



NEW APWA STORMWATER MANUAL

MARC

MID-AMERICA REGIONAL COUNCIL





**THE NEW MANUAL
MOVES OUR REGION TO A MODERN
METHOD OF MANAGING
STORMWATER.**



WHY DOES THIS MATTER?



Saves money



Supports development

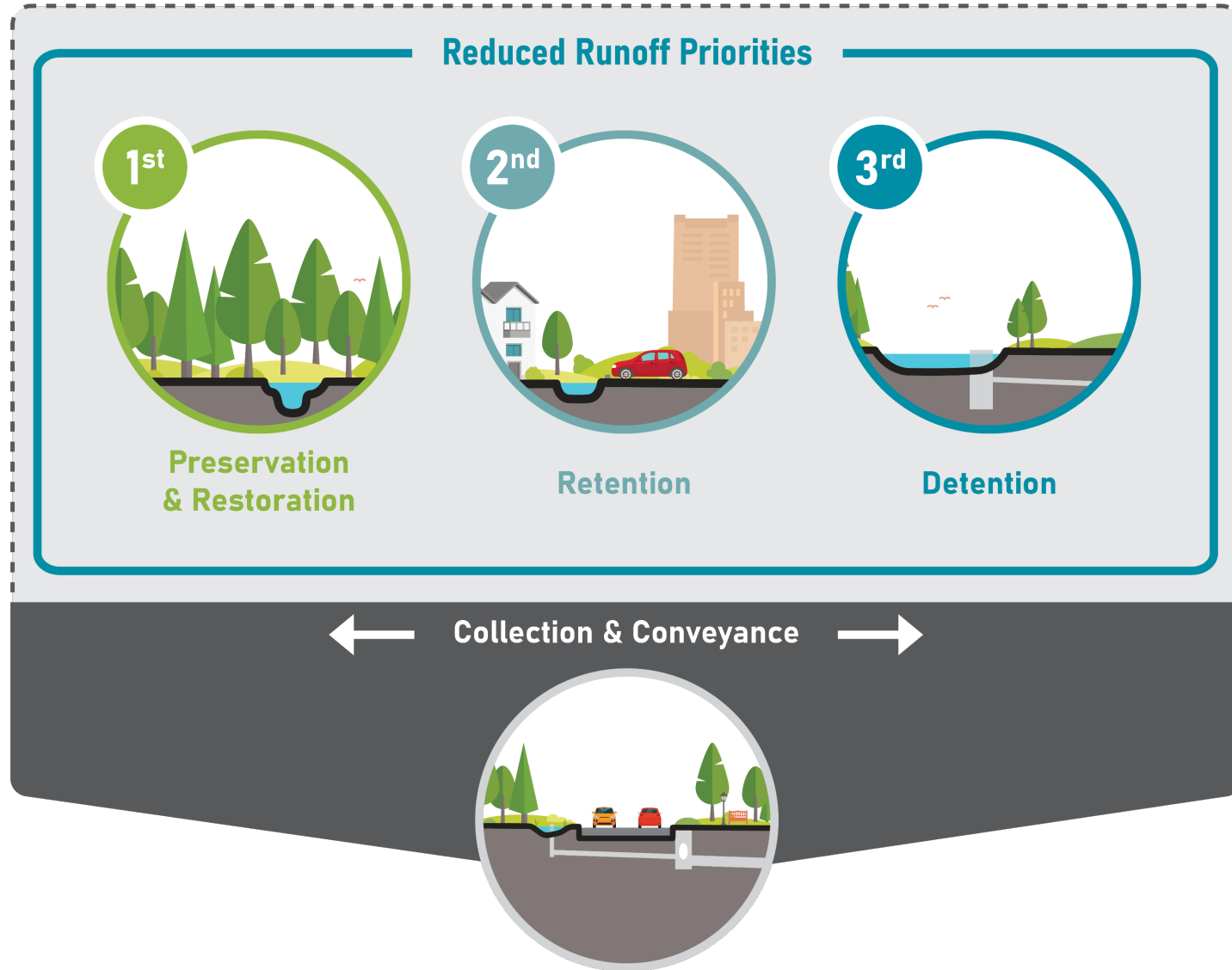


Improves efficiency



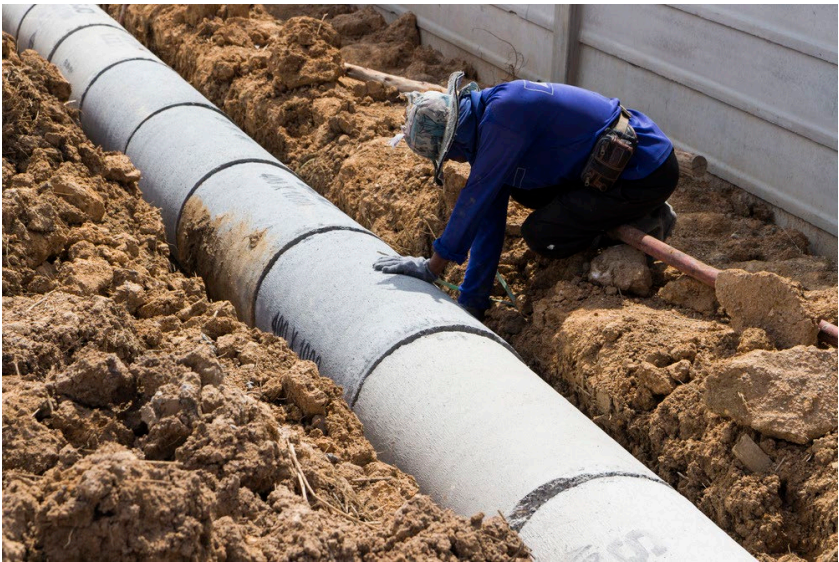
Reduces flood damage

A LAYERED APPROACH





AVOID COSTLY UPSIZING





PROMOTE MULTIPLE BENEFITS





NEW STANDARDS RESULT IN
LONGEVITY AND EFFICIENCY

REGULATORY REQUIREMENTS

- + New manual will help meet increasing regulatory requirements
- + Help maintain compliance with state/federal requirements
- + Avoid future penalties





OPTIMIZE THE SYSTEM

- + Better management of rain on-site instead of piping it away:
 - › Reduces upsizing requirements
 - › Extends life of existing infrastructure





