



CITY OF CASTLE PINES

FEBRUARY 5, 2021

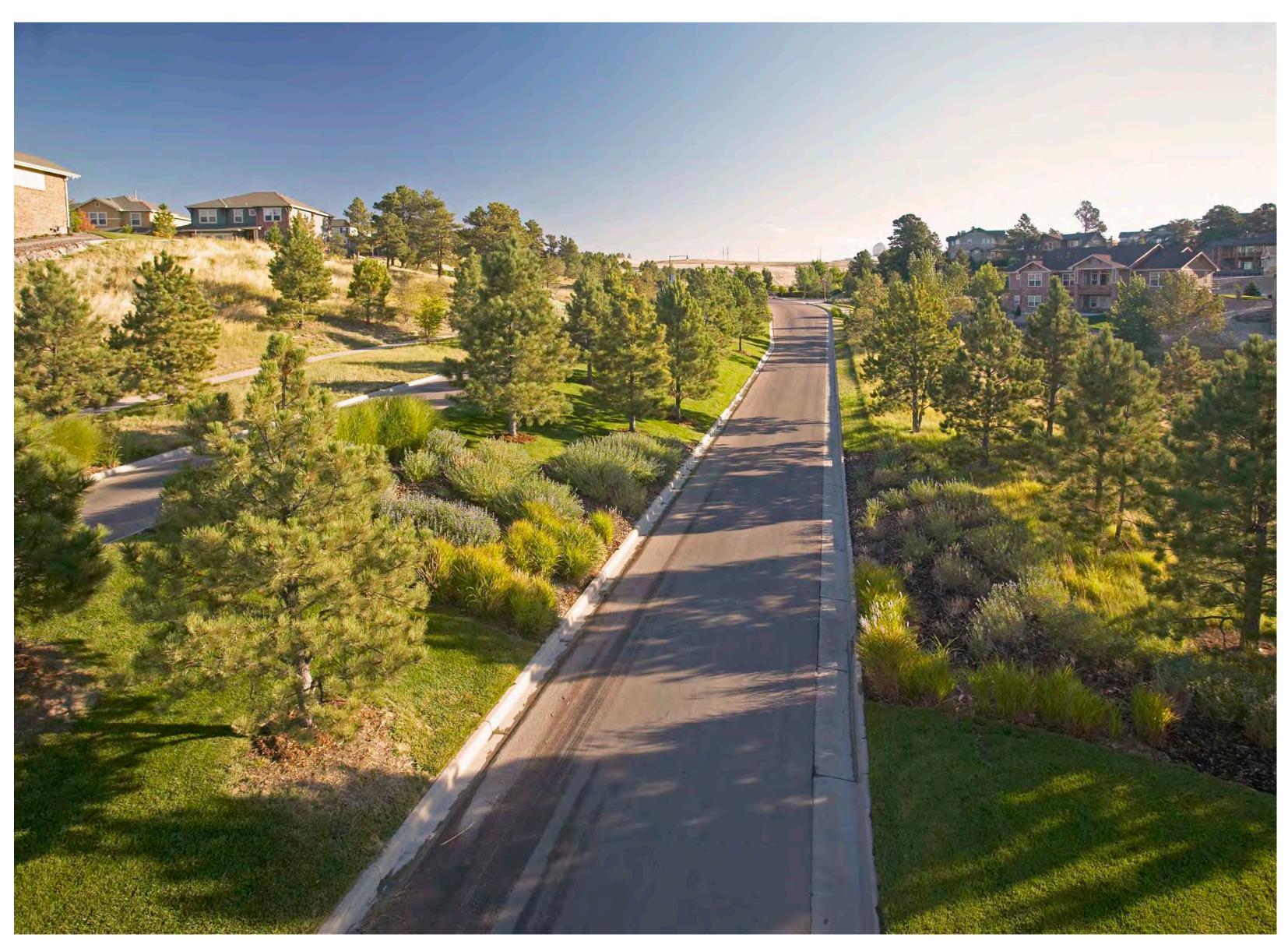
# CASTLE PINES PARKWAY

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**















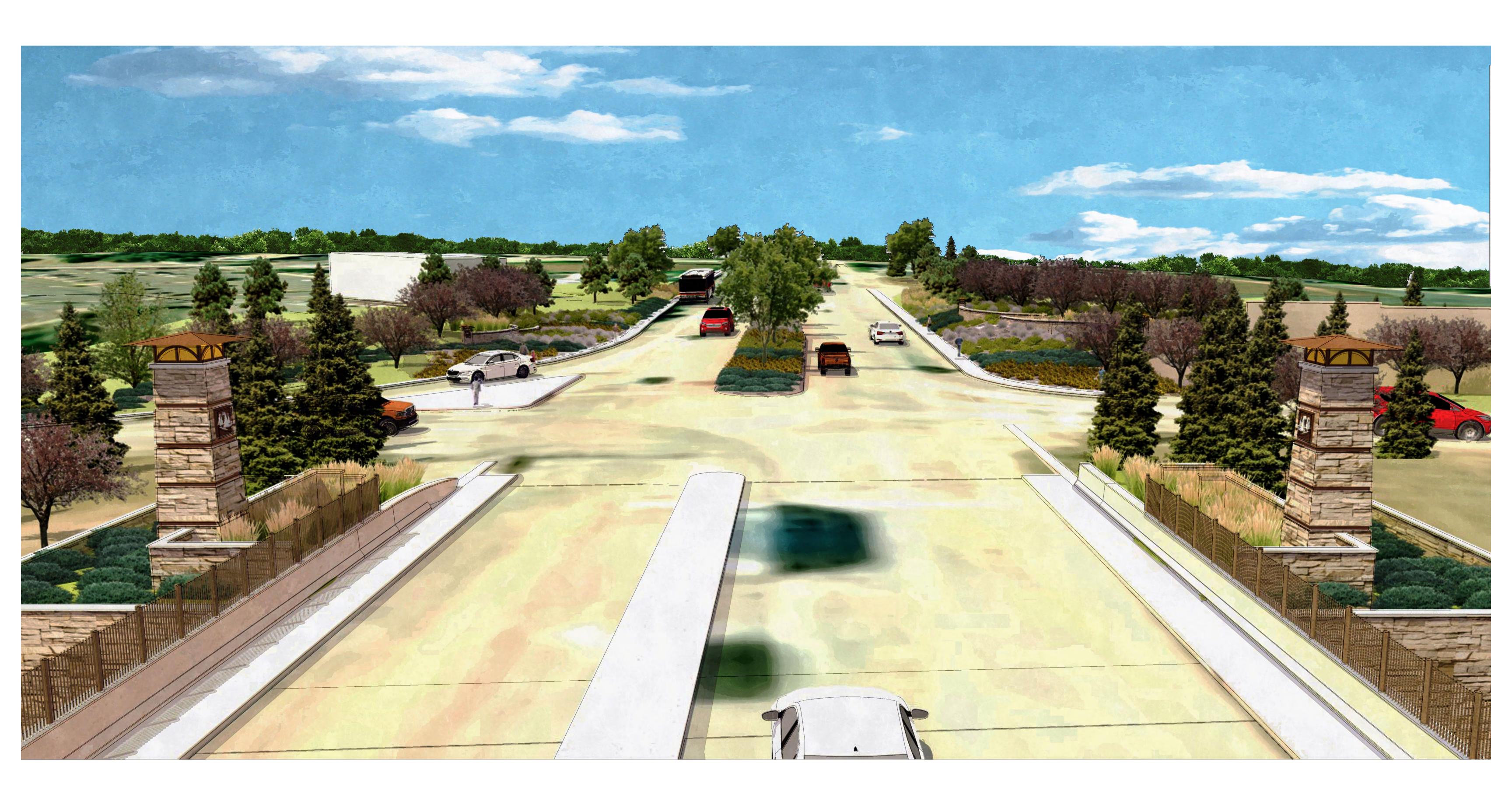














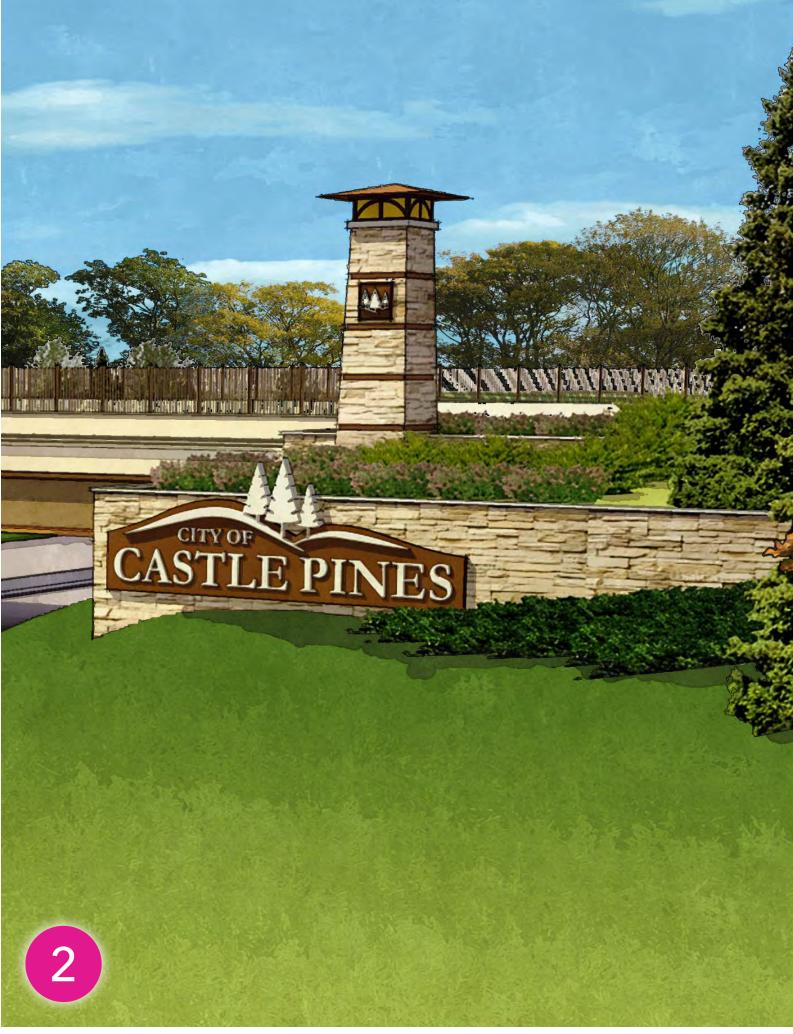


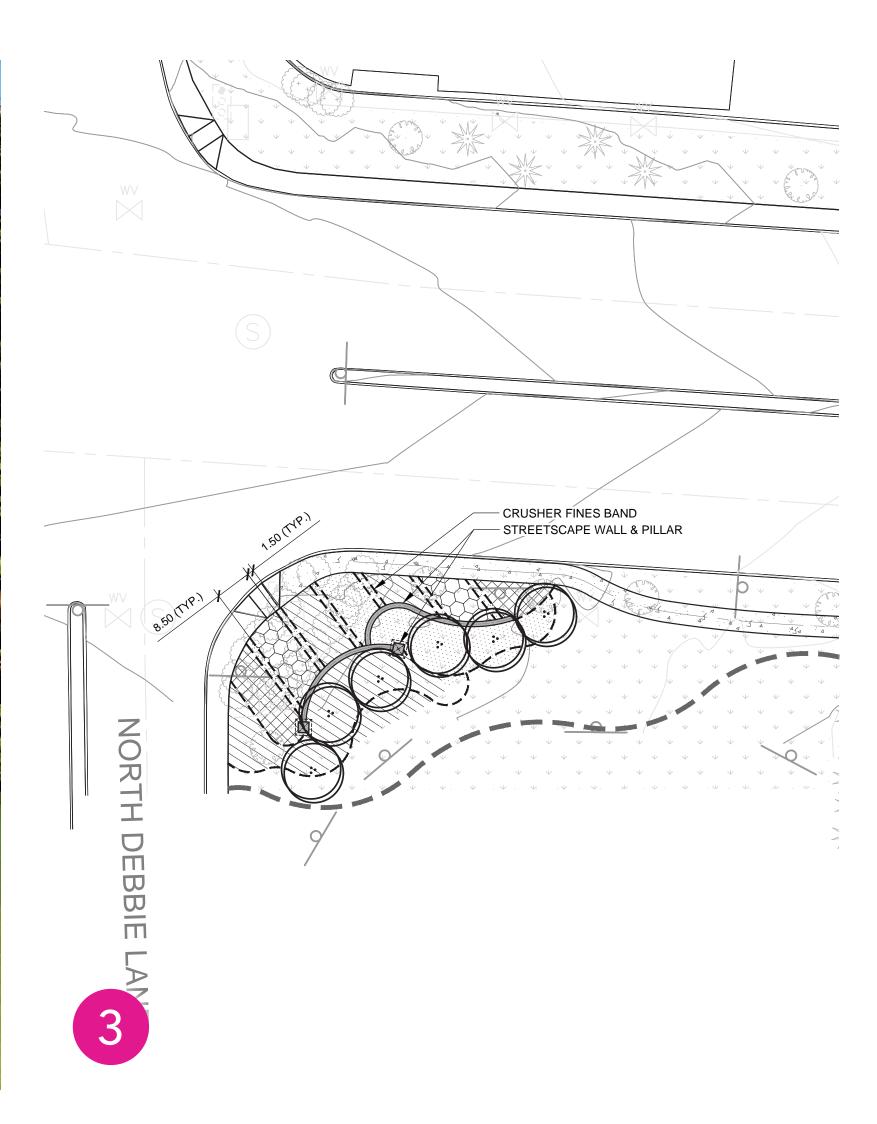
