# CONSTRUCTION PLANS FOR TRUCKING FREIGHT FACILITY

10335 E. PECOS ROAD CITY OF MESA, MARICOPA COUNTY, AZ

# INDEX OF SHEETS

ES2.1

ES2.1A

ES2.2

ES2.2A

SHEET NU	MBER SHE	ET TITLE
C0.00	COVE	R SHEET
C1.00		RAL INFORMATION SHEET
C2.00	EXIS	ING CONDITIONS PLAN
C3.00	SITE	PLAN
<b>⚠</b> C3.01	E PE	COS ROAD STRIPING PLAN
C4.00	) GRAD	ING AND DRAINAGE PLAN
C5.00	SITE	UTILITY PLAN
C6.00	) RETE	NTION BASIN PLAN AND DETAILS
C7.00	SITE	DETAILS
C7.01	SITE	DETAILS
C7.02	2 SITE	DETAILS
C7.03	3 SITE	DETAILS
ES1.0	0 PRED	EVELOPMENT EROSION AND SEDIMENTATION CONTROL PLAN
ES2.0	00 POST	DEVELOPMENT EROSION AND SEDIMENTATION CONTROL PLAN
ES3.0	00 EROS	ION AND SEDIMENTATION CONTROL NOTES
ES3.0	)1 EROS	ION AND SEDIMENTATION CONTROL NOTES
ES3.0	)2 EROS	ION AND SEDIMENTATION CONTROL DETAILS
ES3.0		ION AND SEDIMENTATION CONTROL DETAILS
ES3.0	)4 EROS	ION AND SEDIMENTATION CONTROL DETAILS
L1.01	LAND	SCAPE PLAN
L1.02	LAND	SCAPE DETAILS & NOTES
L1.03	IRRIG	ATION PLAN
L1.04		ATION DETAILS
L1.05	IRRIG	ATION SCHEDULE & NOTES
ELECTRICA	AL PLANS SHE	ET TITLE

SITE LIGHTING PLAN

SITE PHOTOMETRICS
SITE LIGHTING DETAILS

ROAD LIGHTING PLAN

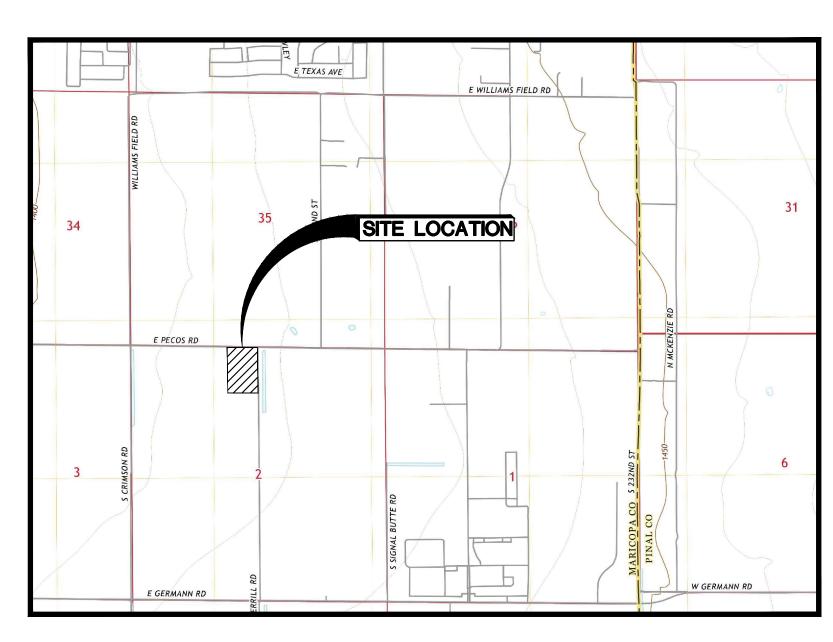
ROAD PHOTOMETRICS SITE LIGHTING NOTES PREPARED FOR:

SAIA MOTOR FREIGHT LINE, LLC
11465 JOHNS CREEK PKWY, SUITE 400
JOHNS CREEK, GEORGIA 30097
WWW.SAIACORP.COM
TEL: (678) 543-3938

PREPARED BY:



ENGINEERING



LOCATION MAP

EH.F. LENZ

ENGINEERING
AZ #: 13460-0

Headquarters:
1407 Scalp Avenue
Johnstown, PA 15904
814-269-9300
www.hflenz.com

Joan

Seal:

SAIA MOTOR

PROPOSED
TRUCKING FREIGHT
FACILITY

E PECOS ROAD, CITY OF MESA, MARICOPA COUNTY, ARIZONA

No.: Date: Description:

O9/17/24 REVISED PER CITY OF MESA COMMENTS

Sheet Title: COVER SHEET

Project No.: 2023-0302.01

Cadd File: C0.00.dwg

Drawn By: JJS

Checked By: BJC

Date: 05/17/2024

Copyright: © 2024 H.F. LENZ COMPANY

C0.00

## **GENERAL NOTES:**

- DO NOT SCALE DRAWINGS.
- NO SLAG SHALL BE PERMITTED.
- PROPOSED CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE STATE AND LOCAL STANDARDS, SPECIFICATIONS AND REQUIREMENTS.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE.
- THE CONTRACTOR SHALL EXERCISE CAUTION AND EMPLOY CAREFUL EXCAVATION METHODS DURING INSTALLATION OF THE FACILITIES TO AVOID DAMAGE TO OR CONFLICT WITH EXISTING UTILITIES. THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATIONS AS DIRECTED AND/OR REQUIRED BY THE ENGINEER TO ASCERTAIN THE HORIZONTAL AND VERTICAL ALIGNMENT OF EXISTING UTILITIES PRIOR TO CONSTRUCTION IN AFFECTED AREAS AND MAKE THE APPROPRIATE ADJUSTMENTS IN THE FIELD IF CONFLICTS OCCUR, NO SEPARATE PAYMENT SHALL BE MADE FOR THE HEREIN DESCRIBED PROVISIONS AND SHALL BE INCLUDED IN THE COST OF THOSE ITEMS FOR WHICH PAYMENT SHALL BE MADE IN THE BID SCHEDULE.
- CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL UTILITIES WITHIN THE IMMEDIATE WORK AREA DURING CONSTRUCTION WHEN WORK IS IN PROGRESS AT ALL TIMES.
- CONTRACTOR IS RESPONSIBLE TO STABILIZE AND MAINTAIN ALL UTILITY POLES WITHIN THE IMMEDIATE WORK AREA THAT MAY BE AFFECTED BY THE CONSTRUCTION OPERATIONS.
- PROVIDE, ERECT AND MAINTAIN BARRICADES, LIGHTING AND GUIDE RAILS AS REQUIRED BY APPLICABLE REGULATORY AGENCIES TO PROTECT THE PUBLIC AND WORKMAN.
- ALL DISTURBED AREAS EXCEEDING THE LIMITS OR WORK SHALL BE RESTORED TO EXISTING CONDITIONS AT THE FULL EXPENSE OF THE CONTRACTOR UNLESS OTHERWISE DIRECTED BY THE OWNER.
- ALL CONCRETE WORK SHALL COMPLY WITH THE SPECIFICATIONS AND THE AMERICAN CONCRETE INSTITUTE'S "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318-14 OR THE LATEST REVISION THERETO.
- ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT THE END OF 28 DAYS.
- ALL REINFORCEMENT STEEL TO BE GRADE 60 DEFORMED BARS.
- MINIMUM SPLICE FOR REINFORCEMENT STEEL IS 30 BAR DIAMETERS UNLESS OTHERWISE NOTED.
- C WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A-185 SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK NECESSARY TO ESTABLISH LINES, LOCATIONS, GRADES, DIMENSIONS AND ELEVATIONS OF THE WORK FROM EXISTING FACILITIES.
- THE CONTRACTOR SHALL EXCAVATE TO THE LINES AND GRADES AS SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION OF EVERY DESCRIPTION AND OF WHATEVER SUBSTANCES ENCOUNTERED TO THE DEPTHS INDICATED. ALL EXCAVATED MATERIAL NOT REQUIRED OR UNSUITABLE FOR FILL SHALL BE REMOVED AND WASTED OFF SITE.
- UNLESS OTHERWISE INDICATED ON THESE DRAWINGS, REMOVE TREES, SHRUBS, GRASS AND OTHER VEGETATION INTERFERING WITH INSTALLATION OF NEW CONSTRUCTION. REMOVAL INCLUDES DIGGING OUT STUMPS AND ROOTS.
- DURING EXCAVATION EXTREME CARE SHOULD BE TAKEN BY THE CONTRACTOR TO AVOID UNNECESSARY CUTTING OF ROOTS. WHEN ROOTS ARE CUT THEY SHOULD BE PROPERLY DRESSED SO AS NOT TO KILL THE TREE.
- ALL TRENCH EXCAVATION SIDE WALL GREATER THAN 4 FEET IN DEPTH SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED BY MEANS OF THE SUFFICIENT STRENGTH TO PROTECT THE WORKMAN WITHIN THEM IN ACCORDANCE WITH APPLICABLE RULES AND REGULATIONS ESTABLISHED FOR CONSTRUCTION BY THE DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND BY LOCAL ORDINANCES. LATERAL TRAVEL DISTANCES TO AN EXIT LADDER OR STEPS SHALL NOT BE GREATER THAN 25 FEET IN TRENCHES 4 FEET OR DEEPER.

## **CONSTRUCTION NOTES:**

COMPLY WITH ALL PROVISIONS AND REQUIREMENTS OF MESA BUILDING CODE (MBC) CHAPTER 33 — SAFEGUARDS DURING CONSTRUCTION, MESA FIRE CODE (MFC) CHAPTER 33 — FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION, AND NFPA 241 FOR ITEMS NOT SPECIFICALLY ADDRESSED BY MFC CHAPTER 33.

- FIRE APPARATUS ACCESS ROADS ARE ESSENTIAL DURING CONSTRUCTION TO ALLOW EMERGENCY RESPONSE TO THE SITE FOR BOTH FIRE AND MEDICAL EMERGENCIES. ACCESS ROADS SHALL BE IN PLACE PRIOR TO THE START OF VERTICAL CONSTRUCTION. IT IS IMPORTANT TO DEVELOP ACCESS ROADS AT AN EARLY STAGE OF CONSTRUCTION TO ALLOW FOR FIRE DEPARTMENT ACCESS TO THE SITE IN THE CASE OF FIRE OR INJURY.
- REQUIRED FIRE APPARATUS ACCESS ROAD DURING CONSTRUCTION OR DEMOLITION SHALL COMPLY WITH MESA FIRE AND MEDICAL DEPARTMENT STANDARD DETAIL FPD 3310.1. THE ACCESS ROAD SHALL BE A MINIMUM OF 20 FEET WIDE OF ALL—WEATHER DRIVING SURFACE, GRADED TO DRAIN STANDING WATER AND ENGINEERED TO BEAR THE IMPOSED LOADS OF FIRE APPARATUS (78,000 lbs. / 24,000 lbs. FRONT AXLE, 54,000 lbs. REAR AXLE) WHEN ROADS ARE WET.
- THE ACCESS ROAD SHALL EXTEND TO WITHIN 200 FEET OF ANY COMBUSTIBLE MATERIALS AND/OR ANY LOCATION ON THE JOBSITE WHERE ANY PERSON(S) SHALL BE WORKING FOR A MINIMUM OF FOUR (4) CONTINUOUS HOURS IN ANY DAY. A CLEARLY VISIBLE SIGN MARKED FIRE DEPARTMENT ACCESS, IN RED LETTERS, SHALL BE PROVIDED AT THE ENTRY TO THE ACCESS ROAD.
- ALL OPEN TRENCHES SHALL HAVE STEEL PLATES CAPABLE OF MAINTAINING THE ACCESS ROAD DESIGN WHEN THESE TRENCHES CROSS AN ACCESS ROAD.
- THESE ACCESS ROADS MAY BE TEMPORARILY OR PERMANENT. THIS POLICY APPLIES ONLY DURING CONSTRUCTION AND/OR DEMOLITION. PERMANENT ACCESS PER THE MFC SHALL BE IN PLACE PRIOR TO ANY FINAL INSPECTION OR CERTIFICATE OF OCCUPANCY.
- WATER SUPPLY FOR FIRE PROTECTION. AN APPROVED WATER SUPPLY FOR CONSTRUCTION SITE SHALL MEET THE REQUIREMENTS OF MFC APPENDIX CHAPTERS B AND C. THE MINIMUM FIRE FLOW REQUIREMENT WHEN CONTRACTOR OR DEVELOPER BRINGS COMBUSTIBLE MATERIALS ON SITE IS 1,500 GPM AT 20 PSI. AT LEAST ONE FIRE HYDRANT SHALL BE WITHIN 500 FEET OF ANY COMBUSTIBLE MATERIAL AND CAPABLE OF DELIVERING THE MINIMUM FIRE FLOW REQUIREMENT. THIS HYDRANT OR HYDRANTS MAY BE EITHER TEMPORARY OR PERMANENT AS THE PROJECT SCHEDULE PERMITS.
- IN ADDITION, THERE ARE TIMES WHEN HYDRANTS AND VALVES MUST BE CLOSED TEMPORARILY FOR REPAIR WORK OR CONSTRUCTION OF THE WATER SYSTEM. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE WATER SUPPLY IS ALWAYS AVAILABLE. WHEN THE WORK IS COMPLETE, DEVELOPER/CONTRACTOR SHALL MAKE SURE THAT THE FIRE HYDRANTS ARE ACTIVE, AND THE VALVES ARE

