



ARAPAHOE COUNTY
COLORADO'S FIRST

Administrative Procedure 87-5

Adopted January 24, 1989

**A POLICY CONCERNING THE PAYMENT OF CERTAIN COSTS ASSOCIATED WITH
RELOCATION OF FACILITIES IN THE PUBLIC RIGHT-OF-WAY**

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Presentation Agenda

- ▶ Contributing Public Works Staff
- ▶ Administrative Policy 87-5 Background
- ▶ 2019 Study Session
- ▶ 2020 Review and Progress
- ▶ New Policy Goals
- ▶ Public Involvement
- ▶ Next Steps
- ▶ Request For BOCC Recommendations

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Contributing Staff

- ▶ Cathleen Valencia, PE
 - ▶ PWD Capital Improvement Program Manager

- ▶ Daniel Wiseheart, PE
 - ▶ PWD CIP Staff Engineer.

- ▶ Brian Love, PE
 - ▶ PWD Capital Improvement Program Manager, retired but consulting.

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Background

- ▶ Policy 87-5 defined responsibilities for relocation of water and sanitary facilities in conflict with County projects
 - ▶ Established and assigned cost responsibility to the County
 - ▶ Necessitated by bridge, street, storm sewer, drainage, or other County capital improvement projects
 - ▶ Originally developed to not burden Water and Sanitation Districts with costs of relocation(s)

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2019 BOCC Study Session

- ▶ Per 2019 directions PWD is reviewing Policy 87-5 for:
 - ▶ Applicability to current economic and funding climate
 - ▶ Financial obligations of County
 - ▶ Monies paid out due to policy
 - ▶ Possible modifications or revisions

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Applicability in Current Climate

- ▶ Policy 87-5's (adopted January 24, 1989) original intention has not changed, but economic climate and funding availability has changed considerably.
- ▶ County Capital Improvement Projects still occasionally necessitate utility relocations, and Policy 87-5 has cost the County approximately \$1 million over the years.
- ▶ Utility Providers have used this policy to require the County to pay for replacement costs beyond minimum project requirements. Expanded detail in Case Study/Example (slide 12).

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Obligation of County

- ▶ Policy 87-5 directly stated that County had full cost responsibility to pay for Water and Sanitary district facility relocations when required by Capital Improvement Projects.
- ▶ Policy was NOT clear on specifics regarding the construction requirements to accomplish the relocations.
- ▶ Policy has no standards, specifications or limitations regarding how much, why, or how money is spent.
- ▶ Policy leaves no provisions for updates or changes.

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Representative Costs

Road	District	Length	Cost
Jordan Road	ACWWA	8,000 feet	\$ 575,000
Easter Avenue	ACWWA	1,575 feet	\$ 124,000
Arapahoe / Quebec Southgate/Willows		Adjustments	\$ 21,000
Arapahoe Road	Aurora W/S	Adjustments	\$ 9,300
Broncos Parkway	ACWWA	Adjustments	\$ 9,800
Beeler Street	CCVWSD	Adjustments	\$ 14,000
Chambers Road	ACWWA	1,700 feet	\$ 205,000
Iliff Ave at Highline	CCVWSD	400 feet	\$ 55,000
		Total	\$1,013,100

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Possible Modifications or Revisions

- ▶ PWD has identified 3 possible paths
 - ▶ Alternate #1 – No change to 87-5
 - ▶ Alternate #2 – Replace 87-5 with new policy that places cost burden on Utility Providers
 - ▶ Alternate #3 – Replace 87-5 with new policy that shares cost responsibility between Utility Provider and County
 - ▶ Expanded details on next few slides

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Alternative #1 – No Policy Change

- ▶ PWD would continue to follow 1989 resolution and require the County to pay for Sanitary and Water facility relocations that conflict with CIP project improvements.
- ▶ It should be noted that there have been instances where the districts have applied extremely conservative relocation policies/requirements* (see Example / Case Study below) resulting in substantial additional costs to the County.
- ▶ Arapahoe County is the only jurisdiction that covers full cost.
- ▶ Alternative #1 **NOT** recommended by County Attorney or PWD.

