

**TASK ORDER NO. 6  
TO  
ENGINEERING SERVICES AGREEMENT  
CITY OF NEWPORT  
PUBLIC WORKS DEPARTMENT  
PROJECT: NORTH SIDE STORMWATER MASTER PLAN**

TASK ORDER NO. 6 (PROJECT) to the Engineering Services Agreement dated March 19, 2010 (AGREEMENT), between the CITY OF NEWPORT (CITY), and DAVID EVANS AND ASSOCIATES, INC. (ENGINEER).

As described in detail in Attachment A – Project Description, this PROJECT will include the following:

1. Stormwater Master Plan for North Side area of the City, north of Yaquina Bay, within the Urban Growth Boundary (UGB).

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, the parties mutually agree as follows:

**A. SCOPE OF SERVICES**

CITY agrees to utilize the services of ENGINEER and ENGINEER agrees to perform the engineering services to the PROJECT, as outlined in Attachment B – Scope of Services.

**B. SCHEDULE**

The PROJECT will begin immediately after receipt of this signed Task Order and be completed within 5 months.

**C. COMPENSATION**

OWNER shall pay ENGINEER according to the fee schedule set forth in the AGREEMENT. The not to exceed total cost for these services is **Seventy-Four Thousand Seven Hundred Forty Five Dollars (\$74,745.00)**. CITY reserves the right to increase compensation level at any time upon written authorization to the ENGINEER. The detailed estimate of anticipated hours and associated fees is outlined in Attachment C- Fee Estimate.

The Task Order will be completed over the following Phases:

- Phase 1 of this Task Order, including Tasks 1, 2, 3, and 4, will be completed by June 30, 2010 and will not exceed \$30,000.
- Phase 2 of this Phase 2, including Tasks 5 and 6, will be completed after June 30, 2010 and will not exceed \$44,745.

**D. MISCELLANEOUS**

All terms and conditions of the AGREEMENT apply to this PROJECT as though fully set forth therein. In the event of a conflict between this PROJECT and AGREEMENT, the terms of this PROJECT shall apply.

**CITY OF NEWPORT**

\_\_\_\_\_  
By: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**DAVID EVANS AND ASSOCIATES, INC.**

  
\_\_\_\_\_  
By: THOMAS J. PUTMAN  
Title: SR. ASSC.  
Date: 5/10/10

## **Attachment A**

### **North Side Stormwater Master Plan**

#### **PROJECT BACKGROUND**

The City of Newport (City) has identified the need to develop a Stormwater Master Plan (Master Plan) for the North Side section of the City, similar to the South Beach Stormwater Master Plan prepared by SHN Consulting Engineers and Geologists, Inc. in January of 2004. The area of interest is north of Yaquina Bay, within the Urban Growth Boundary (UGB). It is understood that contributing drainage basins may extend beyond the UGB and will be included in the Master Plan effort.

This Master Plan will be developed with the goal of providing the City with a clear understanding of their existing stormwater system and addressing existing system deficiencies while providing guidance for future development within basins throughout the North Side area.

#### **PROJECT DESCRIPTION**

Master Plan elements include the following:

- Collection and summary of existing stormwater facility information (base map and system inventory, etc.)
- Hydrologic/Hydraulic modeling and engineering analysis
- Summary of results and recommended improvements

The City has identified a few special areas of concern that will be evaluated in greater detail, including:

- Nye Creek flooding where the creek enters a closed conveyance system,
- Flooding in the downtown area near the Nye Beach outfall,
- Flooding at Fogerty Street and Bay Boulevard,
- Bluff erosion near the Agate Beach Motel outfall and structural integrity, and
- Capacity issues of various storm water pipes crossing private property.

The special areas of concern will be reviewed with City staff and Street Maintenance personnel, and included in the Master Plan effort, but it is assumed that generally, there are few flooding problems throughout the North Side plan area. The City has also indicated there are relatively few, if any, permitting or regulatory concerns to be addressed with this Master Plan.

While structural solutions may be necessary, it is expected that the Master Plan will focus on non-structural solutions and regional detention/retention facilities as necessary. Facility maintenance recommendations and preliminary development standards will also be included in the Master Plan.