## WATER, WASTEWATER AND STORM DRAIN GENERAL NOTES:

- 1. MATERIALS AND INSTALLATION OF WATER AND SEWER MAINS, WATER METERS AND SERVICE LINE CONNECTIONS SHALL CONFORM TO CURRENT CITY DETAILS, MESA AMENDMENTS TO MAG SPECIFICATIONS, AND THE APPROVED PRODUCTS LIST. SEE BELOW FOR APPROVED PRODUCT LISTS FOR WATER AND WASTEWATER.
- HTTPS: //WWW.MESAAZ.GOV/BUSINESS/ENGINEERING/MESA-STANDARD-DETAILS-SPECIFICATIONS
- 2. IN ACCORDANCE WITH ARIZONA ADMINISTRATIVE CODE (A.A.C.) R18-4-213, ALL MATERIALS WHICH MAY COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NATIONAL SANITATION FOUNDATION (NSF) STANDARDS 60, 61, AND 372 AND SHALL BE LEAD-FREE AS DEFINED IN A.A.C. R18-5-504 AND R18-4-101.
- 3. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL NECESSARY FITTINGS AND ADAPTERS REQUIRED TO CONNECT DIFFERENT TYPES OF WATER MAIN MATERIALS.
- 4. PER MESA AMENDMENTS 610.4.2 ALL MINOR VERTICAL OR HORIZONTAL DEFLECTIONS SHALL BE BY PIPE JOINT DEFLECTION UNLESS OTHERWISE NOTED. PIPE JOINT DEFLECTION SHALL NOT EXCEED 3 DEGREES OR 3 OF PIPE MANUFACTURER'S RECOMMENDATIONS WHICHEVER IS LESS.
- 5. PER MAG AND MESA AMENDMENTS 610.11 ALL WATER LINE TESTS SHALL BE COMPLETED SO THAT NO EXISTING LINES, EXISTING VALVES, OR NEWLY INSTALLED VALVES WHICH ARE CONNECTED TO THE OPERATING WATER SYSTEM ARE INCLUDED IN THE TESTS. ALLOWABLE TIMEFRAMES SHOULD FOLLOW MESA AMENDMENTS TO MAG AND MUST BE COORDINATED WITH THE CITY INSPECTOR. FOR A DAYTIME TIE—IN, THE CONTRACTOR SHALL COMPLETE ALL WORK NECESSARY TO RESTORE UTILITY SERVICE AND FULLY OPEN THE TIE—IN AREA TO TRAFFIC WITHIN THE TIME ALLOWED.
- 6. WATER LINE FLUSHING, PRESSURE TESTING, AND DISINFECTION SHALL BE COMPLETED PER MAG SPECIFICATION SECTION 611, MESA AMENDMENTS TO MAG SPECIFICATION SECTION 611, AND AWWA C651 (CURRENT VERSION).
- 7. SOURCE WATER UTILIZED FOR FILLING, FLUSHING AND TESTING SHALL BE OBTAINED FROM A HYDRANT METER ORDERED THROUGH PERMIT SERVICES AND SET BY CITY OF MESA WATER RESOURCES STAFF. IT IS PROHIBITED TO OPEN A VALVE TO THE EXISTING WATER SYSTEM TO FILL A NEWLY CONSTRUCTED OR REPAIRED PIPELINE AS OUTLINED IN THE MESA AMENDMENTS TO MAG SECTION 610.11 AND 611.
- 8. WATER METERS, METER BOXES, LIDS, ETC. IN CONFLICT WITH NEW CONSTRUCTION SHALL BE RELOCATED PER CITY OF MESA STANDARD DETAIL M-49 BY THE CONTRACTOR. THE RELOCATION SHALL INCLUDE ALL MATERIALS NECESSARY TO RECONNECT THE METER TO THE CITY DISTRIBUTION SYSTEM. SERVICE LINE EXTENSIONS, IF APPROVED IN WRITING BY MESA WATER RESOURCES DEPARTMENT, SHALL CONFORM TO MESA STANDARD DETAIL M-49. WHEN SERVICE LINE EXTENSIONS ARE APPROVED PER MESA STANDARD DETAIL M-49, SERVICE LINE COUPLINGS SHALL NOT BE PLACED UNDER ROADWAY SURFACES, CONCRETE GUTTERS, CURB AND GUTTER, OR CONCRETE DRIVEWAYS.
- 9. VALVES SHALL BE INSTALLED WITH VALVE BOX AND COVER PER MAG STD DETAILS 391-1, TYPE C WITH A DEEP-SKIRTED LID (4-INCHES MINIMUM) AS NOTED IN THE APPROVED PRODUCTS LIST.
- 10. ALL WATER LINE ABANDONMENT CUT AND PLUGS FOR ACTIVE LINES SHALL CONFORM TO THE FOLLOWING: 10.1. 12" AND SMALLER DIAMETER PER MESA STANDARD DETAIL M-50
- 10.2. 16" DIAMETER PER M.A.G. STANDARD DETAIL 390, TYPE B 10.3. GREATER THAN 16" DIAMETER, AS DESIGNED PER PLAN
- 11. LIME-TREATED AGGREGATE BASE COURSE (ABC) MATERIAL, RECLAIMED CONCRETE MATERIAL (RCM), AND RECLAIMED ASPHALT PAVEMENT (RAP) MATERIALS ARE PROHIBITED FOR USE IN THE PIPE EMBEDMENT ZONE (BEDDING, HAUNCHING, INITIAL BACKFILL) FOR WATERLINE CONSTRUCTION PER MESA AMENDMENTS
- 601.4.2.

  12. PER MESA AMENDMENTS 610.11, APPLICATIONS TO THE CITY OF MESA ENGINEERING INSPECTOR AND REVIEWED AND APPROVED BY THE WATER RESOURCES DEPARTMENT FOR WATER SYSTEM SHUTDOWN FOR THE PURPOSES OF CONSTRUCTION—RELATED ACTIVITIES SHALL BE MADE A MINIMUM OF FIVE (5) BUSINESS DAYS PRIOR TO THE SCHEDULED SHUTDOWN DATE. THE REQUEST SHALL INCLUDE PRIMARY AND SECONDARY VALVE NUMBERS, WHETHER A TEST SHUTDOWN IS REQUESTED, AND THE DATE AND DURATION OF THE REQUESTED SHUTDOWN. PER MAG 610.11, THE CITY OF MESA DOES NOT GUARANTEE A COMPLETE
- SHUTDOWN.

  13. REQUIRED BACKFLOW PREVENTION ASSEMBLIES SHALL INCLUDE MANUFACTURERS AND MODELS DESIGNATED IN THE CURRENT "LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES" AS PUBLISHED BY THE FOUNDATION FOR CROSS—CONNECTION CONTROL AND HYDRAULIC RESEARCH, UNIVERSITY OF SOUTHERN CALIFORNIA.
- 14. BACKFLOW PREVENTION ASSEMBLIES SHALL BE TESTED AND APPROVED BY A CERTIFIED TECHNICIAN DESIGNATED IN THE CURRENT CITY OF MESA "LIST OF APPROVED INSPECTORS" PRIOR TO THE REQUEST FOR FINAL INSPECTION.
- 15. ALL WATER METERS ARE TO BE SUPPLIED BY THE CITY OF MESA. CHARGES FOR INSTALLING NEW SERVICES AND METERS WILL BE IN ACCORDANCE WITH THE CURRENT UTILITY SERVICE FEE SCHEDULE. METERS TWO INCHES OR LESS WILL BE DELIVERED AND INSTALLED BY CITY FORCES. METERS LARGER THAN TWO INCHES WILL BE DELIVERED BY THE CITY AND INSTALLED BY THE CONTRACTOR AND REQUIRE SCHEDULING AND INSPECTIONS WITH CITY FORCES. CONTACT THE DEVELOPMENT SERVICES DEPARTMENT AT 480-644-4273 FOR THE SPECIFIC PROCEDURE. SEE M-27.01 FOR MORE INFORMATION.
- 16. FOR PROJECTS INVOLVING PUBLIC WATER MAINS WITH DIAMETERS 20" AND LARGER, THE FOLLOWING SHALL APPLY:
- 16.1. PROCUREMENT OF PIPES AND APPURTENANCES SHALL NOT COMMENCE UNTIL SHOP DRAWINGS AND PRODUCT DATA SUBMITTALS HAVE BEEN REVIEWED AND ACCEPTED IN WRITING BY THE CITY OF MESA WATER RESOURCES DEPARTMENT.
- 16.2. SUBMITTALS AND SHOP DRAWINGS SHALL INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING: 16.2.1. PIPE AND FITTINGS
- 16.2.2. PIPE APPURTENANCES (ISOLATION VALVES, AIR RELEASE VALVES, HYDRANTS, ETC)
- 16.2.3. CORROSION MONITORING AND PROTECTION SYSTEMS (WHERE APPLICABLE)
  16.2.4. FABRICATION/LAY DRAWINGS (FOR C200 STEEL OR C303 CONCRETE CYLINDER PIPE)
- 16.2.5. VALID WELDER'S CERTIFICATIONS (FOR C200 OR C303 CONCRETE CYLINDER PIPE)
  16.3. ALL FIELD WELDS SHALL BE MADE AVAILABLE FOR INSPECTION BY THE CITY OR THE CITY'S
- REPRESENTATIVE PRIOR TO GROUTING.

  16.4. ADDITIONAL REQUIREMENTS FOR C200 STEEL AND C303 CONCRETE CYLINDER PIPE WITH DIAMETERS 30"
- AND LARGER ARE AS FOLLOWS:

  16.4.1. EACH PIPE SECTION SHALL BE MADE AVAILABLE FOR VISUAL AND SOUNDING INSPECTIONS BY CITY STAFF OR THE CITY'S REPRESENTATIVE PRIOR TO INSTALLATION PIPES FAILING INSPECTIONS SHALL
- STAFF OR THE CITY'S REPRESENTATIVE PRIOR TO INSTALLATION. PIPES FAILING INSPECTIONS SHALL BE REPAIRED OR REPLACED AS DETERMINED BY THE CITY.

  16.4.2. INSTALLED PIPE SHALL BE MADE AVAILABLE FOR INTERNAL VISUAL AND SOUNDING INSPECTIONS BY
- CITY STAFF OR THE CITY'S REPRESENTATIVE PRIOR TO FILLING. PIPES FAILING INSPECTIONS SHALL BE REPAIRED OR REPLACED AS DETERMINED BY THE CITY.
- 17. WHEN GROUTING OR CASTING CONCRETE AROUND PVC SEWER PIPE, SUCH AS AT MANHOLE OR VAULT PENETRATIONS, THE CONTRACTOR SHALL INSTALL WATER STOPS PER MESA AMENDMENTS TO MAG SPECIFICATION 625 AND MANUFACTURERS RECOMMENDATIONS.
- 18. SEWER BUILDING CONNECTION LATERALS SHALL BE INSTALLED PER MAG STANDARD DETAIL 440. LATERAL WYES SHALL BE INSTALLED AT NO GREATER THAN A 45 ANGLE FROM HORIZONTAL. SEWER LATERAL SLOPES SHALL BE AS INDICATED ON MAG STANDARD DETAIL 440 AND IN NO CIRCUMSTANCE SHALL SEWER LATERAL SLOPES EXCEED % PER FOOT FOR 6" LATERALS AND 1-1/2" PER FOOT FOR 4" LATERALS. FITTINGS SHALL BE INSTALLED WITH NO ANGULAR JOINT DEFLECTION AND ALL CONNECTIONS SHALL BE GASKETED OR SEALED PER MAG SPECIFICATIONS.
- 19. SEWER MANHOLE BASES, BENCHES, SHELVES, AND CHANNELS SHALL BE CONSTRUCTED PER MAG STANDARD DETAIL 420. EACH INLET PIPE SHALL HAVE A DESIGNATED, FORMED CHANNEL AND BENCHING. THE DIMENSIONS OF CHANNELS, SHELF SLOPE, AND MINIMUM INLET PIPE ANGLES SHALL BE CONSTRUCTED PER MAG STANDARD DETAIL 420—3.
- 20. PER MESA DESIGN STANDARDS, SEWER MANHOLES SHALL BE CONSTRUCTED PER MAG STANDARD DETAILS 420-1, TYPE "A" TOP; AND 423-2 EXCEPT THAT:
- 20.1. MANHOLE SHAFT DIAMETERS SHALL BE 5 FEET 20.2. MANHOLE RINGS AND COVERS SHALL HAVE 30-INCH DIAMETERS
- 20.2. MANHOLE RINGS AND COVERS SHA 20.3. STEPS SHALL NOT BE INCLUDED

EDGE OF THE DISCONTINUOUS JOINT.

## **CONCRETE PAVEMENT NOTES:**

GENERAL CONTRACTOR TO SUBMIT PLAN OF CONCRETE PAVEMENT CRACK CONTROL JOINT LOCATIONS TO ENGINEER FOR APPROVAL. LOCATIONS OF JOINTS TO BE IN ACCORDANCE WITH THE FOLLOWING GUIDELINES:

- CONCRETE PAVEMENT CRACK CONTROL JOINT SPACING GUIDELINES:
- AREA BOUND BY CRACK CONTROL JOINTS NOT TO EXCEED 625 SQUARE FEET.
   DISTANCE BETWEEN JOINTS NOT TO EXCEED 25 FEET.
- 3. LENGTH TO WIDTH RATIO NOT TO EXCEED 1:1.25 (I.E. 25X20)
- 4. CONSTRUCTION JOINTS ARE CONSIDERED CONTRACTION JOINTS.
  5. AT LOCATIONS WHERE JOINT IS DISCONTINUOUS INTO ADJOINING PANEL, PLACE TWO (2) NO. 4 BARS AT MID—DEPTH OF OPPOSING PANEL, PARALLEL TO THE
- FOR INTERSECTIONS AND AREAS CONSTRUCTED ON A RADIUS, REFER TO DETAILS.

## SYMBOL AND ABBREVIATION SCHEDULE

4.0	AODE	EVD	EVEANCION	DEINE	DEINEODOFMENT	
AC	ACRE	EXP	EXPANSION	REINF	REINFORCEMENT	
AC	AIR CONDITIONER	EX	EXISTING	RCP	REINFORCED CONCRETE PIPE	
ADOT	ARIZONA DEPARTMENT OF	FFE	FINISH FLOOR ELEVATION	R/W	RIGHT-OF-WAY	
	TRANSPORTATION	FH	FIRE HYDRANT	SCH	SCHEDULE	
AASHTO		GM	GAS METER	SEC	SECTION	
	HIGHWAYS AND TRANSPORTATION	GV	GAS VALVE	SEG	SEGMENT	
	OFFICIALS	HP	HIGH POINT	SLCPP	SMOOTH LINED CORRUGATED PLASTIC PIPE	
ACI	AMERICAN CONCRETE TRANSPORTATION	HORIZ	HORIZONTAL	STA	STATION	Г
	OFFICIALS	INC	INCORPORATED	SR	STATE ROUTE	
ASTM	AMERICAN SOCIETY FOR TESTING AND	INV	INVERT	ST	STREET	
	MATERIALS	LP	LIGHT POLE	SRL	SKID RESISTANCE LEVEL	
0	AT	МН	MANHOLE	S	SOUTH	
₽	BASELINE	MAX	MAXIMUM	SF	SQUARE FEET	
ВС	BOTTOM OF CURB	MIN	MINIMUM	SY	SQUARE YARD	
BW	BOTTOM OF WALL	MPH	MILES PER HOUR	TC	TOP OF CURB	
BY/4"	BROKEN YELLOW PAVEMENT LINE/WIDTH	N	NORTH	TW	TOP OF WALL	
BLDG	BUILDING	NPDES	NATIONAL POLLUTANT DISCHARGE	XF	TRANSFORMER	
Q.	CENTERLINE		ELIMINATION SYSTEM	TYP	TYPICAL	
CC C/C		No/#	NUMBER	WM	WATER METER	
·		PM	PARKING METER	WV	WATER VALVE	
CLR	CLEAR	OC	ON CENTER	WWF	WELDED WIRE FABRIC	
CONC	CONCRETE	PERF	PERFORATED	W/4"	WHITE PAVEMENT LINE/WIDTH	
CONSTR		PE	POLYETHYLENE	,	,	
CMP	CORRUGATED METAL PIPE	PUB	PUBLICATION			
CPP	CORRUGATED POLYETHYLENE PIPE	PSI	POUNDS PER SQUARE INCH			
DIA	DIAMETER	PP	POWER POLE			
DI	DUCTILE IRON	PVC	POLYVINYL CHLORIDE			
EOB	EDGE OF BERM	P	PROPERTY LINE			
EOP	EDGE OF PAVEMENT	R	RADIUS			
ELEC	ELECTRIC	IX	ומאוט			
EMH	ELECTRIC MANHOLE					_
EM	ELECTRIC METER					(
<b></b>	_, _, , , _, _, , ,					

## LEGEND

	<u>EXISTING</u>		<u>PROPOSED</u>
W	WATERLINE	w	WATERLINE
G	GAS LINE	<u>—</u> —G——	GAS LINE
SS	SANITARY SEWER	——ss——	SANITARY SEWER
ST	STORM SEWER	——st——	STORM SEWER
STE	STEAM LINE	STE	STEAM LINE
EU	UNDERGROUND ELEC TELE CABLE	EU	UNDERGROUND ELEC TELE CABLE
<i>TU</i>	UNDERGROUND TELEPHONE	TU	UNDERGROUND TELEPHONE
CTVU	UNDERGROUND CABLE	CTVU	UNDERGROUND CABLE
——E——	OVERHEAD ELECTRIC	FO/COM	FIBER OPTICS/COMMUNICATIONS
	OVERHEAD TELEPHONE	——Е——	OVERHEAD ELECTRIC
CTV	OVERHEAD CABLE	—т—	OVERHEAD TELEPHONE
——OH W——	OVERHEAD WIRES	—стv—	OVERHEAD CABLE
C	CONDUIT	—с—	CONDUIT
F0/C0M	FIBER OPTICS / COMMUNICATIONS	●FH	FIRE HYDRANT
$ abla_{FH}$	FIRE HYDRANT	PP_	POWER POLE
<i>PP</i> —	POWER POLE	SL 🕱	STREET LIGHT
_0_	SIGN (EXISTING)	•	SIGN
		-XXX-	FENCE
		$\bigcirc$	NUMBER OF PARKING SPACES

CALL BEFORE YOU DIG!



