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CHAPTER 12
ACCEPTANCE REQUIREMENTS

12.00.00 APPLICABILITY

This chapter applies to all required PUBLIC IMPROVEMENTS and any stormwater treatment facilities. Before the CITY will assume ownership and maintenance responsibility for PUBLIC IMPROVEMENTS, the PUBLIC IMPROVEMENTS shall be formally accepted by the CITY ENGINEER. The OWNER is responsible for the proper installation of all improvements. Failure by the CITY's representatives to detect improper installations or defects during the construction of improvements or during subsequent inspections does not relieve the OWNER of the responsibility to correct such defects at a later date. There shall be no partial acceptances of PUBLIC IMPROVEMENTS.

12.01.00 ACCEPTANCE PROCEDURE

12.01.01 Written Request

At such time that the OWNER believes that the construction of all required PUBLIC IMPROVEMENTS and any stormwater treatment facilities have been completed, all improvements are accessible and visible for inspection and a written Release For Service (See Chapters 3 and 4) for water and sanitary sewer systems has been issued by the CITY's Engineering Division, a written request for ACCEPTANCE shall be submitted to the CITY ENGINEER.

12.01.02 Record Drawings

A complete set of "redlined" as-constructed drawings of the PUBLIC IMPROVEMENTS and any stormwater treatment facilities shall accompany the request for acceptance. If corrections to the improvements are noted during the acceptance inspection. The as-constructed drawings will be returned to the OWNER for revisions. The as-constructed drawings shall be of the entire plan set. Upon approval by the city, the OWNER will be required to submit a certified set of the as-construction drawings in digital PDF and DXF formats with the Professional Engineer registered in the State of Colorado's stamp and signature on each sheet.

12.01.03 Certification of Stormwater Treatment Facilities

- A. Registered Land Surveyor: A land surveyor registered in the State of Colorado shall affirm the as-built stormwater treatment facility volumes and surface areas at the design depths, outlet structure sizes and elevations, storm sewer sizes and invert elevations at inlets, manholes, and discharge location, and representative open channel cross-sections, and dimensions of all structures. The certification shall include orifice plates, if any. Certification measurements shall not happen until landscape is established, or, with the approval of the CITY ENGINEER, the treatment facility base grade shall be constructed to six inches (6") below design elevations and certified without landscaping established.
- B. Registered Professional Engineer: The Engineer of Record shall ensure proper field tests of stormwater treatment facilities and verify that any deviation of the as-built conditions from the construction drawings is within acceptable tolerances and are in accordance with

the design intent The Engineer of Record shall state that “I have reviewed the stormwater treatment facilities as-built information and any required field test data and to the best of my knowledge, belief, and opinion, the facilities appear to have been constructed in accordance with the design intent of the approved drainage report and construction drawings.”

- C. The DEVELOPER shall fully complete and submit an Operations and Maintenance Manual for stormwater treatment facilities to the CITY in accordance with the Phase III drainage report.
- D. The DEVELOPER shall fully complete and submit the “Stormwater Detention and Infiltration Design Data Sheet” to the CITY in compliance with C.R.S §37-92-602(8). The CITY will input this data into the Colorado stormwater detention and infiltration facilities website.

12.01.04 Preparation of Corrections List

Upon receipt of the written request for ACCEPTANCE, certification of stormwater treatment facilities, and record drawings, the CITY INSPECTOR will schedule a final inspection of the work. The OWNER, or their representative will be invited to accompany the CITY's representative on all such inspections. The construction of PUBLIC IMPROVEMENTS and any stormwater treatment facilities will be inspected for conformance with the approved plans, the Official Development Plan, the Public Improvements Agreement, these STANDARDS AND SPECIFICATIONS, the CRITERIA and CITY CODE. If, due to excessive dirt or snow on streets, poor weather conditions, inaccessibility, or other reasons the inspection cannot be performed, the OWNER will be notified of the need to postpone these activities until the cause of the delay can be rectified. Deficiencies noted during the inspection will be compiled in a corrections list by the OWNER or their representative to be sent to the CITY INSPECTOR for review and approval.

12.01.05 Correction of Deficiencies

Correction list items shall be corrected within sixty (60) days of the date of the corrections list. If all of the noted deficiencies are not corrected within this time, the PUBLIC IMPROVEMENTS and any stormwater treatment facilities may be reinspected and any new defects may be added to the corrections list. Public improvements and any stormwater treatment facilities will not be accepted until all noted deficiencies are corrected within the proper time frame. The CITY INSPECTOR shall be notified before any corrective work commences and immediately upon the completion of the repairs.

