North End Market

NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT H AND OUTLOT K REPLAT

PROJECT DESCRIPTION

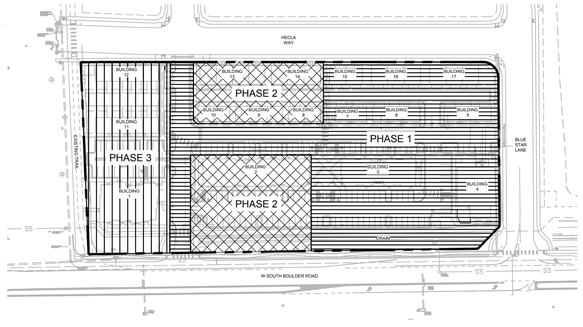
THIS PROJECT IS A MIXED USE NEIGHBORHOOD MARKET CONSISTING OF RESIDENTIAL, RETAIL AND OFFICE USES. THE RESIDENTIAL BUILDINGS WILL BE MARKET RATE. THE PROJECT IS DESIGNED WITH A MAIN STREET AND NEW URBAN CHARACTER.

COVERAGE AREA

	LOT 1		LOT 2		LOT 3		BLOCK 11 TOTAL	
	MULTI-FAMILY RESIDENTIAL USE		MULTI-FAMILY RESIDENTIAL USE		COMMERCIAL		-	
	S.F.	Acres	S.F.	Acres	S.F.	Acres	S.F.	Acres
BUILDING COVERAGE	5000	0.115	20699	0.475	21999	0.505	47,698	1.095
% OF LOT	33.25		40.97		18.94		26.24	
DRIVES AND PARKING	4689	0.108	14620	0.336	53557	1.229	72,866	1.672
% OF LOT	31.18		28.94		46.10		40.09	
OPEN SPACE AND LANDSCAPING	5350	0.123	15204	0.349	40611	0.932	61,165	1.4038
% OF LOT	35.57		30.09		34.96		33.65	
OUTLOT A			-				17,449	0.401
TOTALS	15,039	0.345	50,523	1.160	116,167	2.666	181,746	4.571
% OF DEVELOPMENT	8.27		27.80		63.92		99.99	

Revise square footage total (should be 199,178 Sq. ft.)

PHASING PLAN OF RESIDENTIAL AND COMMERCIAL REQUIREMENTS



PHASE 1:
BUILDINGS: RESIDENTIAL BUILDINGS 5, 6, 7, 15, 16, AND 17
COMMERCIAL BUILDING 3 & 4.
RESIDENTIAL UNITS: 16 DU
COMMERCIAL SQ.FT.: 15,030 SQ.FT.

PHASE 2:
BUILDINGS: RESIDENTIAL BUILDINGS 8, 9, 10 , 13, AND 14
COMMERCIAL BUILDING 2
RESIDENTIAL UNITS: 14 DU
COMMERCIAL SQ.FT.: 14,584 SQ.FT.

PHASE 3:
BUILDINGS: RESIDENTIAL BUILDINGS 11 AND 12
COMMERCIAL BUILDING 1
RESIDENTIAL UNITS: 8 DU
COMMERCIAL SQ.FT.: 10,942 SQ.FT.

Commercial Sq. Ft. still adds up to over 40,000 sq. ft. revise the areas to be under 40,000

NOTES:
1. IN PHASE 1, CONCURRENT CONSTRUCTION OF RESIDENTIAL AND COMMERCIAL BUILDINGS.
2. IN PHASE 2, CONCURRENT CONSTRUCTION OF RESIDENTIAL AND COMMERCIAL BUILDINGS.
3. IN PHASE 3, CONCURRENT CONSTRUCTION OF RESIDENTIAL AND COMMERCIAL BUILDINGS.
4. NO RESIDENTIAL BUILDING PERMITS SHALL BE ISSUED UNTIL COMPLETION AND FINAL INSPECTION APPROVAL OF A FOUNDATION FOR COMMERICAL BUILDINGS IN EACH PHASE.

RESIDENTIAL DENSITY

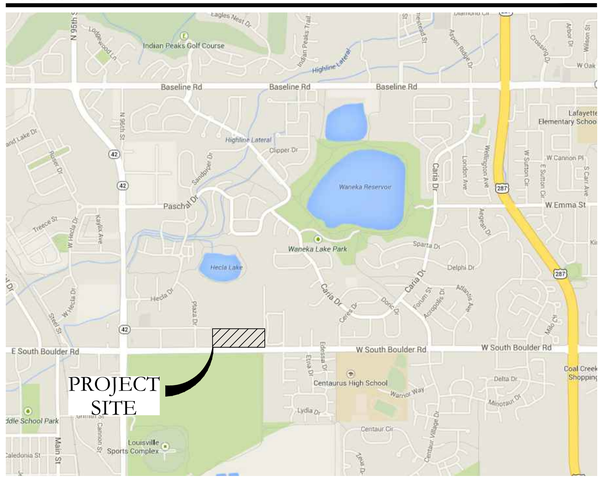
8.31 DWELLING UNITS PER ACRE

Should they use gross area of 9.04 acres to be consistent with GDP? Currently the 8.31 is measured from 4.57 Acres (net area) We said they could measure commercial FAR from gross area as well

17.76 - INCLUSIONARY HOUSING

TO SATISFY THIS PORTION OF THE CODE OF ORDINANCES, THE DEVELOPER PLANS TO PURSUE THE FEE IN LIEU OPTION AVAILABLE WITHIN THE CODE.

VICINITY MAP



NOT TO SCALE

PUD DIMENSIONAL AND BULK STANDARDS

DIMENSIONAL / BULK STANDARD	COMMERCIAL	MULTIFAMILY	BLOCK 11 - RESIDENTIAL
MINIMUM LOT AREA	6,000 SF	1,000 SF	N/A
MINIMUM LOT WIDTH	-	30'-0"	N/A
MAXIMUM LOT COVERAGE (% OF LOT AREA)	0.25 FAR	85%	85%
MINIMUM FRONT YARD SETBACK FOR PRINCIPLE USES	0'-0"	6'-0"	6'-0"
MINIMUM FRONT SETBACK TO PORCH/ UPPER DECK	-	6'-0"	6'-0"
MINIMUM SETBACK BETWEEN ALL BUILDINGS	10'-0"	10'-0"	10'-0"
MINIMUM SIDE YARD AND ACCESSORY USES SETBACK	0'-0"	5'-0"	5'-0"
MINIMUM REAR YARD SETBACK	0' OR 10' OF ABUTTING RESIDENTIAL ZONE	4'-0' (TO EASEMENT)	0'-0"
MAXIMUM BUILDING HEIGHT (PRINCIPLE BUILDING)	40'-0"	40'-0"	45'-0"
MAXIMUM BUILDING HEIGHT (ACCESSORY BUILDING)	28'-0"	28'-0"	N/A
PARKING SPACES REQUIRED (OFF STREET)	-	1 BED: 1 SPACE 2 BED: 1.5 SPACES 3 BED: 2 SPACES	1 BED: 1 SPACE 2 BED: 1.5 SPACES 3 BED: 2 SPACES
ALL RETAIL USES	1 SPACE/ 250 SQ FT	-	-
ALL OFFICE USES	1 SPACE/ 300 SQ FT	-	-
MAXIMUM ROOF OVERHANG ENCROACHMENT WITHIN SETBACKS AND EASEMENTS	-	-	2-6"

MINIMUM PARKING LOT SETBACKS - PER CDDSG 1.2. C

CONDITION	REQUIRED	PROVIDED
ARTERIAL STREET R.O.W. - SOUTH BOULDER ROAD	25'-0"	33'-0" MIN
INTERNAL/ COMMON PROPERTY LINE - ALL OTHER CONDITIONS	10'-0"	10'-0" MIN

SHEET INDEX

Sheet Number	Sheet Title
S1	COVER
S2	OVERALL SITE PLAN
S3	SITE PLAN ENLARGEMENT
S4	SITE PLAN ENLARGEMENT
S5	PARKING PLAN
S6	EMERGENCY ACCESS PLAN
S7	BUILDING SECTION ELEVATIONS
S8	BUILDING SECTION ELEVATIONS
S9	BUILDING SECTION ELEVATIONS
S10	BUILDING SECTION ELEVATIONS
L1	OVERALL LANDSCAPE PLAN
L2	LANDSCAPE PLAN ENLARGEMENT
L3	LANDSCAPE PLAN ENLARGEMENT
L4	LANDSCAPE SCHEDULE AND NOTES
L5	TREE MITIGATION PLAN
MEP 1	PHOTOMETRIC
MEP 1	PHOTOMETRIC DETAILS
IR-1	IRRIGATION PLAN ENLARGEMENT
IR-2	IRRIGATION PLAN ENLARGEMENT
IR-3	IRRIGATION PLAN DETAILS
IR-4	IRRIGATION PLAN SCHEDULE

Sheet Number	Sheet Title
CVR	COVER SHHET
NOTES	NOTES AND SPECIFICATIONS
EX	EXISTING CONDITIONS AND DEMO PLAN
SP	SITE PLAN
ECP	EROSION CONTROL PLAN
UP	UTILITY PLAN
GP	GRADING PLAN
PP1	UTILITY - PLAN & PROFILE
PP2	UTILITY - PLAN & PROFILE
PP3	UTILITY - PLAN & PROFILE
DET1	EROSION CONTROL DETAILS
DET2	EROSION CONTROL DETAILS
DET3	WATER DETAILS
DET4	WATER DETAILS
DET5	SANITARY SEWER DETAILS
DET6	SITE DETAILS
DET7	SITE DETAILS
DET8	SITE DETAILS

Make sheets 1-38 rather than their construction sheet names; revise sheet numbers on the corner of each sheet to match

Usually just want Grading and Utility plan, right?

Revise to have the following columns to compare the PUD to the GDP:

Block 11 - Residential Standard (GDP)	Proposed Block 11 Residential (Multi-family) PUD	Commercial Standard (GDP)	Proposed Commercial PUD

PUD columns should show the proposed values for minimum lot area, coverage, etc.

PROPERTY DESCRIPTION & SIGNATURE BLOCK

OWNERSHIP SIGNATURE BLOCK

By signing this PUD, the owner acknowledges and accepts all the requirements and intent set forth in this PUD. Witness my/our hand(s) seal(s) this ___ day of _____, 20___.

_____
Owner Name and Signature

_____ (Notary Seal)
Notary Name (print)

_____
Notary Signature

My Commission Expires _____

CLERK AND RECORDER CERTIFICATE
(COUNTY OF BOULDER, STATE OF COLORADO)

I hereby certify that this instrument was filed in my office at _____ o'clock, ____. M., this _____ day of _____ , 20___, and is recorded in Plan File _____ , Fee _____ paid. _____ Film No. _____ Reception.

_____
Clerk & Recorder

_____
Deputy

PLANNING COMMISSION CERTIFICATE

Approved this ___ day of _____, 20___ by the Planning Commission of the City of Louisville, Colorado.
Resolution No. _____, Series _____

"Recommended approval"

CITY COUNCIL CERTIFICATE

Approved this ___ day of _____, 20___ by the City Council of the City of Louisville, Colorado.
Resolution No. _____, Series _____

(City Seal)

_____
Mayor Signature

_____
City Clerk Signature

Make sheets 1-38 rather than their construction sheet names; revise sheet numbers on the corner of each sheet to match

NORTH END MARKET

PUD AMENDMENT

LOUISVILLE, CO

PREPARED BY:

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NORTH

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	PUD	8/23/2016
02	MYLAR	7/27/2017

REVISIONS

No.	DESCRIPTION	DATE
01	AMENDMENT	03/25/2021
02	AMENDMENT	06/23/2021
03	AMENDMENT	12/10/2021
04	AMENDMENT	06/17/2022

COVER

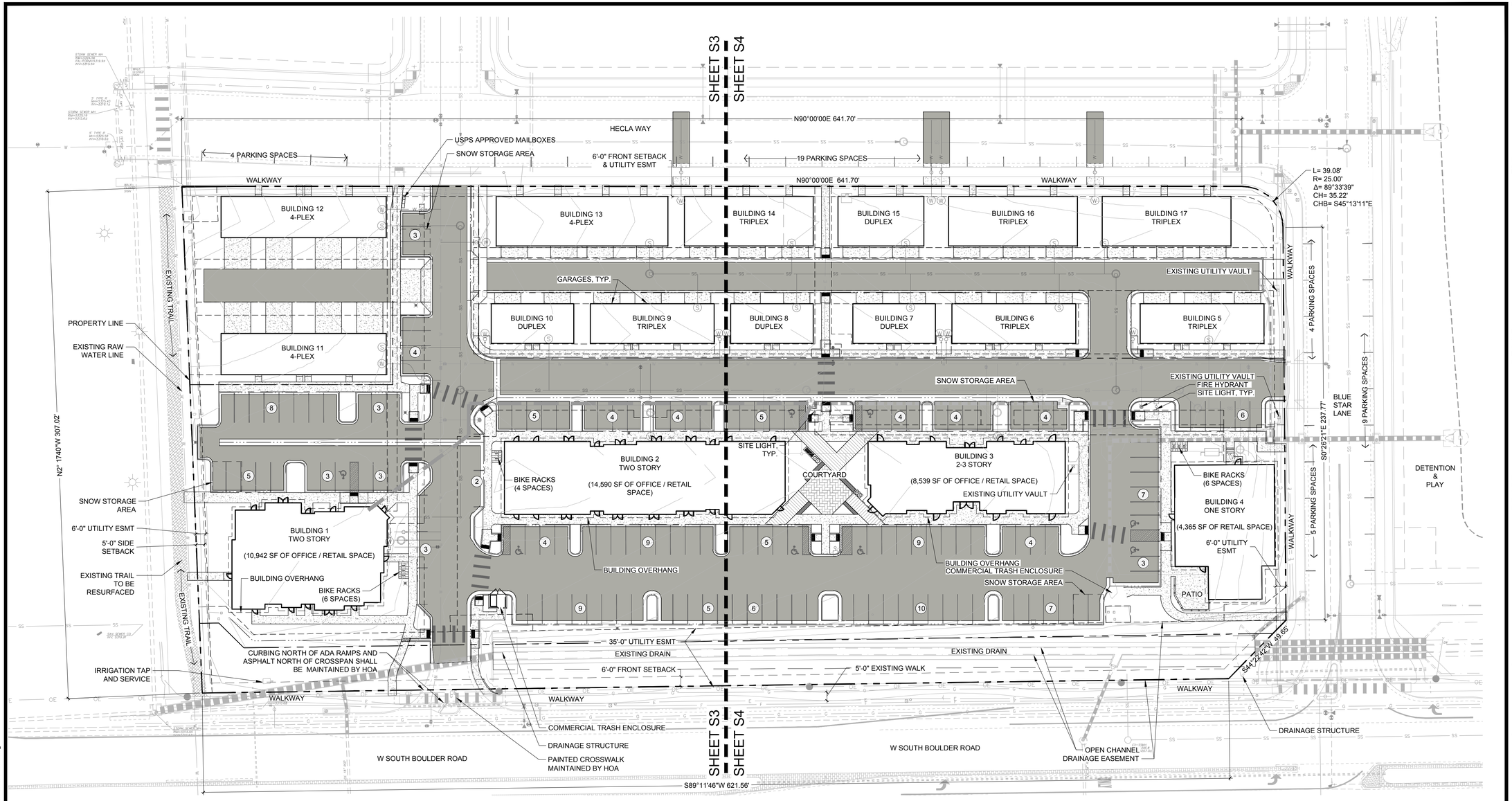
SEAL:

ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

DRAWING NUMBER: S1

Plotted By: Joel Weikert **Layout:** 1 COVER **Printed On:** 6/16/2022 6:39 PM **File Name:** Cover.dwg



LEGEND

- BIKE RACK
- WALK CHASE
- DRAIN PIPE
- DRAIN INLET
- MANHOLE
- WATER METER
- FIRE HYDRANT
- PARKING COUNT
- PROPERTY LINE
- RIGHT-OF-WAY / LOT PROPERTY LINE
- EASEMENT LINE
- BUILDING SETBACK LINE
- SS — PROPOSED SANITARY SEWER SERVICE LINE
- PROPOSED STORM DRAIN LINE
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- F — EXISTING FIBER OPTIC LINE
- ASPHALT
- CONCRETE
- CRUSHED FINES TRAIL
- PAVER 1
- PAVER 2

NOTES

1. REFER TO UTILITY PLANS FOR LOCATIONS OF STORM DRAINAGE STRUCTURES, UTILITY MAINS AND SERVICES.
2. REFER TO THE CIVIL ENGINEERING PLANS FOR DETAILED INFORMATION OF PROPOSED TOPOGRAPHY, UTILITY, AND STREET IMPROVEMENTS.
3. REFER TO THE PLAT FOR LOT AREAS, TRACT SIZES, EASEMENTS, LOT DIMENSIONS, UTILITY EASEMENTS, OTHER EASEMENTS, AND OTHER SURVEY INFORMATION.
4. ALL SIDEWALKS AND RAMPS WILL CONFORM TO CITY STANDARDS. ALL HANDICAP PARKING SPACES, AND RAMPS ARE TO BE VERIFIED WITH CIVIL ENGINEER FOR GRADING, DRAINAGE, AND ACCESSIBLE ROUTE CONSIDERATIONS. HANDICAP PARKING SPACES SHOULD SLOPE NO MORE THAN 1:48 IN ANY DIRECTION. ALL ACCESSIBLE ROUTES SHOULD SLOPE NO MORE THAN 1:20 IN DIRECTION OF TRAVEL AND NO MORE THAN 1:48 CROSS SLOPE.
5. ACCESSIBLE RAMPS TO BE PROVIDED AT ALL STREET AND DRIVE INTERSECTIONS AND AT ALL DESIGNATED ACCESSIBLE PARKING SPACES.
6. PLACEMENT OF ALL LANDSCAPING SHALL BE IN ACCORDANCE WITH THE SIGHT DISTANCE CRITERIA AS SPECIFIED BY THE CITY OF LOUISVILLE. NO STRUCTURES OR LANDSCAPE ELEMENTS GREATER THAN 24" SHALL BE ALLOWED WITHIN THE SIGHT DISTANCE TRIANGLE OR EASEMENT WITH THE EXCEPTION OF DECIDUOUS TREES PROVIDING THE LOWEST BRANCH IS AT LEAST 6' FROM GRADE. ANY FENCES WITHIN THE SIGHT DISTANCE TRIANGLE OR EASEMENT SHALL BE NO MORE THAN 42" IN HEIGHT AND AT LEAST 80% OPEN.
7. FIRE ACCESS REMAINS AS APPROVED ON ORIGINAL FDP FOR PHASE II
8. HOA SHALL MAINTAIN PRIVATE WALK CONNECTIONS TO PUBLIC TRAIL AND PUBLIC WALKS.
9. HOA SHALL MAINTAIN THE PAINTED CROSSWALK WITHIN THE PRIVATE DRIVE ADJACENT TO SOUTH BOULDER ROAD.
10. HOA SHALL PROVIDE SNOW REMOVAL FROM PUBLIC WALKS ON HELCA WAY, BLUE STAR LANE, AND S. BOULDER ROAD ADJACENT THE SITE.
11. HOA TO PRIVATELY MAINTAIN ONSITE STORM SEWER.
12. FIRE LANES SHALL BE PRIVATELY MAINTAINED BY THE HOA. RESIDENTIAL FIRE LINE PIPING COMMENCES DOWNSTREAM FROM THE GATE VALVE CONNECTION AT CITY WATER MAIN.
13. PARKING REQUIREMENTS WILL BE VERIFIED AT BUILDING PERMIT TO CONFIRM COMPLIANCE WITH PARKING MINIMUMS FOR EACH USE ON SITE.
14. FLOOR AREA RATION FOR BLOCK 11 IS 0.19 FAR. THIS WAS CALCULATED WITH THE GROSS AREA OF BLOCK 11.
15. SURFACE RESTORATION WITHIN EXCLUSIVE UTILITY EASEMENTS (E.G. PAVEMENT, LANDSCAPE, ETC.) DAMAGED DURING CITY UTILITY MAINTENANCE/ REPAIR OPERATIONS SHALL BE RESTORED BY THE OWNER/ HOA AT THEIR EXPENSE. CITY TO COORDINATE PLANNED REPAIRS WITH HOA TO MITIGATE EXTENSIVE MAINTENANCE REPAIRS.

BUILDING KEY

BUILDING	USE	DWELLING UNITS OR SQUARE FOOTAGE
1	COMMERCIAL	10,942 SF OFFICE / RETAIL
2	COMMERCIAL	14,590 SF OFFICE / RETIAL
3	COMMERCIAL	8,539 SF OFFICE / RETIAL
4	COMMERCIAL	4,365 SF RETAIL
5	RESIDENTIAL	3 D.U. (TRIPLEX)
6	RESIDENTIAL	3 D.U. (TRIPLEX)
7	RESIDENTIAL	2 D.U. (DUPLEX)
8	RESIDENTIAL	2 D.U. (DUPLEX)
9	RESIDENTIAL	3 D.U. (TRIPLEX)
10	RESIDENTIAL	2 D.U. (DUPLEX)
11	RESIDENTIAL	4 D.U. (4-PLEX)
12	RESIDENTIAL	4 D.U. (4-PLEX)
13	RESIDENTIAL	4 D.U. (4-PLEX)
14	RESIDENTIAL	3 D.U. (TRIPLEX)
15	RESIDENTIAL	2 D.U. (DUPLEX)
16	RESIDENTIAL	3 D.U. (TRIPLEX)
17	RESIDENTIAL	3 D.U. (TRIPLEX)

COMMERICLA BUILDINGS: AREA BY STORY

BUILDING NUMBER	FLOOR	AREA (SF)	TOTAL AREA (SF)
1	1	5,471 SF (RETAIL)	10,942 SF
	2	5,471 SF (OFFICE)	
2	1	7,295 SF (RETAIL)	14,590 SF
	2	7,295 SF (OFFICE)	
3*	1	3,742 SF (RETAIL)	8,539 SF
	2	4164 SF (OFFICE)	
	3	633 SF (OFFICE)	
4	1	5,471 SF (RETAIL)	4,365 SF
TOTAL			38,436 SF

* SF #'S ON COMMERCIAL BUILDING NUMBER 3 ARE SHOWN FOR RETNABLE SPACE INTENDED FOR COMMERCE. SQUARE FOOTAGES FOR VESTIBULES, MECHANICAL ROOMS, ELEVATORS, AND STAIRS NOT INCLUDED IN FIGURE.

NORTH END MARKET

PUD AMENDMENT

LOUISVILLE, CO

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NORTH
SCALE: 1"=30'-0"
0 15 30 60
ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	PUD	8/23/2016
02	MYLAR	7/27/2017

REVISIONS

No.	DESCRIPTION	DATE
01	AMENDMENT	03/25/2021
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OVERALL SITE PLAN

SEAL:

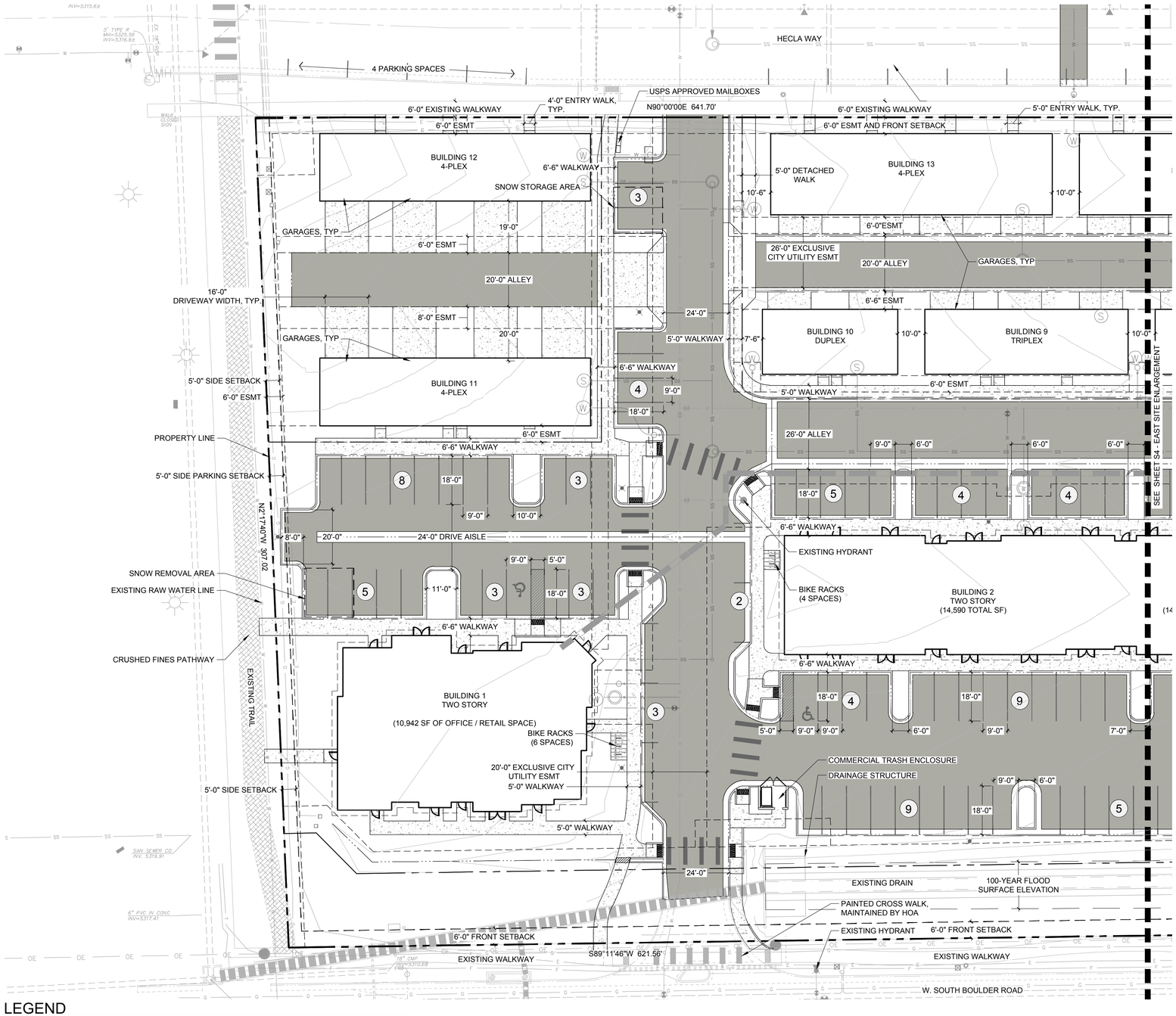
ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

DRAWING NUMBER:

S2

Plotted By: Joel Weikert **Layout:** OVERALL SITE PLAN **Printed On:** 6/16/2022 6:37 PM **File Name:** Site Plan.dwg



LEGEND

- BIKE RACK
- WALK CHASE
- DRAIN PIPE
- DRAIN INLET
- MANHOLE
- WATER METER
- FIRE HYDRANT
- PARKING COUNT (#)
- ASPHALT
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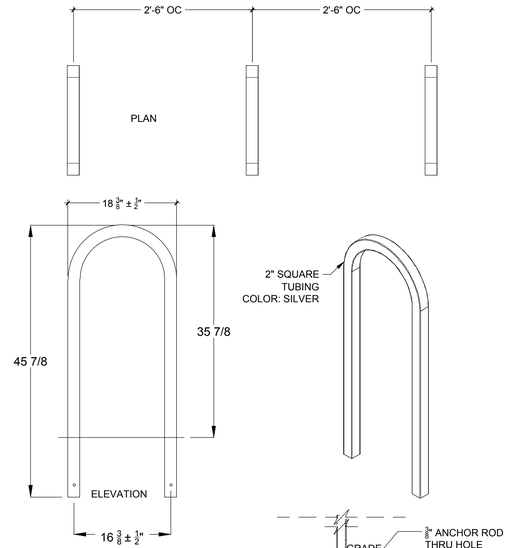
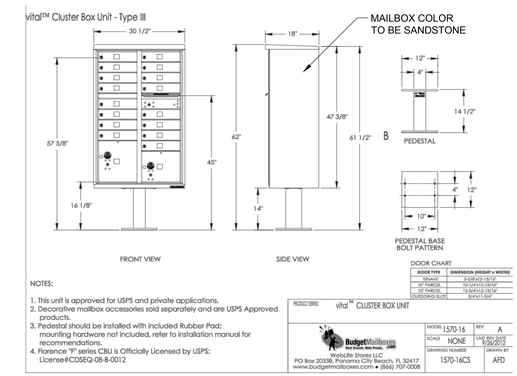


NOTES:
1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. PROVIDE COLOR SAMPLES TO OWNER'S REPRESENTATIVE.
3. SEE SITE PLAN FOR LOCATION OR CONSULT OWNER.

1 BIKE RACK

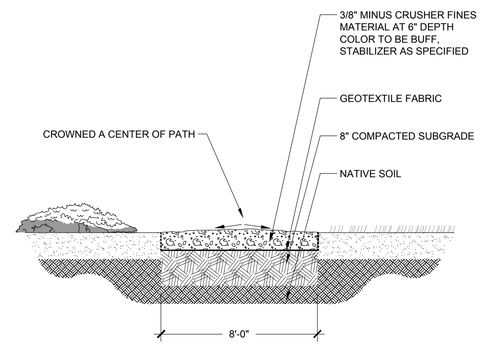
1" = 1'-0" OP-NO2-01



NOTES:
1. This unit is approved for USPS and private applications.
2. Decorative mailbox accessories sold separately and are USPS Approved products.
3. Pedestal should be installed with included Rubber Pad; mounting hardware not included, refer to installation manual for recommendations.
4. Florence "F" series CBU is Officially Licensed by USPS: License#CD5EQ-08-8-0012

2 MAILBOX

1/2" = 1'-0" OP-NO2-17



3 CRUSHER FINES PATHWAY

SCALE: NTS OP-NO2-03

NORTH END MARKET

PUD AMENDMENT

LOUISVILLE, CO

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NORTH SCALE: 1"=20'-0" (0, 10, 20, 40)

ORIGINAL SIZE 24X36

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SITE PLAN ENLARGEMENT

SEAL:

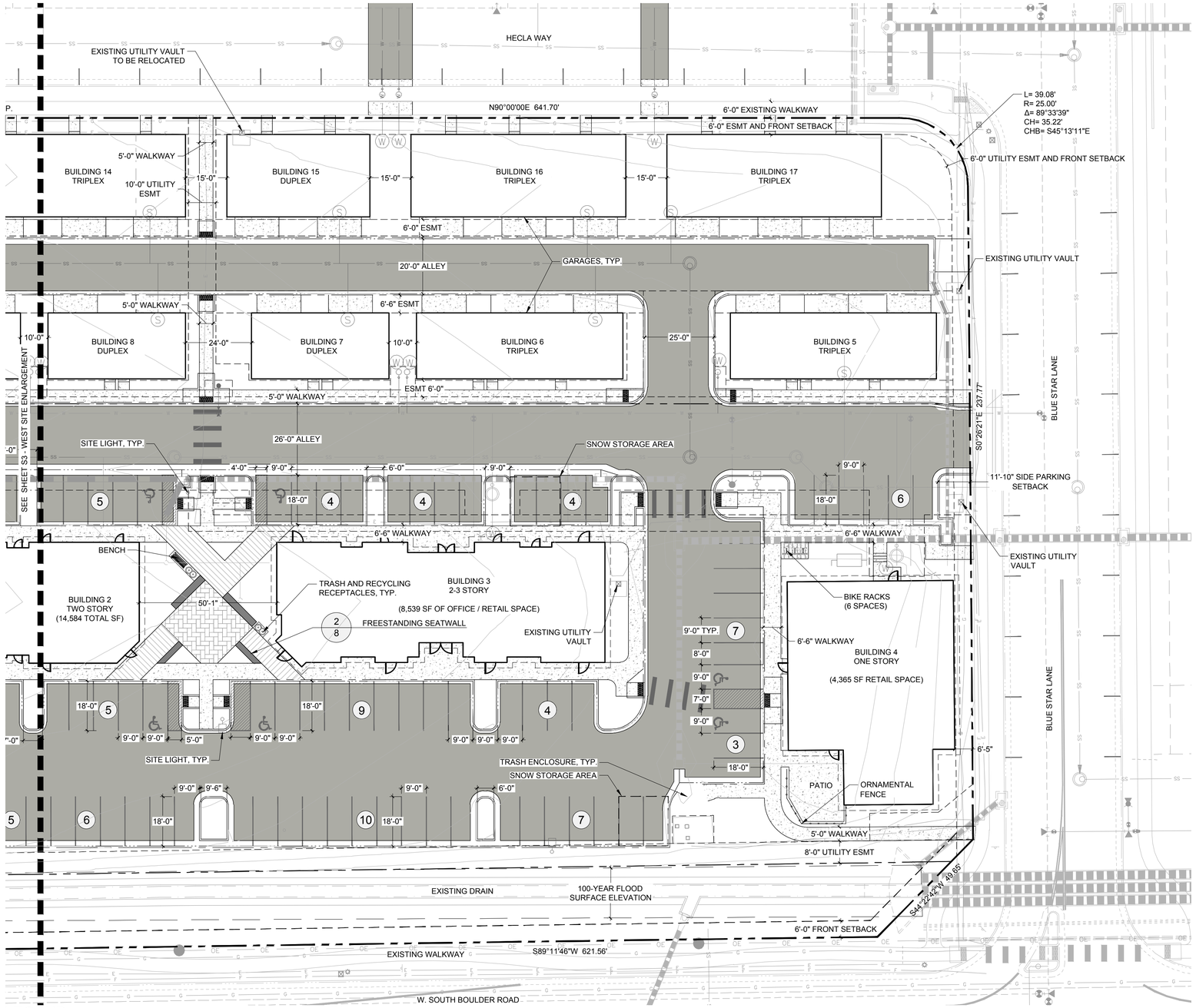
ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

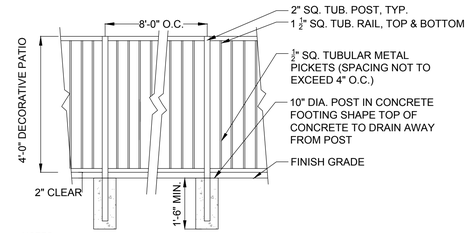
PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

DRAWING NUMBER:

S3

Plotted By: Joel Weikert **Layout:** SITE PLAN ENLARGEMENT **Printed On:** 6/16/2022 6:37 PM **File Name:** Site Plan.dwg

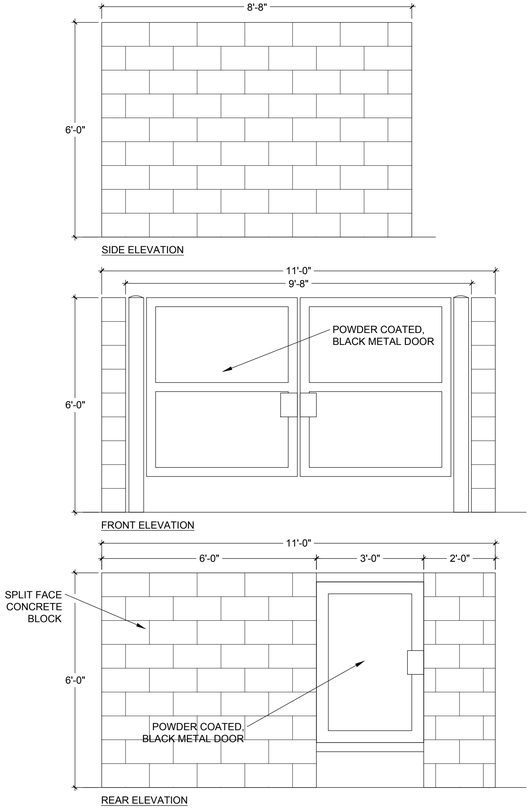




NOTES:
1. GRIND ALL WELDS SMOOTH
2. ALL METAL PIECES TO BE PREFINISHED ALUMINUM. COLOR TO BE BLACK SEMI-GLOSS.
3. PLATES TO BE WELDED TO THE POST WITH A CONTINUOUS 1/4" WELD GROUND SMOOTH AND ALL PRIMED/PAINTED TO MATCH THE FENCE. ANCHOR SYSTEM TO BE RED HEAD TRU-BOLT WEDGE ANCHOR 1/4" X 21/8" WWS04S.S (OR APPROVED EQUAL).
4. SELF-CLOSING SPRING HINGES SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES THE DOOR WILL MOVE TO THE CLOSED POSITION IN 1.5 SECONDS MINIMUM.

1 ORNAMENTAL FENCE

NTS OP-NO2-10



2 TRASH ENCLOSURE ELEVATIONS

1/2" = 1'-0" OP-NO2-19

LEGEND

BIKE RACK	PROPERTY LINE
WALK CHASE	RIGHT-OF-WAY / LOT PROPERTY LINE
DRAIN PIPE	EASEMENT LINE
DRAIN INLET	BUILDING SETBACK LINE
MANHOLE	PROPOSED SANITARY SEWER SERVICE LINE
WATER METER	PROPOSED STORM DRAIN LINE
FIRE HYDRANT	PROPOSED WATER SERVICE LINE
PARKING COUNT	PROPOSED STORM DRAIN
	EXISTING SANITARY SEWER SERVICE LINE
ASPHALT	EXISTING STORM DRAIN LINE
CONCRETE	EXISTING WATER SERVICE LINE
	EXISTING STORM DRAIN
CRUSHED FINES	EXISTING FIBER OPTIC LINE
PAVER 1	PAVER 2

NORTH END MARKET

PUD AMENDMENT

LOUISVILLE, CO

PREPARED BY:

ripley design
LANDSCAPE ARCHITECTURE, LAND PLANNING
419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.225.6657 | www.ripleydesigninc.com

PLANNER / LANDSCAPE ARCHITECT
RIPLEY DESIGN INC
Sam Coutts
419 CANYON AVE #200
FORT COLLINS, CO 80550
p. 970.224.5828

OWNER
RIDGELINE DEVELOPMENT CORPORATION
Michael Markel
5723 Arapahoe Ave. #2B
Boulder, CO 80303
p. 303.449.8689

ENGINEER
MPD ENGINEERING, LLC
Marc Dolezal, P.E.
1550 QUINCE AVE.
BOULDER, CO 80304
p: 303.498.9224

NORTH SCALE: 1"=20'-0" (0 10 20 40)

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	PUD	8/23/2016
02	MYLAR	7/27/2017

REVISIONS

No.	DESCRIPTION	DATE
01	AMENDMENT	03/25/2021
02	AMENDMENT	06/23/2021
03	AMENDMENT	12/10/2021
04	AMENDMENT	06/17/2022

SITE PLAN ENLARGEMENT

SEAL:

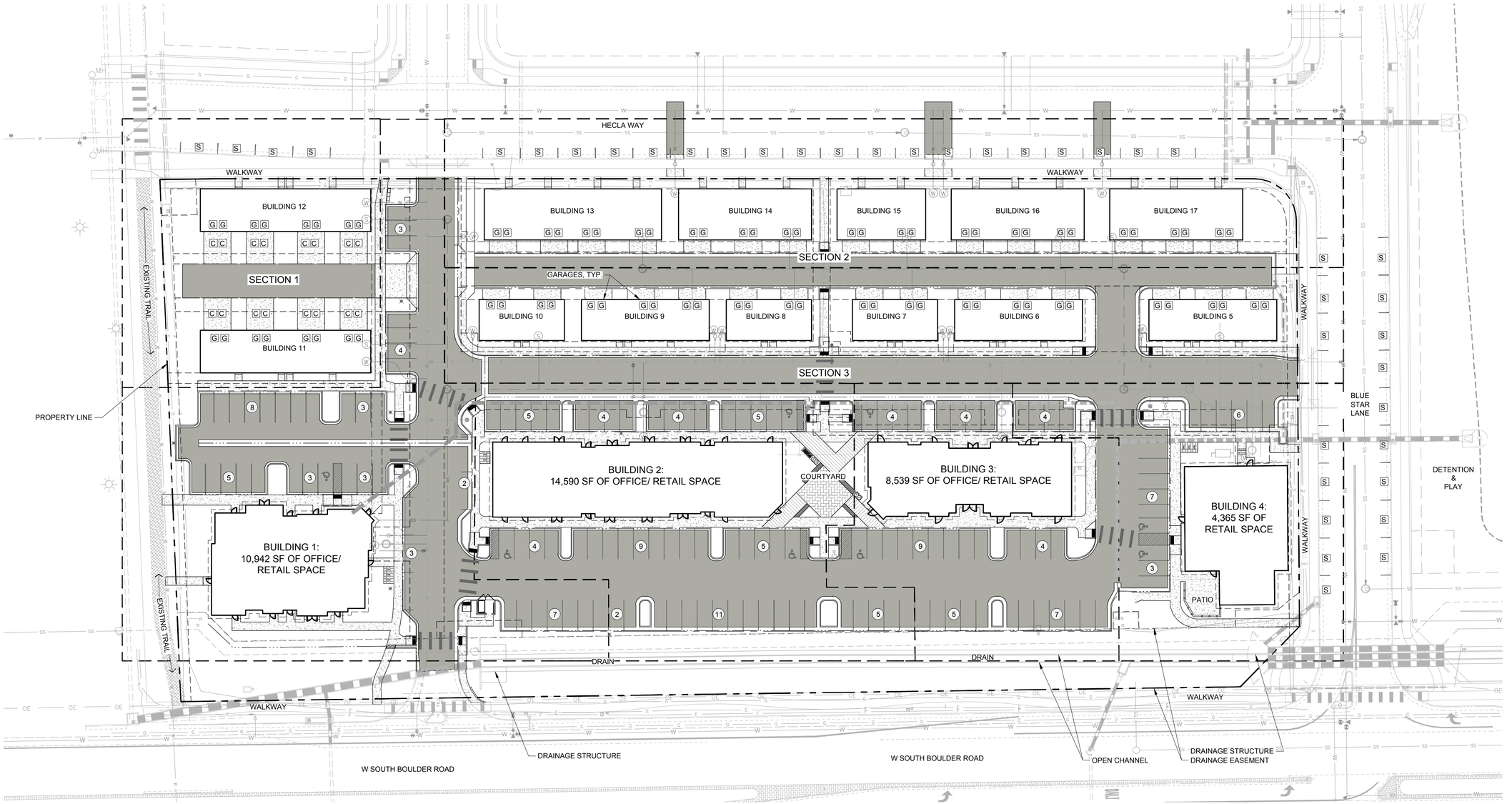
ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

DRAWING NUMBER:

S4

Plotted By: Joel Weikert **Layout:** SITE PLAN ENLARGMENT **Printed On:** 6/16/2022 6:37 PM **File Name:** Site Plan.dwg



PARKING CALCULATIONS - RESIDENTIAL

SECTION 1 - QUADRIPLEX			RATIO		REQUIRED		PROVIDED (GARAGE & DRIVEWAY)
8	UNITS	(2-BED UNITS)	1.50	SPACES / UNIT	12.0	SPACES	
TOTAL					**12**	**SPACES**	32
SECTION 2 - QUADRIPLEX, DUPLEX, & TRIPLEX			**RATIO**		**REQUIRED**		**PROVIDED (GARAGE)**
15	UNITS	(3-BED UNITS)	2.00	SPACES / UNIT	30	SPACES	
TOTAL					**30**	**SPACES**	30
SECTION 3 - DUPLEX & TRIPLEX			**RATIO**		**REQUIRED**		**PROVIDED (GARAGE)**
15	UNITS	(2-BED UNITS)	1.50	SPACES / UNIT	23	SPACES	
TOTAL					**23**	**SPACES**	30

RESIDENTIAL TOTAL		REQUIRED		PROVIDED
38	DWELLING UNITS	64.5	SPACES	92

PARKING CALCULATIONS - COMMERCIAL

BUILDING 1			RATIO		REQUIRED		PROVIDED OFF-STREET
5471	SF	RETAIL	1.00	SPACES / 250 S.F.	21.9	SPACES	
5471	SF	OFFICE	1.00	SPACES / 300 S.F.	18.2	SPACES	
TOTAL 10,942 SQ.FT.					**40.1**	**SPACES**	41 (37)
BUILDING 2			**RATIO**		**REQUIRED**		**PROVIDED OFF-STREET**
7295	SF	RETAIL	1.00	SPACES / 250 S.F.	29.2	SPACES	
7295	SF	OFFICE	1.00	SPACES / 300 S.F.	24.3	SPACES	
TOTAL 14,590 SQ.FT.					**53.5**	**SPACES**	54
BUILDING 3			**RATIO**		**REQUIRED**		**PROVIDED OFF-STREET**
3742	SF	RETAIL	1.00	SPACES / 250 S.F.	15.0	SPACES	
4797	SF	OFFICE	1.00	SPACES / 300 S.F.	16.0	SPACES	
TOTAL 8,539 SQ.FT.					**31.0**	**SPACES**	33 (31)
BUILDING 4			**RATIO**		**REQUIRED**		**PROVIDED OFF-STREET**
4365	SF	RETAIL	1.00	SPACES / 250 S.F.	17.5	SPACES	
TOTAL 4,365 SQ.FT.					**17.5**	**SPACES**	20 (18)

* PARENTHESIS INDICATE THE NUMBER OF PARKING SPACES AVAILABLE WHEN SPACES DESINGATED AS SNOW STORAGE ARE IN USE.

