LOCAL UTILITY CONTACTS

CITY OF TONTITOWN
PLANNING AND ZONING DEPARTMENT
201 E. HENRI DE TONTI BLVD.
P.O. BOX 305
TONTITOWN, AR 72770
PH: (479) 361-2700 (EXT. 5)

BUILDING DEPARTMENT
201 E. HENRI DE TONTI BLVD.
P.O. BOX 305
TONTITOWN, AR 72770
PH: (479) 361-2700 (EXT. 5)

PARKS AND RECREATION
PH: (479) 361-2700

STREETS DEPARTMENT
235 W. HENRI DE TONTI BLVD.
P.O. BOX 305
TONTITOWN, AR 72770
PH: (479) 361-2996

TONTITOWN WATER UTILITY
235 E. HENRI DE TONTI BLVD.
TONTITOWN, AR 72770
PH: (479) 361-2700 (EXT. 2,3)

TONTITOWN AREA FIRE DEPARTMENT
P.O. BOX 305
TONTITOWN, AR 72770
PH: (479) 361-2700

GAS COMPANY
BLACK HILLS ENERGY
CONTACT: SCOTT STOKES
P.O. BOX 13288
FAYETTEVILLE, AR 72703-1002
PH: (479) 435-0229

TELEPHONE COMPANY
AT&T
CONTACT: LANE RHOADS
627 WHITE RD.
SPRINGDALE, AR 72766
PH: (479) 442-1977

CENTURYLINK
CONTACT: MIKE EDWARDS
PH: (479) 524-9943

ELECTRIC COMPANY
OZARKS ELECTRIC COOPERATIVE
CONTACT: MIKE PHIPPS
PH: (479) 841-2012

CABLE COMPANY
COX COMMUNICATIONS
CONTACT: CHRIS BYRD
4901 S. 48TH ST.
SPRINGDALE, AR 72762
PH: (479) 871-2431

CERTIFICATE OF APPROVAL

PURSUANT TO THE TONTITOWN SUBDIVISION REGULATIONS AND ALL OTHER CONDITIONS AND APPROVAL HAVING BEEN COMPLETED, THIS DOCUMENT IS HEREBY EXECUTED UNDER THE AUTHORITY OF THE SAID RULES AND REGULATIONS.

DATE OF EXECUTION _____

SIGNED _____
TONTITOWN PLANNING
COMMISSION CHAIRMAN

SIGNED _____
MAYOR, CITY OF TONTITOWN

SIGNED _____
RECORDER/TREASURER
CITY OF TONTITOWN

APPROVAL: DATE:

CITY OF TONTITOWN PLANNING COMMISSION _____
CITY OF TONTITOWN WATER UTILITIES _____
SOUTHWESTERN BELL _____
OZARKS ELECTRIC _____
SOURCE GAS _____
ARKANSAS DEPARTMENT OF HEALTH _____
COX COMMUNICATIONS _____

DEVELOPMENT PLANS

FOR

OLD OAK COMMERCIAL WAREHOUSE

TONTITOWN, ARKANSAS

CERTIFICATE OF PRELIMINARY SURVEY ACCURACY

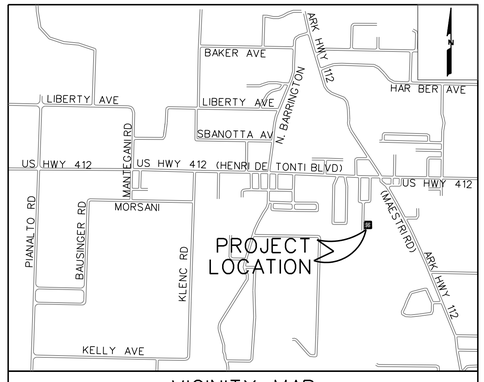
I, JAMES CALDWELL, HEREBY CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS A BOUNDARY SURVEY MADE BY ME AND ALL MONUMENTS SHOWN HEREON ACTUALLY EXIST AND THEIR LOCATION, SIZE, TYPE AND MATERIAL ARE CORRECTLY SHOWN.

DATE OF EXECUTION: 07-18-23

_____
REGISTERED LAND SURVEYOR

STATE OF ARKANSAS REGISTRATION NO.

PS #1310



VICINITY MAP
NOT TO SCALE

INDEX

CERTIFICATE OF PRELIMINARY ENGINEERING ACCURACY

I, RON HOMEYER, HEREBY CERTIFY THAT THIS PLAN CORRECTLY REPRESENTS A PLAN MADE UNDER MY DIRECTION AND ENGINEERING REQUIREMENTS OF THE TONTITOWN SUBDIVISION REGULATIONS HAVE BEEN COMPILED WITH.

DATE OF EXECUTION: 07-18-23

_____
REGISTERED ENGINEER

STATE OF ARKANSAS REGISTRATION NO.

7731

GENERAL NOTES:

1. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COORDINATING WITH ARKANSAS ONE-CALL A MINIMUM OF TWENTY-FOUR (24) HOURS BEFORE ANY DIGGING BEGINS.
2. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONDITIONS ON THE SITE DURING CONSTRUCTION AND MUST BE WITHIN INDUSTRY AND OSHA ACCEPTED STANDARDS FOR SAFETY AT AL TIMES, INCLUDED BUT NOT LIMITED TO WORKING HOURS. THE ENGINEER SHALL NOT BE RESPONSIBLE TO MONITOR SAFETY STANDARDS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL DEMOLITION AND CONSTRUCTION MATERIALS, AT STATE AND FEDERALLY ACCEPTED SITES.
4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO NEIGHBORING PROPERTIES.
5. IN THE EVENT THAT THERE IS A QUESTION WITH REGARD TO THE DESIGN INTENT, THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING IN ACCORDANCE WITH ALL REGULATORY AGENCY AND CITY CONSTRUCTION STANDARDS.

INSPECTIONS AND TESTING PROCEDURES

1. ALL FIELD TESTS REQUIRED FOR THE PROJECT SHALL BE WITNESSED BY THE CITY'S REPRESENTATIVE IN THE PRESENCE OF THE ENGINEER AND CONTRACTOR OR THEIR REPRESENTATIVE.
2. THE CITY WILL REQUIRE A MINIMUM OF 48 HOURS NOTICE ON ALL TESTS. CALLS TO THE CITY FOR THE PURPOSE OF SETTING TEST TIMES SHOULD BE MADE BY 10:00 AM. TESTS DELAYED BY WEATHER OR OTHER FACTORS WILL BE RESCHEDULED ON THE SAME BASIS.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE SCHEDULING OF SUCH TESTS WITH THE CITY AND CIVIL ENGINEERING INC.
4. ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED FOR TESTING SHALL BE FURNISHED BY THE CONTRACTOR.
5. PRIOR TO FINAL ACCEPTANCE BY THE CITY, THE PROJECT SHALL BE SUBJECT TO A JOINT FINAL INSPECTION BY A DESIGNATED REPRESENTATIVE OF THE CITY'S ENGINEERING OFFICE, A REPRESENTATIVE OF THE WATER AND SEWER MAINTENANCE DEPARTMENT, THE ENGINEER OF RECORD FOR THE PROJECT AND THE CONTRACTOR.

NOTES:

1 - NO PREVIOUS OVERFLOW OF SEWER OR SEPTIC SYSTEMS ON THIS SITE PER TONTITOWN PUBLIC WORKS DIRECTOR.

2 - NO VISIBLE EVIDENCE HAS BEEN OBSERVED THAT WOULD INDICATE THAT A WETLANDS EXISTS ON THIS PROPERTY. THE USFWS NATIONAL WETLANDS INVENTORY DOES NOT INDICATE THERE MAY BE WETLANDS PRESENT ON THIS SITE. NO FURTHER INVESTIGATION WILL BE REQUIRED TO CONFIRM THIS ASSESSMENT.

3 - NO KNOWN EXISTING EROSION PROBLEMS EXISTING ONSITE DOWNSTREAM FROM THIS SITE.

4 - NO KNOWN EXISTING OR ABANDONED WATER WELLS, SUMPS, CESSPOOLS, SPRINGS, WATER IMPOUNDMENTS, AND UNDERGROUND STRUCTURES EXIST ON THIS SITE.

5 - NO EXISTING OR PROPOSED GROUND LEASES EXIST ON THIS SITE.

6 - NO POTENTIALLY DANGEROUS AREAS EXIST ON THIS SITE.

7 - THIS SITE IS NOT LOCATED WITHIN A 100 YEAR FLOODPLAIN AND/OR FLOODWAY.

PREPARED FOR

OLD OAK COMMERCIAL, LLC

PO BOX 10620
FAYETTEVILLE, AR 72703
(479) 595-2618

Know what's **below.** **Call** before you dig.

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1	PER CITY COMMENTS	RDH	09-19-23
2	PER CITY COMMENTS	RDH	10-10-23

PRELIMINARY FOR GOVT REVIEW ONLY

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
RONALD HOMEYER
No. 7731
07-18-23

This document was originally issued and sealed by Ronald Homeyer, P.E. 7731 on July 18, 2023

CIVIL ENGINEERING INC
CIVIL ENGINEERING, INC.
P.O. Box 12, 701 S Mt Olive, Siloam Springs, Arkansas 72761
(479)524-9956 Phone or (479)524-4747 Fax
E-MAIL: mail@civilengineeringss.com

LARGE SCALE DEVELOPMENT PLANS FOR
OLD OAK COMMERCIAL WAREHOUSE
TONTITOWN, ARKANSAS

TITLE SHEET

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JTM	RDH	RDH	1 OF 8
JOB NUMBER	DATE	SCALE: NONE	
2313	JULY 2022		

701 S. MT. OLIVE, P.O. BOX 12
E-MAIL: mail@civilengineeringss.com
CIVIL ENGINEERING INC
SILOAM SPRINGS, ARKANSAS 72761
(479)524-9956 OFC - (479)524-4747 FAX

CIVIL ENGINEERING INC #716 CERTIFICATE OF AUTHORIZATION ARKANSAS - ENGINEER

REF.: 2313-01-Title Sheet.dgn
REVISED:
DATE: 7/18/2023
PF:

Survey By:
JAMES CALDWELL, PS #1310
609 South Oakhill
Siloam Springs, AR 72761
(479) 238-4069

SURVEY DESCRIPTION – TOTAL PROJECT:

LOT 6, NORTHWEST ARKANSAS INDUSTRIAL PARK, A SUBDIVISION OF THE CITY OF TONTITOWN, WASHINGTON COUNTY, ARKANSAS, AS SHOWN ON PLAT RECORD 10 AT PAGE 73, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT AN IRON PIN AT THE NW CORNER OF SAID LOT 6; THENCE S87°01'23"E 460.00 FEET TO AN IRON PIN AT THE NE CORNER OF SAID LOT 6; THENCE S03°04'25"W 360.12 FEET TO AN IRON PIN; THENCE N86°59'48"W 429.53 FEET TO AN "X" CUT IN CONCRETE PAVING IN THE EAST RIGHT-OF-WAY LINE OF NWA INDUSTRIAL DRIVE; THENCE ALONG SAID EAST RIGHT OF WAY LINE ALONG A CURVE CONCAVE TO THE SOUTHWEST WITH AN ARC LENGTH OF 53.67 FEET, AND A RADIUS OF 60.00 FEET, AND A CHORD OF N22°36'58"W 51.90 FEET TO AN IRON PIN; THENCE ALONG A REVERSE CURVE CONCAVE TO THE NORTHEAST WITH AN ARC LENGTH OF 18.01 FEET, AND A RADIUS OF 20.00 FEET, AND A CHORD OF N22°37'56"W 17.41 FEET TO AN IRON PIN; THENCE N02°59'33"E 297.42 FEET TO THE POINT OF BEGINNING; CONTAINING 3.774 ACRES MORE OR LESS, AND SUBJECT ALL EASEMENTS OF RECORD.

OWNER AND SITE INFORMATION

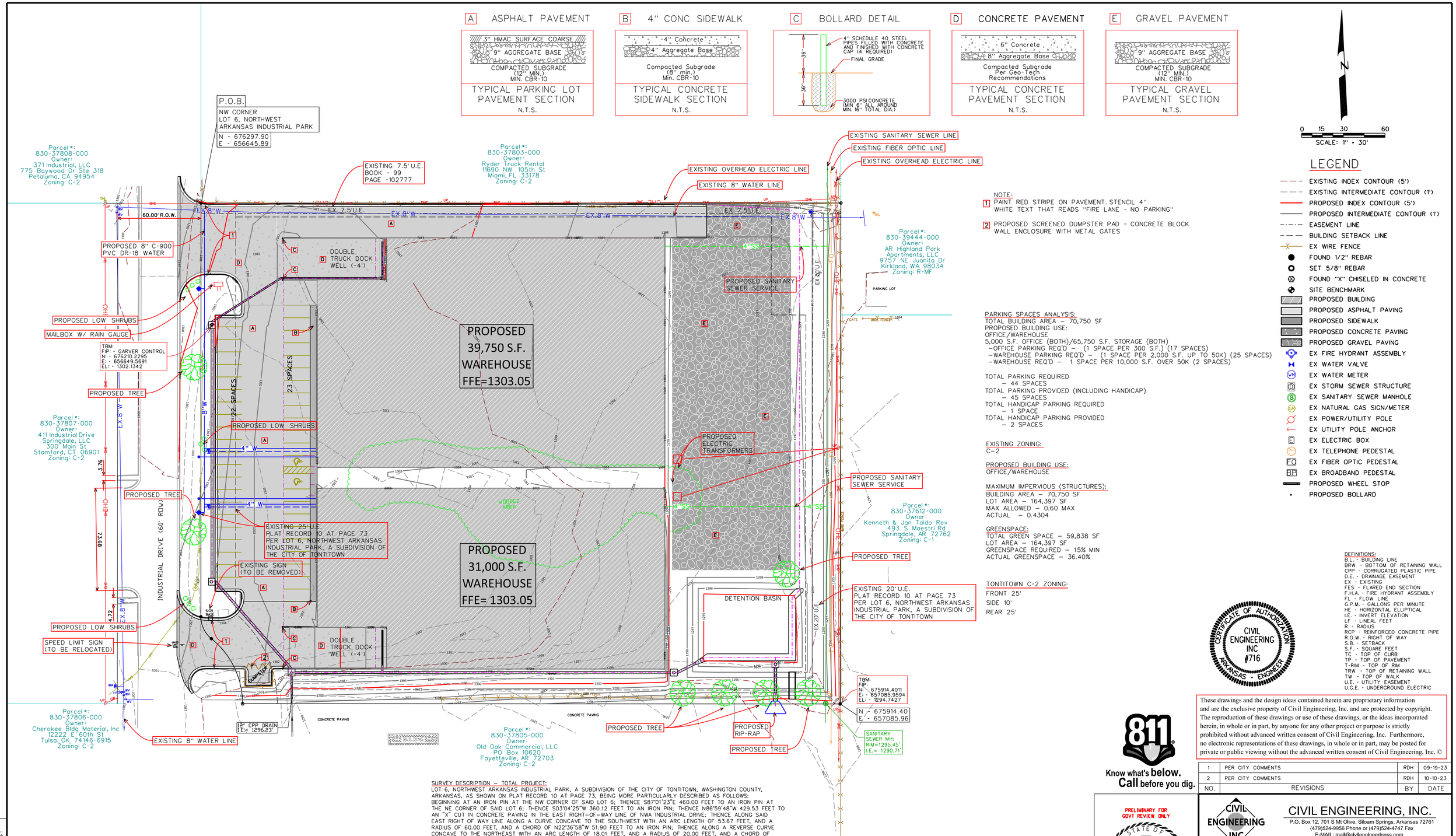
LOT 6: Old Oak Commercial, LLC
PO Box 10620, Fayetteville, AR 72703
PARCEL# 830-37804-000
AREA= 3.774 acres

Property Address:
432 Industrial Drive, Tontitown, AR

BASIS OF BEARINGS: State Plane Coordinate System - Arkansas North Zone - NAD 83 GPS observations Jan. 23, 2023 with corrections from the ArDot correction network. NAD_83 (2011) (EPOCH:2010)

CERTIFICATION: I hereby certify that on Feb. 7, 2023 the hereon platted and described survey was completed as shown to the best of my knowledge, and is for the sole use of the party stated hereon.
This property DOES NOT LIE in a designated flood according to F.E.M.A. Map #05143 C 0065 F, Dated May 16, 2008.

