Final Development Plans / Site Civil Plans
Summit Point
504 NE Chipman Road
City of Lee's Summit, Missouri
Section 32, Township 48N, Range 31W

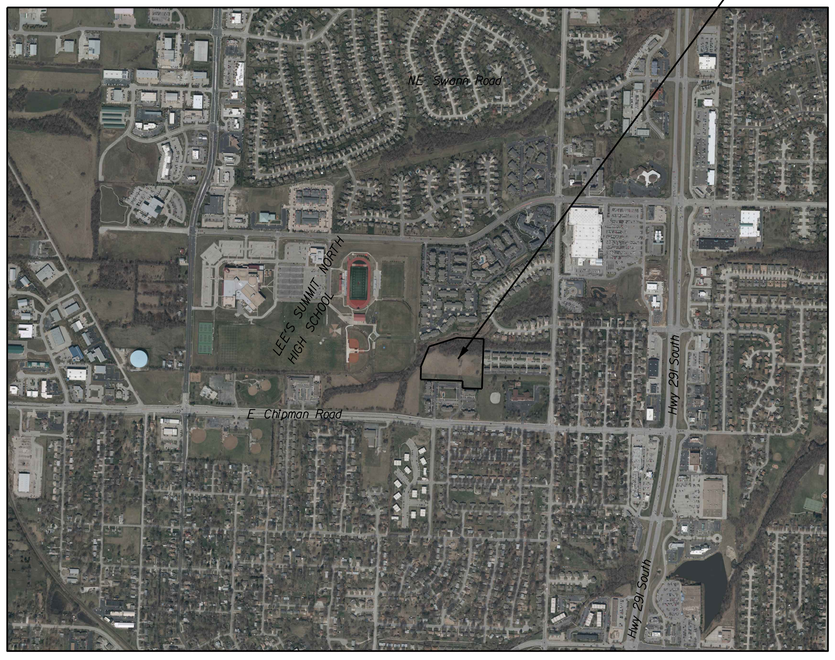
LEGAL DESCRIPTION:

LEGAL DESCRIPTION:

A tract of land in the Southwest Quarter of Section 32, Township 48N, Range 31W in Lee's Summit, Jackson County, Missouri, described as follows:

Commencing at the Southwest corner of the Southwest Quarter of Section 32; thence North 88 degrees, 00 minutes, 27 seconds West, along the South line of the Southwest Quarter, 1525.36 feet; thence North 01 degree, 59 minutes, 33 seconds East, leaving the South line, 97.98 feet to a point on the existing North right-of-way of Chipman Road and the Southwest corner of "Summit Point First Plat" recorded in Book 41 at Page 60; thence North 01 degree, 54 minutes, 38 seconds East, along the West line of the plat, 417.58 feet (measured), (420.12 feet, plat), to the Northwest corner of the plat and the Point of Beginning; thence North 01 degree, 54 minutes, 38 seconds East, 135.86 feet; thence North 72 degrees, 33 minutes, 20 seconds West, 5.19 feet; thence North 22 degrees, 20 minutes, 37 seconds East, 250.76 feet to a point on the South line of "AMLI Summit Ridge Lot 1", recorded in Book I66 at Page 48; thence North 72 degrees, 31 minutes, 35 seconds East, along the South line of the plat, 330.00 feet; thence South 87 degrees, 28 minutes, 25 seconds East, continuing along the South line, 251.73 feet to the Southeast corner of the plat, also being a point on the West line of "Maple Tree Manor First Plat" recorded in Book I60 at Page 59; thence South 87 degrees, 28 minutes, 25 seconds East, along the West line of the plat, 44.56 feet to a point on the West line of "Maple Tree Manor, Lot 8A and 8B", recorded In Book I116 at Page 85; thence South 02 degrees, 04 minutes, 01 second West, along the West line of the plat, 32.10 feet to the Southwest corner of the plat and the Northwest corner of "Replat of English Manor Units 41-72 Inclusive", recorded in Book I49 at Page 13; thence South 02 degrees, 04 minutes, 01 second West, along the West line of the plat, 439.00 feet to the Southwest corner of the Southwest corner of the plat and the Northwest corner of "St. Matthews Acres", recorded in Book 39 at Page 160, thence South 02 degrees, 04 minutes, 01 second West, along the West line of the plat, 88.48 feet to the Northeast corner of "Summit Point First Plat"; thence along the North line of the plat the following three courses; North 88 degrees, 05 minutes, 22 seconds West, 218.00 feet; thence North 01 degree, 54 minutes, 38 seconds East, 81.01 feet; thence North 88 degrees, 05 mintues, 22 seconds West, 470.58 feet to the Point of Beginning, containing 314,151.52 square feet or 7.21 acres, more or less.

PROJECT LOCATION



LOCATION MAP
LEE'S SUMMIT, MISSOURI

UTILITY INFORMATION

UTILITY LOCATION	MISSOURI ONE-CALL SYSTEM 1-800-DIG-RITE 1-800-344-7483
ELECTRIC	KANSAS CITY POWER AND LIGHT P.O. BOX 418679 KANSAS CITY, MISSOURI 64141 816-471-5275 816-298-1196
GAS SERVICE	MISSOURI GAS ENERGY 3025 SE CLOVER DRIVE LEE'S SUMMIT, MISSOURI 64082 1-800-582-0000
TELEPHONE	AT&T 777 NW BLUE PARKWAY, *3080 LEE'S SUMMIT, MISSOURI 64086 816-251-2800
WATER SERVICE	CITY OF LEE'S SUMMIT UTILITIES 220 SE GREEN STREET LEE'S SUMMIT, MISSOURI 64063 816-966-1900

ENGINEER:

CFS ENGINEERS
1421 E 104th STREET, SUITE 100
KANSAS CITY, MO 64131
816.333.4477
ATTN: LANCE SCOTT

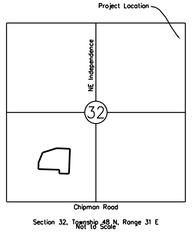
ARCHITECT:

BCS Design
19920 West 161st Street
Olathe, Kansas 66062
913.780.4820
Attn: Jeff Shinkle

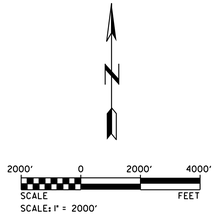
OWNER / DEVELOPER:

Summit Point II, LLC
Gary R. Rauscher
President
331 Soquel Avenue, Suite 100
Santa Cruz, CA 95062

Phone (831) 480-6339



VICINITY MAP



INDEX OF SHEETS

C100 -	TITLE SHEET
C101 -	FINAL DEVELOPMENT PLAN
C200 -	OVERALL SITE PLAN
C201 -	SITE PLAN (WEST)
C202 -	SITE PLAN (EAST)
C300 -	OVERALL GRADING PLAN
C301 -	GRADING PLAN (WEST)
C301 -	GRADING PLAN (EAST)
C400 -	UTILITY PLAN
C401 -	STORM SEWER PLAN (WEST)
C402 -	STORM SEWER PLAN (EAST)
C403 -	STORM SEWER PROFILES
C404 -	STORM SEWER PROFILES
C405 -	SANITARY SEWER PLAN & PROFILE - LINE 1
C406 -	SANITARY SEWER PLAN & PROFILE - LINE 2
C407 -	WATER LINE PLAN & PROFILE - LINE 1
C500 -	EROSION CONTROL PLAN
C600 -	DETAILS
C601 -	WATER LINE DETAILS
C602 -	EROSION CONTROL DETAILS
C700 -	CLUBHOUSE SITE PLAN
C701 -	CLUBHOUSE GRADING PLAN
C1000	PUBLIC STREET DEMO PLAN
C1001	PUBLIC STREET PLAN
C1002	PUBLIC STREET GRADING AND EROSION CONTROL PLAN
C1003	PUBLIC STREET DETAILS

GENERAL NOTES:

1. THE BOUNDARY INFORMATION, EXISTING UTILITY LINES, AND TOPOGRAPHIC FEATURES SHOWN ARE ACCORDING TO THIS INFORMATION MADE AVAILABLE TO THE ENGINEER. HOWEVER, ALL UTILITIES EXISTING MAY NOT BE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY EXISTING TOPOGRAPHIC FEATURES AND EXISTING UTILITY LOCATIONS AND REPORT ANY DISCREPANCIES TO THE OWNER AND ENGINEER PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. PORTION OF TOPOGRAPHIC SURVEY PROVIDED BY OWNER.
2. LANDSCAPING SHALL BE INSTALLED PRIOR TO OCCUPANCY.
3. THE CONTRACTOR SHALL SUBMIT AN EXPANSION/CONTRACTION JOINT PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
4. ALL EXCAVATION SHALL BE UNCLASSIFIED.
5. THE CONTRACTOR SHALL CONTACT THE CITY OF LEE'S SUMMIT PUBLIC WORKS INSPECTIONS AT (816) 969-1829 WITHIN 48 HOURS OF COMMENCEMENT OF CONSTRUCTION.
6. THE CONTRACTOR SHALL CONTACT RIGHT-OF-WAY INSPECTIONS AT (816) 969-1838 PRIOR TO ANY LAND DISTURBANCE ACTIVITIES WITHIN THE RIGHTS-OF-WAY. THESE ACTIVITIES MAY REQUIRE A PERMIT.

CFS ENGINEERS
1421 E 104th Street, Ste. 100 KCMO 64131
O 816-333-4477 F 816-333-6888
cfse.com

STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-23015
PROFESSIONAL ENGINEER
7/21/22

Work	Description	Date	Appr.
	CITY SUBMITTAL	02/02/22	

Designed by: RP
Drawn by: RP
Ckd by: LWS
Submitted by: ---
Date: 03-25-2015
Reviewed by: ---
Plot scale: 1:20
Rev. -
File name=215065-ST-SH-CD Cover Sheet.dgn
Plot date=8/22/2022 2:49 PM

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

SITE/CIVIL PLANS
Construction Drawings

TITLE SHEET

C100

G:\Shared drives\215065\CADD\215065-ST-SH-CD Cover Sheet.dgn

FINAL DEVELOPMENT PLAN
SUMMIT POINT 2nd PLAT
LEE'S SUMMIT, MISSOURI

LEGAL DESCRIPTION:

A tract of land in the Southwest Quarter of Section 32, Township 48N, Range 31W in Lee's Summit, Jackson County, Missouri, described as follows:
Commencing at the Southeast corner of the Southwest Quarter of Section 32; thence North 88 degrees, 00 minutes, 27 seconds West, along the South line of the Southwest Quarter, 1525.36 feet; thence North 01 degree, 59 minutes, 33 seconds East, leaving the South line, 97.98 feet to a point on the existing North Right-Of-Way of Chipman Road and the Southwest corner of "Summit Point First Plat", recorded in Book 41 at Page 60; thence North 01 degree, 54 minutes, 38 seconds East, along the West line of the plat, 417.58 feet (measured), (420.12 feet, plat), to the Northwest corner of the plat and the POINT OF BEGINNING; thence North 01 degree, 54 minutes, 38 seconds East, 135.86 feet; thence North 72 degrees, 33 minutes, 20 seconds West, 5.19 feet; thence North 22 degrees, 20 minutes, 37 seconds East, 250.76 feet to a point on the South line of "JMILI Summit Ridge Lot 1", recorded in Book 166 at Page 48; thence North 72 degrees, 31 minutes, 35 seconds East, along the South line of the plat, 330.00 feet; thence South 87 degrees, 28 minutes, 25 seconds East, continuing along the South line, 251.73 feet to the Southeast corner of the plat, also being a point on the West line of "Maple Tree Manor-1st Plat, recorded in Book 80 at Page 59; thence South 87 degrees, 28 minutes, 25 seconds East, along the West line of the plat, 44.56 feet to a point on the West line of "Maple Tree Manor, Lot 8A and 8B", recorded in Book 1116 at Page 85; thence South 02 degrees, 04 minutes, 01 second West, along the West line of the plat, 32.10 feet to the Southwest corner of the plat and the Northwest corner of "Replat of English Manor Units 41-72 Inclusive", recorded in Book 149 at Page 13; thence South 02 degrees, 04 minutes, 01 second West, along the West line of the plat, 439.00 feet to the Southwest corner of the plat and the Northwest corner of "St. Matthews Acres", recorded in Book 39 at Page 160; thence South 02 degrees, 04 minutes, 01 second West, along the West line of the plat, 88.48 feet to the Northeast corner of "Summit Point First Plat"; thence along the North line of the plat the following three courses:
North 88 degrees, 05 minutes, 22 seconds West, 218.00 feet;
North 01 degree, 54 minutes, 38 seconds East, 81.01 feet;
North 88 degrees, 05 minutes, 22 seconds West, 470.58 feet
to the POINT OF BEGINNING, containing 314,151.52 square feet, or 7.21 acres, more or less.

SITE DATA TABLE:

AREA OF SITE = 7.21 ACRES
EXISTING ZONING - RP-4
PROPOSED ZONING - RP-4

DENSITY = 36 UNITS/4.97 ACRES = 7.24 UNITS PER ACRE

UNIT MIX (NEW CONSTRUCTION)

48 - 1 BEDROOM
72 - 2 BEDROOM
24 - 3 BEDROOM

PARKING REQUIREMENTS

5 – EXISTING BUILDINGS (100 UNITS)
1 & 2 BR @ 1.5 PER UNIT + 0.5 GUEST PER UNIT
(100x1.5) + (100x0.5) = 200 spaces

3 – Type A Buildings (72 UNITS)
24 – 2 BR @ 1.5 PER UNIT + 0.5 GUEST PER UNIT
3(24X1.5) + 3(24x0.5) = 144 spaces

1 – Type B Building (24 UNITS)
12 – 1 BR @ 1.5 PER UNIT + 0.5 GUEST PER UNIT
1(12X1.5) + 1(12x0.5) = 24 spaces
12 – 3 BR @ 2 PER UNIT + 0.5 GUEST PER UNIT
1(12X2.0) + 1(12x0.5) = 30 spaces

2 – Type C Building (48 UNITS)
18 – 1 BR @ 1.5 PER UNIT + 0.5 GUEST PER UNIT
2(18X1.5) + 2(18x0.5) = 72 spaces
6 – 3 BR @ 2 PER UNIT + 0.5 GUEST PER UNIT
2(6X2.0) + 2(6x0.5) = 30 spaces

500 TOTAL SPACES REQUIRED

PARKING PROVIDED

230 EXISTING
245 NEW

475 TOTAL SPACES PROVIDED

PROJECT DENSITY (PHASES 1 & 2)

5 – EXISTING BUILDINGS (100 1 & 2 BR UNITS)

3 – Type A Buildings (72 2 BR UNITS)

1 – Type B Building (12 1BR UNITS & 12 3BR UNITS)

2 – Type C Building (36 1BR UNITS & 12 3BR UNITS)

244 TOTAL UNITS EXISTING AND PROPOSED
100 UNITS ON EXISTING PROPERTY (PHASE I)
144 UNITS ON NORTH PROPERTY (PHASE II)

AREA OF TRACT (PHASES I & II) = 13.96 ACRES

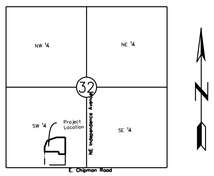
DENSITY 244 UNITS /13.96 ACRES = 17.48 UNITS PER ACRE (PHASES I-II)

IMPERVIOUS AREA = 3.8 ACRES
GREEN SPACE (PERVIOUS AREA) = 3.41 ACRES = 47%

FLOOR AREA RATIO (FAR)

3A BUILDINGS @ 11,300 SF - 33,900 SF
1B BUILDING @ 11,000 SF - 11,000 SF
2C BUILDINGS @ 10,580 SF - 21,160 SF
TOTAL - 66,060 SF

FAR = 66,060/314,068 (7.21 ACRES) = 0.21



Section 32, Township 48 N, Range 31 E
Not to Scale

Vicinity Map

ID	OWNER	ZONING
1	MAPLE TREE MANOR HOMES ASSOCIATION LLC	RP–3
2	LANDON M GOMES	RP–3
3	RKM REAL ESTATE LLC	RP–3
4	ROBIN L HALL	RP–3
5	ERW PROPERTIES LLC (7 UNITS)	RP–3
6	LW PROPERTIES LLC (8 UNITS)	RP–3
7	ST MATTHEW LUTHERAN CHURCH	R–1
8	JEFFREY AND LAUREN DITTMER	RP–2
9	BRUCE RUSSELL SCOGGAN	RP–2
10	A&R INVESTMENT SOLUTIONS LLC	RP–2
11	RONNIE JOANNE BABICH	RP–2
12	SHE SHERMAN & ZHON SHELLY	RP–2
13	JABAN M MOORE	RP–2
14	DAN A NEUSTADTER	RP–2
15	MCAP SAGE LP	RP–4
16	CARROLL L METZGER TRUSTEE	CP–2
17	CARROLL L METZGER TRUSTEE	RP–4
18	REORGANIZED SCHOOL DISTRICT NO 7	R–1
19	JVM SUMMIT RIDGE APARTMENTS LLC	RP–4

SEWER IMPACT STATEMENT:

THE PROPOSED DEVELOPMENT WILL PRODUCE MINIMAL SEWAGE TO THE SYSTEM. ASSUMING AN AVERAGE FLOW OF 100 GPCD AND AN AVERAGE OF 1 PERSON PER BEDROOM (414 BEDROOMS), THE SYSTEM WILL RECEIVE 41,400 GPD OR 29 GPM. THE EXISTING SEWER HAS AVAILABLE CAPACITY.

WATER MAIN CAPACITY:

PER STAFF, THE EXISTING WATER MAIN IN CHIPMAN ROAD HAS THE CAPACITY TO SERVE THE PROJECT.

NOTES:

1. PROJECT SHALL BE CONSTRUCTED IN ONE PHASE AND BE PLATTED IN ONE LOT.
2. CONSTRUCTION SHALL COMMENCE SPRING 2021
3. CONSTRUCTION COMPLETE FALL 2022
4. AS PER FEMA MAP (COMMUNITY PANEL NO. 29095C0436G) DATED JANUARY 20, 2017, THE PROPERTY LIES TO THE SOUTH OF TRIBUTARY P3 OF PRAIRIE LEE LAKE WHERE LOCATED IN FEMA DESIGNATED ZONE A WHERE NO BASE FLOOD ELEVATIONS HAVE BEEN DETERMINED.

MODIFICATIONS:

1. REDUCTION OF GUEST PARKING REQUIRMENTS FROM 122 TO 111
2. INCREASE OF PROJECT DENSITY TO 17.48 UNITS PER ACRE

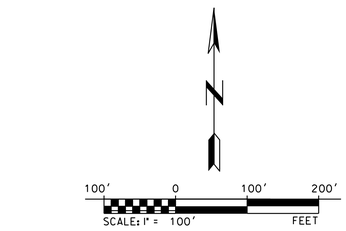
OIL & GAS WELLS

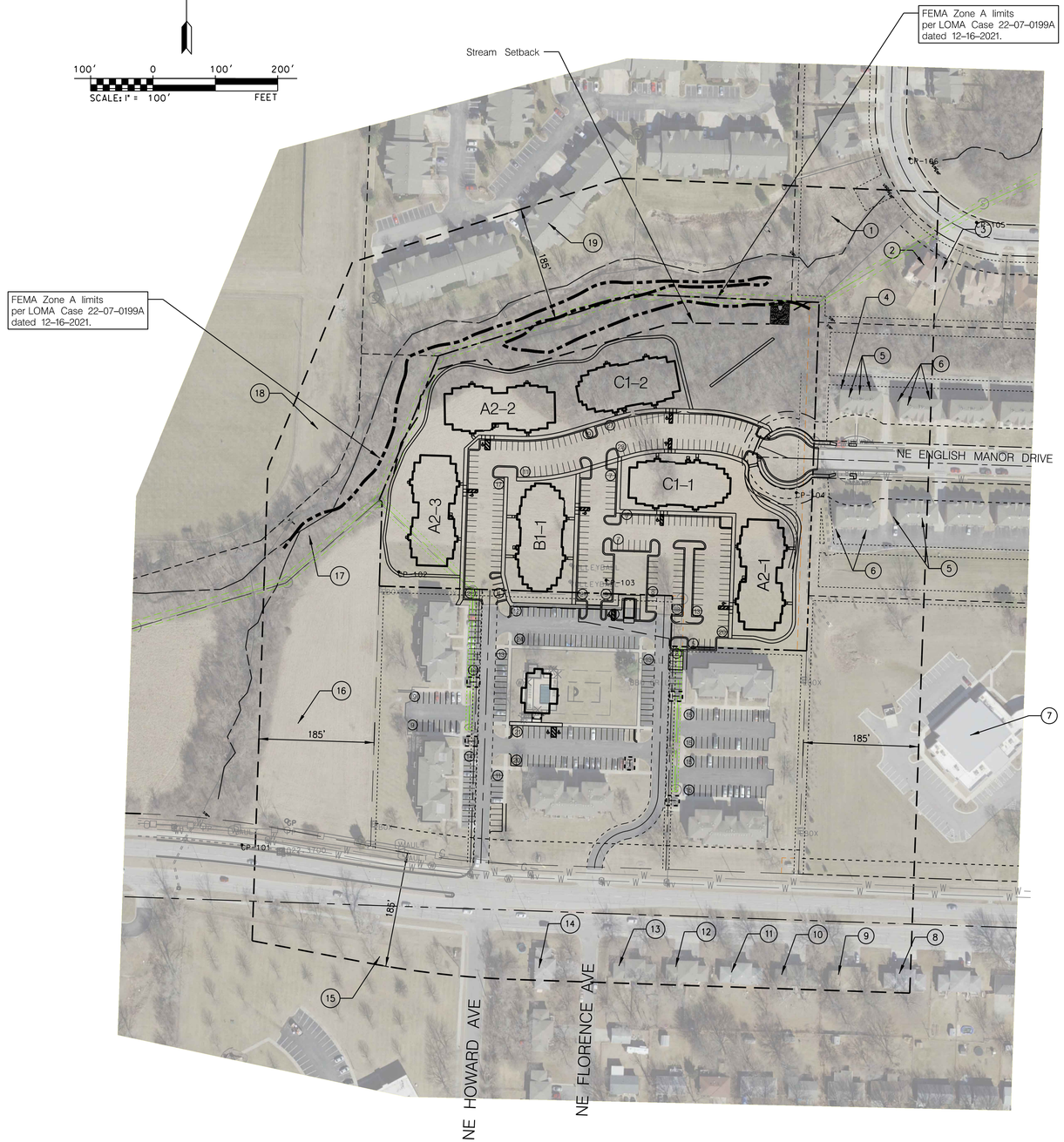
We have made a visual inspection of the premisis and have determined that there is no visual evidence that any oil or gas wells exist within the boundary of the subject property.