COMMERCIAL TOTAL		REQUIRED		PROVIDED OFF-STREET
38,436	SQ.FT.	142	SPACES	148

PARKING CALCULATIONS - ON STREET

ON-STREET	RATIO	REQUIRED		PROVIDED ON-STREET
HECLA WAY	NA	NA	SPACES	23
BLUE STAR LANE	NA	NA	SPACES	17
		0	**SPACES**	**40**

PARKING CALCULATIONS - OVERALL

BUILDING TYPE	REQUIRED		PROVIDED		DIFFERENCE
COMMERCIAL(OFFICE/ RETAIL = 38,436 SF)	142	SPACES	148	SPACES	
ON STREET	0	SPACES	40	SPACES	
TOTAL	**142**	**SPACES**	**188**	**SPACES**	**46**

ACCESSIBLE PARKING SPACES

OFF-STREET		REQUIRED		PROVIDED
148	COMMERCIAL	6	SPACES	8 (2 VAN ACCESSIBLE)

BICYCLE PARKING CALCULATIONS - CDDSG 3.4.E

	VEHICULAR PARKING SPACES		BICYCLE PARKING SPACES REQUIRED*	BICYCLE PARKING SPACES PROVIDED
COMMERCIAL LOT	148	SPACES	14.8	16

* REQUIRED BICYLCE PARKING IS CALCULATED AS FOLLOWS: 148 PARKING SPACES / 10 = 14.8 BICYCLE SPACES.

LEGEND

- G — GARAGE PARKING SPACE
- C — DRIVEWAY PARKING SPACE
- S — ON-STREET PARKING SPACE

NORTH END MARKET

PUD AMENDMENT

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NORTH SCALE: 1"=30'-0" (0, 15, 30, 60)

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
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REVISIONS

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04	AMENDMENT	06/17/2022

PARKING PLAN

SEAL:

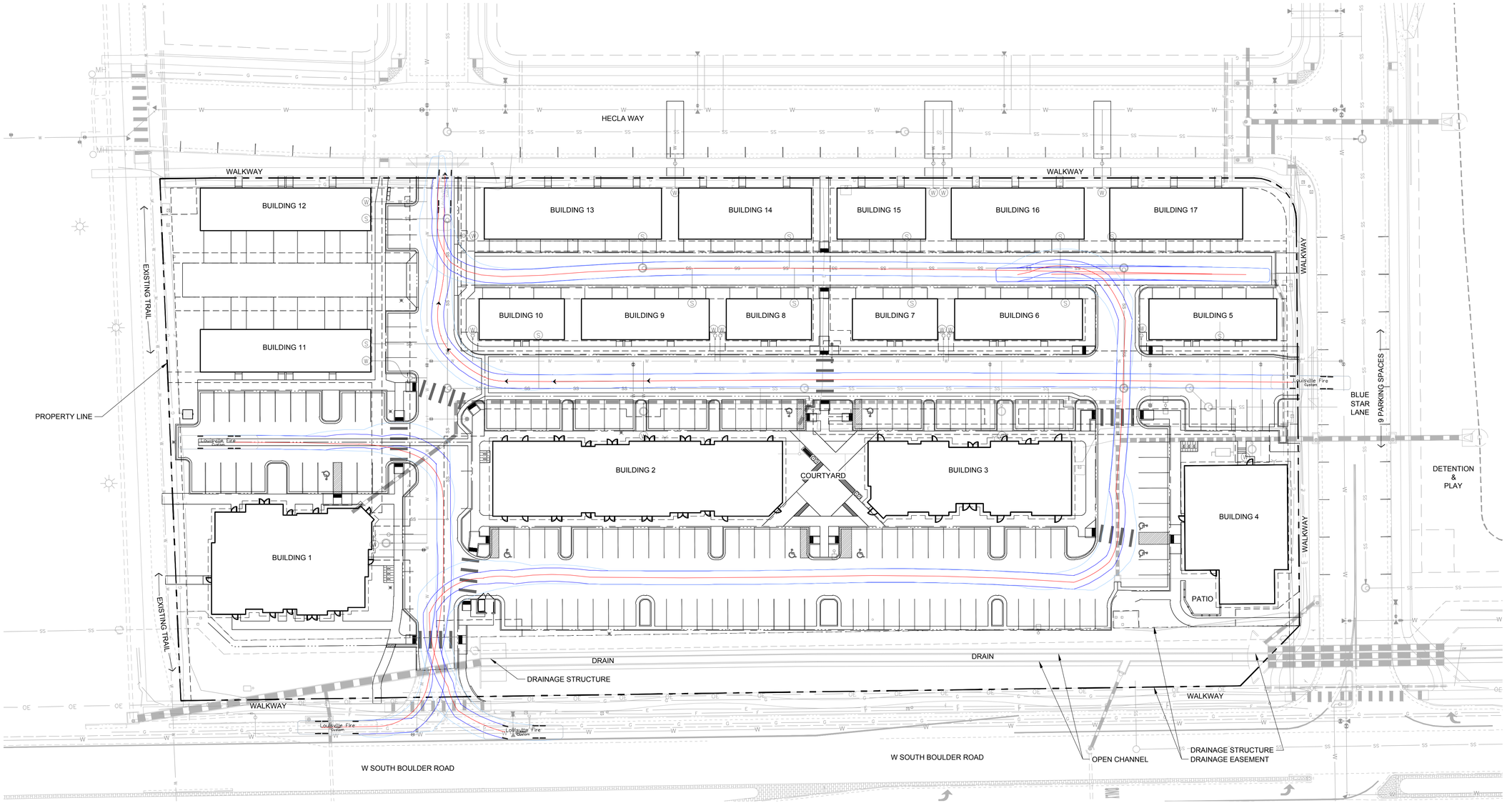
ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

DRAWING NUMBER:

S5

Plotted By: Joel Weikert **Layout:** Parking Plan **Printed On:** 6/16/2022 6:37 PM **File Name:** Parking Plan.dwg



LEGEND

- TRUCK OVERHANG
- WHEEL PATH
- CENTER LINE

Plotted By: Joel Weikert **Layout:** Emergency Access Plan **Printed On:** 6/16/2022 6:37 PM **File Name:** Emergency Access Plan2.dwg

NORTH END MARKET

PUD AMENDMENT

LOUISVILLE, CO

PREPARED BY:

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EMERGENCY ACCESS PLAN

SEAL:

ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

DRAWING NUMBER:

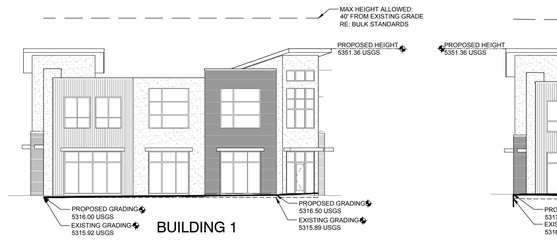
S6

BUILDING 1 - NORTH ELEVATION

1/16" = 1'-0"

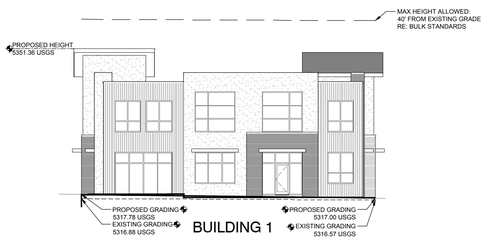
BUILDING 1 - SOUTH ELEVATION

1/16" = 1'-0"



BUILDING 1 - EAST ELEVATION

1/16" = 1'-0"



BUILDING 1 - WEST ELEVATION

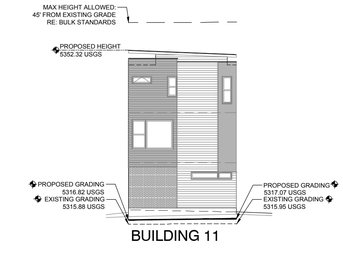
1/16" = 1'-0"

BUILDING 11 - NORTH ELEVATION

1/16" = 1'-0"

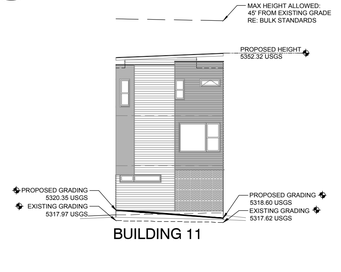
BUILDING 11 - SOUTH ELEVATION

1/16" = 1'-0"



BUILDING 11 - EAST ELEVATION

1/16" = 1'-0"



BUILDING 11 - WEST ELEVATION

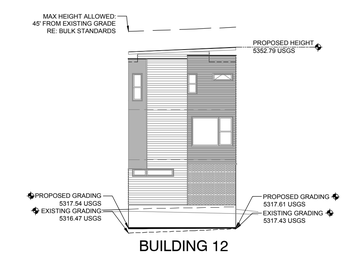
1/16" = 1'-0"

BUILDING 12 - NORTH ELEVATION

1/16" = 1'-0"

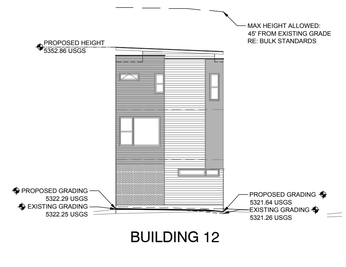
BUILDING 12 - SOUTH ELEVATION

1/16" = 1'-0"



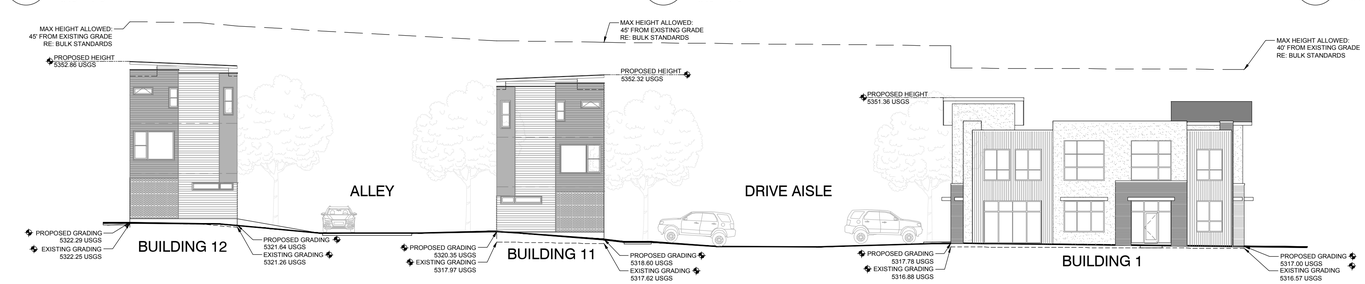
BUILDING 12 - EAST ELEVATION

1/16" = 1'-0"



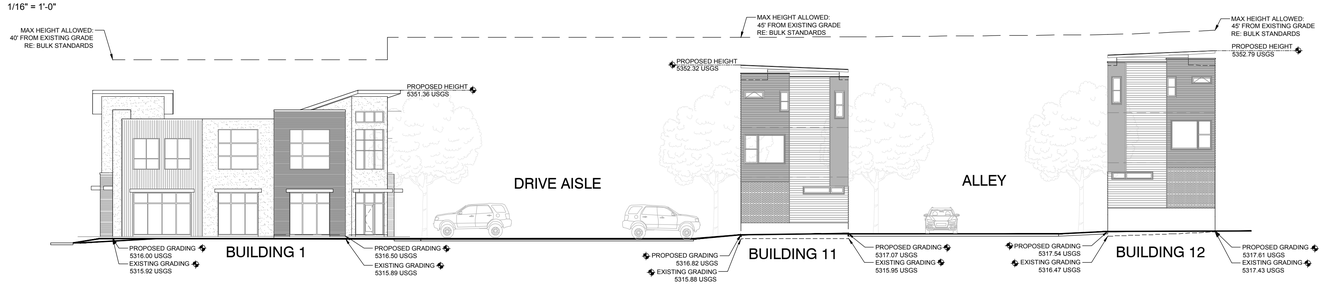
BUILDING 12 - WEST ELEVATION

1/16" = 1'-0"



NORTH/SOUTH SITE SECTION - WEST ELEVATION FACING EAST (BUILDINGS 1, 11, & 12)

1/16" = 1'-0"



NORTH/SOUTH SITE SECTION - EAST ELEVATION FACING WEST(BUILDINGS 1, 11, & 12)

1/16" = 1'-0"

ARCHITECTURAL MATERIAL LEGEND

- = ASPHALT SHINGLE ROOF
- = BOARD AND BATTAN SIDING, TYP.
- = HORIZONTAL SIDING W/ 6" EXPOSURE AND MITERED CORNERS
- = FIBER CEMENT PANELS
- = THIN BRICK OR TILE VENEER
- = STUCCO FINISH
- = PRE-STAINED CEMENTIOUS LAP SIDING W/ 6" EXPOSURE

* APPROVED EXTERIOR COLOR LIST ON FILE WITH THE CITY

NORTH END MARKET

PUD AMENDMENT

LOUISVILLE, CO

PREPARED BY:

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ORIGINAL SIZE 24X36

ISSUED

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REVISIONS

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BUILDING SECTION ELEVATIONS

SEAL:

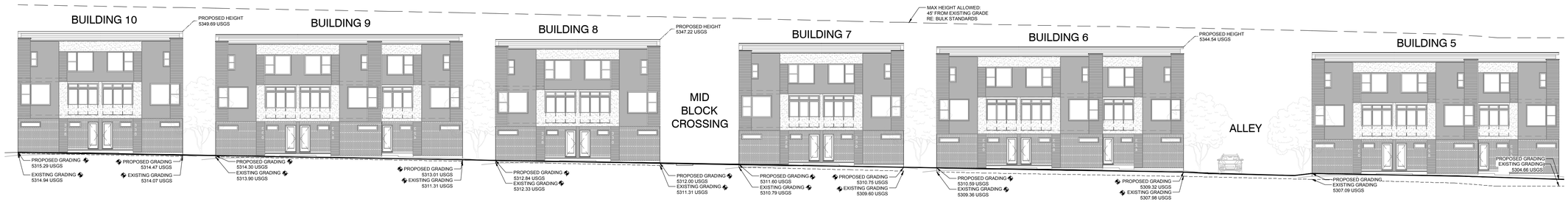
ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

DRAWING NUMBER:

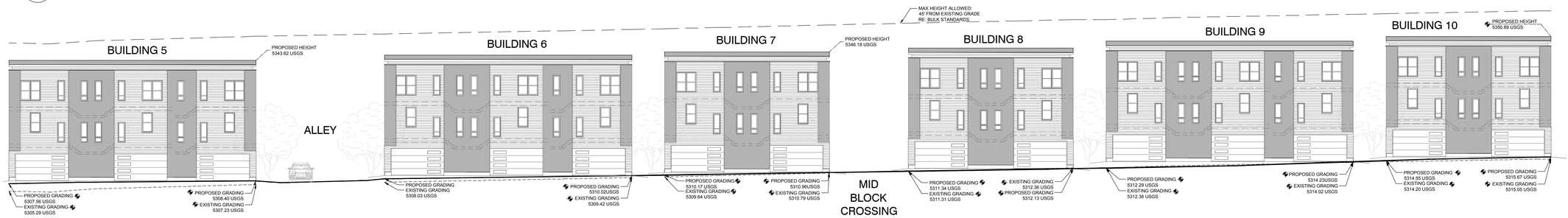
S7

Plotted By: Joel Weikert **Layout:** BUILDING SECTION ELEVATIONS **Printed On:** 6/16/2022 6:37 PM **File Name:** Elevations_PUD.dwg



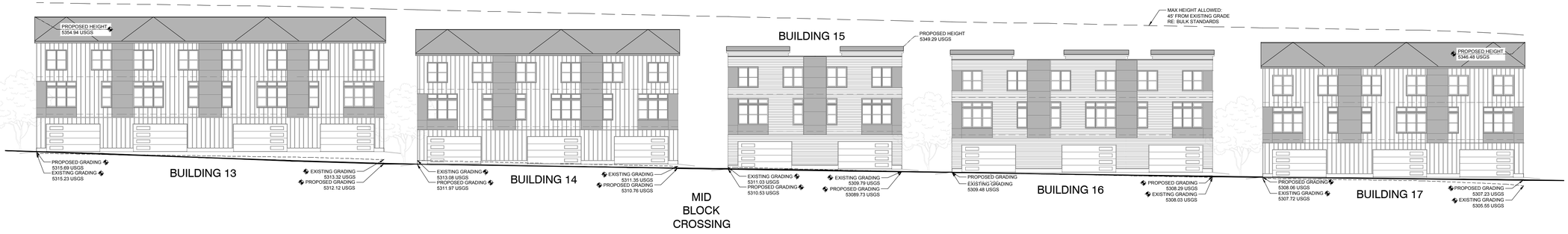
WEST/EAST SECTION LINE - SOUTH ELEVATION FACING NORTH (BUILDINGS 5, 6, 7, 8, 9, &10)

1/16" = 1'-0"



EAST/WEST SECTION LINE - NORTH ELEVATION FACING SOUTH (BUILDINGS 5, 6, 7, 8, 9, &10)

1/16" = 1'-0"



WEST/EAST SECTION LINE - SOUTH ELEVATION FACING NORTH (BUILDINGS 13,14,15,16, & 17)

1/16" = 1'-0"

ARCHITECTURAL MATERIAL LEGEND

- = ASPHALT SHINGLE ROOF
- = BOARD AND BATTAN SIDING, TYP.
- = HORIZONTAL SIDING W/ 6" EXPOSURE AND MITERED CORNERS
- = FIBER CEMENT PANELS
- = THIN BRICK OR TILE VENEER
- = STUCCO FINISH
- = PRE-STAINED CEMENTIOUS LAP SIDING W/ 6" EXPOSURE

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NORTH END MARKET

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ORIGINAL SIZE 24X36

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REVISIONS

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BUILDING SECTION ELEVATIONS

SEAL:

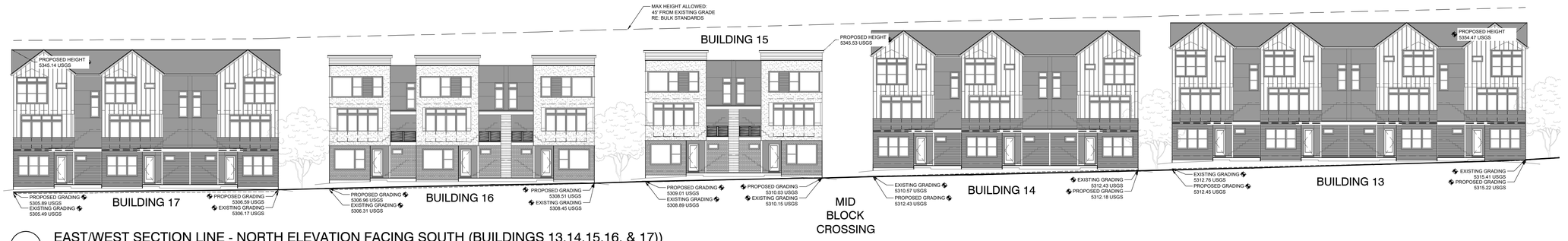
ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

DRAWING NUMBER:

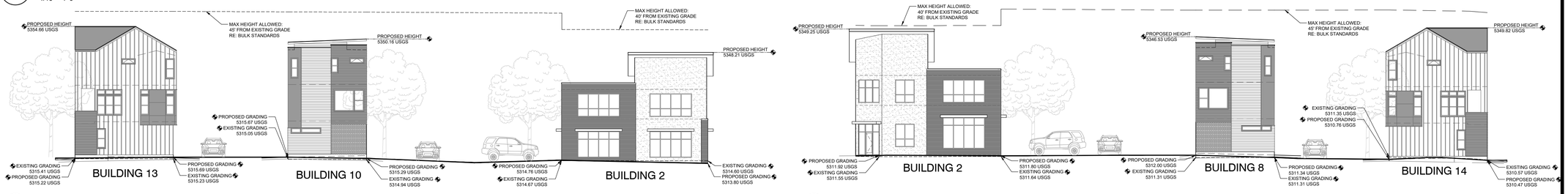
S8

Plotted By: Joel Weikert **Layout:** BUILDING SECTION ELEVATIONS 2 **Printed On:** 6/16/2022 6:37 PM **File Name:** Elevations_PUD.dwg



EAST/WEST SECTION LINE - NORTH ELEVATION FACING SOUTH (BUILDINGS 13,14,15,16, & 17))

1/16" = 1'-0"



NORTH/SOUTH SITE SECTION - WEST ELEVATION FACING EAST (BUILDINGS 2, 10, & 13)

1/16" = 1'-0"

NORTH/SOUTH SITE SECTION - EAST ELEVATION FACING WEST (BUILDINGS 2, 8,14)

1/16" = 1'-0"

NORTH/SOUTH SITE SECTION - WEST ELEVATION FACING EAST (BUILDINGS 3, 7, & 15)

1/16" = 1'-0"

NORTH/SOUTH SITE SECTION - EAST ELEVATION FACING WEST (BUILDINGS 3, 6, & 16)

1/16" = 1'-0"

BUILDING 2 - NORTH ELEVATION

1/16" = 1'-0"

BUILDING 2 - SOUTH ELEVATION

1/16" = 1'-0"

ARCHITECTURAL MATERIAL LEGEND

- = ASPHALT SHINGLE ROOF
- = BOARD AND BATTAN SIDING, TYP.
- = HORIZONTAL SIDING W/ 6" EXPOSURE AND MITERED CORNERS
- = FIBER CEMENT PANELS
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NORTH END MARKET

PUD AMENDMENT

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BUILDING SECTION ELEVATIONS

SEAL:

ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

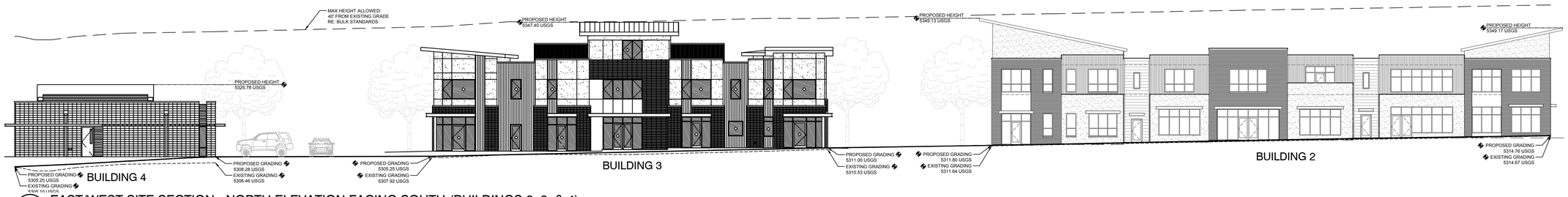
PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

DRAWING NUMBER:

S9

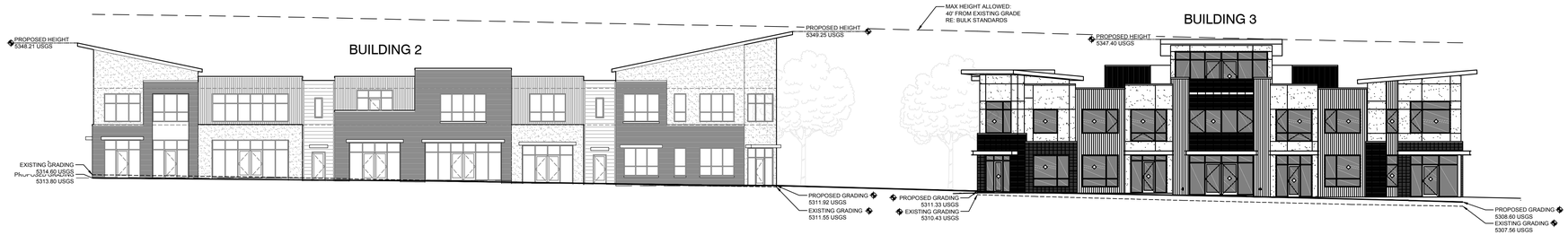
Plotted By: Joel Weikert **Layout:** BUILDING SECTION ELEVATIONS 3 **Printed On:** 6/16/2022 6:56 PM **File Name:** Elevations_PUD.dwg

1/16" = 1'-0"



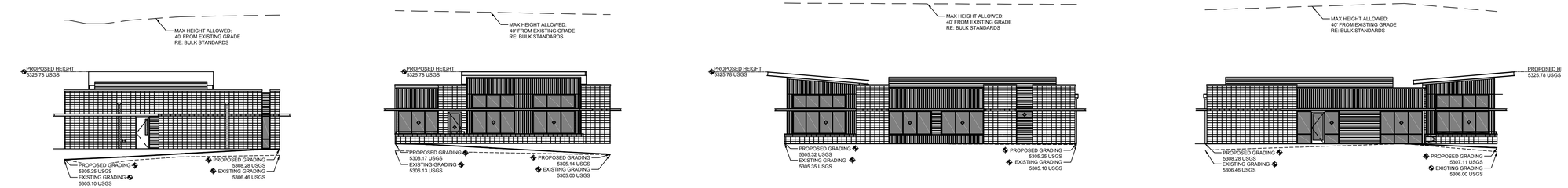
EAST/WEST SITE SECTION - NORTH ELEVATION FACING SOUTH (BUILDINGS 2, 3, & 4)

1/16" = 1'-0"



EAST/WEST SITE SECTION - SOUTH ELEVATION FACING NORTH (BUILDINGS 2 & 3)

1/16" = 1'-0"



BIULDING 4 - NORTH ELEVATION

1/16" = 1'-0"

BIULDING 4 - SOUTH ELEVATION

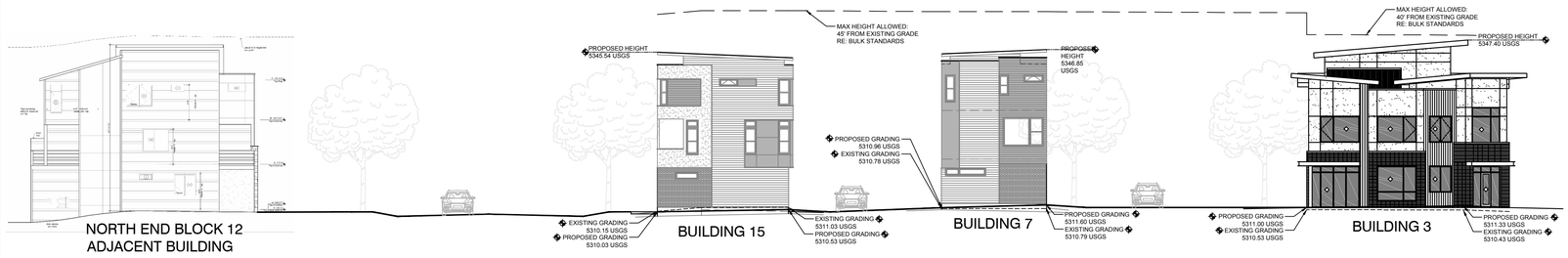
1/16" = 1'-0"

BIULDING 4 - EAST ELEVATION

1/16" = 1'-0"

BIULDING 4 - WEST ELEVATION

1/16" = 1'-0"



NORTH/SOUTH SITE SECTION - WEST ELEVATION FACING EAST (BUILDINGS 3, 7, & 15 AND ADJACENT NORTH BLOCK 12)

1/16" = 1'-0"

ARCHITECTURAL MATERIAL LEGEND

- = ASPHALT SHINGLE ROOF
- = BOARD AND BATTAN SIDING, TYP.
- = HORIZONTAL SIDING W/ 6" EXPOSURE AND MITERED CORNERS
- = FIBER CEMENT PANELS
- = THIN BRICK OR TILE VENEER
- = STUCCO FINISH
- = PRE-STAINED CEMENTIOUS LAP SIDING W/ 6" EXPOSURE

* APPROVED EXTERIOR COLOR LIST ON FILE WITH THE CITY

NORTH END MARKET

PUD AMENDMENT

LOUISVILLE, CO

PREPARED BY:

ripley design
LANDSCAPE ARCHITECTURE, LAND PLANNING
419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.225.6657 | www.ripleydesigninc.com

PLANNER / LANDSCAPE ARCHITECT
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p. 970.224.5828

OWNER
RIDGELINE DEVELOPMENT CORPORATION
Michael Markel
5723 Arapahoe Ave. #2B
Boulder, CO 80303
p. 303.449.8689

ENGINEER
MPD ENGINEERING, LLC
Marc Dolezal, P.E.
1550 QUINCE AVE.
BOULDER, CO 80304
p: 303.498.9224

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	PUD	8/23/2016
02	MYLAR	7/27/2017

REVISIONS

No.	DESCRIPTION	DATE
01	AMENDMENT	03/25/2021
02	AMENDMENT	06/23/2021
03	AMENDMENT	12/10/2021
04	AMENDMENT	06/17/2022

BUILDING SECTION ELEVATIONS

SEAL:

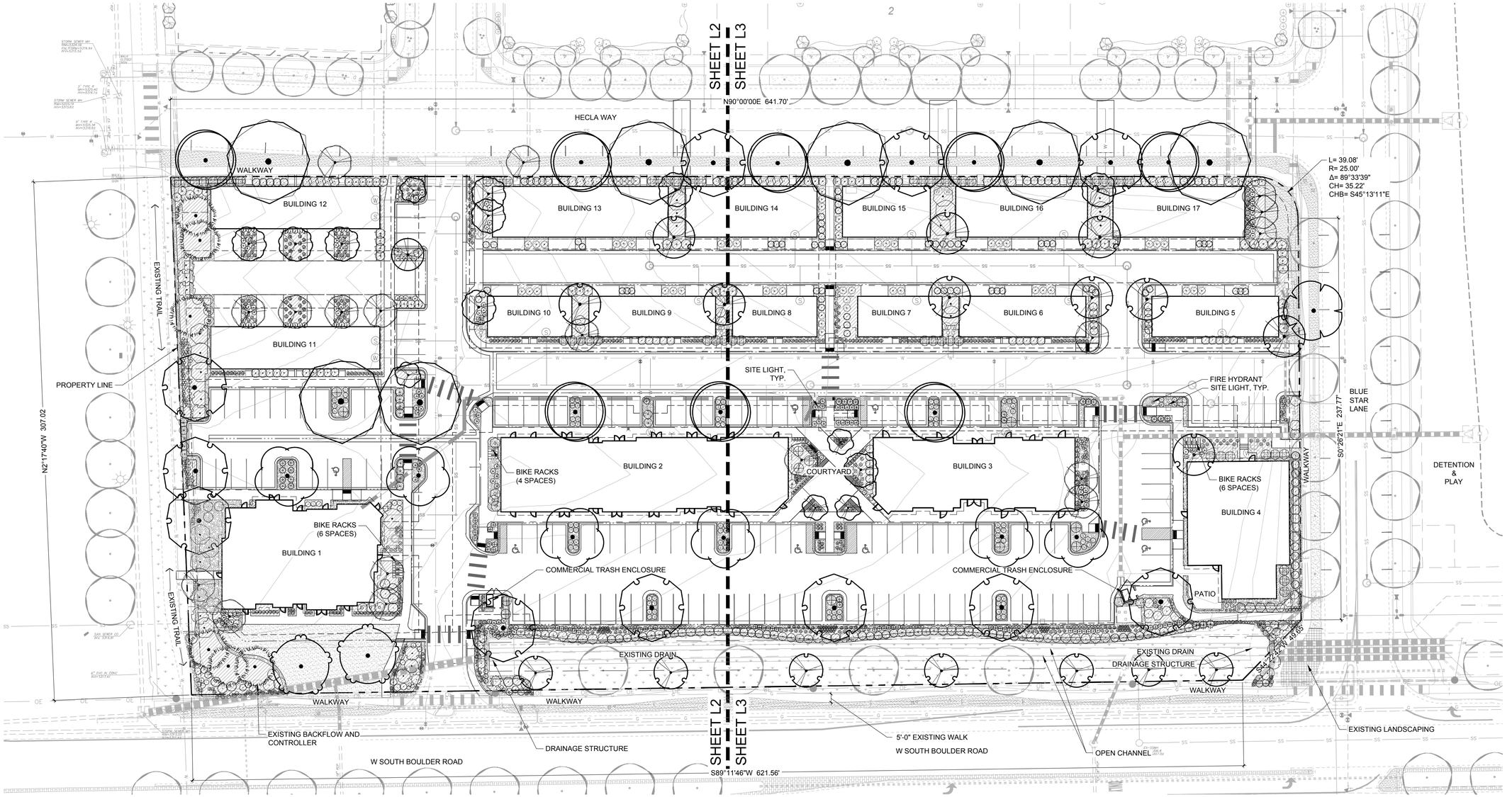
ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

DRAWING NUMBER:

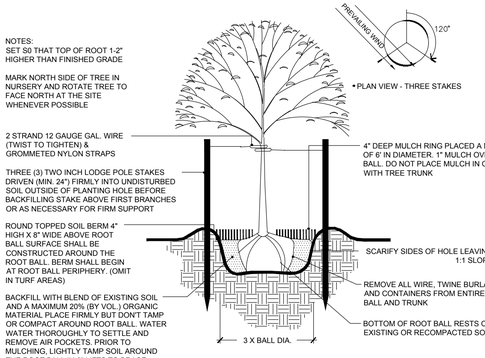
S10

Plotted By: Joel Weikert **Layout:** BUILDING SECTION ELEVATIONS 4 **Printed On:** 6/16/2022 6:57 PM **File Name:** Elevations_PUD.dwg



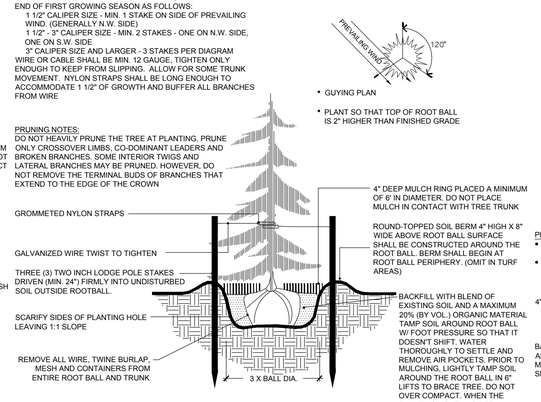
LEGEND

- BIKE RACK
- WALK CHASE
- DRAIN PIPE
- DRAIN INLET
- MANHOLE
- WATER METER
- FIRE HYDRANT
- PARKING COUNT
- EXISTING TREE
- PROPERTY LINE
- RIGHT-OF-WAY / LOT PROPERTY LINE
- EASEMENT LINE
- BUILDING SETBACK LINE
- SS — PROPOSED SANITARY SEWER SERVICE LINE
- PROPOSED STORM DRAIN LINE
- W — PROPOSED WATER SERVICE LINE
- SD — PROPOSED STORM DRAIN
- SS — EXISTING SANITARY SEWER SERVICE LINE
- EXISTING STORM DRAIN LINE
- W — EXISTING WATER SERVICE LINE
- SD — EXISTING STORM DRAIN
- F — EXISTING FIBER OPTIC LINE



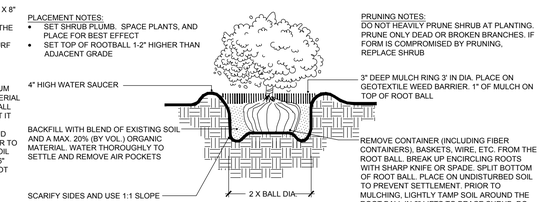
1 TREE PLANTING DETAIL - WOOD POSTS

SCALE: NTS — OP-NO2-02



2 CONIFER TREE PLANTING DETAIL - WOOD POSTS

SCALE: NTS — OP-NO2-16



3 SHRUB PLANTING DETAIL

SCALE: NTS — OP-NO2-14

NORTH END MARKET

PUD AMENDMENT

LOUISVILLE, CO

PREPARED BY:

ripley design
LANDSCAPE ARCHITECTURE, LAND PLANNING
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ENGINEER
MPD ENGINEERING, LLC
Marc Dolezal, P.E.
1550 QUINCE AVE.
BOULDER, CO 80304
p: 303.498.9224

NORTH — 0 15 30 60 — SCALE: 1"=30'-0"

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	PUD	8/23/2016
02	MYLAR	7/27/2017

REVISIONS

No.	DESCRIPTION	DATE
01	AMENDMENT	03/25/2021
02	AMENDMENT	06/23/2021
03	AMENDMENT	12/10/2021
04	AMENDMENT	06/17/2022

OVERALL LANDSCAPE PLAN

SEAL:

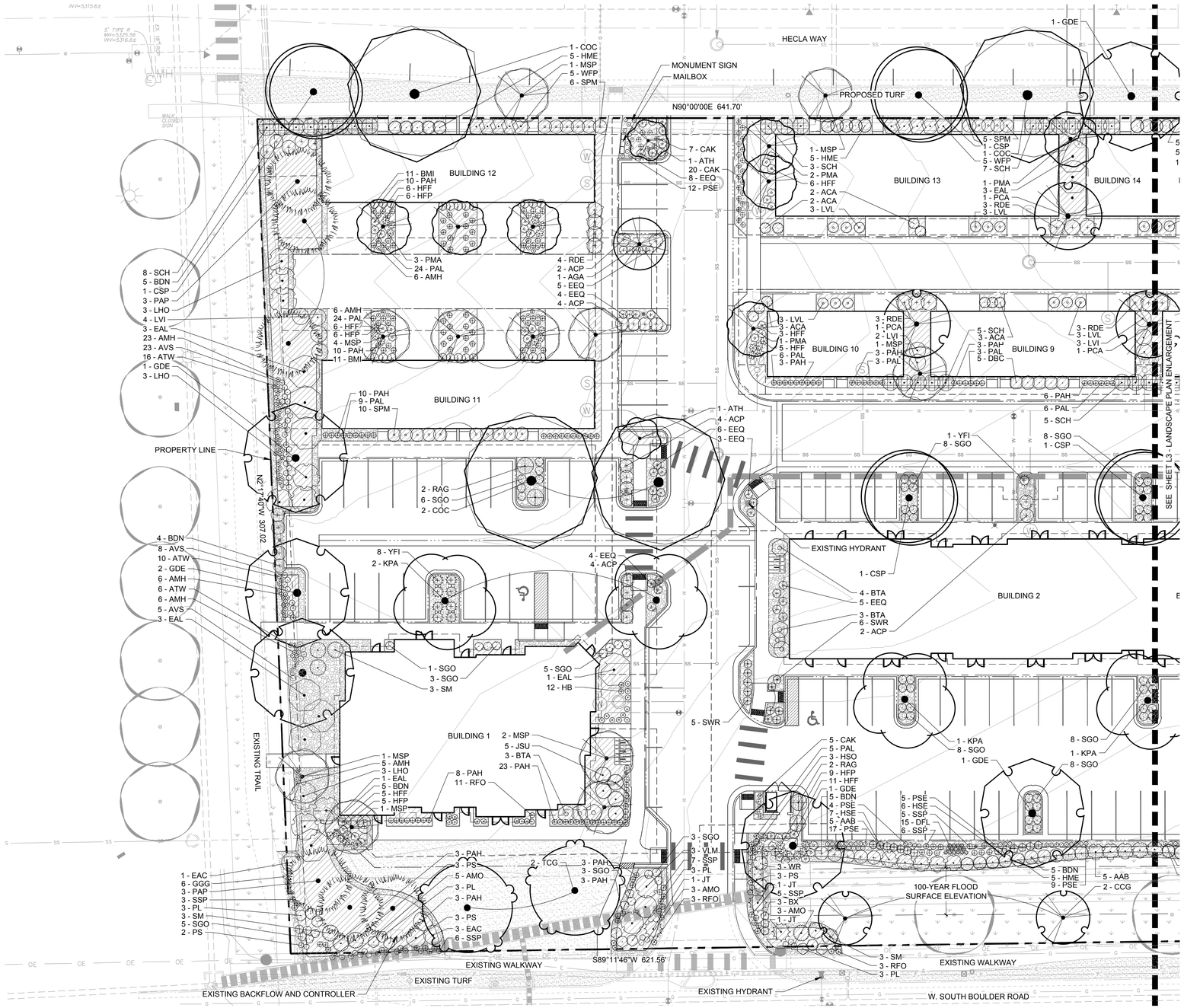
ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

