
ERIE MEDIAN POLICY

September 2020





ERIE MEDIAN POLICY RECOMMENDATIONS

Introduction

The Town of Erie Transportation Master Plan (Master Plan) adopted in 2018 set forth a plan that provides guidance on how to strategically plan and accommodate the observed and projected growth throughout the Town. The Master Plan set forth a recommended future roadway network to meet the Town's current and future roadway needs.

The Town has this unique opportunity to set forth a median policy that establishes a placemaking identity and works to incorporate the sustainable practices that are consistent with other Town policies as many of the Town's arterial roads are not yet built out to their ultimate configurations identified in the Master Plan and do not yet have medians. The Town has this unique opportunity to set forth a median policy that establishes a placemaking identity and works to incorporate the sustainable practices that are consistent with other Town policies. Raised medians provide many community benefits, including improved pedestrian safety, access control, environmental 'cooling', visual aesthetics and placemaking. They can be hardscaped or landscaped, wide or narrow, elaborate or simple – the design possibilities are endless. A set of standards will help ensure that medians are designed to meet the individual micro-climates in a context-appropriate manner that takes into account the many different types of median materials and configurations available.

The standards set forth in this policy shall apply to Town-owned and maintained medians on all Town arterial roads and major collectors as identified. The standards set forth in this policy may also apply to medians built on local collector roads as part of new developments but would not preclude the Town's development partners from proposing median designs that establish a unique neighborhood identity for a proposed development. This policy will serve as a guiding document to staff, policy makers, and the Town's development partners for how to responsibly plan medians with the perspectives of desired location, size, and aesthetics as the improvements identified in the Master Plan occur through Town Capital Projects or through Development Projects. It is not the intent of this policy to determine the responsible party, a timeline of construction, or associated costs for final build out of the medians with the proposed locations, aesthetics, and sizes.

Arterial Roads and associated medians identified in areas that have already been developed within the Town will likely fall under the scope of a Capital Improvement Project (CIP) as identified and budgeted by Town staff. These medians identified may or may not be budgeted in the same year as identified, rather need to go through the same prescriptive budget process as all other CIPs. Arterial roads and the associated medians that are located in areas being developed will likely be improved with the development through coordination with the Town's development partners. Arterial roads identified in the Master Plan but not within the Town's jurisdiction will be evaluated as right-of-way is annexed in to the Town; however, standards will be set forth with this policy to ensure that the Town is responsibly planning for future opportunities. Existing medians on arterial roads within the Town will also be evaluated as maintenance is needed or as opportunities are identified to retrofit the medians to meet this standard.

Policy Development

As indicated above, the Town's interest in establishing a median policy arose from a desire to establish a consistent, placemaking identity and to better integrate sustainable practices into the continued growth and development throughout Erie. The Town's current street standards include 16' raised medians for four roadway classifications: 2-lane minor arterial, 4-lane minor arterial, 4-lane principal arterial, and 6-lane principal arterial. The recommendations provided in this document would necessitate amending existing standards to show the 8' and 12' median configurations for the lower arterial classifications.

Placemaking

Raised medians offer a means for streetscape beautification with well-designed landscaping features and can make their communities more attractive and livable; they can also enhance pedestrian safety through traffic calming effects and the provision of refuge space.

Erie Parkway is the only principal arterial in the Town that has existing medians (July 2020). The existing medians on Erie Parkway were evaluated for placemaking features in an effort to tie the proposed median policy to the existing medians. While xeric landscaping components and colorful perennial plantings in wood mulch at bullnoses were identified as desirable placemaking features, it has been made clear that there is a need for a policy that provides a uniform aesthetic identifiable to the Town. As can be seen in **Appendix E**, the existing medians on Erie Parkway are very inconsistent aesthetically.

Sustainability

There are three primary aspects to consider with regard to sustainability that are relevant to median design: social, economic, and environmental. Social sustainability factors are discussed as part of the placemaking features of medians. Economic sustainability factors into median design in several ways, with median widths and landscaping treatments being major determinants of the construction and maintenance costs a community will need to account for. With regards to environmental sustainability, landscaped medians, particularly those in semi-arid climates like Colorado, can be water-intensive to maintain. Conservation-minded communities, like Erie, have placed emphasis on the responsible use of water and encouraged native plants and decorative rock material as much as possible to minimize the supplemental water need on landscaping Town Ordinances 8-1-10 Water Conservation and 8-1-11 Waste of Water are in place to mandate these exact policies. Resolution 19-299 also promotes the use of native landscaping and low-irrigation practices along with the Town's Water Conservation Plan, Drought Mitigation Plan, WaterWise Landscaping Best Practices Manual.

Development

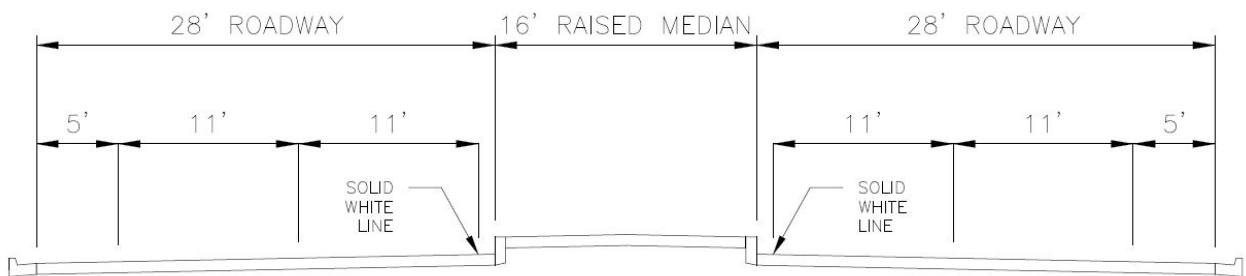
A series of matrices were developed to evaluate the potential median configuration options for the Town to consider incorporating into its standards and to identify the relative strengths of various median widths and landscape treatments with regards to each of the aspects of sustainability. Specific factors considered included relative construction costs, pedestrian comfort, aesthetic appeal, and water consumption; see **Appendix A** and **Appendix B** for the full evaluation matrices related to median widths and landscaping treatments, respectively. The general design character recommended and supported by the Town's Engineering, Parks & Recreation, Public Works, and Planning departments for implementation and detailed later in this document most closely resembles the Xeric concept (Type C in **Appendix B**) – this solution provides the best visual impact with the most economically and environmentally responsible finish. It also has the greatest degree of adaptability, allowing the context and adjacent land use to inform design and ensure the best fit into the fabric of the corridor.

