

Crescent Hills & Springwood Channel Improvements

Informational Meeting Project #P-10

February 26, 2013

Agenda

- Welcome & Introductions
- Storm Water Master Plan Overview
- Conceptual Overview of Improvement Project
- Examples of Channel Improvements
- Letter of Intent
- Schedule
- Update Resident Contact Information

Storm Water Master Plan Overview

- MS4 Stormwater Permit
- 2011 Storm Water Master Plan
 - 47-miles of Stream Assessment
 - 250 Basins
 - Hydrologic and Hydraulic Modeling
 - Flooding, Stream Stability & Habitat, Water Quality
 - Storm Water Code and Ordinance Review
 - Capital Improvement Projects
 - Over 100 projects at a cost of \$125,000,000

CIP Project Distribution

\$0 < 75 Projects < \$ 2 Million

(\$20 Million)

\$2 Million < 11 Projects < \$ 4 Million

(\$32 Million)

\$10 Million < 5 Projects < \$15 Million

(\$66 Million)

Funding

- 2008: City Voters authorized the City to issue up to \$ 40 million for Storm Water Bonds
- Aug 2012: Voters passed Proposition P
 - 0.4% Sales Tax Increase
 - Generate \$4.8 million annually for Parks & Storm Water
- Nov 2012: City sold first \$ 4 million in bonds
- Sales Tax started January 1, 2013

Current Project Status

- TEN project areas to begin design phase
 - Initial meetings with trustees and residents from 10 subdivisions already completed
 - Consultants selected and Design Contracts approved
 - 18 detention basin retrofits & 3 channel projects
- FOUR projects currently in design consultant selection phase
 - Currently meeting with trustees and residents
 - 4 detention basin retrofits & 4 channel projects

Partnership

SWMP outlines projects & conceptual improvements

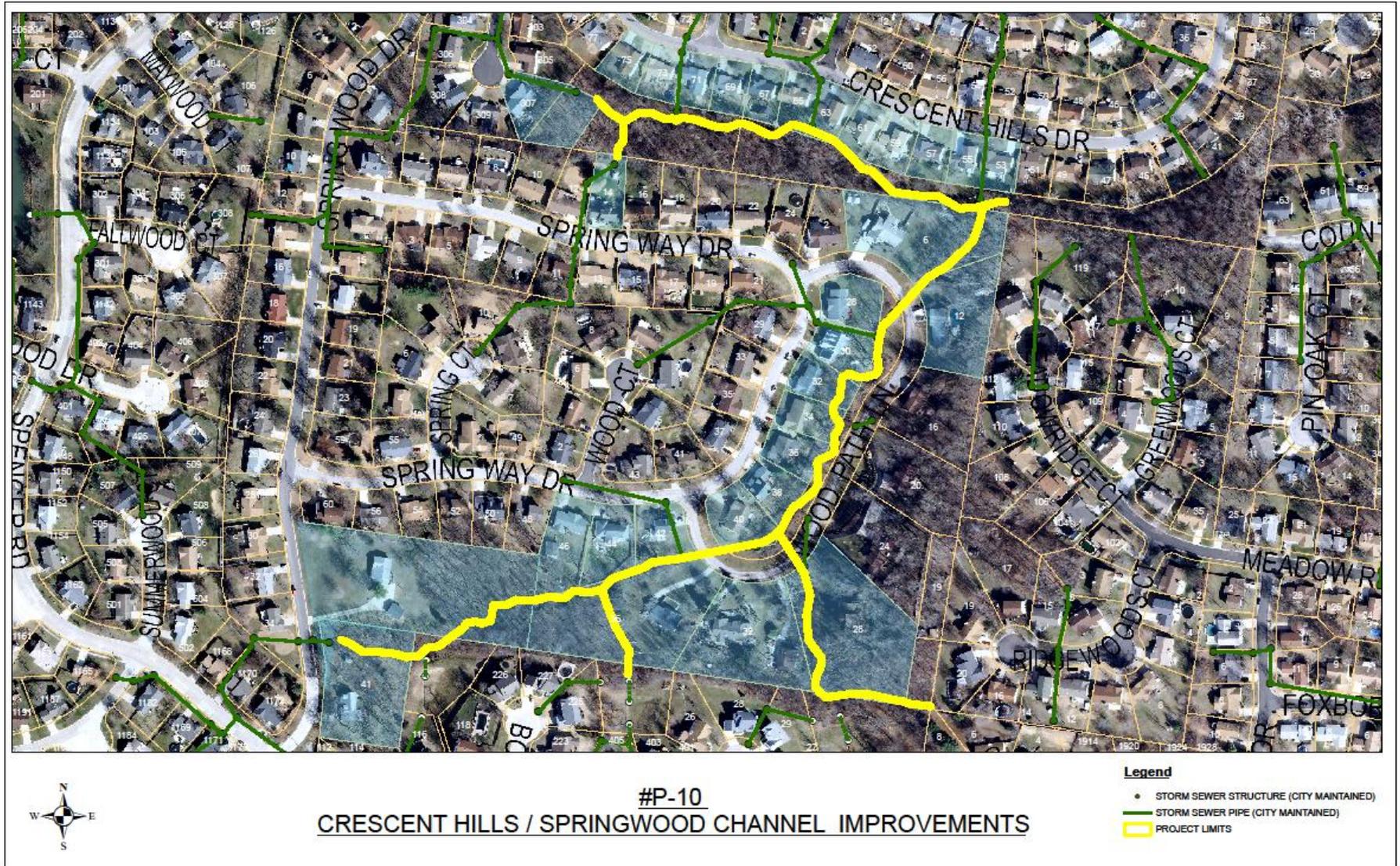
Prop P provides funding to design & construct

City cannot spend public \$ on private property

Property owner donates necessary easements

City can fund design, construction & maintenance

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Conceptual Project Overview

Overall Goals and Benefits

- Watershed based improvement
- Stabilize mass wasting, inlet erosion, eroding banks
- Vertical grade controls
- Provide diverse and productive ecosystem
- City will maintain improvements
- Relieves HOAs and property owners from financial burden

Conceptual Project Overview

- Stabilize channel bottom with grade controls
- Stabilize eroding banks at specific locations and reaches throughout the project limits
- Renovate or Improve the riparian corridor

Conceptual Channel Improvements

Upstream portion of channel (11 Whitewood to upstream project limit)

- Grade controls to stabilize bed
- Bank stabilization to stop active erosion
- Improve riparian corridor
- Remove invasive plants

Downstream portion of channel (11 Whitewood down to McClay basin)

- A more stable portion of channel, limited stabilization measures
- Better riparian corridor, create more diversity
- Attention to Sanitary sewer crossing

Example Channel Improvements



Example Channel Improvements



Fish Creek Ravine before (above) and after (below)



Example Channel Improvements



Pre-Construction (Looking Downstream)



Example Project, SC-4



Example Project, CD-1



Example Project, MC-1



Storm Water Improvement Project, McClay Village Reach (MC-1)



Bank erosion and mass wasting along incising reach in 2006.



Installation of turf reinforcement mat along incised area. Photo taken 3/26/2007



Installation of erosion control blanket & shrubs in former incised area. Photo taken 4/12/07.



Erosion control plantings are visible while native plantings are emerging. Photo taken 5/21/2007.



Additional growth of plantings along banks in former incised area. Photo taken 6/7/2007.

These photographs were taken of upstream and downstream segments of the project during various stages of construction and presented as a brief chronology of the project.



Placement of angular rock on banks, and mattress letdown. Photo taken 1/10/2007



Area of angular rock blanket and mattress letdown five months later. Photo taken 6/7/2007

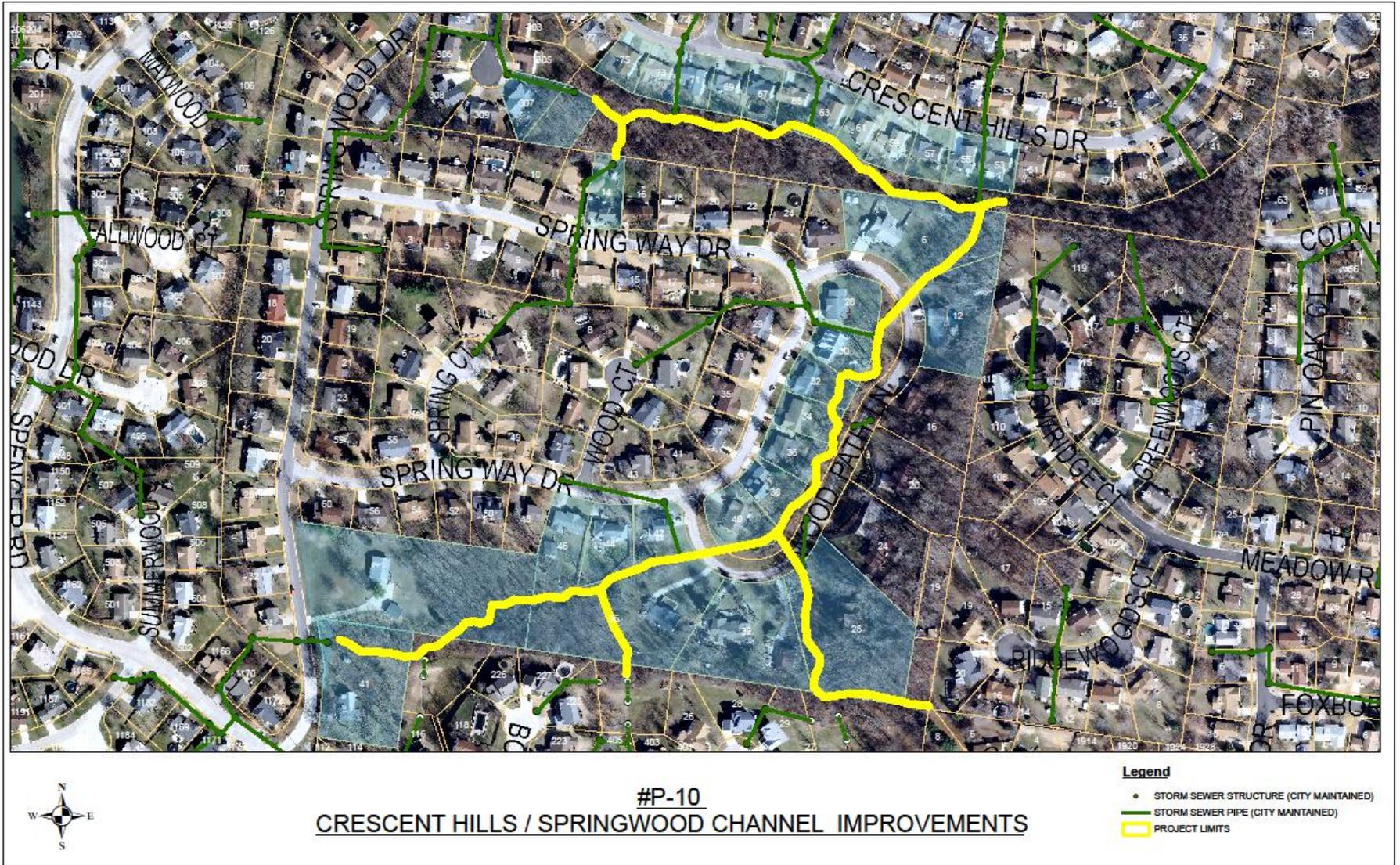


Another view of the angular rock blanket and trees planted at top of bank. Photo taken 6/7/07

Easements

- Much of the channel is on private property
- At this time, easement limits are conceptual
- Easements are necessary, and may include
 - Temporary Construction Easements
 - Permanent Drainage Easements
 - Permanent Access Easements

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Maintenance and Stewardship

- Property Owner will retain ownership of land
- City and Property Owner will define the easement areas for designed improvements.
- City will maintain channel improvements within easement
- Property Owner will retain maintenance of property outside of improvement and easement area



Letter of Intent (LOI)