Survey By:	Survey For:	Plat Code:	
JAMES CALDWELL, PS #1310 609 South Oakhill Siloam Springs, AR 72761 (479) 238-4069	OLD OAK COMMERCIAL, LLC	500-17N-33W-0-04-210-04-1310	
		Date: FEB. 7, 2023	Job #: 223010



NOTE:
1. PAINT RED STRIPE ON PAVEMENT. STENCIL 4" WHITE TEXT THAT READS "FIRE LANE - NO PARKING"
2. PROPOSED SCREENED DUMPSTER PAD - CONCRETE BLOCK WALL ENCLOSURE WITH METAL GATES

PARKING SPACES ANALYSIS:
TOTAL BUILDING AREA – 70,750 SF
PROPOSED BUILDING USE:
OFFICE/WAREHOUSE
5,000 S.F. OFFICE (BOTH)/65,750 S.F. STORAGE (BOTH)
- OFFICE PARKING REQ'D – (1 SPACE PER 300 S.F.) (17 SPACES)
- WAREHOUSE PARKING REQ'D – (1 SPACE PER 2,000 S.F. UP TO 50K) (25 SPACES)
- WAREHOUSE REQ'D – 1 SPACE PER 10,000 S.F. OVER 50K (2 SPACES)

TOTAL PARKING REQUIRED
– 44 SPACES
TOTAL PARKING PROVIDED (INCLUDING HANDICAP)
– 45 SPACES
TOTAL HANDICAP PARKING REQUIRED
– 1 SPACE
TOTAL HANDICAP PARKING PROVIDED
– 2 SPACES

EXISTING ZONING:
C-2

PROPOSED BUILDING USE:
OFFICE/WAREHOUSE

MAXIMUM IMPERVIOUS (STRUCTURES):
BUILDING AREA – 70,750 SF
LOT AREA – 164,397 SF
MAX ALLOWED – 0.60 MAX
ACTUAL – 0.4304

GREENSPACE:
TOTAL GREEN SPACE – 59,838 SF
LOT AREA – 164,397 SF
GREENSPACE REQUIRED – 15% MIN
ACTUAL GREENSPACE – 36.40%

TONTITOWN C-2 ZONING:
FRONT 25'
SIDE 10'
REAR 25'

LEGEND

- EXISTING INDEX CONTOUR (5')
- EXISTING INTERMEDIATE CONTOUR (1')
- PROPOSED INDEX CONTOUR (5')
- PROPOSED INTERMEDIATE CONTOUR (1')
- EASEMENT LINE
- BUILDING SETBACK LINE
- EX WIRE FENCE
- FOUND 1/2" REBAR
- SET 5/8" REBAR
- FOUND "X" CHISELED IN CONCRETE
- SITE BENCHMARK
- PROPOSED BUILDING
- PROPOSED ASPHALT PAVING
- PROPOSED SIDEWALK
- PROPOSED CONCRETE PAVING
- PROPOSED GRAVEL PAVING
- EX FIRE HYDRANT ASSEMBLY
- EX WATER VALVE
- EX WATER METER
- EX STORM SEWER STRUCTURE
- EX SANITARY SEWER MANHOLE
- EX NATURAL GAS SIGN/METER
- EX POWER/UTILITY POLE
- EX UTILITY POLE ANCHOR
- EX ELECTRIC BOX
- EX TELEPHONE PEDESTAL
- EX FIBER OPTIC PEDESTAL
- EX BROADBAND PEDESTAL
- PROPOSED WHEEL STOP
- PROPOSED BOLLARD

DEFINITIONS:
B.L. - BUILDING LINE
BRW - BOTTOM OF RETAINING WALL
CPP - CORRUGATED PLASTIC PIPE
D.E. - DRAINAGE EASEMENT
EX - EXISTING
FES - FLARED END SECTION
F.H.A. - FIRE HYDRANT ASSEMBLY
FL - FLOW LINE
G.P.M. - GALLONS PER MINUTE
HE - HORIZONTAL ELLIPTICAL
I.E. - INVERT ELEVATION
LF - LINEAL FEET
R - RADIUS
RCP - REINFORCED CONCRETE PIPE
R.O.W. - RIGHT OF WAY
S.B. - SETBACK
S.F. - SQUARE FEET
TC - TOP OF CURB
TP - TOP OF PAVEMENT
T-RIM - TOP OF RIM
TRW - TOP OF RETAINING WALL
TW - TOP OF WALK
U.E. - UTILITY EASEMENT
U.G.E. - UNDERGROUND ELECTRIC

CIVIL ENGINEERING INC #716 CERTIFICATE OF AUTHORIZATION ARKANSAS ENGINEER

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NO.	REVISIONS	BY	DATE
1	PER CITY COMMENTS	RDH	09-19-23
2	PER CITY COMMENTS	RDH	10-10-23

SURVEY DESCRIPTION – TOTAL PROJECT:
LOT 6, NORTHWEST ARKANSAS INDUSTRIAL PARK, A SUBDIVISION OF THE CITY OF TONTITOWN, WASHINGTON COUNTY, ARKANSAS, AS SHOWN ON PLAT RECORD 10 AT PAGE 73, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT AN IRON PIN AT THE NW CORNER OF SAID LOT 6; THENCE S87°01'23"E 460.00 FEET TO AN IRON PIN AT THE NE CORNER OF SAID LOT 6; THENCE S03°04'25"W 360.12 FEET TO AN IRON PIN; THENCE N86°59'48"W 429.53 FEET TO AN "X" CUT IN CONCRETE PAVING IN THE EAST RIGHT-OF-WAY LINE OF NWA INDUSTRIAL DRIVE; THENCE ALONG SAID EAST RIGHT OF WAY LINE ALONG A CURVE CONCAVE TO THE SOUTHWEST WITH AN ARC LENGTH OF 53.67 FEET, AND A RADIUS OF 60.00 FEET, AND A CHORD OF N22°36'58"W 51.90 FEET TO AN IRON PIN; THENCE ALONG A REVERSE CURVE CONCAVE TO THE NORTHEAST WITH AN ARC LENGTH OF 18.01 FEET, AND A RADIUS OF 20.00 FEET, AND A CHORD OF N22°37'56"W 17.41 FEET TO AN IRON PIN; THENCE N02°59'33"E 297.42 FEET TO THE POINT OF BEGINNING; CONTAINING 3.774 ACRES MORE OR LESS, AND SUBJECT ALL EASEMENTS OF RECORD.

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CERTIFICATION: I hereby certify that on Feb. 7, 2023 the hereon platted and described survey was completed as shown to the best of my knowledge, and is for the sole use of the party stated hereon. This property DOES NOT LIE in a designated Flood according to F.E.M.A. Map #05143 C 0065 F, Dated May 16, 2008.

Survey By:
JAMES CALDWELL, PS #1310
609 South Oakhill
Siloam Springs, AR 72761
(479) 238-4069

SITE INFORMATION:

APPROXIMATE AREA: 3.774 ACRES
PARCEL NO:
830-37804-000

OWNER/DEVELOPER:
OLD OAK COMMERCIAL, LLC
PO BOX 10620
FAYETTEVILLE, AR 72703

PROJECT ADDRESS:
432 INDUSTRIAL DRIVE
TONTITOWN, AR

PRELIMINARY FOR GOVT REVIEW ONLY

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER RONALD HOMEYER No. 7731

This document was originally issued and sealed by Ronald Homeyer, P.E. 7731 on July 18, 2023

CIVIL ENGINEERING INC
CIVIL ENGINEERING, INC.
P.O. Box 12, 701 S Mt Olive, Siloam Springs, Arkansas 72761
(479)524-9956 Phone or (479)524-4747 Fax
E-MAIL: mail@civilengineerings.com

DEVELOPMENT PLANS FOR
OLD OAK COMMERCIAL WAREHOUSE
TONTITOWN, ARKANSAS

SITE PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JTM	RDH	RDH	
JOB NUMBER	DATE	SCALE: 1"=30"H 1"= --"V	3 OF 8
2313	JULY 2023		

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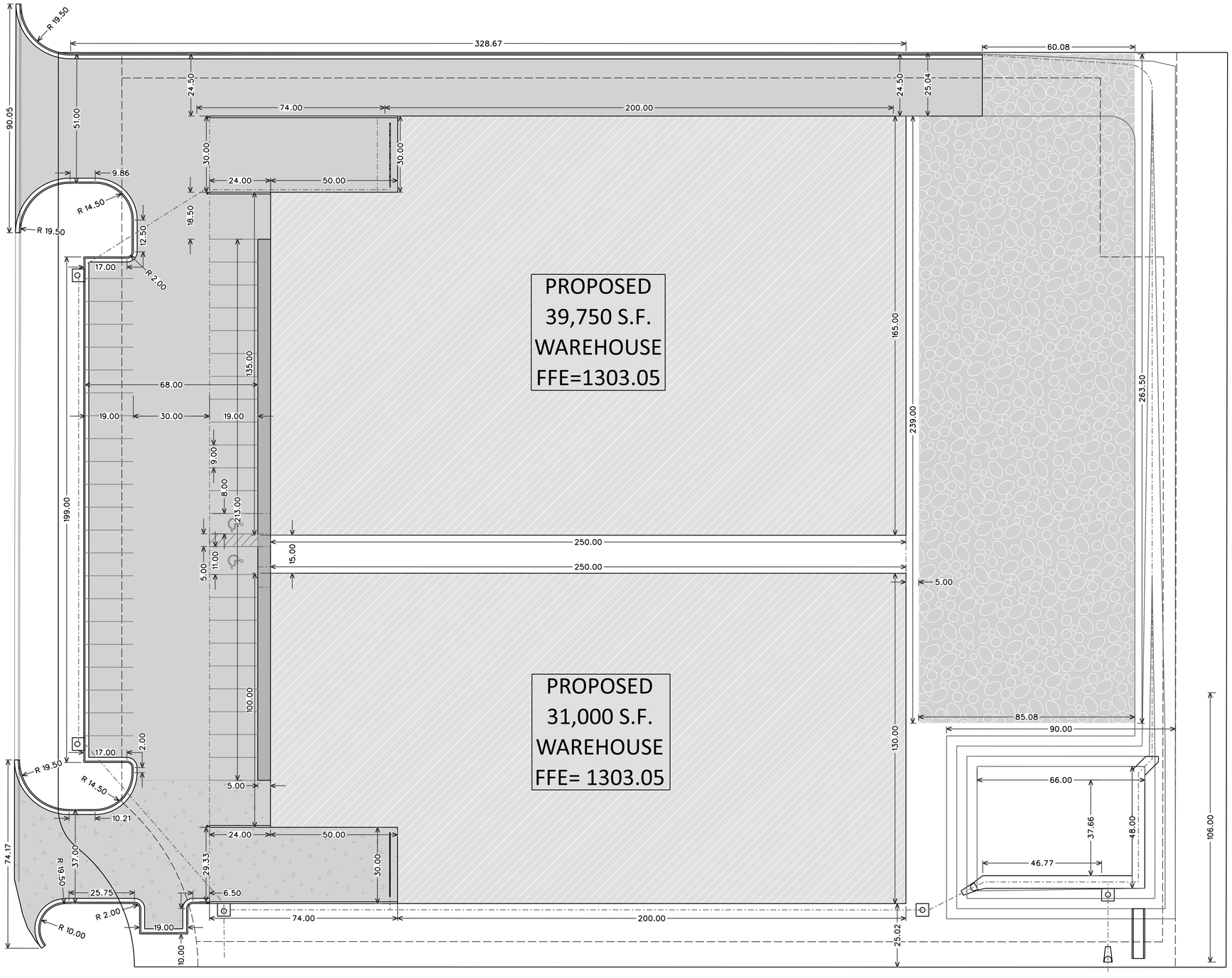
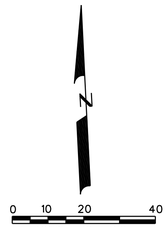
VIEW:
DATE: 7/18/2023
PF:





LEGEND

- EXISTING INDEX CONTOUR (5')
- EXISTING INTERMEDIATE CONTOUR (1')
- PROPOSED INDEX CONTOUR (5')
- PROPOSED INTERMEDIATE CONTOUR (1')
- EASEMENT LINE
- BUILDING SETBACK LINE
- PROPOSED BUILDING
- PROPOSED ASPHALT PAVING
- PROPOSED SIDEWALK
- PROPOSED CONCRETE PAVING
- PROPOSED GRAVEL PAVING
- EX FIRE HYDRANT ASSEMBLY
- EX WATER VALVE
- EX WATER METER
- EX STORM SEWER STRUCTURE
- EX SANITARY SEWER MANHOLE
- EX NATURAL GAS SIGN/METER
- EX POWER/UTILITY POLE
- EX UTILITY POLE ANCHOR
- EX ELECTRIC BOX
- EX TELEPHONE PEDESTAL
- EX FIBER OPTIC PEDESTAL
- EX BROADBAND PEDESTAL
- PROPOSED WHEEL STOP
- PROPOSED BOLLARD

DEFINITIONS:
P.O.B. - POINT OF BEGINNING
P.O.C. - POINT OF COMMENCEMENT
U.E. - UTILITY EASEMENT
B.L. - BUILDING LINE
D.E. - DRAINAGE EASEMENT
FL - FLOW LINE
I.E. - INVERT ELEVATION
T-RIM - TOP OF RIM
R - RADIUS
EX - EXISTING
R.O.W. - RIGHT OF WAY
F.H.A. - FIRE HYDRANT ASSEMBLY
G.P.M. - GALLONS PER MINUTE
S.F. - SQUARE FEET

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STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7731
RONALD HOMEYER
07/18/23

This document was originally issued and sealed by Ronald Homeyer, P.E. 7731 on July 18, 2023

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(479)524-9958 Phone or (479)524-4747 Fax
E-MAIL: mail@civilengineeringss.com

DEVELOPMENT PLANS FOR
OLD OAK COMMERCIAL WAREHOUSE
TONTITOWN, ARKANSAS

DIMENSION PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JTM	RDH	RDH	4 OF 8
JOB NUMBER	DATE	SCALE: 1"=20' H	
2313	JULY 2023	1"= --' V	

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VIEW:
DATE: 7/18/2023
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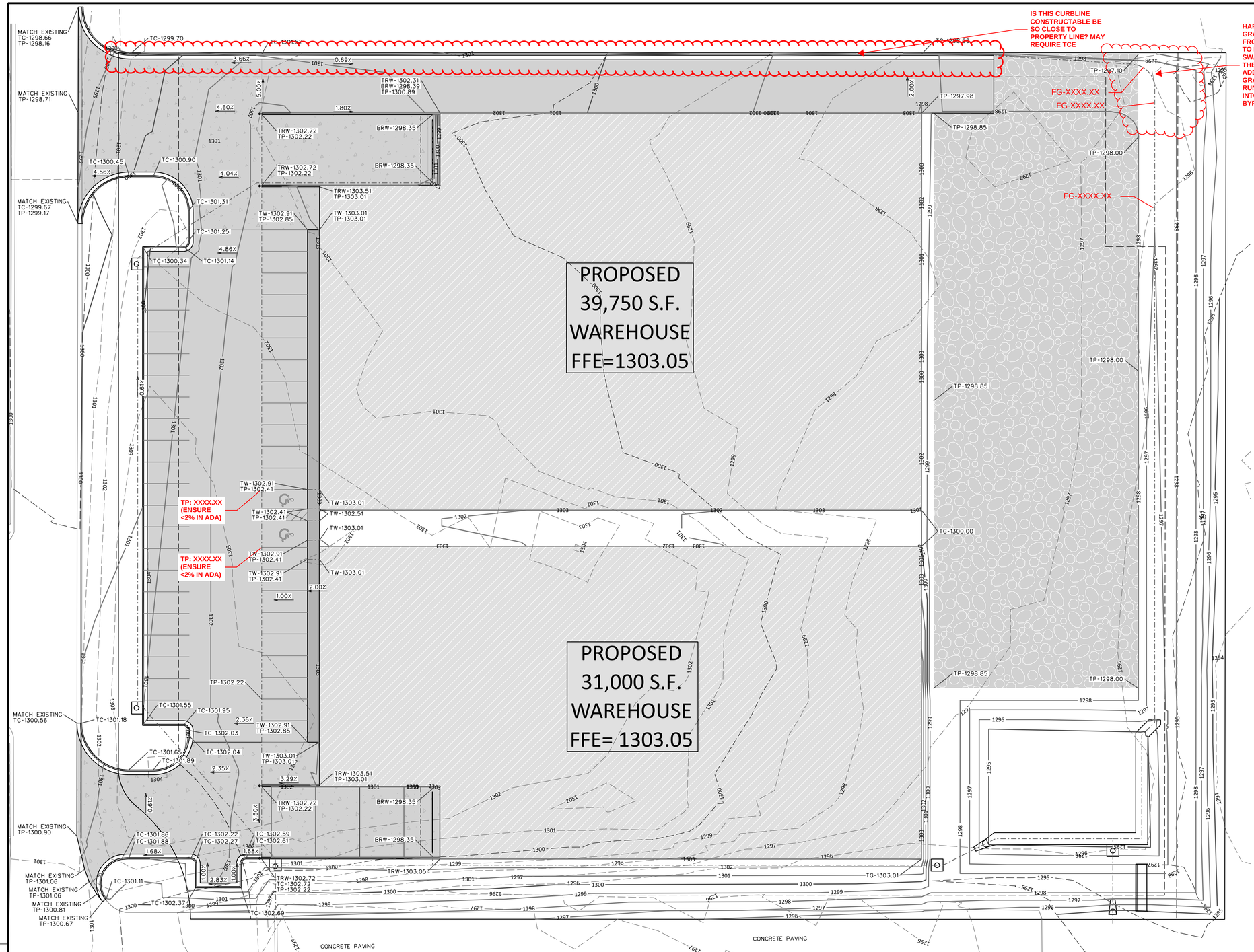

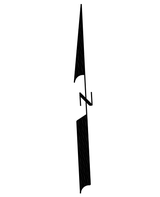

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TP - TOP OF PAVEMENT
T-RIM - TOP OF RIM
TRW - TOP OF RETAINING WALL
TW - TOP OF WALK
U.E. - UTILITY EASEMENT
U.G.E. - UNDERGROUND ELECTRIC

ADA ACCESSIBLE PARKING TO HAVE MAXIMUM 2% CROSS SLOPE IN ANY DIRECTION

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1	PER CITY COMMENTS	RDH	09-19-23
2	PER CITY COMMENTS	RDH	10-10-23

PRELIMINARY FOR GOVT REVIEW ONLY

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7731
RONALD HOMEYER

This document was originally issued and sealed by Ronald Homeyer, P.E. 7731 on July 18, 2023