We have also made a review of the file "Oil and Gas Permits Database" found at https://dnr.mo.gov/geology/geosrv/oilandgas.htm and find no permits for oil and gas wells on the subject property.

ADDRESSES

All units shall be addressed separately. House numbers will be provided by the city.





DEVELOPER:

CANYON VIEW PROPERTIES
331 SOQUEL AVENUE, SUITE 100
SANTA CRUZ, CA 95062
831,480,6339
ATTN: GARY RAUSCHER

ENGINEER:

CFS ENGINEERS
9229 WARD PARKWAY, SUITE 110
KANSAS CITY, MO 64114
816,333,4477
ATTN: LANCE SCOTT

OWNER:

SUMMIT POINT PHASE II LLC
331 SOQUEL AVENUE, SUITE 100
SANTA CRUZ, CA 95062
831,480,6339
ATTN: GARY RAUSCHER

ARCHITECT:

JIM SKINNER RESIDENTIAL PLANS
21212 W. 82ND STREET
LENEXA, KS 66220
913-268-3154
ATTN: JIM SKINNER

CFS ENGINEERS
1421 E. 104th Street, Ste. 100 KCMO 64131
O 816-333-4477 F 816-333-8888
cfse.com

STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-23035
PROFESSIONAL ENGINEER

Mark	Description	Date	Appr.
	CITY SUBMITTAL	2-2-22	

Designed by: RP
Drawn by: RP
Submitted by: ---
Checked by: LWS
Date: 03-25-2015
Reviewed by: ---
Plot scale: 1:00
Rev. -
File name: 215065-ST-SH-FDP Existing Conditions.dgn
Plot date: 2/2/2022
Sheet 1 of 1 Sheets All

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Final Development Plan

INDEX AND SITE DATA

Sheet reference number:
C101

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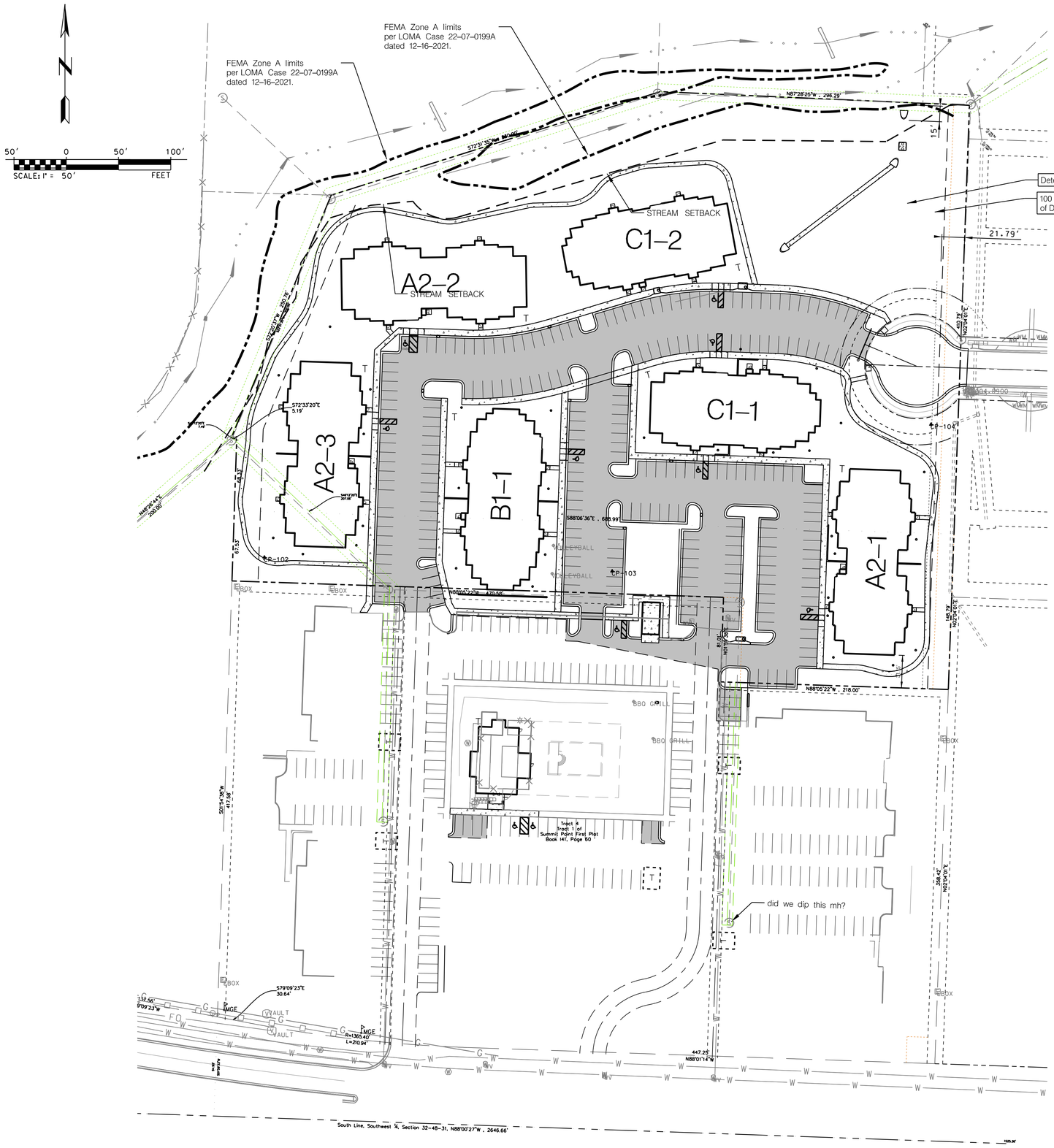

NOTES:

1. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
2. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL PROPERTY CORNERS.
3. CONTRACTOR SHALL MATCH EXISTING PAVEMENT IN GRADE AND ALIGNMENT TO PROVIDE SMOOTH SURFACE TRANSITIONS BETWEEN NEW ENTRANCE DRIVES AND EXISTING STREETS.
4. CONTRACTOR SHALL MATCH EXISTING CURB & GUTTER IN GRADE, SIZE, TYPE, AND ALIGNMENT AT CONNECTIONS TO EXISTING STREETS.
5. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION SUCH AS, BUT NOT LIMITED TO: DRAINAGE UTILITIES, PAVEMENT, STRIPING, CURB, ETC., AND TO INCLUDE ANY WORK IN DOT R.O.W. AND/OR CITY R.O.W. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
6. ALL WORK ON THIS PLAN SHALL BE DONE IN STRICT ACCORDANCE WITH GEOTECHNICAL REPORT.
7. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND PRECISE BUILDING DIMENSIONS. SIDEWALK AND SPECIFIC BUILDING AREA TREATMENTS AND IMPROVEMENTS.
8. ALL DIMENSIONS SHOWN ON BUILDINGS ARE TO OUTSIDE FACE OF BUILDING.
9. ALL RADII SHALL BE 4.0' MEASURED AT THE BACK OF CURB UNLESS OTHERWISE NOTED.
10. THE EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS AND GEOTECH REPORT.
11. PARKING LOT STRIPING SHALL BE ACCORDING TO KANSAS CITY METROPOILTON CHAPTER OF APWA. ALL STRIPING IS TO HAVE TWO COATS OF PAINT (MIN.). ALL STRIPING OTHER THAN ACCESSIBLE SHALL BE WHITE. ACCESSIBLE STRIPING SHALL BE BLUE.
12. ALL CONSTRUCTION WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF LEE'S SUMMIT, MISSOURI STANDARDS AND SPECIFICATIONS.
13. ALL ACCESSIBLE PARKING SIGNAGE AND STRIPING SHALL BE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS.
14. THE CONTRACTOR SHALL SUPPLY THE OWNER WITH A LIST OF ALL SUB-CONTRACTORS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OPERATIONS.
15. ALL CURB AND GUTTER SHALL BE TYPE CG-1 OR CG-2 AS NOTED ON THE PLAN.
16. ALL WORK SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND DESIGN CRITERIA OF THE METROPOLITAN CHAPTER OF APWA AND THE CITY OF LEE'S SUMMIT, MISSOURI, IN CURRENT USAGE EXCEPT AS NOTED.

Legend

Major Contour		Water Meter
Minor Contour		Water Valve
Right-of-Way Line		Fire Hydrant
Section Line		Light Pole
Easement Line		Center Line
Storm Sewer Line	Found	F
Sanitary Sewer Line	Bar & Cap	B&C
Waterline		
Fence Line	Existing Contour (Index)	
Vegetation Line	Existing Contour (Intermediate)	
Found Survey Monument		
Set Iron Bar with Cap CF&S CLS 1999141100		
Section Corner	Proposed Contour	970
(88) Schedule B-2 Exception		
Storm Sewer Manhole		
Sanitary Sewer Manhole		
Tree		

CFS ENGINEERS
1421 E. 104th Street, Ste. 100 KCMO 64131
O 816-333-4477 F 816-333-6888
cfse.com

STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-28315
PROFESSIONAL ENGINEER
07/27/22

Mark	Description	Date	Appr.
	CITY SUBMITTAL	02/02/22	

Designed by: RP
Drawn by: RP
Submitted by: ---
Checked by: LWS
Date: 03-25-2005
Reviewed by: ---
Plot scale: 1:50
Rev. -
File name: 215065-ST-SHCD Overall Site Plan.dgn
Plot date: 07/27/2022
Job # 215065

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

OVERALL SITE PLAN

Sheet reference number:
C200

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Property Line
4' Concrete Sidewalk
25' Building Setback Line
201.00'
43.39'
35.49'
29.34'
25' Building Setback Line
32.23'
FEMA Zone A limits per LOMA Case 22-07-0199A dated 12-16-2021.
Modular Block Retaining Wall
A2-3
Type CG-1 Curb and Gutter
Modular Block Retaining Wall
6' Concrete Sidewalk
Asphalt Parking
4'x4' Concrete Stoop Typical at each entry
Sawcut existing asphalt
NO PARKING
Stream Setback
A2-2
Property Line
FEMA Zone A limits per LOMA Case 22-07-0199A dated 12-16-2021.
6' Combination Curb and Sidewalk
Modular Block Retaining Wall
B1-1
Type CG-1 Curb and Gutter
6' Concrete Sidewalk
Modular Block Retaining Wall
6' Combination Curb and Sidewalk
6' Concrete Sidewalk
Property Line
4' Concrete Sidewalk
Asphalt Parking
Asphalt Parking
ADA Ramp (Typ)
Sawcut existing asphalt
ADA Ramp (Typ)
Tract 2 unplatted
C1-
Tract 2 unplatted
BBQ GRILL
17.5'
9'
6'
5'
7.5'
8'
4'
17'
25'
19'
26'
6'
8'
5'
4'
6'
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17'
17'
17.5'
17.5'
17.5'
17.5'
17

Asphalt Parking

Sawcut existing asphalt

ADA Ramp (Typ)

Cram-A-Lot Trash Compactor and Enclosure See Architectural

Sawcut existing asphalt

Modular Block Retaining Wall

Modular Block Retaining Wall

Modular Block Retaining Wall

4' Concrete Sidewalk

Modular Block Retaining Wall

Asphalt Parking

4' Concrete Sidewalk

FEMA Zone A limits per LOMA Case 22-07-0199A dated 12-16-2021.

Stream Setback

FEMA Zone A limits per LOMA Case 22-07-0199A dated 12-16-2021.

4' wide concrete trickle channel

Detention Basin

NE English Manor Drive (Public Street) See sheets C1000-1004

C1-2

C1-1

A2-1

S88°06'36"E, 688.99'

N88°05'22"W, 218.00'

N88°28'25"W, 296.29'

81.01'
N01°54'38"E

148.79'
N02°04'01"E

410.79'
N02°04'01"E

47.46'

30.67'

16.67'

16'

16'

4'

6' 5' 6'

8' 5'

17.5'

26'

6'

19'

17'

25'

25'

17.5'

17.5'

17.5'

18'

17'

5' 8'

9'

17'

37.47'

Notes:

1.

2.

GrShared drives\215065\CADD\215065-ST-SHCD East Side Plandgn

CFS ENGINEERS
1421 E. 104th Street, Ste. 100 KCMO 64131
O 816-333-4477 F 816-333-6888
cfse.com

STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-28315
PROFESSIONAL ENGINEER
07/28/22

Mark	Description	Date	Appr.
	CITY SUBMITTAL	02/02/22	

Rev.	Date:	Designed by:	Drwn by:	Submitted by:
-	03-25-2065	RP	RP	---

Reviewed by:	Chkd by:	Plot scale:
---	LWS	1:20

File name=215065-ST-SHCD East Side Plandgn
Plot date=7/27/2022

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

SITE PLAN (EAST)

C202

FEMA Zone A limits
per LOMA Case 22-07-0199A
dated 12-16-2021.
Detention basin
100 year water surface elevation of Detention Basin = 1000.48
50' 0 50' 100'
SCALE: 1" = 50' FEET
A2-2
STREAM SETBACK
C1-2
STREAM SETBACK
C1-1
A2-3
B1-1
A2-1
FF ELEV 1005.0
FF ELEV 1007.5
FF ELEV 1008.5
FF ELEV 1006.00
FF ELEV 1008.00
FF ELEV 1012.50
FF ELEV 1011.00
FF ELEV 1015.00
FF ELEV 1023.5
S72°33'20"W 419.19'
S72°33'20"W 265.76'
N00°00'22"W 270.58'
N00°00'22"W 278.00'
N00°04'01"E 396.20'
N00°04'01"E 396.20'
21.79'
S72°33'20"W 417.56'
S70°09'23"E 30.64'
737.06' S70°09'23"W
447.25' N88°01'14"W
N88°00'22"W 270.58'
TO PARSHALL
BBQ GRILL
Tract A
Tract 1 of
Summit Point First Plat
Book 141, Page 60
did we dip this mh?
EXISTING STORM SE
EXISTING STORMWATER M
DRAINAGE BOX
CONNECTION TO
INLET INVERT IN
OUT INVERT IN
RIM ELEV
W 6" WL PL
W 12" WL PL
W 8" WL PL
W 16" WL PL
W 24" WL PL
W 30" WL PL
W 36" WL PL
W 8" WL PL Sprinklers
W 6" WL PL Irrigation
W 6" WL PL Irrigation
W 6" WL PL Irrigation

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STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-28315
PROFESSIONAL ENGINEER
02/28/22

Mark	Description	Date	Appr.
	CITY SUBMITTAL	02/28/22	

Rev. -
Date: 03-25-2015
Designed by: RP
Drawn by: RP
Ckkd by: LWS
Submitted by: ---
Plot scale: 1:20
File name: 215065-ST-SHCD West Side Grading Plan.dgn
Plot date: 02/28/2022

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

WEST SIDE GRADING PLAN

C301

G:\Shared drives\215065\CADD\215065-ST-SHCD West Side Grading Plan.dgn

20' 0 20' 40'
SCALE: 1" = 20' FEET

FEMA Zone A limits
per LOMA Case 22-07-0199A
dated 12-16-2021.

FF ELEV = 1006.00

C1-1

FF ELEV = 1008.00

FF ELEV = 1005.0

C1-2

Stream Setback

FF ELEV = 1005.0

FF ELEV = 1015.00

A2-1

FF ELEV = 1011.00

Existing pavement (Verify)

Verify Match exist

Verify

Notes:

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STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-23015
PROFESSIONAL ENGINEER
07/26/22

Mark	Description	Date	Appr.
	CITY SUBMITTAL	02/02/22	

Date: 03-25-2015
Rev. -
Designed by: RP
Drwn by: RP
Ckd by: LWS
Submitted by: ---
Plot scale: 1:20
File name: 215065-ST-SH-CD East Side Grading Plan.dgn
Plot date: 7/27/2022

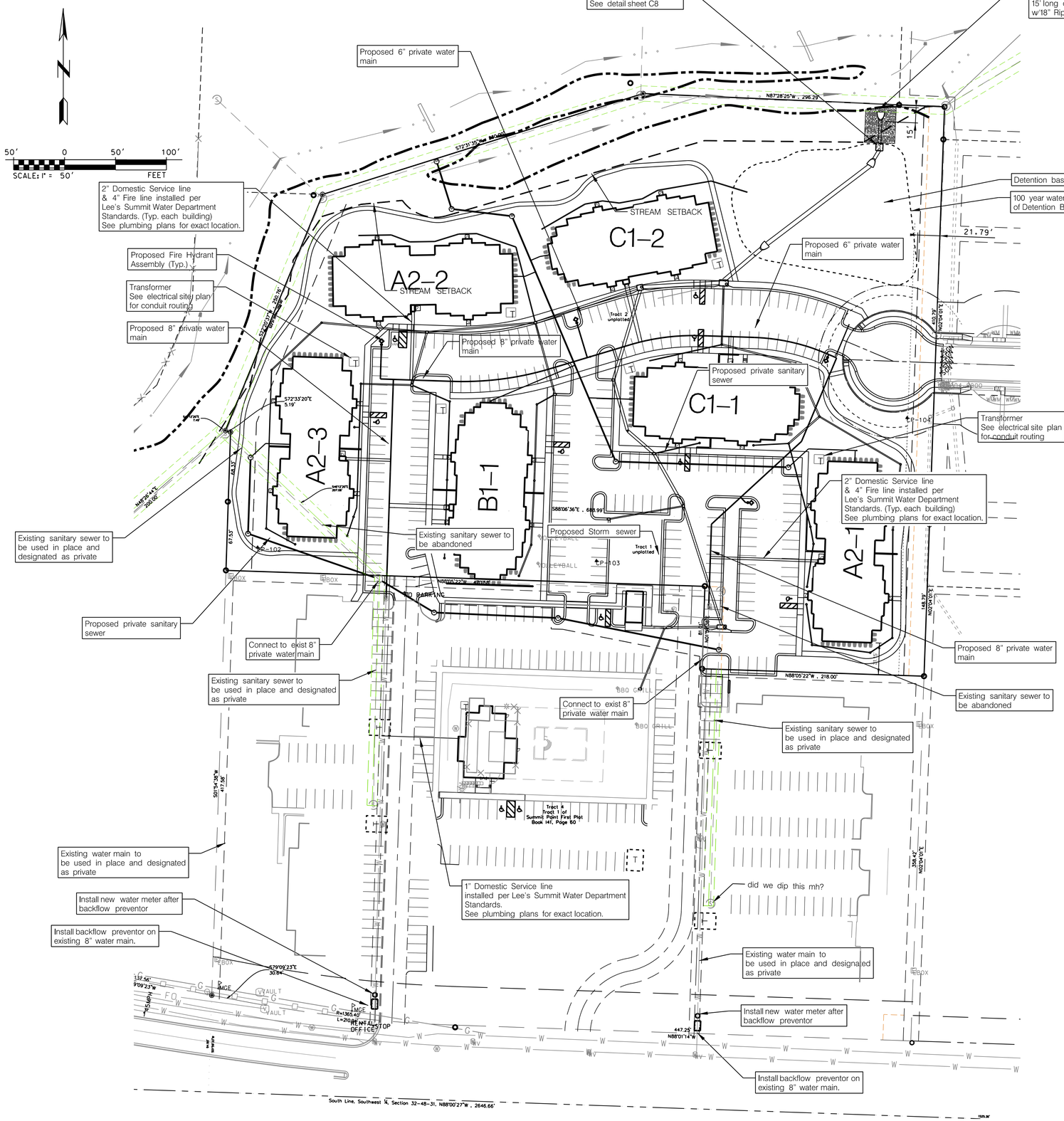
SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