DRAWING NUMBER:

L1

Plotted By: Joel Weikert **Layout:** OVERALL LANDSCAPE PLAN **Printed On:** 6/16/2022 6:38 PM **File Name:** Landscape Plan.dwg



PLANT SCHEDULE

EVERGREEN TREES	QTY	COMMON NAME
PAP	6	WEEPING NORWAY SPRUCE

ORNAMENTAL TREE	QTY	COMMON NAME
ATH	5	HOT WINGS MAPLE
AGA	1	AUTUMN BRILLIANCE SERVICEBERRY (SINGLE)
CCG	5	THORNLESS COCKSPUR HAWTHORN
MSP	18	SPRING SNOW CRAB APPLE
PMA	9	AMUR CHOKECHERRY
PCA	10	AUTUMN BLAZE ORNAMENTAL PEAR

SHADE TREE	QTY	COMMON NAME
CSP	9	WESTERN CATALPA
COC	7	WESTERN HACKBERRY
GTI	1	THORNLESS IMPERIAL HONEYLOCUST
GDE	11	SEEDLESS KENTUCKY COFFEETREE
KPA	6	GOLDEN RAIN TREE
TCG	4	GREENSPIRE LINDEN

DECIDUOUS SHRUBS	QTY	COMMON NAME
ACA	58	LEADPLANT
AAB	25	BRILLIANT RED CHOKEBERRY
BTA	7	REDLEAF JAPANESE BARBERRY
BDN	45	COMPACT WHITE BUTTERFLY BUSH
BX	3	LO & BEHOLD BLUE CHIP BUTTERFLY BUSH
CAI	3	IVORY HALO DOGWOOD (VARIEGATED)
DBC	18	CAROL MACKIE DAPHNE
EAL	19	BURNING BUSH
EAC	4	DWARF BURNING BUSH
HME	81	ENDLESS SUMMER HYDRANGEA (BLUE)
LVL	48	LODENSE PRIVET
LVI	14	GOLDEN VICARYI PRIVET
LHO	9	HONEYROSE HONEYSUCKLE
PON	5	DWARF NINEBARK
PL	15	LITTLE DEVIL DWARF NINEBARK
RAG	24	GROW-LOW SUMAC
RDE	29	BOULDER RASPBERRY
SGO	26	GOLDMOUND SPIREA
SCH	58	HANCOCK CORALBERRY
SM	9	DWARF KOREAN LILAC
SPM	35	MISS KIM DWARF LILAC (PALE LAVENDER)
VLM	6	MOHICAN WAYFARING TREE
WFP	29	PINK PRINCESS WEIGELA
WR	6	RED PRINCE WEIGELA

EVERGREEN SHRUBS	QTY	COMMON NAME
ACP	33	PANCHITO MANZANITA
BMI	30	WINTER GEM BOXWOOD
EEQ	54	BLUESTEM JOINTFIR
JSU	5	BUFFALO JUNIPER
JT	4	NEW BLUE TAMARIX JUNIPER
YFI	15	YUCCA

ORNAMENTAL GRASS	QTY	COMMON NAME
BGB	18	BLONDE AMBITION GRAMA GRASS
CAK	58	FEATHER REED GRASS
HSE	48	BLUE AVENA/BLUE OAT GRASS
MSI	3	MAIDEN GRASS
PAH	166	DWARF FOUNTAIN GRASS
PAL	121	BLACK FOUNTAIN GRASS
SSP	91	PRAIRIE BLUES LITTLE BLUESTEM GRASS
SWR	11	GIANT SACATON

PERENNIAL	QTY	COMMON NAME
AMO	19	MOONSHINE YARROW
AMH	94	MCKANA IMPROVED COLUMBINE
AVS	62	SEAFOAM SAGE
ATW	81	PURPLE ASTER
DFL	69	FIRST LOVE PINKS
GGG	6	DWARF BLANKET FLOWER
HB	19	BLACK EYED STELLA DAYLILY
HSO	9	SOUTHERN COMFORT CORAL BELLS
HFF	59	FRANCEE HOSTA (VARIEGATED)
HFP	52	PATRIOT HOSTA (VARIEGATED)
PS	11	ROCKY MOUNTAIN PENSTEMON
PSE	77	BLUE CREEPING PHLOX
RFO	44	BLACK-EYED SUSAN

02 LANDSCAPE MATERIAL SCHEDULE

SYMBOL	DESCRIPTION
	WOOD MULCH
	IRRIGATED TURF
	ROCK MULCH
	NATIVE SEED 1
	EXISTING LANDSCAPE

LEGEND

- BIKE RACK
- WALK CHASE
- DRAIN PIPE
- DRAIN INLET
- MANHOLE
- WATER METER
- FIRE HYDRANT
- PARKING COUNT
- EXISTING TREE
- PROPERTY LINE
- RIGHT-OF-WAY / LOT PROPERTY LINE
- EASEMENT LINE
- BUILDING SETBACK LINE
- SS — PROPOSED SANITARY SEWER SERVICE LINE
- PROPOSED STORM DRAIN LINE
- W — PROPOSED WATER SERVICE LINE
- SD — PROPOSED STORM DRAIN
- SS — EXISTING SANITARY SEWER SERVICE LINE
- EXISTING STORM DRAIN LINE
- W — EXISTING WATER SERVICE LINE
- SD — EXISTING STORM DRAIN
- F — EXISTING FIBER OPTIC LINE

NORTH SCALE: 1"=20'-0"

0 10 20 40

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	PUD	8/23/2016
02	MYLAR	7/27/2017

REVISIONS

No.	DESCRIPTION	DATE
01	AMENDMENT	03/25/2021
02	AMENDMENT	06/23/2021
03	AMENDMENT	12/10/2021
04	AMENDMENT	06/17/2022

NORTH END MARKET

PUD AMENDMENT

LOUISVILLE, CO

PREPARED BY:

ripley design
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ENGINEER
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BOULDER, CO 80304
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ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

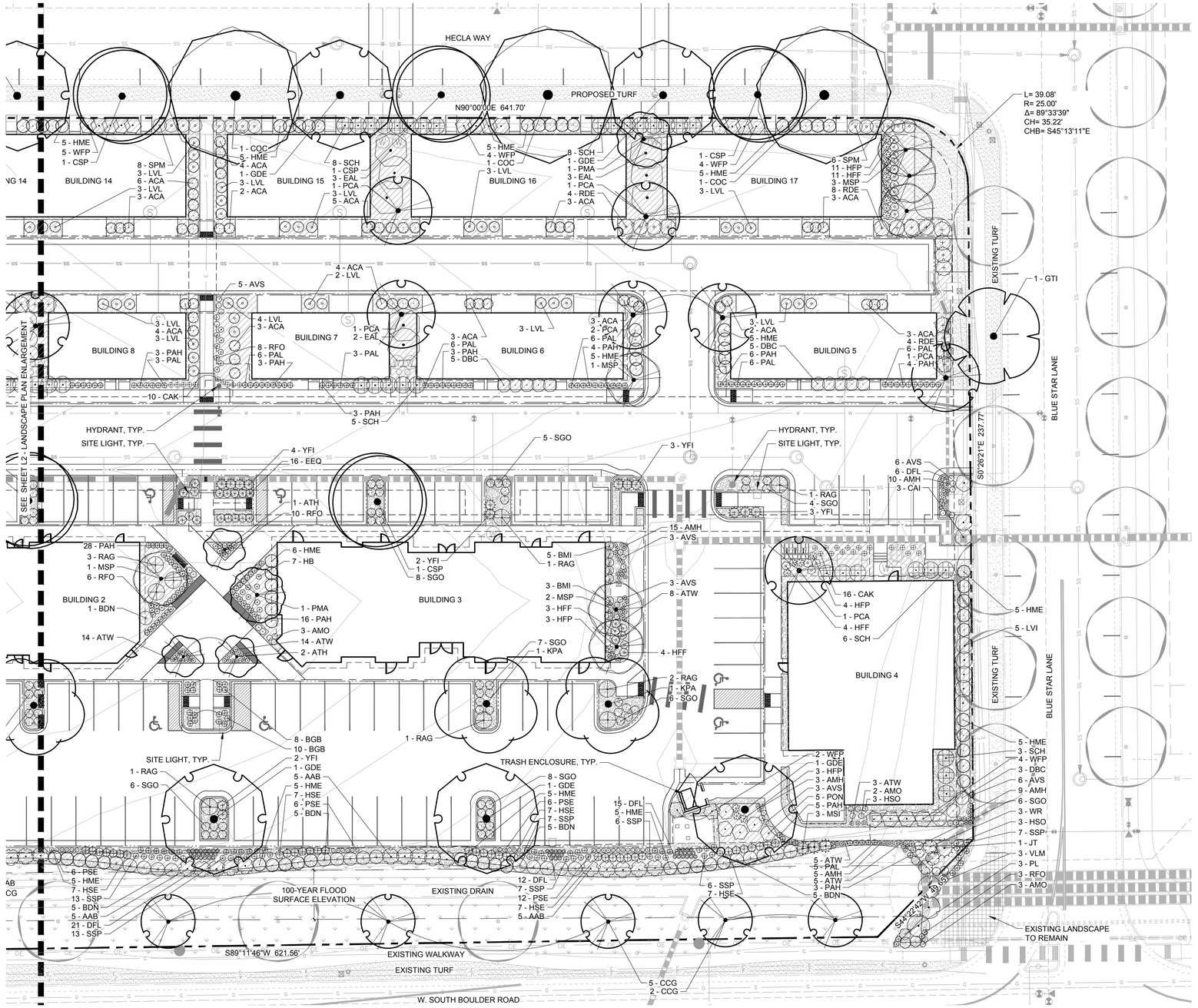
DRAWING NUMBER:

L2

LANDSCAPE PLAN ENLARGEMENT

SEAL:

Plotted By: Joel Weikert **Layout:** LANDSCAPE ENLARGEMENT **Printed On:** 6/16/2022 6:38 PM **File Name:** Landscape Plan.dwg



LEGEND

- BIKE RACK
- WALK CHASE
- DRAIN PIPE
- DRAIN INLET
- MANHOLE
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- PARKING COUNT
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- EXISTING WATER SERVICE LINE
- EXISTING STORM DRAIN
- EXISTING FIBER OPTIC LINE

PLANT SCHEDULE

EVERGREEN TREES	QTY	COMMON NAME
PAP	6	WEEPING NORWAY SPRUCE

ORNAMENTAL TREE	QTY	COMMON NAME
ATH	5	HOT WINGS MAPLE
AGA	1	AUTUMN BRILLIANCE SERVICEBERRY (SINGLE)
CCG	5	THORNLESS COCKSPUR HAWTHORN
MSP	18	SPRING SNOW CRAB APPLE
PMA	9	AMUR CHOKECHERRY
PCA	10	AUTUMN BLAZE ORNAMENTAL PEAR

SHADE TREE	QTY	COMMON NAME
CSP	9	WESTERN CATALPA
COC	7	WESTERN HACKBERRY
GTI	1	THORNLESS IMPERIAL HONEYLOCUST
GDE	11	SEEDLESS KENTUCKY COFFEETREE
KPA	6	GOLDEN RAIN TREE
TCG	4	GREENSPIRE LINDEN

DECIDUOUS SHRUBS	QTY	COMMON NAME
ACA	58	LEADPLANT
AAB	25	BRILLIANT RED CHOKEBERRY
BTA	7	REDLEAF JAPANESE BARBERRY
BDN	45	COMPACT WHITE BUTTERFLY BUSH
BX	3	LO & BEHOLD BLUE CHIP BUTTERFLY BUSH
CAI	3	IVORY HALO DOGWOOD (VARIEGATED)
DBC	18	CAROL MACKIE DAPHNE
EAL	19	BURNING BUSH
EAC	4	DWARF BURNING BUSH
HME	81	ENDLESS SUMMER HYDRANGEA (BLUE)
LVL	48	LODENSE PRIVET
LVI	14	GOLDEN VICARYI PRIVET
LHO	9	HONEYROSE HONEYSUCKLE
PON	5	DWARF NINEBARK
PL	15	LITTLE DEVIL DWARF NINEBARK
RAG	24	GROW-LOW SUMAC
RDE	29	BOULDER RASPBERRY
SGO	26	GOLDMOUND SPIREA
SCH	58	HANCOCK CORALBERRY
SM	9	DWARF KOREAN LILAC
SPM	35	MISS KIM DWARF LILAC (PALE LAVENDER)
VLM	6	MOHICAN WAYFARING TREE
WFP	29	PINK PRINCESS WEIGELA
WR	6	RED PRINCE WEIGELA

EVERGREEN SHRUBS	QTY	COMMON NAME
ACP	33	PANCHITO MANZANITA
BMI	30	WINTER GEM BOXWOOD
EEQ	54	BLUESTEM JOINTFIR
JSU	5	BUFFALO JUNIPER
JT	4	NEW BLUE TAMARIX JUNIPER
YFI	15	YUCCA

ORNAMENTAL GRASS	QTY	COMMON NAME
BGB	18	BLONDE AMBITION GRAMA GRASS
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PAH	166	DWARF FOUNTAIN GRASS
PAL	121	BLACK FOUNTAIN GRASS
SSP	91	PRAIRIE BLUES LITTLE BLUESTEM GRASS
SWR	11	GIANT SACATON

PERENNIAL	QTY	COMMON NAME
AMO	19	MOONSHINE YARROW
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DFL	69	FIRST LOVE PINKS
GGG	6	DWARF BLANKET FLOWER
HB	19	BLACK EYED STELLA DAYLILY
HSO	9	SOUTHERN COMFORT CORAL BELLS
HFF	59	FRANCEE HOSTA (VARIEGATED)
HFP	52	PATRIOT HOSTA (VARIEGATED)
PS	11	ROCKY MOUNTAIN PENSTEMON
PSE	77	BLUE CREEPING PHLOX
RFO	44	BLACK-EYED SUSAN

02 LANDSCAPE MATERIAL SCHEDULE

SYMBOL	DESCRIPTION
	WOOD MULCH
	IRRIGATED TURF
	ROCK MULCH
	NATIVE SEED 1
	EXISTING LANDSCAPE

NORTH SCALE: 1"=20'-0" (0, 10, 20, 40)

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	PUD	8/23/2016
02	MYLAR	7/27/2017

REVISIONS

No.	DESCRIPTION	DATE
01	AMENDMENT	03/25/2021
02	AMENDMENT	06/23/2021
03	AMENDMENT	12/10/2021
04	AMENDMENT	06/17/2022

NORTH END MARKET

PUD AMENDMENT

LOUISVILLE, CO

PREPARED BY:

ripley design
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ENGINEER
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BOULDER, CO 80304
p: 303.498.9224

LANDSCAPE PLAN ENLARGEMENT

SEAL:

ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

DRAWING NUMBER:

L3

Plotted By: Joel Weikert **Layout:** LANDSCAPE ENLARGMENT **Printed On:** 6/16/2022 6:38 PM **File Name:** Landscape Plan.dwg

PLANT SCHEDULE

EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME
	PAP	6	PICEA ABIES `PENDULA` / WEEPING NORWAY SPRUCE

ORNAMENTAL TREE	CODE	QTY	BOTANICAL / COMMON NAME
	ATH	5	ACER TATARICUM `HOT WINGS` / HOT WINGS MAPLE
	AGA	1	AMELANCHIER X GRANDIFLORA `AUTUMN BRILLIANCE` / AUTUMN BRILLIANCE SERVICEBERRY (SINGLE
	CCG	7	CRATAEGUS CRUS-GALLI INERMIS / THORNLESS COCKSPUR HAWTHORN
	MSP	18	MALUS `SPRING SNOW` / SPRING SNOW CRAB APPLE
	PMA	9	PRUNUS MAACKII / AMUR CHOKECHERRY
	PCA	10	PYRUS CALLERYANA `AUTUM BLAZE` / AUTUMN BLAZE ORNAMENTAL PEAR

SHADE TREE	CODE	QTY	BOTANICAL / COMMON NAME
	CSP	9	CATALPA SPECIOSA / WESTERN CATALPA
	COC	7	CELTIS OCCIDENTALIS / WESTERN HACKBERRY
	GTI	1	GLEDITSIA TRIACANTHOS INERMIS `IMPERIAL` / THORNLESS IMPERIAL HONEYLOCUST
	GDE	11	GYMNOCLADUS DIOICA `ESPRESSO` / SEEDLESS KENTUCKY COFFEETREE
	KPA	6	KOELREUTERIA PANICULATA / GOLDEN RAIN TREE
	TCG	2	TILIA CORDATA `GREENSPIRE` / GREENSPIRE LINDEN

DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME
	ACA	58	AMORPHA CANESCENS / LEADPLANT
	AAB	25	ARONIA ARBUTIFOLIA `BRILLIANTISSIMA` / BRILLIANT RED CHOKEBERRY
	BTA	7	BERBERIS THUNBERGII `ATROPURPUREA` / REDLEAF JAPANESE BARBERRY
	BDN	45	BUDDLEJA DAVIDII NANHOENSIS `PETITE SNOW` / COMPACT WHITE BUTTERFLY BUSH
	BX	3	BUDDLEJA X 'BLUE CHIP' TM / LO & BEHOLD BLUE CHIP BUTTERFLY BUSH
	CAI	3	CORNUS ALBA `IVORY HALO` / IVORY HALO DOGWOOD (VARIEGATED)
	DBC	18	DAPHNE X BURKWOODII `CAROL MACKIE` / CAROL MACKIE DAPHNE
	EAL	19	EUONYMUS ALATUS / BURNING BUSH
	EAC	4	EUONYMUS ALATUS `COMPACTUS` / DWARF BURNING BUSH
	HME	81	HYDRANGEA MACROPHYLLA `ENDLESS SUMMER` / ENDLESS SUMMER HYDRANGEA (BLUE)
	LVL	48	LIGUSTRUM VULGARE `LODENSE` / LODENSE PRIVET
	LVI	14	LIGUSTRUM X VICARYI / GOLDEN VICARYI PRIVET
	LHO	9	LONICERA X HONEYROSE / HONEYROSE HONEYSUCKLE
	PON	5	PHYSOCARPUS OPULIFOLIUS `NANUS` / DWARF NINEBARK
	PL	15	PHYSOCARPUS OPULIFOLIUS 'LITTLE DEVIL' TM / LITTLE DEVIL DWARF NINEBARK
	RAG	14	RHUS AROMATICA `GRO-LOW` / GROW-LOW SUMAC
	RDE	29	RUBUS DELICIOSUS / BOULDER RASPBERRY
	SGO	116	SPIRAEA X `GOLDMOUND` / GOLDMOUND SPIREA
	SCH	58	SYMPHORICARPOS X CHENAULTII `HANCOCK` / HANCOCK CORALBERRY
	SM	9	SYRINGA MEYERI 'PALIBIN' / DWARF KOREAN LILAC
	SPM	35	SYRINGA PATULA `MISS KIM` / MISS KIM DWARF LILAC (PALE LAVENDER)
	VLM	6	VIBURNUM LANTANA `MOHICAN` / MOHICAN WAYFARING TREE
	WFP	29	WEIGELA FLORIDA `PINK PRINCESS` / PINK PRINCESS WEIGELA
	WR	6	WEIGELA FLORIDA 'RED PRINCE' / RED PRINCE WEIGELA

EVERGREEN SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME
	ACP	16	ARCTOSTAPHYLOS X COLORADOENSIS `PANCHITO` / PANCHITO MANZANITA
	BMI	30	BUXUS MICROPHYLLA INSULARIS `WINTER GEM` / WINTER GEM BOXWOOD
	EEQ	55	EPHEDRA EQUISETINA / BLUESTEM JOINTFIR
	JSU	5	JUNIPERUS SABINA `BUFFALO` / BUFFALO JUNIPER
	JT	4	JUNIPERUS SABINA 'TAMARISCIFOLIA NEW BLUE' / NEW BLUE TAMARIX JUNIPER
	YFI	23	YUCCA FILAMENTOSA / YUCCA

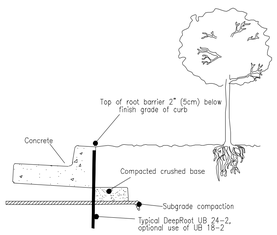
ORNAMENTAL GRASS	CODE	QTY	BOTANICAL / COMMON NAME
	BGB	18	BOUTELOUA GRACILIS `BLONDE AMBITION` / BLONDE AMBITION GRAMA GRASS
	CAK	58	CALAMAGROSTIS X ACUTIFLORA `KARL FOERSTER` / FEATHER REED GRASS
	HSE	48	HELICTOTRICHON SEMPERVIRENS / BLUE AVENA/BLUE OAT GRASS
	MSI	3	MISCANTHUS SINENSIS `GRACILLIMUS` / MAIDEN GRASS
	PAH	166	PENNISETUM ALOPECUROIDES `HAMELN` / DWARF FOUNTAIN GRASS
	PAL	121	PENNISETUM ALOPECUROIDES `MOUDRY` / BLACK FOUNTAIN GRASS
	SSP	91	SCHIZACHYRIUM SCOPARIUM `PRAIRIE BLUES` / PRAIRIE BLUES LITTLE BLUESTEM GRASS
	SWR	11	SPOROBOLUS WRIGHTII / GIANT SACATON

PERENNIAL	CODE	QTY	BOTANICAL / COMMON NAME
	AMO	19	ACHILLEA X `MOONSHINE` / MOONSHINE YARROW
	AMH	94	AQUILEGIA MCKANA HYBRIDS / MCKANA IMPROVED COLUMBINE
	AVS	62	ARTEMISIA VERSICOLOR `SEA FOAM` / SEAFOAM SAGE
	ATW	81	ASTER TONGOLENSIS `WARTBURG STAR` / PURPLE ASTER
	DFL	69	DIANTHUS `FIRST LOVE` / FIRST LOVE PINKS
	GGG	6	GAILLARDIA X GRANDIFLORA `GOBLIN` / DWARF BLANKET FLOWER
	HB	19	HEMEROCALLIS X 'BLACK EYED STELLA' TM / BLACK EYED STELLA DAYLILY
	HSO	9	HEUCHERA â€˜SOUTHERN COMFORTâ€™ / SOUTHERN COMFORT CORAL BELLS
	HFF	59	HOSTA FORTUNEI `FRANCEE` / FRANCEE HOSTA (VARIEGATED)
	HFP	52	HOSTA FORTUNEI `PATRIOT` / PATRIOT HOSTA (VARIEGATED)
	PS	11	PENSTEMON STRICTUS / ROCKY MOUNTAIN PENSTEMON
	PSE	77	PHLOX SUBULATA `EMERALD CUSHION BLUE` / BLUE CREEPING PHLOX

TYPICAL SECTION OF CURB AND GUTTER WITH DEEPROOT TREE ROOT BARRIER INSET INTO CONCRETE. BARRIER INSTALLED IN A TRENCH IN SUBGRADE WHICH IS THEN COMPACTED. BARRIER IS SET SO THAT TOP EDGE WILL BE 2" (5CM) BELOW FINISH GRADE OF CURB, AND SET FLUSH WITH EDGE OF CURB. BARRIER RIBS FACE TOWARD TREE ROOTS.

INSTALLATION SEQUENCE:

1. Prepare base and subgrade
2. Trench to appropriate depth for installation of root barrier so that top of barrier is 2" (5cm) below finish grade of top of curb.
3. Place root barrier in trench, vertical ribs must face toward tree roots.
4. Backfill and compact to requirements.
5. Place form material against barrier (it may be nailed from the outside of the form)

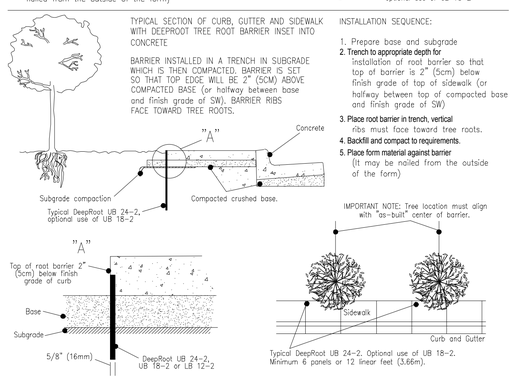


TYPICAL SECTION OF CURB, GUTTER AND SIDEWALK WITH DEEPROOT TREE ROOT BARRIER INSET INTO CONCRETE

BARRIER INSTALLED IN A TRENCH IN SUBGRADE WHICH IS THEN COMPACTED. BARRIER IS SET SO THAT TOP EDGE WILL BE 2" (5CM) ABOVE COMPACTED BASE (or halfway between base and finish grade of SW). BARRIER RIBS FACE TOWARD TREE ROOTS.

INSTALLATION SEQUENCE:

1. Prepare base and subgrade
2. Trench to appropriate depth for installation of root barrier so that top of barrier is 2" (5cm) below finish grade of top of sidewalk (or halfway between top of compacted base and finish grade of SW)
3. Place root barrier in trench, vertical ribs must face toward tree roots.
4. Backfill and compact to requirements.
5. Place form material against barrier (it may be nailed from the outside of the form)



1 18" DEPTH DEEPROOT ROOT BARRIER
NTS OP-NO2-18

HYDROZONE DATA

HYDROZONE	AREA (SQ.FT)
HIGH	12,394
MODERATE	22,734
LOW	11,333
TOTAL	46,461

NOTE: IRRIGATION PLANS TO BE PROVIDED AT FUTURE SUBMITTAL.

GENERAL LANDSCAPE NOTES

1. ALL LANDSCAPE IMPROVEMENTS AREA TO BE DESIGNED AND IMPLEMENTED IN ACCORDANCE WITH CITY OF LOUISVILLE STANDARDS. REVISE TREE SPACING AND/OR RELOCATE TREES AS NEEDED TO AVOID CONFLICT WITH SITE DISTANCE TRIANGLES
2. ALL CITY STREET SIGNS SHALL BE PLACED IN THE TREE LAWNS.
3. TREES TO BE PLANTED AT TIME OF ADJACENT CONSTRUCTION.
4. NATIVE SEED MIX PER CITY OPEN SPACE REQUIREMENTS.
   - 4.1. 3.3 pls# BLUE GRAMA
   - 4.2. 3.3pls# BUFFALOGRASS, CODY
   - 4.3. 2.0pls# SIDEOATS GRAMA, VAUGHN
   - 4.4. 1.0pls# SANDBERG BLUEGRASS, CANBAR
   - 4.5. 0.7pls# PRAIRIE JUNEGRASS
5. ALL DISTURBED AREAS ON PREVIOUSLY DEDICATED OPEN SPACE SHALL BE NATIVE SEEDED AND LANDSCAPED.
6. WHEN INSTALLING NATIVE SEED, THE LANDSCAPE CONTRACTOR IS TO:
   - 6.1. PROVIDE A PHOTO/COPY OF THE ORIGINAL SEED TAGS TO THE CITY.
   - 6.2. DRILL NATIVE SEED TO A DEPTH OF ¼" - ½" OR HAND BROADCAST AT DOUBLE THE SEEDING RATE.
   - 6.3. NOTIFY THE OPEN SPACE DIVISION AND PARKS MANAGER WHEN THE SEEDING WILL BE TAKING PLACE.
7. STREET TREES SHALL BE CENTERED WITHIN THE TREE LAWN. IN AREAS WHERE STREET TREES ARE PLACED IN A TREE LAWN LESS THAN 10' WIDE, ROOT BARRIER SHALL BE PROVIDED AT THE BACK-OF-CURB AND ALONG THE SIDEWALK. IRRIGATION IN THE TREE LAWNS SHALL BE SUBSURFACE IN ALL AREAS. IRRIGATION IN THE TREE LAWNS SHALL BE ON A CENTRAL SYSTEM CONTROLLED BY THE HOA.
8. INDIVIDUAL TREE SPECIES SHALL COMPRISE NO MORE THAN 10% OF THE OVERALL PLANTING QUANTITY, OR AS APPROVED ON FINAL PLAN.
9. CITY RESERVES THE RIGHT TO RELOCATE LANDSCAPING ON FINAL PLAN THAT IS IN CONFLICT WITH THE CITY WET UTILITIES.
10. ALL PLANT MATERIAL SHALL BE AT LEAST 5 FEET AWAY FROM BUILDING FOUNDATIONS UNLESS IN RAISED PLANT BEDS.
11. ALL PLANT MATERIAL SHALL MEET SPECIFICATIONS OF THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) FOR NUMBER ONE GRADE. ALL TREES SHALL BE BALLED AND BURLAPPED OR EQUIVALENT.
12. ALL TURF AREAS TO BE PLANTED WITH TEXAS BLUEGRASS "REVELLI" TURF MIX OR EQUIVALENT VARIATION UNLESS INDICATED ON PLAN AS NATIVE GRASS AREA.
13. ALL SHRUB BEDS EXCEPT THOSE NOTED SHALL BE MULCHED WITH A MINIMUM 4" DEPTH WOOD MULCH OVER WATER PERMEABLE GEO-TEXTILE FABRIC MESH WEED BARRIER.
14. EDGING BETWEEN SOD AND SHRUB BEDS SHALL BE 14 GA. X 4" GALVANIZED STEEL SET LEVEL WITH TOP OF SOD.
15. NO TREES, SHRUBS, FENCES, BERMS, OR OTHER MATERIAL CONSTITUTING VISUAL OBSTRUCTION SHALL BE PLANTED WITHIN ANY SITE DISTANCE TRIANGLE.
16. MINIMUM REQUIREMENTS FOR SOIL PREPARATION SHALL INCLUDE 3 CUBIC YARDS OF ORGANIC MATERIAL PER 1000 SF OF EXISTING SOIL TILLED TO A MINIMUM DEPTH OF 6 INCHES. TREE AND SHRUB PITS SHALL BE BACKFILLED USING A MIXTURE OF ONE THIRD EXISTING SITE SOIL AND ONE THIRD TOPSOIL, AND ONE THIRD ORGANIC MATTER.
17. MAINTENANCE OF THE WALK AND LANDSCAPING WITHIN THE RIGHT OF WAY SHALL BE THE OBLIGATION OF THE PROPERTY OWNER.
18. LANDSCAPING TO BE INSTALLED WITH ADJACENT LOT OR BUILDING CONSTRUCTION.

PERIMETER LANDSCAPE CALCULATIONS* - CDDSG 5.1.E(2)

	LENGTH (L.F.)	REQUIRED PLANTINGS**	PROVIDED PLANTINGS
STREET EDGE SOUTH (DETACHED SIDEALK)	622	16 TREES AND 124 SHRUBS	17 TREES, 143 SHRUBS, 171 ORNAMENTAL GRASSES, AND 215 PERENNIALS.

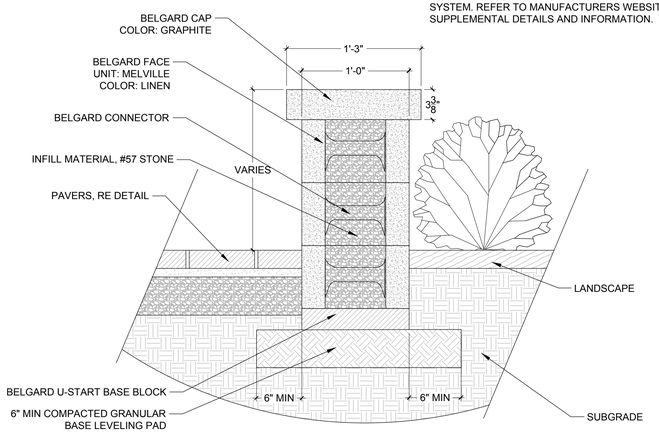
* ADJACENT TO SOUTH BOULDER ROAD
**REQUIRED PARKING LOT LANDSCAPING IS CALCULATED AS FOLLOWS: 622 LINEAL FEET OF STREET FRONTAGE / 40 LINEAL FEET = 16 TREES. 622 LINEAL FEET OF STREET FRONTAGE / 5 LINEAL FEET = 124 SHRUBS.

PARKING LOT LANDSCAPE CALCULATIONS - CDDSG 5.3.C

	VEHICULAR PARKING SPACES		TREES REQUIRED*	TREES PROVIDED
COMMERCIAL LOT	148	SPACES	18.5	20

* REQUIRED PARKING LOT LANDSCAPING IS CALCULATED AS FOLLOWS:
148 PARKING SPACES / 8 = 18.5 TREES REQUIRED

NOTE: WALL TO BE BELGARD TANDEM RETAINING WALL SYSTEM. REFER TO MANUFACTURERS WEBSITE FOR SUPPLEMENTAL DETAILS AND INFORMATION.



2 FREESTANDING SEATWALL
1 1/2" = 1'-0" OP-NO2-04

NORTH END MARKET

PUD AMENDMENT

LOUISVILLE, CO

PREPARED BY:

ripley design
LANDSCAPE ARCHITECTURE, LAND PLANNING
419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.225.6657 | www.ripleydesigninc.com

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OWNER
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ENGINEER
MPD ENGINEERING, LLC
Marc Dolezal, P.E.
1550 QUINCE AVE.
BOULDER, CO 80304
p: 303.498.9224

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	PUD	8/23/2016
02	MYLAR	7/27/2017

REVISIONS

No.	DESCRIPTION	DATE
01	AMENDMENT	03/25/2021
02	AMENDMENT	06/23/2021
03	AMENDMENT	12/10/2021
04	AMENDMENT	06/17/2022

LANDSCAPE SCHEDULE AND NOTES

SEAL:

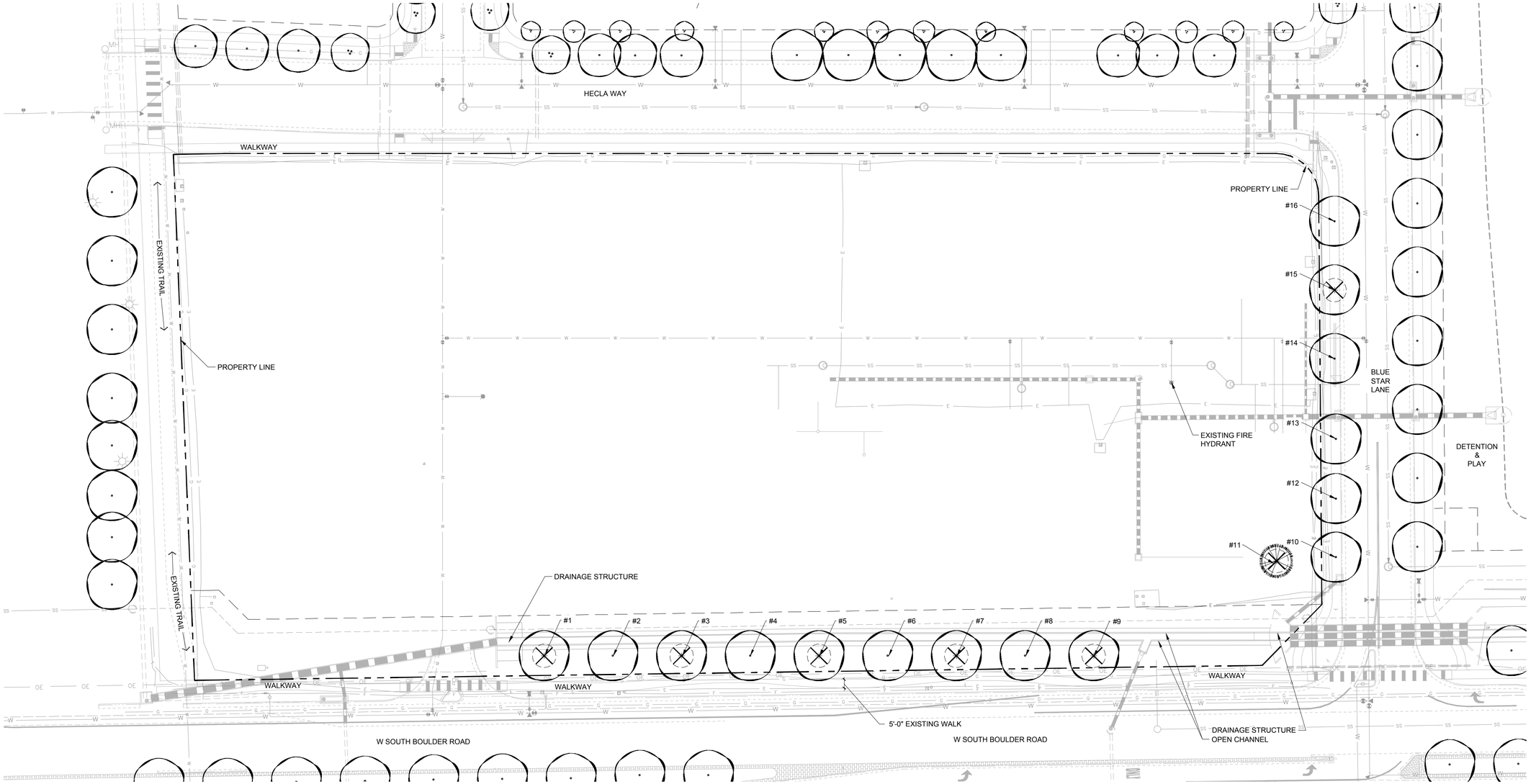
ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

DRAWING NUMBER:

L4

Plotted By: Joel Weikert **Layout:** Landscape Schedule and notes **Printed On:** 6/16/2022 6:38 PM **File Name:** Landscape Notes and Details.dwg



LEGEND

- PROPERTY LINE
- EASEMENT LINE
- SS — EXISTING SANITARY SEWER SERVICE LINE
- EXISTING STORM DRAIN LINE
- W — EXISTING WATER SERVICE LINE
- SD — EXISTING STORM DRAIN
- F — EXISTING FIBER OPTIC LINE
- E — EXISTING ELECTRIC LINE

TREE MITIGATION LEGEND

XXX — EXISTING TREES TO SAVE IN PLACE

XXX — EXISTING TO BE REMOVED

TREE MITIGATION TABLE

#	TYPE	TO BE REMOVED?	REASON FOR REMOVAL / NOTES
1	CRABAPPLE	YES	TREE IS DEAD, NEEDS TO BE REPLACED.
2	HAWTHORN	NO	-
3	CRABAPPLE	YES	TREE IS DEAD, NEEDS TO BE REPLACED.
4	HAWTHORN	NO	-
5	CRABAPPLE	YES	TREE IS DEAD, NEEDS TO BE REPLACED.
6	HAWTHORN	NO	-
7	CRABAPPLE	YES	TREE IS DEAD, NEEDS TO BE REPLACED.
8	HAWTHORN	NO	-
9	CRABAPPLE	YES	TREE IS DEAD, NEEDS TO BE REPLACED.
10	KENTUCKY COFFEE	NO	-
11	BLUE SPRUCE	YES	PROPOSED COMMERCIAL BUILDING (4) LOCATION.
12	KENTUCKY COFFEE	NO	-
13	MAPLE	NO	-
14	BUCKEYE	NO	-
15	HONEYLOCUST	YES	TREE IS DECLINING AND IN POOR HEALTH, NEEDS TO BE REPLACED.
16	BUCKEYE	NO	-
TOTAL REMOVED		7	

TREE PROTECTION NOTES

1. ALL EXISTING TREES WITHIN THE LIMITS OF THE DEVELOPMENT SHALL REMAIN AND BE PROTECTED UNLESS NOTED ON THESE PLANS FOR REMOVAL.
2. WITHIN THE DRIP LINE OF ANY PROTECTED EXISTING TREE, THERE SHALL BE NO CUT OR FILL OVER A FOUR-INCH DEPTH UNLESS A QUALIFIED ARBORIST OR FORESTER HAS EVALUATED AND APPROVED THE DISTURBANCE.
3. PRIOR TO AND DURING CONSTRUCTION, BARRIERS SHALL BE ERECTED AROUND ALL PROTECTED EXISTING TREES WITH SUCH BARRIERS TO BE OF ORANGE FENCING A MINIMUM OF FOUR (4) FEET IN HEIGHT, SECURED WITH METAL T-POSTS, NO CLOSER THAN SIX (6) FEET FROM THE TRUNK OR ONE-HALF (½) OF THE DRIP LINE, WHICHEVER IS GREATER. THERE SHALL BE NO STORAGE OR MOVEMENT OF EQUIPMENT, MATERIAL, DEBRIS OR FILL WITHIN THE FENCED TREE PROTECTION ZONE.
4. DURING THE CONSTRUCTION STAGE OF DEVELOPMENT, THE APPLICANT SHALL PREVENT THE CLEANING OF EQUIPMENT OR MATERIAL OR THE STORAGE AND DISPOSAL OF WASTE MATERIAL SUCH AS PAINTS, OILS, SOLVENTS, ASPHALT, CONCRETE, MOTOR OIL OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF A TREE WITHIN THE DRIP LINE OF ANY PROTECTED TREE OR GROUP OF TREES.
5. NO DAMAGING ATTACHMENT, WIRES, SIGNS OR PERMITS MAY BE FASTENED TO ANY PROTECTED TREE.
6. NO TREES SHALL BE REMOVED DURING THE SONGBIRD NESTING SEASON (FEBRUARY 1 TO JULY 31) WITHOUT FIRST HAVING A PROFESSIONAL ECOLOGIST OR WILDLIFE BIOLOGIST COMPLETE A NESTING SURVEY TO IDENTIFY ANY ACTIVE NESTS EXISTING ON THE PROJECT SITE. IF ACTIVE NESTS ARE FOUND, THE CITY WILL COORDINATE WITH RELEVANT STATE AND FEDERAL REPRESENTATIVES TO DETERMINE WHETHER ADDITIONAL RESTRICTIONS ON TREE REMOVAL AND CONSTRUCTION APPLY.

