STANDARD SYMBOLS FOR EXISTING/PROPOSED TOPOGRAPHY AND UTILITIES

DESCRIPTION	EXISTING	PROPOSED
TOP OF BERM		
GRASSED SWALE OR PAVT. FLOW LINE		
DRAINAGE FLOW ARROWS		
RIP-RAP SAND CEMENT BAGS		
RAILROAD		
SHORE LINE		
CLAY OR DIRT ROAD		
FENCE/GATE		
TREE LINE		
SOIL BORING		
MISC. SHRUB OR HEDGE		
TREE	16" TREE	16" TREE
STANDARD PARKING STALL(TOTAL OF 5)	5	5
COMPACT PARKING STALL (TOTAL OF 6)	6	6
HANDICAP PARKING STALL		
B.M. OR T.B.M.		
BUILDING	BLDG. TYPE FIN FL 100.00	BLDG. TYPE FIN FL 100.00
LIGHT POLE		

DESCRIPTION	EXISTING	PROPOSED
TELEPHONE POLE		
POWER POLE		
COMBINATION POLE		
SIGN		
IRON PIPE		
NAIL & CAP	N & C	N & C
POINT OF INTERSECTION	P.I.	P.I.
CONCRETE MONUMENT	C.M.	C.M.
MANHOLE		
LIFT STATION		
CURB INLET		
FIRE HYDRANT		
GATE VALVE		
GAS MARKER		
CLEAN OUT	C.O.	C.O.
WATER METER	1" W.M.	1" W.M.
BLOW OFF	B.O.	B.O.
FITTINGS	TEE BEND CROSS WYE	TEE BEND CROSS WYE

DESCRIPTION	EXISTING	PROPOSED
REDUCER		
PLUG OR FLANGE		
SEWER LATERALS	SAN 8	SAN 8
WATER SERVICES	WM 8	WM 8
MITERED END SECTION		
POLLUTION CONTROL STRUCTURE		
DIRECTION ARROW STRAIGHT		
DIRECTION ARROW LEFT TURN		
DIRECTION ARROW RIGHT TURN		
WATER MAIN	WM 8	WM 8
FORCE MAIN	FM 6	FM 6
SANITARY SEWER	SAN 8	SAN 8
STORM SEWER	STS 18	STS 18
UNDERDRAIN	UD 6	UD 6
DITCH OR CANAL		
UNDERGROUND TELEPHONE CABLE	TEL	TEL
UNDERGROUND CABLE T.V.	CATV	CATV
CONTOUR LINE	100	100

DESCRIPTION	EXISTING	PROPOSED
EASEMENT LINE	E/L	E/L
PROPERTY LINE OR RIGHT-OF-WAY	P/L R/W	P/L R/W
CENTER LINE	C/L	C/L
BASE LINE CONSTRUCTION	B/L	B/L
UNDERGROUND ELECTRICAL CABLE OR CONDUIT	E	E
GAS MAIN	G	G
ELEVATION	148.75	148.75
HEADWALL		
DITCH INLET		
2'-0" STANDARD CURB AND GUTTER		
2'-0" MIAMI CURB		
8"x12" FLUSH CURB		
6"x12" HEADER CURB		
MEDIAN CURB		
6"x16" CURB		
ASPHALT PAVEMENT	ASPH	ASPH
ASPHALT PAVEMENT HEAVY DUTY	H.D. ASPH	H.D. ASPH
CONCRETE PAVEMENT	CONC	CONC

DESCRIPTION	EXISTING	PROPOSED
OPEN CUT PAVT REHAB		
REFERENCE POINT NO. LOCATION		2356
SILT FENCE		SF

MISCELLANEOUS

SEE DETAIL (1 / 8) — DETAIL NO. — SHEET ON WHICH DETAIL IS SHOWN

SEE SECTION (1 / 8) — SECTION NO. — SHEET ON WHICH SECTION IS SHOWN

GENERAL NOTES

GENERAL:

1. ALL CONSTRUCTION SHALL CONFORM TO THESE DRAWINGS AND PROJECT SPECIFICATIONS AND SHALL MEET THE MINIMUM REQUIREMENTS OF STATE AND LOCAL GOVERNMENTS HAVING JURISDICTION.

2. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL POST AT THE JOB SITE ALL REQUIRED CONSTRUCTION PERMITS AND A COPY OF THE RECORDED "NOTICE OF COMMENCEMENT".

3. ALL BENCHMARKS, MONUMENTS AND OTHER REFERENCE POINTS SHALL BE CAREFULLY MAINTAINED BY THE CONTRACTOR. ANY USGS MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF IN DANGER OF DAMAGE THE CONTRACTOR AND / OR OWNER / DEVELOPER SHALL NOTIFY: THE DIRECTOR, NATIONAL GEODETIC SURVEY GEODETIC INFORMATION CENTER ATTENTION C-185 ROCKVILLE, MARYLAND 20852 TELEPHONE (301) 443-8631 BENCHMARK DATA REFERRED TO HEREIN IS FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL VERIFY PROJECT BENCHMARK PRIOR TO SITE CONSTRUCTION AND INFORM THE ENGINEER OF ANY DEVIATION IMMEDIATELY.

4. THE CONTRACTOR SHALL COORDINATE THE SUBMISSION OF ALL SUBMITTALS TO THE ENGINEER FOR MATERIALS REVIEW AND APPROVAL.

5. THE CONTRACTOR SHALL GIVE THE ENGINEER A MINIMUM OF 48 HOURS NOTICE PRIOR TO CONDUCTING FIELD TESTS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR NOTIFYING AND ARRANGING FOR INSPECTIONS BY STATE AND LOCAL GOVERNMENTS AND UTILITY COMPANIES HAVING JURISDICTION.

6. THE CONTRACTOR SHALL MAINTAIN, AT THE JOB SITE, A RECORD COPY OF CONSTRUCTION DRAWINGS AND SPECIFICATIONS ON WHICH ALL FIELD CHANGES ARE TO BE SHOWN. THESE "AS-BUILTS" DOCUMENTS ARE TO BE MADE AVAILABLE TO OWNER/ENGINEER DURING CONSTRUCTION AND SHALL BE DELIVERED TO THE ENGINEER UPON COMPLETION OF THE PROJECT.

7. PRIOR TO INITIATING WORK, THE CONTRACTOR SHALL SECURE AND FORWARD TO THE OWNER / ENGINEER ALL NECESSARY PERFORMANCE BONDS AND CERTIFICATES OF INSURANCE REQUIRED PER CONTRACT AGREEMENT.

SITE LAYOUT:

1. THE CONTRACTOR IS ADVISED TO BRING ANY LAYOUT DISCREPANCIES TO THE IMMEDIATE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION.

2. ALL REQUIRED PAINTED PAVEMENT MARKINGS AND ALL REQUIRED ROADWAY / PARKING LOT SIGNAGE SHALL CONFORM TO THE LATEST STANDARDS AS REQUIRED BY THE CITY OF PALM COAST AND FDOT.

3. THE CONTRACTOR IS ADVISED TO VERIFY WITH OWNER / ARCHITECT, PRIOR TO CONSTRUCTION, THAT THE LATEST BUILDING DESIGN CONFORMS TO THAT SHOWN ON THESE CONSTRUCTION DRAWINGS.

4. EROSION / SEDIMENTATION CONTROL:
CONTRACTOR IS TO PROVIDE EROSION CONTROL / SEDIMENTATION BARRIER TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATER WAYS. IF, IN THE OPINION OF THE ENGINEER AND / OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE AND CLEAN SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES. EROSION CONTROL BARRIER SHALL BE ESTABLISHED AS SITE CLEARING PROCEEDS AND MAINTAINED UNTIL SUCH TIME AS VEGETATION OR OTHER CONTROLS BECOME EFFECTIVE.