CIVIL ENGINEERING INC
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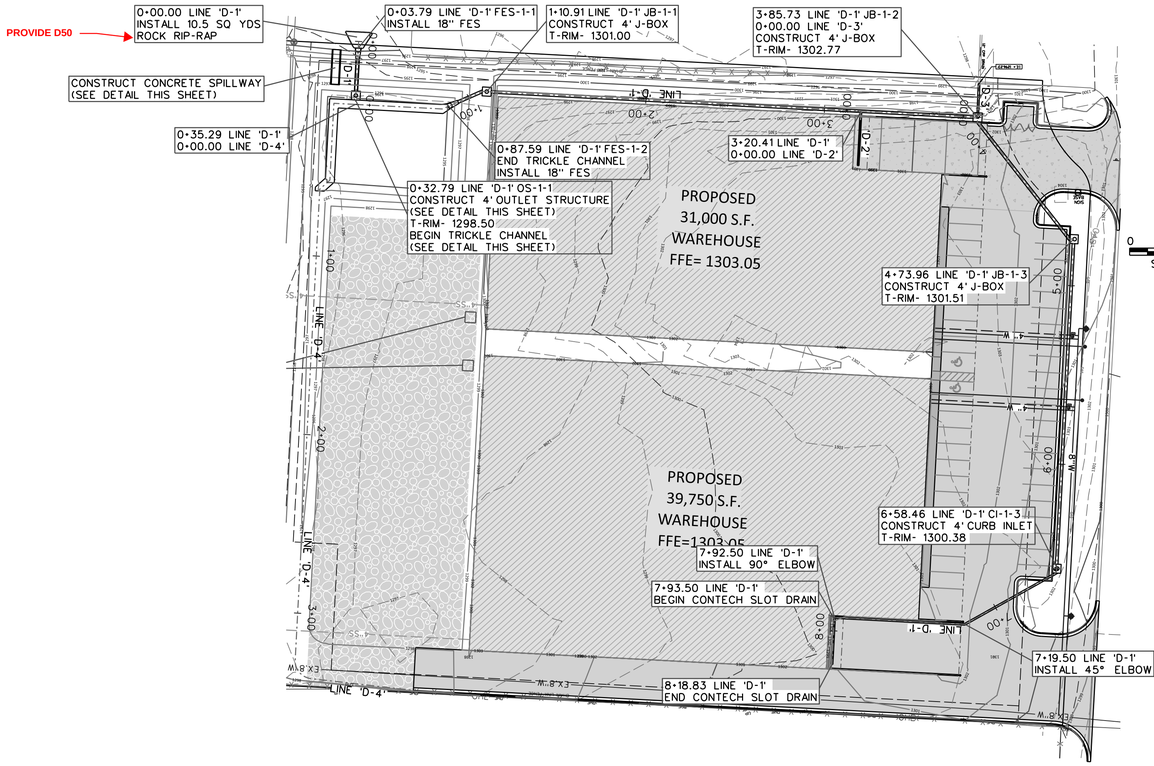
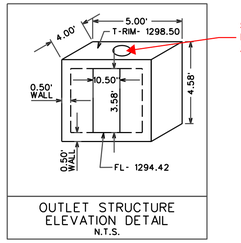
DEVELOPMENT PLANS FOR
OLD OAK COMMERCIAL, LLC
TONTITOWN, ARKANSAS

GRADING PLAN

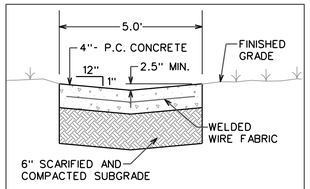
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JTM	RDH	RDH	5 OF 8
JOB NUMBER	DATE	SCALE: 1"=20' H	
2313	JULY 2023	1"= --' V	

FILE: 2313-04 Grading Plan.dgn
REF. FILE: 2313 xl.dgn
VIEW:
DATE: 7/18/2023
PF:

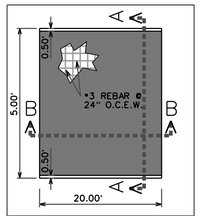




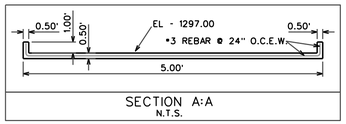
OUTLET STRUCTURE ELEVATION DETAIL
N.T.S.



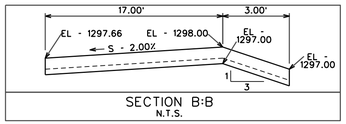
CONCRETE TRICKLE CHANNEL SECTION DETAIL
N.T.S



CONCRETE OVERFLOW SPILLWAY
N.T.S.



SECTION A:A
N.T.S.



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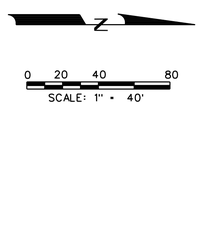
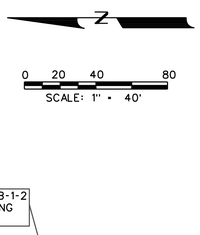
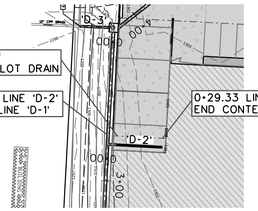
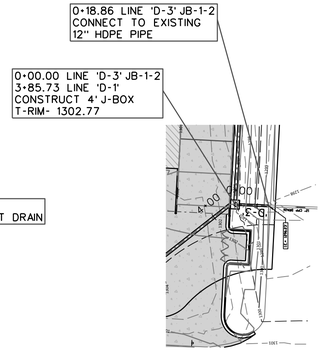
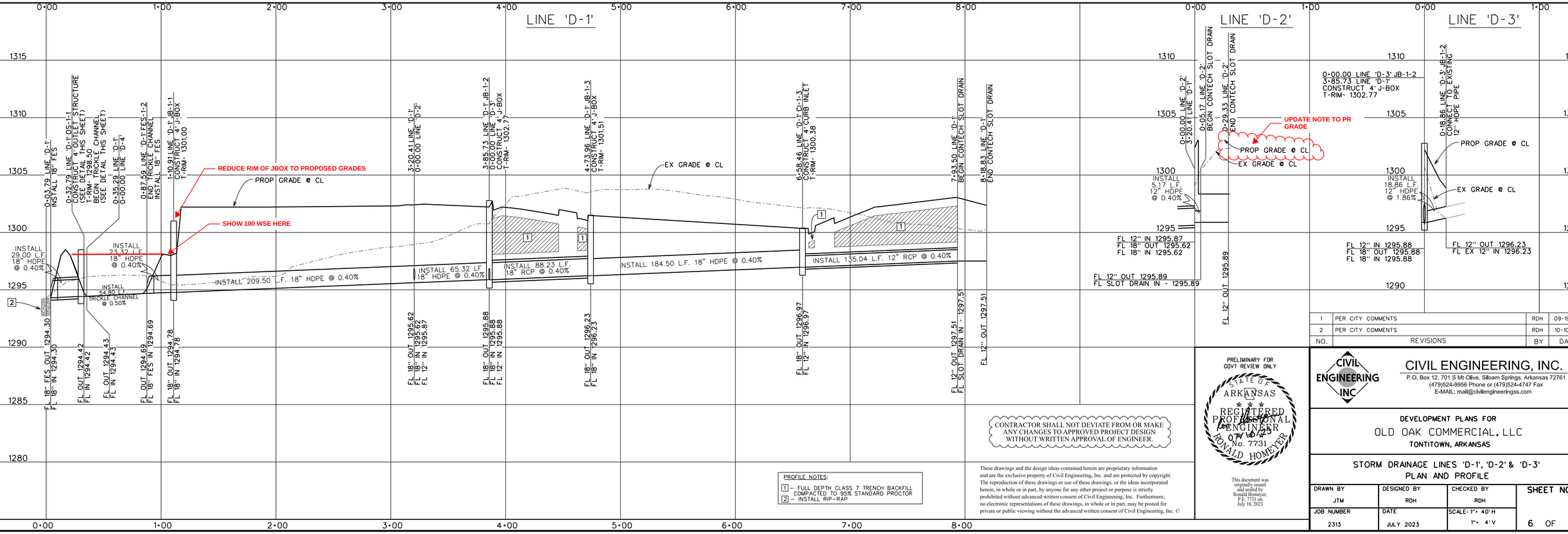








NOTE:
CONTRACTOR SHALL VERIFY ALL GRADES AND EXISTING ELEVATIONS PRIOR TO ANY CONSTRUCTION.



PROFILE NOTES:
1 - FULL DEPTH CLASS 7 TRENCH BACKFILL COMPACTED TO 95% STANDARD PROCTOR
2 - INSTALL RIP-RAP

NO.	REVISIONS	BY	DATE
1	PER CITY COMMENTS	RDH	09-19-23
2	PER CITY COMMENTS	RDH	10-10-23

CONTRACTOR SHALL NOT DEVIATE FROM OR MAKE ANY CHANGES TO APPROVED PROJECT DESIGN WITHOUT WRITTEN APPROVAL OF ENGINEER.

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STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
07-18-23
No. 7731
RONALD HOMEYER

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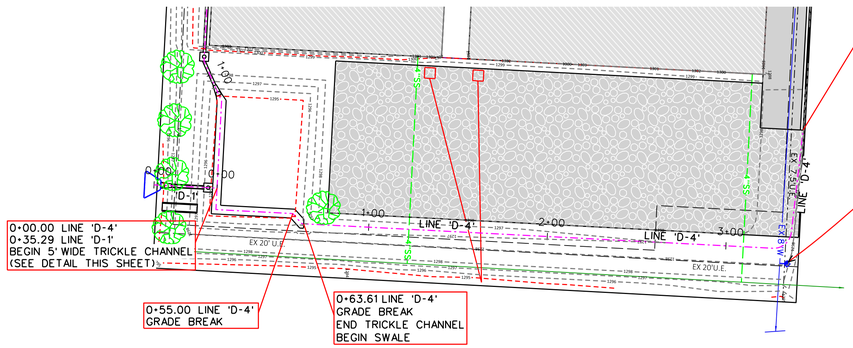
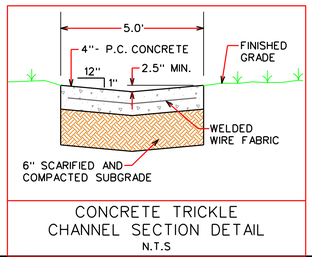
DEVELOPMENT PLANS FOR
OLD OAK COMMERCIAL, LLC
TONTITOWN, ARKANSAS

STORM DRAINAGE LINES 'D-1', 'D-2' & 'D-3'
PLAN AND PROFILE

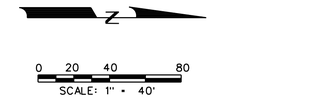
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JTM	RDH	RDH	6 OF 8
JOB NUMBER	DATE	SCALE: 1"= 40'H 1"= 4'V	
2313	JULY 2023		

PLT: 2313-SS Storm Sewer Plan and Profiles.dgn
REF FIL: 2313-SS.dgn
USER: RDH
DATE: 7/18/2023

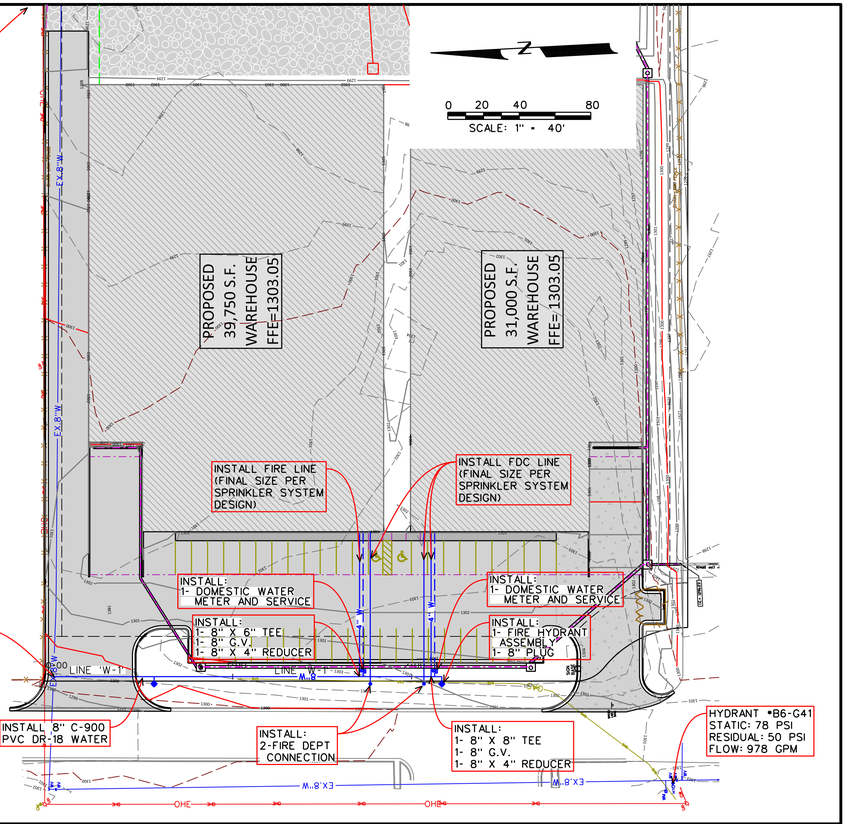




CONCRETE TRICKLE CHANNEL SECTION DETAIL
N.T.S



INSTALL:
1- FIRE HYDRANT ASSEMBLY
1- 8"x6" TAPPING SADDLE & VALVE



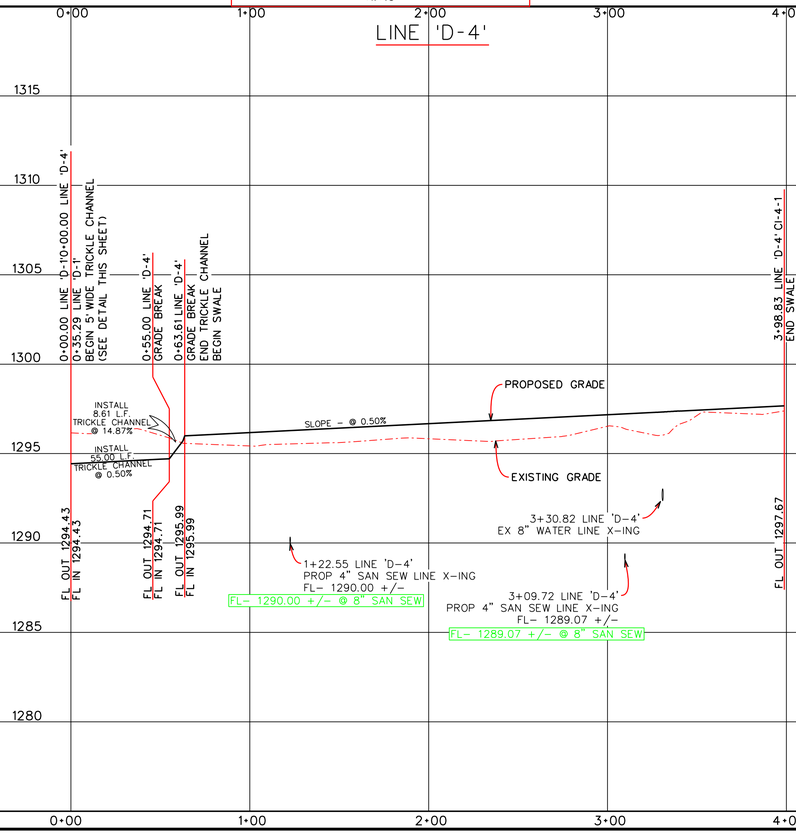
INSTALL:
1- 8" X 8" TAPPING SLEEVE & VALVE

INSTALL 8" C-900 PVC DR-18 WATER

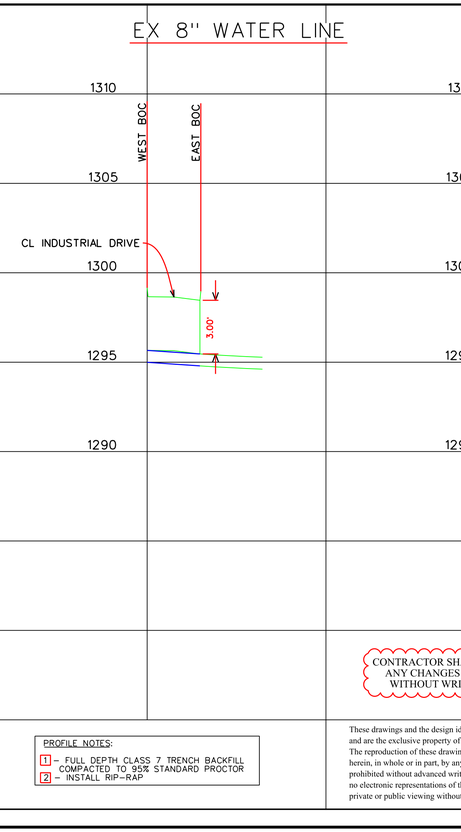
HYDRANT #B6-G41
STATIC: 78 PSI
RESIDUAL: 50 PSI
FLOW: 978 GPM

NOTE:
CONTRACTOR SHALL VERIFY ALL GRADES AND EXISTING ELEVATIONS PRIOR TO ANY CONSTRUCTION.

