

GENERAL NOTES

- UNLESS OTHERWISE SPECIFIED, ALL WORK SHALL BE PERFORMED CONSISTENT WITH THE FOLLOWING SPECIFICATIONS:
 - CITY OF APOPKA, FLORIDA
 - ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
 - FLORIDA DEPARTMENT OF TRANSPORTATION
 - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 - NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
- THE GEOTECHNICAL REPORT SHALL BE REVIEWED BY THE CONTRACTOR, AND THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE, INCLUDING ALL SURFACE AND SUBSURFACE CONDITIONS, THE WORK REQUIRED, AND ALL OTHER CONDITIONS THAT MAY AFFECT THE SUCCESSFUL COMPLETION OF THE JOB PRIOR TO COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND PERMIT CONDITIONS BEARING ON THE CONDUCT OF THE WORK, AS DRAWN AND SPECIFIED. IF THE CONTRACTOR OBSERVES THAT THE DRAWINGS AND SPECIFICATIONS ARE AT VARIANCE THEREWITH, HE SHALL PROMPTLY NOTIFY THE ENGINEER, IN WRITING, AND ANY NECESSARY CHANGES SHALL BE ADJUSTED, AS PROVIDED IN THE AGREEMENT FOR CHANGES IN THE WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER AND THE ENGINEER FOR THE ACTS AND OMISSIONS OF CONTRACTOR'S EMPLOYEES AND ALL HIS SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES AND OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL NECESSARY ARRANGEMENTS WITH GOVERNMENTAL DEPARTMENTS, PUBLIC UTILITIES, PUBLIC CARRIERS, SERVICE COMPANIES, AND CORPORATIONS OWNING OR CONTROLLING ROADWAYS, RAILWAYS, WATER, SEWER, GAS, ELECTRICAL, TELEPHONE, AND TELEGRAPH FACILITIES SUCH AS PAVEMENTS, TRACKS, PIPING, WIRES, CABLES, CONDUITS, POLES, GUYS, OR OTHER SIMILAR FACILITIES, INCLUDING INCIDENTAL STRUCTURES CONNECTED THEREWITH THAT ARE ENCOUNTERED IN THE WORK IN ORDER THAT SUCH ITEMS MAY BE PROPERLY SUPPORTED, PROTECTED OR LOCATED.
- UNLESS OTHERWISE SPECIFIED IN THE GENERAL CONDITIONS, ALL CONSTRUCTION IS TO BE GOVERNED BY THE PLANS, APPLICABLE PERMITS, AND SPECIFICATIONS HEREIN, AND ALL APPLICABLE FEDERAL, STATE AND LOCAL BUILDING AND SAFETY CODES, LAWS AND ORDINANCES.
- PRIOR TO PERFORMING ANY WORK WITHIN ANY PUBLIC OR UTILITY RIGHT-OF-WAY, CONTRACTOR SHALL OBTAIN AUTHORIZATION AND PERMIT FROM JURISDICTION RESPONSIBLE FOR SUCH RIGHT-OF-WAY. IN ADDITION, CONTRACTOR SHALL OBTAIN GAS I.D. NUMBER FROM LOCAL GAS COMPANY AND NOTIFY SUNSHINE STATE ONE-CALL UTILITY NOTIFICATION CENTER AT 1-800-432-4770 AT LEAST 48 HOURS PRIOR TO START OF WORK.
- PRIOR TO PERFORMING ANY WORK WITHIN ANY PUBLIC RIGHT-OF-WAY, CONTRACTOR SHALL DEVELOP AND IMPLEMENT A TRAFFIC CONTROL PLAN CONSISTENT WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, AND SUBMIT TO THE COUNTY ENGINEER FOR APPROVAL.
- IN THE EVENT THE CONTRACTOR DISCOVERS ANY ERRORS OR OMISSIONS IN THE PLANS HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND/OR OWNER OR OWNER'S AGENT.
- CONTRACTOR SHALL PRESERVE AND PROTECT ALL PERMANENT REFERENCE MONUMENTS, PERMANENT CONTROL POINTS, PERMANENT BENCH MARKS AND PROPERTY CORNERS. IN THE EVENT THE MONUMENTS, POINTS OR MARKERS ARE DISTURBED THE CONTRACTOR SHALL EMPLOY A FLORIDA REGISTERED LAND SURVEYOR TO RESET OR REPLACE THEM.
- THE OWNER, OWNER'S AGENT AND INSPECTORS OF APPLICABLE GOVERNMENT JURISDICTIONS, SHALL AT ALL TIMES HAVE ACCESS TO THE WORK WHEREVER AND WHENEVER IT IS IN PREPARATION OR PROGRESS; AND THE CONTRACTOR SHALL PROVIDE PROPER FACILITIES FOR SUCH ACCESS AND FOR THE INSPECTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO TAKE ALL REASONABLE AND PRUDENT PRECAUTIONS TO INSURE THAT ALL COMPLETED WORK, MATERIALS AND EQUIPMENT STORED ON SITE ARE SAFE AND SECURED FROM UNAUTHORIZED ACCESS, USE, THEFT, OR VANDALISM. SUCH PRECAUTIONS MAY INCLUDE INSTALLATION OF SIGNS, FENCES, OR POSTING OF SECURITY GUARDS.
- CONTRACTOR SHALL, AT ALL TIMES, UTILIZE ALL NORMALLY ACCEPTED AND REASONABLY EXPECTED SAFETY PRACTICES AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND GUIDELINES PERTAINING TO SAFE UTILIZATION OF EQUIPMENT OR MATERIALS AS PUBLISHED BY THEIR MANUFACTURERS'S.
- PRIOR TO INITIATING ANY EXCAVATION (INCLUDING BUT NOT LIMITED TO TUNNELS, DITCHES, STORM WATER PONDS, CANALS, ARTIFICIAL LAKES) CONTRACTOR SHALL INSTALL FENCES AND/OR TAKE ALL OTHER REASONABLE AND PRUDENT STEPS TO INSURE THAT ACCESS TO EXCAVATION BY UNAUTHORIZED PERSONNEL IS PREVENTED.
- CONTRACTOR SHALL COMPLY IN EVERY RESPECT WITH THE PROVISIONS OF THE FLORIDA STATE TRENCH SAFETY ACT.
- THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS FOR THE SAFETY OF, AND SHALL PROVIDE ALL REASONABLE PROTECTION TO PREVENT DAMAGE, INJURY OR LOSS TO:
 - ALL EMPLOYEES ON THE WORK AND ALL OTHER PERSONS WHO MAY BE AFFECTED THEREBY;
 - ALL THE WORK AND ALL MATERIALS AND EQUIPMENT TO BE INCORPORATED THEREIN, WHETHER IN STORAGE ON OR OFF THE SITE, UNDER THE CARE, CUSTODY OR CONTROL OF THE CONTRACTOR OR ANY OF ITS SUBCONTRACTORS;
 - OTHER PROPERTY AT THE SITE OR ADJACENT THERETO, INCLUDING TREES, SHRUBS, LAWNS, WALKS, PAVEMENTS, ROADWAY, STRUCTURES AND UTILITIES NOT DESIGNATED FOR DEMOLITION IN THE COURSE OF CONSTRUCTION.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY CODES AND WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC, QUASI PUBLIC OR OTHER AUTHORITY HAVING JURISDICTION FOR THE SAFETY OF PERSONS OR PROPERTY OR FOR THEIR PROTECTION AGAINST DAMAGE, INJURY OR LOSS, OR DESIGNED TO PROTECT THE ENVIRONMENT. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY EXISTING CONDITIONS AND PROGRESS OF THE WORK, ALL REASONABLE SAFEGUARDS FOR SAFETY AND PROTECTION, INCLUDING POSTING DANGER SIGNS AND OTHER WARNINGS AGAINST HAZARDS, PROMULGATING SAFETY REGULATIONS AND NOTIFYING OWNERS AND USERS OF ADJACENT UTILITIES OF THE EXISTENCE OF HAZARDS AND OF THE SAFETY REGULATIONS.
- ALL DAMAGE OR LOSS TO ANY PROPERTY CAUSED IN WHOLE OR IN PART BY THE CONTRACTOR, A SUBCONTRACTOR, OR BY ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE, SHALL BE REMEDIED BY THE CONTRACTOR, EXCEPT DAMAGE OR LOSS PROPERLY ATTRIBUTABLE SOLELY TO THE ACTS OR OMISSIONS OF THE OWNER, OR THE ENGINEER OR ANYONE EMPLOYED BY THEM, OR FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE, AND NOT PROPERLY ATTRIBUTABLE IN WHOLE OR IN PART, TO THE FAULT OR NEGLIGENCE OF THE CONTRACTOR.
- THOSE PARTS OF WORK IN PLACE WHICH ARE SUBJECT TO DAMAGE BECAUSE OF OPERATIONS BEING CARRIED ON ADJACENT THERETO SHALL BE COVERED, BOARDED UP OR SUBSTANTIALLY ENCLOSED WITH ADEQUATE PROTECTION BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.
- UNTIL FINAL ACCEPTANCE OF THE WORK BY OWNER, THE CONTRACTOR SHALL HAVE THE CHARGE AND CARE OF AND SHALL BEAR THE RISK OF INJURY OR DAMAGE, LOSS OR EXPENSE TO ANY PART THEREOF, OR TO ANY MATERIALS STORED ON SITE, BY THE ACTION OF THE ELEMENTS OR FROM ANY OTHER CAUSE WHETHER ARISING FROM THE EXECUTION OR NON-EXECUTION OF THE WORK. THE CONTRACTOR SHALL REBUILD, REPAIR, RESTORE AND MAKE GOOD ALL INJURIES OR DAMAGES TO ANY PORTION OF THE WORK OCCASIONED BY ANY OF THE ABOVE CAUSES BEFORE FINAL ACCEPTANCE AND SHALL BEAR THE EXPENSES THEREOF.
- ADEQUATE TRAFFIC CONTROL, BARRICADES AND FLAGMAN SERVICES SHALL BE FURNISHED AND MAINTAINED BY THE CONTRACTOR AT ALL POINTS WHERE CONVEYING EQUIPMENT ENGAGED ON THE WORK REGULARLY ENTERS ONTO OR CROSSES TRAFFIC-CARRYING ROADS.
- THE CONTRACTOR SHALL COMPLY IN EVERY RESPECT WITH THE FEDERAL OCCUPATIONAL HEALTH AND SAFETY ACT OF 1970 AND ALL RULES AND REGULATIONS NOW OR HEREAFTER IN EFFECT UNDER SAID ACT, AND THE CONTRACTOR FURTHER AGREES TO COMPLY WITH ANY AND ALL APPLICABLE STATE LAWS AND REGULATIONS PERTAINING TO JOB SAFETY AND HEALTH.
- CONTRACTOR AND ITS SUBCONTRACTORS SHALL USE, HANDLE, TRANSPORT, AND DISPOSE OF ALL MATERIALS (HAZARDOUS OR OTHERWISE) IN COMPLIANCE WITH ALL PRESENT FEDERAL, STATE AND LOCAL ENVIRONMENTAL, HEALTH OR SAFETY LAW, INCLUDING, BUT NOT LIMITED TO, ALL SUCH STATUTES, REGULATIONS, RULES, ORDINANCES, CODES, AND RULES OF COMMON LAW.

- CONTRACTOR FURTHER AGREES THAT CONTRACTOR AND ITS SUBCONTRACTORS SHALL NOT CAUSE THE DISCHARGE, RELEASE OR DISPOSAL OF ANY HAZARDOUS MATERIAL CREATED BY ITS WORK ON OR ABOUT THE JOB SITE. IN THE EVENT OF ANY SPILL, RELEASE OR ANY OTHER REPORTABLE OCCURRENCE, CONTRACTOR SHALL NOTIFY THE APPROPRIATE GOVERNMENTAL AGENCY AND SHALL TAKE SUCH ACTION AS MAY BE NECESSARY TO MINIMIZE THE DELETERIOUS EFFECT OF SUCH SPILL ON PERSONS OR PROPERTY.
- THE CONTRACTOR SHALL PROTECT AND KEEP OWNER (INCLUDING THEIR AGENTS AND EMPLOYEES) FREE AND HARMLESS FROM ANY AND ALL LIABILITY, PUBLIC OR PRIVATE, PENALTIES, CONTRACTUAL OR OTHERWISE, LOSSES, DAMAGES, COSTS, ATTORNEY'S FEES, EXPENSES, CAUSES OF ACTION, CLAIMS OR JUDGMENTS RESULTING FROM THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AS AMENDED OR ANY RULE OR REGULATION PROMULGATED THEREUNDER OR OF ANY STATE LAWS OR REGULATIONS PERTAINING TO JOB SAFETY AND HEALTH ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF WORK OR WORK TO BE PERFORMED UNDER THIS CONTRACT, AND CONTRACTOR SHALL INDEMNIFY OWNER FROM ANY SUCH CLAIMS, PENALTIES, SUITS OR ACTIONS, PUBLIC OR PRIVATE, ADMINISTRATIVE OR JUDICIAL, INCLUDING ATTORNEY'S FEES PAID OR INCURRED BY OR ON BEHALF OF OWNER, JOINTLY OR SEVERALLY, AND/OR THEIR AGENTS AND EMPLOYEES. THE CONTRACTOR FURTHER AGREES, IN THE EVENT OF A CLAIMED VIOLATION OF ANY FEDERAL OR STATE SAFETY AND HEALTH LAW OR REGULATION ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF WORK OR WORK TO BE PERFORMED UNDER THIS CONTRACT, OWNER MAY IMMEDIATELY TAKE WHATEVER ACTION IS DEEMED NECESSARY BY OWNER TO REMEDY THE CLAIMED VIOLATION, ANY AND ALL COSTS OR EXPENSES PAID OR INCURRED BY OWNER IN TAKING SUCH ACTION SHALL BE BORNE BY CONTRACTOR, AND CONTRACTOR AGREES TO PROTECT, HOLD HARMLESS AND INDEMNIFY OWNER AGAINST ANY AND ALL SUCH COSTS OR EXPENSES.
- CONTRACTOR AND ITS SUBCONTRACTORS SHALL, UPON COMPLETION OF PERFORMANCE OF ALL DUTIES UNDER THIS CONTRACT, REMOVE ALL SUPPLIES, MATERIALS, AND WASTE CONTAINING AND HAZARDOUS MATERIAL FROM THE JOB SITE. CONTRACTOR SHALL BEAR FULL FINANCIAL RESPONSIBILITY, AS BETWEEN THE PARTIES OF THIS CONTRACT, FOR THE COMPLIANCE OF CONTRACTOR AND ITS SUBCONTRACTORS WITH THE PROVISIONS OF THIS CONTRACT.
- CONTRACTOR AGREES TO INDEMNIFY, DEFEND, PROTECT AND HOLD THE OWNER HARMLESS FROM AND AGAINST ANY CLAIMS INCLUDING, WITHOUT LIMITATION, ACTUAL ATTORNEY'S FEES AND ANY COSTS OF INVESTIGATION, SOILS TESTING, GOVERNMENTAL APPROVALS, REMEDIATION AND CLEANUP ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE FAILURE OF CONTRACTOR OR ITS SUBCONTRACTORS, OR THEIR AGENTS, EMPLOYEES, OFFICERS, OR REPRESENTATIVES, TO COMPLY WITH THE TERMS OF THESE CONSTRUCTION DOCUMENTS.
- SHOULD CONTRACTOR OR ITS SUBCONTRACTORS DISCHARGE, RELEASE OR DISPOSE OF ANY HAZARDOUS MATERIAL ON OR ABOUT THE JOB SITE IN VIOLATION OF THESE CONSTRUCTION DOCUMENTS, CONTRACTOR SHALL IMMEDIATELY SO INFORM OWNER & ENGINEER IN WRITING. IN THE EVENT OF ANY SPILL, RELEASE OR ANY OTHER REPORTABLE OCCURRENCE, CONTRACTOR SHALL NOTIFY THE APPROPRIATE GOVERNMENTAL AGENCY, OWNER & ENGINEER AND SHALL TAKE SUCH ACTION AS MAY BE NECESSARY TO MINIMIZE THE DELETERIOUS EFFECT OF SUCH SPILL ON PERSONS OR PROPERTY.
- IN THE EVENT CONTRACTOR OR ITS SUBCONTRACTORS ENCOUNTER ON THE PREMISES ANY PIPELINE, UNDERGROUND STORAGE TANK OR OTHER CONTAINER, OF ANY KIND, THAT MAY CONTAIN A HAZARDOUS MATERIAL, OR ENCOUNTER MATERIAL REASONABLY BELIEVED TO BE A HAZARDOUS MATERIAL, CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO OWNER AND/OR ENGINEER IN WRITING.
- "HAZARDOUS MATERIAL" MEANS ANY SUBSTANCE: (A) THE PRESENCE OF WHICH REQUIRES INVESTIGATION OR REMEDIATION UNDER ANY PRESENT FEDERAL, STATE OR LOCAL STATUTE, REGULATION, ORDINANCE, RULE, CODE, ORDER, ACTION, POLICY OR COMMON LAW, OR (B) WHICH IS OR BECOMES DEFINED AS A "HAZARDOUS WASTE," "HAZARDOUS SUBSTANCE," POLLUTANT OR CONTAMINANT UNDER ANY PRESENT FEDERAL, STATE OR LOCAL STATUTE, REGULATION, RULE OR ORDINANCE OR AMENDMENTS THERETO INCLUDING, WITHOUT LIMITATION, THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (42 U.S.C. SECTIONS 9601 ET SEQ.) AND/OR THE RESOURCE CONSERVATION AND RECOVERY ACT (42 U.S.C. SECTIONS 6901 ET SEQ.), OR (C) WHICH IS TOXIC, EXPLOSIVE, CORROSIVE, FLAMMABLE, INFECTIOUS, RADIOACTIVE, CARCINOGENIC, MUTAGENIC, OR OTHERWISE HAZARDOUS AND IS REGULATED BY ANY GOVERNMENTAL AUTHORITY, AGENCY, DEPARTMENT, COMMISSION, BOARD, AGENCY OR INSTRUMENTALITY OF THE UNITED STATES, THE STATE IN WHICH THE PREMISES ARE LOCATED OR ANY POLITICAL SUBDIVISION THEREOF, OR (D) THE PRESENCE OF WHICH ON THE PREMISES CAUSES OR THREATENS TO CAUSE A NUISANCE UPON THE PREMISES OR TO ADJACENT PROPERTIES OR POSES OR THREATENS TO POSE A HAZARD TO THE HEALTH OR SAFETY OF PERSONS ON OR ABOUT THE PREMISES, OR (E) WHICH CONTAINS GASOLINE, DIESEL FUEL OR OTHER PETROLEUM HYDROCARBONS, OR (F) WHICH CONTAINS POLYCHLORINATED BIPHENYLS (PCBS), ASBESTOS, LEAD OR UREA FORMALDEHYDE FOAM INSULATION.
- THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES AS TO SIZE, LOCATION, AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY AND ALL CONFLICTS, DEVIATIONS OR OMISSIONS TO THESE CONSTRUCTION DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.
- IF ANY TESTING, INSPECTION OR APPROVAL REVEAL DEFECTIVE WORK, CONTRACTOR SHALL NOT BE ALLOWED TO RECEIVE ANY ASSOCIATED COSTS AND THE OWNER SHALL BE ENTITLED TO DEDUCT FROM THE CONTRACT PRICE, BY ISSUING A CHANGE ORDER, OWNER'S COSTS ARISING OUT OF THE DEFECTIVE WORK, INCLUDING COSTS OF REPEATED PROCEDURES, COMPENSATION FOR ENGINEER'S AND DESIGN ENGINEER'S SERVICES AND ALL OTHER RELATED COSTS.

HANDICAP ACCESSIBILITY NOTES:

- ALL CONSTRUCTION MUST MEET OR EXCEED ALL REQUIREMENTS AS OUTLINED IN THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE FLORIDA ACCESSIBILITY CODE, MOST RECENT EDITIONS. BOTTOM OF CURB RAMP ELEVATION (B.O. RAMP) IS RELATIVE TO EACH CURB RAMP CONDITION. ACTUAL ELEVATIONS SHALL BE BASED ON EXISTING GRADE OF CURB FLOW LINE AT THE B.O. RAMPS.
- TOP OF CURB ELEVATION ADJACENT TO B.O. RAMP = 0.50 FT. MAX. UNLESS OTHERWISE NOTED.
- ADA REQUIREMENTS SUPERSEDE SPOT GRADES AT LOT LINES. CONTRACTOR TO CUT BACK SLOPE AT 3:1 OR FLATTER AS NEEDED FOR RAMP AND SIDEWALK CONNECTION.
- REFER TO PLAN SHEETS AND SECTIONS FOR LOCATIONS AND SIDEWALK WIDTHS.
- THE DETECTABLE WARNING STRIP SHALL CONSIST OF A 24 INCH WIDE TACTILE PATTERN OF RAISED TRUNCATED DOMES (ALIGNED PATTERN). DOMES SHALL HAVE A DIAMETER OF 0.9 INCH, A HEIGHT OF 0.2 INCH, AND A CENTER TO CENTER SPACING OF 2.35 INCHES. THE RAMP DETECTABLE WARNING STRIP SHALL BE CONTRASTING IN COLOR. THE MATERIAL USED TO PROVIDE CONTRAST SHALL CONTRAST BY AT LEAST 70%.
- THE CROSS SLOPE OF RAMP SURFACES AND ADJACENT STREET GRADES SHALL BE NO MORE THAN 1:50 OR 2% MAXIMUM.
- CURB RAMPS CONSTRUCTED BY THE CONTRACTOR SHALL MEET ALL CURRENT APPLICABLE A.D.A. REQUIREMENTS AND SHALL HAVE DETECTABLE WARNING COMPLYING WITH A.D.A. REQUIREMENTS. ACCESSIBILITY ROUTES SHALL MEET ALL APPLICABLE A.D.A. REQUIREMENTS.
- CONTRACTOR TO REFER TO MUNICIPALITY DETAILS AS NEEDED.
- DRIVEWAY/ROADWAY CROSS SLOPES AT CROSSWALKS SHALL BE MAXIMUM 2% PER ADA REQUIREMENTS.
- SIDEWALK CROSS SLOPES SHALL BE MAXIMUM 2% PER ADA REQUIREMENTS.
- CURB RAMP FLARES & LANDINGS SHALL MEET ADA REQUIREMENTS.
- ACCESSIBLE ROUTE WITH RUNNING SLOPES GREATER THAN 1:20 IS A RAMP AND SHALL COMPLY WITH ADA RAMP REQUIREMENTS.
- IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO MEET ALL CURRENT ADA STANDARDS. CONTRACTOR SHALL REFER TO FDOT STANDARDS. (INDEX 304, MOST CURRENT EDITION)

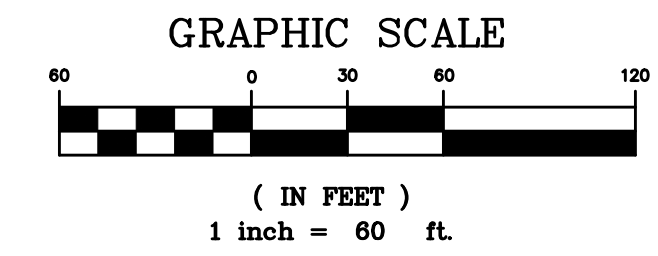
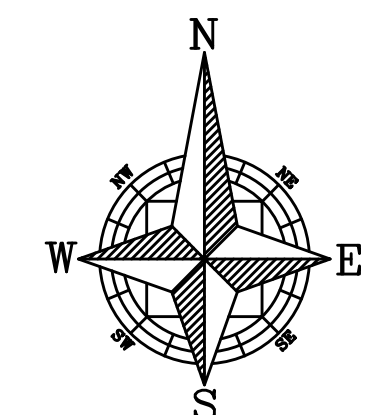
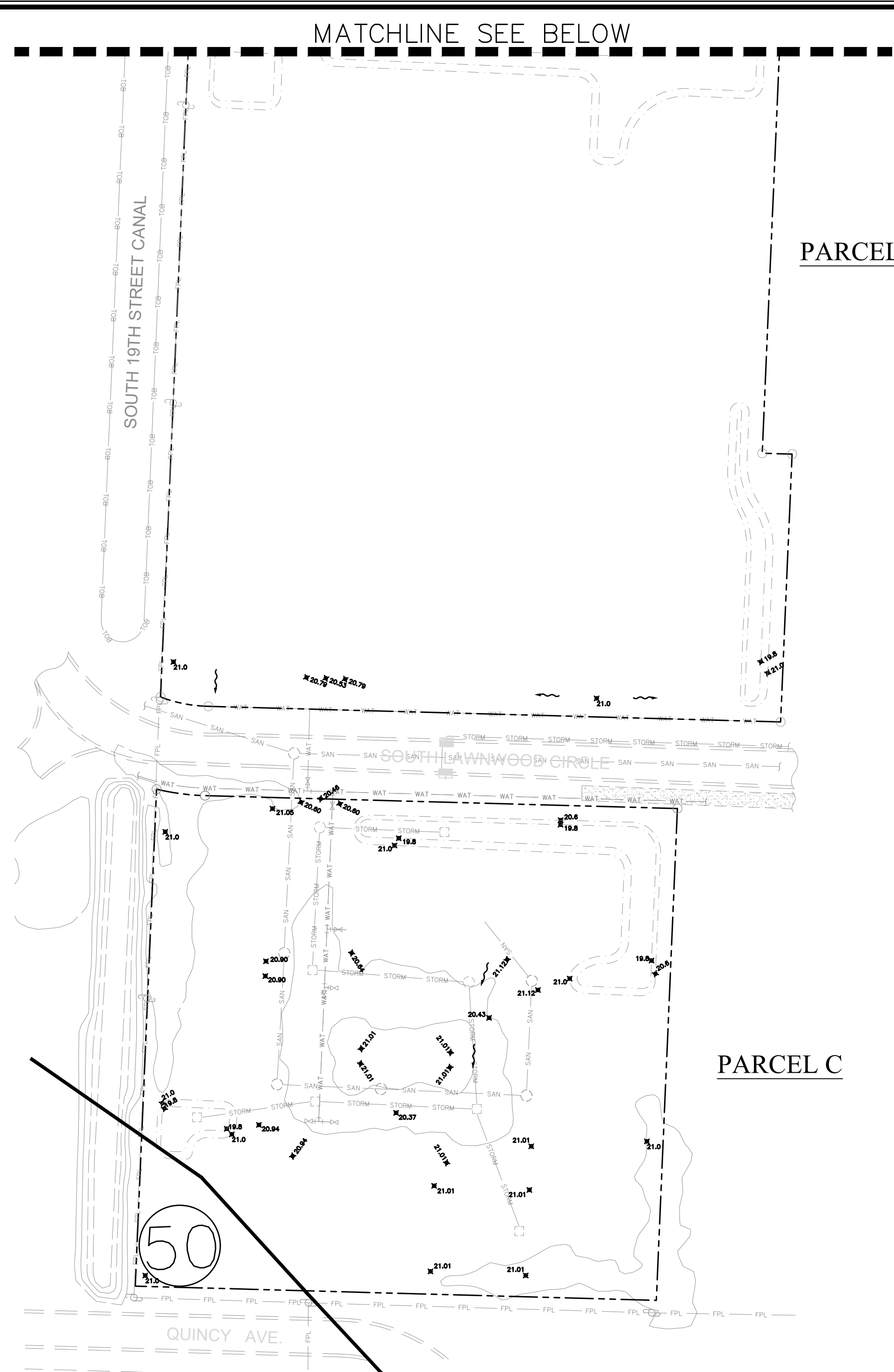
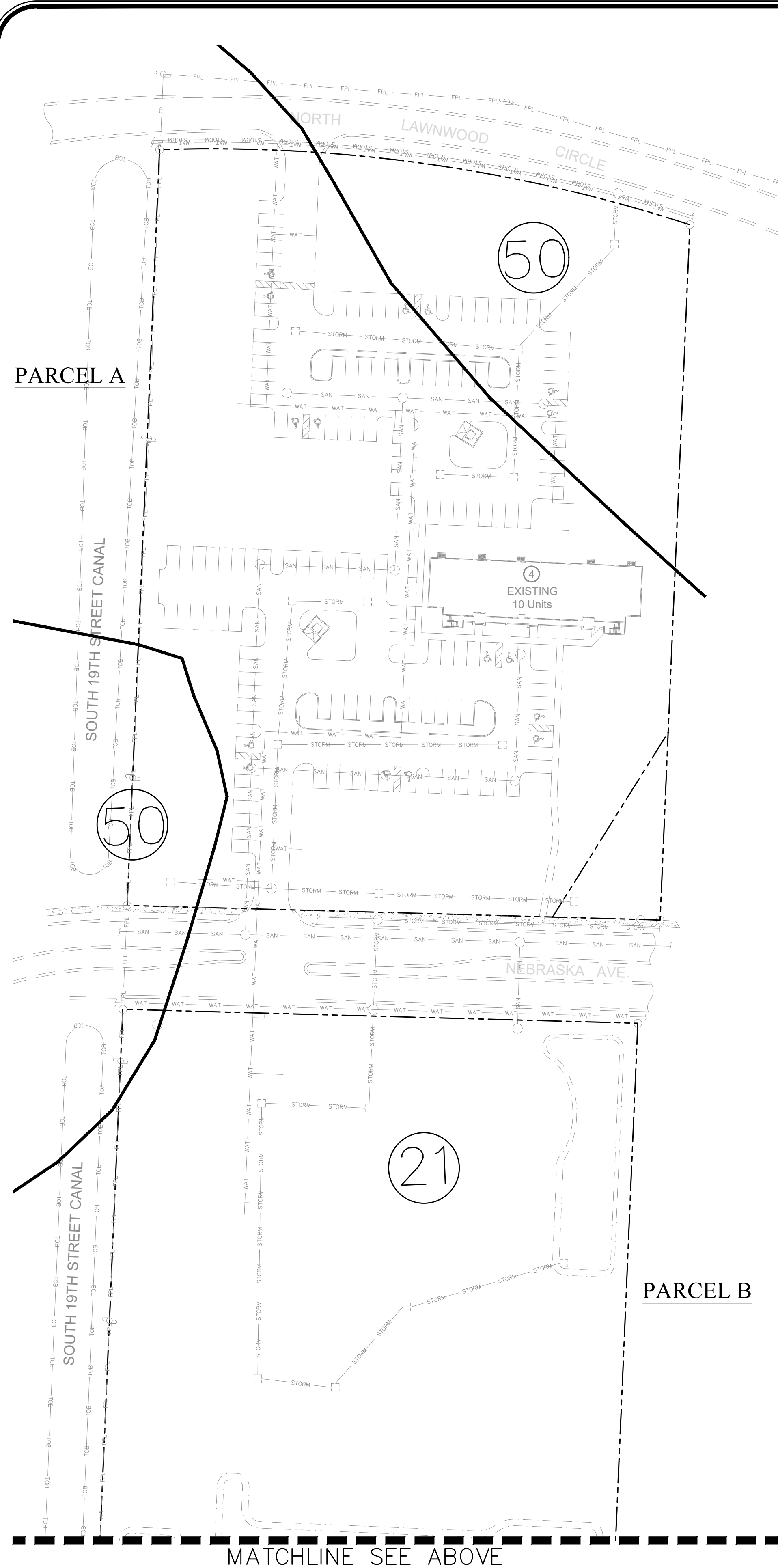
RECORD DRAWING AS-BUILT REQUIREMENTS:

AS-BUILT DRAWINGS SHALL BE PREPARED BY AND CERTIFIED (SIGNED AND SEALED) BY A REGISTERED SURVEYOR, AND SHALL BE PROVIDED TO THE ENGINEER OF RECORD UPON COMPLETION OF THE PROJECT SITE IMPROVEMENTS A MINIMUM OF 1 WEEK PRIOR TO CONTRACTORS ATTEMPT FOR FINAL CERTIFICATE OF OCCUPANCY (CO). AS-BUILT DRAWINGS SHALL REFLECT ANY CHANGES TO THE IMPROVEMENTS MADE DURING CONSTRUCTION AND MUST MEET THE MINIMUM REQUIREMENTS OF ALL REGULATORY AGENCIES HAVING JURISDICTION AS WELL AS THE CRITERIA OUTLINED BELOW. BOTH THE ORIGINAL DESIGN AND REVISED AS-BUILT DATA, AS APPLICABLE, MUST BE CLEARLY SHOWN. THE AS-BUILT DRAWINGS MUST BE CLEARLY LABELED AS AS-BUILT OR RECORD DRAWING. THE FOLLOWING INFORMATION, AT A MINIMUM, SHALL BE CERTIFIED ON THE AS-BUILT DRAWINGS:

- WATER DISTRIBUTION SYSTEM:
- LOCATION AND DIMENSIONS OF PIPES, VALVES, FITTINGS, CHANGE OF DIRECTION, AND OTHER ASSOCIATED FACILITIES.
- WASTEWATER COLLECTION/TRANSMISSION SYSTEM:
- LOCATION, DIMENSION, AND INVERT ELEVATIONS OF PIPES, MANHOLES (INCLUDING RIM ELEVATION), LIFTSTATION, FORCEMAIN, FITTINGS, CHANGE IN DIRECTION AND OTHER ASSOCIATED FACILITIES.
- PAVING AND DRAINAGE SYSTEM:
- DIMENSIONS AND ELEVATIONS OF ALL DISCHARGE STRUCTURES INCLUDING ALL WEIRS, SLOTS, GATES, PIPES, AND SKIMMERS;
 - LOCATIONS, DIMENSIONS, AND ELEVATIONS OF ALL FILTER, EXFILTRATION, OR UNDERDRAIN SYSTEMS INCLUDING CLEANOUTS, PIPES, CONNECTIONS TO CONTROL STRUCTURES, AND POINTS OF DISCHARGE TO THE RECEIVING WATERS;
 - DIMENSIONS, ELEVATIONS, CONTOURS, OR CROSS-SECTIONS OF ALL STORMWATER TREATMENT POND STORAGE AREAS SUFFICIENT TO DETERMINE STAGE-STORAGE RELATIONSHIPS OF THE STORAGE AREA, AND THE POND DEPTH AND VOLUME BELOW THE CONTROL WATER ELEVATION FOR NORMALLY WET SYSTEMS;
 - DIMENSIONS, ELEVATIONS, CONTOURS, FINAL GRADES, OR CROSS-SECTIONS OF THE DRAINAGE SYSTEM IMPROVEMENTS TO DETERMINE FLOW DIRECTIONS AND CONVEYANCE OF RUNOFF TO THE TREATMENT SYSTEM;
 - DIMENSIONS, ELEVATIONS, CONTOURS, FINAL GRADES, OR CROSS-SECTIONS OF ALL CONVEYANCE SYSTEMS UTILIZED TO CONVEY OFF-SITE RUNOFF AROUND THE SYSTEM;
 - EXISTING WATER ELEVATION OF SURFACE WATERS AND THE DATE DETERMINED;
 - ELEVATION AND LOCATION OF BENCHMARK'S FOR THE SURVEY.
- ADA FACILITIES:
- ELEVATIONS AT THE FOUR CORNERS OF ALL HANDICAP PARKING SPACES AND ADJACENT LOADING AISLES.
 - ELEVATIONS AND LOCATIONS FOR ALL ACCESSIBLE RAMPS WHICH ADEQUATELY REFLECT THE BUILT SLOPES.
 - ELEVATIONS AND LOCATIONS ALONG THE PATHS OF CONVEYANCE FOR PEDESTRIAN TRAFFIC AND ALL ADA ACCESSIBLE ROUTES EVERY 25 FT. WHICH ADEQUATELY REFLECT THE SLOPE AND CROSS SLOPE.

