

SURVEY & LOCATE DATA:

- 1) ALL ELEVATIONS ARE BASED ON U.S.C.&G.S. DATUM AND SHOWN IN FEET.
- 2) ELEVATIONS ARE BASED ON N.G.V.D. 1929.
- 3) LOCATION OF EXISTING UTILITIES OBTAINED BY SOFT DIG LOCATES WHERE SHOWN ON PLANS, OR INCLUDED WITH BID SPECS.
- 4) EXISTING WATER AND SEWER LINES ARE SHOWN AS PER FIELD LOCATES AND SUBDIVISION AS-BUILT PLANS.
- 5) UNDERGROUND UTILITIES WERE LOCATED UTILIZING GROUND PENETRATING RADAR (GPR) AND A DIGITAL LOCATOR. CONTRACTOR SHALL BE AWARE THAT IN SOME CASES UTILITIES HAVE BEEN LOCATED, AND SURVEY HAS BEEN COMPLETED ONLY ON ONE SIDE OF THE ROAD.
- 6) ALL PIPE LENGTHS SHOWN ON PLAN AND PROFILES ARE FROM CENTER TO CENTER OF MANHOLES, CATCH BASINS, INLETS ETC. OR ALONG THE CENTER LINE OF FORCE MAINS AND WATER MAINS.
- 7) INVERT ELEVATIONS SHOWN ON DRAWINGS REFER TO THE CENTERLINE OF MANHOLES, UNLESS OTHERWISE INDICATED.
- 8) THE LOCATION OF ALL EXISTING SEWER AND WATER SERVICE LINES MAY NOT BE INDICATED ON THESE PLANS. THE LOCATION OF NEW SERVICES SHALL BE VERIFIED IN THE FIELD.
- 9) BENCHMARK DATA:

PERMIT REQUIREMENTS (NOT ALL INCLUSIVE):

- 1) CONTRACTOR TO OBTAIN ALL REQUIRED RIGHT-OF-WAY PERMITS.
- 2) CONTRACTOR SHALL NOT OPEN CUT STREETS IN THE PROJECT AREA UNLESS SPECIFICALLY SHOWN ON PLANS.
- 3) THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CONSUMPTIVE USE PERMIT (C.U.P.) THROUGH THE ST. JOHNS WATER MANAGEMENT DISTRICT SHOULD DEWATERING ACTIVITIES BE REQUIRED.
- 4) THE DEPARTMENT OF TRANSPORTATION, RAILROAD COMPANIES AND C.O.J. ARE TO BE NOTIFIED IN ADVANCE OF CONSTRUCTION PER THEIR RESPECTIVE PERMIT CONDITIONS.
- 5) ALL WORK SHALL BE IN ACCORDANCE WITH BID DOCUMENTS, JEA WATER AND SEWER STANDARDS, DETAILS AND MATERIALS MANUAL, LATEST REVISION, AND CITY OF JACKSONVILLE STANDARD SPECIFICATIONS AND DETAILS AND ALL APPLICABLE STATE AND LOCAL REGULATIONS.
- 6) IF SOLVENT CONTAMINATION IS FOUND IN THE PIPE TRENCH, WORK SHALL BE STOPPED AND THE PROPER AUTHORITIES NOTIFIED. WITH APPROVAL OF THE PERMITTING AGENCY, DUCTILE IRON PIPE, FITTINGS AND SOLVENT RESISTANT GASKET MATERIAL SHALL BE USED IN THE CONTAMINATED AREA. THE DUCTILE IRON PIPE SHALL EXTEND AT LEAST 100 FEET BEYOND ANY SOLVENT NOTED.
- 7) THE CONTRACTOR SHALL NOTIFY APPLICABLE UTILITY CONTACT PERSONNEL NOT LESS THAN ONE WEEK PRIOR TO CONSTRUCTION OF FACILITIES IN THEIR RESPECTIVE AREAS.
- 8) TREE PROTECTION SHALL BE IN ACCORDANCE WITH JACKSONVILLE ORDINANCE CODE 656 AND/OR AS DETAILED ON SPECIFIC PLAN SHEETS. NO TRIMMING OF OVERHANGING TREE LIMBS WILL BE ALLOWED. USE SMALLER EQUIPMENT IF NECESSARY.
- 9) THE CONTRACTOR SHALL LOCATE THE DRAINAGE INLET STRUCTURES IN THE PROJECT AREA AND ERECT SEDIMENTATION CONTROL DEVICES AS NECESSARY PER THE CITY OF JACKSONVILLE STORMWATER POLLUTION PREVENTION PLAN.
- 10) CONTRACTOR TO COORDINATE WORK WITH OTHER UTILITIES DURING CONSTRUCTION.

