

**AGENDA FOR THE
ENGLEWOOD CITY COUNCIL
STUDY SESSION
MONDAY, AUGUST 12, 2013**

- I. **Executive Session**
At 6:00 p.m. in the City Council Conference Room, City Council will discuss a real estate issue (McLellan Property) pursuant to C.R.S. 24-6-402-4(a).
- II. **Parks Dedication Citizen Initiative**
At 6:30 p.m. in the Community Room, City Attorney Dan Brotzman and City Clerk Lou Ellis will discuss the citizen initiative relating to parks dedication.
- III. **Wastewater Treatment Plant Disinfection System**
Utilities Director Stu Fonda and Wastewater Treatment Plant Director Dennis Stowe will discuss the WWTP Disinfection System.
- IV. **South Platte River Update**
Parks and Recreation Director Jerrell Black will provide an update for the South Platte Working Group.
- V. **City Manager's Choice.**
 - A. Confirm 2014 Budget Workshop Date - September 23rd.
- VI. **City Attorney's Choice.**
- VII. **Council Member's Choice.**

A QUESTION FOR THE NOVEMBER 5, 2013 BALLOT. B&C

B&C
DEDICATE

Shall The Englewood Municipal Code of the City of Englewood, Colorado be amended to include official designation of Park property within the City of Englewood in order to protect the people of Englewood and their right to vote on the sale of Park property by: designating as "Park" any property identified on 2006 Englewood Parks and Recreation Master Plan as a Park including but not limited to: Baker, Barde, Bates-Logan, Bellview, Centennial, Clarkson, Cushing, Depot, Duncan, Emerson, Hosanna, Jason, Miller Fields, Romans and Rotolo?

Beverly Cummins
3048 South Acoma Street
Englewood, Colorado 80110
303 789-1415

Signature: _____ 7/8/13

Elaine Hults
3333 South Lincoln St #706
Englewood, Colorado 80113
303 781-0198

Signature: _____ 7/9/13

RECEIVED
CITY OF ENGLEWOOD, CO
JUL 9 2013
OFFICE OF
THE CITY CLERK

Englewood Home Rule Charter.

45: Initiative.

Any proposed ordinance may be submitted to the Council by a petition signed by registered electors of the City equal in number to the percentage herein required.

(Amended 11-5-1991)

46: Submissions.

If the petition accompanying the proposed ordinance is signed by registered electors equal in number to ten percent (10%) of the preceding gubernatorial vote in the City, with a request for a special election, the Council shall either pass said ordinance without alterations within thirty days after the petition is filed, subject to the referendum, or call a special municipal election, unless a general municipal election, special municipal election or general state election is to occur within ninety days thereafter. At such general municipal election, special municipal election or general state election the Council shall submit said ordinance to a vote of the electors of the City. If the petition is signed by registered electors equal in number to at least five percent (5%) of the preceding gubernatorial vote in the City, and is filed with the City Clerk at least ninety (90) days before a general municipal or general state election, the Council shall pass said proposed ordinance without alterations within thirty (30) days, or shall submit same to a vote of the electors at the next general municipal election or general state election. If the petition is not filed with the City Clerk at least ninety (90) days before the next general municipal election or general state election, it shall be null and void.

An initiated ordinance shall be published in the same manner as other ordinances. The ballot upon which such proposed ordinance is submitted shall comply with the requirements set forth in Section 14 of this Charter. If a majority of the electors voting thereon shall vote in favor thereof, the same shall thereupon, without further publication, become an ordinance of the City immediately. Any number of proposed ordinances may be submitted at the same election. The number of special elections shall be limited as provided in Section 14 of this Charter.

(Amended 11-2-1965; 11-5-1991; 11-3-1998; 11-6-2001)

47: Referendum.

The referendum shall apply to all ordinances passed by Council, except ordinances making the tax levy, the annual appropriation ordinance, or the ordering of

improvements initiated by petition and to be paid for in whole or part by special assessments.

