MASTER DEVELOPMENT PLANS

FOR

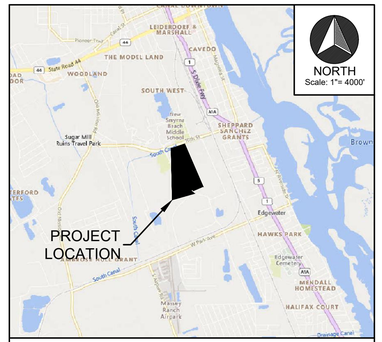
SPACE COAST COMMERCE PARK @ PARKTOWNE

CITY OF EDGEWATER, FL

PREPARED FOR:

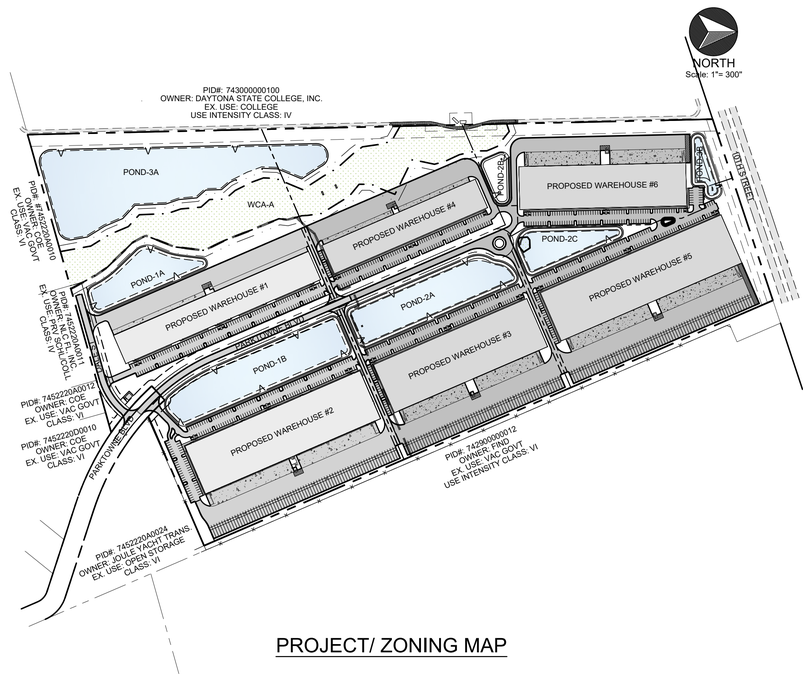
ONICX MANAGEMENT GROUP, LLC

5600 MARINER STREET, SUITE 140
TAMPA, FL 33609



SECTION 29 TOWNSHIP 17S RANGE 34E

LOCATION MAP



PROJECT/ ZONING MAP

INDEX OF DRAWINGS

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Project Name: SPACE COAST COMMERCE PARK @ PARKTOWNE
CITY OF EDGEWATER, FL

Prepared For: ONICX MANAGEMENT GROUP, LLC

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FL Registry 36174 FL L22000260419

Revision No.	Date	Description
1	2023-06-08	Preliminary Plat Resubmittal

Seal: MICHAEL J. SANDERS, JR. LICENSE No 76918 STATE OF FLORIDA PROFESSIONAL ENGINEER
8/21/2023
MICHAEL J. SANDERS, JR., P.E.
License Number 76918

This item has been digitally signed and sealed by Michael J. Sanders, Jr. P.E. on the date adjacent to the seal.

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Project No.:	1001-002
Issued:	AUG 21, 2023
Drawn By:	ECC
Checked By:	MJS
Scale:	1" = 300'

Sheet Title: COVER SHEET

Sheet Number: C-01

STATISTICAL TREE SURVEY NOTES

1. A STATISTICAL TREE SURVEY WAS PREPARED IN ACCORDANCE WITH CITY OF EDGEWATER LDC (21-55.07)(C.) THE SURVEY COMPLIES WITH ACCEPTABLE FORESTRY PRACTICES UTILIZING "1-TREE ECO" PLOT METHODOLOGY DEVELOPED IN CONJUNCTION WITH THE USDA FORESTRY SERVICE SUPPORTED BY THE FLORIDA URBAN FORESTRY COUNCIL.
2. THE SUBJECT SITE OF APPROXIMATELY 83.35 ACRES IS HOMOGENOUS IN TREE CANOPY COVERAGE THEREFORE (10) RANDOM 0.1 ACRES CIRCULAR PLOTS WITH RADIUS OF 37.2 FEET WITHIN THE PROJECT SITE WERE SURVEYED TO ESTIMATE TREE INVENTORY FOR THE MASTER DEVELOPMENT.
3. PROVIDED PLOT DATA IS BASED UPON THE SPECIFIC PURPOSE TREE SURVEY PREPARED BY ALSM DATED (2/25/23).

STASTICAL TREE SURVEY DATA - PLOT 1

Plot	ID	Common Name	Botanical Name	DBH (in)	COE Designation
1	10270	Palm	Arecaceae	12	Non-Mitigated
1	10271	Palm	Arecaceae	11	Non-Mitigated
1	10272	Palm	Arecaceae	10	Non-Mitigated
1	10273	Palm	Arecaceae	13	Non-Mitigated
1	10274	Palm	Arecaceae	13	Non-Mitigated
1	10275	Palm	Arecaceae	13	Non-Mitigated
1	10276	Oak	Quercus Spp.	36	Historic
1	10277	Oak	Quercus Spp.	14	Specimen
1	10278	Palm	Arecaceae	14	Non-Mitigated
1	10279	Palm	Arecaceae	15	Non-Mitigated
1	10280	Palm	Arecaceae	11	Non-Mitigated
1	10281	Palm	Arecaceae	12	Non-Mitigated
1	10282	Palm	Arecaceae	12	Non-Mitigated
1	10283	Oak	Quercus Spp.	17	Specimen
1	10284	Palm	Arecaceae	9	Non-Mitigated
1	10285	Palm	Arecaceae	13	Non-Mitigated
1	10286	Palm	Arecaceae	10	Non-Mitigated
1	10287	Palm	Arecaceae	12	Non-Mitigated
1	10288	Palm	Arecaceae	9	Non-Mitigated
1	10289	Palm	Arecaceae	8	Non-Mitigated
1	10290	Palm	Arecaceae	13	Non-Mitigated
1	10291	Palm	Arecaceae	11	Non-Mitigated
1	10292	Oak	Quercus Spp.	12	Specimen
1	10293	Oak	Quercus Spp.	14	Specimen
1	10294	Palm	Arecaceae	10	Non-Mitigated
1	10295	Oak	Quercus Spp.	23	Specimen
1	10296	Palm	Arecaceae	10	Non-Mitigated
1	10297	Palm	Arecaceae	9	Non-Mitigated
1	10298	Palm	Arecaceae	12	Non-Mitigated
1	10299	Palm	Arecaceae	12	Non-Mitigated
1	10300	Palm	Arecaceae	9	Non-Mitigated
1	10301	Palm	Arecaceae	14	Non-Mitigated
1	10302	Palm	Arecaceae	12	Non-Mitigated
1	10303	Palm	Arecaceae	13	Non-Mitigated
1	10304	Oak	Quercus Spp.	17	Specimen

STASTICAL TREE SURVEY DATA - PLOT 2

Plot	ID	Common Name	Botanical Name	DBH (in)	COE Designation
2	1576	Oak	Quercus Spp.	41	Historic
2	1577	Cherry Laural	Prunus Caroliniana	7	Non-Mitigated
2	1578	Oak	Quercus Spp.	19	Specimen
2	1579	Palm	Arecaceae	13	Non-Mitigated
2	1580	Oak	Quercus Spp.	20	Specimen
2	1581	Palm	Arecaceae	9	Non-Mitigated
2	1582	Oak	Quercus Spp.	28	Specimen
2	1583	Palm	Arecaceae	12	Non-Mitigated
2	1584	Palm	Arecaceae	14	Non-Mitigated

STASTICAL TREE SURVEY DATA - PLOT 3

Plot	ID	Common Name	Botanical Name	DBH (in)	COE Designation
3	1640	Oak	Quercus Spp.	15	Specimen
3	1641	Oak	Quercus Spp.	12	Specimen
3	1642	Oak	Quercus Spp.	10	Non-Mitigated
3	1643	Oak	Quercus Spp.	19	Specimen
3	1644	Oak	Quercus Spp.	12	Specimen
3	1645	Oak	Quercus Spp.	12	Specimen
3	1646	Oak	Quercus Spp.	13	Specimen
3	1647	Oak	Quercus Spp.	11	Non-Mitigated
3	1648	Oak	Quercus Spp.	7	Non-Mitigated
3	1649	Oak	Quercus Spp.	7	Non-Mitigated
3	1650	Oak	Quercus Spp.	6	Non-Mitigated
3	1651	Oak	Quercus Spp.	9	Non-Mitigated
3	1652	Oak	Quercus Spp.	18	Specimen
3	1653	Oak	Quercus Spp.	9	Non-Mitigated
3	1654	Oak	Quercus Spp.	8	Non-Mitigated
3	1655	Oak	Quercus Spp.	6	Non-Mitigated
3	1656	Oak	Quercus Spp.	7	Non-Mitigated
3	1657	Oak	Quercus Spp.	6	Non-Mitigated
3	1658	Oak	Quercus Spp.	9	Non-Mitigated
3	1659	Oak	Quercus Spp.	7	Non-Mitigated
3	1660	Oak	Quercus Spp.	9	Non-Mitigated
3	1661	Oak	Quercus Spp.	9	Non-Mitigated
3	1662	Pine	Pinus	14	Non-Mitigated

STASTICAL TREE SURVEY DATA - PLOT 4

Plot	ID	Common Name	Botanical Name	DBH (in)	COE Designation
4	1586	Palm	Arecaceae	8	Non-Mitigated
4	1587	Palm	Arecaceae	8	Non-Mitigated
4	1588	Palm	Arecaceae	12	Non-Mitigated
4	1589	Palm	Arecaceae	10	Non-Mitigated
4	1590	Palm	Arecaceae	13	Non-Mitigated
4	1591	Palm	Arecaceae	10	Non-Mitigated
4	1592	Palm	Arecaceae	14	Non-Mitigated
4	1593	Cherry	Prunus	10	Non-Mitigated
4	1594	Cherry	Prunus	9	Non-Mitigated
4	1595	Oak	Quercus Spp.	29	Specimen
4	1596	Oak	Quercus Spp.	24	Specimen
4	1597	Palm	Arecaceae	10	Non-Mitigated
4	1598	Palm	Arecaceae	10	Non-Mitigated
4	1599	Palm	Arecaceae	10	Non-Mitigated
4	1600	Oak	Quercus Spp.	7	Non-Mitigated
4	1601	Oak	Quercus Spp.	18	Specimen
4	1602	Oak	Quercus Spp.	15	Specimen
4	1603	Palm	Arecaceae	12	Non-Mitigated
4	1604	Palm	Arecaceae	9	Non-Mitigated
4	1605	Palm	Arecaceae	11	Non-Mitigated
4	1606	Palm	Arecaceae	11	Non-Mitigated
4	1607	Palm	Arecaceae	8	Non-Mitigated
4	1608	Palm	Arecaceae	11	Non-Mitigated
4	1609	Palm	Arecaceae	10	Non-Mitigated
4	1610	Oak	Quercus Spp.	12	Specimen
4	1611	Oak	Quercus Spp.	10	Non-Mitigated
4	1612	Palm	Arecaceae	9	Non-Mitigated
4	1613	Oak	Quercus Spp.	17	Specimen
4	1614	Palm	Arecaceae	9	Non-Mitigated
4	1615	Oak	Quercus Spp.	12	Specimen
4	1616	Palm	Arecaceae	9	Non-Mitigated
4	1617	Palm	Arecaceae	12	Non-Mitigated
4	1618	Palm	Arecaceae	9	Non-Mitigated
4	1619	Palm	Arecaceae	9	Non-Mitigated
4	1620	Palm	Arecaceae	12	Non-Mitigated
4	1621	Palm	Arecaceae	6	Non-Mitigated
4	1622	Palm	Arecaceae	8	Non-Mitigated
4	1623	Oak	Quercus Spp.	20	Specimen
4	1624	Palm	Arecaceae	9	Non-Mitigated
4	1625	Palm	Arecaceae	10	Non-Mitigated
4	1626	Palm	Arecaceae	9	Non-Mitigated
4	1627	Palm	Arecaceae	8	Non-Mitigated
4	1628	Palm	Arecaceae	8	Non-Mitigated
4	1629	Palm	Arecaceae	12	Non-Mitigated
4	1630	Palm	Arecaceae	12	Non-Mitigated
4	1631	Palm	Arecaceae	12	Non-Mitigated
4	1632	Cherry	Prunus	6	Non-Mitigated

STASTICAL TREE SURVEY DATA - PLOT 5

Plot	ID	Common Name	Botanical Name	DBH (in)	COE Designation
5	1698	Oak	Quercus Spp.	9	Non-Mitigated
5	1699	Oak	Quercus Spp.	7	Non-Mitigated
5	1700	Oak	Quercus Spp.	9	Non-Mitigated
5	1701	Palm	Arecaceae	11	Non-Mitigated
5	1702	Palm	Arecaceae	12	Non-Mitigated
5	1703	Palm	Arecaceae	14	Non-Mitigated
5	1704	Palm	Arecaceae	11	Non-Mitigated
5	1705	Palm	Arecaceae	12	Non-Mitigated
5	1706	Pine	Pinus	12	Non-Mitigated
5	1707	Palm	Arecaceae	10	Non-Mitigated
5	1708	Palm	Arecaceae	12	Non-Mitigated
5	1709	Palm	Arecaceae	8	Non-Mitigated
5	1710	Palm	Arecaceae	9	Non-Mitigated
5	1711	Palm	Arecaceae	9	Non-Mitigated
5	1712	Oak	Quercus Spp.	24	Specimen
5	1713	Oak	Quercus Spp.	13	Specimen
5	1714	Oak	Quercus Spp.	16	Specimen
5	1715	Oak	Quercus Spp.	21	Specimen
5	1716	Oak	Quercus Spp.	10	Non-Mitigated