EL/ELEV ELEVATION

EQUAL

CAUTION
THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN
ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE
(INCLUDING, BUT NOT LIMITED TO, MANHOLES, INLETS, VALVES, AND
MARKS MADE UPON THE GROUND BY OTHERS) AND ARE
SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING
UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND
EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS
OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND
UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY
AND ALL CONSTRUCTION.
ARIZONA UTILITIES PROTECTION SERVICES
CALL: 8-1-1 OR TOLL FREE: 1-800-782-5348

Project Identification:

SAIA MOTOR
FREIGHT LINE, LLC

PROPOSED TRUCKING FREIGHT FACILITY

AZ #: 13460-0

Headquarters:

814-269-9300

www.hflenz.com

Consultants

Seal:

Seal

1407 Scalp Avenue

Johnstown, PA 15904

E PECOS ROAD, CITY OF MESA, MARICOPA COUNTY, ARIZONA

No.:	Date:	Description:
Λ	11/08/24	REVISED PER CITY OF MESA COMMENTS

GENERAL INFORMATION
SHEET

 A
 Cadd File:
 C1.00.dwg

 Drawn By:
 JJS

 Checked By:
 BJC

 Date:
 05/17/2024

 Copyright:
 © 2024 H.F. LENZ COMPANY

C1.00

4

**EROSION & SEDIMENTATION CONTROL** 

ROCK CONSTRUCTION ENTRANCE

LIMIT OF DISTURBANCE/NPDES PERMIT

— CFS — COMPOST FILTER SOCK

BOUNDARY

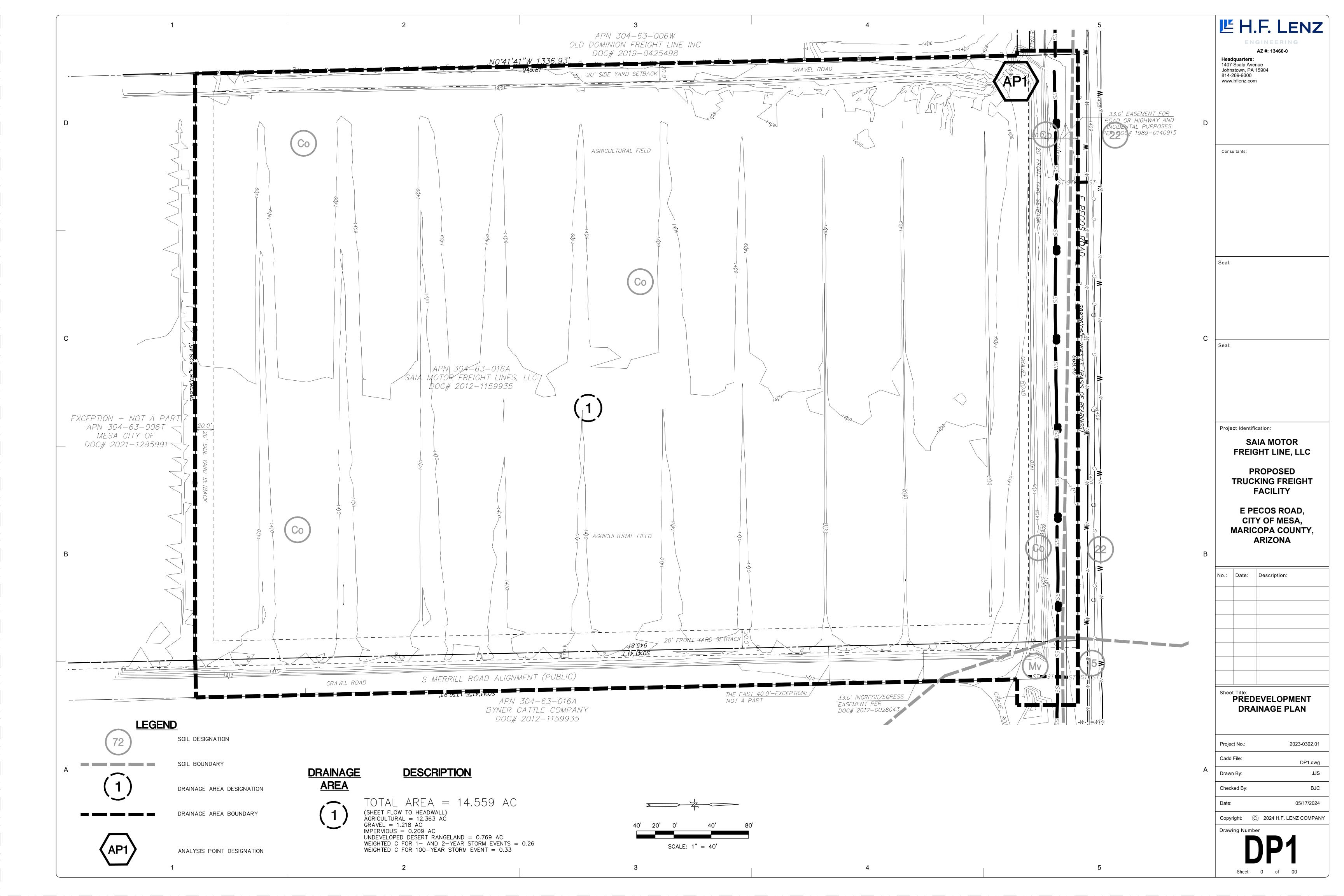
SOIL BOUNDARY

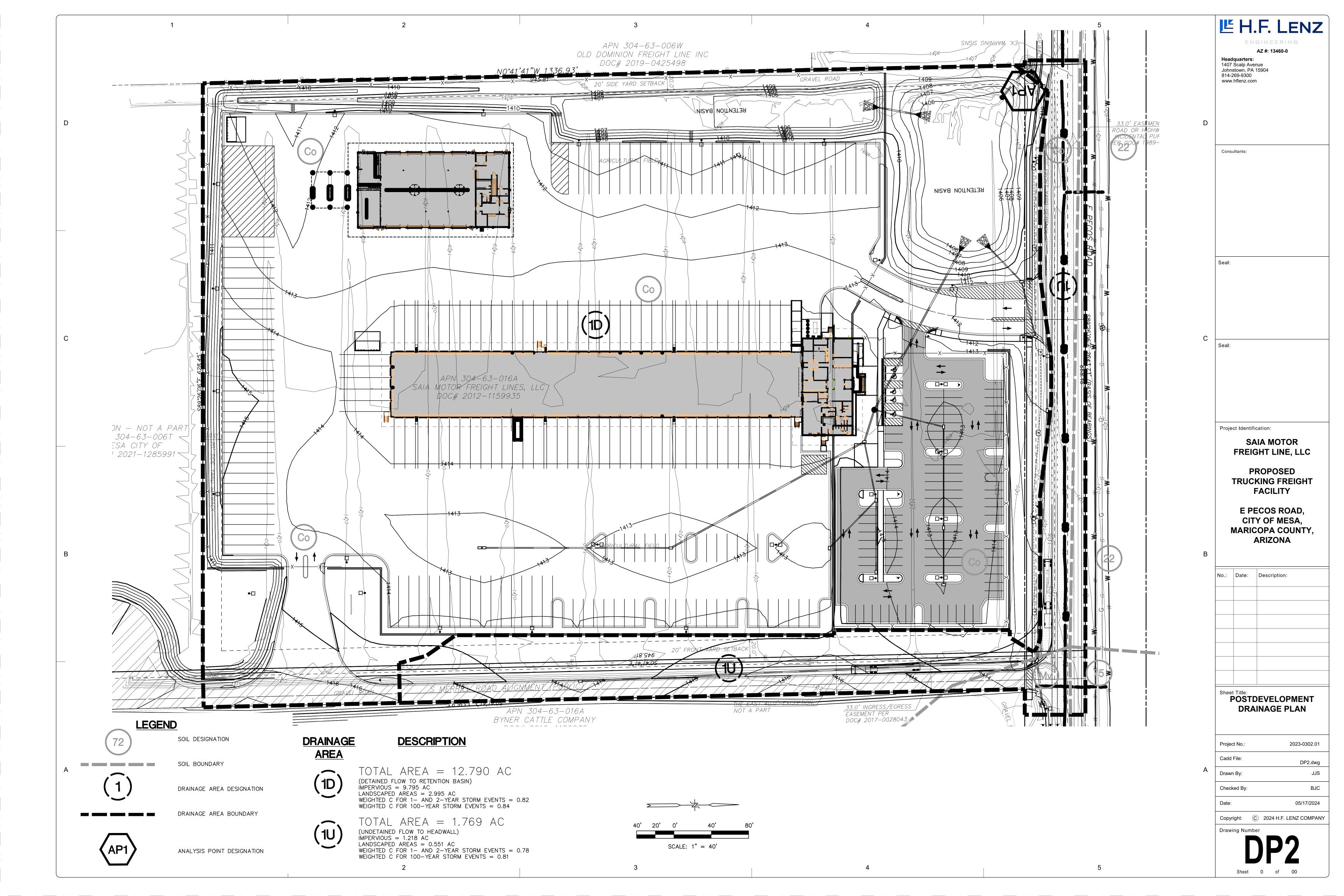
SOIL DESIGNATION

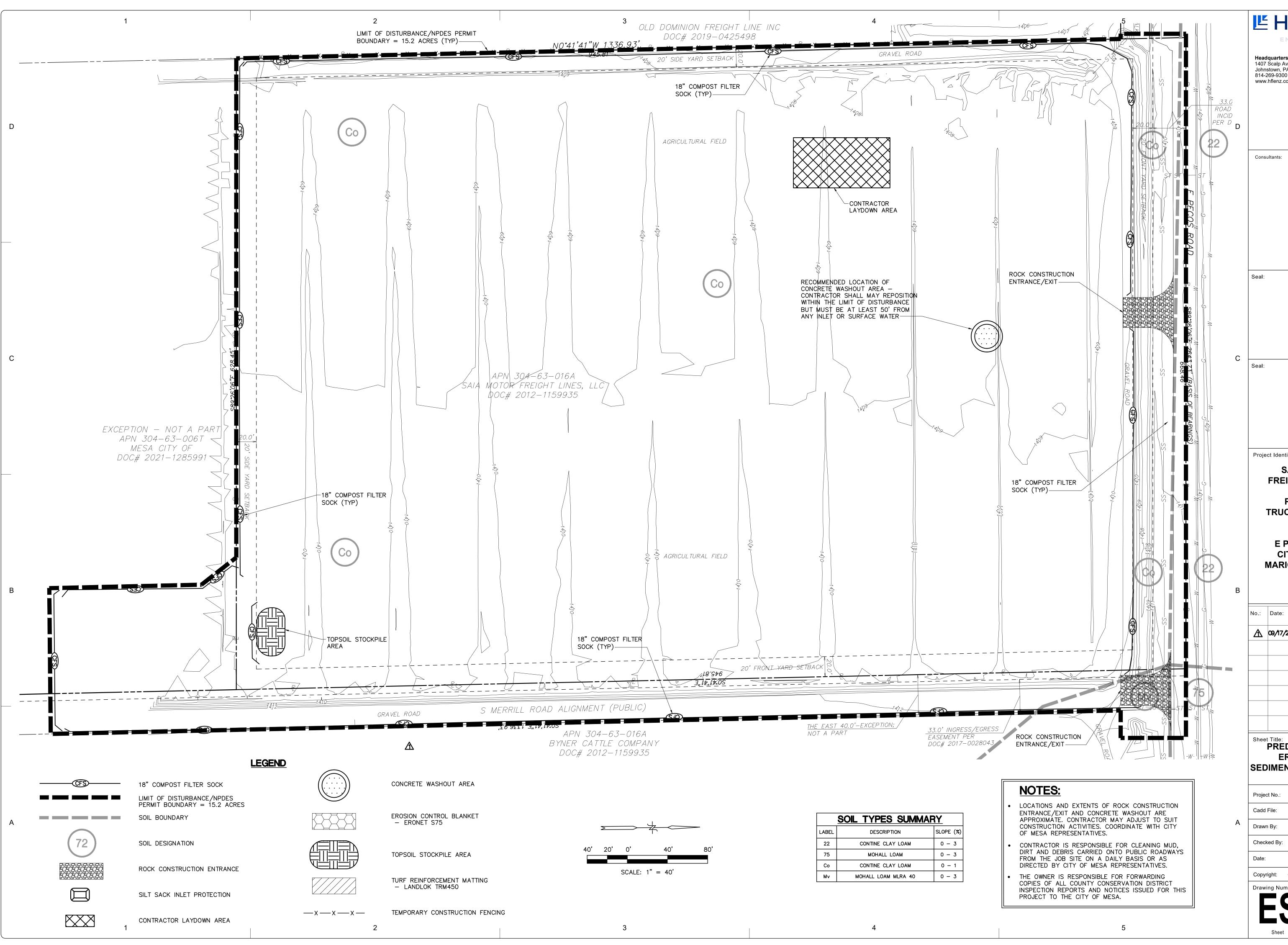
INLET PROTECTION

Copyright: © 2024 H.F. LENZ COMPA









世 H.F. LENZ

AZ #: 13460-0

**Headquarters:** 1407 Scalp Avenue Johnstown, PA 15904 814-269-9300 www.hflenz.com

Project Identification:

**SAIA MOTOR** FREIGHT LINE, LLC

**PROPOSED** TRUCKING FREIGHT **FACILITY** 

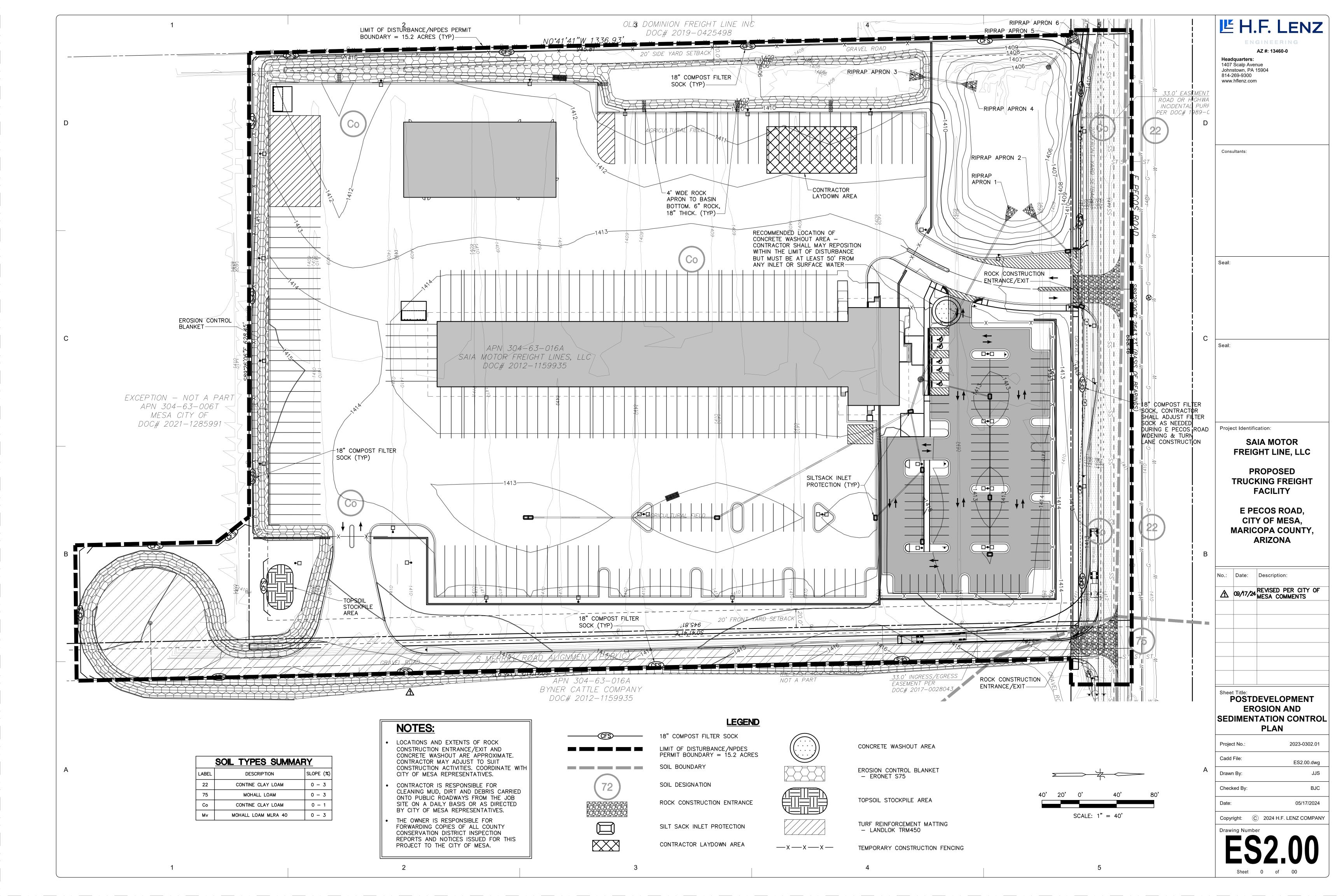
E PECOS ROAD, CITY OF MESA, MARICOPA COUNTY, **ARIZONA** 

No.: Date: Description: MESA COMMENTS

## **PREDEVELOPMENT EROSION AND** SEDIMENTATION CONTROL **PLAN**

2023-0302.01 ES1.00.dwg 05/17/2024 Copyright: C 2024 H.F. LENZ COMPANY

**Drawing Number** 



# GENERAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENTATION CONTROL

- SOIL EROSION AND SEDIMENTATION CONTROL SHALL BE IMPLEMENTED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES. COMPOST FILTER SOCK SHALL BE INSTALLED TO A MINIMUM AS SHOWN ON THESE DRAWINGS.
- EARTH MOVING OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE ACCELERATED SOIL EROSION, IN ACCORDANCE WITH THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY, AND AS SHOWN ON THESE DRAWINGS.
- COMPOST FILTER SOCK SHALL BE INSTALLED DOWNSTREAM OF CONSTRUCTION AND STOCKPILE AREAS TO CONFINE SEDIMENT THAT MAY BE WASHED FROM NEW FILL OR CUT SLOPES.
- COMPOST FILTER SOCK MUST BE INSTALLED AT LEVEL GRADE. BOTH ENDS OF EACH FENCE SECTION MUST EXTEND AT LEAST 10 FEET UPSLOPE AT 45° TO THE MAIN FENCE ALIGNMENT.
- COMPOST FILTER SOCK SHALL BE INSPECTED ONCE A WEEK AND AFTER EACH RUNOFF EVENT. DAMAGE SHALL BE REPAIRED IMMEDIATELY, SEDIMENT ACCUMULATIONS SHALL BE REMOVED AND PLACED IN THE TOPSOIL STOCKPILE.
- COMPOST FILTER SOCK SHALL BE MAINTAINED UNTIL FINAL PROTECTIVE VEGETATION HAS BEEN ESTABLISHED, OR OTHER GROUND COVER MATERIALS HAVE BEEN PLACED.
- THE CONTRACTOR SHALL PLACE SEEDING, SOIL SUPPLEMENTS, AND MULCHING IN ALL DISTURBED AREAS IN ACCORDANCE WITH ADOT SPECIFICATIONS.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROL AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY.

## INTERIM STABILIZATION

INTERIM STABILIZATION IN THE EVENT OF PLANNED OR UNPLANNED PROJECT SUSPENSION WILL CONSIST OF MULCHING OF DISTURBED AREAS DURING WINTER OR NON-GROWING SEASONS. INTERIM STABILIZATION MUST BE IMPLEMENTED IMMEDIATELY TO ANY DISTURBED AREA ON WHICH EARTH MOVING ACTIVITIES HAVE CEASED. GROWING SEASON STABILIZATION WILL CONSIST OF TEMPORARY SEEDING ACCORDING TO PROVIDED SPECIFICATIONS AND MULCHING OF THE DISTURBED AREAS. FALL CUTOFF FOR SEEDING WILL BE APPROXIMATELY THE END OF OCTOBER DEPENDING UPON LOCAL WEATHER CONDITIONS. DISTURBED AREAS, WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE (1) YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS, WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE RE-DISTURBED WITHIN ONE (1) YEAR, MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS.

## PERMANENT SEEDING SPECIFICATIONS

SEEDING (CLASS I) SHALL CONSIST OF FURNISHING AND PLANTING LAWN SEED.

IMMEDIATELY BEFORE SEEDING, THE SURFACE AREA SHALL BE RAKED OR OTHERWISE LOOSENED TO OBTAIN A SMOOTH FRIABLE SURFACE FREE OF EARTH CLODS, HUMPS AND DEPRESSIONS. LOOSE STONES HAVING A DIMENSION GREATER THAN 1 INCH AND DEBRIS BROUGHT TO THE SURFACE DURING CULTIVATION SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE ENGINEER.

WHERE INDICATED ON THE PROJECT PLANS OR SPECIFIED IN THE SPECIAL PROVISIONS, TOPSOIL SHALL BE PLACED AND ALLOWED TO SETTLE FOR AT LEAST ONE WEEK PRIOR TO SEEDING. THE TOPSOIL SHALL BE THOROUGHLY WATERED AT LEAST TWICE DURING THE SETTLEMENT PERIOD.

SEED SHALL BE UNIFORMLY APPLIED IN TWO DIRECTIONS AT RIGHT ANGLES TO EACH OTHER WITH ONE—HALF THE SPECIFIED APPLICATION RATE APPLIED IN EACH DIRECTION.

IMMEDIATELY AFTER SEEDING, THE AREA SHALL BE UNIFORMLY COVERED WITH SCREENED MANURE AT THE RATE OF 1 CUBIC YARD PER 1,000 SQUARE FEET AND THEN WATERED UNTIL THE GROUND IS WET TO A MINIMUM DEPTH OF 2 INCHES.

HYDROSEEDING (HYDRAULIC SEEDING), USING 1,500 POUNDS OF WOOD CELLULOSE FIBER PER ACRE, WILL BE AN ACCEPTABLE ALTERNATE FOR PLANTING AND MULCHING SEEDING (CLASS I).

MACHINES USED FOR HYDROSEEDING SHALL BE APPROVED TYPES CAPABLE OF CONTINUOUS AGITATION OF THE SLURRY MIXTURE DURING THE SEEDING OPERATION. PUMP PRESSURE SHALL BE SUCH AS TO MAINTAIN A CONTINUOUS NONFLUCTUATING SPRAY CAPABLE OF REACHING THE EXTREMITIES OF THE SEEDING AREA WITH THE PUMP UNIT LOCATED ON THE ROADBED. THE SPRAYER SHALL BE EQUIPPED TO USE THE PROPER TYPE OF NOZZLES TO OBTAIN A UNIFORM APPLICATION ON THE VARIOUS SLOPES AT THE DISTANCE TO BE COVERED.

THE SEED, FERTILIZER, MULCH, TACKING AGENT (WHEN REQUIRED) AND WATER SHALL BE COMBINED IN THE PROPORTIONS OF THE VARIOUS MATERIALS AS PROVIDED IN THE SPECIAL PROVISIONS AND ALLOWED TO MIX A MINIMUM OF FIVE MINUTES PRIOR TO STARTING THE APPLICATION OF THE SLURRY. SEED SHALL BE APPLIED WITHIN 30 MINUTES AFTER MIXING WITH WATER.

HYDROSEEDING WHICH IS DEPOSITED ON ADJACENT TREES AND SHRUBS, ROADWAYS, IN DRAIN DITCHES, ON STRUCTURES AND UPON ANY AREAS WHERE SEEDING IS NOT SPECIFIED OR WHICH IS PLACED IN EXCESSIVE DEPTHS ON SEEDING AREAS SHALL BE REMOVED.

SEEDING AREAS FLOODED OR ERODED AS A RESULT OF IRRIGATION SHALL BE REPAIRED, RESEEDED AND REFERTILIZED BY THE CONTRACTOR, AT NO EXPENSE TO THE OWNER.

## CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE

THE NPDES PERMIT FOR THIS PROJECT, OF WHICH THIS EROSION AND SEDIMENTATION POLLUTION CONTROL PLAN IS A PART, COVERS THE "MOVING, DEPOSITING, STOCKPILING, OR STORING OF SOIL ROCK OR EARTH MATERIALS". IF THIS PROJECT WILL NEED FILL IMPORTED FROM AN OFF SITE LOCATION, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND THE DETERMINATION OF CLEAN FILL WILL RESIDE WITH THE CONTRACTOR. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF ARIZONA UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.) FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY'S REGULATIONS. AS ALL CUT AND FILL MATERIALS FOR THIS PROJECT WILL BE USED ON SITE, A CLEAN FILL DETERMINATION IS NOT REQUIRED BY THE CONTRACTOR UNLESS THERE IS A BELIEF THAT A SPILL OR RELEASE OF A REGULATED SUBSTANCE HAS OCCURRED.

# RECYCLING/DISPOSING OF CONSTRUCTION WASTES AND DISPOSAL OF SEDIMENT REMOVED FROM BMP'S

- 1. ANY SEDIMENT REMOVED FROM BMP'S DURING CONSTRUCTION WILL BE RETURNED TO UPLAND AREAS ON SITE AND INCORPORATED INTO THE SITE GRADING.
- 2. ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY'S SOLID WASTE MANAGEMENT REGULATIONS. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.
- 3. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ANY EXCESS MATERIAL AND MAKE SURE THE SITE RECEIVING THE EXCESS HAS AN APPROVED EROSION AND SEDIMENTATION CONTROL PLAN THAT MEETS THE CONDITIONS OF THE STATE AND FEDERAL REGULATIONS.

## SPECIFIC BMP MAINTENANCE INSTRUCTIONS

#### TEMPORARY VEGETATIVE COVER

- A. SOW ANNUAL RYE GRASS AT THE RATE OF 43 POUNDS PER ACRE, ONE POUND PER 1000 SQFT. BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION; PLUS A STRAW MULCH ANCHORED TO PREVENT LOSS.
- B. COVER GRASS SEED WITH 1/4" (6MM) OF SOIL USING SUITABLE EQUIPMENT FOR THAT PURPOSE. ADD LIME AND FERTILIZER (LIME=1 TON/AC, FERTILIZER = 5:5:5 MIX).
- C. MULCHING, WITHOUT SEEDING, IS TO BE USED AS AN INTERIM STABILIZATION CONTROL DURING NON-GROWING SEASONS OF THE YEAR.

#### ROCK CONSTRUCTION ENTRANCE

COMPOST FILTER SOCKS

- A. ROCK CONSTRUCTION ENTRANCE WILL BE PLACED AT THE LOCATION SHOWN ON THE PLAN AND CONSTRUCTED TO THE MINIMUM DIMENSIONS AS SHOWN ON THE DETAIL.
- B. THE ROCK CONSTRUCTION ENTRANCE THICKNESS WILL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSION BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON SITE FOR THIS PURPOSE.
- C. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PUBLIC AND PRIVATE ROADWAYS WILL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING OF THE ROADWAYS IS NOT PERMITTED.
- A. COMPOST FILTER SOCKS WILL BE PLACED AS SHOWN ON THE PLAN TO INTERCEPT THE STORM WATER, AND FILTER THE RUNOFF BEFORE IT LEAVES THE CONSTRUCTION SITE.
- B. COMPOST FILTER SOCKS ARE NOT PERMITTED IN ANY AREA OF CONCENTRATED FLOW SUCH AS DITCHES, SWALES, OR CHANNELS.
- C. ADD SECTION OF COMPOST FILTER SOCK FROM POST TO POST WHEN UNDERCUTTING OF COMPOST FILTER SOCK OCCURS.
- D. INSTALL COMPOST FILTER SOCKS IN ACCORDANCE WITH DETAILS AS SHOWN ON THE DRAWINGS.
- E. INSPECT COMPOST FILTER SOCKS AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL EVENT. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
- F. ACCUMULATED SEDIMENT WILL BE REMOVED AS REQUIRED TO KEEP THE COMPOST FILTER SOCKS FUNCTIONAL. IN ALL CASES REMOVE DEPOSITS WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE COMPOST FILTER SOCK.
- G. THE REMOVED SEDIMENT IS TO BE USED FOR ON SITE GRADING, SEEDED, AND MULCHED.
- H. ANY COMPOST FILTER SOCK SECTION WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A NEW COMPOST FILTER SOCK.
- I. ADHERE TO MANUFACTURERS RECOMMENDATIONS FOR REPLACING COMPOST FILTER SOCKS DUE TO WEATHERING.
- J. AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED, REMOVE ALL COMPOST FILTER SOCKS AND UNSTABLE SEDIMENT DEPOSITS. BRING THE DISTURBED AREA TO GRADE AND STABILIZE.

#### INLET PROTECTION

- A. INLET PROTECTION WILL BE PLACED IN EXISTING AND NEW INLETS AS DEPICTED ON THE PLANS.
- B. INSTALL INLET PROTECTION IN ACCORDANCE WITH THE DETAIL ON THE DRAWING.
- C. INSPECT INLET PROTECTION AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL EVENT. MAKE ANY REQUIRED REPAIRS OR REPLACE IMMEDIATELY.
- D. IN ALL CASES, REMOVE DEPOSITS AFTER EACH RAINFALL EVENT.
- E. THE REMOVED SEDIMENT IS TO BE USED FOR ON SITE GRADING, SEEDED, AND MULCH.
- F. ADHERE TO MANUFACTURERS RECOMMENDATIONS FOR INSTALLATION OF INLET PROTECTION.
- G. AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED, REMOVE INLET PROTECTION.

## PUMPED WATER FILTER BAG

- A. PUMPED WATER FILTER BAGS SHALL BE PLACED IN WELL VEGETATED AREA AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS NEAR EXCAVATIONS.
- B. A REPLACEMENT FILTER BAG SHALL BE AVAILABLE AT ALL TIMES.
- C. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. DISPOSED OF SEDIMENT IN A LAWFUL MANNER.
- D. REFER TO MANUFACTURERS RECOMMENDATIONS FOR INSTALLATION AND USE.

## CONCRETE WASHOUT

- A. CONCRETE WASHOUT FACILITIES SHALL BE INSPECTED DAILY.
- B. DAMAGED OR LEAKING CONCRETE WASHOUTS SHALL BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.
- C. REMOVE MATERIALS, AND DISPOSE OF IN A LAWFUL MANNER, FROM THE CONCRETE WASHOUT WHEN 75% CAPACITY IS REACHED.
- D. REPLACE THE PLASTIC LINER DURING EACH CLEANING OF THE CONCRETE WASHOUT.