# Gateway - Phase II

## 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- Concerns about west side of city looking old & outdated while east side of city looks new & flashy.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						
CO	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						

	CASTLE PINES GATEWAY <b>UNDERSTORY</b> SCHEDULE														
KEY	Scientific Name	Common Name	Size	Height	Spread	Light	Water use	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'



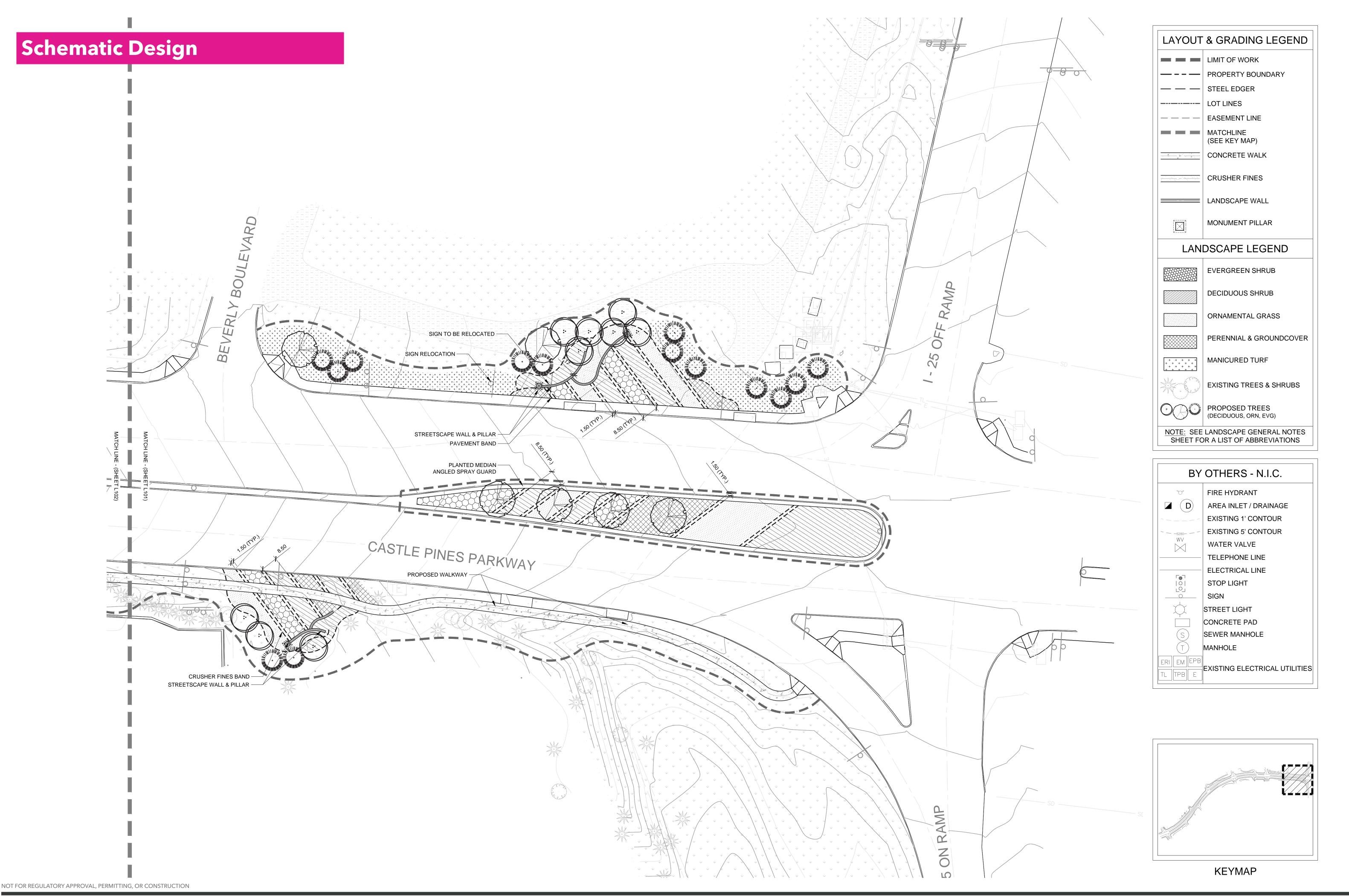
Purple Coneflower Echinacea purpurea



Prairiefire Crabapple Malus x 'Prairiefire'