STASTICAL TREE SURVEY DATA - PLOT 6

Plot	ID	Common Name	Botanical Name	DBH (in)	COE Designation
6	1664	Oak	Quercus Spp.	18	Specimen
6	1665	Oak	Quercus Spp.	9	Non-Mitigated
6	1666	Oak	Quercus Spp.	6	Non-Mitigated
6	1667	Oak	Quercus Spp.	9	Non-Mitigated
6	1668	Oak	Quercus Spp.	12	Specimen
6	1669	Oak	Quercus Spp.	6	Non-Mitigated
6	1670	Oak	Quercus Spp.	6	Non-Mitigated
6	1671	Oak	Quercus Spp.	10	Non-Mitigated
6	1672	Oak	Quercus Spp.	11	Non-Mitigated
6	1673	Oak	Quercus Spp.	6	Non-Mitigated
6	1674	Palm	Arecaceae	9	Non-Mitigated
6	1675	Palm	Arecaceae	11	Non-Mitigated
6	1676	Palm	Arecaceae	12	Non-Mitigated
6	1677	Palm	Arecaceae	10	Non-Mitigated
6	1678	Palm	Arecaceae	12	Non-Mitigated
6	1679	Palm	Arecaceae	8	Non-Mitigated
6	1680	Palm	Arecaceae	11	Non-Mitigated
6	1681	Palm	Arecaceae	9	Non-Mitigated
6	1682	Palm	Arecaceae	11	Non-Mitigated
6	1683	Palm	Arecaceae	11	Non-Mitigated
6	1684	Palm	Arecaceae	8	Non-Mitigated
6	1685	Oak	Quercus Spp.	7	Non-Mitigated
6	1686	Oak	Quercus Spp.	9	Non-Mitigated
6	1687	Oak	Quercus Spp.	8	Non-Mitigated
6	1688	Oak	Quercus Spp.	6	Non-Mitigated
6	1689	Oak	Quercus Spp.	12	Specimen
6	1690	Oak	Quercus Spp.	8	Non-Mitigated
6	1691	Oak	Quercus Spp.	6	Non-Mitigated
6	1692	Oak	Quercus Spp.	6	Non-Mitigated
6	1693	Oak	Quercus Spp.	8	Non-Mitigated
6	1694	Oak	Quercus Spp.	10	Non-Mitigated
6	1695	Oak	Quercus Spp.	7	Non-Mitigated
6	1696	Oak	Quercus Spp.	15	Specimen

STASTICAL TREE SURVEY DATA - PLOT 7

Plot	ID	Common Name	Botanical Name	DBH (in)	COE Designation
7	1291	Pine	Pinus	15	Non-Mitigated
7	1292	Pine	Pinus	10	Non-Mitigated
7	1293	Palm	Arecaceae	9	Non-Mitigated
7	1294	Oak	Quercus Spp.	6	Non-Mitigated
7	1295	Oak	Quercus Spp.	11	Non-Mitigated
7	1296	Palm	Arecaceae	9	Non-Mitigated
7	1297	Palm	Arecaceae	9	Non-Mitigated
7	1298	Palm	Arecaceae	11	Non-Mitigated
7	1299	Palm	Arecaceae	9	Non-Mitigated
7	1300	Palm	Arecaceae	12	Non-Mitigated
7	1301	Palm	Arecaceae	12	Non-Mitigated
7	1302	Oak	Quercus Spp.	8	Non-Mitigated
7	1303	Palm	Arecaceae	8	Non-Mitigated
7	1304	Palm	Arecaceae	10	Non-Mitigated
7	1305	Palm	Arecaceae	11	Non-Mitigated
7	1306	Oak	Quercus Spp.	6	Non-Mitigated
7	1307	Palm	Arecaceae	12	Non-Mitigated
7	1308	Oak	Quercus Spp.	9	Non-Mitigated
7	1309	Palm	Arecaceae	10	Non-Mitigated
7	1310	Palm	Arecaceae	10	Non-Mitigated
7	1311	Palm	Arecaceae	8	Non-Mitigated
7	1312	Palm	Arecaceae	11	Non-Mitigated
7	1313	Oak	Quercus Spp.	26	Specimen
7	1314	Oak	Quercus Spp.	10	Non-Mitigated
7	1315	Palm	Arecaceae	10	Non-Mitigated
7	1316	Palm	Arecaceae	9	Non-Mitigated
7	1317	Palm	Arecaceae	8	Non-Mitigated
7	1318	Palm	Arecaceae	8	Non-Mitigated
7	1319	Oak	Quercus Spp.	6	Non-Mitigated
7	1320	Oak	Quercus Spp.	7	Non-Mitigated
7	1321	Oak	Quercus Spp.	13	Specimen

STASTICAL TREE SURVEY DATA - PLOT 8

Plot	ID	Common Name	Botanical Name	DBH (in)	COE Designation
8	1223	Oak	Quercus Spp.	6	Non-Mitigated
8	1224	Oak	Quercus Spp.	6	Non-Mitigated
8	1225	Oak	Quercus Spp.	10	Non-Mitigated
8	1226	Oak	Quercus Spp.	12	Specimen
8	1227	Oak	Quercus Spp.	7	Non-Mitigated
8	1228	Oak	Quercus Spp.	7	Non-Mitigated
8	1229	Oak	Quercus Spp.	6	Non-Mitigated
8	1230	Oak	Quercus Spp.	7	Non-Mitigated
8	1231	Oak	Quercus Spp.	6	Non-Mitigated
8	1232	Oak	Quercus Spp.	6	Non-Mitigated
8	1233	Oak	Quercus Spp.	6	Non-Mitigated
8	1234	Oak	Quercus Spp.	7	Non-Mitigated
8	1235	Oak	Quercus Spp.	6	Non-Mitigated
8	1236	Oak	Quercus Spp.	7	Non-Mitigated

STASTICAL TREE SURVEY DATA - PLOT 9

Plot	ID	Common Name	Botanical Name	DBH (in)	COE Designation
9	1239	Oak	Quercus Spp.	16	Specimen
9	1240	Pine	Pinus	12	Non-Mitigated
9	1241	Pine	Pinus	12	Non-Mitigated
9	1242	Palm	Arecaceae	10	Non-Mitigated
9	1243	Palm	Arecaceae	13	Non-Mitigated
9	1244	Palm	Arecaceae	14	Non-Mitigated
9	1245	Palm	Arecaceae	9	Non-Mitigated
9	1246	Palm	Arecaceae	10	Non-Mitigated
9	1247	Palm	Arecaceae	13	Non-Mitigated
9	1248	Palm	Arecaceae	10	Non-Mitigated
9	1249	Palm	Arecaceae	10	Non-Mitigated
9	1250	Pine	Pinus	10	Non-Mitigated
9	1251	Oak	Quercus Spp.	8	Non-Mitigated
9	1252	Oak	Quercus Spp.	7	Non-Mitigated
9	1253	Oak	Quercus Spp.	13	Specimen
9	1254	Palm	Arecaceae	11	Non-Mitigated
9	1255	Oak	Quercus Spp.	7	Non-Mitigated
9	1256	Palm	Arecaceae	11	Non-Mitigated
9	1257	Oak	Quercus Spp.	20	Specimen
9	1258	Palm	Arecaceae	10	Non-Mitigated
9	1259	Oak	Quercus Spp.	6	Non-Mitigated
9	1260	Palm	Arecaceae	10	Non-Mitigated
9	1261	Palm	Arecaceae	8	Non-Mitigated
9	1262	Palm	Arecaceae	12	Non-Mitigated
9	1263	Palm	Arecaceae	11	Non-Mitigated
9	1264	Palm	Arecaceae	12	Non-Mitigated
9	1265	Oak	Quercus Spp.	9	Non-Mitigated
9	1266	Palm	Arecaceae	8	Non-Mitigated
9	1267	Pine	Pinus	10	Non-Mitigated
9	1268	Palm	Arecaceae	9	Non-Mitigated
9	1269	Pine	Pinus	12	Non-Mitigated
9	1270	Palm	Arecaceae	10	Non-Mitigated
9	1271	Oak	Quercus Spp.	9	Non-Mitigated
9	1272	Palm	Arecaceae	8	Non-Mitigated
9	1273	Palm	Arecaceae	8	Non-Mitigated
9	1274	Palm	Arecaceae	11	Non-Mitigated
9	1275	Oak	Quercus Spp.	11	Non-Mitigated
9	1276	Palm	Arecaceae	10	Non-Mitigated
9	1277	Palm	Arecaceae	13	Non-Mitigated
9	1278	Palm	Arecaceae	10	Non-Mitigated
9	1279	Palm	Arecaceae	10	Non-Mitigated
9	1280	Palm	Arecaceae	11	Non-Mitigated
9	1281	Palm	Arecaceae	11	Non-Mitigated
9	1282	Palm	Arecaceae	11	Non-Mitigated
9	1283	Palm	Arecaceae	8	Non-Mitigated
9	1284	Palm	Arecaceae	11	Non-Mitigated
9	1285	Palm	Arecaceae	9	Non-Mitigated
9	1288	Palm	Arecaceae	10	Non-Mitigated

STASTICAL TREE SURVEY DATA - PLOT 10

Plot	ID	Common Name	Botanical Name	DBH (in)	COE Designation
10	1205	Oak	Quercus Spp.	12	Specimen
10	1206	Oak	Quercus Spp.	7	Non-Mitigated
10	1207	Oak	Quercus Spp.	10	Non-Mitigated
10	1208	Oak	Quercus Spp.	7	Non-Mitigated
10	1209	Oak	Quercus Spp.	7	Non-Mitigated
10	1210	Oak	Quercus Spp.	9	Non-Mitigated
10	1211	Oak	Quercus Spp.	8	Non-Mitigated
10	1212	Oak	Quercus Spp.	9	Non-Mitigated
10	1213	Oak	Quercus Spp.	6	Non-Mitigated
10	1214	Oak	Quercus Spp.	6	Non-Mitigated
10	1215	Oak	Quercus Spp.	7	Non-Mitigated
10	1216	Oak	Quercus Spp.	6	Non-Mitigated
10	1217	Oak	Quercus Spp.	9	Non-Mitigated
10	1218	Oak	Quercus Spp.	7	Non-Mitigated
10	1219	Oak	Quercus Spp.	6	Non-Mitigated
10	1220	Oak	Quercus Spp.	6	Non-Mitigated

HISTORIC & SPECIMEN TREE SUMMARY TABLE

STATISTICAL TREE SURVEY SUMMARY

Site & Tree Survey Plot Data

Master Development Project Area (Ac):	**83.35**
Tree Survey Plot Area (Ac):	**0.1**
No. of Tree Survey Plots:	**10**

Total Tree Quantity & DBH Summary for All Tree Survey Plots (1 Ac)

Designation	Quantity	Total Inches
Historic	2	77
Specimen	39	655
Non-Mitigated	234	2,224
Total	**275**	**2,956**

Total Statistical Tree Quantity Within Property (83.35 Ac)

Designation	Quantity	Total Inches
Historic	167	6,418
Specimen	3,251	54,595
Non-Mitigated	19,504	185,371
Total	**22,922**	**246,384**

Project Name: SPACE COAST COMMERCE PARK @ PARKTOWNE
CITY OF EDGEWATER, FL

Prepared For: ONICX MANAGEMENT GROUP, LLC

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4206 NATIONAL GUARD DRIVE, #1
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Revision No.	Date	Description

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MICHAEL J. SANDERS, JR., P.E.
License Number 70918

Project No.:	1001-002
Issued:	AUG 21, 2023
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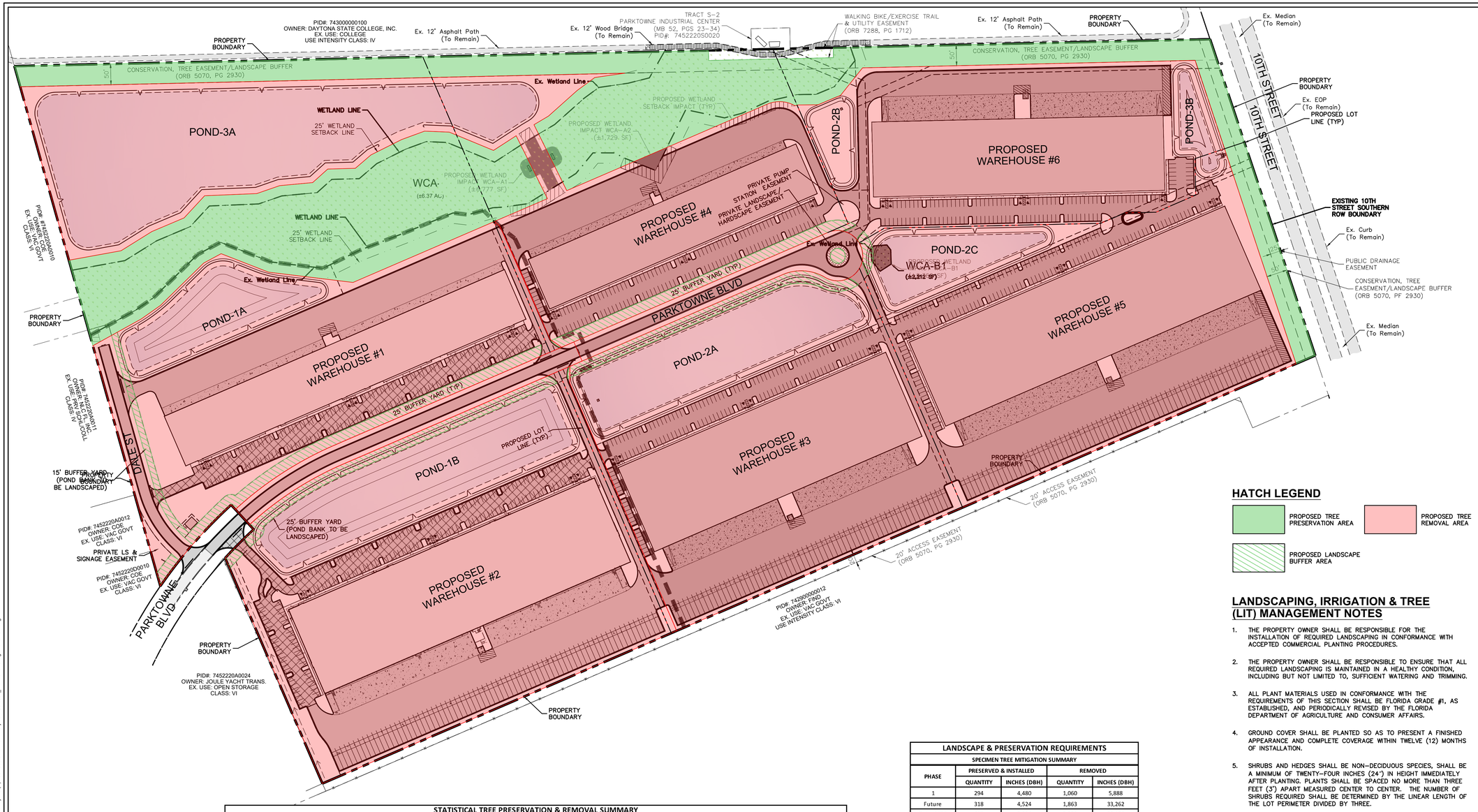
Sheet Title: MASTER DEV. STATISTICAL TREE SURVEY

