

## Development Advisory Forum Meeting Agenda 6/27/2023

236531





### **Agenda**

I. Introduction – 7:30am

a. Update From Development Services Department Director

II. Permit And Land-Use Entitlement Activity Levels – 7:45am

- a. Planning Applications
- b. Building Permit Applications

c. Questions and Discussion For Activity Levels

- III. Planning And Land Use Policy Updates 8:00am
  - a. 2050 General Plan Process Update
  - b. Zoning Text Amendments

c. Questions And Discussion For Planning and Land Use

### **Agenda Continued**

IV. Environmental & Sustainability Department Updates – 8:30am

- a. Mesa Climate Action Plan Initiatives Update
- b. Water Conservation Update
- c. Trees Are Cool Initiative
- d. Mesa Receives SRP Sustainable Cities Program Platinum Designation
- e. Questions and Discussion For Environmental & Sustainability Department
- V. City Engineering Department Updates 9:00am
  - a. Updates To The Mesa Standard Details And Mesa Amendments To MAG

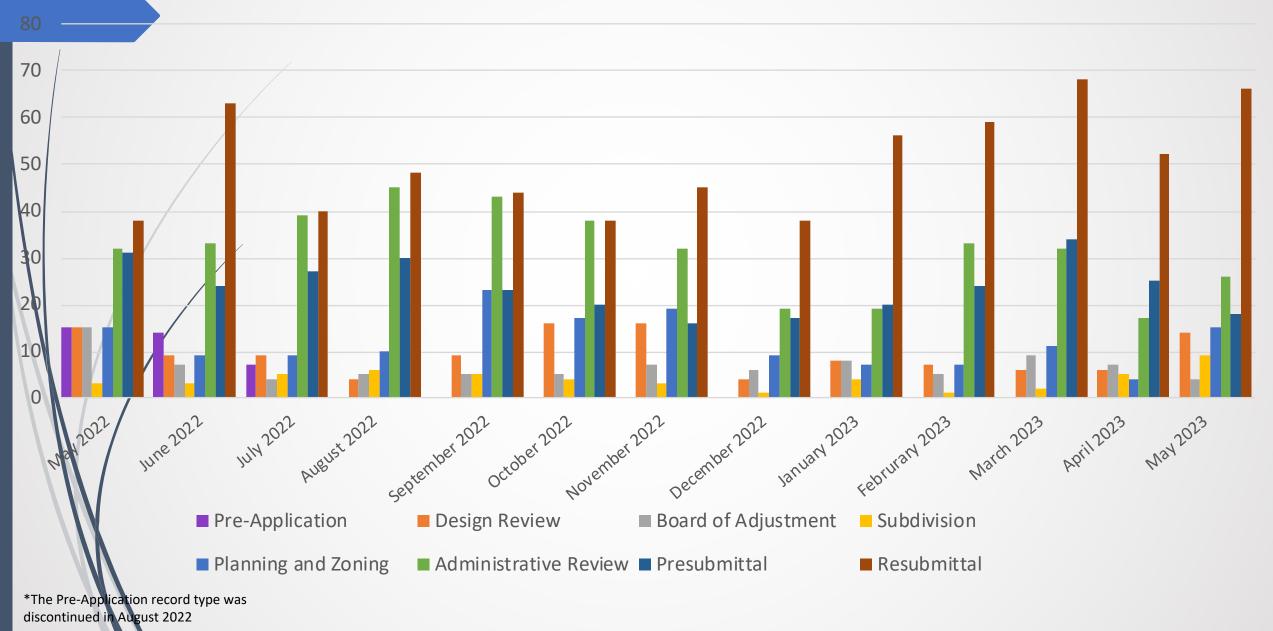
Specifications – Melody Zyburt, Engineering Department

b. Updates To The Engineering Design Manual – Julie Christoph, Engineering
 Department

