

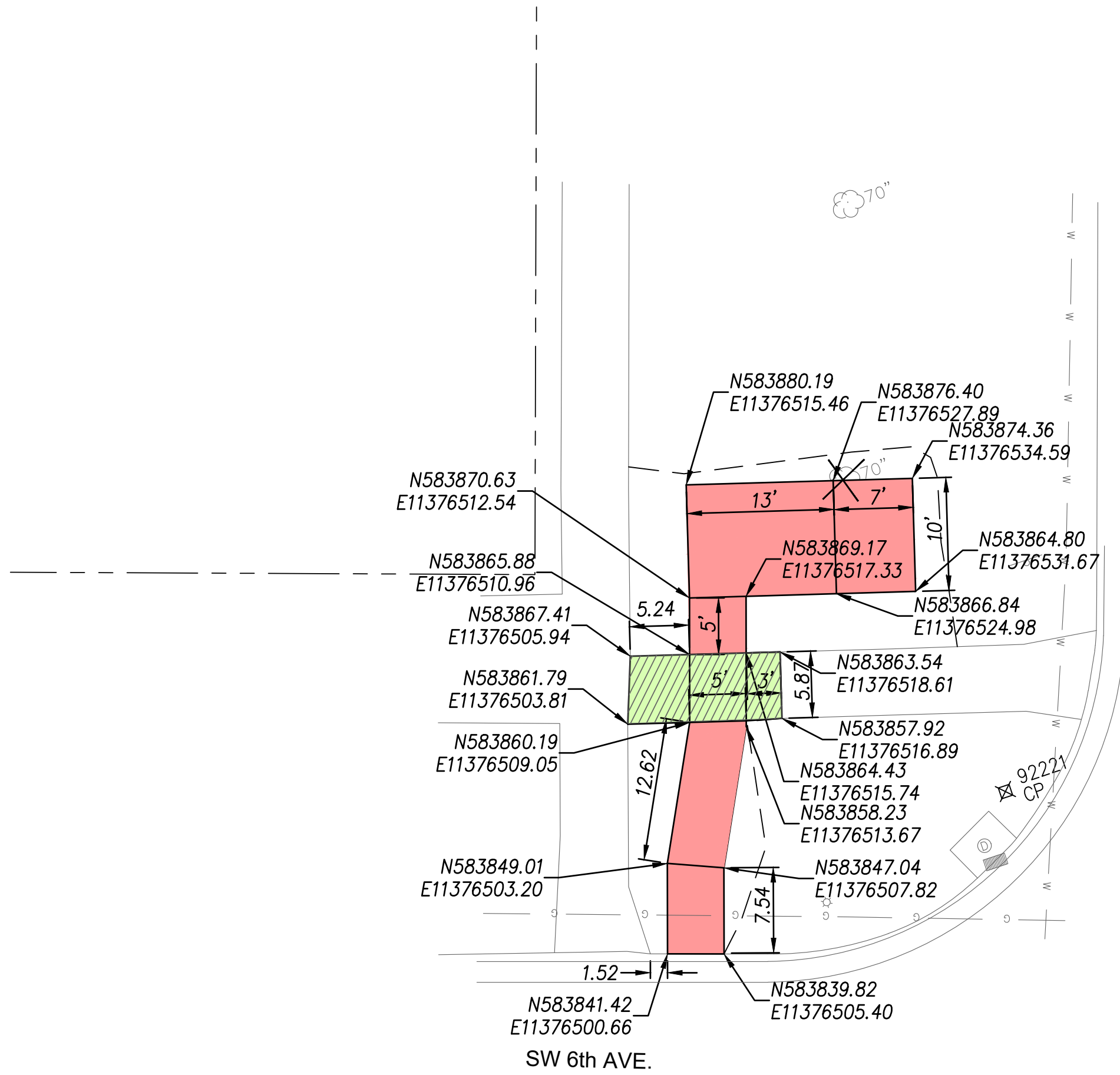


TOPEKA METRO

**REQUEST FOR BIDS
Concrete Pads for Bus Stops
Phase 9 Group 3
TO-20-14**

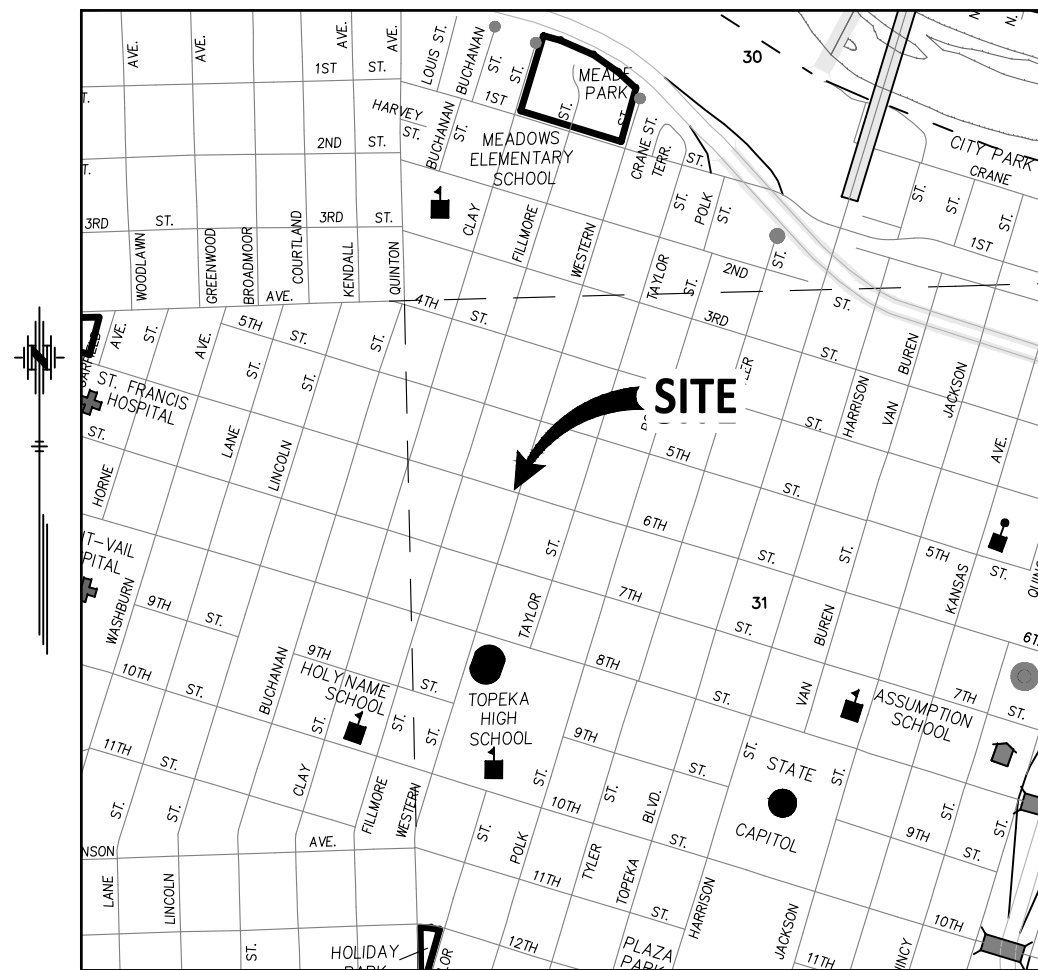
**Appendix III
Engineering Studies**

J:\01\SPW\155044_15014_P14_173\DWG\Design\155044.dwg P14 173 21:36:46, 08/16/2019, 11/26/2019 2:47:34 PM



SW WESTERN AVE.

SW 6th AVE.



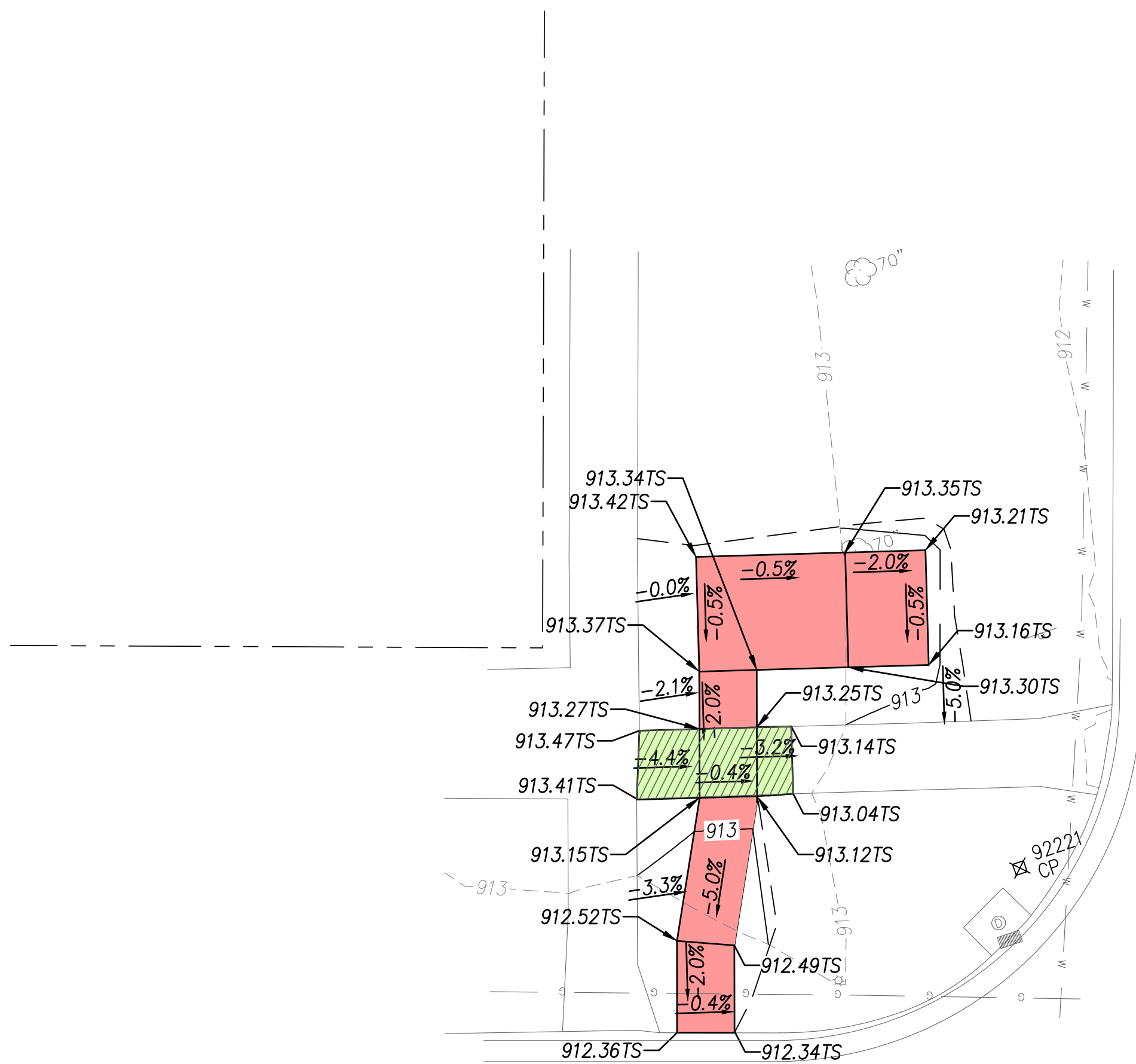
VICINITY MAP
NO SCALE

155044 CONTROL TMTA PH 8.5
NAD 83 KRCS ZONE 11
NAVD 88

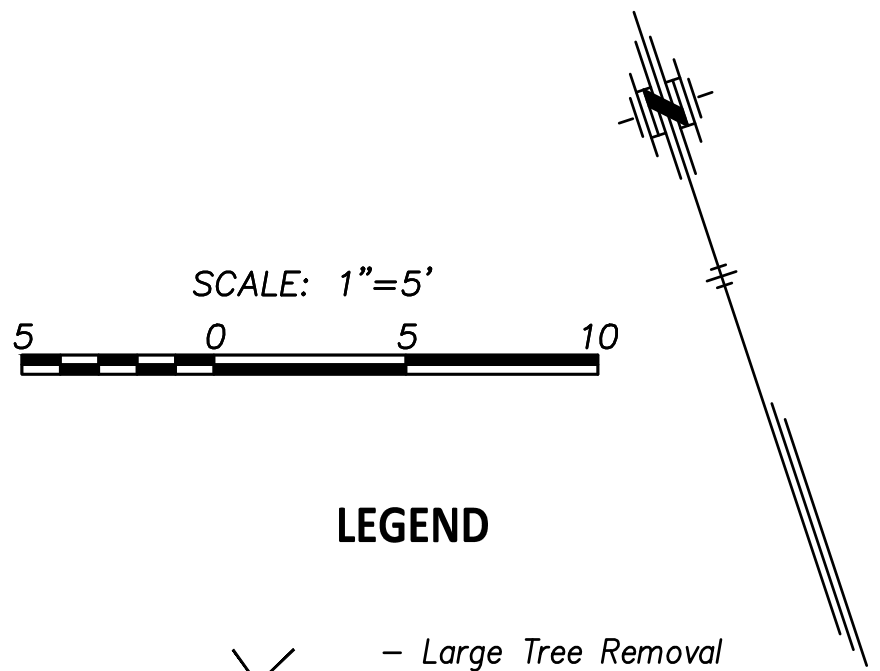
CP 92221 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 583845.4910 E: 11376533.5530 EL: 912.68
1) TO SOUTH EDGE E-W WALK 7.0' N
2) TO B/C MW CURB RETURN 3.4' SE
3) TO NW COR INLET 2.1' SW

CP 92222 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 583814.0590 E: 11376592.0230 EL: 913.90
1) TO NORTH B/C 6TH AVE 3.5' S
2) TO NE COR INLET 4.0' W
3) TO KEY FH 15.9' WNW

92202
CP



SW WESTERN AVE.

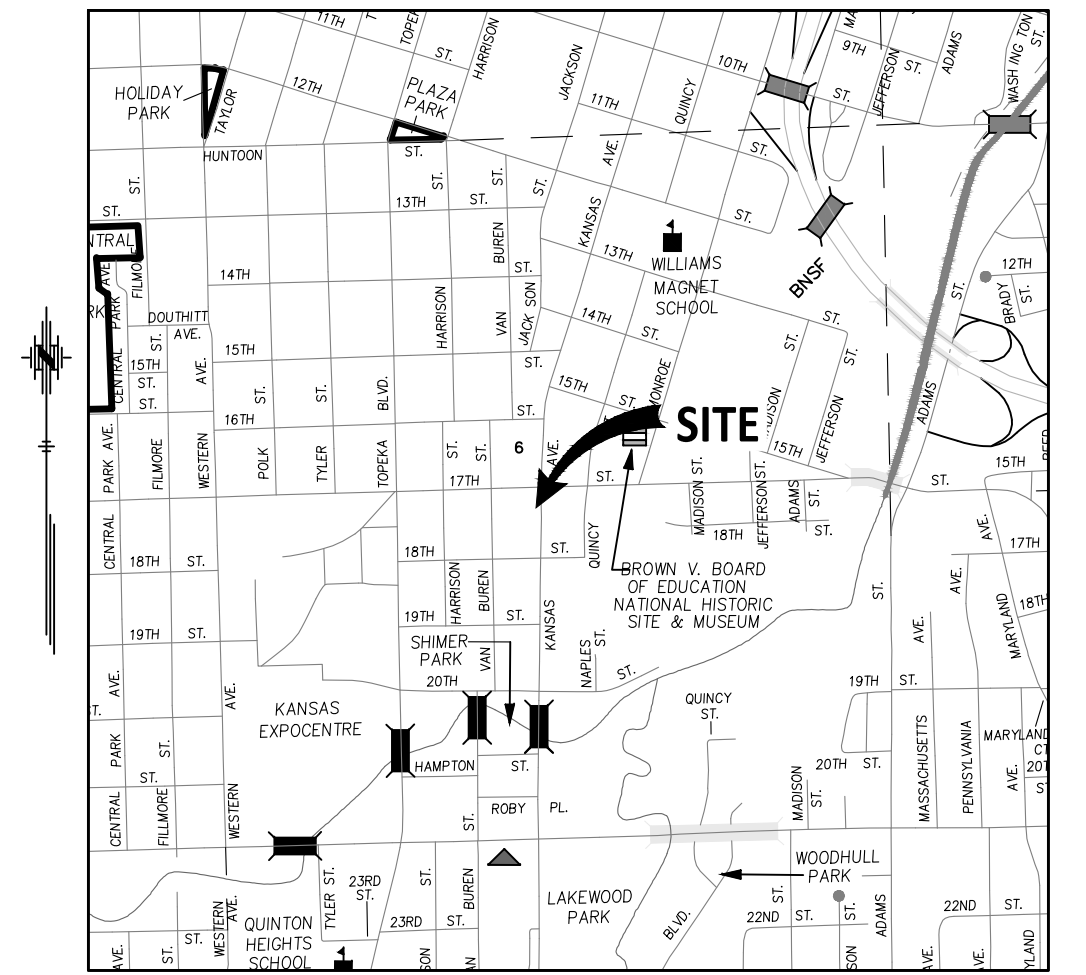
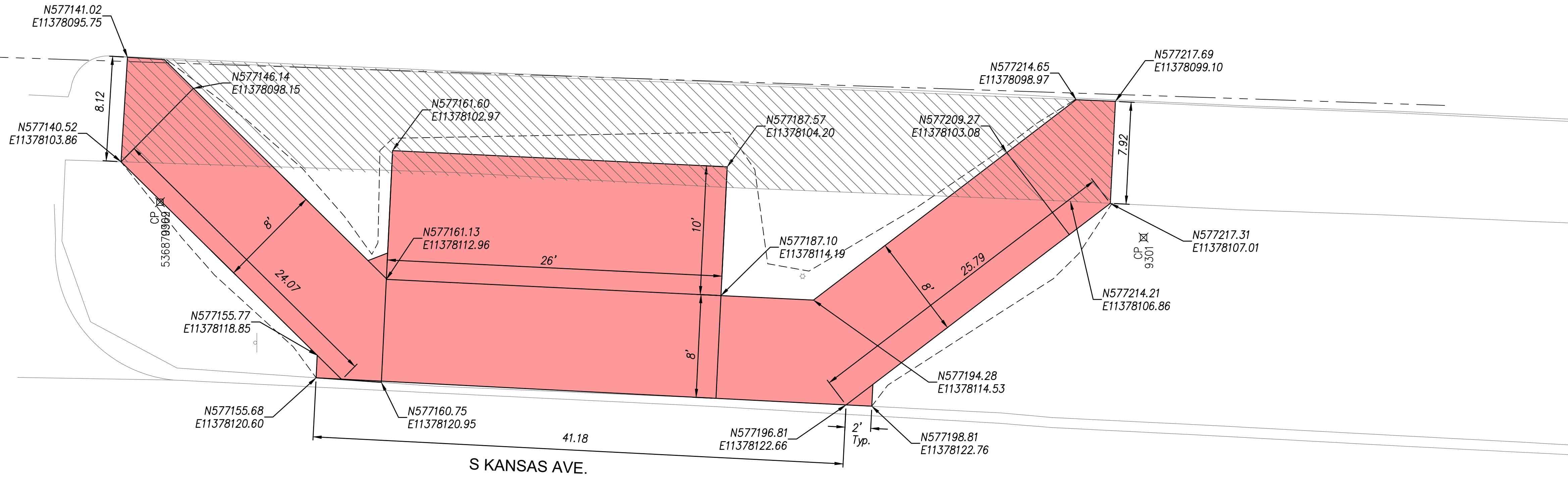


Note:
1. All grading side slopes shall be a 6:1
unless noted on plan.

SW 6TH AVE. & SW WESTERN AVE. (SW) (Shelter, Bike Rack & Trash Can)		CFS ENGINEERS cfse.com 2830 SW Woodside Dr., Topeka, KS 66614 P: 785-272-4706 F: 785-272-4735	
NOTE: TMTA, PHASE 9.2		CFS PROJECT # 15-5044 DATE: 07/2019	
CITY OF TOPEKA		SHAWNEE CO., KS PROJECT MANAGER: KH SHEET 1 OF 1	

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PRIVATE DR.