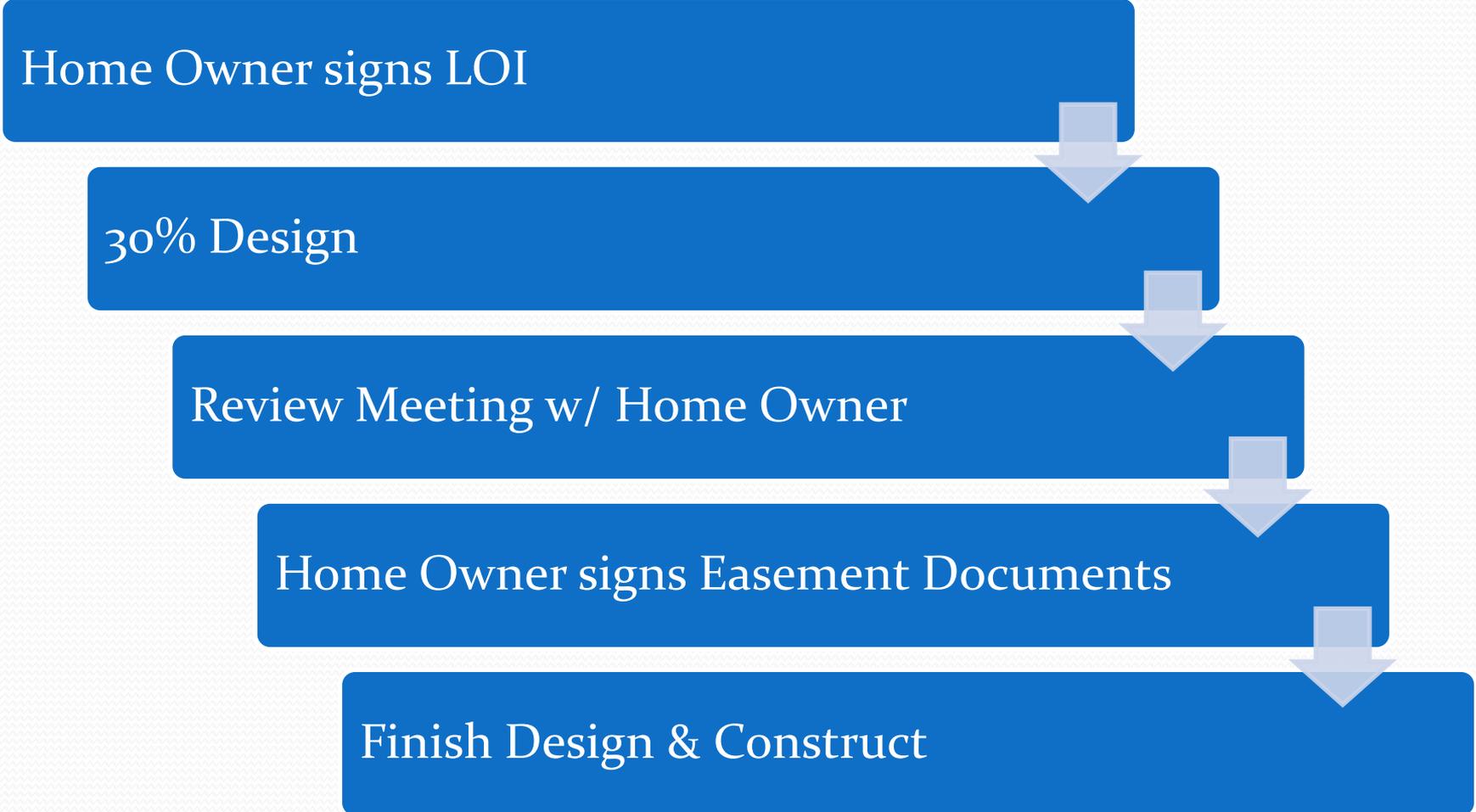
- Allows City to proceed to spend Public Funds for Design Services
- LOI states:
 - Acknowledge and agree to support the proposed channel improvement project
 - Intend to donate the necessary easements when more detailed information can be provided after a preliminary design has been completed
 - Understand if the project does not have support from all affected property owners, this project may not move forward and improvements may not be made along the entire project reach.

Signed Letter of Intent (LOI)

- Design contract can be awarded
- Project start-up meeting w/City, design team & property owners
- 30% preliminary plans designed & presented
- 30% design plans provide more detail and better easement limits
- After review of 30% design, easement documents can be prepared with certainty on final limits

Channel Improvements along Private Property – Flow Chart

Home Owner signs LOI



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graph TD; A[Home Owner signs LOI] --> B[30% Design]; B --> C[Review Meeting w/ Home Owner]; C --> D[Home Owner signs Easement Documents]; D --> E[Finish Design & Construct];
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30% Design

Review Meeting w/ Home Owner

Home Owner signs Easement Documents

Finish Design & Construct

Schedule

- February: Reviewing Design Firms' Qualifications
- **March 11 :** **Property Owners submit signed LOI to City**
- March: City Negotiates Design Contracts
- March 28: Submit contracts for BOA approval
- **April:** **Project start-up meeting**
- Apr-Sept: Design
- **May-June:** **30% Design Presentation & Discussion**
- Jul-Sept: Easement Acquisition
- Nov: Bid Construction
- Jan 2014: Submit Construction Bids for BOA Approval
- Spring 2014: Start Construction