

CITY OF TONTITOWN PLANNING OFFICE

201 E. Henri de Tonti Blvd. 479-361-2700 planning@tontitownar.gov

Meeting: **September**, **24**, **2019** Project: **Timmons Oil Pre-LSD**

Planner: Rick Barry

AGENDA ITEM

Н

PRELIMINARY LARGE-SCALE DEVELOPMENT PLAN APPROVAL REQUEST

North of E. Henri de Tonti Blvd Parcel # 830-37683-000

SUMMARY: Timmons Oil is requesting Preliminary Large-Scale Development (LSD) approval for 10,000 SF of building storage space, as well as outdoor storage over a gravel lot to the north of the proposed building structure. This proposal is on a 3.70 acre lot.

CURRENT ZONING: <u>C-2</u> General Commercial **CITY WARD:** 2- Arthur Penzo, Larry Ardemagni

FLOODPLAIN: No

INFRASTRUCTURE SERVICE AREAS (not a guarantee of service availability):

Water: Tontitown Water, existing 6" line

Electric: Ozarks Electric

Sewer/Septic: Tontitown Sewer

Phone: AT&T

Natural Gas: SourceGas Cable: Cox Communications School District: Springdale

PROJECT SYNOPSIS:

Timmons Oil is requesting Preliminary Large-Scale Development (LSD) approval for 10,000 SF of building storage space, as well as outdoor storage over a gravel lot to the north of the proposed building structure. This proposal is on a 3.70 acre lot.

TECHNICAL INFORMATION:

Utilities:

Water: Tontitown Water-According to the Water System information, there is an existing 6-

inch water line along W. Henri de Tonti.

Electric: Ozarks Electric-No comments were received from OECC.

Sewer/Septic: Sewer- this project proposes to connect to the City of Tontitown sewer

system. The connection must be approved prior to construction.

Phone: AT&T- No comments were received from ATT.

Natural Gas: SourceGas- No comments were received from SG. **Cable:** Cox Communications- No comments were received from Cox.

It is the applicant's responsibility to coordinate any additional utility easements or connections as needed to service their property.

School District: Springdale school district was notified of this project, but submitted no comments.

Stormwater Pollution Prevention Plan (SWPPP):

The applicant has provided a grading a drainage plan. A SWPPP must be completed and posted on site prior to construction.

Police:

The Tontitown Chief of Police has no concerns with this project.

Fire:

There are no existing fire hydrants within 500' of the property line of this proposal. The nearest offsite hydrant is at the Jack Willis property, approximately 950 feet away, with a fire flow of 1203 gpm.

The proposed access driveway for this project is 52 feet wide. All interior drives must meet the required compaction rating to support emergency vehicles.

Drainage:

There is a detention pond proposed for this site. The applicant's engineer has submitted a drainage report for review.

The City Engineer has submitted comments addressing the resubmitted plans and drainage report. He is concerned about the direction of the run off from the proposed buildings and the manner in which the runoff will be directed. He has stated that all water coming off of the roof of each building must be directed to the detention pond on site prior to being released. Additional comments are noted and have been provided to the applicant's engineer. All remaining comments from the City Engineer must be addressed prior to Construction Plan approval.

Roads:

This project has access on W. Henri de Tonti, which is an Arkansas State Highway. Approval for the entrance drive will be required by the Arkansas Department of Transportation (ARDOT).

Site visibility appears to be adequate from the proposed entrance location.

As stated above, all interior drives must meet the required compaction rating to support emergency vehicles.

STAFF RECOMMENDATION: There are some details that remain to be addressed at the Construction Plan phase of plan review, but nothing that should significantly impact the overall design.

Therefore, staff recommends approval of Timmons Oil Preliminary Large-Scale Development with conditions.

CONDITIONS RECOMMENDED FOR APPROVAL:

- 1. It is the applicant's responsibility to coordinate any additional utility easements or connections as needed to service their property.
- 2. The SWPPP must be completed and posted on site prior to construction.
- 3. All interior drives must meet the required compaction rating to support emergency vehicles.
- 4. Approval for the entrance drive will be required by the Arkansas Department of Transportation (ARDOT).
- 5. Correct all comments from the City Engineer prior to Construction Plan approval.
- 6. Correct all comments from the Fire Marshal prior to Construction Plan approval.
- 7. The applicant must apply for all required permits prior to construction.



CERTIFICATE OF APPROVAL

LOCAL UTILITY CONTACTS CITY OF TONTITOWN PLANNING AND ZONING DEPARTMENT 201 E. HENRI DE TONTI BLVD. P.O. BOX 305 TONTITOWN, AR 72770

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

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: WAYNE MEEK

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

(479)549-7834

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

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

TONTITOWN PLANNING COMMISSION CHAIRMAN

MAYOR, CITY OF TONTITOWN

RECORDER/TREASURER CITY OF TONTITOWN

DATE OF EXECUTION: 07-28-15

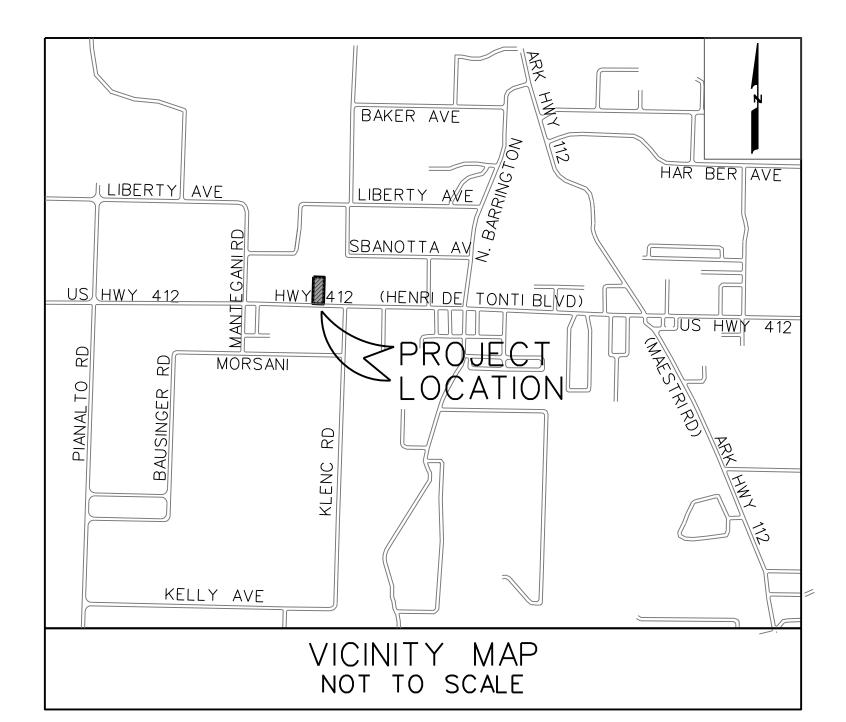
REGISTERED LAND SURVEYOR

STATE OF ARKANSAS REGISTRATION NO.