Median Widths and Placement

Map I presents the median widths identified for each street in the Town’s future arterial network. As shown, three different typical median configurations have been developed for the Town: intermittent 8’ medians, consistent 12’ medians, and 16’ medians. More detailed information on the landscaping elements of each of these median types can be found in the next section.

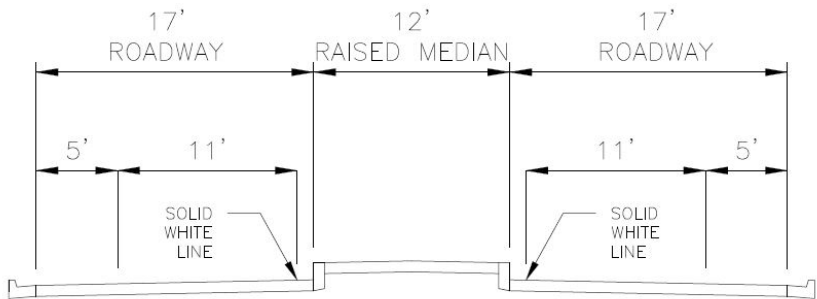
Consistent 16’ Median

Erie Parkway, County Line Road (south of Erie Parkway), and Weld County Road 7 (transitioning to Sheridan Boulevard south of Weld County Road 6) as the Erie’s principal arterials and will ultimately serve as the backbone for getting across town and for concentrating future development. Given their particular importance, these arterials will have more substantive 16’ medians (as already exist along portions of Erie Parkway) that act as placemaking visual anchors for the Town and make it an attractive place for both residents and visitors to travel through. The greater width provides space for median noses at intersections that maintain physical separation between opposing directions of traffic; where left turn lanes are needed, the 16’ medians would be transitioned to 4’ wide hardscaped noses. Below is a typical section for a 16’ raised median on a 4-lane arterial with bike lanes.