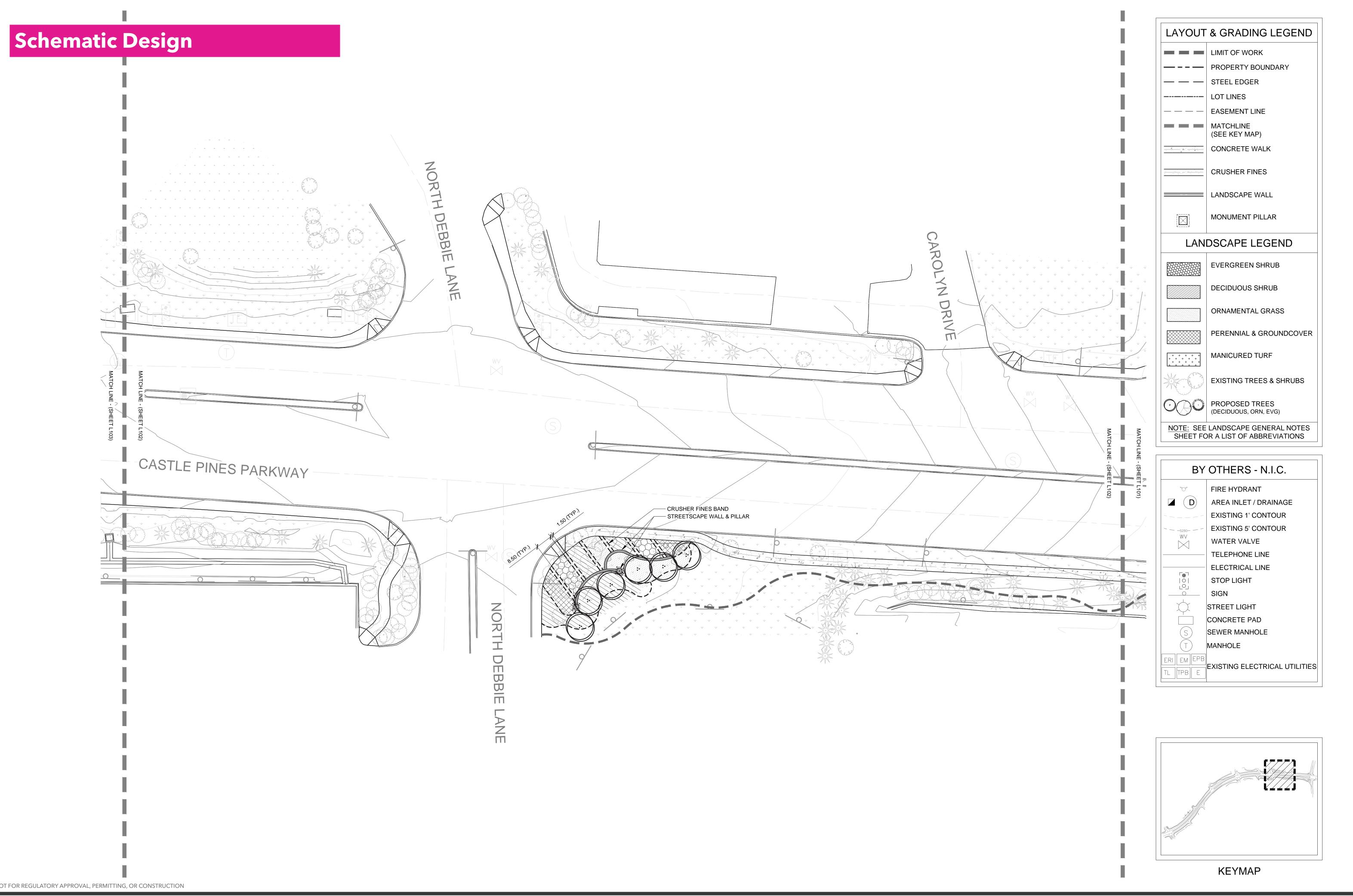


Southwestern White Pine Pinus strobiformus



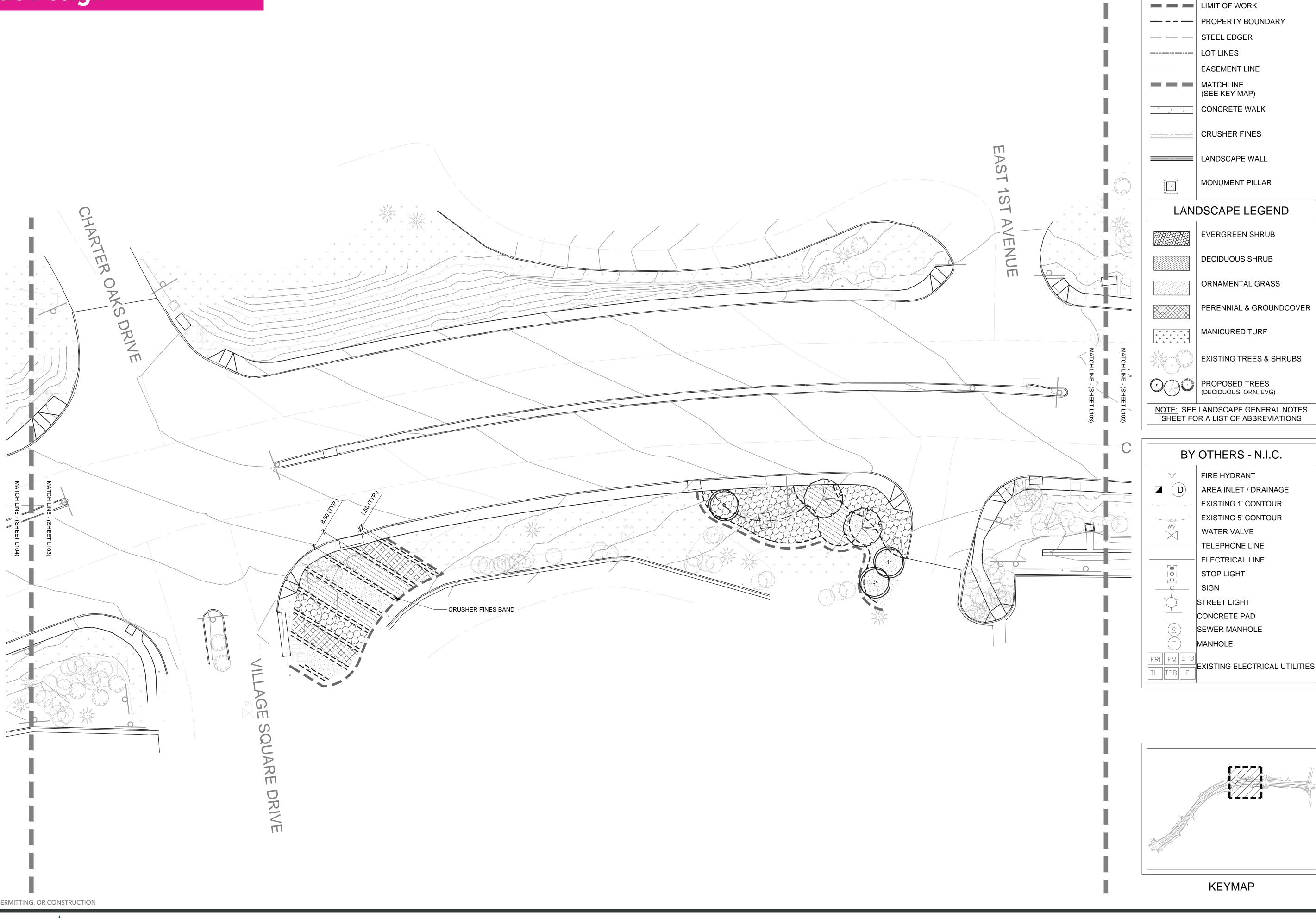








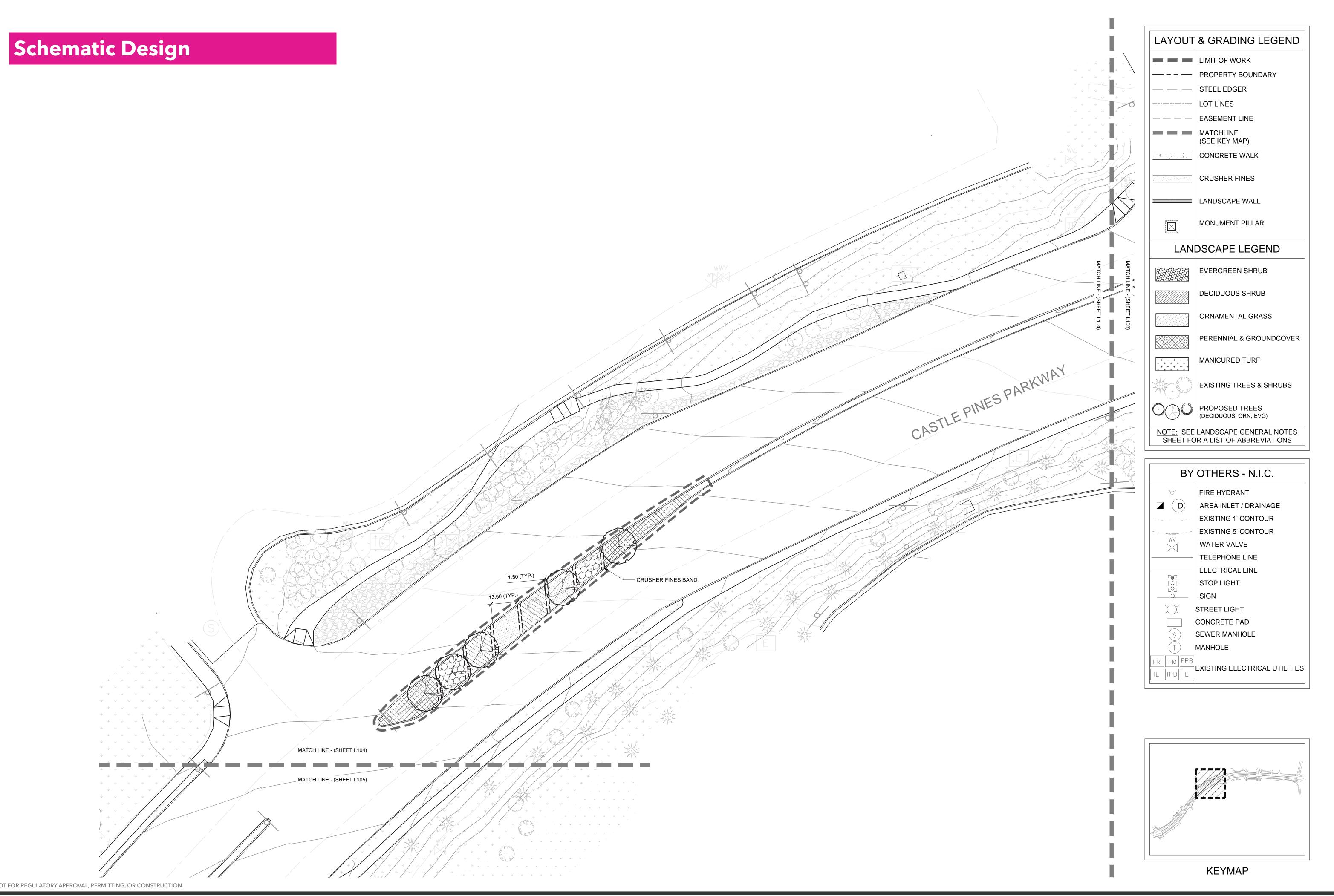






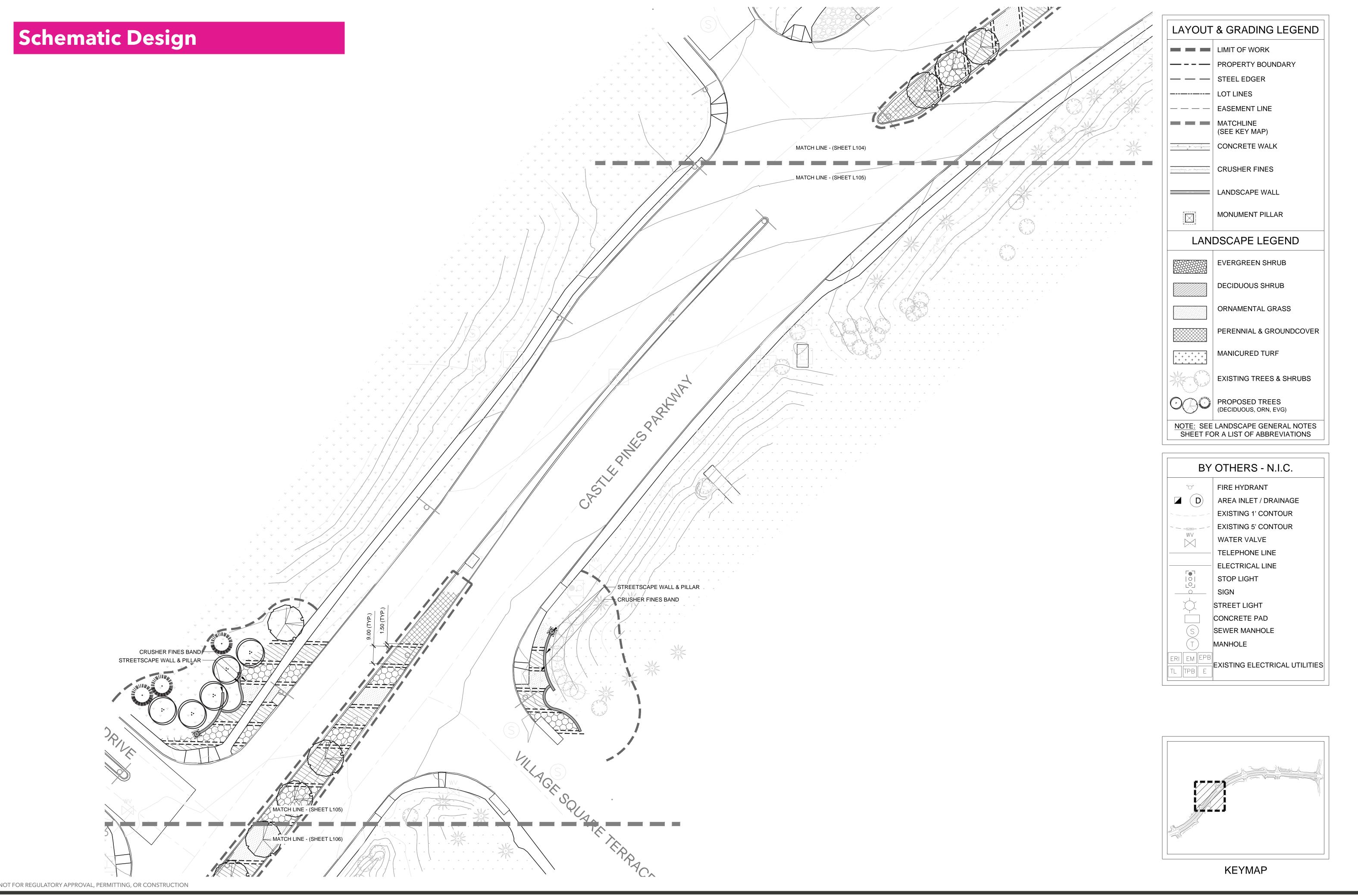


LAYOUT & GRADING LEGEND



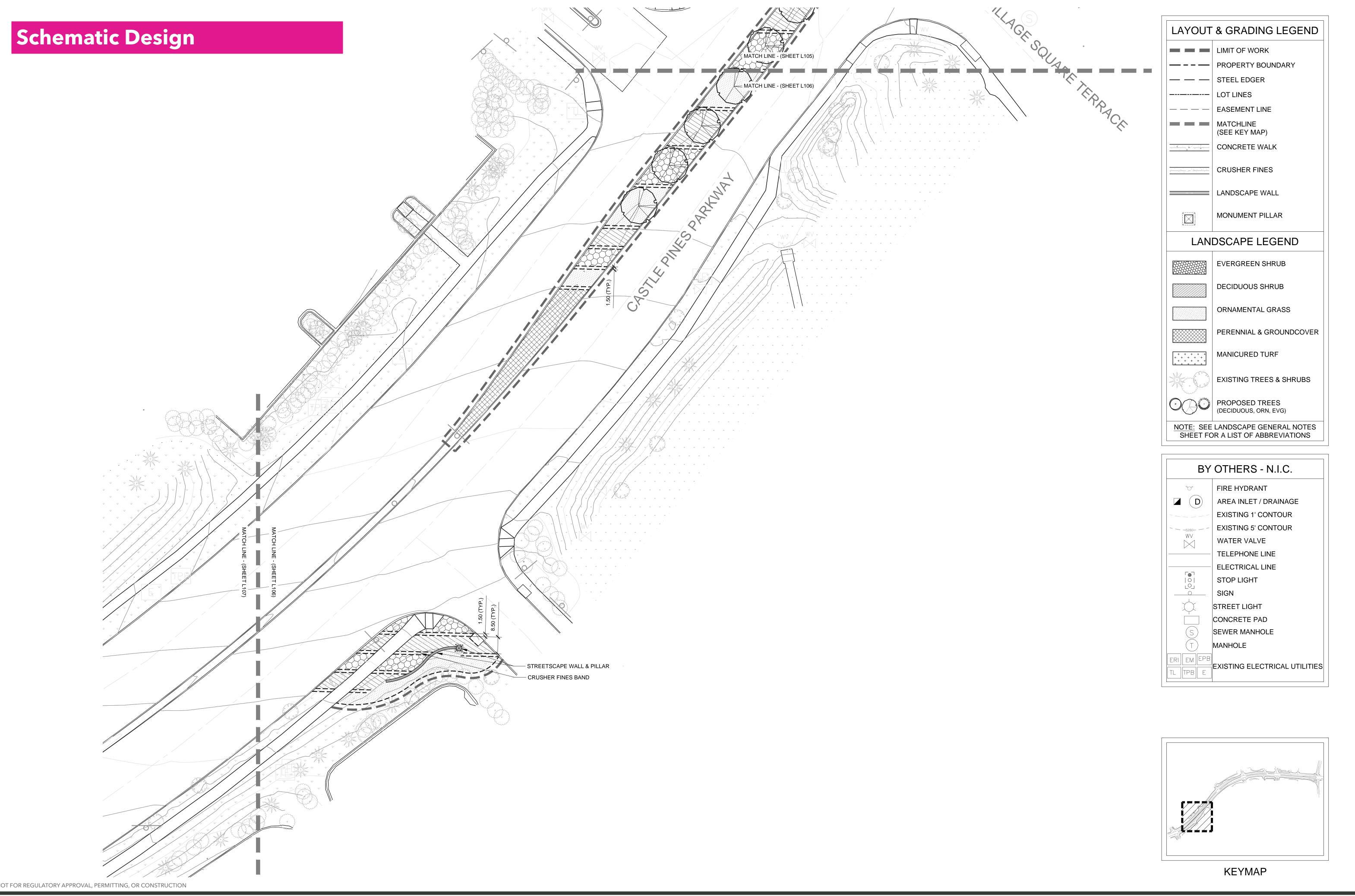






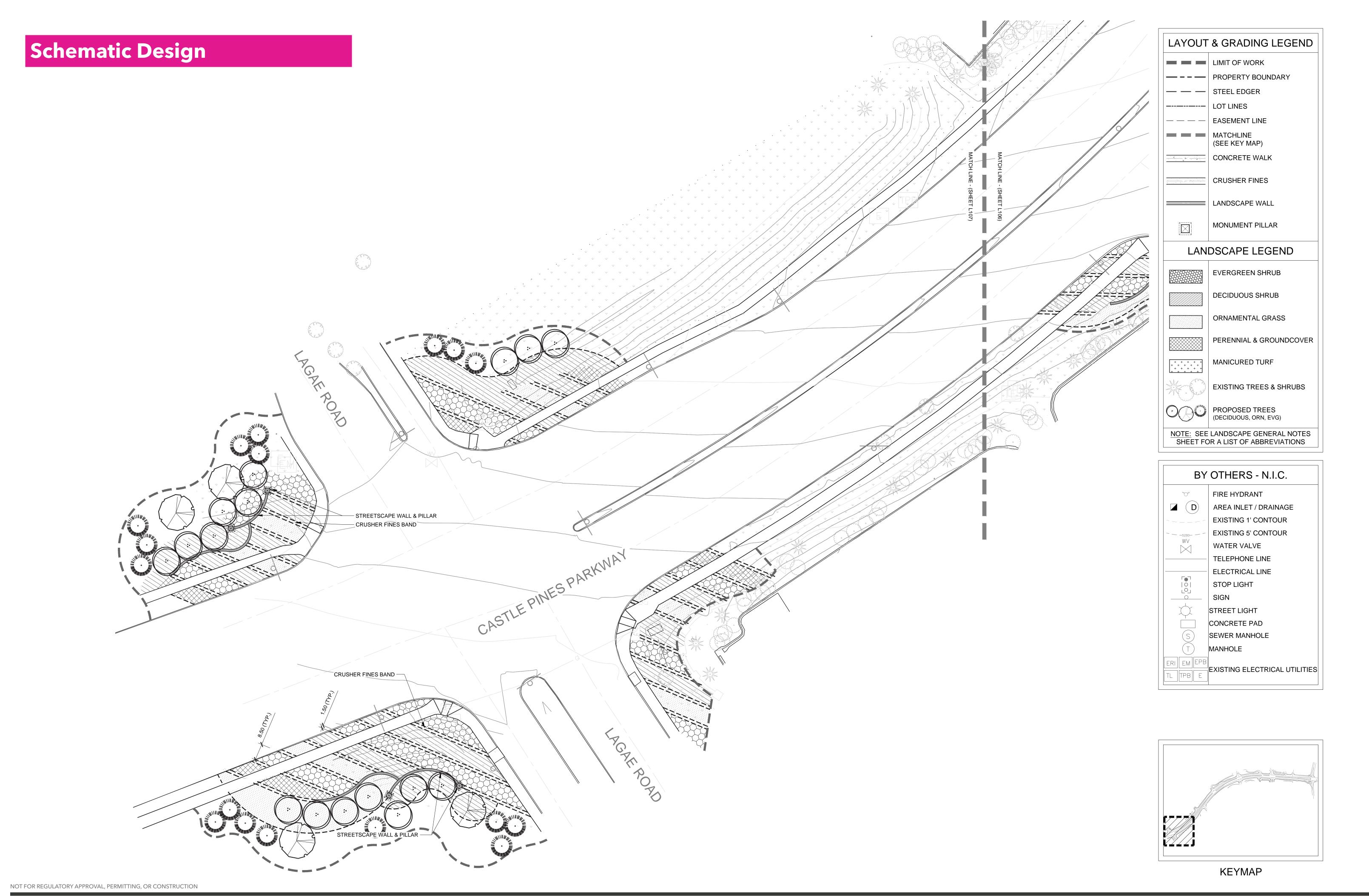






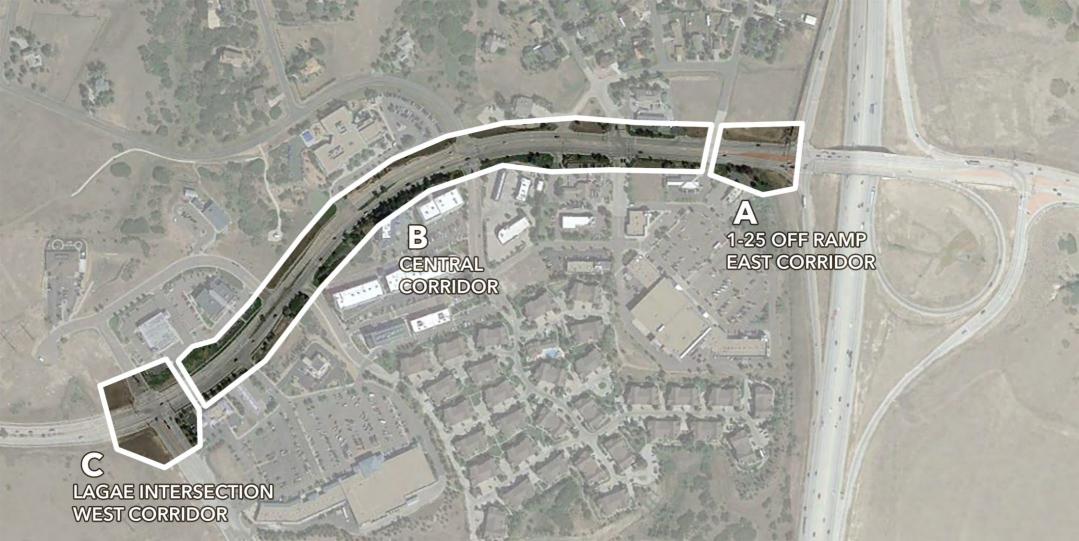












### CITY OF CASTLE PINES

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

## 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	\$	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		\$	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							T	
Item	Unit Qty	Unit	Unit Cost	Base-Total		Extended Cost		Total
Angled Spray Guard along median	1020	SF	\$ 14.00	\$ 14,280.00			Ι	\$ 14,280.00
Crusher Fine Hardscape Bands (incl. steel edger)	283	SF	\$ 6.00	\$ 1,698.00	П		Т	\$ 1,698.00
Deciduous Tree - 2.5" cal.	4	EA	\$ 600.00	\$ 2,400.00			Ι	\$ 2,400.00
