University of Colorado
Boulder | Colorado Springs | Denver | Anschutz Medical Campus

University of Colorado Design Review Board
Meeting Notes

Date:	Wednesday, April 23, 2025
Time:	9:00 a.m. – 4:30 p.m.
Location:	Bruce and Marcy Benson Conference Room, First Floor, 1800 Grant Street, Denver, Colorado

DRB and Campus Members present:
Mike Winters, Jody Beck, Sarah Brown, Tom Hootman, Laurel Raines, Chris Shears, d'Andre Willis, campus DRB member for the University of Colorado Boulder campus (CU Boulder), and Fawn Behrens-Smith, campus DRB member for the University of Colorado Colorado Springs (UCCS),

Others in attendance not otherwise noted:
Kori Donaldson, AVP of Budget, Finance, and Capital and ex officio member of the DRB
Linda Money, CU Real Estate Services, CU System employee / DRB notetaker (via Zoom)
Emily Parker, Sr. Budget, Planning, and Policy Analyst, Office of the VP for Budget & Finance

Mike Winters, Chair, determined a quorum and called the meeting of the Design Review Board to order at 9:00 a.m.

9:00 – 9:45 a.m. **Study Session – Board Only**

9:45 – 10:00 a.m. **Break/Set Up**

10:00 a.m. – 12:00 p.m. **Chemistry and Applied Math Building – *CU Boulder***
Design Development (Action Requested)

Architects/Consultants:
- ZGF
- James Corner Field Operations
- Group 14 Engineering
- Whiting-Turner Contracting Company

Presenters:
- Braulio Baptista, Design Partner, ZGF
- Kalan Beck, Designer, ZGF
- Karli Molter, Senior Associate, Field Operations
- Lauren McNeill, Group 14 Engineering

CU Boulder Campus Presenter:
- d'Andre Willis, Assistant Vice Chancellor of Planning and Design /Campus Architect, Facilities Planning

Others Present:
Sadie Cline, ZGF
David Grant, ZGF (via Zoom)
Neil Parks, ZGF
Ryan Velasco, ZGF
Anthony Durst, Adolphson & Peterson

Other CU Boulder Campus Representatives Present:
David Byrne, Jr., Facilities Planning
Katherine Dunklau, Facilities Planning
Richelle Goedert, Facilities Planning
Wayne Northcutt, Facilities Planning
Christopher Rabenhorst, Laboratory for Atmospheric and Space Physics

Description:
Design Development ("DD") submittal for a new 147,000 GSF Chemistry and Applied Mathematics (CHAP) academic/ research building on the Business Field (a four-acre recreational field on main campus).

A/E Presentation

The design team gave a comprehensive presentation of the submittal package, which is available upon request through the contact information noted at the bottom of this document.

DRB Comments

General

The DRB recognized the work of the design team in resolving budgetary issues in a way that maintained the program and improved the building massing. It commented that the team was able to solve problems in a way that maintained the integrity of the design. The DRB also welcomed A&P to the CHAP team.

A. Energy and Sustainability

The team has done a great job. The energy and sustainability components of the project are on track.

- Consider sourcing local rooftop pavers, which may be less expensive and could reduce carbon emissions from transport.

B. Site & Landscape Architecture

- Continue to study the proposed screening that will be used to shield the generators and transformers from view. Perforated metal may not create a visual disconnect because it is virtually transparent with light behind it.

- Study whether there are ways to eliminate the auto parking and shield the loading dock from view by more berming along Regent Dr., taller plant materials, and by shifting the truck-manuevering area slightly to the west.
- Evaluate whether structural soil is needed anywhere except the bike parking sites.
- Reshare the site grading plan in a format that is easier to read.
- Explore alternatives to Hanover pavers (see note in "A. Energy and Sustainability").
- Review planting notes (see attached).
    - Reevaluate the planting scheme at the rooftop deck to ensure it will weather the wind and sunlight of the harsh Colorado climate.
    - Consider the addition of planting to soften the south entryway edge along the monumental precast wall.

C. Architecture

- The DRB supports preferred Option 2a for the ground floor window infill.
    - Consider adding patterning/detail to the metal.
    - The stone base (from the NM quarry) is an acceptable alternate to pre-cast below the windows.
- The DRB accepts the proposed glass types (Solarban 90 with argon gas), signage, and exterior soffit lighting.
    - Avoid the use of paint to infill the signage.
- If the team decides to add a permanent shade structure to the rooftop terrace, it will need to be reviewed by the DRB at a future meeting.
- The DRB encourages several rounds of material mock ups. Please share the schedule of mock-ups. The DRB would like to participate in the mock-up review.

DRB Action

Chris Shears moved to approve the Design Development submittal for the Chemistry and Applied Math Building with the direction that d'Andre Willis follow up with a future Board-only meeting about the comments noted above. Jody Beck seconded the motion, which passed unanimously.

1:00 – 2:00 p.m. **National Quantum Nanofabrication (NQN) Facility – *CU Boulder***
Introduction/Pre-Design (Information/Direction)

Architects/Consultants:
Page Architects
BSA Landscape Architects

Presenters:
Alex Goldberg, Page
Michael Reilly, Page
Scott Stoll, Page
Jason Messaros, BSA

CU Boulder Campus Presenters:
d'Andre Willis, Director of Planning/Campus Architect, Facilities Planning
Wayne Northcutt, Facilities Planner, Architect, Facilities Planning

Other CU Boulder Campus Representatives Present:
Richelle Goedert, Facilities Planning

Description: Submittal for a 3,800 GSF addition to the SEEL building on east campus funded with an National Science Foundation grant to further national security interests in quantum sensing

A/E Presentation

The design team gave a comprehensive presentation of the submittal package, which is available upon request through the contact information noted at the bottom of this document.

DRB Comments

This is a small but important project on an important site.

A. Energy and Sustainability

- No comments

B. Site & Landscape Architecture

- Continue to study and plan for flood risk. The fact that the site is on a 500-year floodplain may not mitigate risks of flooding.
- The existing storm drain will affect the footprint of the building and its proximity to the sidewalk.
- Consider completing a micro master plan to show how the site could be further developed in the future.

C. Architecture

- The DRB expressed support for conceptual massing images that showed contrasting materials and a reveal at the point the new building connects to the existing building.
- The exhaust stack could be a vertical design opportunity. Continue to study this.
- Continue to study the service access ramp area.

DRB Action

No formal action was required. The DRB provided the comments and direction noted above.

2:15 – 4:15 p.m. **Farrand Hall Renovation – CU Boulder**
Schematic Design Workshop (Information/Direction)

Architects/Consultants:
- Anderson Mason Dale (AMD)
- Swinerton
- Wenk Associates
- Group14 Engineering

Presenters:
- Greg Dorolek, Wenk Associates
- Lauren McNeill, Group14 Engineering
- Andy Nielsen, AMD

CU Boulder Campus Presenters:
- d'Andre Willis, Assistant Vice Chancellor for Planning & Design, Campus Architect, Facilities Planning
- Lindsay Schumacher, Planner, Planning, Design and Construction, Facilities Planning

Others Present:
- Katie Spicer, AMD
- Ace Martin, Wenk Associates
- Mark Bokhoven, Swinerton

Other CU Boulder Campus Representatives Present:
- JT Allen, Director of Housing Facilities Services
- Dan Gette, AVC of Student Affairs
- Richelle Goedert, Campus Landscape Architect, Facilities Planning
- Jon Keiser, Design and Project Management, Housing Facilities

Description:
Schematic Design workshop for a comprehensive interior renovation; systems replacement and upgrade, addition of cooling; window/door replacement, exterior repairs, create new accessible entries, upgrade building envelope; site improvements and landscaping renovation of Farrand Hall.

A/E Presentation

The design team gave a comprehensive presentation of the preliminary schematic design, a copy of which is available upon request.

DRB Comments

A. Energy and Sustainability

- The DRB appreciates the progression toward meeting energy and sustainability goals in the overall design.
- Continue to study the glass type and framing options.
- Resolve the wall insulation options.