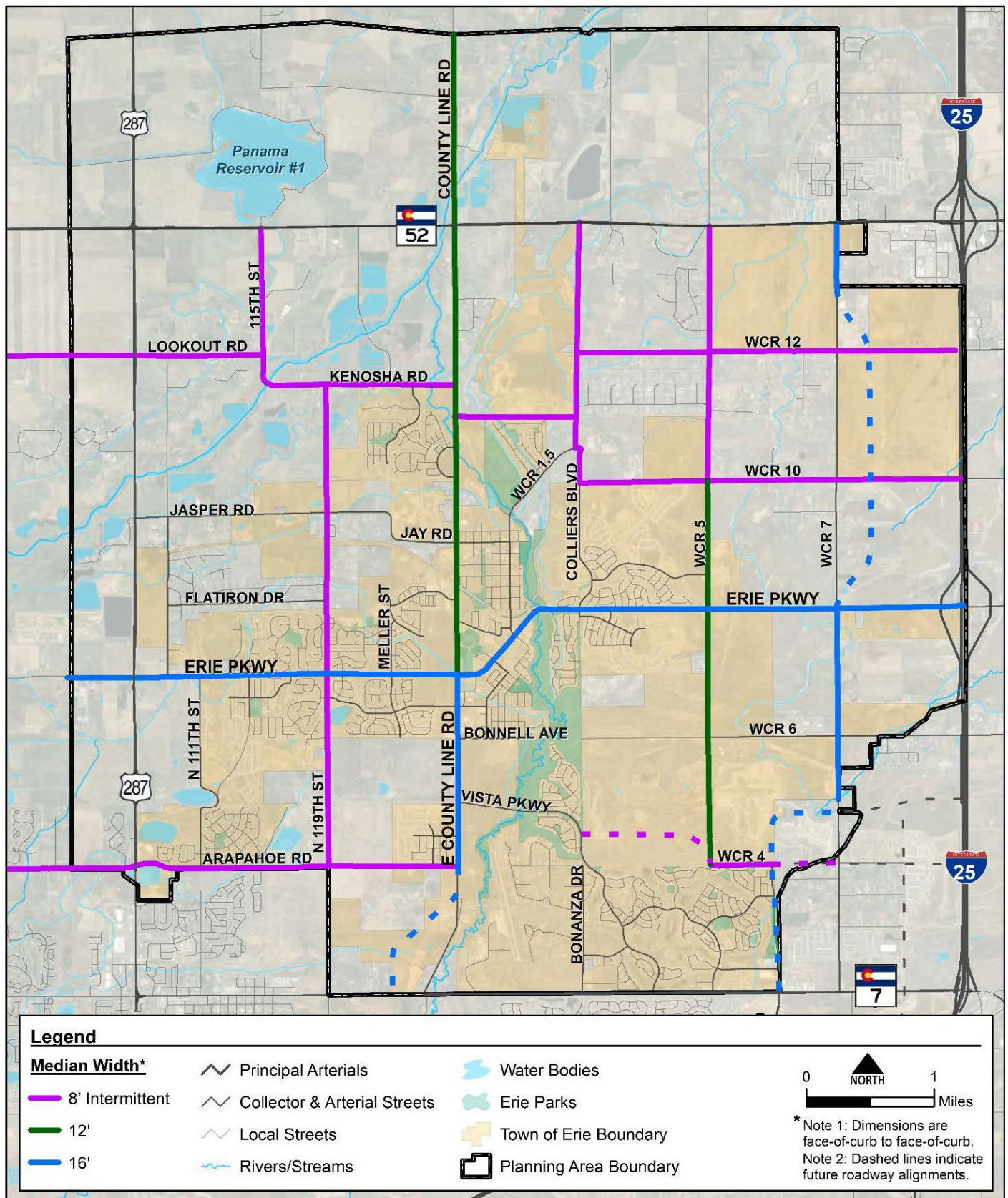


Consistent 12’ Median

Two of the Town’s arterials, County Line Road north of Erie Parkway and Weld County Road 5 between Weld County Road 4 and Weld County Road 10, will have 12’ medians – ending where left turn lanes are needed – when fully built out. Unlike the Town’s other identified 2-lane arterials, County Line Road is ultimately planned to be wide enough for a 3-lane section throughout north of Erie Parkway to accommodate left turns (see the following section for County Line Road’s median standard south of Erie Parkway). A 12’ median will provide a means for access control where it is not desirable to permit left turns. A 12’ median will also be provided on Weld County Road 5 to improve access control and pedestrian crossing safety adjacent to Erie High School and Soaring Highs PK-8 north of Erie Parkway, and adjacent to future residential development south of Erie Parkway. Below is a typical section for a 12’ raised median on a 2-lane arterial with bike lanes.

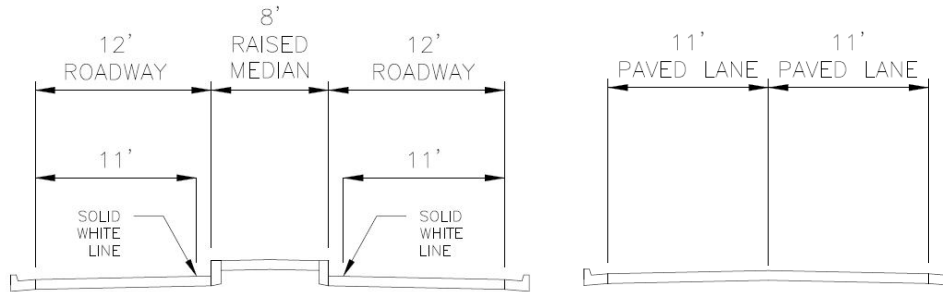


Map 1. Future Arterial Median Widths

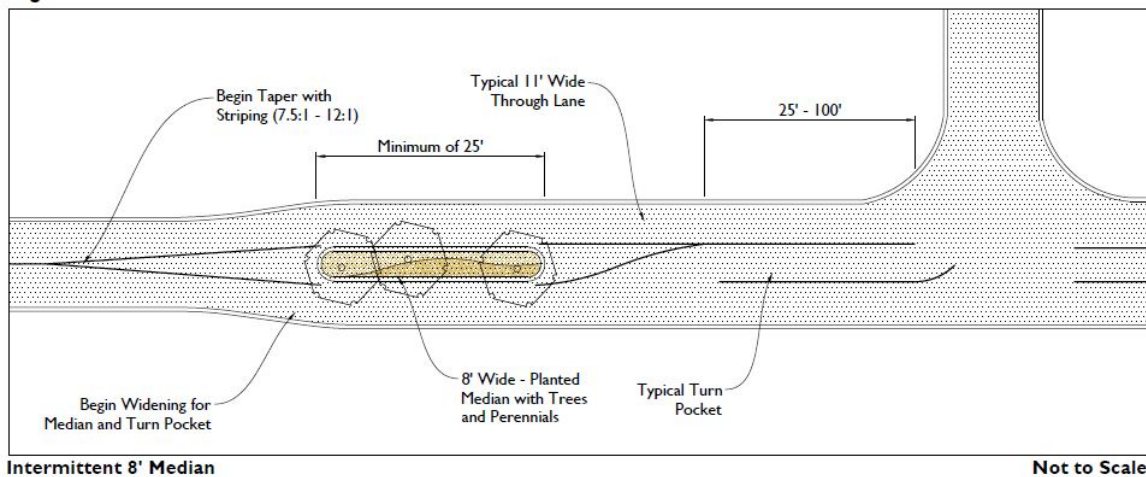


Intermittent 8' Median

Most streets in the Town's future arterial network will be 2-lane arterials without the space or need to provide a raised median along their entire length. However, at intersections where widening is necessary to provide left turn pockets, a short 8' wide median should be provided. These medians will serve two purposes: adding aesthetic elements throughout the Town and helping to calm traffic ahead of intersections. This configuration fits well with the Town's focus on sustainability – placing 8' medians only at major intersections is considerably less expensive than constructing medians along the full length of each 2-lane arterial, lessens the amount of water required for upkeep, and focused aesthetic elements at locations where they will have the most impact. Below are two typical sections for these 2-lane arterials, one with and one without the 8' median present.

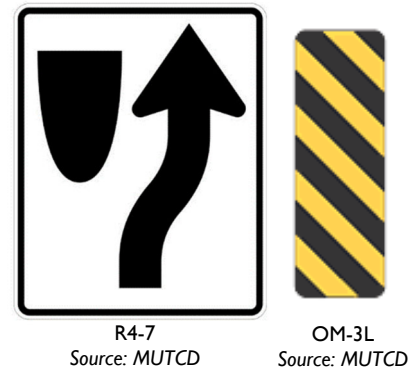


The precise dimensions of the intermittent 8' medians will vary depending on specific intersection characteristics. Required left-turn storage length will be dictated by hourly turning volumes and generally range from 25' (fewer than 30 vehicles) to 100' (between 60 and 100 vehicles) – Chapter 9 of the *CDOT Roadway Design Guide* provides more information. The median itself should be no shorter than 25' in length but may be longer depending on the desired aesthetic features. Recommended taper rates, also provided in the Chapter 9 of the *Roadway Design Guide*, depend on a street's design speed and will generally range from 7.5:1 (25 miles per hour) to 12:1 (40 miles per hour) on Erie's arterials. The figure below is a conceptual layout of how the intermittent 8' medians would be configured.