Sheet Number: C-02



HATCH LEGEND

- PROPOSED TREE PRESERVATION AREA
- PROPOSED TREE REMOVAL AREA
- PROPOSED LANDSCAPE BUFFER AREA

STATISTICAL TREE PRESERVATION & REMOVAL SUMMARY

PHASE-1

LOT	TREE PRESERVATION					TREE REMOVAL					PROPOSED LANDSCAPE BUFFERS & MITIGATION PLANTINGS			
	AREA (AC)	SPECIMEN		HISTORIC		AREA (AC)	SPECIMEN		HISTORIC		BUFFER AREA (AC)	BUFFER AREA (SF)	(1 PER PARKING ISLAND)	
		QUANTITY	INCHES (DBH)	QUANTITY	INCHES (DBH)		QUANTITY	INCHES (DBH)	QUANTITY	INCHES (DBH)			QUANTITY	2.5" CAL.
1	5.95	232	3,897	12	458	10.39	405	3,897	21	800	0.78	33,959	22	55
2	0.00	0	0	0	0	14.11	550	0	28	1,086	0.51	22,264	28	70
*3	0.00	0	0	0	0	0.23	9	0	0	18	0.00	0	0	0
*4	0.00	0	0	0	0	0.09	4	0	0	7	0.00	0	0	0
ROW	0.00	0	0	0	0	1.04	41	0	2	80	0.00	0	0	0
PH-1 Subtotal	5.95	232	3,897	12	458	25.86	1,009	3,897	51	1,991	1.29	56,223	50	125
FUTURE PHASES														
**1	0.00	0	0	0	0	6.16	240	4,035	12	474	0.00	0	0	0
3	3.66	143	2,397	7	282	11.60	452	7,598	23	893	0.43	18,857	20	50
4	0.00	0	0	0	0	7.17	280	4,696	14	552	0.44	19,222	19	48
5	0.62	24	406	1	48	11.63	454	7,618	23	896	0.05	2,151	19	48
6	1.64	64	1,074	3	126	7.89	308	5,168	16	608	0.00	0	18	45
ROW	0.00	0	0	0	0	0.99	39	648	2	76	0.00	0	0	0
Future Subtotal	5.92	231	3,877	11	456	45.44	1,773	29,763	90	3,499	0.92	40,230	76	191
MDP TOTAL	**11.87**	**463**	**7,774**	**23**	**914**	**71.30**	**2,782**	**33,660**	**141**	**5,490**	**2.21**	**96,453**	**126**	**316**

* PAVEMENT AREAS & DAYLIGHT GRADING LOCATED OUTSIDE OF LOT 1 & 2 NECESSARY TO FACILIATE PHASE-1 INFASTRUCTURE

** POND-3A TO BE CONSTRUCTED IN FUTURE PHASES

LANDSCAPE & PRESERVATION REQUIREMENTS

SPECIMEN TREE MITIGATION SUMMARY

PHASE	PRESERVED & INSTALLED		REMOVED	
	QUANTITY	INCHES (DBH)	QUANTITY	INCHES (DBH)
1	294	4,480	1,060	5,888
Future	318	4,524	1,863	33,262
Total MDP	**612**	**9,004**	**2,923**	**39,150**

AREA TREE PROTECTION REQUIREMENTS - (SEC. 21-55.08)

PHASE	PRESERVED AREA (AC)	LANDSCAPE BUFFER AREA (AC)	TOTAL (AC)	%
1	5.95	1.29	37.66	19.23%
Future	5.92	0.92	45.69	*N/A
Total MDP	11.87	2.21	83.35	**16.90%**
Required Area Tree Protection Zone:				15.00%

* As Future Phases are Permitted Developer is Required to Demonstrate 15% Min. Area Tree Protection Requirement is Met.

PROPOSED LANDSCAPING INSTALLATION REQUIREMENTS

LOT	PERIMETER (LF)	REQUIRED HEDGES/SHRUBS (24"H/3' O.C.)	PROPOSED PARKING ISLANDS (EA)	PROPOSED SPECIMENT TREE PLANTINGS (EA)
1	4,175	1,392	22	22
2	3,132	1,044	28	28
3	2,861	954	20	20
4	2,850	950	19	19
5	3,197	1,066	19	19
6	2,953	984	18	18
Total MDP	19,168	**6,390**	126	**126**

LANDSCAPING, IRRIGATION & TREE (LIT) MANAGEMENT NOTES

1. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE INSTALLATION OF REQUIRED LANDSCAPING IN CONFORMANCE WITH ACCEPTED COMMERCIAL PLANTING PROCEDURES.
2. THE PROPERTY OWNER SHALL BE RESPONSIBLE TO ENSURE THAT ALL REQUIRED LANDSCAPING IS MAINTAINED IN A HEALTHY CONDITION, INCLUDING BUT NOT LIMITED TO, SUFFICIENT WATERING AND TRIMMING.
3. ALL PLANT MATERIALS USED IN CONFORMANCE WITH THE REQUIREMENTS OF THIS SECTION SHALL BE FLORIDA GRADE #1, AS ESTABLISHED, AND PERIODICALLY REVISED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER AFFAIRS.
4. GROUND COVER SHALL BE PLANTED SO AS TO PRESENT A FINISHED APPEARANCE AND COMPLETE COVERAGE WITHIN TWELVE (12) MONTHS OF INSTALLATION.
5. SHRUBS AND HEDGES SHALL BE NON-DECIDUOUS SPECIES, SHALL BE A MINIMUM OF TWENTY-FOUR INCHES (24") IN HEIGHT IMMEDIATELY AFTER PLANTING. PLANTS SHALL BE SPACED NO MORE THAN THREE FEET (3') APART MEASURED CENTER TO CENTER. THE NUMBER OF SHRUBS REQUIRED SHALL BE DETERMINED BY THE LINEAR LENGTH OF THE LOT PERIMETER DIVIDED BY THREE.
6. SOD SHALL BE USED IN ROAD RIGHT-OF-WAYS, SWALES, STORMWATER MANAGEMENT AREAS AND OTHER AREAS SUBJECT TO EROSION. ALL NEW DEVELOPMENT OR EXPANSIONS MUST SOD ALL DISTURBED AREAS OF THE LOT PRIOR TO THE TIME THE CERTIFICATE OF OCCUPANCY IS ISSUED IN ACCORDANCE WITH ALL APPLICABLE REGULATORY AGENCY REQUIREMENTS.
7. LANDSCAPED AREAS REQUIRED BY THIS SECTION SHALL NOT USE EITHER THE TREES LISTED IN TABLE V-6NOR THE PLANTS LISTED IN TABLE V-2.
8. THE DEVELOPERS AGREEMENT (DA) SECTION 10.D.(1) – NO MIN. # OF TREES IS REQUIRED ON INDIVIDUAL PARCELS PROVIDED THE DEVELOPER MITIGATES HISTORIC INCHES REMOVED VIA REPLACEMENT OR TREE FUND PAYMENT.

Project Name: SPACE COAST COMMERCE PARK @ PARKTOWNE
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Seal

MICHAEL J. SANDERS, JR. P.E.
License Number 70018

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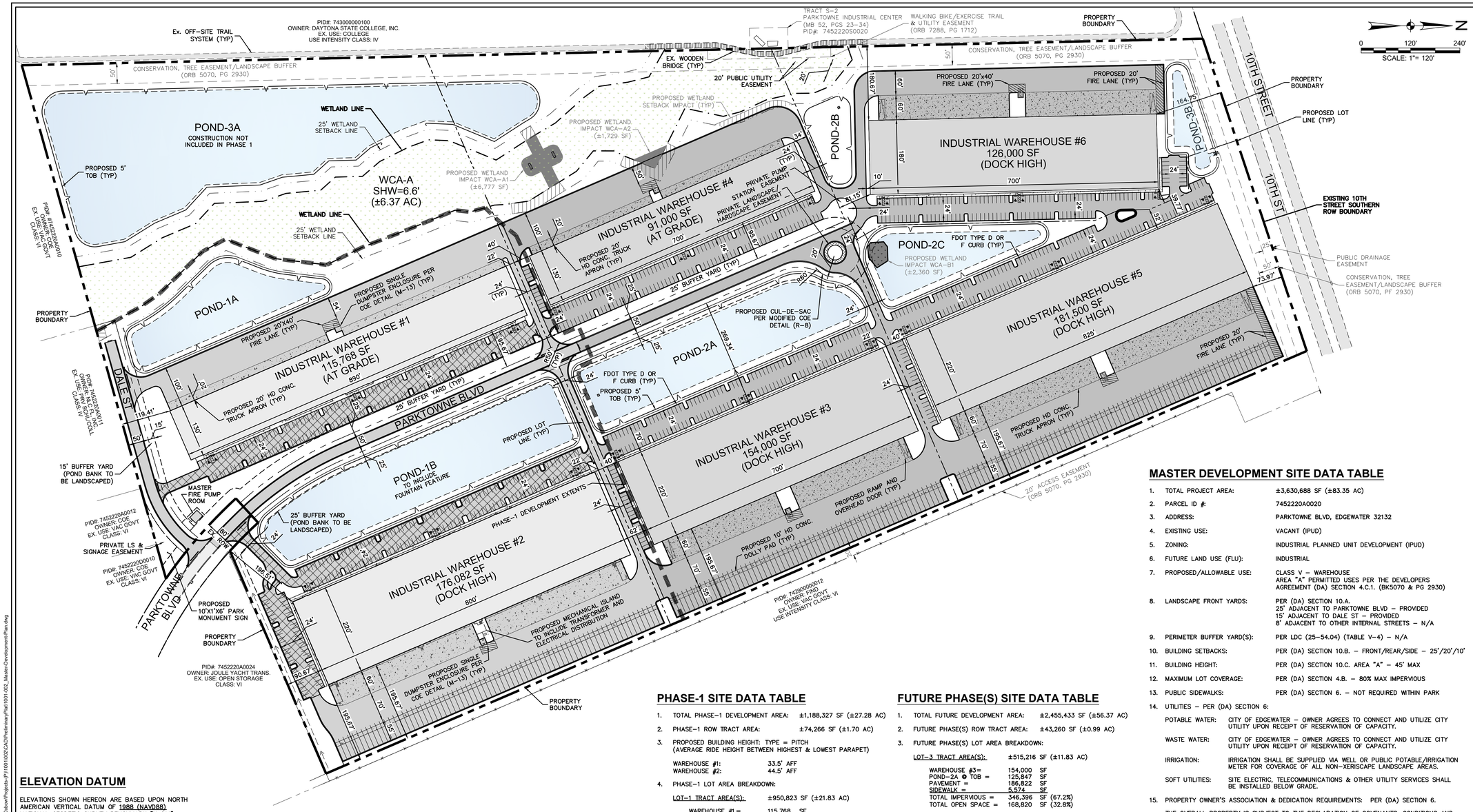
Sheet Title: MASTER DEVELOPMENT LIT MANAGEMENT PLAN

Sheet Number: C-03



ELEVATION DATUM

ELEVATIONS SHOWN HEREON ARE BASED UPON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). NATIONAL GEODETIC SURVEY BENCHMARK "U 211" HAVING AND ELEVATION OF 12.80' (NAVD88 DATUM)

NAVD1988 + 1.20 = NGVD1929
NAVD1988 :12.80'
NGVD1929 :14.00'

MASTER DEVELOPMENT PLAN PARKING TABLE

LAND USE CATEGORY - WAREHOUSE, STORAGE & SIMILAR / MANUFACTURING - GENERAL

OFF-STREET PARKING REQUIREMENTS PER LDC 21-56.02 TABLE V-8: (1/1,000 SFGFA) / 1 PER (2) EMPLOYEES ON LARGEST SHIFT

WAREHOUSE	SFGFA	REQUIRED SPACES			PROVIDED SPACES				
		STANDARD (10' X 18')	ADA (12' X 18')	TOTAL	STANDARD (10' X 18')	ADA (12' X 18')	TRAILER DROPS (12' X 55')	TOTAL EMP. SPACES	TOTAL W/ TRL DROPS
1	115,768	111	5	116	150	6	0	166	166
2	176,082	170	6	176	178	6	71	184	255
3	154,000	149	5	154	140	6	60	146	206
4	91,000	87	4	91	131	5	0	136	136
5	181,500	176	6	182	138	6	69	144	213
*6	126,000	121	5	126	122	5	0	127	127
TOTAL	**844,350**	**814**	**31**	**845**	**859**	**34**	**200**	**903**	**1,103**