PAVING/GRADING/UNDERGROUND:

1. PRIOR TO BEGINNING PAVING, GRADING AND UNDERGROUND UTILITY WORK, THE CONTRACTOR SHALL POST AT THE JOB SITE ALL APPROPRIATE FDEP AND WATER MANAGEMENT DISTRICT PERMITS.

2. THE CONTRACTOR SHALL ADHERE TO ALL PERMIT CONDITIONS REGARDING THE INSTALLATION, TESTING AND DISINFECTION OF THE PERMITTED FACILITIES. ALL WATER MAIN DISINFECTION RESULTS SHALL BE FORWARDED DIRECTLY TO THE OWNER AND / OR ENGINEER.

3. THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND BASED UPON BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL FIELD DETERMINE THE EXACT LOCATION OF UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR IS ALSO ADVISED TO COORDINATE CLOSELY WITH THE RESPECTIVE UTILITY COMPANIES WHEN CONNECTING TO EXISTING FACILITIES.

4. PRIOR TO REQUESTING THE ENGINEER TO WITNESS FIELD TESTS OF NEW UNDERGROUND UTILITIES, THE CONTRACTOR SHALL PRE - TEST FACILITIES UNTIL SPECIFIED PERFORMANCE CRITERIA ARE MET. ANY RETEST ATTENDED BY THE ENGINEER, WILL BE AT THE CONTRACTORS EXPENSE.

5. FLORIDA LAW (553.851) REQUIRES THAT PERSONS MAKING EXCAVATIONS IN PUBLIC OR PRIVATE STREETS, ALLEYS, RIGHT - OF - WAY, OR UTILITY EASEMENTS WITH HAND TOOLS OR POWER EQUIPMENT MUST FIRST OBTAIN INFORMATION ON THE LOCATION OF UNDERGROUND GAS PIPELINES. THE EXCAVATOR MUST NOTIFY THE GAS UTILITY A MINIMUM OF 10 HOURS AND A MAXIMUM OF 5 DAYS PRIOR TO EXCAVATING (EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS).

6. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.