B. Site & Landscape Architecture

- At the west courtyard, continue to study how the west stairs terminate into the courtyard. Consider whether the location of the first row of trees can be extended further toward the edge (to the west) and whether the interior trees will get enough sunlight or if the overall tree count should be reduced. Study seating options at this location if the two trees are removed.
- At the east courtyard, consider whether the opening in the low wall at the entryway to the courtyard should be made symmetrical. Study the relationship of the newly designed courtyard to the engineering quad (to the east) to determine whether the edge should be made more formal. Unify the paving material at the main entry point. Finally, look at whether a small path of pavers should be added from the largest seating area along the informal path to the main entry to the courtyard.
- At the north courtyard, consider replacing the small patch of grass shown by the northeast door with permeable pavers or gravel.
- At SD, provide details about the program inside the building at each courtyard entry.

C. Architecture

- Continue your study of window types.
- Determine how the new building entryways relate; explore a similar vocabulary for these entryways.

DRB Action

No formal action was required. The DRB provided the comments and direction noted above.

There being no further business, the public meeting of the Design Review Board adjourned at 4:15 p.m.

(For assistance with the attachments referenced within this document, please contact Linda Money at (303) 860-6110 or linda.money@cu.edu.

Addendum to the Meeting Summary
For the Design Review Board Meeting
Held April 23, 2025,
Regarding the Chemistry and Applied Math Building
Design Development Submittal for the Boulder Campus

Please see the notes prepared by Laurel Raines on the following pages.

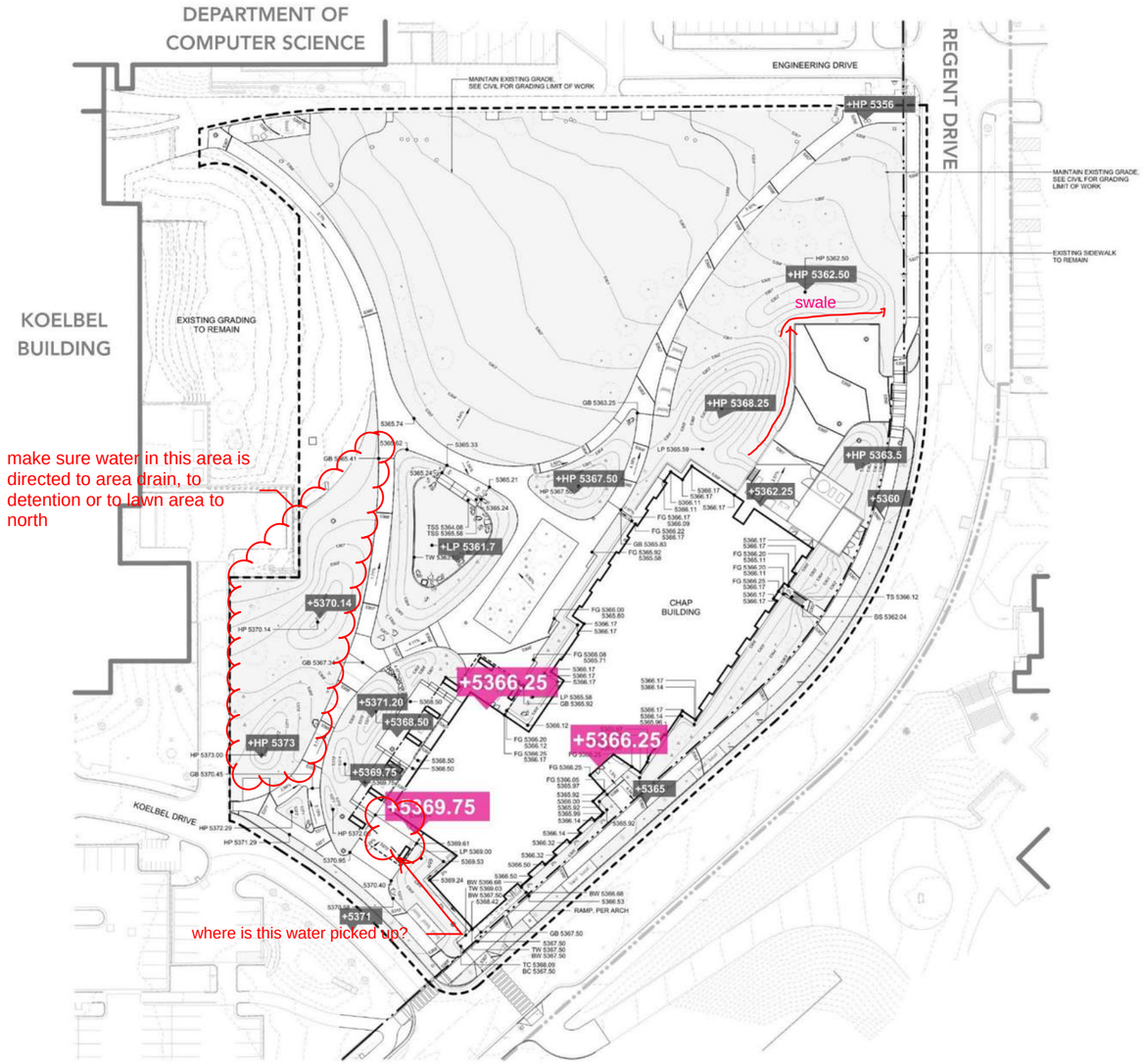
Additionally, Laurel requested that the following planting list also be included in the Addendum:

Colorado Roof Top Favorites from Dig Studio:

Amelanchier alnifolia Regent
Pinus mugo White Bud
Penstemon strictus
Mahonia repens
Diablo Ninebark
Gro-low sumac
Calamagrostis Karl Forester
Vinca Bowles

