

OGUNQUIT SEWER DISTRICT

OGUNQUIT, MAINE

STANDARD SPECIFICATIONS

RELATED TO

SANITARY SEWER CONSTRUCTION

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September, 1990

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DIVISION 1
GENERAL REQUIREMENTS

Scope of Work

The scope of this Division covers the general administrative requirements and the general work related provisions of the Construction Contract.

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END OF SECTION

SECTION 01000DESCRIPTION OF THE WORKPART 1 - GENERAL1.1 DESCRIPTION

A. Work Included:

1. Submit full plans and specifications of all proposed sewer extensions to the Ogunquit Sewer District for review and approval prior to the commencement of any work.

1.2 QUALITY ASSURANCE

1. Developer shall be responsible for obtaining all other regulatory body approvals, such as zoning and planning boards, state review authorities and all other pertinent agencies.
2. Developer shall pay for any reasonable fees for work performed by professionals retained by the Ogunquit Sewer District for the sole purpose of reviewing the technical merits of the proposed project.
3. Developer shall guarantee all work to be free of defects for a period of one year after Substantial Completion, as determined by the District.

PART II - PRODUCTS

- 2.1 Only those materials specifically approved by the Ogunquit Sewer District shall be incorporated into the work.
- 2.2 All materials shall meet the requirements of all applicable codes and regulations.

PART III - EXECUTION

- 3.1 All work ~~shall be~~ performed in accordance with OSHA and all other regulatory agencies.
- 3.2 All work shall be performed in accordance with these Specifications and in a professional manner.

END OF SECTION

SECTION 01050COORDINATIONPART 1 - GENERAL1.1 DESCRIPTION

- A. Contractor may be required to work on private easement(s). The Contractor shall coordinate construction with property Owner(s).
- B. Other Construction Contractors may be interfacing and working within the work area and in the vicinity of this project. The Contractor shall coordinate construction with other contractors working in the Town of Ogunquit.
- C. Any damage to existing structures, equipment and property, accepted equipment or structures, and property or work in progress by others; as a result of the Contractor's or his subcontractor's operations shall be made good by the Contractor at his own expense.

1.2 COORDINATION WITH OTHERS:

- A. Maine Department of Transportation (MDOT)
The Owner shall be responsible for obtaining all opening and utility location permits. The Contractor shall be responsible for coordinating access, egress, detours and traffic control on all State Highways with the MDOT division office.
- B. Central Maine Power Company
The Contractor shall be responsible for coordinating and providing temporary (and permanent, when applicable) power to all construction sites. The Contractor shall be responsible for coordinating all work in and around CMP facilities with CMP and bear all costs of CMP inspection requirements, temporary facilities relocation and all other requirements.
- C. Water
The Contractor shall be responsible for coordinating work in the vicinity of water lines with the Kennebunk, Kennebunkport and Wells Water District. Contractor shall bear all costs for inspection requirements, temporary facilities, water main adjustment, and other requirements.
- D. New England Telephone (NYNEX)
The Contractor shall be responsible for coordinating and providing telephone service to all construction sites, both temporary and permanent. The contractor shall also be responsible for coordinating all work around NYNEX facilities with NYNEX and shall bear all costs of inspection requirements, temporary facilities relocation and all other requirements.
- E. Paving
All paving shall be coordinated with and approved by either by the Town of Ogunquit or MDOT, at Contractor's expense.
- F. Other Public Services
The Contractor shall be responsible for coordinating and maintaining public services to all properties. The Contractor shall notify police and fire departments and rescue squad at least 24 hours in advance of any street closings and detours.