NORTH END MARKET

PUD AMENDMENT

LOUISVILLE, CO

PREPARED BY:

ripley design
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ENGINEER

MPD ENGINEERING, LLC
Marc Dolezal, P.E.
1550 QUINCE AVE.
BOULDER, CO 80304
p: 303.498.9224

NORTH — SCALE: 1"=30'-0" (0, 15, 30, 60)

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	PUD	8/23/2016
02	MYLAR	7/27/2017

REVISIONS

No.	DESCRIPTION	DATE
01	AMENDMENT	03/25/2021
02	AMENDMENT	06/23/2021
03	AMENDMENT	12/10/2021
04	AMENDMENT	06/17/2022

TREE MITIGATION PLAN

SEAL:

ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

DRAWING NUMBER:

L5

Plotted By: Joel Weikert **Layout:** TREE MITIGATION **Printed On:** 6/16/2022 6:38 PM **File Name:** Tree Mitigation Plan.dwg

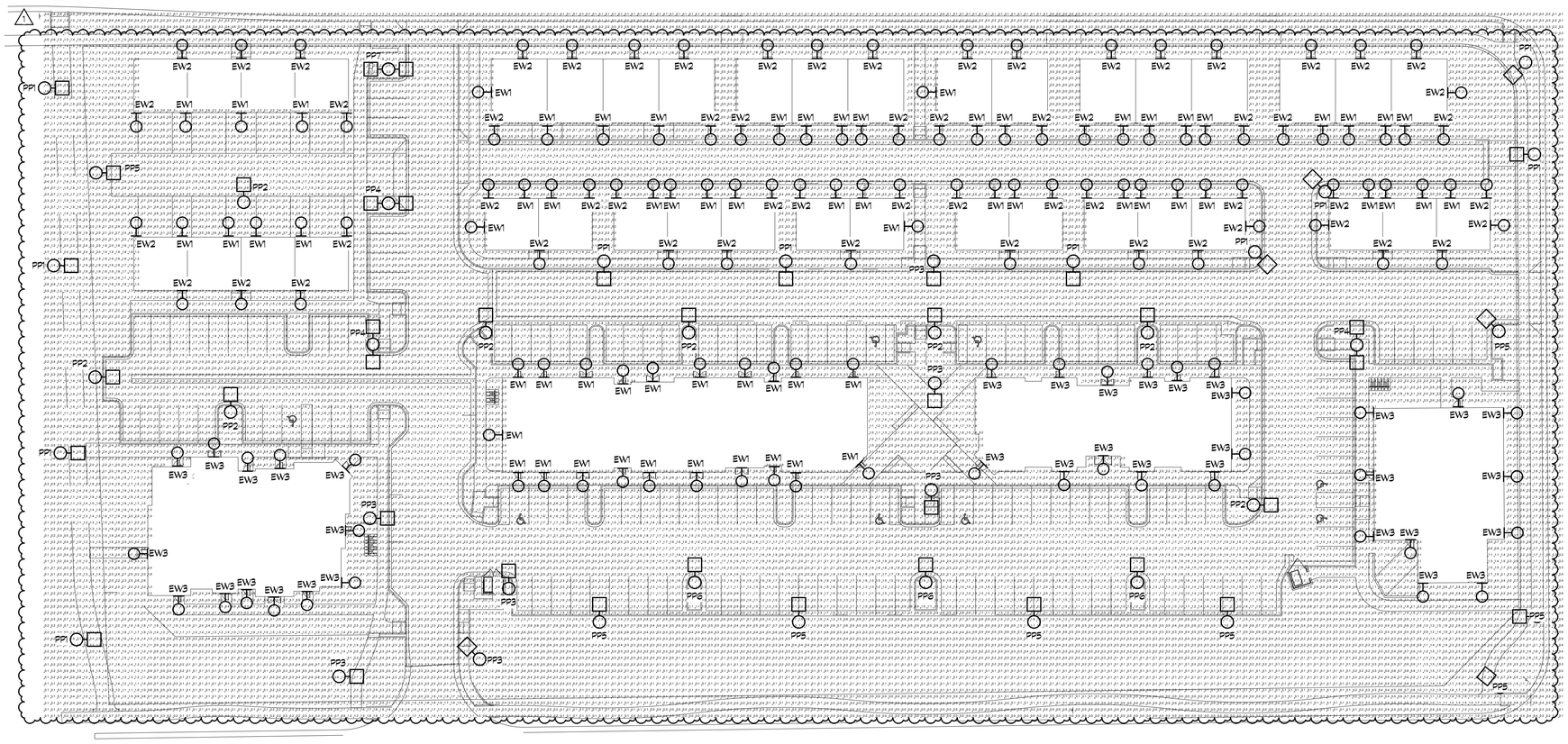
GENERAL NOTES

A. ANY PROPOSED LIGHT FIXTURES INSTALLED ON PRIVATE PROPERTY, ADJACENT TO THE PUBLIC ROW, SHALL BE ORIENTED IN SUCH A MANNER OR LIMITED IN LUMEN OUTPUT TO PREVENT GLARE PROBLEMS AND SHALL NOT EXCEED NATIONAL I.E.S. LIGHTING STANDARDS FOR DISABILITY GLARE.

B. ALL FIXTURES SHALL BE FULL CUT-OFF.

1

AVERAGE FC	
AREA	AVERAGE FOOTCANDLES
ENTRANCES	4.9
SIDEWALKS	2.8
COURTS/ PLAZAS	2.2
PARKING LOTS	2.5
ROADWAYS	2.3



SITE PHOTOMETRIC
1" = 30'-0"

boulder engineering
plumbing, mechanical and electrical
1717 15th Street
Boulder, CO 80302
303.444.6038 phone
303.442.1172 fax
staff@boulderengineering.com

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NORTH END MARKET BLOCK 11

LOUISVILLE, CO 80027

No.	Description	Date
1	BLDG DEPT COMMENTS	06/06/22

COLORADO LICENSED MICHAEL DEAN VAN ES 38983 06/06/2022 PROFESSIONAL ENGINEER

Issue	PERMIT SET
Date	11.12.2021
Project Number	21157
Drawn by	MOD
Checked by	MV

Sheet Title:

SITE PHOTOMETRIC

Sheet Number

MEP 1

6/6/2022 7:28:20 PM

LEGEND

- MAIN DISTRIBUTION CENTER
- PANELBOARD
- ELECTRIC SERVICE METER
- CT — CURRENT TRANSFORMER
- T — TRANSFORMER
- CONCEALED CIRCUIT
- UNDERFLOOR / UNDERGROUND CIRCUIT
- EXPOSED CIRCUIT
- WM — WIREMOLD (SURFACE WIREWAY)
- PM — PLUGMOLD
- P-3 — HOMERUN TO PANELBOARD (ONE ARROW / CKT, PNL & CKT #'S SHOWN)
- (44,46) — CIRCUIT NUMBER(S) FOR SPECIFIED PANEL
- CONDUIT TURNS UP
- CONDUIT TURNS DOWN
- J — JUNCTION BOX / CARD READER
- K — PORCELAIN LAMP HOLDER (PC: PULL CHAIN)
- LIGHT FIXTURE: SURFACE MOUNTED
- RECESSED LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE
- EXIT LIGHT; DIRECTIONAL ARROW
- BATTERY PACK
- SURFACE FLUORESCENT FIXTURE
- RECESSED FLUORESCENT FIXTURE
- SINGLE OUTLET: C-CLOCK (+70")
- DUPLEX RECEPTACLE IG: ISOLATED GROUND SI: SAFETY
- GFCI — DUPLEX RECEPTACLE - GFCI
- GFCI — DUPLEX RECEPTACLE - GFCI BREAKER
- TR — DUPLEX RECEPTACLE - TAMPER RESIST
- SPLIT WIRE DUPLEX
- QUADRAPLEX (DOUBLE DUPLEX)
- COMB. SWITCH / RECEPTACLE
- FLOOR MOUNTED RECEPTACLE
- SPECIAL PURPOSE (AS NOTED)
- TELEVISION OUTLET
- M — MOTOR OUTLET (sto - switched thermal overload)
- TELEPHONE TERMINAL
- TELEPHONE OUTLET
- FLOOR MTD. TELEPHONE OUTLET
- ∇_C — COMPUTER OUTLET
- COMB. TELE/COMPUTER OUTLET
- S — TOGGLE SWITCH (a-switching, 2-2 pole, 3-3 way, 4-4 way; p-pilot light, k-keyed, t-thermal overload, d-dimmer)
- # — WALL MOUNTED LIGHTING CONTROL DEVICE RE: LIGHTING CONTROL DEVICE SCHEDULE
- CEILING MOUNTED LIGHTING CONTROL DEVICE RE: LIGHTING CONTROL DEVICE SCHEDULE
- T — THERMOSTAT
- TS — TIME SWITCH
- PE — PHOTOCELL
- PUSH-BUTTON STATION
- SAFETY SWITCH
- MOTOR STARTER / LIGHTING CONTACTOR
- COMBINATION MOTOR STARTER
- R — RELAY
- FACP — FIRE ALARM CONTROL PANEL
- ANNUNCIATOR
- PULL STATION
- HORN
- HORN / LIGHT COMBINATION
- S — HORN / STROBE
- S — STROBE
- BELL
- OS & Y VALVE
- F — FLOW SWITCH
- ROOM DETECTOR (SMOKE)
- $\bullet_T$ — ROOM DETECTOR (THERMAL)
- DUCT DETECTOR
- REMOTE INDICATING LIGHT / TEST SWITCH
- DOOR HOLDER
- CHIME
- FUSED SWITCH
- CIRCUIT BREAKER
- GROUND CONNECTOR
- MECHANICAL EQUIPMENT
- DETAIL NOTE
- KITCHEN / MEDICAL EQUIPMENT
- (E) — EXISTING TO REMAIN
- (ER) — EXISTING TO BE RELOCATED
- (ED) — EXISTING TO BE DEMOLISHED

6/6/2022 7:28:21 PM

Yoga 5005 LED Outdoor Wall Sconce

By Abra **EW2**

LUMENS LIGHT AND LIVING
Call Us 877.445.4486

Yoga 5005 LED Outdoor Wall Sconce
By Abra

Product Options

Finish: Matte Black , Silica

Details

- May be mounted in any direction
- Material: Steel
- Shade Material: Frosted Acrylic
- Dimmable when used with a Electronic low voltage (ELV) Dimmer (Not Included)
- ETL Listed Wet
- Marine Grade
- Made In China

Dimensions

Backplate: Width 6.3", Height 7.2"
Fixture: Width 6.3", Height 7.2", Depth 6.3", Weight 8Lbs

Lighting

- 12 Watt (765 Lumens) 120 Volt Integrated LED: CRI: 90 Color Temp: 3000K Lifespan: 50000 hours

Additional Details

Product URL:
https://www.lumens.com/yoga-5005-led-outdoor-wall-sconce-by-abra-ABAP293857.html
Rating: ETL Listed Wet

Product ID: ABAP293857

Notes:

Prepared by:

Prepared for:
Project:
Room:
Placement:
Approval:

Created November 4th, 2021

LUMINAIRE SCHEDULE

KEY	LAMP	DESCRIPTION	CEIL'G (DEPTH)	MANUFACTURER/#	VOLT
PP1	LED 3000K 54W 5481LM	LED EXTERIOR PARKINGLOT POLE FIXTURE WITH TYPE T3M DISTRIBUTION AND P1 PERFORMANCE PACKAGE, FULL CUTOFF WITH HOUSE-SIDE SHIELD.	POLE (20'-0")	LITHONIA DSX1-LED-P1-30K-T3M-MVOLT-HS	MVOLT
PP2	LED 3000K 54W 5280LM	LED EXTERIOR PARKINGLOT POLE FIXTURE WITH TYPE T4M DISTRIBUTION AND P1 PERFORMANCE PACKAGE, FULL CUTOFF WITH HOUSE-SIDE SHIELD.	POLE (20'-0")	LITHONIA DSX1-LED-P1-30K-T4M-MVOLT-HS	MVOLT
PP3	LED 3000K 54W 6816LM	LED EXTERIOR PARKINGLOT POLE FIXTURE WITH TYPE T4M DISTRIBUTION AND P1 PERFORMANCE PACKAGE, FULL CUTOFF	POLE (20'-0")	LITHONIA DSX1-LED-P1-30K-T4M-MVOLT	MVOLT
PP4	LED 3000K 108W 6848LM	DOUBLE-HEAD LED EXTERIOR PARKINGLOT POLE FIXTURE WITH TYPE T3M DISTRIBUTION AND P1 PERFORMANCE PACKAGE, FULL CUTOFF	POLE (20'-0")	LITHONIA DSX1-LED-P1-30K-T3M-MVOLT	MVOLT
PP5	LED 3000K 54W 5048LM	LED EXTERIOR PARKINGLOT POLE FIXTURE WITH TYPE TFTM DISTRIBUTION AND P1 PERFORMANCE PACKAGE, FULL CUTOFF WITH HOUSE-SIDE SHIELD.	POLE (20'-0")	LITHONIA DSX1-LED-P1-30K-TFTM-MVOLT-HS	MVOLT
PP6	LED 3000K 38W 4373LM	LED EXTERIOR PARKINGLOT POLE FIXTURE WITH TYPE TFTM DISTRIBUTION AND P1 PERFORMANCE PACKAGE, FULL CUTOFF.	POLE (20'-0")	LITHONIA DSXC-LED-P1-30K-TFTM-MVOLT	MVOLT
PP7	LED 3000K 76W 4376LM	DOUBLE-HEAD LED EXTERIOR PARKINGLOT POLE FIXTURE WITH TYPE T3M DISTRIBUTION AND P1 PERFORMANCE PACKAGE, FULL CUTOFF	POLE (20'-0")	LITHONIA DSXC-LED-P1-30K-T3S-MVOLT	MVOLT
EW1	LED 3000K 9.5W 1349LM	FULL CUTOFF LUMINAIRE, SINGLE HEAD, WALL MOUNTED, TYPE T2M DISTRIBUTION, P1 PERFORMANCE PACKAGE	WALL (7'-6")	LITHONIA DSXW1-LED-10C-350-30K-T2M-MVOLT	MVOLT
EW2	LED 3000K 12W 765LM	LED EXTERIOR WALL MOUNTED FULL CUTOFF FIXTURE, WET LOCATION LISTED	WALL (8'-0")	ABRA LIGHTING YOGA-5005-ABAP293857	120V
EW3	LED 3000K 19.1W 1811LM	FULL CUTOFF LUMINAIRE, SINGLE HEAD, WALL MOUNTED, TYPE T3M DISTRIBUTION, P1 PERFORMANCE PACKAGE WITH HOUSE-SIDE SHIELD.	WALL (7'-6")	LITHONIA DSXW1-LED-10C-530-30K-T3M-MVOLT-HS	MVOLT

NOTES:
1. NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN MODEL NUMBERS AND DESCRIPTIONS PRIOR TO ORDERING
2. VERIFY CEILING INSULATION W/ GC AND NOTIFY ENGINEER OF ANY IC RATING CONFLICTS PRIOR TO ORDERING

D-Series Size 1
LED Wall Luminaire

Buy American

d-series

Catalog Number
Notes
Type EW1 EW3

Hit the Tab key or mouse over the page to see all interactive elements.

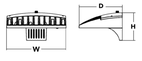
Specifications

Luminaire

Width:	13-3/4" (34.9 cm)	Weight:	12 lbs (5.4 kg)
Depth:	10" (25.4 cm)		
Height:	6-3/8" (16.2 cm)		

Back Box (BBW, E20WC)

Width:	13-3/4" (34.9 cm)	BBW Weight:	5 lbs (2.3 kg)
Depth:	4" (10.2 cm)	E20WC Weight:	10 lbs (4.5 kg)
Height:	6-3/8" (16.2 cm)		



Introduction

The D-Series Wall luminaire is a stylish, fully integrated LED solution for building-mount applications. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.

With an expected service life of over 20 years of nighttime use and up to 74% in energy savings over comparable 250W metal halide luminaires, the D-Series Wall is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

Ordering Information

EXAMPLE: DSXW1 LED 20C 1000 40K T3M MVOLT DDBTXD

DSXW1 LED

Series	LEDs	Drive Current	Color temperature	Distribution	Voltage	Mounting	Control Options
DSXW1 LED	10C 10 LEDs (one engine) 20C 20 LEDs (two engines) [1]	350 350 mA 530 530 mA 700 700 mA 1000 1000 mA (1 A) [1]	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted	T2S Type II Short T2M Type II Medium T3S Type III Short T3M Type III Medium T4M Type IV Medium TFTM Forward Throw Medium	MVOLT [2] 120 [3] 208 [3] 240 [3] 277 [3] 347 [3,4] 480 [3,4]	**Shipped included** (blank) Surface mounting bracket BBW Surface-mounted back box (for conduit entry) [5]	**Shipped installed** PE Photoelectric cell, button type [6] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) PIR 180° motion/ambient light sensor, <15' mtg ht [7,8] PIRH 180° motion/ambient light sensor, 15-30' mtg ht [7,8] PIR1FC3V Motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc [7,9] E20WC Emergency battery backup (includes external component enclosure), CA Title 20 compliant [10]

Other Options		Finish (required)			
Shipped installed SF Single fuse (120, 277 or 347V) [3,9] DF Double fuse (208, 240 or 480V) [3,9] HS House-side shield [11] SPD Separate surge protection [12]	**Shipped separately** [13] BSW Bird-deterrent spikes VG Vandal guard DDL Diffused drop lens	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White	DSSXD Sandstone DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum	DWHGXD Textured white DSSTXD Textured sandstone	

Accessories
Ordered and shipped separately.

DSXW1S U House-side shield (one per light engine)
DSXW1BW U Bird-deterrent spikes
DSXW1VG U Vandal guard accessory

NOTES
1 20C 1000 is not available with PIR, PIRH, PIR1FC3V or PIRH1FC3V.
2 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
3 Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
4 Only available with 20C, 700mA or 1000mA. Not available with PIR or PIRH.
5 Back box ships installed on fixture. Cannot be field installed. Cannot be ordered as an accessory.
6 Photocontrol (PE) requires 120, 208, 240, 277 or 347 voltage option. Not available with motion/ambient light sensors (PIR or PIRH).
7 Reference Motion Sensor table on page 3.
8 Same as dsl ELCW. Cold weather (-20C) rated. Not compatible with conduit entry applications. Not available with BBW mounting option. Not available with fusing. Not available with 347 or 480 voltage options. Emergency components located in back box housing. Emergency mode IES files located on product page at www.lithonia.com
9 Not available with SPD.
10 Not available with E20WC.
11 Also available as a separate accessory; see Accessories information.
12 Not available with E20WC.

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D-Series Size 1
LED Area Luminaire

Buy American

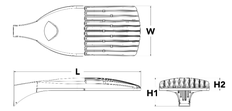
d-series

Catalog Number
Notes
Type PP1, PP2, PP3, PP4, PP5, PP6, PP7

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA:	1.01 ft² (0.09 m²)
Length:	33" (83.8 cm)
Width:	13" (33.0 cm)
Height H1:	7-1/2" (19.0 cm)
Height H2:	3-1/2"
Weight (max):	27 lbs (12.2 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED

Series	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX1 LED	**Forward optics** P1 P4 [1] P7 [1] P2 P5 [1] P8 P3 P6 [1] P9 [1] **Rotated optics** P10 [1] P12 [1] P11 [1] P13 [1,2]	30K 3000 K 40K 4000 K 50K 5000 K	T1S Type I short (Automotive) T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium T5VS Type V very short [3] T5S Type V short [3] T5M Type V medium [3] T5W Type V wide [3] BLC Backlight control [4] LCCO Left corner cutoff [4] RCCO Right corner cutoff [4]	MVOLT [5] XVOLT (277V-480V) [6,7,8] 120 [5] 208 [5] 240 [5] 277 [5] 347 [5] 480 [5]	**Shipped included** SPA Square pole mounting RPA Round pole mounting [9] WBA Wall bracket [9] SPUMBA Square pole universal mounting adaptor [9] RPUMBA Round pole universal mounting adaptor [9] **Shipped separately** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) [9]

Control options		Other options	Finish (required)	
Shipped installed NLTAIR2 nLight AIR generation 2 enabled [10] PIRHN Network, high/low motion/ambient sensor [14] PER NEMA twist-lock receptacle only (controls ordered separate) [15] PER5 Five-pin receptacle only (controls ordered separate) [15,16] PER7 Seven-pin receptacle only (controls ordered separate) [15,16] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) [11] DS Dual switching [8,15,17]	PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc [8,12] PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc [8,12] PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc [8,12] PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc [8,12] FAO Field adjustable output [8,13]	**Shipped installed** HS House-side shield [17] SF Single fuse (120, 277, 347V) [8] DF Double fuse (208, 240, 480V) [8] L90 Left rotated optics [1] R90 Right rotated optics [1] HA 50°C ambient operations [1] BAA Buy America(n) Act Compliant **Shipped separately** BS Bird spikes [18] EGS External glare shield	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

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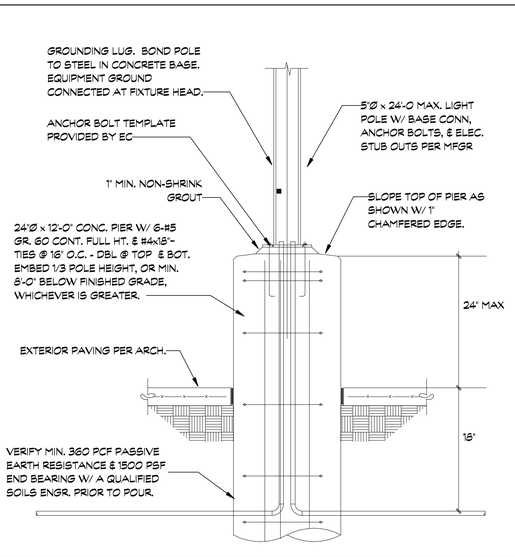
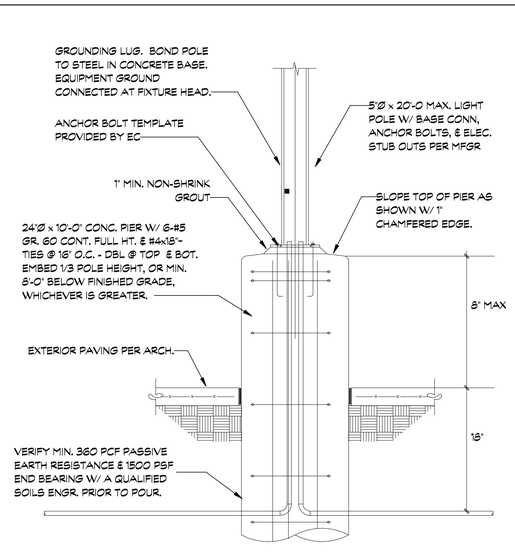


PARKING LOT LIGHT POLE BASE DETAIL | 2



LANDSCPE AND PLAZA AREA LIGHT POLE BASE DETAIL | 1

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plumbing, mechanical and electrical
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Boulder, CO 80302
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303.442.1172 fax
staff@boulderengineering.com

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NORTH END MARKET BLOCK 11

LOUISVILLE, CO 80027

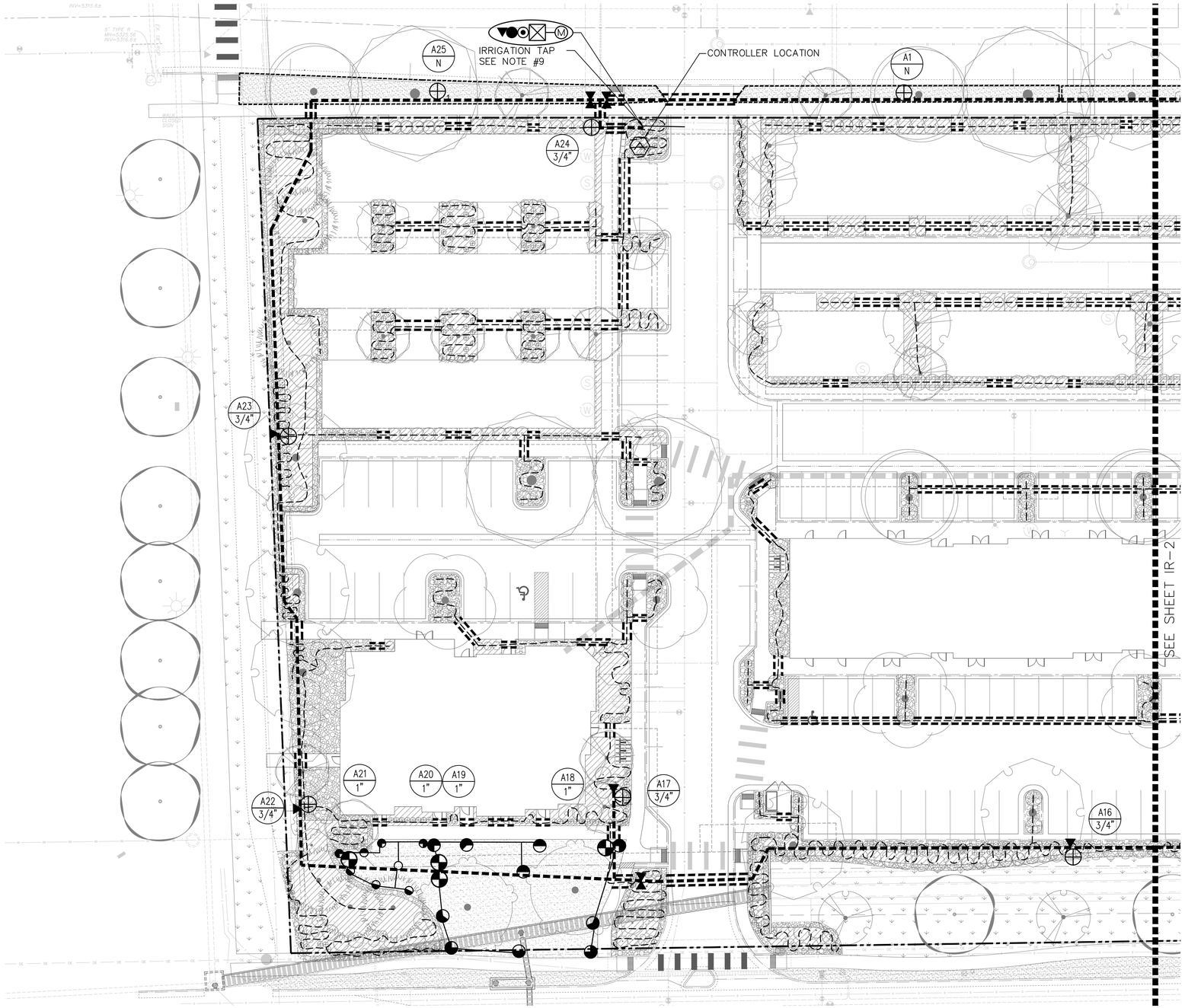
No.	Description	Date
1	BLDG DEPT COMMENTS	06/06/22

COLORADO LICENSED
MICHAEL D. VARNER
38983
06/06/2022
PROFESSIONAL ENGINEER

Issue	PERMIT SET
Date	11.12.2021
Project Number	21157
Drawn by	MOD
Checked by	MV

Sheet Title:
PHOTOMETRIC DETAILS

Sheet Number
MEP 2



NORTH END MARKET

PUD AMENDMENT

LOUISVILLE, CO

PREPARED BY:

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LANDSCAPE ARCHITECTURE, LAND PLANNING
419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.225.6657 | www.ripleydesigninc.com

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OWNER

RIDGELINE DEVELOPMENT CORPORATION
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IRRIGATION

IDC, INC.
STEVE NELSON
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LAFAYETTE, CO 80026
p: 303.518.3672

NORTH
0 10 20 40
SCALE: 1"=20'-0"

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	PUD	8/23/2016
02	MYLAR	7/27/2017

REVISIONS

No.	DESCRIPTION	DATE
01	AMENDMENT	03/25/2021
02	AMENDMENT	06/23/2021
03	AMENDMENT	12/10/2021
04	AMENDMENT	06/22/2022

IRRIGATION PLAN ENLARGEMENT

SEAL:

ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	
DRAWN BY:	
REVIEWED BY:	

DRAWING NUMBER:

IR-1

IDC
IRRIGATION DESIGN & CONSULTING, INC.
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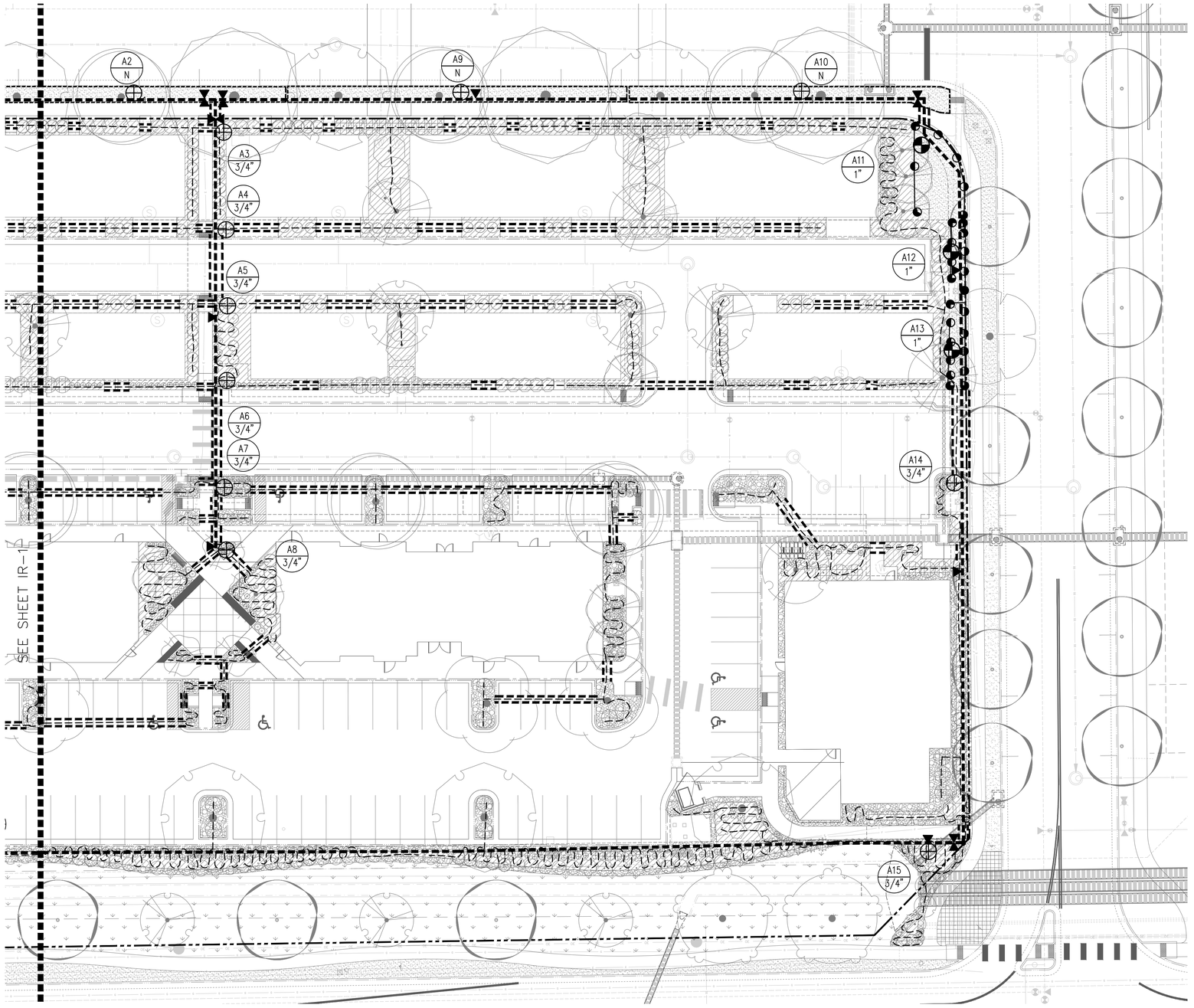
Plotted By: Steve **Layout:** LANDSCAPE ENLARGEMENT **Printed On:** 6/16/2022 12:51 PM **File Name:** Northend Irrigation Plan.dwg



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NORTH

SCALE: 1"=20'-0"

0 10 20 40

ORIGINAL SIZE 24X36

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03	AMENDMENT	12/10/2021
04	AMENDMENT	06/22/2022

IRRIGATION PLAN ENLARGEMENT

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PROJECT No.:	
DRAWN BY:	
REVIEWED BY:	

DRAWING NUMBER:

IR-2

IDC
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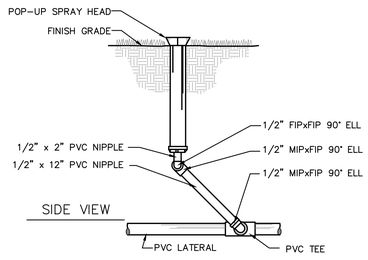
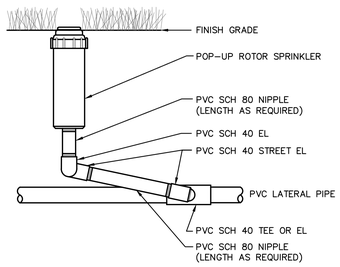
Plotted By: Steve **Layout:** LANDSCAPE ENLARGMENT **Printed On:** 6/16/2022 12:51 PM **File Name:** Northend Irrigation Plan.dwg

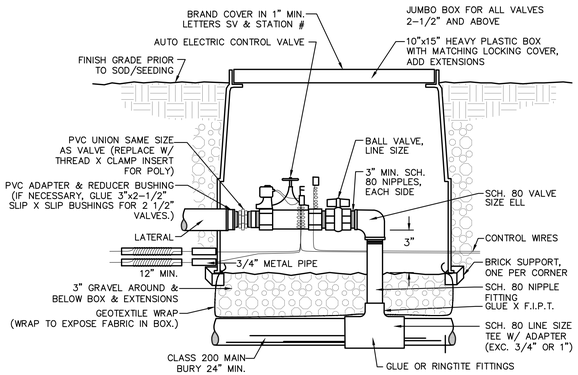


NOTE:
1. COMPACT BACKFILL TO DENSITY OF UNDISTURBED SOIL.
2. ALL PVC NIPPLES TO BE SCHEDULE 80

1 POP-UP SPRAY HEAD

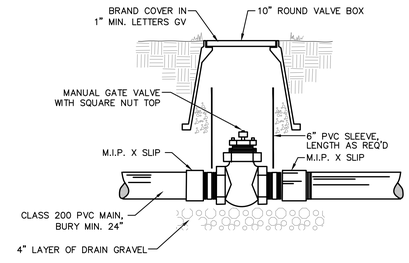


2 POP-UP ROTOR HEAD



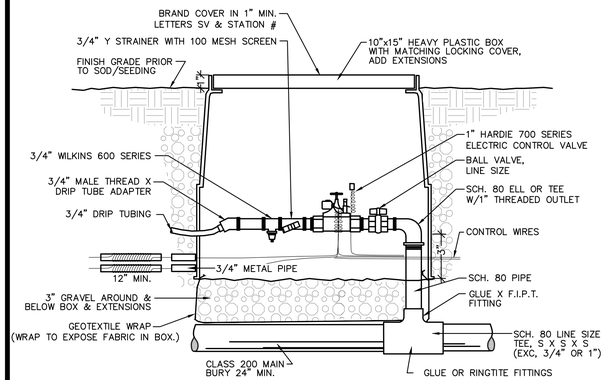
COMPACT BACKFILL TO DENSITY OF UNDISTURBED SOIL

3 CONTROL VALVE



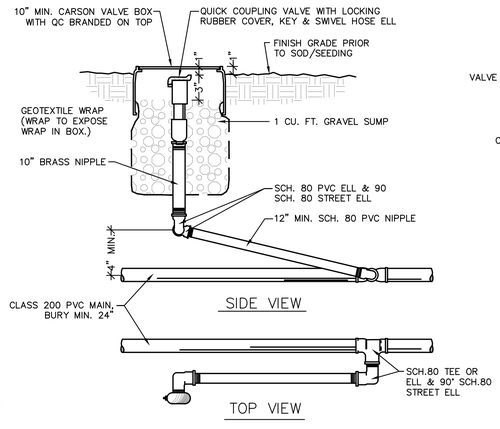
1. COMPACT BACKFILL TO DENSITY OF UNDISTURBED SOIL
2. LOCKING BOLTS FOR VALVE COVERS TO BE STAINLESS STEEL.

4 ISOLATION GATE VALVE



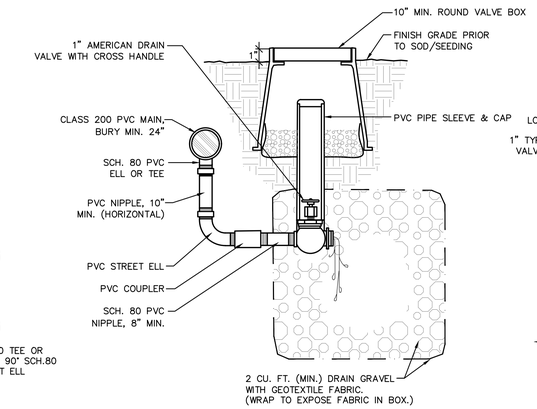
COMPACT BACKFILL TO DENSITY OF UNDISTURBED SOIL

5 DRIP VALVE



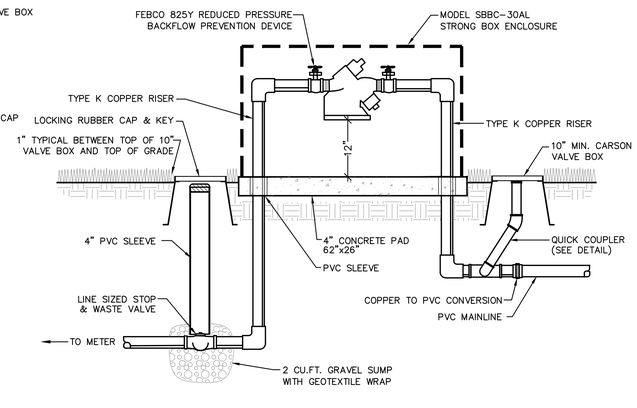
COMPACT BACKFILL TO DENSITY OF UNDISTURBED SOIL

6 QUICK COUPLER



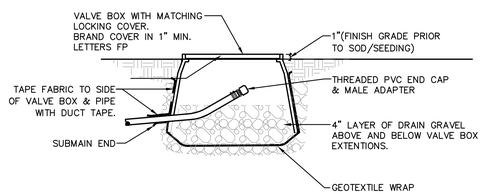
COMPACT BACKFILL TO DENSITY OF UNDISTURBED SOIL

7 DRAIN VALVE

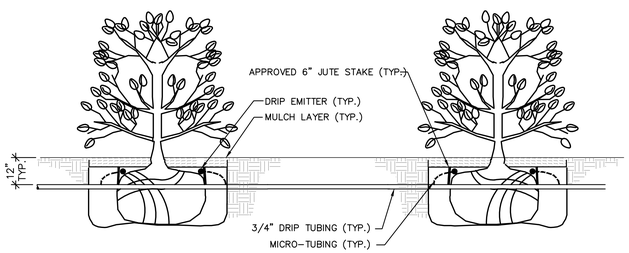


COMPACT BACKFILL TO DENSITY OF UNDISTURBED SOIL

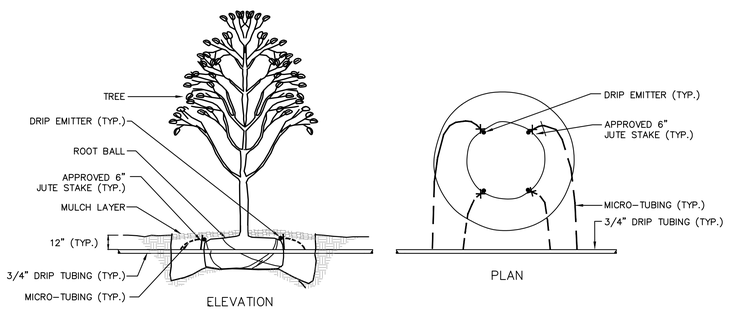
8 REDUCED PRESSURE BACKFLOW PREVENTER



9 DRIP-BLOWOUT



10 DRIP-SHRUB



11 DRIP-TREE

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NORTH
0 10 20 40
SCALE: 1"=20'-0"

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
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REVISIONS

No.	DESCRIPTION	DATE
01	AMENDMENT	03/25/2021
02	AMENDMENT	06/23/2021
03	AMENDMENT	12/10/2021
04	AMENDMENT	06/22/2022

NORTH END MARKET

PUD AMENDMENT

LOUISVILLE, CO

PREPARED BY:

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IRRIGATION
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STEVE NELSON
P.O. BOX 607
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p: 303.518.3672

IRRIGATION PLAN DETAILS

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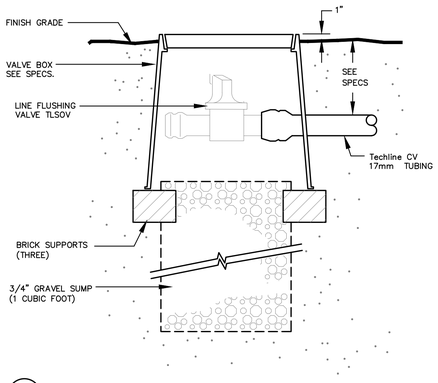
PROJECT No.:	
DRAWN BY:	
REVIEWED BY:	

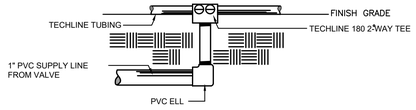
DRAWING NUMBER:

IR-3

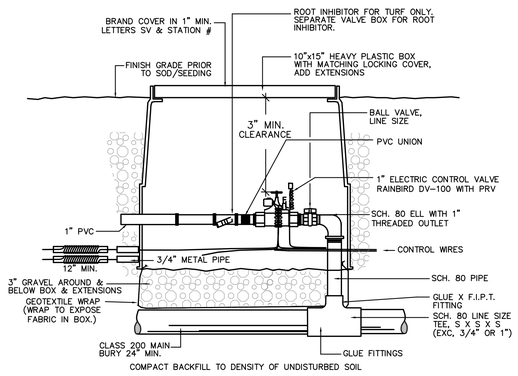
Plotted By: Steve **Layout:** LANDSCAPE ENLARGMENT (2) **Printed On:** 6/16/2022 12:51 PM **File Name:** Northend Irrigation Plan.dwg



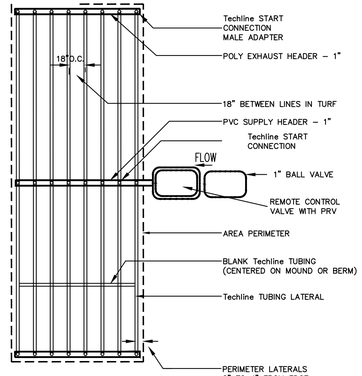
(12) MANUAL LINE FLUSHING VALVE TLSOV PLUMBED TO TUBING



(16) TECHLINE START CONNECTION
(W/ PVC RISER)

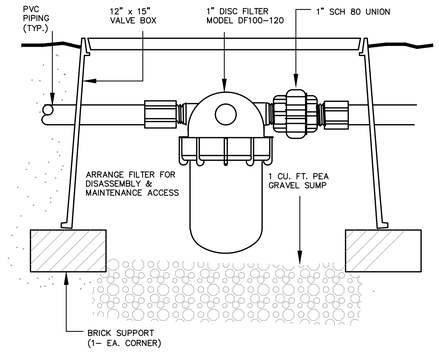


(13) Netafim Valve
NOT TO SCALE



NOTE: INSTALL GRID TUBING PARALLEL TO SLOPE.

