

MEP Final Acceptance: Site Stability and Revegetation

Mike Sarmento, Senior Construction Manager
msarmento@udfcd.org



UDFCD Organization

Floodplain Management

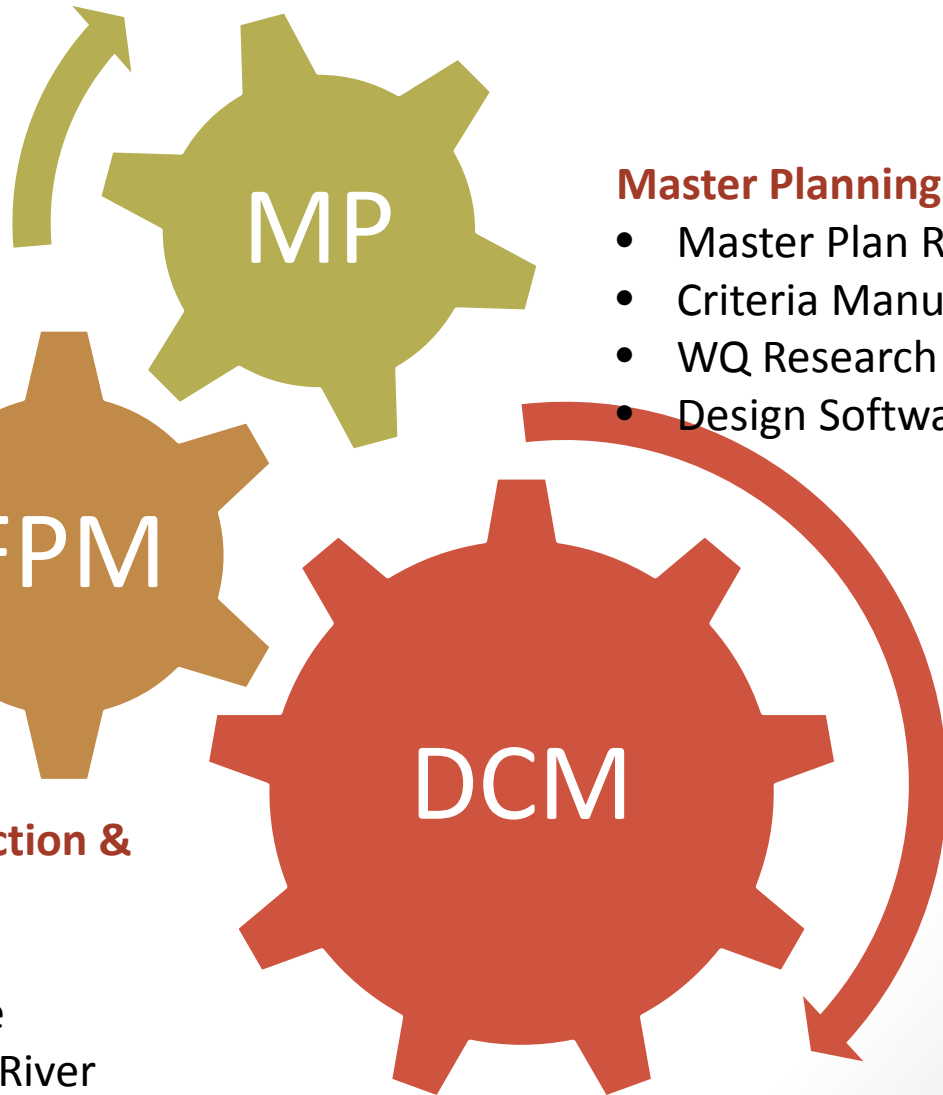
- FHAD Studies
- LOMC Coordination
- **MEP** ←
- CRS Assistance