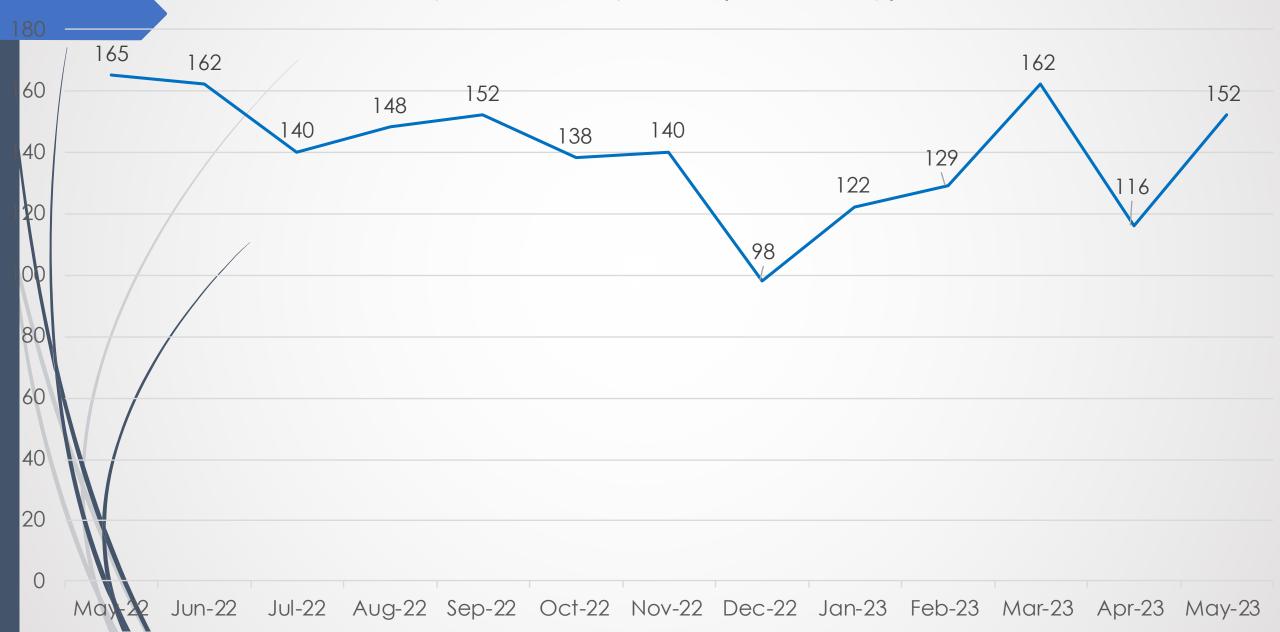
c. Questions and Discussion For City Engineering Department

#### VI. Adjourn at 9:30am

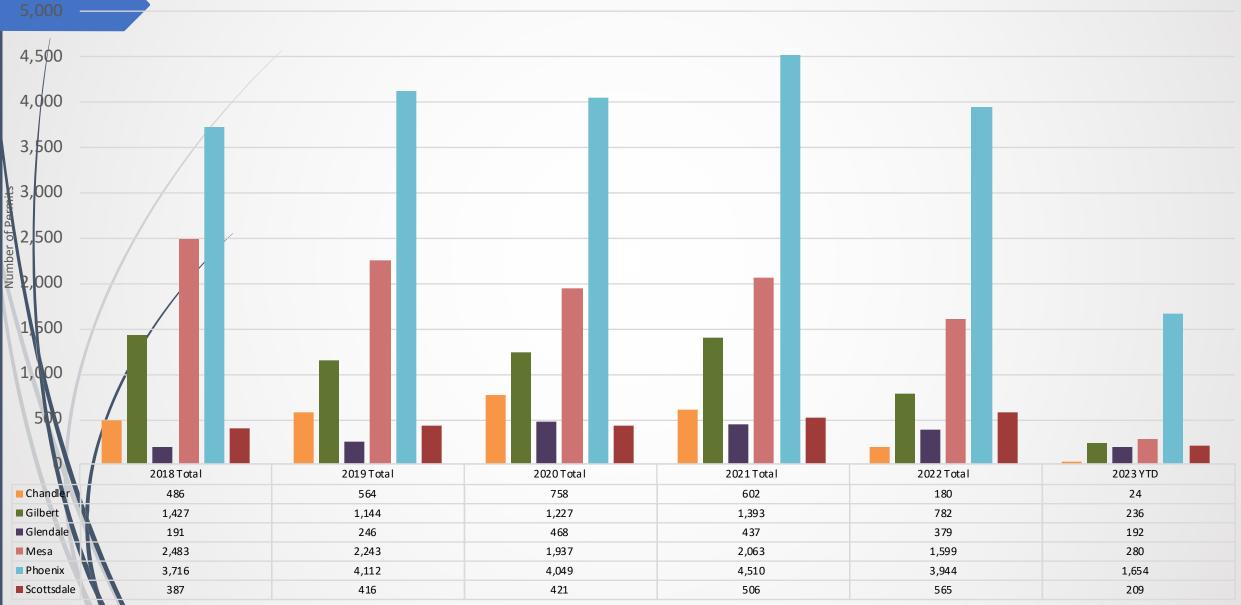
Monthly Planning Submissions (Mesa only) May 2022- May 2023