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Example / Case Study

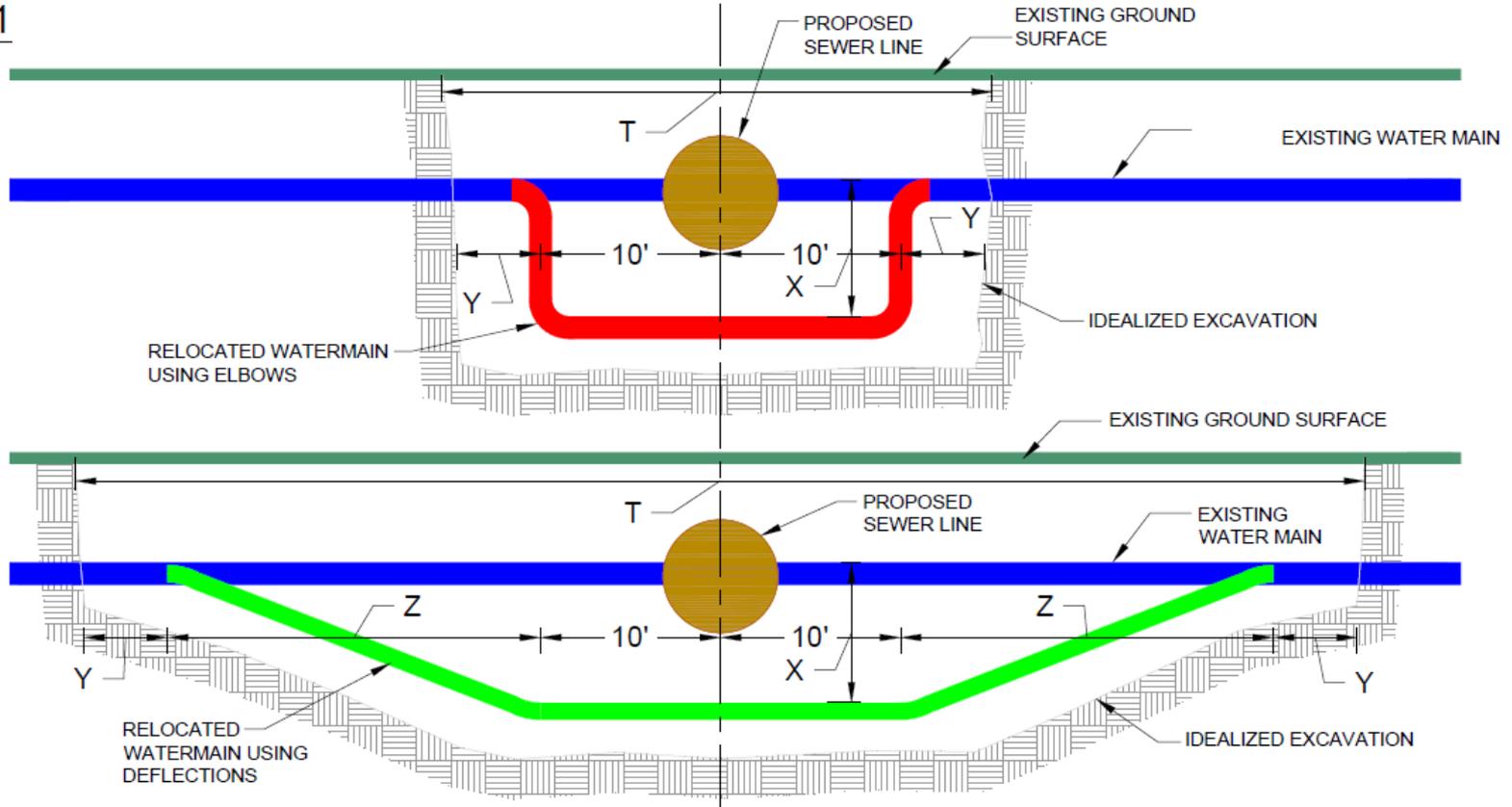
- ▶ **Recent project watermain relocation**
 - ▶ County was required by the Utility Provider to relocate watermain using only pipe deflections, not elbows (despite common industry accepted practices), resulting in an additional 270 feet of pipe to relocate.
 - ▶ The relocation under these criteria resulted in significant high quantity of pipe being replaced, and significant additional costs in excavation, labor, backfill, and restoration. All costs were paid by the County.
 - ▶ See Figure #1 for visual.



