

# USSRC A-12 EXHIBIT

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CONSTRUCTION ISSUE

GOODWYN MILLS CAWOOD, LLC TUCKER JONES ENGINEERS ASSOCIATED, P.C

ARCHITECTURE, INTERIORS, CIVIL, LANDSCAPE

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### BEST MANAGEMENT PRACTICES NOTES

- 1. ALL BEST MANAGEMENT PRACTICES SHALL BE DEVELOPED AND MAINTAINED BY THE CONTRACTOR ACCORDING TO THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL, AND STORM WATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS, (MARCH 2009 ed. OR MOST CURRENT) BY THE ALABAMA SOIL AND WATER CONSERVATION COMMITTEE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND FAMILIARIZING HIMSELF WITH THE HANDBOOK AND THE STANDARDS AND MATERIALS CONTAINED THEREIN. THE HANDBOOK MAY BE PURCHASED FROM THE ALABAMA CHAPTER OF THE SOIL AND WATER CONSERVATION SOCIETY THROUGH THE COUNTY SOIL AND WATER CONSERVATION FOUNDATION. ORDER FORMS ARE AVAILABLE ON THE HOME PAGES OF THE ALABAMA CHAPTER OF THE SOIL AND WATER CONSERVATION SOCIETY (http://www.alchapterswcs.aces.edu) AND THE ALABAMA SOIL AND WATER CONSERVATION COMMITTEE (https://alconservationdistricts.gov/) AND AT LOCAL SOIL AND WATER CONSERVATION DISTRICT OFFICES IN EACH COUNTY.
- 2. THE MAINTENANCE OF ALL BEST MANAGEMENT PRACTICES, SO AS TO BE AN EFFECTIVE BARRIER TO EROSION AND SEDIMENTATION, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THROUGHOUT THE DURATION OF THE CONSTRUCTION PERIOD. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN COMPLIANCE WITH ALL ADEM AND EPA BEST MANAGEMENT PRACTICES AND THE NPDES PERMIT ASSOCIATED WITH THIS SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR, REPLACEMENT, AND/OR SUPPLEMENTATION OF ANY CONTROL MEASURES THAT ARE NOT FUNCTIONING PROPERLY. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHOWN ON THE PLANS SHALL BE CONSIDERED A MINIMUM.
- 3. OTHER THAN LAND-CLEARING ACTIVITIES REQUIRED TO INSTALL THE APPROPRIATE BMP IN ACCORDANCE WITH THE BMP PLANS, ANY DOWN SLOPE EROSION AND SEDIMENT CONTROL MEASURES, ON-SITE STREAM CHANNEL PROTECTION AND UPSLOPE DIVERSION OF DRAINAGE REQUIRED BY THE BMP PLAN SHALL BE IN PLACE AND FUNCTIONAL BEFORE ANY CLEARING OR EARTH MOVING OPERATIONS BEGIN AND SHALL BE CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. TEMPORARY MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT SHALL BE REPLACED AT THE END OF THE WORKDAY.
- 4. THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE WHICH CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. ANY SLOPE OR FILL WHICH HAS BEEN GRADED SHALL WITHIN THIRTEEN (13) DAYS OF THE COMPLETION OF SUCH GRADING OR THE COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE BE PROVIDED WITH GROUND COVER, MATERIALS, DEVICES, OR STRUCTURES SUFFICIENT TO RETAIN EROSION. THE BMPs SHALL REMAIN IN PLACE IN ACCORDANCE WITH THE BMP PLAN UNTIL THE GRADED SLOPE OR FILL IS STABILIZED.
- 5. ALL HAZARDOUS SUBSTANCES USED FOR THIS PROJECT (PAINT, OIL, GREASE, AND OTHER PETROLEUM PRODUCTS) SHALL BE STORED IN ACCORDANCE WITH SPCC REGULATIONS. THESE SUBSTANCES SHALL BE STORED AWAY FROM STORM DRAINS, DITCHES, AND GUTTERS IN WATERTIGHT CONTAINERS. DISPOSAL OF THESE SUBSTANCES SHALL BE IN ACCORDANCE WITH ADEM REGULATIONS. THE CONTRACTOR SHALL PROVIDE ADEQUATE TRASH CONTAINERS ONSITE FOR THE DISPOSAL OF CONSTRUCTION MATERIALS WASTE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING TRASH FROM ENTERING THE STORM DRAINAGE SYSTEM.
- 6. ALL CONTROL MEASURES SHALL BE CHECKED, AND REPAIRED AS NECESSARY, MONTHLY IN DRY PERIODS, AND WITHIN 24 HOURS AFTER ANY RAINFALL AT THE SITE OF 0.75 INCH WITHIN A 24 HOUR PERIOD. DURING PROLONGED RAINFALLS, DAILY CHECKING AND, IF NECESSARY, REPAIRING SHALL BE DONE. THE PERMITTEE SHALL MAINTAIN WRITTEN RECORDS OF SUCH CHECKS AND REPAIRS, WHICH SHALL BE SUBJECT TO THE INSPECTION OF THE OFFICIAL AT ANY REASONABLE TIME.
- 7. DISTURBED AREA = 0.95 +/- Acres
- 8. APPROXIMATE START DATE: AUGUST 2025. APPROXIMATE END DATE: OCTOBER 2025.
- 9. EXISTING SITE CONDITIONS: EXISTING OPEN FIELD WITH ASSOCIATED HARDSCAPES, UTILITIES, ETC.
- 10. ALL MATERIALS SHALL BE PROPERLY STORED, NOT EXPOSED TO RAIN, AND STOCKPILED. ALL CONTAINERS SHALL BE STORED CLOSED OR IN COVER. ALL EXCESS OR WASTE MATERIAL SHALL BE DISPOSED OF PROPERLY. THE CONTRACTOR SHALL PROVIDE A CONSTRUCTION WASTE DUMPSTER OR TRAILER ON SITE FOR CONSTRUCTION WASTE. THE CONTRACTOR SHALL DISPOSE OF TRASH AND WASTE TO AN ACCEPTABLE OFFSITE FACILITY EVERY 10 DAYS MINIMUM.