12.01.06 Written Acceptance

Upon the completion of all items on the correction list and payment of all outstanding fees, reimbursements, and other items owed to the CITY, the CITY ENGINEER will issue a written ACCEPTANCE of the PUBLIC IMPROVEMENTS and any stormwater treatment facilities. The amount of the surety for the PUBLIC IMPROVEMENTS may then be reduced to fifteen percent (15%) of the original, estimated cost of the PUBLIC IMPROVEMENTS and any stormwater treatment facilities.

12.02.00 WARRANTY PERIOD

12.02.01 Duration

All PUBLIC IMPROVEMENTS and any stormwater treatment facilities shall be subject to a WARRANTY period of at least two (2) years after the date of the letter of ACCEPTANCE from the CITY ENGINEER.

12.02.02 Maintenance Responsibility

The OWNER shall be responsible for the maintenance of all PUBLIC IMPROVEMENTS and any stormwater treatment facilities during the WARRANTY period. The CITY ENGINEER will notify the OWNER of any maintenance that may be necessary during this time. Routine maintenance normally performed by the OWNER includes, but shall not be limited to, the cleaning of streets, patching of potholes, removal of blockages from water, storm and sanitary sewer facilities and any stormwater treatment facilities. Temporary erosion and sediment control BMPs shall be maintained according to the requirements of Chapter 2 of these STANDARDS AND SPECIFICATIONS. The cost of any routine maintenance not performed by the OWNER that must be performed by the CITY will be billed to the OWNER at cost plus fifteen percent (15%).

12.02.03 Emergency Repairs

In the event of a water main break, sanitary sewer main blockage, street or bridge failure, or other emergency that may occur during the WARRANTY period, it may become necessary for the CITY to undertake immediate repairs to the facilities and/or make the area safe to residents, pedestrians, or motorists. The CITY will attempt to contact the OWNER in the event of such emergency. If the OWNER cannot be contacted within two (2) hours of the initial incident report, or a CONTRACTOR repair crew cannot arrive onsite within six (6) hours, the CITY may proceed with such action as deemed necessary by the CITY ENGINEER, and the OWNER will be billed for all costs of these actions at cost plus fifteen percent (15%). The OWNER shall be responsible for final restoration of the affected site and will work with the CITY on making such restoration efforts.

12.03.00 END OF WARRANTY PROCEDURE

12.03.01 Preparation of Corrections List

At approximately twenty-one (21) months into the WARRANTY period, the CITY INSPECTOR will schedule and perform an inspection of the PUBLIC IMPROVEMENTS and any stormwater treatment facilities within the development. The OWNER will be invited to accompany the CITY INSPECTOR on all such inspections. The condition of the PUBLIC IMPROVEMENTS and any stormwater treatment facilities will be inspected for conformance with the PLANS, the Official Development Plan, the PUBLIC IMPROVEMENTS AGREEMENT, these STANDARDS AND SPECIFICATIONS, the CRITERIA and CITY CODE. If due to excessive dirt or snow on streets, poor weather conditions, inaccessibility, or other reasons the inspection cannot be performed, the OWNER will be notified of the need to postpone these activities until the cause of the delay can be rectified. Deficiencies noted during

the inspection will be compiled in a corrections list by the OWNER to be sent to the CITY INSPECTOR for review and approval.

12.03.02 Correction of Deficiencies

WARRANTY correction list items should be corrected within sixty (60) calendar days of the date of the WARRANTY correction list, and all corrections must be completed no later than ten (10) working days prior to the scheduled end of the WARRANTY. If all of the noted deficiencies are not corrected within this time, the PUBLIC IMPROVEMENTS and any stormwater treatment facilities may be reinspected, a revised correction list may be issued, and the end of the WARRANTY may be adjusted at the discretion of the CITY ENGINEER to allow ample time for the completion of the corrections. The end of the WARRANTY will not be acknowledged until all noted deficiencies are corrected within the proper time frame. The CITY INSPECTOR shall be notified before any corrective work commences and immediately upon the completion of the repairs.

12.03.03 Written Acknowledgment of End of Warranty

Upon completion of the correction of all deficiencies noted in the WARRANTY correction list, the CITY ENGINEER will issue a written acknowledgment of the end of the WARRANTY for the PUBLIC IMPROVEMENTS and any stormwater treatment facilities. SURETY for PUBLIC IMPROVEMENTS and any stormwater treatment facilities may be released in its entirety at this time.

12.04.00 ACCEPTANCE/WARRANTY INSPECTION CRITERIA

12.04.01 General

All PUBLIC IMPROVEMENTS and any stormwater treatment facilities shall be installed in conformance with the PLANS, the Official Development Plan, IMPROVEMENTS AGREEMENT, these STANDARDS AND SPECIFICATIONS and CITY CODE. The COMMUNITY DEVELOPMENT DIRECTOR shall be the final authority in the determination of defects and required corrections to PUBLIC IMPROVEMENTS and any stormwater treatment facilities.