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FIGURE 1

NOT TO SCALE



VARIABLE LEGEND

**EXAMPLE MATRIX
(ASSUMES 8 FOOT PIPE LENGTHS)**

X = DISTANCE WATERMAIN NEEDS TO BE LOWERED TO AVOID PROPOSED CONFLICT. DISTANCE IS SITUATIONALLY DEPENDANT.

Y= ADDITIONAL EXCAVATION AREA NEEDED FOR PIPE CONNECTION AND TRENCH SAFETY REQUIREMENTS. VARIES BASED ON SOIL TYPE AND PIPE DEPTH.

Z= EXCAVATION REQUIRED TO INSTALL SLOPPED PIPE. WILL VARY DEPENDING ON DEFLECTION ANGLE IN PIPE JOINTS.

T= APPROXIMATION OF TOTAL EXCAVATION WIDTH IN FEET (ROUNDED), BASED ON 'BEST CASE' SITE CONDITIONS AND GENERAL ASSUMPTIONS.

X DISTANCE (VERTICAL DROP IN FEET)	ASSUMED DISTANCE FOR Y, IN FEET	Z DISTANCE, ROUNDED TO NEAREST FOOT			TOTAL EXCAVATION WIDTH (T), ROUNDED TO NEAREST FOOT		
		USING 90° ELBOWS	USING DEFLECTIONS OF 2.4°	USING DEFLECTIONS OF 4.0°	USING 90° ELBOWS	USING DEFLECTIONS OF 2.4°	USING DEFLECTIONS OF 4.0°
2	8	0	10	6	36	56	48
5	5	0	42	25	30	114	80
10	10	0	52	31	40	144	102
12	12	0	63	38	44	170	120
15	15	0	78	47	50	206	144

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Alternative #2 – Utility Providers Cover Cost

- ▶ Common law places the burden of utility relocations on the individual Utility Provider.
- ▶ That philosophy stems from thought that utilities are being granted *conditional* access to place their facilities in the ROW. That condition being specifically that access is granted as long as those facilities do not interfere with the operation of the ROW.
- ▶ Alternative #2 is a common practice in the industry. Used by CDOT, Adams County, Douglas County, City and County of Denver.



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Alternative #3 – Costs are shared

- ▶ County would need to establish a set of regulations/criteria on when, why, and how much the County would contribute to a relocation effort.
- ▶ Criteria would need to be developed and reviewed before approved.
- ▶ Alternative #3 is not as common as Alternative #2, but does exist in a few agencies under certain scenarios.
- ▶ Used by Jefferson County and on project with Federal Funding.

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New Policy Goals

- ▶ Shift of cost responsibility away from 100% on County.
- ▶ Better advanced communication between County and Utility Providers for upcoming/possible projects.
- ▶ A better system of communication, coordination, & project execution. Including responsibilities for all parties.
- ▶ Inclusion of ALL Utility Providers.
- ▶ Inclusion of language for County owned utilities.



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BOCC Feedback from alternates

- ▶ BOCC recommendations for which alternative to pursue?
- ▶ BOCC recommendations for additional policy goals?

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Next Steps

- ▶ With BOCC direction, create a DRAFT policy for internal review and comments.
- ▶ Return to BOCC study session to present draft of policy.
- ▶ With BOCC direction, seek public review and comments.
- ▶ Review and address public comments.
- ▶ Return to BOCC for policy approval.

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Public Involvement

- ▶ A Utility Relocation Policy is likely invisible (does not directly affect) to the majority of residents.

- ▶ PWD anticipates corresponding with:
 - ▶ Utility Districts/Providers that have facilities within Arapahoe County.
 - ▶ CDOT Regional Office & Adjacent Local Governing Agencies.

- ▶ BOCC comments on public involvement?