SCALE		N/A		PROJECT		2017-004		SHEET		C-20	
DRAWING		DESIGNED		CHECKED		DATE		DATE		DATE	
DM		RW		RW		5/5/2018					
<p>WOHLFARTH CONSULTING GROUP LLC ENGINEERS & PLANNERS 246 N. WESTMOORE DRIVE ALHAMBRA, CA 91704 (917) 750-3123 ORLANDO</p>				<p>MAYFAIR FORT PIERCE, FLORIDA</p>				<p>GENERAL NOTES</p>			
<p>BUSINESS NO. 32108</p>											
<p>NOT FOR CONSTRUCTION</p>											

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LEGEND	
	EXISTING FLOOD ZONE A
	EXISTING SOILS
	EXISTING TOPOGRAPHIC CONTOUR
	EXISTING WETLAND
	BORING/NUMBER

USDA-NRCS SOILS, ORANGE COUNTY, FLORIDA

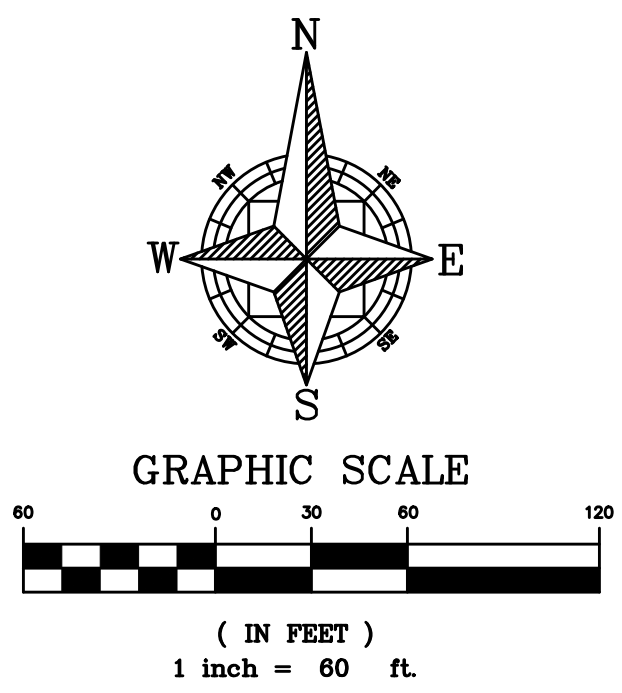
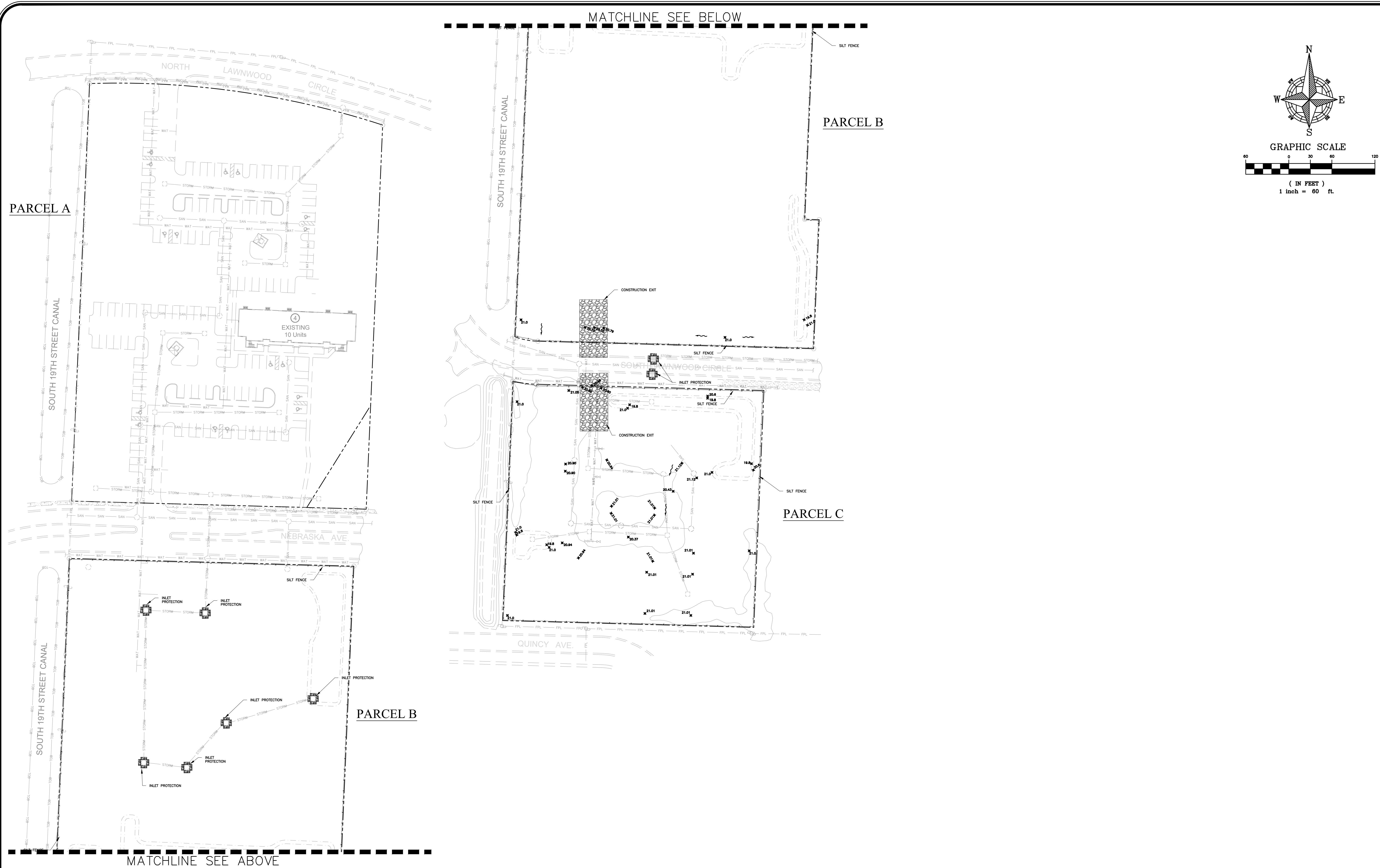
SOIL SYMBOL	NAME
21	LAWNWOOD AND MYAKKA SANDS
50	WAVELAND AND IMMOKALEE FINE SANDS

<p>WOHLFARTH CONSULTING GROUP LLC ENGINEERS & PLANNERS 246 N. WESTMOORE DRIVE ALAMOGADO, FL 32714 (407) 750-3123 ORLANDO</p>		<p>DATE</p>	<p>DESCRIPTION</p>
<p>MAYFAIR FORT PIERCE, FLORIDA</p>		<p>REV. DATE</p>	<p>DESCRIPTION</p>
<p>EXISTING CONDITIONS PLAN</p>		<p>BY</p>	<p>DESCRIPTION</p>
<p>SCALE: 1" = 60'</p>	<p>DRAWN: DM</p>	<p>PROJECT: 2017-004</p>	<p>DATE: 6/13/2018</p>
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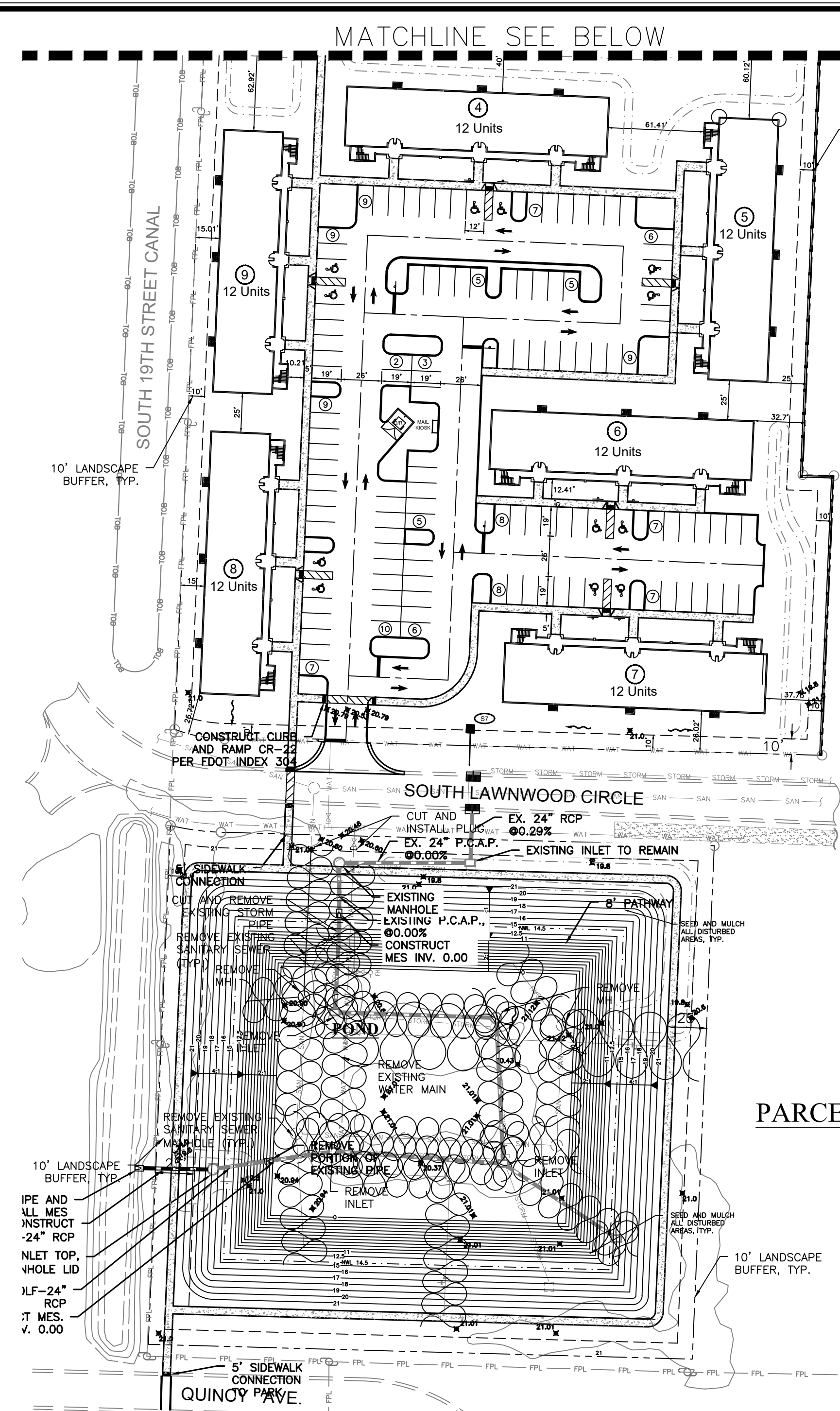
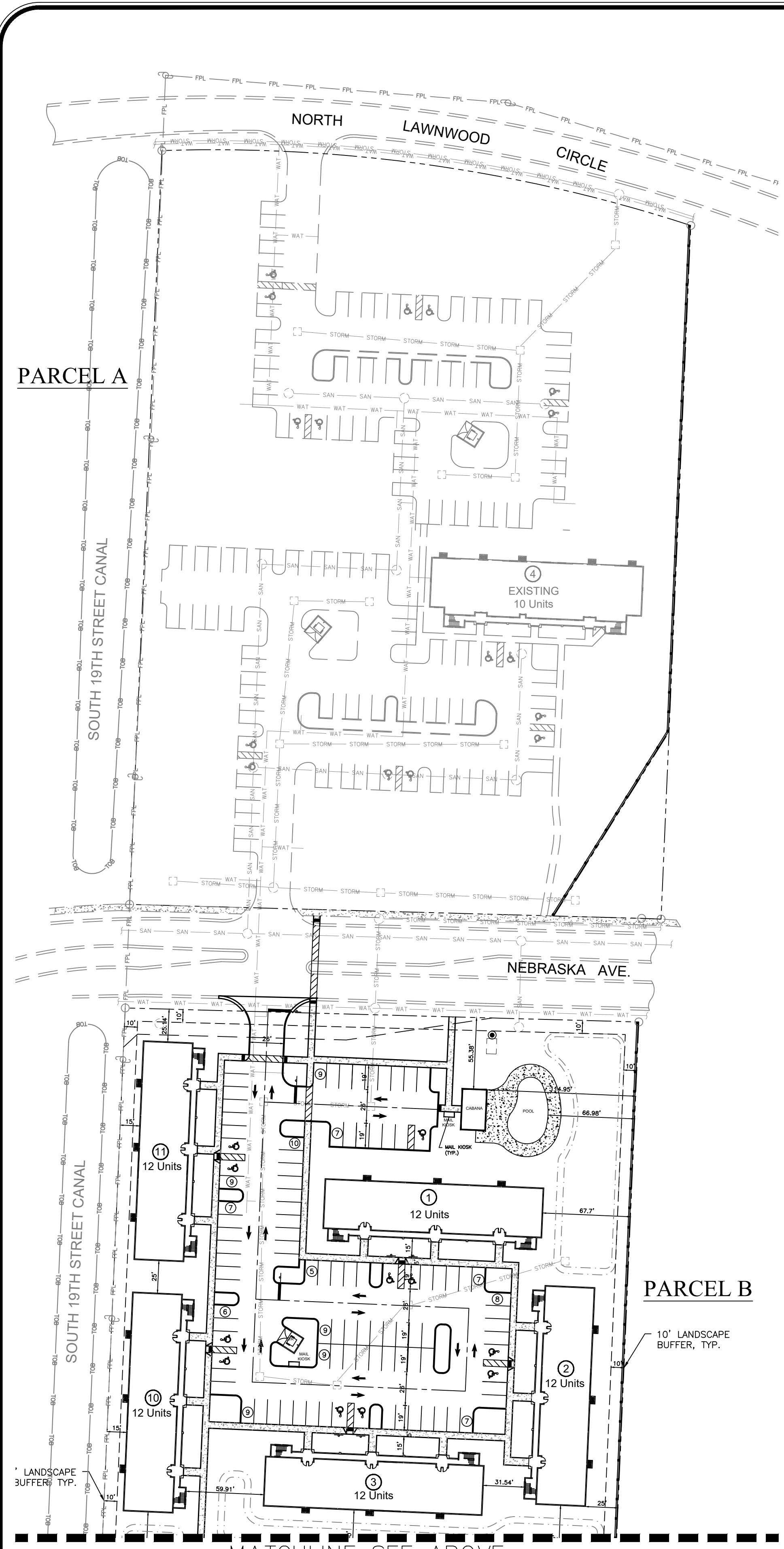
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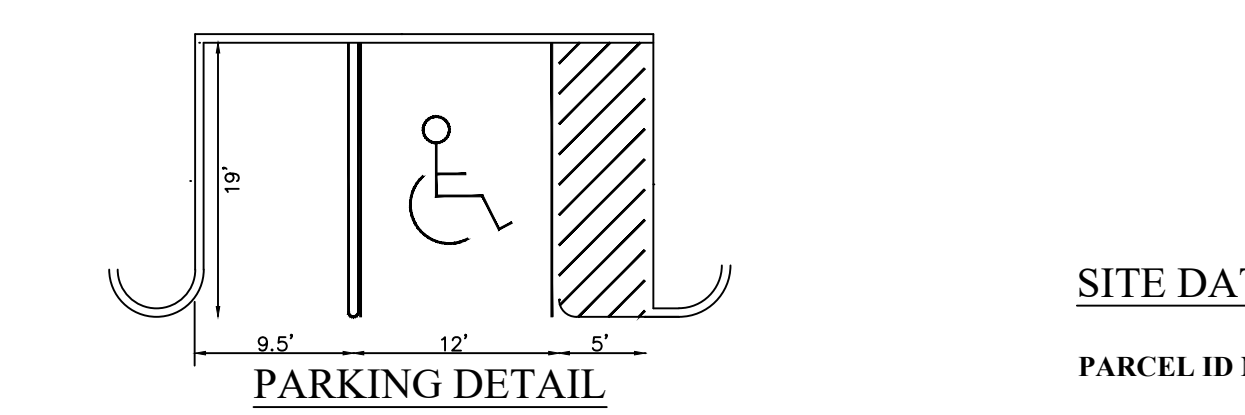
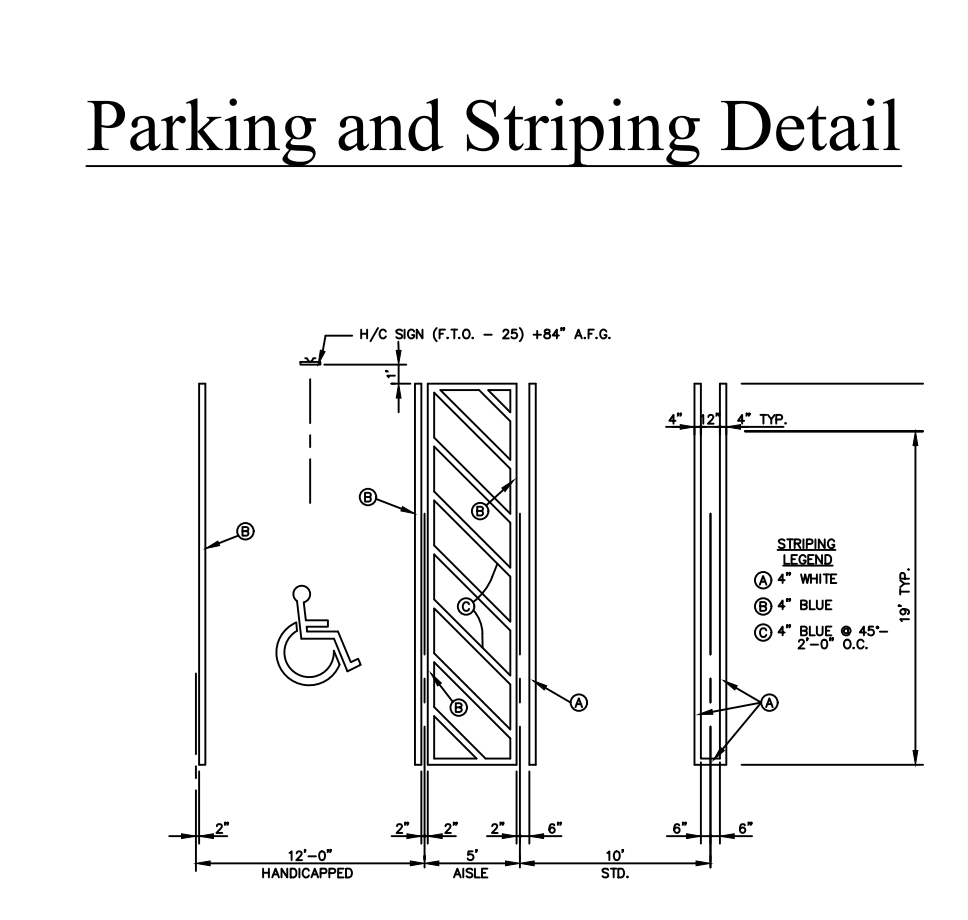
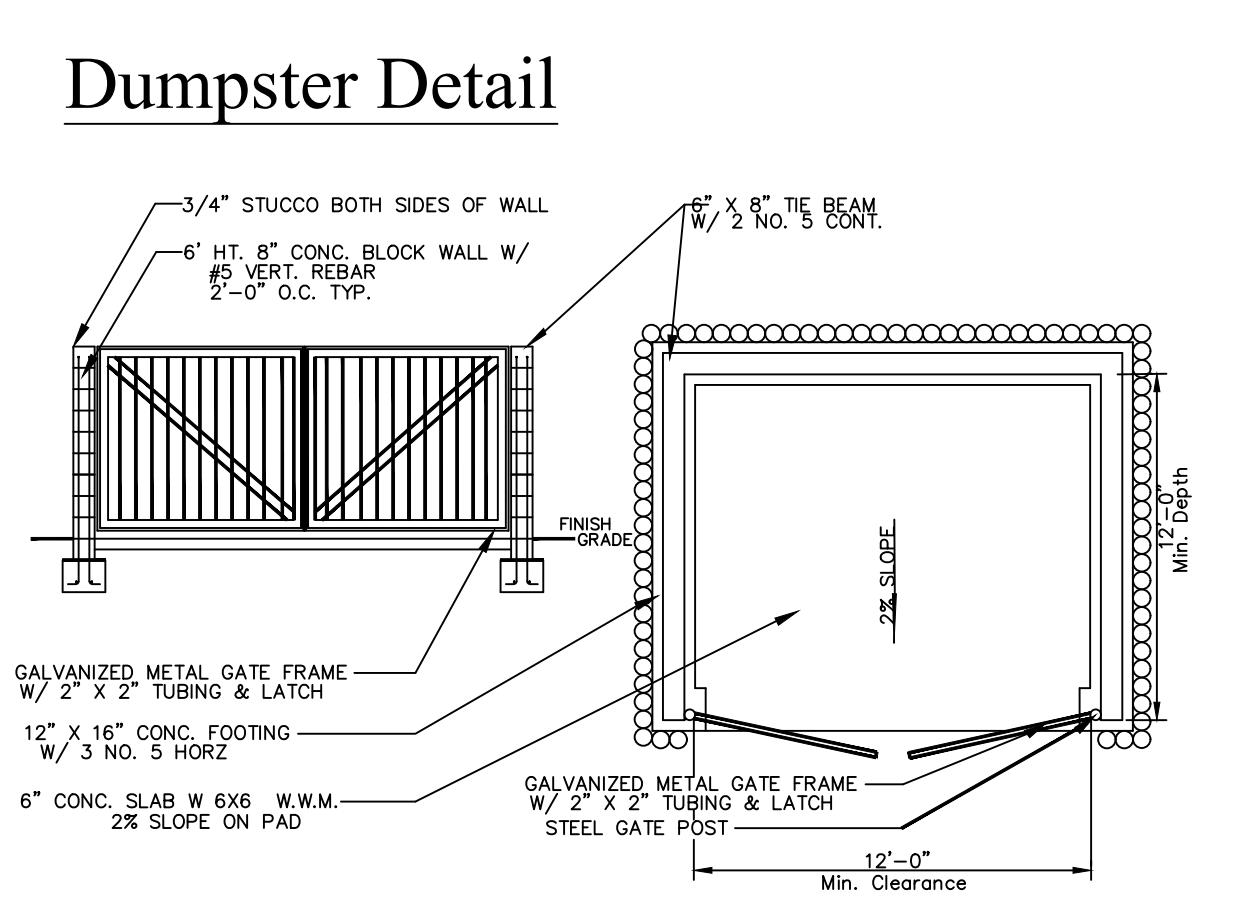
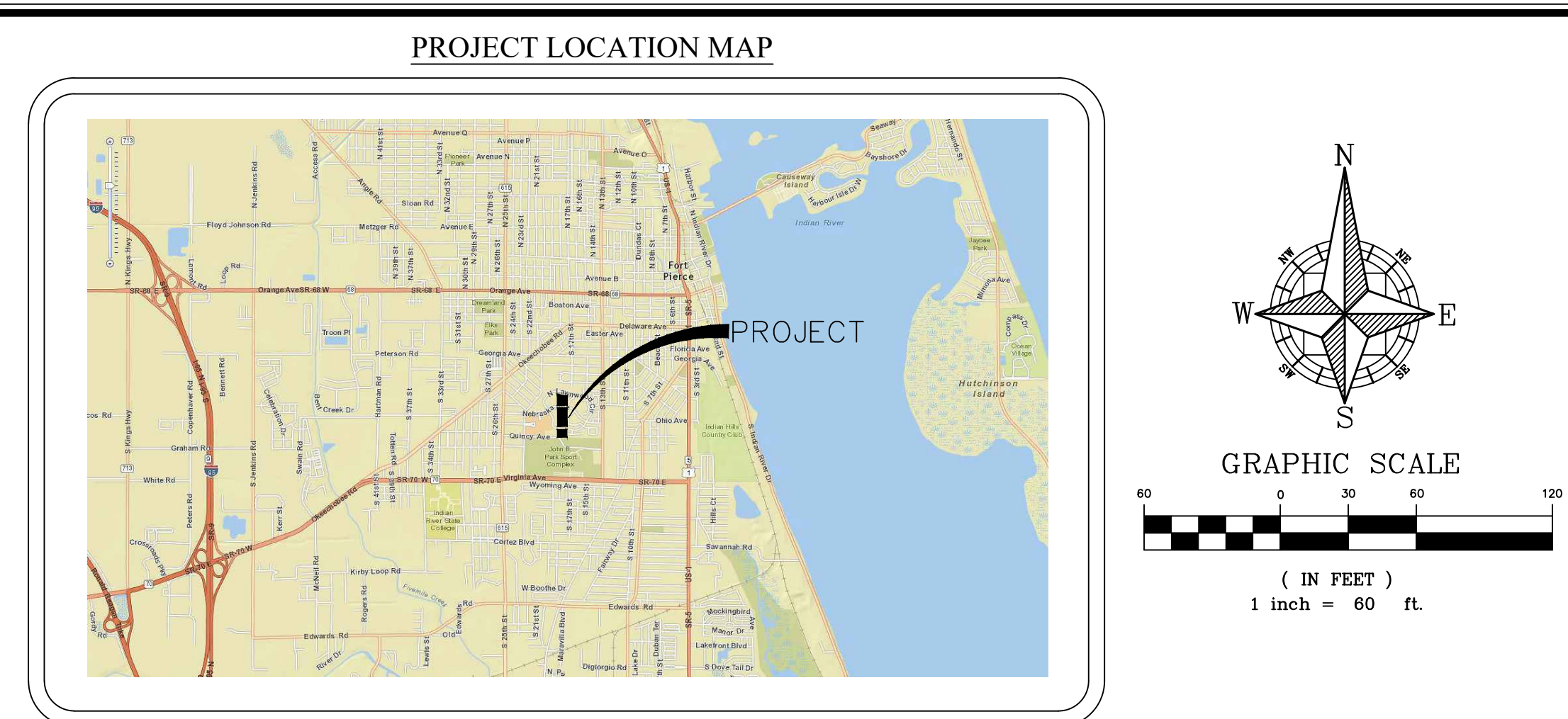


SCALE: 1" = 60'		DRAWN: DM	BY
PROJECT: 2017-004	DESIGNED: RW	CHECKED: RW	DESCRIPTION
SHEET: C-4.0	DATE: 6/13/2018	REV. DATE	
 LAND DEVELOPMENT & ENGINEERING SERVICES BUSINESS NO. 32108		WOHLFARTH CONSULTING GROUP LLC ENGINEERS & PLANNERS 246 N. WESTMORE DRIVE ALAMOGADO, CA 92014 (607) 750-3123 ORLANDO	
MAYFAIR FORT PIERCE, FLORIDA		EROSION CONTROL PLAN	
NOT FOR CONSTRUCTION			

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	North	Middle	South	Total
Gross Area	5.24	7.76	2.66	15.66
Pervious				
Water Management	0.06	0.51	0.20	0.77
Other	1.86	2.66	0.95	5.47
Total	1.92	3.17	1.15	6.24
Impervious				
Buildings	1.27	1.91	0.70	3.88
Pavement	1.68	2.21	0.71	4.60
Walkways	0.28	0.38	0.11	0.77
Pool/Cabana	0.09	0.09	0.00	0.18
Total	3.32	4.59	1.52	9.43
Open Space	1.88	2.81	1.01	5.70
Area	5.24	7.76	2.66	15.66
%	35.84%	36.25%	37.97%	36.40%



	Parcel A	Parcel B	Parcel C	Total
Gross Area	5.24	7.76	2.66	15.66
# of Buildings	7	11	0	18
1 BR	40	66	0	106
2 BR	42	66	0	108
3BR	4			4
	86	132	0	218
Required Parking	16.41	17.01	0.00	13.92
1.5 Spaces Per Unit	129	198	0	327
Provided	149	225	0	374
Parking Ratio	1.73	1.70	0.00	1.72

SITE DATA

PARCEL ID NUMBER: PARCEL A 2416-504-0199-000-1 5.35 AC
 PARCEL B 2416-504-0199-050-6 7.75 AC
 PARCEL C 2416-504-0199-200-3 2.69 AC

PARCEL AREA: 15.8 +/- AC

EXISTING LAND USE: MULTI-FAMILY
 PROPOSED LAND USE: MULTI-FAMILY

EXISTING PARCEL ZONING: PUD
 PROPOSED PARCEL ZONING: PUD
 ADJACENT EXISTING ZONING: NORTH: R4
 SOUTH: OS1
 EAST: PUD
 WEST: C-1

FEMA FIRM FLOOD ZONE: #12111C0187J
 X

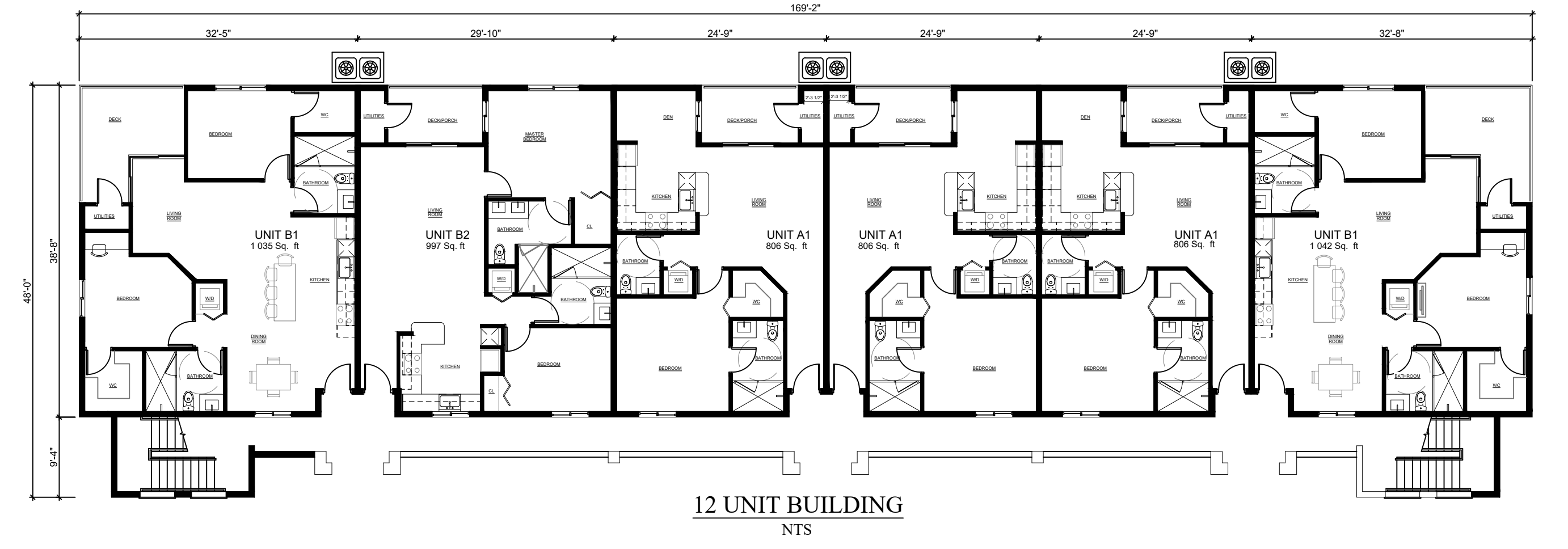
BUILDING SETBACKS: REQUIRED 15' PROVIDED

REAR: 15'

SIDE:

MAXIMUM BUILDING HEIGHT: 35'

PARKING CALCULATIONS:
 REQUIRED: MULTI-FAMILY 1.5 SPACE / 1 D.U. @ 218 D.U. = 327
 PROPOSED: 375 SPACES @ 1.72 SPACES PER UNIT
 ACCESSIBLE PARKING REQUIRED: 9
 ACCESSIBLE PARKING PROVIDED: 39



SCALE	1" = 60'
PROJECT	2017-004
SHEET	C-5.0
DRAWN	DM
DESIGNED	
CHECKED	RW
DATE	6/13/2018

W GROUP
 LAND DEVELOPMENT & ENGINEERING SERVICES
 BUSINESS NO. 32108

WOHLFARTH CONSULTING GROUP LLC
 ENGINEERS & PLANNERS
 246 N. WESTMOORE DRIVE
 ALAMOGADO, CA 92013
 (619) 750-3123
 ORLANDO

MAYFAIR FORT PIERCE, FLORIDA

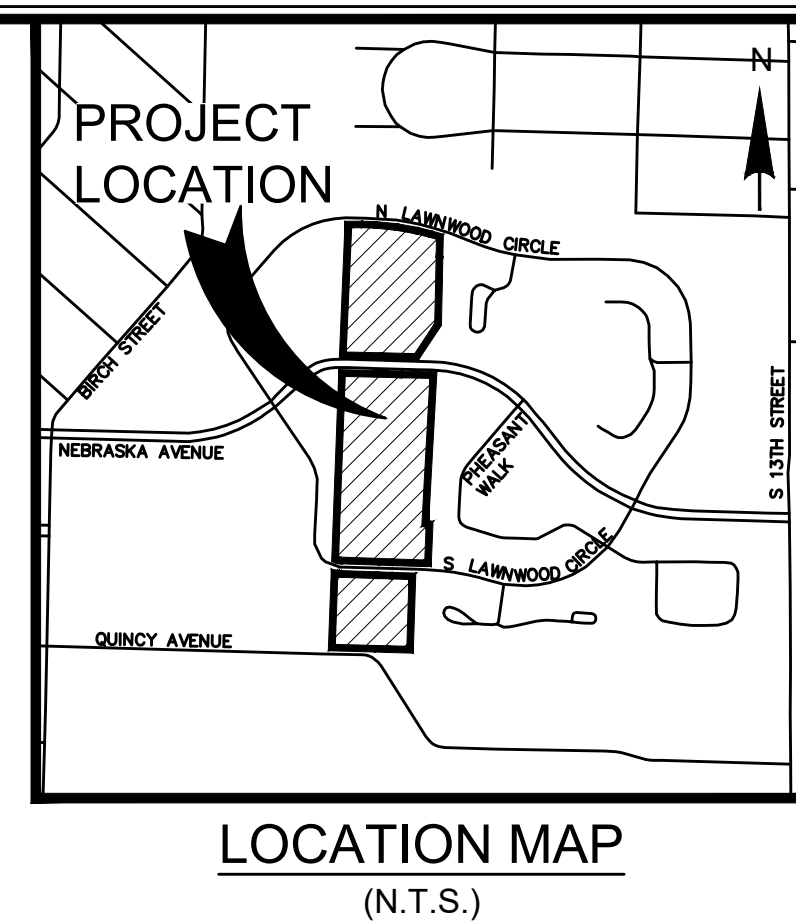
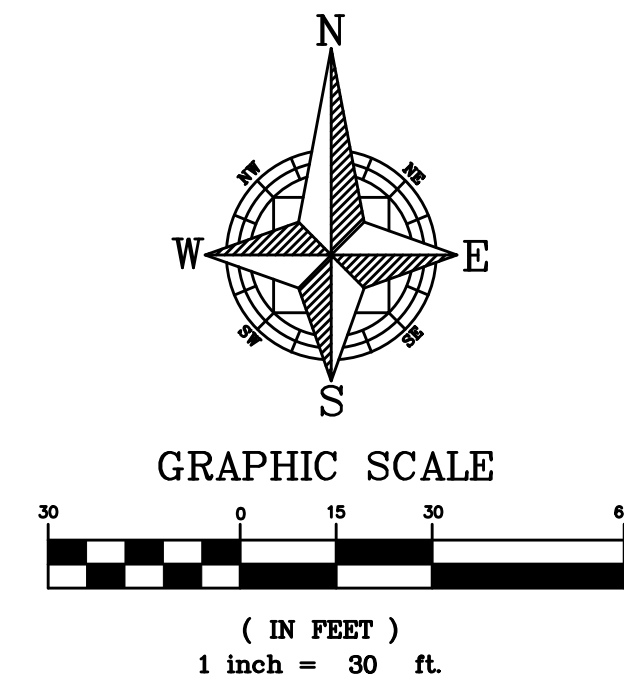
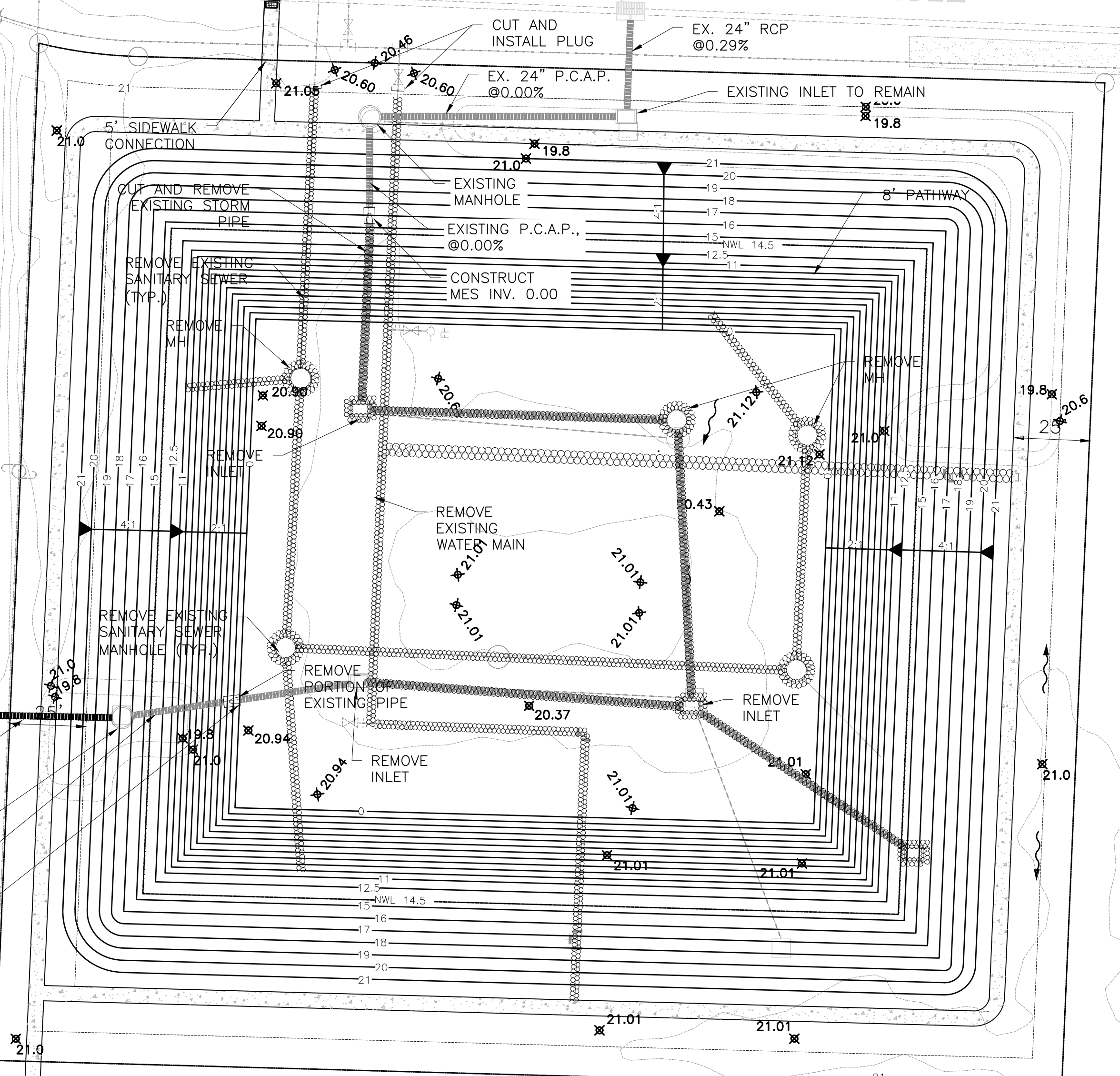
SITE PLAN

NOT FOR CONSTRUCTION 7/17/18

MATCHLINE SEE SHEET PGD-1.2

SOUTH LAWNWOOD CIRCLE

TO VILLAGES OF LAWNWOOD
STORMWATER MANAGEMENT



LEGEND

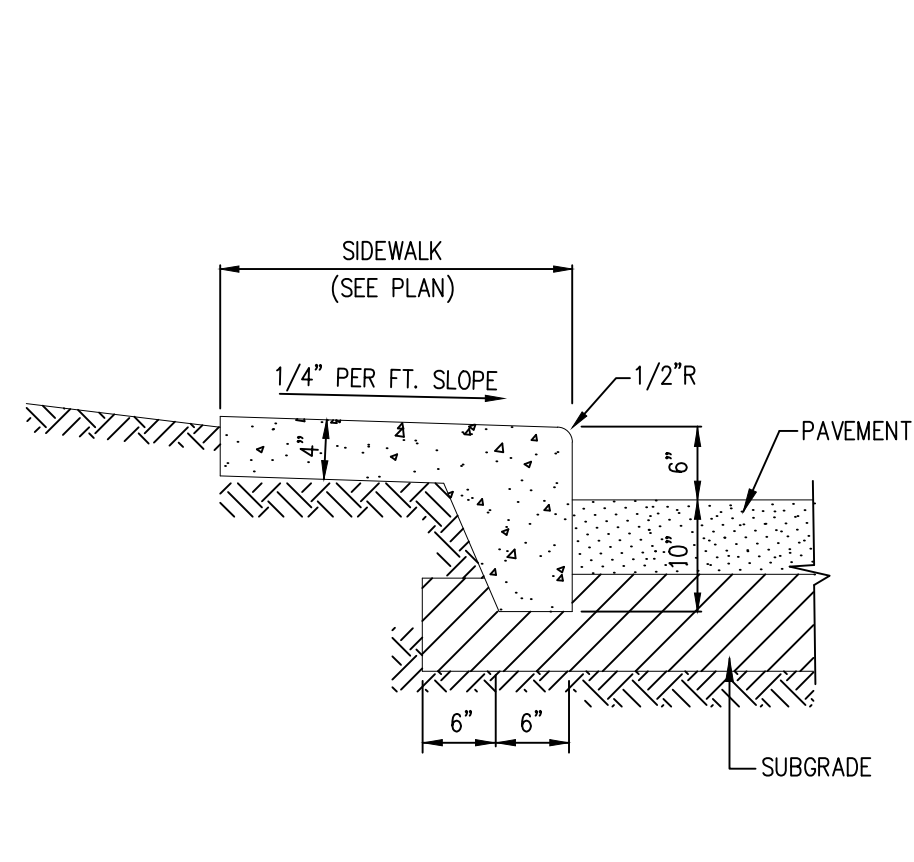
- PROPOSED WATER MAIN
- PROPOSED GATE VALVE
- PROPOSED FIRE HYDRANT ASSEMBLY WITH VALVE
- PROPOSED WATER MAIN FITTINGS (REDUCER, TEE, BENDS)
- EXISTING WATER MAIN
- EXISTING WATER MAIN FITTINGS (TEE, GATE VALVE, REDUCER)
- EXISTING FIRE HYDRANT ASSEMBLY WITH VALVE
- PROPOSED SANITARY SEWER MAIN
- PROPOSED SANITARY SEWER MANHOLE
- EXISTING SANITARY SEWER MAIN
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED STORM SEWER
- PROPOSED STORM CATCH BASIN
- EXISTING STORM SEWER
- EXISTING STORM CATCH BASIN
- PROPOSED GRADE ELEVATION

- T EXISTING PIPE AND INSTALL MES
- INLET AND CONSTRUCT 40LF-24" RCP
- REMOVE INLET TOP, JUST W/ MANHOLE LID
- EX. 40LF-24" RCP
- CONSTRUCT MES. INV. 0.00

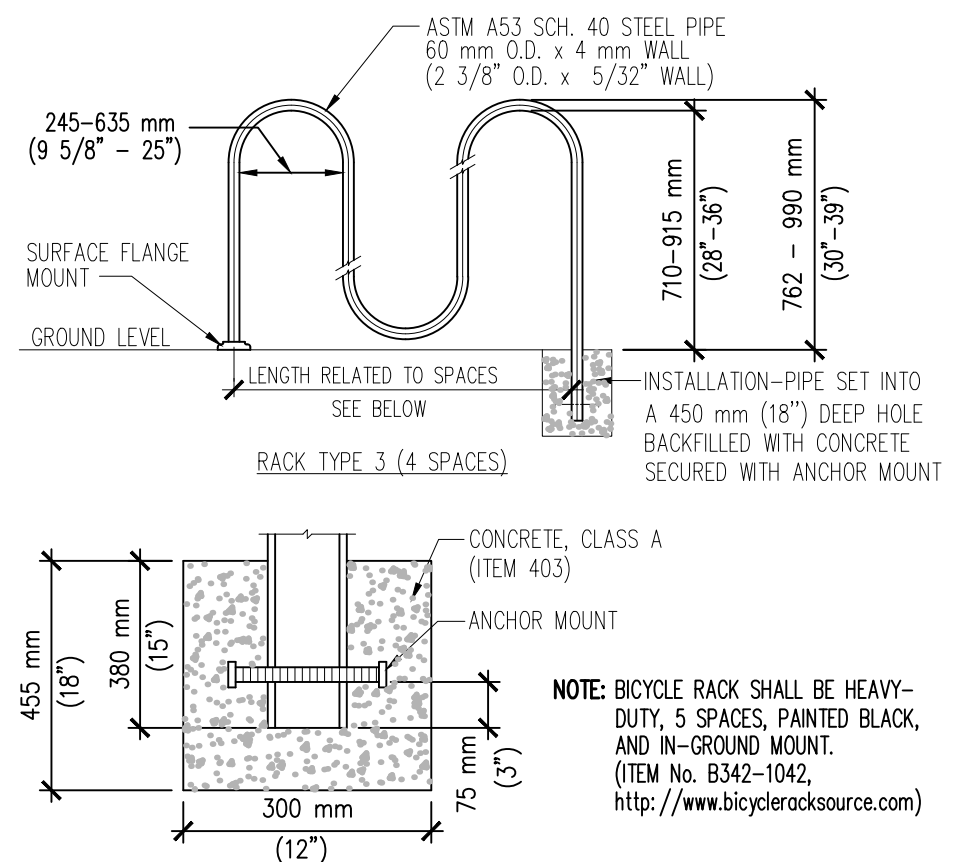
QUINCY AVE.

C:\Users\Dennis Murray\Dropbox\Rick Wohlforth\Mayfair\DWG\Construction Plans\2017.004-C6.0 - PGD Plan.dwg Modified: 7/17/2018 By: Jonathan Plotted By: dennis_murray

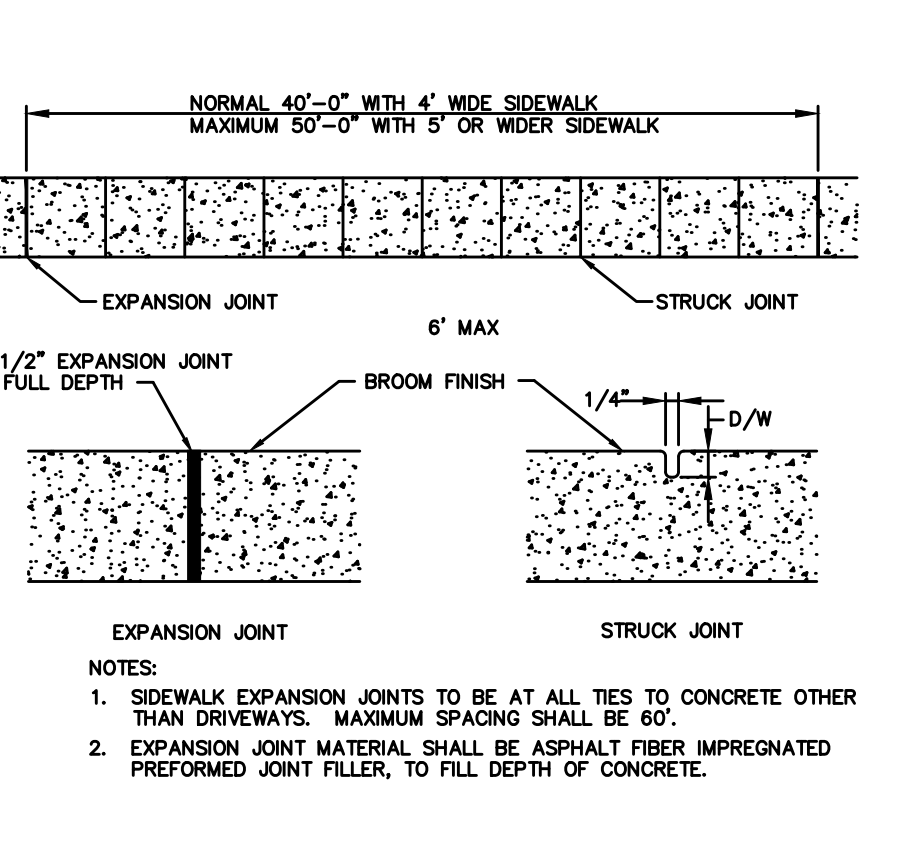
<p>WOHLFARTH CONSULTING GROUP LLC ENGINEERS & PLANNERS</p> <p>246 N. WESTMOORE DRIVE ALAMOGADO, CA 92014 (607) 750-3123 ORLANDO</p>		<p>DATE</p>	<p>DESCRIPTION</p>	<p>BY</p>
<p>MAYFAIR FORT PIERCE, FLORIDA</p>		<p>DRAWN: DM</p>	<p>DESIGNED: --</p>	<p>CHECKED: RW</p>
<p>PAVING, GRADING AND DRAINAGE PLAN</p>		<p>SCALE 1" = 30'</p>	<p>PROJECT 2017-004</p>	<p>DATE 6/13/2018</p>
<p>GROUP LAND DEVELOPMENT & ENGINEERING SERVICES</p> <p>BUSINESS NO. 32108</p>		<p>SHEET C-6.2</p>	<p>DATE 6/13/2018</p>	<p>DATE</p>
<p>NOT FOR CONSTRUCTION</p>				



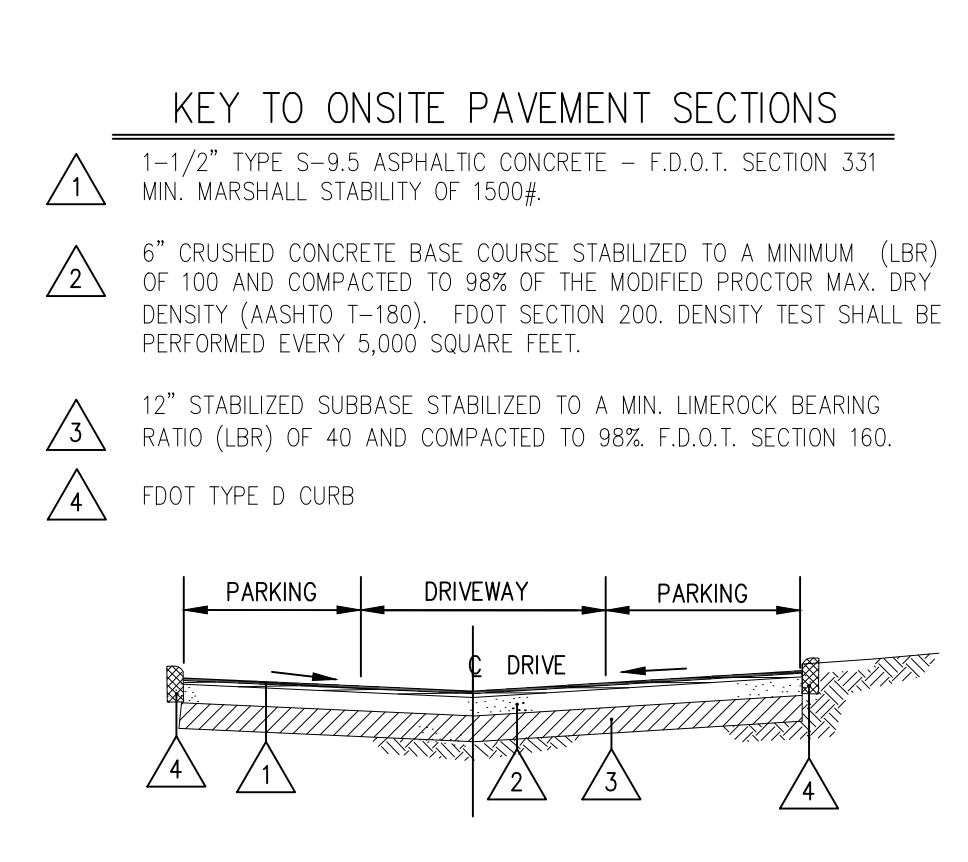
1 MONOLITHIC CURB & SIDEWALK DETAIL
(3,500 PSI (MIN))



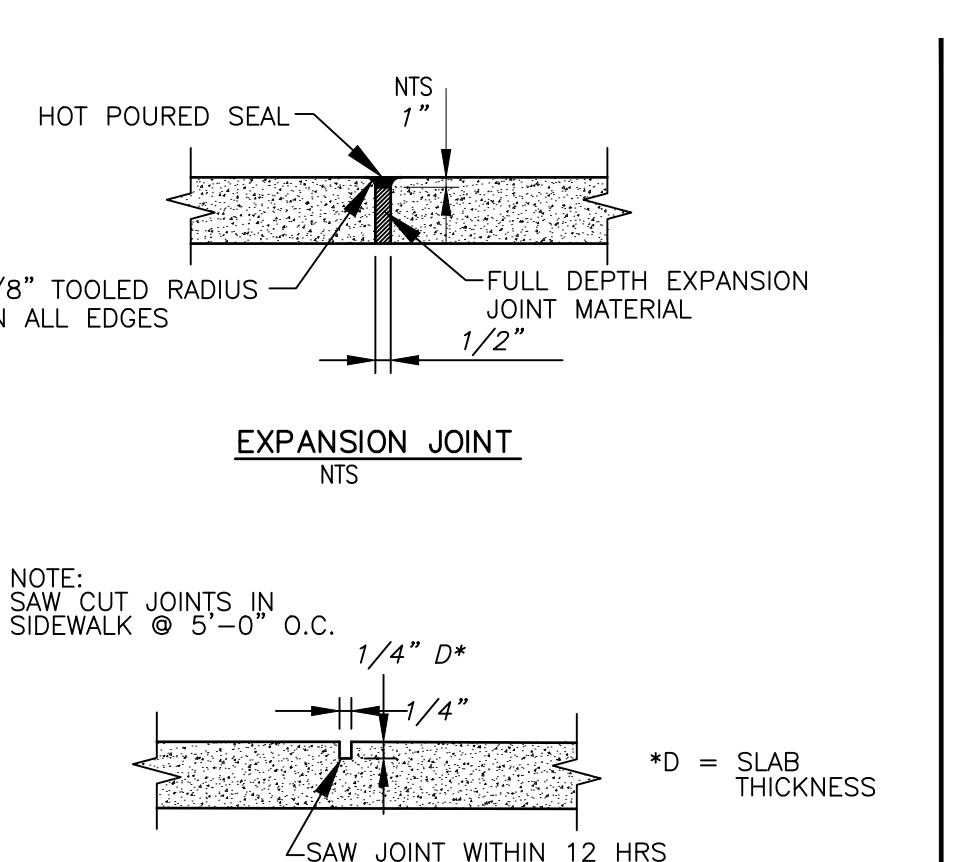
2 BIKE RACK



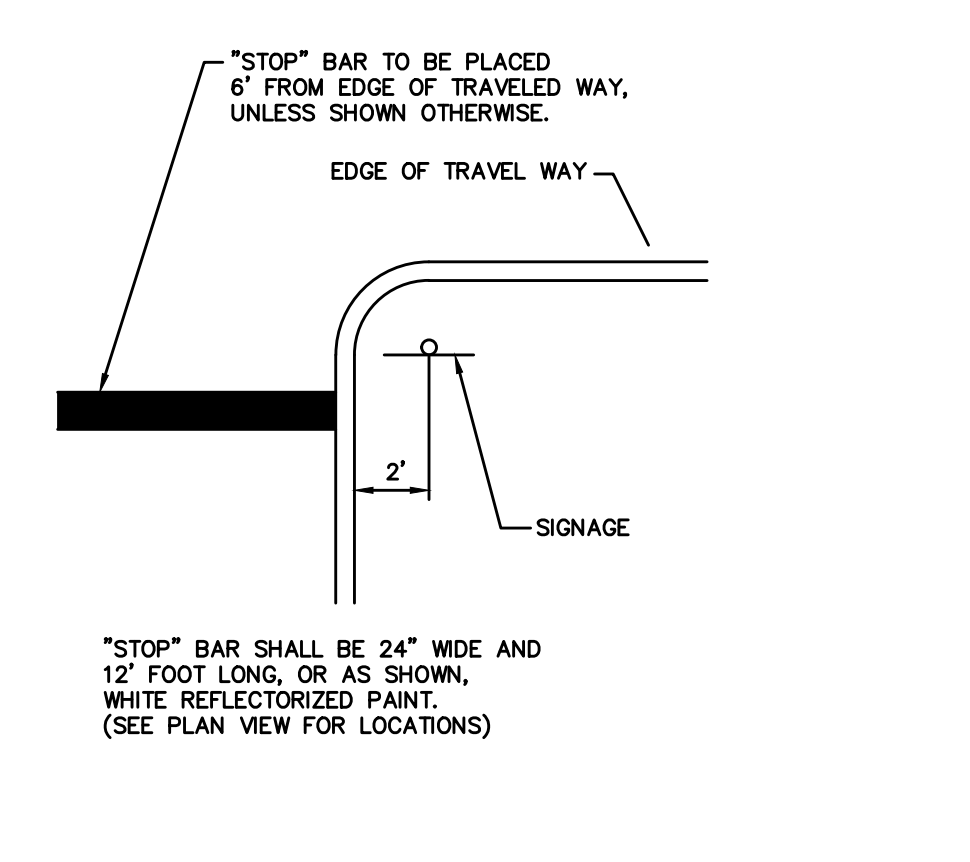
3 CONCRETE SIDEWALK
(3,500 PSI (MIN))



