McDONALD'S RESTAURANT

8000 LAND O' LAKE BOULEVARD (U.S. HIGHWAY 41)
LAND O' LAKES, PASCO COUNTY, FLORIDA 34638
SIMULTANEOUS SUBMITTAL

BUILDING INFORMATION
OCCUPANCY CLASSIFICATION: A-2 (ASSEMBLY)
TYPE OF CONSTRUCTION: V B (SPRINKLERED)
HEIGHT: 19' - 4"
NUMBER OF FLOORS: 1
FOOTPRINT: 4,490 S.F.

FLOOD ZONE INFORMATION
PER FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), THE SITE IS LOCATED WITHIN FLOOD ZONE "A" AND "X" (FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER: 12101C0238F, MAP REVISED 9/26/2014)

BOUNDARY AND TOPOGRAPHIC SURVEY
SURVEY INFORMATION PROVIDED BY: GEORGE A. SHIMP II & ASSOCIATES, INC LB 1834
SIGNED AND SEALED BY: GEORGE A. SHIMP III, P.S.M # 6137
DATED: 6/12/2015

UTILITIES PROVIDERS

ELECTRICITY
WITHLACOOCHEE RIVER ELECTRIC COOPERATIVE
14651 NORTH 21ST STREET
DADE CITY, FLORIDA 33523
TEL: (352) 567-5133

WATER AND SEWER
PASCO COUNTY UTILITIES DEPARTMENT
7530 LITTLE ROAD, SUITE 205
NEW PORT RICHEY, FLORIDA 34654
TEL: (727) 847-8145

CABLE
BRIGHT HOUSE NETWORKS
700 CARILLON PARKWAY, SUITE 6
ST. PETERSBURG, FLORIDA 33716
TEL: (877) 897-7333

TELEPHONE
VERIZON
519 EAST ZACK STREET
TAMPA, FLORIDA 33602
TEL: (800) 483-4000

GAS
CLEARWATER GAS SYSTEM
400 NORTH MYTLE AVENUE
CLEARWATER, FLORIDA 33755
TEL: (727) 562-4900

FIRE
PASCO COUNTY FIRE RESCUE
4111 LAND O' LAKES BLVD
LAND O' LAKES, FLORIDA 34639
TEL: (813) 929-2750

CONTRACTOR SHALL CALL
"SUNSHINE STATE ONE CALL" OF FLORIDA AT 1-800-432-4770
A MINIMUM OF 2 AND A MAXIMUM OF 5 BUSINESS DAYS PRIOR TO START OF CONSTRUCTION.

OWNER:
PASCO INVESTMENT LAND, LLC
77 SARAGOSSA STREET
ST. AUGUSTINE, FLORIDA 32084
TEL: (904) 824-0302

DEVELOPER:
MCDONALDS CORPORATION
10150 HIGHLAND MANOR DRIVE, SUITE 470
TAMPA, FLORIDA 33610
TEL: (813) 630-9634
FAX: (813) 621-4073

ENGINEER:
HIGH POINT ENGINEERING, INC.
5300 W. CYPRESS STREET, SUITE 282
TAMPA, FLORIDA 33607
TEL: (813) 644-8333
FAX: (813) 644-7000

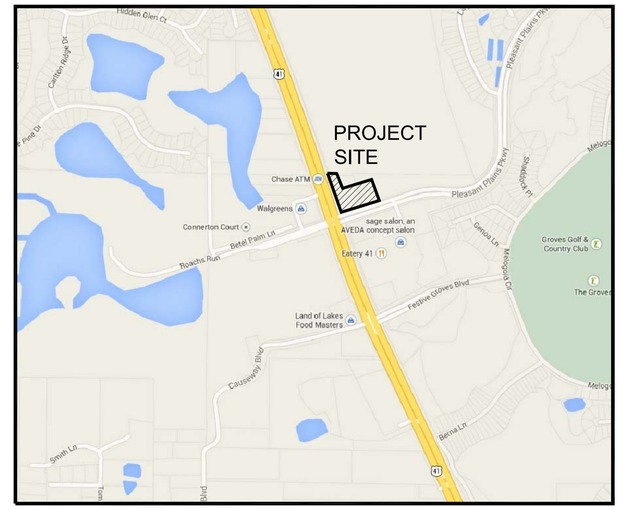
ARCHITECT:
HARTLEY PURDY ARCHITECTURE, INC
1711 NORTH HIMES AVENUE
TAMPA, FLORIDA 33607
TEL: (813) 353-0035
FAX: (813) 353-4350

SURVEYOR:
GEORGE A. SHIMP II & ASSOCIATES, INC
3301 DeSOTO BOULEVARD, SUITE D
PALM HARBOR, FLORIDA 34683
TEL: (727) 784-5496
FAX: (727) 786-1256

CONTRACTOR:
TBD

LANDSCAPE:
HIGH POINT ENGINEERING, INC.
5300 W. CYPRESS STREET, SUITE 282
TAMPA, FLORIDA 33607
TEL: (813) 644-8333
FAX: (813) 644-7000

SITE AERIAL PHOTOGRAPH
N.T.S.



SITE LOCATION MAP
N.T.S.

SITE DATA TABLE

SECTION 35 , TOWNSHIP 25 S, RANGE 18 E
LAND O' LAKES, PASCO COUNTY, FLORIDA
PARCEL ID # 35-25-18-0000-00100-0060

DESCRIPTION		EXISTING	PROPOSED	CODE REQUIREMENTS
ZONING:		MPUD PLANNED UNIT DEVELOPMENT	MPUD PLANNED UNIT DEVELOPMENT	MPUD PLANNED UNIT DEVELOPMENT
LAND USE:		NT NEW TOWN	NT NEW TOWN	NT NEW TOWN
USAGE:		VACANT	RESTAURANT	RETAIL/ OFFICE / RESIDENTIAL
SITE AREA:		83,475 S.F. (1.92 AC.)	83,475 S.F. (1.92 AC.)	15,000 S.F. (MIN)
BUILDING FOOTPRINT AREA: PERCENTAGE OF SITE AREA:		-----	4,490 S.F. 5.4%	0.50 (MAX)
GROSS FLOOR AREA (GFA): FLOOR AREA RATIO (F.A.R.):		-----	4,490 S.F. 0.054	3.0 (MAX)
BUILDING SETBACKS	FRONT (LAND O' LAKES BLVD):	-----	94.7 FT.	25 FT.
	FRONT (PLEASANT PLAINS PWY):	-----	98.6 FT.	25 FT.
	SIDE (NORTHEAST):	-----	150.3 FT.	0 FT.
	SIDE (NORTHWEST):	-----	61.4 FT.	0 FT.
BUILDING HEIGHT:		-----	19.34 FT.	60 FT.
VEHICULAR USE AREA (V.U.A.): PERCENTAGE OF SITE AREA:		0 S.F. 0.0%	40,338 S.F. 48.3%	-----
SIDEWALK, CURB & DUMPSTER AREA: PERCENTAGE OF SITE AREA:		0 S.F. 0.0%	7,320 S.F. 8.8%	-----
TOTAL IMPERVIOUS AREA: IMPERVIOUS SURFACE RATIO (I.S.R.):		0 S.F. 0.0	52,148 S.F. 0.625	-----
TOTAL PERVIOUS AREA: PERCENTAGE OF SITE AREA:		83,475 S.F. 100.0%	31,327 S.F. 37.5%	-----
TOTAL POND AREA: PERCENTAGE OF SITE AREA:		40,720 S.F. 48.8%	0 S.F. 0.0%	-----
TOTAL WETLAND AREA: PERCENTAGE OF SITE AREA:		0 S.F. 0.0%	0 S.F. 0.0%	-----
INTERIOR LANDSCAPE AREA FOR V.U.A.: PERCENTAGE OF V.U.A.:		0 S.F. 0.0%	7,490 S.F. 18.5%	10.0% (MIN)
OFF-STREET PARKING:		0 SPACES	58 SPACES	1 PER 150 GFA (DRIVE-THRU REST.)

-MINIMUM OFF-STREET PARKING CALCULATION:
4,490 SF x 1 SPACES PER 150 SF OF G.F.A = 30 SPACES
-REZONING: RZ6045 (8-12-03)

INDEX OF DRAWINGS

SHEET No.	CONTENT
C-1	SITE DEVELOPMENT DATA
C-2.1	GENERAL NOTES, ABBREVIATIONS & SYMBOLS
C-2.2	SITE CONSTRUCTION NOTES & SPECIFICATIONS
C-2.3	BOUNDARY AND TOPOGRAPHIC SURVEY
C-3	DEMOLITION & TREE PROTECTION PLAN
C-4.1	SITE LAYOUT AND PARKING PLAN
C-4.2	SIGNING & MARKING PLAN
C-5.1	PAVING, GRADING & DRAINAGE PLAN
C-5.2 & C-5.3	STORMWATER POLLUTION PREVENTION PLAN & CERTIFICATION
C-5.4	CROSS SECTIONS
C-6	UTILITIES PLAN
C-7.1, C-7.2 & C-7.3	SITE CONSTRUCTION DETAILS
C-7.4 & C-7.5	UTILITIES DETAILS
L-1	LANDSCAPE PLAN
L-2	LANDSCAPE NOTES
L-3	LANDSCAPE DETAILS
I-1	IRRIGATION PLAN
I-2	IRRIGATION DETAILS
PH-1	PHOTOMETRIC PLAN

SUMMARY OF PARKING SUPPLY:
REGULAR PARKING = 55 SPACES
HANDICAP PARKING = 3 SPACES
TOTAL PARKING = 58 SPACES

©COPYRIGHT 2015
THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date
COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

No.	BY	DATE	REVISIONS DESCRIPTION

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

CONTENT: SITE DEVELOPMENT DATA
PROJECT: McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (U.S. HWY 41)
LAND O' LAKES, FLORIDA 34638
SITE ID 009-2580

HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET: C-1

GENERAL CONSTRUCTION NOTES

1. THESE DRAWINGS SHALL NOT BE UTILIZED FOR CONSTRUCTION PRIOR TO OBTAIN THE PERMITS FROM THE CITY/COUNTY AND OTHER GOVERNMENTAL AND REGULATORY AGENCIES HAVING JURISDICTION OVER THE PROJECT. THE CONTRACTOR SHALL ASSURE THAT CONSTRUCTION IS IN ACCORDANCE WITH THE APPROVED DRAWINGS.

2. THE CONTRACTOR SHALL READ AND UNDERSTAND THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AND REGULATORY AGENCIES, THE ENGINEER, AND THE ARCHITECT. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE ANY NECESSARY INSPECTIONS ACCORDING TO AGENCY INSTRUCTIONS.

3. UNLESS OTHERWISE SPECIFIED, ALL WORK PERFORMED SHALL COMPLY WITH THE ORDINANCES AND REGULATIONS OF THE GOVERNMENTAL AND REGULATORY AGENCIES HAVING JURISDICTION OVER THE PROJECT. ALL CONSTRUCTION MATERIALS, MEANS, METHODS, PROCEDURES AND TECHNIQUES SHALL CONFORM TO CITY/COUNTY CONSTRUCTION STANDARDS, FDOT "STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM" AND FDOT "SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION.

4. THE INFORMATION PROVIDED IN THESE CONSTRUCTION DOCUMENTS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING AND EVALUATING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT ANY OR ALL INVESTIGATIONS AS DEEMED NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT MAY BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.

5. THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM A SITE RECONNAISSANCE PRIOR TO BIDDING THE WORK AND CONDUCT STUDIES, TESTS AND SURVEYS AS DEEMED NECESSARY TO MAKE THEIR OWN DETERMINATION AS TO THE ACTUAL SURFACE AND SUBSURFACE CONDITIONS EXISTING AT THE SITE. ACTUAL CONDITIONS THAT DIFFER FROM THOSE SHOWN ON THE CONSTRUCTION DOCUMENTS SHALL NOT CONSTITUTE GROUNDS FOR AMENDMENTS TO THE CONTACT PRICE.

6. IMMEDIATELY UPON MOBILIZING TO THE SITE, THE CONTRACTOR (ACCOMPANIED BY THE OWNER AND ARCHITECT) SHALL PERFORM A SURVEY OF THE ENTIRE PROJECT AREA. THE CONTRACTOR SHALL SURVEY IN DETAIL USING WRITTEN AND PHOTOGRAPHIC MEANS, BUILDING(S) AND SITE AREAS THAT ARE NOT IN A FIRST CLASS CONDITION (SURFACES THAT ARE UNBROKEN, NON-CRACKED, NON-RUSTING, WITHOUT CHIPS, WITHOUT SPLINTERS, OF TEXTURE MATCHING ITS SURROUNDING, WITH NEW APPEARING FINISHES, AND OPERATING AS ORIGINALLY DESIGNED OR INTENDED TO OPERATE) SPECIALLY THOSE THAT WILL REMAIN IN THEIR EXISITNG CONDITION AT THE END OF PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TO THE OWNER A COMPLETE PROJECT IN FIRST CLASS CONDITION, MEETING INDUSTRY WIDE STANDARDS IN QUALITY AND PERFORMANCE (REGARDLESS OF WHETHER AN AREA IS SPECIFICALLY IDENTIFIED WITHIN THE DRAWINGS AND SPECIFICATIONS OR NOT) UNLESS A PARTICULAR AREA HAS BEEN DESCRIBED IN THE WRITTEN AND PHOTOGRAPHIC DETAILS. SHOULD DURING THE COURSE OF THE WORK, ANY AREA OF THE BUILDING(S) AND/OR UTILITIES AND/OR THE SITE BECOME DAMAGED AND THAT AREA WAS NOT SPECIFICALLY CALLED OUT TO BE A PART OF THE CONSTRUCTION, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE THE DAMAGED AREA TO THE SATISFACTION OF THE ARCHITECT AND OWNER AT NO ADDITIONAL COST.

7. WHEN NECESSARY, THE CONTRACTOR SHALL COORDINATE AND SCHEDULE CONSTRUCTION ACTIVITIES WITH OTHER CONTRACTORS AND UTILITY COMPANIES (E.G., POWER, TELEPHONE, CABLE, GAS, ETC.). IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN THE REQUIRED PERMITS TO PERFORM WORK WITHIN PUBLIC EASEMENTS AND RIGHT-OF-WAY AND ENSURE THAT ALL PERMITS ARE APPROVED PRIOR TO CONSTRUCTION.

8. THE CONTRACTOR SHALL USE THE BENCHMARK ELEVATION NOTED IN THE BOUNDARY AND TOPOGRAPHIC SURVEY TO REFERENCE ALL TEMPORARY BENCHMARKS, BASE LINES, GRADE POINTS AND PROPERTY MONUMENTS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REESTABLISH, IN THEIR ORIGINAL STATE, THE PROPERTY MONUMENTS DISTURBED OR DAMAGED DURING CONSTRUCTION. THE CONTRACTOR IS FULLY RESPONSIBLE TO VERIFY AND CORRELATE IN THE FIELD ALL BASE LINES, ELEVATIONS, AND DIMENSIONS SHOWN IN THESE PLANS, AND REPORT TO THE ENGINEER IN WRITING ANY ERROR, OMISSION, OR DISCREPANCY BEFORE PERFORMING ANY WORK.

9. THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE AND MAKE ADJUSTMENTS OF ANY CONFLICT SHOWN OR NOT SHOWN IN THESE PLANS WITH OTHER EXISTING SITE IMPROVEMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS OR DISCREPANCIES BEFORE PERFORMING ANY WORK IN THE CONFLICTING AREA.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE STAKE-OUT OF THE PROJECT SUCH AS BASE LINES, GRADES, SLOPES, UTILITY RELOCATIONS, OR ANY OTHER STAKE-OUT THAT MAY BE REQUIRED TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS. ANY AND ALL EXPENSES INCURRED FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE. ACTUAL CONDITIONS THAT DIFFER FROM THOSE SHOWN IN THESE PLANS SHALL NOT CONSTITUTE GROUNDS FOR AMENDMENTS TO THE CONTACT PRICE.

11. TOPOGRAPHIC SURVEY AND LEGAL DESCRIPTIONS WERE PREPARED BY OTHERS AND ARE SHOWN HEREIN FOR INFORMATION PURPOSES ONLY. THE ENGINEER ASSUME NO RESPONSIBILITY FOR THEIR PREPARATION, COMPLETENESS NOR ACCURACY AND THE CONTRACTOR IS FULLY RESPONSIBLE WHEN USING SAID INFORMATION. PROPOSED LOCATIONS, ELEVATIONS, AND DIMENSIONS OF STRUCTURES AND OTHER SITE FEATURES ARE SHOWN IN ACCORDANCE TO THE SURVEY INFORMATION PROVIDED TO THE ENGINEER AT THE TIME OF THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK PRIOR TO CONSTRUCTION.

12. GEOTECHNICAL INVESTIGATION AND RECOMMENDATIONS WERE PREPARED BY OTHERS AND ARE USED SOLELY TO ASSIST CONTRACTORS IN ASSESSING THE NATURE AND EXTENT OF TESTING AND STUDIES REQUIRED TO MAKE THEIR OWN DETERMINATION AS TO THE ACTUAL SURFACE AND SUBSURFACE CONDITIONS EXISTING AT THE SITE. NO REPRESENTATION IS MADE OR GIVEN CONCERNING THE ACTUAL SURFACE AND SUBSURFACE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK AND CONTRACTORS ARE FULLY RESPONSIBLE WHEN USING SAID INFORMATION. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT ANY OR ALL INVESTIGATIONS THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT MAY BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.

13. THE EXISTING UNDERGROUND UTILITY LINES SHOWN HEREON WERE TAKEN FROM DOCUMENTS FURNISHED BY OTHERS AND NOT FIELD VERIFIED. THE CONTRACTOR MUST USE SAID INFORMATION ONLY AS A GUIDE TO THE SUGGESTED LOCATION OF UNDERGROUND UTILITY SERVICES, INCLUDING BUT NOT LIMITED TO: POTABLE WATER LINES, SANITARY SEWER, STORM SEWER, GAS LINES, ELECTRICAL POWER, RECLAIMED WATER LINES, IRRIGATION LINES, TELEVISION CABLES, FIBER OPTIC CABLES, TELEPHONE CABLES, ALARM SYSTEM CABLES, SECURITY WIRING, SITE UNDERGROUND MECHANICAL, CONTROL SYSTEMS WIRING, SYSTEMS INCLUDING INSULATION, ETC. THE ENGINEER CANNOT GUARANTEE THE ACCURACY OF THE EXISTING UNDERGROUND UTILITY LINES NOR THAT ALL ARE SHOWN HEREON. THE CONTRACTOR SHALL DETERMINE THE SPECIFIC LOCATION AND CAREFULLY EXPOSE ALL UNDERGROUND UTILITY LINES IN COORDINATION WITH OWNER(S) TO THEIR SATISFACTION AND MAKE ADJUSTMENTS TO SAME IN THE EVENT THERE ARE CONFLICTS WITH NEW CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR, PER SPECIFICATIONS, ANY AND ALL DAMAGED UNDERGROUND UTILITY SERVICES AS LISTED ABOVE AT NO ADDITIONAL COST.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, REPAIRING AND/OR REINSTALLING DAMAGED OR DISTURBED EXISTING IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO, SIDEWALKS, DUMPSTER PADS, FENCES, HAND RAILS, GATE VALVES, CLEANOUTS, FIRE HYDRANTS, FIRE DEPARTMENT CONNECTIONS, ELECTRICAL, CABLE AND TELEPHONE BOXES, ELEVATED POWER AND TELEPHONE LINES, WATER, SANITARY, GAS AND STORMWATER PIPELINES, UNDERGROUND POWER, TELEPHONE AND CABLE LINES, IRRIGATION SYSTEMS AND CONTROLS, ETC.

15. THE CONTRACTOR SHALL LOCATE PROPERTY LINES AS REQUIRED TO AVOID ENCROACHMENT INTO ADJACENT PROPERTY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE OWNER CONCERNING LIMITS OF CONSTRUCTION, TRANSITIONS, PHASES, ETC. WHICH MAY NOT BE SHOWN ON THESE PLANS.

16. THE CONTRACTOR SHALL RESTORE TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING, UNLESS SPECIFICALLY EXEMPTED BY THE PLANS, ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THE WORK. ADDITIONAL COSTS ARE INCIDENTAL AND NO EXTRA COMPENSATION IS TO BE ALLOWED.

17. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE OWNER FOR APPROVAL ON ALL PRECAST AND MANUFACTURED ITEMS FOR THIS PROJECT. FAILURE TO OBTAIN APPROVAL BEFORE MANUFACTURE AND INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

18. THE CONTRACTOR SHALL EMPLOY THE SERVICES OF A FLORIDA REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER TO PERFORM ALL SITE CONSTRUCTION QUALITY ASSURANCE AND QUALITY CONTROL TESTING, AND THIS COST SHALL BE INCLUDED AS PART OF THE CONTRACT PRICE. IN LOCATIONS WHERE THE CONSTRUCTION TAKES PLACE WITHIN PUBLIC RIGHT-OF-WAY, ALL SAMPLING AND TESTING SHALL BE IN ACCORDANCE WITH FDOT AND LOCAL AGENCY REQUIREMENTS.

19. THE CONTRACTOR SHALL FORWARD TO THE OWNER A COPY OF ALL COMPACTION AND ASPHALT MIX TEST RESULTS. THE TEST RESULTS SHALL BE CERTIFIED BY A MATERIAL/GEOTECHNICAL ENGINEER, IN WRITING, THAT ALL TESTING REQUIREMENTS, REQUIRED BY CITY/COUNTY AND/OR THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) AS WELL AS BY THE APPROVED CONSTRUCTION PLANS, ARE SATISFIED.

20. DEVIATIONS TO THESE PLANS AND SPECIFICATIONS WITHOUT CONSENT OF THE ENGINEER OR THE OWNER MAY BE A CAUSE FOR THE WORK TO BE UNACCEPTABLE. VALUE ENGINEERING SHALL RECEIVE WRITTEN APPROVAL FROM THE ENGINEER AND THE OWNER.

21. THE CONTRACTOR SHALL PROVIDE CERTIFIED AS-BUILT DRAWINGS, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR. THE AS-BUILT DRAWINGS SHALL INCLUDE, BUT NOT LIMITED TO, ACCURATE HORIZONTAL AND VERTICAL LOCATION OF DETENTION / RETENTION BASIN(S) INCLUDING TOP OF BANK, TOE OF SLOPE, BOTTOM OF POND AND SIDE SLOPES, CONTROL STRUCTURE(S), DIMENSION AND INVERT ELEVATION OF WEIR, ORIFICE AND SKIMMER, INLET AND MANHOLE SIZES AND STORM PIPE INVERT ELEVATIONS, SIZE AND LOCATIONS OF ALL UTILITIES INCLUDING SANITARY SEWER AND WATER PIPES AND FITTINGS, STORM AND SANITARY SEWER SLOPES, CONCRETE PADS, SIDEWALKS, FINISHED FLOOR ELEVATION(S), GRADE BREAKS, ETC. THE CONTRACTOR SHALL PROVIDE FIVE COPIES OF THE CERTIFIED AS-BUILT DRAWINGS TO THE ENGINEER. THE AS-BUILT DRAWING SHALL BE SUFFICIENT IN DETAIL TO BE ACCEPTABLE BY GOVERNMENTAL AND REGULATORY AGENCIES HAVING JURISDICTION ON THE PROJECT.

22. SIGN MONUMENTS, WALLS AND FENCES REQUIRE SEPARATE PERMIT APPLICATION(S). ANY DEVIATIONS SHALL RECEIVE WRITTEN APPROVAL FROM THE OWNER.

23. WHEN NECESSARY, CONTRACTOR SHALL BE RESPONSIBLE FOR AN EASEMENT INSPECTION BY CITY/COUNTY ENGINEERING DEPARTMENT PRIOR TO CONCRETE POUR OF FOOTER/SLAB. CONTRACTOR SHALL STAKE ALL PROPERTY CORNERS AND EASEMENT LINES PRIOR TO EASEMENT INSPECTION.

24. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED PLANS AND PERMITS AT THE CONSTRUCTION SITE AT ALL TIMES.

GENERAL SAFETY NOTES

1. THESE CONSTRUCTION PLANS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY IN ACCORDANCE WITH U.S. DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). THE CONTRACTOR SHALL BE ENTIRELY RESPONSIBLE FOR MEANS, METHODS, PROCEDURES AND TECHNIQUES OF CONSTRUCTION SAFETY.

2. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET BY THE U.S. DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).

3. DURING CONSTRUCTION, ALL SAFETY CONTROLS AND REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF PEDESTRIANS AND WORKERS.

4. THE MINIMUM STANDARDS IN "THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS" SHALL BE FOLLOWED FOR THE DESIGN, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PEDESTRIANS AND WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS.

5. THE CONTRACTOR'S MAINTENANCE OF TRAFFIC PLAN SHALL BE SUBMITTED AND APPROVED BY APPLICABLE AGENCIES PRIOR TO START OF CONSTRUCTION.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ITS EMPLOYEES AND SUB CONTRACTORS WITH ADEQUATE INFORMATION AND TRAINING TO ENSURE THAT THEY COMPLY WITH ALL APPLICABLE SAFETY REQUIREMENTS. CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL U.S. DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS.

7. THE CONTRACTOR PERFORMING TRENCH EXCAVATION, IN EXCESS OF 5' FEET IN DEPTH, SHALL CONFORM TO THE REQUIREMENTS OF THE U.S. DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS FOR EXCAVATIONS SAFETY STANDARDS, 29 C.F.R., S.1926.650, SUBPART P, INCLUDING ALL SUBSEQUENT REVISIONS OR UPDATES TO THE STANDARDS AS ADOPTED BY THE DEPARTMENT OF LABOR AND EMPLOYMENT SECURITY (DLES).

8. TO COMPLY WITH THE UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT THE CONTRACTOR SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES, AFFILIATED OR NOT AFFILIATED TO THE "SUNSHINE STATE ONE CALL" OF FLORIDA CORPORATION, PRIOR TO CONSTRUCTION TO OBTAIN FIELD LOCATIONS AND/OR CLEARANCE OF EXISTING UNDERGROUND UTILITIES.

LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED) NOTES

1. TO MINIMIZE CARBON FOOTPRINT, THE OWNER AND CONTRACTOR SHALL SELECT LOCAL MATERIALS FROM SUPPLIERS AND MANUFACTURES WITHIN 500 MILES OF THE PROJECT SITE.

2. TO REDUCE ENVIRONMENTAL IMPACT, THE OWNER AND CONTRACTOR SHALL USE SUSTAINABLE OR RECYCLED MATERIALS SUCH AS CRUSHED CONCRETE, RECYCLED AGGREGATE, RECLAIMED WOOD, ETC.

3. TO MITIGATE ENVIRONMENTAL IMPACT, THE OWNER AND CONTRACTOR SHALL SEND ANY CONSTRUCTION DEBRIS PRODUCED DURING DEMOLITION ACTIVITIES TO RECYCLING FACILITIES RATHER THAN LANDFILLS.

4. TO MINIMIZE POTABLE WATER USAGE AND CONSERVE GROUNDWATER, THE OWNER AND CONTRACTOR SHOULD INSTALL WHEN POSSIBLE, UNDERGROUND CISTERNS TO HARVEST RAINWATER TO BE USED AS SUPPLEMENTAL WATER FOR NEEDS OTHER THAN HUMAN CONSUMPTION.

5. TO REDUCE POLLUTED STORMWATER LEAVING THE SITE AND TO MAXIMIZE ON-SITE STORMWATER RETENTION, THE OWNER AND CONTRACTOR SHOULD USE WHEN POSSIBLE, PERMEABLE OR PERVIOUS PAVEMENT DESIGNED USING THE MIX-PROCESS METHOD DEVELOPED IN FLORIDA.

McDONALD'S GENERAL NOTES

1. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES TO DETERMINE EXACT POINT OF SERVICE CONNECTION AT EXISTING UTILITY. REFER TO THE BUILDING ELECTRICAL AND PLUMBING DRAWINGS FOR UTILITY SERVICE ENTRANCE LOCATIONS, SIZES, AND CIRCUITING.

2. GENERAL CONTRACTOR MUST PROVIDE EXACT "AS BUILT" INFORMATION UPON COMPLETION.

3. ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE BENCHMARK AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR AT GROUNDBREAKING.

4. FINISH WALK AND CURB ELEVATIONS SHALL BE 6" ABOVE FINISH PAVEMENT.

5. ALL LANDSCAPE AREAS SHALL BE ROUGH GRADED TO 6" BELOW TOP OF ALL WALKS AND CURBS. FINISHED GRADING, LANDSCAPING AND SPRINKLER SYSTEMS ARE BY THE OWNER/OPERATOR.

6. LOT LIGHTING CONCRETE FOOTINGS TO CONFORM WITH THE SOILS REPORT RECOMMENDATIONS FOR THIS PARTICULAR SITE.

7. IT IS STRONGLY RECOMMENDED THAT NO CONTRACTUAL AGREEMENTS OF ANY KIND BE SIGNED PRIOR TO RECEIVING AND THOROUGHLY REVIEWING ALL APPROVALS FROM ALL OF THE REGULATORY AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT.

8. DUE TO THE NATURE OF THE WORK, ALL DIMENSIONS SHOWN SHALL BE CONSIDERED APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO BEGINNING CONSTRUCTION. CONTRACTORS PRICING SHALL COVER ALL COSTS ASSOCIATED WITH A COMPLETE AND PROPERTY FUNCTIONING INSTALLATION INCLUDING ALL RELATED PARTS, APPURTENANCE, PERMITS, CONNECTORS. ETC. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO FABRICATION OR INSTALLATION OF ANY ITEM. FAILURE TO ADHERE TO THIS PROCEDURE SHALL PLACE FULL RESPONSIBILITY FOR ANY ERRORS DIRECTLY UPON THE CONTRACTOR.

9. ALL MATERIALS AND CONSTRUCTION WITHIN EASEMENTS AND R.O.W. SHALL CONFORM TO ALL GOVERNING AUTHORITIES' JURISDICTIONAL STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS.

10. BASES, ANCHOR BOLTS, CONDUIT, AND WIRING FOR ALL SIGNS ARE BY THE GENERAL CONTRACTOR.

11. 3/4" EMPTY CONDUIT TO LOCATIONS SHOWN AT THE LOT PERIMETER FOR LOT LIGHTING IS BY THE GENERAL CONTRACTOR. LIGHTING FIXTURES, BASES, POLES, CONDUIT, AND WIRING ARE BY THE GENERAL CONTRACTOR.

12. BASES FOR FLAGPOLES ARE BY THE GENERAL CONTRACTOR. ANCHOR BOLTS ARE BY THE FLAGPOLE SUPPLIER.

13. PROPOSED UTILITIES ARE SHOWN IN SCHEMATIC ONLY. EXACT LOCATIONS SHALL BE DETERMINED TO ALLOW FOR THE MOST ECONOMICAL INSTALLATION.

WORK IN PASCO COUNTY RIGHT-OF-WAY NOTES

IT IS TO BE UNDERSTOOD THAT ALL ROADWAYS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING:

(1) FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.

(2) FLORIDA DEPARTMENT OF TRANSPORTATION "DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEMS", LATEST EDITION.

(3) FLORIDA DEPARTMENT OF TRANSPORTATION "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS", LATEST EDITION.

(4) FLORIDA DEPARTMENT OF TRANSPORTATION "FLEXIBLE PAVEMENT DESIGN STANDARDS", LATEST EDITION.

1. PERMANENT EROSION CONTROL AND SHOULDER SODDING AND TURF ON EXISTING FACILITIES SHALL CONFORM TO FDOT DESIGN STANDARD INDEX 104 -105.

2. CURB & CURB AND GUTTER SHALL CONFORM TO FDOT DESIGN STANDARD INDEX 300.

3. GUARDRAILS SHALL CONFORM TO FDOT DESIGN STANDARD INDEX 400.

4. TURNOUTS (DRIVEWAY CONNECTIONS) SHALL CONFORM TO FDOT DESIGN STANDARD INDEX 515.

5. TRAFFIC CONTROL THROUGH WORK ZONES SHALL CONFORM TO FDOT DESIGN STANDARD INDEX 600.

6. SINGLE COLUMN GROUND SIGNS SHALL CONFORM TO FDOT DESIGN STANDARD INDEX 11860 AND SHALL BE PLACED IN ACCORDANCE WITH FDOT DESIGN STANDARD INDEX 17302.

7. STRIPING SHALL CONFORM TO FDOT DESIGN STANDARD INDEX 17346.

8. REFLECTIVE PAVEMENT MARKERS SHALL CONFORM TO FDOT DESIGN STANDARD INDEX 17352.

9. SIGNING AND STRIPING SHALL BE IN ACCORDANCE WITH THE FHWA "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD).

10. ALL DISTURBED AREAS IN FDOT RIGHT-OF-WAY SHALL BE SODDED.

HOWEVER, IN NO INSTANCE SHALL THE ROADWAY STANDARDS BE LESS THAN THOSE REQUIRED BY THE PASCO COUNTY LAND DEVELOPMENT CODE.

TESTING METHODS SHOWN IN PASCO COUNTY ENGINEERING SERVICES DEPARTMENT TESTING SPECIFICATIONS FOR CONSTRUCTION OF ROADS, STORM DRAINAGE, AND UTILITIES ARE REFERENCED TO THE FLORIDA DEPARTMENT OF TRANSPORTATION, MANUAL OF FLORIDA SAMPLING AND TESTING METHODS, LATEST EDITION.

THE CONTRACTOR SHALL PROVIDE A MAINTENANCE OF TRAFFIC PLAN AND PROOF OF LIABILITY INSURANCE. THE CONTRACTOR SHALL NOTIFY PASCO COUNTY (48) HOURS PRIOR TO START OF CONSTRUCTION.

STANDARD SYMBOLS

EXISTING	DESCRIPTION	PROPOSED
EX. WM	WATER METER	WM
EX. RM	RECLAIMED METER	RM
EX. WM & BFP	METER AND BACK FLOW PREVENTOR	WM & BFP
EX. DDCVA	DOUBLE DETECTOR CHECK VALVE ASSEMBLY	DDCVA
EX.FHA	FIRE HYDRANT ASSEMBLY	FHA
EX. FDC	FIRE DEPARTMENT CONNECTION	FDC
EX. G.V.	GATE VALVE	G.V.
	BLOW-OFF VALVE	
	SANITARY SEWER MANHOLE	
EX. C.O.	CLEANOUT	C.O.
	GREASE TRAP / OIL SEPARATOR	
	SURFACE FLOW ARROW	
	GRATE INLET	
	CURB INLET	
	STORM SEWER MANHOLE	
	MITERED END SECTION	
	FLARED END SECTION	
EX. LP	LIGHT POLE	LP
	CONCRETE UTILITY POLE	
	WOOD UTILITY POLE	
	GUIDE WIRE	
	BOLLARD	
	SIGNAGE	
	WHEEL STOP	
	HANDICAP SPACE	
	TRAFFIC MARKINGS	

L I N E T Y P E S

EXISTING	DESCRIPTION	PROPOSED
	PROPERTY LINE	
	CENTER LINE	
	EDGE OF PAVEMENT	
	WALL	
	WOOD FENCE	
	CHAIN LINK FENCE	
	BARB WIRE FENCE	
N/A	SILT FENCE	
	LOT LINE	
	POND TOP OF BANK	
	RIGHT OF WAY LINE	
	SECTION LINE	
EX. ST	STORM SEWER LINE	ST
EX. CATV	CABLE TV LINE	CATV
EX. FO	FIBER OPTIC LINE	FO
EX. TEL	TELEPHONE LINE	TEL
EX. ELE	ELECTRIC LINE	ELE
EX. OHP	OVERHEAD POWER LINE	OHP
EX. UGP	UNDERGROUND POWER LINE	UGP
EX. REC	RECLAIMED WATER LINE	REC
EX. IRR	IRRIGATION WATER LINE	IRR
EX. FIRE	FIRE LINE	FIRE
EX. WM	POTABLE WATER LINE	WM
EX. SAN	SANITARY SEWER LINE	SAN
EX. FM	FORCE MAIN LINE	FM
EX. GAS	GAS LINE	GAS
	EASEMENT LINE	
JD JD JD JD	WETLAND LINE	WET WET WET WET
FLOOD FLOOD	FLOOD ZONE LINE	N/A
75	CONTOUR LEVEL	75
R.L	RIDGE LINE	R.L
	BASIN LINE	

ABBREVIATIONS

ABC	ASPHALT BASE COURSE	EL	ELEVATION	NHW	NORMAL HIGH WATER
ABS	ACRYLONITRITE-BUTADIENE-STYRENE PIPE	ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE	NTS	NOT TO SCALE
A/C	AIR CONDITIONER	EOP	EDGE OF PAVEMENT	OD	OUTSIDE DIAMETER
ACCEL	ACCELERATION	EM	ELECTRIC METER	OHP	OVERHEAD POWER
ASPH	ASPHALT	EMBK	EMBANKMENT	PAVT	PAVEMENT
ASPH CONC	ASPHALTIC CONCRETE	EMUL	EMULSIFIED	PL	PROPERTY LINE
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	ESMT	EASEMENT	PVC	POLYVINYL CHLORIDE PIPE
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	EXCAV	EXCAVATION	Q	PEAK DISCHARGE or FLOW VOLUME (CFS)
		FAC	FLORIDA ADMINISTRATIVE CODE	RBAC	ROCK BASE ASPHALTIC CONCRETE
BFP	BACK FLOW PREVENTER	FC	FRICTION COURSE	RCP	REINFORCED CONCRETE PIPE
BOC	BACK OF CURB	FDC	FIRE DEPARTMENT CONNECTION	REQ	REQUIRED
BCCMP	BITUMINOUS COATED CORRUGATED METAL PIPE	FDN	FOUNDATION	RPZ	REDUCED PRESSURE ZONE
BIT	BITUMINOUS	FFE	FINISHED FLOOR ELEVATION	R/W	RIGHT OF WAY
BL	BASE LINE	FES	FLARED END SECTION	RR	RAILROAD
BLKHD	BULKHEAD	FHA	FIRE HYDRANT ASSEMBLY	SAHM	SAND-ASPHALT HOT MIX
BLVD	BOULEVARD	FHWA	FEDERAL HIGHWAY ADMINISTRATION	SAN	SANITARY SEWER
BM	BENCH MARK	FM	FORCE MAIN	SBAC	SHELL BASE ASPHALTIC CONCRETE
BOT	BOTTOM	FO	FIBER OPTIC CABLE	SBRM	SAND BITUMINOUS ROAD MIX
BRG	BEARING	GD	GUTTER DRAIN	SCST	SAND-CLAY SURFACE TREATMENT
BT	BURRIED TELEPHONE CABLE OR DUCT	GI	GUTTER INLET	SHLDR	SHOULDER
BTFLY	BUTTERFLY	GIP	GALVANIZED IRON PIPE	SHW	SEASONAL HIGH WATER
BWF	BARBED WIRE FENCE	GM	GAS MAIN	ST	STRUCTURE
C&G	CURB AND GUTTER	GTTR	GUTTER	SUBS	SUBSOIL
CAP	CORRUGATED ALUMINUM PIPE	GUY	GUIDE WIRE	SUBGR	SUBGRADE
CBC	CONCRETE BOX CULVERT	HT	HEIGHT	TBO	TEMPORARY BLOW-OFF
CEM	CEMENT	H/W	HEADWALL	TBM	TEMPORARY BENCH MARK
CIP	CAST IRON PIPE	HS-20	AASHTO NEW TRUCK MODEL FOR BRIDGE EVALUATION	TCB	TEMPORARY CONCRETE BARRIER
CL	CENTER LINE	HWY	HIGHWAY	TCE	TEMPORARY CONSTRUCTION EASEMENT
CLF	CHAIN LINK FENCE	ID	INSIDE DIAMETER	TCP	TERRA COTTA PIPE
CM	CONCRETE MONUMENT	IE	INVERT ELEVATION	TEL	TELEPHONE
CMP	CORRUGATED METAL PIPE	IMC	INTERMEDIATE METAL CONDUIT	TOB	TOP OF BANK
CMPA	CORRUGATED METAL PIPE ARCH	ITE	INSTITUTE OF TRANSPORTATION ENGINEERS	TOP	TOP OF PIPE
CO	CLEANOUT	JB	JUNCTION BOX	TOS	TOE OF SLOPE
CONC	CONCRETE	JT	JOINT	TYP	TYPICAL
CP	CONCRETE PIPE	L	LENGTH	T/W	TOP OF WALL
CPE	CORRUGATED POLYETHYLENE PIPE	LBR	LIMEROCK BEARING RATIO	T&V	TAP AND VALVE
CSP	CORRUGATED STEEL PIPE	LFD	LOAD FACTOR DESIGN	U.D.	UNDERDRAIN
CT	CLEAR TRUNK	LRFD	LOAD RESISTANCE FACTOR DESIGN	UG	UNDERGROUND
CULV	CULVERT	M	MASS	USGS	US GEOLOGICAL SURVEY
DA	DRAINAGE AREA	MES	MITERED END SECTION	VCP	VITRIFIED CLAY PIPE
DBI	DITCH BOTTOM INLET	MH	MANHOLE	VOL	VOLUME
DD	DRY DENSITY	MHW	MEAN HIGH WATER	W/C	WATER-CEMENT RATIO
DECEL	DECELERATION	MON	MONUMENT	WB40	INTERMEDIATE SEMI TRAILER (40' WB)
DENS	DENSITY	MOT	MAINTENANCE OF TRAFFIC	WB50	LARGE SEMI TRAILER (50' WB)
DHW	DESIGN HIGH WATER	MP	MILE POST	WB60	TANDUM SEMI TRAILER (60' WB)
DIP	DUCTILE IRON PIPE	MSL	MEAN SEA LEVEL	WM	WATER MAIN
DT	DITCH	MTD	MOUNTED	WQT	WATER QUALITY TREATMENT
DI	DROP INLET	N	NORTH	WT	WATER TABLE
DIA	DIAMETER	NA or N/A	NOT AVALABLE or NOT APPLICABLE	WPF	WOOD PLANK FENCE
DLW	DESIGN LOW WATER	NAVD	NORTH AMERICA VERTICAL DATUM of 1988	XSEC	CROSS SECTION
DDCVA	DOUBLE DETECTOR CHECK VALVE ASSEMBLY	NGVD	NATIONAL GEODETIC VERTICAL DATUM of 1929	YI	YARD INLET

UNITS OF MEASURE

AC	ACRE
BA	BARREL
BSH	BUSHEL
CF	CUBIC FOOT
CFS	CUBIC FOOT PER SECOND
CY	CUBIC YARD
DA	DAYS
FT	FOOT
FPS	FEET PER SECOND
GA	GALLON
HP	HORSE POWER
HR	HOUR
IN	INCH
KIP	THOUSAND POUNDS (FORCE)
KSI	KIPS PER SQUARE INCH
KV	KILOVOLT
LB	POUND
LF	LINEAR FOOT
LS	LUMP SUM
M	METER
MG	THOUSAND GALLONS
MI	MILE
MPH	MILES PER HOUR
OZ	OUNCE
PSI	POUNDS PER SQUARE INCH
SEC	SECOND
SQ FT or SF	SQUARE FOOT
SQ IN or SI	SQUARE INCH
SQ YD OR SY	SQUARE YARD
TN	TON
VF	VERTICAL FOOT
YR	YEAR

©COPYRIGHT 2015

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date

COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

REVISIONS			
No.	BY	DATE	DESCRIPTION

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

CONTENT:
GENERAL NOTES, SYMBOLS & ABBREVIATIONS

PROJECT:
McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (U.S. HWY 41)
LAND O' LAKES, FLORIDA 34638

SITE ID 009-2580

HPE HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
Tel. (813) 644-8333
Fax (813) 644-7000
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET:
C-2.1

TESTING SCHEDULE

ITEM	TEST	TEST FREQUENCY
BUILDING PAD	OPTIMUM MOISTURE / MAXIMUM DENSITY 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70) GRADATION AS DETERMINED BY AASHTO T27-06 (ASTM D136-06)	PER SOIL TYPE ONE PER 2,500 SF HORIZONTALLY IN 12 INCH LIFTS EACH LIFT (SEE NOTE 3)
EMBANKMENT	OPTIMUM MOISTURE / MAXIMUM DENSITY 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70) GRADATION AS DETERMINED BY AASHTO T27-06 (ASTM D136-06)	PER SOIL TYPE ONE PER 5,000 SF HORIZONTALLY IN 12 INCH LIFTS EACH LIFT (SEE NOTE 3)
UTILITY TRENCH BACKFILL OVER PIPELINES AND AROUND STRUCTURES FROM RIGHT-OF-WAY LINE TO RIGHT-OF-WAY LINE AND IN STRUCTURAL AREAS	OPTIMUM MOISTURE / MAXIMUM DENSITY 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70)	PER SOIL TYPE (SEE NOTES 1 AND 2)
UTILITY TRENCH BACKFILL OVER PIPELINES OUTSIDE THE RIGHT-OF-WAY AND IN NON-STRUCTURAL AREAS	OPTIMUM MOISTURE / MAXIMUM DENSITY 95% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70)	PER SOIL TYPE (SEE NOTES 1 AND 2)
STABILIZED SUB GRADE	OPTIMUM MOISTURE / MAXIMUM DENSITY MINIMUM LBR 40 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70), NO TOLERANCE	PER MATERIAL TYPE PER MATERIAL TYPE (SEE NOTE 3)
BASE (OTHER THAN SOIL CEMENT OR CRUSHED CONCRETE)	OPTIMUM MOISTURE / MAXIMUM DENSITY MINIMUM LBR 100 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70) - NO TOLERANCE GRADATION, ATTERBERG LIMITS	PER SOURCE PER SOURCE EACH LIFT (SEE NOTE 3) PER SOURCE
CRUSHED CONCRETE BASE	MINIMUM LBR 120 ABRASION TEST BY USING LOS ANGELES MACHINE AS DETERMINED BY FM-1T096 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70)	PER MATERIAL TYPE PER MATERIAL TYPE (SEE NOTE 3)
SOIL CEMENT BASE (NO IN PLACE MIXING ALLOWED)	DESIGN MIX AS DETERMINED BY PORTLAND CEMENT ASSOCIATION SPECIFICATIONS OPTIMUM MOISTURE / MAXIMUM DENSITY PROCTOR AS DETERMINED BY AASHTO T180 COMPRESSIVE STRENGTH SPECIMENS AS DETERMINED BY PORTLAND CEMENT ASSOCIATION SPECIFICATIONS (300 PSI AT 7 DAYS), (SEE NOTE 4) TEST CORES AS DETERMINED BY PORTLAND CEMENT ASSOCIATION SPECIFICATIONS (300 PSI AT 21 DAYS), (SEE NOTE 4) 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T134 - NO TOLERANCE	ONE PER MATERIAL TYPE ONE PER MATERIAL TYPE DAILY ONE PER MATERIAL TYPE ONE SET OF 3 SAMPLES PER MATERIAL TYPE PER ONE-HALF DAY (SEE NOTE 3) (SEE NOTE 3)
CONCRETE (SEE NOTE 5)	SLUMP TEST COMPRESSIVE STRENGTH CYLINDERS (MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS = 3,000 PSI), NO TOLERANCE AIR CONTENT	ONE PER SET OF CYLINDERS ONE SET OF THREE (3) CYLINDERS FOR 100 CY OR FRACTION THEREOF ONE PER SET OF CYLINDERS
ASPHALTIC CONCRETE	AGGREGATE ANALYSIS DESIGN MIX BITUMEN CONTENT GRADATION STABILITY FLOW PROPERTIES OF IN-PLACE MATERIALS (MARSHALL TEST) THICKNESS MAXIMUM SPECIFIC GRAVITY 95% OF LAB DENSITY	ONE PER DESIGN ONE PER FDOT APPROVED TYPE ONE PER DAY UNLESS TONNAGE > 1,000 TON ONE PER DAY ONE PER DAY (SEE NOTE 3) ONE PER DAY (SEE NOTE 3)

NOTES:

1. TESTS SHALL BE LOCATED NO MORE THAN 500 FEET APART. TESTS SHALL BE PERFORMED ON EACH LIFT. FIELD DENSITIES SHALL BE TAKEN OVER ALL ROAD CROSSINGS. FIELD DENSITIES FOR SANITARY LINES SHALL BE STAGGERED TO INCLUDE RESULTS OVER SERVICE LATERALS. THERE SHALL BE A MINIMUM OF ONE (1) TEST SERIES FOR EACH 6 INCHES OF LIFT OVER PIPELINE BETWEEN MANHOLES. TESTS AROUND STRUCTURES SHALL BE SPIRALED IN 6 INCH LIFTS. TESTS AROUND BOX CULVERTS SHALL DONE ON BOTH SIDES EVERY LIFT.

