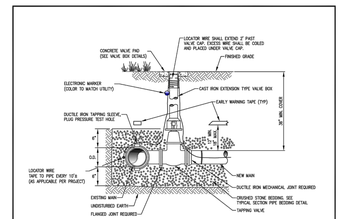


NOTES

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2. ELECTRONIC MARKERS SHALL BE REQUIRED AT ALL VALVES 3" OR LARGER.
3. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
4. EDGE OF VALVE PAD TO BE INSTALLED PARALLEL WITH CENTERLINE OF ROADWAY.
5. VALVE PAD SHALL NOT STRADDLE PAVEMENT EDGE.
6. FOR DEPTHS GREATER THAN 4' FROM FINISH GRADE TO VALVE NUT PROVIDE EXTENSION WITH COLLAR AS REQUIRED AND BOLT TO VALVE NUT.
7. LOCATOR WIRE SHALL EXTEND 3' PAST VALVE CAP. EXCESS WIRE SHALL BE COILED AND PLACED UNDER VALVE CAP. TAPE LOCATOR WIRE TO PIPE EVERY 10'±, AS APPLICABLE PER PROJECT.
8. INSTALL TO ADA SLOPE COMPLIANCE IF LOCATED WITHIN SIDEWALK.
9. ANY DAMAGE TO THE EXISTING ASPHALT SURFACE SHALL BE REPAIRED AS DEFINED IN THE ENGINEERING DESIGN STANDARDS.

W-210 VALVE BOX (PAVED AREAS/GRASSED AREAS)
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-21-2017		VALVE BOX (PAVED AREAS/GRASED AREAS)	W-210
ADOPTION DATE 08-01-2017			

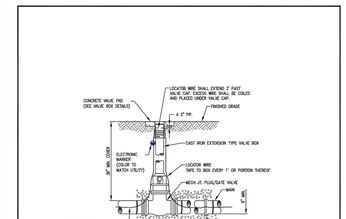


NOTES

1. CAUTION SHOULD BE TAKEN NOT TO ALLOW ANY MATERIAL TO FALL INTO THE VALVE BOX CYLINDER. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING ANY AND ALL MATERIAL RESULTING FROM THEIR VALVE BOX INSTALLATION AND/OR ADJUSTMENT OPERATION.
2. ELECTRONIC MARKERS SHALL BE REQUIRED AT ALL VALVES 3" OR LARGER.
3. NO REVERSE TAPS, UNLESS APPROVED BY THE CITY.
4. NO TAPS CLOSER THAN 18" FROM OTHER TAPS, BELLS, OR ALL FITTINGS.
5. NO SIZE ON SIZE TAPS.
6. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
7. INSTALL EARLY WARNING TAPE PER MANUFACTURER'S INSTRUCTIONS.

W-211 MECHANICAL JOINT TAPPING SLEEVE AND VALVE
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-21-2017		MECHANICAL JOINT TAPPING SLEEVE AND VALVE	W-211
ADOPTION DATE 08-01-2017			

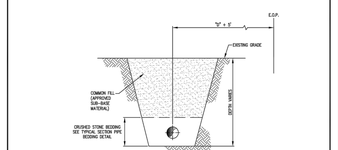


NOTES

1. FOR DEPTHS GREATER THAN 4 FEET FROM FINISH GRADE TO VALVE NUT, PROVIDE EXTENSION WITH COLLAR AS REQUIRED AND BOLT TO VALVE NUT.
2. ELECTRONIC MARKERS SHALL BE REQUIRED AT ALL VALVES 3" OR LARGER.
3. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.

W-212 GATE VALVE
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-21-2017		GATE VALVE	W-212
ADOPTION DATE 08-01-2017			

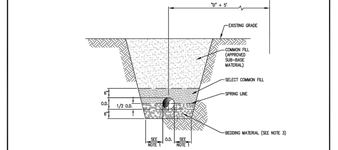


NOTE:

1. COMMON FILL (APPROVED SUB-BASE MATERIAL) SHALL BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY (AASHTO T-180). WHEN THE CENTERLINE OF THE TRENCH IS WITHIN A DISTANCE OF "5" + X" FROM THE EDGE OF A PAVED ROAD OR DRIVEWAY, COMMON FILL (APPROVED SUB-BASE MATERIAL) (LBR 40) MINIMUM SHALL BE USED AND COMPACTED TO AT LEAST 98% MAXIMUM DENSITY (AASHTO T-180).

W-231 TYPICAL SECTION: BACKFILL - UNPAVED AREAS
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-21-2017		TYPICAL SECTION BACKFILL - UNPAVED AREAS	W-231
ADOPTION DATE 08-01-2017			

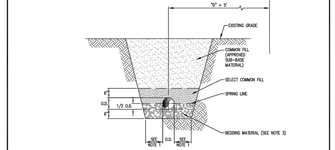


NOTES:

1. DIMENSION VARIES WITH PIPE DIAMETER:
   12 MAX. FOR NOMINAL PIPE DIAMETER OF 24"OR LESS.
   12 MAX. FOR NOMINAL PIPE DIAMETER OF MORE THAN 24" AND LESS THAN 42".
   24 MAX. FOR NOMINAL PIPE DIAMETER OF 42"OR MORE.
2. COMMON FILL (APPROVED SUB-BASE MATERIAL) SHALL BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY (AASHTO T-180). WHEN THE CENTERLINE OF THE TRENCH IS WITHIN A DISTANCE OF "5" + X" FROM THE EDGE OF A PAVED ROAD OR DRIVEWAY, COMMON FILL (APPROVED SUB-BASE MATERIAL) (LBR 40) MINIMUM SHALL BE USED AND COMPACTED TO AT LEAST 98% MAXIMUM DENSITY (AASHTO T-180).
3. BEDDING MATERIAL SHALL BE FOOT #57 STONE IF IN OR BELOW THE GROUNDWATER TABLE, OR FOOT #89 STONE IF ABOVE THE GROUNDWATER TABLE.
4. BEDDING FOR GRAVITY SEWER SHALL BE #57 STONE.

W-232 TYPICAL SECTION: DUCTILE IRON PIPE BEDDING
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-21-2017		TYPICAL SECTION DUCTILE IRON TRENCH BEDDING	W-232
ADOPTION DATE 08-01-2017			

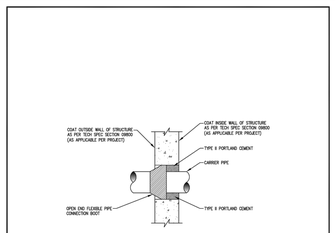


NOTES:

1. DIMENSION VARIES WITH PIPE DIAMETER:
   12 MAX. FOR NOMINAL PIPE DIAMETER OF 24"OR LESS.
   12 MAX. FOR NOMINAL PIPE DIAMETER OF MORE THAN 24" AND LESS THAN 42".
   24 MAX. FOR NOMINAL PIPE DIAMETER OF 42"OR MORE.
2. COMMON FILL (APPROVED SUB-BASE MATERIAL) SHALL BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY (AASHTO T-180). WHEN THE CENTERLINE OF THE TRENCH IS WITHIN A DISTANCE OF "5" + X" FROM THE EDGE OF A PAVED ROAD OR DRIVEWAY, COMMON FILL (APPROVED SUB-BASE MATERIAL) (LBR 40) MINIMUM SHALL BE USED AND COMPACTED TO AT LEAST 98% MAXIMUM DENSITY (AASHTO T-180).
3. BEDDING MATERIAL SHALL BE FOOT #57 STONE IF IN OR BELOW THE GROUNDWATER TABLE, OR FOOT #89 STONE IF ABOVE THE GROUNDWATER TABLE.
4. BEDDING FOR GRAVITY SEWER SHALL BE #57 STONE.