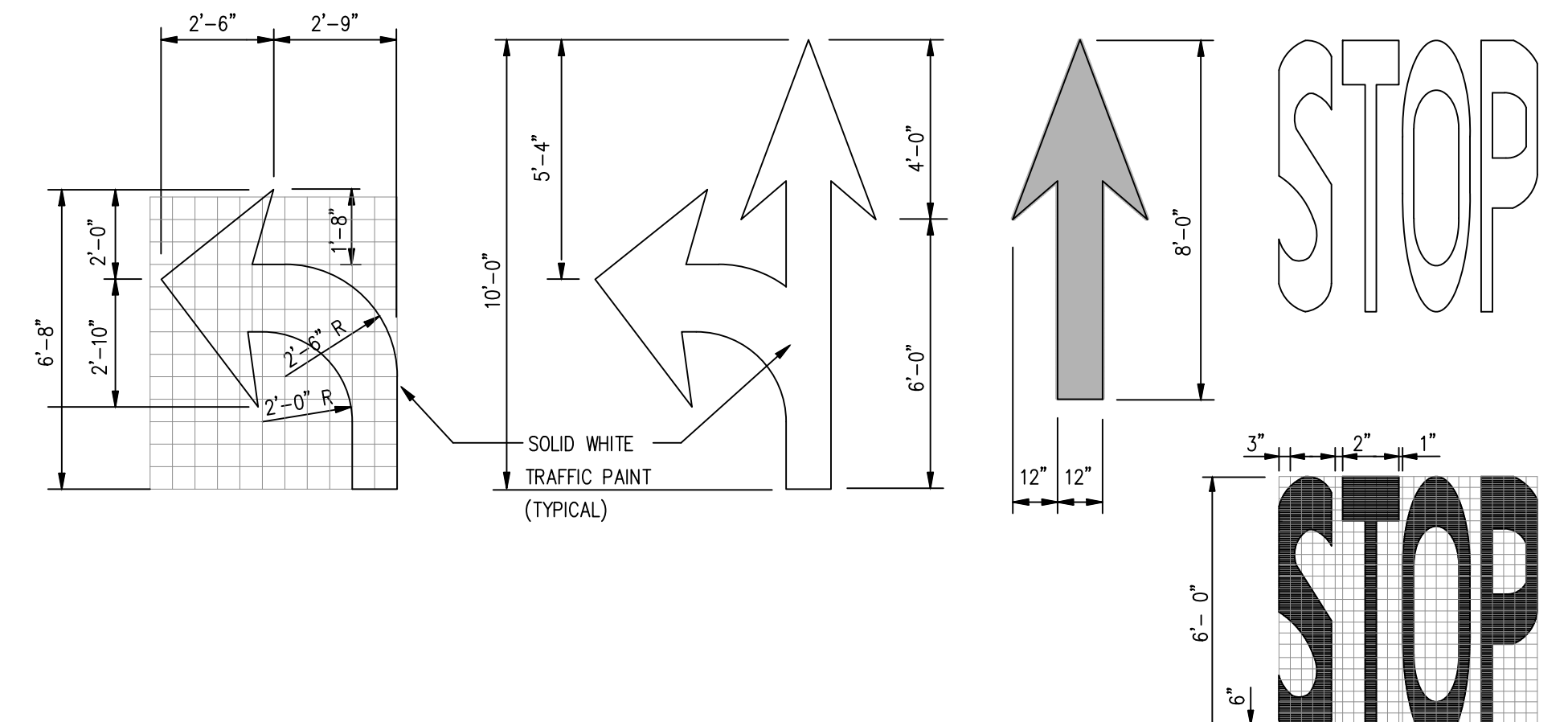
4 PAVEMENT SECTIONS



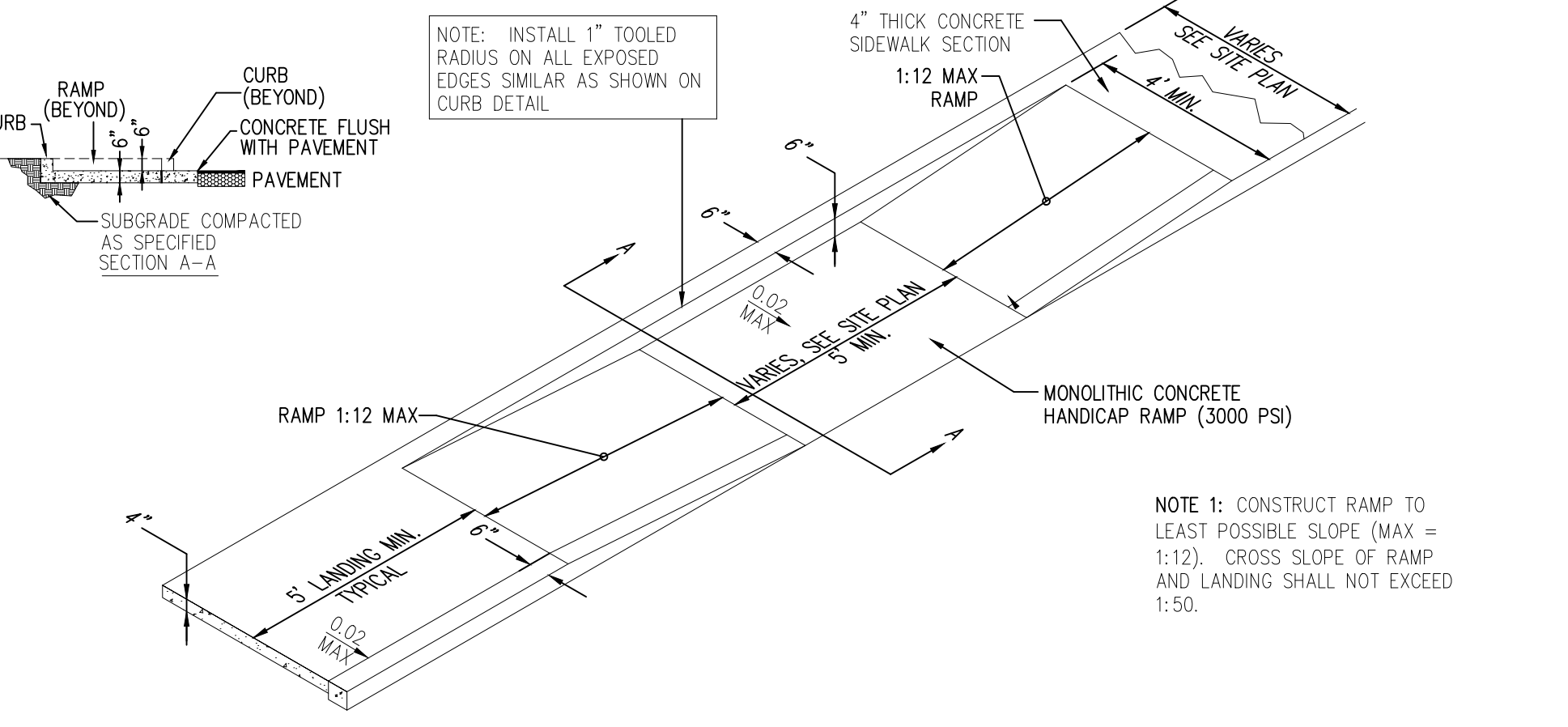
5 SAWED CONSTRUCTION JOINT



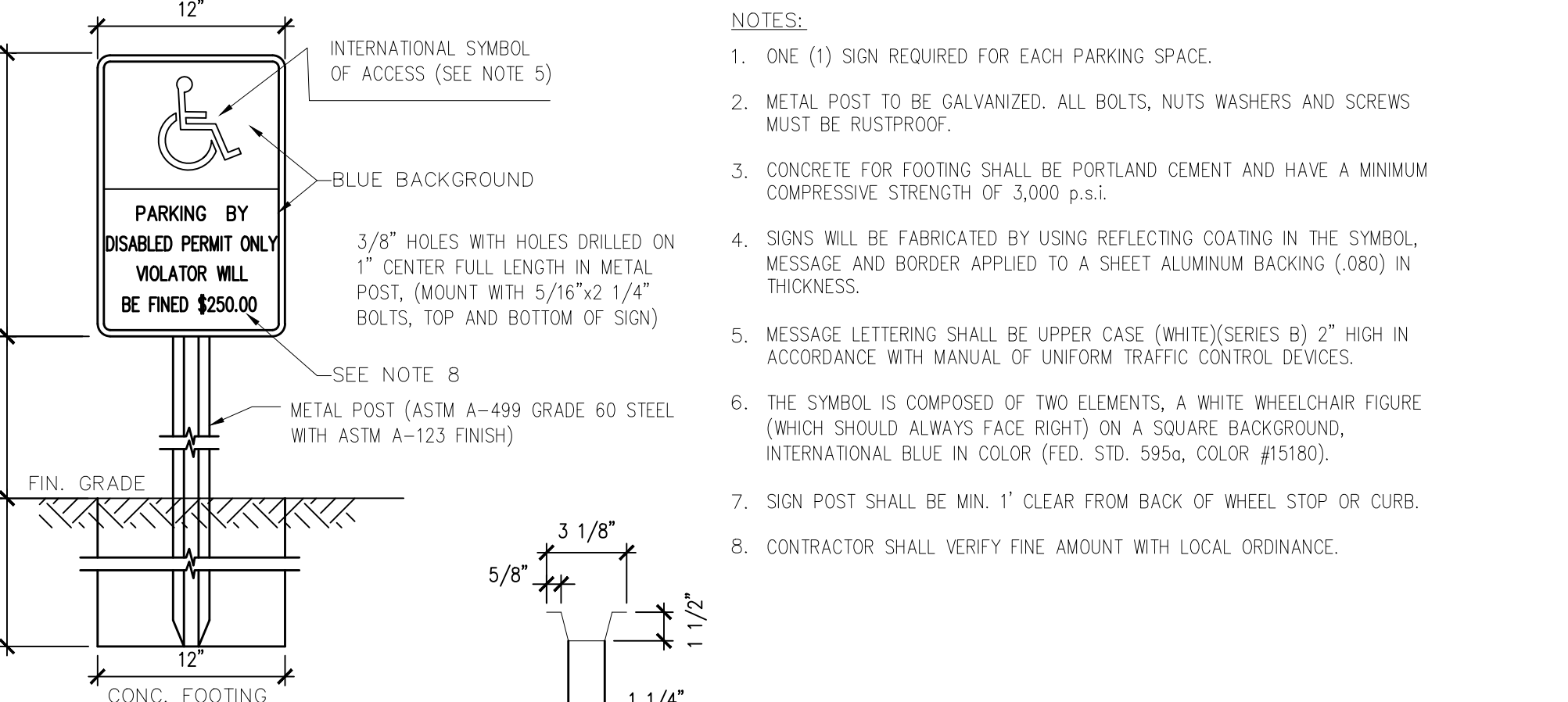
6 STOP BAR W/ SIGNAGE



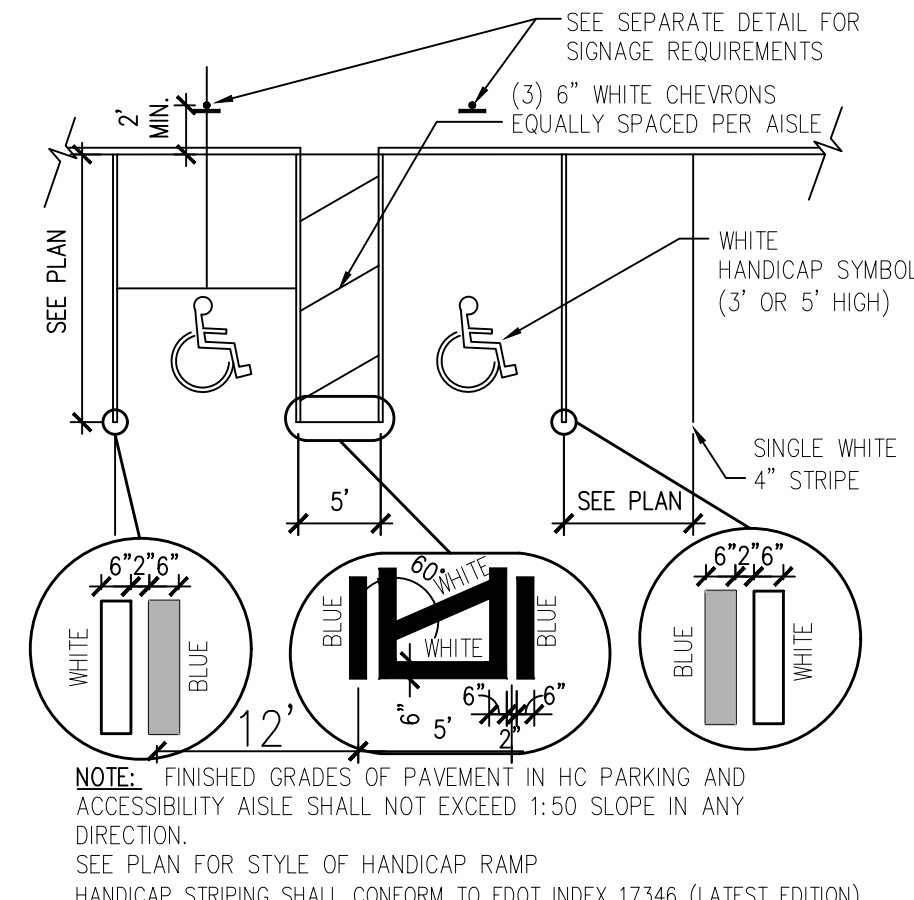
7 TRAFFIC DIRECTIONAL ARROWS



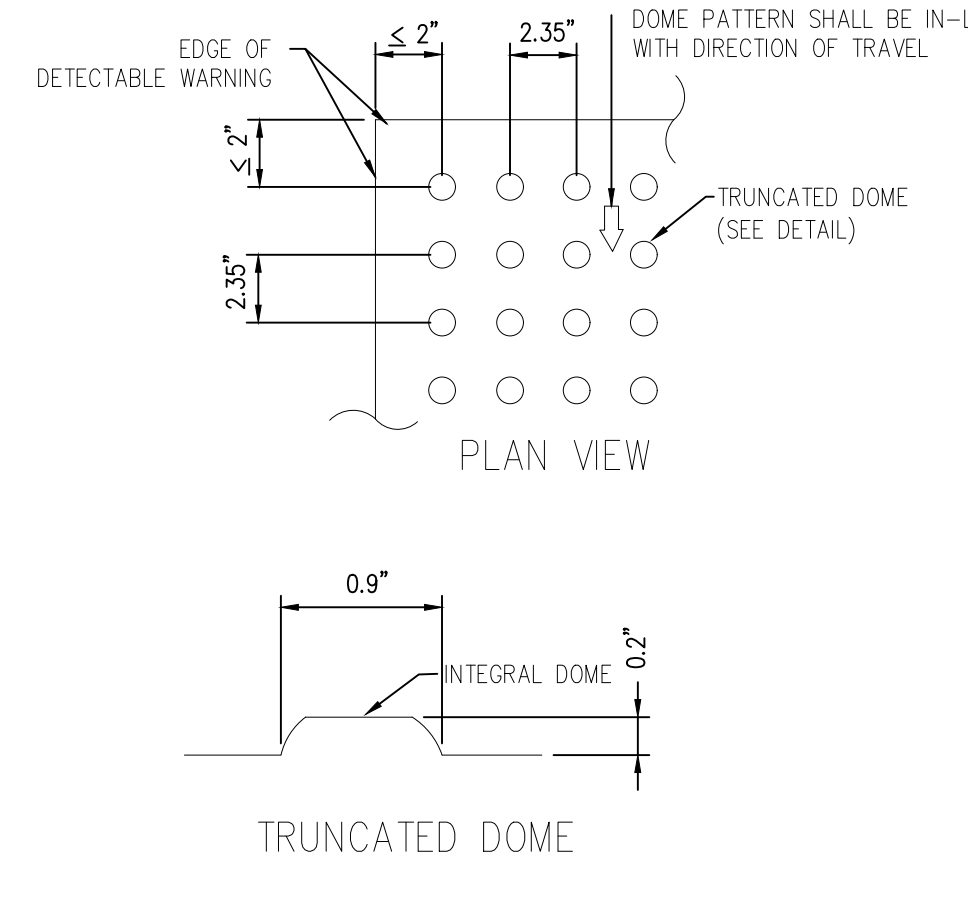
8 SIDE WALK HANDICAP RAMP
3000 PSI (MIN.) CONCRETE



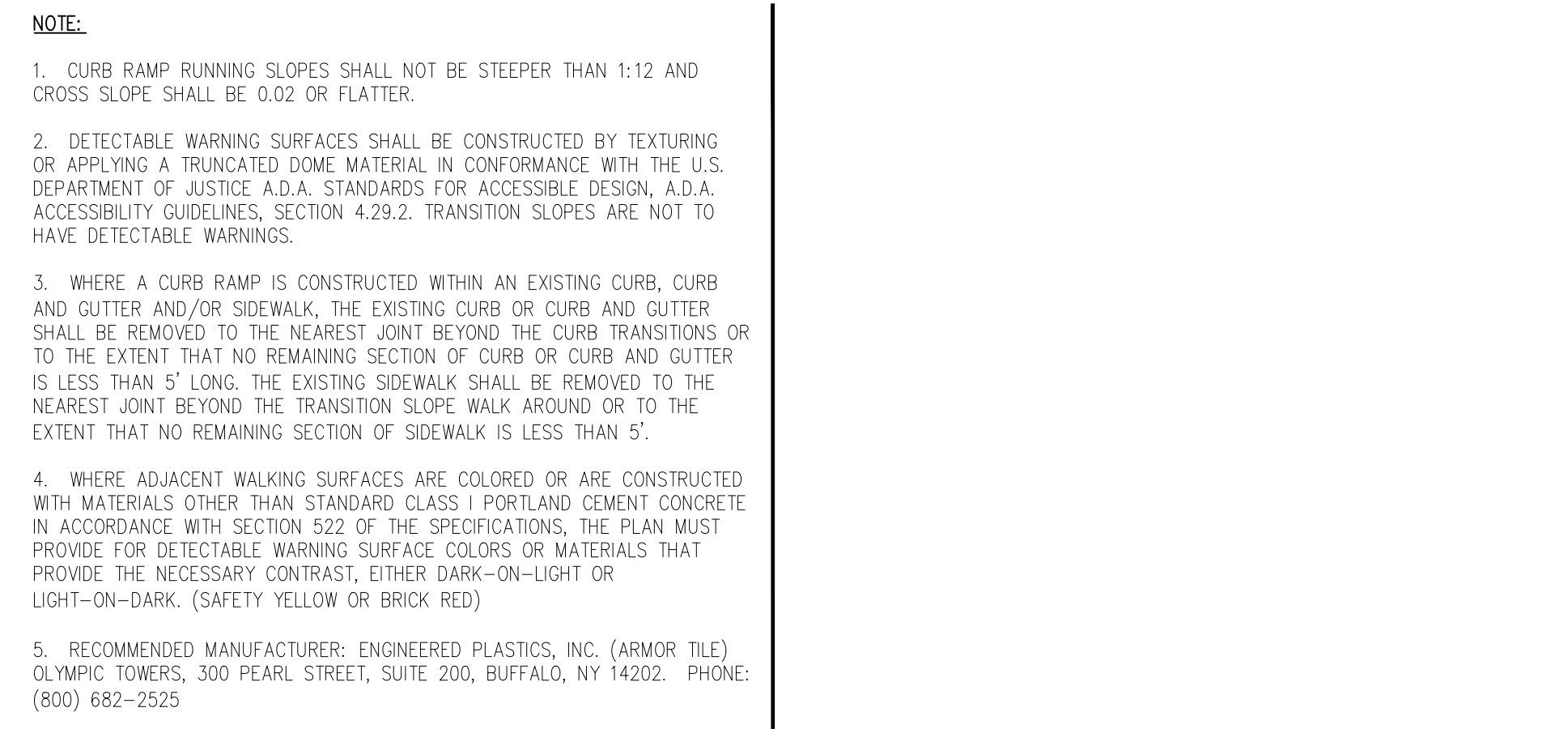
9 HANDICAP SIGN



10 HANDICAP STRIPING



11 CURB RAMP DETECTABLE WARNING
3000 PSI (MIN.) CONCRETE



NOTES:
1. CURB RAMP RUNNING SLOPES SHALL NOT BE STEEPER THAN 1:12 AND CROSS SLOPE SHALL BE 0.02 OR FLATTER.
2. DETECTABLE WARNING SURFACES SHALL BE CONSTRUCTED BY TEXTURING OR APPLYING A TRUNCATED DOME MATERIAL IN CONFORMANCE WITH THE U.S. DEPARTMENT OF JUSTICE A.D.A. STANDARDS FOR ACCESSIBLE DESIGN, A.D.A. ACCESSIBILITY GUIDELINES, SECTION 4.29.2. TRANSITION SLOPES ARE NOT TO HAVE DETECTABLE WARNINGS.
3. WHERE A CURB RAMP IS CONSTRUCTED WITHIN AN EXISTING CURB, CURB AND GUTTER AND/OR SIDEWALK, THE EXISTING CURB OR CURB AND GUTTER SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE CURB TRANSITIONS OR TO THE EXTENT THAT NO REMAINING SECTION OF CURB OR CURB AND GUTTER IS LESS THAN 5' LONG. THE EXISTING SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE TRANSITION SLOPE WALK AROUND OR TO THE EXTENT THAT NO REMAINING SECTION OF SIDEWALK IS LESS THAN 5'.
4. WHERE ADJACENT WALKING SURFACES ARE COLORED OR ARE CONSTRUCTED WITH MATERIALS OTHER THAN STANDARD CLASS I PORTLAND CEMENT CONCRETE IN ACCORDANCE WITH SECTION 522 OF THE SPECIFICATIONS, THE PLAN MUST PROVIDE FOR DETECTABLE WARNING SURFACE COLORS OR MATERIALS THAT PROVIDE THE NECESSARY CONTRAST, EITHER DARK-ON-LIGHT OR LIGHT-ON-DARK. (SAFETY YELLOW OR BRICK RED)
5. RECOMMENDED MANUFACTURER: ENGINEERED PLASTICS, INC. (ARMOR TILE) OLYMPIC TOWERS, 300 PEARL STREET, SUITE 200, BUFFALO, NY 14202. PHONE: (800) 682-2525



NOTES:
1. ONE (1) SIGN REQUIRED FOR EACH PARKING SPACE.
2. METAL POST TO BE GALVANIZED. ALL BOLTS, NUTS WASHERS AND SCREWS MUST BE RUSTPROOF.
3. CONCRETE FOR FOOTING SHALL BE PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 p.s.i.
4. SIGNS WILL BE FABRICATED BY USING REFLECTING COATING IN THE SYMBOL, MESSAGE AND BORDER APPLIED TO A SHEET ALUMINUM BACKING (.080) IN THICKNESS.
5. MESSAGE LETTERING SHALL BE UPPER CASE (WHITE)(SERIES B) 2" HIGH IN ACCORDANCE WITH MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
6. THE SYMBOL IS COMPOSED OF TWO ELEMENTS, A WHITE WHEELCHAIR FIGURE (WHICH SHOULD ALWAYS FACE RIGHT) ON A SQUARE BACKGROUND, INTERNATIONAL BLUE IN COLOR (FED. STD. 595a, COLOR #15180).
7. SIGN POST SHALL BE MIN. 1' CLEAR FROM BACK OF WHEEL STOP OR CURB.
8. CONTRACTOR SHALL VERIFY FINE AMOUNT WITH LOCAL ORDINANCE.



NOTES:
FINISHED GRADES OF PAVEMENT IN HC PARKING AND ACCESSIBILITY AISLE SHALL NOT EXCEED 1:50 SLOPE IN ANY DIRECTION.
SEE PLAN FOR STYLE OF HANDICAP RAMP
HANDICAP STRIPING SHALL CONFORM TO FDOT INDEX 17346 (LATEST EDITION)



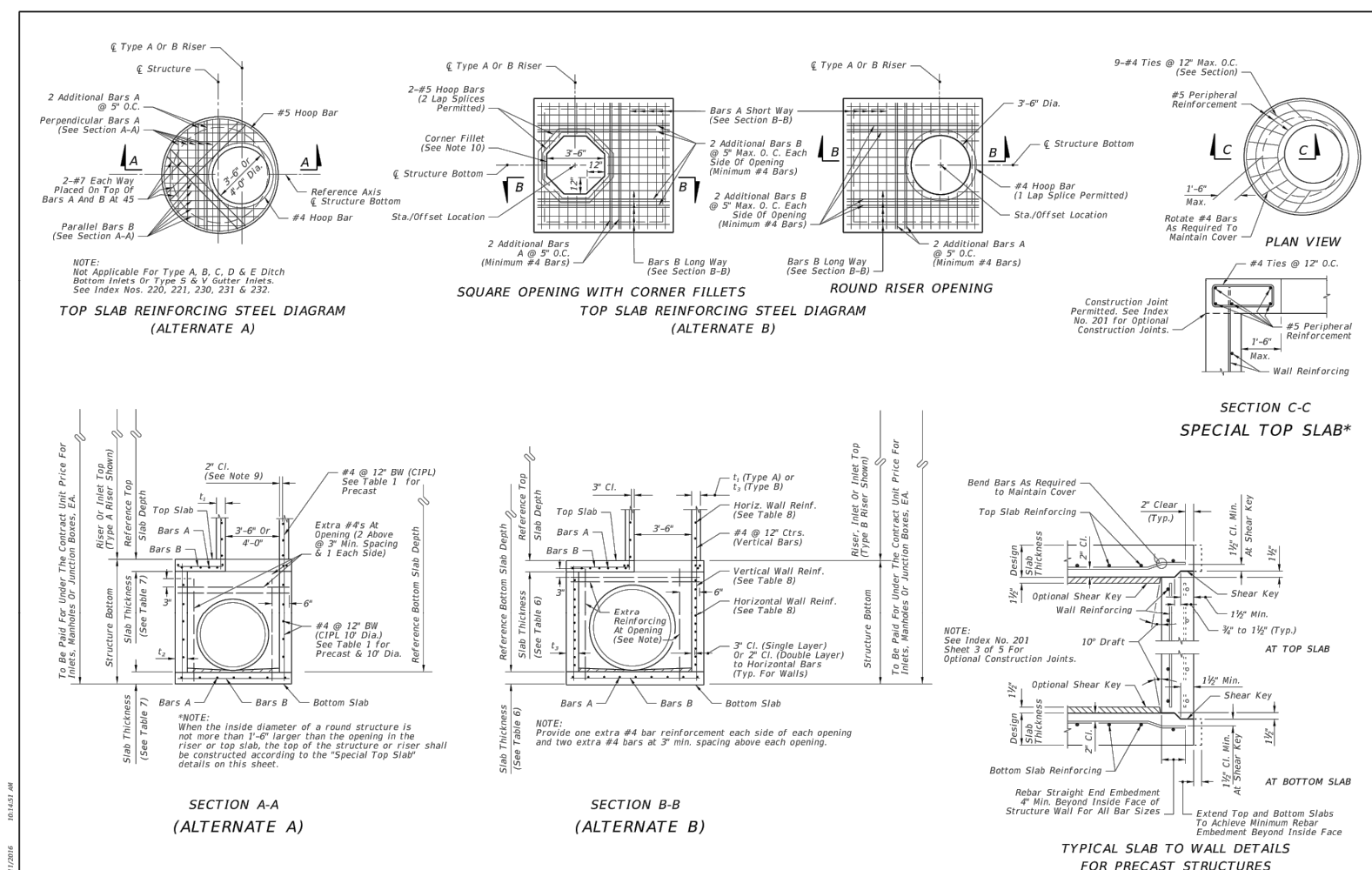
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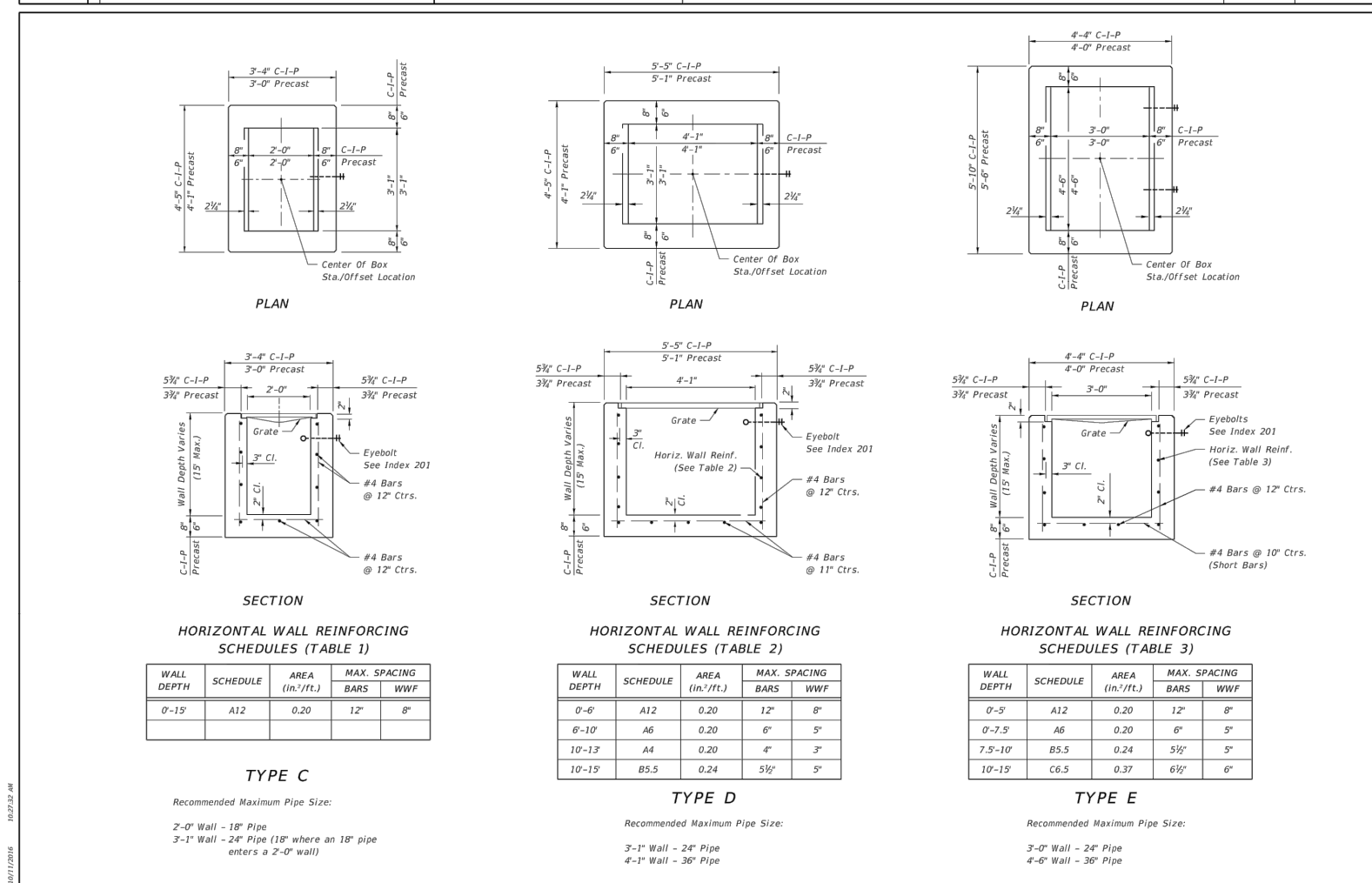
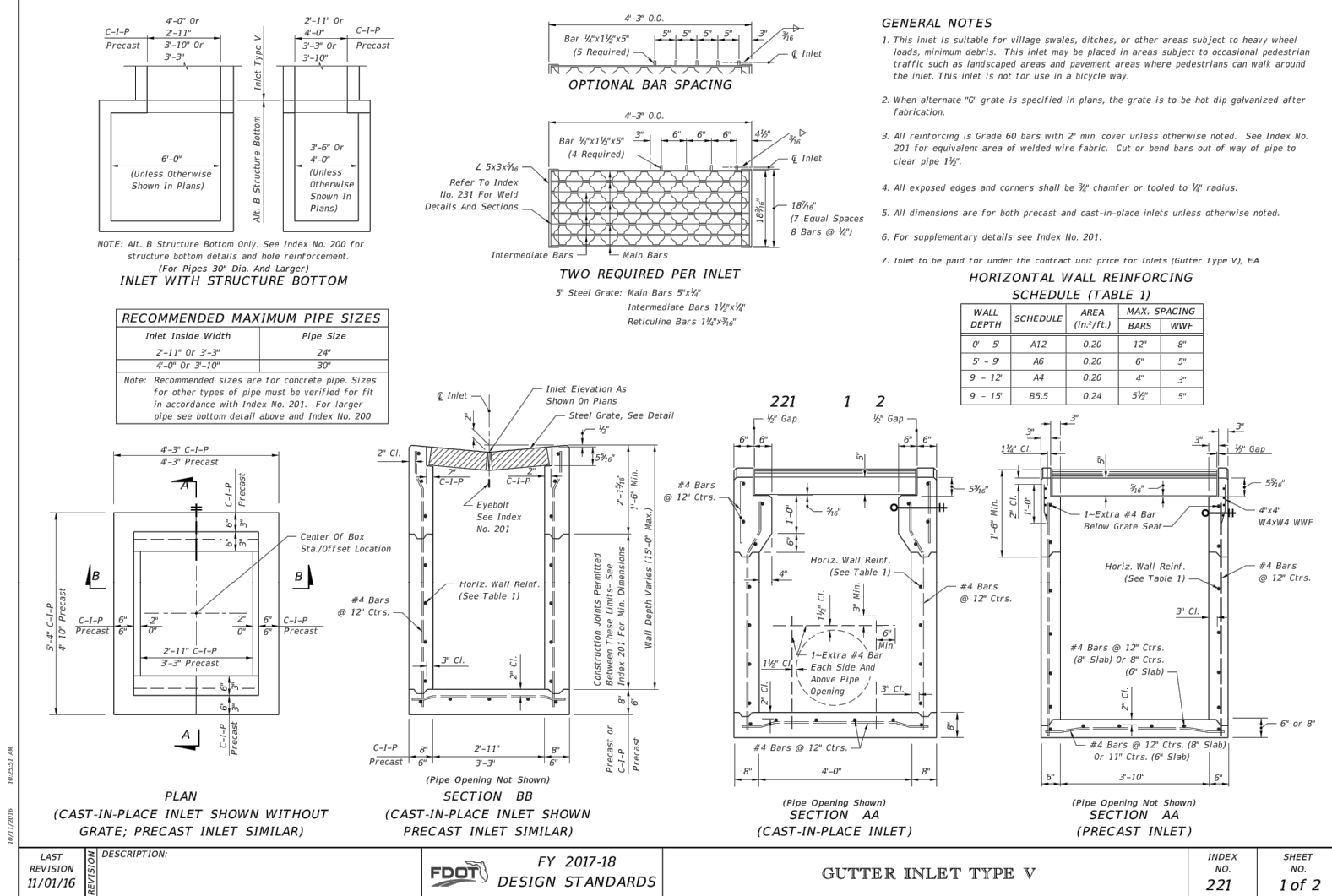
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8. CONTRACTOR SHALL VERIFY FINE AMOUNT WITH LOCAL ORDINANCE.