(14) Techline Center Feed Layout For Turf And Shrub Beds
NOT TO SCALE



(15) 1" DISC FILTER
NOT TO SCALE

IRRIGATION SCHEDULE

SYMBOL	MODEL	DESCRIPTION	DETAIL
	1806 -SAM-PRS W/ 15 SER. NOZZLE	RAINBIRD POP UP SPRAY HEAD	1
	5006+-SAM-R-SS-2.0	RAINBIRD ROTOR	2
	5006+-SAM-R-SS-3.0	RAINBIRD ROTOR	2
	PEB SERIES	RAINBIRD CONTROL VALVE	3
	LINE SIZE	GATE VALVE	4
	¾"	DRIP VALVE	5
1	1"	NETAFIM VALVE	13
	44LRC	RAINBIRD QUICK COUPLER	6
	825YA- ¾"	FEBCO BACKFLOW PREVENTER	8
	ESP-LXME-36 STATIONS SERIES	RAINBIRD CONTROLLER - PEDESTAL MOUNT	
	CL. 200 B.E. (1½")	PVC MAINLINE	
	CL. 200 B.E.	PVC LATERALS- 1" UNLESS OTHERWISE NOTED	
	CL. 200	PVC SLEEVING	
	¾"	DRIP TUBING	
		CONTROLLER NUMBER VALVE SIZE	
	20930 SERIES - ¾"	BUCKNER MASTER VALVE	
	600 SERIES - ¾"	WILKINS PRV	

NOTES

1. REFER TO SPECIFICATIONS AND DETAILS FOR INSTALLATION INSTRUCTIONS.
2. ALL BASE PLAN INFORMATION HAS BEEN TAKEN FROM DRAWINGS PREPARED FOR MARKEL HOMES, INC.
3. IRRIGATION SYSTEM IS DESIGNED FOR A STATIC WATER PRESSURE OF 70 PSI. CONTRACTOR IS TO VERIFY PRESSURE PRIOR TO INSTALLATION OF IRRIGATION SYSTEM AND NOTIFY LANDSCAPE ARCHITECT WITH VERIFICATION FIGURES. FAILURE TO NOTIFY LANDSCAPE ARCHITECT WILL RESULT IN CONTRACTOR TAKING RESPONSIBILITY FOR ANY ALTERATIONS AT HIS/HER OWN COST.
4. INSTALL DRIP EMITTERS IN BED AREAS AS DESCRIBED BELOW:

GROUND COVER	AGRIFIM IFT-5	1 EA. 12" RADIUS, 15" O.C.
1 GALLON MAT'L.	AGRIFIM IFT-5	1 EA.
5 GALLON MAT'L.	AGRIFIM IFT-5	2 EA.
DECIDUOUS TREES (1½" - 2" CAL.)	AGRIFIM IFT-10	3 EA.
DECIDUOUS TREES (3"-4" CAL.)	AGRIFIM IFT-10	4 EA.
PINE TREES (6'-10')	AGRIFIM IFT-10	2 EA.
PINE TREES (11'-14')	AGRIFIM IFT-10	3 EA.

5. CONTRACTOR TO COORDINATE INSTALLATION OF SLEEVING WITH INSTALLATION OF PAVING AND SIDEWALKS.
6. USE RAINBIRD 12 SERIES NOZZLES FOR SPRAY HEADS SPACED LESS THAN 13'.
7. USE RAINBIRD 10 SERIES NOZZLES FOR SPRAY HEADS SPACED LESS THAN 11'.
8. ELECTRICAL POWER TO THE NEW CONTROLLER IS SUPPLIED BY CONTRACTOR.
9. TAP LOCATION:
CONNECT TO EXISTING ¾" COPPER STUB AND EXTEND ¾" COPPER. INSTALL ¾" STOP AND WASTE VALVE, ¾" BACKFLOW PREVENTER, ¾" PRV, ¾" MASTER VALVE AND EXTEND 1½" MAINLINE AS SHOWN. INSTALL MASTER VALVE AND PRV IN SEPARATE CARSON #1419-13B VALVE BOXES. INSTALL STRONGBOX #SBBC-30 A.L. BACKFLOW PREVENTER CAGE. INSTALL TAP, METER AND ALL RELATED EQUIPMENT AS PER CITY SPECIFICATIONS AND DETAILS.
10. EACH ZONE REPRESENTS A GRID PATTERN OF NETAFIM TECHLINE TUBING. USE NETAFIM CV-#TLDL4-12 TUBING AND INSTALL AT 4" DEPTH FOR TURF AREAS.
11. VALVES ARE TO BE BURIED PER DETAILS.
12. INSTALL NETAFIM TUBING PER MANUFACTURERS RECOMMENDATIONS. THIS SHALL INCLUDE BUT NOT LIMITED TO TUBING SPACING, DEPTH AND SIZING. INSTALL ALL REQUIRED ACCESSORIES.
13. OWNER'S REPRESENTATIVE TO FIELD VERIFY TAP AND CONTROLLER LOCATIONS PRIOR TO INSTALLATION.
14. ALL VALVE BOX LIDS ARE TO BE BRANDED WITH CONTROL NUMBER, ETC.
15. CONTRACTOR TO ADJUST NOZZLES AS DIRECTED BY OWNER'S REPRESENTATIVE AND BY CITY OF LOUISVILLE ENGINEERING DEPARTMENT IN THE FIELD. HEAD LOCATION IS TO BE APPROVED PRIOR TO INSTALLATION.
16. INSTALL LATERALS BASED ON LATERAL GUIDE BELOW:

GPM	REQUIRED LATERAL
1-14 GPM	1" LATERAL
15-22 GPM	1¼" LATERAL
23-30 GPM	1½" LATERAL
31-45 GPM	2" LATERAL
46-65 GPM	2½" LATERAL
65+ GPM	3" LATERAL

17. INSTALL SLEEVING BASED ON SLEEVING GUIDE BELOW:

PIPE SIZE OR WIRE QUANTITY	REQUIRED SLEEVE
3/4" TO 1" PIPING	2" SLEEVE
1-1/4" TO 2" PIPING	4" SLEEVE
2-1/2" TO 3" PIPING	6" SLEEVE
4" PIPING	8" SLEEVE
6" PIPING	10" SLEEVE
CONTROL WIRES	2" SLEEVE

NOTE: EACH LENGTH OF SLEEVED PIPE SHOWN SHALL BE ROUTED THROUGH A SEPARATE SLEEVE.

VALVE CHART

VALVE #	GPM	VALVE #	GPM
A1	3.2		
A2	3.2		
A3	2.3		
A4	1.3		
A5	1.1		
A6	3.4		
A7	1.4		
A8	3.1		
A9	3.2		
A10	3.2		
A11	11		
A12	12		
A13	10		
A14	1.3		
A15	3.8		
A16	4.2		
A17	1.3		
A18	11		
A19	9		
A20	11		
A21	12		
A22	1.3		
A23	2.3		
A24	3.7		
A25	4.3		

Development: Northend-Louisville

Date: 6/16/2022

Form fillout by: Steve Nelson - IDC, inc.

Contact Info:

Approximate Irrigation Usage for Landscape at Northend-Louisville

Notes	Type (1)	(2) Area of Landscaping Type (sq.ft.)	(3) Landscaping water needs in Inches per Year	Irrigation application efficiency (%)	Total water needs inches per year	Total water needs in AF/yr
a)	Seed -Temporary Irrigation	0		85%	0.00	0.00
				85%	0.00	0.00
	Shrubs	34,067	15	85%	17.65	1.15
	Sod	12,394	25	85%	29.41	0.70
				85%	0.00	0.00
				85%	0.00	0.00
				85%	0.00	0.00
				85%	0.00	0.00
				85%	0.00	0.00
					Total	1.85

(1) **Type** of landscaping being irrigated together (i.e. turf grass, shrub beds, native seed). or Drip Irrigaton as defined in Louisville Municipal Code (Sec. 13.12.040.B.)
(2) **Area** associated with provided Type.
(3) **Water Needs** is the estimated (inches per year) associated with the named landscape Type.

IDC
IRRIGATION DESIGN & CONSULTING, INC.
303-442-7027
303-665-8485- FAX

NORTH SCALE: 1"=20'-0"

ORIGINAL SIZE 24X36

ISSUED

No.	DESCRIPTION	DATE
01	PUD	8/23/2016
02	MYLAR	7/27/2017

REVISIONS

No.	DESCRIPTION	DATE
01	AMENDMENT	03/25/2021
02	AMENDMENT	06/23/2021
03	AMENDMENT	12/10/2021
04	AMENDMENT	06/22/2022

NORTH END MARKET

PUD AMENDMENT

LOUISVILLE, CO

PREPARED BY:

ripley design
LANDSCAPE ARCHITECTURE, LAND PLANNING
419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.225.6657 | www.ripleydesigninc.com

PLANNER / LANDSCAPE ARCHITECT
RIPLEY DESIGN INC
Sam Coutts
419 CANYON AVE #200
FORT COLLINS, CO 80550
p. 970.224.5828

OWNER
RIDGELINE DEVELOPMENT CORPORATION
Michael Markel
5723 Arapahoe Ave. #2B
Boulder, CO 80303
p. 303.449.8689

ENGINEER
MPD ENGINEERING, LLC
Marc Dolezal, P.E.
1550 QUINCE AVE.
BOULDER, CO 80304
p: 303.498.9224

IRRIGATION
IDC, INC.
STEVE NELSON
P.O. BOX 607
LAFAYETTE, CO 80026
p: 303.518.3672

IRRIGATION PLAN SCHEDULE

SEAL:

ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	
DRAWN BY:	
REVIEWED BY:	

DRAWING NUMBER:

IR-4

Plotted By: Steve Layout: LANDSCAPE ENLARGMENT (3) Printed On: 6/16/2022 12:51 PM File Name: Northend Irrigation Plan.dwg

Know what's **below.**
Call before you dig.

WHERE THIS SYMBOL OCCURS, CONTRACTOR TO POTHOLE EXISTING UTILITY(S) AND DETERMINE LOCATION, DEPTH, CONDITION, TYPE OF UTILITY, ANY SPECIAL CONDITIONS AND REPORT TO THE ENGINEER PRIOR TO STARTING ANY WORK ON THE SITE.

CONTRACTOR TO COMPLETE ALL POTHOLES PRIOR TO STARTING CONSTRUCTION AND PROVIDE A REPORT TO THE ENGINEER

CONSTRUCTION PLANS FOR

NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT

PUBLIC IMPROVEMENTS, UTILITY EXTENSIONS AND ACCESS IMPROVEMENTS

CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

JUNE 17, 2022

A PORTION OF THE SOUTHWEST ONE QUARTER
OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST, OF THE SIXTH
PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO.

PREPARED UNDER THE
DIRECT SUPERVISION OF
MARC P. DOLEZAL, PE
COLORADO REGISTERED PROFESSIONAL
ENGINEER NO 42318
FOR AND ON BEHALF OF
MPD ENGINEERING

MPD
ENGINEERING
1550 QUINCE AVE.
BOULDER, CO 80304
PHONE: 303.498.9224
marc@mpd-engineering.com

COLORADO REGISTERED PROFESSIONAL ENGINEER
MARC P. DOLEZAL
42318
6/17/2022

GENERAL NOTES AND SPECIFICATIONS:

1. TOPOGRAPHIC INFORMATION ON THE PLANS WAS PROVIDED BY THE SURVEYOR LISTED IN THE CONTACTS SECTION ON THIS SHEET. SEE THE INFORMATION AT THE BOTTOM OF THIS SHEET FOR BASIS OF BEARING AND BENCHMARK. CERTAIN DATA SHOWN IS ALSO BASED ON AS-BUILT INFORMATION. CONTRACTOR TO CONFIRM ALL DATA PRIOR TO CONNECTIONS AND REPORT DIFFERENCES TO ENGINEER IMMEDIATELY AND PRIOR TO PERFORMING WORK. ADJUSTMENTS MAY BE NECESSARY TO THE DESIGN BASED ON ACTUAL AS-BUILT DATA UNCOVERED.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE PLANS AND THE CURRENT CITY OF LOUISVILLE DESIGN AND CONSTRUCTION STANDARDS. OTHER REFERENCES INCLUDE THE STATE OF COLORADO, DEPARTMENT OF TRANSPORTATION, M&S STANDARDS AND THE COLORADO HIGHWAY SPECIFICATIONS, LATEST ADDITION AND AMENDMENTS.
3. EXISTING UTILITIES ARE INDICATED ON THESE PLANS. THAT INFORMATION IS SHOWN BASED ON MAPPING AND LOCATES PROVIDED BY THE UTILITY PROVIDERS, BUT IS NOT TO BE DEEMED ABSOLUTE OR COMPLETE. THE ENGINEER MAKES NO REPRESENTATION THAT ALL EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE IN THEIR ABSOLUTE HORIZONTAL OR VERTICAL LOCATIONS.
4. A STORMWATER PERMIT FROM THE STATE OF COLORADO DEPARTMENT OF PUBLIC HEALTH IS IN PLACE FOR THIS SITE. A COPY OF THE PERMIT SHALL BE OBTAINED FROM THE WATER QUALITY DIVISION OR THE OWNER. THE CONTRACTOR SHALL KEEP A COPY OF THIS PERMIT AND ANY AMENDMENTS ON SITE AT ALL TIMES. THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF THE PERMIT AND AMENDMENTS. THIS LOT MAY BE PART OF A LARGER STORM WATER MANAGEMENT PLAN, AND IF SO, THAT PLAN MUST BE AMENDED TO SUPPORT THIS SPECIFIC SITE DEVELOPMENT PLAN.
5. THE CONTRACTOR SHALL OBTAIN ALL PERMITS FOR CONSTRUCTION. PERMITS MAY BE REQUIRED FROM THE STATE OF COLORADO, THE CITY OF LOUISVILLE OR OTHER AGENCIES.
6. A FUGITIVE DUST PERMIT (APEN) IS IN PLACE FOR THE MASTER DEVELOPMENT. THE CONTRACTOR SHALL OBTAIN A COPY OF THE FUGITIVE DUST PERMIT FROM THE OWNER AND KEEP IT ON SITE. THE CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS OF THAT PERMIT.
7. ANY GROUNDWATER ENCOUNTERED WILL REQUIRE A DEWATERING PERMIT FROM THE STATE OF COLORADO, DEPARTMENT OF PUBLIC HEALTH. THE CONTRACTOR WILL BE REQUIRED TO SECURE THAT PERMIT AS NEEDED, INCLUDING COMPLETION OF THE PERMIT FORMS AND SUPPORTING DOCUMENTS AND PAY ANY FEES ASSOCIATED WITH THE PERMIT.
8. NOTES AND SPECIFICATIONS ARE ON SHEET 2 OF THESE PLANS. THE ORDER OF PRECEDENCE IF CONFLICTS OCCUR ARE:
   - –CITY OF LOUISVILLE DESIGN AND CONSTRUCTION STANDARDS.
   - –NOTES AND SPECIFICATIONS AND THESE PLANS
   - –CDOT BRIDGE AND HIGHWAY STANDARDS
   - –CDOT M&S STANDARDS
9. THE ENGINEER IS AVAILABLE TO ANSWER ANY QUESTIONS REGARDING THE INFORMATION PRESENTED IN THESE PLANS.
10. IMPROVEMENTS SHOWN AS EXISTING MAY NOT BE COMPLETE INCLUDING THE DRIVEWAY CUT FROM BLUE STAR, THE WATER STUBS AND SEWER STUBS INTO THE SITE. THESE IMPROVEMENTS ARE DEPICTED ON PLANS PREPARED BY JLB ENGINEERING AND MUST BE COMPLETED BEFORE OR CONCURRENT WITH THESE IMPROVEMENTS.

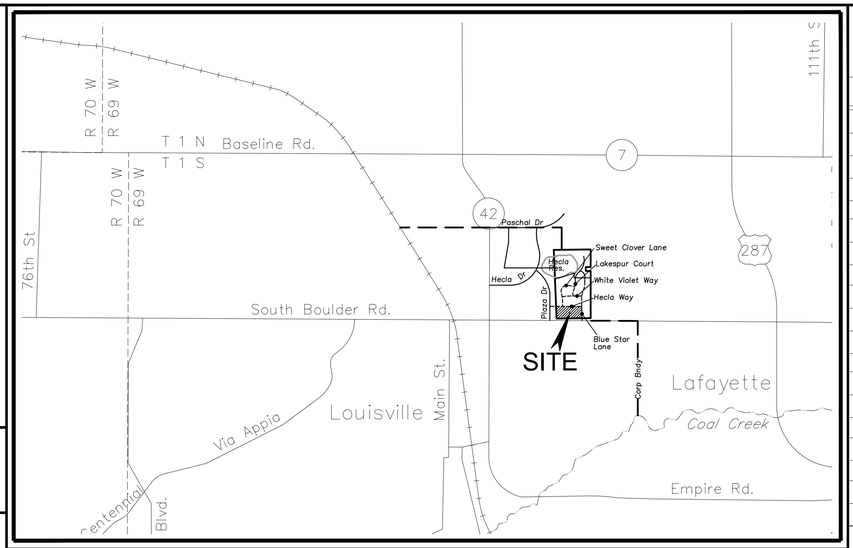
PRIVATE ENGINEERS NOTE REGARDING EXISTING UTILITIES

EXISTING UTILITIES ARE DEPICTED BASED ON FIELD EVIDENCE, MAPS PROVIDED BY OTHERS, LOCATES BY PRIVATE LOCATERS, LOCATES BY THE UTILITY OWNER AND OTHER OBTAINED EVIDENCE. THIS PLAN DOES NOT GURANTEE THE LOCATIONS OR TYPES OF EXISTING UTILITIES, YET SIMPLY LOCATES THEM IN ACCORDANCE WITH THE EVIDENCE LISTED ABOVE.

BASIS OF BEARING AND BENCHMARK

BASIS OF BEARING
WEST LINE OF THE SOUTHWEST 1/4 OF SECTION 4, T1S, R69W, 6TH P.M.
BEARS S05°00'40"W (GRID NORTH).

BENCHMARK:
NORTH AMERICAN VERTICAL DATUM OF 1988, LOUISVILLE CONTROL POINT LP4.
PUBLISHED ELEVATION 5320.64. SITE BENCHMARK TO BE SET PRIOR TO CONSTRUCTION.



VICINITY MAP

1" = 1000'

SHEET INDEX

NUMBER	SHEET TITLE	SHEET
1	COVER SHEET	CVR
2	NOTES AND SPECIFICATIONS	NOTES
3	EXISTING CONDITIONS & DEMO PLAN	EX
4	SITE PLAN	SP
5	EROSION CONTROL PLAN	ECP
6	UTILITY PLAN	UP
7	GRADING PLAN	GP
8	UTILITY - PLAN & PROFILE	PP1
9	UTILITY - PLAN & PROFILE	PP2
10	UTILITY - PLAN & PROFILE	PP3
11	EROSION CONTROL DETAILS	DET1
12	EROSION CONTROL DETAILS	DET2
13	WATER DETAILS	DET3
14	WATER DETAILS	DET4
15	SANITARY SEWER DETAILS	DET5
16	SITE DETAILS	DET6
17	SITE DETAILS	DET7
18	SITE DETAILS	DET7

LEGEND OF ABBREVIATIONS

ITEM	ABBREVIATION	ITEM	ABBREVIATION	ITEM	ABBREVIATION
REMOVE	REM	ALGEBRAIC DIFF.	A.D.	LOW POINT	LP
REPLACE	REPL	BEGIN VERT CURVE ELEV	BVCE	MAXIMUM	MAX
EXISTING	EX	END VERT CURVE ELEV	EVCE	MINIMUM	MIN
WATER	W	CABLE TELEVISION	CATV	PROPERTY CORNER	PC
SANITARY SEWER	SS	COLO DEPT OF TRANS	CDOT	PROOPOSED	PROP
STORM SEWER	ST	CORRUGATED METAL PIPE	CMP	POLYVINYL CHLORIDE	PVC
FIBER OPTICS	FO	DUCTILE IRON PIPE	DIP	POINT OF VERT INTERSECT	PVI
GAS	G	ELEVATION	EL OR ELEV	INVERT	INV
STEEL	STL	FLARE END SECTION	FES	REINF CONCRETE PIPE	RCP
OVER HEAD	OVH	FINISH GRADE	FG	RIGHT OF WAY	ROW
ELECTRIC	E	FOOT	FT	STATION	STA
OVER HEAD LINE	OL	FIRE HYDRANT	FH	THRUST BLOCK	TB
ON CENTER	OC	FLOW LINE	FL	TOP OF PIPE	TOP
UNLESS OTHERWISE NOTED	UON	GATE VALVE	GV	TOP OF SLOPE	TOS
NOT TO SCALE	NTS	HIGH POINT	HP	BOTTOM OF SLOPE	BOS
CONTROL POINT	CP	INCHES	IN	TYPICAL	TYP
CHAIN LINK FENCE	CL	INSIDE DIAMETER	ID	UNDERDRAIN	UD
WATER VALVE	WV	EDGE OF ASPHALT	EOA	AMER WATER WORKS ASSN	AWWA
MANHOLE	MH	EASEMENT	ESMT	TOP BACK OF CURB	TBC
DOWNSPOUT	DS	END VERT CURVE ELEV	EVCE	EDGE OF GRAVEL	EOG
CONCRETE	CONC	END VERT CURVE STA	EVCS	RIGHT	RT
MECHANICAL	MECH	LEFT	LT	POWER POLE	PP
UTILITY EASEMENT	UE	ACCESS EASEMENT	AE	UNDER DRAIN	UD
DRAINAGE EASEMENT	DE	CROWN TRANSITION	CT	UNDER DRAIN (4")	UD4
TO BE REMOVED	TBR	PROTECT IN PLACE	PIP		

LEGEND OF SYMBOLS

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROL POINT	CP		WATER SERVICE (3/4")		
SECTION CORNER			WATER SERVICE (1")		
BOLLARD/STL POST			WATER SERVICE (1-1/2")		W1.5
UTILITY METER			WATER METER		W
OVH LIGHT POLE			SEWER SERVICE (4")		
FIRE HYDRANT			CONTOUR (1' INT)	5301	5301
UTILITY MANHOLE			CONTOUR (5' INT)	5300	5300
FENCE-CHAIN LINK			DRAINAGE INLET		
WATER MAIN	W		THRUST BLOCK		
SEWER MAIN	SS		GATE VALVE (WATER)		
ELECTRIC - OVERHEAD	OL		OTHER VALVE (WATER)		
ELECTRIC - UG	E		BLOW OFF (WATER)		
FIBER OPTICS	F		FITTING (WATER)		
GAS - NATURAL	G		SIGN		
STORM DRAIN			BOUNDARY LINE		
CURB AND GUTTER			PROPERTY LINE		
EDGE OF ASPHALT					
EDGE OF CONCRETE					

PROJECT CONTACTS

OWNER/AGENT:	CIVIL ENGINEER:
RIDGELINE DEVELOPMENT CORP. CHAD KIPFER 5723 ARAPAHOE AVE. #2 BOULDER, COLORADO 80303 303-339-6116	MPD ENGINEERING, LLC MARC DOLEZAL, PE 1550 QUINCE AVE. BOULDER, COLORADO 80304 303-498-9224
SURVEYOR:	
CORE CONSULTANTS MILES SMALL, PLS 1331 17TH ST., SUITE 900 DENVER, CO 80202 720-946-0969	
GAS/ELECTRIC:	**PHONE:**
XCEL ENERGY BARBARA TEMPLE 303-245-2287	CENTURY LINK MICHAEL O'HEARNE 303-441-6021(O)
CABLE TV:	**WATER DISTRICT**
COMCAST KEVIN YOUNG 720-281-8666	NOR. COLO. WATER DISTRICT JIM STRUBLE 970-622-2243
LOUISVILLE PUBLIC WORKS:	**LOUISVILLE INSPECTORS:**
CRAIG DUFFIN CITY ENGINEER 749 MAIN STREET LOUISVILLE, CO 80027 303-335-4602	PUBLIC WORKS MARK WOZNY 303-489-5750 STORM WATER MANAGEMENT VICKIE ILKO 303-335-4780

CITY OF LOUISVILLE
APPROVAL

By: _____

Date: _____

Document Approval Expires: _____

This document was reviewed for conformance with City of Louisville Design and Construction Standards. City approval does not relieve owners, design engineer, or contractor of responsibility to correct errors or ommissions relating to this document.

NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT

COVER SHEET

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

DATE	BY	REVISION/ISSUE
12/10/21	MPD	PER CITY COMMENTS 9-23-21
6/17/22	MPD	PER CITY COMMENTS 3-21-22

Design DSS *Drawn* DSS
Checked MPD *Approv.* MPD
Date JUNE 23, 2021
Job No. 1915
D:- 1915-cover&notes

SHEET
CVR
1 OF 18 SHEETS

CITY OF LOUISVILLE NOTES:

1. ALL CONCRETE (PUBLIC IMPROVEMENTS) SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGHT OF 4500 PSI. NO FLY ASH OR WATER REDUCER IS ALLOWED.
2. FOR FITTING AND VALVES, THE CONTRACTOR SHALL USE CORROSION RESISTANT T-THEAD BOLTS WITH A FLUORPOLYMER COATING AND SHALL BE EITHER "COR-BLUE" BY NSS INDUSTRIES OF "BLUE BOLT" BY BIRMINGHAM FASTENERS OR APPROVED EQUAL.
3. ALL PUBLIC FIRE HYDRANTS SHALL BE FACTORY PAINTED RED. ALL PRIVATE FIRE HYDRANTS SHALL BE FACTORY PAINTED SAFETY YELLOW.
4. AT LEAST 45 DAYS PRIOR TO THE REQUESTED CONSTRUCTION ACCEPTANCE (CA) DATE, THE FOLLOWING SHALL BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT FOR REVIEW AND APPROVAL:
   a. AS-BUILT MYLARS OF THE ENTIRE CIVIL CONSTRUCTION PLAN SET. AS-BUILTS WHICH ARE NOT CLEAN, CLEAR AND FREE FROM OBJECTIONABLE BACKGROUND WILL NOT BE ACCEPTED.
   b. ELECTRONIC VERSION OF COMPUTER AS-BUILT DISK INFORMATION, AUTOCAD 2012 COMPATIBLE. AS-BUILT INFORMATION SHALL BE CONTAINED IN ONE AUTOCAD DRAWING AND INCLUDE ALL HORIZONTAL INFORMATION (PROPERTY LINES, EASEMENTS, RIGHT-OF-WAYS, CONTOURS, ENTIRE WATER SYSTEM, ENTIRE SANITARY SEWER SYSTEM, ENTIRE STORM SEWER SYSTEM, STREETS, CURB AND GUTTER, SIDEWALKS, TRAILS, AND LABELING FOR ALL ITEMS, ETC. ALL FONTS AND ANY OTHER AUTOCAD INFORMATION (CTB FILES, DST FILES, ETC.) SHALL BE INCLUDED.
   c. ELECTRONIC VERSION OF COMPUTER AS-BUILT DRAWINGS IN PDF FORMAT.
   d. AS-BUILT MYLARS AND PDF OF THE ENTIRE LANDSCAPE AND IRRIGATION PLAN SET. AS-BUILTS WHICH ARE NOT CLEAN, CLEAR AND FREE FROM OBJECTIONABLE BACKGROUND WILL NOT BE ACCEPTED.
   e. CERTIFICATION OF CONSTRUCTION COSTS ON PUBLIC IMPROVEMENTS. CERTIFIED COSTS TO BE LISTED SEPARATELY FOR EACH PUBLIC IMPROVEMENT INSTALLED.
   f. FORMAL COMPACTION TEST REPORTS SIGNED AND SEALED FOR WATER MAIN AND SERVICES, SANITARY SEWER MAIN AND SERVICES, STORM SEWER MAIN, CURB AND GUTTER, SIDEWALKS, AND RAMP DRIVES. THE TEST REPORTS SHALL BE ORGANIZED BY PHASE, TYPE OF TEST, STREET, DATE, ETC. AND TEST REPORT LOCATIONS PLACED ON A CLEAN DRAWING FOR REFERENCE.
   g. FORMAL MATERIAL TESTING REPORTS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER CONCERNING THE RESULTS OF PUBLIC CONCRETE CURB AND GUTTER, SIDEWALKS, AND RAMP DRIVE COMPRESSION STRENGTH TESTING.
   h. ANY EASEMENTS, LICENSE AGREEMENTS, OR OTHER DOCUMENTS REQUESTED BY PUBLIC WORKS.
   i. DRAINAGE AND GRADING CERTIFICATION FOR THE ENTIRE SITE.
   j. ANY OTHER ITEMS REQUIRED BY THE DEVELOPMENT/SUBDIVISION AGREEMENT.

GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE CITY OF LOUISVILLE DESIGN AND CONSTRUCTION STANDARDS AND THE CITY OF LOUISVILLE STORM DRAINAGE DESIGN AND TECHNICAL CRITERIA.
2. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LOUISVILLE PUBLIC WORKS DEPARTMENT. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
3. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF CONSTRUCTION. A PRE-CONSTRUCTION MEETING WILL NOT BE SCHEDULED UNTIL THE GRADING PERMIT AND ALL OTHER NECESSARY PERMITS HAVE BEEN OBTAINED.
4. THE CITY INSPECTOR SHALL BE CONTACTED A MINIMUM OF 24 HOURS PRIOR TO A NECESSARY INSPECTION. THE CITY OF LOUISVILLE RESERVES THE RIGHT TO REJECT THE IMPROVEMENT IF SUBSEQUENT TESTING REVEALS AN IMPROPER INSTALLATION.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION CONTACT DENVER INTER-UTILITY GROUP AT 811. THE CONTRACTOR SHALL FIELD VERIFY SIZE AND HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING FACILITIES PRIOR TO CONSTRUCTION, AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES. OTHER UTILITIES THAT ARE NOT MEMBERS OF THE ONE-CALL NETWORK SHALL BE LOCATED BY A PRIVATE LOCATER AS CONTRACTED WITH THE CONTRACTOR.
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE PLANS, APPROVED BY THE CITY OF LOUISVILLE PUBLIC WORKS DIRECTOR, AND ONE (1) COPY OF THE DCS AT THE JOB SITE AT ALL TIMES.
7. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY FOR ACCEPTANCE WITH THE RIGHT-OF-WAY PERMIT USE APPLICATION. A PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR USE DURING CONSTRUCTION. SEE REQUIREMENTS FOR TRAFFIC CONTROL PLANS ON THIS SHEET. THE CONTRACTOR SHALL OBTAIN CDOT APPROVALS IF NEEDED.
8. ALL TRENCHES SHALL BE ADEQUATELY SUPPORTED AND THE SAFETY OF WORKERS PROVIDED FOR AS REQUIRED BY THE MOST RECENT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION."
9. COMPACTION OF ALL TRENCHES MUST BE ATTAINED AND COMPACTION TEST RESULTS WITH MAPPED TEST LOCATIONS MUST BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL PRIOR TO PAVING. THE FINAL REPORT SHALL BE SUBMITTED PRIOR TO CONSTRUCTION ACCEPTANCE.
10. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING EROSION AND SEDIMENT CONTROL MEASURES AT ALL TIMES DURING CONSTRUCTION. THE PLAN MAY BE MODIFIED AS FIELD CONDITIONS WARRANT WITH APPROVAL FROM THE CITY OF LOUISVILLE PUBLIC WORKS DEPARTMENT.
11. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN PROPER TRAFFIC CONTROL DEVICES UNTIL THE SITE IS OPEN TO TRAFFIC. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE ENGINEER AND THE CITY OF LOUISVILLE PUBLIC WORKS DEPARTMENT FOR APPROVAL PRIOR TO CONSTRUCTION.
12. PLANS ARE APPROVED FOR PERIOD OF 1 (ONE) YEAR FROM THE DATE SHOWN ON THE CITY OF LOUISVILLE SIGNATURE BLOCK. PLANS SHALL BE RESUBMITTED TO THE CITY FOR APPROVAL AFTER 1 YEAR. THE COST OF THE PLAN RE-REVIEW AND RE-ACCEPTANCE WILL BE CHARGED BACK TO THE DEVELOPER INCLUDING ALL TIME AND EXPENSES OF THE CITY OF LOUISVILLE PUBLIC WORKS DEPARTMENT.
13. REPAIR OF ANY DAMAGE TO EXISTING IMPROVEMENTS OR LANDSCAPING IS THE RESPONSIBILITY OF THE CONTRACTOR. THE REPAIR OF IMPROVEMENTS OR LANDSCAPING SHALL MATCH EXISTING CONDITIONS OR BETTER.
14. ALL DAMAGED EXISTING CURB, GUTTER, AND SIDEWALK SHALL BE REPAIRED PRIOR TO ACCEPTANCE OF COMPLETED IMPROVEMENTS.
15. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE STATE OF COLORADO PERMITTING PROCESS FOR "STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY." FOR INFORMATION, PLEASE CONTACT COLORADO DEPARTMENT OF HEALTH, WATER QUALITY CONTROL DIVISION, WQCD-PE-B2, 4300 CHERRY DRIVE SOUTH, DENVER, COLORADO 80222-1530. ATTENTION: PERMITS AND ENFORCEMENT SECTION. PHONE (303) 692-3500.
16. IF DEWATERING IS REQUIRED, A STATE CONSTRUCTION DEWATERING DISCHARGE PERMIT IS REQUIRED FOR DISCHARGES TO A STORM SEWER, CHANNEL, IRRIGATION DITCH, ANY STREET THAT IS TRIBUTARY TO THE AFOREMENTIONED FACILITIES, OR ANY WATER OF THE UNITED STATES.
17. ALL REFERENCES TO BOOKS, PAGES, MAPS, AND RECEPTION NUMBER ARE PUBLIC DOCUMENTS ON FILE WITH THE COUNTY CLERK AND RECORDER'S OFFICE.

LAYOUT, STAKING AND AS-BUILT NOTES

1. ADEQUATE INFORMATION FOR ESTABLISHING LINES, GRADES, AND LOCATIONS FOR ALL WORK ITEMS HAVE BEEN SPECIFIED ON THE PLANS. ANY ADDITIONAL INFORMATION REQUIRED TO STAKE THE ITEM OR ELEMENT SHALL REQUESTED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
2. STAKES AND MONUMENTS WHICH ARE DAMAGED OR DESTROYED BY THE PROGRESS OF CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
3. SPOT ELEVATIONS ARE PROVIDED AT VARIOUS LOCATIONS IN THE PLANS. FOR CURB AND GUTTER, THE SPOT ELEVATION IS GENERALLY THE FLOW LINE AT THE INDICATED LOCATION. FOR OVERLOT GRADING, THE SPOT ELEVATION IS GENERALLY THE FINISH GRADE AFTER REPLACEMENT OF ANY TOPSOIL. FOR STORM DRAIN INLETS, THE SPOT ELEVATION IS THE NORMAL FLOW LINE OF THE CURB AND GUTTER OR PAN OF WHICH THE INLET IS LOCATED.
4. CONTRACTOR SHALL LAYOUT STAKES BEFORE COMMENCING WITH THE WORK.
5. STORM DRAIN STAKING:STORM DRAINS LENGTHS ARE LISTED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE OR CENTER OF INLET. SLOPES ARE CALCULATED FROM THE INSIDE FACE OF THE MANHOLE OR INLET. NORMAL FLOW LINE ELEVATIONS ARE LISTED FOR TYPE R INLETS. THE NORMAL FLOWLINE IS THE ELEVATION FROM THE STREET PROFILE AT THE FLOW LINE WHERE THE TYPE R STATION POINT IS SHOWN ON THE DETAILS SHEET. THE INLETS SHALL FOLLOW THE GRADE OF THE STREET.
6. SANITARY SEWER STAKING: DISTANCES FOR THE SANITARY SEWER ARE FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. SLOPES ARE CALCULATED BASED ON THE INVERT OUT LESS THE INVERT IN OF THE DOWNSTREAM MANHOLE WITH THE DISTANCE BEING THAT FROM INSIDE FACE OF MANHOLE TO INSIDE FACE OF MANHOLE.
7. WATER LINE STAKING: WATER LINES SHALL BE 4.5' BELOW THE GRADE ABOVE THE PIPE. WHERE NEEDED, WATER LINES MAY BE LOWERED TO AVOID CONFLICTS WITH STORM DRAINS OR IRRIGATION PIPES AND THOSE LOWERINGS ARE INDICATED ON THE PROFILES SHEETS. WATER LINE LOWERINGS SHALL BE IN ACCORDANCE WITH THE CITY OF LOUISVILLE STANDARDS AND SPECIFICATIONS.
8. CONTRACTOR SHALL PROVIDE AS-BUILT DATA COLLECTED BY A LICENSED PROFESSIONAL ENGINEER FOR ALL MANHOLE LOCATIONS AND INVERTS, ALL INLETS AND INVERTS, ALL FIRE HYDRANT LOCATIONS, ALL WATER VALVE LOCATIONS, ALL WATER METER LOCATIONS, ANY DRY UTILITY BOXES, AND SPOT ELEVATIONS AT ALL CURB RETURN POINTS OF TANGENCY AND AT THE MIDDLE POINT OF THE CURB RETURN. THIS DATA SHALL BE PROVIDED TO THE ENGINEER OF RECORD IN POINT FORMAT IN A DRAWING ON THE SAME DATUM AND COORDINATE BASE OF THE SITE SURVEY, IN AUTOCAD COMPATIBLE SOFTWARE.

PRE-CONSTRUCTION NOTES

1. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF ANY CONSTRUCTION WORK INVOLVING PUBLIC IMPROVEMENTS IN THE CITY RIGHT-OF-WAY OR PROPOSED DEVELOPMENT. WHEN CONSTRUCTION PLANS HAVE BEEN APPROVED BY THE CITY, THE DEVELOPER SHALL SCHEDULE A PRE-CONSTRUCTION CONFERENCE. THE CONTRACTOR, DEVELOPER, DESIGN ENGINEER, ENGINEER, INSPECTOR AND UTILITY REPRESENTATIVES SHALL BE IN ATTENDANCE.
2. AT OR PRIOR TO THE PRE-CONSTRUCTION CONFERENCE THE DEVELOPER SHALL SUBMIT TO THE ENGINEER THE FOLLOWING:
   1) A LIST OF ALL CONTRACTORS AND CONSULTANTS WHO WILL BE WORKING ON THE PROJECT. THE LIST SHALL INCLUDE THE NAME AND PHONE NUMBER OF AN AUTHORIZED REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO REPRESENT AND ACT FOR THE CONTRACTOR OR CONSULTANT. THE LIST SHALL ALSO INCLUDE EACH CONTRACTOR'S CITY OF LOUISVILLE CONTRACTOR'S LICENSE NUMBER.
   2) A MATERIALS LIST. THE LIST SHALL IDENTIFY ALL MATERIALS BY NAME, MANUFACTURE AND MODEL NUMBER OR CLASSIFICATION. ONLY THE MATERIALS ON THE APPROVED MATERIALS LIST WILL BE ALLOWED TO BE USED IN THE CONSTRUCTION OF THE PROJECT. AN APPROVED MATERIALS LIST WILL BE ISSUED WITH THE NOTICE TO PROCEED.
   3) MIX DESIGNS. MIX DESIGNS CERTIFIED BY THE SUPPLIER SHALL BE SUBMITTED FOR ALL CONCRETE, ASPHALT AND AGGREGATE. ONLY THE CITY APPROVED MIX DESIGNS WILL BE ALLOWED TO BE USED IN THE CONSTRUCTION OF THE PROJECT.
   4) A PROJECT SCHEDULE. SCHEDULE SHALL INCLUDE THE START DATE AND DURATION OF EACH MAJOR ITEM OF WORK.
   5) AN APPLICATION FOR A CITY RIGHT OF WAY PERMIT.
   6) COPIES OF EXECUTED PERMITS REQUIRED BY ANY OTHER AGENCY OR ORGANIZATION.
3. CONSTRUCTION SHALL NOT COMMENCE UNTIL THE DEVELOPER OR CONTRACTOR HAS BEEN ISSUED A NOTICE TO PROCEED BY THE ENGINEER. A NOTICE TO PROCEED WILL NOT BE ISSUED UNTIL THE DEVELOPER HAS SUCCESSFULLY COMPLETED THE FOLLOWING:
   1) THE SUBMITTAL PROCEDURE FOR IMPROVEMENT PLANS.
   2) THE PRE-CONSTRUCTION CONFERENCE.
   3) THE PRE-CONSTRUCTION SUBMITTALS.
   4) ALL APPLICABLE REQUIREMENTS OF THE SUBDIVISION AGREEMENT.
4. AN UPDATED OR AMENDED STORM WATER PERMIT FROM THE CDPHE SHALL BE IN PLACE PRIOR TO ANY CONSTRUCTION.
5. THE CONTRACTOR/DEVELOPER SHALL APPLY FOR A CITY OF LOUISVILLE OVERLOT GRADING PERMIT THAT INCLUDES SUBMISSION AND APPROVAL OF A STORM WATER MANAGEMENT PLAN.

CLEARING, GRUBBING AND EARTHWORK

1. THE CONTRACTOR SHALL REMOVE ANY RUBBISH, TRASH AND DEBRIS ON THE SITE PRIOR TO AND DURING CONSTRUCTION.
2. THE CONTRACTOR SHALL REMOVE AND STOCKPILE ALL TOPSOIL. STOCKPILES SHALL BE SUBJECT TO PROTECTION AGAINST EROSION FROM WIND AND WATER AND SHOULD INCLUDE TEMPORARY MEASURES SUCH AS SILT FENCE AND WATERING.
3. EARTHWORK SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEERING REPORT FOR THIS SITE. THIS INCLUDES ANY OVERLOT GRADING AND FINE GRADING FOR ROADS, STREETS AND WALKS.
4. IN THE ABSENCE OF TOLERANCES ELSEWHERE, THE FINAL OVERLOT GRADING SHALL BE WITHIN 0.2' OF THE GRADE SHOWN ON THESE PLANS FOR ALL AREAS OUTSIDE OF THE PUBLIC RIGHT OF WAY. FOR AREAS WITHIN THE PUBLIC RIGHT OF WAY, REFER TO THE CITY STANDARDS.

