

\_STRUCTURAL ENGINEER\_

DENVER, CO 80202

\_ELECTRICAL ENGINEER\_

(P) 719-536-0036

CONTACT: JEREMY O'BRIEN

(P) 303-444-1951

1675 LARIMER STREET, SUITE 550

CONTACT: KATIE COURTRIGHT

**ME-ENGINEERS** 

1125 KELLY JOHNSON BLVD, SUITE 301 COLORADO SPRINGS, CO 80920

JVA, INCORPORATED

# SITE DEVELOPMENT PLANS

\_ARCHITECT / APPLICANT\_

(P) 719-471-7566

(F) 719-471-1174

(P) 719-536-0036

CONTACT: JEREMY O'BRIEN

**RTA ARCHITECTS** 

CONTACT: BRIAN CALHOUN, PRINCIPAL brian@rtaarchitects.com
PATRICK WARD, PLAN PREPARER patrickw@rtaarchitects.com

19 SOUTH TEJON STREET, SUITE 300

\_MECHANICAL/ PLUMBING ENGINEER\_

**ME-ENGINEERS** 

1125 KELLY JOHNSON BLVD, SUITE 301 COLORADO SPRINGS, CO 80920

COLORADO SPRINGS, CO 80903

**SCHOOL DISTRICT 49** 10850 E WOODMEN ROAD

(P) 719-495-1100

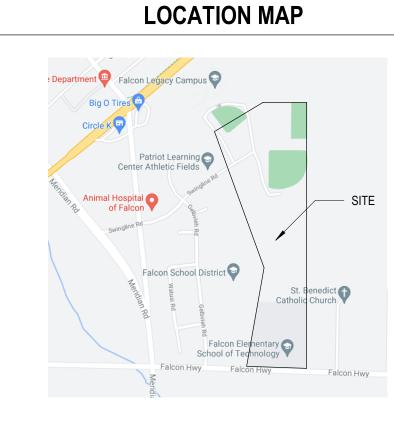
CONTACT: MELISSA ANDREWS, BRUCE BROWN mandrews@d49.org, brlbrown@d49.org

\_CIVIL ENGINEER/ SURVEYOR\_ JVA, INCORPORATED

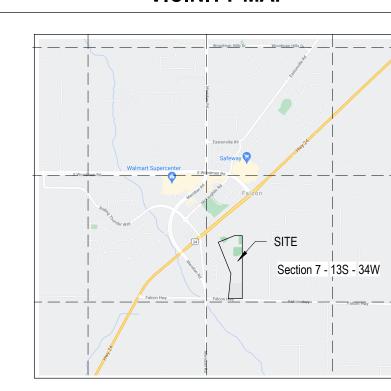
47 COOPER CREEK WAY, SUITE 328 WINTER PARK, CO 80482 (P) 303-444-1951 CONTACT: COOPER KARSH

\_LANDSCAPE ARCHITECT\_ KIMLEY-HORN

2 NORTH NEVADA AVENUE COLORADO SPRINGS, CO 80903 (P) 719-453-0180 CONTACT: JIM HOUCK



# **VICINITY MAP**



# **PROJECT DATA**

FALCON SCHOOL DISTRICT NO 49 10850 E WOODMEN RD PEYTON, CO 80831 719-495-1100 BRUCE BROWN brlbrown@d49.org

OWNER

APPLICANT

RTA ARCHITECTS 19 S TEJON ST SUITE 300 COLORADO SPRINGS, CO 80903 719-471-7566

BRIAN CALHOUN, PRINCIPAL brian@rtaarchitects.com PATRICK WARD, PLAN PREPARER

patrickw@rtaarchitects.com SCOPE OF WORK: CONSTRUCTION OF A SCHOOL DISTRICT TRANSPORTATION SUPPORT BUILDING AND GRAVEL BUS PARKING

LOT WITH ASSOCIATED SITE WORK, INCLUDING PARKING FOR 175 BUSES, SITE LIGHTING, ACCESS ROAD, PERIMETER FENCE, DETENTION POND AND SITE LANDSCAPING. CONSTRUCTION WILL BE PHASED. PHASE 1 INCLUDES THE BUILDING CORE & SHELL AND SITE WORK. PHASE 1B INCLUDES THE VEHICLE MAINTENANCE BAYS. PHASE 1C INCLUDES THE ADMINISTRATION AREA. PHASE 2 INCLUDES BUILDING AND PARKING LOT EXPANSIONS.

PARCEL SIZE 39.37 ACRES

LEGAL DESCRIPTION TRACT IN SW4 SEC 07-13-64 DESC AS FOLS, COM AT SW COR OF SD SEC 7, TH S 88<33'11" E 1549.33 FT, N 00<03'19" W 30.0 FT TO NLY LN OF FALCON HWY FOR POB, CONT N 00<03'19" W

LANDSCAPING:

SEE SITE PLANS

IMPERMEABLE SURFACE: 5%

2673.46 FT, S 89<18'15" W 408.01 FT, S 56<02'15" W 132.40 FT, S 49<27'15" W 510.0 FT, S 16<24'19" E 1489.85 FT, S 07<50'10" W 826.38 FT TO NLY LN OF FALCON HWY, TH S 88<33'11" E 600.0 FT TO POB

> 32'-0" 1 STORY

TAX SCHEDULE NUMBER 4307300006

EXISTING LAND USE EXEMPT POLITICAL SUBDIVISION - EDUCATIONAL PROPOSED LAND USE EXEMPT POLITICAL SUBDIVISION - EDUCATIONAL

BUILDING INFORMATION GROSS AREA: 33,928 SF HEIGHT: STORIES: LAND PERCENTAGE: OPEN SPACE:

PARKING CALCULATIONS:

SETBACKS FRONT 25'-0", REAR 25'-0", SIDE 25'-0" ZONING DISTRICT

# SIGNATURE BLOCK

Approved By: Ryan Howser, AICP Date:04/27/2023 El Paso County Planning & Community Development For PCD Director

Planning and Community Development Director

19 SOUTH TEJON ST., SUITE 300 COLORADO SPRINGS, CO. 80903 TELE. 719-471-7566 FAX: 719-471-1174 www.rtaarchitects.com

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SHEET TITLE **GENERAL** INFORMATION

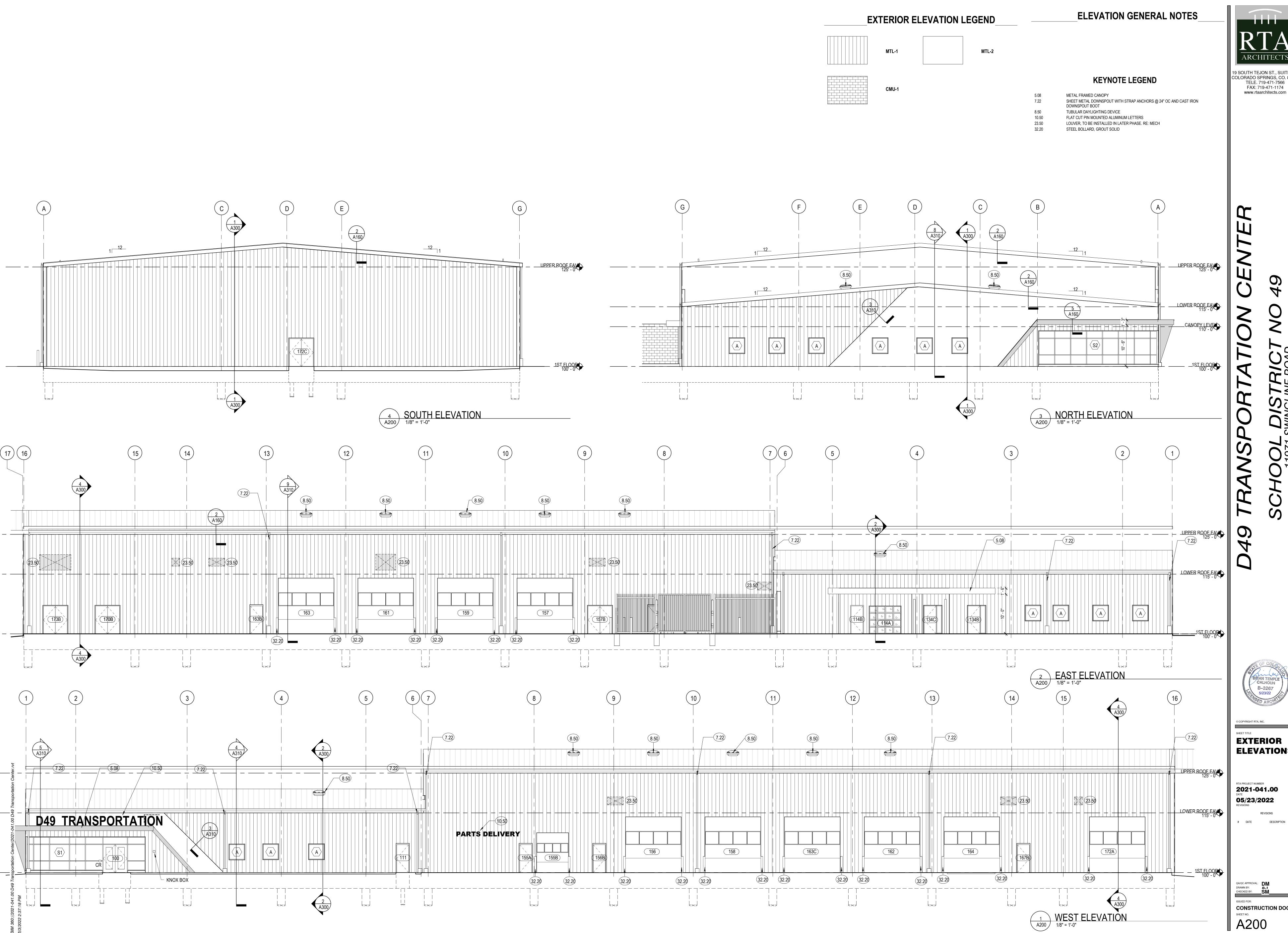
RTA PROJECT NUMBER 09/23/2022

# DATE DESCRIPTION 9 04/13/2023 Revision

QA/QC APPROVAL: BTC
DRAWN BY: PW/AJ
CHECKED BY: BTC

ISSUED FOR:
CONSTRUCTION DOCUMENTS

DP-00





BRIAN TEMPLE CALHOUN B-3267 5/23/22

**EXTERIOR ELEVATIONS** 

2021-041.00
DATE
05/23/2022
REVISIONS

CONSTRUCTION DOCUMENT A200



# SITE DEVELOPMENT PLANS

**SCHOOL DISTRICT 49** 

(P) 719-495-1100 CONTACT: MELISSA ANDREWS, BRUCE BROWN

mandrews@d49.org, brlbrown@d49.org

JVA, INCORPORATED

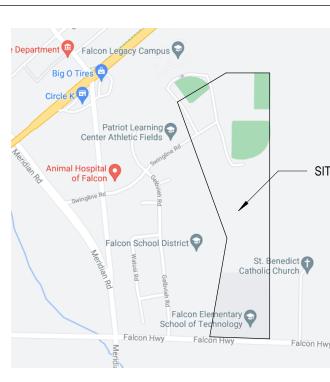
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\_LANDSCAPE ARCHITECT\_ **KIMLEY-HORN** 

2 NORTH NEVADA AVENUE COLORADO SPRINGS, CO 80903 (P) 719-453-0180 CONTACT: JIM HOUCK

**LOCATION MAP** 



## **VICINITY MAP**



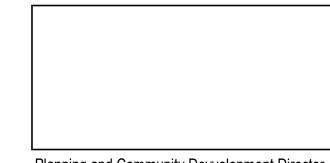
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SETBACKS	FRONT 25'-0", REAR 25'-0", SIDE 25'-0"

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SEE SITE PLANS

ZONING DISTRICT

PARKING CALCULATIONS:



Planning and Community Devvelopment Director

TELE. 719-471-7566 FAX: 719-471-1174 www.rtaarchitects.com

**GENERAL** INFORMATION

2021-041.00 9/23/2022

**DEVELOPMENT PLAN** 

DP-00

19 SOUTH TEJON STREET, SUITE 300 COLORADO SPRINGS, CO 80903

(F) 719-471-1174 CONTACT: BRIAN CALHOUN, PRINCIPAL brian@rtaarchitects.com
PATRICK WARD, PLAN PREPARER patrickw@rtaarchitects.com

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\_MECHANICAL/ PLUMBING ENGINEER\_

1675 LARIMER STREET, SUITE 550 DENVER, CO 80202 CONTACT: KATIE COURTRIGHT

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\_ELECTRICAL ENGINEER\_

## **CODE PLAN GENERAL NOTES**

1. THIS DRAWING PACKAGE IS FOR THE CONSTRUCTION OF PHASE 1 CORE SHELL AND SITE WORK ONLY.

PHASE 1 CODE DATA

# 19 SOUTH TEJON ST., SUITE 300 COLORADO SPRINGS, CO. 80903

TELE. 719-471-7566 FAX: 719-471-1174 www.rtaarchitects.com

CODE ANALYSIS IS BASED UPON:

2021 INTERNATIONAL EXISTING BUILDING CODE (IEBC)

2021 INTERNATIONAL BUILDING CODE (IBC) 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) 2021 INTERNATIONAL FIRE CODE (IFC)

2018 COLORADO PLUMBING CODE 2018 COLORADO FUEL GAS CODE ICC A117.1-2017 ACCESSIBILITY STANDARDS

2020 NATIONAL ELECTRICAL CODE (NEC)

A. DESCRIPTION OF WORK PRE-ENGINEERED METAL BUILDING. PERMIT FOR CORE & SHELL CONSTRUCTION IS REQUESTED. CERTIFICATE OF OCCUPANCY PERMITS WILL BE REQUESTED UNDER SEPARATE APPLICATIONS. NO PERMITS ARE REQUESTED FOR CERTIFICATE OF OCCUPANCY WITHIN THESE DOCUMENTS.

B. USE AND OCCUPANCY CLASSIFICATION (CHAPTER 3)

B - BUSINESS

C. GENERAL BUILDING HEIGHTS AND AREAS (CHAPTER 5) CONSTRUCTION TYPE: TYPE II B TABULAR ALLOWABLE AREA: 23,000 SF

TABLE 506.3.3 - FRONTAGE INCREASE: 100% OF BUILDING PERIMETER HAS GREATER THAN 30 FEET OF OPEN SPACE. FRONTAGE INCREASE FACTOR IS .75

 $Aa = At + (At \times If)$  $Aa = 23,000 + [23,000 \times .75)$ Aa = 40,250 SF ACTUAL AREA: 33,928 SF

504.3 ALLOWABLE HEIGHT: 55'-0" ACTUAL HEIGHT: 32'-0"

504.4 ALLOWABLE STORIES ABOVE GRADE: 3 ACTUAL STORIES: 1

TYPE IIB CONSTRUCTION; NO RATING IS REQUIRED FOR STRUCTURAL FRAME, BEARING WALLS (int or ext), NONBEARING WALLS AND PARTITIONS, FLOOR CONSTRUCTION, OR ROOF CONSTRUCTION FOR TYPE IIB PER TABLE 601.

E. FIRE PROTECTION SYSTEMS (CHAPTER 9) PER APPLICABLE CODES AND LOCAL CODES, REFER TO SPECS. NO SPRINKLER SYSTEM AT THIS PHASE.

F. MEANS OF EGRESS (CHAPTER 10)

OCCUPANT LOAD: PER TABLE 1004.5, BUSINESS, 150 GROSS SF PER OCCUPANT = 227 NUMBER OF EXITS REQUIRED: 2 REQUIRED (TABLE 1006.3.3), 12 PROVIDED; 227/12= 19 OCCUPANTS PER EXIT

EGRESS WIDTH: (IBC 1005.3): DOORS (1005.3.2): 0.20" x 19 = 3.8" < PROVIDED 33.5" CLR MIN FOR SINGLE DOOR.

BUILDING IS CONFIGURED FOR MULTIPLE PHASES EXCEEDING REQUIRED EXITING WIDTHS. FINAL EXITING REQUIREMENTS WILL BE PROVIDED AT EACH PHASE AND CORRESPONDING CONSTRUCTION

G. PLUMBING SYSTEMS (CHAPTER 29)

REQUIREMENTS WILL BE FULLFILLED UNDER SEPARATE PHASED CONSTRUCTION PERMITS.

## **ENERGY CODE DATA**

2021 IECC - ENERGY CONSERVATION CODE SUMMARY CLIMATE ZONE: 5B

C401.2: APPLICATION

THE PROJECT WILL COMPLY WITH THE REQUIREMENTS OF IECC C402 THROUGH C406.

C402.1: BUILDING ENVELOPE REQUIREMENTS. REFER TO ARCHITECTURAL DETAILS AND SPECIFICATIONS FOR THERMAL ENVELOPE ASSEMBLIES INCLUDING ROOFS, WALLS, AND FENSTRATION.

402.1.3 OPAQUE ASSEMBLIES: REQUIRED MINIMUM R-VALUES (TABLE C402.1.3) PROVIDED U-0.35 U-0.35 U-0.52 U-0.52 F-0.54

REFER TO ARCHITECTURAL DETAILS OF ASSEMBLY TYPES FOR CONFIGURATION OF INSULATION SYSTEMS.

PROVIDED

C402.4 FENESTRATION - WINDOWS AND EXTERIOR DOORS: MAXIMUM U VALUES: (TABLE C402.4) REQUIRED FIXED FENESTRATION 0.36 OPERABLE FENESTRATION ENTRANCE DOORS

SKYLIGHTS MAXIMUM SHGC: SEW GLAZING FIXED 0.38 OPERABLE 0.33 0.33

C402.4.2: REFER TO DAYLIGHTING CALCULATIONS AND ROOF AND CEILING PLANS FOR COMPLIANCE WITH MINIMUM SKYLIGHT FENESTRATION AREA.

C402.5: REFER TO ARCHITECTURAL DETAILS AND SPECIFICATIONS FOR CONTINUITY AND CONSTRUCTION OF

C403: REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR COMPLIANCE OF HVAC SYSTEMS C404: REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR COMPLIANCE.OF WATER HEATING

C405: REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR COMPLIANCE OF POWER AND LIGHTING

C408: REFER TO MECHANICAL SPECIFICATIONS FOR COMPLIANCE WITH COMMISSIONING REQUIREMENTS.

C406: ADDITIONAL EFFICIENCY PACKAGE OPTIONS: BUILDING WILL COMPLY WITH OPTION 2. C406.3: REFER TO COMCHECK REPORT FOR REDUCED LIGHTING POWER DENSITY CALCULATION.

CODE PLAN EGRESS PATH LENGTH				
PATH NAME	LENGTH			
EXIT 01		85' .		

