

# NORTH MARIN WATER DISTRICT'S (NMWD'S)

## STANDARD SPECIFICATIONS

### SECTION 01000 GENERAL REQUIREMENTS

#### PART 1 GENERAL

##### 1.01 DEFINITIONS

Wherever the following terms or pronouns occur in these Standard Specifications or in related documents, the intent and meaning shall be interpreted as follows:

- A. **"Approved Plans"** shall mean the official plans, profiles, typical cross-sections, working drawings, detail drawings, or exact reproductions thereof, approved by the District and other appropriate government agencies, which show the locations, character, dimensions, and details of the work required to construct the specified public improvements.
- B. **"Board"** shall mean the Board of Directors of the North Marin Water District.
- C. **"Contractor"** shall mean the independent person, firm, corporation or partnership with whom the District or Developer contracts for the performance of the work or any part thereof covered by the Approved Plans and these Standard Specifications. Instructions or information given by the District to the Contractor's superintendent or agent on the Project shall be considered as having been given to the Developer.
- D. **"Developer"** shall mean the independent person, firm, corporation or partnership whose purpose is the development of property. The Developer shall, at all times be represented on the Project in person or by a duly designated agent (Contractor or Private Engineer). Instructions or information given by the District to the Contractor's superintendent or agent on the Project shall be considered as having been given to the Developer.
- E. **"District"** shall mean the North Marin Water District.

For the unique purpose of these Standard Specifications, District shall also refer to the District's representative(s) acting within the scope of the particular duties entrusted to them.

The District shall resolve any and all issues which may arise with regard to the quality or acceptability of approved materials furnished or work performed, to the manner of performance and rate of progress of the work and shall answer all questions relating to the interpretation of the Standard Drawings, the Approved Plans, the job specifications, if any, and these Standard Specifications as well as the acceptable fulfillment of the Contract on the part of the Developer.

- F. **"District Engineer"** or **"Engineer"** shall mean the District's Chief Engineer, or the District's General Manager, acting either directly or through properly authorized agents, such agents acting severally within the scope of the particular duties entrusted to them.
- G. **"Inspector"** shall mean the District's authorized agent whose duties shall include those defined elsewhere within these Standard Specifications, but who shall not direct the work being performed.

- H. **"Engineer of Work"** or **"Private Engineer"** shall mean a Civil Engineer or Structural Engineer registered or licensed in California who is qualified to act as an agent of the Developer in preparing plans for facilities to be approved and accepted by the District and incorporated thereafter into the District's system
- I. **"Project"** or the **"Work"** shall mean the public improvement to be constructed in whole or part within the boundaries of the District.
- J. **"Standard Drawings"** shall mean the standard details issued by the District for construction of District facilities.

## 1.02 LICENSE

The Contractor installing any new facilities or performing work on existing facilities within the District shall possess, prior to the start of the Project, a License, defined by the latest edition of the California Contractor's License Law and Reference Book, as:

- A. Class A or C-34 for water pipeline installations.
- B. Class A or C-42 for sewer pipeline installations.
- C. Class A for major water and sewer facilities such as pump stations, reservoirs and treatment plants.

Any Contractor possessing a license other than a Class A must receive written approval from the District prior to initiating the work.

## 1.03 OPERATIONS IN PUBLIC RIGHT-OF-WAY

Work in public right-of-way shall be done in accordance with the requirements of the permit issued by the public agency in whose right-of-way the work is located, in addition to the requirements of the Approved Plans and Standard Specifications. If a permit is not required, the work shall conform to the standards of the public agency involved in addition to conforming to the Approved Plans and Standard Specifications.

## 1.04 STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS

The Contractor shall abide by the conditions of the Regional Water Quality Control Board, General Construction Activity Storm Water Permit and the project Storm Water Pollution Prevention Plan (SWPPP).

## 1.05 REFERENCE STANDARDS

The reference standards of the organizations listed below form a part of these Standard Specifications to the extent referenced and are referred to in the text by the basic designation only. Reference shall be made to the latest edition of said standards unless otherwise stated.