## RIPRAP APRON

- A. RIPRAP APRONS MAY BE USED TO PREVENT SCOUR AT PIPE OR CHANNEL OUTFALLS WHERE ANTICIPATED DISCHARGE VELOCITIES DO NOT EXCEED 17.0 FPS, THERE IS SUFFICIENT ROOM TO CONSTRUCT THE APRON, AND WHERE APRONS CAN BE INSTALLED ON LEVEL GRADE.
- B. IN CASES WHERE DISCHARGE VELOCITIES EXCEED 17.0 FPS, A SUITABLE MEANS OF VELOCITY REDUCTION SHOULD BE USED PRIOR TO DISCHARGING SIGNIFICANT FLOWS ONTO A RIPRAP APRON.
- C. INSPECT RIRRAP APRONS AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL EVENT. MAKE ANY REQUIRED REPAIRS OR REPLACE DISPLACED ROCK IMMEDIATELY.

# DOCUMENTATION OF BMP INSPECTION, REPAIR & REPLACEMENT

THE CONTRACTOR SHALL KEEP WRITTEN RECORDS DOCUMENTING THE INSPECTION, REPAIR AND REPLACEMENT OF ALL BMP'S.

## RECYCLING AND/OR DISPOSAL OF PROJECT WASTE

PROJECT CONSTRUCTION WASTES SHALL CONSIST OF UNSUITABLE MATERIAL FOR USE AS A FILL OR BACKFILL MATERIAL. SUCH MATERIAL SHALL CONSIST OF CLAY, ROCK, EXCESS MATERIAL, TRASH AND DEBRIS. ALL WASTE MATERIAL SHALL BE STOCKPILED AND PROPERLY STABILIZED UNTIL THE WASTE CAN BE PROPERLY RECYCLED OR DISPOSED OF OFF SITE AT A WASTE DISPOSAL SITE THAT HAS BEEN APPROVED BY THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY. OTHER WASTE ITEMS SUCH AS GLASS, PLASTIC, OR METALS MUST BE DISPOSED OF IN ACCORDANCE WITH ANY LOCAL RECYCLING PROGRAM. A CONCRETE WASHOUT FACILITY SHALL BE PROVIDED FOR THE CLEANING OF CHUTES, MIXERS AND HOPPERS OF DELIVERY TRUCKS.

## OTHER CONTROLS

- 1. NON-SEDIMENT POLLUTANT CONTROLS. IN ACCORDANCE WITH PART II.E, NO SOLID (OTHER THAN SEDIMENT) OR LIQUID WASTE. INCLUDING BUILDING MATERIALS. SHALL BE DISCHARGED IN STORM WATER RUNOFF. THE PERMITTEE MUST IMPLEMENT ALL NECESSARY BMPS TO PREVENT THE DISCHARGE OF NON-SEDIMENT POLLUTANTS TO THE DRAINAGE SYSTEM OF THE SITE OR SURFACE WATERS OF THE STATE OR AN MS4. UNDER NO CIRCUMSTANCE SHALL WASTEWATER FROM THE WASHOUT OF CONCRETE TRUCKS, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS, AND OTHER CONSTRUCTION MATERIALS BE DISCHARGED DIRECTLY INTO A DRAINAGE CHANNEL. STORM SEWER OR SURFACE WATERS OF THE STATE. ALSO, NO POLLUTANTS FROM VEHICLE FUEL, OILS, OR OTHER VEHICLE FLUIDS CAN BE DISCHARGED TO SURFACE WATERS OF THE STATE. NO EXPOSURE OF STORM WATER TO WASTE MATERIALS IS RECOMMENDED. THE SWPPP MUST INCLUDE METHODS TO MINIMIZE THE EXPOSURE OF BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, AND SANITARY WASTE TO PRECIPITATION, STORM WATER RUNOFF, AND SNOW MELT. THE SWPPP SHALL INCLUDE MEASURES TO PREVENT AND RESPOND TO CHEMICAL SPILLS AND LEAKS. YOU MAY ALSO REFERENCE THE EXISTENCE OF OTHER PLANS (I.E., SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLANS, SPILL CONTROL PROGRAMS, SAFETY RESPONSE PLANS, ETC.) PROVIDED THAT SUCH PLAN ADDRESSES CONDITIONS OF THIS PERMIT CONDITION AND A COPY OF SUCH PLAN IS MAINTAINED ON SITE.
- 2. OFF-SITE TRAFFIC. OFF-SITE VEHICLE TRACKING OF SEDIMENTS AND DUST GENERATION SHALL BE MINIMIZED. THE SWPPP SHALL INCLUDE METHODS TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASHWATER, AND OTHER WASHWATERS. NO DETERGENTS MAY BE USED TO WASH VEHICLES. WASHWATERS SHALL BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THE PROVIDES EQUIVALENT TREATMENT PRIOR TO DISCHARGE.
- 3. <u>COMPLIANCE WITH OTHER REQUIREMENTS</u>. THE SWPPP SHALL BE CONSISTENT WITH APPLICABLE STATE AND/OR LOCAL WASTE DISPOSAL, SANITARY SEWER OR SEPTIC SYSTEM REGULATIONS, INCLUDING PROVISIONS PROHIBITING WASTE DISPOSAL BY OPEN BURNING AND SHALL PROVIDE FOR THE PROPER DISPOSAL OF CONTAMINATED SOILS TO THE EXTENT THESE ARE LOCATED WITHIN THE PERMITTED AREA.
- 4. TRENCH AND GROUNDWATER CONTROL. THERE SHALL BE NO TURBID DISCHARGES TO SURFACE WATERS OF THE STATE RESULTING FROM DEWATERING ACTIVITES. IF TRENCH OR GROUND WATER CONTAINS SEDIMENT, IT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR OTHER EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE, PRIOR TO BEING DISCHARGED FROM THE CONSTRUCTION SITE. ALTERNATIVELY, SEDIMENT MAY BE REMOVED BY SETTLING IN PLACE OR BY DEWATERING INTO A SUMP PIT, FILTER BAG OR COMPARABLE PRACTICE. GROUND WATER WHICH DOES NOT CONTAIN SEDIMENT OR OTHER POLLUTANTS IS NOT REQUIRED TO BE TREATED PRIOR TO DISCHARGE. HOWEVER, CARE MUST BE TAKEN WHEN DISCHARGING GROUND WATER TO ENSURE THAT IT DOES NOT BECOME POLLUTANT—LADEN BY TRAVERSING OVER DISTURBED SOILS OR OTHER POLLUTANT SOURCES.
- 5. CONTAMINATED SEDIMENT. WHERE CONSTRUCTION ACTIVITIES ARE TO OCCUR ON SITES WITH CONTAMINATION FROM PREVIOUS ACTIVITIES, OPERATORS SHALL BE AWARE THAT CONCENTRATIONS OF MATERIALS THAT MEET OTHER CRITERIA (IS NOT CONSIDERED A HAZARDOUS WASTE, MEETING VAP STANDARDS, ETC.) MAY STILL RESULT IN STORM WATER DISCHARGES IN EXCESS OF ARIZONA WATER QUALITY STANDARDS. SUCH DISCHARGES ARE NOT AUTHORIZED BY THIS PERMIT. APPROPRIATE BMPS INCLUDE, BUT ARE NOT LIMITED TO:
- THE USE OF BERMS, TRENCHES, AND PITS TO COLLECT CONTAMINATED RUNOFF AND PREVENT DISCHARGES;
- PUMPING RUNOFF INTO A SANITARY SEWER (WITH PRIOR APPROVAL OF THE SANITARY SEWER OPERATOR) OR INTO A CONTAINER FOR TRANSPORT TO A APPROPRIATE TREATMENT/DISPOSAL FACILITY; AND
- COVERING AREAS OF CONTAMINATION WITH TARPS OR OTHER METHODS THAT PREVENT STORM WATER FROM COMING INTO CONTACT WITH THE MATERIAL.

OPERATORS SHOULD CONSULT WITH ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY PRIOR TO SEEKING PERMIT COVERAGE.

## CONTRACTOR'S RESPONSIBILITIES

- CONTRACTOR SHALL IMPLEMENT THE EROSION AND SEDIMENT POLLUTION CONTROL PLAN IN ACCORDANCE WITH THE DRAWINGS.
- 2. ALL FACILITIES WILL BE INSPECTED AND REPAIRED, IF NECESSARY, AFTER EACH STORM EVENT OR AT A PERIOD NOT TO EXCEED ONE WEEK. SEDIMENT COLLECTED FROM THE EROSION CONTROL STRUCTURES WILL BE PLACED UPSTREAM OF THOSE CONTROLS AND STABILIZED WITH GRAVEL OR RESEEDING.
- 3. AT NO TIME WILL SEDIMENT BE ALLOWED TO LEAVE THE SITE AND ENTER SURFACE WATERS.
- 4. ANY PERMANENTLY SEEDED AREAS THAT BECOME ERODED WILL HAVE THE TOPSOIL REPLACED, THE EROSION CONTROL MATTING REPLACED (IF APPLICABLE), THE GRASS RESOWN, AND MULCH REAPPLIED.
- 5. A COPY OF THIS PLAN MUST BE KEPT AVAILABLE FOR INSPECTION ON THE CONSTRUCTION SITE AT ALL TIMES THROUGHOUT THE TERM OF THE PROJECT.
- 6. THE INTENT OF THIS PLAN/NARRATIVE IS TO INDICATE GENERAL MEANS OF COMPLIANCE WITH THE REQUIREMENTS OF THE RULES AND REGULATIONS OF THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IMPLEMENT THESE METHODS. PLUS ADDITIONAL PROCEDURES IN ORDER TO ASSURE COMPLIANCE WITH APPLICABLE LAW. IT WILL FURTHER BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION AND SEDIMENT CONTROL FACILITIES SO THAT THEY PERFORM AS REQUIRED BY APPLICABLE LAW.
- 7. FINES AND RELATED COSTS RESULTING FROM THE CONTRACTOR'S FAILURE TO PROVIDE ADEQUATE PROTECTION AGAINST SOIL EROSION AND FOR ANY VIOLATIONS OF THE CLEAN STREAMS LAW AND THE RULES AND REGULATIONS PROMULGATED THEREUNDER SHALL BE BORNE BY THE CONTRACTOR.

## MAINTENANCE/OWNER'S RESPONSIBILITIES

MAINTENANCE OF ALL PERMANENT STORM WATER AND E&SC FACILITIES BECOMES THE RESPONSIBILITY
OF THE OWNER IN PERPETUITY UPON COMPLETION OF CONSTRUCTION AND ACCEPTANCE BY OWNER,
SUBJECT TO THE TERMS OF THE WARRANTY PERIOD SPECIFIED IN THE CONTRACT DOCUMENTS.

# REMOVAL OF TEMPORARY BMP'S

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROPERLY DISPOSE OF ALL MATERIALS ENCOUNTERED DURING CONSTRUCTION THAT ARE NOT TO BE RECYCLED OR REUSED ON THE PROJECT. THESE MATERIALS INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, TEMPORARY BMP'S, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, AND ANY OTHER MATERIALS THAT COULD ADVERSELY IMPACT WATER QUALITY. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR IMPLEMENTING A PROCEDURE FOR LITTER CONTROL DURING THE PROJECT. WHEREVER POSSIBLE, RECYCLING OF MATERIALS SUCH AS PAPER, PLASTIC, GLASS, AND ALUMINUM SHALL BE IN ACCORDANCE WITH THE LOCAL MUNICIPAL RECYCLING PROGRAM.
- 2. THE BMP'S MAY NOT BE REMOVED UNTIL A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER IS WELL ESTABLISHED ACROSS THE ENTIRE UPSLOPE ACROSS THE ENTIRE UPSLOPE PROJECT DRAINAGE AREA. ALL PARKING LOTS DRIVEWAYS, AND STREETS MUST BE PAVED OR HAVE A COMPACTED STONE BASE IN PLACE.
- 3. PERMANENT STABILIZATION IS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.

世 H.F. LENZ

ENGINEERII AZ #: 13460-0

Headquarters: 1407 Scalp Avenue Johnstown, PA 15904 814-269-9300

www.hflenz.com

Consultants:

Project Identification:

Seal:

SAIA MOTOR FREIGHT LINE, LLC

PROPOSED
TRUCKING FREIGHT
FACILITY

E PECOS ROAD, CITY OF MESA, MARICOPA COUNTY,

**ARIZONA** 

E		
,		

No.: Date: Description:

Sheet Title:
EROSION AND
SEDIMENTATION CONTROL
PLAN NOTES

 Project No.:
 2023-0302.01

 Cadd File:
 ES3.00.dwg

 Drawn By:
 JJS

 Checked By:
 BJC

 Date:
 05/17/2024

ES3.00

Copyright: (C) 2024 H.F. LENZ COMPANY

## INSPECTIONS & MAINTENANCE OF EROSION & SEDIMENTATION CONTROLS

MAINTENANCE. ALL TEMPORARY AND PERMANENT CONTROL PRACTICES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ENSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED IN A FUNCTIONAL CONDITION UNTIL ALL UP-SLOPE AREAS THEY CONTROL ARE PERMANENTLY STABILIZED. THE SWPPP SHALL BE DESIGNED TO MINIMIZE MAINTENANCE REQUIREMENTS. THE APPLICANT SHALL PROVIDE A DESCRIPTION OF MAINTENANCE PROCEDURES NEEDED TO ENSURE THE CONTINUED PERFORMANCE OF CONTROL PRACTICES.

- INSPECTIONS. THE PERMITTEE SHALL ASSIGN "QUALIFIED INSPECTION PERSONNEL" TO CONDUCT INSPECTIONS TO ENSURE THAT THE CONTROL PRACTICES ARE FUNCTIONAL AND TO EVALUATE WHETHER THE SWPPP IS ADEQUATE AND PROPERLY IMPLEMENTED IN ACCORDANCE WITH THE SCHEDULE PROPOSED IN PART III.G.1.H OF THIS PERMIT OR WHETHER ADDITIONAL CONTROL MEASURES ARE REQUIRED. AT A MINIMUM, PROCEDURES IN A SWP3 SHALL PROVIDE THAT ALL CONTROLS ON THE SITE ARE INSPECTED:
- AFTER ANY STORM GREATER THAN ONE-HALF INCH OF RAIN PER 24-HOUR PERIOD BY THE END OF THE NEXT CALENDAR DAY, EXCLUDING WEEKENDS AND HOLIDAYS UNLESS WORK IS SCHEDULED: AND
- ONCE EVERY SEVEN CALENDAR DAYS

THE INSPECTION FREQUENCY MAY BE REDUCED TO AT LEAST ONCE EVERY MONTH FOR DORMANT SITES IF:

- THE ENTIRE SITE IS TEMPORARILY STABILIZED OR
- RUNOFF IS UNLIKELY DUE TO WEATHER CONDITIONS FOR EXTENDED PERIODS OF TIME (E.G., SITE IS COVERED WITH SNOW, ICE, OR THE GROUND IS FROZEN).

THE BEGINNING AND ENDING DATES OF ANY REDUCED INSPECTION FREQUENCY SHALL BE DOCUMENTED IN THE SWPPP.

ONCE A DEFINABLE AREA HAS ACHEIVED FINAL STABILIZATION, THE AREA MAY BE MARKED ON THE SWPPP AND NO FURTHER INSPECTION REQUIREMENTS SHALL APPLY TO THAT PORTION OF THE SITE.

FOLLOWING EACH INSPECTION, A CHECKLIST MUST BE COMPLETED AND SIGNED BY THE QUALIFIED INSPECTION PERSONNEL REPRESENTATIVE. AT A MINIMUM, THE INSPECTION REPORT SHALL INCLUDE:

- 1. THE INSPECTION DATE;
- NAMES, TITLES, AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION;
- WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION (OR SINCE COMMENCEMENT OF CONSTRUCTION ACTIVITY IF THE FIRST INSPECTION) INCLUDING A BEST ESTIMATE OF THE BEGINNING OF EACH STORM EVENT, DURATION OF EACH STORM EVENT, APPROXIMATE AMOUNT OF RAINFALL FOR EACH STORM EVENT (IN INCHES), AND WHETHER
- ANY DISCHARGES OCCURRED: 4. WEATHER INFORMATION AND A DESCRIPTION OF ANY DISCHARGES OCCURRING AT THE TIME OF THE INSPECTION:
- 5. LOCATION(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE;
- 6. LOCATION(S) OF BMPS THAT NEED TO BE MAINTAINED; 7. LOCATION(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE
- FOR A PARTICULAR LOCATION;
- 8. LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION: AND
- 9. CORRECTIVE ACTION REQUIRED INCLUDING ANY CHANGES TO THE SWPPP NECESSARY AND IMPLEMENTATION DATES.

DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF OR THE POTENTIAL FOR POLLUTANTS ENTERING THE DRAINAGE SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE SWPPP SHALL BE OBSERVED TO ENSURE THAT THOSE ARE OPERATING CORRECTLY. DISCHARGE LOCATION SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION AND SEDIMENT CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO THE RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE VEHICLE TRACKING.

THE PERMITTEE SHALL MAINTAIN FOR THREE YEARS FOLLOWING THE SUBMITTAL OF A NOTICE OF TERMINATION FORM, A RECORD SUMMARIZING THE RESULTS OF THE INSPECTION, NAMES(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE SWPPP AND A CERTIFICATION AS TO WHETHER THE FACILITY IS IN COMPLIANCE WITH THE SWPPP AND THE PERMIT AND IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.

- a. WHEN PRACTICES REQUIRE REPAIR OR MAINTENANCE. IF THE INSPECTION REVEALS THAT A CONTROL PRACTICE IS IN NEED OF REPAIR OR MAINTENANCE, WITH THE EXCEPTION OF A SEDIMENT SETTLING POND, IT SHALL BE REPAIRED OR MAINTAINED WITHIN 3 DAYS OF THE INSPECTION. SEDIMENT SETTLING PONDS SHALL BE REPAIRED OR MAINTAINED WITHIN 10 DAYS OF THE INSPECTION.
- WHEN PRACTICES FAIL TO PROVIDE THEIR INTENDED FUNCTION. IF THE INSPECTION REVEALS THAT A CONTROL PRACTICE FAILS TO PERFORM ITS INTENDED FUNCTION AND THAT ANOTHER, MORE APPROPRIATE CONTROL PRACTICE IS REQUIRED, THE SWPPP SHALL BE AMENDED AND THE NEW CONTROL PRACTICE SHALL BE INSTALLED WITHIN 10 DAYS OF THE INSPECTION.
- WHEN PRACTICES DEPICTED ON THE SWPPP ARE NOT INSTALLED. IF THE INSPECTION REVEALS THAT A CONTROL PRACTICE HAS NOT BEEN IMPLEMENTED IN ACCORDANCE WITH THE SEQUENCE OF CONSTRUCTION, THE CONTROL PRACTICE SHALL BE IMPLEMENTED WITHIN 10 DAYS FROM THE DATE OF THE INSPECTION. IF THE INSPECTION REVEALS THAT THE PLANNED CONTROL PRACTICE IS NOT NEEDED, THE RECORD SHALL CONTAIN A STATEMENT OF EXPLANATION AS TO WHY THE CONTROL PRACTICE IS NOT NEEDED.

## **CONSTRUCTION NOTES:**

- 1. AT LEAST (7) DAYS BEFORE STARTING CONSTRUCTION ANY EARTH DISTURBANCE ACTIVITIES, THE OWNER AND OR THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENTATION CONTROL PLAN PREPARER, AND ANY REPRESENTATIVES OF THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY TO AN ON-SITE PRECONSTRUCTION MEETING.
- 2. AT LEAST (2) DAYS BEFORE STARTING ANY EARTH DISTURBING ACTIVITIES ALL CONTRACTORS INVOLVED WITH THOSE ACTIVITIES SHALL NOTIFY THE ARIZONA811 (ARIZONA UTILITY PROTECTION SERVICE) AT 1-800-782-5348 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- 3. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING AND TOPSOIL STRIPPING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.
- 4. IMMEDIATELY AFTER DISCOVERING UNFORESEEN CONDITIONS POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENTATION POLLUTION. THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
- TEMPORARY STABILIZATION MUST BE APPLIED TO ANY DISTURBED AREA WHICH WILL BE LEFT UNTOUCHED FOR 4+ DAYS.
- 6. FAILURE TO CORRECTLY INSTALL E&S BMPs, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FORM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPs MAY RESULT IN ADMINISTRATIVE. CIVIL. AND OR CRIMINAL PENALTIES BEING INSTITUTED BY THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY.

## PROCEDURES FOR TRENCHING OF **UNDERGROUND UTILITIES**

- CONTRACTOR SHALL MINIMIZE THE AMOUNT OF EARTH DISTURBANCE REQUIRED FOR TRENCHING ACTIVITIES.
- CONTRACTOR SHALL ONLY EXCAVATE THE AMOUNT OF TRENCHES THAT CAN BE BACKFILLED AND STABILIZED IN A DAY.
- TRENCHES SHALL NOT BE EXPOSED OVERNIGHT.
- PLACE SPOIL MATERIAL ON THE HIGH SIDE OF THE TRENCH.
- ANY EXCESS SPOIL MATERIAL NOT USED FOR BACKFILL SHALL BE REMOVED FROM THE SITE AND DISPOSED IN A LEGAL MANNER OR PLACED IN A STOCKPILE AREA WITH FILTER FABRIC FENCE AND TEMPORARY SEED AND MULCH.
- AFTER BACKFILLING IMMEDIATELY STABILIZE TRENCH WITH SEED AND MULCH.
- REFER TO STREAM, /WETLAND UTILITY CROSSING DETAIL FOR EXCAVATING THROUGH WETLANDS OR UNDER STREAMS.
- 1. ALL UTILITY LINES UNDER STREAMBEDS OR WETLANDS SHALL BE LOCATED SUCH THAT THERE WILL BE A MINIMUM OF THREE (3) FEET OF COVER BETWEEN THE TOP OF THE UTILITY LINE OR ENCASEMENT AND THE LOWEST POINT IN THE NATURAL CONTOUR OF THE STREAMBED, UNLESS THE UTILITY LINE IS IN ROCK, WHERE A MINIMUM COVER OF ONE (1) FOOT SHALL BE PROVIDED.
- 2. TRENCHES EXCAVATED FOR THE INSTALLATION OF UTILITY LINES SHALL BE THE MINIMUM WIDTH NECESSARY. AS SOON AS THE UTILITY LINE IS INSTALLED AND TESTED TO ASCERTAIN NO LEAKAGE, APPROPRIATE NEW OR PREVIOUSLY EXCAVATED BACKFILL MATERIAL SHALL BE PLACED IN THE TRENCH AND THE AREA RESTORED TO ITS ORIGINAL CONDITION AND ELEVATION AND STABILIZATED. BACKFILL MATERIAL STORED IN CONNECTION WITH THE INSTALLATION MUST BE PROPERLY RETAINED OUT OF THE FLOODWAY SO AS TO PREVENT ITS DISCHARGE. WASHINGS OR RUNOFF FROM ENTERING THE WATERWAY PRIOR TO ITS PLACEMENT AS BACKFILL.
- 3. ADEQUATE MEASURES SHALL BE USED TO PREVENT SEDIMENTATION FROM THE TRENCH FROM ENTERING THE STREAM.
- 4. THE BACKFILLING OF THE TRENCH IN WHICH THE PIPE WILL BE LAID SHALL BE DONE SO AS TO ELIMINATE THE FORMATION OF A PERMANENT RIDGE IN THE STREAMBED.
- 5. MATS, PADS, OR OTHER SIMILAR DEVICES SHALL BE USED WHERE CROSSINGS OF WETLAND AREAS BY CONSTRUCTION EQUIPMENT CANNOT BE AVOIDED. ORIGINAL GRADES THROUGH WETLANDS MUST BE RESTORED AFTER TRENCHING AND BACKFILLING. ANY EXCESS FILL MATERIAL MUST BE REMOVED FROM THE WETLAND AND NOT SPREAD ON-SITE. MOUNDING OF FILL MATERIAL TO ALLOW FOR SETTLEMENT IN THE TRENCH WILL BE PERMITTED IN ACCORDANCE WITH BEST CONSTRUCTION METHODS.
- 6. DEPOSITION OF DREDGED OR EXCAVATED MATERIALS AND ALL EARTHWORK OPERATIONS WILL BE CARRIED OUT IN SUCH A WAY AS TO MINIMIZE EROSION OF THE MATERIAL AND PRECLUDE ITS ENTERING INTO ANY WETLAND ADJACENT TO THE UTILITY LINE CROSSING.
- 7. UTILITY LINE CROSSINGS OF STREAMS SHOULD BE ACCOMPLISHED SO THAT THE LINE IS AT A RIGHT ANGLE TO THE STREAM WHERE POSSIBLE, UNLESS THE CROSSING IS INSTALLED ON AN EXISTING BRIDGE.
- 8. WHENEVER POSSIBLE, IN ACCORDANCE WITH BEST CONSTRUCTION METHODS UTILITY LINE CROSSINGS ARE TO BE MADE "IN THE DRY" BY INSTALLING SANDBAG AND PLASTIC DAMS AND PIPING STREAM FLOW THROUGH THE AFFECTED AREA. REFER TO DETAIL.
- 9. TRENCH PLUGS SHALL BE PLACED ON EACH SIDE OF STREAM AT A MAXIMUM DISTANCE OF 4'. IN WETLAND AREAS PLUGS SHALL BE PLACED ON OUTSIDE OF WETLAND AT A MAXIMUM DISTANCE OF 1'.

## THE TYPES, DEPTH, SLOPE, LOCATIONS, AND LIMITATIONS OF THE SOILS

### SOIL TYPES

THE SOILS ON THE SITE AS DETERMINED BY THE USDA-SCS SOIL SURVEY OF AGUILLA-CAREFREE AREA, ARIZONA, PARTS OF MARICOPA AND PINAL COUNTIES: AND EASTERN MARICOPA AND NORTHERN PINAL COUNTIES AREA. ARIZONA CONSIST OF THE FOLLOWING TYPES:

SOIL TYPE SOIL DESCRIPTION

CONTINE CLAY LOAM, O TO 3 PERCENT SLOPES. THE SOIL IS ON FAN TERRACES. WATER MOVEMENT IN THE MOST RESTRICTIVE LAYER IS VERY LOW. DEPTH TO A ROOT RESTRICTIVE LAYER IS GREATER THAN 60 INCHES. THIS SOIL HAS A SLIGHT HAZARD OF EROSION AND IS WELL DRAINED. AVAILABLE WATER TO A DEPTH OF 60 INCHES (OR RESTRICTED DEPTH) IS MODERATE, SHRINK SWELL POTENTIAL IS LOW. THIS SOIL IS NOT FLOODED. IT IS NOT PONDED. THERE IS NO ZONE OF WATER SATURATION WITHIN A DEPTH OF 72 INCHES. THIS SOIL BELONGS TO HYDROLOGIC SOIL GROUP D. THIS SOIL DOES NOT MEET HYDRIC CRITERIA.

CONSTRUCTION TECHNIQUES INCLUDE THE USE OF LADDERS IN EXCAVATION, TRENCH BOXES, AND EXCAVATIONS WITH SLOPES NOT CONDUCIVE TO CAVE-INS. PROTECTION SHALL BE USED AROUND CONCRETE AND STEEL TO PREVENT CORROSION. CARE SHOULD BE TAKEN TO STABILIZE SOILS AND PROVIDE SUFFICIENT EROSION AND SEDIMENTATION MEASURES. SLOW PERCOLATION RATES MAY CAUSE WET SATURATED SOILS AND SOIL PIPING, USE CAUTION WHILE MOVING EQUIPMENT AROUND IN SATURATED SOILS. SOIL SHALL BE PROTECTED FROM THE ELEMENTS TO PREVENT FROST ACTION POTENTIAL. TOPSOIL SHOULD BE IMPORTED INTO THE SITE. CARE SHOULD BE TAKEN TO ENSURE SOIL IS AT PROPER MOISTURE CONTENT FOR COMPACTION.

MOHALL LOAM, O TO 3 PERCENT SLOPES. THE SOIL IS ON FAN TERRACES. WATER MOVEMENT IN THE MOST RESTRICTIVE LAYER IS MODERATELY HIGH. DEPTH TO A ROOT RESTRICTIVE LAYER IS GREATER THAN 60 INCHES. THIS SOIL HAS A SLIGHT HAZARD OF EROSION AND IS WELL DRAINED. AVAILABLE WATER TO A DEPTH OF 60 INCHES (OR RESTRICTED DEPTH) IS HIGH. SHRINK SWELL POTENTIAL IS MODERATE. THIS SOIL IS NOT FLOODED. IT IS NOT PONDED. THERE IS NO ZONE OF WATER SATURATION WITHIN A DEPTH OF 72 INCHES. THIS SOIL BELONGS TO HYDROLOGIC SOIL GROUP C. THIS SOIL DOES NOT MEET HYDRIC CRITERIA.

CONSTRUCTION TECHNIQUES INCLUDE THE USE OF LADDERS IN EXCAVATION, TRENCH BOXES, AND EXCAVATIONS WITH SLOPES NOT CONDUCIVE TO CAVE-INS. PROTECTION SHALL BE USED AROUND CONCRETE AND STEEL TO PREVENT CORROSION. CARE SHOULD BE TAKEN TO STABILIZE SOILS AND PROVIDE SUFFICIENT EROSION AND SEDIMENTATION MEASURES. SLOW PERCOLATION RATES MAY CAUSE WET SATURATED SOILS AND SOIL PIPING, USE CAUTION WHILE MOVING EQUIPMENT AROUND IN SATURATED SOILS. SOIL SHALL BE PROTECTED FROM THE ELEMENTS TO PREVENT FROST ACTION POTENTIAL. TOPSOIL SHOULD BE IMPORTED INTO THE SITE. CARE SHOULD BE TAKEN TO ENSURE SOIL IS AT PROPER MOISTURE CONTENT FOR COMPACTION.

CONTINE CLAY LOAM, O TO 1 PERCENT SLOPES. THE SOIL IS ON OLD ALLUVIAL FANS. WATER MOVEMENT IN THE MOST RESTRICTIVE LAYER IS MODERATELY LOW. DEPTH TO A ROOT RESTRICTIVE LAYER IS GREATER THAN 60 INCHES. THIS SOIL HAS A SLIGHT HAZARD OF EROSION AND IS WELL DRAINED. AVAILABLE WATER TO A DEPTH OF 60 INCHES (OR RESTRICTED DEPTH) IS HIGH. SHRINK SWELL POTENTIAL IS HIGH. THIS SOIL IS NOT FLOODED. IT IS NOT PONDED. THERE IS NO ZONE OF WATER SATURATION WITHIN A DEPTH OF 72 INCHES. THIS SOIL BELONGS TO HYDROLOGIC SOIL GROUP C. THIS SOIL DOES NOT MEET HYDRIC CRITERIA.

CONSTRUCTION TECHNIQUES INCLUDE THE USE OF LADDERS IN EXCAVATION, TRENCH BOXES, AND EXCAVATIONS WITH SLOPES NOT CONDUCIVE TO CAVE-INS. PROTECTION SHALL BE USED AROUND CONCRETE AND STEEL TO PREVENT CORROSION. CARE SHOULD BE TAKEN TO STABILIZE SOILS AND PROVIDE SUFFICIENT EROSION AND SEDIMENTATION MEASURES. SLOW PERCOLATION RATES MAY CAUSE WET SATURATED SOILS AND SOIL PIPING, USE CAUTION WHILE MOVING EQUIPMENT AROUND IN SATURATED SOILS. SOIL SHALL BE PROTECTED FROM THE ELEMENTS TO PREVENT FROST ACTION POTENTIAL. TOPSOIL SHOULD BE IMPORTED INTO THE SITE. CARE SHOULD BE TAKEN TO ENSURE SOIL IS AT PROPER MOISTURE CONTENT FOR COMPACTION.