EAST SIDE GRADING PLAN

C302

G:\Shared drives\215065\CADD\215065-ST-SH-CD East Side Grading Plan.dgn



UTILITY NOTES:

1. CONTRACTOR TO COORDINATE WITH APPROPRIATE, UTILITY COMPANIES PRIOR TO CONSTRUCTION ADJUSTMENT, OR RELOCATION OF EXISTING UTILITIES AS DESIGNATED ON PLANS, ANY DEVIATION FROM THE DESIGN LOCATIONS SHALL BE REPORTED TO THE ENGINEER OF RECORD AND THE OWNER PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL REFER TO ARCHITECTS PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION, WATER SERVICE, ELECTRICAL, AND TELEPHONE SERVICE.
3. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH CITY UTILITY REQUIREMENTS AS TO LOCATION AND SCHEDULING OF TIE-INS/CONNECTION TO THEIR FACILITIES.
4. THE CONTRACTOR SHALL COORDINATE ALL UTILITY CONNECTIONS AND RELOCATIONS AS REQUIRED WITH THE RESPECTIVE UTILITY COMPANY/OWNER.
5. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL PERMITS AND PAY ALL FEES AS REQUIRED FOR UTILITY SERVICE CONNECTIONS.
6. THE CONTRACTOR SHALL COORDINATE LOCATIONS AND SIZES OF UTILITY SERVICE CONNECTIONS AT THE BUILDING WITH THE ARCHITECTS, MECHANICAL, PLUMBING PLANS AND DETAILS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING ALL PUBLIC AND DOMESTIC WATER SERVICE LINES, METERS, BACK-FLOW DEVICES, PITS, VALVES AND ALL OTHER INCIDENTALS REQUIRED FOR A COMPLETE OPERABLE DOMESTIC WATER SYSTEM. ALL COST ASSOCIATED WITH THE COMPLETE WATER SYSTEM FOR THE BUILDING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DOMESTIC AND IRRIGATION LINES SHALL BE OF MATERIALS APPROVED BY THE CITY OF LEE'S SUMMIT. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT.
8. THE CONTRACTOR SHALL INSTALL A BACKFLOW PREVENTION ASSEMBLY ON THE DOMESTIC WATER SERVICE LINE PRIOR TO ANY POINT OF USE.
9. THE CONTRACTOR SHALL COORDINATE INSTALLATION AND LOCATION OF ELECTRICAL SERVICE AND TRANSFORMER PADS WITH THE POWER COMPANY.
10. THE CONTRACTOR SHALL COORDINATE LOCATION AND CONSTRUCTION OF GAS SERVICE LINE AND GAS METER WITH THE GAS COMPANY.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING ALL SANITARY SEWER SERVICE LINES FROM THE BUILDINGS TO THE PUBLIC OR PRIVATE LINE. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL AND PLUMBING PLANS FOR SPECIFIC LOCATIONS AND ELEVATIONS OF THE SERVICE LINES AT THE BUILDING CONNECTION. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT, MISSOURI.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIALS, TOOLS AND EQUIPMENT AND INSTALLATION OF ELECTRICAL POWER, TELEPHONE AND GAS SERVICE FROM A POINT OF CONNECTION FROM THE PUBLIC OR PRIVATE UTILITY LINES TO THE BUILDING STRUCTURES. THIS WILL INCLUDE ALL CONDUITS, SERVICE LINES, METERS, CONCRETE PADS AND ALL OTHER INCIDENTALS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM AS REQUIRED BY THE OWNER AND THE PUBLIC UTILITIES. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR SIZE OF UTILITIES SPECIFIC LOCATION OF SERVICE AND ENTRANCE DETAILS OF THE BUILDINGS.
13. THE CONTRACTOR SHALL COORDINATE WITH THE PHONE COMPANY FOR LOCATION AND INSTALLATION OF PHONE SERVICE TO BUILDING.
14. A RIGHT-OF-WAY WORK PERMIT SHALL BE OBTAINED BY THE CONTRACTOR TO COMPLETE UTILITY WORK WITHIN THE PUBLIC STREET RIGHT-OF-WAY.
15. CONTRACTOR SHALL INSTALL 2-2" CONDUITS FOR THE TELEPHONE AND CATV SERVICE CONNECTIONS TO THE BUILDING AS REQUIRED BY THE UTILITY COMPANY (SEE ELECTRICAL PLAN).
16. ALL SANITARY SEWER PVC PIPING SHALL BE SDR-26, UNLESS OTHERWISE NOTED. ALL SERVICE LATERALS SHALL BE 4" DIA., AND ALL WYE CONNECTIONS SHALL BE "CUT IN".

NOTES:

1. All construction shall be per APWA and/or Lee's Summit standards.
2. Project will be all electric. No gas lines will be provided.
3. Storm Sewer shall be HDPE or PVC.
4. Unless noted otherwise, all of the drainage for the project shall be Private.
5. Fire Department Connection (FDC) shall be 4" Storz type fitting.
6. All water lines and fire hydrants shall be Private.
7. All Transforming and ground mounted equipment shall be screened by landscaping.

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LANCE W. SCOTT NUMBER E-23015 STATE OF MISSOURI PROFESSIONAL ENGINEER

Mark	Description	Date	Appr.
	CITY SUBMITTAL	02/02/22	

Date: 03-25-2015 | Rev. -
Designed by: RP | Drawn by: RP | Checked by: LWS | Reviewed by: ---
Submitted by: --- | Plot scale: 1/50
File name: 215065-ST-SHCD Utility Plan.dgn
Plot date: 2/2/2022

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

UTILITY PLAN

Sheet reference number:
C400

G:\Shared drives\215065\CADD\215065-ST-SH-CD Utility Plan.dgn

240
Sta. 6+82.01, Line 2
Install 6" Nyloplast Drain Basin w/solid lid
Top el = 1009.60
FL (6")(in) = 1006.17
FL (6")(out) = 1005.97

235
Sta. 5+26.25, Line 2
Install 8" Nyloplast Drain Basin w/solid lid
Top el = 1005.80
FL (6")(in) = 1002.37
FL (8")(out) = 1002.20

230
Sta. 4+58.62, Line 2
Install 6" Nyloplast Drain Basin
Top el = 1003.65
FL (8")(in) = 1001.71
FL (12")(out) = 1001.38

20' 0 20' 40'
SCALE: 1" = 20' FEET

Proposed Sanitary Sewer

245
Sta. 7+14.28, Line 2
Install 6" Nyloplast Drain Basin w/6" grate
Top el = 1010.5
FL (6")(out) = 1006.87

1120
Sta.1+81.42, Line 11
Install 6" Nyloplast Drain Basin w/6" grate
Top el = 1010.5
FL (6")(in) = 1006.87
FL (6")(out) = 1006.67

1110A
Sta. 0+92.96 (5' Rt.), Line 11
Install 6" Nyloplast Drain Basin w/6" grate
Top elev = 1006.50
FL (6") = 1003.28

1110
Sta. 0+92.96, Line 11
Install 6" Tee
1 – 8"x6" reducer
FL = 1002.61

A2–3

1125
Sta. 2+00.98, Line 11
Install 6" Nyloplast Drain Basin w/6" grate
Top el = 1010.5
FL (8")(out) = 1007.07

1115
Sta. 1+71.60, Line 11
Install 6" 15 degree bend
FL (6") = 1006.26

1105
Sta. 0+50.12, Line 11
Install 12" Nyloplast Drain Basin w/12" solid lid
Top el = 1006.50
FL (8")(in) = 1002.12
FL (12")(out) = 1001.79

Proposed Water Main

1020
Sta. 2+48.45, Line 10
Install 6" Nyloplast Drain Basin w/6" Grate
Top el = 1011.50
FL (6")(out) = 1009.03

1005
Sta. 0+54.09, Line 10
Install 24" Nyloplast Drain Basin w/2'x3' Curb Inlet
Top of curb el = 1005.98
FL (8")(in) = 1001.64
FL (12")(in) = 1001.30
FL (18")(out) = 1000.80

Proposed Sanitary Sewer

1015
Sta. 1+71.57, Line 10
Install 8" Nyloplast Drain Basin w/8" Grate
Top el = 1007.50
FL (6")(in) = 1004.23
FL (8")(out) = 1004.06

1010
Sta. 0+94.50, Line 10
Install 6" Nyloplast Drain Basin w/solid lid
Top el = 1006.8
FL (8")(in) = 1003.31
FL (8")(out) = 1003.11

B1–1

225
Sta. 3+54.77, Line 2
Sta. 0+00, Line 10
Install 30" Nyloplast Drain Basin w/2'x3' Curb Inlet
Top of curb el = 1004.25
FL (12")(in) = 1000.77
FL (18")(in) = 1000.27
FL (24")(out) = 999.77

925
Sta. 2+64.03, Line 9
Install 6" Nyloplast Drain Basin w/6" grate
Top el = 1011.5
FL (6")(out) = 1008.05

910
Sta. 0+93.18, Line 9
Install 8" Nyloplast Drain Basin w/solid lid
Top el = 1006.40
FL (8")(in) = 1003.18
FL (8")(out) = 1002.98

Proposed Water Main

Proposed Sanitary Sewer

920
Sta. 2+31.17, Line 9
Install 6" Nyloplast Drain Basin w/6" grate
Top el = 1011.5
FL (6")(in) = 1007.73
FL (6")(out) = 1007.53

915
Sta. 1+68.03, Line 9
Install 8" Nyloplast Drain Basin w/8" grate
Top el = 1007.50
FL (6")(in) = 1004.24
FL (8")(out) = 1004.07

905
Sta. 0+72.98, Line 9
Install 24" Nyloplast Drain Basin w/2'x3' Curb Inlet
Top of curb el = 1005.63
FL (8")(in) = 1001.38
FL (12")(out) = 1001.05

220
Sta. 2+47.88, Line 2 =
Sta. 0+00, Line 9 & Sta. 0+00, Line 12
Install 30" Nyloplast Drain Basin w/2'x3' Curb Inlet
Top of curb el = 1003.31
FL (12")(in) = 1000.34
FL (24")(in) = 999.54
FL (24")(out) = 999.34

215
Sta. 1+39.24, Line 2 =
Sta. 0+00, Line 5
Install 5'x5' Precast Concrete Curb Inlet No. 2
Top of curb el = 1004.34
FL (24" HDPE)(in) = 998.53
FL (30" HDPE)(in) = 998.03
FL (42" HDPE)(out) = 997.03

A2–2

Tract 2 unplatted

LINE 2
LINE 11
LINE 10
LINE 9
LINE 10
LINE 9
LINE 9
LINE 2

30' PARKING
BBQ GRILL
BBQ GRILL
BBQ GRILL
BBQ GRILL

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STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-28015
PROFESSIONAL ENGINEER
3/24/22

Mark	Description	Date	Appr.
	CITY SUBMITTAL	02/02/22	

Designed by: RP
Drawn by: RP
Checked by: LWS
Submitted by: ---
Date: 03-25-2005
Reviewed by: ---
Rev. -
Plot scale: 1:20
File name=215065-SF-SHCD West Side Drainage Plandgn
Plot date=2/2/2022

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

WEST SIDE DRAINAGE PLAN
L2, L9, L10, L11 & L12

C401

G:\Shared drives\215065\CADD\215065-SF-SHCD West Side Drainage Plandgn

SCALE: 1" = 20'

20' 0 20' 40' FEET

535
Sta. 4+90.30, Line 5
Install 12" Nyloplast Drain Basin w/12" grate
Top el = 1015.00
FL (15")(out) = 1009.57

530
Sta. 4+25.37, Line 5
Install 24" Nyloplast Drain Basin w/2'x3' Curb Inlet
Top el = 1013.48
FL (15")(in) = 1008.88
FL (24")(out) = 1006.13

705
Sta. 0+74.35, Line 7
Install 18" Nyloplast Drain Basin w/2'x3' Curb Inlet
Top el = 1010.21
FL (6")(out) = 1006.65

505
Sta. 0+94.56, Line 5
Install 2'x3' Nyloplast Curb Inlet No. 1
Top of curb el = 1004.79
FL = (30")(in) = 999.47
FL = (30")(out) = 999.27

515
Sta. 1+79.40, Line 5 =
Sta. 0+00, Line 6
Install 30" Nyloplast Drain Basin w/2'x3' Curb Inlet
Top el = 1005.25
FL (6")(in) = 1002.60
FL (30")(in) = 1000.80
FL (30")(out) = 1000.60

510
Sta. 1+46.42, Line 5
Install 30" Nyloplast Drain Basin w/12" grate
Top el = 1004.5
FL (30")(in) = 1000.19
FL (30")(out) = 999.99

605
Sta. 0+45.85, Line 6
Install 6" Nyloplast Drain Basin w/6" grate
Top el = 1005.25
FL (6")(out) = 1002.88

405A
Sta. 0+34.59, Line 4A
Install 8" Nyloplast Drain Basin w/8" grate
Top el = 1005.25
FL (8")(out) = 1002.92

405
Sta. 0+40.15, Line 4=
Sta. 0+00, Line 4A
Install 24" Nyloplast Drain Basin w/12" solid grate
Top el = 1007.00
FL (8")(in) = 1001.41
FL (8")(in) = 1001.41
FL (12")(out) = 1001.08

520
Sta. 2+38.39 Bk, Line 5 =
Sta. 2+45.39, Line 5 =
Sta. 0+00, Line 7
Install 30" Nyloplast Drain Basin w/2'x3' Curb Inlet
Top el = 1007.85
FL (6")(in) = 1003.16
FL (30")(in) = 1001.37
FL (30")(out) = 1001.16

525
Sta. 3+69.68, Line 5
Install 8'x3' Precast Concrete Curb Inlet No. 3
Top of curb el = 1012.93
FL (24")(in) = 1004.46
FL (30")(out) = 1004.06

415
Sta. 1+41.76, Line 4
Install 8" Nyloplast Drain Basin w/8" grate
Top el = 1010.00
FL (6")(in) = 1007.12
FL (8")(out) = 1006.95

340
Sta. 5+49.85, Line 3
Install 8" Nyloplast Drain Basin w/8" grate
Top el = 1013.50
FL (6")(in) = 1010.29
FL (8")(out) = 1010.12

420
Sta. 1+84.33, Line 4
Install 6" Nyloplast Drain Basin w/6" grate
Top el = 1014.00
FL (6")(out) = 1010.95

410
Sta. 1+24.65, Line 4
Install 8" Nyloplast Drain Basin w/8" grate
Top el = 1010.00
FL (8")(in) = 1006.61
FL (8")(out) = 1006.41

345
Sta. 5+90.14, Line 3
Install 6" Nyloplast Drain Basin w/6" grate
Top el = 1014.00
FL (6")(out) = 1010.72

335
Sta. 4+92.26, Line 3
Install 8" Nyloplast Drain Basin w/8" grate
Top el = 1013.50
FL (8")(in) = 1009.27
FL (8")(out) = 1009.07

330
Sta. 4+66.75, Line 3
Install 8" Nyloplast Drain Basin w/8" grate
Top el = 1013.50
FL (8")(in) = 1008.82
FL (8")(out) = 1008.62

325
Sta. 3+60.23, Line 3=
Install 12" Nyloplast Drain Basin w/12" grate
Top el = 1010.00
FL (8")(in) = 1005.71
FL (12")(out) = 1005.38

320
Sta. 2+95.28, Line 3=
Install 18" Nyloplast Drain Basin w/12" solid grate
Top el = 1009.20
FL (12")(in) = 1004.74
FL (12")(out) = 1004.54

315
Sta. 2+02.86, Line 3 =
Sta. 0+00, Line 4
Install 24" Nyloplast Drain Basin w/12" solid grate
Top el = 1006.7
FL (12")(in) = 1000.84
FL (12")(in) = 1000.84
FL (15")(out) = 1000.59

305
Sta. 0+70.55, Line 3
Install 24" Nyloplast Drain Basin w/12" solid grate
Top el = 1004.58
FL (8")(in) = 1002.30
FL (15")(in) = 999.50
FL (15")(out) = 999.30

310
Sta. 1+45.62, Line 3
Install 24" Nyloplast Drain Basin w/12" solid grate
Top el = 1006.75
FL (15")(in) = 1000.25
FL (15")(out) = 1000.05

215
Sta. 1+39.24, Line 2 =
Sta. 0+00, Line 5
Install 5'x5' Precast Concrete Curb Inlet No. 2
Top of curb el = 1004.34
FL (24" HDPE)(in) = 998.53
FL (30" HDPE)(in) = 998.03
FL (42" HDPE)(out) = 997.03

210
Sta. 0+57.35, Line 2 =
Sta. 0+10.20 Line 3
Install 8'x5' Precast Concrete Curb Inlet No. 1
Top of curb el = 1004.08
FL (15" HDPE)(in) = 998.75
FL (42" HDPE)(in) = 996.70
FL = (42" HDPE)(out) = 996.50

200
Sta 0+00, Line 2
42" HDPE End Section
FL = 996.25

Install 4' wide x 124 LF
Concrete trickle channel @ 0.50%

Overflow Structure, Line 1
See detail, sheet C

Proposed 8" Sanitary Sewer

Proposed 8" Water Main

Proposed 8" Sanitary Sewer

Proposed 8" Water Main

81.01'
N01°54'38"E

148.79'
N02°04'01"E

410.79'
N02°04'01"E

218.00'
N88°

S88°06'36"E 688.99'

N87°28'25"W, 296.29'

Tract 2 unplatted

Lot 1

Lot 2

LINE 2
LINE 3
LINE 4
LINE 5
LINE 6
LINE 7

1010
1005
1004
1001
999

Bad drill

Overflow Structure, Line 1

Sta. 0+00, Line 2

Sta. 0+10.20 Line 3

Sta. 0+57.35, Line 2 =

Sta. 1+39.24, Line 2 =

Sta. 0+00, Line 5

Sta. 0+94.56, Line 5

Sta. 0+74.35, Line 7

Sta. 1+79.40, Line 5 =

Sta. 0+00, Line 6

Sta. 1+46.42, Line 5

Sta. 0+45.85, Line 6

Sta. 0+34.59, Line 4A

Sta. 0+40.15, Line 4=

Sta. 0+00, Line 4A

Sta. 0+70.55, Line 3

Sta. 1+45.62, Line 3

Sta. 2+02.86, Line 3 =

Sta. 0+00, Line 4

Sta. 2+38.39 Bk, Line 5 =

Sta. 2+45.39, Line 5 =

Sta. 0+00, Line 7

Sta. 3+69.68, Line 5

Sta. 1+41.76, Line 4

Sta. 5+49.85, Line 3

Sta. 1+84.33, Line 4

Sta. 1+24.65, Line 4

Sta. 5+90.14, Line 3

Sta. 4+92.26, Line 3

Sta. 4+66.75, Line 3

Sta. 3+60.23, Line 3=

Sta. 2+95.28, Line 3=

Sta. 4+25.37, Line 5

Sta. 4+90.30, Line 5

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cfse.com

STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-23015
PROFESSIONAL ENGINEER
12/2/22

Mark	Description	Date	Appr.
	CITY SUBMITTAL	02/02/22	

Designed by: RP
Dwn by: RP
Submitted by: ---
Date: 03-25-2005
Ckd by: LWS
Reviewed by: ---
Plot scale: 1:20
Rev. -
File name: 25065-ST-SHCD East Side Drainage Plan.dgn
Plot date: 12/2/2022
6:05:30 AM

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

EAST SIDE DRAINAGE PLAN
L1, L2, L3, L4, L4A, L5, L6 & L7

C402

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CFS ENGINEERS
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cfse.com

STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-28115
PROFESSIONAL ENGINEER
2/28/22

Mark	Description	Date	Appr.
	CITY SUBMITTAL	02/28/22	

Designed by: RP
Dwn by: RP
Ckd by: LWS
Submitted by: ---
Date: 03-25-205
Reviewed by: ---
Plot scales: 1:50
Rev. -
File name=215065-ST-SHCD Storm Sewer Profiles Sheet.dgn
Plot date=2/28/2022 @ 8:56 AM

