







CITY OF CASTLE PINES

FEBRUARY 5, 2021

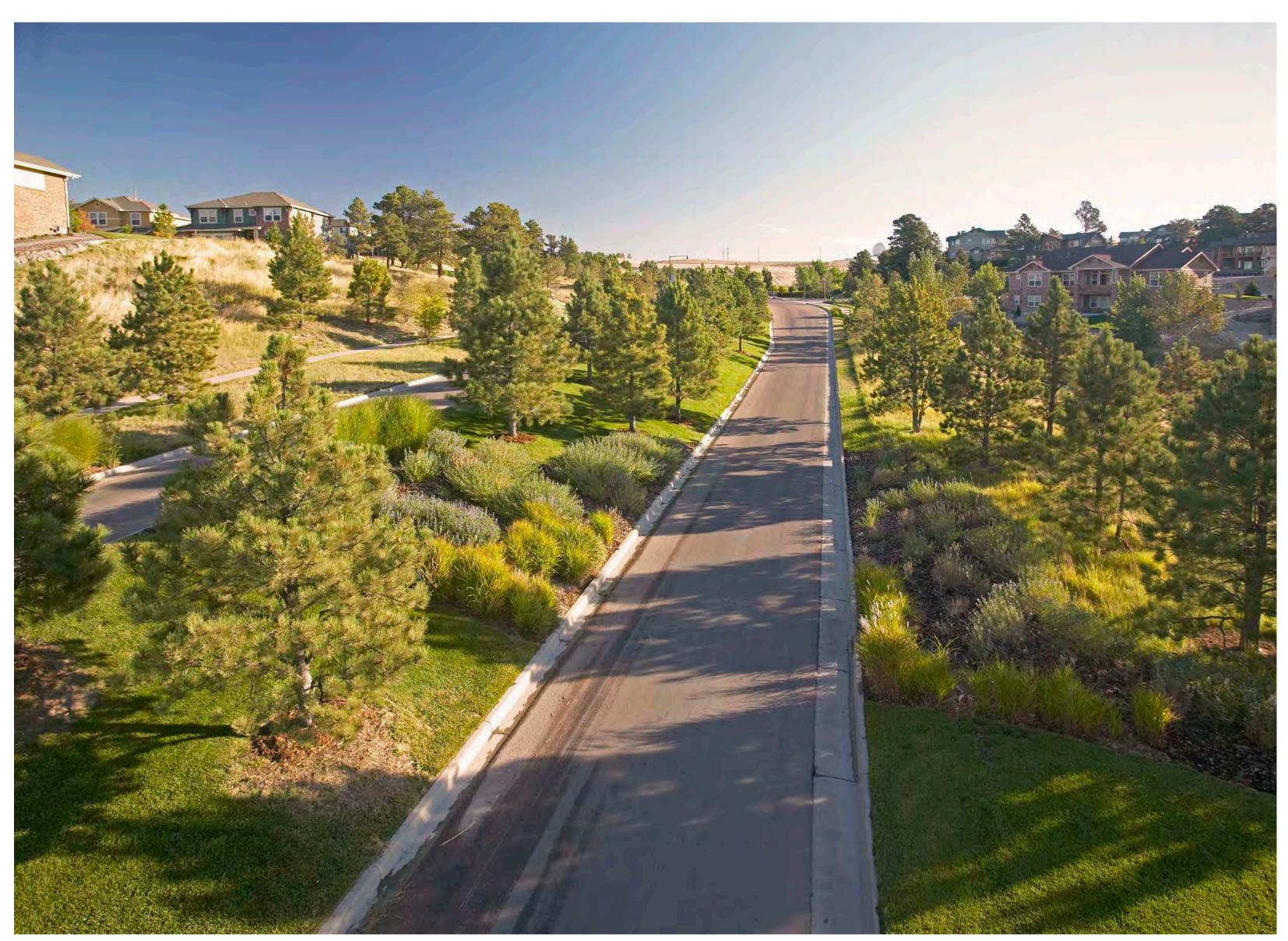
# CASTLE PINES PARKWAY

I-25 TO LAGAE ROAD LANDSCAPE PLAN

# Gateway - Phase I



Organized
[formal at intersections, nodes, entrances]



Organic
[ naturally flowing stretches between major nodes ]