DEVELOPMENT PLANS FOR

TIMMONS OIL COMPANY INC.

TONTITOWN, ARKANSAS



GENERAL NOTES:

1227

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.

CERTIFICATE OF PRELIMINARY SURVEY ACCURACY

ACTUALLY EXIST AND THEIR LOCATION, SIZE, TYPE AND MATERIAL ARE CORRECTLY SHOWN

REPRESENTS A BOUNDARY SURVEY MADE BY ME AND ALL MONUMENTS SHOWN HEREON

- 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
- THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER. 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING IN ACCORDANCE WITH ALL

5. IN THE EVENT THAT THERE IS A QUESTION WITH REGARD TO THE DESIGN INTENT,

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.

PREPARED FOR TIMMONS OIL COMPANY INC.

13003 E. ADMIRAL PL TULSA, OK 74116 (918) 437-6457

701 S. MT. OLIVE, P.O. BOX 12 **ENGINEERING** E-MAIL: mail@civilengineeringss.com

SILOAM SPRINGS, ARKANSAS 72761

(479)524-9956 OFC - (479)524-4747 FAX

APPROVAL: DATE: CITY OF TONTITOWN PLANNING COMMISSION CITY OF TONTITOWN WATER UTILITIES SOUTHWESTERN BELL OZARKS ELECTRIC

INDEX

ARKANSAS DEPARTMENT OF HEALTH

BLACK HILLS ENERGY

COX COMMUNICATIONS

- TITLE PAGE
- SITE PLAN
- DIMENSION, GRADING & SEDIMENT AND EROSION CONTROL PLAN
- LANDSCAPE PLAN

DETAILS

EROSION AND SEDIMENT CONTROL DETAILS

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: 07-28-15

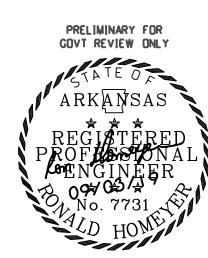
STATE OF ARKANSAS REGISTRATION NO.

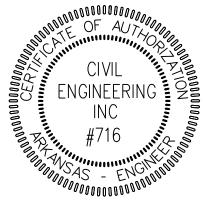
Know what's below.

Call before you dig.

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

These drawings and the design ideas contained herein are proprietary information and are the exclusive property of Civil Engineering, Inc. and are protected by copyright. The reproduction of these drawings or use of these drawings, or the ideas incorporated herein, in whole or in part, by anyone for any other project or purpose is strictly prohibited without advanced written consent of Civil Engineering, Inc. Furthermore, no electronic representations of these drawings, in whole or in part, may be posted for private or public viewing without the advanced written consent of Civil Engineering, Inc. ©







AUGUST 06, 2019 REVISED: SEPTEMBER 17, 2019

A PART OF THE NORTHEAST QUARTER OF SECTION 02, TOWNSHIP 17 NORTH, RANGE 31 WEST, WASHINGTON COUNTY, ARKANSAS. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTH RIGHT OF WAY OF U.S. HIGHWAY 412 SAID POINT BEING N 86°55'39" W 542.00' AND N 03°04'21" E 49.49' FROM THE SE CORNER OF THE S 1/2 OF THE NE 1/4 OF SAID SECTION 02; THENCE N 87°16'31" W 260.73'; THENCE N 03°04'21" E 619.16'; THENCE S 86°55'39" E 260.73'; THENCE S 03°04'21" W 617.58' TO THE POINT OF BEGINNING AND CONTAINING 3.70 ACRES. PROPERTY IS SUBJECT TO ANY EASEMENT OF RECORD.

NOTES:

- 1. THIS SURVEY IS VALID ONLY IF THE DRAWING INCLUDES THE SEAL AND SIGNATURE OF THE SURVEYOR.
- 2. BASIS OF BEARINGS: ARKANSAS STATE PLANE COORDINATES NORTH ZONE AS PER GPS OBSERVATION.
- 3. THIS SURVEY MEETS CURRENT MINIMUM STANDARDS FOR PROPERTY BOUNDARY SURVEYS AND PLATS FOR THE STATE OF ARKANSAS.
- 4. NO CURRENT ABSTRACT OR TITLE OPINION WAS FURNISHED TO THE SURVEYOR AT THE TIME OF THIS SURVEY. THEREFORE ALL EASEMENTS, RIGHTS-OF-WAY, OR RESTRICTIONS, OF RECORD, MAY NOT BE SHOWN HEREON.
- FLOOD CERTIFICATION:

THIS PROPERTY IS NOT LOCATED WITHIN ANY PRESENTLY

ESTABLISHED 100-YEAR FLOOD PLAIN, AS DETERMINED

THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP FOR WASHINGTON COUNTY, ARKANSAS AND INCORPORATED AREAS. MAP NUMBER: 05143C0065F J. EFFECTIVE DATE: MAY 16, 2008.

SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY THAT THE HEREON PLATTED AND DESCRIBED SURVEY WAS COMPLETED AND MONUMENTS WERE FOUND OR SET AS SHOWN ON JULY 18, 2019.