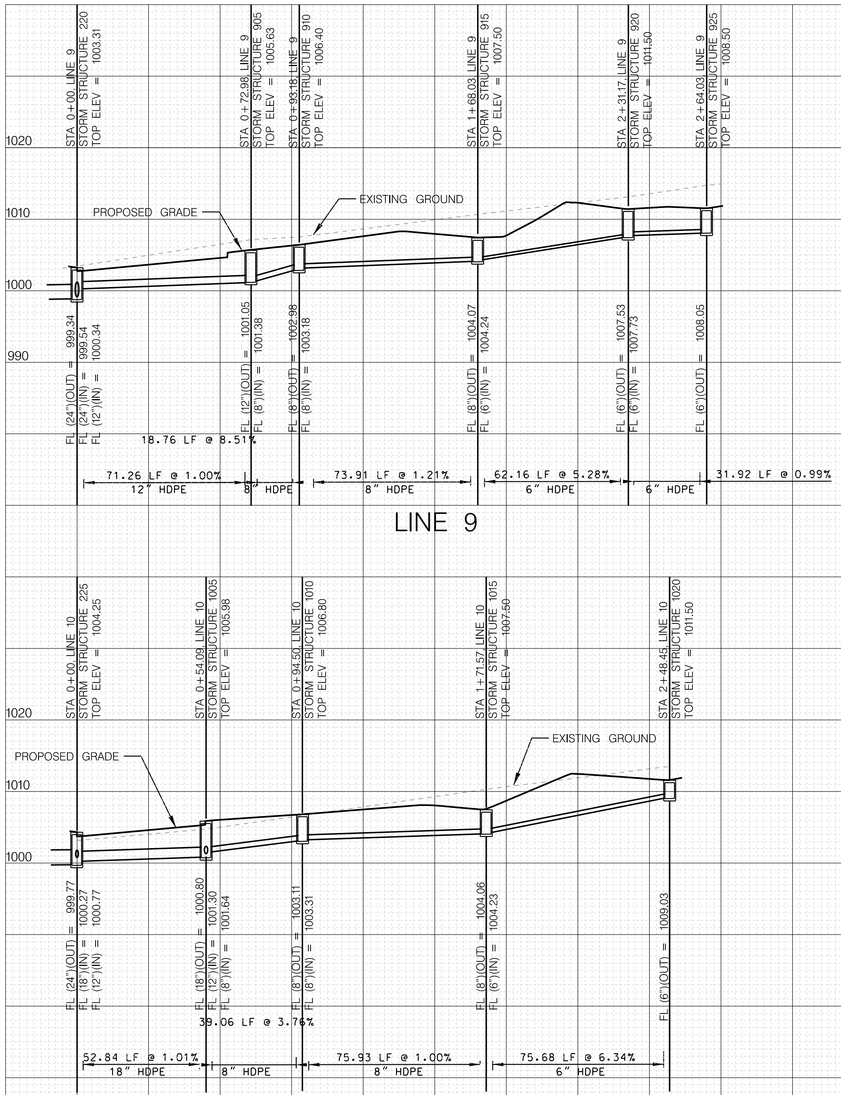
SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

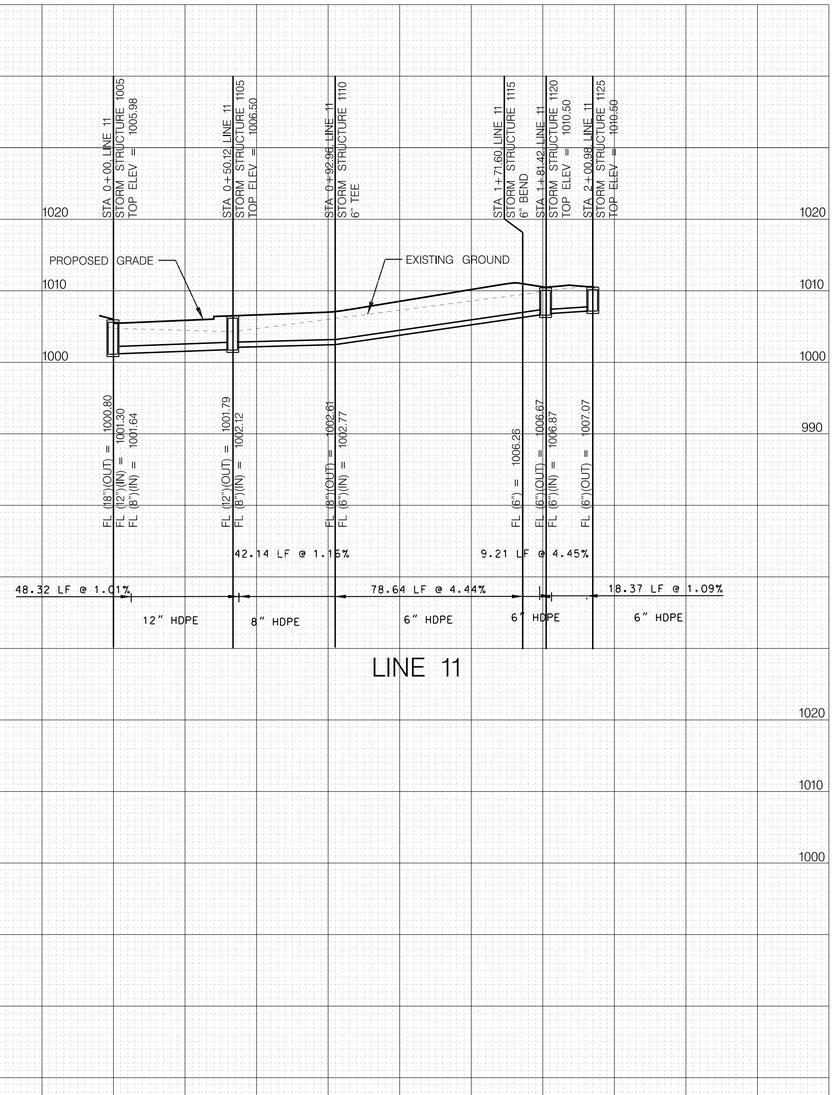
DRAINAGE PROFILES
L2, L3, L4, L4A, L5, L6 & L7

C403

G:\Shared drives\215065\CADD\215065-ST-SH-CD Storm Sewer Profiles Sheet.dgn



LINE 9



LINE 11

LINE 10

CFS ENGINEERS
1421 E. 104th Street, Ste. 100 KCMO 64131
O 816-333-4477 F 816-333-8888
cfse.com

STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-28315
REGISTERED PROFESSIONAL ENGINEER
7/22/22

Mark	Description	Date	Appr.
	CITY SUBMITTAL	02/02/22	

Date: 03-25-205
Rev. -
Designed by: RP
Drawn by: RP
Ckd by: LWS
Reviewed by: ---
Submitted by: ---
Plot scale: 1:50
File name: 215065-ST-SHCD Storm Sewer Profiles Sheet Ed.dgn
Plot date: 7/22/2022

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

DRAINAGE PROFILES
L9, L10 & L11

C404

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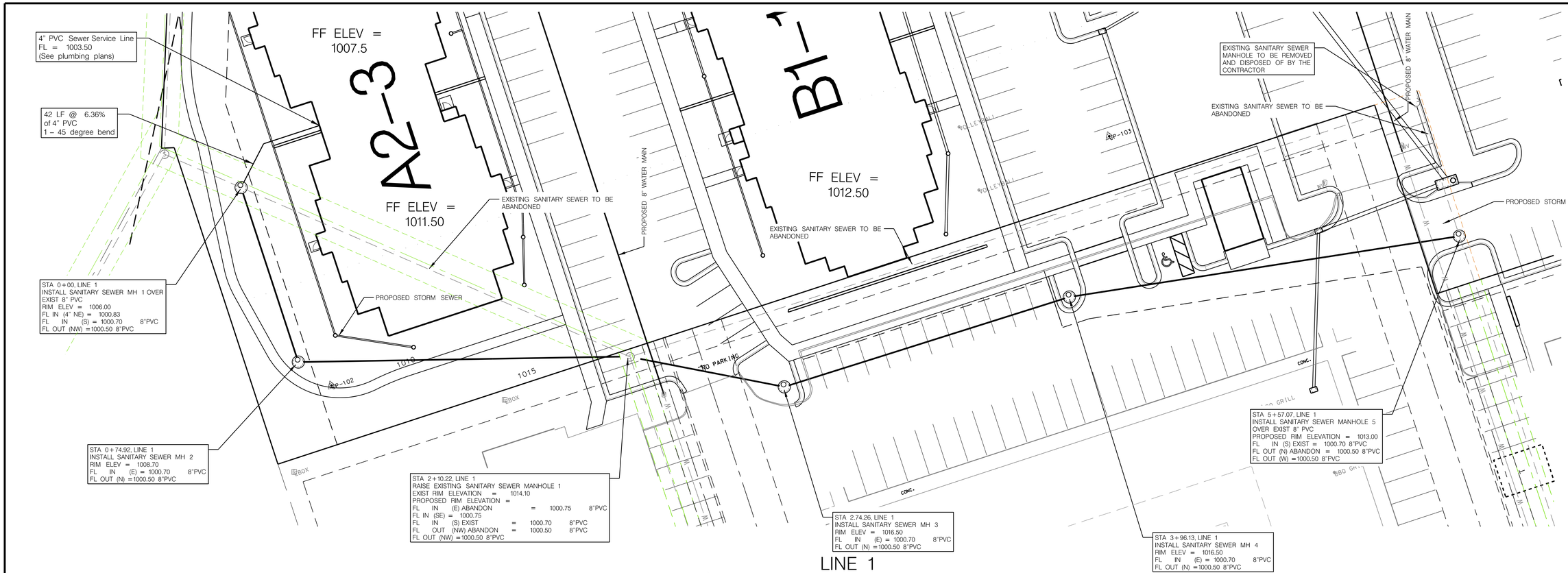

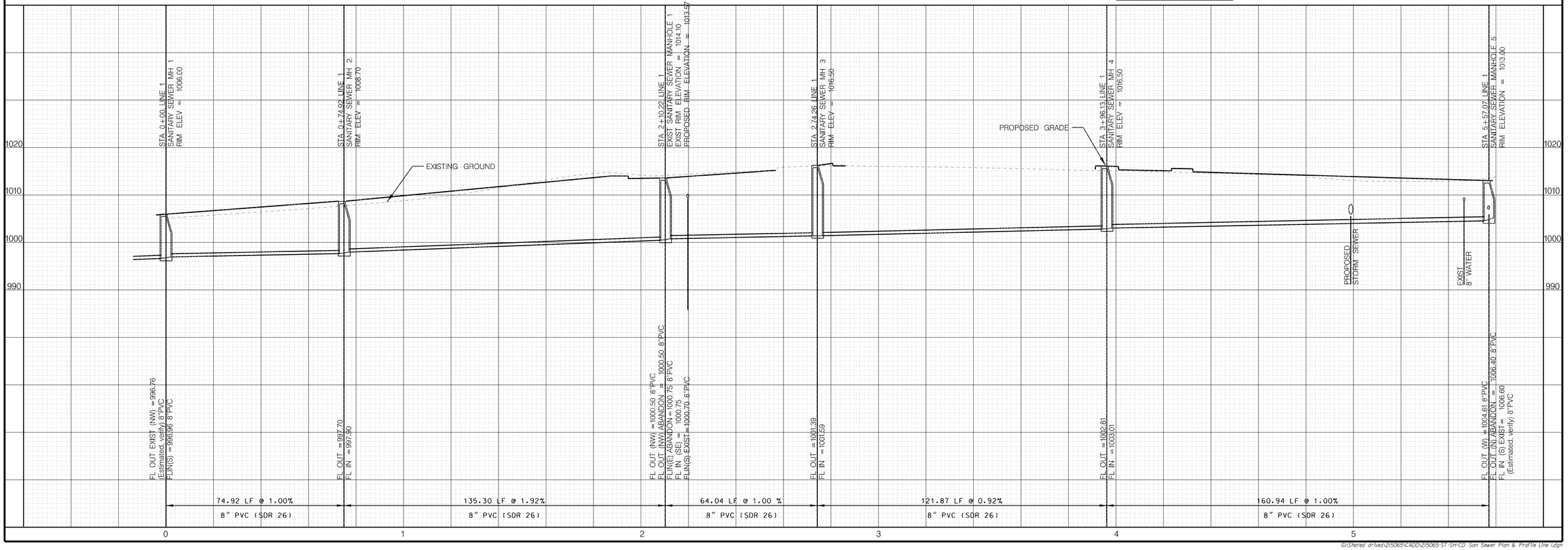

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STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-23015
ENGINEER
02/28/22

Mark	Description	Date	Appr.
-	CITY SUBMITTAL	02/28/22	

Rev. -
Date: 03-25-2015
Plot scale: 1:20
Designed by: RP
Drawn by: RP
Ckd by: LWS
Submitted by: ---
File name: 215065-ST-SHCD Plot date: 02-27-2022
215065-ST-SHCD
ASSET AM

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

SANITARY SEWER
PLAN AND PROFILE
LINE 1

C405

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STA 0+00, LINE 2
INSTALL SANITARY SEWER MANHOLE 5
OVER EXIST 8" PVC
PROPOSED RIM ELEVATION =
FL IN (SW) EXIST = 991.05 8"PVC
FL IN (SE) NEW = 991.15
FL OUT (NE) =990.95 8"PVC

STA 1+08.65, LINE 2
INSTALL SANITARY SEWER MANHOLE 7
PROPOSED RIM ELEVATION =
FL IN (SE) =
FL OUT (NW) =1000.50 8"PVC

4" PVC Sewer Service Line
FL = 1000.50
(See plumbing plans)

FF ELEV = 1005.0

19.5 LF @ 37.03%
of 4" PVC
1 – 15 degree bend

Sta 1+68.09, Line 2
Install 8"x4" Tee
FL (8") = 993.23

82.20 LF @ 6.90%
of 4" PVC
1 – 90 degree bend
1 – 45 degree bend
1 – cleanout

FF ELEV = 1008.0

STA 5+64.32, LINE 2
INSTALL SANITARY SEWER MANHOLE 9
PROPOSED RIM ELEVATION = 1009.50
FL IN (4" NE) = 1000.83
FL OUT (NW) =1000.50 8"PVC

FF ELEV = 1011.0

1010

1000

1005

90°27'27"

114°15'35"

120°10'45"

C1–1

PROPOSED 8" WATER MAIN

Sta 2+67.60, Line 2
Install 8"x4" Tee
FL (8") = 994.22

FF ELEV = 1006.0

4" PVC Sewer Service Line
FL = 1001.50
(See plumbing plans)

4" PVC Sewer Service Line
FL = 1006.50
(See plumbing plans)

Sta 1+55.85, Line 2
Install 8"x4" Tee
FL (8") = 993.11

4" PVC Sewer Service Line
FL = 1000.50
(See plumbing plans)

23.2 LF @ 30.60%
of 4" PVC
1 – 15 degree bend

PROPOSED STORM SEWER

EXIST 8" PVC

FF ELEV = 1005.0

A2–2

44.3 LF @ 15.24%
of 4" PVC

PROPOSED STORM SEWER

PROPOSED 8" WATER MAIN

Sta 3+02.30, Line 2
Install 8"x4" Wye
FL (8") = 994.58

90.5 LF @ 10.62%
of 4" PVC
1 – 45 degree bend
1 – cleanout

STA 3+70.29, LINE 2
INSTALL SANITARY SEWER MANHOLE 8
PROPOSED RIM ELEVATION =
FL IN (NE) =
FL OUT (NW) =1000.50 8"PVC

STA 0+48.98, LINE 2
INSTALL SANITARY SEWER MANHOLE 6
PROPOSED RIM ELEVATION =
FL IN (SE) = 991.20
FL OUT (NW) =991.00 8"PVC (Exist, verify)

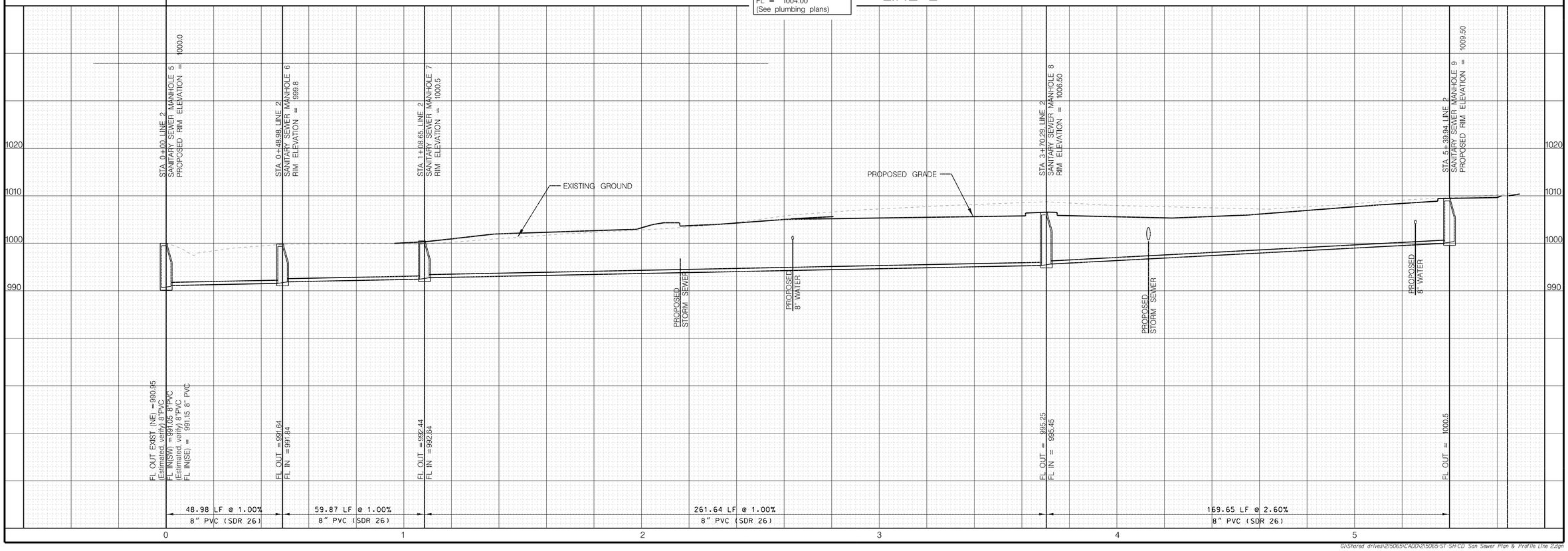
FF ELEV = 1005.0

GRID 1/2" IRON BAR & CAP STAMPED AD 2000 KS 872

GRID 1/2" IRON BAR

4" PVC Sewer Service Line
FL = 1004.00
(See plumbing plans)

LINE 2



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C 816-333-4477 F 816-333-8888
cfse.com

STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-23015
PROFESSIONAL ENGINEER
12/16/22

Mark	Description	Date	Appr.
1	CITY SUBMITTAL	02/02/22	

Rev. -
Date: 03-25-2015
Reviewed by: ---
Plot scale: 1/20
Chkd by: LWS
Submitted by: ---
Designed by: RP
Dwn by: RP
File name:215065-ST-SHCD San Sewer Plan & Profile Line 2.dgn
Plot date: 12/22/2022

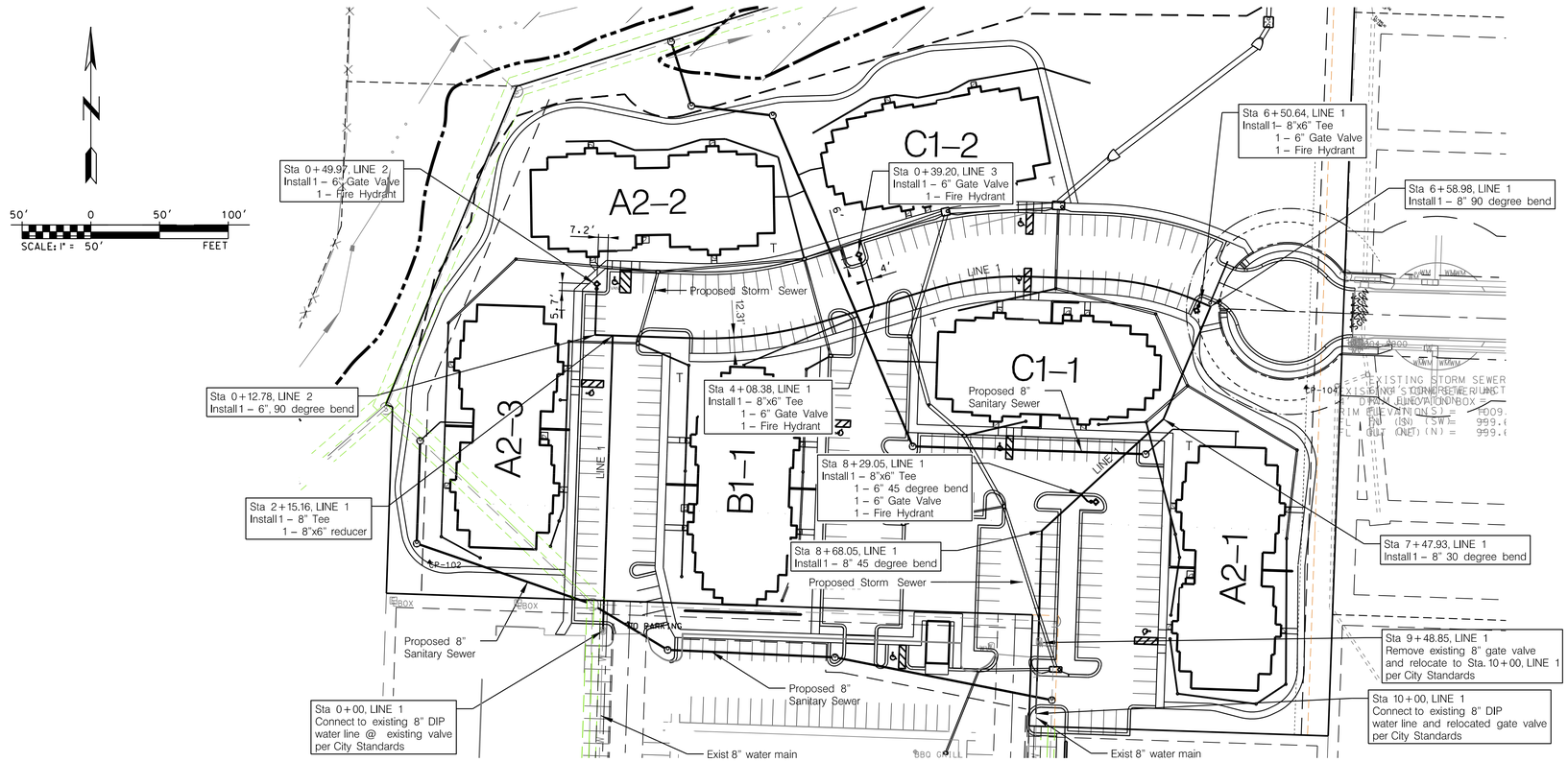
SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

