

SOUTHEAST METRO STORMWATER AUTHORITY
acting by and through
SEMSWA WATER ACTIVITY ENTERPRISE

RESOLUTION 20-06

Authorization to Fund the Analysis of the Littles Creek Floodplain Improvements

WHEREAS, the instability of the Littles Creek Watershed has resulted in severe erosion and current floodplain mapping shows that existing infrastructure and structures are at risk; and

WHEREAS, SEMSWA and the Mile High Flood District (MHFD) participated in a planning study titled "Littles Creek Major Drainageway Plan" (2012 MDP) dated July 2012 and "Flood Hazard Area Delineation Littles Creek" (2012 FHAD) dated July 2012; and

WHEREAS, the 2012 MDP and 2012 FHAD newly identified 48 single-family attached and 34 single-family detached structures within the Upper Littles Creek basin that would be impacted by the 100-year rainfall event; and

WHEREAS, the 2012 FHAD Study for Littles Creek was submitted to FEMA for Physical Map Revision (PMR) to update the Flood Insurance Rate Maps (FIRMs) in Centennial. The PMR is tentatively scheduled to become effective in 2020; and

WHEREAS, SEMSWA has determined the improvements selected in the 2012 MDP Selected Plan may not be feasible to implement as identified; and

WHEREAS, MHFD revised the Urban Storm Drainage Criteria Manual in August 2018. MHFD criteria now allows for the use of National Oceanic and Atmospheric Administration (NOAA) Atlas 14 point-precipitation depths, which are precipitation depths less than the previous precipitation depths defined in the NOAA Atlas 2; and

WHEREAS, MHFD also updated the Colorado Urban Hydrograph Procedure (CUHP), a method of hydrologic analysis, through recalibration to attain better agreement between modeled and observed flows. MHFD criteria also recommends use of the latest version of CUHP 2005 2.0.0 (UDFCD 2017) for watersheds of this size; and

WHEREAS, using the reduced rainfall depths in the NOAA Atlas 14 data and the latest version of the CUHP may result in a reduction in peak runoff rates used to determine flooding impacts within the Littles Creek Watershed; and

WHEREAS, SEMSWA has determined the need to update the existing basin hydrology and develop feasible infrastructure improvements that reduce existing flooding concerns within the Littles Creek watershed; and

WHEREAS, the updated basin hydrology may be used to support an update to the 2012 MDP and 2012 FHAD for the Littles Creek watershed; and

WHEREAS, the cost of the engineering analysis/design and other design related services for the Project has been estimated to be \$124,798; and

WHEREAS, it is typical to budget the engineering analysis/design amount plus an additional ten (10) percent (\$12,479) to cover contingencies that may be encountered during design; and

WHEREAS, SEMSWA has adopted a budget for calendar year 2020 subsequent to public hearing, which includes funds for the design of the Project.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Board authorizes the Executive Director to enter into contracts on behalf of SEMSWA for the analysis/design or the Project.
2. The funding for the Project is limited to \$137,277 without prior approval of the Board.

