# **TABLE OF CONTENTS**

TABLE OF CONTENTS	i
SECTION 9 - PROJECT CLOSEOUT	1
PURPOSE	1
POST-CONSTRUCTION REVIEW	1
CLOSEOUT PROCESS	1
Final Inspection	1
Project Punch List	1
Project Corrections	1
Project Completion Requirements For Maintenance Status (Final Acceptance)	1
USE OF SYSTEM IMPROVEMENTS	
FINAL ACCEPTANCE AND PROJECT CLOSEOUT DOCUMENTATION	2
MAINTENANCE AND WARRANTY	3
Maintenance Assurance Required	3
Construction Maintenance Assurance	3
Landscape maintenance assurance	3
Prompt Compliance	
Warranty Period Observation	4
PRESERVATION AND RESTORATION	
Site Restoration and Cleanup	4
Street Cleanup	5
Preservation of Irrigation and Drainage Ditches	5
RECORD DRAWING CERTIFICATION STATEMENTS	
Record Drawings Requirements	6
MINIMUM INFORMATION ON AS-BUILT DRAWINGS:	6
General	6
Street	6
Storm Drains	7
Wastewater	7
Water Main	7
RESIDENTIAL AS-BUILTS	7
PLATS	7
DRAWING SUBMITTAL	8

SECTION 9 – PROJECT CLOSEOUT

THIS PAGE INTENTIONALLY LEFT BLANK.

# **SECTION 9 - PROJECT CLOSEOUT**

### **PURPOSE**

The purpose of this document is to provide clear expectations for project closeout and City acceptance of new infrastructure for City ownership and maintenance, including restoration of site and warranty of new systems.

# POST-CONSTRUCTION REVIEW

The City Engineer, Developer, or the Contractor may request a post-construction meeting.

### CLOSEOUT PROCESS

At the conclusion of the project, the applicant shall notify the City's authorized representative in writing that the project is ready for final inspection. On receipt of this notice, the City's authorized representative will schedule the final walk-thru.

# **Final Inspection**

Once the City authorized representative receives the initial set of record drawings in paper and electronic PDF format, the City authorized representative will conduct a final inspection of the project.

# **Project Punch List**

After this inspection, the City authorized representative will issue a project correction/repair list (punchlist) to the applicant and contractor. The project correction/repair list will include any items either damaged or improperly placed during construction, and any item(s) that, in the opinion of the City authorized representative, need repair.

# **Project Corrections**

Contractor shall perform correction/repair work as required on the project correction/repair list. The City encourages the contractor to complete all correction/repair work as expeditiously as possible, the City will retain the performance assurance until the project correction list has been completed, inspected and approved by the City authorized representative, and the contractor submits all maintenance and landscape maintenance assurances to the City. The City authorized representative will consider the project complete and shall so state in writing when all of the following items are complete:

- Contractor/Project Engineer completes all items on the project punch list and the City authorized representative inspect and approves work.
- Developer submits final set of AutoCAD and digitally signed PDF record drawings to the City and City authorized representative approves drawings.
- Confirmation that developer has recorded all easements and legal documents with the County Recorder.
- Contractor submits approved maintenance assurances and warranty as specified in this section.
   At this time, the warranty period will go into effect on written notice from the Engineering Division.

# Project Completion Requirements For Maintenance Status (Final Acceptance)

The following items shall be complete prior to placing a project onto the one-year maintenance period:

A completion report from the private Engineer, in accordance with the Developer-Engineer

### Agreement.

- Check print of as-builts submitted for review and approval.
- Site grading and compaction complete per plan.
- Final report from Geotechnical Engineer submitted for review and approval.
- General clean up, post construction erosion control installed as necessary.
- Power trench and franchise utility installation complete (power, gas, telephone, cable TV), backfilled and compacted.
- Streetlights installed per plan and ready to be energized.
- Sanitary sewer installed; air, mandrill, and TV inspections complete and approved.
- Storm sewer installed; mandrill and TV inspections complete and approved.
- Water mains installed; tests complete and passed, and services installed.
- Water quality/detention facility installed and complete per plan.
- Curbs installed.
- Sidewalks, wheel chair ramps, and mailbox bubble outs installed per plan.
- Bike paths and maintenance access roads installed per plan.
- Streets complete.
- All easements and dedications recorded, including plat at Lincoln County.
- Mailboxes installed per plan.
- Street signs and barricades installed per plan.
- Final Walk-Thru Completed.
- Electronic as-builts submitted.
- Punch List completed.
- Request for Letter of Substantial Completion or Certificate of Occupancy.

See Appendix F for *Project Completion Requirements For Maintenance Status Checklist for Private Development* form. Submit completed checklist with request for letter of Substantial Completion or Certificate of Occupancy.

# **USE OF SYSTEM IMPROVEMENTS**

The public improvements shall be available for public use only after Final Acceptance, or by approval with the City Engineer.