MOHALL LOAM MLRA 40, 0 TO 3 PERCENT SLOPES. THE SOIL IS ON FAN TERRACES, BASIN FLOORS, STREAM TERRACES, BASINS. WATER MOVEMENT IN THE MOST RESTRICTIVE LAYER IS MODERATELY HIGH. DEPTH TO A ROOT RESTRICTIVE LAYER IS GREATER THAN 60 INCHES. THIS SOIL HAS A SLIGHT HAZARD OF EROSION AND IS WELL DRAINED. AVAILABLE WATER TO A DEPTH OF 60 INCHES (OR RESTRICTED DEPTH) IS HIGH. SHRINK SWELL POTENTIAL IS LOW. THIS SOIL IS NOT FLOODED. IT IS NOT PONDED. THERE IS NO ZONE OF WATER SATURATION WITHIN A DEPTH OF 72 INCHES. THIS SOIL BELONGS TO HYDROLOGIC SOIL GROUP C. THIS SOIL DOES NOT MEET HYDRIC CRITERIA.

CONSTRUCTION TECHNIQUES INCLUDE THE USE OF LADDERS IN EXCAVATION, TRENCH BOXES, AND EXCAVATIONS WITH SLOPES NOT CONDUCIVE TO CAVE-INS. PROTECTION SHALL BE USED AROUND CONCRETE AND STEEL TO PREVENT CORROSION. CARE SHOULD BE TAKEN TO STABILIZE SOILS AND PROVIDE SUFFICIENT EROSION AND SEDIMENTATION MEASURES. SLOW PERCOLATION RATES MAY CAUSE WET SATURATED SOILS AND SOIL PIPING, USE CAUTION WHILE MOVING EQUIPMENT AROUND IN SATURATED SOILS, SOIL SHALL BE PROTECTED FROM THE ELEMENTS TO PREVENT FROST ACTION POTENTIAL. TOPSOIL SHOULD BE IMPORTED INTO THE SITE, CARE SHOULD BE TAKEN TO ENSURE SOIL IS AT PROPER MOISTURE CONTENT FOR COMPACTION.

## A SEQUENCE OF BMP INSTALLATION AND REMOVAL IN RELATION TO THE SCHEDULING OF EARTH DISTURBANCE ACTIVITIES PRIOR TO, DURING, AND AFTER EARTH DISTURBANCE ACTIVITIES

ANTICIPATED CONSTRUCTION BEGIN DATE: SPRING 2025

- 1. CONTRACTOR AND/OR DEVELOPER SHALL NOTIFY THE ADEQ 7 TO 10 DAYS PRIOR TO THE START OF CONSTRUCTION. 2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD MARK THE LIMITS OF DISTURBANCE AT THE LOCATIONS INDICATED ON THE
- 3. INSTALL ROCK CONSTRUCTION ENTRANCES/EXITS AT LOCATIONS INDICATED ON THE PLANS. CESSATION OF CONSTRUCTION ACTIVITY FOR FOUR OR MORE DAYS REQUIRES TEMPORARY STABILIZATION.
- INSTALL COMPOST FILTER SOCKS DOWNSLOPE OF THE PROPOSED WORK AREA AND INLET PROTECTION IN THE EXISTING INLETS. REFER TO THE PLANS FOR THE LOCATION OF THE COMPOST FILTER SOCKS AND INLET PROTECTION. NO EARTHMOVING OPERATIONS SHALL BEGIN UNTIL ALL COMPOST FILTER SOCK AND INLET PROTECTION HAVE BEEN PROPERLY INSTALLED. NO COMPOST FILTER SOCKS SHALL BE REMOVED UNTIL THE CONTRIBUTORY AREA DRAINING TO A SECTION OF COMPOST FILTER SOCK IS STABILIZED. THE AREA SHALL BE CONSIDERED STABILIZED AS OUTLINED BELOW.
- CLEAR AND GRUB PROJECT AREA. STRIP ALL THE TOPSOIL AND PLACE IN DESIGNATED TOPSOIL STOCKPILE AREA. COMPOST FILTER SOCK SHALL BE PLACED ON THE DOWNSLOPE SIDE OF THE TOPSOIL STOCKPILE AS SHOWN ON THE PLAN. TEMPORARY SEEDING SHALL BE PLACED ON THE TOPSOIL STOCKPILE (REFER TO TEMPORARY SEEDING SPECIFICATIONS). MINIMIZE MOVING AND REPLACING COMPOST FILTER SOCK TO LIMIT DAMAGE TO THE SOCK.
- 7. INSTALL CONCRETE WASHOUT.
- 8. BEGIN EARTHWORK OPERATIONS TO BRING THE SITE TO THE REQUIRED ELEVATIONS.
- 9. BEGIN CONSTRUCTION OF THE RETENTION BASIN.
- 10. BEGIN CONSTRUCTION OF THE TRUCKING TERMINAL FACILITY AND MAINTENANCE SHOP.
- 11. INSTALL NEW STORM SEWERS AS INDICATED ON THE PLANS. ANY NEWLY INSTALLED INLET SHALL RECEIVE SILT SACK INLET PROTECTION WITHIN 8 HOURS OF THE INLET BEING PLACED. NO INLET PROTECTION SHALL BE REMOVED UNTIL THE CONTRIBUTORY AREA DRAINING TO A SECTION OF INLET PROTECTION IS STABILIZED. THE AREA SHALL BE CONSIDERED STABILIZED AS OUTLINED
- 12. INSTALL UTILITY SERVICE LATERALS.
- 13. BEGIN CONSTRUCTION OF THE PAVEMENT AREAS AFTER ALL STORM SEWERS AND UTILITIES HAVE BEEN INSTALLED. AS SOON AS PRACTICAL, AFTER AREAS TO BE PAVED HAVE REACHED SUBGRADE ELEVATION, PLACE STONE SUBBASE. THESE AREAS SHALL BE CONSIDERED STABILIZED ONCE THE SUBBASE HAS BEEN INSTALLED.
- 14. COMPLETE CONSTRUCTION OF THE TRUCK TERMINAL FACILITY AND MAINTENANCE SHOP.
- 15. COMPLETE LANDSCAPING.
- 16. SPREAD TOPSOIL OVER ALL DISTURBED AREAS NOT TO BE PAVED. SEED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS. 17. REMOVE TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ONCE PERMANENT MEASURES ARE ESTABLISHED. PERMANENT CONTROL IS CONSIDERED ACHIEVED WHEN ROADWAYS ARE PAVED AND A 70% UNIFORM PERENNIAL VEGETATIVE COVER IS ESTABLISHED ON ALL SEEDED AREAS. ALL TEMPORARY EROSION AND SEDIMENTATION PLAN CONTROLS ARE TO BE ASSESSED/INSPECTED BY A LICENSED PROFESSIONAL TO VERIFY THAT SUFFICIENT VEGETAL COVER HAS BEEN ATTAINED PRIOR TO THE REMOVAL OR CONVERSION OF EROSION AND SEDIMENTATION PLAN CONTROLS. ANY AREAS DISTURBED DURING THE REMOVAL
- 18. FINAL CLEANUP OF PROJECT SITE THE CONTRACTOR SHALL DISPOSE OF ALL WASTE MATERIAL OFF SITE IN A LAWFUL MANNER.

ANTICIPATED CONSTRUCTION COMPLETION DATE: SPRING 2026

OF THE TEMPORARY CONTROLS SHALL BE REPAIRED WITHIN 8 HOURS.



AZ #: 13460-0

Headquarters: 1407 Scalp Avenue Johnstown, PA 15904 814-269-9300 www.hflenz.com

Consultants:

Seal:

Project Identification:

SAIA MOTOR FREIGHT LINE, LLC

**PROPOSED** TRUCKING FREIGHT **FACILITY** 

E PECOS ROAD. CITY OF MESA. MARICOPA COUNTY, **ARIZONA** 

No.:	Date:	Description:

Sheet Title **EROSION AND** SEDIMENTATION CONTROL **PLAN NOTES** 

Project No.: 2023-0302.01 Cadd File: ES3.00.dwg Drawn By: BJC Checked By: 05/17/2024

Drawing Number

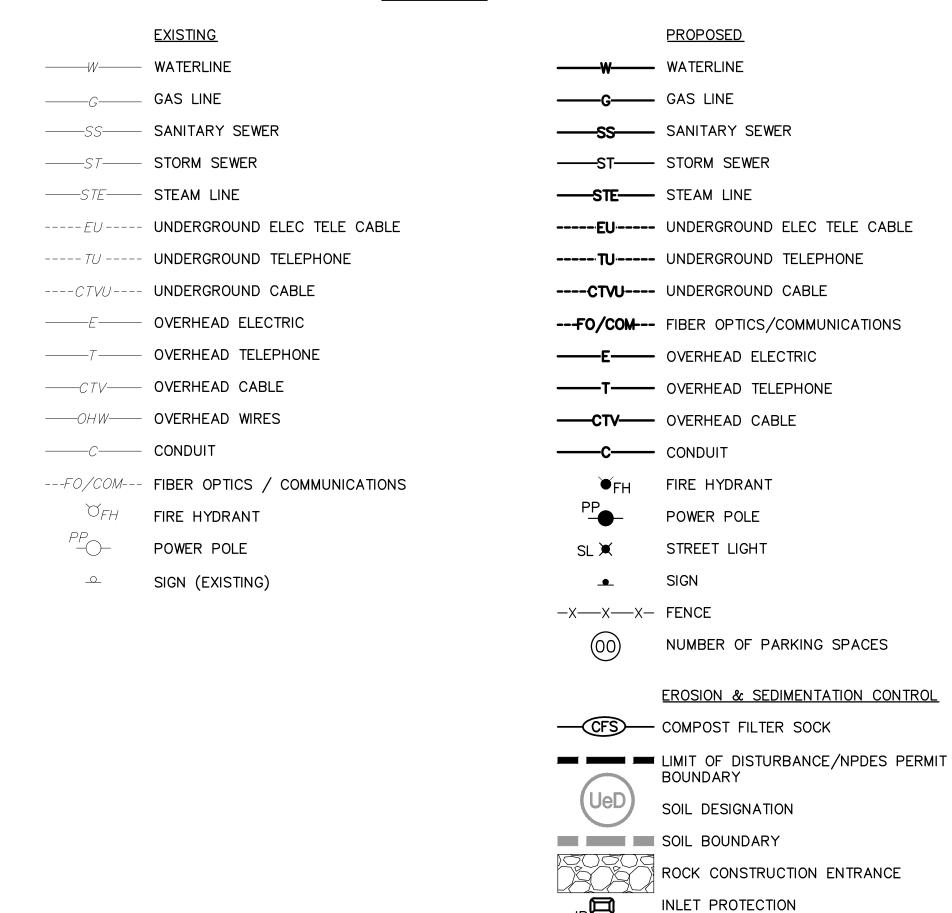
Copyright: C 2024 H.F. LENZ COMPANY

## **EROSION AND SEDIMENTATION CONTROL** MAINTENANCE SCHEDULE

CONTROL	INCDECT	DDODLEVO TO	חטפטוחו ב חבו ובחובס
CONTROL MEASURE	INSPECT	PROBLEMS TO LOOK FOR	POSSIBLE REMEDIES
VEGETATION	ONCE A WEEK AND AFTER EVERY	SEDIMENT AT TOE OF SLOPE	CHECK FOR TOP-OF-SLOPE DIVERSION AND INSTALL IF NEEDEL
	STORM/SNOW MELT RUNOFF EVENT	RILLS AND GULLIES FORMING	FILL RILLS AND REGRADE GULLIED SLOPES
		BARE SOIL PATCHES	RESEED, FERTILIZE AND MULCH BA
		EROSION OF CHANNEL LINING	RESEED, MULCH, AND ANCHOR WIT NETTING, OR INSTALL CHECK DAMS
ROCK CONSTRUCTION		SINK HOLES OR RUTS	ADD ROCK TO BRING TO SPECIFIED DIMENSIONS
ENTRANCES	STORM/SNOW MELT RUNOFF EVENT	SEDIMENT ON PUBLIC AND PRIVATE ROADWAYS	SWEEP MATERIAL BACK TO PROJECT SITE. DO NOT WASH ROADWAY WITH WATER.
SILT SACK INLET	AFTER EVERY	SEDIMENT ACCUMULATION	REMOVE SEDIMENT AND DISPOSE ON SITE
PROTECTION	STORM/SNOW MELT RUNOFF EVENT	RUNOFF ESCAPING AROUND INLET	REMOVE SEDIMENT AND DISPOSE ON SITE — REBUILD BARRIER
		RUNOFF ESCAPING THROUGH OPEN THROAT OF PADOT TYPE "C" TOP	PLACE ADDITIONAL SAND  BAGS, WEIGHTED SEDIMENT  FILTER TUBE, OR SEDIMENT
			LOGS TO DIRECT RUNOFF INTO THE OPEN GRATE
FILTER SOCK	ONCE A WEEK AND AFTER EVERY STORM/SNOW MELT RUNOFF EVENT	UNDERCUTTING OF SOCK SOCK COLLAPSING	ADD SECTION OF SOCK  REPLACE WITH PYRAMID OF SOCKS
	RUNOFF EVENT	TORN SOCK	REPLACE WITH CONTINUOUS NEW RO FROM POST TO POST. SECURELY AND WITH PROPER STAPLES
		RUNOFF ESCAPING AROUND SOCK	EXTEND SOCK
		SEDIMENT LEVEL NEAR TOP OF SOCK	REMOVE SEDIMENT WHEN LEVEL REA
PUMPED WATER FILTER BAG	DAILY AND AFTER EVERY STORM/SNOW MELT RUNOFF EVENT	TORN OR DAMAGED FILTER BAG	REPLACE BAG WITH A NEW PUMPED WATER FILTER BAG. A REPLACEMENT FILTER BAG SHOULD BE AVAILABLE ON SITE AT ALL TIMES.
		FILTER BAG FULL OF SEDIMENT	REPLACE BAG WITH A NEW PUMPED WATER FILTER BAG. A REPLACEMENT FILTER BAG SHOULD BE AVAILABLE ON SITE AT ALL TIMES.
		RUNOFF FROM FILTER BAG CREATING EROSION	PLACE FILTER BAG IN A STABILIZED AREA TO PREVENT ADDITIONAL EROSION FORMING FROM DISCHARG LOCATION.
CONCRETE WASHOUT	DAILY AND AFTER EVERY STORM/SNOW MELT	DAMAGED OR LEAKING WASHOUTS	CONCRETE WASHOUT SHALL BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY
	RUNOFF EVENT	CONCRETE WASHOUT FULL OF MATERIAL	MATERIALS INSIDE CONCRETE WASHOUT SHALL BE REMOVED WHI 75% OF CAPACITY IS REACHED
		PLASTIC LINER TORN	PLASTIC LINERS SHALL BE REPLACE WITH EACH CLEANING OF THE WAS FACILITY
RIPRAP APRONS	ONCE A WEEK AND AFTER EVERY	DISPLACED ROCK	REPLACE DISPLACED ROCK IMMEDI
<u></u>		SEDIMENT ACCUMULATION	CLEAN AND DISPOSE OF SEDIMENT IN A LAWFUL MANNER
EROSION CONTROL	AFTER EVERY	TORN OR COMPROMISED BLANKET	REPLACE WITH A NEW PIECE OF E AND RESEED AND MULCH IF NEED
BLANKET	STORM/SNOW MELT RUNOFF EVENT	RILLS AND GULLIES FORMING UNDER BLANKET	FILL RILLS AND REGRADE GULLIED SLOPES. REPLACE EROSION CONTR

BLANKET AFTER CORRECTION

## **LEGEND**



世 H.F. LENZ

ENGINEERING

Headquarters:

814-269-9300

Consultants:

www.hflenz.com

1407 Scalp Avenue

Johnstown, PA 15904

AZ #: 13460-0

Project Identification:

SAIA MOTOR FREIGHT LINE, LLC

**PROPOSED** TRUCKING FREIGHT **FACILITY** 

E PECOS ROAD, CITY OF MESA, MARICOPA COUNTY, **ARIZONA** 

No.: Date: Description:

Sheet Title: **EROSION AND** SEDIMENTATION CONTROL **PLAN DETAILS** 

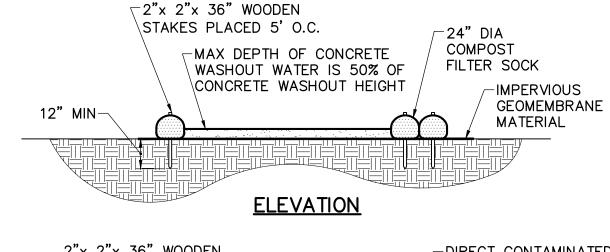
Project No.:		2023-0302.01
Cadd File:		ES3.00.dwg
Drawn By:		JJS
Checked By:		ВЈС
Date:		05/17/2024
Copyright:	<u>C</u>	2024 H.F. LENZ COMPAN
Drawing Nur	nher	

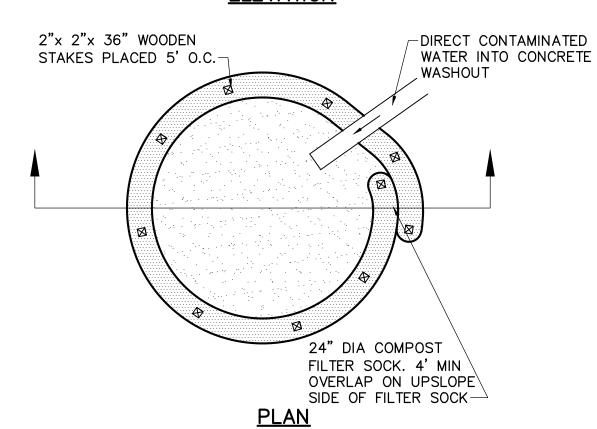
• INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.

