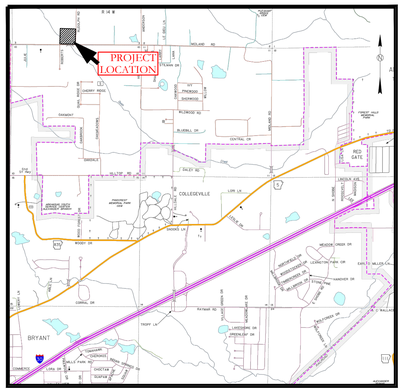
CONSTRUCTION PLANS
JACOB'S CORNER

SALINE COUNTY, AR



VICINITY MAP

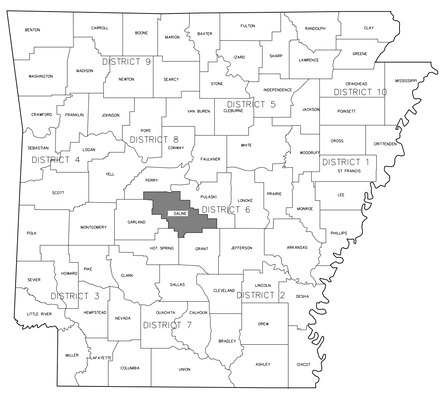
PREPARED BY:

HOPE CONSULTING
ENGINEERS - SURVEYORS

117 S. Market Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
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DRAWING INDEX

SHEET NO.	TITLE
	PLAT
C-1.0	RUDOLPH IMPROVEMENT
C-2.0	STREET PLAN & PROFILE
C-2.1	RUDOLPH IMPROVEMENT PAVEMENT PLAN VIEW
C-3.1	UTILITY PLAN AND PROFILE
C-4.0	UTILITY DETAILS 1
C-4.1	UTILITY DETAILS 2
C-5.0	CIVIL SPECS
C-6.0	DRAINAGE PLAN
C-7.0	EROSION CONTROL PLAN



CIVIL ENGINEER
HOPE CONSULTING INC
117 S. MARKET STREET
BENTON, AR 72015

ARCHITECT
N/A

STRUCTURAL ENGINEER
N/A

GEOTECHNICAL ENGINEER

HOPE CONSULTING
ENGINEERS - SURVEYORS
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Benton, Arkansas 72015
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FOR USE AND BENEFIT OF:
GIRON BUILDERS INC.

JACOB'S CORNER

DATE: 02-01-2022		C.A.D. BY:	DRAWING NUMBER:
REVISED:		CHECKED BY:	20-0722
SHEET:		SCALE:	

K:\LAND PROJECTS 2004\SUBDIVISIONS\2020\20-0722 GIRON SUBDIVISION\DWG\GIRON SUBDIVISION.DWG, UPDATE: 02-01-2022 DWG

Existing Hilldale CL

1+00

44.5'

2+00

3+00

3+53

PROP. MH - (1)
STA 0+00.00

72", 48" CMP
FL IN 391.26'
FL OUT 391.06'

10.6'

0+50

0+51

REMOVE AND REPLACE
RUDOLPH ROAD CULVERTS

EX. 30" HDPE
FL IN 392.74'
FL OUT 393.64'

EX. 36" CMP
FL IN 392.26'
FL OUT 392.72'

EX. MH - (3)
STA 3+81.23

DEMO NOTE: SAWCUT
TAPER TO TRANSITION
SECTION WIDTH

FFE
403.5
LOT 9
0.18 ACRES
7994 Sq. Ft.

FFE
403.8
LOT 8
0.18 ACRES
8023 Sq. Ft.

FFE
404.00
LOT 7
0.18 ACRES
8052 Sq. Ft.

FFE
404.50
LOT 6
0.19 ACRES
8064 Sq. Ft.

FFE
404.60
LOT 5
0.19 ACRES
8060 Sq. Ft.

FFE
405.00
LOT 4
0.18 ACRES
8056 Sq. Ft.

FFE
405.30
LOT 3
0.18 ACRES
8054 Sq. Ft.

FFE
405.80
LOT 2
0.18 ACRES
8053 Sq. Ft.

FFE
406.00
LOT 1
0.19 ACRES
8110 Sq. Ft.

25' B.S.L.

25' B.S.L.

U.E. & D.E. VARIES

U.E. & D.E. VARIES

U.E. & D.E.

5' SIDEWALK

MH - (2)
STA 2+51.12

14.0'

10.5'

MH - (3)
STA 5+51.12

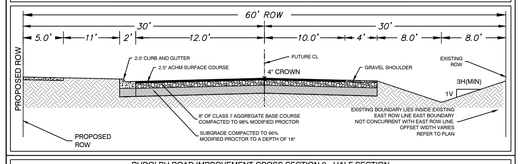
EXISTING BOUNDARY

EXISITNG ROW

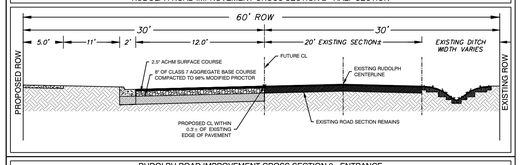
4.17'

NEW CENTERLINE
SEE RUDOLPH ROAD
IMPROVEMENT DETAIL

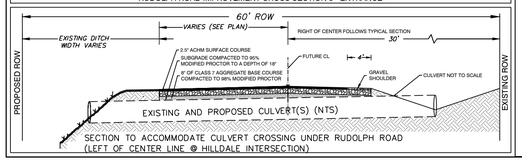
RUDOLPH ROAD IMPROVEMENT CROSS SECTION 1 - FULL TYPICAL SECTION



RUDOLPH ROAD IMPROVEMENT CROSS SECTION 2 - HALF SECTION



RUDOLPH ROAD IMPROVEMENT CROSS SECTION 3 - ENTRANCE



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

20 10' 0 20

HATCH LEGEND

- PROPOSED RIP RAP 630 SF
- PROPOSED GREEN STRIP 6571
- DEMO PAVEMENT 7242
- EXISTING PAVEMENT
- PROPOSED ASPHALT 9941 SF
- PROPOSED SHOULDER 1424 SF
- PROPOSED SIDEWALK (5' WIDTH)