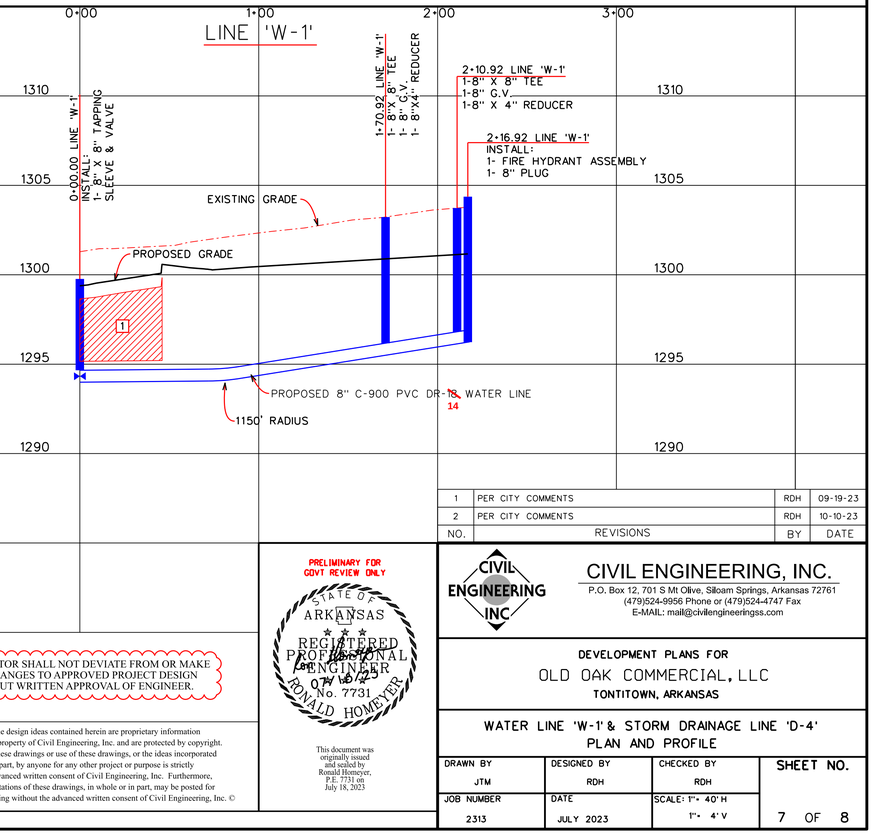
LINE 'D-4'



EX 8" WATER LINE



LINE 'W-1'



PROFILE NOTES:
1 - FULL DEPTH CLASS 7 TRENCH BACKFILL COMPACTED TO 95% STANDARD PROCTOR
2 - INSTALL RIP-RAP

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER RONALD HOMEYER No. 7731 07-18-23

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NO.	REVISIONS	BY	DATE
1	PER CITY COMMENTS	RDH	09-19-23
2	PER CITY COMMENTS	RDH	10-10-23

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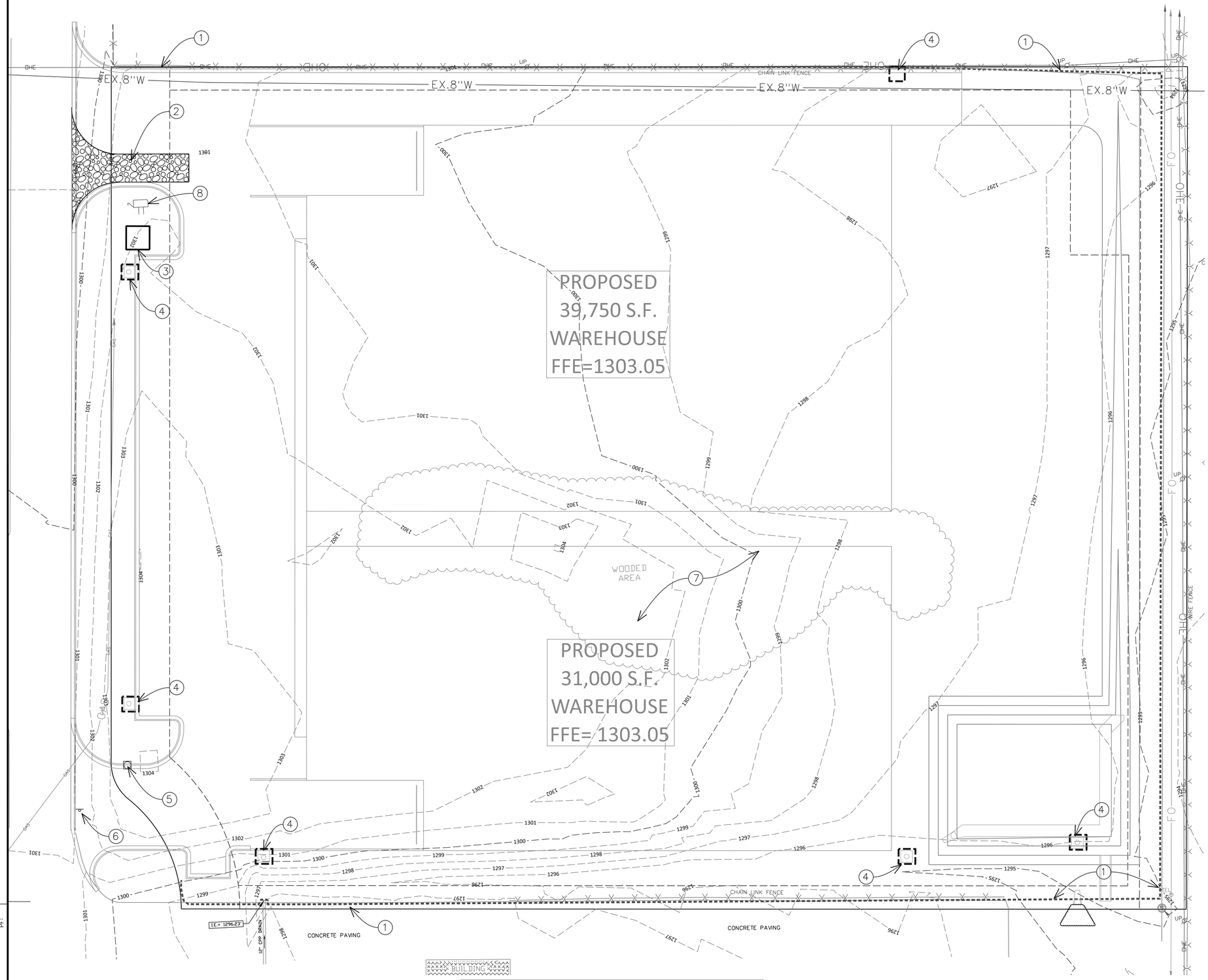
DEVELOPMENT PLANS FOR
OLD OAK COMMERCIAL, LLC
TONTITOWN, ARKANSAS

WATER LINE 'W-1' & STORM DRAINAGE LINE 'D-4'
PLAN AND PROFILE

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JTM	RDH	RDH	7 OF 8
JOB NUMBER	DATE	SCALE: 1"= 40' H	
2313	JULY 2023	1"= 4' V	

P:\...\2313\06 Water Line Plan and Profiles.dgn
REF FILE 2313-08.dgn
DATE 7/18/2023



N

0 10 20 40

SCALE: 1" = 20'

LEGEND

- EXISTING INDEX CONTOUR (5')
- EXISTING INTERMEDIATE CONTOUR (1')
- PROPOSED INDEX CONTOUR (5')
- PROPOSED INTERMEDIATE CONTOUR (1')
- EASEMENT LINE
- BUILDING SETBACK LINE
- PROPOSED BUILDING
- PROPOSED ASPHALT PAVING
- PROPOSED SIDEWALK
- PROPOSED CONCRETE PAVING
- EX FIRE HYDRANT ASSEMBLY
- EX WATER VALVE
- EX WATER METER
- EX STORM SEWER STRUCTURE
- EX SANITARY SEWER MANHOLE
- EX NATURAL GAS SIGN/METER
- EX POWER/UTILITY POLE
- EX UTILITY POLE ANCHOR
- EX ELECTRIC BOX
- EX TELEPHONE PEDESTAL
- EX FIBER OPTIC PEDESTAL
- EX BROADBAND PEDESTAL
- PROPOSED WHEEL STOP
- PROPOSED BOLLARD

DEMOLITION AND EROSION CONTROL PLAN NOTES:

1. INSTALL SILT FENCE (SEE DETAIL SHEET 3 OF 3)
2. INSTALL ROCK CONSTRUCTION ENTRANCE/EXIT (SEE DETAIL SHEET 3 OF 3)
3. PROPOSED CONCRETE WASH AREA (SEE DETAIL SHEET 3 OF 3)
4. INSTALL INLET PROTECTION (SEE DETAIL SHEET 3 OF 3)
5. SIGN AND BASE TO BE REMOVED
6. SPEED LIMIT SIGN TO BE RELOCATED
7. TREES TO BE REMOVED
8. MAILBOX W/ RAIN GAUGE

NOTE:
All portions of the site which have the vegetative cover removed as a result of the project construction shall be graded smooth, grass seed shall be spread and a protective mulch cover of wheat straw (a minimum of 4" thick) shall be placed over the seed to prevent erosion and promote the germination of the grass seed. Contractor shall be responsible for watering and maintaining the seeded areas until such time as the grass is established and the potential for erosion is eliminated. No ground shall be left bare for more than 14 days consecutively.

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NO.	REVISIONS	BY	DATE
1	PER CITY COMMENTS	RDH	09-19-23
2	PER CITY COMMENTS	RDH	10-10-23

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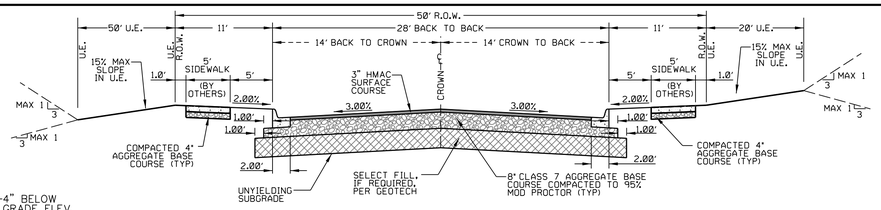
DEVELOPMENT PLANS FOR
OLD OAK COMMERCIAL, LLC
TONTITOWN, ARKANSAS

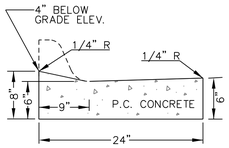
SEDIMENT AND EROSION CONTROL PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JTM	RDH	RDH	
JOB NUMBER	DATE	SCALE: 1"=20'H	8 OF 8
2313	JULY 2023	1"= --'V	

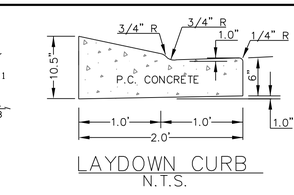
FILE: 2313-07 Erosion Control Plan.dgn
REF FILE: 2313 xl.dgn
VIEW:
DATE: 7/18/2023
PF:



28' B:B ROADWAY TYPICAL SECTION
N.T.S.



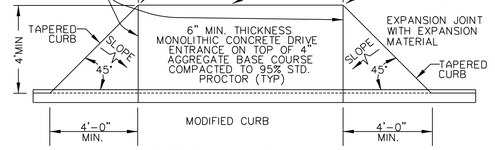
MODIFIED CURB
N.T.S.



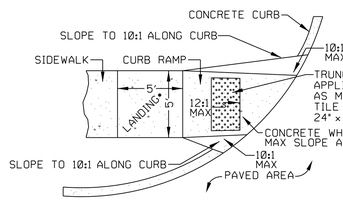
LAYDOWN CURB
N.T.S.

SIDEWALK AND CURB NOTES:

1. CONCRETE USED FOR CURB AND GUTTERS SHALL HAVE MIN. 28 DAY STRENGTH OF 3,500 PSI.
2. CONTRACTION JOINTS SHALL BE AT A MAXIMUM SPACING OF 15 FEET FOR CURB AND GUTTER AND AT A MAXIMUM SPACING OF 5' OR THE WIDTH OF THE SIDEWALK, WHICHEVER IS LESS, AND FORMED BY SAWING 1.5" IN DEPTH, 1/4" WIDE. JOINTS SHALL BE FILLED WITH A GRAY SELF LEVELING POLYURETHANE SEAL.
3. SIDEWALK EXPANSION JOINTS SHALL BE SPACED AT 25', OR 5 TIMES THE WIDTH OF THE SIDEWALK, WHICHEVER IS LESS, ABUTTING CONCRETE DRIVEWAY APRONS, STORM INLETS, CURB AND / OR ANY STRUCTURE. THE PREFORMED EXPANSION JOINT FILLER SHALL COMPLY WITH AASHTO M213.
4. CURB EXPANSION JOINTS SHALL BE AT A MAXIMUM SPACING OF 195', AT DRIVEWAY RADII, INTERSECTION RADII AND AT STATIONARY STRUCTURES. THE PREFORMED EXPANSION JOINT FILLER SHALL COMPLY WITH AASHTO M153. CURB CONTRACTION AND EXPANSION JOINTS SHALL ALIGN WITH JOINTS IN ADJACENT SIDEWALK.
5. ALL SAWED JOINTS SHALL BE COMPLETED WITHIN 24 HOURS OF PLACING CONCRETE.

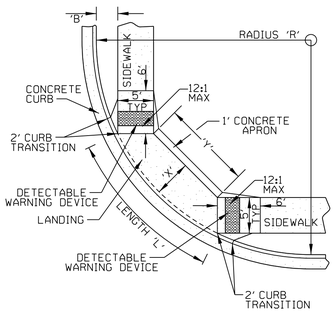


DRIVE ENTRANCE
N.T.S.

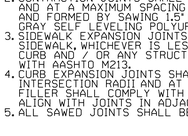


HANDICAP RAMP DETAIL
N.T.S.

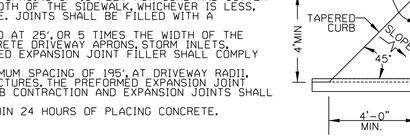
•2.00% (MAX) SLOPE IN ANY DIRECTION ON LANDING



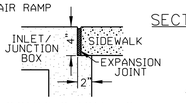
HANDICAP RAMP AT CORNER DETAIL
N.T.S.



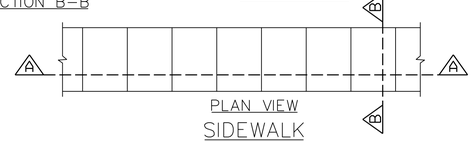
SECTION B-B



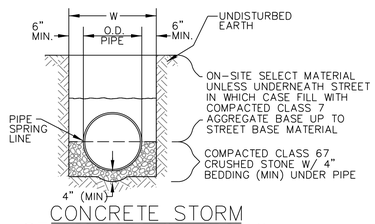
SECTION A-A



CONNECTION TO CONCRETE STRUCTURES



PLAN VIEW SIDEWALK
N.T.S.



CONCRETE STORM SEWER TRENCH DETAIL
N.T.S.

STREET TYPE	'B'	'L'	'X'	'Y'
LOCAL	4'	10.59'	4.10'	3.44'
MINOR COMMERCIAL	3'	14.52'	4.58'	7.25'
COLLECTOR	5'	7.10'	3.79'	0.0'

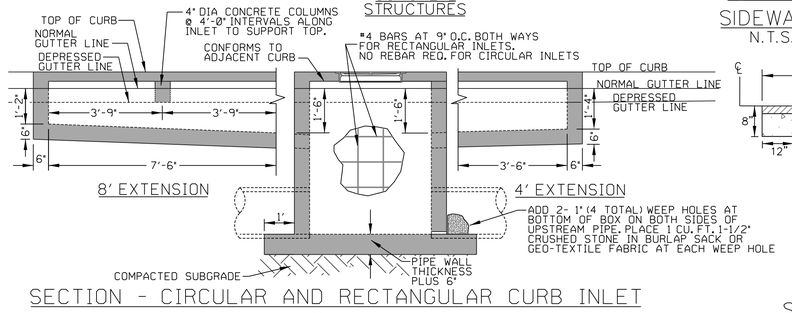
25' RADIUS DIMENSIONS

STREET TYPE	'B'	'L'	'X'	'Y'
LOCAL	4'	15.79	4.57'	8.53'
MINOR COMMERCIAL	3'	20.06'	5.20'	12.62'
COLLECTOR	5'	11.98'	4.13'	4.80'

30' RADIUS DIMENSIONS

STREET TYPE	'B'	'L'	'X'	'Y'
LOCAL	4'	26.75'	5.75'	19.18'
MINOR COMMERCIAL	3'	31.65'	6.63'	23.76'
COLLECTOR	5'	22.40'	5.09'	15.04'

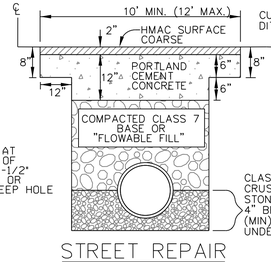
40' RADIUS DIMENSIONS



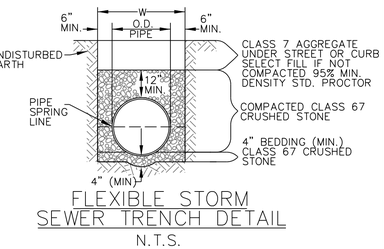
SECTION - CIRCULAR AND RECTANGULAR CURB INLET
N.T.S.

8' EXTENSION

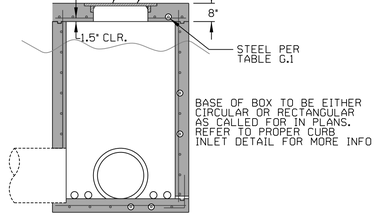
4' EXTENSION



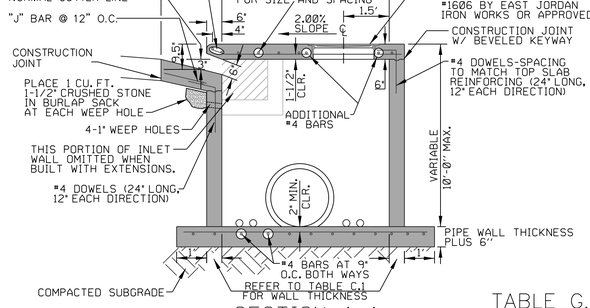
STREET REPAIR
N.T.S.