11. THERE SHALL BE NO DISTINCTLY VISIBLE FLOATING SCUM, OIL, OR OTHER MATTER CONTAINED IN THE STORM WATER DISCHARGE TO A RECEIVING WATER. MUST NOT CAUSE AN UNNATURAL COLOR (EXCEPT DYES OR OTHER SUBSTANCES DISCHARGED FOR THE PURPOSE OF ENVIRONMENTAL STUDIES AND WHICH DO NOT HAVE A HARMFUL EFFECT ON THE RECEIVING WATER), OR ODOR IN THE RECEIVING WATERS. THE STORM WATER DISCHARGE TO RECEIVING WATER MUST RESULT IN NO MATERIAL IN CONCENTRATION SUFFICIENT TO BE HAZARDOUS OR OTHERWISE DETRIMENTAL TO HUMANS, LIVESTOCK, WILDLIFE, PLANT LIFE OR FISH AND AQUATIC LIFE IN THE RECEIVING WATER.

- 12. WHEN THE LAND-DISTURBING ACTIVITY IS FINISHED AND STABLE VEGETATION OR OTHER PERMANENT CONTROLS HAVE BEEN ESTABLISHED ON ALL REMAINING EXPOSED SOIL, THE OWNER OF THE LAND WHERE THE LAND-DISTURBING ACTIVITY WAS CONDUCTED, OR HIS AUTHORIZED AGENT, SHALL NOTIFY THE OFFICIAL OF THESE FACTS AND REQUEST A FINAL INSPECTION. THE OFFICIAL SHALL THEN INSPECT THE SITE WITHIN 5 WORKING DAYS AFTER RECEIPT OF NOTICE, AND MAY REQUIRE ADDITIONAL MEASURES TO STABILIZE THE SOIL AND CONTROL EROSION AND SEDIMENTATION AS REQUIRED.
- 13. THE CONTRACTOR SHALL MINIMIZE THE TRACKING OF MUD AND DEBRIS ONTO PAVED ROADWAYS FROM CONSTRUCTION AREAS. THE CONTRACTOR SHALL PROVIDE A CONSTRUCTION EXIT PAD AS NOTED ON THE PLANS AND MAINTAIN IT ON A REGULAR BASIS AS AN EFFECTIVE MEASURE FOR REMOVING MUD AND DEBRIS FROM EQUIPMENT TIRES FROM BEING TRACKED FROM THE SITE ONTO ADJACENT ROADWAYS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A SPRAY HOSE FOR WASHING OF TIRES AND EQUIPMENT, THE PERIODIC REWORKING OF THE CONSTRUCTION EXIT PAD STONE, OR SUPPLEMENTING THE EXIT PAD WITH ADDITIONAL STONE AS REQUIRED TO ENSURE ITS CONTINUED EFFECTIVENESS THROUGHOUT THE DURATION OF THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AT HIS EXPENSE ANY MUD AND DEBRIS TRACKED OFFSITE AND ONTO ADJACENT ROADWAYS AS REQUIRED.
- 14. ALL EXISTING AND NEW STORM DRAINAGE INLETS, STRUCTURES, AND PIPES SHALL BE CLEANED OF TRASH AND SEDIMENTS ON A REGULAR BASIS, WEEKLY AT A MINIMUM, SO AS NOT TO ALLOW DOWNSTREAM POLLUTION OF RECEIVING WATERS OR THE ESCAPING OF SEDIMENTS OFF SITE.
- 15. TEMPORARY DIVERSION BERMS AND/OR DITCHES SHALL BE PROVIDED AS REQUIRED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING DUST TO A MINIMUM THROUGH THE USE OF WATER TRUCKS OR OTHER DUST CONTROLLING METHODS THROUGHOUT THE CONSTRUCTION PERIOD.
- 17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING EROSION AND SILTATION OFF OF ADJACENT AND DOWNSTREAM PROPERTIES AND/OR ADJOINING SITES. AT HIS EXPENSE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF SEDIMENTS AND DEBRIS ESCAPING THIS PROJECT SITE, THE REMEDIATION AND/OR REPAIR OF ANY DAMAGE THAT MAY OCCUR AS A RESULT TO ADJOINING AND/OR DOWNSTREAM AFFECTED PROPERTIES OR OFFSITE STRUCTURES, AND ANY FINES OR PENALATIES LEVIED AGAINST THE PROJECT BY REGULATORY AGENCIES DUE TO DEFICIENCIES OF CONTROL MEASURES.
- 18. ALL DISTURBED AND REGRADED AREAS NOT TO BE PAVED SHALL RECEIVE TOPSOIL AND BE SEEDED AND MULCHED ACCORDING TO A.L.D.O.T. PERMANENT SEEDING SCHEDULES, COVERED WITH SOLID SOD, OR AS SHOWN ON THE LANDSCAPE PLAN (IF ANY). LOCALIZED EROSION AND RILLS SHALL BE REPAIRED AS NECESSARY AT THE CONTRACTORS EXPENSE. AREAS TO BE SEEDED SHALL RECEIVE 4" OF TOPSOIL AND AREAS TO BE SODDED SHALL RECEIVE 2" (MIN.) OF TOPSOIL. ACCOUNT FOR THICKNESS OF TOPSOIL WITH RESPECT TO FINISHED GRADES.