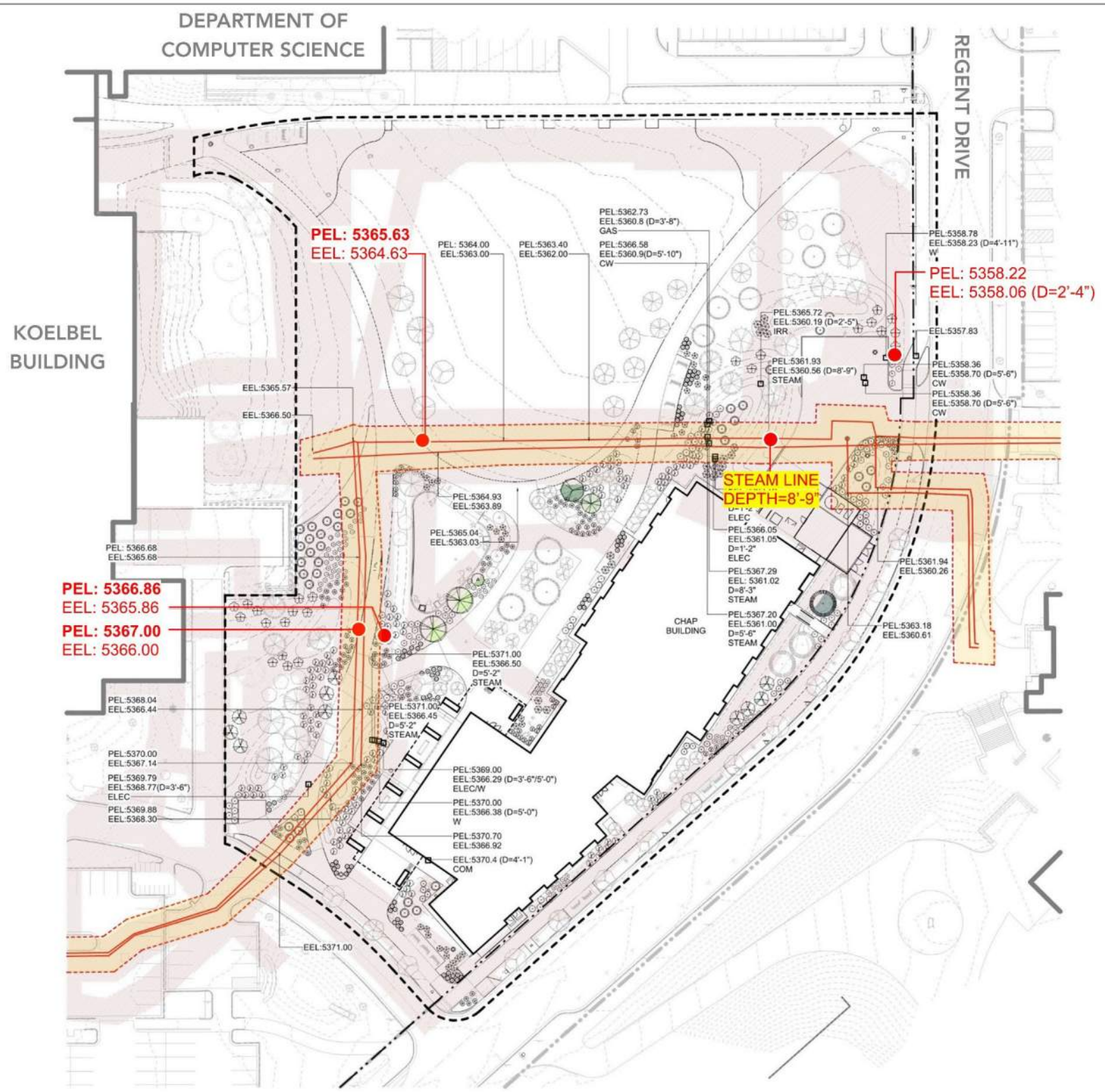
DD WORKSESSION:
FFE MAIN: 5366.00
FFE SOUTH: 5370.00
4.0’ ELEVATION CHANGE

DESIGN UPDATE:
FFE MAIN: 5366.25
FFE SOUTH: 5369.75
3.5’ ELEVATION CHANGE



GRADING PLAN
DESIGN UPDATES

0 100 200



Make sure to accommodate flow to area drains or detention with raised grades

EEL **EXISTING ELEVATION**

PEL **PROPOSED ELEVATION ADJUSTED** (+1' MIN)

CONFLICT POINT (ADD'L GRADE REQ'D)

STEAM LINE

10' OFFSET FOR STEAM LINE

8' OFFSET FOR OTHER UTILITIES

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GRADING INCREASE AT STEAMLINE

In our climate always a tough condition. Dry shade. Will look at your selections for recommendations.

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SUN HOUR ANALYSIS

Annual Average

0 100 200

this is a design decision but wondering why the shape at these corners. Up to design team of course

LOW

MEDIUM

HIGH

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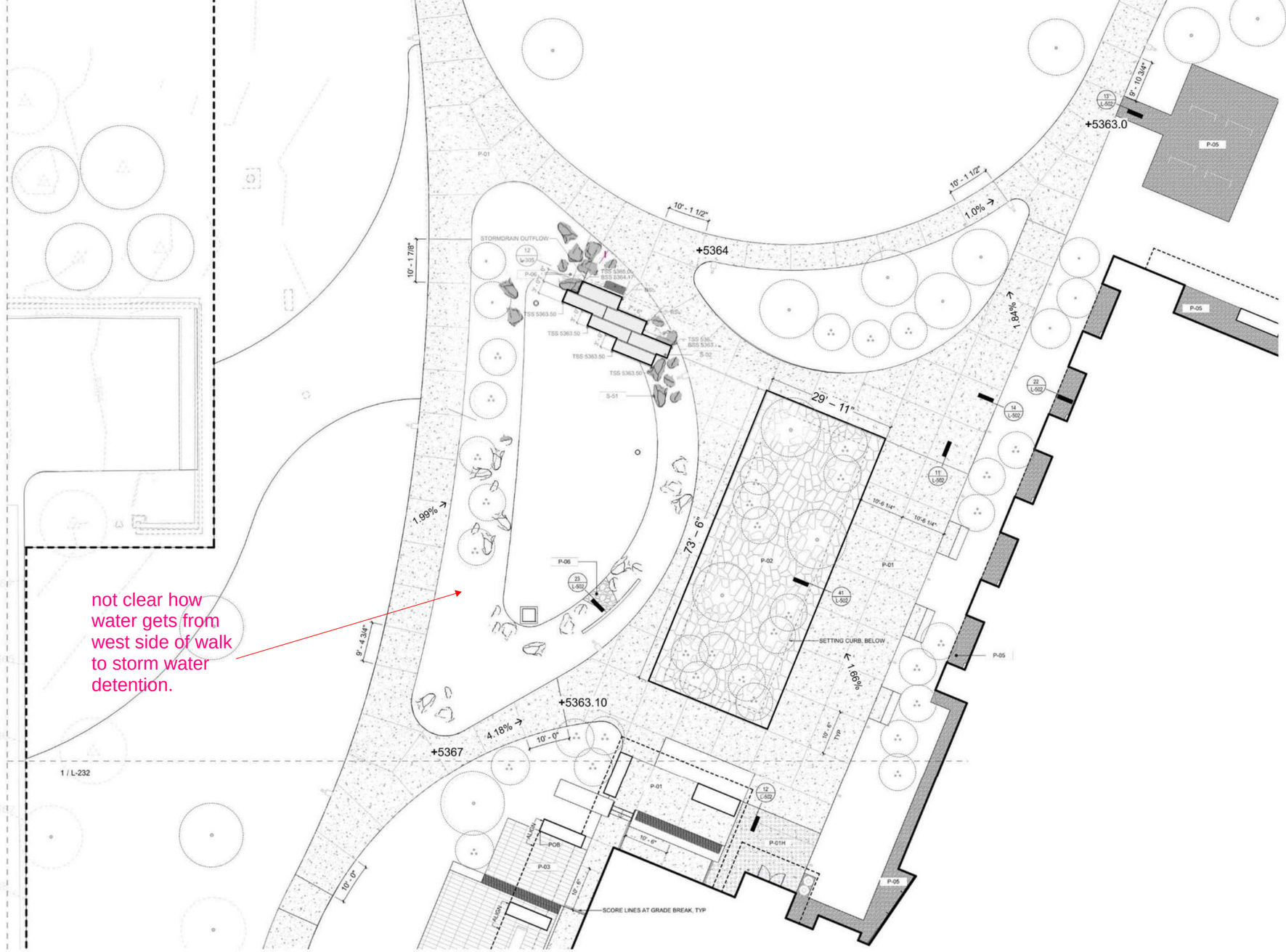
HYDROZONE MAP