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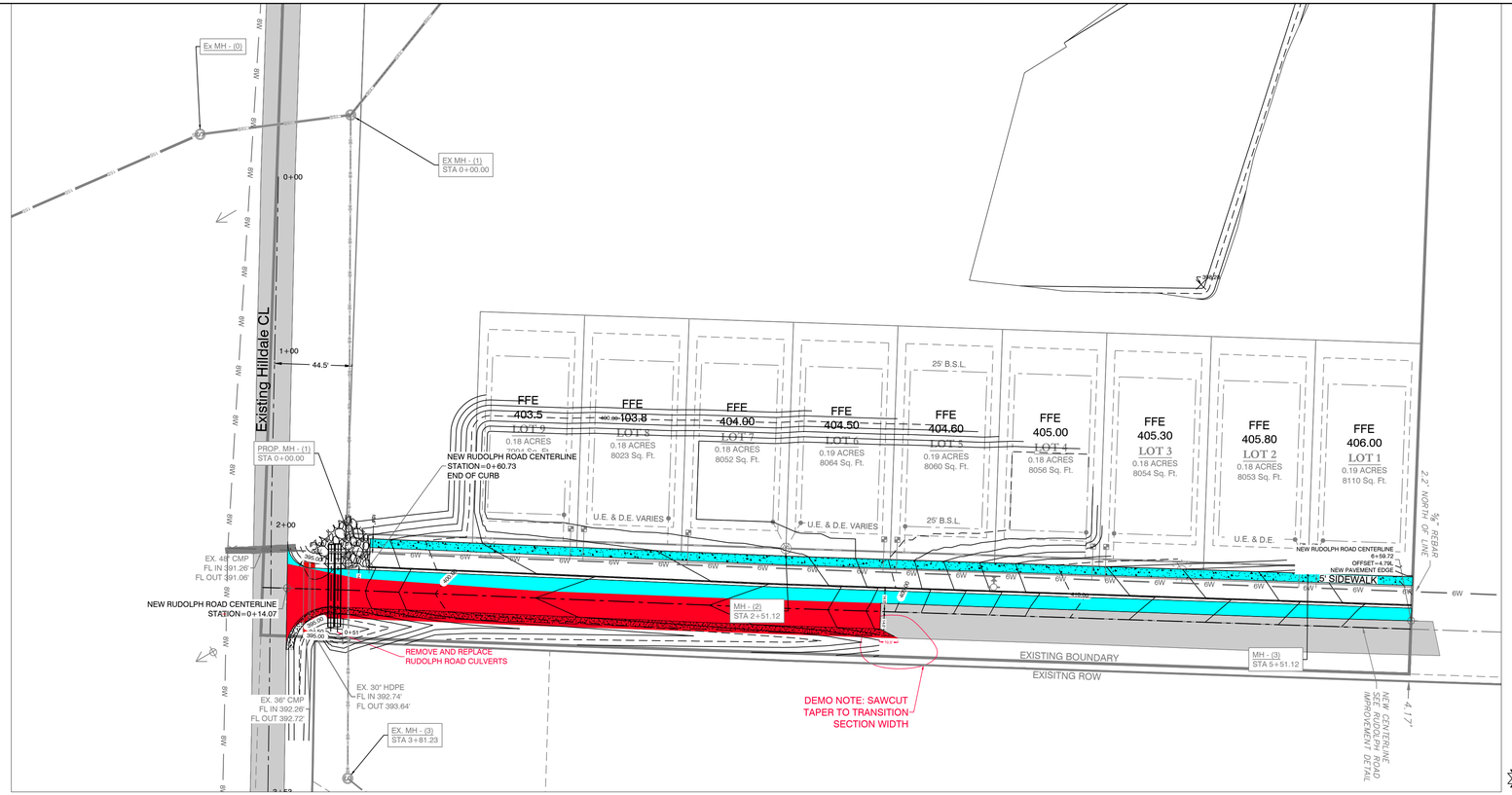
FOR USE AND BENEFIT OF:
GIRON BUILDERS INC.

JACOB'S CORNER
RUDOLPH ROAD IMPROVEMENT PLAN
SALINE COUNTY, ARKANSAS

DATE:	02-01-2022	C.A.D. BY:	DRAWING NUMBER:
REVISED:		CHECKED BY:	20-0722
SHEET:	C-1.0	SCALE:	

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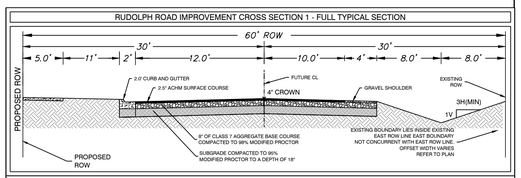
BASIS OF BEARING:
GRID NORTH, ARKANSAS
COORDINATE SYSTEM, SOUTH ZONE BY
GPS OBSERVATION

40' 20' 0 40'

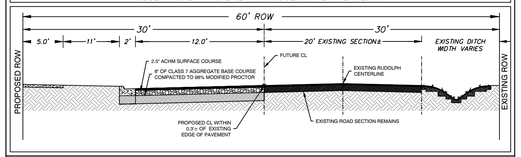
PAVEMENT LEGEND

- DEMO PAVEMENT
- EXISTING PAVEMENT
- PROPOSED PAVEMENT
- PROPOSED SIDEWALK (4')