SANITARY SEWER NOTES

1. NO WORK SHALL BE BACKFILLED UNTIL THE CONSTRUCTION HAS BEEN INSPECTED AND APPROVED FOR BACKFILLING BY THE CITY OF LOUISVILLE.
2. ALL BACKFILL MATERIAL SHALL BE COMPACTED IN ACCORDANCE WITH THE CITY OF LOUISVILLE STANDARDS AND SPECIFICATIONS.
3. "AS-CONSTRUCTED" DRAWINGS ARE TO BE SUPPLIED BY THE CONTRACTOR TO THE ENGINEER PRIOR TO FINAL ACCEPTANCE. DRAWINGS SHALL SHOW LOCATIONS OF ALL FITTINGS, VALVES, AND HYDRANTS FOR WATER LINES CONSTRUCTED; DISTANCES BETWEEN MANHOLES AND LOCATION OF SERVICE WYES OR TEES FOR SANITARY SEWER CONSTRUCTION; AND DISTANCES BETWEEN MANHOLES, INLETS, AND END SECTIONS FOR STORM SEWER CONSTRUCTION.
4. THE CONTRACTOR SHALL AT ALL TIMES COORDINATE HIS WORK WITH THE CITY OF LOUISVILLE. WHEN IT IS NECESSARY TO CLOSE EXISTING PORTIONS OF A WATER OR SEWER SYSTEM DUE TO CONSTRUCTION OPERATIONS, AT LEAST 48 HOURS PRIOR NOTIFICATION MUST BE GIVEN TO THE ENGINEERING AND THE CITY INSPECTOR. ALL WATER VALVES THAT ARE IN SERVICE SHALL ONLY BE OPERATED BY THE CITY. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER AS TO MINIMIZE INCONVENIENCE TO THE PUBLIC DUE TO DISCONNECTED UTILITY SERVICES.
5. SHOULD IT BECOME NECESSARY TO TEMPORARILY DISCONNECT ANY UTILITY, THE CONTRACTOR SHALL FIRST OBTAIN THE APPROVAL OF THE CITY INSPECTOR AND THE ENGINEER AND PROVIDE NOTIFICATION IN WRITING 48 HOURS IN ADVANCE TO THE UTILITY CUSTOMER REGARDING ANY DISCONNECTION OF SERVICE. SUCH UTILITY SHALL THEN BE DISCONNECTED AFTER 9:00 A.M. WITH A MAXIMUM 4 HOUR SHUTDOWN, AND SHALL BE RESTORED BY 4:00 P.M. THE SAME DAY.
6. IF THE CONTRACTOR'S OPERATIONS REQUIRE OR CAUSE THE UTILITY SERVICE TO BE DISCONNECTED BEYOND THE LIMITS STATED ABOVE, HE SHALL MAKE ARRANGEMENTS TO PROVIDE TEMPORARY UTILITY SERVICE. IN THE EVENT A UTILITY IS DISCONNECTED BEYOND THE HOURS STATED ABOVE, THE ENGINEER SHALL HAVE THE AUTHORITY TO ORDER A TEMPORARY UTILITY SERVICE INSTALLED BY A THIRD PARTY AT THE CONTRACTOR'S EXPENSE.
7. DRAWINGS ARE NOT INTENDED TO BE SCALED, BUT ARE SUPPLIED FOR GENERAL INFORMATION TO THE CONTRACTOR.
8. NOTIFY THE ENGINEER A MINIMUM OF 48 HOURS IN ADVANCE OF ANY UTILITY CONSTRUCTION ACTIVITIES

WATER SYSTEM NOTES

1. WATER MAINS SHALL BE PVC DR-18, CLASS 235 AND MANUFACTURED IN ACCORDANCE WITH AWWA C-900. DUCTILE IRON (DI) PIPE SHALL BE CLASS 350 MANUFACTURED IN ACCORDANCE WITH AND MEETING THE REQUIREMENTS OF ANSI/AWWA C150/A21.50. ALL FITTINGS SHALL BE MADE FROM GRAY-IRON OR DUCTILE IRON AND SHALL HAVE A PRESSURE RATING OF 250 PSI. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE WRAPPED WITH 8 MIL POLYETHYLENE MATERIAL MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C-105.
2. WATER MAINS SHALL BE INSTALLED AS SHOWN ON THE PLANS. HORIZONTAL DISTANCES AS SHOWN ON THE PLAN ARE FROM CENTERLINE OF FITTING TO CENTERLINE OF FITTING. ALL PIPE LENGTHS ARE APPROXIMATE.
3. AT ALL POINTS OF CONNECTION OF NEW WATER MAINS TO EXISTING MAINS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATING AND VERIFYING LOCATION OF THE EXISTING LINES PRIOR TO INSTALLATION OF ANY NEW CONSTRUCTION. THE DURATION OF WATER OUTAGE TO EXISTING CUSTOMERS SHALL BE MINIMIZED TO FOUR HOURS.
4. THERE SHALL BE A MINIMUM COVER OF 4.5 FEET OVER ALL WATER MAINS.
5. ALL BENDS, PLUGS, REDUCERS, AND FIRE HYDRANT ASSEMBLIES ARE TO BE CONSTRUCTED PER THE CITY OF LOUISVILLE STANDARD DETAILS AS PRESENTED WITHIN THE DETAIL SHEET SETS OF THESE PLANS. ALL FITTINGS AND GATE VALVES SHALL BE RESTRAINED USING MEGA-LUGS OR APPROVED EQUAL. ALL WATER TEE/GATE VALVES CONNECTIONS SHALL USE SWIVEL TEES AND/OR SOLID/SWIVEL ADAPTERS.
6. WHERE SHORT SECTIONS OF PVC WATER MAIN ARE INSTALLED BETWEEN DUCTILE IRON OR CAST IRON WATER MAIN AT TIE-INS, OR REMOVALS, A JUMPER LOCATOR WITH WIRE SHALL BE INSTALLED BETWEEN THE DUCTILE IRON OR CAST IRON (CAD-WELD) FOR LOCATING PURPOSES.
7. WATER MAIN LINES SHALL BE TESTED IN ACCORDANCE WITH THE CITY OF LOUISVILLE STANDARDS PRIOR TO ACCEPTANCE OF ANY CONNECTION TO THE UTILITY, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
8. ALL WATER TAPS FOR SINGLE FAMILY LOTS ARE 1" UNLESS OTHERWISE NOTED.
9. NOTIFY THE ENGINEER A MINIMUM OF 48 HOURS IN ADVANCE OF ANY UTILITY CONSTRUCTION ACTIVITIES

REMOVALS AND RESTORATION

THE LIMITS OF THE CONCRETE AND ASPHALT REMOVAL AND REPLACEMENT AS SHOWN ON THE PLANS ARE APPROXIMATE. FINAL LOCATION AND EXTENT OF REMOVALS IN THE PUBLIC RIGHT OF WAY SHALL BE DETERMINED BY THE CITY.

CONSTRUCTION TRAFFIC CONTROL

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF LOUISVILLE DCS, LATEST EDITION, AND THE AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS.
2. ALL SIGNS AND TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CITY OF LOUISVILLE DCS AND THE MUTCD, LATEST EDITION.
3. THE CONTRACTOR SHALL PREPARE A DETAILED TRAFFIC CONTROL PLAN FOR CONSTRUCTION THAT INCLUDES ANY TEMPORARY CONTROLS AND PROPOSED REMEDIATION AND SUPERVISION. ALL ROAD CLOSURES SHALL BE KEPT TO A MINIMUM AND SHALL BE APPROVED BY THE CITY AND THE EMERGENCY SERVICES DEPARTMENTS. THE TCP SHALL BE PREPARED BY AN ATSSA CERTIFIED WORK SAFETY SUPERVISOR AND APPROVED BY THE CITY PRIOR TO CONSTRUCTION.
4. ALL EXISTING ROADS AND INTERSECTIONS IN THE NORTH END SUBDIVISION SHALL REMAIN OPEN AND UN-OBSTRUCTED.
5. ALL CONSTRUCTION TRAFFIC SHALL ACCESS THE SITE FROM BLUE STAR LANE UNLESS OTHERWISE SPECIFICALLY AUTHORIZED BY THE CITY.
6. CONTRACTOR SHALL FACILITATE NORTHERN COLORADO CONSERVANCY DISTRICT ACCESS ALONG EAST PROPERTY BOUNDARY. COORDINATE WORK IN THIS AREA WITH THE DISTRICT BY NOTIFICATION OF ACTIVITIES TO JIM STRUBLE AT 970-662-2243.
7. ALL TRENCHES AND EXCAVATIONS ADJACENT TO EXISTING ROADWAYS, PATHS OR SIDEWALKS, THAT ARE LEFT OPEN OVERNIGHT SHALL BE PROPERLY BARRICADED AND EQUIPPED WITH WARNING LIGHTS, AND SHALL BE FENCED OFF WITH ORANGE SAFETY FENCING.
8. ACCESS TO PRIVATE PROPERTY SHALL BE MAINTAINED DURING NON-CONSTRUCTION PERIODS UNLESS SPECIAL PROVISIONS ARE MADE WITH THE PROPERTY OWNER.
9. NO CONSTRUCTION ACTIVITIES OR EQUIPMENT SHALL BE ALLOWED TO OBSTRUCT ANY TRAVELED ROADWAY, WITHOUT PRIOR APPROVAL OF THE CITY. ALL EQUIPMENT ON, AND USE OF ANY PUBLIC ROADWAY SHALL BE SUBJECT TO ALL APPLICABLE LAWS REGULATING THE USE OF SUCH ROADWAYS.
10. ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED AND ANCHORED (WEIGHTED) IN PLACE. WEIGHTS FOR TEMPORARY MOUNTING SHALL BE SAND BAGS. NO ROCKS, ASPHALT, OR CONCRETE CHUNKS, OR OTHER DEBRIS WILL BE ALLOWED. ALL SIGNS SHALL BE MAINTAINED IN GOOD CONDITION AND CLEAN AT ALL TIMES.
11. TRAFFIC CONTROL DEVICES USED AT NIGHT SHALL BE EQUIPPED WITH WARNING LIGHTS.
12. IN ORDER TO BETTER FACILITATE THE CLOSURE OF CERTAIN ROADWAYS, THE USE OF TYPE III BARRICADES IN CONJUNCTION WITH TYPE I BARRICADES OR DRUMS SHALL BE ALLOWED.

UTILITY ACCEPTANCE NOTES

1. ALL UTILITY ACCEPTANCE PROCEDURES SHALL BE IN ACCORDANCE WITH THE CITY OF LOUISVILLE DESIGN AND CONSTRUCTION STANDARDS, AND AS AMENDED HERE-IN.
2. VIDEOTAPING OF ALL SANITARY AND STORM DRAIN MAINS IS REQUIRED PRIOR TO CONSTRUCTION ACCEPTANCE AND PRIOR TO FINAL ACCEPTANCE.

CLEANUP, RESTORATION AND FINAL ACCEPTANCE

1. THE CONTRACTOR SHALL REMOVE ALL RUBBISH, TRASH AND OTHER ITEMS NOT SCHEDULED TO REMAIN AT THE SITE WEEKLY AND AT THE END OF THE PROJECT.
2. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF LOUISVILLE REGARDING ANY BONDS, INSURANCE AND CERTIFICATIONS AND/OR LICENSES.
3. REFER TO THE CITY DESIGN AND CONSTRUCTION STANDARDS FOR SUPPLEMENTAL INFORMATION.

BEST MANAGEMENT PRACTICES FOR STORM WATER

1. SEDIMENT CONTROL SHALL BE PROVIDED AT STORM SEWER INLETS USING CURB SOCKS WITH ½" CLEAN GRAVEL AND ½" STEEL MESH. IMPLEMENTING THESE MEASURES SHOULD MINIMIZE NUISANCE SILT AND SEDIMENTATION EXITING THE SITE AND PREVENT CLOGGING EXISTING STORM SEWERS AND STREET GUTTERS.
2. APPLICATION OF THESE BMP'S FOR STORMWATER MANAGEMENT ARE FOR CONSTRUCTION PERIODS AND ARE CONSIDERED TEMPORARY. POST-CONSTRUCTION STORMWATER MANAGEMENT IS PROVIDED THROUGH STORM COLLECTION SYSTEM.
3. REFER TO THE STORM WATER MANAGEMENT SHEETS FOR INFORMATION REGARDING THE PLAN REQUIREMENTS AND IMPLEMENTATION. REFER TO THE LANDSCAPE PLANS PREPARED BY OTHER FOR PERMANENT LANDSCAPING AND GROUND COVER FEATURES. WHEN THE PROJECT IS COMPLETED, ALL GROUND SURFACES SHALL BE TREATED WITH PLACEMENT OF SEEDING, FORMAL LANDSCAPE SUCH AS GRASSES, MULCH OR TREES, AND PAVEMENTS.

DEFINITIONS

APPROVED	ITEMS REVIEWED BY THE CITY OF LOUISVILLE PUBLIC WORKS DEPARTMENT AND FOUND TO MEET OR EXCEED THE REQUIREMENTS OF THESE DESIGN AND CONSTRUCTION STANDARDS.
CITY	THE CITY OF LOUISVILLE, IN THE STATE OF COLORADO, ACTING BY AND THROUGH ITS CITY ADMINISTRATOR.
CITY CODE	THE OFFICIAL ADOPTED LOUISVILLE MUNICIPAL CODE LOUISVILLE, COLORADO.
CONTRACTOR	THE INDIVIDUAL, FIRM OR CORPORATION CONTRACTING FOR THE CONSTRUCTION OF PUBLIC IMPROVEMENTS.
CONTRACTORS LICENSE	APPLICABLE LICENSES TO CONDUCT WORK OR CONSTRUCTION IN THE CITY OF LOUISVILLE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOUISVILLE MUNICIPAL CODE.
DESIGN ENGINEER	THE INDIVIDUAL, FIRM OR CORPORATION RESPONSIBLE FOR THE PREPARATION OF PUBLIC IMPROVEMENT PLANS.
DEVELOPER	THE INDIVIDUAL, FIRM OR CORPORATION WHO IS DEVELOPING A PROJECT.
PUBLIC WORKS ENGINEER	PUBLIC WORKS DIRECTOR, CITY ENGINEER OF THE CITY OF LOUISVILLE, OR HIS AUTHORIZED REPRESENTATIVES ACTING ON BEHALF OF THE CITY.
INSPECTOR	AUTHORIZED REPRESENTATIVE OF THE ENGINEER.
PROFESSIONAL ENGINEER	PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO.
REGISTERED LAND SURVEYOR	REGISTERED LAND SURVEYOR LICENSED IN THE STATE OF COLORADO.
RIGHT-OF-WAY	ALL STREETS, HIGHWAYS, AVENUES, LANES, ALLEYS, COURTS, PLACES, SQUARES, CURBS, OR OTHER PUBLIC WAYS IN THE CITY WHICH HAVE BEEN OR MAY HEREAFTER BE DEDICATED AND OPEN TO PUBLIC USE, OR SUCH OTHER PUBLIC PROPERTY SO DESIGNATED IN ANY LAW OF THIS STATE.
SHOP DRAWINGS	ALL DRAWINGS, DIAGRAMS, ILLUSTRATIONS, BROCHURES, SCHEDULES, AND OTHER DATA WHICH ARE PREPARED BY THE CONTRACTOR, SUBCONTRACTOR, MANUFACTURER, SUPPLIER, OR DISTRIBUTOR, WHICH ILLUSTRATE HOW SPECIFIC PORTIONS OF THE WORK SHALL BE FABRICATED OR INSTALLED.
SPECIFICATIONS	CONTRACT DOCUMENT SPECIFICATIONS.
STANDARDS	CITY OF LOUISVILLE DESIGN AND CONSTRUCTION STANDARDS.
SUBCONTRACTOR	AN INDIVIDUAL, FIRM OR CORPORATION HAVING A DIRECT CONTRACT WITH THE CONTRACTOR OR WITH ANY OTHER SUB-CONTRACTOR FOR THE PERFORMANCE OF A PART OF THE WORK AT THE SITE.
WRITTEN NOTICE	ANY WRITTEN NOTICE FROM THE CITY, WHICH NOTICE SHALL BE DEEMED TO HAVE BEEN PROPERLY SERVED AND DELIVERED WHEN POSTED BY THE SENDING PARTY BY CERTIFIED OR REGISTERED MAIL TO THE RECEIVING PARTY AT THE RECEIVING PARTY'S LAST GIVEN ADDRESS OR WHEN DELIVERED IN PERSON TO THE RECEIVING PARTY OR TO HIS AUTHORIZED REPRESENTATIVE.

ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
DCS	DESIGN AND CONSTRUCTION STANDARDS (CITY OF LOUISVILLE)
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

CITY OF LOUISVILLE
APPROVAL

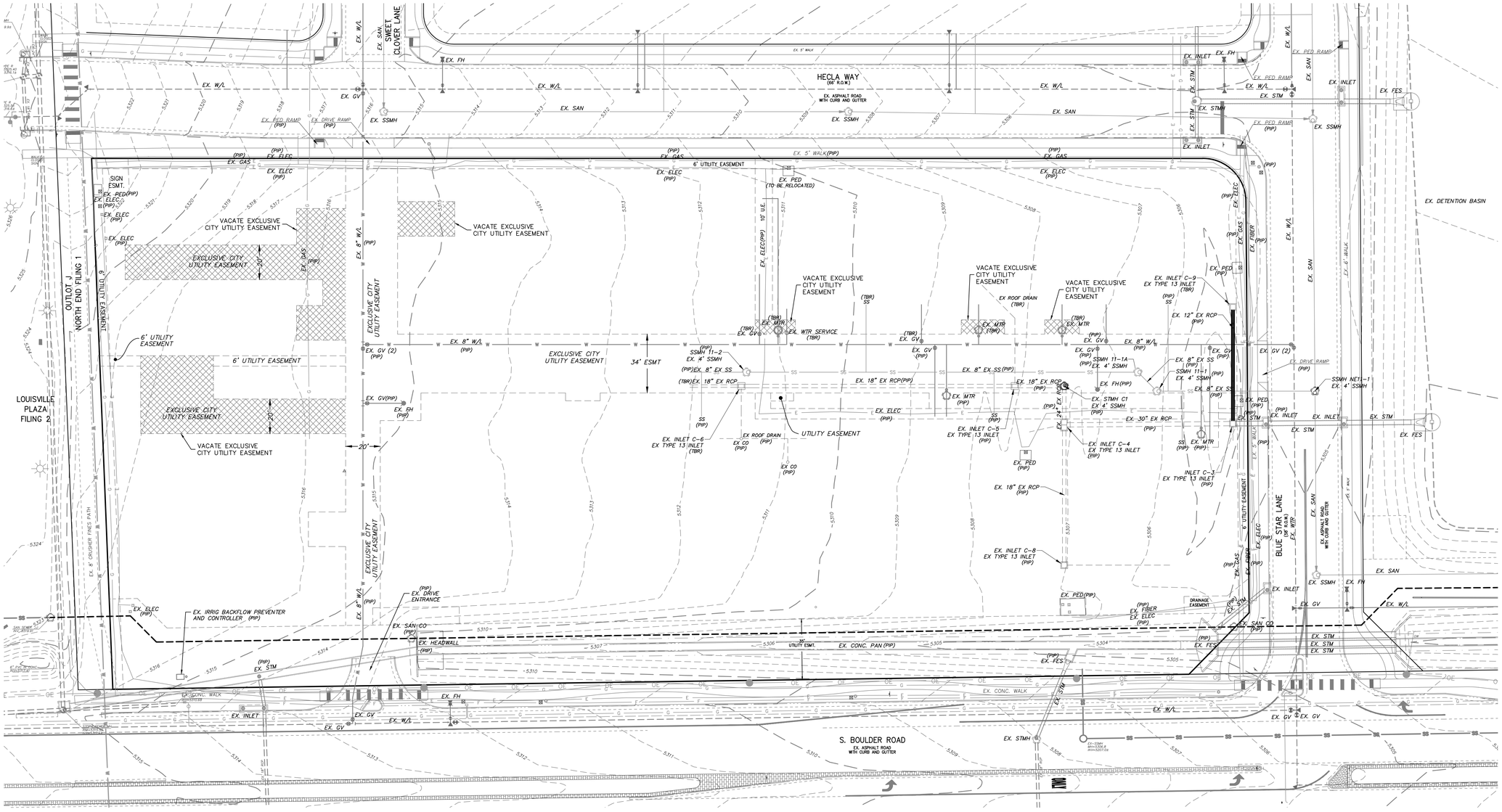
By: _____

Date: _____

Document Approval Expires: _____

This document was reviewed for conformance with City of Louisville Design and Construction Standards. City approval does not relieve owners, design engineer, or contractor of responsibility to correct errors or ommissions relating to this document.

MPD
ENGINEERING
1550 QUINCE AVE.
BOULDER CO 80304
PHONE: 303.498.



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COLORADO REGISTERED PROFESSIONAL ENGINEER
MARC P. DOLEZAL
42318
6/17/2022

NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT

EXISTING CONDITIONS & DEMO PLAN

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

DATE	BY	REVISION/ISSUE
12/10/21	MPD	PER CITY COMMENTS 9-23-21
6/17/22	MPD	PER CITY COMMENTS 3-21-22

Design DSS Drawn DSS
Checked MPD Approv. MPD
Date JUNE 23, 2021
Job No. 1915
D- 1915-ex

SHEET
EX

3 OF 18 SHEETS

1" = 30'
30 0 30 60
scale feet

CITY OF LOUISVILLE
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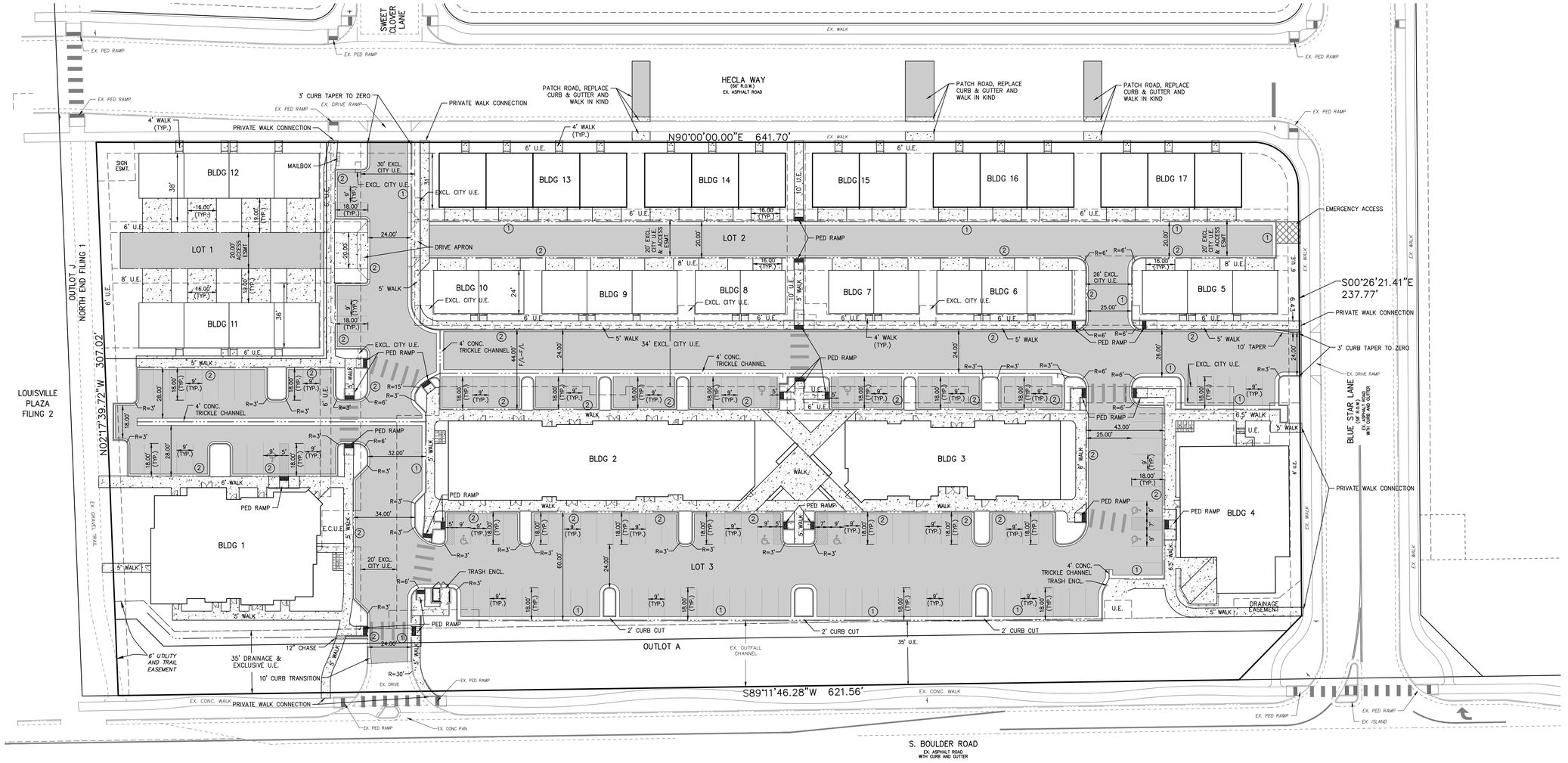

LEGEND OF SURFACING

CONCRETE

ASPHALT

SEE LANDSCAPE PLANS FOR GROUND COVER

LEGEND OF CURB & GUTTER

(1) CATCH CURB & GUTTER, RE: DET6

(2) SPILL CURB & GUTTER, RE: DET6

TRANSITION POINTS ARE NOTED ON GRADING PLANS

U.B.

1"= 30'

30 0 30 60

scale feet

NOTE

PAVEMENT DESIGN WILL BE COMPLETED AFTER OVERLOT GRADING AND PRIOR TO SUBGRADE PREP.

CITY OF LOUISVILLE
APPROVAL

By: _____

Date: _____

Document Approval Expires: _____

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MARC P. DOLEZAL
42318
6/17/2022

NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT

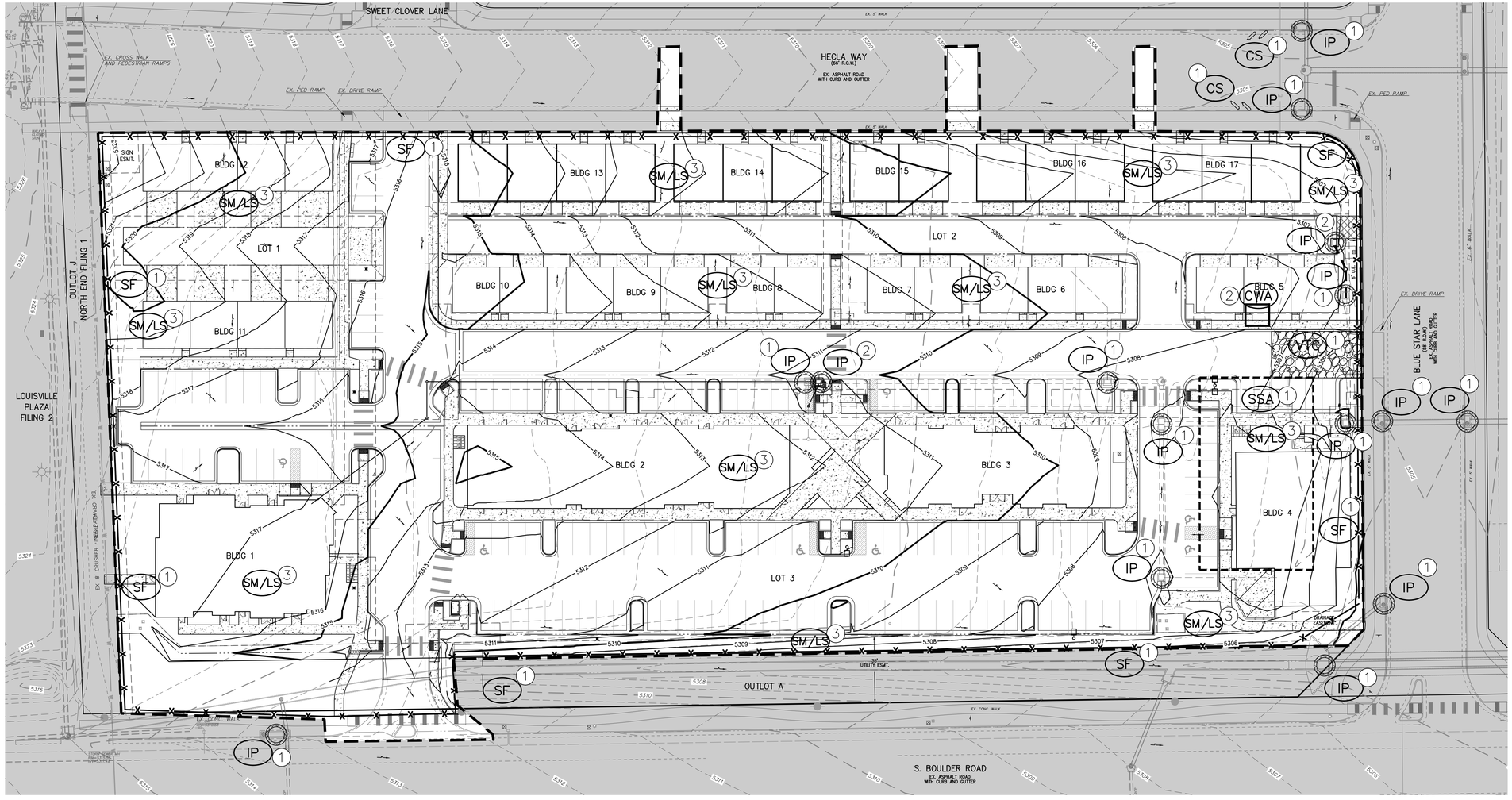
SITE PLAN

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

DATE	BY	REVISION/ISSUE
12/10/21	MPD	PER CITY COMMENTS 9-23-21
6/17/22	MPD	PER CITY COMMENTS 3-21-22

Design DSS *Drawn* DSS
Checked MPD *Approv.* MPD
Date JUNE 23, 2021
Job No. 1915
D– 1915-site plan

SHEET
SP
4 OF 18 SHEETS



BMP NOTES

GENERAL BMP'S ARE DEPICTED ON THIS PLAN. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE INSTALLATION OF THE PROPER BMP'S AS BASED ON CONSTRUCTION SCHEDULING AND OTHER REQUIREMENTS NOTED HERE ON AND WITHIN THE PERMITS FOR THE PROJECT.

OTHER INITIAL OR INTERIM BMP'S MAY BE REQUIRED TO SUPPORT THE CONSTRUCTION SEQUENCING INCLUDING TEMPORARY ITEMS FOR UTILITY INSTALLATION OR TRAIL CONSTRUCTION.

STREET SWEEPING

PAVED SURFACES ADJACENT TO THE CONSTRUCTION SITE MUST BE SWEPT ON A DAILY BASIS AND AS NEEDED DURING THE DAY WHEN SEDIMENT AND OTHER MATERIALS ARE TRACKED OR DISCHARGED ONTO THE STREET. SWEEPING MAY OCCUR BY USE OF AUTOMATED SYSTEMS OR BY HAND, HOWEVER AUTOMATED SYSTEMS WITH DUST PALLIATIVE WATER ARE PREFERRED TO REDUCE DUST EMISSIONS. FLUSHING OF PAVED SURFACES WITH WATER IS PROHIBITED.

SEDIMENT REMOVAL NOTE

CONTRACTOR SHALL COORDINATE REMOVAL OF SEDIMENT FROM INLETS, CULVERTS, CHANNELS AND STORM DRAIN PIPES WITH THE CITY OF LOUISVILLE.

SEEDING NOTES

SEEDING SHALL OCCUR UPON COMPLETION OF WORK IN THAT PARTICULAR AREA, AND NO LATER THAN TWO WEEKS UPON COMPLETION.

SEED MIX SHALL BE DRY LAND NATIVE SEED APPROPRIATE FOR ELEVATIONS OF 5350 FEET AND AVERAGE 20" OF MOISTURE PER YEAR. SUBMIT FOR APPROVAL PRIOR TO USE. INSTALL AS BROADCAST SEEDING. RATE TO BE APPROVED BY THE ENGINEER.

PERMANENT DEVICES

PERMANENT DETENTION POND AND OUTLET STRUCTURE WERE BUILT AS PART OF EARLIER PHASE OF NORTH END DEVELOPMENT.

EROSION CONTROL NOTES:

1. APPROXIMATE AREA TO BE DISTURBED IS 3.4 ACRES FOR CONSTRUCTION OF UTILITIES, PARKING AND BUILDINGS.
2. CONSTRUCTION ENTRANCE LOCATION AS SHOWN ON PLANS.
3. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL SEDIMENT & EROSION CONTROL DEVICES ALREADY IN PLACE. CONTRACTOR SHALL REMOVE AND REPLACE SEDIMENT & EROSION CONTROL AS NEEDED FOR CONSTRUCTION ACCESS. ALL SEDIMENT & EROSION CONTROL DEVICES MUST BE IN PLACE AT THE END OF EACH DAY.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO USE WHATEVER MEANS ARE NECESSARY TO CONTROL AND LIMIT SILT AND SEDIMENT LEAVING THE SITE. SPECIFICALLY , THE CONTRACTOR SHALL PROTECT ALL PUBLIC STREETS, ALLEYS, STREAMS, STORM DRAIN SYSTEMS, AND INLETS FROM SILT AND SEDIMENT DEPOSITS.
5. SLOPE PROTECTION (SP) – CONTRACTOR TO TERRACE SLOPES USING A "TRACKED" VEHICLE, RUN PERPENDICULAR TO SLOPE TO INHIBIT RILL/GULLY EROSION (SURFACE ROUGHENING). CONTRACTOR MAY USE OTHER WINDROW–TYPE METHODS AS APPROVED BY ENGINEER. TYPICAL ALL SLOPES, REPEAT AS NECESSARY UNTIL LANDSCAPING IS INSTALLED.
6. CONTRACTOR SHALL PROVIDE MEASURES TO CONTROL WIND BORNE SEDIMENT BY APPLYING WATER TO DISTURBED SOILS, APPLYING TEMPORARY SEEDING FOR AREAS DISTURBED 30 DAYS OR MORE, OR OTHER MEANS NECESSARY TO MAINTAIN SEDIMENT CONTROL.
7. SEE SHEETS 2 – 3 FOR EROSION AND SEDIMENT CONTROL DETAILS.
8. REFER TO LEGEND ON THIS SHEET FOR SUMMARY OF SEDIMENT & EROSION CONTROL DEVICES.
10. CONTRACTOR TO PLACE CONSTRUCTION FENCING AROUND THE DEVELOPMENT AS NEEDED TO LIMIT ACCESS BY CONSTRUCTION EQUIPMENT AND PERSONAL VEHICLES TO DESIGNATED AREAS OF INGRESS AND EGRESS.
12. A STAGING AREA AT LEAST 100' FROM ANY STORMWATER CONVEYANCE SHOULD BE IDENTIFIED AND SHOWN ON THE SWMP DRAWINGS. STOCKPILE AND STAGING AREAS SHOWN ARE APPROXIMATE. USE CONSTRUCTION STAGING PAD (VEHICLE TRACKING CONTROL) AT THE POINT OF INGRESS AND EGRESS.
13. AFTER COMPLETION OF CURB/GUTTER AND BACKFILL, INSTALL STRAW WATTLES ALONG BACK OF CURB.
14. CONTRACTOR SHALL SUBMIT/ADHERE TO STORM WATER MANAGEMENT REPORT REQUIREMENTS AND SUBMIT COPY OF STATE WATER QUALITY PERMIT.
15. THIS SITE IS LOCATED OUTSIDE THE 100 YEAR FLOODPLAIN.
16. SILT FENCE ALONG WEST SIDE OF PHASE 1 TO BE INSTALLED AT END OF PROJECT PHASE 1. SILT FENCE SHALL BE REGULARLY MAINTAINED AND REPAIRED AND KEPT IN GOOD WORKING ORDER UNTIL DEVELOPMENT OF PHASE 2.

BMP SYMBOL

SF	SILT FENCE
IP	INLET PROTECTION
LOC	LIMITS OF CONSTRUCTION – MAJOR SITE WORK
SSA	STABILIZED STAGING AREA INCLUDES SECURED TOILET, LAYDOWN AND STORAGE
CS	CURB SOCK / ROCK SOCK
VTC	VEHICLE TRACKING CONTROL
CWA	CONCRETE WASH OUT
SM/LS	SEED AND MULCH / LANDSCAPING
	FLOW ARROW

1 INITIAL BMP
2 INTERIM BMP
3 FINAL BMP

CITY OF LOUISVILLE
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BOULDER, CO 80304
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marc@mpd-engineering.com

COLORADO REGISTERED MARC P. DOLEZAL 42318 6/17/2022 PROFESSIONAL ENGINEER

1"= 30'
scale 30 0 30 60 feet

EARTHWORK

CUT: 1,530 CY (UNADJUSTED)
FILL: 3,270 CY (UNADJUSTED)
NET: 1,740 CY FILL

NO OFFSITE SPOIL LOCATION PROPOSED.
ALL MATERIAL TO STAY ON–SITE.