- G. Easements
The Contractor shall coordinate work in all easement areas with the District. The District reserves the right to review and approve construction methods and equipment used in easements in the interest of protecting private property.
- H. Other Construction Contractors.
1. The Contractor shall consult with other contractors and the District with respect to schedules and coordination of work.
 2. The Contractor shall schedule his work so that the schedules and work of other contractors can be maintained.
 3. The Contractor shall install and maintain interfacing structures, pipes, etc. as shown on the Drawings until interfacing work is complete.
- I. Testing of Facilities
1. The contractor shall allow access to interfacing structures to allow testing of adjacent facilities when installed under other contracts.
 2. The contractor shall make the final connection to interfacing facilities and shall be responsible for repair of the connection in the event of a test failure of the connection.

END OF SECTION

SECTION 01070ABBREVIATIONS & SYMBOLSPART 1 - GENERAL1.1 DESCRIPTION

A. Where any of the following abbreviations are used in these Specifications, they shall have the meaning set forth opposite each.

AASHTO	American Association of State Highway and Transportation Officials
AC	Alternating Current
ACI	American Concrete Institute
ACP	Asbestos Cement Pipe
AGA	American Gas Association
AIC	Ampere Interrupting Capacity
AGMA	American Gear Manufacturers Association
AIEE (IEEE)	American Institute of Electrical Engineers (Institute of Electrical and Electronics Engineers, Inc.)
AISC	American Institute of Steel Construction
amp	Ampere
125-16	
Amer. Std.	American Standard for Cast Iron Pipe Flanges and Flanged Fittings, Class 125 (ASA B16 11960)
ANSI	American National Standards Institute
API	American Petroleum Institute
ASA	American Standards Association
ASCE	American Society of Civil Engineers
ASH & AE	American Society of Heating and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWG	American or Brown and Sharpe Wire Gage
AWWA	American Water Works Association
BOD	Biochemical Oxygen Demand
c.f.	Cubic Foot
c.f.m.	Cubic Foot Per Minute
c.f.s.	Cubic Foot Per Second
CI	Cast Iron
CIPRA	Cast Iron Pipe Research Association
CSI	Construction Specifications Institute
c.y.	Cubic Yards
DC	Direct Current
DEP	Department of Environmental Protection
DI	Ductile Iron
DOT	Department of Transportation
EDR	Equivalent Directional Radiation
EPA	U.S. Environmental Protection Agency
FmHA	Farmers Home Administration
fps	Feet Per Second
ft.	Feet

gal.	Gallons
gpd	Gallons Per Day
gpm	Gallons Per Minute
HP	Horsepower
IBR	Institute of Boiler and Radiator Manufacturers
in.	Inches
inter.	Interlock
ISA	Instrument Society of America
kva	Kilovolt-ampere
kw	Kilowatt
lb.	Pound
max.	Maximum
MCB	Master Car Builders
MGD	Million Gallons Per Day
Min.	Minimum
NBS	National Bureau of Standards
NEC	National Electrical Code, Latest Edition
NEMA	National Electrical Manufacturers Association
NEWWA	New England Water Works Association
NPT	National Pipe Thread
OS&Y	Outside Screw and Yoke
PCA	Portland Cement Association
ppm	Parts Per Million
%	Percent
psi	Pounds Per Square Inch
psig	Pounds Per Square Inch Gage
PVC	Polyvinyl Chloride
rpm	Revolutions Per Minute
s.f.	Square Foot
STL. W.G.	U.S. Steel Wire, Washburn and Moen, American Steel and Wire Cos., or Roebling Gage
s.y.	Square yard
TDH	Total Dynamic Head
USAS	Standards of the United States of America Standards Institute (formerly American Standards Association)
USS GAGE	United States Standard Gage
VC	Vitrified Clay
WSP	Working Steam Pressure
Fed. Spec.	Federal Specifications issued by the Federal Supply Service of the General Service Administration, Washington, D.C.

END OF SECTION

SECTION 01380PRE-CONSTRUCTION PHOTOGRAPHSPART 1 - GENERAL1.1 DESCRIPTION

A. Work Included:

1. Supply a full set of 4 inch x 5 inch pre-construction color photos taken at 100 foot intervals over the entire length of the project.
2. Supply other photos as directed by the District not to exceed a quantity of ten percent of that stated in 1. above.
3. Each individual photo shall contain signing showing appropriate stationing.