#### **GENERAL NOTES**

- 1. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND CONDITIONS OF ALL UTILITIES TO BE UTILIZED FOR CONSTRUCTION SERVICE HOOK UPS, STORM SEWERS AND SANITARY SEWERS PRIOR TO PROCEEDING WITH THE LAYING OF PIPE. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY OF ANY CONFLICTS OR DISCREPANCIES. ALL SERVICE CONNECTIONS TO UTILITIES SHALL BE APPROVED BY THE RESPECTIVE UTILITY AND SHALL CONFORM TO THE LATEST SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES CONCERNING CONFLICTS, RELOCATION, REMOVAL, AND INTERRUPTIONS OF
- 3. THE WORK REQUIRED TO RELOCATE, REMOVE, INSTALL, REPLACE, ETC. UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WITHIN THE
- 4. THE CONTRACTOR SHALL BE IN POSSESSION OF ALL REQUIRED PERMITS PRIOR TO ANY CONSTRUCTION EFFORTS.
- 5. ANY CHANGES OR REVISIONS MADE TO THE SITE PLANS SHALL BE SUBMITTED FOR APPROVAL TO THE CITY OF DECATUR AND ALL OTHER PERTINENT
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXTENT, LOCATION AND ELEVATION OF THE EXISTING IMPROVEMENTS. IF ANY SIGNIFICANT DIFFERENCE IN SITE CONDITION OR ELEVATION IS FOUND. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY.
- 7. UNSTABLE AND PUMPING SUB GRADE CONDITIONS MAY OCCUR DURING SITE PREPARATION AND UNDERCUTTING OPERATIONS. PROPER PROTECTION OF SUB GRADE, DRAINAGE AND DEWATERING WILL BE CRITICAL TO SITE CONSTRUCTION EFFORTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MINIMIZE EQUIPMENT TRAFFIC ACROSS THE SITE. EVERY EFFORT SHALL BE MADE TO LOCALIZE EQUIPMENT STAGING AND TRAFFIC TO SPECIFIC AREAS AND LIMIT THE AMOUNT OF UNDERCUTTING AND SOIL STABILIZATION THAT MAY BE NEEDED.
- 8. ALL GRADING OPERATIONS SHALL BE MONITORED BY A QUALIFIED GEOTECHNICAL CONSULTANT AS CHOSEN AND PAID FOR BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING SAID CONSULTANT IN ADVANCE OF ALL REQUIRED TESTING AND SECURING COPIES OF RESULTING
- 9. ALL EXCESS EXCAVATION CREATED BY GRADING OPERATIONS SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF SITE.
- 10. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB, CENTER OF STRIPE, FACE OF BUILDING OR AS SPECIFIED IN THE PLANS.
- 11. ALL SPOT ELEVATIONS SHOWN REFLECT ELEVATIONS AT GUTTER LINE, ASPHALT, OR FINISHED GROUND ELEVATION, UNLESS OTHERWISE NOTED. TOP AND BOTTOM ELEVATIONS FOR RETAINING WALLS (IF ANY) REPRESENT THE FINISHED GROUND ELEVATION AT THE WALL, NOT FOOTINGS, RAILINGS ETC.