Irrigation Usage

0 100 200



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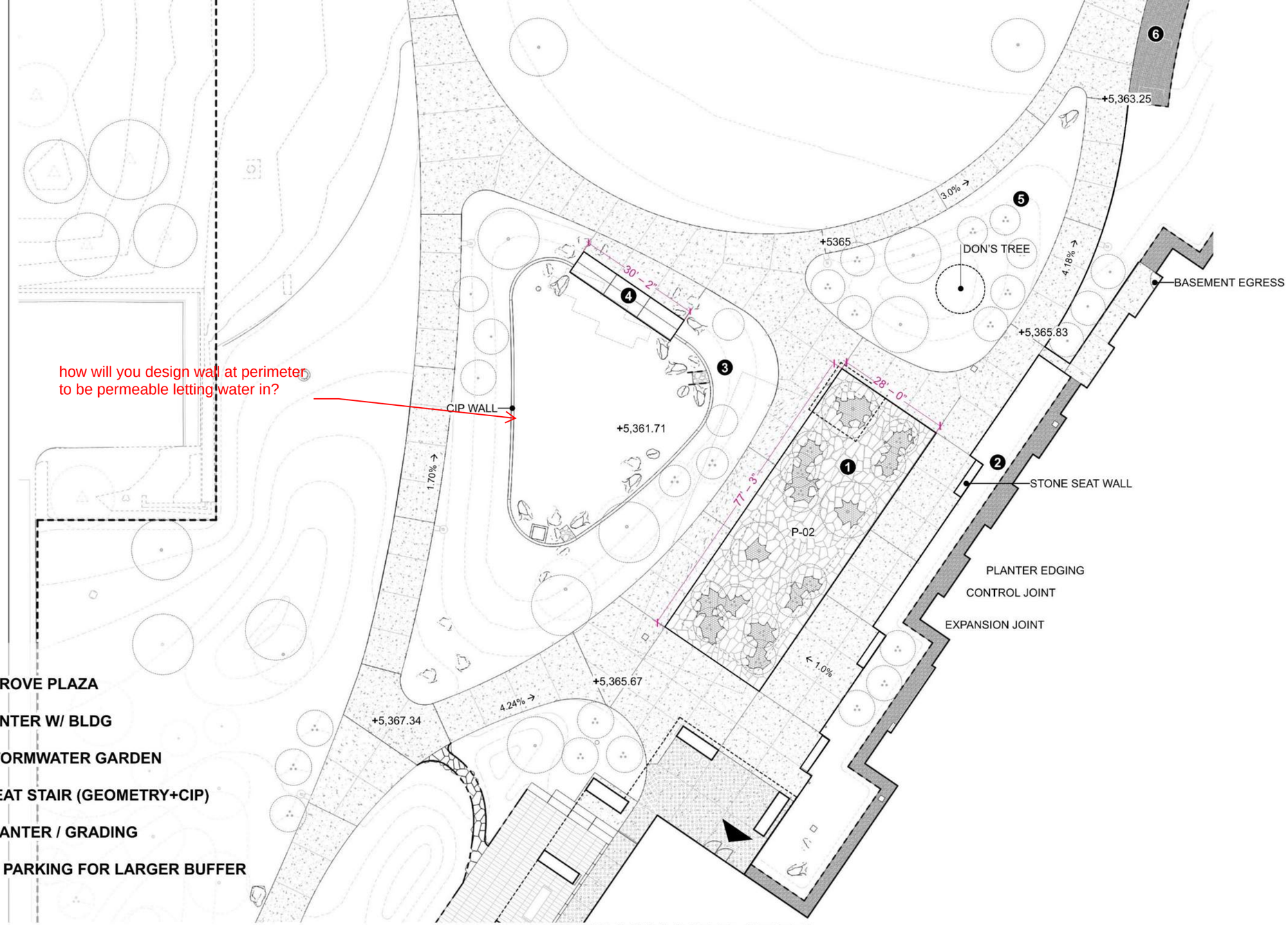
100% DD

STORMWATER GARDEN AND GROVE PLAZA

0' 10' 20' 40'



1. REALIGNED GROVE PLAZA
2. STEPPED PLANTER W/ BLDG
3. EXPANDED STORMWATER GARDEN
4. SIMPLIFIED SEAT STAIR (GEOMETRY+CIP)
5. ADJUSTED PLANTER / GRADING
6. SHIFTED BIKE PARKING FOR LARGER BUFFER

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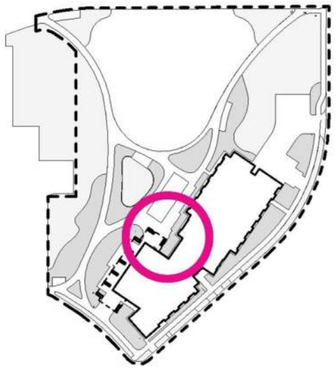
DESIGN UPDATES

STORMWATER GARDEN AND GROVE PLAZA

0' 10' 20' 40'



BENCH, TYP.
SEE STRUCTURES PLAN

LIGHT FIXTURE, TYP.
SEE LIGHTING PLAN

GRAVEL MAINTENANCE STRIP

DRAIN, TYP.
SEE CIVIL

DRAIN,TYP.
SEE CIVIL

BOULDERS, TYP.

BOULDERS, TYP.

CHAP
BUILDING

AMELANCHIER ALNIFOLIA
SASKATOON SERVICEBERRY
(MAY-JULY, SUN-PART SHADE
LOW TO MODERATE WATER)

PHYSOCARPUS MONOGYNUS
MOUNTAIN NINEBARK
(MAY-JULY, SUN-PART SHADE
LOW–MODERATE WATER)

RIBES CEREUM
WAX CURRANT
(SUN-SHADE, LOW TO MODERATE WATER
DROUGHT TOLERANT)

ARCTOSTAPHYLOS UVA-URSI
KINNIKINNICK
(EVERGREEN, MAY-AUGUST)
SUN-PART SUN
LOW-MODERATE WATER

This location you could use some of the taller arctostaphlus

PTELEA TRIFOLIATA
COMMON HOP TREE
(JUNE-AUGUST, SUN-SHADE
LOW TO MODERATE WATER)

CORNUS SERICEA
RED TWIG DOGWOOD
(YEAR-ROUND INTEREST, SUN-PART SHADE,
MODERATE WATER)

be sure to consider multiple varietal options for this plant. Height and shape differences. Does require moderate water

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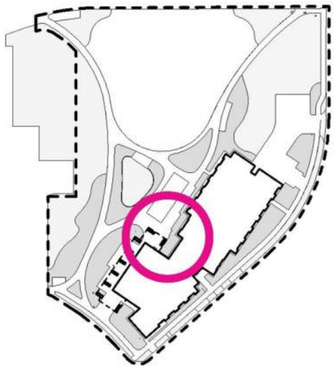
NORTH ENTRYWAY

PLANTING LAYOUT: TREES AND SHRUBS



consider either Mondap or Effusa variety

JUNIPERUS COMMUNIS VAR DEPRESSA
COMMON JUNIPER
(EVERGREEN, SUN-PART SUN, MED-LOW)

this will apply to columbine everywhere. Use selectively and preferably combined or tucked behind another foliage plant. The come up bloom and dry up early in the season leaving nothing there till the next spring.

AQUILEGIA COERULEA
COLORADO BLUE COLUMBINE
(MAY-JULY. SUN-PART SHADE, MED-LOW)

HEUCHERA AMERICANA
CORAL BELLS
(JUNE-JULY, SUN-PART SHADE, MED)

CHASMANTHIUM LATIFOLIUM
NORTHERN SEA OATS
(SUN- SHADE, MED)

not seeing availability of this one, also do not think it will take full shade

PENSTEMON PROCERUS
LITTLEFLOWER PENSTEMON
(JUNE-AUG, SHADE, MED-LOW))

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NORTH ENTRYWAY

PLANTING LAYOUT: UNDERSTORY

BLUE FOREST SAVIN JUNIPER
(EVERGREEN, SUN, LOW)

ARTEMISIA TRIDENTATA
BIG SAGEBRUSH
(JULY-OCT, SUN, LOW)

Sarah requested taller plants against this tall wall. Hawthornes?

CERCOCARPUS MONTANUS
ALDERLEAF MOUNTAIN MAHOGANY
(SEMI-EVERGREEN, MAY-JUNE, SUN, LOW)

CORNUS SERICEA
RED TWIG DOGWOOD
(YEAR-ROUND INTEREST, SUN-PART SHADE, MED)

ARCTOSTAPHYLOS X COLORADENSIS
MOCK BEARBERRY MANZANITA
(APRIL-MAY, SUN-PART, MED-VERY LOW)

may be too hot and dry for this here

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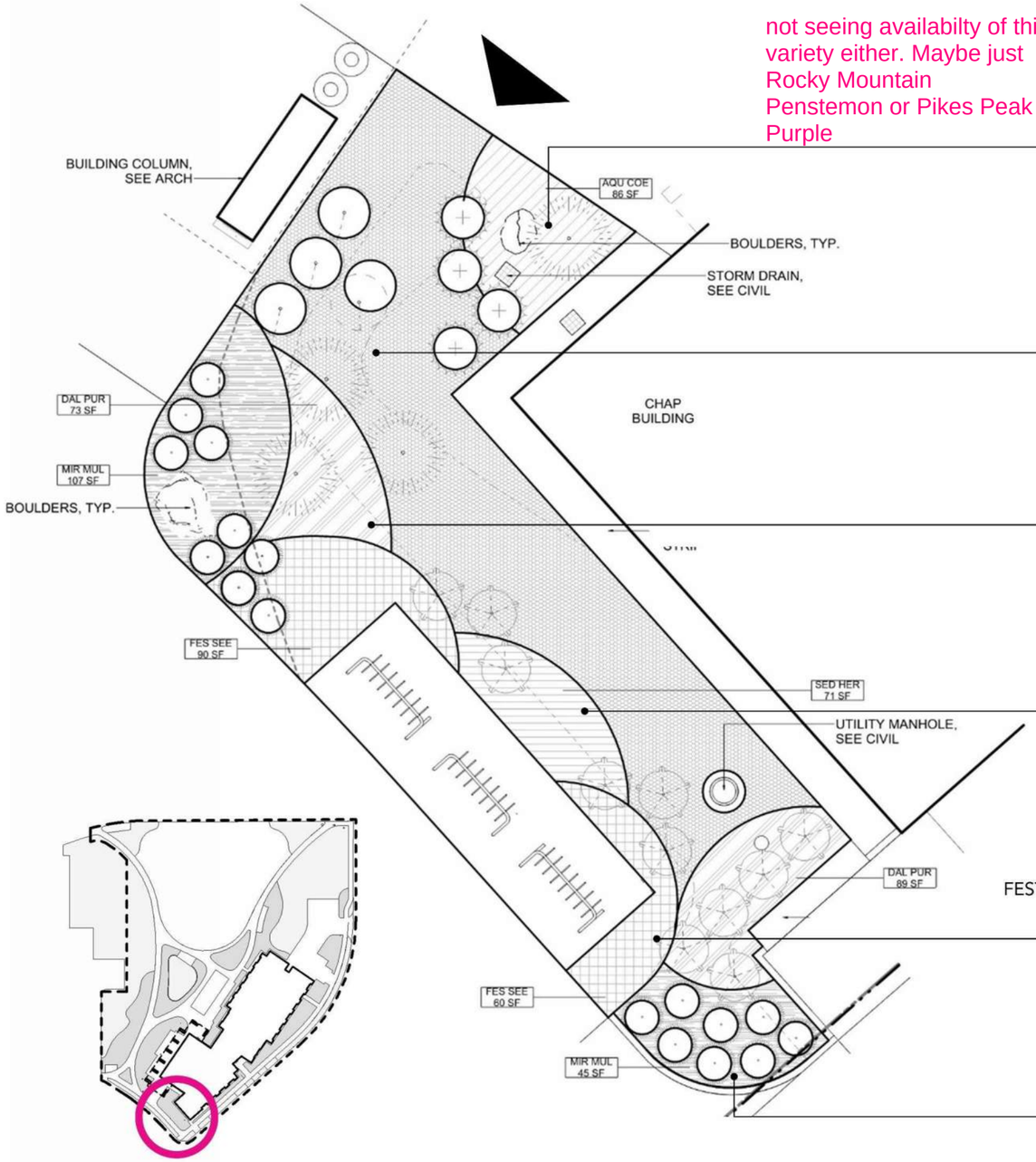
SOUTH ENTRYWAY
PLANTING LAYOUT: SHRUBS

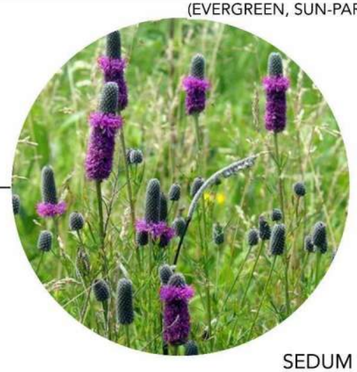
not seeing availabilty of this variety either. Maybe just Rocky Mountain Penstemon or Pikes Peak Purple



PENSTEMON VIRENS
FRONT RANGE PENSTEMON
(MAY-JULY, SUN- PART SHADE, LOW)

JUNIPERUS COMMUNIS VAR DEPRESSA
COMMON JUNIPER
(EVERGREEN, SUN-PART SUN LOW WATER)

DALEA PURPUREA
PURPLE PRAIRIE CLOVER
(MAY-AUG, SUN, LOW)



SEDUM 'HERBSTFREUDE'
SEDUM AUTUMN JOY
(JUNE-SEPT, SUN, LOW WATER)

FESTUCA GLAUCA 'BOULDER BLUE'
BOULDER BLUE FESCUE
(BLUE SHADE, SUN, LOW WATER)

MIRABILIS MULTIFLORA
COLORADO FOUR O'CLOCK
(JUNE-SEPT, SUN, LOW)

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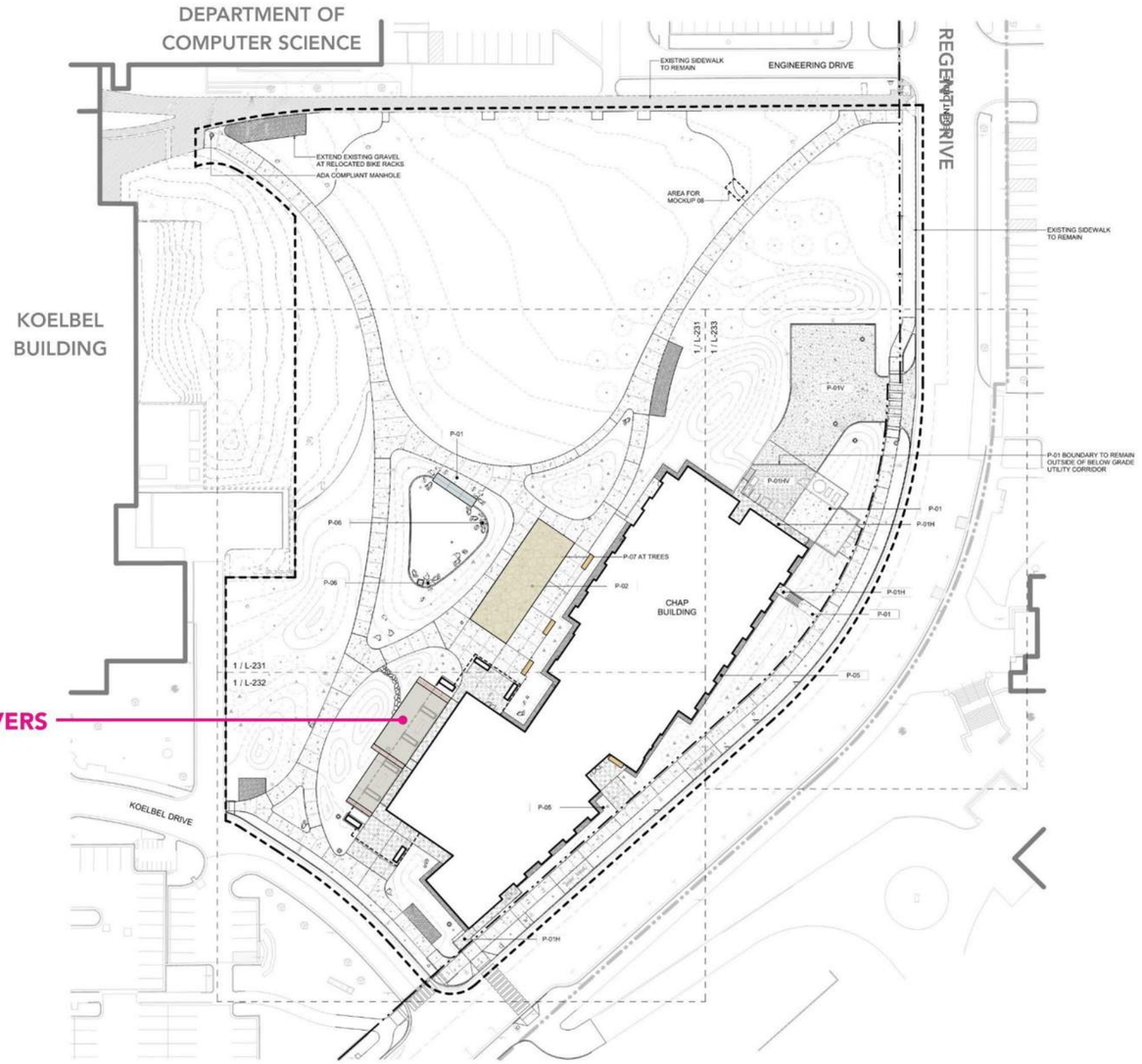
SOUTH ENTRYWAY