Shrub Bed (incl. shrubs, soil prep, fabric, edger, mulch & irrigation)	4,029	SF	\$ 12.00	\$ 48,348.00			Ī	\$ 48,348.00

I-25 Off Ramp Secondary Monumentation							
Item	Unit Qty	Unit	Unit Cost	Base-Total	П	Extended Cost	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			\$ 1,450.00
4'-6' Monument Pillar (ht. varies), including foundation & footing	1	EA	\$ 15,000.00	\$ 15,000.00			\$ 15,000.00
Monument Pillar - Chip Logo Panel	1	EA	\$ 424.85	\$ 424.85	П		\$ 424.85
Monument Pillar Lantern (complete with electrical)	1	EA	\$ 10,178.80	\$ 10,178.80	П		\$ 10,178.80
Monument Signage installation/inspection fees	1	LS	\$ 1,730.00	\$ 1,730.00	П		\$ 1,730.00
Crusher Fine Hardscape Bands (incl. steel edger)	174	SF	\$ 6.00	\$ 1,044.00			\$ 1,044.00
Permitting Acquisition (sign fabrication & installation)	1	LS	\$ 285.38	\$ 285.38	П		\$ 285.38
Concrete Walkway (incl. 5' width walkway, 4" depth)	3,200	SF	\$ 5.00	\$ 16,000.00	Д		\$ 16,000.00
Deciduous Tree - 2.5" cal.	3	EA	\$ 600.00	\$ 1,800.00	T		\$ 1,800.00
Ornamental Tree - 2.5" cal.	0	EA	\$ 600.00	\$ -			\$ -