SANITARY SEWER
PLAN AND PROFILE
LINE 2

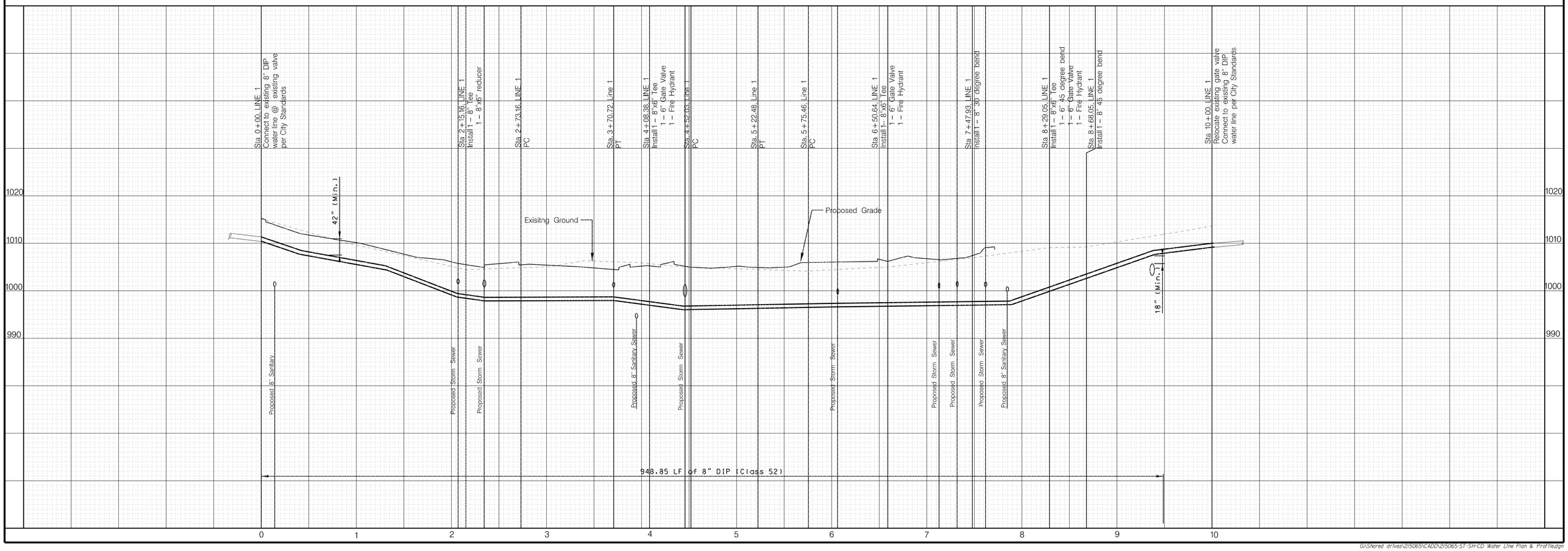
C406

G:\Shared drives\215065\CADD\215065-ST-SH-CD San Sewer Plan & Profile Line 2.dgn



WATERLINE GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE PER APWA AND/OR LEE'S SUMMIT STANDARDS.
2. EXISTING PAVEMENT, CURB AND SIDEWALKS OVER THE EXCAVATION LIMITS SHALL BE SAWCUT AND REMOVED AND PROPERLY DISPOSED OF OFF OF THE SITE. TRENCHING, EXCAVATION AND BACKFILL SHALL BE DONE IN ACCORDANCE WITH LEE'S SUMMIT STANDARDS. PAVEMENT, CURB AND SIDEWALK SHALL BE REPLACED TO MATCH THE EXISTING SECTIONA IN ACCORDANCE WITH LEE'S SUMMIT STANDARDS.
3. THESE PLANS WERE PREPARED BASED OFF OF UTILITY FIELD MARKING LOCATIONS RECORDED IN THE FIELD, AND THE ACTUAL WATER AND UTILITY LINE LOCATIONS COULD VARY. CONTRACTOR SHALL MAKE A RECORD OF THE DEVIATIONS IN MATERIALS, FITTINGS AND ALIGNMENTS TO ACCOMMODATE THE FIELD CONSTRUCTION, AND SHALL PROVIDE THE AS-BUILT CONSTRUCTION RECORDS TO THE CITY AND THE ENGINEER UPON COMPLETION OF THE WATER LINE RELOCATION WORK.
4. THE CONTRACTOR SHALL CONTACT THE CITY OF LEE'S SUMMIT PUBLIC WORKS INSPECTIONS AT (816) 969-1829 A MINIMUM OF 48 HOURS BEFORE COMMENCEMENT OF CONSTRUCTION.
5. CONTRACTOR TO COORDINATE WITH APPROPRIATE, UTILITY COMPANIES PRIOR TO CONSTRUCTION ADJUSTMENT, OR RELOCATION OF EXISTING UTILITIES AS DESIGNATED ON PLANS OR REQUIRED IN THE FIELD. ANY DEVIATION FROM THE DESIGN LOCATIONS SHALL BE REPORTED TO THE ENGINEER OF RECORD AND THE OWNER PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING ALL PUBLIC AND DOMESTIC WATER LINE PIPES, METERS, VALVES AND ALL OTHER INCIDENTALS REQUIRED FOR A COMPLETE OPERABLE WATER SYSTEM. ALL PUBLIC AND DOMESTIC WATER LINES AND FITTINGS SHALL BE OF MATERIALS APPROVED BY THE CITY OF LEE'S SUMMIT. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT.



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O 816-333-4477 F 816-333-8888

STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-23015
PROFESSIONAL ENGINEER
3/2/22

Mark	Description	Date	Appr.
-	CITY SUBMITTAL	02/02/22	

Designed by: RP
Drawn by: RP
Checked by: LWS
Submitted by: ---
Date: 03-25-2005
Reviewed by: ---
Plot scales: 1:50
File name=P2065SE-SHCD Water Line Plan & Profile.dgn
Plot date=4/2/2022 7:46:38 PM

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

WATER LINE PLAN AND PROFILE

C407

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EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES THROUGHOUT THE PROJECT. ANY AND ALL FINES ASSOCIATED WITH EROSION CONTROL VIOLATIONS WILL BE THE CONTRACTOR'S RESPONSIBILITY.
2. EROSION CONTROL IS THE CONTRACTOR'S RESPONSIBILITY AND THIS PLAN SHOULD BE USED AS A GUIDE, AND REPRESENTS THE MINIMUM EROSION CONTROL DEVICES REQUIRED.
3. TOPSOIL FROM GRASS COVERED AREA SHALL BE SALVAGED AND STOCKPILED IN AND SURROUNDED BY SILT FENCE UNTIL IT CAN BE REPLACED IN PROPOSED GREEN SPACE AREAS.
4. SOIL EXCAVATED FROM THE CUT AREAS SHALL BE MOVED AND GRADED INTO FILL AREAS PROMPTLY.
5. SOIL BROUGHT TO THE SITE FOR FILLING SHALL BE GRADED INTO FILL AREAS AS IT ARRIVES.
6. GRAVEL FILTER BAGS OR STRAW BALES SHALL BE PLACED AROUND EACH INLET OR CULVERT PIPE IMMEDIATELY AFTER THEY ARE PLACED OR CONSTRUCTED.
7. THE CONTRACTOR SHALL PROVIDE ANY FURTHER EROSION CONTROL MEASURES IN ADDITION TO THOSE LISTED TO ENSURE THAT SILT WILL NOT LEAVE THE PROJECT CONFINES.
8. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
9. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM THE SITE IF NOT RE-USEABLE ONSITE.
10. THE CONTRACTOR SHALL ENSURE THAT ALL DRAINAGE STRUCTURES, CULVERTS, INLETS, FLUMES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
11. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY STABILIZATION AS REQUIRED.
12. THE CONTRACTOR SHALL PROVIDE INGRESS/EGRESS TRACKING PAD(S) FOR VEHICULAR TRAFFIC TO ACCESS THE SITE AT LOCATION(S) APPROVED BY THE OWNER'S REPRESENTATIVE.
13. ALL DITCHES AND SLOPES WITHIN THE PROJECT LIMITS SHALL BE SEEDED AND STABILIZED IMMEDIATELY AFTER THEY HAVE BEEN GRADED AND CONSTRUCTED.
14. ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED UPON COMPLETION OF FINAL GRADING. INSTALLATION AND MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES (TEMPORARY & PERMANENT) SHALL BE A CONTINUOUS OPERATION UNTIL ALL SITEWORK IS COMPLETE.
15. ALL SLOPES AND AREAS DISTURBED DURING CONSTRUCTION SHALL BE GRADED SMOOTH AND 4" OF TOPSOIL APPLIED. THE AREA SHALL THEN BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL A HEALTHY STAND OF PERMANENT VEGETATION HAS BEEN ESTABLISHED FOR ALL DISTURBED AREAS.
16. SILT FENCES SHALL BE INSPECTED AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. THE CONTRACTOR SHALL MAKE ANY REPAIRS IMMEDIATELY.
17. SILT FENCES SHALL BE INSPECTED FOLLOWING ANY ACTIVITY ON THE SITE WHICH MAY HAVE DAMAGED THE FENCE OR CAUSED ADDITIONAL SEDIMENT TO ACCUMULATE.
18. SHOULD THE SILT FENCE FABRIC COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, THE CONTRACTOR SHALL REPLACE IT PROMPTLY.
19. SEDIMENT DEPOSITS ACCUMULATED ALONG THE SILT FENCE SHALL BE REMOVED AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE.
20. CARE MUST BE TAKEN TO AVOID UNDERMINING THE SILT FENCE DURING CLEANOUT.
21. THE LANDSCAPING PLAN INDICATES GREEN SPACE AREAS THAT SHALL BE COVERED WITH TOPSOIL, AND MULCH FOR GROWING PERMANENT VEGETATION, AND AREAS THAT SHALL BE PERMANENTLY STABILIZED WITH BUILDINGS, PAVEMENT AND SIDEWALKS.
22. ONCE THE SITE IS BROUGHT TO PROPOSED GRADE, PROVIDE TEMPORARY HYDROSEEDING TO ASSIST WITH EROSION AND SEDIMENT CONTROL ON THE AREAS THAT WILL NOT BE PAVED. IF HYDROSEEDING IS NOT SUCCESSFUL, THE AREA WILL BE RE-HYDROSEEDED UNTIL IT IS SUCCESSFUL.
23. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE.

Legend

- Major Contour
- Minor Contour
- Right-of-Way Line
- Section Line
- Easement Line
- Storm Sewer Line
- Sanitary Sewer Line
- Waterline
- Fence Line
- Vegetation Line
- Found Survey Monument
- Set Iron Bar with Cap CF&S CLS 1999141100
- Section Corner
- {88} Schedule B-2 Exception
- Storm Sewer Manhole
- Sanitary Sewer Manhole
- Tree
- Water Meter
- Water Valve
- Fire Hydrant
- Light Pole
- Center Line
- Found — F
- Bar & Cap — B&C
- Existing Contour (Index)
- Existing Contour (Intermediate)
- Proposed Contour 970

CFS ENGINEERS
1421 E. 104th Street, Ste. 100 KCMO 64131
O 816-333-4477 F 816-333-6888
cfse.com

STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-28015
PROFESSIONAL ENGINEER
3/2/22

Mark	Description	Date	Appr.
	CITY SUBMITTAL	02/02/22	

Designed by: RP
Drawn by: RP
Ckd by: LWS
Submitted by: ---
Date: 03-25-2015
Reviewed by: ---
Plot scale: 1/50
Rev. -
File name: 25065-ST-SHCD Erosion Control Plan.dgn
Plot date: 2/2/2022 1:48:3 PM

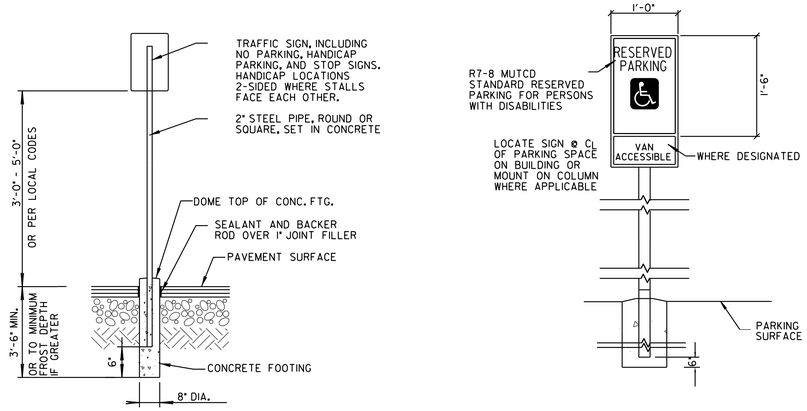
SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

EROSION CONTROL PLAN

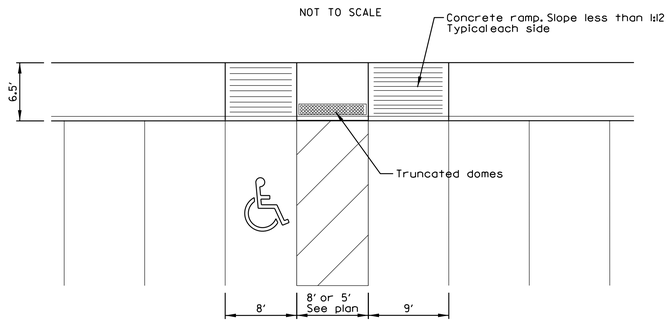
Sheet reference number:
C500

G:\Shared drives\25065\CADD\25065-ST-SHCD Erosion Control Plan.dgn



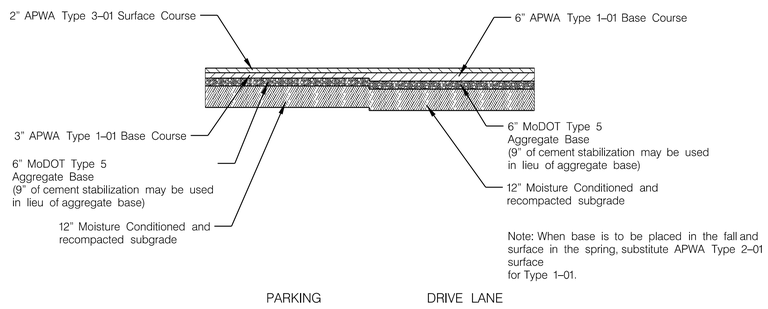
ACCESSIBLE PARKING SPACE SIGNAGE

NOT TO SCALE



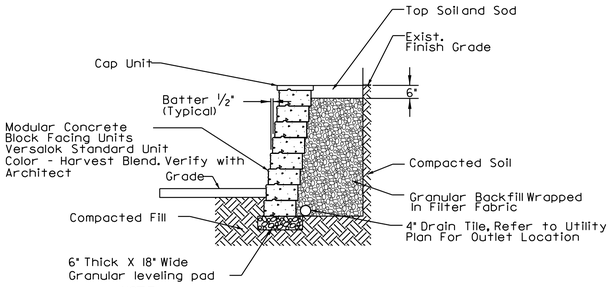
ACCESSIBLE RAMP DETAIL

NOT TO SCALE



ASPHALT PAVING SECTION

NOT TO SCALE



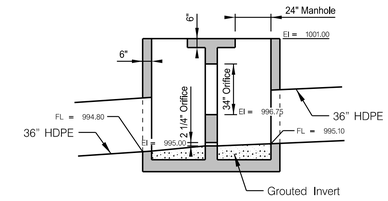
NOTE:

Contractor Shall Submit Shop Drawings For Each Wall. Shop Drawings Shall Include Retaining Wall Plans And Calculations, Sealed By A Missouri Registered Engineer, And Be Submitted To The City And Engineer For Review And Approval Prior To Construction (1994 Ubc Section 106.3.2).

Block Wall Shall Have A Handrail At Location Greater Than A 30" Drop From

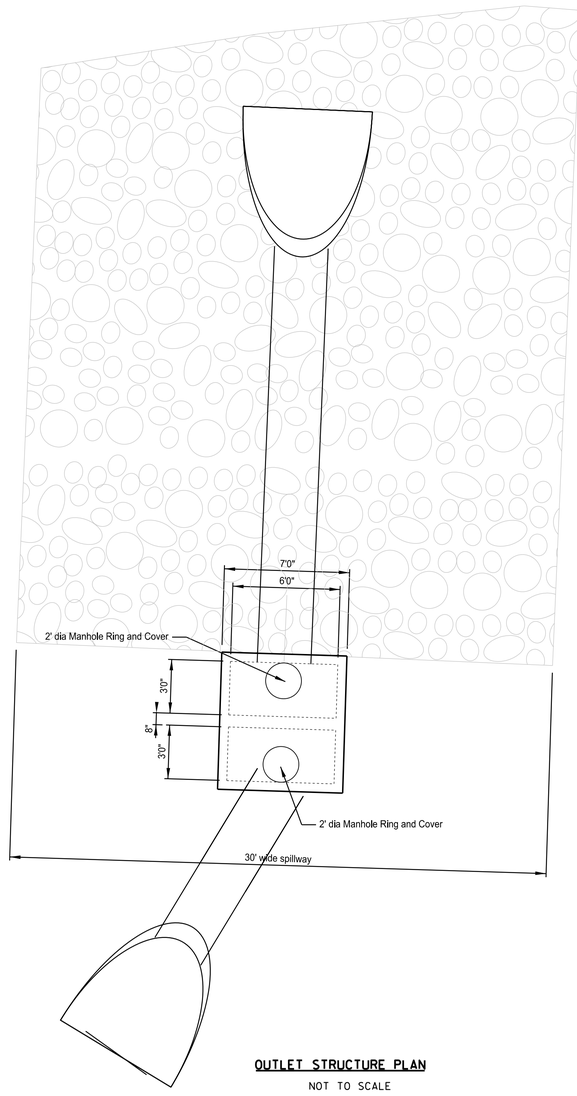
MODULAR BLOCK RETAINING WALL

NOT TO SCALE



OUTLET STRUCTURE SECTION

NOT TO SCALE



OUTLET STRUCTURE PLAN

NOT TO SCALE

CFS ENGINEERS
1421 E. 104th Street, Ste. 100 KCMO 64131
O 816-333-4477 F 816-333-8888
cfse.com

STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-28015
PROFESSIONAL ENGINEER
2/2/22

Mark	Description	Date	Appr.
	CITY SUBMITTAL	02/02/22	

Designed by: RP
Drawn by: RP
Checked by: LWS
Submitted by: ---
Date: 03-25-205
Reviewed by: ---
Plot scale: 1=0
File name:215065-ST SHCD ADA Detailsdgn
Plot date:2/2/2022 8:53:30 PM

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

DETAILS

Sheet reference number:
C600

REQUIRED CONCRETE BEARING AREA (SQUARE FEET – SF)

NOM. DIA. (INCHES)	180 TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	4.7	6.7	4.0	4.0	4.0
8	8.4	11.9	7.2	4.0	4.0
10	13.1	18.5	10.0	5.1	4.0
12	18.8	26.7	14.4	7.4	4.0
14	25.7	36.3	19.6	10.0	5.0
16	33.5	47.4	25.6	13.1	6.6
18	42.4	REST. JT.	32.5	16.5	8.3
20	REST. JT.	REST. JT.	40.1	20.4	10.3
24	REST. JT.	REST. JT.	REST. JT.	29.4	14.8

NOTES:
1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
3. BEARING AREA MUST BE AGAINST UNDISTURBED SOIL.
4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063
HORIZONTAL THRUST BLOCKS

Date: 02/13 | Drawn By: JN | Checked By: DL | FILE: WAT-1 | Rev: 1/14 | Rev:

REQUIRED CONCRETE VOLUME (CUBIC FEET – CF)

NOM. DIA. (INCHES)	180 TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	50.5	71.4	38.6	19.7	9.9
8	89.8	126.9	68.7	35.0	17.6
10	140.2	198.3	107.3	54.7	27.5
12	202.0	REST. JT.	154.7	78.8	39.6
14	REST. JT.	REST. JT.	210.4	107.3	53.9
16	REST. JT.	REST. JT.	REST. JT.	140.1	70.4
18	REST. JT.	REST. JT.	REST. JT.	177.3	89.1
20	REST. JT.	REST. JT.	REST. JT.	REST. JT.	110.0
24	REST. JT.	REST. JT.	REST. JT.	REST. JT.	158.4

NOTES:
1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
3. BEARING MUST BE AGAINST UNDISTURBED SOIL.
4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063
VERTICAL THRUST BLOCKS

Date: 02/13 | Drawn By: JN | Checked By: DL | FILE: WAT-2 | Rev: 1/14 | Rev:

NOTES:
1. FLOWABLE FILL SHALL MEET THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.
2. REGULAR BACKFILL ABOVE THE TRENCH CHECK SHALL BE FREE OF DEBRIS, ORGANIC MATTER, AND STONES > 6" IN ANY DIMENSION.
3. TOP OF FLOWABLE BACKFILL SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE.
4. LENGTH OF TRENCH CHECK SHALL BE A MINIMUM OF 12".