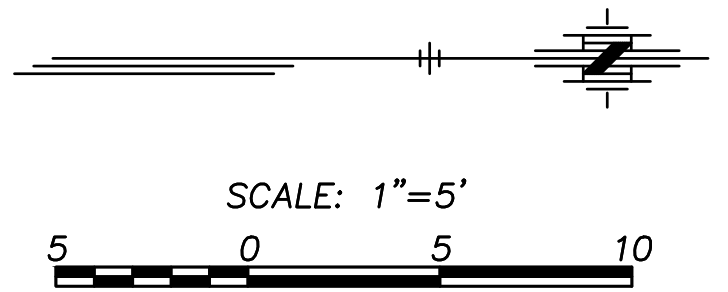
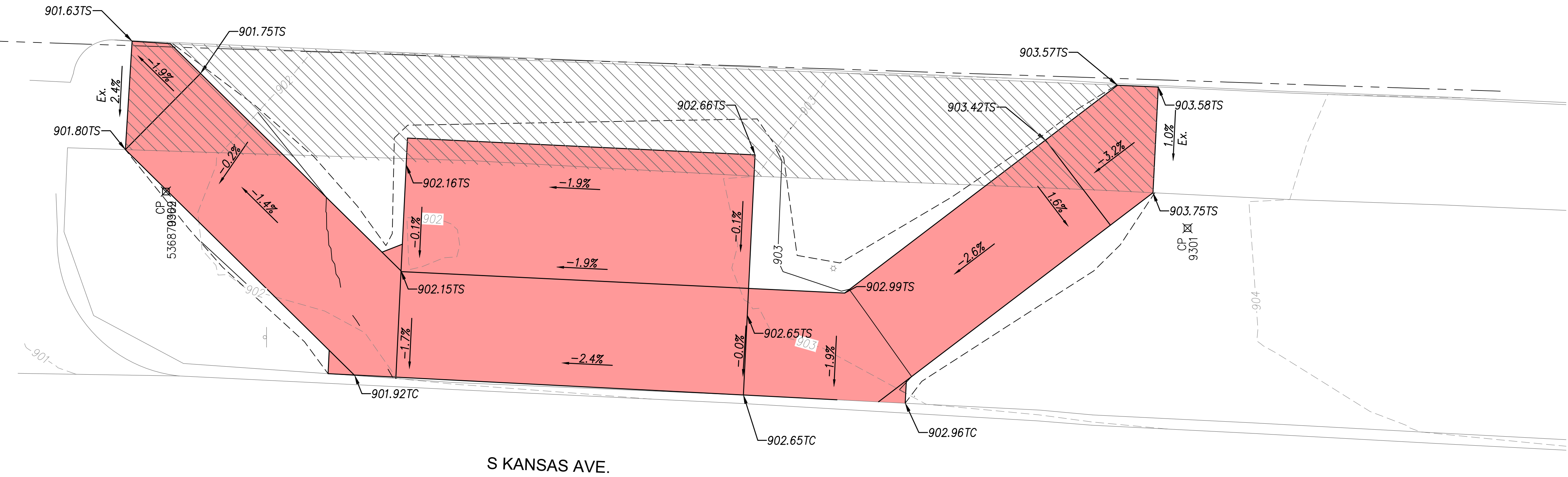
VICINITY MAP
NO SCALE

155044 CONTROL TMTA PH 8.5
NAD 83 KRCS ZONE 11
NAVD 88

CP 9301 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 577219.889 E: 11378109.657 EL: 904.04
1) NORTH FACE LP 26.33' SSE
2) EAST EDGE SIDEWALK WEST SIDE KANSAS AVE 2.50' W
3) TOP KEY FH 41.04' NNE
4) SOUTH FACE O'REILLY SIGN POST 61.75' NNW

CP 9302 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 577143.551 E: 11378106.990 EL: 902.18
1) @ SE ENTR TO O'REILLY 23.0' S
2) EAST EDGE SIDEWALK WEST SIDE KANSAS AVE 2.95' W
3) SOUTH FACE LP 49.51' NNE
4) NORTH FACE LP 40.05' SSE

PRIVATE DR.



LEGEND

- Construct Comb. Sidewalk & Retaining Wall
- Construct 5" Non-Reinforced Pad w/ 4" AB-3
- Conc. Sidewalk Removal
- Construct 4" Conc. Sidewalk w/ 4" AB-3

TP Top of Pavement
TS Top of Sidewalk
TC Top of Curb
TW Top of Wall

Note:
1. All grading side slopes shall be a 6:1 unless noted on plan.

S KANSAS AVE. & SW 17TH ST.
(MBW)

(Med. Shelter, Bike Rack & Trash Can)
CITY OF TOPEKA SHAWNEE CO., KS

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© 785-272-4706 F: 785-272-4735

NOTE: TMTA, PHASE 9.3

CFS PROJECT # 15-5044

PROJECT MANAGER: KH

DATE: 07/2019

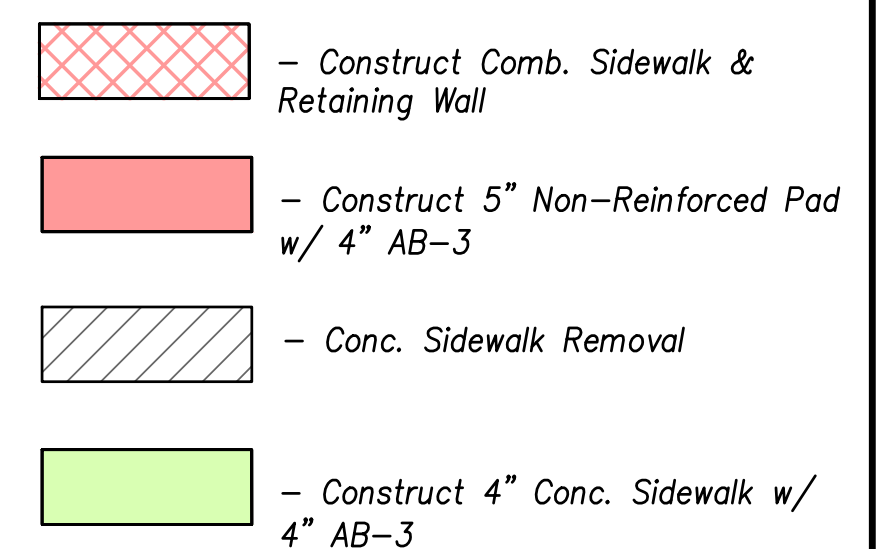
SHEET 1 OF 1



- ▶ THIS TYPE OF WALL MAY BE USED TO A MAXIMUM HEIGHT OF 3'-0".
- ▶ WEEP HOLES AT A MAXIMUM OF 15' CENTER TO CENTER WITH COARSE AGGREGATE PLACED AT EACH WEEP HOLE 18" IN ALL DIRECTIONS ABOVE FLOW LINE.
- ▶ CONCRETE SHALL BE CLASS "A" THROUGHOUT WITH GRADE 40 REINFORCING.
- ▶ PLACE 1/2" HARDWARE SCREEN AT WEEP HOLES TO RETAIN AGGREGATE.



1) C WALMART ENTR	62.0' S
2) NORTH FACE PP	7.0' SW
3) TOP KEY FH	29.9' NNE
4) C WV	30.25' N



TP	Top of Pavement
TS	Top of Sidewalk
TC	Top of Curb
TW	Top of Wall

Note:

1. All grading side slopes shall be a 6:1 unless noted on plan.

**SW MACVICAR AVE. AT
WALMART ENTRANCE (MBW)**
(Bench, Bike Rack & Trash Can)

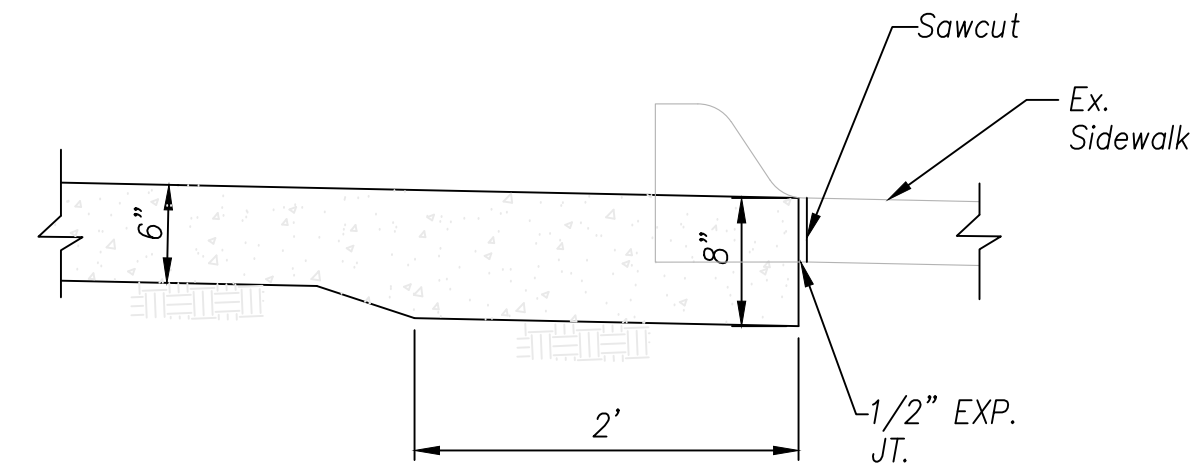
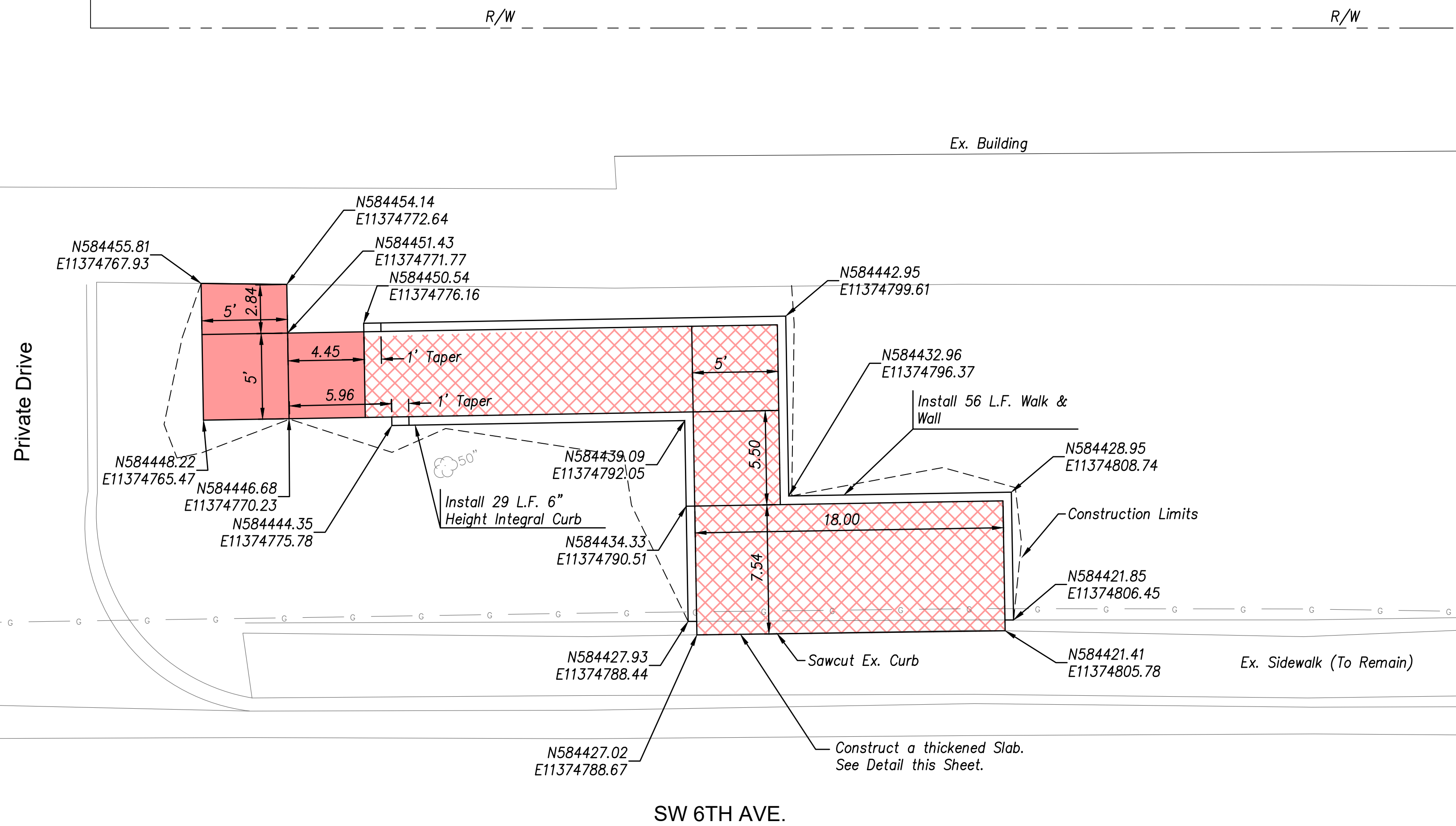
CFS ENGINEERS
cfse.com 2930 SW Woodside Dr, Topeka, KS 66614
 o: 785-272-4706 f: 785-272-4736

NOTE: TMTA , PHASE 9.3	
CFS PROJECT # 15-5044	DATE: 07/2019
PROJECT MANAGER: KH	SHEET 1 OF 1

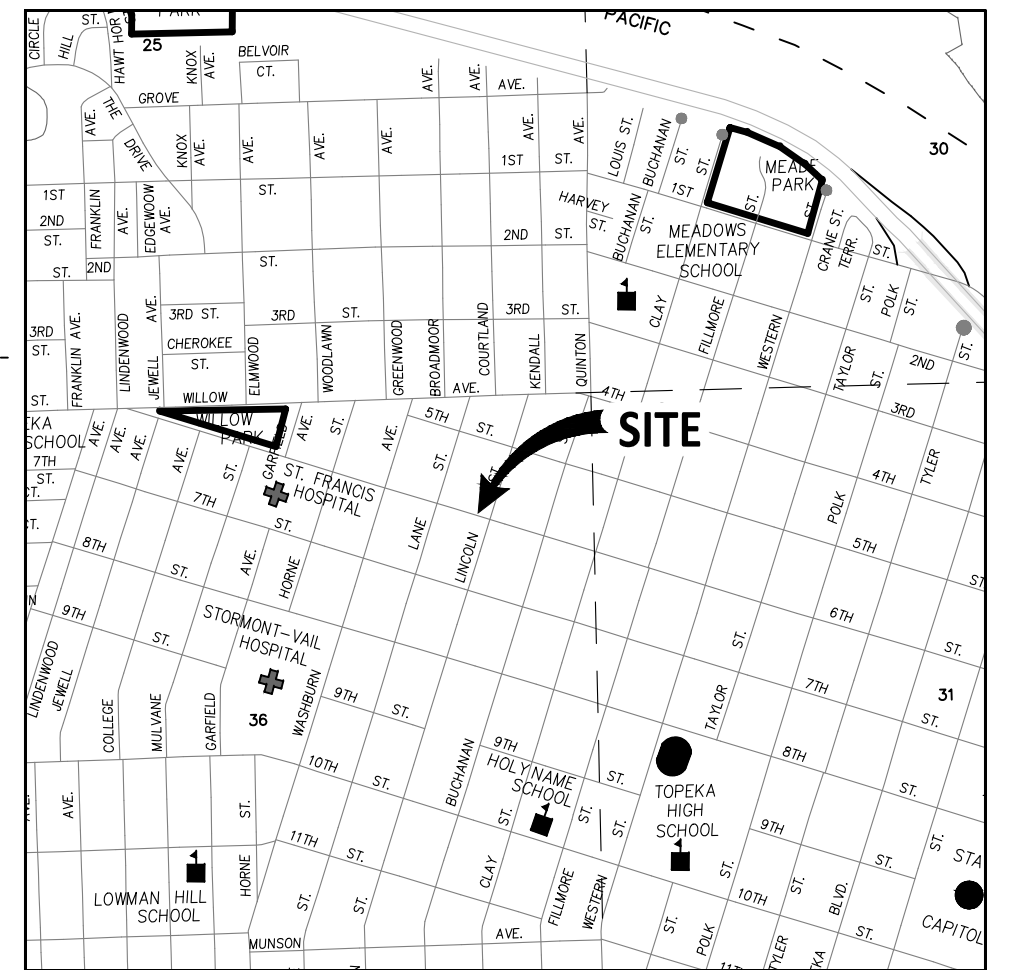
CITY OF TOPEKA

SHAWNEE CO., KS

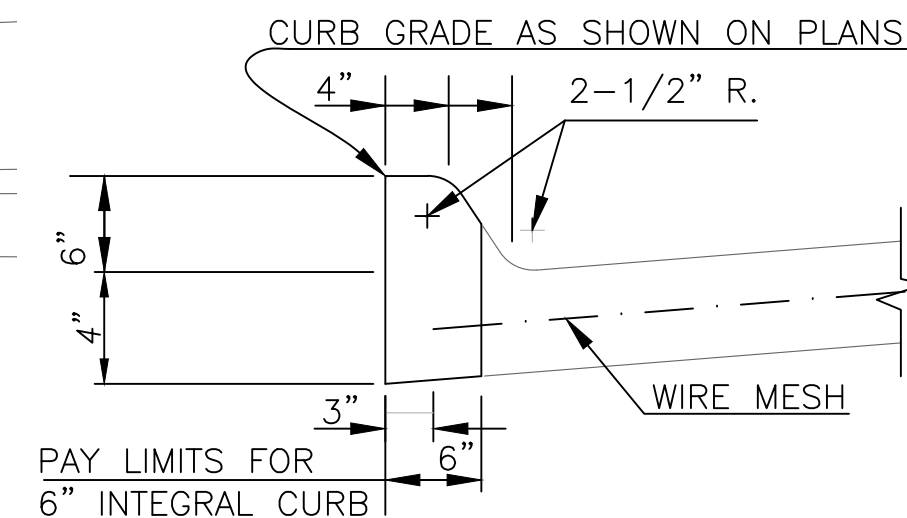
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THICKENED SLAB



VICINITY MAP
NO SCALE



INTEGRAL CURB

155044 CONTROL TMTA PH 8.5
NAD 83 KRCS ZONE 11
NAVD 88

CP 9309 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 584456.169 E: 11374701.126 EL: 925.15