2. FOR FLEXIBLE PIPE (CORRUGATED STEEL OR ALUMINUM), 95% OF MAXIMUM DENSITY (AASHTO-T99) PER FDOT SUPPLEMENTAL SPECIFICATIONS SUB ARTICLE 125-8.3.2 AS MODIFIED.

3. TESTS SHALL BE LOCATED NO MORE THAN 500 FEET APART. THERE SHALL BE NO LESS THAN ONE (1) TEST PER 5,000 SF.

4. MAXIMUM STRENGTH LIMITS, AS ESTABLISHED BY SOILS TESTING COMPANY, SHALL NOT BE EXCEEDED.

5. APPLIES TO SITE CONCRETE SUCH AS CURBS, DRIVEWAYS, PADS AND SIDEWALKS.

CLEARING AND GRUBBING NOTES

1. PRIOR TO SITE CLEARING AND GRUBBING, ALL TREES SHOWN TO REMAIN ON THE CONSTRUCTION PLANS SHALL BE PROTECTED IN ACCORDANCE WITH THE CITY / COUNTY TREE ORDINANCE AND DETAILS CONTAINED IN THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE TO KEEP THESE TREES IN GOOD CONDITION. NO TREES SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM THE OWNER.

2. THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE PRIOR TO CONSTRUCTION IN ACCORDANCE, WITH THE GEOTECHNICAL INVESTIGATION REPORT. COPIES OF THE GEOTECHNICAL INVESTIGATION REPORT ARE AVAILABLE THROUGH THE OWNER. ANY QUESTION REGARDING SITE PREPARATION REQUIREMENTS DESCRIBED IN THE GEOTECHNICAL INVESTIGATION REPORT ARE TO BE DIRECTED TO THE GEOTECHNICAL ENGINEERING COMPANY THAT PREPARE THE REPORT.

3. THE CONTRACTOR SHALL CLEAR AND GRUB, ONLY THOSE AREAS OF THE SITE NEEDED FOR CONSTRUCTION. DISTURBED AREAS SHALL BE SEEDED, MULCHED, OR PLANTED WITH APPROVED LANDSCAPE MATERIAL IMMEDIATELY AFTER CONSTRUCTION.

4. UNLESS OTHERWISE DIRECTED, THE TOP 4" TO 6" OF SOIL REMOVED DURING CLEARING AND GRUBBING SHALL BE STOCKPILED AT A SITE DESIGNATED BY THE OWNER TO BE USED FOR LANDSCAPING PURPOSED.

5. ONLY GRADING BY HAND IS PERMITTED WITHIN THE CANOPY / DRIP LINE OF TREES TO REMAIN.

PAVING AND GRADING NOTES

1. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS) SHALL BE EXCAVATED IN ACCORDANCE WITH THESE CONSTRUCTION DOCUMENTS OR AS DIRECTED BY THE OWNER, OR THE GEOTECHNICAL ENGINEER. DELETERIOUS MATERIAL SHALL BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS SHALL BE BACK FILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND SHALL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.

3. ALL NECESSARY FILL AND EMBANKMENT MATERIAL THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S GEOTECHNICAL ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE CONSTRUCTION DOCUMENTS OR THE REFERENCED GEOTECHNICAL INVESTIGATION REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES, WHICH INCLUDE BUT ARE NOT LIMITED TO EARTHWORK ACTIVITIES, SUB GRADE PREPARATION, ETC. CONFORM WITH THE GEOTECHNICAL INVESTIGATION REPORT.

4. PROPOSED PAD GRADES SHOWN ARE MINIMUM GRADES. ELEVATIONS OF ADJOINING LOTS, EXISTING TREES, AND OTHER FIELD CONDITIONS MAY WARRANT LEAVING LOTS WHICH ARE HIGHER IN THEIR NATURAL STATE. THE CONTRACTOR SHALL CONSULT WITH THE OWNER AND THE ENGINEER IN WRITING PRIOR TO GRADING ACTIVITIES WHEN THESE CONDITIONS EXIST.

5. PROPOSED ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON THESE CONSTRUCTION DOCUMENTS.

6. ALL SLOPES STEEPER THAN 5:1 SHALL BE SODDED; ALL SLOPES STEEPER THAN 4:1 SHALL BE REINFORCED WITH STAKED SOD.

7. CONTRACTOR SHALL SAW CUT, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.

8. CURBING SHALL BE PLACED AT THE EDGE OF ALL PAVEMENT, AS SHOWN ON THESE CONSTRUCTION DOCUMENTS.

9. REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS" FOR DETAILS AND SPECIFICATIONS OF ALL F.D.O.T. TYPE CURBING AND GUTTERS CALLED FOR IN THESE CONSTRUCTION DOCUMENTS.

10. CONTRACTOR SHALL PROVIDE A 1/2" BITUMINOUS EXPANSION JOINT WITH SEALER AT ABUTMENT OF CONCRETE AND ANY STRUCTURE. EXPANSION JOINT FILLER SHALL CONFORM TO THE SPECIFICATIONS OF ASTM D1751.

11. CONTRACTOR SHALL PROVIDE EROSION CONTROL AND SEDIMENTATION BARRIER TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR CITY / COUNTY AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR SHALL REMOVE SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR CITY / COUNTY AUTHORITIES.

12. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS.

13. THE CONTRACTOR SHALL STABILIZE BY SEED AND MULCH, SOD OR OTHER APPROVED MATERIALS AS REQUIRED ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING APPLICABLE SOIL AND MATERIAL TESTING AND SUBMITTING TEST RESULTS TO OWNER'S ENGINEER ON A WEEKLY BASIS. SOIL TESTS ARE REQUIRED PURSUANT WITH THE TESTING SCHEDULE REQUIRED BY THE GOVERNMENTAL AGENCY HAVING JURISDICTION OVER THIS SITE. UPON COMPLETION OF THIS WORK, THE CONTRACTOR SHALL SUBMIT TO THE OWNER CERTIFICATIONS SIGNED BY THE MATERIAL / GEOTECHNICAL ENGINEER STATING THAT ALL SOIL AND MATERIAL REQUIREMENTS HAVE BEEN MET.

15. A QUALIFIED TESTING LABORATORY SELECTED BY THE OWNER SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN PLACE MATERIALS AS REQUIRED BY THESE CONSTRUCTION DOCUMENTS AND THE VARIOUS AGENCIES HAVING JURISDICTION OVER THIS SITE. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THE REQUIREMENTS, THE CONTRACTOR SHALL BEAR ALL COSTS OF SAID RETESTING.

16. MIXING IN PLACE OF SOIL CEMENT SHALL NOT BE ALLOWED.

17. ALL CURB RAMPS SHALL BE CONSTRUCTED AND TEXTURED PER FDOT INDEX NO. 304. THE CONTRACTOR SHALL FINISH ALL EXPOSED BACK OF CURB.

18. PRIOR TO CONSTRUCTION OF CONCRETE PAVEMENT, THE CONTRACTOR SHALL SUBMIT A PROPOSED JOINTING PATTERN TO THE ENGINEER FOR APPROVAL.

19. ALL PAVEMENT MARKINGS IN THE RIGHT-OF-WAY SHALL BE MADE WITH PERMANENT THERMOPLASTIC AND SHALL CONFORM TO F.D.O.T STANDARD INDEX NO. 17346, SHEETS 1-7. PARKING STALL STRIPING SHALL BE 4" WIDE STRIPES PAINTED IN WHITE COLOR. YELLOW PAINT SHALL BE USED FOR NO PASSING, NO PARKING OR TO DESIGNATE A FIRE LANE.

20. THE CONTRACTOR SHALL INSTALL EXTRA BASE MATERIAL WHEN THE DISTANCE BETWEEN THE PAVEMENT SURFACE AND THE TOP OF THE PIPE OR BELL IS LESS THAN TWELVE (12) INCHES.

21. ON-SITE PAVEMENT SHALL CONSIST OF 2" ASPHALT (TYPE S-III) ON 6" LIMEROCK BASE OR CRUSHED PORTLAND CEMENT CONCRETE COMPACTED TO 98% OF MAXIMUM DENSITY FROM MODIFIED PROCTOR TEST OVER 6" STABILIZED SUBGRADE (40 LBR) COMPACTED TO 98% OF MAXIMUM DENSITY FROM MODIFIED PROCTOR TEST PER ASTM D1557 / AASHTO T-180.

22. CITY / COUNTY RIGHT-OF-WAY PAVEMENT SHALL CONSIST OF 3" ASPHALT (TYPE S-I) ON 11" LIMEROCK BASE COMPACTED TO 98% OF MAXIMUM DENSITY FROM MODIFIED PROCTOR TEST OVER 12" STABILIZED SUBGRADE (40 LBR) COMPACTED TO 98% OF MAXIMUM DENSITY FROM MODIFIED PROCTOR TEST PER ASTM D1557 / AASHTO T-180, UNLESS OTHERWISE SPECIFIED.

DRAINAGE NOTES

1. STANDARD INDEXES REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS" FOR DETAILS AND SPECIFICATIONS OF ALL F.D.O.T. TYPE INLETS AND OTHER DRAINAGE STRUCTURES CALLED FOR IN THESE CONSTRUCTION DOCUMENTS.

2. ALL STORM SEWER PIPES SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76, ASTM C-507) UNLESS OTHERWISE NOTED ON PLANS. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS UNLESS OTHERWISE NOTED ON PLANS. SUBSTITUTION OF RCP WITH OTHER MATERIAL (PVC, HDPE, ADS, ETC.) SHALL NOT BE PERMITTED.

3. PVC STORM PIPE, 12" AND SMALLER SHALL CONFORM TO AWWA C-900, CLASS 150 STANDARDS, UNLESS OTHERWISE NOTED ON PLANS.

4. REINFORCED CONCRETE STORM SEWER PIPE JOINTS SHALL BE ROUND RUBBER GASKET (ASTM C-361) UNLESS OTHERWISE NOTED ON PLANS. ELLIPTICAL REINFORCED PIPE SHALL BE COLD ADHESIVE PERFORMED PLASTIC GASKET IN ACCORDANCE WITH F.D.O.T. STANDARD 942-2. ALL STORMWATER PIPE JOINTS WILL BE WRAPPED PER F.D.O.T. INDEX NO. 280.

5. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO CENTER OF DRAINAGE STRUCTURE WITH THE EXCEPTION OF MITERED END SECTIONS (MES) AND FLARED END SECTIONS (FES) WHICH ARE NOT INCLUDED IN LENGTHS. CONTRACTOR SHALL VERIFY ALL QUANTITIES IN SUBMITTAL OF BID, AND INFORM THE ENGINEER OF ANY DISCREPANCIES.

6. ALL STORM DRAINAGE PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE ENGINEER PRIOR TO THE PLACEMENT OF BACK FILL. CONTRACTOR SHALL NOTIFY THE ENGINEER AND APPLICABLE AGENCIES 72 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS.

7. THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR MAY BE REQUIRED TO RECLEAN PIPES AND INLETS FOR THESE PURPOSES.

8. ALL INLETS WITHIN PAVEMENT AREAS ARE TO BE MODIFIED FOR TRAFFIC BEARING WITH HOT DIPPED GALVANIZED STEEL GRATES AND FRAMES IN ACCORDANCE WITH FDOT SPECIFICATIONS. ALL DRAINAGE STRUCTURE GRATES AND COVERS TO BE TRAFFIC RATED FOR HS-20 AASHTO TRUCK LOADINGS.

9. ALL MITERED END SECTIONS ON SIDE DRAIN PIPES AT DRIVEWAY ENTRANCES TO CITY/COUNTY/FDOT ROADWAYS MUST BE IN ACCORDANCE WITH F.D.O.T. INDEX NO. 273.

10. FOR INLETS NOT IMMEDIATELY ADJACENT TO LOW POINT (C/L) OF ROADWAY CONTRACTOR TO ADJUST CROSS SLOPE IN THESE AREAS IN ACCORDANCE WITH ENGINEER'S DIRECTION.

11. STORMWATER RUNOFF FROM THE ROOF(S) SHALL BE ROUTED THROUGH THE PROPOSED STORMWATER SYSTEM AND DIRECTED TOWARD DETENTION POND.

EARTHWORK NOTES

1. IF EVIDENCE OF THE EXISTENCE OF HISTORIC RESOURCES IS DISCOVERED OR OBSERVED AT THE SITE OR DURING DEVELOPMENT ACTIVITIES AFTER FINAL APPROVAL, ALL WORK SHALL CEASE. THE DEVELOPER, OWNER, OR AGENT THEREOF SHALL NOTIFY THE DEPARTMENT OF HISTORICAL RESOURCES WITHIN 24 HOURS. EXAMPLES OF EVIDENCE OF HISTORIC RESOURCES INCLUDE WHOLE OR FRAGMENTARY STONE TOOLS, SHELL TOOLS, ABORIGINAL OR HISTORIC POTTERY, HISTORIC GLASS, HISTORIC BOTTLES, BONE TOOLS, HISTORIC BUILDING FOUNDATIONS, SHELL MOUNDS, SHELL MIDDENS, OR SAND MOUNDS. THE DIRECTOR OF HISTORIC RESOURCES SHALL ASSESS THE SIGNIFICANCE OF THE FINDS AND MITIGATE ANY ADVERSE EFFECTS AS SOON AS POSSIBLE, BUT NO LATER THAN THREE (3) WORKING DAYS OF NOTIFICATION. WORK ACTIVITIES CAN BE NORMALLY RESUMED EXCEPT IN THE AREA OF EFFECT AS DETERMINED BY THE DIRECTOR OF HISTORIC RESOURCES.

2. TOP SOIL, ORGANIC SILTY SOILS WITH ROOTS AND ORGANIC MUCK MATERIALS SHALL BE REMOVED WHEN ENCOUNTERED AT THE GROUND SURFACE AND IF NOT REMOVED DURING NORMAL CLEARING AND GRUBBING OPERATIONS. OTHER ISOLATED AREAS OF ORGANIC MATERIAL OR DELETERIOUS MATERIAL MAY EXIST WITHIN THE PROJECT SITE. IF ADDITIONAL UNSUITABLE MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION, THEY SHALL BE REMOVED AND REPLACED WITH CLEAN, SLIGHTLY SILTY OR SILTY FINE SAND (A-3, A-2-4).

3. EMBANKMENT CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE FDOT STANDARD SPECIFICATIONS. SITE PREPARATION SHALL BE PERFORMED IN ACCORDANCE WITH THE FDOT STANDARD INDEXES NO. 500 AND 505. EMBANKMENT FILL, WHERE REQUIRED, SHALL CONTAIN NO MUCK, STUMPS, ROOTS, OR OTHER DELETERIOUS MATERIAL AND SHALL BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX 505. THE BACKFILL SHALL BE SHAPED AND ADDRESSED TO CONFORM TO THE CROSS SECTIONS AND GRADES INDICATED ON THESE CONSTRUCTION DOCUMENTS WITHIN THE TOLERANCES STATED IN THE FDOT STANDARD SPECIFICATIONS.

4. PIPE BEDDING MATERIAL IN TRENCHES SHALL CONSIST OF CLEAN OR SLIGHTLY SILTY FINE SAND (A-3) WITH LESS THAN 10 PERCENT PASSING THE US STANDARD NO 200 SIEVE. THE MATERIAL SHALL BE FREE OF STONES, GRAVEL, ORGANICS, VEGETATION AND OTHER DELETERIOUS MATERIAL, PLACED IN UNIFORM LIFTS NOT EXCEEDING SIX (6) INCHES THICK AND COMPACTED TO AT LEAST 95 PERCENT OF ITS MAXIMUM DENSITY PER ASTM D1557 / AASHTO T-180 (MODIFIED PROCTOR TEST). TRENCH BACK FILL MATERIAL SHALL CONSIST OF CLEAN, SLIGHTLY SILTY OR SILTY FINE SAND (A-3, A-2-4) WITH LESS THAN 35 PERCENT PASSING THE U.S. STANDARD NO. 200 SIEVE. ALL BACKFILL SHALL CONTAIN NO MORE THAN FIVE PERCENT ORGANICS AS DETERMINED BY ASTMD-2974.

5. PIPE BEDDING MATERIAL SHALL BE SOLIDLY TAMPED AROUND PIPES IN SIX (6) INCH ES THICK LAYERS UP TO A LEVEL OF AT LEAST ONE (1) FOOT ABOVE THE TOP OF THE PIPE. IN AREAS TO BE PAVED, PIPE BEDDING MATERIAL SHALL BE COMPACTED TO 98% MAXIMUM DENSITY PER ASTM D1557 / AASHTO T-180 (MODIFIED PROCTOR TEST).

6. BACKFILL MATERIAL OVER ANY PIPE (STORM SEWER, SANITARY SEWER, OR WATER MAINS) INSTALLED UNDER ROADWAYS OR WITHIN THE EMBANKMENT OF THE ROADWAY SHALL BE COMPACTED IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, SECTION 125-8, LATEST EDITION.

7. IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF THE PRESENCE OF STATE AND/OR FEDERALLY PROTECTED PLANT AND/OR ANIMAL SPECIES OR THOSE LISTED AS THREATENED, ENDANGERED OR OF SPECIAL CONCERN IS DISCOVERED OR OBSERVED, WORK SHALL COME TO AN IMMEDIATE STOP AND THE DEVELOPER, OWNER, OR AGENT THEREOF SHALL NOTIFY THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FFWCC), THE U.S. FISH AND WILDLIFE SERVICE (USFWS) AND CITY / COUNTY AUTHORITIES WITHIN 24 HOURS OF THE PLANT AND/OR ANIMAL SPECIES FOUND ON THE SITE.

WASTEWATER COLLECTION

1. ALL SANITARY SEWER WORK SHALL CONFORM WITH APPLICABLE AGENCY STANDARDS AND SPECIFICATIONS.

2. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.

3. POINTS OF CONNECTION FOR THE SANITARY SEWER LINES SHALL BE COORDINATED WITH THE BUILDING PLUMBING PLANS. SANITARY SERVICE CONNECTION LOCATIONS SHOWN ON THESE CONSTRUCTION DOCUMENTS ARE APPROXIMATE.

4. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING NEW SANITARY SEWER LINES TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES NEAR THE POINT OF CONNECTION AND NOTIFY OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES WITH DESIGN INFORMATION SHOWN IN THESE PLANS. CONTRACTOR SHALL NOTIFY ENGINEER AND THE APPLICABLE AGENCIES AT LEAST 48 HOURS IN ADVANCE OF SCHEDULED WORK.

5. 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 6 INCHES, AND PREFERABLY 12 INCHES, BETWEEN THE INVERT OF THE WATER MAIN 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 6 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 WATER OR STORM SEWERS IF IT IS 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 THAT 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.

6. A MINIMUM 6-FOOT, AND PREFERABLY 10-FOOT, HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 6-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER. WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 6 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (DIP IS NOT REQUIRED FOR WATER IF IT IS NOT AVAILABLE IN THE SIZE PROPOSED). THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM THE JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

7. ALL SANITARY SEWER MAINS, LATERALS AND FORCE MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER, UNLESS OTHERWISE INDICATED IN THE CONSTRUCTION DRAWINGS.

8. ALL SANITARY SEWER COVERS SHALL BE TRAFFIC RATED FOR AASHTO HS-20 TRUCK LOADING.

9. ALL SANITARY SEWER MAINS AND SERVICE LATERALS SHALL BE CONSTRUCTED OF POLYVINYL CHLORIDE (PVC) PIPE S.D.R. 26, UNLESS OTHERWISE INDICATED IN THE CONSTRUCTION DRAWINGS. ALL SANITARY SEWER PIPES SHALL BE GREEN COLOR.

10. POLYVINYL CHLORIDE PIPE AND FITTINGS SHALL CONFORM WITH A.S.T.M. SPECIFICATIONS D-3034 FOR S.D.R. 26. INSTALLATION SHALL BE IN STRICT ACCORDANCE TO ASTM D2321 SPECIFICATIONS AND CONFORM TO CITY / COUNTY CONTRACT SPECIFICATIONS AND STANDARDS.

11. ALL DUCTILE IRON PIPE SHALL BE CLASS 52 IN ACCORDANCE TO ANSI A 21.50 (AWWA C 150) AND ANSI A 21.51 (AWWA C 151).

12. ALL ON SITE DUCTILE IRON PIPE SHALL RECEIVE INTERIOR AND EXTERIOR BITUMINOUS COATING IN ACCORDANCE WITH ANSI A 21.6, A 21.8, OR A 21.51. DUCTILE IRON PIPE AND FITTINGS FOR GRAVITY SEWER SHALL CONFORM TO CITY / COUNTY CONTRACT SPECIFICATIONS AND STANDARDS.

13. AT LEAST 3 WEEKS PRIOR TO CONNECTION TO THE EXISTING SANITARY FORCE MAIN, CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE APPLICABLE AGENCIES, DEPARTMENT OF SANITARY SEWERS FIELD ENGINEERING OFFICE AND SUPPLY THEM WITH CONNECTION DETAIL, THE CONTRACTOR'S NAME, STARTING DATE PROJECTED SCHEDULE AND OTHER INFORMATION AS REQUIRED. THE PUBLIC WORKS / FIELD ENGINEERING OFFICE SHOULD ALSO BE CONTACTED 5 DAYS PRIOR TO CONSTRUCTION TO ENSURE AVAILABILITY OF INSPECTION PERSONNEL. ANY WORK PERFORMED PRIOR TO NOTIFYING FIELD ENGINEERING OR WITHOUT A DEPARTMENT INSPECTOR PRESENT MAY BE SUBJECT TO REMOVAL AND REPLACEMENT. THE CONTRACTOR SHALL PERFORM AN INFILTRATION/EXFILTRATION TEST ON ALL GRAVITY SEWERS AND A PRESSURE TEST ON ALL FORCE MAINS (AS APPLICABLE) IN ACCORDANCE TO APPLICABLE AGENCIES REGULATIONS. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE APPLICABLE AGENCIES' DEPARTMENT OF SANITARY SEWERS FOR APPROVAL. THE SCHEDULING, COORDINATION AND NOTIFICATION TO ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.

14. ONE OR MORE OF THE FOLLOWING CERTIFICATES / SHOP DRAWINGS, DEPENDING ON THE TYPE OF CONNECTION, WILL BE REQUIRED. THIS SHOULD BE REVIEWED WITH THE DESIGN DIVISION PRIOR TO APPROVAL FOR CONSTRUCTION AND SUBMITTED IN ACCORDANCE WITH THE ABOVE NOTE 13.

(1) DIP/PVC CERTIFICATE OF MANUFACTURE.
(2) JACKING PIT DETAIL.
(3) MANHOLE SHOP DRAWINGS AND STRENGTH REPORT.
(4) CRUSHED STONE SUBMITTAL.
(5) FRAME AND COVER SHOP DRAWINGS.
(6) VALVE SHOP DRAWING.
(7) FLEXIBLE COUPLING SHOP DRAWINGS.
(8) MANHOLE DROP
(9) CASING PIPE CERTIFICATE.
(10) CONNECTION DETAIL.

15. THE CERTIFICATE OF OCCUPANCY WILL NOT BE ISSUED UNTIL THE FOLLOWING HAS BEEN COMPLETED:

(1) FINAL INSPECTION IN CONJUNCTION WITH DEPARTMENT PERSONNEL COMPLETED.
(2) AS-BUILTS HAVE BEEN SUBMITTED AND ACCEPTED.
(3) ALL NECESSARY TESTING COMPLETED AND CERTIFIED.
(4) PAYMENT OF ALL CAPACITY FEES.

16. THE CONTRACTOR SHALL PERFORM AT HIS OWN EXPENSE AN INFILTRATION OR EXFILTRATION TEST, A TELEVISION INSPECTION, AND A MANDREL (GO, NO GO) TEST ON ALL GRAVITY SEWERS IN ACCORDANCE WITH THE ENGINEER'S REQUIREMENTS AND THE REGULATORY AGENCY HAVING JURISDICTION OVER THE PROJECT. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION OF TESTING AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.

17. ALL SANITARY SEWER PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACK FILL. CONTRACTOR TO NOTIFY THE ENGINEER AND APPLICABLE AGENCIES 5 DAYS IN ADVANCE TO SCHEDULE INSPECTIONS.

18. ALL PVC SANITARY FORCE MAIN SHALL BE CONSTRUCTED BY AWWA C900, DR18, GREEN PVC PIPE WITH A MAGNETIC TAPE A MINIMUM OF 4" WIDE PLACE 18 INCH BELOW THE PROPOSED GRADE. ALL WORK WITHIN PUBLIC RIGHT-OF-WAYS SHALL CONFORM WITH FDOT STANDARDS. THE LOCAL FDOT DISTRICT'S ENGINEER SHALL BE NOTIFIED 5 DAYS PRIOR TO STARTING WORK AND AGAIN IMMEDIATELY UPON COMPLETION.

19. THE CONTRACTOR SHALL PERFORM AT HIS OWN EXPENSE A MANHOLE INSPECTION AND TEST FOR WATERTIGHTNESS OR DAMAGE PRIOR TO PLACING INTO SERVICE. ALL SANITARY SEWER MANHOLES TO BE CONSTRUCTED IN UNPAVED AREAS SHALL HAVE WATER TIGHT RING AND COVER.

20. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE VARIOUS UTILITY AGENCIES AND OBTAINING ALL INFORMATION AVAILABLE TO SHOW UTILITIES ADJACENT TO THE PROPOSED FORCE MAIN.

21. ALL MATERIALS SHALL MEET THE REQUIREMENTS OF THE GOVERNMENTAL AGENCY HAVING JURISDICTION OVER THE PROECT.

22. THE SANITARY SEWER COLLECTION SYSTEM SHALL NOT BE PLACED INTO SERVICE UNTIL APPROVAL FOR CONNECTION IS OBTAINED FROM THE DEPARTMENT OF ENVIRONMENTAL PROTECTION THE CONTRACTOR SHALL SUBMIT TO THE OWNER'S ENGINEER SANITARY SEWER SYSTEM AS-BUILT INFORMATION AT LEAST SIX (6) WEEKS PRIOR TO ANTICIPATED DATE OF CERTIFICATE OF COMPLETION APPLICATION. FAILURE TO OBTAIN EPC APPROVAL PRIOR TO PLACING THE SYSTEM IN OPERATION MAY RESULT IN SUBSTANTIAL FINES.

POTABLE WATER DISTRIBUTION

1. ALL UTILITY WORK AND APPURTENANCES WITHIN THE PROPERTY BOUNDARY (I.E. FIRE HYDRANT ASSEMBLIES, MANHOLES, FIRE DEPARTMENT CONNECTIONS, ETC) ARE TO CONFORM WITH APPLICABLE AGENCIES STANDARDS SPECIFICATIONS AND DETAILS.

2. ALL WATER MAINS SHALL HAVE A MINIMUM 36" COVER.

3. WATER PIPES SHALL BE AS FOLLOWS:

3.1 PIPE SIZES LESS THAN 4 INCHES THAT ARE INSTALLED BELOW GRADE AND OUTSIDE BUILDING SHALL COMPLY WITH:

3.1.1 POLYVINYL CHLORIDE (PVC) PER ASTM D1785, CLASS 1120 OR 1220, SCHEDULE 40, CONTINUALLY MARKED WITH MANUFACTURE'S NAME, PIPE SIZE, ASTM D4216 CELL CLASSIFICATION, COLORED BLUE AND ASTM D1784 MATERIAL CLASSIFICATION.
A. PIPE JOINTS: INTEGRALLY MOLDED BELL ENDS, ASTM D2672.
B. CEMENT PRIMER: ASTM F656.
C. SOLVENT CEMENT: ASTM D2564.

3.2 PIPE SIZES 4 INCHES TO 5 INCHES THAT ARE INSTALLED BELOW GRADE AND OUTSIDE BUILDING SHALL COMPLY WITH:

3.2.1 POLYVINYL CHLORIDE (PVC) MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C-900 (NSF APPROVED), PRESSURE CLASS 150, DR 18, CONTINUALLY MARKED WITH MANUFACTURE'S NAME, PIPE SIZE, ASTM D4216 CELL CLASSIFICATION, SDR RATING, COLORED BLUE AND ASTM D1784 MATERIAL CLASSIFICATION.
A. ELASTOMETRIC GASKET AND LUBRICANT: ASTM F477.
B. PIPE JOINTS: INTEGRALLY MOLDED BELL ENDS, ASTM D2672.

3.2.2 DUCTILE IRON PIPE PER AWW C110, THICKNESS CLASS 50.
A. FITTINGS: EITHER MECHANICAL JOINT OR PUSH -ON JOINT, AWWA C110 OR AWWA C111.
B. ELASTOMETRIC GASKET AND LUBRICANT: ASTM F477.

3.3 PIPE SIZES 6 INCHES AND LARGER THAT ARE INSTALLED BELOW GRADE AND OUTSIDE BUILDING SHALL COMPLY WITH:

3.3.1 POLYVINYL CHLORIDE (PVC) MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C-900 (NSF APPROVED), PRESSURE CLASS 200, DR 14, CONTINUALLY MARKED WITH MANUFACTURE'S NAME, PIPE SIZE, ASTM D4216 CELL CLASSIFICATION, SDR RATING, COLORED BLUE AND ASTM D1784 MATERIAL CLASSIFICATION.
A. ELASTOMETRIC GASKET AND LUBRICANT: ASTM F477.
B. PIPE JOINTS: INTEGRALLY MOLDED BELL ENDS, ASTM D2672.

3.3.2 DUCTILE IRON PIPE PER AWW C110, THICKNESS CLASS 50.
A. FITTINGS: EITHER MECHANICAL JOINT OR PUSH -ON JOINT, AWWA C110 OR AWWA C111.
B. ELASTOMETRIC GASKET AND LUBRICANT: ASTM F477.

4. ALL FIRE WATER PVC PIPE TO BE PRESSURE CLASS 200, DR 14.

5. ALL DUCTILE IRON PIPE SHALL BE CLASS 52 IN ACCORDANCE WITH ANSI A 21.50 (AWWA C 150) AND ANSI A 21.51 (AWWA C 151). DUCTILE IRON PIPE SHALL RECEIVE EXTERIOR BITUMINOUS COATING IN ACCORDANCE WITH ANSI A 21.6, A 21.8 OR A 21.51 AND SHALL BE MORTAR LINED, STANDARD THICKNESS, AND BITUMINOUS SEALED IN ACCORDANCE WITH ANSI A 21.4 (AWWA C 104-71). IN AREAS WHERE THE SOIL IS DETERMINED TO BE CORROSIVE OR HIGH GROUND WATER IS EXPECTED, PIPE WILL BE INSTALLED IN A LOOSE POLYETHYLENE ENCASEMENT NOT LESS THAN 8 MILS THICK AND INSTALLED IN ACCORDANCE WITH AMERICAN NATIONAL STANDARDS INSTITUTE SPECIFICATION A21.5.

6. ALL FITTINGS 2" AND SMALLER SHALL BE SCHEDULE 40 PVC WITH SOLVENT WELDED SLEEVE TYPE JOINTS.

7. ALL FITTINGS LARGER THAN 2" SHALL BE DUCTILE IRON CLASS 53 IN ACCORDANCE WITH AWWA C-110 WITH A PRESSURE RATING OF 350 PSI. JOINTS SHALL BE MECHANICAL JOINTS IN ACCORDANCE WITH AWWA C-111. FITTINGS SHALL BE CEMENT MORTAR LINED AND COATED IN ACCORDANCE WITH AWWA C-104.

8. ALL GATE VALVES 2" OR LARGER SHALL BE RESILIENT SEAT OR RESILIENT WEDGE MEETING THE REQUIREMENTS OF AWWA C509.

9. CONTRACTOR SHALL FURNISH AND INSTALL 4" METAL DETECTABLE IDENTIFICATION TAPE ALONG THE FULL LENGTH OF THE PVC PIPE TRENCH 18 INCHES BELOW THE FINISHED GRADE.

10. CONTRACTOR SHALL INSTALL A CONTINUOUS RUN OF AN INSULATED 12 GAUGE A.W.G. SOLID STRAND COPPER WIRE WOUND AROUND THE PIPE FORMING ONE COMPLETE SPIRAL PER JOINT OF PIPE. THIS WIRE SHALL BE CONTINUOUS WITH SPLICES MADE ONLY BY METHODS APPROVED BY THE ENGINEER AND SECURED TO ALL VALVES, TEES AND ELBOWS.

11. ALL FIRE HYDRANTS SHALL MEET THE REQUIREMENTS OF AWWA C502 AND SHALL BE APPROVED BY THE CITY / COUNTY UTILITY DEPARTMENT AND FIRE MARSHALL.

12. A SHOCK PAD IS TO BE INSTALLED OVER THE WATER MAIN WHENEVER THE DEPTH OF COVER IS LESS THAN THE MINIMUM 36".

13. BENDS SHALL BE INSTALLED ON WATER MAIN, AS NECESSARY, TO MAINTAIN PROPER ALIGNMENT. PIPE DEFLECTION SHALL BE IN ACCORDANCE WITH AWWA C-600, LATEST EDITION.

14. RESTRAINT OF HORIZONTAL PVC PIPE FITTINGS SHALL BE IN ACCORDANCE WITH THE APPROPRIATE RESTRAINT TABLES SHOWN HEREON IN THESE PLANS.

15. PVC RESTRAINT FITTINGS SHALL BE EQUAL OR BETTER THAN UNIFLANGE 1350-C SERIES, EBAA IRON, INC. 1500 SERIES, OR JCM INDUSTRIES MODEL 620. ALL RESTRAINT FITTINGS SHALL HAVE A BITUMINOUS COATING.

16. SERVICE SADDLES SHALL BE USED FOR TAPPING ALL PVC WATER MAINS. SADDLES SHALL BE EQUAL TO OR BETTER THAN FORD FC202 OR JCM 406. ALL TAPS SHALL BE PERFORMED USING SHELL CUTTERS.

17. ALL SUBSURFACE CONSTRUCTION SHALL COMPLY WITH THE "TRENCH SAFETY ACT." THE CONTRACTOR SHALL INSURE THAT THE METHOD OF TRENCH PROTECTION AND CONSTRUCTION IS IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS.

18. LATEST CONSTRUCTION, MATERIALS, AND WORKMANSHIP TO CONFORM WITH THE LATEST APPLICABLE AGENCIES SPECIFICATIONS.

19. CONTRACTOR TO INSTALL TEMPORARY BLOW-OFF ASSEMBLIES AT THE TERMINATION OF THE WATER AND FIRE SERVICE LINES FOR TESTING PURPOSES.

20. CONTRACTOR TO VERIFY THE LOCATIONS AND ELEVATIONS OF ALL UTILITY CONNECTIONS PRIOR TO ORDERING MATERIALS OR CASTING STRUCTURES. VARIATIONS AFFECTING THE DESIGN OF THE SYSTEM SHOULD BE REPORTED TO THE ENGINEER IMMEDIATELY.

21. FOLLOWING THE COMPLETION OF CONSTRUCTION AND REQUIRED TESTING, THE CONTRACTOR SHALL REMOVE THE TEMPORARY BLOW-OFF ASSEMBLIES AND REPLACE WITH PERMANENT BLOW-OFFS IN ACCORDANCE WITH APPLICABLE AGENCIES DETAILS.

22. CONFLICTS BETWEEN WATER AND STORM OR SANITARY SEWER TO BE RESOLVED BY ADJUSTING THE WATER LINES AS NECESSARY.

23. CONTRACTOR TO INSTALL TEMPORARY BLOWOFFS AT THE END OF WATER LATERALS TO ASSURE ADEQUATE FLUSHING AND DISINFECTION.

24. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY INSPECTED AND ACCEPTED BY THE OWNER'S ENGINEER AND APPLICABLE AGENCIES. PRESSURE TESTS TO BE IN ACCORDANCE WITH APPLICABLE AGENCIES SPECIFICATIONS. CONTRACTOR TO NOTIFY OWNER'S ENGINEER AND APPLICABLE AGENCIES INSPECTORS 72 HOURS IN ADVANCE OF PERFORMING TESTS.

25. CONTRACTOR TO PERFORM CHLORINATION AND BACTERIOLOGICAL SAMPLING PURSUANT TO AGENCY REQUIREMENTS AND OBTAIN CLEARANCE OF DOMESTIC WATER SYSTEM (IE: TWO DAYS OF PASSING TESTS AT EACH SAMPLING LOCATION). COPIES OFF ALL BACTERIOLOGICAL TESTS TO BE SUBMITTED TO OWNER'S ENGINEER WITHIN 3 DAYS AFTER TESTING. UNDER NO CIRCUMSTANCES SHALL A NEW WATER SYSTEM BE PLACED INTO SERVICE UNTIL CERTIFICATION BY THE ENGINEER HAS BEEN COMPLETED AND A RELEASE FROM COUNTY PUBLIC HEALTH UNIT HAS BEEN ISSUED.

©COPYRIGHT 2015

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date

COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

REVISIONS			
No.	BY	DATE	DESCRIPTION

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

SITE ID 009-2580

CONTENT:
GENERAL NOTES, SYMBOLS & ABBREVIATIONS

PROJECT:
McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (U.S. HWY 41)
LAND O' LAKES, FLORIDA 34638

HPE HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET:
C-2.2

McDonald's

LAND O' LAKES BOULEVARD & PLEASANT PLAINS PARKWAY
SECTION 35, TOWNSHIP 25 SOUTH, RANGE 18 EAST
LAND O' LAKES, PASCO COUNTY, FLORIDA

LEGAL DESCRIPTION

A PARCEL OF LAND LYING IN THE NORTHWEST 1/4 OF SECTION 35, TOWNSHIP 25 SOUTH, RANGE 18 EAST, PASCO COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 35, TOWNSHIP 25 SOUTH, RANGE 18 EAST, PASCO COUNTY, FLORIDA; THENCE S89°03'43"E, ALONG THE NORTH BOUNDARY OF THE NORTHWEST 1/4 OF SAID SECTION 35, A DISTANCE OF 1216.33 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY OF LAND O' LAKES BOULEVARD (U.S. HIGHWAY NO. 41 – STATE ROAD NO. 45), SAID POINT BEING THE POINT OF BEGINNING; THENCE CONTINUE S89°03'43"E, ALONG SAID NORTH BOUNDARY OF THE NORTHWEST 1/4 OF SECTION 35, A DISTANCE OF 76.16 FEET; THENCE S18°05'41"E, A DISTANCE OF 155.28 FEET; THENCE N71°53'24"E, A DISTANCE OF 273.00 FEET; THENCE S18°05'41"E, A DISTANCE OF 207.00 FEET TO THE NORTHERLY RIGHT-OF-WAY OF PLEASANT PLAINS PARKWAY; THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY OF PLEASANT PLAINS PARKWAY FOR THE FOLLOWING TWO (2) COURSES AND DISTANCES: (1) S71°53'24"W, A DISTANCE OF 331.99 FEET TO A POINT OF CURVATURE; (2) WESTERLY ALONG THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 25.00 FEET, AN ARC OF 13.68 FEET, A CENTRAL ANGLE OF 31°20'51", A CHORD OF 13.51 FEET AND A CHORD BEARING OF S87°33'50"W TO AFORESAID EASTERLY RIGHT-OF-WAY OF LAND O' LAKES BOULEVARD (U.S. HIGHWAY NO. 41 – STATE ROAD NO. 45); THENCE N18°05'41"W, ALONG SAID EASTERLY RIGHT-OF-WAY OF LAND O' LAKES BOULEVARD (U.S. HIGHWAY NO. 41 – STATE ROAD NO. 45), A DISTANCE OF 383.49 FEET TO THE POINT OF BEGINNING.

SITE CONTAINS 83,475 SQUARE FEET OR 1.92 ACRES, MORE OR LESS.

FLOOD ZONE

THE ABOVE DESCRIBED PROPERTY IS LOCATED IN ZONE X (OR ZONE D) AND ZONE A, IN ACCORDANCE WITH THE FIRM MAP OF PASCO COUNTY, COMMUNITY NUMBER 120230 (MAP NUMBER 12101C-0238-F), MAP DATED SEPTEMBER 26, 2014.

CERTIFICATION

TO: McDONALD'S USA, LLC, A DELAWARE LIMITED LIABILITY COMPANY; McDONALD'S RESTAURANTS OF FLORIDA, INC., A FLORIDA CORPORATION; McDONALD'S CORPORATION, A DELAWARE CORPORATION; AND CHICAGO TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT HAS BEEN COMPILED FROM A SURVEY ACTUALLY MADE ON THE GROUND UNDER MY SUPERVISION; THAT IT IS CORRECT AND COMPLIES WITH THE REQUIREMENTS PROVIDED BY McDONALD'S CORPORATION; THAT IT MEETS MINIMUM TECHNICAL STANDARDS FOR LAND SURVEYS IN THE STATE OF FLORIDA CHAPTER 5J-17 FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES; AND THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 3, 4, 6(B), 8, 11(A), 13, 14, 16, 17 AND 18 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON MAY 12, 2015.

____

GEORGE A. SHIMP III
DATE
REGISTRATION NO. 6137

GENERAL NOTES

1.) THIS SURVEY HAS BEEN EXCLUSIVELY PREPARED FOR THE NAMED ENTITIES (THE "CERTIFIED PARTIES") SHOWN HEREON AND IS NOT TRANSFERABLE. NO OTHER PERSON OR ENTITY IS ENTITLED TO RELY UPON AND/OR RE-USE THIS SURVEY FOR ANY PURPOSE WITHOUT THE EXPRESSED, WRITTEN CONSENT OF GEORGE A. SHIMP II & ASSOCIATES, INC. (THE "SURVEY FIRM") AND THE CERTIFYING PROFESSIONAL SURVEYOR AND MAPPER (THE "SIGNING SURVEYOR"), HEREINAFTER COLLECTIVELY REFERRED TO AS "THE SURVEYOR". NOTHING HEREIN SHALL BE CONSTRUED TO GIVE ANY RIGHTS OR BENEFITS TO ANYONE OTHER THAN THE CERTIFIED PARTIES SHOWN ON THIS SURVEY.

2.) UNAUTHORIZED COPIES AND/OR REPRODUCTIONS VIA ANY MEDIUM OF THIS SURVEY OR ANY PORTIONS THEREOF ARE EXPRESSLY PROHIBITED WITHOUT THE SURVEYOR'S EXPRESSED, WRITTEN CONSENT.

3.) THE WORD "CERTIFY" AS SHOWN AND USED HEREON, MEANS AN EXPRESSION OF THE SURVEYOR'S OPINION REGARDING THE FACTS OF THE SURVEY BASED ON HIS BEST KNOWLEDGE, INFORMATION AND BELIEF, AND THAT IT THUS CONSTITUTES NEITHER A GUARANTEE NOR A WARRANTY, EITHER EXPRESSED OR IMPLIED.

4.) THIS SURVEY SHALL BE VALID FOR ONE (1) YEAR FROM THE DATE OF FIELD SURVEY SHOWN HEREON.

5.) THIS PROPERTY WAS SURVEYED BASED ON THE PROPERTY'S LEGAL DESCRIPTION, AS SHOWN HEREON, WHICH UNLESS OTHERWISE STATED, WAS PROVIDED TO THE SURVEYOR BY THE CLIENT, OR CLIENT'S DESIGNATED AGENT.

6.) THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN ABSTRACT OF TITLE OR TITLE COMMITMENT AND IS SUBJECT TO ANY DEDICATIONS, LIMITATIONS, RESTRICTIONS, RESERVATIONS, EASEMENTS AND/OR OTHER MATTERS OF RECORD. NO INSTRUMENTS OF RECORD REFLECTING EASEMENTS, RIGHTS-OF-WAY, AND/OR OWNERSHIP WERE FURNISHED TO THE SURVEYOR, EXCEPT AS SHOWN.

7.) THE SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE OR ANY OTHER MATTERS OF RECORD THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.

8.) THERE MAY BE ADDITIONAL EASEMENTS, RESERVATIONS, RESTRICTIONS AND/OR OTHER MATTERS OF RECORD AFFECTING THIS PROPERTY THAT ARE NOT SHOWN HEREON AND MAY (OR MAY NOT) BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.

9.) BASIS OF BEARINGS: MEASURED BEARINGS ARE IN REFERENCE TO FLORIDA STATE PLANE COORDINATE GRID NORTH, WEST ZONE, NORTH AMERICAN DATUM OF 1983 (2011 READJUSTMENT), AS ESTABLISHED BY THE NATIONAL GEODETIC SURVEY.

10.) THERE ARE NO VISIBLE ENCROACHMENTS, EXCEPT AS SHOWN HEREON.

11.) THIS SURVEY SHOWS VISIBLE, ABOVE GROUND FEATURES. NO UNDERGROUND FEATURES, INCLUDING BUT NOT LIMITED TO FOUNDATIONS, STRUCTURES, INSTALLATIONS OR IMPROVEMENTS HAVE BEEN LOCATED, EXCEPT AS SHOWN HEREON.

12.) ALL BUILDING TIES, PROPERTY MARKER LOCATIONS AND OTHER SITE IMPROVEMENT LOCATIONS SHOWN HEREON ARE MEASURED PERPENDICULAR TO ADJACENT BOUNDARY LINES, UNLESS OTHERWISE STATED.

13.) THE FLOOD ZONE DETERMINATION IS BASED ON THE FLOOD INSURANCE RATE MAP, AS PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, AND DOES NOT IMPLY THAT THE PROPERTY WILL OR WILL NOT BE FREE FROM FLOODING AND DAMAGE. LARGER FLOODS THAN THOSE PREDICATED ON SAID MAP MAY OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THE FLOOD INSURANCE RATE MAP "IS FOR INSURANCE PURPOSES ONLY" AND ANY DAMAGES THAT MAY RESULT FROM RELIANCE ON THIS FLOOD ZONE DETERMINATION SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR. THE FLOOD ZONE LINES (IF ANY) SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON A SCALED INTERPRETATION FROM THE FLOOD INSURANCE RATE MAP AS PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

14.) A DIG TICKET WAS SUBMITTED WITH SUNSHINE STATE ONE CALL OF FLORIDA ON MAY 15, 2014, TICKET I.D. NUMBER 13340013. THE UNDERGROUND UTILITIES, IF ANY, SHOWN HEREON ARE BASED ON ANY SUBSEQUENT FIELD MARKINGS OR DELINEATIONS PERFORMED BY THE AFFECTED UTILITY PROVIDERS, AND WERE LOCATED BY A FIELD SURVEY AND ONLY LOCATED AS SHOWN HEREON. ONLY THE UNDERGROUND UTILITIES WHICH WERE VISIBLE FROM GROUND LEVEL TO THE SURVEYOR ON THE ACTUAL DAY OF THE FIELD SURVEY WERE LOCATED AND ANY UNDERGROUND UTILITIES NOT FIELD MARKED OR DELINEATED ON THE GROUND ARE NOT SHOWN HEREON. NO EXCAVATIONS OR SUBSURFACE WORK EFFORTS OF ANY KIND WERE PERFORMED BY GEORGE A. SHIMP II & ASSOCIATES, INC. TO VERIFY THE EXISTENCE OF ANY UNDERGROUND UTILITIES. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED.

15.) UNLESS OTHERWISE SHOWN, THIS SURVEY DOES NOT REFLECT OR DETERMINE OWNERSHIP LINES, LINES AFFECTED BY ADVERSE USE, LINES OF CONFLICTING/OVERLAPPING DEEDS, OR OTHER LINES THAT MAY OTHERWISE BE DETERMINED BY A COURT OF LAW.

16.) NO INFORMATION ON ADJOINING PROPERTY OWNERS OR ADJOINING PROPERTY RECORDING INFORMATION WAS PROVIDED TO THE SURVEYOR.

17.) BECAUSE OF THE POSSIBILITY OF MOVEMENT OF THE MONUMENTATION FROM ITS ORIGINAL PLACEMENT BY PERSONS OTHER THAN THE SURVEYOR, IT IS RECOMMENDED THAT PRIOR TO ANY NEW IMPROVEMENTS ON THE PROPERTY THAT THE POSITION OF THE MONUMENTATION BE VERIFIED.

18.) FENCES AND WALLS (IF ANY) SHOWN ALONG THE BOUNDARIES OF THIS SURVEY ARE EXAGGERATED FOR CLARITY AND OWNERSHIP IS NOT DETERMINED. THE TIES AT THE PROPERTY CORNERS OR AT SPECIFICALLY DESIGNATED POINTS ARE BASED UPON FIELD LOCATIONS. FENCES AND WALLS ALONG OTHER PROPERTY BOUNDARIES MEANDER AND ARE APPROXIMATE. PRIOR TO THE RECONSTRUCTION OF ANY FENCES OR WALLS, IT WOULD BE PRUDENT TO HAVE THE BOUNDARY LINE STAKED.