Total Monthly Planning Submissions Between May 2022 – May 2023 (Mesa only)

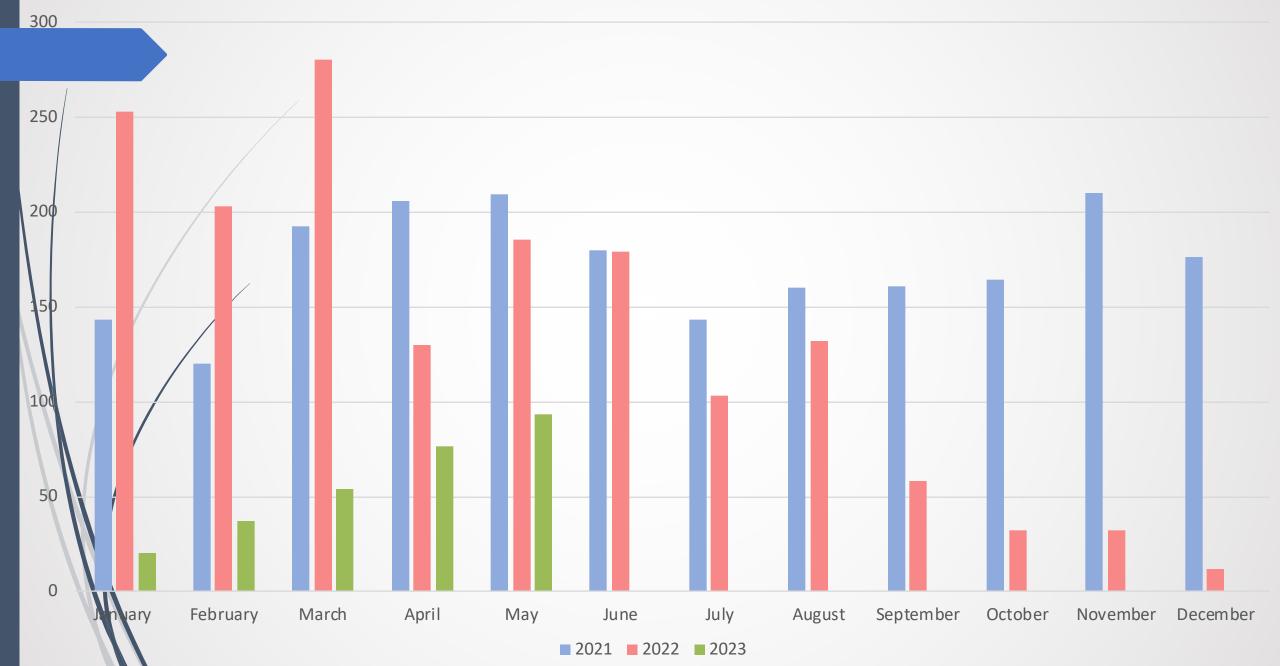


# Total Number of New Single Family Permits Issued Per Year 2018-2023YTD

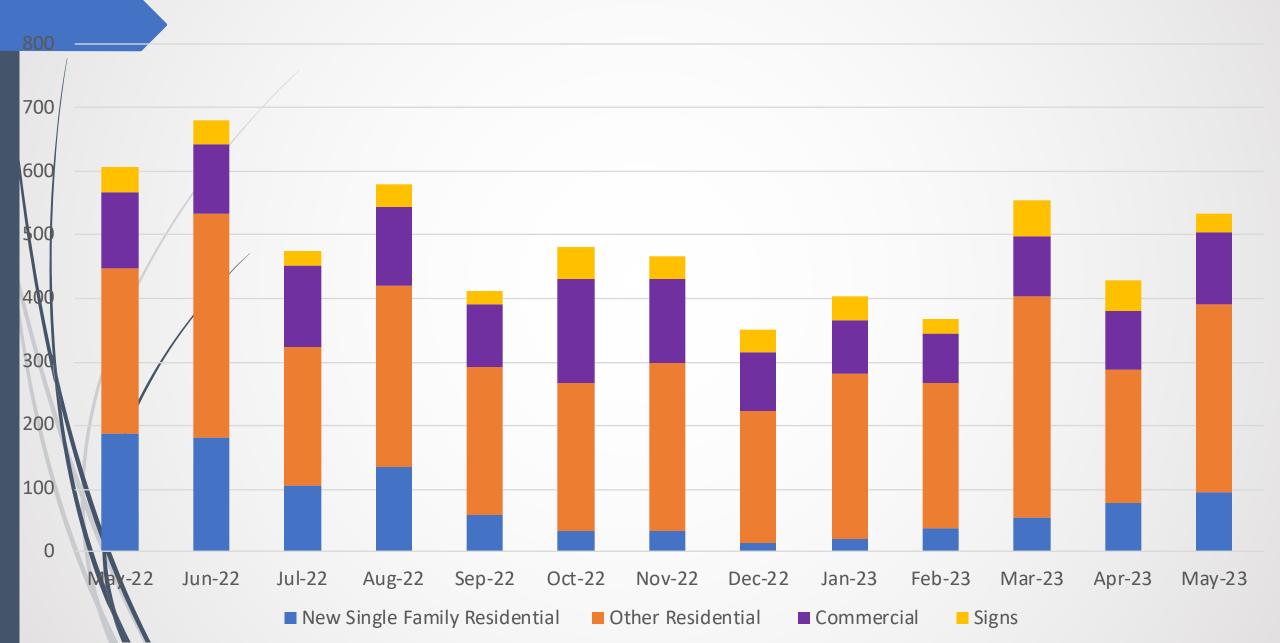


Source: Home Builders Association of Central

### New Single Family Residential Permits Issued by Month (Mesa only)



Number of Building Permits Issued Each Month between May 2022 – May 2023 (Mesa only)





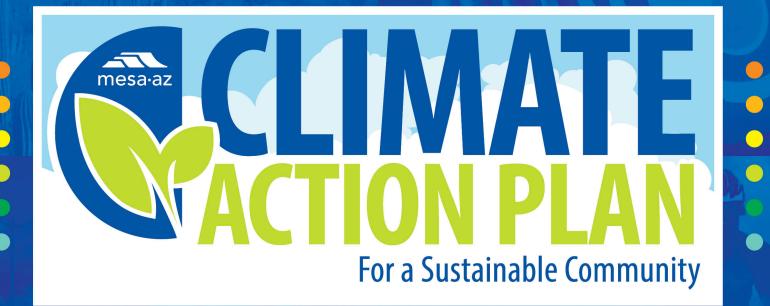


## 2050 General Plan Process Update





https://www.mesalistens.com/hubpage/tomorrow-s-mesa DEVELOPERS ADVISORY FORUM | June 27, 2023



MCAP UPDATE | MESAAZ.GOV/CLIMATEACTION

Laura Hyneman, Environmental & Sustainability Department, Deputy Director

### ASPIRATIONAL GOALS



### ASPIRATIONAL GOAL #1: Carbon Neutrality

- Achieve carbon neutrality by 2050 by reducing greenhouse gas emissions and enhancing carbon sinks
- Strive to reduce the greenhouse gas emissions from City Operations by 50% by 2030



### ASPIRATIONAL GOAL #2: **Renewable Energy**

• Prioritize the use of renewable, resilient energy to achieve 100% renewable energy by 2050