Median Signage

Because raised medians present a potential hazard to road users, regulatory signs should be used at intersections to direct drivers around them. Keep Right signs (MUTCD R4-7) should be installed at intersection median noses and may be supplemented with left-oriented Type 3 object markers (MUTCD OM-3L) placed underneath for enhanced visibility. If it is not desired to use object markers, circular reflectors should be added to the Keep Right sign instead. At any intersection or access where the presence of a raised median prevents left-turn movements, One Way signs (MUTCD R6-2) should be installed to face the intersecting street or access. All median signs should be installed to read at standard driver eye height – approximately 4 feet above the curb.



Landscaping

Median Landscaping with the Prairie / High Plains Aesthetic

The decision to construct and landscape a roadway median in a prairie and high plains environment requires careful planning, commitments and education. The Front Range of Colorado is a socially diverse community of travelers and citizens. Those who experience designed outdoor spaces have a variety of perceptions and expectations. The Town of Erie's guidance to incorporate sustainability (social, economic, environmental) is a proper vision for current and future investments.

The prairie and high plains median landscape aesthetic in the context of roadway corridors in Erie will be a modest and colorful expression of water-wise plants, creative inorganic groundcovers and aesthetically pleasing scenes for travelers and pedestrians. Refer to the Erie Standards & Specifications, section 1000 (Parks and Recreation Construction) for size, character and quality of materials including mulches and groundcovers for planting and decoration.

The basic design scheme shown in **Appendix D** shows an ideal ratio of plant material / inorganic median cover (cobble and boulders) of 44% / 56%. This calculation is arrived by using 65% of the mature tree canopy area plus the mature shrub area that falls outside the tree canopy. Also, the design indicates an overall average tree spacing of 30', placed in tighter clusters with large spaces between clusters to promote a more natural appearance. This ratio and spacing suggestion will allow designers and reviewers to analyze median landscape designs that meet Town standards and offer an aesthetically-pleasing roadway landscape for drivers and pedestrians.

Plant Uses and Choices

Plants should be grouped in tight clusters with ample spacing between groupings to allow travelers to better experience their character, especially between designed stops. The groundcover beneath and between groupings will be expressed with 'white' river cobble, wood mulch around the base of each plant, and boulder groupings to naturalize / soften the median landscape scene amidst expanses of pavement and roadway infrastructure. The river cobble decorative stone will be the typical groundcover except in perennial beds which will be mulched with the Town's specified wood mulch. Refer to subsection 1062.01 for rock and wood mulch specifications.

Trees will be carefully selected and spaced to thrive in a harsh growing environment and provide a vertical median element and shade for travelers. The selected / preferred shrub, grass and perennial list was selected to best tolerate hot, dry and chemical environments. Ideally the plant list will be adaptable and require minimal replacements due to environmental conditions. Coniferous trees are not recommended due to visibility and wintertime shadows that prevent natural snow and ice melting. See plant list, **Appendix C**.

Shrubs and perennials have the ability to help promote the prairie theme and respect Erie's sustainability goals. The proposed median plants will be considered 'xeric' and several are native to Colorado. These selections will also become an educational element to the designed median landscape due to their ability to showcase some native and low water consuming plant material appropriate for this region. Planted in tight clusters, these plants will be able to showcase their unique color and texture. Selected shrubs have a looser and 'native' character. They require less maintenance and will help promote the prairie / high plains theme, especially if allowed to grow into their natural form. Grasses, while in the ornamental grass category, do not require annual maintenance. Their unique character is best displayed in their natural condition. As with most formal landscaping, those plants with the most color require the most maintenance. Therefore, colorful perennials will be used sparingly and in major intersection locations (selected by the Town) that provide the most visual impact to corridor and Town travelers.

Median Taper/Intermittent Median Options

Two treatment options are recommended for the intermittent medians (8' medians) and where the 12' and 16' medians taper at intersection approaches. A blending of these two treatments is recommended, depending on the context. The gateway feature (hardscape) may be applied where appropriate (e.g., at entry points into the Town) and the perennial bed (landscape) may be applied in other locations to introduce more color with a modest and sustainable approach.

Perennial Bed (Landscape) Option

Colorful, small-scale perennial beds are recommended to promote plant health, cool the environment, and enhance intersections for vehicular travelers and pedestrians. The landscape beds will include perennial plant material, natural wood mulch (preferably from City stockpile), drip irrigation. Landscape fabric is not recommended to reduce blowing and enhance soil quality. The perennial beds will create a high visual appeal (social sustainability), will capture stormwater (environmental sustainability), and will include recycled city tree and shrub trimmings (environmental sustainability). Maintenance requirements will include annual pruning, mulch replenishing, weed control, and irrigation repairs (as needed).



Pros

- Visual appeal
- Roadway "cooling" (reduction in urban heat island effect)
- Relatively low initial cost

Cons

- Annual and long-term maintenance costs
- Increased exposure to unsafe working environment for maintenance crews

Gateway Feature (Hardscape) Option

Boulders or other sculptural elements within the median are recommended to function as entry features and to create a sense of Town identity. The large boulder will be stamped or signed with lettering or a plaque demarking the Town of Erie and will be surrounded by cobble. The gateway feature will offer placemaking (social sustainability), low maintenance (economic sustainability), and will require no water (environmental sustainability). Maintenance requirements will include weed control and replacing pavement or median cover (as needed).