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063
TRENCH CHECK

Date: 02/13 | Drawn By: JN | Checked By: DL | FILE: WAT-6 | Rev: 1/14 | Rev:

NOTES:
1. WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
4. BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
5. FOR STREETS WITHOUT CURBS, FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE, BUT NOT MORE THAN 10' FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN BOTTOM OF DITCH.
6. HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063
HYDRANT INSTALLATION – STRAIGHT SET

Date: 02/13 | Drawn By: JN | Checked By: DL | FILE: WAT-7 | Rev: 1/14 | Rev:

NOTES:
1. WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
4. BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
5. FOR STREETS WITHOUT CURBS, FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE, BUT NOT MORE THAN 10' FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN BOTTOM OF DITCH.
6. HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063
HYDRANT WITH 90 DEGREE BEND

Date: 02/13 | Drawn By: JN | Checked By: DL | FILE: WAT-8 | Rev: 1/14 | Rev:

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063
VALVE STEM EXTENSION AND VALVE BOX

Date: 02/13 | Drawn By: JN | Checked By: DL | FILE: WAT-10 | Rev: 1/14 | Rev:

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063
AIR RELEASE ASSEMBLY

Date: 02/13 | Drawn By: JN | Checked By: DL | FILE: WAT-11 | Rev: 1/14 | Rev:

TYPICAL METER INSTALLATION – 2" AND SMALLER
NOT TO SCALE

NOTES:
1. METER INSTALLATION SHALL NOT BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC OR IN CONCRETE PAVEMENT WITHOUT CITY APPROVAL.
2. 1" METER IS TO BE LOCATED OTHER THAN IN FRONT OF PROPERTY LINE, CITY APPROVAL SHALL BE OBTAINED.
3. CITY TO FURNISH ITEMS A–K.
4. NO OTHER EQUIPMENT SHALL BE INSTALLED IN THIS PIT.
5. 42" MINIMUM BURY DEPTH FOR ALL SERVICE LINES.
6. EXCAVATION FOR TAP TO EXPOSE 4 LINEAR FEET OF MAIN.
7. NO SPLICES ALLOWED BETWEEN METER AND MAIN.
8. SERVICE CONNECTION TAP AT APPROXIMATELY 45 DEGREES.
9. LID AND RISER RING SHALL BE SET SO THAT GROUND WATER WILL DRAIN AWAY FROM THE WELL.
10. CONTACT WATER UTILITIES, 816-969-1900, FOR REQUIREMENTS OF A METER LARGER THAN 2"

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063
SERVICE CONNECTION/METER WELL

Date: 02/13 | Drawn By: JN | Checked By: DL | FILE: WAT-11 | Rev: 1/14 | Rev:

GENERAL NOTES:
1. METER VAULT WALLS TO BE POURED OR PRECAST CONCRETE. METER VAULT ROOF TO BE REINFORCED CONCRETE WITH OPENING CENTERED OVER DETECTOR METER. REINFORCED WALLS AND SLABS ARE TO BE DESIGNED BY THE OWNER'S ENGINEER OR PRECAST ENGINEER.
2. METER VAULT TO BE LOCATED, WHEN POSSIBLE, OUTSIDE TRAFFIC AREA. WHERE THIS IS NOT POSSIBLE, THE VAULT SHALL HAVE A CONCRETE SUMP TO DRAIN TO AN ABOVE GROUND DISCHARGE POINT.
3. ALL PIPE AND FITTINGS FROM THE CITY WATER MAIN THROUGH THE VAULT SHALL BE PROVIDED WITH RESTRAINED JOINT FITTINGS.
4. ALL FITTINGS FOR THE DETECTOR METER TO BE BRASS.
5. STEPS SHALL BE IN ACCORDANCE WITH THE APPROVED PRODUCTS LIST FOR WATER UTILITIES AND SHALL BE ON 16" CENTERS.
6. A DEPARTMENT OF NATURAL RESOURCES APPROVED DOUBLE CHECK DETECTOR ASSEMBLY BACKFLOW PREVENTER MUST BE USED. FOR A COPY OF THE MISSOURI DEPARTMENT OF NATURAL RESOURCE'S APPROVED BACKFLOW PREVENTION ASSEMBLIES, CONTACT WATER UTILITIES AT 816-969-1900.
7. ALL VALVES SHALL HAVE RISING STEMS.
8. MANHOLE COVER SHALL BE A BILCO K-1 MODEL UNLESS IN A VEHICLE TRAFFIC AREA. SEE THE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR TRAFFIC CONDITIONS. THE COVER SHALL HAVE A 1-3/4" ø HOLE DRILLED FOR A TOUCH/READ DEVICE.
9. A MINIMUM OF 18" CLEARANCE SHALL BE PROVIDED AROUND ALL PIPING, VALVES, APPURTENANCES, ETC.
10. CONTACT PUBLIC WORKS ENGINEERING FOR VAULTS THAT INCLUDE A FIRE DEPARTMENT CONNECTION OR A 3" OR LARGER METER.

CITY OF LEE'S SUMMIT, MO
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
STANDARD DRAWINGS
VAULT FOR DOUBLE CHECK DETECTOR CHECK

Drawn By: JN | Checked By: DL | Date: 1/14 | Rev: 11/14 | Rev: | WAT-12

CFS ENGINEERS
cfse.com
1421 E. 104th Street, Ste. 100 KCMO 64131
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STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-28015
2/21/22

Mark	Description	Date	Appr.
	CITY SUBMITTAL	02/02/22	

Designed by: RP | Date: 03-25-2015 | Rev. -
Drawn by: RP | Ckd by: LWS | Reviewed by: ---
Submitted by: --- | Plot scale: 1:40
File name: P215065-ST-SH-CD Details-LSH.dgn
Plot date: 2/21/2022 | 12:54:45 PM

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

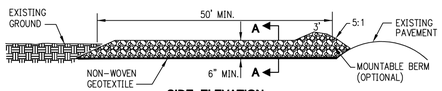
Construction Drawings

WATER DETAILS

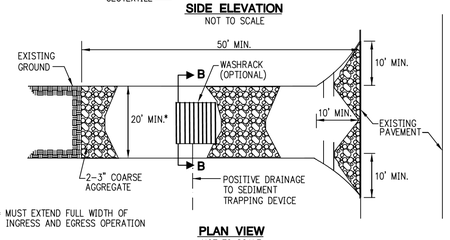
C601

G:\Shared drives\215065\CADD\215065-ST-SH-CD Details-LSH.dgn

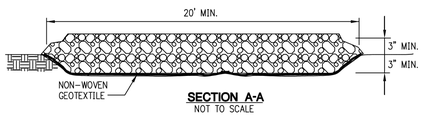
TEMPORARY CONSTRUCTION ENTRANCE



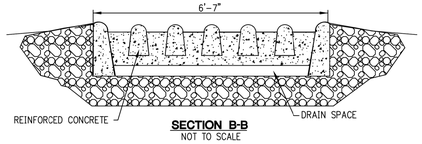
SIDE ELEVATION
NOT TO SCALE



PLAN VIEW
NOT TO SCALE



SECTION A-A
NOT TO SCALE



SECTION B-B
NOT TO SCALE

SOURCE: MODIFIED FROM VA. DCR, 1992

TEMPORARY CONSTRCUTION ENTRANCE PAD NOTES:

A) INSTALLATION:

1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS. IF POSSIBLE, LOCATE WHERE PERMANENT ROADS WILL EVENTUALLY BE CONSTRUCTED.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. IF SLOPE TOWARDS THE PUBLIC ROAD EXCEEDS 2%, CONSTRUCT A 6-TO 8-INCH HIGH RIDGE WITH 3H:1V SIDE SLOPES ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE EDGE OF THE PUBLIC ROAD TO DIVERT RUNOFF AWAY FROM IT.
4. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES ALONG PUBLIC ROADS.
5. PLACE STONE TO DIMENSIONS AND GRADE AS SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPED FOR DRAINAGE.
6. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE.
7. IF WET CONDITIONS ARE ANTICIPATED, PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY.

B) TROUBLESHOOTING:

1. CONSULT WITH A QUALIFIED DESIGN PROFESSIONAL IF ANY OF THE FOLLOWING OCCUR:
   a. INADEQUATE RUNOFF CONTROL TO THE EXTENT THAT SEDIMENT WASHES ONTO PUBLIC ROAD – INSTALL DIVERSIONS OR OTHER RUNOFF CONTROL MEASURES.
   b. SMALL STONE, THIN PAD, OR ABSENCE OF GEOTEXTILE FABRIC RESULTS IN RUTS AND MUDDY CONDITIONS AS STONE IS PRESSED INTO SOIL – INCREASE STONE SIZE OR PAD THICKNESS OR ADD GEOTEXTILE FABRIC.
   c. PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC – EXTEND PAD BEYOND THE MINIMUM 50-FOOT LENGTH AS NECESSARY.

C) INSPECTION AND MAINTENANCE:

1. INSPECT STONE PAD AND SEDIMENT DISPOSAL AREA WEEKLY AND AFTER 1/2-INCH OR GREATER STORM EVENTS.
2. RESHAPE PAD AS NEEDED FOR PROPER DRAINAGE AND RUNOFF CONTROL.
3. TOPDRESS WITH CLEAN 2-AND 3-INCH STONE AS NEEDED.
4. IMMEDIATELY REMOVE MUD OR SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROAD. REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY.
5. REMOVE ALL TEMPORARY ROAD MATERIALS FROM AREAS WHERE PERMANENT VEGETATION WILL BE ESTABLISHED.

AMERICAN PUBLIC WORKS ASSOCIATION	
APWA	KANSAS CITY METROPOLITAN CHAPTER
TEMPORARY CONSTRUCTION ENTRANCE	STANDARD DRAWING NUMBER ESC-01 ADOPTED:

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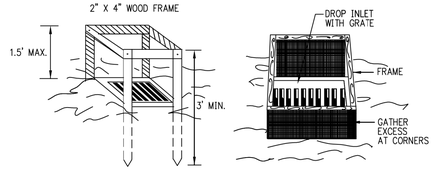
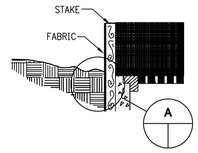
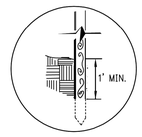
SEDIMENT FENCE DROP INLET PROTECTION



PERSPECTIVE VIEWS
NOT TO SCALE



ELEVATION OF STAKE AND FABRIC ORIENTATION



DETAIL A
NOT TO SCALE

SOURCE: MODIFIED FROM VA. DCR, 1992

SEDIMENT FENCE DROP INLET PROTECTION NOTES:

A) CONSTRUCTION SPECIFICATIONS:

1. SEDIMENT FENCE SHALL CONFORM TO THE CONSTRUCTION SPECIFICATIONS FOR EXTRA STRENGTH FOUND IN THE TABLE BELOW AND SHALL BE CUT FROM A CONTINUOUS ROLL TO AVOID JOINTS.

   PHYSICAL PROPERTIES OF FABRIC IN SEDIMENT FENCE:

PHYSICAL PROPERTY	TEST	REQUIREMENTS
FILTERING EFFICIENCY	ASTM 5141	75%
TENSILE STRENGTH AT 20% (MAX.) ELONGATION*	ASTM 4632 AASHTO M288-96	EXTRA STRENGTH – 50 LBS./LINEAR INCH
FLOW RATE	ASTM 5141	0.2 GAL./SQ.FT/ MINUTE**
ULTRAVIOLET RADIATION STABILITY %	ASTM D 4355	90%

   * REQUIREMENTS REDUCED BY 50% AFTER SIX MONTHS OF INSTALLATION.
   ** HIGH POROSITY FABRIC MADE BY BETTER SUITED FOR THIS DEVICE.
2. FOR STAKES, USE 2X4 WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3 FEET.
3. SPACE STAKES EVENLY AROUND THE PERIMETER OF THE INLET A MAXIMUM OF 3 FEET APART, AND SECURELY DRIVE THEM INTO THE GROUND, APPROXIMATELY 18 INCHES DEEP.
4. TO PROVIDE NEEDED STABILITY TO THE INSTALLATION, FRAME WITH 2X4 WOOD STRIPS AROUND THE CREST OF THE OVERFLOW AREA AT A MAXIMUM OF 1.5 FEET ABOVE THE DROP INLET CREST.
5. PLACE THE BOTTOM 12 INCHES OF THE FABRIC IN A TRENCH AND BACKFILL THE TRENCH WITH 12-INCHES OF COMPACTED SOIL.
6. FASTEN FABRIC SECURELY BY STAPLES, OR WIRE IT TO THE STAKES AND FRAME. JOINTS MUST BE OVERLAPPED TO THE NEXT STAKE.
7. IT MAY BE NECESSARY TO BUILD A TEMPORARY DIKE ON THE DOWNSLOPE SIDE OF THE STRUCTURE TO PREVENT BYPASS FLOW.

B) INSPECTION AND MAINTENANCE:

1. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN EVENT OF 1/2 INCH OR GREATER AND REPAIRS MADE AS NEEDED.
2. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
3. STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

AMERICAN PUBLIC WORKS ASSOCIATION	
APWA	KANSAS CITY METROPOLITAN CHAPTER
SEDIMENT FENCE DROP INLET PROTECTION	STANDARD DRAWING NUMBER ESC-19 ADOPTED:

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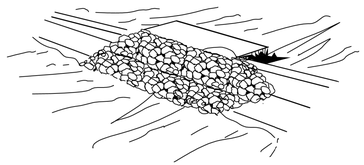
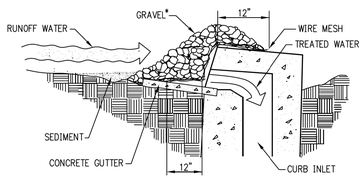
GRAVEL CURB INLET SEDIMENT TRAP





CROSS SECTION
NOT TO SCALE

NOTE:
*USE CLEAN GRAVEL 1/2" TO 1" IN DIAMETER.

SOURCE: MODIFIED FROM VA. DCR, 1992

GRAVEL CURB INLET SEDIMENT TRAP NOTES:

A) GENERAL NOTES:

1. WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE PLACED OVER THE CURB INLET OPENING SO THAT AT LEAST 12 INCHES OF WIRE EXTENDS ACROSS THE INLET COVER AND AT LEAST 12 INCHES OF WIRE EXTENDS ACROSS THE CONCRETE GUTTER FROM THE INLET OPENING.
2. STONE SHALL BE PILED AGAINST THE WIRE SO AS TO ANCHOR IT AGAINST THE GUTTER AND INLET COVER AND TO COVER THE INLET OPENING COMPLETELY.
3. IF THE STONE BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCK AND CLEANED OR REPLACED.

B) INSPECTION AND MAINTENANCE:

1. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN EVENT OF 1/2-INCH OR GREATER AND REPAIRS MADE AS NEEDED.
2. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA SO THAT IT WILL NOT ERODE.
3. STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

AMERICAN PUBLIC WORKS ASSOCIATION	
APWA	KANSAS CITY METROPOLITAN CHAPTER
GRAVEL CURB INLET SEDIMENT TRAP	STANDARD DRAWING NUMBER ESC-24 ADOPTED:

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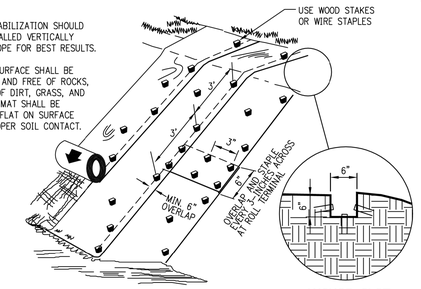
TURF REINFORCEMENT MAT SLOPE INSTALLATION

NOTES:

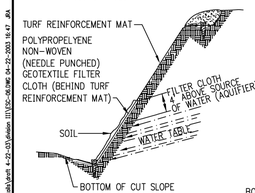
1. SOIL STABILIZATION SHOULD BE INSTALLED VERTICALLY DOWNSLOPE FOR BEST RESULTS.
2. SLOPE SURFACE SHALL BE SMOOTH AND FREE OF ROCKS, LUMPS OF DIRT, GRASS, AND STICKS. MAT SHALL BE PLACED FLAT ON SURFACE FOR PROPER SOIL CONTACT.



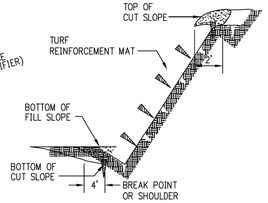
FILL SLOPE SECTION
NOT TO SCALE

ANCHOR SLOT
NOT TO SCALE
TRENCH INTO BERM AND PROGRESS DOWNSLOPE

TOE
MAINTAIN SLOPE ANGLE



SLOPE LINING (WET SLOPE)
NOT TO SCALE



SLOPE LINING (DRY SLOPE)
NOT TO SCALE

SOURCE: MODIFIED FROM VA. DCR, 1992

TURF REINFORCEMENT MAT SLOPE INSTALLATION NOTES:

A) TURF REINFORCEMENT MAT:

1. THE MAJORITY OF THESE PRODUCTS PROVIDE A THREE DIMENSIONAL GEOMATRIX OF NYLON, POLYETHYLENE, OR RANDOMLY ORIENTED MONOFILAMENTS, FORMING A MAT. THESE PRODUCTS CONTAIN ULTRAVIOLET (UV) INHIBITING STABILIZERS, ADDED TO THE COMPOUNDS TO ENSURE ENDURANCE, AND PROVIDE "PERMEANENT ROOT REINFORCEMENT." THE THREE DIMENSIONAL FEATURE CREATES AN OPEN SPACE WHICH IS ALLOWED TO FILL WITH SOIL. THE ROOTS OF THE GRASS PLANT BECOME ESTABLISHED WITHIN THE MAT ITSELF, FORMING A SYNERGISTIC ROOT AND MAT SYSTEM. AS THE GRASS BECOMES ESTABLISHED, THE TWO ACTUALLY "REINFORCE" EACH OTHER, PREVENTING MOVEMENT OR DAMAGE TO THE SOIL. ALLOWABLE VELOCITIES ARE INCREASED CONSIDERABLY OVER NATURAL TURF STANDS. SELECTION OF THE APPROPRIATE MATTING MATERIALS ALONG WITH PROPER INSTALLATION BECOME CRITICAL FACTORS IN THE SUCCESS OF THIS PRACTICE. CONSULTATION WITH THE SUPPLIER OR THE MANUFACTURER AND THOROUGH EVALUATION OF PERFORMANCE DATA TO ENSURE PROPER SELECTION OF A SOIL STABILIZATION MATTING ARE ALSO ESSENTIAL.