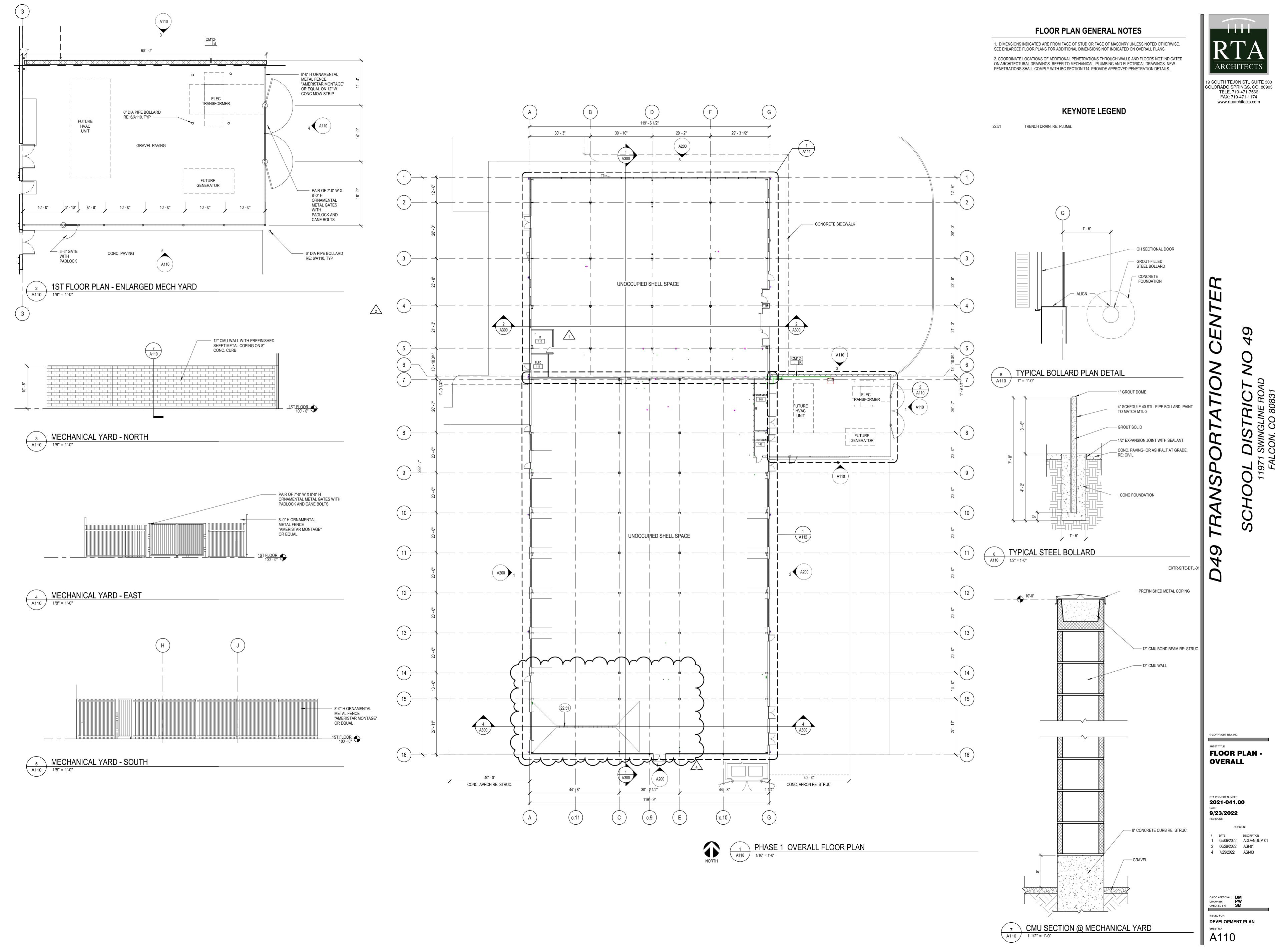
**CODE PLAN -**PHASE 1

2021-041.00 9/23/2022

DEVELOPMENT PLAN

CORE AND SHELL CODE PLAN

1/16" = 1'-0"



**DEVELOPMENT PLAN** A110

TELE. 719-471-7566

FAX: 719-471-1174

FLOOR BOX

26.50

119' - 7 1/4"

29' - 2"

23' - 11 1/2"

**⊚**FD 6' - 2" 8' - 8"

30' - 10"

UNOCCUPIED SHELL SPACE

DASHED WALLS INDICATE
FUTURE CMU PARTITIONS
REQUIRING THICKENED
SLAB FOUNDATIONS. SEE
STRUCTURAL PLANS
AND PHASING PLANS.

30' - 3"

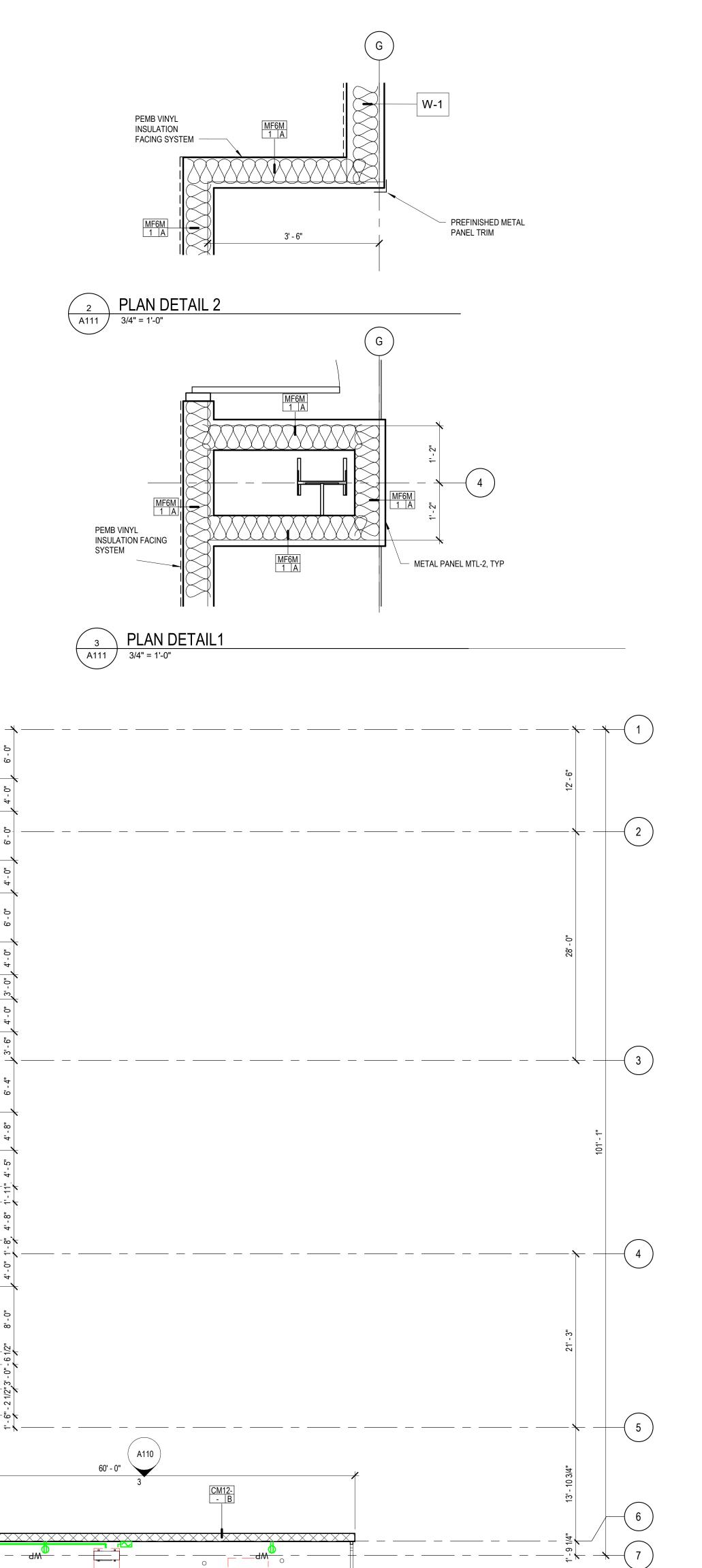
8' - 8"

LINE OF CANOPY ABV. -

PLUMBING LINES TO BE STUBBED AND CAPPED, RE: PLUMB.

1. DIMENSIONS INDICATED ARE FROM FACE OF STUD OR FACE OF MASONRY UNLESS NOTED OTHERWISE. SEE ENLARGED FLOOR PLANS FOR ADDITIONAL DIMENSIONS NOT INDICATED ON OVERALL PLANS. 2. COORDINATE LOCATIONS OF ADDITIONAL PENETRATIONS THROUGH WALLS AND FLOORS NOT INDICATED ON ARCHITECTURAL DRAWINGS. REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS. NEW PENETRATIONS SHALL COMPLY WITH IBC SECTION 714. PROVIDE APPROVED PENETRATION DETAILS.

19 SOUTH TEJON ST., SUITE 300 COLORADO SPRINGS, CO. 80903 TELE. 719-471-7566 FAX: 719-471-1174 www.rtaarchitects.com



PHASE 1 FLOOR PLAN AREA 111

FLOOR PLAN -AREA 111

2021-041.00
DATE
9/23/2022
REVISIONS

DEVELOPMENT PLAN
SHEET NO.

A 1 1 1



ARCHITECTS

OUTH TEJON ST., SUITE 300
ORADO SPRINGS, CO. 80903
TELE. 719-471-7566
FAX: 719-471-1174
www.rtaarchitects.com

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SHEET TITLE

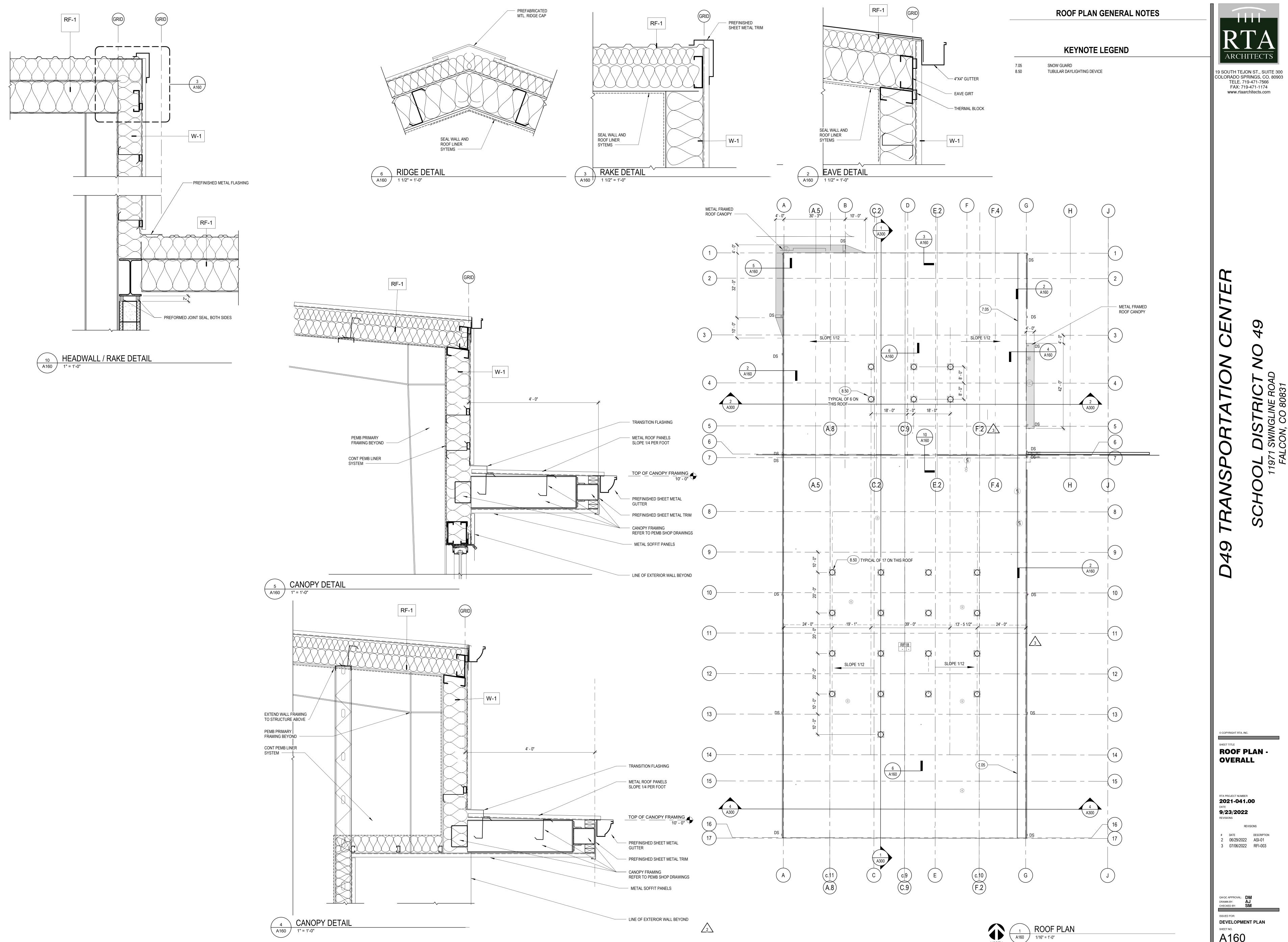
FLOOR PLAN 
AREA 112

RTA PROJECT NUMBER
2021-041.00
DATE
9/23/2022
REVISIONS

# DATE DESCRIPTION
2 06/29/2022 ASI-01
4 7/29/2022 ASI-03

QA/QC APPROVAL: DM
DRAWN BY: PW
CHECKED BY: SM

ISSUED FOR:
DEVELOPMENT PLAN
SHEET NO.
A 1 12



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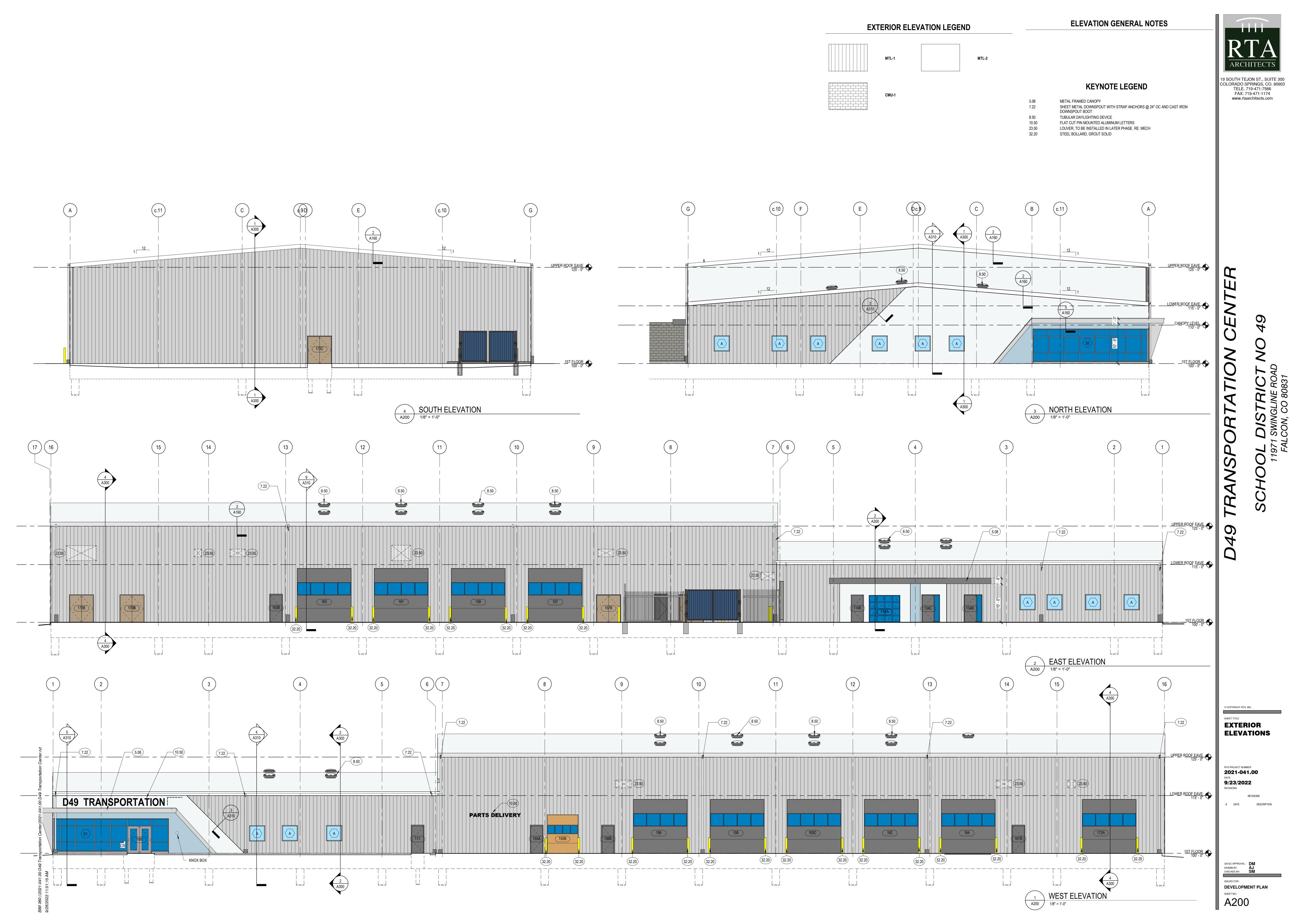
**ROOF PLAN -**OVERALL

