

**WEST BOUNTIFUL CITY**

RESOLUTION 414-17

**A RESOLUTION UPDATING CONSTRUCTION STANDARDS  
FOR WEST BOUNTIFUL CITY**

**WHEREAS**, the West Bountiful City Council desires to maintain current standards and specifications for construction, design, and on-site review of all public improvements such that the health, safety and welfare of the community is preserved; and

**WHEREAS**, West Bountiful Municipal Code 16.20.020 A. requires that the above standards be prepared by the City Engineer and approved by Resolution of the City Council before becoming effective; and

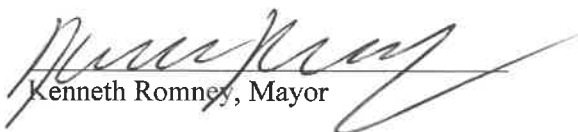
**WHEREAS**, the City Engineer is recommending updates and modifications to the previously adopted City design standards, which provide requirements specific to West Bountiful for the construction of municipal infrastructure such as streets, water, and storm drain systems, and

**WHEREAS**, the planning commission held a public hearing on March 14, 2017 and voted unanimously to recommend approval of the proposed updates to the West Bountiful Minimum Construction Standards.

**NOW, THEREFORE, BE IT RESOLVED** by the West Bountiful City Council that the updates and modifications proposed by the planning commission and city engineer are adopted as reflected in Exhibit A.

**EFFECTIVE DATE.** This resolution shall take effect immediately upon passage.

**ADOPTED** and **APPROVED** by the City Council of West Bountiful City this 21<sup>ST</sup> day of March, 2017.

  
Kenneth Romney, Mayor

<u>Voting by the City Council:</u>	<u>Aye</u>	<u>Nay</u>
Councilmember Ahlstrom	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Councilmember Bruhn	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Councilmember Enquist	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Councilmember Preece	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Councilmember Williams	<input checked="" type="checkbox"/>	<input type="checkbox"/>



ATTEST:

  
Cathy Brightwell, City Recorder

## West Bountiful City Minimum Construction Standards

This policy defines the general requirements for improvements to be constructed by Developer, sub-divider, owner, or Contractor for all types of construction, including residential, commercial, industrial, institutional, governmental, and professional office. All improvements which are in areas that are or will become public rights-of-way and/or easements, or that will be under the responsibility of a home owners association shall meet these requirements.

The Utah Chapter, American Public Works Association (APWA) Manual of Standard Specifications and Standard Plans, latest addition with all approved supplements is the City's general construction standard. The City has some local standards that deviate from the APWA standards. City Municipal Code and the standards included in this policy shall supersede APWA and other standards whenever they conflict. Any variation, substitution or exception from the standards in this policy must be authorized in writing by the City Engineer or his/her designee. Any item of construction not covered by these standards must have plans and specifications approved by the City Engineer or his/her designee.

1. Storm drainage system
  - a. Inlet boxes
    - i. Installed at intersections to eliminate waterways (cross gutters) **wherever possible**
    - ii. Installed at 800± foot spacing along curb & gutter streets
    - iii. Max. gutter flow is 1.6 CFS for 25 year recurrence frequency
    - iv. Standard box is 18" X 42" with bicycle safe inlet grate
    - v. **Wood shims and similar materials are not permitted to adjust frame elevations**
  - b. Cleanout boxes
    - i. Installed at all pipe junctions with pipes 8 inch or larger
    - ii. Installed at change in grade or change in alignment
    - iii. Standard box is 18 X 48 solid cover
    - iv. May be 60 inch manholes
  - c. Line size, type and capacity
    - i. Minimum size shall be 15" **in street right of ways**
    - ii. Pipe material is RCP
    - iii. The rational formula may be used to determine line capacity within each drainage sub-basin.
    - iv. Minimum slope shall provide for 3 fps at 80% capacity
  - d. A site drainage plan will show existing and finish grades **for the entire property being considered as well as information relating to upstream and downstream contributing areas, flow rates, infrastructure capacity, etc.**
  - e. **Video inspection of pipelines is required prior to acceptance**

- f. Minimum cover and placement
  - i. The pipe, including the bell, shall be placed at least 15 inches below the lip of the curb & gutter.
  - ii. Additional depth as required to accommodate area drain systems.
  - iii. Storm drain line installed with the centerline of the pipe 24 inches into the street from the lip of the gutter.
  - iv. Tangent lines may not cross behind curb & gutter on curve streets.
- g. UPDES permit
  - i. Comply with the City's Storm Water Management Plan requirements
  - ii. Prepare SWPPP with BMPs incorporated
  - iii. Rear yard drains with an 8" minimum pipe size, are required whenever the average ground slope is less than 2%