Pros

- Opportunity for local/regional artist
- Expression of entry into the Town of Erie
- Very low maintenance

Cons

- Replacing pavement or median cover
- Weed control

Hardscape Elements

A mixture of small (6"-8") and medium (12"-18"), boulders will replace typical median concrete 'splashblocks' to elevate and protect plants from roadway splash-back and deicers. The buried, medium boulders represent the structure of the raised beds. A layer of landscape fabric should be placed under the median boulders and the gaps will be filled in with the smaller boulders to contain the planting mix. The boulders for this element should be a mixture of brown and gray colors to provide contrast against the smaller (4"-6") river cobble landscape rock mentioned above. The random boulder groupings should consist of odd-numbered groupings of medium (12"-18") and large (2'-4') boulders of various colors from local (state) sources. The boulders should be buried approximately 1/3-1/2 of the boulder height for a secure and natural appearance. The bury depth includes the adjacent specified cobble and sandstone or sharp-edged boulders are not permitted.

This material choice is less expensive, easier to maintain and provides more natural colors, textures and familiarity. The typical median landscape look will best express Erie's sustainable commitment to current and future budgets, maintenance efforts and promote a responsible solution to citizens and visitors with high expectations for civic improvements.

The Erie Median Policy provides reasonable design flexibility for median treatments to respond to the adjacent context. For example, a portion of a landscaped median adjacent to open space or expanses of native grasses should be allowed to respond likewise. Conversely, median treatments in more modern and urban / suburban landscape context may respond with a denser, more colorful plant selection and formal arrangement of landscape features.

The diagrams in **Appendix D** are intended to capture the typical layout of medians in Erie. Spacing between elevated portions of the overall median should be adapted to the adjacent land uses and ultimately approved by the Town.

Life Cycle Cost Analysis

Capital Costs and Maintenance

Developing and maintaining medians in Erie is a financial decision that requires careful analysis. Typically, construction and maintenance budgets are separate (including privately developed and publicly maintained) and design decisions can have long-term impacts on maintenance staff and operation budgets. Landscaping, especially plant materials, are less likely to live out their typical life cycle in a median setting and will require replacement on a shorter interval compared to parks and traditional commercial landscaping.

Currently Erie invests approximately 2,345 total manhours to maintain approximately 4.5 miles of landscaped medians each year. At a labor rate of \$25/hr. (labor plus fringe benefits) the per/mile per/year maintenance cost is approximately \$13,100. Considering the proposed landscape treatment for future median development in the Town of Erie, the per/mile cost is expected to decrease.

The design concepts, materials and equipment proposed in this policy have been selected to respect implementation budgets and lessen the long-term maintenance burden. Plants are placed in similar, natural clumps which are easier to identify and replace as needed. This design concept also allows maintenance crews to more efficiently control weeds and safely access the medians. Chemical overspray can harm desirable plants and intended plants are easier to identify in separate clusters against typical random weed growth habits. The clumps are spaced in a manner that still looks pleasing to motorists (angle of view while driving) but lowers the plant quantity to a reasonable number for replacements.

The largest contributor to median capital costs are concrete 'splashblocks' and irrigation equipment. Erie's response to this challenge is using real boulders and stones to contain soil and elevate plant material from the roadway. This solution will also aid in maintenance as repairing angled, colored concrete is very burdensome and costly and color / pattern matching is problematic. The irrigation system's largest impact to median construction budgets is the point-of-connection and pipe sleeving and/or boring. Connecting median islands to each other with irrigation pipe to save tap fees and connection costs that should be avoided if possible.

Irrigation

The most appropriate irrigation system for Erie medians is a low-pressure, drip system (individual emitters to each plant with distribution tubing). This arrangement is the most efficient and maintainable system as there is no overspray, fewer breaks and emitters may be increased or removed easily. Also, a large low-pressure zone can be irrigated with one or two valves which decreases cost and maintenance. Erie has the convenience of not paying tap fees which will aid in relatively low-cost irrigation systems. This also decreases the need to add expensive bores to connect median islands to save tap fees. If roadway improvements are planned where a median island is also planned, sleeving should be added to avoid the cost of future boring (depending on the location of the water source). Smaller, individual irrigation systems can be implemented with smaller, less expensive controllers and can be powered with a solar or battery-powered system. These systems can be managed with a Central Control system with the addition of proper hardware.

Retrofitting Erie Parkway

Most of Erie Parkway between 119th Street and Briggs Street already has the 16' landscaped median described previously, with the exception of an approximately ½ mile segment between Woodson Drive and Mitchell Way – the combined width of the existing raised medians and left turn lanes in this ½ mile is greater than 16' and the medians are covered with native grasses. Retrofitting this section to conform with the median design standards would substantially improve roadway aesthetics through the Town's core.

The large grassy median on Erie Parkway just west of County Line Road is not consistent with the median landscaping standard throughout the rest of the corridor and detracts from the aesthetic appeal of an area that will ultimately be the commercial center of Erie when fully developed. Replacing these native grasses with the landscape materials detailed in this document would enable a unifying visual standard for the entirety of Erie Parkway and establish a showcase corridor for the Town. The construction cost range to convert this section of median is \$300,000 - \$375,000. Factors such as permitting fees, traffic control costs and water tap fees are not included in this estimate.