- 12. ALL STORM DRAINAGE PIPE SHALL BE CLASS 3 MINIMUM REINFORCED CONCRETE PIPE WITH TYPE 1, 2 OR 3 BEDDING UNLESS SPECIFICALLY SHOWN OTHERWISE IN THE PLANS. IF ANOTHER TYPE OF PIPE IS SPECIFIED, BEDDING AND BACKFILL SHALL BE AS PER THE MANUFACTURER'S STANDARDS AND
- 13. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL CONNECTION POINT, SERVICE, SIZE, POLE LOCATIONS, AND TRANSFORMER LOCATIONS WITH THE SERVICE PROVIDER PRIOR TO CONSTRUCTION ACTIVITIES.
- 14. THE CONTRACTOR SHALL PAY ALL CONNECTION COSTS AND FEES, INCLUDING BUT NOT LIMITED TO TAPPING FEES, METER COSTS, SETTING CHARGES,
- 15. ALL DRAINAGE STRUCTURES, INLETS BOXES, MANHOLES, ETC. SHALL BE POURED IN PLACE OR PRE CAST CONCRETE AS REQUIRED.
- 16. BRICK WILL ONLY BE ALLOWED TO ADJUST GRADE ON STORM MANHOLES. THE MAXIMUM ALLOWABLE HEIGHT OF BRICK SHALL BE 11 INCHES.
- 17. ALL DRAINAGE STRUCTURES, INLET BOXES, AND CATCH BASINS SHALL HAVE 2" WEEP HOLES FORMED, OR DRILLED, ON ALL SIDES WHERE DRAINAGE PIPES DO NOT INTERFERE WITH THEM. ALL WEEP HOLES SHALL HAVE GRAVEL WRAPPED WITH FILTER FABRIC AT THEIR INTERFACE WITH BACK FILL TO AID GROUNDWATER FLOW TO THE WEEP HOLE.
- 18. THE CONTRACTOR SHALL USE SPILL OUT CURB AND GUTTER AS REQUIRED TO ENSURE POSITIVE DRAINAGE AND THAT NO WATER IS HELD IN THE LOW POINTS OF GUTTERS. THE TRANSITION FROM STANDARD GUTTER TO SPILLOUT GUTTER SHALL BE SMOOTH AND AESTHETICALLY PLEASING.
- 19. THE CONTRACTOR SHALL ENSURE THAT ALL SIDEWALKS, RAMPS, AND ACCESSIBLE PARKING AREAS ARE CONSTRUCTED IN ACCORDANCE WITH THE MOST RECENT AMERICANS WITH DISABILITIES ACT AND ARCHITECTURAL BARRIERS ACT ACCESSIBILITY GUIDELINES.
- 20. ALL FUEL STORAGE TANKS USED ON THE SITE BY THE CONTRACTOR SHALL MEET ALL LOCAL, STATE, AND FEDERAL CODES AND REGULATIONS.
- 21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSURING ALL TRENCH EXCAVATIONS FOR THIS PROJECT ARE IN ACCORDANCE WITH OSHA
- 22. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER THE AREAS TO BE USED FOR LAYDOWN AND TRAILERS. THE CONTRACTOR SHALL RESTORE ALL THE AREAS USED FOR LAYDOWN AND TRAILER TO THEIR ORIGINAL CONDITION.
- 23. SITE SECURITY WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE LAYOUT OF TEMPORARY CONSTRUCTION FENCING WITH THE OWNER.
- 24. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF WALKS, DOORS, UTILITY SERVICE TIE-INS (LOCATION, SIZE, AND ELEVATION), ROOF DRAINS, BUILDING DIMENSIONS, ETC. WITH THE ARCHITECTURAL, STRUCTURAL, PLUMBING, MECHANICAL, ELECTRICAL, AND FIRE PROTECTION PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE WORK OF OTHER TRADES PRIOR TO INSTALLING THE IMPROVEMENTS SHOWN ON THESE