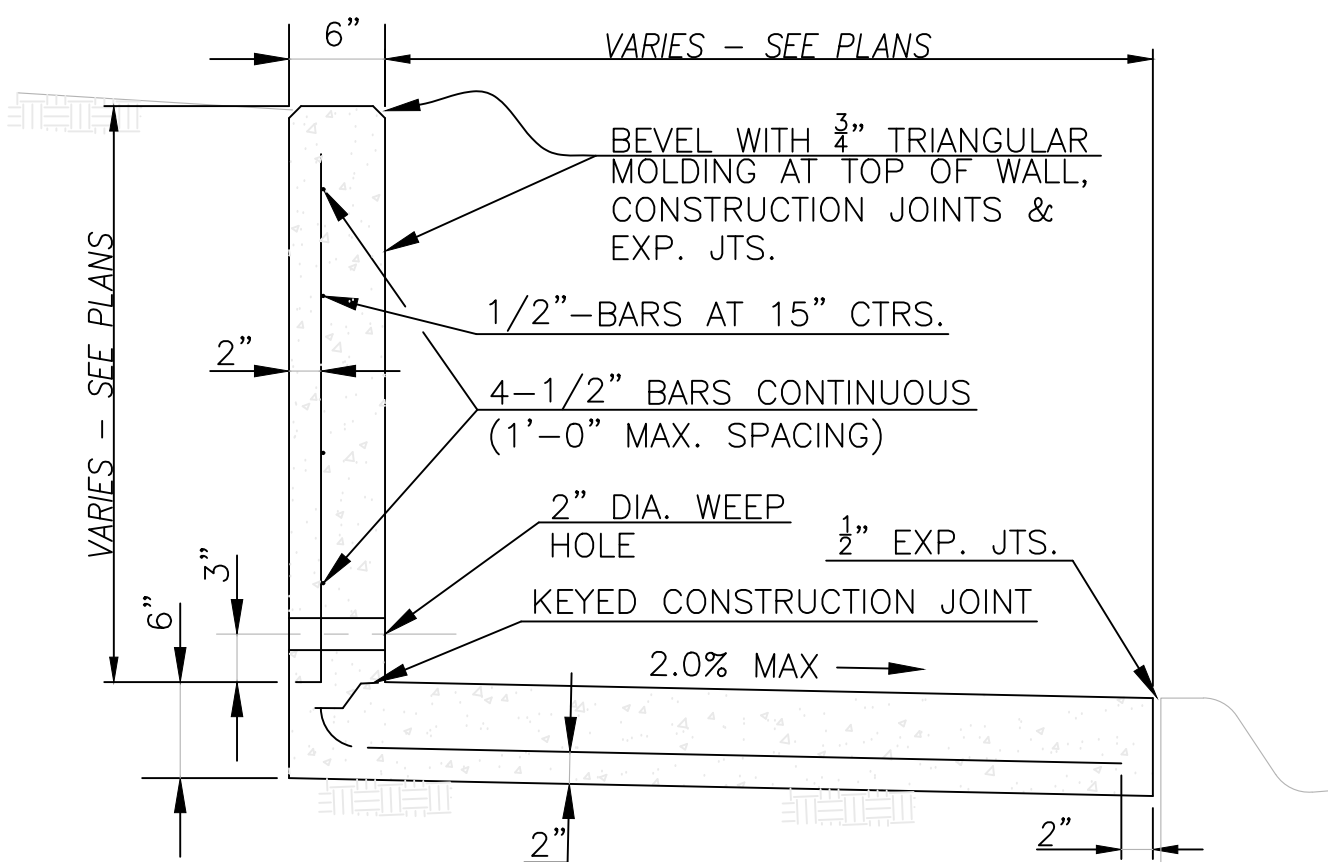
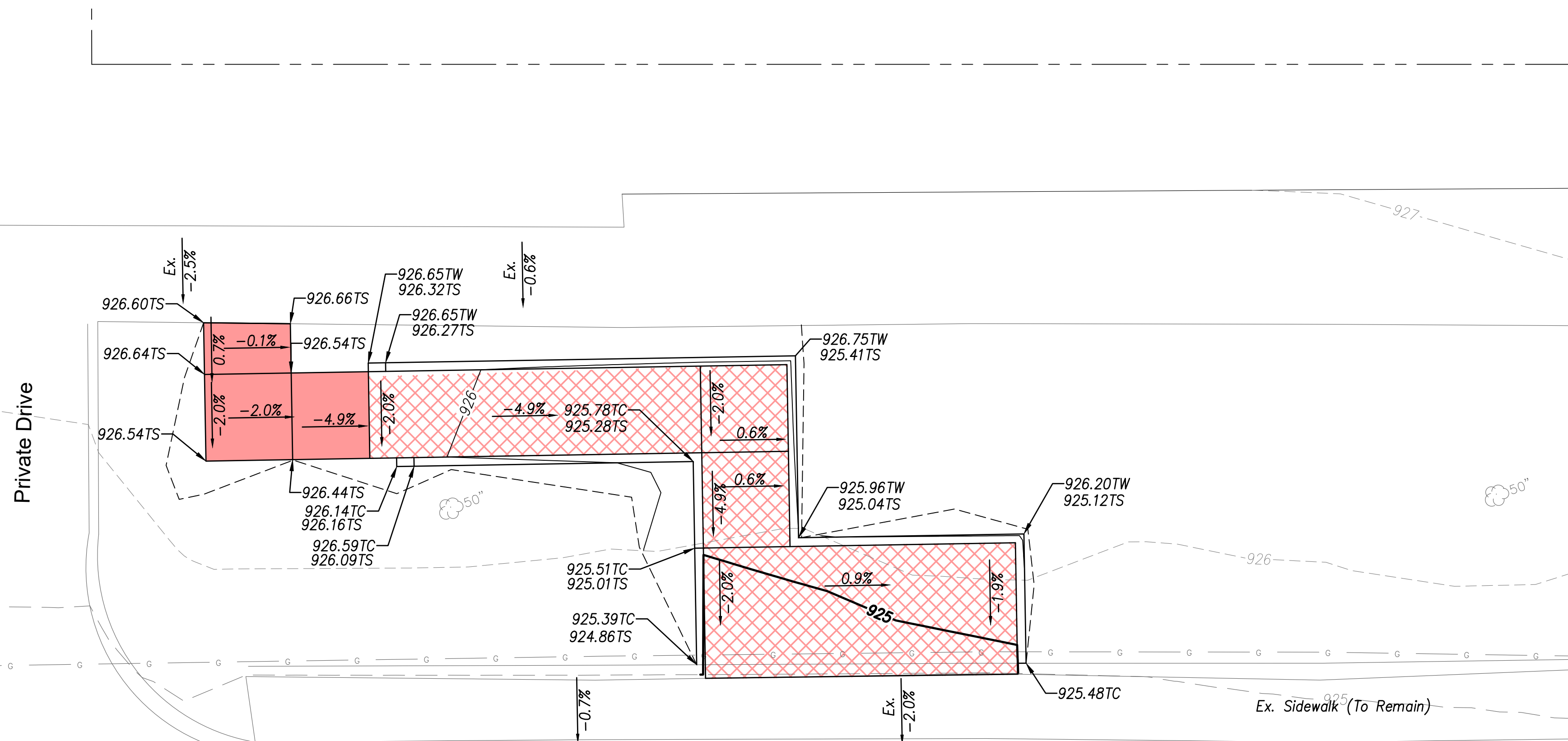
- 1) @ 6TH AVE
- 2) @ ALLEY BTW LINCOLN & LANE
- 3) NW COR CURB INLET
- 4) EAST FACE LP

37.0' S
48.0' E
18.06' E
15.92' WSW

CP 9310 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 584367.059 E: 11374735.687 EL: 924.16

- 1) @ 6TH AVE
- 2) @ ALLEY BTW LINCOLN & LANE
- 3) NW COR CONC STOOP (1309 6TH ST)
- 4) EAST FACE PP

36.0' N
14.5' W
25.65' SSW
25.08' WSW



RETAINING WALL & WALK DETAILS

NOTE:
▶ THIS TYPE OF WALL MAY BE USED TO A MAXIMUM HEIGHT OF 3'-0".
▶ WEEP HOLES AT A MAXIMUM OF 15' CENTER TO CENTER WITH COARSE AGGREGATE PLACED AT EACH WEEP HOLE 18" IN ALL DIRECTIONS ABOVE FLOW LINE.
▶ CONCRETE SHALL BE CLASS "A" THROUGHOUT WITH GRADE 40 REINFORCING.
▶ PLACE 1/2" HARDWARE SCREEN AT WEEP HOLES TO RETAIN AGGREGATE.

SCALE: 1"=5'
5 0 5 10

LEGEND

- Construct Comb. Sidewalk & Retaining Wall
- Construct 5" Non-Reinforced Pad w/ 4" AB-3
- Conc. Sidewalk Removal
- Construct 4" Conc. Sidewalk w/ 4" AB-3

TP Top of Pavement
TS Top of Sidewalk
TC Top of Curb
TW Top of Wall

Note:
1. All grading side slopes shall be a 6:1 unless noted on plan.

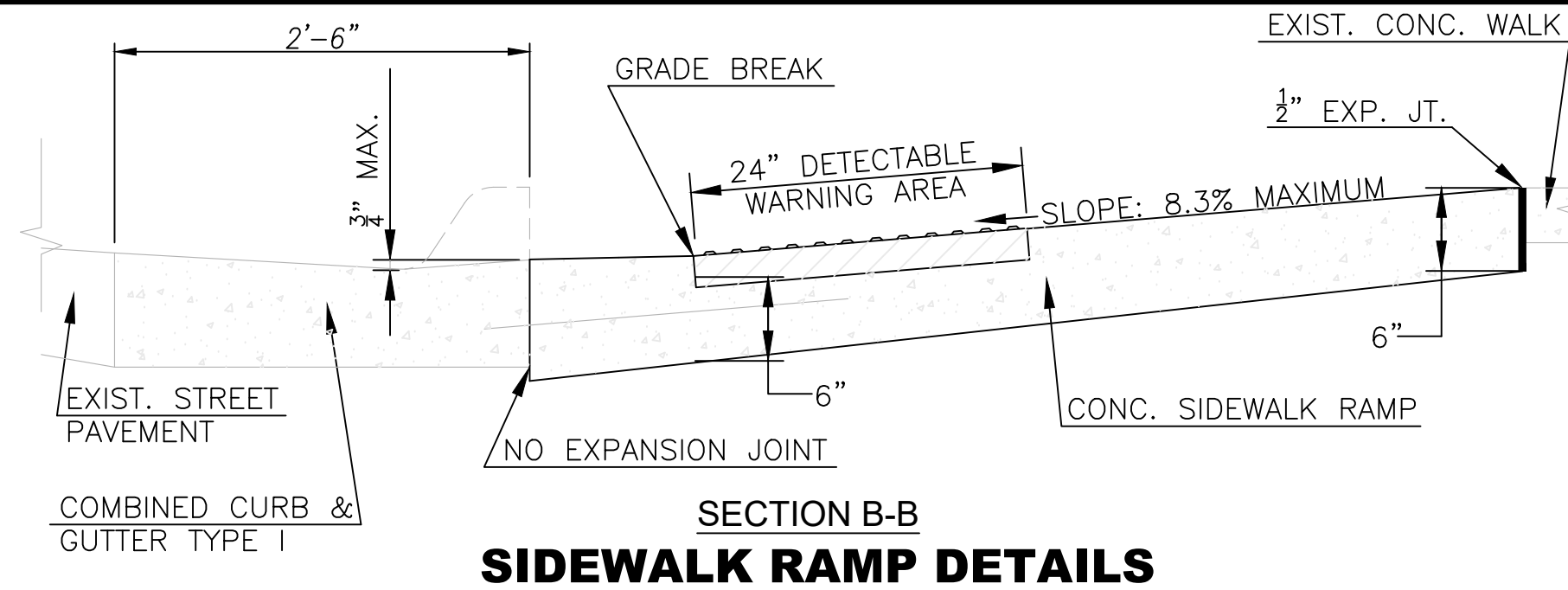
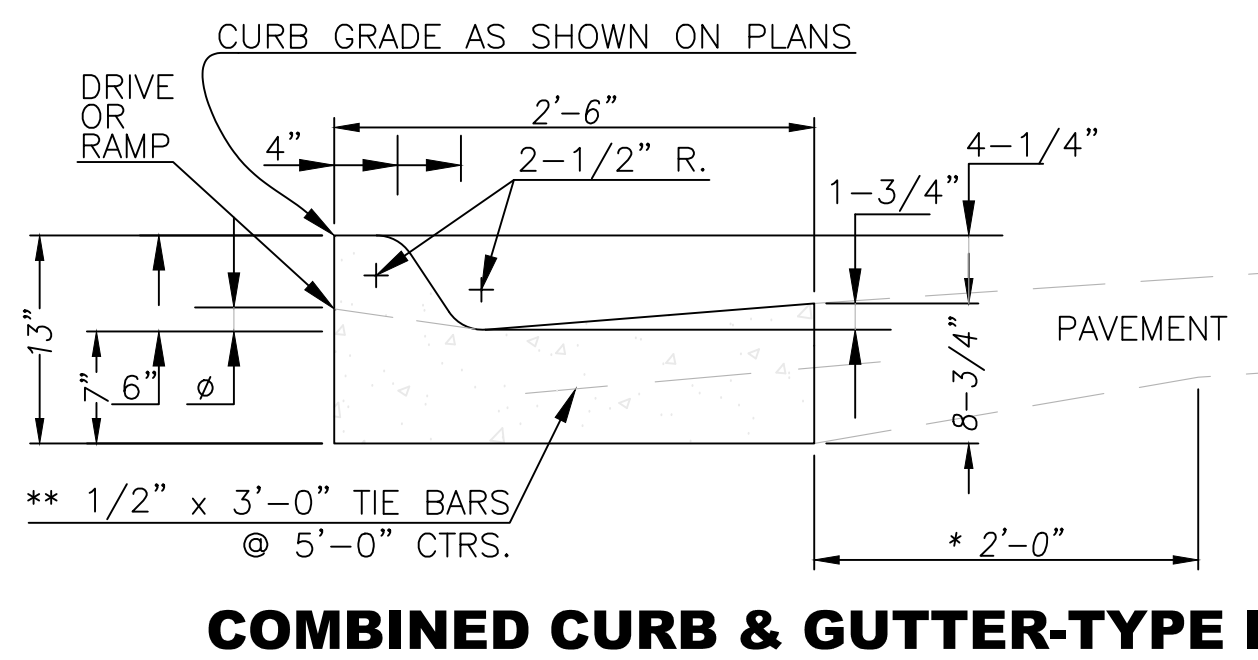
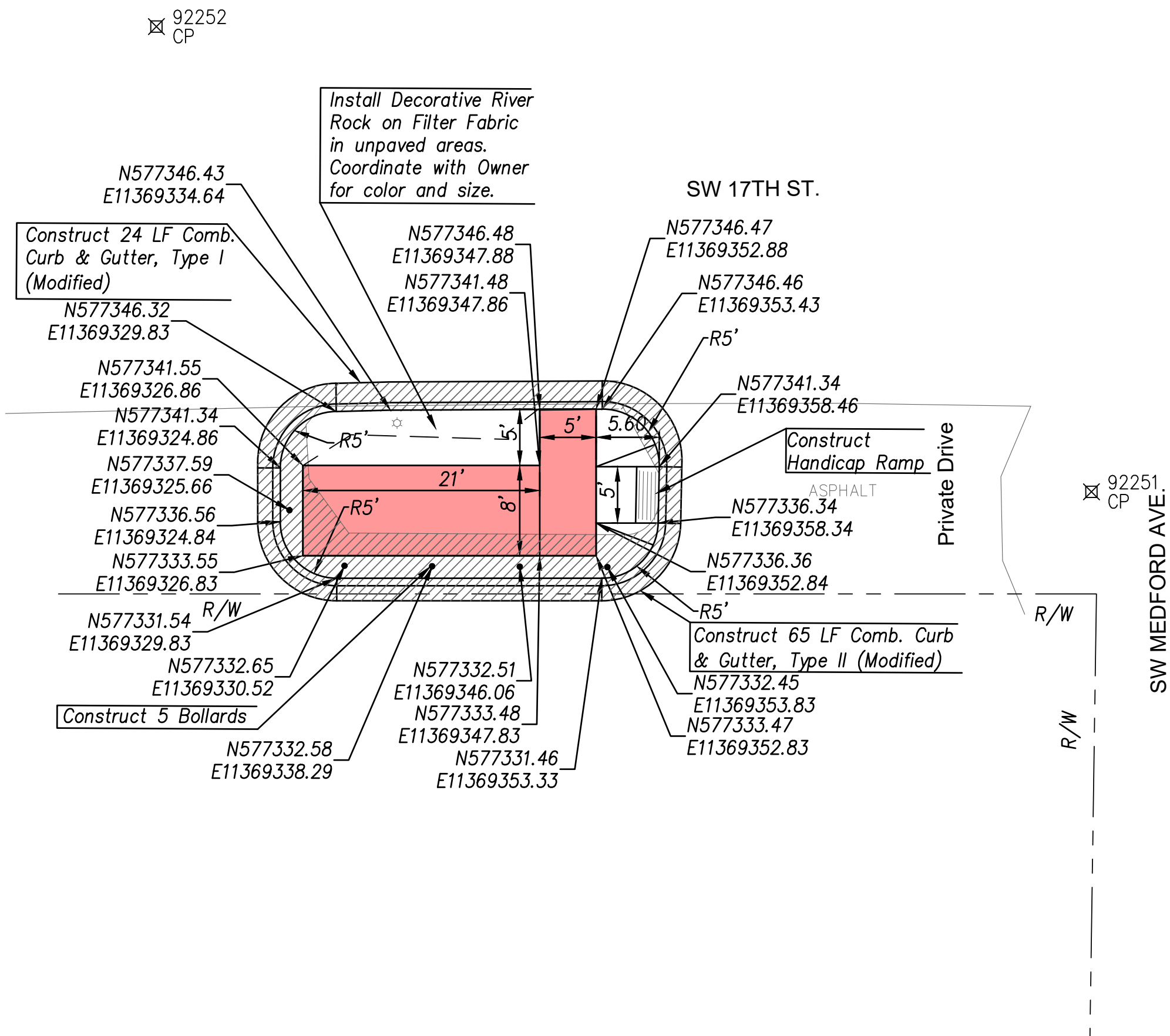
SW 6TH AVE. &
SW LINCOLN ST.
(Bench & Trash Can)

CITY OF TOPEKA

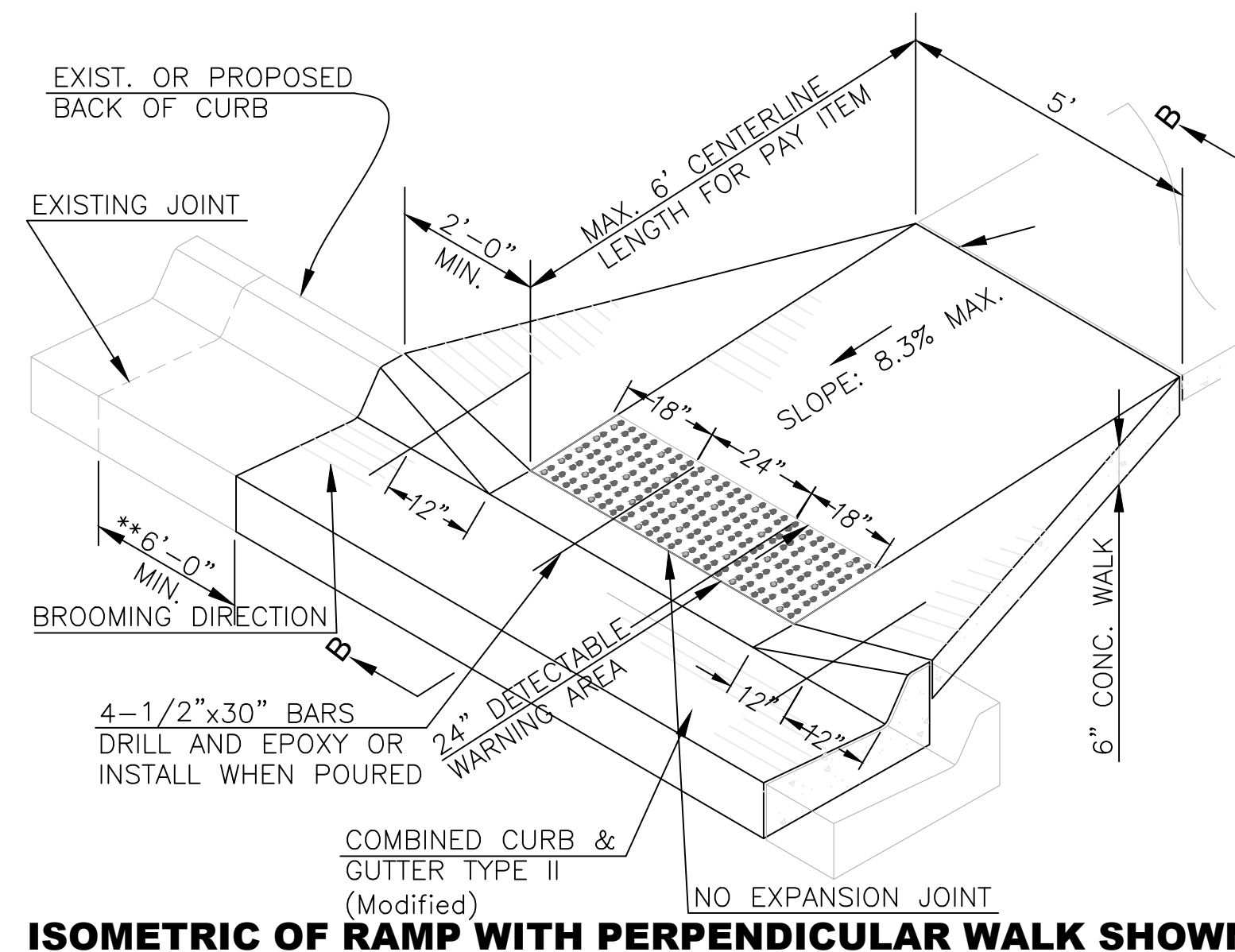
SHAWNEE CO., KS

CFS ENGINEERS
cfs.com
2830 SW Woodside Dr., Topeka, KS 66614
P: 785-272-4706 F: 785-272-4735