	<u>AGENCY</u>	<u>ADDRESS</u>
AASHTO	American Association of State Highway and Transportation Officials	444 N. Capital St. Washington, D.C. 20004
ACI	American Concrete Institute	P.O. Box 19150 Detroit, MI 48219
ANSI	American National Standards Institute	1430 Broadway New York, NY 10018
ASA	American Standards Association	70 East 45th Street New York, NY 10017
ASME	American Society of Mechanical Engineers	345 E. 47th Street New York, NY 10017
ASTM	American Society for Testing and Materials	1916 Race Street Philadelphia, PA 19103
AWS	American Welding Society	550 N.W. Le Jeune Rd. Miami, FL 33135
AWWA	American Water Works Association, Inc.	6666 W. Quincy Ave. Denver, CO 80235
CAL/ OSHA	State of California Occupational Safety and Health Administration	1006 Fourth Street Sacramento, CA 95814
CFR	Code of Federal Regulations	Office of Federal Register National Archives Administration Washington, D.C. 20408
CRSI	Concrete Reinforcing Steel Institute	228 N. La Salle St. Chicago, IL 60601
CSLB	Contractors State License Board	9821 Business Park Dr. Sacramento, CA 95827
NACE	National Association of Corrosion Engineers	1440 South Creek Dr. Houston, TX 77084
NFPA	National Fire Protection Agency	Battery March Park Quincy, MA 02269
NSF	National Sanitation Foundation	P.O. Box 130140 Ann Arbor, MI 48113
SSPC	Steel Structures Painting Council	4400 Fifth Ave. Pittsburgh, PA 1521

	<u>AGENCY</u>	<u>ADDRESS</u>
SSPWC	Standard Specifications for Public Works Construction (Greenbook)	Joint Cooperative Committee c/o Associated General Contractors of California 1255 Corporated Center Dr., Suite 100 Monterey Park, CA 91754
UBC	Uniform Building Code	International Conference of Building Officials 5360 Workman Mill Rd. Whittier, CA 90601
UNI-B	Uni-Bell PVC Pipe Association	2655 Villa Creek Dr., Ste. 155 Dallas, TX 75234
UPC	Uniform Plumbing Code	International Conference of Plumbing and Mechanical Officials 20001 E. Walnut Dr. South Walnut, CA 91789
WAS	Water Agency Standards	2554 Sweetwater Springs Blvd. Spring Valley, CA 91977-7299
NMWD	North Marin Water District	999 Rush Creek Place Novato, CA 94945

## 1.06 ORDER OF PRECEDENCE

If contract documents have been prepared for a project, the project specific specifications take precedence.

The Approved Plans, together with these North Marin Water District' Standard Specifications (Standard Specifications), shall govern the work to be done. Anything indicated in the Standard Specifications but not shown on the Approved Plans, or shown on the Approved Plans but not indicated in the Standard Specifications, shall be of like effect as though shown or indicated in both. In resolving inconsistencies between the Approved Plans and the various sections of the Standard Specifications, the order of precedence shall be as follows:

1. Technical Specifications (Standard Specifications Sections 2 through 16)
2. Appendices to the Standard Specifications
3. Standard Drawings
4. Approved Plans
5. General Specifications (Standard Specifications Section 1)
6. Reference Standards

Figure dimensions on drawings shall take precedence over scale dimensions. Detailed drawings shall take precedence over general drawings. The Contractor shall immediately notify District if any conflict, inconsistency, omission, error, or ambiguity is discovered between the Approved Plans and the various sections of the Standard Specifications.

## **1.07 EXAMINATION OF APPROVED PLANS, SPECIFICATIONS, AND SITE**

The Contractor shall carefully examine the site of the proposed work, the Approved Drawings, the Specifications, and all other pertinent documents. Contractor shall be satisfied as to the character, quality and quantities of work to be furnished, and as to the requirements of the Approved Plans and these Standard Specifications. The District will not be liable for any loss sustained by the Contractor as a result of any variance between conditions as shown on the Approved Plans and the actual conditions revealed during the progress of the work or otherwise.

## **1.08 QUALITY OF WORK AND MATERIALS**

The work shall be performed in a thorough, professional manner in accordance with the Approved Plans and these Standard Specifications. All work shall conform to the lines and grades shown on said plans.

At least one member of the Contractor's workforce who is thoroughly familiar with the specified requirements of work and who is completely trained and experienced in the construction skills necessary for satisfactory completion of the work shall be present at the site, directing the work, at all times.