W-233 TYPICAL SECTION: PVC BEDDING
NOT TO SCALE

| REVISION DATE | CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150027 CAPE CORA

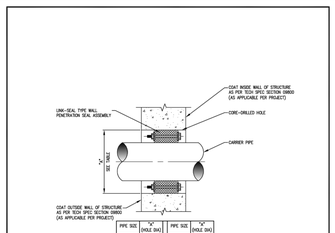


NOTES

1. ALL METAL PARTS OF PENETRATION SEAL SHALL BE 316 U.S. MANUFACTURED STAINLESS STEEL (INCLUDING BANDS)
2. WALL PENETRATIONS SHALL BE CORE BIT DRILLED. ANY EXPOSED REINFORCING BARS SHALL BE EPOXY COATED IN ACCORDANCE WITH THE SPECIFICATIONS SECTION 09900.
3. COAT INSIDE AND OUTSIDE WALLS OF WET WELL PER TECHNICAL SPECIFICATION SECTION 09900.
4. USE ONLY AS NOTED ON PLAN AND PROFILE SHEETS.
5. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.

S-273 WALL PENETRATION
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL	DETAIL NAME	DETAIL NO.
07-21-2017	UTILITIES DEPARTMENT	WALL PENETRATION	S-273
ADOPTION DATE	P.O. BOX 150027		
08-01-2017	CAPE CORAL, FLORIDA 33915-0027		



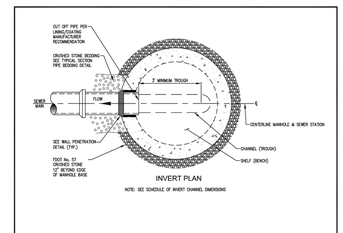
PIPE SIZE	"A" (SOLE SIG)	PIPE SIZE	"A" (SOLE SIG)
3	4	12	16
2-1/2	4	14	16
3	5	16	18
4	6	18	23
6	10	20	25
8	12	24	29
10	14		

NOTES

1. ALL DIMENSIONS ARE GIVEN IN INCHES.
2. INSTALL AS PER MANUFACTURER'S DIRECTIONS.

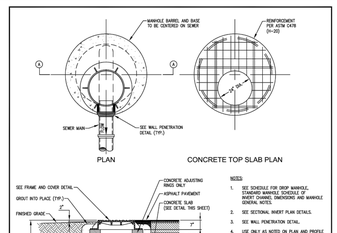
S-274 PENETRATION SEAL - LINK SEAL (CORE-DRILLED)
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL	DETAIL NAME	DETAIL NO.
07-21-2017	UTILITIES DEPARTMENT	PENETRATION SEAL LINK SEAL (CORE-DRILLED)	S-274
ADOPTION DATE	P.O. BOX 150027		
08-01-2017	CAPE CORAL, FLORIDA 33915-0027		



S-275 TERMINAL MANHOLE
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL	DETAIL NAME	DETAIL NO.
07-21-2017	UTILITIES DEPARTMENT	TERMINAL MANHOLE	S-275
ADOPTION DATE	P.O. BOX 150027		
08-01-2017	CAPE CORAL, FLORIDA 33915-0027		

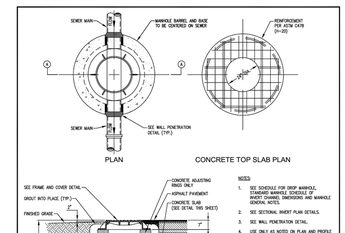


NOTES

1. SEE SCHEDULE FOR DROP MANHOLE, STANDARD MANHOLE SCHEDULE OF INVERT CHANNEL DIMENSIONS AND MANHOLE GENERAL NOTES.
2. SEE SECTIONAL INVERT PLAN DETAILS.
3. SEE WALL PENETRATION DETAIL.
4. USE ONLY AS NOTED ON PLAN AND PROFILE SHEETS.
5. SEE EXISTING MANHOLE RING AND COVER ADJUSTMENT DETAIL.
6. SEE PAVING DETAILS.
7. BRICK ADJUSTING RINGS NOT ALLOWED.
8. USE ONLY 316 SS FASTENERS EPOXY COATED INTO MANHOLE WALL.
9. MANHOLE SHALL BE COATED (INTERIOR AND EXTERIOR) PER SPECIFICATIONS SECTION 09900.
10. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
11. "DA" IS THE INSIDE DIAMETER OF THE SEWER MAIN, 8" DIAMETER UP TO 24" DIAMETER.

S-276 TYPICAL SHALLOW MANHOLE (TERMINAL)
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL	DETAIL NAME	DETAIL NO.
07-21-2017	UTILITIES DEPARTMENT	TYPICAL SHALLOW MANHOLE (TERMINAL)	S-276
ADOPTION DATE	P.O. BOX 150027		
08-01-2017	CAPE CORAL, FLORIDA 33915-0027		



NOTES

1. SEE SCHEDULE FOR DROP MANHOLE, STANDARD MANHOLE SCHEDULE OF INVERT CHANNEL DIMENSIONS AND MANHOLE GENERAL NOTES.
2. SEE SECTIONAL INVERT PLAN DETAILS.
3. SEE WALL PENETRATION DETAIL.
4. USE ONLY AS NOTED ON PLAN AND PROFILE SHEETS.
5. SEE EXISTING MANHOLE RING AND COVER ADJUSTMENT DETAIL.
6. SEE PAVING DETAILS.
7. BRICK ADJUSTING RINGS NOT ALLOWED.
8. USE ONLY 316 SS FASTENERS EPOXY COATED INTO MANHOLE WALL.
9. MANHOLE SHALL BE COATED (INTERIOR AND EXTERIOR) PER SPECIFICATIONS SECTION 09900.
10. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
11. "DA" IS THE INSIDE DIAMETER OF THE SEWER MAIN, 8" DIAMETER UP TO 24" DIAMETER.

S-277 TYPICAL SHALLOW MANHOLE (IN LINE)
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL	DETAIL NAME	DETAIL NO.
07-21-2017	UTILITIES DEPARTMENT	TYPICAL SHALLOW MANHOLE (IN LINE)	S-277
ADOPTION DATE	P.O. BOX 150027		
08-01-2017	CAPE CORAL, FLORIDA 33915-0027		

NOTE: SEE SCHEDULE OF INVERT CHANNEL DIMENSIONS

S-278 SECTIONAL INVERT PLAN - 90° CHANGE
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL	DETAIL NAME	DETAIL NO.
07-21-2017	UTILITIES DEPARTMENT	SECTIONAL INVERT PLAN	S-278
ADOPTION DATE	P.O. BOX 150027		
08-01-2017	CAPE CORAL, FLORIDA 33915-0027		

NOTE: SEE SCHEDULE OF INVERT CHANNEL DIMENSIONS

S-279 SECTIONAL INVERT PLAN - VARIED ANGLE CHANNEL
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL	DETAIL NAME	DETAIL NO.
07-21-2017	UTILITIES DEPARTMENT	SECTIONAL INVERT PLAN	S-279
ADOPTION DATE	P.O. BOX 150027		
08-01-2017	CAPE CORAL, FLORIDA 33915-0027		

NOTES

1. SEE SCHEDULE FOR DROP MANHOLE, STANDARD MANHOLE SCHEDULE OF INVERT CHANNEL DIMENSIONS AND MANHOLE GENERAL NOTES.
2. SEE SECTIONAL INVERT PLAN DETAILS.
3. SEE WALL PENETRATION DETAIL.
4. USE ONLY AS NOTED ON PLAN AND PROFILE SHEETS.
5. SEE EXISTING MANHOLE RING AND COVER ADJUSTMENT DETAIL.
6. SEE PAVING DETAILS.
7. BRICK ADJUSTING RINGS NOT ALLOWED.
8. USE ECCENTRIC CONE WHERE POSSIBLE.
9. USE ONLY 316 SS FASTENERS EPOXY COATED INTO MANHOLE WALL.
10. MANHOLE SHALL BE COATED (INTERIOR AND EXTERIOR) PER SPECIFICATIONS SECTION 09900.
11. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
12. 0 = 24" (STANDARD) 0 = 30" (REGIONAL) 0 = 36" (MASTER)
13. "DA" IS THE INSIDE DIAMETER OF THE SEWER MAIN, 8" DIAMETER UP TO 24" DIAMETER.
- SEE TABLE 1

