

### **Engineering Division**

### **DEVELOPER'S GUIDE**

#### **FOR**

### SUBDIVISON & INFRASTRUCTURE DESIGN REVIEW PROCESS

This guide is provided to assist engineers, architects, developers and developer's representatives with the City Public Works Department and Engineering Division related elements of the development process.

### **Resources and Documents available to Developers:**

- City of Great Falls Municipal Code (OCCGF)
- Water Master Plan 2006
- Wastewater Treatment and Collection System Facility Plan 1998
- Storm Drainage Master Plan for the City of Great Falls 1989
- North Great Falls Storm Drain Master Plan 2007
- Storm Drainage Design Manual June 1990
- Stormwater Management Program 2010 to 2014
- Area Transportation Plan 2003
- Montana Department of Environmental Quality Codes, Administrative Rules and Circulars
- Water and Sewer Service Tapping and Connection Fee Schedule
- Driveway, Curb & Gutter, Sidewalk, Street Opening, Other Miscellaneous Fees Schedule
- As-Built Plans for City of Great Falls Public Infrastructure
- Standard Drawings Public Works
- City Base Map with Subdivisions, Lots, Blocks, Streets, Geo Features, Landmarks, Parks
- Aerial Mapping (Imagery, Topography, Coordinates) 2009
- Utilities, Streets, Traffic Signing Asset Management Data Base Information
- City of Great Falls Supplementary Specifications & Design Criteria Water and Sewer Mains & Services
- City of Great Falls Inspection Policy for Privately Installed Public Infrastructure
- City of Great Falls Growth Policy
- Montana Public Works Standard Specifications, Sixth Edition, April 2010



# **DEVELOPER'S GUIDE**

**Engineering Division** 

### **Useful Web Links and or Resource Location:**

Resource	Link/Location
<ul> <li>City of Great Falls Municipal Code</li> </ul>	https://library.municode.com/mt/great falls /codes/
Streets/ Sidewalks (Title 12)	code of ordinances
Water, Sewer, Storm Drain (Title 13)	City Offices
Land Development (Title 17)	
<ul> <li>Water Master Plan - 2006</li> </ul>	Engineering Division Office
<ul> <li>Wastewater Facilities Plan - 1998</li> </ul>	Engineering Division Office
<ul> <li>Storm Drainage Master Plan - 1989</li> </ul>	Engineering Division Office
<ul> <li>Storm Drainage Design Manual - 1990 (Currently being Updated)</li> </ul>	Engineering Division Office
<ul> <li>Stormwater Management Program</li> </ul>	Engineering Division Office
<ul> <li>Area Transportation Plan -2003</li> </ul>	Engineering Division Office
<ul> <li>Transportation Improvement Plan</li> </ul>	Planning/Community Development Office
<ul> <li>Water &amp; Sewer Fee Schedule</li> </ul>	https://greatfallsmt.net/publicworks/water-and-sewer-tapping-and-
	<u>connection-fees</u>
<ul> <li>InspectionPermits/Fees</li> </ul>	https://greatfallsmt.net/sites/default/files/fileattachments/
	public works/page/42251/web inspection fee summary
	<u>072015.pdf</u>
	Planning/Community Development Office
	Engineering Division Office
As-Built Plans – Public Infrastructure	Engineering Division Office
<ul> <li>Standard Drawings – Public Works</li> </ul>	Engineering Division Office
MT Public Works Standard Specifications	Engineering Division Office
	Montana Contractors' Association (Helena MT)
	https://montanacontractorsmtassoc.wliinc24.com/cwt/external
	/wcpages/wcecommerce/ecomlistpage.aspx
City of Great Falls Growth Policy	https://greatfallsmt.net/sites/default/files/fileattachments/
	planning and community development/page/27411/growth_
	policy_update august_6_2013.pdfPlanning/Community
	<u>Development Office</u>