ASPHALT PAVEMENT

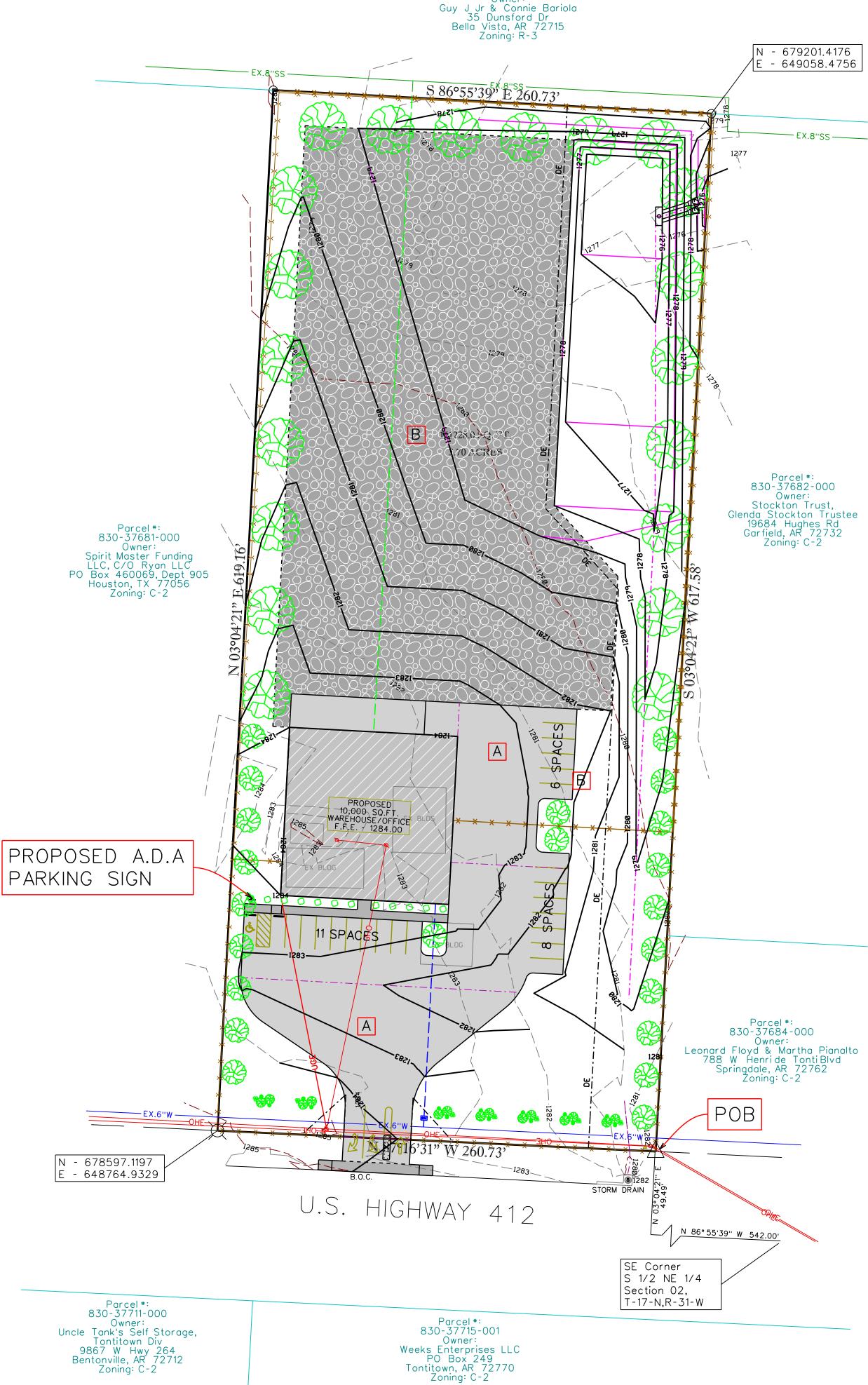
3" HMAC SURFACE COARSE /// 6" AGGREGATE BASE 6" AGGREGATE DAGE COMPACTED SUBGRADE (8" MIN.) MIN. CBR-8 TYPICAL PARKING LOT

PAVEMENT SECTION N.T.S.

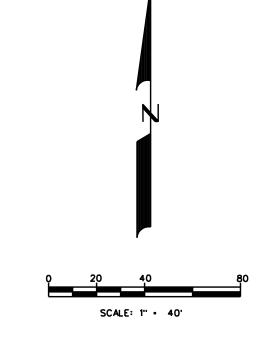
GRAVEL PAVEMENT

🥳 6'' Aggregate Base 🕏 Compacted Subgrade (18'' min.) Min. CBR-8

TYPICAL GRAVEL PAVEMENT SECTION N.T.S.



Parcel *: 830-37676-005



PARKING SPACES ANALYSIS: TOTAL BUILDING AREA - 10,000 SF

PROPOSED BUILDING USE: OFFICE/WAREHOUSE 1,200 S.F. OFFICE/10,000 S.F. STORAGE

-PARKING REQ'D - 1 SPACE PER 250 SF (OFFICE=5 SPACES) -PARKING REQ'D - 1 SPACE PER 500 SF (RETAIL/SERVICE, FURNITURE AND BULKY GOODS=20 SPACES)

TOTAL PARKING REQUIRED - 25 SPACES

TOTAL PARKING PROVIDED (INCLUDING HANDICAP)

- 25 SPACES TOTAL HANDICAP PARKING REQUIRED

- 1 SPACE TOTAL HANDICAP PARKING PROVIDED - 1 SPACE

CURRENT ZONING: C-2

PROPOSED BUILDING USE: OFFICE/WAREHOUSE

FLOOR TO AREA RATIO (FAR): BUILDING AREA - 10,000 SF LOT AREA - 161,228 SF FAR RATIO REQUIRED - 0.60 MAX ACTUAL FAR RATIO - 0.062

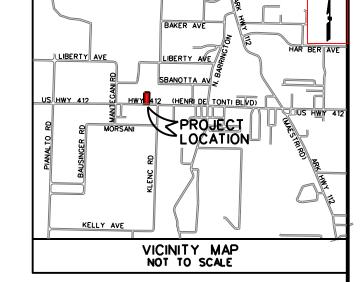
IMPERVIOUS AREA - 94,974 SF LOT AREA - 161,228 SF LOT COVERAGE REQUIRED - 85% MAX ACTUAL LOT COVERAGE - 58.9%

TOTAL GREEN SPACE - 66,254 SF LOT AREA - 161,228 SF GREENSPACE REQUIRED - 15% MIN ACTUAL GREENSPACE - 41.09%

GREENSPACE INTERIOR TO PARKING: INTERIOR GREENSPACE - 926 SF GROSS PARKING AREA - 12,275 SF % INTERIOR GREENSPACE REQUIRED - 8.0% MIN // INTERIOR GREENSPACE ACTUAL - 7.54/

TONTITOWN C-2 ZONING:

FRONT (WITH PARKING IN FRONT) FRONT (WITHOUT PARKING IN FRONT) 20' SIDE (ADJACENT TO NON-RESIDENTIAL) SIDE (ADJACENT TO RESIDENTIAL) REAR (ADJACENT TO NON-RESIDENTIAL) 20' REAR (ADJACENT TO RESIDENTIAL) 30' (ALL SETBACKS SHALL BE UTILITY EASEMENTS)



LEGEND

FOUND IRON PIN

FOUND PIPE

FENCE CORNER ——— EXISTING INDEX CONTOUR (5')

——— EXISTING INTERMEDIATE CONTOUR (1')

PROPOSED INDEX CONTOUR (5') PROPOSED INTERMEDIATE CONTOUR (1')

EXISTING FENCE LINE

-OHE- EX OVER HEAD ELECTRIC LINE

— w — EX WATER LINE

-EX SS- EX SANITARY SEWER LINE

PROPOSED BUILDING

PROPOSED ASPHALT PAVING PROPOSED GRAVEL PAVING

PROPOSED CONCRETE SIDEWALK

PROPOSED A.D.A. PARKING SIGN PROPOSED PARKING WHEEL STOP

EX WATER METER

EX SANITARY SEWER MANHOLE EX SANITARY SEWER CLEANOUT

EX NATURAL GAS SIGN/METER EX POWER/UTILITY POLE

EX UTILITY POLE ANCHOR EXISTING TREE

PROPOSED TREE

⊕ EXISTING 'TBM'

SITE INFORMATION: APPROXIMATE AREA: 3.70 ACRES PARCEL NO: 830-37683-000 CURRENT ZONING: C-2 <u>OWNER/DEVELOPER:</u> TIMMONS OIL COMPANY INC. 13003 E. ADMIRAL PL TULSA, OK 74116 (918) 437-6457