S-281 TYPICAL MANHOLE
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL	DETAIL NAME	DETAIL NO.
07-21-2017	UTILITIES DEPARTMENT	TYPICAL MANHOLE	S-281
ADOPTION DATE	P.O. BOX 150027		
08-01-2017	CAPE CORAL, FLORIDA 33915-0027		

NOTES

1. SEE SCHEDULE FOR DROP MANHOLE, STANDARD MANHOLE SCHEDULE OF INVERT CHANNEL DIMENSIONS AND MANHOLE GENERAL NOTES.
2. SEE SECTIONAL INVERT PLAN DETAILS.
3. SEE WALL PENETRATION DETAIL.
4. USE ONLY AS NOTED ON PLAN AND PROFILE SHEETS.
5. SEE EXISTING MANHOLE RING AND COVER ADJUSTMENT DETAIL.
6. SEE PAVING DETAILS.
7. BRICK ADJUSTING RINGS NOT ALLOWED.
8. USE ECCENTRIC CONE WHERE POSSIBLE.
9. USE ONLY 316 SS FASTENERS EPOXY COATED INTO MANHOLE WALL.
10. MANHOLE SHALL BE COATED (INTERIOR AND EXTERIOR) PER SPECIFICATIONS SECTION 09900.
11. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
12. 0 = 24" (STANDARD) 0 = 30" (REGIONAL) 0 = 36" (MASTER)
13. "DA" IS THE INSIDE DIAMETER OF THE SEWER MAIN, 8" DIAMETER UP TO 24" DIAMETER.
- SEE TABLE 1

S-284 NEW GRAVITY SEWER CONNECTION TO EXISTING MANHOLE W/INTERNAL DROP
NOT TO SCALE

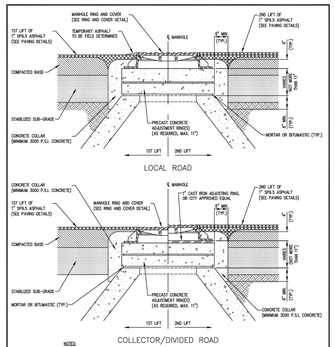
REVISION DATE	CITY OF CAPE CORAL	DETAIL NAME	DETAIL NO.
07-21-2017	UTILITIES DEPARTMENT	NEW GRAVITY SEWER CONNECTION TO EXISTING MANHOLE W/ INTERNAL DROP	S-284
ADOPTION DATE	P.O. BOX 150027		
08-01-2017	CAPE CORAL, FLORIDA 33915-0027		

NOTES

1. SEE SCHEDULE FOR DROP MANHOLE, STANDARD MANHOLE SCHEDULE OF INVERT CHANNEL DIMENSIONS AND MANHOLE GENERAL NOTES.
2. SEE SECTIONAL INVERT PLAN DETAILS.
3. SEE WALL PENETRATION DETAIL.
4. USE ONLY AS NOTED ON PLAN AND PROFILE SHEETS.
5. SEE EXISTING MANHOLE RING AND COVER ADJUSTMENT DETAIL.
6. SEE PAVING DETAILS.
7. BRICK ADJUSTING RINGS NOT ALLOWED.
8. USE ONLY 316 SS FASTENERS EPOXY COATED INTO MANHOLE WALL.
9. MANHOLE SHALL BE COATED (INTERIOR AND EXTERIOR) PER SPECIFICATIONS SECTION 09900.
10. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
11. "DA" IS THE INSIDE DIAMETER OF THE SEWER MAIN, 8" DIAMETER UP TO 24" DIAMETER.

S-285 EXISTING MANHOLE RING AND COVER ADJUSTMENT
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL	DETAIL NAME	DETAIL NO.
07-21-2017	UTILITIES DEPARTMENT	EXISTING MANHOLE RING AND COVER ADJUSTMENT	S-285
ADOPTION DATE	P.O. BOX 150027		
08-01-2017	CAPE CORAL, FLORIDA 33915-0027		

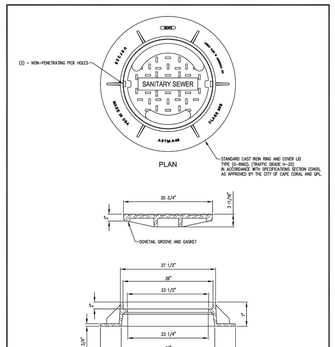


NOTES

1. CAUTION SHOULD BE TAKEN NOT TO ALLOW ANY FOREIGN MATERIAL TO FALL INTO THE MANHOLE. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY AND ALL DEBRIS RESULTING FROM ADJUSTMENT OPERATIONS OF THE MANHOLE.
2. MAXIMUM ALLOWABLE ADJUSTMENT USING PRECAST CONCRETE ADJUSTING RINGS IS 11".

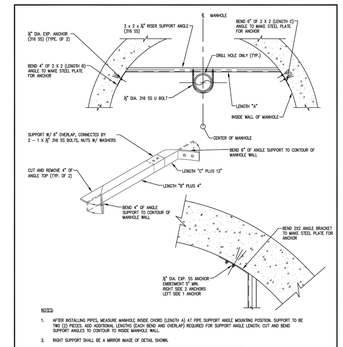
S-286 MANHOLE RING AND COVER INSTALLATION
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL	DETAIL NAME	DETAIL NO.
07-21-2017	UTILITIES DEPARTMENT	MANHOLE RING AND COVER INSTALLATION	S-286
ADOPTION DATE	P.O. BOX 150027		
08-01-2017	CAPE CORAL, FLORIDA 33915-0027		



S-303 MANHOLE RING AND COVER - PRIVATE SANITARY SEWER
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL	DETAIL NAME	DETAIL NO.
07-21-2017	UTILITIES DEPARTMENT	MANHOLE RING AND COVER PRIVATE SANITARY SEWER	S-303
ADOPTION DATE	P.O. BOX 150027		
08-01-2017	CAPE CORAL, FLORIDA 33915-0027		

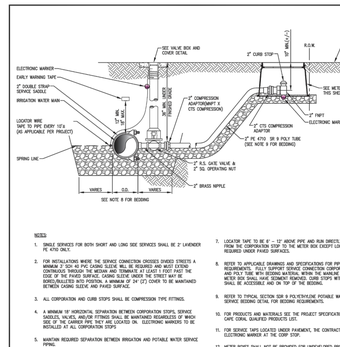


NOTES

1. AFTER INSTALLING PIPE(S), MEASURE MANHOLE INSIDE CHORD (LENGTH A) AT PIPE SUPPORT ANGLE MOUNTING POSITION. SUPPORT TO BE TWO (2) PIECES, ADD ADDITIONAL LENGTHS (EACH BEND AND OVERLAP) REQUIRED FOR SUPPORT ANGLE LENGTH. CUT AND BEND SUPPORT ANGLES TO CONTOUR TO INSIDE MANHOLE WALL.
2. RIGHT SUPPORT SHALL BE A MIRROR IMAGE OF DETAIL SHOWN.
3. ALL MATERIAL AND HARDWARE TO BE 316 STAINLESS STEEL, AMERICAN MADE. (CERTIFICATION REQUIRED)
4. USE ONLY AS NOTED ON PLAN AND PROFILE SHEETS.
5. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.