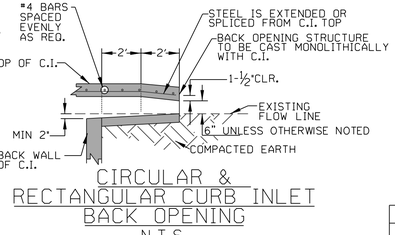
FLEXIBLE STORM SEWER TRENCH DETAIL
N.T.S.



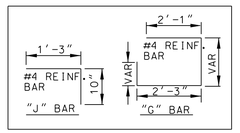
TYPICAL JUNCTION BOX
N.T.S.



SECTION A-A CIRCULAR CURB INLET
N.T.S.



CIRCULAR & RECTANGULAR CURB INLET BACK OPENING
N.T.S.

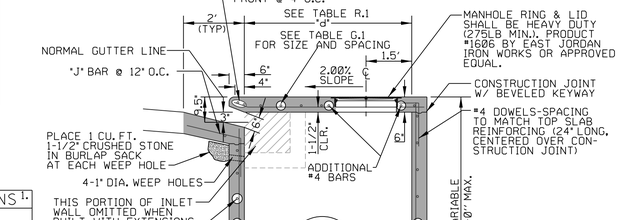


BAR DIAGRAM
N.T.S.

TABLE R.1

TABLE OF 'W' & 'd' DIMENSIONS[1]			
PIPE SIZE	SKEW OF CROSS DRAIN [2]		
SINGLE	STRAIGHT	30°	45°
18"	3'- 0"	3'- 0"	3'- 0"
24"	3'- 6"	3'- 0"	3'- 0"
30"	4'- 0"	4'- 0"	5'- 1"
36"	4'- 8"	4'- 11"	5'- 11"
42"	5'- 3"	5'- 7"	6'- 9"
48"	5'-10"	6'- 3"	7'- 7"
54"	6'-5"	7'- 3"	8'- 6"
≥ 60"	SEE PLAN NOTES OR CONTACT ENGINEER		

1. MIN 'W' = 4.0' UNLESS OTHERWISE NOTED
2. ANGLE TO BE MEASURED FROM LINE PERPENDICULAR TO LINE OF DIMENSION



SECTION A-A RECTANGULAR CURB INLET
N.T.S.

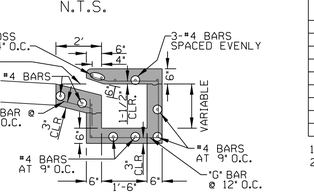
TABLE C.1 CIRCULAR CURB INLET DIA. & WALL THICKNESS TABLE

I.D. OF C.I.	DIA. OF OUTLET PIPE	MIN. WALL THICKNESS
4' I.D.	12" - 27" •	6"
5' I.D.	30" - 42" •	8"
6' I.D.	48" - 54" •	8"

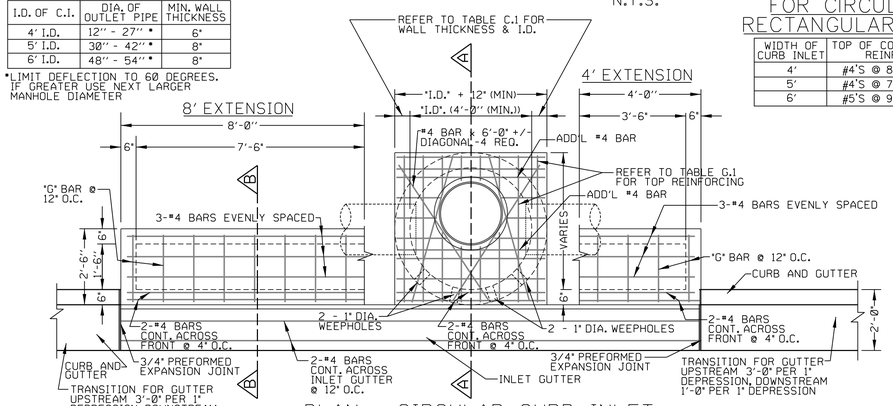
•LIMIT DEFLECTION TO 60 DEGREES. IF GREATER USE NEXT LARGER MANHOLE DIAMETER

TABLE G.1 BOX TOP REINFORCING FOR CIRCULAR & RECTANGULAR INLETS

WIDTH OF CURB INLET	TOP OF CONCRETE SLAB REINFORCING
4'	#4'S @ 8" O.C. E.W.
5'	#4'S @ 7" O.C. E.W.
6'	#5'S @ 9" O.C. E.W.



SECTION B-B CIRCULAR & RECTANGULAR CURB INLET
N.T.S.



PLAN - CIRCULAR CURB INLET
N.T.S.

TYPICAL CIRCULAR CURB INLET
N.T.S.

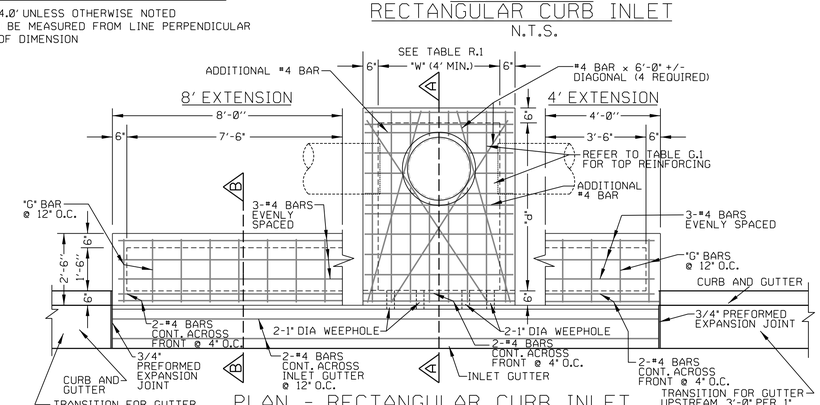
MODIFY PER DIMENSIONS ON PLAN

NOTES:

1. PIPES MAY ENTER CIRCULAR INLET FROM ANY ANGLE OR ELEVATION AS APPROVED BY ENGINEER.
2. PIPES SHALL CONNECT TO THE ENDS OR SIDES OF RECTANGULAR INLET. CONNECTION SHALL NOT BE MADE AT CORNERS OF INLET.
3. REINFORCING BARS SHALL BE CUT TO CLEAR PIPE BY 1-1/2".
4. PROVIDE 3/4" CHAMFER ON ALL EXPOSED CORNERS.
5. ALL #4 & #5 REINFORCING BARS SHALL HAVE 1-1/2" MINIMUM COVER. LARGER SIZES TO HAVE 2" COVER.
6. PLASTIC COATED STEPS SHALL BE INSTALLED IN ALL STORM BOXES 4'- 0" IN DEPTH OR GREATER, OR AS APPROVED BY THE ENGINEER.
7. EXTENSION LENGTHS SHOWN ON THE PLANS SHALL BE TAKEN TO MEAN CLEAR OPENING LENGTH, NOT INCLUDING WIDTHS OF SUPPORTS.
8. CONCRETE FOR STORM BOXES TO BE CLASS A, 3500 PSI, MIX WITH 4-7% AIR ENTRAINMENT.
9. DROP INLETS AND EXTENSIONS ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB.
10. ALL CURB INLETS TO HAVE 3' GUTTER DEPRESSIONS UNLESS OTHERWISE NOTED.
11. PIPES ENTERING INLETS / JUNCTION BOXES SHALL HAVE MINIMUM 0.1' DROP THROUGH THE BOX.

ANNOTATION LEGEND

ACHM - ASPHALT CONCRETE HOT MIX	I.D. - INSIDE DIAMETER	P.S.I. - POUNDS PER SQUARE INCH
C.I. - CURB INLET	MAX - MAXIMUM	R - RADIUS
CL - CENTERLINE	MIN - MINIMUM	REQ. - REQUIRED
CLR - CLEAR	N.T.S. - NOT TO SCALE	R.O.W. - RIGHT-OF-WAY
CONT. - CONTINUOUS	O.C. - ON CENTER	REINF. - REINFORCED
DIA - DIAMETER	O.C.E.W. - ON CENTER EACH WAY	STD - STANDARD
GA. - GAUGE	O.D. - OUTSIDE DIAMETER	SW - SIDEWALK
HMAC - HOT MIX ASPHALT CONCRETE	P.C. - PORTLAND CEMENT	TYP - TYPICAL



PLAN - RECTANGULAR CURB INLET
N.T.S.

TYPICAL RECTANGULAR CURB INLET
N.T.S.

MODIFY PER DIMENSIONS ON PLAN

CIVIL ENGINEERING, INC.
P.O. Box 12, Siloam Springs, Arkansas 72761
(479)524-9956 Phone or (479)524-4747 Fax
e-mail: mail@civilengineeringsi.com

CIVIL ENGINEERING INC

REVISION			
12/18/20	PER CITY COMMENTS		
01/07/21	PER CITY COMMENTS		

STANDARD DETAILS FOR STREET & STORM SEWER CONSTRUCTION

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER RONALD HOWERTER No. 7731 12-04-20

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REF FILE:
USER:
DATE: 11/20/2020 8:28:29 AM
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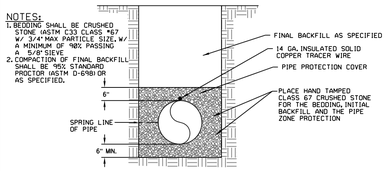
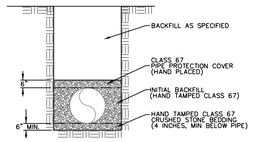


TYPICAL PVC PRESSURE PIPE TRENCH

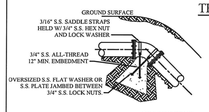
N.T.S.



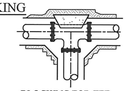
SEWER PIPE TRENCH

N.T.S.

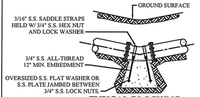
THRUST BLOCKING



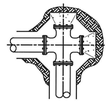
TYPICAL BLOCKING FOR VERTICAL BENDS



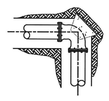
BLOCKING FOR TEE



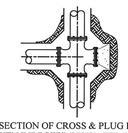
* SPECIAL BLOCKING OF TEE & PLUG (WHEN DIRECTED BY WATER DEPT.)



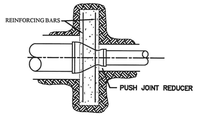
TYPICAL SECTION OF CROSS & 2 PLUG BLOCKING (WHEN DIRECTED BY WATER DEPT.)



TYPICAL BLOCKING FOR HORIZONTAL BENDS



TYPICAL SECTION OF CROSS & PLUG BLOCKING (WHEN DIRECTED BY WATER DEPT.)



THRUST SUPPORT FOR REDUCER (SIZE TO BE DETERMINED BY WATER DEPT.)

NOTES ON THRUST BLOCKING

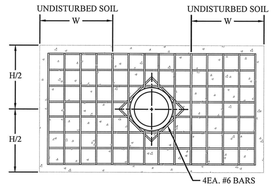
1. ALL BLOCKING SHALL BE AGAINST UNDISTURBED SOIL USING 3,000 PSI CONCRETE.
2. WHERE SOIL CONDITIONS MAKE IT NECESSARY TO POUR CONCRETE OVER JOINTS, THE ENDS OF THE ADJACENT PIPES MUST HAVE A THRUST BLOCK TO RESIST MOVEMENT OF THESE JOINTS.
3. WEIGHT CALCULATIONS TO BE BASED ON REACTION BACKING TABLE (SEE GWS10).
4. WHEN BLOCKING AGAINST FITTINGS, FITTINGS SHALL BE COVERED WITH POLYETHYLENE TUBING TO PREVENT BONDING OF CONCRETE.
5. WHERE SHEAR BECOMES A PROBLEM PROPER REINFORCING MUST BE INSTALLED INTO THE BLOCKING.
6. CLEARANCE SHALL BE A MINIMUM OF 6" BETWEEN PIPE AND OBSTRUCTIONS.
7. CLEARANCE ON PIPES BELONGING TO OIL/GAS COMPANIES SHALL BE 18" UNLESS SPECIAL PERMISSION IS GIVEN BY THESE COMPANIES.

CITY OF TONTITOWN	GEN. WATER/SEWER DETAIL: GWS02
	LAST REVISION DATE: 08/29/02
DRAWN BY: CRB / CHECKED BY: ___	APPROVED: ___ / DATE: 09/01/05

ANCHOR COLLAR SPECIFICATIONS

ANCHOR COLLAR SCHEDULE

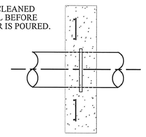
PIPE SIZE	DIMENSIONS W	H	T	M	REINFORCING BARS "A" BARS	"B" BARS
6"	1.5'	2.0'	1.0'	M.J. RETAINER GLAND	#6@6"	#6@6"
8"	1.5'	2.5'	1.0'	M.J. RETAINER GLAND	#6@6"	#6@6"
12"	2.0'	4.0'	1.5'	M.J. RETAINER GLAND	#6@6"	#6@6"
16"	3.0'	4.5'	1.5'	M.J. RETAINER GLAND	#6@6"	#6@6"
20"	3.0'	5.0'	2.0'	M.J. RETAINER GLAND	#6@6"	#6@6"
24"	3.5'	5.5'	2.0'	M.J. RETAINER GLAND	#7@6"	#6@10"
30"	6.5'	6.0'	2.5'	4"	#8@6"	#7@10"
36"	7.0'	7.0'	2.5'	4"	#8@6"	#7@10"



ANCHOR COLLAR (ELEVATION)

NOTE:
PIPE SURFACES SHALL BE CLEANED OF ALL FOREIGN MATERIAL BEFORE 3000 PSI CONCRETE COLLAR IS POURED.

NOTE:
USE M.J. RETAINER GLANDS FOR PIPE 24" AND SMALLER.



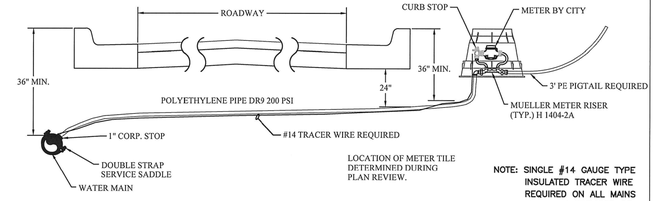
ANCHOR COLLAR (SIDE)

CITY OF TONTITOWN	GEN. WATER/SEWER DETAIL: GWS03
	LAST REVISION DATE: 08/29/02
DRAWN BY: CRB / CHECKED BY: ___	APPROVED: ___ / DATE: 09/01/05

WATER SERVICE DETAIL 1"

DOUBLE SET

SINGLE SET



LOCATION OF METER TILE DETERMINED DURING PLAN REVIEW.

NOTE: SINGLE #14 GAUGE TYPE INSULATED TRACER WIRE REQUIRED ON ALL MAINS PE WATER SERVICES OR OTHER APPURTENANCES

NOTE: SERVICE CROSSINGS UNDER STREETS AND ROADWAYS MUST BE ENCASED IN A 2" PVC OR PE PIPE.

CITY OF TONTITOWN	WATER DETAIL: W02
	LAST REVISION DATE: 03/18/16
DRAWN BY: CRB / CHECKED BY: ___	APPROVED: ___ / DATE: 09/01/05

ADD TONTITOWN STANDARD DETIALS
W05
W07

REACTION BACKING TABLE

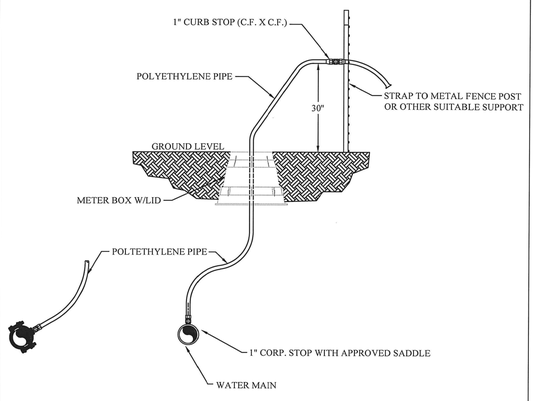
SIZE	REQUIRED SQ. FT. OF UNDISTURBED EARTHWALL FOR REACTION BACKING — TYPE OF FITTINGS TEE	90°	45°	22 1/2°	11 1/4°	PLUG
2"	1	1	1	1	1	1
3"	1	1	1	1	1	1
4"	1	2	1	1	1	1
6"	2	3	2	1	1	2
8"	3	5	3	2	1	3
10"	5	7	4	2	1	5
12"	7	10	6	3	2	7
14"	10	13	7	4	2	10
16"	12	17	10	5	3	12
18"	15	22	12	6	3	15
20"	19	26	14	7	4	19
24"	26	37	20	10	5	26

NOTES:

1. ALL FITTINGS SHALL BE MECHANICAL JOINTS.
2. DO NOT COVER BELLS OR FLANGES WITH CONCRETE.
3. WRAP ALL FITTINGS WITH POLY WRAP.
4. BACK ALL TEES ACCORDING TO SIZE OF BRANCH.
5. BACKING FUTURE LINE EXTENSIONS SHALL BE SUCH THAT LATER REMOVAL IS POSSIBLE.
6. ALL BENDS WHERE FITTINGS ARE USED, BOTH HORIZONTAL OR VERTICAL, SHALL BE BACKED.
7. REACTION BACKING TABLE IS BASED ON 100 PSI AND SOIL BEARING PRESSURE OF 2,000 LB/SQ. FT. ADDITIONAL BACKING MAY BE REQUIRED IN SOME AREAS AS REQUIRED BY CITY WATER DEPARTMENT.