Adequate number of skilled workers and sufficient and appropriate equipment shall be present at the site prior to commencing daily construction operations.

The Engineer shall inform the Contractor if any person in the employ of the Contractor fails to or refuses to comply with the requirements of these Specifications, or appears to the Engineer to be incompetent or unfit, or to act in a disorderly, improper or unsafe manner. It shall be the Contractor's responsibility to dismiss any such person from the work site or take any other action deemed appropriate by the Contractor.

All equipment, materials, and supplies to be incorporated in the work shall be new. All equipment, material and supplies shall be produced in a good and workmanlike manner. Materials to be used within the scope of work on the project shall be those specified in the District's current Standard Specifications. When the quality of a material, process, or article is not specifically set forth in the Approved Plans, or the Specifications, the best available quality of the material, process, or article shall be provided.

## **1.09 SHOP DRAWING PROCEDURES**

- A. Unless amended by job specifications, Developer shall submit, at no expense to District, six (6) copies of all shop drawings, submittals, and manufacturer's cut sheets detailing the methods and materials intended for use on the project. Submittals shall be consecutively numbered, shall be accompanied by a transmittal letter marked with the number and title of the submittal, name of the project, name and address of the Contractor and supplier, along with contact persons for same, and shall be checked by and marked with the approval of the Contractor. In addition, any submittals that deviate from the requirements of the Contract shall be clearly noted and explained in the transmittal letter. All data sheets shall clearly indicate items to be provided using arrows, highlights or other similar means.
- B. District will review the submittals so provided, and will return the submittals marked to indicate that submittals are approved or must be returned for revision. Unless amended by job specifications, District shall be allowed a minimum of ten (10) working days for the review of submittals. Submittals returned for revision must be corrected as noted and developer must re-submit shop drawings as noted above until approved by District. Review and approval of shop drawings by District shall not relieve developer of the

responsibility for executing the work in accordance with these Standard Specifications, using proper methods of construction, nor from furnishing materials or work required but not indicated on the submittals.

- C. Construction shall not begin on relevant portions of the work until shop drawing submittals have been approved by District. Shop drawings shall be submitted in a timely manner so as not to delay construction of the work.

## **1.10 MATERIALS**

All materials shall be new and unused, of the quality defined in these Standard Specifications, and approved by the District Engineer. All materials to be used within a specific project and intended for equivalent uses shall be identical as to manufacturer and model number. Materials not identical as to manufacturer and model number to those approved by the District Engineer, materials that are damaged, or materials that are otherwise unacceptable to the District Engineer shall be rejected and immediately removed from the job site.

## **1.11 PRE-CONSTRUCTION CONFERENCE**

- A. The Developer shall schedule a Pre-Construction Conference with the District's Engineering Department at least five (5) days prior to beginning any water or sewer work in the field. As a minimum, the attendees at this conference shall include:
  - 1. The Owner or a designee, who is to be the on-site representative of the Owner of the project.
  - 2. The Contractor's Superintendent.
  - 3. The Soils Technician who is to verify backfill compaction.
  - 4. The District Inspector.
- B. In addition, the following persons shall be invited to the Pre-Construction conference upon request of the District:
  - 1. A representative of the Agency of Jurisdiction.
  - 2. Representative(s) of other utility companies.
  - 3. Contractor's Competent Person.
- C. The purpose of this meeting is to review the plans for the project relative to the requirements of the District's Standard Specifications and the Approved Plans. The Contractor shall be prepared to discuss, in detail, the project schedule, and shall provide the District with any schedules, submittals, lists, permits, or other information required by the Engineer, by these Standard Specifications or by the job specifications.

## **1.12 INSPECTION**

All work and materials furnished shall be subject to inspection for compliance with these Standard Specifications and all other appropriate specifications.

The Contractor shall make application to the District for inspection at least five (5) days in advance of starting any work. Inspectors shall be recognized as authorized agents of the District,

and their duties shall be to evaluate materials used and work performed. Instructions given by the Inspector shall be respected and executed by the Contractor.

The District shall at all times have access to the work wherever it is in preparation or progress and the Contractor shall provide proper facilities for such access and for inspection. The Contractor shall provide adequate safe means by which to inspect the work.