# PERMANENT SEEDING SPECIFICATION

1. SEED MIXES

REFERENCE: ALDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2012 EDITION OR MOST CURRENT, SECTION 650, SECTION 652, SECTION 860, AND OTHERS AS APPLICABLE. ZONE 1 - AREAS SUBJECT TO FREQUENT MOWING (REQUIRED LBS. PER ACRE)

DATE OF PLANTING	AUG. 16 - FEB. 29	MAR. 1 - MAY 15	MAY 16 - AUG.
ANNUAL RYEGRASS	25		
HULLED BERMUDAGRASS		18	24
UNHULLED BERMUDAGRASS	30	12	
ANNUAL LESPEDEZA (KOBE)			38
WHITE DUTCH CLOVER	5	6	
REQ'D PERMANENT PLANT		BERMUDAGRASS	

# ZONE 1 - AREAS NOT SUBJECT TO FREQUENT MOWING (REQUIRED LBS. PER ACRE)

DATE OF PLANTING	JAN. 1 - FEB. 29	MAR. 1 - AUG. 15	AUG. 16 - NOV. 15	NOV. 16 - DEC. 31
ANNUAL RYEGRASS	15			15
HULLED BERMUDAGRASS		18		
UNHULLED BERMUDAGRASS	35	12	18	35
TALL FESCUE	35	35	35	35
WEEPING LOVEGRASS		2		
HULLED SERICEA LESPEDEZA		38	38	
UNHULLED SERICEA LESPEDEZA	38			38
RESEEDING CRIMSON CLOVER			29	
REQ'D PERMANENT PLANT		MIXED		

2. FERTILIZER APPLY 4000 LBS. AGRICULTURAL LIMESTONE PER ACRE.

APPLY 1000 LBS. OF FERTILIZER PER ACRE FOR GRASS SEEDING OR AS RECOMMENDED BY MANUFACTURER I IMF AND FERTILIZER ARE TO BE DISKED INTO THE SOIL SURFACE TO A MINIMUM DEPTH OF 4 INCHES.