NOTE: TMTA, PHASE 9.3
CFS PROJECT # 15-5044 DATE: 07/2019
PROJECT MANAGER: KH SHEET 1 OF 1



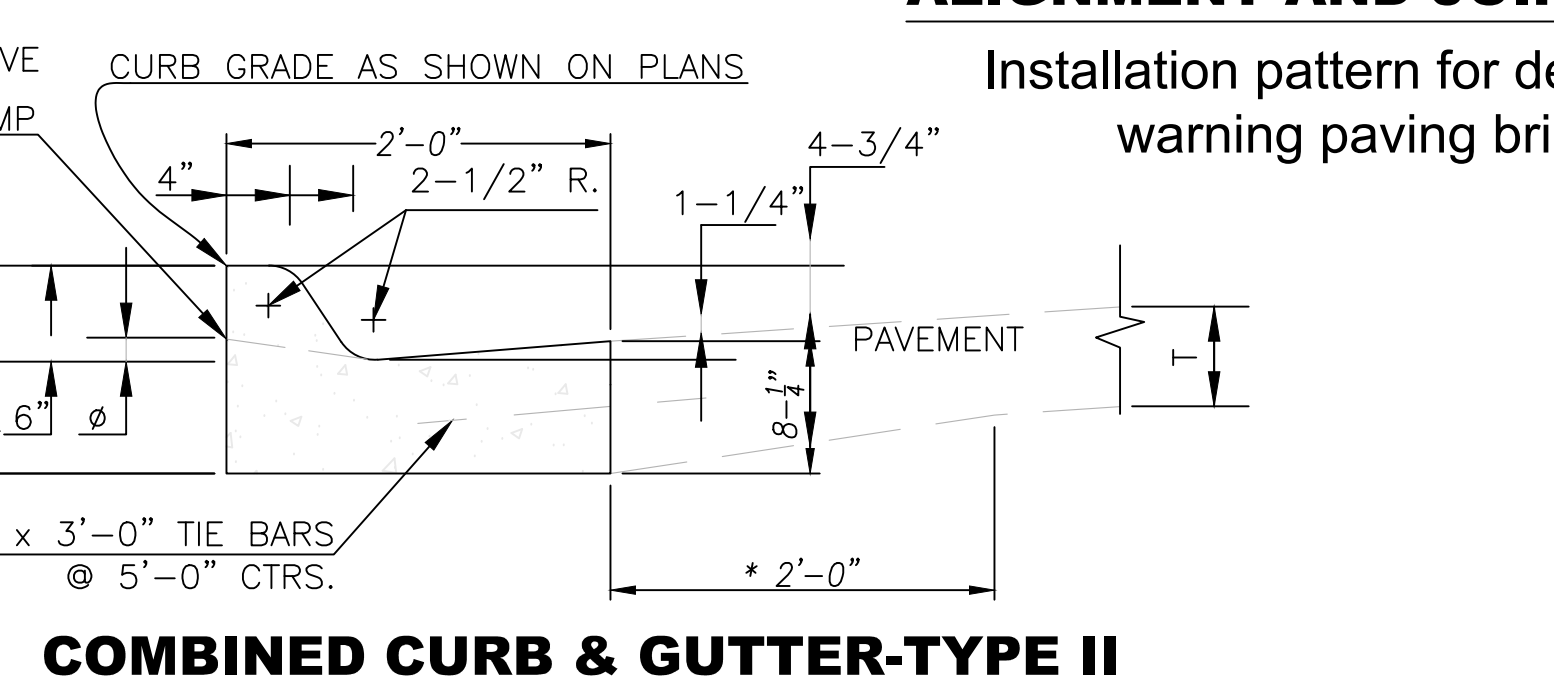
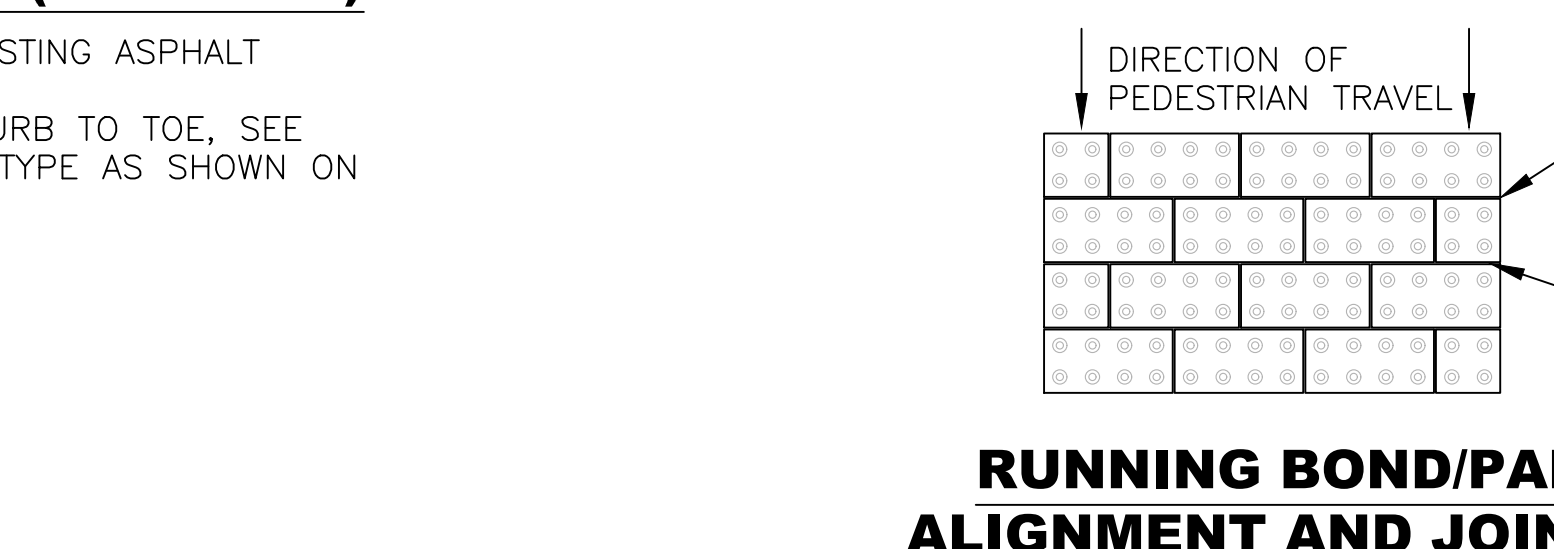
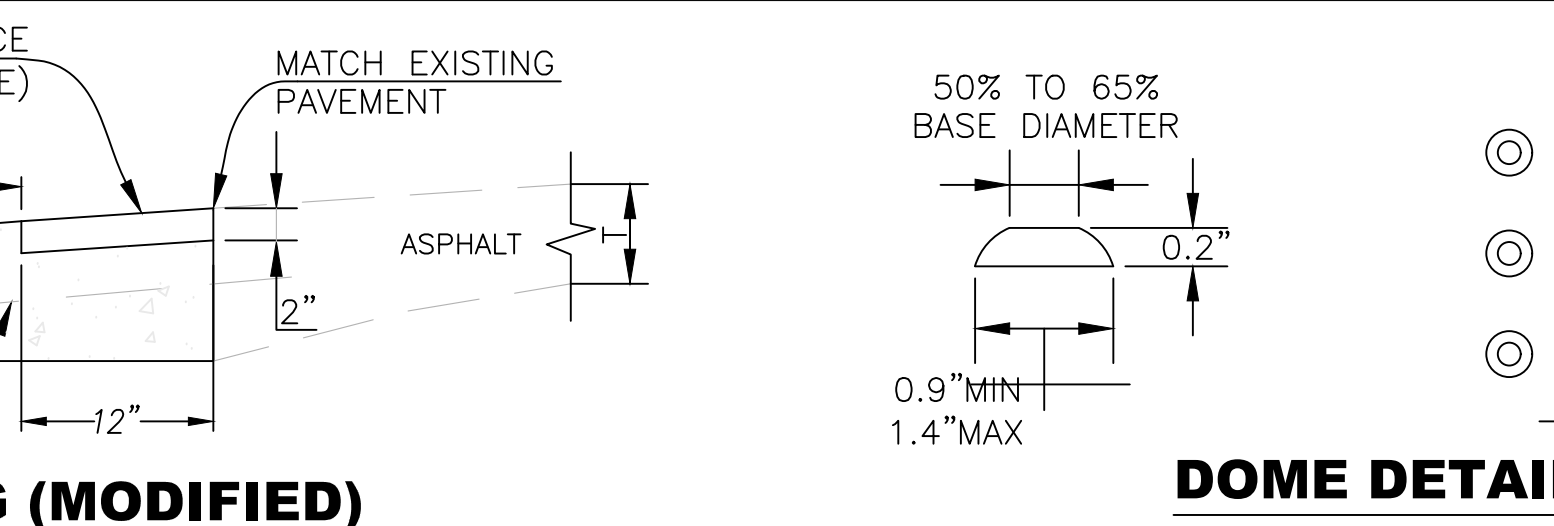
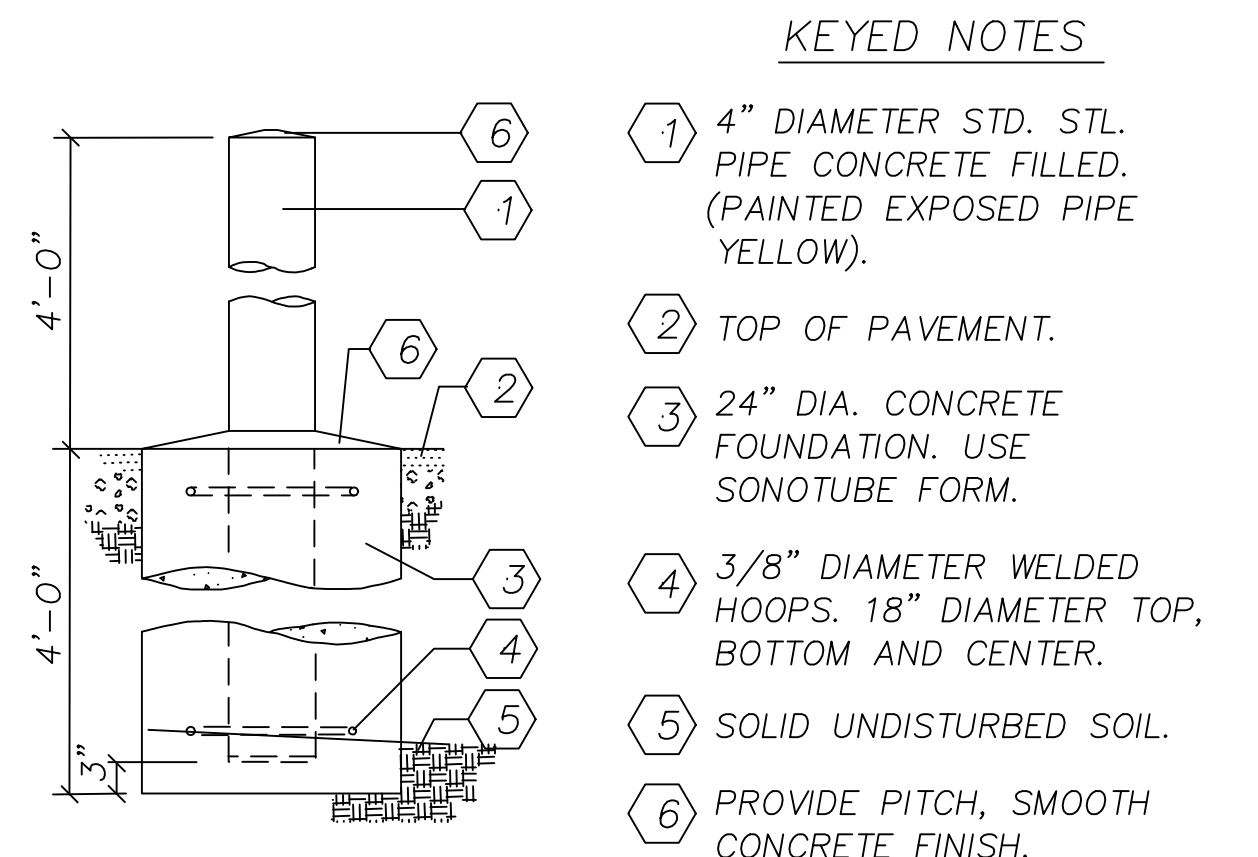
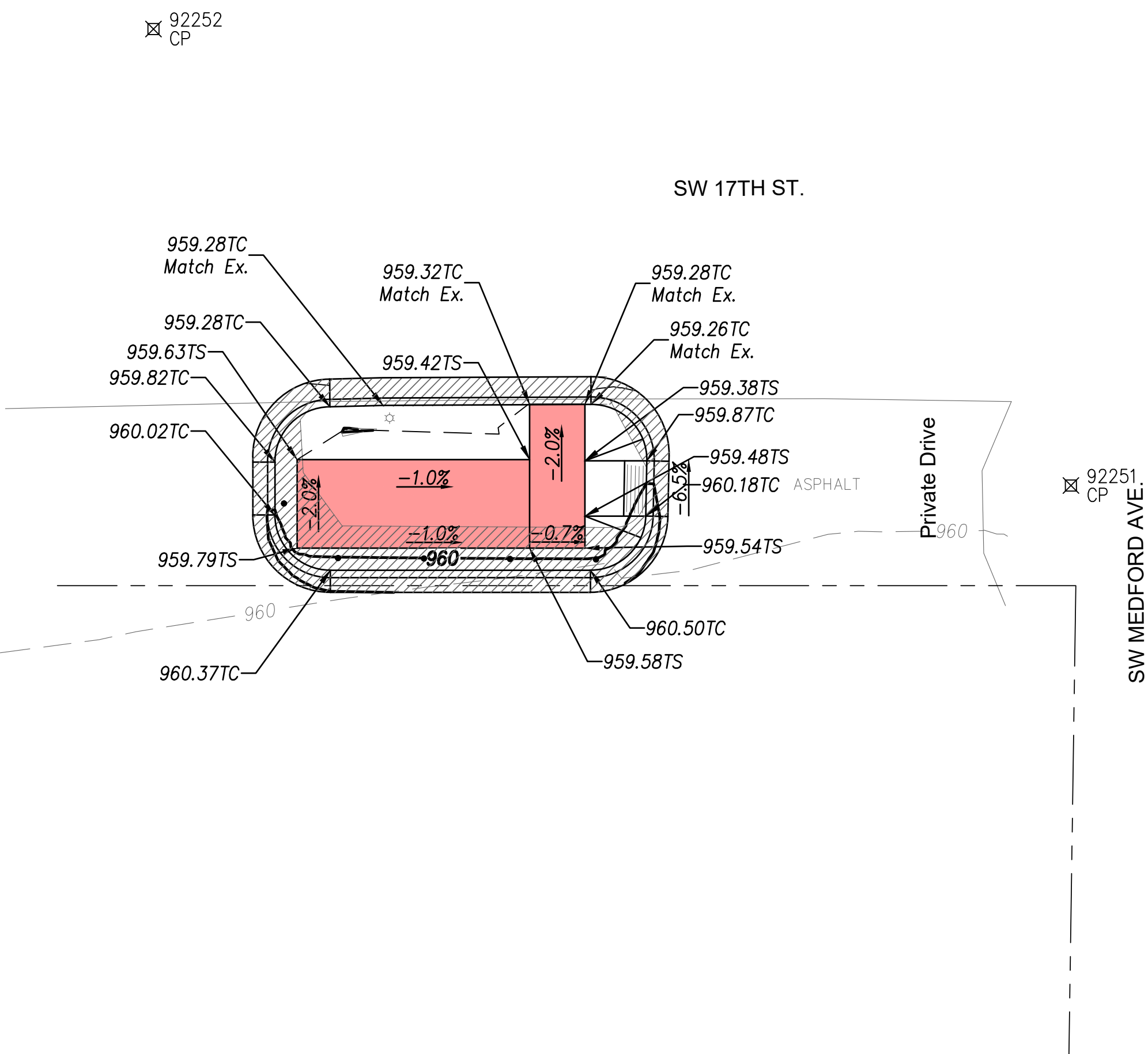
NOTES:
1. RAMP TO BE PAID FOR AS SIDEWALK RAMP. CURB AND GUTTER TO BE INCLUDED IN THE PRICE BID FOR COMBINED CURB AND GUTTER TYPE I.
2. SIDEWALK RAMP SHALL OBTAIN A MINIMUM OF 6" ABOVE ℓ FOR NEW SIDEWALK CONSTRUCTION.



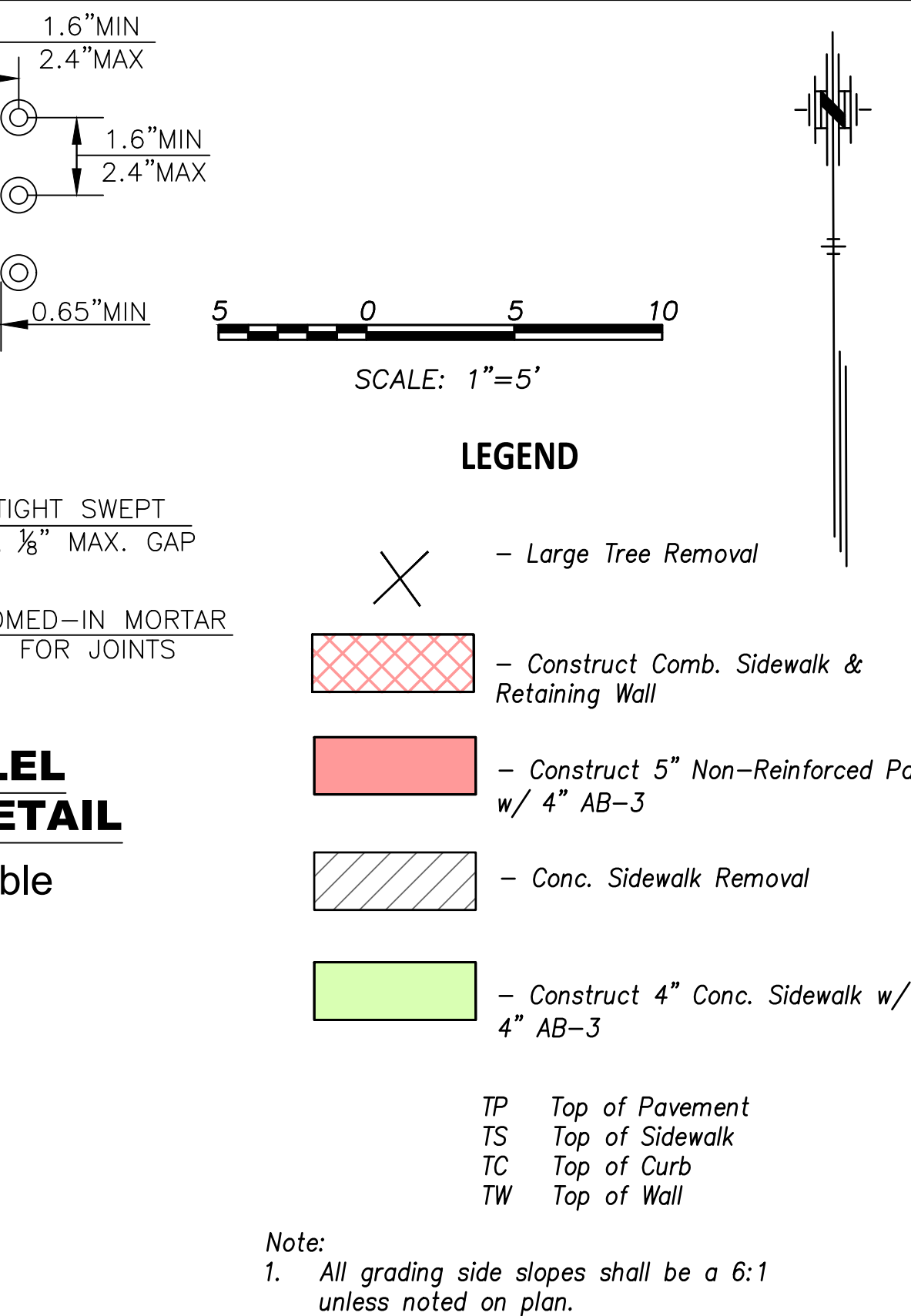
155044 CONTROL TMTA PH 8.5
NAD 83 KRCS ZONE 11
NAVD 88

CP 92251 SET 1/2" REBAR W/CAP (CFS CONTROL)
N:577338.988 E:11369396.775 EL:960.08
1) TO NORTH EDGE E-W WALK 3.3' S
2) TO B/C @ NORTH EDGE E-W WALK 10.3' ESE
3) TO ℓ SIGN POST 10.0' SSE

CP 92252 SET 1/2" REBAR W/CAP (CFS CONTROL)
N:577380.511 E:11369314.000 EL:959.72
1) TO NORTH B/C 17TH ST 3.0' S
2) TO PP 45.2' W
3) TO PP 38.4' E



NOTES:
* THE CONTRACTOR HAS THE OPTION OF MAINTAINING OR TRANSITIONING AS SHOWN AT NO ADDITIONAL COST.
**THE TIE BARS MAY BE ELIMINATED WITH ASPHALTIC CONCRETE PAVEMENT CONSTRUCTION.
 ϕ 1-1/2" FOR DRIVE ENTRANCES AND 3/4" FOR SIDEWALK RAMP



Note:
1. All grading side slopes shall be a 6:1 unless noted on plan.