### ASPIRATIONAL GOAL #3: Materials Management

• Manage material responsibly and divert 90% waste from the landfill by 2050



### ASPIRATIONAL GOAL #4: Climate Ready Community

• Enhance community resilience through collaboration and inclusive engagement

CITY OF MESA CLIMATE ACTION PLAN: FOR A SUSTAINABLE COMMUNITY



CITY OF MESA CLIMATE ACTION PLAN: FOR A SUSTAINABLE COMMUNITY





# MCAP Update – Council Priority

✓ Reduce Urban Heat

- ✓ Reduce Carbon Emissions
- ✓ Conserve Water



Sustainable Environment

- $\checkmark$  Vibrant, prosperous and thriving city for generations to come
- ✓ Tracking Progress on the Open Data Portal:

<u>https://data.mesaaz.gov/stories/s/Sustainable-</u> Environment/ezpt-8p2j



# Renewable Energy – Innovative Solutions

Mesa Electric Utility

- Climate Action Plan (MCAP)
- Utility-scale solar
- On-site generation
- Flare to Fuel Food Waste to Energy

Salt River Project

- 2035 Sustainability Goals
- Utility-scale solar with storage
- Innovative energy strategies



Partnership



mesaaz.gov/sustainability

CITY OF MESA CLIMATE ACTION PLAN: FOR A SUSTAINABLE COMMUNITY



# Accelerating the Adoption of Electric Vehicles

✓ Community Adoption Plan✓ Regional Partnerships





Reducing Carbon Emissions

## <u>mesalistens.com/ev-project</u>

CITY OF MESA CLIMATE ACTION PLAN: FOR A SUSTAINABLE COMMUNITY



# Water Conservation – Sustainable Development

- ✓ Using water efficiently in our beautiful desert city
- ✓ Outdoor water use
  - ✓ Eliminate non-recreational grass
  - Select low-water use, desert adapted plants and trees (many varieties available!)
  - Controllers, weather stations, efficient irrigation equipment
  - ✓ Capture rainwater and use it on site
  - ✓ Use technology budgets, leak detection, monitor use

✓ Resources



CITY OF MESA CLIMATE ACTION PLAN: FOR A SUSTAINABLE COMMUNITY



# Water Conservation – Sustainable Development

### ✓ Indoor water use

- ✓ Use efficient fixtures/WaterSense standards
- ✓ Perform water audits
- ✓ Equipment
- ✓ Monitor water use
- ✓ Use technology
- ✓ Resources
  - ✓ Water Shortage Management Plan
  - ✓ Large Customer Sustainable Water Agreement



CITY OF MESA CLIMATE ACTION PLAN: FOR A SUSTAINABLE COMMUNITY



# Drought Resilience/Forest Health

- ✓ Watershed protection
- ✓ Forest health
- ✓ Renewable Energy





CITY OF MESA CLIMATE ACTION PLAN: FOR A SUSTAINABLE COMMUNITY







- ✓ Reduce Urban Heat
- ✓ Tree & Shade Plan(s)
- ✓ Planting right tree/right place
- ✓ Caring for community trees
- ✓ Green Stormwater Infrastructure

### <u>MesaListens.com/trees-are-cool</u>

### Record Your Newly Planted Tree!

CITY OF MESA CLIMATE ACTION PLAN: FOR A SUSTAINABLE COMMUNITY



# Trees & Shade – Sustainable Development

## ✓Shade Corridors

- ✓ Working in disadvantaged neighborhoods with low tree canopy cover, and high MFMD calls for heat related issues
- ✓Community goal 15% tree canopy cover w/50% vegetative cover



CITY OF MESA CLIMATE ACTION PLAN: FOR A SUSTAINABLE COMMUNITY



# **Sustainable Cities**

"Actively working and making significant progress in addressing economic health, the environment and social/cultural impact through urban planning and city management."

### ✓ Environmentally Responsible

## ✓ Resilient

## ✓ Prepared for Change

## ✓ Inclusive

✓ Competitive





# Thoughts & Ideas

Laura.Hyneman@mesaaz.gov



### DEVELOPMENT ADVISORY FORUM UPDATES

mesa·az

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## General Overview

Mesa Standard Details

Mesa Amendments to MAG Specifications

- Engineering Design Standards
  - Access to Existing Infrastructure
  - Protection of Existing Infrastructure
- Water General Notes 20" Diameter+ Pipe

# Mesa Standard Details & Specifications 2023 Edition

- Highlight Major Changes
  - Refer to complete list in draft document for minor updates
- Publishing for Review June 29<sup>th</sup>
- Comment Period thru July 27<sup>th</sup>
- Effective Date August 10<sup>th</sup>