ERIE MEDIAN POLICY APPENDICES




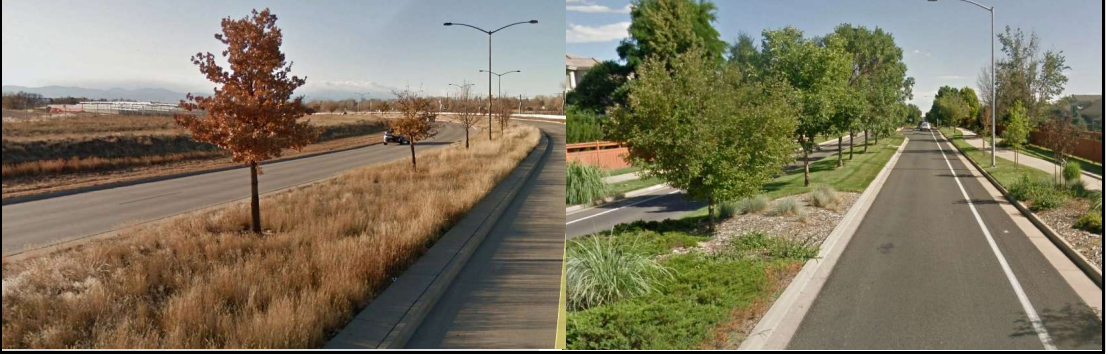
Appendix A. Median Width Matrix



Appendix B. Landscape Treatment Matrix

Appendix C. Plant List

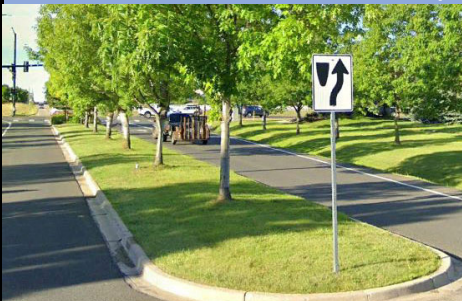
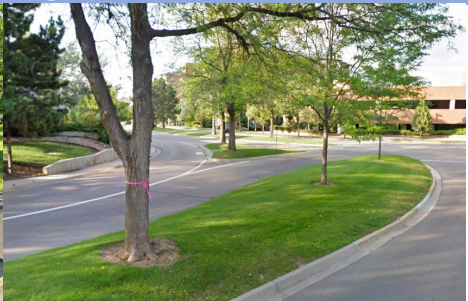



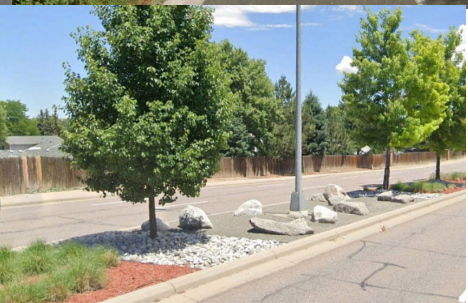


Appendix D. Conceptual Design – Typical Median Plan and Section





Appendix E. Arterial Median Diversity in the Town

Appendix A									
Erie Median Policy - Width Matrix									
SUSTAINIBILITY COMPONENT		SOCIAL				ECONOMIC	ENVIRONMENTAL		Sample Images
Typical Median Types	Name	Pedestrian Safety & Comfort	Relative Pedestrian Space Outside of Roadway	Access Control	Vehicular Mobility	Relative Construction & Maintenance Cost	Stormwater Permeability	Applicable Landscape/Hardscape Treatments	
1	Centerline (no median)	Low: No space for median refuge island	High: Maximizes right-of-way outside of the roadway footprint	None	Low: No physical separation between directions, and no room for turn pockets	Low	None	None	
2	Striped 18' Median	High: Ample space for median refuge island	Low: Least right-of-way available outside of the roadway footprint	Low	High: Room for median noses at left-turn pockets	Low	None	I	
3	Striped 12' Median	High: Ample space for median refuge island	Moderate	Low	Moderate: No room for median noses at left-turn pockets	Low	None	I	
4	Raised 16' Median	High: Ample space for median refuge island	Low: Least right-of-way available outside of the roadway footprint	High	High: Room for median noses at left-turn pockets	High	High, with landscaped cover	A, B, C, D, E, F, G	

SUSTAINIBILITY COMPONENT		SOCIAL				ECONOMIC	ENVIRONMENTAL		Sample Images
Typical Median Types	Name	Pedestrian Safety & Comfort	Relative Pedestrian Space Outside of Roadway	Access Control	Vehicular Mobility	Relative Construction & Maintenance Cost	Stormwater Permeability	Applicable Landscape/Hardscape Treatments	
5	Raised 12' Median	High: Ample space for median refuge island	Moderate	Moderate	Moderate: No room for median noses at left-turn pockets	High	High, with landscaped cover	A, B, C, D, E, F, G	
6	Raised 9' Median	Moderate: Space for median refuge island, but may not be comfortable depending on vehicle speeds	Moderate	Moderate	Low: No room for left-turn pockets without intersection widening	Moderate	High, with landscaped cover	A, B, C, D, E, F, G	

Erie Median Policy - Landscape Treatment Matrix

SUSTAINABILITY COMPONENT				SOCIAL	ECONOMIC		ENVIRONMENTAL						
Typical Median Types	Name	Description	Minimum Recommended Width (with / without splashblock-Curb Face	Anticipated Visual Appeal (high, moderate, low)	Construction Cost Range (per mile-commercial + residential)	Splashblock Benefit? (will increase cost)	Water Consumption (high, medium, low, none)	Stormwater Permeability	Relative Maintenance Effort (high, medium, low)	Summary of Maintenance Activities	Remarks	Sample Images	
A	Traditional Parkway	Irrigated turf grass, trees	11 feet / 9 feet	high	\$950,000 - \$1,375,000	no	high	yes	high	weekly mowing, irrigation system inspections and adjustments, annual irrigation maintenance	splashblock not necessary due to amount of water to 'wash' the salts / chemicals		
B	Blended Parkway and Xeric	Some irrigated turf, low water-use shrubs, mulches	11 feet / 9 feet	high	\$1,100,000-\$1,600,000	yes (incl. in cost)	medium	yes	high	weekly mowing, irrigation system inspections, annual irrigation maintenance, annual shrub pruning, regular weed control, annual mulching	fairly formal and attractive, slightly less water consumption		
C	Xeric	Low water-use trees, shrubs, perennials, boulders, decorative rock	7 feet / 5 feet	high / moderate	\$1,100,000-\$1,600,000	yes (incl. in cost)	low	yes	medium	seasonal irrigation inspections and adjustments, shrub & perennial pruning, weed control, annual mulching	can be very beautiful and elaborate depending the knowledge and dedication of the maintenance staff		
D	Native Grass + Trees	Native grass (seeded) and trees	n/a / 5 feet	moderate	\$700,000-\$1,000,000	no	low	yes	low	annual irrigation inspection and maintenance, seasonal mowing, minor weed control	this design can be depressed to eliminate / reduce irrigation and take advantage of precipitation and roadway splash-could be blended in more open adjacent land uses		