### February 23, 2018

Montana DEQ Home Page http://deq.mt.gov/ http://deq.mt.gov/Water/TFA/srf/circularseq Montana DEQ Public Water & Wastewater Standards (Circular DEQ 1 Water Quality Division/Public Water Supply & Engineering and DEQ Circular 2) **Bureaus** City of Great Falls Engineering Division Office Public Water Supply Checklists & Forms http://deq.mt.gov/Water/pwsub/pws/pwsMonitoringForms Water Quality Division/Public Water Supply Bureau **Subdivision Review** http://deq.mt.gov/Water/PWSUB/sub Water Quality Division/Engineering Bureau/Subdivision Review **Program** http://deq.mt.gov/Water/WPB/mpdes Water Pollution/MPDES Permits Water Quality Division/Water Protection Bureau City of Great Falls Sector Control https://greatfallsmt.net/publicworks/sector-control FOG (Fats, Oils, and Greases) Manual City of Great Falls Environmental Division Office City of Great Falls Industrial https://greatfallsmt.net/publicworks/industrial-pretreatment Pretreatment Program City of Great Falls Environmental Division Office



### **DEVELOPER'S GUIDE**

#### **Useful Web Links and or Resource Location Continued:**

Resource Link/Location

 Montana DEQ Public Water Supply Engineering Design Review of Water and Wastewater Facilities (Laws & Regulations, Design Circulars, Fees) http://deq.mt.gov/wqinfo/pws/PlanReviewEngineer.mcpx

**DEQ Public Water and Subdivisions Bureau** 

 Montana DEQ Subdivision Forms (Municipal Facilities Exclusion Check List)

http://deq.mt.gov/wqinfo/sub/SubReviewForms.mcpx

DEQ Public Water and Subdivisions Bureau City of Great Falls Engineering Division Office

Montana DEQ MPDES Permits
 Wastewater Discharges
 Stormwater Discharges (Construction
 (and Industrial Activities)

http://www.deq.mt.gov/wqinfo/mpdes/default.mcpx#GP

**DEQ Water Quality Bureau** 

 Montana DEQ Public Water Supply Review Forms (Water Main and Sewer Main Certified Checklists, Deviations) http://deq.mt.gov/wqinfo/pws/pwsMonitoringForms.mcpx
DEQ Public Water and Subdivisions Bureau

City of Great Falls Engineering Division Office

#### City Public Works Department and Engineering Division Mailing, Street Addresses, Phone Numbers:

Mailing Address: City of Great Falls

Public Work Department/Engineering Division

P.O. Box 5021

Great Falls, MT 59403

Street Address: City of Great Falls Public Works Department Complex

1025 25<sup>th</sup> Avenue NE

Phone Numbers: Public Works Department – Administration (406) 727-8390

Public Works Department - Engineering Division (406) 771-1258



### **DEVELOPER'S GUIDE**

**Engineering Division** 

#### **Types of Development and Projects:**

- Major Subdivisions
- Minor Subdivisions
- Public Water and Sewer System Improvements
- Public and Private Storm Drain System Improvements
- Public Streets, Roadways, Alley, and other Transportation Improvements
- Commercial and Industrial and Multi-Family Building Projects

#### **Sections of Guide:**

The guide is set up in five sections according to the development phase. Each section or development phase has a **general explanation** of what that development phase consists of and a corresponding **checklist** that summarizes what is required by the developer during that development phase. Please note that all checklist requirements may not apply to certain developments and/or projects and that the City may modify or negate checklist requirements and/or impose other requirements not listed.

The five sections (Development Phases) are:

Section 1 - Planning

Section 2 – Preliminary Design Review

Section 3 - Final Design Review

Section 4 - Construction

Section 5 – Final Inspection, Warranty, As-Built Plans



### PLANNING PHASE

SECTION - 1

**Description:** This phase generally consists of contacting the Public Works Department and Engineering Division to present the development proposal and/or concept to City staff and discuss the viability of the development and/or project. Various City Department representatives may be involved in this phase. This phase also involves:

- Gathering appropriate infrastructure information
- Identifying availability of public water, sewer, storm drainage and transportation facilities and systems.
- Discussing and identifying what public infrastructure improvements will be required.
- Identifying what City funding contributions and sources may be available to pay for over-sizing of required public infrastructure.
- Identifying what monetary reimbursements may be required of the Developer to pay for the cost of previous infrastructure installed by Developers, City, Improvement Districts or other.
- Indentify tentative schedule for the review process.
- Indentify application and other possible fees and costs.
- Identify possible permit requirements.
- Identify and right-of-way/easements requirements.
- Consider possible legal issues.
- Consider time periods for Commission, Board and other actions/approvals such as zoning, annexation, building design review
- Identify City of Great Falls and Developer contact information.
- Identify City of Great Falls resources available to Developer.
- Discuss other applicable development issues as they relate to Public Works and Engineering.

The time period for this phase will vary depending on the type, scope, permitting, right-of-way, funding, cost reimbursements and other factors. Projects involving the subdivision and/or annexation may require 3 to 6—months during this phase. Development projects involving public water and sewer main extensions or pumping stations may require up to a 30-day assessment period. Projects that may require special water booster or wastewater pumping stations and/or supplemental water of wastewater treatment may require up to a 6-month planning period. Typical commercial and industrial development projects requiring standard water and sewer service extensions from existing public mains and standard stormwater management will generally be completed in 30 days.



## **CHECKLIST – PLANNING PHASE**

SECTION - 1

The following Information must be addressed in the subdivision and/or project development planning phase and process:

Subdivision and/or Project Name:  City Office File Number (to be assigned by City Engineering):  Developer's Representative and contact information:  Date Submitted:	
Check	Item
	Notify Public Works Director and City Engineer of proposed development/project.
	Contact City Planning & Community Development Department for other requirements and scheduling of Pre-Application Meeting.
	Preliminary or conceptual drawings of proposed development/project including public infrastructure improvements.
	Preliminary plat.
	Preliminary geotechnical information.
	Water demand and wastewater discharge information.
	Preliminary drainage plan(s) and Information.
	Estimated traffic generation.
	Funding proposal for the public infrastructure.



### **CHECKLIST – PLANNING PHASE**

**SECTION - 1** 

If the development involves water, wastewater and other public infrastructure improvements in an existing subdivision, then comply with or submit the following items to City Engineering Division for review:

Check	Item
	Notify Public Works Director and City Engineer of proposed development/project.
	Preliminary or conceptual drawings of proposed development/project including public infrastructure improvements.
	Water demand and wastewater discharge information.
	Preliminary drainage plan(s) and information.
	Estimated traffic generation.
	Funding proposal for the public infrastructure.



### **CHECKLIST – PLANNING PHASE**

SECTION - 1

If the development or redevelopment does not involve public infrastructure but involves multi-family, commercial or industrial zoned building, parking lot and/or site development with 15,000 or more square feet of impervious surface, then comply with or submit the following items to City Engineering Division for review:

	Item
	Notify Public Works Director and City Engineer of proposed development/project.
	Schedule Design Review Meeting with City Planning/Community Development Department.
	Preliminary or conceptual drawings of proposed development/project.
	Provide water demand and wastewater discharge information.
	Preliminary drainage plan(s) and information.
	Estimated Traffic Generation for Development.
	velopment or redevelopment does not involve public infrastructure but involves multi-family all or industrial zoned building, parking lot and/or site development with less than 15,000 square
feet of imp	pervious surface, then submit the following items to City Engineering Division for review:
feet of imp	
•	pervious surface, then submit the following items to City Engineering Division for review:
•	pervious surface, then submit the following items to City Engineering Division for review:
•	Item  Notify Public Works Director and City Engineer of proposed development/project.
•	Item  Notify Public Works Director and City Engineer of proposed development/project.  Schedule Design Review Meeting with City Planning/Community Development Department.