If at any time within thirty (30) days after the final passage of an ordinance to which the referendum is applicable a petition signed by registered electors equal in number to at least ten percent (10%) of the preceding gubernatorial vote in the City, is presented to the Council protesting any ordinance going into effect, it shall reconsider such ordinance. If the ordinance is not entirely repealed, Council shall submit it to a vote of the electors of the City as provided in the Initiative and Section 14 of this Charter, at the next general municipal election, special municipal election or general state election. Such ordinance shall then go into effect without further publication if a majority of the electors voting thereon vote in favor of it. The Council, on its own motion, shall have the power to submit any proposed ordinance to a vote of the electors at a general municipal election, special municipal election or general state election as provided and limited in this Charter. No provision of this Charter shall be construed as limiting the right of Council to refer to any ordinance subject to referendum. If provisions of two or more proposed ordinances adopted or approved at the same election conflict, the ordinance receiving the highest affirmative vote shall become effective.

(Amended 11-2-1965; 11-5-1991; 11-6-2001)

48: Amendments.

An ordinance adopted or rejected by electoral vote under either the initiative or referendum, cannot be revised, repealed, or amended except by electoral vote; but the Council shall have the power to submit a proposition without a petition therefor, subject to the limitations set forth in Section 14 of this Charter.

Englewood Municipal Code.

1-8-8: Protests of Proposed Ballot Titles and/or Submission Clause for Initiative, Referenda and Referred Measures.

Any City of Englewood registered elector desiring to protest a proposed ballot title and/or submission clause for any initiated or referred measure may file a written protest in the office of the City Clerk. Said notice of protest shall be filed no later than 5:00 p.m. on the Friday immediately preceding the date upon which the City Council will consider the ordinance, on final reading, setting the ballot title and/or submission clause. The notice of protest shall set forth with particularity the grounds of the

protest. Such protest shall be heard, considered, and resolved by the City Council prior to the adoption of said ordinance.

Denver looks to redesignate hundreds of acres into city park land

By Jeremy P. Meyer *The Denver Post* *The Denver Post*

Posted:

DenverPost.com

In the next two years, Denver will redesignate hundreds of acres of land it owns into official park land under the city charter — a move that means the land cannot be transferred or sold without a majority vote of the people.

The move began earlier this year as the city was looking at swapping 11 acres of open space in southeast Denver to Denver Public Schools in exchange for a downtown building the district owns.

Some neighbors and park lovers sued the city on grounds that the area near Hentzell Park was perceived to be a park even though it wasn't officially a park by city law.

A Denver District Court judge ruled for the city, which will go ahead with the swap. The group was trying to get signatures to put the matter on the November ballot.

Meanwhile, Denver Parks and Recreation wants to make sure it isn't caught in the same type of struggle again. An inventory of the city's overall acreage found 31 percent of the nearly 6,000 acres managed by Denver Parks and Recreation wasn't officially designated as a park.

So, the slow process is underway to redesignate most of that land that is now labeled as open space, parkways, medians, trails, regional parks, natural areas, etc. Some of the largest parks in the city — park land that was brought onto the system after 1956 — weren't officially recognized as city parks, such as Ruby Hill, Stapleton's Central Park and Bear Creek Park.

Last spring, the City Council redesignated 178.5 acres into city parks, including several parks in Green Valley Ranch, the 81.9-acre Ruby Hill and a 15.9-acre addition adjacent to Hentzell Park.

Now, Denver's City Council will be looking at the second phase — changing the designation of 317 acres, including the 79-acre Bear Creek Park, 78.9-acre Central Park in Stapleton and a 40.3-acre Greenway Park, also in Stapleton.

Next spring, another 121.5 acres will be redesignated, including the 56-acre Lakewood/Dry Gulch Park, the 32.5-acre Hampden Heights Park and the 5.1-acre City of Ulaanbaatar Park.

The plan is to have about 90 percent by the end of 2015, Deputy Parks Manager Scott Gilmore said.

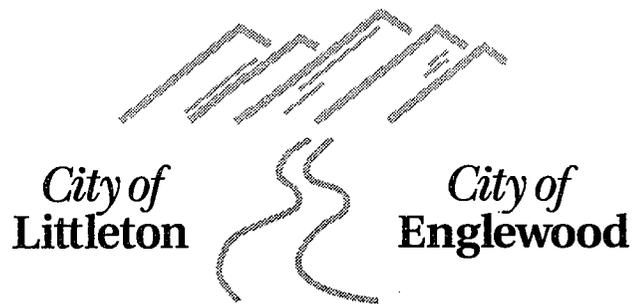
"About 10 percent cannot be designated because of right-of-way issues or utility corridor issues," Gilmore said. "But we are trying to designate as much as possible."