PROJECT ADDRESS: 830 W. HENRI DE TONTI BLVD. TONTITOWN, AR 72770

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

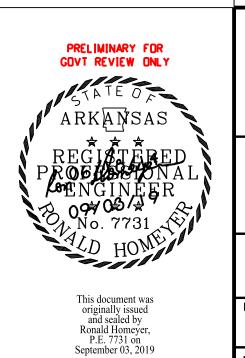
RDH 09/17/19

BY DATE

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





LARGE SCALE DEVELOPMENT PLANS FOR TIMMONS OIL COMPANY INC. TONTITOWN, ARKANSAS

SITE PLAN

REVISIONS

PER CITY COMMENTS

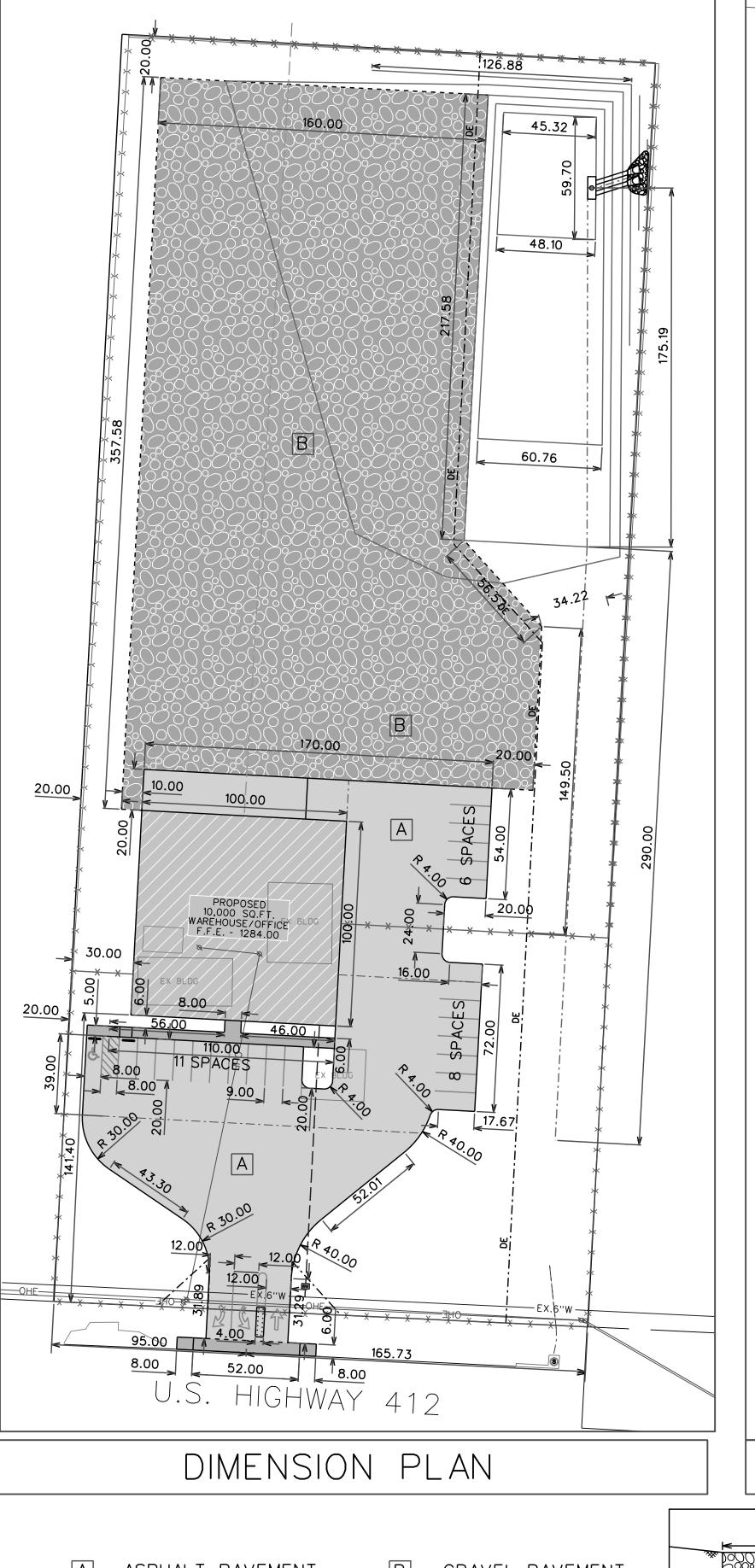
ENGINEERING

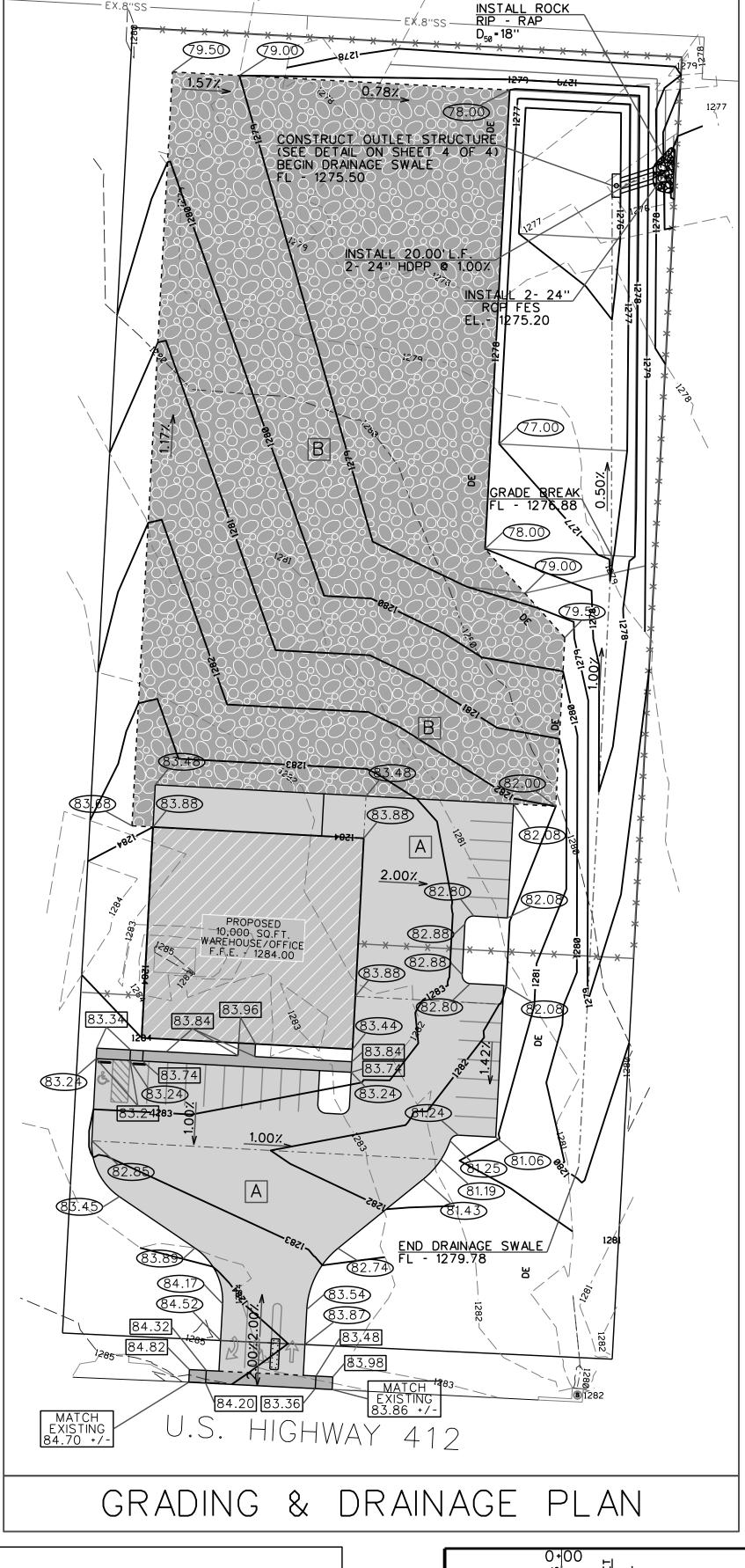
NO.