#### PRELIMINARY DESIGN REVIEW

SECTION - 2

**Description:** The preliminary design review of subdivisions, infrastructure projects, and other miscellaneous development ensures the proper design of public and private infrastructure (water, wastewater, storm drains, site drainage, streets, alleys, traffic control, other utilities, etc.). Subdivision and public infrastructure plans are reviewed by the Engineering Division for conformance with City Municipal Codes, City specifications and design standards, Montana Public Works Standard Specifications, Montana Department of Environmental Quality rules and standards, requirements set forth in the Planning phase, provisions of the Annexation and/or Development Agreements and any other requirements that may have been stipulated by City staff or Boards. When plans, specifications, design reports and other submittals are submitted, they are normally routed through the Public Works Engineering Division for review and coordination with other Public Works Department Divisions such as Utilities, Streets, and Traffic and if necessary other City Departments.

The Montana Department of Environmental Quality (MDEQ) Water Quality Division reviews public water and sewer facilities plans and specifications which includes the submission of plans, specifications, design reports, checklists, and other miscellaneous documents.

Prior to operating, constructing, altering or extending a public utility (water and wastewater), the applicant must submit plans, specifications, design reports to the City of Great Falls and the Montana DDEQ for review and written approval. The engineering report, plans and specifications for a community public water supply must be prepared and designed by a Montana licensed professional engineer according to specific engineering criteria.

The time period for this phase will vary depending on the type, scope, permitting, and right-of-way procurement. Typically the initial engineering review of the plans, specifications and design reports will be completed within 60 days. Re-submittal of plans, specifications and design reports may require an additional 60-day review time.

Public Works Department

# CHECKLIST – PRELIMINARY DESIGN REVIEW

**Engineering Division** 

The following Information must be addressed in the subdivision and/or project development preliminary design review phase and process:		
Subdivision and/or Project Name:  City Office File Number (to be assigned by City Engineering):		
		Develope
Date Subr		
	velopment is a major or minor subdivision then submit the following items to City Engineering or review:	
Check	Item	
	3 – Sets of all public infrastructure plans, including sanitary sewer, storm drainage/grading, street, water and traffic facilities. Note: All plans shall be prepared and stamped by a Montana licensed Professional Engineer. All plans shall be 100% complete when submitted.	
	3 – Sets of contract documents including technical specifications and special provisions. Note: The technical specifications and special provisions shall be prepared and stamped by a Montana licensed Professional Engineer. All plans shall be 100% complete when submitted.	
	2 – Sets of storm drainage and roadway section/thickness design reports. Note: The reports shall be prepared and stamped by a Montana Licensed Professional Engineer.	
	2 – Sets of sanitary sewer and water design reports. The reports shall be prepared and stamped by a Montana Licensed Professional Engineer and shall be in accordance with the MDEQ requirements and standards.	
	2 – Sets of all other MDEQ required documents.	
OFGREATER	Public Works Department	



### CHECKLIST – PRELIMINARY DESIGN REVIEW

**SECTION - 2** 

**Engineering Division** 

Section 2 Continued (Major or Minor Subdivision)		
Check	ltem	
	Letter certifying that the Developer will be responsible for the cost of full-time construction inspection services provided by the City Engineering Division or a Consultant Engineering firm. Note: Check with City Engineering Division for requirements.	
	2 – Copies of Utilities System Vicinity Maps showing proposed utilities extensions.	
	2 – Copies of Subdivision Final Plat and/or Certificate of Survey to City Engineering Division.	
	elopment involves water, wastewater and other public infrastructure improvements in an existing on, then submit the following items to City Engineering Division for review:	
Check	Item	
	3 – Sets of public infrastructure plans, including sanitary sewer, storm drainage/grading, street, water and traffic facilities. Note: All plans shall be prepared and stamped by a Montana licensed Professional Engineer. All plans shall be 100% complete when submitted.	
	3 – Sets of contract documents including technical specifications and special provisions. Note: The technical specifications and special provisions shall be prepared and stamped by a Montana licensed Professional Engineer. All plans shall be 100% complete when submitted.	
	2 – Sets of storm drainage and roadway section/thickness design reports. Note: The reports shall be prepared and stamped by a Montana Licensed Professional Engineer.	
	2 – Sets of sanitary sewer and water design reports. The reports shall be prepared and stamped by a Montana Licensed Professional Engineer and shall be in accordance with the MDEQ requirements and standards.	
	2 – Sets of all other MDEQ required documents.	
	Letter certifying that the Developer will be responsible for the cost of full-time	

Engineering firm. Note: Check with City Engineering Division for requirements.