WOHLFARTH CONSULTING GROUP LLC ENGINEERS & PLANNERS 246 N. WESTMORE DRIVE ALHAMBRA, CA 91801 (407) 750-3723 ORLANDO		DESCRIPTION
MAYFAIR FORT PIERCE, FLORIDA		DATE
CIVIL SITE DETAILS		REV.
SCALE: N/A	PROJECT: 2017-004	BY
DRAWN: DM	CHECKED: RW	DATE: 6/13/2018
SHEET: C-6.3	BUSINESS NO. 32108	
NOT FOR CONSTRUCTION		

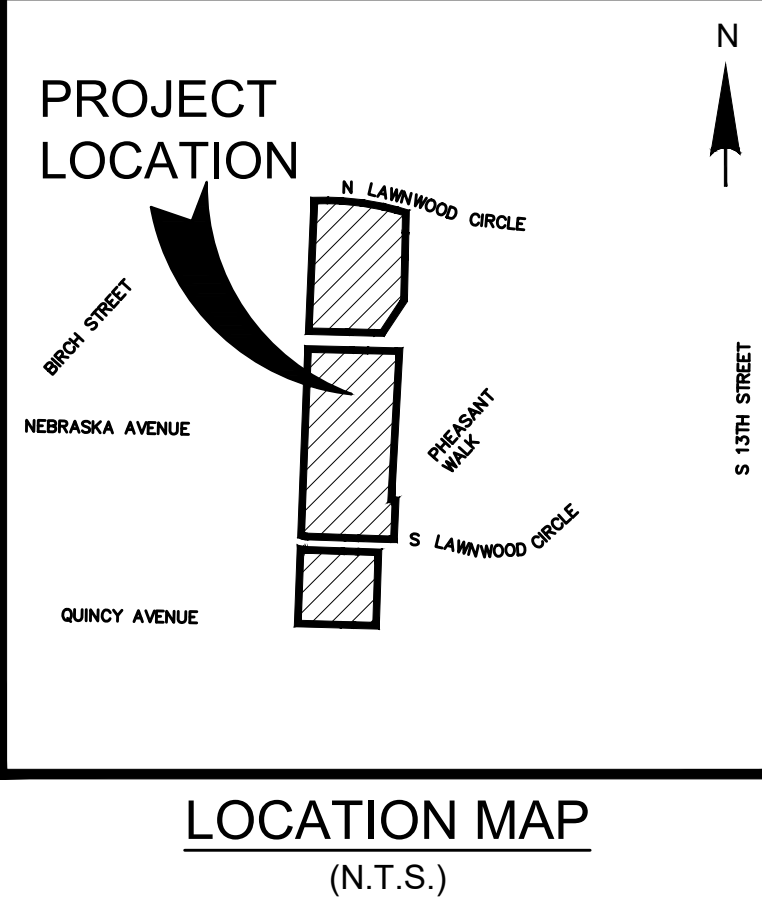
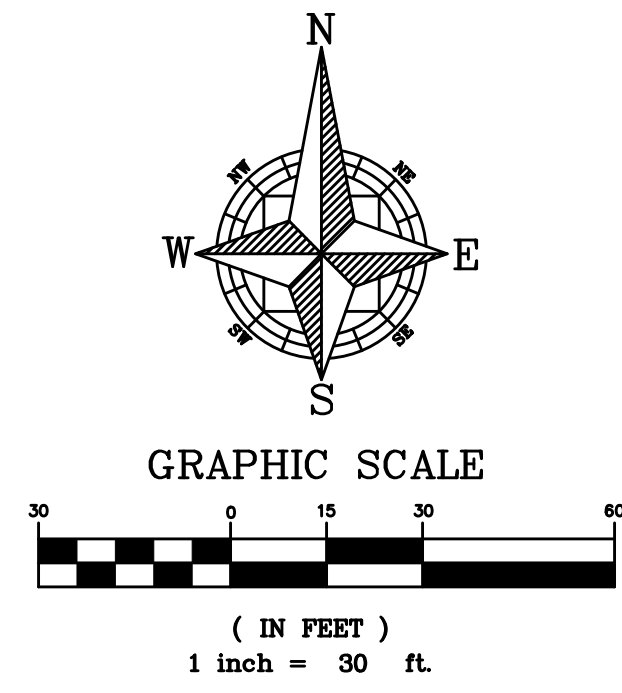
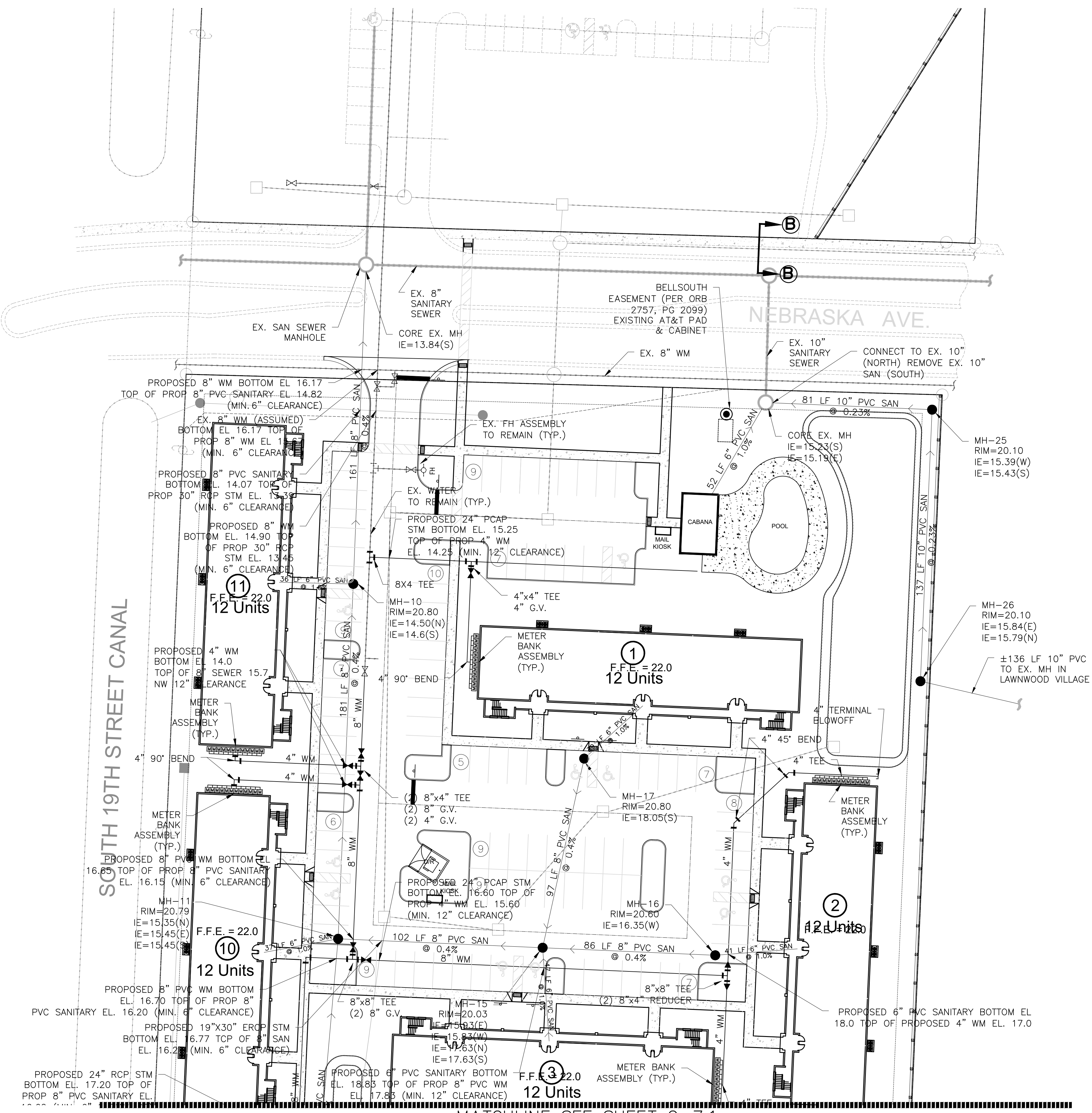
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LAST REVISION	DESCRIPTION	PDOT DESIGN STANDARDS	STRUCTURE BOTTOMS TYPE J AND P	INDEX NO.	SHEET NO.
01/01/00				200	1 of 5



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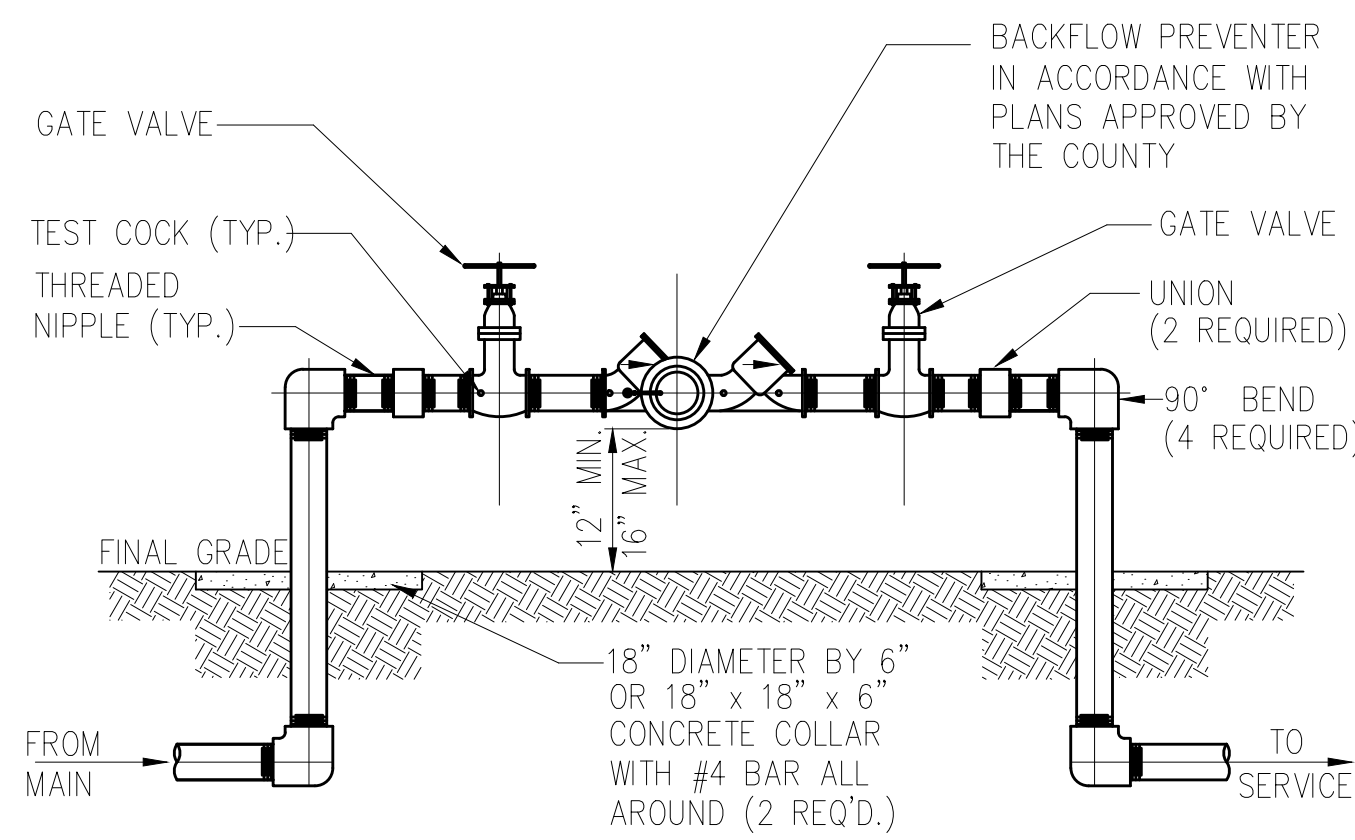


LEGEND

	PROPOSED WATER MAIN
	PROPOSED GATE VALVE
	PROPOSED FIRE HYDRANT ASSEMBLY WITH VALVE
	PROPOSED WATER MAIN FITTINGS (REDUCER, TEE, BENDS)
	EXISTING WATER MAIN
	EXISTING WATER MAIN FITTINGS (TEE, GATE VALVE, REDUCER)
	EXISTING FIRE HYDRANT ASSEMBLY WITH VALVE
	PROPOSED SANITARY SEWER MAIN
	PROPOSED SANITARY SEWER MANHOLE
	EXISTING SANITARY SEWER MAIN
	EXISTING SANITARY SEWER MANHOLE
	PROPOSED STORM SEWER
	PROPOSED STORM CATCH BASIN
EXISTING UTILITIES	
	LIGHT POLE
	WOOD POWER POLE
	FIRE HYDRANT
	WATER VALVE
	CATCH BASIN
	SANITARY MANHOLE
	DRAINAGE MANHOLE
	FPL TRANSFORMER PAD

WOHLFARTH CONSULTING GROUP LLC ENGINEERS & PLANNERS		246 N. WESTMORE DRIVE ALAMOGADO, CA 92014 (407) 750-3123 ORLANDO	
MAYFAIR FORT PIERCE, FLORIDA		WATER AND SEWER PLAN	
SCALE: 1" = 30'	PROJECT: 2017-004	CHECKED: RW	DATE: 6/13/2018
SHEET: C-7.0	DRAWN: DM DESIGNED: -- DATE: 6/13/2018		
W GROUP LAND DEVELOPMENT & ENGINEERING SERVICES BUSINESS NO. 32108			
NOT FOR CONSTRUCTION 7/17/18			

MATCHLINE SEE SHEET C-7.1



- NOTES:
1. ALL PIPE AND FITTINGS 2" AND SMALLER SHALL BE THREADED SCHEDULE 40 GALVANIZED STEEL OR BRASS.

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S). *

	PIPE SIZE								
	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	16	21	25	29	37	44	51	59	68
45° BEND	7	9	11	12	16	19	22	25	29
22-1/2° BEND	4	5	5	6	8	9	11	12	14
11-1/4° BEND	2	3	3	3	4	5	5	6	7
PLUG OR BRANCH OF TEE									

- NOTES:
1. FITTINGS SHALL BE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
 2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN SHOWN IN THE TABLE.
 3. WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
 4. IN LINE VALVES AND THROUGH RUN OF TEES OUTSIDE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE RESTRAINED UNLESS OTHERWISE INDICATED.
 5. LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY DIPRA, WITH THE FOLLOWING ASSUMPTIONS:
WORKING PRESSURE: 100 P.S.I.*
SOIL DESIGNATION: SILT 1 *
LAYING CONDITIONS: 5 *
 6. FOR PIPE ENCASED IN POLYETHYLENE, USE VALUES GIVEN IN PARENTHESES OR INCREASE THE GIVEN VALUE BY A FACTOR OF 1.5.

* TO BE COMPLETED BY THE ENGINEER.

(X) REDUCED PRESSURE BACKFLOW PREVENTER

NTS
UTL031.DWG

(X) RESTRAINED JOINT

NTS
UTL028.DWG

WATER SYSTEM NOTES

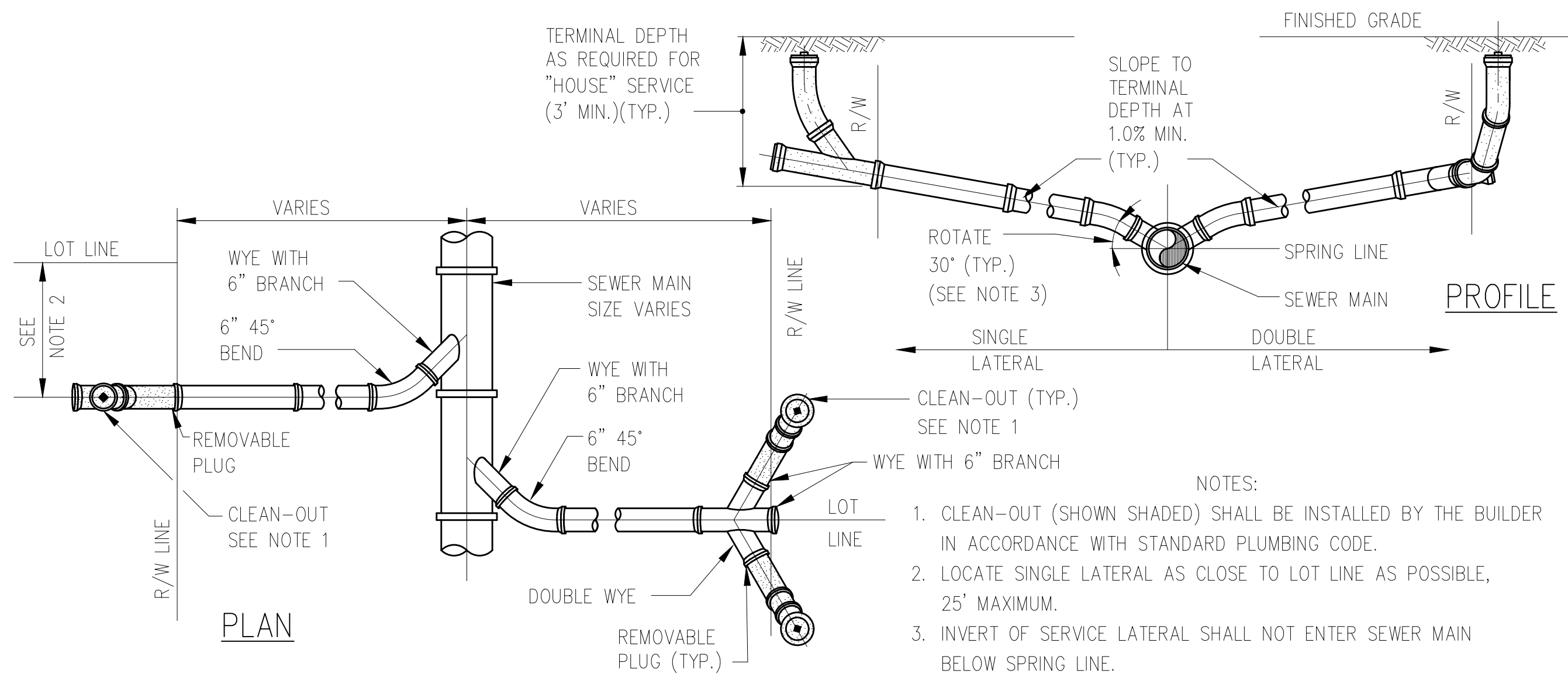
(IN THE EVENT OF CONFLICT OR OMISSION BETWEEN THE PLANS AND THESE CODES/GUIDELINES, CONSTRUCTION SHALL BE EXECUTED IN CONFORMANCE WITH THE STRICTEST PROVISIONS OF THE CODES/GUIDELINES.)

1. ALL PVC WATER MAINS SHALL BE CLASS 150 AND DR 18 ANSI/AWWA C900-97 AND SHALL BE DESIGNED FOR 250 PSI WORKING PRESSURE. WATER MAIN INSTALLATION SHALL BE IN ACCORDANCE WITH ANSI/AWWA C600-05 STANDARD.
2. ALL DIP WATER MAINS SHALL BE DUCTILE IRON CLASS 350. ALL DUCTILE IRON PIPE SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AWWA C151/A21.51-02 AND BE CEMENT LINED AND SEAL COATED PER ANSI/AWWA C104/A21.4-03.
3. FITTINGS SHALL BE CAST IRON OR DUCTILE IRON MEETING ANSI/AWWA C-153-00 /A21.53 SPECIFICATIONS, WITH 350 PSI MINIMUM WORKING PRESSURE. FITTINGS MUST BE CEMENT LINED AND SEAL COATED PER ANSI/AWWA C104/A21.4-95.
4. GATE VALVES 4" AND LARGER SHALL BE RESILIENT SEAT AND SHALL MEET ANSI/AWWA C-509-01 SPECIFICATIONS, LATEST REVISION. VALVES MUST BE MUELLER (O.A.E.). VALVE BOXES SHALL BE OPELIKA #19 (O.A.E.).
5. PAVEMENT RESTORATION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF B.C.O.E.S.
6. ALL TRENCHING, PIPE LAYING, BACKFILL, PRESSURE TESTING, AND DISINFECTING MUST COMPLY WITH B.C.O.E.S. REQUIREMENTS.
7. BACTERIOLOGICAL TESTS SHALL BE CONDUCTED BY THE CONTRACTOR.
8. ALL CONNECTIONS TO EXISTING MAINS SHALL BE MADE UNDER THE DIRECTIONS OF THE CITY. CITY WATER USED FOR FILLING AND FLUSHING OF MAINS SHALL BE METERED, AND THE COST OF WATER AND TEMPORARY METER SHALL BE BORNE BY THE CONTRACTOR.
9. ALL PIPE ETC. SHALL BE TESTED UNDER A CONSTANT PRESSURE OF 150 PSI (FIRE MAINS TO BE TESTED TO 200 PSI) FOR 2 HOURS AND SHALL NOT EXCEED THE LEAKAGE REQUIREMENTS AS PER ANSI/AWWA SPECIFICATIONS OF C600-05 LEAKAGE FORMULA:
$$Q = \frac{SD\sqrt{P}}{133,200}$$

Q=ALLOWABLE LEAKAGE IN GALLONS PER HOUR.
S=TOTAL LENGTH OF PIPE TESTED IN FEET.
D=DIAMETER OF THE PIPE TESTED IN INCHES.
P=AVERAGE TEST PRESSURE IN POUNDS PER SQUARE INCH.

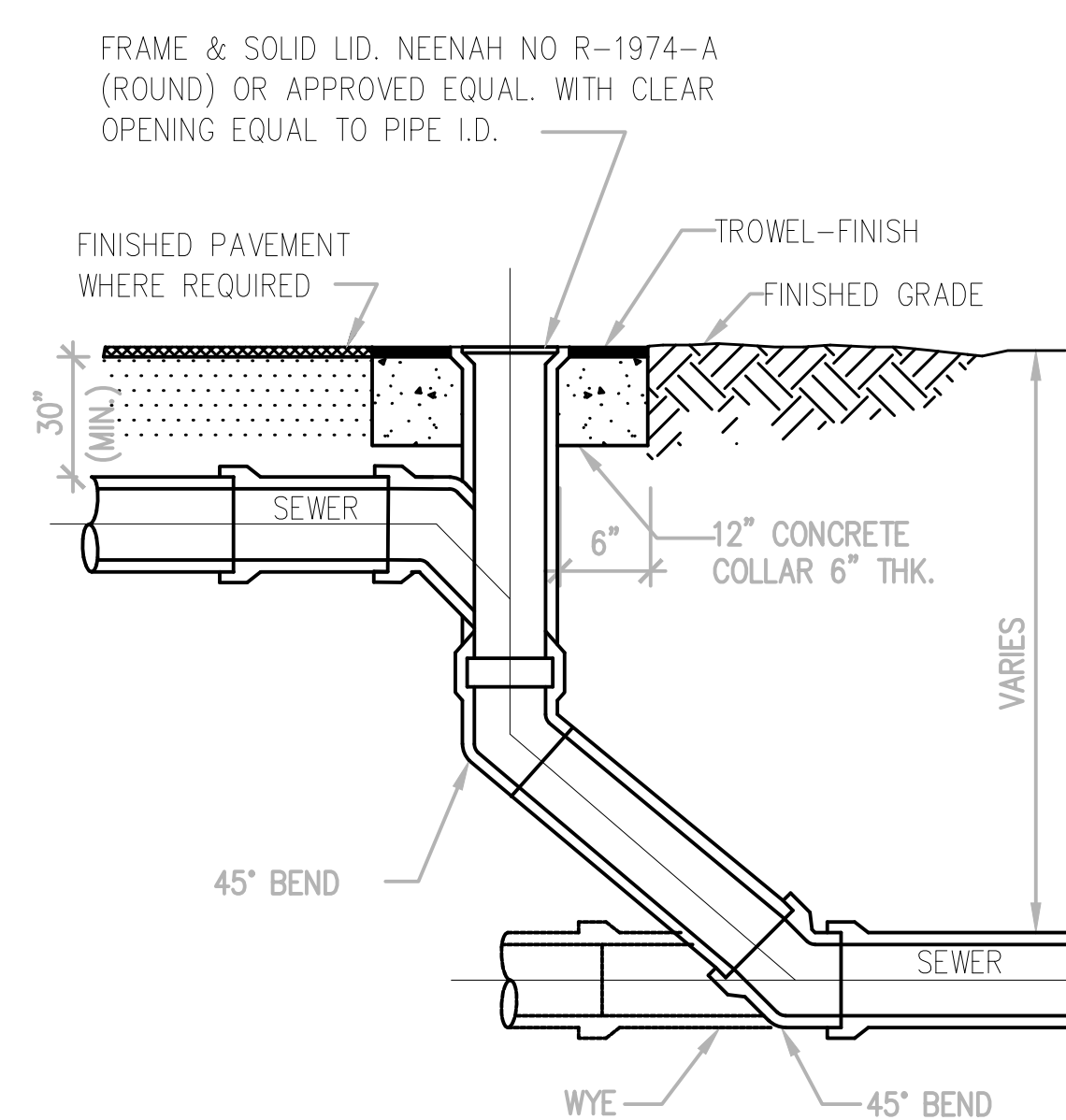
10. THE MINIMUM DEPTH OF COVER OVER WATER MAINS IS 30"(D.I.P.) OR 36"(PVC).
11. DISINFECTION OF MAINS SHALL COMPLY WITH ANSI/AWWA C-651-05 STANDARD. BACTERIOLOGICAL SAMPLING POINTS SHALL BE AS DESIGNATED ON THE ENGINEERING PLANS.
12. MINIMUM CLEARANCE BETWEEN STORM STRUCTURES AND WATER MAINS SHALL BE 2', AND MAXIMUM DEFLECTION PER EACH JOINT SHALL BE 3" WHERE DEFLECTION IS REQUIRED.
13. 48 HOURS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT, "CALL SUNSHINE" (1-800-432-1770), F.P. & L., AND CABLE TV IN ORDER TO LOCATE EXISTING UNDERGROUND UTILITIES.
14. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY AND ARE BASED ON AS-BUILT INFORMATION. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION. ALL CONFLICTS WITH EXISTING UTILITIES SHALL BE REPORTED TO THE ENGINEER AND CITY. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
15. TAPPING SLEEVES SHALL BE MUELLER H-615 (O.A.E.). TAPPING VALVES 4" AND LARGER SHALL BE RESILIENT WEDGE TYPE MEETING ANSI/AWWA C-509-01. ALL TAPPING VALVES SHALL HAVE A CAST-IN ALIGNMENT RING AND BE CAPABLE OF ACCEPTING A FULL-SIZE CUTTER.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING CONFLICTS BETWEEN STORM DRAINS AND WATER MAINS PLACED AT MINIMUM COVER. IN CASE OF CONFLICT, WATER MAIN SHALL BE LOWERED TO PASS UNDER STORM DRAIN WITH 18" MINIMUM SEPARATION. NO ADDITIONAL PAYMENT SHALL BE DUE TO CONTRACTOR FOR LOWERING THE MAIN OR THE ADDITIONAL FITTINGS USED THEREON.
17. PIPE JOINT RESTRAINT SHALL BE PROVIDED BY THE USE OF DUCTILE IRON FOLLOWER GLANDS MANUFACTURED TO ASTM A 536-80. TWIST-OFF NUTS SHALL BE USED TO ENSURE PROPER ACTUATING OF THE RESTRAINING DEVICES. THE MECHANICAL JOINT RESTRAINING DEVICES SHALL HAVE A WORKING PRESSURE OF 250 PSI MINIMUM, WITH A MINIMUM SAFETY FACTOR OF 2:1, AND SHALL BE EBAA IRON INC., MEGALUG OR EQUAL. JOINT RESTRAINTS SHALL BE PROVIDED AT A MINIMUM OF TWO JOINTS FROM ANY FITTING.
18. WHENEVER IT IS NECESSARY, IN THE INTEREST OF SAFETY, TO BRACE THE SIDES OF A TRENCH, THE CONTRACTOR SHALL FURNISH, PUT IN PLACE AND MAINTAIN SUCH SHEETING OR BRACING AS MAY BE NECESSARY TO SUPPORT THE SIDES OF THE EXCAVATION TO ENSURE PERSONNEL SAFETY, AND TO PREVENT MOVEMENT WHICH CAN IN ANY WAY DAMAGE THE WORK OR ENDANGER ADJACENT STRUCTURES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SEQUENCE, METHODS AND MEANS OF CONSTRUCTION, AND FOR THE IMPLEMENTATION OF ALL OSHA AND OTHER SAFETY REQUIREMENTS. "CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE OFFICE OF ENVIRONMENTAL SERVICES MINIMUM DESIGN AND CONSTRUCTION STANDARDS."
19. ALL NEW MAINS MUST BE PIGGED. LOCATER TAPS MUST BE USED ON NEW MAINS.
20. ALL WATER MAIN INSTALLATIONS SHALL COMPLY WITH THE COLOR CODING REQUIREMENTS OF CHAPTER 62-555.320, FAC.

* REFER TO WATER AND SEWER SEPARATION NOTES PER D.E.R. REQUIREMENTS



(X) SERVICE LATERAL DETAIL

NTS
UTL021.DWG



(X) DROP CLEANOUT

NTS
UTL022.DWG

WOHLFARTH CONSULTING GROUP LLC
ENGINEERS & PLANNERS
246 N. WESTMORE DRIVE
ALAMOGADO, CA 92014
(619) 750-3123
ORLANDO

MAYFAIR FORT PIERCE, FLORIDA
WATER AND SEWER DETAILS

SCALE: N/A
PROJECT: 2017-004
SHEET: C-7.4
DATE: 6/13/2018

W GROUP
LAND DEVELOPMENT & ENGINEERING SERVICES
BUSINESS NO. 32108

NOT FOR CONSTRUCTION
7/17/18

GENERAL PIPELINE NOTES

(IN THE EVENT OF CONFLICT OR OMISSION BETWEEN THE PLANS AND THESE CODES/GUIDELINES, CONSTRUCTION SHALL BE EXECUTED IN CONFORMANCE WITH THE STRICTEST PROVISIONS OF THE CODES/GUIDELINES.)

- ALL MATERIALS, INSTALLATION, TESTING AND SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE BROWARD COUNTY OFFICE OF ENVIRONMENTAL SERVICES (OES) "MINIMUM STANDARDS," BROWARD COUNTY ENGINEERING DIVISION STANDARDS AND THE TECHNICAL SPECIFICATIONS (WHEN APPLICABLE).
- DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO ANSI A21.51/AWWA C151-96 WITH WALL THICKNESS CLASS 50 FOR 8" AND ABOVE, CLASS 52 FOR 4" AND 6" PRESSURE CLASS 350 FOR 4" - 24" AND PRESSURE CLASS 250 FOR 30" - 64" AND SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSI A21.4/AWWA C104-95. EPOXY LININGS SHALL BE USED FOR FORCE MAINS AND GRAVITY SEWERS. PIPE, FITTINGS AND APPURTENANCES IN METER VAULTS SHALL BE FLANGED. ALL FLANGED DUCTILE IRON PIPE SHALL BE CLASS 53.
- PVC NON-PRESSURE PIPE (GRAVITY SEWER PIPE) SHALL CONFORM TO ASTM D3034 WITH A MINIMUM WALL THICKNESS OF DR 26.
- MINIMUM COVER FOR DUCTILE IRON PIPE SHALL BE 30" (SEE NOTE 6).
- ALL PRESSURE MAINS SHALL BE HYDROSTATICALLY PRESSURE TESTED FOR A PERIOD OF NOT LESS THAN 2 HOURS AT 150 PSI WITH AN ALLOWABLE LEAKAGE NOT TO EXCEED THE FORMULA.

$$L = SD \sqrt{P} / 133,200$$

IN WHICH -L- EQUALS ALLOWABLE LEAKAGE IN GALLONS/HOUR, -S- EQUALS LENGTH OF PIPE IN FEET, -D- EQUALS NOMINAL DIAMETER OF PIPE IN INCHES, -P- EQUALS AVERAGE TEST PRESSURE DURING TEST IN LBS/SQ. IN. ALL TESTING SHALL BE MADE IN ACCORDANCE WITH ANSI/AWWA C600-99 (HYDROSTATIC TESTS) AND C651-99 (WATER MAIN BACTERIOLOGICAL TESTS).

- ALL MECHANICAL JOINTS SHALL BE RESTRAINED IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND IN COMPLIANCE WITH AWWA STANDARDS.
- WHERE AN EXISTING WATER OR FORCE MAIN REQUIRES DEFLECTION TO CONNECT WITH OR PASS BY PROPOSED PIPE, THE AMOUNT OF DEFLECTION PER PIPE JOINT SHALL CONCUR WITH THE STANDARD UTILITY CROSSING DETAIL. THE LENGTH OF EXISTING PIPE TO BE DEFLECTED SHALL BE APPROVED BY THE ENGINEER.
- ALL PIPES DENOTED "ABANDON, PLUG AND GROUT" SHALL BE EMPTIED, FLUSHED OUT AND COMPLETELY FILLED WITH GROUT.
- WHERE THE PROPOSED WATER MAIN OR FORCE MAIN IS IN CONFLICT WITH OTHER EXISTING OR PROPOSED UTILITIES, THE NEW MAIN SHALL BE DEFLECTED AT PIPE JOINTS IN ACCORDANCE WITH THE STANDARD UTILITY CROSSING DETAIL. THE SPECIAL UTILITY CROSSING DETAIL WITH BENDS SHALL ONLY BE USED WHEN APPROVED BY THE ENGINEER.

FIRE HYDRANT SPECIFICATIONS

(IN THE EVENT OF CONFLICT OR OMISSION BETWEEN THE PLANS AND THESE CODES/GUIDELINES, CONSTRUCTION SHALL BE EXECUTED IN CONFORMANCE WITH THE STRICTEST PROVISIONS OF THE CODES/GUIDELINES.)

ALL FIRE HYDRANTS WILL CONFORM TO THE FOLLOWING:

- HYDRANTS MUST COMPLY WITH AWWA STANDARD C502 OR THE LATEST REVISION THEREOF.
- HYDRANTS SHALL HAVE A BRONZE-TO-BRONZE OPERATING NUT WITH THRUST WASHER AND OPERATING NUT WEATHER CAP.
- SHALL HAVE A ONE PIECE BONNETT WITH A MINIMUM OF TWO (2) "O" RINGS STEM TO PREVENT WATER FROM ENTERING THE BONNETT.
- HYDRANTS SHALL HAVE A LUBRICATION CHAMBER LOCATED IN THE BONNETT SO THAT ALL THREADED AND BEARING SURFACES ARE AUTOMATICALLY LUBRICATED.
- NATIONAL STANDARD THREAD (NST) IS TO BE USED. NOZZLE CAPS AND OPERATING STEM NUT(S) ARE TO OPEN LEFT. OPERATING NUTS ARE TO BE 1 1/2" PENTAGON SHAPED (5 SIDED).
- HYDRANTS ARE TO BE EQUIPPED WITH ONE (1) PUMPER NOZZLE, 4 1/2" DIAMETER, AND TWO (2) HOSE NOZZLES, 2 1/2" DIAMETER, AND ARE TO SEAT ON "O" RINGS AND BE FIELDING REPLACEABLE. CHAINS NOT REQUIRED.
- SHALL BE FURNISHED WITH A BREAKABLE FEATURE THAT WILL BREAK CLEANLY UPON IMPACT. THIS SHALL CONSIST OF A TWO-PART BREAKABLE SAFETY FLANGE AND BREAKABLE STEM COUPLING ALLOWING 360 DEGREE ROTATION OF THE HYDRANT.
- THE MAIN VALVE IS TO BE A MINIMUM OF 5 1/4" IN DIAMETER AND SHALL BE MADE OF BRONZE AND THREADED INTO A BRONZE SEAT RING IN THE ELBOW OF THE HYDRANT (BRONZE-TO-BRONZE SEATING), FROST DRAIN NOT REQUIRED.
- THE VALVE WILL BE THE COMPRESSION TYPE WITH A MAXIMUM PRESSURE LOSS THROUGH THE HYDRANT OF 2.80 PSI AT 1,000 GPM WITH A 6" SHOE (TO BE CERTIFIED BY THE MANUFACTURER). SHOE (INSIDE) SHALL BE EPOXY COATED.
- HYDRANTS MUST BE DRY TOP, LOW PROFILE DESIGN WITH A MAXIMUM HEIGHT OF 34".
- ALL HYDRANTS ARE TO BE SUPPLIED COMPLETE AND READY FOR INSTALLATION INCLUDING, BUT NOT LIMITED TO, ALL NUTS, BOLTS, RINGS AND RUBBERS.
- ALL HYDRANTS TO INCLUDE A BLUE 4" X 4" X 3/4" PAVEMENT MARKER BY VULCAN SIGNS #V88-AB. 13. FIRE HYDRANTS SHALL BE DARLING B-50-B, MUELLER CENTURION OR WATERHOU.

STANDARD SEPARATION STATEMENT FOR "W&S" CONFLICTS

(IN THE EVENT OF CONFLICT OR OMISSION BETWEEN THE PLANS AND THESE CODES/GUIDELINES, CONSTRUCTION SHALL BE EXECUTED IN CONFORMANCE WITH THE STRICTEST PROVISIONS OF THE CODES/GUIDELINES.)

- SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS SHOULD ALWAYS CROSS UNDER WATER MAINS. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE.
- WHERE SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS IF IT NOT AVAILABLE IN THE SIZE PROPOSED). SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE, AND MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT THE CROSSING.
- ALL CROSSINGS SHALL BE ARRANGED SO THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).
- WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP AND THE CROSSING SHALL BE ARRANGED TO MEET THE REQUIREMENTS ABOVE.
- A MINIMUM OF 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHEREVER POSSIBLE.
- IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR AN UNDISTURBED EARTH SHELF ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.
- WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (IF AVAILABLE IN THE SIZE PROPOSED) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL ALWAYS BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR THE FORCE MAIN (STAGGERED JOINTS).
- ALL DIP SHALL BE CLASS 50 OR HIGHER. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED.
- MAXIMUM OBTAINABLE SEPARATION OF RECLAIMED WATER LINES AND DOMESTIC WATER LINES SHALL BE PRACTICED. A MINIMUM HORIZONTAL SEPARATION OF FIVE FEET (CENTER TO CENTER) OR THREE FEET (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN RECLAIMED WATER LINES AND EITHER POTABLE WATER MAINS OR SEWAGE COLLECTION LINES. A MINIMUM VERTICAL CLEARANCE OF 18 INCHES MUST BE MAINTAINED BETWEEN RECLAIMED WATER LINES AND POTABLE WATER MAINS OR SEWAGE COLLECTION LINES. AT CROSSINGS, PROVISIONS OF FAC RULE 17-604 AND 10 STATES STANDARDS APPLY.