EXISTING UTILITY PROTECTION:

- 1) IN ORDER TO REDUCE THE DISRUPTION AND COST OF UTILITY DAMAGES OCCURRING IN THE DUVAL COUNTY RIGHT-OF-WAY AND EASEMENTS, THE CONTRACTOR SHALL PREVENT DAMAGES TO EXISTING UTILITIES CAUSED BY HIS WORK THROUGH FIELD VERIFICATION OF THE LOCATION OF THE EXISTING UTILITIES. IN THE CASE OF OPEN EXCAVATION, VERIFICATION MAY BE PERFORMED DURING THE CONTRACTORS WORK. IN THE CASE OF DIRECTIONAL DRILLING, VERIFICATION SHALL TAKE PLACE PRIOR TO MOBILIZATION OF THE DRILLING EQUIPMENT.
- 2) THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES AS NEEDED TO AVOID CONTACT. EXISTING UTILITIES SHALL BE EXPOSED USING DETECTION EQUIPMENT OR OTHER ACCEPTABLE MEANS. SUCH METHODS MAY INCLUDE BUT SHALL NOT BE LIMITED TO "SOFT DIG" EQUIPMENT AND GROUND PENETRATING RADAR (GPR). THE EXCAVATOR SHALL BE HELD LIABLE FOR DAMAGES CAUSED TO THE CITY'S/JEA'S INFRASTRUCTURE AND THE EXISTING FACILITIES OF OTHER UTILITY COMPANIES.
- 3) IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND AVOID ALL UTILITIES, OTHER STRUCTURES AND OBSTRUCTIONS BOTH ABOVE AND BELOW GROUND SURFACE. ALL DAMAGE RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

ABBREVIATIONS

AC	ASBESTOS CEMENT	EXP. JT.	EXPANSION JOINT	P.R.M.	PERMANENT REFERENCE
A.G.	ALLEY GRATE	F	FILL	P.V.C.	POLYVINYL CHLORIDE
B	BASE LINE	F.H.	FIRE HYDRANT	R	RATE
B.M.	BENCH MARK	FM	FORCE MAIN	R.C.P.	REINFORCED CONCRETE PIPE
BC	BOTTOM OF CURVE	G	GALVANIZED	RT	RIGHT
C.B.	CATCH BASIN	G.V.	GAS VALVE	R/W	RIGHT OF WAY
C.I.	CAST IRON	HDPE	HIGH DENSITY POLYETHYLENE PIPE	R.D.	ROOF DRAIN
C.E.P.	CITY ELECTRIC POLE	H.W.	HEAD WALL	S/B.T.	SOUTHERN BELL TELEPHONE
CONC.	CONCRETE	H.C.	HIGH CURB	STA	STATION
CONST.	CONSTRUCTION	INT.	INTERSECTION	TC	TOP OF CURVE
C.M.P.	CORRUGATED METAL PIPE	INV.	INVERT	U.G.E.	UNDERGROUND ELECTRIC
C.M.P.A.	CORRUGATED METAL PIPE ARCH	J.W.W.	JACKSONVILLE WATER WORKS	U.G.T.	UNDERGROUND TELEPHONE
CULV.	CULVERT	L.T.	LEFT	U.S.C. & G.S.	UNITED STATES COASTAL & GEODETIC SURVEY
C&G	CURB & GUTTER	M.B.	MAIL BOX	V.C.	VITRIFIED CLAY
C	CUT	M.H.	MANHOLE	WM	WOOD WATER METER
D.B.I.	DITCH BOTTOM INVERT	M.H.	MANHOLE	W.V.	WOOD VALVE
D.W. OR DR	DRIVEWAY	N.T.S.	NOT TO SCALE	W.P.	WOOD LIGHT POLE
D.I.	DUCTILE IRON	O.E.	OVERHEAD ELECTRIC	WPP	WOOD POWER POLE
E.O.P.	EDGE OF PAYMENT	O.T.	OVERHEAD TELEPHONE	WTP	WOOD TELEPHONE POLE
ELEV.	ELEVATION				
ERCP	ELLIPTICAL REINFORCED CONC. PIPE				