Sustainability Component				Social	Economic		Environmental			Summary of Maintenance Activities		Sample Images		
Typical Median Types	Name	Description	Minimum Recommended Width (with / without splashblock-Curb Face)	Anticipated Visual Appeal (high, moderate, low)	Construction Cost Range (per mile-commercial + residential)	Splashblock Benefit? (will increase cost)	Water Consumption (high, medium, low, none)	Stormwater Permeability	Relative Maintenance Effort (high, medium, low)					
E	Native Grass	Native grass	n/a / 5 feet	moderate / low	\$575,000-\$875,000	no	none	yes	low	annual / seasonal mowing, minor weed control	may be a visually acceptable solution depending on adjacent land uses			
F	Decorative Rock + Xeric Plants	Multiple decorative rock, some drought-tolerant plants, boulders	7 feet / 5 feet	moderate	\$775,000-\$1,150,000	no	none	yes	low	regular weed control, minor shrub pruning, annual mulching	will need supplemental water for establishment, expect regular plant replacements			
G	Synthetic Turf	Synthetic turf and trees / shrubs	n/a / 5 feet	high	\$1,000,000-\$1,600,000	yes (incl. in cost)	low	yes	moderate	seasonal irrigation inspections and adjustments, shrub & perennial pruning, weed control, annual mulching	some viewers think green grass in the fall and winter is strange, but most like it, use 'lower' grade turf for cost			
H	Paving	Concrete paving (patterned, colored or typical flatwork)	n/a / 1 foot	low	\$1,175,000-\$1,700,000	n/a	none	no	low	seasonal weed control	best suited for turn pockets or narrow areas due to relative cost to construct			
I	Striping	Striped asphalt roadway	n/a	low	n/a	n/a	none	no	n/a	n/a	best suited for cost savings and/or narrow areas			

Appendix C

Erie Median Policy - Plant List

Latin Name	Common Name
Deciduous Trees (shade and ornamental)	
<i>Celtis occidentalis</i>	Common hackberry
<i>Gymnocladus dioica</i>	Kentucky coffeetree
<i>Prunus x virginiana</i> 'Sucker Punch / P002S'	Sucker Punch chokecherry
<i>Quercus muelenburgii</i>	Chinkapin oak
<i>Quercus gambelii</i>	Gambel oak
<i>Heptacodium miconoides</i>	Seven-son flower
<i>Gleditsia triacanthos inermis</i> 'Shademaster'	Shademaster honeylocust
<i>Ulmus frontier</i>	Frontier elm
<i>Acer grandidentatum</i>	Bigtooth maple
<i>Xanthoceras sorbifolium</i> 'Clear Creek'	Clear Creek golden yellowthorn
<i>Crataegus crus-galli inermis</i>	Thornless Cockspur hawthorn
<i>Acer tataricum</i> 'Garann'	Hot Wings Tatarian maple
<i>Koelreuteria paniculata</i>	Goldenraintree
Shrubs	
<i>Viburnum burejaeticum</i>	Mini man dwarf Manchurian virurnum
<i>Cercocarpus brevifolius</i>	Little Flowered mountain mahagony
<i>Perovskia atriplicifolia</i>	Russian sage
<i>Forestiera neomexicana</i>	New Mexican privet
<i>Prunus besseyi</i> 'Pawnee Buttes'	Pawnee Buttes sand cherry
<i>Rhus aromatica</i> 'Gro-Low'	Gro-Low sumac
<i>Ribes alpinum</i>	Alpine currant
<i>Symphoricarpus chenaultii</i> 'Hancock'	Hancock coralberry
<i>Yucca glauca</i>	Common yucca
<i>Arctostaphylos x coloradoensis</i> Panchito	Panchito manzanita
Ornamental Grasses	
<i>Andropogon gerardii</i>	Big bluestem
<i>Schizachyrium scoparium</i>	Little bluestem
<i>Boeteloua gracilis</i>	Blue grama
<i>Pennisetum alopecuroides</i>	Fountain grass
<i>Imperata cylindrica</i> 'Red Baron'	Japanese bloodgrass
Perennials	

Latin Name	Common Name
Kniphora uvaria	Red Hot Poker
Hemerocallis sp.	Daylily
Achillea sp.	Yarrow
Aquilegia sp.	Columbine
Arctostaphylos uva-ursi	Kinnikinnick
Aster sp.	Aster
Echinacea purpurea	Purple coneflower
Gallardia aristata / grandiflora	Blanketflower
Lavandula sp.	Lavender
Leucanthemum x superbum	Shasta daisy
Rudbeckia sp.	Black-eyed Susan