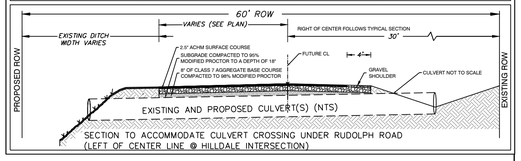
RUDOLPH ROAD IMPROVEMENT CROSS SECTION 1 - FULL TYPICAL SECTION

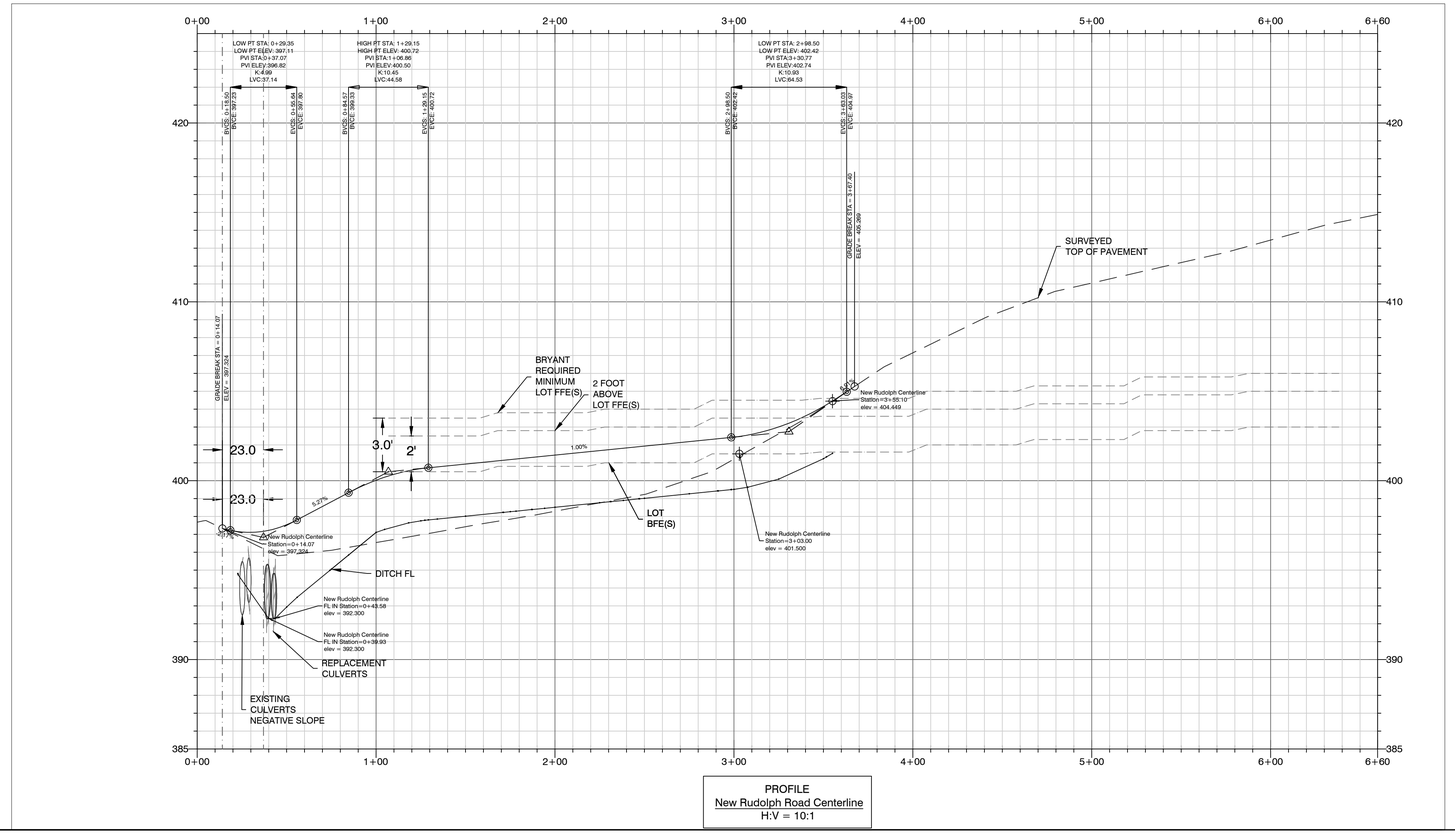


RUDOLPH ROAD IMPROVEMENT CROSS SECTION 2 - HALF SECTION



RUDOLPH ROAD IMPROVEMENT CROSS SECTION 3 - ENTRANCE





PROFILE
New Rudolph Road Centerline
H:V = 10:1

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JACOB'S CORNER
STREET PLAN AND PROFILES
SALINE COUNTY, ARKANSAS

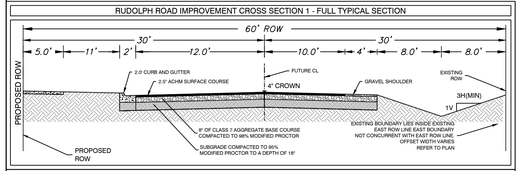
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REVISED:		CHECKED BY:	20-0722
SHEET:	C-2.0	SCALE:	

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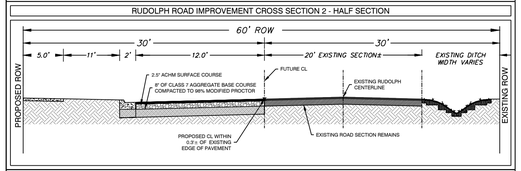
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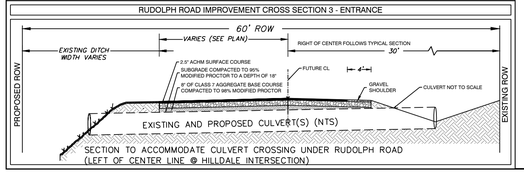
RUDOLPH ROAD IMPROVEMENT CROSS SECTION 1 - FULL TYPICAL SECTION



RUDOLPH ROAD IMPROVEMENT CROSS SECTION 2 - HALF SECTION



RUDOLPH ROAD IMPROVEMENT CROSS SECTION 3 - ENTRANCE



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

20 10' 0 20

HATCH LEGEND
PROPOSED RIP RAP 630 SF
PROPOSED GREEN STRIP 6571
DEMO PAVEMENT 7242
EXISTING PAVEMENT
PROPOSED ASPHALT 9941 SF
PROPOSED SHOULDER 1424 SF
PROPOSED SIDEWALK (5' WIDTH)

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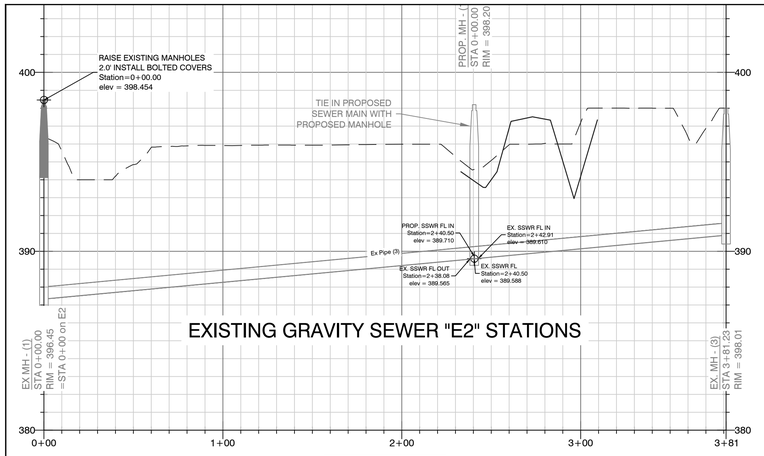
JACOB'S CORNER
RUDOLPH ROAD PAVEMENT PLAN VIEW

SALINE COUNTY, ARKANSAS

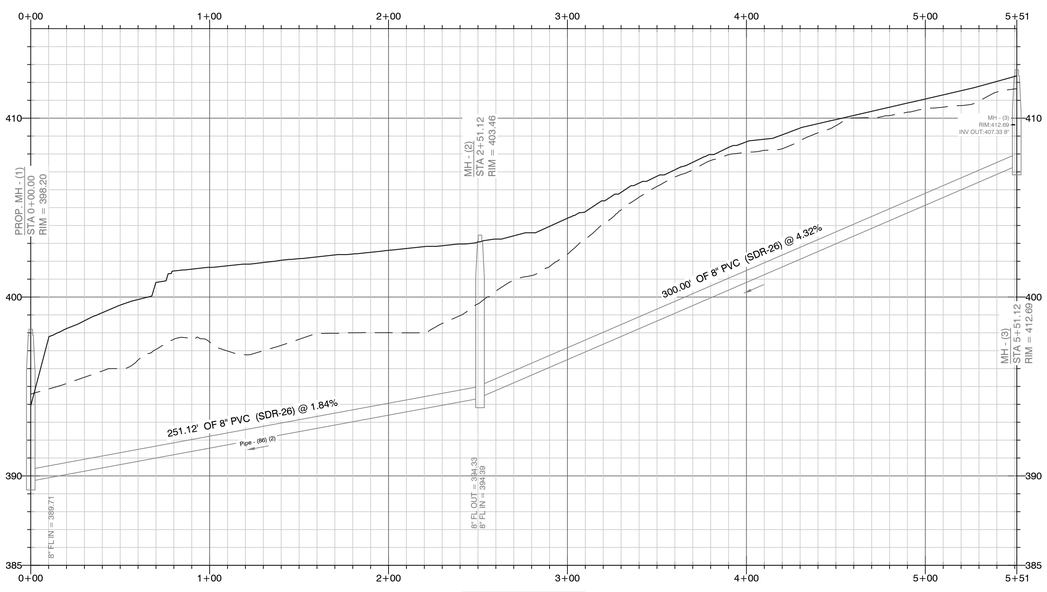
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REVISED:		CHECKED BY:	20-0722
SHEET:	C-2.1	SCALE:	

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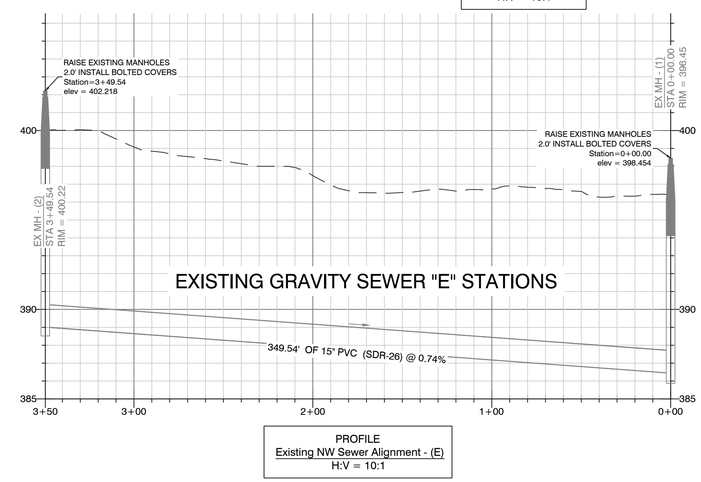
K:\LAND PROJECTS\2020\SUBDIVISIONS\2020-20-0722 GIRON SUBDIVISION\DWG\GIRON SUBDIVISION JACOBS CORNER_UPDATE 02-01-2022.DWG