Failure or oversight of any Inspector to condemn defective materials at the time of use, or to condemn improper work at the time it is performed, shall not diminish the Contractor's obligations to meet the requirements of the Approved Plans and these Standard Specifications. The Contractor shall remove and replace any faulty materials and work at no additional cost to the District upon discovery of the defects or upon receipt of notice from the District to do so.

Defective work or material may be rejected prior to the date of acceptance of the work notwithstanding that such defective work or material may have been previously inspected. Acceptance shall not constitute approval of latent defects or waiver of maintenance requirements.

Any work covered up or otherwise rendered inaccessible without approval or consent of the District must, if required by the District, be uncovered for examination at the Contractor's expense. Any work done in the absence of the Inspector without written permission shall be subject to rejection.

### **1.13 TESTING LABORATORY SERVICES**

- A. The Developer shall engage testing firms to provide the various testing required for the project. Soils testing is typically required for projects, but concrete testing or other types of testing may additionally be required. The testing firm shall provide a competent, on-site Soils Technician to perform the various compaction testing required for the project. All tests shall be performed at the direction of the Soils Technician and in a manner acceptable to the District. Soils testing shall be performed in accordance with Section 02223 of these Standard Specifications.
- B. Prior to the District's acceptance of the project, a report of all soils tests taken shall be submitted to the District in accordance with Section 02223 of these Standard Specifications.

### **1.14 CONSTRUCTION STAKING AND PRESERVATION OF MONUMENTS**

Staking of the various public improvements required shall be performed by the Developer's surveyor. Generally, stakes for alignment and grade shall be set at 7.6m (25') intervals. The survey shall conform to the lines, grades, and dimensions shown on the Approved Plans. The District shall give an account of the adequacy, readability, and frequency of the stakes provided and comment on any remedies required.

The Contractor shall preserve all monuments, benchmarks, survey marks, and stakes. In case of their removal or destruction by Contractor or its employees, agents or subcontractors, the Contractor shall be liable for the cost of their replacement.

### **1.15 ENVIRONMENTAL CONTROL**

The Contractor shall abide by all applicable local, state and federal regulations, and by the conditions of the Regional Water Quality Control Board

The Contractor shall provide effective measures where necessary to prevent operations from producing dust in an amount damaging to property or causing a nuisance as determined by the

District. The Contractor shall be responsible for any damage due to dust originating from its operations.

The Contractor shall anticipate and correct any erosion problem arising from its operations.

## **1.16 PUBLIC SAFETY AND TRAFFIC CONTROL**

- A. The Contractor shall at all times conduct operations in a manner causing the minimum obstruction and inconvenience to public traffic. The Contractor shall not interfere with the normal operation of public transit vehicles unless otherwise authorized. Open trenches and excavations shall be provided with adequate barricades in accordance with the approved traffic control plan or the requirements of the agency of jurisdiction. At night, lights shall mark all open work and obstructions. The Contractor shall install and maintain all signs, lights, flares, barricades, traffic plates, railings, runways, stairs, bridges and other equipment necessary to safeguard the public. Safety instructions received from governmental authorities shall be followed, but compliance with such instructions shall not diminish the Contractor's responsibility or liability for accidents to workers or damage or injury to persons or property.

In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work, and the Contractor shall fully comply with all state, federal, and other laws, rules, regulations, and orders relating to the safety of workers and others.

The right of the District to conduct construction review or observation of the Contractor's performance does not include review or observation of the adequacy of the Contractor's safety measures in, on, or near the construction site.

The Contractor shall take immediate action to correct any condition adversely affecting public safety.

- B. The Contractor shall submit a traffic control plan to the agency having jurisdiction and shall obtain approval prior to starting the work.

## **1.17 PROTECTION OF EXISTING FACILITIES**

- A. The Contractor's attention is directed to the possible existence of pipe and other underground improvements that may or may not be shown on the Approved Plans. Once discovered, the Contractor shall preserve and protect all such improvements whether shown on the Approved Plans or not. The Contractor shall provide and install suitable safeguards, and shall be responsible for the care and protection of all existing sewer and water pipe, telephone conduit, gas mains, culverts, or other above-ground or below-ground facilities or structures which may be encountered in or near the area of work. It shall be the responsibility of the Contractor to notify each agency of jurisdiction and utility company and to make arrangements for location of facilities prior to beginning construction. In the event of damage to existing facilities during the progress of the work, such facilities shall be replaced or restored to original condition, as determined by District, at the Contractor's expense.