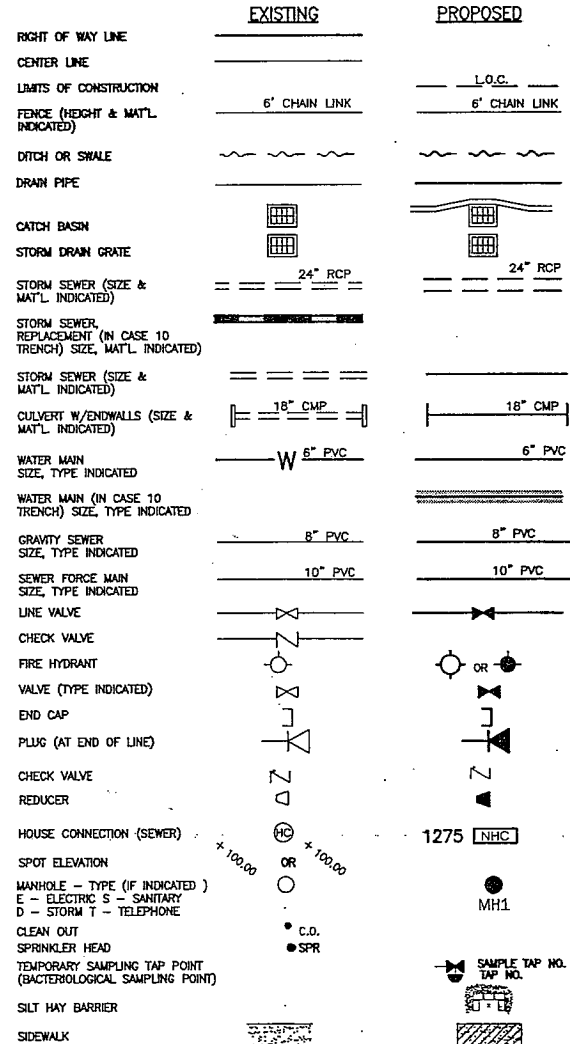
RESTORATION NOTES:

- 1) THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR, REGISTERED IN THE STATE OF FLORIDA, TO REFERENCE AND RESTORE PROPERTY CORNERS AND LANDMARKS WHICH MAY BE DISTURBED BY CONSTRUCTION, KNOWN CORNER LOCATIONS ARE AVAILABLE FROM THE CITY OF JACKSONVILLE ENGINEERING DIVISION.
- 2) THE CONTRACTOR SHALL RESTORE/REPLACE ALL CULVERTS, HEADWALLS AND STORM DRAIN INLETS REMOVED OR DISTURBED BY THE CONSTRUCTION OPERATION.
- 3) TRAFFIC SIGNS AND PAVEMENT MARKINGS SHALL BE RESTORED TO THEIR PRE-CONSTRUCTION CONDITION IN ACCORDANCE WITH CITY OF JACKSONVILLE/FDOT STANDARD SPECIFICATIONS.
- 4) SIDEWALKS, DRIVEWAYS AND CURBING DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED IN ACCORDANCE WITH JACKSONVILLE STANDARD SPECIFICATIONS. SIDEWALKS REMOVED AND REPLACED IN CURB AND GUTTER AREAS AT INTERSECTIONS SHALL HAVE HANDICAP RAMPS INSTALLED. DRIVEWAYS AND SIDEWALKS SHALL BE SAWCUT ALONG THE RIGHT-OF-WAY LINE OR NEAREST JOINT AND REMOVED AND REPLACED TO THE EDGE OF STREET.
- 5) GRASS SOD SHALL BE FURNISHED AND PLACED IN THE AREAS DISTURBED OR DAMAGED BY THE CONSTRUCTION OPERATION.
- 6) ALL PAVEMENT REPAIR SHALL BE IN ACCORDANCE WITH THE CITY OF JACKSONVILLE/FDOT STANDARD DETAILS AND SPECIFICATIONS LATEST EDITION.
- 7) UNLESS OTHERWISE NOTED, REMOVE AND REPLACE EXISTING PAVEMENT AS PER C.O.J. CASE X (10) PAVEMENT REPLACEMENT DETAIL.
- 8) CONTRACTOR MUST MAINTAIN AND PRESERVE NEWLY GRADED AREAS AND REPAIR AREAS WHERE SETTLING AND EROSION HAVE OCCURRED.