Appendix D: Conceptual Design - Typical Median Plan and Section



Russian Sage



Pawnee Buttes Sandcherry



Panchito Manzanita



Gro-Low Sumac



Red Hot Poker



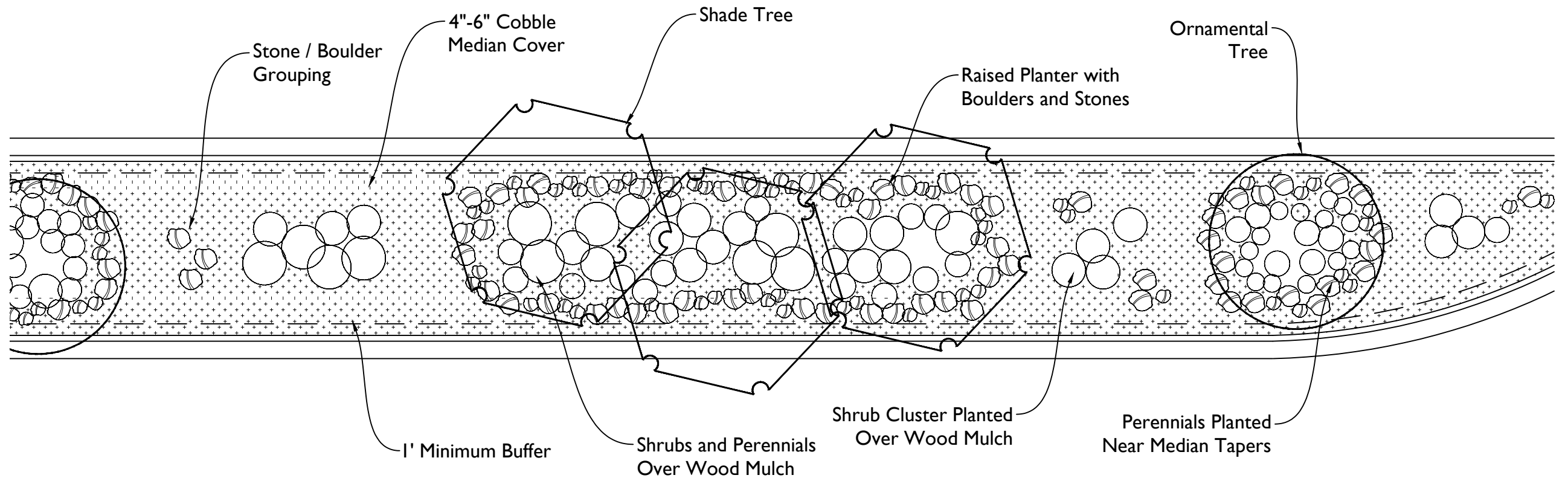
Daylily



4"-6" Median Cover

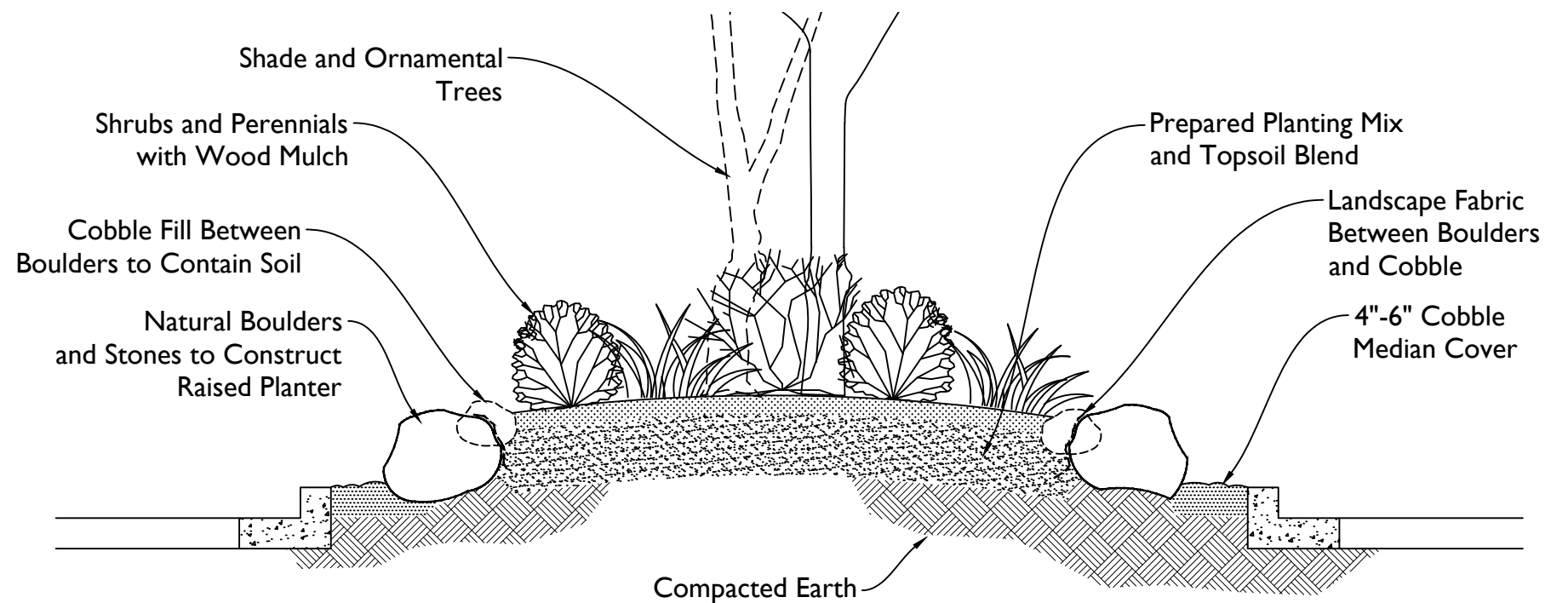


Boulder Grouping Example



Typical 16' Median Plan

Scale: 1" = 10'



Typical 16' Median Section

Not to Scale

Appendix E: Arterial Median Diversity in the Town



Erie Parkway West of County Line



Erie Parkway East of County Line

Appendix E: Arterial Median Diversity in the Town



County Line Road North of Erie Parkway



Erie Parkway Near Colliers

Appendix E: Arterial Median Diversity in the Town



Erie Parkway near Colliers



Erie Parkway near West of 119th

Appendix E: Arterial Median Diversity in the Town



Erie Parkway Immediately East of 119th.



Erie Parkway between 119th and County Line

Appendix E: Arterial Median Diversity in the Town



Erie Parkway County Line to Bridge over Coal Creek

PREPARED FOR THE TOWN OF ERIE BY