- B. The Contractor shall be responsible for determining in advance the location, elevation, alignment and pipe type and size of all existing pipelines to which connections are to be made. Potholing to determine location will be allowed only after providing the District with three (3) day's advance notice. The Contractor is required to contact Underground Service Alert (USA) at 1-800-227-2600 for mark-out of all utilities in the area of the work.



- C. If the Contractor, either before commencing work or during the course of the work, finds any discrepancy between specifications or drawings and the physical conditions at the site of the work, Contractor shall promptly notify the District in writing of such discrepancy.

#### **1.18 PROTECTION OF LANDSCAPING**

- A. The Contractor shall be responsible for the protection of all the trees, shrubs, fences, and other landscape items adjacent to or within the work area, unless specific removals are indicated on the Approved Plans.
- B. In the event of damage to landscape items, including the thickness of topsoil, the Contractor shall replace the damaged items in kind, in a manner satisfactory to the District and the Developer.
- C. When pipelines are proposed within planted or otherwise improved areas in public or private easements, the Contractor shall restore such areas to original condition after completion of the work.
- D. When pipelines are proposed within unimproved areas, the ground surface shall be dressed smooth to the contour of the original ground and left in a neat, presentable condition, free of cleared vegetation, rubbish and other construction wastes. Rocks and clumps that cannot be readily covered by spreading shall be hauled away and disposed of by the Contractor.
- E. Unimproved areas disturbed during construction of the pipeline shall be hydro seeded in accordance with these Standard Specifications.

#### **1.19 PUBLIC UTILITIES**

- A. In case it should be necessary to relocate or temporarily maintain the property of any public utility or any other property, and it is understood that the cost of such relocation or temporary maintenance is not required to be borne by the owner of the utility or property, the Contractor shall bear all expenses incidental to the removal or temporary maintenance of such property in a manner satisfactory to said owner. It is understood that in such cases, the utility or property owner has the option of doing such work with his or her own forces, or permitting the work to be performed by the Contractor.
- B. The right is reserved to the State, County, City, District or utility owners to enter at any time upon any street, alley, right of way or easement for the purpose of making changes for maintenance or repairs to their property necessitated by the Contractor's work.

#### **1.20 PROTECTION OF WORKERS IN TRENCH EXCAVATION**

Whenever work involves trench excavation, the Contractor shall provide all necessary shoring, bracing, sloping, or other provisions to be made for worker protection from hazard of caving ground during the excavation. If such plan varies from the shoring system standards established by the Construction Safety Orders of the Division of Industrial Safety, a Civil Engineer or Structural Engineer registered in the State of California shall prepare the plans.

Contractor shall comply with the Safety Orders of California, Code of Regulations: Title 8, Section 1539 (Excavation, Trenches, Earthwork).

## **1.21 WORK WITHIN CONFINED SPACES**

The Contractor shall comply with all Federal and State regulations for confined space entry. Work inside confined spaces as defined by the applicable regulations shall not be undertaken until all the tests and safety provisions of the Code of Federal Regulations 1910.146, and the Safety Orders of the California Code of Regulations Title 8 Article 108 sections 5156 et seq. for confined space entry have been performed and the area is verified as safe to enter.

## **1.22 CONSTRUCTION EQUIPMENT**

The Contractor shall furnish appropriate construction equipment to perform the work in accordance with the Approved Plans and Specifications. Such equipment shall be in a good state of repair and shall be maintained in such state during the progress of the work. In no case shall the manufacturer's rating or capacity for any equipment be exceeded.

## **1.23 STORAGE OF MATERIALS**

All materials for use in the work shall be stored by the Contractor in such manner as to prevent damage from exposure to the elements, admixture of foreign materials, or from any other cause. The Contractor shall be entirely responsible for damage or loss by weather or other causes. The Material Safety Data Sheets (MSDS) for all products to be used in the work shall be kept on-site by the Contractor, and the material manufacturer's recommendations for proper storage of its products shall be strictly followed.