# **Concept A - Pine Rows**



# **Concept B - Tiered Walls**















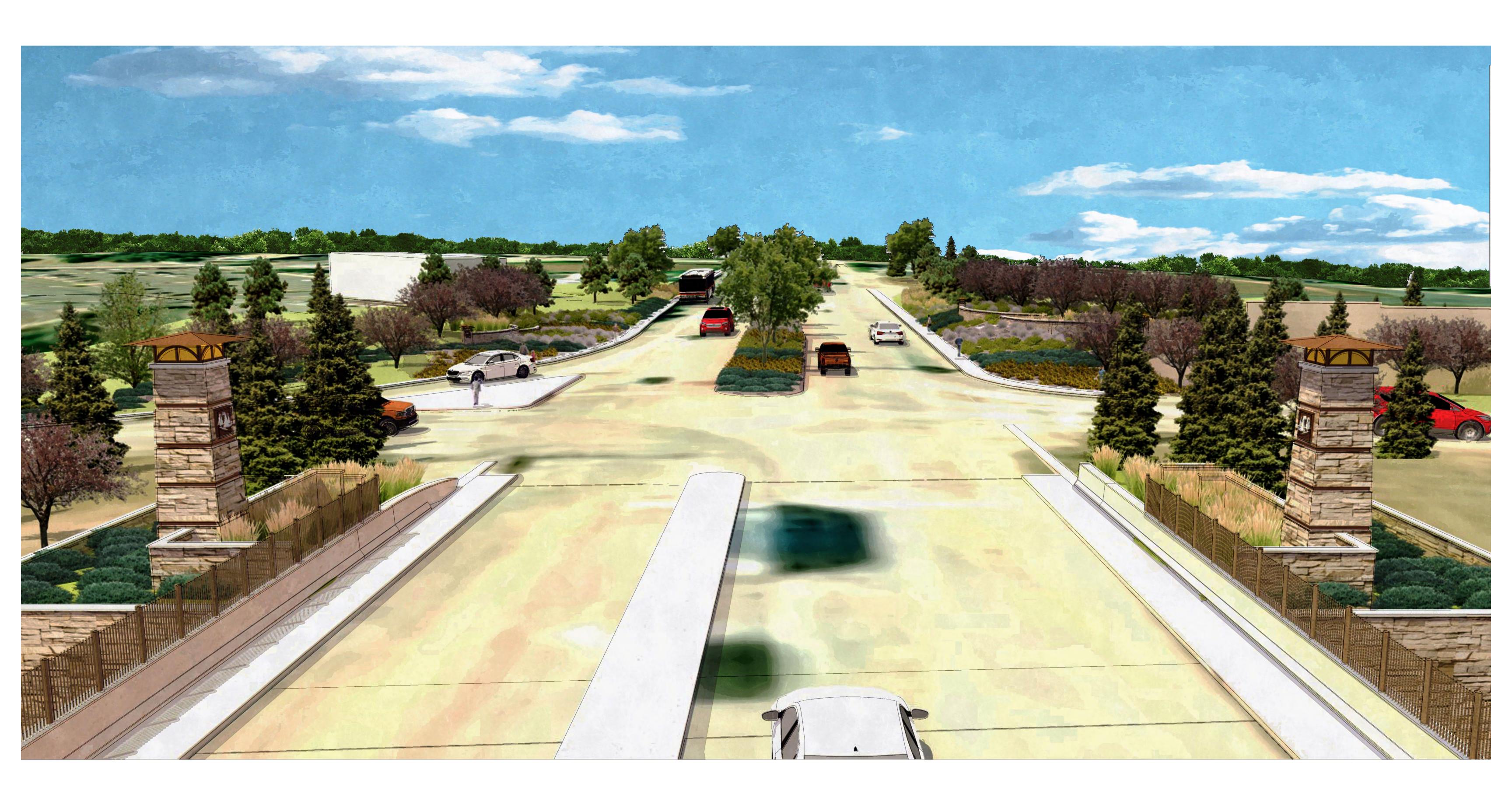














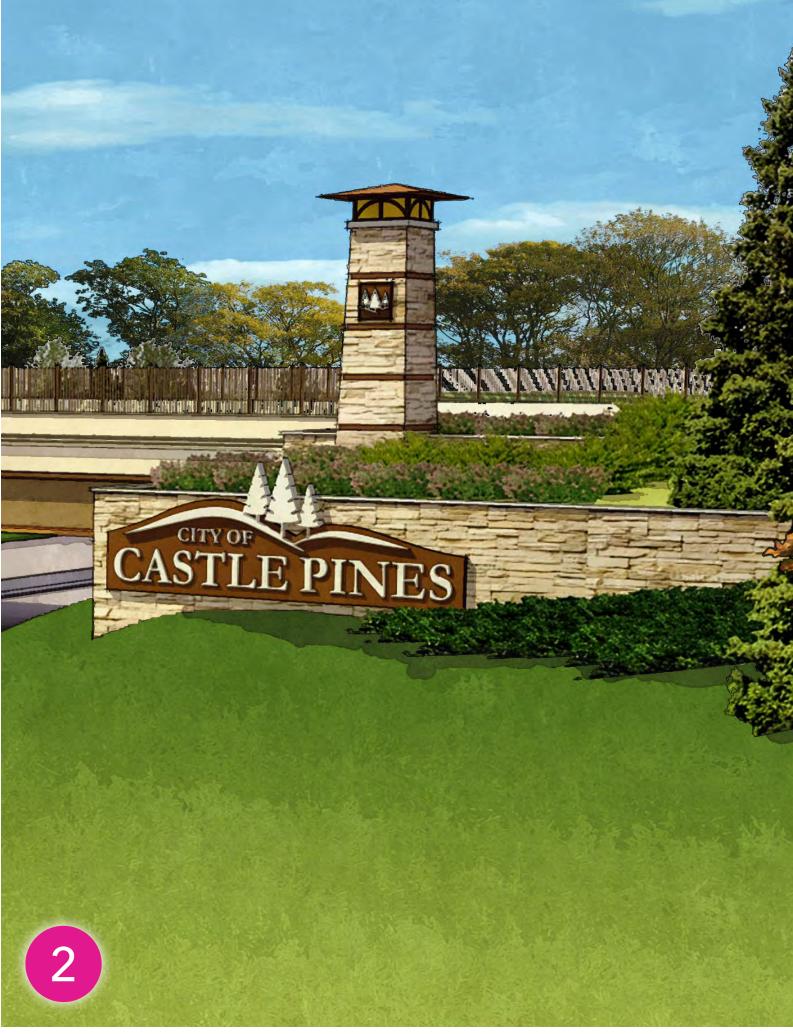


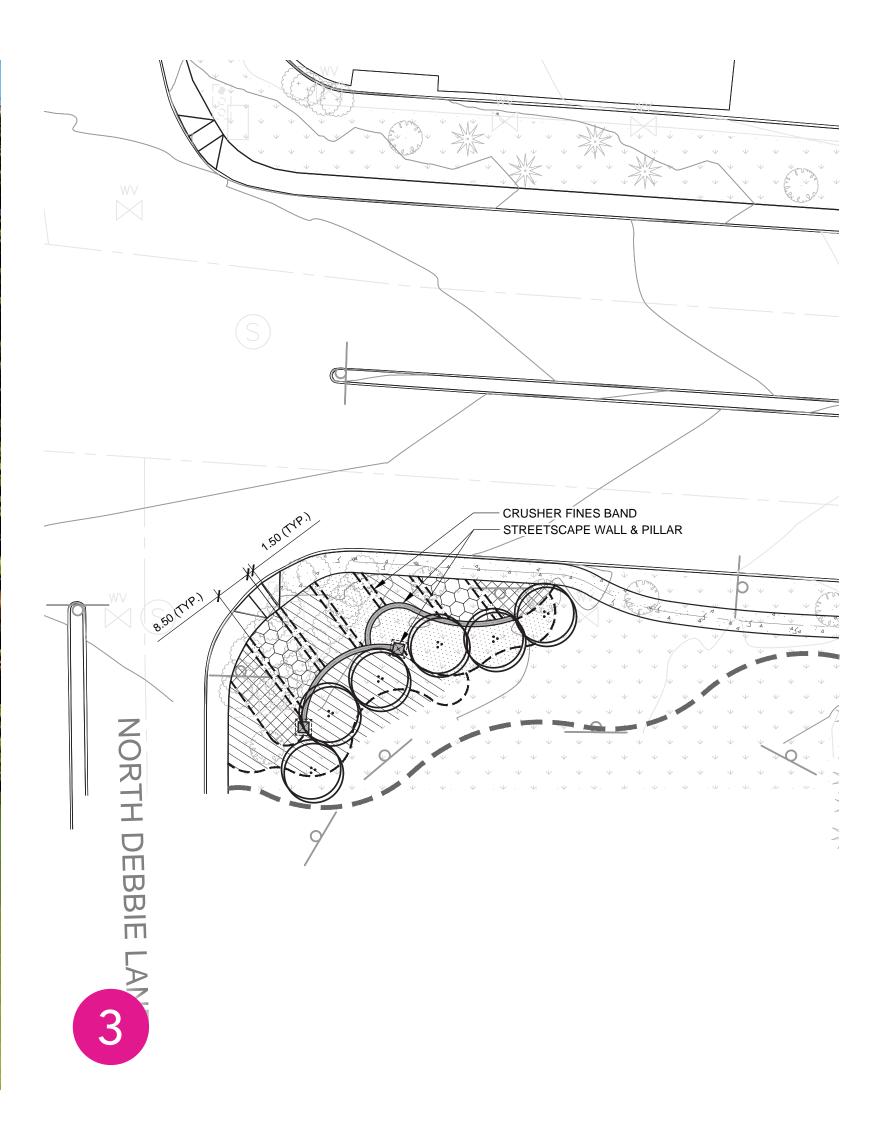
# Gateway - Phase II

## Previous Council Comments - 10/13/20

- Snow Tolerance of the design resistance to mag chloride / ice / snow piling.
- Concerns about west side of city looking old & outdated while east side of city looks new & flashy.
- Concerns about sight lines; spacing between monumentation and roads / walkways.
- Castle Pines is subject to a tremendous amount of microclimates, wind conditions, and other factors. The planting design needs to respond to these local elements, be exclusively native zone 4 plants, and have consideration to cost of maintenance.











## **Planting Palette**

- Native Palette with low-water use / low-maintenance cost, in line with Castle Pines North Metro District suggestions
- □ Tolerant of all urban / street conditions
- Year-round Seasonal Interest
- Planting that stands out as a community
- Create a unique identity as guests and residents enter Castle Pines
- Accent local businesses and entities



Simplistic overstory selections with native evergreen, deciduous, and ornamental variety



Tough native shrub selections with variety of seasonal color to act as a backdrop to showy plants



**Evergreen shrubs & groundcovers** for winter interest and to compliment the rugged rock style of monumentation elements



Native ornamental grasses to compliment shrub/perennial plantings and for height variety adjacent to monumentation