NEW MANUAL WILL BE EASIER FOR
EVERYONE TO USE



NEW MANUAL



Better organized



More concise

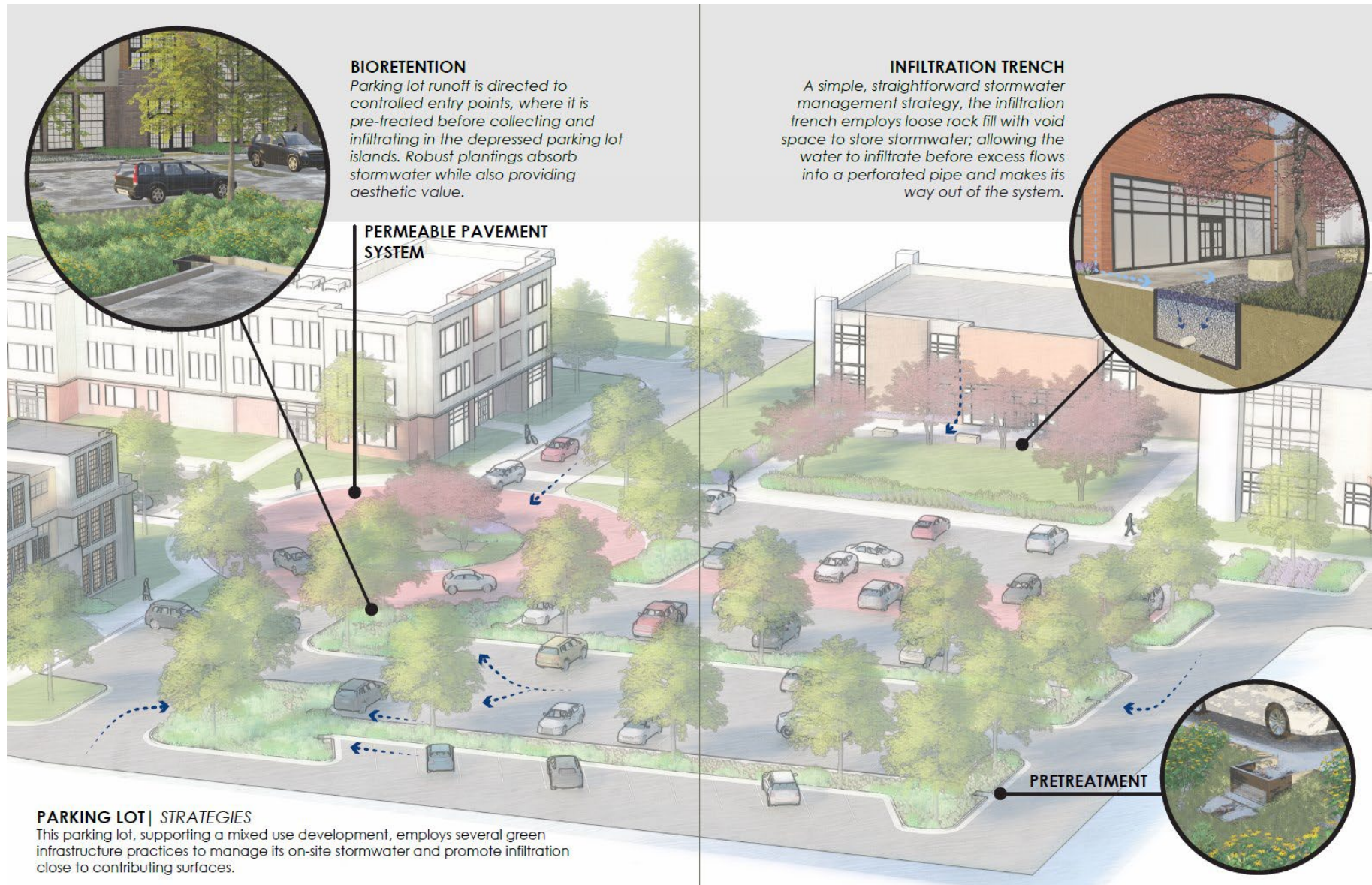


Easier to understand



More graphics and examples

BETTER GUIDANCE FOR DEVELOPMENT



BIORETENTION
Parking lot runoff is directed to controlled entry points, where it is pre-treated before collecting and infiltrating in the depressed parking lot islands. Robust plantings absorb stormwater while also providing aesthetic value.

PERMEABLE PAVEMENT SYSTEM

INFILTRATION TRENCH
A simple, straightforward stormwater management strategy, the infiltration trench employs loose rock fill with void space to store stormwater; allowing the water to infiltrate before excess flows into a perforated pipe and makes its way out of the system.



PARKING LOT | STRATEGIES
This parking lot, supporting a mixed use development, employs several green infrastructure practices to manage its on-site stormwater and promote infiltration close to contributing surfaces.



MORE RESILIENT DEVELOPMENT



CREATE HIGHLY FUNCTIONAL INFRASTRUCTURE





REDUCE STREAM EROSION & FLOODING IMPACTS





BE INVOLVED IN THIS PROJECT



MANAGEMENT STAKEHOLDERS

Blue Springs

Bonner Springs

De Soto

Excelsior Springs

Fairway

Gardner

Gladstone

Grandview

Independence

Johnson County

Kansas City

Leawood

Lenexa

Liberty

Merriam

Miami County

Mission Hills

Mission

North Kansas City

Olathe

Osawatomie

Overland Park

Parkville

Prairie Village

Riverside

Roeland Park

Shawnee

Spring Hill

Unified Government of Wyandotte County

