

## SECTION II: GENERAL REQUIREMENTS

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### A. SCOPE

**1. City Code:** These specifications supersede and shall take precedence over all other construction standards and specifications contained in the City ordinances. If any part of these specifications is in variance with adopted City ordinances, the provisions of these specifications shall apply.

**2. Intent:** These specifications shall apply to all construction performed on City property, easements or rights-of-way. Adoption of these specifications in no way alleviates the responsibility of the developer or contractor to practice sound engineering in all phases of their work. It is the intent of these standards and specifications to provide uniformity, continuity and eventual lessening of unnecessary maintenance expenses to the City.

**3. Standard Construction Drawings:** The latest revision of the Providence City Standard Construction Drawings shall be a part of the City Standards and Specifications Manual.

**4. Compliance with Utah Code:** All construction shall be in compliance with Utah Code and regulations and with state and federal law.

**5. Licensed Contractors:** A contractor licensed by the State of Utah shall perform or be responsible for all construction work on City property or rights-of-way. Owner of record is responsible for Construction policies sheet.

**a. Contractor's Responsibility:** It is the sole responsibility of the contractor to:

- i. Secure any and all permits required for completion of the project.
- ii. Provide for the safety and protection of all those engaged in the project, not allowing any unsafe conditions to exist.

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iii. Acquire materials and produce workmanship which conforms to City standards and specifications. Substandard installations and materials are subject to removal and replacement at the contractor's expense.

iv. Satisfy himself/herself that work performed is acceptable by the City Engineer. The City Engineer shall be called for inspections with a minimum of twenty four (24) hours' notice.

## **B. ADMINISTRATION AND ENFORCEMENT**

**1. Compliance Required:** No person shall perform any construction work on City property or on any parcel of land that has been platted for dedications to the City, except as in compliance with these specifications. The dedication to the City of all improvements shall include, but shall not be limited to, streets, water works, sewer works, etc., included in a proposed subdivision or development.

**a. Variance from Specifications:** The burden of proof is on the developer to justify any construction that varies from the specifications and drawings contained herein. Final approval or disapproval will be made by the City.

**2. Penalty:** The City shall enforce the provisions of these specifications. Whoever shall violate any of the provisions of these specifications shall be guilty of a Class C misdemeanor and, upon conviction of any such violation, shall be subject to penalty as provided in the City Code. Each violation shall be considered a separate offense, and each day such violation is permitted to exist shall constitute a separate offense. Failure of the City to pursue appropriate legal remedies shall not legalize any violation of the provisions. Reasonable legal fees incurred by the City in enforcement hereof may be assessed as an additional penalty for violations.

**3. Revisions:** These standards and specifications are subject to revision, modification, additions or changes without notice. Work in progress shall proceed under the revision that was in effect at the time the development was approved by the City. It is the responsibility of the developer to obtain the latest revised edition of these specifications and to make it available to the contractor and sub-contractors.

**4. Fee Schedule:** Any and all persons requesting approval of construction drawings and specifications for the construction of improvements shall have first paid all fees required as set forth by the most recent prevailing fee schedule adopted by the City. All costs of inspection, including any necessary testing, shall be borne by the developer, not the City. The fee schedule shall be held in the City office.

## C. STANDARDS FOR CONSTRUCTION DRAWINGS

The following instructions are for the purpose of standardizing the preparation of drawings to obtain uniformity in appearance, clarity, size and style. Construction of public improvements shall proceed only after the construction drawings have been approved by all required entities of the City. Any changes or alterations to the original drawings must be approved by the City Engineer prior to the construction of any such changes.

**1. Sound Engineering Practices:** The developer's engineer shall be a Professional Engineer licensed in the State of Utah and shall prepare, or shall be responsible for the preparation and design of, all construction drawings relative to public improvements associated with the development in and out of the subdivision. The developer's engineer shall also prepare, as part of the construction documents, an estimate of the cost of construction of all the public improvements.

**2. City Review:** Two (2) copies (20" x 30" minimum) of the construction drawings, one (1) 11" x 17" copy and the estimates of the cost of construction of all the public improvements must be submitted with the final plat to the City. All such drawings shall be reviewed, approved, and signed in the appropriate block by the City Engineer. The City Engineer shall review the estimate of the cost of construction for the purpose of determining the amount required for the security of performance.