SW 17TH ST. &
SW MEDFORD AVE. (SW)
(Bench, 2-Bike Racks & Trash Can)

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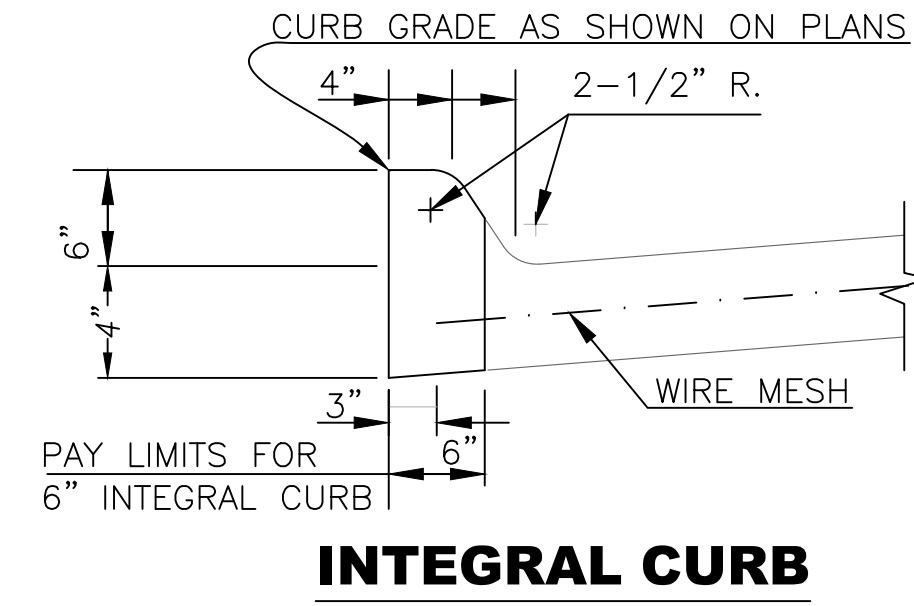
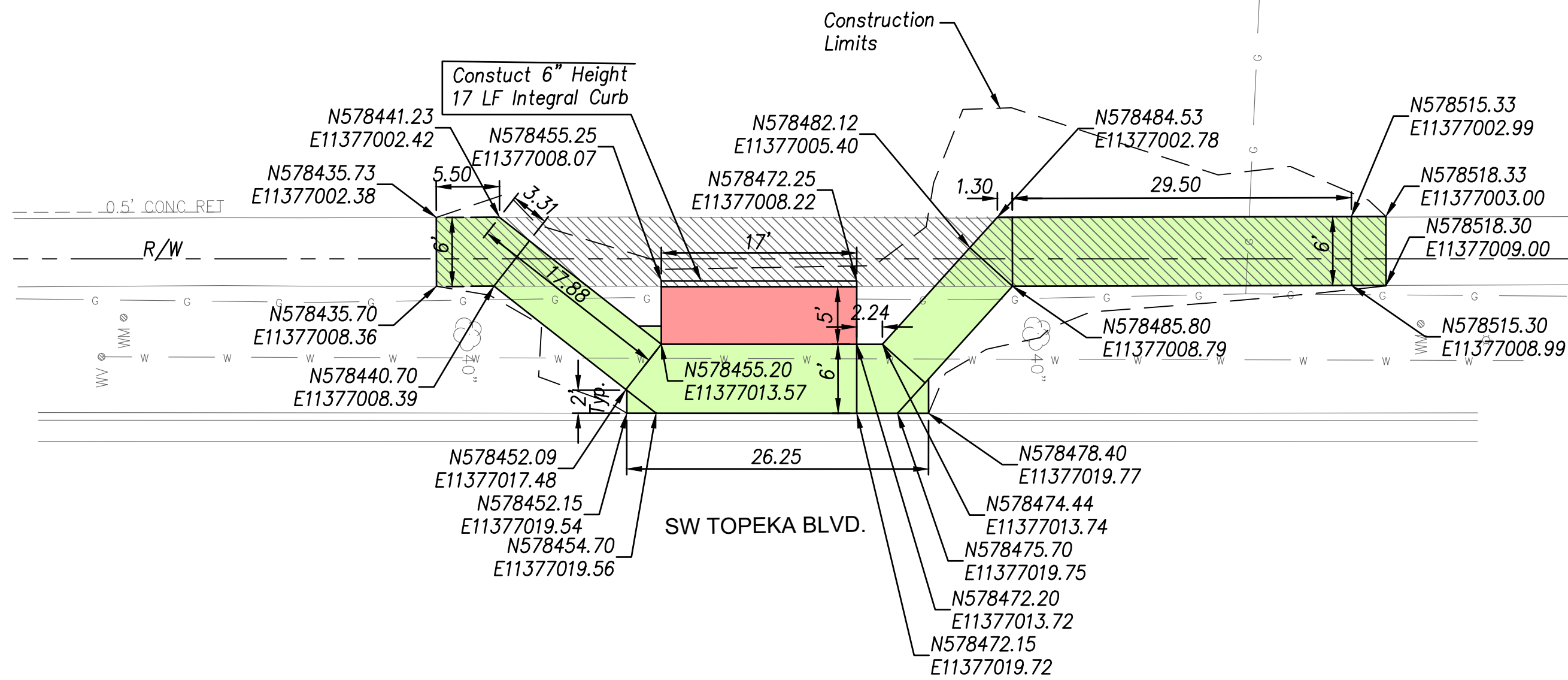
NOTE: TMTA, PHASE 9.2

CFS PROJECT # 15-5044 DATE: 07/2019

PROJECT MANAGER: KH SHEET 1 OF 1

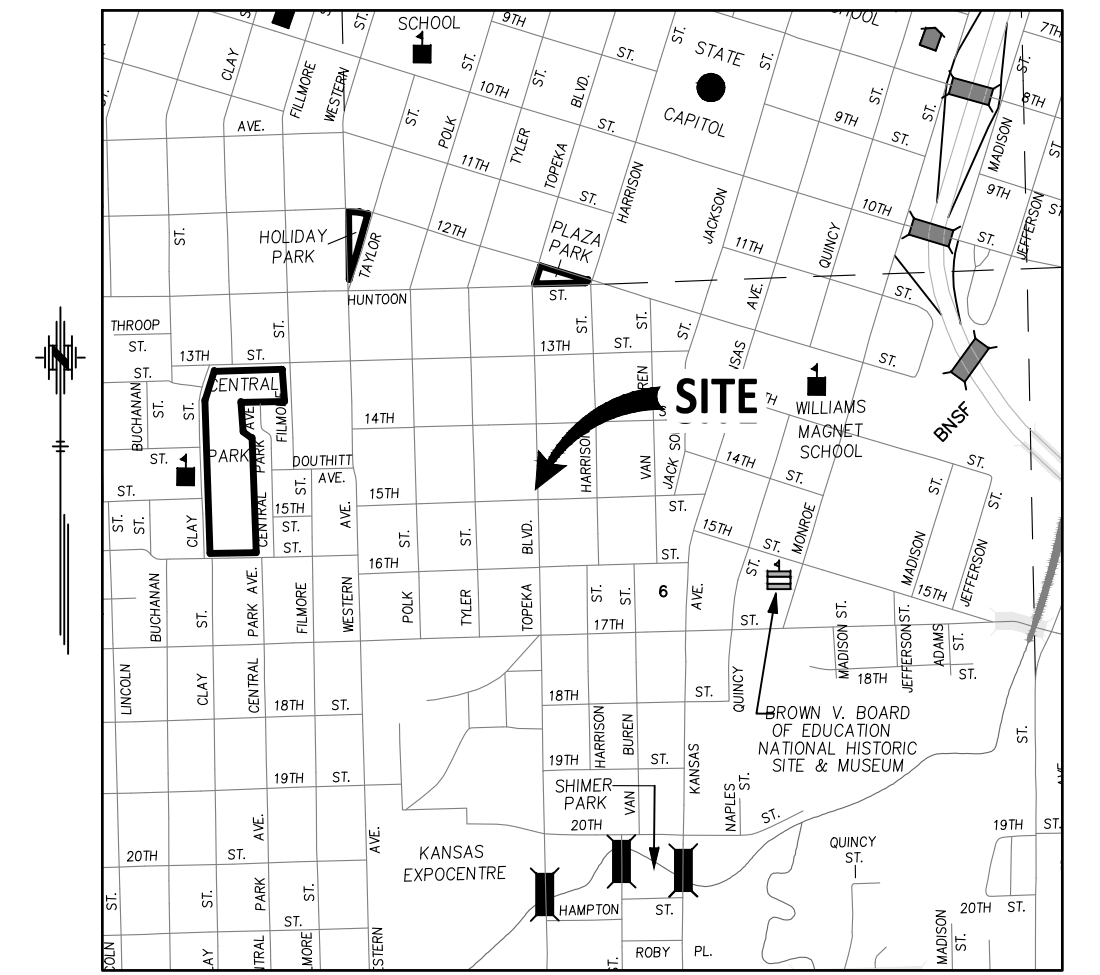
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CP 92231
SW 15th ST.



INTEGRAL CURB

CP 92232



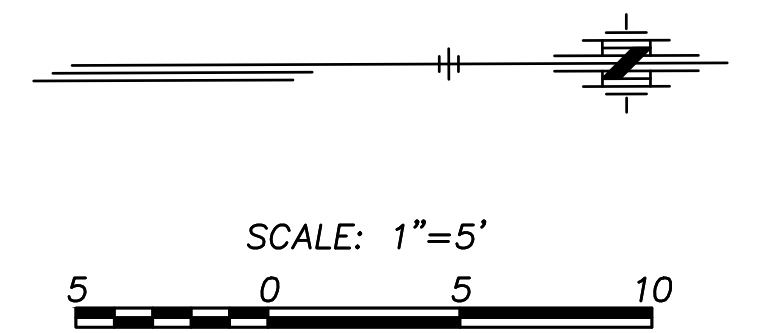
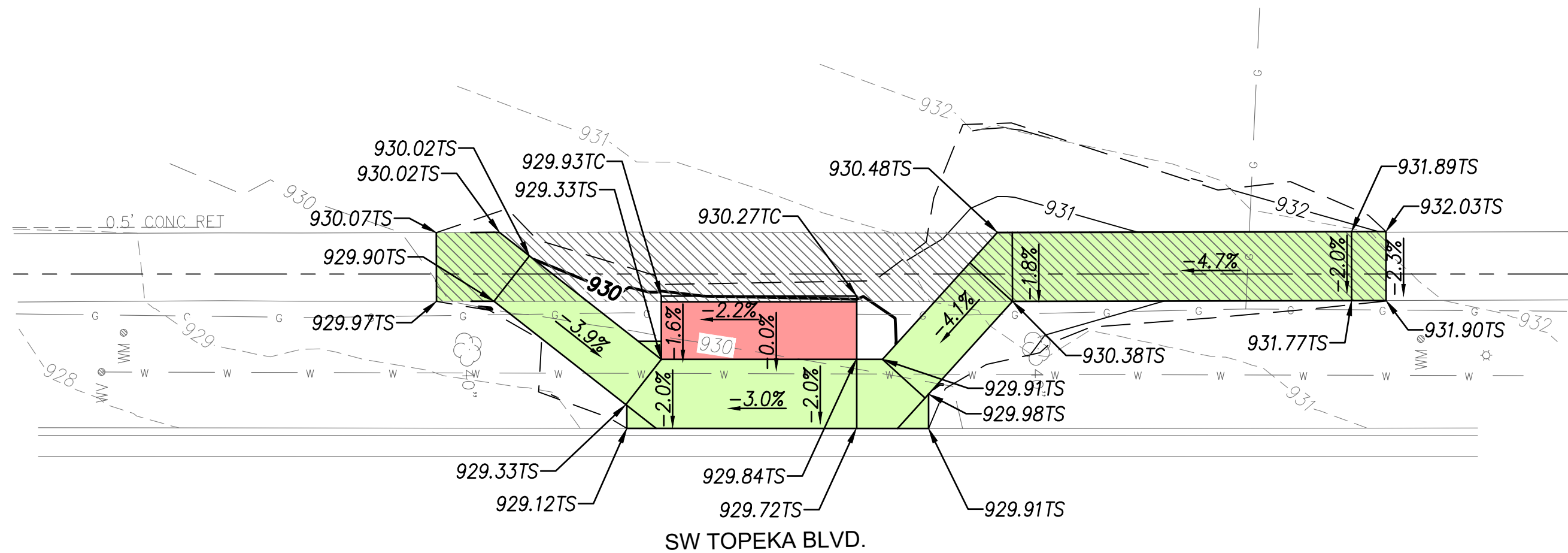
VICINITY MAP
NO SCALE

155044 CONTROL TMTA PH 8.5
NAD 83 KRCS ZONE 11
NAVD 88

CP 92231 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 578363.2250 E: 11376996.6950 EL: 926.24
1) TO SOUTH EDGE E-W WALK 3.2' N
2) TO RET WALL PI W-N 9.8' NE
3) TO WEST EDGE N-S WALK @ B/C 3.3' SE

CP 92232 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 578561.1900 E: 11377014.8650 EL: 932.53
1) TO NORTH B/C TOPEKA 5.5' E
2) TO EAST EDGE N-S WALK 5.2' W
3) TO E WM 13.0' NNW

CP 92231
SW 15th ST.



LEGEND

- Large Tree Removal
- Construct Comb. Sidewalk & Retaining Wall
- Construct 5" Non-Reinforced Pad w/ 4" AB-3
- Conc. Sidewalk Removal
- Construct 4" Conc. Sidewalk w/ 4" AB-3
- TP Top of Pavement
- TS Top of Sidewalk
- TC Top of Curb
- TW Top of Wall

Note:
1. All grading side slopes shall be a 6:1 unless noted on plan.

SW TOPEKA BLVD. &
SW 15TH ST. (MBW)
(Bench, Bike Rack & Trash Can)

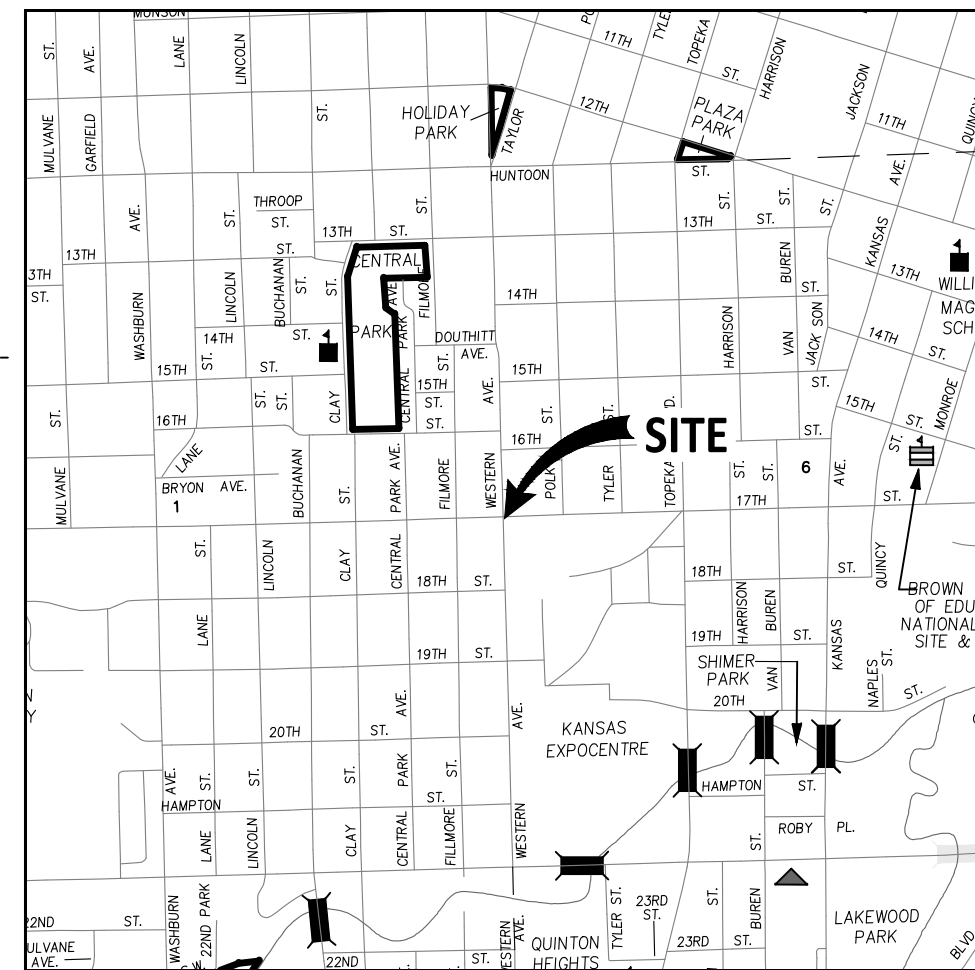
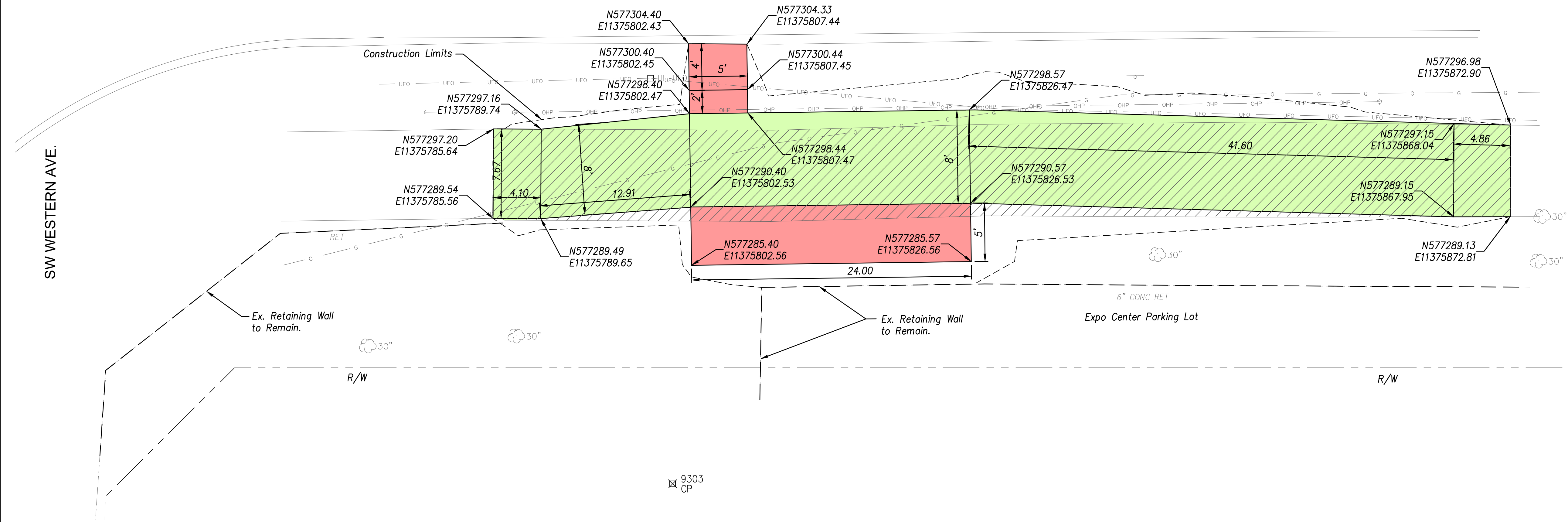
CITY OF TOPEKA

SHAWNEE CO., KS

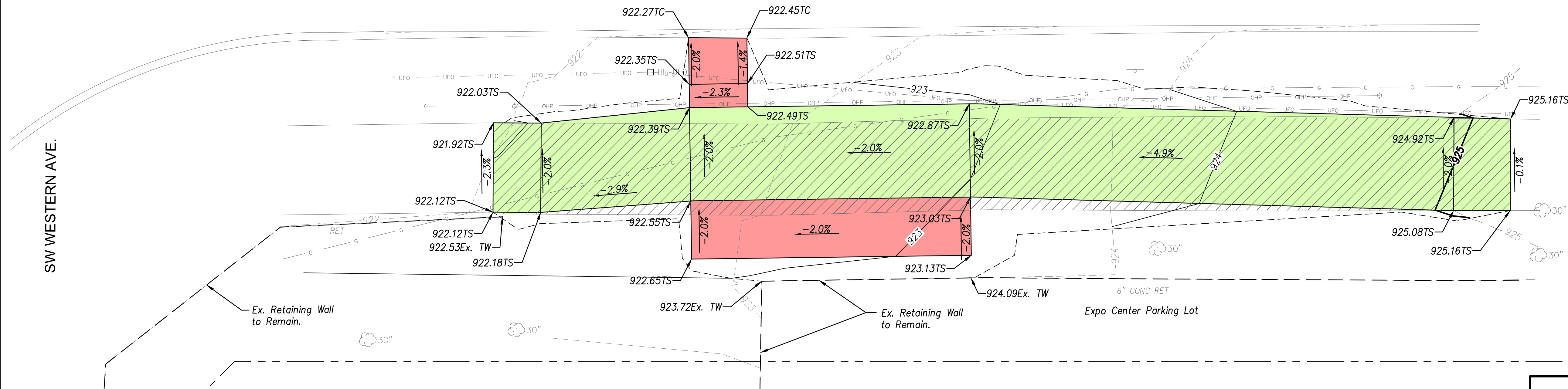
CFS cfse.com	ENGINEERS 2830 SW Woodside Dr., Topeka, KS 66614 P: 785-272-4706 F: 785-272-4735	
	NOTE: TMTA, PHASE 9.2	
CFS PROJECT #	15-5044	DATE: 07/2019
PROJECT MANAGER:	KH	SHEET 1 OF 1

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SW 17TH ST.



