

SECTION 014200

REFERENCES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Reference Abbreviations
- B. Abbreviations
- C. Reference Standards
- D. Definitions

1.2 RELATED SECTIONS

- A. Information provided in this section is used where applicable in individual Specification Sections.

1.3 REFERENCE ABBREVIATIONS

- A. Reference to a technical society, trade association or standards setting organization, may be made in the Specifications by abbreviations in accordance with the following list:

AABC	Associated Air Balance Council
AAMA	Architectural Aluminum Manufacturers Association
AASHTO	American Association of State Highway and Transportation Officials
AATCC	American Association of Textile Chemists and Colorists
ACI	American Concrete Institute
ADC	Air Diffusion Council
AFBMA	Anti-Friction Bearing Manufacturers Association
AGA	American Gas Association
AGMA	American Gear Manufacturers Association
AHA	Association of Home Appliance Manufacturers
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AMCA	Air Movement and Control Association, Inc.
ANSI	American National Standards Institute
APA	American Plywood Association
ARI	American Refrigeration Institute
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning

	Engineers
ASME	American Society of Mechanical Engineers
ASSE	American Society of Sanitary Engineers
ASTM	American Society for Testing and Materials
AWI	Architectural Woodwork Institute
AWPA	American Wood Preservers Association
AWS	American Welding Society
AWWA	American Water Works Assoc
BHMA	Builders' Hardware Manufacturers Association
BIA	Brick Institute of American
CABO	Council of American Building Officials
CAGI	Compressed Air and Gas Institute
CISPI	Cast Iron Soil Pipe Institute
CMAA	Crane Manufacturers Association of America
CRD	U.S. Corps of Engineers Specifications
CRSI	Concrete Reinforcing Steel Institute
CTI	Cooling Tower Institute
DHI	Door and Hardware Institute
DOH	Department of Health
DOT	Department of Transportation
Fed. Spec.	Federal Specifications
FGMA	Flat Glass Marketing Association
FM	Factory Mutual
HMI	Hoist Manufacturing Institute
HPMA	See HPVA
HPVA	Hardwood Plywood Veneer Association
ICEA	Insulated Cable Engineers Association
IEEE	Institute of Electrical and Electronics Engineers
IFI	Industrial Fasteners Institute
MIL	Military Specifications
MSS	Manufacturer's Standardization Society
NAAMM	National Association of Architectural Metal Manufacturers
NACM	National Association of Chain Manufacturers
NBS	National Bureau of Standards, See NIST
NEBB	National Environmental Balancing Bureau
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NETA	National Electrical Testing Association
NFPA	National Fire Protection Association
NFPA	National Forest Products Association
NFPA	National Fluid Power Association
NIST	National Institute of Standards and Technology
NLMA	National Lumber Manufacturers Association
NSF	National Sanitation Foundation
OSHA	Occupational Safety and Health Act
PCI	Prestressed Concrete Institute
PDI	Plumbing and Drainage Institute

SAE	Society of Automotive Engineers
SCPRF	Structural Clay Products Research Foundation
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association
SPI	Society of the Plastics Industry
SSPC	Steel Structures Painting Council
STI	Steel Tank Institute
TCA	Tile Council of American
TIMA	Thermal Insulation Manufacturers' Association
UL	Underwriters' Laboratories, Inc.
USBR	U. S. Bureau of Reclamation
USBS	U. S. Bureau of Standards, See NIST

1.4 ABBREVIATIONS

A. Abbreviations which may be used in individual Specification Sections are as follows:

alternating current	ac
American wire gauge	AWG
ampere(s)	amp
ampere-hour(s).....	AH
annual.....	ann
Ampere Interrupting Capacity	AIC
atmosphere(s)	atm
average.....	avg
biochemical oxygen demand.....	BOD
Board Foot.....	FBM
brake horsepower.....	bhp
Brinell Hardness.....	BH
British thermal unit(s).....	Btu
calorie (s)	cal
carbonaceous biochemical oxygen demand.....	CBOD
Celsius (centigrade)	C
Center to Center	C to C
centimeter(s)	cm
chemical oxygen demand.....	COD
coefficient, valve flow	Cv
condensate return	CR
cubic.....	cu
cubic centimeter(s).....	cc
cubic feet per day	cfm
cubic feet per hour	cfh
cubic feet per minute	cfm
cubic feet per minute, standard conditions	scfm