**3. Approved and Signed Copies Submitted:** Three (3) twenty four inch by thirty six inch (24" x 36") sets, one (1) eleven inch by seventeen inch (11" x 17") set, with the approval mark of the City Engineer, shall be submitted to the City, with one set to be retained by the City Engineer and one set to be retained by Public Works and one (1) electronic set of the approved construction plans.

a. An approved set shall be kept available at the construction site.

**4. General Information:** Construction drawings shall be clear and legible and conform to current standards of engineering design and drafting practices. All drawings shall have the following format and general information:

**a. Sheet Size:** The sheet size shall be a minimum of twenty inches by thirty inches (20" x 30"). Each sheet shall be numbered in the lower right corner and show the total number of sheets. Each set of drawings shall be stapled along the left edge.

**b. Title Block:** Each sheet shall include a title block in the lower right corner or along the right-hand margin with the following information:

- ◆The title of the sheet (e.g. Grading Plan, Sewer Profiles, Storm Drainage Plan, etc.)
- ◆The name and street address of the project or subdivision.
- ◆The name of the City.
- ◆The name, address, and telephone number of the developer.
- ◆The name, address, and telephone number of the engineer that prepared the drawings.
- ◆The engineer's license stamp and original signature.
- ◆The original date of the drawing and the dates and nature of all revisions.

**c. Legend:** Sheet number one shall include a legend explaining all drawing lines, symbols, shading patterns, and special abbreviations. All drawings shall show the scale, and plan views shall have a north arrow.

**d. City Engineer Approval Block shall contain the following:** CITY ENGINEER ACCEPTANCE OF IMPROVEMENT PLANS. The improvement plans for this subdivision have been reviewed by the City Engineer for general conformance with the requirements of the City Subdivision Ordinance. This set of City-approved drawings shall be used for construction of the required subdivision improvements. The developer's engineer, whose stamp is on these drawings, is responsible for the engineering design, drafting and related field information. The construction contractor is responsible for dimensions which shall be confirmed and correlated at the job site; fabrication processes and techniques of construction; coordination of his or her work with that of all other trades; and the satisfactory performances of his or her work. By: \_\_\_\_(City Engineer)\_\_\_ Date: \_\_\_\_\_ .

**5. Street Drawings:** Street drawings shall show accurate location of all new and existing curb and gutter, sidewalks, cross drains, waterways, catch basins, storm drains, irrigation pipes and ditches, signs, lighting, and sidewalks. Drawings shall be shaded to show the full extent of all new street asphalt pavement.

**a. Street Plan Views:** Shall include a north arrow and have a scale of no less than one inch to sixty feet (1" = 60'). Grading plans shall show stationing and grades along the top back of new curbs at intervals no greater than fifty feet. Grades shall also be shown at all major points of tangency and at curb returns. Commercial building and multiple housing site plans may require scales as large

as one inch to twenty feet (1" = 20'). Site plans shall include existing and finish grade contour lines at one foot intervals with heavy index contour lines every five feet. Spot elevations shall be shown at a regular interval. Elevations shall be referenced to an accepted City datum or an established and permanent bench mark.

**b. Street Cross Sections:** Shall include curb and gutter details and show all dimensions and information contained in the Standard Construction Drawings.

**c. Street Profiles:** Shall include stationing with existing and finish elevations corresponding to those shown on the plan views. Profiles shall be drawn along the street center line. The vertical scale shall be exaggerated to clearly show all significant variations in the topography of the site.

**6. Sewer Drawings:** Shall show accurate location of all new and existing pipe lines, manholes, and service laterals. The size and flow line elevations of existing lines must be field verified and shown on the drawings. All new sewer lines must show the pipe size and material, the distances between manholes, the pipe slopes, and the direction of flow. Each new manhole must show the elevation of each invert and the existing and finish elevations at the top of the manhole cover and must be numbered sequentially.

**a. Sewer Plan:** Views shall have the same horizontal scale as the street plans. New sewer pipes shall have their own unique line type to clearly distinguish them from other underground utilities. The diameter and elevations of all manholes shall be shown.

**b. Sewer Profiles:** shall show stationing along the flow line of the pipes and have a vertical exaggeration sufficient to show the slope and flow direction. The profiles shall show all manholes and their elevations.