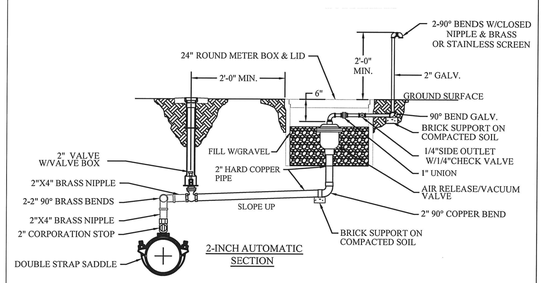
CITY OF TONTITOWN	GEN. WATER/SEWER DETAIL: GWS10
	LAST REVISION DATE: 06/23/17
DRAWN BY: SAK / CHECKED BY: TWC	APPROVED: ___ / DATE: 09/01/05

TEMPORARY 1" BLOW OFF ASSEMBLY / SAMPLE POINTS



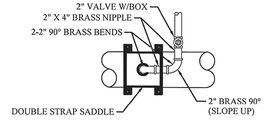
CITY OF TONTITOWN	WATER DETAIL: W01
	LAST REVISION DATE: 08/29/02
DRAWN BY: CRB / CHECKED BY: ___	APPROVED: ___ / DATE: 09/01/05

2" COMBINATION AIR/VACUUM VALVE DETAIL



2-INCH AUTOMATIC SECTION

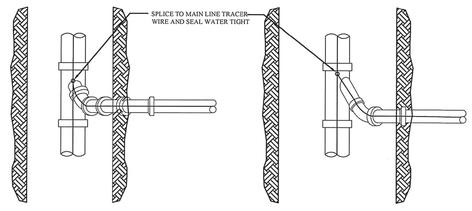
1. ALL THREADED CONNECTIONS SHALL HAVE A DOUBLE WRAP OF TEFLON TAPE ON THREADS.
2. DRILL HOLE IN SIDE OF METER BOX FOR OUTLET PIPING.
3. VALVES WILL BE PIPED TO POINT BEYOND PAVEMENT AND SHOULDER.
4. SINGLE #14 GAUGE TYPE INSULATED COPPER TRACER WIRE IS REQUIRED ON ALL MAINS, PE WATER SERVICES, OR OTHER APPURTENANCES.



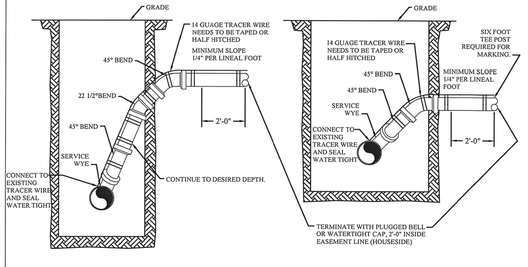
2-INCH AUTOMATIC PLAN VIEW

CITY OF TONTITOWN	WATER DETAIL: W09
	LAST REVISION DATE: 08/29/02
DRAWN BY: CRB / CHECKED BY: ___	APPROVED: ___ / DATE: 09/01/05

SANITARY SEWER SERVICE WYE



NOTE: SEE BACKFILL DETAIL FOR BEDDING AND BACKFILL INSTRUCTIONS.



RISER FROM DEEP MAIN

NORMAL DEPTH

NOTE: SEE PLANS FOR PIPE SIZES

CITY OF TONTITOWN	SANITARY SEWER DETAIL: SS06
	LAST REVISION DATE: 09/01/05
DRAWN BY: FCN / CHECKED BY: ___	APPROVED: ___ / DATE: 09/21/07

CIVIL ENGINEERING, INC.
P.O. Box 12, Siloam Springs, Arkansas 72761
(479)524-9956 Phone or (479)524-4747 Fax
e-mail: mail@civilengineeringss.com

CIVIL ENGINEERING INC

REVISION	
12/18/20	PER CITY COMMENTS
01/07/21	PER CITY COMMENTS

STANDARD DETAILS FOR WATER & SEWER CONSTRUCTION

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7731
12/04/20
RONALD HOWERTON

FILE: N:\2016 A-12 Civil\Sheets.dgn
REF FILE:
USER:
DATE: 11/20/2020 8:28:39 AM
PF1:

SOLID WASTE MANAGEMENT

DESCRIPTION:
LARGE VOLUMES OF SOLID WASTE ARE OFTEN GENERATED AT CONSTRUCTION SITES INCLUDING: PACKAGING, PALLETS, WOOD WASTE, CONCRETE WASTE, SOIL, ELECTRICAL WIRING, CUTTINGS, AND A VARIETY OF OTHER MATERIALS. THE SOLID WASTE MANAGEMENT PRACTICE LISTS TECHNIQUES TO MINIMIZE THE POTENTIAL OF STORM WATER CONTAMINATION FROM SOLID WASTE THROUGH APPROPRIATE STORAGE AND DISPOSAL PRACTICES.

PRIMARY USE:
THESE PRACTICES SHOULD BE A PART OF ALL CONSTRUCTION PRACTICES. BY LIMITING THE TRASH AND DEBRIS ON SITE, STORM WATER QUALITY IS IMPROVED ALONG WITH REDUCED CLEAN UP REQUIREMENTS AT THE COMPLETION OF THE PROJECT.

APPLICATIONS:
THE SOLID WASTE MANAGEMENT PRACTICE FOR CONSTRUCTION SITES IS BASED ON PROPER STORAGE AND DISPOSAL PRACTICES BY CONSTRUCTION WORKERS AND SUPERVISORS. KEY ELEMENTS OF THE PROGRAM ARE EDUCATION AND MODIFICATION OF ROPER DISPOSAL HABITS. COOPERATION AND VIGILANCE IS REQUIRED ON THE PART OF SUPERVISORS AND WORKERS TO ENSURE THAT THE RECOMMENDATIONS AND PROCEDURES ARE FOLLOWED. FOLLOWING ARE LISTS DESCRIBING THE TARGETED MATERIALS AND RECOMMENDED PROCEDURES:

-TARGETED SOLID WASTE MATERIALS	-CONCRETE, BRICK, AND MORTAR WASTE
-PAPER AND CARDBOARD CONTAINERS	-DEMOLITION WASTE
-PLASTIC PACKAGING	-FOOD WASTE
-STYROFOAM PACKING AND FORMS	-MISCELLANEOUS CUTTINGS AND WASTE
-INSULATION MATERIALS (NON HAZARDOUS)	-SHEATHING CUTTINGS AND WASTE
-WOOD PALLETS AND CUTTINGS	-GYPSUM BOARD CUTTINGS AND WASTE
-SHINGLE CUTTING AND WASTE	-STEEL (CUTTINGS, NAILS RUST RESIDUE)
-PIPE AND ELECTRICAL CUTTINGS	-ROOFING TAR

STORAGE PROCEDURES:
- -DESIGNATE A FOREMAN OR SUPERVISOR TO OVERSEE AND ENFORCE PROPER SOLID WASTE PROCEDURES.
- -WHEREVER POSSIBLE, MINIMIZE PRODUCTION OF SOLID WASTE MATERIALS.
- -DESIGNATE A FOREMAN OR SUPERVISOR TO OVERSEE AND ENFORCE PROPER SOLID WASTE PROCEDURES.
- -INSTRUCT CONSTRUCTION WORKERS IN PROPER SOLID WASTE PROCEDURES.
- -SEGREGATE POTENTIALLY HAZARDOUS WASTE FROM NON-HAZARDOUS CONSTRUCTION SITE DEBRIS.
- -KEEP SOLID WASTE MATERIALS UNDER COVER IN EITHER A CLOSED DUMPSTER OR OTHER ENCLOSED TRASH CONTAINER THAT LIMITS CONTACT WITH RAIN AND RUN OFF.
- -STORE WASTE MATERIALS AWAY FROM DRAINAGE DITCHES, SWALES AND CATCH BASINS.
- -DO NOT ALLOW TRASH CONTAINERS TO OVERFLOW.
- -DO NOT ALLOW WASTE MATERIALS TO ACCUMULATE ON THE GROUND.
- -PROHIBIT LITTERING BY WORKERS AND VISITORS.
- -POLICE AREA DAILY FOR LITTER AND DEBRIS.
- -ENFORCE SOLID WASTE HANDLING AND STORAGE PROCEDURES.

DISPOSAL PROCEDURES:
- -IF FEASIBLE, SEGREGATE RECYCLABLE WASTES FROM NON-RECYCLABLE WASTE MATERIALS AND DISPOSE OF PROPERLY.
- -GENERAL CONSTRUCTION DEBRIS MAY BE HAULED TO A LICENSED CONSTRUCTION DEBRIS LANDFILL (TYPICALLY LESS EXPENSIVE THAN A SANITARY LANDFILL).
- -USE WASTE WATER FACILITIES APPROVED BY LOCAL JURISDICTION.
- -RUN OFF WHICH COMES INTO CONTACT WITH UNPROTECTED WASTE SHALL BE DIRECTED INTO STRUCTURAL TREATMENT SUCH AS SILT FENCE TO REMOVE DEBRIS.

EDUCATION:
- -EDUCATE ALL WORKERS ON SOLID WASTE STORAGE AND DISPOSAL PROCEDURES.
- -INSTRUCT WORKERS IN IDENTIFICATION OF SOLID WASTE AND HAZARDOUS WASTE.
- -HAVE REGULAR MEETINGS TO DISCUSS AND REINFORCE DISPOSAL PROCEDURES (INCORPORATE IN REGULAR SAFETY SEMINARS).
- -CLEARLY MARK ON ALL SOLID WASTE CONTAINERS WHICH MATERIALS ARE ACCEPTABLE.

QUALITY CONTROL:
- -FOREMAN AND/OR CONSTRUCTION SUPERVISOR SHALL MONITOR ON-SITE SOLID WASTE STORAGE AND DISPOSAL PROCEDURES.
- -DISCIPLINE WORKERS WHO REPEATEDLY VIOLATE PROCEDURES.

REQUIREMENTS:
- -JOB-SITE WASTE HANDLING AND DISPOSAL EDUCATION AND AWARENESS PROGRAM.
- -COMMITMENT BY MANAGEMENT TO IMPLEMENT AND ENFORCE SOLID WASTE MANAGEMENT PROGRAM.
- -COMPLIANCE BY WORKERS.
- -SUFFICIENT AND APPROPRIATE WASTE STORAGE CONTAINERS.
- -TIMELY REMOVAL OF STORED SOLID WASTE MATERIALS.

LIMITATIONS:
- -ONLY ADDRESSES NON-HAZARDOUS SOLID WASTE.
- -ONE PART OF A COMPREHENSIVE CONSTRUCTION SITE MANAGEMENT SITE PROGRAM.

CONCRETE WASTE MANAGEMENT

DESCRIPTION:
CONCRETE WASTE AT CONSTRUCTION SITES COMES IN TWO FORMS:
1. EXCESS FRESH CONCRETE MIX INCLUDING TRUCK AND EQUIPMENT
2. CONCRETE DUST AND CONCRETE DEBRIS RESULTING FROM DEMOLITION.

BOTH FORMS HAVE THE POTENTIAL TO IMPACT WATER QUALITY THROUGH STORM WATER RUNOFF CONTACT WITH THE WASTE.

PRIMARY USE:
CONCRETE WASTE IS PRESENT AT MOST CONSTRUCTION SITES. THIS BMP SHOULD BE UTILIZED AT SITES WHERE CONCRETE WASTE IS PRESENT.

APPLICATIONS:
A NUMBER OF WATER QUALITY PARAMETERS CAN BE AFFECTED BY INTRODUCTION OF CONCRETE - ESPECIALLY FRESH CONCRETE. CONCRETE AFFECTS THE PH OF RUNOFF, CAUSING SIGNIFICANT CHEMICAL CHANGES IN WATER BODIES AND HARMING AQUATIC LIFE. SUSPENDED SOLIDS IN THE FORM OF BOTH CEMENT AND AGGREGATE DUST ARE ALSO GENERATED FROM BOTH FRESH AND DEMOLISHED CONCRETE WASTE.

CURRENT UNACCEPTABLE WASTE CONCRETE DISPOSAL PRACTICES:
- -DUMPING IN VACANT AREAS ON THE JOB SITE.
- -ILLICIT DUMPING OFF SITE.
- -DUMPING INTO DITCHES OR DRAINAGE AREAS.

RECOMMENDED DISPOSAL PRACTICES:
- AVOID UNACCEPTABLE DISPOSAL PRACTICES LISTED ABOVE.
- DEVELOP PREDETERMINED, SAFE CONCRETE DISPOSAL AREAS.
- PROVIDE A WASHOUT AREA WITH A MINIMUM OF 6 CUBIC FEET OF CONTAINMENT AREA VOLUME FOR EVERY 10 CUBIC YARDS OF CONCRETE PLACED.
- NEVER DUMP WASTE CONCRETE ILLICITLY OR WITHOUT PROPERTY OWNERS KNOWLEDGE AND CONSENT.
- TREAT RUNOFF FROM STORAGE AREAS THROUGH THE USE OF STRUCTURAL CONTROLS AS REQUIRED.

EDUCATION:
- DRIVERS AND EQUIPMENT OPERATORS SHOULD BE INSTRUCTED ON PROPER DISPOSAL AND EQUIPMENT WASHING PRACTICES (SEE ABOVE).
- SUPERVISORS MUST BE MADE AWARE OF THE POTENTIAL ENVIRONMENTAL CONSEQUENCES OF IMPROPERLY HANDLED CONCRETE WASTE.

ENFORCEMENT:
- THE CONSTRUCTION SITE MANAGER OR FOREMAN MUST ENSURE THAT EMPLOYEES AND PREMIX COMPANIES FOLLOW PROPER PROCEDURES FOR CONCRETE DISPOSAL AND EQUIPMENT WASHING.
- EMPLOYEES VIOLATING DISPOSAL OR EQUIPMENT CLEANING DIRECTIVES MUST BE REEDUCATED OR DISCIPLINED IF NECESSARY.

DEMOLITION PRACTICES:
MONITOR WEATHER AND WIND DIRECTION TO ENSURE CONCRETE DUST IS NOT ENTERING DRAINAGE STRUCTURES AND SURFACE WATERS. WHERE APPROPRIATE, CONSTRUCT SEDIMENT TRAPS OR OTHER TYPES OF SEDIMENT DETENTION DEVICES DOWNSTREAM OF DEMOLITION ACTIVITIES.

REQUIREMENTS:
USE PREDETERMINED DISPOSAL SITES FOR WASTE CONCRETE.
PROHIBIT DUMPING WASTE CONCRETE ANYWHERE BUT PREDETERMINED AREAS.
ASSIGN PREDETERMINED TRUCK AND EQUIPMENT CLEANING PROCEDURES.
EDUCATE DRIVERS AND OPERATORS ON PROPER DISPOSAL AND EQUIPMENT CLEANING PROCEDURES.

LIMITATIONS:
THIS CONCRETE WASTE MANAGEMENT PROGRAM IS ONE PART OF A COMPREHENSIVE CONSTRUCTION SITE WASTE MANAGEMENT PROGRAM.

NOTE:

ALL PORTIONS OF THE SITE WHICH HAVE THE VEGETATIVE COVER REMOVED AS A RESULT OF THE PROJECT CONSTRUCTION SHALL BE GRADED SMOOTH, GRASS SEED SHALL BE SPREAD AND A PROTECTIVE MULCH COVER OF WHEAT STRAW (A MINIMUM OF 4" THICK) SHALL BE PLACED OVER THE SEED TO PREVENT EROSION AND PROMOTE THE GERMINATION OF THE GRASS SEED. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND MAINTAINING THE SEEDED AREAS UNTIL SUCH TIME AS THE GRASS IS ESTABLISHED AND THE POTENTIAL FOR EROSION IS ELIMINATED. NO GROUND SHALL BE LEFT BARE FOR MORE THAN 14 DAYS CONSECUTIVELY.