**Public Works Department** 



# CHECKLIST – PRELIMINARY DESIGN REVIEW

	2 – Copies of sanitary sewer and water systems maps.
	2 Copies of Sameary Sewer and Water Systems maps.
commercial o	opment or redevelopment does not involve public infrastructure but involves multi-family, or industrial zoned building, parking lot and/or site development with 15,000 or more square of impervious surface, then submit the following items to City Engineering Division for review:
Check	Item
	2-Sets of site civil, storm drainage and grading plans. Note: The storm drainage and grading plans shall be in accordance with the City of Great Falls Storm Drainage Design Manual & MS4 Permit requirements. Plans shall include utility services (water, sanitary sewer, storm drain), driveways connected to public streets, boulevard sidewalk, site grading, other improvements in public right-of-way and on-site storm drain improvements required by the Storm Drain Design Manual. Note: The storm drainage plan shall be prepared and stamped by a Montana licensed Professional Engineer.
	2-Copies of the storm drainage design report. Note: The storm drainage design report shall be in accordance with the City of Great Falls Storm Drainage Design Manual & MS4 Permit requirements. Note: The storm drainage plan shall be prepared and stamped by a Montana licensed Professional Engineer.
If the development or redevelopment does not involve public infrastructure but involves multi-family, commercial or industrial zoned building, parking lot and/or site development with less than 15,000 square feet of impervious surface, then submit the following items to City Engineering Division for review:	
Check	Item
	2-Sets of site civil, and grading plans. Plans shall include utility services (water, sanitary sewer, storm drain), driveways connected to public streets, boulevard sidewalk, site grading and other improvements in public right-of-way.



#### **FINAL DESIGN REVIEW**

SECTION - 3

**Description:** The Final Design Phase begins once the preliminary design review has been completed and design review comments have been provided by the City Engineer Division to the Developer's engineer and/or architect. This phase of project development involves refinement of the preliminary plans, specifications, reports and work scope and concludes in the completion of the final construction contract documents (i.e., project plans, specifications, design reports, surveys, easements, permits and cost estimates).

The Final Design Phase includes continuing and completing tasks started during the Preliminary Design Phase, such as utilities and roadway design, right of way and access, environmental permits and clearances, and coordination with community interests. The completion of these tasks involves various internal and external project stakeholders. Stakeholder coordination includes review meetings with internal offices and communication with local officials, Neighborhood Councils, the general public and other state and federal agencies.

The Final Design Phase is completed when the project is authorized for construction, which initiates the Construction Phase of project delivery.

The time period for this phase will vary depending on the type, scope, permitting, and right-of-way procurement. Typically the final engineering review of the plans, specifications and/or design reports involving public infrastructure projects will be completed within 30 days while projects only requiring site civil and/or storm water management will be completed in 15 days. Any re-submittal of plans, specifications, and/or design reports may require an additional review time.



# CHECKLIST – FINAL DESIGN REVIEW

**SECTION - 3** 

**Engineering Division** 

The following Information must be addressed in the subdivision and/or project development Final Design Review phase and process:	
Subdivisio	on and/or Project Name:
City Office	e File Number (to be assigned by City Engineering):
Develope	r's Representative and contact information:
Date Subr	mitted:
If the dev	velopment is a major or minor subdivision then submit the following items to City Engineering or review:
Check	ltem
	3 - Sets of final plans
	3 - Sets of specifications and other contract documents.
	2 - Sets of any revised design reports, checklists, any other design related documents.
	1 – Original Executed Copy of any required easements or other right-of-way documents. Include a check payable to the Cascade County for the cost of the filing and recording fees.
	2 - Copies of final plat, certificate of survey.
	Copy of all MDEQ correspondence related to project.