**c. Sewer Trench Details:** The developer shall refer to the Standard Construction Drawings.

**d. Sewer Manhole Details:** The developer shall refer to the Standard Construction Drawings. The City Engineer may require additional drawings for any special sewer system construction such as lift stations or special manhole design.

**7. Culinary Water Drawings:** Shall show the accurate location and size of all existing and new pipe lines and service lines. Drawings of the new water lines shall show the material, and size of all water mains and laterals, water meters, valves, fire hydrants, and fittings, including bends, tees, reducers, and couplers. The line type used for water lines must be clearly distinguishable from those used for other utilities. The City

Engineer may require additional drawings for any special water system construction such as pressure reducing stations, pump stations, or reservoirs.

**a. Water Trench Details:** The developer shall refer to the Standard Construction Drawings.

**b. Water Line Valved Sections:** Valved sections must have a combo air vac/relief valve on the high side of the valved section.

**8. Storm Water Drawings:** May be combined with the street plans and shall show the accurate location and size of all existing and new drain pipes, catch basins, holding ponds, culverts, and ditches, including the following information:

**a.** The size and flow line elevations of existing drain lines and ditches must be field verified and shown on the drawings.

**b.** All new drain lines must show the pipe size and material, the distances between catch basins and junction boxes, the pipe slopes, and the direction of flow.

**c.** Each new drain box must show the existing and finish elevations at the top of the box cover or grate.

**d.** Holding ponds and retention or detention basins shall show existing and finish grade contours with flow line elevations at the inlet and/or outlet.

## **9. Storm Water Pollution Prevention Plan**

**a. Regulations:** State, Federal and local regulations must be followed.

**b. Fugitive Dust:** The developer shall comply with all regulations of the Utah Division of Air Quality. No blowing dust, also known as fugitive dust, will be allowed during the construction period. Steps shall to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. The City may require the developer to regularly wet down the project site with a water truck to control fugitive dust. If complaints from the public require the city to perform any fugitive dust abatement or mud cleanup work, the developer will be billed for the cost of the abatement or cleanup plus a penalty of \$100 per occurrence. Any use of water by the contractor from City fire hydrants must be approved by permit from the Public Works Director.

**c. Cleaning Streets & Drains:** Dirt, mud, and debris that accumulates on City streets as a result of the developer's construction shall be removed at the end of

each work day. Silt fences and/or filters shall be installed around all City catch basins and drain manholes. All catch basins and drain pipes must be free of silt and debris before they will be accepted by the City.

**10. Utilities:** All newly installed utilities shall be underground.

**11. Design of Extension of Public Works Facilities:** Layout must provide for future extension to adjacent development and be compatible with the contour of the ground for proper drainage. All water lines, sewer lines and any other buried conduit shall be installed to the boundary lines of the development. Depending on topography and location, the City may require public works infrastructure to be designed up to three hundred feet (300') on either side of the development.

**12. Patching:** The developer shall refer to the Standard Construction Drawings.

**13. Additional Drawing Details:** Each set of plans may be accompanied by a separate sheet of details. References shall be made on the construction drawings to the City's Standards and Specifications Manual. All such references shall state the City's drawing number and revision date.

#### **D. SURVEY MONUMENTS**

Permanent monuments as per state surveying requirements with land surveyor's caps shall be set by the developer's engineer at all corners and tangent points of the subdivision boundary and at all lot corners within the development. This includes permanent street center line monuments (built according to the City Standard Construction Drawings) installed as required by the City.

#### **E. PROTECTING CITY PROPERTY**

**1. Locating:** Prior to construction, the contractor shall have a state-approved utility locator verify the location of all existing underground facilities on City property. The developer's engineer or surveyor is responsible for accurately locating street right-of-way lines prior to construction.

**2. Demolition:** Anything on City property that is not specifically shown or called out for removal or demolition on the approved construction drawings is to remain undisturbed and undamaged. Living trees, bushes and shrubbery on City property and within City right-of-way are to be removed only with the written approval of the Public Works Director. The contractor and/or developer will repair at his expense any damage he causes to City-owned vegetation, facilities, utility lines, or property. The developer and/or contractor are responsible for restoring said vegetation and facilities to the satisfaction of the Public Works Director.