SANITARY SEWER COLLECTION SYSTEM NOTES

(IN THE EVENT OF CONFLICT OR OMISSION BETWEEN THE PLANS AND THESE CODES/GUIDELINES, CONSTRUCTION SHALL BE EXECUTED IN CONFORMANCE WITH THE STRICTEST PROVISIONS OF THE CODES/GUIDELINES.)

GENERAL:

- ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE CITY MINIMUM STANDARDS.

MATERIALS:

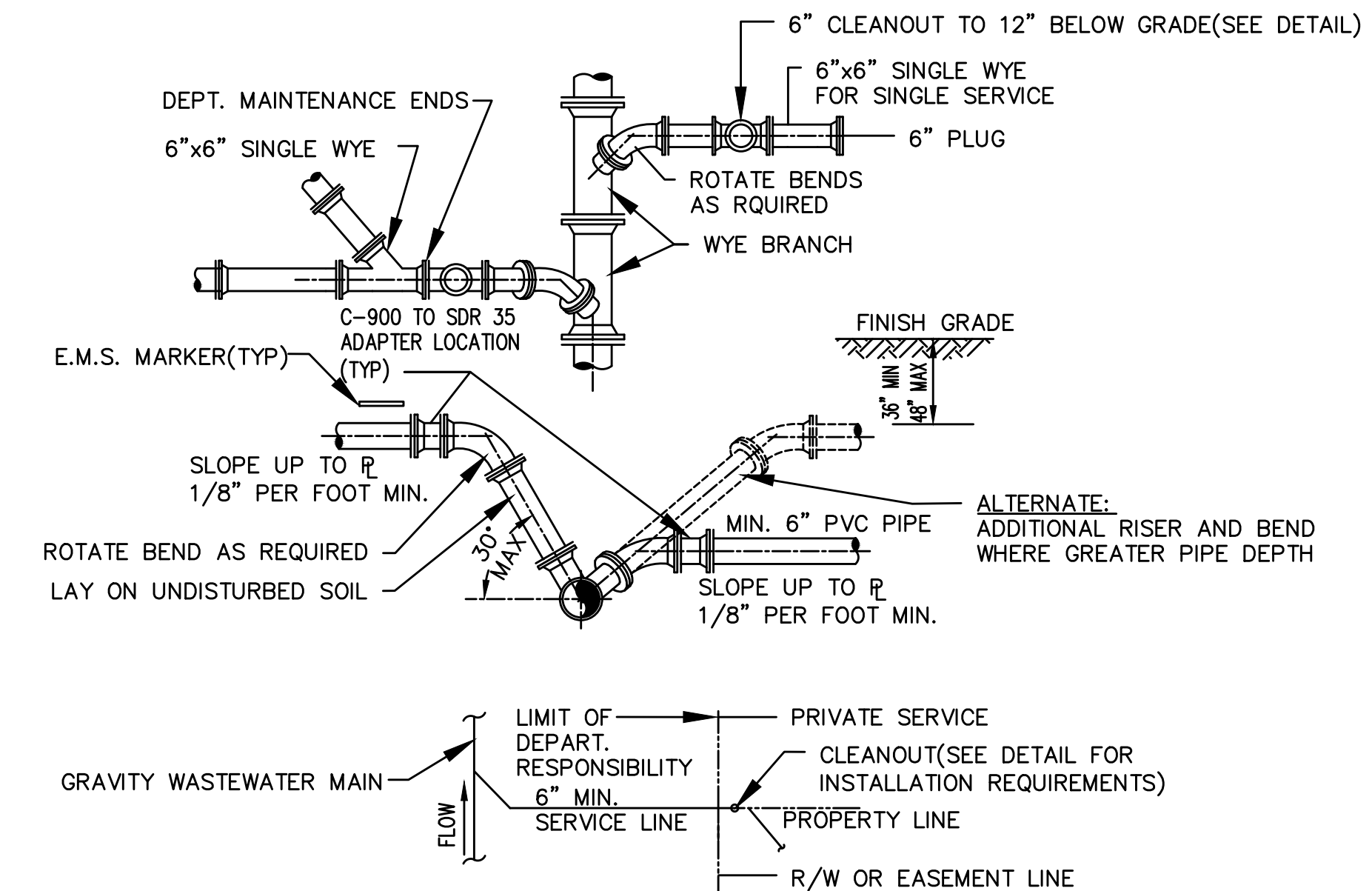
- ALL GRAVITY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO ASTM D3034, SDR 35 PIPES.
- ALL FITTINGS AND ACCESSORIES SHALL BE AS MANUFACTURED OR SUPPLIED BY THE PIPE MANUFACTURER OR APPROVED EQUAL.
- IRON CASTINGS SHALL CONFORM TO ASTM A-48 AND IN GENERAL SHALL BE CLASS 30. FRAMES AND GRATES MAY BE CLASS 20. ALL CLEAN-OUT COVERS SHALL BE LABELED "SANITARY SEWER".
- PRECAST CONCRETE MANHOLES SHALL CONFORM TO THE REQUIREMENT OF ASTM C-478 & 64 T. BASE SECTION TO BE MONOLITHIC.

INSTALLATION:

- P.V.C. SEWER PIPE SHALL BE LAID IN ACCORDANCE WITH ASTM D 2321 AND THE UNI-BELL PLASTIC PIPE ASSOCIATION'S "RECOMMENDED PRACTICE FOR THE INSTALLATION OF PVC SEWER PIPE".
- BACKFILL MATERIAL SHALL BE WELL GRADED GRANULAR MATERIAL, WELL TAMPED IN LAYERS NOT TO EXCEED 6 INCHES TO A HEIGHT OF 12 INCHES ABOVE PIPE AS SHOWN ON THE PLANS AND IN 12" LAYERS THEREAFTER. BACKFILL SHALL BE COMPACTED ON EACH 12" LIFT TO MINIMUM OF 98% OF THE MAXIMUM DENSITY (AASHTO T180).
- WHENEVER IT IS NECESSARY, IN THE INTEREST OF SAFETY, TO BRACE THE SIDES OF A TRENCH, THE CONTRACTOR SHALL FURNISH, PUT IN PLACE AND MAINTAIN SUCH SHEETING OR BRACING AS MAY BE NECESSARY TO SUPPORT THE SIDES OF THE EXCAVATION TO ENSURE PERSONNEL SAFETY, AND TO PREVENT MOVEMENT WHICH CAN IN ANY WAY DAMAGE THE WORK OR ENDANGER ADJACENT STRUCTURES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SEQUENCE, METHODS AND MEANS OF CONSTRUCTION, AND FOR THE IMPLEMENTATION OF ALL OSHA AND OTHER SAFETY REQUIREMENTS.

TESTING:

- AN AS-BUILT SURVEY OF THE SYSTEM, PREPARED BY A REGISTERED SURVEYOR, SHALL BE PROVIDED TO THE ENGINEER PRIOR TO FINAL INSPECTIONS. THE AS-BUILT SURVEY SHALL SHOW LOCATIONS, PIPE ELEVATIONS AND LENGTHS AT EACH CLEANOUT, VALVE, FITTING, AND BEND AND AT INTERVALS NOT TO EXCEED 100 FT.



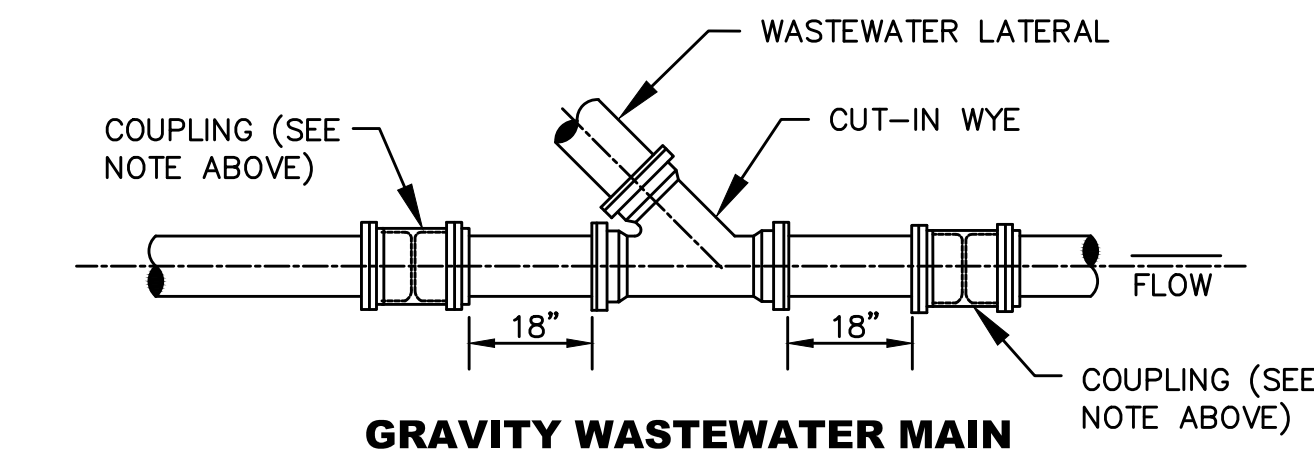
NOTES:

- SERVICE LATERALS SHALL TERMINATE AT PROPERTY LINE AT A DEPTH OF 3 FEET (MIN.) TO 4' (MAX.) TO T.O.P.
- THE END OF EACH SERVICE CONNECTION SHALL BE MARKED WITH A 2"x2" TREATED WOOD STAKE AND AN E.M.S. SANITARY SEWER MARKER.
- EACH SERVICE CONNECTION SHALL BE PLUGGED WATERTIGHT WITH AN APPROVED WING PLUG.
- CUT OFF BELL END WHEN USING FERNCO COUPLING FOR V.C.P. (FOR EXISTING SERVICES ONLY)
- CLEANOUT IS TO BE INSTALLED PER DEPARTMENT STANDARDS PRIOR TO WATER METER INSTALLATION. AN INSPECTION OF CONNECTION INTO THE DEPARTMENTS LATERAL IS REQUIRED PRIOR TO WATER METER RELEASE.
- WASTEWATER MAIN WYE BRANCH TO MATCH MAIN PIPE MATERIAL. ALTERNATE MATERIALS TO BE APPROVED BY THE DEPARTMENT.
- NO 90° BENDS SHALL BE USED FOR WASTEWATER SERVICE AND CLEANOUT INSTALLATION.
- SOLIDLY TAMP BACKFILL AT LEAST ONE FOOT ABOVE TOP OF PIPE. SERVICES UNDER PAVED AREAS SHALL BE BACKFILLED TO THE SAME SPECIFICATIONS AS SHOWN ON "PAVEMENT REPLACEMENT" DETAIL.
- CONTRACTOR SHALL MARK ON A CLEAN SET OF PLANS THE FINAL STATIONING OR DISTANCE AND DIRECTION FROM MANHOLE TO EACH SERVICE LATERAL AND GIVE TO ENGINEER FOR RECORD DRAWING PURPOSES.
- ANY DEVIATION FROM THESE METHODS SHALL BE APPROVED BY THE DEPARTMENT.
- THE USE OF UNNECESSARY FITTINGS ON THE CUSTOMERS LINE TO REDUCE EXCAVATION EFFORTS WILL BE CAUSE FOR REJECTION.
- CLEANOUTS DESIGNATING THE END OF THE DEPARTMENTS MAINTENANCE RESPONSIBILITY SHALL BE LOCATED WITHIN AN UTILITY EASEMENT OR RIGHT-OF-WAY DEDICATED FOR UTILITIES.
- CONTRACTOR TO MAINTAIN LESS THAN 10" WHENEVER POSSIBLE.

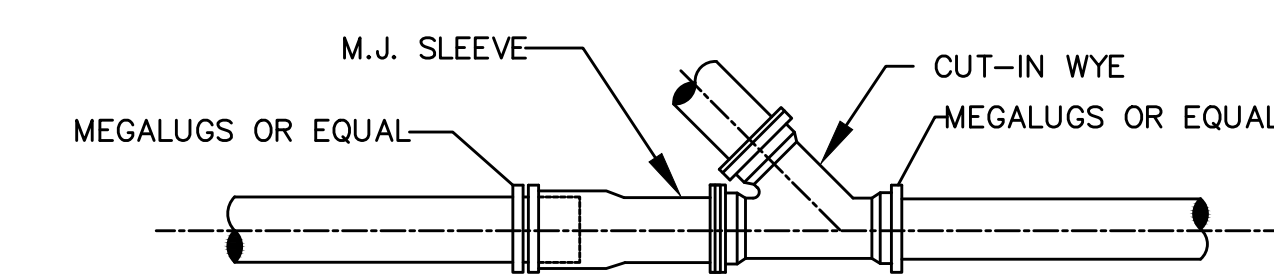
WASTEWATER SERVICE CONNECTIONS

NOTES:

- COUPLINGS USED ON V.C.P. SHALL BE FERNCO WITH SHEAR BAND AND SCREWS ALL STAINLESS STEEL.
- COUPLINGS USED ON P.V.C. SHALL BE FERNCO WITH STAINLESS STEEL BANDS AND SCREWS.
- COUPLINGS USED ON D.I.P. SHALL BE M.J. EPOXY LINED.



GRAVITY WASTEWATER MAIN



DUCTILE IRON-MECHANICAL JOINT (FORCE MAIN)

- MEGALUGS OR EQUAL ARE REQUIRED THROUGHOUT ASSEMBLY.

WASTEWATER SERVICE STANDARD CUT-IN

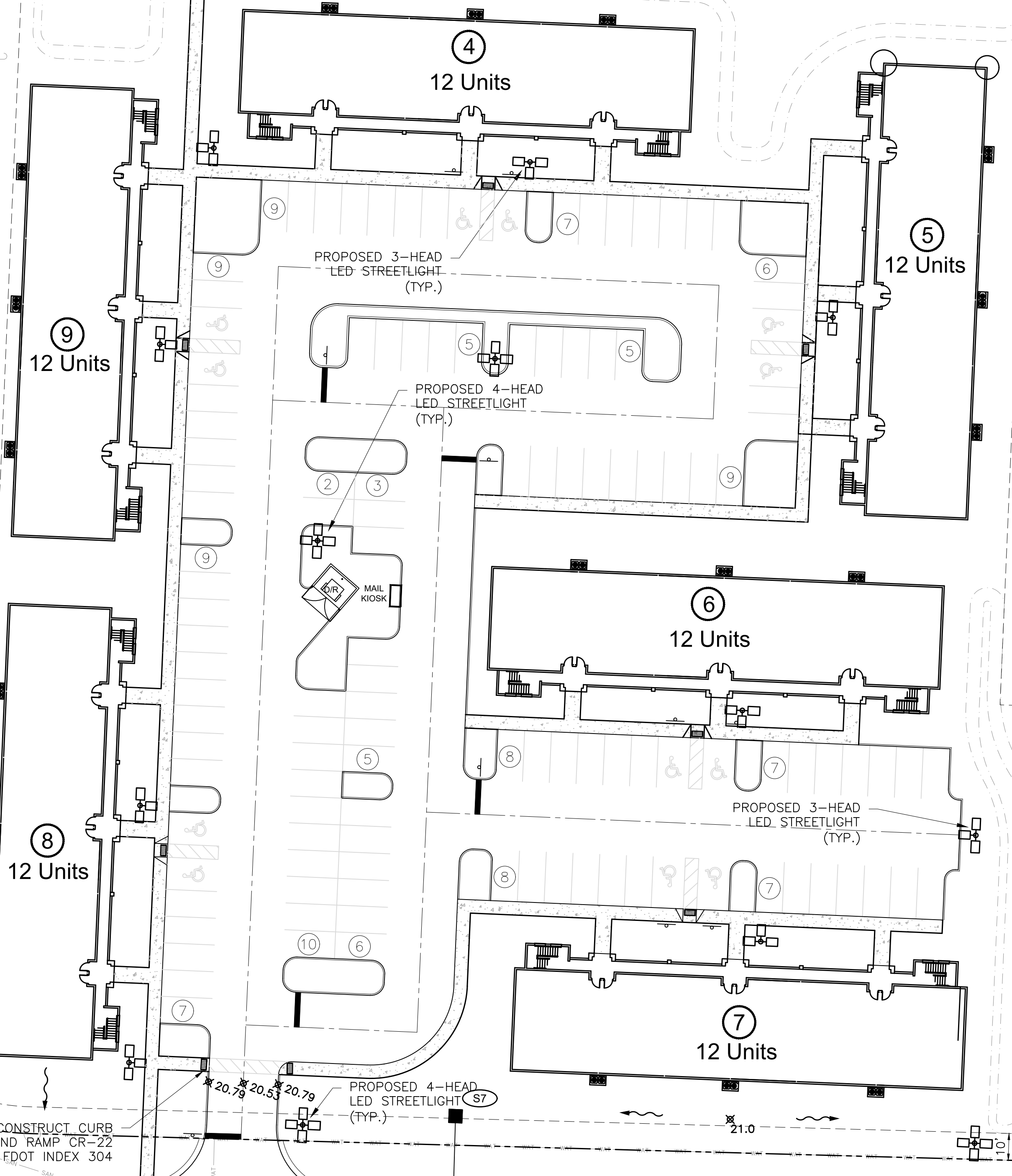
<p>WOHLFARTH CONSULTING GROUP LLC ENGINEERS & PLANNERS 246 N. WESTMOORE DRIVE ALHAMBRA, CA 91701 (407) 750-3123 ORLANDO</p>		<p>DATE: 6/13/2018</p>
<p>MAYFAIR FORT PIERCE, FLORIDA</p>	<p>WATER AND SEWER DETAILS</p>	<p>SCALE: N/A</p>
<p>PROJECT: 2017-004</p>	<p>CHECKED: RW</p>	<p>DATE: 6/13/2018</p>
<p>SHEET: C-7.5</p>	<p>DESIGNED: --</p>	<p>PROJECT: 2017-004</p>
<p>W GROUP LAND DEVELOPMENT & ENGINEERING SERVICES BUSINESS NO. 32108</p>		<p>NOT FOR CONSTRUCTION 7/17/18</p>

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MATCHLINE SEE SHEET C-8.0

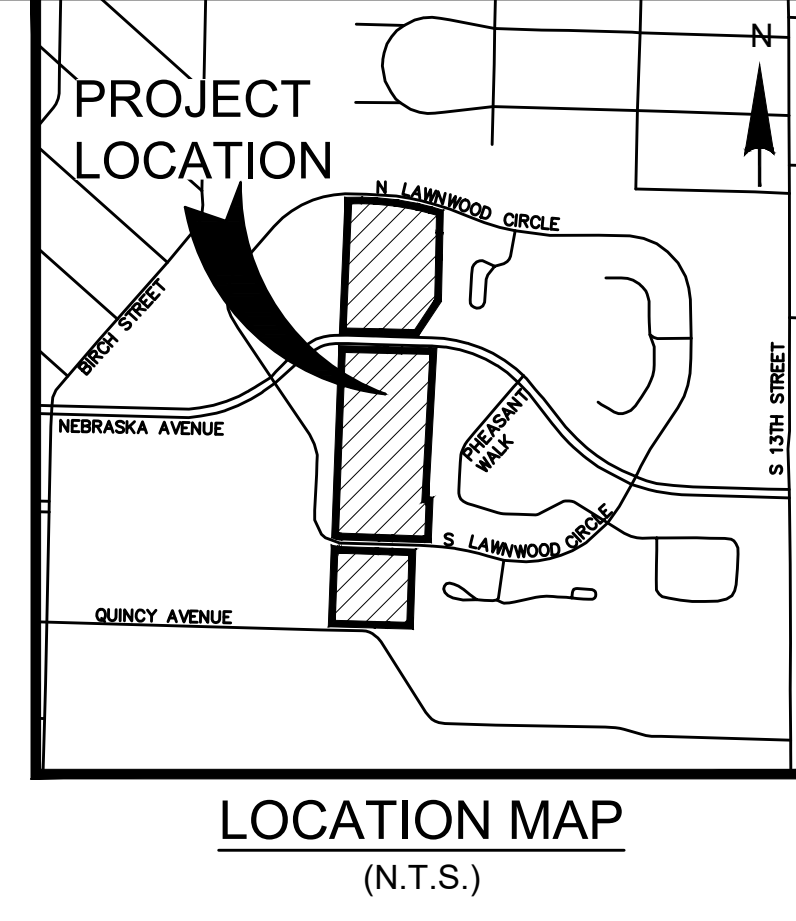
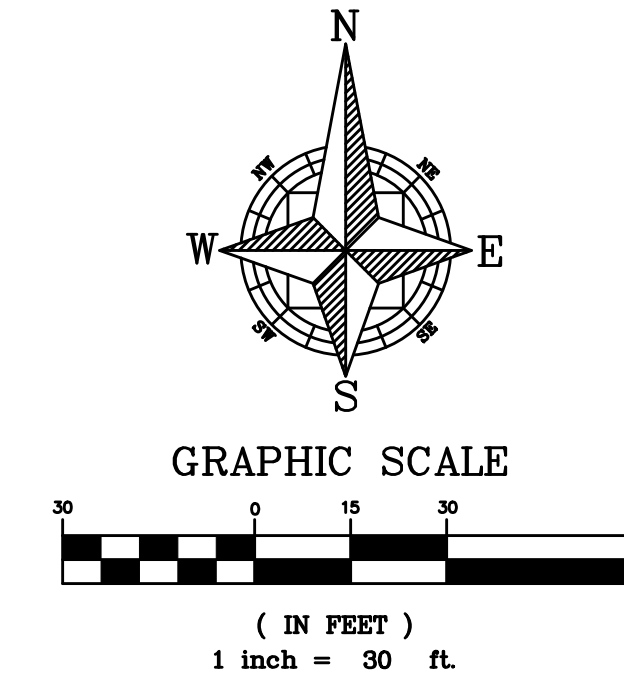
SOUTH 19TH STREET CANAL



CONSTRUCT CURB AND RAMP CR-22 PER FDOT INDEX 304

SOUTH LAWNWOOD CIRCLE

MATCHLINE SEE SHEET C-8.2



LEGEND

	PROPOSED WATER MAIN
	PROPOSED GATE VALVE
	PROPOSED FIRE HYDRANT ASSEMBLY WITH VALVE
	PROPOSED WATER MAIN FITTINGS (REDUCER, TEE, BENDS)
	EXISTING WATER MAIN
	EXISTING WATER MAIN FITTINGS (TEE, GATE VALVE, REDUCER)
	EXISTING FIRE HYDRANT ASSEMBLY WITH VALVE
	PROPOSED SANITARY SEWER MAIN
	PROPOSED SANITARY SEWER MANHOLE
	EXISTING SANITARY SEWER MAIN
	EXISTING SANITARY SEWER MANHOLE
	PROPOSED STORM SEWER
	PROPOSED STORM CATCH BASIN
	EXISTING STORM SEWER
	EXISTING STORM CATCH BASIN
	PROPOSED GRADE ELEVATION
	PROPOSED 4-HEAD STREETLIGHT
	PROPOSED 2-HEAD STREETLIGHT
	PROPOSED 3-HEAD STREETLIGHT

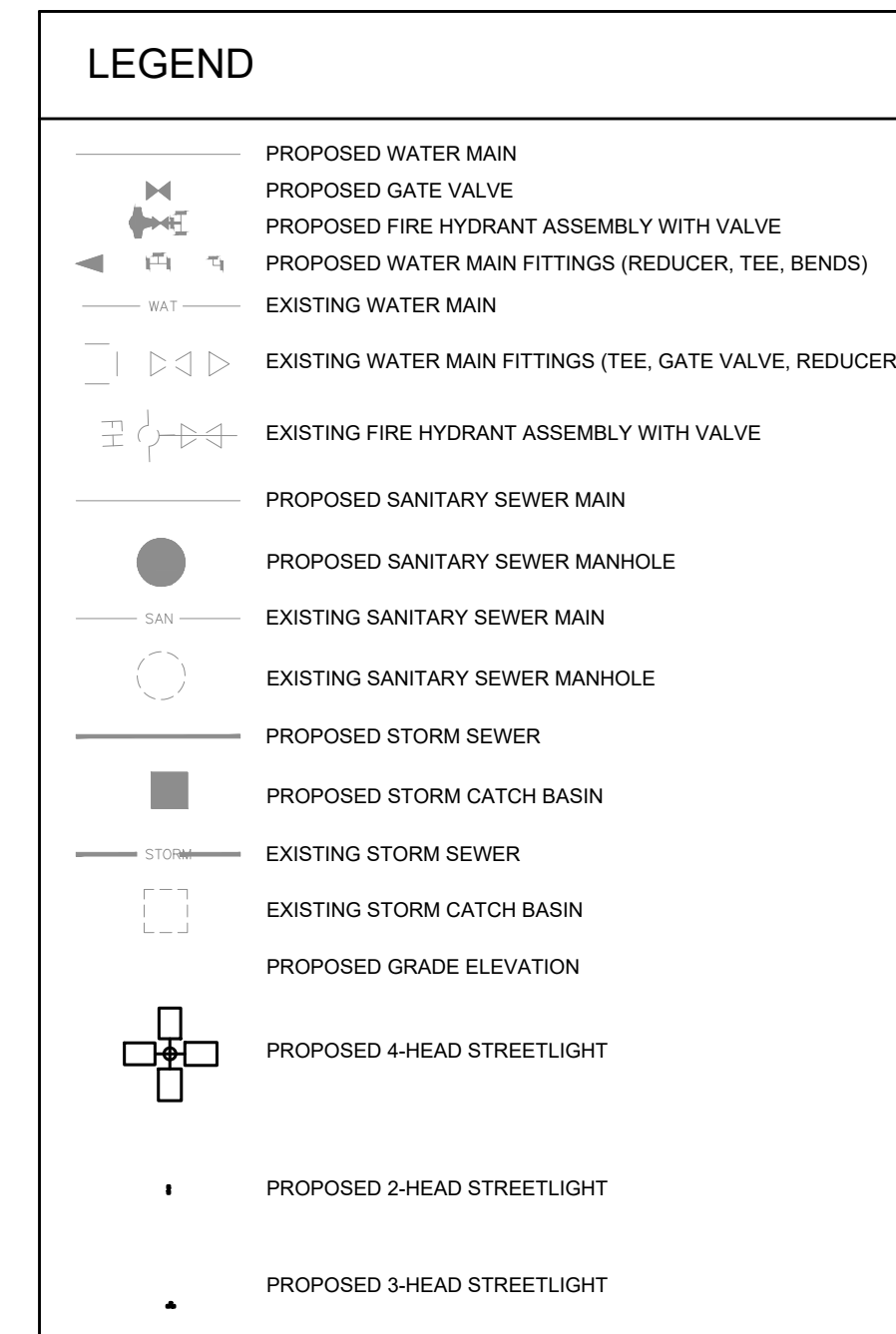
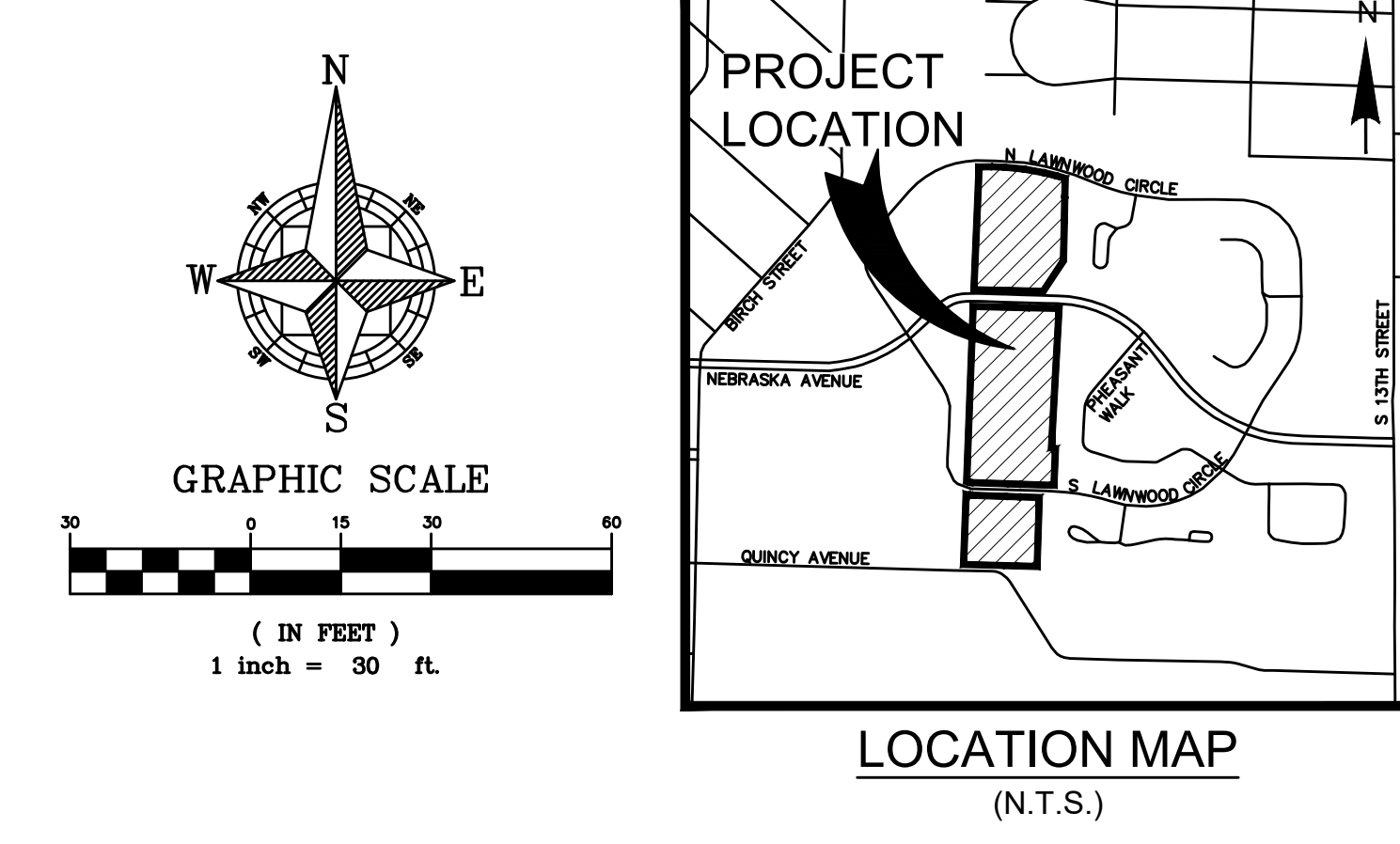
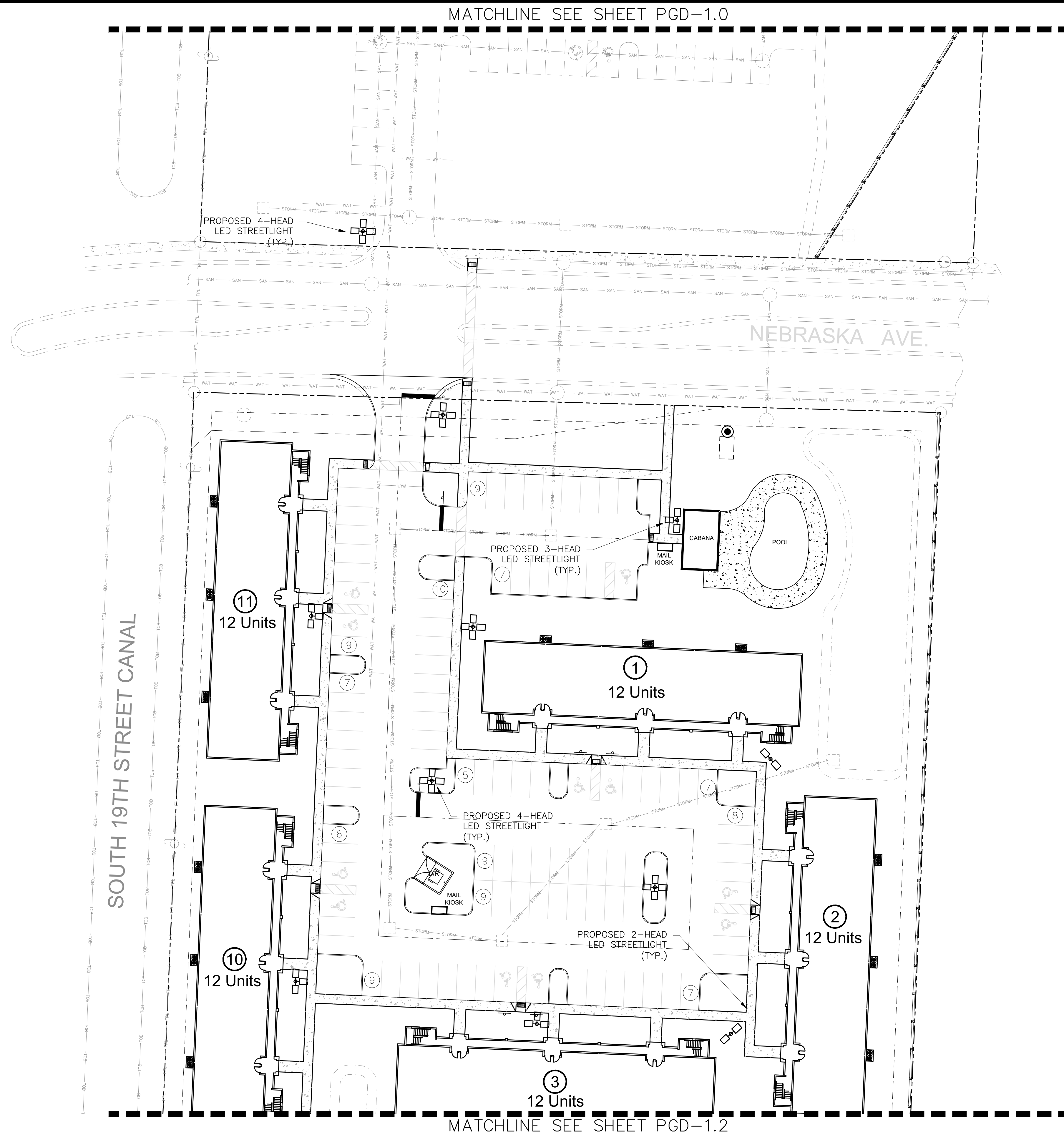
LIGHTING FIXTURE DETAIL

LIGHTING FIXTURE SCHEDULE

TYPE	SYMBOL	DESCRIPTION	LAMPS	REMARKS
SA2		POLE MOUNTED LED AREA LIGHT FIXT. (2) LSI LIGHTING XAM3/3LED/119/350/UE/BRZ 30' POLE(1) LSI LIGHTING 5RPBS/507G/30/S/BRZ	(2) 119W LED	DOUBLE HEAD POLE MOUNTED LED AREA LIGHT ON A 30' BRONZE POLE.
SA3		POLE MOUNTED LED AREA LIGHT FIXT. (3) LSI LIGHTING XAM3/3LED/119/350/UE/BRZ 30' POLE(1) LSI LIGHTING 5RPBS/507G/30/T90/BRZ	(3) 119W LED	TRIPLE HEAD (T90) POLE MOUNTED LED AREA LIGHT ON A 30' BRONZE POLE.
SA4		POLE MOUNTED LED AREA LIGHT FIXT. (4) LSI LIGHTING XAM3/3LED/119/350/UE/BRZ 30' POLE(1) LSI LIGHTING 5RPBS/507G/30/Q90/BRZ	(4) 119W LED	QUAD HEAD (Q90) POLE MOUNTED LED AREA LIGHT ON A 30' BRONZE POLE.