SEDIMENTATION BASIN NOTES:

1. DETENTION BASIN IS TO BE CONSTRUCTED AND MAINTAINED AS A SEDIMENTATION BASIN FOR DURATION OF CONSTRUCTION
2. AREA DRAINING TO DETENTION BASIN = 60 ACRES
   SEDIMENTATION BASIN REQUIRED VOLUME = 5.0 ACRE-FT

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EROSION CONTROL NOTES

1. CLEARING AND GRUBBING SHALL NOT BE INITIATED MORE THAN 20 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS TEMPORARILY SEEDED AND MULCHED.
2. ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE.
3. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED CONCURRENT WITH CLEARING OPERATIONS, AND SHALL BE FUNCTIONAL PRIOR TO EARTH MOVING OPERATIONS.
4. INSPECTION AND MAINTENANCE OF STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS AND SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EROSION CONTROL STRUCTURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.
5. SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND BE TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS AND DOES NOT MIGRATE INTO WATERS OF THE STATE/ U.S.
6. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC.
7. SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EROSION AND SEDIMENTATION CONTROL MEASURES TO PROTECT WATER QUALITY MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. SILT FENCE MUST BE INSTALLED ALONG STREAM BANKS OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG STREAM BANKS IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS. THEY MUST BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.
8. SLURRY WATER PUMPED FROM WORK AREAS AND EXCAVATIONS MUST BE HELD IN SETTLING BASINS OR TREATED BY FILTRATION PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS SHALL NOT BE LOCATED CLOSER THAN 20 FEET FROM THE TOP BANK OF A STREAM. SETTLING BASINS AND TRAPS SHALL BE PROPERLY DESIGNED AND SIZED ACCORDING TO THE DISCHARGE RATE OF THE SLURRY OPERATION. THE EFFLUENT FROM THE SETTLING BASIN OR TRAP SHALL BE DISCHARGED THROUGH A PIPE OR A WELL-VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION AND SEDIMENTATION.
9. CHECK DAMS SHALL BE UTILIZED WHERE RUNOFF IS CONCENTRATED. CLEAN ROCK, SANDBAGS, OR CHECK DAMS SHALL BE PROPERLY CONSTRUCTED TO DETAIN RUNOFF AND TRAP SEDIMENT. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION, THAT CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS.
10. PERMANENT EROSION CONTROL MEASURES SHALL BE INITIATED WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING.
11. THE CONTRACTOR SHALL INSTALL A RAIN GAUGE ON-SITE AND MAINTAIN IT IN GOOD WORKING CONDITION. THE CONTRACTOR SHALL RECORD DAILY PRECIPITATION ON THE PROJECT AND PROVIDE THIS INFORMATION TO THE ENGINEER ON A MONTHLY BASIS. THE COST FOR THE RAIN GAUGE IS TO BE INCLUDED IN THE UNIT BID PRICES FOR OTHER ITEMS.
12. INSPECTION OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DONE BEFORE ANTICIPATED STORM EVENTS (OR SERIES OF STORM EVENTS SUCH AS INTERMITTENT SHOWERS OVER ONE OR MORE DAYS) AND WITHIN 24 HOURS AFTER THE END OF A STORM EVENT OF 0.50 INCHES OR GREATER, AND AT LEAST ONCE PER WEEK.
13. OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION AND SEDIMENT CONTROL MEASURES ARE EFFECTIVE IN PREVENTING IMPACTS TO SURROUNDING WATERS. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.
14. UPON CONCLUSION OF THE INSPECTIONS, EROSION AND SEDIMENT CONTROL MEASURES FOUND TO INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE MORE THAN SEVEN DAYS AFTER THE CONDITION IS IDENTIFIED.
15. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN ON-SITE (OR AT A NEARBY OFFICE) AND SHALL PLACE COPIES OF ANY PROJECT-RELATED PERMITS ON THE PROJECT BULLETIN BOARD.
16. THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES; INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE UTILIZED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURE SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.
17. BORROW AND WASTE DISPOSAL AREAS SHALL BE LOCATED IN NON-WETLAND AREAS AND ABOVE THE 100-YEAR, FEDERAL EMERGENCY MANAGEMENT AGENCY FLOODPLAIN. BORROW AND WASTE DISPOSAL AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY AN ARAP, 404, OR NPDES PERMIT.
18. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS FROM STATED AND/OR LOCAL AGENCIES REGARDING THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS.
19. WETLAND AREAS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS PROVIDED FOR IN THE PLANS.
20. ANY DISAGREEMENT BETWEEN THE PROJECT PLANS, THE PROJECT AS CONSTRUCTED AND THE PERMIT OR PERMITS ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. THE ADEQ SHALL DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.

POLLUTION CONTROL GENERAL NOTES:

1. THIS PLAN HAS BEEN PREPARED TO PROVIDE MEANS TO PREVENT OR MINIMIZE POLLUTION OF STORM WATER
2. THIS PROJECT CONSIST OF THE DEVELOPMENT OF 182 LOTS ON A 60.43 ACRE TRACT FOR A RESIDENTIAL SUBDIVISION USE.
3. THE CONSTRUCTION ACTIVITY INCLUDED IN THIS PLAN WILL INCLUDE
   A. CLEARING AND GRUBBING
   B. STOCK PILING
   C. ROUGH GRADING
   D. UTILITY INSTALLATION/EXCAVATION OF TRENCHES
   E. FINAL OR FINISH GRADING
   F. PAVEMENT INSTALLATION
   G. BUILDING CONSTRUCTION
   H. PREPARATION OF SEEDING OR PLANTING
4. BEST MANAGEMENT PRACTICES (STRUCTURAL PRACTICES) USED ON THIS PROJECT COULD INCLUDE: SILT FENCING, CONSTRUCTION ENTRANCE, INLET PROTECTION, OUTLET PROTECTION, SUBSURFACE DRAINS, CHECK DAMS, DRAINAGE SWALES, SEDIMENT TRAPS, EARTH DIKE, PIPE SLOPE DRAINS, EROSION CONTROL MATTING, DETENTION/RETENTION PONDS, SEDIMENT TRAPS AND SILT FENCES.
5. THE TOTAL ESTIMATED SITE AREA IS 3.77 ACRES
   THE TOTAL ESTIMATED SITE AREA TO BE DISTURBED IS 3.77 ACRES
   THE TOTAL ESTIMATED SITE AREA NOT TO BE DISTURBED IS 00.0 ACRES
6. THE ESTIMATED RUNOFF COEFFICIENT PRIOR TO DEVELOPMENT IS 0.45
7. THE ESTIMATED RUNOFF COEFFICIENT UPON COMPLETION IS 0.90
8. THE SLOPES EXPECTED ON THE SITE UPON COMPLETION OF FINAL GRADING WILL RANGE BETWEEN 1% AND 5%
9. THE STORM WATER EXITING THE SITE IS COLLECTED IN DETENTION BASIN.
10. THE NAME OF THE RECEIVING WATER BODY IS BRUSH CREEK, LOCATED APPROXIMATELY 4 MILES FROM THE SUBJECT PROPERTY.
11. THE SOILS PRESENT AT THE SITE ARE GENERALLY CAPTINA, SOILS.
12. THE CONTRACTOR SHALL PROVIDE DOWNHILL EROSION PROTECTION AROUND THE WORK AREA PERIMETER AND AT ALL INLET MOUTHS DURING CONSTRUCTION.
13. THE CONTRACTOR SHALL REMOVE ALL EXCESS SOIL FROM CONSTRUCTION VEHICLES PRIOR TO EXITING THE SITE.
14. ALL DISTURBED AREAS WHICH WILL NOT BE RE-DISTURBED FOR A MINIMUM OF 14 DAYS MUST BE STABILIZED BY THE CONTRACTOR TO CONTROL EROSION AND OR DUST.
15. THE CONTRACTOR SHALL UNDERTAKE PROPER METHODS TO REDUCE DUST GENERATION FROM THE SITE.
16. THE CONTRACTOR MUST COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS REGARDING SEDIMENT AND EROSION CONTROL.
17. THE COPY OF THE STORM WATER POLLUTION PREVENTION PLAN ALONG WITH THE E.P.A. (NPDES) PERMIT MUST BE POSTED AT THE CONSTRUCTION SITE THROUGHOUT THE CONSTRUCTION OF THE PROJECT. NO WORK IS ALLOWED BEFORE THE PERMIT HAS BEEN ISSUED.
18. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS FOR THIS PROJECT. CHANGES ARE TO BE APPROVED BEFORE CONSTRUCTION BY THE DESIGN ENGINEER AND THE CITY.
19. IF OFF-SITE SOIL BORROW OR SPOIL SITES ARE USED IN CONJUNCTION WITH THIS PROJECT, THE CONTRACTOR SHALL NOTIFY THE CITY INSPECTOR AND BE RESPONSIBLE FOR EROSION CONTROL REQUIREMENTS AS PER FEDERAL, STATE AND LOCAL REQUIREMENTS.
20. INSPECTIONS SHALL BE MADE WEEKLY AND AFTER 1/2" RAIN STORM EVENTS TO INSURE THAT ALL DEVICES ARE FUNCTIONING PROPERLY. WHEN SEDIMENT OR MUD HAS CLOGGED THE VOID SPACES BETWEEN STONES OR MUD IS BEING TRACKED ONTO A PUBLIC ROADWAY THE AGGREGATE PAD MUST BE WASHED DOWN OR REPLACED. RUNOFF FROM THE WASH DOWN OPERATION SHALL NOT BE ALLOWED TO DRAIN DIRECTLY OFF-SITE WITHOUT FIRST FLOWING THROUGH ANOTHER BEST MANAGEMENT PRACTICE (BMP) TO CONTROL OFF-SITE SEDIMENTATION. PERIODIC RE-GRADING OR THE ADDITION OF NEW STONE MAY BE REQUIRED TO MAINTAIN EFFICIENCY OF THE INSTALLATION.
21. MAINTENANCE AND INSPECTIONS PROCEDURES: CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF ANY STORM EVENT OF 0.5 INCHES OR GREATER. IF REPAIR IS NECESSARY IT SHALL BE DONE AT THE EARLIEST PRACTICAL DATE BUT IN NO CASE GREATER THAN 48 HOURS.
22. FINAL STABILIZATION IS DEFINED AS A UNIFORM PERENNIAL VEGETATIVE COVER AT A MINIMUM OF 70% RESTORATION OF THE NATIVE OR NATURAL PREEXISTING BACKGROUND COVER FOR THE AREA.
23. SEDIMENTATION PONDS/TRAPS MUST BE CLEANED OUT WHEN SEDIMENTATION ACCUMULATES TO A POINT OF 50% FULL (BY VOLUME).

SEQUENCE OF EROSION CONTROL BEST MANAGEMENT PRACTICES

1. INSTALL DOWN SLOPE AND SIDE SLOPE PERIMETER CONTROLS PRIOR TO THE LAND DISTURBING ACTIVITIES.
2. DO NOT DISTURB AN AREA UNTIL IT IS NECESSARY FOR CONSTRUCTION TO PROCEED.
3. COVER AND STABILIZE DISTURBED AREAS AS SOON AS POSSIBLE (WITHIN A MAXIMUM OF 14 DAYS).
4. TIME ACTIVITIES TO LIMIT IMPACT FROM SEASONAL CLIMATE CHANGES OR WEATHER EVENTS.
5. DELAY CONSTRUCTION OF INFILTRATION MEASURES UNTIL THE END OF THE CONSTRUCTION PROJECT, WHEN UPSTREAM DRAINAGE AREAS HAVE BEEN STABILIZED.
6. DO NOT REMOVE TEMPORARY PERIMETER CONTROLS UNTIL AFTER ALL UPSTREAM AREAS ARE FINAL STABILIZED.

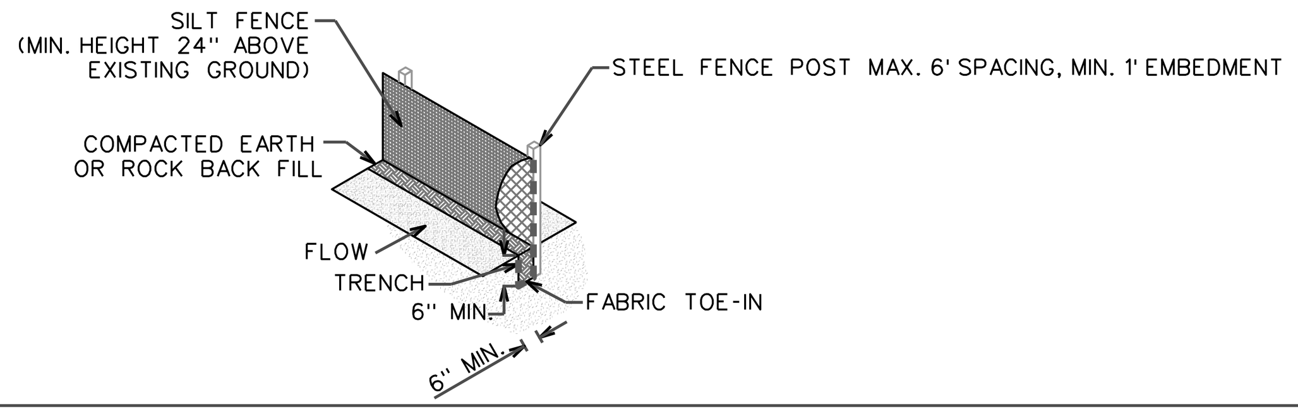
IN CASE OF SPILLS AND RELEASES (OF REPORTABLE QUANTITIES) THE FOLLOWING STEPS SHALL BE TAKEN

1. NOTIFY THE NATIONAL RESPONSE CENTER (800) 424-8802 OR (202) 426-2675 AS SOON AS YOU HAVE KNOWLEDGE OF THE SPILL.
2. THE SWPPP MUST BE MODIFIED WITHIN 14 DAYS TO PROVIDE A DESCRIPTION OF THE RELEASE, THE CIRCUMSTANCES LEADING TO THE RELEASE AND THE DATE OF THE RELEASE.

ALLOWABLE NON-STORM WATER DISCHARGE

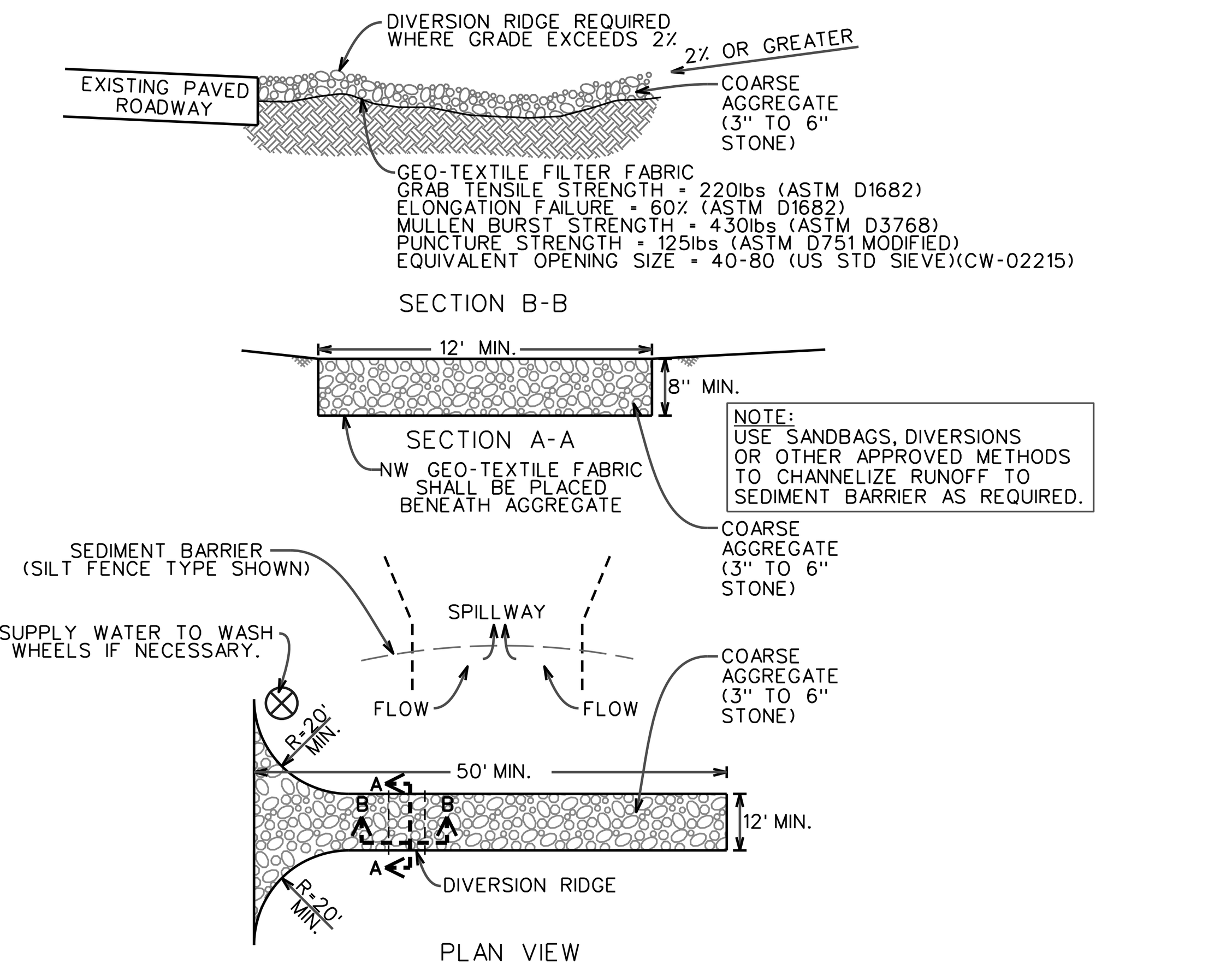
- -DISCHARGES FROM FIRE FIGHTING ACTIVITIES.
- -FIRE HYDRANT FLUSHINGS.
- -WATER USED TO WASH VEHICLES OR CONTROL DUST.
- -POTABLE WATER SOURCES (INCLUDING WATERLINE FLUSHINGS CONTAINING LESS THAN 1000 GALLONS).
- -UNCONTAMINATED GROUND WATER (INCLUDING DEWATERING GROUNDWATER INFILTRATION).
- -FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS SUCH AS SOLVENTS.
- -SPRINGS, RIPARIAN HABITATS, WETLANDS AND UNCONTAMINATED GROUNDWATER.
- -IRRIGATION WATER.
- -EXTERIOR BUILDING WASH DOWN WITHOUT DETERGENTS.
- -PAVEMENT WASH WATERS WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED (UNLESS ALL SPILL MATERIAL HAS BEEN REMOVED) AND WHERE DETERGENTS ARE NOT USED.
- -AIR CONDITIONING CONDENSATE.

SILT FENCE GENERAL NOTES:
1. STEEL POST WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED (E.G. PAVEMENT), WEIGHT FABRIC FLAP WITH ROCK ON THE UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF SIX INCHES DEEP AND SIX INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACK FILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IN TURN IS ATTACHED TO THE STEEL POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS MEET.
5. INSPECTION SHALL BE MADE EVERY WEEK AND AFTER EACH 1/2" RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
8. INSTALL SILT FENCE DOWNSTREAM FROM ANY AREAS WHERE FILL IS TO BE PLACED.
9. ALL SILT FENCE IS TO BE PLACED PARALLEL TO GROUND CONTOURS SO THAT THE FENCE DOES NOT CHANNELIZE THE WATER.
10. SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0° TO 120°



SILT FENCE DETAIL
N.T.S.