19.) THE PRINTED DIMENSIONS SHOWN ON THIS SURVEY SUPERSEDE ANY SCALED DIMENSIONS. THERE MAY BE ITEMS DRAWN OUT OF SCALE TO GRAPHICALLY SHOW THEIR LOCATION.

20.) THIS SURVEY IS A REPRESENTATION OF EXISTING FIELD CONDITIONS AT THE TIME OF THE FIELD SURVEY AND UNLESS OTHERWISE SHOWN, IS BASED ON EXISTING SURVEY MONUMENTATION AS FOUND IN THE FIELD.

21.) THE ACCURACY OF THIS SURVEY, AS OBTAINED BY FIELD-MEASURED CONTROL MEASUREMENTS AND CALCULATIONS, MEETS OR EXCEEDS THE MINIMUM RELATIVE DISTANCE ACCURACY REQUIREMENT AS SPECIFIED IN THE MINIMUM TECHNICAL STANDARDS (5J-17, FLORIDA ADMINISTRATIVE CODE).

22.) THIS SURVEY IS BEING CERTIFIED ACCORDING TO THE LAST DATE OF FIELD SURVEY AND NOT THE SIGNATURE DATE (IF ANY).

23.) THIS SURVEY SHALL NOT BE FILED FOR PUBLIC RECORDS WITHOUT THE KNOWLEDGE AND THE EXPRESSED, WRITTEN CONSENT OF THE SURVEYOR.

24.) UNLESS OTHERWISE SHOWN, THE DIMENSIONS SHOWN HEREON ARE IN FEET AND DECIMAL PARTS THEREOF AND ARE BASED ON THE DEFINITION OF A FOOT AS ADOPTED BY THE UNITED STATES BUREAU OF STANDARDS AND REFER TO THE HORIZONTAL PLANE.

25.) TREES BY NATURE ARE IRREGULAR IN SHAPE AND SIZE AND EVERY EFFORT IS MADE TO ACCURATELY LOCATE THEM. THE TREE SIZE IS DETERMINED AT CHEST HEIGHT DIAMETER AND THE TREE LOCATION IS CENTER OF THE TREE TRUNK. ANY TREE LOCATIONS THAT ARE CRITICAL TO DESIGN SHOULD BE FIELD VERIFIED. EVERY EFFORT HAS BEEN MADE TO PROPERLY IDENTIFY THE TREES SHOWN HEREON. HOWEVER, TREE IDENTIFICATION IS OUTSIDE THE AREA OF EXPERTISE OF A PROFESSIONAL SURVEYOR AND MAPPER, THEREFORE, THE SURVEYOR ACCEPTS NO RESPONSIBILITY FOR IDENTIFICATION OF TREE SPECIES. ALL TREE TYPES SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY AND ANY TREE SPECIES THAT ARE CRITICAL SHOULD BE VERIFIED BY A CERTIFIED ARBORIST.

26.) THIS SURVEY SHALL NOT BE USED WITH A SURVEY AFFIDAVIT. AN INCORRECT SURVEY AFFIDAVIT CAN INCREASE THE OWNER/BUYER'S LIABILITY, DECREASE THEIR LEGAL RIGHTS AND PROTECTIONS WHICH ARE AFFORDED BY A CURRENT SURVEY AND MAY RESULT IN COSTLY LITIGATION AS WELL. AN INCORRECT SURVEY AFFIDAVIT CAN BE THE RESULT OF CHANGES MADE TO THE PROPERTY SINCE THE DATE OF THE LAST SURVEY, WHICH MAY INCLUDE IMPROVEMENTS MADE BY THE OWNER, ADJACENT OWNERS OR UTILITY COMPANIES OR CHANGES IN THE SURVEY BOUNDARY MONUMENTATION. USE OF THIS SURVEY BY A LENDING INSTITUTION OR TITLE COMPANY IN CONJUNCTION WITH A SURVEY AFFIDAVIT IS STRICTLY PROHIBITED AND SHALL RENDER THIS SURVEY NULL AND VOID.

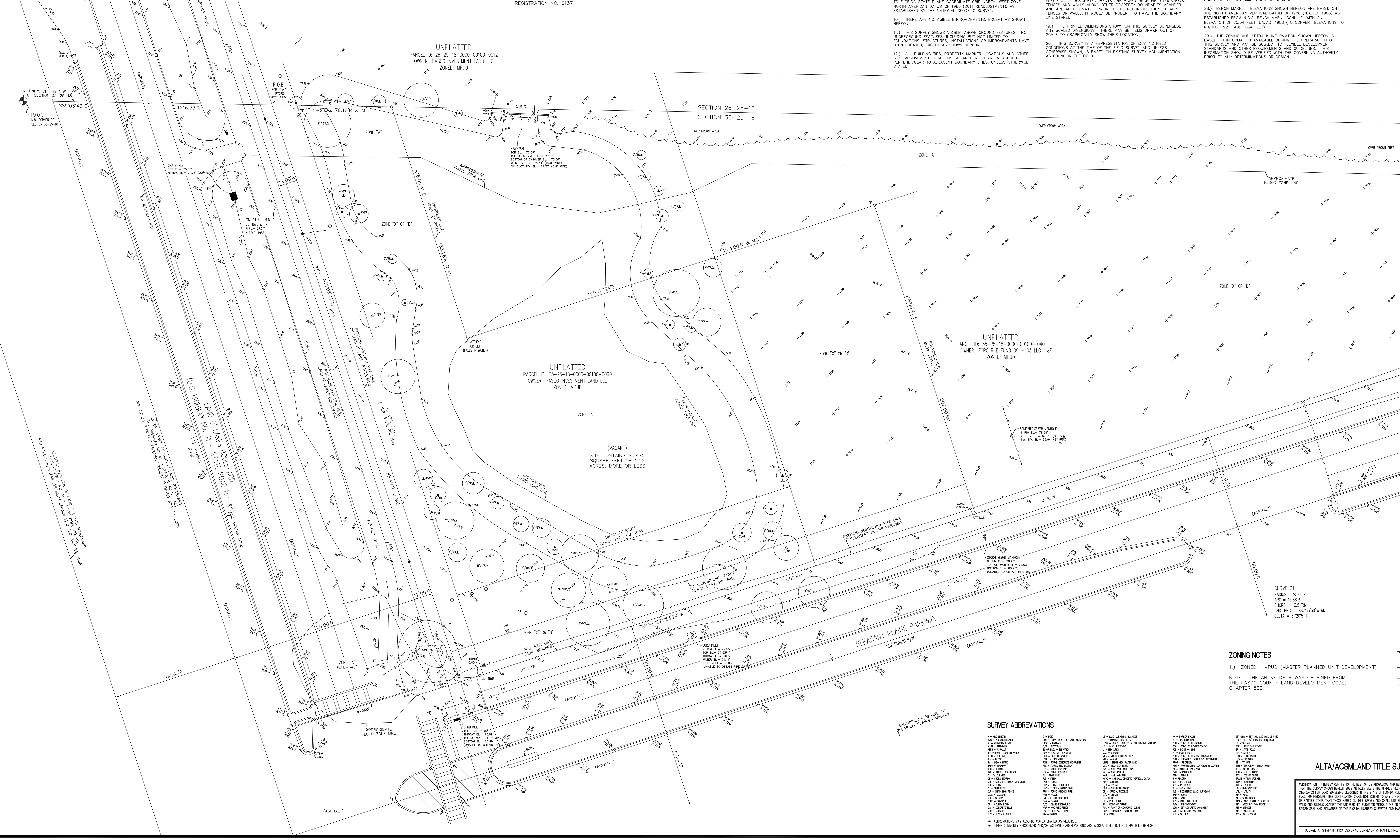
27.) THE ZONING AND SETBACK INFORMATION SHOWN HEREON IS BASED ON INFORMATION AVAILABLE DURING THE PREPARATION OF THIS SURVEY AND MAY BE SUBJECT TO FLEXIBLE DEVELOPMENT STANDARDS AND OTHER REQUIREMENTS AND GUIDELINES. THIS INFORMATION SHOULD BE VERIFIED WITH THE GOVERNING AUTHORITY PRIOR TO ANY DETERMINATIONS OR DESIGN.

28.) BENCH MARK: ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D. 1988) AS ESTABLISHED FROM N.G.S. BENCH MARK "CONN 1", WITH AN ELEVATION OF 75.34 FEET N.A.V.D. 1988 (TO CONVERT ELEVATIONS TO N.G.V.D. 1929, ADD 0.84 FEET).

29.) THE ZONING AND SETBACK INFORMATION SHOWN HEREON IS BASED ON INFORMATION AVAILABLE DURING THE PREPARATION OF THIS SURVEY AND MAY BE SUBJECT TO FLEXIBLE DEVELOPMENT STANDARDS AND OTHER REQUIREMENTS AND GUIDELINES. THIS INFORMATION SHOULD BE VERIFIED WITH THE GOVERNING AUTHORITY PRIOR TO ANY DETERMINATIONS OR DESIGN.

NORTH

GRAPHIC SCALE
0 30 60 90
1 inch = 30 feet



ZONING NOTES

1.) ZONED: MPUD (MASTER PLANNED UNIT DEVELOPMENT)

NOTE: THE ABOVE DATA WAS OBTAINED FROM THE PASCO COUNTY LAND DEVELOPMENT CODE, CHAPTER 500.

LEGEND

- BOLLARD
- CROSS WALK SIGNAL
- 0.00 – ELEVATION
- GAS MARKER
- GAS VALVE
- GRATE INLET
- LIGHT POLE
- MITERED END SECTION
- POWER POLE
- RECLAIMED WATER VALVE
- SANITARY SEWER MANHOLE
- SANITARY SEWER STAND PIPE (2" PVC)
- SANITARY SEWER VALVE
- SANITARY SEWER VENT
- SIGN
- STORM SEWER MANHOLE
- TRAFFIC SIGNAL VAULT
- GUY WIRE
- TOP OF BANK
- OVERHEAD WIRES
- G – U.G. GAS LINE
- P – U.G. POWER LINE
- S – U.G. SANITARY SEWER LINE
- D – U.G. STORM SEWER LINE
- 2' CURB & GUTTER
- 00"▲ – CYPRESS
- 00"△ – OAK

SURVEY ABBREVIATIONS

A = ARC LENGTH
A/C = AIR CONDITIONER
AF = ALUMINUM FENCE
ALUM = ALUMINUM
ASPH = ASPHALT
BFE = BASE FLOOD ELEVATION
BLDG = BUILDING
BLK = BLOCK
BM = BENCH MARK
BNDY = BOUNDARY
BRG = BEARING
BWF = BARBED WIRE FENCE
C = CALCULATED
CB = CHORD BEARING
CBS = CONCRETE BLOCK STRUCTURE
CHD = CHORD
CL = CENTERLINE
CLF = CHAIN LINK FENCE
CLOS = CLOSURE
COL = COLUMN
CONC = CONCRETE
CR = COUNTY ROAD
C/S = CONCRETE SLAB
COR = CORNER
COV = COVERED AREA
D = DEED
DOT = DEPARTMENT OF TRANSPORTATION
DRNG = DRAINAGE
D/W = DRIVEWAY
EL OR ELEV = ELEVATION
EOP = EDGE OF PAVEMENT
EOW = EDGE OF WATER
ESM'T = EASEMENT
FCM = FOUND CONCRETE MONUMENT
FES = FLARED END SECTION
FIP = FOUND IRON PIPE
FIR = FOUND IRON ROD
FL = FLOW LINE
FLD = FIELD
FND = FOUND
FOP = FOUND OPEN PIPE
FPC = FLORIDA POWER CORP.
FPP = FOUND PINCHED PIPE
FRM = FRAME
FZL = FLOOD ZONE LINE
GAR = GARAGE
G/E = GLASS ENCLOSURE
HWF = HOG WIRE FENCE
HWL = HIGH WATER LINE
INV = INVERT
LB = LAND SURVEYING BUSINESS
LFE = LOWEST FLOOR ELEV
LHSM = LOWEST HORIZONTAL SUPPORTING MEMBER
LS = LAND SURVEYOR
M = MEASURED
MAS = MASONRY
MES = MITERED END SECTION
MH = MANHOLE
MHWL = MEAN HIGH WATER LINE
MSL = MEAN SEA LEVEL
N&B = NAIL AND BOTTLE CAP
N&D = NAIL AND DISK
N&T = NAIL AND TAB
NGVD = NATIONAL GEODETIC VERTICAL DATUM
NO = NUMBER
O/A = OVERALL
OHW = OVERHEAD WIRE(S)
OR = OFFICIAL RECORDS
O/S = OFFSET
P = PLAT
PB = PLAT BOOK
PC = POINT OF CURVE
PCC = POINT OF COMPOUND CURVE
PCP = PERMANENT CONTROL POINT
PG = PAGE
PK = PARKER KALON
PL = PROPERTY LINE
POB = POINT OF BEGINNING
POC = POINT OF COMMENCEMENT
POL = POINT ON LINE
PP = POWER POLE
PRC = POINT OF REVERSE CURVATURE
PRM = PERMANENT REFERENCE MONUMENT
PROP = PROPERTY
PSM = PROFESSIONAL SURVEYOR & MAPPER
PT = POINT OF TANGENCY
PVM'T = PAVEMENT
RAD = RADIUS
R = RECORD
REF = REFERENCE
RES = RESIDENCE
RL = RADIAL LINE
RLS = REGISTERED LAND SURVEYOR
RND = ROUND
RNG = RANGE
RRS = RAIL ROAD SPIKE
R/W = RIGHT-OF-WAY
SCM = SET CONCRETE MONUMENT
S/E = SCREENED ENCLOSURE
SEC = SECTION
SET N&D = SET NAIL AND DISK LB# 1834
SIR = SET 1/2" IRON ROD LB# 1834
SQ = SQUARE
SRF = SPLIT RAIL FENCE
SR = STATE ROAD
STY = STORY
SUB = SUBDIVISION
S/W = SIDEWALK
TB = "T" BAR
TBM = TEMPORARY BENCH MARK
TC = TOP OF CURB
TOB = TOP OF BANK
TOS = TOE OF SLOPE
TRANS = TRANSFORMER
TWP = TOWNSHIP
TYP = TYPICAL
UG = UNDERGROUND
UTIL = UTILITY
WD = WOOD
WF = WOOD FENCE
WFS = WOOD FRAME STRUCTURE
WIF = WROUGHT IRON FENCE
WIT = WITNESS
WRF = WIRE FENCE
WV = WATER VALVE

*** ABBREVIATIONS MAY ALSO BE CONCATENATED AS REQUIRED.
*** OTHER COMMONLY RECOGNIZED AND/OR ACCEPTED ABBREVIATIONS ARE ALSO UTILIZED BUT NOT SPECIFIED HEREON.

ALTA/ACSMLAND TITLE SURVEY (L/C # 9-2580) - SHEET OF 3

CERTIFICATION: I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE SURVEY SHOWN HEREON SUBSTANTIALLY MEETS THE MINIMUM TECHNICAL STANDARDS FOR LAND SURVEYING DESCRIBED IN THE STATE OF FLORIDA RULE 5J-17, F.A.C. FURTHERMORE, THIS CERTIFICATION SHALL NOT EXTEND TO ANY OTHER PERSONS OR PARTIES OTHER THAN THOSE NAMED ON THIS SURVEY AND SHALL NOT BE VALID AND BINDING AGAINST THE UNDERSIGNED SURVEYOR WITHOUT THE ORIGINAL RAISED SEAL AND SIGNATURE OF THE FLORIDA LICENSED SURVEYOR AND MAPPER.

GEORGE A. SHIMP III, PROFESSIONAL SURVEYOR & MAPPER No. 6137

JOB NUMBER: 140129	DATE SURVEYED: 5-13-2014
DRAWING FILE: 140129.DWG	DATE DRAWN: 6-11-2014
LAST REVISION: 6-1-2015	X REFERENCE: N/A

R.C.
LB 1834
GEORGE A. SHIMP II AND ASSOCIATES, INCORPORATED
LAND SURVEYORS LAND PLANNERS
3301 DeSOTO BOULEVARD, SUITE D
PALM HARBOR, FLORIDA 34683
PHONE (727) 784-5496 FAX (727) 786-1256

No.	BY	DATE	DESCRIPTION

REVISIONS

PROJECT No:	13-018-MDC
ISSUE DATE:	06/01/15
DESIGNED BY:	ED
DRAWN BY:	ED
CHECKED BY:	BG
APPROVED BY:	BG

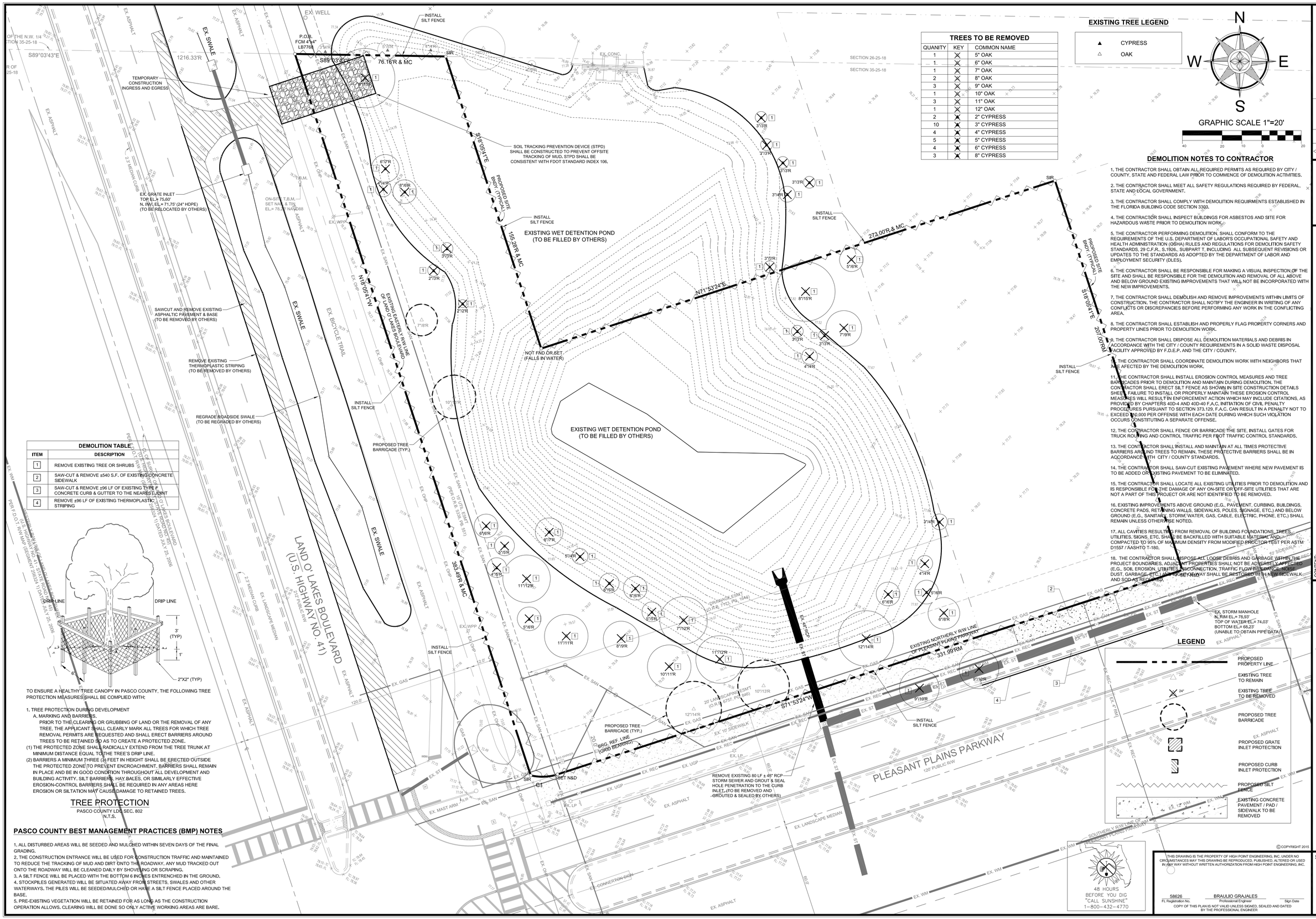
SITE ID 009-2580

CONTENT:
BOUNDARY AND TOPOGRAPHIC SURVEY

PROJECT:
McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (U.S. HWY 41)
LAND O' LAKES, FLORIDA 34638

HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET:
C-2.3



TREES TO BE REMOVED

QUANITY	KEY	COMMON NAME
1	X	5" OAK
1	X	6" OAK
1	X	7" OAK
2	X	8" OAK
3	X	9" OAK
1	X	10" OAK
3	X	11" OAK
1	X	12" OAK
2	X	2" CYPRESS
10	X	3" CYPRESS
4	X	4" CYPRESS
5	X	5" CYPRESS
4	X	6" CYPRESS
3	X	8" CYPRESS

DEMOLITION TABLE

ITEM	DESCRIPTION
1	REMOVE EXISTING TREE OR SHRUBS
2	SAW-CUT & REMOVE ±540 S.F. OF EXISTING CONCRETE SIDEWALK
3	SAW-CUT & REMOVE ±96 LF OF EXISTING TYPE F CONCRETE CURB & GUTTER TO THE NEAREST JOINT
4	REMOVE ±96 LF OF EXISTING THERMOPLASTIC STRIPING

TO ENSURE A HEALTHY TREE CANOPY IN PASCO COUNTY, THE FOLLOWING TREE PROTECTION MEASURES SHALL BE COMPLIED WITH:

1. TREE PROTECTION DURING DEVELOPMENT
   A. MARKING AND BARRIERS.
   PRIOR TO THE CLEARING OR GRUBBING OF LAND OR THE REMOVAL OF ANY TREE, THE APPLICANT SHALL CLEARLY MARK ALL TREES FOR WHICH TREE REMOVAL PERMITS ARE REQUESTED AND SHALL ERECT BARRIERS AROUND TREES TO BE RETAINED SO AS TO CREATE A PROTECTED ZONE.
   (1) THE PROTECTED ZONE SHALL RADICALLY EXTEND FROM THE TREE TRUNK AT MINIMUM DISTANCE EQUAL TO THE TREE'S DRIP LINE.
   (2) BARRIERS A MINIMUM THREE (3) FEET IN HEIGHT SHALL BE ERECTED OUTSIDE THE PROTECTED ZONE TO PREVENT ENCROACHMENT. BARRIERS SHALL REMAIN IN PLACE AND BE IN GOOD CONDITION THROUGHOUT ALL DEVELOPMENT AND BUILDING ACTIVITY. SILT BARRIERS, HAY BALES, OR SIMILARLY EFFECTIVE EROSION-CONTROL BARRIERS SHALL BE REQUIRED IN ANY AREAS HERE EROSION OR SILTATION MAY CAUSE DAMAGE TO RETAINED TREES.

TREE PROTECTION
PASCO COUNTY LDC SEC. 802
N.T.S.

PASCO COUNTY BEST MANAGEMENT PRACTICES (BMP) NOTES

1. ALL DISTURBED AREAS WILL BE SEEDED AND MULCHED WITHIN SEVEN DAYS OF THE FINAL GRADING.
2. THE CONSTRUCTION ENTRANCE WILL BE USED FOR CONSTRUCTION TRAFFIC AND MAINTAINED TO REDUCE THE TRACKING OF MUD AND DIRT ONTO THE ROADWAY. ANY MUD TRACKED OUT ONTO THE ROADWAY WILL BE CLEANED DAILY BY SHOVELING OR SCRAPING.
3. A SILT FENCE WILL BE PLACED WITH THE BOTTOM 6 INCHES ENTRENCHED IN THE GROUND.
4. STOCKPILES GENERATED WILL BE SITUATED AWAY FROM STREETS, SWALES AND OTHER WATERWAYS. THE PILES WILL BE SEEDED/MULCHED OR HAVE A SILT FENCE PLACED AROUND THE BASE.
5. PRE-EXISTING VEGETATION WILL BE RETAINED FOR AS LONG AS THE CONSTRUCTION OPERATION ALLOWS. CLEARING WILL BE DONE SO ONLY ACTIVE WORKING AREAS ARE BARE.

DEMOLITION NOTES TO CONTRACTOR

1. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AS REQUIRED BY CITY / COUNTY, STATE AND FEDERAL LAW PRIOR TO COMMENCE OF DEMOLITION ACTIVITIES.

2. THE CONTRACTOR SHALL MEET ALL SAFETY REGULATIONS REQUIRED BY FEDERAL, STATE AND LOCAL GOVERNMENT.

3. THE CONTRACTOR SHALL COMPLY WITH DEMOLITION REQUIRMENTS ESTABLISHED IN THE FLORIDA BUILDING CODE SECTION 3303.

4. THE CONTRACTOR SHALL INSPECT BUILDINGS FOR ASBESTOS AND SITE FOR HAZARDOUS WASTE PRIOR TO DEMOLITION WORK.

5. THE CONTRACTOR PERFORMING DEMOLITION, SHALL CONFORM TO THE REQUIREMENTS OF THE U.S. DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS FOR DEMOLITION SAFETY STANDARDS, 29 C.F.R., S.1926., SUBPART T, INCLUDING ALL SUBSEQUENT REVISIONS OR UPDATES TO THE STANDARDS AS ADOPTED BY THE DEPARTMENT OF LABOR AND EMPLOYMENT SECURITY (DLES).

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING A VISUAL INSPECTION OF THE SITE AND SHALL BE RESPONSIBLE FOR THE DEMOLITION AND REMOVAL OF ALL ABOVE AND BELOW GROUND EXISTING IMPROVEMENTS THAT WILL NOT BE INCORPORATED WITH THE NEW IMPROVEMENTS.

7. THE CONTRACTOR SHALL DEMOLISH AND REMOVE IMPROVEMENTS WITHIN LIMITS OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS OR DISCREPANCIES BEFORE PERFORMING ANY WORK IN THE CONFLICTING AREA.

8. THE CONTRACTOR SHALL ESTABLISH AND PROPERLY FLAG PROPERTY CORNERS AND PROPERTY LINES PRIOR TO DEMOLITION WORK.

9. THE CONTRACTOR SHALL DISPOSE ALL DEMOLITION MATERIALS AND DEBRIS IN ACCORDANCE WITH THE CITY / COUNTY REQUIREMENTS IN A SOLID WASTE DISPOSAL FACILITY APPROVED BY F.D.E.P. AND THE CITY / COUNTY.

10. THE CONTRACTOR SHALL COORDINATE DEMOLITION WORK WITH NEIGHBORS THAT ARE AFECTED BY THE DEMOLITION WORK.

11. THE CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES AND TREE BARRICADES PRIOR TO DEMOLITION AND MAINTAIN DURING DEMOLITION. THE CONTRACTOR SHALL ERECT SILT FENCE AS SHOWN IN SITE CONSTRUCTION DETAILS SHEET. FAILURE TO INSTALL OR PROPERLY MAINTAIN THESE EROSION CONTROL MEASURES WILL RESULT IN ENFORCEMENT ACTION WHICH MAY INCLUDE CITATIONS, AS PROVIDED BY CHAPTERS 40D-4 AND 40D-40 F.A.C. INITIATION OF CIVIL PENALTY PROCEDURES PURSUANT TO SECTION 373.129, F.A.C. CAN RESULT IN A PENALTY NOT TO EXCEED $10,000 PER OFFENSE WITH EACH DATE DURING WHICH SUCH VIOLATION OCCURS CONSTITUTING A SEPARATE OFFENSE.

12. THE CONTRACTOR SHALL FENCE OR BARRICADE THE SITE, INSTALL GATES FOR TRUCK ROUTING AND CONTROL TRAFFIC PER FDOT TRAFFIC CONTROL STANDARDS.

13. THE CONTRACTOR SHALL INSTALL AND MAINTAIN AT ALL TIMES PROTECTIVE BARRIERS AROUND TREES TO REMAIN. THESE PROTECTIVE BARRIERS SHALL BE IN ACCORDANCE WITH CITY / COUNTY STANDARDS.

14. THE CONTRACTOR SHALL SAW-CUT EXISTING PAVEMENT WHERE NEW PAVEMENT IS TO BE ADDED OR EXISTING PAVEMENT TO BE ELIMINATED.

15. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO DEMOLITION AND IS RESPONSIBLE FOR THE DAMAGE OF ANY ON-SITE OR OFF-SITE UTILITIES THAT ARE NOT A PART OF THIS PROJECT OR ARE NOT IDENTIFIED TO BE REMOVED.

16. EXISTING IMPROVEMENTS ABOVE GROUND (E.G., PAVEMENT, CURBING, BUILDINGS, CONCRETE PADS, RETAINING WALLS, SIDEWALKS, POLES, SIGNAGE, ETC.) AND BELOW GROUND (E.G., SANITARY, STORM WATER, GAS, CABLE, ELECTRIC, PHONE, ETC.) SHALL REMAIN UNLESS OTHERWISE NOTED.

17. ALL CAVITIES RESULTING FROM REMOVAL OF BUILDING FOUNDATIONS, TREES, UTILITIES, SIGNS, ETC. SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO 95% OF MAXIMUM DENSITY FROM MODIFIED PROCTOR TEST PER ASTM D1557 / AASHTO T-180.

18. THE CONTRACTOR SHALL DISPOSE ALL LOOSE DEBRIS AND GARBAGE WITHIN THE PROJECT BOUNDARIES. ADJACENT PROPERTIES SHALL NOT BE ADVERSELY AFFECTED (E.G., SOIL EROSION, UTILITIES, DISCONNECTION, TRAFFIC FLOW/TEMPORARY NOISE, DUST, GARBAGE, ETC.) ANY AND ALL WAY SHALL BE RESTORED WITH NEW SIDEWALK AND SOD AS REQUIRED.

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date

COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

No.	BY	DATE	REVISIONS DESCRIPTION

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

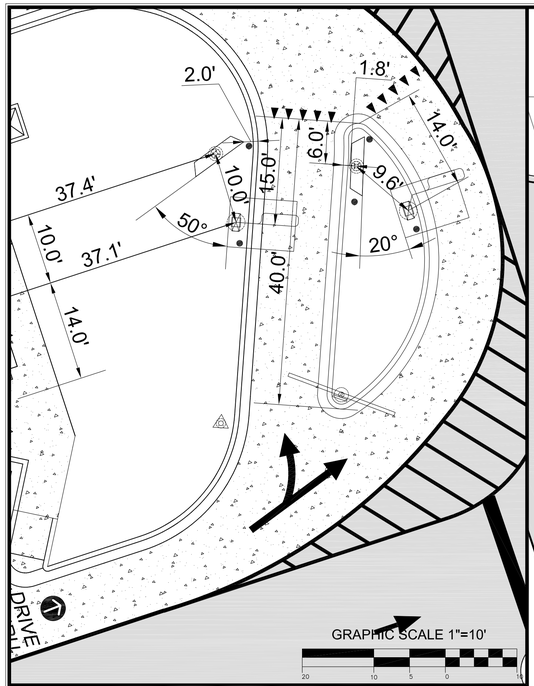
CONTENT:
DEMOLITION & TREE PROTECTION PLAN

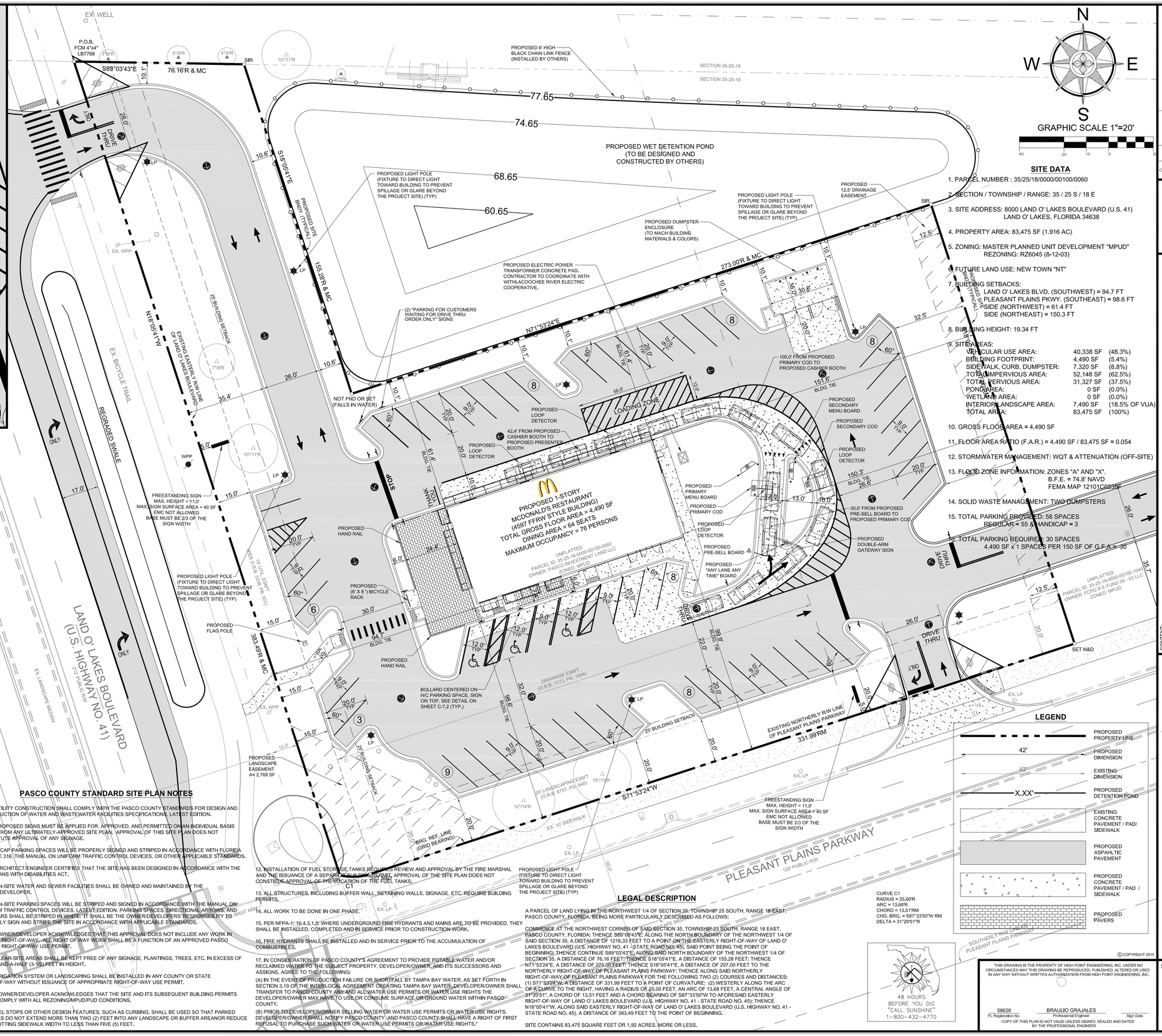
PROJECT:
McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (U.S. HWY 41)
LAND O' LAKES, FLORIDA 34638

SITE ID 009-2580

HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
Tel. (813) 644-8333
Fax (813) 644-7000
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET:
C-3





SIDE BY SIDE DRIVE THRU CRITICAL DIMENSIONS AND NOTES:

1. 6" WIDE YELLOW PAINT STRIPE TO SPAN OUTER EDGE OF THE ENTIRE DRIVE-THRU LANE. LANE STARTS AT DRIVE-THRU ENTRANCE WHERE "McDONALD'S GATEWAY" SIGN IS LOCATED.

2. DOUBLE-HEADED ARROW PAVEMENT MARKING, STANDARD STRIPING MARKINGS ARE 7' SHAFT, 7' ARROW STEM AND 3' FOR THE ARROW HEAD. TIP OF ARROW HEAD TO BE LOCATED AT CENTER OF EACH LANE.

3. AUGER "McDONALD'S ORDER HERE CANOPY" COD/CANOPY FOUNDATION TIGHT AGAINST BACK OF CURB. SEE MANUFACTURER/LOCAL SPECIFICATIONS FOR DETAILS.

4. AUGER "McDONALD'S GATEWAY" SIGN FOUNDATION TIGHT AGAINST BACK OF CURB. SEE MANUFACTURER/LOCAL SPECIFICATIONS FOR DETAILS.

5. THE PRIMARY LANE DETECTOR LOOP SHOULD BE PERPENDICULAR TO THE CENTER OF THE PRIMARY COD.

6. WHEN POSITIONING THE SECONDARY COD, THE DISTANCE BETWEEN THE TIP OF THE CURBED ISLAND AND THE CENTER LINE OF THE SECONDARY COD MUST BE 14'-0". THIS MEASUREMENT IS TAKEN ALONG THE CENTERLINE OF THE SECONDARY LANE WHILE FOLLOWING THE INSIDE CURB FACE.

7. WHEN THE SECONDARY COD IS LOCATED IN THE 14', THE LOOP DETECTOR IS TO BE 2' FORWARD OF THE COD CENTER LINE WITH THE LOOP FACING FORWARD AND THE DETECTOR LOOP PERPENDICULAR TO THE SECONDARY COD WHEN POSSIBLE.

8. THE CENTER OF THE SECONDARY MENU BOARD FOUNDATION SHOULD BE LOCATED 22" FROM FACE OF CURB AND APPROXIMATELY 60' FROM THE TIP OF THE CURBED ISLAND, THE END CAP OF THE SECONDARY MENU BOARD SHOULD NOT BE LESS THAN 12" FROM FACE OF CURB. ANGLE SHOULD BE TO MAXIMIZE FIRST CAR VIEWING.

9. AUGER "McDONALD'S ORDER HERE CANOPY" COD/CANOPY FOUNDATION TIGHT AGAINST BACK OF CURB. SEE MANUFACTURER/LOCAL SPECIFICATIONS FOR DETAILS.

10. PRE-SELL BOARD MUST BE 18'-28' FROM FACE OF CURB, THIS IS MEASURED FROM THE CENTER OF THE PRE-SELL BOARD FOUNDATION TO THE CENTER OF THE COD FOUNDATION. THE DISTANCE BETWEEN THE PRIMARY COD AND PRE-SELL BOARD IS TO BE 30' AS MEASURED ALONG THE CENTER LINE OF THE LANE. THE ANGLE OF THE PRE-SELL BOARD SHOULD MAXIMIZE VISIBILITY TO THE THIRD CAR FROM COD.

11. "ANY LANE, ANY TIME" BOLLARD SIGN MUST BE A MIN. OF 1.5' FROM FACE OF CURB AT THE BEGINNING OF THE LANDSCAPE ISLAND. BOLLARD SIGN IS TO BE ORIENTED AT AN ANGLE OF 90° FROM THE CURB.

SITE PLAN NOTES

1. ALL DESIGN AND CONSTRUCTION MUST CONFORM TO THE MINIMUM STANDARDS SET DOWN IN THE PASCO COUNTY LAND DEVELOPMENT, ZONING AND/OR RELATED ORDINANCES.

2. ALL PEDESTRIAN ROUTES, SIDEWALKS AND ACCESSIBILITY RAMPS, HANDICAPPED PARKING SPACES, ACCESSIBILITY SIGNS AND SYMBOLS SHALL BE CONSTRUCTED IN STRICT CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) AND THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC), LATEST EDITIONS.

3. ALL POINTS AND MONUMENTS SHALL BE SURVEYED UPON MOBILIZATION TO VERIFY THEIR ACCURACY, ANY DISCREPANCIES DISCOVERED MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING PRIOR TO CONSTRUCTION.

4. MONUMENTS AND OTHER SURVEY CONTROL POINTS SHALL BE PROTECTED FROM DAMAGE AND DISTURBANCE. IF ANY CONTROL POINTS ARE DAMAGED OR DISTURBED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER AND REPLACE THE CONTROL POINTS TO THEIR ORIGINAL CONDITION AT HIS OWN EXPENSE.

5. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS.

6. ALL PROPOSED PARKING/DRIVE AREAS TO BE CURBED WITH FDOT TYPE 'F' CURB, UNLESS SPECIFIED OTHERWISE. ALL CURB RAMPS SHALL BE CONSTRUCTED AND TEXTURED PER FDOT INDEX NO. 304.

7. MINIMUM CURB RADII IS THREE (3) FEET, UNLESS OTHERWISE NOTED. EXACT RADII DIMENSIONS ARE SPECIFIED HEREON.

8. ALL DIMENSIONS SHOWN ON PLAN ARE TO FACE OF BUILDING, EDGE OF PAVEMENT, FACE OF CURB OR CENTERLINE OF STRUCTURE, UNLESS OTHERWISE NOTED.

9. PYLON, BUILDING AND DRIVE-THRU SIGNAGE SHALL BE PERMITTED BY THE OWNER'S SIGN CONTRACTOR UNDER SEPARATE APPLICATION.

10. PROPOSED SITE LIGHTING SHALL BE AUTOMATICALLY CONTROLLED TO TURN-OFF WHEN BUSINESS IS CLOSED.

11. REFER TO ARCHITECTURAL PLANS FOR DUMPSTER PAD SIZE, LOCATION AND DETAILS.

12. REFER TO ARCHITECTURAL PLANS FOR TRANSFORMER PAD SIZE, LOCATION AND DETAILS.

13. REFER TO SHEET C-5.4 AND C-5.5 FOR CROSS SECTIONS.

14. ALL DISTURBED AREAS ARE TO RECEIVE FOUR (4) INCHES OF TOP SOIL, SEED, MULCH AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.

15. ALL BOUNDARY AND TOPOGRAPHICAL INFORMATION SHOWN WAS TAKEN FROM TOPOGRAPHIC SURVEY BY GEORGE A. SHIMP II AND ASSOCIATES, INC. DATED 6/12/2015.

16. ALL EXISTING AND PROPOSED ELEVATIONS ARE REFERENCED FROM NORTH AMERICAN VERTICAL DATUM OF 1988.

PASCO COUNTY STANDARD SITE PLAN NOTES

1. ALL UTILITY CONSTRUCTION SHALL COMPLY WITH THE PASCO COUNTY STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER AND WASTEWATER FACILITIES SPECIFICATIONS, LATEST EDITION.

2. ALL PROPOSED SIGNS MUST BE APPLIED FOR, APPROVED, AND PERMITTED ON AN INDIVIDUAL BASIS APART FROM ANY ULTIMATELY-APPROVED SITE PLAN. APPROVAL OF THIS SITE PLAN DOES NOT CONSTITUTE APPROVAL OF ANY SIGNAGE.

3. HANDICAP PARKING SPACES WILL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH FLORIDA STATUTE 316, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, OR OTHER APPLICABLE STANDARDS.

4. THE ARCHITECT/ENGINEER CERTIFIES THAT THE SITE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT.

5. ALL ON-SITE WATER AND SEWER FACILITIES SHALL BE OWNED AND MAINTAINED BY THE OWNER-DEVELOPER.

6. ALL ON-SITE PARKING SPACES WILL BE STRIPED AND SIGNED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. PARKING SPACES, DIRECTIONAL ARROWS, AND STOP BARS SHALL BE STRIPED IN WHITE. IT SHALL BE THE OWNER/DEVELOPERS' RESPONSIBILITY TO PROPERLY SIGN AND STRIPE THE SITE IN ACCORDANCE WITH APPLICABLE STANDARDS.

7. THE OWNER/DEVELOPER ACKNOWLEDGES THAT THIS APPROVAL DOES NOT INCLUDE ANY WORK IN COUNTY RIGHT-OF-WAY. ALL RIGHT OF WAY WORK SHALL BE A FUNCTION OF AN APPROVED PASCO COUNTY RIGHT-OF-WAY USE PERMIT.

8. ALL CLEAR-SITE AREAS SHALL BE KEPT FREE OF ANY SIGNAGE, PLANTINGS, TREES, ETC. IN EXCESS OF THREE-AND-A-HALF (3-1/2) FEET IN HEIGHT.

9. NO IRRIGATION SYSTEM OR LANDSCAPING SHALL BE INSTALLED IN ANY COUNTY OR STATE RIGHT-OF-WAY WITHOUT ISSUANCE OF APPROPRIATE RIGHT-OF-WAY USE PERMIT.

10. THE OWNER/DEVELOPER ACKNOWLEDGES THAT THE SITE AND ITS SUBSEQUENT BUILDING PERMITS SHALL COMPLY WITH ALL REZONING/MPUD/PUD CONDITIONS.

11. WHEEL STOPS OR OTHER DESIGN FEATURES, SUCH AS CURBING, SHALL BE USED SO THAT PARKED VEHICLES DO NOT EXTEND MORE THAN TWO (2) FEET INTO ANY LANDSCAPE OR BUFFER AREANOR REDUCE AND ABUTTING SIDEWALK WIDTH TO LESS THAN FIVE (5) FEET.

12. INSTALLATION OF FUEL STORAGE TANKS REQUIRES REVIEW AND APPROVAL BY THE FIRE MARSHAL AND THE ISSUANCE OF A SEPARATE BUILDING PERMIT. APPROVAL OF THE SITE PLAN DOES NOT CONSTITUTE APPROVAL OF THE LOCATION OF THE FUEL TANKS.

13. ALL STRUCTURES, INCLUDING BUFFER WALL, RETAINING WALLS, SIGNAGE, ETC. REQUIRE BUILDING PERMITS.

14. ALL WORK TO BE DONE IN ONE PHASE.

15. PER NFPA-1; 16.4.3.1.2: WHERE UNDERGROUND FIRE HYDRANTS AND MAINS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED AND IN SERVICE PRIOR TO CONSTRUCTION WORK.

16. FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.

17. IN CONSIDERATION OF PASCO COUNTY'S AGREEMENT TO PROVIDE POTABLE WATER AND/OR RECLAIMED WATER TO THE SUBJECT PROPERTY, DEVELOPER/OWNER, AND ITS SUCCESSORS AND ASSIGNS, AGREE TO THE FOLLOWING:

(A) IN THE EVENT OF PRODUCTION FAILURE OR SHORTFALL BY TAMPA BAY WATER, AS SET FORTH IN SECTION 3.19 OF THE INTERLOCAL AGREEMENT CREATING TAMPA BAY WATER, DEVELOPER/OWNER SHALL TRANSFER TO PASCO COUNTY ANY AND ALL WATER USE PERMITS OR WATER USE RIGHTS THE DEVELOPER/OWNER MAY HAVE TO USE OR CONSUME SURFACE OR GROUND WATER WITHIN PASCO COUNTY.

(B) PRIOR TO DEVELOPER/OWNER SELLING WATER OR WATER USE PERMITS OR WATER USE RIGHTS, DEVELOPER/OWNER SHALL NOTIFY PASCO COUNTY, AND PASCO COUNTY SHALL HAVE A RIGHT OF FIRST REFUSAL TO PURCHASE SUCH WATER OR WATER USE PERMITS OR WATER USE RIGHTS."

LEGAL DESCRIPTION

A PARCEL OF LAND LYING IN THE NORTHWEST 1/4 OF SECTION 35, TOWNSHIP 25 SOUTH, RANGE 18 EAST, PASCO COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 35, TOWNSHIP 25 SOUTH, RANGE 18 EAST, PASCO COUNTY, FLORIDA; THENCE S89°03'43"E, ALONG THE NORTH BOUNDARY OF THE NORTHWEST 1/4 OF SAID SECTION 35, A DISTANCE OF 1216.33 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY OF LAND O' LAKES BOULEVARD (U.S. HIGHWAY NO. 41 - STATE ROAD NO. 45), SAID POINT BEING THE POINT OF BEGINNING; THENCE CONTINUE S89°03'43"E, ALONG SAID NORTH BOUNDARY OF THE NORTHWEST 1/4 OF SECTION 35, A DISTANCE OF 76.16 FEET; THENCE S18°05'41"E, A DISTANCE OF 155.28 FEET; THENCE N71°53'24"E, A DISTANCE OF 273.00 FEET; THENCE S18°05'41"E, A DISTANCE OF 207.00 FEET TO THE NORTHERLY RIGHT-OF-WAY OF PLEASANT PLAINS PARKWAY; THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY OF PLEASANT PLAINS PARKWAY FOR THE FOLLOWING TWO (2) COURSES AND DISTANCES: (1) S71°53'24"W, A DISTANCE OF 331.99 FEET TO A POINT OF CURVATURE; (2) WESTERLY ALONG THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 25.00 FEET, AN ARC OF 13.68 FEET, A CENTRAL ANGLE OF 31°20'51", A CHORD OF 13.51 FEET AND A CHORD BEARING OF S87°33'50"W TO AFORESAID EASTERLY RIGHT-OF-WAY OF LAND O' LAKES BOULEVARD (U.S. HIGHWAY NO. 41 - STATE ROAD NO. 45); THENCE N18°05'41"W, ALONG SAID EASTERLY RIGHT-OF-WAY OF LAND O' LAKES BOULEVARD (U.S. HIGHWAY NO. 41 - STATE ROAD NO. 45), A DISTANCE OF 383.49 FEET TO THE POINT OF BEGINNING.