IBI GROUP (FLORIDA) INC.	MAYFAIR FORT PIERCE, FLORIDA	LIGHTING PLAN	ORLANDO	POMPANO BEACH	
ENGINEERS SURVEYORS PLANNERS LANDSCAPE ARCHITECTS ENVIRONMENTAL CONSULTANTS	2200 PARK CENTRAL BLVD. N. SUITE 300 MAITLAND, FLORIDA 32751 (407) 866-2120	2200 PARK CENTRAL BLVD. N. SUITE 300 POMPANO BEACH, FLORIDA 33064 (954) 974-2200	ORLANDO	POMPANO BEACH	BY
DRAWN: BW	DESIGNED:	CHECKED: RW	DATE: 6/3/2018		
SCALE: 1" = 30'	PROJECT: 38890	SHEET: C-8.1			
IBI GROUP FLORIDA ENGINEERING BUSINESS NO. 2966			NOT FOR CONSTRUCTION		
7/17/18					

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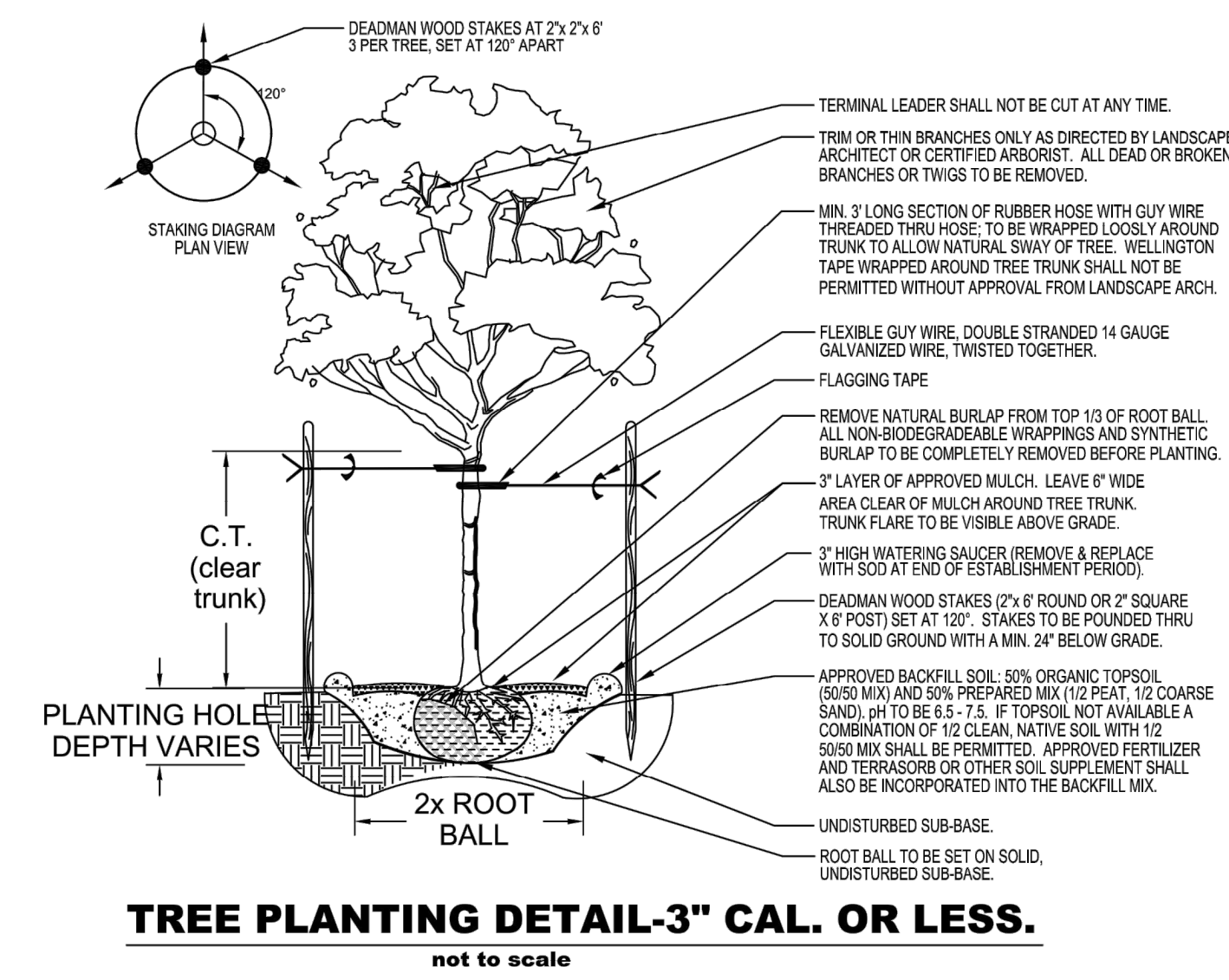


LIGHTING FIXTURE SCHEDULE				
TYPE	SYMBOL	DESCRIPTION	LAMPS	REMARKS
SA2		POLE MOUNTED LED AREA LIGHT FIXT. (2) LSI LIGHTING XAM3/3LED/119/350/UE/BRZ 30' POLE(1) LSI LIGHTING 5RPBS/507G/30/S/BRZ	(2) 119W LED	DOUBLE HEAD POLE MOUNTED LED AREA LIGHT ON A 30' BRONZE POLE.
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SA4		POLE MOUNTED LED AREA LIGHT FIXT. (4) LSI LIGHTING XAM3/3LED/119/350/UE/BRZ 30' POLE(1) LSI LIGHTING 5RPBS/507G/30/S/BRZ	(4) 119W LED	QUAD HEAD (Q90) POLE MOUNTED LED AREA LIGHT ON A 30' BRONZE POLE.

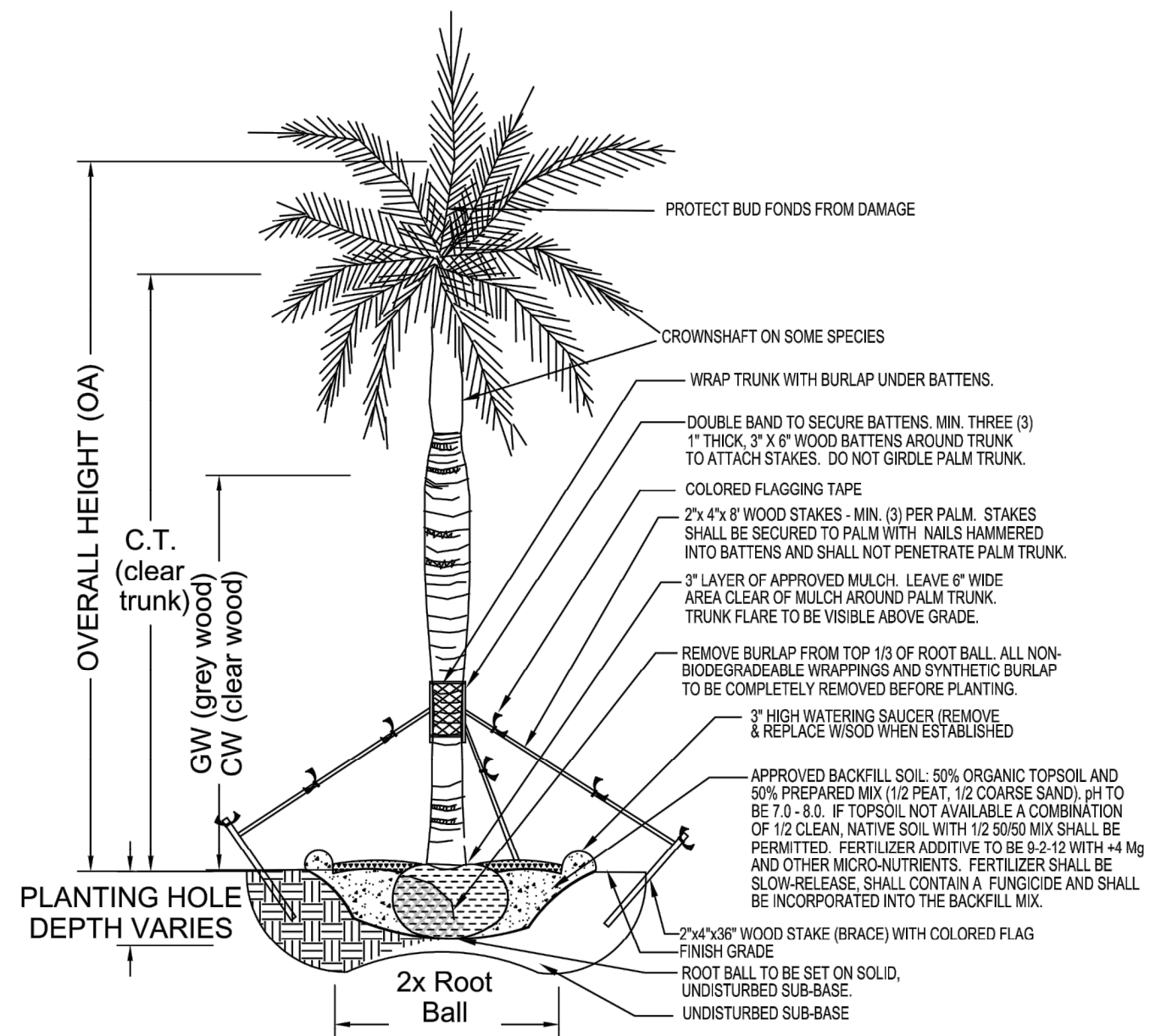
LIGHTING FIXTURE DETAIL

IBI GROUP (FLORIDA) INC. ENGINEERS PLANNERS http://www.ibigroup.com SURVEYORS ENVIRONMENTAL CONSULTANTS LANDSCAPE ARCHITECTS 2200 PARK CENTRAL BLVD. N. SUITE 300 POMPANO BEACH, FLORIDA 33064 MAITLAND OFFICE: (407) 866-2120 ORLANDO (407) 866-2120 POMPANO BEACH		PROJECT: 38890 SHEET: C-8.0 DATE: 6/13/2018
MAYFAIR FORT PIERCE, FLORIDA LIGHTING PLAN		DRAWN: BW DESIGNED: CHECKED: RW DATE: 6/13/2018
IBI GROUP FLORIDA ENGINEERING BUSINESS NO. 2966		NOT FOR CONSTRUCTION 7/17/18

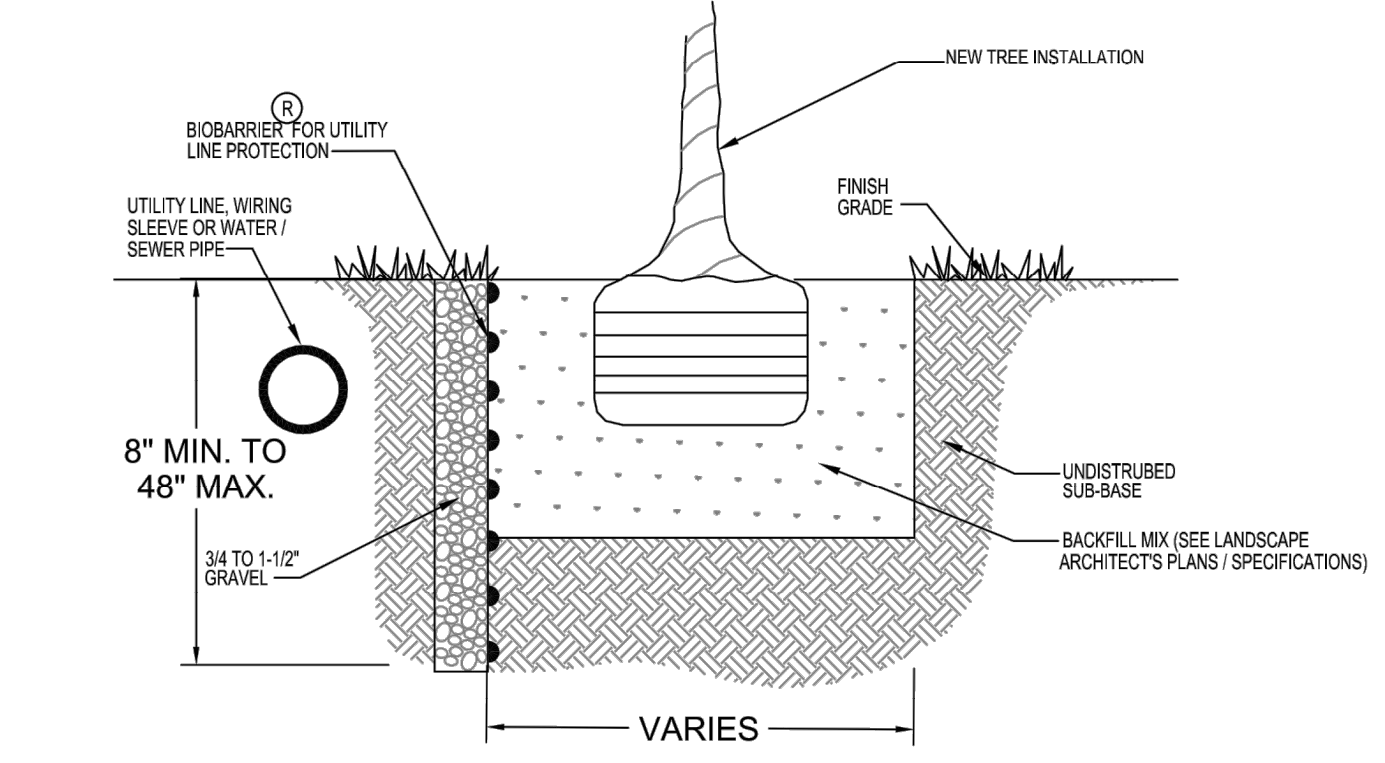
C:\Users\Dennis Murrey\Dropbox\Risk Wohlfarth\Mayfair\DWG\Construction Plans\2017-004-11-1-00 - Landscape Plan.dwg Modified: 6/3/2018 By: Dennis Murrey Plotted By: Dennis Murrey



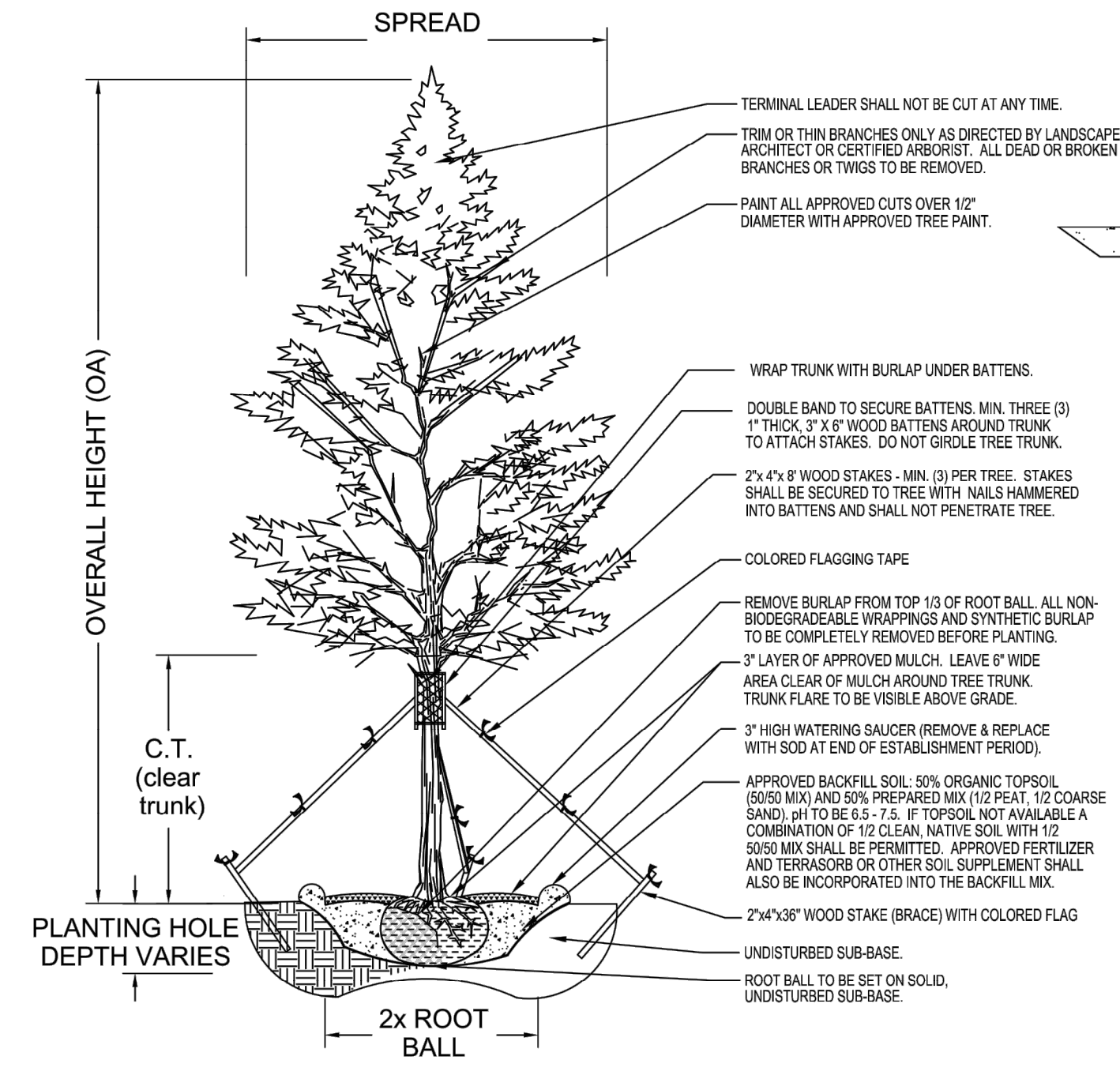
TREE PLANTING DETAIL-3" CAL. OR LESS.
not to scale



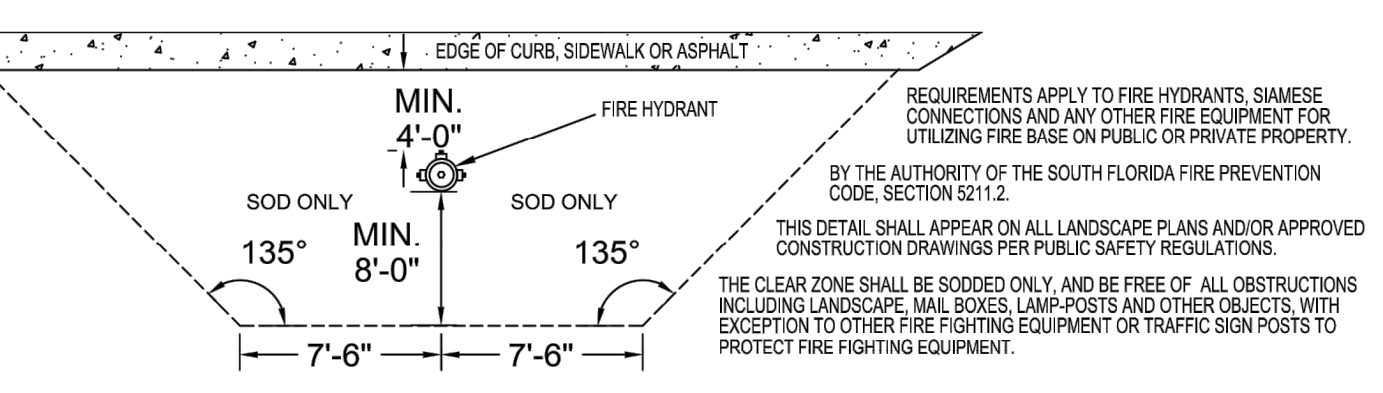
PALM PLANTING DETAIL-TYP.
not to scale



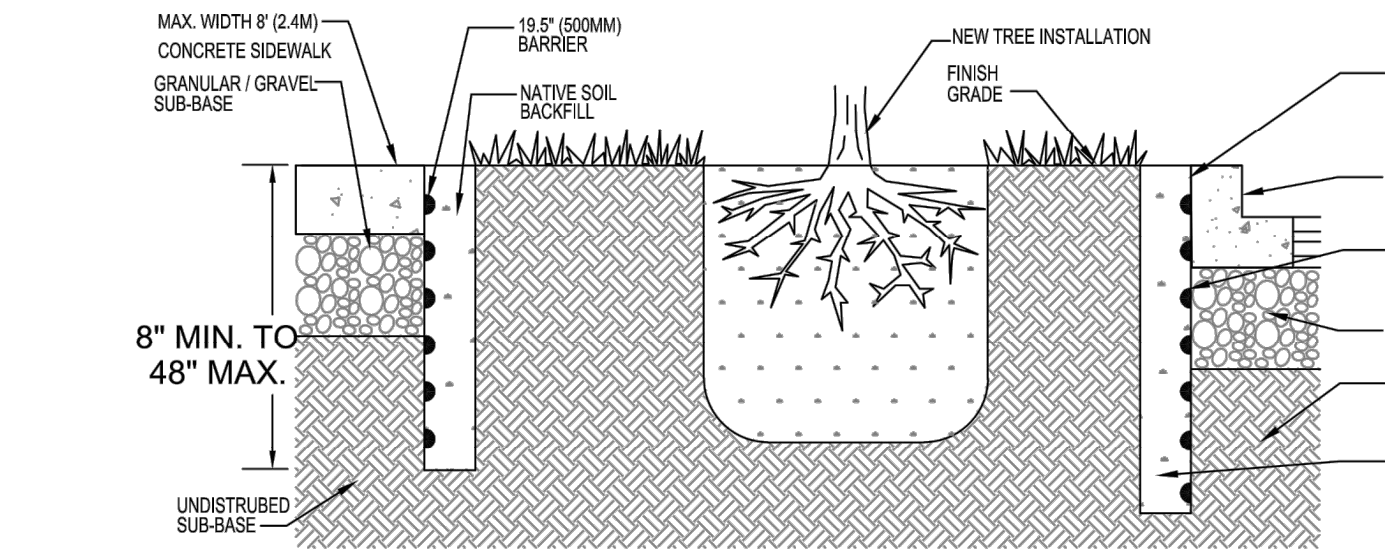
ROOT BARRIER DETAIL - UNDERGROUND UTILITY LINES
not to scale



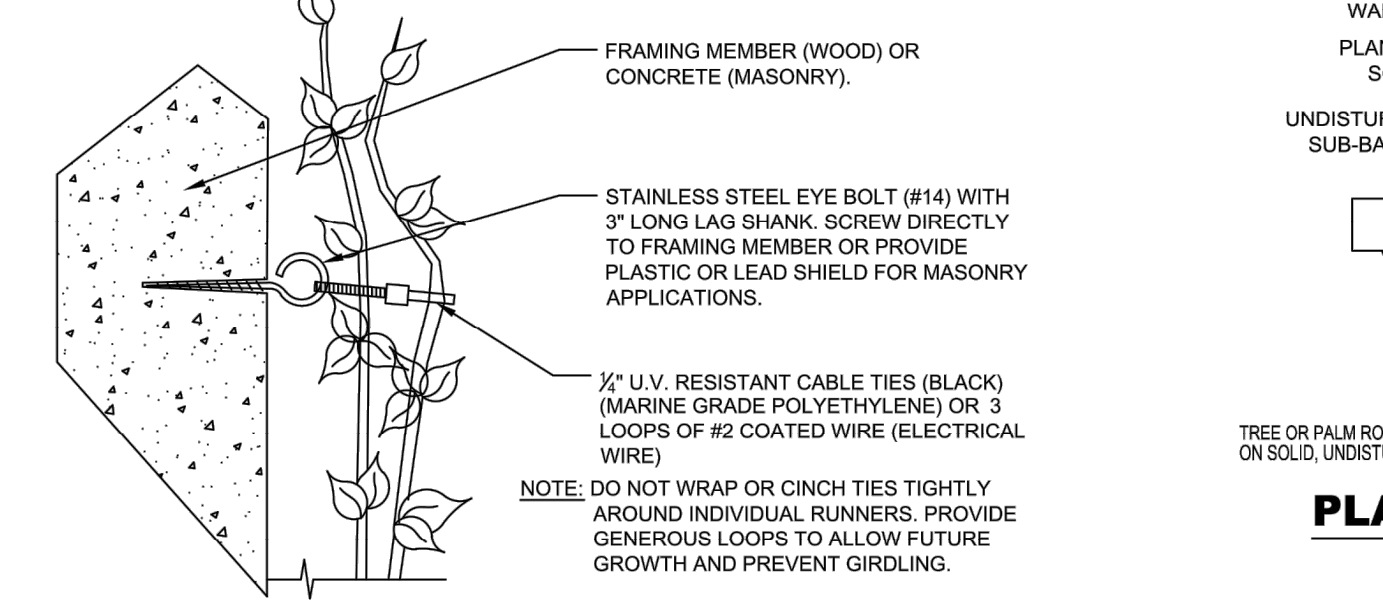
LARGE TREE PLANTING DETAIL- GREATER THAN 3" CAL.
not to scale



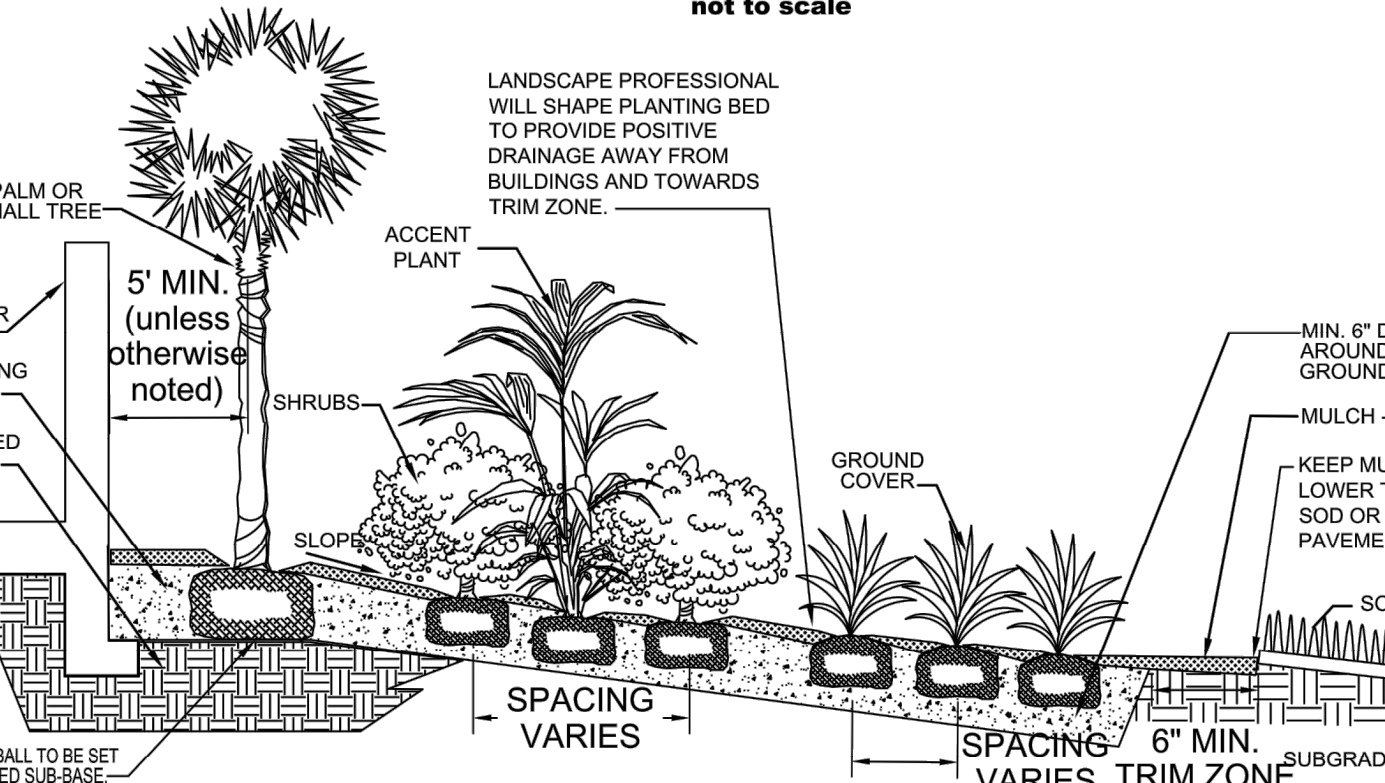
FIRE HYDRANT CLEAR ZONE DETAIL
not to scale



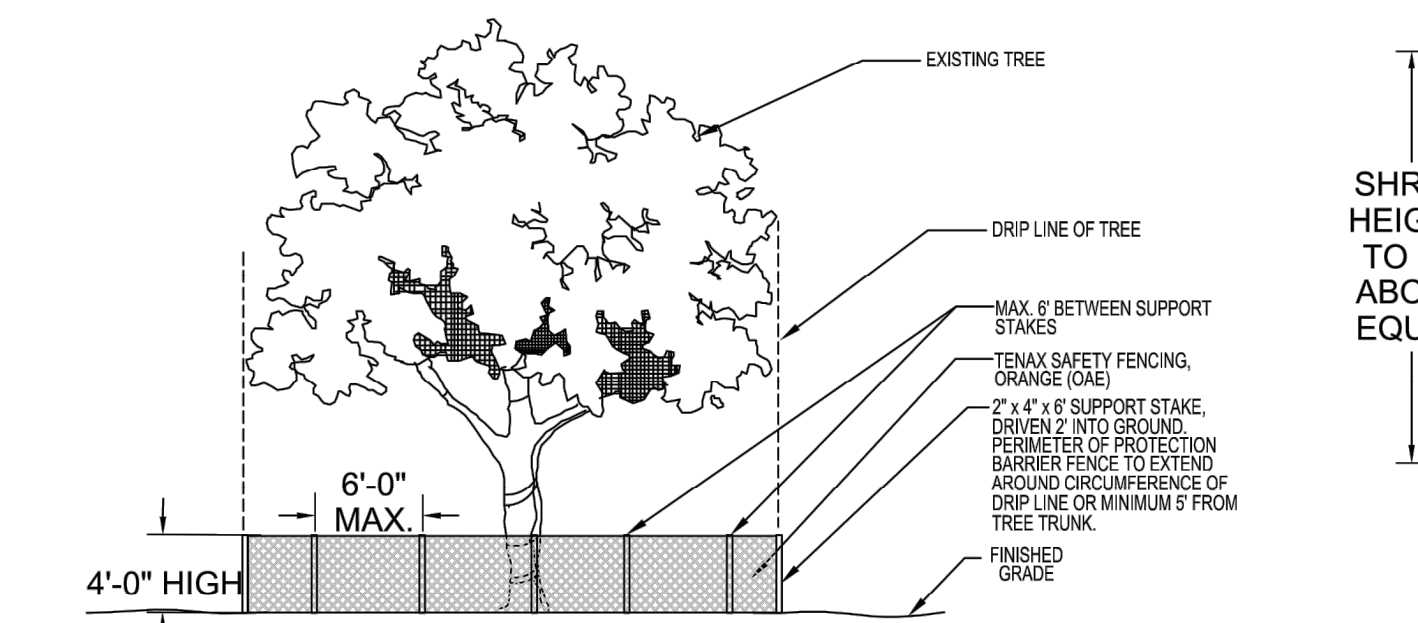
ROOT BARRIER DETAIL - PAVING / CURBING
not to scale



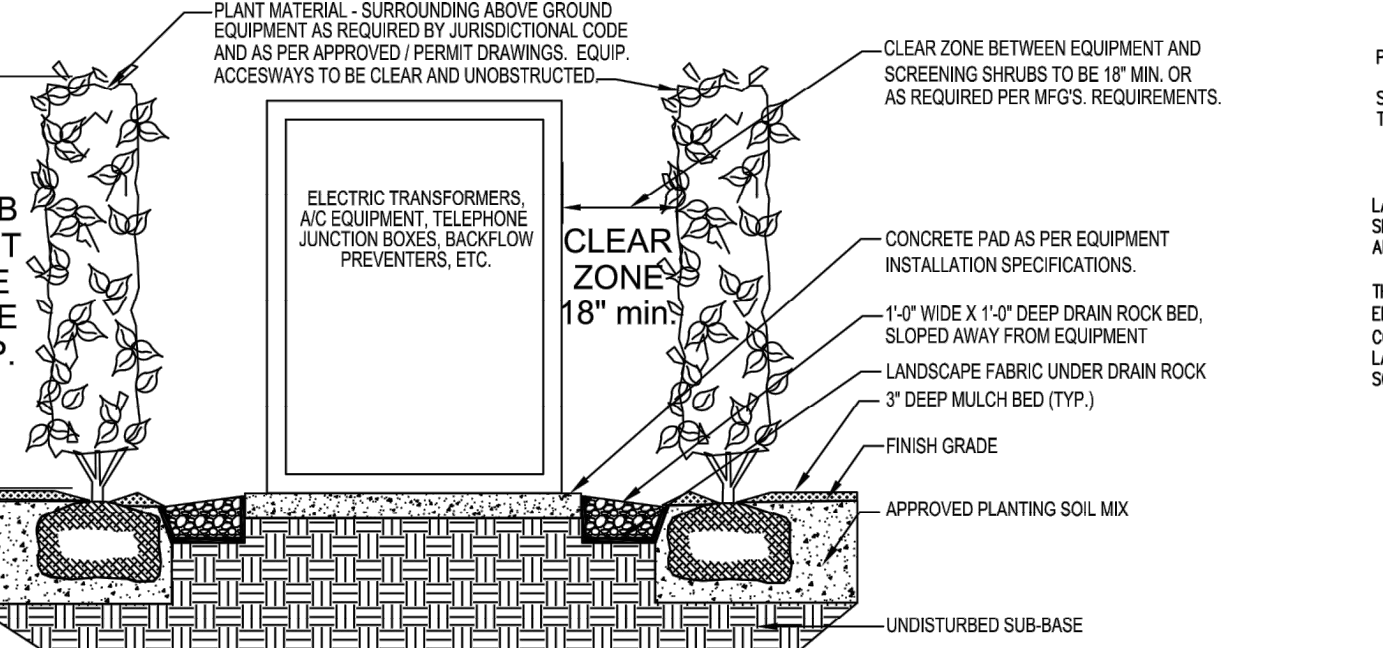
VINE TO WALL ATTACHMENT DETAIL
not to scale



PLANTING BED - SHRUB INSTALLATION DETAIL - CROSS-SECTION
not to scale



TREE PROTECTION BARRIER DETAIL
not to scale



GROUND MOUNTED EQUIPMENT SCREENING DETAIL
not to scale

GENERAL NOTES, LANDSCAPE INSTALLATION SPECIFICATIONS (cont.)