As a task separate from this Master Plan, the City has also expressed interest in combining this North Side Stormwater Master Plan with the existing South Beach Plan into one Comprehensive Stormwater Plan that provides the framework for a City-wide Stormwater Ordinance. This Comprehensive Stormwater Plan will be an effective tool that clearly identifies existing systems and potential deficiencies throughout the entire UGB, providing guidance for future City development and identifying Capital Improvement Projects (CIP). A finance structure, including proposed storm drain utility rates and system development charges (SDC's), along with estimated costs for annual Maintenance and Operations will be included in the Comprehensive Plan.

## **Attachment B**

### **Scope of Services**

#### **TASKS AND DELIVERABLES**

Unless the PROJECT is terminated or suspended, ENGINEER shall complete all Tasks and provide all deliverables included in this Scope of Services and in accordance with the performance requirements and delivery schedules included in this Scope of Services

#### **Task 1: Project Management and Meetings**

**Purpose and Approach:** ENGINEER shall be responsible for Project Management throughout the duration of this PROJECT. ENGINEER shall manage the production efforts, coordination with the CITY and other Agencies, monitor progress, and direct Quality Control (QC) activities.

This Task also includes project team meetings in which the ENGINEER shall meet with CITY during the Existing Data Collection phase of the PROJECT to review the PROJECT scope and schedule, to delineate team member responsibilities, and to discuss and resolve issues and concerns that may impact the ENGINEER's ability to complete the work on time or within budget.

**Project Management Task Description:** ENGINEER's specific responsibilities/activities include, but are not limited to the following:

ENGINEER shall:

- Program, supervise and coordinate PROJECT work and ENGINEER's staff.
- Establish and maintain all PROJECT files (written and electronic).
- Develop and maintain PROJECT design schedule
- Monitor work tasks, budget and schedule.
- Prepare monthly written progress reports and invoices (electronic file to CITY).
- Conduct management level reviews of work-in-progress and final products (technical reviews shall be performed as part of associated tasks)

**Team Meetings Task Description:** ENGINEER shall coordinate and participate in a kick-off meeting and two (2) other Project Team (PT) meetings with CITY. The kick-off and PT meetings will be held at the CITY. The duration of the meetings will be up to two (2) hours in length, not including travel time. The ENGINEER shall also coordinate field review and data gathering exercises to correspond to these meetings as necessary. At least one (1) coordination conference call meeting will be conducted with CITY. Conference call meeting will be attended by up to three ENGINEER staff and be up to two (2) hours in length.

#### **Deliverables:**

ENGINEER shall:

- Prepare and submit monthly project invoices and progress reports electronically for the duration of the PROJECT, due no later than the twentieth (20<sup>th</sup>) calendar day of each month.

- Submit PROJECT files and documents to CITY within thirty (30) calendar days of written (e-mail acceptable) request.
- Submit PROJECT schedule when revised
- Prepare and submit meeting agenda three (3) business days prior to a meeting.
- Prepare and submit draft meeting summary notes within five (5) business dates after the meeting.
- Prepare and submit final meeting summary notes, incorporating CITY comments within three (3) business days from the time that comments are received.

**CITY Responsibilities:**

CITY will:

- Identify necessary parties to participate in meetings.
- Review draft meeting summary notes and provide comments within three (3) business days after a meeting.

**Task 2: Existing Conditions**

**Purpose and Approach:** The purpose of this Task is to collect and compile existing stormwater facility information (provided by the CITY) and supplement existing data gaps as identified jointly with CITY.

**Assumptions:**

- Geotechnical investigations are not included in this scope of services.
- Other utilities (water, sewer, electrical, gas, etc.) will not be included in project base map and system inventory.
- City will coordinate DEA access to stormwater facilities located on private property.
- Existing stormwater system is exclusively stormwater and does not include combined sewer.
- Field/ground survey of existing stormwater facilities is not included in this scope of services, but can be added upon request.

**Task Description:**

ENGINEER shall:

- Gather the CITY provided AutoCAD survey/topo drawings, GIS information and any other available stormwater as-built or record drawings and compile a preliminary base map of the North Side area to review with CITY.
- Compile existing aerial photography and topo data into a planning level base map (3 meter accuracy). This map will serve as the basis for the stormwater base map.
- Meet with CITY for project kick-off and to review the collected data and preliminary base map to jointly identify gaps and provide recommendations for system mapping supplementation and ground survey verification of critical areas by ENGINEER (separate survey scope to be provided at that time). Special areas of concern, which will be evaluated in greater detail, will be reviewed with CITY at this time.
- Assist in creating an existing stormwater system inventory to for CITY utility asset management. This inventory would include naming/numbering stormwater facilities (pipes, manholes, catch basins, structures, etc.) that will be helpful for CITY maintenance staff in managing the stormwater system. As an extension of the CITY, ENGINEER will work closely with Public Works engineers and field staff to utilize local resources for as much system inventory data gathering and tabulation as possible. For this scope of services, it is anticipated that this system inventory will be in Microsoft Excel Spreadsheet format. However, ENGINEER recommends that the CITY integrate this system

inventory into a GIS database, linked to the comprehensive stormwater basemap and Master Plan, as an effective tool that can provide the CITY with one touch asset management (additional GIS integration scope to be provided upon request).