1.2 QUALITY

- A. Quality shall be such that the condition of existing pavement, curbing, driveway entrances, sidewalks, etc. can be readily determined.

1.3 SUBMITTAL OF PRINTS

- A. Submit all prints and negatives to the District prior to any construction work.
- B. The quality of the photos are subject to approval by the District prior to the start of construction work in the areas shown by the photos.

END OF SECTION

SECTION 01510TEMPORARY UTILITIESPART 1 - GENERAL1.1 DESCRIPTIONA. Work Included:

1. Provide and pay for all temporary applicable utilities required to properly perform the Work at no cost to the District including the placement and removal of the utilities.
2. Completely remove all temporary equipment and materials upon completion of the Work and repair all damage caused by the installation of temporary utilities.
3. Make all necessary applications and arrangements for electric power, light, water and other utilities with the local utility companies. Notify the local electric power company if unusually heavy loads, such as welders, will be connected.

1.2 QUALITY ASSURANCEA. Requirements of Regulatory Agencies:

1. Obtain permits as required by local governmental authorities.
2. Obtain easements, when required, across private property other than that of the District for temporary power service.
3. Comply with the latest National Electrical Code.
4. Comply with all local, State and Federal codes, laws, and regulations.

B. All temporary utilities are subject to the approval of the District.

PART 2 - PRODUCTS2.1 MATERIALSA. Electrical:

1. Provide all required facilities, including but not limited to, transformers, conductors, poles, conduits, raceways, fuses, switches, fixtures, and lamps.
2. Use new or used materials adequate in capacity for the purposes intended.
3. Materials must not create unsafe conditions or violate the requirements of applicable codes.
4. Conductors:
 - a. Wire, cable or busses shall be of appropriate type, sized in accordance with the latest National Electrical Code for the applied loads.
 - b. Use only UL approved wire.
5. Conduit:
 - a. Rigid steel, galvanized: ANSI C80.1.
 - b. Electrical metallic tubing: ANSI C80.3.
 - c. Other material approved by NEC.
6. Equipment: Provide appropriate enclosures for the environment in which used in compliance with NEMA Standards.

- B. Heating:
 - 1. When heat is required for the protection of the work, provide and install a non-hazardous type of heating apparatus, and provide adequate and proper fuel.
 - 2. Heating equipment and materials shall be maintained in proper condition.
- C. Water:
 - 1. Provide drinking water equipment and material that will prevent contamination and health hazards.
- D. Sanitary Accommodations:
 - 1. Shall comply with all local, State and Federal codes, laws and regulations.

PART 3 - EXECUTION

3.1 PERFORMANCE

- A. Electrical:
 - 1. Provide electrical energy to:
 - a. All necessary points on the construction site so that power can be obtained at any desired point with extension cords no longer than 100 feet.
 - b. Construction site offices.
 - c. Lighting as required for safe working conditions at any location on the construction site.
 - d. Night security light.
 - 2. Maintain electrical energy throughout the entire construction period.
 - 3. Capacity:
 - a. Provide and maintain adequate electrical service for construction use by all trades during the construction period at the locations necessary.
 - 4. Installation:
 - a. Install all work with a neat and orderly appearance.
 - b. Have all installations performed by a qualified electrician.
 - c. Modify service as job progress requires.
 - d. Locate all installations to avoid interference with cranes and materials handling equipment, storage areas, traffic areas and other work.
- B. Heating:
 - 1. Maintain a heated environment for the applicable work at the temperature and for the length of time specified or as directed by the District.
 - 2. Precaution:
 - a. Operate temporary heating apparatus in such a manner that finished work will not be damaged.
 - b. Repair all damage, caused by temporary heating operations, to the complete satisfaction of the District.
- C. Water:
 - 1. Provide and maintain water for drinking and construction purposes as required for the proper execution of the Work.