**Perennial plant mixture** tolerant of adjacent road conditions as a thriving plant community



# **Planting Palette**

	CASTLE PINES GATEWAY <b>OVERSTORY</b> SCHEDULE													
KEY	Scientific Name	Common Name	Size (min)	Height	Spread	Light	Water use	Notes Notes						
	DECIDUOUS TREES													
AG	Acer grandidentatum	Big Tooth Maple	2 1/2" cal.	10'-30'	20'-30'	Full sun, Partial shade	Low	native; tolerant of many soils						
СО	Celtis occidentalis	Western Hackberry	2 1/2" cal.	40'-60'	50'	Full Sun	Low	xeric tree; highly adaptable to adverse conditions, good street tree						
	EVERGREEN TREES													
JS	Juniperus scopulorum	Rocky Mountain Juniper	6'-12' ht.	20'-30'	8'-12'	Full Sun	Low	good windbreak; pyramidal, bluish-green; drought tolerant						
PS	Pinus strobiformus	Southwestern White Pine	6'-12' ht.	40'-50'	20'-30'	Full Sun	Low	tolerates heat and wind, will thrive in variety of soil conditions						
	ORNAMENTAL TREES													
MXP	Malus x 'Prairiefire'	Prairiefire Crabapple	2" cal.	20'	20'	Full Sun	Low	four season ornamental interest, deep red color with spectacular pink blooms						

	CASTI	LE PINES GATEWAY	UNDER	STORY	'SCHE	DULE		
KEY	Scientific Name	Common Name	Size	Height	Spread	Light	Water use	Notes Notes Notes Notes
			(min)					
	DECIDUOUS SHRUBS							
CM	Chamaebatiaria millefolium	Fernbush	1 gal.	4'	4'	Full Sun	Low	semi-evergreen, showy white blooms through summer, winter interest
PLC	Philadelphus lewisii 'Cheyenne'	Cheyenne Mockorange	5 gal.	5'-8'	5'-8'	Full Sun	Low	native; tough, beautifu shrub
PB	Prunus besseyi 'Pawnee Buttes'	Pawnee Buttes Sandcherry	1 gal.	18"	4'	Full Sun	Low	attractive and reliable; great native bee plant
RT	Rhus trilobata	Three Leaf Sumac	5 gal.	6'	6'	Full Sun	Low	high habitat value, use in masses; brilliant fall foliage
	EVERGREEN SHRUBS							
CN	Chrysothamnus nauseosus var. nauseosus	Baby Blue Rabbitbrush	1 gal.	24"	24"	Full sun, Partial shade	Low - Xeric	seasonal interest, wind resistant
PMM	Pinus mugo 'Slow Mound'	Dwarf Mountain Pine	1 gal.	12"-36"	36"	Full Sun	Low	
PMH	Pinus sylvestris 'Hillside Creeper'	Hillside Creeper Scotch Pine	1 gal.	24"-36"	7'-8'	Full Sun	Low	winter interest; low maintenance, thrives in all soils and tolerant of urban pollution
YS	Yucca glauca	Soapweed	1 gal.	2'-3'	2'-3'	Full Sun	Low	native
	ORNAMENTAL GRASSES							
AC	Pennisetum alopecuroides 'Hameln'	Dwarf Fountain Grass	1 gal.	24"-36"	24"	Full Sun	Low	effective mass planting, beautiful color variety over seasons, tolerates soils
PVN	Schizachyrium scoparium 'Prairie Blues'	Little Bluestem 'Prairie Blues'	1 gal.	48"	30"	Full Sun	Low - Xeric	
	PERENNIALS / GROUNDCOVERS							
AXC	Archostaphylos x coloradoensis	Panchito Manzanita	1 gal.	12"-15"	24"-36"	Full sun, Partial shade	Low - Xeric	native broadleaf evergreen groundcover, winter interest
AF	Artemisia frigida	Prairie Sagewort	1 gal.	24"	24"	Full Sun	Low	native; silver foliage
СР	Ceratostigma plumbaginoides	Plumbago	1 gal.	12"	24"	Full sun, Partial shade	Low	
	Echinacea purpurea	Purple Coneflower	1 gal.	24"	24"	Full Sun	Low	
JHM	Juniperus horizontalis 'Mother Lode'	'Mother Lode' Juniper	1 gal.	4"	8'-10'	Full Sun	Low / Mod	effective for mass groundcover, rocks, erosion control; good border plant in front of taller shrubs
NF	Nepeta x faassenii	Catmint	1 gal.	24"	24"	Full Sun	Low	
RH	Rudbeckua hirta	Black Eyed Susan	1 gal.	36"-42"	24"	Full Sun	Low	

## **NOTES:**

1. Final plant selections pending per availability and final soil testing.







## Planting Palette at Monumentation





**Dwarf Fountain Grass** Pennisetum alopecuroides 'Hameln'



Hillside Creeper Scotch Pine Pinus sylvestris 'Hillside Creeper'



Catmint Nepeta x faassenii



Prairie Sagewort Artemisia frigida



Hackberry Celtis occidentalis



Baby Blue Rabbitbrush Chrysothamnus nauseosus



'Mother Lode' Juniper Juniperus horizontalis 'Mother Lode'



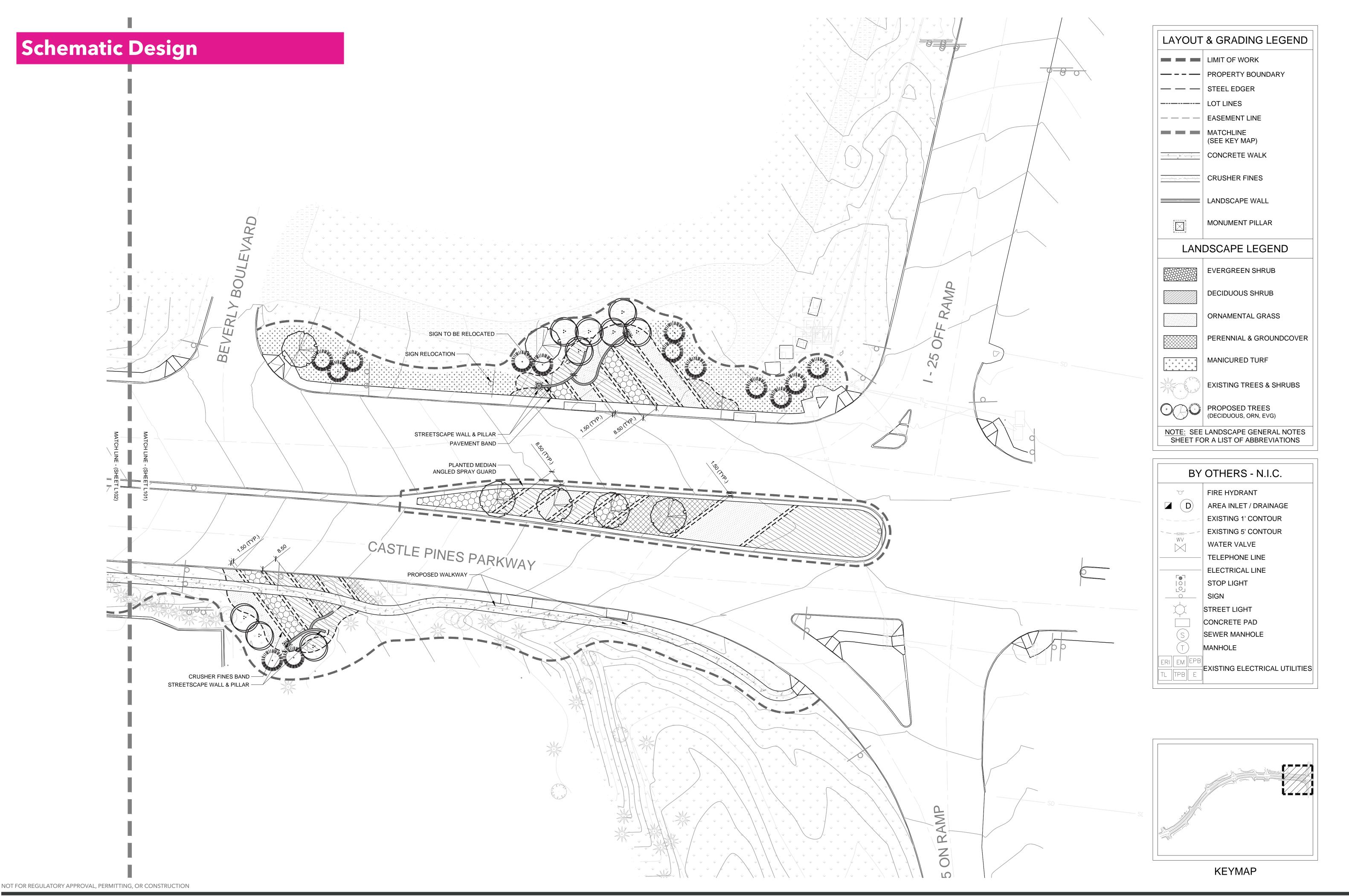
Purple Coneflower Echinacea purpurea



Prairiefire Crabapple Malus x 'Prairiefire'