- Summarize findings of existing conditions review in a report for CITY records.
- Meet with CITY to review basemap, system inventory and existing conditions for CITY concurrence and to identify any additional ground survey and system inventory field information necessary before beginning modeling (a separate site visit for additional system inventory and ground survey data gathering can be provided upon request on a time and materials basis).

**Deliverables:**

ENGINEER shall:

- Prepare a Draft and Final stormwater system basemap (AutoCAD)
- Prepare a foam mounted hard copy of base map
- Prepare a Draft and Final system inventory spreadsheet (electronic copy)
- Provide meeting and site-visit records
- Provide a Draft and Final Existing Conditions summary report (PDF electronic copy)

**Task 3: Stormwater Model Criteria and Development**

**Purpose and Approach:** ENGINEER shall identify and describe the recommended stormwater model and provide an overview of conveyance (hydrology and hydraulic) and water quality requirements specific to the CITY. This includes technical requirements as well as regulatory requirements. The stormwater model (including drainage basin delineation) will be developed as part of this Task.

**Task Description:**

ENGINEER shall:

- Identify and describe the recommended stormwater model (hydrologic and hydraulic)
- Identify hydrology and hydraulic requirements (basin size, slope, soil infiltration, rainfall intensity, percent impervious, etc.)
- Identify water quality requirements (such as City, State, Federal)
- Identify contributing North Side drainage basins based on existing data and the base map created as part of this project.

**Deliverables:**

ENGINEER shall:

- Include model criteria and development results in the Stormwater Master Plan (Task 6)

**Task 4: Stormwater Hydrologic/Hydraulic Modeling**

**Purpose and Approach:** Once existing data is collected and verified by CITY and any supplemental data is integrated into the base map, and the stormwater model and criteria have been identified, the purpose of this Task is to provide detailed hydrologic and hydraulic modeling of the North Side area. This includes model calibration and identifying potential stormwater system hydraulic problems (structure flooding, channel erosion, major culvert crossings, conveyance system deficiencies) and water quality impacts.

**Assumptions:**

- Permitting and agency coordination/submittals are not anticipated or included in this scope of services, but can be added upon request.
- System condition evaluation (television inspection, dye or smoke testing, infiltration and inflow analysis, etc.) is not included in this scope of services but can be added upon request.
- Engineering analysis and modeling to include mainlines and major outfalls and will not include every catch basin and lateral pipe in the system.
- CITY shall provide rainfall and flow monitoring data necessary for model calibration.

**Task Description:**

ENGINEER shall:

- Develop a full hydrologic model and analysis of the North Side drainage basins (anticipated SWMM model).
- Develop a full hydraulic analysis (anticipated SWMM model) of each of the CITY identified special areas of concern along with all mainlines and major outfalls. It is not anticipated that every catch basin and lateral pipe in the North Side plan area would be included in the hydraulic model.
- Utilize this model to determine the existing system capacity and deficiencies and identify areas of opportunity for system improvement throughout the North Side plan area.

**Deliverables:**

ENGINEER shall:

- Include modeling results in the Stormwater Master Plan (Task 6)

**Task 5: Stormwater Alternatives Analysis and Improvement Recommendations**

**Purpose and Approach:** The stormwater model (developed and executed in previous Tasks) will be used to identify and evaluate system improvement alternatives for deficient areas within the system. Analysis will be provided for conveyance and detention alternatives as well as water quality alternatives and improvements will be recommended based on alternative evaluation criteria specific to the CITY.

**Task Description:**

ENGINEER shall:

- Identify and evaluate stormwater system improvement alternatives for deficient areas within the system. Evaluation will be based on criteria developed by ENGINEER with CITY.
- Meet with CITY to review alternatives and preliminary recommendations.
- Provide recommended stormwater system improvements, including preliminary cost estimates.