cubic feet per second.....cfs
 cubic foot (feet)cu ft
 cubic inch(es).....cu in
 cubic yard(s)cu yd
 decibelsdB
 decibels (A scale)dBa
 degree(s)deg
 dewpoint temperaturedpt
 diameterdia
 direct currentdc
 dissolved oxygenDO
 dissolved solids.....DS
 dry-bulb temperaturedbt
 efficiency.....eff
 elevation..... el
 engineer of record.....EOR
 entering water temperatureewt
 entering air temperatureeat
 equivalent direct radiationedr
 face area.....fa
 face to facef to f
 Fahrenheit.....F
 feet per dayfpd
 feet per hourfph
 feet per minutefpm
 feet per secondfps
 foot (feet).....ft
 foot-candle.....fc
 foot-poundft-lb
 foot-pounds per minuteft-lb/min
 foot-pounds per secondft-lb/sec
 formazin turbidity unit(s)FTU
 frequency.....freq
 fuel oil.....FO
 fuel oil supply.....FOS
 fuel oil returnFOR
 gallon(s)gal
 gallons per day.....gpd
 gallons per day per
 cubic foot.....gpd/cu ft
 gallons per day per
 square footgpd/sq ft
 gallons per hour gph
 gallons per minutegpm
 gallons per second.....gps
 gas chromatography and
 mass spectrometry.....GC-MS

gauge.....	ga
grain(s)	gr
gram(s).....	g
grams per cubic centimeter	gm/cc
Heat Transfer Coefficient	U
height	hgt
Hertz.....	Hz
horsepower	hp
horsepower-hour	hp-hr
hour(s)	hr
humidity, relative	rh
hydrogen ion concentration	pH
inch(es)	in
inches per second	ips
inside diameter	ID
Jackson turbidity unit(s)	JTU
kelvin	K
kiloamperes.....	kA
kilogram(s)	kg
kilometer(s)	km
kilovar (kilovolt-amperes reactive)	kvar
kilovolt(s).....	kV
kilovolt-ampere(s).....	kVA
kilowatt(s)	kW
kilowatt-hour(s)	kWh
linear foot (feet)	lin ft
liter(s)	L
megavolt-ampere(s).....	MVA
meter(s).....	m
micrograms per liter	ug/L
miles per hour	mph
milliampere(s).....	mA
milligram(s)	mg
milligrams per liter.....	mg/L
milliliter(s)	mL
millimeter(s)	mm
million gallons.....	MG
million gallons per day	mgd
millisecond(s).....	ms
millivolt(s)	mV
minute(s).....	min
mixed liquor suspended solids	MLSS
nephelometric turbidity unit.....	NTU
net positive suction head	NPSH

noise criteria.....nc
 noise reduction coefficientNRC
 number.....no
 ounce(s).....oz
 outside air.....oa
 outside diameter.....OD
 parts per billion..... ppb
 parts per million..... ppm
 percent pct
 phase (electrical).....ph
 pound(s)..... lb
 pounds per cubic foot pcf
 pounds per cubic foot
 per hourpcf/hr
 pounds per daylbs/day
 pounds per day per
 cubic footlbs/day/cu ft
 pounds per day per
 square foot.....lbs/day/sq ft
 pounds per square foot..... psf
 pounds per square foot
 per hourpsf/hr
 pounds per square inch psi
 pounds per square inch
 absolutepsia
 pounds per square inch
 gauge.....psig
 power factorPF
 pressure drop or
 difference.....dp
 pressure, dynamic
 (velocity).....vp
 pressure, vapor.....vap pr
 quart(s).....qt
 Rankine R
 relative humidityrh
 resistance..... res
 return airra
 revolution(s) rev
 revolutions per minuterpm
 revolutions per second rps
 Right of Way.....ROW
 root mean squared..... rms
 safety factor sf
 second(s)..... sec
 shading coefficient..... SC
 sludge density index..... SDI