- D. Sanitary Accommodations:
1. Provide and maintain sanitary accommodations for the use of the employees of the Contractor and his subcontractors.
 2. Sanitary accommodations shall meet the requirements of all local, State and Federal health codes, laws and regulations.

END OF SECTION

SECTION 01546USE OF EXPLOSIVESPART 1 - GENERAL1.1 DESCRIPTIONA. Work Included:

1. Provide all materials and perform all work necessary to insure safe use and storage of explosives.
2. Contractor shall be responsible for any and all damage resulting from use of explosives.

1.2 QUALITY ASSURANCE

- A. Requirements of regulatory agencies: Conduct all blasting in accordance with all applicable local, state and federal laws, ordinances and code requirements.

PART 2 - PRODUCTS2.1 MATERIALS

- A. Explosive charges and detonation devices shall be of a type suitable for the intended use.
- B. Store all explosives in a secure manner, in compliance with all State and local laws and ordinances, and legibly mark all such storage places. Storage shall be limited to such quantity as may be needed for the work underway.

PART 3 - EXECUTION3.1 PERFORMANCE

- A. Designate as a BLASTING AREA all sites where electric blasting caps are located and where explosive charges are being placed.
- B. Mark all blasting areas with signs as required by law.
- C. Place signs, as required by law, at each end of the blasting area and leave in place while the above conditions prevail. Immediately remove signs after blasting operations or the storage of caps is over.
- D. Perform a pre-blast survey of structures in proximity of the blasting area to determine pre-blast conditions.
- E. Notify each property owner and public utility company having structures in proximity to the site of the work sufficiently in advance to enable the companies to take such steps as they may deem necessary to protect their property. Such notice shall not relieve the Contractor of any of his responsibility for damage resulting from his blasting operation.
- F. Warn all persons within the danger zone of blasting operations and do not perform blasting work until the area is cleared. Provide sufficient flagmen outside the danger zone to stop all approaching traffic and pedestrians.
- G. Provide watchmen during the loading period and until charges have been exploded.
- H. Provide adequate protective covering over all charges before being exploded.

END OF SECTION

SECTION 01562DUST CONTROLPART 1 - GENERAL1.1 DESCRIPTIONS

A. Work Included:

1. Furnish and apply water or calcium chloride on the road surfaces within the construction site, when required to control dust.

PART 2 - PRODUCTS2.1 MATERIALS

A. Water for Sprinkling:

1. Clean, free of salt, oil, and other injurious matter.

B. Calcium Chloride:

1. Meet the requirements of AASHTO M144.

PART 3 - EXECUTION3.1 APPLICATION

A. Water:

1. Apply water by methods approved by the District.
2. Use approved equipment including a tank with gauge equipped pump and spray bar.

B. Calcium Chloride:

1. Apply at a rate sufficient to maintain a damp surface but low enough to assure non-contamination of water courses.
2. Apply water prior to calcium chloride addition.

END OF SECTION

SECTION 01570TRAFFIC REGULATIONPART 1 - GENERAL1.1 DESCRIPTIONA. Work Included:

1. Provide all materials and perform all work necessary to completely regulate traffic in the area of Work.
 2. Perform all work in such a manner as to provide safe passage at all times for the public and with a minimum of obstruction to traffic.
 3. Do not close roads or streets to passage of the public without the permission of the proper authorities.
- B. The local police department and/or the Maine Department of Transportation will decide if safe passage is being maintained and shall have the authority to require the Contractor to take any additional steps necessary to maintain safe passage. If MDOT furnishes an inspector on the job as a result of poor traffic control by the Contractor, the Contractor shall be responsible for all costs assessed by MDOT. (State Highways)

1.2 SCHEDULING WORK

- A. Schedule all work so that two adjacent parallel streets are not closed to passage by the public at any one time, if at all possible.
- B. Revise the plan of work if it will create a traffic hazard or an unreasonably long detour.
- C. Do not start work in any new location without the permission of the District.
- D. Notify all police, fire, school and emergency departments of all scheduled detours and when streets are reopened.