SW 17TH ST.



LEGEND

- Construct Comb. Sidewalk & Retaining Wall
- Construct 5" Non-Reinforced Pad w/ 4" AB-3
- Conc. Sidewalk Removal
- Construct 4" Conc. Sidewalk w/ 4" AB-3

TP Top of Pavement
TS Top of Sidewalk
TC Top of Curb
TW Top of Wall

Note:
1. All grading side slopes shall be a 6:1 unless noted on plan.

SW 17TH ST. &
SW WESTERN AVE. (SE)
(Bench, Bike Rack & Trash Can)

CITY OF TOPEKA

SHAWNEE CO., KS

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ENGINEERS

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G: 785-272-4706 F: 785-272-4735

NOTE: TMTA, PHASE 9.3

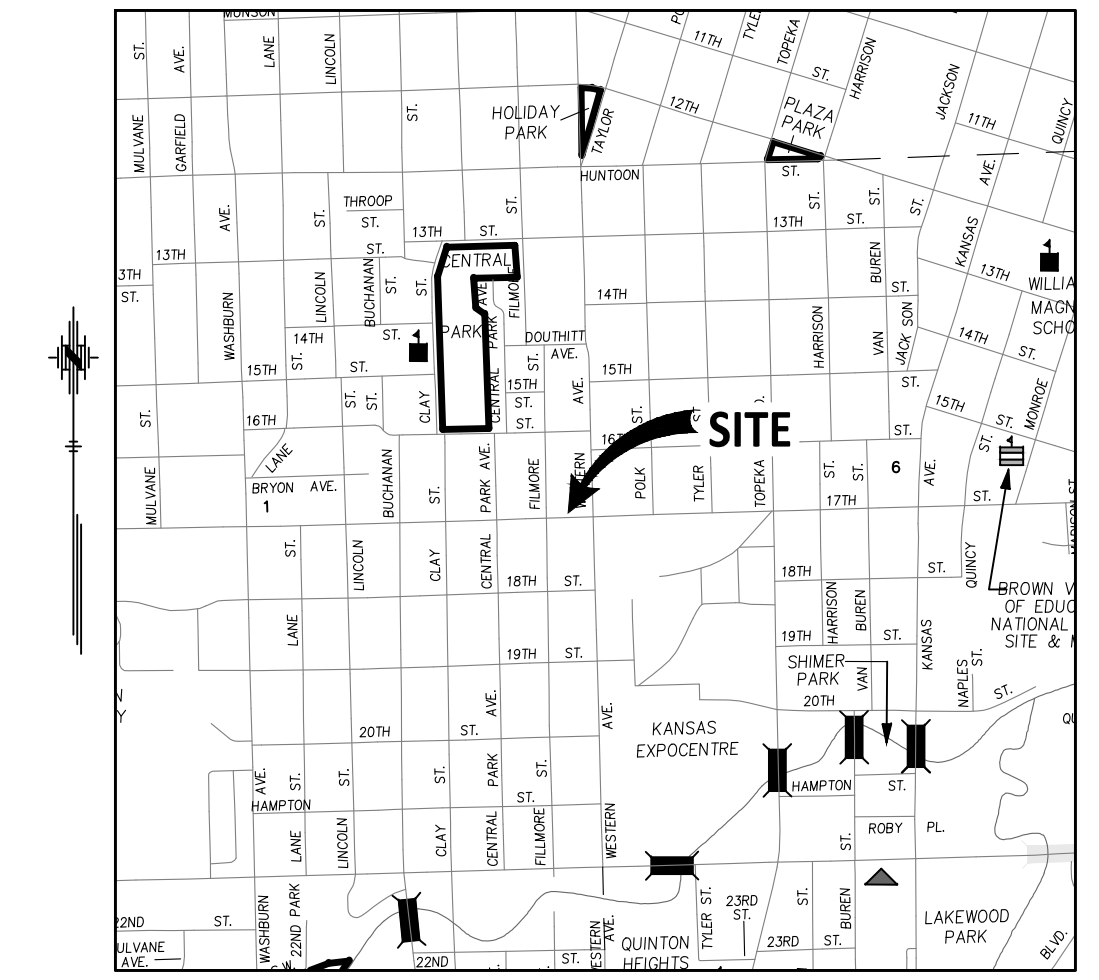
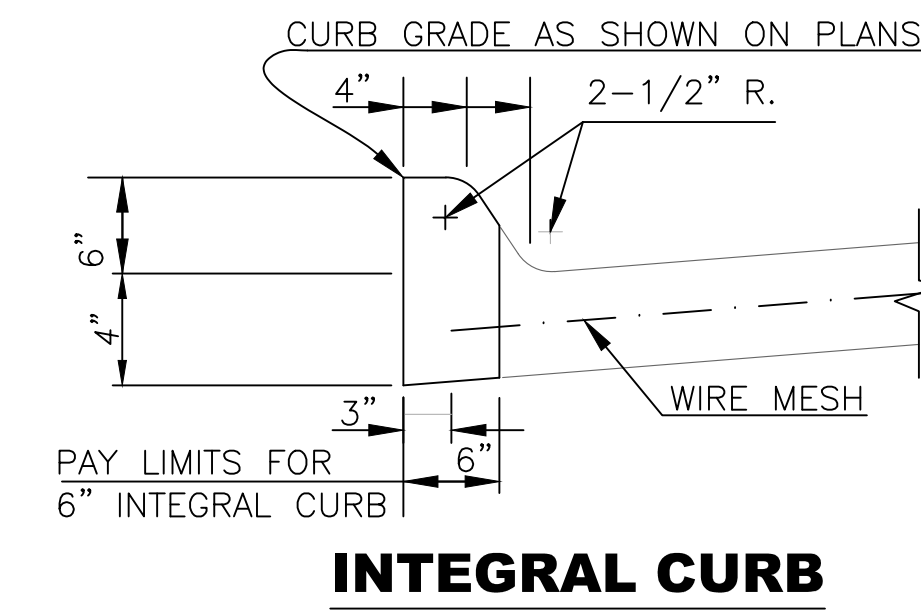
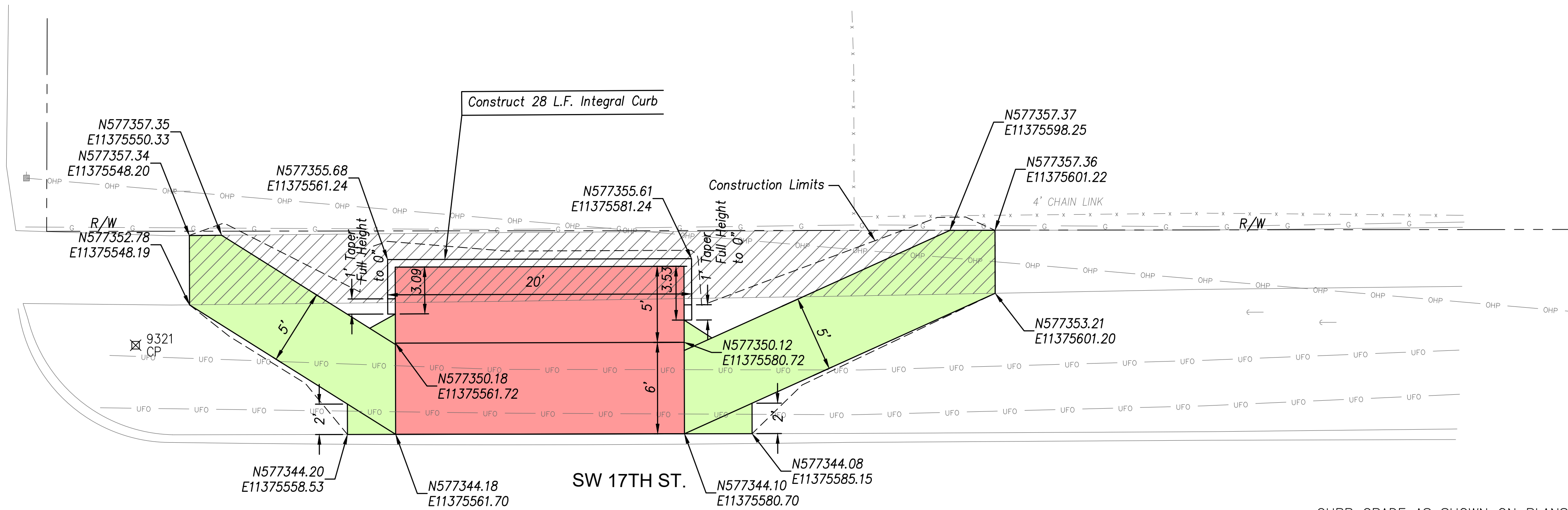
CFS PROJECT # 15-5044

PROJECT MANAGER: KH

DATE: 07/2019

SHEET 1 OF 1

ALLEY BETWEEN
WESTERN AVE &
FILMORE ST.



VICINITY MAP
NO SCALE

155044 CONTROL TMTA PH 8.5
NAD 83 KRCS ZONE 11
NAVD 88

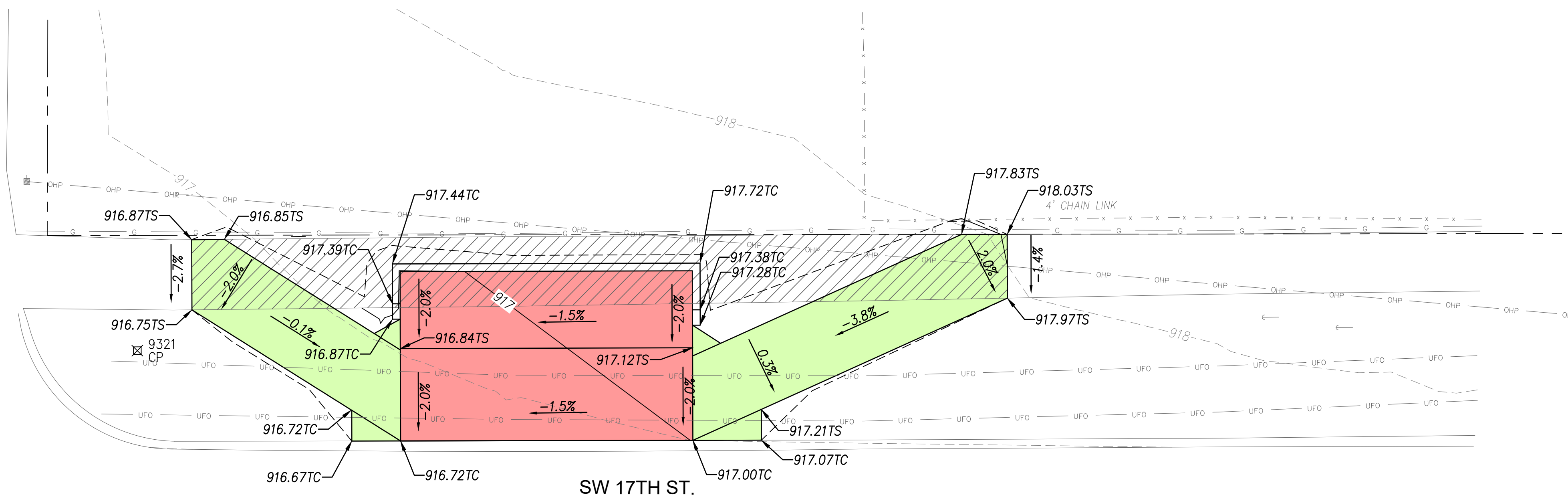
CP 9321 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 577350.152 E: 11375544.626 EL: 916.65

- 1) 17TH ST 25.0' S
- 2) ALLEY TO NORTH (BTW WESTERN & FILMORE) 15.0' W
- 3) SE FACE PP 13.10' NW
- 4) CHAINLINK FENCE PI E-N 48.20' ENE

CP 9322 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 577347.452 E: 11375641.671 EL: 918.37

- 1) 17TH ST 23.0' S
- 2) WESTERN TO NORTH 69.0' E
- 3) SW FACE PP 3.95' NE
- 4) CHAINLINK FENCE PI W-NE 23.85' ENE

ALLEY BETWEEN
WESTERN AVE &
FILMORE ST.



SCALE: 1"=5'
5 0 5 10

LEGEND

- Construct Comb. Sidewalk & Retaining Wall
- Construct 5" Non-Reinforced Pad w/ 4" AB-3
- Conc. Sidewalk Removal
- Construct 4" Conc. Sidewalk w/ 4" AB-3

TP Top of Pavement
TS Top of Sidewalk
TC Top of Curb
TW Top of Wall

Note:
1. All grading side slopes shall be a 6:1 unless noted on plan.

SW 17TH ST. & SW WESTERN
AVE. (O.B.)(MBN)

(Bench, Bike Rack & Trash Can)

CITY OF TOPEKA

SHAWNEE CO., KS

CFS ENGINEERS
cfse.com
2830 SW Woodside Dr., Topeka, KS 66614
P: 785-272-4706 F: 785-272-4735

NOTE: TMTA, PHASE 9.3

CFS PROJECT # 15-5044

PROJECT MANAGER: KH

DATE: 07/2019

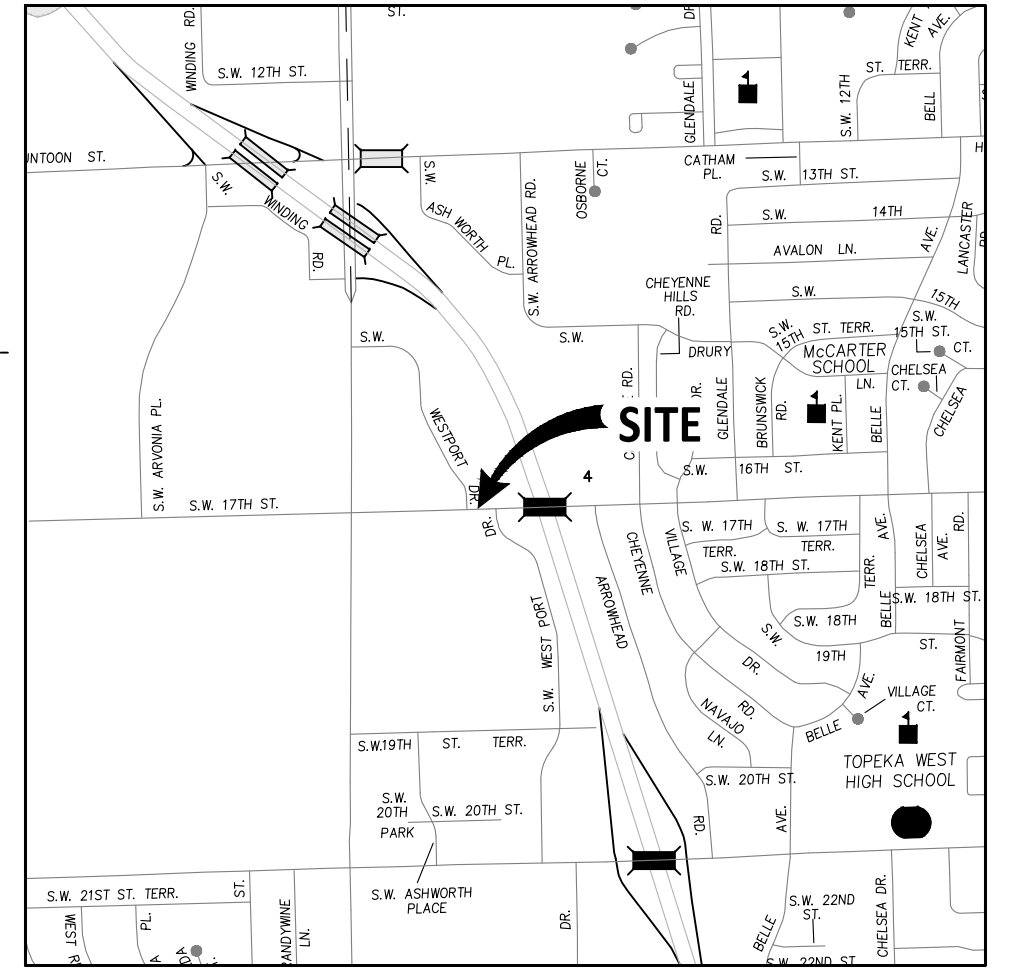
SHEET 1 OF 1

SW WESTPORT DR.

SW WESTPORT DR.

SW 17TH ST.

SW 17TH ST.



VICINITY MAP
NO SCALE

155044 CONTROL TMTA PH 8.5
NAD 83 KRCS ZONE 11
NAVD 88

CP 9315 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 577284.047 E: 11355489.218 EL: 986.68

- | | |
|---------------------------|------------|
| 1) @ WESTPORT DR TO NORTH | 53.0' W |
| 2) TOP KEY FH | 28.95' WNW |
| 3) NW COR CURB INLET | 15.08' SSE |
| 4) NE COR CURB INLET | 18.91' SE |

CP 9316 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 577284.812 E: 11355585.422 EL: 989.19

- | | |
|--|------------|
| 1) @ WESTPORT DR TO NORTH | 77.0' E |
| 2) @ 17TH ST | 39.0' S |
| 3) @ @ BASE BUS STOP SIGN POST | 49.32' WSW |
| 4) NORTH EDGE SIDEWALK NORTH SIDE 17TH | 3.11' S |

SCALE: 1"=5'
5 0 5 10

LEGEND

- Construct Comb. Sidewalk & Retaining Wall
- Construct 5" Non-Reinforced Pad w/ 4" AB-3
- Conc. Sidewalk Removal
- Construct 4" Conc. Sidewalk w/ 4" AB-3

TP Top of Pavement
TS Top of Sidewalk
TC Top of Curb
TW Top of Wall

Note:
1. All grading side slopes shall be a 6:1 unless noted on plan.