PLANTING LAYOUT: UNDERSTORY



- PRECAST SEAT WALL
- PRECAST CONCRETE PAVER – 12” x 36”
- CIP CONC WALL
- STONE PAVERS
- STONE SEAT WALL
- GRAVEL
- CONCRETE HEATED
- CONCRETE

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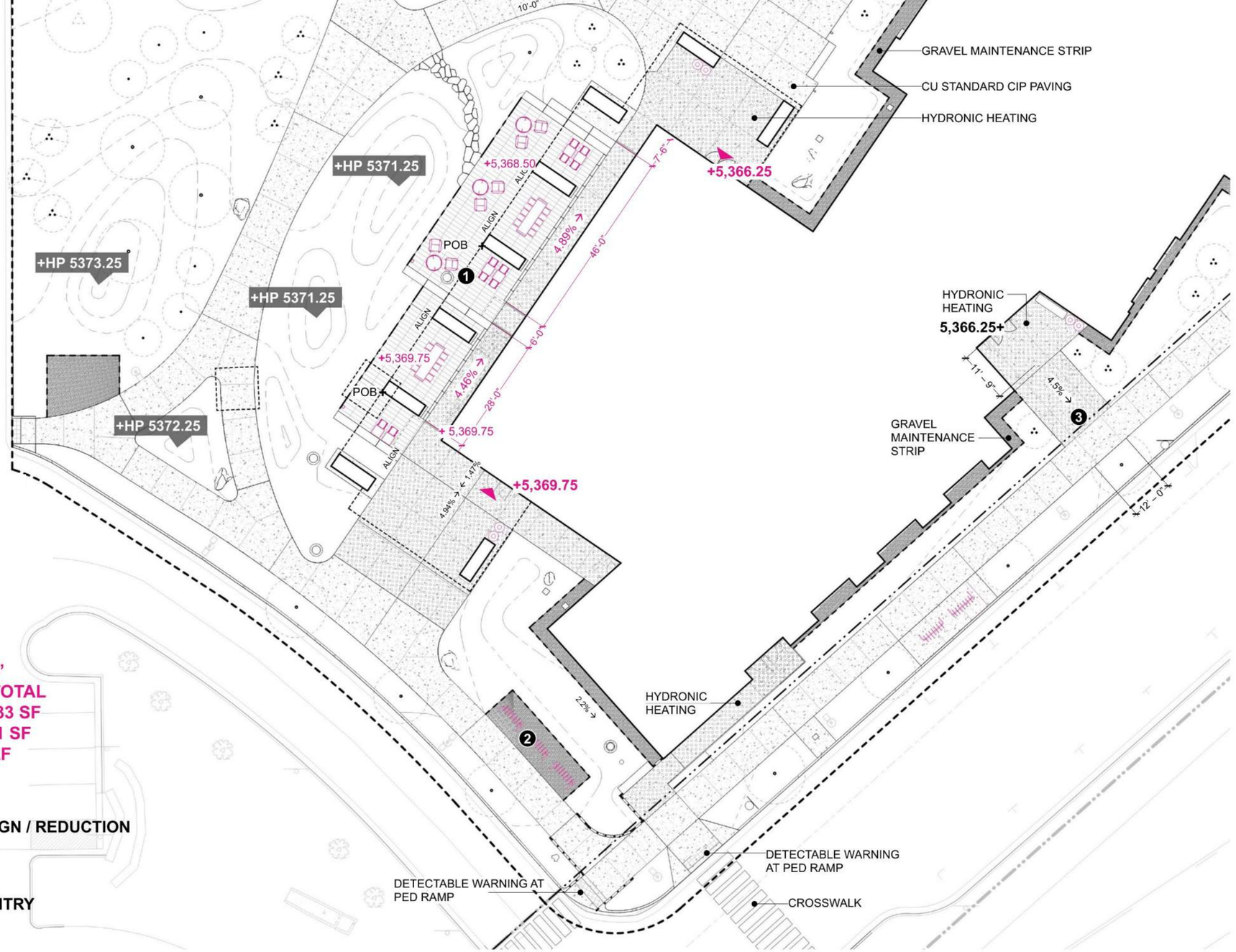
MATERIALS PLAN

0 100 200



DESIGN UPDATE:

GRADE CHANGE:	3.5’
TERRACES:	2 TOTAL
PRECAST PAVER:	1633 SF
SEAT WALL:	171 SF
WOOD TOPPER:	0 LF

1. TERRACE REDESIGN / REDUCTION
2. BIKE PARKING
3. REGENT DRIVE ENTRY

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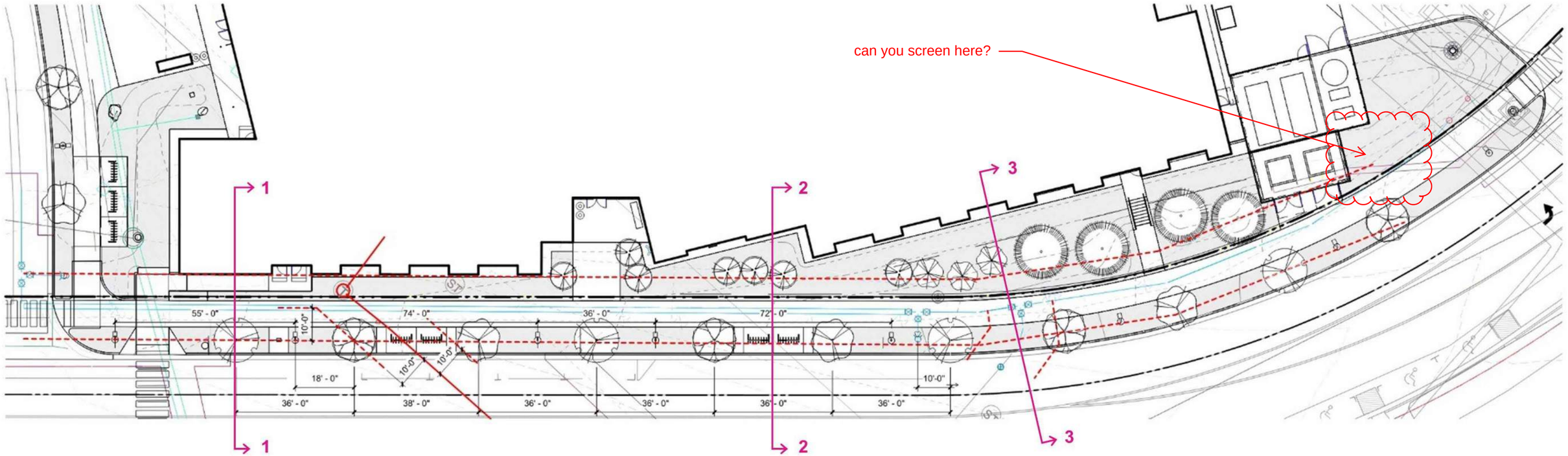
TERRACE REDESIGN

0' 10' 20' 40'


Not seeing any Echineacea in the images or plant selections. ONe of our most successful natives in multiple varieties and colors and has good winter interest, pollinator value and bird food.
Obviously lots of other options for perennials too?!
fieldoperations
CAMPUS PATH WITH TERRACES BEYOND