S-309 MANHOLE OFFSET PIPE SUPPORT
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL	DETAIL NAME	DETAIL NO.
07-21-2017	UTILITIES DEPARTMENT	MANHOLE OFFSET PIPE SUPPORT	S-309
ADOPTION DATE	P.O. BOX 150027		
08-01-2017	CAPE CORAL, FLORIDA 33915-0027		

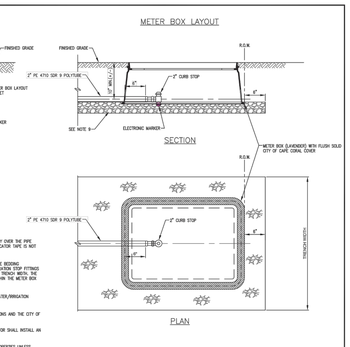


NOTES

1. SINGLE SERVICES FOR BOTH SHORT AND LONG SIDE SERVICES SHALL BE 2" LAVENDER PE 4710 ONLY.
2. FOR INSTALLATIONS WHERE THE SERVICE CONNECTION CROSSES UNDER STREETS A MINIMUM 3' SDR 40 PVC CASING SLEEVE WILL BE REQUIRED AND MUST EXTEND CONTINUOUS THROUGH THE MEDIAN AND TERMINATE AT LEAST 1 FOOT PAST THE EDGE OF THE PAVED SURFACE. CASING SLEEVE UNDER THE STREET MAY BE BORED/DRILLED INTO POSITION. A MINIMUM OF 3' OF (2") COVER TO BE MAINTAINED BETWEEN CASING SLEEVE AND PAVED SURFACE.
3. ALL CORPORATION AND CURB STOPS SHALL BE COMPRESSION TYPE FITTINGS.
4. A MINIMUM 18" HORIZONTAL SEPARATION BETWEEN CORPORATION STOPS, SERVICE SADDLES, AND WATER MAINS SHALL BE MAINTAINED REGARDLESS OF WHICH SIDE OF THE ALIGNMENT PIPE THAT WILL LOCATED ON. ELECTRONIC MARKERS TO BE INSTALLED AT ALL CORPORATION STOPS
5. MAINTAIN REQUIRED SEPARATION BETWEEN IRRIGATION AND POTABLE WATER SERVICE PIPING.
6. ALL CURB STOPS SHALL HAVE COLOR CODED TAGS FOR POSITIVE IDENTIFICATION.
7. LOCATOR TAPE TO BE 6" – 12" ABOVE PIPE AND RUN DIRECTLY OVER THE PIPE. TAPE SHALL BE CONTINUOUS FROM THE METER BOX EXCEPT LOCATOR TAPE IS NOT REQUIRED UNDER PAVED SURFACES.
8. REFER TO APPLICABLE DRAWINGS AND SPECIFICATIONS FOR PIPE BEDDING REQUIREMENTS. FULLY SUPPORT SERVICE CONNECTION CORPORATION STOP FITTINGS WITH SAND OR SELECT BACKFILL MATERIAL. THE BOTTOM OF THE METER BOX AND METER BOX SHALL HAVE SEDIMENT REMOVED. CURB STOPS WITHIN THE METER BOX SHALL BE ACCESSIBLE AND ON TOP OF THE BEDDING.
9. REFER TO TYPICAL SECTION SDR 9 POLYETHYLENE POTABLE WATER/IRRIGATION SERVICE BEDDING DETAIL FOR BEDDING REQUIREMENTS.
10. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
11. FOR SERVICE TAPS LOCATED UNDER PAVEMENT, THE CONTRACTOR SHALL INSTALL AN ELECTRONIC MARKER AT THE CORP STOP.
12. METER BOXES SHALL NOT BE PROVIDED FOR UNDEVELOPED PROPERTIES UNLESS OTHERWISE INDICATED.

I-255 2" IRRIGATION WATER (SHORT & LONG SIDE) COMMERCIAL/MULTI-FAMILY SINGLE SERVICE CONNECTION - HDPE -OPTION - IMPROVED PROPERTY
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL	DETAIL NAME	DETAIL NO.
07-21-2017	UTILITIES DEPARTMENT	2" IRRIGATION WATER (SHORT & LONG SIDE) COMMERCIAL/MULTI-FAMILY SINGLE SERVICE CONNECTION - HDPE OPTION - IMPROVED PROPERTY	I-255
ADOPTION DATE	P.O. BOX 150027		
08-01-2017	CAPE CORAL, FLORIDA 33915-0027		



NOTES

1. MAXIMUM ALLOWABLE ADJUSTMENT USING PRECAST CONCRETE ADJUSTING RINGS IS 11".
2. CAUTION SHOULD BE TAKEN NOT TO ALLOW ANY FOREIGN MATERIAL TO FALL INTO THE MANHOLE. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING ANY AND ALL DEBRIS RESULTING FROM ADJUSTMENT OPERATIONS OF THE MANHOLE.

S-285 EXISTING MANHOLE RING AND COVER ADJUSTMENT
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL	DETAIL NAME	DETAIL NO.
07-21-2017	UTILITIES DEPARTMENT	EXISTING MANHOLE RING AND COVER ADJUSTMENT	S-285
ADOPTION DATE	P.O. BOX 150027		
08-01-2017	CAPE CORAL, FLORIDA 33915-0027		

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ZIMMER DEVELOPMENT COMPANY

CLIENT NAME AND ADDRESS

OASIS @ CAPE CORAL PHASE 2
CITY OF CAPE CORAL, FLORIDA

PROJECT NAME AND LOCATION

NO.	REVISION	DATE
R1	PER CITY COMMENTS	10-28-21

REVISIONS DESCRIPTION

DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03 UTIL.dwg
SCALE:	AS SHOWN

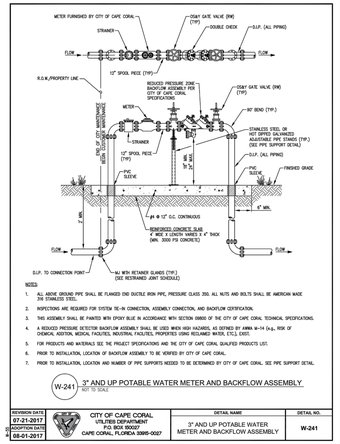
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SHEET TITLE

C-20

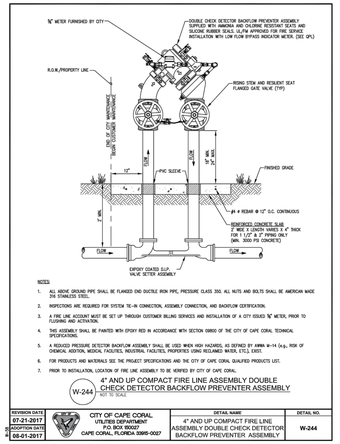
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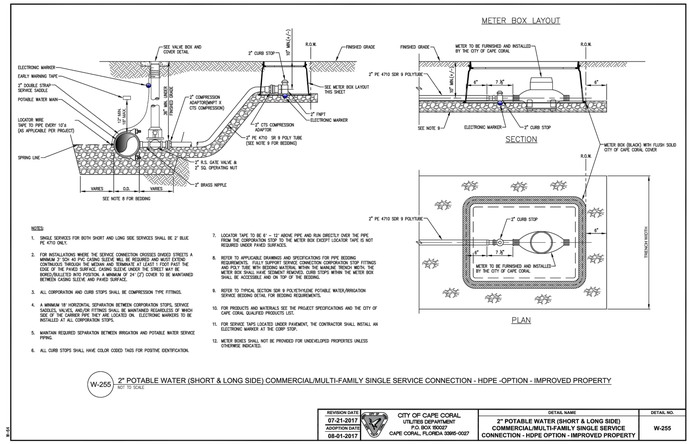
W-241 3" AND UP POTABLE WATER METER AND BACKFLOW ASSEMBLY
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150022 CAPE CORAL, FLORIDA 33995-0027	DETAIL NAME	DETAIL NO.
07-21-2017		3" AND UP POTABLE WATER METER AND BACKFLOW ASSEMBLY	W-241
ADOPTION DATE 08-01-2017			