SW 17TH ST. & SW WESTPORT DR. (O.B.)(NE)

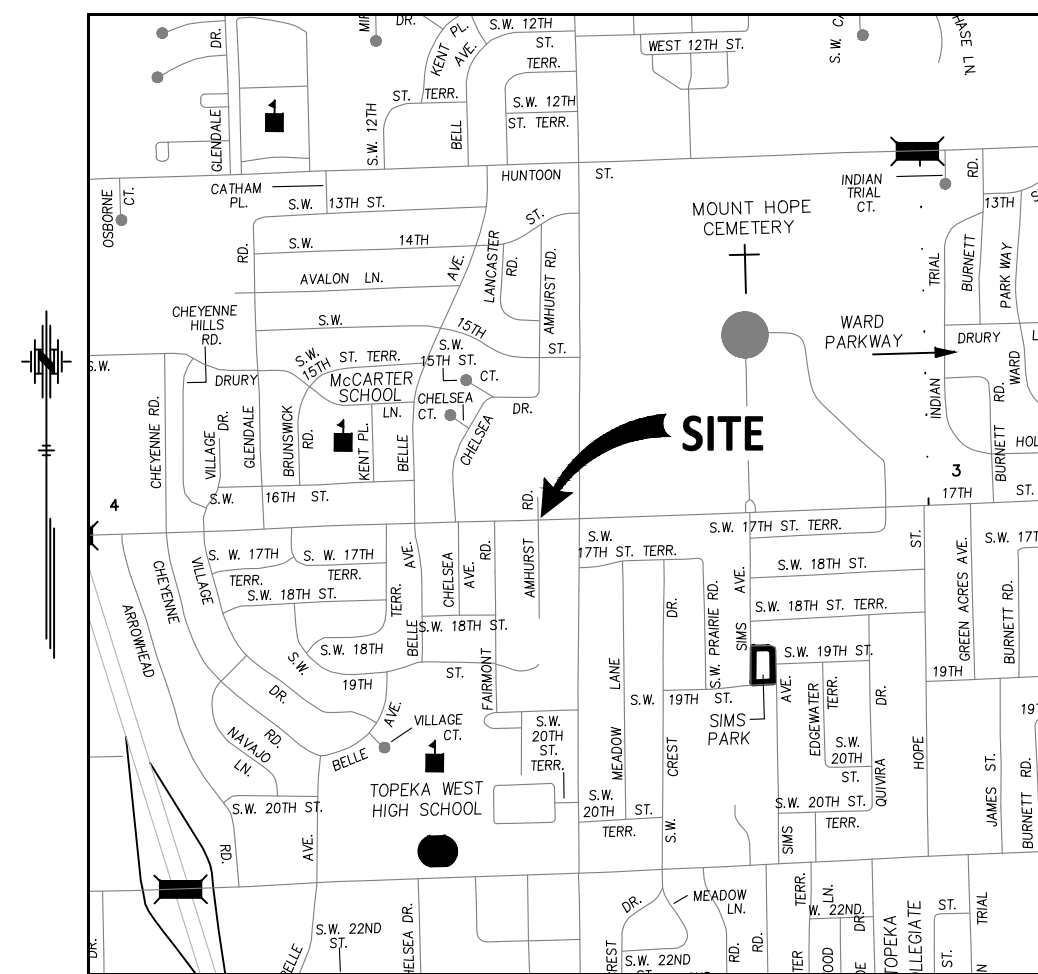
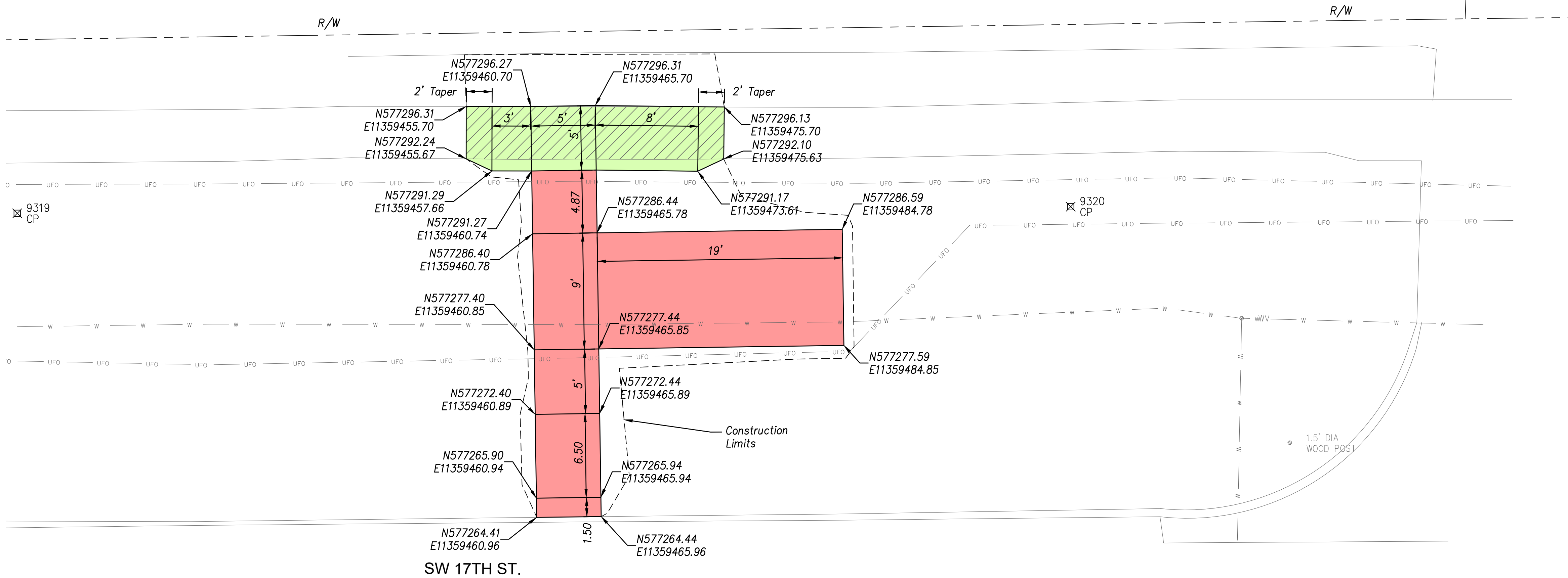
(Bench, Bike Rack & Trash Can)

CITY OF TOPEKA

SHAWNEE CO., KS

CFS ENGINEERS
cfs.com
2830 SW Woodside Dr., Topeka, KS 66614
P: 785-272-4706 F: 785-272-4735

NOTE: TMTA, PHASE 9.3
CFS PROJECT # 15-5044 DATE: 07/2019
PROJECT MANAGER: KH SHEET 1 OF 1



VICINITY MAP
NO SCALE

155044 CONTROL TMTA PH 8.5
NAD 83 KRCS ZONE 11
NAVD 88

CP 9317 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 577215.575 E: 11356871.356 EL: 990.75

- 1) 17TH ST
- 2) VILLAGE DR
- 3) SE CORNER HAND HOLE
- 4) EAST FACE PP

31.0' N
135.0' E
10.59' WNW
14.8' NW

CP 9318 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 577224.670 E: 11356950.278 EL: 989.47

- 1) 17TH ST
- 2) VILLAGE DR
- 3) SW COR CURB INLET
- 4) 6' WOOD FENCE PI S-W

22.0' N
57.0' E
19.45' ENE
21.7' SW

SCALE: 1"=5'
5 0 5 10

LEGEND

- Construct Comb. Sidewalk & Retaining Wall
- Construct 5" Non-Reinforced Pad w/ 4" AB-3
- Conc. Sidewalk Removal
- Construct 4" Conc. Sidewalk w/ 4" AB-3

TP Top of Pavement
TS Top of Sidewalk
TC Top of Curb
TW Top of Wall

Note:
1. All grading side slopes shall be a 6:1 unless noted on plan.

SW 17TH ST. &
SW FAIRLAWN RD.

(Bench, Trash Can, & Bike Rack)

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NOTE: TMTA, PHASE 9.3

CFS PROJECT # 15-5044

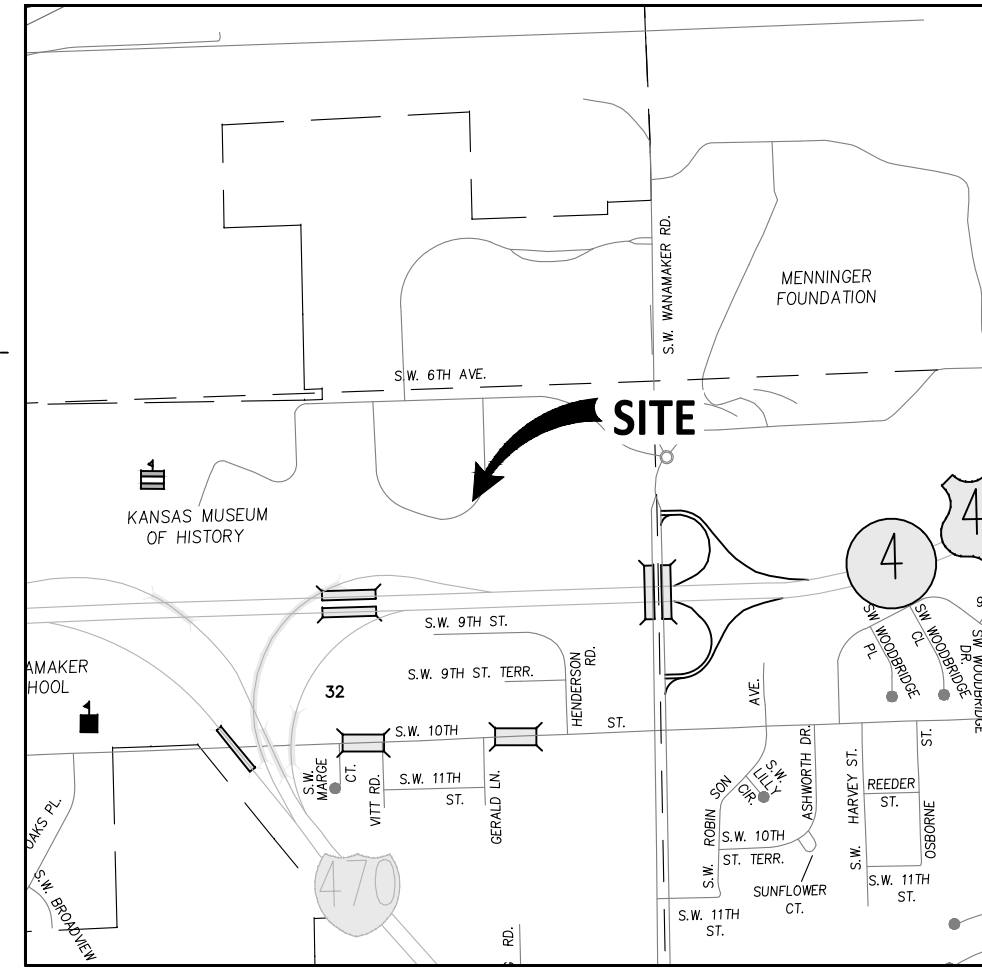
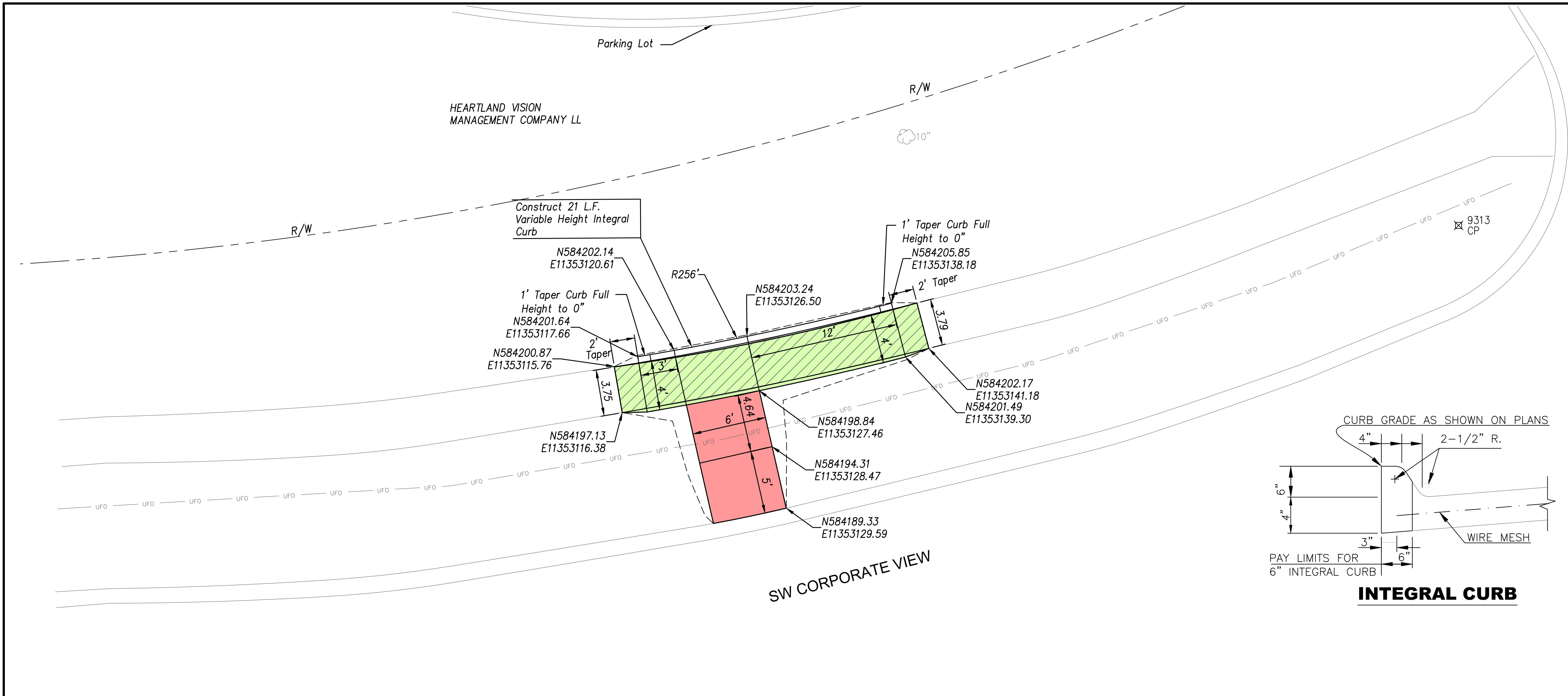
PROJECT MANAGER: KH

DATE: 07/2019

SHEET 1 OF 1

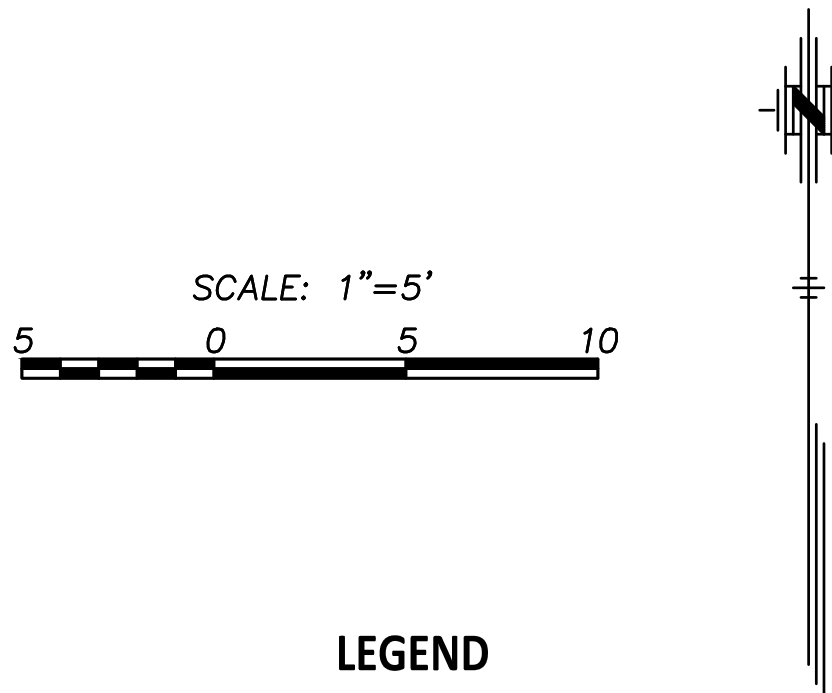
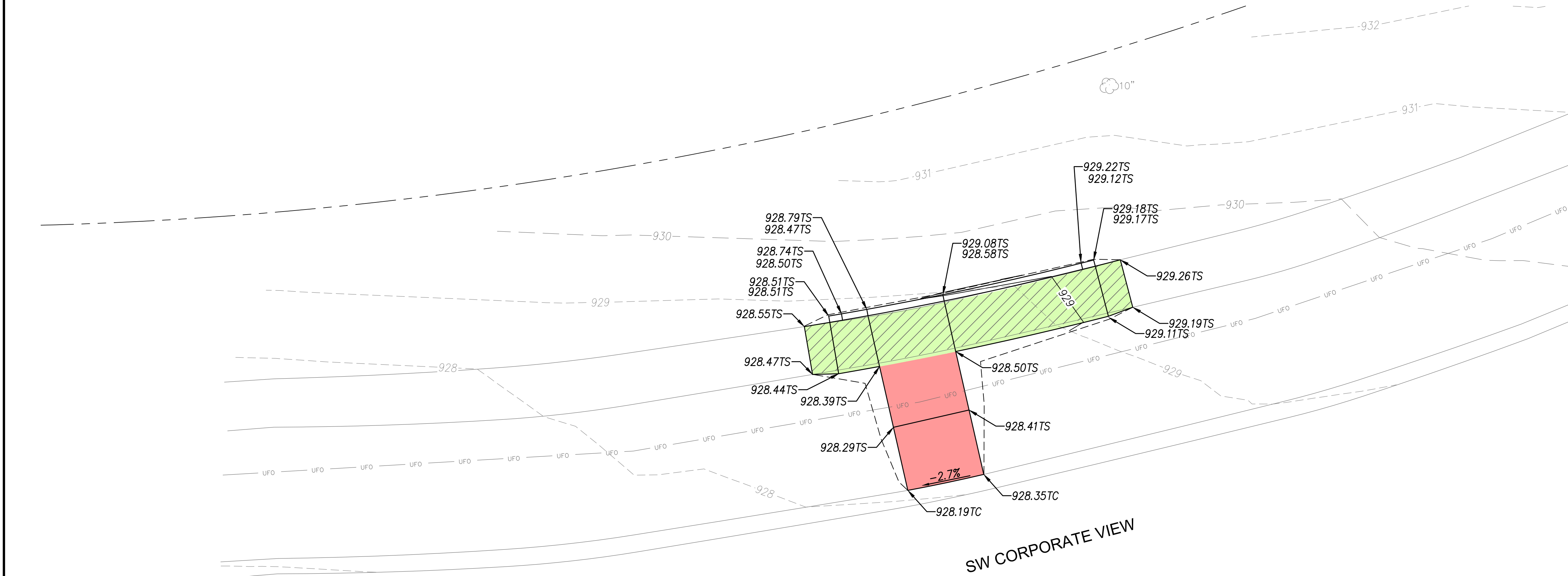
CITY OF TOPEKA

SHAWNEE CO., KS



VICINITY MAP
NO SCALE

- 155044 CONTROL TMTA PH 8.5
NAD 83 KRCS ZONE 11
NAVD 88
- CP 9313 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 584211.849 E: 11353184.048 EL: 930.96
1) 1/2" ENTR TO HEARTLAND EYE CARE 27.0' E
2) 1/2" CORPORATE VIEW 20.5' S
3) 1/2" SOUTH FACE METAL LP BASE 25.39' NNW
4) 1/2" EAST FACE 20" TREE 44.52' SW
- CP 9314 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 584188.197 E: 11353051.314 EL: 926.88
1) 1/2" CORPORATE VIEW 20.0' S
2) 1/2" NE COR CURB INLET 4.15' S
3) 1/2" MH 12.0' E
4) 1/2" SE FACE METAL LP BASE 55.09' NW



- LEGEND
- Construct Comb. Sidewalk & Retaining Wall
 - Construct 5" Non-Reinforced Pad w/ 4" AB-3
 - Conc. Sidewalk Removal
 - Construct 4" Conc. Sidewalk w/ 4" AB-3
- TP Top of Pavement
TS Top of Sidewalk
TC Top of Curb
TW Top of Wall

Note:
1. All grading side slopes shall be a 6:1 unless noted on plan.