B) INSTALLATION REQUIREMENTS:

1. SITE PREPARATION:
   AFTER SITE HAS BEEN SHAPED AND GRADED, PREPARE A FRIABLE SEEDBED RELATIVELY FREE OF CLODS AND ROCKS MORE THAN 1-INCH IN DIAMETER AND ANY FOREIGN MATERIAL THAT WILL PREVENT CONTACT OF THE SOIL STABILIZATION MAT WITH THE SOIL SURFACE. IF NECESSARY, REDIRECT ANY RUNOFF AWAY FROM THE DITCH OR SLOPE DURING INSTALLATION.
2. PLANTING:
   LIME, FERTILIZE, AND SEED IN ACCORDANCE WITH THE APPROVED PLAN, PAYING SPECIAL ATTENTION TO THE PLANT SELECTION CHOSEN FOR THE MATTED AREA. IF THE AREA HAS BEEN SEEDED PRIOR TO INSTALLING THE MAT, RESEED ALL AREAS DISTURBED DURING INSTALLATION.
3. LAYING AND SECURING:
   SIMILAR TO INSTALLING OTHER EROSION CONTROL BLANKETS, BUT PLAN-APPROVING AUTHORITY'S REQUIREMENTS OR MANUFACTURER'S RECOMMENDATIONS MUST BE FOLLOWED AS DETAILED. THE KEY TO ACHIEVING DESIRED PERFORMANCE IS DEPENDENT UPON PROPER INSTALLATION.
4. SECURING THE MATERIAL AND JOINING BLANKETS:
   PRODUCT SPECIFICATIONS VARY. UPSTREAM AND DOWNSTREAM TERMINAL SLOTS, NEW ROLL OVERLAPS, AND MULTIPLE WIDTH INSTALLATIONS DIFFER BY PRODUCT AND MANUFACTURER.
5. FINAL CHECK:
   ENSURE THAT THESE INSTALLATION CRITERIA ARE COMPLETED:
   a. ALL DISTURBED AREAS ARE SEEDED.
   b. SOIL STABILIZATION BLANKET IS IN UNIFORM CONTACT WITH THE SOIL
   c. ALL REQUIRED SLOTS AND LAPPED JOINTS ARE IN PLACE.
   d. THE MATERIAL IS PROPERLY ANCHORED.

AMERICAN PUBLIC WORKS ASSOCIATION	
APWA	KANSAS CITY METROPOLITAN CHAPTER
TURF REINFORCEMENT MAT SLOPE INSTALLATION	STANDARD DRAWING NUMBER ESC-06 ADOPTED:

CFS ENGINEERS
1421 E. 104th Street, Ste. 100 KCMO 64131
O 816-333-4477 F 816-333-6888
cfse.com

STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-23015
PROFESSIONAL ENGINEER
2/2/22

Mark	Description	Date	Appr.
	CITY SUBMITTAL	02/02/22	

Designed by: RP
Drawn by: RP
Checked by: LWS
Submitted by: ---
Date: 03-25-2005
Reviewed by: ---
Plot scale: 1=0
File name=215065-ST-SHCD EC Detailsdgn
Plot date=2/2/2022

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

EROSION CONTROL DETAILS

Sheet reference number:
C-602

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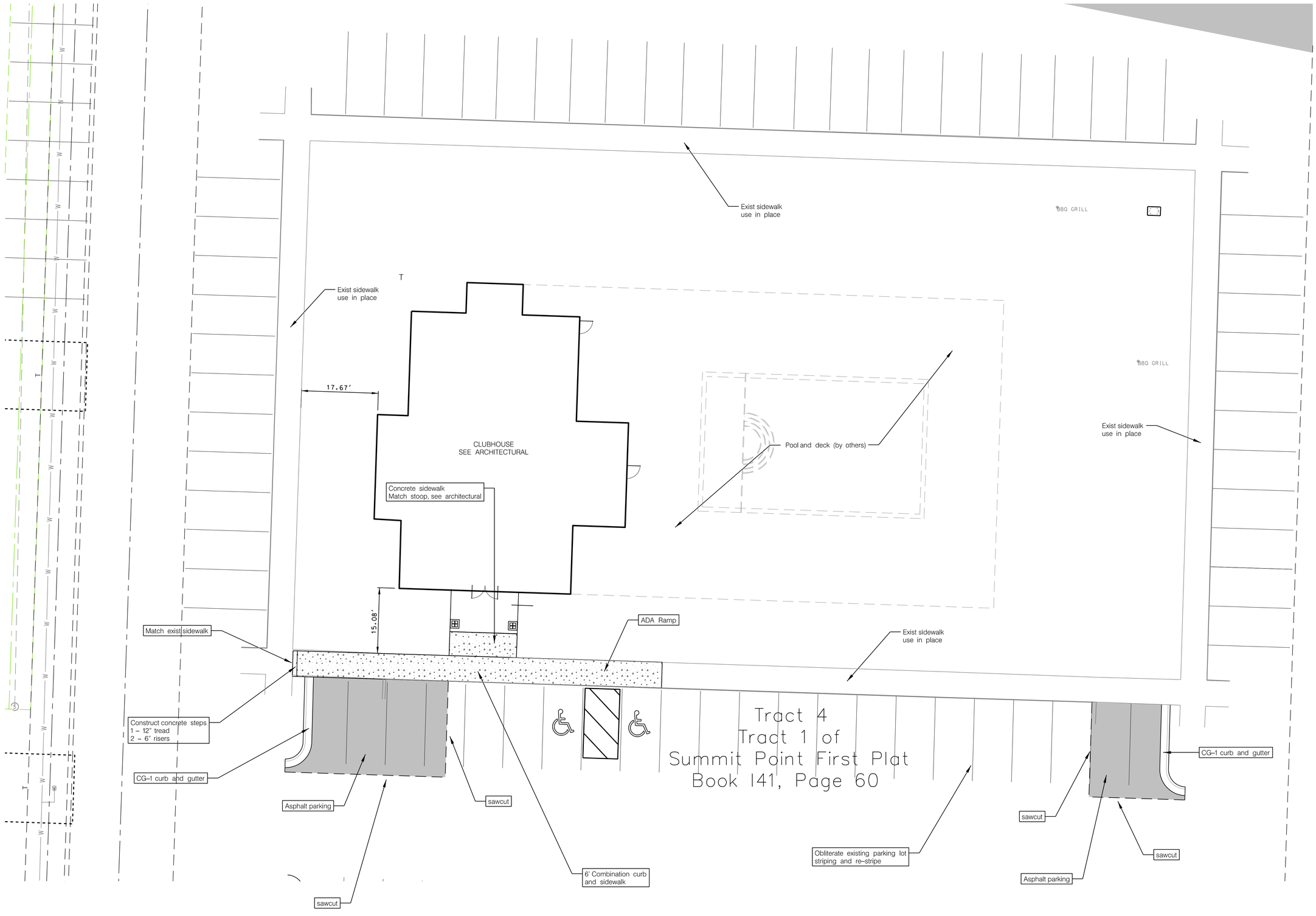

CFS ENGINEERS
1421 E. 104th Street, Ste. 100 KCMO 64131
O 816-333-4477 F 816-333-8888
cfse.com

STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-28015
PROFESSIONAL ENGINEER
2/2/22

Mark	Description	Date	Appr.
	CITY SUBMITTAL	02/02/22	

Designed by: RP
Drawn by: RP
Checked by: LWS
Submitted by: ---
Date: 03-25-2015
Revised by: ---
Plot scales: 1:1
File name: 215065-ST-SHCD Clubhouse Plandgn
Plot date: 2/2/2022
Rev. -

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

CLUBHOUSE SITE PLAN

C700

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STATE OF MISSOURI
LANCE W. SCOTT
NUMBER E-23015
PROFESSIONAL ENGINEER
3/2/22

Mark	Description	Date	Appr.
-	CITY SUBMITTAL	02/02/22	

Designed by: RP
Drawn by: RP
Ckd by: LWS
Submitted by: ---
Date: 03-25-205
Reviewed by: ---
Plot scale: 1:1
File name: 215065-ST-SH-CD Clubhouse Grading Plan.dgn
Plot date: 2/2/2022 10:49 AM

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Construction Drawings

CLUBHOUSE GRADING PLAN

C701

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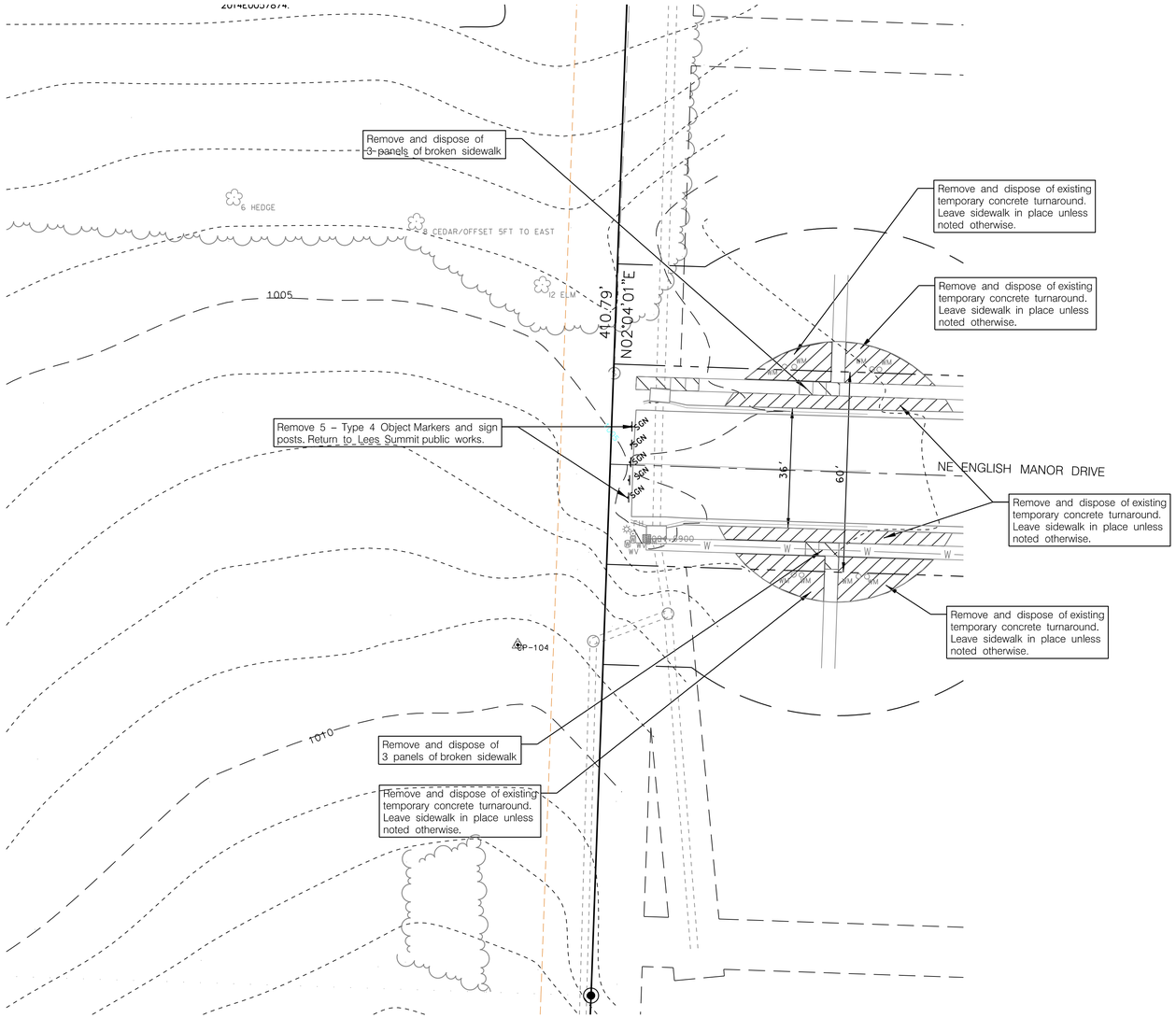

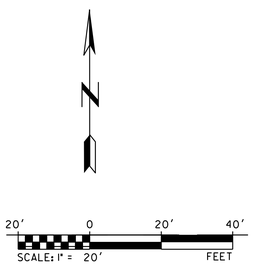

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STATE OF MISSOURI
RACHEL P. LOUTH
E-28008
DEVELOPMENT ENGINEER

Mark	Description	Date	Appr.
	REVISED PER COMMENTS	11/12/21	
	CITY SUBMITTAL	10/21/21	

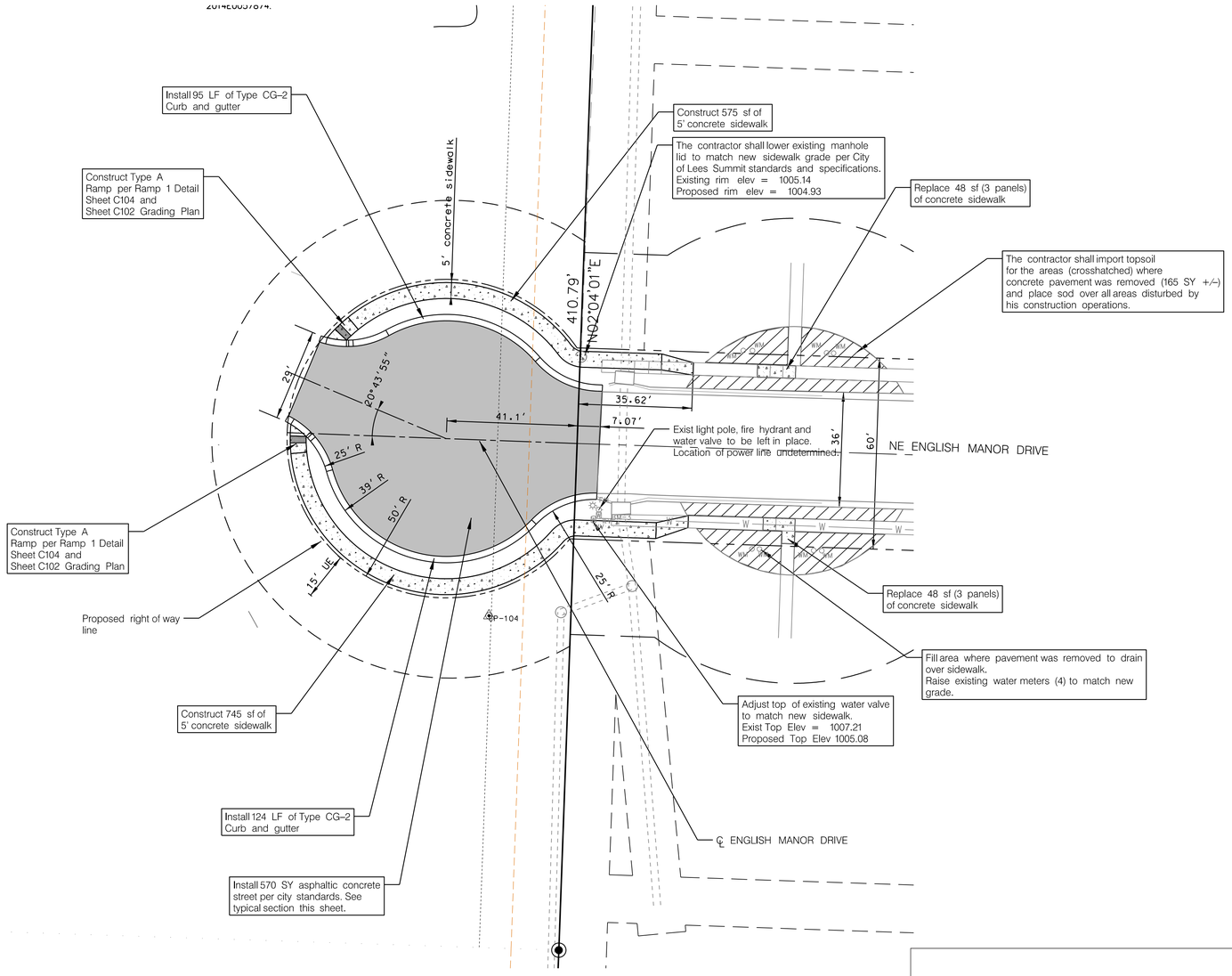
Rev. -
Date: 03-25-2065
Reviewed by: ---
Plot scale: 1:20
Designed by: RP
Dwn by: RP
Ckd by: LWS
Submitted by: ---
File name: 215065-ST-SHCD Public Street Demo Plan.dgn
Plot date: 1/7/2022

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Public Street
Construction Drawings

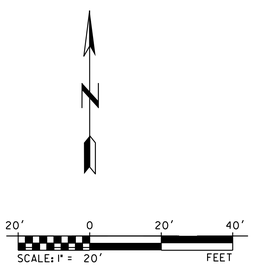
NE ENGLISH MANOR DRIVE
PUBLIC STREET DEMO PLAN

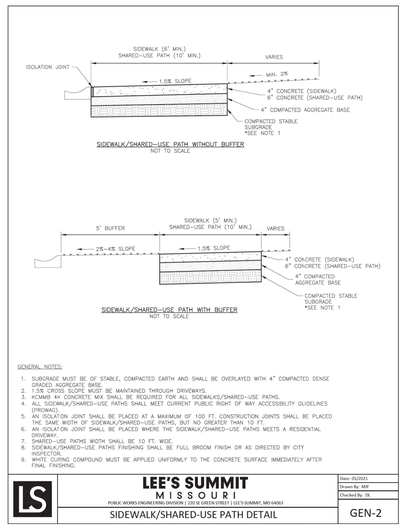
C1000



Notes:

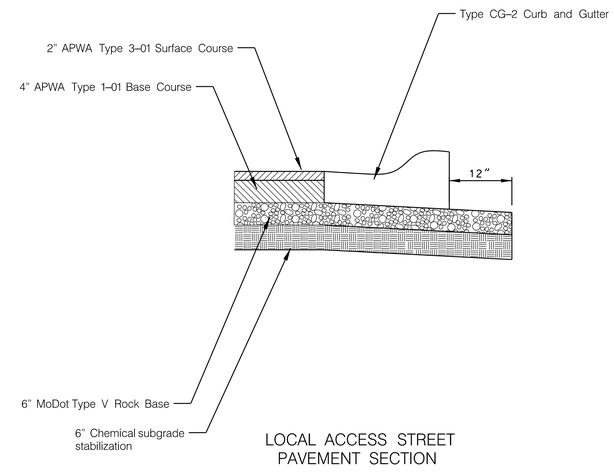
1. All construction within the right of way shall be done per the Standards and Specifications of the City of Lee's Summit.
2. Curb and gutter shall be Type CG-2 unless noted otherwise.





NOTES:

1. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
2. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL PROPERTY CORNERS.
3. CONTRACTOR SHALL MATCH EXISTING PAVEMENT IN GRADE AND ALIGNMENT TO PROVIDE SMOOTH SURFACE TRANSITIONS BETWEEN NEW ENTRANCE DRIVES AND EXISTING STREETS.
4. CONTRACTOR SHALL MATCH EXISTING CURB & GUTTER IN GRADE, SIZE, TYPE, AND ALIGNMENT AT CONNECTIONS TO EXISTING STREETS.
5. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION SUCH AS, BUT NOT LIMITED TO: DRAINAGE UTILITIES, PAVEMENT, STRIPING, CURB, ETC., AND TO INCLUDE ANY WORK IN DOT R.O.W. AND/OR CITY R.O.W. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
6. ALL WORK ON THIS PLAN SHALL BE DONE IN STRICT ACCORDANCE WITH GEOTECHNICAL REPORT.
7. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND PRECISE BUILDING DIMENSIONS. SIDEWALK AND SPECIFIC BUILDING AREA TREATMENTS AND IMPROVEMENTS.
8. ALL DIMENSIONS SHOWN ON BUILDINGS ARE TO OUTSIDE FACE OF BUILDING.
9. ALL RADII SHALL BE 4.0' MEASURED AT THE BACK OF CURB UNLESS OTHERWISE NOTED.
10. THE EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS AND GEOTECH REPORT.
11. PARKING LOT STRIPING SHALL BE ACCORDING TO KANSAS CITY METROPOILTON CHAPTER OF APWA. ALL STRIPING IS TO HAVE TWO COATS OF PAINT (MIN.). ALL STRIPING OTHER THAN ACCESSIBLE SHALL BE WHITE. ACCESSIBLE STRIPING SHALL BE BLUE.
12. ALL CONSTRUCTION WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF LEE'S SUMMIT, MISSOURI STANDARDS AND SPECIFICATIONS.
13. ALL ACCESSIBLE PARKING SIGNAGE AND STRIPING SHALL BE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS.
14. THE CONTRACTOR SHALL SUPPLY THE OWNER WITH A LIST OF ALL SUB-CONTRACTORS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OPERATIONS.
15. ALL CURB AND GUTTER SHALL BE TYPE CG-1 OR CG-2 AS NOTED ON THE PLAN.
16. ALL WORK SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND DESIGN CRITERIA OF THE METROPOLITAN CHAPTER OF APWA AND THE CITY OF LEE'S SUMMIT, MISSOURI, IN CURRENT USAGE EXCEPT AS NOTED.