7. THE SITEWORK FOR THIS PROJECT SHALL MEET OR EXCEED THE SITEWORK SPECIFICATIONS FOR THIS PROJECT.

8. CAUTION - NOTICE TO CONTRACTOR
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

ABBREVIATIONS

AASHO	AMERICAN ASSOC. OF STATE HIGHWAY OFFICIALS
AASHTO	AMERICAN ASSOC./STATE HWY. OFFICIALS AND TRANSPORTATION OFFICIALS
ASPH	ASPHALT
ABD	ABANDONED
AC	ACRE
ACP	ASBESTOS CEMENT PIPE
ADDL	ADDITIONAL
ALT	ALTERNATE
ALUM	ALUMINUM
APPROX	APPROXIMATE
ARV	AIR RELEASE VALVE
ARVV	AIR RELEASE VACUUM VALVE
ASPH CONC	ASPHALTIC CONCRETE
ASSEM	ASSEMBLY
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
BCCMP	BITUMINOUS COATED CORRUGATED METAL PIPE CULVERT
BCAP	BITUMINOUS COATED PIPE ARCH CULVERT
BCPCMP	BITUMINOUS COATED AND PAVED CORRUGATED METAL PIPE CULVERT
BCPPA	BITUMINOUS COATED AND PAVED PIPE ARCH CULVERT
BFP	BACKFLOW PREVENTER
BIT	BITUMINOUS
BHP	BREAK HORSEPOWER
B/L	BASE LINE
BLDG	BUILDING
BLK	BLOCK
BM	BENCHMARK
BO	BLOW-OFF
BOC	BACK OF CURB
BOT	BOTTOM
BRG	BEARING
BSP	BLACK STEEL PIPE
BV	BUTTERFLY VALVE
BW	BARBED WIRE
C & G	CURB AND GUTTER
CAP	CORRUGATED ALUMINUM PIPE
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CC	CENTER TO CENTER
CEM	CEMENT
CFS	CUBIC FEET PER SECOND
CI	CAST IRON
CIP	CAST IRON PIPE
CV	CHECK VALVE
C/L	CENTER LINE
CL	CLEARANCE
CM	CONCRETE MONUMENT
CMP	CORRUGATED METAL PIPE
CMPA	CORRUGATED METAL PIPE ARCH
CND	CONDUIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCT
CONT	CONTINUOUS
CONTR	CONTRACTOR
COR	CORNER
CP	CONCRETE PIPE
CPLG	COUPLING
CTG	COATING
CTR	CENTER
CTV	CABLE TELEVISION
CULV	CULVERT
CY	CUBIC YARD
D	DEGREE OF CURVATURE
DA	DRAINAGE AREA
DBL	DOUBLE
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DMH	DROP MANHOLE
DR	DRAIN
DWG	DRAWING
DRWY	DRIVEWAY
E	EAST
EA	EACH
ECC	ECCENTRIC
EL	ELEVATION
E/L	EASEMENT LINE
ELEC	ELECTRIC
ELLIP	ELLIPTICAL
EMBK	EMBANKMENT
ENC	ENCASEMENT
ENGR	ENGINEER
EOP	EDGE OF PAVEMENT
EOS	END OF SURVEY
EQ	EQUATION
ESMT	ESTIMATE
EW	END WALL
EXCAV	EXCAVATION
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTENSION
FAB	FABRICATE
FOUND	FOUNDATION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FIN FL	FINISH FLOOR
FIN GR	FINISH GRADE
FH	FIRE HYDRANT
FIN	FINISH
FIT	FITTING
FLG	FLANGE
FM	FORCEMAIN
FL	FLOW LINE
FT	FEET OR FOOT
GA	GUAGE
GAL	GALLON
GALV	GALVANIZED
GAR	GARAGE
GIP	GALVANIZED IRON PIPE
GM	GAS MAIN
GPM	GALLONS PER MINUTE
GR	GRADE
GRT	GRATE
GRTG	GRATING
GSP	GALVANIZED STEEL PIPE
GV	GATE VALVE
GPH	GALLONS PER HOUR
HB	HOSE BIBB
HDWL	HEAD WALL
HNDRL	HAND RAIL
HORIZ	HORIZONTAL
HP	HORSEPOWER
HT	HEIGHT
HWL	HIGH WATER LEVEL
I	EXTERNAL ANGLE (DELTA)
ID	INSIDE DIAMETER
IN	INCHES
INL	INLET
INSTL	INSTALL
INTR	INTERIOR
IP	IRON PIPE
INV	INVERT
JB	JUNCTION BOX
JCT	JUNCTION
JT	JOINT
L	LENGTH OF CURVE
LAT	LATERAL
LBS	POUNDS
LBR	LIMEROCK BEARING RATIO
LF	LINEAR FEET
LT	LEFT
LWL	LOW WATER LEVEL
MATL	MATERIAL
MAX	MAXIMUM
MB	MEDIAN BARRIER
MEG	MATCH EXISTING GRADE
MECH	MECHANICAL