STABILIZED CONSTRUCTION ENTRANCE GENERAL NOTES:
1. STONE SHALL BE 3 TO 6 INCH DIAMETER CRUSHED ROCK OR ACCEPTABLE CRUSHED PORTLAND CEMENT CONCRETE.
2. LENGTH SHALL BE SHOWN ON PLANS WITH A MINIMUM LENGTH OF 30 FEET FOR LOTS WHICH ARE LESS THAN 150 FEET FROM EDGE OF PAVEMENT. THE MINIMUM DEPTH IN ALL OTHER CASES SHALL BE 50 FEET.
3. THE THICKNESS SHALL NOT BE LESS THAN 8 INCHES.
4. THE WIDTH SHALL BE NO LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED IMMEDIATELY.
7. THE ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.



STABILIZED CONSTRUCTION ENTRANCE DETAIL
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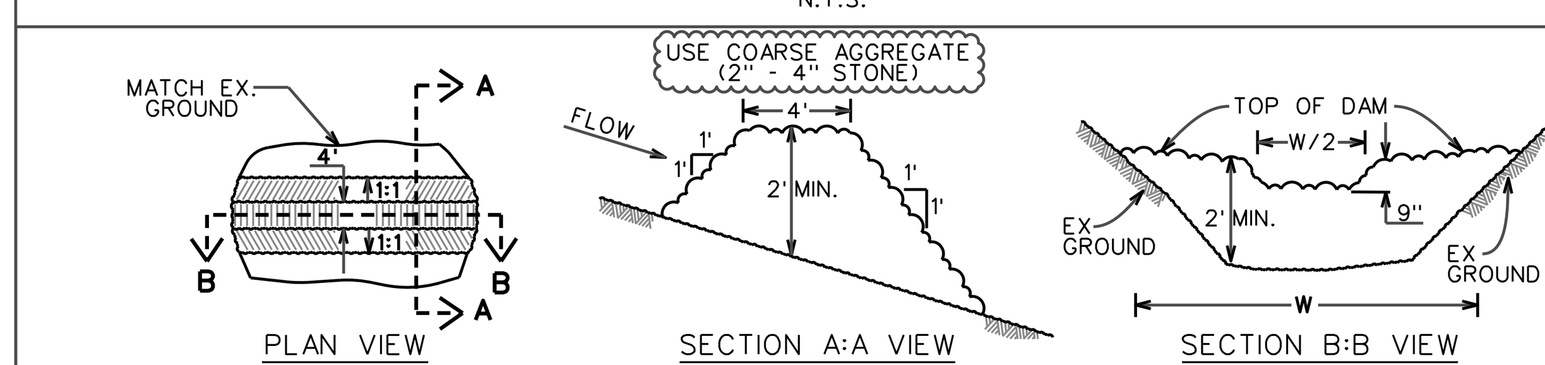

ROCK DAM DETAIL
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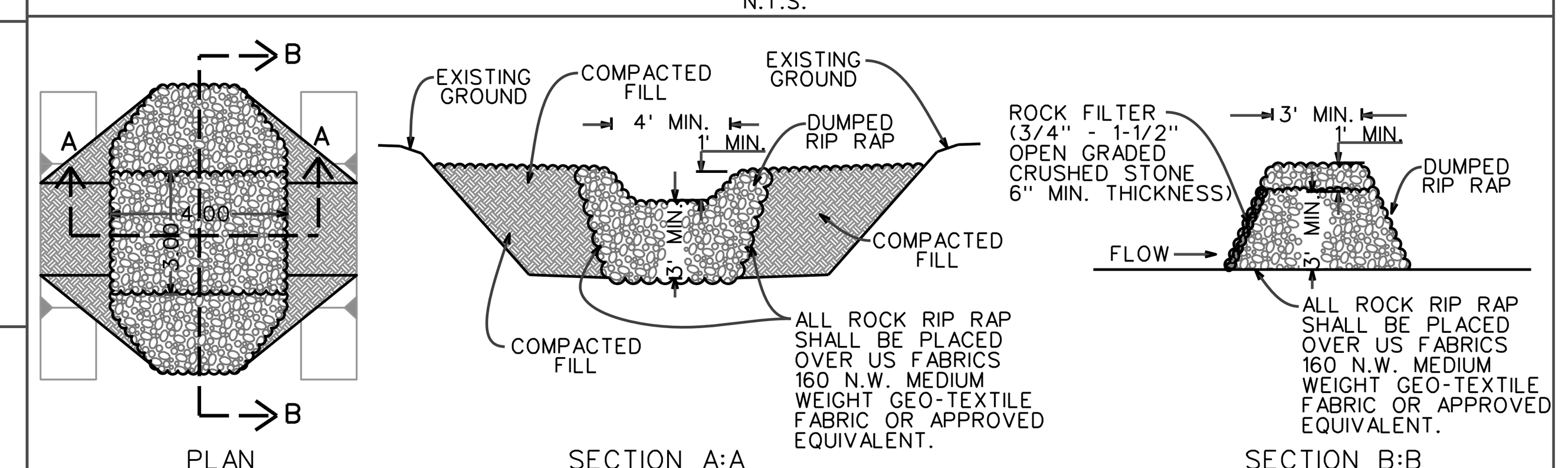

RIP RAP SEDIMENTATION BASIN OUTLET
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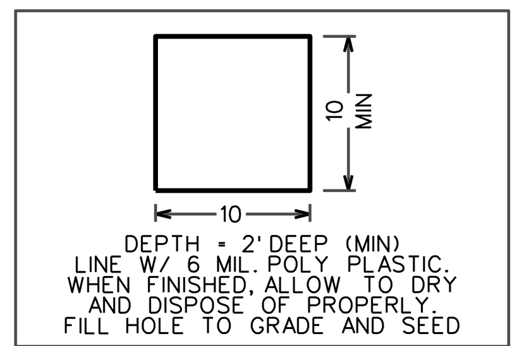

CONCRETE WASH AREA
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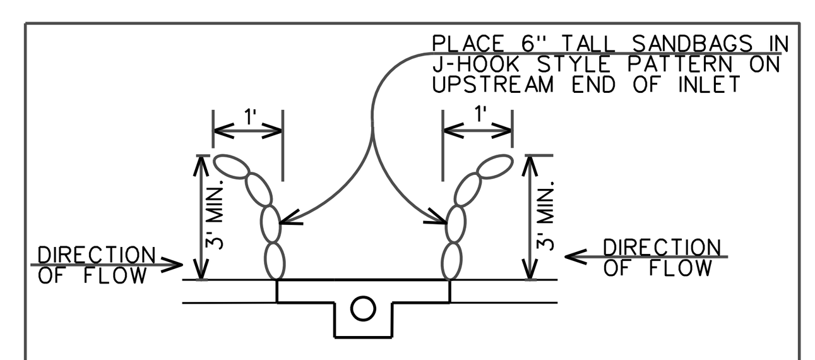

INLET SANDBAG DETAIL
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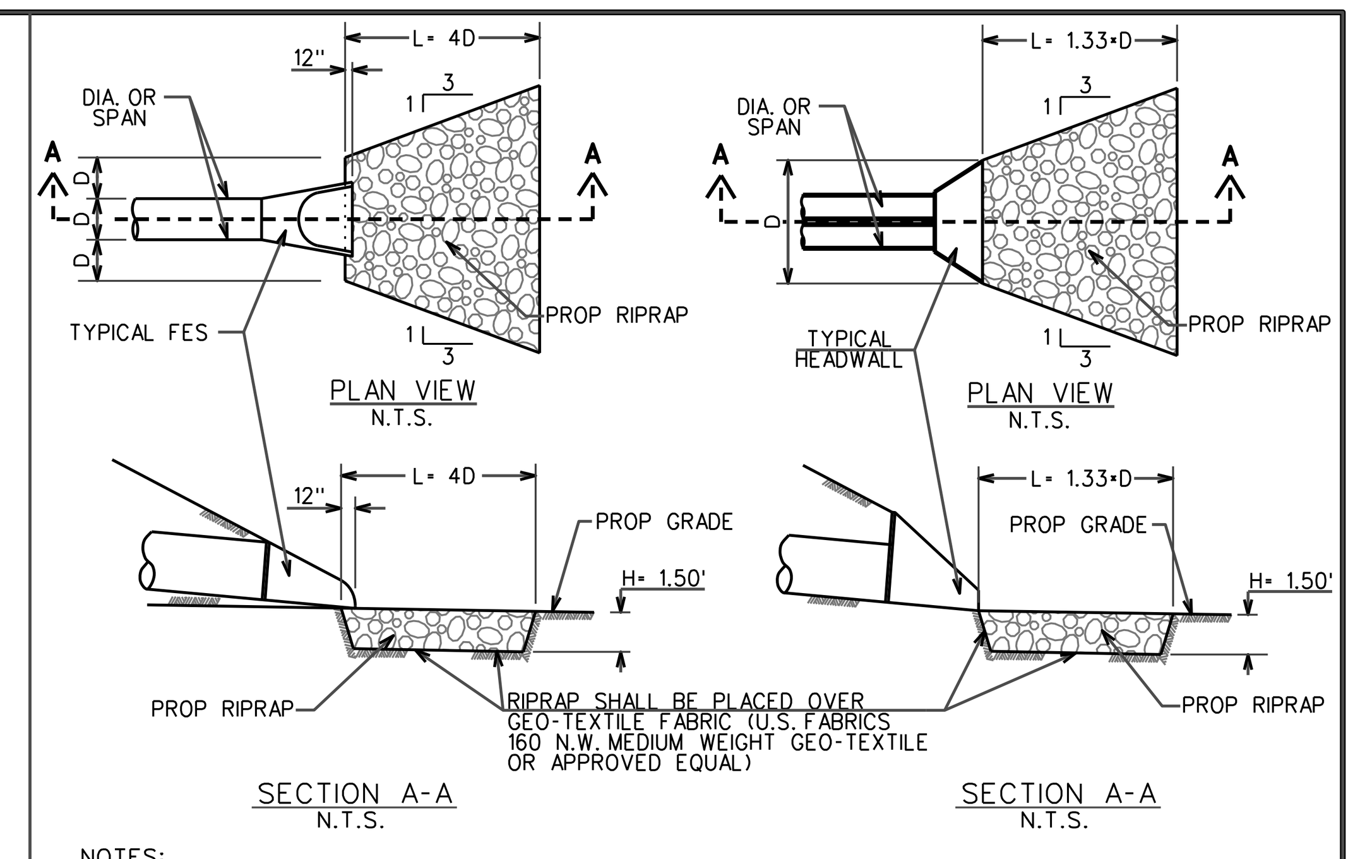
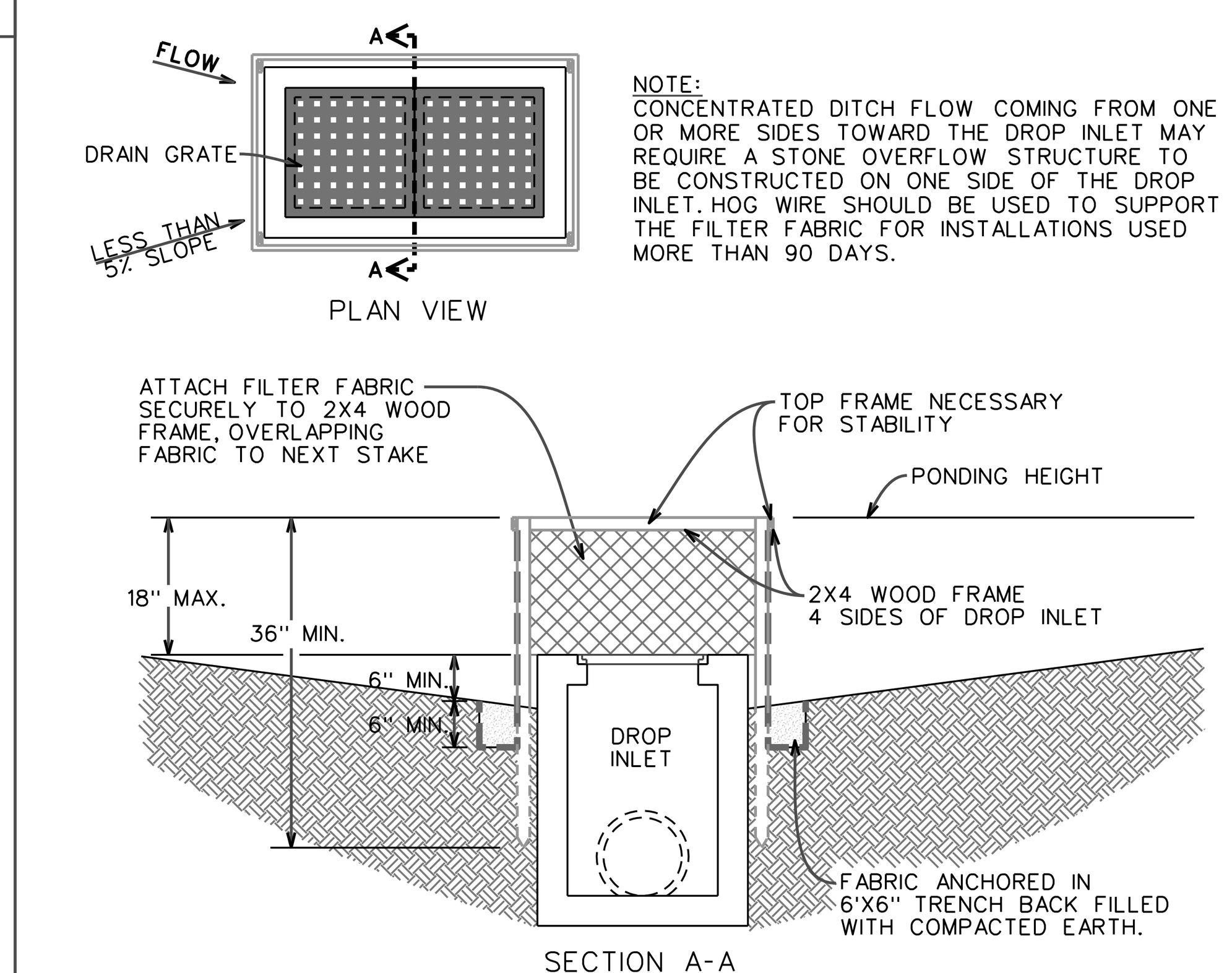


NOTES:
1. EXCAVATION FOR PLACEMENT OF RIPRAP WILL NOT BE MEASURED FOR PAYMENT.
2. IF CULVERT IS ARCH OR ELLIPTICAL PIPE USE EQUIVALENT SIZE CIRCULAR PIPE FOR 'D'.
3. THE MAXIMUM RIPRAP PIECE SIZE SHALL NOT BE GREATER THAN 18" IN ANY DIMENSION AND APPROX. 50% OF THE MATERIAL SHALL CONSIST OF PIECES WEIGHING 35 POUNDS OR MORE.

ROCK RIP-RAP DETAIL FOR TYPICAL FES AND HEADWALL
N.T.S.

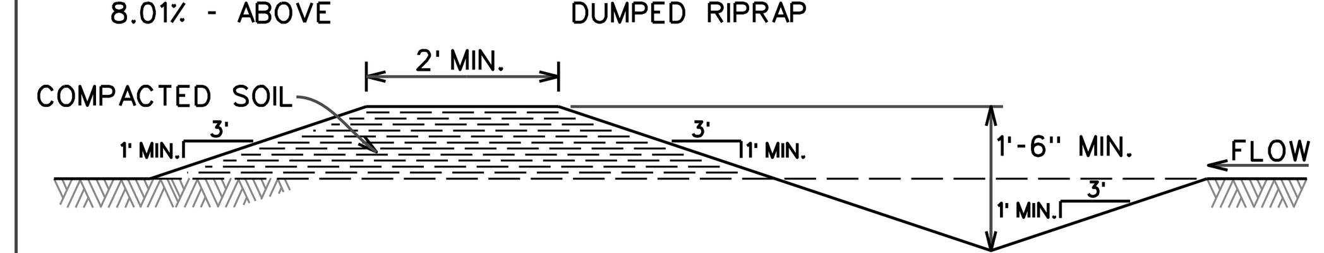


NOTE:
CONCENTRATED DITCH FLOW COMING FROM ONE OR MORE SIDES TOWARD THE DROP INLET MAY REQUIRE A STONE OVERFLOW STRUCTURE TO BE CONSTRUCTED ON ONE SIDE OF THE DROP INLET. HOG WIRE SHOULD BE USED TO SUPPORT THE FILTER FABRIC FOR INSTALLATIONS USED MORE THAN 90 DAYS.

DROP INLET PROTECTION
N.T.S.

NOTES:
- -LONGITUDINAL SLOPE OF DITCH SHALL BE 1.00% MINIMUM.
- -UNLESS NOTED OTHERWISE, INSTALL ROCK OR SAND BAG CHECKDAM 25' UPSTREAM OF DIVERSION DITCH OUTLET.
- -STABILIZE CHANNEL BASED ON SLOPE AS LISTED BELOW:

CHANNEL GRADE	TYPE OF TREATMENT
1.00% - 5.00%	SEED AND MULCH
5.01% - 8.00%	SEED AND EROSION CONTROL MATTIING
8.01% - ABOVE	DUMPED RIPRAP



DIVERSION DITCH
N.T.S.

ANNOTATION LEGEND
- EX. - EXISTING
- DIA. - DIAMETER
- MIL. - MILLIMETER
- MIN. - MINIMUM
- N.T.S. - NOT TO SCALE
- N.W. - NON WOVEN
- PROP - PROPOSED
- R - RADIUS
- W/ - WITH

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REVISION		
12/18/20	PER CITY COMMENTS	
01/07/21	PER CITY COMMENTS	

SEDIMENT AND EROSION CONTROL DETAILS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 7731 RONALD HOMEYER 1/7/21