EROSION CONTROL PLAN

NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT
LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

DATE	BY	REVISION/ISSUE
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6/17/22	MPD	PER CITY COMMENTS 3–21–22

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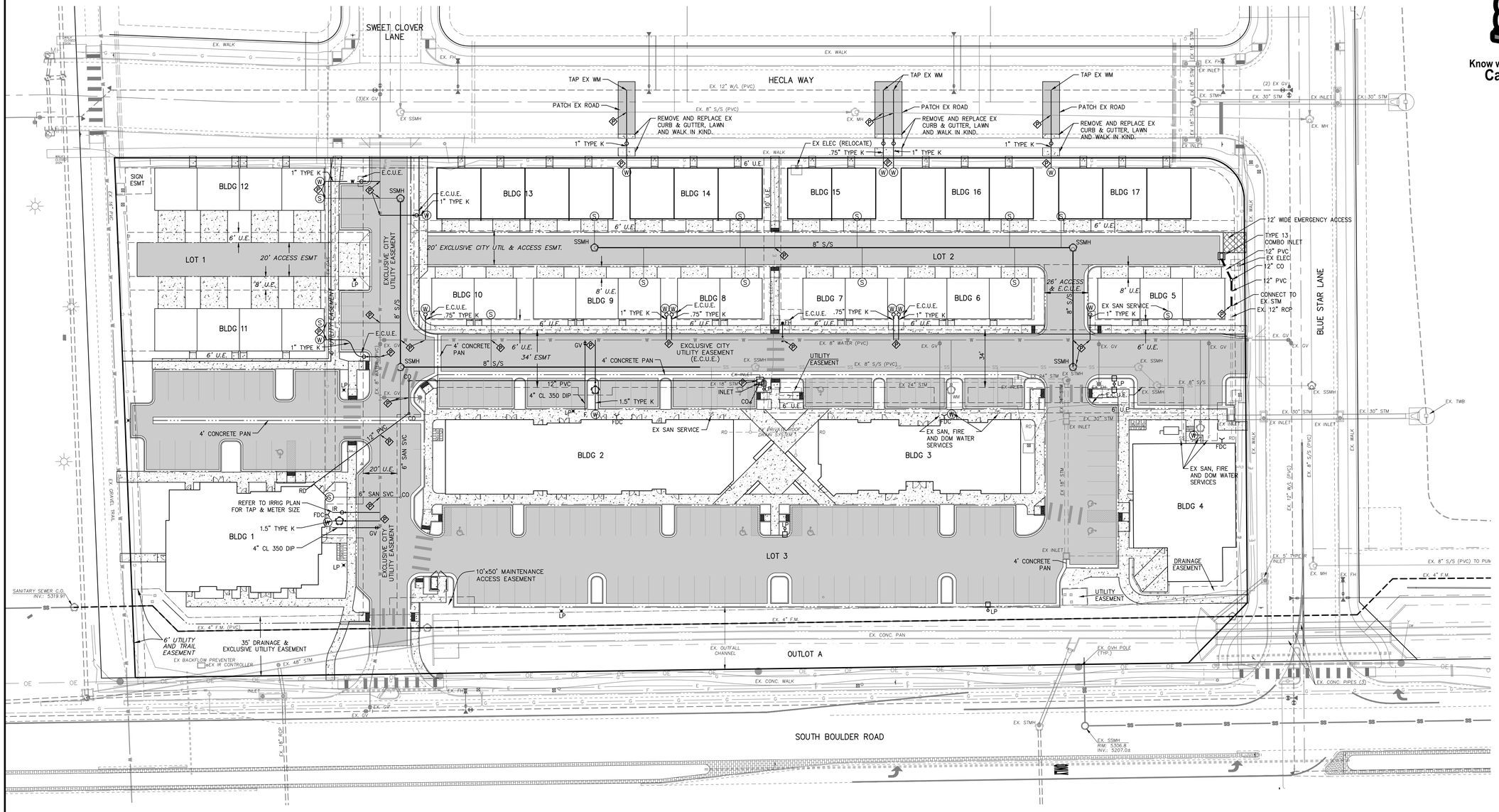
Checked MPD Approv. MPD
Date JUNE 23, 2021
Job No. 1915
D– 1915–ecp

SHEET
ECP
5 OF 18 SHEETS



LEGEND

- WATERMAIN, HYDRANT, GATE VALVE
- WATER SERVICE
- SANITARY SEWER, MANHOLE
- SANITARY SEWER SERVICE
- STORM SEWER, MANHOLE
- UNDERDRAIN
- EXISTING SANITARY SEWER, MANHOLE
- EXISTING WATERMAIN, HYDRANT, GATE VALVE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE, STREET LIGHTS, BOXES
- EXISTING TELEPHONE LINE
- EXISTING CABLE LINE
- EXISTING FIBER OPTIC LINE
- EXISTING FENCE

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MARC P. DOLEZAL
42318
6/17/2022

UTILITY PLAN

NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

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Drawn	DSS
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Approv.	MPD
Date	JUNE 23, 2021
Job No.	1915
D-	1915-utilityplan

SHEET
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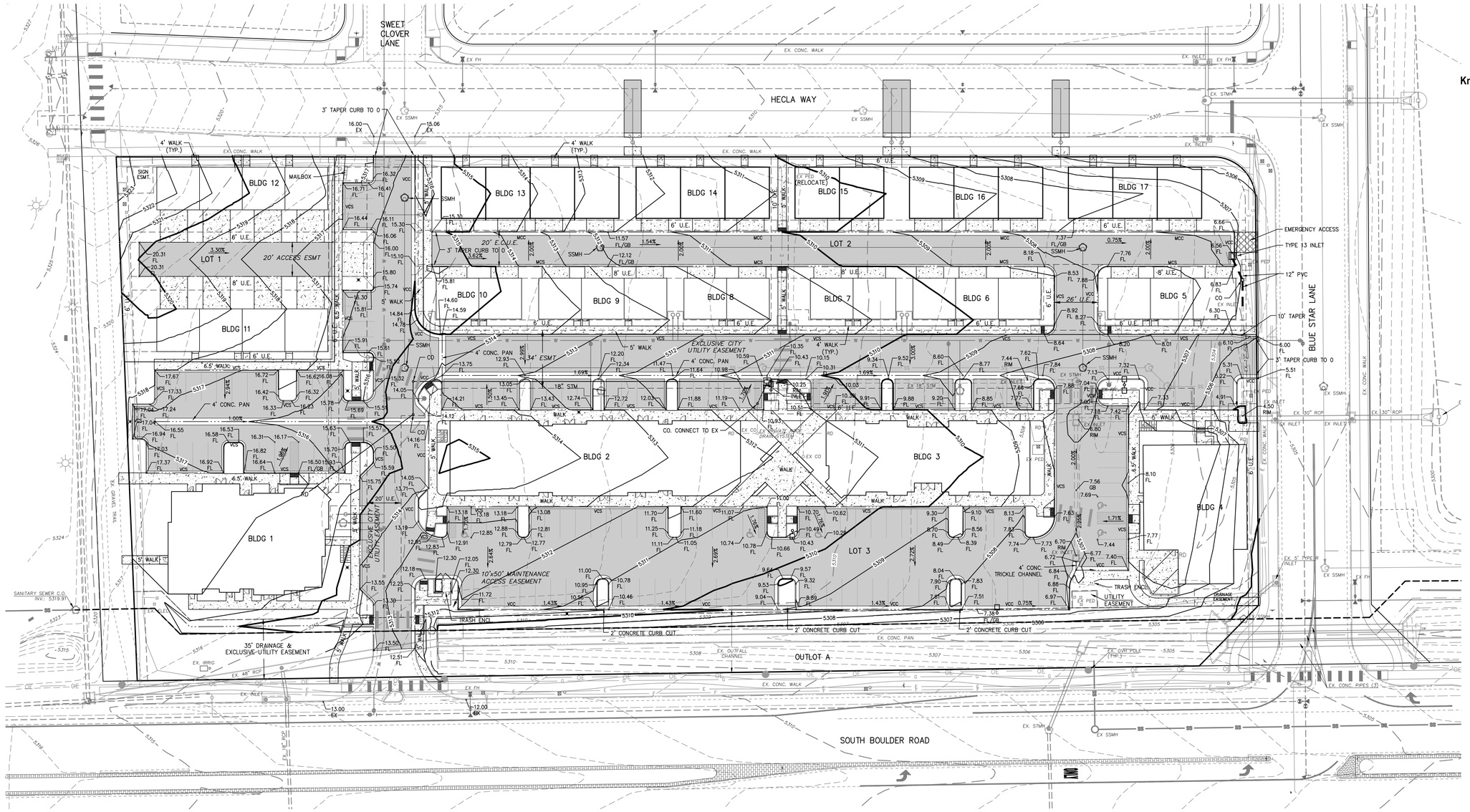

LEGEND

- STORM SEWER, MANHOLE
- EXISTING ELECTRIC LINE, STREET LIGHTS, BOXES
- EXISTING FENCE

LEGEND

FL = FLOW LINE ELEVATION
EOC = EDGE OF CONCRETE ELEVATION
HP = HIGH POINT
LP = LOW POINT
FFL = FINISH FLOOR ELEVATION
TOW = TOP OF WALL ELEVATION
BOW = BOTTOM OF WALL ELEVATION
U.E. = UTILITY EASEMENT
C.F. = CURB FACE
L/S = LANDSCAPE
T.P. = TRANSITION POINT
G.B. = GRADE BREAK
FLOWLINE – SWALE
FLOWLINE – CURB AND GUTTER
VCS = VERTICAL CURB – SPILL
VCC = VERTICAL CURB – CATCH
MCS = MOUNTABLE CURB – SPILL
MCC = MOUNTABLE CURB – CATCH

NOTES

1. GUTTER TRANSITION FROM SPILL TO CATCH OCCURS 1.5' EACH SIDE OF FLOW LINE P.I.
2. SITE LAYOUT PLAN BY OTHERS.
3. SIGN AND STRIPES ON SITE PLAN BY OTHERS.
4. ALL STORM DRAIN SYSTEMS ARE PRIVATE IMPROVEMENTS, OWNED AND MAINTAINED BY THE PROPERTY OWNER OR H.O.A.
5. FOR CURB AND GUTTER TYPES RE: TYPICAL LAYOUT PLAN

LEGEND OF SURFACING

- CONCRETE
- ASPHALT
- GRAVEL

SEE LANDSCAPE PLANS FOR GROUND COVER

1"= 30'
scale: 30 0 30 60 feet

CITY OF LOUISVILLE
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NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT

GRADING PLAN

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

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Job No. 1915
D:- 1915-gradingplan

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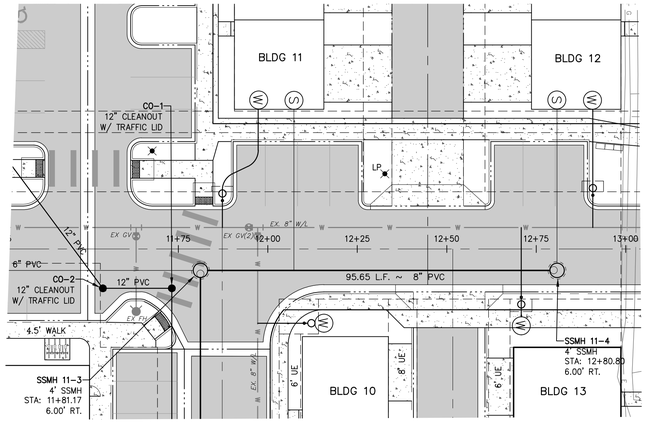

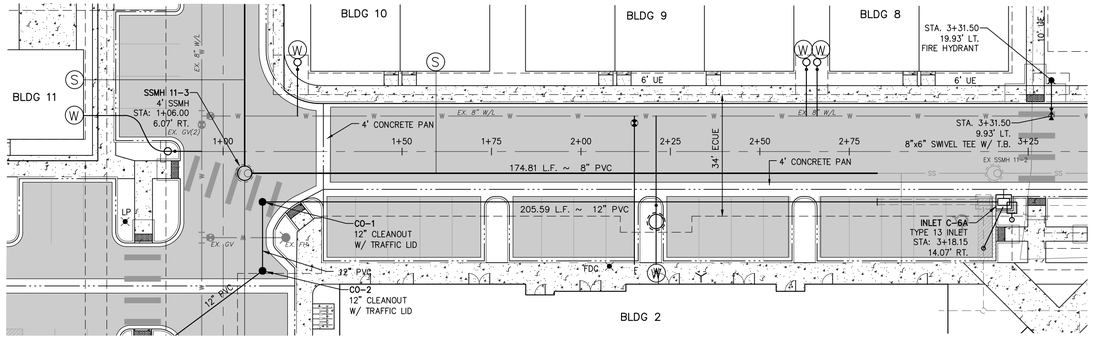

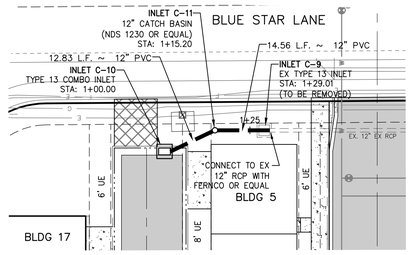

Bldg #	DS MH	Distance from MH Wall (ft.)	Main Inv Elev @ MH	Mainline Slope	WYE Inv @ Main	Service Inv @ End of Line	Service Slope	Service Length (ft.)
10	11-2	105.00	5298.96	1.74%	5300.79	5302.06	2.00%	28.5
11	11-3	80.00	5302.81	2.00%	5304.41	5306.01	2.00%	45.0
12	11-4	0.00	5304.80	N/A	5305.13	5305.99	2.00%	43.0

1"= 20'
scale: 20 0 20 40 feet

1"= 20'
scale: 20 0 20 40 feet

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scale: 20 0 20 40 feet

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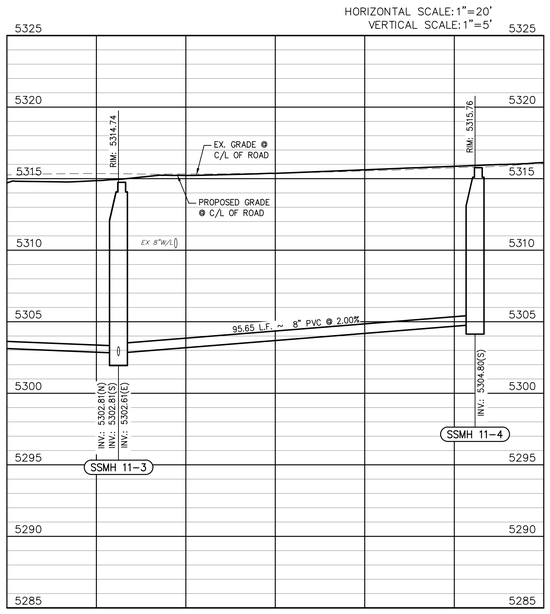
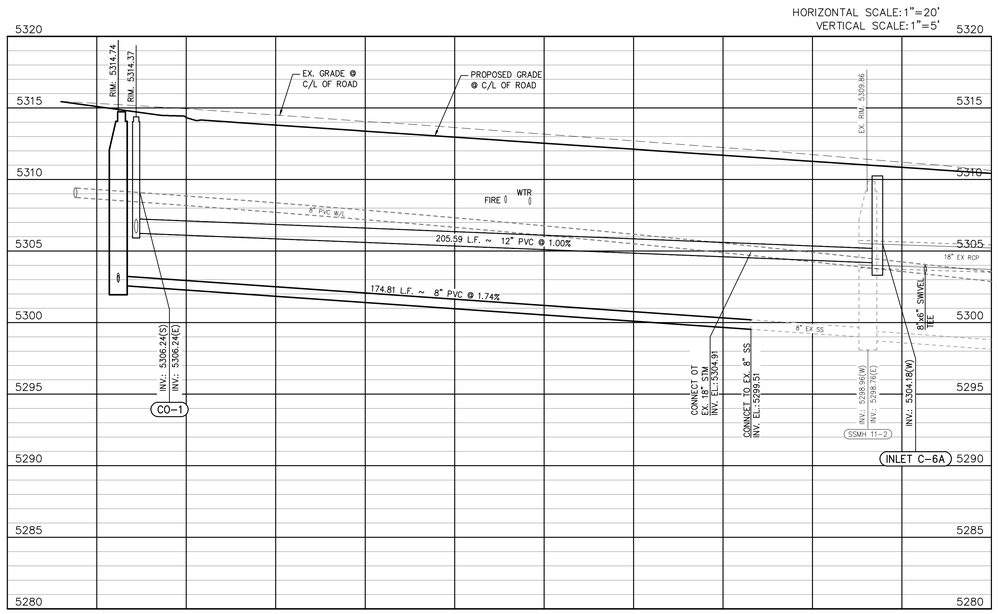
6/17/2022
PROFESSIONAL ENGINEER

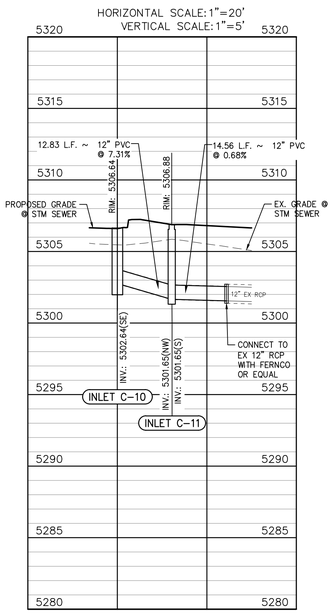
NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT

UTILITY PLAN AND PROFILE

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO







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Job No. 1915

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PP1

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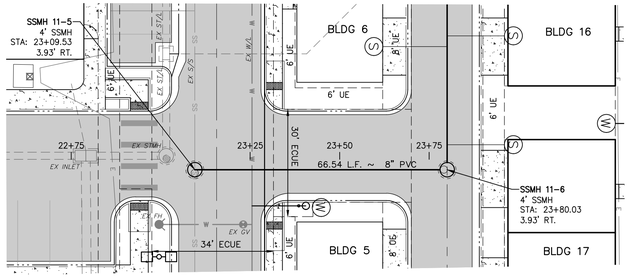

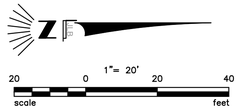

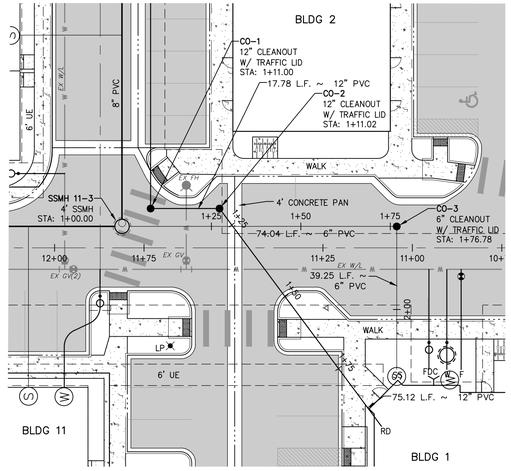

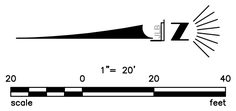

Bldg #	DS MH	Distance from MH Wall (ft.)	Main Inv Elev @ MH	Mainline Slope	WYE Inv @ Main	Service Inv @ End of Line	Service Slope	Service Length (ft.)
1	11-3	0.00	5302.61	N/A	5302.81	5303.98	1.00%	116.8

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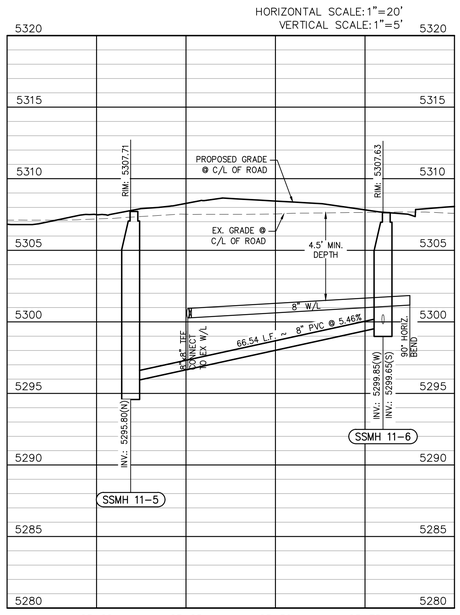

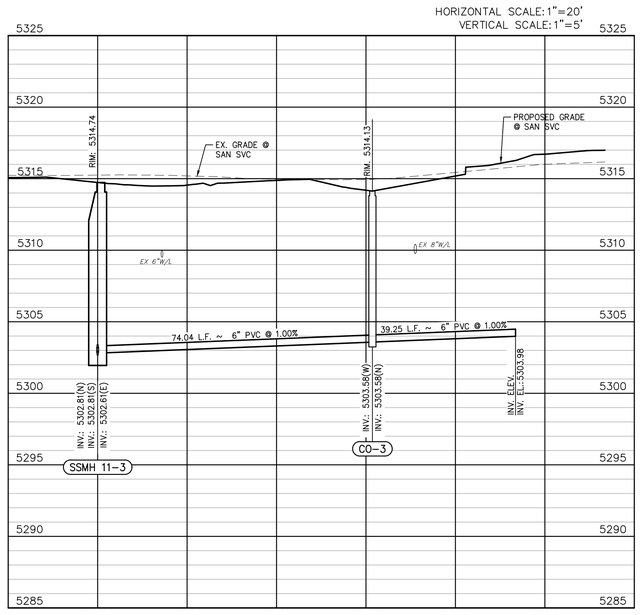

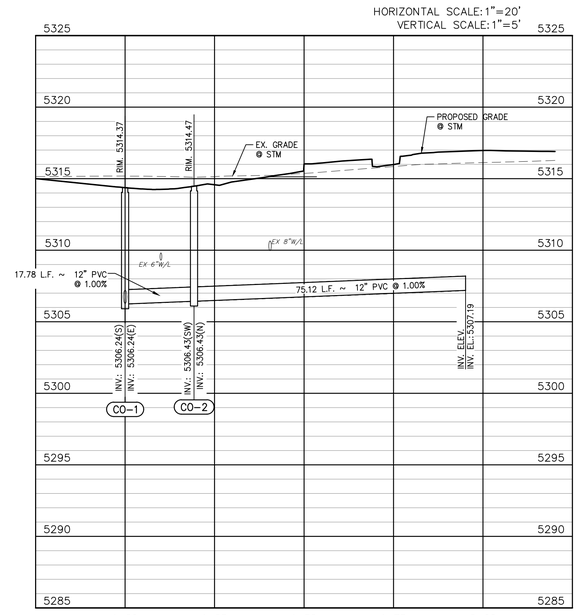

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6/17/2022

NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT

UTILITY PLAN AND PROFILE

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

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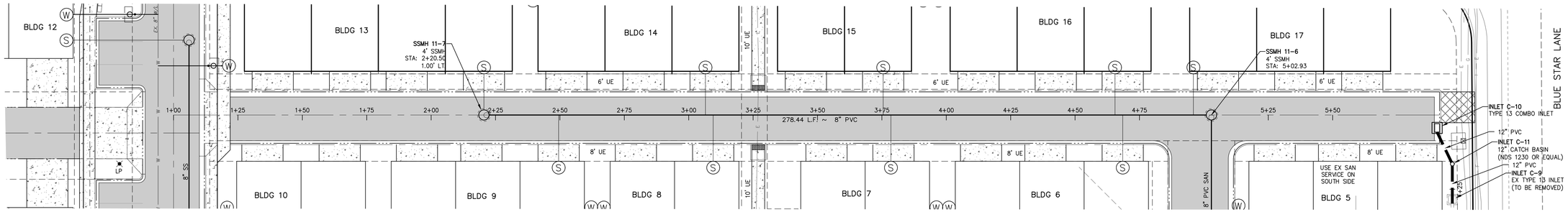
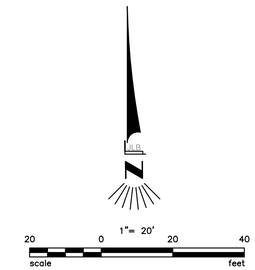
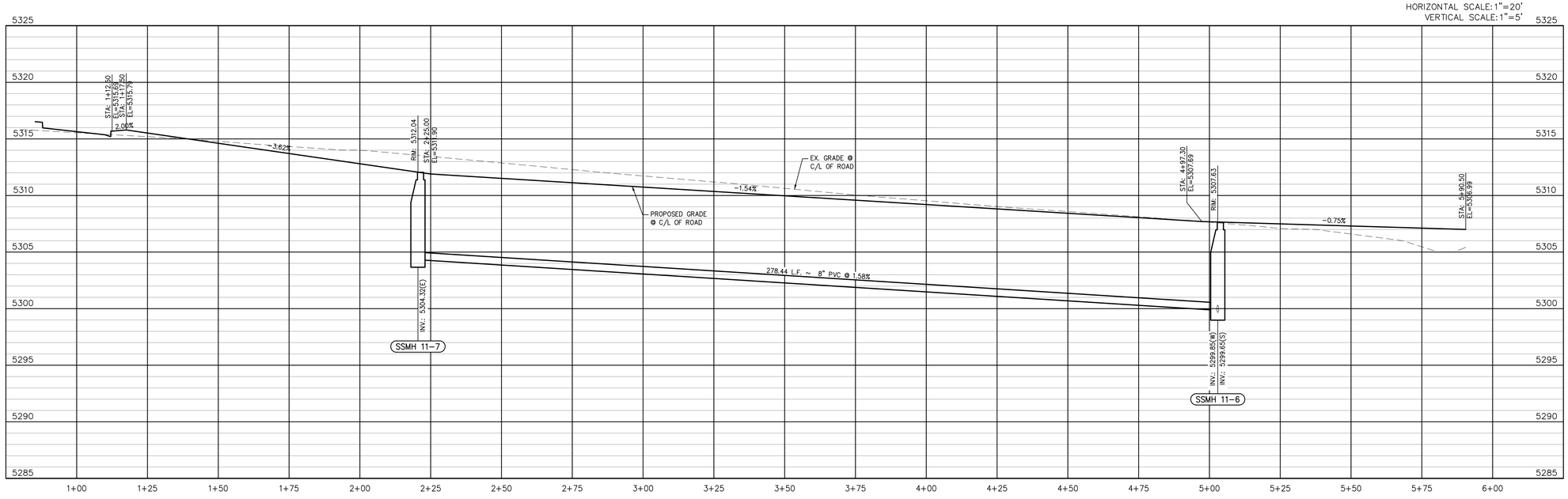
SHEET
PP2
9 OF 18 SHEETS



Bldg #	DS MH	Distance from MH Wall (ft.)	Main Inv Elev @ MH	Mainline Slope	WYE Inv @ Main	Service Inv @ End of Line	Service Slope	Service Length (ft.)
6	11-6	33.50	5299.85	1.58%	5300.38	5301.44	2.00%	18.0
7	11-6	122.50	5299.85	1.58%	5301.79	5302.85	2.00%	18.0
8	11-6	191.50	5299.85	1.58%	5302.88	5303.94	2.00%	18.0
9	11-6	251.30	5299.85	1.58%	5303.82	5304.88	2.00%	18.0
13	11-7	0.00	5304.32	N/A	5304.65	5304.93	2.00%	14.0
14	11-6	194.50	5299.85	1.58%	5302.92	5303.94	2.00%	16.0
15	11-6	125.50	5299.85	1.58%	5301.83	5302.85	2.00%	16.0
16	11-6	35.50	5299.85	1.58%	5300.41	5301.43	2.00%	16.0
17	11-6	5.00	5299.85	1.58%	5304.65	5305.67	2.00%	16.0





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NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT

UTILITY PLAN AND PROFILE

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PP3
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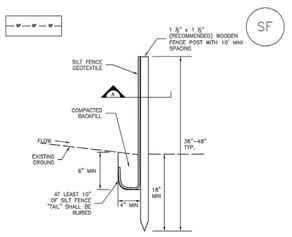
Silt Fence (SF) SC-1



SILT FENCE

SECTION A

SF–1. SILT FENCE

SC-1 Silt Fence (SF)

SILT FENCE INSTALLATION NOTES

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING AND FUTURE MAINTENANCE. THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2–5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO HOND GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.

4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.

5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J–HOOK". THE "J–HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' – 20').

7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".

5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

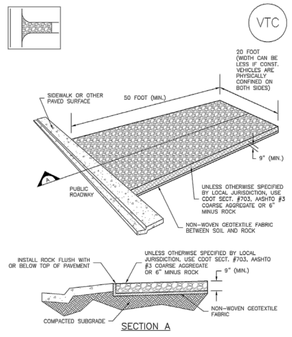
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

PLAN SYMBOL

SF

A 10 SILT FENCE NTS

Vehicle Tracking Control (VTC) SM-4



SECTION A

VTC–1. AGGREGATE VEHICLE TRACKING CONTROL

SM-4 Vehicle Tracking Control (VTC)

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

1. SEE PLAN VIEW FOR
–LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
–TYPE OF CONSTRUCTION ENTRANCE(S)/EXIT(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).

2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.

3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT–OF–WAYS.

4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

5. A NON–WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.

5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

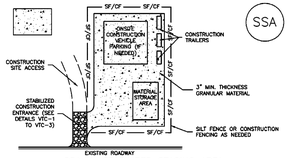
(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

PLAN SYMBOL

VTC

B 10 VEHICLE TRACKING CONTROL NTS

Stabilized Staging Area (SSA) SM-6



SSA–1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR
–LOCATION OF STAGING AREA(S).
–CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.

3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.

4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

SM-6 Stabilized Staging Area (SSA)

STABILIZED STAGING AREA MAINTENANCE NOTES

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.

6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE–ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

PLAN SYMBOL

SSA

G 10 STABILIZED STAGING AREA NTS

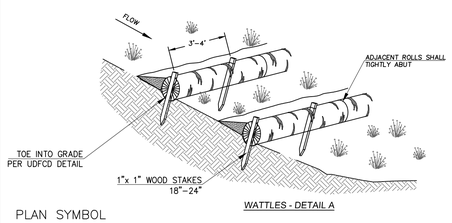
DETAIL A NOTES:

INSTALLATION:
WHEN INSTALLING RUNNING LENGTHS OF WATTLES, BUTT THE SECOND WATTLE TIGHTLY AGAINST THE FIRST, DO NOT OVERLAP THE ENDS. STAKE THE WATTLES AT EACH END AND FOUR FOOT ON CENTER. FOR EXAMPLE:

A 25 FOOT WATTLE USES 6 STAKES
A 20 FOOT WATTLE USES 5 STAKES
A 12 FOOT WATTLE USES 4 STAKES

STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE. LEAVING 2 – 3 INCHES OF THE STAKE PROTRUDING ABOVE THE WATTLE. A HEAVY SEDIMENT LOAD WILL TEND TO PICK THE WATTLE UP AND COULD PULL IT OFF THE STAKES IF THEY ARE DRIVEN DOWN TOO LOW. IT MAY BE NECESSARY TO MAKE A HOLE IN THE WATTLE WITH A PICK END OF YOUR MADDOX IN ORDER TO GET THE STAKE THROUGH THE STRAW. WHEN STRAW WATTLES ARE USED FOR FLAT GROUND APPLICATIONS, DRIVE THE STAKES STRAIGHT DOWN; WHEN INSTALLING WATTLES ON SLOPES, DRIVE THE STAKES PERPENDICULAR TO THE SLOPE.

DRIVE THE FIRST END STAKE OF THE SECOND WATTLE AT AN ANGLE TOWARD THE FIRST WATTLE IN ORDER TO HELP ABUT THEM TIGHTLY TOGETHER. IF YOU HAVE DIFFICULTY DRIVING THE STAKE INTO EXTREMELY HARD OR ROCKY SLOPES, A PILOT BAR MAY BE NEEDED TO BEGIN THE STAKE HOLE.



WATTLES - DETAIL A

PLAN SYMBOL

W1 (X•X X•X)

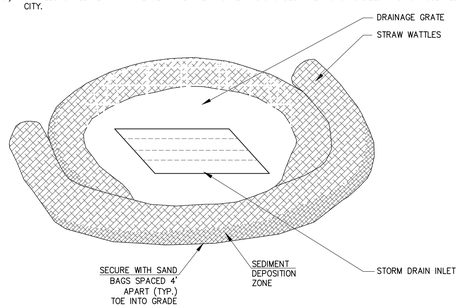
C 10 WATTLES ON SLOPE NTS

COMMON NAME	SPECIES	VARIETY	% OF MIX	#PLS/ACRE
SIDE OATS GRAMA	BOUTELOUA CURTIPENDULA	VAUGHN	15	2.74
BLUE GRAMA	BOUTELOUA GRACILIS	NATIVE, ALMA OR HACHITA	20	0.84
BUFFALOGRASS	BUCHLOE DACTYLOIDES	NATIVE	15	9.33
WESTERN WHEATGRASS	PASCOPYRUM SMITHII	ARRIBA	12.5	3.96
WESTERN WHEATGRASS	PASCOPYRUM SMIGHII	NATIVE	12.5	3.96
LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUM	CIMARRON OR PASTURA	13	1.74
GREEN NEEDLEGRASS	STIPA VIRIDULA	LODROM OR NATIVE	12	2.31
			100	24.88

E 15 SEED MIX FOR REVEGETATION NTS

WATTLE MAINTENANCE NOTES:

1.) THE CONTRACTOR SHALL INSPECT WATTLES EVERY TWO WEEKS AND AFTER ANY SIGNIFICANT STORM EVENT AND MAKE REPAIRS OR REMOVE SEDIMENT ACCUMULATED BEHIND WATTLE AS NECESSARY.
2.) SEDIMENT ACCUMULATED BEHIND WATTLE SHALL BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DIAMETER OF THE WATTLE.
3.) WATTLES SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND IS ACCEPTED BY THE CITY.

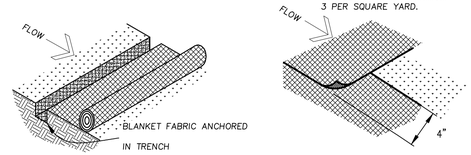


PLAN SYMBOL

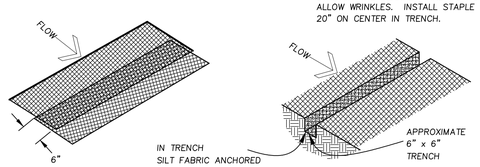
IP13

D 10 INLET PROTECTION - TYPE 13 NTS

1. BURY UPSLOPE END OF BLANKET IN A TRENCH 6" DEEP BY 6" WIDE.
2. USE A 4" OVERLAP WHEREVER TWO WIDTHS OF BLANKET ARE APPLIED SIDE BY SIDE. STAPLE PATTERN: MINIMUM 3 PER SQUARE YARD.



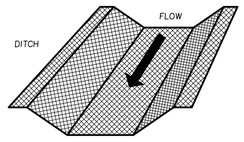
3. USE A 6" OVERLAP WHEREVER ONE ROLL OF BLANKET ENDS AND ANOTHER BEGINS.
4. CHECK SLOTS SHOULD BE MADE EVERY 18'. INSERT A FOLD OF THE BLANKET INTO A TRENCH 6" WIDE BY 6" DEEP AND TAMP FIRMLY. LAY THE BLANKET SMOOTHLY ON THE SURFACE OF THE SOIL; DO NOT STRETCH THE BLANKET, AND DO NOT ALLOW WRINKLES. INSTALL STAPLE 20" ON CENTER IN TRENCH.



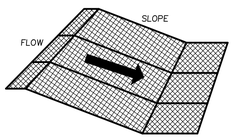
PLAN SYMBOL

SSF

F 10 SOIL STABILIZATION FABRIC NTS



PLACE BLANKET PARALLEL TO THE DIRECTION OF FLOW. DO NOT JOIN STRIPS IN THE CENTER OF THE DITCH. USE CHECK SLOTS AS REQUIRED.



PLACE BLANKET PARALLEL TO THE DIRECTION OF FLOW AND ANCHOR SECURELY. BRING BLANKET TO A LEVEL AREA BEFORE TERMINATING THE INSTALLATION.

PRODUCT SPECIFICATION:
NORTH AMERICAN GREEN, SC150, DOUBLE NET STRAW/COCONUT BLANKET OR EQUAL.

MPD
ENGINEERING
1550 QUINCE AVE.
BOULDER, CO 80304
PHONE: 303.498.9224
marc@mpd-engineering.com

COLORADO REGISTERED PROFESSIONAL ENGINEER
MARC P. DOLEZAL
42318
6/17/2022

NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT
LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

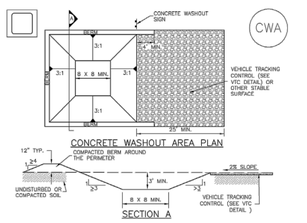
EROSION CONTROL DETAILS

REVISION/ISSUE	BY	DATE
PER CITY COMMENTS 9–23–21	MPD	12/10/21
PER CITY COMMENTS 3–21–22	MPD	6/17/22

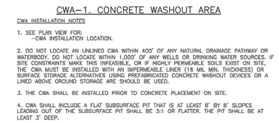
Design MPD Drawn DSS
Checked MPD Approv. MPD
Date JUNE 23, 2021
Job No. 1915
D– 1915.1

SHEET
DET1
11 OF 18 SHEETS

Concrete Washout Area (CWA) MM-1



CONCRETE WASHOUT AREA PLAN



SECTION A

CWA–1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –CWA INSTALLATION LOCATION.
2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (18 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ADJACENT TO THE CWA AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP TRUCKS.
8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

MM-1 Concrete Washout Area (CWA)

CWA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.
5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSFORMED FROM THE JOB SITE IN A WATER–TIGHT CONTAINER AND DISPOSED OF PROPERLY.
6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD).

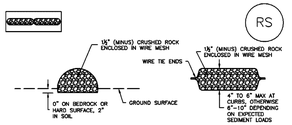
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

PLAN SYMBOL

CWA

A / 11 CONCRETE WASH OUT NTS

SC-5 Rock Sock (RS)



ROCK SOCK SECTION ROCK SOCK PLAN

ROCK SOCK JOINTING

ROCK SOCK INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION(S) OF ROCK SOCKS.
2. CRUSHED ROCK SHALL BE 1½" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET (1½" MINUS).
3. WIRE MESH SHALL BE FABRICATED OF 10 GAGE POULTRY MESH, OR EQUIVALENT, WITH A MAXIMUM OPENING OF ½", RECOMMENDED MINIMUM ROLL WIDTH OF 48"
4. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS AND AT 3' CENTERS ON ENDS OF SOCKS.
5. SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROCK ENCLOSURE.

RS–1. ROCK SOCK PERIMETER CONTROL

GRADATION TABLE	
SIEVE SIZE	MASS PERCENT PASSING SQUARE MESH SIEVES
	NO. 4
2"	100
1½"	50 – 100
1"	20 – 50
½"	0 – 15
¾"	0 – 5
MATCHES SPECIFICATIONS FOR NO. 4 COARSE AGGREGATE FOR CONCRETE PER AASHTO M43. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES.	

Rock Sock (RS) SC-5

ROCK SOCK MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, OR DAMAGED BEYOND REPAIR.
5. SEDIMENT ACCUMULATED UPSTREAM OF ROCK SOCKS SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE ROCK SOCK.
6. ROCK SOCKS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
7. WHEN ROCK SOCKS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

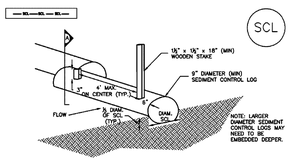
NOTE: THE DETAILS INCLUDED WITH THIS EXCT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF ROCK SOCK INSTALLATION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY OTHER SIMILAR PROPRIETARY PRODUCTS ON THE MARKET. UDFCD NEITHER NOORSES, NOR DISCOURAGES USE OF PROPRIETARY PROTECTION PRODUCTS; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE BMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

PLAN SYMBOL

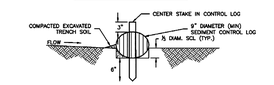
RS

B / 11 ROCK SOCK NTS

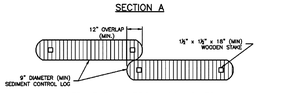
Sediment Control Log (SCL) SC-2



SEDIMENT CONTROL LOG



SECTION A



SEDIMENT CONTROL LOG JOINTS

SCL–1. SEDIMENT CONTROL LOG

PLAN SYMBOL

SCL

C / 11 SEDIMENT CONTROL LOG NTS

Sediment Control Log (SCL) SC-2

SEDIMENT CONTROL LOG INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.
2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND–DISTURBING ACTIVITIES.
3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER MATERIAL WITH A MINIMUM OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.
4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS OR HIGH VELOCITY DRAINAGE WAYS.
5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY ⅓ OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING
6. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER.
7. FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED.

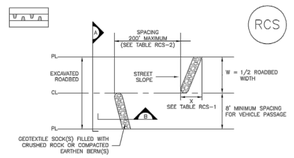
SEDIMENT CONTROL LOG MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.
5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

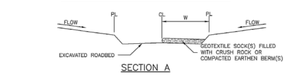
(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, JEFFERSON COUNTY, COLORADO, DOUGLAS COUNTY, COLORADO, AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

EC-9 Rough Cut Street Control (RCS)



ROUGH CUT STREET CONTROL PLAN



SECTION A

SECTION B

TABLE RCS–1

W (FT)	X (FT)
20–30	5
31–40	7
41–50	9
51–60	10.5
61–70	12

TABLE RCS–2

LONGITUDINAL STREET SLOPE (%)	SPACING (FT)
<2	200
2	200
3	200
4	150
5	100
6	50
7	25
8	25

SPACE @ 200'

RCS–1. ROUGH CUT STREET CONTROL

Rough Cut Street Control (RCS) EC-9

ROUGH CUT STREET CONTROL INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF ROUGH CUT STREET CONTROL MEASURES.
2. ROUGH CUT STREET CONTROL SHALL BE INSTALLED AFTER A ROAD HAS BEEN CUT IN, AND WILL NOT BE PAVED FOR MORE THAN 14 DAYS OR FOR TEMPORARY CONSTRUCTION ROADS THAT HAVE NOT RECEIVED ROAD BASE.

ROUGH CUT STREET CONTROL INSPECTION AND MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

(DETAILS ADAPTED FROM AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

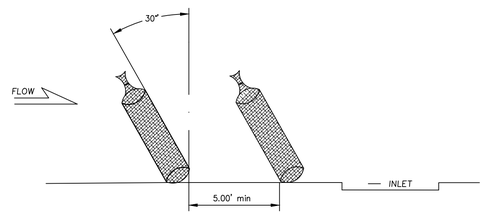
PLAN SYMBOL

RCS

D / 11 ROUGH CUT STREET CONTROL NTS

OR

Detail 1



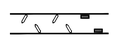
Detail 2

NOTES:

1) Socks will be used upgradient of inlet perpendicular to and flush with curb.
2) No less than two 10–inch diameter socks must be used in sequence, spaced no more than five feet apart, upgradient of inlet. No less than six socks shall be used if the 4–inch sock size is chosen.
3) Incline at 30 degrees from perpendicular, opposite the direction of flow (see Detail 2).
4) Erosion control measures shall be maintained at all times.

PLAN SYMBOL

CS



E / 11 CURB SACK NTS

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COLORADO REGISTERED PROFESSIONAL ENGINEER MARC P. DOLEZAL 42318 6/17/2022

NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT

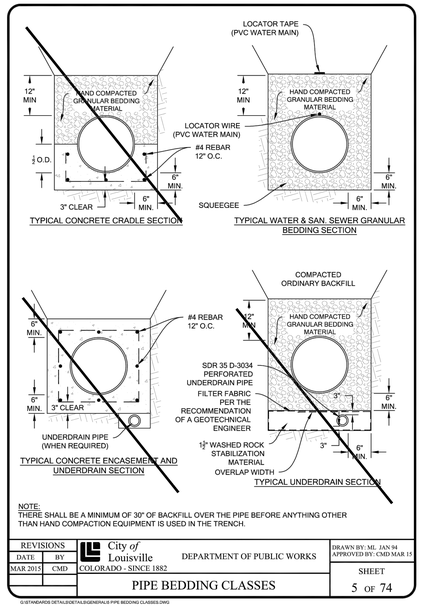
EROSION CONTROL DETAILS

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

DATE	BY	REVISION/ISSUE
12/10/21	MPD	PER CITY COMMENTS 9–23–21
6/17/22	MPD	PER CITY COMMENTS 3–21–22

Design MPD Drawn DSS
Checked MPD Approv. MPD
Date JUNE 23, 2021
Job No. 1915
D– 1925.1

SHEET
DET2
12 OF 18 SHEETS



REVISIONS		City of Louisville	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94 APPROVED BY: CMD MAR 15
DATE	BY	COLORADO - SINCE 1882		SHEET
MAR 2015	CMD	PIPE BEDDING CLASSES		5 OF 74

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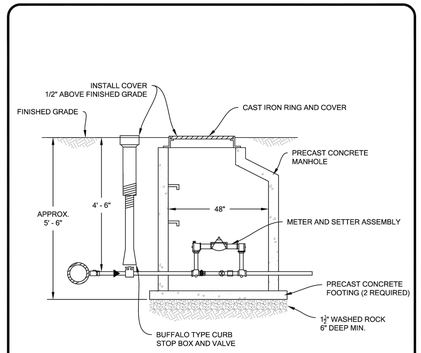

NOTES:

1. CITY WILL SUPPLY AND INSTALL METER AFTER ALL PLUMBING IS INSTALLED, TESTED AND FLUSHED.
2. BACK FLOW PREVENTER TO BE FURNISHED AND INSTALLED BY CONTRACTOR AS DIRECTED BY CITY.
3. CITY WILL SUPPLY PRECAST CONCRETE MANHOLE (PIT), FOOTINGS, CAST IRON RING AND COVER, AND METER SETTER.
4. CONTRACTOR TO PROVIDE STRUCTURAL SUPPORT FOR METER AND SETTER AS DIRECTED BY CITY.

REVISIONS		City of Louisville	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94 APPROVED BY: CMD MAR 15
DATE	BY	COLORADO - SINCE 1882		SHEET
MAR 2015	CMD	1 1 2 & 2 METER PIT INSTALLATION		19 OF 74

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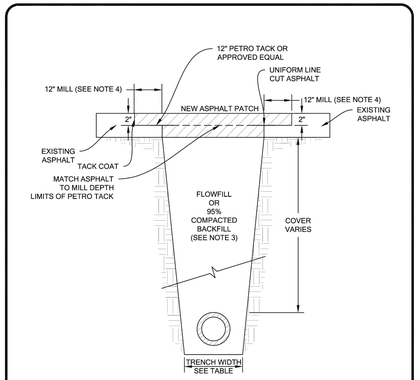

NOTES:

1. TRENCH TO BE SLOPED OR BRACED AND SHORED AS REQUIRED.
2. 6" MIN. ASPHALT PATCH OR COMPLETE FULL DEPTH ASPHALT PATCH OF EXISTING STREET SECTION. INSTALL ASPHALT IN LIFTS AND COMPACT TO 95% MIN.
3. COMPACTED BACKFILL ONLY AS DIRECTED BY ENGINEER.
4. 12" MILL ONLY REQUIRED IF PAVEMENT IS 5 YEARS OLD OR LESS OR AS DIRECTED BY THE CITY.