LIME AND FERTILIZER ARE	IO BE DISKED IN	TO THE SOIL SURFACE TO A MI	INIMUM DEPTH OF 4
MANUFACTURED FERTIL	<u>IZER</u>		
TYPE	NITROGEN	PHOSPHORUS (P2O5)	POTASH (K2O)
15-0-15	15	0	15
13-13-13	13	13	13
10-10-10	10	10	10
8-8-8	8	8	8
0-14-14	0	14	14
4-12-12	4	12	12
4-16-8	4	16	8
SUPER PHOSPHATE	0	18	0
AMMONIUM NITRATE	33.5	0	0
AMMONIUM SULPHATE	20.5	0	0
SODIUM NITRATE	16	0	0
POTASSIUM CHLORIDE	0	0	60

3. GENERAL NOTES AND MAINTENANCE

- AFTER SEEDING, THE AREA IS TO BE ROLLED OR CULTIPACKED TO INSURE THAT THE SEED IS PRESSED INTO CONTACT WITH SOIL SURFACE. ALL SEEDED AREAS ARE TO BE MULCHED WITH STRAW MULCH AT THE RATE OF 4000 LBS. PER ACRE. (APPROX. 100 BALES PER ACRE.) APPLY ASPHALT EMULSION TO THE STRAW MULCH AT THE RATE OF 150 GALLONS PER ACRE.
- THE ABOVE DESCRIBED SEEDING RECOMMENDATIONS AND RATES HAVE BEEN PREPARED FOR SELECTION OF A VEGETABLE COVER
- SUITABLE FOR SOIL EROSION CONTROL IN <u>PLANTING ZONE 1</u> AS DEFINED BY THE ALDOT STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION, 2012 EDITION. THE CONTRACTOR SHALL VERIFY THE PLANTING ZONE THE PROJECT IS LOCATED WITHIN AND ALERT THE PROJECT ENGINEER OF ANY DISCREPANCIES.
- **MAINTENANCE** REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

# SEEDING AND GRASSING NOTES

1. SCOPE OF WORK

GENERAL REQUIREMENTS: PROVIDE SEEDBED PREPARATION, TOPSOILING, LIMING, FERTILIZING, SEEDING AND MULCHING OF ALL NEWLY GRADED FINISH EARTH SURFACES, UNLESS INDICATED OTHERWISE, AND AT ALL AREAS INSIDE OR OUTSIDE THE LIMITS OF CONSTRUCTION THAT ARE DISTURBED BY THE CONTRACTOR'S OPERATIONS. REFERENCE ALDOT STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION, 2012 EDITION OR MOST CURRENT, SECTION 650, SECTION 652, SECTION 860, AND OTHERS AS APPLICABLE. 2. MATERIALS

<u>ERTILIZER AND LIME</u>: DELIVER MATERIALS TO THE SITE IN ORIGINAL, UNOPENED CONTAINERS BEARING THE MANUFACTURER'S HEMICAL ANALYSIS, NAME, TRADE NAME, TRADEMARK, AND INDICATION OF CONFORMANCE TO STATE AND FEDERAL LAWS.

FERTILIZER : COMMERCIAL GRADE, FREE FLOWING, SLOW-RELEASE, UNIFORM IN COMPOSITION GRANULAR FERTILIZER SHALL CONTAIN A MINIMUM PERCENTAGE BY WEIGHT OF 17 PERCENT NITROGEN, 17 PERCENT AVAILABLE PHOSPHORIC ACID, AND 17 PERCENT POTASH. APPLY FERTILIZER AT THE RATE OF 500 POUNDS PER ACRE.

LIME: LIME SHALL BE COMMERCIAL AGRICULTURAL LIMESTONE CONTAINING A MINIMUM OF 94 PERCENT OF TOTAL CARBONATES, 80 PERCENT CALCIUM, AND 14 PERCENT MAGNESIUM. AGRICULTURAL LIMESTONE SHALL BE INCORPORATED INTO THE SOIL AT THE RATE OF 2000 POUNDS PER ACRE.