PART 2 - PRODUCTS2.1 WARNING SIGNS AND BARRICADES

- A. Provide adequate warning signs, barricades, signal lights, watchmen and take other necessary precautions for the safety of the public.
- B. Provide and illuminate suitable warning signs to show where construction, barricades or detours exist.
- C. Provide barricades of substantial construction and painted with a finish that increases visibility at night.
- D. Keep signal lights illuminated at all barricades and obstructions from sunset to sunrise.
- E. Maintain all necessary signs, barricades, lights, watchmen and other safety precautions during authorized suspension of the Work, weekends, holidays or other times when the Work is not in progress.
- F. Traffic control signs for construction work shall be located and of the size and type as outlined in Manual on Uniform Traffic Control Devices for Streets and Highways as published by U. S. Department of Transportation.

2.2 UNIFORMED POLICE OFFICER

- A. A uniformed police officer is a police officer (local, county or state) on regular or special duty dressed in uniform with the necessary high visibility vest and apparel needed for traffic control.
- B. Arrange the police detail with the local Chief of Police, County Sheriff, or State Police Captain depending on jurisdiction.

2.3 FLAG PERSON

- A. A flag person is an individual assigned specifically to the task of directing traffic and is outfitted in the necessary high visibility vest and apparel needed for traffic control.
- B. Flag persons shall be provided by the Contractor.

PART 3 - EXECUTION

3.1 DETOURS

- A. Provide, identify and maintain suitable detours when the project, or any part thereof, is closed to public travel.
- B. When the closed part of the project is reopened, restore the detour area and any other disturbed areas to the original condition.

3.2 INCONVENIENCE TO RESIDENTS OF VICINITY

- A. Whenever a traveled way is closed, perform the Work in such a manner that local travel and residents in the vicinity of the Work will be inconvenienced as little as possible.
- B. Allow access to residents and abutting land owners along the project to driveways and other normal outlets from their property.

3.3 TRAFFIC CONTROL OFFICERS

- A. Where required by the local, county or state police departments and/or when specified, traffic control officer shall be Uniformed Police Officers.
- B. Where the local, county or state police departments do not wish to or are unable to furnish traffic control officers and/or when specified, the traffic control officers shall be flag person.

END OF SECTION

SECTION 01710PROJECT CLEANINGPART 1 GENERAL1.1 DESCRIPTION

A. Work Included:

1. Maintain premises and public properties free from accumulations of waste, debris, and rubbish, caused by Contractor's operations.
2. At completion of work, remove waste materials, tools, equipment, machinery and surplus materials, and clean all sight-exposed surfaces. Leave project clean and ready for use.

1.2 QUALITY ASSURANCE

- A. Requirements of Regulatory Agencies: Conduct cleaning and disposal operations in accordance with all applicable local, state and federal laws, ordinances, and code requirements.

PART 2 - PRODUCTS2.1 MATERIALS

- A. Use only cleaning materials recommended by manufacturer of surfaces to be cleaned.
- B. Use cleaning materials only on surfaces recommended by cleaning material manufacturers.

PART 3 - EXECUTION3.1 PERFORMANCE

A. Cleaning During Construction:

1. Execute cleaning operations to ensure that buildings, grounds, and public properties are maintained free from accumulations of waste materials and rubbish.
2. Entirely remove and dispose of material or debris during the progress of the work that has washed into or has been placed in watercourses, ditches, gutters, drains, catch basins, or elsewhere as a result of the Contractor's operations.
3. Wet down dry materials and rubbish to lay dust and prevent blowing dust.
4. At reasonable intervals during the progress of work, clean the site and dispose of waste materials, debris, and rubbish.
5. Clean interiors of structures, when applicable, prior to finish painting, and continue to clean on an as-needed basis until the project is accepted by the District.
6. Handle materials in a controlled manner with as few handlings as possible. Do not drop or throw material from heights.
7. When applicable, schedule cleaning operations so that dust and other contaminants resulting from the cleaning process will not fall on wet, newly painted surfaces.