Master Planning

- Master Plan Reports
- Criteria Manual
- WQ Research
- Design Software

Design Construction & Maintenance

- CIP
- Maintenance
- South Platte River

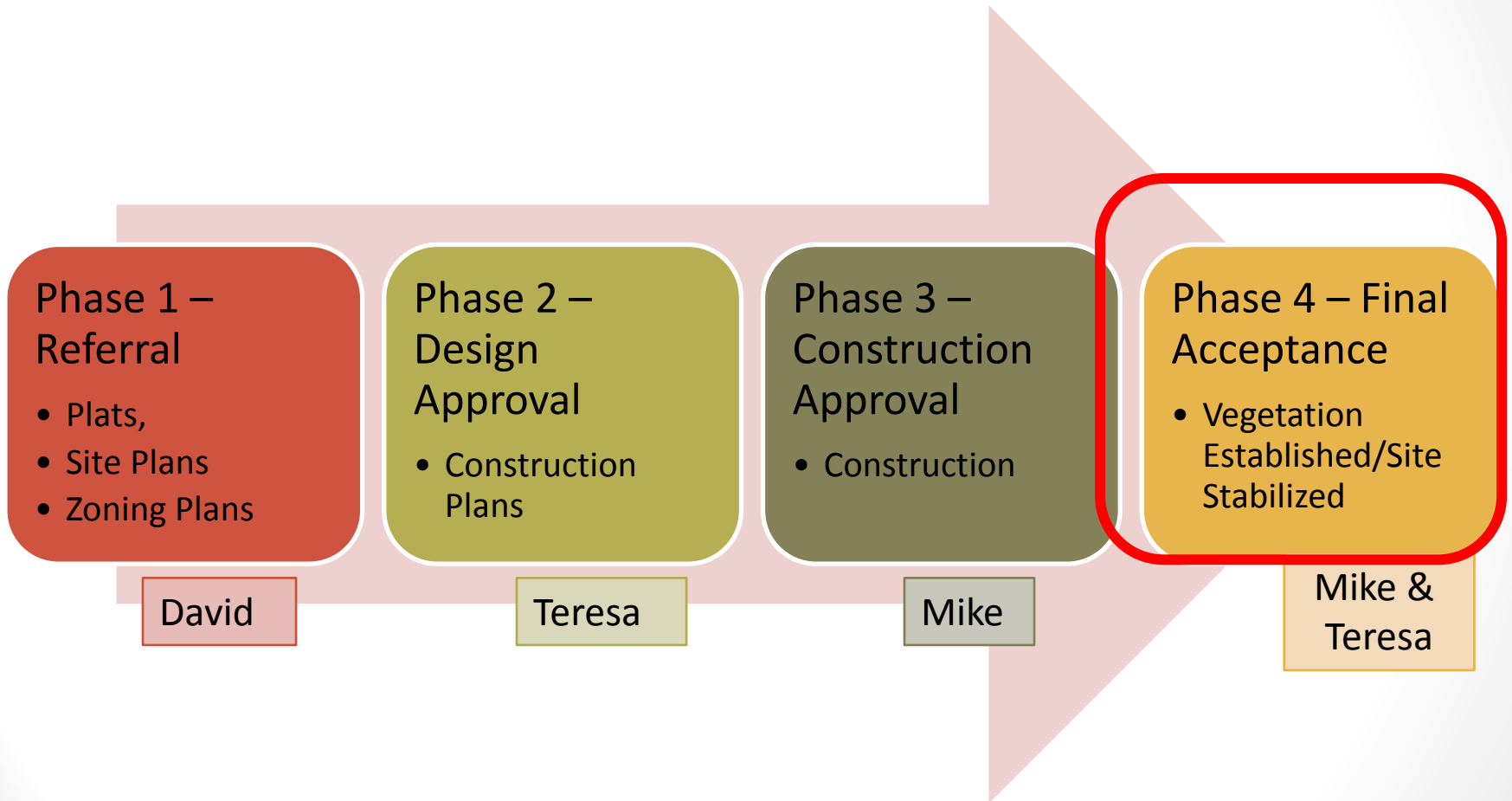


Maintenance Eligibility Policy

*“Facilities constructed by or approved for construction by a **local public body** after March 1, 1980, must be approved by the District in order for these facilities to be eligible for District maintenance assistance.”*

MEP specifically deals with developer and local government projects and should NOT be confused with DCM-constructed projects which are automatically MEP eligible.