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			\$ 18,912.00
Manicured Turf - Seed	0	SF	\$ 0.22	\$ -	T		\$ -
Fine Grading	1,576	SF	\$ 0.07	\$ 110.32			\$ 110.32

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			\$	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
S	-	1.0	4	2 000 00	Ļ	2 000 00			4	2 000 00

Sub-Total 46,732.92

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

81,279.35

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

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

### CITY OF CASTLE PINES

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

## **B - CENTRAL CORRIDOR**

Central Corridor Monumentation + Landscape							
Item	Unit Qty	Unit	Unit Cost		Base-Total	Extended Cost	Total
Retaining Wall: Masonville Buff Sandstone, including foundation - Colloidal Backfill	784	SFF	\$ 98.0	0 \$	76,832.00		\$ 76,832.00
Excavation	176	CY	\$ 50.0	0 \$	8,800.00		\$ 8,800.00
4'-6' Monument Pillar (ht. varies), including foundation & footing	5	EA	\$ 15,000.0	0 \$	75,000.00		\$ 75,000.00
Monument Pillar - Chip Logo Panel	5	EA	\$ 424.8	5 \$	2,124.25		\$ 2,124.25
Monument Pillar Lantern (complete with electrical)	5	EA	\$ 10,178.8	0 \$	50,894.00		\$ 50,894.00
Monument Signage installation/inspection fees	1	LS	\$ 6,280.0	0 \$	6,280.00		\$ 6,280.0
Crusher Fine Hardscape Bands (incl. steel edger)	1030	SF	\$ 6.0	0 \$	6,180.00		\$ 6,180.00
Permitting Acquisition (sign fabrication & installation)	1	LS	\$ 285.3	8 \$	285.38		\$ 285.38
Deciduous Tree - 2.5" cal.	4	EA	\$ 600.0	0 \$	2,400.00		\$ 2,400.00
Ornamental Tree - 2.5" cal.	12	EA	\$ 600.0	0 \$	7,200.00		\$ 7,200.0
Evergreen Tree - 10'	6	EA	\$ 900.0	0 \$	5,400.00		\$ 5,400.0
Shrub Bed (incl. shrubs, soil prep, fabric, edger, mulch & irrigation)	9,832	SF	\$ 12.0	0 \$	117,984.00		\$ 117,984.0
Manicured Turf - Sod	0	SF	\$ 0.5	8 \$	-		\$ -
Fine Grading	9,832	SF	\$ 0.0	7 \$	688.24		\$ 688.2
			Sub-Tota	ı –			\$ 360,067.87

Central Corridor Median							П	
Item	Unit Qty	Unit	Unit Cost	Base-Total	П	Extended Cost	П	Total
Crusher Fine Hardscape Bands (incl. steel edger)	470	SF	\$ 6.00	\$ 2,820.00	П		П	\$ 2,820.00
Deciduous Tree - 2.5" cal.	11	EA	\$ 600.00	\$ 6,600.00			П	\$ 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 83,100.00

	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		П	\$ 2,064.72
Γ	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		П	\$ 41,657.78
Ε	Landscape - 1 yr. Warranty/1 yr. Maintenance	1	LS	\$ 8,784.60	\$ 8,784.60		П	\$ 8,784.60
ſ	Survey/Layout	1	LS	\$ 5,000.00	\$ 5,000.00		П	\$ 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

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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	\$ 0.00	7 \$	876.19		\$ 876.1
			Sub-Tota	, —			\$ 345,100.1

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

Sub-Total

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

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

56,753.62

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