SITE CONTAINS 83,475 SQUARE FEET OR 1.92 ACRES, MORE OR LESS.

CURVE C1
RADIUS = 25.00'R
ARC = 13.68'R
CHORD = 13.51'RM
CHD. BRG. = S87°33'50"W RM
DELTA = 31°20'51"R

48 HOURS BEFORE YOU DIG "CALL SUNSHINE" 1-800-432-4770

SITE DATA

1. PARCEL NUMBER : 35/25/18/0000/00100/0060
2. SECTION / TOWNSHIP / RANGE: 35 / 25 S / 18 E
3. SITE ADDRESS: 8000 LAND O' LAKES BOULEVARD (U.S. 41) LAND O' LAKES, FLORIDA 34638
4. PROPERTY AREA: 83,475 SF (1.916 AC)
5. ZONING: MASTER PLANNED UNIT DEVELOPMENT "MPUD" REZONING: RZ6045 (8-12-03)
6. FUTURE LAND USE: NEW TOWN "NT"
7. BUILDING SETBACKS:
   LAND O' LAKES BLVD. (SOUTHWEST) = 94.7 FT
   PLEASANT PLAINS PKWY. (SOUTHEAST) = 98.6 FT
   SIDE (NORTHWEST) = 61.4 FT
   SIDE (NORTHEAST) = 150.3 FT
8. BUILDING HEIGHT: 19.34 FT
9. SITE AREAS:

VEHICULAR USE AREA:	40,338 SF	(48.3%)
BUILDING FOOTPRINT:	4,490 SF	(5.4%)
SIDEWALK, CURB, DUMPSTER:	7,320 SF	(8.8%)
TOTAL IMPERVIOUS AREA:	52,148 SF	(62.5%)
TOTAL PERVIOUS AREA:	31,327 SF	(37.5%)
POND AREA:	0 SF	(0.0%)
WETLAND AREA:	0 SF	(0.0%)
INTERIOR LANDSCAPE AREA:	7,490 SF	(18.5% OF VUA)
TOTAL AREA:	83,475 SF	(100%)

10. GROSS FLOOR AREA = 4,490 SF
11. FLOOR AREA RATIO (F.A.R.) = 4,490 SF / 83,475 SF = 0.054
12. STORMWATER MANAGEMENT: WQT & ATTENUATION (OFF-SITE)
13. FLOOD ZONE INFORMATION: ZONES "A" AND "X". B.F.E. = 74.8' NAVD FEMA MAP 12101C0235F
14. SOLID WASTE MANAGEMENT: TWO DUMPSTERS
15. TOTAL PARKING PROVIDED: 58 SPACES REGULAR = 55 & HANDICAP = 3
16. TOTAL PARKING REQUIRED: 30 SPACES 4,490 SF X 1 SPACES PER 150 SF OF G.F.A. = 30

LEGEND

- PROPOSED PROPERTY LINE
- PROPOSED DIMENSION (42")
- EXISTING DIMENSION (42")
- PROPOSED DETENTION POND (X.XX')
- EXISTING CONCRETE PAVEMENT / PAD/ SIDEWALK
- PROPOSED ASPHALTIC PAVEMENT
- PROPOSED CONCRETE PAVEMENT / PAD / SIDEWALK
- PROPOSED PAVERS

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date
COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

©COPYRIGHT 2015

No.	BY	DATE	REVISIONS DESCRIPTION

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

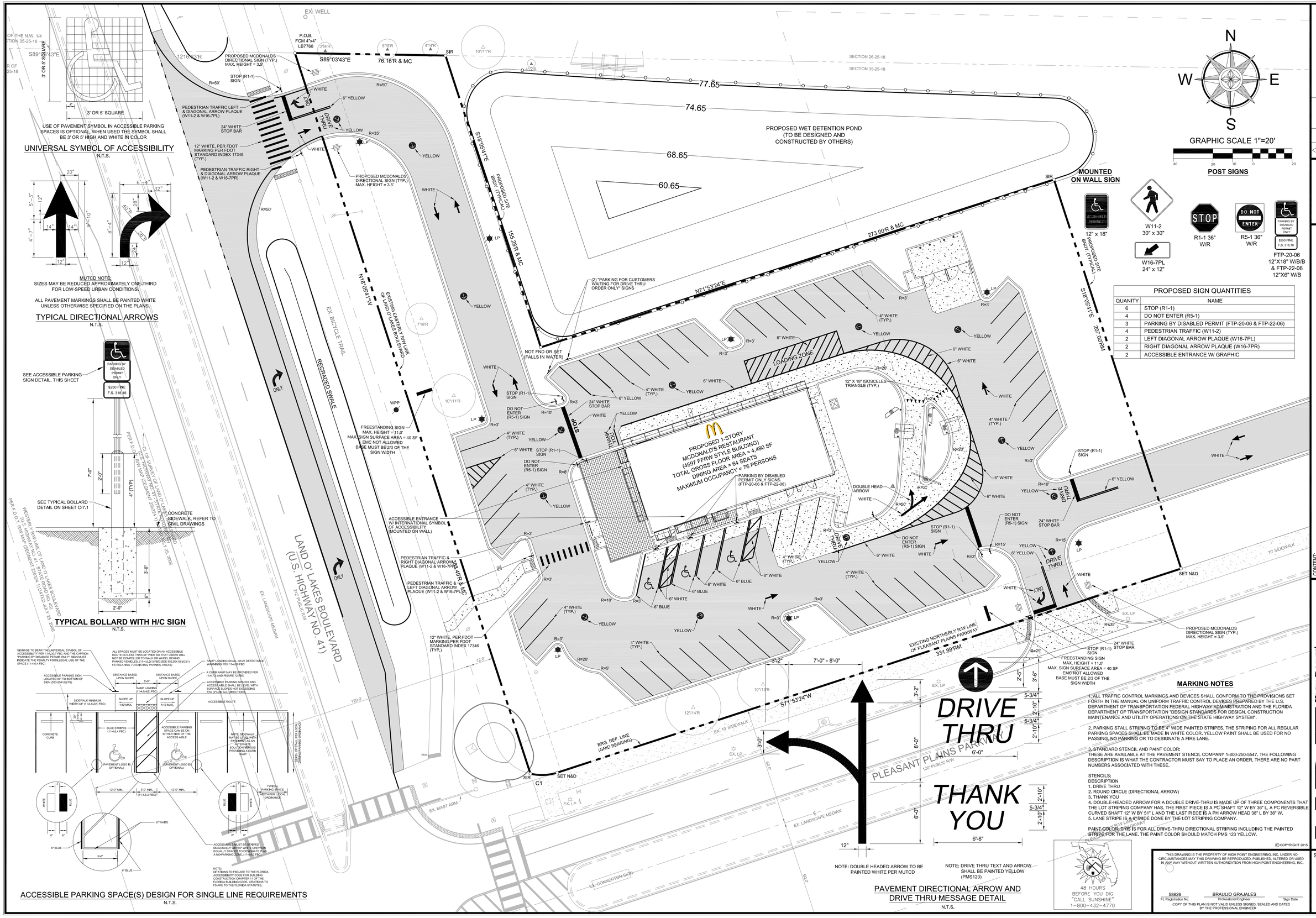
SITE ID 009-2580

CONTENT: SITE LAYOUT & PARKING PLAN

PROJECT: McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638

HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
Tel. (813) 644-8333
Fax (813) 644-7000
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET: C-4.1



QUANITY	NAME
6	STOP (R1-1)
4	DO NOT ENTER (R5-1)
3	PARKING BY DISABLED PERMIT (FTP-20-06 & FTP-22-06)
4	PEDESTRIAN TRAFFIC (W11-2)
2	LEFT DIAGONAL ARROW PLAQUE (W16-7PL)
2	RIGHT DIAGONAL ARROW PLAQUE (W16-7PR)
2	ACCESSIBLE ENTRANCE W/ GRAPHIC

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

FOUNDATION AND SOILS NOTES

1. ACCORDING TO THE FLORIDA BUILDING CODE SECTION 1804, THE MAXIMUM ALLOWABLE FOUNDATION PRESSURE, LATERAL PRESSURE OR LATERAL SLIDING-RESISTANCE VALUES FOR SUPPORTING SOILS NEAR THE SURFACE SHALL NOT EXCEED THE VALUES SPECIFIED IN THE FLORIDA BUILDING CODE TABLE 1804.2 UNLESS DATA TO SUBSTANTIATE THE USE OF A HIGHER VALUE ARE SUBMITTED AND APPROVED. PRESUMPTIVE LOAD-BEARING VALUES SHALL APPLY TO MATERIALS WITH SIMILAR PHYSICAL CHARACTERISTICS AND DISPOSITIONS. MUD, ORGANIC SILT, ORGANIC CLAYS, PEAT OR UNPREPARED FILL SHALL NOT BE ASSUMED TO HAVE A PRESUMPTIVE LOAD-BEARING CAPACITY UNLESS DATA TO SUBSTANTIATE THE USE OF SUCH A VALUE ARE SUBMITTED. A PRESUMPTIVE LOAD-BEARING CAPACITY IS PERMITTED TO BE USED WHERE THE BUILDING OFFICIAL DEEMS THE LOAD-BEARING CAPACITY OF MUD, ORGANIC SILT OR UNPREPARED FILL IS ADEQUATE FOR THE SUPPORT OF LIGHTWEIGHT AND TEMPORARY STRUCTURES.
2. ACCORDING TO THE FLORIDA BUILDING CODE SECTION 1805, FOOTINGS AND FOUNDATIONS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE SECTIONS 1805.1 THROUGH 1805.9. FOOTINGS AND FOUNDATIONS SHALL BE BUILT ON UNDISTURBED SOIL, COMPACTED FILL MATERIAL OR CONTROLLED LOW-STRENGTH MATERIAL (CLSM). COMPACTED FILL MATERIAL SHALL BE PLACED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE SECTION 1803.5. CLSM SHALL BE PLACED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE SECTION 1803.6. THE TOP SURFACE OF FOOTINGS SHALL BE LEVEL. THE BOTTOM SURFACE OF FOOTINGS IS PERMITTED TO HAVE A SLOPE NOT EXCEEDING ONE UNIT VERTICAL IN 10 UNITS HORIZONTAL (10-PERCENT SLOPE). FOOTINGS SHALL BE STEPPED WHERE IT IS NECESSARY TO CHANGE THE ELEVATION OF THE TOP SURFACE OF THE FOOTING OR WHERE THE SURFACE OF THE GROUND SLOPES MORE THAN ONE UNIT VERTICAL IN 10 UNITS HORIZONTAL (10-PERCENT SLOPE). THE MINIMUM DEPTH OF FOOTINGS BELOW THE UNDISTURBED GROUND SURFACE SHALL BE 12 INCHES. WHERE APPLICABLE, THE DEPTH OF FOOTINGS SHALL ALSO CONFORM TO THE FLORIDA BUILDING CODE SECTIONS 1805.2.1 THROUGH 1805.2.3.

EXCAVATION, GRADING AND FILL NOTES

1. ACCORDING TO THE FLORIDA BUILDING CODE SECTION 3304, EXCAVATION AND FILL FOR BUILDINGS AND STRUCTURES SHALL BE CONSTRUCTED OR PROTECTED SO AS NOT TO ENDANGER LIFE OR PROPERTY. STUMPS AND ROOTS SHALL BE REMOVED FROM THE SOIL TO A DEPTH OF AT LEAST 12 INCHES BELOW THE SURFACE OF THE GROUND IN THE AREA TO BE OCCUPIED BY THE BUILDING. WOOD FORMS WHICH HAVE BEEN USED IN PLACING CONCRETE, IF WITHIN THE GROUND OR BETWEEN FOUNDATION SILLS AND THE GROUND, SHALL BE REMOVED BEFORE A BUILDING IS OCCUPIED OR USED FOR ANY PURPOSE. BEFORE COMPLETION, LOOSE OR CASUAL WOOD SHALL BE REMOVED FROM DIRECT CONTACT WITH THE GROUND UNDER THE BUILDING.
2. ACCORDING TO THE FLORIDA BUILDING CODE SECTION 3304, SLOPES FOR PERMANENT FILL SHALL NOT BE STEEPER THAN ONE UNIT VERTICAL IN TWO UNITS HORIZONTAL (50-PERCENT SLOPE). CUT SLOPES FOR PERMANENT EXCAVATIONS SHALL NOT BE STEEPER THAN ONE UNIT VERTICAL IN TWO UNITS HORIZONTAL (50-PERCENT SLOPE). DEVIATION FROM THE FOREGOING LIMITATIONS FOR CUT SLOPES SHALL BE PERMITTED ONLY UPON THE PRESENTATION OF A SOIL INVESTIGATION REPORT ACCEPTABLE TO THE BUILDING OFFICIAL.
3. ACCORDING TO THE FLORIDA BUILDING CODE SECTION 3304, NO FILL OR OTHER SURCHARGE LOADS SHALL BE PLACED ADJACENT TO ANY BUILDING OR STRUCTURE UNLESS SUCH BUILDING OR STRUCTURE IS CAPABLE OF WITHSTANDING THE ADDITIONAL LOADS CAUSED BY THE FILL OR SURCHARGE. EXISTING FOOTINGS OR FOUNDATIONS WHICH CAN BE AFFECTED BY ANY EXCAVATION SHALL BE UNDERPINNED ADEQUATELY OR OTHERWISE PROTECTED AGAINST SETTLEMENT AND SHALL BE PROTECTED AGAINST LATER MOVEMENT.
4. ACCORDING TO THE FLORIDA BUILDING CODE SECTION 1803.1, EXCAVATIONS FOR ANY PURPOSE SHALL NOT REMOVE LATERAL SUPPORT FROM ANY FOOTING OR FOUNDATION WITHOUT FIRST UNDERPINNING OR PROTECTING THE FOOTING OR FOUNDATION AGAINST SETTLEMENT OR LATERAL TRANSLATION.
5. ACCORDING TO THE FLORIDA BUILDING CODE SECTION 1803.2, THE EXCAVATION OUTSIDE THE FOUNDATION SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ORGANIC MATERIAL, CONSTRUCTION DEBRIS, COBBLES AND BOULDERS OR A CONTROLLED LOW-STRENGTH MATERIAL (CLSM). THE BACKFILL SHALL BE PLACED IN LIFTS AND COMPACTED, IN A MANNER THAT DOES NOT DAMAGE THE FOUNDATION OR THE WATERPROOFING OR DAMPPROOFING MATERIAL.
6. ACCORDING TO THE FLORIDA BUILDING CODE SECTION 1803.3, THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING AT A SLOPE OF NOT LESS THAN ONE UNIT VERTICAL IN 20 UNITS HORIZONTAL (5-PERCENT SLOPE) FOR A MINIMUM DISTANCE OF 10 FEET MEASURED PERPENDICULAR TO THE FACE OF THE WALL. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT 10 FEET OF HORIZONTAL DISTANCE, A 5-PERCENT SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATIVE METHOD OF DIVERTING WATER AWAY FROM THE FOUNDATION. SWALES USED FOR THIS PURPOSE SHALL BE SLOPED A MINIMUM OF 2 PERCENT WHERE LOCATED WITHIN 10 FEET OF THE BUILDING FOUNDATION. IMPERVIOUS SURFACES WITHIN 10 FEET OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF 2 PERCENT AWAY FROM THE BUILDING. WHERE CLIMATIC OR SOIL CONDITIONS WARRANT, THE SLOPE OF THE GROUND AWAY FROM THE BUILDING FOUNDATION IS PERMITTED TO BE REDUCED TO NOT LESS THAN ONE UNIT VERTICAL IN 48 UNITS HORIZONTAL (2-PERCENT SLOPE).

IMPORTANT NOTES TO CONTRACTOR

1. ALL POINTS AND MONUMENTS SHALL BE SURVEYED UPON MOBILIZATION TO VERIFY THEIR ACCURACY. ANY DISCREPANCIES DISCOVERED MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING PRIOR TO CONSTRUCTION.

2. MONUMENTS AND OTHER SURVEY CONTROL POINTS SHALL BE PROTECTED FROM DAMAGE AND DISTURBANCE. IF ANY CONTROL POINTS ARE DAMAGED OR DISTURBED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER AND REPLACE THE CONTROL POINTS TO THEIR ORIGINAL CONDITION AT HIS OWN EXPENSE.

3. ON-SITE FILL IS NOT ANTICIPATED FOR THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR IS FULLY RESPONSIBLE WHEN USING THIS INFORMATION AND SHALL PERFORM THEIR OWN CALCULATION OF FILL MATERIAL NEEDED AND CONDUCT STUDIES, TESTS AND SURVEYS AS DEEMED NECESSARY TO MAKE THEIR OWN DETERMINATION AS TO THE ACTUAL VOLUME OF FILL MATERIAL NEEDED PRIOR TO BIDDING THE WORK.

4. DEWATERING IS ANTICIPATED FOR THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR IS FULLY RESPONSIBLE WHEN USING THIS INFORMATION AND SHALL CONDUCT STUDIES, TESTS AND SURVEYS AS DEEMED NECESSARY TO MAKE THEIR OWN DETERMINATION AS TO THE ACTUAL DEPTH OF THE GROUND WATER PRIOR TO BIDDING THE WORK.

5. ON-SITE BURNING IS NOT ANTICIPATED FOR THE CONSTRUCTION OF THIS PROJECT.

6. THE SOIL EROSION AND SEDIMENT CONTROL DEVISES SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MAINTAINED THROUGHOUT CONSTRUCTION AND UNTIL THE SITE IS PERMANENTLY STABILIZED.

7. ALL SODDED SLOPES OVER 4 TO 1, SHALL BE INSTALLED WITH SOD PEGS.

8. THE SITE IS IN EVACUATION ZONE "NONE".

9. ANY OFF SITE DISTURBANCE SHALL BE RESTORED TO THE PRE OR BETTER CONDITION.

10. THE OWNER/DEVELOPER WILL PROVIDE COPIES OF THE REQUIRED PERMITS FROM THE RESPECTIVE GOVERNING AGENCIES, PRIOR TO ISSUANCE OF THE SITE DEVELOPMENT PERMIT.

11. PRIOR TO CONSTRUCTION, A BUILDING PERMIT SHALL BE OBTAINED FOR ALL STRUCTURES THAT HAVE A FOOTER, REGARDLESS OF SIZE, THROUGH PASCO COUNTY CENTRAL PERMITTING. (IE. INCLUDING BUT NOT INCLUSIVE BUILDINGS, ACCESSORIES, AND RETAINING WALLS).

12. ALL WORK WITHIN THE RIGHT-OF-WAY WILL REQUIRE A RIGHT-OF-WAY USE PERMIT.

13. IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF THE PRESENCE OF STATE AND FEDERALLY PROTECTED PLANT AND/OR ANIMAL SPECIES IS DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND PASCO COUNTY SHALL BE NOTIFIES NOTIFIED WITHIN TWO WORKING DAYS OF THE PLANT AND/OR ANIMAL SPECIES FOUND ON THE SITE.

14. IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF ARCHEOLOGICAL RESOURCES ARE DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND THE FLORIDA DEPARTMENT OF HISTORIC RESOURCES (STATE HISTORIC PRESERVATION OFFICE) AND PASCO COUNTY SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE RESOURCES FOUND ON THE SITE.

PAVING AND GRADING NOTES

1. PROPOSED ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON THESE CONSTRUCTION DOCUMENTS.

2. CONTRACTOR SHALL SAW CUT, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.

3. CURBING SHALL BE PLACED AT THE EDGE OF ALL PAVEMENT, AS SHOWN ON THESE CONSTRUCTION DOCUMENTS.

4. CONTRACTOR SHALL PROVIDE A 1/2" BITUMINOUS EXPANSION JOINT WITH SEALER AT ABUTMENT OF CONCRETE AND ANY STRUCTURE. EXPANSION JOINT FILLER SHALL CONFORM TO THE SPECIFICATIONS OF ASTM D1751.

5. CONTRACTOR SHALL PROVIDE EROSION CONTROL AND SEDIMENTATION BARRIER TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR CITY / COUNTY AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR SHALL REMOVE SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR CITY / COUNTY AUTHORITIES.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING APPLICABLE SOIL AND MATERIAL TESTING AND SUBMITTING TEST RESULTS TO OWNER'S ENGINEER ON A WEEKLY BASIS. SOIL TESTS ARE REQUIRED PURSUANT WITH THE TESTING SCHEDULE REQUIRED BY THE GOVERNMENTAL AGENCY HAVING JURISDICTION OVER THIS SITE. UPON COMPLETION OF THIS WORK, THE CONTRACTOR SHALL SUBMIT TO THE OWNER CERTIFICATIONS SIGNED BY THE MATERIAL / GEOTECHNICAL ENGINEER STATING THAT ALL SOIL AND MATERIAL REQUIREMENTS HAVE BEEN MET.

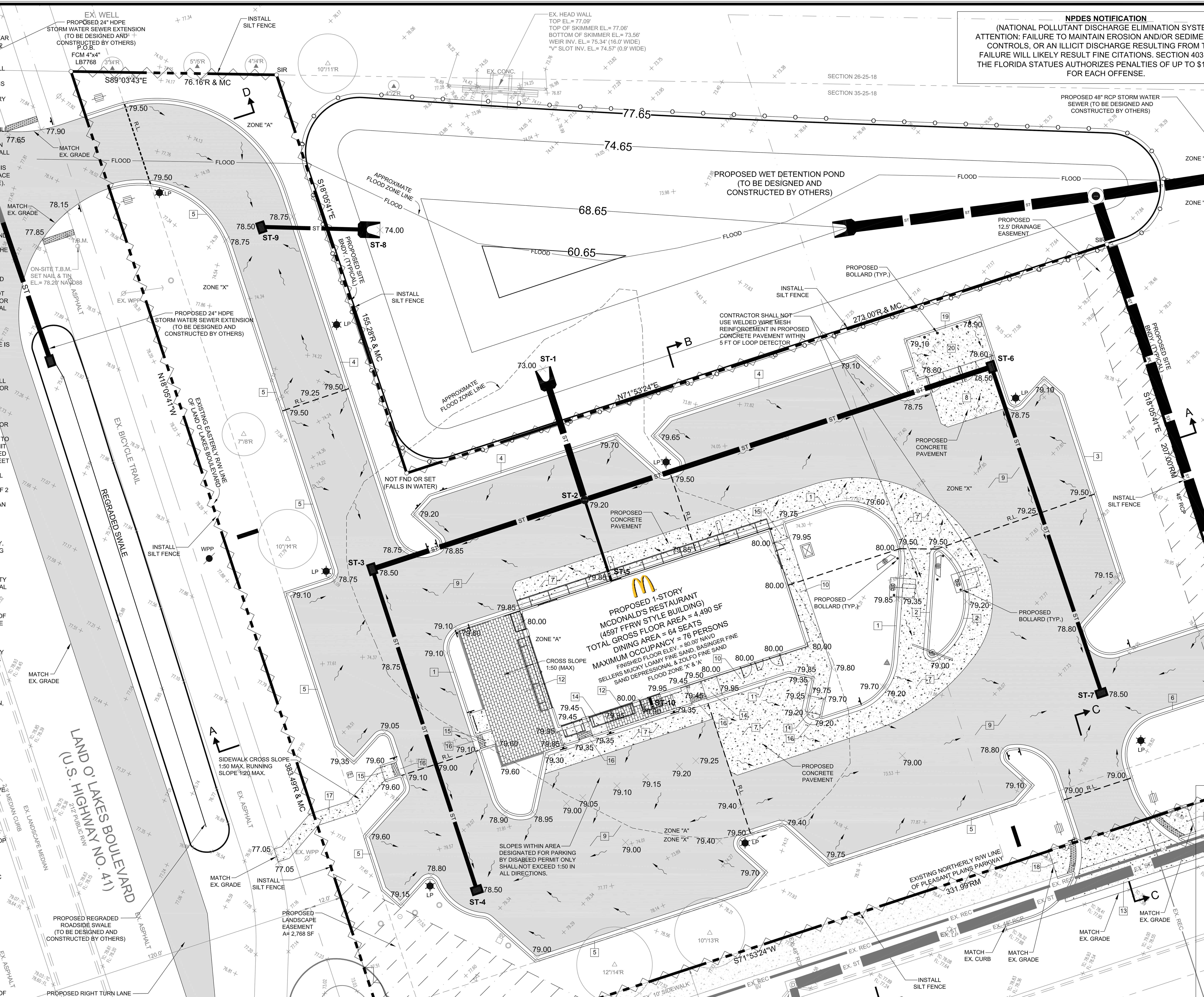
7. A QUALIFIED TESTING LABORATORY SELECTED BY THE OWNER SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN PLACE MATERIALS AS REQUIRED BY THESE CONSTRUCTION DOCUMENTS AND THE VARIOUS AGENCIES HAVING JURISDICTION OVER THIS SITE. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THE REQUIREMENTS, THE CONTRACTOR SHALL BEAR ALL COSTS OF SAID RETESTING.

8. ALL CURB RAMPS SHALL BE CONSTRUCTED AND TEXTURED PER FDOT INDEX NO. 304. THE CONTRACTOR SHALL FINISH ALL EXPOSED BACK OF CURB.

9. PRIOR TO CONSTRUCTION OF CONCRETE PAVEMENT, THE CONTRACTOR SHALL SUBMIT A PROPOSED JOINTING PATTERN TO THE ENGINEER FOR APPROVAL.

10. ON-SITE PAVEMENT SHALL CONSIST OF 2" ASPHALT (TYPE S-III) ON 6" LIMEROCK BASE OR CRUSHED PORTLAND CEMENT CONCRETE COMPACTED TO 98% OF MAXIMUM DENSITY FROM MODIFIED PROCTOR TEST OVER 6" STABILIZED SUBGRADE (40 LBR) COMPACTED TO 98% OF MAXIMUM DENSITY FROM MODIFIED PROCTOR TEST PER ASTM D1557 / AASHTO T-180.

NPDES NOTIFICATION
(NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM)
ATTENTION: FAILURE TO MAINTAIN EROSION AND/OR SEDIMENTATION CONTROLS, OR AN ILLICIT DISCHARGE RESULTING FROM THEIR FAILURE WILL LIKELY RESULT FINE CITATIONS. SECTION 403.0885 OF THE FLORIDA STATUES AUTHORIZES PENALTIES OF UP TO $10,000.00 FOR EACH OFFENSE.



ITEM	DESCRIPTION
1	CONST. ± 498 L.F. OF TYPE "F" CONC. CURB AND GUTTER.
2	CONST. ± 100 L.F. OF TYPE "F" CONC. CURB AND GUTTER
3	CONST. ± 198 L.F. OF TYPE "F" CONC. CURB AND GUTTER
4	CONST. ± 502 L.F. OF TYPE "F" CONC. CURB AND GUTTER
5	CONST. ± 724 L.F. OF TYPE "F" CONC. CURB AND GUTTER
6	CONST. ± 82 L.F. OF TYPE "F" CONC. CURB AND GUTTER.
7	CONST. ± 4,565 S.F. OF 6" THICK REINFORCED CONCRETE PAVEMENT, SEE TYPICAL SECTION SHEET C-7.1.
8	CONST. ± 492 S.F. OF 6" THICK REINFORCED CONCRETE APRON, SEE TYPICAL SECTION SHEET C-7.1.
9	CONST. 35,102 S.F. OF NEW ASPHALT PAVEMENT AND BASE. SEE TYPICAL SECTION SHEET C-7.1
10	CONST. ± 648 S.F. 4" THICK CONCRETE SIDEWALK.
11	CONST. NEW CONCRETE SIDEWALK CURB RAMP PER FDOT STANDARD INDEX 304, 3 OF 7 (CR-F).
12	CONST. ± 1,394 S.F. 4" THICK CONCRETE PATIO/SIDEWALK WITH PAVERS.
13	CONST. ± 750 S.F. OF 6" THICK REINFORCED CONCRETE PAVEMENT, SEE TYPICAL SECTION SHEET C-7.1.
14	CONST. NEW CONCRETE SIDEWALK CURB RAMP PER FDOT STANDARD INDEX 304, 2 OF 7 (CR-C) WITH DETECTABLE WARNING SURFACE PER F.B.C. SECTION 11-4.29.
15	CONST. NEW CONCRETE SIDEWALK CURB RAMP PER FDOT STANDARD INDEX 304, 3 OF 7 (CR-E) WITH DETECTABLE WARNING SURFACE PER F.B.C. SECTION 11-4.29.
16	DROP CURB SEGMENT, CURB FLUSH AT PAVEMENT
17	CONST. ± 258 S.F. 4" THICK CONCRETE SIDEWALK.
18	CONST. NEW CONCRETE SIDEWALK CURB RAMP PER FDOT STANDARD INDEX 304, 3 OF 7 (CR-F) WITH DETECTABLE WARNING SURFACE PER FDOT STANDARD INDEX 304, 6 OF 7.
19	PROPOSED DUMPSTER ENCLOSURE, 6' HIGH CMU WALL, SEE TYPICAL SECTION SHEET C-7.2.
20	CONST. ± 440 S.F. OF 6" THICK CONCRETE PAD SEE TYPICAL SECTION SHEET C-7.2.

STORMWATER COLLECTION SYSTEM STRUCTURE SCHEDULE

STRUCTURE NUMBER	TYPE OF STRUCTURE	RIM/GRATE ELEV. (FT)	INV. ELEV. (FT)	BOTTOM ELEV. (FT)
ST-1	MITERED END SECTION PER FDOT INDEX 273	-----	73.00	-----
ST-2	PRECAST CONCENTRIC CONE MANHOLE (4' DIAM.) / TOP "8"	79.20	73.15 NW 74.60 NE, SW 75.70 SE	73.15
ST-3	FDOT TYPE "F" INLET	78.50	74.85	74.85
ST-4	FDOT TYPE "F" INLET	78.50	75.25	75.25
ST-5	TWO WAY CLEAN OUT	79.85	75.80	-----
ST-6	FDOT TYPE "F" INLET	78.50	75.10	75.10
ST-7	FDOT TYPE "F" INLET	78.50	75.50	75.50
ST-8	MITERED END SECTION PER FDOT INDEX 273	-----	74.00	-----
ST-9	FDOT TYPE "F" INLET	78.50	74.15	74.15
ST-10	CLEAN OUT	79.95	76.00	-----

STORMWATER COLLECTION SYSTEM SEWER LINE SCHEDULE

SEWER LINE	LOWER END	UPPER END	LENGTH (FT)	SIZE & MATERIAL	SLOPE (%)
1	ST-1	ST-2	52	30" RCP	0.29
2	ST-2	ST-3	82	24" RCP	0.30
3	ST-3	ST-4	126	18" RCP	0.32
4	ST-2	ST-5	28	12" PVC	0.36
5	ST-2	ST-6	158	24" RCP	0.32
6	ST-6	ST-7	128	18" RCP	0.31
7	ST-8	ST-9	44	18" RCP	0.34

LEGEND

- PROPOSED PROPERTY LINE
- EXISTING ELEVATION
- PROPOSED ELEVATION
- FLOW DIRECTION
- PROPOSED EROSION CONTROL
- EX. ST — EXISTING STORM SEWER LINE
- R.L. — PROPOSED RIDGE-LINE
- ST — PROPOSED STORM SEWER LINE
- PROPOSED ASPAHLTIC PAVEMENT
- PROPOSED CONCRETE PAVEMENT / PAD / SIDEWALK
- PROPOSED PAVERS

ALL EXISTING AND PROPOSED ELEVATIONS ARE REFERENCED FROM NORTH AMERICAN VERTICAL DATUM (N.A.V.D.) 1988.

©COPYRIGHT 2015

48 HOURS BEFORE YOU DIG "CALL SUNSHINE" 1-800-432-4770

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date

COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

No.	BY	DATE	REVISIONS DESCRIPTION

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

SITE ID 009-2580

CONTENT: PAVING, GRADING & DRAINAGE PLAN

PROJECT: McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638

HPE HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
Tel. (813) 644-8333
Fax (813) 644-7000
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET: C-5.1

NOTES TO CONTRACTOR

1. ASSURE COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) DURING CONSTRUCTION.

2. REQUIRED EROSION CONTROL MEASURES MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. FAILURE TO INSTALL OR PROPERLY MAINTAIN THESE EROSION CONTROL MEASURES WILL RESULT IN ENFORCEMENT ACTION WHICH MAY INCLUDE CITATIONS AS PROVIDED BY CHAPTERS 40D-4 AND 40D-40 F.A.C. INITIATION OF CIVIL PENALTY PROCEDURES PURSUANT TO SECTION 373.129, F.A.C. CAN RESULT IN A PENALTY NOT TO EXCEED $10,000 PER OFFENSE WITH EACH DATE DURING WHICH SUCH VIOLATION OCCURS CONSTITUTING A SEPARATE OFFENSE.

3. NOTIFY THE OWNER IN WRITING IF OTHER SOURCES OF POLLUTION ARE BEING STORED, OR OTHERWISE USED DURING CONSTRUCTION OF THE PROJECT (E.G: OILS, FUELS, FERTILIZERS, PESTICIDES, OTHER CHEMICALS, ETC). THIS NOTIFICATION SHALL BE ACCOMPANIED WITH THE CONTRACTOR'S DESIGN INCLUDING MEANS AND METHODS TO BE USED TO PREVENT POLLUTION FROM THESE SOURCES.

4. IF RELEASES OF REPORTABLE QUANTITIES OF OIL, COMBUSTIBLES OR HAZARDOUS MATERIAL OCCUR NOTIFY NATIONAL RESPONSE CENTER (800) 424-8802 IMMEDIATELY, NOTIFY PERMITTING AUTHORITY IN WRITING WITHIN 14 DAYS AND MODIFY THE POLLUTION PREVENTION PLAN TO INCLUDE THE DATE OR RELEASE, CIRCUNSTANCES LEADING TO THE RELEASE AND STEPS TAKEN TO PREVENT REOCURRANCE OF THE RELEASE.

5. INSPECT ALL EROSION CONTROL MEASURES REGULARLY DURING CONSTRUCTION (WEEKLY) AND AFTER EACH RAINFALL AND REPAIRE AND/OR REPLACE AS NECESSARY TO MAINTAIN ADEQUATE CONTROL OF EROSION AND SEDIMENTATION FOR THE DURATION OF THE PROJECT.

6. TAKE ALL REASONABLE MEASURES TO ASSURE THAT SEDIMENTED AND/OR POLLUTED STORMWATER IS NOT DISCHARGED FROM THE SITE.

7. USE DETENTION PONDS AS SEDIMENTATION BASINS OR CREATE SEDIMENTATION BASINS AS NEEDED.

8. PREPARE INSPECTION REPORTS SUMMARIZING NAME OF INSPECTOR(S), QUALIFICATIONS OF INSPECTOR(S), MEASURES/AREAS INSPECTED, OBSERVED CONDITIONS AND CHANGES NECESSARY TO THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).

9. NOTIFY THE ENGINEER IN WRITING IF STORMWATER POLLUTION PREVENTION MEASURES ARE INEFFECTIVE AND IF REVISION TO THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) ARE NEEDED.

10. MAINTAIN RECORDS OF CONSTRUCTION ACTIVITIES, INCLUDING DATES WHEN MAJOR GRADING ACTIVITIES OCCUR, DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY CEASE ON A PORTION OF THE SITE, DATES WHEN CONSTRUCTION ACTIVITIES PERMANENTLY CEASE ON A PORTION OF THE SITE AND DATES WHEN STABILIZATION MEASURES ARE INITIATED ON THE SITE.

11. INITIATE SITE STABILIZATION MEASURES AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED.

12. MAINTAIN A COPY OF THE CONSTRUCTION PLANS WHICH INCLUDE THE CONSTRUCTION SURFACE WATER MANAGEMENT PLAN (CSWMP) ON SITE.

EROSION AND SEDIMENTATION CONTROL NOTES

1. ALL EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP) IN ADDITION TO THOSE PRESENTED ON THESE CONSTRUCTION DOCUMENTS SHALL BE IMPLEMENTED PRIOR TO START OF CONSTRUCTION AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETE TO PREVENT TURBID DISCHARGES FROM FLOWING ONTO ADJACENT PROPERTY, ROADWAYS AND STREETS, AND SILTATION OF STORM SEWERS, WATERWAYS AND WETLANDS.

2. THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.

3. THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE, WHILE SANDY MATERIAL MAY NEED ONLY SILT SCREENS OR HAY BALES TO PREVENT EROSION. FLOATING TURBIDITY CURTAINS SHALL BE USED IN OPEN WATER SITUATIONS. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORM WATER RUNOFF FROM BEING DISCHARGED TO WETLANDS OR OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES AND OTHER EROSION/TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT.

4. THE CONTRACTOR SHALL SCHEDULE CONSTRUCTION OPERATIONS SUCH THAT THE AREA OF UNPROTECTED ERODIBLE EARTH EXPOSED IS NOT LARGER THAN THE MINIMUM AREA NECESSARY FOR EFFICIENT CONSTRUCTION OPERATIONS, AND THE DURATION OF EXPOSED, UNCOMPLETED CONSTRUCTION SHALL BE AS SHORT AS PRACTICABLE. CLEARING AND GRUBBING SHALL BE SCHEDULED AND PERFORMED SO THAT GRADING OPERATIONS CAN FOLLOW IMMEDIATELY THEREAFTER, AND GRADING OPERATIONS SHALL BE SCHEDULED AND PERFORMED SO THAT PERMANENT EROSION CONTROL FEATURES CAN FOLLOW IMMEDIATELY THEREAFTER IF CONDITIONS ON THE PROJECT PERMIT.

5. PERMANENT DETENTION AREA(S) AND/OR TEMPORARY SEDIMENTATION BASIN(S) SHALL BE CONSTRUCTED AS A FIRST STEP IN THE LAND ALTERATION ACTIVITIES AS PART OF THE CONSTRUCTION SURFACE WATER MANAGEMENT PLAN. THE CONTRACTOR SHALL CREATE POSITIVE DRAINAGE FOR DIRECTING ANTICIPATED RUNOFF TO THE SEDIMENTATION BASIN AREA(S). WHEN REQUIRED, DEWATERING SHALL INCLUDE PROVISIONS TO DETAIN AS MUCH WATER ON-SITE AS POSSIBLE.

6. SEDIMENT BASINS, PERIMETER SWALES, SILT FENCES, BERMS, SEDIMENT TRAPS, VEGETATIVE BUFFERS AND OTHER MEASURES INTENDED TO DETAIN SEDIMENT AND/OR PREVENT THE MIGRATION OF SEDIMENT ONTO ADJACENT PROPERTIES, OR INTO EXISTING WATER BODIES, SHALL BE INSTALLED, CONSTRUCTED OR, IN THE CASE OF VEGETATIVE BUFFERS, PROTECTED FROM DISTURBANCE, AS A FIRST STEP IN THE LAND ALTERATION ACTIVITIES. SILTATION CONTROLS SHALL BE INSTALLED AND MAINTAINED AS REQUIRED BY THE ENGINEER TO ENSURE SURFACE WATER QUALITY CONDITIONS ARE IN COMPLIANCE WITH STATE WATER QUALITY STANDARDS.

7. ALL STORMWATER INLETS, ON-SITE AND ADJACENT TO THE PROJECT, SHALL BE PROTECTED USING SEDIMENT TRAPS (I.E. STAKED HAY BALES) AND FILTER FABRIC SHALL BE PLACED BENEATH GRATES WHICH SHALL BE MAINTAINED AND REPLACED DURUNG CONSTRUCTION AS REQUIRED.

8. ALL EXTERIOR SWALES, DITCHES AND CHANNELS SHALL BE SODDED WITHIN (3) DAYS OF EXCAVATION. ALL OTHER INTERIOR SWALES, DITCHES AND CHANNELS INCLUDING DETENTION PONDS WILL BE SODDED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

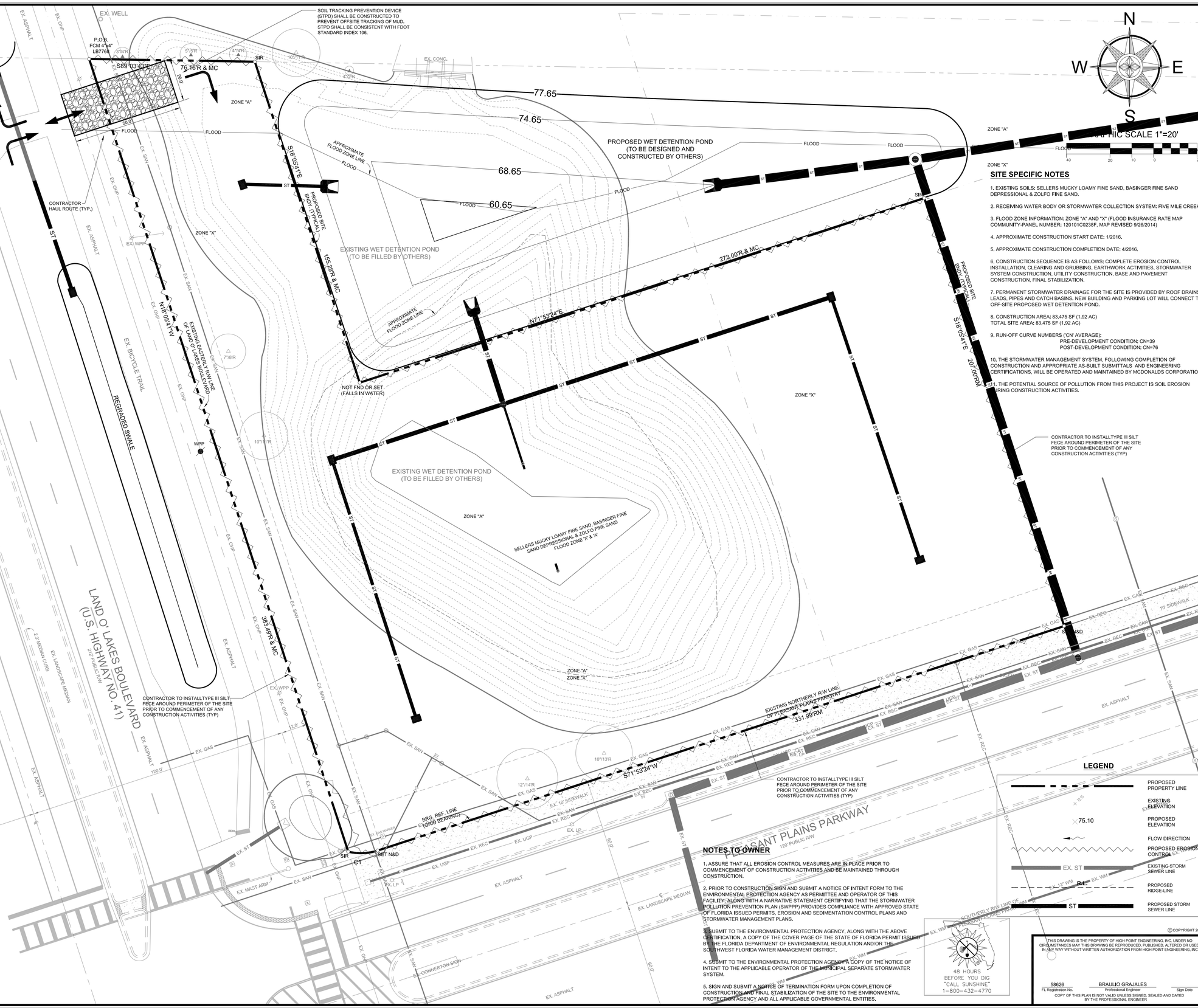
9. FILL MATERIAL STOCKPILES SHALL BE PROTECTED AT ALL TIMES BY ON-SITE DRAINAGE CONTROLS WHICH PREVENT EROSION OF THE STOCKPILED MATERIAL. CONTROL OF DUST FROM SUCH STOCKPILED MATERIAL, MAY BE REQUIRED, DEPENDING UPON THEIR LOCATION AND THE LENGTH OF TIME THE STOCKPILES WILL BE KEPT. IN NO CASE SHALL UNSTABILIZED STOCKPILE REMAIN MORE THAN THIRTY (30) DAYS.

10. ALL EROSION AND SILTATION CONTROL DEVICES SHALL BE CHECKED WEEKLY, ESPECIALLY AFTER EACH RAINFALL AND WILL BE REPAIRED AND/OR REPLACED AS REQUIRED.

11. TEMPORARY SEEDING AND MULCHING MAY BE APPLIED TO COVER BARE SOIL AND TO PREVENT WIND EROSION. SOLID BOARD FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND BLOWN DUST. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING WIND CURRENTS AT INTERVALS OF ABOUT 15 TIMES THE BARRIER HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION. IRRIGATION WITH WATER UNTIL THE SURFACE IS WET AND REPEATED AS NECESSARY CAN BE USED TO PREVENT WIND EROSION AND CONTROL BLOWN DUST. IF THIS METHOD IS TO BE EMPLOYED, THE CONTRACTOR SHALL CONSTRUCT A TEMPORARY GRAVEL ROCK ENTRANCE OR A SOIL TRACKING PREVENTION DEVICE (STPD) TO PREVENT OFFSITE TRACKING OF MUD ONTO LOCAL STREETS. STPD SHALL BE CONSISTENT WITH FDOT STANDARD INDEX 106.

12. THE CONTRACTOR SHALL REPORT ALL OFF-SITE SURFACE WATER DISCHARGES WITH TURBIDITY IN EXCESS OF 29 NTUS ABOVE BACKGROUND LEVEL TO AIR AND WATER QUALITY PROTECTION WITHIN 24 HOURS AFTER OCCURRENCE AS PER THE REQUIREMENTS OF THE NPDES PERMIT. NOTIFICATION SHALL INCLUDE CAUSE OF THE PROBLEM, CORRECTIVE ACTIONS TAKEN, AND INSTALLATION OF ADDITIONAL EROSION/SEDIMENT CONTROLS NOT SHOWN ON THE APPROVED CONSTRUCTION PLAN DRAWINGS.

13. WHEN CONSTRUCTION IS COMPLETE, THE PERMANENT DETENTION BASIN SHALL BE REGRADED AND RE-SODDED IN ACCORDANCE TO THE CONSTRUCTION PLANS. ANY SOD PLACED ON SLOPES EXCEEDING 3:1 TO BE ANCHORED BY STAKES, AND/OR ENGINEER'S APPROVED METHOD. PERMANENT DETENTION AREAS SHALL BE TOTALLY CLEANED OUT AND OPERATE PROPERLY AT FINAL INSPECTION AND AT THE END OF THE WARRANTY PERIOD.



SITE SPECIFIC NOTES

1. EXISTING SOILS: SELLERS MUCKY LOAMY FINE SAND, BASINGER FINE SAND DEPRESSIONAL & ZOLFO FINE SAND.

2. RECEIVING WATER BODY OR STORMWATER COLLECTION SYSTEM: FIVE MILE CREEK

3. FLOOD ZONE INFORMATION: ZONE "A" AND "X" (FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER: 120101C0238F, MAP REVISED 9/26/2014)

4. APPROXIMATE CONSTRUCTION START DATE: 1/2016.

5. APPROXIMATE CONSTRUCTION COMPLETION DATE: 4/2016.

6. CONSTRUCTION SEQUENCE IS AS FOLLOWS: COMPLETE EROSION CONTROL INSTALLATION, CLEARING AND GRUBBING, EARTHWORK ACTIVITIES, STORMWATER SYSTEM CONSTRUCTION, UTILITY CONSTRUCTION, BASE AND PAVEMENT CONSTRUCTION, FINAL STABILIZATION.

7. PERMANENT STORMWATER DRAINAGE FOR THE SITE IS PROVIDED BY ROOF DRAINS LEADS, PIPES AND CATCH BASINS. NEW BUILDING AND PARKING LOT WILL CONNECT TO OFF-SITE PROPOSED WET DETENTION POND.

8. CONSTRUCTION AREA: 83,475 SF (1.92 AC)
TOTAL SITE AREA: 83,475 SF (1.92 AC)

9. RUN-OFF CURVE NUMBERS ('CN' AVERAGE):
PRE-DEVELOPMENT CONDITION: CN=39
POST-DEVELOPMENT CONDITION: CN=76

10. THE STORMWATER MANAGEMENT SYSTEM, FOLLOWING COMPLETION OF CONSTRUCTION AND APPROPRIATE AS-BUILT SUBMITTALS AND ENGINEERING CERTIFICATIONS, WILL BE OPERATED AND MAINTAINED BY MCDONALDS CORPORATION.