12.04.02 Grading and Seeding

Finished grades shall be in conformance with the approved plans and the Official Development Plan. Unless otherwise approved, no slopes shall exceed a grade of four (horizontal) to one (vertical) (4:1). Seeding shall be performed and grass shall be established in conformance with Chapter 2 of these STANDARDS AND SPECIFICATIONS.

12.04.03 Water Systems

The required inspection and testing of water mains and appurtenances that shall be performed before systems can be released for service is outlined in Chapter 3 of these STANDARDS AND SPECIFICATIONS. At the time of ACCEPTANCE and WARRANTY inspections of all PUBLIC IMPROVEMENTS and PRIVATE IMPROVEMENTS, additional aspects of water system construction that shall be inspected include, but shall not be limited to, the following:

- (A) All valves, blow-off installations, and fire hydrants shall be operable.
- (B) Valve box risers shall be vertical and shall be adjusted to within one-eighth inch (1/8") below grade in paved areas or one inch (1") above grade in landscaped areas.
- (C) Valve operating nuts shall be accessible with a six-foot (6') valve key with between eighteen inches (18") and four feet (4') of clearance between the handle of the key and finished grade.
- (D) Fire hydrants shall be vertical and shall be adjusted to a minimum of eighteen inches (18") from the center of the nozzle to finished grade. Extensions shall not be allowed.
- (E) A minimum of five feet (5') of clearance for operation shall be provided around all fire hydrants and water valve risers.
- (F) Manhole rims and covers for water valve vaults shall be adjusted to within one-eighth inch (1/8") below grade in paved areas or one inch (1") above a concrete collar in landscaped areas. Bollards may be required by the CITY ENGINEER.
- (G) The construction and operation of any required pumping systems shall be in conformance with the specifications issued and approved for that specific installation.
- (H) All vaults and meter pits shall be free of construction debris, dirt, trash, and other foreign material. All steps shall be properly installed, spaced and aligned.

12.04.04 Sanitary Sewer System

The required inspection and testing of sanitary sewer mains and appurtenances that shall be performed before systems can be placed into service is outlined in Chapter 4 of these STANDARDS AND SPECIFICATIONS. At the time of ACCEPTANCE and WARRANTY inspections of all PUBLIC IMPROVEMENTS, additional aspects of sanitary sewer system construction that shall be inspected include, but shall not be limited to, the following:

- (A) All mains and manholes shall be free of construction debris, dirt, trash, and other foreign material.
- (B) The CITY's TV inspection of all sanitary sewer mains shall be completed prior to the ACCEPTANCE of public improvements. All lines shall be jet-cleaned prior to TV inspection.
- (C) Manhole rims and covers shall be adjusted to within one-eighth inch (1/8") below grade in paved areas or one inch (1") above grade in landscaped areas.
- (D) Grade adjustment rings shall be properly installed and spaced in accordance with Chapter 4. The maximum depth of the adjustment rings shall be twelve inches (12"). If manholes are located in paved areas, the maximum depth from the top of cone to street grade shall be eighteen inches (18"). If manholes are located in field installations, the ring and cover shall be twelve to eighteen inches (12" – 18") above final grade.
- (E) Manhole steps shall be properly installed, spaced, and aligned.

12.04.05 Storm Sewer System

The required inspection and testing of storm sewer mains and appurtenances that shall be performed are outlined in Chapter 5 of these STANDARDS AND SPECIFICATIONS. At the times of ACCEPTANCE and WARRANTY inspections of all PUBLIC IMPROVEMENTS, additional aspects of storm sewer system construction that shall be inspected include, but shall not be limited to, the following;

- (A) All pipes and manholes shall be free of construction debris, dirt, trash, and other foreign material.
- (B) Manhole rims and covers shall be adjusted to within one-eighth inch (1/8") below grade in paved areas or one inch (1") above grade in landscaped areas.
- (C) Manhole steps shall be properly installed, spaced and aligned.
- (D) Inlets shall be constructed flush with adjoining pavement, sidewalk and/or curb and gutter.

12.04.06 Concrete

At the time of ACCEPTANCE and WARRANTY inspection of all PUBLIC IMPROVEMENTS the aspects of concrete construction that shall be inspected include, but shall not be limited to the following:

- (A) Breakage or cracking greater than 1/32" at areas other than construction joints.
- (B) Ponding of any size.
- (C) Settlement affecting drainage, pedestrian or traffic safety.
- (D) Surface spalling or deterioration.
- (E) Any longitudinal cracking.