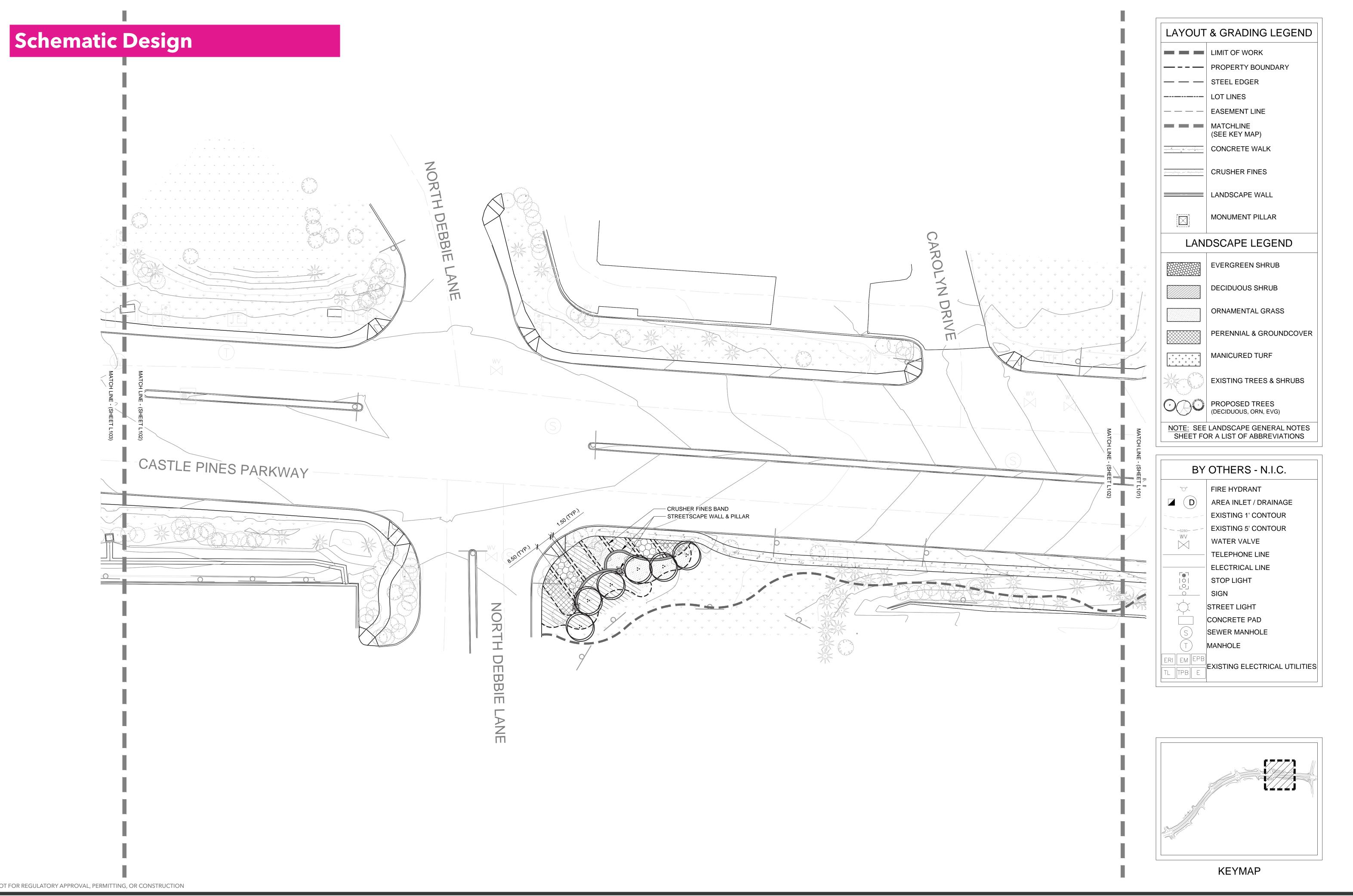


Southwestern White Pine Pinus strobiformus



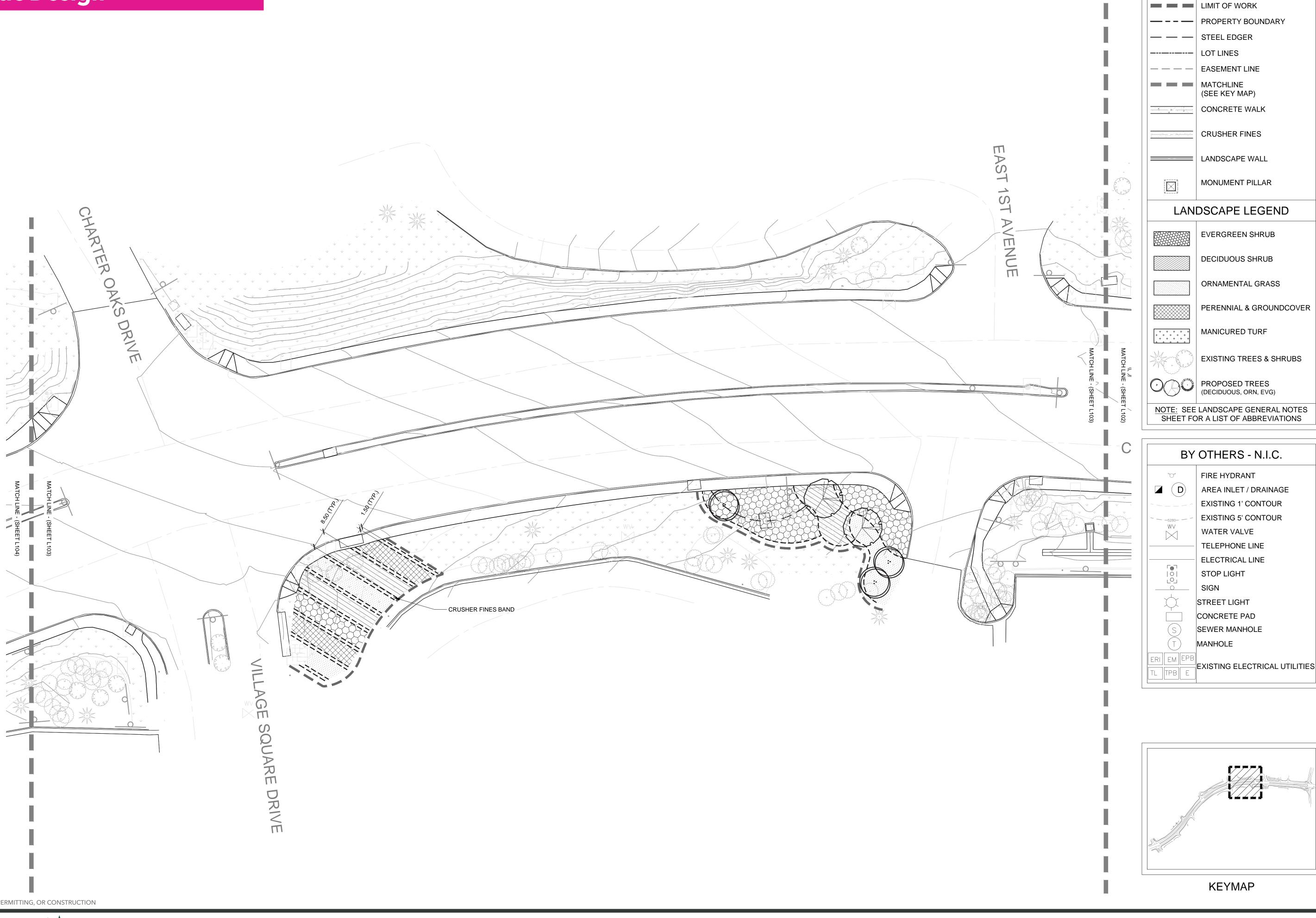








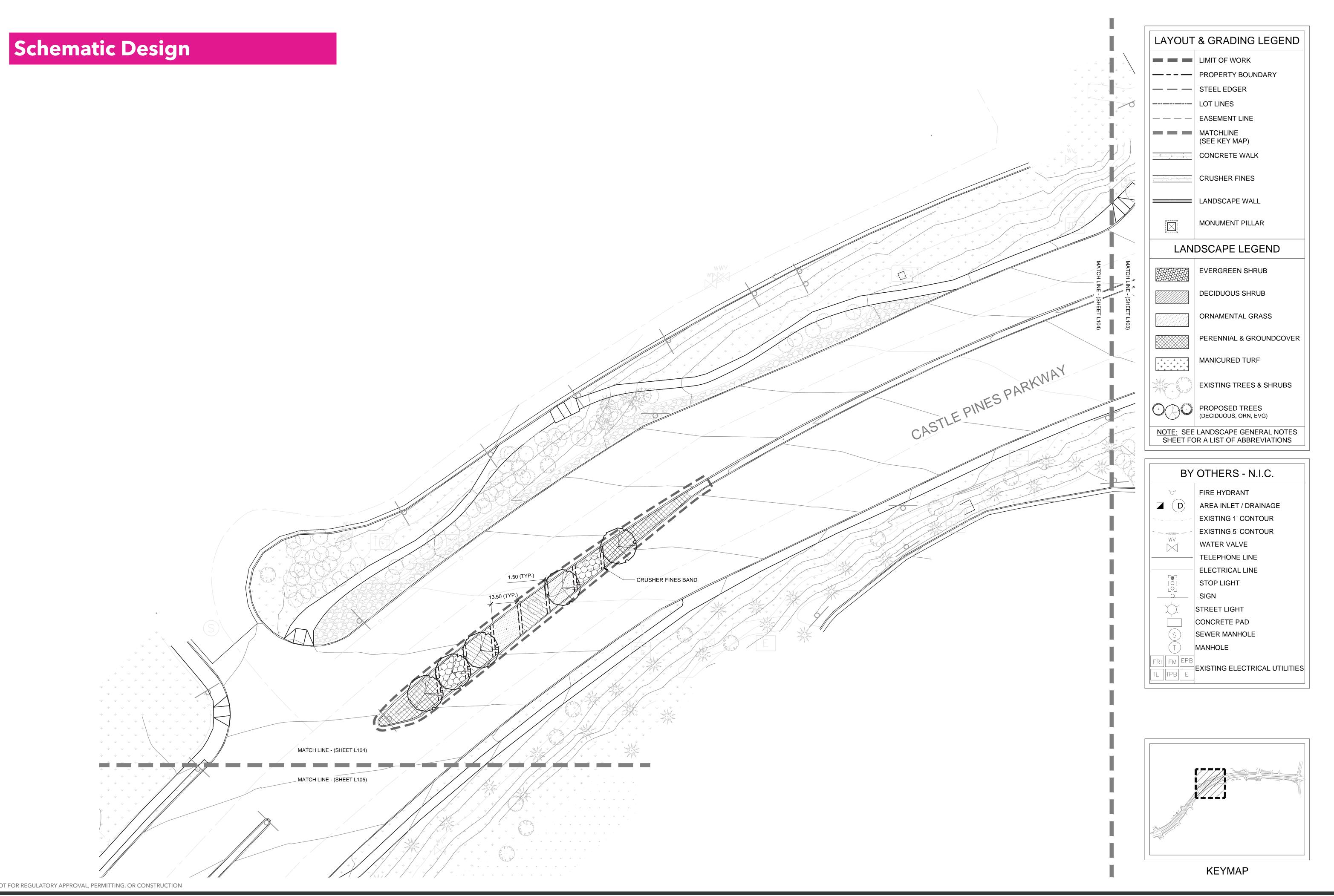






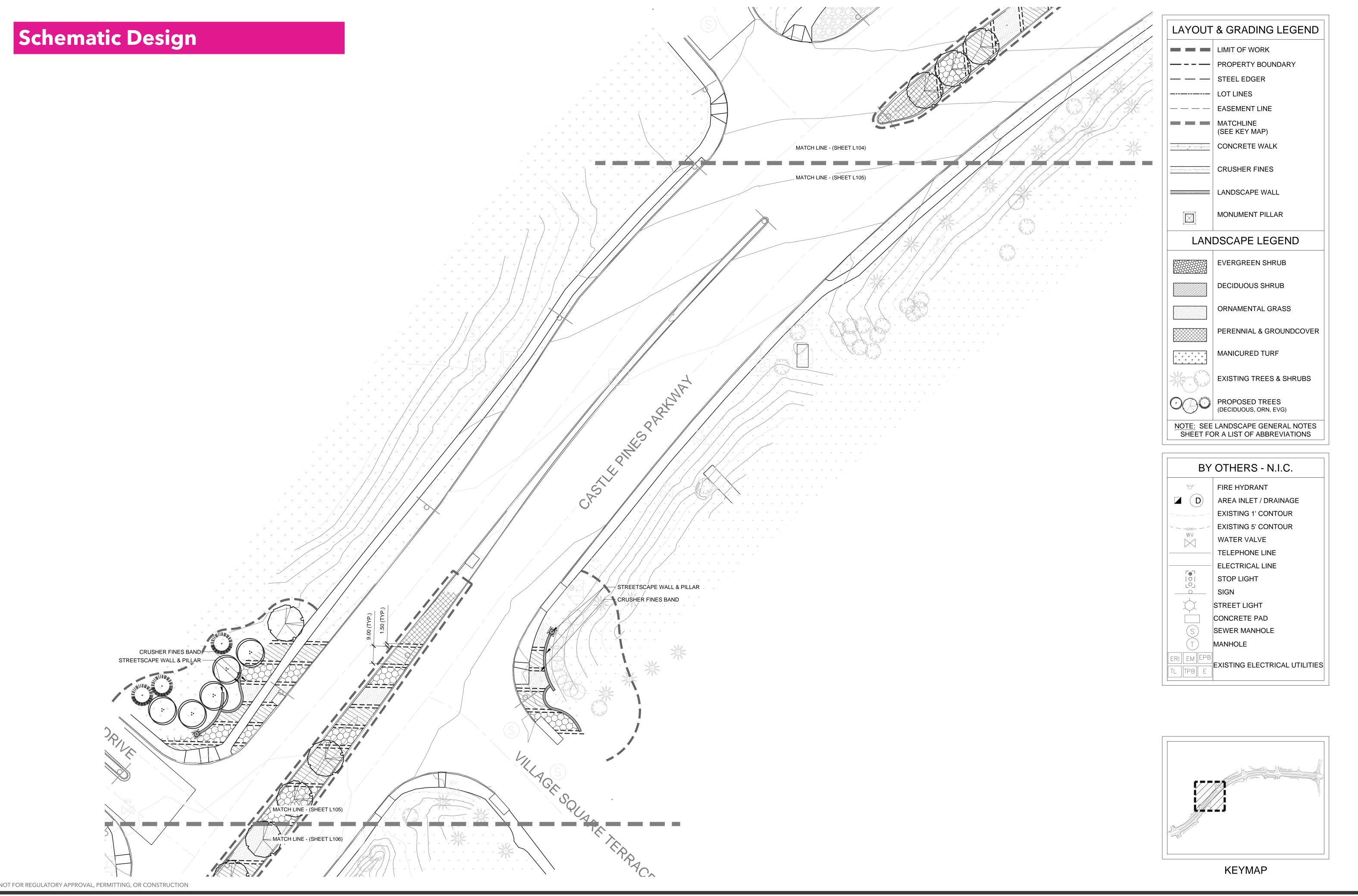


LAYOUT & GRADING LEGEND



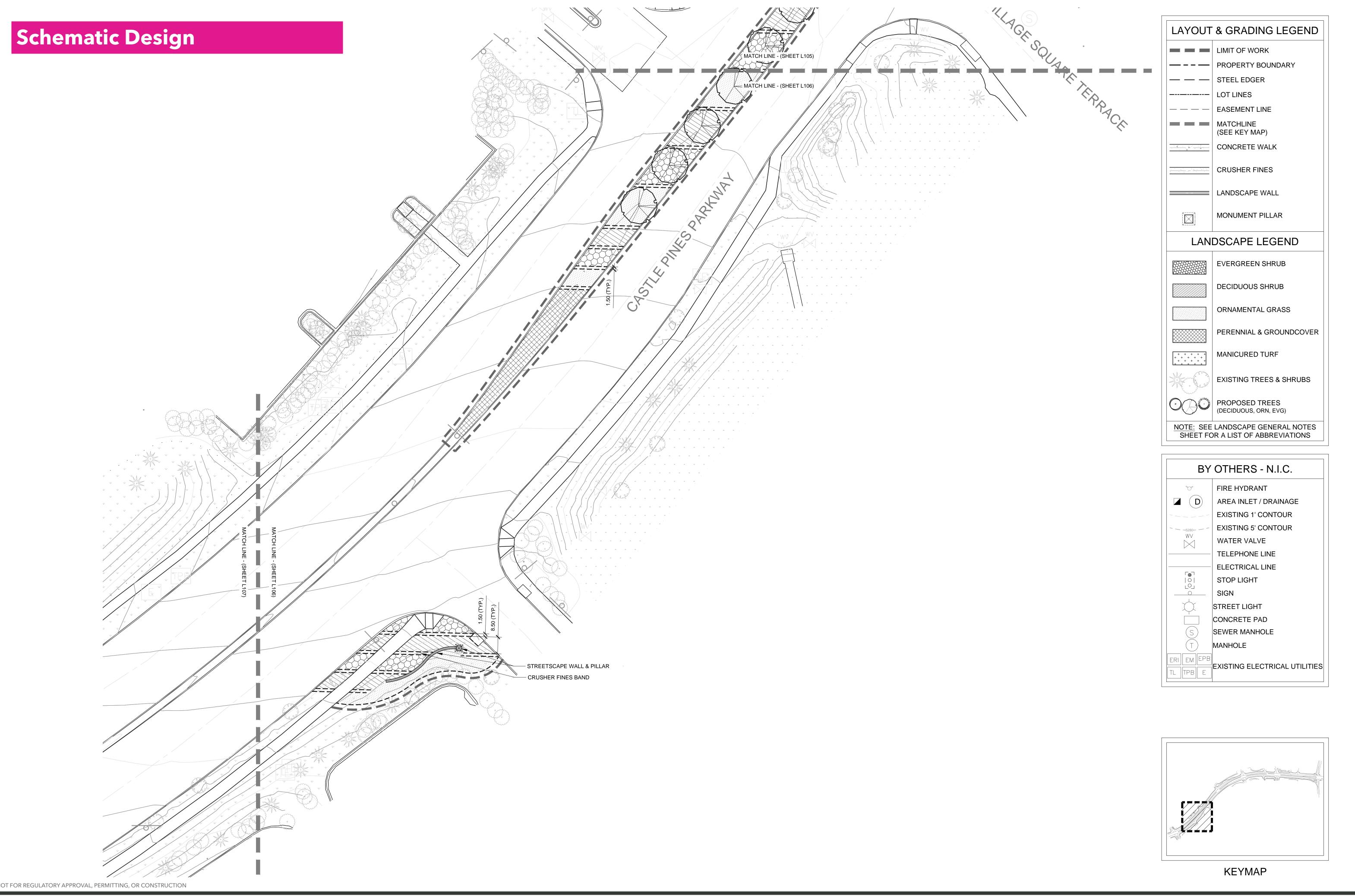






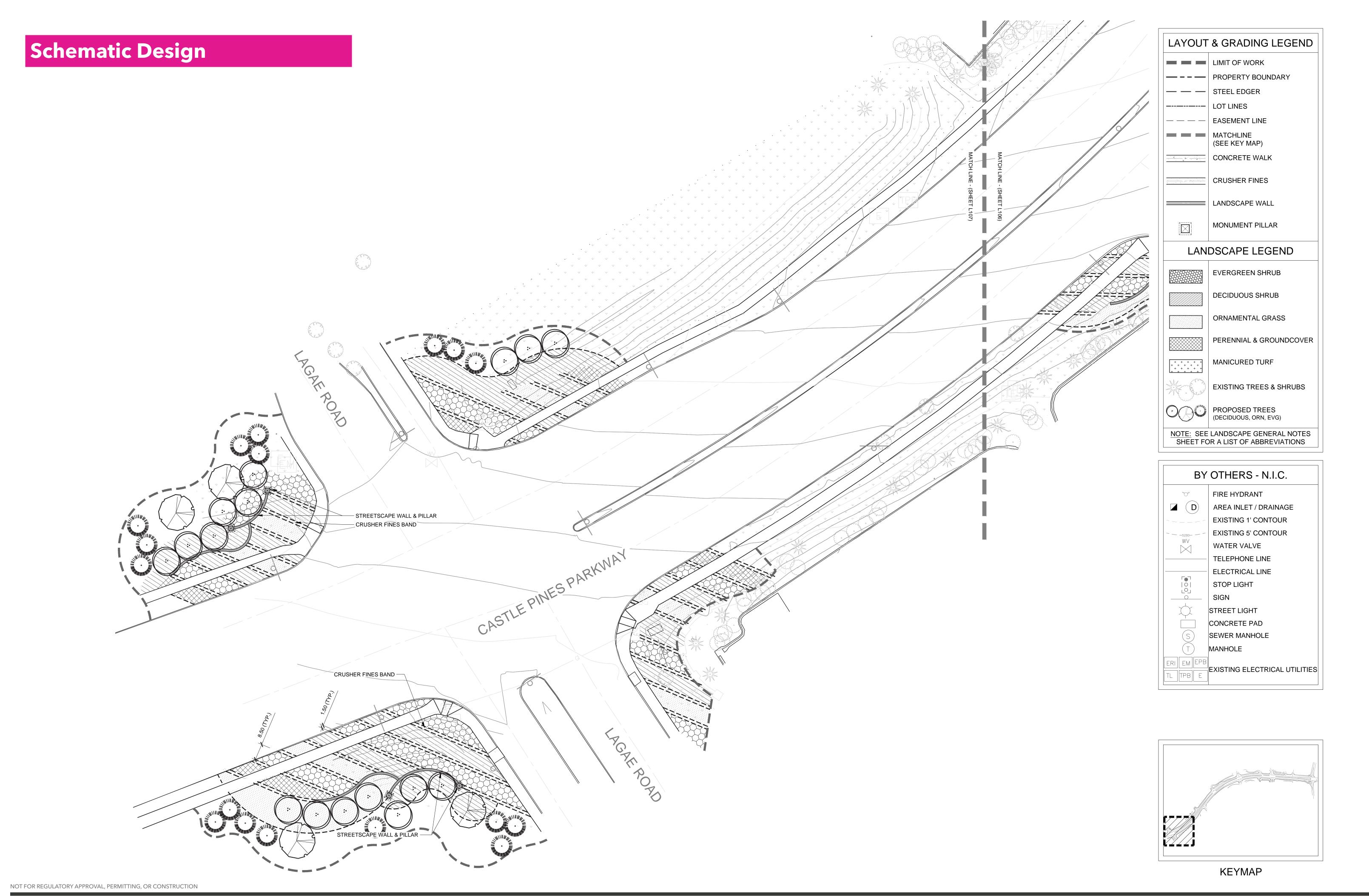






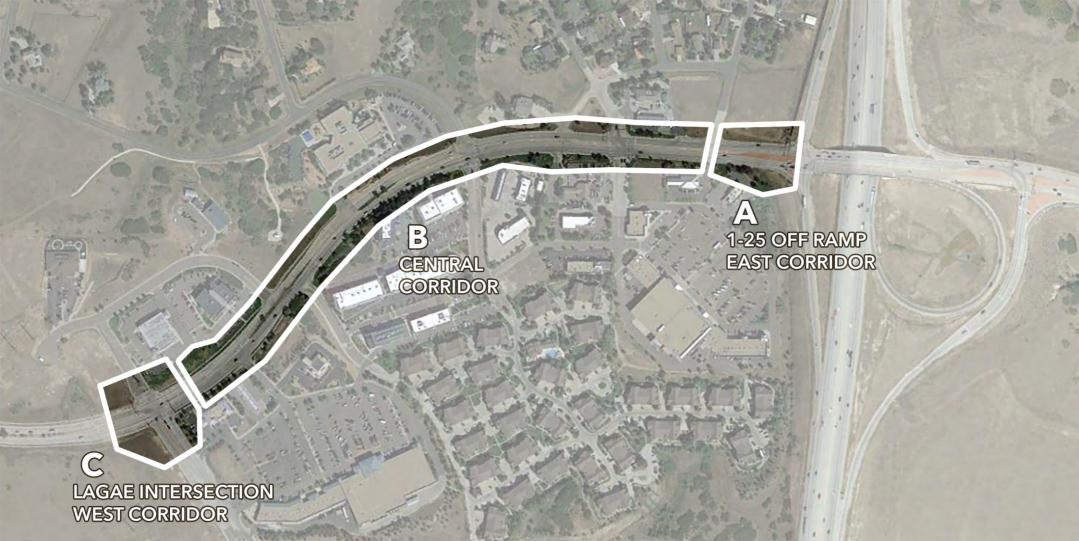












## CITY OF CASTLE PINES

Castle Pines Parkway
Gateway Entrance Monumentation - Preliminary Construction Pricing
2/5/2021

Shrub Bed (incl. shrubs, soil prep, fabric, edger, mulch & irrigation)

## A - I-25 OFF RAMP EAST CORRIDOR

I-25 Off Ramp Primary Monumentation									
Item	Unit Qty	Unit		Unit Cost		Base-Total	Extended Cost		Total
Retaining Wall: Masonville Buff Sandstone, including foundation - Colloidal Backfill	233	SFF	\$	98.00	\$	22,834.00		\$	22,834.0
Excavation	52	CY	\$	50.00	\$	2,600.00		\$	2,600.0
4'-6' Monument Pillar (ht. varies), including foundation & footing	2	EA	\$	15,000.00	\$	30,000.00		\$	30,000.0
Monument Pillar - Chip Logo Panel	2	EA	\$	424.85	\$	849.70		\$	849.7