#### Mesa Standard Details & Specifications

Amendments to MAG Uniform Standard Details & Specifications for Public Works Construction



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## Updates – Details

- M-17 Detail Typical Right In/Right Out Driveway with Raised Median
  - New detail
- M-19.04.1 Detail Standard Trench Backfill Detail Arterial, Collector & Local
  - 1-ft maximum lift placement for pipe zone and initial backfill
- M-19.04.3 Detail Pavement Restoration
  - New Note 13 clarifying full lane restoration width and length
- M-19.05 Detail
   – Standard Trench Backfill Detail for Trenches Within Future Roadway Prisms and Alleys
  - Added new Alley Section

- M-19.06 Detail Water & Sewer Access Path (Outside of City Right-of-Way) and Easement Requirements
  - New detail developed for operations and maintenance access path
- M-25.01 Detail Parks Accessible & Van Accessible Parking Signs
  - New detail for non-federally funded Parks installations outside of Right-of-Way
- M-38.03 Detail ARV / WV / Sewer Manhole Marker Detail
  - Added Sewer Manhole decal, associated notes, and updated title
- M-38.04.3 Detail Water Main Cathodic Protection System Details
  - New detail for water main installations

- M-46.01.4 detail Median Stamped Concrete / Paver Detail
  - Provided stamped concrete class, integral color and subgrade information
- M-46.05.3 detail Transition From Striped to 4' Raised Median (4 Lanes)
  - New detail
- M-46.05.4 detail Transition From Striped to 8' Raised Median (4 Lanes)
  - New detail
- M-46.06 detail Right Turn Deceleration Lane Detail
  - New detail

 M-62.02.2 Detail – Single And Double-Wide Bin Enclosures -Notes

New notes providing clearance around enclosure and gates

- M-62.07 Detail Residential Solid Waste Guidelines
  - New note providing clearance requirements in front of gates
- M-90.05 Detail Traffic Signal Construction Procedures II
  - Added new Traffic Signal Activation Requirements
- M-104.08 Detail Calsense Solar Irrigation Controller and Solar Panels
  - Replacement of previous LEIT controller detail

M-104.09 Detail – Motorola IRRInet Ace PED Detail

- Updated detail for IRRInet Ace Pedestal
- M-104.10 Detail Motorola IRRInet M Ac PED Detail
  - New detail for IRRInet M Ac Pedestal
- M-109.01.1 Detail Remote Control Valve Assembly In Right-of-Way or Roadway
  - Updated title and provided clarification for when to use PVC valves
- M-109.01.2 Detail Remote Control Valve Assembly In Park
  - New detail for remote control valves in Park applications

Adoption of MAG Updates (2023 revision to 2020 version)

- Section 106.2.5 Required Minimum QC Testing Frequencies
  - Updates to Table 1 with new QC and/or QA frequencies for Structure Foundation Subgrade, Gyratory Asphaltic Concrete and Marshall Asphaltic Concrete.
- Subsection 321.10.2 Gradation, Binder Content and Air Voids
  - Provided clarification on pavement signs of instability and removal limits

- Section 326- Placement And Construction Of Polymer Modified Asphalt Concrete
  - Changes throughout section providing guidance to follow the East Valley Asphalt Committee Criteria and approved mixes
- Section 360.1 Description
  - Provided requirements and guidance on Small Wireless Facilities and a link to the City's Right of Way Management Group
- Section 402 Pavement Marking
  - Updated City of Mesa's Specification providing types of markings, removals/obliterations, materials and payment requirements

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### Subsection 610.3 (B) – Materials

Deleted welded steel as a pipe material

### Subsection 610.13 – Meter Service Connections

- Added a new paragraph that prohibits meter box installations in roadways, driveways, washes or retention/detention basins
- Subsection 610.13 (A) Meter Service Connections
  - Replaced paragraph (A) with new paragraph discussing that extensions of service lines are prohibited and guidance for relocations

### Subsection 615.2 – Materials

- Added new paragraph removing references to HDPE, SRPE, PP and DIP
- Subsection 625.3.2 Sanitary Sewer Drop Connections
  - Removed City's requirement for 'Type B' inside drop connections