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Date: _____

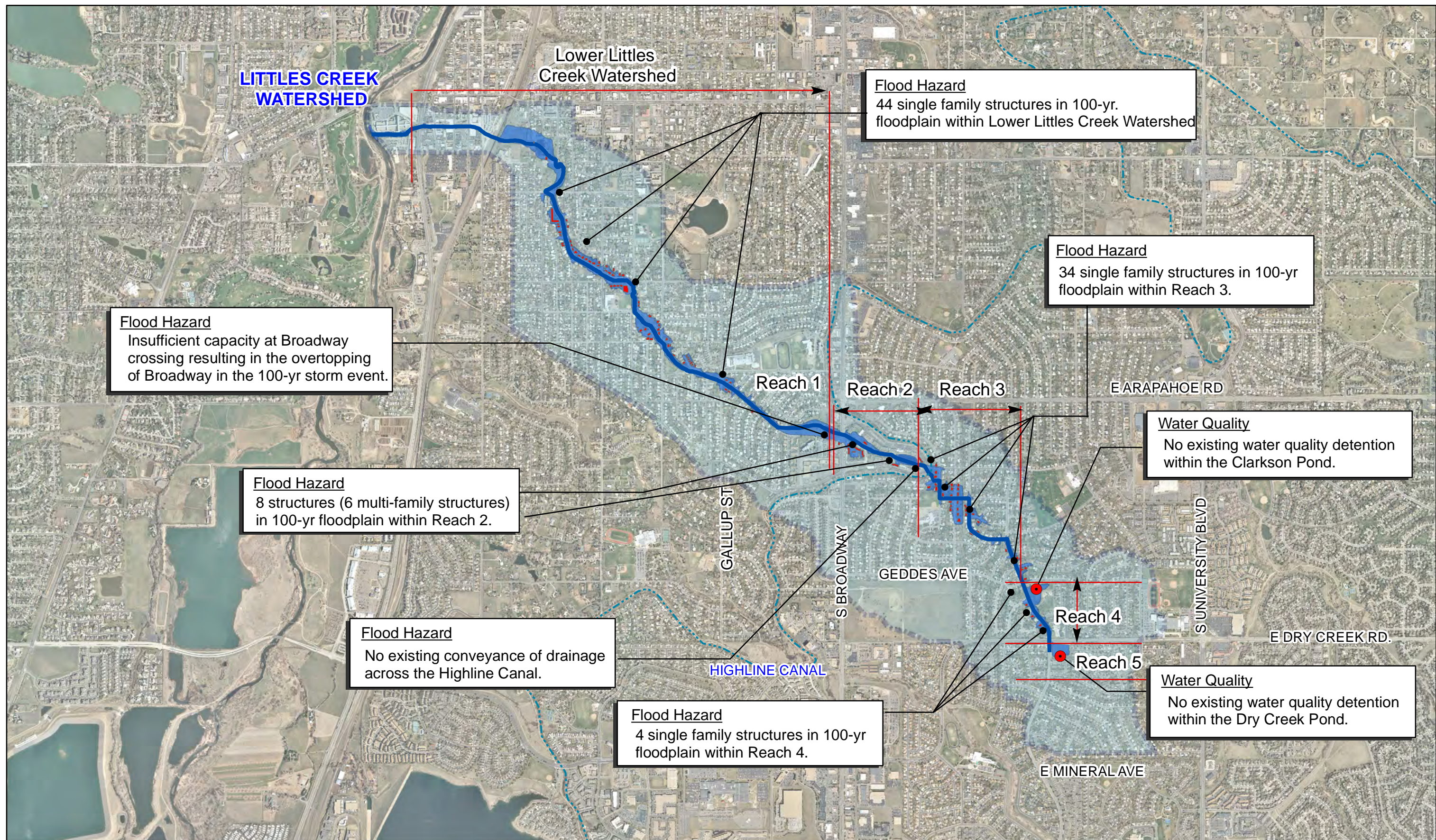
ATTEST:

Secretary


Chairperson



APPROVED AS TO FORM:
Attorney for
Southeast Metro Stormwater Authority

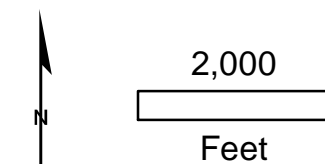
By _____
Edward J. Krisor



LEGEND:

- Littles Creek Major Drainageway
- Highline Canal
-  Watershed Boundary

-  Existing 100-yr Floodplain
-  Inundation Structures



DATE: NOVEMBER 2011

LITTLES CREEK MAJOR DRAINAGEWAY PLAN

**FIGURE C-4
DRAINAGE PROBLEM AREAS**

URBAN DRAINAGE AND FLOOD CONTROL DISTRICT