## CHECKLIST – FINAL DESIGN REVIEW

	Final permit and right-of-way documents.
	lopment involves water, wastewater and other public infrastructure improvements in an existing a, then comply with or submit the following items to City Engineering Division for review:
Check	Item
	3 - Sets of final plans, specifications and other contract documents.
	3 - Sets of final plans, specifications and other contract documents.
	2 - Sets of any revised design reports, checklists, any other design related documents.
	1 – Original Executed Copy of any required easements or other right-of-way documents. Include a check payable to the Cascade County for the cost of the filing and recording fees.
	2 - Copies of the final plat and/or certificate of survey.
	Copy of all MDEQ correspondence related to project.
	Final permit and right-of-way documents.
commercia	elopment or redevelopment does not involve public infrastructure but involves multi-family, of industrial zoned building, parking lot and/or site development with 15,000 or more square servious surface, then submit the following items to City Engineering Division for review:
Check	Item
	1 - Set of the final site civil, storm drainage and grading plans. Note: The storm drainage and grading plans shall be in accordance with the City of Great Falls Storm Drainage Design Manual and MS4 Permit. Plans shall include utility services (water, sanitary sewer, storm drain), driveways connected to public streets, boulevard sidewalk, site grading, other improvements in public right-of-way and on-site storm drain improvements required by the Storm Drain Design Manual. Note: The storm drainage plan shall be prepared and stamped by a Montana licensed Professional Engineer.



MONTANA	CHECKLIST – FINAL DESIGN REVIEW	SECTION - 3
Engineering Division	1-Copy of the final storm drainage design report. Note: The storm drainage de be in accordance with the City of Great Falls Storm Drainage Design Manual Note: The storm drainage plan shall be prepared and stamped by a Professional Engineer.	and MS4 Permit.
commercial o	opment or redevelopment does not involve public infrastructure but involor industrial zoned building, parking lot and/or site development with less the vious surface, then submit the following items to City Engineering Division for	an 15,000 square
Check	Item	
	1 - Set of the final site civil and grading plans. Plans shall include utility services sewer, storm drain), driveways connected to public streets, boulevard sidewal other improvements in public right-of-way.	•



#### **SECTION 4 – CONSTRUCTION**

**SECTION - 4** 

**Description:** The Construction Phase normally begins at the completion of the design phase after all construction plans, specifications, design reports, and agreements are submitted and approved by the City and authorization to proceed is granted. The objective of the construction phase is to build the project according to the approved plans, specifications, design reports, agreements, and schedules. The Construction Phase of public infrastructure projects begins with a preconstruction meeting held between City and Developer's Architects, Engineers and Contractors. Construction activities generally commence following a preconstruction meeting. This phase concludes when all the public improvements and other required construction work are completed according to City of Great Falls and Montana Department of Environmental Quality requirements, conditions and approvals and the resulting improvements are accepted by the City of Great Falls Public Works Department.

All public infrastructure improvements (including water and sewer extensions) in new subdivisions generally need to be completed within two years of approval of the subdivision by the City Commission. The Montana Department of Environmental Quality requires all public sewer and water improvements be completed within 3 years of approval.

The time period for the construction phase will vary depending on the project construction time allotted and the time of year/weather conditions. Typically the larger development projects are completed in a 1 to 2 year time period with mid size development projects in the 6 to 12 month time period. Smaller development projects typically are completed in a 3 to 6 month. Completion of as-built plans for public infrastructure shall be completed within 90 days.