LOCAL ACCESS STREET PAVEMENT SECTION

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Mark	Description	Date	Appr.
	REVISED PER COMMENTS	11/12/21	
	CITY SUBMITTAL	10/21/21	

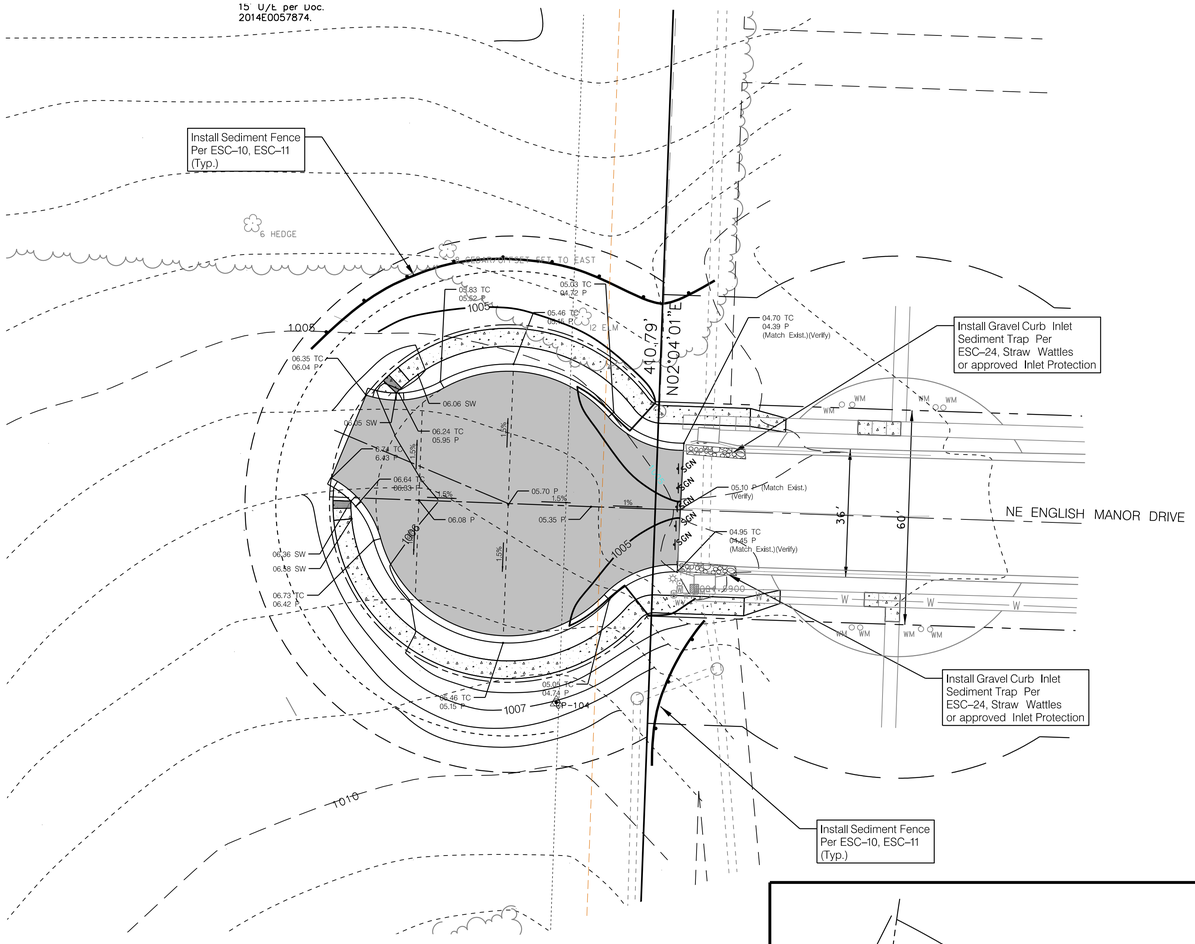
Designed by: RP
Drawn by: RP
Submitted by: ---
Ckd by: LWS
Reviewed by: ---
Date: 03-25-2105
Plot scale: 1:20
Rev. -
File name: #25065-ST-SHCD Public Street Plandgn
Plot date: 4/7/2022 7:54:27 PM

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Public Street
Construction Drawings

NE ENGLISH MANOR DRIVE
PUBLIC STREET PLAN

C1001

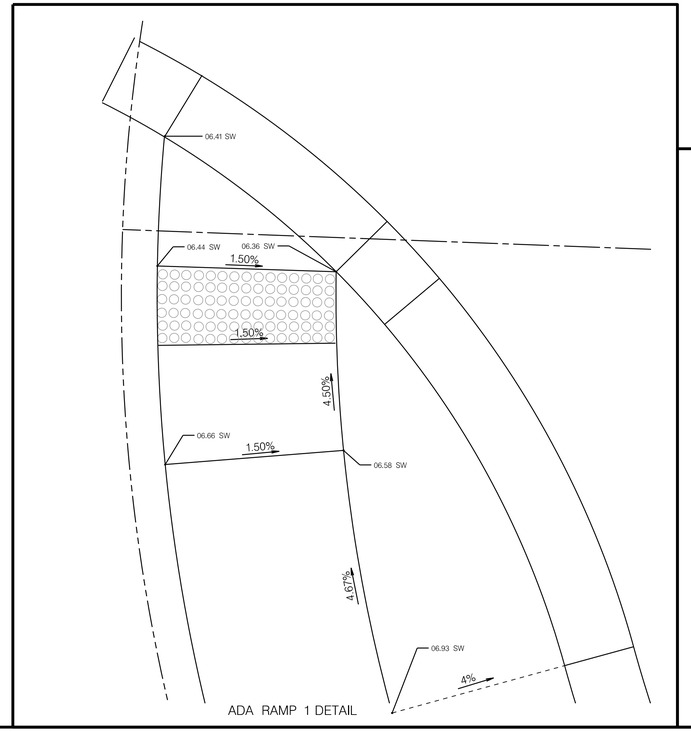


GRADING NOTES:

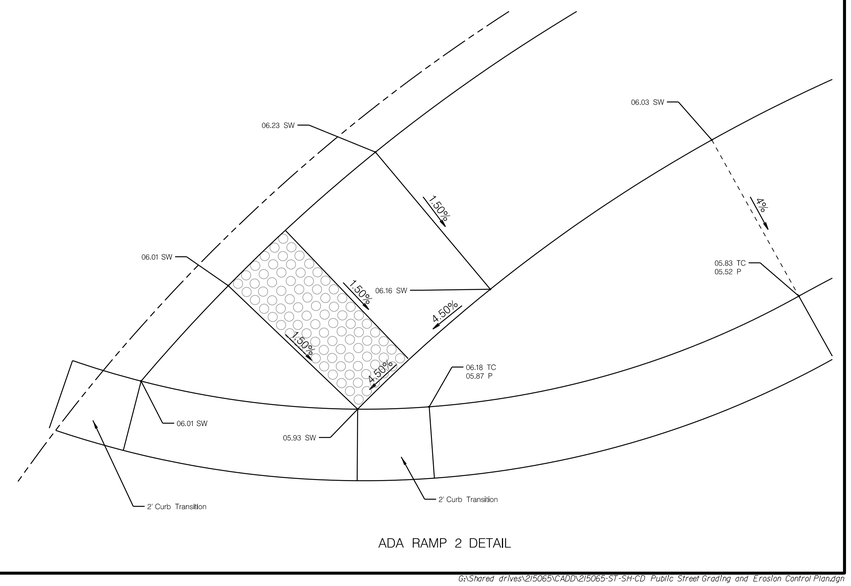
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING THE NECESSARY PERMITS FOR THE COMPLETION OF EARTHWORK AS SHOWN AND FOR HAULING BORROW MATERIAL IN AND WASTE MATERIAL OFF OF THE SITE.
2. AREAS OF PROPOSED CONSTRUCTION SHALL BE STRIPPED OF ALL VEGETATION AND TOPSOIL TO A DEPTH OF SIX INCHES (6") OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER. THE TOPSOIL SHALL BE STOCKPILED AND REDISTRIBUTED PER THE SPECIFICATIONS. TOPSOIL SHALL NOT BE USED FOR STRUCTURAL FILL IN BUILDING AND PAVEMENT AREAS.
3. TESTING AND INSPECTION OF EARTHWORK SHALL BE PROVIDED BY A TESTING LABORATORY SELECTED BY THE OWNER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD ADJUST THE TOPS OF ALL MANHOLES AND VALVE/METER BOXES AS NECESSARY TO MATCH THE FINISH GRADE OF ADJACENT AREAS, NO SEPARATE OR ADDITIONAL COMPENSATION SHALL BE MADE TO THE CONTRACTOR FOR MAKING FINAL ADJUSTMENTS TO MANHOLES AND BOXES.
5. THE CONTRACTOR SHALL CLEAN OUT ALL EXISTING AND PROPOSED INLETS, PIPES AND MANHOLES OF DEBRIS AND SEDIMENTATION AT COMPLETION OF SITEWORK. THIS WORK SHALL BE DONE TO THE SATISFACTION OF THE OWNER.
6. SOIL FROM THE CUT AREA TO BE MOVED AND GRADED INTO FILL AREA PROMPTLY.
7. SOIL FOR FILLING SHOULD BE GRADED AS IT ARRIVES.

EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES THROUGHOUT THE PROJECT,ANY AND ALL FINES ASSOCIATED WITH EROSION CONTROL VIOLATIONS WILL BE THE CONTRACTOR'S RESPONSIBILITY.
2. EROSION CONTROL IS THE CONTRACTOR'S RESPONSIBILITY AND THIS PLAN SHOULD BE USED AS A GUIDE, AND REPRESENTS THE MINIMUM EROSION CONTROL DEVICES REQUIRED.
3. TOPSOIL FROM GRASS COVERED AREA SHALL BE SALVAGED AND STOCKPILED IN AND SURROUNDED BY SILT FENCE UNTIL IT CAN BE REPLACED IN PROPOSED GREEN SPACE AREAS.
4. SOIL EXCAVATED FROM THE CUT AREAS SHALL BE MOVED AND GRADED INTO FILL AREAS PROMPTLY.
5. SOIL BROUGHT TO THE SITE FOR FILLING SHALL BE GRADED INTO FILL AREAS AS IT ARRIVES.
6. GRAVEL FILTER BAGS OR STRAW BALES SHALL BE PLACED AROUND EACH INLET OR CULVERT PIPE IMMEDIATELY AFTER THEY ARE PLACED OR CONSTRUCTED.
7. THE CONTRACTOR SHALL PROVIDE ANY FURTHER EROSION CONTROL MEASURES IN ADDITION TO THOSE LISTED TO ENSURE THAT SILT WILL NOT LEAVE THE PROJECT CONFINES.
8. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
9. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM THE SITE IF NOT RE-USEABLE ONSITE.
10. THE CONTRACTOR SHALL ENSURE THAT ALL DRAINAGE STRUCTURES, CULVERTS, INLETS, FLUMES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
11. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY STABILIZATION AS REQUIRED.
12. THE CONTRACTOR SHALL PROVIDE INGRESS/EGRESS TRACKING PAD(S) FOR VEHICULAR TRAFFIC TO ACCESS THE SITE AT LOCATION(S) APPROVED BY THE OWNER'S REPRESENTATIVE.
13. ALL DITCHES AND SLOPES WITHIN THE PROJECT LIMITS SHALL BE SEEDED AND STABILIZED IMMEDIATELY AFTER THEY HAVE BEEN GRADED AND CONSTRUCTED.
14. ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED UPON COMPLETION OF FINAL GRADING. INSTALLATION AND MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES (TEMPORARY & PERMANENT) SHALL BE A CONTINUOUS OPERATION UNTIL ALL SITEWORK IS COMPLETE.
15. ALL SLOPES AND AREAS DISTURBED DURING CONSTRUCTION SHALL BE GRADED SMOOTH AND 4" OF TOPSOIL APPLIED. THE AREA SHALL THEN BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL A HEALTHY STAND OF PERMANENT VEGETATION HAS BEEN ESTABLISHED FOR ALL DISTURBED AREAS.
16. SILT FENCES SHALL BE INSPECTED AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. THE CONTRACTOR SHALL MAKE ANY REPAIRS IMMEDIATELY.
17. SILT FENCES SHALL BE INSPECTED FOLLOWING ANY ACTIVITY ON THE SITE WHICH MAY HAVE DAMAGED THE FENCE OR CAUSED ADDITIONAL SEDIMENT TO ACCUMULATE.
18. SHOULD THE SILT FENCE FABRIC COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, THE CONTRACTOR SHALL REPLACE IT PROMPTLY.
19. SEDIMENT DEPOSITS ACCUMULATED ALONG THE SILT FENCE SHALL BE REMOVED AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE.
20. CARE MUST BE TAKEN TO AVOID UNDERMINING THE SILT FENCE DURING CLEANOUT.
21. THE LANDSCAPING PLAN INDICATES GREEN SPACE AREAS THAT SHALL BE COVERED WITH TOPSOIL, AND MULCH FOR GROWING PERMANENT VEGETATION, AND AREAS THAT SHALL BE PERMANENTLY STABILIZED WITH BUILDINGS, PAVEMENT AND SIDEWALKS.
22. ONCE THE SITE IS BROUGHT TO PROPOSED GRADE, PROVIDE TEMPORARY HYDROSEEDING TO ASSIST WITH EROSION AND SEDIMENT CONTROL ON THE AREAS THAT WILL NOT BE PAVED. IF HYDROSEEDING IS NOT SUCCESSFUL, THE AREA WILL BE RE-HYDROSEEDED UNTIL IT IS SUCCESSFUL.
23. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE.



ADA RAMP 1 DETAIL



ADA RAMP 2 DETAIL

CFS ENGINEERS
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LANCE W. SCOTT
NUMBER E-25555
10/21/21

Mark	Description	Date	Appr.
-	CITY SUBMITTAL	10/21/21	

Designed by: RP
Drawn by: RP
Checked by: LWS
Submitted by: ---
Date: 03-25-2015
Reviewed by: ---
Plot scale: 1:20
File name: 215065-ST-SHCD Public Street Grading and Erosion Control Plan.dwg
Plot date: 7/27/2022 10:55:54 AM

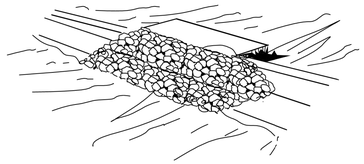
SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

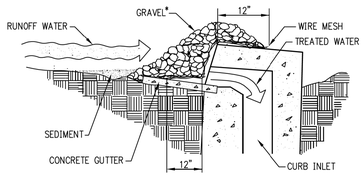
Construction Drawings

NE ENGLISH MANOR DRIVE
GRADING AND EROSION CONTROL PLAN

C1003

GRAVEL CURB INLET SEDIMENT TRAP





CROSS SECTION
NOT TO SCALE

NOTE:

*USE CLEAN GRAVEL 1/2" TO 1" IN DIAMETER.

SOURCE: MODIFIED FROM VA. DCR, 1992

GRAVEL CURB INLET SEDIMENT TRAP NOTES:

A) GENERAL NOTES:

1. WIRE MESH WITH 1/2–INCH OPENINGS SHALL BE PLACED OVER THE CURB INLET OPENING SO THAT AT LEAST 12 INCHES OF WIRE EXTENDS ACROSS THE INLET COVER AND AT LEAST 12 INCHES OF WIRE EXTENDS ACROSS THE CONCRETE GUTTER FROM THE INLET OPENING.
2. STONE SHALL BE PILED AGAINST THE WIRE SO AS TO ANCHOR IT AGAINST THE GUTTER AND INLET COVER AND TO COVER THE INLET OPENING COMPLETELY.
3. IF THE STONE BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCK AND CLEANED OR REPLACED.

B) INSPECTION AND MAINTENANCE:

1. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN EVENT OF 1/2–INCH OR GREATER AND REPAIRS MADE AS NEEDED.
2. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA SO THAT IT WILL NOT ERODE.
3. STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

AMERICAN PUBLIC WORKS ASSOCIATION		
APWA	KANSAS CITY METROPOLITAN CHAPTER	
GRAVEL CURB INLET SEDIMENT TRAP	STANDARD DRAWING NUMBER ESC-24	ADOPTED:

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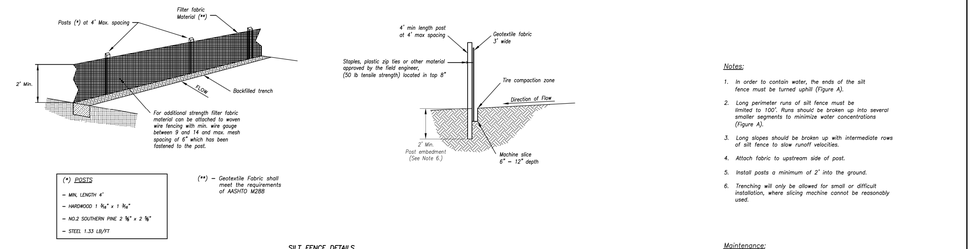
SOURCE: MODIFIED FROM MARC STANDARD DRAWINGS

Drawn By: MJF	
Checked By: DL	
Date: 05/2023	
Proj. #	

GEN-3A



SILT FENCE DETAILS
Not to Scale

Notes:

1. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
2. Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
3. Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
4. Attach fabric to upstream side of post.
5. Install posts a minimum of 2' into the ground.
6. Trenching will only be allowed for small or difficult installation, where slicing machine cannot be reasonably used.

Maintenance:

1. Remove and dispose of sediment deposits when the deposit approaches ½ the height of silt fence.
2. Repair as necessary to maintain function and structure.

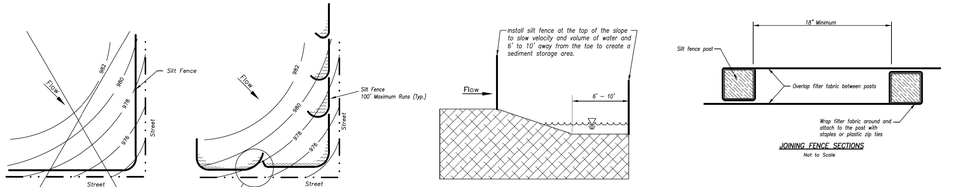
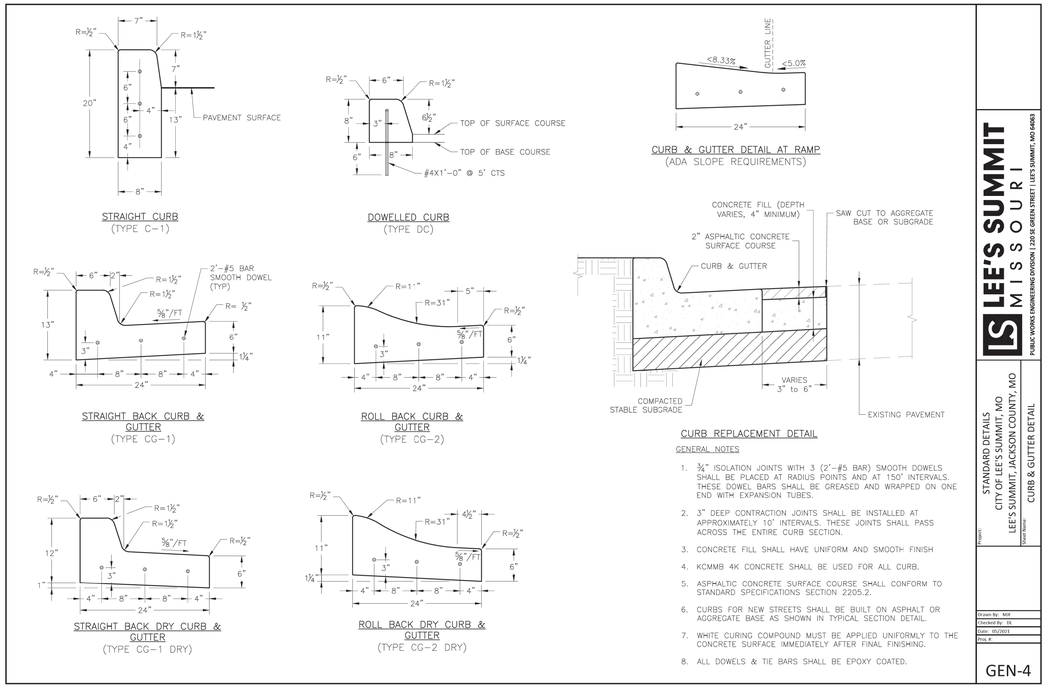


Figure A

SILT FENCE LAYOUT
Not to Scale

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

AMERICAN PUBLIC WORKS ASSOCIATION		
Kansas City Metro Chapter APWA	KANSAS CITY METRO CHAPTER	
SILT FENCE	STANDARD DRAWING NUMBER ESC-03	ADOPTED: 10/24/2016



GENERAL NOTES

1. ¾" ISOLATION JOINTS WITH 3 (2'–#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
8. ALL DOWELS & TIE BARS SHALL BE EPOXY COATED.

Drawn By: MJF	
Checked By: DL	
Date: 05/2023	
Proj. #	

GEN-4

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Mark	Description	Date	Appr.
	CITY SUBMITTAL	09/xx/21	
	REVISED PER COMMENTS	11/12/21	

Designed by: RP
Drawn by: RP
Cked by: LWS
Submitted by: ---
Date: 03-25-2015
Reviewed by: ---
Plot scale: 1=0
File name: 21065-ST-SHCD Public Street Details.dgn
Plot date: 7/2022

SUMMIT POINT
504 NE Chipman Road
Lee's Summit, Missouri

Public Street Construction Drawings

DETAILS

Sheet reference number:
C1004

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