Monument Pillar Lantern (complete with electrical)	2	EA	\$	10,178.80	\$	20,357.60		\$	20,357.6
Monument Signage installation/inspection fees	1	LS	\$	2,830.00	\$	2,830.00		\$	2,830.0
Crusher Fine Hardscape Bands (incl. steel edger)	253	SF	\$	6.00	\$	1,518.00		\$	1,518.
Permitting Acquisition (sign fabrication & installation)	1	LS	\$	285.38	\$	285.38		\$	285.
Existing Sign Relocation	1	LS	\$	500.00	\$	500.00		\$	500.0
Deciduous Tree - 2.5" cal.	2	EA	\$	600.00	\$	1,200.00		\$	1,200.0
Ornamental Tree - 2.5" cal.	6	EA	\$	600.00	\$	3,600.00		\$	3,600.
Evergreen Tree - 10'	12	EA	\$	900.00	\$	10,800.00		\$	10,800.
Shrub Bed (incl. shrubs, soil prep, fabric, edger, mulch & irrigation)	2,273	SF	\$	12.00	\$	27,276.00		\$	27,276.
Manicured Turf - Sod	3,655	SF	\$	0.58	\$	2,119.90	İ	\$	2,119.
Manicured Turf Irrigation	3,655	SF	\$	1.60	\$	5,848.00		\$	5,848.
Fine Grading	5.928	SF	Ś	0.07	Ś	414.96		Ś	414.

	I-25 Off Ramp Median						Т	
	Item	Unit Qty	Unit	Unit Cost	Base-Total	Extended Cost	Г	Total
	Angled Spray Guard along median	1020	SF	\$ 14.00	\$ 14,280.00		Ι	\$ 14,280.00