Plant Schedule					
Symbol	Plant Code	Botanical Name	Common Name	Size	Count
	AM	Acer miyabei	Miyabe Maple	2-1/2"	5
	AS	Acer saccharum Fall Fiesta	Fall Fiesta Sugar Maple	2-1/2"	5
	CC	Cercis canadensis `Rising Sun`	Rising Sun Eastern Redbud	2-1/2"	3
	PD	Pinus ponderosa	Ponderosa Pine		4
	PM	Prunus maackii	Amur Chokecherry		7
	QM	Quercus muehlenbergii	Chinkapin Oak	2-1/2"	4



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Regent Drive

CERCOCARPUS MONTANUS
MOUNTAIN MAHOGANY
(EVERGREEN)

ARCTOSTAPHYLOS x COLORADENSIS
MOCK BEARBERRY MANZANITA
(EVERGREEN)

CORNUS SERICEA
RED TWIG DOGWOOD
(YEAR-ROUND INTEREST)

ARTEMISIA TRIDENTATA
BIG SAGEBRUSH
(SEMI-EVERGREEN, JUNE-OCTOBER)

PHYSOCARPUS MONOGYNUS
MOUNTAIN NINEBARK
(MAY, JUNE, JULY)

MAHONIA AQUIFOLIUM
OREGEON GRAPE
(EVERGREEN, APRIL)

not one of my favorites???

capturing room for planting to screen here would be good.

AMELANCHIER UTAHENSIS
UTAH SERVICEBERRY
(SEMI-EVERGREEN, JUNE-OCTOBER)

JUNIPERUS SABINA
SAVIN JUNIPER
(EVERGREEN)

CORNUS SANGUINEA
BLOODTWIG DOGWOOD
(YEAR-ROUND INTEREST)

CHAMAEBATIARIA MILLEFOLIUM
FERNBUSH
(WINTER INTEREST, JULY-SEPT)

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LOADING DOCK
PLANTING LAYOUT: SHRUBS

BOUTELOUA GRACILIS 'BLONDE AMBITION'
BLONDE AMBITION BLUE GRAMA
(JULY-OCTOBER)

DALEA CANDIDA
WHITE PRAIRIE CLOVER
(JUNE-SEPT, FULL SUN, LOW)

WYETHIA AMPLEXICAULIS
MULES-EARS
(JUNE-AUG, SUN, MED-LOW)

FESTUCA GLAUCA 'BOULDER BLUE'
BOULDER BLUE FESCUE
(SEMI-EVERGREEN, FULL SUN, MED-LOW)

MUHLENBERGIA CAPILLARIS
PINK MUHLY GRASS
(MAY-NOV, WINTER INTEREST, FULL SUN-PART SHADE, MED-LOW)

CREEPING COTONEASTER
COTONEASTER ADPRESSUS
(EVERGREEN, SUN-PART SUN, MED-LOW)

JUNIPERUS COMMUNIS
VAR DEPRESSA
COMMON JUNIPER
(EVERGREEN, SUN-PART, LOW)

ERIOGONUM UMBELLATUM
SULPHURFLOWER BUCKWHEAT
(JULY-SEPT, FULL SUN, VERY LOW))

SPOROBOLUS AIROIDES
ALKALI SCATON
(JUNE-SEPT, FULL SUN, MED-VERY LOW)

AQUILEGIA CHRYSANTHA 'DENVER GOLD'
DENVER GOLD COLUMBINE
(MAY-OCT, FULL-PART, MED)

DAL CAN
BOU GRA
WYE AMP
FES BOU
MUH CAP
DAL CAN
UPLAND SEED MIX
WYE AMP
FES BOU
MUH CAP
CRE COT
BOU GRA
NO EDGE BTWN
PERENNIAL AND SEED MIX
MUH CAP
JUN COM
FES BOU
ERI UMB
GEU TRI
CRE COT
SPO AIR
JUN COM
AQU CHR
SPO AIR
FES BOU

this plant has a tendacy to collect trash might be tough near loading. Peking cotoneaster is a very successful upright plant. Don't know if that is appropriate to have something tall in front of this facade.

fieldoperations

LOADING DOCK

PLANTING LAYOUT: UNDERSTORY

TREE SCHEDULE

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	CA	QTY.
	AM	ACER MIYABEI	MIYABEI MAPLE	2.5"	11
	AS	ACER SACCHARUM 'FALL FIESTA'	FALL FIESTA SUGAR MAPLE	2.5"	6
	BN	BETULA NIGRA	RIVER BIRCH	15'	12
	BO	BETULA OCCIDENTALIS	WATER BIRCH	14'	4
	CS	CATALPA SPECIOSA	NOTHERN CATALPA	2.5"	5
	CC	CERCIS CANADENSIS 'RISING SUN'	RISING SUN EASTERN REDBUD	2.5"	10
	CL	CERCOCARPUS LEDIFOLIUS	CURLY LEAF MOUNTAIN MAHOGANY	10-12'	3
	CG	CRATAEGUS CRUS-GALI INERMIS	THORNLESS COCKSPUR HAWTHORN	2.5"	3
	JS	JUNIPERUS SCOPULORUM	ROCKY MOUNTAIN JUNIPER	15'	6
	KP	KOELREUTERIA PANICULATA	GOLDEN RAINTREE	2.5"	6
	PP	PICEA PUNGENS	COLORADO SPRUCE	15'	7
	PF	PINUS FLEXILIS	LIMBER PINE	15'	5
	PD	PINUS PONDEROSA	PONDEROSA PINE	15'	4
	PD2	PINUS PONDEROSA SCOPULORUM	ROCKY MOUNTAIN PONDEROSA PINE	15'	3
	PM	PRUNUS MAACKII	AMUR CHOKECHERRY	10'	17
	QB	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5"	9
	QG	QUERCUS GAMBELII	GAMBEL OAK	2.5"	13
	QM	QUERCUS MUEHLENBERGII	CHINKAPIN OAK	2.5"	4

TOTAL: 128

Pinyon Pine is a very effective "massing" plant in Colorado. Richelle, is it recommended on campus?