Jeremy P. Meyer: 303-954-1367,

twitter.com/jpmeyerdpost

**LITTLETON/ENGLEWOOD
WASTEWATER TREATMENT PLANT**

2900 S. Platte River Drive
Englewood, Colorado 80110
(303) 762-2600
FAX 762-2620



MEMORANDUM

TO: Mayor Penn
Members of City Council

THROUGH: Gary Sears, City Manager
Stu Fonda, Utilities Director

FROM: Dennis W. Stowe, L/E WWTP Manager

DATE: August 7, 2013

SUBJECT: Littleton/Englewood WWTP Disinfection System

Background

The current disinfection system at the wastewater plant is a liquid chemical system using sodium hypochlorite (a strong bleach solution) to provide chlorine to disinfect the treated water and sodium bisulfate to remove the chlorine before discharging the water to the South Platte River. The system is the subject of two recent engineering reports.

The first report, prepared by Brown & Caldwell, was intended to evaluate the current system, evaluate alternative disinfection systems and to make recommendations regarding the future of disinfection at the plant. The recommendation of this report was to replace the chemical system with a system using ultraviolet light for disinfection. A project was begun to convert the current disinfection system to ultraviolet light disinfection.

The second report, prepared by CH2MHill, was intended to determine if converting to ultraviolet light disinfection was required at that time. The report determined that the current chemical system is very complicated and that there is the potential (expressed in percent of the time) for exceeding permit limitations (ie, permit violations). The report did not make any recommendations regarding the acceptability of permit violations, only that they might occur. The report did suggest several improvements to the current system that would reduce the potential for permit violations.

As a result of the CH2MHill report, work on converting to ultraviolet light disinfection was stopped and the current disinfection system remains in operation.

Improvements to the existing system included in the CH2MHill report are:

1. Modifications to the ORP Control System
2. Modification to the Ammonia Bypass pumping system
3. Installation of a new Chlorine Contact Tank (CCT) Flowmeter
4. Modifications to the Denitrification (denite) Backwash Tank
5. Installation of a larger Centrate Tank to allow gradual return of centrate to the system.

Staff has reviewed the improvements and believes the following changes are appropriate:

See #3: Modify the Denitrification Clearwell to improve flowmeter performance (instead of replacing the flow meter).

See #4: Modify the control system at the Denitrification Backwash Tank (instead of modifying the tank itself).

See #5: Delay this improvement and re-assess after the other improvements have been operated for a period of time.

New: Modify the chemical feed and sampling system to improve reliability (not included in the CH2MHill report improvements).

A description of each modification included in this project is attached. Staff requested a proposal from Brown & Caldwell to perform the design of each of these modifications.

The engineering design is estimated to be \$145,795, with an estimated total project cost of \$1,290,000. Funds for the design are in the 2013 budget and the cost of implementation is included in the 2014 proposed budget.

Action Recommended

We have two reports on the disinfection system recommending changing the current system: one report recommending changing to ultraviolet light disinfection and one report recommending modifications to the existing system. Proceeding with the modifications to the existing system, as described in the attached project description, is an appropriate response to these two reports.

Staff presented the project and engineering design proposal to the Supervisory Committee at their July 18 meeting and the Committee approved the proposal.

We recommend proceeding with the engineering design portion of this project, which includes bidding on the final design of the project.

This project would be brought back to Council after bids are received and evaluated for approval at that time.

Attachment: Interim Disinfection Improvements (July 18, 2013)

Interim Disinfection Improvements

Littleton/Englewood WWTP Supervisory Committee

July 18, 2013

Purpose

The purpose of this project is to make improvements to the Littleton/Englewood (L/E) Wastewater Treatment Plant's (WWTP) disinfection system to increase the reliability of existing equipment. In addition, improvements recommended in the Technical Memorandum titled *Assessment of the Existing Disinfection System at the Littleton/Englewood Wastewater Treatment Plant*, dated August 1, 2011 will be addressed. These improvements include:

- Replacement of the ORP control system
- Reconfiguration and optimization of the ammonia bypass pumping system
- Reprogramming and improved monitoring of the denitrification filters to optimize backwash and speed-bump cycles
- Prevent algae growth in the denitrification filter clearwells to avoid impacting the chlorine contact tank (CCT) flowmeter
- Improve redundancy and reliability of chemical feed and effluent sampling systems

ORP Control System

The current ORP control system is nearing the end of its useful life and requires replacement. The manufacturer of the unit, Stranrol, was acquired by Siemens, which is no longer supporting the Stranrol product line. Replacement parts are becoming more difficult to find, significantly reducing the reliability of the system. This project will identify an alternative ORP control system for installation at the L/E WWTP.