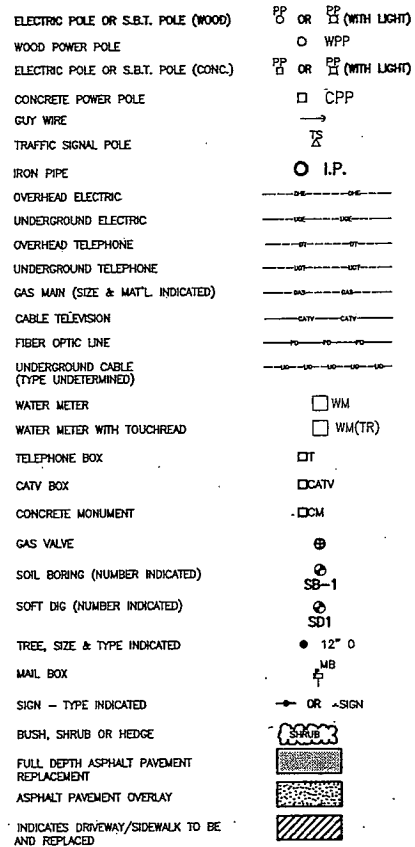
UTILITY CONTACTS

A. AMERICAN TELEPHONE & TELEGRAPH CO.	904-353-2229
B. BELLSOUTH TELEPHONE CO. ~ GARRETT RIGBY - PM NORTH DISTRICT	904-519-2544
C. BELLSOUTH TELEPHONE CO. ~ LARRY KEELS - PM SOUTH DISTRICT	904-519-2529
D. CITY OF JACKSONVILLE PUBLIC WORKS DEPT.	904-630-1665
E. CITY OF JACKSONVILLE STREETS AND DRAINAGE DEPT.	904-630-1341
F. CITY OF JACKSONVILLE TRAFFIC ENGINEERING DEPT.	904-387-8863
G. FLORIDA DEPT. OF TRANSPORTATION	904-381-8778
H. JEA - COLLECTION & DISTRIBUTION	904-665-8491
I. JEA - GENERAL INFORMATION	904-665-6000
J. JEA - PROJECT OUTREACH	904-665-7500
K. JEA - POWER OUTAGES	904-665-0300
L. JEA - SEWER PROBLEMS	904-665-4802
M. JEA - WATER PROBLEMS	904-665-4801
N. JEA - WATER & SEWER LOCATES	904-665-7613
O. COMCAST	904-380-6423
P. MOBILE ONE	904-733-9533
Q. TECO/PEOPLES GAS JOHN CUNNINGHAM ~ ENGINEERING SUPERVISOR	904-739-1211
R. SUNSHINE ONE CALL	800-432-4770

GENERAL LEGEND



UTILITY SYMBOLS



INSTALLATION NOTES:

- 1) CONTRACTOR TO REHABILITATE ALL MANHOLES ON PIPE BURST SEWERS VIA COATING/LINING PER JEA SPECIFICATION 446-2, UNLESS OTHERWISE NOTED ON THE PLANS.
- 2) CONTRACTOR TO RENEW, REHABILITATE, REPLACE OR REINSTALL AS APPLICABLE ALL SERVICE LATERALS TO R.O.W. LINE.
- 3) CONTRACTOR TO INSTALL SEWER SERVICE PIPING A MINIMUM OF 60 INCHES BELOW GRADE. WHERE NEW SANITARY SEWER MAIN IS LESS THAN 5 FEET DEEP, THE SEWER SERVICE PIPE SHALL BE INSTALLED AS DEEP AS POSSIBLE.
- 4) WHEN THE DISTANCE BETWEEN A POWER POLE AND THE TRENCH IS LESS THAN THE TRENCH DEPTH, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH JEA ELECTRICAL PERSONNEL TO SECURE POWER POLES. THE CONTACTS FOR JEA ARE AS FOLLOWS:
 NORTHSIDE-EAST OF US-1 MIKE CORBITT • 665-7991 (mobile 662-0635)
 NORTHSIDE-WEST OF US-1 ANDY YEAGER • 665-7998 (mobile 662-0622)
 NORTHSIDE-BACKUP ALAN AINSLEY • 665-7303 (mobile 662-6557)
 SOUTHSIDE-SOUTH OF BEACH BLVD. TOM KERNS • 665-6847 (mobile 860-1687)
 SOUTHSIDE-NORTH OF BEACH BLVD. DERYL BASFORD • 665-6855 (mobile 662-0616)
 SOUTHSIDE-BACKUP EDDIE GALES • 665-6855 (mobile 662-0616)
 A MINIMUM OF TWO (2) WORKING DAYS NOTICE IS REQUIRED FOR AN OUTSIDE MEETING WITH JEA ELECTRICAL TO DISCUSS THE REQUIRED WORK. ADDITIONAL TIME WILL BE REQUIRED BY JEA ELECTRICAL FOR ANY REQUIRED WORK TO BE ACCOMPLISHED.
- 5) ALL NEW STORM DRAIN PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC.
- 6) THE DESIGN FOR THE PROJECT IS BASED UPON THE "OPEN-CUT" METHOD OF CONSTRUCTION. IF USING ALTERNATIVE MEANS OR METHODS, THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE STANDARDS FOR THAT MEANS OR METHOD.
- 7) THE CONTRACTOR SHALL MINIMIZE SERVICE INTERRUPTIONS AT SERVICE CONNECTIONS. THE MEANS AND METHODS SHALL BE LEFT TO THE DISCRETION OF THE CONTRACTOR, SUBJECT TO THE REQUIREMENTS OF THE CONTRACT SPECIFICATIONS. NO EXISTING ACTIVE SERVICE SHALL BE LEFT INTERRUPTED AT THE END OF THE WORK DAY.
- 8) CONTRACTOR SHALL PROVIDE ADDITIONAL CORPORATION STOPS FOR FILLING AND DRAINING PURPOSES DURING CONSTRUCTION AS NEEDED. CORPORATION STOPS ARE TO BE PLUGGED AND LEFT IN PLACE. INDICATE CORPORATION STOP LOCATIONS ON RECORD DRAWINGS. (AS-BUILTS)
- 9) WATER AND SEWER SERVICES SHALL BE TRANSFERRED TO THE NEW MAIN UPON COMPLETION AND F.D.E.P./JEA CERTIFICATION, AND PRIOR TO THE EXISTING MAINS BEING ABANDONED.
- 10) IF EXISTING VALVES ARE IN UNPAVED AREAS AND ARE TO BE TAKEN OUT OF SERVICE, THEY SHALL BE CLOSED AND THE VALVE BOX AND COVER SHALL BE REMOVED. IF THE VALVES ARE UNDER PAVED AREAS, THEY SHALL BE CLOSED, THE VALVE BOX GROUT FILLED AND THE COVER REMOVED.
- 11) CONTRACTOR SHALL REPLACE EXISTING WATER METER BOXES WHEN DEEMED NECESSARY BY THE JEA INSPECTOR.
- 12) CONTRACTOR TO PROVIDE ADDITIONAL DEPTH OF BURY VIA PIPE JOINT DEFLECTION TO ACCOMMODATE VALVE SELECTION PER JEA STANDARDS.
- 13) WATER METERS MAY REQUIRE RELOCATION FOR CONSTRUCTION, CONTRACTOR SHALL CONTACT JEA METER DEPARTMENT AND RELOCATE WATER METERS AS NECESSARY.
- 14) PRIOR TO COMMENCING ANY EXCAVATION OR GRADING, THE CONTRACTOR SHALL OBTAIN ALL GEOTECHNICAL AND TOPOGRAPHIC SURVEY DATA AND LOCATIONS OF ABOVE GROUND AND UNDERGROUND UTILITIES. SHOULD THE CONTRACTOR DISCOVER ANY INACCURACIES, ERRORS OR OMISSIONS IN THE SURVEY DATA, HE SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER IN ORDER THAT PROPER ADJUSTMENTS CAN BE ANTICIPATED AND ORDERED.
- 15) SHEET PILING WILL BE REQUIRED ON ALL EXCAVATIONS DEEPER THAN 16 FEET.