SW CORPORATE VIEW @
WIBW
(Standing Pad)

CITY OF TOPEKA

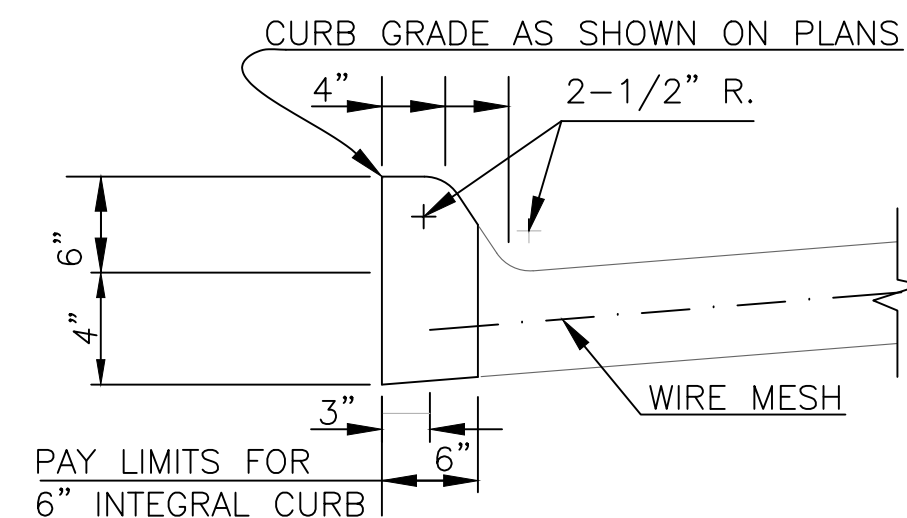
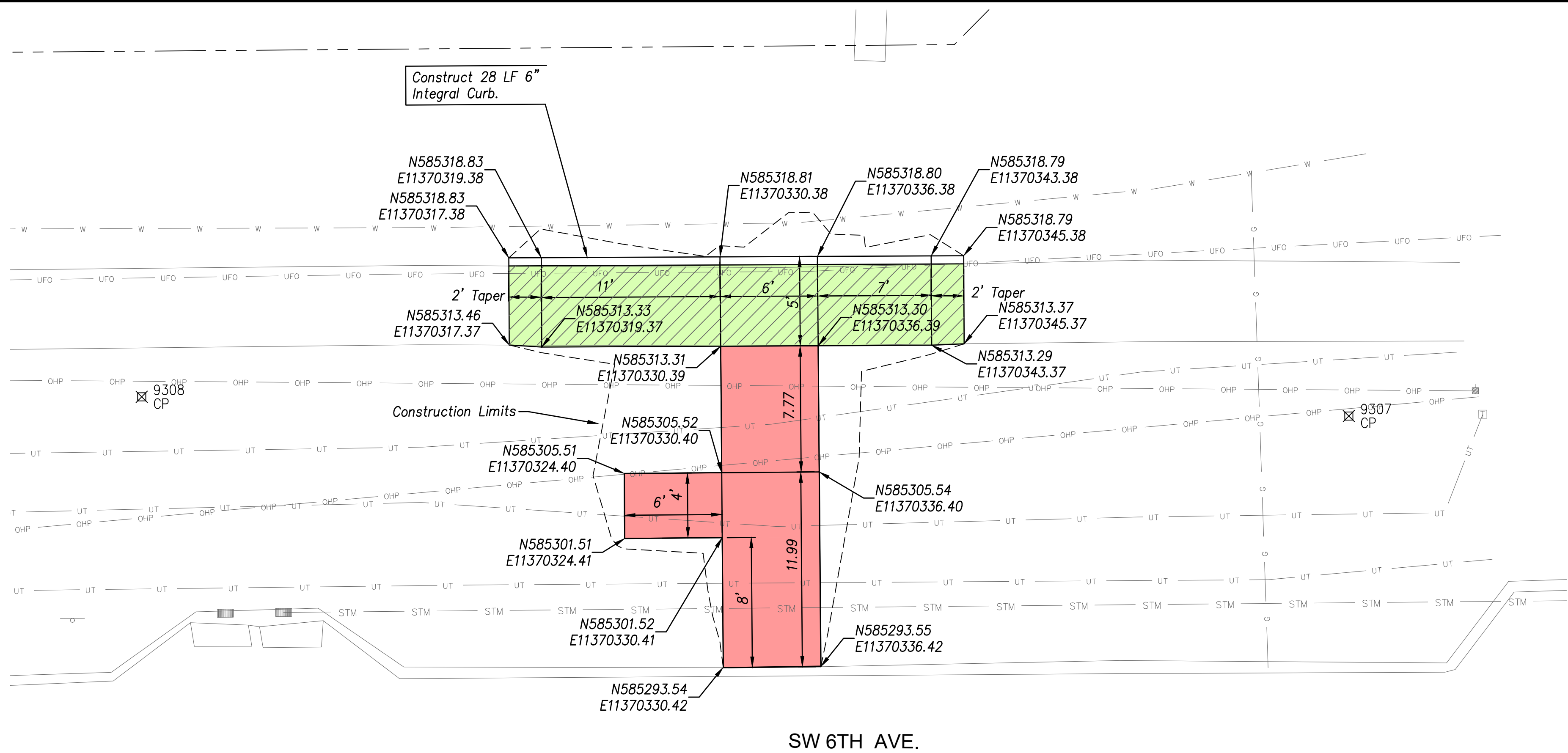
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cfse.com

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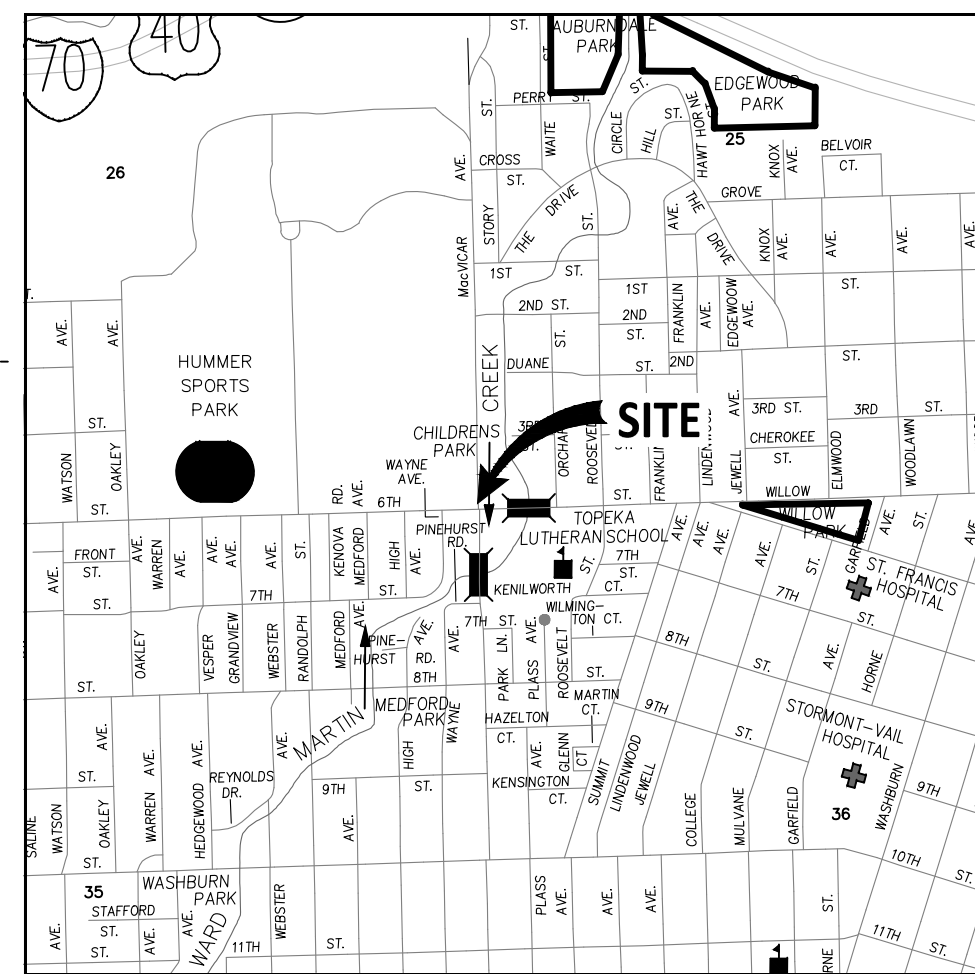
NOTE: TMTA, PHASE 9.3

CFS PROJECT # 15-5044 DATE: 07/2019

PROJECT MANAGER: KH SHEET 1 OF 1



INTEGRAL CURB



VICINITY MAP
NO SCALE

155044 CONTROL TMTA PH 8.5
NAD 83 KRCS ZONE 11
NAVD 88

CP 9307 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 585308.769 E: 11370369.020 EL: 895.28
1) B/C PI E-SW @ NW COR CURB INLET
2) WEST FACE PP

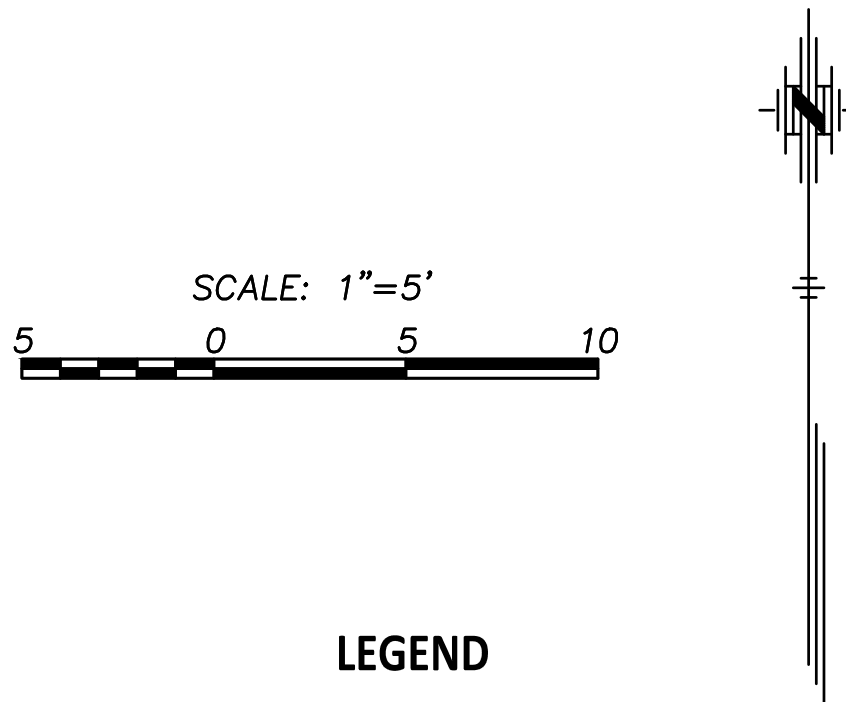
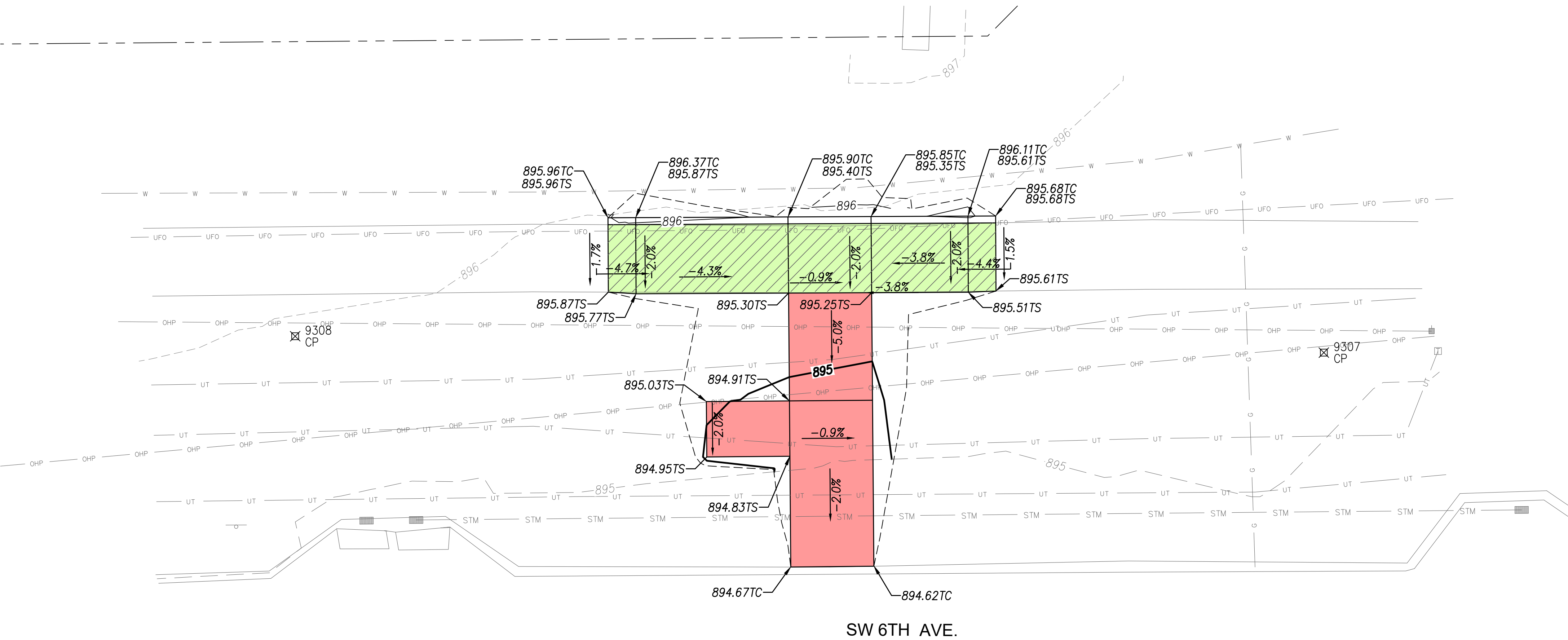
16.40' SE
8.19' E

3) SOUTH EDGE SIDEWALK NORTH SIDE 6TH
4) SE COR KWIK SHOP SIGN BASE

4.45' N
35.5' NE

CP 9308 SET 1/2" REBAR W/CAP (CFS CONTROL)
N: 585310.418 E: 11370294.734 EL: 896.10
1) B/C PI E-SW @ NW COR CURB INLET
2) NE FACE LP
3) SOUTH EDGE SIDEWALK NORTH SIDE 6TH
4) SW COR KWIK SHOP SIGN POST

13.39' SSE
26.75' WSW
2.85' N
48.59' ENE



Note:
1. All grading side slopes shall be a 6:1
unless noted on plan.

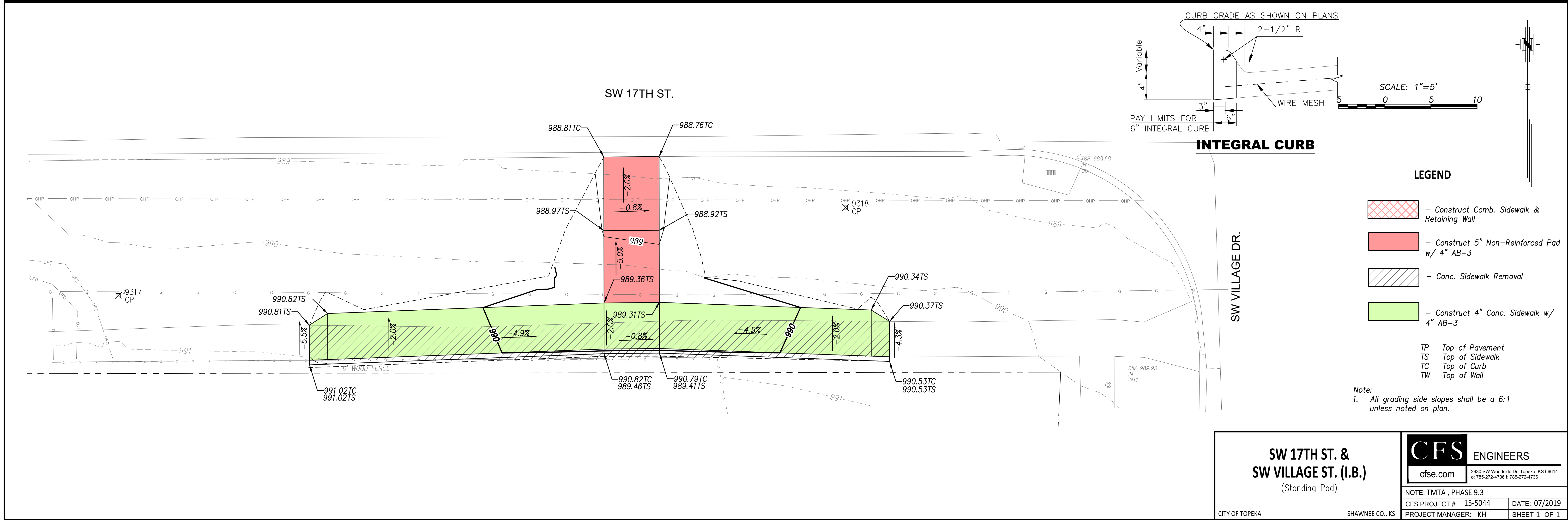
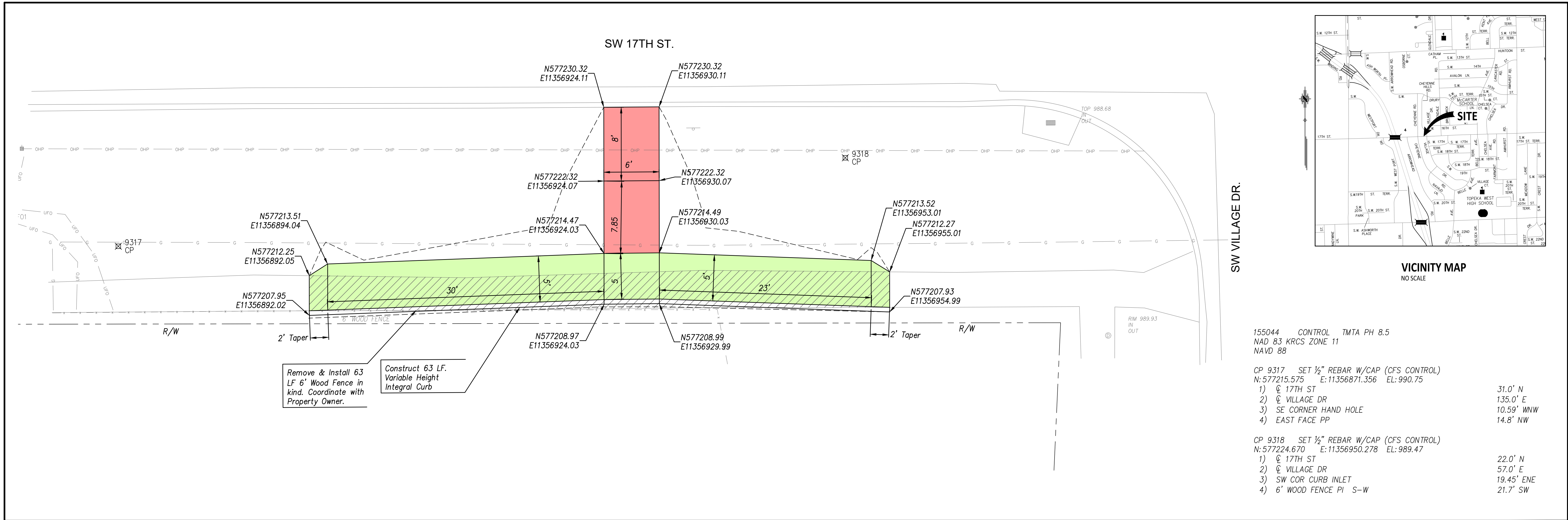
**SW 6TH AVE. &
SW MAC VICAR AVE. (NW)**
(Standing Pad & Bike Grass)

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NOTE: TMTA, PHASE 9.3
CFS PROJECT # 15-5044 DATE: 07/2019
PROJECT MANAGER: KH SHEET 1 OF 1

CITY OF TOPEKA

SHAWNEE CO., KS



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