Ammonia Bypass

The L/E WWTP relies on effluent ammonia to produce chloramines for disinfection. Effluent ammonia from the WWTP is too low to reliably produce chloramines, so secondary effluent is bypassed around the tertiary treatment processes to maintain an effluent ammonia concentration of 1.5 to 2.0 mg/L. During summer months, secondary effluent ammonia is reduced due to unplanned nitrification in the secondary process. This limits the capacity of the existing ammonia bypass system. This project will explore both process and mechanical alternatives to address this issue.

Denite Filters - Monitoring and Control

Currently, when a filter enters backwash mode, effluent flow fluctuates by as much as 10 mgd. This sudden change in flow requires the chemical feed system to respond quickly. Lags in the system increase the risk of violation. This project will improve the monitoring and control of the denite filters to minimize the impact of backwash and speed bumps on the system by installing additional instrumentation and modifying the existing SCADA programming.

CCT Flowmeter

The CCT Flowmeter is a propeller-style meter. Algae in the effluent has been observed to accumulate on the meter, impacting control of the chemical feed system. The flowmeter is integral to the disinfection control system, and elimination of algae buildup is critical to maintaining reliability in the system. The source of the algae appears to be the denitrification filter clearwell. This project will construct a shade structure, and coat the interior of the clearwell to prevent algae growth and accumulation.

Chemical Feed and Sampling

The sodium hypochlorite piping is prone to scaling. The piping is paralleled for the majority of its route from the chemical feed building to the injection point; however, there are short sections of this piping for which there is no redundancy. This project will reconfigure the piping to provide full redundancy in the sodium hypochlorite feed system, allowing one pipe to be cleaned while the other remains in service. In addition, the sampling system in the Sodium Bisulfite Building requires modification. The sampling hose is difficult to remove and replace, and the sampling pumps are submersible units, which require frequent maintenance. This project will explore alternatives for replacing the submersible sampling pumps with dry units, and reconfiguring the sampling conduit to allow for regular removal and replacement of the sampling hose.

MEMORANDUM



TO: Englewood City Council

THROUGH: City Manager Gary Sears

FROM: Jerrell Black, Director of Parks and Recreation ✓

DATE: August 8, 2013

RE: South Platte River Group Update

The South Platte River Group is a consortium of interested parties whose goal is to make improvements along the South Platte River from C 470 South to Bear Creek Trail/Platte River intersection on the North. The intent is to provide better accessibility to the river for recreational use. Some of the parties included in this group are the City of Englewood, the City of Sheridan, the City of Littleton, Arapahoe County, South Suburban Parks and Recreation District, the Colorado Water Conservation Board, Urban Drainage and Flood Control District, the Army Corps of Engineers and other interested parties.

In April 2012, Arapahoe County pledged up to \$5,000,000 in seed money to help leverage new dollars for river restoration, recreational opportunities and environmental enhancement of the South Platte River. Each entity that receives project support from this funding source will be required to provide a 50% match for their projects. Over the last eighteen months, Mayor Penn, City Manager Gary Sears and I have been representatives on behalf of the City of Englewood to this group effort.

The key focus area for the City of Englewood has been the area between Union Avenue and Oxford Avenue. We have titled this portion of the project as the "River Run Project". Key projects in the area include a passive walking/biking trail on the East side of the river, new kayak shoots in the river at Oxford Avenue, channelization of the river for faster water flow, screening of unsightly views along the river, improvements for fishing and recreation access and development of the area (North East Corner of Oxford Avenue and the Platte River) at Broken Tee Golf Course.

I will be at the City Council Study Session on Monday, August 12 to give City Council a brief update on the status of the South Platte Working Group's efforts.

Attached are a couple of conceptual drawings depicting visions of what the River Run Project could potential become.