Γ	Crusher Fine Hardscape Bands (incl. steel edger)	283	SF	\$ 6.00	\$ 1,698.00		Γ	\$ 1,698.00

12.00 48,348.00 48,348.00

2,400.00

I-25 Off Ramp Secondary Monumentation					T		Т	
Item	Unit Qty	Unit	Unit Cost	Base-Total	Ī	Extended Cost	T	Total
Retaining Wall: Masonville Buff Sandstone, including foundation - Colloidal Backfill	128	SFF	\$ 98.00	\$ 12,544.00				\$ 12,544.00
Excavation	29	CY	\$ 50.00	\$ 1,450.00	I			\$ 1,450.00
4'-6' Monument Pillar (ht. varies), including foundation & footing	1	EA	\$ 15,000.00	\$ 15,000.00	ĺ			\$ 15,000.00
Monument Pillar - Chip Logo Panel	1	EA	\$ 424.85	\$ 424.85	T		T	\$ 424.85
Monument Pillar Lantern (complete with electrical)	1	EA	\$ 10,178.80	\$ 10,178.80	Т		Т	\$ 10,178.80
Monument Signage installation/inspection fees	1	LS	\$ 1,730.00	\$ 1,730.00	Т		Т	\$ 1,730.00
Crusher Fine Hardscape Bands (incl. steel edger)	174	SF	\$ 6.00	\$ 1,044.00	Т		Т	\$ 1,044.00
Permitting Acquisition (sign fabrication & installation)	1	LS	\$ 285.38	\$ 285.38	Т		Т	\$ 285.38
Concrete Walkway (incl. 5' width walkway, 4" depth)	3,200	SF	\$ 5.00	\$ 16,000.00	I		Į	\$ 16,000.00