DRAWN BY DESIGNED BY SHEET NO. CHECKED BY JTM RDH JOB NUMBER SCALE: 1"-40' H 2 OF 4 1''• --' V SEPTEMBER 2019

SURVEY PROVIDED BY: JAMES SURVEYING PO Box 617 Gentry, AR 72734 (479) 736-8416

Know what's below.





WAREHOUSE OF FICE U.S. HIGHWAY 412 EROSION CONTROL PLAN

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

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

PLAN VIEW

SECTION A:A VIEW

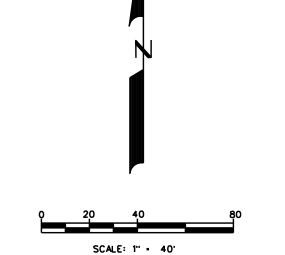
SECTION B:B VIEW

ROCK DAM DETAIL N.T.S.

CONCRETE WASH AREA

MATCH EX. GROUND

ĞROUND



LEGEND

PROP. TOP OF PAVEMENT/GRAVEL (+1200)

---- PROP. TOP OF CURB/SIDEWALK (+1200)

——— EXISTING INDEX CONTOUR (5')
——— EXISTING INTERMEDIATE CONTOUR (1')
——— PROPOSED INDEX CONTOUR (5')

PROPOSED INTERMEDIATE CONTOUR (1')

EXISTING FENCE LINE

OHE— EX OVER HEAD ELECTRIC LINE

— w — EX WATER LINE

-EX SS- EX SANITARY SEWER LINE
PROPOSED BUILDING

PROPOSED ASPHALT PAVING
PROPOSED GRAVEL PAVING

PROPOSED CONCRETE SIDEWALK

EX FIRE HYDRANT ASSEMBLY

EX WATER VALVE

EX WATER METER

EX SANITARY SEWER MANHOLE

EX SANITARY SEWER CLEANOUT

EX NATURAL GAS SIGN/METER

EX POWER/UTILITY POLE

EX UTILITY POLE ANCHOR

PROPOSED TREE

DEPTH = 2' DEEP
LINE W/ 6 MIL. POLY PLASTIC.
WHEN FINISHED, ALLOW TO DRY
AND DISPOSE OF PROPERLY.
FILL HOLE TO GRADE AND SEED

EXISTING 'TBM'

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

SEE ARCHITECTURAL PLANS
FOR BUILDING DIMENSIONS

CONTRACTOR SHALL NOT DEVIATE FROM OR MAKE ANY CHANGES TO APPROVED PROJECT DESIGN WITHOUT WRITTEN APPROVAL OF ENGINEER. Know what's below.

Call before you dig.

PER CITY COMMENTS RDH 09/17/19
. REVISIONS BY DATE

A ASPHALT PAVEMENT

3" HMAC SURFACE COARSE

6" AGGREGATE BASE

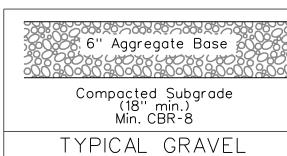
COMPACTED SUBGRADE

(8" MIN.)

MIN. CBR-8

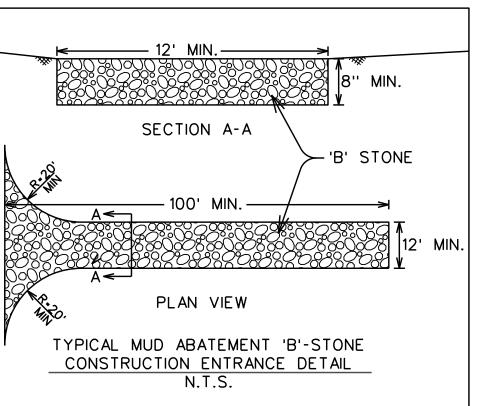
TYPICAL PARKING LOT PAVEMENT SECTION N.T.S.

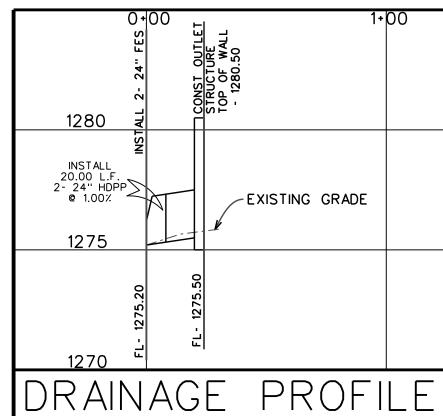
GRAVEL PAVEMENT



TYPICAL GRAVEL
PAVEMENT SECTION

N.T.S.



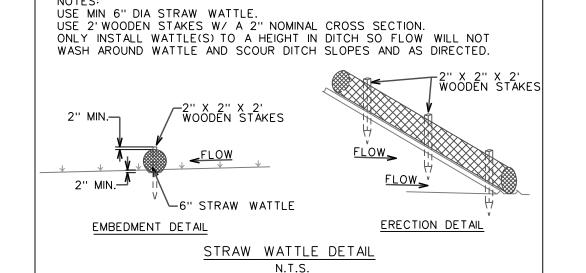


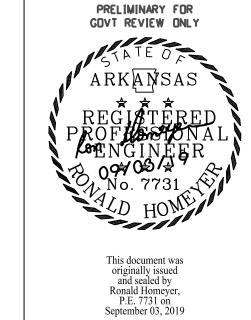
DEMOLITION AND EROSION CONTROL PLAN NOTES:

① INSTALL ROCK CONSTRUCTION ENTRANCE/EXIT (SEE DETAIL THIS SHEET)
② PROPOSED CONCRETE WASH AREA (SEE DETAIL THIS SHEET)
③ INSTALL STRAW WATTLES (SEE DETAIL THIS SHEET)
④ INSTALL ROCK DAM (SEE DETAIL THIS SHEET)
⑤ REMOVE EXISTING TREE

(6) DEMOLISH AND REMOVE EXISTING BUILDING, CONCRETE AND BUILDING FOUNDATION (7) DEMOLISH AND REMOVE ABANDON DRIVEWAY (REPLACE W/ CURB AND GUTTER)

(8) SAW CUT A NEAT LINE IN CONCRETE ALONG PROPERTY LINE





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

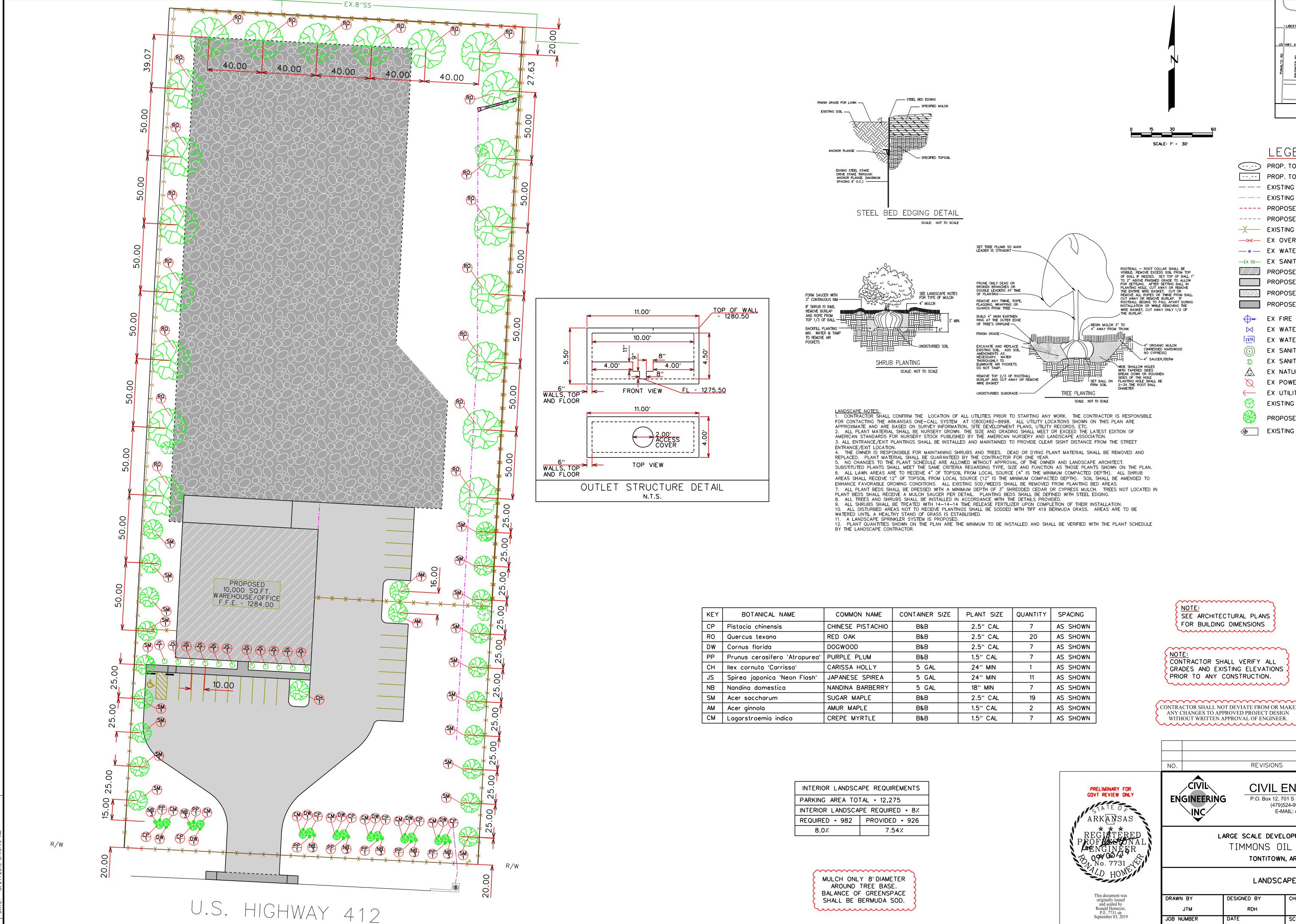
TIMMONS OIL COMPANY INC.
TONTITOWN, ARKANSAS

DIMENSION, GRADING AND EROSION CONTROL PLAN

LARGE SCALE DEVELOPMENT PLANS FOR

| DRAWN BY | DESIGNED BY | CHECKED BY | SHI | EET | NO. | |
|------------|----------------|-----------------|-----|-----|-----|--|
| JTM | RDH | RDH | | | | |
| JOB NUMBER | DATE | SCALE: 1"-40' H | | | | |
| 1919 | SEPTEMBER 2019 | 1"- 4' V | 3 | OF | 4 | |

LE: 1919-04-Dimension Grading and EC Plan, dgn F.FILE: 1919 al.dgn EW: 8/6/2019 8:32:10 AM PF:



VICINITY MAP

LEGEND

PROP. TOP OF PAVEMENT/GRAVEL (+1200) PROP. TOP OF SIDEWALK (+1200)

——— EXISTING INDEX CONTOUR (5') ——— EXISTING INTERMEDIATE CONTOUR (1')

---- PROPOSED INDEX CONTOUR (5') ---- PROPOSED INTERMEDIATE CONTOUR (1')

EXISTING FENCE LINE —OHE— EX OVER HEAD ELECTRIC LINE

— w — EX WATER LINE

-EX SS- EX SANITARY SEWER LINE PROPOSED BUILDING

PROPOSED ASPHALT PAVING PROPOSED GRAVEL PAVING PROPOSED CONCRETE SIDEWALK

EX FIRE HYDRANT ASSEMBLY

EX WATER VALVE

EX WATER METER

EX SANITARY SEWER MANHOLE

EX SANITARY SEWER CLEANOUT EX NATURAL GAS SIGN/METER

> EX POWER/UTILITY POLE EX UTILITY POLE ANCHOR

EXISTING TREE

PROPOSED TREE

EXISTING 'TBM'

SEE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS

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

Know what's below. Call before you dig.

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

> REVISIONS BY DATE

> > 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 TIMMONS OIL COMPANY INC. TONTITOWN, ARKANSAS

LANDSCAPE PLAN

| WN BY | DESIGNED BY | CHECKED BY | SHEET NO |
|--------|----------------|-----------------|----------|
| JTM | RDH | RDH | |
| NUMBER | DATE | SCALE: 1"-30' H | 1 |
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SOLID WASTE MANAGEMENT

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.