SEED: DELIVER SEED TO THE SITE IN ORIGINAL SEALED PACKAGES BEARING THE PRODUCER'S GUARANTEED ANALYSIS FOR PERCENTAGES OF MIXTURE, PURITY, GERMINATION, WEEDSEED CONTENT, AND INERT MATERIAL. LABEL IN CONFORMANCE WITH USDA FEDERAL SEED ACT AND APPLICABLE STATE SEED LAWS. WET MOLDY, OR OTHERWISE DAMAGED SEED WILL BE REJECTED. SEED SHALL BE STATE-CERTIFIED SEED AND OF THE LATEST SEASON'S CROP.

MULCH: FREE FROM NOXIOUS WEEDS, MOLD, OR OTHER DELETERIOUS MATERIAL. PROVIDE WOOD CELLULOSE FIBER MULCH WHEN

STRAW: STALKS FROM OATS, WHEAT, RYE, BARLEY, OR RICE. FURNISH IN AIR-DRY CONDITION AND OF PROPER CONSISTENCY FOR PLACING WITH COMMERCIAL MULCH BLOWING EQUIPMENT OR BY HAND.

WOOD CELLULOSE FIBER: PROCESSED TO CONTAIN NO GROWTH OR GERMINATION - INHIBITING FACTORS AND DYED AN APPROPRIATE COLOR TO FACILITATE VISUAL METERING OF MATERIAL'S APPLICATION. COMPOSITION ON AIR-DRY WEIGHT BASIS: 9-15 PERCENT MOISTURE, pH RANGE FROM 3.5 TO 5.0.

EMULSIFIED ASPHALT ADHESIVE: SUITABLE QUALITY FOR IRRIGATION.

WATER: SUITABLE QUALITY FOR IRRIGATION.

3. SEEDING

ORAGE AND HANDLING: STORE LIME, FERTILIZER, AND SEED IN DRY LOCATIONS AWAY FROM CONTAMINANTS. PROTECT SEED FROM RYING OUT, DO NOT DROP OR DUMP MATERIALS FROM VEHICLES.

SOIL PREPARATION: AT THE COMPLETION OF ROUGH GRADING, SPREAD TOPSOIL OVER AREAS TO BE SEEDED OR AS SOI PREPARATION INDICATED, TO A MINIMUM THICKNESS OF 2 INCHES. TOPSOIL SHALL BE IN THE MATERIAL STRIPPED FROM THE SITE DURING THE GRADING OPERATIONS. DO NOT SPREAD TOPSOIL WHEN FROZEN OR EXCESSIVELY WET OR DRY. AREAS NOT RECEIVING TOPSOIL SHALL BE LOOSENED TO A MINIMUM DEPTH OF 4 INCHES BEFORE AGRICULTURAL LIME, FERTILIZER OR SEED IS APPLIED. LAWN AREAS SHALL BE FINE GRADED TO A SMOOTH, POSITIVELY DRAINING SLOPE, REMOVING ALL STONES OVER ONE INCH.

DING: SEED SHALL BE SOWN WITHIN 24 HOURS FOLLOWING THE APPLICATION OF FERTILIZER AND LIME, AND PREPARATION OF THE SEEDBED. DO NOT SEED WHEN THE GROUND IS MUDDY, FROZEN, SNOW COVERED, OR IN ANY UNSATISFACTORY CONDITION FOR SEEDING. IF SPECIAL CONDITIONS EXIST THAT MAY WARRANT A VARIANCE IN THE ABOVE SEEDING DATES OR CONDITIONS. SUBMIT A WRITTEN REQUEST TO THE ENGINEER STATING THE SPECIAL CONDITIONS AND PROPOSED VARIANCE.

SOW SEED WITH APPROVED SOWING EQUIPMENT USING ONE OR A COMBINATION OF THE FOLLOWING METHODS. SOW 1/2 THE SEED IN ONE DIRECTION AND SOW THE REMAINDER AT RIGHT ANGLES TO THE FIRST SOWING. FOR DRILL, BROADCAST, AND DROP SEEDING, INCORPORATE FERTILIZER AND LIME INTO THE SOIL TO A MINIMUM DEPTH OF 6 INCHES PRIOR TO SEEDING. FOR HYDROSEEDING, APPLY LIQUID FERTILIZER IN AMOUNTS SUFFICIENT TO PROMOTE THE SPECIFIED STAND OF TURF AND APPLY LIME MANUALLY DURING SUBGRADE PREPARATION.