PROFILE
Existing Sewer - (E2)
H:V = 10:1



PROFILE
Sewer Alignment - (2)
H:V = 10:1



PROFILE
Existing NW Sewer Alignment - (E)
H:V = 10:1

WATER LEGEND

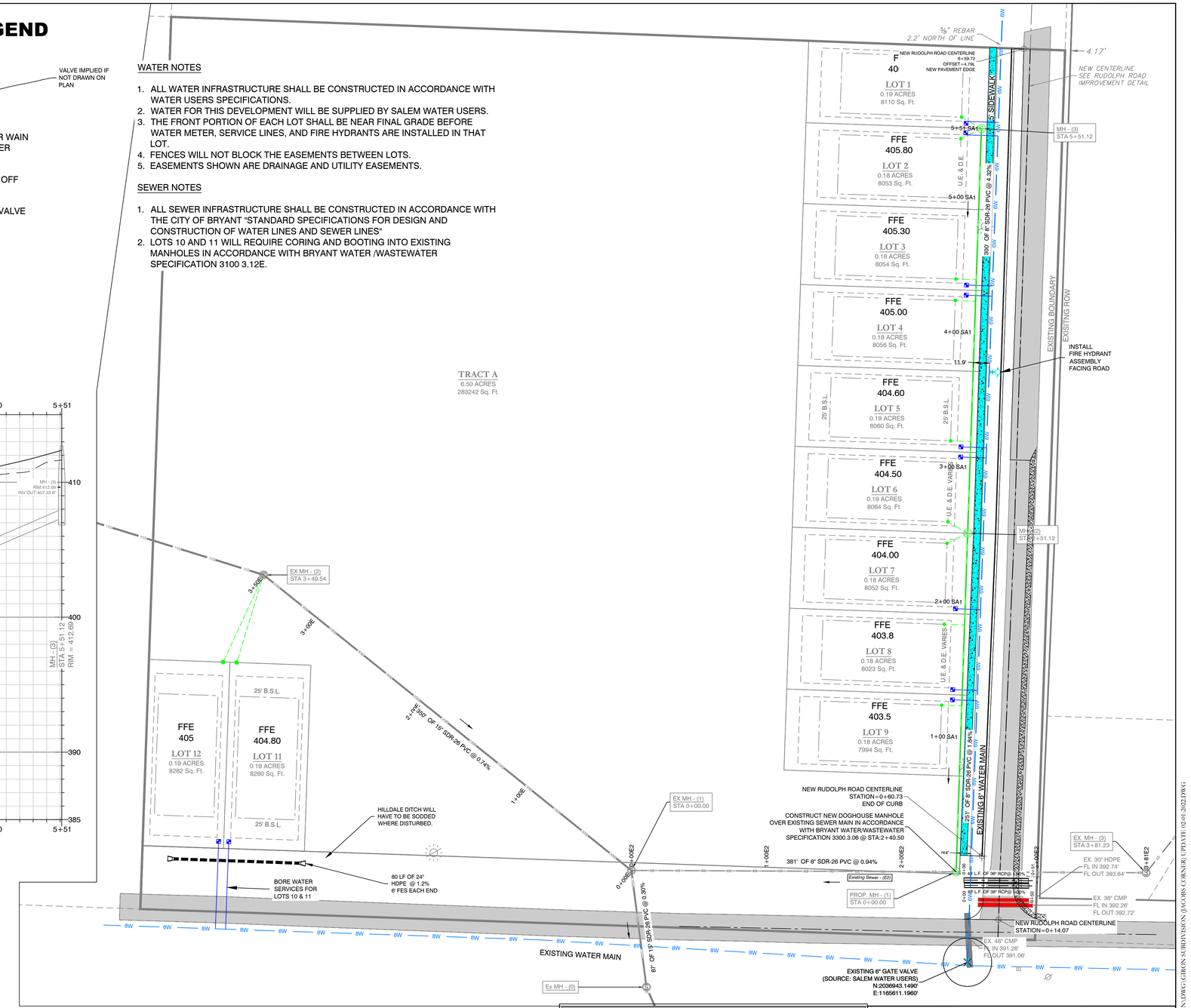
- FIRE HYDRANT ASSEMBLY — VALVE IMPLIED IF NOT DRAWN ON PLAN
- EXISTING WATER WAIN BY PIPE DIAMETER
- EXISTING BLOW OFF
- EXISTING GATE VALVE
- WATER METER

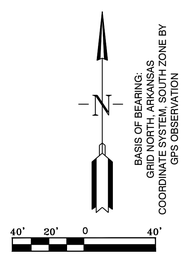
WATER NOTES

1. ALL WATER INFRASTRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH WATER USERS SPECIFICATIONS.
2. WATER FOR THIS DEVELOPMENT WILL BE SUPPLIED BY SALEM WATER USERS.
3. THE FRONT PORTION OF EACH LOT SHALL BE NEAR FINAL GRADE BEFORE WATER METER, SERVICE LINES, AND FIRE HYDRANTS ARE INSTALLED IN THAT LOT.
4. FENCES WILL NOT BLOCK THE EASEMENTS BETWEEN LOTS.
5. EASEMENTS SHOWN ARE DRAINAGE AND UTILITY EASEMENTS.

SEWER NOTES

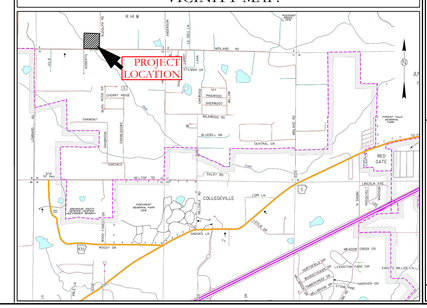
1. ALL SEWER INFRASTRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES"
2. LOTS 10 AND 11 WILL REQUIRE CORING AND BOOTING INTO EXISTING MANHOLES IN ACCORDANCE WITH BRYANT WATER /WASTEWATER SPECIFICATION 3100 3.12E.





JACOB'S CORNER SUBDIVISION
SEWER PROFILES

VICINITY MAP:



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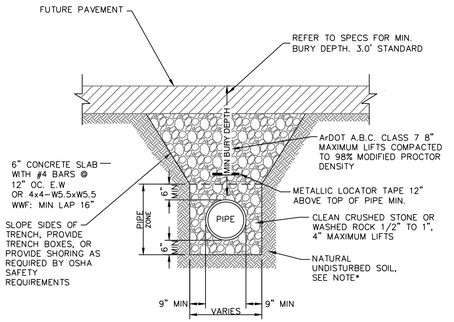
FOR USE AND BENEFIT OF:
GIRON BUILDERS INC.

JACOB'S CORNER
UTILITY PLAN AND PROFILE
SALINE COUNTY, ARKANSAS

DATE:	02-01-2022	C.A.D. BY:	DRAWING NUMBER:
REVISED:		CHECKED BY:	20-0722
SHEET:	C-3.1	SCALE:	

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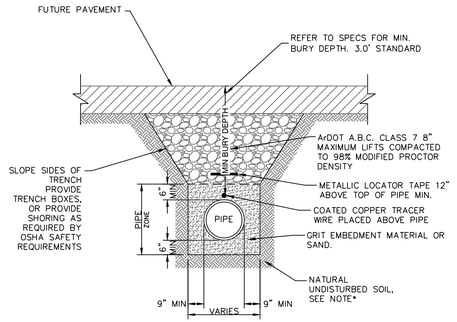


DISPOSE OF EXCESS EXCAVATED MATERIAL OFF SITE

NOTE:*
FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED BELOW THE PIPE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE ENGINEER.

PVC SEWER TRENCH UNDER FUTURE ASPHALT STREET

N.T.S.

