



# Bryant Development and Review Committee Meeting

Boswell Municipal Complex - City Hall Conference Room

210 SW 3rd Street

**Date:** March 16, 2023 - **Time:** 9:00 AM

## Call to Order

## Old Business

## New Business

### 1. Butler Center - 1109 N Reynolds Road - Site Plan

*GarNat Engineering - Requesting Recommendation for Site Plan Approval*

- [0685-SMP-01.pdf](#)
- [0685-LTR-02.pdf](#)
- [0685-LTR-01.pdf](#)
- [0685-APP-01.pdf](#)
- [0685-AFF-01.pdf](#)
- [0685-PLN-01.pdf](#)

### 2. Butler Center - 1109 N Reynolds Road - Rezoning

*GarNat Engineering - Requesting Recommendation for Rezoning of Property from R-E to C-2*

- [0686-PNO-01.pdf](#)
- [0686-LTR-01.pdf](#)
- [0686-SRV-01.pdf](#)
- [0686-AFF-01.pdf](#)
- [0686-APP-01.pdf](#)

### 3. 25300 I-30 N - Conditional Use Permit

*Hope Consulting - Requesting Recommendation for Conditional Use Permit for a Storage Facility*

- [0687-APP-02.pdf](#)
- [0687-PLN-01.pdf](#)
- [0687-APP-01.pdf](#)

### 4. Jacob's Corner Subdivision - Final Plat

*Hope Consulting - Requesting Recommendation for Approval of Final Plat*

- [0688-ADH-01.pdf](#)
- [0688-PLT-01.pdf](#)
- [0688-ASB-01.pdf](#)
- [0688-LTR-01.pdf](#)

### 5. Hilldale Crossing Subdivision Ph. 2 - Final Plat

*Hope Consulting - Requesting Recommendation for Approval of Final Plat*

- [0689-ADH-01.pdf](#)
- [0689-ASB-01.pdf](#)
- [0689-PLT-01.pdf](#)
- [0689-LTR-01.pdf](#)

#### **6. Hilltop Landing Subdivision - Preliminary Plat**

*Hope Consulting - Requesting Recommendation for Preliminary Plat Approval*

- [0690-LTR-01.pdf](#)
- [0690-PLN-01.pdf](#)

#### **7. Midland Road Estates Subdivision - Preliminary Plat**

*Hope Consulting - Requesting Discussion for Preliminary Plat Approval*

- [0691-PLT-01.pdf](#)
- [0691-LTR-01.pdf](#)

### **Staff Approved**

#### **8. Wendy's - 2206 N Reynolds - Sign Permit**

*Action Signs - Requesting Sign Permit Approval - STAFF APPROVED*

- [0677-APP-01.pdf](#)

#### **9. Alliance Technical Group - 219 Brown Lane - Sign Permit**

*Aero Signs - Requesting Sign Permit Approval - STAFF APPROVED*

- [0678-PLN-01.pdf](#)

### **Permit Report**

### **Adjournments**

**New Facility For:  
Butler Center  
1109 N Reynolds Road  
Bryant, AR 72022**

**STORM WATER MAINTENANCE PLAN**

The Reynolds Road Storage owner will be responsible for the inspection and maintenance of the stormwater detention pond located on its.

Inspections are to be scheduled as directed in this document. All documentation on scheduled inspections, dates of inspections, and maintenance completed shall be retained by the Reynolds Road Storage owner for a period of three years.

**DETENTION PIPES**

Annual Maintenance (as applicable):

- Check pipes for sediment in-fill, clean when necessary
- Check outlets for clogging with trash or dead vegetation, clean when necessary

  
\_\_\_\_\_  
Michael Butler  
Butler Wealth Capital, LLC

03/07/2023  
\_\_\_\_\_  
date



**NEW FACILITY FOR:  
BUTLER CENTER  
CITY OF BRYANT, AR  
DRAINAGE CALCULATIONS – SUMMARY  
3/2/2023**

**DESCRIPTION OF PROJECT**

Butler center is an approximately 1.51 Acre development located in the City of Bryant, Arkansas approximately a mile south of Reynolds Road. There are three drainage basins on the site. Eastern and Southern basins are small and will not be detained. The large basin will be detained in a pipe network storage located in the western end of the site. The detention for the storage network will be underground in 30" HDPE pipe.

Stormwater Calculations were prepared with the intent to comply with the City of Bryant's Drainage Code. The primary intent of this analysis is to produce a drainage system adequately sized to convey post development runoff while attenuating post development discharge levels equal to or less than pre development flows.

Hydraulic calculations were made using the Rational Method. Design frequencies were analyzed for 2, 5, 10, 25, 50, and 100 year return periods.

These calculations are divided into the following sections:

**Summary of Drainage Basins**

**Summary of Inlets**

**Summary of Pipes**

**Pipe Network Storage Summary**

**Appendices**

Exhibit A – Pre-Development Drainage Basins

Exhibit B – Post-Development Drainage Basins

**NEW FACILITY FOR:  
BUTLER CENTER  
CITY OF BRYANT, AR  
DRAINAGE CALCULATIONS – SUMMARY  
3/2/2023**

**SUMMARY OF DRAINAGE BASINS**

**PRE-DEVELOPMENT CONDITIONS**

There are three drainage basins on the site. Basin 1 drains to east side and Basin 3 drains to south side of the site. This discharge will not be captured. Basin 2 is developed. This discharge will be captured. The existing site is a mixture of gravel, grass and a building.

**POST-DEVELOPMENT CONDITIONS**

As previously described, this site is being developed into a commercial facility. Slopes range from 1% to 8%. Runoff drains from the developed areas to underground detention in the south western section of the development.

**SUMMARY OF INLETS**

On the drainage plan you will see labels for all of the inlets for these calculations. The flows shown are for the 10-year return storm. The distance from the face of the curb to the center of the street is 15 feet.

**SUMMARY OF PIPES**

All pipes used in this project are HDPE and RCP. Therefore, a manning's of 0.012 was used on all pipes in the analysis.

**PIPE NETWORK STORAGE SUMMARY**

The pipe network storage in these calculations detains flows from all of the runoff of the site. The pipe network storage is located in the south western portion of the property. Water collected in the storm water system is discharged into the pipe network via curb inlets. The pipe network storage is made of 263 linear feet of 30" HDPE and RCP pipe and has a volume of 1,289 cf. A concrete control structure is constructed on the southern end of the pipe network storage. This control structure uses a slotted weir to limit the discharge through the structure to that of the 2, 10, 25, 50, and 100-year pre-development flow. The pipe network storage is designed to hold the 100-year storm event.







**Stormwater Calcs - Butler Center  
Using Rational Method**

Pre-development

**Calculated Tc values - Drainage Basin 1 & 3**

$$T_c = \frac{56 * L^{.6} * n^{.6}}{i^{.4} * S^{.3}} \text{ seconds}$$

L1 = 100 feet  
 n1 = 0.03  
 S1 = 0.032 ft/ft  
 I<sub>assumed</sub> = 8.40 inches  
 T<sub>c</sub><sub>calculated</sub> = 130 seconds  
 T<sub>c</sub><sub>calculated</sub> = 2.16 minutes

Tc = 2.16 minutes  
 I = 8.40 inches

Use Tc = **5.00** minutes

Tc for 25-yr Storm from Exhibit 400-1 of Bryant Drainage Manual  
 i for 25-yr Storm from Exhibit 400-1 of Bryant Drainage Manual

I<sub>100</sub> = 10 Inches      I<sub>10</sub> = 7.2 Inches  
 I<sub>50</sub> = 9.2 Inches      I<sub>5</sub> = 6.5 Inches  
 I<sub>25</sub> = 8.40 Inches      I<sub>2</sub> = 5.6 Inches

**Calculated Tc values - Drainage Basin 2**

$$T_c = \frac{56 * L^{.6} * n^{.6}}{i^{.4} * S^{.3}} \text{ seconds}$$

L1 = 320 feet  
 n1 = 0.03  
 S1 = 0.032 ft/ft  
 I<sub>assumed</sub> = 8.40 inches  
 T<sub>c</sub><sub>calculated</sub> = 261 seconds  
 T<sub>c</sub><sub>calculated</sub> = 4.35 minutes

Tc = 4.35 minutes  
 I = 8.40 inches

Use Tc = **5.00** minutes

Tc for 25-yr Storm from Exhibit 400-1 of Bryant Drainage Manual  
 i for 25-yr Storm from Exhibit 400-1 of Bryant Drainage Manual

I<sub>100</sub> = 10 Inches      I<sub>10</sub> = 7.2 Inches  
 I<sub>50</sub> = 9.2 Inches      I<sub>5</sub> = 6.5 Inches  
 I<sub>25</sub> = 8.40 Inches      I<sub>2</sub> = 5.6 Inches

**Stormwater Calcs - Butler Center  
Using Rational Method**

Post-development

**Calculated Tc values - Drainage Basin 1, 2 & 3**

$$T_c = \frac{56 * L^{.6} * n^{.6}}{i^{.4} * S^{.3}} \text{ seconds}$$

L1 = 320 feet  
n1 = 0.013  
S1 = 0.035 ft/ft  
I<sub>assumed</sub> = 8.40 inches  
T<sub>Ccalculated</sub> = 154 seconds  
T<sub>Ccalculated</sub> = 2.56 minutes

Tc = 2.56 minutes  
I = 8.40 inches

Use Tc = **5.00** minutes

Tc for 25-yr Storm from Exhibit 400-1 of Bryant Drainage Manual  
i for 25-yr Storm from Exhibit 400-1 of Bryant Drainage Manual

I <sub>100</sub> =	10 Inches	I <sub>10</sub> =	7.2 Inches
I <sub>50</sub> =	9.2 Inches	I <sub>5</sub> =	6.5 Inches
I <sub>25</sub> =	8.40 Inches	I <sub>2</sub> =	5.6 Inches

Stormwater Calcs - Butler Center  
using Rational Method

Pre-development

Calculated C values - Drainage Basin 1

	Area	C <sub>100</sub>	C <sub>50</sub>	C <sub>25</sub>	C <sub>10</sub>	C <sub>5</sub>	C <sub>2</sub>
Greenspace	0.08	0.47	0.43	0.4	0.36	0.34	0.31
Driveway	0.09	0.97	0.92	0.88	0.83	0.8	0.75
<b>Total Area =</b>	<b>0.17</b>	<b>0.73</b>	<b>0.69</b>	<b>0.65</b>	<b>0.61</b>	<b>0.58</b>	<b>0.54</b>

(C values taken from Table 400-2 of City of Bryant Drainage Manual)

Flat, 0-2%

Road

Calculated C values - Drainage Basin 2

	Area	C <sub>100</sub>	C <sub>50</sub>	C <sub>25</sub>	C <sub>10</sub>	C <sub>5</sub>	C <sub>2</sub>
Greenspace	1.09	0.47	0.43	0.4	0.36	0.34	0.31
Gravel	0.07	0.65	0.55	0.5	0.35	0.3	0.25
Roof	0.02	0.97	0.92	0.88	0.83	0.8	0.75
<b>Total Area =</b>	<b>1.18</b>	<b>0.49</b>	<b>0.45</b>	<b>0.42</b>	<b>0.37</b>	<b>0.35</b>	<b>0.32</b>

(C values taken from Table 400-2 of City of Bryant Drainage Manual)

Flat, 0-2%

Gravel

Roof

Calculated C values - Drainage Basin 3

	Area	C <sub>100</sub>	C <sub>50</sub>	C <sub>25</sub>	C <sub>10</sub>	C <sub>5</sub>	C <sub>2</sub>
Greenspace	0.16	0.47	0.43	0.4	0.36	0.34	0.31
<b>Total Area =</b>	<b>0.16</b>	<b>0.47</b>	<b>0.43</b>	<b>0.40</b>	<b>0.36</b>	<b>0.34</b>	<b>0.31</b>

(C values taken from Table 400-2 of City of Bryant Drainage Manual)

Flat, 0-2%

Stormwater Calcs - Butler Center  
using Rational Method

Post-development

Calculated C values - Drainage Basin 1

	Area	C <sub>100</sub>	C <sub>50</sub>	C <sub>25</sub>	C <sub>10</sub>	C <sub>5</sub>	C <sub>2</sub>
Greenspace	0.13	0.46	0.42	0.39	0.35	0.32	0.29
<b>Total Area =</b>	<b>0.13</b>	<b>0.46</b>	<b>0.42</b>	<b>0.39</b>	<b>0.35</b>	<b>0.32</b>	<b>0.29</b>

(C values taken from Table 400-2 of City of Bryant Drainage Manual)

Good Condition, Average 2-7%

Calculated C values - Drainage Basin 2

	Area	C <sub>100</sub>	C <sub>50</sub>	C <sub>25</sub>	C <sub>10</sub>	C <sub>5</sub>	C <sub>2</sub>
Greenspace	0.05	0.46	0.42	0.39	0.35	0.32	0.29
Roof/Pavement	0.90	0.97	0.92	0.88	0.83	0.8	0.75
<b>Total Area =</b>	<b>0.95</b>	<b>0.94</b>	<b>0.89</b>	<b>0.85</b>	<b>0.80</b>	<b>0.77</b>	<b>0.73</b>

(C values taken from Table 400-2 of City of Bryant Drainage Manual)

Good Condition, Average 2-7%

Road

Calculated C values - Drainage Basin 3

	Area	C <sub>100</sub>	C <sub>50</sub>	C <sub>25</sub>	C <sub>10</sub>	C <sub>5</sub>	C <sub>2</sub>
Greenspace	0.34	0.46	0.42	0.39	0.35	0.32	0.29
<b>Total Area =</b>	<b>0.34</b>	<b>0.46</b>	<b>0.42</b>	<b>0.39</b>	<b>0.35</b>	<b>0.32</b>	<b>0.29</b>

(C values taken from Table 400-2 of City of Bryant Drainage Manual)

Good Condition, Average 2-7%

Stormwater Calcs - Butler Center  
using Rational Method

Pre-development

Drainage Basin 1

Q <sub>100</sub> = 1.25 CFS	Q <sub>50</sub> = 1.08 CFS	Q <sub>25</sub> = 0.93 CFS	Q <sub>10</sub> = 0.75 CFS	Q <sub>5</sub> = 0.64 CFS	Q <sub>2</sub> = 0.52 CFS
c = 0.73	c = 0.69	c = 0.65	c = 0.61	c = 0.58	c = 0.54
i = 10.00 in/hr	i = 9.20 in/hr	i = 8.40 in/hr	i = 7.20 in/hr	i = 6.50 in/hr	i = 5.60 in/hr
A = 0.17 acres	A = 0.17 acres	A = 0.17 acres	A = 0.17 acres	A = 0.17 acres	A = 0.17 acres

Drainage Basin 2

Q <sub>100</sub> = 5.79 CFS	Q <sub>50</sub> = 4.85 CFS	Q <sub>25</sub> = 4.12 CFS	Q <sub>10</sub> = 3.13 CFS	Q <sub>5</sub> = 2.66 CFS	Q <sub>2</sub> = 2.08 CFS
c = 0.49	c = 0.45	c = 0.42	c = 0.37	c = 0.35	c = 0.32
i = 10.00 in/hr	i = 9.20 in/hr	i = 8.40 in/hr	i = 7.20 in/hr	i = 6.50 in/hr	i = 5.60 in/hr
A = 1.18 acres	A = 1.18 acres	A = 1.18 acres	A = 1.18 acres	A = 1.18 acres	A = 1.18 acres

Drainage Basin 3

Q <sub>100</sub> = 0.75 CFS	Q <sub>50</sub> = 0.63 CFS	Q <sub>25</sub> = 0.54 CFS	Q <sub>10</sub> = 0.41 CFS	Q <sub>5</sub> = 0.35 CFS	Q <sub>2</sub> = 0.28 CFS
c = 0.47	c = 0.43	c = 0.40	c = 0.36	c = 0.34	c = 0.31
i = 10.00 in/hr	i = 9.20 in/hr	i = 8.40 in/hr	i = 7.20 in/hr	i = 6.50 in/hr	i = 5.60 in/hr
A = 0.16 acres	A = 0.16 acres	A = 0.16 acres	A = 0.16 acres	A = 0.16 acres	A = 0.16 acres

Post-development

Drainage Basin 1

Q <sub>100</sub> = 0.60 CFS	Q <sub>50</sub> = 0.50 CFS	Q <sub>25</sub> = 0.43 CFS	Q <sub>10</sub> = 0.33 CFS	Q <sub>5</sub> = 0.27 CFS	Q <sub>2</sub> = 0.21 CFS
c = 0.46	c = 0.42	c = 0.39	c = 0.35	c = 0.32	c = 0.29
i = 10.00 in/hr	i = 9.20 in/hr	i = 8.40 in/hr	i = 7.20 in/hr	i = 6.50 in/hr	i = 5.60 in/hr
A = 0.13 acres	A = 0.13 acres	A = 0.13 acres	A = 0.13 acres	A = 0.13 acres	A = 0.13 acres

Drainage Basin 2

Q <sub>100</sub> = 8.96 CFS	Q <sub>50</sub> = 7.81 CFS	Q <sub>25</sub> = 6.82 CFS	Q <sub>10</sub> = 5.50 CFS	Q <sub>5</sub> = 4.78 CFS	Q <sub>2</sub> = 3.86 CFS
c = 0.94	c = 0.89	c = 0.85	c = 0.80	c = 0.77	c = 0.73
i = 10.00 in/hr	i = 9.20 in/hr	i = 8.40 in/hr	i = 7.20 in/hr	i = 6.50 in/hr	i = 5.60 in/hr
A = 0.95 acres	A = 0.95 acres	A = 0.95 acres	A = 0.95 acres	A = 0.95 acres	A = 0.95 acres

Drainage Basin 3

Q <sub>100</sub> = 1.56 CFS	Q <sub>50</sub> = 1.31 CFS	Q <sub>25</sub> = 1.11 CFS	Q <sub>10</sub> = 0.86 CFS	Q <sub>5</sub> = 0.71 CFS	Q <sub>2</sub> = 0.55 CFS
c = 0.46	c = 0.42	c = 0.39	c = 0.35	c = 0.32	c = 0.29
i = 10.00 in/hr	i = 9.20 in/hr	i = 8.40 in/hr	i = 7.20 in/hr	i = 6.50 in/hr	i = 5.60 in/hr
A = 0.34 acres	A = 0.34 acres	A = 0.34 acres	A = 0.34 acres	A = 0.34 acres	A = 0.34 acres

Detention Volume

Pond-1 for Q100	
Cundev =	0.49
lundev =	10.00 in/hr
Cdev =	0.94
ldev =	10.00 in/hr
R =	4.52
A =	0.95 acres
Tc =	5.00 minutes
	60 sec/min
Detention Volume =	1,289 cubic feet

$$R = (Cdev * ldev) - (Cundev * lundev)$$

$$Detention Volume = R * A * Tc * 60$$

**Stormwater Calcs - Butler Center  
using Rational Method  
Weir & Detention Pond Sizing**

Storm Event	Flow (cfs)
Q2 - Pre Basin 2	2.08
Q10 - Pre Basin 2	3.13
Q25 - Pre Basin 2	4.12
Q50 - Pre Basin 2	4.85
Q100 - Pre Basin 2	5.79
Q10 - Post Basin 2	5.50
Q25 - Post Basin 2	6.82
Q100 - Post Basin 2	8.96

**Rectangular Weir**

Q2			Q10			Q25			Q50			Q100	
Q (cfs)	CLH <sup>1.5</sup>		Q (cfs)	CLH <sup>1.5</sup>		Q (cfs)	CLH <sup>1.5</sup>		Q (cfs)	CLH <sup>1.5</sup>		Q (cfs)	CLH <sup>1.5</sup>
C	2.5	6"	C	2.5	6"	C	2.5	6"	C	2.5	6"	C	2.5
L	0.5		L	0.5		L	0.5		L	0.5		L	0.5
H	1.33		H	1.75		H	2.17		H	2.33		H	2.5
Q (cfs)	1.92		Q (cfs)	2.89		Q (cfs)	4.00		Q (cfs)	4.45		Q (cfs)	4.94

Pond Volume	
Volume Required	1289 CF
Use 36" Pipe	
Dia =	30.00
A =	4.91 SF
L (required) =	262.61 FT

Stormwater Calcs - Butler Center  
Detention Culverts

PIPE NAME	DIAMETER (IN)	LENGTH (FT)	AREA (SF)	VOLUME (CF)
PIPE 141	30.00	117	4.91	574.47
PIPE 139	30.00	121	4.91	594.11
PIPE 140	30.00	46	4.91	225.86
<b>TOTAL</b>		284		<b>1394.44</b>

Stormwater Calcs - Butler Center

Outlet Pipe Capacity

OUTLET CULVERT

Pipe	From	To	Design Flow (cfs)	Slope (ft/ft)	Diameter (inches)	No. Pipes	Manning's	Area Full (sf)	Wetted Perimeter Full (ft)	Hydraulic Radius Full (ft)	Flow Capacity (cfs)	% Capacity
18" HDPE	East	West	5.79	0.0050	18	1	0.012	1.77	4.712	0.375	8.05	72%



## Stormwater Calcs - Butler Center

### Ditch Capacity

Mannings equation for ditch

n= 0.022 based on n for open channel earth with short grass, few weeds

	Width						
Depth (ft)	Bottom (ft)	Top (ft)	area (ft <sup>2</sup> )	rH	slope (ft/ft)	Velocity (ft/s)	Q (cfs)
0.75	0.00	4.50	1.69	0.36	1.000%	3.40	5.74



**Stormwater Calcs - Butler Center  
Using Rational Method**

Post-development Basin

**Calculated Tc values - Drainage Basin CI-1**

$$T_c = \frac{56 * L^{.6} * n^{.6}}{i^{.4} * S^{.3}} \text{ seconds}$$

L1 = 700 feet  
n1 = 0.013 Smooth Concrete/Asphalt  
S1 = 0.031 ft/ft

I<sub>assumed</sub> = 7.20 inches  
T<sub>c</sub><sub>calculated</sub> = 271 seconds  
T<sub>c</sub><sub>calculated</sub> = 4.52 minutes

Tc = 4.52 minutes  
I = 7.20 inches

Use Tc = **5.00** minutes

Stormwater Calcs - Butler Center  
 using Rational Method  
 POST-DEV C VALUES

CI-1					
Area	C <sub>10</sub>	C <sub>25</sub>	C <sub>100</sub>	(C values taken from Table 400-2 of City of Bryant Drainage Manual)	
0.41	0.83	0.88	0.97	Asphalt/Roof	
<b>Total Area = 0.41</b>	<b>0.83</b>	<b>0.88</b>	<b>0.97</b>		

CI-2					
Area	C <sub>10</sub>	C <sub>25</sub>	C <sub>100</sub>	(C values taken from Table 400-2 of City of Bryant Drainage Manual)	
0.09	0.83	0.88	0.97	Asphalt/Roof	
<b>Total Area = 0.09</b>	<b>0.83</b>	<b>0.88</b>	<b>0.97</b>		

CI-4					
Area	C <sub>10</sub>	C <sub>25</sub>	C <sub>100</sub>	(C values taken from Table 400-2 of City of Bryant Drainage Manual)	
0.29	0.83	0.88	0.97	Asphalt/Roof	
<b>Total Area = 0.29</b>	<b>0.83</b>	<b>0.88</b>	<b>0.97</b>		

Stormwater Calcs - Butler Center  
using Rational Method  
Post Development Flowrates

CI-1	$Q_{10} =$	2.45 CFS
	$c =$	0.83
	$i =$	7.20 in/hr
	$A =$	0.41 acres

CI-2	$Q_{10} =$	0.54 CFS
	$c =$	0.83
	$i =$	7.20 in/hr
	$A =$	0.09 acres

CI-4	$Q_{10} =$	1.73 CFS
	$c =$	0.83
	$i =$	7.20 in/hr
	$A =$	0.29 acres

## Stormwater Calcs - Butler Center GUTTER SPREAD 10-YR STORM

### CI-1

$$T = \left( \frac{Q * n}{k_u * S_x^{1.67} * S_L^{0.5}} \right)^{.375}$$

Q	2.45 cfs	Q= Flowrate(cfs)
n	0.012	n=manning's number
k <sub>u</sub>	0.56	k=0.56
S <sub>x</sub>	0.028	S <sub>x</sub> = cross slope
S <sub>L</sub>	0.031	S <sub>L</sub> = longitudinal slope
T	<u>5.96</u> ft	T= Gutter Spread

### CI-2

$$T = \left( \frac{Q * n}{k_u * S_x^{1.67} * S_L^{0.5}} \right)^{.375}$$

Q	0.54 cfs
n	0.012
k <sub>u</sub>	0.56
S <sub>x</sub>	0.03
S <sub>L</sub>	0.017
T	<u>3.62</u> ft

### CI-4

$$T = \left( \frac{Q * n}{k_u * S_x^{1.67} * S_L^{0.5}} \right)^{.375}$$

Q	1.73 cfs
n	0.012
k <sub>u</sub>	0.56
S <sub>x</sub>	0.028
S <sub>L</sub>	0.03
T	<u>5.34</u> ft

## Stormwater Calcs - Butler Center - CURB INLETS

10-YEAR STORM

Area #	Area	I	C	Weir			Required L (ft)	Actual L (ft)	
				Q (cfs)	$Q=3.0LY^{1.5}$ Q (cfs)	Y (ft)			
CI-1	0.41	7.20	0.83	2.45	2.45	0.49	<b>2.38</b>	5	5' box
CI-2	0.09	7.20	0.83	0.54	0.54	0.49	<b>0.52</b>	5	5' box
CI-4	0.29	7.20	0.83	1.73	1.73	0.49	<b>1.68</b>	5	5' box

# GNE

3825 Mt Carmel Rd.  
Bryant, AR 72022

**GarNat Engineering, LLC**

P.O. Box 116  
Benton, AR 72018

March 8, 2023

Mr. Truett Smith  
Bryant Planning Coordinator/Planning Commission Secretary  
210 SW 3<sup>rd</sup> Street  
Bryant, AR 72022

Re: Large Scale Development Commercial Building – Butler Center

Dear Mr. Smith:

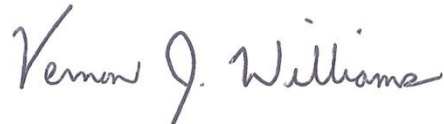
Please allow this letter and following list of enclosures to serve as my application for approval of the referenced large scale development. It is my desire that this matter be included on the agenda for your May 2023 City of Bryant Planning Commission Meeting.

List of Enclosures

- 2 Full Set Plans
- Affidavit
- 8 copies of Site Plan
- Drainage Study
- Bryant Large Development Checklist
- ADA/ABA Form

If you have questions or need any additional information, please do not hesitate to contact me.

Sincerely,  
GarNat Engineering, LLC



Vernon J. Williams, P.E., President



# Bryant Planning Commission

## LARGE SCALE DEVELOPMENT COMMERCIAL BUILDING CHECKLIST

CITY OF BRYANT  
210 SW 3<sup>RD</sup> STREET  
BRYANT, AR 72022  
501-943-0309

**PC MEETING DATE:** SECOND MONDAY OF EACH MONTH  
**TIME:** 6:00 P.M.  
**PLACE:** COURTROOM - BRYANT OFFICE COMPLEX  
**AGENDA DEADLINE:** 5:00 P.M. THREE WEEKS PRIOR TO THE REGULARLY SCHEDULED MEETING DATE

### REQUIREMENTS FOR SUBMISSION

LETTER TO PLANNING COMMISSION STATING YOUR REQUEST  
COMPLETED CHECKLIST (SUBDIVISION OR BUILDING)  
ADA/ABA FORM COMPLETED  
TWO FULL SETS OF BUILDING PLANS  
20 FOLDED COPIES OF SITE PLAN (MINIMUM SIZE 17" X 34") THAT INCLUDES THE FOLLOWING:  
VICINITY MAP - LEGAL DESCRIPTION - LANDSCAPING PLAN  
20 FOLDED COPIES OF FLOOR PLAN  
20 COPIES OF FRONT AND REAR BUILDING ELEVATIONS  
AN IBM COMPATIBLE DISKETTE IN PDF FORMAT  
COPY OF ADEQ STORMWATER POLLUTION PREVENTION PLAN FOR PROPERTY PARCEL CONTAINING ONE ACRE OR LARGER.  
COPY OF STORMWATER DETENTION APPROVAL BY ENGINEER  
\$250.00 FOR STORMWATER DETENTION AND DRAINAGE PLAN REVIEW

### ALL REQUIREMENTS LISTED ABOVE MUST BE COMPLETED AND ATTACHED BEFORE SUBMITTING APPLICATION TO BE PLACED ON THE PLANNING COMMISSION AGENDA.

NOTE: WHEN MAKING CHANGES TO AN APPROVED SITE PLAN, A REVISED SITE PLAN MUST BE SUBMITTED TO THE BRYANT PLANNING COMMISSION FOR APPROVAL. THIS MUST BE DONE PRIOR TO IMPLEMENTATION. FAILURE TO COMPLY WILL RESULT IN PENALTIES/FINES BEING IMPOSED IN ACCORDANCE WITH CITY ORDINANCES.

I HAVE COMPLIED WITH THE REQUIREMENTS LISTED ABOVE AND HAVE CHECKED ALL OF THE BOXES ON THE CHECKLIST WHICH APPLY TO THIS PROJECT SUBMITTAL.

  
SIGNATURE

3/8/23  
DATE

# City of Bryant Commercial Building Checklist

Name of Development Butler Center  
Site Location 1109-A North Reynolds Rd. Bryant, AR Current zoning R-E  
Owner Butler Wealth Capital, LLC Phone 870-703-3807

## I. BASIC INFORMATION NEEDED ON THE SITE PLAN

- ▲ 1. Name of Development
- ▲ 2. Current zoning
- ▲ 3. Name and Address of owner of Record
- ▲ 4. Name and address of the architect, landscape architect, engineer, surveyor, or other person involved in the preparation of the plan
- ▲ 5. Date of preparation of the plan
- ▲ 6. Vicinity map locating streets, highways, section lines, railroad, schools, & parks within ½ mile
- ▲ 7. Legal description of the property with exact boundary lines
- ▲ 8. North arrow & Scale
- ▲ 9. Identification of any land areas within the 100 year floodplain and within the 100 year floodway
- ▲ 10. Lot area in square feet
- ▲ 11. Show scale (not less than 1" = 100') (paper size minimum 17" X 34")
- ▲ 12. Existing streams, drainage channels, and other bodies of water
- ▲ 13. Drainage easements for stormwater run-off and detention shown & labeled
- ▲ 14. Location and name of existing streets
- ▲ 15. Show source of water supply
- ▲ 16. Show location of waste water connection to municipal system & sanitary sewer layout
- ▲ 17. Fire Hydrant placement
- ▲ 18. Proposed location of buildings and other structures, parking areas, drives, loading areas, service areas, alleys, walks, screening, and public streets
- ▲ 19. Sufficient dimensions to indicate relationship between buildings, property lines, parking areas and other elements of the plan
- ▲ 20. Extent and character of proposed landscaping. Common and/or Botanical plant names and sizes of new vegetation must be clearly indicated.
- ▲ 21. Location, massing and pattern of existing vegetation to be retained
- ▲ 22. Existing structures on the site
- ▲ 23. Pedestrian and vehicular access points, sidewalks, crosswalks, etc.
- ▲ 24. Typical building elevations depicting the style, size and exterior construction materials of the buildings proposed. Where several building types are proposed on the plan, such as apartments and commercial buildings, a separate sketch shall be prepared for each type. The elevations shall be drawn at a minimum scale of 1/16" to a foot and must show adjoining context.
- ▲ 25. Any variance approvals

II ADDITIONAL INFORMATION NEEDED, BUT NOT ON THE SITE PLAN

COMMERCIAL BUILDING WORKSHEET

	Yes	No
Site is compatible with Master Street Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proposed improvement is within building line setbacks Front <u>37</u> ft. Side <u>25</u> ft. CNR Side <u>N/A</u> ft. Back <u>30</u> ft.	<input type="checkbox"/>	<input type="checkbox"/>
Parking requirements can be satisfied	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Floor Space <u>13500</u> sq.ft. divided by 300 = <u>45</u> (no. of parking spaces required)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Improvement is outside 100 year flood plain (if answer is no - Provide 404 Permit for site)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lowest building floor level and all mechanical equipment are above FEMA 100 year flood elevation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will there be a dumpster located on the site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will there be a construction site office?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have you made "One Call"?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Structure and site complies with ADA (Americans with Disability Act) and ABA (Architectural Barriers Act) Accessibility Guidelines	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Design complies with Arkansas Plumbing Code and National Electric Code requirements	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Foundation and structure meet earthquake requirements for Zone 1.	<input type="checkbox"/>	<input type="checkbox"/>
Structure meets Arkansas Energy Code for specified use.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Complies with Arkansas Fire Prevention Code	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Complies with International Code Council regulations	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will a Site Clearance Permit be required? (City Ordinance 2002-03)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Are you granted any variances by the Board of Adjustment?	<input type="checkbox"/>	<input type="checkbox"/>
If you have been granted a variance please explain in detail:		

III. LANDSCAPING COMPLIANCE WITH REQUIREMENTS

	YES	NO
No planting within 5 feet of a fire hydrant	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Spacing will be 40' between trees	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tree must be a minimum 3" in diameter at the base and 12' + tall	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Existing trees meeting the minimum size can be counted to meet above criteria	<input checked="" type="checkbox"/>	<input type="checkbox"/>
No trees can be planted within 30 feet of a property corner or driveway	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Shrubs along street right-of-way lines cannot exceed 30 inches in height	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**IV. SITE COVERAGE COMPLIANCE WITH REQUIREMENTS**

(FOR YOUR CONVENIENCE WE HAVE LISTED THE THREE COMMERCIAL ZONING SITE COVERAGE REQUIREMENTS - CHOOSE THE ZONING FOR THIS PROJECT AND COMPLETE ONLY THAT SECTION)

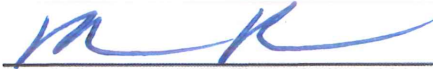
	<u>YES</u>	<u>NO</u>
<b>1. C-1 Zoning - Neighborhood Commercial</b>		
Lot area: minimum of 2,500 square feet; maximum 16,000 square feet	_____	_____
Front Yard: none required	_____	_____
Side Yard: minimum of 5 feet each side	_____	_____
Rear Yard: minimum of 55 feet	_____	_____
Maximum lot coverage of 70% of the total area of the site for all principal, accessory buildings, parking lots, sidewalks, private streets, or drives.	_____	_____
Parking: one space per each 200 sq. ft. of commercial use	_____	_____
Loading areas: physically separated from all streets with 10 ft grassy area	_____	_____
When abuts a residential district, a minimum 6' high wood, rock, or masonry fence is required with a landscape screen	_____	_____
<b>2. C-2 Zoning - Lots fronting along roadways designated as Interstate 30 and frontage roads, State Highway 5 and 183</b>		
Front Yard: not less than 50 feet from front property line	_____	_____
Side Yard: not required, except where they abut a street or a residential lot line then a minimum of 25 feet is required	_____	_____
Rear Yard: minimum of 15 feet, except where they abut residential area then a minimum of 55 feet is required	_____	_____
A maximum lot coverage of 35% of the total area of the site for all principal and accessory buildings	_____	_____
Parking: one space per each 300 sq. ft. of occupied space	_____	_____
When abuts a residential district, a minimum 6' high wood, rock, or masonry fence is required with a landscape screen	_____	_____
<b>3. C-2 Zoning - Lots fronting along roadways designated as interior local.</b>		
Front Yard: none required	_____	✓
Side Yard: not required, except where they abut a street or a residential lot line then a minimum of 25 percent of lot dimension	_____	✓
Rear Yard: minimum of 15 feet, except where they abut residential area then a minimum of 55 feet is required	_____	✓
A maximum lot coverage of 85% of the total area of the site for all principal, accessory buildings and parking	✓	_____
Parking: one space per each 300 sq. ft. of occupied space	✓	_____
When abuts a residential district, a minimum 6' high wood, rock, or masonry fence is required with a landscape screen	_____	_____

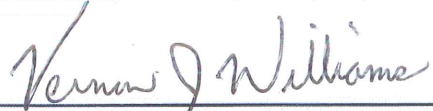
V. SITE PLAN ATTACHMENTS

(APPLICATION WILL NOT BE ACCEPTED UNTIL ALL ATTACHMENT REQUIREMENTS ARE MET)

- ▲ 26. Letter to Planning Commission stating your request
- ▲ 27. Completed Checklist
- ▲ 28. Completed ADA/ABA Form
- ▲ 29. Two full sets of Building Plans
- ▲ 30. 20 copies of Site Plan (folded to no larger than 8 1/2 X 14 size) that includes vicinity map and landscaping plan (minimum size 17" X 34" paper)
- ▲ 31. 20 copies of Landscaping Plan (folded to no larger than 8 1/2 X 14 size)
- ▲ 32. 20 copies of building floor plan (folded to no larger than 8 1/2 X 14 size)
- ▲ 33. Copy of Stormwater Detention approval
- ▲ 34. Copy of ADEQ Stormwater Pollution Prevention Plan for property containing one acre or larger.
- ▲ 35. IBM compatible diskette or CD with data in PDF format.
- ▲ 36. Receipt for \$250.00 for Stormwater Detention and Drainage Plan review

I CERTIFY that the design of Butler Center in the City of Bryant, Arkansas complies with the above regulations, laws and codes.

  
 Owner  
6 Creekwood Court  
 Mailing Address  
Little Rock, AR 72223  
 City

  
 Engineer/Architect  
501-408-4650  
 Phone #  
03/08/2023  
 Date

CITY USE

Action Taken:

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Special Conditions:

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Permit Issued:	Date _____	Sq.Ft. _____	Amount \$ _____
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Construction Completed Certified For Occupancy:	Date: _____
	Inspector: _____

Permit No. \_\_\_\_\_

## BUILDING PERMIT

### ADA/ABA ACCESSIBILITY STANDARDS

The *Americans with Disability Act* and *Architectural Barriers Act* Accessibility Guidelines were prepared by the U.S. Access Board and mandated by the U. S. Department of Justice regulations implementing Title III as the official ADA/ABA accessibility guidelines. **All new construction, remodeling, and modifications must conform to these building standards** for places of public accommodation and commercial facilities. Residential is exempt.

The ADA/ABA accessibility guidelines contain general design standards for building and site elements, such as accessible entrances and routes, ramps, parking spaces, stairs, elevators, restrooms, signage, etc. Also included are specific standards for restaurants, medical care facilities, libraries and transportation facilities and vehicles, and places of lodging.

The guidelines also include "scoping" requirements that outline the necessary features or appropriate quantity for achieving ready access. For example, at least 50 percent of all public entrances to buildings must be accessible with an accessible path of travel. In public restrooms, at least one bathroom stall must be accessible unless there are more than six stalls, in which case the number increases.

I hereby certify that I have read and examined the above notice and will comply with all guidelines of the ADA Accessibility Guidelines. I further understand that a copy of the ADA/ABA Regulations are available for inspection during business hours of City Hall or I may obtain a copy by writing:

**The Access Board**  
1331 F Street, NW, Suite 1000  
Washington, DC 20004-1111  
(202) 272-0080 (v) (202) 272-0082 (TTY) (202) 272-0081 (fax)  
(800) 872-2253 (v) (800) 993-2822 (TTY)  
email: [info@access-board.gov](mailto:info@access-board.gov)

Signature of Contractor  
or Authorized Agent

Date 03/07/2023

Signature of Owner  
(if owner-builder)

Date 03/07/2023

Application of Permit Approved: \_\_\_\_\_ Date \_\_\_\_\_  
Commission - Chairman

**AFFIDAVIT**

I, Michael Butler, Butler Wealth Capital, LLC certify by my signature below that I hereby authorize Vernon Williams of GarNat Engineering, LLC to act as Butler Wealth Capital, LLC's agent regarding the Planning Commission Approval of the proposed development at 1109 N Reynolds Road.

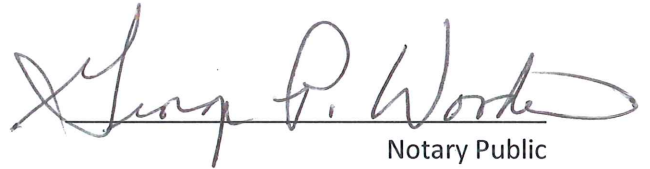


Michael Butler  
Butler Wealth Capital, LLC

03/07/2023

Date

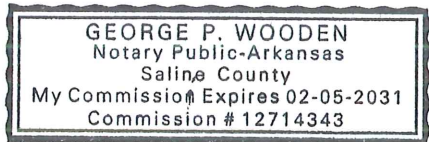
Subscribed and sworn to me a Notary Public on this 7<sup>TH</sup> day of MARCH, 2023.



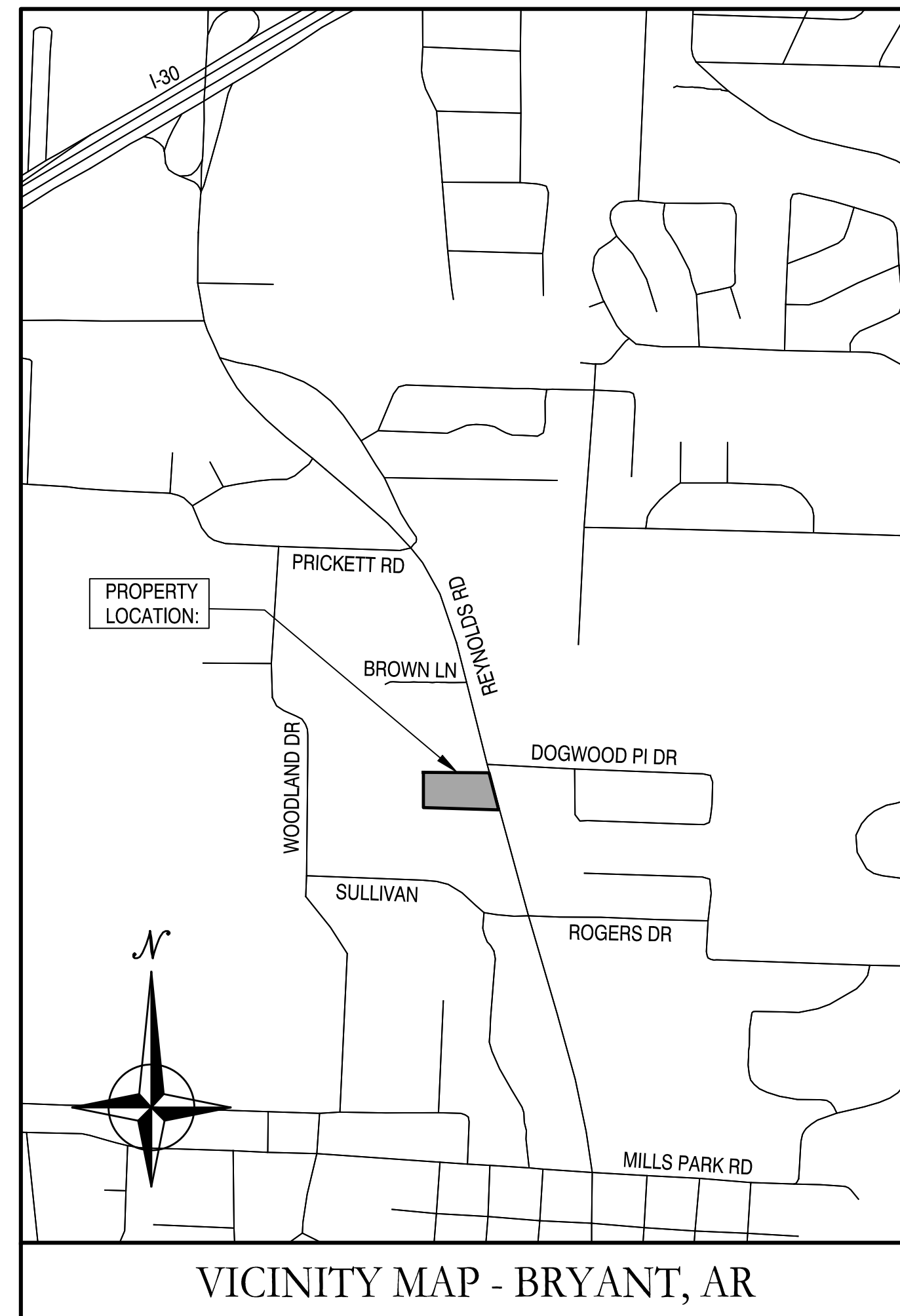
Notary Public

My Commission Expires:

02-05-2031



# NEW FACILITY FOR: BUTLER CENTER CITY OF BRYANT, AR



Prepared by:  
**GarNat Engineering, LLC**

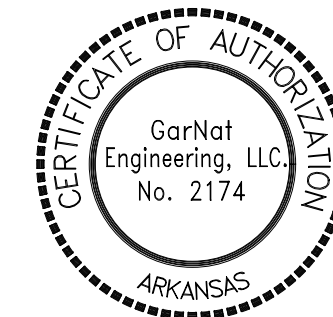
Designing our client's success  
[www.garnatengineering.com](http://www.garnatengineering.com)

P.O. Box 116  
Benton, AR 72018  
Ph (501) 408-4650

3825 Mt Carmel Road  
Bryant, AR 72022  
Fx (888) 900-3068



ARKANSAS



03-06-2023

## DRAWING INDEX:

G1.0	GENERAL NOTES
D1.0	SITE DEMO PLAN
C1.0	SITE PLAN
C1.1	SITE DETAILS
C2.0	UTILITY PLAN
C3.0	GRADING & DRAINAGE PLAN
C3.1	DRAINAGE PROFILE & OUTLET STRUCTURE DETAILS
C3.2	OFFSITE DRAINAGE AND BMP
C4.0	EROSION CONTROL PLAN
L1.0	LANDSCAPE PLAN
L1.1	LANDSCAPING NOTES & DETAILS

## ARDOT STANDARD DRAWINGS:

CG-1	CURBING DETAILS
DR-1	DETAILS OF DRIVEWAYS & ISLANDS
FPC-9	DETAILS OF DROP INLETS & JUNCTION BOXES
FPC-9E	DETAILS OF DROP INLETS (TYPE C)
PCC-1	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING
PCP-1	PLASTIC PIPE CULVERT (HIGH DENSITY POLYETHYLENE)
TEC-1	TEMPORARY EROSION CONTROL DEVICES
TEC-4	TEMPORARY EROSION CONTROL DEVICES
WR-2	WHEELCHAIR RAMPS ALTERATIONS ONLY



**SITE LEGEND:**

	FIRE HYDRANT		ASPHALT
	ELECTRICAL & UTILITY POLE		GRAVEL
	SANITARY SEWER MANHOLE		CONCRETE
	WATER VALVE		
	STORM MANHOLE		
	LIGHT POLE		
	TELEPHONE PEDESTAL		
	BENCHMARKS		
	ELECTRIC BOX		
	GUY ANCHOR		
	WATER METER		
	GAS METER		
	SIGN		
	EXISTING WATERLINE		
	OVERHEAD POWER		
	TEST PIT		
	FORCE MAIN		
	CHAIN-LINK FENCE		
	WOOD FENCE		
	SANITARY SEWER LINE		

**SURVEY LEGEND**

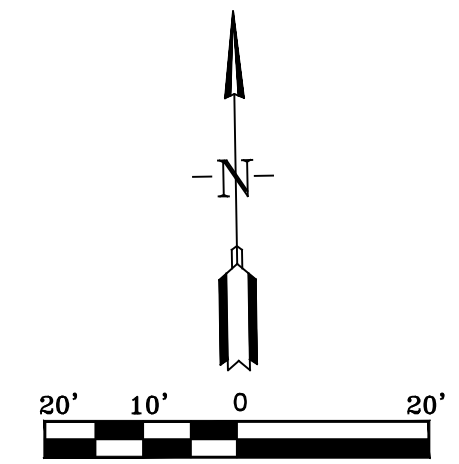
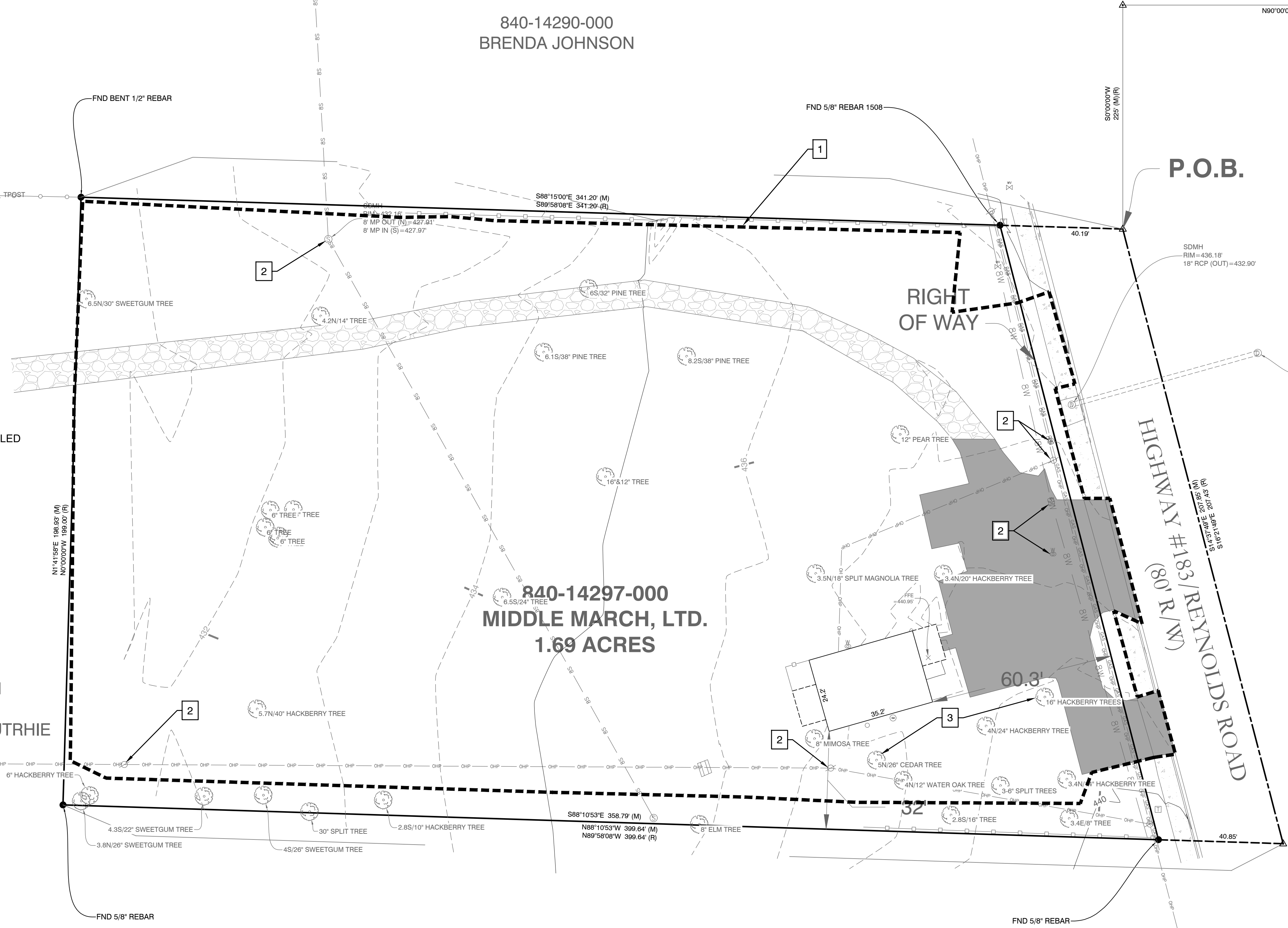
	Computed point
	Found monument
	Set #4 RB/Plas. Cap
	Measured
	Record
	Platted

**KEYED DEMO NOTES:**

1. REMOVE ALL ABOVE GROUND FEATURES & UTILITY SERVICES WITHIN THESE LIMITS THAT ARE NOT CALLED TO BE PROTECTED OR REUSED. CLEAR & GRUB WITHIN THESE LIMITS.
2. PROTECT EXISTING UTILITY.
3. PROTECT TREES.

**LEGEND:**

	ASPHALT DEMOLITION LIMITS
	CONCRETE DEMOLITION LIMITS



BY	REVISION	DATE

**Designing our client's success**

**GNE**  
**GarNat Engineering, LLC**  
 3825 Mt Carmel Rd  
 Bryant, AR 72022  
 P.O. Box 116  
 Benton, AR 72018  
 Ph (501) 408-4650  
 gnatengineering@gmail.com

**NEW FACILITY FOR:  
 BUTLER CENTER  
 CITY OF BRYANT, AR**



03-06-2023

CONTENTS:  
 SITE DEMO PLAN

PROJECT NO:  
 22203

DATE:  
 FEB 2023

SHEET NO:  
**D1.0**

J:\Projects\2022\Projects\22203\Butler\_Center\_1103\_North\_Reynolds\_Road\_Kerry\_Williams\Drawings\22203\_1103\_N\_Reynolds\_Rd\_SheetD1.dwg

A	B	C	D	E	F																		
<p>1. SAFETY</p> <p>1.1. JOBSITE SAFETY IS THE SOLE AND EXCLUSIVE RESPONSIBILITY OF THE GENERAL CONTRACTOR.</p> <p>1.2. THIS RESPONSIBILITY COVERS THEIR OWN WORK FORCE, ALL SUBCONTRACTORS, VISITING PERSONNEL, OFFICIALS, AND THE GENERAL PUBLIC WHICH MAY HAVE ACCESS TO THE JOBSITE.</p> <p>1.3. THE CONTRACTOR SHALL EXERCISE COMPLETE CONTROL OVER WHO HAS ACCESS TO THE JOBSITE TO ENSURE JOBSITE SAFETY.</p> <p>1.4. THE CONTRACTOR SHALL CONFORM TO ALL SECURITY AND SAFETY REQUIREMENTS OF THE OWNER.</p> <p>1.5. ANY SAFETY OR OTHER TRAINING REQUIRED BY THE OWNER FOR THE WORK FORCE MUST BE PROVIDED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.</p>		<p>TO INVERT OUT.</p> <p>7.2. BEDDING FOR STORM STRUCTURES SHALL CONSIST OF A MINIMUM OF 6-INCHES OF COMPACTED #57 STONE ON TOP OF COMPACTED SUBGRADE.</p> <p>7.3. AREAS EXPOSED BY EXCAVATION OR STRIPPING AND ON WHICH SUBGRADE PREPARATIONS ARE TO BE PERFORMED SHALL BE SCARIFIED TO MINIMUM DEPTH OF 0'-8" AND COMPACTED TO MINIMUM OF 95% OPTIMUM DENSITY. ANY AREAS THAT FAIL COMPACTION ARE TO BE STABILIZED AS DIRECTED BY THE ENGINEER.</p> <p>8. PRIOR TO PLACING FILL IN LOW AREAS, SUCH AS PREVIOUSLY EXISTING CREEKS, PONDS, OR LAKES, PERFORM FOLLOWING PROCEDURES:</p> <p>8.1. DRAIN WATER OUT BY GRAVITY WITH DITCH HAVING FLOW LINE LOWER THAN LOWEST ELEVATION IN LOW AREA. IF DRAINAGE CANNOT BE PERFORMED BY GRAVITY DITCH, USE ADEQUATE PUMP TO OBTAIN THE SAME RESULTS.</p> <p>8.2. AFTER DRAINAGE OF LOW AREA IS COMPLETE, REMOVE MULCH, MUD DEBRIS, AND OTHER UNSUITABLE MATERIAL BY USING ACCEPTABLE EQUIPMENT AND METHODS THAT WILL KEEP NATURAL SOILS UNDERLYING LOW AREA DRY AND UNDISTURBED.</p>		<p>12.1. THE CONTRACTOR IS TO MEET ALL ENVIRONMENTAL REQUIREMENTS OF THE OWNER AND ANY REGULATORY AGENCY HAVING AUTHORITY OVER THIS SITE.</p> <p>12.2. THE CONTRACTOR IS TO UTILIZE BEST MANAGEMENT PRACTICES (BMP'S) FOR CONTROL OF EROSION DURING ALL CONSTRUCTION PHASES OF THIS PROJECT.</p> <p>12.3. MINIMUM BMP'S REQUIRED FOR THE PROJECT ARE LISTED ON SHEET THESE PLANS. CONTRACTOR SHALL PROVIDE THESE BMP'S AND ANY OTHERS REQUIRED FOR THE PROJECT.</p> <p>12.4. CONTRACTOR SHALL KEEP WORK AREA CLEAN AND FREE OF ACCUMULATED TRASH AND DEBRIS. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING MEASURES TO AVOID TRACKING OF MUD, DIRT, ROCKS, AND DEBRIS ONTO AREAS OUTSIDE THE PROJECT AREA. CONTRACTOR SHALL CLEAN PAVEMENTS WHEN NECESSARY OR AS OTHERWISE DIRECTED, AND SHALL CONTROL DUST BY SWEEPING AND WATERING AS NEEDED. DE-TRACKING MAY BE REQUIRED AT ALL ENTRANCES.</p>	<table border="1"> <tr> <td>BY</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>REVISION</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>DATE</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	BY						REVISION						DATE					
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DATE																							
<p>2. PERMITS</p> <p>2.1. CONTRACTOR SHALL SECURE ALL REQUIRED PERMITS AS REQUIRED BY REGULATING AUTHORITIES OR BY THE OWNER. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE TERMS AND CONDITIONS ASSOCIATED WITH EACH REQUIRED PERMIT, AS WELL AS ADHERING TO THE RULES AND REGULATIONS OF EACH REGULATING AUTHORITY</p> <p>3. CONTRACT DOCUMENTS</p> <p>3.1. ALL WORK SHALL CONFORM TO THE PLANS, THESE NOTES, AND SPECIFICATIONS IN ALL RESPECTS AND SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER.</p>		<p>9. UTILITIES</p> <p>9.1. AN ATTEMPT HAS BEEN MADE TO APPROXIMATELY LOCATE UTILITIES ON THE DRAWINGS.</p> <p>9.2. UTILITIES SHOWN ON THE DRAWINGS WERE LOCATED BY VISUAL OBSERVATION, AND BY TRANSCRIBING FROM RECORD MAPS AND PLANS.</p> <p>9.3. NO EXCAVATIONS WERE MADE TO CONFIRM SUB-SURFACE UTILITIES. NEITHER THE SURVEYOR NOR PROJECT ENGINEER GUARANTEES THAT ALL UTILITIES HAVE BEEN SHOWN, OR THAT THOSE SHOWN ARE FULLY ACCURATE.</p>		<p>13. FINAL SITE CONDITIONS</p> <p>13.1. ALL DISTURBED AREAS NOT RECEIVING PAVEMENT OR LANDSCAPING SHALL HAVE VEGETATION ESTABLISHED AT TIME OF FINAL INSPECTION.</p> <p>13.2. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATIONS SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPE 2H:1V OR STEEPER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.</p> <p>13.3. ALL CUT OR FILL SLOPES SHALL BE 3H:1V OR FLATTER UNLESS OTHERWISE NOTED.</p> <p>13.4. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS</p> <p>13.5. UPON PARTIAL OR FINAL COMPLETION OF GRADING WORK, SPREAD TOPSOIL, SEED, FERTILIZER, AND MULCH IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE STORM WATER POLLUTION PREVENTION PLAN.</p>	<p>2</p>																		
<p>4. INDEMNITY</p> <p>4.1. BY ACCEPTING THE CONTRACT FOR THIS WORK, THE CONTRACTOR, AT THEIR OWN EXPENSE AND RISK, HEREBY RELEASES AND AGREES TO INDEMNIFY, DEFEND AND HOLD HARMLESS THE OWNER, GARNAT ENGINEERING, THEIR OFFICERS, AGENTS, EMPLOYEES, CONSULTANTS, AND REPRESENTATIVES FOR DAMAGE TO THE PROPERTY OR INJURY TO, OR DEATH, OF ANY PERSONS, FROM ANY AND ALL CLAIMS, DEMANDS, ACTIONS OF ANY KIND WHATSOEVER ARISING OUT OF AND IN CONNECTION WITH THE AGREEMENT OR PROSECUTION OF WORK UNDER IT, WHETHER SUCH CLAIMS, DEMANDS, ACTIONS, OR LIABILITY ARE CAUSED BY THE CONTRACTOR, ITS AGENTS, EMPLOYEES, SUBCONTRACTORS, PRODUCTS INSTALLED ON THE PROJECT OR CAUSED BY ANY OTHER PARTY.</p> <p>5. CONSTRUCTION PROCEDURES, MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING STANDARDS UNLESS OTHERWISE MODIFIED ON THE DRAWINGS OR IN THESE NOTES OR SPECIFICATIONS.</p> <p>5.1. STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION - ARKANSAS HIGHWAY AND TRANSPORTATION DEPARTMENT</p> <p>5.2. INTERNATIONAL BUILDING CODE</p> <p>5.3. ACI 315 MANUAL OF STANDARD PRACTICES FOR DETAILING REINFORCED CONCRETE STRUCTURES</p> <p>5.4. CRSI RECOMMENDED PRACTICE FOR PLACING REINFORCING STEEL.</p> <p>5.5. CITY OF BRYANT STANDARD SPECIFICATIONS.</p> <p>5.6. LATEST EDITIONS OF AWWA, ASTM, ADH, AND TEN STATES STANDARDS.</p>		<p>9.4. <b>CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADJUSTMENTS AND/OR RELOCATION OF EXISTING UTILITIES THAT ARE DAMAGED AS A RESULT OF WORK OF THIS PROJECT.</b></p> <p>9.5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND PROPERLY DISCONNECTING, ABANDONING, RELOCATING, AND/OR ADJUSTING ALL AFFECTED UTILITIES WITHIN THE PROJECT AREA.</p> <p>9.6. ALL UTILITY WORK SHALL BE COORDINATED AND EXECUTED IN ACCORDANCE WITH THE OWNER AND/OR GOVERNING UTILITY COMPANY CODES, SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.</p> <p>9.7. DESIGN AND ALIGNMENT OF UNDERGROUND TELEPHONE, TV CABLE, GAS AND ELECTRIC SERVICES SHALL BE PROVIDED BY THE INDIVIDUAL UTILITIES AND ARE NOT NECESSARILY SHOWN WITH THESE PLANS. CONTRACTOR SHALL PROVIDE CONDUITS SIZED TO ACCOMMODATE UTILITY ROUTING WITH PULL STRINGS WHERE NECESSARY.</p> <p>9.8. CONTRACTOR TO PROVIDE ALL NECESSARY APPURTENANCES NECESSARY FOR COMPLETE UTILITY SERVICES WHICH ARE NOT PROVIDED BY THE UTILITY COMPANY.</p> <p>9.9. WATER AND SEWER RELOCATIONS SHOWN SHALL COMPLY WITH THE CITY OF BRYANT'S STANDARD WATER AND SEWER SPECIFICATIONS AND DETAILS. SERVICE LINE WORK SHALL BE COMPLETED BY A LICENSED PLUMBER AND COMPLY WITH ARKANSAS PLUMBING CODE.</p>		<p>14. TRAFFIC CONTROL</p> <p>14.1. CONTRACTOR SHALL ENGAGE A SUBCONSULTANT WHO SPECIALIZES IN MAINTENANCE OF TRAFFIC PLANS. SUBCONSULTANT SHALL PREPARE A MAINTENANCE OF TRAFFIC PLAN FOR THE PROJECT THAT COMPLIES WITH THE REQUIREMENTS OF MUTCD AND ALL APPLICABLE AUTHORITIES HAVING JURISDICTION OVER ROAD RIGHT-OF-WAY. CONTRACTOR SHALL SUBMIT MAINTENANCE OF TRAFFIC PLAN TO ENGINEER FOR APPROVAL PRIOR TO BEGINNING WORK.</p>	<p>3</p>																		
<p>6. SITE</p> <p>6.1. CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTION OF ALL PROPERTY CORNERS.</p> <p>6.2. CONTRACTOR IS NOT TO PERFORM WORK BEYOND THE DESIGNATED WORK LIMITS WITHOUT FIRST OBTAINING WRITTEN AUTHORIZATION FROM THE PROJECT ENGINEER OR OWNER.</p> <p>6.3. CONTRACTOR IS RESPONSIBLE FOR REPAIRING THE DAMAGE DONE TO ANY EXISTING ITEM DURING CONSTRUCTION SUCH AS BUT NOT LIMITED TO: DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. REPAIRS SHALL BE EQUAL TO, OR BETTER THAN EXISTING CONDITIONS.</p> <p>6.4. CONTRACTOR TO REMOVE OR RELOCATE, WHEN APPLICABLE, ALL ITEMS, SHOWN TO BE REMOVED OR RELOCATED AND NOT SHOWN WITHIN CONSTRUCTION LIMITS AND WHERE REQUIRED TO ALLOW FOR NEW CONSTRUCTION AS SHOWN.</p> <p>6.5. CONTRACTOR TO ADJUST ALL EXISTING AND PROPOSED MANHOLES, VALVE BOXES, ETC. TO FINISH GRADE, WHERE REQUIRED.</p>		<p>10. DISPOSAL OF DEBRIS, WASTE OR SPOIL</p> <p>10.1. BURNING OF DEBRIS AND WASTE IS NOT ALLOWED. CONTRACTOR MAY BE REQUIRED TO PROPERLY HAUL AWAY AND DISPOSE OF ANY WASTE MATERIAL REMOVED FROM THE SITE.</p> <p>10.2. ANY WASTE OR SPOIL MATERIAL WHICH IS EXCAVATED FROM THE JOB SITE IS TO BE DISPOSED OF AS DIRECTED BY THE ENGINEER OR OWNER.</p> <p>10.3. REMOVAL AND DISPOSAL OF EXCAVATED WASTE MATERIAL IS CONSIDERED SUBSIDIARY TO ALL OTHER ITEMS IN THE PROJECT, AND WILL NOT BE PAID FOR SEPARATELY.</p> <p>10.4. CONTRACTOR SHALL FOLLOW ALL LOCAL, STATE AND FEDERAL REGULATIONS IN DISPOSING OF DEMOLISHED MATERIAL REMOVED FROM THIS SITE.</p> <p>10.5. CONTRACTOR SHALL REMOVE FROM SITE AND DISPOSE OF MATERIAL ENCOUNTERED IN GRADING OPERATIONS THAT, IN OPINION OF THE ENGINEER, IS UNSUITABLE OR UNDESIRABLE FOR BACKFILLING OR SUBGRADE PURPOSES. DISPOSE OF IN A MANNER SATISFACTORY TO ENGINEER. BACKFILL UNDERCUT AREAS WITH LAYERS OF SUITABLE MATERIAL AND COMPACT AS SPECIFIED HEREIN.</p>			<p>4</p>																		
<p>7. STRUCTURES</p> <p>7.1. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM Poured MORTAR INVERT IN</p>		<p>11. SUBSTITUTIONS</p> <p>11.1. SUBSTITUTIONS ARE NOT ALLOWED WITHOUT PRIOR APPROVAL FROM THE PROJECT ENGINEER.</p> <p>12. ENVIRONMENTAL</p>			<p>4</p>																		

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 gnmaterengineering@gmail.com

**NEW FACILITY FOR:  
 BUTLER CENTER  
 CITY OF BRYANT, AR**



03-06-2023

CONTENTS:  
**GENERAL NOTES**

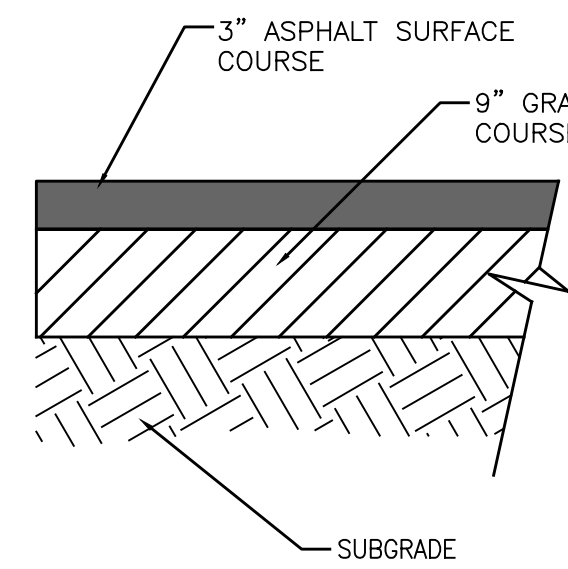
PROJECT NO:  
**22203**

DATE:  
**FEB 2023**

SHEET NO:  
**G1.0**

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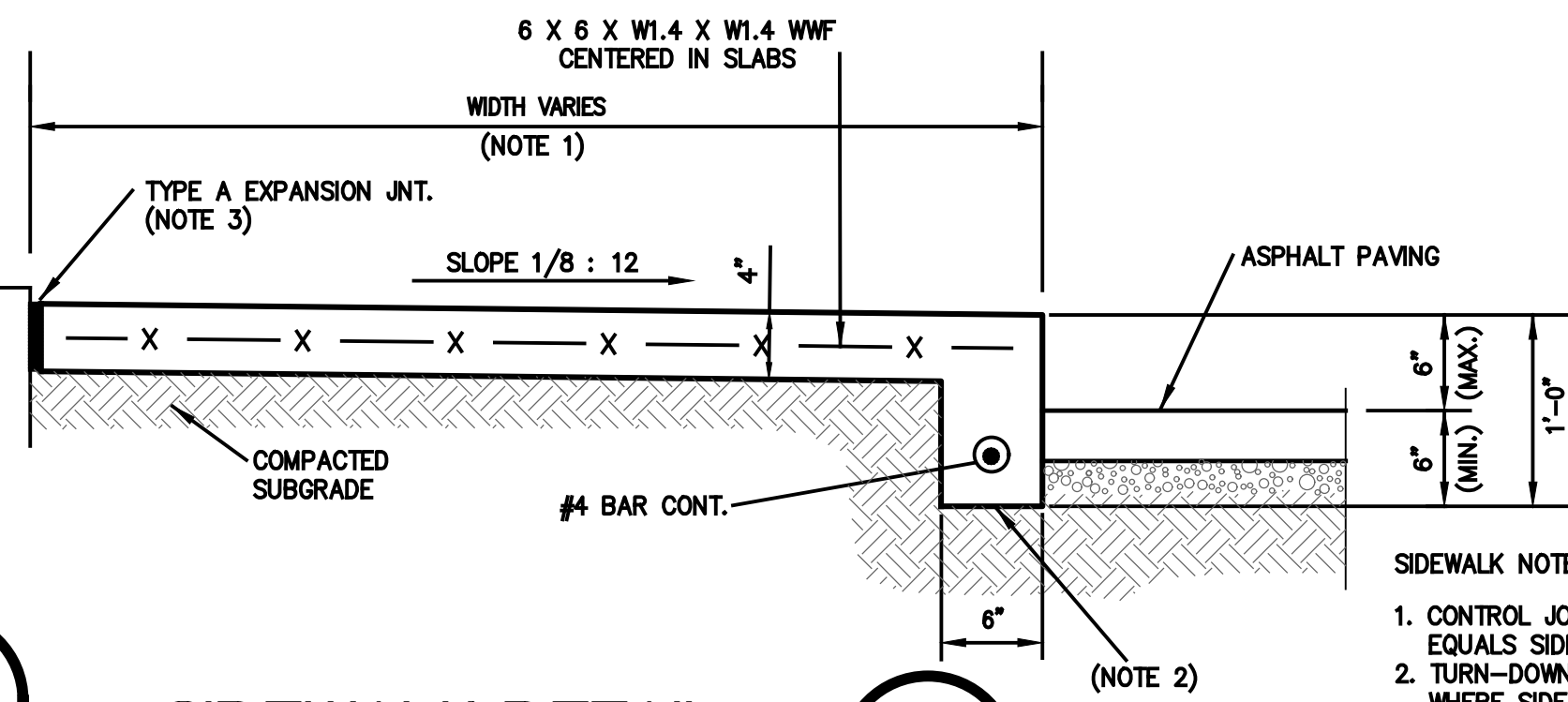
### ASPHALT PAVING

NOT TO SCALE

NOTES:

1. ASPHALT SURFACE COURSE SHALL MEET MATERIAL AND INSTALLATION REQUIREMENTS OF SECTION 407 OF AHTD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.
2. ASPHALT BINDER COURSE SHALL MEET MATERIAL & INSTALLATION REQUIREMENTS OF SECTION 406 OF AHTD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.
3. GRAVEL BASE COURSE SHALL MEET MATERIAL AND INSTALLATION REQUIREMENTS FOR AHTD CLASS 7 AGGREGATE BASE COURSE IN SECTION 303 OF AHTD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.
4. SUBGRADE SHALL BE COMPACTED TO A UNIFORM DENSITY OF NOT LESS THAN 95% OF THE MODIFIED PROCTOR.

1

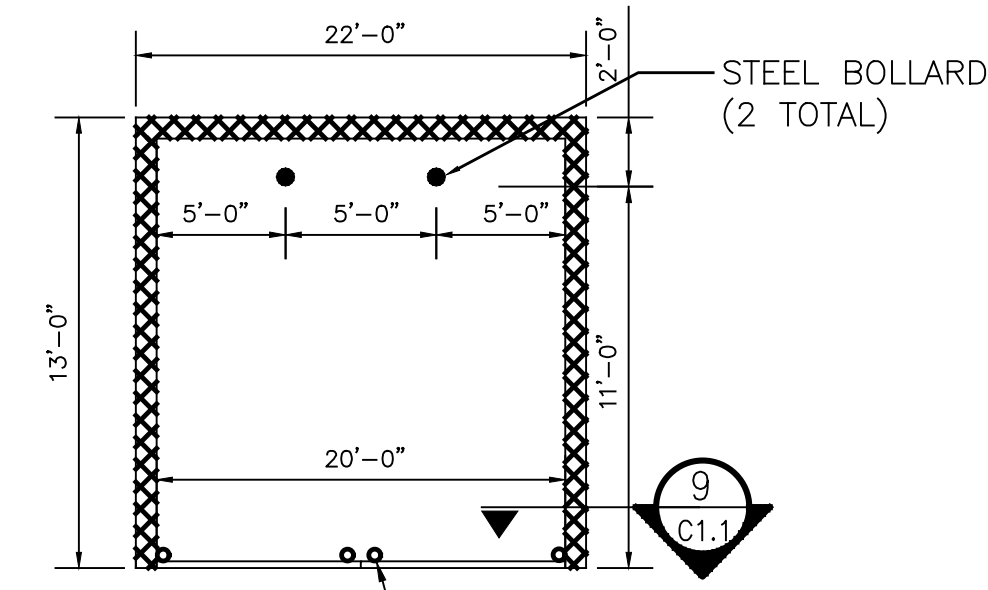


### SIDEWALK DETAIL

NOT TO SCALE

2

- SIDEWALK NOTES:
1. CONTROL JOINT SPACING EQUALS SIDEWALK WIDTH
  2. TURN-DOWN NOT REQUIRED WHERE SIDEWALK MATCHES SURROUNDING GRADE
  3. EXPANSION JOINT REQUIRED AT ALL ADJACENT CONCRETE. NOT REQUIRED AT ASPHALT PAVING OR SOIL



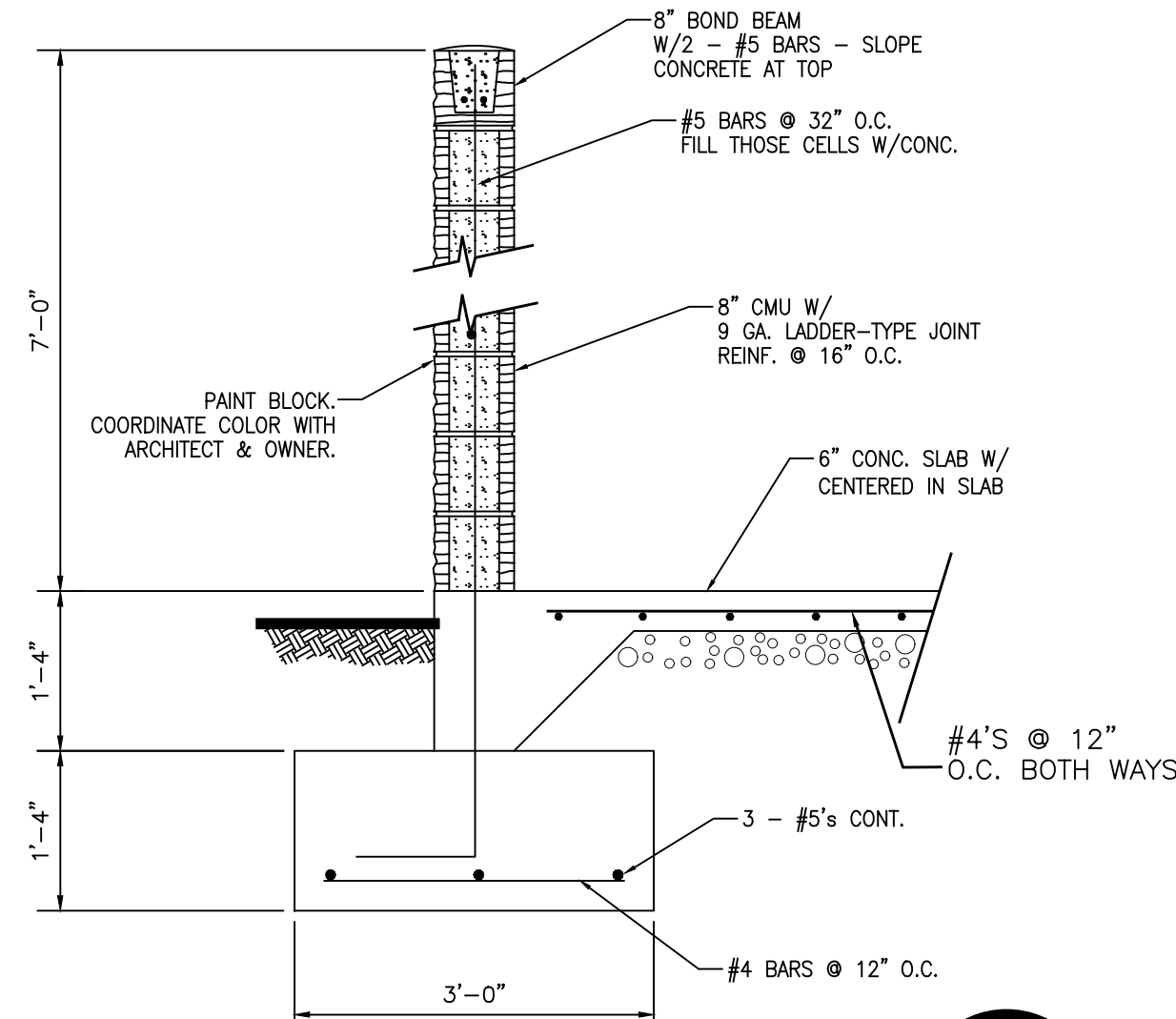
### SCREENED DUMPSTER ENCLOSURE

NOT TO SCALE

3

GATE NOTES:

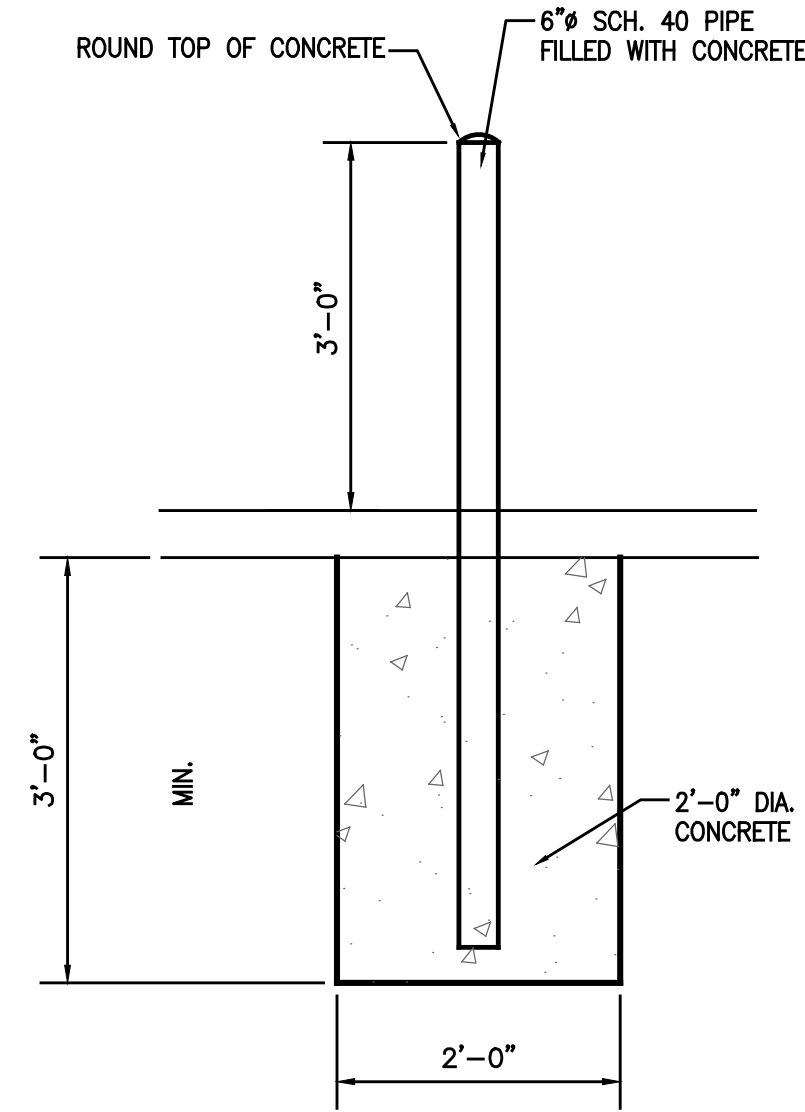
1. GATE MUST OPEN AT LEAST 120°.
2. HOLD OPEN RODS MUST BE INSTALLED ON THE OUTSIDE FACE OF THE GATES WITH THE HANDLES AT LEAST 36" AFG.
3. HOLES MUST BE DRILLED IN THE PAVEMENT TO HOLD THE GATES IN THE OPEN AND CLOSED POSITION.



### DUMPSTER ENCLOSURE SECTION

NOT TO SCALE

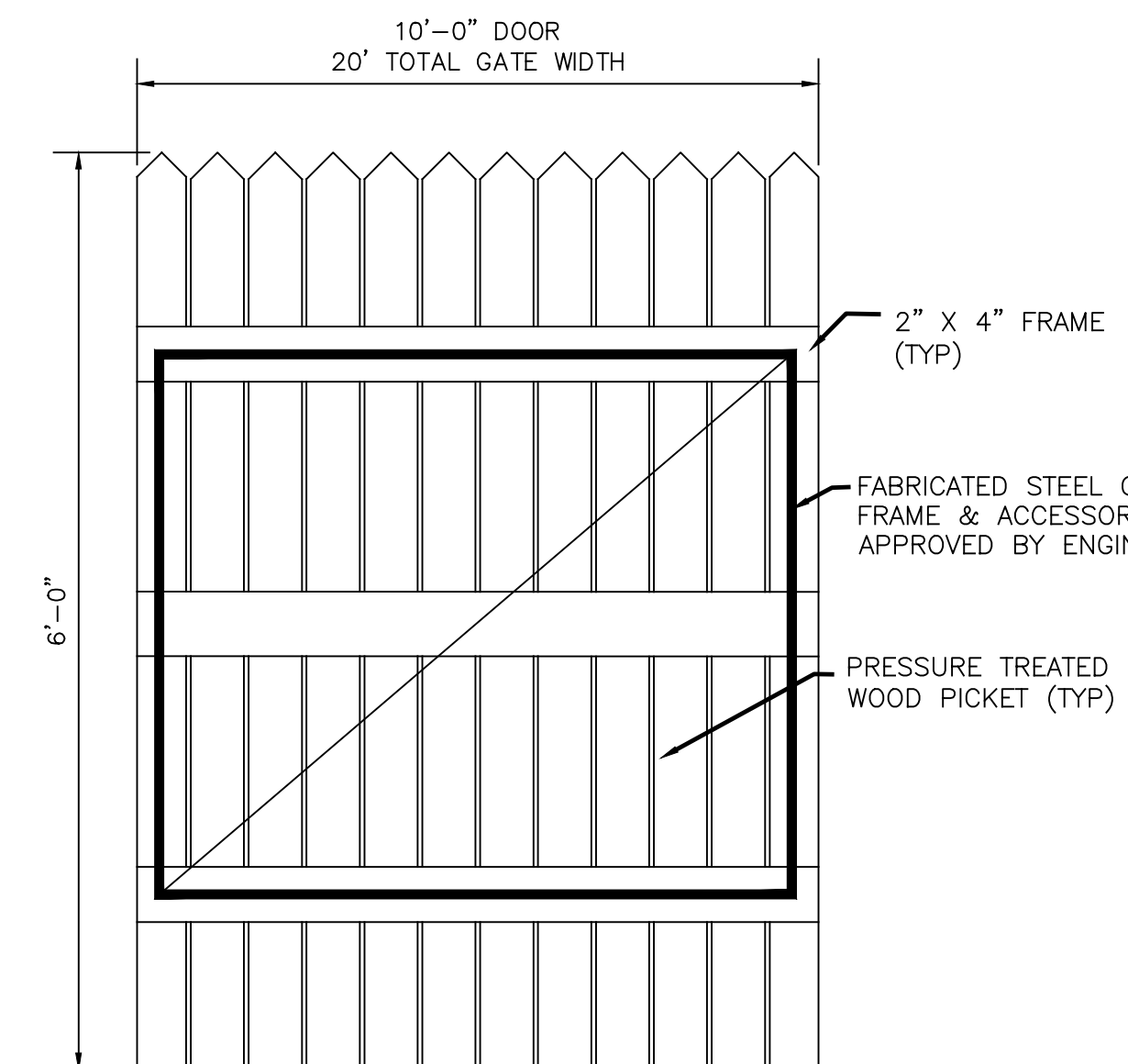
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### PIPE BOLLARD DETAIL

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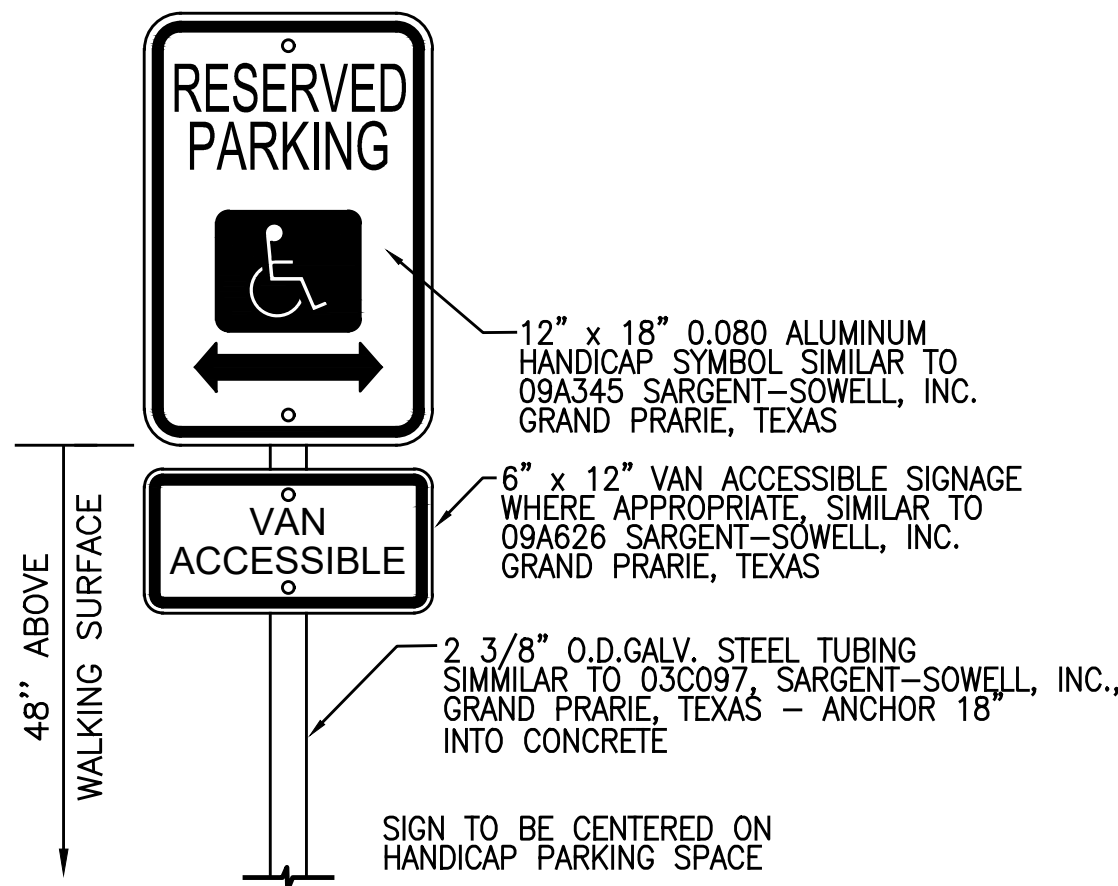
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### GATE DETAIL

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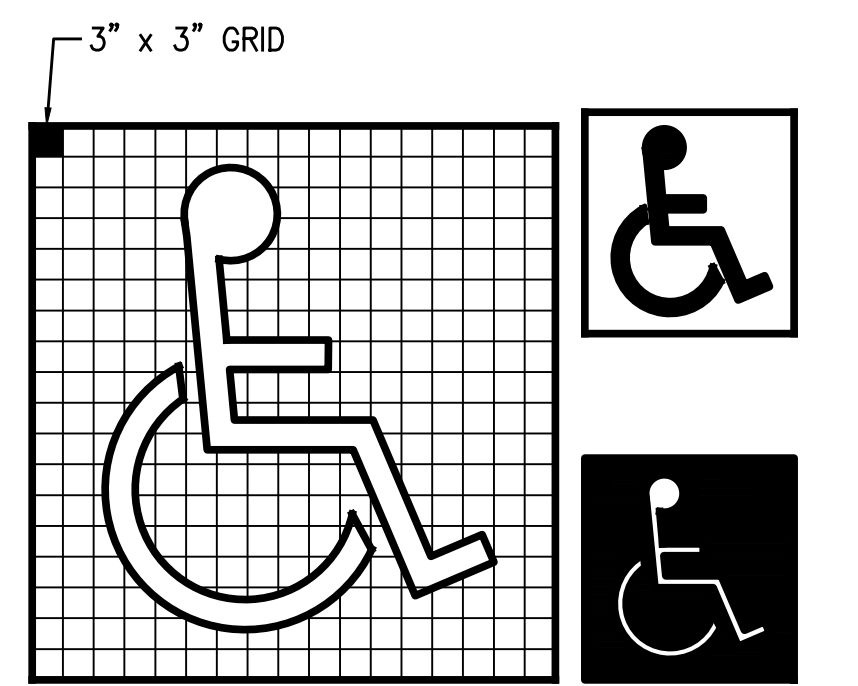
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### TYP. H.C. SIGN

NOT TO SCALE

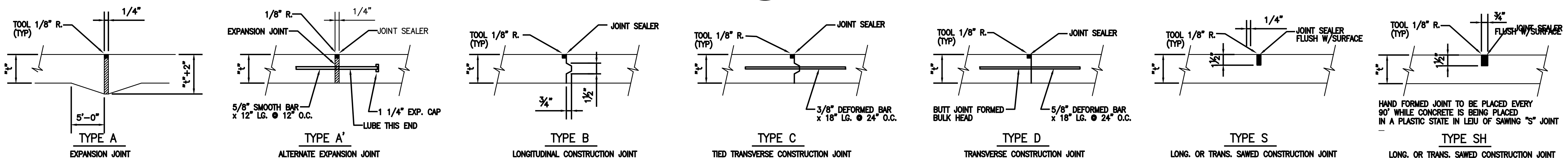
7



### H.C. PAVEMENT EMBLEM

NOT TO SCALE

8



### CONCRETE JOINTING DETAILS

NOT TO SCALE

9

NOTE: ALL JOINT SPACING NOT TO EXCEED 15'-0" INTERVALS

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 garnatengineering@gmail.com

**NEW FACILITY FOR:  
 BUTLER CENTER  
 CITY OF BRYANT, AR**

STATE OF ARKANSAS  
 REGISTERED PROFESSIONAL ENGINEER  
 LERON J. WILLIAMS  
 NO. 9551

03-06-2023

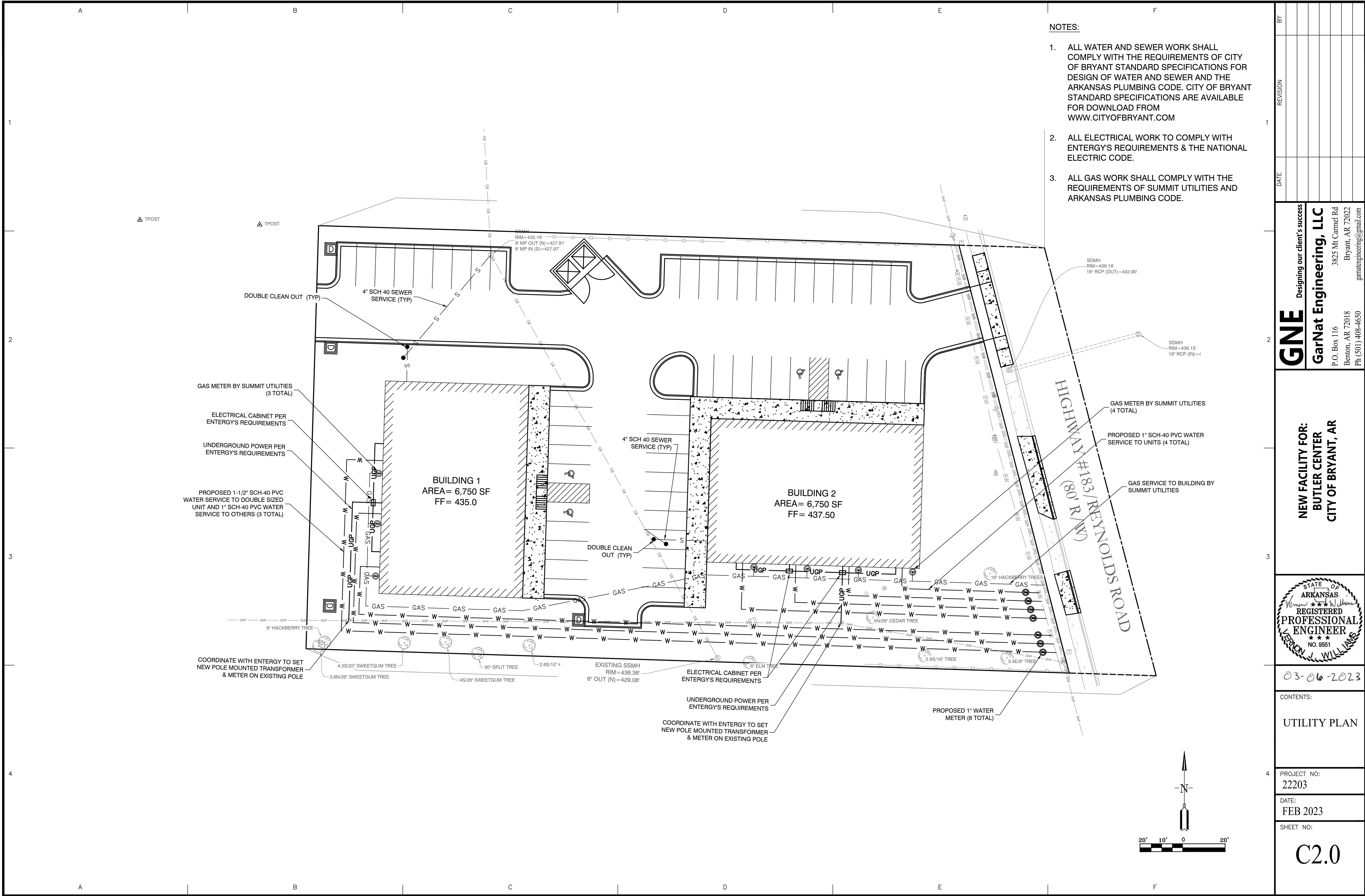
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 SITE DETAILS

PROJECT NO:  
 22203

DATE:  
 FEB 2023

SHEET NO:  
 C1.1

A:\Projects\2022 Projects\1108 North Reynolds Road Kemp White\GarNat\GarNat\22203 1108 N Reynolds Rd.dwg



- NOTES:**
1. ALL WATER AND SEWER WORK SHALL COMPLY WITH THE REQUIREMENTS OF CITY OF BRYANT STANDARD SPECIFICATIONS FOR DESIGN OF WATER AND SEWER AND THE ARKANSAS PLUMBING CODE. CITY OF BRYANT STANDARD SPECIFICATIONS ARE AVAILABLE FOR DOWNLOAD FROM WWW.CITYOFBRYANT.COM
  2. ALL ELECTRICAL WORK TO COMPLY WITH ENTERGY'S REQUIREMENTS & THE NATIONAL ELECTRIC CODE.
  3. ALL GAS WORK SHALL COMPLY WITH THE REQUIREMENTS OF SUMMIT UTILITIES AND ARKANSAS PLUMBING CODE.

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 gnatengineering@gmail.com

**NEW FACILITY FOR:  
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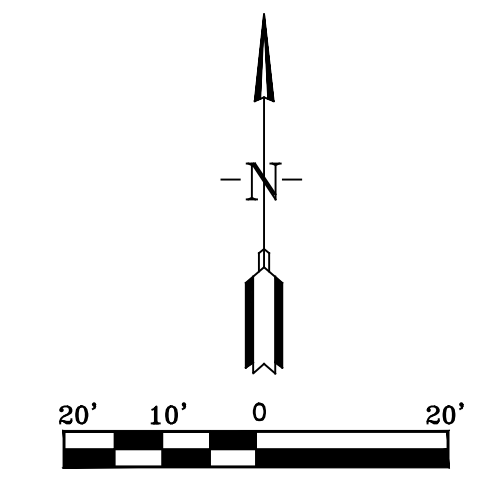
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**UTILITY PLAN**

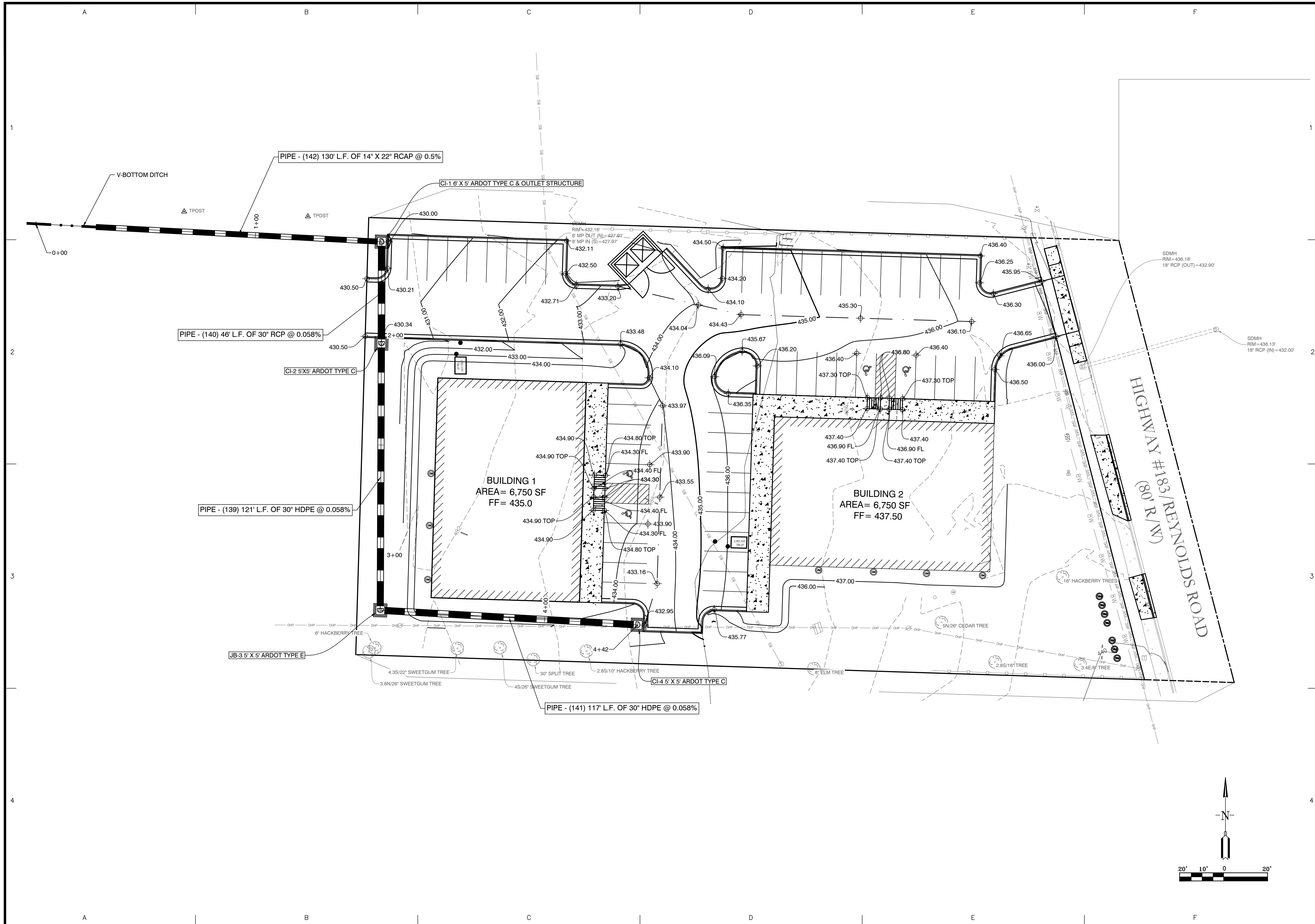
PROJECT NO:  
 22203

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 garnatengineering@gmail.com

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 CITY OF BRYANT, AR**



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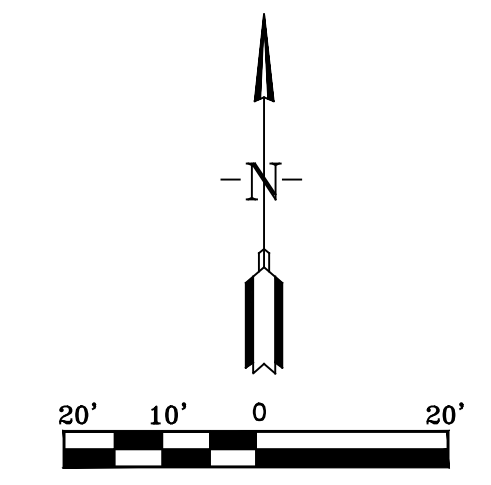
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**GRADING &  
 DRAINAGE  
 PLAN**

PROJECT NO:  
 22203

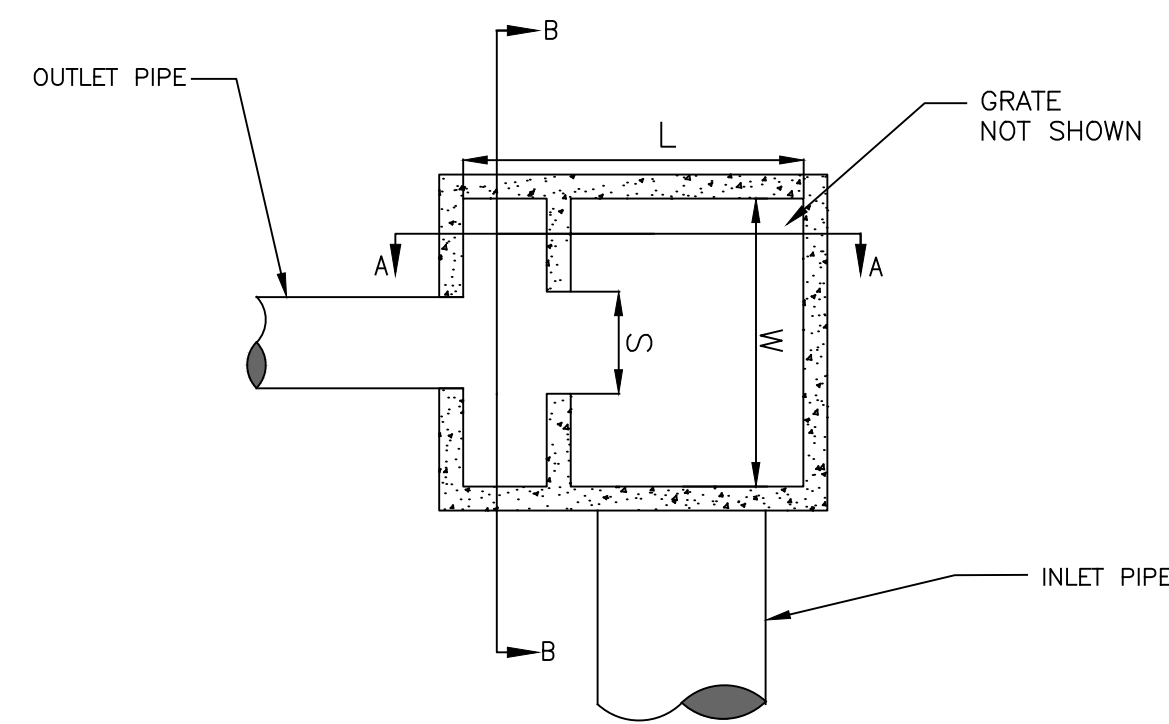
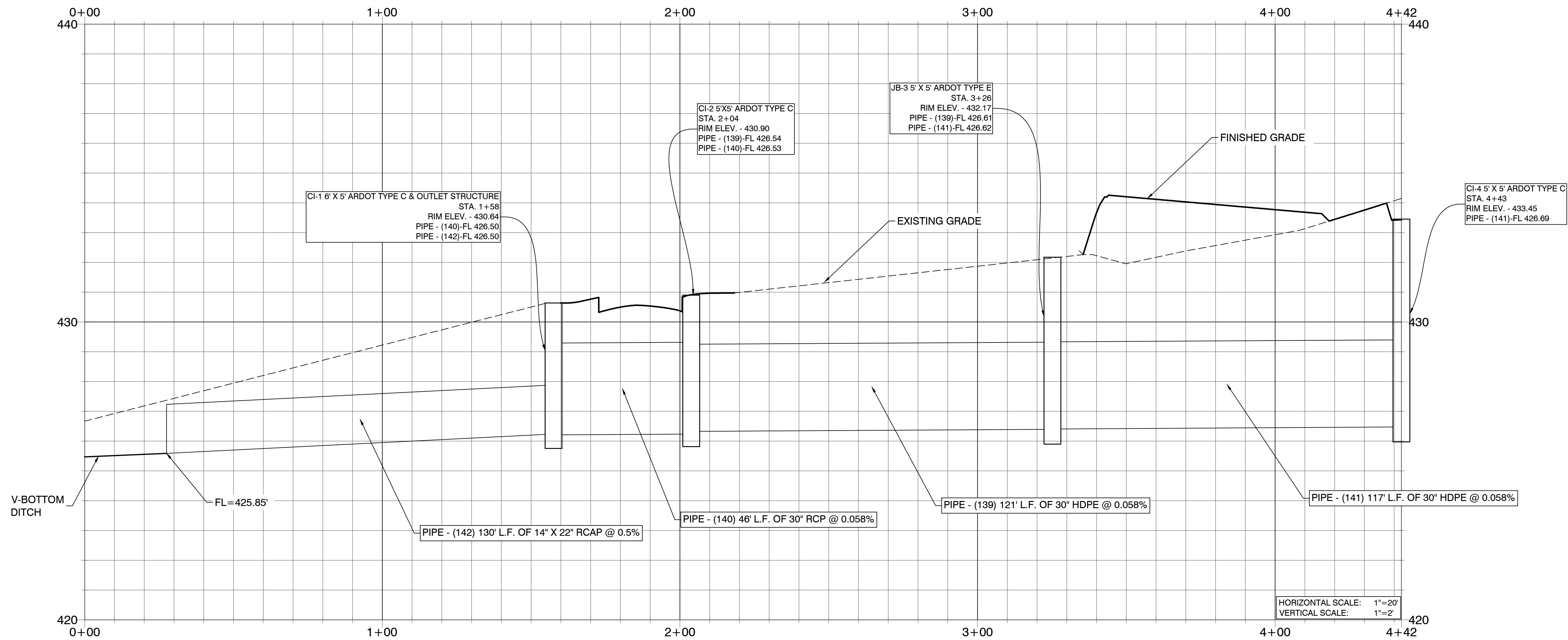
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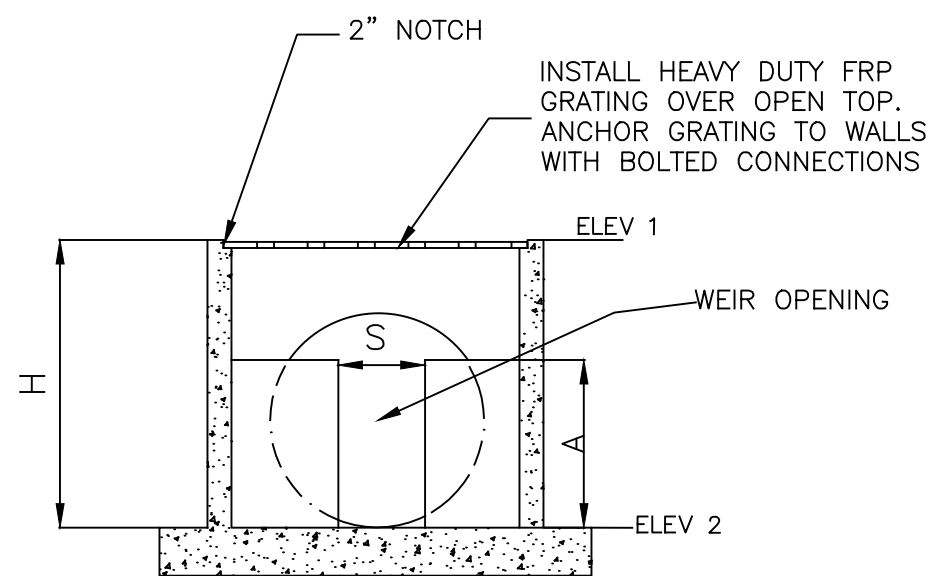
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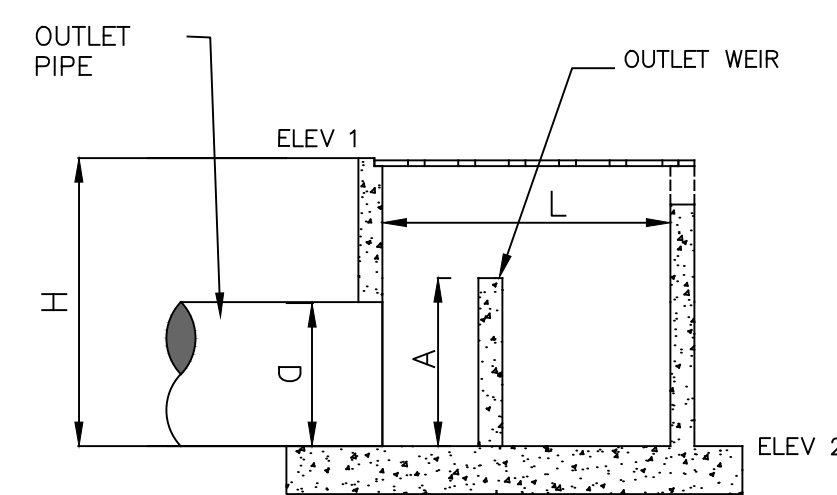
STORM DRAINAGE PROFILE



**OUTLET STRUCTURE - WEIR  
PLAN VIEW**  
NOT TO SCALE



**OUTLET STRUCTURE - WEIR  
SECTION B-B**  
NOT TO SCALE



**OUTLET STRUCTURE - WEIR  
SECTION A-A**  
NOT TO SCALE

OUTLET STRUCTURE								
OUTLET STRUCTURE	L	W	H	ELEV 1	ELEV 2	S	A	D
WEIR	6'-0"	5'-0"	4'-1 1/2"	430.64	426.50	0'-6"	2'-6"	18"

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	1	

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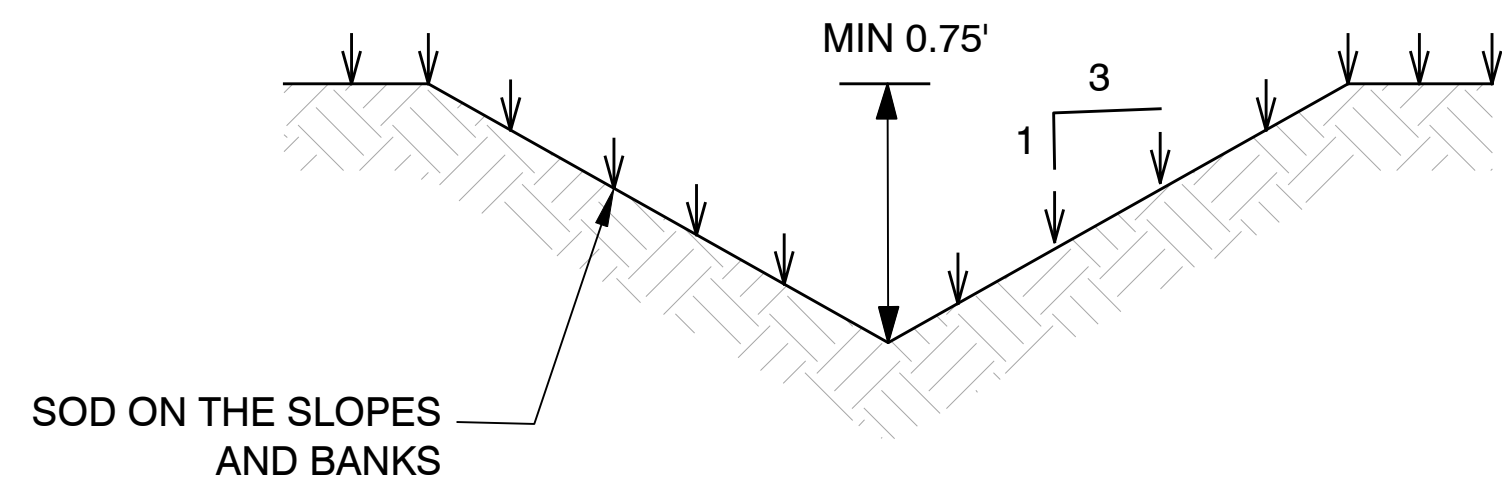
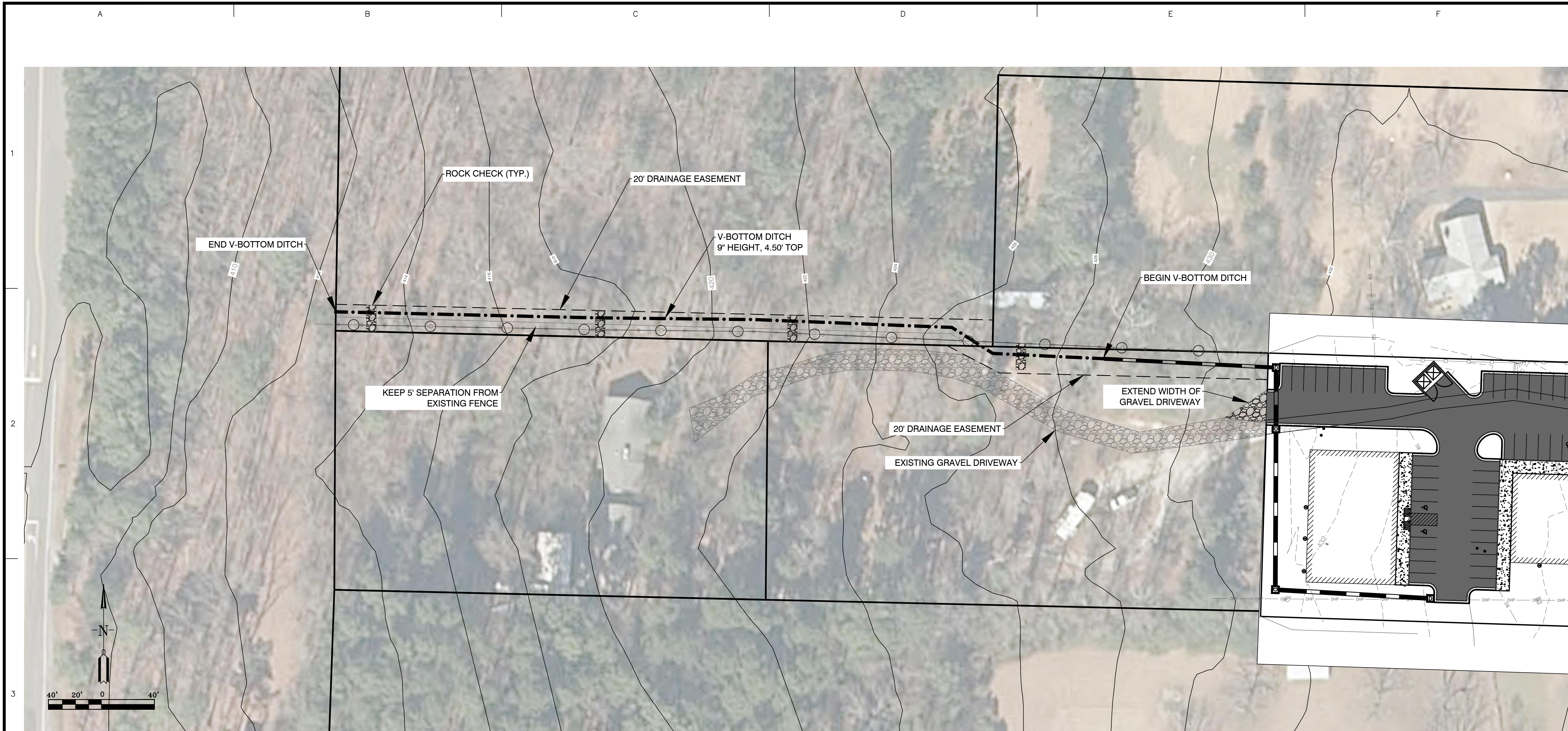
CONTENTS:  
DRAINAGE  
PROFILE &  
OUTLET  
STRUCTURE  
DETAILS

PROJECT NO:  
22203

DATE:  
FEB 2023

SHEET NO:

**C3.1**



**TYPICAL V-DITCH CROSS SECTION**  
(N.T.S)

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03-06-2023

CONTENTS:  
 OFFSITE DRAINAGE & BMP

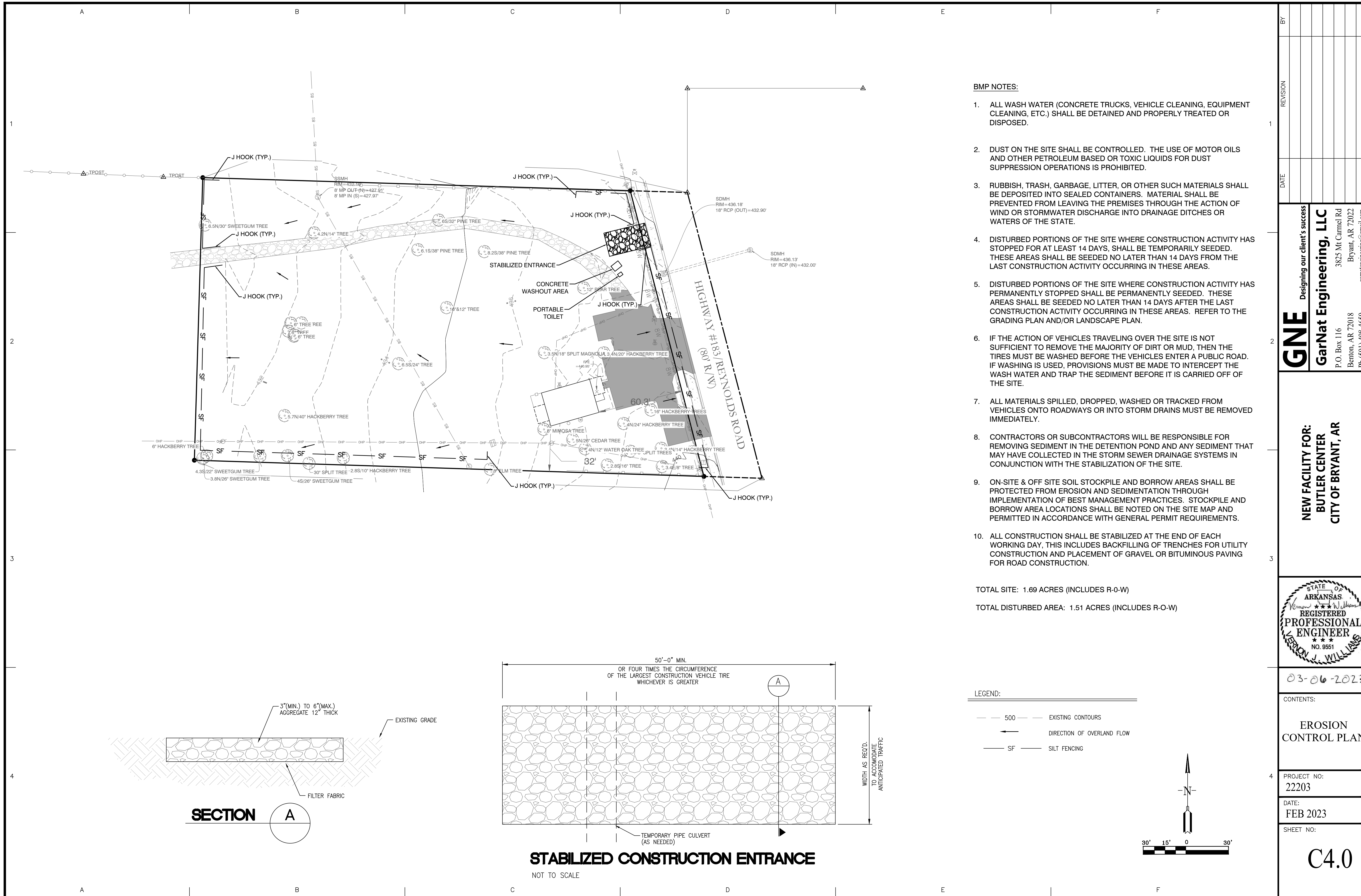
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DATE:  
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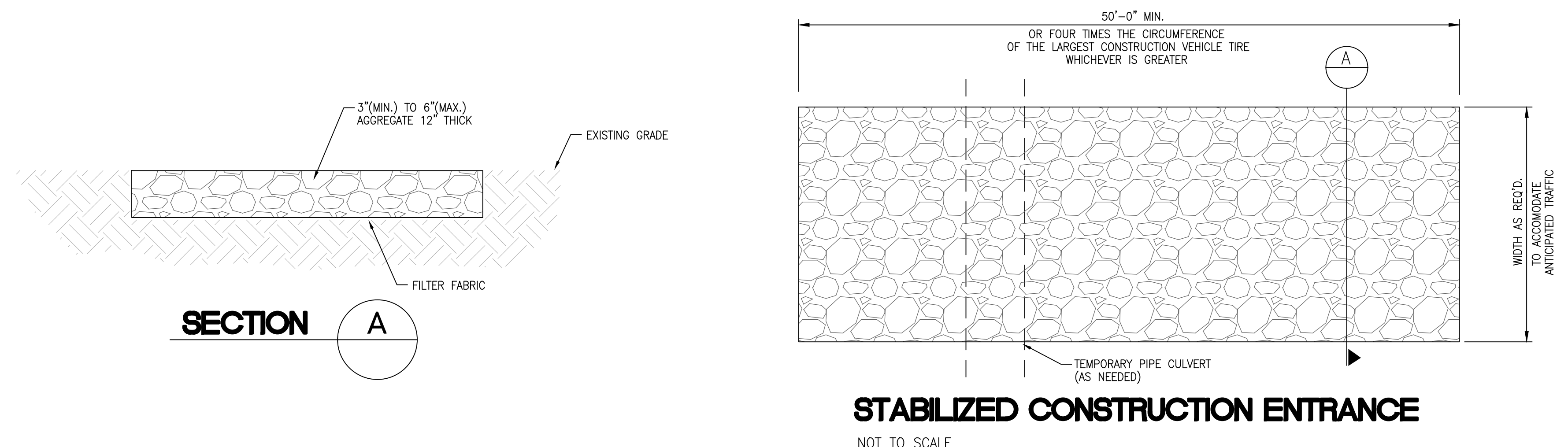
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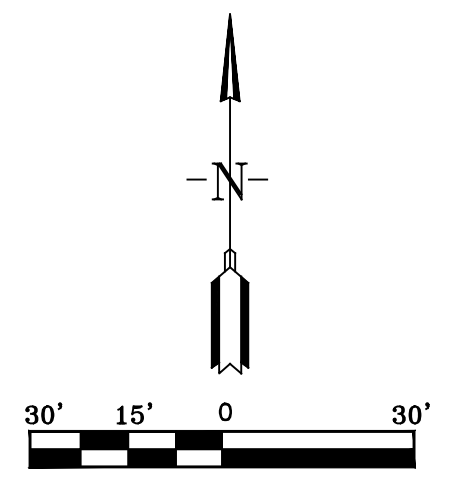


- BMP NOTES:**
1. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
  2. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
  3. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIAL SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
  4. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 14 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
  5. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
  6. IF THE ACTION OF VEHICLES TRAVELING OVER THE SITE IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF OF THE SITE.
  7. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
  8. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
  9. ON-SITE & OFF SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
  10. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

TOTAL SITE: 1.69 ACRES (INCLUDES R-O-W)  
 TOTAL DISTURBED AREA: 1.51 ACRES (INCLUDES R-O-W)



- LEGEND:**
- 500 --- EXISTING CONTOURS
  - DIRECTION OF OVERLAND FLOW
  - SF — SILT FENCING



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**NEW FACILITY FOR:  
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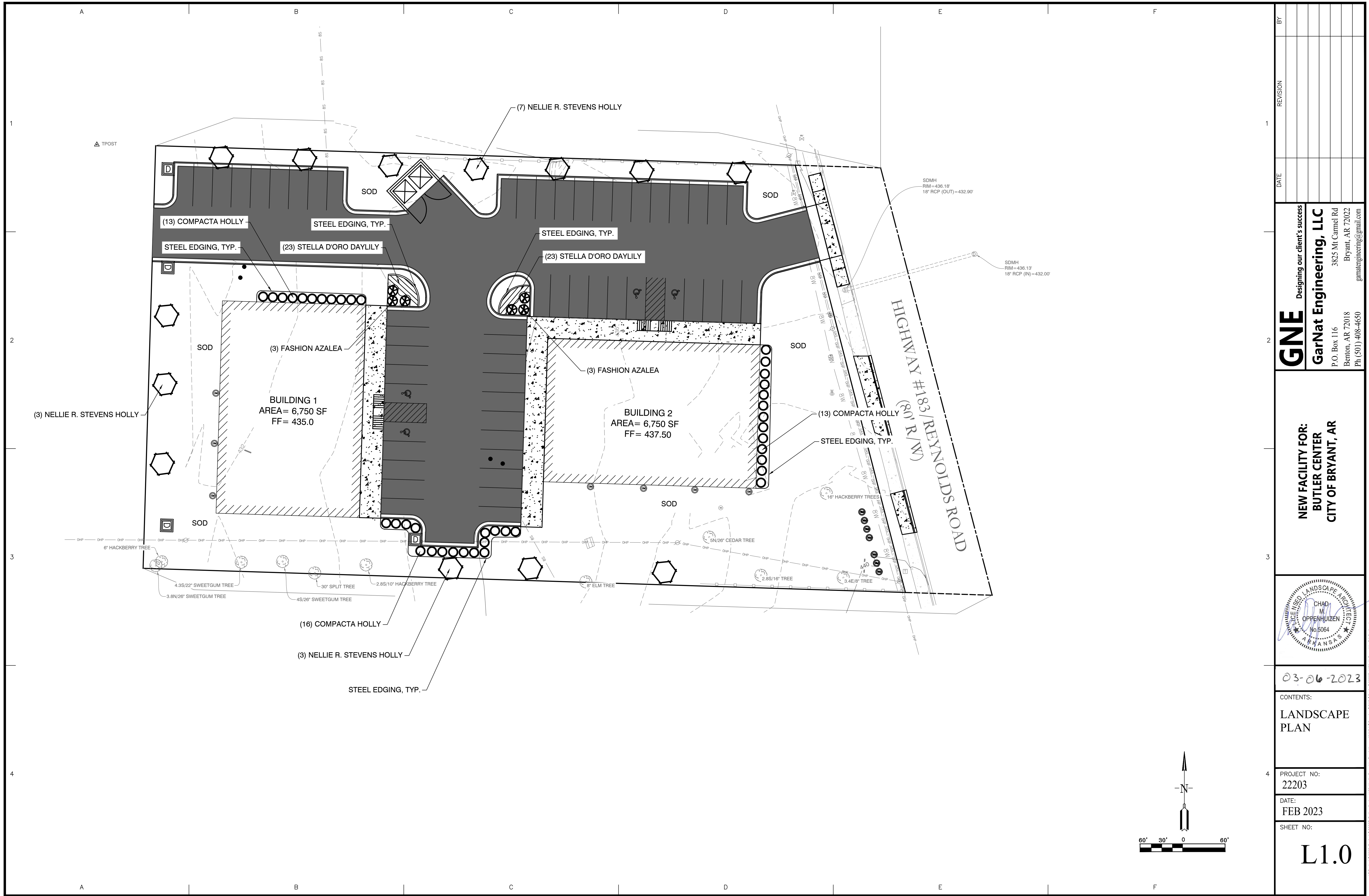
**EROSION CONTROL PLAN**

PROJECT NO:  
22203

DATE:  
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SHEET NO:  
**C4.0**

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**NEW FACILITY FOR:  
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03-06-2023

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 PLAN**

PROJECT NO:  
 22203

DATE:  
 FEB 2023

SHEET NO:  
**L1.0**

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## LANDSCAPING NOTES:

- REPORT ANY DISCREPANCIES FOUND IN THE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADVISE THE DESIGNER OF ANY CONDITION FOUND ON THE SITE WHICH PROHIBITS INSTALLATION AS SHOWN ON THESE DRAWINGS.
- THE NUMBER OF PLANTS OR INTENDED COVERAGE AREAS SHOWN SHALL SUPERSEDE NOTED QUANTITIES. TREE LOCATIONS ARE DIAGRAMMATIC.
- ALL PLANT MATERIALS MUST BE APPROVED PRIOR TO INSTALLATION. SUBSTITUTIONS OF SIZE OR TYPE OF MATERIAL ARE NOT PERMITTED WITHOUT WRITTEN APPROVAL PRIOR TO DELIVERY OR INSTALLATION.
- ALL PLANT MATERIALS SHALL BE MAINTAINED IN A HEALTHY AND GROWING CONDITION. REPLACE ANY DAMAGED, DESTROYED, OR REMOVED PLANT MATERIALS WITH THE SAME VARIETY AND SIZE PRIOR TO FINAL ACCEPTANCE.
- PLANT STORAGE TO BE LOCATED OUT OF VEHICULAR USE AREAS AND NEAR A WATERING SYSTEM TO OPTIMIZE SURVIVAL.
- ALL PLANTING BEDS SHALL BE IRRIGATED BY AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM.
- ALL PLANTING BEDS SHALL BE MULCHED WITH 3-INCHES SHREDDED HARDWOOD OR CYPRESS MUGH.
- ALL SHRUBS AND TREES SHALL RECEIVE PLANTING BACKFILL OF 2/3 TOPSOIL AND 1/3 COMPOST BY VOLUME AND 2 POUNDS OF 14-14-14 TIMED-RELEASE FERTILIZER PER CUBIC YARD OF BACKFILL.
- ALL BEDS INSIDE LAWN AREAS TO BE EDGED WITH 4" PAINTED STEEL EDGING.
- ALL TREES AND SHRUBS SHALL BE THOROUGHLY WATERED IMMEDIATELY AFTER PLANTING.
- TREES SHALL NOT BE TOPPED AT ANY TIME. PROPER TREE PRUNING TECHNIQUES AS ESTABLISHED BY THE LATEST EDITION OF ANSI A300 STANDARDS FOR TREE CARE SHALL BE UTILIZED FOR MAINTENANCE PURPOSES.
- COORDINATE ALL INSTALLATION ACTIVITIES WITH IRRIGATION WORK AND IMMEDIATELY REPAIR DAMAGES TO FINISH GRADES, SOD, AND PLANT MATERIALS UNTIL FINAL ACCEPTANCE.
- SEE GRADING AND DRAINAGE PLAN FOR PROPOSED SLOPES, SWALES, BERMS, AND WATER FEATURES. MAINTAIN PROPER FINISH GRADES IN ALL AREAS AS INDICATED.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FINE GRADING, REMOVAL OF MISCELLANEOUS DEBRIS AND ANY ADDITIONAL FILL REQUIRED TO PROVIDE MINIMUM TOPSOIL DEPTHS AND CREATE A SMOOTH CONDITION PRIOR TO PLANTING IN ALL AREAS.
- TOPSOIL SHALL BE FREE OF STONES, ROOTS, CLODS, AND ANY OTHER FOREIGN MATERIAL THAT IS NOT BENEFICIAL FROM PLANT GROWTH.
- LANDSCAPE AND OPEN AREAS SHALL BE KEPT FREE OF TRASH, LITTER, AND WEEDS AT ALL TIMES DURING CONSTRUCTION.
- IDENTIFICATION LABELS MUST BE ATTACHED TO ALL PLANT MATERIALS AND SHALL REMAIN INTACT UNTIL FINAL ACCEPTANCE OF THE WORK. REMOVE ALL TAGS AND LABELS FOLLOWING FINAL ACCEPTANCE.
- CALIPER OF TREES TO BE MEASURED 6-INCHES ABOVE GROUND LEVEL FOR TREES UP TO 4-INCH CALIPER SIZE.
- GENERAL CONTRACTOR SHALL PROVIDE 6-INCH DIAMETER MINIMUM SCHEDULE 40 PVC SLEEVING FOR IRRIGATION TO ALL CURB ISLANDS AND UNDER ALL DRIVE ISLE CROSSINGS.
- CONTRACTOR TO REFER TO THE UTILITY PLAN SHEET FOR RECENT FIRE FLOW INFORMATION.

## LEGEND:

## PLAN QUANTITIES:

Quantity	Common Name/Botanical Name	Size	Remarks
13	Nellie R. Stevens Holly Ilex x 'Nellie R. Stevens'	10/15 gallon, 3-4' tall	Specimen with positive upright form and symmetrical. Well branched canopies.
40	Compacta Holly Ilex crenata 'Compacta'	3 gallon	Full well branched shrub with uniform shape.
6	Fashion Azalea Rhododendron 'Fashion'	3 gallon	Full well branched shrub with uniform shape.
46	Stella D'Oro Daylily Hemerocallis x Stella D'oro	1 gallon	Plant 18" o.c.
Contractor Bermuda Tifway 419 to measure Cynodon Dactylon var. Tifway 419		Sod	Solid sod, all areas indicated with close knit joints

NOTE: PLANTS SHALL BE SET SLIGHTLY HIGHER THAN GRADE TO ALLOW FOR SETTLING & POSITIVE DRAINAGE.

## SODDING OF DISTURBED AREAS

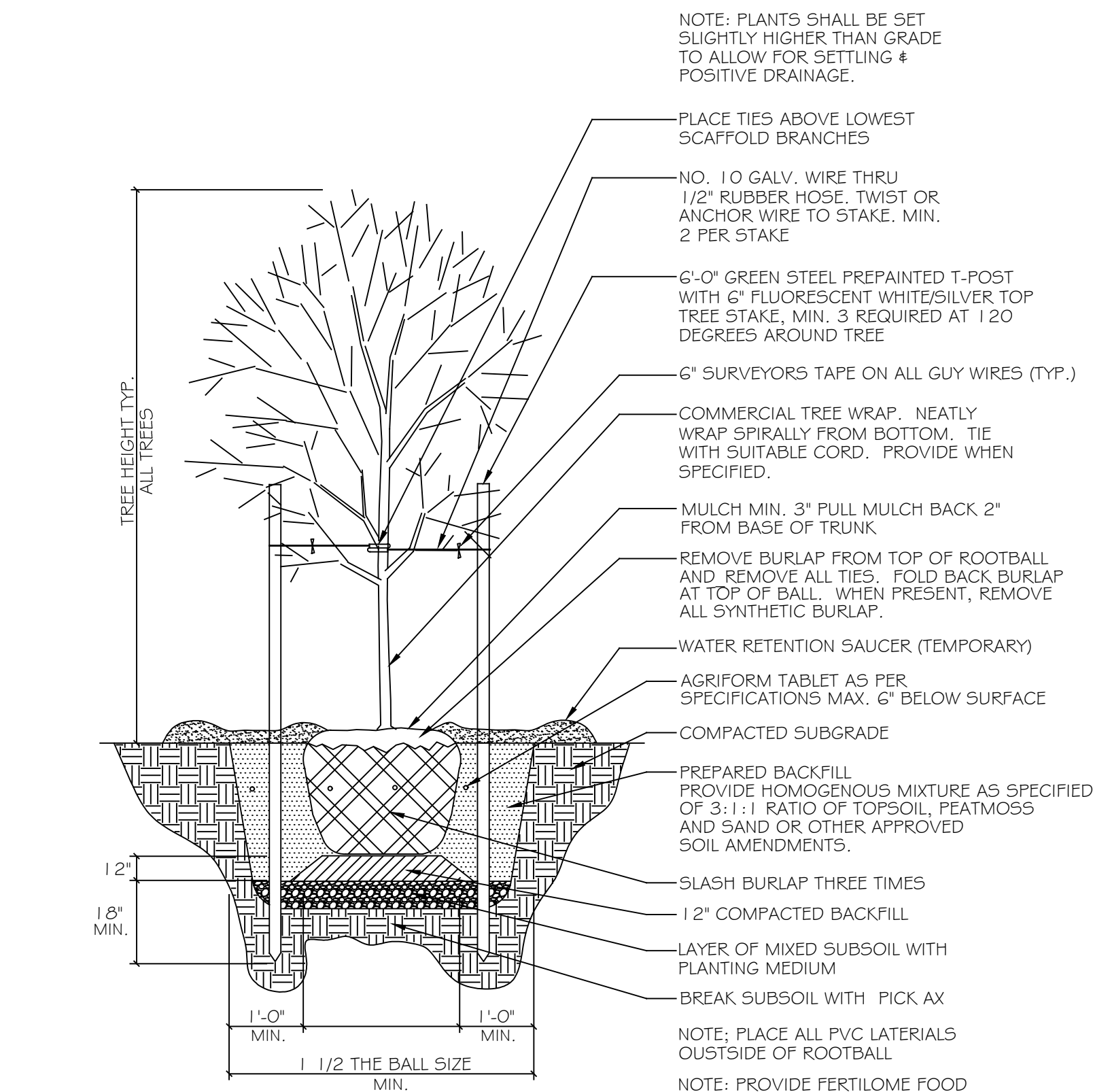
AREAS AND LIMITS OF SODDING ARE INDICATED BASED ON ANTICIPATED DISTURBANCE BY GRADING OPERATIONS. CONTRACTOR TO PROVIDE ADDITIONAL SODDING IN ANY OTHER AREAS DISTURBED BY WORK UNDER THIS CONTRACT. EXCAVATE AND REMOVE ANY REMAINING TURF AND SOIL TO A 4-INCH MINIMUM DEPTH WITHIN NEW SOD AREAS. HAND EXCAVATION REQUIRED WITHIN DRIP LINES OF TREE AREAS TO AVOID DAMAGE TO EXISTING ROOTS. CONTRACTOR TO INSTALL MINIMUM OF 3" OF TOPSOIL TO ALL AREAS TO BE SODDED OR SEEDED. FINE GRADE THE TOPSOIL TO ENSURE POSITIVE DRAINAGE AND A SMOOTH SURFACE FOR SOD INSTALLATION.

## MAINTENANCE AND WARRANTY

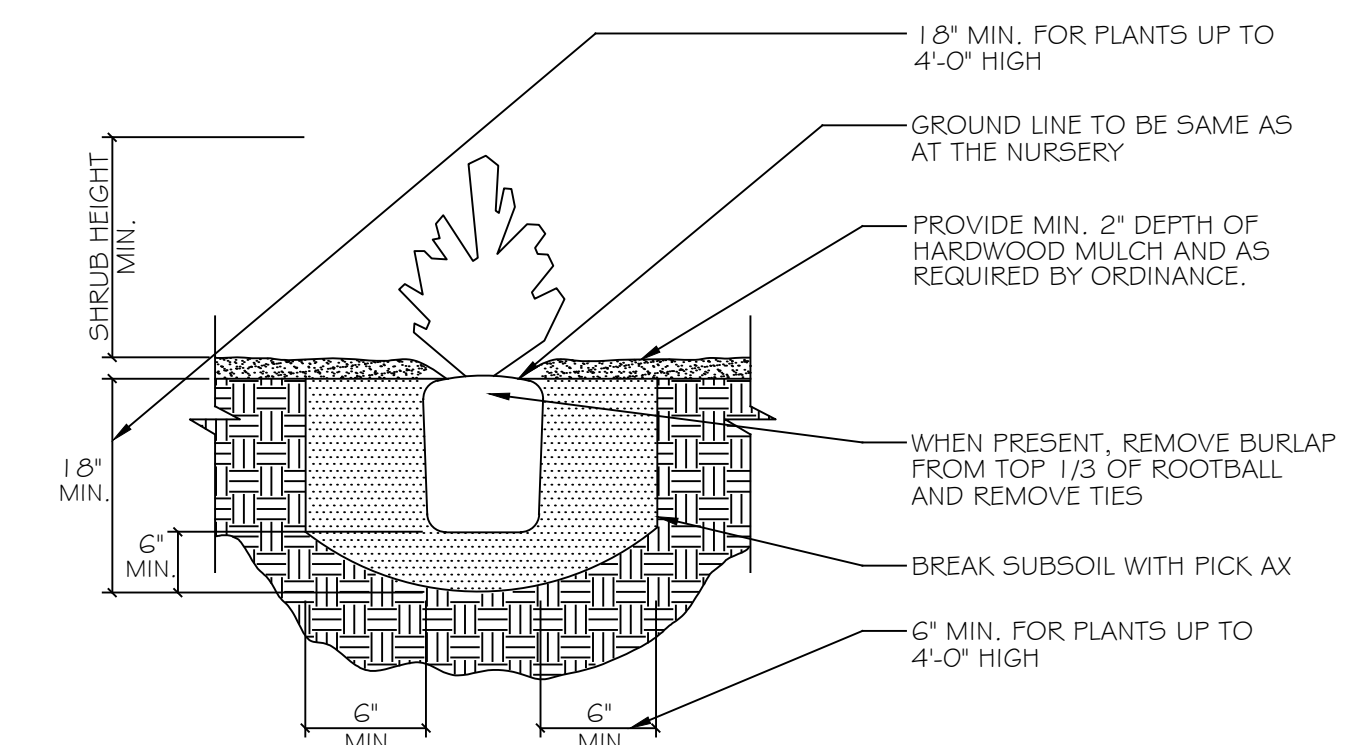
CONTRACTOR TO PROVIDE FULL MAINTENANCE OF INSTALLED LANDSCAPE AND IRRIGATION UNTIL DATE OF FINAL ACCEPTANCE. ADDITIONALLY, CONTRACTOR TO PROVIDE ONE YEAR WARRANTY FOR ALL LANDSCAPE AND IRRIGATION WORK FROM THE DATE OF FINAL ACCEPTANCE.

## IRRIGATION SYSTEM

CONTRACTOR TO PROVIDE AUTOMATIC IRRIGATION SYSTEM FOR ALL NEW LANDSCAPE AND TURF AREAS SHOWN ON THE PLANS. SYSTEM WILL REQUIRE PROVIDING BACKFLOW PREVENTER, PERMITTING, POWER CONNECTION, CONTROLLER, AND ALL OTHER WORK REQUIRED FOR A COMPLETE AND FUNCTIONING SYSTEM THAT PROVIDES 100% COVERAGE. COORDINATE LOCATION OF CONTROLLER WITH OWNER, GENERAL CONTRACTOR, AND ELECTRICAL CONTRACTOR. COORDINATE LOCATION OF IRRIGATION SLEEVES WITH GENERAL CONTRACTOR PRIOR TO FULLY MOBILIZING TO SITE. CONTRACTOR TO REFER TO THE UTILITY PLAN SHEET FOR CURRENT FIRE FLOW INFORMATION.



**TREE PLANTING DETAIL**  
No Scale



- NOTES:
- PROVIDE WEED CONTROL AND/OR FERTILIZER AS SPECIFIED BELOW.
  - WEED CONTROL AND FERTILIZER MAY BE APPLIED AT A LATER DATE TO COMPLY WITH SEASONAL CONDITIONS AND THE GROWING PERIOD.
  - PROVIDE AGRIFORM TABLETS AS PER MANUFACTURERS RECOMMENDATIONS.
  - PROVIDE HOMOGENOUS BACKFILL PLANTING MIXTURE OF 3:1 RATIO TOPSOIL TO PEATMOSS AND/OR OTHER APPROVED SOIL AMENDMENTS.
  - PROVIDE FERTILOME ROOT STIMULATOR OR APPROVED EQUAL IN PITS.
  - APPLY BALAN PREEMERGENT WEED CONTROL OR APPROVED EQUAL TREATMENT ON ALL SHRUB AND GROUND COVER BEDS.

**SHRUB PLANTING DETAIL**  
No Scale

**GN** Designing our client's success  
**GarNat Engineering, LLC**  
 3825 Mt Carmel Rd  
 Bryant, AR 72022  
 P.O. Box 116  
 Benton, AR 72018  
 Ph: (501) 408-4650  
 gnatengineering@gmail.com

**NEW FACILITY FOR:  
 BUTLER CENTER  
 CITY OF BRYANT, AR**



03-06-2023

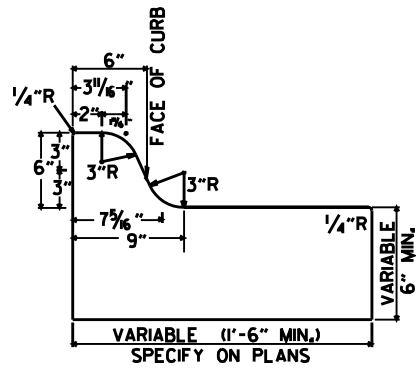
CONTENTS:  
**LANDSCAPING  
 NOTES &  
 DETAILS**

PROJECT NO:  
**22203**

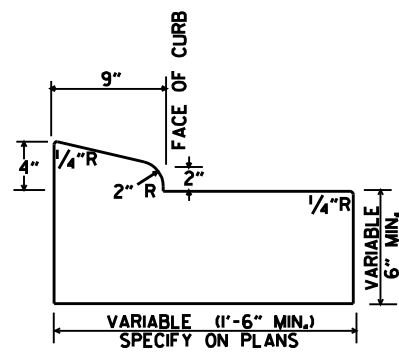
DATE:  
**FEB 2023**

SHEET NO:

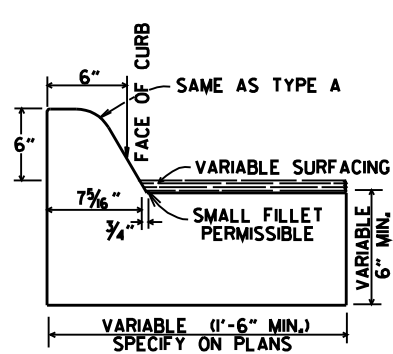
**L1.1**



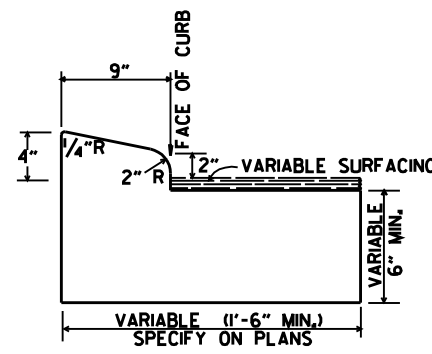
TYPE A



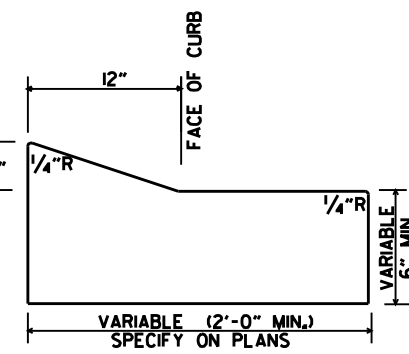
TYPE B-1



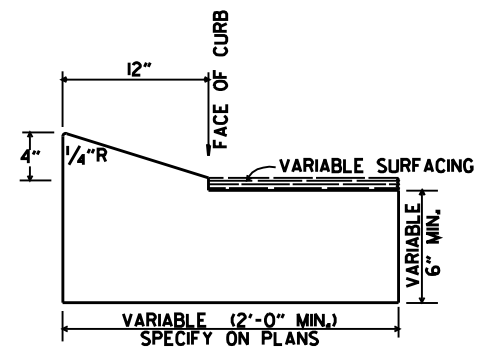
TYPE C



TYPE B-2

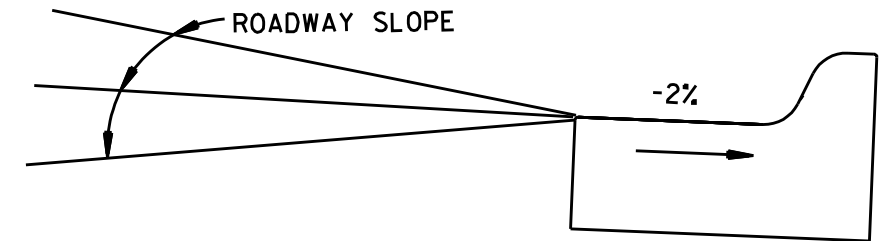


TYPE E-1

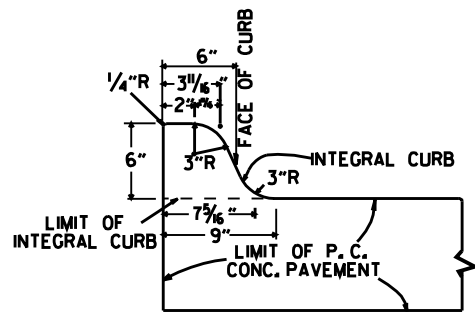


TYPE E-2

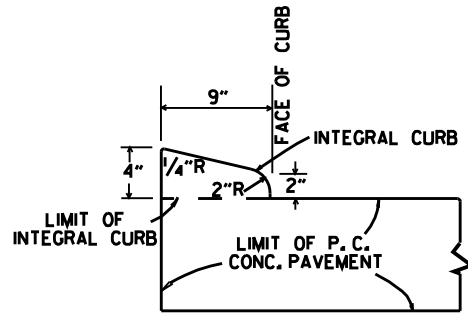
CONCRETE COMBINATION CURB AND GUTTER



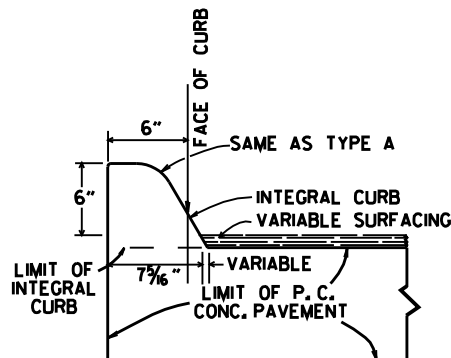
DETAIL OF GUTTER SLOPE  
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.



TYPE A

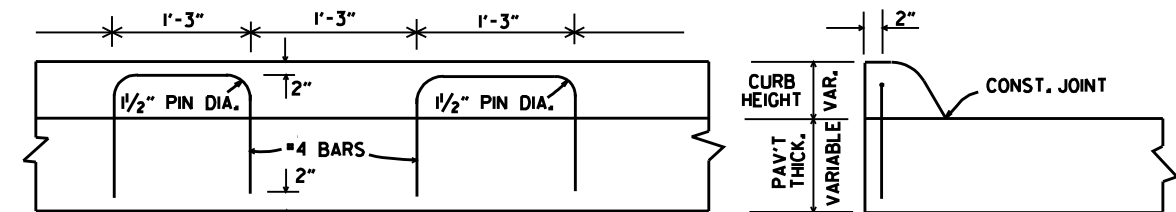


TYPE B



TYPE C

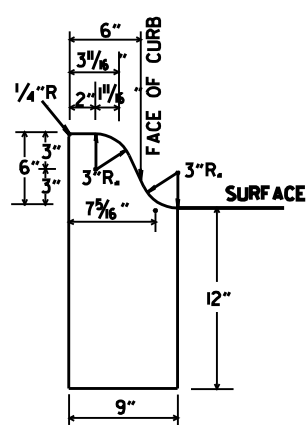
INTEGRAL CURB



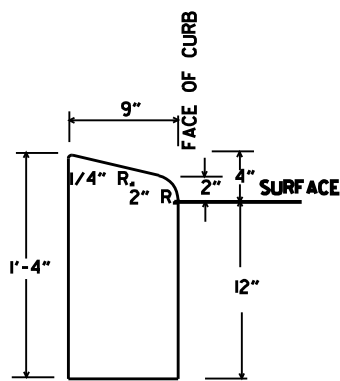
LONGITUDINAL SECTION

ELEVATION

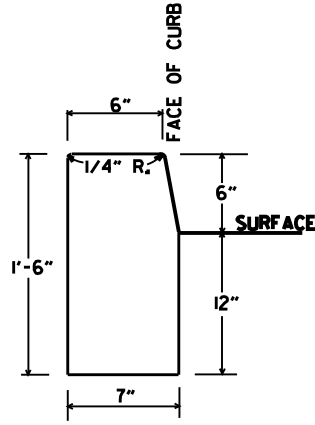
ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB



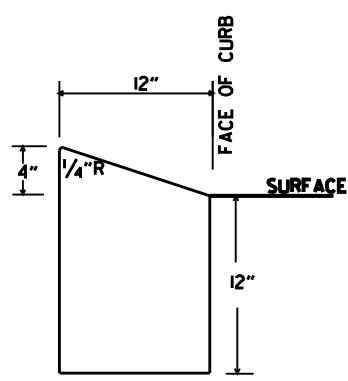
TYPE A



TYPE B

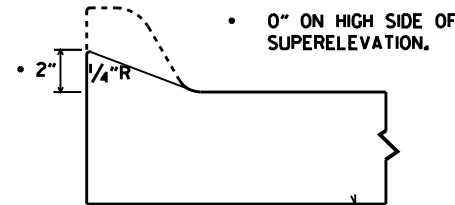


TYPE D



TYPE E

CONCRETE CURB



NOTE: USE MODIFIED CURB AS SPECIFIED ON STD. DR-1. COMPENSATION FOR MODIFIED CURB WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE TYPE OF CURB OR CURB AND GUTTER SPECIFIED.

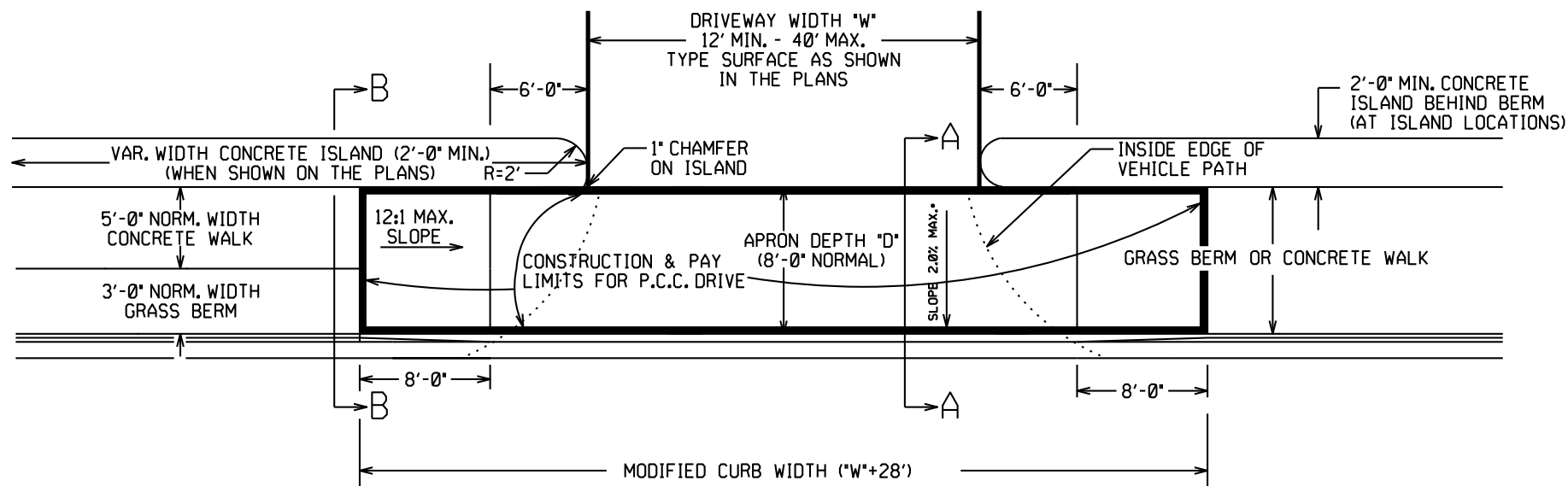
DETAILS OF MODIFIED CURB

DATE	REVISION	DATE FILMED
11-29-07	REVISED GUTTER SLOPE & MODIFIED CURB DETAILS	
11-10-05	ADDED DETAILS OF TYPE E CURBS	
11-16-01	REVISED CONCRETE CURB TYPE B	
11-18-98	REVISED MODIFIED CURB	
6-2-94	ADDED NOTE TO SPECIAL MODIFIED CURB	
8-5-93	CORRECTED GUTTER SLOPE	8-5-93
10-1-92	ADDED DETAILS OF GUTTER SLOPE	10-1-92
5-24-90	ADDED DETAILS OF MODIFIED CURB	5-24-90
11-30-89	VARIABLE DEPTH TYPE A & B I	11-30-89
7-15-88	REVISED MODIFIED CURB	630-7-15-88
11-1-73	REVISED MODIFIED CURB	500-11-1-73
10-2-72	REVISED AND REDRAWN	512-10-2-72

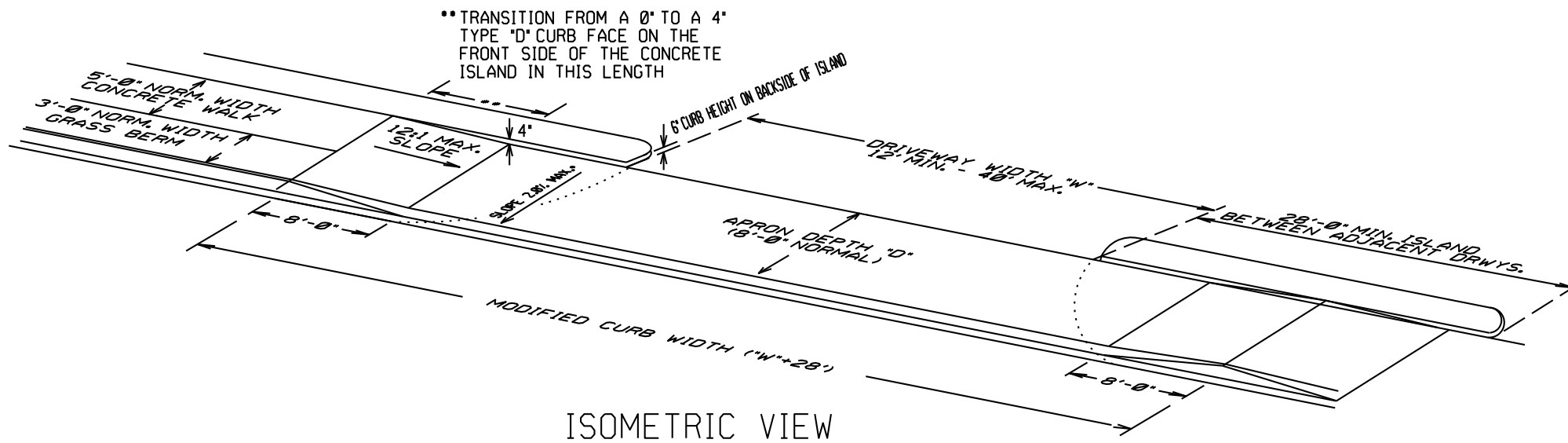
ARKANSAS STATE HIGHWAY COMMISSION

CURBING DETAILS

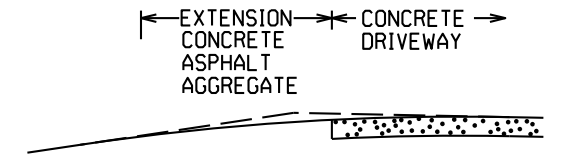
STANDARD DRAWING CG-1



PLAN VIEW



ISOMETRIC VIEW

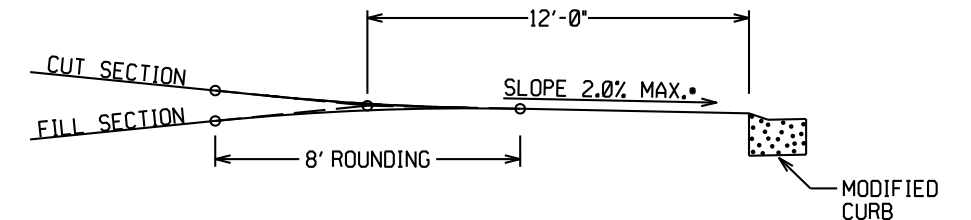


EXTENSION TYPICAL SECTIONS

- 1: CONCRETE - 6" P.C. CONCRETE DRIVEWAY
- 2: ASPHALT - 2" ACHM SURFACE COURSE (1/2")  
4" ACHM BINDER COURSE (1") OR  
4" ACHM BASE COURSE (1-1/2")
- 3: ASPHALT - 2" ACHM SURFACE COURSE (1/2")  
7" AGGREGATE BASE COURSE
- 4: AGGREGATE - 6" AGGREGATE BASE COURSE

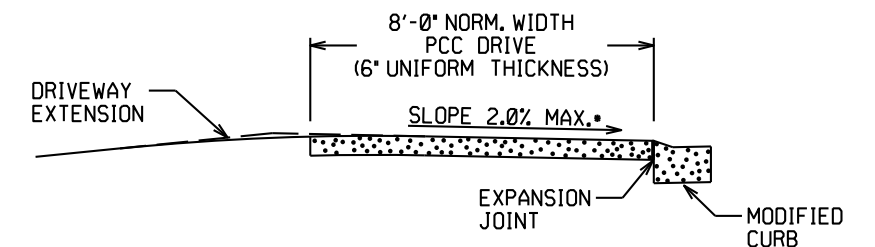
THE TYPE OF EXTENSION SHALL BE AS SHOWN IN THE PLANS. THE CONTRACTOR MAY, WITH THE APPROVAL OF THE ENGINEER, SUBSTITUTE A LOWER NUMBERED TYPE OF EXTENSION IN LIEU OF THE TYPE SPECIFIED IN THE PLANS, BUT AT NO ADDITIONAL COST TO THE DEPARTMENT.

DRIVEWAY EXTENSION DETAILS

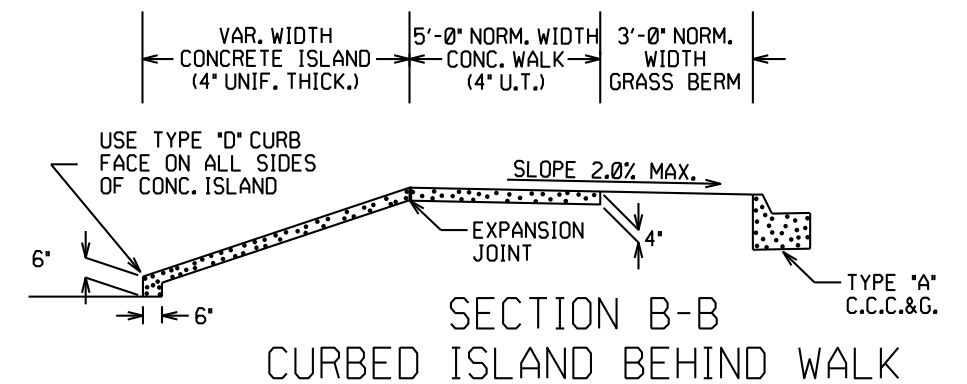


DRIVEWAY VERTICAL ALIGNMENT DETAILS

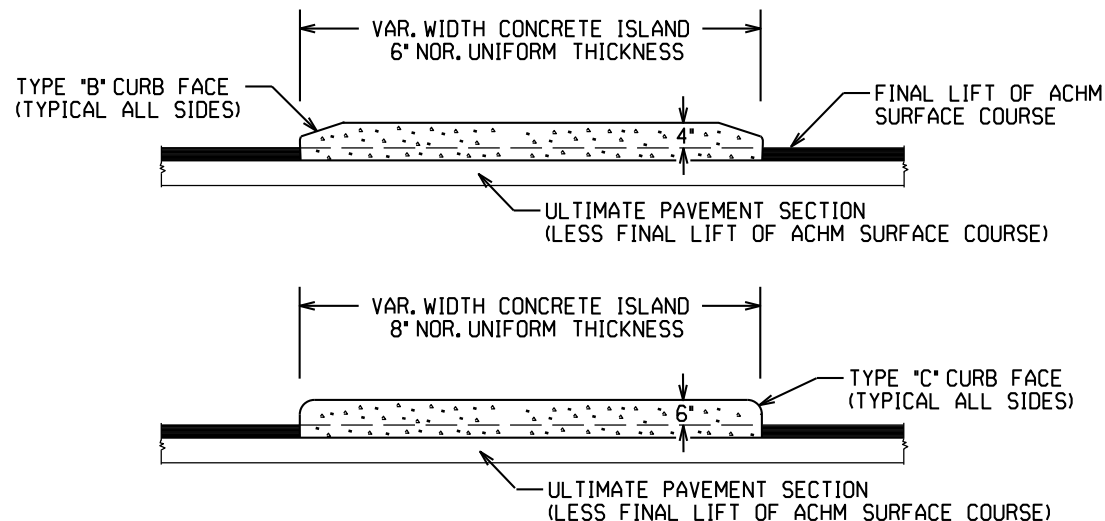
NOTE: DRIVEWAYS MAY NOT BE SLOPED AWAY FROM THE ROADWAY UNLESS APPROVED BY THE ENGINEER.



SECTION A-A



SECTION B-B  
CURBED ISLAND BEHIND WALK

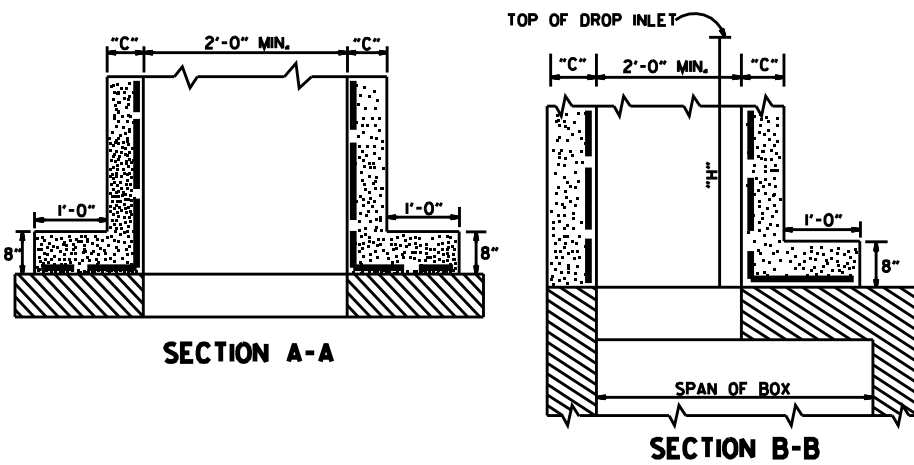
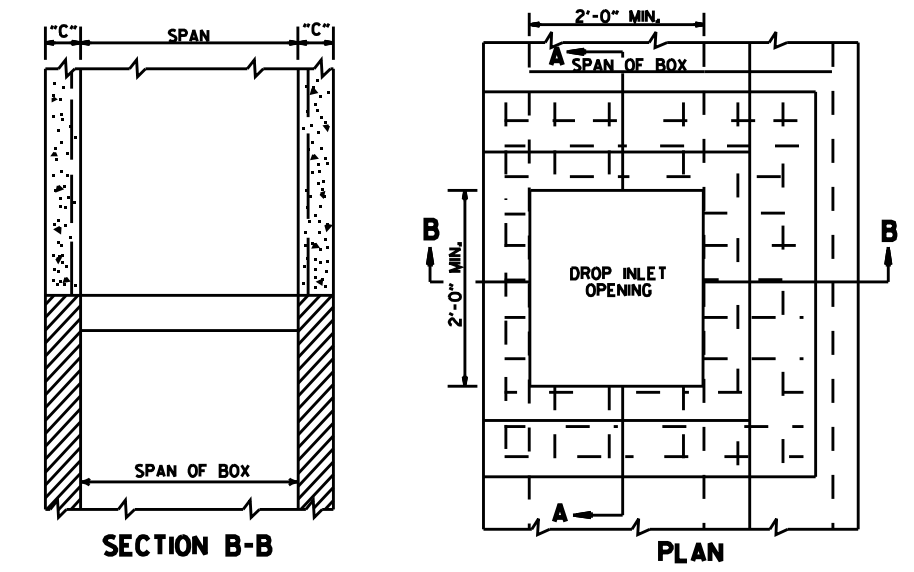


CURBED ISLANDS FOR CHANNELIZATION

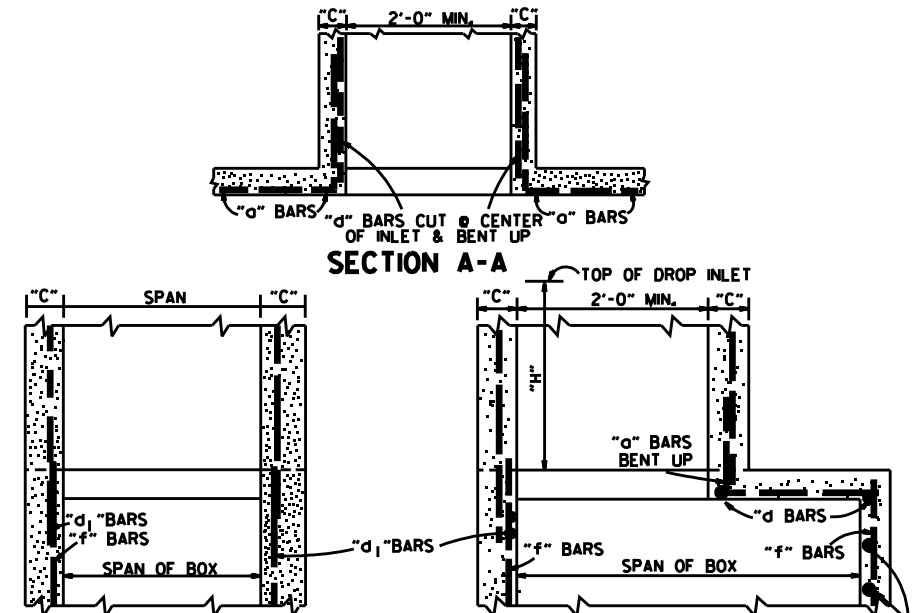
CONCRETE ISLAND NOTES:

1. REFER TO PLANS FOR TYPE OF CURB FACE TO BE USED. NO DIRECT PAYMENT WILL BE MADE FOR THE CURB FACES SHOWN ON THE ISLAND DETAILS. PAYMENT FOR THE CURB FACE WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEM "CONCRETE ISLAND".
2. TRANSVERSE EXPANSION JOINTS, NOT LESS THAN 1/2" WIDE, SHALL BE PLACED AT MINIMUM INTERVAL OF 45'. TRANSVERSE JOINT SHALL BE CONSTRUCTED USING A JOINT FILLER COMPLYING WITH AASHTO M213.

DATE	REV	DATE FILMED	DESCRIPTION
5-19-22			REVISED ISLAND NOTES
11-07-19			REVISED WALK DETAILS
2-27-14			REVISED PLAN & ISOMETRIC VIEW
11-29-07			ADDED CHANNELIZATION ISLAND WITH TYPE C CURB FACE & REVISED DRIVEWAY SLOPE NOTE & VERTICAL ALIGNMENT DETAIL
11-10-05			REV. APRON SLOPE & DEPTH OF AGG. BASE.
8-22-02			ADDED ISLAND DETAILS & NOTES
3-30-00			REV. MOD. CURB WIDTH & TRANS. NOTE
11-19-98			REVISED NOTES
11-18-98			REDRAWN AND REISSUED

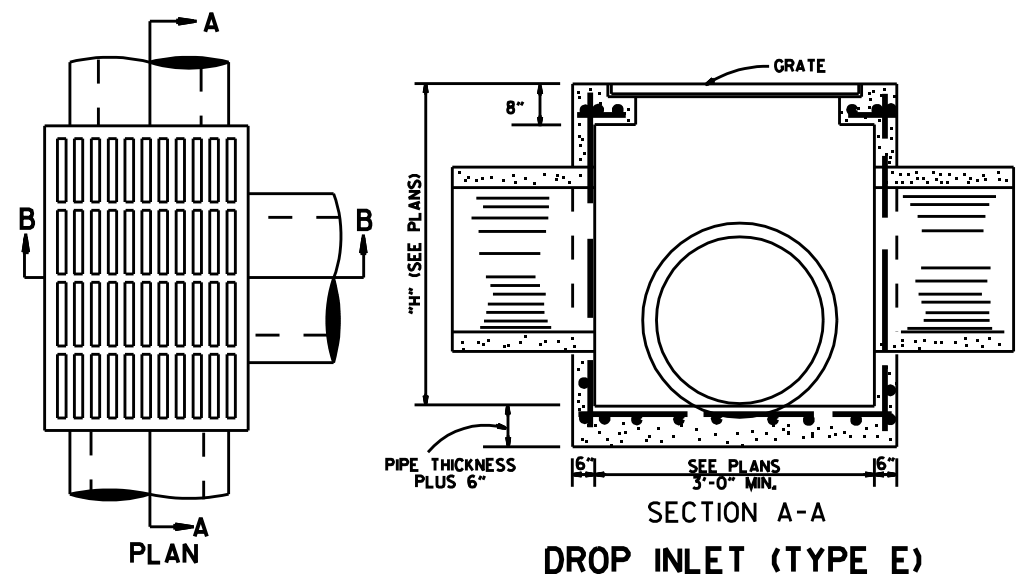


**METHOD OF CONSTRUCTING DROP INLET ON EXISTING R.C. BOX CULVERT**



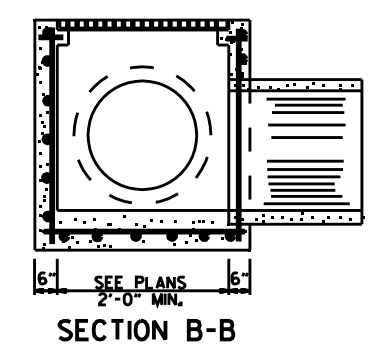
**METHOD OF CONSTRUCTING DROP INLET ON NEW R.C. BOX CULVERT**

NOTE: "C" DIMENSIONS AND REINFORCING BAR SIZES, SHALL CONFORM TO THOSE SHOWN ON STANDARD DRAWING FOR DROP INLET.

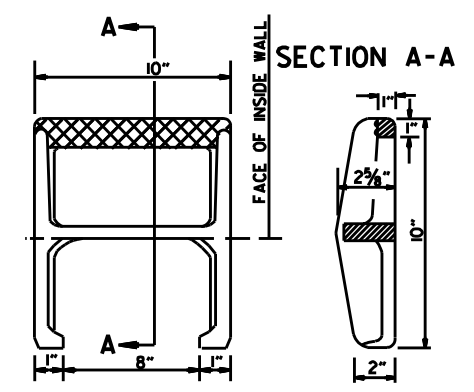


**DROP INLET (TYPE E)**

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1/2" MIN. COVER. THIS TYPE DROP INLET TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.

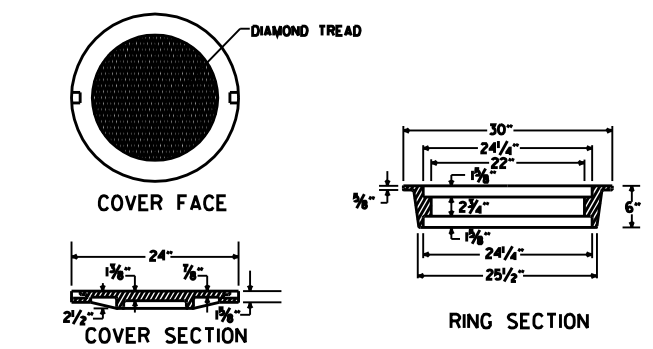


**SECTION B-B**



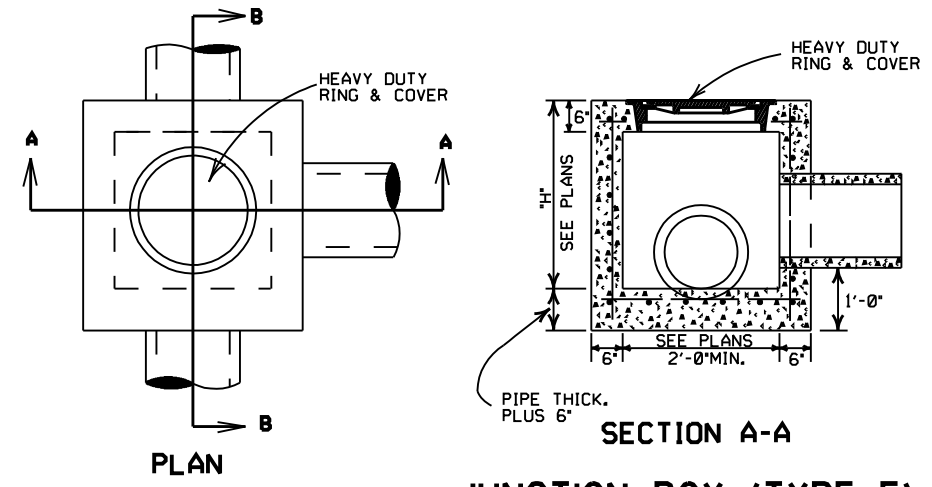
APPROX. WEIGHT = 11 LBS. (CAST IRON)  
**PLAN**  
NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

**DETAIL OF STEP FOR DROP INLET**



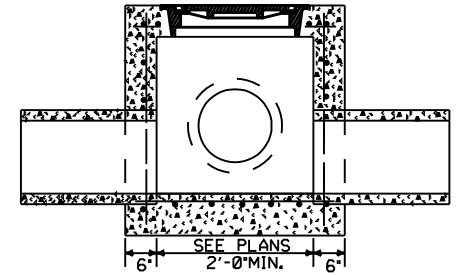
**HEAVY DUTY RING & COVER**

APPROXIMATE TOTAL WEIGHT = 333 LBS.

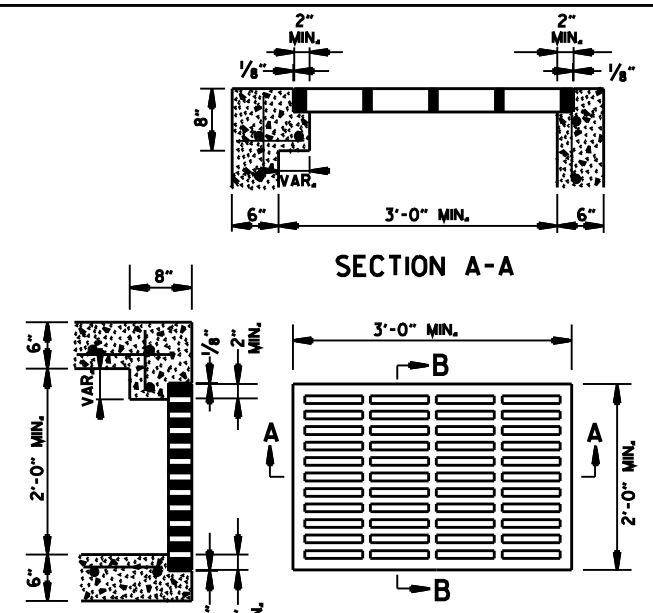


**JUNCTION BOX (TYPE E)**

NOTE: REINF. BARS TO BE #4 BARS ON 6" CTRS. WITH 1/2" MIN. COVER. THIS TYPE JUNCTION BOX TO BE USED WHERE NOT SUBJECTED TO TRAFFIC.

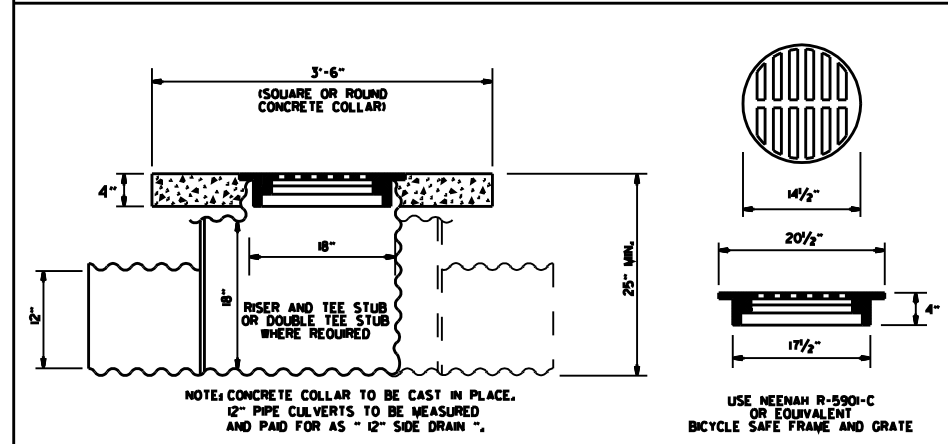


**SECTION B-B**



**GRATE FOR TYPE E DROP INLET**

APPROXIMATE MINIMUM WATERWAY OPENING = 260 SQ. IN.



**DETAIL OF YARD DRAIN**

DATE	REV.	REVISION	DATE FILMED
11-16-01		ADDED NOTE 10	
1-12-00		REVISED HEAVY DUTY RING & COVER	
7-02-98		CHANGED GRATE DETAIL, DELETED D (TYPE D), REPLACED RING & COVER W/HEAVY DUTY RING & COVER, ADDED JUNCTION BOX (TYPE E)	
6-26-97		ADDED DIMENSION TO TYPE IV-A	
10-18-96		ADDED DETAIL OF YARD DRAIN	
8-15-91		DELETE TYPE IV GRATE	
7-15-88		REVISED STEP DETAIL	
5-20-83		REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83		ADDED GENERAL NOTE NO. 4	
3-2-81		ADDED TYPE IV-A GRATE	
5-22-74		DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72		REVISED AND REDRAWN	

- GENERAL NOTES:**
- ALL EXPOSED CORNERS SHALL BE 3/4" CHAMFERED.
  - STEPS SHALL BE INSTALLED ON 16" CENTERS ON ALL INLETS 4'-0" HIGH OR OVER, OR AS APPROVED BY THE ENGINEER.
  - EXPANSION JOINT MATERIAL SHALL BE 3/4" PREFORMED FIBER.
  - GRATE OR GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105 CLASS 35B. GRATE MAY BE USED WITHOUT FRAME.
  - GRATE AND FRAME SHALL NOT BE PAINTED.
  - GRATE SHALL BE BICYCLE SAFE.
  - HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
  - HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
  - HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
  - DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER, REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

**ARKANSAS STATE HIGHWAY COMMISSION**  
**DETAILS OF DROP INLETS & JUNCTION BOXES**  
**STANDARD DRAWING FPC-9**

**4'-0" LENGTH DROP INLET DROP INLET EXTENSION**

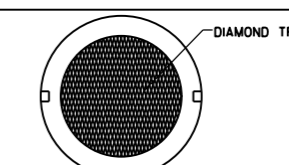
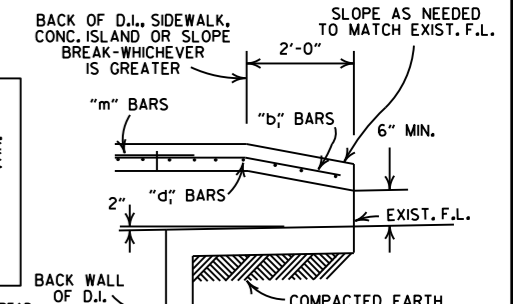
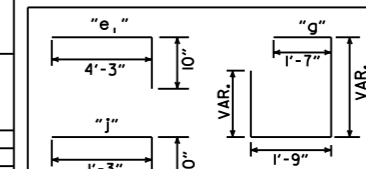
PIPE SIZE	MIN. WIDTH	HEIGHT 5'-0"		PLUS OR MINUS PER LIN. FT. OF HEIGHT		4'-0"		8'-0"	
		CLASS A CONC.	REINF. STEEL	CLASS A CONC.	REINF. STEEL	CLASS A CONC.	REINF. STEEL	CLASS A CONC.	REINF. STEEL
		CU. YDS.	POUNDS	CU. YDS.	POUNDS	CU. YDS.	POUNDS	CU. YDS.	POUNDS
18"	2'-6"	1.77	156	0.28	22	0.58	38	0.87	72
24"	2'-6"	1.79	156	0.28	22				
30"	3'-2"	2.39	205	0.30	26				
36"	3'-8"	2.63	236	0.32	28				
42"	4'-4"	2.95	250	0.34	30				
48"	4'-10"	3.21	265	0.36	32				
						DEDUCT FROM QUANTITY COMPUTED FOR EACH EXTENSION ADDED.			
						0.04	3		

NOTE: QUANTITIES ARE APPROXIMATE AND ARE SHOWN FOR BIDDER INFORMATION ONLY.

**DEDUCT FROM QUANTITY COMPUTED FOR EACH PIPE ENTERING INLET**

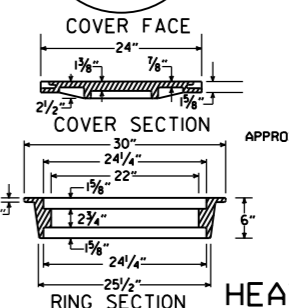
INSIDE DIA. PIPE	CLASS A CONC.	REINF. STEEL
INCHES	CU. YDS.	POUNDS
18	0.05	2
24	0.09	3
30	0.13	4
42	0.24	8

**BAR DIAGRAM**



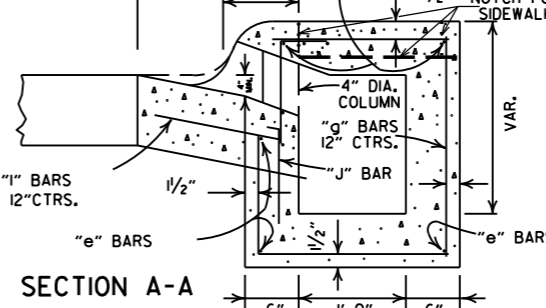
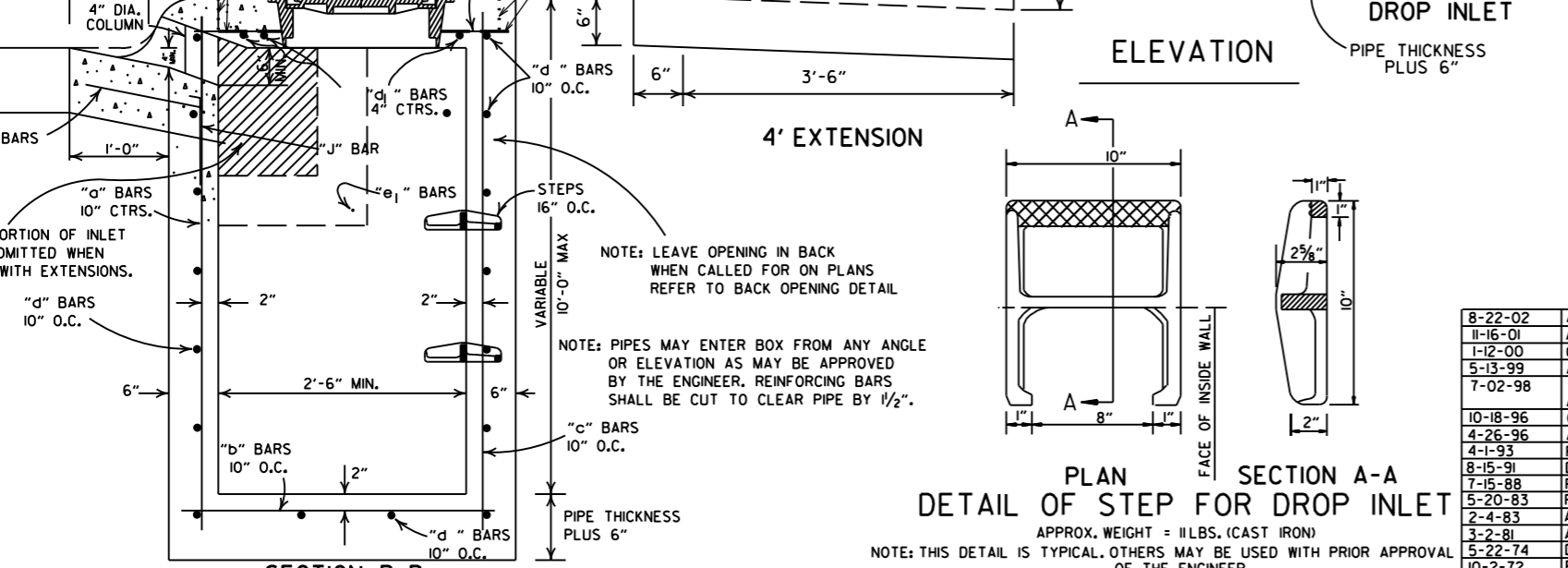
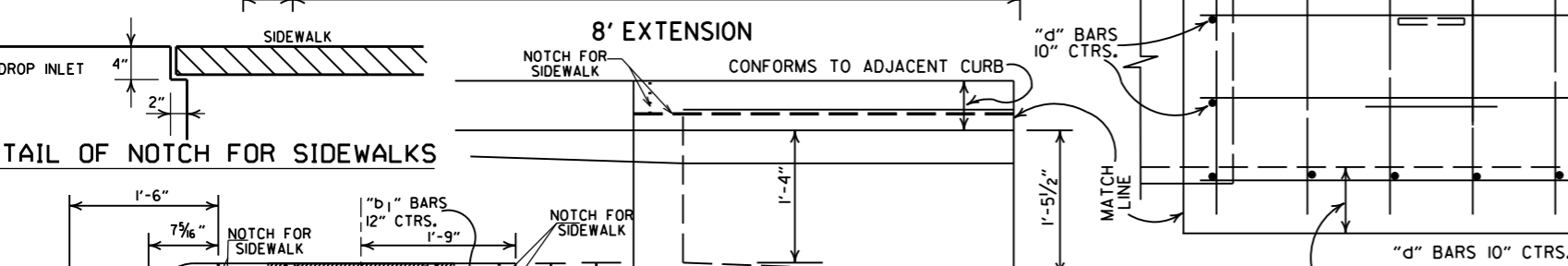
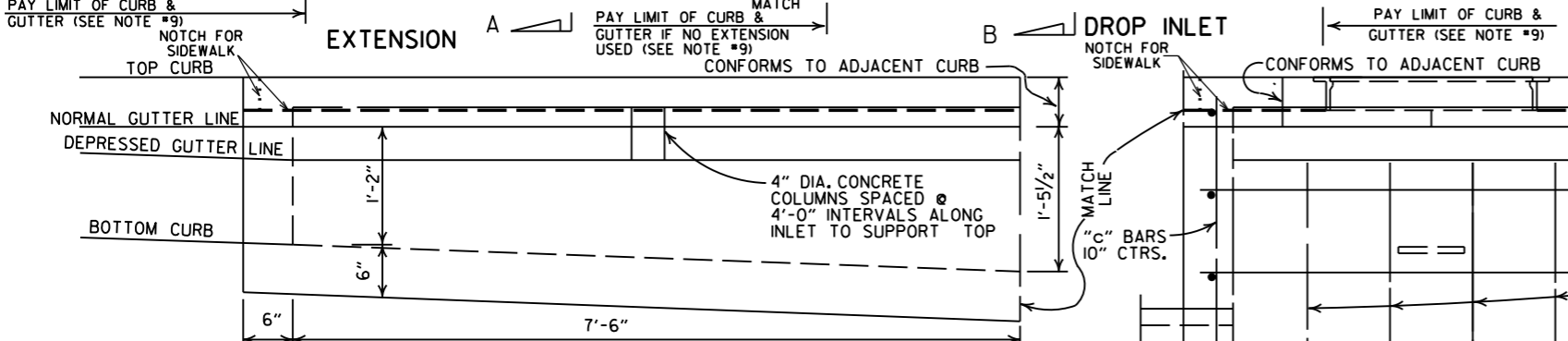
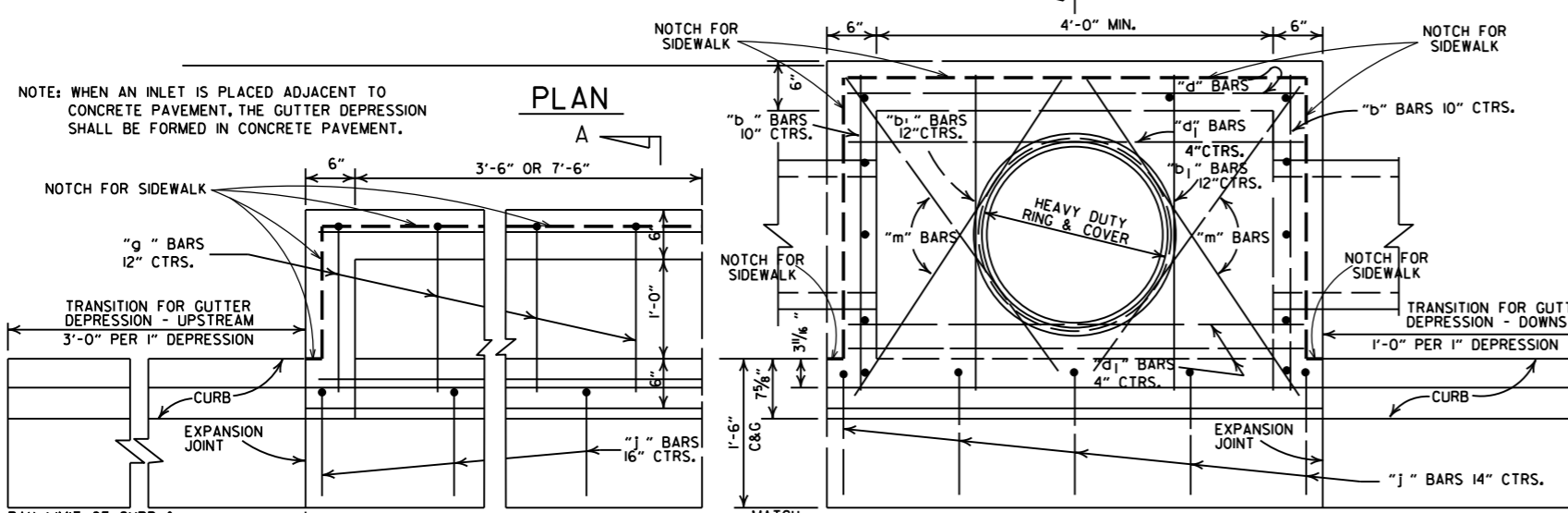
**BACK OPENING**

WHEN OPENING IN BACK IS CALLED FOR ON PLANS EXTEND OPENING AS SHOWN IN DETAIL. PAYMENT TO BE INCLUDED IN PRICE BID FOR DROP INLET (TYPE C).



**HEAVY DUTY RING & COVER**

- APPROXIMATE TOTAL WEIGHT = 333 LBS.
- GENERAL NOTES:**
- ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
  - STEPS SHALL BE INSTALLED IN ALL INLETS 4'-0" HIGH AND OVER OF AS APPROVED BY THE ENGINEER.
  - ALL REINF. BARS SHALL BE #4 AND HAVE 1/2" COVER.
  - DROP INLETS AND EXTENSION ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
  - THIS DROP INLET MAY BE CONSTRUCTED ON NEW OR EXISTING R.C. BOX CULVERT AS SHOWN ON F.P.C.-9.
  - WHEN PLANS CALL FOR DROP INLET OVER 10'-0" HIGH, FLOOR AND WALLS SHALL BE CONSTRUCTED AS SHOWN FOR TYPE "RM" DROP INLET (FPC-9D).
  - HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
  - DURING CONSTRUCTION OF THE ROADWAY THE CONTRACTOR SHALL MAINTAIN DRAINAGE INTO OR AROUND THE DROP INLET AS APPROVED BY THE ENGINEER.
  - PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE CONSIDERED INCLUDED IN PAYMENT MADE FOR DROP INLETS AND/OR DROP INLET EXTENSIONS.
  - HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
  - HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
  - 4"x2" NOTCH SHALL BE FORMED IN ALL DROP INLETS TO SUPPORT SIDEWALK CONSTRUCTION. REFER TO DETAIL OF NOTCH FOR SIDEWALKS.
  - DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.



DATE	REV.	REVISION	DATE FILMED
8-22-02		ADDED PAY LIMIT CURB NOTES TO SECTIONS A-A & B-B	
11-16-01		ADDED NOTE 13; REVISED SECTION B-B	
1-12-00		CORRECTED DIMENSION ON SECTION B-B & REVISED RING & COVER	
5-13-99		ADDED DETAIL OF NOTCH FOR SIDEWALKS	
7-02-98		REPLACED RING & COVER W/HEAVY DUTY RING & COVER	
		ADDED NOTES 9,10,&11	
10-18-96		CORRECTED SPELLING	
4-26-96		ADDED NOTE 8 & REVISED (4'x8') EXTENSION TITLES	10-18-96
4-1-95		REVISED BACK OPENING & NOTE	
8-15-91		DELETE TYPE IV GRATE	
7-15-88		REVISED STEP DETAIL	
5-20-83		REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83		ADDED GENERAL NOTE NO. 4	
3-2-81		ADDED TYPE IV-A GRATE	
5-22-74		DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72		REVISED AND REDRAWN	

**ARKANSAS STATE HIGHWAY COMMISSION**

**DETAILS OF DROP INLETS (TYPE C)**

**STANDARD DRAWING FPC-9E**

**PLAN SECTION A-A**  
**DETAIL OF STEP FOR DROP INLET**  
 APPROX. WEIGHT = 11 LBS. (CAST IRON)  
 NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

**REINFORCED CONCRETE ARCH PIPE DIMENSIONS**

EQUIV. DIA.	SPAN		RISE	
	AASHTO M 206	ARDDOT NOMINAL	AASHTO M 206	ARDDOT NOMINAL
INCHES	INCHES			
15	18	18	11	11
18	22	22	13½	14
21	26	26	15½	16
24	28½	29	18	18
30	36¼	36	22½	23
36	43¾	44	26¾	27
42	51½	51	31¾	31
48	58½	59	36	36
54	65	65	40	40
60	73	73	45	45
72	88	88	54	54
84	102	102	62	62
90	115	115	72	72
96	122	122	77½	77
108	138	138	87½	87
120	154	154	96¾	97
132	168¾	169	106½	107

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M206.

**REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE DIMENSIONS**

EQUIV. DIA.	AASHTO M 207	
	SPAN	RISE
INCHES	INCHES	
18	23	14
24	30	19
27	34	22
30	38	24
33	42	27
36	45	29
39	49	32
42	53	34
48	60	38
54	68	43
60	76	48
66	83	53
72	91	58
78	98	63
84	106	68

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M207.

**CONSTRUCTION SEQUENCE**

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE MIDDLE OF THE PIPE.
5. COMPLETE BACKFILL ACCORDING TO SUBSECTION 606.03.(f)(1).

NOTE: HAUNCH AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF CONCRETE PIPE.

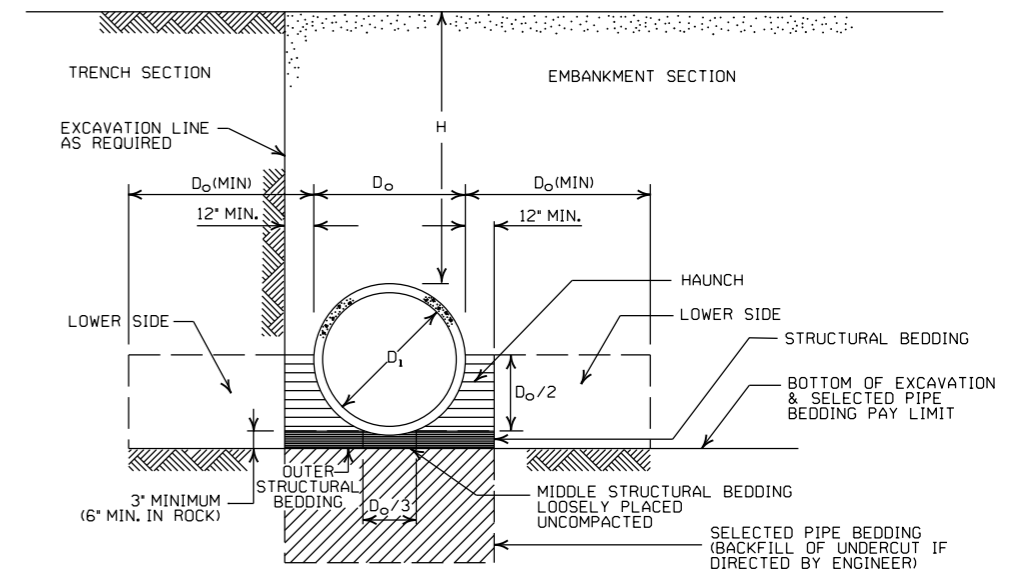
**- LEGEND -**

- D<sub>i</sub> = NORMAL INSIDE DIAMETER OF PIPE
- D<sub>o</sub> = OUTSIDE DIAMETER OF PIPE
- H = FILL COVER HEIGHT OVER PIPE (FEET)
- MIN. = MINIMUM
- UNDISTURBED SOIL

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR HAUNCH AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 5 OR CLASS 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL*
TYPE 3**	AASHTO CLASSIFICATION A-1 THRU A-6 SOIL OR TYPE 1 OR 2 INSTALLATION MATERIAL

\* SM-3 WILL NOT BE ALLOWED.

\*\* MATERIALS SHALL NOT INCLUDE ORGANIC MATERIALS OR STONES LARGER THAN 3 INCHES.



**EMBANKMENT AND TRENCH INSTALLATIONS**

1. MATERIAL IN THE HAUNCH AND OUTER STRUCTURAL BEDDING SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. FOR TRENCHES WITH WALLS OF NATURAL SOIL, THE DENSITY OF THE SOIL IN THE LOWER SIDE ZONE SHALL BE AS FIRM AS THE 95% DENSITY REQUIRED FOR THE HAUNCH. IF THE EXISTING SOIL DOES NOT MEET THIS CRITERIA, IT SHALL BE REMOVED AND RECOMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OF MATERIAL USED.
3. FOR EMBANKMENTS, THE MATERIAL IN THE LOWER SIDE ZONE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

**GENERAL NOTES**

1. CONCRETE PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. CONCRETE PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. ALL PIPE SHALL CONFORM TO SECTION 606. CIRCULAR R.C. PIPE CULVERTS SHALL CONFORM TO AASHTO M170. R.C. ARCH PIPE CULVERTS SHALL CONFORM TO AASHTO M206 AND HORIZONTAL ELLIPTICAL PIPE CULVERTS SHALL CONFORM TO AASHTO M207.
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. NOT MORE THAN ONE LIFTING HOLE MAY BE PROVIDED IN CONCRETE PIPE TO FACILITATE HANDLING. HOLE MAY BE CAST IN PLACE, CUT INTO THE FRESH CONCRETE AFTER FORMS ARE REMOVED, OR DRILLED. THE HOLE SHALL NOT BE MORE THAN TWO INCHES IN DIAMETER OR TWO INCHES SQUARE. CUTTING OR DISPLACEMENT OF REINFORCEMENT WILL NOT BE PERMITTED. SPALLED AREAS AROUND THE HOLE SHALL BE REPAIRED IN A WORKMANLIKE MANNER. LIFTING HOLE SHALL BE FILLED WITH MORTAR, CONCRETE, OR OTHER METHOD AS APPROVED BY THE ENGINEER.
9. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
10. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS THE HAUNCH), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

**MINIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS**

INSTALLATION TYPE	CLASS OF PIPE			
	CLASS III	CLASS IV	CLASS V	CLASS V
PIPE ID (IN.)	FEET			
12-15	2	2.5	2	1
18-24	2.5	3	2	1
27-33	3	4	2	1
36-42	3.5	5	2	1
48	4.5	5.5	2	1
54-60	5	7	2	1
66-78	6	8	2	1
84-108	7.5	8	2	1

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

**MAXIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS**

INSTALLATION TYPE	CLASS OF PIPE		
	CLASS III	CLASS IV	CLASS V
TYPE 1	21	32	50
TYPE 2	16	25	39
TYPE 3	12	20	30

NOTE: IF FILL HEIGHT EXCEEDS 50 FEET, A SPECIAL DESIGN CONCRETE PIPE WILL BE REQUIRED USING TYPE 1 INSTALLATION.

**MINIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS**

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
TYPE 2 OR TYPE 3	FEET	
	2.5	1.5

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

**MAXIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS**

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
TYPE 2	13	21
TYPE 3	10	16

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED FOR LRFD DESIGN SPECIFICATIONS	
5-18-00	REVISED TYPE 3 BEDDING & ADDED NOTE	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

**ARKANSAS STATE HIGHWAY COMMISSION**

**CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING**

STANDARD DRAWING PCC-1





INSTALLATION TYPE	•• MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 2	•SELECTED MATERIALS (CLASS SM-1, SM-2 OR SM-4)

- AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7) MAY BE USED IN LIEU OF SELECTED MATERIAL.
  - SM3 WILL NOT BE ALLOWED.
  - STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1/2 INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.
- STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF HDPE PIPE.

### MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"

PIPE DIAMETER	TRENCH WIDTH (FEET)	
	"H" < 10'-0"	"H" >OR= 10'-0"
18"	4'-6"	4'-6"
24"	5'-0"	6'-0"
30"	5'-6"	7'-6"
36"	6'-0"	9'-0"
42"	7'-0"	10'-6"
48"	8'-0"	12'-0"

NOTE:  
 18" MIN. (18" - 30" DIAMETERS)  
 24" MIN. (36" - 48" DIAMETERS)  
 MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM 12" OF PAVEMENT AND/OR BASE.

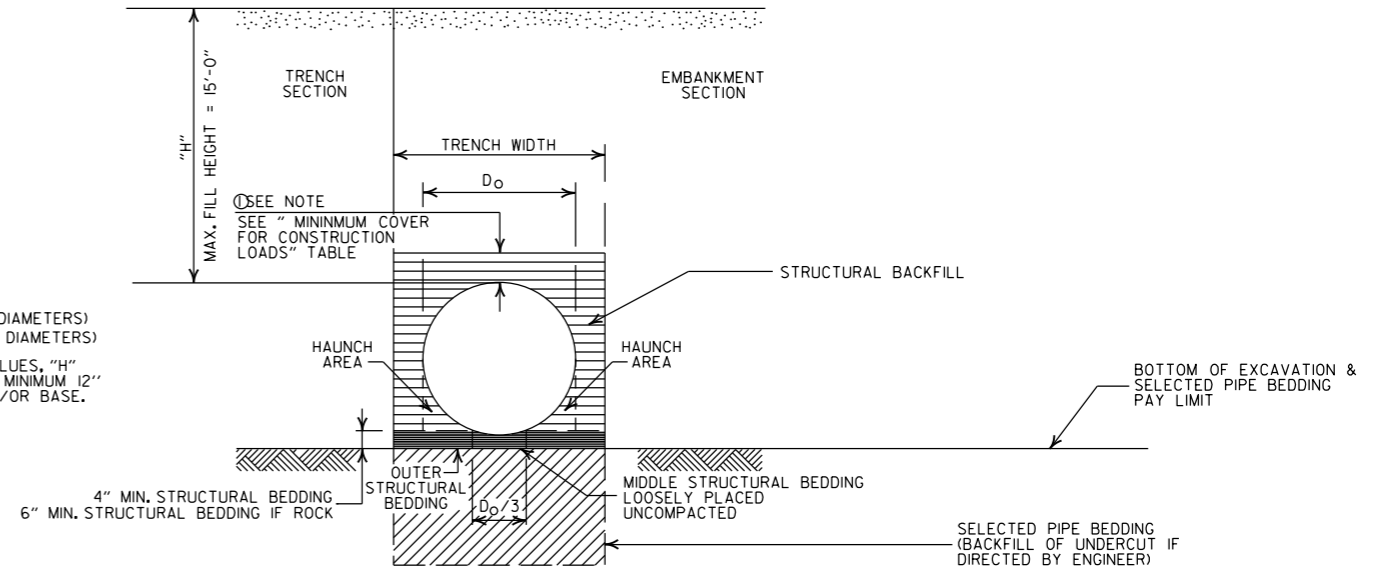
### MULTIPLE INSTALLATION OF HIGH DENSITY POLYETHYLENE PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18"	1'-6"
24"	2'-0"
30"	2'-6"
36"	3'-0"
42"	3'-6"
48"	4'-0"

### MINIMUM COVER FOR CONSTRUCTION LOADS

PIPE DIAMETER	MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS			
	18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-175.0 (KIPS)
36" OR LESS	2'-0"	2'-6"	3'-0"	3'-0"
42" OR GREATER	3'-0"	3'-0"	3'-6"	4'-0"

MINIMUM COVER SHALL BE MEASURED FROM TOP OF PIPE TO TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE. THE SURFACE SHALL BE MAINTAINED.



### TYPE 2 EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

### CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. THE STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8". THE LAYERS SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY TO THE ELEVATION OF THE MINIMUM COVER.
5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

### - LEGEND -

- H = FILL HEIGHT (FT.)
- Do = OUTSIDE DIAMETER OF PIPE
- MAX. = MAXIMUM
- MIN. = MINIMUM
- [Hatched pattern] = STRUCTURAL BACKFILL MATERIAL
- [Dotted pattern] = UNDISTURBED SOIL

### GENERAL NOTES

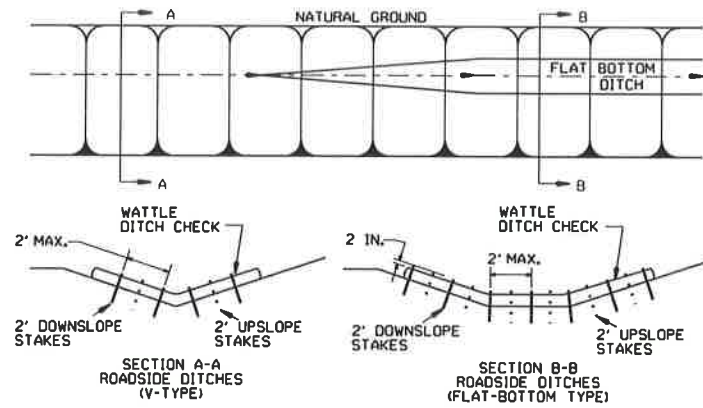
1. PIPE SHALL CONFORM TO AASHTO M294, TYPE S. INSTALLATION SHALL CONFORM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
5. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
6. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. HIGH DENSITY POLYETHYLENE PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR HDPE PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN AASHTO SECTION 26.4.2.4 AND 30.4.2 "AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS." JOINTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED GENERAL NOTES & MINIMUM COVER NOTE	
11-17-10	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION  
**PLASTIC PIPE CULVERT  
 (HIGH DENSITY POLYETHYLENE)**  
 STANDARD DRAWING PCP-1

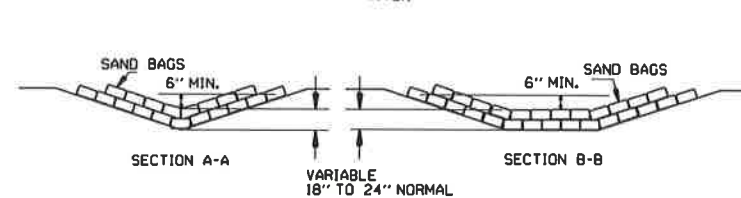
**GENERAL NOTES**

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

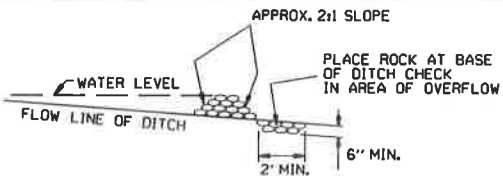


**WATTLE DITCH CHECK (E-1)**

NUMBER OF SAND BAGS AND ARRANGEMENT VARIABLE WITH ON-SITE CONDITIONS. PLACE SAND BAGS AT BASE OF DITCH CHECK IN AREA OF OVERFLOW.

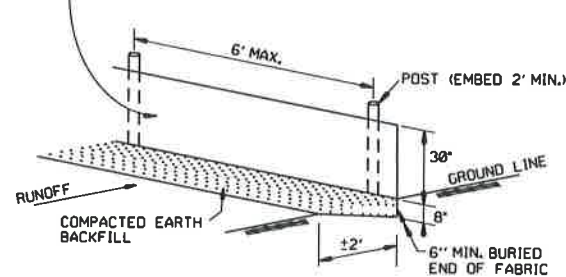


**SAND BAG DITCH CHECK (E-5)**

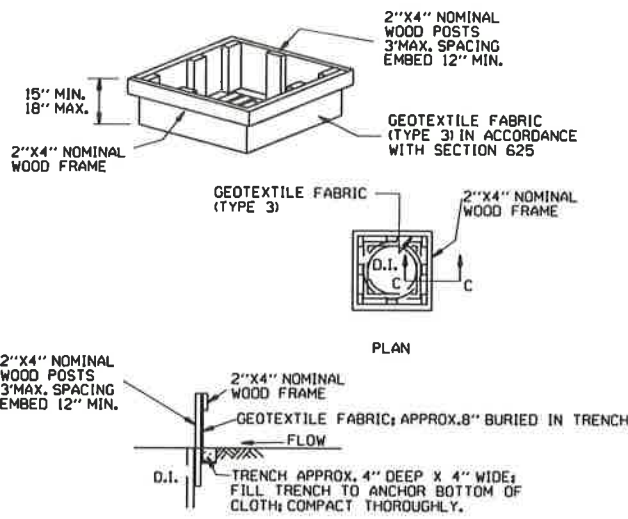


**ROCK DITCH CHECK (E-6)**

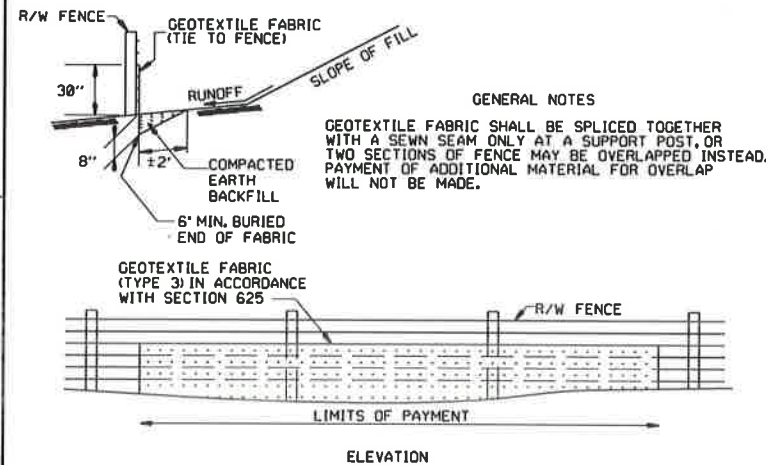
**GENERAL NOTES**  
 GEOTEXTILE FABRIC (TYPE 4) IN ACCORDANCE WITH SECTION 625  
 GEOTEXTILE FABRIC SHALL BE SPICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



**SILTS FENCE (E-11)**

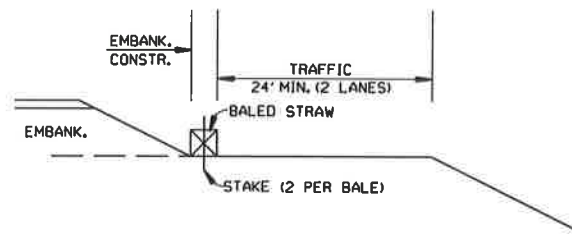


**DROP INLET SILTS FENCE (E-7)**

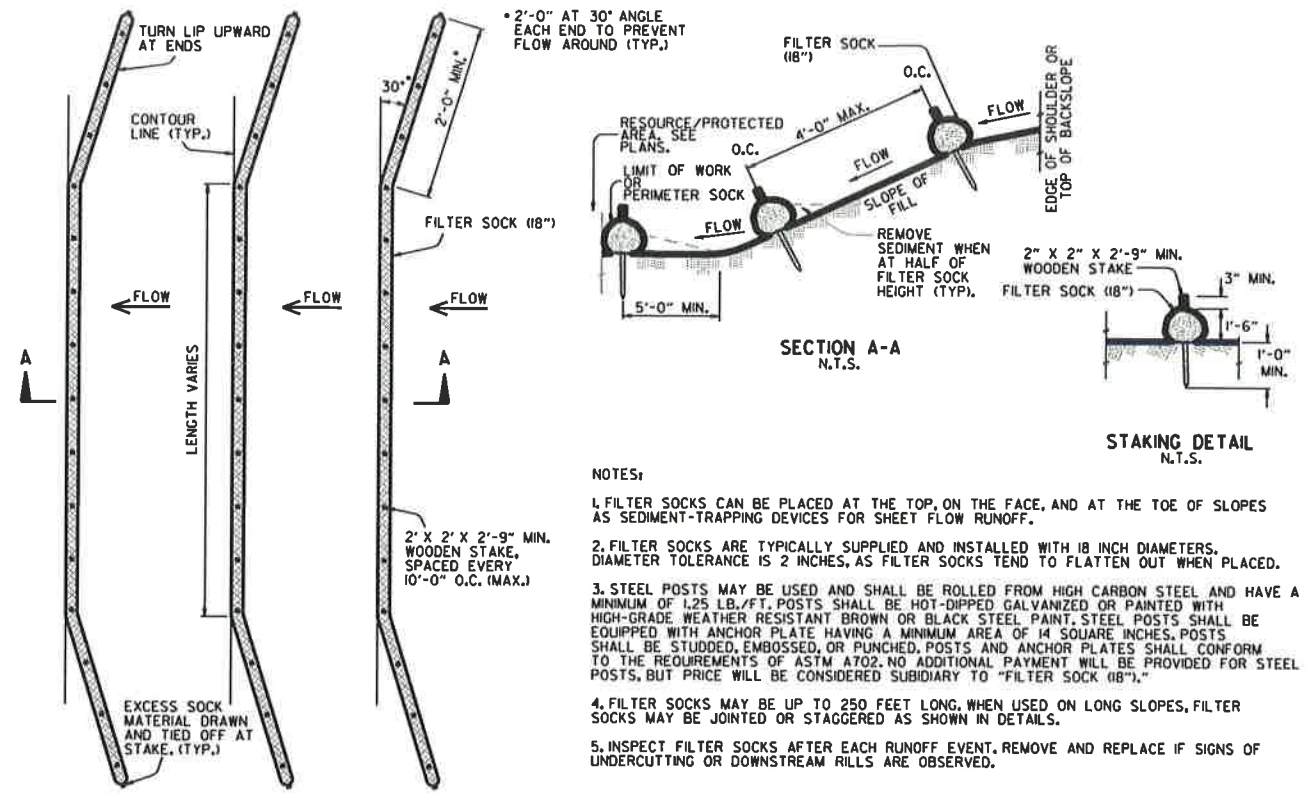


**SILTS FENCE ON R/W FENCE (E-4)**

**GENERAL NOTES**  
 1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.  
 2. NO GAPS SHALL BE LEFT BETWEEN BALES.  
 3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.

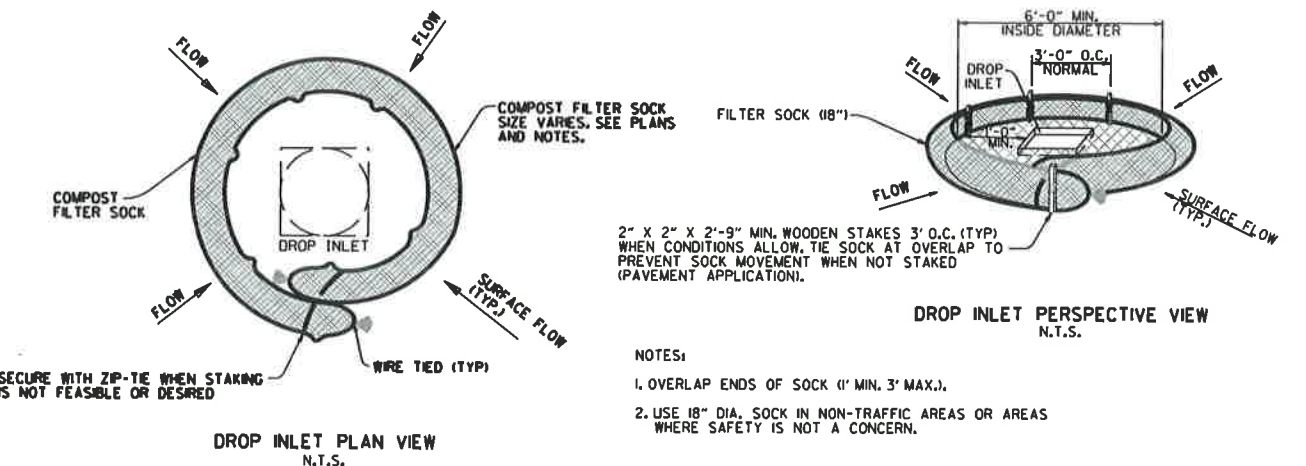


**BALED STRAW FILTER BARRIER (E-2)**



**FILTER SOCK ALONG SLOPE (E-3)**

**NOTES:**  
 1. FILTER SOCKS CAN BE PLACED AT THE TOP, ON THE FACE, AND AT THE TOE OF SLOPES AS SEDIMENT-TRAPPING DEVICES FOR SHEET FLOW RUNOFF.  
 2. FILTER SOCKS ARE TYPICALLY SUPPLIED AND INSTALLED WITH 18 INCH DIAMETERS. DIAMETER TOLERANCE IS 2 INCHES, AS FILTER SOCKS TEND TO FLATTEN OUT WHEN PLACED.  
 3. STEEL POSTS MAY BE USED AND SHALL BE ROLLED FROM HIGH CARBON STEEL AND HAVE A MINIMUM OF 1.25 LB./FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH-GRADE WEATHER RESISTANT BROWN OR BLACK STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR STEEL POSTS, BUT PRICE WILL BE CONSIDERED SUBSIDIARY TO "FILTER SOCK (18\"/>

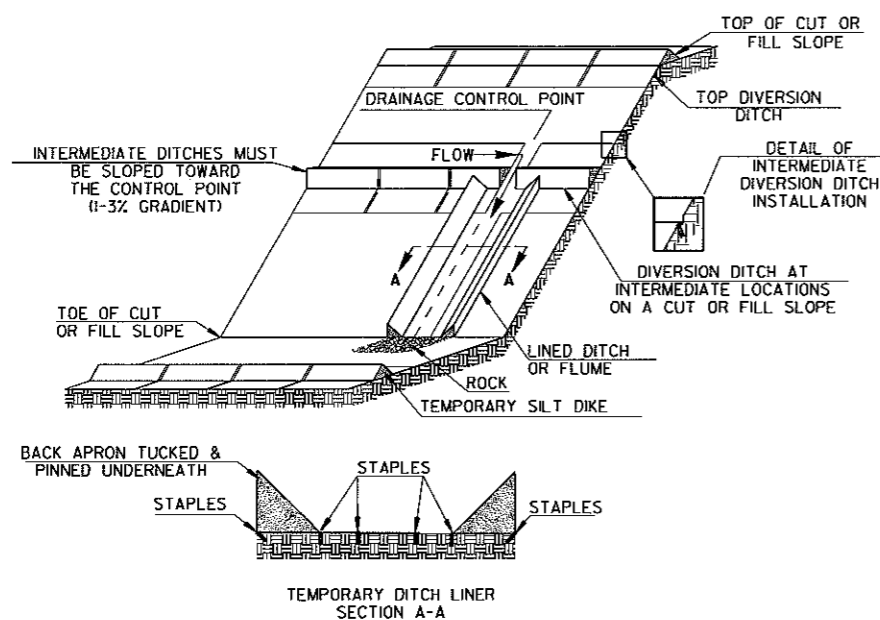


**COMPOST FILTER SOCK DROP INLET PROTECTION (E-13)**

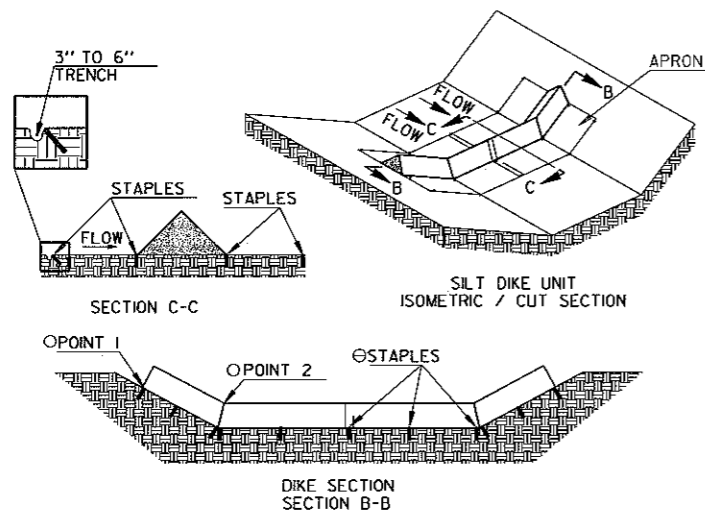
**NOTES:**  
 1. OVERLAP ENDS OF SOCK (1\"/>

11-16-17	ADDED FILTER SOCK E-3 AND E-13	
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	
1-18-98	ADDED NOTES	
07-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	7-20-95
07-20-95	REVISED SILTS FENCE E-4 AND E-11	
07-15-94	REV. E-4 & E-11 MIN. 13\"/>	
06-02-94	REVISED E-1, 4, 7 & 11 DELETED E-2 & 3	6-2-94
04-01-93	REDRAWN	
10-01-92	REDRAWN	
08-02-76	ISSUED R.D.M.	298-7-28-76
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION  
 TEMPORARY EROSION CONTROL DEVICES  
 STANDARD DRAWING TEC-1

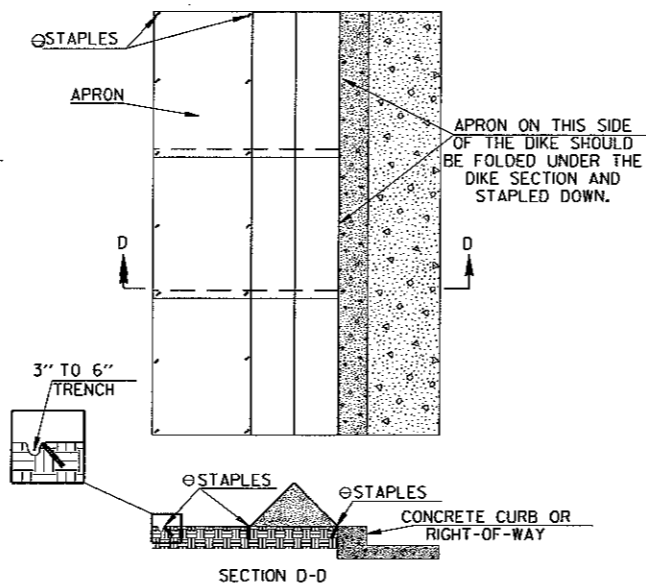


TRIANGULAR SILT DIKE INSTALLATION FOR DIVERSION DITCH AND/OR DITCH LINER

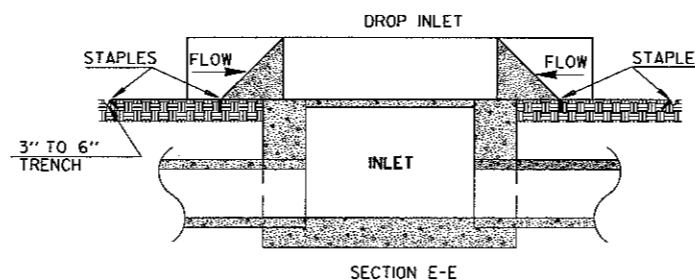
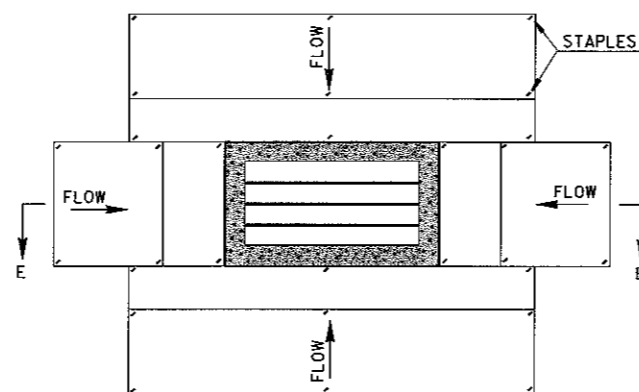


TRIANGULAR SILT DIKE INSTALLATION FOR ROADWAY DITCH OR DRAINAGE DITCH

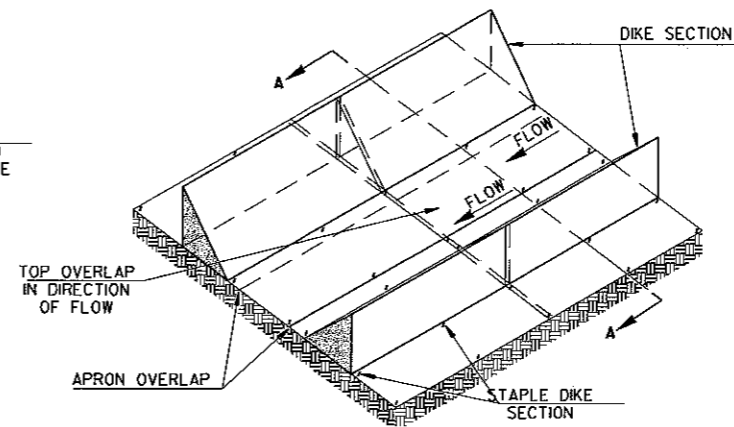
- POINT "1" MUST BE HIGHER THAN POINT "2" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.
- ⊙ STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE UNIT AS SHOWN ON THE DIAGRAM.



TRIANGULAR SILT DIKE INSTALLATION FOR CONTINUOUS BARRIER



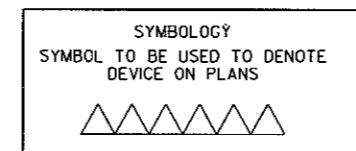
TRIANGULAR SILT DIKE INSTALLATION FOR DROP INLETS



TRIANGULAR SILT DIKE INSTALLATION FOR TEMPORARY DITCH LINER

GENERAL NOTES

1. THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, AND MAINTAINING THE TRIANGULAR SILT DIKE. THE DIKES SHALL BE USED AS A CONTINUOUS LINE BARRIER AT THE TOE OF SLOPE OR ACROSS THE ROADWAY DITCH TO CONTAIN SEDIMENT AND MINIMIZE EROSION, OR AS DIRECTED BY THE ENGINEER. THESE DIKES SHALL BE INSTALLED AND LOCATED AS SOON AS CONSTRUCTION WILL ALLOW OR AS DIRECTED BY THE ENGINEER.
2. TRIANGULAR SILT DIKE SHALL BE TRIANGULAR SHAPED HAVING A HEIGHT OF AT LEAST 8" TO 10" IN THE CENTER WITH EQUAL SIDES AND A 16" TO 20" BASE. THE TRIANGULAR SHAPED INNER MATERIAL SHALL BE URETHANE FOAM. THE OUTER COVER SHALL BE A WOVEN GEOTEXTILE FABRIC PLACED AROUND THE INNER MATERIAL & ALLOWED TO EXTEND BEYOND BOTH SIDES OF THE TRIANGLE 24" TO 36". THIS FABRIC SHOULD BE MILDEW RESISTANT, ROT-PROOF AND RESISTANT TO HEAT AND ULTRAVIOLET RADIATION MEETING REQUIREMENTS FOR SEDIMENT CONTROL IN AASHTO M288. THE DIKES SHALL BE ATTACHED TO THE GROUND WITH WIRE STAPLES. THE STAPLES SHALL BE NO. 11 GAUGE WIRE AND BE AT LEAST 6" TO 8" LONG. STAPLES SHALL BE PLACED AS SHOWN ON THESE DETAILS.
3. THE CONTRACTOR SHALL INSPECT ALL DIKES AFTER EACH RAINFALL EVENT OF AT LEAST 0.5" OR GREATER. ANY DEFICIENCIES OR DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR. ACCUMULATED SILT OR DEBRIS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER. IF THE DIKES ARE DAMAGED OR INADVERTENTLY MOVED DURING THE SILT REMOVAL PROCESS, THE CONTRACTOR SHALL IMMEDIATELY REPLACE AFTER DAMAGE OCCURS.
3. ACCEPTED TRIANGULAR SILT DIKE, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR TRIANGULAR SILT DIKE. PRICE BID WILL INCLUDE THE COST OF FURNISHING THE DIKES, INSTALLING, MAINTAINING AND REMOVAL WHEN DIRECTED BY THE ENGINEER.

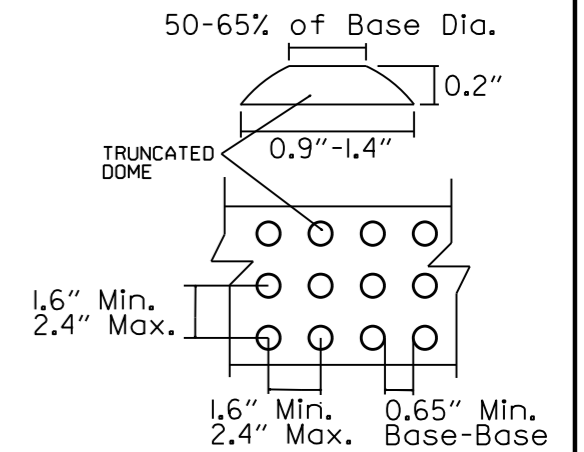


NOTE: SILT DIKE SHOULD ONLY BE USED FOR DROP INLETS IN SUMP LOCATIONS.

			ARKANSAS STATE HIGHWAY COMMISSION
			TEMPORARY EROSION CONTROL DEVICES
			STANDARD DRAWING TEC-4
7-26-12	REVISED GENERAL NOTE 2.		
12-15-11	ISSUED		
DATE	REVISION		FILMED

**GENERAL NOTES FOR DETECTABLE WARNING DEVICES**

THE DETECTABLE WARNING DEVICE SHALL BE LOCATED SO THAT THE NEAREST EDGE OF THE DEVICE IS 6 TO 8 INCHES FROM THE FACE OF THE CURB. TRUNCATED DOMES IN THE DETECTABLE WARNING SURFACE SHALL MEET THE REQUIREMENTS OF THE GEOMETRIC CONFIGURATION SHOWN. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES. DETECTABLE WARNING DEVICE SHALL BE 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE. DETECTABLE WARNING DEVICE SHALL BE ON THE ARDOT QUALIFIED PRODUCTS LIST FOR CAST-IN-PLACE TACTILE PANELS (ADA DETECTABLE WARNING).



**DETECTABLE WARNING DEVICE DETAIL**

**GENERAL NOTES:**

IN ALTERATIONS WHEELCHAIR RAMPS ARE TO BE PROVIDED AT CURBED STREET INTERSECTIONS WITH PEDESTRIAN TRAFFIC AND MID-BLOCK CROSSWALK LOCATIONS. THE LENGTH OF THE RAMP SHALL BE SUCH THAT THE SLOPE DOES NOT EXCEED 12:1. THE SURFACE TEXTURE OF THE RAMP SHALL CONFORM TO A CLASS 6 FINISH ACCORDING TO SECTION 802.19. THE NORMAL CUTTER GRADE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION. THE MINIMUM THICKNESS OF THE RAMP, WALK, & LANDING SHALL BE 4". THE MINIMUM WIDTH OF THE RAMPS SHALL BE THE EXISTING WALK WIDTH OR 36", WHICHEVER IS GREATER. MINOR MODIFICATIONS OF THESE DETAILS, AS APPROVED BY THE ENGINEER, MAY BE MADE TO ADJUST TO LOCAL CONDITIONS.

**RAMP SELECTION CRITERIA**

FIRST CHOICE	TYPE 1	CORNER LOCATIONS WITH THE WALK ADJACENT TO THE CURB (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 2	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE INSUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 3	CORNER LOCATIONS WITH THE WALK OFFSET FROM THE CURB A DISTANCE SUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS).
	TYPE 4	TANGENT LOCATIONS (BOTH NEW CONSTRUCTION AND ALTERATIONS).
SECOND CHOICE	TYPE 5	TANGENT LOCATIONS (ALTERATIONS ONLY).
THIRD CHOICE	TYPE 6	CORNER LOCATIONS (ALTERATIONS ONLY). THIS RAMP MAY BE USED ONLY IF THE TYPE 5 RAMPS CANNOT BE PLACED AT THE ENDS OF THE RADIUS.
FOURTH CHOICE		IF SITE CONSTRAINTS PREVENT THE CONSTRUCTION OF ANY OF THE TYPES LISTED, THEN AND ONLY THEN CAN THE 12:1 MAX. SLOPE ON THE RAMP BE EXCEEDED TO PROVIDE ACCESS TO THE STREET LEVEL (ALTERATIONS ONLY). THE SLOPE CAN BE STEEPENED TO A 10:1 MAX. FOR A MAX. LENGTH OF 5' OR A 8:1 MAX. FOR A MAX. LENGTH OF 2'. SLOPES STEEPER THAN 8:1 ARE NOT ALLOWED UNDER ANY CIRCUMSTANCES.

NOTE: IN ALTERATIONS, THE SELECTION OF THE TYPE OF WHEELCHAIR RAMP TO BE CONSTRUCTED SHALL BE BASED ON THE AMOUNT OF RIGHT-OF-WAY AVAILABLE, AND ON THE PRESENCE OF OTHER SITE CONSTRAINTS (UTILITIES, BUILDINGS, ETC.). THE TABLE ABOVE LISTS THE ORDER IN WHICH THE RAMPS ARE TO BE CONSIDERED.

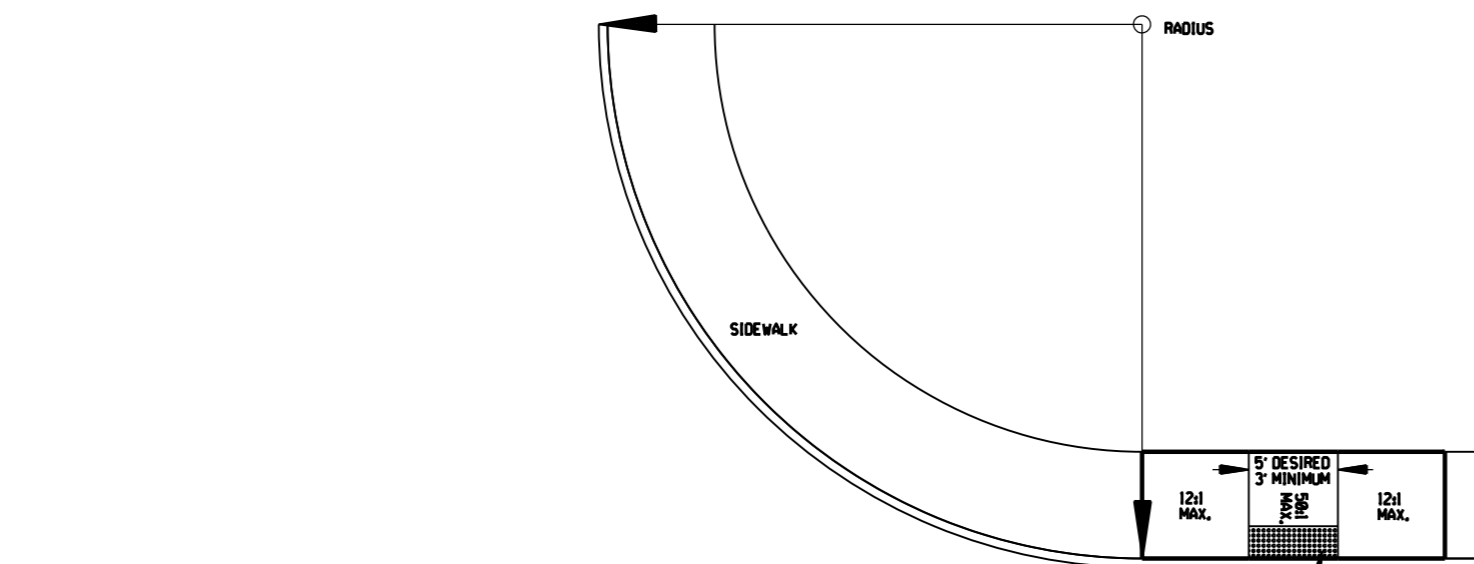
AN ALTERATION IS DEFINED AS A PROJECT THAT CHANGES OR AFFECTS THE USE OF A PEDESTRIAN PATHWAY (OVERLAYS, SIGNALIZATION PROJECTS, ETC.) BUT DOES NOT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY. ALL PROJECTS THAT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY WILL USUALLY BE CONSIDERED NEW CONSTRUCTION FOR THE PURPOSES OF THE CHART ABOVE.

DATE	REVISION	DATE FILED
10-9-03	REVISED GENERAL NOTES & ADDED NOTE.	
4-10-03	REVISED DETECTABLE WARNING DEVICE DETAIL	
8-22-02	ADDED DETECTABLE WARNING DEVICES DETAILS	
11-18-98	REV. FOURTH CHOICE NOTE	
8-12-98	REVISED TEXTURE	
7-02-98	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

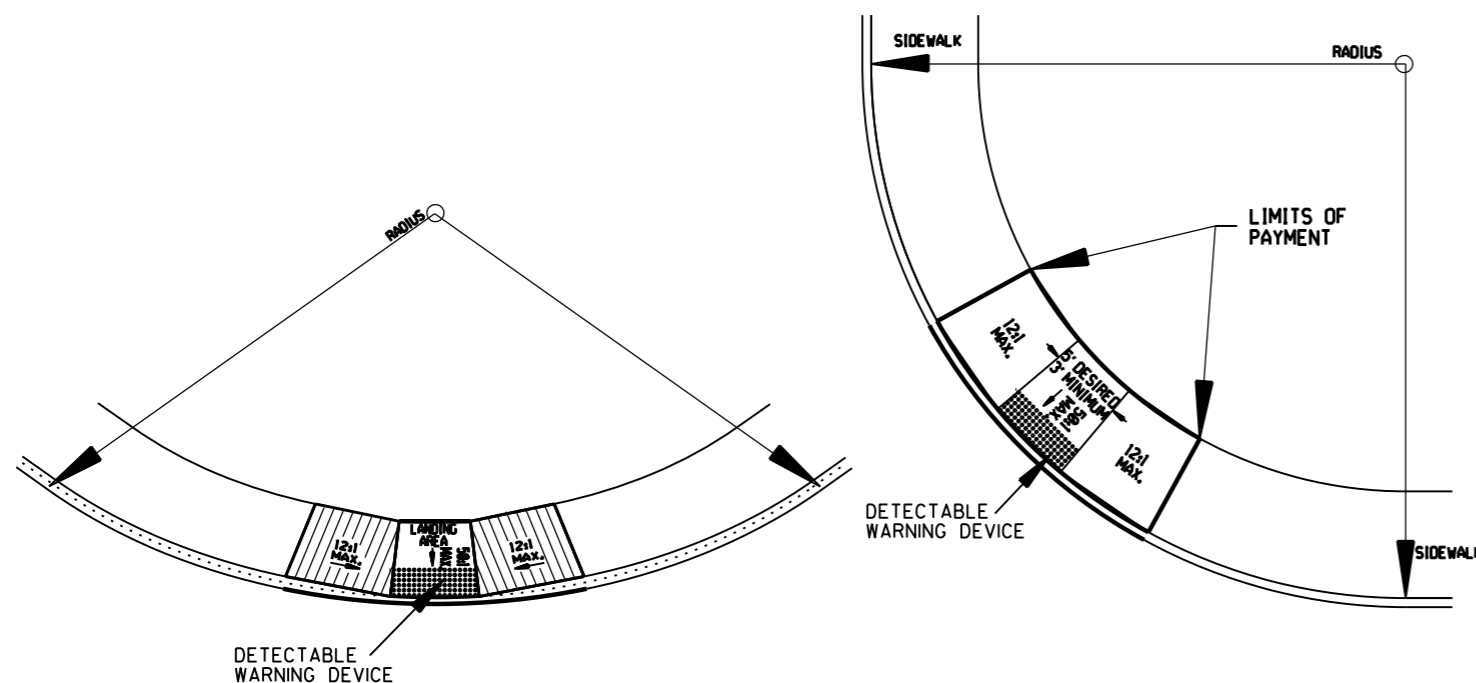
WHEELCHAIR RAMPS ALTERATIONS ONLY

STANDARD DRAWING WR-2



**TYPE 5 RAMP**

NOTE: THE CROSS SLOPE OF THE RAMPS AND SIDEWALKS SHALL NOT EXCEED 2.0% UNLESS REQUIRED TO MATCH STREET LONGITUDINAL GRADE.



**TYPE 6 RAMP**

## RE-ZONING PETITION

The property located at 1109-A North Reynolds Road in Bryant is being considered for re-zoning from R-E to C-2. The property is more particularly described as follows:

PART OF THE NORTH HALF OF THE SOUTHWEST QUARTER (N1/2 SW1/4) OF SECTION 27, TOWNSHIP 1 SOUTH, RANGE 14 WEST, SALINE COUNTY, ARKANSAS, MORE PARTICULARLY DESCRIBED AS FOLLOWS: **BEGINNING** AT A COMPUTED POINT IN THE CENTERLINE OF HIGHWAY #183 (NORTH REYNOLDS ROAD), WHICH IS 480 WEST AND 225 FEET SOUTH OF THE NORTHEAST CORNER OF THE SAID N1/2 SW1/4; THENCE S14°37'49"E - 207.85 FEET ALONG SAID CENTERLINE OF HIGHWAY #183 TO A COMPUTED POINT; THENCE LEAVING SAID CENTERLINE OF HIGHWAY #183, N88°10'53"W - 399.64 FEET TO A FOUND 5/8" REBAR; THENCE N1°41'58"E - 198.93 FEET TO A FOUND BENT 1/2" REBAR; THENCE S88°15'00"E - 341.20 FEET TO THE **POINT OF BEGINNING**, CONTAINING 1.69 ACRES, MORE OR LESS. SUBJECT TO A RIGHT OF WAY FOR (HIGHWAY #183) REYNOLDS ROAD AND UTILITY EASEMENT ALONG EAST LINE. ALSO SUBJECT TO A 10 FOOT EASEMENT FOR A DRIVEWAY.

A petition has been filed with the City of Bryant Planning Commission to re-zone the property. As part of this process a public hearing will be held April 10<sup>th</sup>, 2023 at 6:00 p.m. in the Bryant City Office Complex, 210 Southwest 3<sup>rd</sup> Street, Bryant, Arkansas 72022.

Public comments will be accepted at that time regarding this re-zoning. Since you own property within 300 feet of the tract in consideration, you have been sent this notice via certified mail as required by city ordinance.

Should you have any questions regarding this matter you may contact the City of Bryant at 501-943-0301 and ask for Truett Smith or by contacting me at the information listed below.

Vernon Williams, P.E.  
GarNat Engineering, LLC  
501-408-4650  
garnatengineering@gmail.com

# GNE

3825 Mt Carmel Rd.  
Bryant, AR 72022

**GarNat Engineering, LLC**

P.O. Box 116  
Benton, AR 72018

March 8, 2023

Mr. Truett Smith  
Bryant Planning Coordinator/Planning Commission Secretary  
210 SW 3<sup>rd</sup> Street  
Bryant, AR 72022

Re: Rezone Application – 1109-A North Reynolds Road Parcel Number 840-14297-000

Dear Mr. Smith:

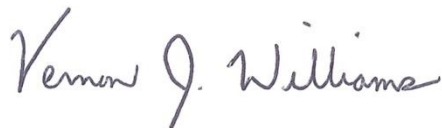
Please allow this letter and following list of enclosures to serve as my application for rezone of the referenced property located at 1109-A North Reynolds Road. We are seeking a rezone from R-E to C-2 to build chiropractic center on the property. It is my desire that this matter be included on the agenda for your April 2023 City of Bryant Planning Commission Meeting.

List of Enclosures

- Affidavit
- Rezone Application
- Rezone – Public Notice
- Property Survey

If you have questions or need any additional information, please do not hesitate to contact me.

Sincerely,  
GarNat Engineering, LLC



Vernon J. Williams, P.E., President



**AFFIDAVIT**

I, Michael Butler, Butler Wealth Capital, LLC certify by my signature below that I hereby authorize Vernon Williams of GarNat Engineering, LLC to act as Butler Wealth Capital, LLC's agent regarding the Planning Commission Approval of the proposed development at 1109 N Reynolds Road.

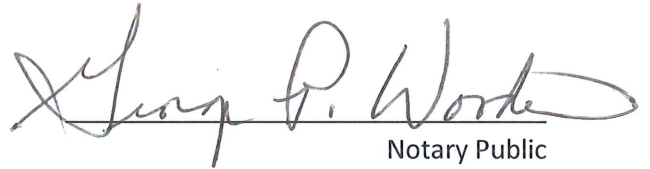


Michael Butler  
Butler Wealth Capital, LLC

03/07/2023

Date

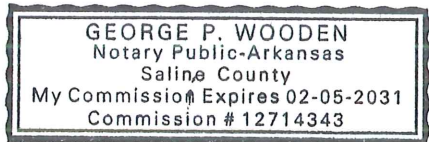
Subscribed and sworn to me a Notary Public on this 7<sup>TH</sup> day of MARCH, 2023.



Notary Public

My Commission Expires:

02-05-2031







City of Bryant, Arkansas  
Community Development  
210 SW 3<sup>rd</sup> Street Bryant, AR 72022  
501-943-0943

## Rezoning Application

Applicants are advised to read the Amendments section of Bryant Zoning Code prior to completing and signing this form. The Zoning Code is available at [www.cityofbryant.com](http://www.cityofbryant.com) under the Planning and Community Development tab.

Date: 03/08/2023

**Applicant or Designee:**

Name VERNON WILLIAMS  
Address P.O. BOX 116 BENTON, AR 72018  
Phone (501) 408-4650  
Email Address garnetengineering@gmail.com

**Property Owner (If different from Applicant):**

Name Butler Wealth Capital, LLC  
Address 6 Creekwood Court, Little Rock, AR 72223  
Phone 870-703-3807  
Email Address \_\_\_\_\_

**Property Information:**

Address 1109-A NORTH REYNOLDS ROAD  
Parcel Number 840-14297-000  
Existing Zoning Classification R-E  
Requested Zoning Classification C-2

Legal Description (If Acreage or Metes and Bounds description, please attach in a legible typed format)

SEE ATTACHED

**Application Submission Checklist:**

- Letter stating request of zoning change from (Current Zoning) to (Requested Zoning) and to be placed on the Planning Commission Agenda
- Completed Rezoning Application
- Rezoning Application Fee (\$40 fee for lot and block descriptions or \$125 for acreage or metes and bound descriptions)
- If someone, other than the owner, will be handling the zoning process, we will require a

letter from the owner of said property, giving him or her authority to do so.

- Recent surveyed plat of the property including vicinity map

**Additional Requirements:**

*Items below must be completed before the public hearing can occur. Failure to provide notices in the following manners shall require delay of the public hearing until notice has been properly made.*

- Publication: Public Notice shall be published by the applicant at least one (1) time fifteen (15) days prior to the public hearing at which the rezoning application will be heard. Once published please provide a proof of publication to the Community Development office. (Sample notice attached below)
- Posting of Property: The city shall provide signs to post on the property involved for the fifteen (15) consecutive days leading up to Public hearing. One (1) sign is required for every two hundred (200) feet of street frontage.
- Notification of adjacent landowners: Applicant shall attempt to inform by certified letter, return receipt requested, all owners of land within three hundred (300) feet of any boundary of the subject property of the public hearing. (Sample letter attached below)
- Certified list of property owners, all return receipts, and a copy of the notice shall be provided to the Community Development Department at least five (5) days prior to the public hearing.

**Note: that this is not an exhaustive guideline regarding the Conditional Use Permit Process. Additional information is available in the Bryant Zoning Ordinance.**

**READ CAREFULLY BEFORE SIGNING**

I Vernon J. Williams, do hereby certify that all information contained within this application is true and correct. I further certify that the owner of the property authorizes this proposed application. I understand that I must comply with all City Codes that pertain to this project and that it is my responsibility to obtain all necessary permits as needed.



**City of Bryant, Arkansas**  
Community Development  
210 SW 3<sup>rd</sup> Street Bryant, AR 72022  
501-943-0943

## Conditional Use Permit Application

Applicants are advised to read the Conditional Use Permit section of Bryant Zoning Code prior to completing and signing this form. The Zoning Code is available at [www.cityofbryant.com](http://www.cityofbryant.com) under the Planning and Community Development tab.

Date: 3/6/2023

**Applicant or Designee:**

Name Jonathan Hope

Address 129 N Main Street Benton, AR

Phone 501-315-2626

Email Address: jonathan@hopeconsulting.com

**Project Location:**

Property Address 25300 I-30 NORTH  
Bryant, Arkansas

Parcel Number 840-11640-124 and 840-11640-239

Zoning Classification C-2

**Property Owner (If different from Applicant):**

Name FIRST SOUTHERN BAPTIST CHURCH OF BRYANT

Phone (501) 847-3014

Address 604 S Reynolds Rd, Bryant, AR 72022

Email Address \_\_\_\_\_

**Additional Information:**

Legal Description (Attach description if necessary)

See attached Survey Exhibit

Description of Conditional Use Request (Attach any necessary drawings or images)

Proposed Self-Storage Facility in a C-2 Zoning District. Storage in this zoning district is allowed with a conditional use permit.

Proposed/Current Use of Property See attached Site Plan of Proposed Self-Storage Facility



# HOPE

## CONSULTING

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### ENGINEERS - SURVEYORS

February 28, 2023

Colton Leonard  
City of Bryant  
210 Southwest Third St.  
Bryant, AR 72022

RE: Conditional Use Permit for Self-Storage in C-2  
(Parcels 840-11640-124 & 840-11640-239)

Dear Mr. Leonard,

On behalf of our client, Hope Consulting is formally requesting the City of Bryant Staff and Planning Commission begin the review and approval process for the Conditional Use Permit for this property. A detailed drawing of the boundary of this property is shown on Exhibit "A".

The property adjoined to the east is zoned C-3 which storage is allowed by right. The property adjoined to the south is C-3 which storage is allowed by right. The property adjoined to the north is C-3 and R-1. The property adjoined to the west is zoned R-E and C-3. On sides adjacent to residential our proposed use would have a substantial building setback. An arial photo and site plan have been submitted with this application which we believe shows this "use" is appropriate for this property. The applicant understands all outdoor lighting must be shielded from neighboring properties, and any lighting must be indirect and not cause disturbance to neighbors. An arial photo of the parcel and site have been submitted with this application which we believe shows this "use" is appropriate for this location.

Please feel free to contact me with any questions or concerns or if I can be of any further assistance.

Sincerely,



Jonathan Hope

129 N MAIN ST. BENTON, ARKANSAS 72015  
501-315-2626  
WWW.HOPECONSULTING.COM

# HOPE

## CONSULTING

### ENGINEERS - SURVEYORS

EXHIBIT "A"



129 N MAIN ST. BENTON, ARKANSAS 72015  
501-315-2626  
WWW.HOPECONSULTING.COM



# Arkansas Department of Health

4815 West Markham Street • Little Rock, Arkansas 72205-3867 • Telephone (501) 661-2000

Governor Asa Hutchinson

José R. Romero, MD, Secretary of Health

Engineering Section, Slot 37  
www.healthy.arkansas.gov/eng

Ph (501) 661-2623 Fax (501) 661-2032  
After Hours Emergency (501) 661-2136

May 13, 2022

Hope Consulting Engineers Surveyors  
Mr. William McFadden P.E.  
117 S. Market St.  
Benton, AR 72015

RE: SUBDIVISION SEWER IMPROVEMENTS AND NEW FIRE HYDRANT ENGINEERING PLAN APPROVAL  
Jacob's Corner Subdivision (Lots 1-9, 11, 12) Sewer Improvements and New FH (existing waterline)  
Rudolph Road, Bryant, Saline County  
Hope Job Number: 20-0722  
**ADH Reference No. 119196**

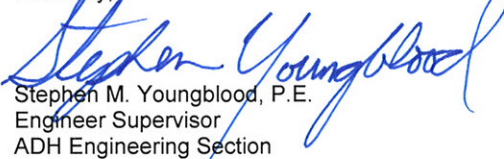
Mr. McFadden,

The submittal for the project referenced above, received at the ADH Engineering Section on April 26, 2022, has been reviewed and is hereby approved with the following conditions:

1. The Engineering Section relied upon the statements and representations made in the plans and specifications. In case any statement or representation in the aforementioned documents is found to be incorrect, this Approval may be revoked.
2. There shall be no deviation from the plans and specifications unless revised plans and specifications have been first submitted for review and written consent given.
3. The review and approval of the drawings and specifications were for functional and sanitary features and in no way constitute an analysis of the structural or plumbing design.
4. If construction on this project is not started within one year of the date affixed hereto, this Letter of Approval is void.
5. Construction inspection for this project shall be the responsibility of Hope Consulting Engineers Surveyors.
6. Materials and construction shall be in accordance with the standard specifications and details of the Salem Water Users and Bryant Utilities.
7. All materials and components installed after January 3, 2014 in drinking water systems are required to comply with the federal definition of "lead free" contained in Public Law 111-380.

One set of approved plans is being returned with this Approval letter and one set if being retained for our files. When submitting correspondence pertaining to this project, please include **ADH reference #119196**.

Sincerely,

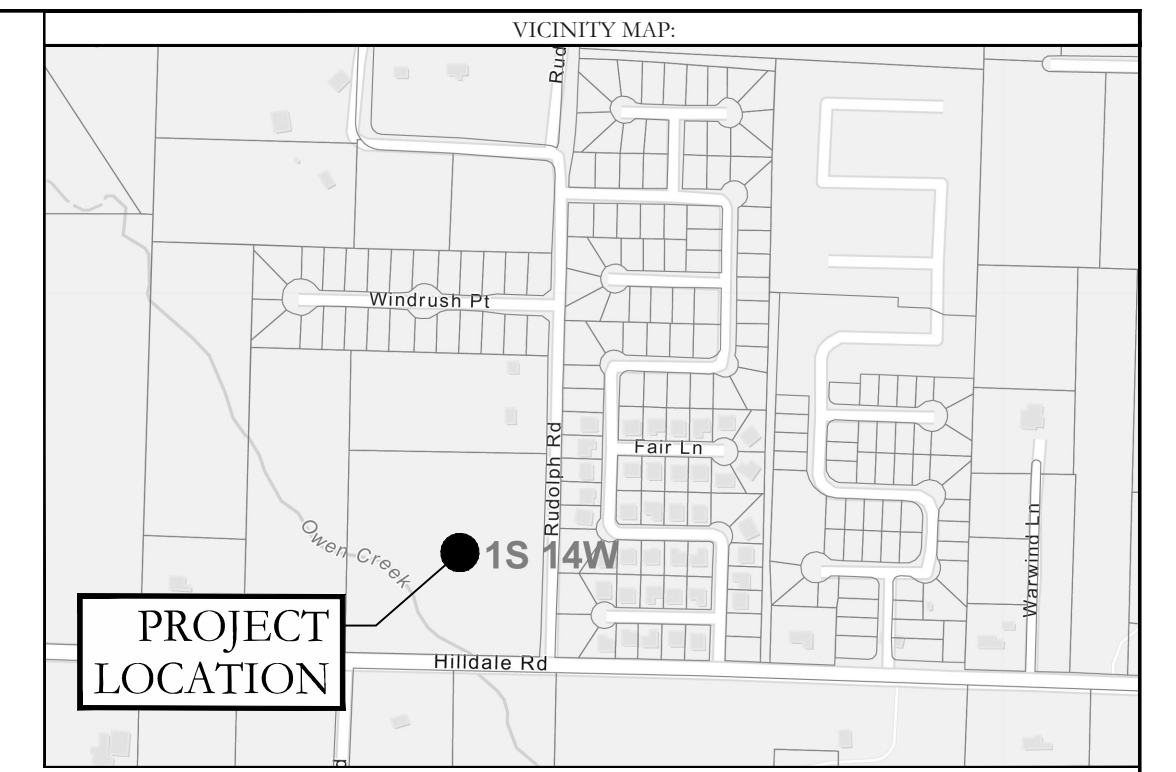
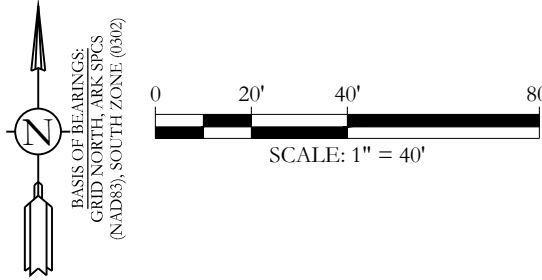
  
Stephen M. Youngblood, P.E.  
Engineer Supervisor  
ADH Engineering Section

SMY : SMR : smr

cc: Salem Water Users (PWS 492) - Water  
Bryant Utilities (PWS 486) - Sewer







SEWER LEGEND:	WATER LEGEND:
CLEAN OUT	EXISTING BLOW OFF
PROPOSED SEWER MANHOLE	WATER MAIN
EXISTING SEWER MANHOLE	EXISTING GATE VALVE
ISOLATION VALVE	REDUCER
EXISTING SEWER LINE	EXISTING FIRE HYDRANT
SEWER MAIN TEE	EXISTING WATER SERVICE
SEWER SERVICE	EXISTING 6" WATER LINE
GRINDER PUMP	EXISTING 8" WATER LINE
	EXISTING WATER LINE

NOTE:  
PROPOSED SEWER MAINS IS TO HAVE TRACER WIRE.  
ALSO A NON-BIODEGRADABLE TAPE IDENTIFYING THE  
LINE AS "SEWER" MUST BE BURIED IN THE TRENCH  
ABOVE THE SEWER MAINS.

NOTE:  
ALL FIRE HYDRANT LEADERS HAVE A GATE  
VALVE BETWEEN MAIN AND FIRE HYDRANT.

By affixing my seal and signature, I Jonathan L. Hope, PLS No. 1762, hereby certify that this drawing correctly depicts a survey compiled under my supervision.

NOTE: This survey was based on legal descriptions and title work furnished by others and does not represent a title search.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Saline County, City of Benton, panel # 03125C02401, dated 06/05/2020, most of the property described hereon does not lie within the 100 year flood hazard boundary.



**HOPE CONSULTING**  
ENGINEERS - SURVEYORS

129 North Main Street  
Benton, Arkansas 72015  
Office: (501) 315-2626  
Fax: (501) 315-0024  
www.hopeconsulting.com

FOR USE AND BENEFIT OF:  
**GIRON BUILDERS INC.**

**JACOB'S CORNER**  
SANITARY SEWER AND WATER AS-BUILTS  
SALINE COUNTY, ARKANSAS

DATE: 03/08/2023	C.A.D. BY: JPP	DRAWING NUMBER:
REVISED:	CHECKED BY:	20-0722
SHEET:	SCALE: 1" = 40'	
500	01S	14W 0 03 320 62 1762

**HOPE**  
**CONSULTING**  
**ENGINEERS - SURVEYORS**

March 6, 2023

Colton Leonard  
City of Bryant  
210 Southwest Third St., Bryant, AR 72022

RE: Jacob's Corner (Hope Job #20-0722)

Dear Mr. Truett Smith,

Hope Consulting is formally requesting the City of Bryant Development Review Committee begin the technical review and approval process for the Final Plat of Jacob's Corner.

Please feel free to contact me with any questions or concerns or if I can be of any further assistance.

Sincerely,



Jonathan Hope

129 N MAIN ST. BENTON, ARKANSAS 72015  
501-315-2626  
WWW.HOPECONSULTING.COM



# Arkansas Department of Health

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4815 West Markham Street • Little Rock, Arkansas 72205-3867 • Telephone (501) 661-2000

**Governor Asa Hutchinson**

**José R. Romero MD, Secretary of Health**

Engineering Section, Slot 37 Ph (501) 661-2623 Fax (501) 661-2032  
[www.healthy.arkansas.gov/eng](http://www.healthy.arkansas.gov/eng) After Hours Emergency (501) 661-2136

September 14, 2020

William McFadden PE  
Hope Consulting  
117 South Market Street  
Benton, Arkansas 72015

RE: WATER AND SEWER EXTENSION  
Sam's Hill Subdivision (Lots 1- 128) | Project #20-0169  
Salem Water Users (PWS 492), Bryant, Saline County  
Reference: ADH Project No. 62280  
ADH Project No. 112190

Dear Mr. McFadden:

The plans for the above-captioned project dated 8-28-19, and submitted to the Engineering Section on 9-4-20, have been reviewed and are hereby approved with the following conditions:

1. The Engineering Section relied upon the statements and representations made in the engineer's report, plans and specifications. In case any statement or representation in the aforementioned documents is found to be incorrect, this Approval may be revoked.
2. There shall be no deviation from the plans and specifications unless revised plans and specifications have been first submitted for review and written consent given.
3. The review and approval of the plans and specifications were for functional and sanitary features and in no way constitute an analysis of the structural design.
4. If construction on this project is not started within one year of the date affixed hereto, this Letter of Approval is void.
5. Construction shall be performed according to the Salem Water Users and Bryant Sewer standard specifications and details.
6. Construction inspection for this project shall be the responsibility of William McFadden PE (Hope Consulting).
7. All materials and components installed after January 3, 2014 in drinking water systems are required to comply with the federal definition of "lead free" contained in Public Law 111-380.

One set of the plans is being retained for our files and a copy is being returned to you. When submitting correspondence pertaining to this project, please include our reference number 112190.

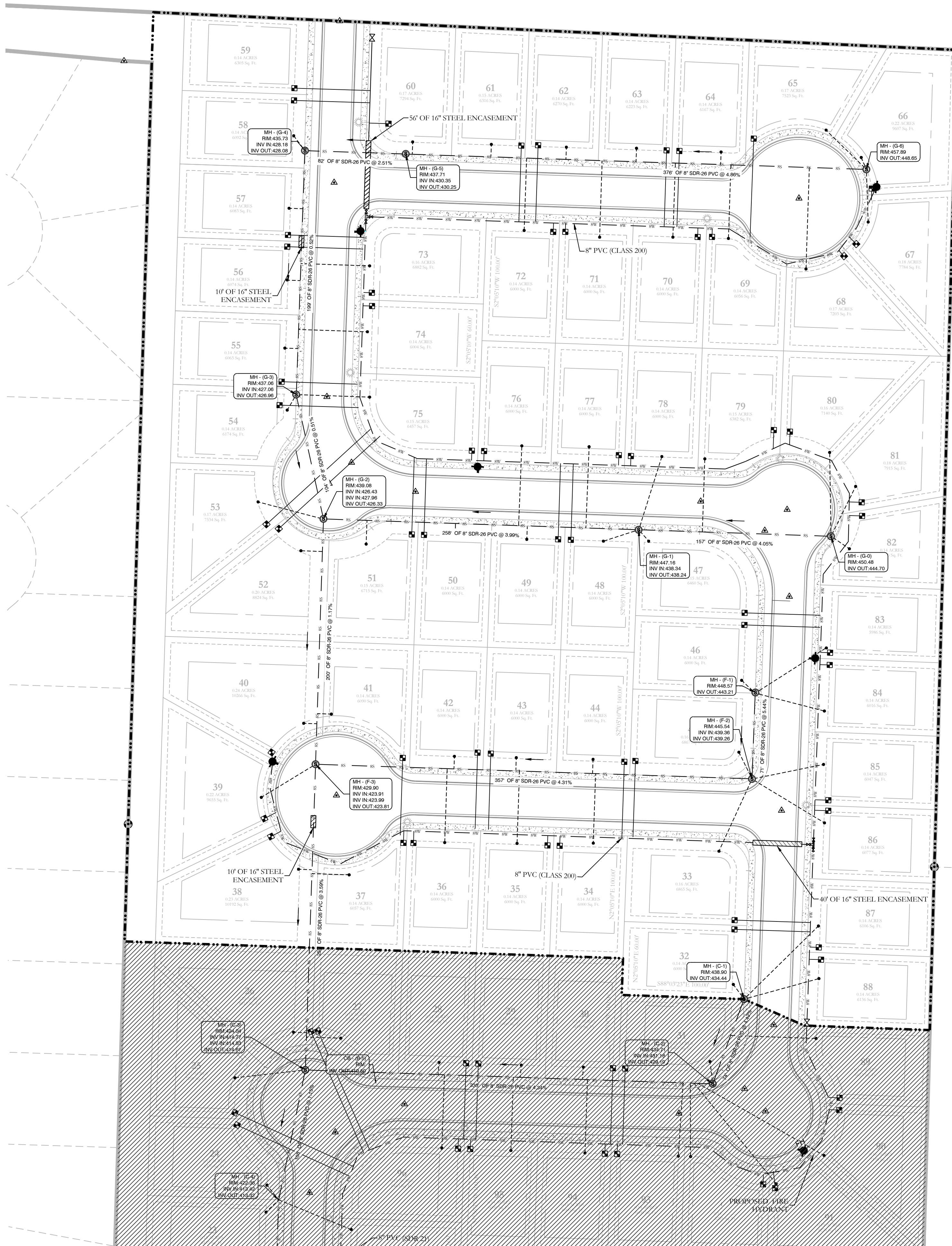
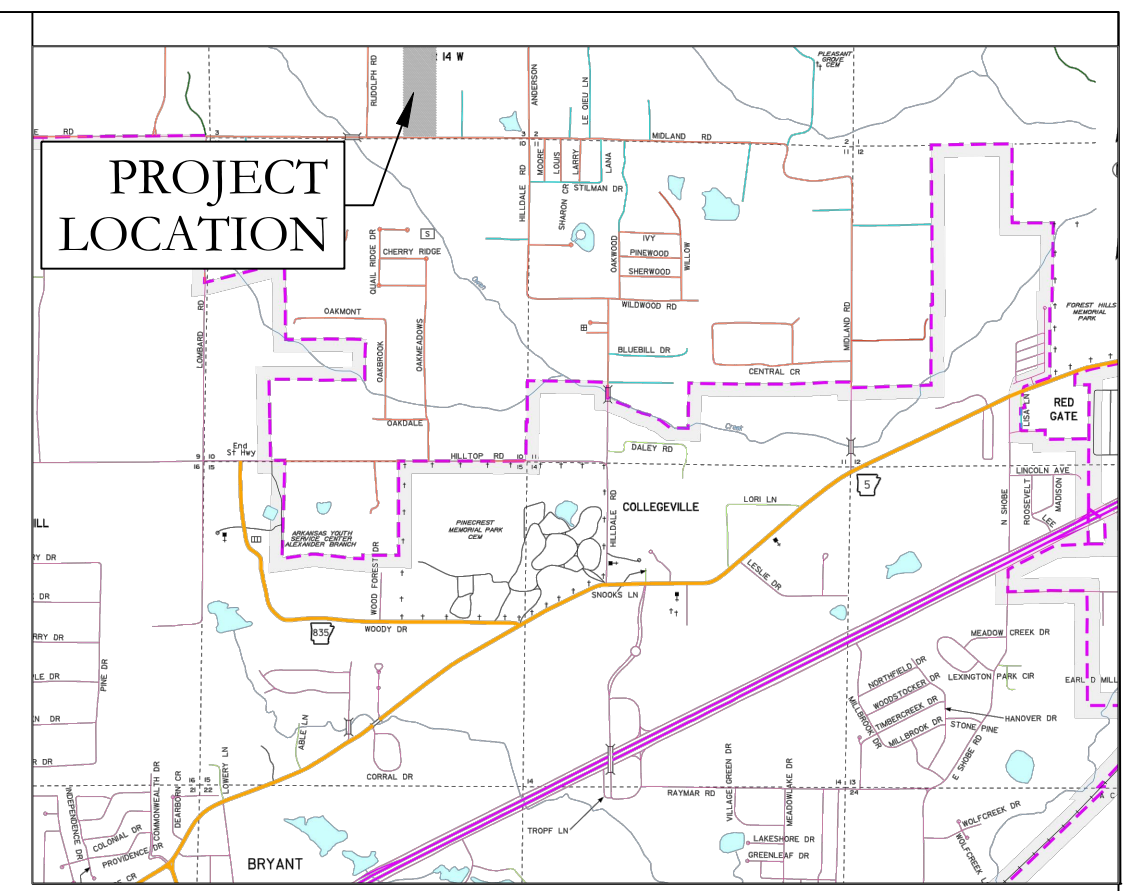
Sincerely,



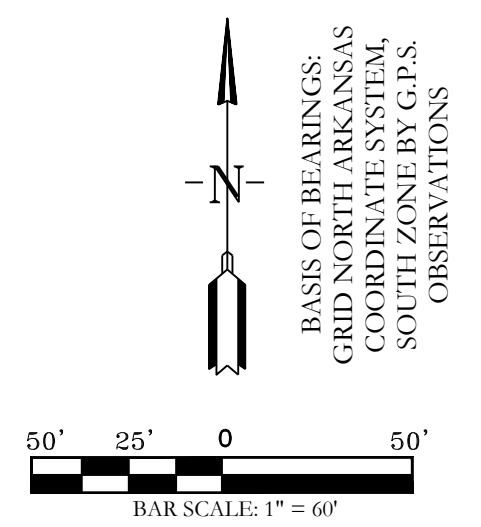
Stephen M. Youngblood, P.E.  
Engineer Supervisor  
Engineering Section

SMY: SGB: sgb

cc: Salem Water Association (PWS 492)  
Bryant Wastewater (PSS S78)



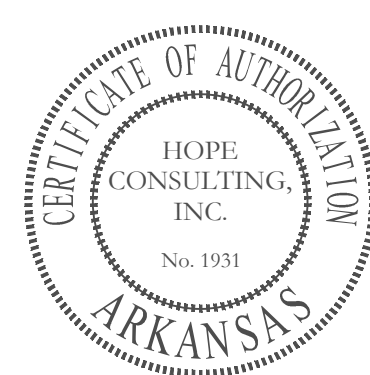
**SANITARY SEWER AND WATER AS-BUILTS**  
**HILLDALE CROSSING PHASE 2**  
 A SUBDIVISION IN SALINE COUNTY, ARKANSAS



SEWER LEGEND:	WATER LEGEND:	TYPICAL FIRE HYDRANT:
AIR RELEASE VALVE	3" BLOW OFF	3" BLOW OFF
CLEAN OUT	GATE VALVE	REDUCER
ISOLATION VALVE	REDUCER	8"
SEWER SERVICE	WATER LINE	GATE VALVE
SEWER SERVICE	FIRE HYDRANT	FIRE HYDRANT
	DOUBLE WATER SERVICE	
	SINGLE WATER SERVICE	

NOTE: PROPOSED SEWER MAINS IS TO HAVE TRACER WIRE. ALSO A NON-BIODEGRADABLE TRENCH ABOVE THE SEWER MAINS.

NOTE: ALL FIRE HYDRANT LEADERS HAVE A GATE VALVE BETWEEN MAIN AND FIRE HYDRANT.



**HOPE CONSULTING ENGINEERS - SURVEYORS** 117 S. Market Street, Benton, Arkansas 72015  
 PH. (501) 315-2626 FAX (501) 315-0024 www.hopeconsulting.com

FOR USE AND BENEFIT OF:  
 HAVENS DEVELOPMENT, LLC

WATER & SEWER AS-BUILTS PLAN  
 HILLDALE CROSSING PHASE 2  
 A SUBDIVISION IN SALINE COUNTY, ARKANSAS

DATE: 12/20/2021	C.A.D. BY: BJOHNSON	DRAWING NUMBER: 20-0169
REVISED:	CHECKED BY:	SCALE: 1"=50'
500	01S	14W 0 03 330 62 1762

# HOPE

## CONSULTING

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### ENGINEERS - SURVEYORS

March 6, 2022

Truett Smith  
City of Bryant  
210 Southwest Third St., Bryant, AR 72022

RE: Request for Residential Subdivision Plat and CD Approval  
Parcel #: 840-11625-125

Dear Mr. Truett Smith,


I represent NXT Gen Homes LLC, in the above-captioned matter. This 54 acre piece of property is located inside the City of Bryant. This property has access to Bryant water and sewer. This development will be for single family residential homes and remain in the R-2 Zoning District.

Hilltop Manor will create a mixture of lot and home sizes in a unique neighborhood. TOur clients neighborhoods have been extremely successful in West Little Rock. They are excited to bring their unique home and neighborhood culture to Bryant.

It is our goal to be included on the April 10th, 2023 Planning Commission agenda.

Please feel free to contact me with any questions or concerns or if I can be of any further assistance.

Sincerely,

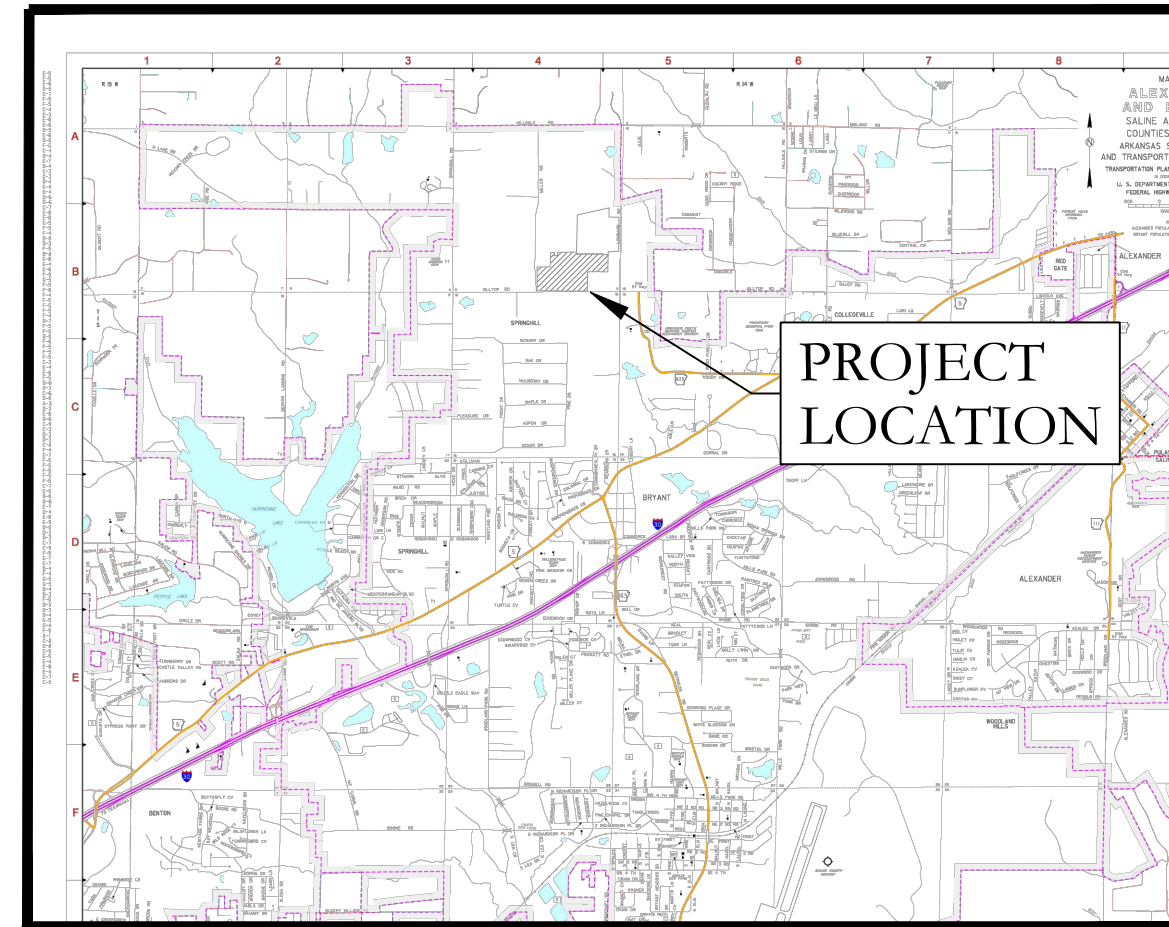


Jonathan Hope  
Hope Consulting, Inc.

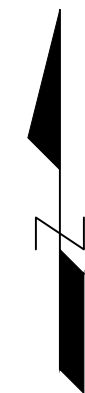
117 SOUTH MARKET ST. BENTON, ARKANSAS 72015  
501-315-2626  
WWW.HOPECONSULTING.COM

# CONSTRUCTION PLANS HILLTOP LANDING

## HILLTOP ROAD & MILLER ROAD ,BRYANT, AR



VICINITY MAP



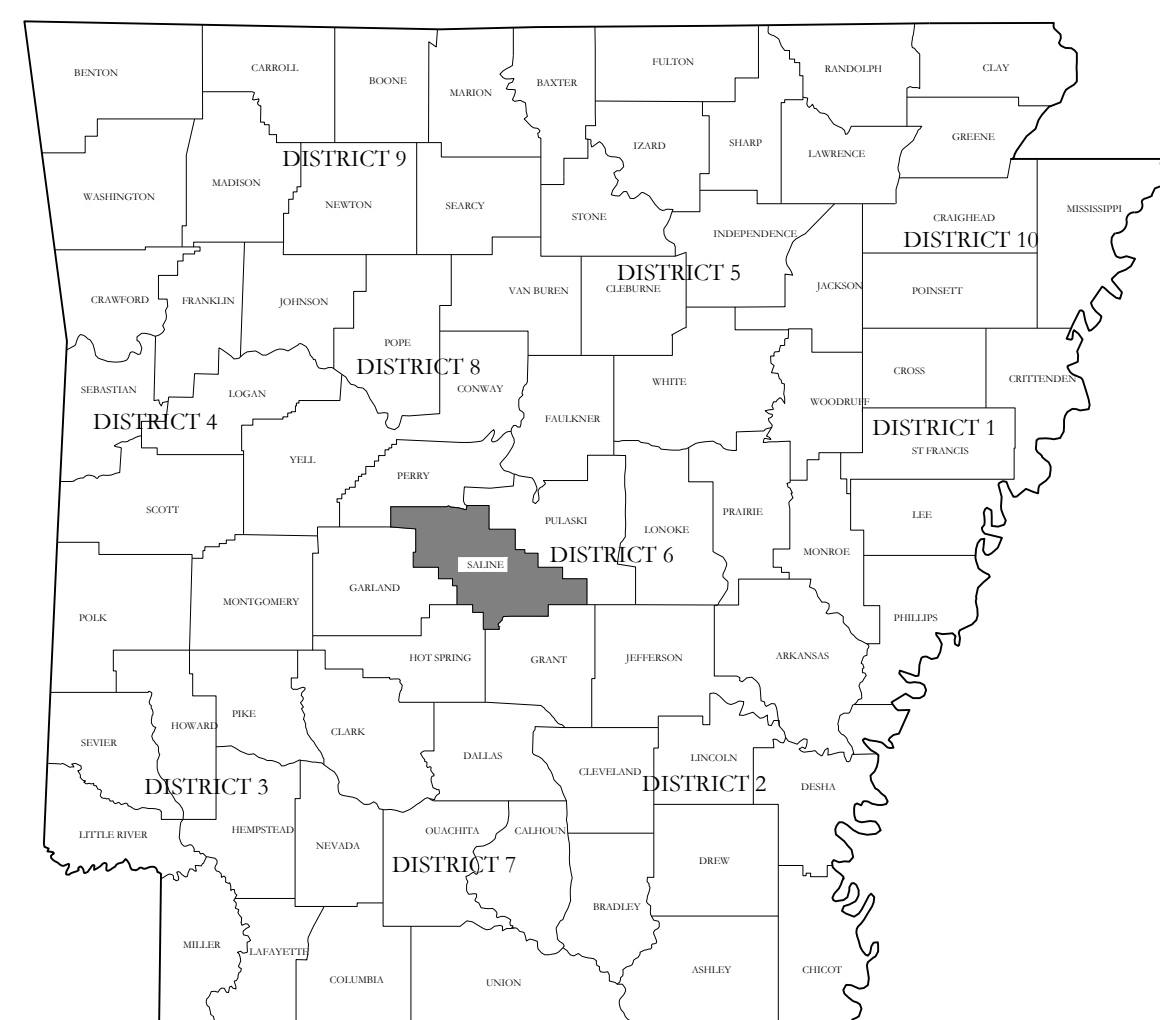
PREPARED BY:

**HOPE**  
**CONSULTING**  
ENGINEERS - SURVEYORS

129 N. Main Street,  
Benton, Arkansas 72015  
PH. (501)315-2626  
FAX (501) 315-0024  
www.hopeconsulting.com

DRAWING INDEX

SHEET NO.	TITLE
	PLAT
C-1.0	STREET PLAN & PROFILE
C-1.1	STREET PLAN & PROFILE
C-1.2	STREET PLAN & PROFILE
C-2.0	UTILITY PLAN
C-2.1	SEWER PLAN & PROFILE
C-2.2	SEWER PLAN & PROFILE
C-2.3	SEWER PLAN & PROFILE
C-3.1	STORM PLAN & PROFILE
C-3.2	STORM PLAN & PROFILE
C-3.3	STORM PLAN & PROFILE
C-3.4	STORM PLAN & PROFILE
C-4.0	TRENCH AND SPECIAL DETAILS
C-5.0	CIVIL SPECIFICATIONS
C-6.0	DETENTION
C-6.1	DETENTION
C-7.0	EROSION CONTROL PLAN



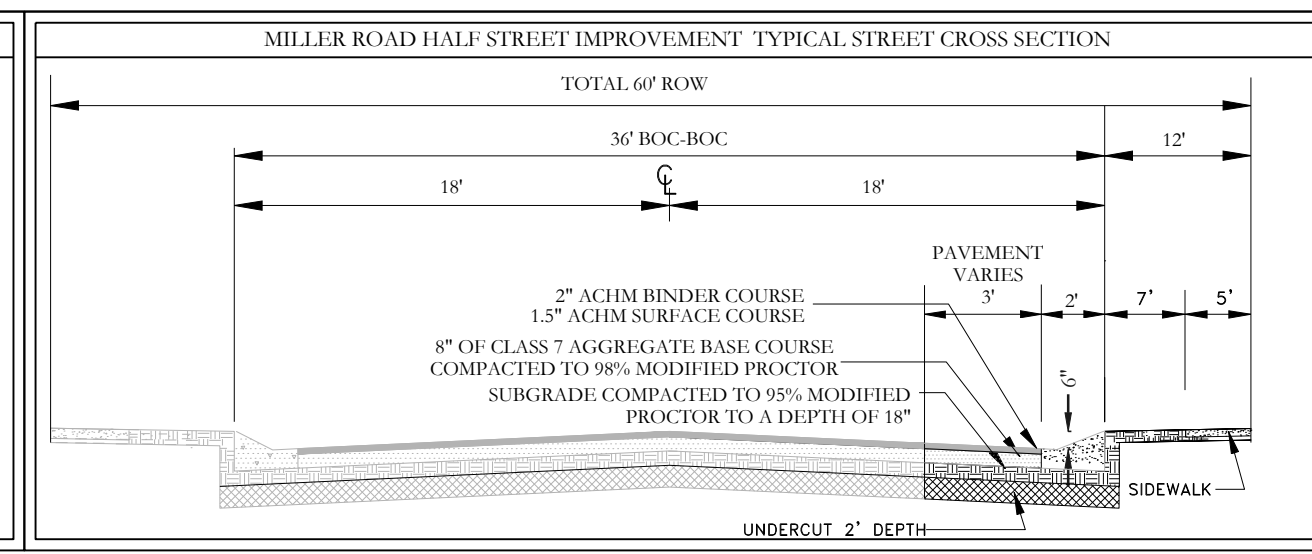
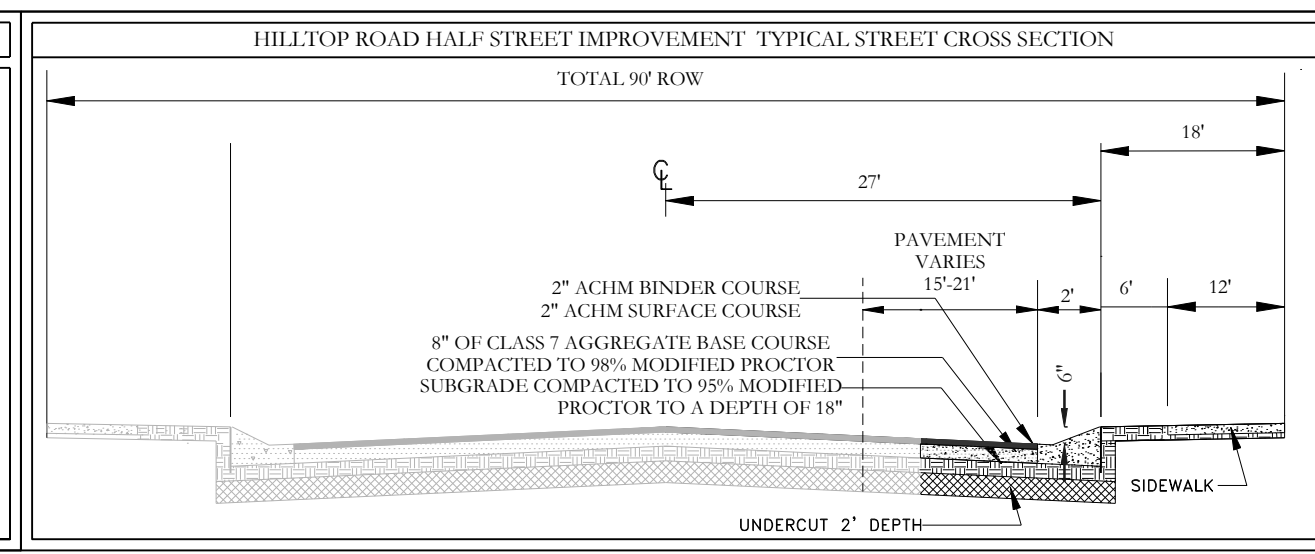
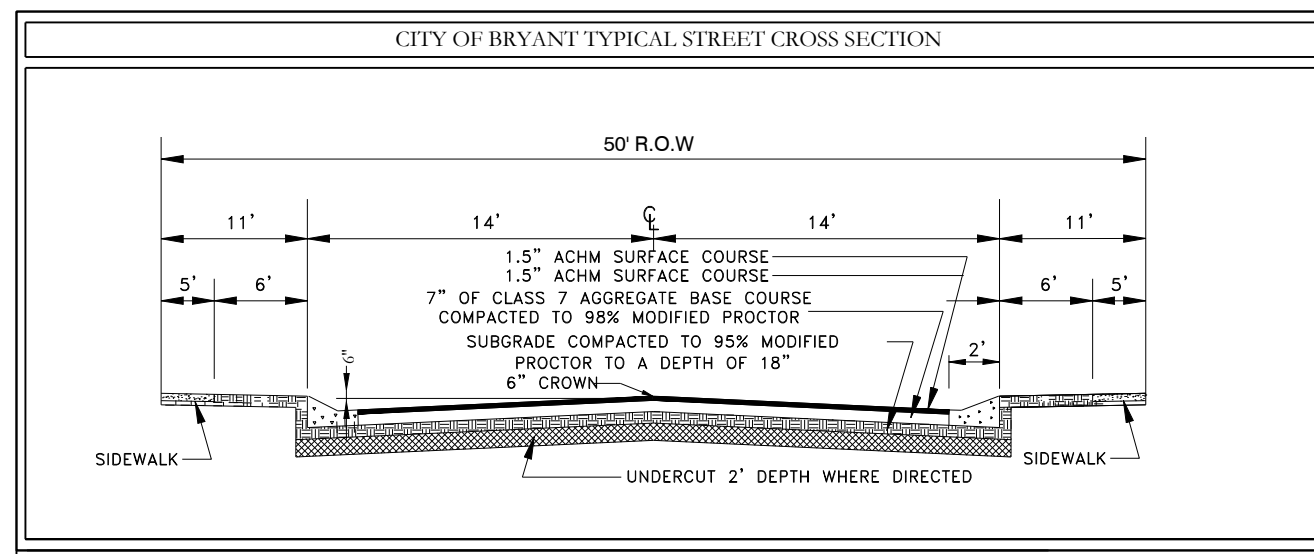
**HOPE** 129 N. Main Street,  
**CONSULTING** Benton, Arkansas 72015  
**ENGINEERS - SURVEYORS** PH. (501)315-2626  
FAX (501) 315-0024  
www.hopeconsulting.com

FOR USE AND BENEFIT OF:  
NXT GEN HOMES LLC.

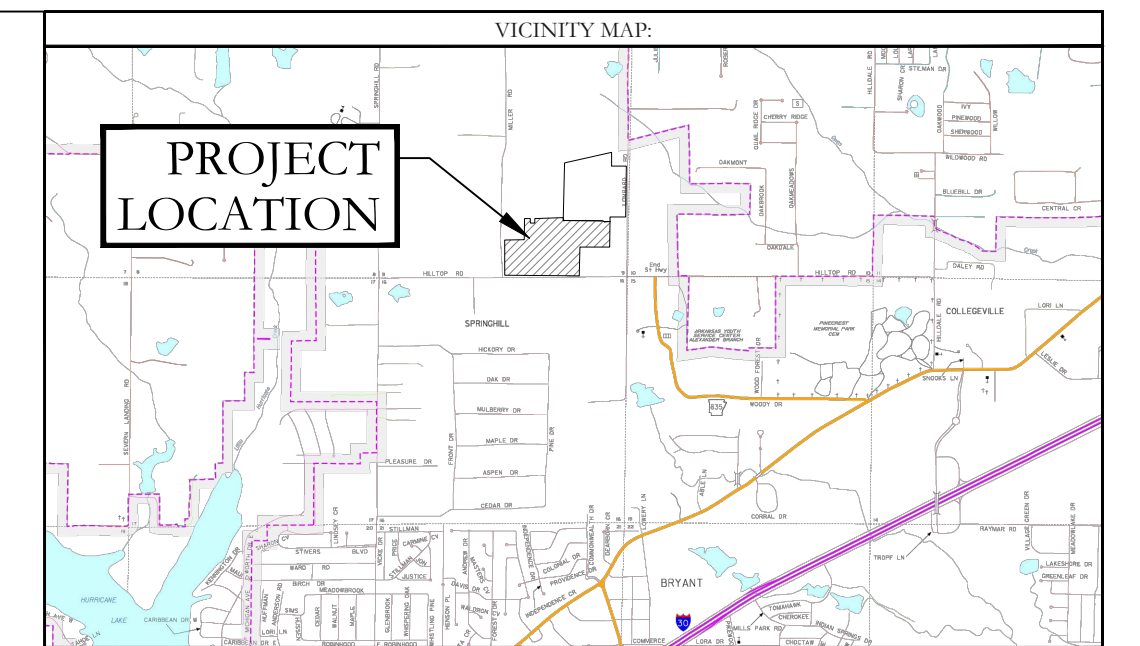
HILLTOP LANDING  
A SUBDIVISION IN THE CITY OF BRYANT, AR  
HILLTOP ROAD & MILLER ROAD, BRYANT, AR

DATE:	02/16/2023	C.A.D. BY:		DRAWING NUMBER:	
REVISED:		CHECKED BY:		20-1341	
SHEET:		SCALE:			

500	01S	14W	0	9	200	62	1762
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**NOTE:**  
TRACTS A, B, C, D AND E WILL BE UTILIZED FOR DRAINAGE AND UTILITIES PURPOSES AND WILL MAINTAINED BY THE PROPERTY OWNERS ASSOCIATION (POA) OR IMPROVEMENT DISTRICT.



**OWNER:** NXT GEN HOMES LLC  
Address: 19218 SUMMERSHADE DRIVE, BRYANT, AR 72022

**DEVELOPER:** NXT GEN HOMES LLC  
Address: 19218 SUMMERSHADE DRIVE, BRYANT, AR 72022

**CERTIFICATE OF OWNER:**  
We, the undersigned, owners of the real estate shown and described herein do hereby certify that we have laid off, platted and subdivided, and do hereby lay off, plat and subdivide said real estate in accordance with the within plat.

Date of Execution: \_\_\_\_\_ Name: \_\_\_\_\_  
Source of Title: 2021-009870

**CERTIFICATE OF PRELIMINARY SURVEYING ACCURACY:**  
I, Jonathan L. Hope, hereby certify that this proposed preliminary plat correctly represents a survey completed by me, or under my supervision on 06/05/2020, that the boundary lines shown hereon correspond with the description in the deeds cited in the above Source Title; and that all monuments which were found or placed on the property are correctly described and located.

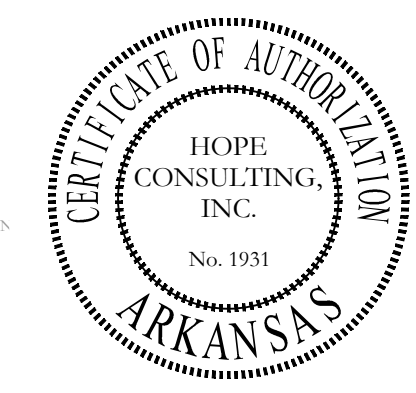
Date of Execution: \_\_\_\_\_ Signed: Jonathan L. Hope  
Registered Professional Land Surveyor No. 1762 Arkansas

**CERTIFICATE OF PRELIMINARY ENGINEERING ACCURACY:**  
I, Kazi Tamzudul Islam, hereby certify that this plat correctly represents a survey and a plan made by me or under my supervision; that all monuments shown hereon actually exist and their location, size, type and material are correctly shown; and that all requirements of the City of Bryant Subdivision Rules and Regulations have been fully complied with.

Date of Execution: \_\_\_\_\_ Signed: Kazi Tamzudul Islam  
Registered Professional Engineer, No. 20876 Arkansas

**CERTIFICATE OF PRELIMINARY PLAT APPROVAL:**  
All requirements of the City of Bryant Subdivision Rules and Regulations relative to the preparation and submittal of a Preliminary Plat having been fulfilled, approval of this plat is hereby granted, subject of further provisions of said Rules and Regulations.

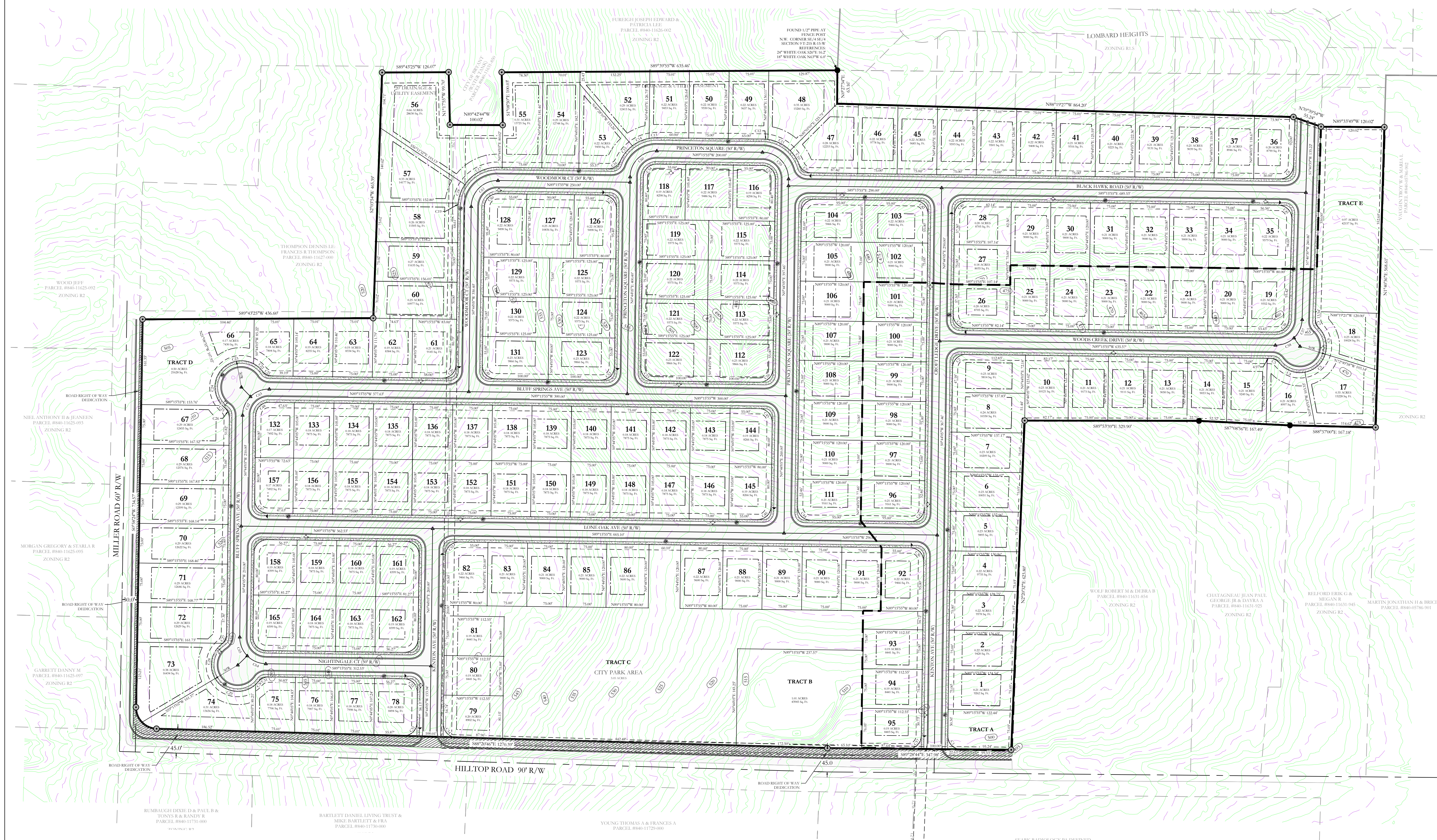
Date of Execution: \_\_\_\_\_ Signed: Rick Johnson, Chairman  
Bryant Planning Commission



By affixing my seal and signature, I Jonathan L. Hope, Arkansas PLS No. 1762, hereby certify that this drawing correctly depicts a survey compiled by me or under my direct supervision.

NOTE: This survey was based on legal descriptions and title work furnished by others and does not represent a title search.

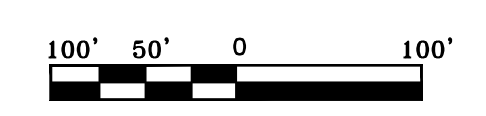
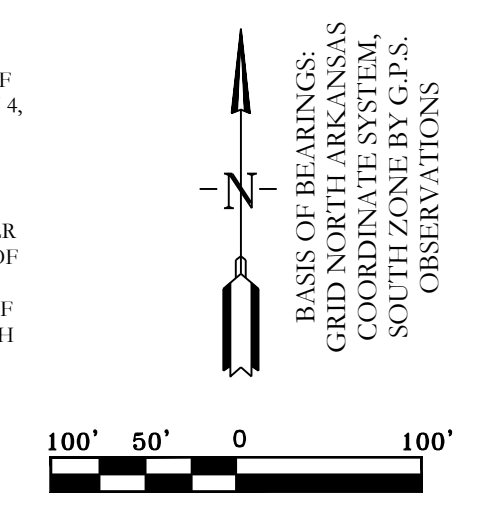
No portion of the property described hereon lies within the 100 year floodplain, according to the Flood Insurance Rate Map, panel # 05125C0225L. Dated: 06/05/2020



**PRELIMINARY PLAT  
HILLTOP MANOR SUBDIVISION**  
A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS.

Curve Table				Curve Table				Curve Table				Curve Table				Curve Table			
Curve #	Delta	Chord B & D	Arc Length	Arc Radius	Curve #	Delta	Chord B & D	Arc Length	Arc Radius	Curve #	Delta	Chord B & D	Arc Length	Arc Radius	Curve #	Delta	Chord B & D	Arc Length	Arc Radius
C1	80°19'56"	S39°25'33"E 32.25'	35.05'	25.00'	C13	11°51'21"W	S84°57'56"W 15.08'	15.10'	75.00'	C25	61°9'40"	S47°19'45"E 5.52'	5.52'	50.00'	C37	89°47'11"	N45°13'41"E 35.29'	39.18'	25.00'
C2	90°00'00"	S45°44'05"W 35.36'	39.27'	25.00'	C14	26°33'06"	S65°55'16"W 34.45'	34.76'	75.00'	C26	51°13'40"	S24°55'45"E 21.62'	22.58'	25.00'	C38	89°03'00"	S46°12'22"W 35.60'	38.80'	25.00'
C3	49°41'45"	N64°25'03"W 21.01'	21.68'	25.00'	C15	28°19'57"	S88°28'45"W 36.71'	37.09'	75.00'	C27	45°04'27"	S25°16'19"W 19.16'	19.67'	25.00'	C39	90°00'00"	N44°15'55"W 35.36'	39.27'	25.00'
C4	61°09'43"	N70°09'02"W 50.88'	53.37'	50.00'	C16	66°25'19"	S57°31'26"W 27.39'	28.98'	25.00'	C28	82°46'43"	S10°34'23"W 66.12'	72.24'	50.00'	C40	90°00'00"	N45°44'05"E 35.36'	39.27'	25.00'
C5	62°06'05"	S48°13'04"W 51.58'	54.19'	50.00'	C17	56°23'01"	S62°34'04"W 70.81'	73.74'	75.00'	C29	101°45'42"	S81°41'49"E 77.58'	88.80'	50.00'	C41	90°56'34"	S43°47'38"E 35.65'	39.68'	25.00'
C6	60°59'22"	S13°19'42"E 50.75'	53.22'	50.00'	C18	28°46'45"	S20°06'41"W 37.28'	37.67'	75.00'	C30	75°45'55"	N43°27'53"E 6.90'	6.91'	50.00'	C42	90°00'00"	S44°15'55"E 35.36'	39.27'	25.00'
C7	45°30'04"	S21°04'23"E 19.34'	19.85'	25.00'	C19	4°55'14"	S51°04'42"W 6.40'	6.40'	75.00'	C31	51°13'40"	N65°07'15"E 21.62'	22.55'	25.00'	C43	90°00'00"	S45°44'05"E 35.36'	39.27'	25.00'
C8	89°03'26"	S46°12'22"W 35.06'	38.86'	25.00'	C20	90°00'00"	S45°44'05"W 35.36'	39.27'	25.00'	C32	90°00'00"	N44°15'55"E 35.36'	39.27'	25.00'	C44	90°00'00"	N44°15'55"E 35.36'	39.27'	25.00'
C9	68°14'54"	N55°08'28"W 28.05'	29.78'	25.00'	C21	51°13'40"	N63°39'05"W 21.62'	22.35'	25.00'	C33	90°55'00"	S46°11'39"W 35.64'	39.67'	25.00'	C45	90°00'00"	N44°15'55"E 35.36'	39.27'	25.00'
C10	23°57'58"	N33°00'00"W 31.14'	31.37'	75.00'	C22	24°16'12"	N50°16'21"W 21.02'	21.18'	50.00'	C34	89°04'51"	S43°48'21"E 35.07'	38.87'	25.00'	C46	90°00'00"	N45°44'05"E 35.36'	39.27'	25.00'
C11	36°57'17"	N63°17'37"W 47.13'	47.94'	75.00'	C23	83°11'10"	S76°05'58"W 66.38'	72.59'	50.00'	C35	90°00'00"	S45°44'05"E 35.36'	39.27'	25.00'	C47	90°00'00"	S45°44'05"E 35.36'	39.27'	25.00'
C12	73°39'40"	N85°26'05"W 10.02'	10.03'	75.00'	C24	78°40'48"	S4°49'46"E 63.39'	68.65'	50.00'	C36	90°00'00"	N44°15'55"E 35.36'	39.27'	25.00'	C48	90°00'00"	S45°44'05"E 35.36'	39.27'	25.00'

**LEGAL DESCRIPTION:**  
ALL OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER AND PART OF THE FRACTIONAL NORTHEAST QUARTER OF THE NORTHEAST QUARTER AND ALL THAT PART OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 4, TOWNSHIP 3 SOUTH, RANGE 20 WEST OF THE FIFTH PRINCIPAL MERIDIAN, GARLAND COUNTY, ARKANSAS DESCRIBED AS FOLLOWS:  
**BEGINNING** AT A FOUND 1/2" CAPPED REBAR AR 1S# 1024 FOUND AT THE SW CORNER OF THE SW 1/4 NE 1/4; **THENCE** N 89°38'29" E ALONG THE EAST SOUTH LINE THEREOF A DISTANCE OF 1283.05 FEET TO A FOUND 60-D NAIL AT A FENCE CORNER AND BEING THE SE CORNER OF THE SW 1/4 NE 1/4; **THENCE** N 89°59'56" E ALONG THE SOUTH LINE THEREOF A DISTANCE OF 1366.52 FEET TO A FOUND BRIDGE SPIKE BEING THE SE CORNER SE 1/4 NE 1/4; **THENCE** S 01°19'00" E A DISTANCE OF 1320.16 FEET TO A 1" PIPE FOUND AT THE NE CORNER OF THE SE 1/4 NE 1/4; **THENCE** N 02°44'51" E ALONG THE EAST LINE THEREOF A DISTANCE OF 816.61 FEET TO A 1/2" ALUMINUM CAPPED REBAR AT THE INTERSECTION OF SAID EAST LINE AND THE SOUTH RIGHT OF WAY LINE OF U.S. HIGHWAY 270 (ALBERT PIKE); **THENCE** ALONG SAID SOUTH LINE THE FOLLOWING COURSES:  
N 83°38'56" W A DISTANCE OF 201.14 FEET;  
N 65°38'55" W A DISTANCE OF 318.36 FEET;  
N 84°06'48" W A DISTANCE OF 800.08 FEET;  
N 64°42'59" W A DISTANCE OF 187.61 FEET;  
N 73°41'47" W A DISTANCE OF 187.61 FEET;  
S 89°53'45" W A DISTANCE OF 29.12 FEET TO A 1/2" CAPPED REBAR AR 1S#4144 FOUND ON THE WEST LINE OF THE FRACTIONAL NE 1/4 NE 1/4; **THENCE**, S 01°17'39" W A DISTANCE OF 1286.53 FEET TO A 1" PIPE FOUND AT THE AT THE NE CORNER OF THE SW 1/4 NE 1/4 AS SHOWN ON SURVEY BY LEWIS & CLARK SURVEYING DATED 11/03/20, SAID POINT BEING 64.78 FEET NORTH OF A FOUND ALUMINUM CAPPED REBAR MARKING THE TECHNICAL NE CORNER AS SHOWN ON SURVEY BY DON MICHAEL BRADY 4/13/2002;  
**THENCE**, S 88°31'10" W A DISTANCE OF 1322.70 FEET TO A FOUND 2" PIPE AS SHOWN ON THE DON M. BRADY SURVEY DATED 4/13/02; **THENCE**, S 07°04'59" W ALONG A FENCE LINE A DISTANCE OF 27.99 FEET TO A 1/2" CAPPED REBAR AR 1S#4144; **THENCE**, S 68°15'40" W ALONG A FENCE LINE A DISTANCE OF 34.98 FEET TO A 1/2" ALUMINUM CAPPED REBAR FOUND ON THE WEST LINE OF THE SW 1/4 NE 1/4; **THENCE**, S 03°53'48" W ALONG THE WEST LINE THEREOF A DISTANCE OF 1298.25 FEET TO THE POINT OF BEGINNING AND CONTAINING 113.35 ACRES (06068.115 SQ FT) MORE OR LESS;



**PROPERTY SPECIFICATIONS:**

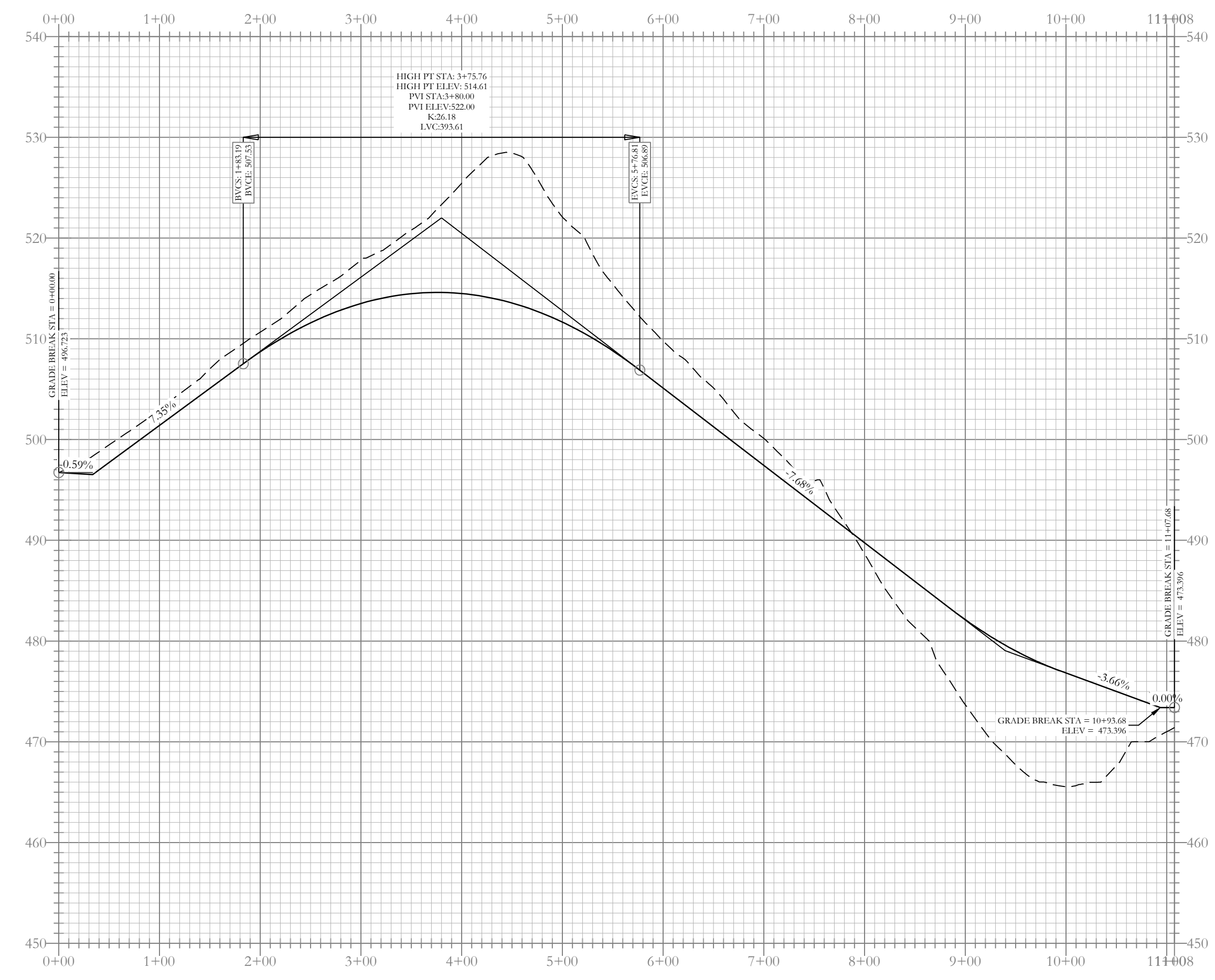
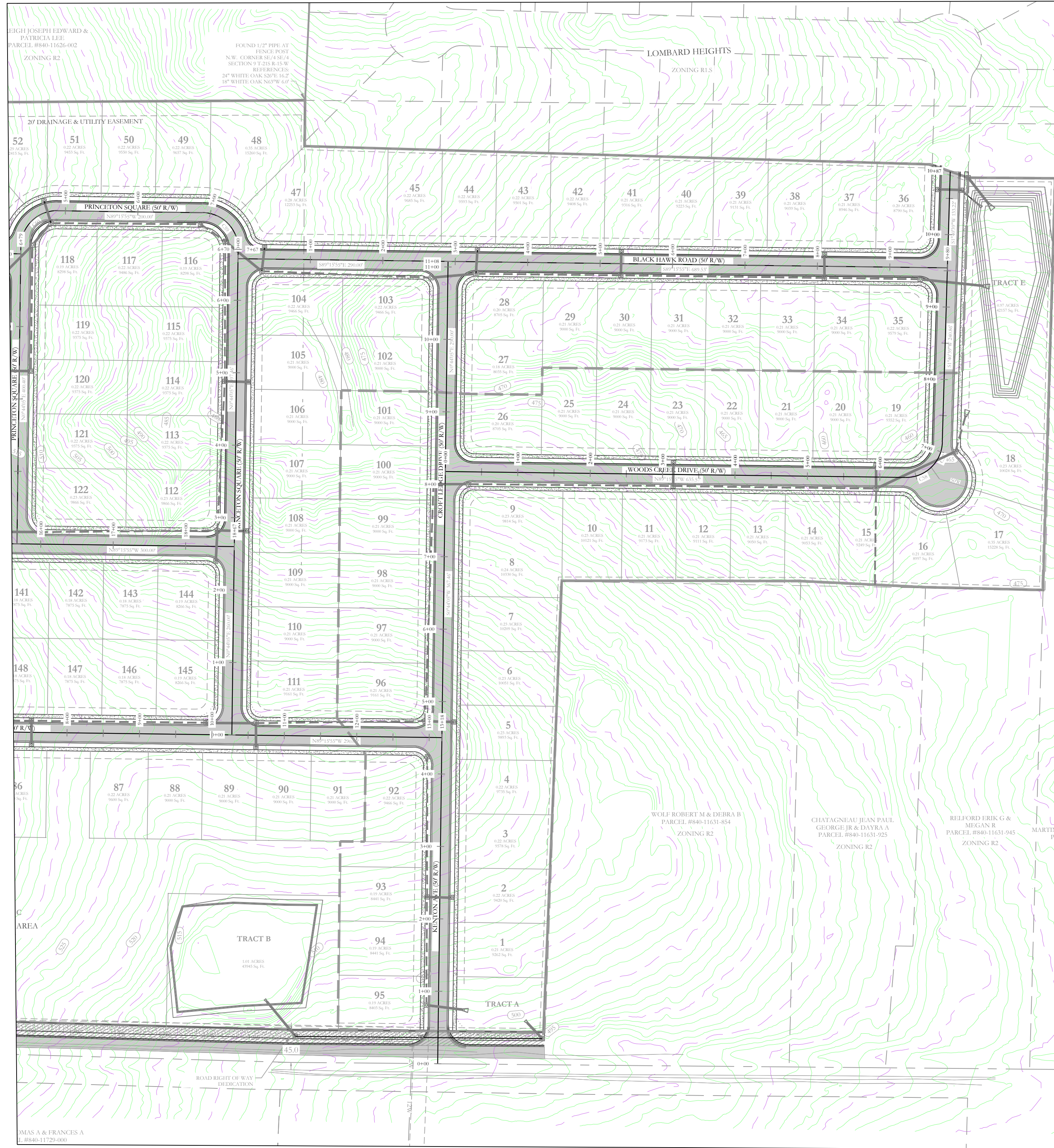
OWNER: NXT GEN HOMES LLC 19218 SUMMERSHADE DRIVE BRYANT, AR 72022	NUMBER OF LOTS: 188 EXISTING ZONING: R2
DEVELOPER: NXT GEN HOMES LLC 19218 SUMMERSHADE DRIVE BRYANT, AR 72022	PROPOSED DENSITY: 385 HOMES PER ACRE
ENGINEERS: HOPE CONSULTING INC. 275 MAIN STREET BENTON, AR 72015	SOURCE OF WATER: CITY OF BRYANT SOURCE OF SEWER: CITY OF BRYANT SOURCE OF ELECTRIC: ENTERGY SOURCE OF GAS: SUMMIT
NAME OF SUBDIVISION: HILLTOP MANOR	BUILDING SETBACKS: FRONT-25' OR AS SHOWN REAR-25' OR AS SHOWN SIDE-5' OR AS SHOWN
	UTILITY & DRAINAGE EASEMENTS: FRONT-5' OR AS SHOWN REAR-5' OR AS SHOWN SIDE-5' OR AS SHOWN

FOR USE AND BENEFIT OF:  
**NXT GEN HOMES LLC**  
129 N. Main Street,  
Benton, Arkansas 72015  
PH: (501) 315-2626  
FAX: (501) 315-0024  
www.hopeconsulting.com

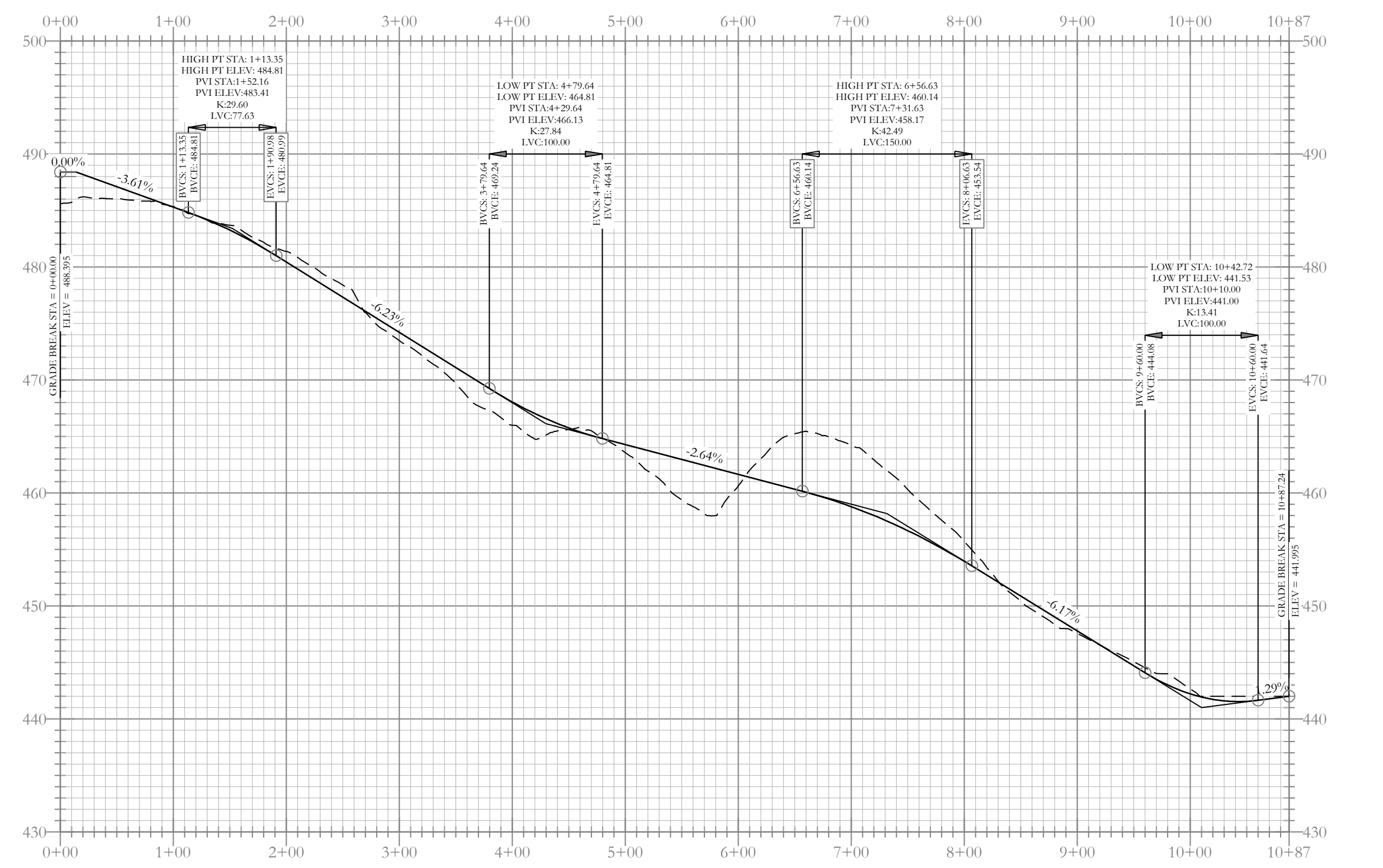
**PRELIMINARY PLAT  
HILLTOP MANOR SUBDIVISION**  
A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS.

DATE: 03/08/2023	C.A.D. BY: BJOHNSON	DRAWING NUMBER: 20-1341
REVISION:	CHECKED BY:	
SHEET: 500	SCALE: 1"=100'	
01S	14W	0   0   200   62   1762

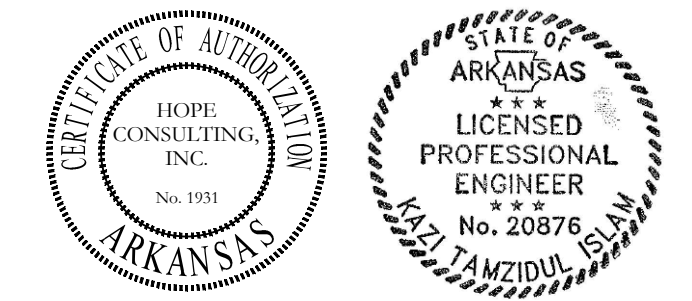
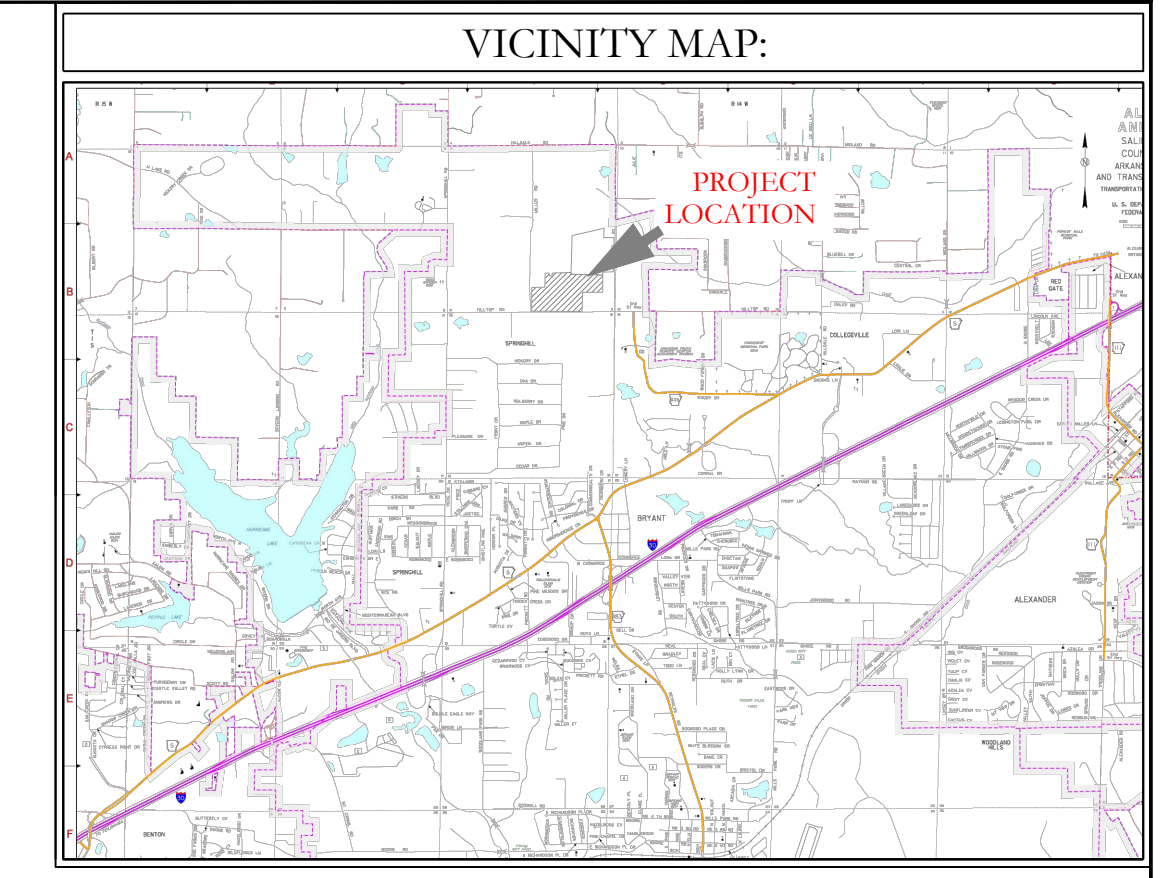




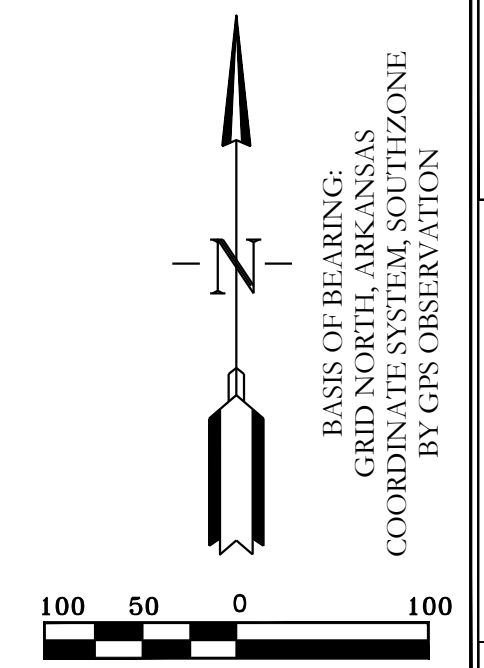
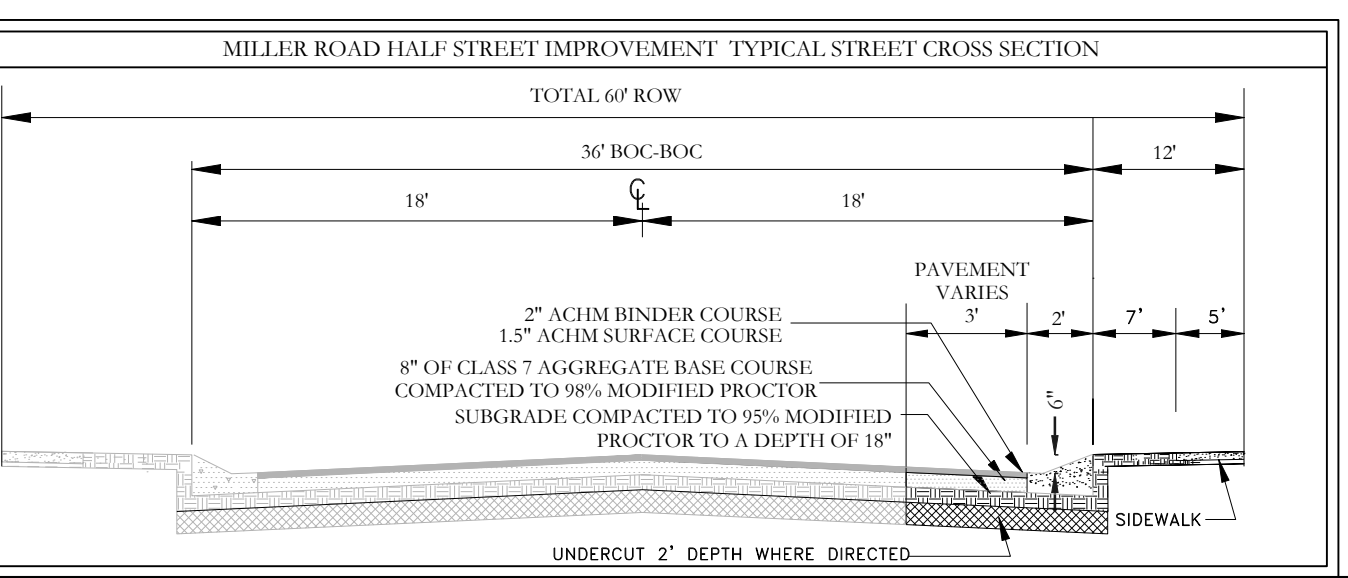
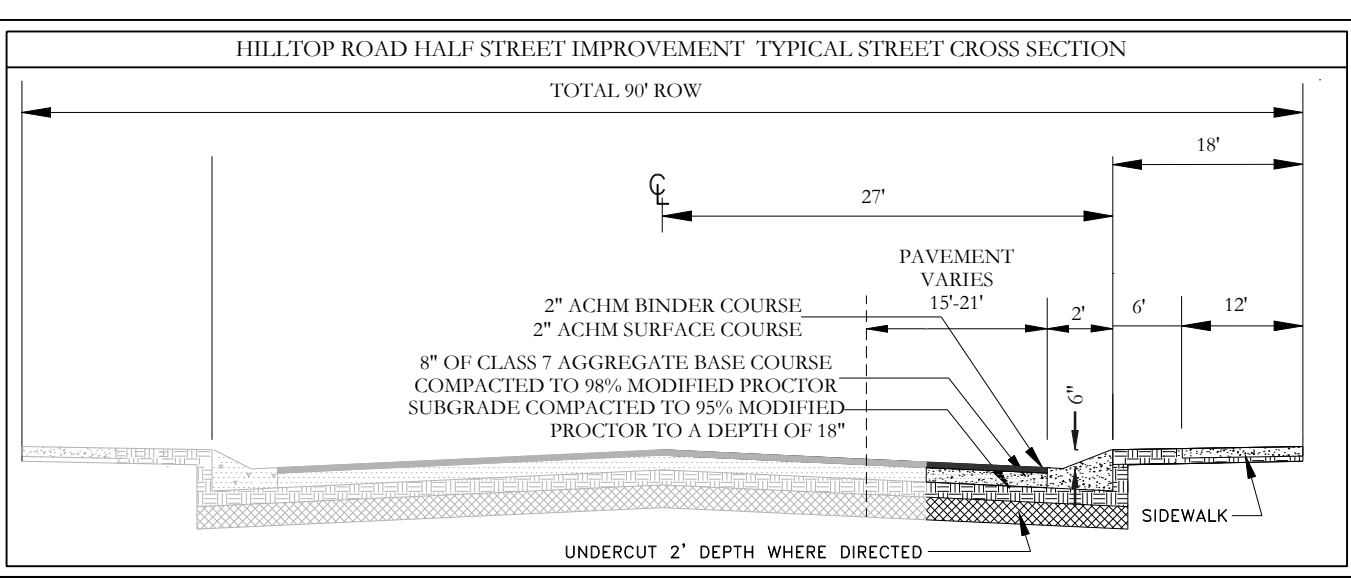
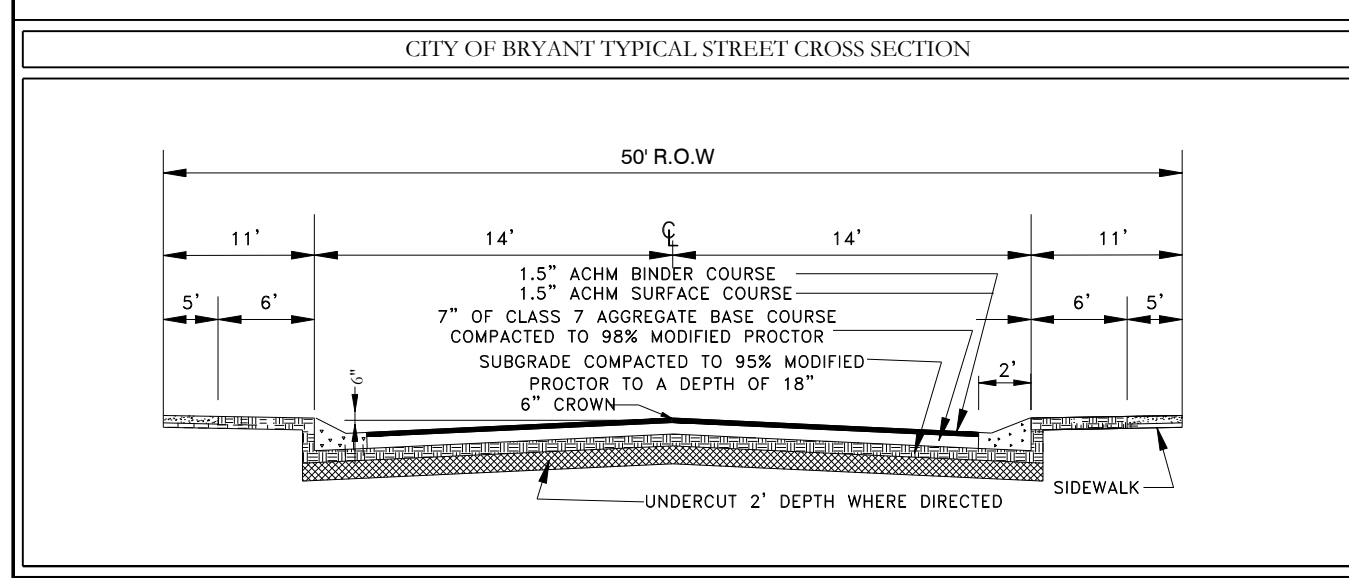
Croft Ledge Drive Profile



Wood Creek Drive Profile



--- HDPE  
 --- RCP



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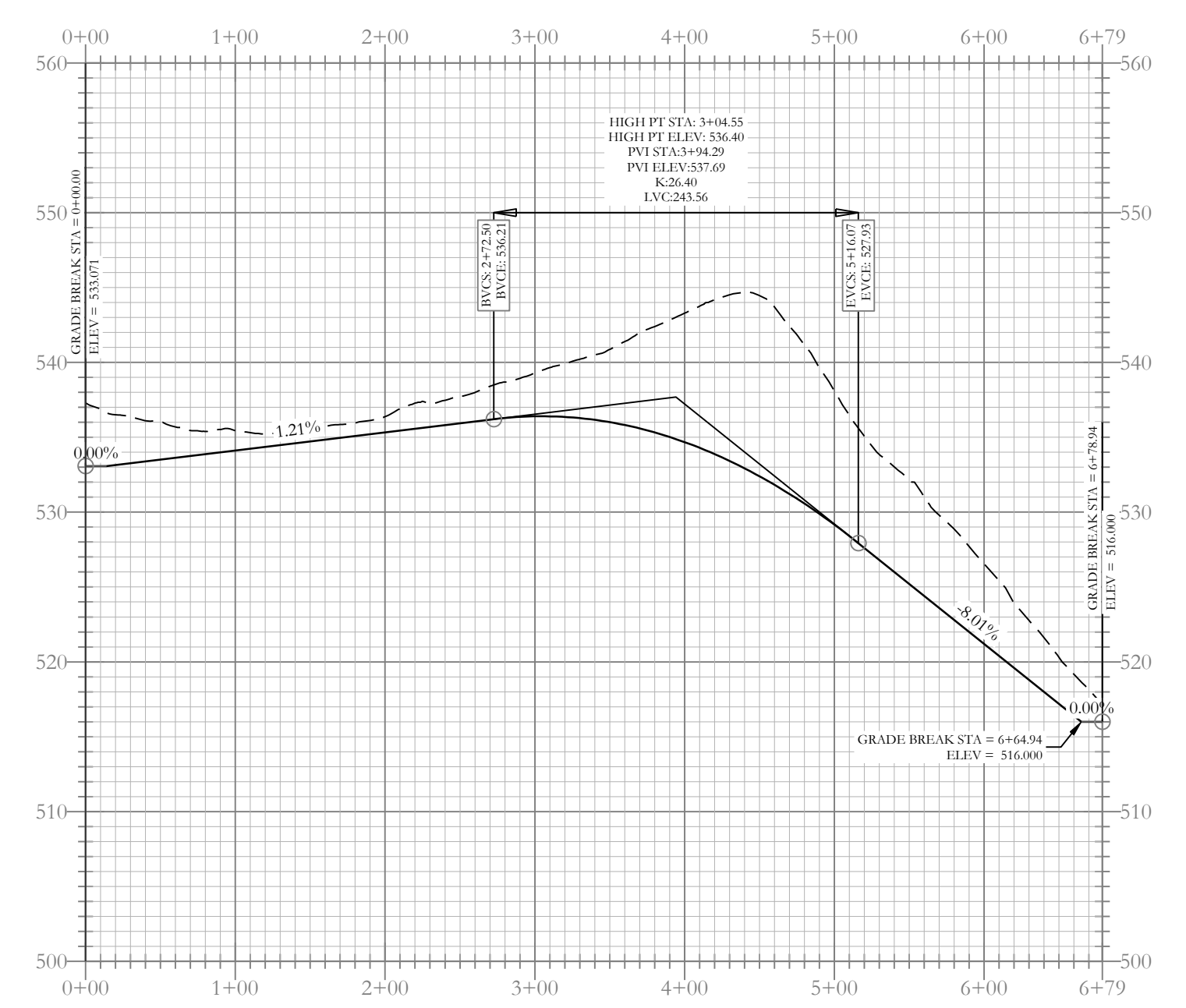
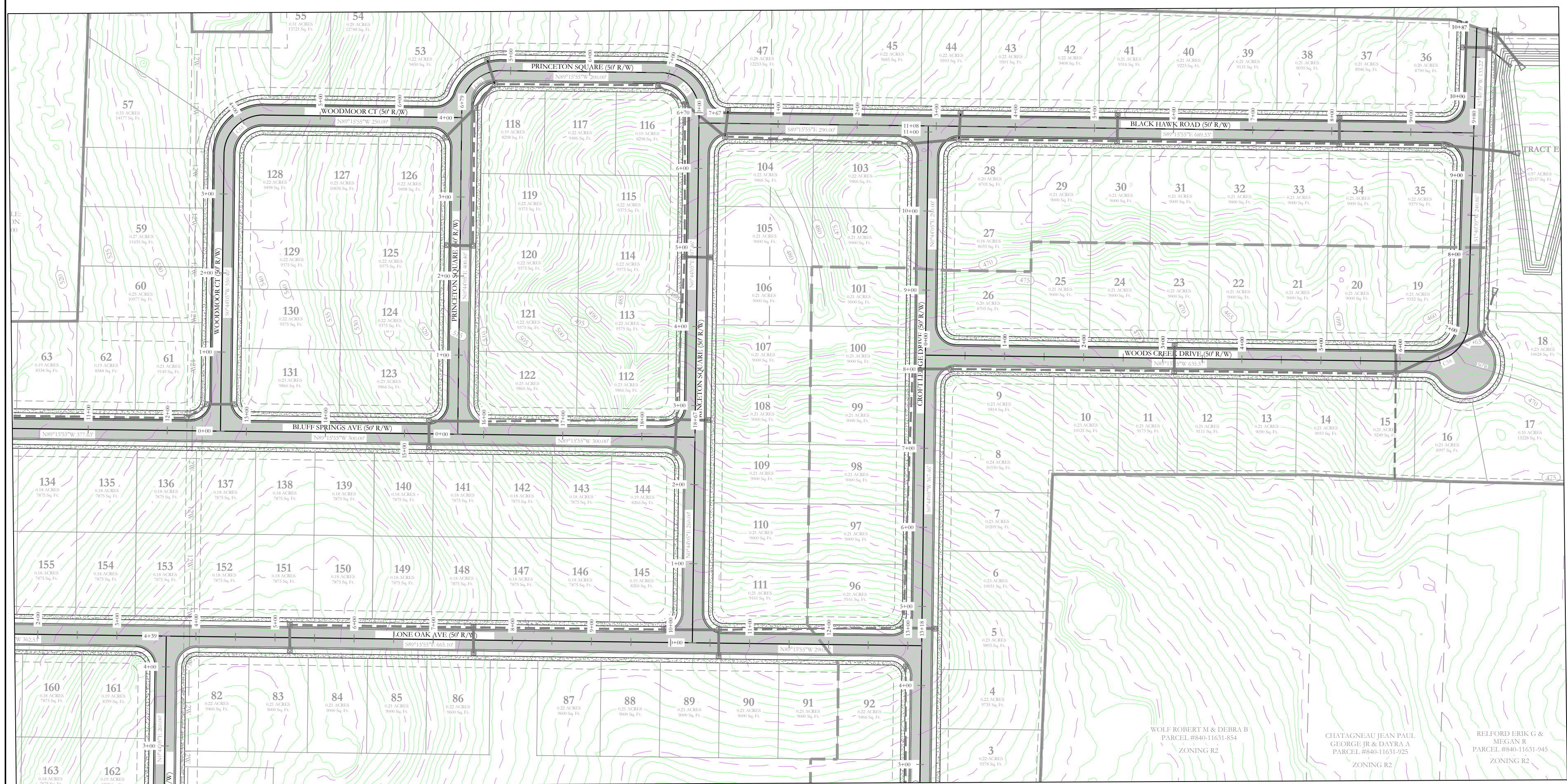
FOR USE AND BENEFIT OF:  
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**HILLTOP LANDING**  
**STREET PLAN & PROFILE**  
 A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

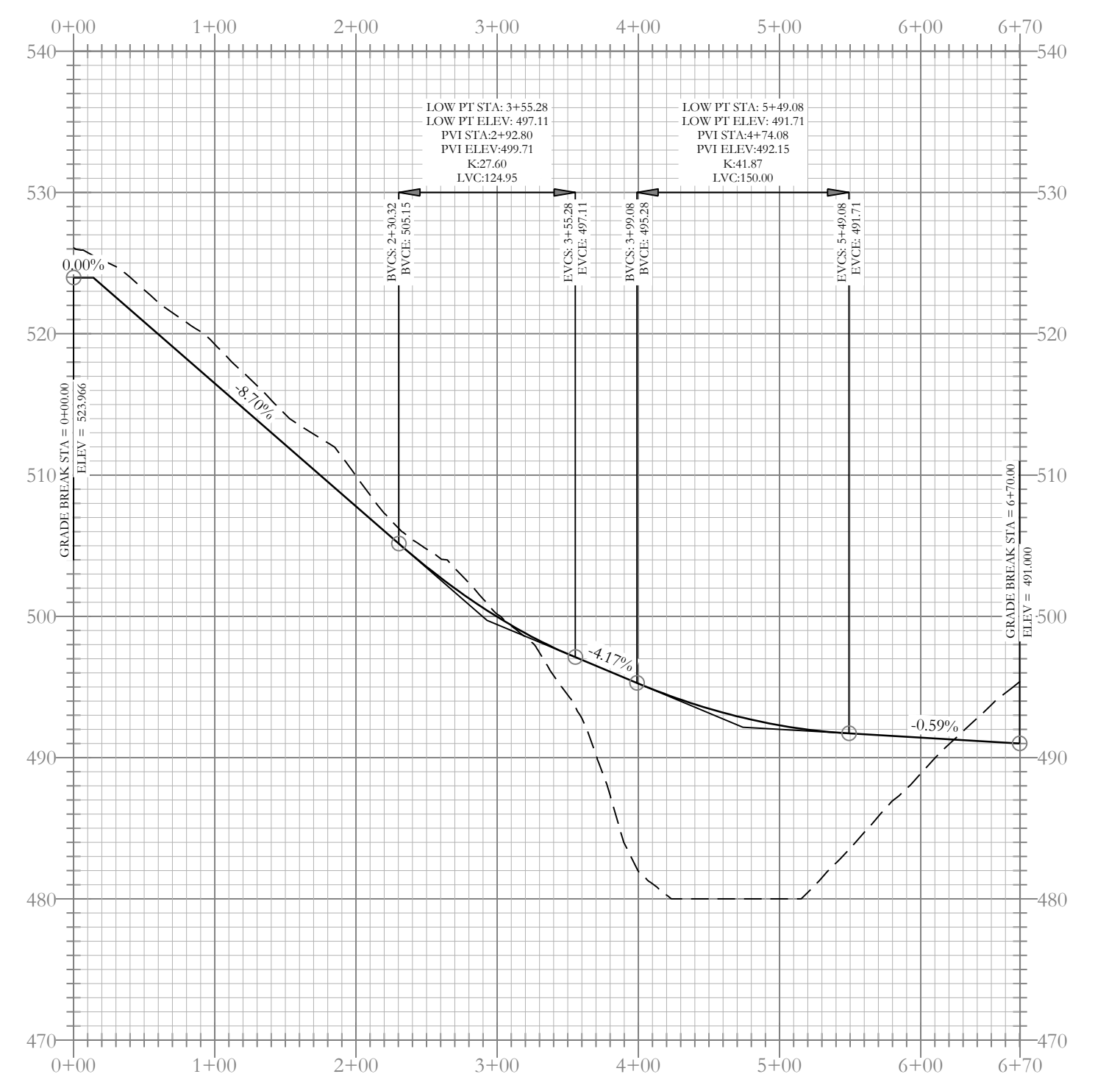
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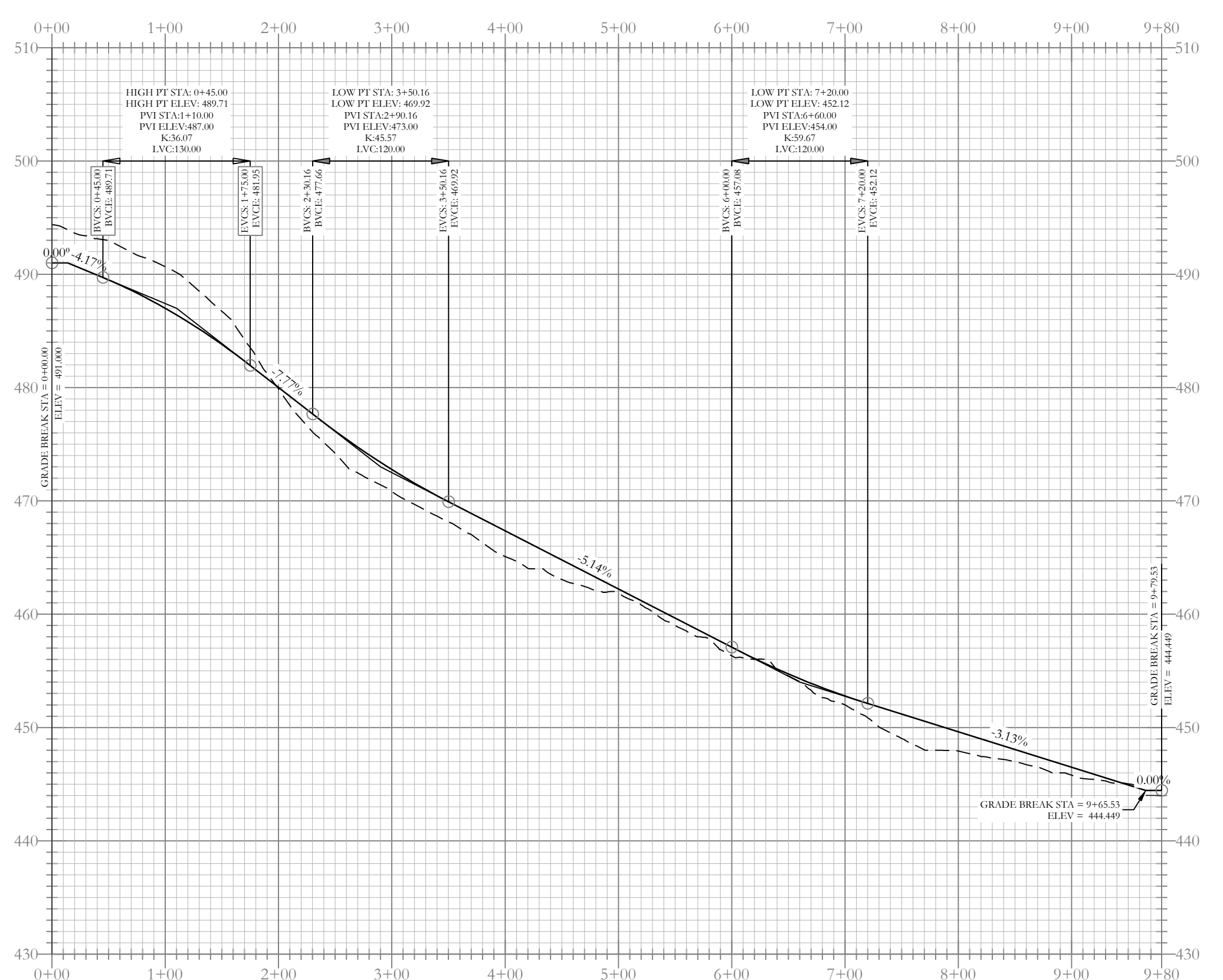
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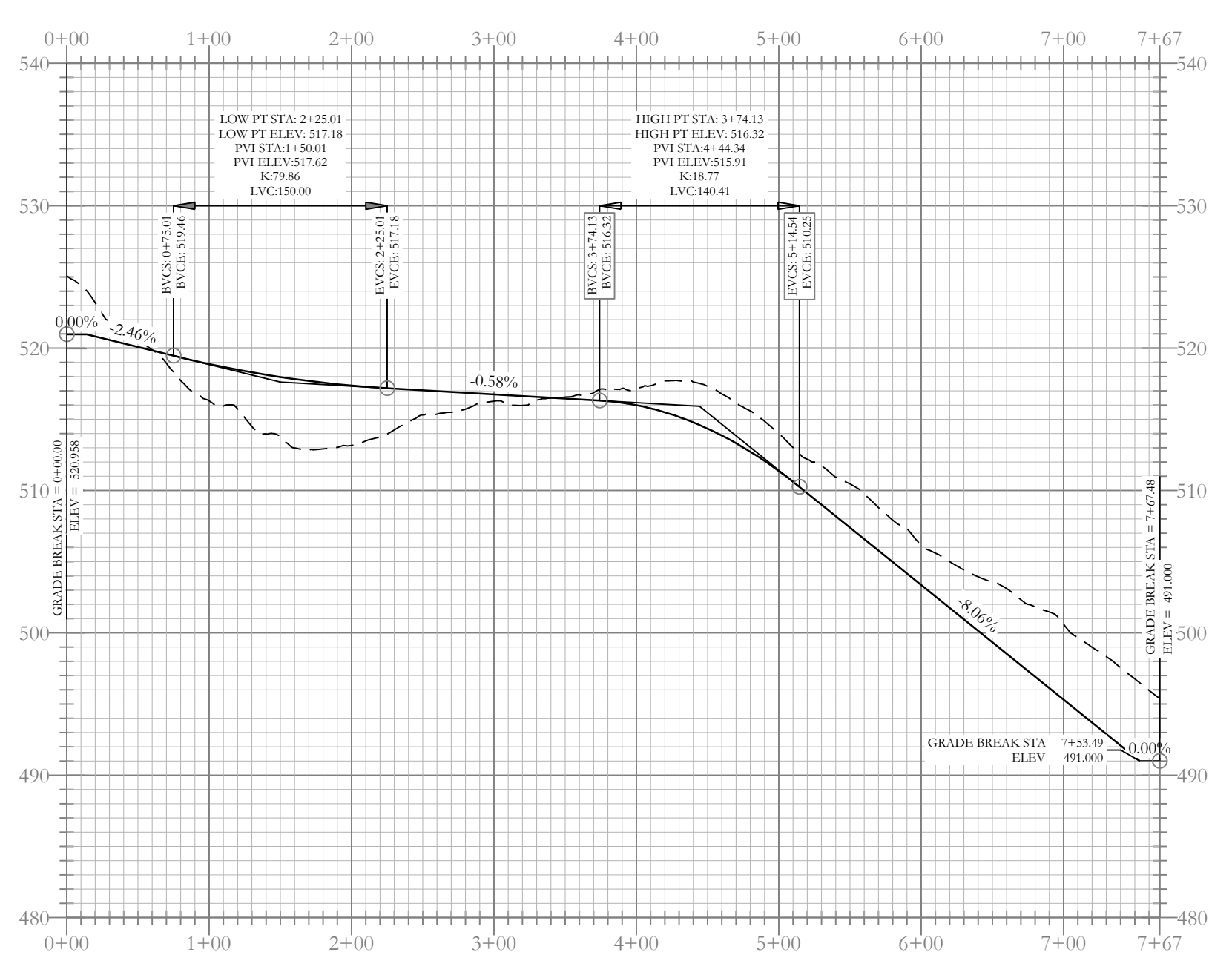
Woodmoor Ct Profile



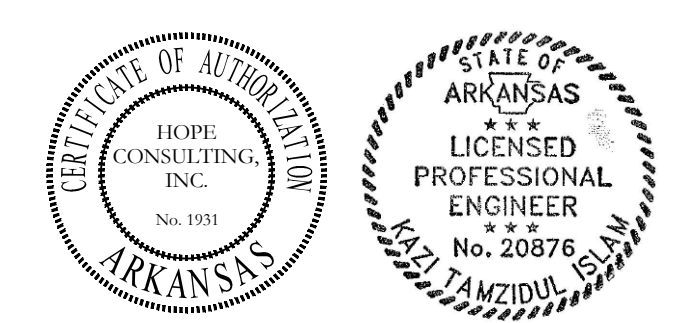
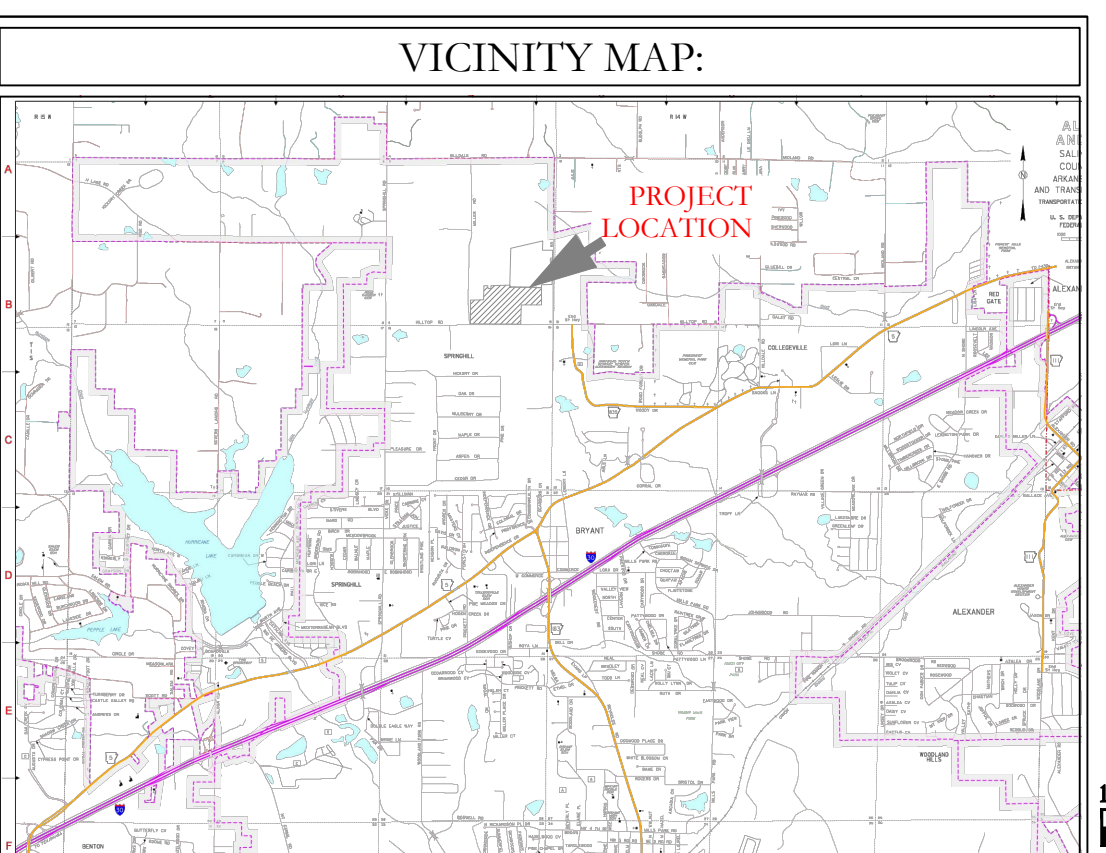
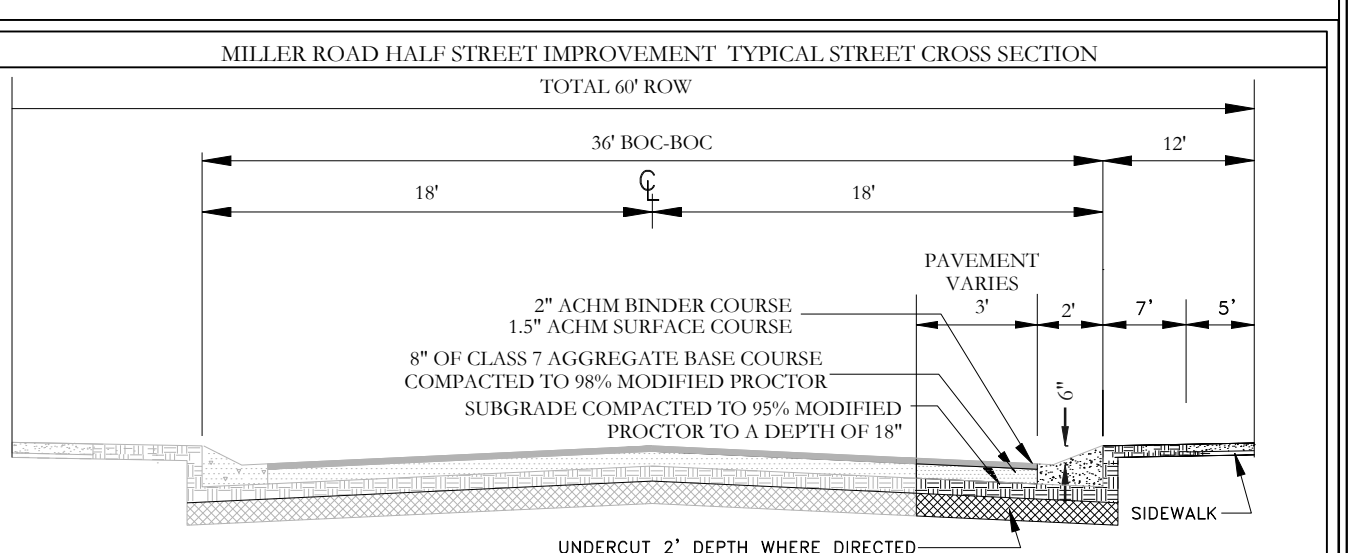
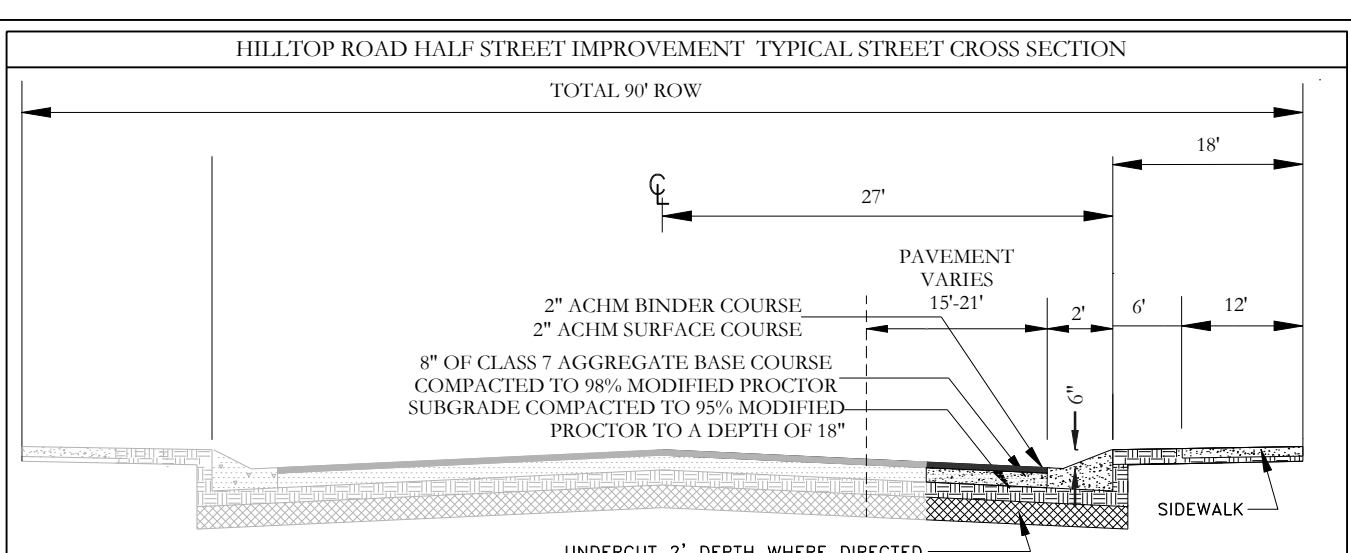
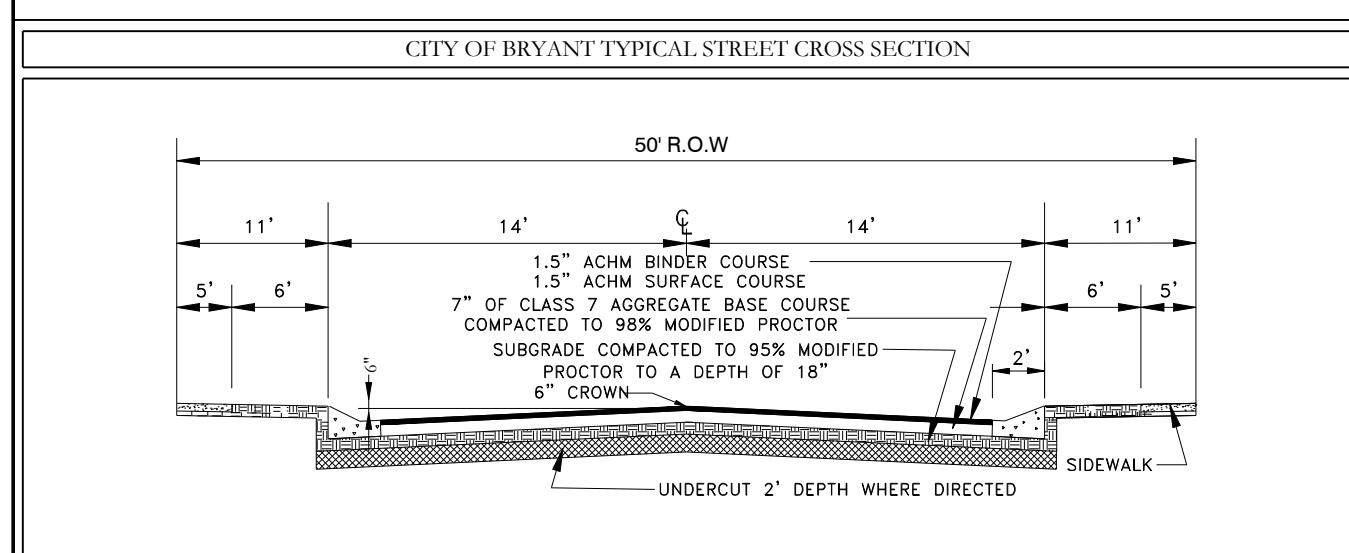
Princeton Square Profile



Black Hawk Profile



Hilltop Road Profile



--- HDPE  
 --- RCP

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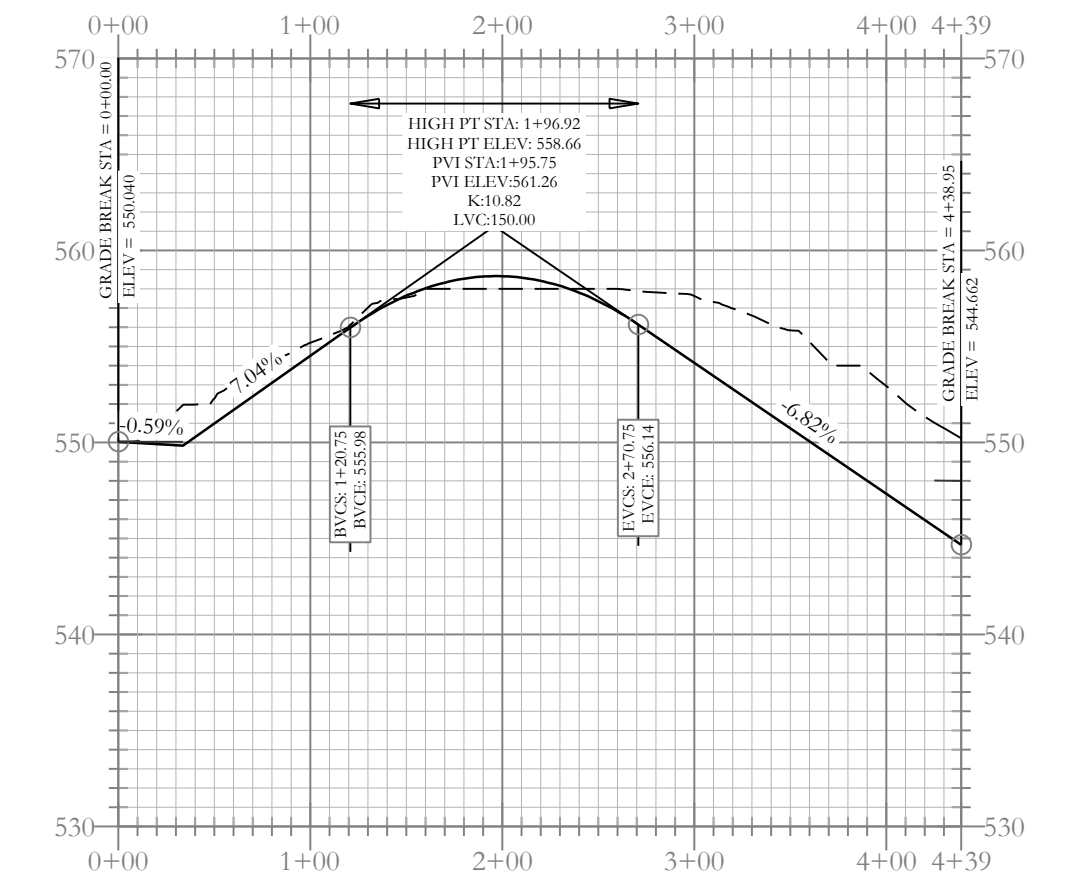
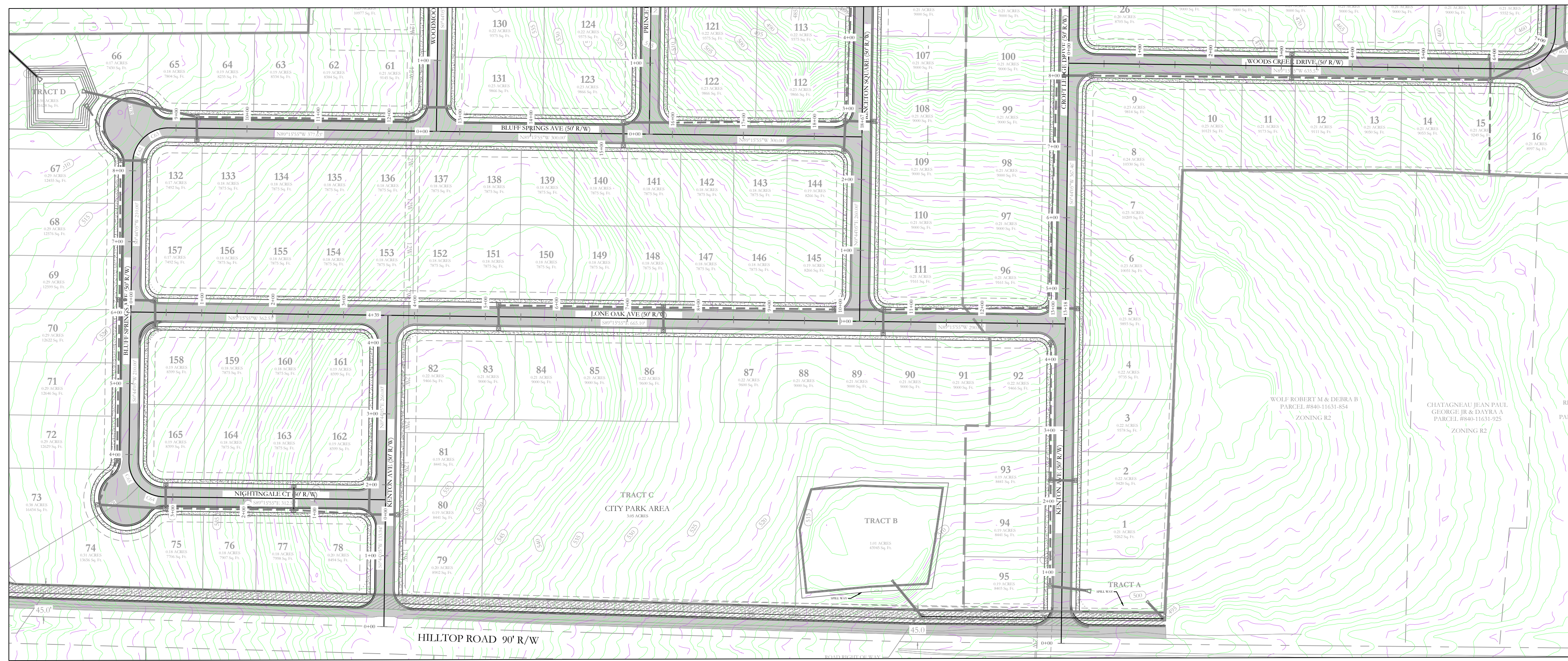
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**HILLTOP LANDING STREET PLAN & PROFILE**  
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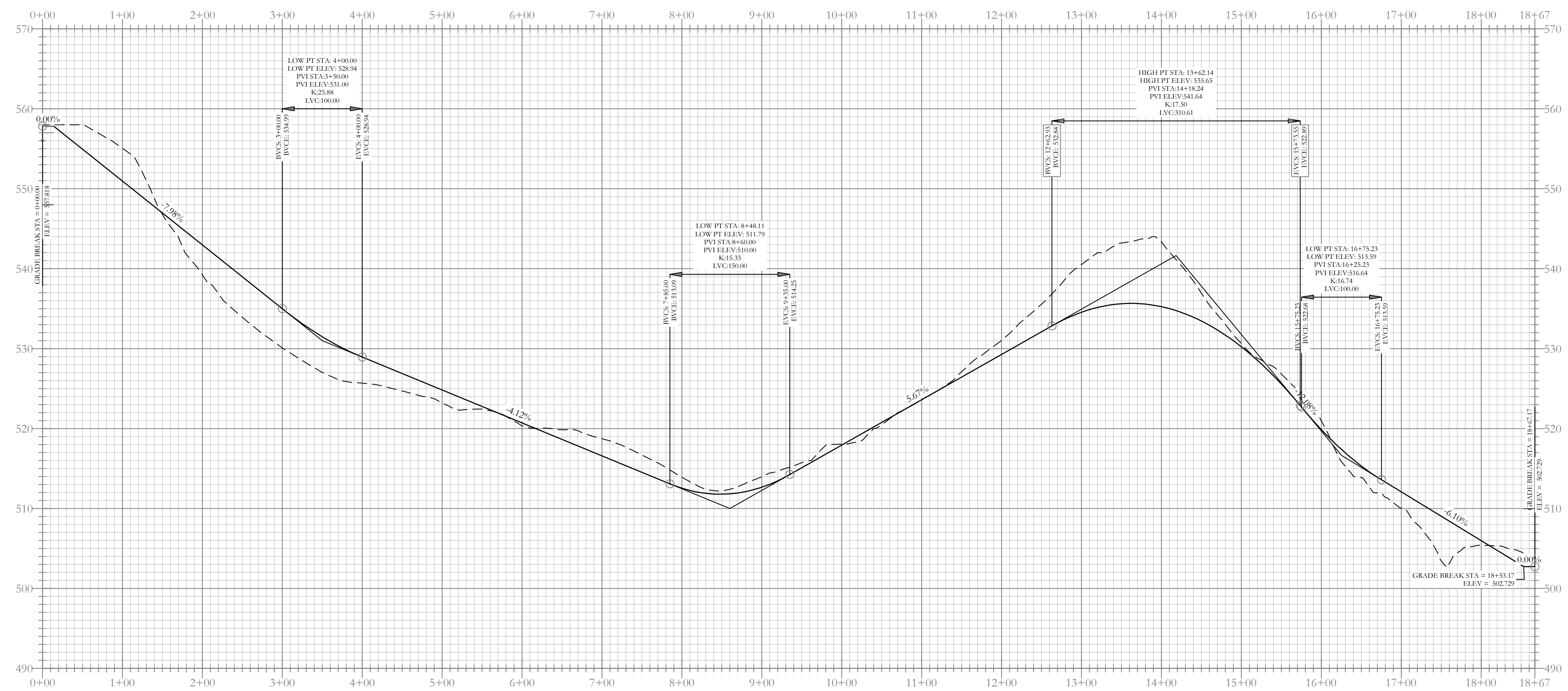
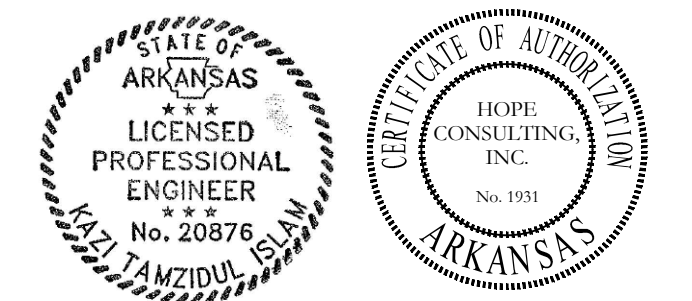
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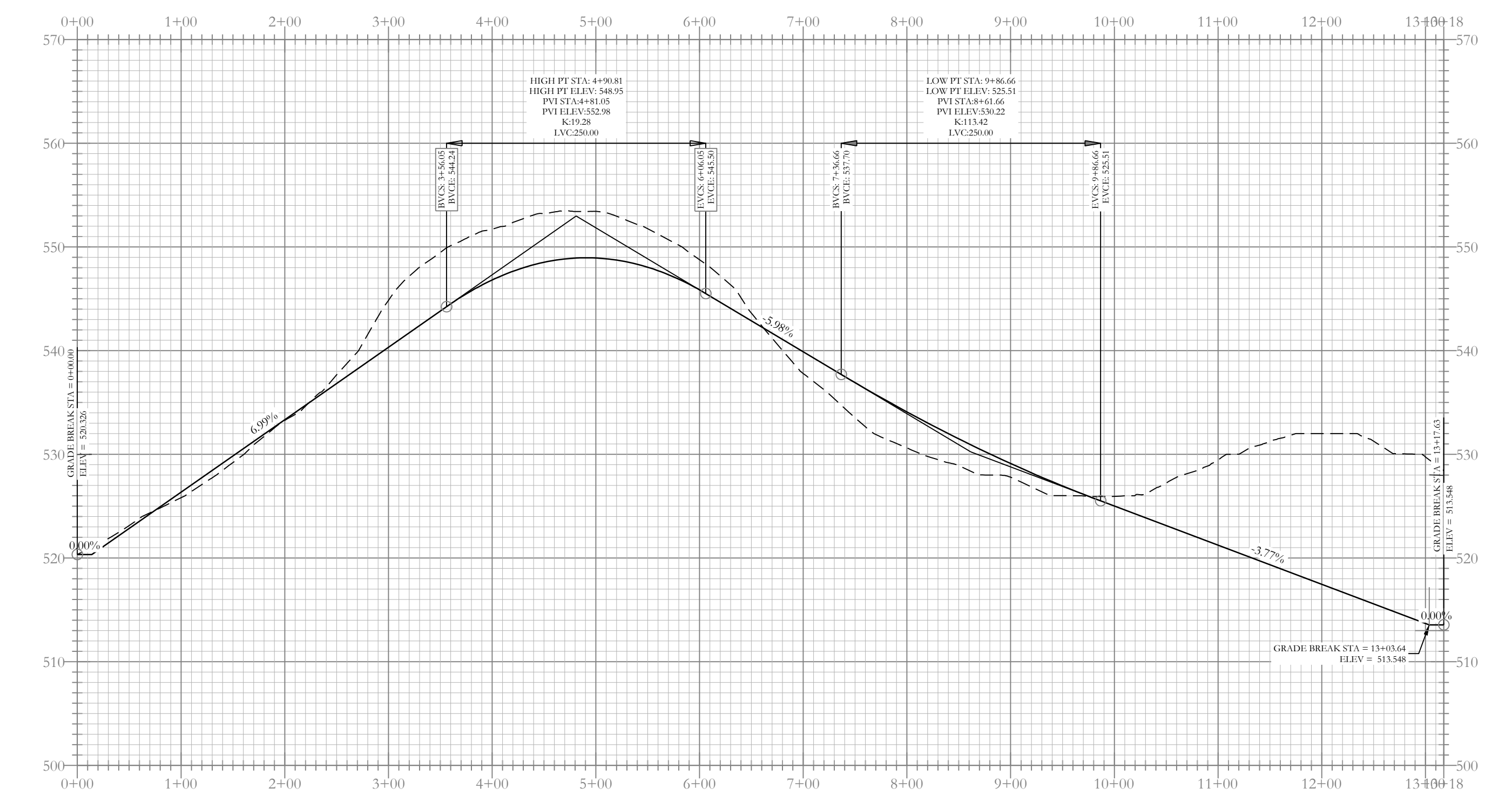
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Kenton Ave Profile

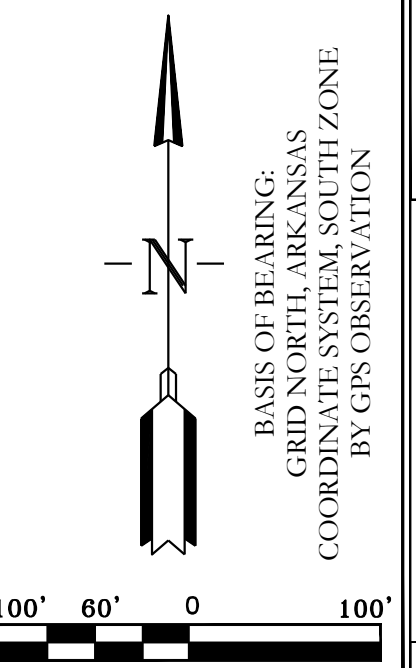
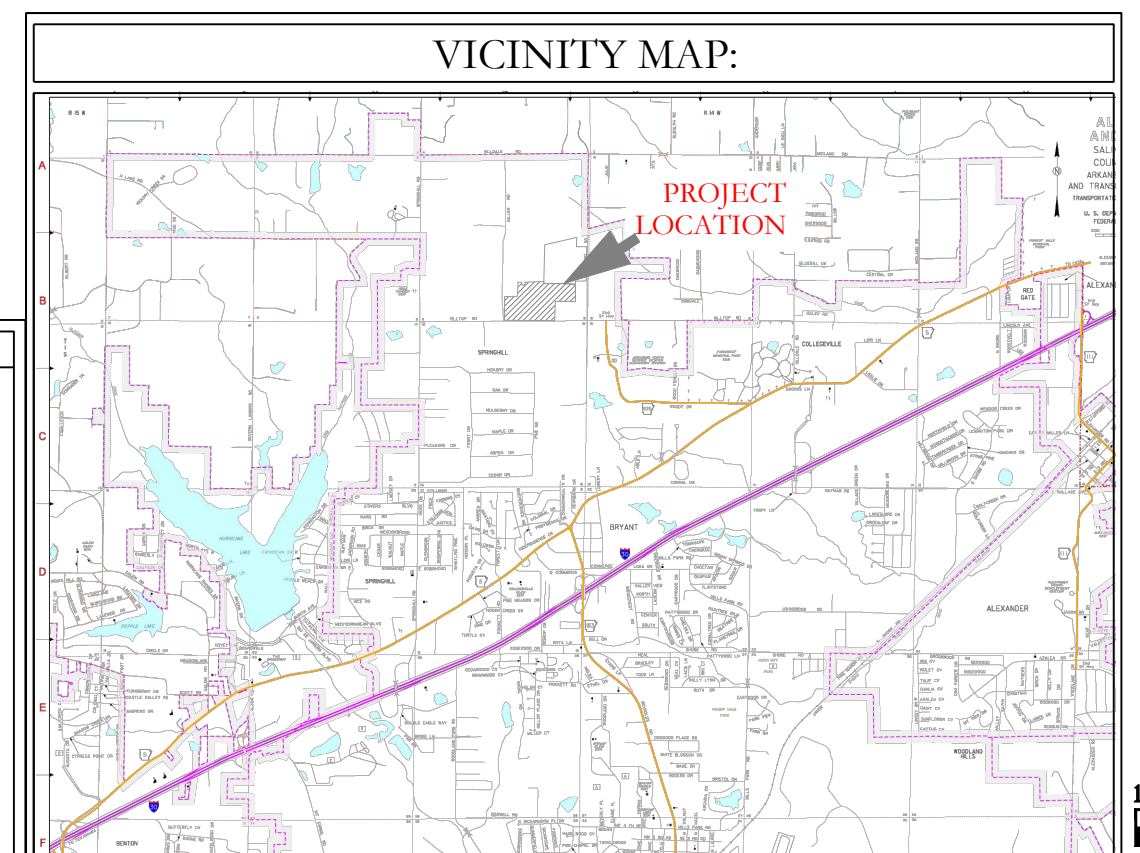
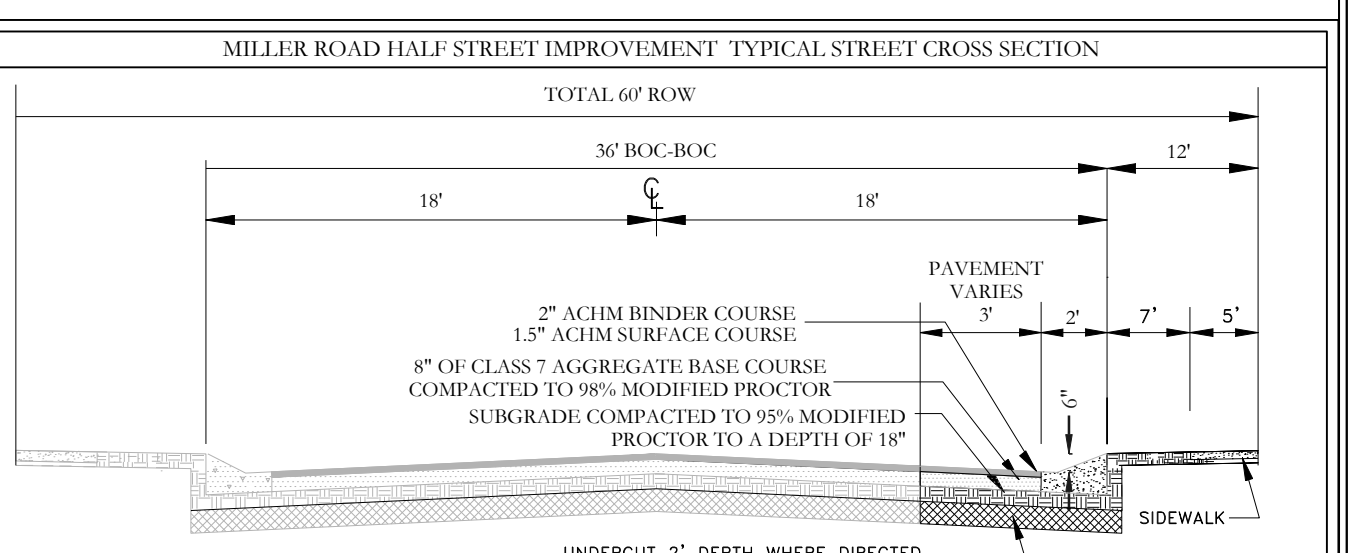
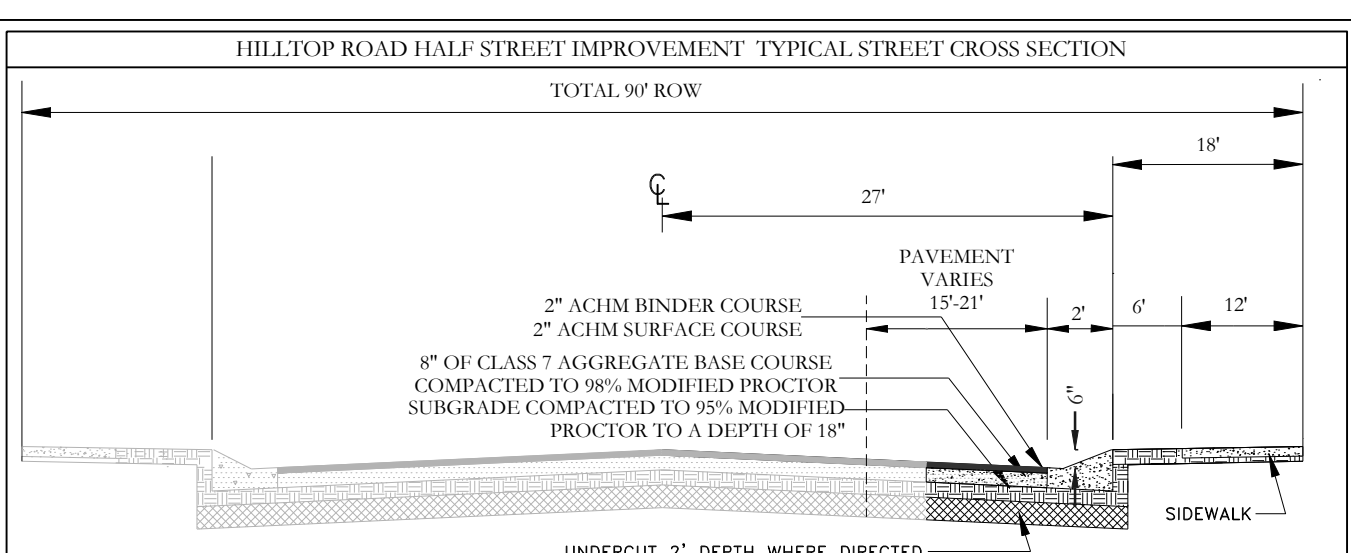
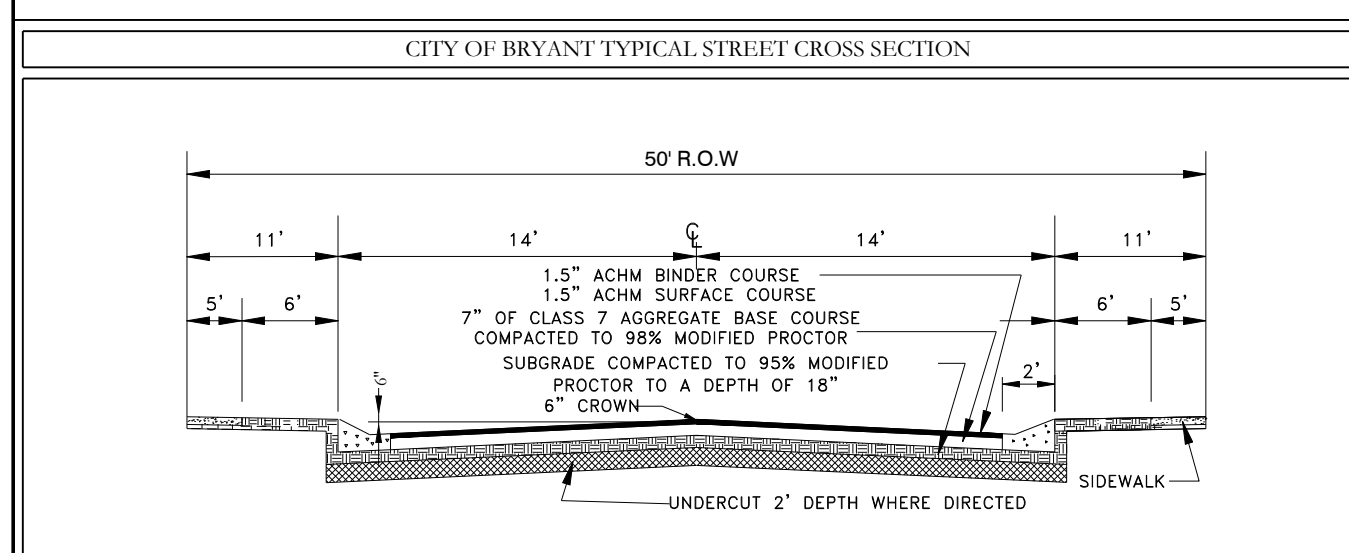


Nightingale Ct-Bluff Springs Ave Profile



Lone Oak Ave Profile

--- HDPE  
 --- RCP



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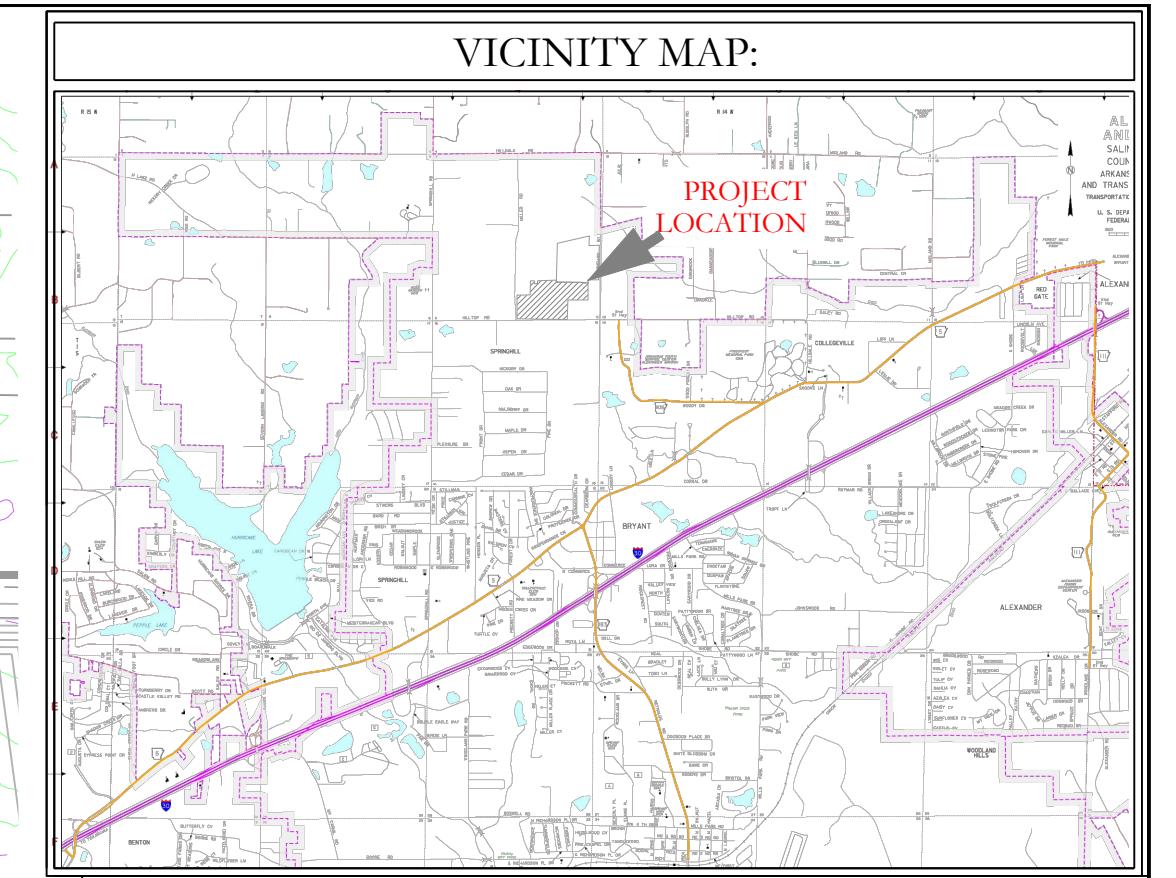
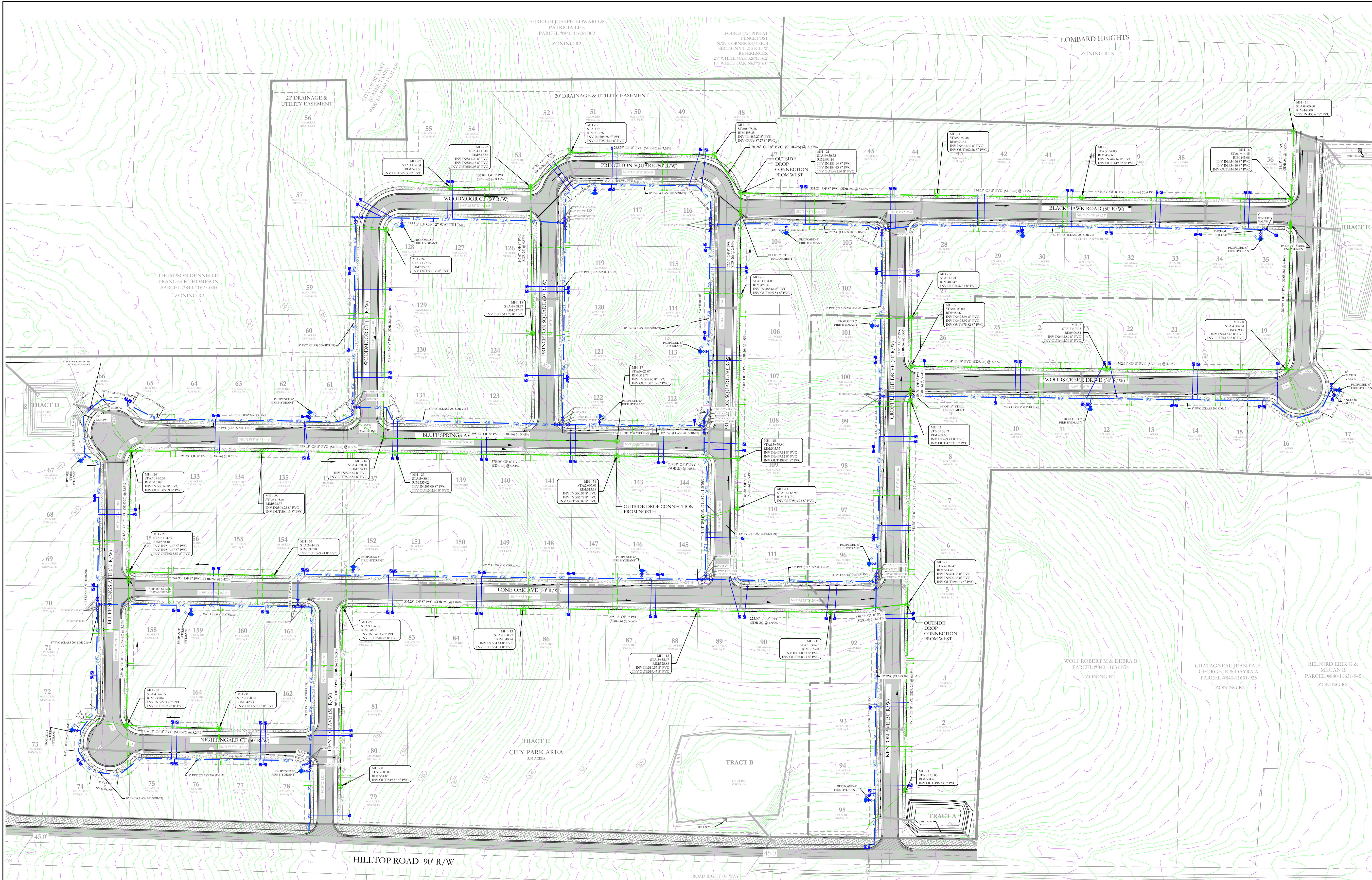
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**HILLTOP LANDING STREET PLAN & PROFILE**  
 A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

DATE: 03/08/2023	C.A.D. BY:	DRAWING NUMBER:
REVISION:	CHECKED BY:	20-1341
SHEET: C-1.2	SCALE: 1" = 120'	

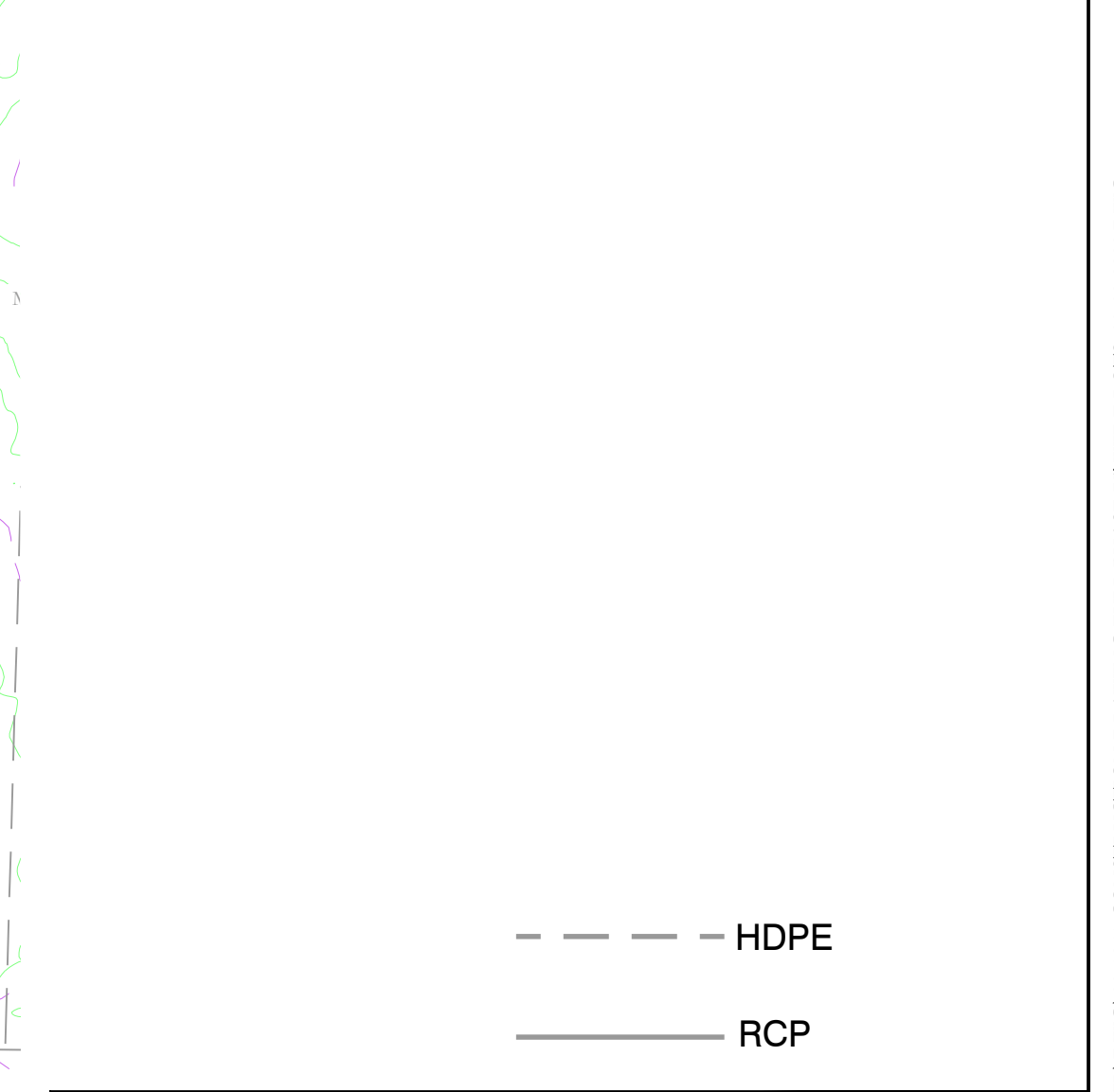
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- SEWER CONSTRUCTION NOTES:**
1. ALL SEWER CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH BRYANT UTILITIES' MASTER SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER AND SEWER UTILITIES' 2015 EDITION.
  2. USE SDR-26 PVC SEWER PIPE EXCEPT WHERE INDICATED OTHERWISE ON THE PLANS OR WHERE DUCTILE IRON PIPE IS REQUIRED FOR COVER.
  3. USE DUCTILE IRON PIPE WHERE 3' MINIMUM COVER CANNOT BE MAINTAINED, OR AS INDICATED.
  4. ALL LONG-SIDE SEWER SERVICES SHALL BE SCHEDULE 40 OR SDR 21 PIPE.
  5. FINISH GRADE HEIGHT ON MANHOLES NEED TO BE 4-6 INCHES ABOVE CURB LINE.
  6. ALL MANHOLES WILL BE XYPEX.
  7. THE LIFT STATION PROPERTY MUST BE DEEDED TO THE CITY OF BRYANT.
  8. STATION MUST BE SET UP THROUGH JACK TYLER.
  9. INSTEAD OF FLOATS, THERE WILL NEED TO BE PROBES.
  10. SAFETY LIGHT MUST BE INSTALLED (NO WOOD).
  11. EVERYTHING IN WET WELL MUST BE STAINLESS STEEL INCLUDING CHAINS.
  12. ALL LIFT STATIONS MUST HAVE WOVEN MONOFILAMENT GEOTEXTILE MATERIAL COVERING THE WHOLE PROPERTY OF THE LIFT STATION WITH THE GRAVEL ON TOP TO CONTROL WEEDS AND GRASS CAUSING PROBLEMS IN THE DRIVE TO THE LIFT STATION AND THE GATED AREA OF THE LIFT STATION.
  13. LIFT STATION MUST HAVE A ROLLING GATE, OR GATES THAT SWING OUT FOR OUR JET VAC/ PUMP TRUCK TO GET INTO.
  14. ALL PANELS MUST HAVE THE ROOF COVER AND MUST BE STEEL FRAME AND PANEL ROOF DESIGN COVERING 5 FEET ON ALL SIDES OF THE PANELS.
  15. AT STORM DRAIN CROSSING OR ANY DRAINAGE DITCHES CROSSING, THE SEWER INFRASTRUCTURE WILL NEED TO BE STEEL ENCASED, FIVE FEET ON EITHER SIDE.
  16. NO STEPS IN MANHOLES.
  17. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL BURIED UTILITIES PRIOR TO CONSTRUCTION.
  18. ELECTRICAL CONDUIT COMING OUT OF THE CONTROL BOX WILL NEED TO BE 3" CONDUIT SHOULD BE PLUGGED WITH PUTTY NOT SPRAY IN FOAM TO RESTRICT GASES FROM ENTERING THE CONTROL BOX THAT CAUSES CORROSION.
  19. THE LIFT STATION ROOF NEEDS TO BE METAL OR OTHER MATERIAL, NOT WOOD, ALSO THE LIGHT POLE CANNOT BE WOOD.
  20. RPZ WILL NEED TO BE IN A WEATHERPROOF BOX.

- WATER CONSTRUCTION NOTES:**
1. ALL WATER CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH BRYANT UTILITIES' MASTER SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER AND SEWER UTILITIES' 2015 EDITION.
  2. LONG-SIDE WATER SERVICE LINES SHALL BE ENCASED, INCLUDING THE LINES BENEATH THE CUL-DE-SAC.
  3. ALL SERVICE CROSSINGS SHALL BE 1" DRISCO SERVICE LINE ENCASED IN A 2" PVC SLEEVE.
  4. ALL WATER MAIN FITTINGS SHALL BE MEGALUG BRAND MECHANICAL JOINT FITTINGS.



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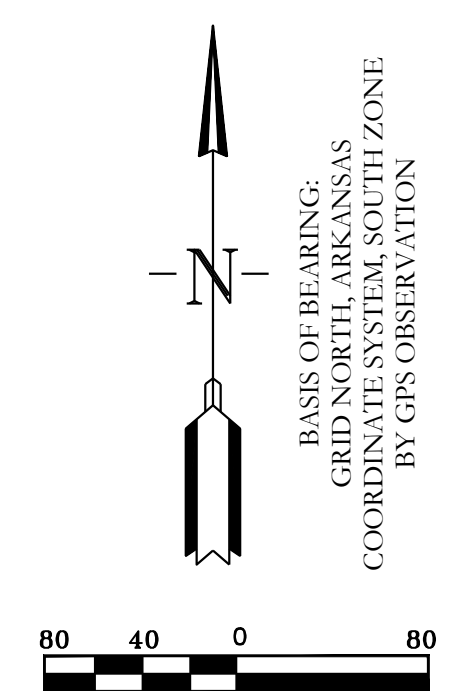
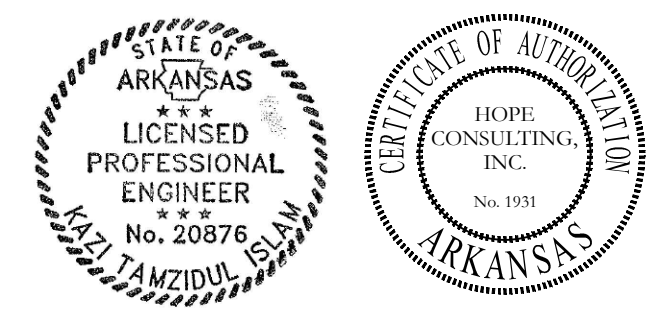
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**HILLTOP LANDING**  
UTILITY PLAN

A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

DATE: 03/08/2023	C.A.D. BY:	DRAWING NUMBER:
REVISION:	CHECKED BY:	<b>20-1341</b>
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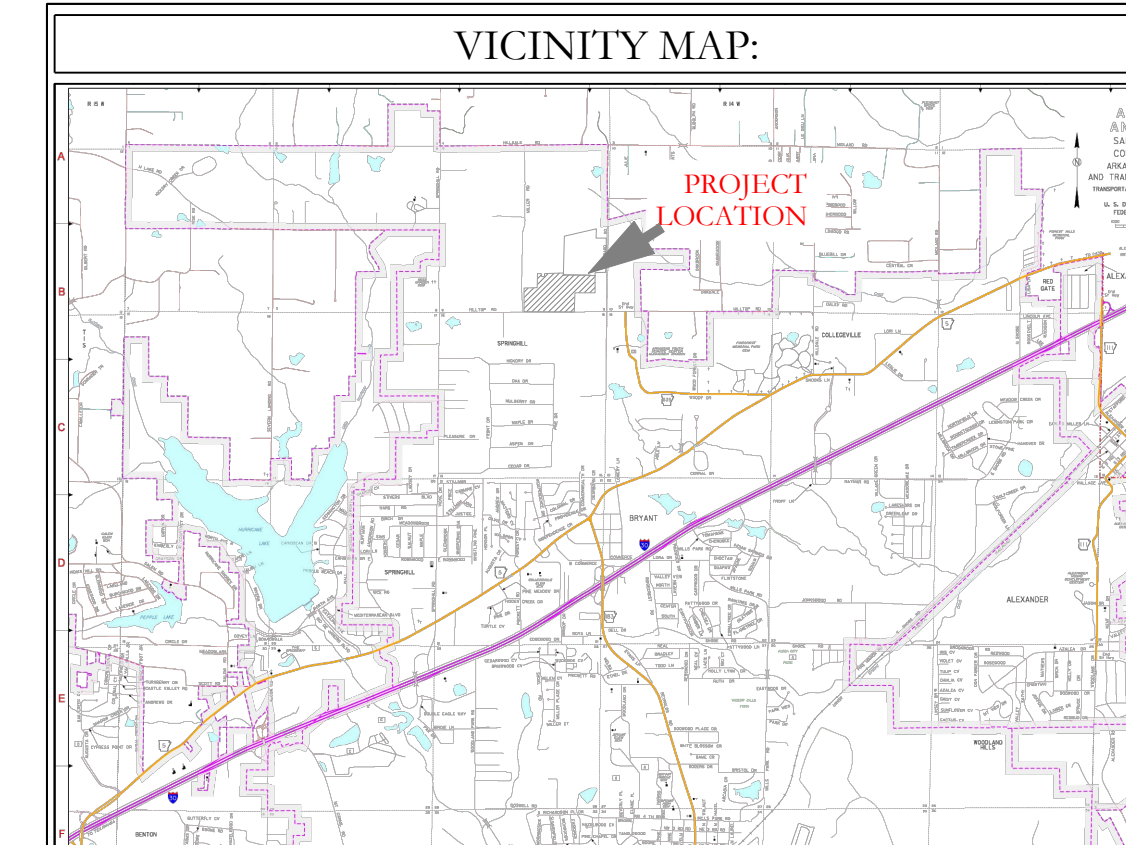
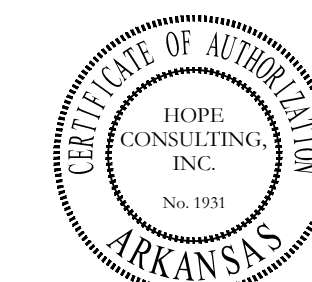
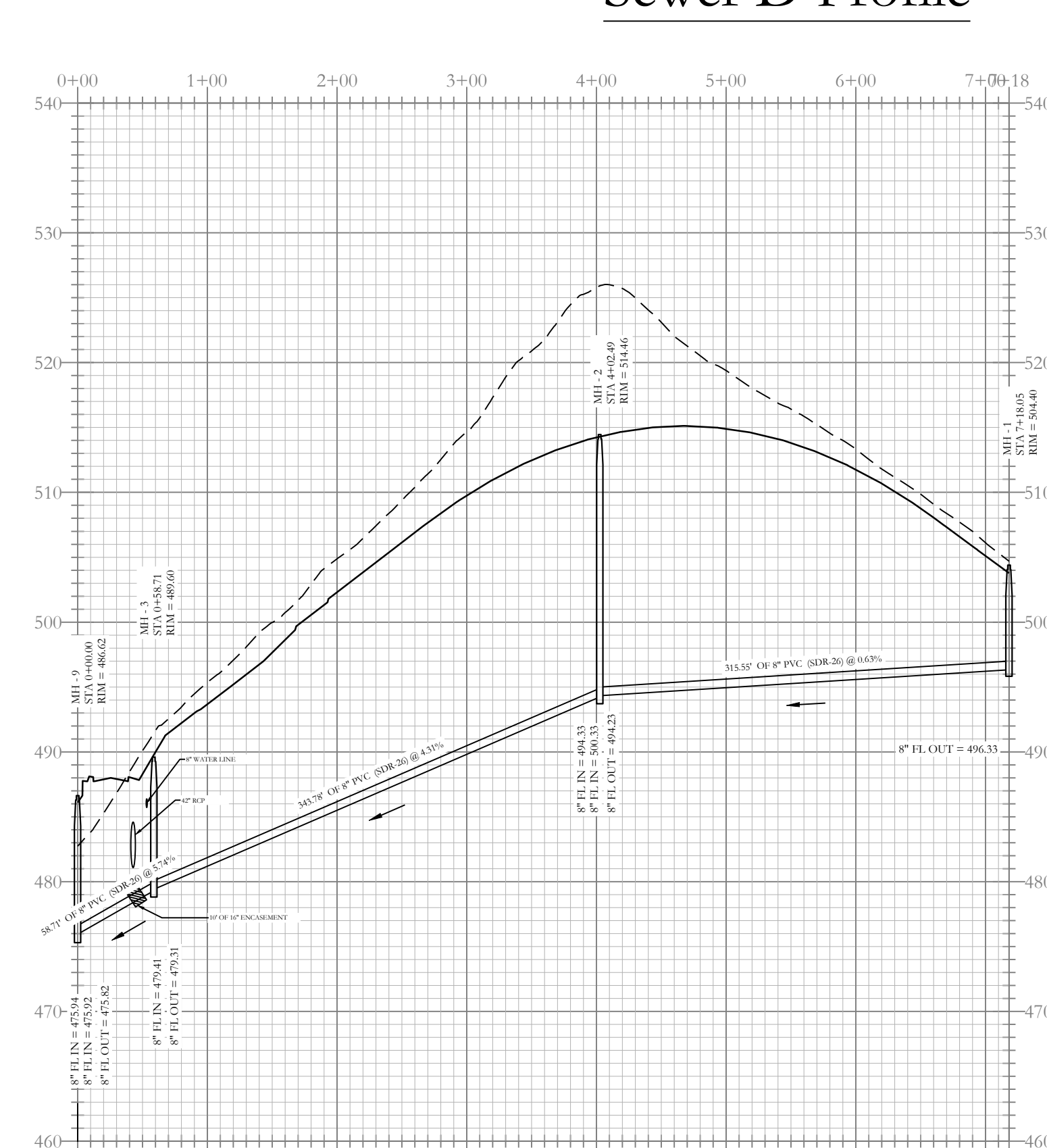
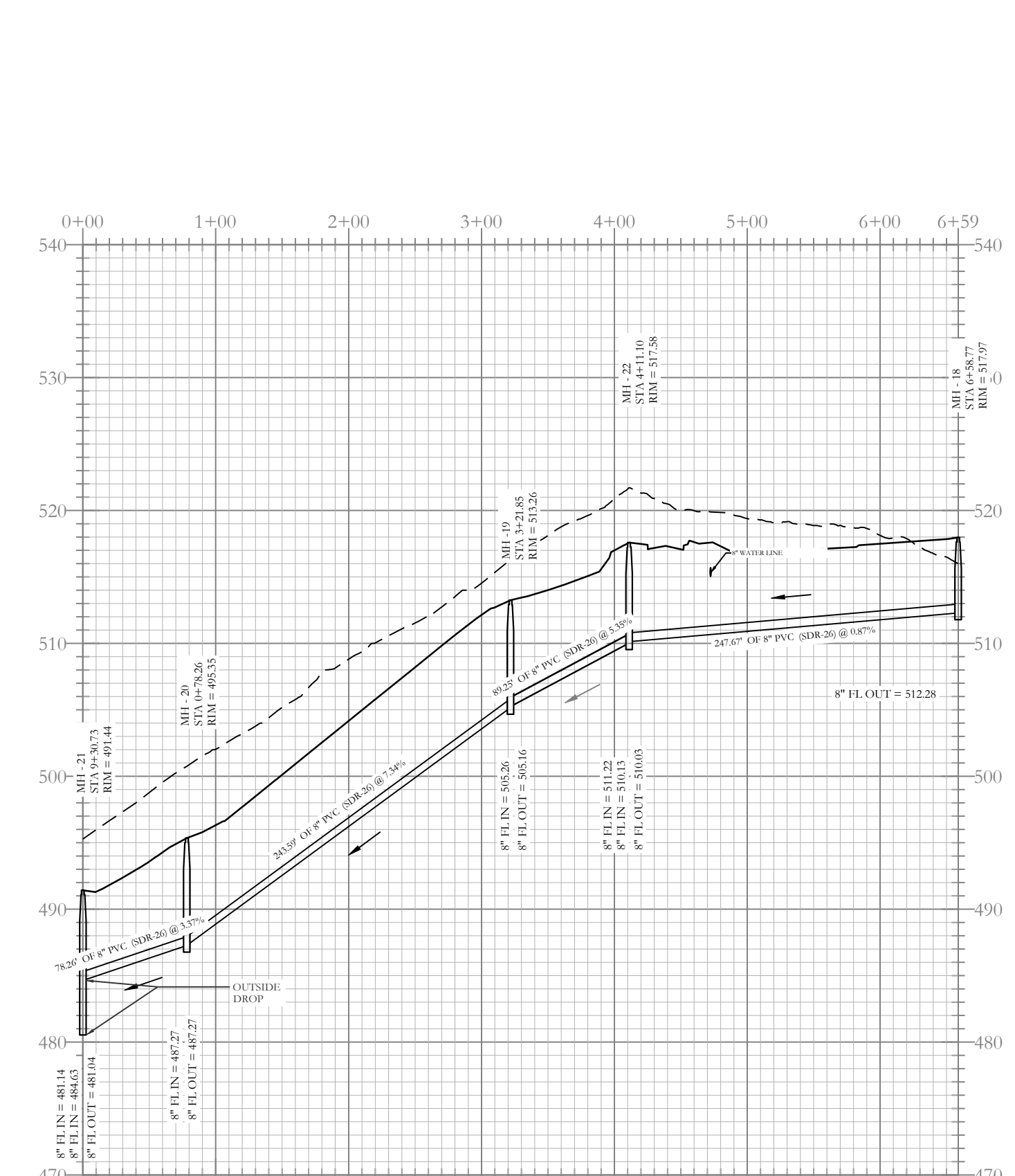
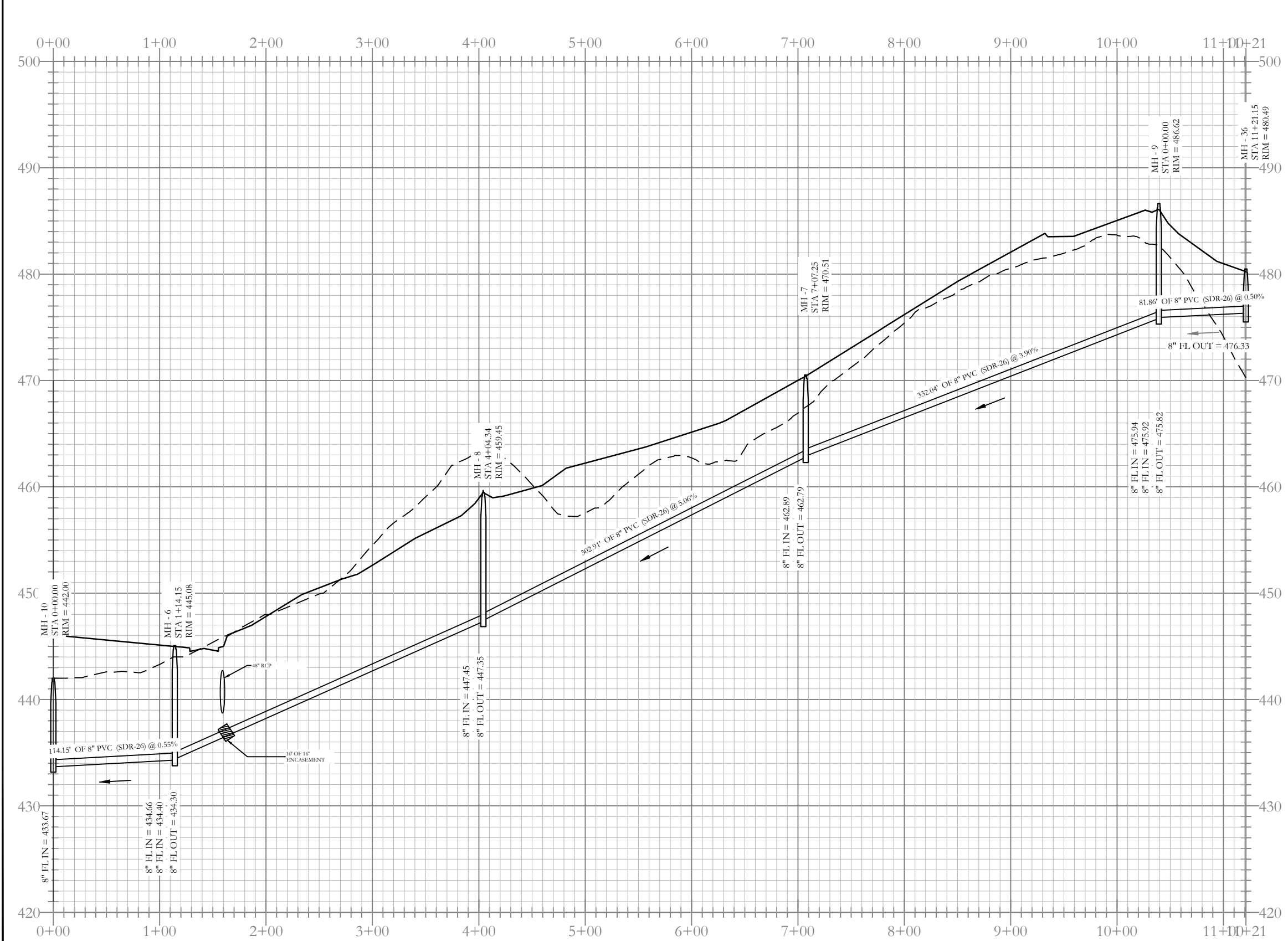
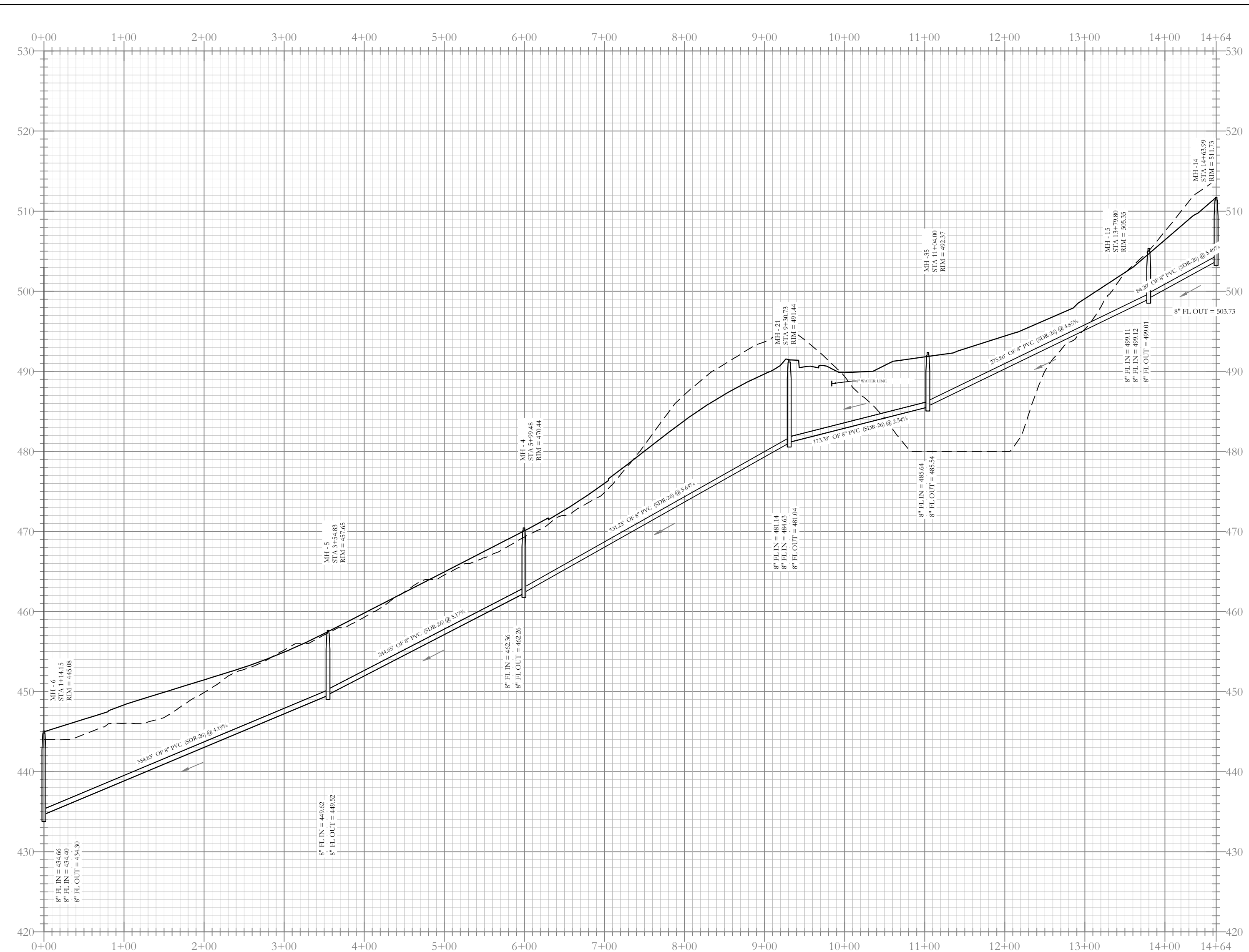
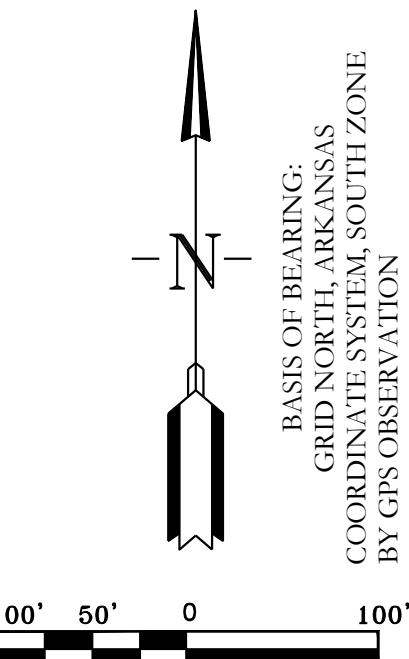
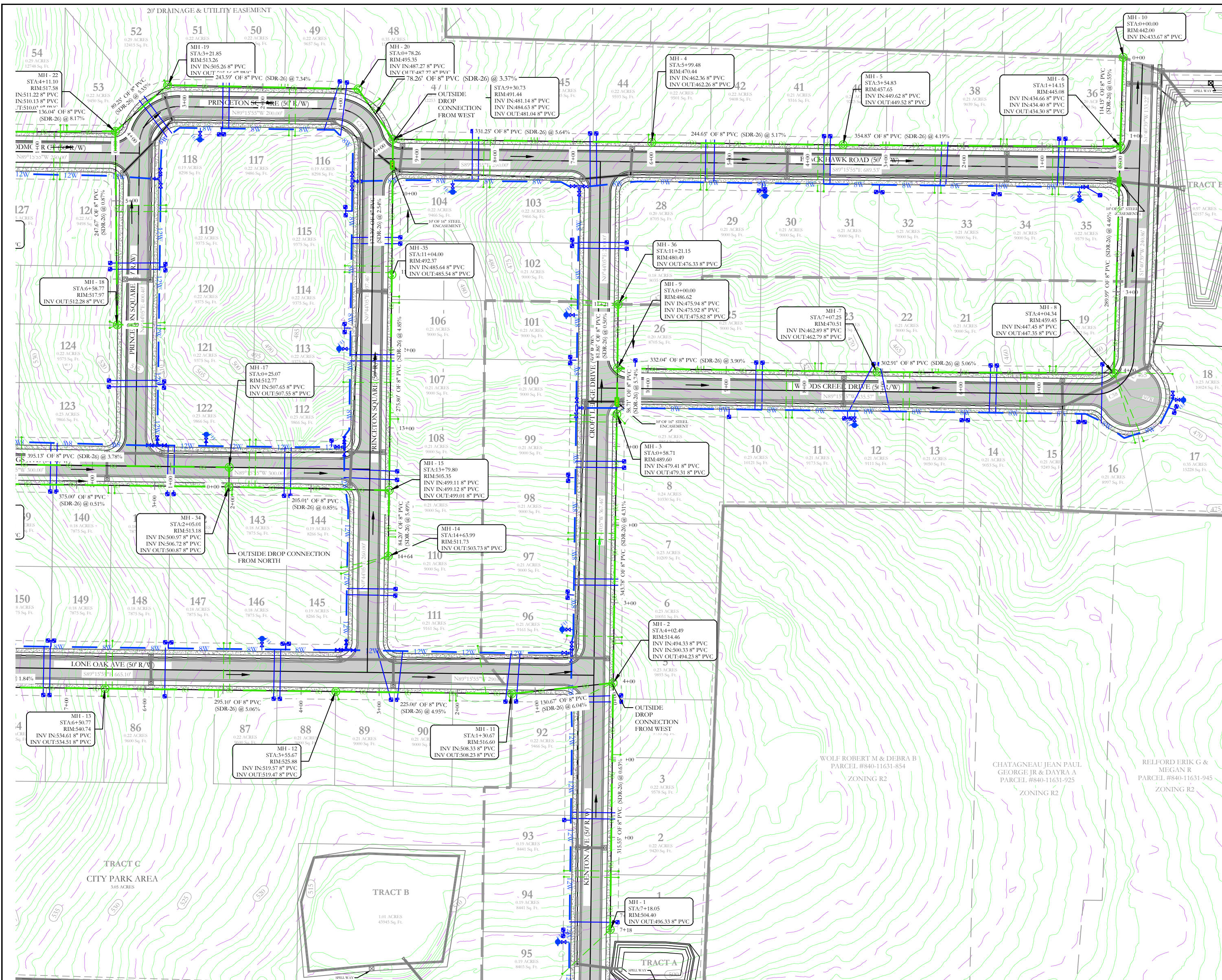
## SUBDIVISION UTILITY PLAN



**WATER LEGEND:**

- DUAL WATER METERS
- SINGLE WATER METER
- GATE VALVE
- 45° FITTING
- 90° FITTING
- TEE FITTING
- CROSS FITTING
- FIRE HYDRANT

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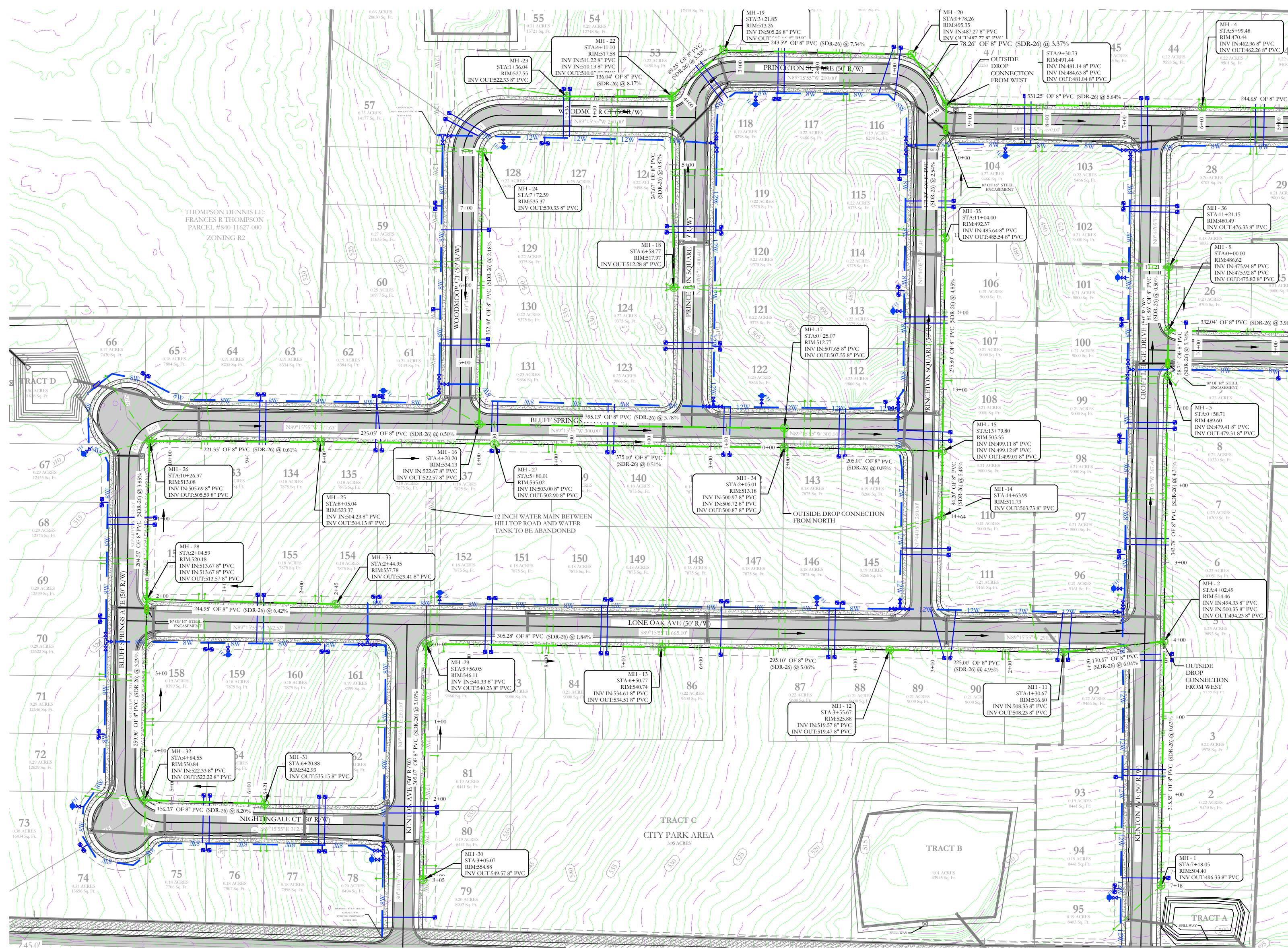
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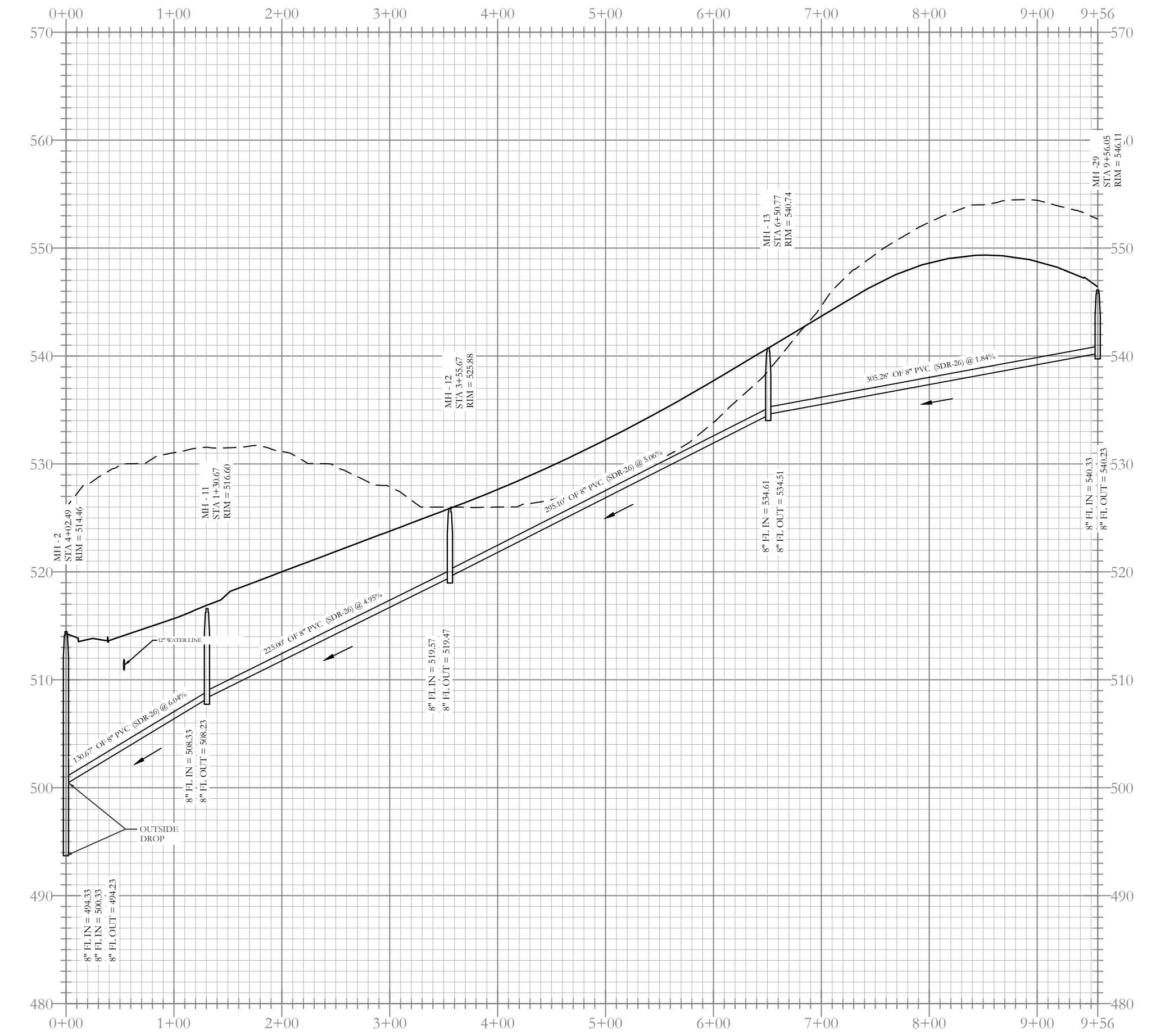
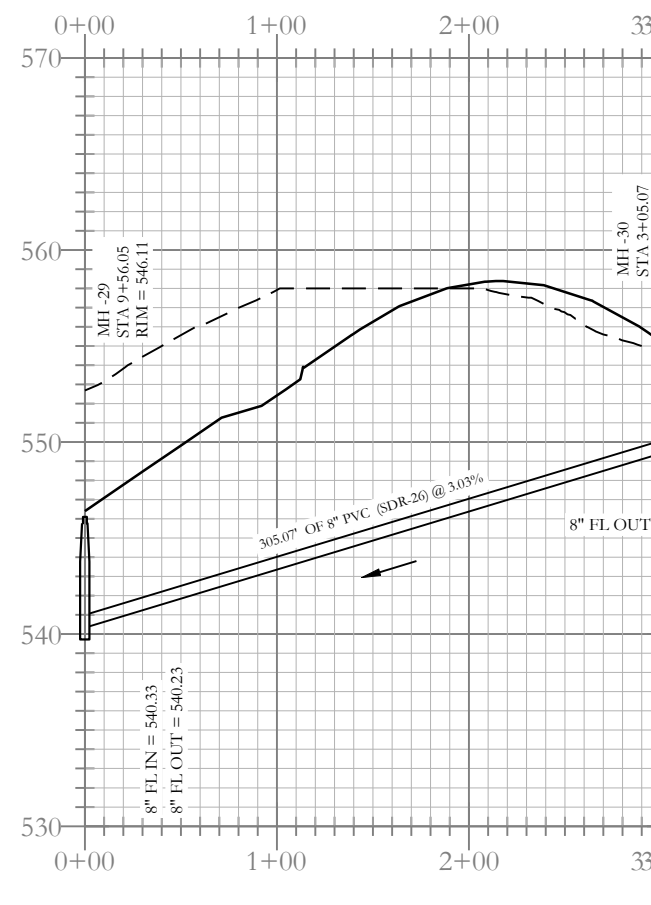
HILLTOP LANDING  
 SEWER PLAN AND PROFILE

A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

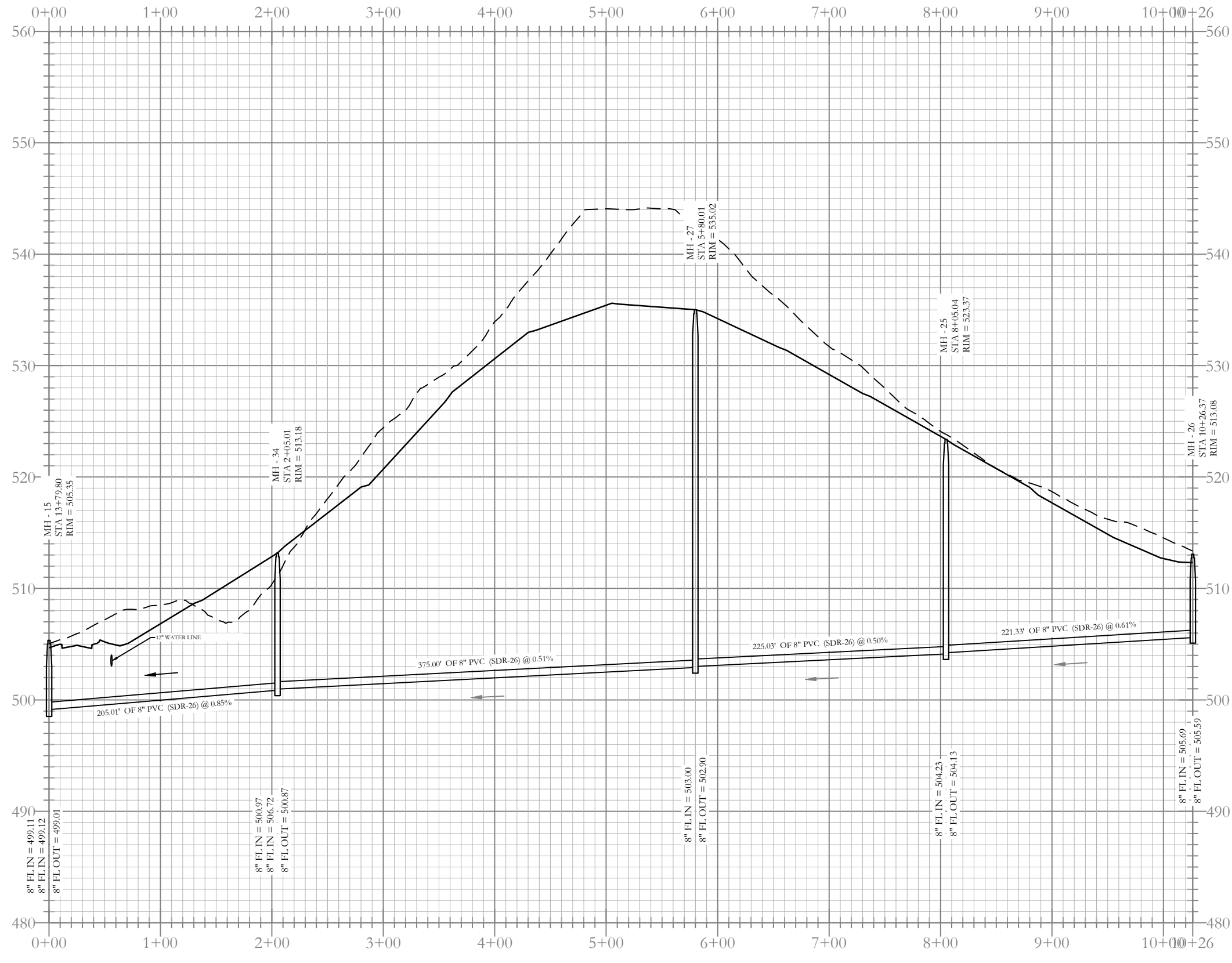
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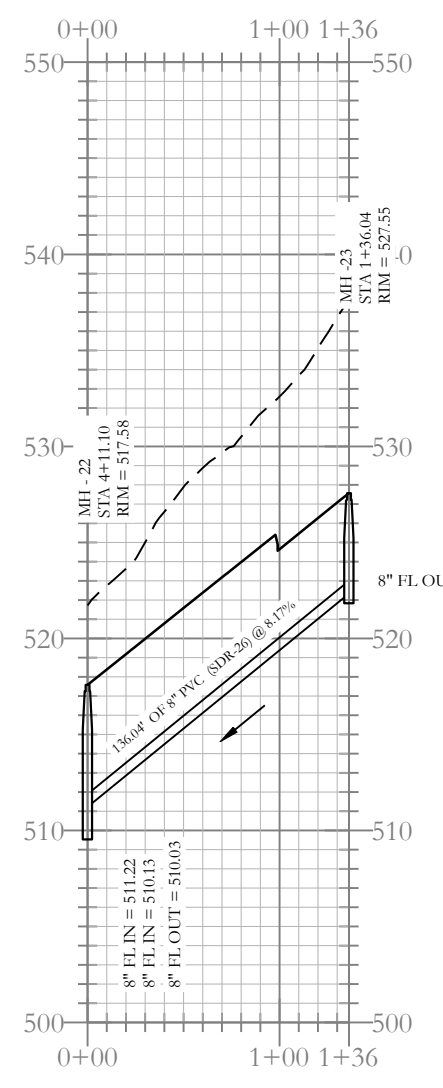
Sewer Entrance-2 Profile



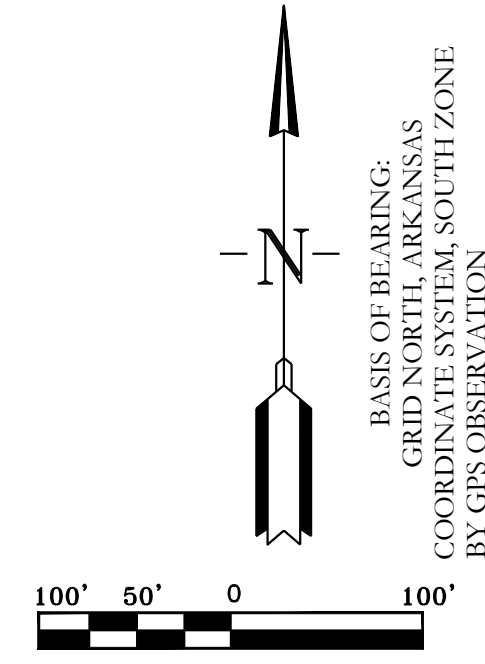
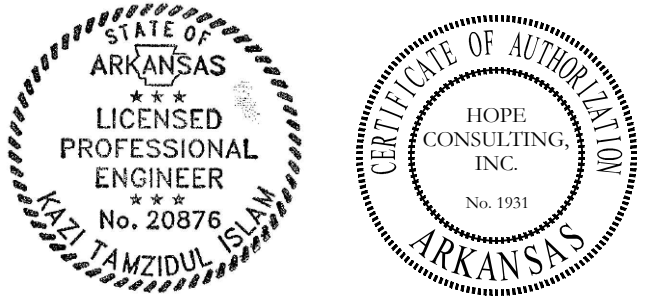
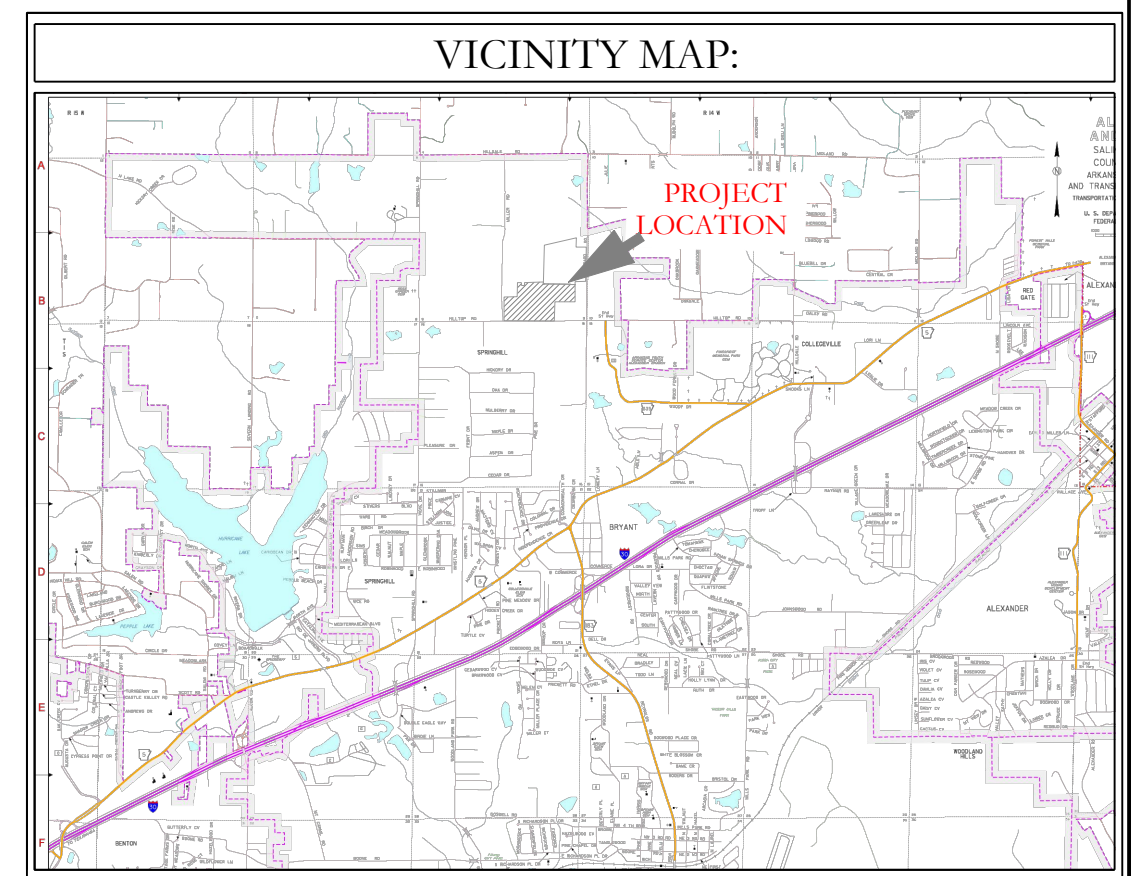
Sewer F-1 Profile



Sewer E-2 Profile



Sewer B-1 Profile

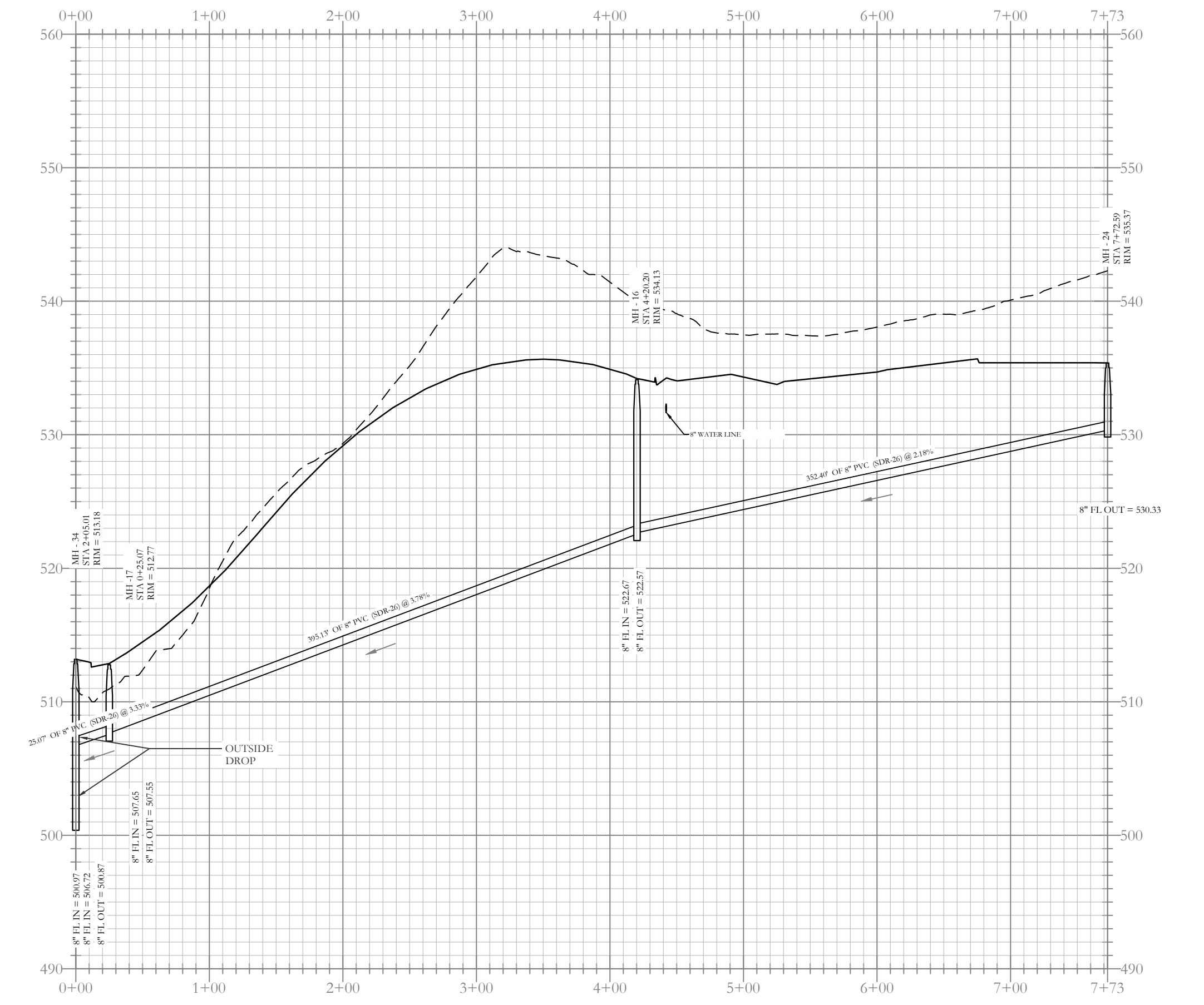
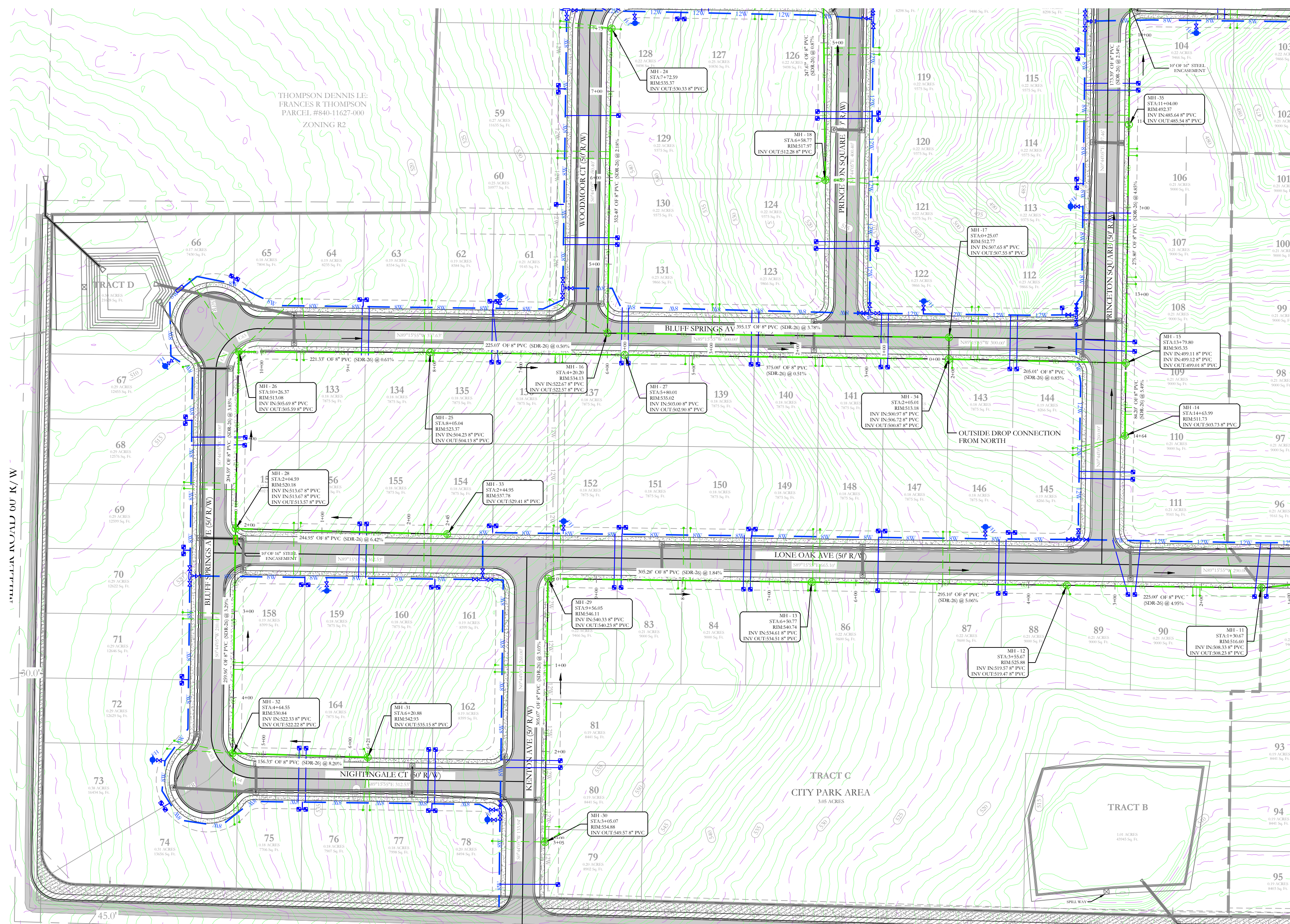


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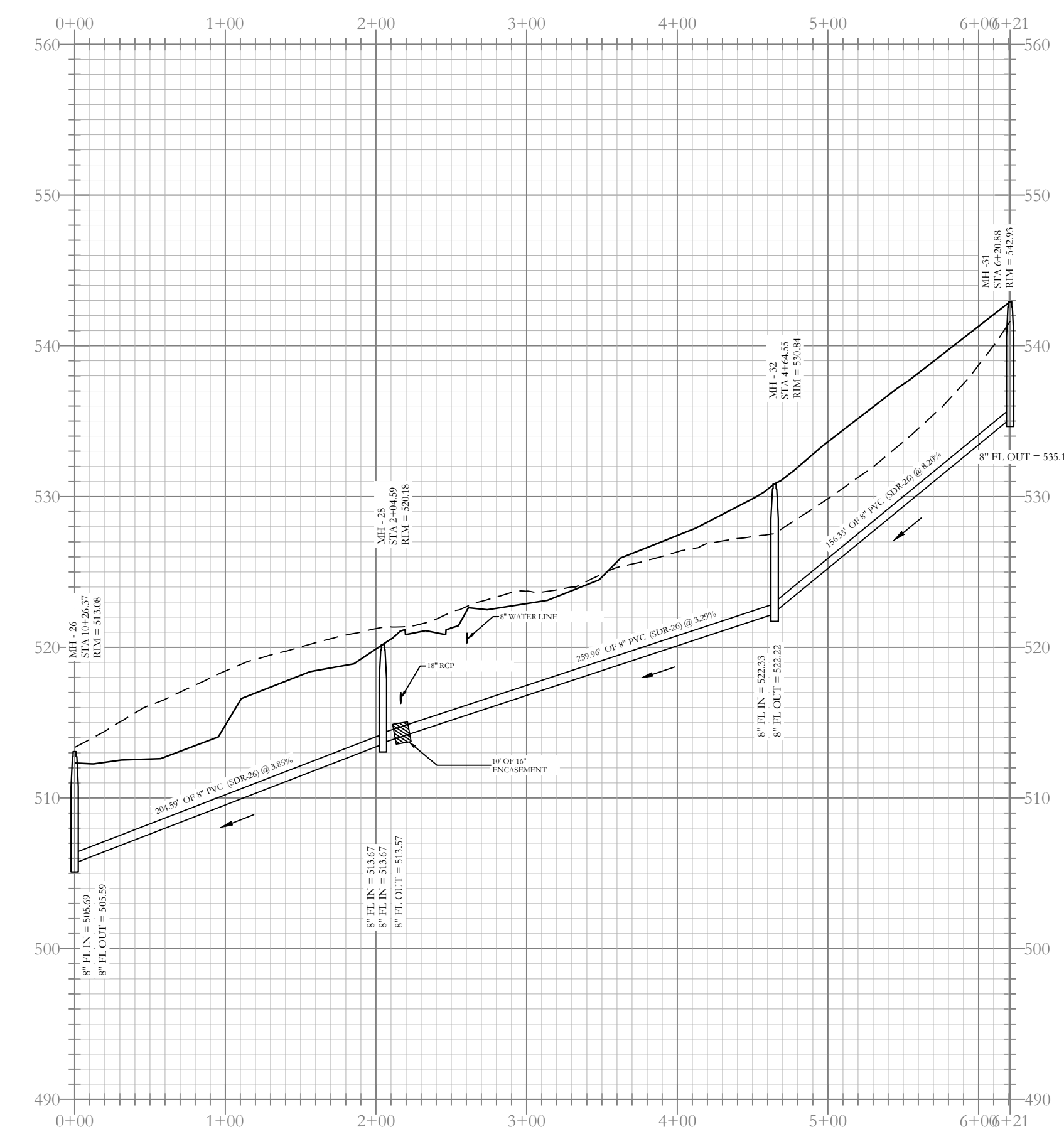
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 SEWER PLAN AND PROFILE  
 A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

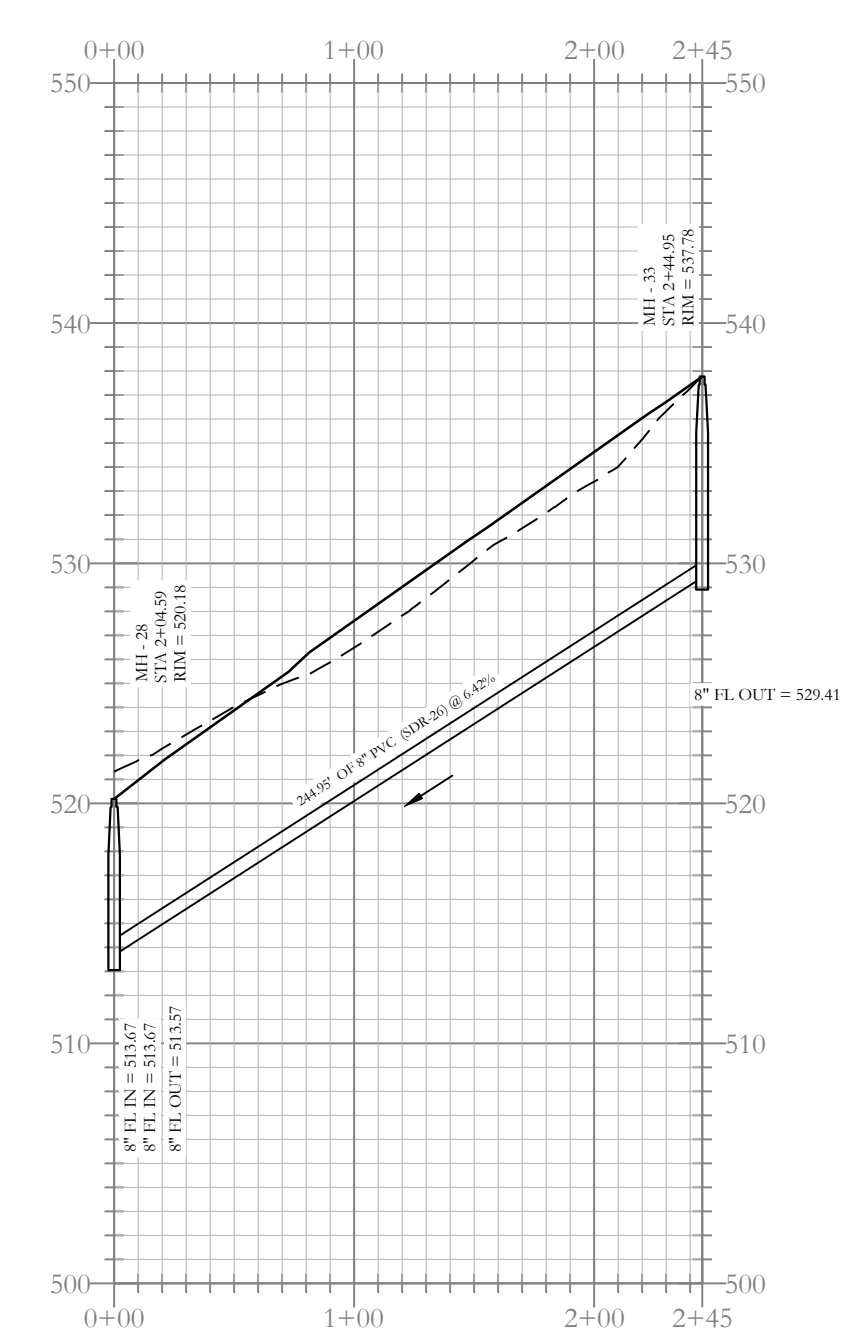
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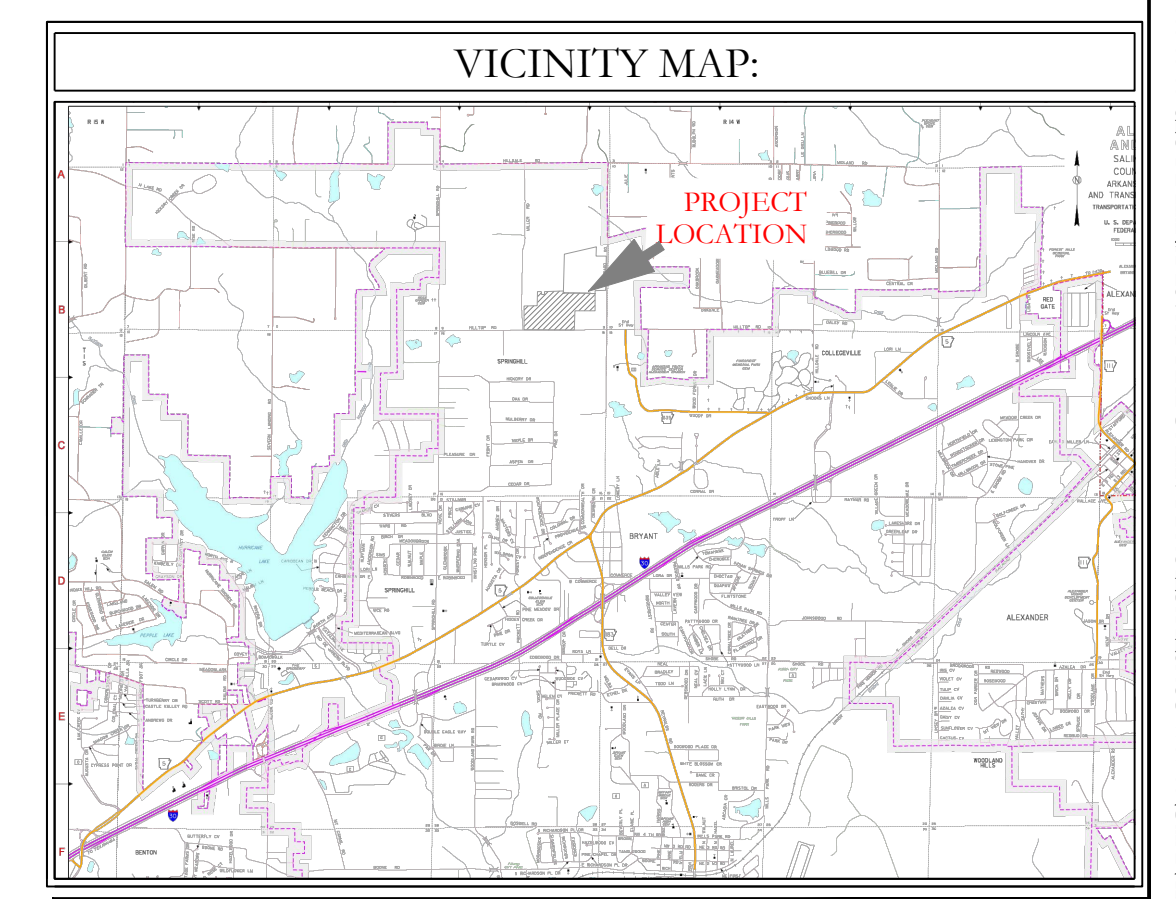
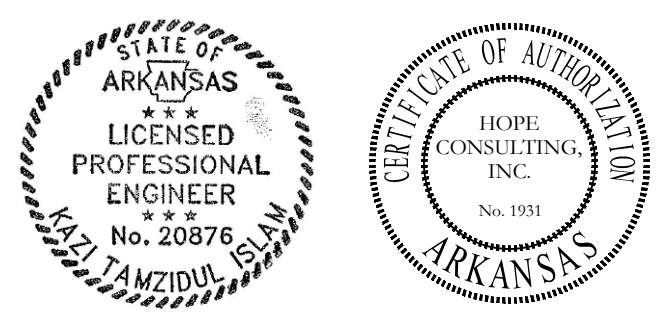
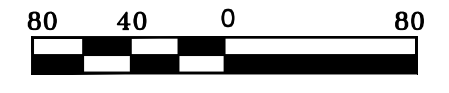
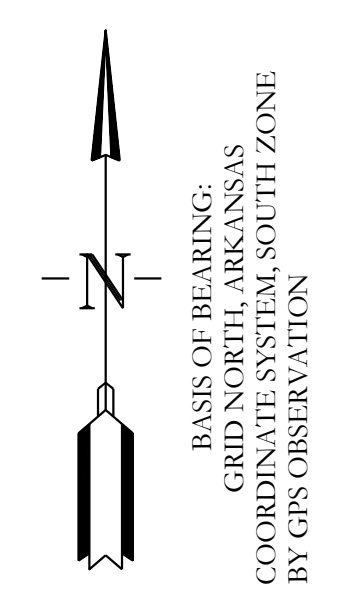
Sewer B-2 Profile



Sewer E-1 Profile



Sewer F-2 Profile

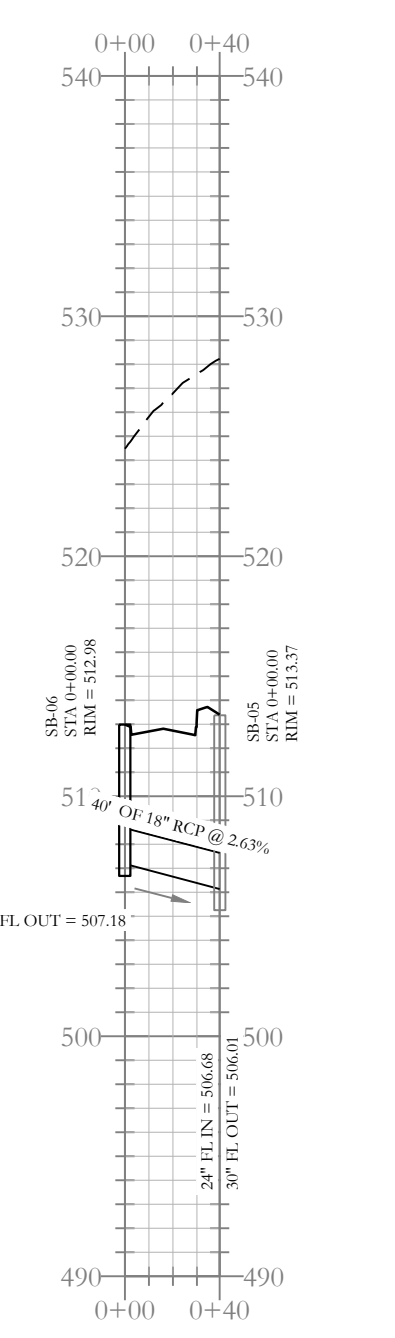
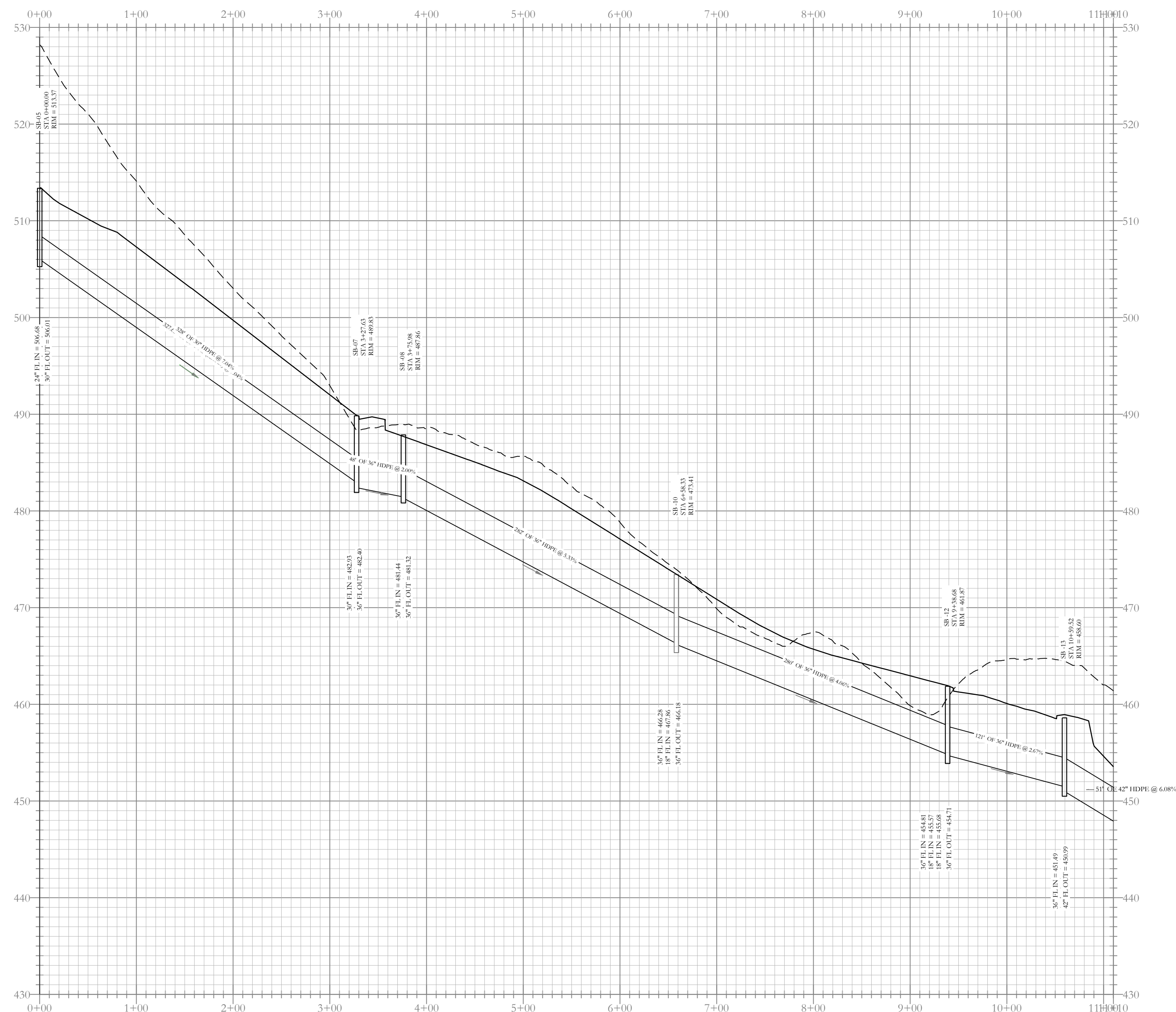


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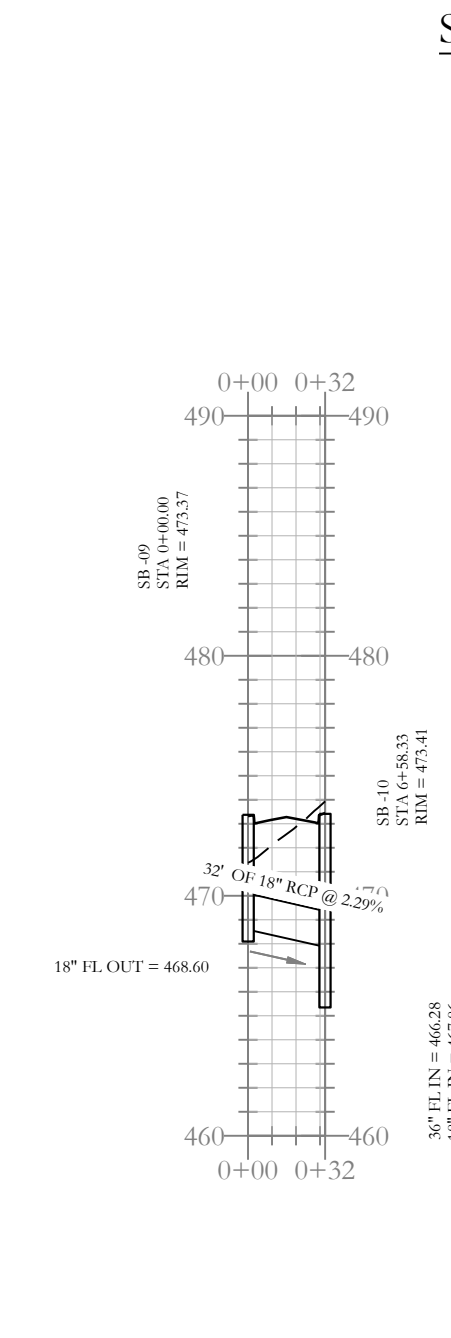
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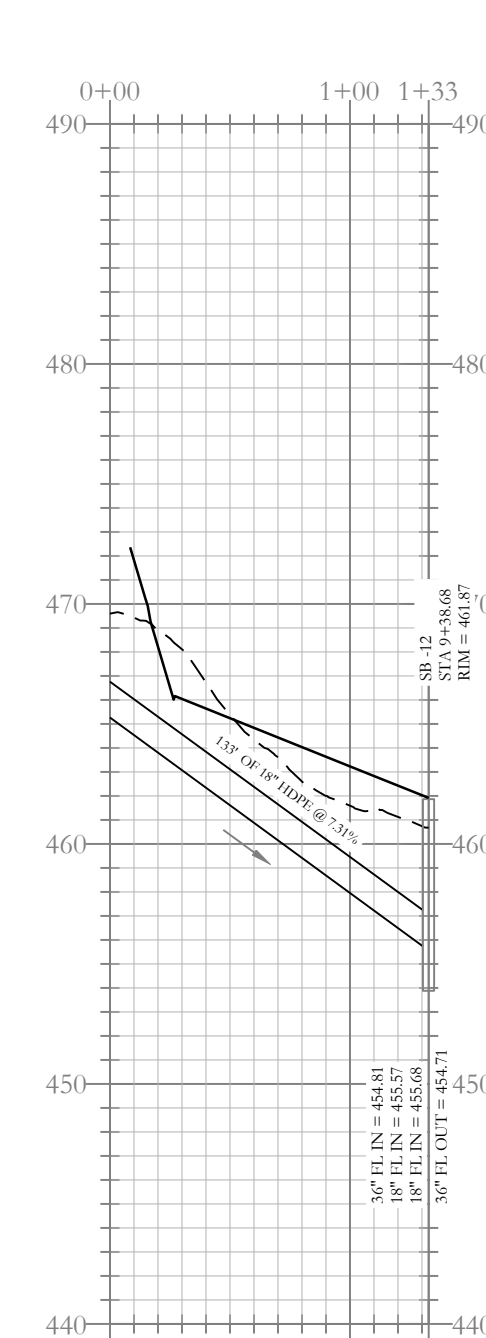


Stormwater A(i) Profile

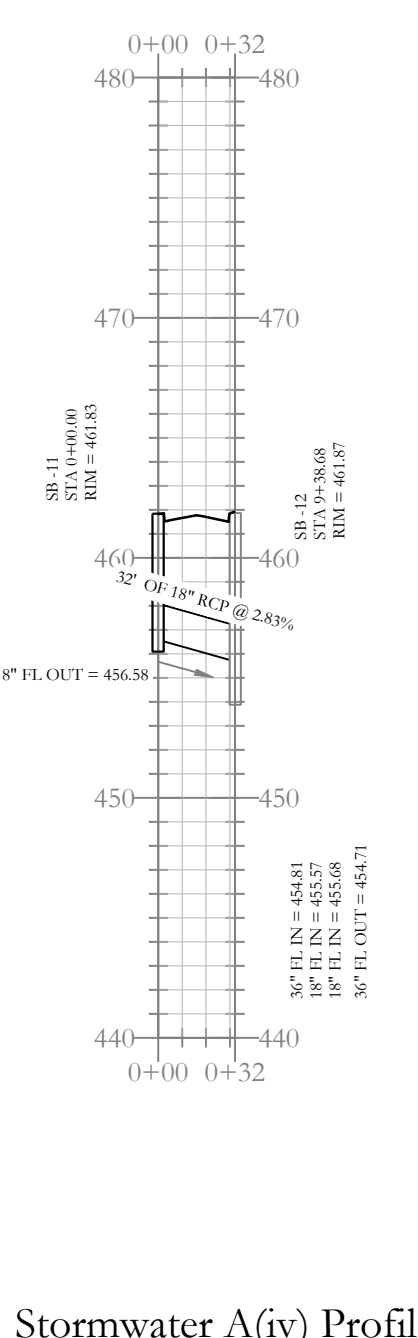


Stormwater A(ii) Profile

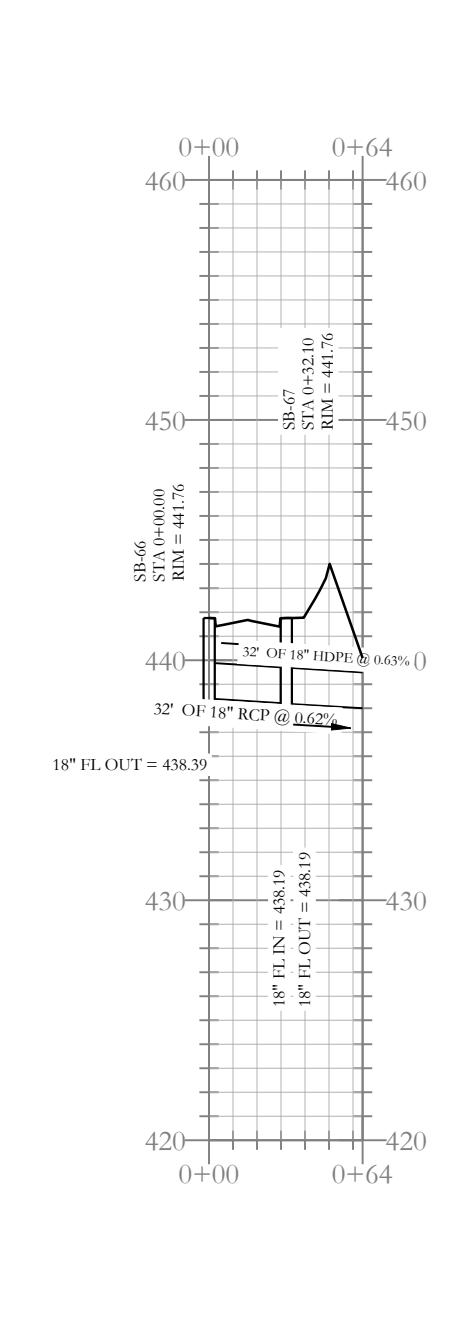
Stormwater A Profile



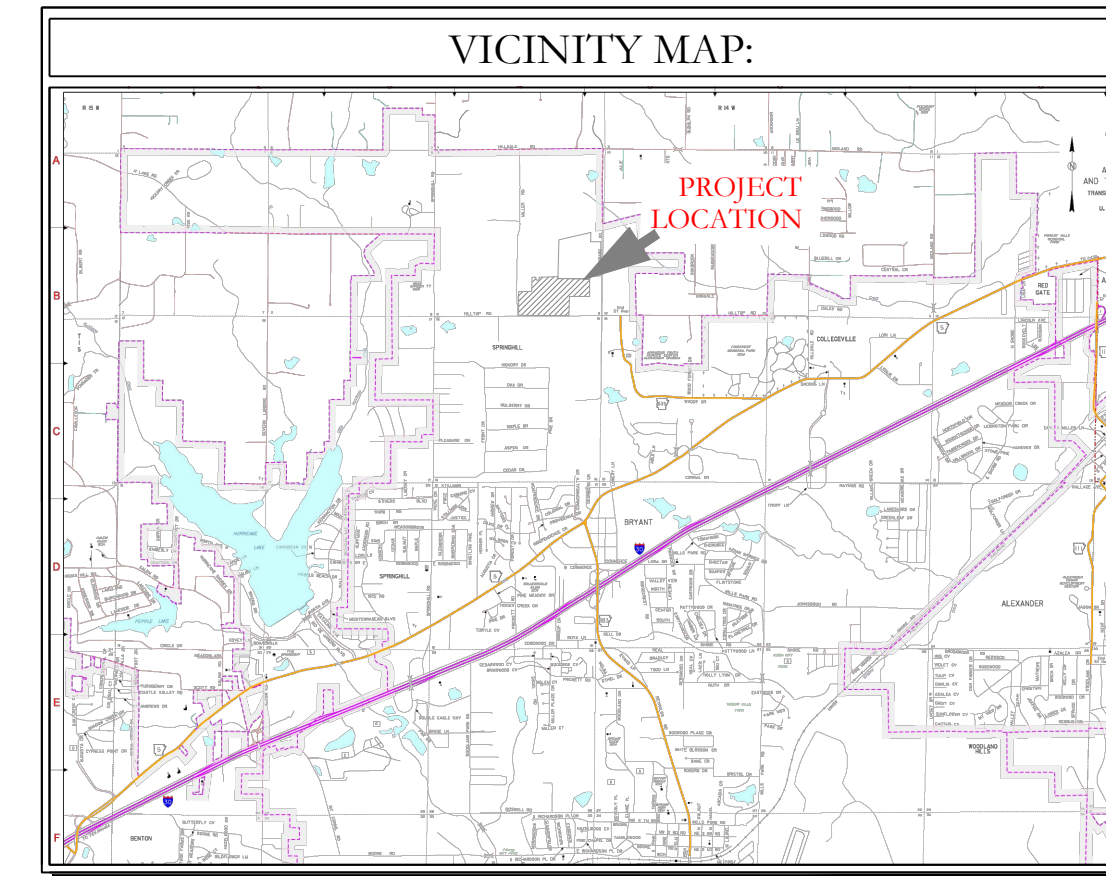
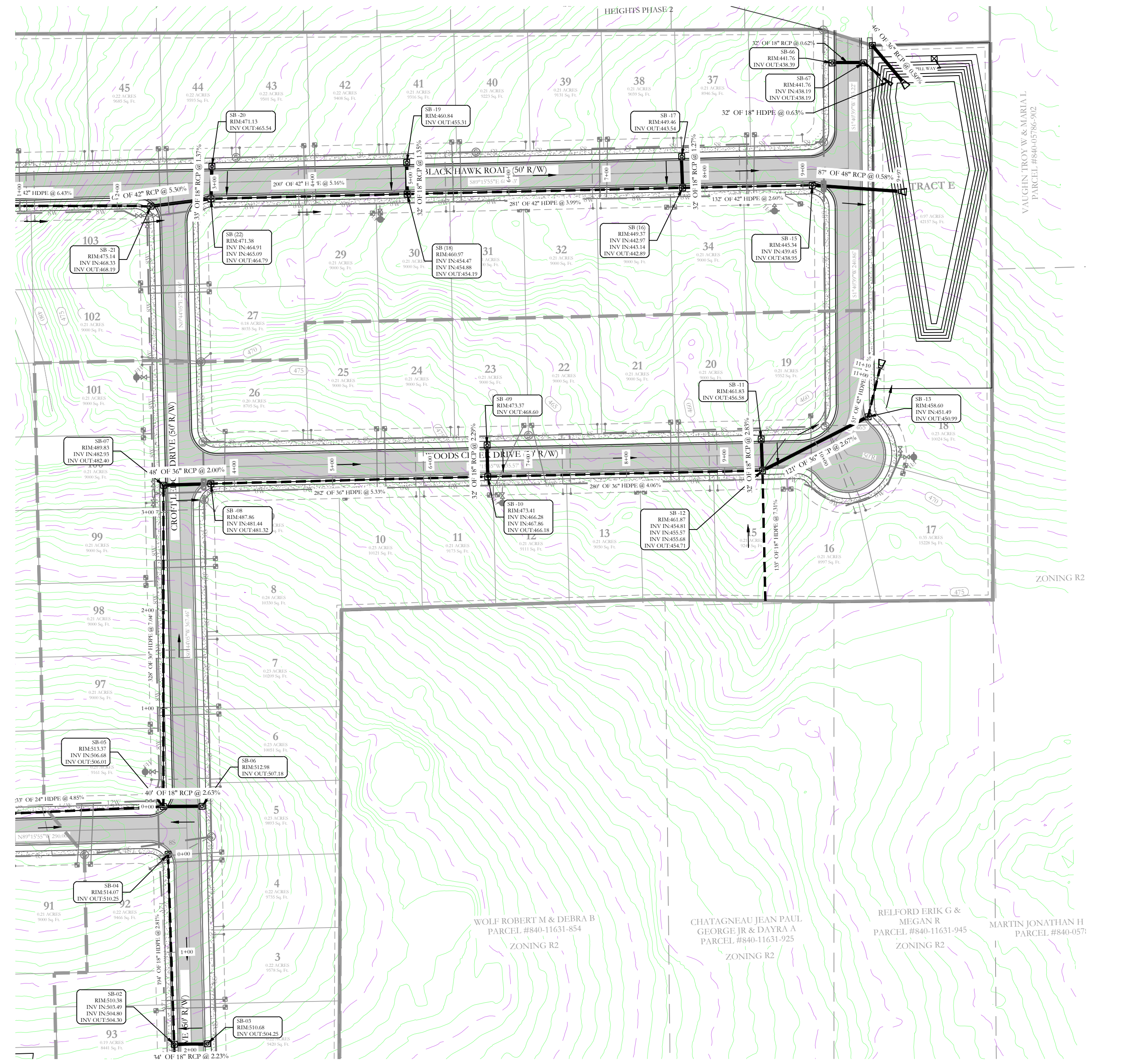
Stormwater A(iii)-Pipe behind the property Profile



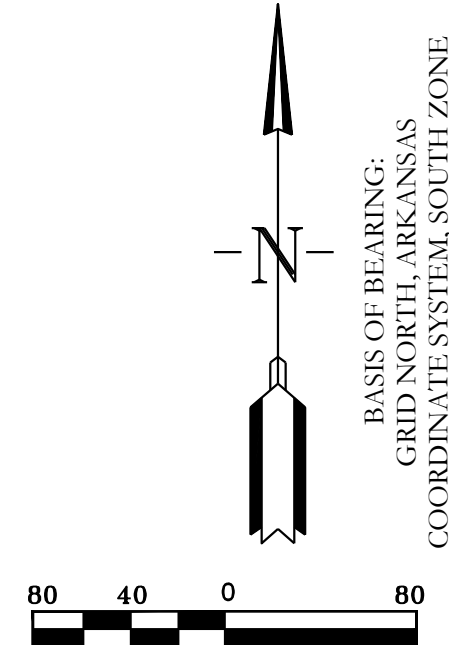
Stormwater A(iv) Profile



Stormwater A(v) Profile



--- HDPE  
 — RCP



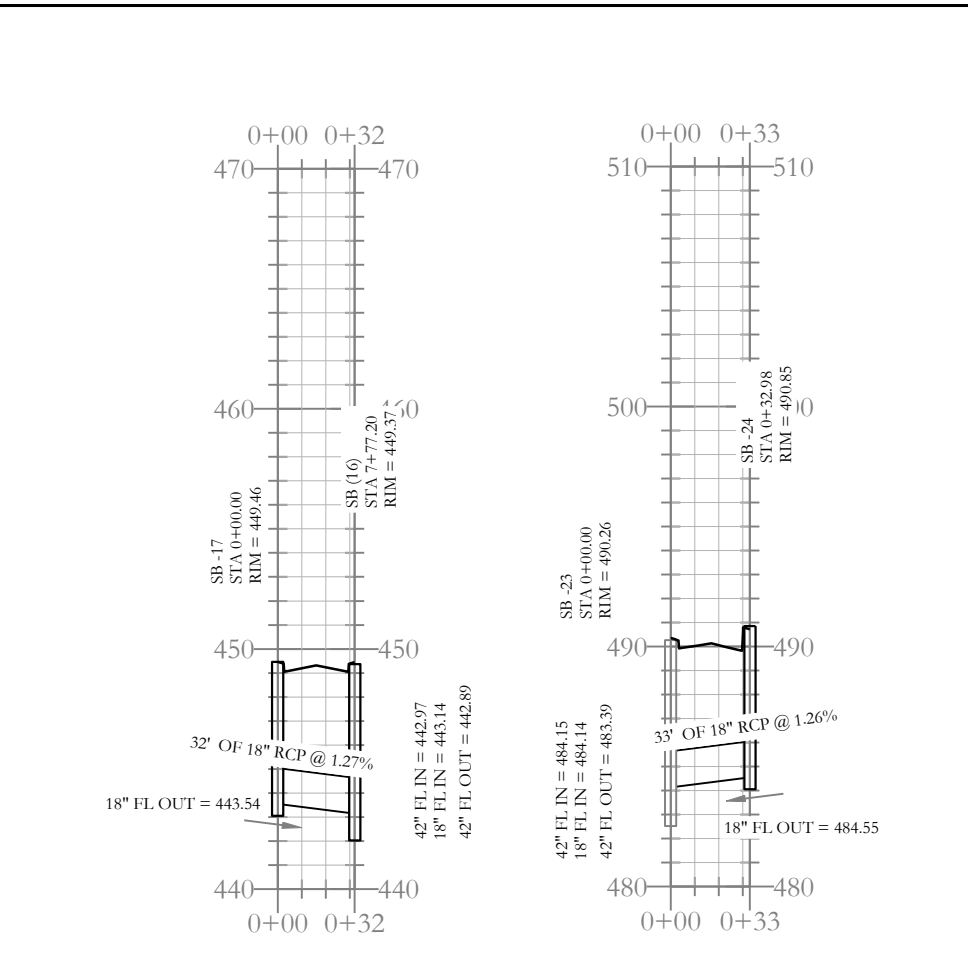
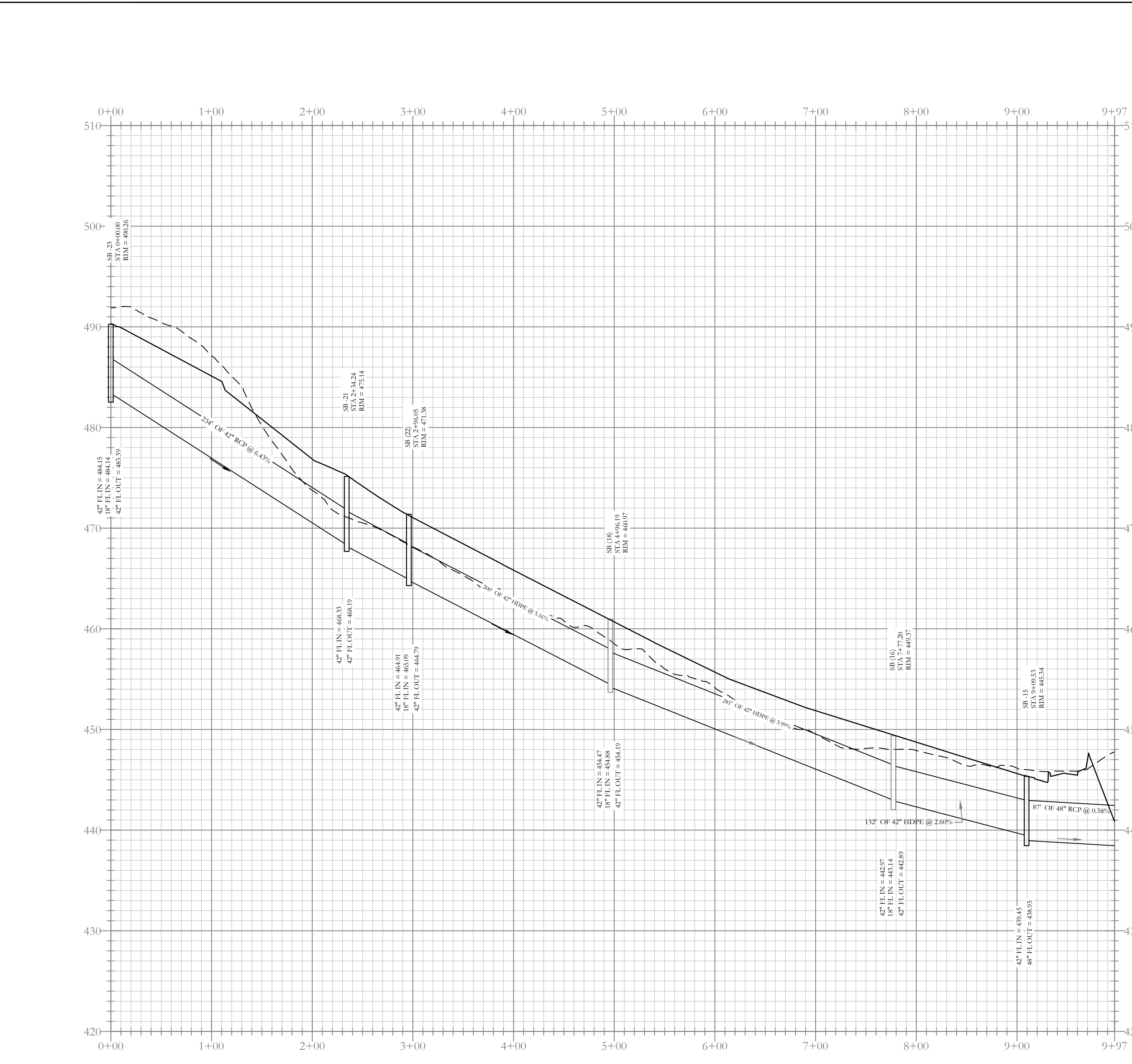
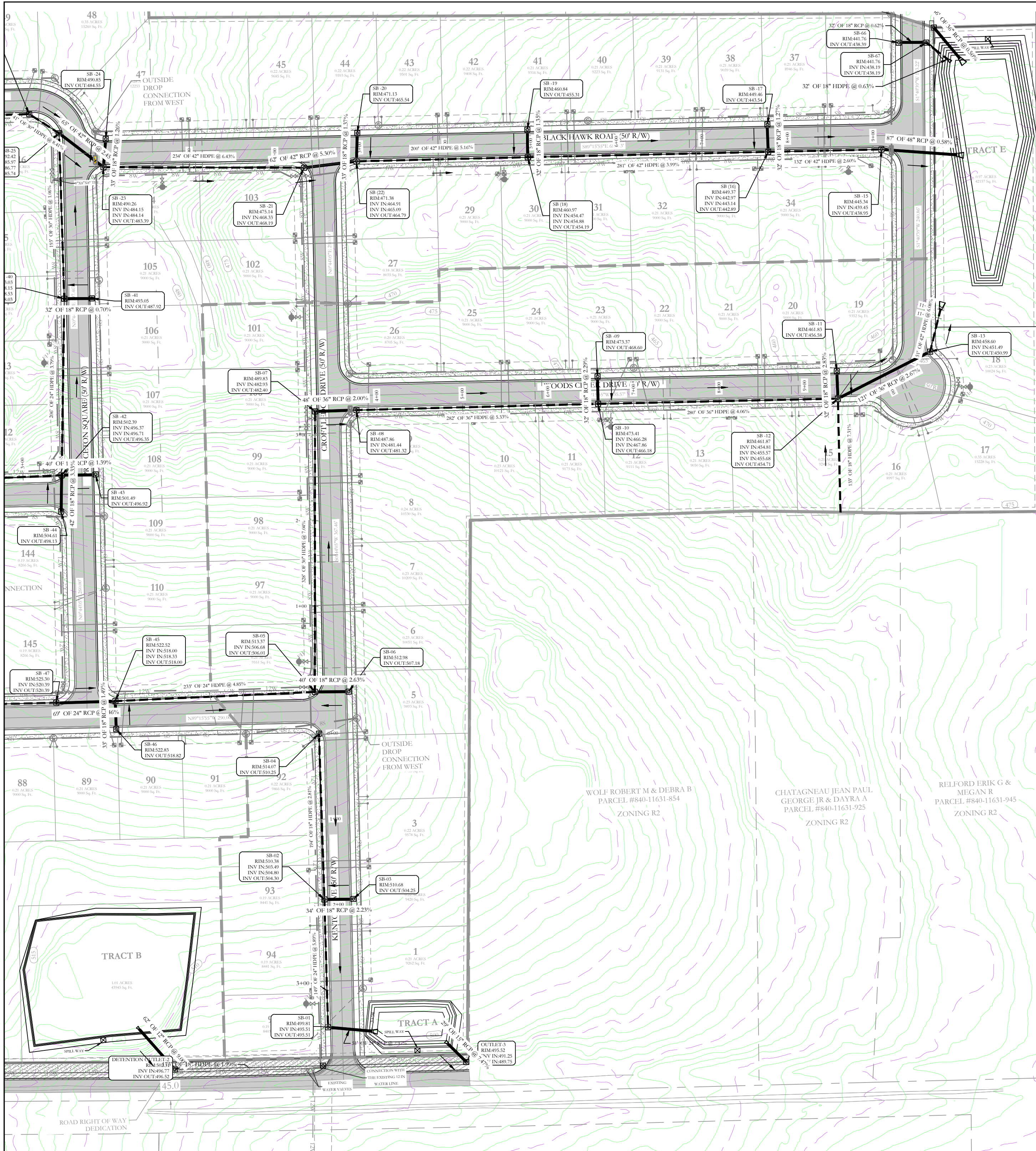
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 PH. (501)315-2626  
 FAX (501) 315-0024  
 www.hopeconsulting.com

FOR USE AND BENEFIT OF:  
**NXT GEN HOMES LLC.**

**HILLTOP LANDING**  
 STORM DRAINAGE PLAN AND PROFILE  
 A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

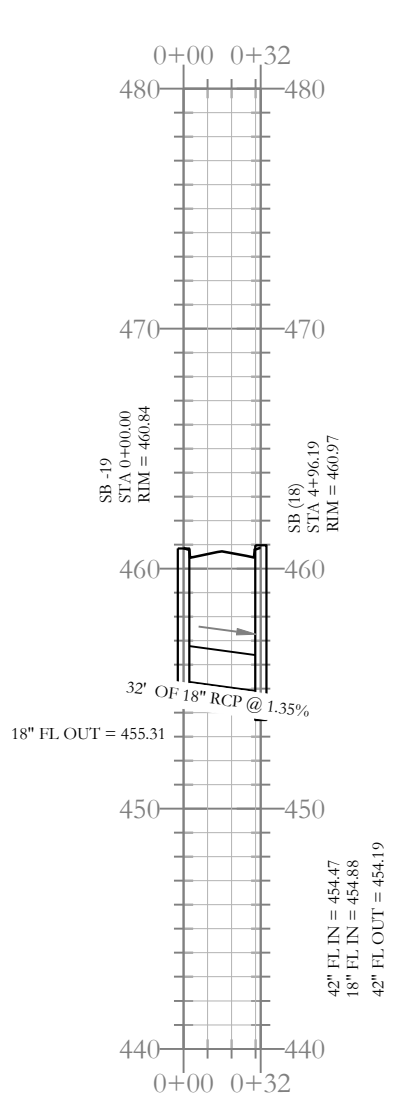
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REVISION:	CHECKED BY:	<b>20-1341</b>
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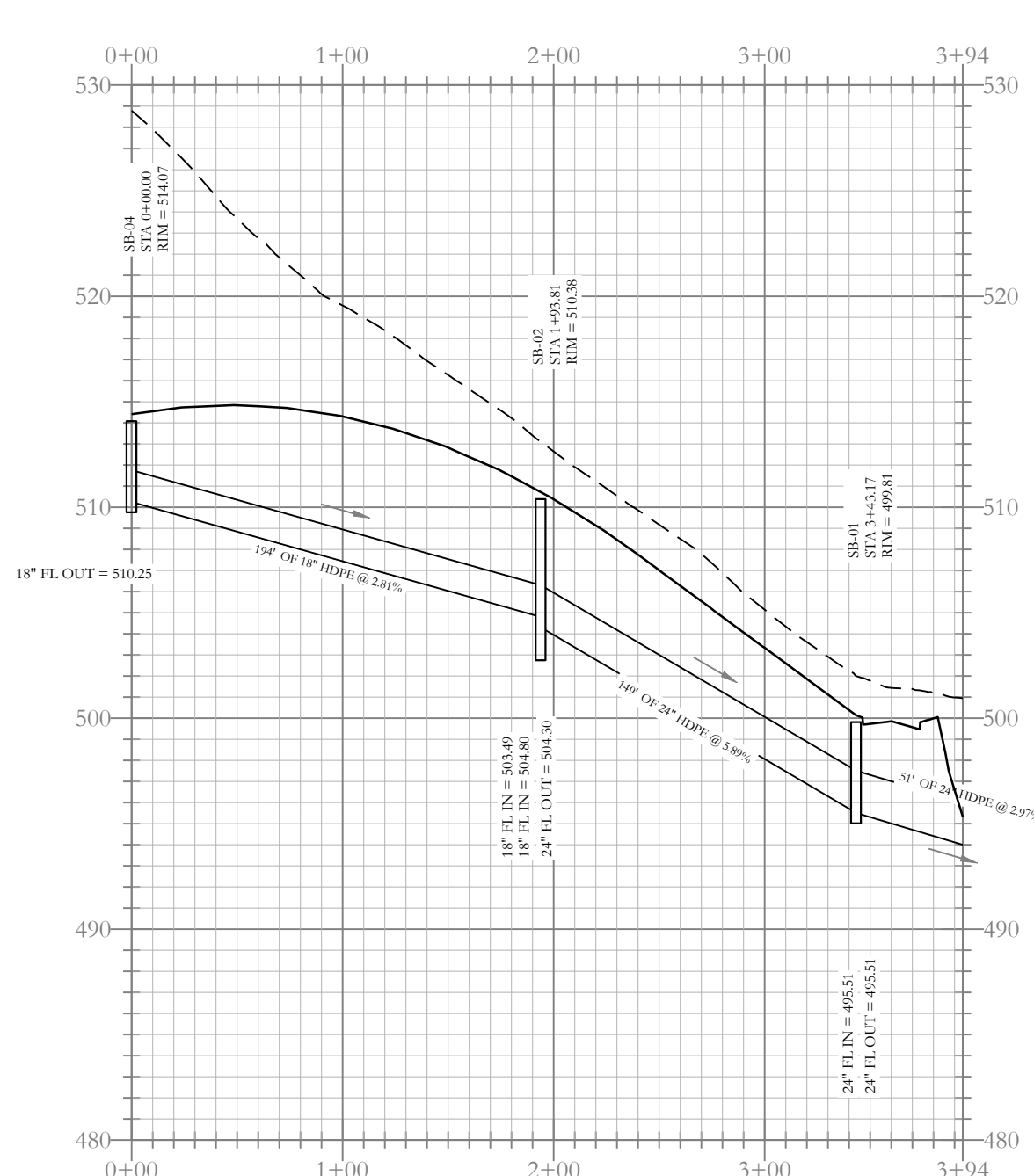
Stormwater G(b) Profile

Stormwater G(c) Profile

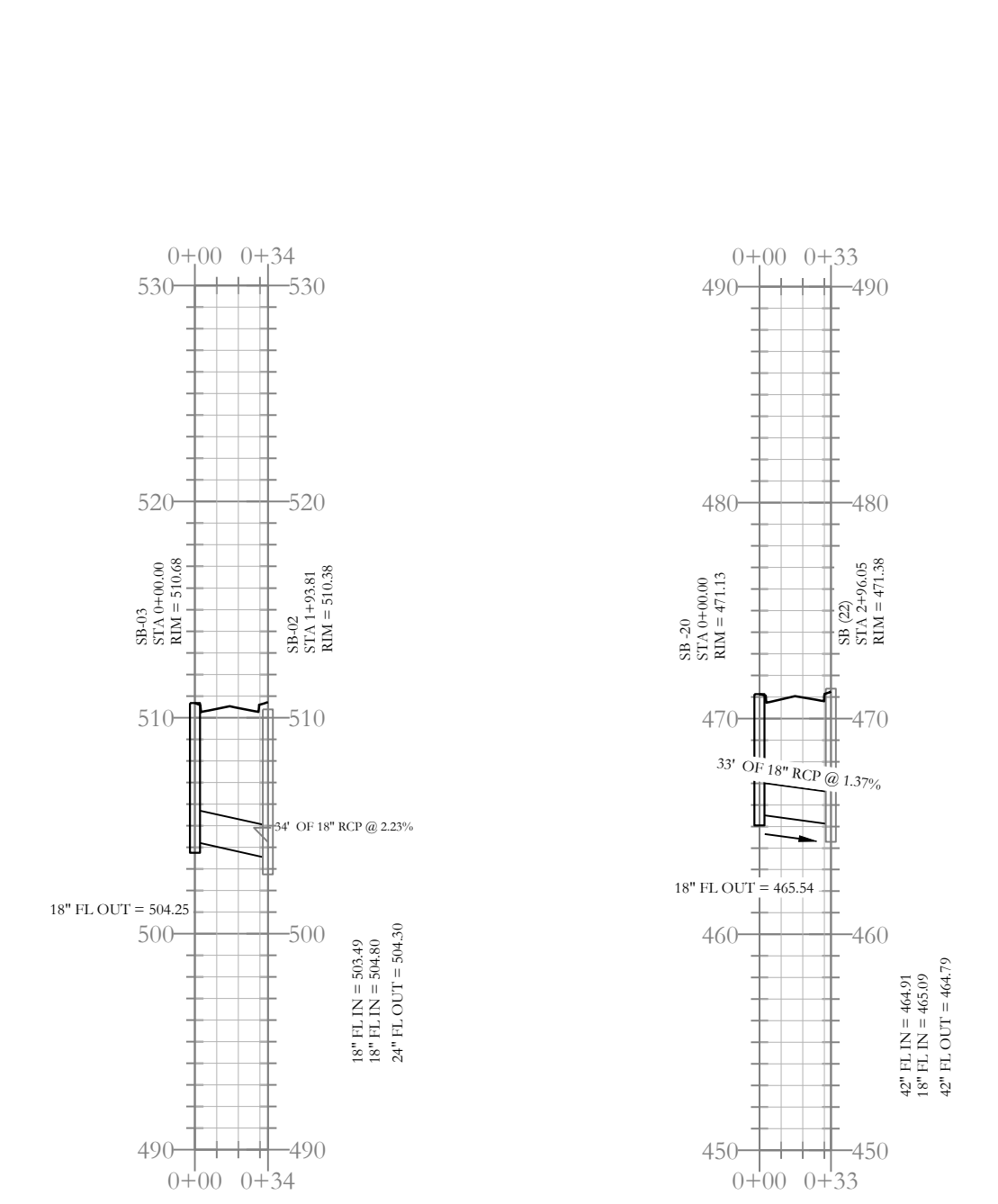


Stormwater G(a) Profile

Stormwater G Profile

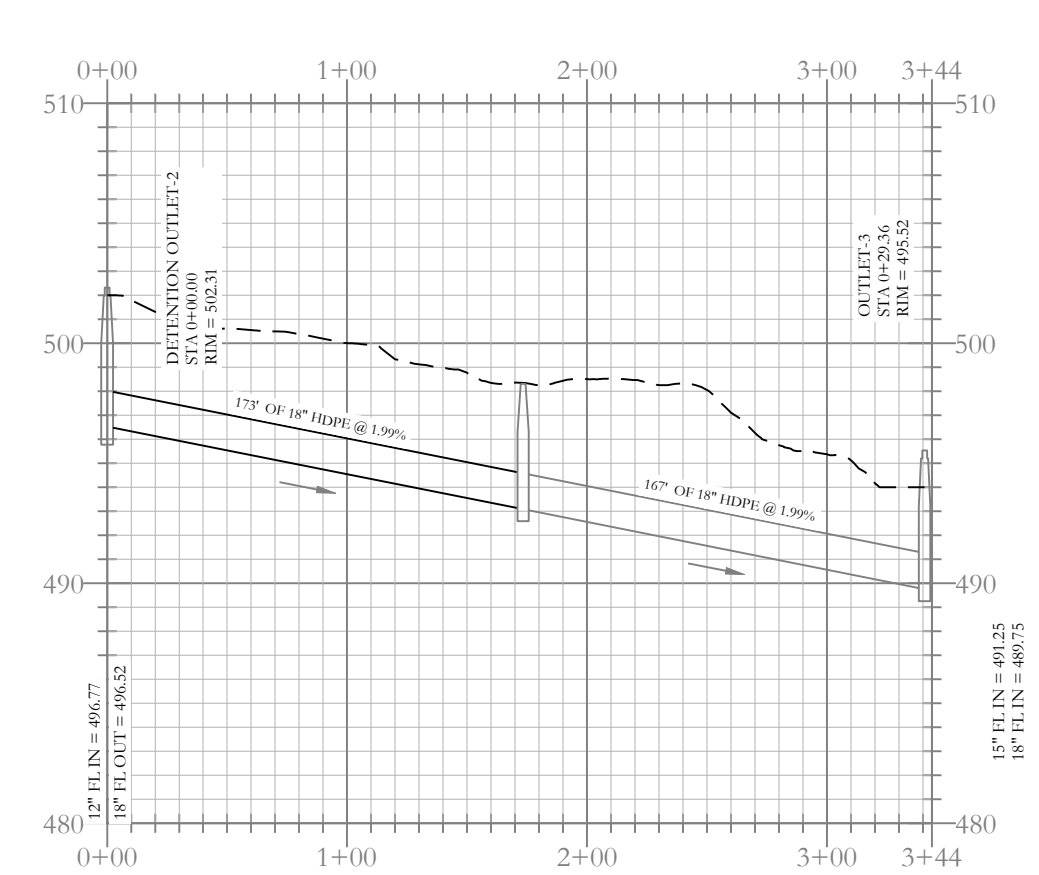


Stormwater Entrance Profile

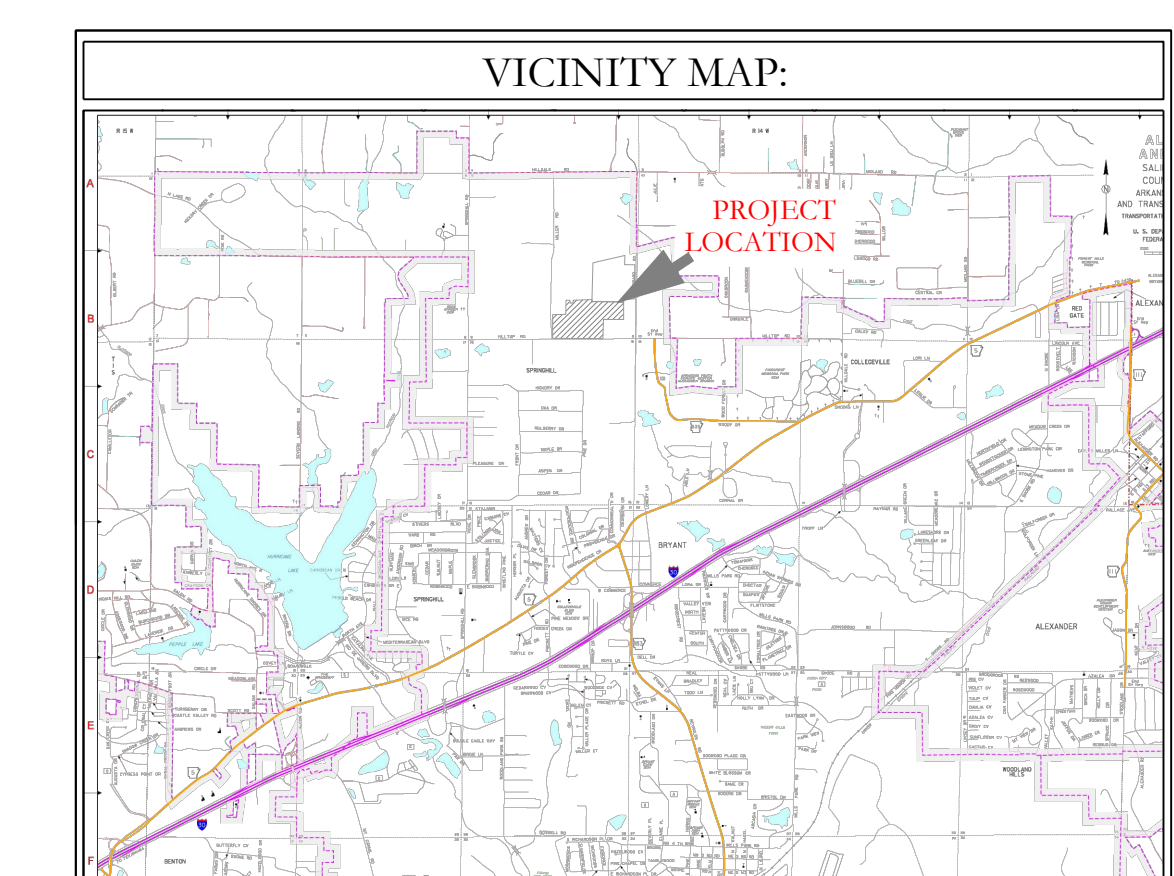


Stormwater Entrance-i Profile

Stormwater G(d) Profile



Detention Outlet to ditch Profile



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**HILLTOP LANDING**  
**STORM DRAINAGE PLAN AND PROFILE**  
A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

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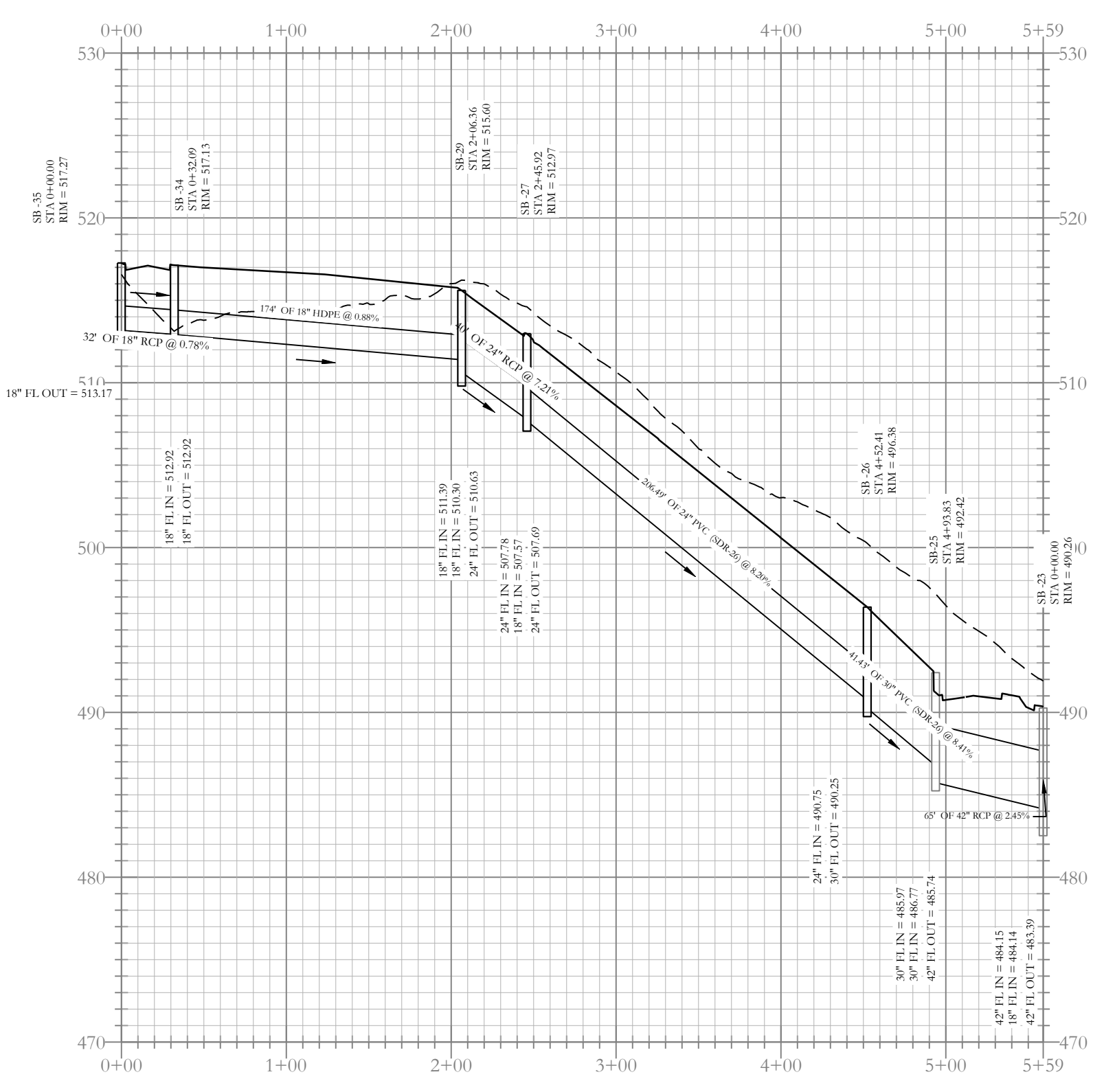
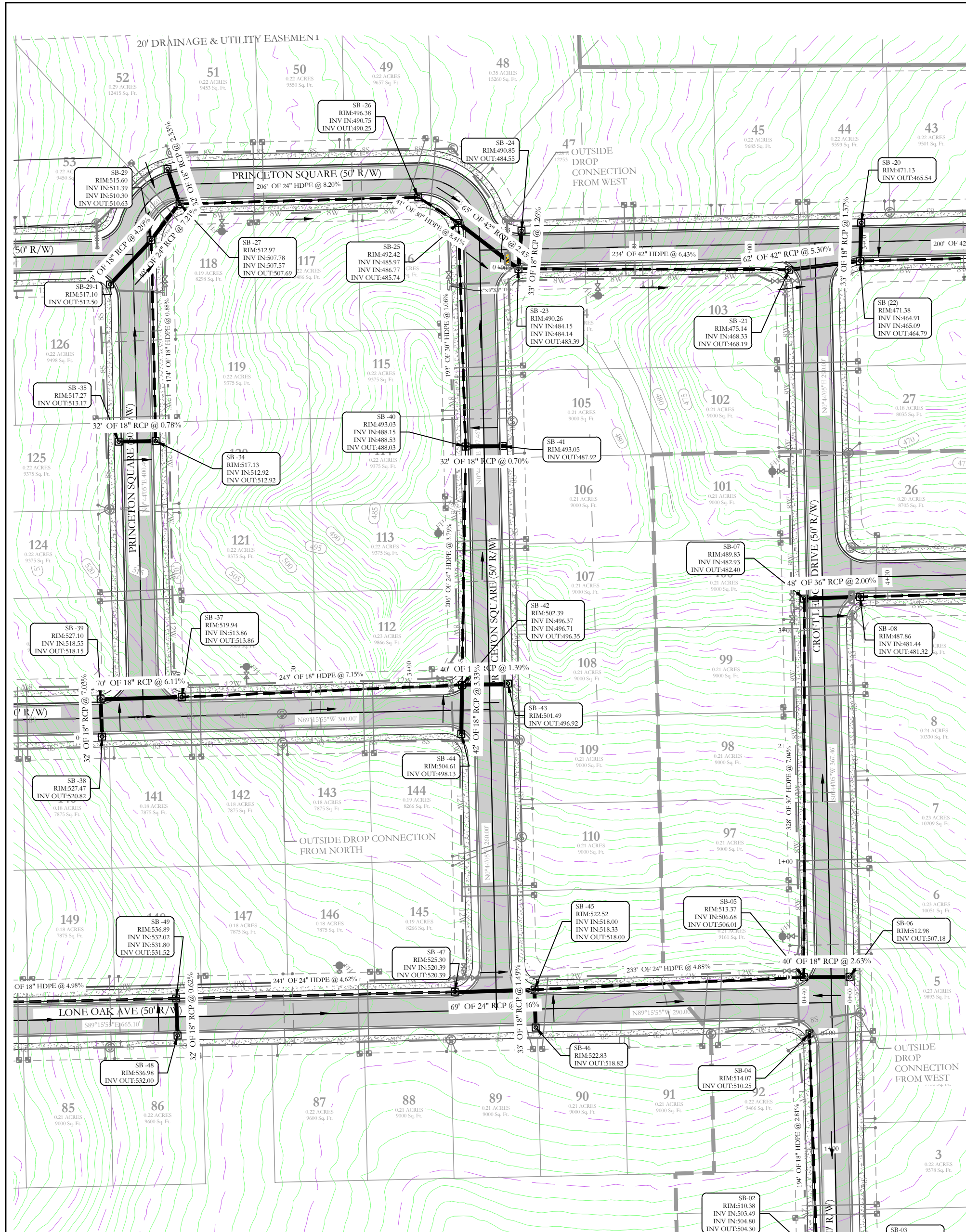
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STATE OF ARKANSAS  
LICENSED PROFESSIONAL ENGINEER  
No. 20876  
AMZIDUL HOPE

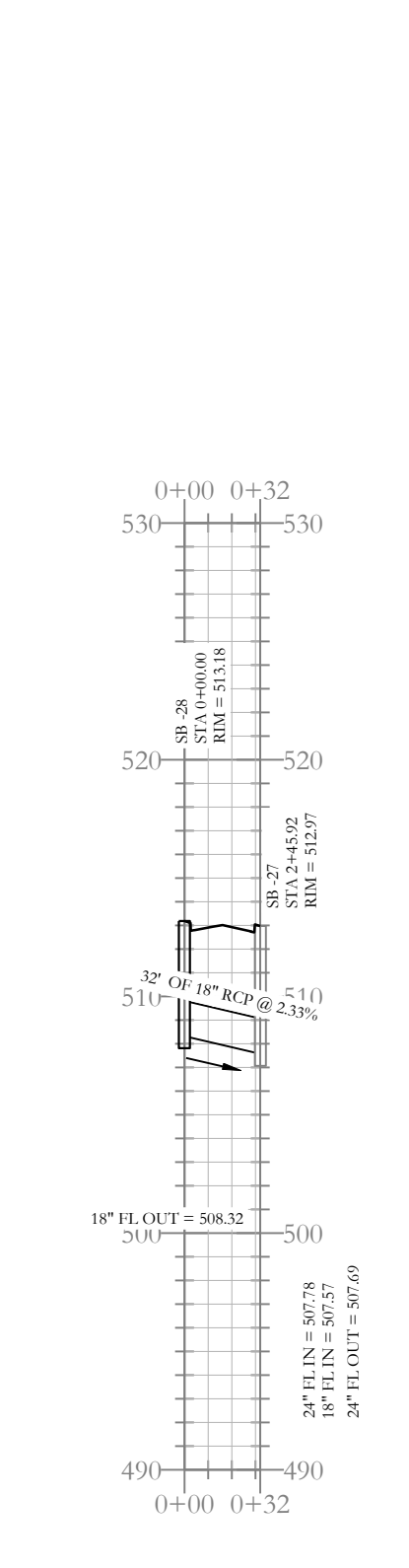
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HOPE CONSULTING, INC.  
No. 1991  
ARKANSAS

--- HDPE  
--- RCP

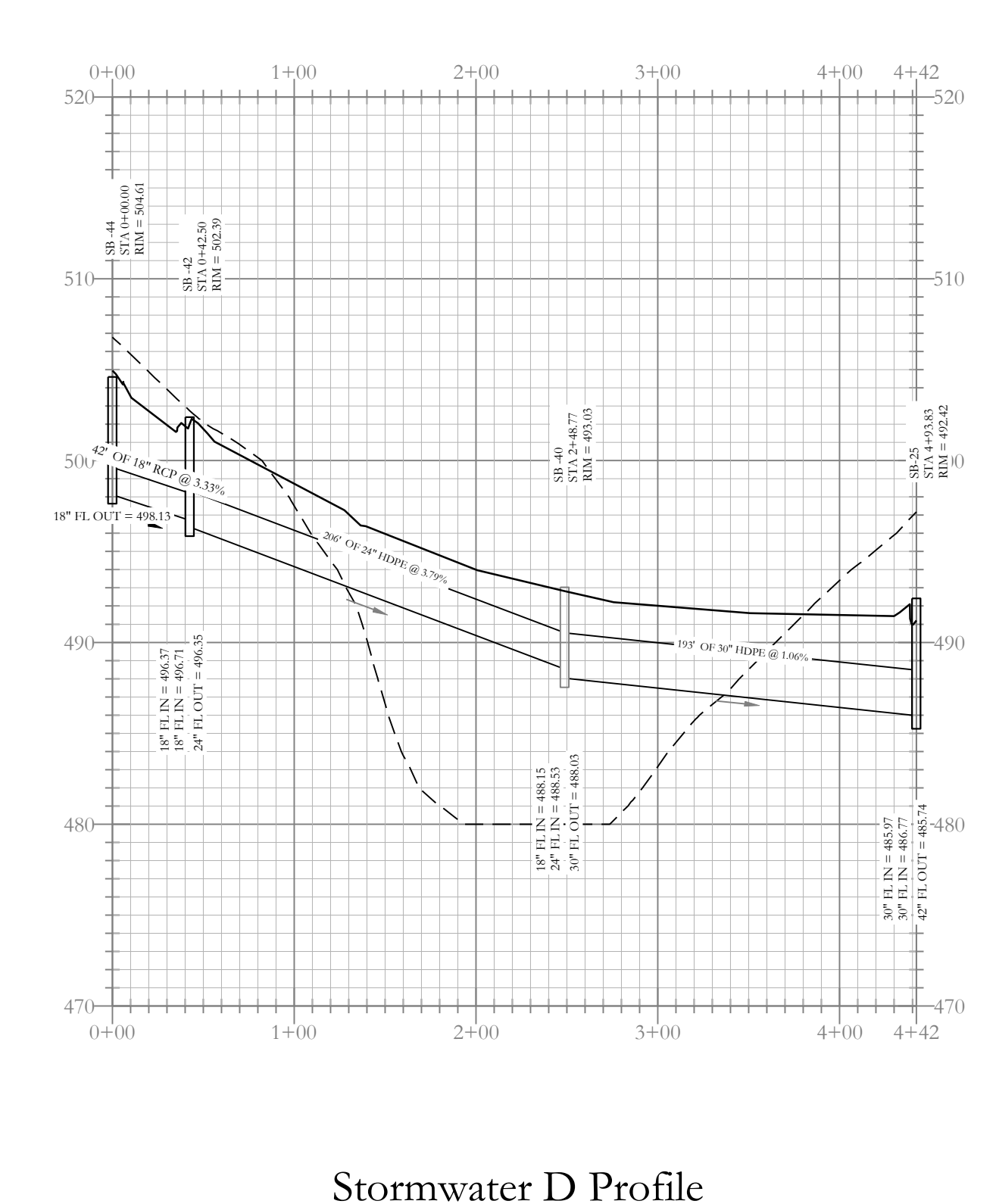
STATE OF ARKANSAS  
BASIS OF BEARING:  
GRID NORTH, ARKANSAS  
COORDINATE SYSTEM, SOUTH ZONE  
BY GPS OBSERVATION



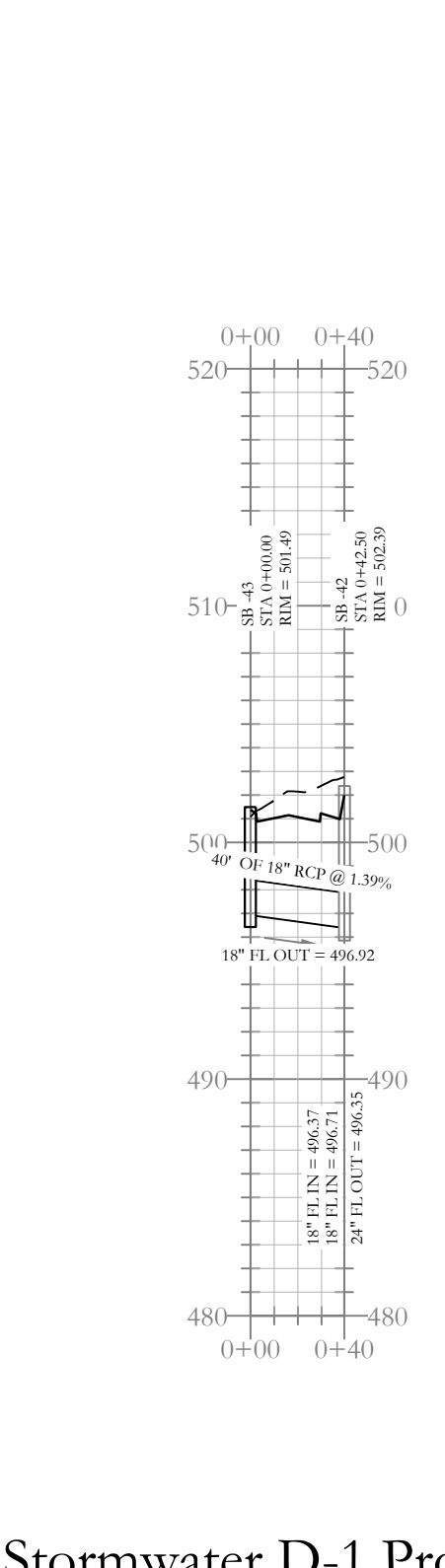
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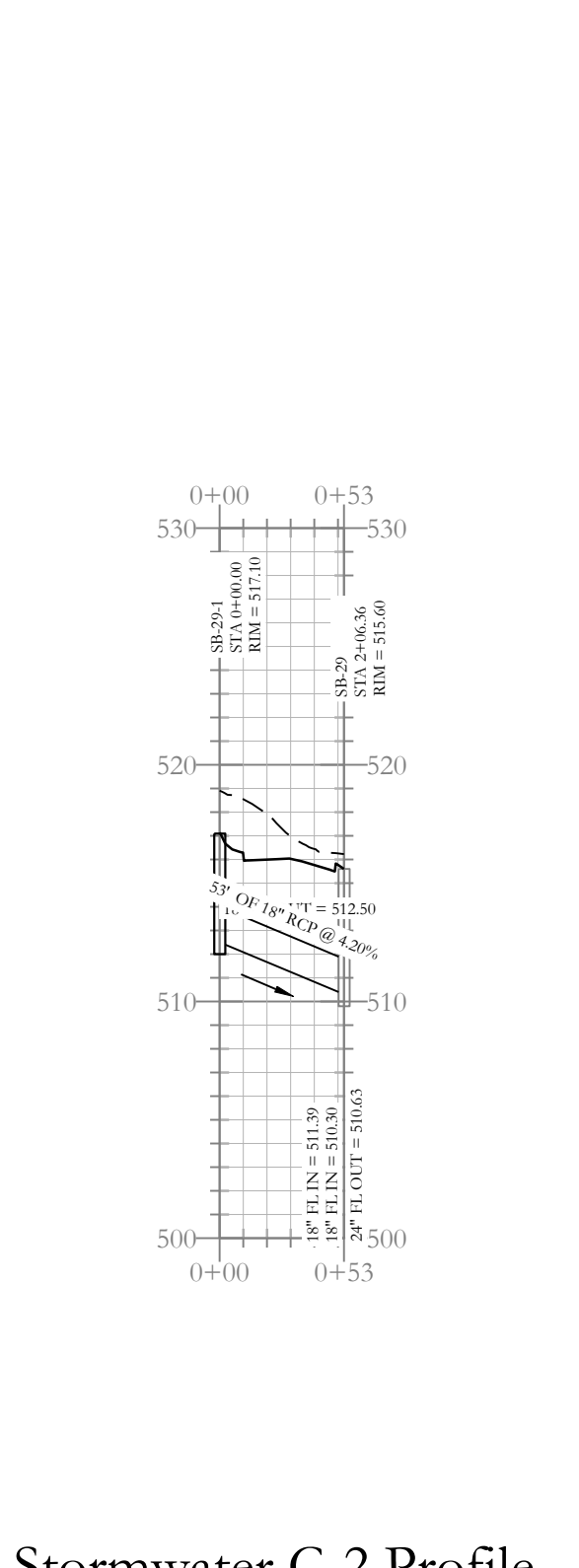
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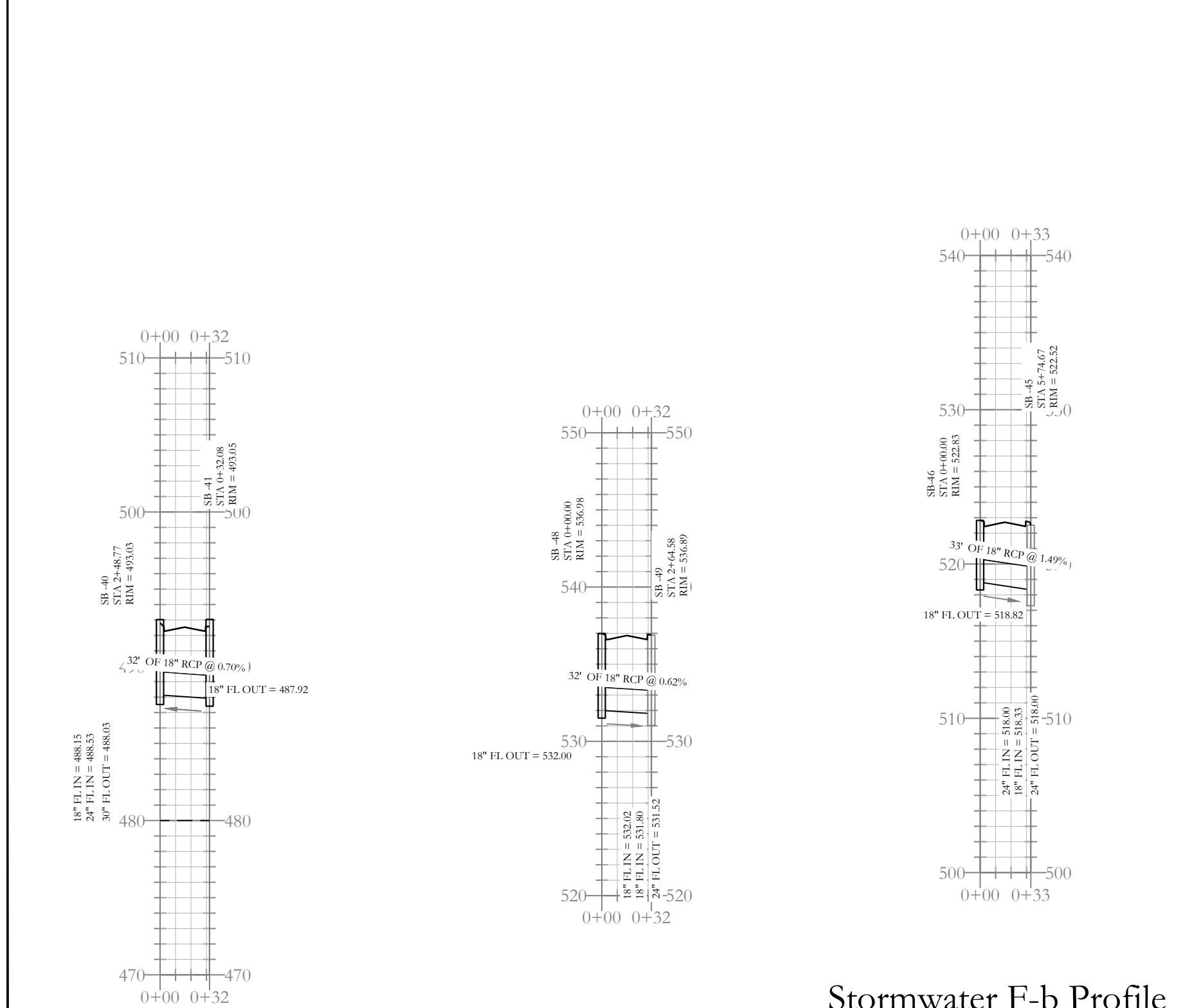
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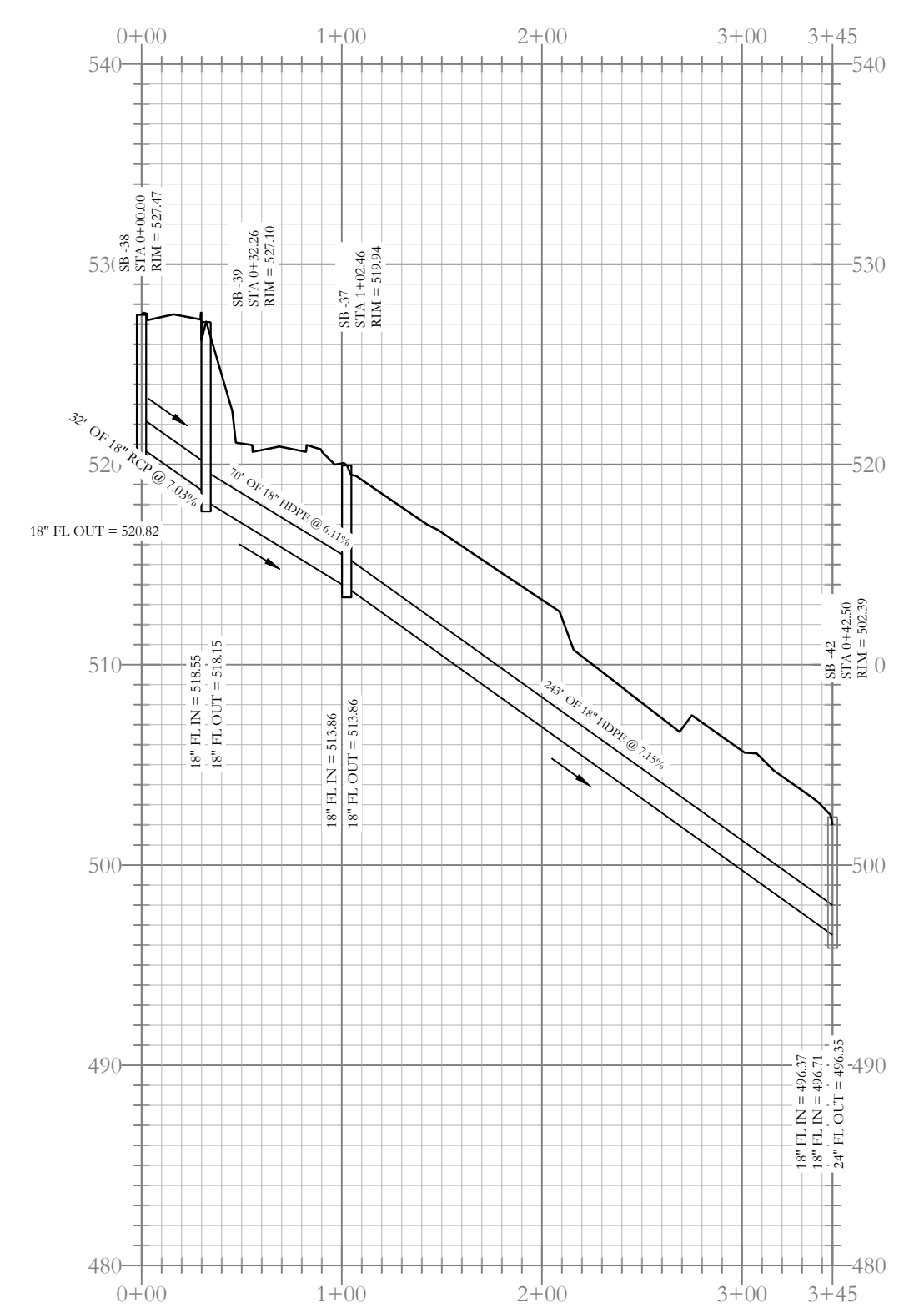
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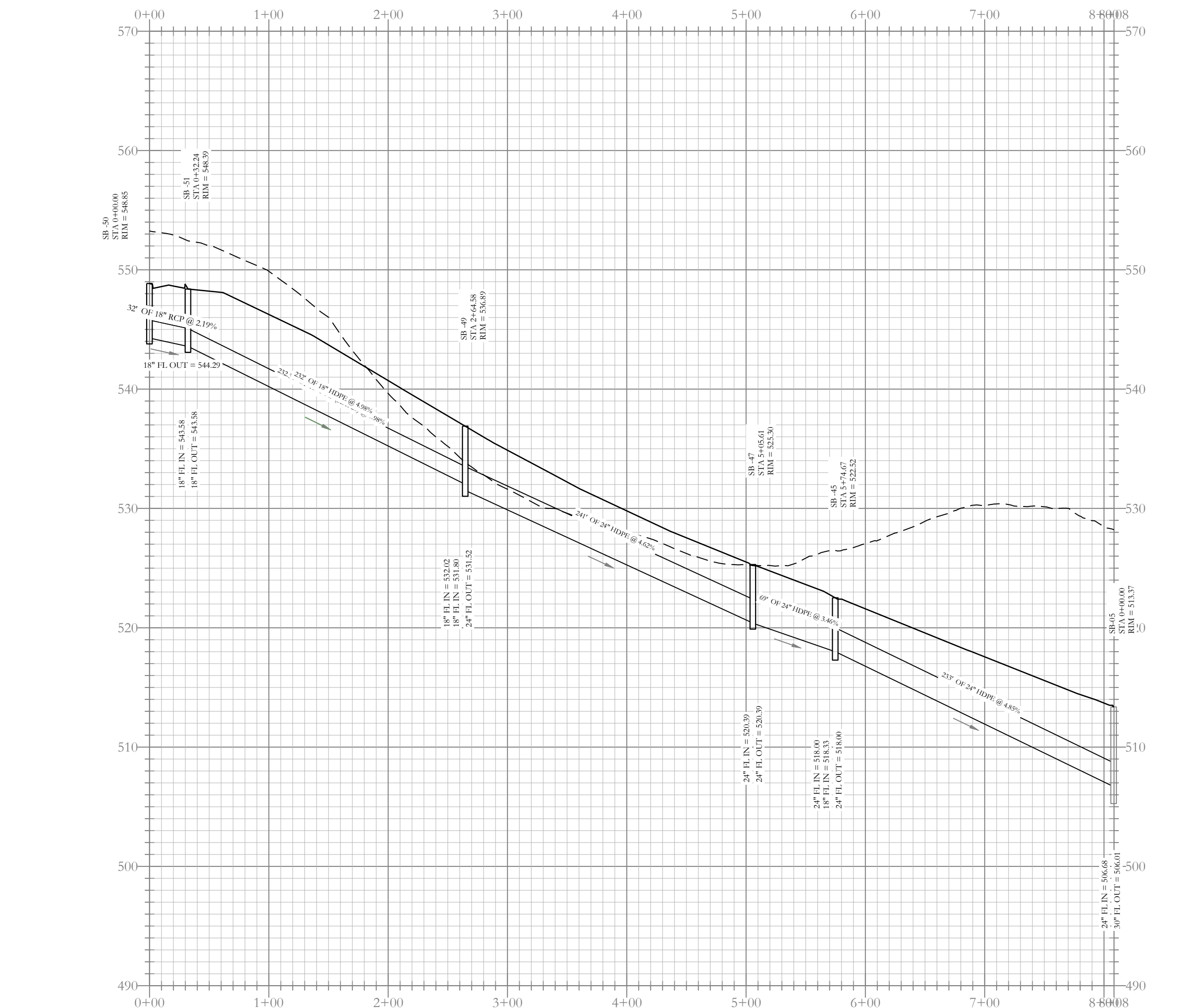
Stormwater C-2 Profile



Stormwater F-a Profile



Stormwater E-1 Profile



Stormwater F Profile

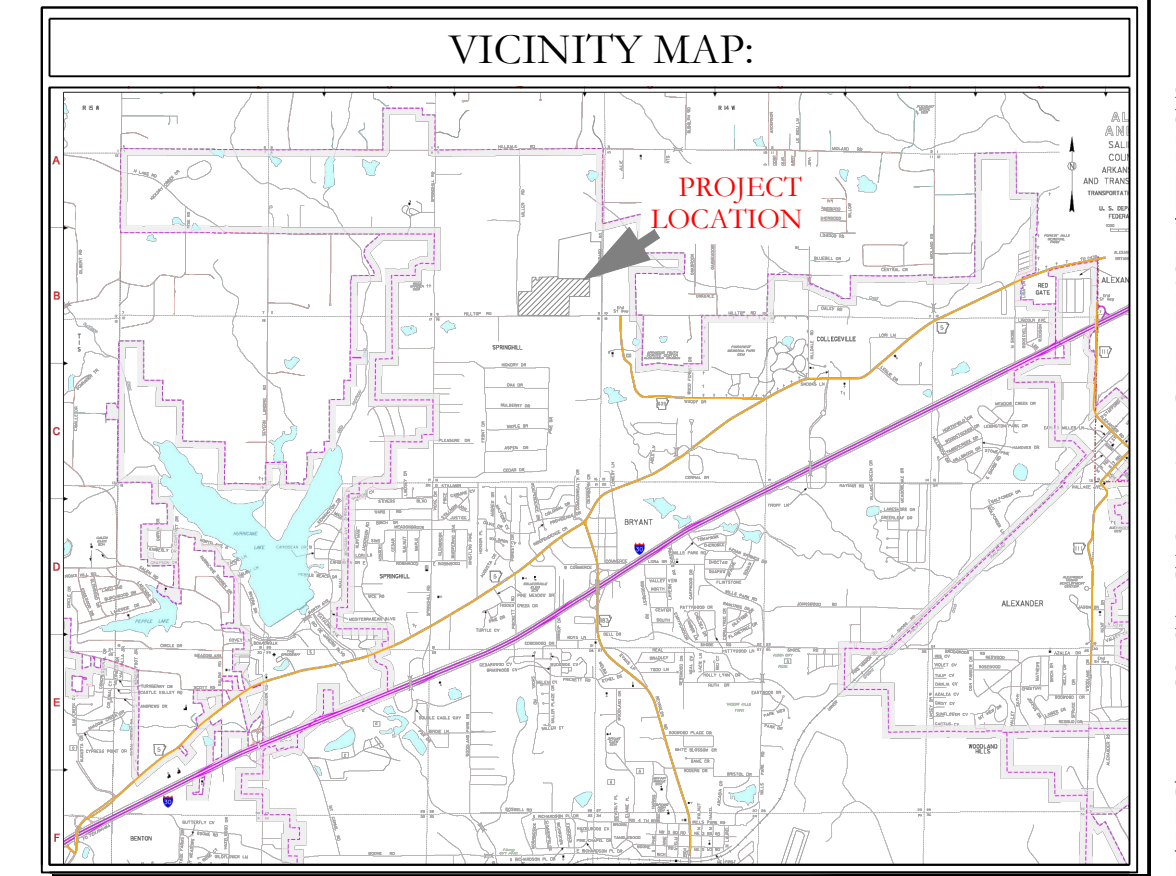
BASIS OF BEARING:  
 GRID NORTH ARKANSAS  
 COORDINATE SYSTEM SOUTH ZONE  
 BY GPS OBSERVATION

80 40 0 80

--- HDPE  
 — RCP

STATE OF ARKANSAS  
 LICENSED PROFESSIONAL ENGINEER  
 No. 20876  
 H. J. JAMZIDIL

CERTIFICATE OF AUTHORITY  
 HOPE CONSULTING, INC.  
 No. 1931  
 ARKANSAS

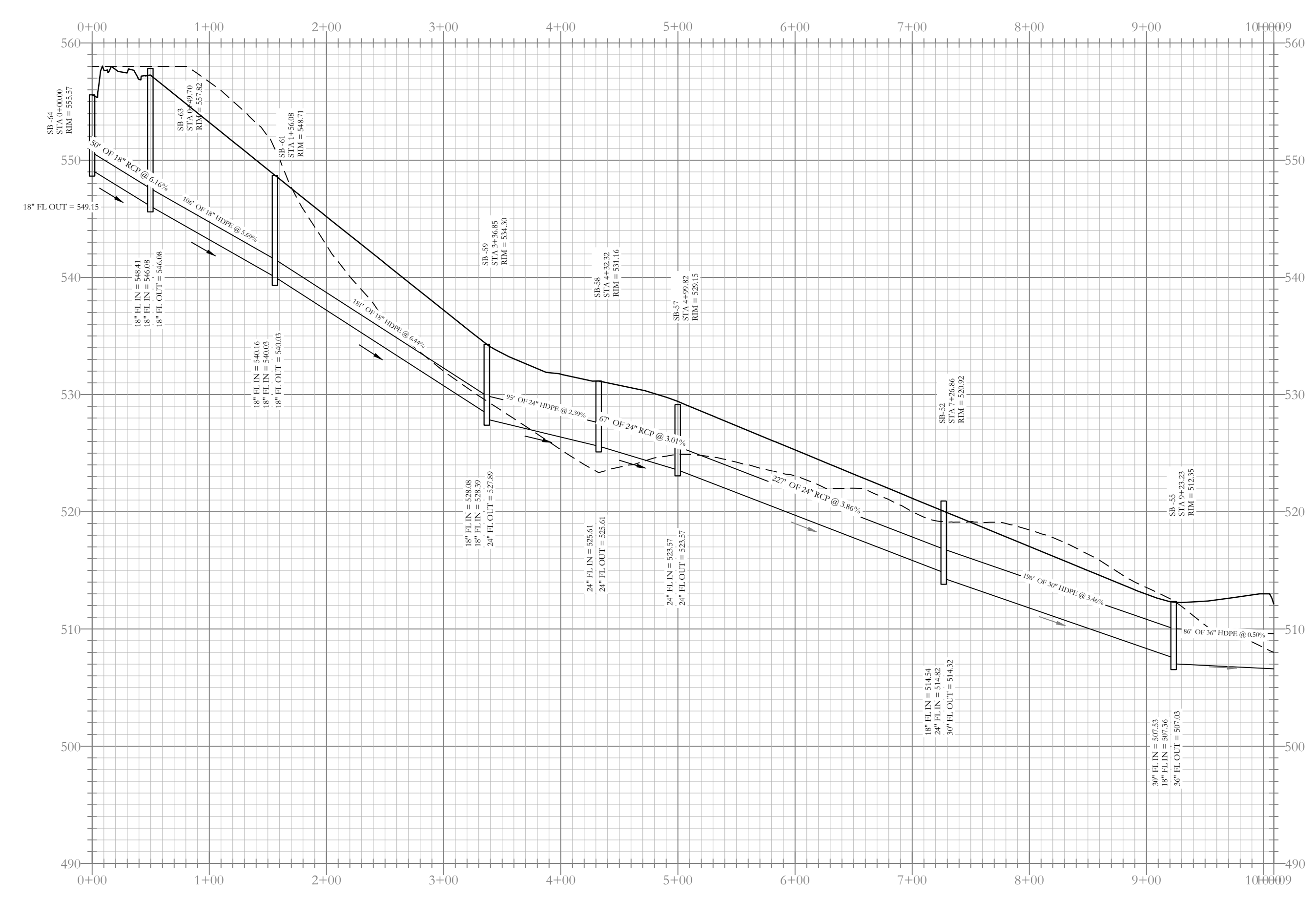
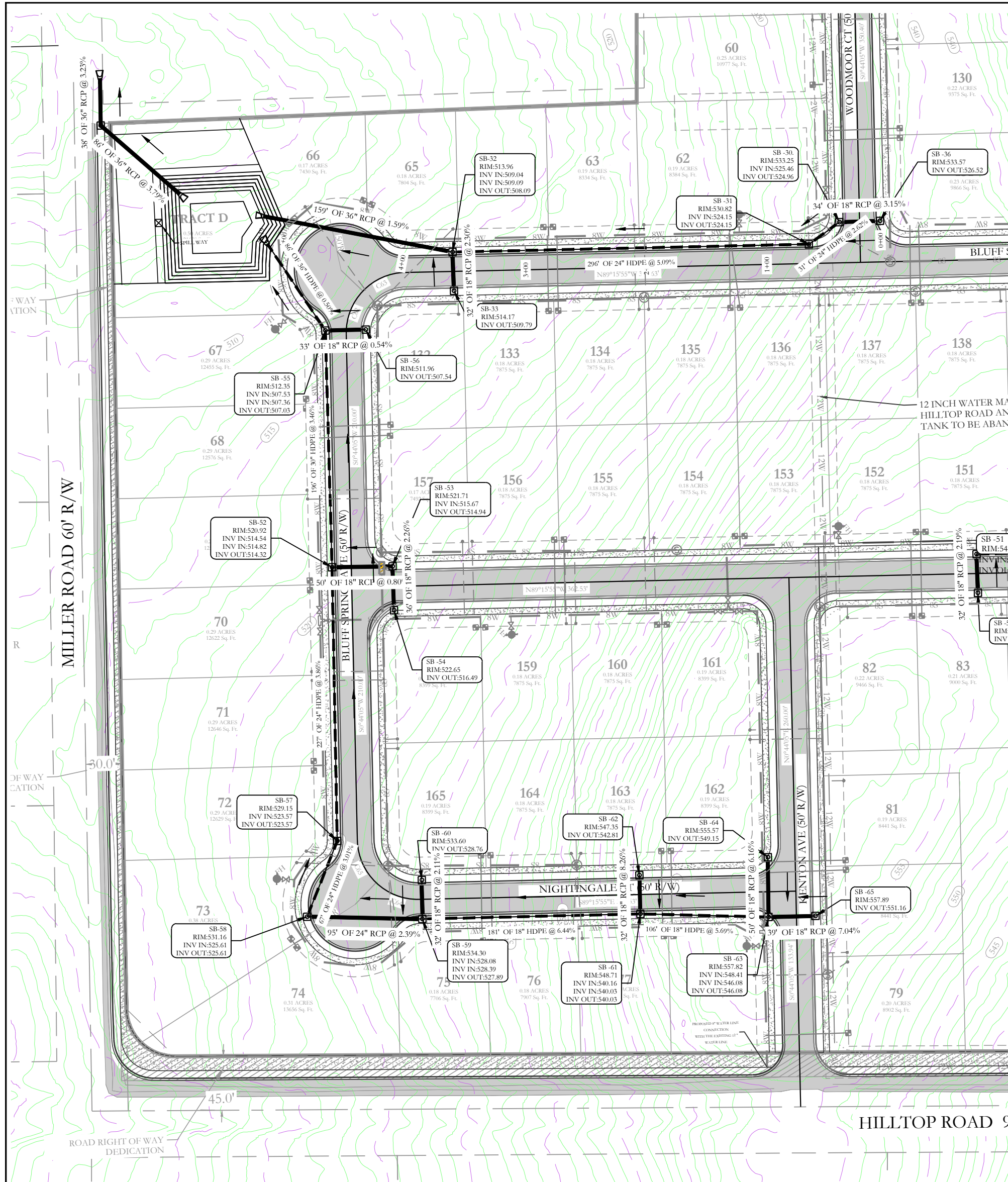


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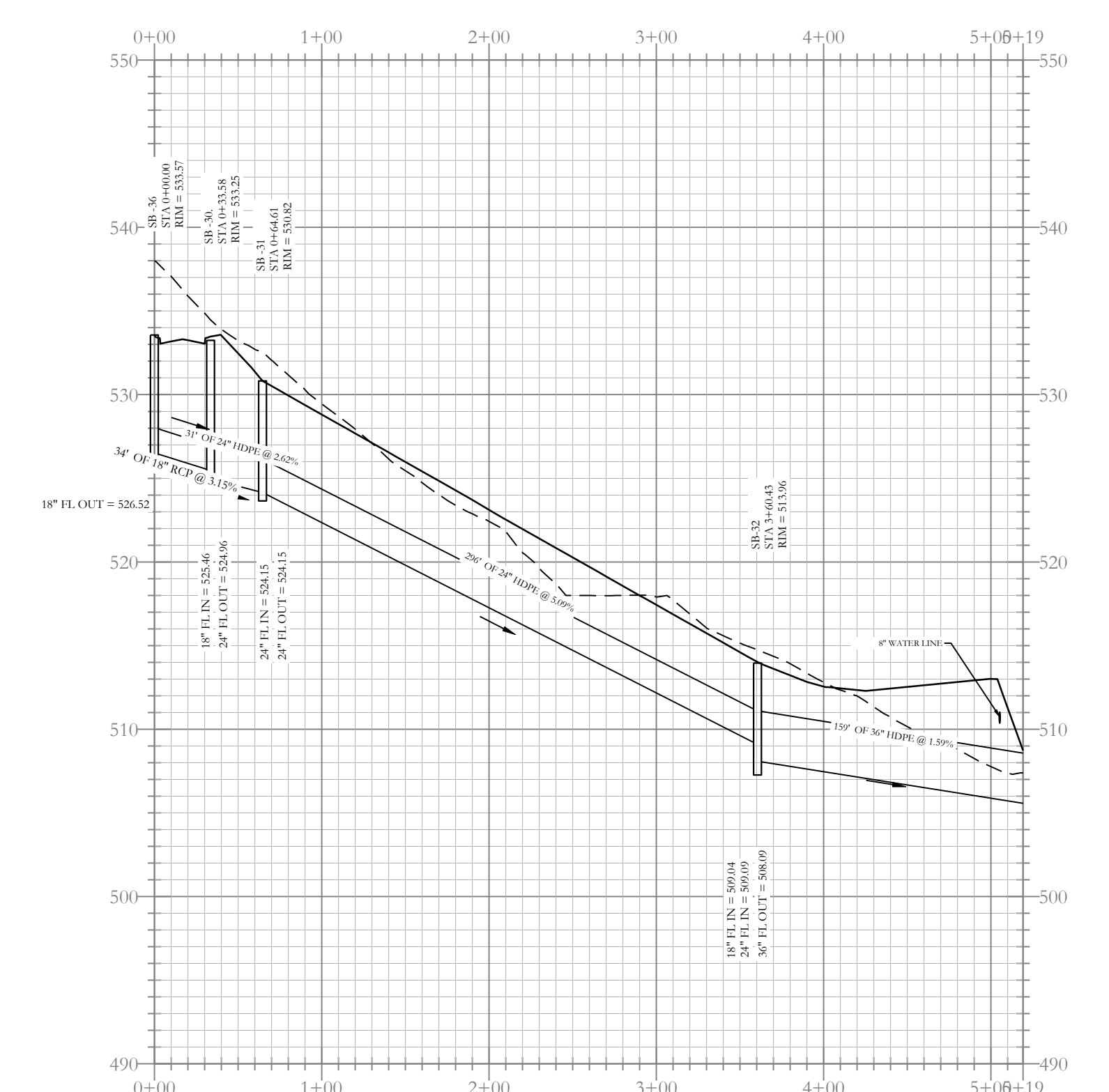
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FOR USE AND BENEFIT OF: <b>NXT GEN HOMES LLC.</b>			
<b>HILLTOP LANDING</b>			
<b>STORM DRAINAGE PLAN AND PROFILE</b>			
A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS			
DATE:	03/08/2023	C.A.D. BY:	
REVISION:		CHECKED BY:	
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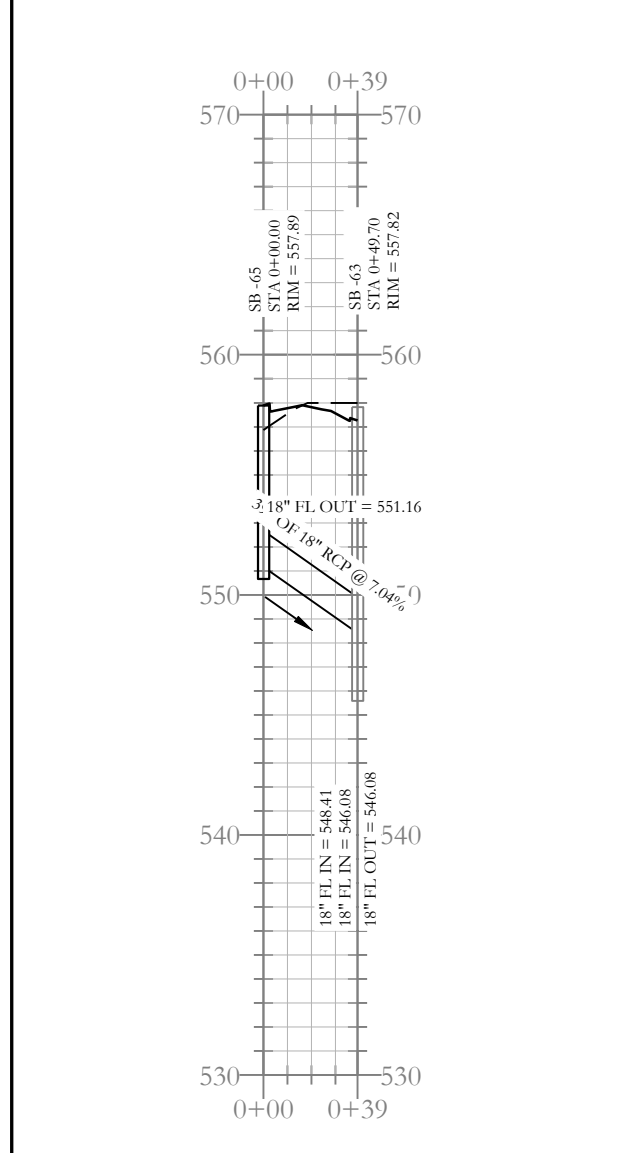
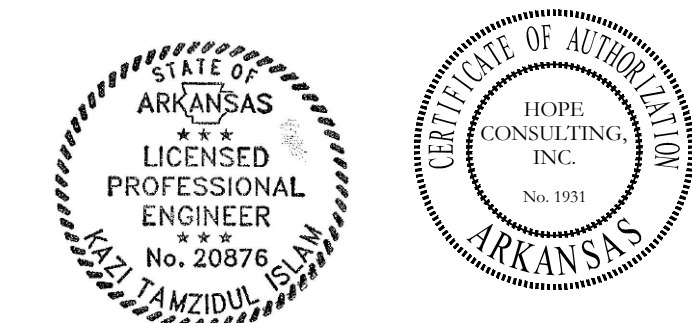
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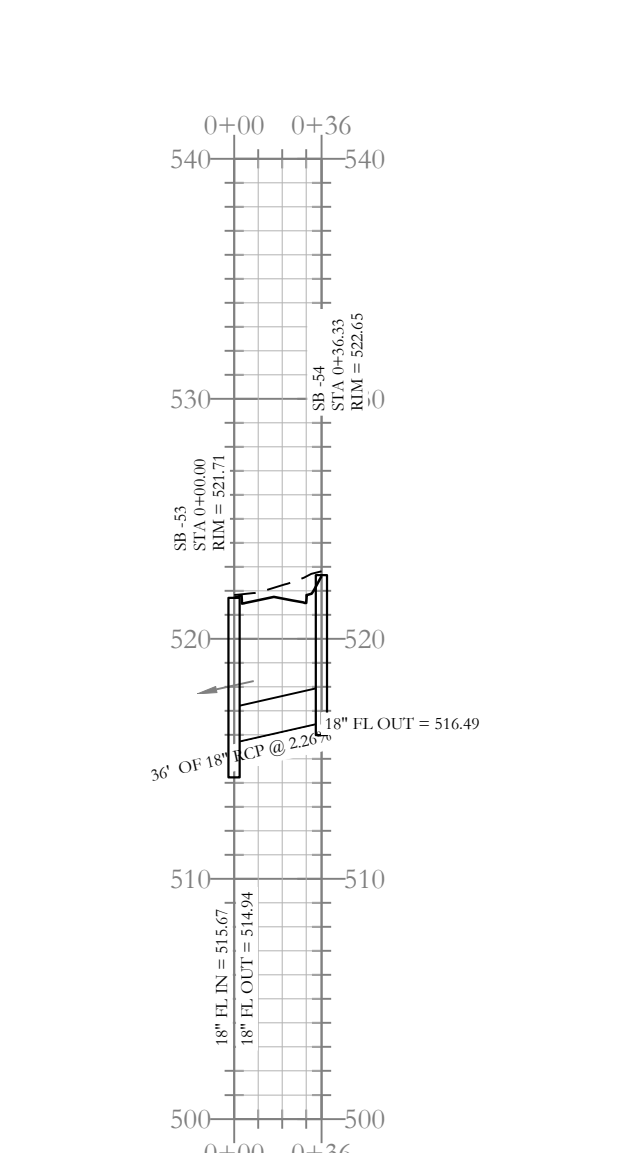
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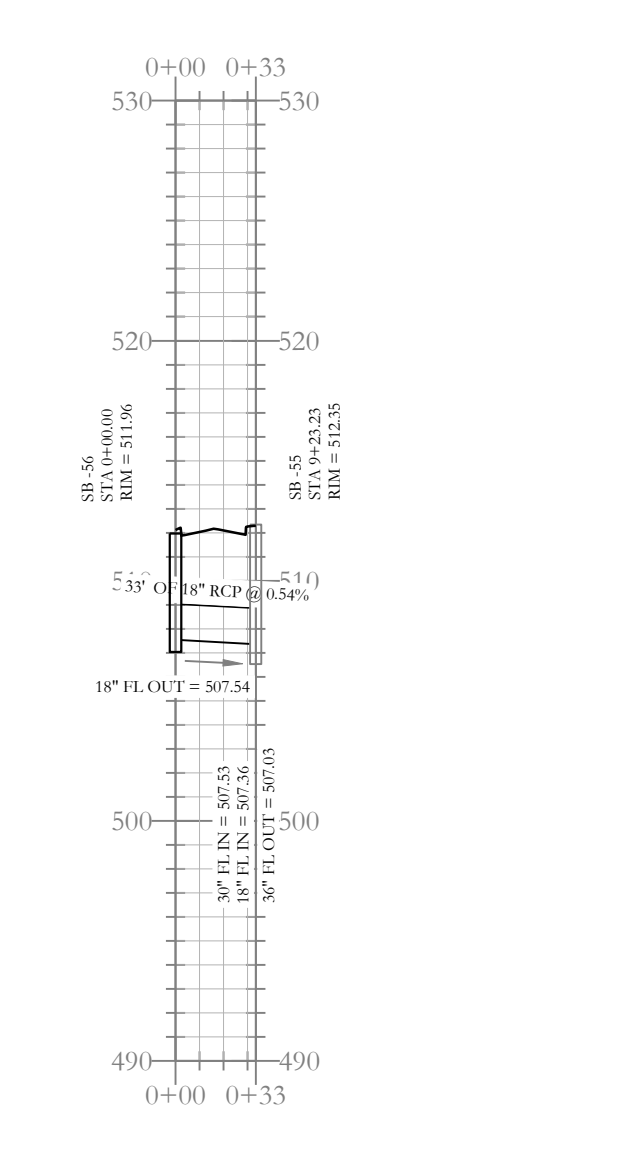
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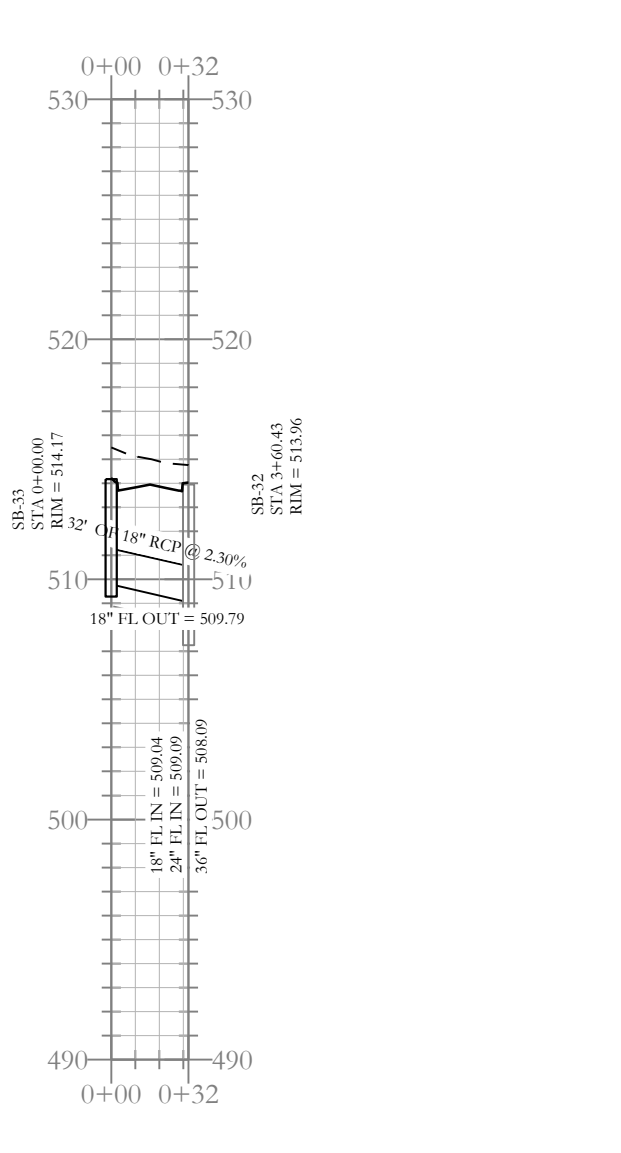
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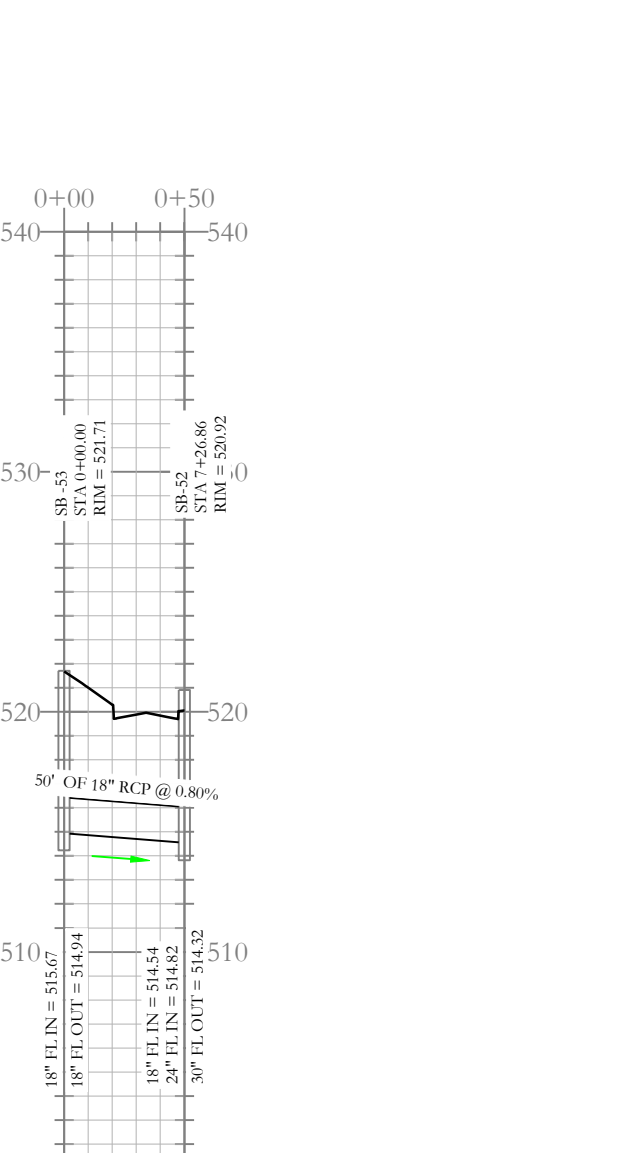
Stormwater F-c Profile



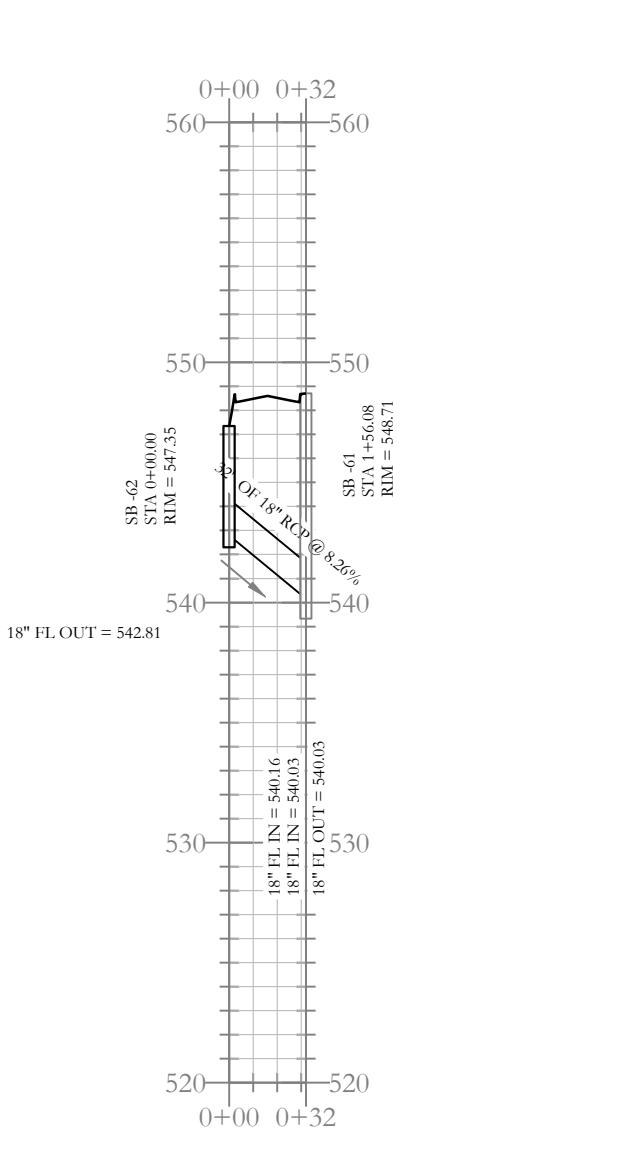
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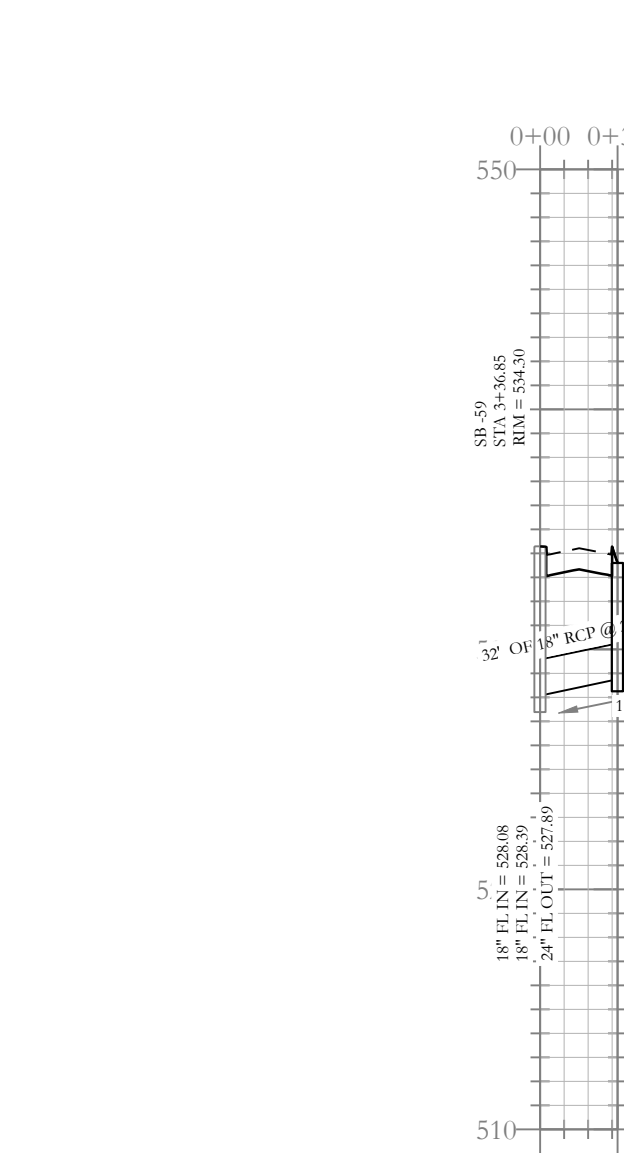
Stormwater E-b Profile



Stormwater E-c Profile

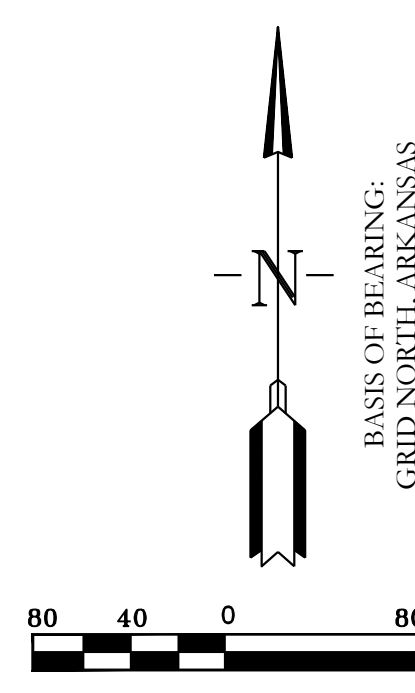
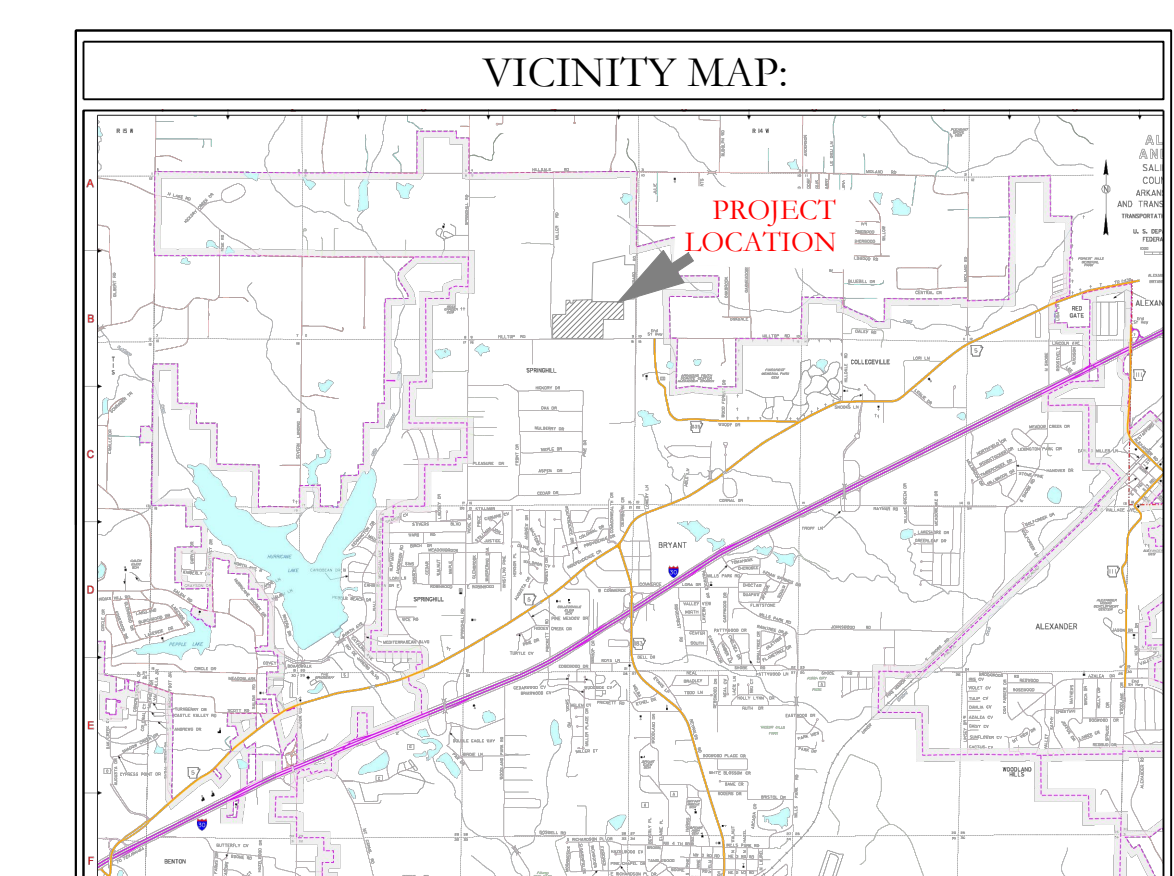


Stormwater E-d Profile



Stormwater E-e Profile

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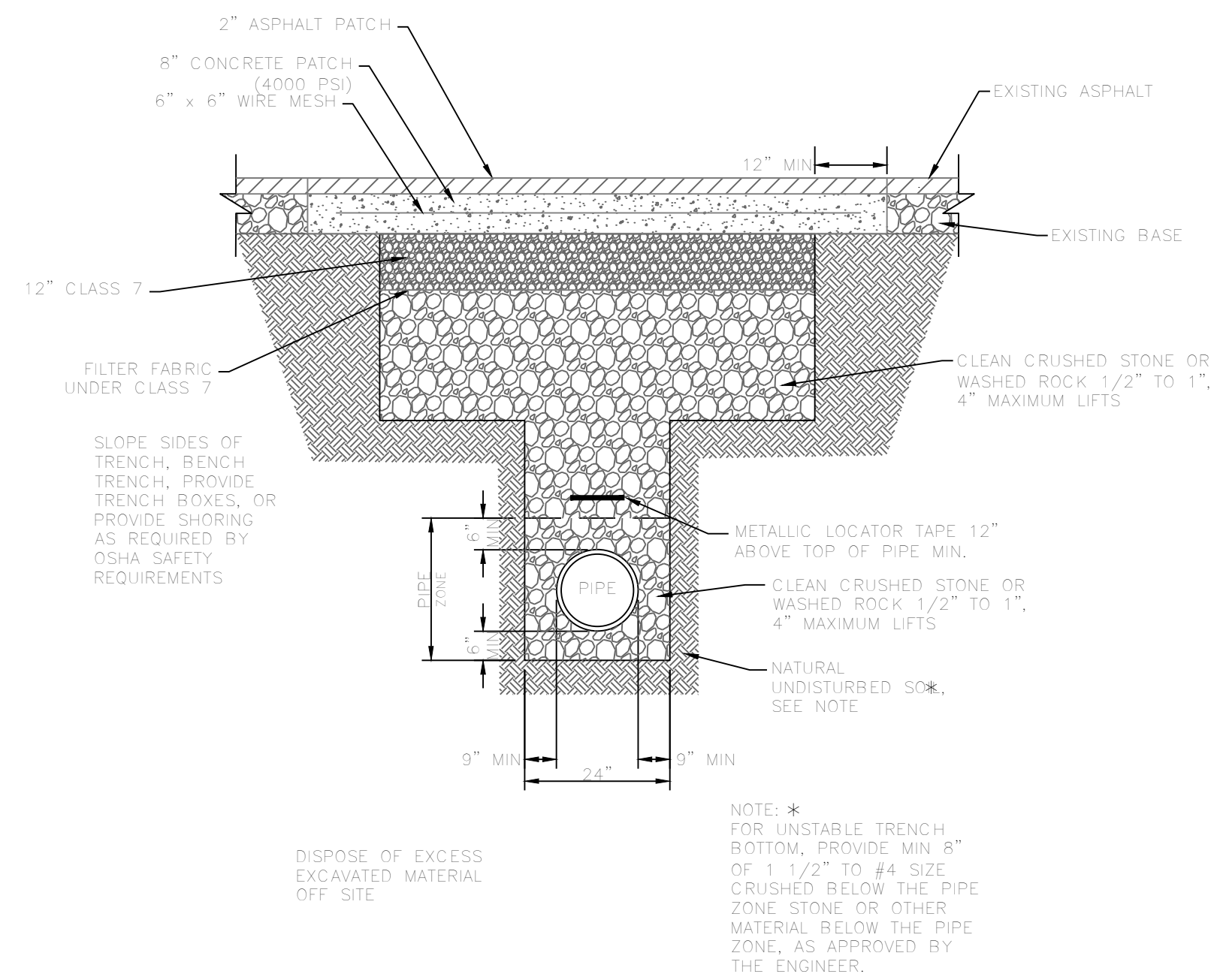
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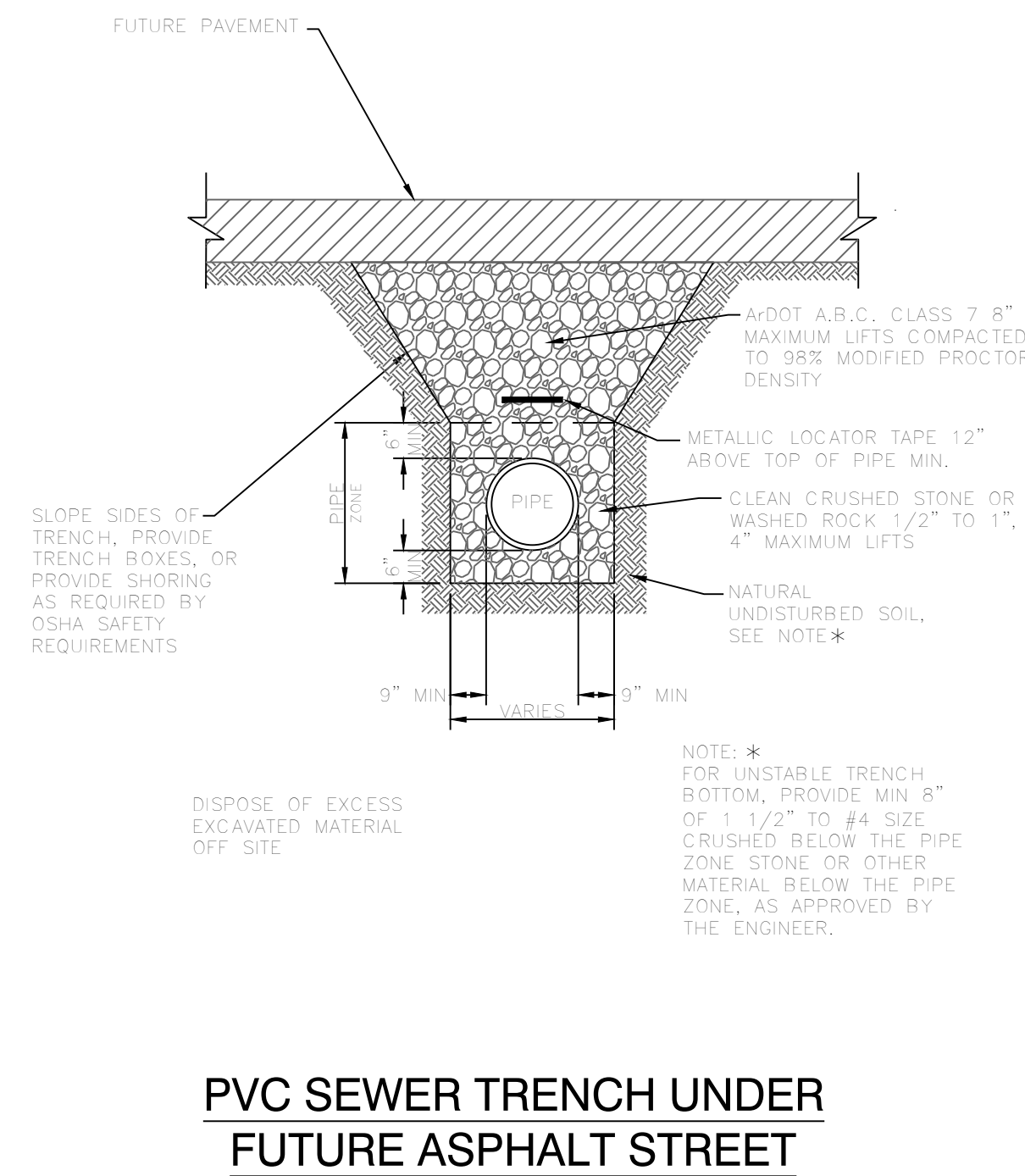
**HILLTOP LANDING**  
 STORM DRAINAGE PLAN AND PROFILE  
 A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

DATE: 03/08/2023	C.A.D. BY:	DRAWING NUMBER:
REVISION:	CHECKED BY:	<b>20-1341</b>
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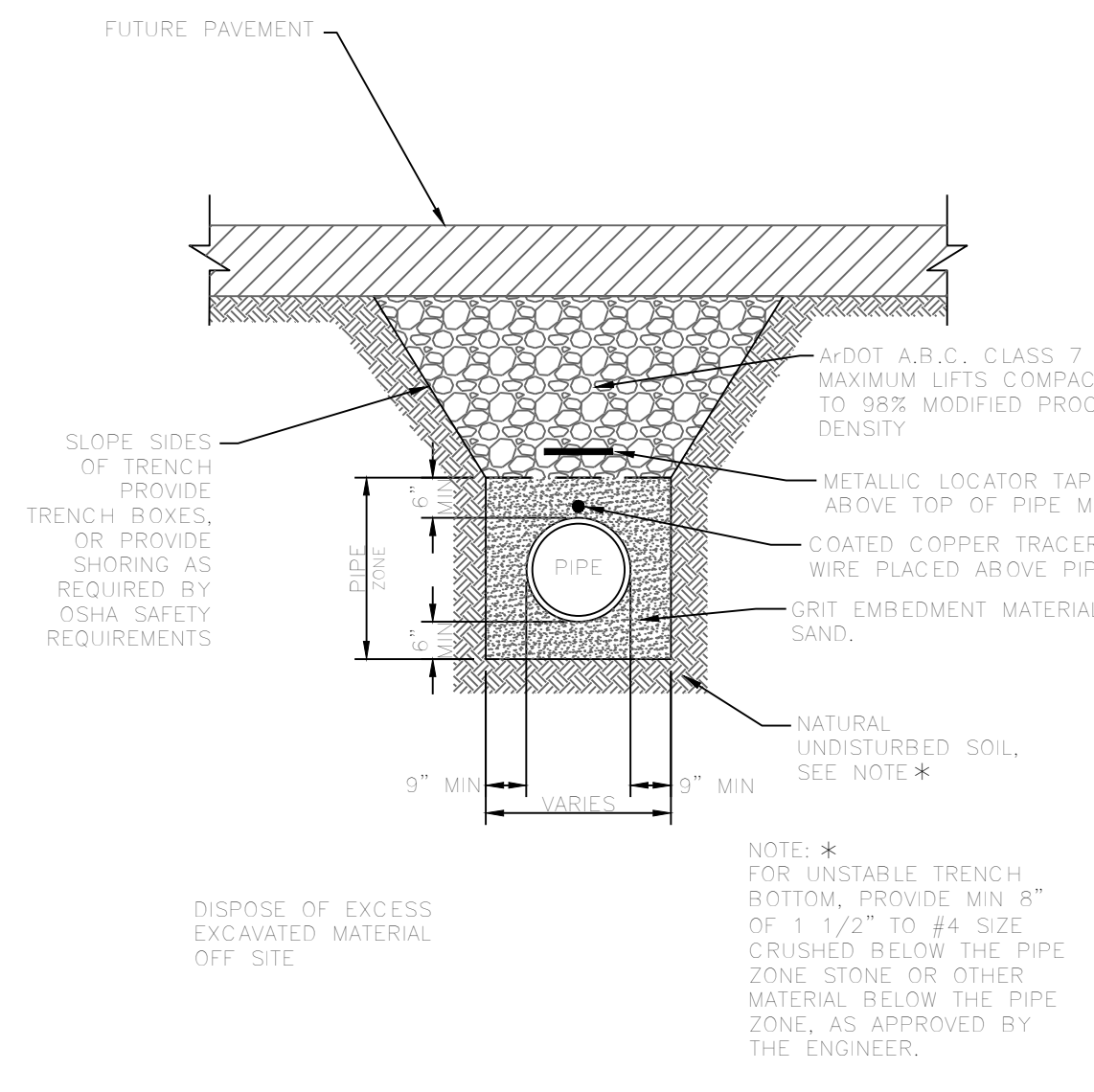
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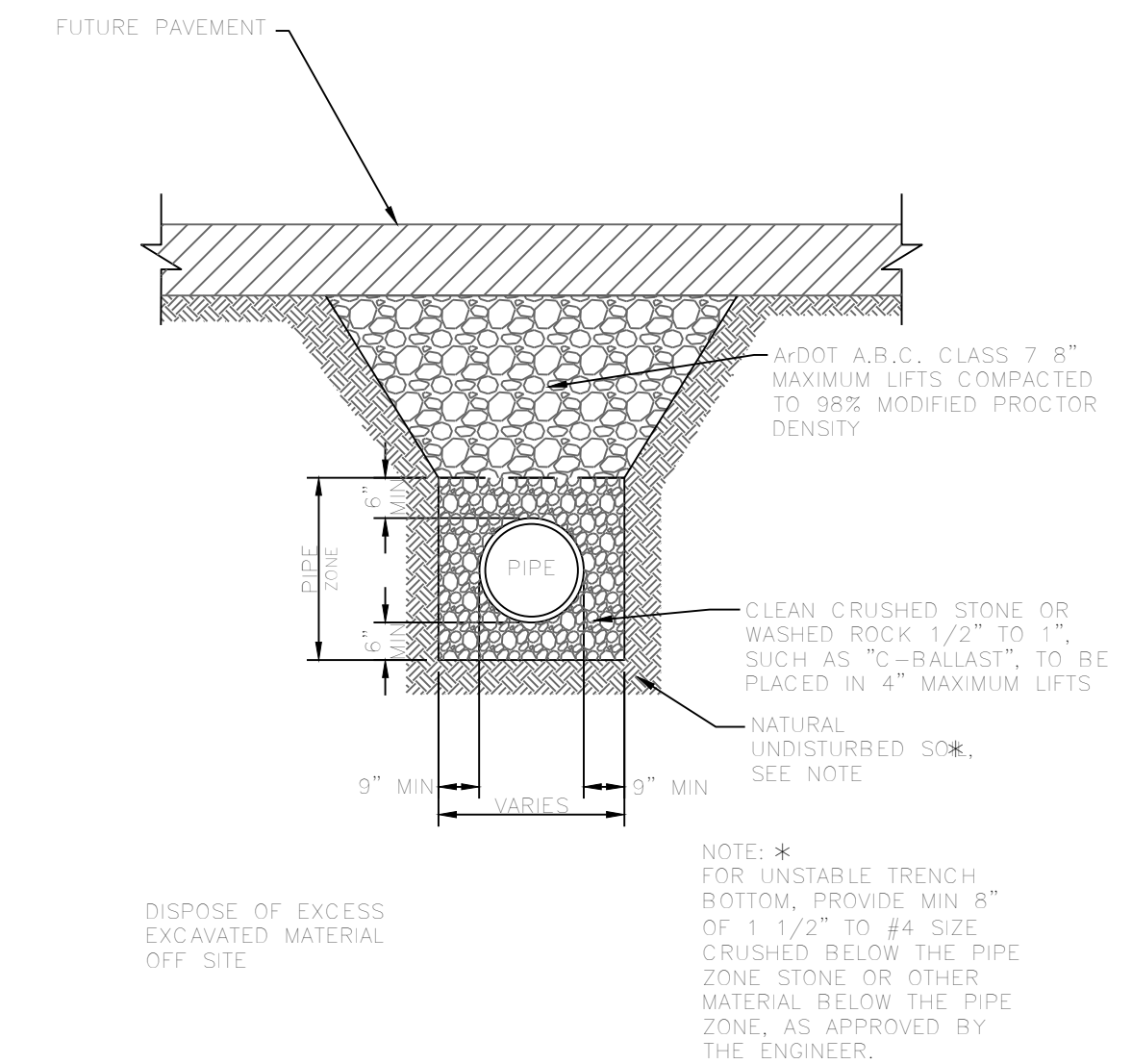
**PVC SEWER TRENCH UNDER EXISTING ASPHALT STREET**  
N.T.S.



**PVC SEWER TRENCH UNDER FUTURE ASPHALT STREET**  
N.T.S.



**PVC WATER LINE TRENCH UNDER FUTURE ASPHALT STREET**  
N.T.S.

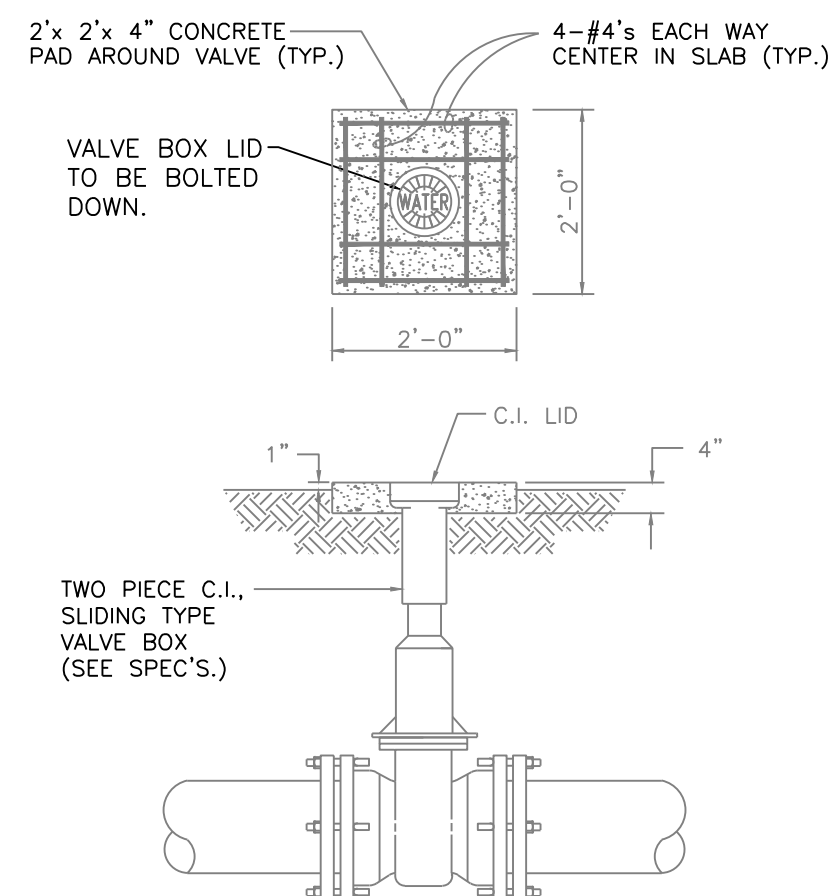


**DRAINAGE PIPE TRENCH UNDER FUTURE ASPHALT STREET**  
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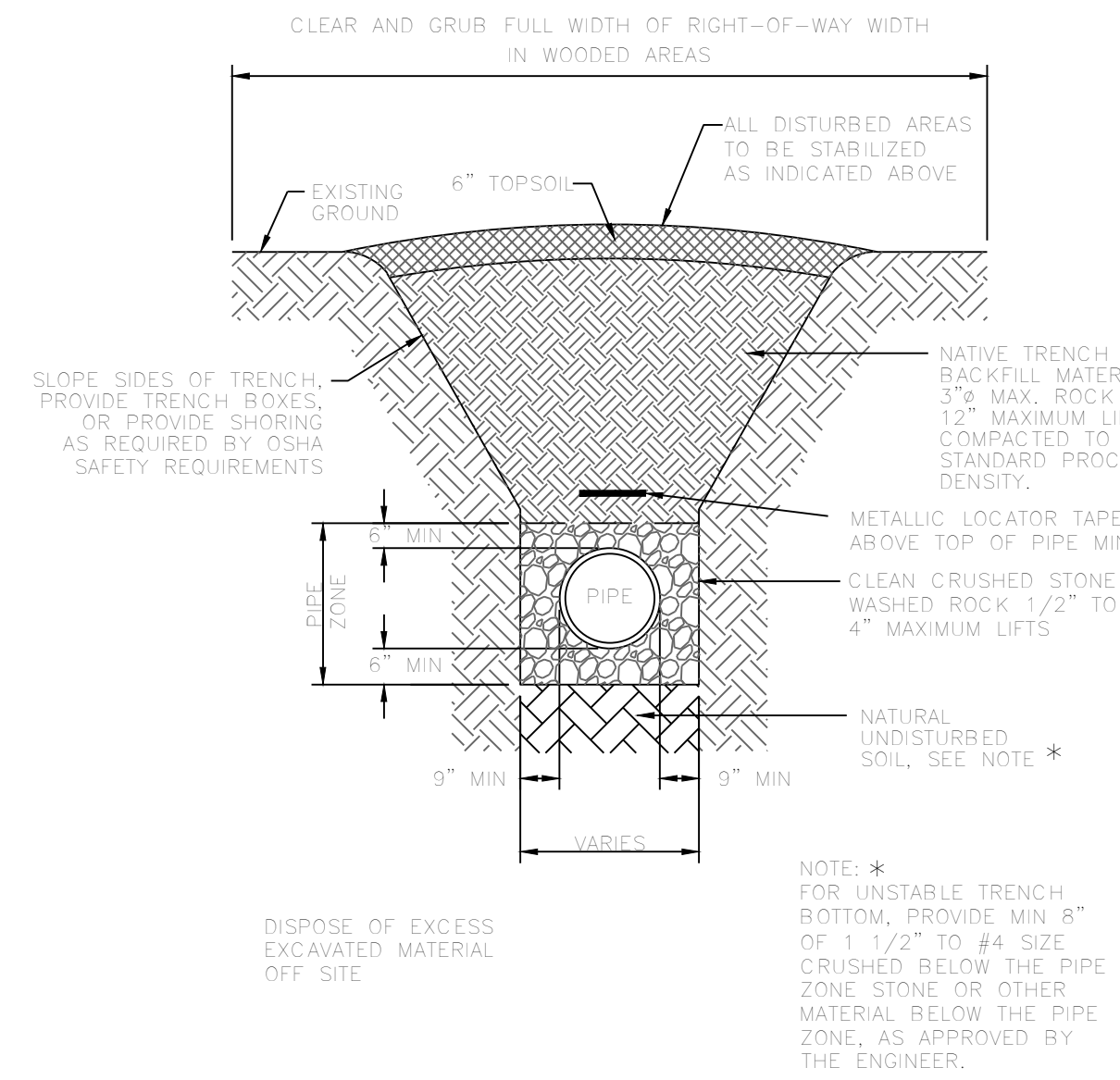
**SOIL STABILIZATION REQUIREMENTS:**  
1. IN LAWN AREAS, DISTURBED SOIL SHALL BE STABILIZED BY PLACEMENT OF SOD TO MATCH EXISTING.  
2. IN FIELDS OR WOODED AREAS, DISTURBED SOIL SHALL BE STABILIZED BY SEEDING.

**SOIL STABILIZATION REQUIREMENTS:**  
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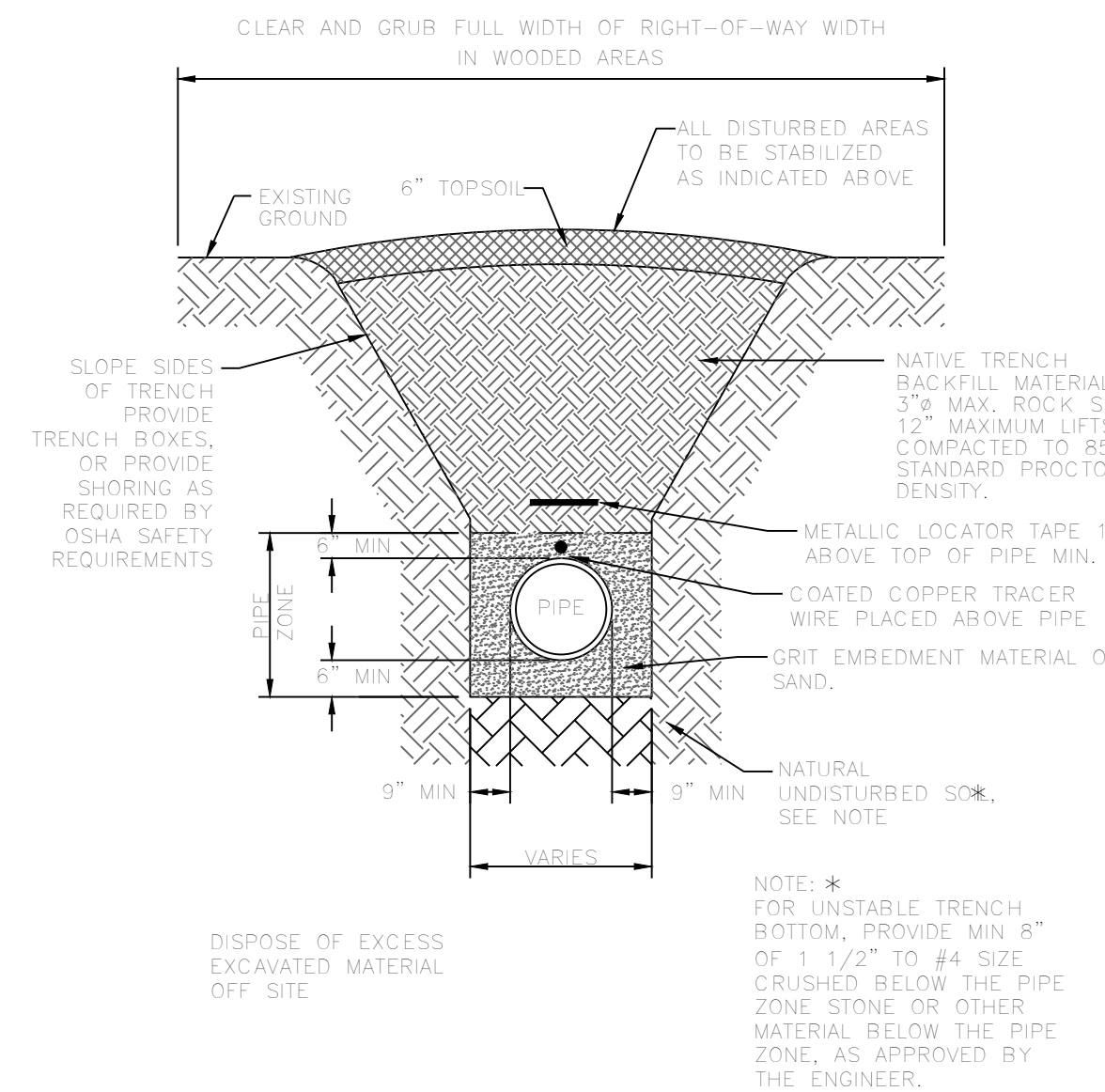
**SOIL STABILIZATION REQUIREMENTS:**  
1. IN LAWN AREAS, DISTURBED SOIL SHALL BE STABILIZED BY PLACEMENT OF SOD TO MATCH EXISTING.  
2. IN FIELDS OR WOODED AREAS, DISTURBED SOIL SHALL BE STABILIZED BY SEEDING.



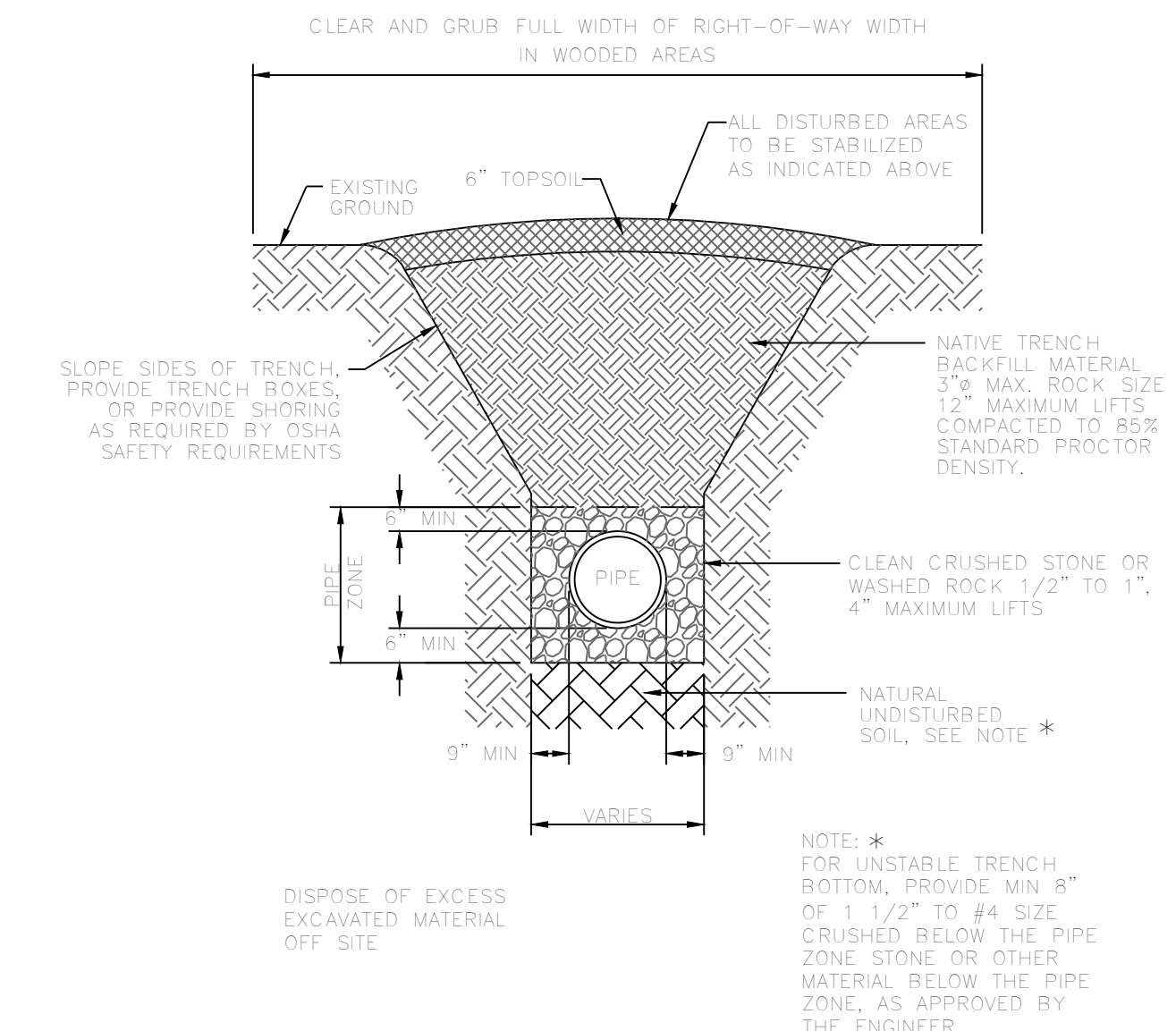
**DETAIL-VALVE BOX**  
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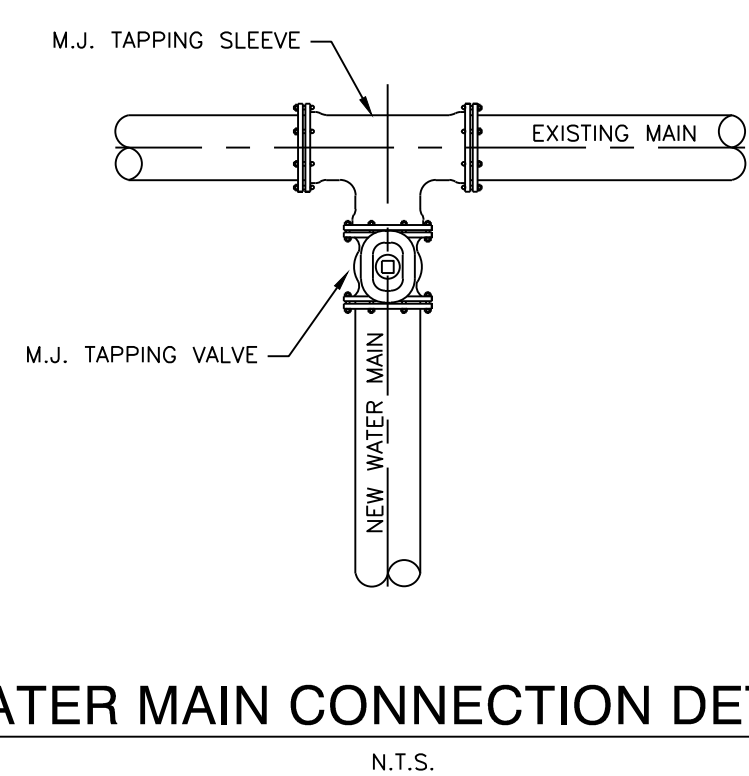
**PVC SEWER TRENCH IN UNPAVED AREAS**  
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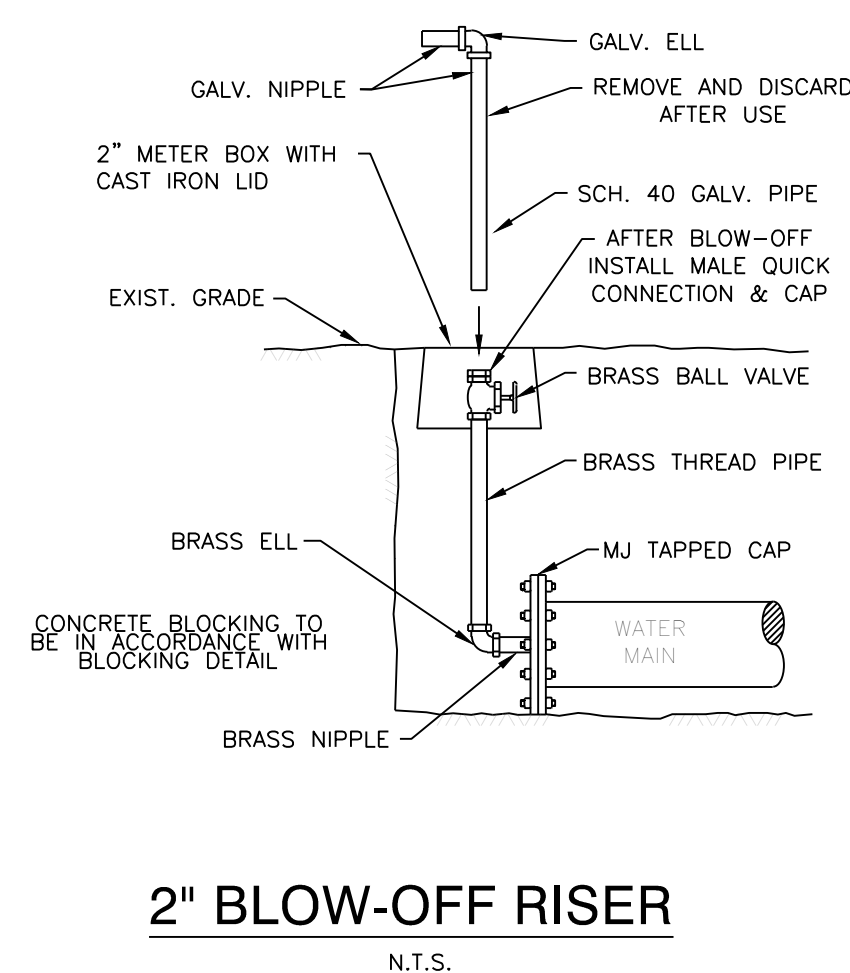
**PVC WATER LINE TRENCH IN UNPAVED AREAS**  
N.T.S.



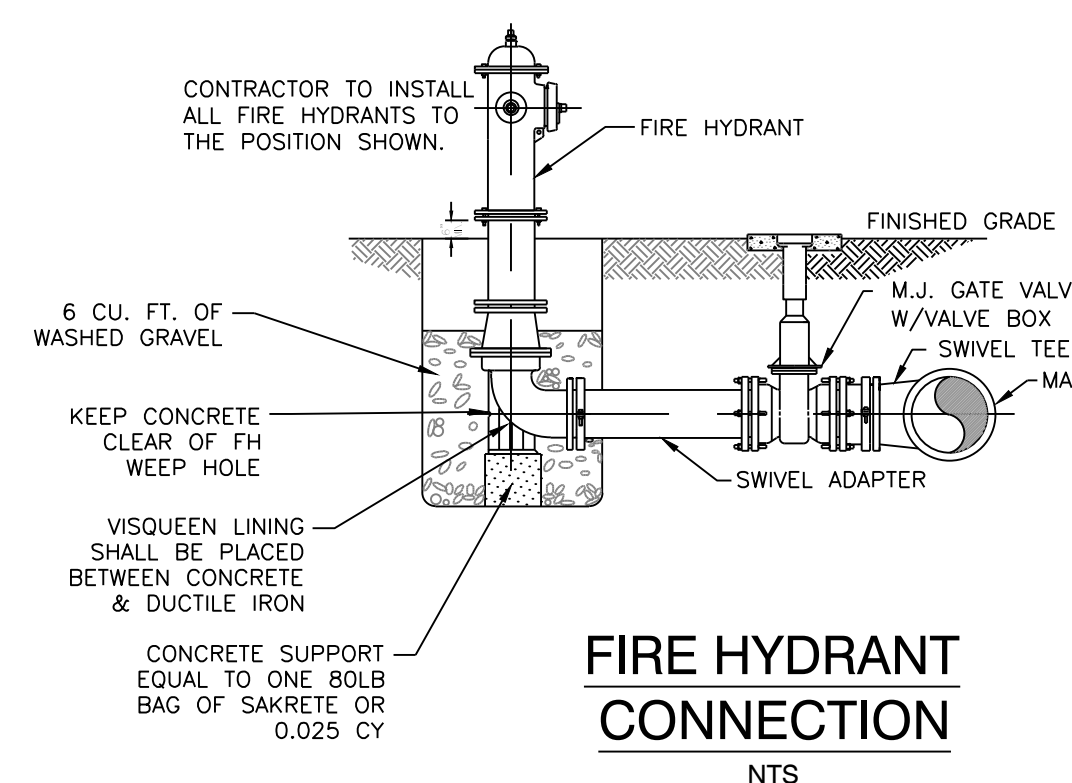
**DRAINAGE PIPES IN UNPAVED AREAS**  
N.T.S.



**WATER MAIN CONNECTION DETAIL**  
N.T.S.



**2" BLOW-OFF RISER**  
N.T.S.



**FIRE HYDRANT CONNECTION**  
N.T.S.

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<b>HILLTOP LANDING TRENCH DETAILS</b> A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS			
DATE: 03/08/2023	C.A.D. BY:	DRAWING NUMBER: <b>20-1341</b>	
REVISED:	CHECKED BY:		
SHEET: C-40	SCALE: 1" = 20"		
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**SPECIFICATIONS**

**SUBGRADE MATERIAL**

- A. Subgrade soils shall be all materials used for subgrade including in-situ materials and fill materials.
- B. Subgrades for pavement shall be stabilized by mechanical compaction. Stabilization methods such as fabrics and chemical stabilization may be submitted for approval when supported by engineering data and calculations to substantiate the adequacy of the stabilized procedure.
- C. Subgrade shall be compacted to 95 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture unless otherwise supported by the site specific geotechnical data and approved by City.
- D. Subgrade shall be prepared in such a manner that the base course shall be placed on a firm foundation that is stable and free from soft spots, pumping, dust pockets, wheel ruts, or other defects.
- E. The top 24 inches of the subgrade shall be a material not susceptible to frost action unless modified with cement, lime or another method approved specifically by the City to resist frost action. Soils classified as A-4 and A-5 including sandy silts, fine silty sand or lean clays are highly susceptible to frost action.
- F. In-situ soils meeting the requirements outlined in these specifications may be utilized as subgrade material. In-situ soils used as subgrade shall be scarified to a minimum depth of 8-inches below finish subgrade, recompact and tested as described below. Fill material for subgrade shall be placed in lifts not to exceed 8-inches compacted depth.
- G. Methods and procedures for establishing the total depth of soil replacement and/or modification shall be as specified by the design engineer and geotechnical investigations. The adequacy of in-situ soils and fill materials as pavement subgrade shall be evaluated based upon the soils classification, liquid limit, and plasticity index.
- H. Soils with a liquid limit greater than 40, or a plasticity index greater than 15 shall be undercut and removed from the street section or improved by a design method of stabilization approved by the City.
- I. Quality control testing shall be as specified below.
- J. Undercut 24" of soil below finished street base course. Proof roll to verify stability.
- K. Backfill the undercut subgrade with Class 7 aggregate or soil meeting the requirements of this section and compact in lifts not exceeding 8".

**BASE COURSE**

- A. Base course material shall be crushed stone meeting the requirements of ArDOT Class 7 aggregate base course as specified in the latest edition of ArDOT Standard Specifications.
- B. Base course shall be compacted to 98 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture.

**SURFACE COURSE**

- A. Surface course for flexible pavement designs shall utilize plant mix bituminous base and binder courses conforming to ArDOT Standard Specifications.

**CURB AND GUTTER**

- A. Curb and gutter shall be Portland Cement Concrete with a minimum 28-day compressive strength of 4,000 psi. Concrete shall be air-entrained with a maximum of 4-inch slump.
- B. Compaction requirements under curb and gutter shall conform to the requirements for street subgrade materials. Compaction requirements shall extend to a minimum of 1 foot behind the back of curb and gutter removing all soft spots and replacing with suitable material.
- C. Curb and gutter shall conform to the typical detail within these specifications or ArDOT Standard Roadway Drawing Details for curbing.
- D. Expansion joints shall be made with 1/2-inch preformed expansion joint filler of a non-extruding type. Expansion joints shall be placed at intervals not exceeding 195 feet, intersection radii, driveways, stationary structures, and sidewalks.
- E. Contraction joints shall be sawed or fromed at intervals not greater than 20 feet. Depth of saw-cut shall be 1 1/2-inch and have a width of 1/4-inch. Contraction joints shall be sealed in accordance with ArDOT Standard Specifications.
- F. Forms shall be made of metal or wood and shall be properly braced. The minimum length of each section of form used shall be 10 feet. Each section of form shall be uniform and free from undesirable bends or warps. Forms shall be of such cross section and strength and so secured as to resist the pressure of the impact and vibration on any equipment which they support without springing or settlement.
- G. Curb and gutter placed with slip form or extruding equipment will be acceptable providing it complies with all of the above requirements.
- H. After curing, the curb shall be immediately backfilled to within 4 inches of the top curb to eliminate the possibility of washing beneath the curb. The remaining 4 inches shall be topsoil.
- I. Cold weather protection shall meet the requirements of the latest edition of ArDOT Standard Specifications.

**SIDEWALKS**

**General**

- A. Sidewalks shall be Portland Cement Concrete with a minimum 28-day compressive strength of 4,000 psi.
- B. Sidewalks shall be on both sides of streets in line with sidewalks on opposite corners of roads.
- C. All sidewalks including ramps shall meet all current Federal Americans with Disabilities (ADA) design guidelines or requirements.
- D. Traverse slopes shall not exceed 2 percent.
- E. Subgrade under sidewalks shall be compacted to 90 percent modified proctor density minimum.
- F. Sidewalks shall not be placed upon grassy or organic materials.
- G. Sidewalks which extend or link existing sidewalks shall adjoin the existing sidewalks to form a continuous, even pathway.
- H. Utility poles, utility boxes, mailboxes, fire hydrants, and other similar obstructions shall not be located in sidewalks. Sidewalk location may vary at the discretion of the City to avoid such obstacles.

**Minimum thickness and reinforcement**

- A. Sidewalks shall have a minimum thickness of 4 inches.
- B. Sidewalks shall be reinforced, at a minimum, with woven wire fabric reinforcement.

**Contraction and expansion joints**

- A. Contraction joints shall be provided perpendicular to the sidewalk at intervals equal to the sidewalk width.
- B. Expansion joints shall be constructed perpendicular to the sidewalk at intervals equal to five times the sidewalk width. Expansion joints shall be made with 1/2-inch preformed expansion joint filler of a non-extruding type. Expansion joints shall be placed at driveways, drop inlets, and curbs.

**Quality control testing and inspection by the City**

- A. Subgrade and formwork for sidewalks shall be inspected by the City prior to pouring of the sidewalk.
- B. All testing of materials and construction shall be provided and paid for by the Developer/Owner.
- C. All field tests required for a project shall be witnessed by the City, contractor, or their authorized representatives.
- D. All testing shall be accomplished by a testing firm approved by the City and shall be performed under the supervision of a licensed Professional Engineer.
- E. Sampling and testing locations shall be subject to approval by the City.
- F. Density tests on subgrades shall be taken every 300 feet or portion thereof.
- G. The City shall be notified at least one day in advance of the need to inspect subgrade and formwork of sidewalks.

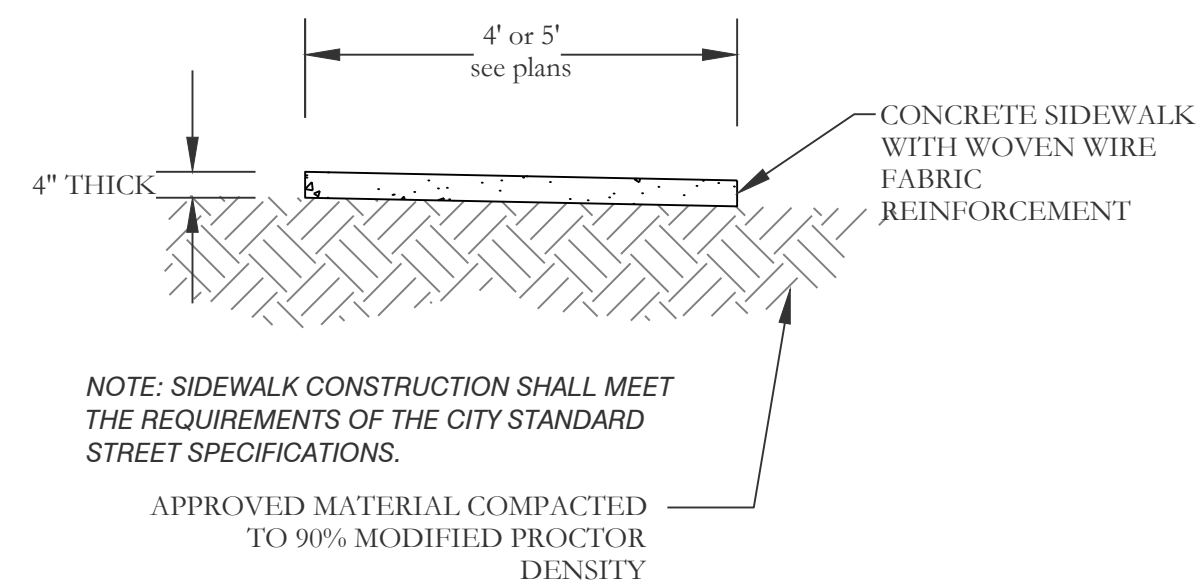
**Subgrade**

- A. Subgrade soils shall be all materials used for subgrade including in-situ materials and fill materials.
- B. Subgrade shall be compacted to 90 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture unless otherwise supported by the site specific geotechnical data and approved by City.
- C. Subgrade shall be prepared in such a manner that the base course shall be placed on a firm foundation that is stable and free from soft spots, pumping, dust pockets, wheel ruts, or other defects.
- D. The top 24 inches of the subgrade shall be a material not susceptible to frost action unless modified with cement, lime or another method approved specifically by the City to resist frost action. Soils classified as A-4 and A-5 including sandy silts, fine silty sand or lean clays are highly susceptible to frost action.

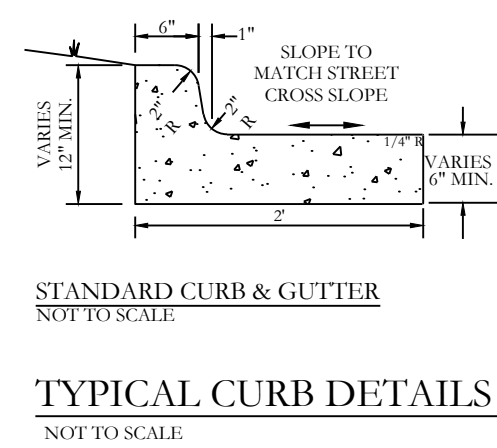
**QUALITY CONTROL TESTING AND INSPECTIONS**

**General**

- A. Materials and construction employed in street improvements shall be subject to inspection and quality control testing. All testing of materials and construction shall be provided and paid for by the Developer/Owner.
- B. The Developer/Owner shall provide for inspections of street improvements during construction. The inspections shall be accomplished under the supervision of the Engineer of Record. The Engineer of Record shall provide certification that all materials and construction conform to the approved plans and specifications and with these minimum street standards.
- C. The Engineer of Record shall furnish inspection whenever a critical construction activity is taking place. This means that a representative of the Engineer of Record must be on-site whenever a critical construction activity is taking place.
- D. All field tests required for a project shall be witnessed by the City, Engineer of Record, contractor, or other authorized representatives.
- E. The City shall be notified at least one day in advance of any test(s). It is the responsibility of the contractor to coordinated the scheduling of all tests with the City.



**Typical Sidewalk Detail**

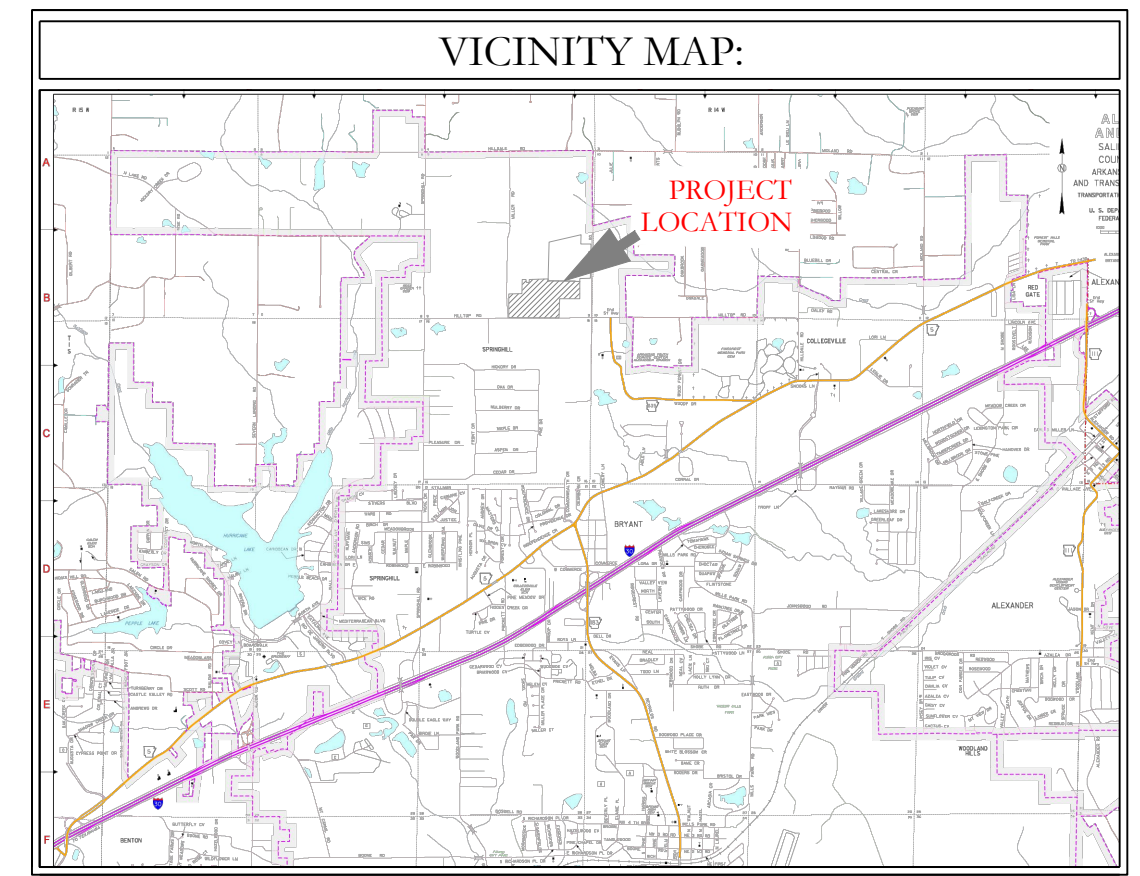
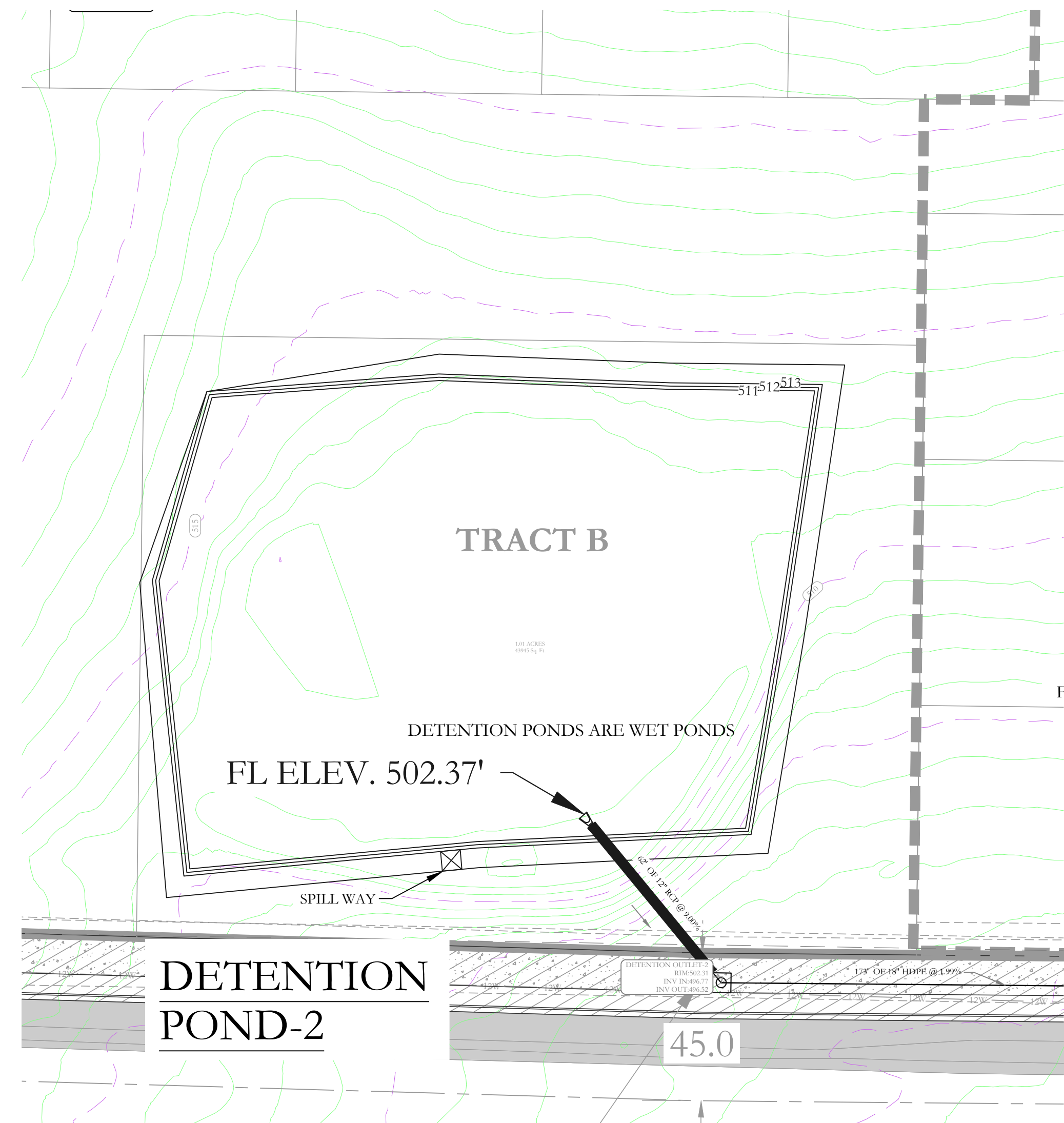
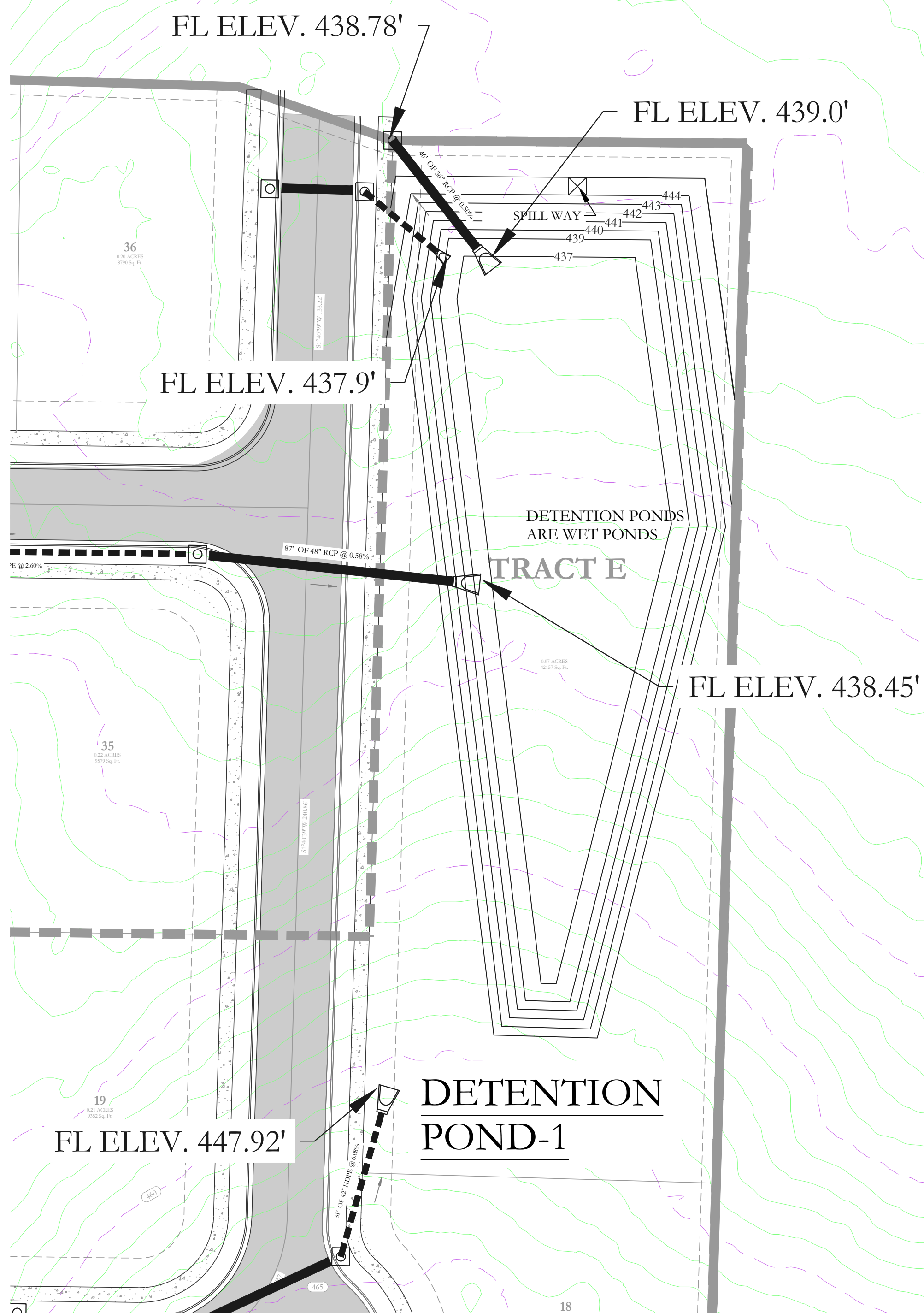


**Typical Curb Details & Notes**

**Typical Curb & Gutter Detail**  
4,000 psi concrete

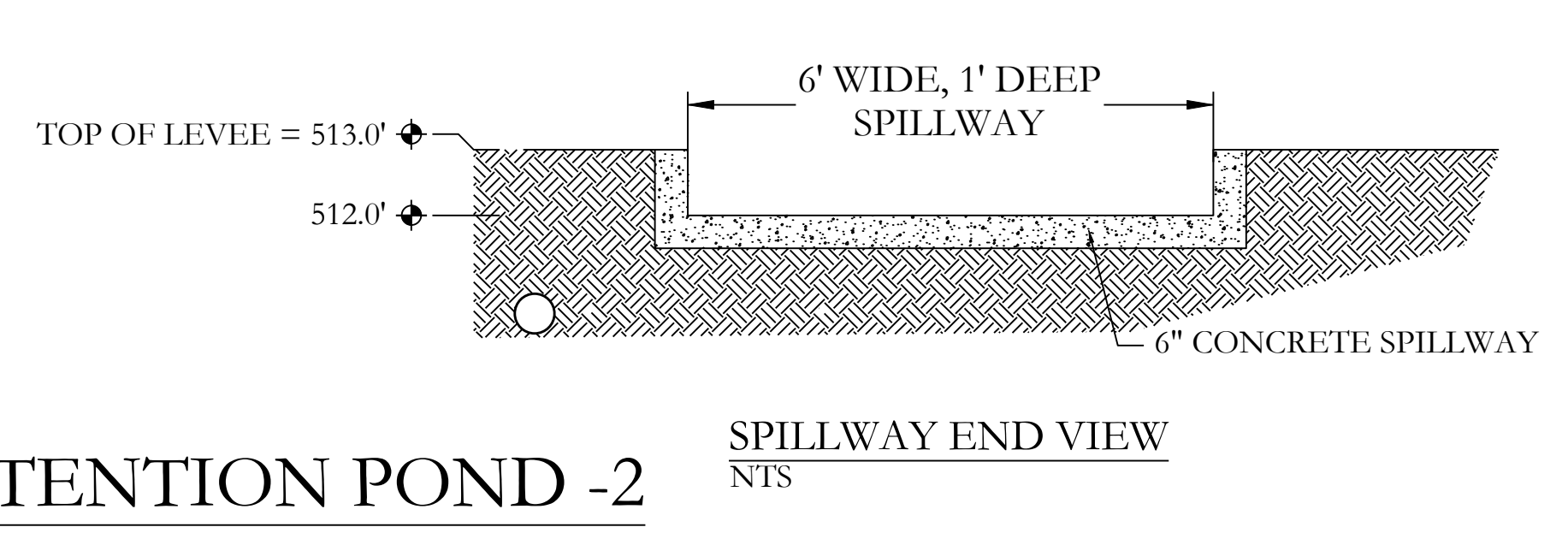
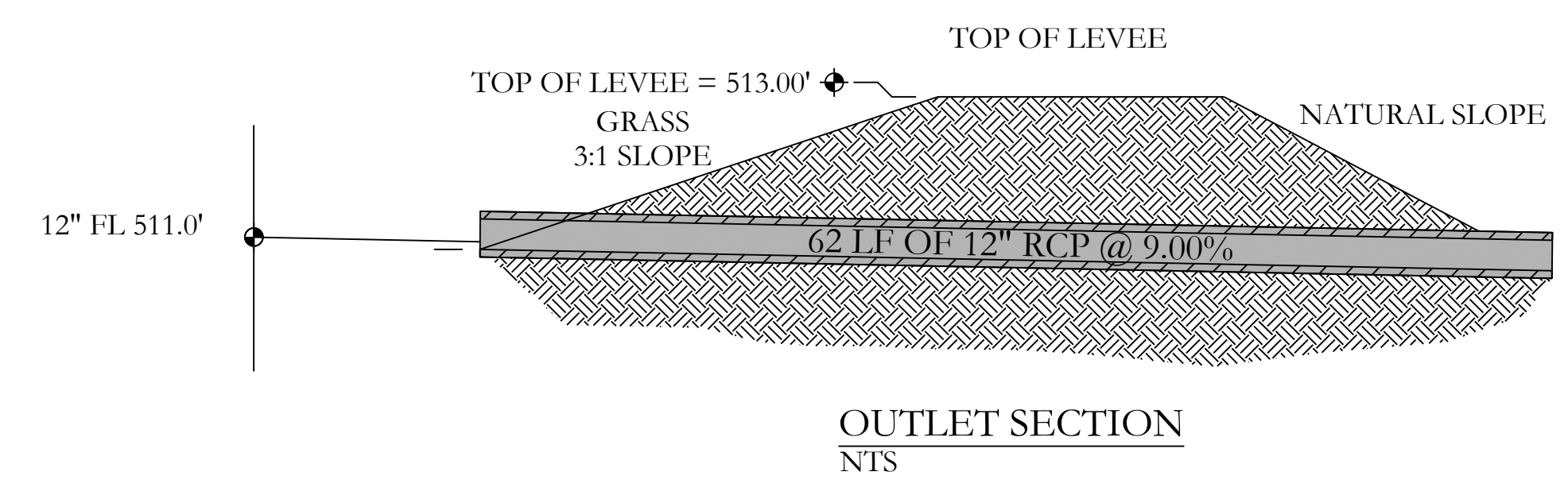
<b>HOPE CONSULTING</b> ENGINEERS - SURVEYORS		129 N. Main Street, Benton, Arkansas 72015 PH. (501)315-2626 FAX (501) 315-0024 www.hopeconsulting.com	
FOR USE AND BENEFIT OF: <b>NXT GEN HOMES LLC.</b>			
<b>HILLTOP LANDING</b> CIVIL SPECIFICATIONS A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS			
DATE:	03/08/2023	C.A.D. BY:	DRAWING NUMBER:
REVISION:		CHECKED BY:	<b>20-1341</b>
SHEET:	C-5.0	SCALE:	
500	01S	14W	0 09 200 62 1762

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**EARTHEN SLOPE NOTE:**  
ALL EARTHEN DETENTION POND SLOPES ON BOTH THE INTERIOR AND EXTERIOR OF THE POND SHALL HAVE A MAXIMUM SLOPE OF 3:1.