Sound Transmission

Coefficient.....	STC
specific gravity	sp gr
specific volume	Sp Vol
sp ht at constant pressure	Cp
square	sq
square centimeter(s)	sq cm
square foot (feet).....	sq ft
square inch (es)	sq in
square meter(s).....	sq m
square yard(s).....	sq yd
standard.....	std
static pressure	st pr
supply air	sa
suspended solids.....	SS
temperature	temp
temperature difference	TD
temperature entering	TE
temperature leaving	TL
thousand Btu per hour.....	Mbh
thousand circular mils	kcmil
thousand cubic feet	Mcf
threshold limit value	TLV
tons of refrigeration	tons
torque.....	TRQ
total dissolved solids	TDS
total dynamic head	TDH
total nitrogen	TKN
total oxygen demand	TOD
total pressure	TP
total solids	TS
total suspended solids	TSS
total volatile solids	TVS
vacuum.....	vac
viscosity	visc
volatile organic chemical	VOC
volatile solids.....	VS
volatile suspended solids.....	VSS
volt(s).....	V
volts-ampere(s)	VA
volume	vol
watt(s)	W
watthour(s).....	Wh
watt-hour demand	WHD
watt-hour demand meter.....	WHDM
week(s).....	wk
weight	wt

wet-bulbWB
wet bulb temperatureWBT
yard(s).....yd
year(s).....yr

1.5 REFERENCE PUBLICATIONS

The following publications are incorporated into this manual and are made a part of this Manual as if set out verbatim in this Manual. Violations of any provision of every such publication, as of the date of bidding this Contract, shall be a violation of City Ordinance.

- A. Water Environment Federation, Manual of Practice No. 8, Wastewater Treatment Plant Design, W.E.F., 601 Wythe Street, Alexandria, VA, 22314-1994.
- B. Water Environment Federation, Manual of Practice No. 9, Design and Construction of Sanitary and Storm Sewers, W.E.F., 601 Wythe Street, Alexandria, VA, 22314-1994.
- C. Great Lakes/Upper Mississippi River Board of State Sanitary Engineers. Recommended Standards for Sewage Works, Health Education Service, Inc., P.O. Box 7283, Albany, New York, 12224.
- D. Great Lakes/Upper Mississippi River Board of State Sanitary Engineers. Recommended Standards for Water Works, Health Education Service, Inc., P.O. Box 7283, Albany, New York, 12224.
- E. Florida Department of Environmental Protection for Water, Wastewater, and Reclaimed Water Systems, latest revisions of F.A.C. Chapters 62-550, 62-555, 62-600, 62-604, 62-610, 64E-6, and 64E-8, 3900 Commonwealth Boulevard M.S. 49, Tallahassee, Florida, 32399.
- F. American Water Works Association, Inc., Water Treatment Plant Design, AWWA Standards and Applicable Manuals, 6666 West Quincy Avenue, Denver, Colorado, 80235.
- G. Ductile Iron Pipe Research Association, Handbook, Ductile Iron Pipe/Cast Iron Pipe, Ductile Iron Pipe Research Association, 245 Riverchase Parkway East, Birmingham, Alabama, 35244.
- H. Uni-Bell Plastic Pipe Association, Handbook of PVC Pipe, Uni-Bell Plastic Pipe Association, 2655 Villa Creek Drive, Suite 164, Dallas, Texas, 75234.
- I. American National Standards Institute, latest revisions of applicable standards, 1819 L Street NW, Suite 600, Washington, D.C., 20036.