• 18" DIA FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIA

SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT. CONCRETE WASHOUT MAY BE DIRECT SEEDED AT THE TIME OF INSTALLATION.

 A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCK.





COMPOST FILTER SOCK **CONCRETE WASHOUT** NOT TO SCALE

# SYMBOL AND ABBREVIATION SCHEDULE

				<b>:</b>	
AC	ACRE	ELEC	ELECTRIC	PUB	PUBLICATION
AC	AIR CONDITIONER	ЕМН	ELECTRIC MANHOLE	PSI	POUNDS PER SQUARE INCH
ADOT	ARIZONA DEPARTMENT OF	EM	ELECTRIC METER	PP	POWER POLE
	TRANSPORTATION	EL/ELEV	ELEVATION	PVC	POLYVINYL CHLORIDE
AASHTO	AMERICAN ASSOCIATION OF STATE	EQ	EQUAL	ዊ	PROPERTY LINE
	HIGHWAYS AND TRANSPORTATION	EXP	EXPANSION	R	RADIUS
	OFFICIALS	EX	EXISTING	REINF	REINFORCEMENT
ACI	AMERICAN CONCRETE TRANSPORTATION	FFE	FINISH FLOOR ELEVATION	RCP	REINFORCED CONCRETE PIPE
	OFFICIALS	FH	FIRE HYDRANT	R/W	RIGHT-OF-WAY
ASTM	AMERICAN SOCIETY FOR TESTING AND	GM	GAS METER	SCH	SCHEDULE
	MATERIALS	GV	GAS VALVE	SEC	SECTION
0	AT	HP	HIGH POINT	SEG	SEGMENT
₽	BASELINE	HORIZ	HORIZONTAL	SLCPP	SMOOTH LINED CORRUGATED PLASTIC PIPE
ВС	BOTTOM OF CURB	INC	INCORPORATED	STA	STATION
BW	BOTTOM OF WALL	INV	INVERT	SR	STATE ROUTE
BY/4"	BROKEN YELLOW PAVEMENT LINE/WIDTH	LP	LIGHT POLE	ST	STREET
BLDG	BUILDING	МН	MANHOLE	SRL	SKID RESISTANCE LEVEL
<b>Q</b>	CENTERLINE	MAX	MAXIMUM	S	SOUTH
cc c/c	CENTER TO CENTER	MIN	MINIMUM	SF	SQUARE FEET
CLR	CLEAR	MPH	MILES PER HOUR	SY	SQUARE YARD
CONC	CONCRETE	N	NORTH	TC	TOP OF CURB
CONSTR	CONSTRUCTION	NPDES	NATIONAL POLLUTANT DISCHARGE	TW	TOP OF WALL
CMP	CORRUGATED METAL PIPE		ELIMINATION SYSTEM	XF	TRANSFORMER
CPP	CORRUGATED POLYETHYLENE PIPE	No/#	NUMBER	TYP	TYPICAL
DIA	DIAMETER	PM	PARKING METER	WM	WATER METER
DI	DUCTILE IRON	OC	ON CENTER	WV	WATER VALVE
EOB	EDGE OF BERM	PERF	PERFORATED	WWF	WELDED WIRE FABRIC
EOP	EDGE OF PAVEMENT	PE	POLYETHYLENE	W/4"	WHITE PAVEMENT LINE/WIDTH

-MOUNTABLE

**EXISTING** 

ROADWAY

-EARTH FILL

50' MIN

MIN 8"

**PROFILE** 

PLAN VIEW

ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY

APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

COURSES IS NOT ACCEPTABLE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION

SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION

MOUNTABLE BERM SHALL BE INSTALLED WHERE OPTIONAL CULVERT

MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING

ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAY SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY.

IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY

50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS

INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE

ROCK CONSTRUCTION ENTRANCE

AASHTO #1

EXISTING

GROUND-

ENTRANCE.

GEOTEXTILE —

BERM (6" MIN) \*

-PIPE AS NECESSARY

PIPE

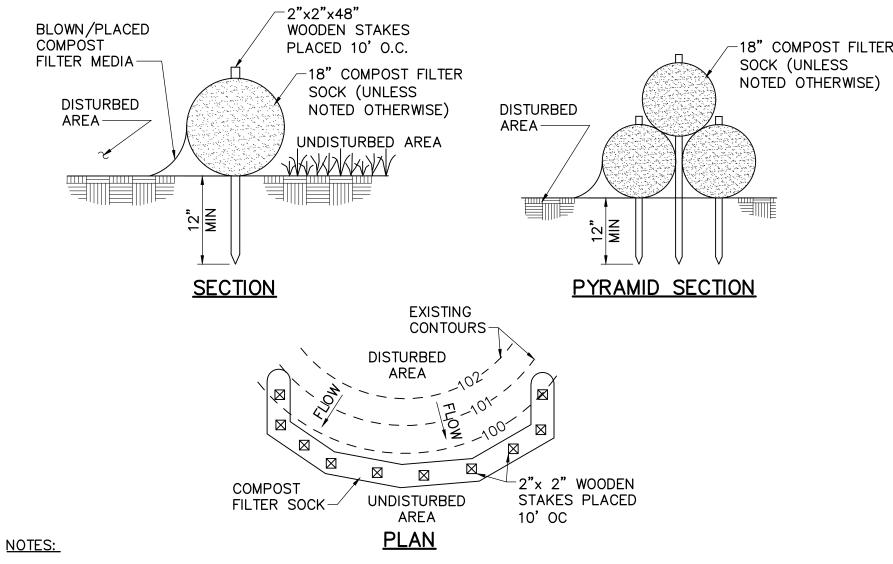
ROADWAY

\* MOUNTABLE BERM

USED TO PROVIDE PROPER COVER FOR

TABLE 4.1							
COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS							
MATERIAL TYPE	3 mil HDPE	5 mil HDPE	5 mil HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPP)		
MATERIAL CHARACTERISTICS	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE	BIO- DEGRADABLE	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE		
SOCK DIAMETERS		12"	12"	12"	12"		
	12"	18"	18"	18"	18"		
	18 <b>"</b>	24"	24"	24"	24"		
		32"	32"	32"	32"		
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"		
TENSILE STRENGTH		26 psi	26 psi	44 psi	202 psi		
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.		
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS		
		TWO-PLY S	SYSTEMS				
			HDPE BIAXIAL NET				
INNED CO		FTINIC	CONTINUOUSLY WOUND				
INNER CO	ONTAINMENT NE	TIING	FUSION-WELDED JUNCTURES				
			3/4" X	3/4" MAX. APER	TURE SIZE		
OUTER	FILTRATION ME	SH	COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER AND NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)				
			3/1	6" MAX. APERTUR	RE SIZE		
SOCK FABRICS COM	MPOSED OF BUR	LAP MAY BE US	SED ON PROJEC	CTS LASTING 6 MG	ONTHS OR LESS.		

TABLI	TABLE 4.2					
COMPOST S	STANDARDS					
ORGANIC MATTER CONTENT	80% - 100% (DRY WEIGHT BASIS)					
ORGANIC PORTION	FIBROUS AND ELONGATED					
рН	5.5 - 8.0					
MOISTURE CONTEN	T 35% – 55%					
PARTICLE SIZE	98% PASS THROUGH 1" SCREEN					
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM					



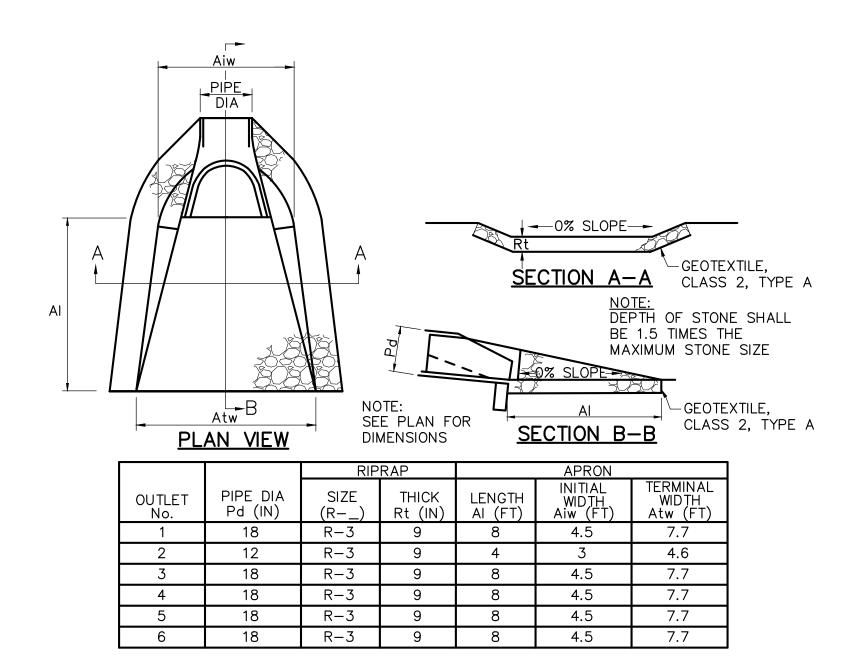
- SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1. COMPOST SHALL MEET THE STANDARDS OF
- COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF FILTER SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
- TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.

С

- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN
- SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.
- STAKES SPACED AT 10' MAXIMUM. USE 2"x 2" WOOD OR EQUIVALENT STEEL STAKES.

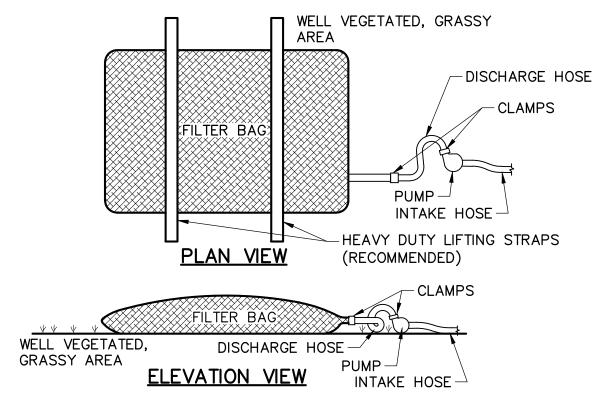
## COMPOST FILTER SOCK

NOT TO SCALE



- ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.
- ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

# **ROCK APRON DETAIL**



LOW VOLUME FILTER BAGS SHALL BE MADE FORM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

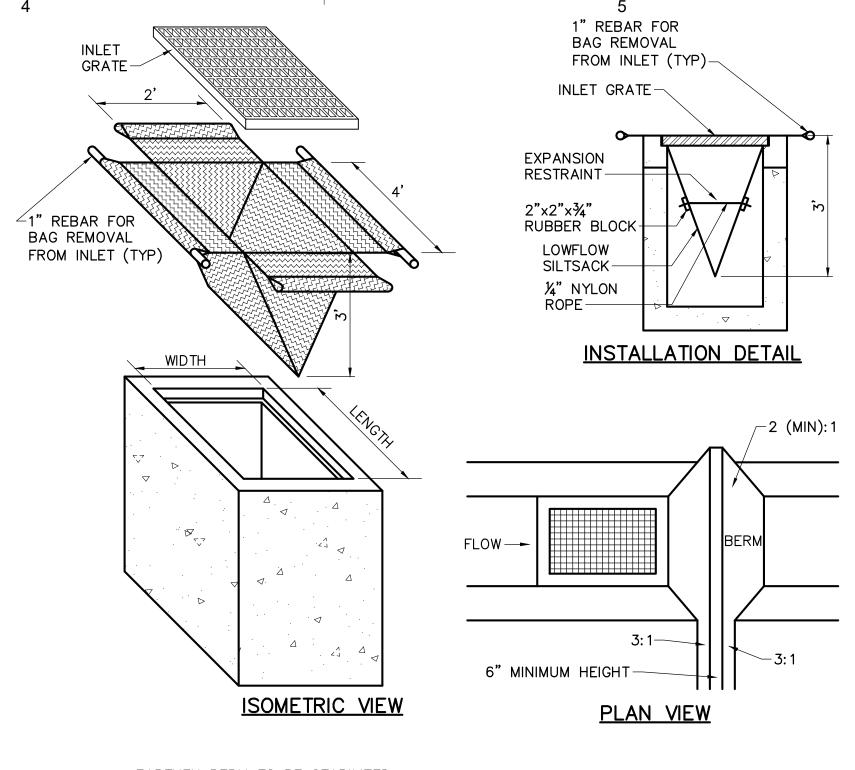
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR ½ THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

# PUMPED WATER FILTER BAG

NOT TO SCALE



ELEVATION VIEW

• MAXIMUM DRAINAGE AREA = 1/2 ACRE.

- INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
- ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.
- AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A No. 40 SIEVE.
- INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.
- DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

## FILTER BAG INLET PROTECTION DETAIL

NOT TO SCALE

Seal:

世 H.F. LENZ

AZ #: 13460-0

Headquarters: 1407 Scalp Avenue Johnstown, PA 15904 814-269-9300 www.hflenz.com

Consultants:

Project Identification:

SAIA MOTOR

PROPOSED
TRUCKING FREIGHT

FREIGHT LINE, LLC

**FACILITY** 

E PECOS ROAD, CITY OF MESA, MARICOPA COUNTY, ARIZONA

No.:	Date:	Description:

Sheet Title:
EROSION AND
SEDIMENTATION CONTROL
PLAN DETAILS

Α	Project No.:		2023-0302.0
	Cadd File:		ES3.00.dw
	Drawn By:		JJS
	Checked By:		ВЈО
	Date:		05/17/2024
	Copyright:	<u>C</u>	2024 H.F. LENZ COMPA

ES3.03

3

5