MFR	MANUFACTURE
MGD	MILLION GALLONS PER DAY
MH	MANHOLE
MI	MILE
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MON	MONUMENT
MP	MILE POST
N	NORTH
N & C	NAIL AND CAP
NE	NORTHEAST
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
NW	NORTHWEST
NSHWE	NORMAL SEASONAL HIGH WATER ELEVATION
OC	ON CENTER
OD	OUTSIDE DIAMETER
OPNG	OPENING
OPP	OPPOSITE
OVFL	OVERFLOW
OVHD	OVERHEAD
PAVT	PAVEMENT
PCS	POLLUTION CONTROL STRUCTURE
PCC	POINT OF COMPOUND CURVE
PEP	POLYETHYLENE PIPE
PI	POINT OF INTERSECTION
P/L	PROPERTY LINE
POB	POINT OF BEGINNING
PC	POINT OF CURVE
POE	POINT OF ENTRY
POJ	PUSH ON JOINT
PP	POWER POLE
PRC	POINT OF REVERSE CURVE
PRSE	PRESSURE
PRM	PERMANENT REFERENCE MONUMENT
PROP	PROPOSED
PROJ	PROJECT
PRVC	POINT OF REVERSE VERTICAL CURVE
PSIG	POUNDS PER SQUARE INCH (GUAGE)
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
Q	DISCHARGE (FLOW RATE)
R	RADIUS
RNG	RANGE
RCP	REINFORCED CONCRETE PIPE
RCPA	REINFORCED CONCRETE PIPE ARCH
RD	ROAD
RED	REDUCER
REINF	REINFORCED
REQD	REQUIRED
RT	RIGHT
R/W	RIGHT-OF-WAY
S	SOUTH
SCHED	SCHEDULE
SE	SOUTHEAST
SECT	SECTION
SG	SUB-GRADE
SGL	SINGLE
SHTG	SHEETING
SL	SLOPE
SPCG	SPACING
SPEC	SPECIFICATION
SQ FT	SQUARE FOOT
SQ	SQUARE
SAN	SANITARY SEWER
SST	STAINLESS STEEL
STA	STATION
STD	STANDARD
STL	STEEL
STRA	STRAIGHT
STS	STORM SEWER
SUPPT	SUPPORT
SW	SOUTHWEST, SIDEWALK
SYM	SYMMETRICAL
STR	STRUCTURE
T	TANGENT
TOB	TOP OF BANK
TBM	TEMPORARY BENCHMARK
TC	TANGENT TO CURVE
TCP	TERRA COTTA PIPE
TEL	TELEPHONE
TEMP	TEMPERATURE
THK	THICKNESS
TN	TON
TWP	TOWNSHIP
TYP	TYPICAL
UD	UNDERDRAIN
USC & GS	U.S. COASTAL & GEODETIC SURVEY (NOW NATIONAL GEODETIC SURVEY)
USGS	U.S. GEODETIC SURVEY
UTC	UNDERGROUND TELEPHONE CABLE
UTVC	UNDERGROUND TELEVISION CABLE
UELEC	UNDERGROUND ELECTRICAL CABLE
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VPC	VERTICAL POINT OF CURVE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	WEST
W/	WITH
WM	WATERMAIN
W/O	WITHOUT
WWF	WELDED WIRE FABRIC
WT	WEIGHT
X	COORDINATE DISTANCE (EAST-WEST)
X-SEC	CROSS SECTION
XING	CROSSING
X RD	CROSS ROAD
Y	COORDINATE DISTANCE(NORTH-SOUTH)
YDS	YARDS

JOB #:	08033.2
PRJ. MGR:	J.P.M.
DESIGNER:	R.I.D.
CHECKED:	T.G.L.

ENGINEER
JASON P. MAHONEY, P.E.
FL LIC. # 65183

NO.	DATE	REVISIONS
△	12-7-09	OUT-TO-BID SET

RECORD DRAWING

THIS RECORD DRAWING IS BASED ON THE RESULTS OF LIMITED PERIODIC FIELD OBSERVATIONS DURING CONSTRUCTION, A REVIEW OF CONTRACTOR FURNISHED RELINED PLANS INDICATING CHANGES INCORPORATED DURING CONSTRUCTION, AND WITNESSED UTILITY TESTING OF DRINKING WATER AND WASTEWATER SYSTEMS. ALTHOUGH THE ACCURACY CAN NOT BE GUARANTEED, THE ENGINEER BELIEVES THIS RECORD DRAWING IS CORRECT TO THE BEST OF HIS/HER KNOWLEDGE.

ENGINEER:
FL LIC. #

OUTPARCEL 6A
PALM COAST LANDING
AT
WEINGARTEN REALTY, INC.

ABBREVIATIONS, SYMBOLS AND GENERAL NOTES

Consulting Engineers & Surveyors

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SHEET C-2