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

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 -PAPER AND CARDBOARD CONTAINERS -PLASTIC PACKAGING -STYROFOAM PACKING AND FORMS

-POLICE AREA DAILY FOR LITTER AND DEBRIS.

-ENFORCE SOLID WASTE HANDLING AND STORAGE PROCEDURES.

-WOOD PALLETS AND CUTTINGS

-PIPE AND ELECTRICAL CUTTINGS

-SHINGLE CUTTING AND WASTE

-CONCRETE, BRICK, AND MORTAR WASTE -DEMOLITION WASTE -MISCELLANEOUS CUTTINGS AND WASTE -INSULATION MATERIALS (NON HAZARDOUS) -SHEATHING CUTTINGS AND WASTE -GYPSUM BOARD CUTTINGS AND WASTE

-STEEL (CUTTINGS, NAILS RUST RESIDUE)

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.

-ROOFING TAR

<u>DISPOSAL PROCEDURES</u>:
-IF FEASIBLE, SEGREGATE RECYCLABLE WASTES FROM NON-RECYCLABLE WASTE MATERIALS AND DISPOSE OF PROPERI Y -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

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

-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

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.

<u>RECOMMENDED DISPOSAL PRACTICES:</u>
- 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

DEMOLITION PRACTICES: MONITOR WEATHER AND WIND DIRECTION TO ENSURE CONCRETE DUST IS NOT ENTERING DRAINAGE STRUCTURES AND AND ADDRESS OF SEDIMENT DETENTION 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.

NECESSARY

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

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 SEDIMENTATION BASIN AND OUTLET PIPE ARE TO BE CONSTRUCTED PRIOR TO ANY OTHER CONSTRUCTION W/IN DRAINAGE BASIN
- AREA DRAINING TO DETENTION BASIN = 69 ACRES SEDIMENTATION BASIN REQUIRED VOLUME = 5.7 ACRE-FT

EROSION CONTROL NOTES

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. ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE.

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED CONCURRENT WITH CLEARING OPERATIONS,

AND SHALL BE FUNCTIONAL PRIOR TO EARTH MOVING OPERATIONS.
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.
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

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.

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

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.

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 CONTAMINANT PERMANENT EROSION CONTROL MEASURES SHALL BE INITIATED WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING. 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

NGINEER ON A MONTHLY BASIS. THE COST FOR THE RAIN GAUGE IS TO BE INCLUDED IN THE UNIT BID PRICES FOR 12. INSPECTION OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DONE BEFORE ANTICIPATED STORM EVENTS

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.

HAN 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

INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR. 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,

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. WETLAND AREAS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS

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

POLLUTION CONTROL GENERAL NOTES:

THIS PLAN HAS BEEN PREPARED TO PROVIDE MEANS TO PREVENT OR MINIMIZE POLLUTION OF STORM WATER THIS PROJECT CONSIST OF THE DEVELOPMENT OF 129 LOTS ON A 78.23 ACRE TRACT FOR A

RESIDENTIAL SUBDIVISION USE. THE CONSTRUCTION ACTIVITY INCLUDED IN THIS PLAN WILL INCLUDE

A. CLEARING AND GRUBBING B. STOCK PILING

WILL PREVAIL.

: ROUGH GRADING D. UTILITY INSTALLATION/EXCAVATION OF TRENCHES

. FINAL OR FINISH GRADING F. PAVEMENT INSTALLATION

G. BUILDING CONSTRUCTION H. PREPARATION OF SEEDING OR PLANTING

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 AND SEDIMENT TRAPS

5. THE TOTAL ESTIMATED SITE AREA IS 78.2 ACRES

THE TOTAL ESTIMATED SITE AREA TO BE DISTURBED IS 35.0 ACRES THE TOTAL ESTIMATED SITE AREA NOT TO BE DISTURBED IS 43.2 ACRES

THE ESTIMATED RUNOFF COEFFICIENT PRIOR TO DEVELOPMENT IS 0.30 THE ESTIMATED RUNOFF COEFFICIENT UPON COMPLETION IS 0.80
THE SLOPES EXPECTED ON THE SITE UPON COMPLETION OF FINAL GRADING WILL RANGE BETWEEN 1% AND 50% THE STORM WATER EXITING THE SITE IS COLLECTED IN DETENTION BASIN. 10. THE NAME OF THE RECEIVING WATER BODY IS OSAGE CREEK, LOCATED APPROXIMATELY 1 MILE FROM THE SUBJECT

11. THE SOILS PRESENT AT THE SITE ARE GENERALLY PERIDGE, TONTI, CAPTINA, NIXA & SECESH 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 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

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%

SEQUENCE OF EROSION CONTROL BEST MANAGEMENT PRACTICES

INSTALL DOWN SLOPE AND SIDE SLOPE PERIMETER CONTROLS PRIOR TO THE LAND DISTURBING ACTIVITIES. DO NOT DISTURB AN AREA UNTIL IT IS NECESSARY FOR CONSTRUCTION TO PROCEED

COVER AND STABILIZE DISTURBED AREAS AS SOON AS POSSIBLE (WITHIN A MAXIMUM OF 14 DAYS).

TIME ACTIVITIES TO LIMIT IMPACT FROM SEASONAL CLIMATE CHANGES OR WEATHER EVENTS. DELAY CONSTRUCTION OF INFILTRATION MEASURES UNTIL THE END OF THE CONSTRUCTION PROJECT, WHEN UPSTREAM DRAINAGE AREAS HAVE BEEN STABILIZED.

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

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

ALLOWABLE NON-STORM WATER DISCHARGE

-FIRE HYDRANT FLUSHINGS.

FULL (BY VOLUME).

-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.

LEADING TO THE RELEASE AND THE DATE OF THE RELEASE.

-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 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. 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.

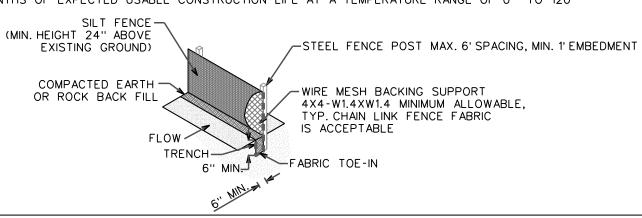
SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IN

FURN IS ATTACHED TO THE STEEL POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE

INSPECTION SHALL BE MADE EVERY WEEK AND AFTER EACH 1/2" RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE 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. INSTALL SILT FENCE DOWNSTREAM FROM ANY AREAS WHERE FILL IS TO BE PLACED.
ALL SILT FENCE IS TO BE PLACED PARALLEL TO GROUND CONTOURS SO THAT THE FENCE DOES NOT

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°

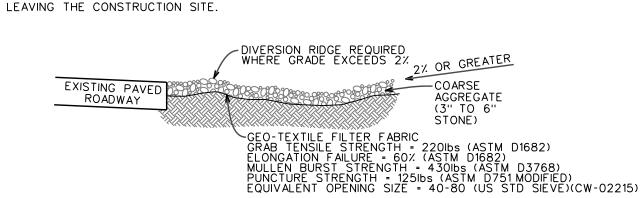


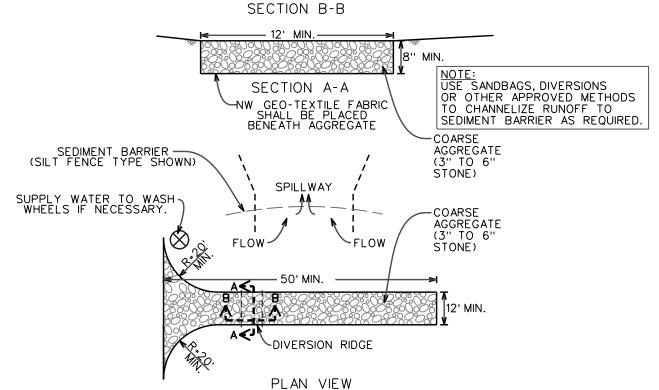
SILT FENCE DETAIL N.T.S.