MEP Phases



Construction Approval Letter

<p style="text-align: center;">MEMORANDUM</p> <p>TO: Dan Sillwell Metro Wastewater Reclamation District</p> <p>FROM: David Malloy Manager, Floodplain Management Program</p> <p>SUBJECT: Acceptance of Construction of Project for Maintenance Eligibility</p> <p>DATE: December 10, 2014</p> <p>The construction of two groined boulder drop structures and bank stabilization at Sand Creek Bank Substation at RW HTF (Metro Wastewater) is accepted for District maintenance assistance. This acceptance is based upon visual inspection of those elements of the project which are visible to the naked eye, and should not be construed as a certification of the structural integrity of any element of the project. A final determination of maintenance eligibility will be made upon establishment of an adequate vegetative cover. It is your responsibility to advise the District in writing when you feel an adequate cover exists, and we will then arrange to inspect it with you or a representative.</p> <p>The following conditions apply:</p> <ul style="list-style-type: none">• The project qualifies for Routine Maintenance for the entire length of the project (from the confluence with the South Flats Farrow up to the FROCO property line approximately 20 feet downstream of the irrigation canal structure).• The project qualifies for Restorative Maintenance, excluding the upstream section between the irrigation canal and first drop structure.• Final Acceptance of the project is dependent on installation of the future grade control improvements planned downstream of this project and once adequate vegetative cover has been established. Plans for future grade control improvements must also be reviewed and obtained Design Approval, Construction Approval, and Final Acceptance. <p style="text-align: left;"><small>Dr-Form 1 (8/14)</small></p>	<p>It is your responsibility to obtain approvals from UDFCD in writing for the future grade control improvements planned downstream and to obtain approval of the vegetative cover.</p> <p>David Malloy, P.E. Manager, Floodplain Management Program</p> <p>UD ID 9137 DLM/gh Enclosure (completion report) cc: David Denzels, UDFCD</p> <p style="text-align: left;"><small>Dr-Form 1 (8/14)</small></p>
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SPECIAL NOTE: Construction Acceptance does NOT mean you've achieved Final Acceptance for MEP!

Structural Integrity: What are We Looking for?

- Stream improvements and adjacent disturbed areas!
- Structural integrity
 - Damage
 - Overall Stability
- Maintenance
 - Sediment removal



Keys to Success for Site Stability

- MONITOR the site
- Set an inspection schedule
- Types of Problems: design/construction, unanticipated disturbances
- Communicate issues
- Site Remediation prior to acceptance

Final Stabilization Examples

The Good



The Bad



Keys to Success for Revegetation

- Pre-construction site survey
- Formal restoration plan
- Avoid canned/"cookbook" seed mixes
- Monitor construction progress
- Review final grades before equipment demobilized
- Use a QUALIFIED revegetation contractor

Keys to Success for Reveg (Cont.)

- Monitor the Reveg installation
- Post-revegetation monitoring
- Replace dead/severely stressed trees PRIOR to the warranty inspection
- Replace mulch and/or repair blankets
- UNDERSTAND that it takes time!

Other Examples

- Bear Creek upstream of Lowell Blvd



- Goldsmith Gulch at Cook park



A Word on Weed Management

- #1 - Disturbance promotes weed growth!
- Plan Ahead!
- Weeds are the competition!
- Bare areas are anchor opportunities
- Constant vigilance pays off!

Weeds Won't Work !



Final Acceptance Issues

- Requesting final acceptance before site is ready:
 - Vegetation too sparse
 - Bank erosion and/or channel erosion/sedimentation
 - Dead/dying trees and shrubs
- Sediment accumulation in WQ structures

Final Acceptance! Now what?

- Eligible for maintenance assistance from UDFCD
- Local Government MUST request and submit a maintenance request to UDFCD's DCM program.
- Acceptance based on:
 - Local Government prioritization
 - DCM Program funding

What's Our Goal: The Final Acceptance Letter

MEMORANDUM

TO: Steve Krawczyk, Jefferson County
FROM: David Mallory, Manager, Floodplain Management Program
SUBJECT: Certification of Maintenance Eligibility
DATE: July 9, 2014

The construction of two storm sewer outfalls to Van Bibber Creek at Wild Horse Ranch Filing 2 in Section 10, T3S, R70W, Jefferson County, Colorado is eligible for District maintenance assistance. This approval is based upon visual inspection of those elements of the project which are visible to the naked eye, and should not be construed as a certification of the structural integrity of any element of the project.

David Mallory, P.E.
Manager, Floodplain Management Program

UD ID 3595
DLM/mc
cc: David Bennetts, UDFCD