## **CHECKLIST – CONSTRUCTION**

The follow process:	wing Information must be addressed in the subdivision and/or project Construction phase and	
Subdivisio	Subdivision and/or Project Name:  City Office File Number (to be assigned by City Engineering):	
City Office		
Developer's Representative with contact information:		
Date Subr	mitted:	
	relopment is a major or minor subdivision then comply with or submit the following items to Cityng Division for review:	
Check	Item	
	Schedule and Attend Pre-Construction Meeting.	
	Have Consultant (Architect or Engineer) review and approve all material and equipment submittals prior to Notice to Proceed.	
	Provide 2 copies of all approved material and equipment submittals to City Engineers Office prior to Notice to Proceed.	
	Provide 2 copies of Maximum Density/Optimum Moisture (Proctors) of all required Proctors of all native and import soils to be used for trench backfill and/or street embankment and subgrade to the City Engineers Office prior to Notice to Proceed. Note: Testing shall be conducted by a licensed Independent Testing Laboratory.	
	Retain City or licensed Engineering firm for Construction Inspection Services. Verify with City Engineers Office if project is to be City (Type 1 Inspection) or Consultant inspected (Type 2 Inspection).	
	Obtain MPDES Stormwater Discharge Permit Associated with Construction Activities. Note: This permit is required if one (1) or more acres will be disturbed by the construction activities.	
	Obtain all required permitting and pay all fees for utility services, public boulevard sidewalk, driveways, street curb and gutter modifications and street openings.	



### **CHECKLIST – CONSTRUCTION**

**SECTION - 4** 

If the development involves water, wastewater and other public infrastructure improvements in an existing subdivision, then comply with or submit the following items to the City Engineering Division for review:

Check	Item	
	Schedule and Attend Pre-Construction Meeting.	
	Have Consultant (Architect or Engineer) review and approve all material and equipment submittals prior to Notice to Proceed.	
	2 - Copies of all approved material and equipment submittals prior to the Notice to Proceed.	
	2 - Copies of Maximum Density/Optimum Moisture (Proctors) of all required Proctors of all native and import soils to be used for trench backfill and/or street embankment and subgrade prior to the Notice to Proceed. Note: Testing shall be conducted by a licensed Independent Testing Laboratory.	
	Retain City or licensed Engineering firm for Construction Inspection Services. Verify with Engineering Division if the project is to be City (Type 1 Inspection) or Consultant inspected (Type 2 Inspection).	
	Obtain MPDES Stormwater Discharge Permit Associated with Construction Activities. Note: This permit is required if one (1) or more acres will be disturbed by the construction activities.	
	Obtain all required permitting and pay all fees for utility services, public boulevard sidewalk, driveways, street curb and gutter modifications and street openings.	
If the development or redevelopment does not involve public infrastructure but involves multi-family, commercial or industrial zoned building, parking lot and/or site development with 15,000 or more square feet of impervious surface, then submit the following items to City Engineering Division for review:		
Check	Item	
	Obtain all required permitting and pay all fees for utility services, public boulevard sidewalk, driveways, street curb and gutter modifications and street openings.	
	Construct on-site storm drainage improvements	
	Obtain MPDES Stormwater Discharge Permit Associated with Construction Activities. Note: This permit is required if one (1) or more acres will be disturbed by the construction activities.	



### **CHECKLIST – CONSTRUCTION**

**SECTION - 4** 

If the development or redevelopment does not involve public infrastructure but involves multi-family, commercial or industrial zoned building, parking lot and/or site development with less than 15,000 square feet of impervious surface, then submit the following items to City Engineering Division for review:

Check	Item
	Obtain all required permitting and pay all fees for utility services, public boulevard sidewalk, driveways, street curb and gutter modifications and street openings.
	Obtain MPDES Stormwater Discharge Permit Associated with Construction Activities. Note: This permit is required if one (1) or more acres will be disturbed by the construction activities.



### FINAL INSPECTION, WARRANTY, AS-BUILT PLANS

**SECTION - 5** 

**Description:** The Final Inspection and Warranty Phase begins after the Construction Phase is completed in accordance with the approved plans specifications, design reports, and agreements. The Final Inspection is held between the Developer and/or his Architect, Engineer and Contractor(s) and representative from the City Engineering Division. The purpose of the Final Inspection is to identify uncompleted and deficient work and clean up the site. This phase also completes the as-built drawings that include all changes made to the original drawings and design. All required testing reports, operation and maintenance manuals, warranties, as-built and shop drawings and other contract submittals shall be submitted to the City Engineering Division or other Public Works Divisions prior to final acceptance of the public improvements or development project. Operator training may also be part of the Developer's agreement or contractual responsibilities.