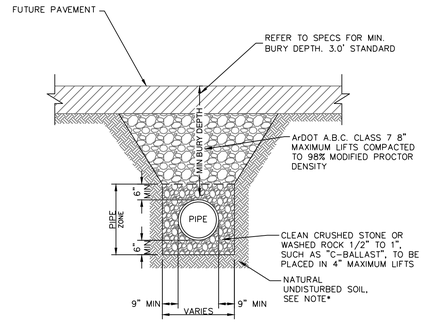


DISPOSE OF EXCESS EXCAVATED MATERIAL OFF SITE

NOTE:*
FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED BELOW THE PIPE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE ENGINEER.

PVC WATER LINE TRENCH UNDER FUTURE ASPHALT STREET

N.T.S.

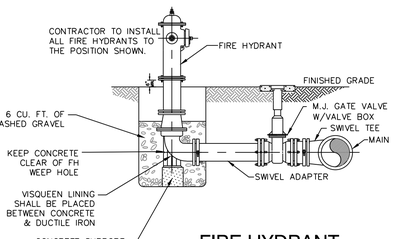


DISPOSE OF EXCESS EXCAVATED MATERIAL OFF SITE

NOTE:*
FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED BELOW THE PIPE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE ENGINEER.

DRAINAGE PIPE TRENCH UNDER FUTURE ASPHALT STREET

N.T.S.

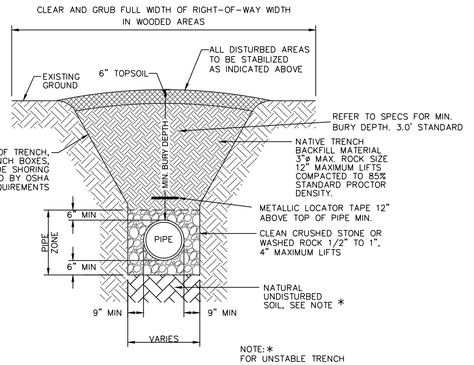


FIRE HYDRANT CONNECTION

NTS

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.



DISPOSE OF EXCESS EXCAVATED MATERIAL OFF SITE

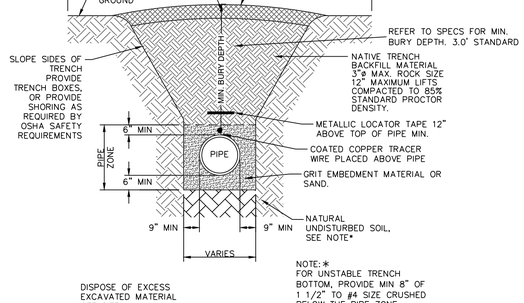
NOTE:*
FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED BELOW THE PIPE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE ENGINEER.

PVC SEWER TRENCH IN UNPAVED AREAS

N.T.S.

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.



DISPOSE OF EXCESS EXCAVATED MATERIAL OFF SITE

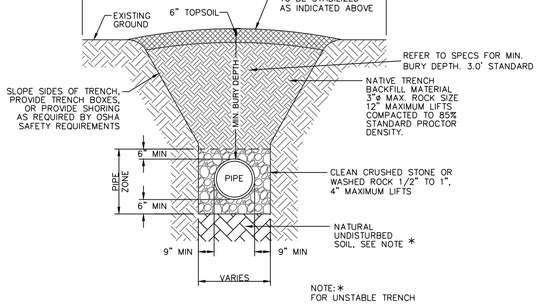
NOTE:*
FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED BELOW THE PIPE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE ENGINEER.

PVC WATER LINE TRENCH IN UNPAVED AREAS

N.T.S.

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.

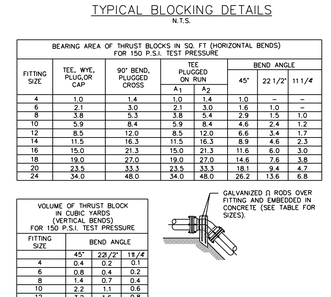


DISPOSE OF EXCESS EXCAVATED MATERIAL OFF SITE

NOTE:*
FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED BELOW THE PIPE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE ENGINEER.

DRAINAGE PIPES IN UNPAVED AREAS

N.T.S.



VOLUME OF THRUST BLOCK IN CUBIC YARDS (VERTICAL BENDS) FOR 150 P.S.I. TEST PRESSURE

FITTING SIZE	BEND ANGLE		
	45°	22 1/2°	11 1/4°
4	0.4	0.2	0.1
6	0.8	0.4	0.2
8	1.4	0.7	0.4
10	2.2	1.1	0.6
12	3.2	1.6	0.8
14	4.4	2.2	1.1
16	5.7	2.9	1.5
18	7.2	3.7	1.8
20	8.9	4.5	2.3
24	12.8	6.5	3.3

THRUST BLOCK NOTES:

1. KEEP CONCRETE CLEAR OF JOINT ACCESSORIES.
2. CONCRETE THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH.
3. REQUIRED VOLUMES OF BEARING AREAS AT FITTINGS SHALL BE AS INDICATED IN THE TABLES PROVIDED AND ADJUSTED, IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S) STATED IN THE SPECIFICATIONS AND ALLOWABLE SOIL BEARING STRESS(ES) STATED IN THE SPECIFICATIONS.
4. THRUST BLOCK VOLUMES FOR VERTICAL BENDS HAVING UPWARD RESULTANT THRUSTS ARE BASED ON TEST PRESSURE OF 150 PSIG AND THE WEIGHT OF CONCRETE (4,050 LB/CY). TO COMPUTE VOLUMES FOR DIFFERENT TEST PRESSURES, USE THE FOLLOWING EQUATION: VOLUME = (TEST PRESSURE / 150) X (TABLE VALUE).
5. BEARING AREAS FOR HORIZONTAL BEND THRUST BLOCKS ARE BASED ON TEST PRESSURE OF 150 PSIG AND AN ALLOWABLE SOIL BEARING STRESS OF 2,000 LB/SF TO COMPUTE BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA = (TEST PRESSURE / 150) X (2,000 / SOIL BEARING STRESS) X (TABLE VALUE).
6. THRUST BLOCKS FOR VERTICAL BENDS HAVING DOWNWARD RESULTANT THRUST SHALL BE THE SAME AS FOR HORIZONTAL BENDS.
7. BEARING AREAS, VOLUMES, AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER THIS STANDARD.
8. BEARING AREA OF THRUST BLOCK SHALL NOT BE LESS THAN 1.0 SF.
9. VERTICAL BENDS THAT REQUIRE A THRUST BLOCK VOLUME EXCEEDING 5 CY REQUIRE SPECIAL BLOCKING DETAILS. SEE PLANS.

TYPICAL BLOCKING DETAILS

N.T.S.