11. THE POTENTIAL SOURCE OF POLLUTION FROM THIS PROJECT IS SOIL EROSION DURING CONSTRUCTION ACTIVITIES.

NOTES TO OWNER

1. ASSURE THAT ALL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND BE MAINTAINED THROUGH CONSTRUCTION.

2. PRIOR TO CONSTRUCTION SIGN AND SUBMIT A NOTICE OF INTENT FORM TO THE ENVIRONMENTAL PROTECTION AGENCY AS PERMITTEE AND OPERATOR OF THIS FACILITY. ALONG WITH A NARRATIVE STATEMENT CERTIFYING THAT THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PROVIDES COMPLIANCE WITH APPROVED STATE OF FLORIDA ISSUED PERMITS, EROSION AND SEDIMENTATION CONTROL PLANS AND STORMWATER MANAGEMENT PLANS.

3. SUBMIT TO THE ENVIRONMENTAL PROTECTION AGENCY, ALONG WITH THE ABOVE CERTIFICATION, A COPY OF THE COVER PAGE OF THE STATE OF FLORIDA PERMIT ISSUED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION AND/OR THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT.

4. SUBMIT TO THE ENVIRONMENTAL PROTECTION AGENCY, A COPY OF THE NOTICE OF INTENT TO THE APPLICABLE OPERATOR OF THE MUNICIPAL SEPARATE STORMWATER SYSTEM.

5. SIGN AND SUBMIT A NOTICE OF TERMINATION FORM UPON COMPLETION OF CONSTRUCTION AND FINAL STABILIZATION OF THE SITE TO THE ENVIRONMENTAL PROTECTION AGENCY AND ALL APPLICABLE GOVERNMENTAL ENTITIES.

48 HOURS BEFORE YOU DIG "CALL SUNSHINE" 1-800-432-4770

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date
COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

©COPYRIGHT 2015

No.	BY	DATE	DESCRIPTION

REVISIONS

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

CONTENT: STORMWATER POLLUTION PREVENTION PLAN

PROJECT: McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638

SITE ID 009-2580

HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax (813) 644-7000
5300 W. Cypress Street, Suite 262
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET: C-5.2

NOTES TO CONTRACTOR

1. FEDERAL LAW PROHIBITS THE POINT SOURCE DISCHARGE OF POLLUTANTS, INCLUDING THE DISCHARGE OF STORMWATER ASSOCIATED WITH LARGE OR SMALL CONSTRUCTION ACTIVITIES TO WATER OF THE UNITED STATES WITHOUT A NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT. UNDER THE STATE OF FLORIDA'S AUTHORITY TO ADMINISTER THE NPDS STORMWATER PROGRAM, OPERATORS THAT HAVE STORMWATER DISCHARGE ASSOCIATED WITH LARGE OR SMALL CONSTRUCTION ACTIVITIES TO SURFACE WATERS OF THE STATE, INCLUDING THROUGH A MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4), MUST OBTAIN COVERAGE EITHER UNDER THE GENERIC PERMIT OR AN INDIVIDUAL PERMIT.
2. THERE A SPECIFIC ELIGIBILITY CRITERIA AND LIMITATIONS ON COVERAGE THAT CAN BE REVIEWED IN THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES DATED MAY 2003 (HENCEFORTH REFERRED TO AS "THE GENERIC PERMIT"). ACTIVITIES SPECIFICALLY DESCRIBED IN THIS STORMWATER POLLUTION PREVENTION PLAN (SWPPP) ARE COVERED. ANY ACTIVITY NOT SPECIFICALLY DISCUSSED IN THIS SWPPP MAY NOT BE COVERED AND SHOULD INMEDIATELY BE INDENTIFY TO THE TO THE SIGNATURE AUTHORITY (OWNER AND GENERAL CONTRACTOR) ON THE POSTED NOTICE OF INTENT (NOI).
3. OPERATOR SEEKING COVERAGE UNDER THIS GENERIC PERMIT TO AUTHORIZE STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY FOR NEW LARGE OR SMALL CONSTRUCTION ACTIVITIES SHALL FILE AN NOI FOR COVERAGE UNDER THIS PERMIT AT LEAST TWO (2) DAYS BEFORE COMMENCEMENT OF CONSTRUCTION. SHOULD THE OPERATOR CHANGE DURING CONSTRUCTION, THE NEW OPERATOR SHALL FILE AN NOI FOR COVERAGE UNDER THIS PERMIT AT LEAST TWO (2) DAYS BEFORE ASSUMING CONTROL OF THE PROJECT AND THE PREVIOUS OPERATOR SHALL FILE A NOTICE OF TERMINATION (NOT) TO TERMINATE PERMIT COVERAGE.
4. A COPY OF THE NOI CONFIRMING COVERAGE UNDER THIS GENERIC PERMIT SHALL BE POSTED AT THE CONSTRUCTION SITE IN A PROMINENT PLACE FOR PUBLIC VIEWING.
5. THE PERIOD OF COVERAGE UNDER THIS GENERIC PERMIT IS EFFECTIVE TWO (2) DAYS AFTER THE DATE OF SUBMITTAL OF THE COMPLETE NOI TO THE FLORIDA DEPARTMENT OF ENVIROMENTAL PROTECTION (FDEP). COVERAGE UNDER THIS GENERIC PERMIT IS LIMITED TO A TERM NOT TO EXCEED FIVE (5) YEARS FROM THE EFFECTIVE DATE OF COVERAGE.
6. EXCEPT AS NOTED IN THE GENERIC PERMIT, ALL DISCHARGES COVERED BY THIS PERMIT SHALL BE COMPOSED ENTIRELY OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY AND DISCHARGES OF MATERIAL OTHER THAN STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY MUST BE IN COMPLIANCE WITH AN FDEP PERMIT (OTHER THAN THIS PERMIT) ISSUED FOR THE DISCHARGE OR BE EXEMPT FROM PERMITTING.
7. THE FOLLOWING NON-STORMWATER DISCHARGES MAY BE AUTHORIZED BY THIS PERMIT PROVIDED THE NON-STORMWATER COMPONENT OF THE DISCHARGE IS IN COMPLIANCE WITH THE GENERIC PERMIT AND THE DISCHARGE ACTIVITIES ARE LISTED AND DESCRIBED IN THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PROVIDED BELOW: DISCHARGES FORM FIRE FIGHTING ACTIVITIES, FIRE HYDRANT FLUSHING, WATERS USED TO SPRAY OFF LOOSE SOLIDS FROM VEHICLES (WASTEWATERS FORM A MORE THOROUGH CLEANING, INCLUDING THE USE OF DETERGENTS OR OTHER CLEANERS, IS NOT AUTHORIZED BY THIS PERMIT) OR CONTROL DUST, POTABLE WATER SORCES INCLUDING WATERLINE FLUSHING, IRRIGATION DRAINAGE, ROUTINE EXTERNAL BUILDING WASHDOWN WHICH DOES NOT US DETERGENTS, PAVEMENT WASTEWATER WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED (UNLESS ALL SPILL MATERIAL HAS BEEN REMOVED) AND WHERE DETERGENTS ARE NOT USED, AIR CONDITIONING CONDENSATE, SPRINGS, AND FOUNDATIONS OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS SUCH AS SOLVENTS.
8. DISCHARGES RESULTING FROM GROUND WATER DEWATERING ACTIVITIES AT CONSTRUCTION SITES ARE NOT COVERED BY THIS PERMIT. APPLICANTS FOR THESE DISCHARGES MUST OBTAIN COVERAGE UNDER FDPE'S GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUND WATER FROM ANY NON-CONTAMINATED SITE ACTIVITY.
9. THE DISCHARGE OF HAZARDOUS SUBSTANCES OR OIL IN THE STORMWATER DISCHARGE(S) FROM A FACILITY OR ACTIVITY SHALL BE PREVENTED OR MINIMIZED IN ACCORDANCE WITH THE APLICABLE STORMWATER POLLUTION PREVENTION PLAN FOR THE FACILITY OR ACTIVITY. THIS PERMIT DOES NOT RELIEVE THE OPERATOR OF THE REPORTING REQUIREMENTS OF 40 CFR PART 117 AND 40 CFR PART 302. WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO OR IN EXCESSS OF A REPORTING QUANTITY ESTABLISHED UNDER EITHER 40 CFR 117 OR 40 CFR 302, OCCURS DURING A 24 HOUR PERIOD:
A. THE OPERATOR IS REQUIRED TO NOTIFY THE STATE WARNING POINT AT (800) 320-0519 OR (850) 413-9911 AS SOON AS HE OR SHE HAS KNOWLEDGE OF THE DISCHARGE;
B. THE OPERATOR SHALL SUBMIT WITHIN 14 CALENDAR DAYS OF KNOWLEDGE OF THE RELEASE A WRITTEN DESCRIPTION OF: THE RELEASE INCLUDING THE TYPE AND ESTIMATE OF THE AMOUNT OF MATERIAL RELEASED), THE DATE THAT SUCH RELEASE OCURRED, THE CIRCUMSTANCES LEADING TO THE RELEASE, AND REMEDIAL STEPS TO BE TAKEN, TO FDEP, NPDES STORMWATER SECTION, MAIL STATION 2500, 2600 BLAIR STONE ROAD, TALLAHASSEE, FLORIDA 32399-2400.
C. THE SWPPP BELOW MUST BE MODIFIED WITHIN 14 CALENDAR DAYS OF THE KNOWLEDGE OF THE RELEASE TO: PROVIDE A DESCRIPTION OF THE RELEASE, THE CIRCUMSTANCES LEADING TO THE RELEASE, AND THE DATE OF THE RELEASE. IN ADDITION, THE PLAN MUST BE REVIEWED TO IDENTIFY MEASURES TO PREVENT THE REOCCURRENCE OF SUCH RELEASES AND TO RESPOND TO SUCH RELEASES, AND THE PLAN MUST BE MODIFIED WHERE APPROPRIATE.
9. THIS PERMIT DOES NOT AUTHORIZE THE DISCHARGE OF HAZARDOUS SUBSTANCES OR OIL RESULTING FROM AN ON-SITE SPILL.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

1. A STORMWATER POLLUTION PREVENTION PLAN SHALL BE DEVELOPED AND IMPLEMENTED FOR EACH CONSTRUCTION SITE COVERED BY THIS PERMIT. THE PLAN SHALL IDENTIFY POTENTIAL SOURCES OF POLLUTION THAT MAY REASONABLY BE EXPECTED TO AFFECT THE QUALITY OF STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY. IN ADDITION, THE PLAN SHALL DESCRIBE AND ENSURE THE IMPLEMENTATION OF BEST MANAGEMENT PRACTICES WHICH WILL BE USED TO REDUCE THE POLLUTANTS IN STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY AND TO ASSURE COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT. FACILITIES MUST IMPLEMENT THE PROVISIONS OF THE STORMWATER POLLUTION PREVENTION PLAN REQUIRED UNDER THIS PART AS A CONDITION OF THIS PERMIT. FAILURE TO DEVELOP AND IMPLEMENT A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE REQUIREMENTS OF THIS PART SHALL BE DEEMED A VIOLATION OF THIS PERMIT AND MAY RESULT IN ENFORCEMENT ACTION.
2. THE PERMITTEE SHALL AMEND THE PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OF THE STATE OR AN MS4, INCLUDING THE ADDITION OF OR CHANGE IN LOCATION OF STORMWATER DISCHARGE POINTS, AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE PLAN. THE PERMITTEE ALSO SHALL AMEND THE PLAN IF IT PROVES TO BE INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS FROM SOURCES IDENTIFIED IN THE GENERIC PERMIT OR IN OTHERWISE ACHIEVING THE GENERAL OBJETIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY. IN ADDITION, THE PLAN SHALL BE AMENDED TO IDENTIFY ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR THAT WILL IMPLEMENT A MEASURE OF THIS SWPPP.AMENDMENTS TO THE PLAN SHALL BE PREPARED, SIGNED, DATED, AND KEPT AS ATTACHMENTS TO THE ORIGINAL PLAN. THE GENERAL CONTRACTOR'S ON-SITE PROJECT FOREMAN WILL ENSURE COMPLIANCE WITH ALL PROCEDURES OUTLINED IN THIS PLAN.

STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT FORM

INSPECTION MUST OCCUR AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM EVEN THAT IS 0.50 INCHES OR GREATER

PROJECT NAME ____________________ FDEP NPDES STORMWATER IDENTIFICATION NUMBER: ____________________

LOCATION	RAIN DATA	TYPE OF CONTROL (SEE BELOW)	DATE INSTALLED / MODIFIED	CURRENT CONDITION (SEE BELOW)	CORRECTIVE ACTION / OTHER REMARKS

CONDITION CODE: G = GOOD; C = NEEDS TO BE CLEANED; M = MARGINAL, NEEDS MAINTENANCE OR REPLACEMENT SOON; O = OTHER; P = POOR, NEEDS IMMEDIATE MAINTENANCE OR REPLACEMENT

LOCATION

1. SILT FENCE	10. STORM DRAIN INLET PROTECTION	19. REINFORCED SOIL RETAINING SYSTEM	28. TREE PROTECTION
2. EARTH DIKES	11. VEGETATIVE BUFFER STRIP	20. GABION	29. DETENTION POND
3. STRUCTURAL DIVERSION	12. VEGETATIVE PRESERVATION AREA	21. SEDIMENT BASIN	30. RETENTION POND
4. SWALE	13. RETENTION POND	22. TEMPORARY SEED / SOD	31. WASTE DISPOSAL / HOUSEKEEPING
5. SEDIMENT TRAP	14. CONSTRUCTION ENTRANCE STABILIZATION	23. PERMANENT SEED / SOD	32. DAM
6. CHECK DAM	15. PERIMETER DITCH	24. MULCH	33. SAND BAG
7. SUBSURFACE DRAIN	16. CURB AND GUTTER	25. HAY BALES	34. OTHER
8. PIPE SLOPE DRAIN	17. PAVED ROAD SURFACE	26. GEOTEXTILE	
9. LEVEL SPREADERS	18. ROCK OULET PROTECTION	27. RIP-RAP	

INSPECTOR INFORMATION:

NAME ____________________ QUALIFICATION ____________________ DATE ____________________

THE ABOVE SIGNATURE ALSO SHALL CERTIFY THAT THIS FACILITY IS IN COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN AND THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES IF THERE ARE NOT ANY INCIDENTS OF NON-COMPLIANCE IDENTIFIED ABOVE.

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED UPON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING.

NAME (RESPONSIBLE AUTHORITY) ____________________ DATE ____________________

SEQUENCE OF MAJOR ACTIVITY	RESPONSIBLE CONTRACTOR OR SUBCONTRACTOR	START DATE
A. INSTALL TEMPORALY PERIMETER EROSION AND SEDIMENT CONTROL - SILT FENCE		
B. INSTALL STABILIZED CONSTRUCTION ENTRANCE		
C. SELECTIVELY CLEAR & GRUB SITE WITHIN SILT FENCE		
D. PILE AND REMOVE EXCESS TOP SOIL		
E. EXCAVATE STORMWATER MANAGEMENT POND		
F. STABILIZE DENUDED AREAS AND STOCKPILES WITH 14 CALENDAR DAYS OF LAST CONSTRUCTION ACTIVITY IN A SPECIFIC AREA		
G. INSTALL STORMWATER MANAGEMENT SYSTEM ALONG WITH TEMPORARY DRAIN SEDIMENT CONTROL		
H. ADD FILL, GRADE AND STABILIZE AREA UNDER BUILDING FOOTPRINTS AND PAVEMENT.		
I. CONSTRUCT BUILDINGS		
J. INSTALL UTILITIES		
K. INSTALL CURBING AND GUTTERS		
L. INSTALL IRRIGATION SYSTEM		
M. COMPLETE FINAL GRADING AND INSTALL LAST OF SOD AND PLANTINGS		
N. COMPLETE PAVING (IF APPLICABLE)		
O. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND SITE IS STABILIZED, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL, RE-GRADE AND RE-SOD ANY AREAS DISTURBED BY REMOVAL ACTIVITIES		

CONTROLS

EROSION AND SEDIMENT CONTROLS - STABILIZATION
1. TEMPORARY STABILIZATION - SOIL AND BASE MATERIALS STAGED, STOCKPILED, OR STORED ON-SITE ALONG WITH ANY DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR AT LEAST 21 DAYS WILL BE STABILIZED WITH TEMPORARY SEED AND STRAW MULCH NOT LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEED SHALL BE APPLIED AT A RATE TO ENSURE APPROPRIATE COVERAGE TO PREVENT EROSION. FERTILIZATION WILL BE PROVIDED PRIOR TO SEEDING. AFTER SEEDING, STRAW MULCH OR MATTING MATERIAL WILL BE APPLIED IN ORDER TO PREVENT EROSION AND HOLD THE SEED UNTIL IT GERMINATES AND IS ESTABLISHED. APPLICATION RATES AND THE CHOICES OF STRAW OR MATTING IS SLOPE DEPENDENT, SUB-BASE AND BASE MATERIALS WILL BE APPLIED TO PAVED AREAS AND COMPACTED TO TEMPORARILY STABILIZE THEM UNTIL PAVEMENT IS APPLIED. TEMPORARY STABILIZATION STRUCTURES AND MATERIALS WILL BE MAINTAINED UNTIL CONSTRUCTION ACTIVITIES ARE COMPLETE.

2. PERMANENT STABILIZATION - DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASE SHALL BE STABILIZED WITH SOD OR OTHER GROUND COVER AS DESCRIBED IN THE LANDSCAPE PLANS NOT LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY THE SOD AND OTHER PLANTINGS SHALL BE MAINTAINED IN A MANNER TO PRESERVE AND MAINTAIN HEALTHY GROWTH.

STRUCTURAL PRACTICES

1. THE SILT FENCE SURROUNDING THE CONSTRUCTION SITE WILL BE THE PRIMARY METHOD TO CONTROL THE QUALITY OF RUNOFF UNTIL THE PERMANENT STORMWATER MANAGEMENT SYSTEM IS INSTALLED AND OPERATIONAL. TEMPORARY SILT BARRIERS USING EITHER HAY BALES OR SUPPLIER SPECIFIC ATTACHMENTS MAY BE INSTALLED TO PROTECT THE NEWLY INSTALLED STORMWATER MANAGEMENT SYSTEM UNTIL THE DRAINAGE AREAS ARE STABILIZED. THE CONTRACTOR WILL PROTECT ALL STORMWATER INLETS WITHIN AFFECTED AREAS TO PREVENT SILT OR SEDIMENT FROM ENTERING THE PUBLIC STORWATER MANAGEMENT SYSTEM. THIS CAN BE ACCOMPLISHED THROUGH SEVERAL COMMONLY ACCEPTED PRACTICES SUCH AS SAND BAGS, INFILTRATION PIPE WRAPPED IN GEOTEXTILE, ETC.

2. SEDIMENT BASINS ARE NOT REQUIRED FOR SITES UNDER 10 ACRES BUT ARE RECOMMENDED DEPENDING UPON THE EXPECTED PRECIPITATION DURING THE CONSTRUCTION PERIOD. SEDIMENT BASINS OR TRAPS SHOULD NOT BE CONSTRUCTED IN THE STORMWATER MANAGEMENT POND AREAS UNLESS ACCUMULATED SEDIMENT AND SILT ARE REMOVED FROM THE SITE ONCE CONSTRUCTION IS COMPLETE AND AS LONG AS THE CONSTRUCTION EQUIPMENT REMOVING THE ACCUMULATED SEDIMENT AND SILT WILL NOT EXCESSIVELY COMPACT THE AREA WITHIN THE POND HINDERING INFILTRATION OF THE SOILS.

CONTROLS FOR OTHER POTENTIAL POLLUTANTS

1. WASTE MATERIALS - ALL WASTE MATERIALS WILL BE COLLECTED AND STORED SECURELY IN DUMPSTERS. SEPARATE DUMPSTERS WILL BE MAINTAINED FOR COMMON TRASH AND CONSTRUCTION DEBRIS IN THAT THESE ARE DISPOSED OF AT DIFFERENT LOCATIONS. COMMON TRASH WILL BE CONNECTED AND STORED IN A LIDDED DUMPSTER TO PREVENT WIND BLOWN DISTRIBUTION AND ACCESS BY VECTORS OR ANIMALS. THE DUMPSTERS WILL MEET LOCAL GOVERNING AGENCY'S SOLID WASTE REGULATIONS AND WILL BE DUMPED A MINIMUN OF ONCE A WEEK OR MORE OFTEN AS REQUIRED. NO WASTE MATERIALS WILL BE BURIED ON- SITE. ALL PERSONNEL WILL BE INSTRUCTED ON PROPER WASTE HANDLING AND DISPOSAL PROCEDURES.
2. HAZARDOUS WASTE - ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY THE LOCAL GOVERNING AGENCY, THE STATE OF FLORIDA, FEDERAL GOVERMENT, OR BY THE MANUFACTURER, SITE PERSONNEL WILL BE INSTRUCTED IN THE PRACTICES.
3. SANITARY WASTE - ALL SANITARY WASTE WILL BE COLLECTED FROM PORTABLE UNITS A MINIMUN OF THREE TIMES PER WEEK BY ____________________COMPANY, LICENSED IN GOVERNING JURISDICTION AS A SANITARY WASTE MANAGEMENT CONTRACTOR.

OFF-SITE VEHICLE TRACKING AND DUST CONTROL

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED AND MAINTAINED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. ALL STREETS WITH CONSTRUCTION ENTRANCES WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN. BASED UPON SITE CONDITIONS, WATER WILL BE SPRAYED BY MECHANICAL MEANS TO CONTROL FUGITIVE DUST EMISSIONS PREVENTING THEM FROM LEAVING THE CONSTRUCTION SITE.

MAINTENANCE / INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES.
THESE ARE THE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

1. ALL CONTROL MEASURES WILL BE INSPECTED AT LEAST ONCE EACH WEEK AND WITHIN 24 HOURS OF THE END OF ANY STORM EVENT OF 0.5 INCHES OR GREATER AS FOLLOWS: DISTURBED AREA AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR POTENTIAL FOR, POLLUTANTS ENTERING THE STORMWATER SYSTEM. THE STORMWATER MANAGEMENT SYSTEM AND EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. DISCHARGE LOCATIONS OR POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION AND SEDIMENT CONTROL AND STORMWATER TREATMENT MEASURES ARE EFFECTIVE IN PREVENTING OR MINIMIZING THE DISCHARGE OF POLLUTANTS INCLUDING RETAINING SEDIMENT ON-SITE. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING.
2. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF THE REPORT AND SHALL BE COMPLETE WITHIN 7 CALENDAR DAYS FOLLOWING THE INSPECTION.
3. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
4. SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
5. THE SEDIMENT BASIN WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB.
6. ANY DIVERSION DIKE WILL BE INSPECTED AND BREACHES PROMPTLY REPAIRED.
7. TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
8. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS SHOWN ON THIS SHEET.
9. THE GENERAL CONTRACTOR'S ON-SITE FOREMAN WILL SELECT THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTION, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
10. PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSABILITIES WILL RECEIVE TRAINING THROUGH THE GENERAL CONTRACTOR. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ON-SITE IN GOOD WORKING ORDER.
11. A QUALIFIED INSPECTOR IS DEFINED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AS A PERSON THAS HAS SUCCESSFULLY COMPLETED AND MET ALL REQUIREMENTS NECESSARY TO BE FULLY CERTIFIED THROUGH THE FDEP STORMWATER, EROSION, AND SEDIMENTATION CONTROL INSPECTOR TRAINING PROGRAM; HAS SUCCESFULLY COMPLETED AN EQUIVALENT FORMAL TRAINING OR PRACTICAL EXPERIENCE IN THE FILED OF STORMWATER POLLUTION PREVENTION AND EROSION AND SEDIMENT CONTROL.

RETENTION OF RECORDS

1. THE PERMITTEE OWNER SHALLL RETAIN COPIES OF THE STORMWATER POLLUTION PREVENTION PLANS AND ALL REPORTS REQUIRED BY THIS PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT, FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED.
2. THE PERMITTEE GENERAL CONTRACTOR SHALL RETAIN A COPY OF THE STORMWATER POLLUTION PREVENTION PLAN AND ALL REPORTS, RECORDS AND DOCUMENTS REQUIRED BY THIS PERMIT AT THE CONSTRUCTION SITE, OR AN APPROPRIATE ALTERNATIVE LOCATION AS SPECIFIED IN THE NOI, FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION. ALL OF THESE RECORDS, DOCUMENTS, ETC. WILL BE PRESENTED TO THE OWNER TO BE RETAINED FOR THE PERIOD SPECIFIED ABOVE.

NON-STORMWATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORMWATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD. AL NON-STORMWATER DISCHARGES WILL BE DIRECTED INTO A SEDIMENT BASIN PRIOR TO DISCHARGE IF THE DISCHARGE IS NOT CAPTURED BY THE SILT FENCE PRIOR TO CONSTRUCTION OF THE ON-SITE STORMWATER MANAGEMENT SYSTEM OR ENTERS THE ON-SITE STORMWATER MANAGEMENT SYSTEM.

1. WATER FORM WATER LINE FLUSHING.
2. PAVEMENT WASH WATERS WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCURRED.
3. UNCONTAMINATED GROUNDWATER FROM DE-WATERING EXCAVATION.
4. WATER FROM HIRE FIGHTING ACTIVITIES.

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORMWATER RUNOFF.

HOUSEKEEPING PRACTICES

THE FOLLOWING HOUSEKEEPING PRACTICES WILL BE FOLLOWED ON-SITE DURING THE CONSTRUCTION PROJECT:

1. AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
2. ALL MATERIALS STORED ON-SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND , IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
3. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
4. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
5. WHENEVER POSSIBLE, ALL OF PRODUCT WILL BE USED BEFORE DISPOSING OF THE CONTAINER.
6. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
7. THE GENERAL CONTRACTOR'S ON-SITE PROJECT FOREMAN WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.

HAZARDOUS PRODUCTS

THESE SERVICES WILL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:

1. PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY CANNOT BE RESEALED.
2. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
3. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL/STATE/FEDERAL RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES

THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON-SITE:

PETROLEUM PRODUCTS - ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ON-SITE WILL BE APPLIED TO THE MANUFACTURER'S RECOMMENDATIONS.
FERTILIZE - FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. STORAGE WILL BE IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
PAINTS - ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORE WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO ON-SITE OR COUNTY STORMWATER MANAGEMENT SYTEMS, BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS OR LOCAL, STATE, FEDERAL REGULATIONS.
CONCRETE TRUCKS - CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISPOSE OF SURPLUS CONCRETE OR DRUM WASH WATER ON THIS SITE.

SPILL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION CLEANUP:

1. MANUFACTURE'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
2. MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON-SITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, SHOVELS, RAGS, GLOVES, KITTY LITTER,SAND,SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
3. ALL SPILLS WILL BE CLEANED UP AFTER DISCOVERY.
4. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
5. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE STATE WARNING POINT AS EARLIER DESCRIBED REGARDLESS OF SIZE.
6. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE, A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
7. THE GENERAL CONTRACTOR'S ON-SITE PROJECT FOREMAN RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE PROJECT FOREMAN WILL DESIGNATE AT LEAST THREE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF THE RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA, IN THE OFFICE TRAILER ON-SITE AND NEAR THIS PLAN.

STORMWATER POLLUTION PLAN CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONEEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSON WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNED:____________________ DATE:____________________

NAME & TITLE:____________________

NOTE: THE INDIVIDUAL SIGNING THIS IS THE SAME INDIVIDUAL WHO SIGNS (ED) THE NOTICE OF INTENT (NOI) SECTION VI CERTIFICATION.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

GENERAL CONTRACTOR FIRM: ____________________
ADDRESS: ____________________
SIGNATURE: ____________________ TELEPHONE: ____________________
NAME: ____________________ TITLE: ____________________
RESPONSIBLE FOR: ____________________

SUBCONTRACTOR FIRM: ____________________
ADDRESS: ____________________
SIGNATURE: ____________________ TELEPHONE: ____________________
NAME: ____________________ TITLE: ____________________
RESPONSIBLE FOR: ____________________

SUBCONTRACTOR FIRM: ____________________
ADDRESS: ____________________
SIGNATURE: ____________________ TELEPHONE: ____________________
NAME: ____________________ TITLE: ____________________
RESPONSIBLE FOR: ____________________

SUBCONTRACTOR FIRM: ____________________
ADDRESS: ____________________
SIGNATURE: ____________________ TELEPHONE: ____________________
NAME: ____________________ TITLE: ____________________
RESPONSIBLE FOR: ____________________

SUBCONTRACTOR FIRM: ____________________
ADDRESS: ____________________
SIGNATURE: ____________________ TELEPHONE: ____________________
NAME: ____________________ TITLE: ____________________
RESPONSIBLE FOR: ____________________

SUBCONTRACTOR FIRM: ____________________
ADDRESS: ____________________
SIGNATURE: ____________________ TELEPHONE: ____________________
NAME: ____________________ TITLE: ____________________
RESPONSIBLE FOR: ____________________

SUBCONTRACTOR FIRM: ____________________
ADDRESS: ____________________
SIGNATURE: ____________________ TELEPHONE: ____________________
NAME: ____________________ TITLE: ____________________
RESPONSIBLE FOR: ____________________

SUBCONTRACTOR FIRM: ____________________
ADDRESS: ____________________
SIGNATURE: ____________________ TELEPHONE: ____________________
NAME: ____________________ TITLE: ____________________
RESPONSIBLE FOR: ____________________

SUBCONTRACTOR FIRM: ____________________
ADDRESS: ____________________
SIGNATURE: ____________________ TELEPHONE: ____________________
NAME: ____________________ TITLE: ____________________
RESPONSIBLE FOR: ____________________

SUBCONTRACTOR FIRM: ____________________
ADDRESS: ____________________
SIGNATURE: ____________________ TELEPHONE: ____________________
NAME: ____________________ TITLE: ____________________
RESPONSIBLE FOR: ____________________

I, ____________________ ACKNOWLEDGE THE PLACEMENT OF ALL STORMWATER POLLUTION PROTECTION MEASURES REQUIRED TO ASSURE THAT SILTED AND/OR POLLUTED STORMWATER IS NOT DISCHARGED FROM THIS SITE AND SHALL ENSURE THAT THE SURFACE WATER AND STORMWATER MANAGEMENT MEASURES PROPOSED IN THIS PLAN ARE EFFECTIVELY IMPLEMENTED UNTIL THE PERMANENT SURFACE WATER MANAGEMENT SYSTEM IS OPERATIONAL.

OWNER/PERMITTEE SIGNATURE ____________________ DATE

NOTE: THE GENERAL CONTRACTOR SHALL FILL IN THE BLANKS AS INFORMATION BECOMES AVAILABLE. THE GENERAL CONTRACTOR SHALL REQUIRE ALL SUBCONTRACTORS TO SIGN THIS PLAN AND MAKE THEM COMPLY WITH ALL REQUIREMENTS OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) DURING CONSTRUCTION.

No.	BY	DATE	REVISIONS DESCRIPTION

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

CONTENT: STORMWATER POLLUTION PREVENTION CERTIFICATION

PROJECT: McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638
SITE ID 009-2580

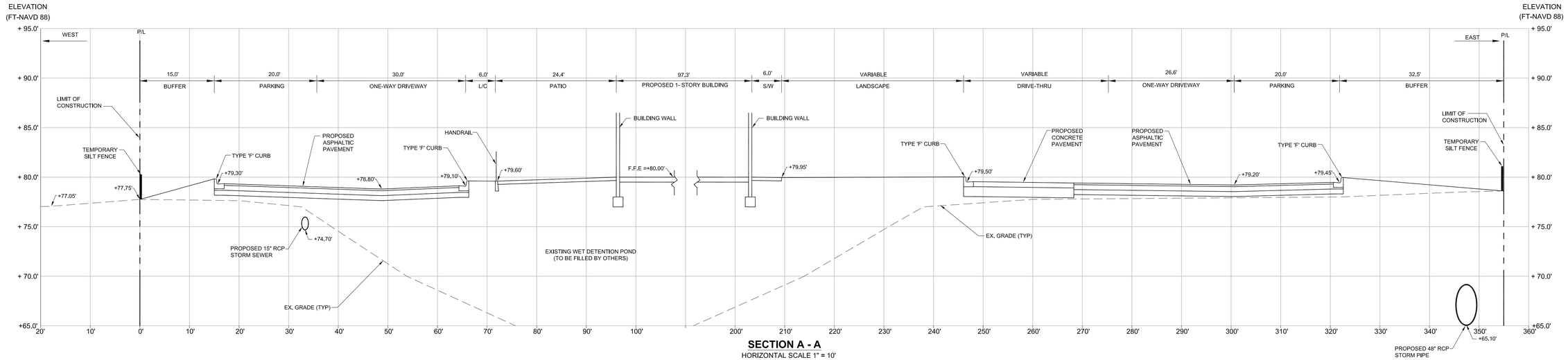
HPE HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
Tel. (813) 644-8333
Fax (813) 644-7000
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

©COPYRIGHT 2015

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

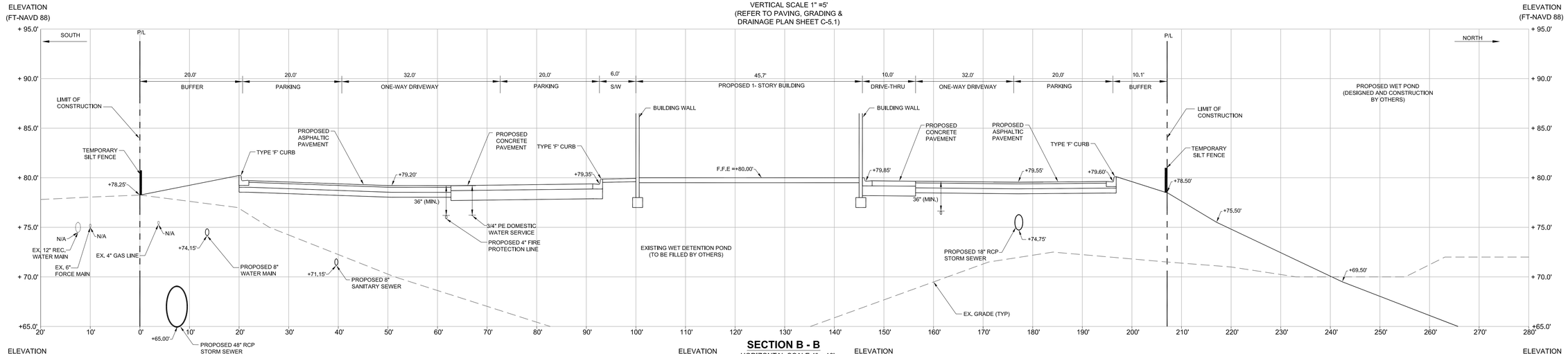
58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date
COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

SHEET: C-5.3



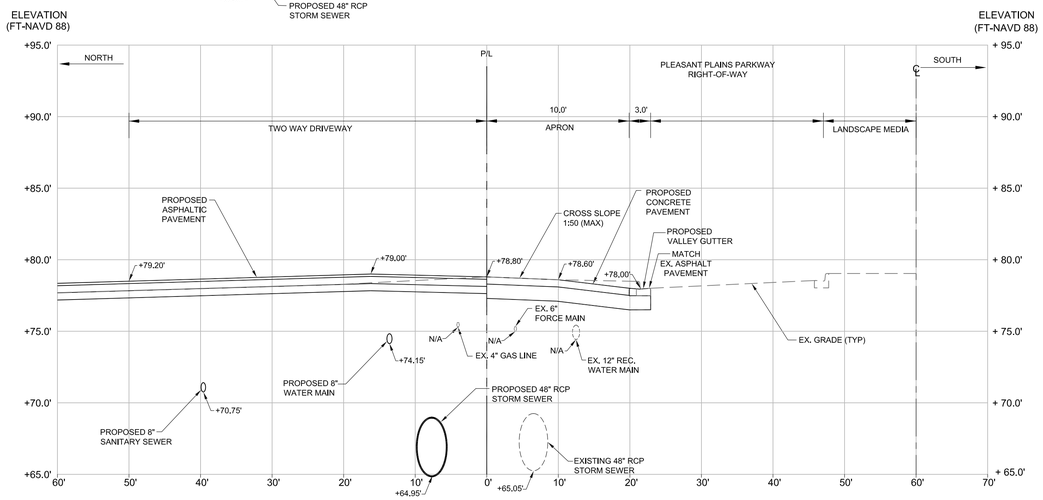
SECTION A - A

HORIZONTAL SCALE 1" = 10'
VERTICAL SCALE 1" =5'
(REFER TO PAVING, GRADING & DRAINAGE PLAN SHEET C-5.1)



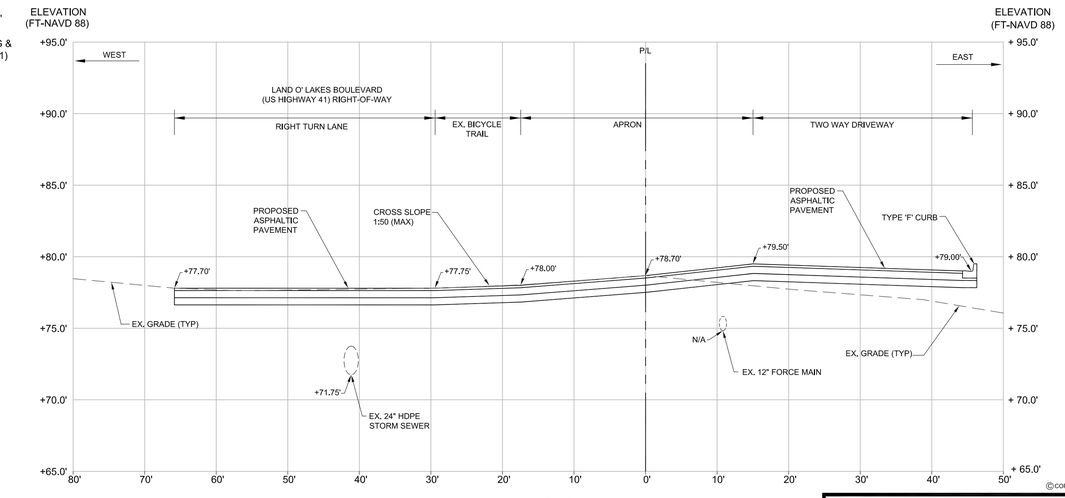
SECTION B - B

HORIZONTAL SCALE 1" = 10'
VERTICAL SCALE 1" =5'
(REFER TO PAVING, GRADING & DRAINAGE PLAN SHEET C-5.1)



SECTION C - C

HORIZONTAL SCALE 1" = 10'
VERTICAL SCALE 1" =5'
(REFER TO PAVING, GRADING & DRAINAGE PLAN SHEET C-5.1)



SECTION D - D

HORIZONTAL SCALE 1" = 10'
VERTICAL SCALE 1" =5'
(REFER TO PAVING, GRADING & DRAINAGE PLAN SHEET C-5.1)

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC, UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date

COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

©COPYRIGHT 2015

No.	BY	DATE	DESCRIPTION

REVISIONS

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

SITE ID 009-2580

CONTENT: CROSS SECTIONS

PROJECT: McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638

HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET: C-5.4

PASCO COUNTY UTILITIES NOTES

1. IN CONSIDERATION OF PASCO COUNTY'S AGREEMENT TO PROVIDE POTABLE WATER AND/OR RECLAIMED WATER TO THE SUBJECT PROPERTY, DEVELOPER/OWNER, AND ITS SUCCESSORS AND ASSIGNS, AGREE TO THE FOLLOWING:
   1.1. IN THE EVENT OF PRODUCTION FAILURE OR SHORTFALL BY TAMPA BAY WATER, AS SET FORTH IN SECTION 3.19 OF THE INTERLOCAL AGREEMENT CREATING TAMPA BAY WATER, DEVELOPER/OWNER SHALL TRANSFER TO PASCO COUNTY ANY AND ALL WATER USE PERMITS OR WATER USE RIGHTS THE DEVELOPER/OWNER MAY HAVE TO USE OR CONSUME SURFACE OR GROUND WATER WITHIN PASCO COUNTY.
   1.2. PRIOR TO DEVELOPER/OWNER SELLING WATER OR WATER USE PERMITS OR WATER USE RIGHTS, DEVELOPER/OWNER SHALL NOTIFY PASCO COUNTY, AND PASCO SHALL HAVE A RIGHT OF FIRST REFUSAL TO PURCHASE SUCH WATER OR WATER USE PERMITS OR WATER USE RIGHTS.

2. SANITARY SEWER PLUGS SHALL BE INSTALLED AT THE BEGINNING OF THE CONSTRUCTION BY THE CONTRACTOR AND SHALL REMAIN IN PLACE UNTIL THE SYSTEM HAS BEEN CLEANED, INSPECTED, AND APPROVED BY THE UTILITIES SERVICES BRANCH. WHEN THE SYSTEM HAS BEEN APPROVED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF THE PLUGS.

3. FIRE HYDRANTS MUST BE FLOW-TESTED AND COLOR-CODED BASED ON THE FLOW RESULTS.

4. ALL UTILITY SYSTEM-DESIGN MATERIALS AND WORKMANSHIP MUST COMPLY WITH STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER, WASTEWATER, AND RECLAIMED WATER FACILITIES SPECIFICATIONS, LATEST EDITION.

5. CONNECTIONS INTO EXISTING COUNTY- OWNED SYSTEM SHALL BE VIA WET TAP. WET TAPS SHALL BE PERFORMED BY THE UTILITIES SERVICES BRANCH AT THE DEVELOPER'S EXPENSE, EXCAVATION, BACKFILL, AND SURFACE RESTORATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. MATERIAL FOR WET TAPS LARGER THAN TWO INCHES SHALL BE PROVIDED AND INSTALLED BY THE PROJECT CONTRACTOR.

6. THE UTILITIES SERVICES BRANCH SHALL NOT OWN OR MAINTAIN WATER AND SEWER LINES OR FACILITIES ON-SITE.

CONTRACTOR'S RESPONSIBILITIES

1. **2" ONLY** - THIS EXCAVATED TRENCH MUST BE DRY OR THE TRENCH WILL REQUIRE ROCK AND A PUMP TO BE IN PLACE. THE MINIMUM DISTANCE FROM THE FACE OF THE VALVE TO THE WALL OF THE TRENCH IS TO BE SIX FEET.
2. **3" AND LARGER** - THE CONTRACTOR WILL SUPPLY A TAPPING SADDLE BEING EPOXY COATED, A TAPPING VALVE WITH 2 MECHANICAL JOINT AND THE EQUIPMENT TO PROVIDE, AND CONDUCT A PRESSURE TEST WHICH MUST BE AT 150 PSI FOR DURATION OF THIRTY MINUTES.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE EXCAVATION BEFORE ANY COUNTY PERSONNEL WILL ENTER AND EXCAVATED AREA. IF THE TRENCH IS FOUR FEET IN DEPTH OR DEEPER, IT WILL REQUIRE A TRENCH BOX OR SLOPING, AND A LADDER ACCORDING TO OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS.
4. THE TAPPING VALVE WILL REQUIRE A BLOCKING DEVICE MADE OF SUITABLE MATERIAL OR DEVICE. THIS BLOCKING DEVICE OR MATERIAL WILL BE PLACED UNDER THE VALVE AND REMAIN IN PLACE UNTIL THE TAP MACHINE IS REMOVED AND THE TAP IS COMPLETED.
5. IF THE CONTRACTOR HAS NOT FULFILLED HIS RESPONSIBILITIES, AS STATED ABOVE, PRIOR TO THE ARRIVAL OF PASCO COUNTY UTILITIES OPERATIONS AND MAINTENANCE TAPPING CREW, THERE WILL BE AN ADDITIONAL CHARGE OF $92.00.

IMPORTANT NOTES TO CONTRACTOR

1. THE CONTRACTOR SHALL COORDINATE ALL WORK WITHIN, BUT NOT LIMITED TO, PASCO COUNTY AND FDOT RIGHT-OF-WAY WITH ALL UTILITY COMPANIES IN ORDER TO PREVENT DAMAGE TO UNDERGROUND FACILITIES AND DISRUPTION OF SERVICES.

2. UTILITIES SUCH AS WITHLACOOCHEE UNDERGROUND POWER CABLES, TECO PEOPLES GAS MAINS, VERIZON COMMUNICATION CABLES AND BRIGHT HOUSE NETWORKS COMMUNICATION CABLES , PASCO COUNTY UTILITIES POTABLE AND RECLAIMED WATER MAINS, PASCO COUNTY UTILITIES SANITARY SEWER LINES, ETC ARE BELIEVED TO BE WITHIN RIGHTS-OF-WAY AND MAY CONFLICT WITH THE PROPOSED UTILITY WORK. THERE IS NO GUARANTEE THAT THESE UTILITIES ARE LOCATED AS SHOWN OR THAT OTHER UTILITIES MAY NOT BE PRESENT. THE CONTRACTOR IS FULLY RESPONSIBLE WHEN USING THE INFORMATION CONTAINED IN THESE PLANS AND SHALL CONDUCT STUDIES, TESTS AND SURVEYS AS DEEMED NECESSARY TO MAKE THEIR OWN DETERMINATION AS TO THE ACTUAL VERTICAL AND HORIZONTAL LOCATION OF ALL UNDERGROUND FACILITIES PRIOR TO START OF CONSTRUCTION.

3. TO PREVENT DAMAGE TO UNDERGROUND UTILITIES AND DISRUPTION OF SERVICES, THE CONTRACTOR SHALL FIELD VERIFY EXACT SIZE, DEPTH, INVERT ELEVATION AND LOCATION OF ALL UTILITIES PRIOR TO START OF CONSTRUCTION. TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL PHYSICALLY EXPOSE ALL UTILITIES USING NONDESTRUCTIVE METHODS (I.E. VACUUM EXCAVATION).

4. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH OWNER'S ENGINEER WITH COMPLETE "AS-BUILT" INFORMATION CERTIFIED BY A REGISTERED LAND SURVEYOR. THIS "AS-BUILT" INFORMATION SHALL BE PRODUCED WITH AND UPON COMPLETION, THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH DISKS OF ALL DRAWINGS, ONE SET OF REPRODUCIBLE PLANS, AND FIVE SETS OF PLANS. THE "AS-BUILT" INFORMATION SHALL CLEARLY AND ACCURATELY REPRESENT ALL CONSTRUCTED ITEMS INCLUDING, BUT NOT LIMITED TO:

A. ELEVATIONS OF ALL STORM SEWER OUTFALL STRUCTURES AND SANITARY SEWER STRUCTURE BOTTOMS, TOPS, AND INVERTS.

B. FIELD MEASURED LENGTHS OF PIPES FOR ALL INSTALLED UTILITIES, CONDUITS, SLEEVES, ETC.

C. LOCATIONS OF ALL STRUCTURES, PIPES, CONDUITS, SLEEVES, ETC.

D. CALCULATED SLOPE OF ALL SANITARY SEWER AND STORM SEWER LINES.

E. HORIZONTAL AND VERTICAL CONTROL OF ALL WATER MAIN FITTINGS AND APPURTENANCES, AND HORIZONTAL AND VERTICAL CONTROL ON THE TOP OF WATER MAINS AT ALL CROSSINGS, AND A MINIMUM OF EVERY 200 LINEAL FEET OF PIPE.

F. HORIZONTAL AND VERTICAL CONTROL OF ALL TOP OF BANKS, TOE OF SLOPES, ALL GRADE BREAKS, BUILDINGS, PONDS, DITCHES, LITTORAL ZONES, ETC.

5. NO ENGINEER'S CERTIFICATIONS CAN BE SUBMITTED TO OBTAIN A CERTIFICATE OF OCCUPANCY UNTIL THE "AS-BUILT" INFORMATION IS RECEIVED, REVIEWED, AND APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL ALLOW THE ENGINEER A MINIMUM OF FOUR WEEKS TO COMPLETE THE REVIEW OF THE "AS-BUILT" INFORMATION UPON RECEIPT, PRIOR TO SUBMITTAL TO APPLICABLE AGENCIES.

STANDARD FIRE PROTECTION NOTES

A. THE PROJECT MUST COMPLY WITH PASCO COUNTY FIRE HYDRANT ORDINANCE NO. 46-5.

B. FIRE HYDRANT(S) SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.

C. PER THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA-1 , 16.4.3.1.3; WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK.