## Comments

- Proposed changes posted on Mesa website <u>https://www.mesaaz.gov/business/engineering/mesa-standard-details-specifications</u>
- Return comments by July 27<sup>th</sup>, 2023 to Melody.Zyburt@mesaaz.gov

### 2023 Mesa Engineering & Design Standards

- General Updates
- Highlight Major Changes
- Comment Period thru July 28<sup>th</sup>
- Effective Date August 10<sup>th</sup>





## Update Highlights

### Section 106: Easements

Utility-specific instead of generic PUE/PUFE

Section 204: Signing & Pavement Marking
Masterseal to be applied following obliteration
Traffic paint to be reflectorized, high-build

- Section 204: Traffic Impact Studies
  - Include Crash History and Safety Analysis

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## Update Highlights

## Section 316: Water Main Minimum Cover

60" for pipe not in street (new for <12" diameter)</li>

### Section 317: Fire Lines

- No service taps or other connections
- Section 317: Backflow for Fire Sprinkler Systems
  - Required for all systems connected to potable water

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## Update Highlights

Section 418: Sewer Easement Access Path

- Revise max cross-slope to 5%
- Revise max longitudinal slope to 10%
- Section 426: Sewer Force Main Design
  - Air-release valves shall be located above-ground in lockable, powder-coated enclosures
  - Cleanout spacing increased 800' to 1300' for 2way, 400' to 650' for 1-way

## Update Highlights

Section 806: Ultimate site drainage outfalls to a public R/W or dedicated drainage easement.

- Section 1102: Irrigation plans shall include pressure calculations
- Minor updates throughout list will be posted on-line
- As-builts
- CADD files

## Comments

- Proposed changes posted on Mesa website <u>https://www.mesaaz.gov/business/engineering/mesa-standard-details-specifications</u>
- Return comments by July 27, 2023 to Julie.Christoph@mesaaz.gov

### Water General Notes

FOR PROJECTS INVOLVING PUBLIC WATER MAINS WITH DIAMETERS 20" AND LARGER, THE FOLLOWING SHALL APPLY:

- A. PROCUREMENT OF PIPES AND APPURTENANCES SHALL NOT COMMENCE UNTIL SHOP DRAWINGS AND PRODUCT DATA SUBMITTALS HAVE BEEN REVIEWED AND ACCEPTED IN WRITING BY THE CITY OF MESA WATER RESOURCES DEPARTMENT.
- B. SUBMITTALS AND SHOP DRAWINGS SHALL INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
  - i. PIPE AND FITTINGS
  - ii. PIPE APPURTENANCES (ISOLATION VALVES, AIR RELEASE VALVES, HYDRANTS, ETC)
  - iii. CORROSION MONITORING AND PROTECTION SYSTEMS (WHERE APPLICABLE)
  - iv. FABRICATION/LAY DRAWINGS (FOR C200 STEEL OR C303 CONCRETE CYLINDER PIPE)
  - v. VALID WELDER'S CERTIFICATIONS (FOR C200 OR C303 CONCRETE CYLINDER PIPE)
- C. ALL FIELD WELDS SHALL BE MADE AVAILABLE FOR INSPECTION BY THE CITY OR THE CITY'S REPRESENTATIVE PRIOR TO GROUTING.
- D. ADDITIONAL REQUIREMENTS FOR C200 STEEL AND C303 CONCRETE CYLINDER PIPE WITH DIAMETERS 30" AND LARGER ARE AS FOLLOWS:
  - i. EACH PIPE SECTION SHALL BE MADE AVAILABLE FOR VISUAL AND SOUNDING INSPECTIONS BY CITY STAFF OR THE CITY'S REPRESENTATIVE PRIOR TO INSTALLATION. PIPES FAILING INSPECTIONS SHALL BE REPAIRED OR REPLACED AS DETERMINED BY THE CITY.
  - ii. INSTALLED PIPE SHALL BE MADE AVAILABLE FOR INTERNAL VISUAL AND SOUNDING INSPECTIONS BY CITY STAFF OR THE CITY'S REPRESENTATIVE PRIOR TO FILLING. PIPES FAILING INSPECTIONS SHALL BE REPAIRED OR REPLACED AS DETERMINED BY THE CITY.



# Questions?