# FINAL ACCEPTANCE AND PROJECT CLOSEOUT DOCUMENTATION

When all required work is complete, Project Engineer shall submit a formal Final Acceptance Request to the City. The Project Engineer shall compile and submit the following closeout documentation:

- A complete set of Record Drawings both hardcopy and electronic
- Contractor's field installation notes of the facilities as-constructed
- All lab and on-site materials testing reports/results
- Drywell Testing Reports and final Grading and Drainage Certification Letter
- ADA Compliance Documents
- Final water and sewer testing documents
- Any other documentation as required by the City

City Engineer shall coordinate with Developer or Project Engineer to complete all required final project acceptance and warranty documents. Once City Engineer accepts all completed required documents and

the warranty financial guarantees, City Engineer shall issue a Certificate of Substantial Completion that establishes a specific date for the project substantial completion, recommendations for approval for occupancy of the project or final plat signatures, and the initiation of the warranty period begins.

### MAINTENANCE AND WARRANTY

# Maintenance Assurance Required

Contractor shall fully warrant all work from defect, for a time-period determined by the type of work. The warranty shall be required for work to ensure post-construction quality and landscape survivability. Contractor will automatically extend warranty from date of accepted/approved repair if City discovers defective or negligent work. This warranty from the Contractor is in addition to, and not in lieu of, any other warranties provided by various suppliers or manufacturers. Guarantee such warranty in the form of maintenance assurance. Assurances shall be in the form of a letter of commitment, letter of credit, assignment of deposit, bond, or cash deposit, in form and substance satisfactory to the City. Assurances shall remain in place until the City issues a written release. This provision of the Maintenance Assurance is to help secure Contractor performs any corrective work needed within the Project warranty period, but in no way limits the Contractor's liability therefore.

### **Construction Maintenance Assurance:**

Maintenance assurance shall be required for all public improvements constructed by the Contractor. The construction maintenance assurance shall be for ten (10) percent of the cost to construct the public improvements and be in place for a period of not less than one (1) year from the date of Final Acceptance. Prior to the end of the one (1) year assurance, the City will provide contractor with a maintenance project corrections list; the City reserves the option to video inspect the sanitary and/or storm sewer lines, if any were constructed, repaired or installed as part of the contract. Contractor shall make, in a manner satisfactory to the City authorized representative and at no cost to the City, all necessary repairs and replacements to remedy any-and-all defects, breaks, or failures of the public improvements due to faulty or inadequate materials or workmanship as identified by City and occurring within one (1) year following the date of Final Acceptance.

Contractor shall repair damage or disturbances to other improvements under, within, or adjacent to the public improvements, whether or not caused by settling, washing, or slipping, when such damage or disturbance is caused, in whole or in part, from activities of Contractor in performing his/her duties and obligations when such defects or damage occur within the warranty period. City will release the construction maintenance assurance one (1) year after acceptance of any corrective work performed during the maintenance assurance period.

### Landscape maintenance assurance

Landscape maintenance assurance shall be for 100% of the cost to install all required landscaping in water quality/quantity facilities, plus 100% of the cost to maintain the landscaping in these areas and be in place for a period of not less than one (1) year from the date of Final Acceptance. City shall release the assurance two years after acceptance of construction, providing remaining landscapes meets the 90% survival level.

# **Prompt Compliance**

If Contractor, after written notice, fails within ten (10) days to proceed to comply with the terms of this section, Owner may have the defects corrected, and Contractor and Contractor's Surety shall be liable for all expenses incurred. If the assurance is in the forms of cash or letter of credit, the City may

immediately draw upon such amount. In case of an emergency where, in the opinion of City Engineer, delay would cause serious loss or damage, City shall make repairs without giving notice to Contractor; Contractor or Surety shall pay the cost of repairs. Failure of City Engineer to act in case of an emergency shall not relieve Contractor or Surety from liability and payment of all such costs.

# **Warranty Period Observation**

City Engineer and City Observer shall monitor the project during the warranty period and schedule a final project inspection with the Owner approximately thirty (30) days before the end of the warranty period. City Engineer shall issue to the Owner a Final Warranty Punch List if there are items to correct. Owner shall be responsible to repair all punch list items and notify City Observer to verify repair of all items to the satisfaction of City. City Observer shall notify City Engineer after successful completion of all requirements of the warranty period. City Engineer shall then issue a Certification of Final Project Acceptance and release the warranty document.