- J. American Society for Testing and Materials, latest revisions of applicable standards, ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, Pennsylvania, 19428-2959.
- K. National Water Research Institute, Treatment Technologies for Removal of MTBE. NWRI, 10500 Ellis Ave., P.O. Box 20865, Fountain Valley, CA, 92728.
- L. National Water Research Institute, Valuing Ground Water: Economic Concepts/Approaches. NWRI, 10500 Ellis Ave., P.O. Box 20865, Fountain Valley, CA, 92728.7.3.14.
- M. U.S. Environmental Protection Agency, Design Criteria for Mechanical, Electric, and Fluid System and Component Reliability, Supplement to the Federal Guidelines for Design, Operation, and Maintenance of Wastewater Treatment Facilities, Technical Bulletin EPA-430-99-74-001, U.S. EPA, Office of Water Program Operations.
- O. Florida Department of Transportation, Standard Specifications for Road and Bridge Construction, Maps & Publications Sales, Mail Station 12, 605 Suwannee Street, Tallahassee, Florida 32399-0450.
- P. Plastics Pipe Institute, Handbook of Polyethylene Pipe, 1825 Connecticut Ave., NW, Suite 680, Washington, DC 20009.
- Q. National Fire Protection Association, 1995 Edition of NFPA 24 – Standard for the Installation of Private Fire Service Mains and Their Appurtenances, 1 Batterymarch Park, Quincy, MA 02169.
- R. City of North Port Utilities Standards and Specifications Manual.
- S. National Electrical Code, latest revisions of applicable requirements.
- T. Metcalf and Eddy, Wastewater Engineering Treatment and Reuse, 4th Edition, McGraw-Hill, 2002.
- U. Water Environment Federation, Manual of Practice No. 11, Operation of Municipal Wastewater Treatment Plants, 601 Wythe Street, Alexandria, VA 22314-1994.
- V. American Petroleum Institute, 1801 K Street NW, Washington, DC 20006.
- W. American Welding Society, 2501 NW 7th St, Miami, FL 33125.

- X. Factory Mutual Research, 1151 Boston-Providence Turnpike, Norwood, MA 02062
- Y. National Association of Corrosion Engineers, P.O. Box 218340, Houston, TX 77218.
- Z.
- AA. National Electrical Manufacturer's Association, 155 East 44th St., NY, NY 10017.
- BB. Occupational Safety and Health Act, U.S. Dept. of Labor, Occupational Safety and Health Administration, 299E. Broward Blvd. – Rm 302, Ft. Lauderdale, FL 33301.
- CC. Society of Automotive Engineers, 2 Pennsylvania Plaza, NY, NY 10001.
- DD. Steel Structures Painting Council, 4400 Fifth Ave., Pittsburgh, PA 15213.
- EE. Standard Specification for Public Works, Construction Building News, Inc., 3055 Overland Ave., Los Angeles, CA 90034.
- FF. Uniform Building Code, published by ICBO.
- GG. Underwriters Laboratories, Inc., 207 East Ohio Street, Chicago, IL 60611.

1.6 REFERENCE STANDARDS

- A. Latest Edition: Construe references to furnishing materials or testing, which conform to the standards of a particular technical society, organization, or body, to meet the latest standard, code, or specification of that body, adopted and published as of the date of bidding this Contract. Standards referred to herein are made a part of these Specifications to the extent that is indicated or intended.
- B. Precedence: The duties and responsibilities of the City, Contractor or Engineer, or any of their consultants, agents or employees are set forth in the Contract Documents, and are not changed or altered by any provision of any referenced standard specifications, manuals or code, whether such standard manual or code is or is not specifically incorporated by reference in the Contract Documents. Any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority, to undertake responsibility contrary to the powers of the City as set forth in the Contract Documents cannot be assigned to the City or any of the City's consultants, agents or employees.

1.7 DEFINITIONS

A. In these Contract Documents the words furnish, install, and provide are defined as follows:

1. Furnish (Materials): to supply and deliver to the project ready for installation and in operable condition.
2. Install (services or labor): to place in final position, complete, anchored, connected in operable condition.
3. Provide: to furnish and install complete. Includes the supply of specified services. When neither furnish, install, or provide is stated, provided is implied.
4. City: City of North Port, Florida, or authorized staff or representatives.
5. Engineer: The terms Design Professional, Design Engineer, Engineer, and Engineer of Record are interchangeably used throughout the Contract Documents.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION