DETAILED PLANS:

HILLCREST ADDITION

PART OF SECTION 12, T-4-N, R-10-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

JULY 9, 2024

PREPARED FOR:

SPRINGHILL HWY 5 DEVELOPMENT, LLC
816 E. OAK STREET
CONWAY, ARKANSAS 72032

Arkansas 811
Know what's below.
Call before you dig.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7373
TIMOTHY B. LEMONS

Prepared By:

LEMONS ENGINEERING CONSULTANTS, INC.
204 CHERRY STREET
CABOT, ARKANSAS 72023

ENGINEERING • SURVEYING • PLANNING

INDEX OF SHEETS

Preliminary Plat	1
Street Plan/Profile	2
Grading Plan	3
Detention Pond Plan	4
Water Layout	5
Construction Details – Water	6
Sewer Plan/Profile	7
Construction Details – Sewer	8
Erosion Control Plan	9

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7373
TIMOTHY B. LEMONS

CERTIFICATE OF ENGINEERING ACCURACY:

I, TIMOTHY B. LEMONS, HEREBY CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS A PLAT MADE BY ME, OR UNDER MY SUPERVISION, AND THAT ENGINEERING REQUIREMENTS OF THE BRYANT SUBDIVISION RULES AND REGULATIONS HAVE BEEN COMPLIED WITH.

DATE

TIMOTHY B. LEMONS, REGISTERED PROFESSIONAL ENGINEER
NO. 7373, ARKANSAS

CERTIFICATE OF PRELIMINARY PLAT APPROVAL:

ALL REQUIREMENTS OF THE BRYANT SUBDIVISION RULES AND REGULATIONS RELATIVE TO THE PREPARATION AND SUBMITTAL OF A PRELIMINARY PLAT HAVING BEEN FULFILLED, APPROVAL OF THIS DOCUMENT IS HEREBY GRANTED, SUBJECT TO FURTHER PROVISIONS OF SAID RULES AND REGULATIONS, THIS CERTIFICATE SHALL EXPIRE

DATE

DATE OF EXECUTION

SIGNED: CHAIRMAN,
BRYANT PLANNING COMMISSION

REGISTERED
STATE OF ARKANSAS
NO 1552
SIGNATURE
BILLY A. LAWRENCE
PROFESSIONAL LAND SURVEYOR

CERTIFICATE OF SURVEYING ACCURACY:

I, BILLY A. LAWRENCE, HEREBY CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS A BOUNDARY SURVEY MADE BY ME AND ALL MONUMENTS SHOWN HEREON ACTUALLY EXIST AND THEIR LOCATION, SIZE, TYPE AND MATERIAL ARE CORRECTLY SHOWN.

DATE

BILLY A. LAWRENCE, ARKANSAS
PROFESSIONAL SURVEYOR,
NO. 1552

CERTIFICATE OF OWNERS:

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 THIS PLAT.

DATE

SPRINGHILL HWY 5 DEVELOPMENT, LLC
816 E. OAK STREET
CONWAY, ARKANSAS 72032

LEGAL DESCRIPTION:

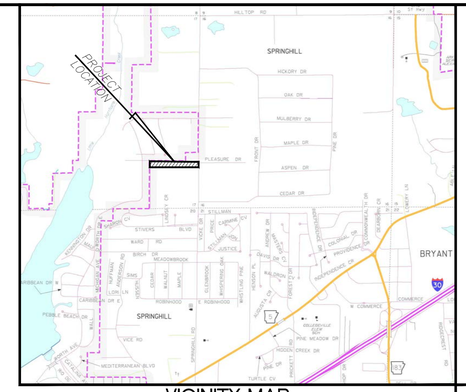
PART OF THE SE ¼, OF THE SE ¼, SECTION 17, T-1-S, R-14-W, SALINE COUNTY, ARKANSAS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF THE SE ¼, OF THE SE ¼, SECTION 17, T-1-S, R-14-W, SALINE COUNTY, ARKANSAS; THENCE N 02°17'33" E, 1167.19 FEET TO THE POINT OF BEGINNING; THENCE N 88°34'40" W, 1344.97 FEET; THENCE N 01°36'19" E, 167.98 FEET; THENCE S 87°44'58" E, 1346.85 FEET; THENCE S 02°18'02" W, 148.52 FEET; TO THE POINT OF BEGINNING, CONTAINING 4.89 ACRES, MORE OR LESS.

SOURCE OF TITLE: 2021-03121

FLOOD CERTIFICATION:

BASED UPON REVIEW OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FIRM COMMUNITY PANEL NO. 05125C0225E, EFFECTIVE DATE: JUNE 5, 2020 THE PROPERTY DEPICTED ON THIS PLAT IS LOCATED WITHIN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.



VICINITY MAP
SCALE: 1" = 2000'



LEGEND:

- FOUND CONC. MONUMENT
- FOUND IRON PIN (FIP)
- LP LIGHT POLE
- STOP/STREET NAME SIGN
- PROPERTY BOUNDARY
- LOT LINE
- CENTERLINE OF ROAD
- BUILDING SETBACK
- EASEMENT
- EXISTING CONTOUR
- CURB & GUTTER

OWNER: ST REGIS @ HURRICANE LAKE, LLC
(DOC. 2012-33184)

CURVE	RADIUS	ARC LENGTH	TANGENT	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	83.37'	97.14'	54.93'	66°45'36"	N 55°11'52" W	91.74'
C2	84.70'	97.46'	54.93'	65°55'55"	N 54°47'01" W	92.17'

GENERAL NOTES:

1.) IRON PINS TO BE SET AT ALL LOT CORNERS.
2.) EASEMENTS TO BE USED FOR UTILITIES AND DRAINAGE.
3.) ALL EASEMENTS ARE AS NOTED.
4.) ALL BUILDING LINES ARE AS NOTED.
5.) CURRENT ZONING - R2.
6.) WATER - SALEM WATER.
7.) SEWER - CITY OF BRYANT.

0' 50' 100' 150'
SCALE: 1" = 50'

Arkansas 811
Know what's below.
Call before you dig.

LEMONS ENGINEERING CONSULTANTS, INC.
204 CHERRY STREET
CABOT, ARKANSAS 72023
(501) 843-5081 • Fax (501) 941-0959
ENGINEERING + SURVEYING
WATER • SEWER • TRANSPORTATION • SUBDIVISIONS

PRELIMINARY PLAT
HILLCREST ADDITION
PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

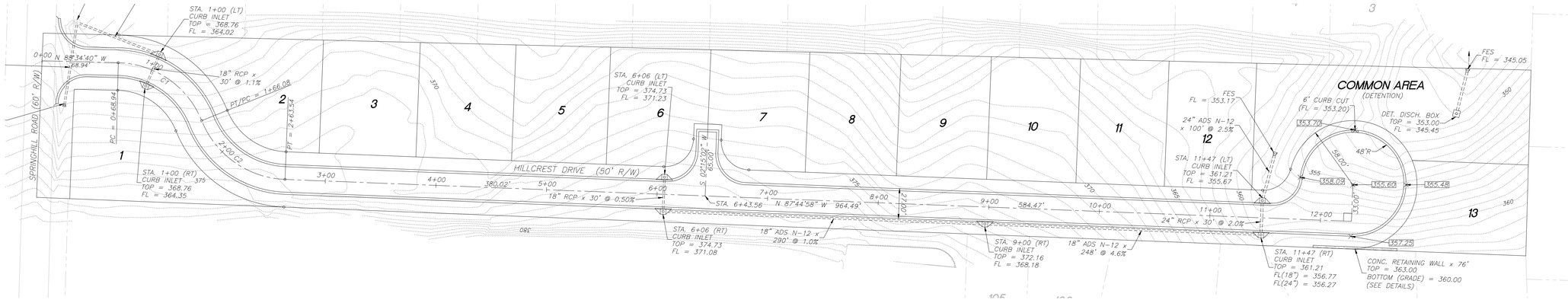
Prepared For:
Springhill HWY 5
Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

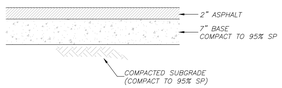
No.	Revisions	Date	By

Project No. 24-018
Date: JULY 9, 2024
File: 01_Hillcrest Plat
Scale: 1" = 50'
Sheet: 1 of 9
Drawn By: B. Judd

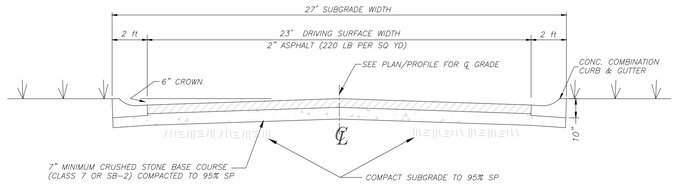
Arkansas 811
Know what's below.
Call before you dig.

CURVE	RADIUS	ARC LENGTH	TANGENT	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	83.37'	97.14'	54.93'	66°45'36"	N 55°11'52" W	91.74'
C2	84.70'	97.46'	54.93'	65°55'55"	N 54°47'01" W	92.17'

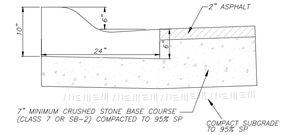




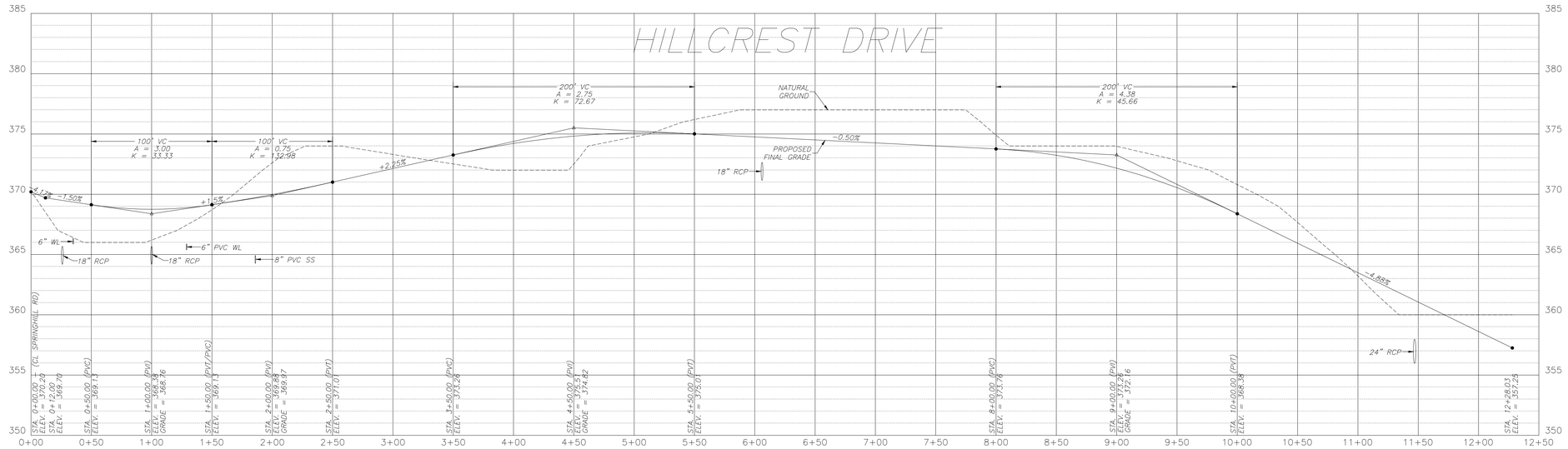
PAVEMENT STRUCTURE
NTS
(TO BE VERIFIED W/ GEOTECHNICAL CONSULTANT PRIOR TO CONSTR.)



TYPICAL CROSS SECTION
NTS



TYPICAL - CONC. CURB/GUTTER
NTS
PAVEMENT STRUCTURE TO BE DETERMINED BY GEOTECHNICAL CONSULTANT





GENERAL NOTES:

1.) ALL STOP SIGNS SHALL BE 30" X 30"
2.) ALL TRAFFIC CONTROL MARKERS MUST MEET MUTCD SPECS.
3.) CONTRACTOR SHALL INCLUDE IN BID THE COST FOR COMPACTION TESTS ON SUBGRADE & SUBBASE. TEST TO BE CONDUCTED ON 500' INTERVALS.
4.) CONTRACTOR TO PROOF ROLL BOTH SUBGRADE AND SUBBASE (CITY TO INSPECT).
5.) LIGHT POLES SHALL BE PLACED AT ALL INTERSECTIONS. ADDITIONAL LOCATIONS TO BE DETERMINED BY THE CITY.
6.) ALL BACK OF CURB RADII AT INTERSECTIONS SHALL BE 25' UNLESS OTHERWISE NOTED.
7.) CONTRACTOR TO INCLUDE IN BID THE COST OF MATERIAL AND INSTALLATION OF STREET SIGNS & TRAFFIC CONTROL SIGNS.
8.) WHERE STOP SIGNS & STREET NAME SIGNS ARE SHOWN ON THE PLAN, A COMBINATION SIGN IS ACCEPTABLE.
10.) SEE PLAN/PROFILE SHEETS FOR ADDITIONAL INFORMATION.
11.) ALL PAVEMENT TO BE TYPE 'A'.
12.) ALL INLETS TO HAVE DOUBLE EXTENDED THROATS UNLESS STATED OTHERWISE.

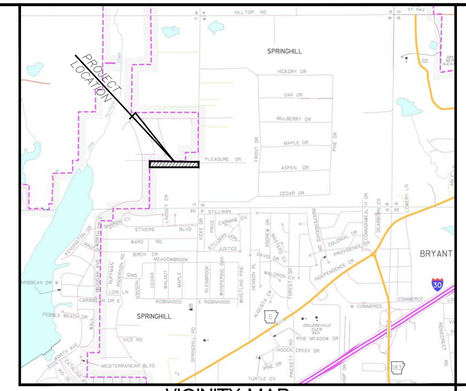
LEMONS ENGINEERING CONSULTANTS, INC.
204 CHERRY STREET
CABOT, ARKANSAS 72023
(501) 843-5081 • Fax (501) 941-0959
ENGINEERING + SURVEYING
WATER • SEWER • TRANSPORTATION • SUBDIVISIONS

STREET PLAN/PROFILE
HILLCREST ADDITION
PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

Prepared For: Springhill HWY 5 Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

No.	Revisions	Date	By

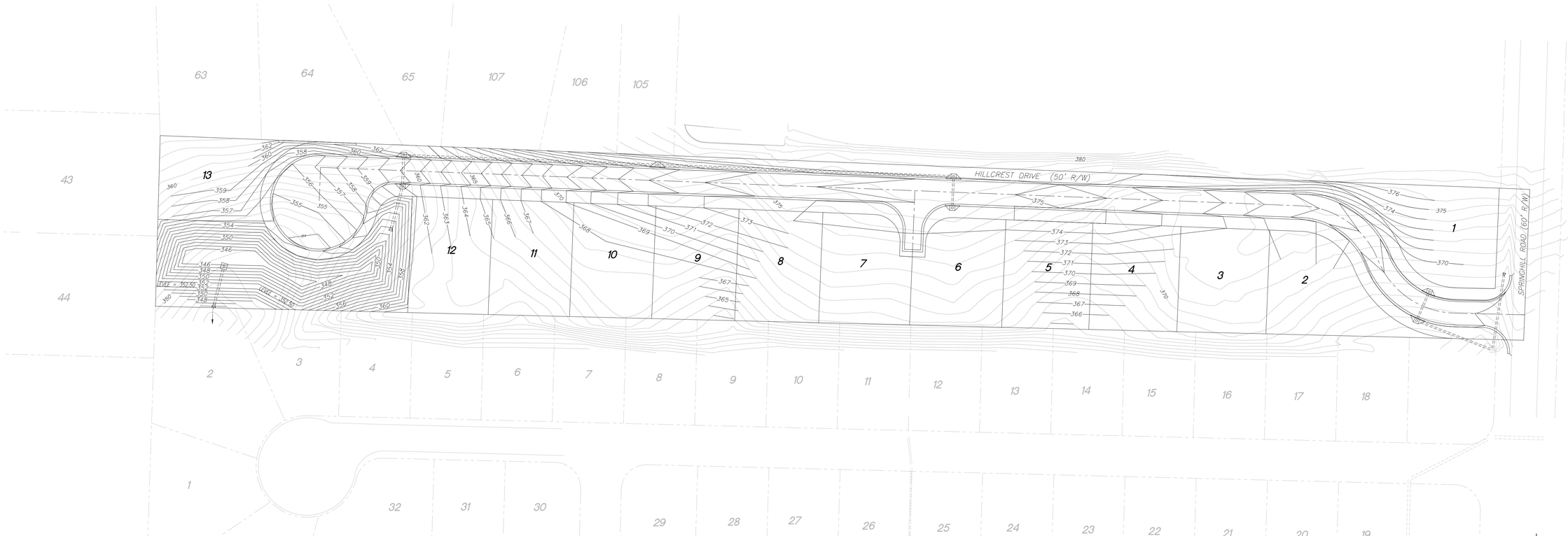
Date: JULY 9, 2024
Scale: 1" = 50'
Drawn By: B. Judd
Project No. 24-018
File: 02_Hillcrest Street
Sheet: 2 of 9



VICINITY MAP
SCALE: 1" = 2000'

GENERAL NOTES:

1.) ALL CONSTRUCTION AND MATERIALS TO BE VERIFIED BY A GEOTECHNICAL CONSULTANT PRIOR TO CONSTRUCTION.
2.) CONTRACTOR SHALL NOTIFY ENGINEER IF SIGNIFICANT CHANGES ARE MADE TO GRADING PLAN.
3.) ALL MATERIAL TO BE COMPACTED TO 95% STANDARD PROCTOR, INSTALLED IN 6" – 8" LIFTS, OR AS DIRECTED BY GEOTECHNICAL CONSULTANT.
4.) CONTRACTOR SHALL PROVIDE TEMPORARY EROSION CONTROL MEASURES UNTIL CONSTRUCTION IS COMPLETE.
5.) ALL UTILITIES TO BE LOCATED PRIOR TO CONSTRUCTION (ONE CALL, CITY, ETC.).
6.) CONTRACTOR SHALL NOT DISTURB ANY MORE GROUND THAN IS NECESSARY FOR THE INSTALLATION OF IMPROVEMENTS & GRADING WORK.
7.) CONTRACTOR SHALL GRADE YARDS TO ENSURE THAT GROUND SLOPES AWAY FROM ALL BUILDINGS IN ALL DIRECTIONS.



LEGEND:

350 – EXISTING CONTOUR
350 – PROPOSED CONTOUR

0' 50' 100' 150'
SCALE: 1" = 50'

LEMONS ENGINEERING CONSULTANTS, INC.
204 CHERRY STREET
CABOT, ARKANSAS 72023
(501) 843-5081 • Fax (501) 941-0959
ENGINEERING + SURVEYING
WATER • SEWER • TRANSPORTATION • SUBDIVISIONS

GRADING PLAN
HILLCREST ADDITION
PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

Prepared For:
Springhill HWY 5
Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

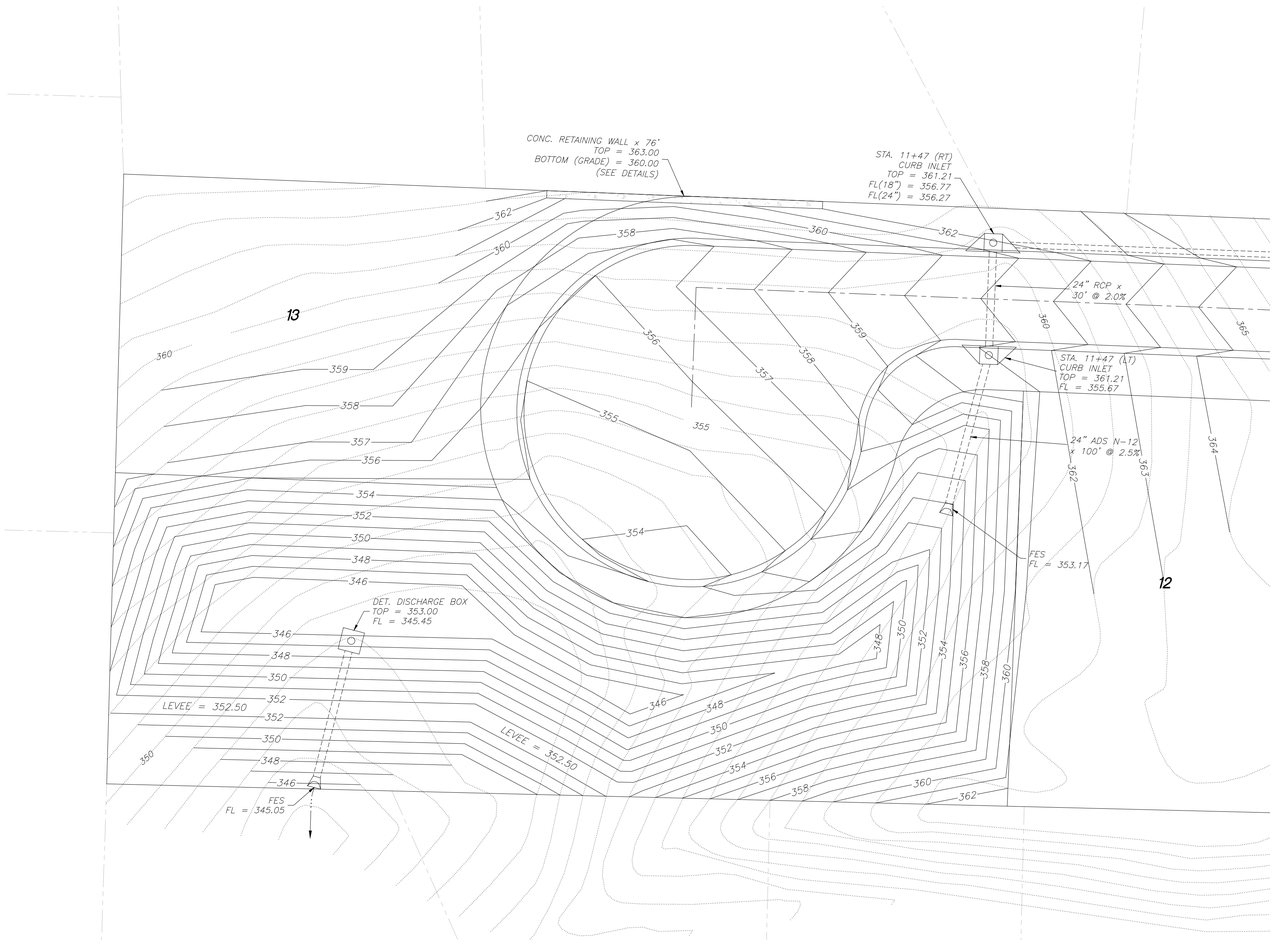
No.	Revisions	Date	By

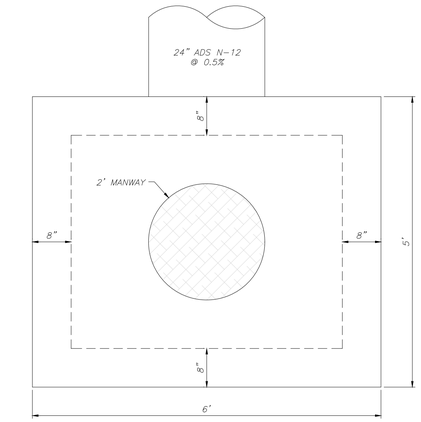
Project No. 24-018
File: 03_Hillcrest Grading
Date: JULY 9, 2024
Scale: 1" = 50'
Drawn By: B. Judd
Sheet: 3 of 9

LEGEND:

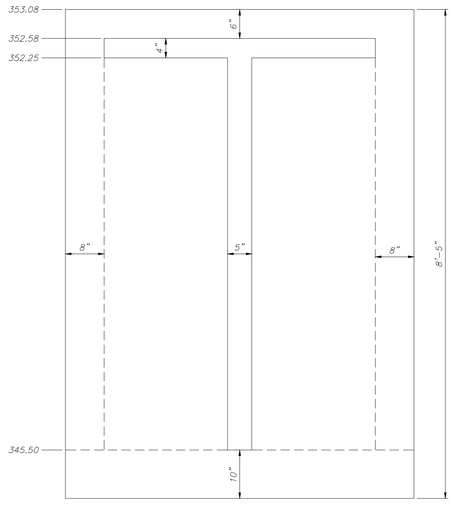
350 – EXISTING CONTOUR

350 – PROPOSED CONTOUR





TOP VIEW

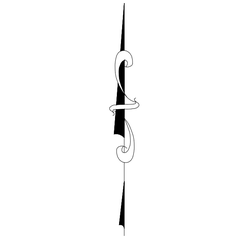


FRONT VIEW

DISCHARGE STRUCTURE
NTS

GENERAL NOTES:

1.) ALL CONSTRUCTION AND MATERIALS TO BE VERIFIED BY A GEOTECHNICAL CONSULTANT PRIOR TO CONSTRUCTION.
2.) CONTRACTOR SHALL NOTIFY ENGINEER IF SIGNIFICANT CHANGES ARE MADE TO GRADING PLAN.
3.) ALL MATERIAL TO BE COMPACTED TO 95% STANDARD PROCTOR, INSTALLED IN 6" – 8" LIFTS, OR AS DIRECTED BY GEOTECHNICAL CONSULTANT.
4.) CONTRACTOR SHALL PROVIDE TEMPORARY EROSION CONTROL MEASURES UNTIL CONSTRUCTION IS COMPLETE.
5.) ALL UTILITIES TO BE LOCATED PRIOR TO CONSTRUCTION (ONE CALL, CITY, ETC.).
6.) CONTRACTOR SHALL NOT DISTURB ANY MORE GROUND THAN IS NECESSARY FOR THE INSTALLATION OF IMPROVEMENTS & GRADING WORK.
7.) CONTRACTOR SHALL GRADE YARDS TO ENSURE THAT GROUND SLOPES AWAY FROM ALL BUILDINGS IN ALL DIRECTIONS.



SCALE: 1" = 20'

Arkansas 811
Know what's below.
Call before you dig.

LEMONS ENGINEERING CONSULTANTS, INC.
204 CHERRY STREET
CABOT, ARKANSAS 72023
(501) 843-5081 • Fax (501) 941-0959
ENGINEERING + SURVEYING
WATER ● SEWER ● TRANSPORTATION ● SUBDIVISIONS

DETENTION POND PLAN
HILLCREST ADDITION
PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

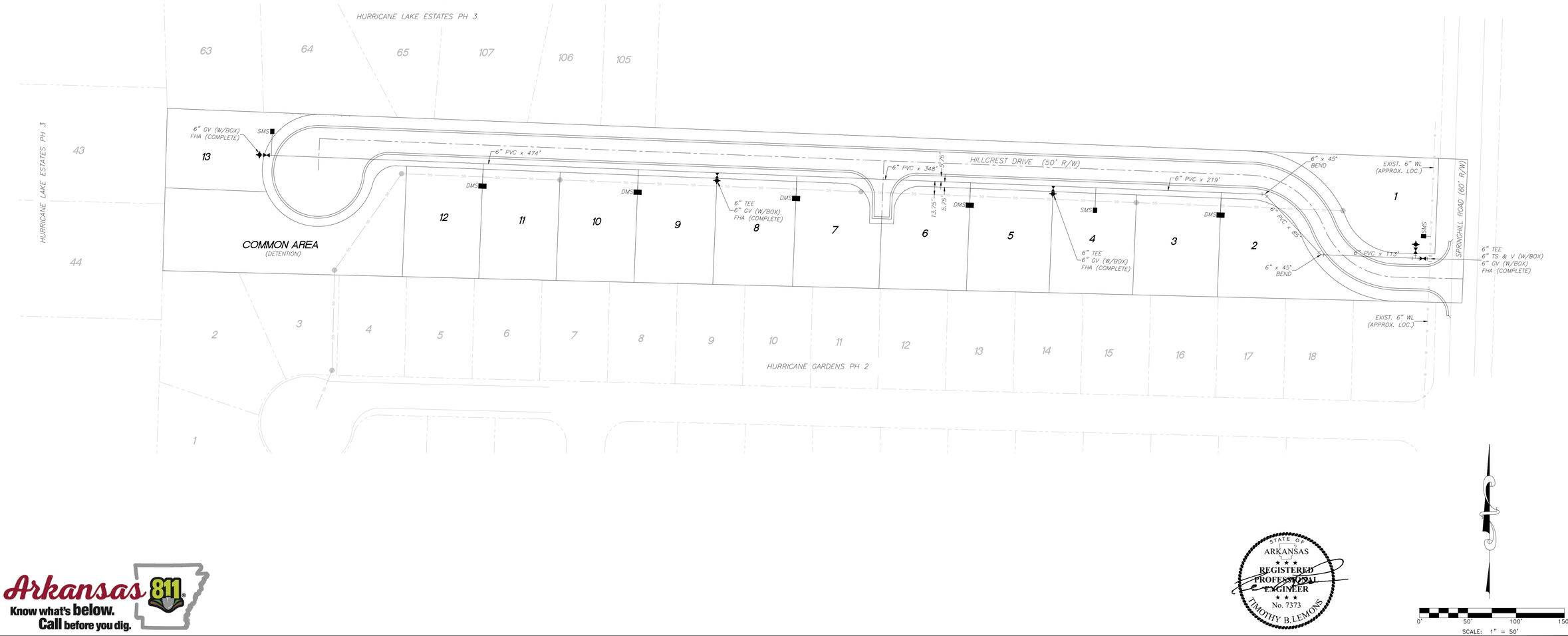
Prepared For:
Springhill HWY 5
Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

No.	Revisions	Date	By

Date: JULY 9, 2024
Scale: 1" = 20'
Drawn By: B. Judd
Project No. 24-018
File: 04_Hillcrest Pond
Sheet: 4 of 9

GENERAL NOTES:

1.) ALL CONSTRUCTION AND MATERIALS TO MEET OR EXCEED SALEM WATER SPECIFICATIONS.
2.) INSTALL 12ga BLUE POLYETHELENE COATED SOLID COPPER WIRE IN A CONTINUOUS CIRCUIT UNDER ALL WATER MAINS AND SERVICE LINES. DIRECT BURY, WATERPROOF WIRE SPLICE CONNECTORS SHALL BE USED. TRACER WIRE SHALL BE TURNED UP AT ALL VALVES, HYDRANTS, METERS, AND BLOW-OFFS.
3.) ALL FITTINGS SHALL BE DUCTILE IRON M.J. (WHERE AVAILABLE).
4.) ATTENTION IS CALLED TO DETAILS FOR ADDITIONAL INFORMATION.
5.) CONSTRUCTION SHALL COMPLY WITH SECTION XIV.A - ADH RULES PERTAINING TO PUBLIC WATER SYSTEMS THAT STATES: "THE OPERATING ROUTINE SHALL INCLUDE NECESSARY PROTECTIVE MEASURES TO DETECT AND REMOVE OR DESTROY ANY CONTAMINANT OF CONCERN OR REGULATION THAT MIGHT ENTER THE DISTRIBUTION SYSTEM. EVERY PRECAUTION MUST BE TAKEN AGAINST THE POSSIBILITY OF SEWAGE CONTAMINATION OF THE WATER IN THE DISTRIBUTION SYSTEM. WATER MAINS AND SANITARY SEWERS SHALL BE CONSTRUCTED AS FAR APART AS PRACTICABLE, AND SHALL BE SEPARATED BY UNDISTURBED AND COMPACTED EARTH. A MINIMUM HORIZONTAL DISTANCE OF TEN FEET SHOULD BE MAINTAINED BETWEEN WATER LINES AND SEWER LINES OR OTHER SOURCES OF CONTAMINATION. WATER LINES AND SEWERS SHALL NOT BE LAID IN THE SAME TRENCH EXCEPT ON THE WRITTEN APPROVAL OF THE ARKANSAS DEPARTMENT OF HEALTH. WATER MAINS NECESSARILY IN CLOSE PROXIMITY TO SEWERS MUST BE PLACED SO THAT THE BOTTOM OF THE WATER LINE WILL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE AT ITS HIGHEST POINT. IF THIS DISTANCE MUST UNAVOIDABLY BE REDUCED, THE WATER LINE OR THE SEWER LINE MUST BE ENCASED IN WATERTIGHT PIPE WITH SEALED WATERTIGHT ENDS EXTENDING AT LEAST TEN FEET EITHER SIDE OF THE CROSSING. ANY JOINT IN THE ENCASEMENT PIPE IS TO BE MECHANICALLY RESTRAINED. THE ENCASEMENT PIPE MAY BE VENTED TO THE SURFACE IF CARRYING WATER OR SEWER UNDER PRESSURE. WHERE A WATER LINE MUST UNAVOIDABLY PASS BENEATH THE SEWER LINE, AT LEAST 18 INCHES OF SEPARATION MUST BE MAINTAINED BETWEEN THE OUTSIDE OF THE TWO PIPES IN ADDITION TO THE PRECEDING ENCASEMENT REQUIREMENT. EXCEPTIONS TO THIS MUST BE APPROVED IN WRITING BY THE ARKANSAS DEPARTMENT OF HEALTH. A MINIMUM HORIZONTAL DISTANCE OF THREE FEET SHALL BE MAINTAINED BETWEEN WATER LINES AND OTHER UNDERGROUND UTILITIES OF A NONSANITARY NATURE (GAS, ELECTRIC, ETC.). EXCEPTIONS TO THIS MUST BE APPROVED IN WRITING BY THE ARKANSAS DEPARTMENT OF HEALTH.
6.) CONTRACTOR SHALL ADHERE TO CURRENT OSHA REGULATIONS FOR EXCAVATION & TRENCH SAFETY.
7.) CONTRACTOR TO ADHERE TO AWWA SPECS FOR BLOCKING.
8.) CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED PRIOR TO CONSTRUCTION.
9.) CONTRACTOR SHALL CONTACT WATER & WASTEWATER UTILITIES FOR ALL APPLICABLE INSPECTION & TESTING.
10.) CONTRACTOR SHALL CONTACT WATER & WASTEWATER UTILITIES AT LEAST 24 HOURS PRIOR TO DISRUPTION OF ANY SERVICE.
11.) ALL MATERIALS AND COMPONENTS INSTALLED IN DRINKING WATER SYSTEMS ARE REQUIRED TO COMPLY WITH THE FEDERAL DEFINITION OF "LEAD FREE" CONTAINED IN PUBLIC LAW 111-380.



LEMONS ENGINEERING CONSULTANTS, INC.
204 CHERRY STREET
CABOT, ARKANSAS 72023
(501) 843-5081 • Fax (501) 941-0959
ENGINEERING + SURVEYING
WATER • SEWER • TRANSPORTATION • SUBDIVISIONS

WATER LAYOUT
HILLCREST ADDITION
PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

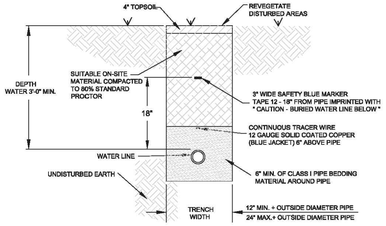
Prepared For:
Springhill HWY 5
Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

No.	Revisions	Date	By

Project No.: 24-018
File: 05_Hillcrest Water
Date: JULY 9, 2024
Scale: 1" = 50'
Drawn By: B. Judd
Sheet: 5 of 9

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7373
TIMOTHY B. LEMONS

Arkansas 811
Know what's below.
Call before you dig.



NOTES:

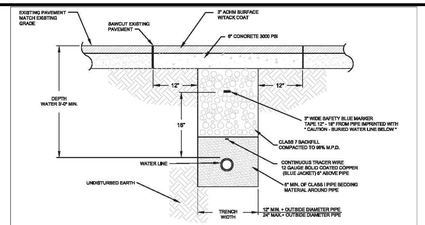
1. ALL VALVES, BENDS, ETC. SHALL BE RESTRAINED.
2. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING WATER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE WATER SYSTEM.
3. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B).
4. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.
5. MAXIMUM PIPE COVER SHALL BE 60" UNDER NORMAL CONDITIONS. COVER GREATER THAN 60" MAY BE ALLOWED FOR SHORT DISTANCES WHERE REQUIRED BY FIELD CONDITIONS. NO HYDRANT SHALL BE ALLOWED WHERE LINES ARE GREATER THAN 60" DEEP.

WATER MAIN TRENCH

(NON-PAVED AREA)

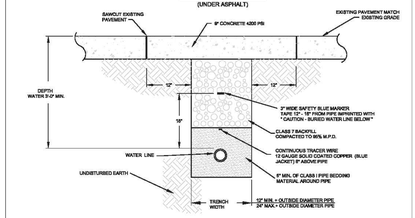
CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE: WATER DETAILS | DESCRIPTION: WATER MAIN TRENCH (NON-PAVED AREA) | DRAWN BY: | CHECKED BY: | FILE: W1-Water Trench (Non-Paved Area).dwg | DATE: APRIL 2018 | REVISED: ----- | SHEET: W1



WATER MAIN TRENCH

(UNDER ASPHALT)



WATER MAIN TRENCH

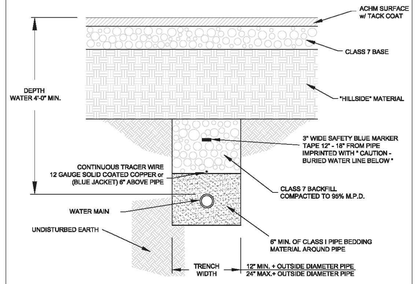
(UNDER CONCRETE)

NOTES:

1. ALL VALVES, BENDS, ETC. SHALL BE RESTRAINED.
2. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING WATER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE WATER SYSTEM.
3. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B).
4. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.
5. MAXIMUM PIPE COVER SHALL BE 60" UNDER NORMAL CONDITIONS. COVER GREATER THAN 60" MAY BE ALLOWED FOR SHORT DISTANCES WHERE REQUIRED BY FIELD CONDITIONS. NO HYDRANT SHALL BE ALLOWED WHERE LINES ARE GREATER THAN 60" DEEP.

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE: WATER DETAILS | DESCRIPTION: WATER MAIN TRENCH (UNDER PAVEMENT) | DRAWN BY: | CHECKED BY: | FILE: W2-Water Trench (Under Pavement).dwg | DATE: APRIL 2018 | REVISED: ----- | SHEET: W2



WATER MAIN INSTALLATION
PRIOR TO ROADWAY CONSTRUCTION

NOTES:

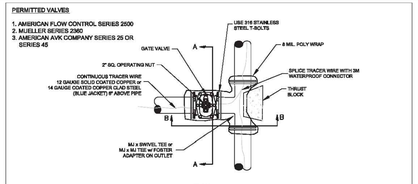
1. ALL VALVES, BENDS, ETC. SHALL BE RESTRAINED.
2. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING WATER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE WATER SYSTEM.
3. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B).
4. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.
5. MAXIMUM PIPE COVER SHALL BE 60" UNDER NORMAL CONDITIONS. COVER GREATER THAN 60" MAY BE ALLOWED FOR SHORT DISTANCES WHERE REQUIRED BY FIELD CONDITIONS. NO HYDRANT SHALL BE ALLOWED WHERE LINES ARE GREATER THAN 60" DEEP.

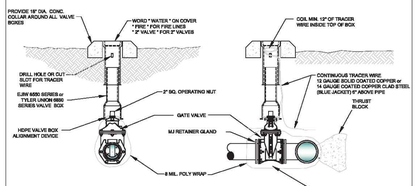
CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE: WATER DETAILS | DESCRIPTION: WATER MAIN INSTALLATION PRIOR TO ROADWAY CONSTRUCTION | DRAWN BY: | CHECKED BY: | FILE: W3-Water Main Installation Prior to Roadway Const.dwg | DATE: APRIL 2018 | REVISED: ----- | SHEET: W3

PERMITTED VALVES

1. AMERICAN FLOW CONTROL SERIES 2500
2. MUELLER SERIES 2360
3. AMERICAN AVK COMPANY SERIES 25 OR SERIES 48





NOTES:

1. ALL VALVES SHALL BE SECURELY ANCHORED TO THE TEE.
2. ALL HARDWARE SHALL BE 316 STAINLESS STEEL.
3. IF DEPTH OF BURY EXCEEDS 4 FT., A VALVE STEM EXTENSION SHALL BE REQUIRED. THE VALVE STEM EXTENSION NUT SHALL BE WITHIN 24-INCHES TO 12-INCHES OF THE FINISHED SURFACE.

GATE VALVE DETAIL

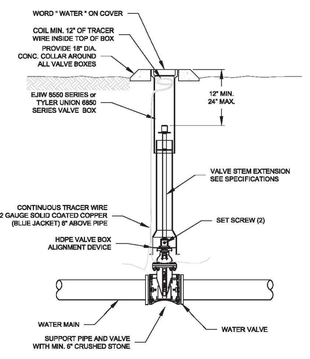
2" - 12"

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE: WATER DETAILS | DESCRIPTION: GATE VALVE | DRAWN BY: | CHECKED BY: | FILE: W4-Gate Valve.dwg | DATE: APRIL 2018 | REVISED: ----- | SHEET: W4

NOTES:

1. OPERATING NUT EXTENSIONS SHALL BE USED WHEN THE TOP OF THE OPERATING NUT IS GREATER THAN 4 FEET FROM THE TOP OF FINISHED SURFACE.
2. THE STEM EXTENSION SHALL BE OF ADEQUATE LENGTH TO REACH FROM THE VALVE OPERATING NUT TO A POINT WITHIN 24-INCHES TO 12-INCHES OF THE FINISHED SURFACE.



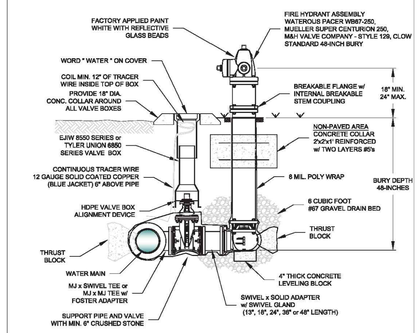
VALVE WITH STEM EXTENSION

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE: WATER DETAILS | DESCRIPTION: VALVE STEM EXTENSION | DRAWN BY: | CHECKED BY: | FILE: W7-Valve Stem Extension.dwg | DATE: APRIL 2018 | REVISED: ----- | SHEET: W7

NOTES:

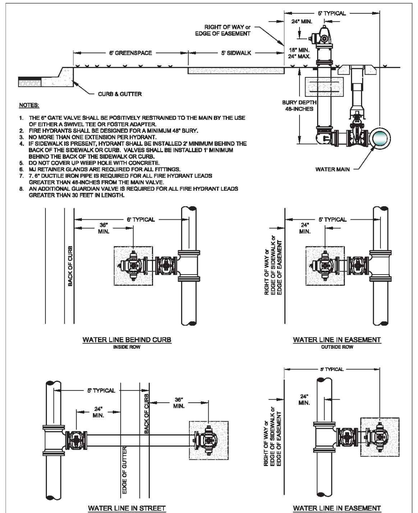
1. THE 6" GATE VALVE SHALL BE POSITIVELY RESTRAINED TO THE MAIN BY THE USE OF EITHER A SWIVEL TEE OR FOSTER ADAPTER.
2. FIRE HYDRANTS SHALL BE DESIGNED FOR A MINIMUM 48" BURY.
3. BURY LINE OF HYDRANT SHALL BE NO LESS THAN THE PROPOSED FINISHED ELEVATION OF BACK OF CURB, OR SIDEWALK, WHICHEVER IS GREATER.
4. NO MORE THAN ONE EXTENSION PER HYDRANT.
5. IF SIDEWALK IS PRESENT, HYDRANT SHALL BE INSTALLED 2' MINIMUM BEHIND THE BACK OF THE SIDEWALK OR CURB. VALVES SHALL BE INSTALLED 1' MINIMUM BEHIND THE BACK OF THE SIDEWALK OR CURB.
6. DO NOT COVER UP WEEP HOLE WITH CONCRETE.
7. MJ RETAINER GLANDS ARE REQUIRED FOR ALL FITTINGS.
8. 7. 6" DUCTILE IRON PIPE IS REQUIRED FOR ALL FIRE HYDRANT LEADS GREATER THAN 48-INCHES FROM THE MAIN VALVE.
9. AN ADDITIONAL GUARDIAN VALVE IS REQUIRED FOR ALL FIRE HYDRANT LEADS GREATER THAN 30 FEET IN LENGTH.



FIRE HYDRANT & VALVE CONNECTION

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE: WATER DETAILS | DESCRIPTION: FIRE HYDRANT AND VALVE CONNECTION | DRAWN BY: | CHECKED BY: | FILE: W8-Fire Hydrant and Valve.dwg | DATE: APRIL 2018 | REVISED: ----- | SHEET: W8



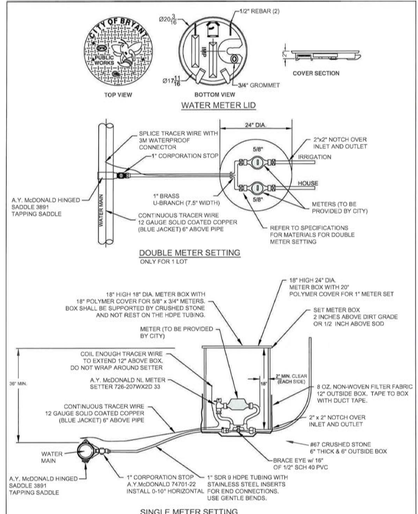
NOTES:

1. THE 6" GATE VALVE SHALL BE POSITIVELY RESTRAINED TO THE MAIN BY THE USE OF EITHER A SWIVEL TEE OR FOSTER ADAPTER.
2. FIRE HYDRANTS SHALL BE DESIGNED FOR A MINIMUM 48" BURY.
3. NO MORE THAN ONE EXTENSION PER HYDRANT.
4. IF SIDEWALK IS PRESENT, HYDRANT SHALL BE INSTALLED 2' MINIMUM BEHIND THE BACK OF THE SIDEWALK OR CURB. VALVES SHALL BE INSTALLED 1' MINIMUM BEHIND THE BACK OF THE SIDEWALK OR CURB.
5. DO NOT COVER UP WEEP HOLE WITH CONCRETE.
6. MJ RETAINER GLANDS ARE REQUIRED FOR ALL FITTINGS.
7. 7. 6" DUCTILE IRON PIPE IS REQUIRED FOR ALL FIRE HYDRANT LEADS GREATER THAN 48-INCHES FROM THE MAIN VALVE.
8. AN ADDITIONAL GUARDIAN VALVE IS REQUIRED FOR ALL FIRE HYDRANT LEADS GREATER THAN 30 FEET IN LENGTH.

FIRE HYDRANT PLACEMENT

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE: WATER DETAILS | DESCRIPTION: FIRE HYDRANT PLACEMENT | DRAWN BY: | CHECKED BY: | FILE: W9-Fire Hydrant Placement.dwg | DATE: APRIL 2018 | REVISED: ----- | SHEET: W9

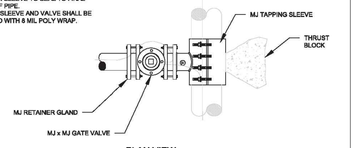


CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

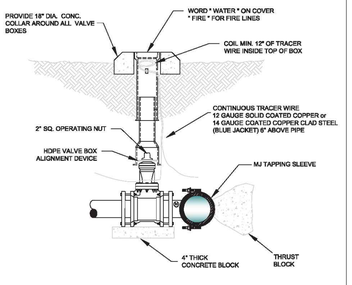
TITLE: WATER DETAILS | DESCRIPTION: METER SETTINGS | DRAWN BY: | CHECKED BY: | FILE: W10-Water Settings.dwg | DATE: APRIL 2018 | REVISED: ----- | SHEET: W10

NOTES:

1. TAPPING SLEEVE SHALL BE SMITH-BLAIR 662 OR FORD FAST.
2. AFTER THE TAP IS MADE, RE-TORQUE BOLTS ON SLEEVE TO SEAL TO FINAL SHAPE OF PIPE.
3. TAPPING SLEEVE AND VALVE SHALL BE WRAPPED WITH 8 MIL POLY WRAP.



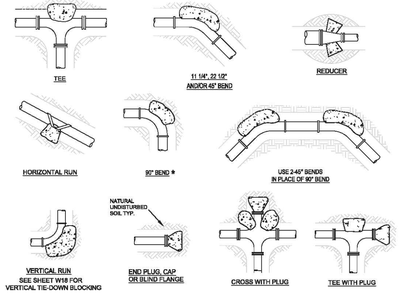
PLAN VIEW



PROFILE VIEW

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE: WATER DETAILS | DESCRIPTION: TAPPING SLEEVE AND VALVE | DRAWN BY: | CHECKED BY: | FILE: W13-Tapping Sleeve and Valve.dwg | DATE: APRIL 2018 | REVISED: ----- | SHEET: W13



THRUST BLOCK SCHEDULE

(2000 PSF SOIL, 500 PSI WATER PRESSURE, 150 PSI WATER HAMMER)

FITTING SIZE	BEARING AREA OF THRUST BLOCKS IN SQ. FT. HORIZONTAL BENDS: PLUGS, CAPS, TEES AND 22-1/2°	11-1/4°	VOLUME OF THRUST BLOCK IN CU. FEET VERTICAL BENDS: 22-1/2°	11-1/4°	MIN. VERT. BEND DEPTH	MIN. HORIZ. BEND WIDTH	MIN. BEARING THICK.
4	3.3	1.7	3.7	1.8	3	3.3	1'-0"
6	7.4	3.7	8.3	4.1	3	7.4	1'-0"
8	13.2	6.6	14.8	7.4	3	13.2	1'-0"
10	20.6	10.3	23.2	11.5	3	20.6	1'-0"
12	29.6	14.7	33.3	16.5	3	29.6	1'-0"
14	40.3	20.1	45.3	22.5	3	40.3	1'-0"
16	52.6	26.2	59.2	29.4	3	52.6	1'-0"
18	66.6	33.2	74.9	37.2	3	66.6	1'-0"
20	82.2	41.0	92.5	46.0	3	82.2	1'-0"
24	118.4	59.0	133.2	66.2	3	118.4	1'-0"

* 90 DEGREE BENDS SHALL ONLY BE USED ON A CASE BY CASE BASIS AND MUST BE SPECIFICALLY APPROVED BY CITY.

THRUST BLOCK NOTES:

1. CONCRETE FOR THRUST BLOCKS - CLASS A CONCRETE SHALL DEVELOP NOT LESS THAN 3000 P.S.I. COMPRESSIVE STRENGTH AT 28 DAYS AND BE PLACED AGAINST UNDISTURBED SOIL.
2. ALL BENDS, BOTH HORIZONTAL AND VERTICAL, SHALL BE BACKED WITH CONCRETE. VERTICAL BENDS SHALL BE PLACED ON CONCRETE PADS WHERE BENDS TURN UP, OR LOADED WHERE BENDS TURN DOWN.
3. WRAP PIPE JOINTS IN 8 MIL "POLYETHLENE" BEFORE PLACING CONCRETE.
4. BEARING AREA SHOWN IN TABLE, IS BASED UPON A 2000 LB/SF, SOIL BEARING, AND UPON A PIPELINE PRESSURE OF 200 psi PLUS 100 psi WATER HAMMER. AREAS SHOWN SHALL BE ADJUSTED, SHOULD FIELD CONDITIONS VARY.
5. MJ RESTRAINTS ARE REQUIRED FOR ALL FITTINGS.
6. ALL BOLTS FOR FITTINGS SHALL BE WHENEVER POSSIBLE STEEL.
7. ALL NUTS FOR FITTINGS SHALL BE 316 STAINLESS STEEL.
8. ALL DUCTILE IRON FITTINGS SHALL BE FUSION BONDED EPOXY COATED INSIDE AND OUTSIDE IN ACCORDANCE WITH ANSI/AWWA C116/A21.16.
9. UNIT WEIGHT OF CONCRETE FOR VERTICAL THRUST BLOCKS IS 150 LBS/CU. FT.

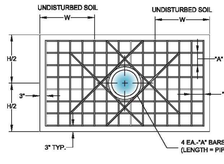
THRUST BLOCKING

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE: WATER DETAILS | DESCRIPTION: THRUST BLOCKING | DRAWN BY: | CHECKED BY: | FILE: W16-Thrust Blocking.dwg | DATE: APRIL 2018 | REVISED: ----- | SHEET: W16

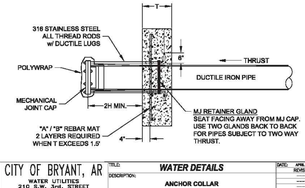
ANCHOR COLLAR SCHEDULE

PIPE SIZE	* MINIMUM DIMENSIONS * W	H	T	REINFORCING BARS "A" BARS	"B" BARS
6"	1.5'	2.0'	1.0'	#6 @ 8"	#6 @ 8"
8"	2.2'	2.5'	1.0'	#6 @ 8"	#6 @ 8"
12"	2.5'	4.0'	1.5'	#6 @ 8"	#6 @ 8"
16"	3.5'	5.5'	1.5'	#6 @ 8"	#6 @ 8"
20"	5.0'	5.5'	2.0'	#6 @ 8"	#6 @ 8"
24"	6.5'	6.0'	2.0'	#7 @ 8"	#7 @ 10"



NOTES:

1. DESIGN PRESSURE IS 200 PSI PLUS 100 PSI SURGE AND 2,000 PSI SOIL BEARING.
2. ALL DIMENSIONS ARE MINIMUM REQUIREMENTS. ACTUAL FIELD CONDITIONS MAY REQUIRE LARGER DIMENSIONS.
3. ALL RETAINER GLANDS SHALL BE MEGA-LUG BY EBAA IRON.



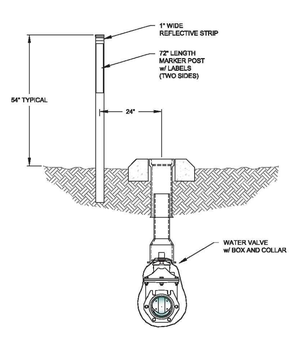
ANCHOR COLLAR

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE: WATER DETAILS | DESCRIPTION: ANCHOR COLLAR | DRAWN BY: | CHECKED BY: | FILE: W18-Anchor Collar.dwg | DATE: APRIL 2018 | REVISED: ----- | SHEET: W18

NOTES:

1. WATER LINE MARKERS SHALL BE TRI-VIEW MARKING SYSTEM BY RHINO MARKING AND PROTECTION SYSTEMS OR CARSONITE INTERNATIONAL DUAL-SIDED UTILITY MARKER (CIB-380).
2. THE UPPERMOST PORTION OF THE CARSONITE MARKER SHALL BE MADE OF VISIBILITY ENHANCER (CVE-360).
3. TRI-VIEW MARKERS DO NOT REQUIRE VISIBILITY ENHANCERS.
4. AN ADDITIONAL WHITE 1" WIDE REFLECTIVE TAPE (3M OR EQUAL) SHALL BE PLACED AROUND THE FULL CIRCUMFERENCE OF THE TOP OF THE MARKER.



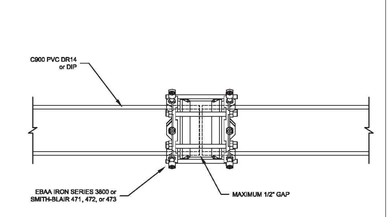
VALVE MARKER

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE: WATER DETAILS | DESCRIPTION: VALVE MARKER | DRAWN BY: | CHECKED BY: | FILE: W22-Valve Marker.dwg | DATE: APRIL 2018 | REVISED: ----- | SHEET: W22

NOTE:

RESTRAINED COUPLINGS SHALL BE USED WHEN JOINING TWO CUT PIECES OF PIPE, GENERALLY WHEN CUTTING IN VALVES AND TEES.



RESTRAINED COUPLING

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE: WATER DETAILS | DESCRIPTION: RESTRAINED COUPLING | DRAWN BY: | CHECKED BY: | FILE: W26-Restrained Coupling.dwg | DATE: APRIL 2018 | REVISED: ----- | SHEET: W26

LEMONS ENGINEERING CONSULTANTS, INC.
204 CHERRY STREET
CABOT, ARKANSAS 72023
(501) 843-5081 • Fax (501) 941-0959
ENGINEERING + SURVEYING
WATER • SEWER • TRANSPORTATION • SUBDIVISIONS

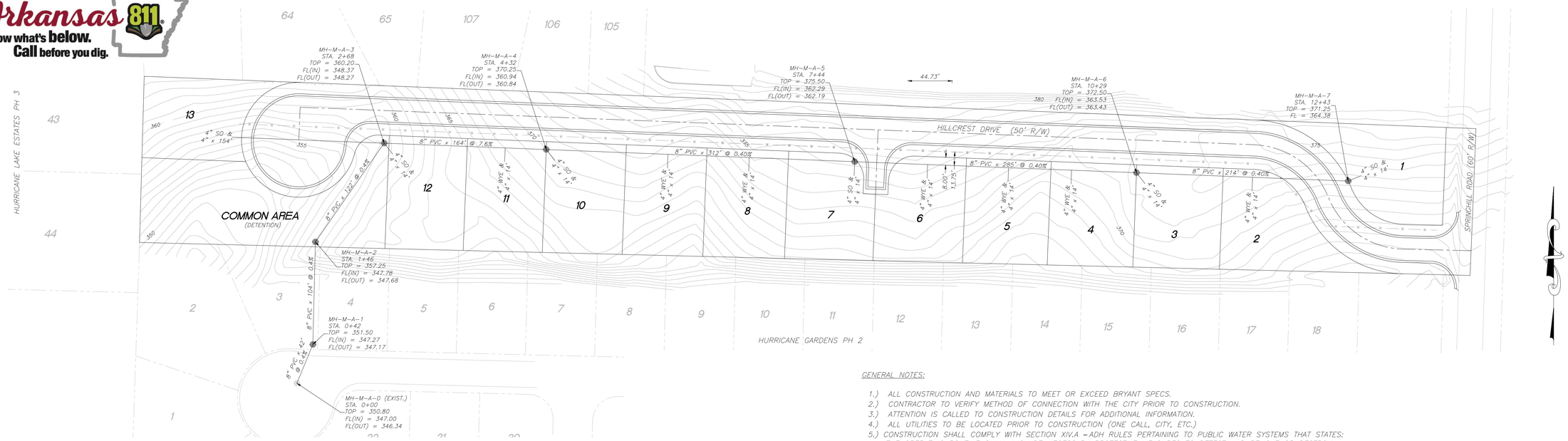
CONSTRUCTION DETAILS — WATER
HILLCREST ADDITION
PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

Prepared For: Springhill HWY 5 Development, LLC 816 E. Oak Street Conway, Arkansas 72032

No.	Revisions	Date	By

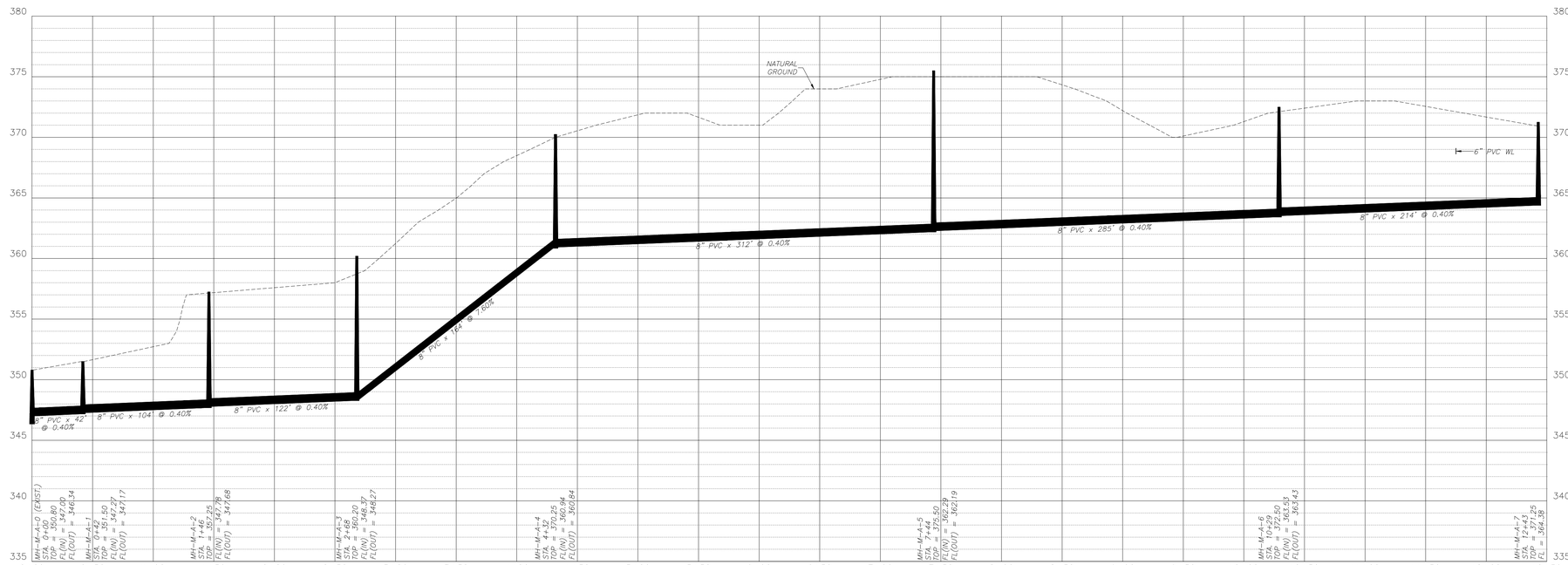
Project No.: 24-018
File: 06_Hillcrest CD Water
Sheet: 6 of 9
Date: JULY 9, 2024
Scale: N.T.S.
Drawn By: B. Judd

Arkansas 811
Know what's below.
Call before you dig.



GENERAL NOTES:

1.) ALL CONSTRUCTION AND MATERIALS TO MEET OR EXCEED BRYANT SPECS.
2.) CONTRACTOR TO VERIFY METHOD OF CONNECTION WITH THE CITY PRIOR TO CONSTRUCTION.
3.) ATTENTION IS CALLED TO CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.
4.) ALL UTILITIES TO BE LOCATED PRIOR TO CONSTRUCTION (ONE CALL, CITY, ETC.)
5.) CONSTRUCTION SHALL COMPLY WITH SECTION XIV.A – ADH RULES PERTAINING TO PUBLIC WATER SYSTEMS THAT STATES: "THE OPERATING ROUTINE SHALL INCLUDE NECESSARY PROTECTIVE MEASURES TO DETECT AND REMOVE OR DESTROY ANY CONTAMINANT OF CONCERN OR REGULATION THAT MIGHT ENTER THE DISTRIBUTION SYSTEM. EVERY PRECAUTION MUST BE TAKEN AGAINST THE POSSIBILITY OF SEWAGE CONTAMINATION OF THE WATER IN THE DISTRIBUTION SYSTEM. WATER MAINS AND SANITARY SEWERS SHALL BE CONSTRUCTED AS FAR APART AS PRACTICABLE, AND SHALL BE SEPARATED BY UNDISTURBED AND COMPACTED EARTH. A MINIMUM HORIZONTAL DISTANCE OF TEN FEET SHOULD BE MAINTAINED BETWEEN WATER LINES AND SEWER LINES OR OTHER SOURCES OF CONTAMINATION. WATER LINES AND SEWERS SHALL NOT BE LAID IN THE SAME TRENCH EXCEPT ON THE WRITTEN APPROVAL OF THE ARKANSAS DEPARTMENT OF HEALTH. WATER MAINS NECESSARILY IN CLOSE PROXIMITY TO SEWERS MUST BE PLACED SO THAT THE BOTTOM OF THE WATER LINE WILL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE AT ITS HIGHEST POINT. IF THIS DISTANCE MUST UNAVOIDABLY BE REDUCED, THE WATER LINE OR THE SEWER LINE MUST BE ENCASED IN WATERTIGHT PIPE WITH SEALED WATERTIGHT ENDS EXTENDING AT LEAST TEN FEET EITHER SIDE OF THE CROSSING. ANY JOINT IN THE ENCASEMENT PIPE IS TO BE MECHANICALLY RESTRAINED. THE ENCASEMENT PIPE MAY BE VENTED TO THE SURFACE IF CARRYING WATER OR SEWER UNDER PRESSURE. WHERE A WATER LINE MUST UNAVOIDABLY PASS BENEATH THE SEWER LINE, AT LEAST 18 INCHES OF SEPARATION MUST BE MAINTAINED BETWEEN THE OUTSIDE OF THE TWO PIPES IN ADDITION TO THE PRECEDING ENCASEMENT REQUIREMENT. EXCEPTIONS TO THIS MUST BE APPROVED IN WRITING BY THE ARKANSAS DEPARTMENT OF HEALTH. A MINIMUM HORIZONTAL DISTANCE OF THREE FEET SHALL BE MAINTAINED BETWEEN WATER LINES AND OTHER UNDERGROUND UTILITIES OF A NONSANITARY NATURE (GAS, ELECTRIC, ETC.). EXCEPTIONS TO THIS MUST BE APPROVED IN WRITING BY THE ARKANSAS DEPARTMENT OF HEALTH.
6.) CONTRACTOR TO ADHERE TO CURRENT OSHA EXCAVATION & TRENCH SAFETY REGULATIONS.
7.) BACKFILL FOR ALL DISTURBED (EXCAVATED) AREAS TO BE COMPACTED TO 95% SP.



STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7373
TIMOTHY B. LEMONS

0' 50' 100' 150'
SCALE: 1" = 50'

LEMONS ENGINEERING CONSULTANTS, INC.
204 CHERRY STREET
CABOT, ARKANSAS 72023
(501) 843-5081 • Fax (501) 941-0959
ENGINEERING + SURVEYING
WATER • SEWER • TRANSPORTATION • SUBDIVISIONS

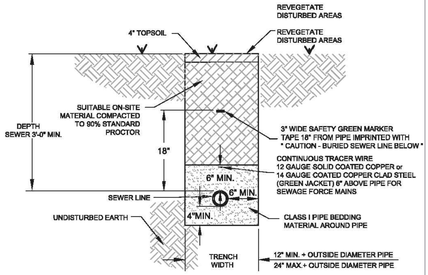
SEWER PLAN/PROFILE
HILLCREST ADDITION

PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

Prepared for:
Springhill HWY 5
Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

No.	Revisions	Date	By

Date: JULY 9, 2024
Scale: 1" = 50'
Drawn By: B. Judd
Project No. 24-018
File: 07_Hillcrest Sewer
Sheet: 7 of 9



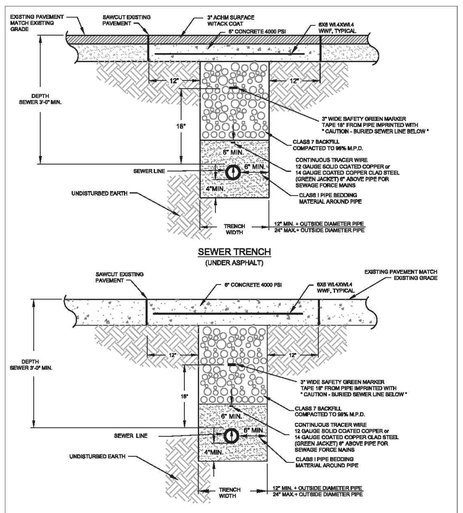
NOTES:

1. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING SEWER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE SEWER SYSTEM.
2. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B)
3. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.

SEWER TRENCH
(NON-PAVED AREA)

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	SEWER TRENCH (NON-PAVED AREA)	REVISED	S1
DRAWN BY:	CHECKED BY:	FILE: S1-Sewer Trench (Non-Paved Area).dwg	



SEWER TRENCH
(UNDER ASPHALT)

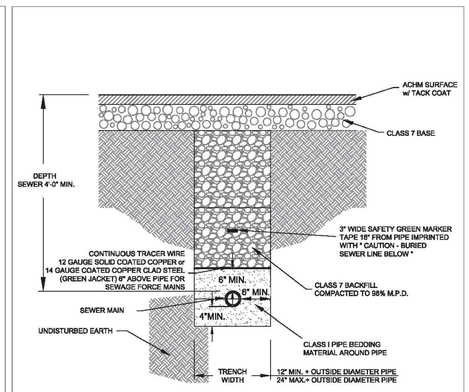
SEWER TRENCH
(UNDER CONCRETE)

NOTES:

1. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING SEWER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE SEWER SYSTEM.
2. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B)
3. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	SEWER TRENCH (UNDER PAVEMENT)	REVISED	S2
DRAWN BY:	CHECKED BY:	FILE: S2-Sewer Trench (Under Pavement).dwg	



NOTES:

1. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING SEWER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE SEWER SYSTEM.
2. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B)
3. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.

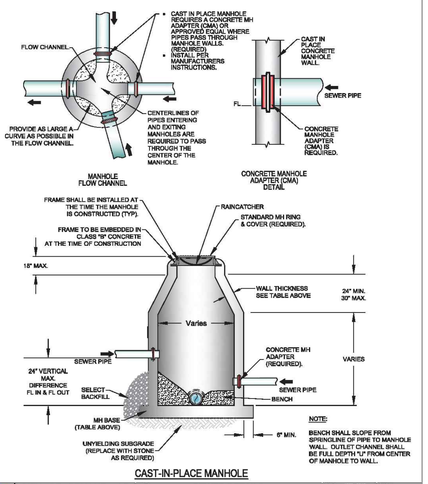
SEWER MAIN INSTALLATION
PRIOR TO ROADWAY CONSTRUCTION

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	SEWER MAIN INSTALLATION PRIOR TO ROADWAY CONSTRUCTION	REVISED	S3
DRAWN BY:	CHECKED BY:	FILE: S3-Sewer Main Installation Prior to Roadway Const.dwg	

Inside Diameter of Manhole	Minimum Wall Thickness	Base Thickness	Minimum Ring & Cover Size
4' DIA	6"	8"	24" (< or Equal to 24" Pipes)
5' DIA	8"	8"	36" (> 24" Pipes)
6' DIA	8"	12"	

MANHOLE INFORMATION TABLE



NOTE:
BENCH SHALL SLOPE FROM SPRINGLINE OF PIPE TO MANHOLE WALL. OUTLET CHANNEL SHALL BE FULL DEPTH "L" FROM CENTER OF MANHOLE TO WALL.

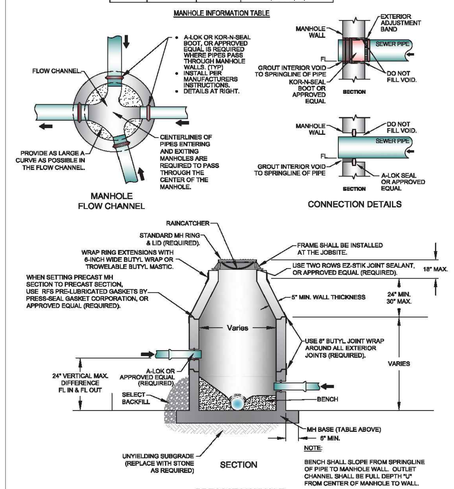
CAST-IN-PLACE MANHOLE

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	CAST-IN-PLACE MANHOLE	REVISED	S4
DRAWN BY:	CHECKED BY:	FILE: S4-Cast In Place Manhole.dwg	

Inside Diameter of Manhole	Minimum Wall Thickness	Base Thickness	Minimum Ring & Cover Size
4' DIA	5"	6"	24" (< or Equal to 24" Pipes)
5' DIA	7"	8"	36" (> 24" Pipes)
6' DIA	7"	8"	

MANHOLE INFORMATION TABLE



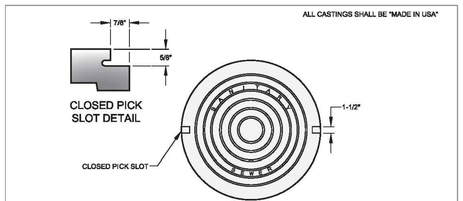
NOTE:
BENCH SHALL SLOPE FROM SPRINGLINE OF PIPE TO MANHOLE WALL. OUTLET CHANNEL SHALL BE FULL DEPTH "L" FROM CENTER OF MANHOLE TO WALL.

PRECAST MANHOLE

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

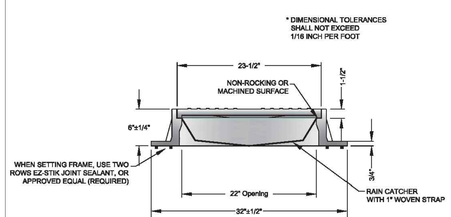
TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	PRECAST MANHOLE	REVISED	S5
DRAWN BY:	CHECKED BY:	FILE: S5-Precast Manhole.dwg	

ALL CASTINGS SHALL BE "MADE IN USA"



1. MINIMUM WEIGHT OF RING: 100 POUNDS
2. MINIMUM WEIGHT OF COVER: 110 POUNDS
3. COVERS ARE FURNISHED WITH TWO CLOSED PICK SLOTS.
4. CASTINGS SHALL BE "MADE IN USA"

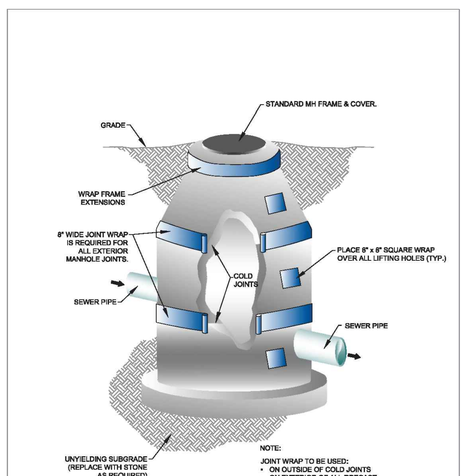
* DIMENSIONAL TOLERANCES SHALL NOT EXCEED 1/16 INCH PER FOOT



FRAME AND COVER DETAIL

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	MANHOLE FRAME AND COVER	REVISED	S6
DRAWN BY:	CHECKED BY:	FILE: S6-Manhole Frame and Cover.dwg	



NOTE:
JOINT WRAP TO BE USED:
- ON OUTSIDE OF COLD JOINTS
- ON EXTERIOR OF ALL PRECAST MANHOLE JOINTS
- ON LIFT HOLES / SOCKETS

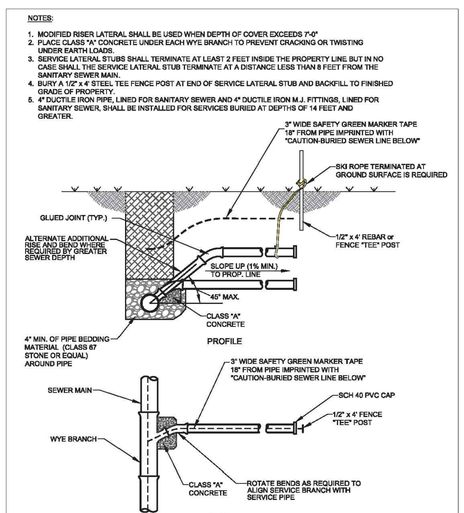
MANHOLE JOINT WRAP

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	MANHOLE JOINT WRAP	REVISED	S9
DRAWN BY:	CHECKED BY:	FILE: S9-Manhole Joint Wrap.dwg	

NOTES:

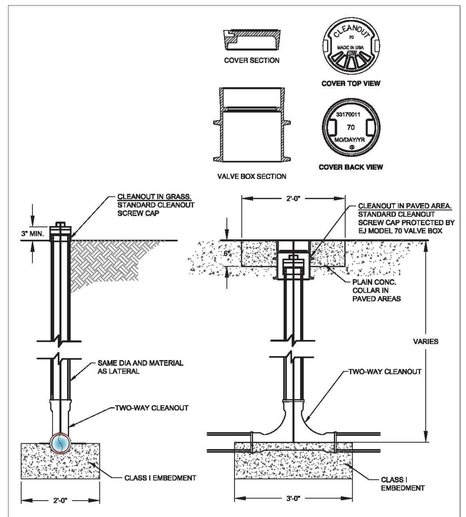
1. MODIFIED RISER LATERAL SHALL BE USED WHEN DEPTH OF COVER EXCEEDS 7'-0"
2. PLACE CLASS "A" CONCRETE UNDER EACH WYE BRANCH TO PREVENT CRACKING OR TWISTING UNDER EARTH LOADS.
3. SERVICE LATERAL STUBS SHALL TERMINATE AT LEAST 2 FEET INSIDE THE PROPERTY LINE BUT IN NO CASE SHALL THE SERVICE LATERAL STUB TERMINATE AT A DISTANCE LESS THAN 8 FEET FROM THE SANITARY SEWER MAIN.
4. BURY A 1/2" x 4' STEEL TEE FENCE POST AT END OF SERVICE LATERAL STUB AND BACKFILL TO FINISHED GRADE OF PROPERTY.
5. 4" DUCTILE IRON PIPE, LINED FOR SANITARY SEWER AND 4" DUCTILE IRON M.J. FITTINGS, LINED FOR SANITARY SEWER, SHALL BE INSTALLED FOR SERVICES BURIED AT DEPTHS OF 14 FEET AND GREATER.



SEWER SERVICE LATERAL

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	SEWER SERVICE LATERAL	REVISED	S15
DRAWN BY:	CHECKED BY:	FILE: S15-Sewer Service Lateral.dwg	



TYPICAL CLEANOUT

CITY OF BRYANT, AR — WATER UTILITIES, 210 S.W. 3rd. STREET, BRYANT, AR, PHONE: (501) 943-5466

TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	SEWER SERVICE CLEANOUT	REVISED	S16
DRAWN BY:	CHECKED BY:	FILE: S16-Sewer Service Cleanout.dwg	

LEMONS ENGINEERING CONSULTANTS, INC.
204 CHERRY STREET
CABOT, ARKANSAS 72023
(501) 843-5081 • FAX (501) 941-0959
ENGINEERING + SURVEYING
WATER • SEWER • TRANSPORTATION • SUBDIVISIONS

CONSTRUCTION DETAILS – SEWER
HILLCREST ADDITION
PART OF THE SE 1/4 OF SECTION 17, T-1-S, R-14-W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

Prepared For:
Springhill HWY 5 Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

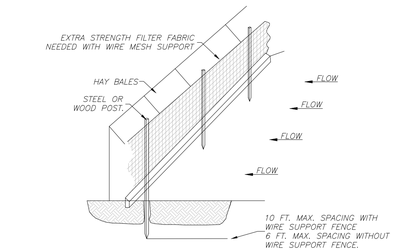
No.	Revisions	Date	By

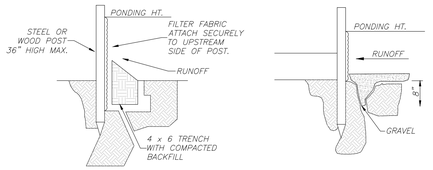
Project No.: 24-018
Date: JULY 9, 2024
File: 08_Hillcrest CD Sewer
Scale: N.T.S.
Drawn By: B. Judd
Sheet: 8 of 9

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
2024
No. 7373
TIMOTHY B. LEMONS

GENERAL NOTES:

1.) A SILT FENCE AND STRAW BALE DIKE SHALL BE PLACED AT POTENTIAL LOCATIONS OF HEAVY EROSION.
2.) TEMPORARY STRAW BALE DIKES ARE TO BE CONSTRUCTED NOT TO POND WATER ON ADJACENT PROPERTY.
3.) ALL TEMPORARY EROSION CONTROLS SHALL BE MAINTAINED UNTIL ALL CONSTRUCTION IS COMPLETE & PERMANENT GROUND COVER HAS BEEN ESTABLISHED.
4.) ONE OF THE FOLLOWING GROUND COVER METHODS SHALL BE USED AT AREAS OF CLEARING OTHER THAN FUTURE PAVEMENT SURFACES:
STRAW OR HAY–LOOSE 2.0 TONS/ACRE
STRAW OR HAY–TIED, ANCHORED, OR TACKED 1.5 TONS/ACRE
5.) SOIL EXPOSED FOR MORE THAN 14 DAYS WITH NO CONSTRUCTION ACTIVITY SHALL BE SEEDED OR REVEGITATED.
6.) CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING ON FLOW OF MUD INTO PUBLIC RIGHT–OF–WAY.
7.) ADDITIONAL EROSION CONTROL MEASURES WILL BE EMPLOYED WHERE NECESSARY BY SITE CONDITIONS.
8.) CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES & PROVIDE RAIN FALL MONITORING & BI–WEEKLY INSPECTION REPORTS IN ACCORDANCE WITH THE NPDES PERMIT REQUIREMENTS.
9.) CONTRACTOR SHALL USE "BEST MANAGEMENT PRACTICES" (BMP'S) WHEN IMPLEMENTING & MAINTAINING SEDIMENT & RUN–OFF CONTROLS.
10.) THE USE OF "BIO–DEGRADABLE SOCK" IS ALLOWED AS OPPOSED TO SILT FENCE.





STANDARD DETAIL
TRENCH WITH NATIVE GRAVEL

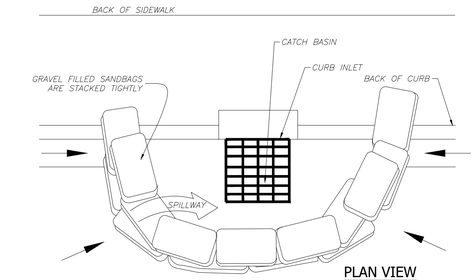
ALTERNATE DETAIL
TRENCH WITH GRAVEL

NOTE:
1.) INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.

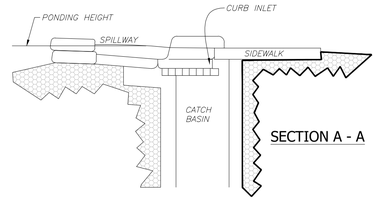
2.) REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF–SITE AND CAN BE PERMANENTLY STABILIZED.

3.) SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

SILT FENCE
NTS



PLAN VIEW



SECTION A - A

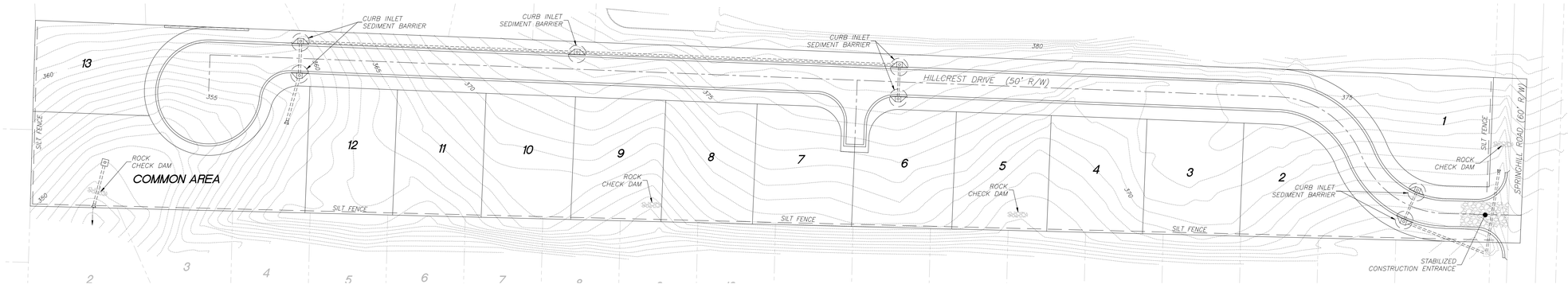
NOTES:
1.) PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.

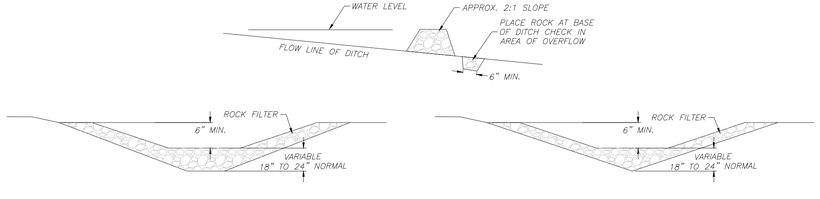
2.) SANDBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC ARE FILLED WITH GRAVEL, LAYERED, AND PACKED TIGHTLY.

3.) LEAVE ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.

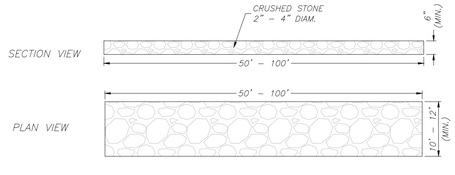
4.) INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

CURB INLET
SEDIMENT BARRIER
NTS

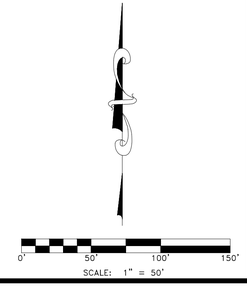




ROCK CHECK DAM
NTS



STABILIZED CONSTRUCTION ENTRANCE
NTS



Arkansas 811
Know what's below.
Call before you dig.

LEMONS ENGINEERING CONSULTANTS, INC.
204 CHERRY STREET
CABOT, ARKANSAS 72023
(501) 843-5081 • Fax (501) 941-0959
ENGINEERING + SURVEYING
WATER • SEWER • TRANSPORTATION • SUBDIVISIONS

EROSION CONTROL PLAN
HILLCREST ADDITION
PART OF THE SE 1/4 OF SECTION 17, T–1–S, R–14–W
CITY OF BRYANT, SALINE COUNTY, ARKANSAS

Prepared For:
Springhill HWY 5
Development, LLC
816 E. Oak Street
Conway, Arkansas 72032

By:	Date:	Revisions	No.

Project No. 24-018
File: 09_Hillcrest Erosion
Date: JULY 9, 2024
Scale: 1" = 50'
Drawn By: B. Judd
Sheet: 9 of 9