

CITY OF WASHINGTON, ILLINOIS Committee of the Whole Agenda Communication

Meeting Date: December 09, 2019

Prepared By: Ray Forsythe, City Administrator

Agenda Item: Capital Improvement Plan proposals

Explanation: The City Council recently approved the 2020/2023 Council Goals. Several of the Goals

are related to planning and economic development.

Here are the top 4 Goals:

1. Complete a new Comprehensive Plan to include economic development to improve chances at attracting private, commercial and industrial development.

2. Consider a comprehensive Economic Development Strategic Plan that includes Route 24, Route 8, the Square, Nofsinger Rd, Freedom Parkway, Lakeshore Drive and the 223 property.

- 3. Adopt a Capital Improvement Plan (CIP) for the city and fire department with a focus on a 20-year reconstruction plan to include maintenance, repair, timely implementation and budgeting consideration.
- 4. Create a Master Development Plan for the 223 property.

One that I would like to start work on is a new Capital Improvement Plan (CIP). This document will be a critical piece of the City's long-range planning as it sets the priorities based on logical and financial data. The CIP will cover the City's utility and road infrastructure and future needs, city owned properties, trails and other assets owned by the City. The plan will look at current conditions of all of our infrastructure and provide a tool for staff and the City Council to make sound decisions on reconstruction, new investments and capital financing priorities and options. This document will become a tool used not only for budgeting the annual Capital Improvement Projects, but an information resource for the other goals listed above and a roadmap of the future needs of the City of Washington.

I have reached out to multiple firms who have experience in drafting plans like this and have received two proposals. Staff has reviewed the proposals and the Public Works Committee discussed the concept and process and were given copies of the proposals at the Monday, December 2nd Committee meeting. I would like the Committee of the Whole to have the opportunity to see the proposals and give feedback on the two options.

We have sufficient funds in Public Works budget for this year. It will be a 6 month or so process to complete.

Fiscal Impact: To be determined, available funds in the current fiscal year budget

Date Prepared: 12/05/2019

Recommendation/

Committee Discussion Summary: The City Administrator recommends moving forward with firm selection and project initiation this fiscal year.

Action Requested: Feedback on proposals; approval of a Contract for Services with selected firm.

Additional Documentation: Attachments – proposals from Terra Engineering, LTD and CMT.

Date Prepared: 12/05/2019



December 5, 2019

Mr. Ray Forsythe City Administrator 301 Walnut Street Washington, IL 61571

Re: Capital Improvement Plan Statement of Interest

Dear Mr. Forsythe:

Thank you very much for contacting me on November 26th to inquire about our interest and ability to develop a Capital Improvement Plan (CIP) for Washington. We appreciate your desire to start this effort right away and the importance of having an annual plan developed with respect to long range goals and objectives established by the City Council.

When considering your question about our interest in this planning effort, my response was a quick "yes". That is because we have a great deal of information about Washington's water system, we are familiar with your sanitary sewer system and street network, and we are currently developing an innovative approach to capital planning and asset management. We are working with many communities to develop capital plans and turn those plans into reality.

Current Projects

CMT's Scott DeSplinter, located in our Peoria office, is working with Kevin Schone to complete the following projects:

- Design of a new 500,000 gallon water tower on the 223 Property that will be connected to the
 existing system by 1,500 feet of new 12" water main along Cummings Lane.
- Exploring cost-effective ways to protect Water Treatment Plant #1 from flood water conditions.
- Investigation of a problem at Water Treatment Plant #2 to find the cause of the reverse flow through the softeners.

Washington Infrastructure

The following is a tabulation of what CMT knows about your infrastructure assets:

Sanitary Sewer System – An IEPA approved Facility Plan has been guiding the improvements to the trunk sewers and wastewater treatment plant. We also know that City staff developed a Capacity Management Operations Maintenance Program in 2016 that was submitted to the IEPA. These documents provide a great deal of information that will be used to create the capital improvement plan. Improvements to be considered in your capital plan are:

- Phase 2B Trunk Sewer
- VFD controllers at sewer pump stations
- Replacement program for broken portions of sewer system
- · Cured-in-place lining program for portions of sewer system
- Lateral sewer program

Crawford, Murphy & Tilly Centered in Value

Water System – CMT performed a comprehensive evaluation of the Water Treatment Plants and delivered a report dated June 2017. That report identified historical records; evaluated existing facilities; listed improvement, maintenance and repair recommendations; and prioritized improvement recommendations. That same year CMT also created a hydraulic model of your water network to guide planning decisions. Annual updates to that model allow us to provide you with guidance regarding new water mains, replacing existing mains, flow conditions, and storage capacity. We are familiar with the age, pipe material, and locations of problematic water mains in the system. Improvements to be considered in your capital plan are:

- Flood protection of Water Plant #1
- Replace water treatment plant filters
- New water tower
- Cummings Lane 12" water main
- Replacement program targeting oldest cast iron mains

Street Network – Washington's MFT fund is receiving a significant fund increase due to the state legislature doubling the fee from \$0.19 to \$0.38 per gallon. Developing an annual maintenance program will maximize the pavement service life therefore, this a high priority. Several new construction and reconstruction street projects have been identified during previous city planning efforts. Establishing priorities for new streets, reconstructing streets, and maintenance needs will be the focus of the capital improvement plan. The 223 Property, Downtown Square, Freedom Parkway Extension, N. Lawndale, W. Holland Street projects are all projects at various stages of development.

Recreation Trails – Completion of the Cruger Road trail is a significant accomplishment. Adding additional trails to create a connected network will expand recreation opportunities and enhance the Washington lifestyle. Trails along Centennial Drive, Freedom Parkway, Cummings Lane, Summit Drive, School Street, and Business 24 are corridors that have been identified in previous planning efforts.

Storm Sewers – Another critical infrastructure asset primarily within the street right of way is the storm sewer system. These facilities require regular maintenance and repair to protect property from damage.

Glendale Cemetery - The City owned cemetery requires annual maintenance and care.

TIF District – TIF funds can be used for municipal infrastructure for the benefit of the District. It is our understanding the TIF District is scheduled to expire in Year 2021.

Public Buildings – The City owns and maintains several buildings for municipal services. A capital improvement plan shall identify improvement needs for each of the buildings. CMT's architects, MEP engineers, and structural engineers can work with City staff to review facility conditions to identify needs and priorities for each building. The following is a list of those buildings and their purpose:

- City Hall administrative operations of the City.
- 115 West Jefferson Street Police Department administration; Street Department Shop; Storage Building
- 107 Legion Road Public Works Facility
- 201 N. Main Street Water Treatment Plant #1
- 1760 Constitution Water Treatment Plant #2
- 700 Woodland Trail Wastewater Treatment Plant #1 (To be taken out of service.)
- 955 Ernest Street Wastewater Treatment Plant #2
- 200 N. Wilmore Road Fire Department

Crawford, Murphy & Tilly Centered in Value

Capital Planning Approach

The following is a brief approach for how we intend to create a plan for Washington's future capital infrastructure investments:

- 1. Review available information
- 2. Identify data gaps about existing assets
- 3. Identify needs of each asset class
- 4. Establish capital budgets relative to revenue source
- 5. Identify projects within each asset class to address needs
- 6. Compute project budgets
- 7. Prioritize projects based on likelihood of failure and the consequence if failure occurs

We know that Washington's list of capital needs is long, and a case can be made that all are important. However, like every city, Washington is only able to complete a limited number of capital improvements each year based on the available revenues. The 2019 adjustment to the water and sewer rates and increased MFT funds will allow more of those needs to be met.

Attached to this letter is a description of a software application that CMT is developing for Peoria, Illinois. The application is being developed to fill a gap in the capital planning process. Our unique process is based on the principles of risk management as an enterprise-wide approach to establish priorities for allocation of resources to ensure organizational success. The attached provides additional information about how we are working to integrate data sources, automate the analysis, and simplify the capital planning process.

Proposal

As you already know, the capital planning process is complex and requires knowledge about a broad array of city assets. If you decide that CMT is the best choice to develop your CIP, we will start by meeting with you to discuss your intentions and the level of detail to be provided in the CIP. At that point we will be able to develop a contract and scope of services based on a mutual understanding. The following table is a possible budget of what might be required to develop a CIP. We know this estimate of hours will change based on your input and expectations.

	Task	Water	Sewer	Streets	Trails	Storm Sewers	Cemetery & TIF	Buildings	Total
1.	Review available information	4	12	12	4	8	8	12	60 hrs.
2.	Identify data gaps about existing assets	2	2	4	1	12	1	24	46 hrs.
3.	Identify needs of each asset class	2	8	8	2	12	3	16	51 hrs.
4.	Establish capital budgets	1	1	1	1	2	2	2	10 hrs.

	Task	Water	Sewer	Streets	Trails	Storm Sewers	Cemetery & TIF	Buildings	Total
5.	Identify projects to address needs	1	2	2	0	8	1	12	26 hrs.
6.	Compute project budgets	2	4	4	0	4	2	12	28 hrs.
7.	Prioritize projects	1	2	4	0	6	0	8	21 hrs.
8.	Create CIP	2	2	2	2	2	2	4	16 hrs.
9.	Project Management	2	2	2	2	2	2	4	16 hrs.
Total (Hours)		17	35	39	12	56	21	94	274 hrs.

As you can see from the above estimate, we are most uncertain about the needs of the buildings and storm sewer systems. If these needs are not a high priority or concern, the scope will be adjusted accordingly.

Considering that your Fiscal Year begins on May 1st, it will be important to begin the planning work as soon as possible. We are available to begin working with you in January. We intend to deliver a CIP for your use in developing next year's budget not later than March 31st. The schedule will likely be driven by how much time is required to investigate the existing buildings. Regardless, we will deliver the CIP at the earliest opportunity.

Conclusion

CMT is a full-service consulting firm providing planning, design, environmental assessments, land acquisition, and construction services on projects that range from simple to complex. We provide leadership in civil infrastructure by leveraging shared knowledge, staff longevity, and unique insights. You also have my commitment that CMT will allocate the necessary resources to follow through on our commitments.

You can contact me at (309) 680-1301 to discuss this proposal or any questions you may have about CMT. Thank you for evaluating our qualifications, and we look forward to your favorable consideration.

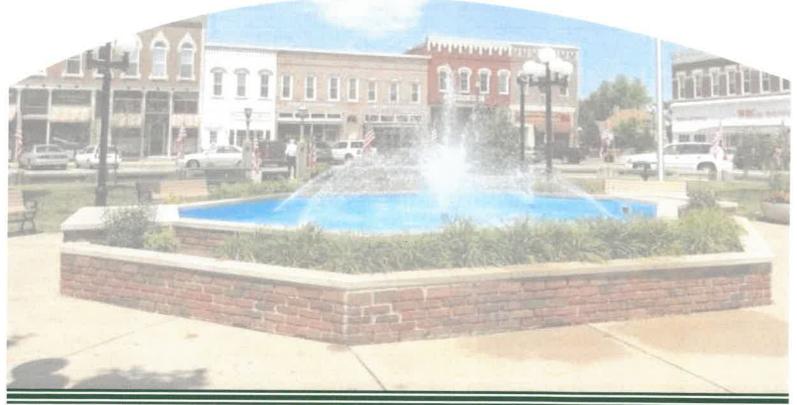
Sincerely,

Eric J. Hansen, PE Vice President

Enclosure: CMT-APP

203 Harrison Street





Capital Improvement Plan Proposal Fiscal Years: 2020 to 2025





INTRODUCTION

TERRA Engineering is pleased to submit our understanding and approach to prepare a Capital Improvement Plan for Fiscal Years 2020 through 2024 for the City of Washington. The plan will also address needs for a 20-year Reconstruction Plan that will cover maintenance and repairs for the City as well as the Fire Department. A Capital Improvement Plan (CIP) is a five-year plan for financing improvements to major public assets based on the City's adopted master plans, goals, budgets, and policies. The purpose of a CIP is to match financial resources with the capital needs of a growing community while also preserving and/or enhancing existing capital assets to provide efficient City services.

The CIP will not serve as a wish list. Only projects with identified funding sources are included within the CIP. Needs, such as City buildings and parks, without a funding source are excluded from the plan.

CAPITAL IMPROVEMENT PROGRAM OBJECTIVE

The objective of the five-year Capital Improvement Program (CIP) is to provide short- and long-range financial planning for the acquisition and/or construction of new or improved City-owned assets. The establishment of a multi-year CIP is a valuable tool in assisting the City in its efforts to:

- > Effectively plan for the City's long-term capital funding needs;
- > Facilitate economic growth;
- > Determine the character and location of needed public improvements; and,
- > Provide for the efficient and responsible financing of these improvements.

The City of Washington has always strived to offer its residents and businesses the most desirable community facilities and reliable infrastructure to improve their quality of life. The City has a portfolio of

capital assets that it owns, maintains, and employs to help deliver quality services to residents. These assets include equipment vehicles, such as fire engines and snowplows, extensive internal office systems and tools, but also permanent assets, such as roads, bridges, buildings, underground utilities, storm water systems, parklands, parking facilities, and natural areas.

As the City plans for future investments in the City's





assets, maintaining a high-quality transportation and utility system is a high priority for the City of Washington.

TERRA will assist the City of Washington to complete a much-needed comprehensive CIP for infrastructure that will incorporate transportation and utilities. The CIP will include:

- Major Streets
- Local Streets
- Stormwater
- Water and Water Treatment Plants
- Wastewater and Wastewater Treatment Plants
- Recreational Trails
- Strategic Investments in Roads and Utilities

The CIP will also involve future projects from the following categories:

- Five Points Washington
- Police Department
- Fire/Emergency Services
- Parks and Recreation
- Cemetery
- Public Works Facility
- City Hall

Guidelines

The initial investigation for this CIP will focus on five (5) years, FY 2020 through FY 2024.

- The CIP is designed to account for expenditures for the acquisition of assets which are characterized by a long-term life expectancy, such as major machinery, buildings or property, street improvements, water or sewer system improvements, and replacements to the motor equipment fleet.
- Items in the CIP are limited to those with a life expectancy of greater than one (1) year.
- All replacements to motor equipment are purchased through the Motor Equipment Replacement Fund (MERF).

The CIP contains only those projects that can either be realistically funded during the five-year period or are deemed essential even if funding is not presently available.





Strategic Planning

TERRA will develop the CIP to adhere to the City Council's strategic priorities that were established in October 2019. These priorities are:

- 1. Complete a new Comprehensive Plan to include economic development to improve chances at attracting private, commercial, and industrial development.
- Consider a comprehensive Economic Development Strategic Plan that incorporates Route 24, Route 8, the Square, Nofsinger Rd, Freedom Parkway, Lakeshore Drive, and the 223 property.
- 3. Adopt a Capital Improvement Plan (CIP) for the City and fire department with a focus on a 20year reconstruction plan to include maintenance, repair, timely implementation, and budgeting consideration.
- 4. Create a Master Development Plan for the 223 property.
- 5. Visit the roles and responsibilities of the mayor, council, staff, and citizens and consider a code of conduct/standard operating procedure to include this information, expectations, limitations, voting, and how to get items on an agenda. Revise the Committee/Committee of the Whole structure as well as the Council agenda for meetings. Have the city administrator create an administrative policy on proper follow-up and feedback to citizen inquiries.

The City's priority (number 3 above) will be to develop a CIP that provides:

- 1. **Financial Stability** Maintain a positive financial position and ensure operating and expenditures are balanced.
- 2. Quality Infrastructure Provide a quality and reliable infrastructure system to support community expectations and strategic growth.
- 3. **Efficient and Effective Services** Sustain high-quality services that are historically achieved by the City Council.
- 4. Be Transparent For this plan to be effective and inclusive of all the City's public services, the plan should be closely coordinated with the Budget and Finance Committee. It should also include public meetings and hearings where the City will educate the public on the needs for improvements as well as allow the public the opportunity to provide input in the process.

The CIP is a long-term planning tool designed to provide the community with a view of the City's infrastructure needs and capital improvements over the next five (5) years, and to substantiate the City's ongoing needs for stable revenue sources to fund these essential and significant capital projects. The document allows the Community, City Council, City Administrator, and staff to discuss long-term capital planning goals and also to begin to identify resources to achieve those goals. Long-term capital planning provides an opportunity to refocus and reprioritize established goals and objectives as new needs arise and prior to the development of the annual budget.

Infrastructure impacts many aspects of our daily lives. Infrastructure encompasses roads, water, sidewalks, bridges, stormwater, wastewater, and public facilities. Investing in infrastructure is critical to the City to maintain a high quality of life, support public health and safety, and foster economic growth, development, and redevelopment for today as well as for future generations.

The CIP will address four (4) different components, which include:

Community Facilities



- Municipal Facilities
- Transportation
- Utilities

Upon completion of an assessment of the City's needs, TERRA will summarize the planned expenditures by category and funding source for each of the above components.

Prioritization

Upon completion of the collection of data to be included in the CIP, TERRA will develop a priority list of projects. Projects included in the CIP are typically greater than \$15,000, and will result in the acquisition or construction of a fixed asset that is highly visible to the community. Major repairs and maintenance for City facilities, as well as projects to meet organizational needs in order to provide services to the community, are also included in the CIP.

TERRA will devise a rating system for all of the projects. Each project will be rated by the Department Director or the respective City Council committees, such as the Public Works Committee. As funds become available, the CIP Team will review the project recommendations and priorities again, and will consider if the project is mandated, a high risk, or if there are leveraged dollars associated with a project.

TERRA suggests that all CIP projects be prioritized based on the assessment of need and availability of funding. TERRA will coordinate review of the projects with each Department, and will recommend whether or not it should be included within the CIP. Departments with smaller project lists are generally not scored, while most public works projects are subjected to a formalized scoring process due to the volume and size of projects.

TERRA will evaluate the projects against the ten criteria listed below, and score them on a 1 to 5 scale (a weighted scoring system can be developed upon coordination with the City).

- 1. Critical condition of assets
- 2. Conformance with Council adopted goals and plans
- 3. Enhancement of economic development
- 4. Calculated level of service
- 5. Availability of outside funding .
- 6. Operation and maintenance (effectiveness / efficiency)
- 7. Public interest
- 8. Regulatory / safety mandates
- 9. Relationship to other projects / coordination
- 10. Social / geographic equity

CIP Development Process

The City Administrator's Office, Engineering Department, Planning & Development, Department of Public Works, and Finance Department, in coordination with the TERRA Team, will facilitate the development of the CIP (preferably prior to the start of the 2020 budget approval process). The CIP will be updated annually and adopted as part of the budget process. The City's Financial and Budgetary Policies set out the basic guidelines under which the CIP is prepared.



TERRA recommends that the CIP be inclusive and developed in close coordination with all of the City's various Departments including, but not limited to:

- Mayor City Council
- City Administrator
- Economic Development Department (including Planning)
- Police Department
- Fire and Rescue
- Finance
- Public Works
- Water & Sewer Utility

Development of CIP Budget

The CIP budget is the result of careful planning and use of the City and County Comprehensive Plans, the Long-Range Financial Plan, and cooperation between resident committees and department staff. TERRA's initial approach is to develop the 5-year plan, FY2020 through FY2024, while ultimately collecting adequate information for the development of the 20-year plan.

TERRA will ensure that the CIP includes capital rehabilitation and asset replacement needs in addition to desires for new amenities and expanded /new facilities. The Plan will assist with the forecasting needs for enhanced capital revenues, such as bond funding, to meet large infrastructure needs.

Policy

- TERRA will coordinate with the City for equipment replacement and maintenance schedule needs
 for the next five (5) years, and will update this projection each year. Using the data from this
 projection, a maintenance and replacement schedule will be developed and followed.
- TERRA will coordinate with City Staff with regards to the cost for design improvements, development, implementation, and operating and maintenance costs.
- TERRA will account for expenditures due to acquisition of assets, such as major machinery, buildings, or property, street improvements, water or sewer system improvements, and replacements to the motor equipment fleet with a life expectancy of greater than one (1) year.

CIP Project Development Process

TERRA will develop an evaluation form that will be used by all departmental staff. This qualitative form will be used as a decision-making tool that assists in the recommendation of projects. The evaluation will primarily focus on the needs of the community and progress towards City goals. Through the assistance of TERRA, staff will consider the project impacts on the community, the project parameters and impact on the Comprehensive Plan, and the construction cost impact on the City's budget as well as the benefit cost analysis. After the evaluation for each project, TERRA will develop a matrix to assign priorities to the projects keeping the following in mind:

- Health and welfare of Washington's residents
- Safety conditions for Washington's staff
- Asset protection to prevent increased future cost
- Opportunity cost such as grant or joint projects with other entities



Once a project is accepted, the CIP Team will proceed with a more in-depth analysis by considering the following factors:

- If this is a replacement of a current asset, are the expenditures necessary to continue providing the same level of service?
- Will the replacement reduce operating costs? For example, will the cost of labor, materials, or other items, such as electricity, be lowered by replacing obsolete equipment?
- What are the future service demands, and will this project be able to meet those demands?
- Is this project required to comply with safety or environmental mandates?

The CIP Team will also review the estimated cost to ensure it is projected at a reasonable cost. Once a project reaches this point, it is then categorized within a predetermined set of categories and added to the Capital Plan. Projects are then categorized by categories and prioritized within their own category.

Upon the coordination with the City Administrator and Council, TERRA can coordinate with resident committees the priorities for projects, such as Open Spaces, Parks, Trials, etc., and will prioritize these projects based on the community needs and added value to the community, as a whole. Using the priority matrix, the projects will be prioritized within their own respective categories. Alternative analysis could also be performed to ensure that construction costs do not outweigh the benefits of the project.

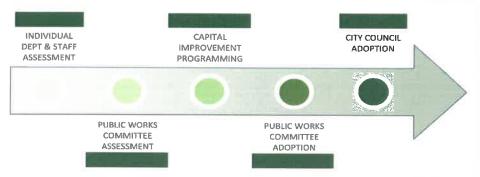
CIP Process and Schedule

TERRA will work closely with the City Administrator, City Staff from various Departments, and Council Committees to develop the CIP within a time frame that is acceptable by the CIP Team. It is anticipated that the schedule to develop, implement, and adopt a CIP will be roughly six (6) months. This would include the following tasks:

CAPITAL IMPROVEMENT PLAN SCHEDULE					
DATE	TASK				
January	Departments complete necessary forms and return to TERRA				
February	TERRA collects and begins the Capital Improvement Review Process				
March	CIP Team to develop project listing and priorities				
April	TERRA completes a draft CIP Plan				
May	CIP Team holds a presentation for City Council				
une City Council adopts the CIP					

These time frames are tentative and could be reduced depending on availability of data and meetings with staff.

Predictions are difficult, particularly about the future. TERRA will develop a CIP for the City of Washington



that is adaptable to the new realities of time. The CIP will be reviewed and revised every year to take advantage of new opportunities, changing priorities, and unexpected events.



The process aligned to complete the CIP for the City of Washington will include the following:

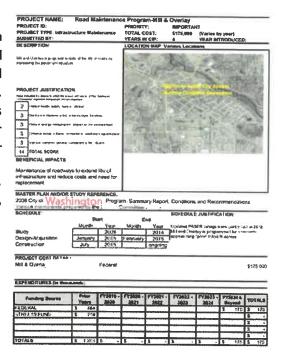
1. CAPITAL INVENTORY:

The process usually begins by creating a complete inventory of the City's assets. This will be based upon individual City staff and departmental assessments of their inventory. Once the inventory is completed, it will serve as the beginning of assessing the need for replacement, expansion, rehabilitation, or replacement of facilities or equipment.

This task will serve a dual purpose, in addition to the information needed for the CIP it will also help the in asset management of City facilities.

2. PROJECT IDENTIFICATION:

The next step for the CIP Team is to identify the potential capital projects that will be needed in the next 5/20 years. Defining the City's assets and condition, as noted above, will help justify the needs of the projects.



3. COST ESTIMATES (Capital Improvement Programming):

TERRA will prepare a cost estimate for each project/asset at this step. TERRA will work with available suppliers and review historical data for cost estimating infrastructure to develop an accurate cost estimate. TERRA will include an inflation factor for the years ahead.

4. MASTER PROJECT LIST

TERRA will prioritize and organize the identified projects, will address the priority levels (based on the above prioritization process), complete the cost estimate, and provide a timeline for construction/replacement based on available funds.

<u>FUNDING</u>: While developing the project master list, TERRA will work with City Staff and Departments to organize budget availability and will also address additional funding possibilities, taking into account grants, State, federal, or other available private funding. The funding source will be included in the mater project list.

5. DRAFT YOUR CAPITAL IMPROVEMENT PLAN

TERRA will gather all the available information and will draft the City's Capital Improvement Plan. The format will include charts, tables, and detailed project sheets for each project identified to be included in the master plan. The project detail sheet will include scope, funding source, approximate cost, year of implementation, the project type, and the project location map, among other factors.



6. ADOPTION:

After the draft plan has been reviewed and polished, the CIP can be adopted by the Public Works Committee in preparation for presentation to the City Council.

CIP Outline

Below is TERRA's vision of the outline for the CIP:

Chapter 1 - Introduction to Capital Improvements Planning

- A. What is Capital Improvements Planning?
- B. What are the benefits to having a CIP?
- C. Do capital improvements plans always work?
- D. What are the steps in the Capital Improvements Planning process?
- E. How does all of this get done?
- F. Who is typically responsible for getting all of this done?
- G. What is the relationship of the CIP to comprehensive plans and growth policies as week as to land use regulations?
- H. Is it necessary to adopt any policies in conjunction with creating a CIP?

Chapter 2 - Assessing Needs

- A. Introduction
- B. Define Your Objectives
- C. Public Participation
- D. Identifying Needs

Chapter 3 - Prioritizing Needs

- A. Introduction
- B. Initial Prioritization of Needs
- C. Evaluating Needs, Developing Projects, and Fine-tuning Priorities
- D. Documenting the Priority Setting Process

Chapter 4 - Evaluating Funding Options

- A. Introduction
- B. Determine Your Local Government's Financial Condition
- C. Evaluate Funding Options
- D. Additional Financing Methods
- E. Financial Depreciation
- F. Special Concerns Related to Financing Water and Wastewater Improvements
- G. Develop a Comprehensive Funding Strategy

Chapter 5 - Adopting and Implementing the Capital Improvements Plan

- A. Introduction
- B. Putting Together the CIP Document
- C. Adopting the Plan



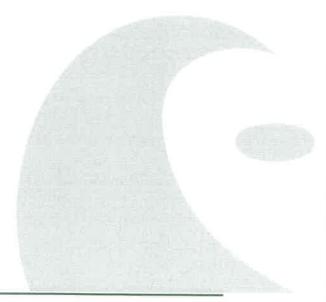
D. Implementing the Plan

APPENDICES

Appendix A - Policies to Consider for Capital Facilities Planning

Appendix B - Public Education and Involvement

Appendix C - Project Detailed Sheets





ACCEPTANCE

This proposal, with the signature of the appropriate personnel, constitutes acceptance of fee and terms as stated herein. Please return one copy of the signed proposal to me as authorization to begin work.

If you have any questions or need clarification on any of the above, please do not hesitate to call. We look forward to working with you on this project and appreciate you including us on your team.

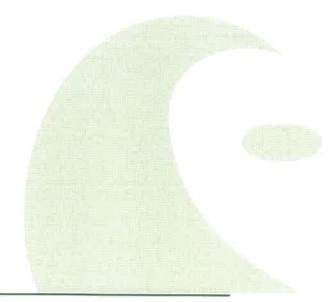
Sincerely yours,

TERRA ENGINEERING, LTD.

George Ghareeb, PE, F.ASCE

Vice President

ACCEPTED BY	
Date:	
Printed name:	
Signed name:	
Title:	





STANDARD TERMS AND CONDITIONS

- STANDARD OF CARE. Services shall be performed in accordance with the standard of professional practice
 ordinarily exercised by the applicable profession at the time and within the locality where the services are
 performed. No warranty or guarantee, express or implied is provided, including warranties or guarantees
 contained in any uniform commercial code.
- 2. CHANGE OF SCOPE. The scope of Services set forth in this Agreement is based on facts known at the time of execution of this Agreement, including, if applicable, information supplied by TERRA Engineering and Client. TERRA Engineering will promptly notify Client of any perceived changes of scope in writing and the parties shall negotiate modifications to this Agreement.
- 3. DELAYS. If events beyond the control of TERRA Engineering, including, but not limited to, fire, flood, explosion, riot, strike, war, process shutdown, act of God or the public enemy, and act or regulation of any government agency, result in delay to any schedule established in this Agreement, such schedule shall be extended for a period equal to the delay. In the event such delay exceeds 90 days, TERRA Engineering shall be entitled to an equitable adjustment in compensation and extension of time.
- 4. TERMINATION/SUSPENSION. Either party may terminate this Agreement upon 30 days written notice to the other party in the event of substantial failure by the other party to perform in accordance with its obligations under this Agreement through no fault of the terminating party. Client shall pay TERRA Engineering for all Services, including profit relating thereto, rendered prior to termination, plus any expenses of termination.
- 5. REUSE OF INSTRUMENTS OF SERVICE. All reports, drawings, specifications, computer data, field data notes and other documents prepared by TERRA Engineering as instruments of service shall remain the property of TERRA Engineering. TERRA Engineering shall retain all common law, statutory and other reserved rights, including the copyright thereto. Reuse of any instruments of service including electronic media, for any purpose other than that for which such documents or deliverables were originally prepared, or alteration of such documents or deliverables without written authorization or adaptation by TERRA Engineering for the specific purpose intended, shall be at Client's sole risk.
- 6. ELECTRONIC MEDIA. Electronic files furnished by either party shall be subject to an acceptance period of 30 days during which the receiving party agrees to perform appropriate acceptance tests. The party furnishing the electronic file shall correct any discrepancies or errors detected and reported within the acceptance period. After the acceptance period, the electronic files shall be deemed to be accepted and neither party shall have any obligation to correct errors or maintain electronic files. In the event of a conflict between the signed construction documents prepared by TERRA Engineering and electronic files, the signed or sealed hard-copy construction documents shall govern. Under no circumstances shall delivery of electronic files for use by Client be deemed a sale by TERRA Engineering and TERRA Engineering makes no warranties, either express or implied, of merchantability and fitness for any particular purpose. In no event shall TERRA Engineering be liable for indirect or consequential damages as a result of the Client's use or reuse of the electronic files.
- OPINIONS OF CONSTRUCTION COST. Any opinion of construction costs prepared by TERRA Engineering is supplied for the general guidance of the Client only. Since TERRA Engineering has no control over competitive bidding or market conditions, TERRA Engineering cannot guarantee the accuracy of such opinions as compared to contract bids or actual costs to Client.
- 8. SAFETY. TERRA Engineering shall establish and maintain programs and procedures for the safety of its employees. TERRA Engineering specifically disclaims any authority or responsibility for general job site safety and safety of persons other than TERRA Engineering employees.
- RELATIONSHIP WITH CONTRACTORS. TERRA Engineering shall serve as Client's professional representative for the Services, and may make recommendations to Client concerning actions relating to Client's contractors, but TERRA Engineering specifically disclaims any authority to direct or supervise the means, methods, techniques, sequences or procedures of construction selected by Client's contractors.
- 10. THIRD PARTY CLAIMS: This Agreement does not create any right or benefit for parties other than TERRA Engineering and Client.



- 11. MODIFICATION. This Agreement, upon execution by both parties hereto, can be modified only by a written instrument signed by both parties.
- 12. PROPRIETARY INFORMATION. Information relating to the Project, unless in the public domain, shall be kept confidential by TERRA Engineering and shall not be made available to third parties without written consent of Client, unless so required by court order.
- 13. INSURANCE. TERRA Engineering will maintain insurance coverage for Professional, Comprehensive General, Automobile, Worker's Compensation and Employer's Liability in amounts in accordance with legal, and TERRA Engineering business requirements. Certificates evidencing such coverage will be provided to Client upon request. For projects involving construction, Client agrees to require its construction contractor, if any, to include TERRA Engineering as an additional insured on its commercial general liability policy relating to the Project, and such coverages shall be primary.
- 14. INDEMNITIES. TERRA Engineering agrees, to the fullest extent permitted by law, to indemnify and hold harmless the Client, its officers, directors and employees against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, to the extent caused by TERRA Engineering's negligent performance of professional services under this Agreement and that of its subconsultants or anyone for whom TERRA Engineering is legally liable. The Client agrees, to the fullest extent permitted by law, to indemnify and hold harmless TERRA Engineering, its officers, directors, employees and subconsultants against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, to the extent caused by the Client's negligent acts in connection with the Project and that of its contractors, subcontractors or consultants or anyone for whom the Client is legally liable. Neither the Client nor TERRA Engineering shall be obligated to indemnify the other party in any manner whatsoever for the other party's own negligence.
- LIMITATIONS OF LIABILITY. No employee or agent of TERRA Engineering shall have individual liability to Client. Client agrees that, to the fullest extent permitted by law, TERRA Engineering's total liability to Client for any and all injuries, claims, losses, expenses or damages whatsoever arising out of or in any way related to the Project or this Agreement from any causes including, but not limited to, TERRA Engineering's negligence, error, omissions, strict liability, or breach of contract shall not exceed the total compensation covered by TERRA Engineering's professional liability insurance.
- ACCESS. Client shall provide TERRA Engineering safe access to the project site necessary for the performance of the services.
- 17. ASSIGNMENT. The rights and obligations of this Agreement cannot be assigned by either party without written permission of the other party. This Agreement shall be binding upon and insure to the benefit of any permitted assigns.
- 18. HAZARDOUS MATERIALS. TERRA Engineering and TERRA Engineering's consultants shall have no responsibility for discovery, presence, handling, removal or disposal of or exposure of persons to hazardous materials in any form at the project site, including but not limited to asbestos, asbestos products, polychlorinated biphenyl (PCB) or other toxic substances. If required by law, the client shall accomplish all necessary inspections and testing to determine the type and extent, if any, of hazardous materials at the project site. Prior to the start of services, or at the earliest time such information is learned, it shall be the duty of the Client to advise TERRA Engineering (in writing) of any known or suspected hazardous materials. Removal and proper disposal of all hazardous materials shall be the responsibility of the Client.
- 19. REMODELING AND RENOVATION. For TERRA Engineering's services provided to assist the Client in making changes to an existing facility, the Client shall furnish documentation and information upon which TERRA Engineering may rely for its accuracy and completeness. Unless specifically authorized or confirmed in writing by the Client, TERRA Engineering shall not be required to perform, or have others perform, destructive testing or to investigate concealed or unknown conditions. The Client shall indemnify and hold harmless TERRA Engineering, TERRA Engineering's consultants, and their employees from and against claims, damages, losses and expenses which arise as a result of documentation and information furnished by the Client.
- 20. CLIENT'S CONSULTANTS. Contracts between the Client and other consultants retained by Client for the Project shall require the consultants to coordinate their drawings and other instruments of service with those of TERRA Engineering and to advise TERRA Engineering of any potential conflict. TERRA Engineering shall have no responsibility for the components of the project designed by the Client's consultants. The Client shall





indemnify and hold harmless TERRA Engineering, TERRA Engineering's consultants and their employees from and against claims, damages, losses and expenses arising out of services performed for this project by other consultants of the Client.

- 21. NO WAIVER. No waiver by either party of any default by the other party in the performance of any particular section of this Agreement shall invalidate another section of this Agreement or operate as a waiver of any future default, whether like or different in character.
- 22. SEVERABILITY. The various terms, provisions and covenants herein contained shall be deemed to be separate and severable, and the invalidity or unenforceability of any of them shall not affect or impair the validity or enforceability of the remainder.
- 23. STATUTE OF LIMITATION. To the fullest extent permitted by law, parties agree that, except for claims for indemnification, the time period for bringing claims under this Agreement shall expire one year after Project Completion.
- DISPUTE RESOLUTION. If TERRA Engineering employs counsel for advice or other representation: (i) with respect to this Agreement, (ii) to represent TERRA Engineering in any litigation, contest, dispute, suit or proceeding (whether instituted by TERRA Engineering, Client or any other party) in any way or respect relating to this Agreement, or (iii) to enforce Client's obligations there under, then, in any of the foregoing events, all of the reasonable attorneys' fees arising from such services and all expenses, costs and charges in any way or respect arising in connection therewith or relating thereto shall be paid by Client to TERRA Engineering on demand.