BEARING AREA OF THRUST BLOCKS IN SQ. FT (HORIZONTAL BENDS) FOR 150 P.S.I. TEST PRESSURE

FITTING SIZE	TEE, WYE, PLUG OR CAP	90° BEND, PLUGGED CROSS	TEE PLUGGED ON RUN		BEND ANGLE		
			A1	A2	45°	22 1/2°	11 1/4°
4	1.0	1.4	1.0	1.4	1.0	–	–
6	2.1	3.0	2.1	3.0	1.6	1.0	–
8	3.8	5.3	3.8	5.4	2.9	1.5	1.0
10	5.9	8.4	5.9	8.4	4.6	2.4	1.2
12	8.5	12.0	8.5	12.0	6.6	3.4	1.7
14	11.5	16.3	11.5	16.3	8.9	4.6	2.3
16	15.0	21.3	15.0	21.3	11.6	6.0	3.0
18	19.0	27.0	19.0	27.0	14.6	7.6	3.8
20	23.5	33.3	23.5	33.3	18.1	9.4	4.7
24	34.0	48.0	34.0	48.0	26.2	13.6	6.8

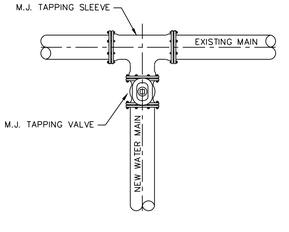
VOLUME OF THRUST BLOCK IN CUBIC YARDS (VERTICAL BENDS) FOR 150 P.S.I. TEST PRESSURE

FITTING SIZE	BEND ANGLE		
	45°	22 1/2°	11 1/4°
4	0.4	0.2	0.1
6	0.8	0.4	0.2
8	1.4	0.7	0.4
10	2.2	1.1	0.6
12	3.2	1.6	0.8
14	4.4	2.2	1.1
16	5.7	2.9	1.5
18	7.2	3.7	1.8
20	8.9	4.5	2.3
24	12.8	6.5	3.3

FITTING SIZES	ROD SIZES	EMBEDMENT
12" AND LESS	#5's	30"
14" – 24"	#8's	36"

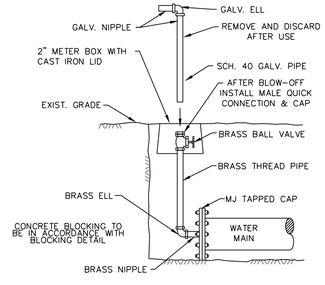
TYPICAL BLOCKING DETAILS

N.T.S.



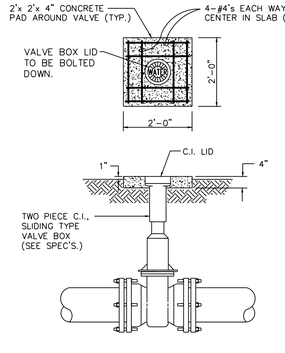
WATER MAIN CONNECTION DETAIL

N.T.S.



2" BLOW-OFF RISER

N.T.S.



DETAIL-VALVE BOX

N.T.S.

TYPICAL BLOCKING DETAILS

N.T.S.

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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:
GIRON BUILDERS INC.

JACOB'S CORNER
UTILITY DETAILS 1
SALINE COUNTY, ARKANSAS

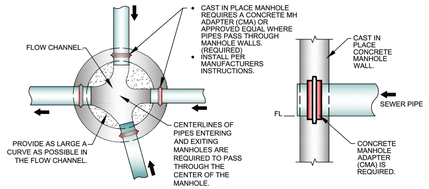
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REVISED:		CHECKED BY:	20-0722
SHEET:	C-4.0	SCALE:	

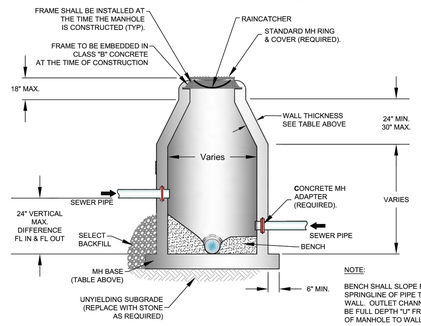
500	01S	15W	0	11	100	62	1762

DRAWING UPDATED 02-01-2022 DRAWING SAVED ON 2020 GIRON\JACOB'S CORNER\DRAWINGS\20-0722 JACOB'S CORNER UTILITY DETAILS 1.DWG

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

MANHOLE INFORMATION TABLE





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

CAST-IN-PLACE MANHOLE

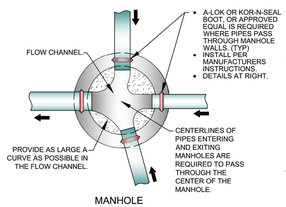
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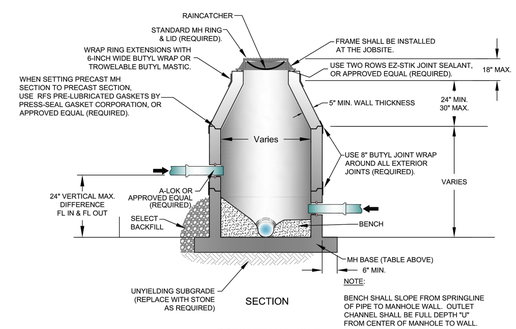
CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

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"	
6' DIA	7"	8"	36" (> 24" Pipes)

MANHOLE INFORMATION TABLE





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

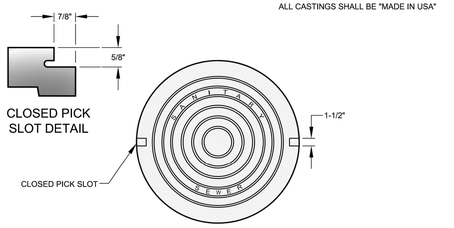
PRECAST MANHOLE

4/24/2015 10:56:37 AM

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

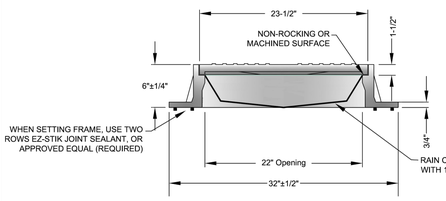
TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	PRECAST MANHOLE	REVISED ----- ----- ----- -----	S5
DRAWN BY:	CHECKED BY:	FILE: S5--Precast Manhole.dwg	

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

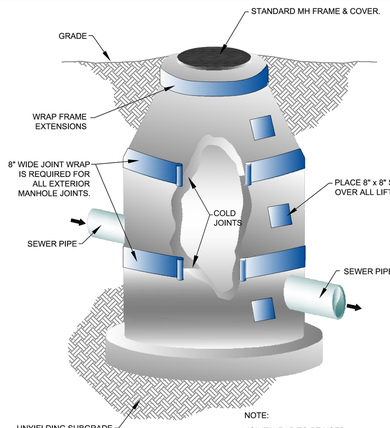


FRAME AND COVER DETAIL

4/24/2015 10:57:01 AM

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

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

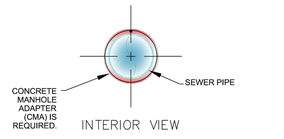
MANHOLE JOINT WRAP

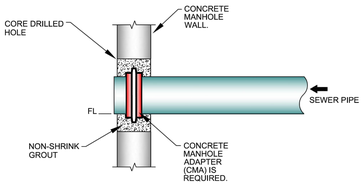
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CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

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

THE INSTALLATION SHALL BE DYE TESTED FOR ACCEPTANCE.





MANHOLE CORING DETAILS

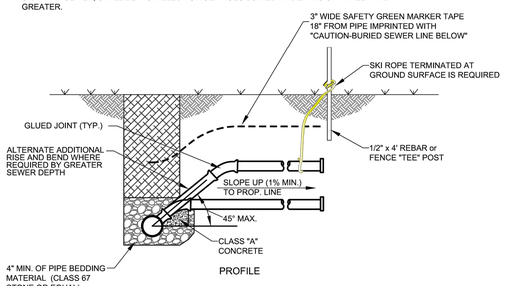
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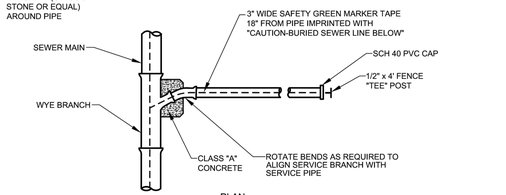
CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	MANHOLE CORING	REVISED ----- ----- ----- -----	S11
DRAWN BY:	CHECKED BY:	FILE: S11--Manhole Coring.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.