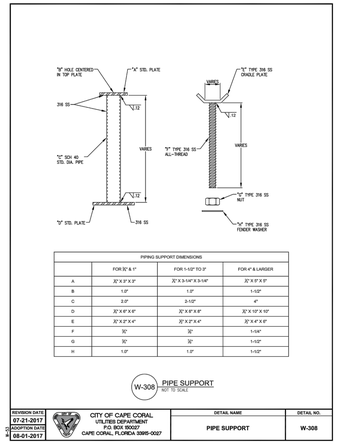
W-244 4" AND UP COMPACT FIRE LINE ASSEMBLY DOUBLE CHECK DETECTOR BACKFLOW PREVENTER ASSEMBLY
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150022 CAPE CORAL, FLORIDA 33995-0027	DETAIL NAME	DETAIL NO.
07-21-2017		4" AND UP COMPACT FIRE LINE ASSEMBLY DOUBLE CHECK DETECTOR BACKFLOW PREVENTER ASSEMBLY	W-244
ADOPTION DATE 08-01-2017			



W-255 2" POTABLE WATER (SHORT & LONG SIDE) COMMERCIAL/MULTI-FAMILY SINGLE SERVICE CONNECTION - HDPE -OPTION - IMPROVED PROPERTY
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150022 CAPE CORAL, FLORIDA 33995-0027	DETAIL NAME	DETAIL NO.
07-21-2017		2" POTABLE WATER (SHORT & LONG SIDE) COMMERCIAL/MULTI-FAMILY SINGLE SERVICE CONNECTION - HDPE -OPTION - IMPROVED PROPERTY	W-255
ADOPTION DATE 08-01-2017			



PIPING SUPPORT DIMENSIONS			
	FOR 3/4" & 1"	FOR 1-1/2" TO 2"	FOR 4" & LARGER
A	3/4" X 3" X 3"	3/4" X 3-1/4" X 3-1/4"	3/4" X 3" X 3"
B	1.0"	1.0"	1-1/2"
C	3.0"	3-1/2"	4"
D	3/4" X 4" X 6"	3/4" X 4" X 6"	3/4" X 10" X 10"
E	3/4" X 3" X 4"	3/4" X 3" X 4"	3/4" X 4" X 6"
F	3/4"	3/4"	1-1/4"
G	3/4"	3/4"	1-1/2"
H	1.0"	1.0"	1-1/2"

W-308 PIPE SUPPORT
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150022 CAPE CORAL, FLORIDA 33995-0027	DETAIL NAME	DETAIL NO.
07-21-2017		PIPE SUPPORT	W-308
ADOPTION DATE 08-01-2017			

EARLY WARNING TAPE WITH METALLIC DETECTOR STRIP
FINISHED GRADE
12 Ga. LOCATOR WIRE (WHERE SHOWN ON PLAN)
PRESSURE MAINS & LATERALS
UNDISTURBED EARTH
SECTION A-A
EARLY WARNING TAPE WITH METALLIC DETECTOR STRIP
LOCATOR WIRE TAPE TO PIPE EVERY 10'± (WHERE SHOWN ON PLAN)
PROFILE
NOTES
1. ALL MAINS SHALL HAVE AN EARLY WARNING PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ALIGNMENT. THE PROTECTION TAPE SHALL BE AS REQUIRED BY THE SPECIFICATIONS. TAPE SHALL BE INSTALLED DURING BACKFILLING 12" – 18" DIRECTLY ABOVE THE PIPE AND BE CONTINUOUSLY MARKED FOR THE TYPE OF PIPE (EXAMPLE: "CAUTION WATER MAIN BURIED BELOW"). THE TAPE SHALL HAVE A METALLIC DETECTABLE STRIP INCLUDED AND COLOR CODED AS FOLLOWS:
BLUE ---------- POTABLE WATER
GREEN ---------- SANITARY SEWER
GREEN ---------- SANITARY SEWER FORCE MAIN
LAVENDER ---------- IRRIGATION/RECLAIM WATER
2. PVC MAINS SHALL BE A SOLID COLOR AND PERMANENTLY MARKED WITH THE MANUFACTURER'S NAME, PIPE SIZE AND/OR PRESSURE RATING.
3. ELECTRONIC MARKERS SHALL BE PLACED AT ALL CHANGES OF DIRECTION, START AND END OF VERTICAL DEFLECTIONS, AND SERVICES AT THE CORPORATION STOP OR SEWER SERVICE WYE, SO NOT INSTALL ELECTRONIC MARKER FOR CORPORATION STOPS UNLESS LOCATED UNDER PAVEMENT. MARKERS SHALL BE LOCATED AT A MAXIMUM DEPTH OF 4 FEET. THE MARKERS SHALL NOT BE PLACED IN CONTACT WITH DIP FITTINGS. THE MARKERS SHALL BE:
POTABLE WATER ---------- COLOR BLUE
SANITARY SEWER ---------- COLOR GREEN
SANITARY SEWER FORCE MAIN ---------- COLOR GREEN
IRRIGATION/RECLAIM WATER ---------- COLOR LAVENDER
4. PLACE ONLY POTABLE WATER MARKER AT POTABLE & IRRIGATION SERVICES WHEN TOGETHER. PLACE IRRIGATION MARKER AT LONE IRRIGATION SERVICE WHEN THERE ARE NO POTABLE SERVICES IN THE VICINITY.
5. FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
6. RECORD DRAWINGS SHALL INCLUDE STATE PLANE COORDINATES AND ELEVATION FOR EACH ELECTRONIC MARKER.

S-103 PIPE LOCATION TAPE, STRIPING AND MARKERS
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150022 CAPE CORAL, FLORIDA 33995-0027	DETAIL NAME	DETAIL NO.
07-21-2017		PIPE LOCATION TAPE, STRIPING AND MARKERS	S-103
ADOPTION DATE 08-01-2017			

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150022 CAPE CORAL, FLORIDA 33995-0027	DETAIL NAME	DETAIL NO.
07-21-2017		UTILITY CROSSING FOR IRRIGATION AND FORCE MAINS UTILITY CROSSING FOR WATER MAINS	S-104
ADOPTION DATE 08-01-2017			

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150022 CAPE CORAL, FLORIDA 33995-0027	DETAIL NAME	DETAIL NO.
07-21-2017		TYPICAL SERVICE LATERAL - PLAN (SEE SERVICE LATERAL SECTION)	S-261
ADOPTION DATE 08-01-2017			

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150022 CAPE CORAL, FLORIDA 33995-0027	DETAIL NAME	DETAIL NO.
07-21-2017		TYPICAL SERVICE LATERAL - SECTION (SEE SERVICE LATERAL PLAN)	S-262
ADOPTION DATE 08-01-2017			

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150022 CAPE CORAL, FLORIDA 33995-0027	DETAIL NAME	DETAIL NO.
07-21-2017		6" SEWER CLEAN-OUT COMMERCIAL/MULTI-FAMILY	S-263
ADOPTION DATE 08-01-2017			

SCHEDULE FOR DROP MANHOLE

INLET PIPE I.D. (NAME ON "M")	DROP PIPE (NAME ON "A")
8"	6"
8"	8"
10"	10"
12"	12"
18"	18"
21"	18"
24"	18"

STANDARD MANHOLE
SCHEDULE OF INVERT CHANNEL DIMENSIONS

PIPE SIZE	ANGLE ∠	MH DIA.	R	X
8" TO 15"	0° TO 90°	4'-0"	1'-4"	0" TO 16"
8"	90° TO 135°	4'-0"	2'-0"	0" TO 16"
18", 21" & 24"	0° TO 90°	4'-0"	2'-0"	0" TO 8"
18" & 21"	90° TO 90°	5'-0"	2'-0"	4" TO 12"
24"	0° TO 90°	5'-0"	2'-0"	8" TO 8"
24" & 30"	90° TO 90°	6'-0"	2'-0"	8" TO 12"
OTHERS		ENGINEER APPROVES OR EQUAL		