# PRESERVATION AND RESTORATION Site Restoration and Cleanup

- Prime / General contractor responsible to repair any damage done by sub-contractors before project is accepted by City.
- The contractor shall keep the premises clean and orderly at all times during the construction period and leave the project free of rubbish or excess materials of any kind on completing the work. The contractor shall immediately replace mailboxes and signposts disturbed by construction activities.
- During construction, the contractor shall stockpile the excavated trench materials in such a way as to do the least damage to adjacent lawns, grassed areas, gardens, shrubbery, trees, or fences, regardless of the ownership of these areas. These surfaces shall be left in a condition equivalent to their original condition or better and free from all rocks, gravel, boulders, or other foreign material.
- Contractor shall expeditiously re-grade/repair original drainage tiles, sewer laterals, existing
  trenches, drainage ditches, and culverts if any damaged during construction. Within five hundred
  (500) feet of pipe-laying and backfilling operations in any trench section, Contractor shall rake and
  drag all disturbed areas and leave them free of rocks, gravel, clay, or any other foreign material and
  ready, in all respects, for seeding. The finished surface shall conform to the original surface, and
  shall be free draining and free from holes, rough spots, or other surface features detrimental to a
  seeded area.
- After backfilling the trenches, Contractor shall restore all public and private irrigation and/or utility systems destroyed, damaged, or otherwise modified during construction to their original condition or better.
- Return all areas disturbed by Contractor operations inside dedicated ROW or easements to their original condition or better. Return areas outside the easements or ROW disturbed by the contractor's operations to their original condition or better.
- Contractor shall perform all site restoration and cleanup work as described above within five (5) working days of substantial completion of the work associated with the disturbance.

### Street Cleanup

- The contractor shall clean spilled soil, mud, rock, gravel, or other foreign material caused by construction operations from all sidewalks, gutters, streets, and roads at the conclusion of each day's operation.
- Cleaning shall be by grader and front-end loader, power brushing, vacuuming, and hand labor, unless otherwise approved by the City authorized representative. Do not wash or flush material into any part of the stormwater and surface water system. If the contractor does not follow these standards, the City may exercise its option to have the street(s) cleaned and bill the contractor for such service.
- When directed by the City authorized representative, the contractor shall, within five (5) working days of notice, remove all erosion-control materials and thoroughly remove all dirt, mud, rock, gravel, and other foreign material from sidewalks, gutters, catch basins, curb inlets, area drains, manholes, and paved surfaces.

# Preservation of Irrigation and Drainage Ditches

- The contractor shall arrange schedules so that construction will not interfere with the irrigation of
  cultivated lands or pasturelands. Construction may proceed during the irrigation season provided
  the contractor constructs, at their own expense, temporary irrigation ditches, turnouts, and
  miscellaneous structures acceptable to the owner of the land in question that permit irrigation of
  the land others during construction.
- After backfilling the trenches, the contractor shall restore all irrigation and storm drain ditches
  destroyed, damaged, or otherwise modified during construction to a condition equivalent, in the
  opinion of the City authorized representative, to the condition of the ditches before construction.
  Rebuild ditches in their original locations, unless specified otherwise on the construction plans.

### RECORD DRAWING CERTIFICATION STATEMENTS

The Project Engineer shall provide the following certification stamp to the Record Drawings. This stamp (in PDF and dwg format) is available from the City Engineer.

The as-built drawing shall show the following on the cover sheet in a box:

# **RECORD DRAWING CERTIFICATION**

I certify that the contractor constructed this project in substantial compliance with the City approved plans and the City of Newport Public Improvement Construction Procedure Standards and Specifications date (XXXX edition). I base this certification on periodic inspections performed by me or by representatives under my direct supervision and information provided by the Construction Contractor and other independent testing and inspection agencies. I assume information provided by others to be correct and verified by the Engineer. This certification indicates that I have reviewed this information and verified that any revision(s) or changes as defined by the record do not appear to be adverse to the planned use and/or intent of the original design.

\_\_\_\_\_\_

# Project Engineer Signature and Date

# RECORD DRAWINGS REQUIREMENTS

For all public works facility improvements, the engineer shall submit a record drawing of as-built drawings for all approved construction plans. As-built drawings shall meet the requirements of these Engineering Design and Construction Standards and shall be of archival quality.

The as-built drawings include the full set of approved construction documents approved by the City under the Final Plan Submittal with all changes applied to the drawings from approved plan modifications and/or Project Engineer.

- Have all modification clouds removed;
- All construction plan sheets signed by the Project Engineer;
- Each sheet's title block containing the permit number and "As-Built"; and,
- Show any changes authorized in the field as "field change".