2021-041.00
DATE
9/23/2022
REVISIONS

2 06/29/2022 ASI-01 3 07/06/2022 RFI-003

DEVELOPMENT PLAN

A160

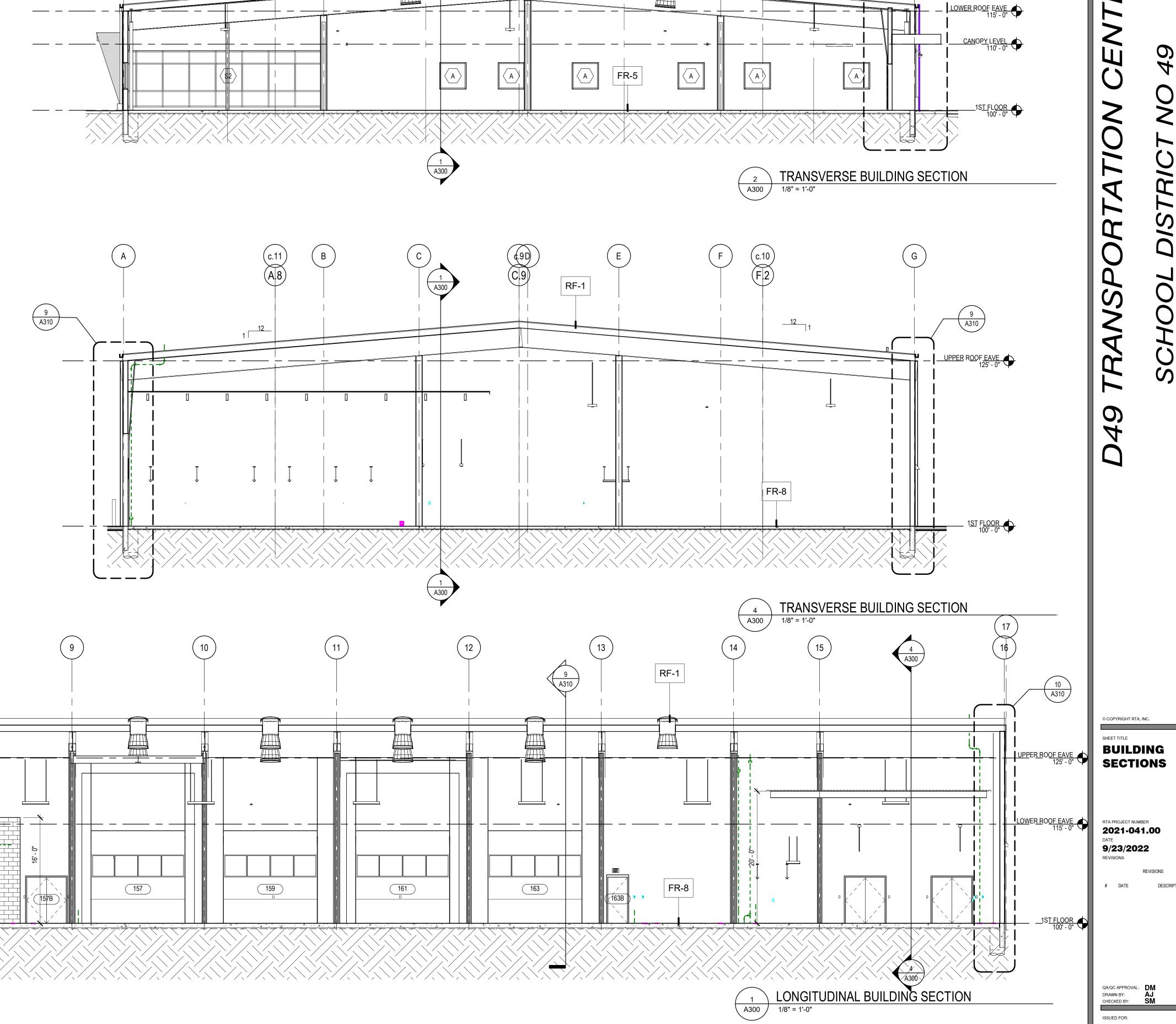


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**KEYNOTE LEGEND** 

TUBULAR DAYLIGHTING DEVICE



8.50

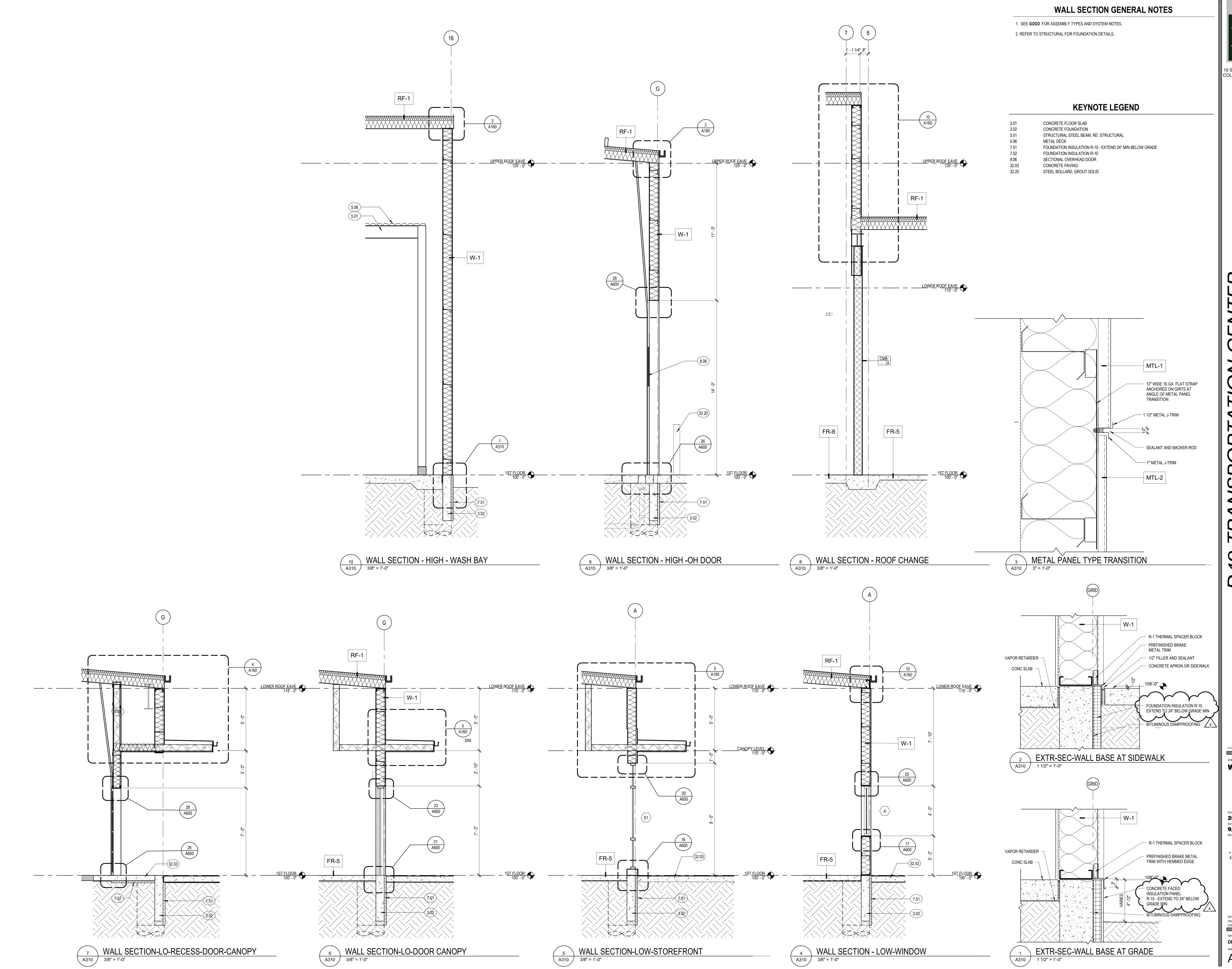
8 A310

ISSUED FOR:

DEVELOPMENT PLAN

SHEET NO.

A300



# RTA

19 SOUTH TEJON ST., SUITE 300 COLORADO SPRINGS, CO. 80903 TELE. 719-471-7566 FAX: 719-471-1174 www.rtaarchitects.com

D49 TRANSPORTATION CEN

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WALL SECTIONS

RTA PROJECT NUMBER
2021-041.00
DATE
9/23/2022
REVISIONS
REVISIONS

REVISIONS

# DATE DESCRIPTION

4 7/29/2022 ASI-03

QA/QC APPROVAL: DM
DRAWN BY: AJ
CHECKED BY: SM

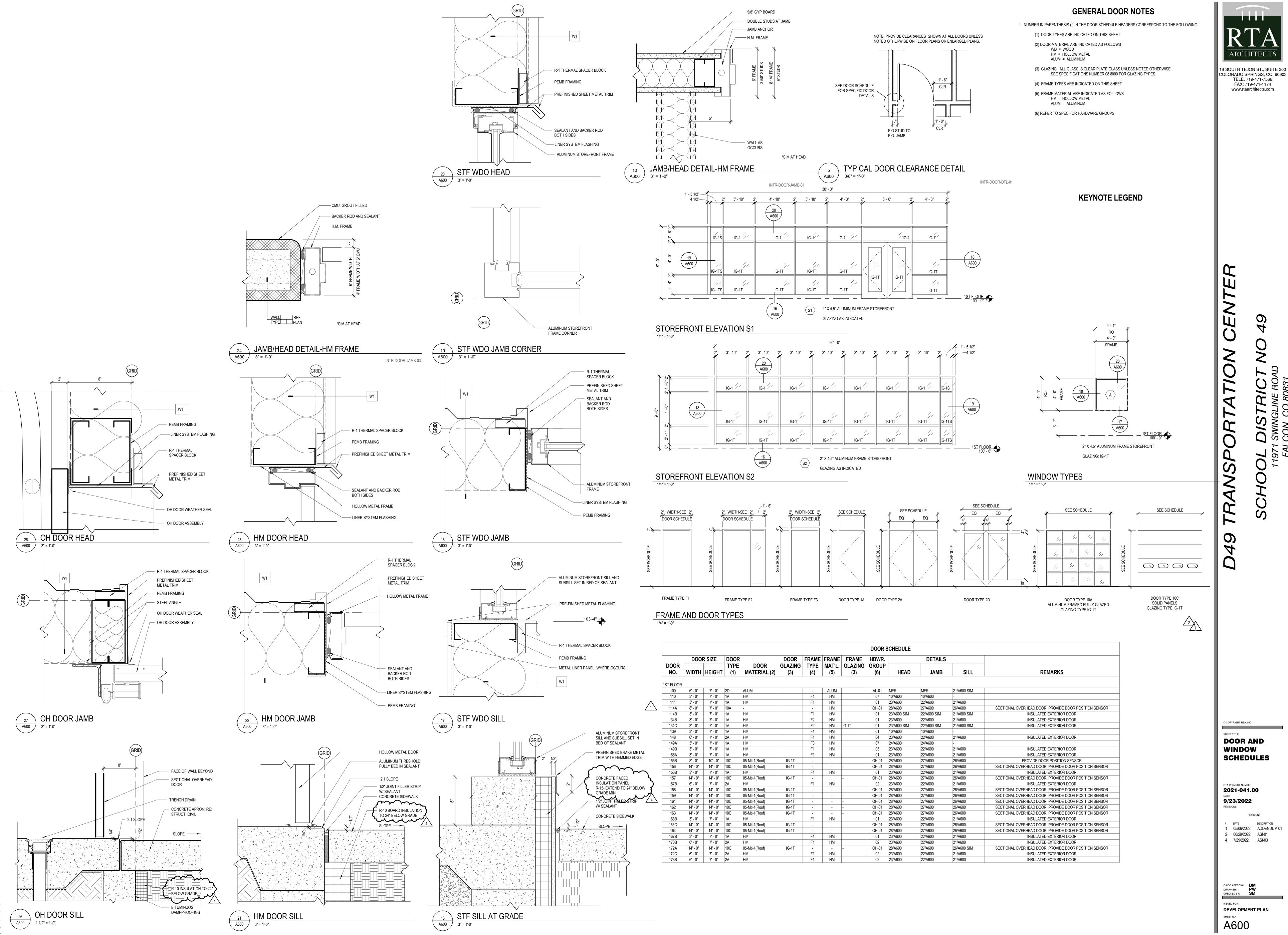
ISSUED FOR:
DEVELOPMENT PLAN

ISSUED FOR:

DEVELOPMENT PLAN

SHEET NO.

A310



**DOOR AND WINDOW** 

**SCHEDULES** 

19 SOUTH TEJON ST., SUITE 300

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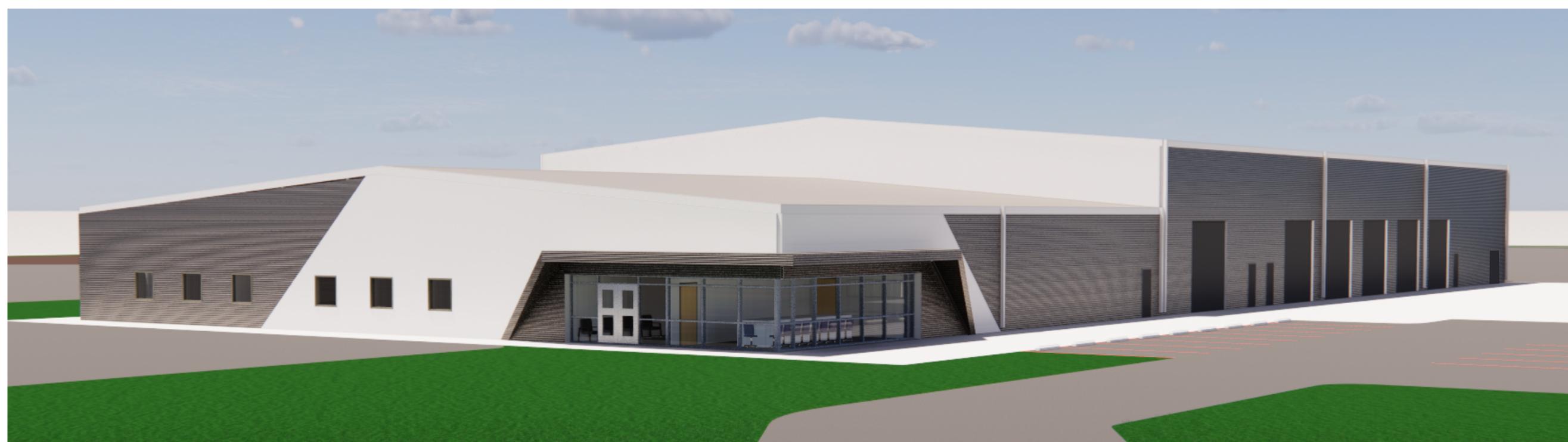
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2021-041.00 9/23/2022 REVISIONS

# DATE DESCRIPTION 05/06/2022 ADDENDUM 01 2 06/29/2022 ASI-01 4 7/29/2022 ASI-03

ISSUED FOR:

**DEVELOPMENT PLAN** SHEET NO. A600



1675 LARIMER STREET, SUITE 550

CONTACT: KATIE COURTRIGHT

**ME-ENGINEERS** 

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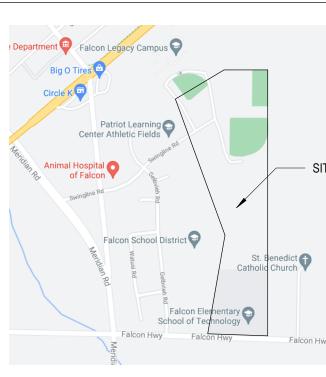
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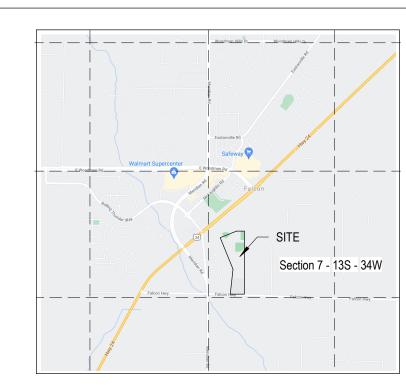
\_LANDSCAPE ARCHITECT\_ **KIMLEY-HORN** 

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# **LOCATION MAP**



## **VICINITY MAP**



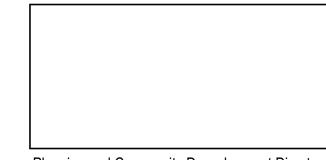
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# SIGNATURE BLOCK

SEE SITE PLANS

ZONING DISTRICT

PARKING CALCULATIONS:



Planning and Community Devvelopment Director

TELE. 719-471-7566 FAX: 719-471-1174

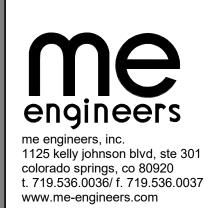
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**DDEVELOPMENT PLAN** 

DP-00

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**PHOTOMETRIC** PLAN - NORTH

2021-041.00 09/21/2022

ES-001

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PROJECT DATA

APPLICANT: RTA ARCHITECTS

LIGHTHING PLAN PREPARER: M-E ENGINEERS, INC

DWNER: FALCON SCHOOL DISTRICT NO 49

10850 E WOOMEN RD PEYTON, CO 80831

19 S TEJON ST STUITE 300

BRAIN CALHOUN, PRINCIPAL

brian@rtaarchitects.com

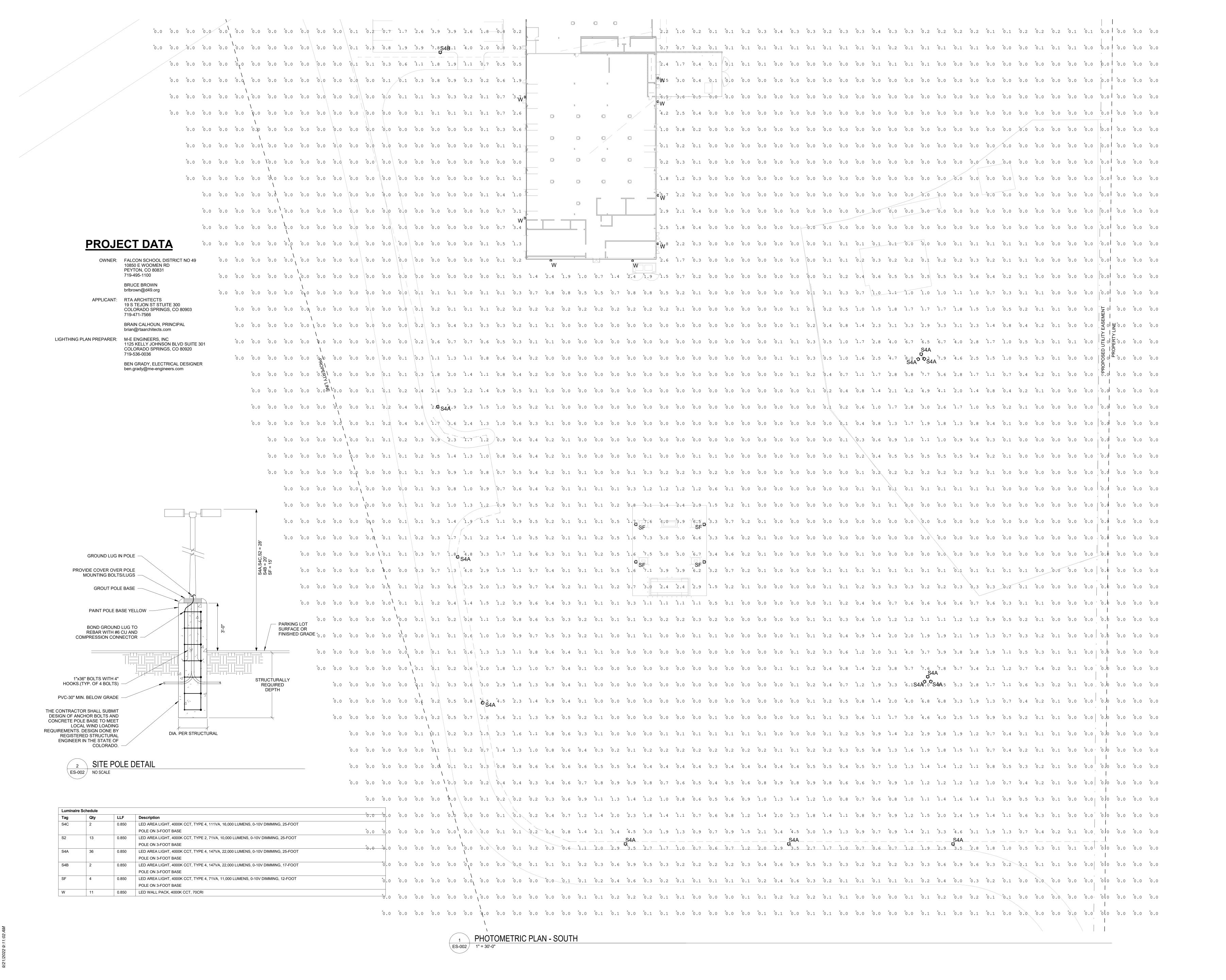
COLORADO SPRINGS, CO 80903

1125 KELLY JOHNSON BLVD SUITE 301 COLORADO SPRINGS, CO 80920

BEN GRADY, ELECTRICAL DESIGNER

ben.grady@me-engineers.com

**BRUCE BROWN** brlbrown@d49.org



RTA
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19 SOUTH TEJON ST., SUITE 300

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SCHOOL DISTRICT NO 49

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SHEET TITLE

SITE

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PLAN - SOUTH

RTA PROJECT NUMBER
2021-041.00
DATE
09/21/2022
REVISIONS

REVISIONS
# DATE DESCRIPTION

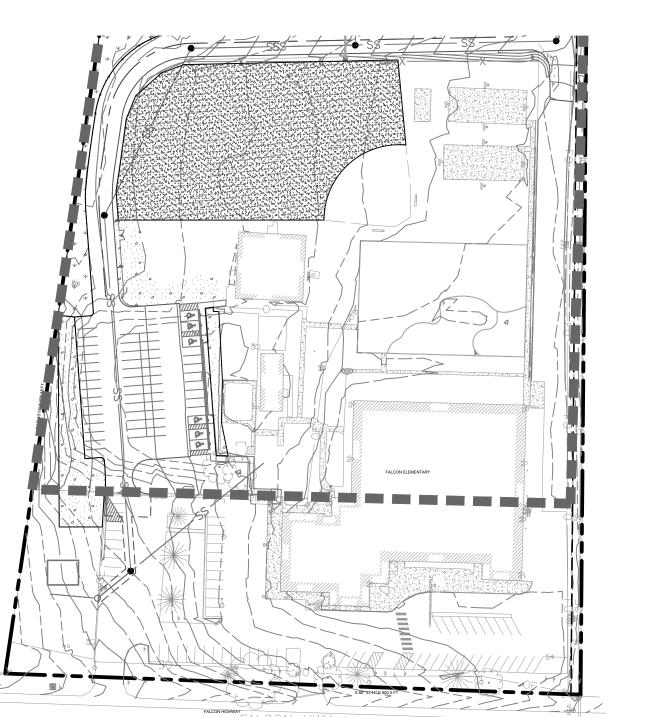
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ISSUED FOR:

CONSTRUCTION DOCUMENTS
SHEET NO.