MANHOLE GENERAL NOTES
1. ALL STUBS FROM MANHOLES AND ENDS OF PIPE TO WHICH CONNECTIONS ARE TO BE MADE UNDER THIS CONTRACT SHALL BE PROVIDED WITH WATERTIGHT PLUGS OR CAPS. ALL PIPE STUBS SHALL BE PROVIDED WITH A TEMPORARY BULKHEAD AT THE END OF THE STUB. ALL STUBS SHALL BE PLACED FROM INSIDE OF THE MANHOLE. SUCH PLUGS LOCATED AT JUNCTIONS OF TWO CONTRACTS SHALL REMAIN IN PLACE AND SHALL BE REMOVED BY THE CONTRACTOR ON COMPLETION AND TURN-OVER OF THE CONTRACT. SEWERS WHICH ARE TO BE CONNECTED TO MANHOLES UNDER OTHER CONTRACTS SHALL BE PROVIDED WITH WATERTIGHT PLUGS AND CAPS.
2. THE SHELF SHALL SLOPE TOWARD THE INVERT CHANNEL AT A MINIMUM OF ONE INCH/FT. A MINIMUM 2 INCH DIFFERENCE SHALL BE MAINTAINED FROM THE O.D POINT OF THE CHANNEL TO THE WALL.
3. THE DEPTH OF THE INVERT CHANNEL SHALL BE EQUAL TO 0.8 OF THE LARGEST DIAMETER SEWER IN THE MANHOLE.
4. MANHOLE SECTIONS SHALL BE JOINED TOGETHER PER THE SPECIFICATIONS SECTION 02400 AND DETAIL S-1.
5. ALL MANHOLES TO BE CONSTRUCTED OF PRECAST CONCRETE SHAFTS, BARRELS AND EXCENTRIC CONES WITH FLEXIBLE RUBBER GASKETS CONFORMING TO ASTM C-443. ALL JOINTS OF STRUCTURE FOR GROUTING PURPOSES, SEE TECHNICAL SPECIFICATION SECTION 02361. ALL INSIDE AND OUTSIDE WALLS AND BASES IN ACCORDANCE WITH SPECIFICATIONS SECTION 03600. NO BRICK MANHOLES WILL BE ACCEPTED UNLESS APPROVED IN WRITING. ALL CONCRETE SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS SECTION 03400.
6. SEE SPECIFICATIONS FOR MATERIAL REQUIREMENTS AND PLACEMENT AND COMPACTION OF PIPE BEDDING AND CRUSHED STONE (SEE TYP. BEDDING DETAILS).
7. REINFORCING FOR PRE-CAST MANHOLES SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS SECTION 03400.
8. CONCRETE FOR MANHOLE STRUCTURE SHALL HAVE A COMPRESSIVE STRENGTH OF NO LESS THAN 4,000 PSI @ 28 DAYS.
9. COATING SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS SECTION 09850.
10. RING AND LID SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS SECTION 03400.
11. A 0.1-FOOT DROP IS REQUIRED ACROSS ALL MANHOLES.
12. MANHOLE CHANNEL SHALL HAVE A UNIFORM SLOPE FROM UPSTREAM INVERT TO DOWNSTREAM INVERT.

S-270 MANHOLE AND DROP MANHOLE SCHEDULE AND GENERAL NOTES
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150022 CAPE CORAL, FLORIDA 33995-0027	DETAIL NAME	DETAIL NO.
07-21-2017		MANHOLE AND DROP MANHOLE SCHEDULE AND GENERAL NOTES	S-270
ADOPTION DATE 08-01-2017			

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 150022 CAPE CORAL, FLORIDA 33995-0027	DETAIL NAME	DETAIL NO.
07-21-2017		TYPICAL MANHOLE JOINT	S-271
ADOPTION DATE 08-01-2017			

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CLIENT NAME AND ADDRESS

OASIS @ CAPE CORAL PHASE 2
CITY OF CAPE CORAL, FLORIDA

PROJECT NAME AND LOCATION

NO.	REVISION	DATE
R1	PER CITY COMMENTS	10-20-21

REVISIONS DESCRIPTION

DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03 UTIL.dwg
SCALE:	AS SHOWN

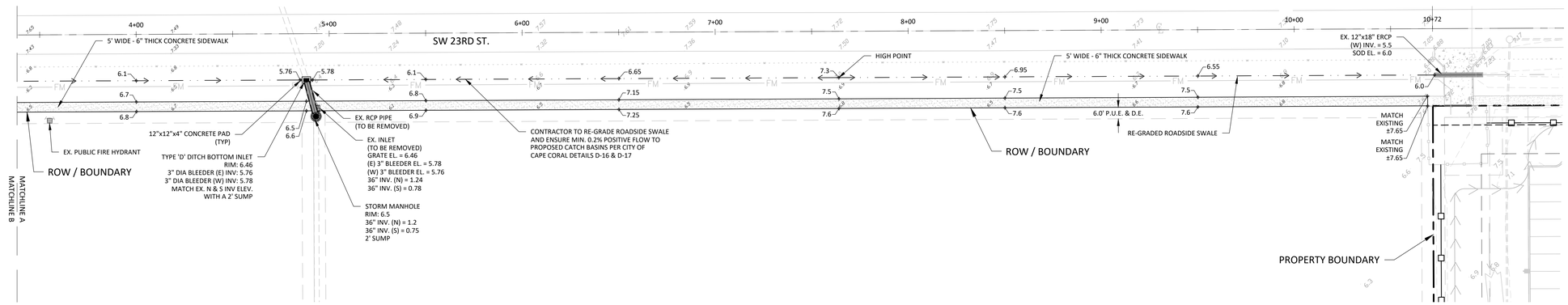
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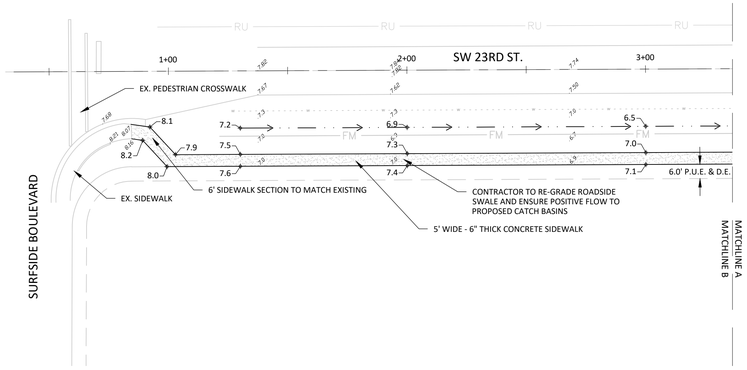
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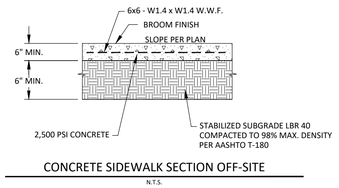
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SHEET NUMBER

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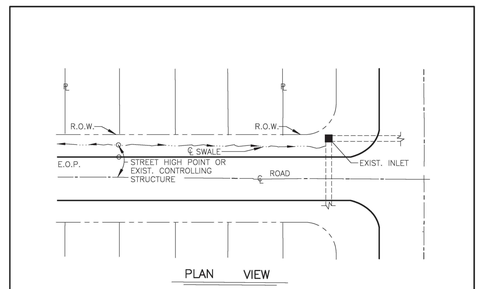




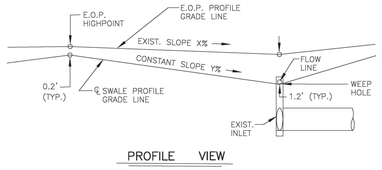


CONCRETE SIDEWALK SECTION OFF-SITE

N.T.S.



PLAN VIEW

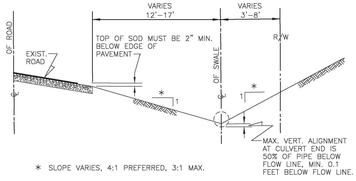


PROFILE VIEW

NOTE: REFER TO D-17 FOR ADDITIONAL DETAILS

ADOPTED BY CITY COUNCIL	CITY OF CAPE CORAL PUBLIC WORKS DEPARTMENT ENGINEERING DESIGN STANDARD	TITLE	SHEET NO.
DRAFT		TYPICAL SWALE GRADIENT DESIGN PROCEDURE	D-16
		REVISIONS: 08-31-2020	

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∗ SLOPE VARIES, 4:1 PREFERRED, 3:1 MAX.