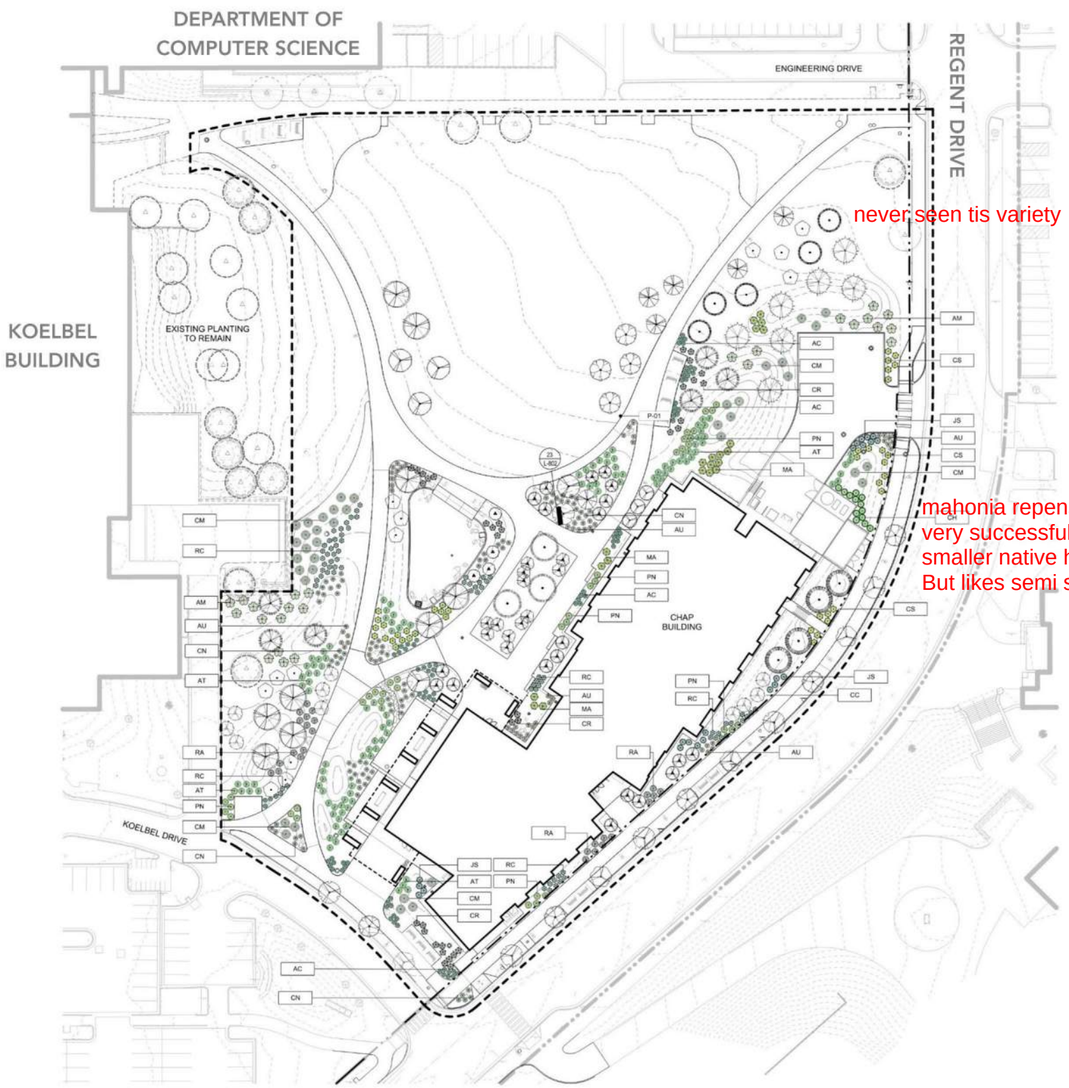
not long lived, disease prone, not very available. Consider more native chokecherry options.

*Redbuds relocated to have coverage from wind

fieldoperations

TREE PLAN

0 100 200



SHRUB SCHEDULE

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	QTY.
	AC	ARCTOSTAPHYLOS X COLORADENSIS	MOCK BEARBERRY MANZANITA	86
	AM	AMELANCHIER UTAHENSIS	UTAH SERVICEBERRY	25
	AT	ARTEMISIA TRIDENTATA	BIG SAGEBRUSH	115
	AU	AMELANCHIER UTAHENSIS	KINNIKINNICK	61
	CH	CHAMAEBATIARIA MILLEFOLIUM	FERNBUSH	13
	CM	CERCOCARPUS MONTANUS	ALDERLEAF MOUNTAIN MAHOGANY	39
	CN	CHRUSOTHAMNUS NAUSEOSUS 'YELLOW TWIG'	YELLOW TWIG RABBITBRUSH	87
	CR	CORNUS SERICEA	RED TWIG DOGWOOD	35
	CS	CORNUS SANGUINEA	BLOODTWIG DOGWOOD	40
	JS	JUNIPERUS SABINA	SAVIN JUNIPER	22
	MA	MAHONIA AQUIFOLIUM	OREGON GRAPE	21
	PN	PHYSOCARPUS MONOGYNUS	MOUNTAIN NINEBARK	40
	RA	RHUS AROMATICA	FRAGRANT SUMAC	26
	RC	RIBES CEREUM	WAX CURRANT	77

TOTAL: 687

never seen tis variety

mahonia repens is a very successful smaller native here. But likes semi shade.

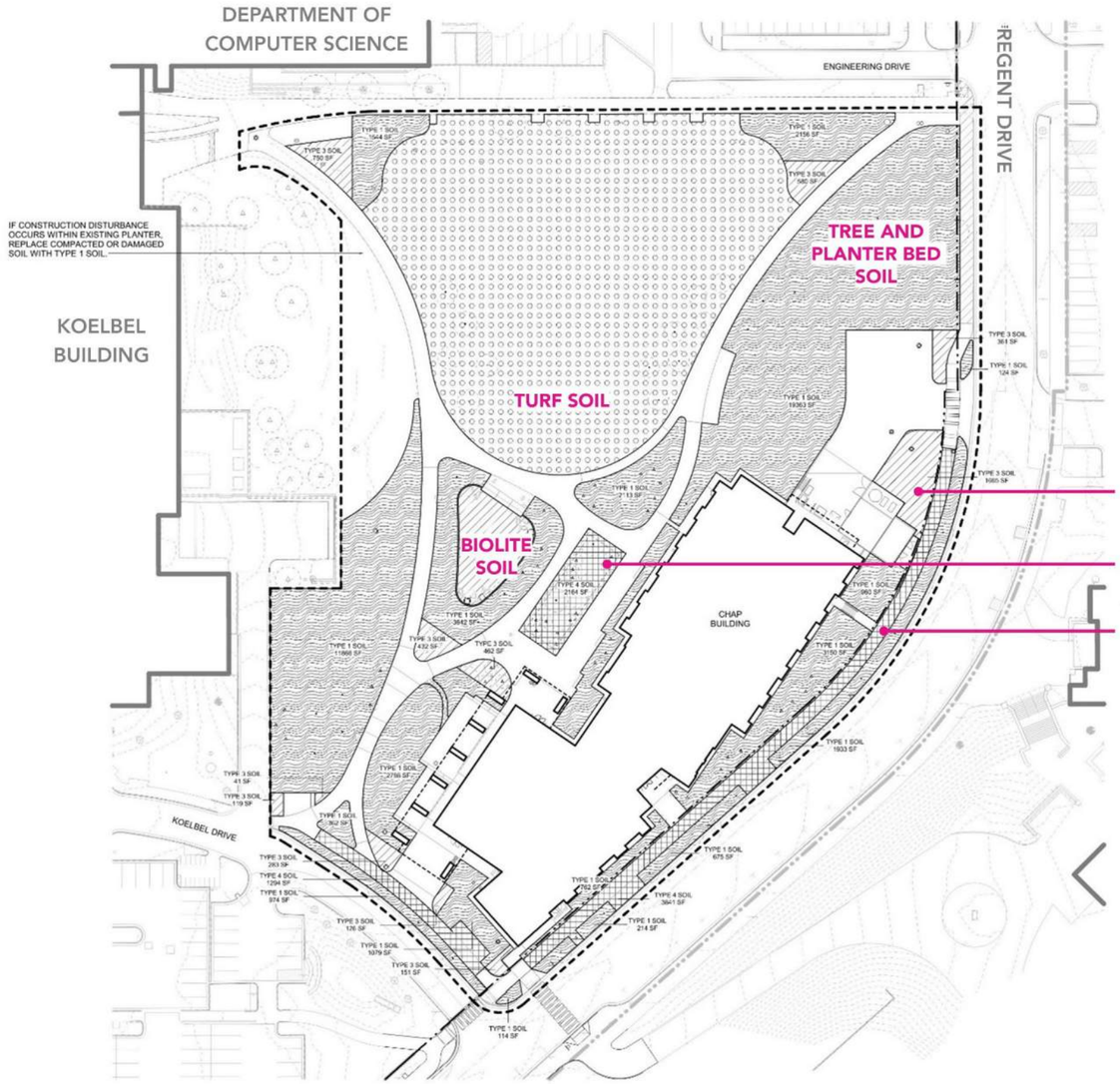
Rhus trilobata and varieties also very successful. Denver Forestry recommends to Avoid planting directly under trees to avoid their alleotoxins effect on tree growth

*Ilex removed from project

fieldoperations

SHRUB PLAN
DESIGN UPDATES

0 100 200



not needed for such a large extent. Allow for 900-1000 cu ft of soil for each tree. Calculated from 3ft below grade. Not covered by impervious surface.

*Soil Cells removed from project

fieldoperations

SOILS PLAN

0 100 200