**NOTE:**  
ALL DETENTION BASINS WILL BE REQUIRED TO BE STABILIZED WITH SOLID SOD STABILIZATION PER THE STORMWATER MANAGEMENT MANUAL.



**DETENTION POND MAINTENANCE PLAN**

**Background**

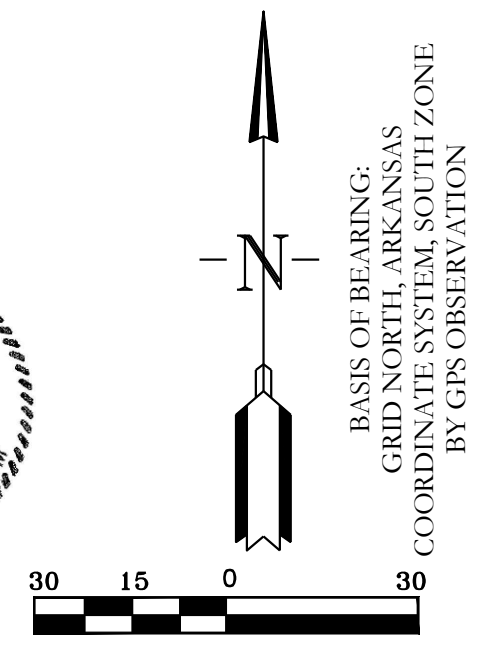
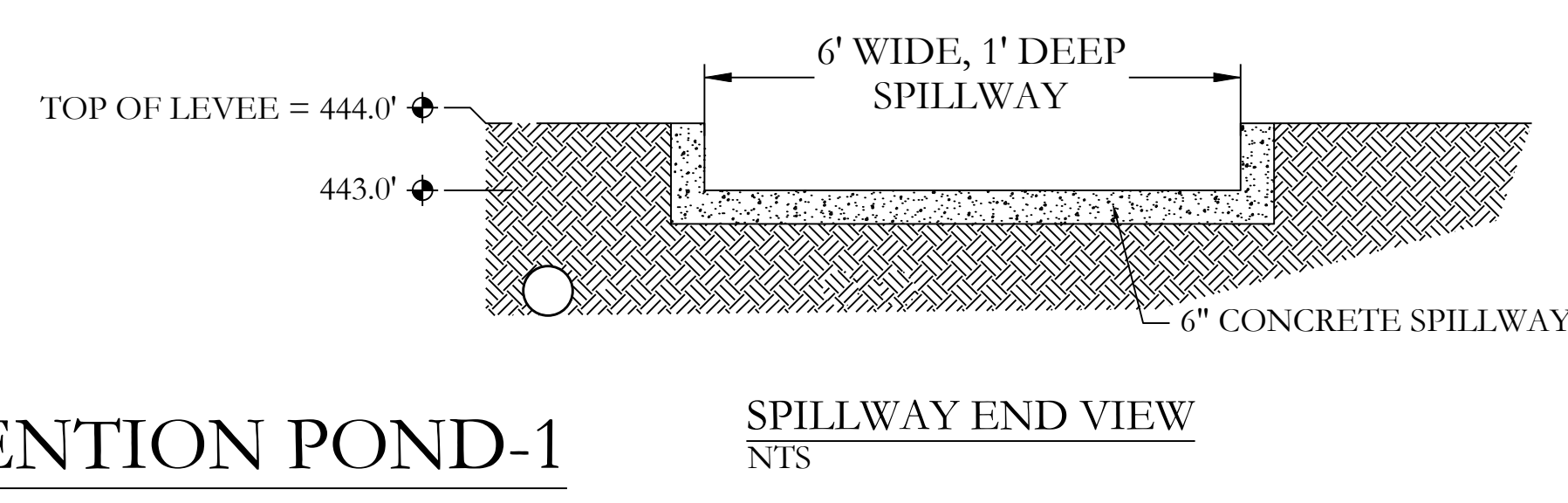
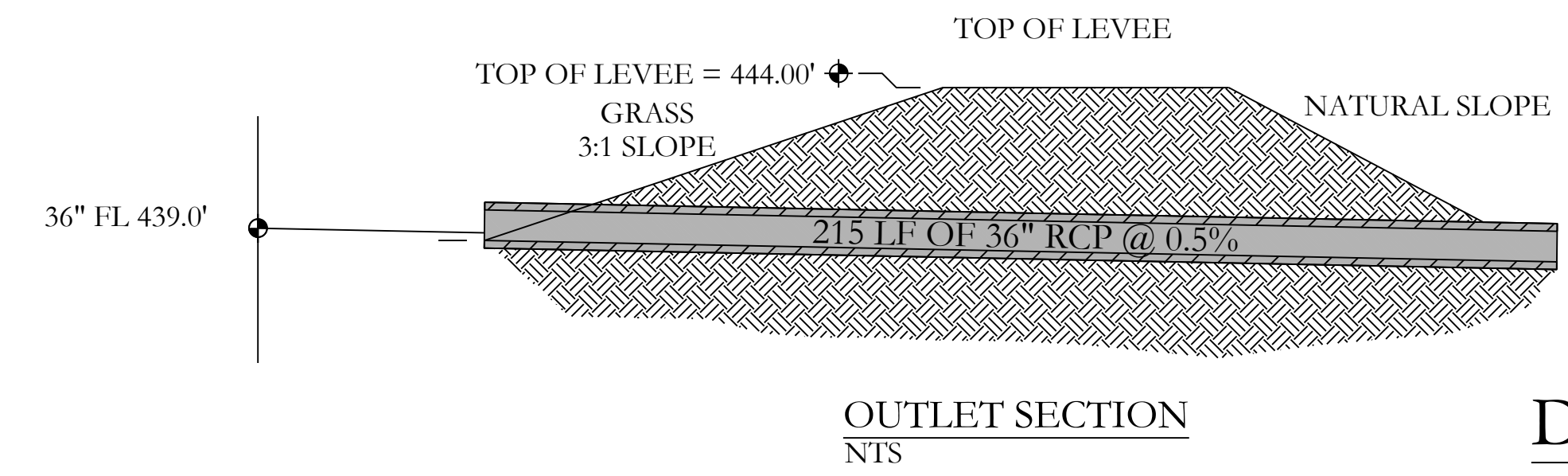
The detention ponds are located on the periphery of the subdivision. They are designed to temporarily detain stormwater to meet water quantity criteria before discharging off the property.

**Routine Maintenance**

- The property owners association will maintain the drainage easements located in Tract "B" and Tract "E". Routine maintenance will include but not be limited to:
  - Mowing of the bank slopes and area around the pond on a monthly basis during the growing season and as needed during the cooler months.
  - The outlet pipe from the pond and other areas will be inspected monthly for debris which could inhibit the proper flow of discharge. Any debris will be removed immediately and disposed of or placed in a location to prevent future maintenance and to not cause impact up or downstream of the structure.
  - Trash will be removed from around the pond to prevent entering the pond. Generally, the site should be kept free of loose trash which could be carried off site by wind or rain.
  - Inspect the pond and outlet pipe for non-routine maintenance need.

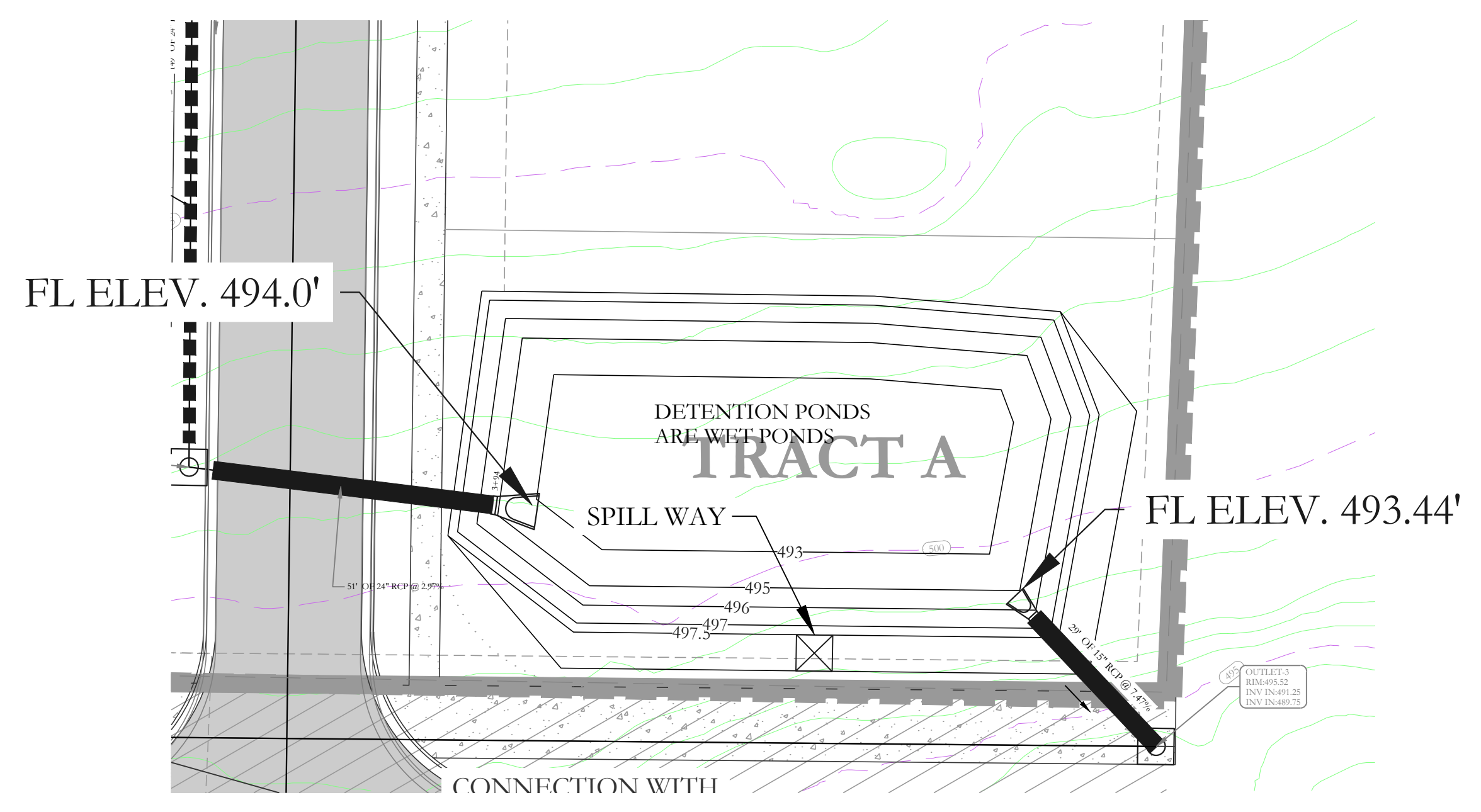
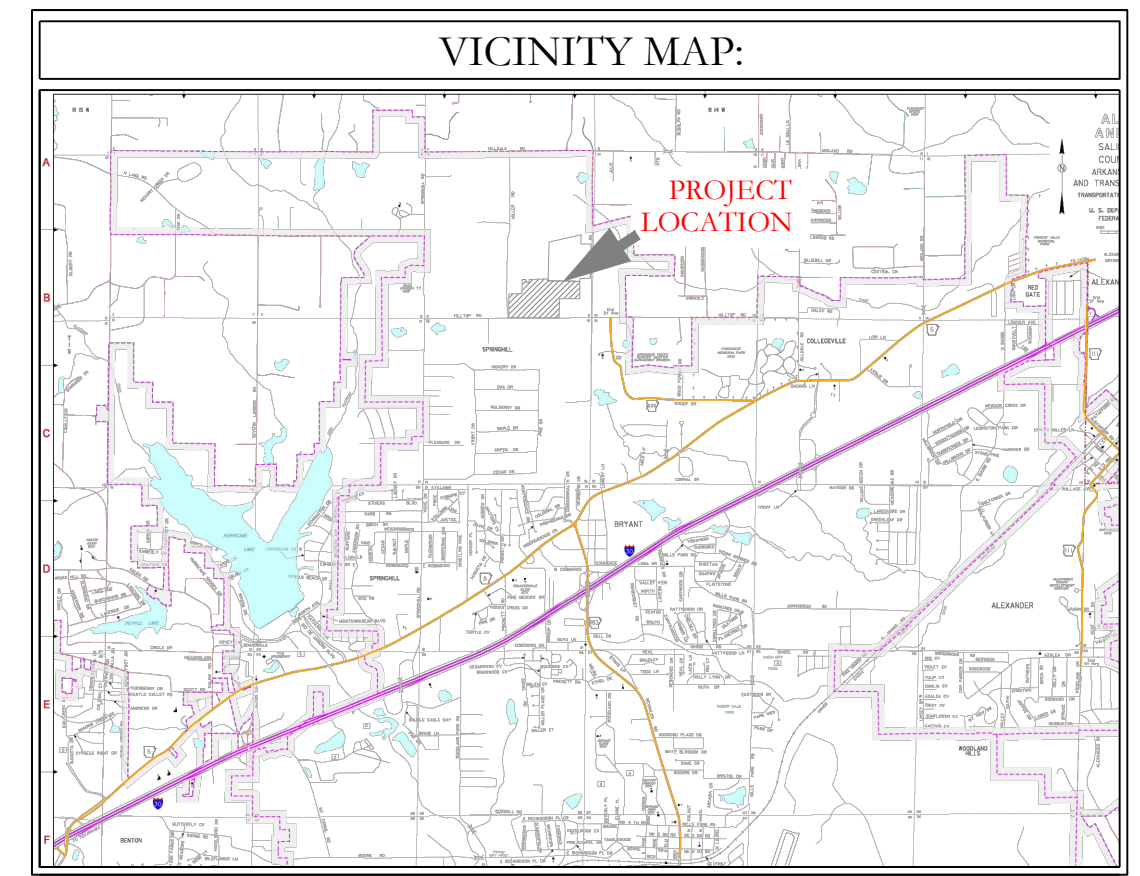
**Periodic or Non-Routine Maintenance**

- The routine inspection of the ponds areas and discharge pipes will identify needed repairs and non-routine maintenance. These items may include but not be limited to:
  - Re-growth of trees on or around the pond bank. These should be cut and removed from the pond area.
  - Sediment from the site may accumulate in the pond bottom and reduce the pond to below design volume requirements. The pond should be excavated if the pond bottom elevation reached a level that allows excessive aquatic growth or reduces the pond efficiency such, that the sediments are passing the discharge structure and release off site.
  - Stabilization or re-grading of side slopes may be required periodically or after excessive rain events. Any disturbance of slopes should be reseeded or may require installation of erosion control materials until seeding can reestablish adequate grasses to prevent future erosion.
  - Any other maintenance or repairs which would minimize other maintenance to the pond or outfall structures.

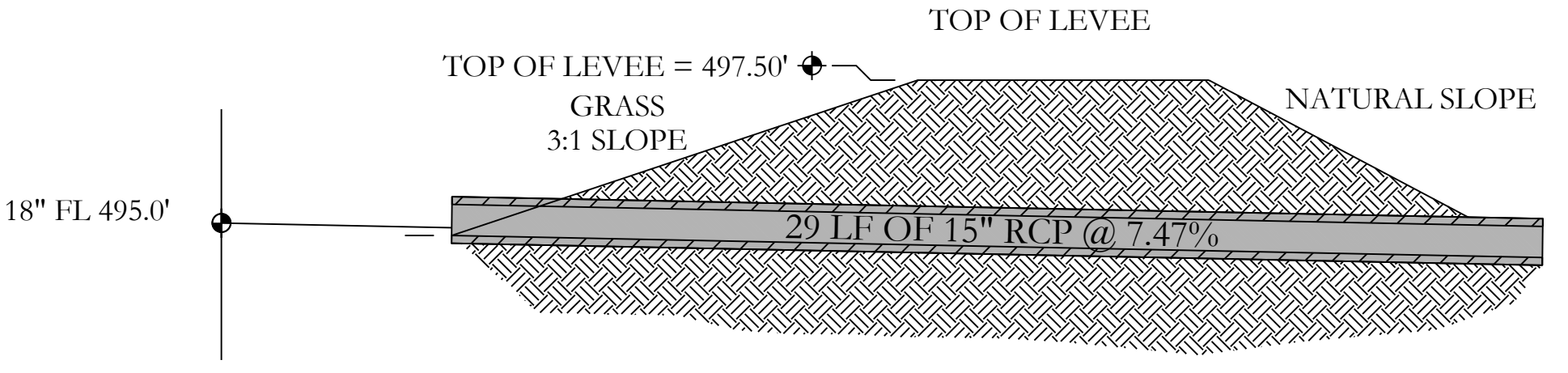


<b>HOPE CONSULTING</b> ENGINEERS - SURVEYORS		129 N. Main Street, Benton, Arkansas 72015 PH. (501)315-2626 FAX (501) 315-0024 www.hopeconsulting.com
FOR USE AND BENEFIT OF: <b>NXT GEN HOMES LLC.</b>		
<b>HILLTOP LANDING</b> DETENTION POND		
A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 03/08/2023	C.A.D. BY:	DRAWING NUMBER:
REVISIONS:	CHECKED BY:	<b>20-1341</b>
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		1762

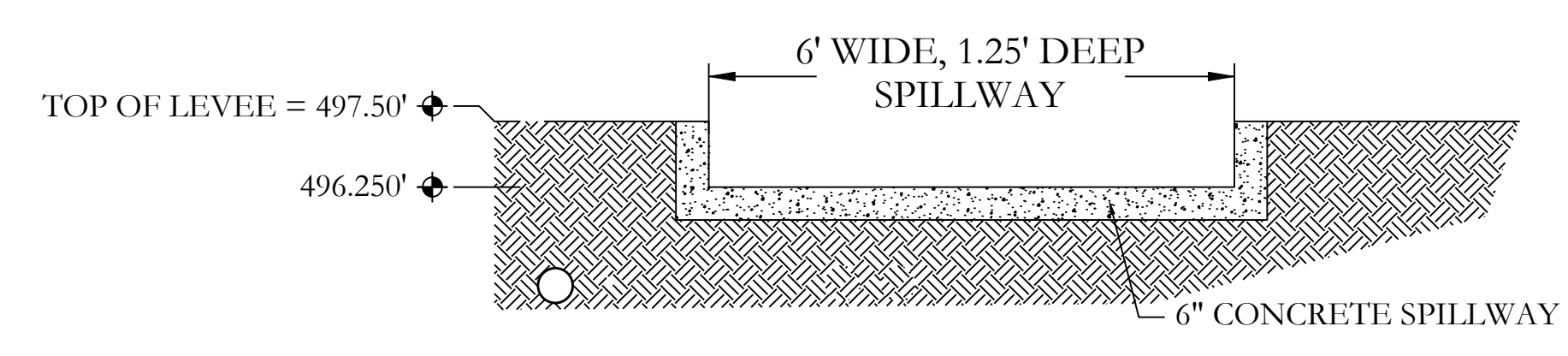
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**DETENTION POND-3**

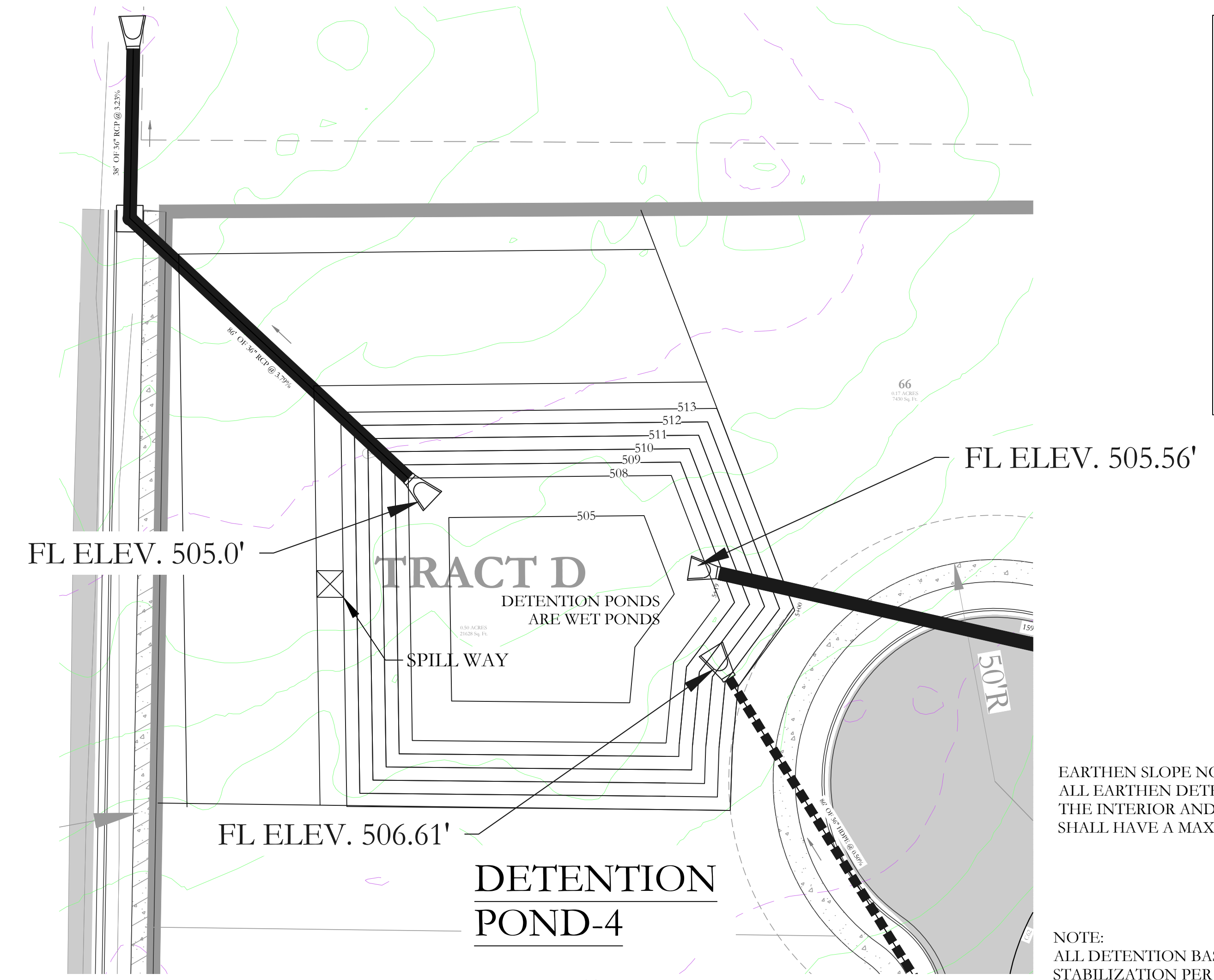


**OUTLET SECTION**  
NTS

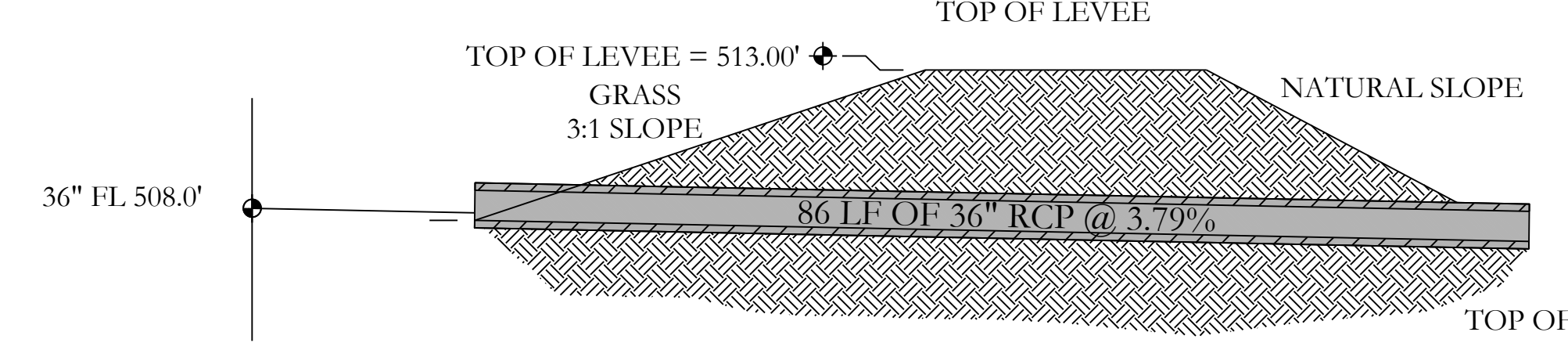


**SPILLWAY END VIEW**  
NTS

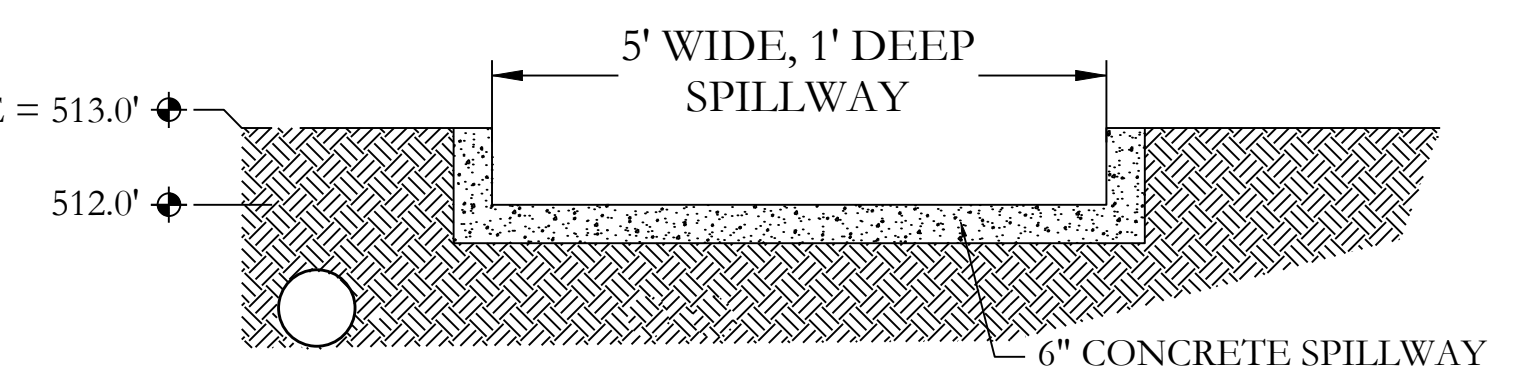
**DETENTION POND-3**



**DETENTION POND-4**



**OUTLET SECTION**  
NTS



**DETENTION POND -4**

**SPILLWAY END VIEW**  
NTS

**EARTHEN SLOPE NOTE:**  
ALL EARTHEN DETENTION POND SLOPES ON BOTH THE INTERIOR AND EXTERIOR OF THE POND SHALL HAVE A MAXIMUM SLOPE OF 3:1.

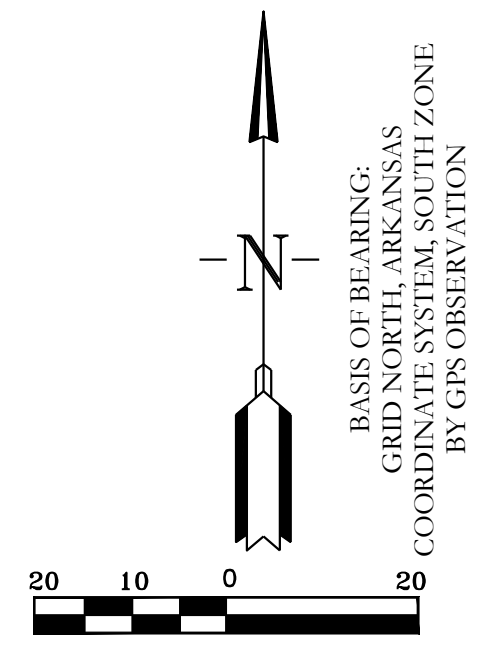
**NOTE:**  
ALL DETENTION BASINS WILL BE REQUIRED TO BE STABILIZED WITH SOLID SOD STABILIZATION PER THE STORMWATER MANAGEMENT MANUAL.

**DETENTION POND MAINTENANCE PLAN**

**Background**  
The detention ponds are located on the periphery of the subdivision. They are designed to temporarily detain stormwater to meet water quantity criteria before discharging off the property.

**Routine Maintenance**  
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-Inspect the pond and outlet pipe for non-routine maintenance need.

**Periodic or Non-Routine Maintenance**  
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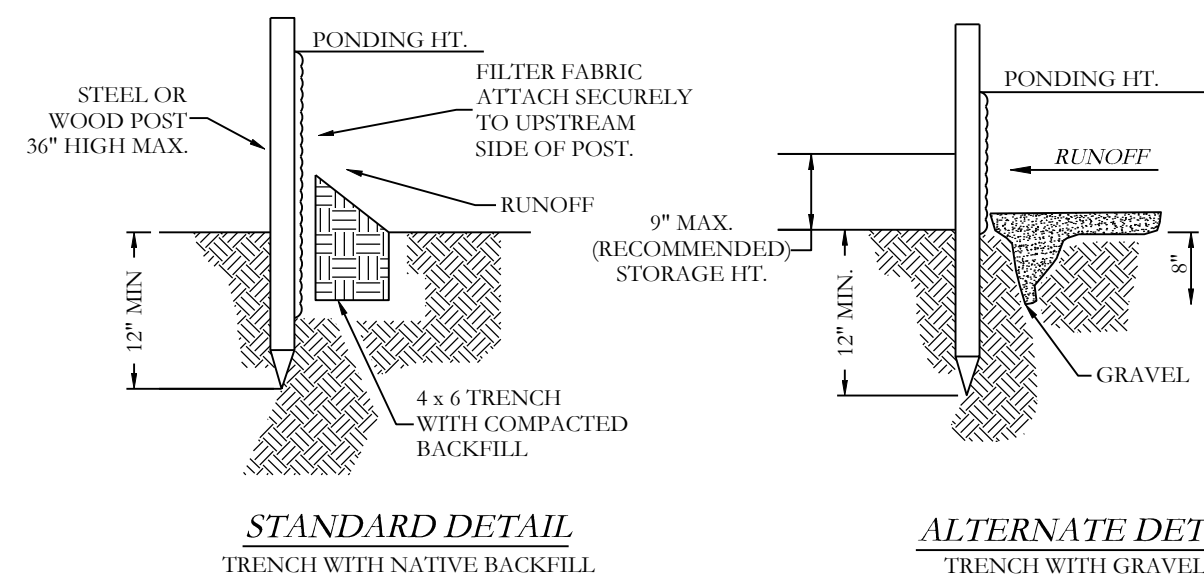
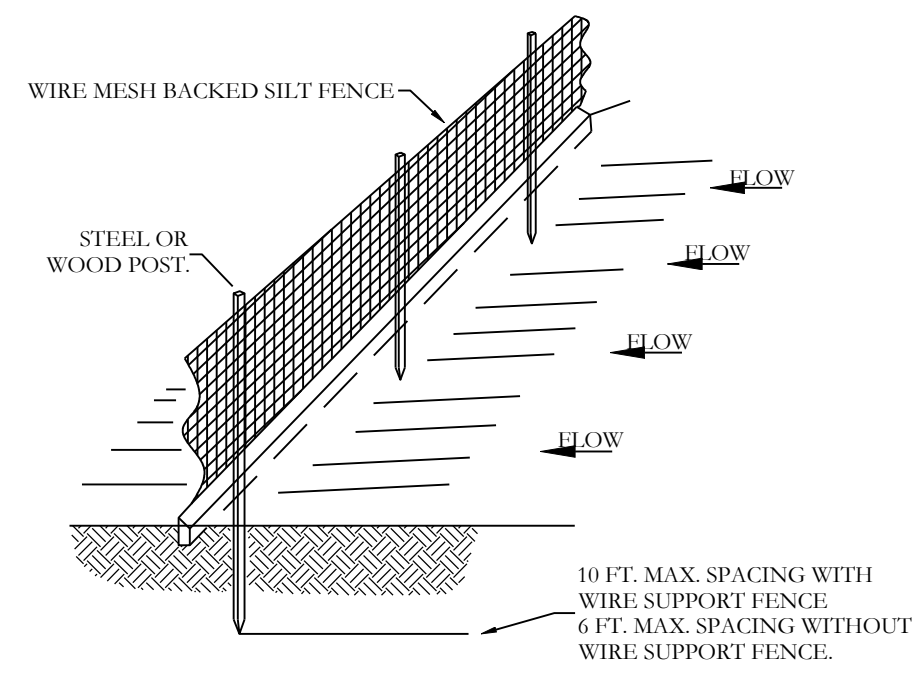
FOR USE AND BENEFIT OF:  
**NXT GEN HOMES LLC.**

**HILLTOP LANDING**  
DETENTION POND  
A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

DATE: 03/08/2023	C.A.D. BY:	DRAWING NUMBER:
REVISER:	CHECKED BY:	20-1341
SHEET: C-6.0	SCALE: 1"=20'	

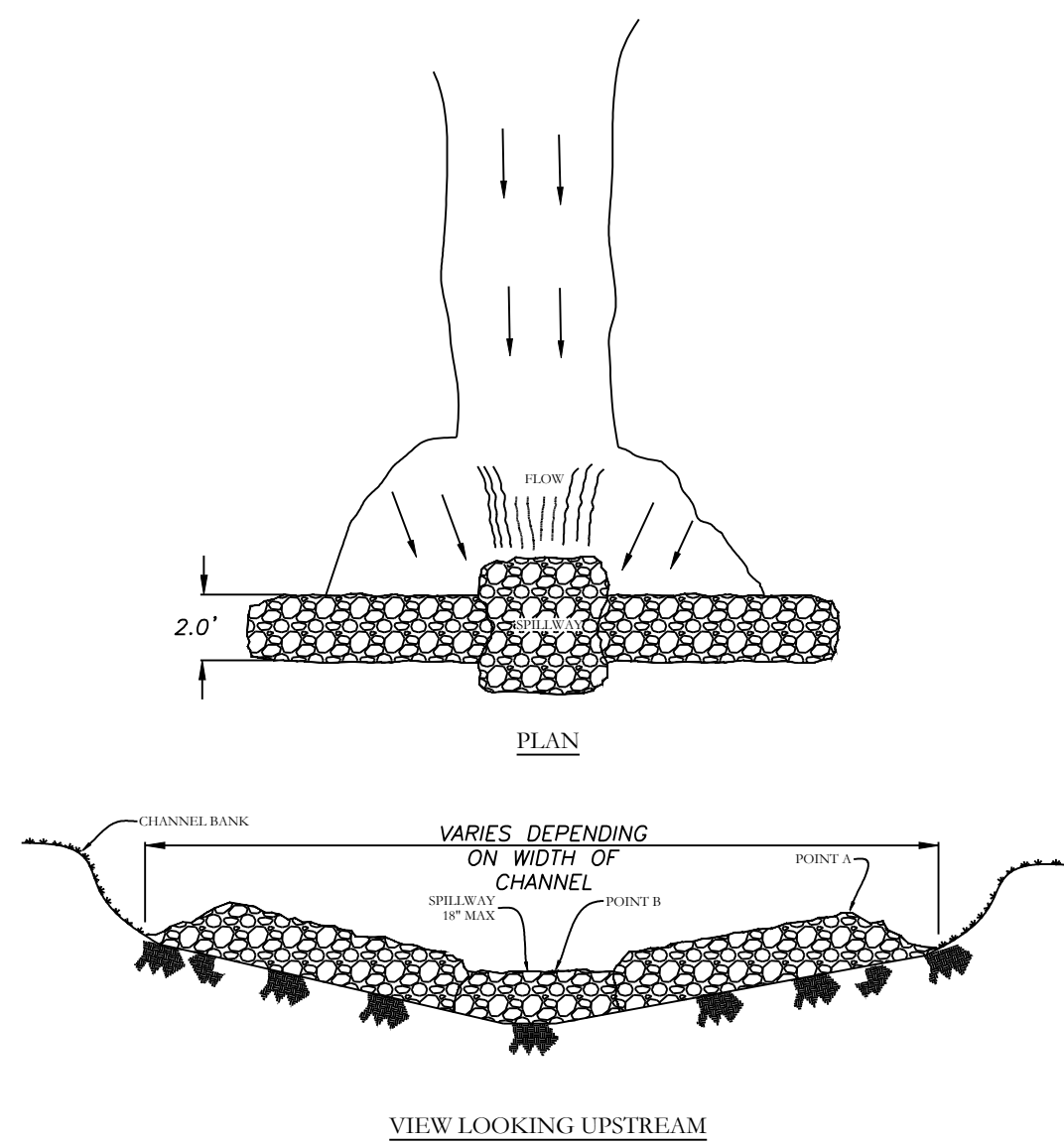
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- NOTE:
- 1) INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
  - 2) REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
  - 3) SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

**SILT FENCE**

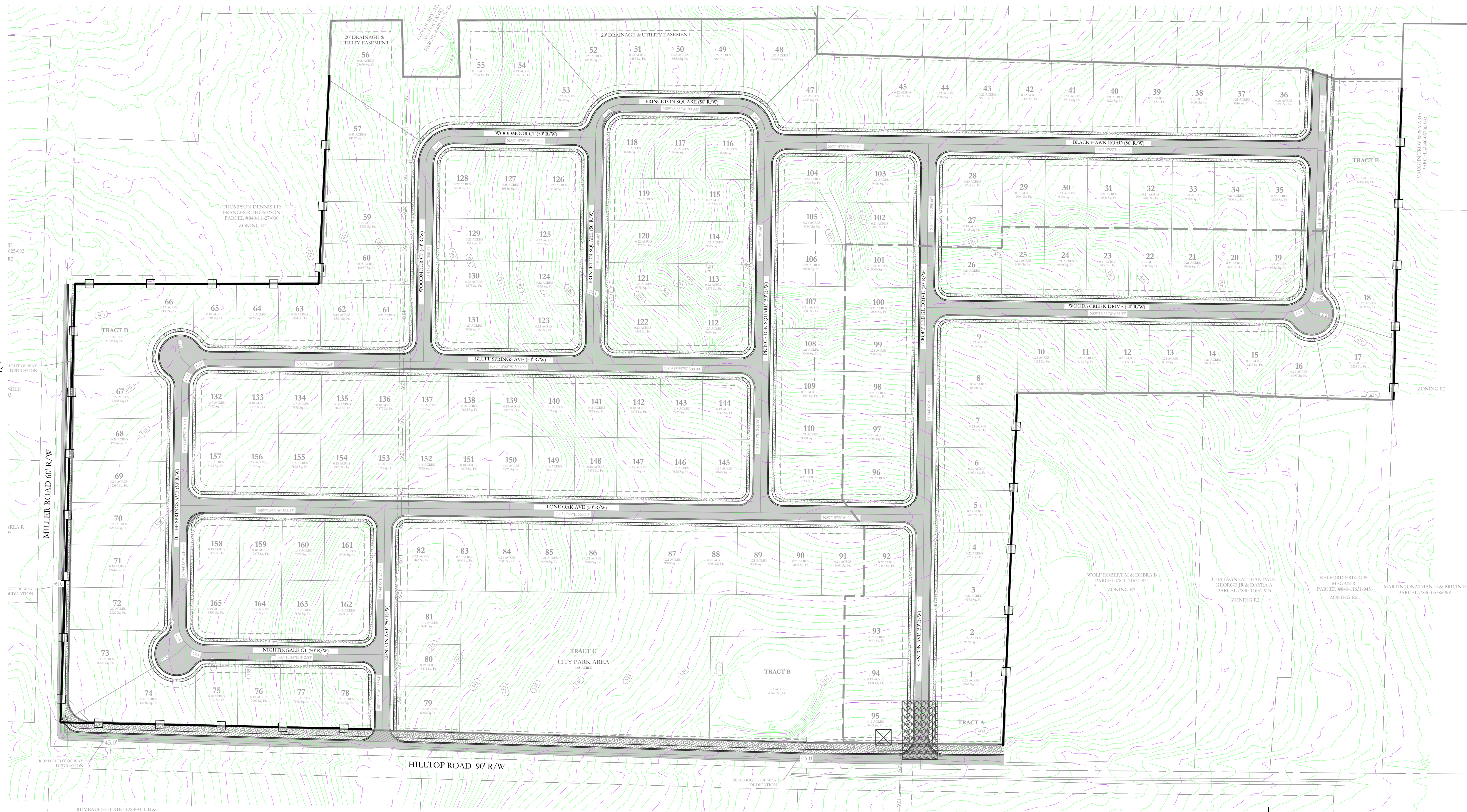
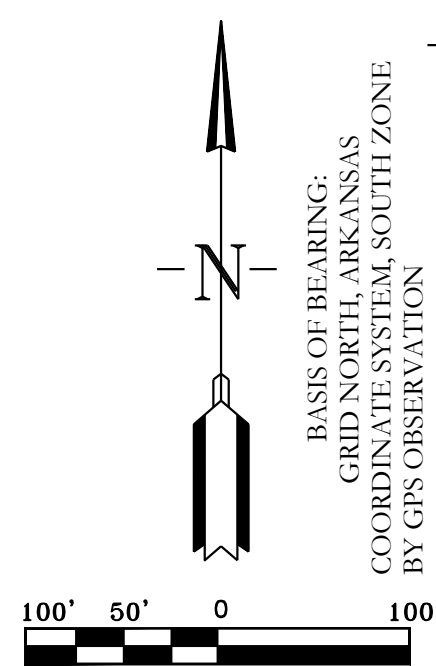


- NOTES:
- 1) POINT 'C' MUST BE HIGHER THAN POINT 'B' (SPILLWAY HEIGHT).
  - 2) TO ADD RIP-RAP TO EXISTING CHECK DAM TO THE FLOW WITH HEIGHT ADJUSTING.
  - 3) USE CHAIN, ROCKS OR FILTER FABRIC TO FILL ANY GAPS AND TO STOP BACKFLOW MATERIAL TO PREVENT BREACHING OF CHECK DAM.
  - 4) SPILLWAY HEIGHT SHALL NOT EXCEED 10'-0".
  - 5) INSPECT AFTER EACH SIGNIFICANT STORM, MAINTAIN AND REPAIR PROMPTLY.

**RIP-RAP CHECK DAM**

**ERC LEGEND**

- SITE POSTING
- CONC. WASHOUT DETENTION AREA
- SILT FENCE
- RIP RAP CHECK DAM
- CONSTRUCTION ENTRANCE
- DISTURBED AREA

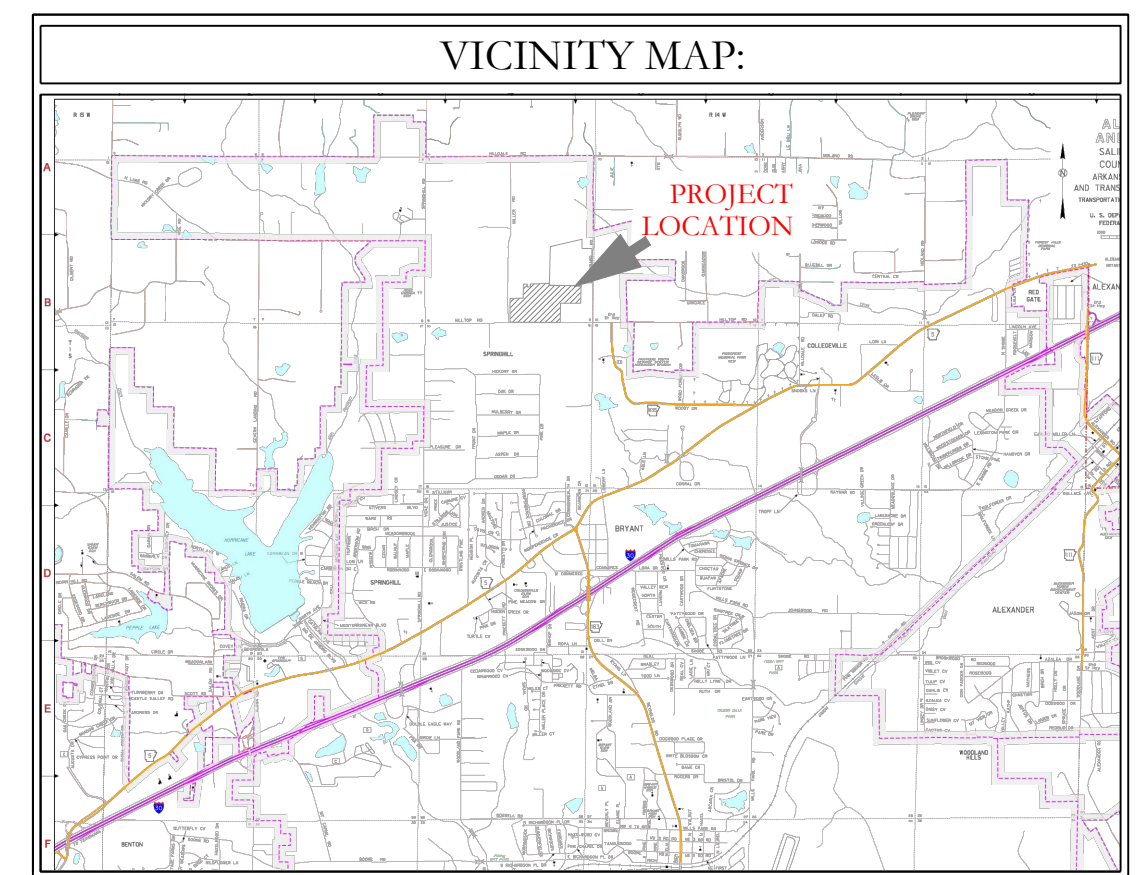


North arrow pointing up, labeled 'BASIS OF BEARING: GRID NORTH, ARKANSAS COORDINATE SYSTEM, SOUTH ZONE, BY GPS OBSERVATION'.

Scale bar showing 0, 50, and 100 feet.

CERTIFICATE OF AUTHORIZATION  
 HOPE CONSULTING, INC.  
 No. 1915  
 ARKANSAS

STATE OF ARKANSAS  
 LICENSED PROFESSIONAL ENGINEER  
 No. 20876  
 TAZZIDUL ISLAM



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 ENGINEERS - SURVEYORS

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**NXT GEN HOMES LLC.**

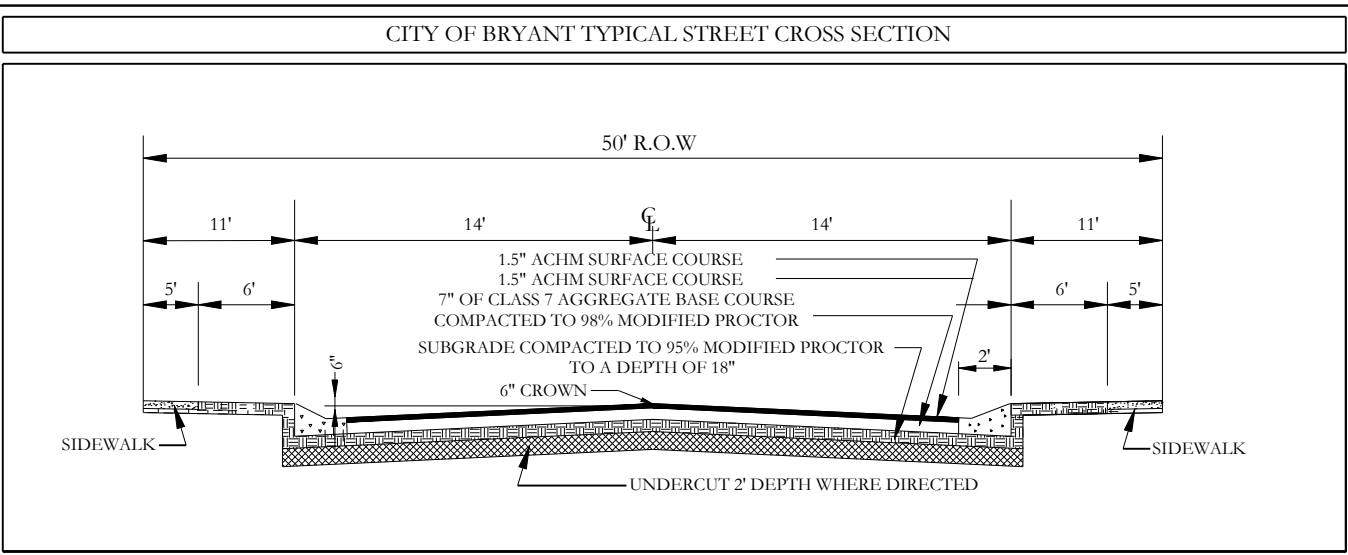
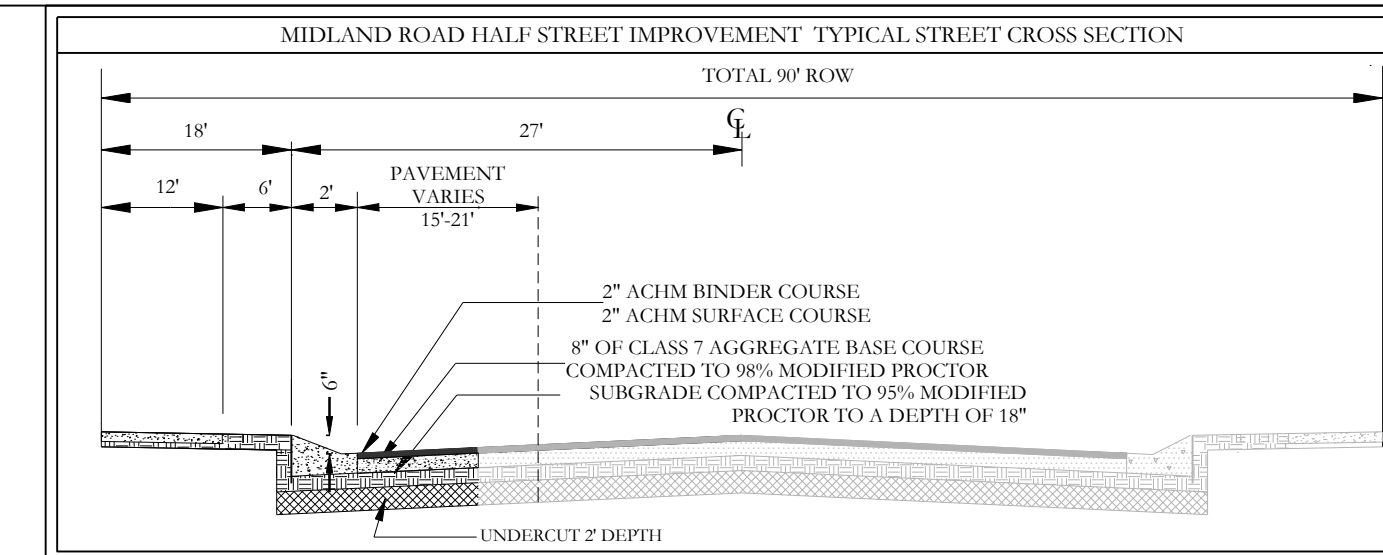
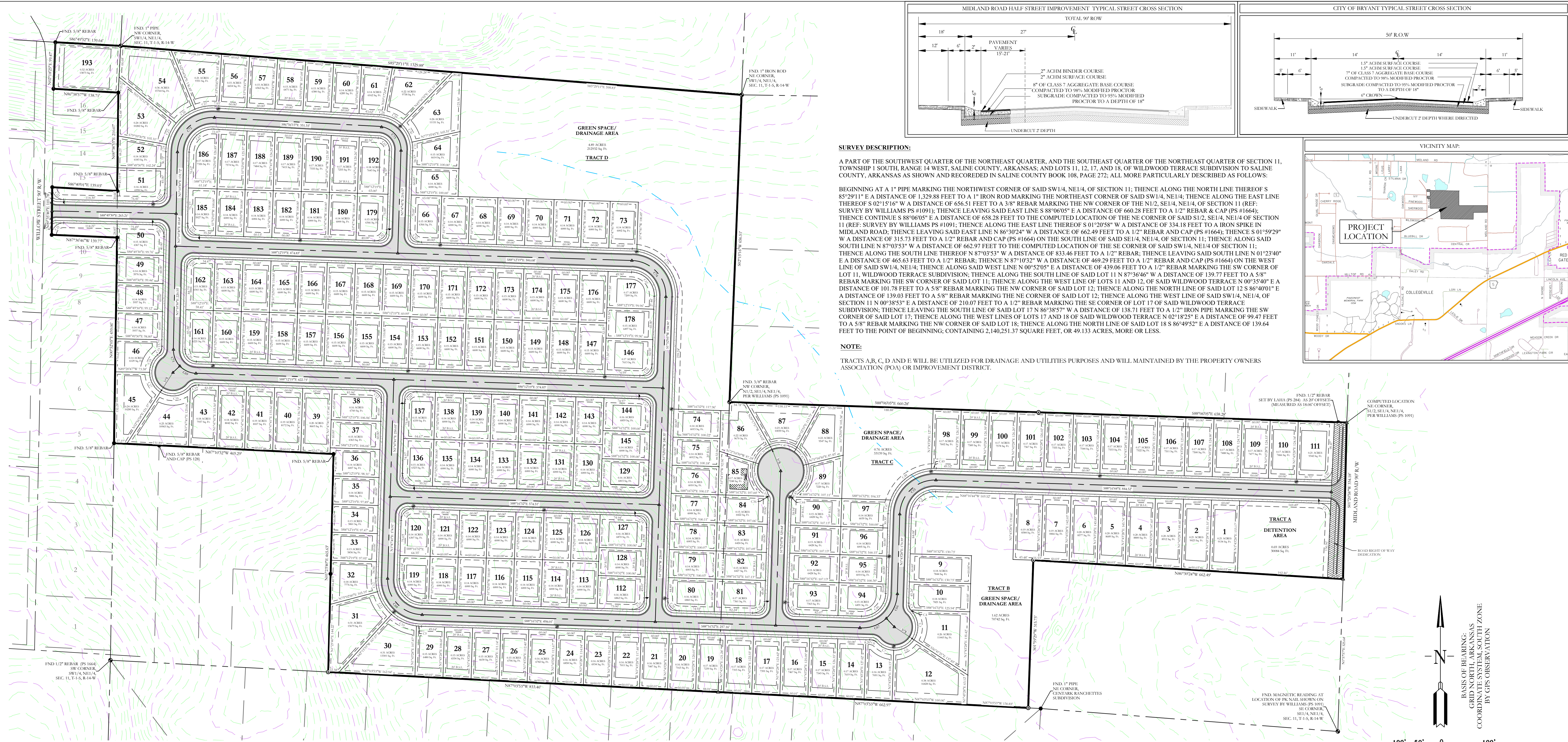
**HILLTOP LANDING**  
 EROSION CONTROL PLAN  
 A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

DATE: 03/08/2023	C.A.D. BY:	DRAWING NUMBER:
REVISIONS:	CHECKED BY:	20-1341
SHEET: C-7.0	SCALE: 1" = 100'	

500 01S 14W 0 09 200 62 1762

K:\LAND PROJECTS\2004 SUBDIVISIONS\2020-20-1341 MILLER & HILLTOP\CD\DWG\20-1341-CONSTRUCTION DRAWING FULL PHASE 75 WIDE LOTS\_03-08-2023.DWG





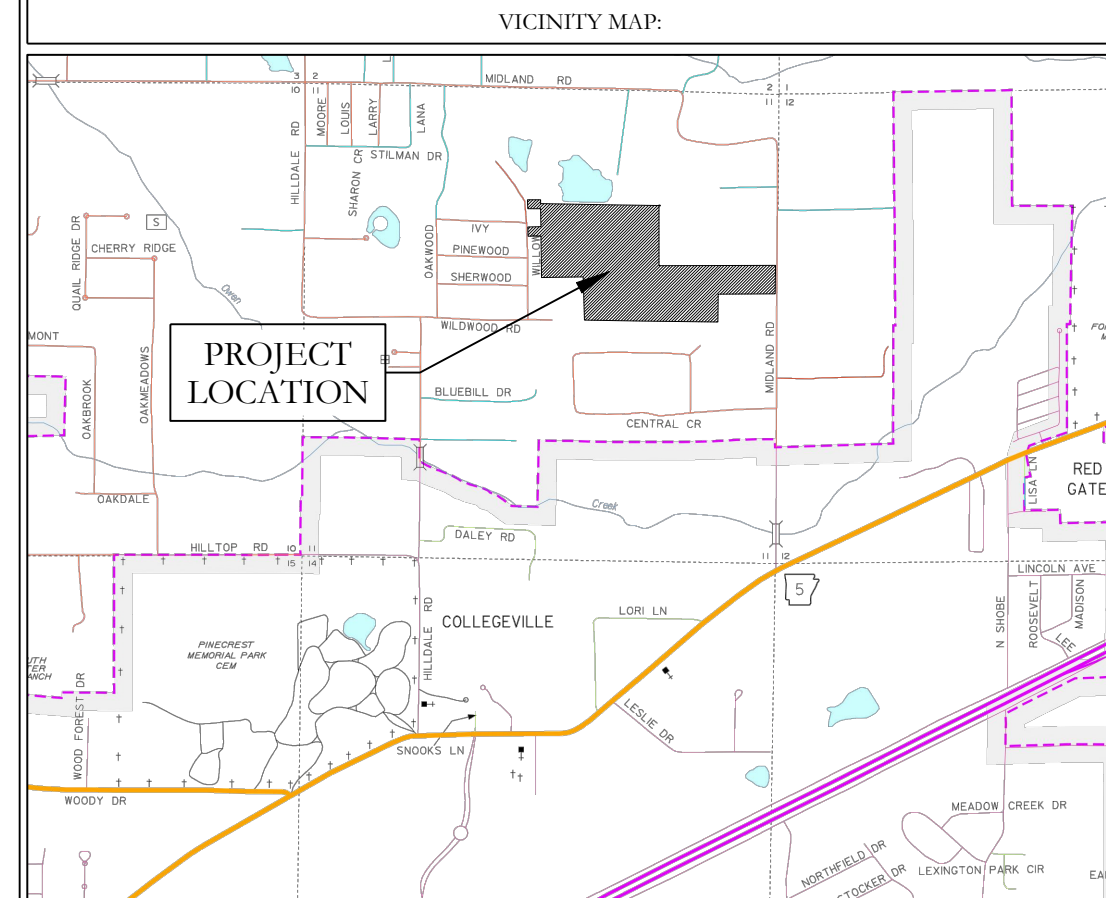
**SURVEY DESCRIPTION:**

A PART OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER, AND THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 1 SOUTH, RANGE 14 WEST, SALINE COUNTY, ARKANSAS; AND LOTS 11, 12, 17, AND 18, OF WILDWOOD TERRACE SUBDIVISION TO SALINE COUNTY, ARKANSAS AS SHOWN AND RECORDED IN SALINE COUNTY BOOK 108, PAGE 272; ALL MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 1" PIPE MARKING THE NORTHWEST CORNER OF SAID SW1/4, NE1/4, OF SECTION 11, THENCE ALONG THE NORTH LINE THEREOF S 85°29'11" E A DISTANCE OF 1,329.88 FEET TO A 1" IRON ROD MARKING THE NORTHEAST CORNER OF SAID SW1/4, NE1/4; THENCE ALONG THE EAST LINE THEREOF S 02°15'16" W A DISTANCE OF 656.51 FEET TO A 3/8" REBAR MARKING THE NW CORNER OF THE N1/2, SE1/4, NE1/4, OF SECTION 11 (REF: SURVEY BY WILLIAMS PS #1091); THENCE LEAVING SAID EAST LINE S 88°06'05" E A DISTANCE OF 660.28 FEET TO A 1/2" REBAR & CAP (PS #1664); THENCE CONTINUE S 88°06'05" E A DISTANCE OF 658.28 FEET TO THE COMPUTED LOCATION OF THE NE CORNER OF SAID S1/2, SE1/4, NE1/4 OF SECTION 11 (REF: SURVEY BY WILLIAMS PS #1091); THENCE ALONG THE EAST LINE THEREOF S 01°20'58" W A DISTANCE OF 334.18 FEET TO A IRON SPIKE IN MIDLAND ROAD; THENCE LEAVING SAID EAST LINE N 86°39'24" W A DISTANCE OF 662.49 FEET TO A 1/2" REBAR AND CAP (PS #1664); THENCE S 01°59'29" W A DISTANCE OF 315.73 FEET TO A 1/2" REBAR AND CAP (PS #1664) ON THE SOUTH LINE OF SAID SE1/4, NE1/4, OF SECTION 11; THENCE ALONG SAID SOUTH LINE N 87°03'53" W A DISTANCE OF 662.97 FEET TO THE COMPUTED LOCATION OF THE SE CORNER OF SAID SW1/4, NE1/4 OF SECTION 11; THENCE ALONG THE SOUTH LINE THEREOF N 87°03'53" W A DISTANCE OF 833.46 FEET TO A 1/2" REBAR; THENCE LEAVING SAID SOUTH LINE N 01°23'40" E A DISTANCE OF 465.63 FEET TO A 1/2" REBAR; THENCE N 87°10'32" W A DISTANCE OF 469.29 FEET TO A 1/2" REBAR AND CAP (PS #1664) ON THE WEST LINE OF SAID SW1/4, NE1/4; THENCE ALONG SAID WEST LINE N 09°52'05" E A DISTANCE OF 439.06 FEET TO A 1/2" REBAR MARKING THE SW CORNER OF LOT 11, WILDWOOD TERRACE SUBDIVISION; THENCE ALONG THE SOUTH LINE OF SAID LOT 11 N 87°36'46" W A DISTANCE OF 139.77 FEET TO A 5/8" REBAR MARKING THE SW CORNER OF SAID LOT 11; THENCE ALONG THE WEST LINE OF LOTS 11 AND 12, OF SAID WILDWOOD TERRACE N 00°35'40" E A DISTANCE OF 101.78 FEET TO A 5/8" REBAR MARKING THE NW CORNER OF SAID LOT 12; THENCE ALONG THE NORTH LINE OF SAID LOT 12 S 86°40'01" E A DISTANCE OF 139.03 FEET TO A 5/8" REBAR MARKING THE NE CORNER OF SAID LOT 12; THENCE ALONG THE WEST LINE OF SAID SW1/4, NE1/4, OF SECTION 11 N 09°38'53" E A DISTANCE OF 210.07 FEET TO A 1/2" REBAR MARKING THE SE CORNER OF LOT 17 OF SAID WILDWOOD TERRACE SUBDIVISION; THENCE LEAVING THE SOUTH LINE OF SAID LOT 17 N 86°38'57" W A DISTANCE OF 138.71 FEET TO A 1/2" IRON PIPE MARKING THE SW CORNER OF SAID LOT 17; THENCE ALONG THE WEST LINES OF LOTS 17 AND 18 OF SAID WILDWOOD TERRACE N 02°18'25" E A DISTANCE OF 99.47 FEET TO A 5/8" REBAR MARKING THE NW CORNER OF SAID LOT 18; THENCE ALONG THE NORTH LINE OF SAID LOT 18 S 86°49'52" E A DISTANCE OF 139.64 FEET TO THE POINT OF BEGINNING; CONTAINING 2,140,251.37 SQUARE FEET, OR 49.133 ACRES, MORE OR LESS.

**NOTE:**

TRACTS A, B, C, D AND E WILL BE UTILIZED FOR DRAINAGE AND UTILITIES PURPOSES AND WILL MAINTAINED BY THE PROPERTY OWNERS ASSOCIATION (POA) OR IMPROVEMENT DISTRICT.



Curve Table					Curve Table					Curve Table							
Curve #	Length	Radius	Delta	Chord Direction	Chord Length	Curve #	Length	Radius	Delta	Chord Direction	Chord Length	Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	36.44	25.00	83.51	N46°31'18"W	33.30	C27	43.88	10000	25.14	N80°29'25"E	43.53	C52	78.60	50.00	90.07	S43°14'26"E	70.75
C2	78.54	50.00	90.00	S46°43'28"W	70.71	C28	9.46	75.00	7.23	S83°19'25"E	9.45	C53	39.24	25.00	89.93	S46°45'34"W	35.33
C3	15.74	25.00	36.08	S16°19'00"E	15.48	C29	44.05	75.00	33.65	S02°53'00"E	43.42	C54	39.33	25.00	90.14	N43°12'13"W	35.40
C4	3.29	25.00	7.54	S38°07'47"E	3.29	C30	44.05	75.00	33.65	S29°13'50"E	43.42	C55	39.21	25.00	89.86	N46°47'47"E	35.31
C5	65.64	50.00	75.21	S4°17'44"E	61.02	C31	18.59	75.00	14.20	S5°18'17"E	18.54	C56	39.30	25.00	90.07	S43°14'26"E	35.38
C6	50.98	50.00	58.41	S62°31'03"W	48.80	C32	39.27	25.00	90.00	S43°12'19"E	35.36	C57	39.30	25.00	90.07	N43°10'07"W	35.38
C7	38.12	50.00	43.68	N66°20'09"W	37.20	C33	147.27	10000	84.38	S40°19'16"E	134.32	C58	39.24	25.00	89.93	N46°49'53"E	35.33
C8	19.06	25.00	43.68	N66°20'09"W	18.60	C34	39.33	25.00	90.14	S43°12'13"E	35.40	C59	39.00	25.00	89.38	S43°30'55"E	35.16
C10	59.54	100.00	34.12	N65°16'17"W	58.67	C35	39.21	25.00	89.86	N46°47'47"E	35.31	C60	39.54	25.00	90.62	S46°29'05"W	35.55
C11	57.73	100.00	33.08	N31°40'27"W	56.93	C36	0.94	25.00	2.15	N0°47'36"E	0.94	C61	78.60	50.00	90.07	N43°10'07"W	70.76
C12	29.55	100.00	16.93	N6°40'12"W	29.44	C37	20.09	25.00	46.04	N23°18'05"W	19.55	C62	39.27	25.00	90.00	N46°47'41"E	35.36
C13	39.27	25.00	90.00	N43°12'19"W	35.36	C38	55.98	50.00	64.14	N14°41'58"W	53.10	C63	39.00	25.00	89.38	S43°30'55"E	35.16
C14	19.69	25.00	45.13	S69°13'41"W	19.19	C39	43.73	50.00	50.11	N42°52'47"E	42.35	C64	80.19	50.00	91.89	S47°07'07"W	71.87
C15	117.81	75.00	90.00	S46°43'28"W	106.07	C40	50.36	50.00	57.71	S83°12'24"E	48.26	C65	38.72	25.00	88.73	N42°34'17"W	34.96
C16	69.10	50.00	79.18	S83°21'33"W	63.73	C41	35.14	50.00	40.26	S34°13'06"E	34.42	C66	58.90	75.00	45.00	N24°13'28"E	57.40
C17	50.36	50.00	57.70	N28°11'54"W	48.26	C42	55.98	50.00	64.14	S17°59'09"W	53.10	C67	61.60	75.00	47.06	N70°15'11"E	59.88
C18	42.37	50.00	48.55	N24°35'38"E	41.11	C43	19.96	25.00	45.75	S27°10'54"W	19.44	C68	117.90	75.00	90.07	S43°14'26"E	106.13
C19	20.96	25.00	48.03	N23°11'17"E	20.35	C44	1.06	25.00	2.44	S3°05'13"W	1.06	C69	39.00	50.00	44.69	S65°51'37"E	38.02
C20	39.27	25.00	90.00	N43°12'19"W	35.36	C45	39.33	25.00	90.14	S43°12'13"E	35.40	C71	39.00	50.00	44.69	S21°10'12"E	38.02
C21	39.40	25.00	90.29	S46°01'44"W	35.45	C46	78.54	50.00	90.00	N46°43'28"E	70.71	C72	120.28	75.00	91.89	S47°07'07"W	107.80
C22	39.02	25.00	89.42	S44°06'55"E	35.18	C47	30.06	10000	17.22	N10°20'12"E	29.95	C73	77.43	50.00	88.73	N42°34'17"W	69.92
C23	39.27	25.00	90.00	N43°12'19"W	35.36	C48	116.52	10000	66.76	N52°19'49"E	110.04	C74	117.91	75.00	90.07	N43°10'07"W	106.13
C24	15.42	100.00	8.83	N5°35'30"E	15.40	C49	10.49	10000	6.01	N88°43'05"E	10.49	C247	39.27	25.00	90.00	S46°47'41"W	35.36
C25	50.34	100.00	28.96	N24°29'09"E	50.00	C50	38.91	25.00	89.18	N47°08'03"E	35.10						
C26	50.54	100.00	28.96	N53°26'27"E	50.00	C51	39.21	25.00	89.86	N46°47'47"E	35.31						

**PRELIMINARY PLAT**  
**MIDLAND ROAD ESTATES**  
 A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS.



By affixing my seal and signature, I, William Cobitt R. Shofner, PLS No. 1762, hereby certify that this drawing correctly depicts a survey based on my supervision.

NOTE: This survey was compiled under my supervision.

No portion of the property described hereon lies within the 100 year floodplain, according to the Federal Insurance Rate Map, panel #0125C0365, Dated: 06/05/2020.

**CERTIFICATIONS:**

**OWNER:** Name: HAVENS DEVELOPMENT, LLC Address: 2615 N. PRICKETT ROAD, SUITE 5 BRYANT, AR 72022

**DEVELOPER:** Name: HAVENS DEVELOPMENT, LLC Address: 2615 N. PRICKETT ROAD, SUITE 5 BRYANT, AR 72022

**CERTIFICATE OF PRELIMINARY ENGINEERING ACCURACY:**  
 I, Kazi Tamzidul Islam, hereby certify that this plat correctly represents a survey and a plan made by me or under my supervision; that all monuments shown hereon actually exist and their location, size, type and material are correctly shown; and that all requirements of the City of Bryant Subdivision Rules and Regulations have been fully complied with.

Date of Execution: \_\_\_\_\_ Signed: Kazi Tamzidul Islam, Registered Professional Engineer, No. 20876 Arkansas

**CERTIFICATE OF OWNER:**  
 We, the undersigned, owners of the real estate shown and described herein do hereby certify that we have laid off, platted and subdivided, and do hereby lay off, plat and subdivide said real estate in accordance with the within plat.

Source of Title: 2021-009870

Date of Execution: \_\_\_\_\_ Name: \_\_\_\_\_

**CERTIFICATE OF PRELIMINARY SURVEYING ACCURACY:**  
 I, Corbett R. Shofner, hereby certify that this proposed preliminary plat correctly represents a survey completed by me, or under my supervision on \_\_\_\_\_ 2023; that the boundary lines shown hereon correspond with the description in the deeds cited in the above Source Title; and that all monuments which were found or placed on the property are correctly described and located.

**CERTIFICATE OF PRELIMINARY PLAT APPROVAL:**  
 All requirements of the City of Bryant Subdivision Rules and Regulations relative to the preparation and submission of a Preliminary Plat having been fulfilled, approval of this plat is hereby granted, subject to further provisions of said Rules and Regulations.

Date of Execution: \_\_\_\_\_ Signed: Jonathan L. Hope, Registered Professional Land Surveyor No. 1762 Arkansas

Date of Execution: \_\_\_\_\_ Signed: Rick Johnson, Chairman, Bryant Planning Commission

**PROPERTY SPECIFICATIONS:**

<b>OWNER:</b> HAVENS DEVELOPMENT, LLC 2615 N. PRICKETT ROAD, SUITE 5 BRYANT, AR 72022	<b>MIN. LOT SIZE:</b> 6,000 SQ. FT. <b>NUMBER OF LOTS:</b> 198 <b>SOURCE OF WATER:</b> CITY OF BRYANT <b>SOURCE OF SEWER:</b> CITY OF BRYANT <b>SOURCE OF ELECTRIC:</b> FIRST ELECTRIC COOP <b>SOURCE OF GAS:</b> CENTERPOINT ENERGY
<b>DEVELOPER/SUBDIVIDER:</b> HAVENS DEVELOPMENT, LLC 2615 N. PRICKETT ROAD, SUITE 5 BRYANT, AR 72022	<b>BUILDING SETBACKS:</b> FRONT: 20' OR AS SHOWN REAR: 20' OR AS SHOWN SIDE: 8' OR AS SHOWN
<b>ENGINEERS:</b> HOPE CONSULTING INC. 129 N. MAIN STREET BENTON, AR 72015	<b>EASEMENTS, UTILITY &amp; DRAINAGE (D.E. &amp; U.):</b> FRONT: 10' OR AS SHOWN REAR: 10' OR AS SHOWN SIDE: 5' OR AS SHOWN
<b>NAME OF SUBDIVISION:</b> MIDLAND ROAD ESTATES	<b>STREET RIGHT OF WAY:</b> 50' OR AS SHOWN <b>STREET WIDTH:</b> 28' BOC TO BOC <b>LOT CORNERS:</b> SET 1/2" REBAR WITH CAP
<b>ZONING CLASSIFICATION:</b> R-15	<b>SOURCE OF TITLE:</b> SALINE COUNTY DOCUMENT BOOK PAGE

**FOR USE AND BENEFIT OF:**  
**HAVENS DEVELOPMENT, LLC**

**PRELIMINARY PLAT**  
**MIDLAND ROAD ESTATES**  
 A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS.

<b>DATE:</b> 03/08/2023	<b>C.A.D. BY:</b> BJOHNSON	<b>DRAWING NUMBER:</b>
<b>REVISED:</b>	<b>CHECKED BY:</b>	<b>SCALE:</b> 1" = 100'
<b>SHEET:</b> 500	<b>DATE:</b> 0	<b>NUMBER:</b> 23-0024

# HOPE

## CONSULTING

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### ENGINEERS - SURVEYORS

March 6, 2022

Truett Smith  
City of Bryant  
210 Southwest Third St., Bryant, AR 72022

RE: Request for Residential Subdivision Plat and CD Approval  
Parcel #: 001-03734-000, 001-03744-000, 370-00105-000, and 370-00106-000


Dear Mr. Truett Smith,

I represent Havens Development LLC, in the above-captioned development. This 50 acre piece of property is located adjacent to the City of Bryant. We are proposing a off site sewer main extension to the south to access to Bryant sewer. Salem Water Users is available on the east side of Midland Road for water. This development will be for single family neighborhood and be proposed into the R-1.S Zoning District. I am requesting a modification from the Walk Bike Drive Code to remove the east/west collector street through this property. Our client does not own the property on Midland or Wildwood where the maps shows the connection. Creekside Subdivision to the east also had this collector removed from their plat at this location.

It is our goal to be included on the April 10th, 2023 Planning Commission agenda.

Please feel free to contact me with any questions or concerns or if I can be of any further assistance.

Sincerely,



Jonathan Hope  
Hope Consulting, Inc.

117 SOUTH MARKET ST. BENTON, ARKANSAS 72015  
501-315-2626  
WWW.HOPECONSULTING.COM



**City of Bryant, Arkansas**  
 Community Development  
 210 SW 3<sup>rd</sup> Street Bryant, AR 72022  
 501-943-0943

## SIGN PERMIT APPLICATION

Applicants are advised to read the Sign Ordinance prior to completing and signing this form.  
 The Sign Ordinance is available at [www.cityofbryant.com](http://www.cityofbryant.com) under the Planning and Community Development tab.

Note: Electrical Permits may be Required, Please contact the Community Development Office for more information.

Date: 2.17.2023

### Sign Co. or Sign Owner

Name Action Signs  
 Address 2700 John Harden Dr  
 City, State, Zip Jacksonville, AR 72076  
 Phone 501.457.7391  
 Email Address tim@actionsignandneon.com

### Property Owner


Name Wendy's  
 Address 2206 N Reynolds Road  
 City, State, Zip Bryant, AR 72022  
 Phone 501.229.9361  
 Email Address nsimpson@livecoteam.com

### GENERAL INFORMATION

Name of Business Wendy's  
 Address/Location of sign 2206 N Reynolds Road Bryant, AR 72022  
 Zoning Classification \_\_\_\_\_

**Please use following page to provide details on the signs requesting approval.** Along with information provided on this application, **a Site Plan showing placement of sign(s) and any existing sign(s) on the property is required** to be submitted. **Renderings of the sign(s) showing the correct dimensions is also required** to be submitted with the application. A thirty-five dollar (\$35) per sign payment will be collected at the time of permit issuance. According to the Sign Ordinance a fee for and sign variance or special sign permit request shall be one hundred dollars (\$100). Additional documentation may be required by Sign Administrator.

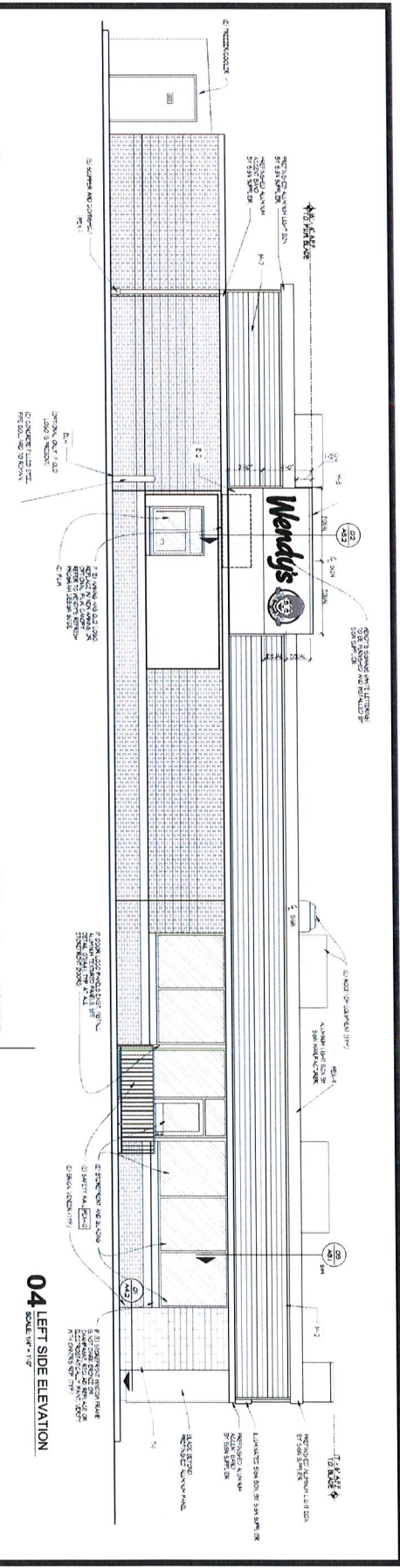
### READ CAREFULLY BEFORE SIGNING

I , do hereby certify that all information contained within this application is true and correct. I fully understand that the terms of the Sign Ordinance supersede the Sign Administrator's approval and that all signs must fully comply with all terms of the Sign Ordinance regardless of approval. I further certify that the proposed sign is authorized by the owner of the property and that I am authorized by the property owner to make this application. I understand

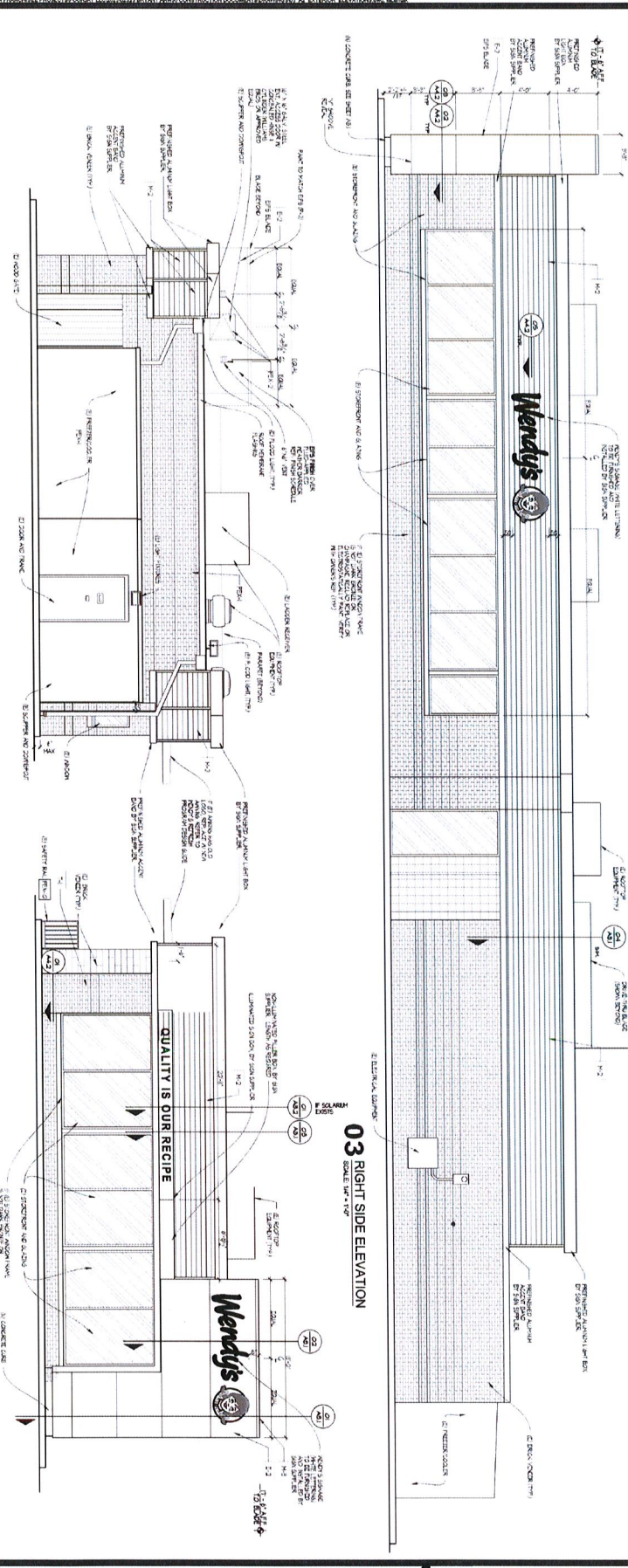
that no sign may be placed in public right of way. I understand that I must comply with all Building and Electrical Codes and that it is my responsibility to obtain all necessary permits.

**Use table below to enter information regarding each sign for approval. Please use each letter to reference each sign rendering.**

SIGN	Type (Façade, Pole, Monument, other)	Dimensions (Height, Length, Width)	Sqft (Measured in whole as rectangle)	Height of Sign (Measured from lot surface)		Column for Admin Certifying Approval
				Top of Sign	Bottom of Sign	
A	Wall Sign (Left)	3'x11'	33'	16'	13	
B	Wall Sign (Right)	3'x11'	33'	13.5'	10.5'	
C	Wall Sign (Front)	3'x11'	33'	17'	14'	
E	Wall Sign (Front)	9"x12'	9'	11'	10'	
F	Pole Sign Faces	16'x19'	304'			
G	Readerboard Pole Faces	5'x9'	45'			



**04 LEFT SIDE ELEVATION**  
SCALE: 1/4" = 1'-0"



**03 RIGHT SIDE ELEVATION**  
SCALE: 1/4" = 1'-0"



**01 FRONT ELEVATION**  
SCALE: 1/4" = 1'-0"

**02 REAR ELEVATION**  
SCALE: 1/4" = 1'-0"

<p><b>McIntire</b></p> <p>PROJECT TYPE: 2020 S DRAWING RELEASE: 2020 S</p>	<p><b>McIntire</b></p> <p>10000 Highway 20 Little Rock, AR 72209 Phone: 501.223.7200 www.mcintire.com</p>	<p><b>Wendy's</b></p> <p>2206 N REYNOLDS RD BRYANT AR 72022</p>	<p>PROJECT TYPE: 30 REFRFR:</p>	<p>DATE: 08/20/2020 DRAWN BY: [redacted] CHECKED BY: [redacted] SCALE: 1/4" = 1'-0"</p>	<p>REGISTERED ARCHITECT STATE OF ARIZONA NO. 10000 EXPIRES: 12/31/2021</p>	<p><b>A2.1</b></p> <p>EXTERIOR ELEVATION</p>
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**Folder Name**

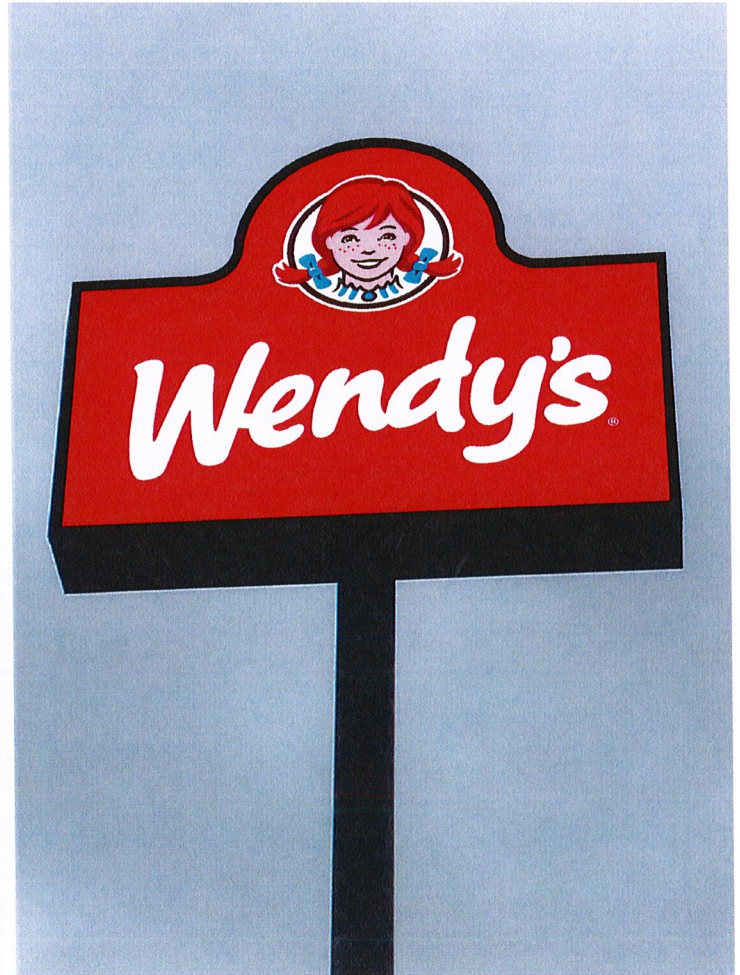
L:\Service and Install\PICTURES\WENDYS - BRYANT2.17.23

**Designer**

**File Name**

2206 N reynolds rd bryant AR 72022 quote 2.2.23.fs

**Job Number**



**Description**

**ARTWORK IS PROPERTY OF ACTION SIGN & NEON AND SHALL NOT BE DUPLICATED OR COPIED IN ANY MANNER.**



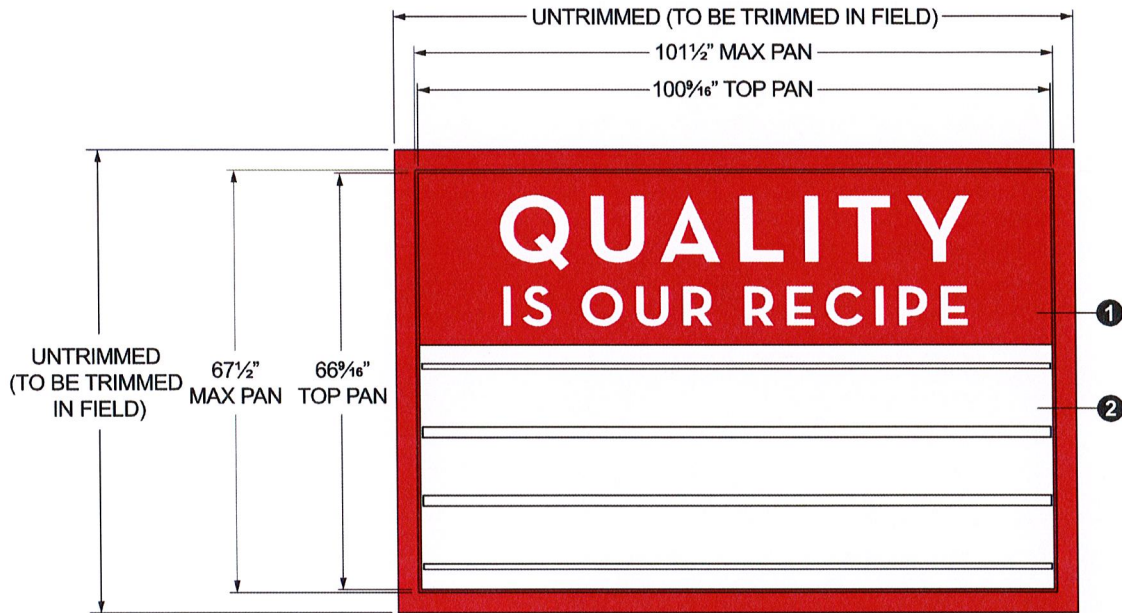
P. O. Box 188  
Jacksonville, AR 72076  
2700 John Harden Dr.  
Jacksonville, AR 72076

Ph 501-457-7391  
Ph/Text 501-712-0012  
Fax 501-457-7393

ARTWORK APPROVAL **MUST** BE MADE IN WRITING.  
THIS CAN BE DONE BY A SIMPLE EMAIL, TEXT, OR FAX  
WITH THE APPROVED ARTWORK ATTACHED.  
**PRODUCTION WILL NOT START OTHERWISE.**

Customer	Name	Design Time	<b>Design Time Pricing</b> Design time is at a rate of \$60 per hour, in 15 minute increments. Your first 15 minutes is <b>FREE.</b>
Phone	Email	Minutes	
		Date	
		2/17/2023	

**COLORS SHOWN ARE FOR REFERENCE ONLY. COLORS MAY VARY.**



MATERIALS & SPECS

- ① 1 3/4" deep pan formed 3/16" modified acrylic with 1/2" deep embossed copy
- ② 3 lines of 8" copy

- PMS 186c - Background
- White (letters)

HI-RISE FACE REPLACEMENT



WHR 220  
NSS#: 81007533



MATERIALS & SPECS

Actual: 214 ft<sup>2</sup> | Nearest Rectangle: 280 ft<sup>2</sup>

① Face - (2) translucent vinyl flex faces decorated first surface

- PMS 186c - hair, freckles
- PMS 201c - hair, outline
- PMS 698c - face, neck
- PMS 299c - bow, shirt, brooch
- PMS 439c - outline
- White





City of Bryant, Arkansas  
 Community Development  
 210 SW 3<sup>rd</sup> Street Bryant, AR 72022  
 501-943-0943 *Colton -*

*Cleonard@cityofbryant.com*

## SIGN PERMIT APPLICATION

Applicants are advised to read the Sign Ordinance prior to completing and signing this form.  
 The Sign Ordinance is available at [www.cityofbryant.com](http://www.cityofbryant.com) under the Planning and Community Development tab.

Date: 2/15/23

Note: Electrical Permits may be Required, Please contact the Community Development Office for more information.

### Sign Co. or Sign Owner

Name Aero Signs LLC  
 Address 3308 PIKE AVE  
 City, State, Zip NLR, AR 72118  
 Phone 501-246-4952  
 Email Address Sales@aero-signs.com

### Property Owner

Name PECAN TREE Co.  
 Address 219 Brown Lane  
 City, State, Zip Bryant, AR 72022  
 Phone 501.607.3188 / 501.847.7077  
 Email Address Judy@MosaicEnterprises.biz

### GENERAL INFORMATION

Name of Business Alliance Technical Group  
 Address/Location of sign 219 Brown Lane Bryant, AR 72022  
 Zoning Classification \_\_\_\_\_

Please use following page to provide details on the signs requesting approval. Along with information provided on this application, a Site Plan showing placement of sign(s) and any existing sign(s) on the property is **required** to be submitted. Renderings of the sign(s) showing the correct dimensions is also **required** to be submitted with the application. A thirty-five dollar (\$35) per sign payment will be collected at the time of permit issuance. According to the Sign Ordinance a fee for and sign variance or special sign permit request shall be one hundred dollars (\$100). Additional documentation may be required by Sign Administrator.

### READ CAREFULLY BEFORE SIGNING

I Paul Vangos do hereby certify that all information contained within this application is true and correct. I fully understand that the terms of the Sign Ordinance supersede the Sign Administrator's approval and that all signs must fully comply with all terms of the Sign Ordinance regardless of approval. I further certify that the proposed sign is authorized by the owner of the property and that I am authorized by the property owner to make this application. I understand