STABILIZED CONSTRUCTION ENTRANCE GENERAL NOTES: . STONE SHALL BE 3 TO 6 INCH DIAMETER CRUSHED ROCK OR ACCEPTABLE CRUSHED PORTLAND CEMENT CONCRETE. 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.

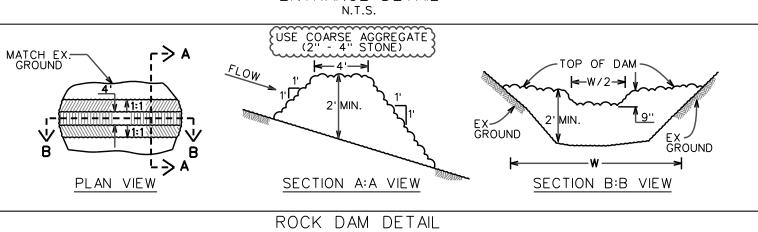
THE THICKNESS SHALL NOT BE LESS THAN 8 INCHES. THE WIDTH SHALL BE NO LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH

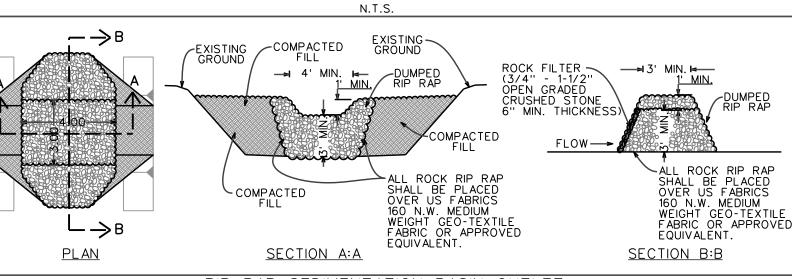
DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS 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. THE ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM





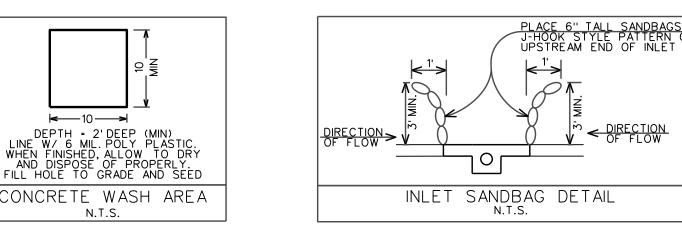
STABILIZED CONSTRUCTION ENTRANCE DETAIL

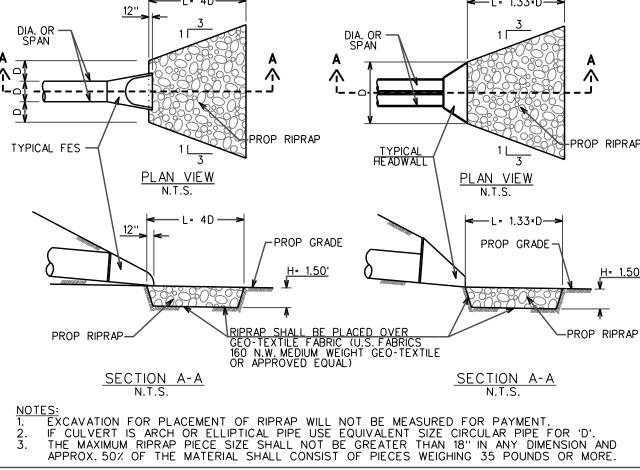




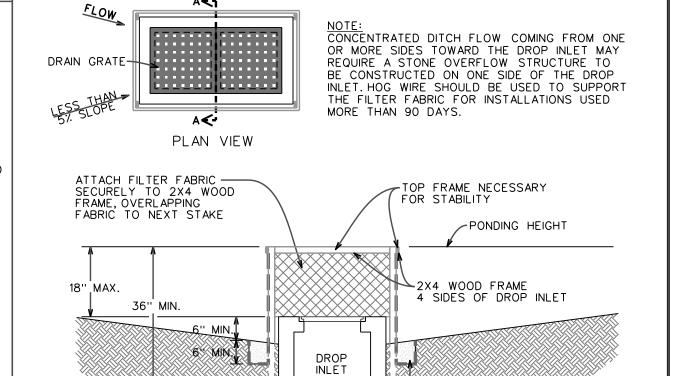
RIP RAP SEDIMENTATION BASIN OUTLET

DEPTH = 2' DEEP (MIN)





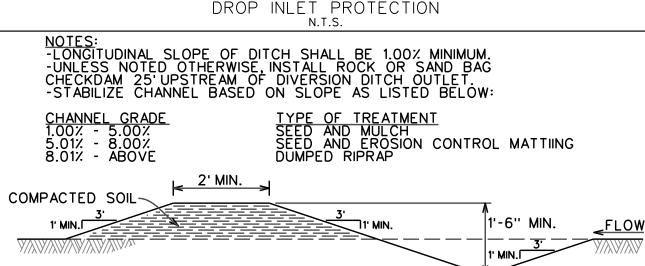
ROCK RIP-RAP DETAIL FOR TYPICAL FES AND HEADWALL



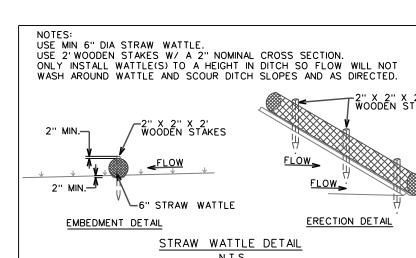
SECTION A-DROP INLET PROTECTION

≶FABRIC ANCHORED II

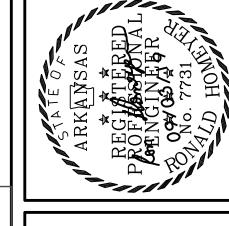
WITH COMPACTED EARTH.



DIVERSION DITCH N.T.S.



-2" X 2" X 2' WOODEN STAKES



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