# MINIMUM INFORMATION ON AS-BUILT DRAWINGS:

#### General

- Vertical and horizontal location on all existing utilities exposed by the trench excavation. Horizontal location may be relative to the newly installed line.
- Horizontal location or stationing, from the nearest feature, at any change in pipe material (i.e., transitions to ductile, change in pipe class, etc.).
- Areas where foundation material is used and/or where bedding material is imported.
- Information on subsurface soil conditions encountered in trenches every three hundred (300) feet
  or where significant changes occur. Place particular emphasis on native materials at the bottom of
  the trench. Delineate areas where preforming over-excavation and placing foundation material.
- Location and stationing of all pipe abandonment. Include both length of pipe removed and pipe abandoned in place.
- Horizontal dimensions of all easements.
- Actual location and depth, from finish grade of street and City datum, of any other utilities encountered during construction.
- As-built drawings must show actual design numbers, "crossed out", and updated with actual as-built numbers.
- Place the words "As-built Drawing" as the last entry in the revision block of the plans, along with the month, day, and year the as-built drawing was prepared.
- Show actual location and depth from finish grade of any other utilities encountered during construction on both plan and profile of the as-built plans.

# Street

- Change in horizontal alignment, curve data, and stationing of primary control points (e.g., PC, PI, PT, PRC, and PCC).
- Vertical curve or grade changes; change in location of low point in sag vertical curve.
- Change to approved thickness for street structural section components. Show station limits where changes in structural section have occurred including subgrade stabilization rock section.
- Change to driveway locations or widths, or construction materials.
- Other change(s) altering the approved plans.

### Storm Drains

- Station of wye or tee connection into main line; tie end of branch line to nearest property corner at ROW line and distance back from the face of curb.
- Show alignment changes, grade changes, and changes in construction materials. If changed alignment results in station changes, show a station equation as appropriate at a manhole.
- Other change(s) altering the approved plans.
- Actual location and depth, from finish grade of street and City datum, of any other utilities encountered during construction.

# Wastewater

- Station of wye or tee into main line. Tie end of service lateral to nearest property corner at ROW line and distance back from the face of curb.
- Depth at the end of service lateral measured from existing ground to invert of pipe. When required by the City Engineer, note invert elevations.
- Length of service lateral measured from centerline of sewer main to end of pipe.
- Show alignment changes, grade changes, and changes in construction materials. If changed alignment results in station changes, show a station equation as appropriate at a manhole.
- Other change altering the approved plans.
- Type of pipe, backfill material and location.
- Actual location and depth, from finish grade of street and City datum, of any other utilities encountered during construction.

# Water Main

- Station and/or property line/corner to valves (not at standard location), all fittings, blow-offs, and dead ended lines.
- All changes from standard thirty-six (36) inch depth cover. Show limits on plan with annotated reason for change. Specify actual pipe elevation at regular intervals by Project Engineer.
- Show alignment changes, grade changes, and changes in construction materials. If changed alignment results in station changes, show a station equation as appropriate at a valve.
- Provide manufacturer of all valves and hydrants; identify types of fittings (i.e., MJ x MJ, FLG x MJ, etc.).
- Other change altering the approved plans.
- Lineal footage of pipe installed, including revisions to stationing and elevations.

# **RESIDENTIAL AS-BUILTS**

Due to the current requirement for City to locate all laterals in the ROW, residential work on laterals done through a ROW permit, will require submittal of as-built drawings with locations of all laterals prior to closing out ROW permit.

# **PLATS**

Prior to recording a plat or providing certificate of occupancy, as-built drawings (pdf and CAD files) for public infrastructure improvements shall be submitted to the City of Newport.

### DRAWING SUBMITTAL

Consultants shall obtain a file number for the project and make sure to complete the appropriate information in the title block. Obtain a file number from the Project Engineer.

At the time of the final as-built plan approval submittal, the applicant shall provide the City with as-built drawings of the public improvements as follows:

- Georeferenced .dwg complete plan set on CD/DVD.
- Georeferenced .pdf format on CD/DVD of the complete plan set.
- Shapefiles containing all of the infrastructure, structure, underground and/or any visible asset to be compatible with the City's GIS and asset management system.
- a .DWG file with all corresponding drawing sheets. All files necessary to reproduce the complete set of construction documents must be included. Drawing files must conform to the City of Newport CAD Standards, text files in MS Word, and spreadsheet files in MS Excel.
- All final drawing files shall be fully purged (purge) prior to final submittal.
- Save and submit all final drawing files with the current layer set to "0".
- Project drawing images (PDF Format) file in electronic format (CD, DVD). Combine PDFs into a
  single file easily printed to scale. Every sheet in the record set of construction drawings needs to
  have a corresponding one-to-one (1:1) image file. Produce the image directly from the CAD
  application or scanned from the hard copy. Regardless of production method, the image file
  must match the content of the CAD file and hard copy for each sheet submitted.
- Hard copies of project drawing. When a prime consultant designs a project in collaboration with sub-consultants, the prime consultant shall be responsible for all submittals of electronic and paper drawing files. Electronic submittals shall be in the form of a single media (1 CD/DVD) and shall include the entire project. Label all electronic media, including the project name, City's project number, design firm name and submittal date.
- Purge all .dwg files prior to final submittal to remove bad blocks, unused layers, etc.

**END OF SECTION**