Materials shall not be stored on District property without the written permission of the Engineer. The Contractor shall be responsible to provide its own storage area or property. Materials for use on the work shall be stored on private property only as allowed by law and with the written permission of the property owner, and a copy of such permission shall be provided to the District. In addition, a release letter signed by said property owner and stating that materials are no longer stored on the property and that Contractor has restored the area to original condition is required prior to the filing of the Notice of Completion.

## **1.24 HOURS OF WORK**

The normal hours of work shall be between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, excepting District-recognized holidays. Alternate work hours may be arranged with the District to accommodate time-restricting schedules imposed on the Contractor by other agencies. The District shall receive written notice forty-eight (48) hours prior to any proposed change in work hours. In no case shall any work be performed outside of the normal working hours indicated above without prior approval by the District.

## **1.25 WATER AND POWER FOR CONSTRUCTION PURPOSES**

Water for construction purposes:

- A. All water used on the project shall be obtained from District's sources using a hydrant meter.
- B. The hydrant meter shall be obtained from the District. The Contractor shall make arrangements with the District for payment of the deposit and installation of the meter.
- C. The Contractor shall pay for all construction water used in accordance with District's Rules and Regulations.

- D. Damage caused to the hydrant meter will be charged to the Contractor.
- E. Water for construction purposes outside the District's service area shall be obtained from the District within which the project lies.

Contractor shall make all arrangements for electrical power required during construction.

#### **1.26 HOUSEKEEPING DURING CONSTRUCTION AND FINAL CLEAN-UP**

- A. The Contractor shall provide suitable drainage and shall erect such temporary structures as are necessary to protect the work or materials from damage. The Contractor shall rebuild, repair, restore, and make good all injuries, losses, or damages to any portion of the work or the materials occasioned by any cause before the acceptance of the work by District and shall bear the expense thereof.
- B. The Contractor shall, at all times during the course of the work, maintain work areas and all adjacent properties and public access roads free from accumulations of waste, debris, rubbish or construction materials.
- C. The Contractor shall conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
- D. Dry materials and rubbish shall be moistened to prevent blowing dust. Loads of excavated materials leaving the site or being imported to the site shall be covered or moistened to prevent blowing dust.
- E. Upon completion of the work, and before making application for acceptance of the work, the Contractor shall clean all rights-of-way, streets, borrow pits, and all other grounds occupied by him in connection with the work. All rubbish, excess materials, temporary structures and equipment shall be removed. All parts of the work shall be left in a neat and presentable condition, as determined by the Engineer, prior to acceptance of the work by District.

#### **1.27 HAZARDOUS WASTE AND UNKNOWN PHYSICAL CONDITIONS**

If conditions listed below are found during construction, or if any other conditions are found during construction that may be detrimental to the District's facilities being constructed, or to the health and safety of the public, the Contractor shall promptly notify the District.

- A. Material that the Contractor or Engineer believes may be hazardous waste, as defined in Section 25117 of the Health and Safety Code, and is thus required to be removed to a Class I, Class II, or Class III disposal site in accordance with the provisions of existing law. If such material is discovered, Contractor shall immediately cease work and shall not disturb the job site except as required to protect public safety.
- B. Subsurface or latent physical conditions at the site differing from those indicated.
- C. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided in the Contract.

The Contractor shall promptly inform the District of any such conditions found during construction. The District shall investigate the conditions, and if it finds that the conditions do materially differ from those shown or expected, or do involve material that may be hazardous waste, Contractor shall cease work in the impacted area. If material that may be hazardous waste is discovered,

the Developer shall insure that the appropriate government agencies are contacted prior to any further work being performed and that a solution is implemented.

## **1.28 WORK TO BE DONE**

The work to be done consists of furnishing all materials, equipment, labor and all other items necessary for the installation of a complete facility as shown on the Approved Plans and in accordance with these Standard Specifications. In some instances, the District may furnish certain materials and services, which will be expressly called out on the Approved Plans.

The District's approval of the plans prepared by a Private Engineer denotes agreement with the plans as prepared and is not an acceptance of responsibility as to accuracy. The Private Engineer shall be responsible for any errors, coordination with other agencies/utilities and interpretation of plans. The intent is that the completed Work shall be in general conformance with the Approved Plans and in accordance with the requirements of these Standard Specifications.