TJB

Attachments (2)

South Platte Working Group_City Council Update_River Run Project_August 8_2013

Cc Gary Sears, City Manager
Michael Flaherty, Deputy City Manager
Dan Brotzman, City Attorney

UNION TO OXFORD SOUTH PLATTE RIVER IMPROVEMENTS

"THE UNION REACH"

IN-CHANNEL:

1. ACCOMMODATE MULTI-USES:

- FISHING
- TUBING/SWIMMING/RAFTING
- KAYAKING & PARK II PLAY WAVES

2. MAINTAIN FLOOD CONVEYANCE

3. ACCESS TO WATER

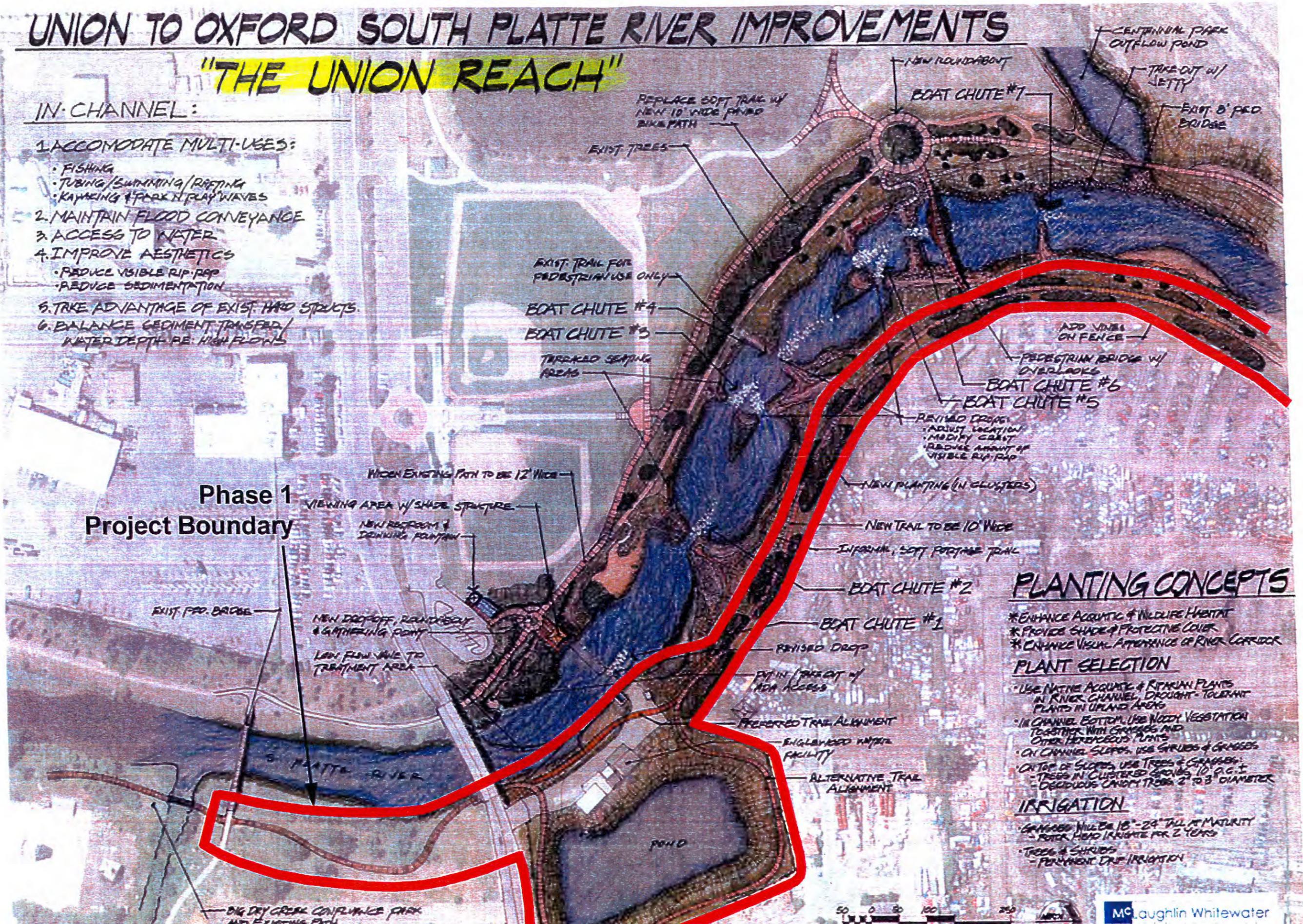
4. IMPROVE AESTHETICS

- REDUCE VISIBLE RIP-RAP
- REDUCE SEDIMENTATION

5. TAKE ADVANTAGE OF EXIST. HARD STRUCTS.

6. BALANCE SEDIMENT TRANSFER/ WATER DEPTH RE. HIGH FLOWS

Phase 1 Project Boundary



REPLACE SOFT TRAIL W/
NEW 10' WIDE PAVED
BIKE PATH

EXIST TREES

EXIST. TRAIL FOR
PEDESTRIAN USE ONLY

BOAT CHUTE #4

BOAT CHUTE #3

TERRACED SEATING
AREAS

WIDEN EXISTING PATH TO BE 12' WIDE

VIEWING AREA W/ SHADE STRUCTURE

NEW RESTROOM &
DRINKING FOUNTAIN

EXIST. PED. BRIDGE

NEW DROPOFF, ROUNDABOUT
& GATHERING POINT

LOW FLOW VALE TO
TREATMENT AREA

BIG DRY CREEK CONFLUENCE PARK
AND EXISTING PATH

NEW ROUNDABOUT

BOAT CHUTE #7

CENTENNIAL PARK
OUTFLOW POND

TAKE-OUT W/
JETTY

EXIST. 8' PED
BRIDGE

ADD VINYL
ON FENCE

PEDESTRIAN BRIDGE W/
OVERLOOKS

BOAT CHUTE #6

BOAT CHUTE #5

REVISED DROP
ADJUST LOCATION
MODIFY COAST
REDUCE AMOUNT OF
VISIBLE RIP-RAP

NEW PLANTING (IN CLUSTERS)

NEW TRAIL TO BE 10' WIDE

INFORMAL, SOFT FOOTING TRAIL

BOAT CHUTE #2

BOAT CHUTE #1

REVISED DROP

PAVING / PAVED W/
ADA ACCESS