NOTES:

1. SWALE FLOWLINE MUST MATCH BLEED DOWN ORIFICE ELEVATION AT EXISTING CATCH BASIN. ALLOWABLE VARIANCE = 0.0 FT. TO −0.1 FT.
2. MAXIMUM ALLOWABLE DEVIATION FROM DESIGN DIMENSIONS;
   A = VERTICAL ALIGNMENT OF SWALE FLOW LINE −0.0 FT. HIGH TO −0.1 FT. LOW.
   B = HORIZONTAL ALIGNMENT OF SWALE FLOW LINE ±1.0 FT. OFF CENTERLINE.
3. MINIMUM LONGITUDINAL DESIGN GRADIENT IS 0.20% SLOPE, RECOMMENDED IS 0.40% SLOPE OR 0.3 FT. PER 80 FT.
4. MAXIMUM ALLOWABLE VERTICAL ALIGNMENT DEVIATION FOR FINISHED GRADE OF THE SOD SHALL BE +0.1 FT. TO −0.2 FT.

ADOPTED BY CITY COUNCIL	CITY OF CAPE CORAL PUBLIC WORKS DEPARTMENT ENGINEERING DESIGN STANDARD	TITLE	SHEET NO.
DRAFT		SOD SWALES	D-17
		REVISIONS: 08-31-2020	

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LEGEND

CONCRETE SIDEWALK

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ZIMMER DEVELOPMENT COMPANY

CLIENT NAME AND ADDRESS

OASIS @ CAPE CORAL PHASE 2
CITY OF CAPE CORAL, FLORIDA

PROJECT NAME AND LOCATION

JASON E. TOMASSETTI, PE
FL License No. 66263

NO.	REVISION	DATE
R1	PER CITY COMMENTS	10-28-21

REVISIONS DESCRIPTION

DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03-OFFSITE.dwg
SCALE:	AS SHOWN

OFFSITE IMPROVEMENTS

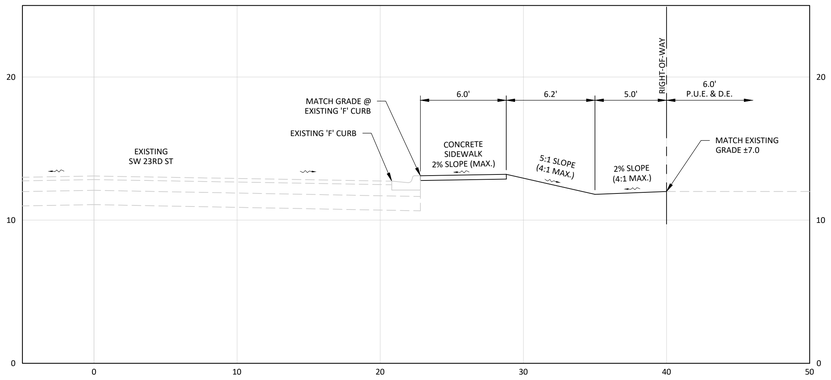
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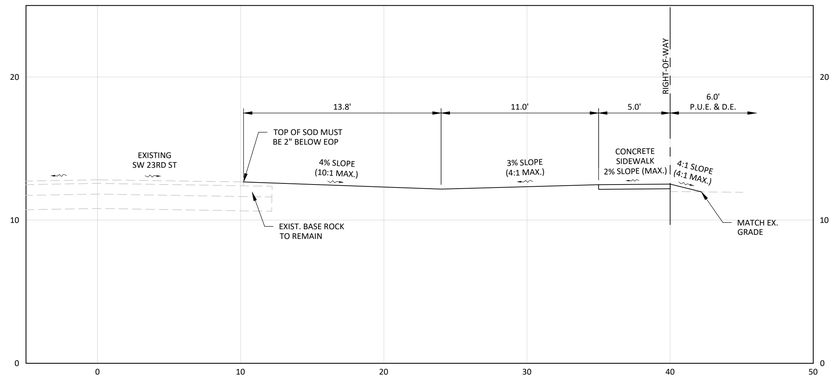
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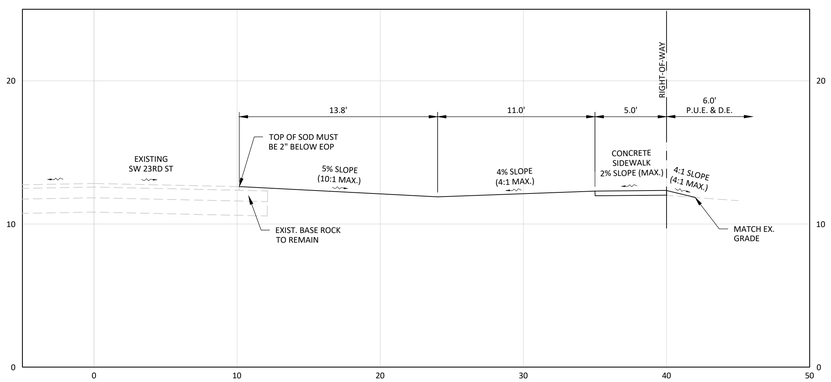
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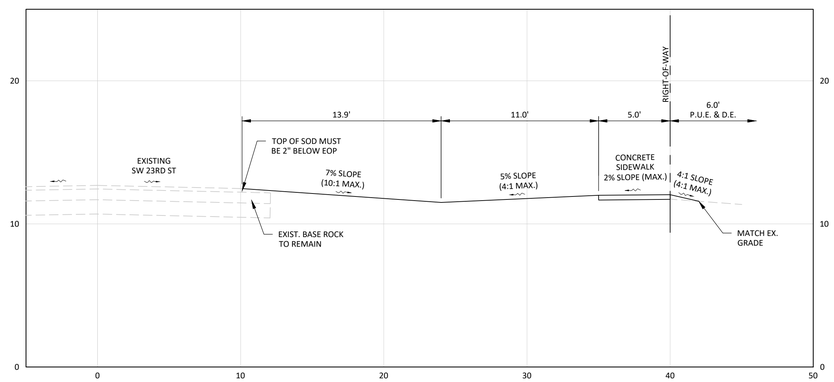
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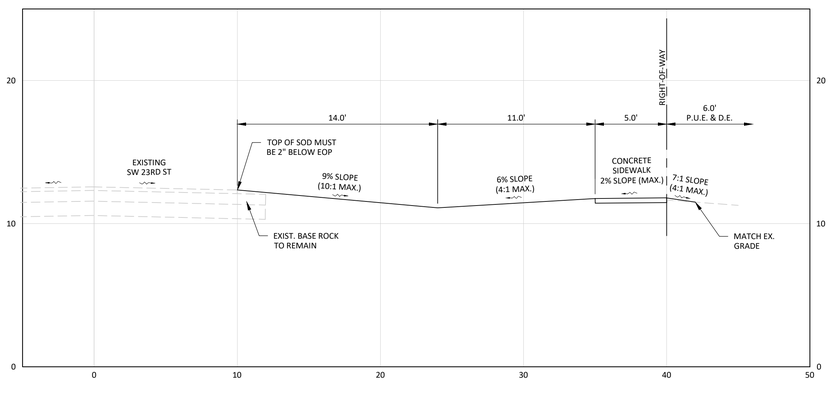
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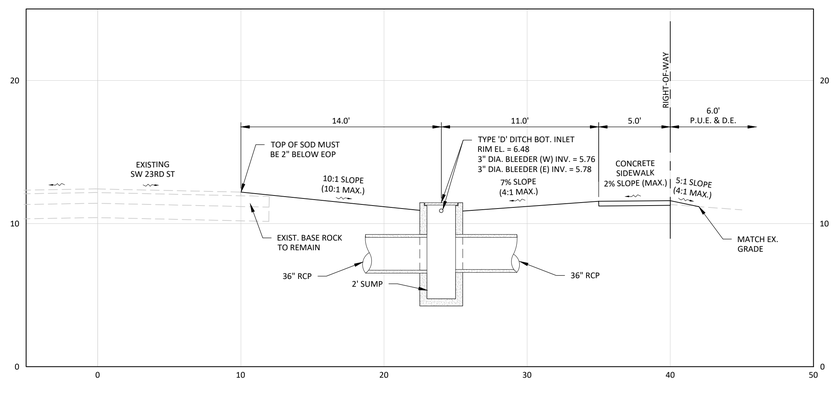
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4+00



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PROJECT NO.	1364-03
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SCALE:	AS SHOWN

OFFSITE IMPROVEMENTS CROSS SECTIONS

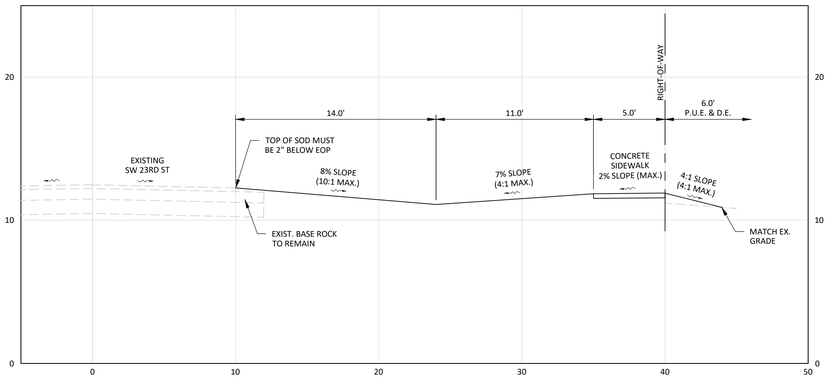
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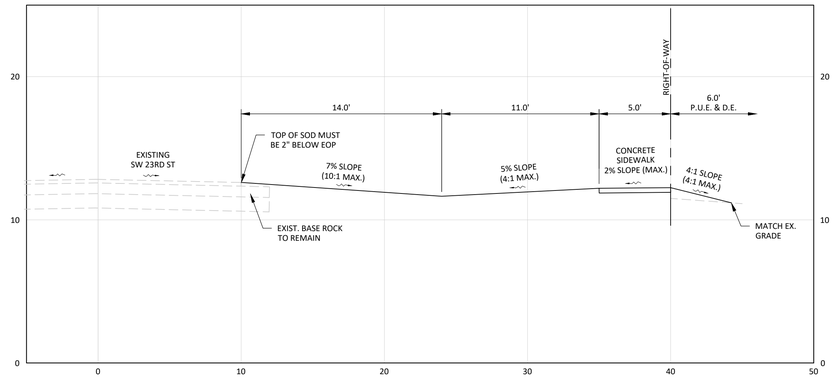
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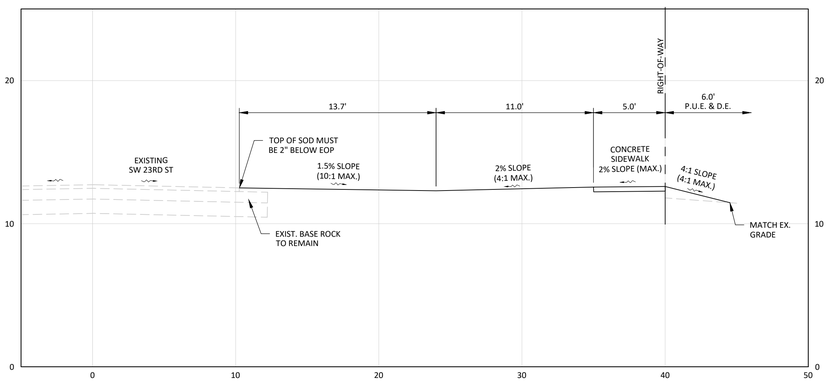
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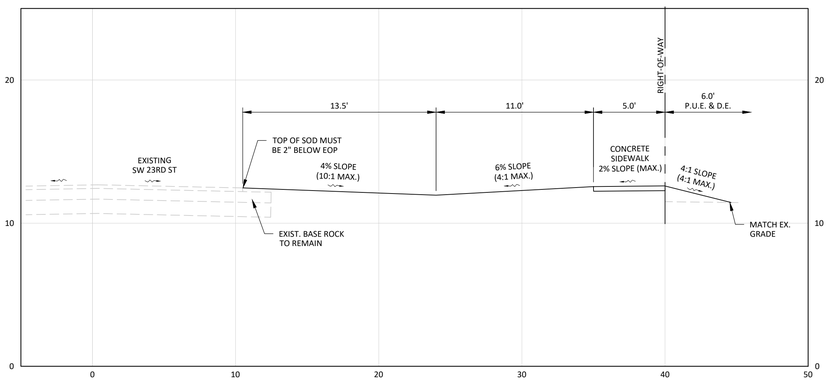
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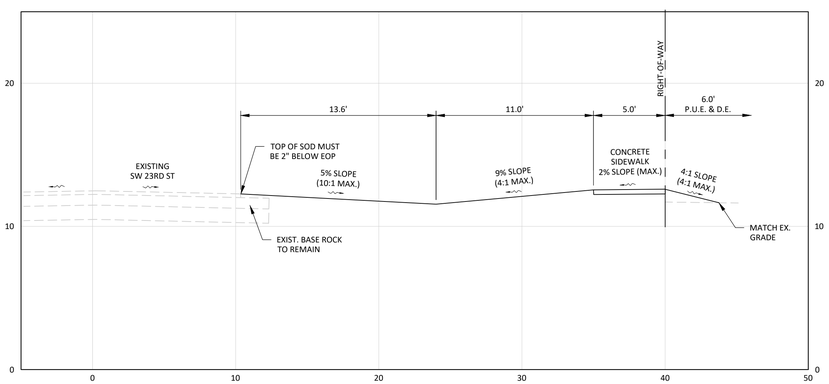
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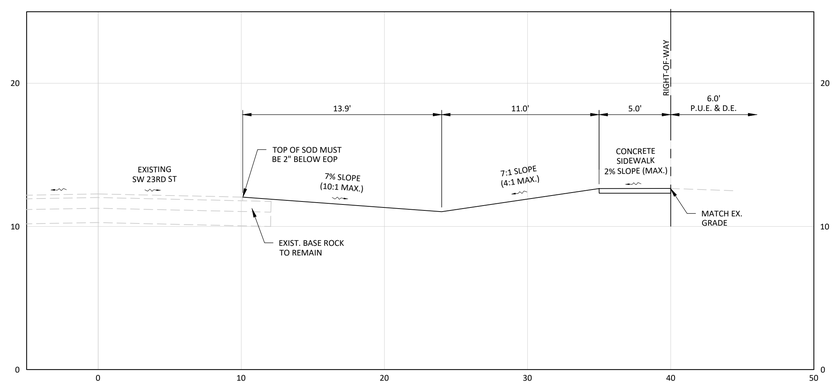
8+50



9+50



10+69.05



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ZIMMER DEVELOPMENT COMPANY

CLIENT NAME AND ADDRESS

OASIS @ CAPE CORAL PHASE 2
CITY OF CAPE CORAL, FLORIDA

PROJECT NAME AND LOCATION

JASON E. TOMASSETTI, PE
FL License No. 66263

NO.	REVISION	DATE	REVISIONS DESCRIPTION
R1	PER CITY COMMENTS	10-28-21	

DATE:	8-20-21
PROJECT NO.	1364-03
FILE NO.	1364-03-OFFSITE.dwg
SCALE:	AS SHOWN

OFFSITE IMPROVEMENTS CROSS SECTIONS

SHEET TITLE

C-24

SHEET NUMBER