**3. Existing Irrigation & Drainage Pipes:** All existing irrigation and drainage pipes not approved for removal shall remain in place undamaged. With City approval an existing pipe may be removed during excavation and replaced with City-approved material and sealed against leakage. The developer is responsible for obtaining written approval from officials of the irrigation company concerning any disruption of the flow of irrigation water. The developer is also responsible for notification to users of the irrigation water if flow will be disrupted.

## F. TRAFFIC CONTROL

General traffic and emergency vehicle access along City streets should be maintained at all times during construction unless closure approval is received. All closures require the approval of the City Public Works Director.

**1. Traffic Control Plan:** All signage and traffic control shall be done as per MUTCD. One lane of traffic may be closed temporarily during working hours, if a Traffic Control Plan is submitted to the Public Works Director 48 hours prior to requested closure.

**2. Alternate Routing Plan:** Before closing any street entirely too through traffic, the contractor must submit an Alternate Routing Plan to the Public Works Director 48 hours prior to the requested closure. If the closure is approved, the developer shall verify to the Public Works Director that notification has been given to all local emergency service authorities and the school bus manager at the Cache County School District and the Cache Valley Transit District.

**3. Signage:** For any street closure, UDOT approved 3x3 orange warning signs and/or "Detour" signs with arrows shall be posted and maintained daily, seven days a week, by the developer. Type "3" road closures are required. Hand printed or spray painted signs, damaged or illegible signs are unacceptable. Signs must be placed at all alternate route intersections and at the ends of each block under construction.

**a.** Any construction materials, trenches or items left in the City right-of-way shall be protected by Type II lighted warning barricades maintained by the developer on a daily basis, seven days a week.

**b.** 300 East Street from Center Street to 200 South Street shall not be used by heavy construction equipment or vehicles. Use the 200 East Street dugway instead for access from the lower section of the City to the bench areas.

## G. INSPECTIONS & TESTING

**1. Inspections - General Requirements:** The City may inspect, or cause to be inspected, all construction covered under these specifications. Inspections may be



unannounced and may be performed at the discretion of the City. The cost of the inspection will be borne by the developer and/or contractor.

**a. Compaction Tests:** May be required by the City whenever and wherever it deems necessary. These tests shall be performed by the developer's licensed engineer and all results (passed or failed) submitted in writing to the City Engineer

**b. Backfilling:** All underground construction requiring inspection in these specifications should not be backfilled before it has been inspected. Work that is backfilled may be uncovered and inspected at the developer's expense.

**2. Scheduling Inspections:** The City shall be given twenty four (24) hours (business days only) notice to make the following inspections. It is the responsibility of the developer to either notify or cause his contractor to notify the City in order that these inspections can be made on days other than holidays and weekends. Failure to do so may result in work stoppage until the inspections are complete.

**a.** The following table includes, but is not limited to, the inspections that shall be made of improvements in a development:

Inspection Type	Schedule (time)	Who
<b>Miscellaneous</b>		
SWPPP		
Road cut		
Sewer line		
Water line		
Storm sewer		
Pit run		
Curb/gutter		
Sidewalk		
Road base		
Asphalt		

## H. SEQUENCE OF CONSTRUCTION APPROVALS

There will be a \$175.00 fee for the following approvals, one time for each. Any subsequent approvals will be billed. Professional service fees **NOT** included.

**1. Preconstruction Meeting:** The developer or contractor will contact the City to schedule a meeting prior to the commencement of work.

**2. Minimum Improvements:** Minimum improvement approval is a preliminary step for issuance of a building permit and does not start the warranty period. An inspection of minimum improvements shall be made and the City Engineer will certify to the City, in writing, that the minimum improvements are complete prior to the issuance of any building permits. The developer shall notify the City when they are ready for a minimum improvement inspection.

**3. Substantial Completion:** A substantial completion inspection shall be made by the City after all construction work is completed or eighteen (18) months from the date of the performance security. A substantial completion approval is a preliminary step prior to the warranty period. A written punch list of any faulty, defective or unfinished work will be compiled and given to the developer or contractor. Any faulty, defective or unfinished work shall be corrected by the persons responsible for the work within a period determined by the City.

**4. Final Approval:** Once **ALL** items listed on the substantial completion punch list are complete, the developer or contractor will contact the City for final approval. Upon written final approval, the two (2) year warranty period will begin. The City will begin maintenance of improvements at this time.