PIPE DIAMETER	6"	8"	12"
MINIMUM WIDTH	1' 10"	2' 0"	2' 4"
MAXIMUM WIDTH	2' 6"	2' 8"	3' 0"

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DATE	BY	COLORADO - SINCE 1882		SHEET
MAR 2015	CMD	TYPICAL TRENCH T PATCH SECTION		16 OF 74

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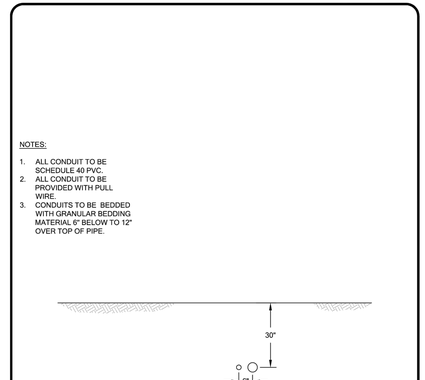

NOTES:

1. ALL CONDUIT TO BE SCHEDULE 40 PVC.
2. ALL CONDUIT TO BE PROVIDED WITH PULL WIRE.
3. CONDUITS TO BE BEDDED WITH GRANULAR BEDDING MATERIAL 6" BELOW TO 12" OVER TOP OF PIPE.

TYPICAL PULLWIRE DETAIL

REVISIONS		City of Louisville	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94 APPROVED BY: CMD MAR 15
DATE	BY	COLORADO - SINCE 1882		SHEET
MAR 2015	CMD	CONDUIT CROSSING		73 OF 74

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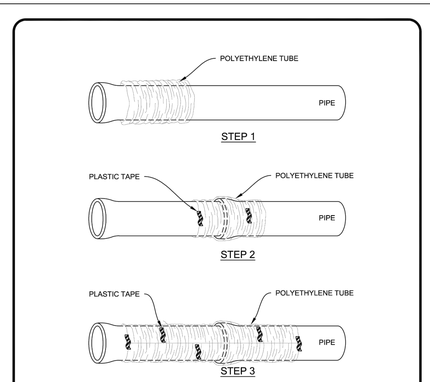

FIELD INSTALLATION - POLYETHYLENE WRAP

STEP 1 - PLACE TUBE OF POLYETHYLENE MATERIAL ON PIPE PRIOR TO LOWERING IT INTO TRENCH.

STEP 2 - PULL THE TUBE OVER THE LENGTH OF THE PIPE. TAPE TUBE TO PIPE AT JOINT. FOLD MATERIAL AROUND THE ADJACENT SPIGOT END AND WRAP WITH TAPE TO HOLD THE PLASTIC TUBE IN PLACE.

STEP 3 - OVERLAP FIRST TUBE WITH ADJACENT TUBE AND SECURE WITH PLASTIC ADHESIVE TAPE. THE POLYETHYLENE TUBE MATERIAL COVERING THE PIPE SHALL BE LOOSE. EXCESS MATERIAL SHALL BE NEATLY DRAWN UP AROUND THE PIPE BARREL, FOLDED ON TOP OF THE PIPE AND TAPED IN PLACE.

REVISIONS		City of Louisville	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94 APPROVED BY: CMD MAR 15
DATE	BY	COLORADO - SINCE 1882		SHEET
MAR 2015	CMD	POLYETHYLENE WRAP		17 OF 74

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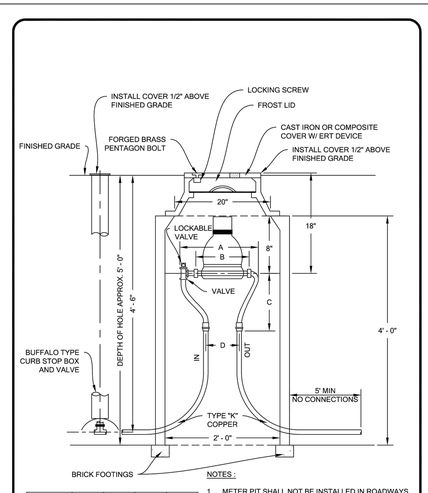

NOTES :

1. METER PIT SHALL NOT BE INSTALLED IN ROADWAYS, DRIVEWAYS, PARKING AREAS, OR ASPHALT.
2. SET METER PIT COVER 1/2" ABOVE SURVEYED FINISHED GRADE. IF SURFACE IS NOT TO FINISHED GRADE AT TIME OF INSTALLATION OF METER PIT, OWNER SHALL RAISE/LOWER PIT AND MODIFY SERVICE LINE PLUMBING AS NEEDED.

METER SIZE	A	B	C	D
3/4"	14 3/4"	9 5/16"	8 15/16"	5"
1"	17 3/4"	11 1/16"	11 3/4"	6"

REVISIONS		City of Louisville	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94 APPROVED BY: CMD MAR 15
DATE	BY	COLORADO - SINCE 1882		SHEET
MAR 2015	CMD	3 4 & 1 METER PIT INSTALLATION		18 OF 74

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6/17/2022
PROFESSIONAL ENGINEER

NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1,
OUTLOT A AND OUTLOT K REPLAT

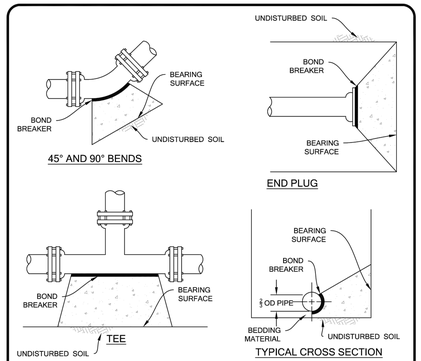
WATER DETAILS

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

REVISION/ISSUE	DATE	BY
PER CITY COMMENTS 9-23-21	12/10/21	MPD
PER CITY COMMENTS 3-21-22	6/17/22	MPD

Design MPD Drawn DSS
Checked MPD Approv. MPD
Date JUNE 23, 2021
Job No. 1915
D- 1925.1

SHEET
DET3
13 OF 18 SHEETS



NOTES:

1. ALL FITTINGS SHALL BE MEGALUG.
2. BEARING SURFACES SHOWN IN CHART ARE MINIMUM.
3. ◄SACK CONCRETE SHALL BE REQUIRED.
4. ALL DUCTILE & CAST IRON SHALL BE WRAPPED IN POLYETHYLENE.

6–1/2

BEARING DIMENSIONS FOR PIPE 250 P.S.I. SURGE 3000 LB/SQ FT. SOIL PRESSURE = 3K

OUTSIDE DIAMETER	CAP, TEE, PLUG & DEAD END	BENDS 90°	45°	22½°	11¼°
4" 3K	1.5	1.5	1.0	1.0	1.0
6" 3K	2.5	3.5	2.0	1.0	1.0
8" 3K	4.5	6.0	3.5	2.0	1.0
12" 3K	9.5	13.5	7.5	4.0	2.0
16" 3K	7.0	24.0	13.0	7.0	3.5
24" 3K	38.0	53.5	29.0	15.0	7.5

REVISIONS DATE	BY
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CONCRETE KICKBLOCK

SHEET 32 OF 74

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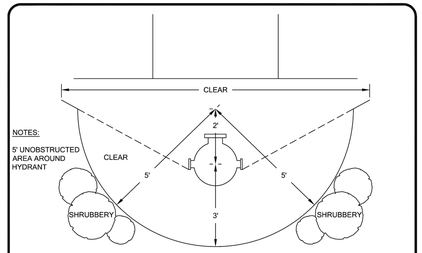
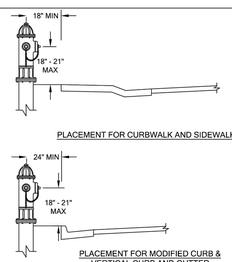
PRIOR TO CONSTRUCTION, CONFIRM SOIL BEARING PRESSURES WITH ENGINEER.



NOTES:

5' UNOBSTRUCTED AREA AROUND HYDRANT



PLACEMENT FOR CURBWALK AND SIDEWALK

PLACEMENT FOR MODIFIED CURB & VERTICAL CURB AND GUTTER

REVISIONS DATE	BY
MAR 2015	CMD

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DRAWN BY: ML JAN 94
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FIRE HYDRANT PLACEMENT

SHEET 34 OF 74

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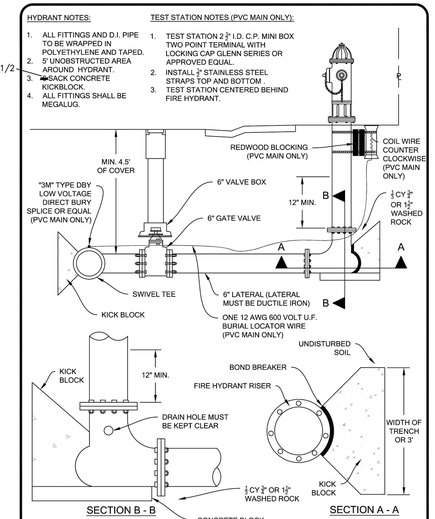
HYDRANT NOTES:

1. ALL FITTINGS AND D.I. PIPE TO BE WRAPPED IN POLYETHYLENE AND TAPED.
2. 5' UNOBSTRUCTED AREA AROUND HYDRANT.
3. ◄SACK CONCRETE KICKBLOCK.
4. ALL FITTINGS SHALL BE MEGALUG.

TEST STATION NOTES (PVC MAIN ONLY):

1. TEST STATION 2 ½" I.D. C.P. MINI BOX TWO POINT TERMINAL WITH LOCKING CAP GLENN SERIES OR APPROVED EQUAL.
2. INSTALL ½" STAINLESS STEEL STRAPS TOP AND BOTTOM.
3. TEST STATION CENTERED BEHIND FIRE HYDRANT.

6–1/2



REVISIONS DATE	BY
MAR 2015	CMD

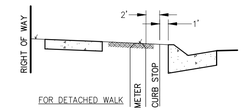
City of Louisville, COLORADO - SINCE 1882 — DEPARTMENT OF PUBLIC WORKS

DRAWN BY: ML JAN 94
APPROVED BY: CMD MAR 15

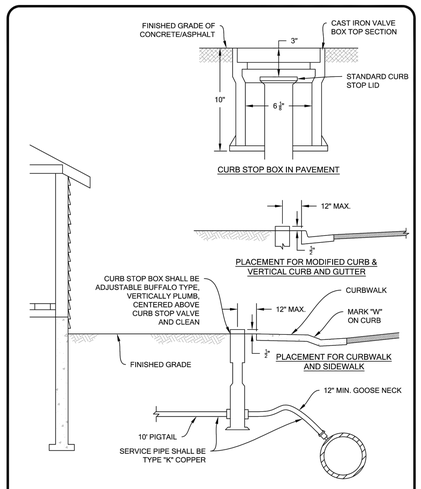
FIRE HYDRANT INSTALLATION

SHEET 35 OF 74

G:\STANDARDS DETAILS\DETAILS\WATER\35 FIRE HYDRANT INSTALLATION.DWG



FOR DETACHED WALK



NOTES:

1. ANY DEFICIENCY IN CURB STOP INSTALLATION SHALL BE CORRECTED PRIOR TO WATER METER INSTALLATION.

REVISIONS DATE	BY
MAR 2015	CMD

City of Louisville, COLORADO - SINCE 1882 — DEPARTMENT OF PUBLIC WORKS

DRAWN BY: ML JAN 94
APPROVED BY: CMD MAR 15

CURB STOP INSTALLATION

SHEET 36 OF 74

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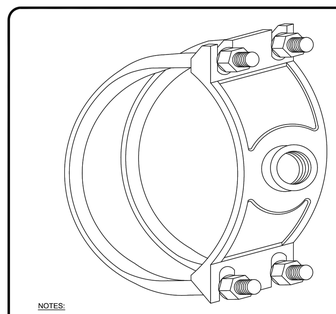
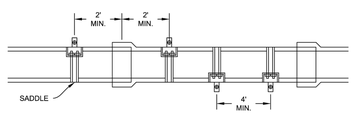


NOTES:

1. ONLY SOLID BRASS DOUBLE STRAP TAPPING SADDLES WITH AN "O" RING SEAL ARE APPROVED FOR PVC WATER MAINS. NO DIRECT TAPS SHALL BE MADE.
2. DOUBLE BRASS TAPPING SADDLES SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR.
3. CORPORATIONS SHALL BE PROVIDED BY THE CITY OF LOUISVILLE.
4. CONTRACTOR SHALL TAP ALL PVC WATER MAIN CONNECTIONS

BRASS TAPPING SADDLE



PVC WATER TAP SPACING

REVISIONS DATE	BY
MAR 2015	CMD

City of Louisville, COLORADO - SINCE 1882 — DEPARTMENT OF PUBLIC WORKS

DRAWN BY: ML JAN 94
APPROVED BY: CMD MAR 15

PVC MAIN TAPPING

SHEET 38 OF 74

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COLORADO REGISTERED MARC P. DOLEZAL 42318 PROFESSIONAL ENGINEER 6/17/2022

NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT

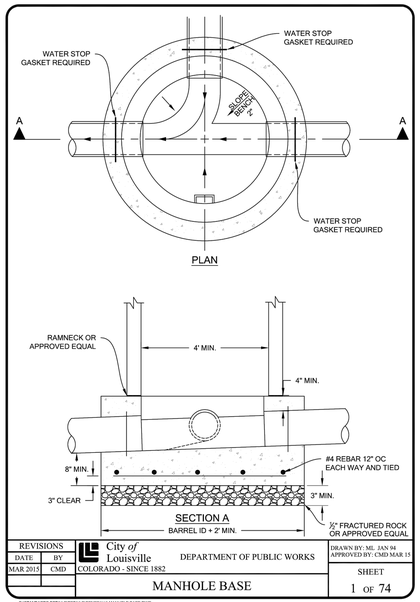
WATER DETAILS

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

REVISION/ISSUE	DATE	BY
PER CITY COMMENTS 9-23-21	12/10/21	MPD
PER CITY COMMENTS 3-21-22	6/17/22	MPD

Design MPD Drawn DSS
Checked MPD Approv. MPD
Date JUNE 23, 2021
Job No. 1915
D– 1925.1

SHEET
DET4



REVISIONS		City of Louisville	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94
DATE	BY	COLORADO - SINCE 1882		APPROVED BY: CMD MAR 15
MAR 2015	CMD	MANHOLE BASE		SHEET 1 OF 74

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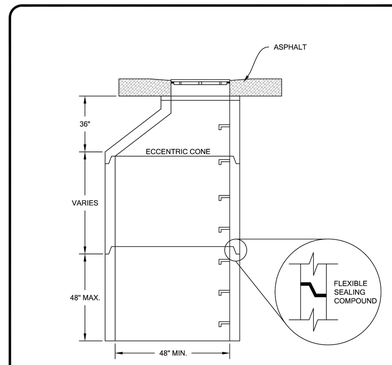

MANHOLE SECTION
W/ ECCENTRIC CONE TOP

NOTES:

1. STEPS SHALL BE LOCATED ABOVE THE BENCH.
2. MANHOLE STEP SPACING SHALL BE 12"- 18" OC.
3. HDPE / TAPERED GRADE RINGS SHALL BE USED FOR GRADE ADJUSTMENT.
4. STEPS SHALL BE VERTICALLY PLUMB ± 1" AND SHALL HAVE EQUAL SPACING.
5. FLEXIBLE SEALING COMPOUND SHALL BE RAMNECK OR APPROVED EQUAL.
6. MANHOLE STEPS SHALL BE NO MORE THAN 24" NOR LESS THAN 18" FROM THE TOP OF THE MANHOLE RING OR FROM THE BENCH OF THE MANHOLE.
7. STEPS SHALL CONFORM TO AASHTO M 199.
8. PRECAST MANHOLES SHALL COMPLY WITH ASTM C 478.

REVISIONS		City of Louisville	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94
DATE	BY	COLORADO - SINCE 1882		APPROVED BY: CMD MAR 15
MAR 2015	CMD	MANHOLE SECTION		SHEET 2 OF 74

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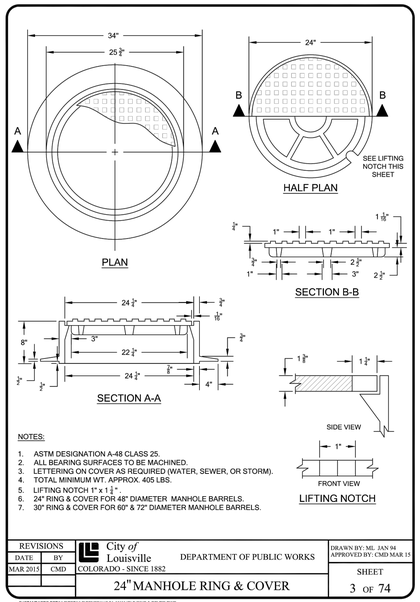

NOTES:

1. ASTM DESIGNATION A-48 CLASS 25.
2. ALL BEARING SURFACES TO BE MACHINED.
3. LETTERING ON COVER AS REQUIRED (WATER, SEWER, OR STORM).
4. TOTAL MINIMUM WT. APPROX. 405 LBS.
5. LIFTING NOTCH 1" x 1 ¼" .
6. 24" RING & COVER FOR 48" DIAMETER MANHOLE BARRELS.
7. 30" RING & COVER FOR 60" & 72" DIAMETER MANHOLE BARRELS.

REVISIONS		City of Louisville	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94
DATE	BY	COLORADO - SINCE 1882		APPROVED BY: CMD MAR 15
MAR 2015	CMD	24" MANHOLE RING & COVER		SHEET 3 OF 74

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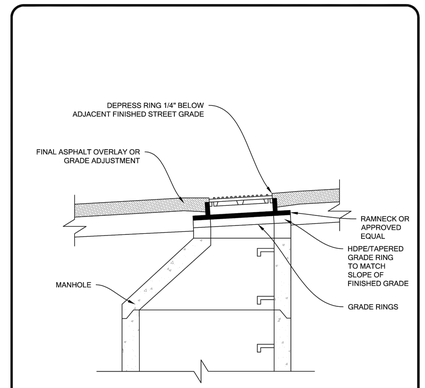

REVISIONS		City of Louisville	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94
DATE	BY	COLORADO - SINCE 1882		APPROVED BY: CMD MAR 15
MAR 2015	CMD	MANHOLE & COVER ADJUSTMENT		SHEET 4 OF 74

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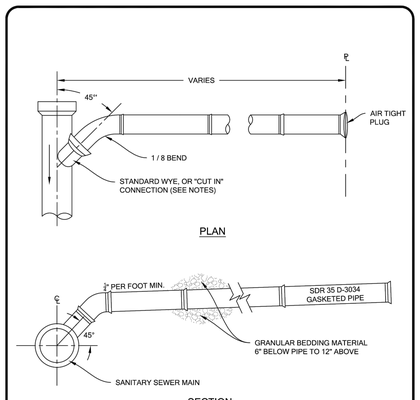

NOTES:

1. BELLS SHALL NOT TOUCH THE SIDES OR BOTTOM OF THE BELL HOLE.
2. THE BARREL SECTION SHALL BE SUPPORTED THROUGHOUT ITS LENGTH.
3. SERVICE TAPS SHALL BE IN LINE WYES ON NEW MAINS, AND MACHINE TAPPED AND WYE SADDLE ON EXISTING MAINS. HAND TAPS SHALL NOT BE ALLOWED.
4. SERVICE LINES SHALL BE LOCATED FIVE FEET DOWNHILL FROM THE CENTERLINE OF THE LOT.
5. THE CURB SHALL BE MARKED WITH "S" OR "X" WHERE THE SEWER SERVICE LINE CROSSES THE CURB.
6. THE MIN. SERVICE LINE SHALL BE 1/4" PER FOOT.
7. ALL JOINTS SHALL BE GASKETED WATER TIGHT.
8. ALL SERVICE LINES SHALL BE 4" UNLESS OTHERWISE APPROVED.
9. INSPECTION REQUIRED PRIOR TO BACKFILL.

REVISIONS		City of Louisville	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94
DATE	BY	COLORADO - SINCE 1882		APPROVED BY: CMD MAR 15
MAR 2015	CMD	SANITARY SEWER SERVICE		SHEET 9 OF 74

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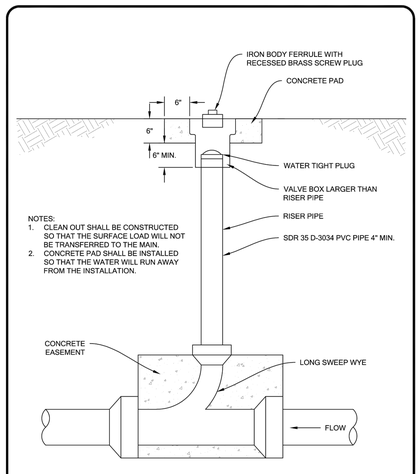

REVISIONS		City of Louisville	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94
DATE	BY	COLORADO - SINCE 1882		APPROVED BY: CMD MAR 15
MAR 2015	CMD	CLEAN OUT		SHEET 11 OF 74

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6/17/2022

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

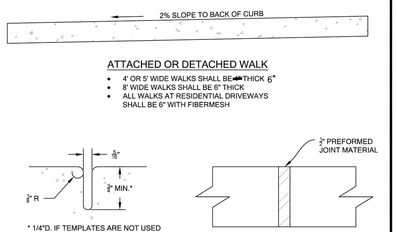
NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT

SANITARY SEWER DETAILS

REVISION/ISSUE	BY	DATE
PER CITY COMMENTS 9-23-21	MPD	12/10/21
PER CITY COMMENTS 3-21-22	MPD	6/17/22

Design MPD Drawn DSS
Checked MPD Approv. MPD
Date JUNE 23, 2021
Job No. 1915
D- 1925.1

SHEET
DET5
15 OF 18 SHEETS



REVISIONS		City of Louisville COLORADO - SINCE 1882	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94 APPROVED BY: CMD MAR 15
DATE	BY			
MAR 2015	CMD			SHEET
		CURBWALK & WALK		57 OF 74

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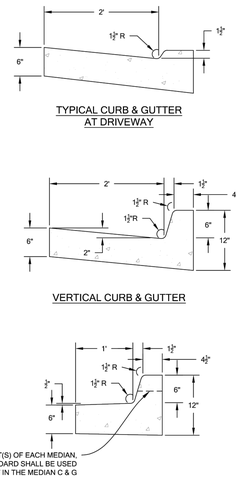

REVISIONS		City of Louisville COLORADO - SINCE 1882	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94 APPROVED BY: CMD MAR 15
DATE	BY			
MAR 2015	CMD			SHEET
		CURB & GUTTER		58 OF 74

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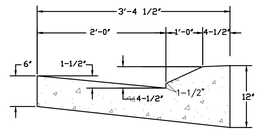
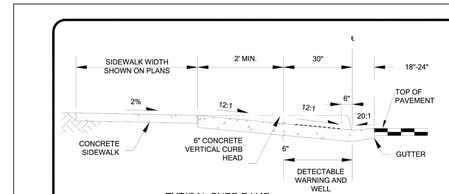


REVISIONS		CITY OF LOUISVILLE ENGINEERING DEPARTMENT	DRAWN BY: -	DATE
DATE	BY		APPROVED BY:	DATE
		HOLLYWOOD CURB ONLY	SHEET____OF____	
STRB				



REVISIONS		City of Louisville COLORADO - SINCE 1882	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94 APPROVED BY: CMD MAR 15
DATE	BY			
MAR 2015	CMD			SHEET
		HANDICAP CURB RAMP 3		70 OF 74

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MARC P. DOLEZAL
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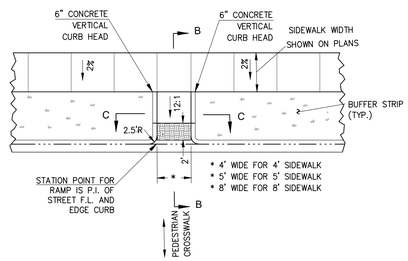
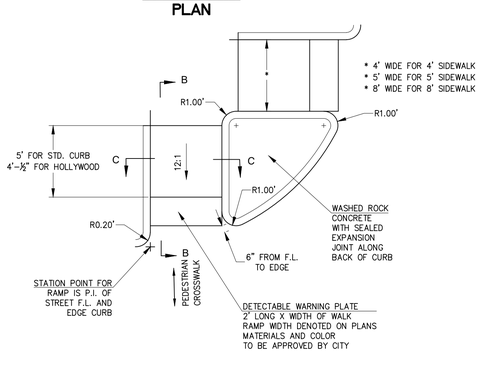
6/17/2022

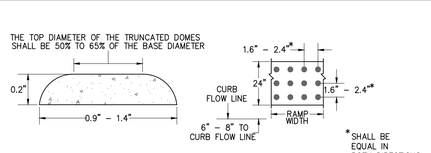
LOT 1, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT
LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

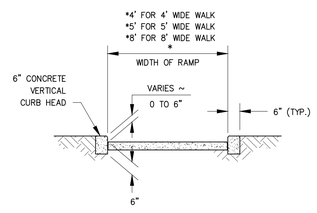
SITE DETAILS

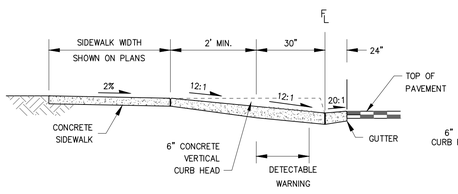


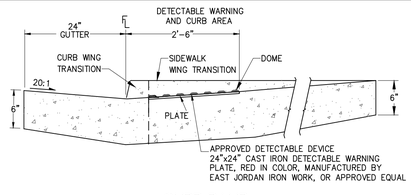


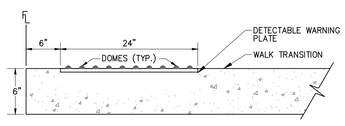
B 15 — PEDESTRIAN RAMPS NTS

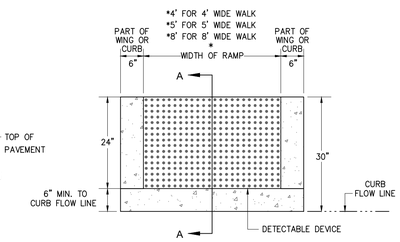


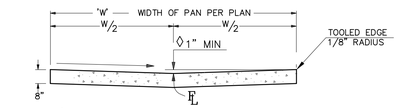




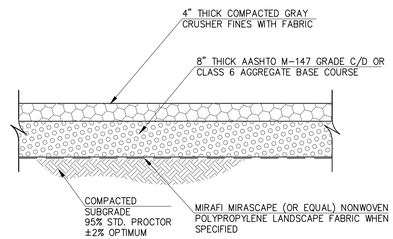








A 15 — CROSS PAN NTS



PAVEMENT SECTION SUBJECT TO APPROVAL BY FIRE DEPARTMENT

C 15 — ACCESS DRIVE SURFACING NTS

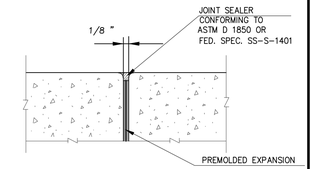
SIDEWALK NOTES:

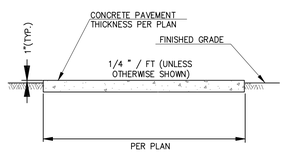
PROVIDE CONTRACTION JOINTS WITH A MAXIMUM SPACING OF 6' OR AS REQUIRED BY THE CITY.

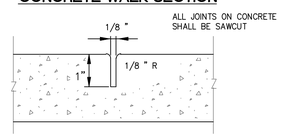
FINISH SCHEDULE:
WALKS – LIGHT BROOM
DRIVES – MEDIUM BROOM

ALL WALKS THAT ARE BEHIND DRIVE OVER (HOLLYWOOD) CURB SHALL BE 8" THICK.

ALL WALKS AT DRIVE RAMPS SHALL BE 8" THICK.







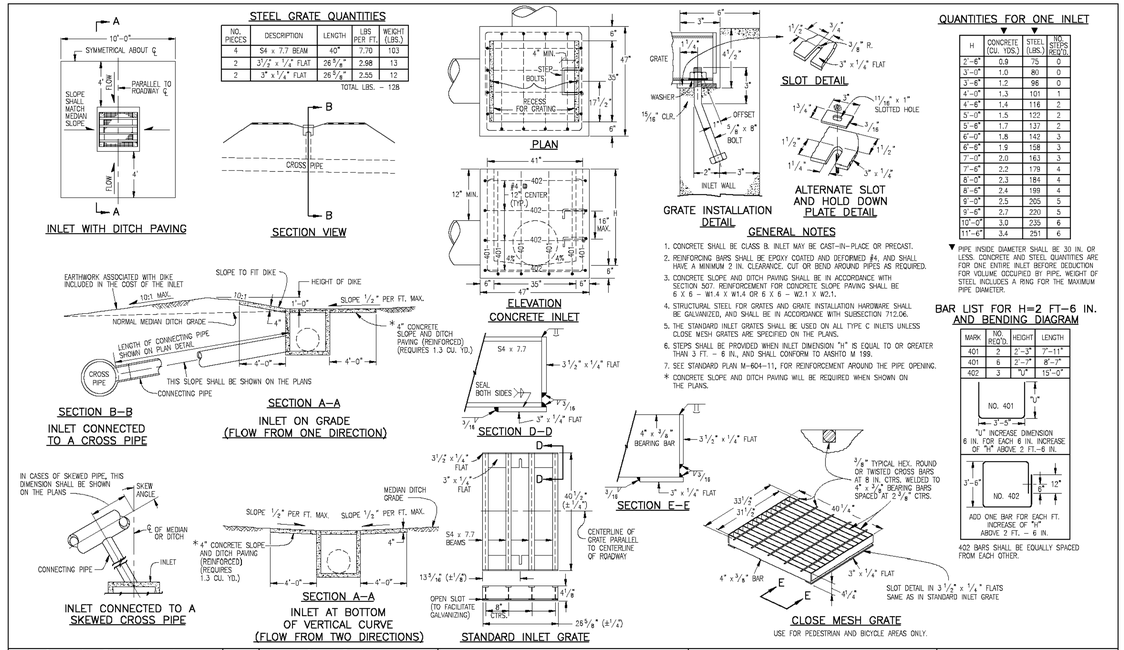
D 15 — CONCRETE WALK JOINTS NTS

REVISION/ISSUE	BY	DATE
PER CITY COMMENTS 9-23-21	MPD	12/10/21
PER CITY COMMENTS 3-21-22	MPD	6/17/22

Design	MPD
Drawn	DSS
Checked	MPD
Approv.	MPD
Date	JUNE 23, 2021
Job No.	1915
D-	1925.1

SHEET
DET6

16 OF 18 SHEETS



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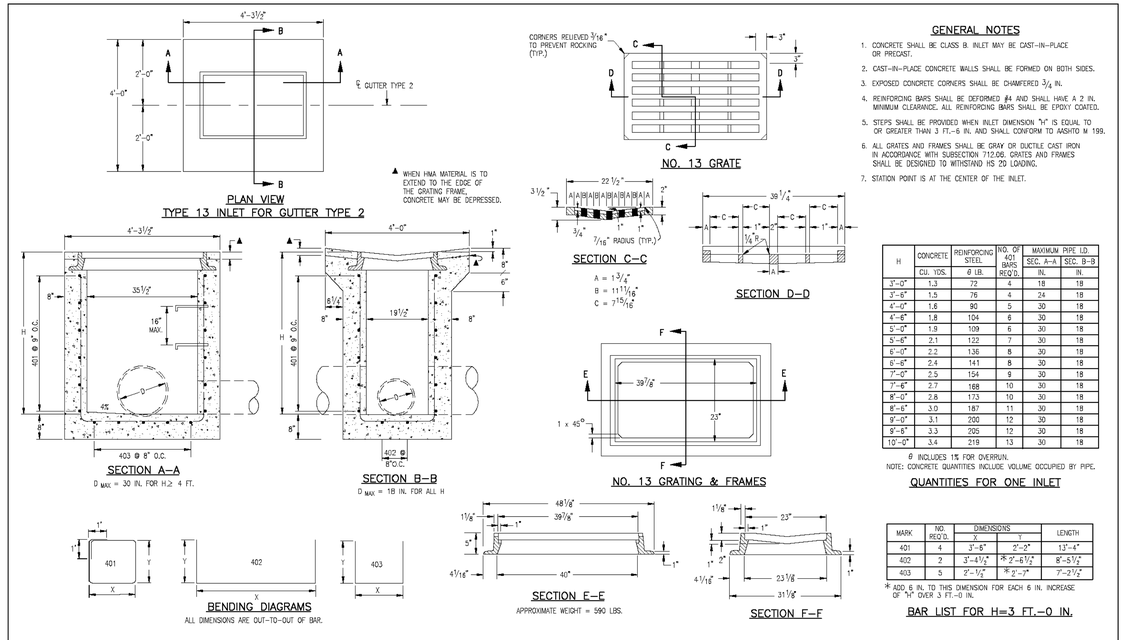
Creation Date: 07/04/06 Initials: SJR		Date:	Comments	4201 East Arkansas Avenue, Denver, Colorado 80222, Phone: (303) 757-9083, Fax: (303) 757-9820	INLET, TYPE C
Last Modification Date: 07/04/06 Initials: LTA				Project Development Branch SRJ/LTA	M-604-10
Full Path: www.dot.state.co.us/DesignSupport/				Issued By: Project Development Branch on July 04, 2006	Sheet No. 1 of 1
Drawing File Name: 6040100101.dwg					
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English					



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Creation Date: 07/04/06 Initials: SJR		Date:	Comments	4201 East Arkansas Avenue, Denver, Colorado 80222, Phone: (303) 757-9083, Fax: (303) 757-9820	CONCRETE INLET TYPE 13
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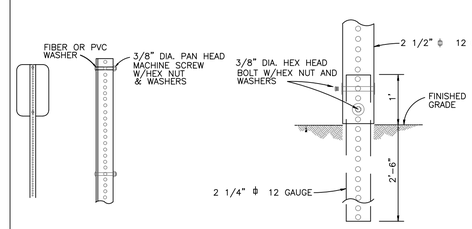
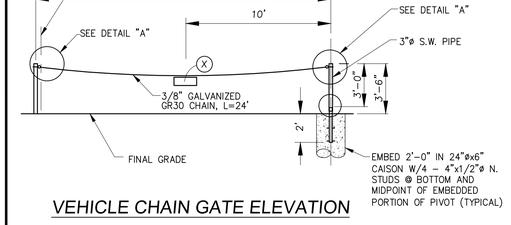
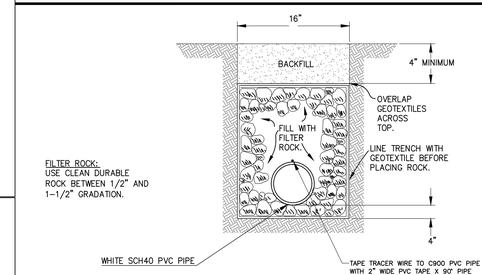


A 16 **SIGN POSTS AND MOUNTING**
NTS



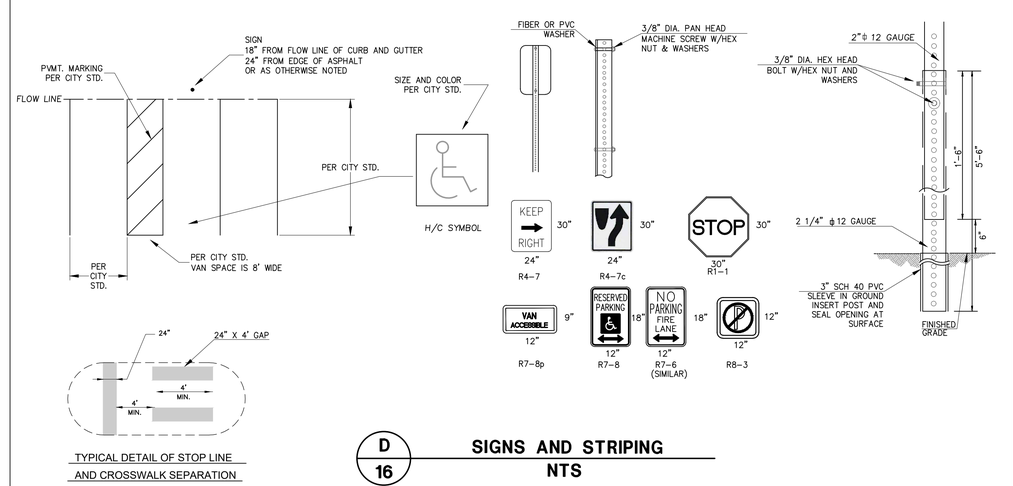
B 16 **EMERGENCY ACCESS CHAIN GATE**
NTS



TRACER WIRE SPECIFICATION

TRACER WIRE WILL BE A 19 GAUGE, TIN COATED, COPPER CONDUCTOR WITH POLYETHYLENE INSULATION. CORE MATERIAL COMPRISED OF HIGH-TENACITY, WOVEN POLYESTER WITH WATER BLOCKING YARNS ENCAPSULATED IN A 30 MIL, HDPE JACKET PROVIDING CORROSION RESISTANCE, FLEXIBILITY, IMPACT STRENGTH AND 1800 LBS. TENSILE STRENGTH. TRACER WIRE WILL NOT CONDUCT AN ELECTRICAL CURRENT WHEN STRUCK BY LIGHTNING AND IS DESIGNED FOR DIRECT BURY AND DIRECTIONAL BORING APPLICATIONS." TRACER WIRE SHALL BE TRACE-SAFE WATER BLOCKING TRACER WIRE, MANUFACTURED BY NEPTCO, OR EQUAL AND PRODUCED IN THE UNITED STATES OF AMERICA. TRACER WIRE INSULATION SHALL BE BLUE FOR WATER SYSTEMS.

C 16 **PIPE TRENCH (PRIVATE)**
NTS



D 16 **SIGNS AND STRIPING**
NTS

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COLORADO REGISTERED MARC P. DOLEZAL 42318 6/17/2022 PROFESSIONAL ENGINEER

NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT

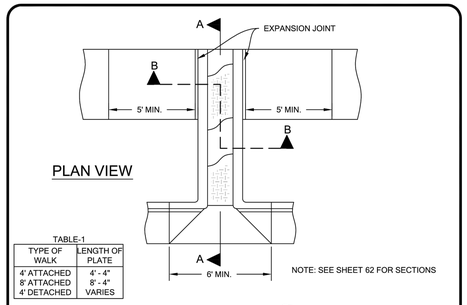
SITE DETAILS

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

DATE	BY	REVISION/ISSUE
12/10/21	MPD	PER CITY COMMENTS 9-23-21
6/17/22	MPD	PER CITY COMMENTS 3-21-22

Design MPD Drawn DSS
Checked MPD Approv. MPD
Date JUNE 23, 2021
Job No. 1915
D- 1925.1

SHEET
DET7
17 OF 18 SHEETS

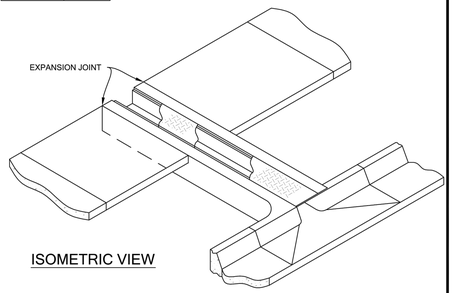


PLAN VIEW

TABLE-1

TYPE OF WALK	LENGTH OF PLATE
4' ATTACHED	4' - 4"
8' ATTACHED	8' - 4"
4' DETACHED	VARIES

NOTE: SEE SHEET 62 FOR SECTIONS



ISOMETRIC VIEW

REVISIONS		City of Louisville	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94
DATE	BY			APPROVED BY: CMD JAN 10
DEC 10	EAJ	COLORADO - SINCE 1882		SHEET
STR-SWCHASE		SIDEWALK CHASE		61 OF 73

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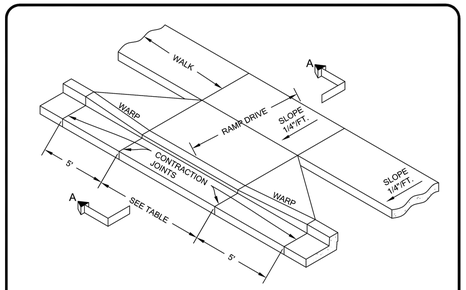

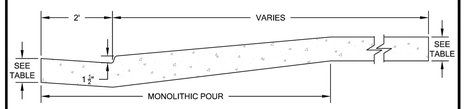

SECTION A-A

NOTES:

1. CONTRACTION JOINTS ARE REQUIRED AT EACH SIDE OF WARPED SECTION AND EVERY 10' (MAX) ALONG THE DRIVEWAY.
2. EXPANSION JOINT REQUIRED IF DRIVEWAY IS CONCRETE BEHIND CURB CUT.
3. BACK OF CURB CUT EXTENDS TO BACK OF WALK OR BIKE PATH.
4. NO END OF CURB SHALL BE CONSTRUCTED WITHIN 5' - 0" OF A PROPERTY LINE OR 30'- 0" OF A PROPERTY CORNER.
5. TRAFFIC ENGINEER SHALL APPROVE LOCATION OF CURB CUT BEFORE CONSTRUCTION.
6. 6.5 SACK CONCRETE WITH FIBERMESH REQUIRED.

TYPE OF CUT	WIDTH OF CURB CUT	TOTAL WIDTH	MINIMUM THICKNESS
SINGLE FAMILY	12' - 16'	22' - 26'	6"
MULTI-FAMILY	16' - 25'	26' - 35'	8"
COMMERCIAL	30' - 40'	40' - 50'	10"

REVISIONS		City of Louisville	DEPARTMENT OF PUBLIC WORKS	DRAWN BY: ML JAN 94
DATE	BY			APPROVED BY: CMD MAR 15
MAR 2015	CMD	COLORADO - SINCE 1882		SHEET
		RAMP DRIVE AT DETACHED WALK		62 OF 74

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COLORADO REGISTERED PROFESSIONAL ENGINEER
MARC P. DOLEZAL
42318
6/17/2022

NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT

SITE DETAILS

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

REVISION/ISSUE	BY	DATE
PER CITY COMMENTS 9-23-21	MPD	12/10/21
PER CITY COMMENTS 3-21-22	MPD	6/17/22

Design MPD Drawn DSS
Checked MPD Approv. MPD
Date JUNE 23, 2021
Job No. 1915
D- 1925.1

SHEET
DET8
18 OF 18 SHEETS