D. PER NFPA-1, 18.3.4.1; CLEARANCES OF 7.5 FEET IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANT WITH 4.4 FEET CLEARANCE TO THE REAR MUST BE MAINTAINED AT ALL TIMES.

E. GATED ENTRIES REQUIRE A SIREN OPENING SYSTEM OR A 3M OPTICOM SYSTEM FOR EMERGENCY ACCESS.

F. A SEPARATE PLAN AND PERMIT, ISSUED TO A CONTRACTOR LICENSED BY THE FLORIDA STATE FIRE MARSHALS OFFICE, IS REQUIRED FOR THE INSTALLATION OF UNDERGROUND FIRES LINES.

IMPORTANT UTILITIES NOTES

1. ALL UTILITIES ARE TO BE LOCATED UNDERGROUND PER PASCO COUNTY STANDARDS AND SPECIFICATIONS.

2. PER FLORIDA BUILDING PLUMBING CODE 2007 SECTION 603.2, WATER SERVICE PIPE AND THE BUILDING SEWER SHALL BE SEPARATED BY 5' OF UNDISTURBED OR COMPACTED EARTH.

3. PER FLORIDA BUILDING PLUMBING CODE 2007 SECTION 603.2, THE REQUIRED SEPARATION DISTANCE SHALL NOT APPLY WHERE THE BOTTOM OF THE WATER SERVICE PIPE WITHIN 5' OF THE SEWER IS A MINIMUM OF 12" ABOVE THE TOP OF THE HIGHEST POINT OF THE SEWER AND THE PIPE MATERIALS CONFORM TO FLORIDA BUILDING PLUMBING CODE 2007 TABLE 702.3.

WATER SERVICE PIPE IS PERMITTED TO BE LOCATED IN THE SAME TRENCH WITH A BUILDING SEWER, PROVIDED SUCH SEWER IS CONSTRUCTED OF MATERIALS LISTED IN FLORIDA BUILDING PLUMBING CODE 2007 TABLE 702.2.

THE REQUIRED SEPARATION DISTANCE SHALL NOT APPLY WHERE A WATER SERVICE PIPE CROSSES A SEWER PIPE. PROVIDED THE WATER SERVICE PIPE IS SLEEVED TO AT LEAST 5' HORIZONTALLY FROM THE SEWER PIPE CENTERLINE ON BOTH SIDES OF SUCH CROSSING WITH PIPE MATERIALS LISTED IN FLORIDA BUILDING PLUMBING CODE 2007 TABLE 605.3, 702.2 OR 702.3.

4. SOD ALL AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION.

5. THE CONTRACTOR IS TO COORDINATE ALL WORK WITHIN, BUT NOT LIMITED TO, PASCO COUNTY RIGHTS-OF-WAY WITH UTILITY COMPANIES IN ORDER TO PREVENT DAMAGE TO UTILITY LINES AND THE MAKING OF ADJUSTMENTS TO SAME, IF REQUIRED.

6. THE CONTRACTOR SHALL VERIFY LOCATIONS AND DEPTHS OF EXISTING WATER AND SEWER LINES PRIOR TO BEGINNING CONSTRUCTION.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL ROAD CROSSING AND/OR UTILITY PERMITS.

8. ADJUSTING MANHOLE TOPS TO MATCH GRADE AND SLOPE OF THE FINISH PAVING SHALL BE INCLUDED IN THE RESPECTIVE CONTRACT UNIT PRICE FOR MANHOLES. PAYMENT OF WHICH WILL CONSTITUTE FULL COMPENSATION FOR THE CONSTRUCTION AND COMPLETION OF THE MANHOLE, AND NO ADDITIONAL PAYMENT WILL BE ALLOWED OR MADE FOR ADJUSTING MANHOLE TOPS.

9. BENDS SHALL BE INSTALLED IN FORCE MAIN AND/OR WATER MAIN TO AVOID UNFORESEEN CONFLICTS WITH EXISTING OR PROPOSED STRUCTURES.

10. THE JOINT DEFLECTION METHOD SHALL BE USED WHERE PRACTICAL IN LIEU OF INSTALLING BENDS.

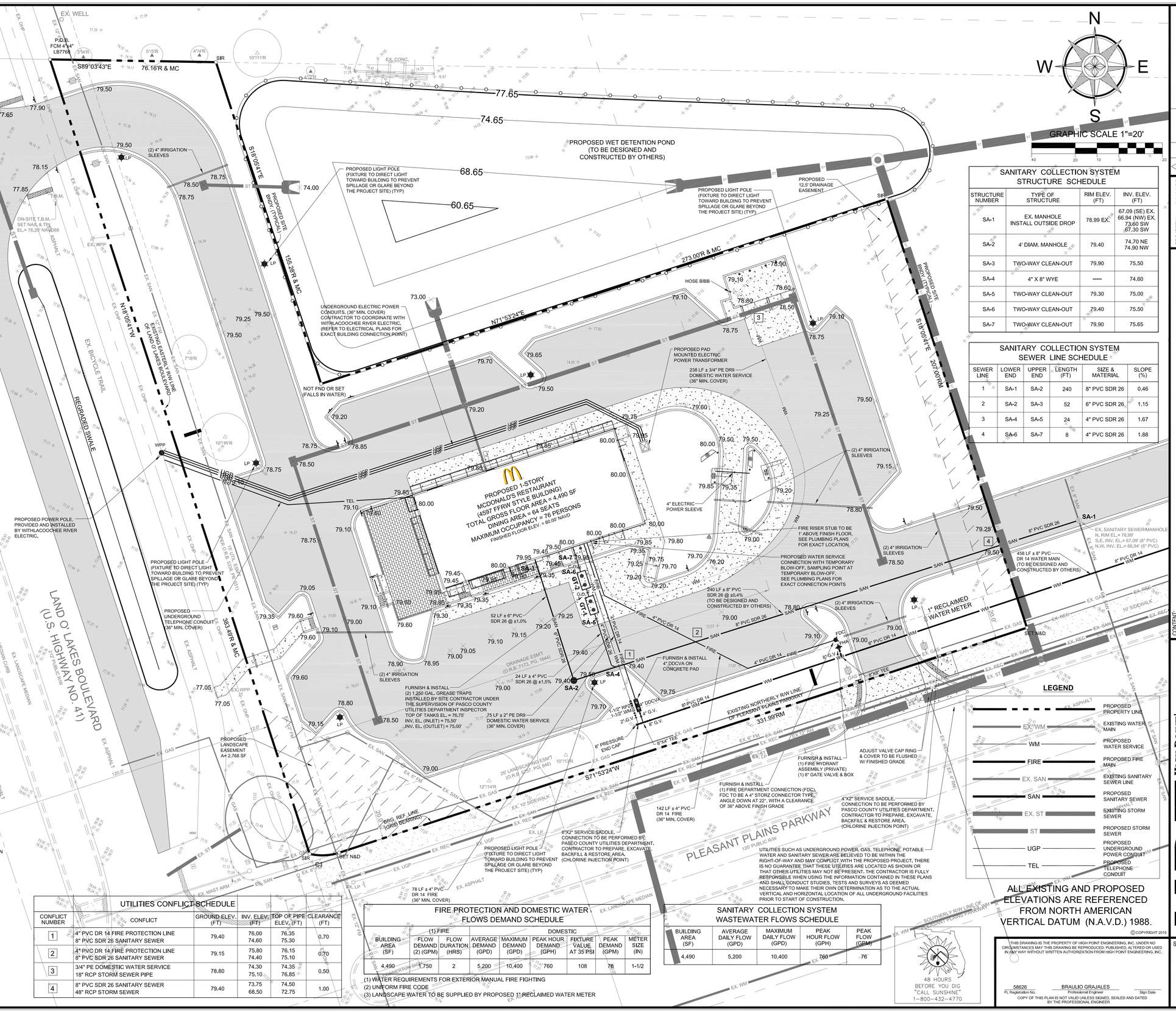
11. UNDERGROUND WATERMAINS AND HYDRANTS MUST BE COMPLETED AND IN-SERVICE PRIOR TO BUILDING CONSTRUCTION.

12. THE LOCATION OF ALL TEMPORARY BLOWOFF'S AND SAMPLE POINTS MUST MEET PASCO COUNTY'S HEALTH DEPARTMENT REQUIREMENTS.

13. PASCO COUNTY, AT THE APPLICANT'S EXPENSE, WILL REMOVE/RELOCATE ANY/ALL WATER METERS THAT HAVE TO BE RELOCATED AS PART OF THIS DEVELOPMENT, INCLUDING RECLAIMED WATER METERS. (NO METERS SHALL BE LOCATED WITHIN ANY IMPERVIOUS AREAS.)

14. PASCO COUNTY WILL PROVIDE WATER MAIN TAP, SET THE WATER METER AND A B.F.P.D. (BACK FLOW PREVENTER DEVICE). APPLICANT IS RESPONSIBLE FOR ALL ASSOCIATED FEES AND ALL OTHER INSTALLATION FEES.

15. ALL SANITARY SEWER LINE EXTENSIONS TO CONFORM TO PASCO COUNTY STANDARDS.



SANITARY COLLECTION SYSTEM STRUCTURE SCHEDULE			
STRUCTURE NUMBER	TYPE OF STRUCTURE	RIM ELEV. (FT)	INV. ELEV. (FT)
SA-1	EX. MANHOLE INSTALL OUTSIDE DROP	78.99 EX.	67.09 (SE) EX. 66.94 (NW) EX. 73.60 SW 67.30 SW
SA-2	4' DIAM. MANHOLE	79.40	74.70 NE 74.90 NW
SA-3	TWO-WAY CLEAN-OUT	79.90	75.50
SA-4	4" X 8" WYE	-----	74.60
SA-5	TWO-WAY CLEAN-OUT	79.30	75.00
SA-6	TWO-WAY CLEAN-OUT	79.40	75.50
SA-7	TWO-WAY CLEAN-OUT	79.90	75.65

SANITARY COLLECTION SYSTEM SEWER LINE SCHEDULE					
SEWER LINE	LOWER END	UPPER END	LENGTH (FT)	SIZE & MATERIAL	SLOPE (%)
1	SA-1	SA-2	240	8" PVC SDR 26	0.46
2	SA-2	SA-3	52	6" PVC SDR 26	1.15
3	SA-4	SA-5	24	4" PVC SDR 26	1.67
4	SA-6	SA-7	8	4" PVC SDR 26	1.88

UTILITIES CONFLICT SCHEDULE					
CONFLICT NUMBER	CONFLICT	GROUND ELEV. (FT)	INV. ELEV. (FT)	TOP OF PIPE ELEV. (FT)	CLEARANCE (FT)
1	4" PVC DR 14 FIRE PROTECTION LINE 8" PVC SDR 26 SANITARY SEWER	79.40	76.00 74.60	76.35 75.30	0.70
2	4" PVC DR 14 FIRE PROTECTION LINE 8" PVC SDR 26 SANITARY SEWER	79.15	75.80 74.40	76.15 75.10	0.70
3	3/4" PE DOMESTIC WATER SERVICE 18" RCP STORM SEWER PIPE	78.80	74.30 75.10	74.35 76.85	0.50
4	8" PVC SDR 26 SANITARY SEWER 48" RCP STORM SEWER	79.40	73.75 68.50	74.50 72.75	1.00

FIRE PROTECTION AND DOMESTIC WATER FLOWS DEMAND SCHEDULE								
	(1) FIRE		DOMESTIC					
BUILDING AREA (SF)	FLOW DEMAND (2) (GPM)	FLOW DURATION (HRS)	AVERAGE DEMAND (GPD)	MAXIMUM DEMAND (GPD)	PEAK HOUR DEMAND (GPH)	FIXTURE VALUE AT 35 PSI	PEAK DEMAND (GPM)	METER SIZE (IN)
4,490	1,750	2	5,200	10,400	760	108	76	1-1/2

(1) WATER REQUIREMENTS FOR EXTERIOR MANUAL FIRE FIGHTING
(2) UNIFORM FIRE CODE
(3) LANDSCAPE WATER TO BE SUPPLIED BY PROPOSED 1" RECLAIMED WATER METER

SANITARY COLLECTION SYSTEM WASTEWATER FLOWS SCHEDULE				
BUILDING AREA (SF)	AVERAGE DAILY FLOW (GPD)	MAXIMUM DAILY FLOW (GPD)	PEAK HOUR FLOW (GPH)	PEAK FLOW (GPM)
4,490	5,200	10,400	760	76

48 HOURS BEFORE YOU DIG "CALL SUNSHINE" 1-800-432-4770

LEGEND

	PROPOSED PROPERTY LINE
EX. WM	EXISTING WATER MAIN
WM	PROPOSED WATER SERVICE
FIRE	PROPOSED FIRE MAIN
EX. SAN	EXISTING SANITARY SEWER LINE
SAN	PROPOSED SANITARY SEWER
EX. ST	EXISTING STORM SEWER
ST	PROPOSED STORM SEWER
UGP	PROPOSED UNDERGROUND POWER CONDUIT
TEL	PROPOSED TELEPHONE CONDUIT

ALL EXISTING AND PROPOSED ELEVATIONS ARE REFERENCED FROM NORTH AMERICAN VERTICAL DATUM (N.A.V.D.) 1988.

©COPYRIGHT 2015

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date
COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

No.	BY	DATE	REVISIONS DESCRIPTION

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

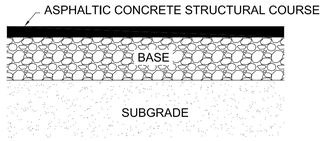
SITE ID 009-2580

CONTENT: UTILITIES PLAN

PROJECT: McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638

HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET: C-6

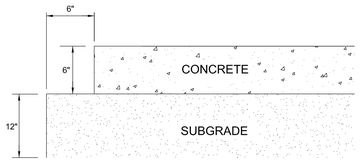


NOTES:

ASPHALT	2" TYPE SP-9.5 ASPHALTIC CONCRETE STRUCTURAL COURSE
BASE	6" LIMEROCK (LBR 100) OR CRUSHED PORTLAND CEMENT CONCRETE FROM FDOT APPROVED SOURCES AND MEETING ALL THE REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS SECTION 204 COMPACTED TO 98% OF MAXIMUM DENSITY PER ASTM D1557 / AASHTO T-180
SUBGRADE	6" STABILIZED SUBGRADE (LBR 40) COMPACTED TO 98% OF MAXIMUM DENSITY PER ASTM D1557 / AASHTO T-180

ON-SITE FLEXIBLE PAVEMENT SECTION

N.T.S.

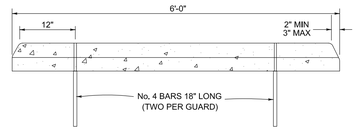


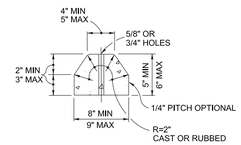
NOTES:

CONCRETE	6" THICK PORTLAND CEMENT CONGRETE SURFACE COURSE (F'c=4,000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS) W 6X6/10X10 WELDED WIRE MESH REINFORCEMENT
	MAXIMUM SPACING BETWEEN JOINTS SHALL BE 12 FEET
	MINIMUM CONTRACTION JOINT DEPTH SHALL BE ONE-FORTH (1/4) OF THE PAVEMENT THICKNESS
	CONCRETE SHALL BE PLACED BY AN ACI CERTIFIED CONTRACTOR
SUBGRADE	12" STABILIZED SUBGRADE (LBR 40) COMPACTED TO 98% OF MAXIMUM DENSITY PER ASTM D1557 / AASHTO T-180

RIGID PAVEMENT SECTION

N.T.S.

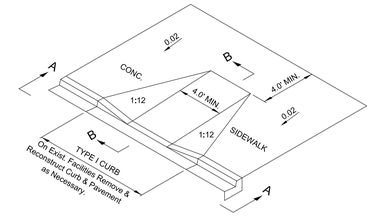




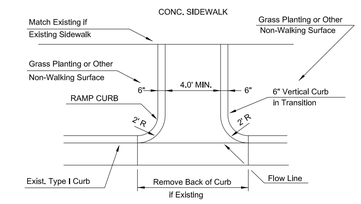
CONCRETE BUMPER GUARD

N.T.S.

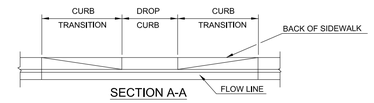
(REFER TO FDOT DESIGN STANDARDS INDEX NO. 300)



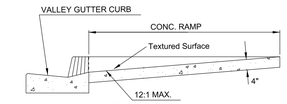
ISOMETRIC VIEW



RETURNED CURB RAMPS



SECTION A-A



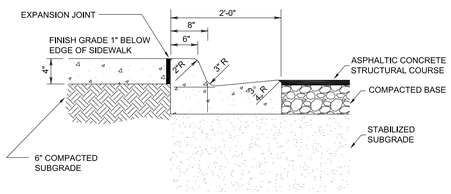
SECTION B-B

NOTES:

1. Ramps are designed to the Uniform Federal Accessibility Standards to comply with the Americans with Disabilities Act.
2. Ramps Shall Have a Tactile Surface, Textured to a Depth Not Exceeding 1/8" by use of Tamp or roller In Conformance with Requirements of FDOT Roadway and Traffic Design Standards, Detail 304 Or Most Recent Modifications.

TYPICAL SIDEWALK CURB CUT RAMPS PHYSICALLY HANDICAPPED

N.T.S.

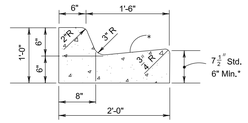


NOTES:

1. WHEN REMOVING EXISTING SIDEWALK, THE SIDEWALK SHALL BE REMOVED AT THE NEAREST EXPANSION JOINT.
2. PROVIDE 1/4" CONTROL JOINTS AT 4' ON CENTERS FOR 4' SIDEWALKS AND AT 5' ON CENTERS FOR 5' OR WIDER SIDEWALKS.
3. PROVIDE 1/2" BITUMINOUS EXPANSION JOINTS AT 40' ON CENTERS FOR 4' SIDEWALKS AND AT 50' ON CENTERS FOR 5' OR WIDER SIDEWALKS.
4. CONCRETE SHALL BE 3,500 PSI.

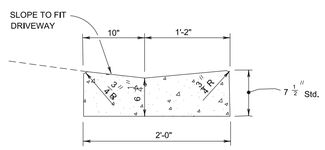
FDOT TYPE 'F' CONCRETE CURB AND SIDEWALK

N.T.S.



FDOT 'TYPE F' CONCRETE CURB

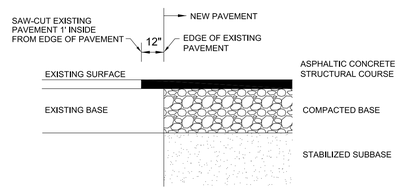
N.T.S.



FDOT DROP CONCRETE CURB

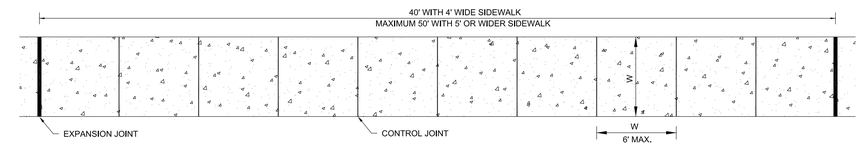
N.T.S.

(REFER TO FDOT DESIGN STANDARDS INDEX NO. 300)



TRANSITION AT EXISTING ASPHALTIC PAVEMENT

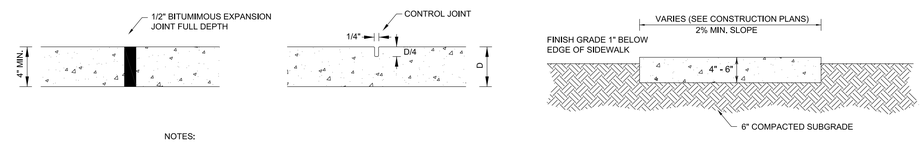
N.T.S.



TOP VIEW

CONCRETE SIDEWALK

N.T.S.



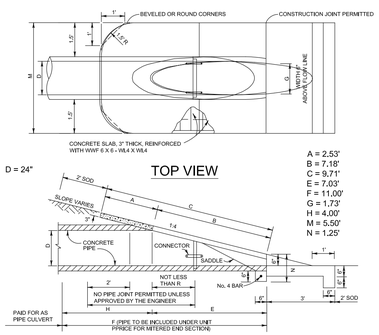
NOTES:

1. IF SOME PHYSICAL OBSTRUCTION EXISTS WHICH PREVENTS THE PLACING OF SIDEWALKS, CONTACT THE ENGINEER FOR ALTERNATE LOCATION.
2. WHEN CONSTRUCTING A NEW SIDEWALK OR REPLACING AN EXISTING SIDEWALK WITHIN A DRIVEWAY CONNECTION OR PUBLIC RIGHT-OF-WAY, THE NEW SIDEWALK SHALL BE 6" THICK MINIMUM.
3. WHEN REMOVING EXISTING SIDEWALK, THE SIDEWALK SHALL BE REMOVED AT THE NEAREST EXPANSION JOINT.
4. PROVIDE 1/4" TOOLED CONTROL JOINTS AT 4' ON CENTERS FOR 4' SIDEWALKS AND AT 5' ON CENTERS FOR 5' OR WIDER SIDEWALKS.
5. PROVIDE 1/2" BITUMINOUS EXPANSION JOINTS AT 40' ON CENTERS FOR 4' SIDEWALKS AND AT 50' ON CENTERS FOR 5' OR WIDER SIDEWALKS.
6. EXPANSION JOINT SPACING SHALL NOT EXCEED 50 FEET.
7. EXPANSION JOINTS SHALL BE PLACED AT DRIVEWAYS AND ALL ABUTMENTS OF CONCRETE AND ANY OTHER STRUCTURE OTHER THAN ASPHALTIC PAVEMENT.
8. EXPANSION JOINT MATERIAL SHALL CONFORM TO SPECIFICATIONS OF ASTM D1751
9. WOODEN AND OTHER SPACERS WILL NOT BE PERMITTED IN SIDEWALKS OR DRIVEWAYS.
10. NO COATINGS OF ANY KIND WILL BE PERMITTED ON CONCRETE SIDEWALKS OR DRIVEWAYS WITHOUT SPECIFIC APPROVAL OF THE CITY/COUNTY ENGINEER.
11. ALL CONCRETE SHALL BE 3,000 PSI AT 28 DAYS, WITH FIBER MESH REINFORCING.
12. CONCRETE SURFACE TO BE LIGHT BROOM FINISH.
13. CONCRETE DRIVEWAY CONSTRUCTION SHALL BE 6" THICK W 6X6/10X10 WELDED WIRE MESH REINFORCEMENT.
14. RAMPS SHALL HAVE A DETECTABLE WARNING SURFACE IN CONFORMANCE WITH REQUIREMENTS OF FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX 304 OR MOST RECENT MODIFICATIONS.

SECTION

CONCRETE SIDEWALK

N.T.S.

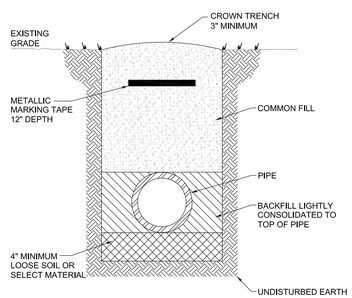


SECTION

(REFER TO FDOT DESIGN STANDARDS INDEX NO. 273)

FDOT MITERED END SECTION FOR RCP

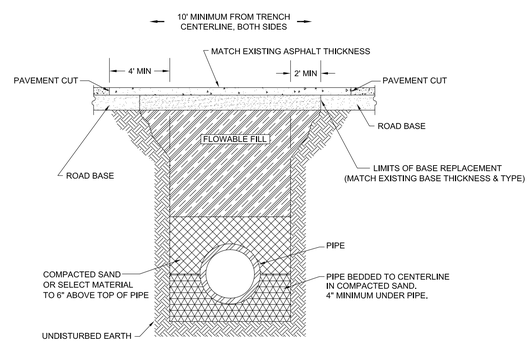
N.T.S.



NOTES:
-LOOSE SOIL OR SELECT MATERIAL IS NATIVE SOIL EXCAVATED FROM THE TRENCH FREE OF ROCKS AND FOREIGN MATERIAL.
-COMMON FILL TO BE PLACED AND COMPACTED IN 12" LAYERS. ROLLING EQUIPMENT SHALL NOT BE USED FOR COMPACTION UNTIL A MINIMUM OF 18" OF COMMON FILL HAS BEEN PLACED AND COMPACTED OVER THE PIPE. THREE (3) FEET OF FILL SHALL BE PLACED BEFORE A HYDROHAMMER MAY BE USED FOR COMPACTION.

PIPE LAYING CONDITIONS IN UNPAVED AREAS WITHIN COUNTY RIGHT-OF-WAY

N.T.S.



NOTE:
-SELECT MATERIAL IS NATIVE SOIL EXCAVATED FROM THE TRENCH FREE OF ROCKS AND FOREIGN MATERIAL.
-COMPACTION TO TOP OF PILE IS TO BE APPROXIMATELY 90% STANDARD PROCTOR, AASHTO T-99.
-EXISTING CONCRETE/ASPHALT PAVEMENT SURFACE AND BASE TO BE CUT SQUARE WITH CONCRETE SAW.

PIPE LAYING CONDITIONS FLOWABLE FILL BACKFILL IN STANDARD EXISTING PAVED AREAS & ROADWAYS WITHIN COUNTY RIGHT-OF-WAY

N.T.S.

© COPYRIGHT 2015

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date

COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

No.	BY	DATE	DESCRIPTION

REVISIONS

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

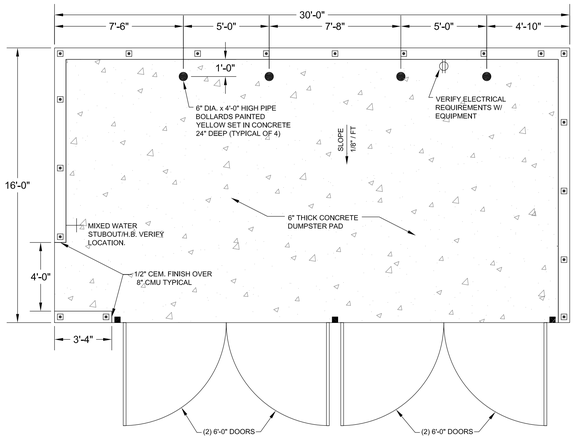
SITE ID 009-2580

CONTENT: SITE CONSTRUCTION DETAILS

PROJECT: McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638

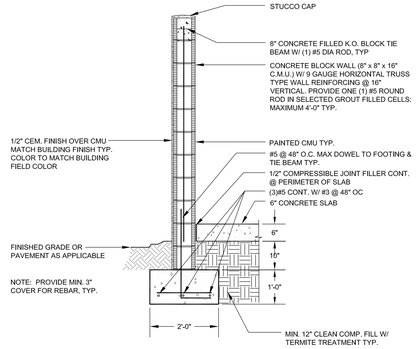
HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET: C-7.1



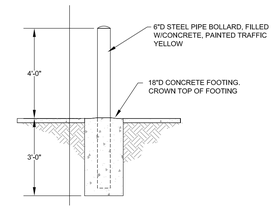
DOUBLE DUMPSTER ENCLOSURE

N.T.S.



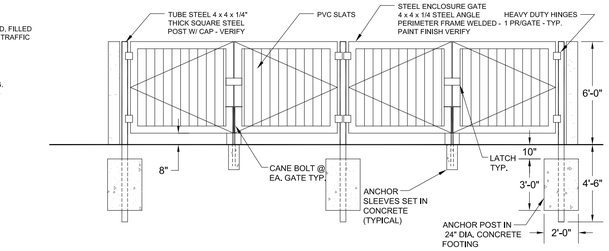
TYPICAL WALL SECTION

N.T.S.



BOLLARD DETAIL

N.T.S.

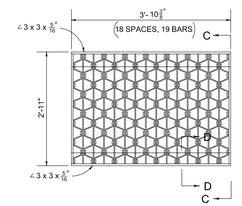


DUMPSTER ENCLOSURE GATES

N.T.S.

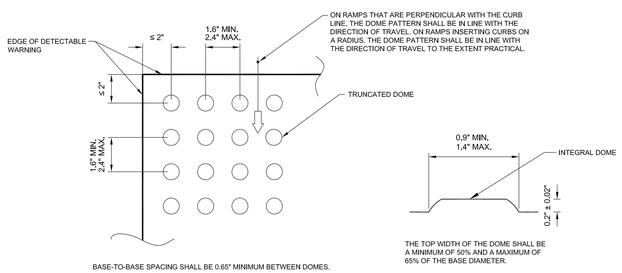
SIDE ELEVATION

N.T.S.



STEEL GRATING, STRAIGHT BARS 3"x 1/4"
RETICULINE BARS 2"x 3/16"

TYPE "F" STEEL GRATE



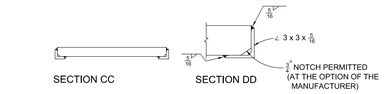
PLAN VIEW

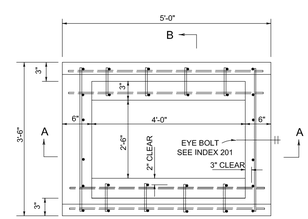
TRUNCATED DOME

ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES (610 MM) FROM THE BACK OF CURB.

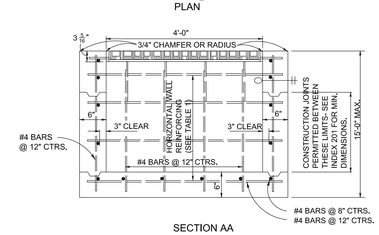
CURB RAMP DETECTABLE WARNING DETAIL

N.T.S.

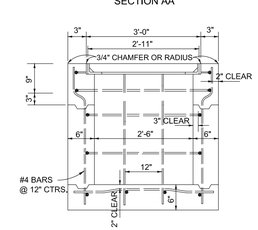




PLAN



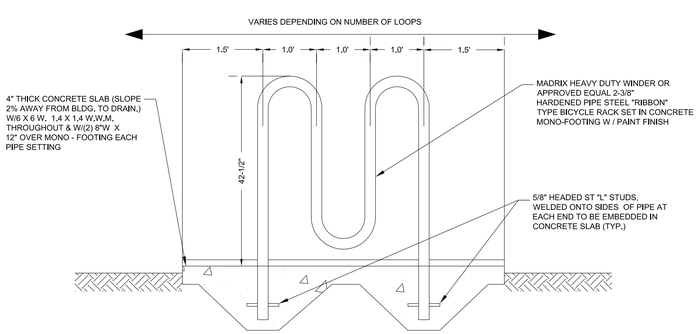
SECTION AA



SECTION BB

FDOT TYPE "F" INLET

N.T.S.



BYCICLE RACK DETAIL

N.T.S.

No.	BY	DATE	DESCRIPTION

REVISIONS

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

SITE ID 009-2580

CONTENT:
SITE CONSTRUCTION DETAILS

PROJECT:
McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638

HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

© COPYRIGHT 2015

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

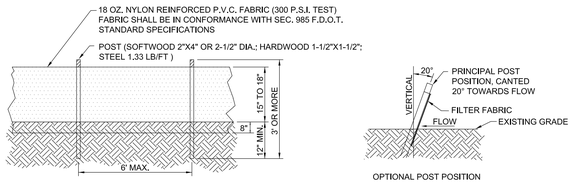
58626
FL Registration No.

BRAULIO GRAJALES
Professional Engineer

Sign Date

COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

SHEET:
C-7.2



NOTES:

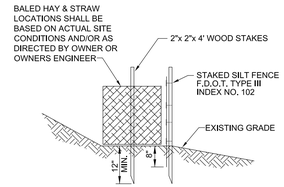
1. REFER TO LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS" INDEX NO. 103 FOR ADDITIONAL DETAILS AND SPECIFICATIONS.
2. SILT FENCE SHALL NOT BE TRENCHED IN AREAS ADJACENT TO TREES DESIGNATED TO REMAIN.
3. SILT FENCE MUST BE SECURED BY PLACEMENT OF FILL OVER THE LOWER LIP OF FABRIC.

ELEVATION SECTION

TYPE III SILT FENCE

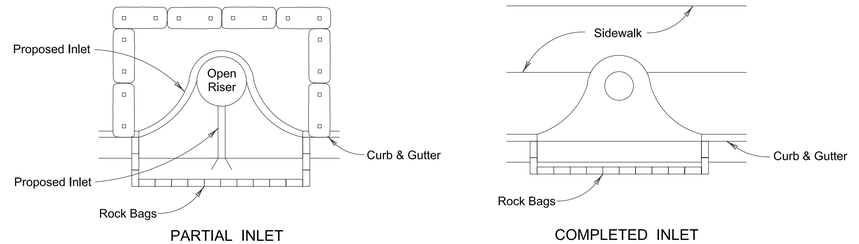
N.T.S.

(REFER TO FDOT DESIGN STANDARDS INDEX NO. 102)



HAY BALE AND SILT FENCE DETAIL

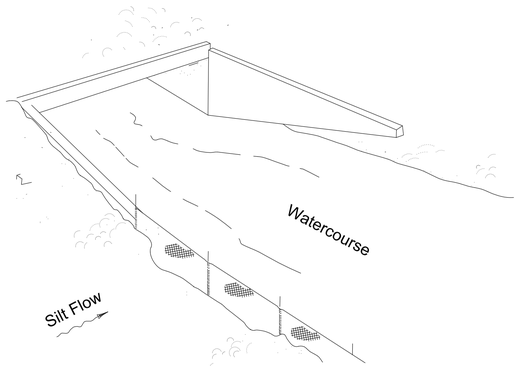
N.T.S.



PROTECTION AROUND INLETS OR SIMILAR STRUCTURES

N.T.S.

(REFER TO FDOT DESIGN STANDARDS INDEX NO. 102)



NOTES FOR SILT FENCES

1. Type III Silt Fence to be used at most locations. Where used in ditches, the spacing for Type III Silt Fence shall be in accordance with Chart 1, Sheet1.

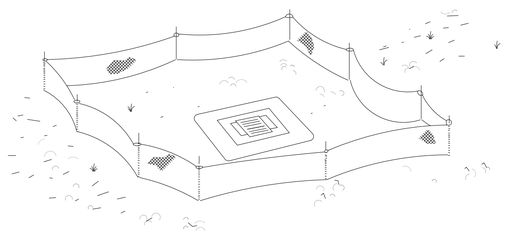
2. Type IV Silt Fence to be used where large sediment loads are anticipated. Suggested use is where fill slope is 1:2 or steeper and length of slope exceeds 25 feet. Avoid use where the detained water may back into travel lanes of off the right of way.

3. Do not construct silt fences across permanent flowing water courses. Silt fences are to be at upland locations and turbidity barriers used at permanent body of waters.

4. Where used as slope protection, Silt Fence is to be constructed on 0% longitudinal grade to avoid channelizing runoff along the length of the fence.

5. Silt Fence to be paid for under the contract unit price for Staked Silt Fence, (LF). avoid channelizing runoff along the length of the fence.

Silt Fence Protection in Ditches with Intermittent Flow

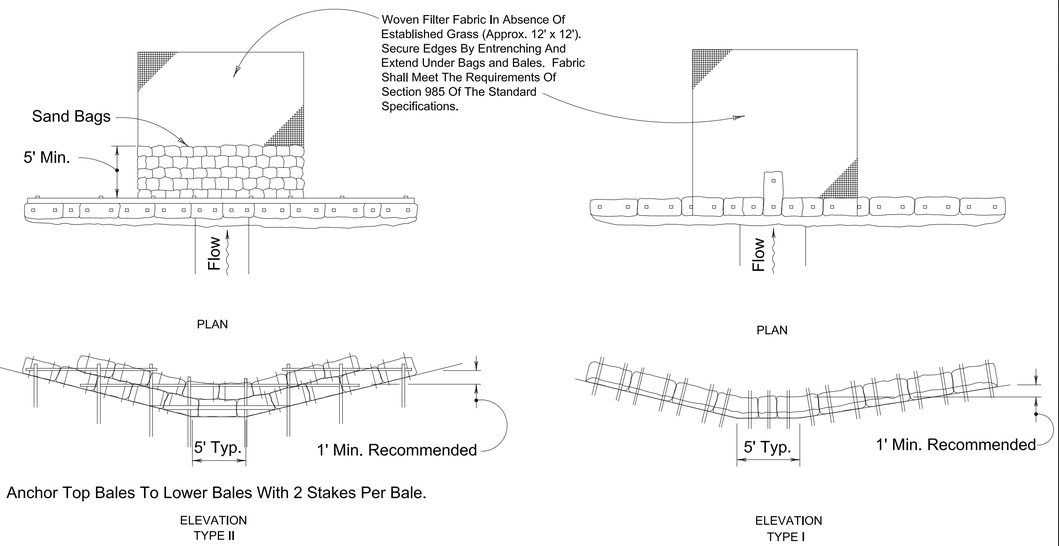


Silt Fence Protection Around Ditch Bottom Inlets

SILT FENCE APPLICATIONS

N.T.S.

(REFER TO FDOT DESIGN STANDARDS INDEX NO. 102)



NOTES FOR SYNTETHIC BALES OR BALE TYPE BARRIERS

1. Type I and II Synthetic Barriers shall be spaced in accordance with Chart 1, Shee 1.

2. Bales shall be trenched 3" to 4" and anchored with 2-1" x 2" (or 1" dia.) x 4' wood stakes. Stakes of other material or shape providing equivalent strength may be used if approved by the engineer. Stakes other than wood shall be removed upon completion of the project.

3. Rails and posts shall be 2" x 4" wood. Other materials providing equivalent strength may be used if approved by the engineer.

4. Adjacent bales shall be butted firmly together.

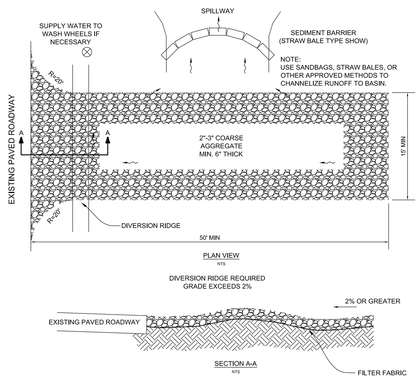
5. When used in conjunction with silt fence, bales shall be placed on the upstream side of the fence.

6. Bales to be paid for under the contract unit price for Synthetic Bales, LF. The unit price shall include the cost of filter fabric for Type I and II barriers. Sandbags shall be paid for under the unit price for sandbagging, CY. Rock bags to be paid for under the contract unit price for Rock Bags, EA.

SYNTETHIC BALES OR BALE TYPE BARRIERS FOR UNPAVED DITCHES

N.T.S.

(REFER TO FDOT DESIGN STANDARDS INDEX NO. 102)



NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTER PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH COARSE AGGREGATE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

N.T.S.

No.	BY	DATE	REVISIONS DESCRIPTION

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

CONTENT: SITE CONSTRUCTION DETAILS

PROJECT: McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638

SITE ID 009-2580

HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

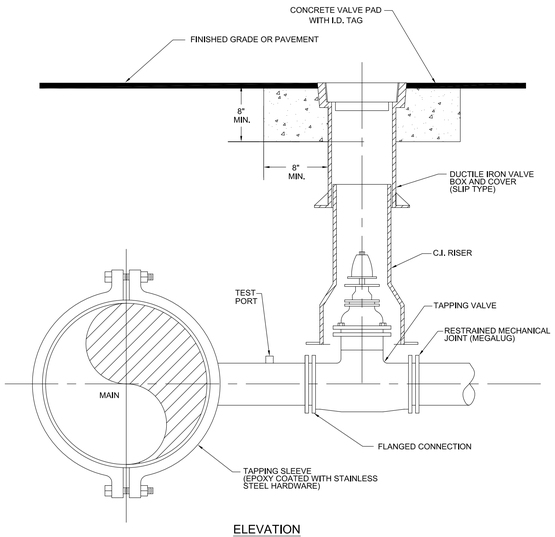
© COPYRIGHT 2015

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date

COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

SHEET: C-7.3



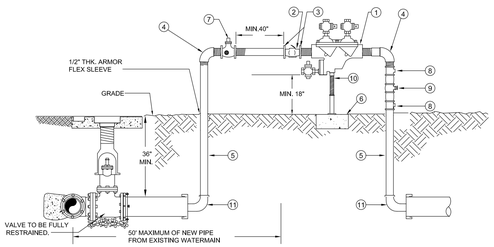
ELEVATION

NOTES:
- SADDLE CONNECTION WILL BE TESTED TO 150 PSI PRIOR TO TAPPING MAIN.
- MECHANICAL JOINTS/UNDERGROUND PIPING SHALL BE RESTRAINED AS SPECIFIED BY COUNTY/ENGINEER.
- VALVE EXTENSION ROD SHALL BE UTILIZED, AS NECESSARY, SO THAT VALVE OPERATING NUT IS A MAXIMUM OF 3' BELOW GRADE.

WATER, REUSE, AND FORCE MAIN TAPPING DETAIL W/ VALVE LOCATION

NTS

PASCO COUNTY UTILITIES DETAIL 37



MATERIALS		
ITEM	QUANT.	DESCRIPTION
1	1	2" BACKFLOW PREVENTER ASSEMBLY, REDUCED PRESSURE ZONE
2	1	2" METER FURNISHED BY PASCO COUNTY UTILITIES
3	2	BRASS-METER FLANGES OR ADAPTORS
4	2	2" ELBOWS - GALV. 90°
5	2	2" RISER - GALV.
6	"	CONCRETE SLAB
7	1	2" VALVE - BRASS OR S.S.
8	2	TEE/ VALVES - BRASS OR S.S.
9	1	2" GATE VALVE - BRASS OR S.S.
10	1	PIPE STAND (SUPPORT)
11	2	M.J. CAP WITH 2" TAP

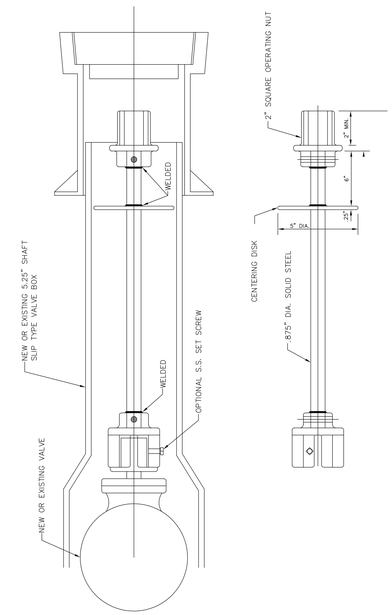
NOTE: -
- CONTRACTOR/CUSTOMER SHALL APPLY AT PASCO COUNTY UTILITIES CUSTOMER SERVICE FOR TEMPORARY WATER SERVICE AT LEAST THREE DAYS PRIOR TO REQUIRED SERVICE DATE.
- THE METER WILL BE FURNISHED, INSTALLED AND INITIAL READING TAKEN BY PASCO COUNTY UTILITIES. ALL FITTINGS, PIPING, VALVES AND MATERIALS INCLUDING THE PASCO COUNTY APPROVED REDUCED PRESSURE BACKFLOW PREVENTION DEVICE SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR/CUSTOMER.
- CONTRACTOR/CUSTOMER FURNISHED REDUCED PRESSURE BACKFLOW PREVENTION DEVICE MUST BE INSTALLED BEFORE THE METER IS INSTALLED BY PASCO COUNTY UTILITIES. THE APPROVED BACKFLOW PREVENTION DEVICE SHALL BE TESTED AND CERTIFIED BY PASCO COUNTY UTILITIES CERTIFIED BACKFLOW PREVENTION TECHNICIAN AT TIME OF METER INSTALLATION.
- CONTRACTOR/CUSTOMER SHALL PROTECT THE JUMPER/METER ASSEMBLY FROM DAMAGE.
- CONTRACTOR/CUSTOMER IS RESPONSIBLE FOR BACTERIOLOGICAL TESTING AFTER CONNECTION OF TEMPORARY WATER SERVICE.
- TEMPORARY CONSTRUCTION JUMPER/METER ASSEMBLY SHALL NOT BE REMOVED UNTIL SYSTEM IS ACCEPTED AND DEPARTMENT OF HEALTH CERTIFICATION AND CLEARANCE FOR SERVICE FORM HAS BEEN RECEIVED BY PASCO COUNTY UTILITIES.
- WHEN THE NEW SYSTEM IS ACCEPTED AND THE FINAL METER READING TAKEN BY PASCO COUNTY, THE TEMPORARY CONSTRUCTION JUMPER/METER ASSEMBLY MUST BE COMPLETELY REMOVED FROM M.J CAP TO M.J. CAP AND A NEW WATER MAIN IS TO BE CHLORINATED AND INSTALLED COMPLETING THE FINAL CONNECTION.
- BY APPLYING FOR SERVICE, CONTRACTOR/CUSTOMER AGREES TO TAKE WATER SERVICE FROM PASCO COUNTY UTILITIES IN ACCORDANCE WITH THE APPROPRIATE RATE SCHEDULE AND IN ACCORDANCE WITH PASCO COUNTY UTILITIES RULES AND REGULATION.

TEMPORARY CONSTRUCTION WATER SERVICE

N.T.S.

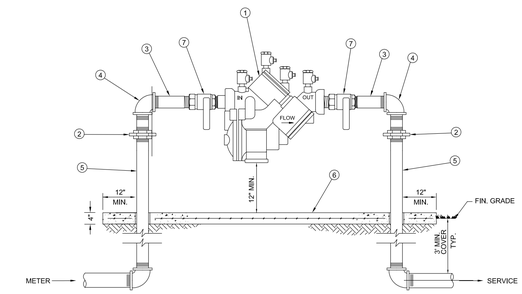
PASCO COUNTY UTILITIES DETAIL 01

NOTE: ALL VALVE BOXES SHALL INCLUDE CONCRETE PAD W/ I.D. TAG



VALVE EXTENSION RODS

NTS



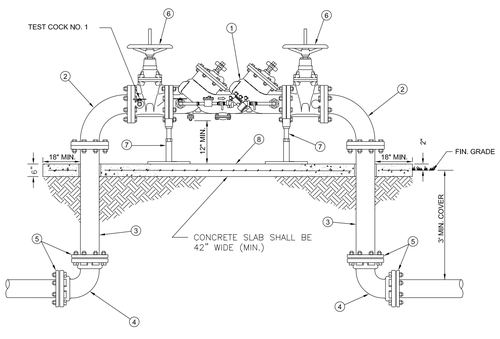
MATERIALS		
ITEM	QUANT.	DESCRIPTION
1	1	BACKFLOW PREVENTER ASSEMBLY, REDUCED PRESSURE ZONE
2	2	UNIONS - GALV.
3	2	NIPPLES - BRASS
4	2	ELBOWS - GALV. 90°
5	2	RISER - GALV.
6	"	CONCRETE SLAB
7	2	BALL VALVES - BRASS OR S.S. (PROVIDED WITH BFP ASS'Y)

NOTE: - FIELD ADJUST AND CUT ITEM 5 TO THE PROPER LENGTH.
- MINIMUM CLEARANCE OF 24" TO BE MAINTAINED AROUND DEVICE FOR TESTING.
- ENTIRE ASSEMBLY TO BE PAINTED SAFETY BLUE.
- CONCRETE SLAB TO EXTEND 12" MIN. AROUND ENTIRE DEVICE.
- DEVICE MUST BE LISTED WITH THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH.

REDUCED PRESSURE BACKFLOW PREVENTER (SINGLE SERVICE: 3/4", 1", 1-1/2", 2")

N.T.S.

PASCO COUNTY UTILITIES DETAIL 12



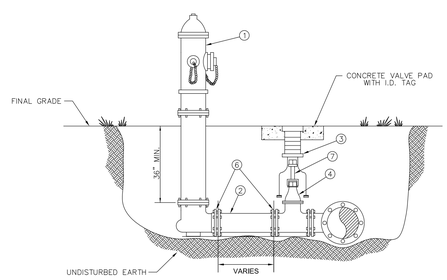
MATERIALS		
ITEM	QUANT.	DESCRIPTION
1	1	3", 4", 6", 8" DOUBLE CHECK VALVE/BFP ASSEMBLY WITH DETECTOR ASSEMBLY
2	2	3", 4", 6", 8" BEND, 90° FLANGE x FLANGE
3	2	3", 4", 6", 8" SPOOL PIECE FLG. x PE. D.I.P.
4	2	3", 4", 6", 8" BEND, 90° M.J. x M.J.
5	4	3", 4", 6", 8" GLAND, RETAINER M.J. (MEGALUG)
6	2	3", 4", 6", 8" VALVE, GATE FLG. x FLG. RESILIENT WEDGE O.S. & Y.
7	2	SUPPORT (AS NEEDED)
8	1	CONCRETE SLAB (6" THICK - 42" WIDE MIN.)