INDEX OF DRAWINGS

SHEET NO.	DWG. NO.	SHEET CONTENTS
1	GEN-01	COVER SHEET
2	GEN-02	GENERAL NOTES, LEGEND AND SHEET INDEX
3	GEN-03	SPECIAL NOTES
4	GEN-04	PROJECT LAYOUT PLAN
WATER AND SEWER IMPROVEMENTS		
5	UTC-01	PLAN AND PROFILE - CLINTON AVENUE
6	UTC-02	PLAN AND PROFILE - CLINTON AVENUE
7	UTC-03	PLAN AND PROFILE - DE KALB AVENUE
8	UTC-04	PLAN AND PROFILE - DE KALB AVENUE
9	UTC-05	PLAN AND PROFILE - DE KALB AVENUE
10	UTC-06	PLAN AND PROFILE - HUDNALL ROAD
11	UTC-07	PLAN AND PROFILE - PUTNAM ROAD
12	UTC-08	PLAN AND PROFILE - RETENTION POND NO. 1
DETAILS		
13	MOT-01	MAINTENANCE OF TRAFFIC DETAILS
14	MOT-02	MAINTENANCE OF TRAFFIC DETAILS
15	WMD-01	WATER DETAILS
16	WMD-02	WATER DETAILS
17	WMD-03	WATER DETAILS
18	WMD-04	WATER DETAILS
19	SAN-01	SANITARY DETAILS
20	SAN-02	SANITARY DETAILS
21	SFM-01	FORCEMAIN DETAILS
22	SFM-02	FORCEMAIN DETAILS
23	SFM-03	FORCEMAIN DETAILS
24	RDY-01	ROADWAY AND DRAINAGE DETAILS
25	RDY-02	ROADWAY AND DRAINAGE DETAILS
26	RDY-03	ROADWAY AND DRAINAGE DETAILS
27	RDY-04	ROADWAY AND DRAINAGE DETAILS
28	SWP-01	STORM WATER POLLUTION PREVENTION PLAN
29	SWP-02	STORM WATER POLLUTION PREVENTION PLAN
30	SWP-03	STORM WATER POLLUTION PREVENTION PLAN
31	SWP-04	STORM WATER POLLUTION PREVENTION PLAN
32	SWP-05	STORM WATER POLLUTION PREVENTION PLAN
33	SWP-06	STORM WATER POLLUTION PREVENTION PLAN



NO.	BY	DATE	SYMBOL	REVISIONS	SURVEY DATA:	BOOK NO.	PGS.	DESIGNER:	HANSEN	DESIGN ENGINEER	SCOTT W. JONES, P.E.	PROJECT NO.	20318.200	NO. SHEETS	33
5					SURVEYED			DRAWN BY:	HANSEN	FLORIDA REGISTRATION NO.		DATE:	APRIL 2007	SHEET NO.	2
3					GRADES CHECKED			CHECKED BY:	NORTON			SCALE:	AS SHOWN	DRAWING NO.	GEN-02
2					BENCHMARKS			DATE:	04-07						
1															

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