- B. Control of Hazards:
 - 1. Store volatile wastes in covered metal containers, and remove from premises daily.
 - 2. Prevent accumulation of wastes which may create hazardous conditions.
 - 3. Provide adequate ventilation during use of volatile or noxious substances.
- C. Disposal:
 - 1. Do not burn or bury rubbish and waste materials on project site.
 - 2. Do not dispose of volatile wastes, such as mineral spirits, oil, or paint thinner, in storm or sanitary drains.
 - 3. Do not dispose of wastes into streams or waterways.
- D. Final Cleaning:
 - 1. Employ experienced workmen, or professional cleaners, for final cleaning.
 - 2. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials, from all sight-exposed interior and exterior finished surfaces.
 - 3. Repair, patch and touch up marred surfaces to specified finishes.
 - 4. Broom clean paved surfaces.
 - 5. Rake clean non-paved surfaces of the project site.
 - 6. Restore to their original condition those portions of the site not designated for alterations, including damage to other areas.

END OF SECTION

SECTION 01720PROJECT RECORD DOCUMENTSPART 1 GENERAL1.1 DESCRIPTION

A. Work Included:

1. Keep accurate record documents for all additions, substitutions of material, variations in work, and any other additions or revisions to the work.

1.2 MAINTENANCE OF DOCUMENTS

A. Maintain at job site, one copy of:

1. Contract Drawings
2. Specifications
3. Addenda
4. Reviewed Shop Drawings
5. Change Orders
6. Any other modifications to the Contract
7. Field Test Reports

B. Store documents in approved files and racks apart from documents used for construction.

C. File documents in a logical manner indexed for easy reference.

D. Maintain documents in clean, dry, legible condition.

E. Do not use record documents for construction purposes.

F. Make documents available at all times for inspection by the District.

1.3 RECORDING

A. Label each document "PROJECT RECORD" in large high printed letters.

B. Keep record documents current and do not permanently conceal any work until required information has been recorded.

C. Contract Drawings - Legibly mark to record actual construction:

1. Depths of various elements of foundation in relation to survey data.
2. Horizontal and vertical locations of underground utilities and appurtenances referenced to permanent surface improvements.
 - a. Include all water, sewer, steam, air, instrumentation and fuel piping systems and all electrical and communications circuits including all direct burial cables.
 - b. Whenever any existing utility line is uncovered in the course of excavation for new utility installation, record location dimensions for such lines.
 - c. Method of location and recording shall have prior approval of the District.
3. Location of house service connection points (when applicable) with any utility (water, sewer, electrical, telephone, etc.) and the location of capped or plugged ends of these same house service lines.
 - a. Locations shall be recorded by accurate "swing ties" or other methods approved by the District.

- b. Method of location and recording shall have prior approval of the District.
- 4. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
 - a. Electrical equipment such as conduits, piping, instrumentation located in slabs, walls and ceilings and to include approximate locations and routing.
 - b. Schematic diagram of actual electric conduit or instrument tubing routing between equipment and supply.
- 5. Field changes of dimension and detail and changes made by Change Order or Field Order.
- 6. Details not on original Contract Drawings.
- D. Specifications and Addenda - Legibly mark up each section to record:
 - 1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
 - 2. Changes made by Change Order or Field Order.

1.4 SUBMITTALS

- A. At the completion of the project, deliver record documents to the District.
- B. Accompany submittal with transmittal letter, in duplicate, containing:
 - 1. Date, project title and number.
 - 2. Contractor's name and address.
 - 3. Title and number of each record document with certification that each document is completed and accurate.
 - 4. Signature of Contractor, or his authorized representative.
- C. Failure to record these locations on the Project Record Drawings shall result in non-acceptance of the project by the District.

END OF SECTION