* JOINT PARKING AREA AGREEMENT MAY BE UTILIZE TO SATISFY CODE PARKING REQUIREMENTS BETWEEN LOTS PER LDC (21-56.04)

** MANUFACTURING USES SHALL BE PARKED BASED ON ANTICIPATED EMPLOYEE COUNT

*** TRAILER DROPS UTILIZED TO SATISFY CODE PARKING REQUIREMENTS BASED ON WAREHOUSE, STORAGE & SIMILAR USE

PHASE-1 SITE DATA TABLE

1. TOTAL PHASE-1 DEVELOPMENT AREA: ±1,188,327 SF (±27.28 AC)
2. PHASE-1 ROW TRACT AREA: ±74,266 SF (±1.70 AC)
3. PROPOSED BUILDING HEIGHT: TYPE = PITCH
   (AVERAGE RIDE HEIGHT BETWEEN HIGHEST & LOWEST PARAPET)
   - WAREHOUSE #1: 33.5' AFF
   - WAREHOUSE #2: 44.5' AFF
4. PHASE-1 LOT AREA BREAKDOWN:

LOT-1 TRACT AREA(S): ±950,823 SF (±21.83 AC)

WAREHOUSE #1 =	115,768	SF
POND-1A @ TOB =	68,933	SF
POND-3A @ TOB =	242,475	SF
WETLAND =	144,904	SF
PAVEMENT =	144,670	SF
SIDEWALK =	6,002	SF
TOTAL IMPERVIOUS =	266,440	SF (28.0%)
OPEN SPACE =	684,383	SF (72.0%)

LOT-2 TRACT AREA(S): ±614,687 SF (±14.11 AC)

WAREHOUSE #2=	176,082	SF
POND-1B @ TOB =	143,525	SF
PAVEMENT =	235,036	SF
SIDEWALK =	6,740	SF
TOTAL IMPERVIOUS =	417,858	SF (68.0%)
OPEN SPACE =	196,829	SF (32.0%)

FUTURE PHASE(S) SITE DATA TABLE

1. TOTAL FUTURE DEVELOPMENT AREA: ±2,455,433 SF (±56.37 AC)
2. FUTURE PHASE(S) ROW TRACT AREA: ±43,260 SF (±0.99 AC)
3. FUTURE PHASE(S) LOT AREA BREAKDOWN:

LOT-3 TRACT AREA(S): ±515,216 SF (±11.83 AC)

WAREHOUSE #3=	154,000	SF
POND-2A @ TOB =	125,847	SF
PAVEMENT =	186,822	SF
SIDEWALK =	5,574	SF
TOTAL IMPERVIOUS =	346,396	SF (67.2%)
TOTAL OPEN SPACE =	168,820	SF (32.8%)

LOT-4 TRACT AREA(S): ±479,339 SF (±11.00 AC)

WAREHOUSE #4=	91,000	SF
POND-3A @ TOB =	28,843	SF
WETLAND =	116,329	SF
PAVEMENT =	124,814	SF
SIDEWALK =	4,834	SF
TOTAL IMPERVIOUS =	220,648	SF (46.0%)
TOTAL OPEN SPACE =	258,691	SF (54.0%)

LOT-5 TRACT AREA(S): ±533,878 SF (±12.26 AC)

WAREHOUSE #5=	181,500	SF
POND-2C @ TOB =	58,896	SF
POND-3B @ TOB =	3,380	SF
PAVEMENT =	208,533	SF
SIDEWALK =	6,342	SF
TOTAL IMPERVIOUS =	396,375	SF (74.2%)
TOTAL OPEN SPACE =	137,503	SF (25.8%)

LOT-6 TRACT AREA(S): ±418,821 SF (±9.62 AC)

WAREHOUSE #6=	126,000	SF
POND-2B @ TOB =	18,542	SF
POND-3B @ TOB =	17,020	SF
WETLAND =	16,343	SF
PAVEMENT =	137,653	SF
SIDEWALK =	4,625	SF
TOTAL IMPERVIOUS =	268,278	SF (64.1%)
TOTAL OPEN SPACE =	150,543	SF (35.9%)

MASTER DEVELOPMENT SITE DATA TABLE

1.	TOTAL PROJECT AREA:	±3,630,688 SF (±83.35 AC)
2.	PARCEL ID #:	7452220A0020
3.	ADDRESS:	PARKTOWNE BLVD, EDGEWATER 32132
4.	EXISTING USE:	VACANT (IPUD)
5.	ZONING:	INDUSTRIAL PLANNED UNIT DEVELOPMENT (IPUD)
6.	FUTURE LAND USE (FLU):	INDUSTRIAL
7.	PROPOSED/ALLOWABLE USE:	CLASS V – WAREHOUSE AREA "A" PERMITTED USES PER THE DEVELOPERS AGREEMENT (DA) SECTION 4.C.1. (BK5070 & PG 2930)
8.	LANDSCAPE FRONT YARDS:	PER (DA) SECTION 10.A. 25' ADJACENT TO PARKTOWNE BLVD – PROVIDED 15' ADJACENT TO DALE ST – PROVIDED 8' ADJACENT TO OTHER INTERNAL STREETS – N/A
9.	PERIMETER BUFFER YARD(S):	PER LDC (25-54.04) (TABLE V-4) – N/A
10.	BUILDING SETBACKS:	PER (DA) SECTION 10.B. – FRONT/REAR/SIDE – 25'/20'/10'
11.	BUILDING HEIGHT:	PER (DA) SECTION 10.C. AREA "A" – 45' MAX
12.	MAXIMUM LOT COVERAGE:	PER (DA) SECTION 4.B. – 80% MAX IMPERVIOUS
13.	PUBLIC SIDEWALKS:	PER (DA) SECTION 6. – NOT REQUIRED WITHIN PARK
14.	UTILITIES – PER (DA) SECTION 6:	
	POTABLE WATER:	CITY OF EDGEWATER – OWNER AGREES TO CONNECT AND UTILIZE CITY UTILITY UPON RECEIPT OF RESERVATION OF CAPACITY.
	WASTE WATER:	CITY OF EDGEWATER – OWNER AGREES TO CONNECT AND UTILIZE CITY UTILITY UPON RECEIPT OF RESERVATION OF CAPACITY.
	IRRIGATION:	IRRIGATION SHALL BE SUPPLIED VIA WELL OR PUBLIC POTABLE/IRRIGATION METER FOR COVERAGE OF ALL NON-XERISCAPE LANDSCAPE AREAS.
	SOFT UTILITIES:	SITE ELECTRIC, TELECOMMUNICATIONS & OTHER UTILITY SERVICES SHALL BE INSTALLED BELOW GRADE.
15.	PROPERTY OWNER'S ASSOCIATION & DEDICATION REQUIREMENTS:	PER (DA) SECTION 6. THE OVERALL PROPERTY IS SUBJECT TO THE DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (CCR) FOR PARKTOWNE INDUSTRIAL CENTER (BK 5576, PG 2132). THE OWNERS SHALL CONVEY TO THE CITY OF EDGEWATER BY PLAT AND/OR WARRANT DEED, TOGETHER WITH TITLE INSURANCE SHOWING THE CONVEYED LAND FREE AND CLEAR OF ALL LIENS AND ENCUMBRANCES, ALL ROADWAY RIGHTS-OF-WAY, UTILITY EASEMENTS AND/OR STORMWATER MANAGEMENT SYSTEMS AS MAY BE REQUIRED. COMMON AREA TRACTS LOCATED WITHIN THE SUBJECT DEVELOPMENT PARCEL SUBJECT TO INDIVIDUAL LOT OWNER OPERATION AND MAINTENANCE SHALL BE ADDRESS IN AN INDEPENDENT (CCR) ADDENDUM (SPACE COAST INDUSTRIAL PARK POA).
16.	STREET LIGHTING/PHOTOMETRIC – PROPOSED LIGHTING FOR THE PARKTOWNE BLVD PUBLIC ROW EXTENSION SHALL BE PROVIDED BY FLORIDA POWER & LIGHT (FPL) IN ACCORDANCE WITH THE LDC & GOVERNING PARKTOWNE INDUSTRIAL CENTER (CCR) REQUIREMENTS PER ARTICLE (V.5.7.)	
17.	STORMWATER MANAGEMENT – PROVIDED VIA WET DETENTION TREATMENT FACILITIES TO BE INTERCONNECTED AND PHASED AS MAY BE NECESSARY TO MAINTAIN HISTORIC DRAINAGE PATTERNS. ROW DRAINAGE SHALL BE COMMINGLED WITH SITE DEVELOPMENT DRAINAGE. TREATED AND ATTENUATION WILL BE ACCOMPLISHED WITHIN COMMON FACILITIES. DRAINAGE EASEMENTS ENCOMPASSING SHARED DRAINAGE FACILITY INFRASTRUCTURE SHALL BE CONVEYED TO THE CITY IN ACCORDANCE WITH (CCR) REQUIREMENTS PER ARTICLE VII.7.1. TO PERMIT PERPETUAL ACCESS, OPERATION AND MAINTENANCE.	
17.	SIGNAGE – SHALL CONFORM TO THE CITY'S LDC SECTION (21-60 & 21-61) AND THE PARKTOWNE INDUSTRIAL CENTER (CCR) REQUIREMENTS PER ARTICLE (V.5.8). ONE PERMANENT GROUND SIGN NO LARGER THAN 60 SF, 10 FT HIGH SHALL BE PERMITTED FOR EACH LOT FRONTAGE.	
18.	FLOOD ZONE: THE PROPERTY IS LOCATED IN FLOOD ZONE "AE" (BFE=5.0'), "X-SHADED" & "X" PER FEMA FLOOD INSURANCE RATE MAP (FIRM) NO. 12127C0543J, EFFECTIVE SEPT. 29, 2017.	

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CITY OF EDGEWATER, FL

Prepared For: ONICX MANAGEMENT GROUP, LLC

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FL Registry 36174 FL L22000260419

Revision No.	Date	Description

Seal
MICHAEL J. SANDERS, JR., P.E.
License Number 79918

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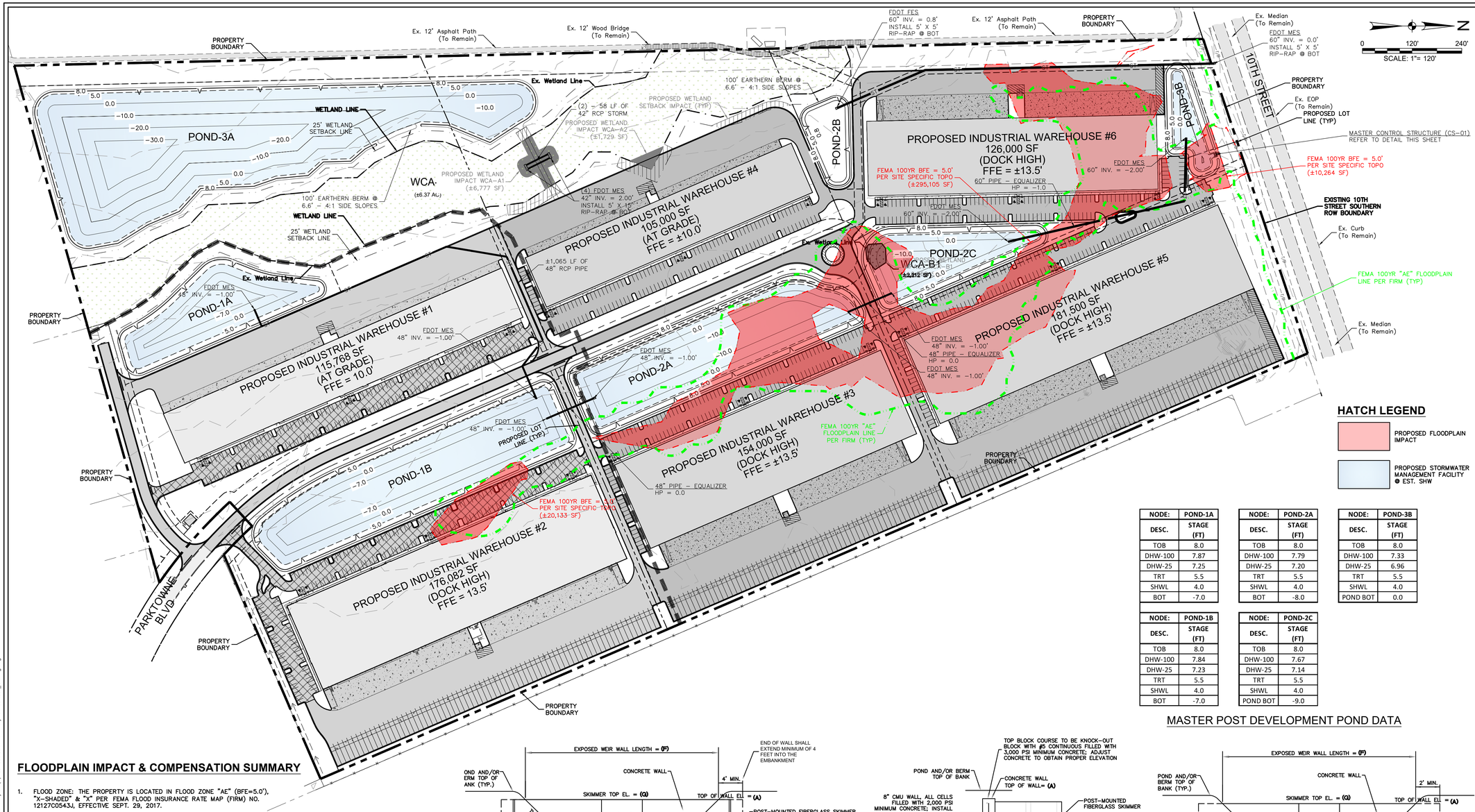
Sheet Title: MASTER DEVELOPMENT SITE PLAN

Sheet Number: C-04



NODE:	POND-1A
DESC.	STAGE (FT)
TOB	8.0
DHW-100	7.87
DHW-25	7.25
TRT	5.5
SHWL	4.0
BOT	-7.0

NODE:	POND-2A
DESC.	STAGE (FT)
TOB	8.0
DHW-100	7.79
DHW-25	7.20
TRT	5.5
SHWL	4.0
BOT	-8.0

NODE:	POND-3B
DESC.	STAGE (FT)
TOB	8.0
DHW-100	7.33
DHW-25	6.96
TRT	5.5
SHWL	4.0
POND BOT	0.0

NODE:	POND-1B
DESC.	STAGE (FT)
TOB	8.0
DHW-100	7.84
DHW-25	7.23
TRT	5.5
SHWL	4.0
BOT	-7.0

NODE:	POND-2C
DESC.	STAGE (FT)
TOB	8.0
DHW-100	7.67
DHW-25	7.14
TRT	5.5
SHWL	4.0
POND BOT	-9.0

MASTER POST DEVELOPMENT POND DATA

FLOODPLAIN IMPACT & COMPENSATION SUMMARY

1. FLOOD ZONE: THE PROPERTY IS LOCATED IN FLOOD ZONE "AE" (BFE=5.0'), "X-SHADED" & "X" PER FEMA FLOOD INSURANCE RATE MAP (FIRM) NO. 12127C0543J, EFFECTIVE SEPT. 29, 2017.

2. PROPOSED FLOODPLAIN IMPACT AREAS:

PHASE-1 =	±20,133 SF	(0.46 AC)
FUTURE PHASE(S) =	±305,369 SF	(7.01 AC)
TOTAL =	±325,502 SF	(7.47 AC)

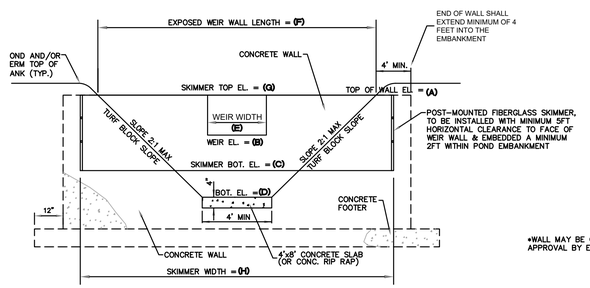
3. FLOODPLAIN COMPENSATION – COMPENSATION IS PROVIDED WITHIN THE ON-SITE STORMWATER MANAGEMENT FACILITIES SUFFICIENT TO DEMONSTRATE BOTH PEAK STAGE AND DISCHARGE TO UPSTREAM AND DOWNSTREAM CRITICAL NODES IS EQUAL TO OR LESS THAN THE PRE-DEVELOPMENT CONDITIONS FOR ALL STORM EVENTS UP TO AND INCLUDING THE 100YR DESIGN STORM. PLEASE REFER TO THE DRAINAGE REPORT FOR DETAILED INFORMATION.

4. A CUP FOR CUP VOLUMETRIC ANALYSIS IS PROVIDED FOR PHASE-1 IMPACTS TO VERIFY COMPLIANCE WITH CITY OF EDGEWATER REQUIREMENTS

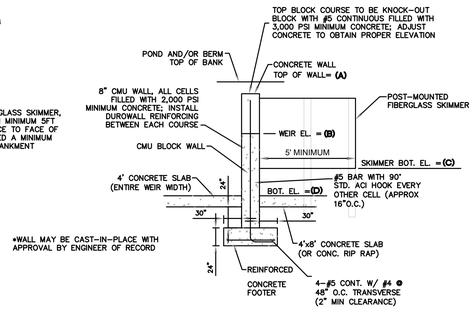
Phase 1 - Floodplain Impact		
Stage (FT)	Area (SF)	Voume (CF)
5	20,133	3,035
4.7	100	0

Phase 1 - Floodplain Compensation -Pond 1B Outfall			
Stage (FT)	Area (SF)	Volume (CF)	
5	7,396	6,674	100YR
4	5,952	0	SHWL

FLOODPLAIN IMPACT AND COMPENSATION ANALYSIS



FRONT (UPSTREAM POND SIDE)
SECTIONAL ELEVATION

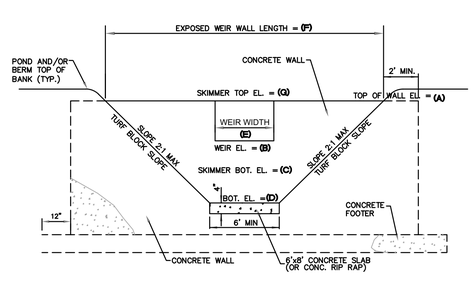


TYPICAL SECTION

STRUCTURE NUMBER	A	B	C	D	E	F	G	H	NOTES
CS-01	8.0'	5.5'	4.5'	3.0'	12'	32'±	8.0'	36'±	MASTER CS POND-3B

WEIR WALL DIMENSION TABLE
N.T.S.

CS-01 WEIR WALL DETAILS
NTS



BACK (DOWNSTREAM DITCH SIDE)
SECTIONAL ELEVATION

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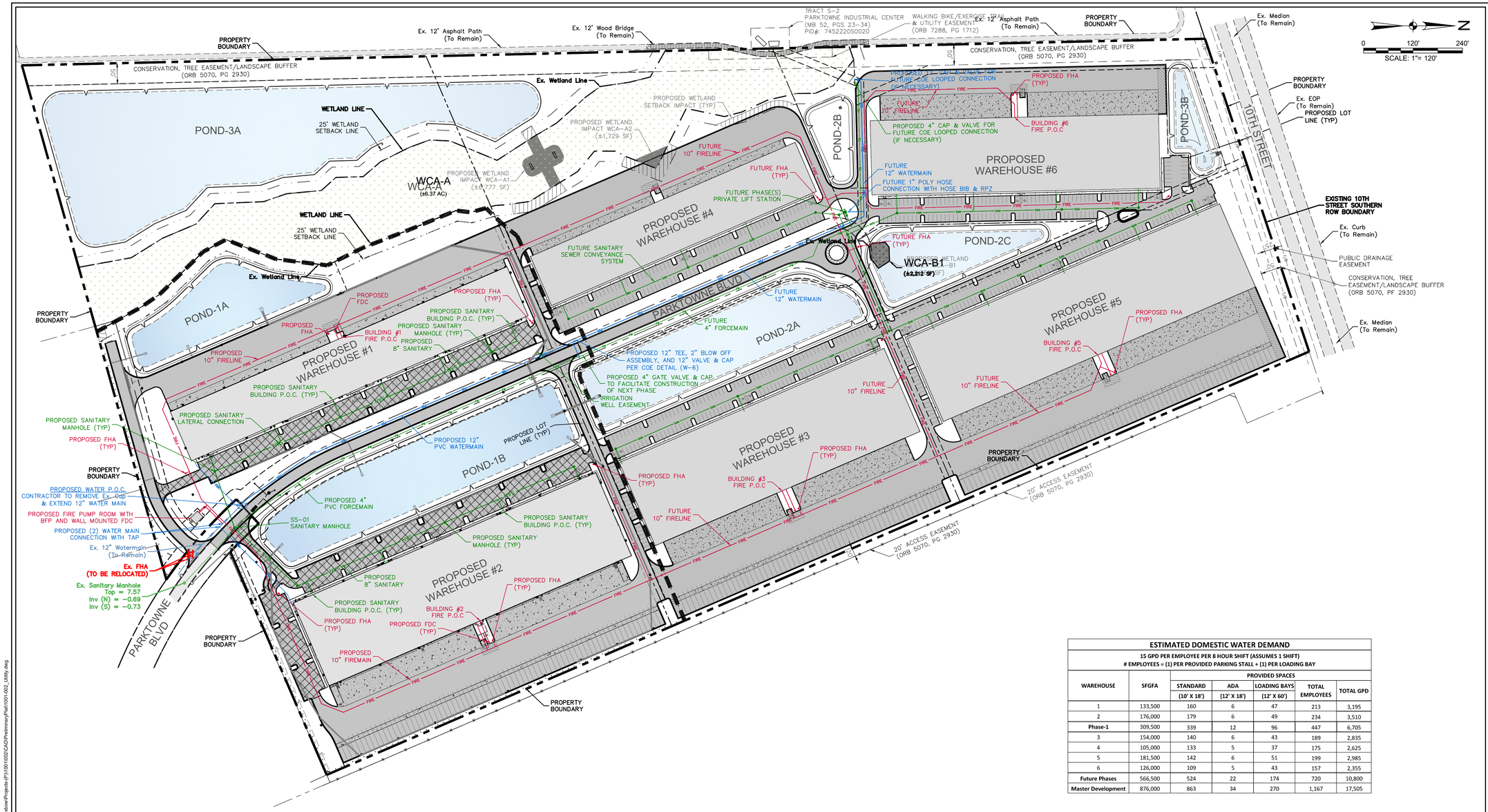

ESTIMATED DOMESTIC WATER DEMAND

15 GPD PER EMPLOYEE PER 8 HOUR SHIFT (ASSUMES 1 SHIFT)
 # EMPLOYEES = (1) PER PROVIDED PARKING STALL + (1) PER LOADING BAY

WAREHOUSE	SFGFA	PROVIDED SPACES				
		STANDARD (10' X 18')	ADA (12' X 18')	LOADING BAYS (12' X 60')	TOTAL EMPLOYEES	TOTAL GPD
1	133,500	160	6	47	213	3,195
2	176,000	179	6	49	234	3,510
Phase-1	309,500	339	12	96	447	6,705
3	154,000	140	6	43	189	2,835
4	105,000	133	5	37	175	2,625
5	181,500	142	6	51	199	2,985
6	126,000	109	5	43	157	2,355
Future Phases	566,500	524	22	174	720	10,800
Master Development	876,000	863	34	270	1,167	17,505

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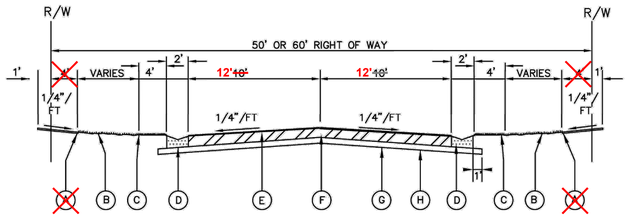


(A) ~~4" 0" WIDE CONCRETE SIDEWALK~~
~~4" THICK, 3000 P.S.I.~~
~~6" THICK AT DRIVEWAY~~
~~3" MINIMUM ABOVE TOP OF CURB~~

*SIDEWALKS NOT PERMITTED WITHIN THE PARK PER (DA) SECTION 6.

(B) SOD or SEED AND MULCH PER F.D.O.T. STANDARD SPECIFICATION SECTION 570 OR 575, AS APPLICABLE.

(C) 4' WIDE AREA WITH MAXIMUM SLOPE OF 1" PER 4 FT.

*ITEMS E - H: CONSIDERED MIN. REQUIREMENTS, PAVEMENT SECTION IS PROPOSED TO BE MODIFIED IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS AND TRAFFIC LOAD

(D) CONCRETE MIAMI CURB, 3000 P.S.I. (SEE DETAIL R-9)

(E) ASPHALT PAVEMENT:
1-1/4" ASPHALT BITUMINOUS CONCRETE TYPE S-III; MINIMUM MARSHALL FIELD STABILITY 1500, COMPACTED TO 98% DENSITY PER FM 1-T238 (METHOD B), NUCLEAR DENSITY TEST, "BACK SCATTER METHOD".

(F) BASE:
6" SOIL CEMENT BASE FOR RESIDENTIAL MINIMUM BEARING STRENGTH OF 350 P.S.I. SHALL BE OBTAINED WITHIN 7 DAYS COMPACTED TO 98% DENSITY BASED ON AASHTO T-99 STANDARD PROCTOR TEST; CONSTRUCTION METHODS SHALL CONFORM TO SECTION 270 OF STANDARD F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
ALTERNATE:
6" LIMEROCK BASE (LBR 100) OR RECYCLED CONCRETE BASE (LBR 130) FOR RESIDENTIAL COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.

(G) SUB-BASE:
6" SUB-BASE COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST WITH MINIMUM LBR 40.

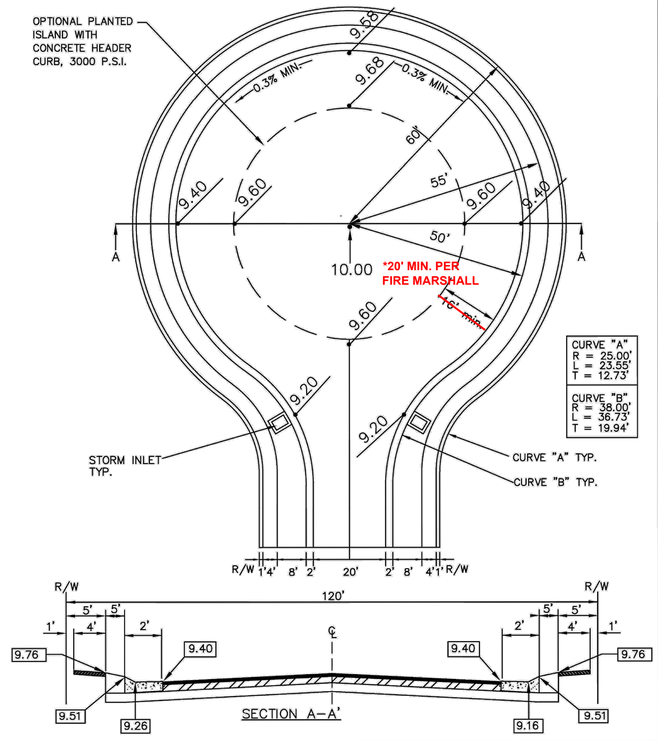
(H) SUBGRADE:
12" SUBGRADE COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST WITH MINIMUM LBR 40.

NOTES:

1. ALL MATERIALS ARE TO BE APPROVED BY THE CITY'S DESIGNATED SITE INSPECTOR AND THE DEVELOPER'S LICENSED SOILS ENGINEER PRIOR TO PLACEMENT.
2. A CITY APPROVED REPRESENTATIVE OF A CERTIFIED SOIL LABORATORY SHALL BE PRESENT DURING ALL CONSTRUCTION PHASES UTILIZING A SOIL CEMENT BASE. THE REPRESENTATIVE SHALL BE CERTIFIED BY F.D.O.T. IN THE INSTALLATION OF SOIL CEMENT.

STANDARD CONSTRUCTION DETAIL
50' or 60' R/W ROAD SECTION
***MODIFIED**

FILE NAME: EW_R1.DWG
DETAIL REF: R-1

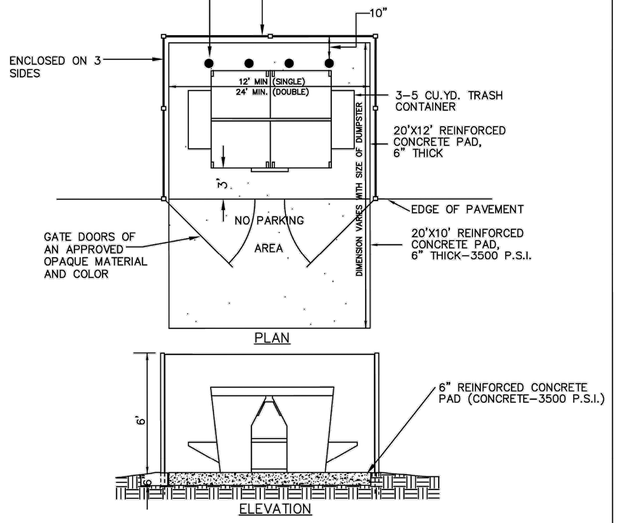


STANDARD CONSTRUCTION DETAIL
STANDARD CUL-DE-SAC DETAIL
WITH DUAL STORM INLET
"PREFERRED"

FILE NAME: EW_R8A.DWG
DETAIL REF: R-8

(4) 4" DIAMETER STEEL PIPES, 4' O.C. CONCRETE FILLED, PAINTED YELLOW. PIPES SHALL HAVE A MINIMUM BURIAL OF 1'-6" AND ABOVE GROUND HEIGHT OF 3'-6".

DECORATIVE WALL OR 6' HIGH STOCKADE FENCE CONSISTING OF ONE OR MORE COLORS AND FINISHES TO BE COMPLEMENTARY TO BUILDING DESIGN.

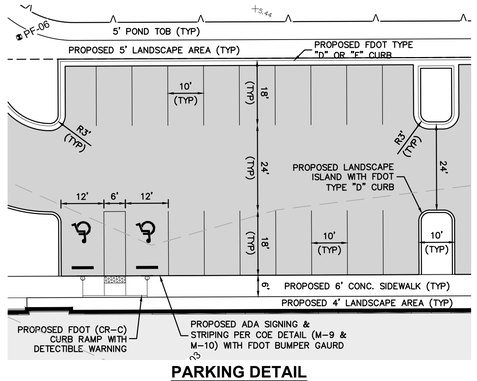


NOTES:

1. MAXIMUM ANGLE OF CONTAINER PAD TO DIRECTION OF AISLE TO BE 30°
2. AREA TO BE FREE OF OVERHEAD LINES AND WIRES.
3. DUMPSTER PAD TO BE 12' MIN. (SINGLE) 24' MIN (DOUBLE) FOR DUMPSTER RECYCLING.
4. APPLICANT TO PROVIDE A SIDE ELEVATION TO DEMONSTRATE COLOR, MATERIAL, AND DESIGN CONSISTENCY WITH THE PRINCIPAL BUILDING.

STANDARD CONSTRUCTION DETAIL
DUMPSTER PAD

FILE NAME: EW_M13.DWG
DETAIL REF: M-13



PARKING DETAIL
SCALE: 1"=20'

Project Name: SPACE COAST COMMERCE PARK @ PARKTOWNE
CITY OF EDGEWATER, FL

Prepared For: ONICX MANAGEMENT GROUP, LLC

OXBOW
4206 NATIONAL GUARD DRIVE, #1
PLANT CITY, FL 33563
Phone (813) 857-7024 Web www.oxboweng.com
FL Registry 36174 FL L22000260419

Revision No.	Date	Description

Seal
MICHAEL J. SANDERS, JR., P.E.
License Number 79018

Project No.:	1001-002
Issued:	AUG 21, 2023
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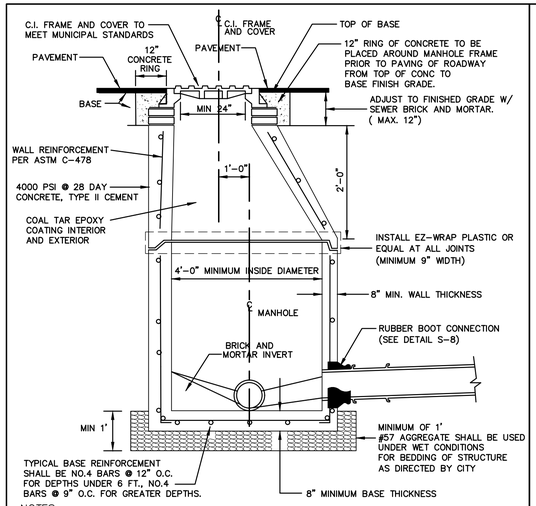
Checked By:	MJS
Scale:	1" = N/A

Sheet Title: MASTER DEVELOPMENT SITE DETAILS

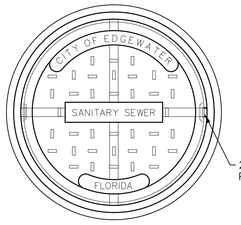
Sheet Number: C-07



NOTES:

1. ON TRANSITIONS BETWEEN LARGER DIAMETER AND SMALLER SEWER COLLECTORS, OUTVERTS OF SEWERS SHALL BE MATCHED.
2. NON-PENETRATING PICK-HOLES IN ALL CONCRETE SECTIONS.
3. USE FARBERTITE BITUMASTIC SEALER BETWEEN SECTIONS OF MANHOLES.
4. 0.1' - DROP ACROSS MANHOLE TYP.
5. ALL MANHOLE TROUGHS AND BENCHES ARE TO BE EPOXY PAINTED BEFORE FINAL INSPECTION.

	STANDARD CONSTRUCTION DETAIL STANDARD MANHOLE DETAIL	FILE NAME: EW_S1.DWG DETAIL REF: S-1



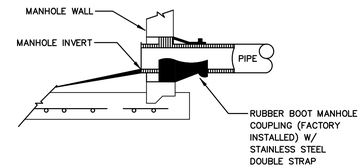
USF No. 117-BL-ORS
FRAME WT = 85 LBS.
COVER WT = 125 LBS.

2 NON-PENETRATING PICKHOLES

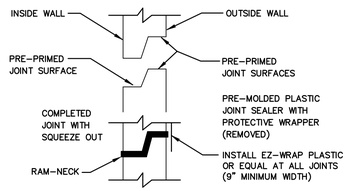
NOTES:

1. CEMENT USED IN PRECAST CONCRETE MIX SHALL BE TYPE II, ACID RESISTANT AND SULFIDE RESISTANT CONCRETE.
2. MORTAR TO CONTAIN "HYDRATITE", OR APPROVED EQUAL, TO PREVENT SHRINKAGE.
3. SUB-GRADE BENEATH MANHOLES SHALL BE UNDISTURBED GRANULAR UNSATURATED SOIL. No. 57 AGGREGATE STONE SHALL BE USED IN WET CONDITIONS AND/OR WHERE UNSUITABLE MATERIAL IS ENCOUNTERED.
4. ALL SEWER LINES SHALL BE VIDEOTAPED WITH "PAN AND TILT" CAMERA AND COPIES OF VIDEOS SUPPLIED TO THE ENVIRONMENTAL SERVICES DEPT. THE CITY MAY REQUIRE ADDITIONAL VIDEO TAPING, VIDEO TAPING OF LATERALS, AND/OR INFILTRATION/EXFILTRATION TESTS IF DEFECTS ARE APPARENT OR WORKMANSHIP IS QUESTIONABLE.
5. UNLESS DETAILED PLANS SHOW OTHERWISE, ALL MANHOLE RING AND COVER CASTINGS IN PAVED AREAS ARE TO BE ADJUSTED TO FINAL GRADE, SEALED AND SECURED IN PLACE WITH A CONCRETE COLLAR AFTER THE ROAD BASE IS PLACED AND JUST PRIOR TO PLACEMENT OF ASHPALT WEARING SURFACE.
6. CONTRACTOR SHALL PROVIDE THICKER MANHOLE WALLS AND BASES AS REQUIRED TO PREVENT FLOTATION BASED ON HISTORIC HIGH GROUND WATER TABLE ELEVATIONS AS DETERMINED USING ACCEPTED ENGINEERING PRACTICES AND/OR APPROVED BY ENVIRONMENTAL SERVICES DEPT.
7. CONCRETE COLLAR AROUND MANHOLE FRAME IS REQUIRED IN PAVED AREAS ONLY.
8. SHOP DRAWINGS FOR ALL STRUCTURES SHALL BE SUBMITTED TO AND APPROVED BY THE DESIGN ENGINEER PRIOR TO INSTALLATION WITH TWO COPIES FORWARDED BY THE DESIGN ENGINEER TO THE CITY.
9. TWO (2) COATS OF BITUMASTIC COATING INSIDE: 16 MIL
10. ONE (1) COAT OF BITUMASTIC COATING OUTSIDE: 8 MIL
11. FRAME AND COVER TO BE USF #117-BL-ORS .
12. NO BUG HOLES OR HONEYCOMB WILL BE ACCEPTED.
13. ENDS OF SECTION SHALL FIT FLUSH TOGETHER
14. SEDIMENTATION BOWLS REQUIRED FOR ALL NEW MANHOLES AND REHABILITATION STRUCTURES. RAINGUARD OR APPROVED EQUAL.

	STANDARD CONSTRUCTION DETAIL SANITARY SEWER COVER & GENERAL NOTES	FILE NAME: EW_S2.DWG DETAIL REF: S-2



MANHOLE PIPE CONNECTION DETAIL
FOR NEW CONNECTIONS IN EXISTING MANHOLES

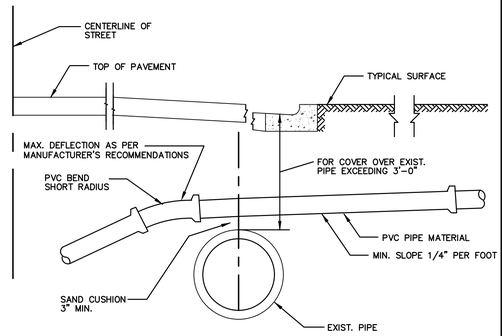


PRECAST JOINT
CONNECTION

NOTES:

1. ALL NEW CONNECTIONS TO EXISTING SANITARY SEWER MANHOLES SHALL UTILIZE A CORING METHOD AND THE IN-FIELD INSTALLATION OF A RUBBER BOOT INTO THE MANHOLE.

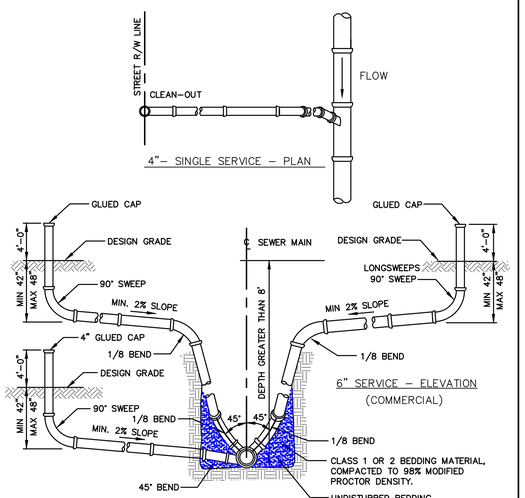
	STANDARD CONSTRUCTION DETAIL RUBBER BOOT AND PRECAST JOINT CONNECTION DETAIL	FILE NAME: EW_S8.DWG DETAIL REF: S-8



ALTERNATE GRADIENT FOR HOUSE SERVICE SEWERS AT CONFLICTS WITH EXISTING STORM SEWERS & OTHER EXISTING CONDUITS

APPROVED PIPE MATERIALS-PVC (SDR 26)

	STANDARD CONSTRUCTION DETAIL SEWER LINE UTILITY CROSSING DETAIL	FILE NAME: EW_S9.DWG DETAIL REF: S-9



6" SERVICE - ELEVATION
(COMMERCIAL)

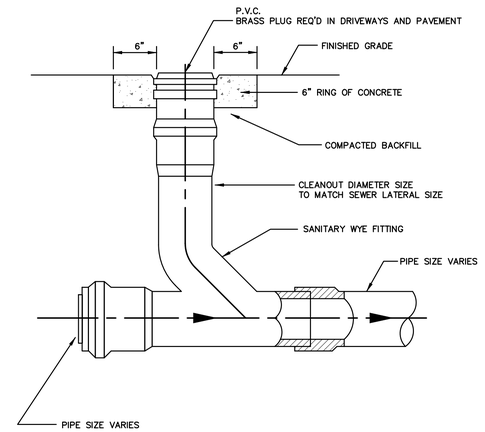
4" - 6" SINGLE SERVICE - ELEVATION

NOTES:

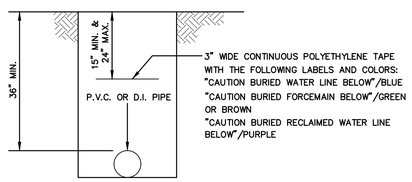
1. USE OF STYRENE MATERIAL WILL NOT BE PERMITTED.
2. ALL JOINTS TO BE RUBBER GASKET (NO GLUED FITTINGS) TYPICAL.
3. USE ALL HARCO SDR-26 FITTINGS OR CITY APPROVED EQUAL.