ES-002

SHEET L-102





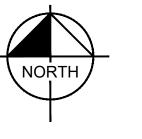
PLANI	5CI	JEDU	JLE				
DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT. SIZE	SIZE/CAL.	WIDTH	<u>HEIGHT</u>
$(\cdot)$	СО	4	CELTIS OCCIDENTALIS / COMMON HACKBERRY	B & B	1.5" CAL MIN	40`-50`	40`-50`
EVERGREEN TREES	CODE	<u>QTY</u>	BOTANICAL / COMMON NAME		SIZE/CAL.	<u>WIDTH</u>	<u>HEIGHT</u>
{·}	PE	15	PINUS CEMBROIDES EDULIS / PINYON PINE	B & B	1.5" CAL MIN	10`-30`	10`-25`
0	PP	9	PINUS PONDEROSA / PONDEROSA PINE	B & B	1.5" CAL MIN	20`-30`	50`-60`
DECIDUOUS SHRUBS	CODE	<u>QTY</u>	BOTANICAL / COMMON NAME	CONT. SIZE	SPACING	<u>WIDTH</u>	<u>HEIGHT</u>
$\bigcirc$	ВС	13	BERBERIS THUNBERGII 'CRIMSON PYGMY' / CRIMSON PYGMY JAPANESE BARBERRY	5 GAL	SEE PLAN	2`-3`	1`-2`
$\odot$	PA	20	PEROVSKIA ABROTANOIDES / RUSSIAN SAGE	5 GAL	SEE PLAN	3`-5`	3`-5`
$\odot$	RA	3	RIBES ALPINUM / ALPINE CURRANT	5 GAL	SEE PLAN	3`-6`	3-6`
0	VA	4	VIBURNUM X RHYTIDOPHYLLOIDES / LANTANAPHYLLUM VIBURNUM	5 GAL	SEE PLAN	6`-10`	6`-10`
EVERGREEN SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT. SIZE	SPACING	WIDTH	<u>HEIGHT</u>
$\odot$	JH	21	JUNIPERUS HORIZONTALIS / CREEPING JUNIPER	5 GAL	SEE PLAN	6`-8`	8"-12"
$\odot$	PM	5	PINUS MUGO 'MOPS' / MOPS MUGO PINE	5 GAL	SEE PLAN	2`-3`	2`-3`
<u>GRASSES</u>	CODE	QTY	BOTANICAL / COMMON NAME	CONT. SIZE	SPACING	<u>WIDTH</u>	<u>HEIGHT</u>
*	ВВ	5	BOUTELOUA GRACILIS 'BLONDE AMBITION' / BLONDE AMBITION BLUE GRAMA	5 GAL	SEE PLAN	2`-3`	2`-3`
o o o o	HS	38	HELICTOTRICHON SEMPERVIRENS / BLUE OAT GRASS	5 GAL	SEE PLAN	2`-4`	2`-4`
PERENNIALS	CODE	QTY	BOTANICAL / COMMON NAME	CONT. SIZE	SPACING	<u>WIDTH</u>	<u>HEIGHT</u>
$\odot$	AC	8	AGASTACHE CANA / TEXAS HUMMINGBIRD MINT	5 GAL	SEE PLAN	12"-15"	12"-18"
Winds	AW	12	ASTER DUMOSUS 'WOOD'S LIGHT BLUE' / WOOD'S LIGHT BLUE ASTER	5 GAL	SEE PLAN	12"-18"	12"-15"
	RM	17	RUDBECKIA PURPUREA / PURPLE CONEFLOWER	5 GAL	SEE PLAN	2`-4`	2`-4`
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	TYPE	INSTALL RATE	WEED FABRIC	MFR.
	ROCK	8,076 SF	1-1/2" ROCK MULCH SUBMIT SAMPLE FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.	ROCK MULCH	4"	YES	
	ROCK2	2,396 SF	3/8" ROCK MULCH SUBMIT SAMPLE FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.	ROCK MULCH	4"	YES	
	SEED2	150,949 SF	EPC LOW GROW MIX INSTALL PER TABLE 5-2. SUBMIT SUPPLIER CUT-SHEET FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.	SEED	PER CHART		PAWNEE BUTTES SEED
Ψ Ψ Ψ Ψ Ψ	SEED3	270,152 SF	EPC ALL PURPOSE MIX INSTALL PER TABLE 5-1. SUBMIT SUPPLIER CUT-SHEET FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.	SEED	PER CHART		
	SOD	41,585 SF	POA PRATENSIS / KENTUCKY BLUEGRASS (BID ALTERNATE #4) INSTALL PER DETAIL.	SOD			GREEN BELT TURF
٥٥٥	BOUL	19	DECORATIVE LANDSCAPE BOULDERS. COLOR BY OWNER. UTILIZE ON-SITE MATERIAL IF AVAILABLE.				

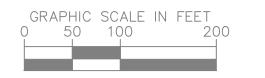
Table 5-1. El Paso County Conservation District All-Purpose Mix for Upland, Transition and Permanent Control Measure Areas

				Pounds PLS			
Common Name	Scientific Name	Growth Season / Form	% of Mix	Irrigated broadcast     Irrigated hydroseeded	Non-irrigated broadcast     Non-irrigated hydroseeded     Irrigated drilled	Non-irrig drilled	
	2:	2:	50	80 seeds/sq ft	40 seeds/sq ft	20 seeds/s	
Bluestem, big	Andropogon gerardii	Warm, sod	20	4.4	2.2	1.1	
Grama, blue	Bouteloua gracilis	Warm, bunch	10	0.5	0.25	0.13	
Green needlegrass <sup>2</sup>	Nassella viridula	Cool, bunch	10	2	1	0.5	
Wheatgrass, western <sup>2</sup>	Pascopyrum smithii	Cool; sod	20	6.4	3.2	1.6	
Grama, sideoats	Bouteloua curtipendula	Warm, bunch	10	2	1	0.5	
Switchgrass <sup>2</sup>	Panicum virgatum	Warm, bunch/sod	10	0.8	0.4	0.2	
Prairie sandreed	Calimovilfa longifolia	Warm, sod	10	1.2	0.6	0.3	
Yellow indiangrass <sup>2</sup>	Sorghastrum nutans	Warm, sod	10	2	1	0.5	
	I.	Seed rate (I	bs PLS/acre)	19.3	9.7	4.8	

Table 5-2. El Paso County All-Purpose Low Gro	w Mix for Upland and Transition Area

				Pounds PLS			
Common Name	Scientific Name	Growth Season / Form	% of Mix	Irrigated broadcast     Irrigated hydroseeded	Non-irrigated broadcast     Non-irrigated hydroseeded     Irrigated drilled	Non-irrigated drilled	
				80 seeds/sq ft	40 seeds/sq ft	20 seeds/sq ft	
Buffalograss	Buchloe dactyloides	Warm, sod	25	9.6	4.8	2.4	
Grama, blue	Bouteloua gracilis	Warm, bunch	20	10.8	5.4	2.7	
Grama, sideoats	Bouteloua curtipendula	Warm, bunch	29	5.6	2.8	1.4	
Green needlegrass	Nassella viridula	Cool, bunch	5	3.2	1.6	0.8	
Wheatgrass, western	Pascopyrum smithii	Cool, sod	20	12	6	3	
Dropseed, sand	Sporobolus cryptandrus	Warm, bunch	1	0.8	0.4	0.2	
	u <u>h</u>	Seed rate (I	bs PLS/acre)	42	21	10.3	





19 SOUTH TEJON ST., SUITE 300 COLORADO SPRINGS, CO. 80903 TELE. 719-471-7566 FAX: 719-471-1174 www.rtaarchitects.com

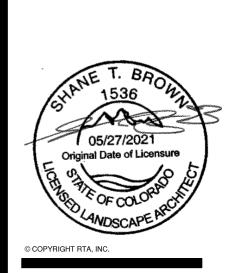
2021-041.00 DATE 05/23/2022

CONSTRUCTION DOCUMENTS

MATCHLINE: SEE SHEET L 100

PLANT	SCI	HEDI	JLE
DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME
$(\cdot)$	СО	4	CELTIS OCCIDENTALIS / COMMON HACKBERRY
EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	PE	15	PINUS CEMBROIDES EDULIS / PINYON PINE
$\bigcirc$	PP	9	PINUS PONDEROSA / PONDEROSA PINE
DECIDUOUS SHRUBS	CODE	<u>QTY</u>	BOTANICAL / COMMON NAME
$\bigcirc$	ВС	13	BERBERIS THUNBERGII 'CRIMSON PYGMY' / CRIMSON PYGMY JAPANESE BARBERRY
$\oplus$	PA	20	PEROVSKIA ABROTANOIDES / RUSSIAN SAGE
$\odot$	RA	3	RIBES ALPINUM / ALPINE CURRANT
$\odot$	VA	4	VIBURNUM X RHYTIDOPHYLLOIDES / LANTANAPHYLLUM VIBURNUM
EVERGREEN SHRUBS	CODE	<u>QTY</u>	BOTANICAL / COMMON NAME
$\odot$	JH	21	JUNIPERUS HORIZONTALIS / CREEPING JUNIPER
$\odot$	РМ	5	PINUS MUGO 'MOPS' / MOPS MUGO PINE
<u>GRASSES</u>	CODE	QTY	BOTANICAL / COMMON NAME
*	ВВ	5	BOUTELOUA GRACILIS 'BLONDE AMBITION' / BLONDE AMBITION BLUE GRAMA
SWILE Frank	HS	38	HELICTOTRICHON SEMPERVIRENS / BLUE OAT GRASS
PERENNIALS	CODE	QTY	BOTANICAL / COMMON NAME
$\odot$	AC	8	AGASTACHE CANA / TEXAS HUMMINGBIRD MINT
A MARTINET	AW	12	ASTER DUMOSUS 'WOOD'S LIGHT BLUE' / WOOD'S LIGHT BLUE ASTER
£ <b>;</b> 3	RM	17	RUDBECKIA PURPUREA / PURPLE CONEFLOWER
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME
	ROCK	8,076 SF	1-1/2" ROCK MULCH SUBMIT SAMPLE FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
	ROCK2	2,396 SF	3/8" ROCK MULCH SUBMIT SAMPLE FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
	SEED2	150,949 SF	EPC LOW GROW MIX INSTALL PER TABLE 5-2. SUBMIT SUPPLIER CUT-SHEET FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
Ψ Ψ Ψ Ψ Ψ	SEED3	270,152 SF	EPC ALL PURPOSE MIX INSTALL PER TABLE 5-1. SUBMIT SUPPLIER CUT-SHEET FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
	SOD	41,585 SF	POA PRATENSIS / KENTUCKY BLUEGRASS (BID ALTERNATE #4) INSTALL PER DETAIL.

DECORATIVE LANDSCAPE BOULDERS. COLOR BY OWNER. UTILIZE ON-SITE MATERIAL IF AVAILABLE.



19 SOUTH TEJON ST., SUITE 300 COLORADO SPRINGS, CO. 80903

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Kimley Horn
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2 NORTH NEVADA AVENUE, SUITE 300
COLORADO SPRINGS, COLORADO 80903 (719) 453-0180

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SHEET TITLE

Landscape

Plan

RTA PROJECT NUMBER
2021-041.00
DATE
05/23/2022

REVISIONS

# DATE DESCRIPTION
1 06/29/2022 ΔASI 01

QA/QC APPROVAL: JH
DRAWN BY: AK
CHECKED BY: SB

ISSUED FOR:
CONSTRUCTION DOCUMENTS
SHEET NO.
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NOTE: FOR REFERENCE ONLY; FUELING ISLANDS, CANOPY, AND FUEL SYSTEMS ARE DESIGN/BUILD BY GENERAL CONTRACTOR

MATCHLINE: SEE SHEET L 102



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2 NORTH NEVADA AVENUE, SUITE 300
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CHOOL DISTRICT NO



Landscape Plan

RTA PROJECT NUMBER
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19 SOUTH TEJON ST., SUITE 300 COLORADO SPRINGS, CO. 80903 TELE. 719-471-7566 FAX: 719-471-1174 www.rtaarchitects.com Kimley >>> Horn
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COLORADO SPRINGS, COLORADO 80903 (719) 453-0180

# PLANT SCHEDULE

	DECIDUOUS TREES	CODE	<u>QTY</u>	BOTANICAL / COMMON NAME
OE	$(\cdot)$	СО	4	CELTIS OCCIDENTALIS / COMMON HACKBERRY
	EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME
	{·}	PE	15	PINUS CEMBROIDES EDULIS / PINYON PINE
	<b>)</b>	PP	9	PINUS PONDEROSA / PONDEROSA PINE
	DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME
	$\bigcirc$	ВС	13	BERBERIS THUNBERGII 'CRIMSON PYGMY' / CRIMSON PYGMY JAPANESE BARBE
	$\oplus$	PA	20	PEROVSKIA ABROTANOIDES / RUSSIAN SAGE
	$\odot$	RA	3	RIBES ALPINUM / ALPINE CURRANT
	$\odot$	VA	4	VIBURNUM X RHYTIDOPHYLLOIDES / LANTANAPHYLLUM VIBURNUM
	EVERGREEN SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME
	$\odot$	JH	21	JUNIPERUS HORIZONTALIS / CREEPING JUNIPER
	0	PM	5	PINUS MUGO 'MOPS' / MOPS MUGO PINE
	GRASSES	CODE	<u>QTY</u>	BOTANICAL / COMMON NAME
	*	ВВ	5	BOUTELOUA GRACILIS 'BLONDE AMBITION' / BLONDE AMBITION BLUE GRAMA
	Suite Trans	HS	38	HELICTOTRICHON SEMPERVIRENS / BLUE OAT GRASS
	PERENNIALS	CODE	<u>QTY</u>	BOTANICAL / COMMON NAME
	$\odot$	AC	8	AGASTACHE CANA / TEXAS HUMMINGBIRD MINT
		AW	12	ASTER DUMOSUS 'WOOD'S LIGHT BLUE' / WOOD'S LIGHT BLUE ASTER
		RM	17	RUDBECKIA PURPUREA / PURPLE CONEFLOWER
	GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME
		ROCK	8,076 SF	1-1/2" ROCK MULCH SUBMIT SAMPLE FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
		ROCK2	2,396 SF	3/8" ROCK MULCH SUBMIT SAMPLE FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
		SEED2	150,949 SF	EPC LOW GROW MIX INSTALL PER TABLE 5-2. SUBMIT SUPPLIER CUT-SHEET FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
	Ψ Ψ Ψ Ψ Ψ	SEED3	270,152 SF	EPC ALL PURPOSE MIX INSTALL PER TABLE 5-1. SUBMIT SUPPLIER CUT-SHEET FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
		SOD	41,585 SF	POA PRATENSIS / KENTUCKY BLUEGRASS (BID ALTERNATE #4) INSTALL PER DETAIL.
	٥٥	BOUL	19	DECORATIVE LANDSCAPE BOULDERS. COLOR BY OWNER. UTILIZE ON-SITE MATERIAL IF AVAILABLE.



Landscape

05/23/2022

CONSTRUCTION DOCUMENTS

### A. SCOPE OF WORK

- THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN.
- 2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER.

### PROTECTION OF EXISTING STRUCTURES

- ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED AND DESIGNATED TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER. AT NO COST TO THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY BEST MANAGEMENT PRACTICES (BMP) DEVICES ACCORDING TO ALL REGULATORY AGENCY'S STANDARDS
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MAINTENANCE OF TRAFFIC (MOT) THAT MAY BE REQUIRED FOR THE PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES. WHETHER PUBLIC OR PRIVATE. PRIOR TO EXCAVATION. THE OWNER AND DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF ANY SUCH INFORMATION OR DATA THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR: REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA: LOCATING ALL UNDERGROUND FACILITIES DURING CONSTRUCTION: THE SAFETY AND PROTECTION THEREOF: REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF ALL WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE. THE CONTRACTOR SHALL NOTIFY ANY AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

### C. PROTECTION OF EXISTING PLANT MATERIALS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC... THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE NO MATERIALS SHALL BE BURNED ON SITE EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/OR LINSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF FOUR HUNDRED DOLLARS (\$400) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.

### SEE TREE MITIGATION PLAN AND NOTES, IF APPLICABLE.

### MATERIALS

GENERAI MATERIAL SAMPLES LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL, ON SITE OR AS DETERMINED BY THE OWNER. UPON APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

TOPSOIL MIX ONE (1) CUBIC FOOT ONE (1) OF EACH VARIETY (OR TAGGED IN NURSERY)

GENERAL LANDSCAPE SPECIFICATIONS

THROUGH THE DURATION OF ALL CONSTRUCTION ACTIVITIES.

### PLANT MATERIALS

a. FURNISH NURSERY-GROWN PLANTS TRUE TO GENUS, SPECIES, VARIETY, CULTIVAR, STEM FORM, SHEARING, AND OTHER FEATURES INDICATED IN PLANT SCHEDULE SHOWN ON DRAWINGS AND COMPLYING WITH ANSI Z60.1 AND THE COLORADO NURSERY ACT; AND WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK, DENSELY FOLIATED WHEN IN LEAF AND FREE OF DISEASE, PESTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT.

- b. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. c. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE PROJECT LANDSCAPE ARCHITECT. ANY ROW TREES MUST BE APPROVED BY OFFICE OF THE CITY FORESTER.
- d. PROVIDE PLANTS OF SIZES, GRADES, AND BALL OR CONTAINER SIZES COMPLYING WITH ANSI Z60.1 AND COLORADO NURSERY ACT FOR TYPES AND FORM OF PLANTS REQUIRED. PLANTS OF A LARGER SIZE MAY BE USED IF ACCEPTABLE TO PROJECT LANDSCAPE ARCHITECT WITH A PROPORTIONATE INCREASE IN SIZE OF ROOTS OR BALLS.
- e. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY. SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.
- f. TREES WITH DAMAGED, CROOKED, OR MULTIPLE LEADERS; TIGHT VERTICAL BRANCHES WHERE BARK IS SQUEEZED BETWEEN TWO BRANCHES OR BETWEEN BRANCH AND TRUNK ("INCLUDED BARK"); CROSSING TRUNKS; CUT-OFF LIMBS MORE THAN \(\frac{3}{4}\) INCH (19 MM) IN DIAMETER; OR WITH STEM GIRDLING ROOTS WILL BE REJECTED.
- g. FURNISH TREES AND SHRUBS WITH ROOTS BALLS MEASURED FROM TOP OF ROOT BALL, WHICH SHALL BEGIN AT ROOT FLARE ACCORDING TO ANSI Z60.1 AND COLORADO NURSERY ACT. ROOT FLARE SHALL BE VISIBLE BEFORE PLANTING
- h. LABEL AT LEAST ONE PLANT OF EACH VARIETY, SIZE, AND CALIPER WITH A SECURELY ATTACHED, WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF COMMON NAME AND FULL SCIENTIFIC NAME, INCLUDING GENUS AND SPECIES. INCLUDE NOMENCLATURE FOR HYBRID, VARIETY, OR CULTIVAR, IF APPLICABLE FOR THE PLANT AS SHOWN ON DRAWINGS. i. IF FORMAL ARRANGEMENTS OR CONSECUTIVE ORDER OF PLANTS IS SHOWN ON DRAWINGS, SELECT STOCK FOR UNIFORM HEIGHT AND SPREAD, AND NUMBER THE LABELS TO ASSURE

## SOIL MIXTURE

- 1. CONTRACTOR SHALL TEST EXISTING SOIL AND AMEND AS NECESSARY IN ACCORDANCE WITH THE GUIDELINES BELOW:
- SOIL MIXTURE SHALL CONSIST OF TWO PARTS OF TOPSOIL AND ONE PART SAND. AS DESCRIBED BELOW, CONTRACTOR TO SUBMIT SAMPLES AND PH TESTING RESULTS OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.
- a. TOPSOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT OPENINGS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER, HAVE A PH BETWEEN 5.5 AND 8.0, AND SOLUBLE SALTS LESS THAN 3.0 MMHOS/CM. SUBMIT SOIL SAMPLE AND PH TESTING RESULTS FOR APPROVAL
- b. SAND SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND.
- TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE AT WHICH POINT THE CONTRACTOR SHALL CONTACT THE PROJECT LANDSCAPE ARCHITECT TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING

WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC.... IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

\* WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY. FERTILIZER

\* FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

### CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A DEPTH OF THREE (3) INCHES CLEAR MULCH FROM EACH PLANT'S CROWN (BASE) OR AS SHOWN IN PLANTING DETAILS. MULCH SHALL BE DOUBLE SHREDDED HARDWOOD MULCH. DYED MULCH IS NOT ACCEPTABLE. SUBMIT SAMPLES TO PROJECT LANDSCAPE ARCHITECT FOR APPROVAL. MULCH SHALL BE PROVIDED OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE RING (6' MINIMUM) PLANTED UNDER THIS CONTRACT, AS WELL AS FOR ANY EXISTING LANDSCAPE AREAS AS SHOWN ON PLANS.

### DIGGING AND HANDLING

K. MATERIALS LIST

- 1. ALL TREES SPECIFIED SHALL BE BALLED AND BURLAPPED (B&B) UNLESS OTHERWISE APPROVED BY PROJECT LANDSCAPE ARCHITECT.
- PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO THE SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS
- B&B, AND FIELD GROWN (FG) PLANTS SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS SHALL NOT BE HANDLED BY STEMS. J. CONTAINER GROWN STOCK
- 1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.
- AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY

### 3. ROOT BOUND PLANTS ARE NOT ACCEPTABLE AND WILL BE REJECTED.

FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES, IF APPLICABLE.

### QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE PLANS SHALL GOVERN. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.

- FINE GRADING 1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN DISTURBED DURING CONSTRUCTION.
- 2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY

### PLANTING PROCEDURES

- THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER DAILY. ALL MORTAR, CEMENT, BUILDING MATERIALS, AND TOXIC MATERIAL SHALL BE COMPLETELY REMOVED FROM PLANTING AREAS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS IN PLANTING AREAS WHICH WILL ADVERSELY AFFECT THE PLANT GROWTH, THE CONTRACTOR SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR
- VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL COLORADO (811) TO LOCATE UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL PLANTING AREAS TO A MINIMUM DEPTH OF 36" OR TO NATIVE SOIL. CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND POSITIVE DRAINAGE CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE POOR DRAINAGE CONDITION PLANTING DETAIL.
- 4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS SPECIFIED HEREIN. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR
- COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ONSITE SHALL NOT REMAIN UNPLANTED OR APPROPRIATELY HEALED IN FOR A PERIOD EXCEEDING TWENTY-FOUR (24)
- HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE SHALL BE EXERCISED 6. WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF
- IRRIGATION APPURTENANCES AND PLANTS. 7. ALL PLANTING OPENINGS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH ANSI Z60.1-2014 AMERICAN STANDARD FOR NURSERY STOCK.
- 8. TEST ALL TREE OPENINGS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER
  - DRAINAGE. IF POOR DRAINAGE EXISTS. UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY
- PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMEN. 10. PRIOR TO EXCAVATION OF TREE OPENINGS, AN AREA EQUAL TO TWO TIMES THE DIAMETER OF THE ROOT BALL SHALL BE ROTO-TILLED TO A DEPTH EQUAL TO THE DEPTH OF THE ROOT BALL. 11. EXCAVATION OF TREE OPENINGS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS,
- FOOTERS AND PREPARED SUB-BASES 2. IN CONTINUOUS SHRUB AND GROUND COVER BEDS, THE ROTO-TILLED PERIMETER SHOULD EXTEND TO A DISTANCE OF ONE FOOT BEYOND THE DIAMETER OF A SINGLE ROOT BALL. THE BED SHALL BE TILLED TO A DEPTH EQUAL TO THE ROOT BALL DEPTH PLUS 6".
- 13. TREE OPENINGS FOR WELL DRAINED SOILS SHALL BE DUG SO THAT THE BOTTOM OF THE ROOT BALL WILL REST ON UNDISTURBED SOIL AND THE TOP OF THE ROOT BALL WILL BE FLUSH WITH FINISH GRADE. IN POORLY DRAINED SOILS THE TREE OPENING SHALL BE DUG SO THAT THE ROOT BALL RESTS ON UNDISTURBED SOIL AND THE TOP OF THE ROOT BALL IS 1" ABOVE FINISH GRADE. PLANT PIT WALLS SHALL BE SCARIFIED PRIOR TO PLANT INSTALLATION.
- 14. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.
- 15. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION 'E'.
- 16. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. SOIL MIXTURE SHALL BE BACK FILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING)
- 7. AMEND PINE AND OAK PLANT OPENINGS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT OPENINGS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL PRIOR TO INOCULATION.
- 18. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET, ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE.
- 19. ALL BURLAP, ROPE, WIRES, BASKETS, ETC... SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.
- 20. TREES SHALL BE PRUNED, IN ACCORDANCE WITH ANSI A-300, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY CERTIFIED ARBORIST.
- 1. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. MATERIALS INSTALLED SHALL MEET MINIMUM SPECIMEN REQUIREMENTS OR QUANTITIES SHOWN ON PLANS, WHICHEVER IS GREATER. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" THE PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION. 22. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE

CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND

23. ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S RECOMMENDATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN

HOLD HARMLESS THE PROJECT LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.

APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)

### N. LAWN SODDING

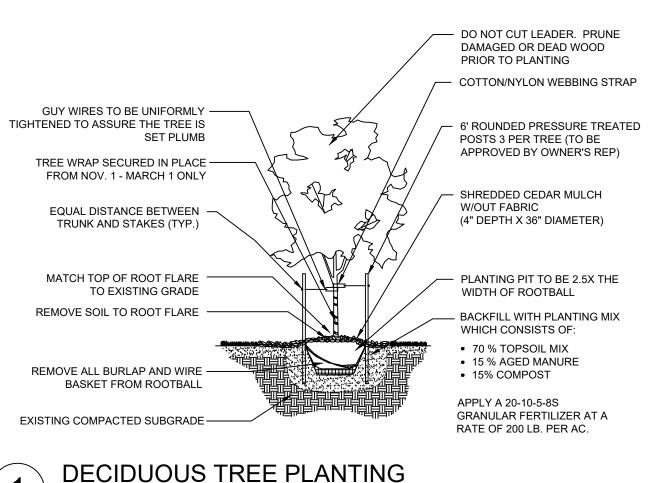
- 1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.
- 2. ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS BY MEANS OF A SOD CUTTER TO A DEPTH OF THREE (3) INCHES, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE
  - 3. PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.

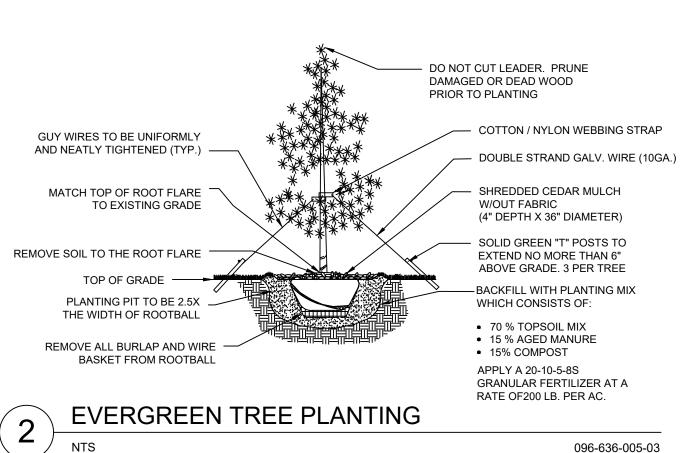
- a. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE. b. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES. AND THEN THOROUGHLY IRRIGATED. IF. IN THE OPINION OF THE OWNER. TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE. SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.
- 5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE. LAWN MAINTENANCE
- a WITHIN THE CONTRACT LIMITS THE CONTRACTOR SHALL PRODUCE A DENSE WELL ESTABLISHED LAWN THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK, INCLUDING REGRADING IF NECESSARY.
- b. CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE. CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY
- a. CONTRACTOR SHALL INSTALL  $4"X_8^{\dagger}"$  ROLLED TOP STEEL EDGING BETWEEN ALL SOD/SEED AREAS AND PLANTING BEDS.

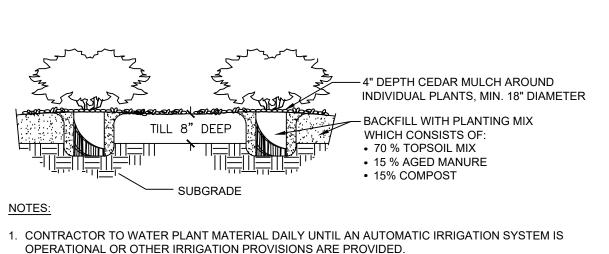
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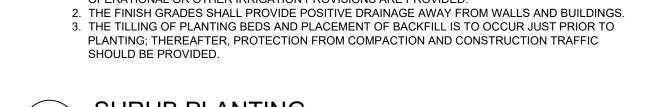
R. FINAL INSPECTION AND ACCEPTANCE OF WORK

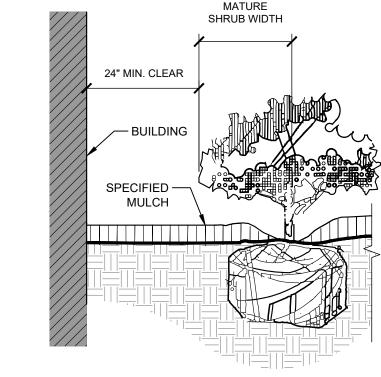
- 1. UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM CONTRACTORS WORK. ALL PAVED AREAS SHALL BE CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S REPRESENTATIVE.
- Q. PLANT MATERIAL MAINTENANCE . ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, PRUNING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.
- FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.
- 1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED (INCLUDING SOD) BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.
- . ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED AT NO ADDITIONAL COST TO THE OWNER.
- 3. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE AND IRRIGATION MAINTENANCE. THE CONTRACTOR SHOULD VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE (1) YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH.
- 1. LANDSCAPE IMPROVMENTS AND MAINTENANCE SHALL BE THE RESPONSIBILITY OF OWNER, AND/ OR THEIR ASSIGNS.
- 2. ALL STREET TREES AND STREETSCAPE IMPROVEMENTS LOCATED IN THE ROW WILL BE MAINTAINED BY THE ABUTTING. PROPERTY OWNER.

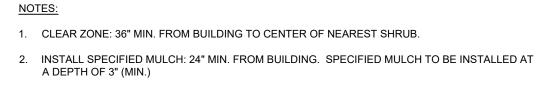




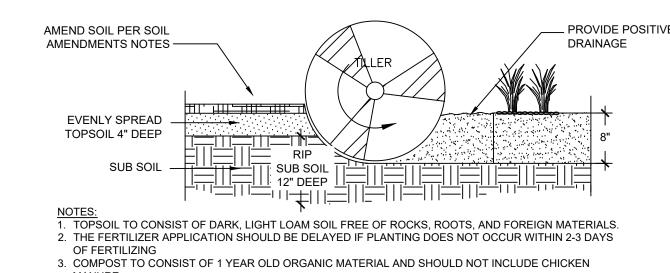






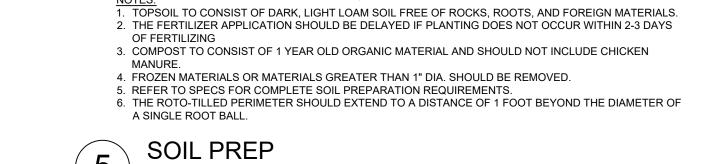


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096-636-005-01



CONSTRUCTION DOCUMENTS

2021-041.00

05/23/2022

19 SOUTH TEJON ST., SUITE 300 COLORADO SPRINGS, CO. 80903 TELE. 719-471-7566 FAX: 719-471-1174 www.rtaarchitects.com © 2022 KIMLEY-HORN AND ASSOCIATES, INC. 2 NORTH NEVADA AVENUE, SUITE 300 COLORADO SPRINGS, COLORADO 80903 (719) 453-0180



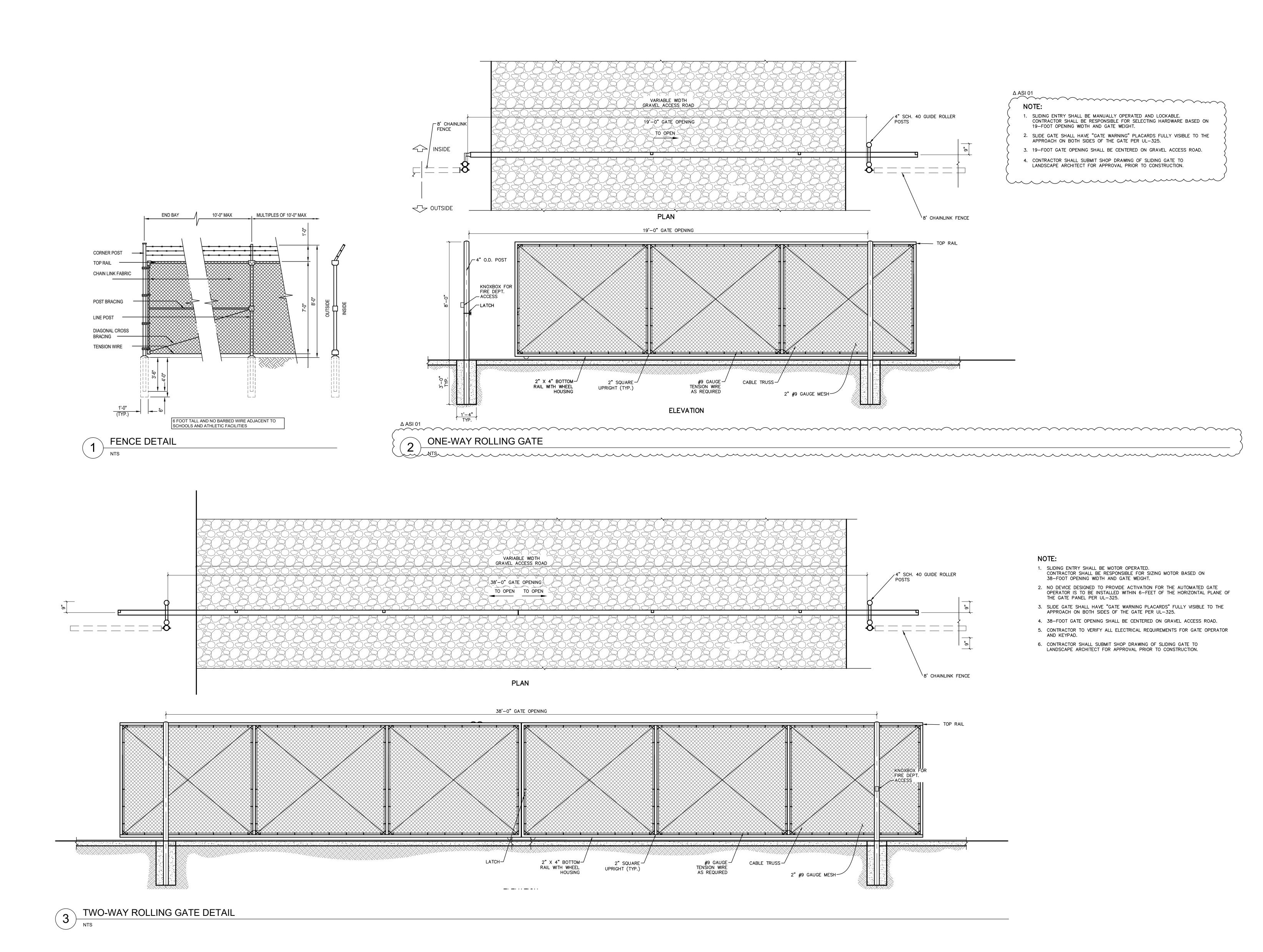
05/27/2021 Original Date of Licensure

Landscape Details

RTA PROJECT NUMBER

construction documents
sheet no.

L-104



CONSTRUCTION DOCUMENTS IR-001

# IRRIGATION SCHEDULE MANUFACTURER/MODEL/DESCRIPTION RAIN BIRD RWS-M-B-C W/ RWS-SOCK 1401 MINI ROOT WATERING SYSTEM WITH 4" DIAMETER X 18" LONG WITH -O- (C) 1401 1402 LOCKING GRATE, SEMI-RIGID MESH TUBE AND RAIN BIRD 1401 0.25 GPM OR 1402 0.5 GPM BUBBLER AS INDICATED. WITH CHECK VALVE, AND SAND SOCK FOR SANDY SOIL. MANUFACTURER/MODEL/DESCRIPTION HUNTER I-25-04-SS 08 TURF ROTOR, 4" POP-UP. ADJUSTABLE AND FULL CIRCLE. STAINLESS STEEL RISER. DRAIN CHECK VALVE. STANDARD NOZZLE.

	OTELE MOLIN. DIVAIN CHECK VALVE, OTANDARD NOZZEE.	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	RAIN BIRD XCZ-100-PRB-COM WIDE FLOW DRIP CONTROL KIT FOR COMMERCIAL APPLICATIONS. 1" BALL VALVE WITH 1" PESB VALVE AND 1" PRESSURE REGULATING 40PSI QUICK-CHECK BASKET FILTER. 0.3 GPM-20 GPM	2
[+ - + - + - + - +	AREA TO RECEIVE DRIP EMITTERS RAIN BIRD XB-PC SINGLE OUTLET, PRESSURE COMPENSATING DRIP EMITTERS. FLOW RATES OF 0.5 GPH=BLUE, 1.0 GPH=BLACK, AND 2.0 GPH=RED. COMES WITH A SELF-PIERCING BARB INLET X BARB OUTLET. Emitter Notes:	3,894 S.F. 292
	1.0 GPH emitters (2 assigned to each 5 GAL plant)	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>QTY</u>
	RAIN BIRD PEB (2) 1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	6
	RAIN BIRD 44-LRC-QC 1" BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, LOCKING THERMOPLASTIC RUBBER COVER, AND 2-PIECE BODY.	9
MV	RAIN BIRD PEB 1" 1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	1
BF	FEBCO 825Y 1" REDUCED PRESSURE BACKFLOW PREVENTER	1
C	RAIN BIRD ESP12LXMEF-LXMMSS 12 STATION, TRADITIONALLY-WIRED, FLOW SMART (MODULE INCLUDED), COMMERCIAL CONTROLLER. INDOOR/OUTDOOR, PLASTIC WALL-MOUNT ENCLOSURE. INSTALL IN LXMMSS STAINLESS STEEL, WALL-MOUNTED CABINET.	1
(RS)	RAIN BIRD WR2-RFS WIRELESS RAIN/FREEZE SENSOR.	1
FS	RAIN BIRD FS-100-B  1" FLOW SENSOR FOR USE WITH RAIN BIRD MAXICOM, SITECONTROL, AND ESP-LXD CENTRAL CONTROL SYSTEMS. BRASS MODEL. SUGGESTED OPERATING RANGE OF 2.0 GPM TO 40.0 GPM. SENSORS SHOULD BE SIZED FOR FLOW RATHER THAN PIPE SIZE.	1
	5.22 · 5. · · · 25 · · · · · · · · · · · · · · ·	

POINT OF CONNECTION 1 1/2" (EXISTING- CONTRACTOR TO LOCATE AND VERIFY)

PVC CLASS 200 IRRIGATION PIPE. ONLY LATERAL TRANSITION PIPE SIZES 3,387 L.F.

1" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING

IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21

=====	PIPE SLEEVE: PVC SCHEDULE 40					
	Valve Callout					
/	Valve Number					
<u></u> # <b>↓</b> # <b>←</b>	Valve Flow					
#" •	Valve Size					
#" •	Valve Size					

WATER METER 1-1/2"

M POC H

# CRITICAL ANALYSIS 2022-09-27 15:58

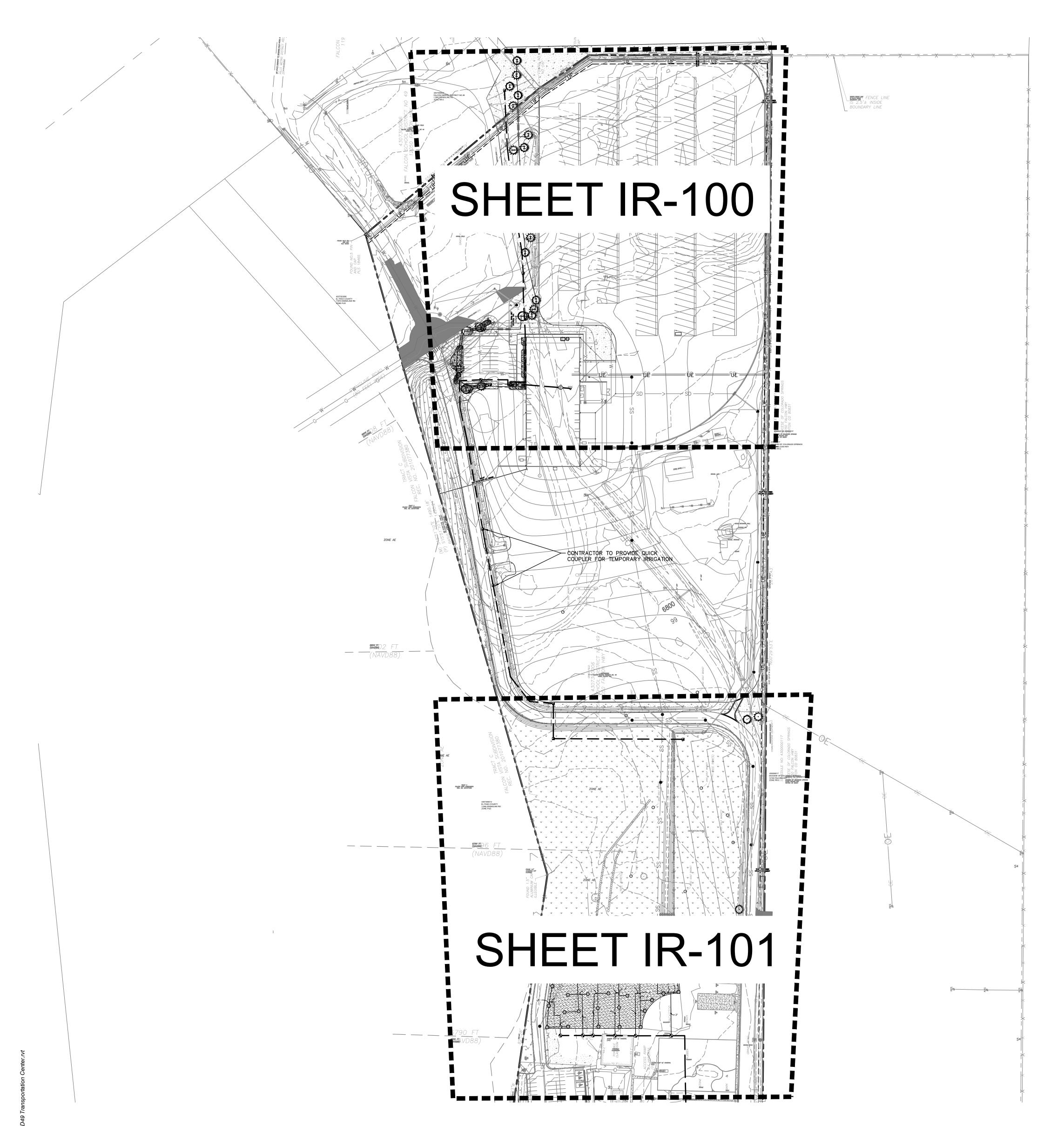
P.O.C. NUMBER: 01 Water Source Information: 2,576 L.F.

262.1 L.F.

QTY PSI

PSI GPM RADIUS

FLOW AVAILABLE Point of Connection Size: Flow Available	1 1/2" 46.59 GPM
PRESSURE AVAILABLE Static Pressure at POC: Pressure Available:	80 PSI 80 PSI
DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available:	11.5 GPM 46.59 GPM 35.09 GPM
Critical Station: Design Pressure: Friction Loss: Fittings Loss: Elevation Loss: Loss through Valve: Pressure Req. at Critical Station: Loss for Fittings: Loss for Main Line: Loss for POC to Valve Elevation: Loss for Backflow: Critical Station Pressure at POC: Pressure Available: Residual Pressure Available:	1 30 PSI 1.54 PSI 0.15 PSI 0 PSI 9.01 PSI 40.71 PSI 1.97 PSI 19.74 PSI 0 PSI 9.85 PSI 72.27 PSI 80 PSI 7.73 PSI
P.O.C. NUMBER: 02 Water Source Information:	
FLOW AVAILABLE Water Meter Size: Flow Available	1-1/2" 75 GPM
PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available:	80 PSI 5.00 ft 3" 20 ft 78 PSI
DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available:	46.2 GPM 75 GPM 28.8 GPM
Critical Station: Design Pressure: Friction Loss: Fittings Loss: Elevation Loss: Loss through Valve: Pressure Req. at Critical Station: Loss for Fittings: Loss for Main Line: Loss for POC to Valve Elevation: Loss for Backflow: Loss for Water Meter: Critical Station Pressure at POC: Pressure Available:	7 40 PSI 2.68 PSI 0.27 PSI 0 PSI 0 PSI 42.95 PSI 0.64 PSI 6.36 PSI 0 PSI 4.25 PSI 54.2 PSI 78 PSI



# VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	<u>GPM</u>	WIRE	<u>PSI</u>	PSI @ POC	PRECIP
1	RAIN BIRD XCZ-100-PRB-COM	1"	BUBBLER	11.5	504.0	40.7	72.3	0.86 in/h
2	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIP EMITTERS	6.07	317.1	34.9	47.5	0.39 in/h
3	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	46.2		43.8	51.7	0.99 in/h
4	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	38.5		42.7	49.4	0.9 in/h
5	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	38.5		42.6	49.8	0.48 in/h
6	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	38.5		42.6	50.4	0.52 in/h
7	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	46.2		42.9	54.2	0.42 in/h





CONSTRUCTION DOCUMENTS
SHEET NO.

IR-100

# IRRIGATION SCHEDULE

---- IRRIGATION MAINLINE: PVC SCHEDULE 40

\_\_\_\_\_\_ PIPE SLEEVE: PVC SCHEDULE 40

√# <del>-------</del> Valve Flow

ZUNE KK-D

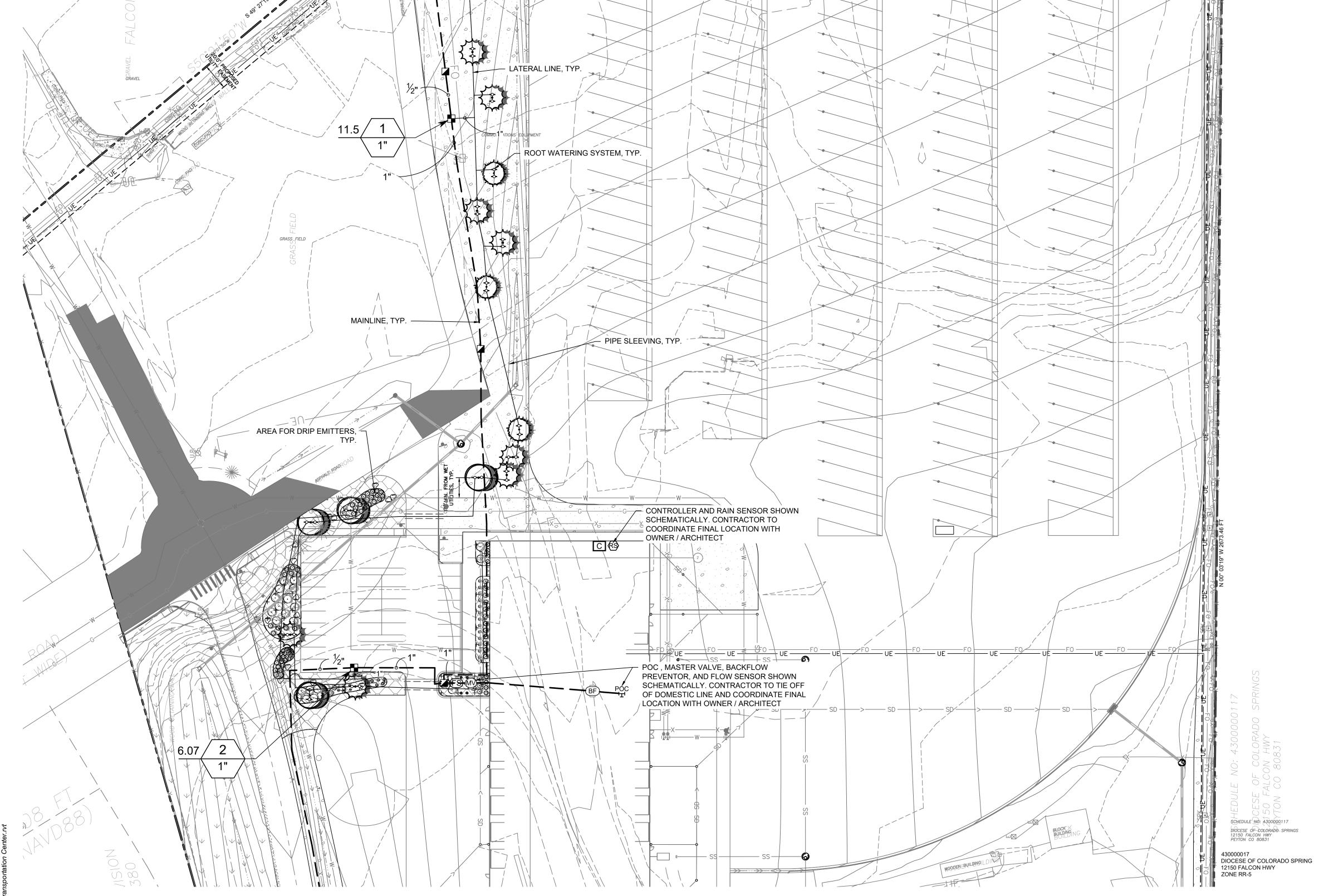
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>QTY</u>	<u>PSI</u>		
- <b>○- €○</b> 1401 1402	RAIN BIRD RWS-M-B-C W/ RWS-SOCK 1401 MINI ROOT WATERING SYSTEM WITH 4" DIAMETER X 18" LONG WITH LOCKING GRATE, SEMI-RIGID MESH TUBE AND RAIN BIRD 1401 0.25 GPM OR 1402 0.5 GPM BUBBLER AS INDICATED. WITH CHECK VALVE, AND SAND SOCK FOR SANDY SOIL.	46	30		
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>QTY</u>	<u>PSI</u>	<u>GPM</u>	<u>F</u>
<b>(08)</b>	HUNTER I-25-04-SS 08 TURF ROTOR, 4" POP-UP. ADJUSTABLE AND FULL CIRCLE. STAINLESS STEEL RISER. DRAIN CHECK VALVE. STANDARD NOZZLE.	32	40	7.7	4
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>QTY</u>			
	RAIN BIRD XCZ-100-PRB-COM WIDE FLOW DRIP CONTROL KIT FOR COMMERCIAL APPLICATIONS. 1" BALL VALVE WITH 1" PESB VALVE AND 1" PRESSURE REGULATING 40PSI QUICK-CHECK BASKET FILTER. 0.3 GPM-20 GPM	2			
	AREA TO RECEIVE DRIP EMITTERS RAIN BIRD XB-PC SINGLE OUTLET, PRESSURE COMPENSATING DRIP EMITTERS. FLOW RATES OF 0.5 GPH=BLUE, 1.0 GPH=BLACK, AND 2.0 GPH=RED. COMES WITH A SELF-PIERCING BARB INLET X BARB OUTLET. Emitter Notes:	3,894 S.F.			
	1.0 GPH emitters (2 assigned to each 5 GAL plant)	292			
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>QTY</u>			
	RAIN BIRD PEB (2) 1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	6			
	RAIN BIRD 44-LRC-QC 1" BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, LOCKING THERMOPLASTIC RUBBER COVER, AND 2-PIECE BODY.	9			
(MV)	RAIN BIRD PEB 1" 1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	1			
BF	FEBCO 825Y 1" REDUCED PRESSURE BACKFLOW PREVENTER	1			
С	RAIN BIRD ESP12LXMEF-LXMMSS 12 STATION, TRADITIONALLY-WIRED, FLOW SMART (MODULE INCLUDED), COMMERCIAL CONTROLLER. INDOOR/OUTDOOR, PLASTIC WALL-MOUNT ENCLOSURE. INSTALL IN LXMMSS STAINLESS STEEL, WALL-MOUNTED CABINET.	1			
RS	RAIN BIRD WR2-RFS WIRELESS RAIN/FREEZE SENSOR.	1			
FS	RAIN BIRD FS-100-B  1" FLOW SENSOR FOR USE WITH RAIN BIRD MAXICOM, SITECONTROL, AND ESP-LXD CENTRAL CONTROL SYSTEMS. BRASS MODEL. SUGGESTED OPERATING RANGE OF 2.0 GPM TO 40.0 GPM. SENSORS SHOULD BE SIZED FOR FLOW RATHER THAN PIPE SIZE.	1			
M	WATER METER 1-1/2"	1			
POC H	POINT OF CONNECTION 1 1/2" (EXISTING- CONTRACTOR TO LOCATE AND VERIFY)	1			
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21 PVC CLASS 200 IRRIGATION PIPE. ONLY LATERAL TRANSITION PIPE SIZES 1" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 3/4" IN SIZE.	3,387 L.F.			

# CRITICAL ANALYSIS

2,576 L.F.

262.1 L.F.

Generated:	2022-09-27 15:58
P.O.C. NUMBER: 01	
Water Source Information:	
FLOW AVAILABLE	
Point of Connection Size:	1 1/2"
Flow Available	46.59 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	80 PSI
Pressure Available:	80 PSI
DESIGN ANALYSIS	
Maximum Station Flow:	11.5 GPM
Flow Available at POC:	46.59 GPM
Residual Flow Available:	35.09 GPM
Critical Station:	1
Design Pressure:	30 PSI
Friction Loss:	1.54 PSI
Fittings Loss:	0.15 PSI
Elevation Loss:	0 PSI
Loss through Valve:	9.01 PSI
Pressure Req. at Critical Station:	40.71 PSI
Loss for Fittings:	1.97 PSI
Loss for Main Line:	19.74 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	9.85 PSI
	72.27 PSI
Critical Station Pressure at POC:	
Pressure Available:	80 PSI
	7.73 PSI
Pressure Available: Residual Pressure Available:	-
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02	-
Pressure Available: Residual Pressure Available:	-
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE	7.73 PSI
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size:	7.73 PSI 1-1/2"
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE	7.73 PSI
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE	7.73 PSI 1-1/2" 75 GPM
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC:	7.73 PSI  1-1/2" 75 GPM  80 PSI
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change:	7.73 PSI  1-1/2"  75 GPM  80 PSI 5.00 ft
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3"
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3"
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available: DESIGN ANALYSIS	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available: DESIGN ANALYSIS Maximum Station Flow:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available: DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI  46.2 GPM 75 GPM
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available: DESIGN ANALYSIS Maximum Station Flow:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available: DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI  46.2 GPM 75 GPM
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available: DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available: Critical Station: Design Pressure:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI  46.2 GPM 75 GPM 28.8 GPM
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available: DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available: Critical Station:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI  46.2 GPM 75 GPM 28.8 GPM 7
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available: DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available: Critical Station: Design Pressure:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI  46.2 GPM 75 GPM 28.8 GPM 7
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available: DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available: Critical Station: Design Pressure: Friction Loss:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI  46.2 GPM 75 GPM 28.8 GPM 7
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available: DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available: Critical Station: Design Pressure: Friction Loss: Fittings Loss:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI  46.2 GPM 75 GPM 28.8 GPM 7 40 PSI 2.68 PSI 0.27 PSI
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available  PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available:  DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available:  Critical Station: Design Pressure: Friction Loss: Fittings Loss: Elevation Loss: Loss through Valve: Pressure Req. at Critical Station:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI  46.2 GPM 75 GPM 28.8 GPM 7 40 PSI 2.68 PSI 0.27 PSI 0 PSI
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available  PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available:  DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available:  Critical Station: Design Pressure: Friction Loss: Fittings Loss: Elevation Loss: Loss through Valve:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI  46.2 GPM 75 GPM 28.8 GPM  7 40 PSI 2.68 PSI 0.27 PSI 0 PSI 0 PSI
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available  PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available:  DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available:  Critical Station: Design Pressure: Friction Loss: Fittings Loss: Elevation Loss: Loss through Valve: Pressure Req. at Critical Station:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI  46.2 GPM 75 GPM 28.8 GPM  7 40 PSI 2.68 PSI 0.27 PSI 0 PSI 0 PSI 42.95 PSI
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available: DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available: Critical Station: Design Pressure: Friction Loss: Fittings Loss: Elevation Loss: Loss through Valve: Pressure Req. at Critical Station: Loss for Fittings:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI  46.2 GPM 75 GPM 28.8 GPM  7 40 PSI 2.68 PSI 0.27 PSI 0 PSI 0 PSI 42.95 PSI 0.64 PSI
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available: DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available: Critical Station: Design Pressure: Friction Loss: Fittings Loss: Elevation Loss: Loss through Valve: Pressure Req. at Critical Station: Loss for Fittings: Loss for Main Line:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI  46.2 GPM 75 GPM 28.8 GPM  7 40 PSI 2.68 PSI 0.27 PSI 0 PSI 0 PSI 0 PSI 42.95 PSI 0.64 PSI 6.36 PSI
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available: DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available: Critical Station: Design Pressure: Friction Loss: Fittings Loss: Elevation Loss: Loss through Valve: Pressure Req. at Critical Station: Loss for Fittings: Loss for Main Line: Loss for POC to Valve Elevation:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI  46.2 GPM 75 GPM 28.8 GPM  7 40 PSI 2.68 PSI 0.27 PSI 0 PSI 0 PSI 42.95 PSI 0.64 PSI 6.36 PSI 0 PSI
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available:  DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available:  Critical Station: Design Pressure: Friction Loss: Fittings Loss: Loss through Valve: Pressure Req. at Critical Station: Loss for Fittings: Loss for Main Line: Loss for POC to Valve Elevation: Loss for Backflow:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI  46.2 GPM 75 GPM 28.8 GPM  7 40 PSI 2.68 PSI 0.27 PSI 0 PSI 0 PSI 42.95 PSI 0.64 PSI 6.36 PSI 0 PSI 0 PSI 0 PSI
Pressure Available: Residual Pressure Available: P.O.C. NUMBER: 02 Water Source Information: FLOW AVAILABLE Water Meter Size: Flow Available  PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available:  DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available:  Critical Station: Design Pressure: Friction Loss: Fittings Loss: Elevation Loss: Loss through Valve: Pressure Req. at Critical Station: Loss for Fittings: Loss for POC to Valve Elevation: Loss for Backflow: Loss for Water Meter:	7.73 PSI  1-1/2" 75 GPM  80 PSI 5.00 ft 3" 20 ft 78 PSI  46.2 GPM 75 GPM 28.8 GPM  7 40 PSI 2.68 PSI 0.27 PSI 0 PSI 0 PSI 42.95 PSI 0.64 PSI 6.36 PSI 0 PSI 0 PSI 0 PSI 4.25 PSI



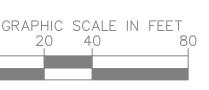
# VALVE SCHEDULE

4307208002 FALCON SCHOOL DISTRICT NO 49 11990 SWINGLINE RD ZONÉ RR-5

GRASS FIELD

NUMBER	MODEL	SIZE	<u>TYPE</u>	<u>GPM</u>	WIRE	<u>PSI</u>	PSI @ POC	PRECIP
1	RAIN BIRD XCZ-100-PRB-COM	1"	BUBBLER	11.5	504.0	40.7	72.3	0.86 in/h
2	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIP EMITTERS	6.07	317.1	34.9	47.5	0.39 in/h
3	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	46.2		43.8	51.7	0.99 in/h
4	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	38.5		42.7	49.4	0.9 in/h
5	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	38.5		42.6	49.8	0.48 in/h
6	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	38.5		42.6	50.4	0.52 in/h
7	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	46.2		42.9	54.2	0.42 in/h
8	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	38.5		43.2	51.9	0.85 in/h
-	Common Wire	,_			2,576			





# VALVE SCHEDULE

<u>NUMBER</u>	MODEL	SIZE	<u>TYPE</u>	<u>GPM</u>	<u>WIRE</u>	<u>PSI</u>	PSI @ POC	<u>PRECIP</u>
1	RAIN BIRD XCZ-100-PRB-COM	1"	BUBBLER	11.5	504.0	40.7	72.3	0.86 in/h
2	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIP EMITTERS	6.07	317.1	34.9	47.5	0.39 in/h
3	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	46.2		43.8	51.7	0.99 in/h
4	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	38.5		42.7	49.4	0.9 in/h
5	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	38.5		42.6	49.8	0.48 in/h
6	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	38.5		42.6	50.4	0.52 in/h
7	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	46.2		42.9	54.2	0.42 in/h
8	RAIN BIRD PEB (2)	1-1/2"	TURF ROTOR	38.5		43.2	51.9	0.85 in/h
	Common Wire				2,576			

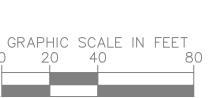
# IDDICATION COLIEDIUE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>QTY</u>	<u>PSI</u>		
- <b>O- CO</b> 1401 1402	RAIN BIRD RWS-M-B-C W/ RWS-SOCK 1401 MINI ROOT WATERING SYSTEM WITH 4" DIAMETER X 18" LONG WITH LOCKING GRATE, SEMI-RIGID MESH TUBE AND RAIN BIRD 1401 0.25 GPM OR 1402 0.5 GPM BUBBLER AS INDICATED. WITH CHECK VALVE, AND SAND SOCK FOR SANDY SOIL.	46	30		
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>QTY</u>	<u>PSI</u>	<u>GPM</u>	RADIUS
(08)	HUNTER I-25-04-SS 08 TURF ROTOR, 4" POP-UP. ADJUSTABLE AND FULL CIRCLE. STAINLESS STEEL RISER. DRAIN CHECK VALVE. STANDARD NOZZLE.	32	40	7.7	47'
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>QTY</u>			
	RAIN BIRD XCZ-100-PRB-COM WIDE FLOW DRIP CONTROL KIT FOR COMMERCIAL APPLICATIONS. 1" BALL VALVE WITH 1" PESB VALVE AND 1" PRESSURE REGULATING 40PSI QUICK-CHECK BASKET FILTER. 0.3 GPM-20 GPM	2			
+ + + + + + + + + + + + + + + + + + +	AREA TO RECEIVE DRIP EMITTERS RAIN BIRD XB-PC SINGLE OUTLET, PRESSURE COMPENSATING DRIP EMITTERS. FLOW RATES OF 0.5 GPH=BLUE, 1.0 GPH=BLACK, AND 2.0 GPH=RED. COMES WITH A SELF-PIERCING BARB INLET X BARB OUTLET. Emitter Notes:	3,894 S.F.			
	1.0 GPH emitters (2 assigned to each 5 GAL plant)				
<u>SYMBOL</u>	MANUFACTURER/MODEL/DESCRIPTION  PANUE DESCRIPTION	QTY			
	RAIN BIRD PEB (2) 1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	6			
	RAIN BIRD 44-LRC-QC 1" BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, LOCKING THERMOPLASTIC RUBBER COVER, AND 2-PIECE BODY.	9			
MV	RAIN BIRD PEB 1" 1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	1			
BF	FEBCO 825Y 1" REDUCED PRESSURE BACKFLOW PREVENTER	1			
С	RAIN BIRD ESP12LXMEF-LXMMSS 12 STATION, TRADITIONALLY-WIRED, FLOW SMART (MODULE INCLUDED), COMMERCIAL CONTROLLER. INDOOR/OUTDOOR, PLASTIC WALL-MOUNT ENCLOSURE. INSTALL IN LXMMSS STAINLESS STEEL, WALL-MOUNTED CABINET.	1			
<del>(RS)</del>	RAIN BIRD WR2-RFS WIRELESS RAIN/FREEZE SENSOR.	1			
FS	RAIN BIRD FS-100-B  1" FLOW SENSOR FOR USE WITH RAIN BIRD MAXICOM, SITECONTROL, AND ESP-LXD CENTRAL CONTROL SYSTEMS. BRASS MODEL. SUGGESTED OPERATING RANGE OF 2.0 GPM TO 40.0 GPM. SENSORS SHOULD BE SIZED FOR FLOW RATHER THAN PIPE SIZE.	1			
M	WATER METER 1-1/2"	1			
POC H	POINT OF CONNECTION 1 1/2" (EXISTING- CONTRACTOR TO LOCATE AND VERIFY)	1			
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21 PVC CLASS 200 IRRIGATION PIPE. ONLY LATERAL TRANSITION PIPE SIZES 1" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 3/4" IN SIZE.	3,387 L.F.			
	IRRIGATION MAINLINE: PVC SCHEDULE 40	2,576 L.F.			
=======	PIPE SLEEVE: PVC SCHEDULE 40	262.1 L.F.			
\	√alve Callout				

# CRITICAL ANALYSIS

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P.O.C. NUMBER: 01 Water Source Information:	
FLOW AVAILABLE	4.4/0"
Point of Connection Size: Flow Available	1 1/2" 46.59 GPM
Flow Available	46.59 GPM
PRESSURE AVAILABLE Static Pressure at POC:	80 DSI
Pressure Available:	80 PSI 80 PSI
DESIGN ANALYSIS	
Maximum Station Flow:	11.5 GPM
Flow Available at POC:	46.59 GPM
Residual Flow Available:	35.09 GPM
Critical Station:	1
Design Pressure:	30 PSI
Friction Loss:	1.54 PSI
Fittings Loss:	0.15 PSI
Elevation Loss:	0 PSI
Loss through Valve:	9.01 PSI
Pressure Req. at Critical Station:	40.71 PSI
Loss for Fittings:	1.97 PSI
Loss for Main Line:	19.74 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	9.85 PSI
Critical Station Pressure at POC:	72.27 PSI
Pressure Available: Residual Pressure Available:	<u>80 PSI</u> 7.73 PSI
P.O.C. NUMBER: 02 Water Source Information:	
FLOW AVAILABLE	
Water Meter Size:	1-1/2"
Flow Available	75 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	80 PSI
Elevation Change:	5.00 ft
Service Line Size:	3"
Length of Service Line:	20 ft
Pressure Available:	78 PSI
DESIGN ANALYSIS	
Maximum Station Flow:	46.2 GPM
Flow Available at POC:	75 GPM
Residual Flow Available:	28.8 GPM
Critical Station:	7
Design Pressure:	40 PSI
Friction Loss:	2.68 PSI
Fittings Loss:	0.27 PSI
Elevation Loss:	0 PSI
Loss through Valve:	0 PSI
Pressure Req. at Critical Station:	42.95 PSI
Loss for Main Line:	0.64 PSI
Loss for Main Line: Loss for POC to Valve Elevation:	6.36 PSI 0 PSI
Loss for POC to valve Elevation:  Loss for Backflow:	0 PSI 0 PSI
Loss for Backflow: Loss for Water Meter:	4.25 PSI
Critical Station Pressure at POC:	4.25 PSI 54.2 PSI
Pressure Available:	78 PSI







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Irrigation
Plan

2021-041.00 05/23/2022

CONSTRUCTION DOCUMENTS IR-101







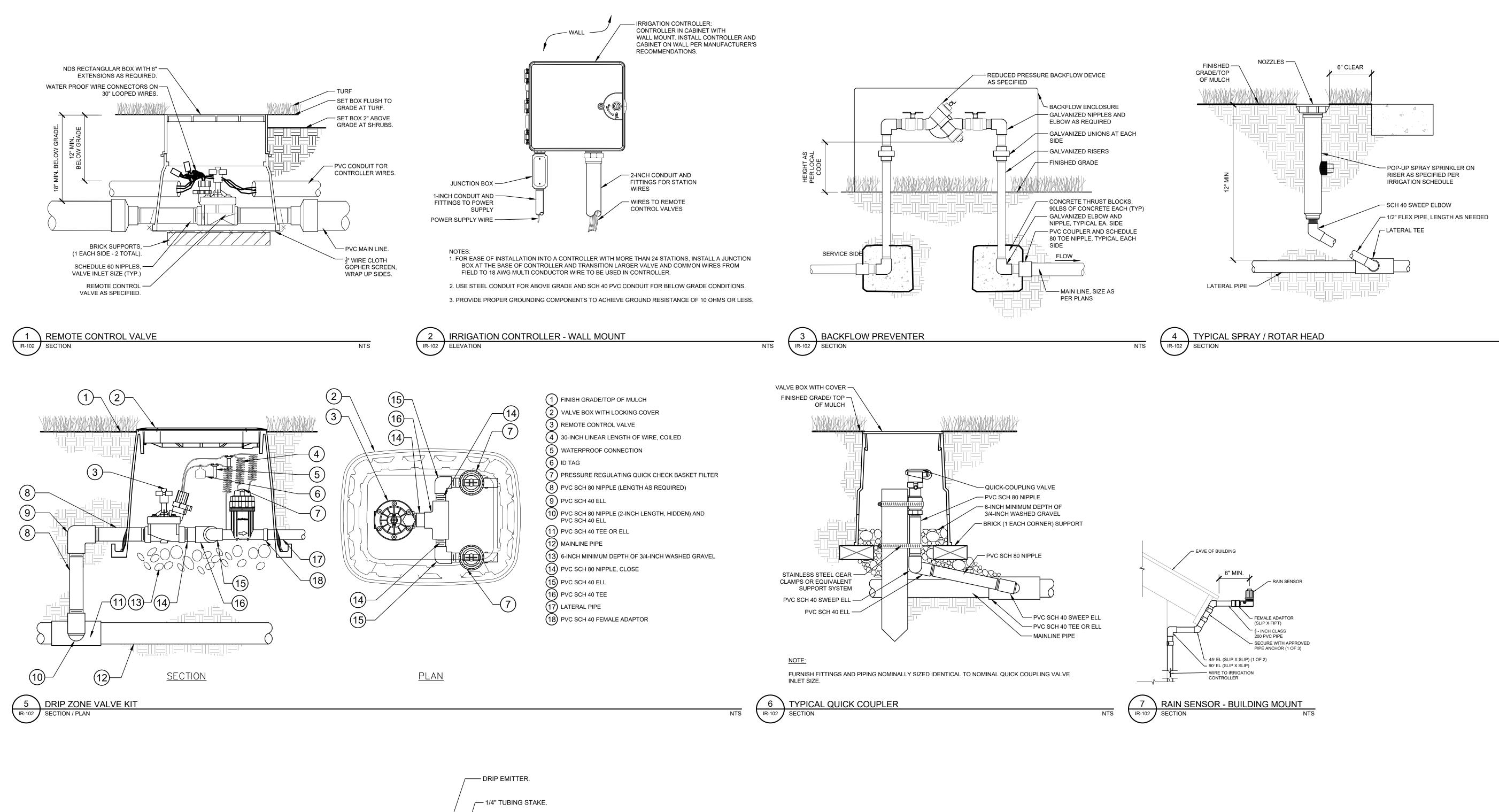


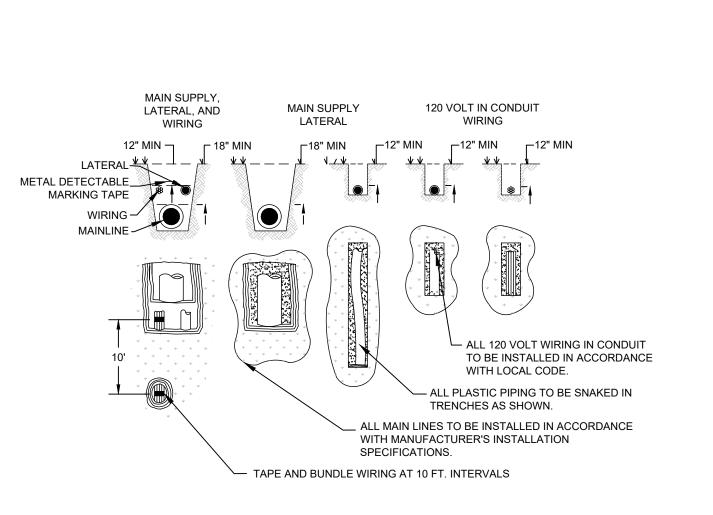


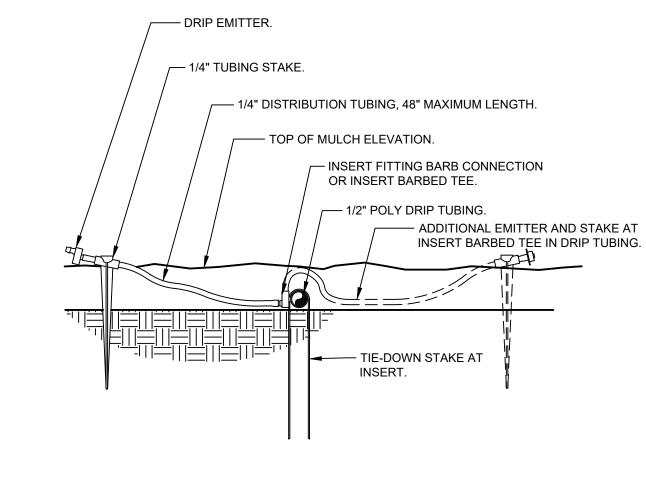
2021-041.00 DATE 05/23/2022

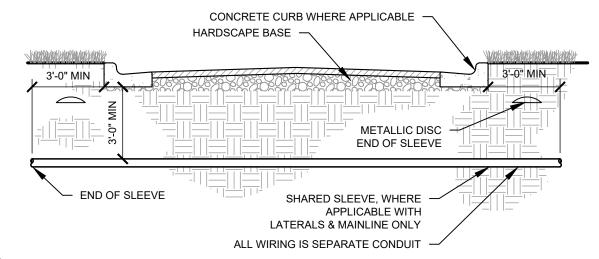
CONSTRUCTION DOCUMENTS
SHEET NO.