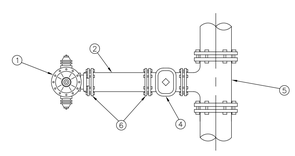
NOTE:
- NO TIE RODS OR EYE BOLT RETAINERS PERMITTED ABOVE GROUND.
- B.F.P. ASSEMBLY TO BE INSTALLED LEVEL & PLUMB.
- MINIMUM CLEARANCE OF 36" TO BE MAINTAINED AROUND ENTIRE DEVICE FOR TESTING
- ENTIRE ASSEMBLY TO BE PAINTED SAFETY BLUE.
- DETECTOR BY-PASS ASSEMBLY TO BE FACTORY INSTALLED AND CERTIFIED
- ALL MECHANICAL JOINTS SHALL BE RESTRAINED WITH MEGALUGS OR APPROVED EQUAL
- BELL JOINT RESTRAINERS SHALL BE PROVIDED ON ALL UNDERGROUND PIPING AS SPECIFIED IN JOINT RESTRAINT TABLE DETAIL
- ALL ABOVE GROUND PIPING SHALL BE FLANGED DUCTILE IRON PIPE (NO GALVANIZED OR PVC)
- ITEM 3 SHALL BE FIELD CUT TO PROPER LENGTH TO ACHIEVE DESIGNATGED GROUND CLEARANCE
- IF SO SPECIFIED, ENTIRE ASSEMBLY TO BE ENCLOSED IN 6' CHAIN LINK FENCE.
- BFP DEVICE MUST BE LISTED WITH THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTORL AND HYDRAULIC RESEARCH.

DOUBLE DETECTOR CHECK VALVE ASSEMBLY/BACKFLOW PREVENTER (SINGLE SERVICE: 3", 4", 6", 8", 10")

N.T.S.

PASCO COUNTY UTILITIES DETAIL 10



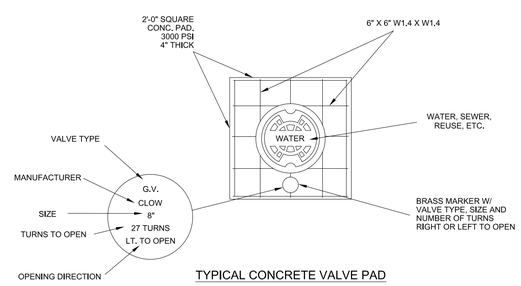


MATERIALS		
ITEM	QUANT.	DESCRIPTION
1	1	HYDRANT, FIRE (5 1/4" VALVE MIN.), PAINTED YELLOW
2	*	6" PIPE, P.V.C. (DR-18)
3	1	BOX, VALVE SLIP TYPE
4	1	6" VALVE, GATE, M.J. RESILIENT WEDGE
5	1	TEE, ANCHORING, M.J.
6	*	6" RESTRAINER GLAND (MEGALUG)
7	*	VALVE EXTENSION ROD, AS NECESSARY (3' MAX. BELOW GRADE)

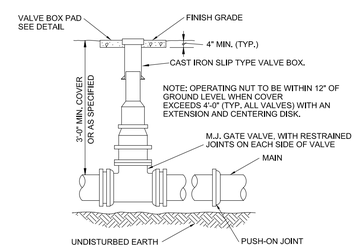
FIRE HYDRANT PERPENDICULAR TO THE MAIN

N.T.S.

PASCO COUNTY UTILITIES DETAIL 27



TYPICAL CONCRETE VALVE PAD



VALVE BOX DETAIL SLIP TYPE

N.T.S.

PASCO COUNTY UTILITIES DETAIL 30

PIPE RESTRAINT LENGTHS IN FEET COMMON FITTINGS

WATER MAINS - TEST PRESSURE 150 PSI						
		FITTING TYPE				
		11-1/4"	22-1/2"	45°	90°	DEAD END
PIPE SIZE	4"	2'	4'	8'	20'	45'
	6"	3'	6'	12'	28'	63'
	8"	4'	7'	15'	36'	82'
	10"	4'	9'	18'	43'	98'
	12"	5'	10'	21'	50'	116'
	16"	6'	13'	26'	63'	148'
	20"	7'	15'	31'	76'	179'
	24"	9'	17'	36'	87'	208'
FORCE MAINS - TEST PRESSURE 100 PSI						
		FITTING TYPE				
		11-1/4"	22-1/2"	45°	90°	DEAD END
PIPE SIZE	4"	1'	3'	6'	13'	30'
	6"	2'	4'	8'	19'	42'
	8"	2'	5'	10'	24'	55'
	10"	3'	6'	12'	29'	66'
	12"	3'	7'	14'	34'	77'
	16"	4'	8'	18'	42'	99'
	20"	5'	10'	21'	50'	119'
	24"	6'	11'	24'	58'	139'

RESTRAINT LENGTHS ARE MEASURED FROM THE CENTER LINE OF THE FITTING ALONG THE PIPE IN BOTH DIRECTIONS (EXCEPT DEAD ENDS).

RESTRAINED JOINT TABLE COMMON FITTINGS

N.T.S.

PASCO COUNTY UTILITIES DETAIL 31

PIPE RESTRAINT LENGTHS IN FEET TEES (BRANCH SIDE)

WATER MAINS - TEST PRESSURE 150 PSI									
		BRANCH SIZE							
		3"	4"	6"	8"	10"	12"	16"	20"	24"
RUN SIZE	3"	6'	14'	30'	—	—	—	—	—	—
	4"	2'	11'	28'	44'	—	—	—	—	—
	6"	1'	2'	22'	40'	52'	—	—	—	—
	8"	1'	1'	16'	35'	48'	62'	—	—	—
	10"	1'	1'	10'	30'	44'	58'	83'	—	—
	12"	1'	1'	3'	25'	40'	55'	80'	103'	—
	16"	1'	1'	1'	14'	31'	48'	75'	98'	119'
	20"	1'	1'	1'	2'	22'	40'	69'	94'	116'
	24"	1'	1'	1'	1'	11'	31'	63'	89'	111'

RESTRAINT LENGTHS ARE MEASURED FROM THE CENTER LINE OF THE TEE ALONG THE BRANCH FOR THE DISTANCE INDICATED, A MINIMUM OF 5 FEET OF RESTRAINED PIPE MUST BE INSTALLED ON BOTH RUNS OF THE TEE. MEGALUG TYPE RESTRAINERS ARE REQUIRED ON ALL JOINTS.

RESTRAINED JOINT TABLE TEES (BRANCH SIDE)

N.T.S.

PASCO COUNTY UTILITIES DETAIL 32

No.	BY	DATE	DESCRIPTION
			REVISIONS

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

SITE ID 009-2580

CONTENT: UTILITIES DETAILS

PROJECT: McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638

HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel.: (813) 644-8333
Fax: (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

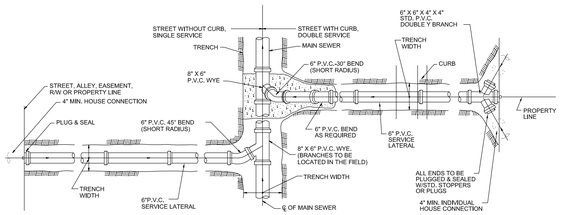
©COPYRIGHT 2015

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

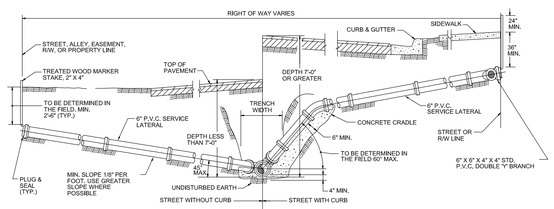
58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date

COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

SHEET: C-7.4



PLAN



SINGLE SERVICE CONNECTION

DEPTH LESS THAN 7'-0" (TYPE "A")

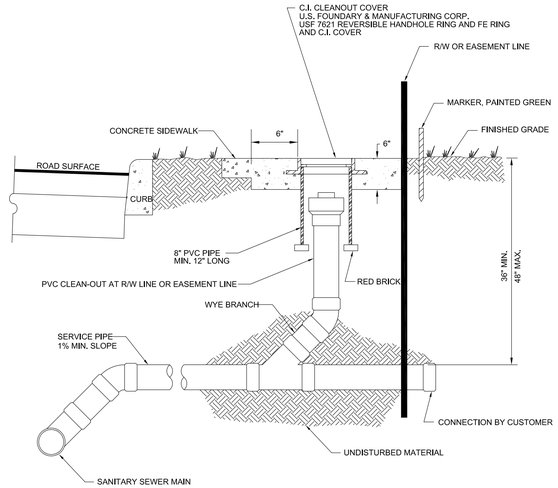
DOUBLE SERVICE CONNECTION

DEPTH 7'-0" OR GREATER (TYPE "B")

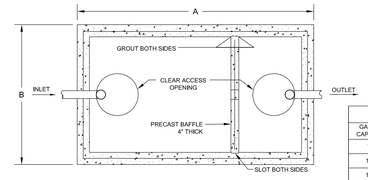
SECTION

NOTE: - CONTRACTOR SHALL MAKE, ON A CLEAN SET OF PLANS, THE FINAL STATIONING OR DISTANCE AND DIRECTION FROM MANHOLE OF EACH SERVICE LATERAL AND THEN GIVE TO ENGINEER FOR RECORD PURPOSES.
- PROVIDE 2" x 4" PRESSURE TREATED WOOD MARKER STAKE AT ALL SANITARY SERVICES (INCLUDE IN PIPE PRICE). TOP OF STAKE TO BE PAINTED WITH GREEN PAINT.
- THE MINIMUM DIAMETER OF ALL SERVICE LATERALS SHALL BE 6 INCHES.

SEWER LATERAL CONNECTION
NTS
PASCO COUNTY UTILITIES DETAIL 44

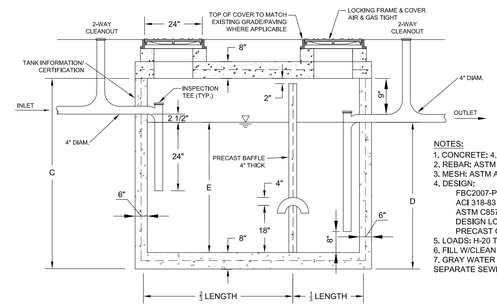


SANITARY SEWER - SINGLE WYE CONNECTION AND TYPICAL CLEAN-OUT
NTS
PASCO COUNTY UTILITIES DETAIL 45



PLAN VIEW

SIZING CHART					
GALLON CAPACITY	A	B	C	D	E
750	7'-4"	5'-0"	6'-0"	4'-11"	4'-0"
1000	9'-4"	5'-4"	5'-10"	4'-9"	3'-10"
1250	9'-4"	5'-4"	6'-10"	5'-9"	4'-10"

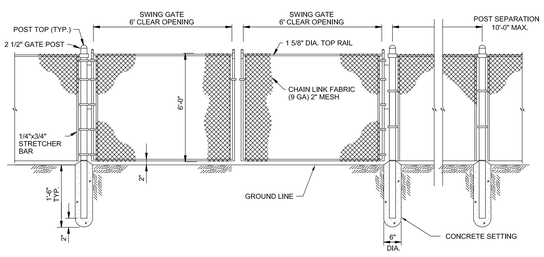


SECTION VIEW

GENERAL NOTES:
1. THE INTERCEPTOR SYSTEM MAY CONSIST OF MULTIPLE CELLS, IF REQUIRED GREATER THAN 1250 GALLON CAPACITY.
2. CONCRETE WALL COATING TAKING INTO CONSIDERATION THE WATER-OIL MIX.
3. CONTRACTOR TO SUPPLY & INSTALL ALL PIPING AND SANITARY TEE'S, CLEAN-OUTS FOR CLEANING TOWARD AND AWAY FROM INTERCEPTOR (ALTERNATE DUAL SWEEP CLEAN-OUTS).
4. CONTRACTOR SHALL ASSURE 2,500 PSI MINIMUM SOIL BEARING CAPACITY AT BEDDING ELEVATION.

NOTES:
1. CONCRETE: 4,000PSI @ 28 DAY.
2. REBAR: ASTM A615 GRADE 60.
3. MESH: ASTM A815 GRADE 65.
4. DESIGN:
FBC2007-P 1003
ACI 318-83 BUILDING CODE
ASTM C857 MINIMUM STRUCTURAL
DESIGN LOADING FOR UNDERGROUND
PRECAST CONCRETE UTILITY STRUCTURES
5. LOADS: H-20 TRUCK WHEELS W/30% IMPACT PER AASHTO.
6. FILL W/CLEAN WATER PRIOR TO START UP OF SYSTEM.
7. GRAY WATER ONLY. BLACK WATER SHALL BE CARRIED BY SEPARATE SEWER.

GREASE INTERCEPTOR DETAIL
NTS



MATERIALS	
ITEM	DESCRIPTION
TYPE	CHAIN LINK
HEIGHT	4', 6', 8' - AS SPECIFIED BY COUNTY
FABRIC	9 GAUGE
POST	2-1/2" DIA. - .085 WALL THICKNESS (MINIMUM)
TOP RAILS	1-5/8" DIA. - .080 WALL THICKNESS (MINIMUM)
GATE	4' x 6' SWING TYPE W/ 2" DIA. - .085 WALL
	THICKNESS (MINIMUM)
	FRAMEWORK (LOCATED AS INDICATED ON METER
	SPEC. SHEET)
LATCH	FORK TYPE - PADLOCK COMPATIBLE

FENCE SPECIFICATIONS
N.T.S.
PASCO COUNTY UTILITIES DETAIL 04

No.	BY	DATE	DESCRIPTION
			REVISIONS

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

CONTENT: UTILITIES DETAILS

PROJECT: McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638

SITE ID 009-2580

HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

© COPYRIGHT 2015

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date
COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

SHEET: C-7.5

LANDSCAPE DATA

LANDSCAPE DESIGN STANDARDS:

-A MINIMUM OF 30 PERCENT OF THE PLANT MATERIALS, OTHER THAN TREES AND TURFGRASS, SHALL BE NATIVE FLORIDIAN SPECIES.
-NO ONE PLANT SPECIES OF SHRUBS OR GROUND COVER PLANTS, EXCLUDING TURFGRASS, SHALL CONSTITUTE MORE THAN 25 PERCENT COVERAGE OF THE OVERALL LANDSCAPE AREA.
-PALM TREES MAY BE SUBSTITUTED FOR SHADE TREES AT A RATE OF THREE PALM TREES, GROUPED TOGETHER, FOR ONE SHADE TREE. PALM TREES MAY BE SUBSTITUTED FOR UP TO 30 PERCENT OF THE REQUIRED SHADE TREES.
-FOR EVERY FIVE TREES REQUIRED, THERE SHALL BE A MINIMUM OF OF ONE SPECIE PROVIDED, UP TO A MINIMUM OF EIGHT SPECIES. WHEN 40 OR MORE TREES ARE REQUIRED, WHERE MORE THAN ONE SPECIES IS REQUIRED, EVEN DISTRIBUTION SHALL BE STRIVED FOR AND SUBJECT TO COUNTY APPROVAL THROUGH THE ASSOCIATED REVIEW PROCESS.
-INTERIOR LANDSCAPING SHALL INCLUDE NOT LESS THAN ONE (1) TREE FOR EVERY 200 SQUARE FEET OF INTERIOR LANDSCAPE AREA.
-WHERE EXISTING TREES ARE RETAINED IN THE LANDSCAPE ISLANDS TO SATISFY THE REQUIREMENTS OF THE CODE, THE AMOUNT OF PARKING SPACES IN THAT ROW MAY BE INCREASED TO 15.

PROPOSED PLANTING MATERIAL:

TOTAL TREES PROVIDED: 54 (28 SHADE TREES, 21 UNDERSTORY TREES, 16 PALMS AT 3:1 RATIO)
DROUGHT TOLERANT TREES: 100%
FLORIDA NATIVE TREES: 70%
SHADE TREES: 52%
UNDERSTORY TREES: 39%
PALMS: 9%

-PERIMETER BUFFER (TYPE A BUFFER): A TEEN-FOOT WIDE BUFFER WITH A SINGLE ROW OF TREES SPACED A MAXIMUM OF 60 FEET ON CENTER AND A CONTINUOUS ROW OF EVERGREEN SHRUBS WITH A MINIMUM HEIGHT OF 18 INCHES AT INSTALLATION WITH THE ABILITY TO OBTAIN 24 INCHES WITHIN ONE YEAR OF PLANTING.

TREES REQUIRED: (76 FT +155 FT + 273 FT + 207 FT) / 60 FT = 12
EXISTING TREES TO REMAIN: 0
PROPOSED TREES: 16 (11 SHADE TREES, 16 PALMS AT 3:1 RATIO)
TREES PROVIDED: 0+16=16

SHRUBS REQUIRED: (76 FT +155 FT + 273 FT + 207 FT) / 3 FT = 273
SHRUBS PROVIDED: 273

SHRUB AND GROUND COVER AREA REQUIRED: 70%
SHRUB AND GROUND COVER AREA PROVIDED: 100%

-PERIMETER BUFFER (TYPE D BUFFER): NON-LOCAL RIGHT-OF WAY BUFFER), A RIGHT-OF-WAY WIDTH OF 100 OR MORE FEET REQUIRES A MINIMUM 15-FOOT WIDE BUFFER. SHADE TREES SHALL BE PLANTED WITH A MAXIMUM SPACING OF 30 FEET ON CENTER. THE BUFFER SHALL ALSO CONTAIN AN EARTHEN BERM. A MINIMUM OF 18 INCHES IN HEIGHT.

TREES REQUIRED: (384 FT + 345 FT - 28 FT - 26 FT) / 30 FT = 23

EXISTING TREES TO REMAIN: 4 (7", 10", 10", 12" OAK TREES)
PROPOSED TREES: 19 (8 SHADE TREES, 11 UNDERSTORY)
TREES PROVIDED: 4+19=23

SHRUBS REQUIRED: (384 FT + 345 FT - 28 FT - 26 FT) / 3 FT = 225
SHRUBS PROVIDED: 414

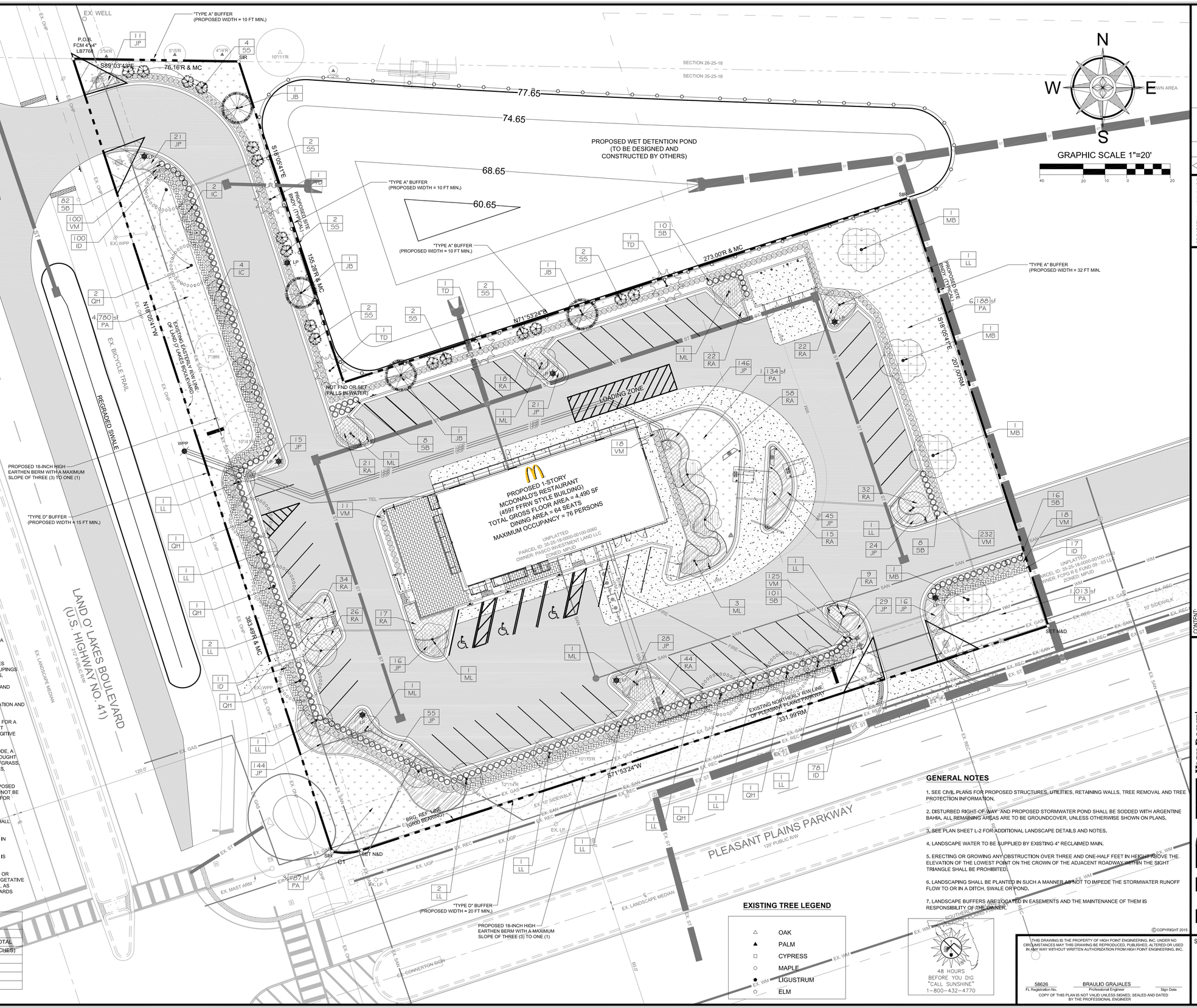
SHRUB AND GROUND COVER AREA REQUIRED: 70%
SHRUB AND GROUND COVER AREA PROVIDED: 70%

-INTERIOR LANDSCAPE FOR ADDITIONAL VEHICULAR USE AREA: ONE TREE PER 200 SF OF REQUIRED INTERIOR LANDSCAPE AREA. EACH LANDSCAPE ISLAND SHALL PROVIDE A MINIMUM OF ONE SHADE TREE WITH SHRUBS, DWARF SRUBS AND /OR GROUNDCOVER PLANTS.

VEHICULAR USE AREA (V.U.A.): 40,338 SF
INTERIOR LANDSCAPE AREA REQUIRED: 4,034 SF (10% OF V.U.A.)
INTERIOR LANDSCAPE AREA PROVIDED: 7,490 SF (18.5% OF V.U.A.)

TREES REQUIRED: 4,034 SF / 200 SF = 21
EXISTING TREES TO REMAIN: 0
PROPOSED TREES: 15 (15 UNDERSTORY TREES)
TREES PROVIDED: 0+15= 15

SHRUB AND GROUND COVER AREA REQUIRED: 70%
SHRUB AND GROUND COVER AREA PROVIDED: 70%



PASCO COUNTY LANDSCAPING STANDARD NOTES

1. ALL PLANT MATERIALS SHALL BE GRADE FLORIDA NO. 1 OR BETTER PURSUANT TO THE FLORIDA DEPARTMENT OF AGRICULTURE GRADES AND STANDARDS FOR NURSERY PLANTS, WHICH IS INCORPORATED HEREIN BY REFERENCE.

2. INSTALLED TREES AND PLANTS SHALL BE GROUPED TOGETHER INTO LANDSCAPE PLANT ZONES ACCORDING TO WATER AND CULTURAL (SOIL, CLIMATE, AND LIGHT) REQUIREMENTS. PLANT GROUPINGS BASED ON WATER REQUIREMENTS ARE AS FOLLOWS: DROUGHT TOLERANT, NATURAL, AND OASIS.

3. ALL LANDSCAPING SHALL BE INSTALLED IN ACCORDANCE WITH FLORIDA NURSERY GROWERS AND LANDSCAPE ARCHITECTS CRITERIA.

4. ALL PLANTED SHRUBS MUST BE A MINIMUM OF 18 INCHES IN HEIGHT AT THE TIME OF INSTALLATION AND SHALL REACH 24 INCHES WITHIN ONE YEAR OF PLANTING.

5. ALL PORTIONS OF A LOT UPON WHICH DEVELOPMENT HAS COMMENCED, BUT NOT CONTINUED FOR A PERIOD OF 30 DAYS, SHALL BE PLANTED WITH A GRASS SPECIES OR GROUND COVER TO PREVENT EROSION AND ENCOURAGE SOIL STABILIZATION. ADEQUATE COVERAGE, SO AS TO SUPPRESS FUGITIVE DUST, SHALL BE ACHIEVED WITHIN 45 DAYS.

6. IN ACCORDANCE WITH THE IRRIGATION STANDARDS SET FORTH IN SECTION 603.14 OF THIS CODE, A MAXIMUM OF 50 PERCENT OF THE PLANT MATERIALS USED, OTHER THAN TREES, MAY BE NONDROUGHT TOLERANT. A MINIMUM OF 30 PERCENT OF THE PLANT MATERIALS, OTHER THAN TREES AND TURFGRASS, USED TO FULFILL THE REQUIREMENTS OF THIS SUBSECTION SHALL BE NATIVE FLORIDIAN SPECIES, SUITABLE FOR GROWTH IN THE COUNTY.

7. MULCH SHALL BE USED IN CONJUNCTION WITH LIVING PLANT MATERIALS SO AS TO COVER EXPOSED SOIL. MULCH SHALL BE INSTALLED TO A MINIMUM DEPTH OF THREE INCHES. THE MULCH SHOULD NOT BE PLACED DIRECTLY AGAINST THE PLANT STEM OR TREE TRUNK. MULCH SHALL NOT BE REQUIRED FOR ANNUAL BEDS. STONE OR GRAVEL MAY BE USED TO COVER A MAXIMUM OF 20 PERCENT OF THE LANDSCAPED AREA.

8. NO ONE PLANT SPECIES OF SHRUBS OR GROUND COVER PLANTS, EXCLUDING TURFGRASS, SHALL CONSTITUTE MORE THAN 25 PERCENT COVERAGE OF THE OVERALL LANDSCAPE AREA.

9. ALL REQUIRED LANDSCAPING SHALL BE MAINTAINED IN A HEALTHY CONDITION IN PERPETUITY IN ACCORDANCE WITH THIS CODE.

10. ONGOING MAINTENANCE TO PREVENT THE ESTABLISHMENT OF PROHIBITED EXOTIC SPECIES IS REQUIRED.

11. *CLEAR-SITE TRIANGLE*. WHERE A DRIVEWAY/ACCESSORY INTERSECTS A ROAD RIGHT-OF-WAY OR WHERE TWO PUBLIC ROAD RIGHTS-OF-WAY INTERSECT, VEGETATION, STRUCTURES, AND NONVEGETATIVE VISUAL SCREENS SHALL NOT BE LOCATED SO AS TO INTERFERE WITH THE CLEAR-SITE TRIANGLE, AS DEFINED IN THE LAND DEVELOPMENT CODE OR THE FDOT MANUAL OF UNIFORM MINIMUM STANDARDS (GREEN BOOK), WHICHEVER IS MORE RESTRICTIVE.

TREES TO BE RETAINED

LIVE OAKS			OTHER TREES		
SIZE (INCHES)	NO.	TOTAL (INCHES)	SIZE (INCHES)	NO.	TOTAL (INCHES)
7	1	7			
10	2	20			
12	1	12			
TOTAL LIVE OAKS:		39	TOTAL OTHER TREES:		

EXISTING TREE LEGEND

- OAK
- PALM
- CYPRESS
- MAPLE
- LIGUSTRUM
- ELM

GENERAL NOTES

1. SEE CIVIL PLANS FOR PROPOSED STRUCTURES, UTILITIES, RETAINING WALLS, TREE REMOVAL AND TREE PROTECTION INFORMATION.

2. DISTURBED RIGHT-OF-WAY AND PROPOSED STORMWATER POND SHALL BE SODDED WITH ARGENTINE BAHIA. ALL REMAINING AREAS ARE TO BE GROUNDCOVER, UNLESS OTHERWISE SHOWN ON PLANS.

3. SEE PLAN SHEET L-2 FOR ADDITIONAL LANDSCAPE DETAILS AND NOTES.

4. LANDSCAPE WATER TO BE SUPPLIED BY EXISTING 4" RECLAIMED MAIN.

5. ERECTING OR GROWING ANY OBSTRUCTION OVER THREE AND ONE-HALF FEET IN HEIGHT ABOVE THE ELEVATION OF THE LOWEST POINT ON THE CROWN OF THE ADJACENT ROADWAY WITHIN THE SIGHT TRIANGLE SHALL BE PROHIBITED.

6. LANDSCAPING SHALL BE PLANTED IN SUCH A MANNER AS NOT TO IMPEDE THE STORMWATER RUNOFF FLOW TO OR IN A DITCH, SWALE OR POND.

7. LANDSCAPE BUFFERS ARE LOCATED IN EASEMENTS AND THE MAINTENANCE OF THEM IS RESPONSIBILITY OF THE OWNER.

48 HOURS BEFORE YOU DIG "CALL SUNSHINE" 1-800-432-4770

©COPYRIGHT 2015
THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date
COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

No.	BY	DATE	REVISIONS DESCRIPTION

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

SITE ID 009-2580

CONTENT: LANDSCAPE PLAN

PROJECT: McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638

HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET: L-1

GENERAL LANDSCAPING NOTES

1. THE LANDSCAPE CONTRACTOR SHALL CAREFULLY REVIEW THE LANDSCAPE SPACIFICATIONS. THE WORK SHALL CONSIST OF THE FURNISHING AND INSTALLATION OF ALL PLANT MATERIALS AS SHOWN ON THE LANDSCAPE PLANS AND DETAILS. THE WORK SHALL INCLUDE, THE SUPPLYING OF ALL PLANT MATERIAL SPECIFIED, THE FURNISHING OF LABOR, EQUIPMENT, AND MATERIALS CALLED FOR, AND PERFORMING ALL OPERATIONS IN CONNECTION WITH THE LANDSCAPE INSTALLATION AS SHOWN ON THESE CONSTRUCTION DOCUMENTS. FURTHER, THE WORK SHALL INCLUDE THE MAINTENANCE OF ALL PLANTS, PLANTING AREAS, AND SOD UNTIL ACCEPTANCE BY THE OWNER AND THE FULFILLING OF GUARANTEE PROVISIONS SPECIFIED HEREON.

2. ALL PLANT MATERIALS SHALL BE GRADE FLORIDA # 1 OR BETTER AS OUTLINED UNDER GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, FLORIDA DIVISION OF PLANT INDUSTRY, AND SHALL CONFORM TO ANSI STANDARDS FOR NURSERY STOCK (ANSI Z60.1-LATEST EDITION).

3. ALL PLANTS SHALL BE CONTAINER GROWN, UNLESS OTHERWISE NOTED.

4. ALL PALMS AND TREES SHALL HAVE STRAIGHT TRUNKS WITH NO TWISTS, KNOTTING, OR OTHER DEFFECTIVE CHARACTERISTICS.

5. ALL PLANTING BEDS AND SINGLE TREES AND PALMS SHALL BE MULCHED WITH RECYCLED HARDWOOD MULCH INSTALLED TO A MINIMUM OF 3" THICK IN ALL PLANTING AREAS.

6. SOD SHALL BE INSTALLED WITH TIGHT JOINTS, ROLLED AND FERTILIZED AT TIME OF INSTALLATION. SOD SHALL BE 95% WEED FREE, THE SOD SHALL BE TAKEN UP IN RECTANGLES PREFERABLY 12" X 24" AND SHALL BE FRESH AND UNINJURED AT THE TIME OF PLANTING. SOD SHALL HAVE A SOIL MAT OF SUFFICIENT THICKNESS ADHERING FIRMLY TO THE ROOTS TO WITHSTAND ALL NECESSARY HANDLING. THE SOD SHALL BE SHADED AND KEPT MOIST UNTIL IT IS PLANTED, DUMPING FROM VEHICLES SHALL NOT BE PERMITTED. DAMAGED SOD WILL BE REJECTED. SOD SHALL BE LAID WITHIN 48 HOURS AFTER TIME OF HARVESTING OR SOD SHALL BE KEPT DAMP UNTIL PLANTED. SOD THAT APPEARS DISEASED, INSECT INFESTED AND/OR DISCOLORED SHALL NOT BE ACCEPTED.

7. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY CONFLICT IN PLANS PRIOR TO PERFORMING ANY WORK IN THE AFFECTED AREA.

8. ALL PLANT MATERIALS SHALL BE AS SPECIFIED ON THE LANDSCAPE PLAN. MATERIALS, LABOR OR INSTALLATION TECHNIQUES THAT DO NOT ADHERE TO THE SPECIFICATIONS SHALL BE REJECTED BY THE OWNER'S REPRESENTATIVE AND PROPER REPLACEMENT SHALL BE CARRIED OUT BY THE LANDSCAPE CONTRACTOR AT NO ADDITIONAL COST.

9. SUBSTITUTIONS OF MATERIALS OR CHANGES TO THE DRAWINGS OR SPECIFICATIONS ARE STRICTLY PROHIBITED, ALL DIMENSION SHALL BE FIELD-CHECKED BY THE LANDSCAPE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DISCREPANCY SHALL BE IMMEDIATELY REPORTED TO THE OWNER'S REPRESENTATIVE.

10. ALL PERMITS NECESSARY ARE TO BE PROVIDED BY THE LANDSCAPE CONTRACTOR UNLESS OTHERWISE NOTED IN THE SPECIFICATIONS.

11. THE LANDSCAPE CONTRACTOR SHALL PROVIDE ALL NECESSARY SITE PREPARATION FOR PLANTING AS SPECIFIED. ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO DIRECT THE REMOVAL AND REPLACEMENT OF ANY ITEMS WHICH DO NOT REPRESENT SUCH AN INSTALLATION.

12. ALL PROPOSED LANDSCAPE AND SOD AREAS CONTAINING WEEDS SHALL BE TREATED WITH ROUND-UP PER MANUFACTURER'S SPECIFICATIONS.

13. SOILS FOR ALL PLANT MATERIALS SHALL BE SUITABLE WITH REGARDS TO pH, SOIL TEXTURE, AND SOIL STRUCTURE. PLANTING SOIL FOR ALL PLANT MATERIALS SHALL CONSIST OF TWO (2) PARTS TOPSOIL, ONE (1) PART CLEAN SAND AND ONE (1) PART COMMERCIAL COMPOST (CONSOLIDATED RESOURCE RECOVERY SCREENED YARD MULCH FINES OR APPROVED EQUAL). PLANTING SOIL MIXTURE SAMPLE SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR APPROVAL. NO PLANTING SHALL OCCUR UNTIL PLANTING SOIL IS APPROVED.

14. APPLY PRE-EMERGENT CHEMICAL WITH A PROPERLY CALIBRATED GRANULAR APPLICATOR AFTER INITIAL PLANTINGS HAVE BEEN COMPLETED. APPLY AT THE MANUFACTURER'S RECOMMENDED RATE PER PLANTED AREA SPECIFIED. DO NOT APPLY PRE-EMERGENT CHEMICAL DIRECTLY ON PLANT MATERIAL.

15. ALL PLANT MATERIALS SHALL BE PLANTED WITH TERRA-SORB AG, IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION FOR THE RATE OF APPLICATION.

16. NEW LANDSCAPING SHALL BE PROTECTED FROM VEHICULAR MOVEMENT BY WHEEL STOPS OR OTHER SUITABLE BARRIER.

17. PROPOSED TREES SHALL NOT BE IN CONFLICT WITH PROPOSED OR EXISTING UTILITY LINES OR STRUCTURES, EASEMENTS OR OTHER AREAS WHICH MAY REQUIRE EXCAVATION IN THE EVENT OF SYSTEM FAILURE. THE CONTRACTOR SHALL BE FULLY ACQUAINTED WITH THE RELATED PAVING, SITE GRADING, WATER SUPPLY, ELECTRICAL SUPPLY, AND OTHER UTILITIES TO PREVENT ANY MISUNDERSTANDING AND TO FACILITATE LANDSCAPE INSTALLATION, CALL THE SUNSHINE STATE ONE CALL 1-800-432-4770 PRIOR TO ANY CONSTRUCTION FOR UTILITY COORDINATION. IN ADDITION, NOTIFY THE OWNER A MINIMUM OF 72 HOURS IN ADVANCE OF CONSTRUCTION TO IDENTIFY UTILITY LINE LOCATIONS.

18. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL TREES AND PALMS FOR A PERIOD OF ONE (1) YEAR, ALL SHURBS AND GROUNDCOVER FOR SIX (6) MONTHS AND ALL SOD FOR 90 DAYS. GUARANTEE PERIOD SHALL BEGIN UPON FINAL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

19. UPON NOTIFICATION BY THE OWNER OR THEIR REPRESENTATIVE, THE LANDSCAPE CONTRACTOR SHALL REPAIR OR REPLACE DEFICIENCIES WITHIN 10 WORKING DAYS.

20. ALL PLANT MATERIALS AND SOD SHALL BE WATERED BY THE LANDSCAPE CONTRACTOR FROM INITIAL PLANTING TIME UNTIL FINAL ACCEPTANCE BY OWNER'S REPRESENTATIVE.

21. THE LANDSCAPE CONTRACTOR SHALL CLEAN UP AND REMOVE ALL SURPLUS AND DISCARDED MATERIALS AND RUBBISH FROM CONSTRUCTION, ON A DAILY BASIS.

22. FINAL INSPECTION SHALL NOT TAKE PLACE UNTIL ALL MATERIALS ARE PLANTED/INSTALLED CORRECTLY. THE CONTRACTOR SHALL REQUEST A FINAL INSPECTION BY OWNER'S REPRESENTATIVE IN WRITING.

23. THE LANDSCAPE CONTRACTOR SHALL BE NOTIFIED IN WRITING OF FINAL ACCEPTANCE WITHIN TEN DAYS AFTER FINAL INSPECTION OR TEN DAYS AFTER REINSPECTION, THE LANDSCAPE CONTRACTOR SHALL PROVIDE A NOTARIZED LETTER OF WARRANTY TO THE OWNER PRIOR TO FINAL ACCEPTANCEE.

24. UPON NOTICE OF FINAL ACCEPTANCE, THE OWNER SHALL ASSUME MAINTENANCE AND THE CONTRACTOR'S WARRANTY PERIOD BEGINS.

NUISANCE TREE ERADICATION NOTES

1. THE CONTRACTOR SHALL ERADICATE ALL NUISANCE TREE SPECIES (DEFINED AS TREE SPECIES LISTED IN THE FLORIDA EXOTIC PEST TREE COUNCIL'S LIST OF INVASIVE SPECIES - LATEST EDITION) OCCURRING ON THE PROJECT SITE, THESE SPECIES INCLUDE, BUT ARE NOT LIMITED TO, BRAZILIAN PEPPER (SCHINUS TEREBINTHIFOLIUS), PUNK TREES (MELALEUCA QUINQUENERVIA OR MELALEUCA LEUCODENDRON), AUSTRALIAN PINE (CASUARINA EQUISETIFOLIA) AND CHINESE TALLOW (SAPIUM SEBIFERUM). CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING AND ERADICATING ALL NUISANCE SPECIES ON SITE. HAND REMOVAL SHALL BE REQUIRED IF NUISANCE TREE SPECIES ARE ADJACENT TO PROTECTED TREE SPECIES, SHOULD SAID REMOVAL CREATE A POTENTIAL FOR EROSION, THE AREA SHALL BE RESTABILIZED WITH SUITABLE MATERIAL.

2. ALL TREES LARGER THAN ONE (1) INCH DBH (DIAMETER AT BREAST HEIGHT) SHALL BE CUT WITHIN SIX (6) INCHES OF EXISTING GRADE. ALL STUMPS SHALL BE TREATED WITH HERBICIDE WITHIN ONE HOUR OF CUTTING. HERBICIDE SHALL BE MIXED WITH MARKER DYE TO ENSURE THAT ALL STUMPS ARE TREATED. TREE BIOMASS SHALL BE REMOVED AND DISPOSED OF AT AN OFF-SITE LOCATION IN STRICT ACCORDANCE WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

3. TREES SMALLER THAN ONE (1) INCH DBH AND SEEDLINGS SHALL BE TREATED IN-SITU WITH A FOLIAR SYSTEMIC HERBICIDE. CARE SHALL BE TAKEN TO AVOID OVERSPRAY ON DESIRABLE VEGETATION. REMOVE DEAD BIOMASS.

4. THE CONTRACTOR SHALL PERFORM QUARTERLY INSPECTIONS OF TREATED AREAS AND RE-TREAT AS NEEDED TO ELIMINATE REGROWTH OF NUISANCE TREE SPECIES.

IPS BEETLE PROTECTION

1. ENVIRONMENTAL MANAGEMENT RECOMMENDS THAT AN APPROVED INSECTICIDE BE APPLIED TO ALL PINES REMAINING FOR PROTECTION AGAINST THE PROMINENT IPS PINE BEETLE. THE OCCURENCE OF THIS BEETLE IS INITIATED THROUGH A PINE'S STRESSED CONDITION WHICH MAY READILY RESULT FROM VARIOUS FORMS OF GROUND DISTURBANCE. THE APPLICATION OF AN INSECTICIDE IS RECOMMENDED PRIOR TO CONSTRUCTION ACTIVITY.

TREE & SHRUB PLANTING NOTES

1. ALL REQUIRED TREES SHALL BE A MINIMUM OF 10' HIGH, 3" CALIPER AT TIME OF PLANTING, UNLESS OTHERWISE INDICATED IN THE SPECIFICATIONS.

2. THE ROOT MASS OF EACH TREE PROPOSED FOR INSTALLATION SHALL BE BALLED OR BURLAPPED, BARE ROOT TREES ARE NOT ACCEPTABLE. ALL NONBIODEGRADABLE WRAPPINGS WILL BE REMOVED AND BURLAP WILL BE FOLDED DOWN TO ENHANCE WATER ABSORPTION. IF WIRE BASKETS ARE USED IN CONJUNCTION WITH BALLED AND BURLAPPED TREES, THE FIRST FEW ROWS OF EACH BASKET WILL BE REMOVED AT THE TIME OF INSTALLATION.

3. SUPPORTING APPARATUS SHALL BE REMOVED AFTER ONE (1) COMPLETE GROWING SEASON. FLEXIBLE ATTACHMENTS SHALL BE USED WHERE SUPPORT WIRES ARE WRAPPED AROUND TREE TRUNKS / STEMS TO PREVENT CAMBIAL DAMAGE.

4. PLANTING HOLES SHALL BE A MINIMUM OF 18 - 24 INCHES WIDER THAN THE DIAMETER OF THE ROOT BALL. TREES SHALL BE INSTALLED SUCH THAT THE TOP OF THE ROOT MASS IS LEVEL WITH THE SURFACE OF THE PLANTING HOLE. TREES SHOULD BE INSTALLED 3 - 5 INCHES ABOVE GRADE ON SITES CONTAINING CLAY.

5. PLANTERS ADJACENT TO OR WITHIN VEHICULAR USE AREAS SHALL BE CONSTRUCTED SUCH THAT LIMEROCK, ASPHALT, CONCRETE OR ANY OTHER OBSTRUCTIONS DO NOT EXTEND UNDER THE SURFACE INTO THE PLANTING AREAS.

6. THE USE OF FERTILIZERS DURING PLANT INSTALLATION IS NOT APPROVED. SCIENTIFIC EVIDENCE INDICATES THAT FERTILIZATION (SPECIFICALLY, THE APPLICATION OF NITROGEN) OF TREES / SHRUBS WITHIN THE FIRST GROWING SEASON INHIBITS ROOT GROWTH.

SHRUBS AND HEDGES

1. SHRUBS SHALL BE MINIMUM 3 GALLON CONTAINER GROWN 18 INCHES IN HEIGHT, MEASURED ABOVE ADJACENT PAVEMENT SURFACES REQUIRED TO BE BUFFERED AND/OR SCREENED, AND SPACED 36 INCHES ON CENTER, UNLESS OTHERWISE NOTED ON THE LANDSCAPE PLAN.

2. PLANTS SHALL BE 24 INCHES IN HEIGHT MINIMUM ONE YEAR AFTER PLANTING, AND MAINTAINED AT 24 INCHES, EXCEPT FOR VISIBILITY AT INTERSECTIONS AND WHERE PEDESTRIAN ACCESS IS PROVIDED.

3. HEDGES AS REQUIRED IN BUFFERS SHALL BE PLANTED IN ROWS AND MAINTAINED SO AS TO FORM A CONTINUOUS UNBROKEN VISUAL SCREEN WITHIN ONE YEARS TIME OF INSTALLATION EXCEPT WHERE STREET VISIBILITY IS REQUIRED BY CODE. A VISIBILITY TRIANGLE SHALL BE AT LEAST 20 FEET ALONG THE ABUTTING RIGHT-OF-WAY LINES MEASURED FROM THE POINT OF INTERSECTION. THE THIRD SIDE OF THE TRIANGLE SHALL BE A LINE CONNECTING THE ENDS OF THE OTHER TWO SIDES.

GROUNDCOVER

1. GROUND COVERS SHALL BE INSTALLED IN A MANNER WHICH REPRESENTS A FINISHED APPEARANCE AND COMPLETE COVERAGE.

2. STONE, GRAVEL, OR ARTIFICIAL GROUND COVER SHALL NOT BE UTILIZED IN THE LANDSCAPE AREA.

MULCH

1. A THREE (3) INCH LAYER OF RECYCLED HARWOOD MULCH SHALL BE PLACED AROUND ALL NEWLY INSTALLED TREES, SHRUBS, AND GROUND COVER PLANTINGS.

2. EACH TREE AND SHRUB SHALL HAVE A RING OF RECYCLED HARWOOD MULCH 24 INCHES BEYOND ITS TRUNK IN ALL DIRECTIONS. IN ORDER TO PREVENT FUNGAL INFECTION MULCH SHALL BE PULLED BACK A FEW INCHES FROM THE BASE OF EACH TREE.

FERTILIZATION

TREES AND SHRUBS

ALL TREES AND SHRUBS SHALL BE FERTILIZED WITH "AGRIFORM" 20-15-5 PLANTING TABLETS AT THE TIME OF PLANTING AND PRIOR TO PIT BACKFILLING. TABLETS SHALL BEPLACED UNIFORMLY AROUND THE ROOT BALL AT A DEPTH THAT IS BETWEEN THE MIDDLE AND THE BOTTOM OF ROOT BALL.

APPLICATION RATE:

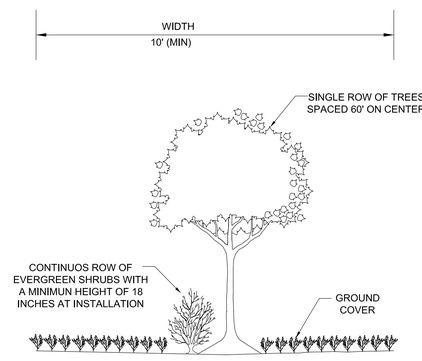
1 GALLON CONTAINER:	1-21 GRAM TABLET
3 GALLON CONTAINER:	2-21 GRAM TABLETS
5 GALLON CONTAINER:	3-21 GRAM TABLETS
7 GALLON CONTAINER:	4-21 GRAM TABLETS
TREES:	3-21 GRAM TABLETS PER EACH 1/2" CALIPER OF TRUNK
PALMS:	7-21 GRAM TABLETS

GROUNDCOVER AREAS

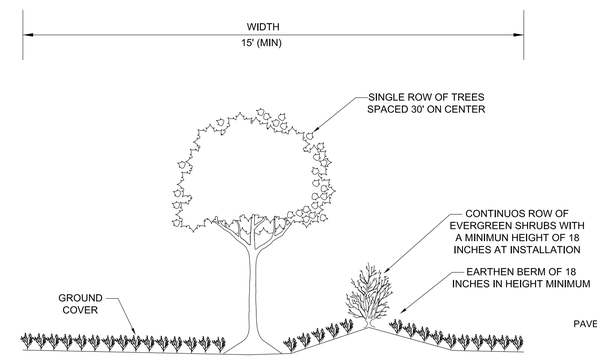
ALL GROUNDCOVER AREAS SHALL RECEIVE FERTILIZATION WITH "OZMOCOTE" TIME RELEASE FERTILIZER PER MANUFACTURER'S SPECIFICATIONS.