**Deliverables:**

ENGINEER shall:

- Provide meeting and site-visit records
- Include recommendations in the Stormwater Master Plan (Task 6)

**Task 6: Stormwater Master Plan**

The results from the stormwater modeling, alternatives analysis and improvement recommendations will be succinctly summarized in a Stormwater Master Plan and will provide the CITY with a clear understanding of their existing stormwater system, potential deficiencies and alternatives for system improvements related to future development within the North Side plan area.

**Assumptions:**

- It is anticipated that a Draft Master Plan will be provided to the city for review and comment and CITY review comments will be returned to ENGINEER within two (2) weeks before being incorporated into the Final Plan.

**Task Description:**

ENGINEER shall:

- Document modeling results, system deficiencies and recommendations, maps and figures, etc. in a Stormwater Master Plan document that will provide guidance for future city development. The Master Plan will also identify potential Capital Improvement Projects (CIP) and will include facility maintenance recommendations and preliminary development standards.
- Meet with CITY to review the Draft Master Plan and any CITY review comments before finalizing the Master Plan.

**Deliverables:**

ENGINEER shall:

- Prepare a Draft and Final Stormwater Master Plan for submittal to the CITY (five (5) bound hard copies and one (1) PDF electronic copy)

**Attachment C  
Fee Estimate**

Job Classifications (Individuals' names are optional)		Project Manager	Senior Engineer	Engineering Technician	Senior CADD Technician	Project Assistant	Hours	Escalated Direct Labor	Direct Expenses	Total Cost
<b>TASKS/DELIVERABLES</b>										
1	<b>Project Management and Meetings</b>	27	29	20	0	12	88	\$ 10,535	\$ 450	\$ 10,985
1.1	Project Administration	16				12	28	\$ 3,080		\$ 3,080
1.2	Meetings with Public Works Staff (3)	9	27	18			54	\$ 6,705	\$ 450	\$ 7,155
1.3	Conference call meetings with Public Works Staff (1)	2	2	2			6	\$ 750		\$ 750
2	<b>Existing Conditions</b>	4	18	36	64	0	122	\$ 12,670	\$ 220	\$ 12,890
2.1	Collect and compile existing stormwater data		12	24	40		76	\$ 7,820	\$ 170	\$ 7,990
2.2	Preliminary stormwater basemap	2	4	8	16		30	\$ 3,140		\$ 3,140
2.3	Follow-up field data collection for basemap (TBD)						0	\$ -		\$ -
2.4	Follow-up field data collection for system inventory (TBD)						0	\$ -		\$ -
2.5	Final stormwater basemap	2	2	4	8		16	\$ 1,710	\$ 50	\$ 1,760
3	<b>Stormwater Model Criteria and Development</b>	4	12	44	8	0	68	\$ 7,340	\$ -	\$ 7,340
3.1	Hydrology and Hydraulic Requirements	1	4	8			13	\$ 1,480		\$ 1,480
3.2	Water Quality Requirements	1	2	6			9	\$ 1,010		\$ 1,010
3.3	Drainage basin delineation	2	6	30	8		46	\$ 4,850		\$ 4,850
4	<b>Stormwater Hydrologic/Hydraulic Modeling</b>	2	18	132	0	0	152	\$ 15,910	\$ -	\$ 15,910
4.1	Hydrologic model and analysis	1	6	32			39	\$ 4,150		\$ 4,150
4.2	Hydraulic model and analysis	1	12	100			113	\$ 11,760		\$ 11,760
5	<b>Stormwater Alternatives Analysis and Improvement Recommendations</b>	4	36	94	14	0	148	\$ 16,150	\$ -	\$ 16,150
5.1	Conveyance and Detention Alternatives	2	20	60	10		92	\$ 9,930		\$ 9,930
5.2	Water Quality Alternatives	2	16	34	4		56	\$ 6,220		\$ 6,220
6	<b>Stormwater Master Plan</b>	12	26	34	14	20	106	\$ 11,320	\$ 150	\$ 11,470
6.1	Stormwater Master Plan - Draft	8	18	18	10	12	66	\$ 7,140	\$ 75	\$ 7,215
6.2	Stormwater Master Plan - Final	4	8	16	4	8	40	\$ 4,180	\$ 75	\$ 4,255
<b>TOTAL</b>		<b>53</b>	<b>139</b>	<b>360</b>	<b>100</b>	<b>32</b>	<b>684</b>	<b>\$ 73,925</b>	<b>\$ 820</b>	<b>\$ 74,745</b>