IR-102





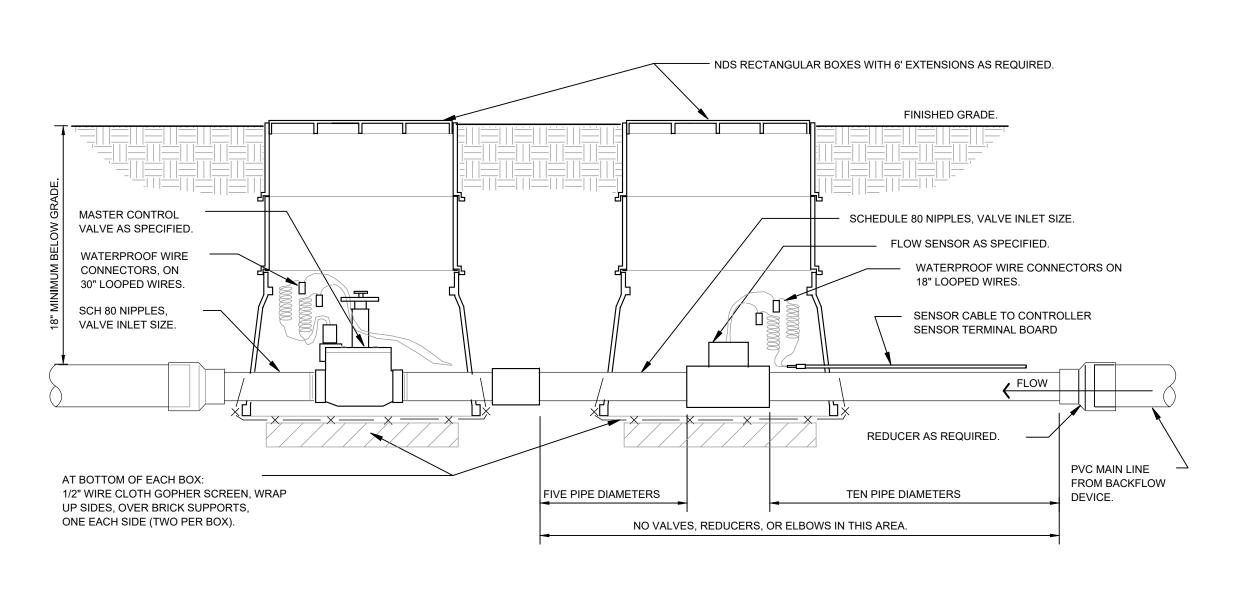


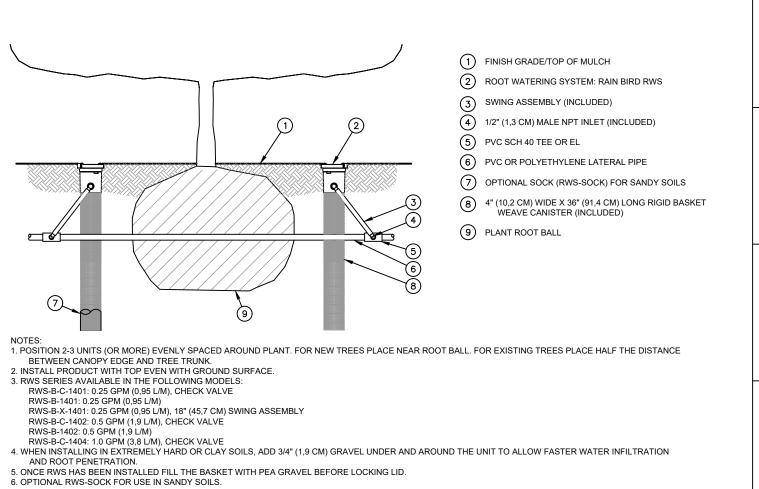


DRIP EMITTER AT 1/4" TUBING

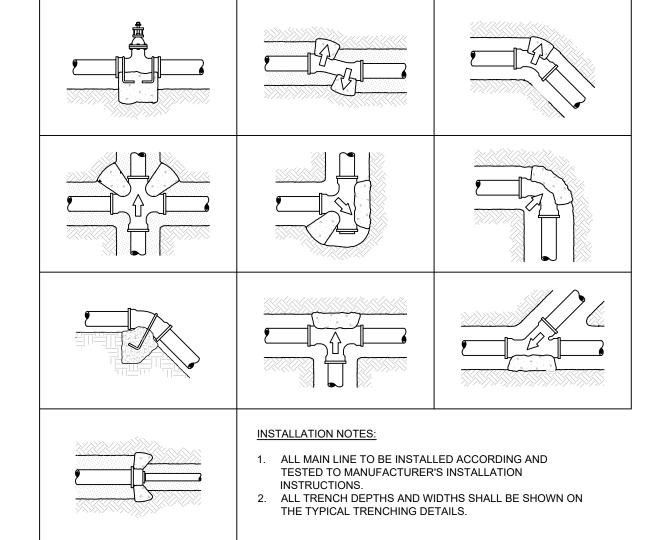
3" = 1'-0"

096-636-005-22 TYPICAL SLEEVING
SECTION





ROOT WATERING SYSTEM





### GENERAL IRRIGATION SPECIFICATIONS AND NOTES

- 1. THE SYSTEM SHALL BE DESIGNED TO PROVIDE 100% COVERAGE. ANY CHANGES MADE IN THE LAYOUT DUE TO FIELD CONDITIONS SHALL BE IN ACCORDANCE WITH THESE STANDARDS. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IN PLANS OR SPECIFICATIONS PRIOR TO BEGINNING OR CONTINUING WORK. THIS PLAN IS SCHEMATIC AND DUE TO THE NATURE OF CONSTRUCTION SLIGHT FIELD MODIFICATIONS MAY BE NECESSARY
- 2. THE CONTRACTOR SHALL MAKE NO SUBSTITUTIONS, DELETIONS, OR ADDITIONS TO THIS PLAN WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.
- 3. ALL CONSTRUCTION SHALL CONFORM TO TOWN, COUNTY, STATE, AND FEDERAL REQUIREMENTS. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO ENSURE THAT ALL IRRIGATION EQUIPMENT MEETS GOVERNMENT REGULATIONS. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS OR APPROVALS.
- 4. VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. ALL UTILITIES AND STRUCTURES MAY NOT BE SHOWN ON THESE PLANS-CONTRACTOR SHALL FIELD VERIFY.
- 5. CONTRACTOR TO VERIFY ACTUAL AVAILABLE WATER PRESSURE BEFORE BEGINNING INSTALLATION. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IF AVAILABLE WATER PRESSURE EXCEEDS 5 PSI HIGHER OR LOWER THAN AVAILABLE WATER PRESSURE. REFER TO CRITICAL ANALYSIS FOR ASSUMED STATIC PRESSURE.
- 6. CONTRACTOR TO FIELD VERIFY ALL POINT OF CONNECTION SOURCE INFORMATION INCLUDING PSI AND GPM PRIOR TO CONSTRUCTION.
- 7. IRRIGATION DESIGN IS SCHEMATIC ONLY. FULL AND COMPLETE SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW BY THE OWNER'S REPRESENTATIVE.
- 8. CONTRACTOR SHALL COORDINATE WITH THE PLANTING PLAN FOR PLANTER BED AND TREE LOCATIONS TO ENSURE ALL PLANT MATERIAL IS COVERED BY 100% HEAD-TO-HEAD IRRIGATION.
- 9. CONTRACTOR SHALL PROVIDE "AS-BUILT" DRAWINGS OF THE FINAL INSTALLATION TO OWNER AT SUBSTANTIAL COMPLETION BEFORE RECEIVING FINAL PAYMENT.
- 10. IRRIGATION CONTRACTOR TO COORDINATE POWER SUPPLY TO ELECTRIC CONTROLLERS WITH ELECTRICAL CONTRACTOR.
- 11. IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF HIS OPERATIONS ON-SITE. COPIES OF THE PERMITS SHALL BE SENT TO THE OWNER/GENERAL CONTRACTOR. WORK IN THE R.O.W. SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE JURISDICTION.
- 12. IRRIGATION LATERAL LINES, MAIN LINES AND EQUIPMENT MAY BE SHOWN OUTSIDE PROPERTY LINES ON THIS PLAN, ALL IRRIGATION LINES AND EQUIPMENT ARE TO BE WITHIN AND INSTALLED WITHIN THE LIMITS OF THE PROPERTY LINE.
- 13. LOCATE ALL IRRIGATION LINES WITHIN LANDSCAPED AREAS WHENEVER POSSIBLE. ALL LINES UNDER PAVEMENT MUST BE SLEEVED. ALL VALVES SHALL BE LOCATED WITHIN LANDSCAPED AREAS, AS SPECIFIED.
- 12. IRRIGATION SYSTEMS CONNECTED TO POTABLE WATER SUPPLY, SHALL HAVE A BACKFLOW PREVENTER INSTALLED.
- 13. SUPPLY LINE AND METER TO BE PROVIDED BY GENERAL CONTRACTOR. BACKFLOW PREVENTER TO BE PROVIDED BY IRRIGATION CONTRACTOR. IRRIGATION CONTRACTOR'S POINT OF CONNECTION TO BEGIN AFTER THE IRRIGATION
- 14. INSTALL ALL BACKFLOW PREVENTION DEVICES AND ALL PIPING BETWEEN THE POINT OF CONNECTION AND THE BACKFLOW PREVENTER AS PER LOCAL CODES. FINAL LOCATION SHALL BE DETERMINED BY THE OWNER'S AUTHORIZED
- 15. CONTRACTOR TO COORDINATE LOCATION OF ALL METERS AND BACKFLOW ASSEMBLIES WITH PROJECT OWNER.
- 16. THE IRRIGATION CONTRACTOR SHALL BE DIRECTLY RESPONSIBLE FOR SLEEVING AND DIRECTIONAL BORES.
- 17. EXISTING TREES TO REMAIN ARE TO BE PROTECTED FROM DAMAGE. DO NOT TRENCH OR EXCAVATE WITHIN THE CRITICAL ROOT ZONE OF ANY TREE.
- 18. ALL SLEEVES UTILIZED BY THE IRRIGATION CONTRACTOR WHETHER INSTALLED BY HIM OR NOT, SHALL BE LOCATED ON THE "AS-BUILT" DRAWINGS. THE DEPTH BELOW FINISH GRADE, TO THE NEAREST FOOT OF EACH END OF THE SLEEVE SHALL BE NOTED AT EACH SLEEVE LOCATION ON THE "AS-BUILT" DRAWINGS. ALL SLEEVES ON PLAN FOR WALL PENETRATIONS AND UNDER SIDEWALKS SHALL BE SIZED TWO PIPE SIZES GREATER THAN THE PIPE IT CARRIES. ALL IRRIGATION SLEEVING TO BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR. ELECTRICAL WIRES FOR IRRIGATION VALVES AND IRRIGATION LINES ARE TO BE PLACED IN SEPARATE SLEEVES. SEE SLEEVING DETAIL.
- 19. ALL PRESSURIZED MAINLINES AND LATERALS UNDER PAVEMENT SHALL BE WITHIN SLEEVES AS NOTED. WHERE ELECTRIC OR HYDRAULIC VALVE CONTROL LINES PASS THROUGH A SLEEVE WITH OTHER MAIN OR LATERAL LINES THEY SHALL BE CONTAINED WITHIN A SEPARATE, SMALLER CONDUIT.
- 20. SLEEVES UNDER EXISTING PAVEMENT MUST BE DIRECTIONAL BORE. OPEN CUT IS NOT AN OPTION.
- 21. NUMBER THE TOP OF ALL VALVE BOX LIDS WITH MINIMUM 1" HEIGHT BLACK LETTERS TO CORRESPOND TO AUTOMATIC AND GATE VALVE DESIGNATIONS. ALL HOSE BIBB VALVE BOXES SHALL BE LABELED IN A SIMILAR MANNER WITH THE DESIGNATION "HB". LETTER OUTSIDE OF TIME CLOCK CABINETS TO CORRESPOND WITH IRRIGATION CLOCK PROGRAM DESIGNATION.
- 22. THE IRRIGATION CONTRACTOR SHALL INSTALL A COLOR CODED METAL DETECTABLE MARKING TAPE WHICH CLEARLY NOTES: "CAUTION: IRRIGATION LINE BURIED BELOW." THE TAPE SHALL BE INSTALLED THE FULL LENGTH OF THE IRRIGATION MAINLINE.
- 23. ALL VALVES, SPLICES WITHIN CONTROL LINES, AND QUICK COUPLERS SHALL BE LOCATED WITHIN VALVE BOXES.
- 24. ALL UNSIZED PIPE SHALL BE 3/4" UNLESS OTHERWISE NOTED ON PLAN. SEE LATERAL PIPE SIZING REQUIREMENTS.
- 25. LOCATE ALL VALVES IN PLANTING BEDS WITH A MINIMUM OF 3'-0" FROM BACK OF CURB OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. PIPE SIZES ON EITHER SIDE OF SECTION VALVES CONNECTING MAINLINE TO SECTION LATERAL SHALL BE ONE (1) PIPE SIZE LARGER THAN VALVE SIZE. WHERE MAINLINES RUN PARALLEL TO PAVEMENT OR CURBING, THE MAINLINE SHALL BE OFFSET 2'-0" FROM THE EDGE OF PAVEMENT OR CURB.
- 26. IRRIGATION ZONES SHALL BE SEPARATED FOR HIGH AND LOW WATER USE REQUIREMENTS AND OPERATED ON DIFFERENT WATERING CYCLES. BUBBLERS, DRIPLINE, AND SPRAY HEADS SHALL BE SEPARATED ON DIFFERENT VALVES. AT NO TIME SHALL MULTIPLE IRRIGATION HEAD TYPES BE LOCATED ON THE SAME VALVE.
- 27. ALL DRIP ZONES SHALL BE INSTALLED WITH A FLUSH VALVE AND DRIP INDICATOR.
- 28. IRRIGATION CONTRACTOR TO COORDINATE WITH OWNER FOR FINAL CONTROLLER AND RAIN SENSOR LOCATIONS. THE CONTROLLER SHALL BE PLACED IN A LOCKING CABINET APPROPRIATE FOR ITS LOCATION. (INDOOR VS. OUTDOOR
- 29. IRRIGATION CONTRACTOR SHALL REVIEW WINTERIZATION PROCEDURES FOR IRRIGATION SYSTEM WITH OWNERS REPRESENTATIVE.
- 30. LOCATE THE AUTOMATIC RAIN / FREEZE SENSOR SHUTOFF DEVICE IN AN AREA THAT IS UNOBSTRUCTED BY TREES, ROOF OVERHANGS, OR ANY OTHER OVERHEAD OBJECT. THE SENSOR SHALL NOT BE PLACED WITHIN THE SPRAY ZONE OF ANY SPRINKLER HEAD, INCLUDING OFF-SITE IRRIGATION. CONTRACTOR SHALL LOCATE SENSOR WITHIN CLOSE PROXIMITY TO THE IRRIGATION CONTROLLER.
- 31. CONTRACTOR SHALL PERFORM HYDRO-TESTING OF MAIN LINES.
- HYDRO-TESTING TO BE PERFORMED AS LISTED:
- THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FORTY-EIGHT (48) HOURS IN ADVANCE OF TESTING. PRIOR TO BACKFILLING, CONTRACTOR SHALL FILL PIPING WITH WATER, IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE, TAKING CARE TO PURGE THE AIR FROM IT. A SMALL, HIGH PRESSURE PUMP OR OTHER MEANS OF MAINTAINING A CONTINUOUS WATER SUPPLY SHALL BE CONNECTED TO THE PIPING AND SET SO AS TO MAINTAIN 125 PSI FOR TWO (2) HOURS WITHOUT INTERRUPTION. CONTRACTOR SHALL MAKE ANY NECESSARY CORRECTIONS AND RETEST THE SYSTEM UNTIL THE OWNER'S REPRESENTATIVE IS SATISFIED THAT THE SYSTEM IS REASONABLY SOUND.
- 32. ALL WIRING FOR CONNECTION OF THE VALVES TO THE CONTROLLER SHALL FOLLOW MANUFACTURERS SPECIFICATIONS.
- 33. ALL CONTROL WIRE SHALL BE INSTALLED IN A 1  $\frac{1}{4}$ " ELECTRICAL CONDUIT.
- 34. CONTRACTOR TO MINIMIZE IRRIGATION OVERTHROW TO IMPERVIOUS AND NATURAL AREAS THROUGH FIELD ADJUSTMENTS TO INDIVIDUAL HEADS.
- 35. ALL UNIMPROVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR.
- 36. ALL PLANT MATERIAL IN TREE HOLDING AREAS SHALL BE MANUALLY WATERED/IRRIGATED TO KEEP MOIST UNTIL PLANTED.

THE CITY OF COLORADO SPRINGS HAS ADOPTED PERMANENT WATER-WISE REGULATIONS AT THE START OF 2020 WHICH WILL AFFECT THE OVERALL OPERATION OF THE IRRIGATION SYSTEM: WATERING IS LIMITED TO THREE DAYS A WEEK (DRIP IRRIGATION IS ALLOWED AT ANY TIME). ESTABLISHMENT PERMITS ARE REQUIRED FROM COLORADO SPRINGS UTILITIES FOR CUSTOMERS WHO NEED TO TEMPORARILY WATER MORE THAN THREE DAYS A WEEK TO

ESTABLISH NEW LANDSCAPES. • FROM MAY 1 TO OCTOBER 15, SPRINKLERS CAN BE OPERATED BEFORE 10 A.M. AND AFTER 6 P.M. SPRINKLERS CAN BE OPERATED AT ANY TIME OF DAY BEFORE MAY 1 AND AFTER OCTOBER ALLOCATION PLANS ARE AVAILABLE FOR CUSTOMERS WHO NEED MORE WATERING SCHEDULE FLEXIBILITY FROM COLORADO SPRINGS UTILITIES.
NOTE: THE WATERING SCHEDULE PROVIDED IS CONCEPTUAL; IT IS DISPLAYED TO SHOW COMPLIANCE

WITH THE CITY OF COLORADO SPRINGS WATER-WISE ORDINANCE. CONTRACTOR SHALL VERIFY AND SET A COMPLIANT WATERING SCHEDULE WITH THE PROPERTY OWNER AND/OR THEIR ASSIGNS.



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