PLANT SCHEDULE

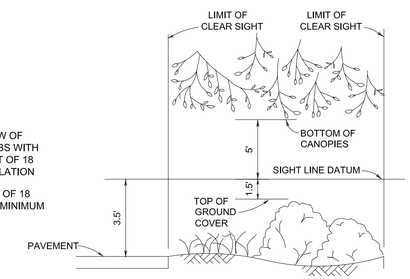
TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	SPA	WATER	NATIVE
	LL	15	Lagerstroemia indica `Lavender`	Crape Myrtle Multi-Trunk	45 gal	Multi-trunk (3 - 17)	6' +	As Shown	Natural	No
NATIVE TREES	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL**	**SIZE**	**SPA**	**WATER**	**NATIVE**
	IC	6	Ilex cassine	Dahoon Holly	45 gal	2"Cal	10' +	As Shown	Natural	Yes
	JB	4	Juniperus silicicola `Brodie`	Brodie Southern Red Cedar	45 gal	2"Cal	6' +	As Shown	Natural	Yes
	MB	4	Magnolia grandiflora `D.D. Blanchard` TM	Southern Magnolia	30 gal	2"Cal	6' +	As Shown	Natural	Yes
	ML	9	Magnolia grandiflora `Little Gem`	Dwarf Southern Magnolia	45 gal	2"Cal	6' +	As Shown	Natural	Yes
	QH	7	Quercus virginiana `High Rise`	High Rise Live Oak	30 gal	2"Cal	6' +	As Shown	Natural	Yes
	SS	16	Sabal palmetto	Cabbage Palmetto	B & B	Robust	10' +CT	As Shown	Natural	Yes
	TD	4	Taxodium distichum	Bald Cypress	30 gal	2"Cal	6' +	As Shown	Natural	Yes
NATIVE GRASSES	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**HT**	**SPA**	**WATER**	**NATIVE**	**SPACING**
	SB	225	Spartina bakeri	Sand Coral Grass	3 gal	20"+	30"OC	Drought Tolerant	Yes	36" o.c.
NATIVE SHRUBS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**HT**	**SPA**	**WATER**	**NATIVE**	**SPACING**
	ID	204	Ilex vomitoria `Schillings Dwarf`	Dwarf Schillings Holly	3 gal	14"H	30"OC	Drought Tolerant	Yes	30" o.c.
	VM	502	Viburnum obovatum `Miss Shillers Delight`	Small-Leaf Arrowwood	3 gal	18"H	30"OC	Drought Tolerant	Yes	30" o.c.
MEDIUM GROUND COVERS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**HT**	**SPA**	**WATER**	**NATIVE**	**SPACING**
	JP	571	Juniperus chinensis `Parsoni`	Parson Juniper	1 gal	6"	24"	Drought Tolerant	No	24" o.c.
	RA	318	Rhaphiolepis indica `Alba`	White Indian Hawthorn	3 gal	12"	30"	Drought Tolerant	No	30" o.c.
SODDED	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**HT**	**SPA**	**WATER**	**NATIVE**	**SPACING**
	PA	16,303 sf	Paspalum notatum `Argentine`	Bahia Grass	sod			Drought Tolerant	Yes	



BUFFER TYPE "A"
TYPICAL SECTION
NTS



BUFFER TYPE "D"
TYPICAL SECTION
NTS



THE INTENT OF THIS STANDARD IS TO PROVIDE A WINDOW WITH VERTICAL LIMITS 5' ABOVE AND 1.5' BELOW THE SIGHT LINE DATUM, AND HORIZONTAL LIMITS DEFINED BY THE LIMITS OF CLEAR SIGHT.

WINDOW DETAIL
NTS

48 HOURS BEFORE YOU DIG "CALL SUNSHINE" 1-800-432-4770

©COPYRIGHT 2015

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date

COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER.

No.	BY	DATE	DESCRIPTION

REVISIONS

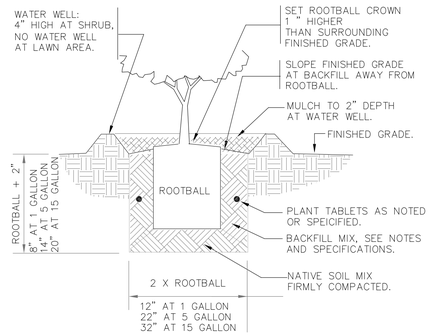
PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

CONTENT:
LANDSCAPE NOTES & DETAILS

PROJECT:
McDONALD'S RESTAURANT REBUILD
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638
SITE ID 009-2580

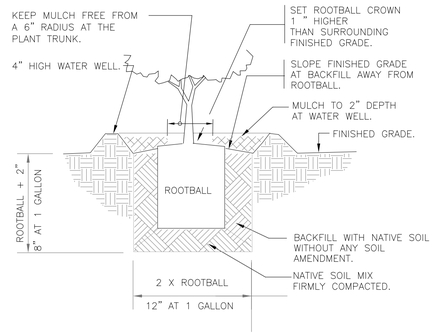
HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET:
L-2



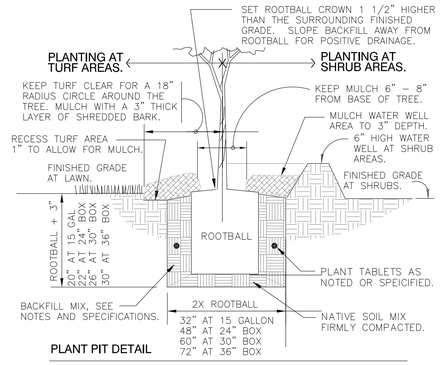
1 SHRUB PLANTING

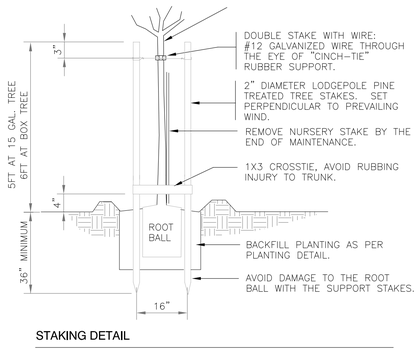
NTS



3 NATIVE SHRUB PLANTING

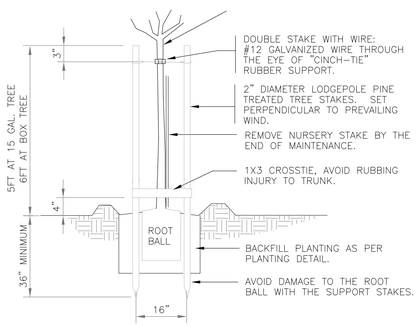
NTS

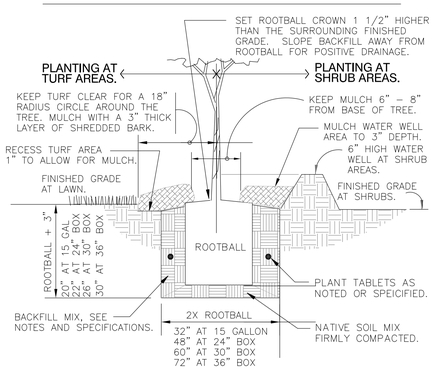




4 TREE DOUBLE STAKE PLANTING

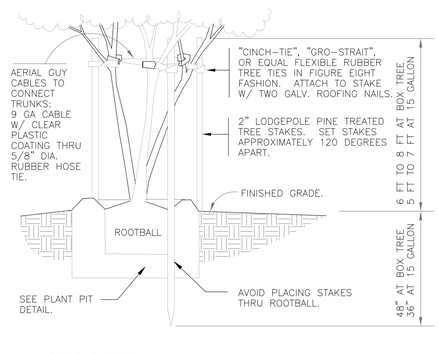
NTS

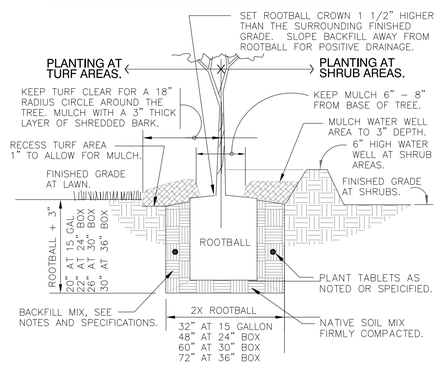




2 TREE PLANTING DOUBLE STAKE

NTS

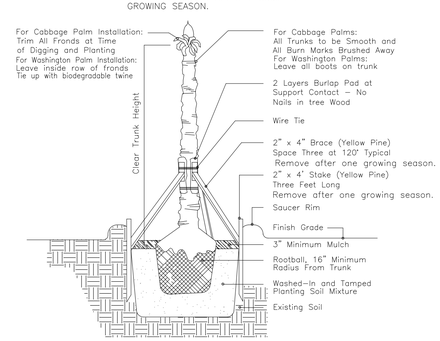




5 TREE PLANTING MULTI-STAKE

NTS

NOTE: ALL TREE STAKES AND SUPPORT WIRES
WILL BE REMOVED AFTER 1 COMPLETE
GROWING SEASON.



6 PALM STAKING & PLANTING DETAIL

NTS

48 HOURS
BEFORE YOU DIG
"CALL SUNSHINE"
1–800–432–4770

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date
COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

©COPYRIGHT 2015

No.	BY	DATE	REVISIONS DESCRIPTION

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

CONTENT: LANDSCAPE NOTES & DETAILS

PROJECT: McDONALD'S RESTAURANT REBUILD
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638
SITE ID 009-2580

HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET: L-3

IRRIGATION NOTES

1. PURSUANT TO SECTION 603.14 FROM PASCO COUNTY CODE OF ORDINANCE, FOR NEW DEVELOPMENT INCLUDING, BUT NOT LIMITED TO, CLASS I, II, AND III DEVELOPMENTS AND SINGLE AND MULTIFAMILY LOTS WHERE PERMANENT IN-GROUND IRRIGATION SYSTEMS ARE INSTALLED AND FOR NEWLY IRRIGATED LANDSCAPED AND TURF AREAS FOR DEVELOPMENT INCLUDING, BUT NOT LIMITED TO, CLASS I, II, AND III DEVELOPMENTS AND SINGLE AND MULTIFAMILY LOTS, A PERMANENT IRRIGATION SYSTEM PROVIDING COMPLETE WATER COVERAGE FOR ALL REQUIRED AND OTHER LANDSCAPING MATERIALS SHALL BE PROVIDED AND MAINTAINED AS A FULLY FUNCTIONING SYSTEM IN ORDER TO PRESERVE THE LANDSCAPING IN A HEALTHY GROWING CONDITION.

2. IRRIGATION SYSTEMS MUST UTILIZE LOW VOLUME DESIGN SUCH AS LOW TRAJECTORY HEADS OR SOAKER HOSES TO PROVIDE DIRECT APPLICATION AND LOW EVAPORATION. SYSTEMS THAT OVERSPRAY AREAS THAT DO NOT REQUIRE IRRIGATION, SUCH AS PAVED AREAS WILL NOT BE ACCEPTABLE. HIGH IRRIGATION NEED AREAS MUST NOT OVERSPRAY LOW NEED AREAS. SPRINKLER SPACING SHALL NOT EXCEED 55 PERCENT OF SPRINKLER'S DIAMETER OF COVERAGE.

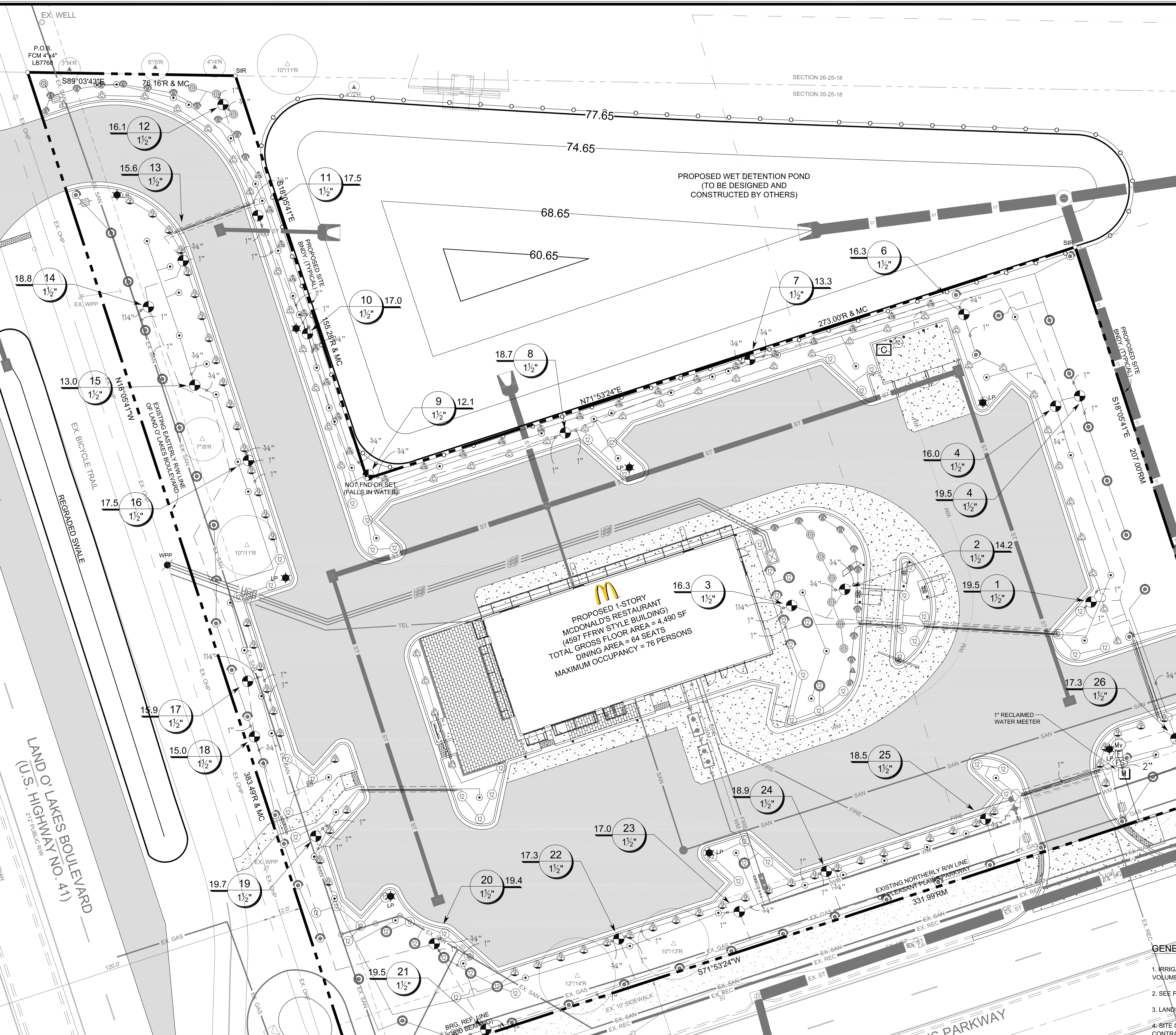
3. HIGH WATER DEMAND LANDSCAPE AREAS SUCH AS TURF MUST BE SERVED BY A SEPARATE IRRIGATION ZONE THAN LOW WATER DEMAND AREAS, SUCH AS PLANTER BEDS, OR MULCHED AREAS WITH TREES. IN NO CASE, SHALL ANY PLANTED VEGETATION AREA BE MORE THAN 50' FROM A WATER SUPPLY HOSE BIBB. BAHIA SOD AREAS WILL BE NON-IRRIGATED.

4. IRRIGATION CONTROL EQUIPMENT SHALL INCLUDE AN OPPERABLE AND FUNCTIONING AUTOMATIC IRRIGATION CONTROLLER CAPABLE OF DIFFERENTIATING BETWEEN THE SCHEDULES OF HIGH AND LOW WATER DEMAND AREAS. CONTROLLERS MUST HAVE MULTIPLE CYCLE START CAPACITY AND A FLEXIBLE CALENDAR PROGRAM ABLE TO BE SET TO COMPLY WITH LOCAL OR WATER MANAGEMENT DISTRICT IMPOSED RESTRICTIONS.

5. AUTOMATIC IRRIGATION SYSTEMS MUST BE EQUIPPED WITH A RAIN SENSOR DEVICE OR SWITCH WHICH WILL OVERRIDE THE IRRIGATION CYCLE OF THE SPRINKLER SYSTEM, WHEN ADEQUATE RAINFALL HAS OCCURRED.

6. SHALLOW WELLS, OPEN SURFACE WATER BODIES, OR RECLAIMED WATER MUST BE USED AS A SOURCE OF IRRIGATION WATER. THE DISTRIBUTION SYSTEM FOR IRRIGATION SHALL NOT BE CONNECTED TO COUNTY OR MUNICIPAL WATER SOURCES, UNLESS IT CAN BE DEMONSTRATED THAT THESE SOURCES ARE NOT AVAILABLE. IF THE IRRIGATION SYSTEM IS CONNECTED TO A POTABLE WATER SOURCE, A BACK FLOW PREVENTER SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND ORDINANCES. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE PROPOSED IRRIGATION SYSTEM DESIGN FOR APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION. COST OF IRRIGATION SHOP DRAWINGS SHALL BE INCLUDED IN PRICE BID FOR IRRIGATION.

7. THE IRRIGATION SYSTEM SHALL HAVE PURPLE COLOR PIPING AND LABELING ON THE PIPE TO INSURE DIFFERENTIATION FROM POTABLE WATER PIPING.



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	DETAIL
EST LCS RCS CST SST	Rain Bird 1806-SAM-PRS-NP 15 Strip Series Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve, Pressure Regulating, and Non Potable Purple Cap.	24	30	
Q T H F	Rain Bird 1806-SAM-PRS-NP 8 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve, Pressure Regulating, and Non Potable Purple Cap.	10	30	
Q H F	Rain Bird 1806-SAM-PRS-NP 8 FLT Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve, Pressure Regulating, and Non Potable Purple Cap.	22	30	
EST LCS RCS CST SST	Rain Bird 1800-PA-8S-PRS 15 Strip Series Shrub Spray on fixed riser with the PA-8S-PRS Pressure Regulating Shrub Adapter. Use with 1/2" MPT threaded risers.	44	30	
SST	Rain Bird 1800-PA-8S-PRS 15 Strip Series Shrub Spray on fixed riser with the PA-8S-PRS Pressure Regulating Shrub Adapter. Use with 1/2" MPT threaded risers.	58	30	
Q T H TQ F	Rain Bird 1800-PA-8S-PRS 12 Series MPR Shrub Spray on fixed riser with the PA-8S-PRS Pressure Regulating Shrub Adapter. Use with 1/2" MPT threaded risers.	13	30	
8 08HE-VAN, 12 12HE-VAN, 10 10HE-VAN, 15 15HE-VAN	Rain Bird 1800-PA-8S-PRS ADJ Shrub Spray on fixed riser with the PA-8S-PRS Pressure Regulating Shrub Adapter. Use with 1/2" MPT threaded risers.	54	30	
Q T H TT TQ F	Rain Bird R-1724 RD-1806-SAM-P45-NP Turf Rotator, 17\`-24\` Rotary Stream, w/RD-1800 turf spray body on 6.0" pop-up, with check valve and 45 psi in-stem pressure regulator. 1/2" NPT Female Threaded Inlet. With Non-Potable Purple Cap.	49	30	
25Q 50Q 50H 10H 10F 20F	Hunter PROS-PRS30-04-CV-R-MSBN Multi-Stream Bubbler, 4" pop-up, factory installed drain check valve, reclaimed body cap, 25=.25gpm, 50=0.5gpm, 10=1.0gpm, 20=2.0gpm.	63	30	

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	DETAIL
(valve)	Rain Bird PESBR 1", 1-1/2", and 2" Durable Chlorine-Resistant Valves for Reclaimed Water Applications. With Scrubber Mechanism Technology, and Purple Flow Control Handle.	26	
Mv	Rain Bird PEB-NP-HAN 1" 1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration. With Purple Handle for Non-Potable Water Use.	1	
C	Rain Bird ESP8LXME-LXMM with (05) ESPLXMSM4 28 Station Capable Commercial Controller. Mounted on a Powder-Coated Metal Cabinet.	1	
rc	Rain Bird RSD-CEx Rain Sensing Device, conduit mount. With threaded adapter, extension wire.	1	
FS	Rain Bird FS-100-P 1" Flow Sensor for use with Rain Bird Maxicom, SiteControl, and ESP-LXD Central Control Systems. Plastic (PVC) Model. Suggested Operating Range of 5.4 GPM to 53.9 GPM. Sensors should be sized for flow rather than pipe size.	1	
F	Rain Bird QKCHK-100-200M 1" Inlet/Outlet w/ 200 mesh stainless steel screen, white	1	
M	Water Meter 1"	1	
(solid line)	Irrigation Lateral Line: Blu-Lock and PVC Class 200 Blu-Lock pipe, as manufactured by Hydro Rain, 1/2" to 1", then PVC Class 200 for 1-1/4" and larger. Only lateral transition pipe sizes 1" and above are indicated on the plan, with all others being 3/4" in size.	5,094 l.f.	
(dashed line)	Irrigation Mainline: Blu-Lock and PVC Class 200 Blu-Lock pipe, as manufactured by Hydro Rain, 1/2" to 1", then PVC Class 200 for 1-1/4" and larger.	1,531 l.f.	
(double dashed line)	Pipe Sleeve: Blu-Lock and PVC Class 200	354.1 l.f.	

Valve Callout: Valve Number (#), Valve Flow (#), Valve Size (#")

CRITICAL ANALYSIS

Generated:	2015-06-10 16:31
P.O.C. NUMBER:01	
Water Source Information:	
FLOW AVAILABLE	
Water Meter Size:	1"
Flow Available:	20.23 gpm
PRESSURE AVAILABLE	
Static Pressure at POC:	60.00 psi
Elevation Change:	5.00 ft
Service Line Size:	1"
Length of Service Line:	20.00 ft
Pressure Available:	56.00 psi
DESIGN ANALYSIS	
Maximum Station Flow:	19.73 gpm
Flow Available at POC:	20.23 gpm
Residual Flow Available:	0.50 gpm
Pressure Req. at Critical Station:	40.06 psi
Loss for Fittings:	0.03 psi
Loss for Main Line:	0.28 psi
Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	0.00 psi
Loss for Master Valve:	2.30 psi
Loss for Water Meter:	1.60 psi
Critical Station Pressure at POC:	44.27 psi
Pressure Available:	56.00 psi
Residual Pressure Available:	11.73 psi

GRAPHIC SCALE 1"=20'

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	WIRE	PSI	PSI @ POC	GPM	HEAD ELEV	VALVE ELEV	PRECIP
1	Rain Bird PESBR	1-1/2"	Shrub Spray	251.7	35.79	39.30	19.50	0.00 ft	0.00 ft	1.31 in/h
2	Rain Bird PESBR	1-1/2"	Turf Spray	369.6	34.17	36.92	14.19	0.00 ft	0.00 ft	1.13 in/h
3	Rain Bird PESBR	1-1/2"	Shrub Spray	370.7	35.07	38.27	16.32	0.00 ft	0.00 ft	1.14 in/h
4	Rain Bird PESBR	1-1/2"	Bubbler	166.8	38.00	40.87	16.00	0.00 ft	0.00 ft	30.64 in/h
5	Rain Bird PESBR	1-1/2"	Turf Rotary	170.1	35.10	38.77	19.50	0.00 ft	0.00 ft	0.34 in/h
6	Rain Bird PESBR	1-1/2"	Shrub Spray	98.1	35.68	38.73	16.32	0.00 ft	0.00 ft	1.01 in/h
7	Rain Bird PESBR	1-1/2"	Turf Spray	89.4	34.92	37.58	13.31	0.00 ft	0.00 ft	1.70 in/h
8	Rain Bird PESBR	1-1/2"	Shrub Spray	162.1	35.85	39.77	18.72	0.00 ft	0.00 ft	1.33 in/h
9	Rain Bird PESBR	1-1/2"	Turf Spray	241.6	35.05	37.75	12.10	0.00 ft	0.00 ft	1.69 in/h
10	Rain Bird PESBR	1-1/2"	Bubbler	304.8	36.81	40.48	17.00	0.00 ft	0.00 ft	30.64 in/h
11	Rain Bird PESBR	1-1/2"	Shrub Spray	351.7	35.79	39.63	17.51	0.00 ft	0.00 ft	1.49 in/h
12	Rain Bird PESBR	1-1/2"	Turf Spray	394.3	35.17	38.75	16.12	0.00 ft	0.00 ft	1.18 in/h
13	Rain Bird PESBR	1-1/2"	Shrub Spray	402.8	34.31	37.70	15.57	0.00 ft	0.00 ft	1.92 in/h
14	Rain Bird PESBR	1-1/2"	Turf Rotary	428.6	35.04	39.26	18.75	0.00 ft	0.00 ft	0.35 in/h
15	Rain Bird PESBR	1-1/2"	Bubbler	465.5	37.38	40.38	13.00	0.00 ft	0.00 ft	30.64 in/h
16	Rain Bird PESBR	1-1/2"	Shrub Spray	507.0	34.67	38.63	17.49	0.00 ft	0.00 ft	1.50 in/h
17	Rain Bird PESBR	1-1/2"	Shrub Spray	583.4	34.76	38.35	15.92	0.00 ft	0.00 ft	1.42 in/h
18	Rain Bird PESBR	1-1/2"	Turf Rotary	603.9	35.65	38.99	15.00	0.00 ft	0.00 ft	0.31 in/h
19	Rain Bird PESBR	1-1/2"	Shrub Spray	656.7	37.27	42.19	19.73	0.00 ft	0.00 ft	1.34 in/h
20	Rain Bird PESBR	1-1/2"	Shrub Spray	614.0	34.36	39.26	19.40	0.00 ft	0.00 ft	1.19 in/h
21	Rain Bird PESBR	1-1/2"	Turf Rotary	577.3	37.32	42.29	19.50	0.00 ft	0.00 ft	0.32 in/h
22	Rain Bird PESBR	1-1/2"	Shrub Spray	535.4	34.56	38.85	17.30	0.00 ft	0.00 ft	1.89 in/h
23	Rain Bird PESBR	1-1/2"	Bubbler	486.2	40.06	44.27	17.00	0.00 ft	0.00 ft	30.64 in/h
24	Rain Bird PESBR	1-1/2"	Shrub Spray	455.1	34.73	39.58	18.94	0.00 ft	0.00 ft	1.52 in/h
25	Rain Bird PESBR	1-1/2"	Shrub Spray	394.0	35.13	39.82	18.49	0.00 ft	0.00 ft	1.59 in/h
26	Rain Bird PESBR	1-1/2"	Turf Rotary	296.8	36.16	38.80	17.25	0.00 ft	0.00 ft	0.36 in/h
	Common Wire			1,531						

GENERAL NOTES

1. IRRIGATION PLAN IS FOR DESIGN INTENT ONLY. CONTRACTOR MUST VERIFY SUPPLY VOLUME AND PRESSURE AND SIZE SYSTEM ACCORDINGLY.

2. SEE PLAN SHEET I-2 FOR ADDITIONAL IRRIGATION DETAILS.

3. LANDSCAPE WATER TO BE SUPPLIED BY EXISTING 4" RECLAIMED MAIN.

4. SITE CONTRACTOR TO COORDINATE THE LOCATION OF ALL SLEEVES WITH IRRIGATION CONTRACTOR.

5. ALL IRRIGATION SLEEVES TO BE PVC SCHEDULE 40 MINIMUM THICKNESS. CONTRACTOR TO BURY ALL SLEEVES A MINIMUM OF 18 BELOW FINISHED GRADE.

6. ALL SLEEVES ARE REQUIRED TO BE AT LEAST 2" DIAMETER.

7. CONTRACTOR TO LOCATE ALL SLEEVES WITH PVC ELBOWS ABOVE GRADE.

8. CONTRACTOR TO ENSURE THAT ALL SLEEVES EXTEND A MINIMUM OF 12" BEYOND ALL CONCRETE CURBS OR WALKS AS REQUIRED.

9. ADDITIONAL SLEEVES MAY BE REQUIRED FOR ADDITIONAL UTILITIES. CONTRACTOR TO COORDINATE ADDITIONAL SLEEVES WITH SITE CONTRACTOR ONSITE.

48 HOURS BEFORE YOU DIG "CALL SUNSHINE" 1-800-432-4770

©COPYRIGHT 2015

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 FL Registration No. — BRAULIO GRAJALES Professional Engineer — Sign Date

COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

REVISIONS: No. | BY | DATE | DESCRIPTION

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

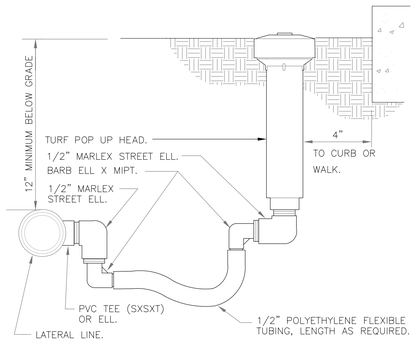
SITE ID 009-2580

CONTENT: IRRIGATION PLAN

PROJECT: McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638

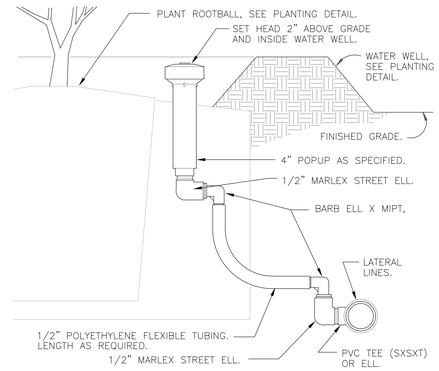
HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET: I-1



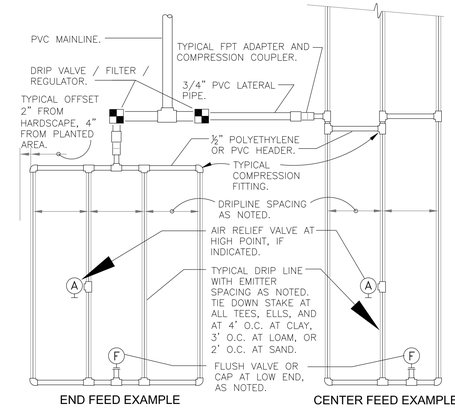
1 TURF SPRAY FLEX ASSEMBLY

NTS



3 POPUP BUBBLER AT PLANT PIT

NTS



MAXIMUM LATERAL LENGTH (FEET)						
	EMITTER FLOW RATE GPH					
	12" SPACING		18" SPACING		24" SPACING	
PSI	0.6	0.9	0.6	0.9	0.6	0.9
10	125	96	175	135	218	171
20	249	191	350	171	442	340
30	307	236	434	333	550	422
40	350	268	495	380	627	171
50	125	96	175	135	218	171
60	125	96	175	135	218	171

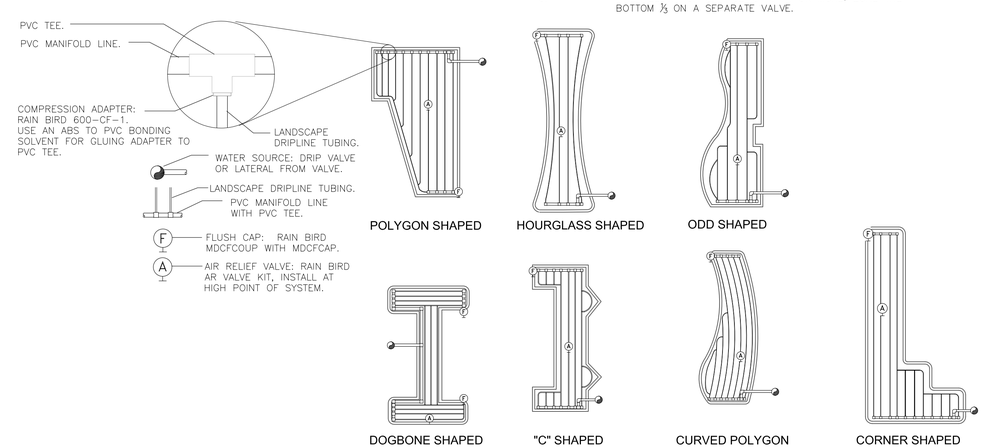
GRID PRECIPITATION RATES (IN/HR)			
EMITTER SPACING	LATERAL SPACING	EMITTER FLOW RATE	
		0.6	0.9
12	12	0.96	1.44
18	18	0.69	1.03
24	24	0.28	0.41

LATERAL FLOW PER 100 FT (GPM)			
EMITTER FLOW	12" SPACING	18" SPACING	24" SPACING
0.6 GPH	1.0 GPM	0.67 GPM	0.50 GPM
0.9 GPH	1.5 GPM	1.0 GPM	0.75 GPM

MAXIMUM FLOW PER ZONE		
	MAX GPM	PSI LOSS
SCHEDULE 40 PVC HEADER SIZE		
1/2"	4.7 GPM	7.7 PSI
3/4"	8.3 GPM	5.6 PSI
1"	13.5 GPM	4.2 PSI
1-1/2"	33.9 GPM	2.9 PSI
2"	52.4 GPM	1.9 PSI
POLY PIPE HEADER SIZE		
1/2"	4.7 GPM	8.8 PSI
3/4"	8.3 GPM	6.3 PSI
1"	13.5 GPM	4.8 PSI
1-1/2"	31.8 GPM	2.9 PSI
2"	52.4 GPM	2.2 PSI

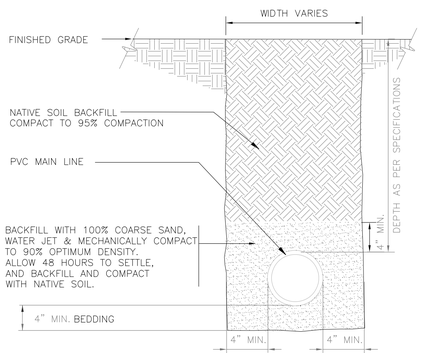
SLOPED CONDITION NOTE:

1. DRIPLINE LATERALS SHOULD FOLLOW THE CONTOURS OF THE SLOPE WHENEVER POSSIBLE.
2. INSTALL AIR RELIEF VALVE AT HIGHEST POINT.
3. NORMAL SPACING WITHIN THE TOP ⅔ OF SLOPE,
4. INSTALL DRIPLINE AT 25% GREATER SPACING AT THE BOTTOM ⅓ OF THE SLOPE.
5. WHEN ELEVATION CHANGE IS 10 FT OR MORE, ZONE THE BOTTOM ½ ON A SEPARATE VALVE.



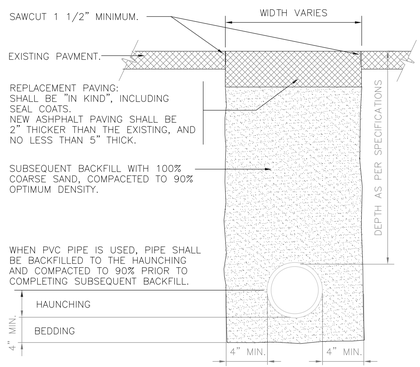
2 TYPICAL RAIN BIRD DRIPLINE REQUIREMENTS

NTS



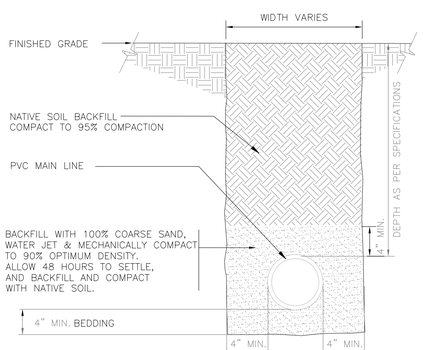
5 MAINLINE WITH SAND BEDDING

NTS



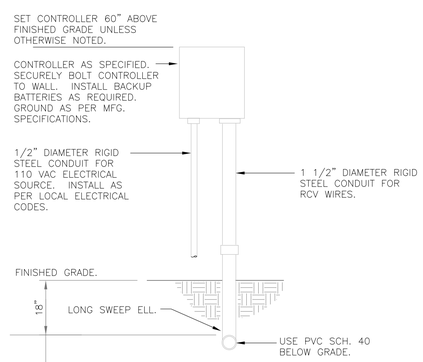
4 TRENCH DETAIL AT ASPHALT PAVING

NTS



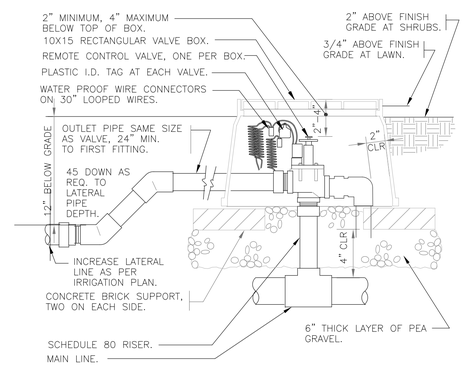
6 SLEEVE AT ROAD

NTS



7 WALL MOUNT CONTROLLER

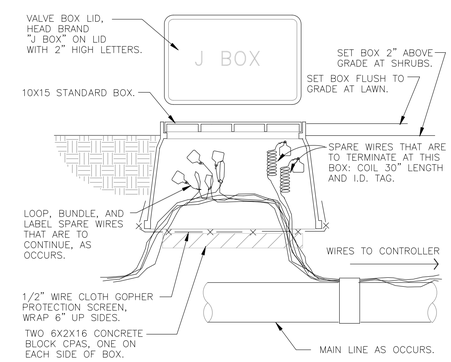
NTS



8 ELECTRIC REMOTE CONTROL VALVE

NTS

DETAIL-FILE



9 WIRE BUNDLE JUNCTION BOX

NTS

©COPYRIGHT 2015

THIS DRAWING IS THE PROPERTY OF HIGH POINT ENGINEERING, INC. UNDER NO CIRCUMSTANCES MAY THIS DRAWING BE REPRODUCED, PUBLISHED, ALTERED OR USED IN ANY WAY WITHOUT WRITTEN AUTHORIZATION FROM HIGH POINT ENGINEERING, INC.

58626 — FL Registration No.
BRAULIO GRAJALES — Professional Engineer
Sign Date
COPY OF THIS PLAN IS NOT VALID UNLESS SIGNED, SEALED AND DATED BY THE PROFESSIONAL ENGINEER

No.	BY	DATE	DESCRIPTION
			REVISIONS

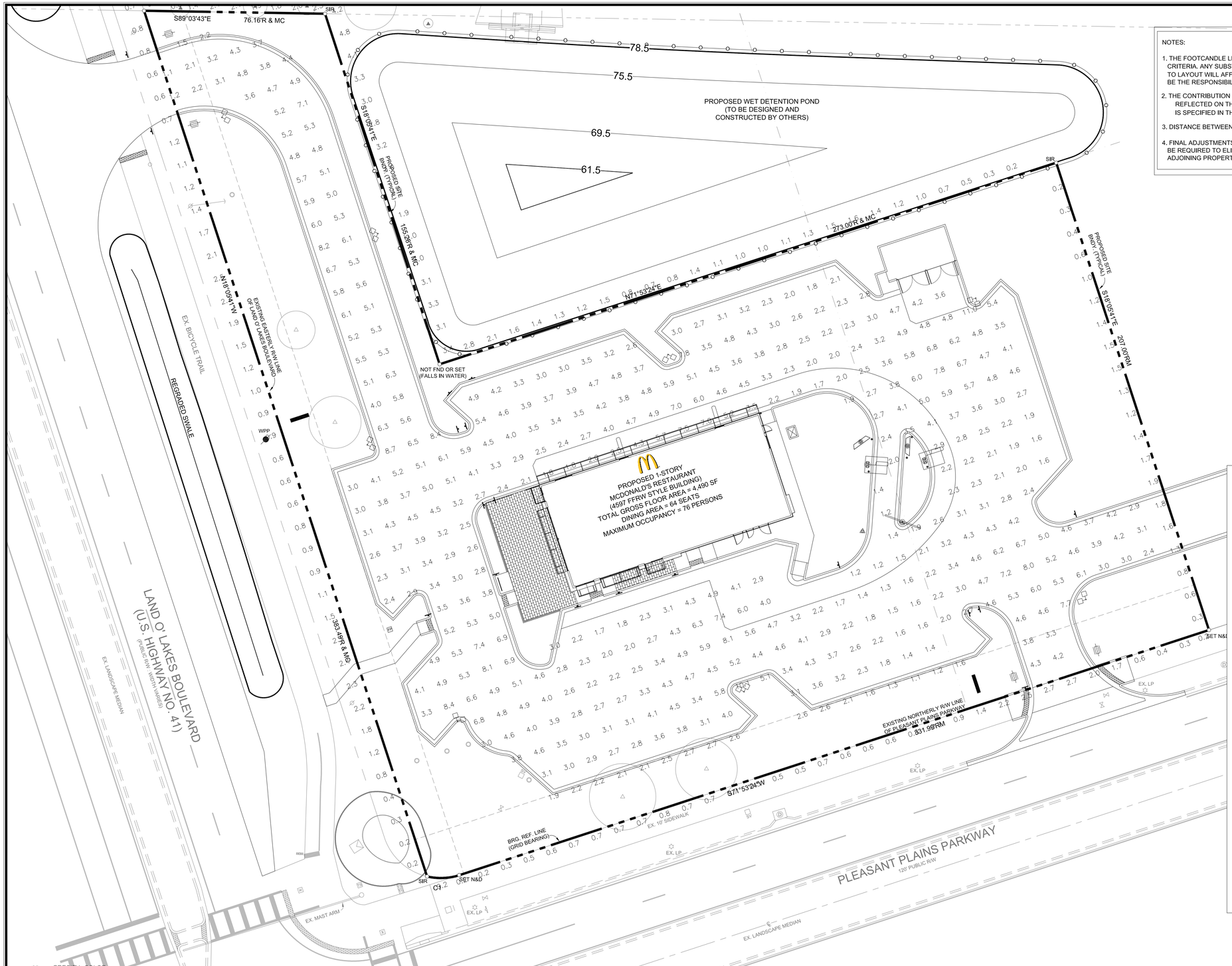
PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

CONTENT: IRRIGATION DETAILS

PROJECT: McDONALD'S RESTAURANT REBUILD
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638
SITE ID 009-2580

HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET: I-2



NOTES:

1. THE FOOTCANDLE LEVELS AS SHOWN ARE BASED ON THE FOLLOWING CRITERIA. ANY SUBSTITUTIONS IN SPECIFIED FIXTURES OR CHANGES TO LAYOUT WILL AFFECT LIGHTING LEVELS SHOWN AND WILL NOT BE THE RESPONSIBILITY OF SECURITY LIGHTING.
2. THE CONTRIBUTION OF THE SOFFIT / BUILDING LIGHTING IS NOT REFLECTED ON THE DRAWING UNLESS SOFFIT / BUILDING LIGHTING IS SPECIFIED IN THE FIXTURE SCHEDULE BELOW.
3. DISTANCE BETWEEN READINGS 10'
4. FINAL ADJUSTMENTS TO AIMING ANGLE/DIRECTION OF FIXTURES MAY BE REQUIRED TO ELIMINATE LIGHT TRESPASS OR GLARE ONTO ADJOINING PROPERTIES OR ROADWAYS.

N
W E
S

GRAPHIC SCALE 1"=20'

40 20 10 0 20

PAVED SURFACE READINGS

Average	3.8
Maximum	11.0
Minimum	0.9
Avg:Min	4.27
Max:Min	12.22

PROPERTY LINE READINGS

Average	1.3
Maximum	4.8
Minimum	0.1
Avg:Min	13.21
Max:Min	48.00

VP-L

Viper (Large)

FEATURES

- The Viper luminaire is available in two sizes with a wide choice of different LED wattage configurations and optical distributions de- signed to replace HID lighting up to 1000W MH or HPS and with 5 different mounting options for application in a wide variety of new and existing installations. Luminaires are suitable for wet locations.
- Each Viper luminaire is supplied with an one piece optical cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel bezel.
- A thermal circuit, LIFESHIELD™, shall protect the luminaire from excessive temperature by interfacing with the 0-10V dimmable drivers to reduce drive current as necessary.
- Aluminum thermal clad board with 0.062" thick aluminum base layer, thermally conductive dielectric layer, 0.0014" thick copper circuit layer circuit layer designed with super pears to minimize thermal impedance across dielectric.

SITE ROADWAY

ORDERING INFORMATION

SLVP-L	NB28	5K	T4	U		RA	PS

MODEL
VP-L Viper (Large)

CCT-COLOR TEMP
5K 5000° K (std.)
4K 4000° K
3K 3000° K

VOLTAGE
U 120-277V
347 347V
480 480V

MOUNTING OPTIONS
RA Rectangular Arm
SF2 2¼" OD Slipfitter
PK2 2¼" Adjustable Knuckle
WB Wall Bracket

COLOR
BBT Basic Black Textured
BMT Black Matte Textured
WHT White Textured
MBT Metallic Bronze Textured
BZT Bronze Textured
GYS Gray Smooth
PS Platinum Silver
GMT Green Textured
MST Metallic Silver Textured
MTT Metallic Titanium Textured
OWI Old World Iron
RAL

ENGINE-WATTAGE
96NB-28 280 Watts

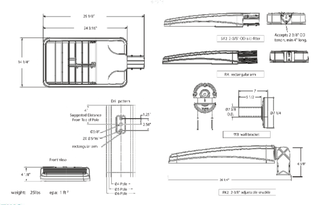
OPTICS
T2 Type II
T3 Type III
T4 Type IV
TSR Rectangular
TSQM Sq. Medium
TSW Round Wide

ELECTRICAL OPTIONS
PCR-TL Photocell, Twist-lock
PCR-SC Photocell, Shorting Cap
NP No Photocontrol
2PF Dual Power Feed [1,4]

STANDARD ELECTRICAL OPTIONS
Lifeshield™ Thermal Protection
20K Surge Protection [2]
Dimming Drivers

[1] Not available 64NB-145
[2] Not available @ 347/480V input
[4] Not available @ 347V input

DETAILS



© 2009 SECURITY LIGHTING • 1085 JOHNSON DRIVE, BUFFALO GROVE, IL 60089 • TEL: 800-644-4848 • FAX: 847-279-0642

** – SPECIFY COLOR

FIXTURE TYPE:	SYMBOL	FIXTURE QUANTITY	CONFIG	QUANTITY	TENON TOP FITTERS	QUANTITY	EPA	MOUNTING HEIGHT	LLF	POLE TYPE:	QUANTITY
VP-L-96NB-280-5k-T4-UNV-RA-**		15	SGL	1	TTFVIPER	1	1.00	25'	0.87	CONCRETE BY OTHERS	8
			DBL90	7	TTFVIPER	7	2.00				

THIS LAYOUT MAY NOT MEET TITLE 24 OR LOCAL ENERGY REQUIREMENTS. IF THIS LAYOUT NEEDS TO BE TITLE 24 COMPLIANT OR MEET OTHER ENERGY REQUIREMENTS, PLEASE CONSULT FACTORY WITH SPECIFIC DETAILS REGARDING PROJECT REQUIREMENTS SO THAT REVISIONS MAY BE MADE TO THE DRAWING.

THIS LIGHTING PATTERN REPRESENTS ILLUMINATION LEVELS CALULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRES MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS.

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES

NOTES:

SCALE 1" = 20' 0"	DATE	NEXT ASSEMBLY	REF. DRWGS.
DRAWN BY MJW	04/16/15		
CHECKED BY			
APPROVED BY			
APPROVED BY		FINISH	
APPROVED BY			
SHOP ORDER		MATERIAL	
PROJECT NO.			

SECURITY LIGHTING
Performance Designed Lighting Products
1085 Johnson Dr., Buffalo Grove, Illinois 60089
1-800-644-4848

POINT-BY-POINT FOOTCANDLE PLOT FOR
- McDONALD'S -
8000 US HIGHWAY 41
LAND O' LAKES, FL

DRAWING NUMBER
1PCP 30251

No.	BY	DATE	REVISIONS DESCRIPTION

PROJECT No: 13-018-MDC
ISSUE DATE: 06/01/15
DESIGNED BY: ED
DRAWN BY: ED
CHECKED BY: BG
APPROVED BY: BG

SITE ID 009-2580

CONTENT:
PHOTOMETRIC PLAN

PROJECT:
McDONALD'S RESTAURANT
8000 LAND O' LAKES BOULEVARD (US HIGHWAY 41)
LAND O' LAKES, FLORIDA 34638

HIGH POINT ENGINEERING
Certificate of Authorization No. 30275
Tel. (813) 644-8333
Fax: (813) 644-7000
5300 W. Cypress Street, Suite 282
Tampa, Florida 33607
LAND PLANNING - CIVIL ENGINEERING - GEOTECHNICAL ENGINEERING

SHEET:
PH-1