PREFERRED TRAIL ALIGNMENT

ENLARGED WATER
FACILITY

ALTERNATIVE TRAIL
ALIGNMENT

PLANTING CONCEPTS

- * ENHANCE AQUATIC & WILDLIFE HABITAT
- * PROVIDE SHADE & PROTECTIVE COVER
- * CHANGE VISUAL APPEARANCE OF RIVER CORRIDOR

PLANT SELECTION

- * USE NATIVE AQUATIC & RIPARIAN PLANTS IN RIVER CHANNEL, DROUGHT-TOLERANT PLANTS IN UPLAND AREAS
- * IN CHANNEL BOTTOM, USE WOODY VEGETATION TOGETHER WITH GRASSES AND OTHER HERBACEOUS PLANTS
- * ON CHANNEL SLOPES, USE SHRUBS & GRASSES
- * ON TOP OF SLOPES, USE TREES & GRASSES
 - TREES IN CLUSTERS, GROWS 10' P.C.±
 - DECIDUOUS CANOPY TREES 2" TO 3" DIAMETER

IRRIGATION

- * GRASSES WILL BE 18"-24" TALL AT MATURITY
- * ROTOR HEAD IRRIGATION FOR 2 YEARS
- * TREES & SHRUBS
- PERMANENT DRIP IRRIGATION



UNION TO OXFORD SOUTH PLATTE RIVER REHABILITATION & RECREATION IMPROVEMENTS "THE OXFORD REACH"

DESIGN CONCEPTS

- MULTI-USE IN-RIVER RECREATION
- ACCESS TO & ALONG WATER EDGE
- COMPLETE EAST BANK TRAIL CONNECTIVITY
- STEEPEN, NARROW & MEANDER CHANNEL
- INTRODUCE RIPARIAN VEGETATION
- ENHANCE FISH & WILDLIFE HABITAT

FISHING, FLOATING & WHITEWATER

LOW TO MEDIUM ACTIVITY

Phase 1
Project Boundary

WEST OXFORD AVE

WHITEWATER PARK
HIGH ACTIVITY

- WHITEWATER FEATURES:
- HIGH PERFORMANCE VENUE
 - "PARK & PLAY" WAVES
 - FISH PASSAGE

- EXPANDED PARKING
- TERRACED VIEWING AREA
- TERRACED PATH
- PLAZA
- VIEWING KNOLL
- COUNTERWEIR
- GOLF COURSE BRIDGE
- VIEWING KNOLL
- PAVED ADA ACCESS IN VIEWING AREA
- PLAZA

FUTURE ENGLEWOOD RIVERFRONT PARK