- THE CONTRACTOR SHALL DEDICATE ALL LIMEROCK FROM INTERIOR PARKING LANDSCAPE STRIPS AND ISLANDS TO A MIN. 2 1/2" DEPTH AND DEDICATE ALL NON-ORGANIC SOLS WITHIN MIN. 10 FT. WIDTH OF THE ENTIRE BUILDING PERIMETER TO A MIN. 12 INCHES DEPTH. THE CONTRACTOR WILL BACKFILL THE STRIPS, ISLANDS AND BUILDING PERIMETERS WITH THE APPROVED 50/50 TOPSOIL MAX TO FINISHED GRADES. THE LANDSCAPE PROFESSIONAL SHALL NOT PROCEED WITH WORK IN THESE DESIGNATED AREAS UNTIL SITE PREPARATION IS COMPLETE AND INSPECTED BY THE LANDSCAPE ARCHITECT AND/OR PERMITTING AGENCY.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND UTILITIES WHICH ARE PROPERLY MARKED OR FOR WHICH HE HAS NOT OBTAINED PROPER MARKINGS THROUGH THE ONE CALL SYSTEM - 22 HOURS BEFORE DIGGING - CALL TOLL FREE (800) 482-8729 OR FROM LOCAL UTILITY DEPARTMENTS. ALL ELECTRICAL, GAS, TELEPHONE, FIBER OPTICS, CABLE, WATER AND SEWER SERVICES LOCATED ON-SITE, ON ADJACENT PROPERTIES WITHIN 10' AND WITHIN ADJACENT R.O.'S SHALL BE CLEARLY MARKED.
- THE CONTRACTOR SHALL PROVIDE ALL PROPOSED PLANTS AT FLA. A GRADE OR BETTER AS DESCRIBED IN GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION AS PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, AND WILL PROVIDE CERTIFICATION FOR ANY AND ALL PLANTS IN DISPUTE. ALL PLANT MATERIAL PROVIDED SHALL MEET OR EXCEED THE MINIMUM SPECIFIED SIZE (HEIGHT, SPREAD, CALIPER, CLEAR TRUNK, ETC.) AS SHOWN ON THE LANDSCAPE PLANS. THE CONTRACTOR SHALL INSTALL PLANTS ACCORDING TO LANDSCAPE PLANS FOR SPACING AND PLACEMENT AND PER THE LANDSCAPE DETAILS WITHOUT EXCEPTION. SHOULD ANY PLANT BE UNAVAILABLE THE CONTRACTOR WILL CONTACT THE LANDSCAPE ARCHITECT FOR RECOMMENDATIONS AND/OR APPROVAL OF ANY AND ALL SPECIES SUBSTITUTIONS.
- THE CONTRACTOR SHALL PROVIDE PROPER TRANSPORT AND DELIVERY OF PLANT MATERIAL TO THE JOB SITE. PLANT MATERIAL SHALL NOT BE DROPPED, SCARRED OR OTHERWISE DAMAGED AT ANY TIME. DAMAGED PLANT MATERIALS SHALL BE RECEIVED BY THE OWNER OR OWNER'S REPRESENTATIVE, REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. ANY PLANTS OTHER THAN FL. #1 GRADE OR WITH INDICATIONS OF DISEASE, INSECT INFESTATION, BROKEN BRANCHES, LACK OF WATER, GIRDLING OR SCARRING AT DELIVERY SHALL BE REJECTED.
- THE CONTRACTOR SHALL PROVIDE IMPORTED ORGANIC BACKFILL MIX AS NOTED ON THE PLANTING DETAILS WHICH WILL BE FREE OF ALL DEBRIS AND STONES OVER 1" DIAMETER. BACKFILL MIX SHALL BE SANITIZED FROM HARMFUL BIOLOGICAL ORGANISMS, INCLUDING WEEDS AND PARASITES AND WILL BE PH 5.5 - 6.0 RANGE. DESCRIBED IN THE TREE OR PALM PLANTING DETAILS. NATIVE SOIL MAY BE MIXED WITH 50/50 MIX PER DETAILS ONLY IF APPROVED BACKFILL MIX IS NOT AVAILABLE. THE CONTRACTOR SHALL SUBMIT WRITTEN LAB RESULTS, CERTIFICATION OF SOIL CONTENT AND TRACKING RECEIPTS WITH TYPE AND VOLUME OF SOIL TO THE OWNER OR OWNER'S REPRESENTATIVE FOR VERIFICATION. BACKFILL WILL BE TESTED FOR CONTENT BY THE LANDSCAPE ARCHITECT AT ANY TIME. FAILURE TO PROVIDE APPROVED BACKFILL CERTIFICATION OF SOIL CONTENT AND/OR TRACKING RECEIPTS WILL BE REJECTION OF ENTIRE LANDSCAPE WITH REMOVAL AND REPLACEMENT COSTS BORNE SOLELY BY THE CONTRACTOR.
- THE CONTRACTOR WILL PROVIDE FERTILIZER FOR ALL PLANTS UPON INSTALLATION AS SPECIFIED ON THE PLANTING DETAILS. FERTILIZER WILL BE THOROUGHLY INCORPORATED INTO THE BACKFILL MIX ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS FOR ALL PROPOSED PLANT MATERIAL IN EXISTING SANDY SOIL OR ON FAST DRAINING SITES. CONTRACTOR WILL BE FAMILIARIZED WITH THE SITE AND THE ENGINEERING SOIL REPORT.
- UNLESS OTHERWISE INDICATED BY CITY OR COUNTY CODE, THE CONTRACTOR SHALL LOCATE ALL TREES WITH A MATURE HEIGHT OF OVER 20' NO CLOSER THAN 15 FEET TO ANY LIGHT POLES. PALMS WILL NOT BE CLOSER THAN 10 FEET TO ANY LIGHT POLES. THE CONTRACTOR MAY FIELD ADJUST HORIZONTAL LOCATION OF TREES AND PALMS FOR BEST FIT WHEN COORDINATED WITH AND CONSENT GIVEN BY THE OWNER OR OWNER'S REPRESENTATIVE. THE LANDSCAPE/IRRIGATION CONTRACTOR SHALL NOT PROCEED WITH WORK UNTIL SITE LIGHTING LOCATIONS ARE COMPLETELY STAKED-OUT TO CONTRAIN APPLICABLE SEPARATION.
- THE CONTRACTOR SHALL INSURE THAT ALL PLANT MATERIAL LOCATED WITHIN THE SIGHT TRIANGLE DISTANCE AREAS AT ROADWAY INTERSECTIONS AND ACCESS POINTS PROVIDE AN UNOBSTRUCTED CROSS VISIBILITY AT A HORIZONTAL DISTANCE BETWEEN 30' AND 6' IN HEIGHT. SEE LANDSCAPE PLANS FOR SIGHT TRIANGLES.
- THE CONTRACTOR SHALL INSURE THAT ALL TREES OR PALMS LOCATED ADJACENT TO ANY OVERHEAD POWER LINES BE INSTALLED IN ACCORDANCE WITH FLORIDA POWER AND LIGHTS "RIGHT TREE, RIGHT PLACE" GUIDELINES. ANY INSTANCES OF INSUFFICIENT SEPARATION BETWEEN TREES OR PALMS AND OVERHEAD LINES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR RESOLUTION BEFORE INSTALLATION.
- THE CONTRACTOR SHALL LOCATE ALL TREES AND PALMS CLEAR OF ALL TRAFFIC SIGNS AND IN SUCH A MANNER TO PREVENT BOTH THE TREE CANOPY AND PALM FRONDS FROM OBSTRUCTING ANY PORTION OF TRAFFIC SIGNS. THE LANDSCAPE/IRRIGATION CONTRACTOR SHALL NOT PROCEED WITH WORK UNTIL TRAFFIC SIGNAGE AND GUARDRAILS ARE COMPLETELY STAKED-OUT TO CONTRAIN SEPARATION AND CLEAR VISIBILITY OF SIGNS.
- THE CONTRACTOR WILL PROVIDE "MUL-PRUF" OR OTHER APPROVED SURFACANT TO BE SPRAYED ON ALL PROPOSED TREES AND PALMS IN AREAS OF SUSTAINED WINDS OF MORE THAN 10 KNOTS AND ALL COASTAL AREAS, ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, TO PREVENT WINDBURN AND EXCESS WATER LOSS THROUGH TRANSPIRATION.
- THE CONTRACTOR SHALL INTERIM SUPPLEMENTAL IRRIGATION, I.E. REGULAR THROUGH, DEEP WATERING, TO ALL INSTALLED PLANT MATERIAL UNTIL SUCH TIME AS THE IRRIGATION SYSTEM IS INSTALLED AND HAS BEEN INSPECTED BY THE LANDSCAPE ARCHITECT AND DEMONSTRATED TO BE 100% OPERATIONAL, OR UNTIL THE CITY'S OR COUNTY'S FINAL INSPECTION, ACCEPTANCE AND PERMIT CLOSE-OUT.
- THE CONTRACTOR SHALL PROVIDE ROOT BARRIER AT A VERTICAL DEPTH OF 18" MIN. TO 48" MAX. FOR ANY SHADE TREES OR LARGE PALMS WHICH ARE INSTALLED AS FOLLOWS: LESS THAN 18" FEET FROM ADJACENT ASPHALT OR CONCRETE PAVEMENT, WITH CURBED PARKING ISLANDS LESS THAN NINE (9) FEET WIDE OR WITHIN SIX (6) FEET PROXIMITY TO UNDERGROUND UTILITY OR INFRASTRUCTURE. ROOT BARRIER SHALL BE "BIOBARRIER," "DEEPTRO PARTNERS," LP," OR APPROVED EQUAL. INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. SEE DETAIL, THIS PAGE.
- THE CONTRACTOR SHALL PROVIDE GUYING OR STAKING TO ALL TREES AND PALMS ACCORDING TO THE DETAILS SHOWN IN THIS SHEET. GUYING AND STAKING REQUIREMENTS WILL BE STRICTLY ENFORCED THROUGHOUT CONSTRUCTION AND THE WARRANTY PERIOD. ALL TREES AND PALMS WILL BE PALME GUARDED AT TIME OF INSPECTION. ALL GUYING OR STAKING SHALL BE REMOVED AFTER NINE MONTHS OR AT THE END OF HURRICANE SEASON, WHICHEVER IS GREATER.
- THE CONTRACTOR SHALL PROVIDE APPROVED MULCH TO ALL TREES, SHRUBS AND PLANT BEDS. CONTRACTOR SHALL INSTALL MULCH AT A DEPTH OF 3", MIN. AND MAINTAIN A 4" DIA. RING AROUND FREE STANDING TREES. ALL TREES SHALL HAVE A 6" WIDE RING CLEAR OF MULCH AROUND THE TREE TRUNK. DO NOT MULCH DURING ANNUAL FLOWERING PERIOD. APPROVED MULCH WILL BE NON-CORROSIVE, STERILIZED NATURAL CELLULOSE FRAGMENTS AS RECOMMENDED BY SPANIOS KOSKOSKI PLANT CARE, LTD. AND WHICH COMPLES WITH ALL APPLICABLE LAND DEVELOPMENT, ZONING AND BUILDING CODES.
- THE CONTRACTOR WILL PROVIDE SCREEN HEDGE MATERIALS AT ALL GROUND MOUNTED, FREE-STANDING UTILITY EQUIPMENT OR ENCLOSURES SUCH AS TRANSFORMERS, AIR CONDITIONING COMPRESSORS, BACKFLOW PREVENTERS AND OTHER MECHANICAL EQUIPMENT NOT DETERMINED PRIOR TO SITE PLAN APPROVAL. SCREEN PLANT MATERIAL WILL BE LOCATED AT ALL NON-ACCESSIBLE PORTION OF GROUND EQUIPMENT AND WILL BE EQUAL TO THE HEIGHT OF SUCH ELEMENTS (REFER TO GROUND MOUNTED EQUIPMENT SCREENING DETAIL). INSTALLATION SHALL BE PERFORMED PRIOR TO INSPECTION BY THE PERMITTING AGENCY. THE CONTRACTOR SHALL CONSULT WITH THE LANDSCAPE ARCHITECT FOR APPROPRIATE PLANT SPECIES, SIZE AND QUANTITY OF ALL SCREENING SHRUBS. THE CONTRACTOR SHALL SUBMIT A R.C.O. (REQUEST FOR CHANGE ORDER) FOR ALL ADDITIONAL REQUIRED SHRUBS TO SCREEN GROUND MOUNTED EQUIPMENT TO THE OWNER OR OWNER'S REPRESENTATIVE FOR CONSENT AND TO THE CITY FOR APPROVAL.
- THE CONTRACTOR WILL, WITH ALL QUOTATIONS OR PROPOSALS/AGREEMENTS, PROVIDE A BINDING LETTER AND WRITTEN REPLACEMENT WARRANTY FOR ALL INSTALLED PLANT MATERIAL AFTER FINAL INSPECTION AND ACCEPTANCE BY THE OWNER. WARRANTY SHALL BE FOR 1 YEAR FOR ALL TREES AND PALMS, 120 DAYS FOR SHRUBS. WHERE INCIDENTAL, COMPLETION CERTIFICATES OR TESTS ARE ISSUED, CONTRACTOR MAY PETITION OWNER & AUTHORITY TO ACCEPT WORK IN CORRESPONDING INCIDENTAL SECTIONS. ALL PLANT MATERIAL SHALL NOT BE BOUND UNDER WARRANTY SHOULD IT BE CONFIRMED THAT DAMAGE OR DEATH TO PLANT MATERIAL BE THE RESULT OF AN "ACT OF GOD".
- THE CONTRACTOR WILL PROVIDE A WRITTEN AGREEMENT TO COVER THE WARRANTY PERIOD AT TIME OF THE COMPLETION, INSPECTION AND PRIOR TO FINAL ACCEPTANCE. CONTRACTOR SHALL ALSO DEFINE INSPECTION DATES AND TIMES THROUGHOUT THE WARRANTY PERIOD TO MONITOR PLANTINGS UNDER WARRANTY. MAINTENANCE AGREEMENT WORK SHALL BE PERFORMED BY A QUALIFIED LANDSCAPE/IRRIGATION CONTRACTOR.
- THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITY OF OBTAINING FROM GROWERS STATEMENT, AND INTERESTED, SPECIFIED PLANT MATERIALS IN ADVANCE OF RELEASING SITE TO LANDSCAPE PROFESSIONAL. AWARD OF THE CONTRACT IS BASED ON THE CONTRACTOR PROVIDING THE MATERIALS AT BID PRICE. CONTRACTOR WILL PROVIDE OFF-SITE NURSERY FACILITIES FOR RECEIVING, MAINTAINING AND GROWING PLANT MATERIALS AT HIS OWN COST, WHEN SPECIAL CONDITIONS EXIST OR OTHER ARRANGEMENTS MUST BE MADE IN ORDER TO SUPPLY SPECIFIED PLANT MATERIALS. ONLY REGIONAL (FLA-COUNTY) AGRICULTURAL DAMAGE AS DETERMINED BY FLORIDA O.D.A. AND/OR THE LOCAL COOPERATIVE EXTENSION SERVICE IN WRITING WILL BE CONSIDERED BY AUTHORITY. IN THIS CASE, THE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING AND OBTAINING WRITTEN MODIFICATION FROM THE LANDSCAPE ARCHITECT AND THE PERMITTING JURISDICTION FOR ACCEPTABLE SUBSTITUTIONS.
- THE CONTRACTOR ACCEPTS THE LANDSCAPE PLAN, PLANT LIST, QUANTITIES AND SPECIFICATIONS CONTAINED HEREIN AS REQUIRED FOR SITE PLAN APPROVAL, ZONING AND LANDSCAPE PERMITTING. FINAL ARCHITECTURE, ENGINEERING IN PLANS AND UTILITY PROVIDERS MAY CREATE CONFLICTS AND OCCURRENCE OF DISCREPANCIES BETWEEN PLANS AND/OR PERMITS AND THE JOB. BIDDER'S AND CONTRACTORS SHALL REPORT IN WRITING ANY AND ALL DESIGN CONFLICTS TO THE LANDSCAPE ARCHITECT FOR RESOLUTION, AND AS REQUIRED BY CODE.

SIGNATURE OF CONTRACTOR/BIDDER _____ DATE _____
COMPANY NAME, ADDRESS & PHONE _____
CONTRACTOR AND/OR LANDSCAPE & IRRIGATION PROFESSIONAL MUST HAVE THIS SIGNED DRAWING IN THE BUILDING PERMIT SET OF PLANS AND THE JOB SITE SET OF PLANS AT ALL TIMES.

NO.	REV.	DATE	DESCRIPTION
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WOHLFARTH CONSULTING
GROUP LLC
 ENGINEERS & PLANNERS
 246 N. WESTMOORE DRIVE
 ALAMOGADO, CA 92014
 (407) 750-3123
 ORLANDO

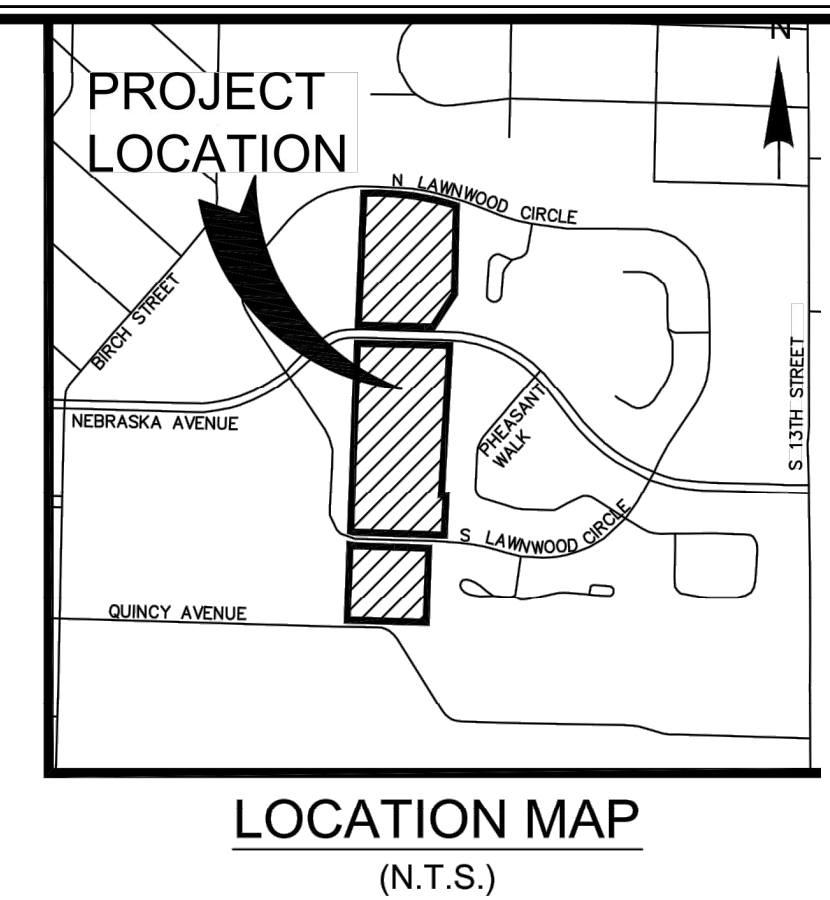
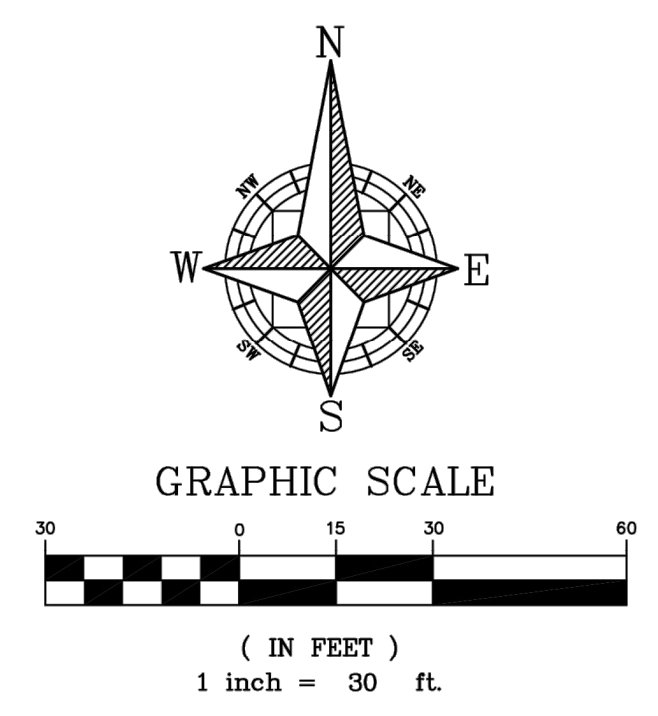
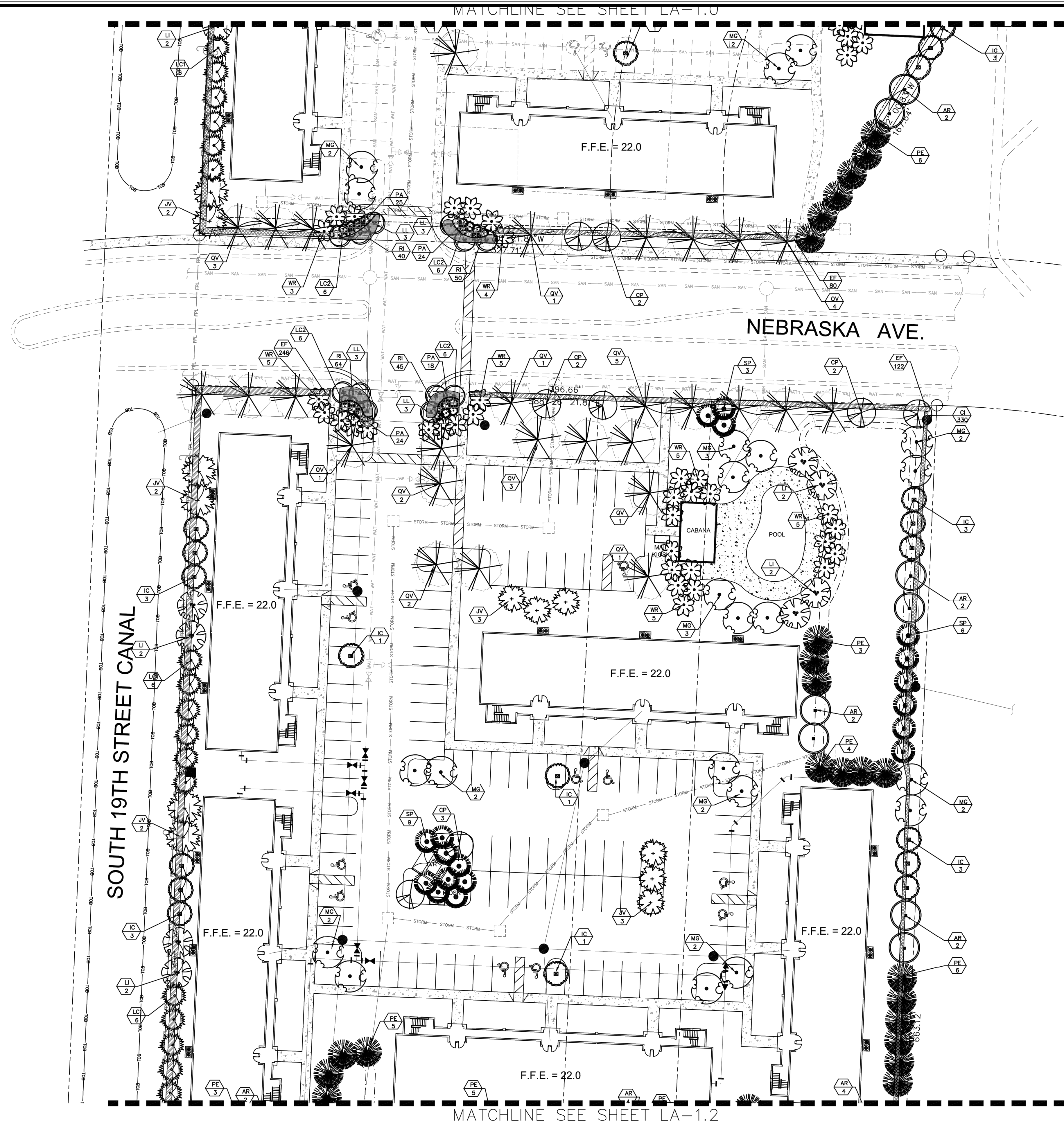
MAYFAIR
FORT PIERCE, FLORIDA
 LANDSCAPE DETAILS

SCALE	1" = 30'
PROJECT	2017-004
SHEET	L1-1.02
CHECKED:	RW
DATE:	6/3/2018

W GROUP
 LAND DEVELOPMENT & ENGINEERING SERVICES
 BUSINESS NO. 32108

NOT FOR CONSTRUCTION

C:\Users\Dennis Murrey\Dropbox\Rick Wohlfarth\Mayfair\DWG\Construction Plans\2017.004-L1-1.00 - Landscape Plan.dwg Modified: 6/3/2018 By: dennis murray Plotted By: dennis murray



Mayfair PLANT MATERIALS LIST Hardiness Zone 9b

Native plants and ecological communities as determined by the FDOACS, UFIFAS, FDEP-Florida Land Use Cover Classification System. Xeriscape principles as determined by the South Florida Water Management District "Waterwise" Xeriscape Plant Guide. Compliance for planting adjacent to overhead electrical wires as determined by Florida Power & Light Administrative Services.

Key	Scientific Name	Common Name	Native	Xert	Height x Spread / Description	Spacing	Qty	SUBT
LARGE TREES greater than 30 ft. at maturity								
QV	Quercus virginiana	Live Oak	Yes	High	12' high x 5' spread, 2-1/2" DBH, 4-1/2' CT., field grown	per plan	59	
AR	Acer rubrum	Red Maple	Yes	Mod.	12' high x 5' spread, 2-1/2" DBH, 4-1/2' CT., field grown	per plan	50	
PE	Pinus Elliotti	Slash Pine	Yes	High	12' high x 5' spread, 2-1/2" DBH, 4-1/2' CT., field grown	per plan	79	
JV	Juniperus virginiana	Southern Red Cedar	Yes	High	10' high x 4' spread, full, 45 gal. or field grown	per plan	39	
MG	Magnolia grandiflora	Southern Magnolia	Yes	Mod.	12' high x 5' spread, 2-1/2" DBH, 4-1/2' CT., field grown	per plan	70	297
SMALL TREES less than 25 ft. at maturity								
LI	Lagerstroemia indica "Muskegee"	Crepe Myrtle "Pink"	No	High	10' high x 4' spread, multi-trunk, 45 gal.	per plan	20	
IC	Ilex cassine	Dahoon Holly	Yes	High	10' high x 4' spread, full, 30 gal./45 gal., Air Root, Pruned Container	per plan	85	
PC	Prunus caroliniana	Cherry Laurel	Yes	High	10' high x 4' spread, 4" CT., 45 gal. or field grown	per plan	0	
CP	Caesalpinia pulcherrima	Owarf (Yellow) poinciana	No	High	10' high x 4' spread, 4" CT., 45 gal. or field grown	per plan	19	
LL	Ligustrum lucidum	Japanese privet	No	High	10' high x 4' spread, multi-trunk, 45 gal.	per plan	24	148
PALMS								
WR	Washingtonia robusta	Washingtonia Palm	No	High	1/3 @ 16' high, 1/3 @ 20' high, 1/3 @ 24' high, staggered heights in all groupings, field grown	per plan	67	
SP	Sabal palm elite	Cabbage Palm	Yes	High	14' high to 20' high, staggered heights in all groupings, balled, field grown	per plan	60	
LC1	Livistonia chinensis	Chinese Fan Palm	No	High	10' CT., 16" OA full heads, container or field grown	per plan	42	
LC2	Livistonia chinensis	Chinese Fan Palm	No	High	6" OA, full to base, 7 gal.	per plan	48	217
SHRUBS								
CI	Chrysobalanus icaco	Cocoplum "Red Tip"	Yes	High	24" OA, full to base, 3 gal.	24" OC	772	
EF	Eugenia bretida	Spanish Stopper	Yes	High	24" OA, full to base, 3 gal.	24" OC	613	
PA	Plumbago auriculata	Plumbago "Imperial Blue"	No	High	18" OA, full, 3 gal.	24" OC	209	
RI	Raphiolepis indica	Indian Hawthorn	No	High	12" OA, full, 3 gal.	18" OC	439	2,033
							Total	2,895
NOTE: ALL AREAS INDICATED FOR SOD SHALL BE INSTALLED WITH ST. AUGUSTINE "FLORITAM" SOD UNLESS ALTERNATE NOTED.							Total Native Plants	1,827
							Native % of Total	67.8%
NOTE: ALL PLANTS SHALL BE INSTALLED AT SIZE INDICATED UNDER THE SPECIFICATIONS. CONTAINER SIZE LISTED IS FOR REFERENCE OR ESTIMATING ONLY.							Total Drought-Tolerant Plants	2,575
							Drought Tol. % of Total	95.5%

NOTE: SEE SHEET LA-1.0 FOR PLANT MATERIALS LIST.
 NOTE: ALL PROPOSED UNDERGROUND UTILITIES SHALL BE MODIFIED TO AVOID CONFLICTS WITH REQUIRED TREES IN LANDSCAPE ISLANDS / VUA AREAS. SEE ENGINEERING PLANS.

SCALE: 1" = 30'		DRAWN: DM		DESIGNED: --		CHECKED: RW		DATE: 6/3/2018	
PROJECT: 2017-004		SHEET: L1-1.00		CONSTRUCTION: NOT FOR CONSTRUCTION		DATE: 7/17/18		DESCRIPTION: LANDSCAPE PLANS	
WOHLFARTH CONSULTING GROUP LLC ENGINEERS & PLANNERS 246 N. WESTMORE DRIVE ALAMOGADO, CA 92014 (607) 750-3123 ORLANDO				MAYFAIR FORT PIERCE, FLORIDA		LANDSCAPE PLANS			
REV.	DATE	DESCRIPTION							