4" - RESIDENTIAL
6" - COMMERCIAL

	STANDARD CONSTRUCTION DETAIL SEWER LATERAL DETAIL (SINGLE 4" RESIDENTIAL) (SINGLE 6" COMMERCIAL)	FILE NAME: EW_S10.DWG DETAIL REF: S-10

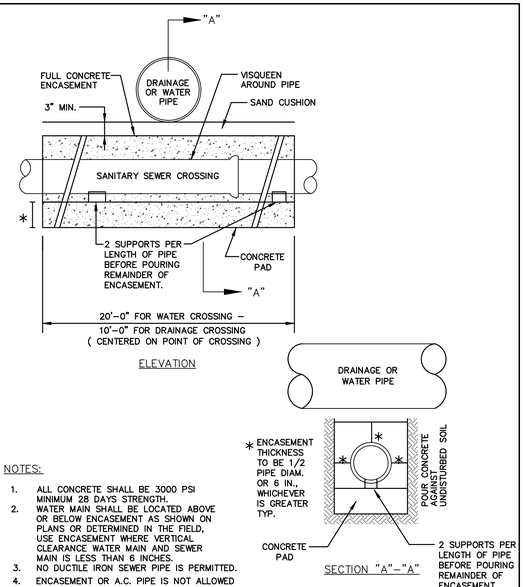


	STANDARD CONSTRUCTION DETAIL CLEANOUT DETAIL	FILE NAME: EW_S12.DWG DETAIL REF: S-12



"TERRA TAPE D" or SIMILAR

	STANDARD CONSTRUCTION DETAIL LOCATOR TAPE INSTALLATION FOR SEWER, WATER AND RECLAIMED WATER PIPELINES	FILE NAME: EW_S13.DWG DETAIL REF: S-13



ELEVATION

SECTION "A"-"A"

NOTES:

1. ALL CONCRETE SHALL BE 3000 PSI MINIMUM 28 DAYS STRENGTH.
2. WATER MAIN SHALL BE LOCATED ABOVE OR BELOW ENCASEMENT AS SHOWN ON PLANS OR DETERMINED IN THE FIELD, USE ENCASEMENT WHERE VERTICAL CLEARANCE WATER MAIN AND SEWER MAIN IS LESS THAN 6 INCHES.
3. NO DUCTILE IRON SEWER PIPE IS PERMITTED.
4. ENCASEMENT OR A.C. PIPE IS NOT ALLOWED REPLACE AFFECTED SECTIONS WITH PVC

	STANDARD CONSTRUCTION DETAIL SEWER CONDUIT CROSSING	FILE NAME: EW_S14.DWG DETAIL REF: S-14

Project Name
SPACE COAST COMMERCE PARK @ PARKTOWNE
CITY OF EDGEWATER, FL

Prepared For
ONICX MANAGEMENT GROUP, LLC

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Sheet Title
MASTER DEVELOPMENT COE SEWER DETAILS

Sheet Number
C-08

SANITARY SEWER DESIGN AND CONSTRUCTION NOTES

1. THE CITY'S ENVIRONMENTAL SERVICES DEPT. (424–2476) SHALL BE GIVEN A MINIMUM OF 48 HOURS ADVANCE NOTICE (NOT INCLUDING HOLIDAYS OR WEEKENDS) PRIOR TO BEGINNING ANY SANITARY SEWER CONSTRUCTION.
2. ALL GRAVITY SANITARY SEWER MAIN LINES SHALL BE 8" DIAMETER MINIMUM. COMMERCIAL SERVICE LATERALS WITH MULITPLE CONNECTIONS SHALL BE GREEN 6" DIA. OR LARGER. ALL SINGLE FAMILY RESIDENTIAL SERVICE LATERALS SHALL BE 4" – SINGLE SERVICES.
3. ALL GRAVITY SANITARY SEWER LINES SHALL BE GREEN PVC SDR 26, ASTM D–3034. IN PLACES WHERE A MINIMUM COVER OF 4.0' CANNOT BE MAINTAINED, AWWA C–900 OR C–905 GREEN PVC DR–25, CLASS 100 OR CONCRETE ENCASEMENT SHALL BE USED. WATER LINES, RECLAIMED LINES, AND STORM DRAINAGE CROSSINGS SHALL ALSO FOLLOW THE CONCRETE ENCASEMENT REQUIREMENT PER THESE STANDARDS AND AS PER REGULATORY REQUIREMENTS.
4. MINIMUM GRAVITY SANITARY SEWER SLOPES ARE AS FOLLOWS:
   8" PIPE 0.40 %
   10" PIPE 0.30 %
   12" PIPE 0.22 %
5. GRAVITY SANITARY SEWER LINES SHALL BE INSTALLED WHENEVER POSSIBLE UNDER PAVED AREAS WITHIN PUBLIC RIGHTS–OF–WAY. UTILITY EASEMENTS SHALL BE PROVIDED WHENEVER PUBLICLY–OWNED SEWER LINES ARE CONSTRUCTED OUTSIDE OF A PUBLIC RIGHT–OF–WAY.
6. GRAVITY SANITARY SEWER LINE CONSTRUCTION SHALL BE ACCOMPLISHED BY THE USE OF A LASER INSTRUMENT UNLESS ANOTHER METHOD IS PREVIOUSLY APPROVED BY THE CITY.
7. THE CONTRACTOR SHALL AT ALL TIMES, DURING PIPE LAYING OPERATIONS, DEWATER THE GROUND SUFFICIENTLY TO KEEP THE GROUNDWATER ELEVATION A MINIMUM OF 6" BELOW THE PIPE BEING LAID WITHIN THE AREA OF THE TRENCH.
8. ALL PIPES SHALL BE LAID ON A FIRM FOUNDATION. SOFT OR SPONGY BEDDING FOR PIPES IS NOT ACCEPTABLE. ANY UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH A DRY, COMPACTED, GRANULAR MATERIAL SATISFACTORY TO THE CITY.
9. ON ALL EXCAVATION AND BACKFILLING THE CONTRACTOR SHALL PROVIDE ADEQUATE SHEETING AND BRACING IN ORDER TO PROVIDE FOR THE SAFETY OF WORKMEN, AS WELL AS REPRESENTATIVES OF THE CITY, THE DESIGN ENGINEER, AND THE DEVELOPER.
10. ALL TRENCHES SHALL BE BACKFILLED WITH ACCEPTABLE MATERIAL AND COMPACTED TO THE SPECIFIED MINIMUM COMPACTION (95% IN UNPAVED AREAS AND 98% IN PAVED AREAS) OF THE OPTIMUM DENSITY OF THAT MATERIAL BASED ON THE AASHTO T–180 MODIFIED PROCTOR TEST.
11. THE CONTRACTOR SHALL EMPLOY AN INDEPENDENT TESTING LABORATORY AT HIS OWN EXPENSE TO INSURE THAT COMPACTION OF ALL FILL MATERIAL IS COMPLETED PROPERLY. TESTS SHALL BE DONE ONE FOOT ABOVE THE PIPE AND THEN AT ONE FOOT VERTICAL INTERVALS UNTIL FINAL GRADE IS REACHED. TESTING SHALL BE COMPLETED AND TEST DOCUMENTS SUBMITTED TO THE CITY AT A MINIMUM FREQUENCY OF ONE SET OF TESTS BETWEEN EACH MANHOLE AND ONE ADDITIONAL SET OF TESTS AT EVERY MANHOLE. IDENTIFICATION OF TEST LOCATIONS SHALL BE CLEARLY INDICATED ON TEST REPORTS. TEST RESULTS SHALL BE FORWARDED PROMPTLY TO THE CITY'S DESIGNATED SITE INSPECTOR.
12. THE CONTRACTOR SHALL INSTALL A METALLIZED FOIL LOCATOR TAPE, OR SIMILAR DEVICE AS MAY BE APPROVED BY THE CITY FOR THE FULL LENGTH OF ALL PVC SEWAGE FORCE MAINS. THIS PIPE LOCATOR AID SHALL BE INSTALLED BETWEEN 15" AND 24" BELOW FINISHED GRADE OR AS DIRECTED BY THE MANUFACTURER. TAPE SHALL BE COLOR CODED GREEN FOR SANITARY SEWER AND FORCE MAIN. INSTALL 12 GUAGE TRACING WIRE IN TRENCH.

	STANDARD CONSTRUCTION DETAIL SANITARY SEWER DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_S23.DWG DETAIL REF: S–23

SANITARY SEWER DESIGN AND CONSTRUCTION NOTES: (CONTD.)

13. ALL TESTING REQUIRED BY THE CITY SHALL BE PAID FOR BY THE CONTRACTOR / DEVELOPER.
14. ALL LOCAL COLLECTION SANITARY SEWER MANHOLES SHALL BE PRECAST WITH A MINIMUM INSIDE DIAMETER OF 4 FEET.
15. STANDARD MANHOLES SHALL BE LOCATED AT INTERVALS NOT EXCEEDING 400 FEET.
16. ALL SEWER FITTINGS TO BE "HARCO" OR CITY APPROVED EQUAL.
17. MANHOLE RIMS SHALL MATCH FLUSH WITH THE FINISH GRADE ELEVATION IN PAVED AREAS AND A MINIMUM OF 0.2 FEET AND MAXIMUM OF 0.5 FEET ABOVE GRADE GENERALLY IN UNPAVED AREAS.
18. THE CONTRACTOR SHALL CONSTRUCT SANITARY SEWER MANHOLES IN SUCH A WAY THAT SEWER LINES DO NOT INTERSECT SEALED JOINTS BETWEEN SECTIONS OF THE MANHOLE.
19. RUBBER BOOTS AND STAINLESS STEEL BANDS SHALL BE UTILIZED IN THE CONNECTION OF THE SEWER MAIN TO THE MANHOLES (SEE STANDARD MANHOLE AND BOOT DETAIL).
20. INDIVIDUAL SANITARY SERVICE CONNECTORS ON NEW CONSTRUCTION SHALL NOT BE CONNECTED DIRECTLY INTO MANHOLES, AND MUST CONNECT TO SEWER MAIN LINES BY USE OF WYE CONNECTIONS, UNLESS OTHERWISE BE APPROVED BY THE CITY.
21. FOR SINGLE FAMILY HOMES, SINGLE OR DOUBLE FOUR INCH SEWER SERVICES LATERALS SHALL BE CONSTRUCTED SINGLES AT EACH LOT OR UNIT AND LOCATED ON THE DOWNSTREAM SIDE OF THE LOT CENTER LINE. DOUBLES LOCATED ON THE LOT LINES THESE SERVICES SHALL BE EXTENDED 4 FEET ABOVE GROUND AT THE PROPERTY LINE WITH A PVC RISER AND PLUG BEING EASILY VISIBLE FROM THE ROAD. RUBBER SEAL FITTINGS SHALL BE USED ON ALL LINES. NO GLUED JOINTS ARE PERMITTED ON LATERALS, INCLUDING DOUBLES.
22. FOR MULTI–FAMILY AND COMMERCIAL SITES, SIX INCH MINIMUM SEWER SERVICES AND CLEANOUTS SHALL BE PROVIDED AS APPROVED BY THE CITY.
23. SANITARY SEWER LIFT STATIONS AND FORCE MAINS, SIZE, MATERIAL, AND DESIGNS SHALL BE APPROVED BY THE CITY. LIFT STATIONS SHALL BE CONSTRUCTED WITH A MINIMUM WET WELL INTERIOR DIAMETER OF 6 FEET. FORCE MAINS SHALL BE A MINIMUM 6 INCH DIAMETER.
24. IT SHALL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER TO PREPARE AND SUBMIT FLOTATION CALCULATIONS TO SIZE THE BASE OF THE WET WELL, AND ANY MANHOLES AS DEEMED NECESSARY BY THE CITY.
25. SANITARY SEWER DROP MANHOLES SHALL ONLY BE USED UNDER SPECIAL CONDITIONS AS APPROVED BY THE CITY. DROPS LESS THAN 2.0' SHALL NOT BE ALLOWED.
26. ALL SANITARY SEWER MANHOLE COVERS SHALL HAVE THE WORDS "EDGEWATER, FLORIDA SANITARY SEWER" CAST INTO THEM.
27. ALL SANITARY SEWER FORCE MAINS, SHALL BE PVC AWWA C–900, OR C–905 (COLOR "GREEN") (PRESSURE FITTINGS, PRESSURE CLASS 150 OR 250 EPOXY LINED DIP. THE FORCE MAIN MINIMUM DEPTH OF COVER SHALL BE 36".
28. ALL SANITARY SEWER FORCE MAINS SHALL USE A THRUST RESTRAINT JOINT METHOD IN COMPLIANCE WITH THE DUCTILE IRON PIPE RESEARCH ASSOCIATION GUIDELINES MODIFIED TO ACCOMMODATE PVC PIPE BY FOLLOWING THE RECOMMENDED INCREASE IN RESTRAINT LENGTH CORRESPONDING TO THE INSTALLATION OF POLYETHYLENE WRAP. IN NO INSTANCE SHALL THRUST BLOCKS BE PERMITTED.

	STANDARD CONSTRUCTION DETAIL SANITARY SEWER DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_S24.DWG DETAIL REF: S–24

SANITARY SEWER DESIGN AND CONSTRUCTION NOTES (CONTD.)