Deciduous Tree - 2.5" cal.	3	EA	\$ 600.00	\$ 1,800.00	Ť		T	\$ 1,800.00
Ornamental Tree - 2.5" cal.	0	EA	\$ 600.00	\$ -	T		T	\$ -
Evergreen Tree - 10'	2	EA	\$ 900.00	\$ 1,800.00				\$ 1,800.00
Shrub Bed (incl. shrubs, soil prep, fabric, edger, mulch & irrigation)	1,576	SF	\$ 12.00	\$ 18,912.00	ĺ			\$ 18,912.00
Manicured Turf - Seed	0	SF	\$ 0.22	\$ -	T		T	\$ -
Fine Grading	1,576	SF	\$ 0.07	\$ 110.32	T		T	\$ 110.32

SF

4,029

Overall Sitework & General Conditions								
Item	Unit Qty	Unit	Unit Cost		Base-Total		Extended Cost	Total
Rough Grading +/3'	7,504	SF	\$ 0.21	\$	1,575.84			\$ 1,575.84
Mobilization/Subcontractor Mobilization	4.0%	LS	\$ 11,241.56	\$	11,241.56	П		\$ 11,241.56
General Conditions	9.4%	LS	\$ 26,417.66	\$	26,417.66			\$ 26,417.66
Landscape - 1 yr. Warranty/1 yr. Maintenance	1	LS	\$ 4,497.87	\$	4,497.87	П		\$ 4,497.87
- 6				•				

Survey/Layout 3,000.00 \$ 3,000.00 3,000.00 Sub-Total 46,732.92

> Total 327,771.81 \$ 65,554.36 Contingency 20%

Note: These are generally accepted costs as of the conceptual project completion in 2020, and should not be relied upon for final budgeting purposes.