2. Culinary Water System

- a. Isolation valves
  - i. Installed at each intersection, all directions
  - ii. Installed not to exceed 800 feet between valves
  - iii. Placed at logical locations (fence lines, property corners, near fire hydrants)
  - iv. Concrete collar is required
- b. Fire hydrants
  - i. Installed not to exceed 400 feet spacing (residential)
  - ii. Installed not to exceed 300 feet spacing (commercial)
  - iii. Installed at property line projections
  - iv. Installed at every dead-end line. These hydrants are for flushing purposes and are not considered part of the fire protection system.
  - v. Installed at the intersection entrance to cul-de-sacs.
  - vi. Auxiliary valve for hydrant installed at the mainline.
- c. Main Line size and placement
  - i. Approved material is C-900 PVC class 200 w/#12 locator wire
  - ii. Minimum line size is 8 inches or as per City Master Plan
  - iii. Minimum depth is 48 inches of cover
  - iv. Placed 10 feet north or east from the street centerline
  - v. Waterline shall parallel street centerline, with bends as required.
  - vi. All trace wire shall be tested for continuity in the presence of the inspector
- d. Culinary water service lines
  - i. 3/4" minimum size for residential, 1" allowed
  - ii. Commercial / industrial service and meter size determined by anticipated fixture unit demand
  - iii. Residential meter vaults shall be 20" white PVC with 21" risers
  - iv. Services placed to the center of the residential lot
  - v. Service lateral extended 10 feet beyond property line and marked with a 2X4 or other full-depth marker

3. Street design

- a. Minimum street right-of-way width is 50 feet.

- b. Maximum length of cul-de-sac, 400 feet from cross street intersection to the centerline of the cul-de-sac circle, as measured along the centerline.
- c. The maximum length of a dead end street which is to extend in the future is 1000 feet from the nearest cross street intersection to the street end. A temporary turn around is required on the dead end if the street is more than 150 feet long.
- d. A second means of access is required for all development with a permanent dead end exceeding 400 feet and a temporary dead end exceeding 1000 feet, measured as described above.
- e. Minimum street curve radius is 150 feet.
- f. Cul-de-sac right-of-way radius is 50 feet.
- g. Street intersections at right angles preferred, with 10 degree approach angle allowance.
- h. "T" intersections preferred with centerline to centerline spacing of 295 foot offset between intersections.
- i. The approach to an intersection shall have at least 100 feet of tangent (perpendicular) approach.
- j. Standard street section
  - i. 30" wide, 6" high back style curb & gutter
  - ii. 48" park strip
  - iii. 48" wide 4" thick concrete sidewalk (6" thick concrete & 6" base thru residential driveway)
  - iv. 29' wide asphalt surface (residential)
    - (1) 12" sub-base
    - (2) 8" roadbase
    - (3) 3" asphalt
  - v. 20' back-of-curb radius at corners for 50' right of ways and 30' back-of curb radius if intersecting with a 60' or larger right of way.
  - vi. Construction of public improvements which does not meet the minimum required standard is to be removed and replaced at no cost to the city.
  - vii. One compaction test per lift of imported granular base and sub base material is required for every 500 square yards
  - viii. In addition to the compaction test requirements, subbase and base course layers will be proof rolled by a loaded water truck or equivalent. Any noticeable deflection in base materials is to be removed and remediated.
- k. Street elevations
  - i. 0.50% minimum gutter slope
  - ii. 1.0% minimum and 4% maximum cross slope
  - iii. Sidewalk installed 0.10' above top of curb
- l. Street Lights
  - i. Lights shall be installed at street intersections, dead ends, group mailboxes, a maximum 350 feet spacing or as otherwise approved by the City.

- ii. Poles in residential areas shall be 14' fiberglass with 100 Watt HPS equivalent LED fixtures with IES Type III distribution.
- iii. Fixtures shall be Granville or American Revolution unless otherwise approved by the City.
- iv. All construction shall be in accordance with Rocky Mountain Power's installation requirements

4. Other items

- a. Group mailboxes are to be located off main streets whenever possible and a 100' minimum from the center of a street intersection.
- b. Extend all stub streets to property boundary, including extensions to future development as directed by the City.
- c. End of construction inspection shall be free of defects, damage and debris.
- d. Landscaped areas shall not be graded with a slope steeper than 30% without mechanical stabilization.
- e. Storm water basins which are designed to hold water deeper than 24" are to have slopes no steeper than 30% without mechanical stabilization and fenced with a 6' high chain link fence or as approved by the City.
- f. Inspections to release residential and commercial construction bonds will not be completed until after all landscaping which may negatively impact public improvements is completed.
- g. Residential drive approaches shall be located a minimum of 50 feet from the center of a street intersection
- h. Extraordinary repairs, as defined by the city code, as well as any new damage to public improvements are required to be repaired as a condition of a building permit for properties with existing main structures (as defined by municipal code).
- i. Concrete and other public improvements will be held to the same standard as newly constructed improvements for properties with a building permit for the original construction of a main structure (as defined by municipal code).
- j. All trenches in street right of way shall be backfilled with imported granular material as directed by the public works department
- k. Required soils report shall include
  - i. Subsurface water level fluctuations
  - ii. Bearing capacity and foundation design requirements
  - iii. Pavement design recommendation including subgrade CBR value (as applicable)
  - iv. Slope stability
  - v. Special considerations such as geologic hazards, collapsible or expansive soils
- l. Water, secondary water, storm drain, sewer utility improvements are to be shown in plan and profile drawings for new construction.