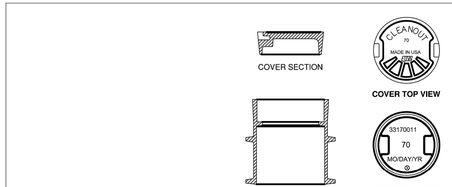


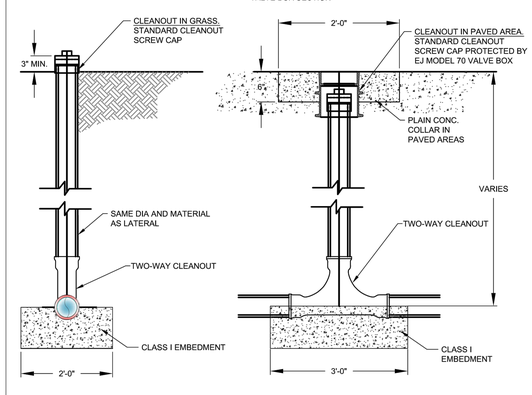
SEWER SERVICE LATERAL

4/24/2015 10:58:06 AM

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

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



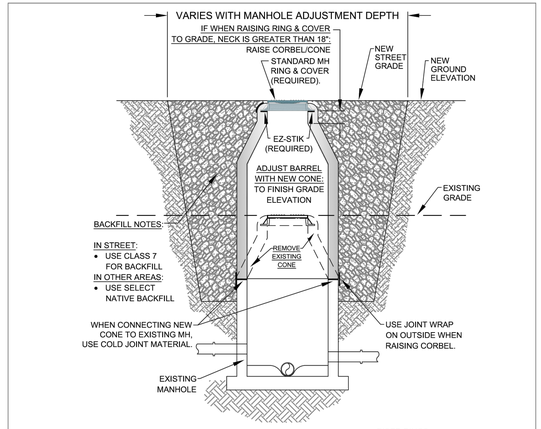


TYPICAL CLEANOUT

4/24/2015 10:58:13 AM

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

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



TYPICAL MANHOLE
ADJUST TO GRADE DETAIL

4/24/2015 10:57:41 AM

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

TITLE:	SEWER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	MANHOLE ADJUST TO GRADE	REVISED ----- ----- ----- -----	S12
DRAWN BY:	CHECKED BY:	FILE: S12--Manhole Adjust to Grade.dwg	

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FOR USE AND BENEFIT OF:
GIRON BUILDERS INC.

JACOB'S CORNER
UTILITY DETAILS 2
SALINE COUNTY, ARKANSAS

DATE:	02-01-2022	C.A.D. BY:	DRAWING NUMBER:
REVISED:		CHECKED BY:	20-0722
SHEET:	C-4.1	SCALE:	

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K:\LAND PROJECTS 2021\20-0722 GIRON SUBDIVISION, 2nd PHASE\DRAWINGS\20-0722 GIRON SUBDIVISION 2nd PHASE.DWG, 2/6/2022 12:01:12 PM, LUPDATE 12:01:2/6/2022 PM, C

SUBGRADE MATERIAL

A. Subgrade soils shall be all materials used for subgrade including in-situ materials and fill materials.
B. Subrades 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, recompacted 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 behond 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 hall 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 eliminatethe 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.

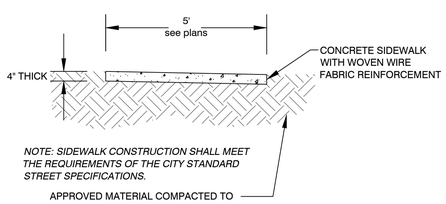
Subgrade

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 desnity 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.

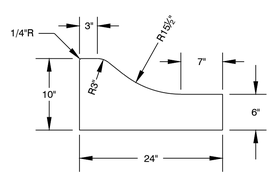
QUALITY CONTROL TESTING AND INSPECTIONS

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 & Gutter Detail

4,000 psi concrete

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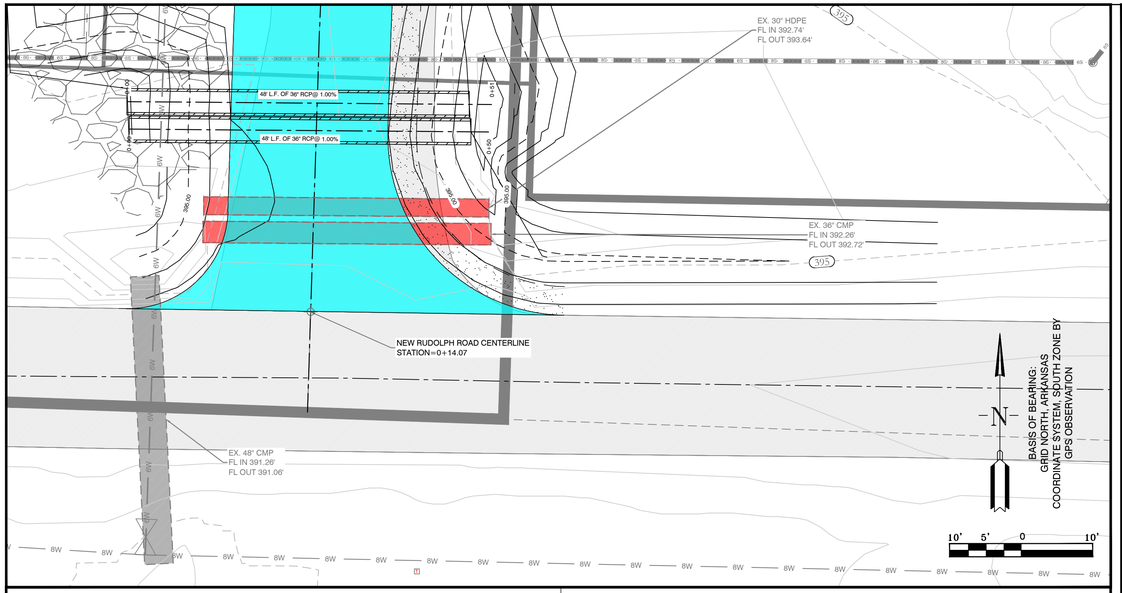
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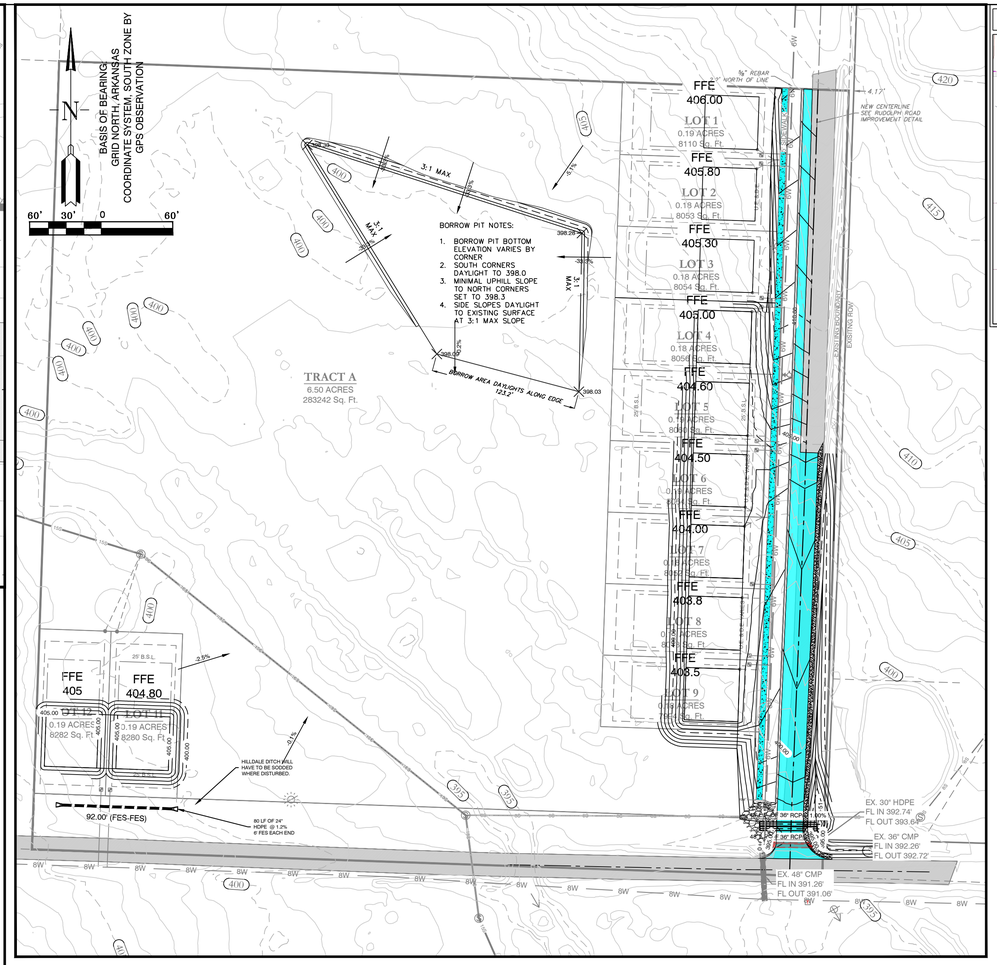
JACOB'S CORNER
CIVIL SPECS
SALINE COUNTY, ARKANSAS