**Grand Total** 

| Exclusions (N.I.C.):
| 1. Lighting/Electrical
| 2. CDOT Costs |
| \$ 393,326.17 |
| 3. Cost of Water & Water Taps

CITY OF CASTLE PINES
Castle Pines Parkway
Gateway Entrance Monumentation - Preliminary Construction Pricing
2/5/2021

## **B - CENTRAL CORRIDOR**

Central Corridor Monumentation + Landscape						П	
Item	Unit Qty	Unit	Unit Cost	Base-Total	Extended Cost	П	Total
Retaining Wall: Masonville Buff Sandstone, including foundation - Colloidal Backfill	784	SFF	\$ 98.00	\$ 76,832.00			\$ 76,832.00
Excavation	176	CY	\$ 50.00	\$ 8,800.00		П	\$ 8,800.00
4'-6' Monument Pillar (ht. varies), including foundation & footing	5	EA	\$ 15,000.00	\$ 75,000.00			\$ 75,000.00
Monument Pillar - Chip Logo Panel	5	EA	\$ 424.85	\$ 2,124.25		П	\$ 2,124.25
Monument Pillar Lantern (complete with electrical)	5	EA	\$ 10,178.80	\$ 50,894.00		П	\$ 50,894.00
Monument Signage installation/inspection fees	1	LS	\$ 6,280.00	\$ 6,280.00		Π	\$ 6,280.00
Crusher Fine Hardscape Bands (incl. steel edger)	1030	SF	\$ 6.00	\$ 6,180.00		Π	\$ 6,180.00
Permitting Acquisition (sign fabrication & installation)	1	LS	\$ 285.38	\$ 285.38		П	\$ 285.38
Deciduous Tree - 2.5" cal.	4	EA	\$ 600.00	\$ 2,400.00		H	\$ 2,400.00
Ornamental Tree - 2.5" cal.	12	EA	\$ 600.00	\$ 7,200.00		Π	\$ 7,200.00
Evergreen Tree - 10'	6	EA	\$ 900.00	\$ 5,400.00		П	\$ 5,400.00
Shrub Bed (incl. shrubs, soil prep, fabric, edger, mulch & irrigation)	9,832	SF	\$ 12.00	\$ 117,984.00			\$ 117,984.00
Manicured Turf - Sod	0	SF	\$ 0.58	\$ -		П	\$ -
Fine Grading	9,832	SF	\$ 0.07	\$ 688.24		П	\$ 688.24

Central Corridor Median							
Item	Unit Qty	Unit	Unit Cost	Base-Total		Extended Cost	Total
Crusher Fine Hardscape Bands (incl. steel edger)	470	SF	\$ 6.00	\$ 2,820.00	П		\$ 2,820.00
Deciduous Tree - 2.5" cal.	11	EA	\$ 600.00	\$ 6,600.00			\$ 6,600.00
Shrub Bed (incl. shrubs, soil prep, fabric, edger, mulch & irrigation)	6,140	SF	\$ 12.00	\$ 73,680.00			\$ 73,680.00

Sub-Total

Sub-Total

	Overall Sitework & General Conditions							
П	Item	Unit Qty	Unit	Unit Cost	Base-Total	Extended Cost		Total
	Rough Grading +/3'	9,832	SF	\$ 0.21	\$ 2,064.72		:	\$ 2,064.72
Г	Mobilization/Subcontractor Mobilization	4.0%	LS	\$ 17,726.71	\$ 17,726.71		,	\$ 17,726.71
	General Conditions	9.4%	LS	\$ 41,657.78	\$ 41,657.78		9	\$ 41,657.78
	Landscape - 1 yr. Warranty/1 yr. Maintenance	1	LS	\$ 8,784.60	\$ 8,784.60		9,	\$ 8,784.60
Г	Survey/Layout	1	LS	\$ 5,000.00	\$ 5,000.00		5	\$ 5,000.00

75,233.81 Sub-Total

Total 518,401.68 Contingency 20% \$ 103,680.34

\$ 622,082.02 Grand Total

Exclusions (N.I.C.):
1. Lighting/Electrical
2. CDOT Costs 3. Cost of Water & Water Taps

\$ 360,067.87

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CITY OF CASTLE PINES
Castle Pines Parkway
Gateway Entrance Monumentation - Preliminary Construction Pricing
2/5/2021

## C - LAGAE INTERSECTION WEST CORRIDOR

Lagae Monumentation + Landscape							
Item	Unit Qty	Unit	Unit Cost		Base-Total	Extended Cost	Total
Retaining Wall: Masonville Buff Sandstone, including foundation - Colloidal Backfill	524	SFF	\$ 98.00	\$	51,352.00		\$ 51,352.0
Excavation	118	CY	\$ 50.00	\$	5,900.00		\$ 5,900.0
4'-6' Monument Pillar (ht. varies), including foundation & footing	4	EA	\$ 15,000.00	\$	60,000.00		\$ 60,000.0
Monument Pillar - Chip Logo Panel	4	EA	\$ 424.85	\$	1,699.40		\$ 1,699.4
Monument Pillar Lantern (complete with electrical)	4	EA	\$ 10,178.80	\$	40,715.20		\$ 40,715.2
Monument Signage installation/inspection fees	1	LS	\$ 5,130.00	\$	5,130.00		\$ 5,130.0
Crusher Fine Hardscape Bands (incl. steel edger)	1423	SF	\$ 6.00	\$	8,538.00		\$ 8,538.0
Permitting Acquisition (sign fabrication & installation)	1	LS	\$ 285.38	\$	285.38		\$ 285.3
Deciduous Tree - 2.5" cal.	4	EA	\$ 600.00	\$	2,400.00		\$ 2,400.0
Ornamental Tree - 2.5" cal.	12	EA	\$ 600.00	\$	7,200.00		\$ 7,200.0
Evergreen Tree - 10'	12	EA	\$ 900.00	\$	10,800.00		\$ 10,800.0
Shrub Bed (incl. shrubs, soil prep, fabric, edger, mulch & irrigation)	12,517	SF	\$ 12.00	\$	150,204.00		\$ 150,204.0
Manicured Turf - Sod	0	SF	\$ 0.58	\$	-		\$ 
Fine Grading	12,517	SF	\$ 0.07	\$	876.19		\$ 876.1
			Sub-Tota	_			\$ 345,100.1

	Overall Sitework & General Conditions								
	Item	Unit Qty	Unit	Unit Cost	Base-Total		Extended Cost	Т	Total
Γ	Rough Grading +/3'	12,517	SF	\$ 0.21	\$ 2,628.57	Т		Т	\$ 2,628.57
Г	Mobilization/Subcontractor Mobilization	4.0%	LS	\$ 13,804.01	\$ 13,804.01			Τ	\$ 13,804.01
Γ	General Conditions	9.4%	LS	\$ 32,439.42	\$ 32,439.42	Т		Т	\$ 32,439.42
Γ	Landscape - 1 yr. Warranty/1 yr. Maintenance	1	LS	\$ 4,881.63	\$ 4,881.63	Т		Т	\$ 4,881.63
Γ	Survey/Layout	1	LS	\$ 3,000.00	\$ 3,000.00	Т		Т	\$ 3,000.00

Sub-Total

Total \$ 401,853.79 Contingency 20% 80,370.76 Exclusions (N.I.C.):
1. Lighting/Electrical
2. CDOT Costs

56,753.62

Grand Total \$ 482,224.55 3. Cost of Water & Water Taps

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