Westwood Hills

Westwood

OTHER PARTICIPATING PARTNERS

Affinis
AGC Engineers, Inc
Armourdale Renewal Association
Benesch
BHC Rhodes
Black & Veatch
Bridging the Gap
Burns & McDonnell
CDM Smith
Center for Watershed Protection
CFS Engineers, PA
Confluence
Continental Consulting Engineers
DCB Development / DCB Homes
Deep Roots
ERM
GaleHart Communities
Garver
GBA
Geosyntec
Grandview-Blue Springs
Groundwork NRG
HDR
Heartland Conservation Alliance

Hg Consult
HNTB
Hunt Midwest
Kansas University
KC HBA
KCCLT
KCMO Water Department
KDHE
Kimley-Horn
Lake Quivira
Lamp Rynearson
Lee's Summit, MO
Lenexa, KS
Little Blue River Watershed Alliance
Luebbert Engineering
MARC
McClure
Missouri Department of Conservation
Missouri Master Naturalist
MKEC Engineering, Inc.
Multistudio
NEER
Northpoint Development
Olsson

OWN, Inc
PEC
Phelps Engineering
Platte County, MO
Prairie Gateway Chapter of ASLA
Prairie Village, KS
Renaissance Infrastructure Consulting
Rooted and Reaching
Schlagel & Associates
SE3, LLC
The Nature Conservancy
Uhl Engineering
UMKC Center for Neighborhoods
University of Missouri - Kansas City
Vireo
VSM Engineering
Walter P Moore
Water Resources Solution, LLC
Westport Regional Business League
Westside Housing Organization
WSP USA
WYCO Conservation District
WYCO EDC



HOW YOU CAN STAY INVOLVED

- + Share the project factsheet
- + Questions or comments:
 - › Tom Jacobs, MARC – tjacobs@marc.org
 - › [Insert your name/contact info]





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AMERICAN PUBLIC WORKS ASSOCIATION
APWA
Kansas City Metro Chapter