DATE:	02-01-2022	C.A.D. BY:	DRAWING NUMBER:
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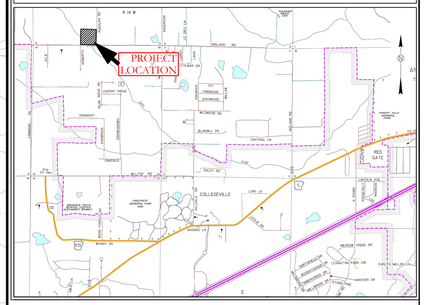
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VICINITY MAP:



PROFILE
30in Storm
H:V = 10:1

PROFILE
36in Storm
H:V = 10:1



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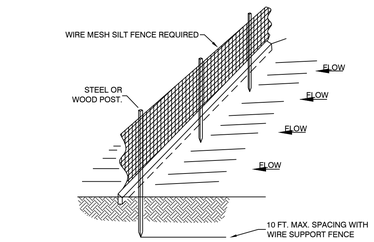
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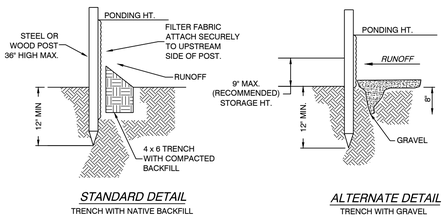
JACOB'S CORNER
GRADING AND DRAINAGE
SALINE COUNTY, ARKANSAS

DATE:	02-01-2022	C.A.D. BY:	DRAWING NUMBER:
REVISED:		CHECKED BY:	20-0722
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STANDARD DETAIL
TRENCH WITH NATIVE BACKFILL

ALTERNATE DETAIL
TRENCH WITH GRAVEL

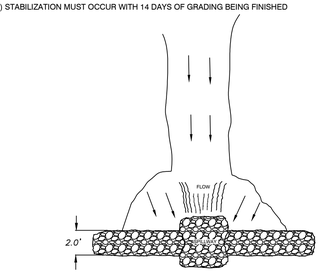
NOTE:
1.) INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.

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

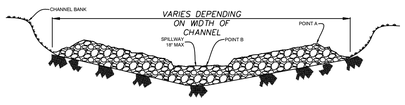
3.) SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

4.) STABILIZATION MUST OCCUR WITH 14 DAYS OF GRADING BEING FINISHED

SILT FENCE



PLAN



VIEW LOOKING UPSTREAM

NOTES:
1.) POINT 'A' MUST BE HIGHER THAN POINT 'B' (SPILLWAY HEIGHT)
2.) PLACE RIP-RAP BARRIER PERPENDICULAR TO THE FLOW WITH TIGHT GROUPING. USE STRAW, ROCKS, OR FILTER FABRIC TO FILL ANY GAPS AND TAMP BACKFILL MATERIAL TO PREVENT EROSION OR FLOW AROUND THE DAM.
3.) SPILLWAY HEIGHT SHALL NOT EXEED 18" OR 1'
4.) INSPECT AFTER EACH SIGNIFICANT STORM. MAINTAIN AND REPAIR PROMPTLY.

RIP-RAP
CHECK DAM



EROSION CONTROL NOTES

SOD DETENTION AREA POST-CONSTRUCTION (IF APPLICABLE)

MAXIMUM SLOPE OF 3H:1V ON DETENTION POND LEVEES

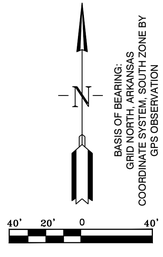
CONTRACTOR MUST HAVE INLET PROTECTION MEASURES INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF DRAINAGE INLETS/STRUCTURES IS COMPLETE. SEDIMENT BARRIERS SHALL BE MAINTAINED THROUGHOUT AND INSPECTED THROUGHOUT CONSTRUCTION PROCESS UNTIL PROJECT IS COMPLETE

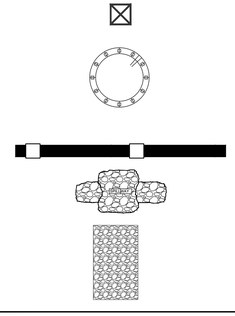
RIP RAP SEDIMENT BARRIERS SHALL BE USED AT ALL STORMWATER DISCHARGE POINTS SHOWN ON PLANS ASAP

CONTRACTOR SHOULD WORK WITH ENGINEER TO ESTABLISH EFFECTIVE AND EFFICIENT PLAN TO PREVENT SEDIMENT RUNOFF BY DETERMINING WHERE SILT FENCING OR OTHER TYPES OF CONTROLS ARE NECESSARY

SOME EROSION CONTROL MEASURES, SILT FENCING, OR CHECK DAMS MAY NOT BE NECESSARY DURING INITIAL ROW CLEARING BUT MAY BE NEEDED ONCE LOT CLEARING AND HOME BUILDING BEGINS

EXISTING VEGETATION WILL ONLY BE REMOVED INSIDE ROW AND WITHIN HOUSE FOOTPRINTS AS THEY ARE CONSTRUCTED. ADDITIONAL SILT FENCING WILL BE ADDED TO INDIVIDUAL LOTS AS HOME CONSTRUCTION TAKES PLACE.





ERC LEGEND

SITE POSTING

CONC. WASHOUT DETENTION AREA

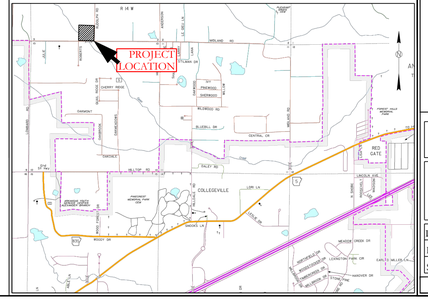
SILT FENCE

RIP RAP CHECK DAM

CONSTRUCTION ENTRANCE

DISTURBED AREA

VICINITY MAP:



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JACOB'S CORNER
EROSION CONTROL PLAN
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