This phase is closed when all construction work is completed in accordance with City approvals and requirements, the as-built plans are completed, easements and right-of-way have been completed and filed and recorded, warranty work has been completed (including two year warranty period for public infrastructure improvements), and all other requirements and/or conditions of the annexation and/or development agreements have been satisfied.

The time period for the final inspection, warranty, as-built plans phase will typically range from 24 to 30 months. Final inspection is typically performed within 30 days of substantial completion. The standard warranty period for public infrastructure is 2 years. As-built plans for public infrastructure shall be completed and submitted within 90 days of project completion.



## **CHECKLIST – FINAL INSPECTION**

The following Information must be addressed in the subdivision and/or project development Final Inspection phase and process:		
Subdivision a	nd/or Project Name:	
City Office Fil	e Number (to be assigned by City Engineering):	
Developer's F	Representative and contact information:	
Date Submitt	ed:	
	pment is a major or minor subdivision then comply with or submit the following items to City Division for review:	
Check	Item	
	Complete the Final Inspection with City Engineering Division and complete all work listed on Punch list.	
	Submit Contractor record (as-built) drawings.	
	Submit operation and maintenance manuals (if applicable).	
	Submit warranty certificates (if applicable).	
	Submit cost information for public improvements for future reimbursements (if applicable).	
	Developers Architect and/or Engineer to complete record (as-built) drawings and submit to City Engineering Division. The as-built plans shall be provided on 24" x 36 inch sized, 4-mil reproducible acetate (Mylar), with one etched side. The plans shall have the design engineer's professional executed seal and shall also be marked "as-built" or "record drawings" with a certification stamp by the engineer over-seeing the construction inspection.	



## **CHECKLIST – FINAL INSPECTION**

	pment involves water, wastewater and other public infrastructure improvements in an existing then comply with or submit the following items to City Engineering Division:
Check	Item
	Complete the 2-year warranty inspection with City Engineering Division and complete all work listed on the punch list.
•	pment involves water, wastewater and other public infrastructure improvements in an existing then comply with or submit the following items to City Engineering Division:
Check	Item
	Complete the Final Inspection with City Engineering Division and complete all work listed on Punch list.
	Submit Contractor record (as-built) drawings.
	Submit operation and maintenance manuals (if applicable).
	Submit warranty certificates (if applicable)
	Submit cost information for public improvements for future reimbursements (if applicable).
	Developers Architect and/or Engineer to complete record (as-built) drawings and submit to City Engineering Division. The as-built plans shall be provided on 24" x 36 inch sized, 4-mi reproducible acetate (Mylar), with one etched side. The plans shall have the design engineer's professional executed seal and shall also be marked "as-built" or "record drawings" with a certification stamp by the engineer over-seeing the construction inspection.
	Complete the 2-year warranty inspection with City Engineering Division and complete all work listed on the punch list.



### **CHECKLIST – FINAL INSPECTION**

**SECTION - 5** 

If the development or redevelopment does not involve public infrastructure but involves multi-family, commercial or industrial zoned building, parking lot and/or site development with 15,000 or more square feet of impervious surface, then submit the following items to City Engineering Division for review:

Check	Item
	Provide Maintenance Agreement for Privately Owned Stormwater Facilities
	Complete the Final Inspection with City Engineering Division of utility services, private storm drain facilities and other site civil improvements. Complete remedial work as required by the City Engineering Division.
commercial o	pment or redevelopment does not involve public infrastructure but involves multi-family, r industrial zoned building, parking lot and/or site development with less than 15,000 square vious surface, then submit the following items to City Engineering Division for review:
Check	Item
	Complete the Final Inspection with City Engineering Division of utility services and other site Civil improvements. Complete remedial work as required by the City Engineering Division.