## **1.29 CHANGES TO THE WORK**

If the District, due to conditions that develop during the progress of the work, determines it impracticable for the Contractor to strictly comply with the Approved Plans or the Standard Specifications, the District may prescribe a modification of requirements. The District may at any time during the life of the project, by written order, make such changes as it may find necessary in the design, line, grade, form, location, dimensions, plan or material of any part of the work originally specified or shown on the Approved Plans.

If such changes increase the cost of material, or work to be performed, the difference in cost shall be borne by the Developer. All changes so performed shall be at no cost to the District.

The District shall provide written authorization for all changes to the work.

The following procedure shall be followed for revisions or changes to the Approved Plans:

- A. Prints showing proposed changes shall be submitted to the District for review and approval.
- B. If the changes will require an increase in the total estimated water facilities cost, plans will be held until a new estimate has been prepared and a new cost estimate has been placed with the District.
- C. If the changes do not affect the construction cost, as determined by the Engineer, the plans shall be reviewed and upon approval, the District (or Private Engineer) will make the corrections on the original drawings. A print of the revised plan shall then be prepared including a signature block revision to the plans to indicate approval of changes made.
- D. After these steps have been taken, the Contractor may proceed with the revised construction.

## **1.30 RECORD DRAWINGS**

- A. During the course of the work, the Contractor shall keep accurate and updated records of the changes made to the work. The changes may be dictated by field conditions, unknown obstructions, design oversight, or other circumstances determined to be in the best interest of the District.

- B. At the end of the project, the Contractor shall provide the District with two sets of prints, with all changes redlined. In addition to the field changes, the correct location of all water and sewer services and driveway centerlines with stations shall be indicated. The District's field representative shall verify that all changes have been included. All revisions will be incorporated.
- C. When applicable, the District's Engineering Department will send one of the redlined sets to the Private Engineer, who will incorporate the changes onto the original mylars, prior to accepting them as final record drawings of the work.
- D. When applicable, the Private Engineer will provide the District with the following:
  - 1. Original mylars if on District title block
  - 2. Reproducible reverse mylars if not on District title block
  - 3. Electronic data per District requirements
- E. Only photo mylars or digital mylars of 4 or 5 mil thickness will be accepted. Mylars must be made from the original mylars and not from interim mylars or sepias. Each sheet shall incorporate a "Record Drawing" box signed by the Engineer of Work.

### **1.31 PROJECT CLOSEOUT AND FINAL ACCEPTANCE**

The District's Engineer or designee shall be responsible for final acceptance of all projects. The following items of work shall be completed prior to final acceptance by District:

- A. The project has been completed in accordance with the Approved Plans, the job specifications and these Standard Specifications.
- B. Final inspection has been performed by District. Any "punch list" items generated by preliminary inspection shall have been completed.
- C. Record drawings reflecting any changes to the project have been submitted to the District's Inspection Department in accordance with these Standard Specifications.
- D. A Soils Test Report has been submitted to the District in accordance with Section 02223 of these Standard Specifications.
- E. All costs and fees relevant to the work have been paid to District by the Developer.
- F. All aspects of the Construction Agreement have been completed to the satisfaction of the District.

Following final acceptance by the District, the District may prepare a Notice of Completion and will have such Notice recorded by the County Recorder.

### **1.32 WARRANTY**

- A. The work shall be guaranteed against failure due to defective materials or workmanship for a period of one (1) year from the recording date of the Notice of Completion. The one-year warranty period shall not, in any way, affect the liability of any party for latent or patent defects allowed for under State law.

- B. All repairs shall be made pursuant to the Development Agreement with the District and in accordance with the District's Rules and Regulations and current Standard Specifications.

### **1.33 WARRANTY INSPECTION**

The District will perform a warranty inspection prior to the expiration of the one-year warranty period. The Developer will be notified in writing of any deficiencies revealed by this inspection. The warranty bond will not be released until the required repairs are completed. If the warranty inspection is satisfactory, the District will release the warranty bond at the end of the one-year warranty period.

### **PART 2 MATERIALS**

"Not Used"

### **PART 3 EXECUTION**

"Not Used"

END OF SECTION