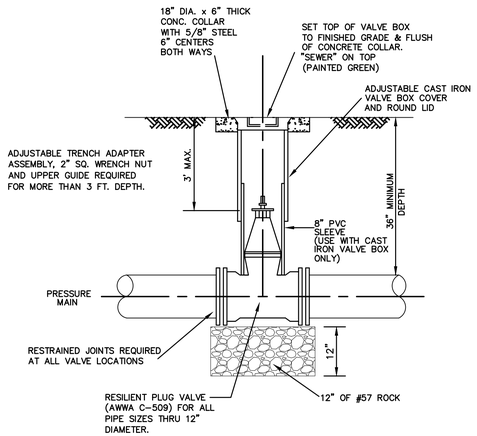
29. SANITARY SEWER MANHOLES WHICH HAVE SEWER FORCE MAINS DISCHARGING DIRECTLY INTO THEM SHALL BE FIBERGLASS OR POLY–ETHYLENE LINED. RETRO–FITTING OF MANHOLES WITH LINERS SHALL BE REQUIRED WHEN NEW CONNECTIONS SUCH AS THIS ARE MADE. FIBERGLASS SHALL BE A MINIMUM 1/2" THICKNESS UNLESS APPROVED OTHERWISE BY THE CITY. OTHER TYPES OF LINING METHODS AND MATERIALS MAY BE CONSIDERED ON A CASE BY CASE BASIS. UNDER SPECIAL CIRCUMSTANCES WHERE HYDROGEN SULFIDE IS A MAJOR CONCERN MANHOLES UPSTREAM AND/OR DOWNSTREAM OF THE FORCE MAIN TIE–IN OR WET WELL MAY ALSO BE REQUIRED TO HAVE LININGS INSTALLED.
30. THE CITY RESERVES THE RIGHT TO REQUIRE THE DEVELOPER TO PERFORM VACUUM TESTING OF ALL SANITARY MANHOLES, AIR TEST SEWER MAINS, AND REQUIRES THAT ALL SANITARY SEWER MAIN LINES BE TELEVISED PRIOR TO FINAL ACCEPTANCE. LATERALS SHALL BE TELEVISED UPON DEMAND BY THE CITY PRIOR TO FINAL ACCEPTANCE WHEN IT IS SUSPECTED THAT A PROBLEM EXISTS.
31. ALL SEWER MAINS, PRIOR TO ACCEPTANCE BY THE CITY AND PRIOR TO ANY FINAL PAVING OPERATIONS, SHALL BE CLEANED FLUSHED AND TELEVISED USING A "PAN AND TILT" CAMERA BY A CITY APPROVED CONTRACTOR. THE VIDEO SHALL BE NON–STOP WITH AUDIO DESCRIBING WHAT IS BEING REVIEWED. WRITTEN VIDEO LOGS DESCRIBING THE CONDITION OF THE LINES SHALL ACCOMPANY THE TAPE SUBMISSION TO THE CITY PRIOR TO COMMENCING ANY INSTALLATION OF ASPHALT OR CONCRETE PAVEMENT. RE–TAPING MAY BE REQUIRED BY THE CITY IF ADDITIONAL CLEARING OR CORRECTIVE ACTIONS ARE NECESSARY.
32. ALL MANHOLES WITH FORCE MAIN CONNECTIONS SHALL BE OUTFITTED WITH EGRU LINERS OR OTHER TYPES OF LINERS APPROVED BY THE VITY. IN ADDITION, THE CITY MAY REQUIRE LINES TO BE INSTALLED IN AREAS WHERE THE ENVIRONMENTAL SERVICES DEPARTMENT BELIEVES THE NEED IS JUSTIFIED.
33. ALL SEWER LINES WHICH ARE CONSTRUCTED OUTSIDE OF PUBLIC RIGHTS–OF–WAY WITHIN SIDE YARDS, BACKYARDS, AND OTHER POORLY ACCESSIBLE AREAS SHALL BE CONSTRUCTED OF C–900 PVC. ABSOLUTELY NO USE OF PLASTIC STYRENE FITTINGS SHALL BE ALLOWED.
34. SEWER LATERAL LOCATIONS SHALL BE MARKED ALONG THE OUTSIDE OF THE CURB WITH A SAW CUT "V", OR BY A METAL TAB SET INTO THE PAVEMENT.
35. CONTEC A–2000 PVC PIPE SHALL NOT BE ALLOWED FOR USE.
36. EZ–WRAP PLASTIC, AS MANUFACTURED BY PRESS SEAL GASKET CORPORATION, SHALL BE USED ON THE OUTSIDE OF ALL MANHOLE AND WETWELL JOINTS. APPLY ONE LAYER OF 9" WRAP CENTERED ON EACH JOINT. A CITY INSPECTOR SHALL PERSONALLY INSPECT ALL JOINT SEALS PRIOR TO BACKFILLING OPERATIONS.
37. ALL PROPOSED SEWER FORCE MAINS SHALL BE FLUSHED, PRESSURE TESTED AND CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIROMENTAL PROTECTION REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE WITH CITY PERSONNEL AT THE ENVIRONMENTAL SERVICES DEPARTMENT (AS APPROPRIATE) AT LEAST 24 HOURS PRIOR TO BEGINNING A FULL–DIAMETER FLUSH OF THE MAINS PRIOR TO THE COMMENCEMENT OF PRESSURE TESTING (SUBJECT TO AVAILABILITY).
38. THE CITY MAY REQUIRE THE CONTRACTOR TO PIG FORCE MAINS IN EXCESS OF 6" IN DIAMETER AND PRIMARY TRANSMISSION MAINS LOCATED ON COLLECTOR AND ARTERIAL ROADWAYS. LAUNCHING AND EXTRACTION POINTS SHALL BE DETERMINED BY THE CONTRACTOR.

	STANDARD CONSTRUCTION DETAIL SANITARY SEWER DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_S25.DWG DETAIL REF: S–25

SANITARY SEWER DESIGN AND CONSTRUCTION NOTES (CONTD.)

39. ANY TIE INTO AN EXISTING MANHOLE WILL BE COORDINATED WITH THE CITY, AND ALL CONFINED SPACE HAZARDS AND PROCEDURES WILL BE FOLLOWED.
40. ANY TIE INTO AN EXISTING SYSTEM WILL BE SWEPT IN THE DIRECTION OF FLOW.
41. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL OSHA, DOT, OR ANY OTHER RULES & REGULATIONS THAT MAY APPLY.
42. AS A GENERAL RULE, THE NUMBER OF JOINTS SHALL BE LIMITED WHENEVER POSSIBLE. IN SPECIAL CASES WHERE A POINT REPAIR TO AN 8"TO 12" PVC SEWER MAIN IS REQUIRED, THE PROPER RIGID WRAP AROUND SLEEVE SUCH AS A JCM–210 OVERSIZED DUCTILE IRON COUPLING OR AN APPROVED EQUAL MAY BE ALLOWED BY SPECIAL APPROVAL BY THE CITY.
43. ALL IN–LINE SANITARY SEWER FORCE MAIN VALVES SHALL BE RESILIENT SEAT (AWWA C–509) VALVES FEATURING A LINED DUCTILE IRON BODY.
44. ALL TAPPING OF MAINS AND CORING OF MANHOLES SHALL BE COORDINATED WITH THE CITY BY AN APPROVED CONTRACTOR AND BILLED IN ACCORDANCE WITH THE ADOPTED FEE RESOLUTION. SCHEDULING OF THESE CONNECTIONS SHALL REQUIRE A MINIMUM 48 HOUR NOTIFICATION (MEASURED ON NORMAL WORK DAYS) DIRECTED TO THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE THE WORK DIRECTLY WITH THE ENVIRONMENTAL SERVICE DEPARTMENT. SUBSEQUENTLY, THE CONNECTION SHALL BE SCHEDULED TO COMMENCE ON THE APPROPRIATE DAY AND TIME ESTABLISHED BY CITY.
45. WITH RESPECT TO TIE–IN CONNECTIONS AND CORING OPERATIONS, THE CITY RESERVES THE RIGHT TO REQUIRE CONNECTIONS TO BE PERFORMED DURING PERIODS OF LOW FLOW (MIDNIGHT TO 6:00 A.M.) IN ORDER TO MINIMIZE SERVICE DISRUPTION TO EXISTING CUSTOMERS.
46. ALL WORK PERFORMED UPON SANITARY SEWER FACILITIES OWNED OR PROPOSED TO BE OWNED BY THE CITY SHALL BE CONSTRUCTED BY A LICENSED UNDERGROUND UTILITY CONTRACTOR, OR LICENSED GENERAL CONTRACTOR, WHO IS LICENSED IN THE STATE OF FLORIDA AND REGISTERED WITH THE CITY.
47. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT SHALL BE THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THAT THE SYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AS–BUILTS ARE PROVIDED TO THE CITY PRIOR TO ANY USE OF THE SYSTEM.
48. FOR CONSTRUCTION PURPOSES, THE PLANS SHALL DIMENSION THE LOCATION, OF ALL FORCE MAINS MEASURED FROM THE BACK OF CURB (OR EDGE OF PAVEMENT, IF NO CURBING EXISTS.)
49. ALL HDPE PIPE INSTALLED FOR SEWAGE FORCE MAINS SHALL BE SDR 11 UNLESS SPECIFICALLY NOTED OTHERWISE. THE HDPE PIPE SHALL BE SIZED TO MATCH THE EXTERNAL DIAMETER OF THE PVC OR DIP TO WHICH IT IS ATTACHED.
50. LANDSCAPE PLANS SHALL CLEARLY DEPICT THE DESIGN LOCATION OF PLANTINGS RELATIVE TO THE LOCATION OF PUBLIC UTILITIES AND STORMWATER INFRASTRUCTURE IN ORDER TO EVALUATE POTENTIAL CONFLICTS.
51. ALL UTILITY INSTALLATIONS ARE SUBJECT TO REVIEW AND APPEAL BY THE CITY OF EDGEWATER. ALL STRUCTURES AND EQUIPMENT SUPPLIED AND/ OR INSTALLED SHALL MEET QUALITY AND PERFORMANCE STANDARDS PRIOR TO ACCEPTANCE. SUBSTANDARD INSTALLATIONS MAY BE REJECTED, REMEMBER MEASURES ARE SUBJECT TO CITY APPROVAL.

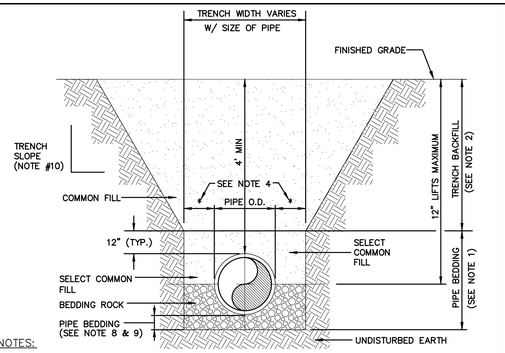
	STANDARD CONSTRUCTION DETAIL SANITARY SEWER DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_S26.DWG DETAIL REF: S–26



NOTE:

1. ROD OR BOLT TO TEE WHERE APPLICABLE.

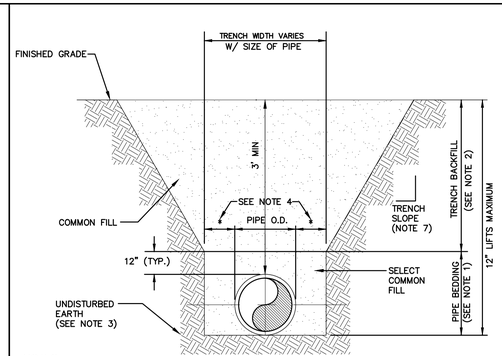
	STANDARD CONSTRUCTION DETAIL SANITARY SEWER FORCE MAIN VALVE & VALVE BOX	FILE NAME: EW_S27.DWG DETAIL REF: S–27



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T–180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T–180. (98% DENSITY REQUIRED UNDER PAVEMENT, DRIVEWAYS AND STRUCTURES.)
3. USE TYPE "A" BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CITY.
4. (•): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF FLOW.
7. REFER TO SECTION 32.5 OF THE MANUAL FOR SHEETING AND BRACING IN EXCAVATIONS.
8. GRAVITY SEWERS SHALL UTILIZE TYPE "A" BEDDING, WHERE UNSUITABLE MATERIAL EXISTS. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15", AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
9. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. CITY SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
10. REFER TO OSHA REQMTS. FOR SLOPING, SHEETING AND BRACING IN EXCAVATIONS.

	STANDARD CONSTRUCTION DETAIL TYPE "A" BEDDING AND TRENCH DETAIL (SPECIAL GRAVITY SEWER INSTALLATIONS)	FILE NAME: EW_S28.DWG DETAIL REF: S–28



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T–180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T–180, (98% DENSITY REQUIRED UNDER DRIVEWAYS, PAVEMENT AND STRUCTURES).
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE "A" BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY THE CITY.
4. (•): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF FLOW.
7. REFER TO OSHA REQUIREMENTS FOR SLOPING, SHEETING AND BRACING IN EXCAVATIONS.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN RIGHT–OF–WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT–OF–WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

	STANDARD CONSTRUCTION DETAIL TYPE "B" BEDDING AND TRENCH DETAIL (TYPICAL FOR WATER, SEWER, FORCE MAIN, STORM DRAIN AND RECLAIMED WATER MAIN INSTALLATIONS)	FILE NAME: EW_S29.DWG DETAIL REF: S–29

Project Name: SPACE COAST COMMERCE PARK @ PARKTOWNE
CITY OF EDGEWATER, FL

Prepared For: ONICX MANAGEMENT GROUP, LLC

OXBOW
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Revision No.	Date	Description

Seal

MICHAEL J. SANDERS, JR. P.E.
License Number 70518

Project No.:	1001-002
Issued:	AUG 21, 2023
Drawn By:	ECC
Checked By:	MJS
Scale:	1" = N/A

Sheet Title: MASTER DEVELOPMENT COE SEWER DETAILS

Sheet Number: C-09

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Prepared For
ONICX MANAGEMENT GROUP, LLC

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License Number 76918

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Sheet Title
MASTER DEVELOPMENT COE WATER DETAILS

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Sheet: EW_W25-Model

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