**5. Warranty Approval:** Upon warranty approval, the warranty bond will be released and the City assumes ownership.

**6. Final Cleanup & Restoration:** Prior to the final approval the developer shall remove all waste soil, mud, pipe, loose asphalt and concrete, scraps, large rocks and other debris from all City streets, sidewalks, parking strips, sanitary sewers, storm sewers and rights-of-way. All existing surfaces on City property that are excavated or damaged are to be graded and restored to their original or better condition as follows:

**a.** Lawn and grass areas excavated or damaged are restored with new grass sod, and any damage to existing sprinkler or irrigation systems caused by construction will be repaired or replaced by the contractor.

**b.** Dirt and mud is to be washed off all existing and new streets, sidewalks and driveways.

**7. As-Built Drawings:** The developer's engineer shall provide the City Engineer with as-built drawings accurately defining, for permanent record, the surface improvements and underground utilities as they were actually constructed.

**a.** Two (2) copies, in addition to one reproducible copy of the as-built drawings, including all approved changes, shall be provided by the developer to the City prior to the minimum improvement inspection and before asphalt is laid.

## I. GUARANTEE OF WORK

**1. Guarantee:** The developer shall guarantee the contractor's work against defective materials or workmanship for a period of one year from the date of its final acceptance under each individual contract.

### **2. Developer's Warranty:**

**a.** The developer shall warrant and guarantee and that the improvements provided for hereunder, and every part thereof, shall be free from defects in materials and workmanship and shall remain in good condition for a period of one year after the date the construction work is formally accepted by the City.

**b.** The developer shall post a bond or other security with the City and shall agree to make all repairs to and maintain the improvements and every part thereof in good condition during the time with no cost to the City. The City may hold ten percent (10%) of the security posted by the developer until one year following final inspection, or such other period of time less than one year as the City deems necessary, to ensure compliance as set forth in the Providence City Subdivision Ordinance.

**3. Determination Of Repairs:** It is further agreed and understood that the determination for necessity of repairs and maintenance of the work during the guarantee of work rests with the City Engineer. His/her decision upon the matter shall be final and binding upon the developer, and the guarantee hereby stipulated shall extend to and include, but shall not be limited to, the entire street base and all pipes, joints, valves, backfill and compaction, as well as the working surface, curbs, gutters, sidewalks and other accessories that are, or may be affected by the construction operations, and whenever, in the judgment of the City Engineer, said work shall be in need of repairs, maintenance or rebuilding, he/she shall cause a written notice to be served the developer, and thereupon, the developer shall undertake and complete such repairs, maintenance or rebuilding.

**4. Failure To Comply:** If the developer fails to take action within ten (10) days from the date of service of such notice, the City Engineer shall have such repairs made and the cost of such repairs shall be paid by the developer, together with twenty five percent (25%) in addition thereto as and for stipulated damages for such failure on the part of the developer to make the repairs.

## J. TIME LIMIT & FINAL ACCEPTANCE:

**1. Time Limit Of Approval:** Approval of plans and specifications by the City Engineer on a submitted project will extend for a period of two (2) years; if all work has not be

completed on such project within a period of two (2) years maximum following initial approval, the plans must be submitted and become subject to re-approval under the latest City standards, specifications and ordinances.

**2. Final Acceptance:** Final acceptance of any or all work is contingent upon:

- a. An on-the-site inspection as the work progresses;
- b. Reproducible as-built plans having been submitted; and
- c. A final inspection of the site.

**3. Approval Of Workmanship:** No project can receive final approval until the workmanship and materials are in compliance with City standards and specifications. This includes accurate and proper placement of survey monuments and acceptable cleanup of area.

**4. Letter of Acceptance:** The subdivision of lands shall not be accepted by the City without the City and developer first receiving a statement signed by the City Engineer that the improvements described in the construction drawings have been completed and that they meet the minimum requirements of all the ordinances, resolutions, rules and regulations of the City, that they comply with the recommendations of the County Board of Health, the Planning Commission, the Fire Department, and with the standards, rules, regulations and policies formulated by the City Engineer and by the various City departments and approved by the City Council; which standards, rules, regulations, and policies the City Council is hereby empowered to approve and adopt by resolution or ordinance, and the same are hereby incorporated in this Title by reference. Additionally, any subdivision of lands shall not be accepted without the developer having first provided the City with a one year written guarantee on all public improvements installed therein.