12.04.07 Roadway

At the time of ACCEPTANCE and WARRANTY inspection of all PUBLIC IMPROVEMENTS, the aspects of roadway construction that shall be inspected include, but shall not be limited to, the following:

- (A) Breakage or cracking greater than 1/8". All cracks shall be sealed prior to ACCEPTANCE.
- (B) Ponding of any size.
- (C) Settlement affecting drainage, pedestrian or traffic safety.
- (D) Surface segregation of fines or aggregate

- (E) Hazardous conditions
- (F) Alligating
- (G) Improper grade or inverted crown.

12.04.08 Signing

At the time of ACCEPTANCE and WARRANTY inspection of all PUBLIC IMPROVEMENTS, the aspects of sign construction that shall be inspected include, but shall not be limited to, the following:

Unless otherwise noted on the PLANS, all signs shall be installed per PLANS and conform to these STANDARDS AND SPECIFICATIONS. The CONTRACTOR shall notify the CITY of substantial completion so staff can complete the inspection process and provide a list of corrections needed to the CONTRACTOR. Once the project has been accepted then the signage shall enter a two (2) year WARRANTY.

12.04.09 Striping

At the time of ACCEPTANCE and WARRANTY inspection of all PUBLIC IMPROVEMENTS, the aspects of striping construction that shall be inspected include, but shall not be limited to, the following:

Unless otherwise noted on the PLANS, all traffic striping shall be installed per PLANS and conform to these STANDARDS AND SPECIFICATIONS. The CONTRACTOR shall notify the CITY of substantial completion so staff can complete the inspection process and provide a list of corrections needed to the CONTRACTOR. Once the project has been accepted then the striping shall enter a two (2) year WARRANTY.

12.04.10 Street Lighting

At the time of ACCEPTANCE and WARRANTY inspection of all PUBLIC IMPROVEMENTS, the aspects of street lighting construction that shall be inspected include, but shall not be limited to, the following:

Unless otherwise noted on the PLANS, all street lighting shall be installed per PLANS and conform to these STANDARDS AND SPECIFICATIONS. The CONTRACTOR shall notify the CITY of substantial completion so staff can complete the inspection process and provide a list of corrections back to the CONTRACTOR. Once the project has been accepted then the street lighting system shall enter a two (2) year WARRANTY.

12.04.11 Signals

At the time of ACCEPTANCE and WARRANTY inspection of all PUBLIC IMPROVEMENTS, the aspects of traffic signal construction that shall be inspected include, but shall not be limited to, the following:

Unless otherwise noted on the PLANS, all traffic signals shall be installed per PLANS and conform to these STANDARDS AND SPECIFICATIONS. The CONTRACTOR shall notify the CITY of substantial completion so staff can complete the inspection process and provide a list of corrections needed to the CONTRACTOR. Once the project has been accepted then the traffic signal shall enter a two (2) year WARRANTY.

12.04.12 Reclaimed Water System

The required inspection and testing of reclaimed water mains and appurtenances that shall be performed before systems can be released for service is outlined in Chapter 11 of these STANDARDS AND SPECIFICATIONS. At the time of ACCEPTANCE and WARRANTY inspections of all PUBLIC IMPROVEMENTS and PRIVATE IMPROVEMENTS, additional aspects of the reclaimed water system construction that shall be inspected include, but shall not be limited to, the following:

- (A) All valves, blow-off installations, and fire hydrants shall be operable.
- (B) Valve box risers shall be vertical and shall be adjusted to within one-eighth inch (1/8") below grade in paved areas or one inch (1") above grade in landscaped areas.
- (C) Valve operating nuts shall be accessible with a six-foot (6') valve key with between eighteen inches (18") and four feet (4') of clearance between the handle of the key and finished grade.
- (D) A minimum of five feet (5') of clearance for operation shall be provided around all water valve risers.
- (E) Manhole rims and covers for water valve vaults shall be adjusted to within one-eighth inch (1/8") below grade in paved areas or one inch (1") above a concrete collar in landscaped areas. Bollards may be required by the CITY ENGINEER.
- (F) All vaults and meter pits shall be free of construction debris, dirt, trash, and other foreign material. All steps shall be properly installed, spaced and aligned.
- (G) A valid Notice of Authorization from the State of Colorado is in place for the reclaimed water system.

12.04.13 Stormwater Treatment Facilities

At the time of ACCEPTANCE and WARRANTY inspections of all PUBLIC IMPROVEMENTS and PRIVATE IMPROVEMENTS, additional aspects of stormwater treatment facilities construction that shall be inspected include, but shall not be limited to, the following:

- (A) Prefabricated components will be installed and tested per manufacturer's specifications.
- (B) Systems with infiltration processes will be field tested with a flow test.
- (C) The CITY ENGINEER will verify all requirements of these STANDARDS AND SPECIFICATIONS have been satisfied.