<u>DRILL SEEDING</u> : USE CULTIPACKER SEEDERS OR GRASS SEED DRILLS. DRILL SEED UNIFORMLY TO A MAXIMUM DEPTH OF 1/4 INCH IN CLAYED SOILS AND 1/2 INCH IN SANDY SOILS. COVER SEED BY SPIKETOOTH HARROW, CULTIPACKER, OR OTHER APPROVED DEVICES.

BROADCAST SEEDING AND DROP SEEDING: USE BROADCAST OR DROP SEEDERS. COVER SEED UNIFORMLY TO A MAXIMUM DEPTH OF 1/4 INCH IN CLAYEY SOILS AND 1/2 INCH IN SANDY SOILS. COVER SEED BY SPIKE TOOTH HARROW, RAKING, OR OTHER APPROVED DEVICES. IMMEDIATELY AFTER SEEDING, FIRM ENTIRE AREA, EXCEPT FOR SLOPES IN EXCESS OF 3 TO 1, WITH A ROLLER NOT EXCEEDING 90 POUNDS FOR EACH FOOT OF ROLLER WIDTH.

YDROSEEDING: MIX SEED, FERTILIZER, AND WOOD CELLULOSE FIBER IN REQUIRED AMOUNT OF WATER TO PRODUCE A HOMOGENEOUS SLURRY. AFTER SEED, WATER, AND FERTILIZER HAVE BEEN THOROUGHLY MIXED, ADD 200 POUNDS OF WOOD CELLULOSE FIBER PER ACRE (DRY WEIGHT) AND APPLY THE SLURRY. SEED SHALL NOT REMAIN IN WATER CONTAINING FERTILIZER FOR MORE THAN ONE HOUR PRIOR TO APPLICATION, UNLESS OTHERWISE APPROVED. KEEP LIQUID FERTILIZER AGITATED DURING APPLICATION. IMMEDIATELY FOLLOWING APPLICATION OF SLURRY MIX, MAKE SEPARATE APPLICATION OF WOOD CELLULOSE MULCH AT THE RATE OF 800 POUNDS (DRY WEIGHT) PER ACRE. WHEN HYDRAULICALLY SPRAYED ON THE GROUND, MATERIAL SHALL FORM A BLOTTERLIKE COVER IMPREGNATED UNIFORMLY WITH GRASS SEED. COVER SHALL ALLOW RAINFALL OF APPLIED WATER TO PERCOLATE TO UNDERLYING SOIL. TOTAL APPLICATION SHOULD EQUAL 2 TONS/ACRE MULCH.

MULCH: EXCEPT WHEN HYDROSEEDING, SPREAD STRAW MULCH EVENLY AT THE RATE OF 2 TONS PER ACRE. ANCHOR BY CRIMPING MULCH WITH A SERRATED DISC OR BY SPRAYING ASPHALT EMULSION ON THE MULCHED SURFACE AT THE RATE OF 5 GALLONS PER 1000 SQUARE FEET. TAKE PRECAUTIONARY MEASURES TO PREVENT ASPHALT MATERIALS FROM MARKING OR DEFACING STRUCTURES, PAVEMENTS, UTILITIES, OR PLANTINGS AND DO NOT USE ASPHALT NEAR PEDESTRIAN TRAFFIC AREAS.

PROTECTION OF SEEDED AREAS: IMMEDIATELY AFTER SEEDING, PROTECT THE AREA AGAINST TRAFFIC OR OTHER USE BY ERECTING BARRICADES, AS REQUIRED, AND PLACING APPROVED SIGNS AT APPROPRIATE INTERVALS UNTIL FINAL ACCEPTANCE.

4. RESTORATION, ESTABLISHMENT, AND FINAL INSPECTION

RESTORATION: RESTORE TO ORIGINAL CONDITION EXISTING LAWN AREAS WHICH WERE DAMAGED DURING GRASSING OPERATIONS. KEEP AT LEAST ONE PAVED PEDESTRIAN ACCESS ROUTE AND ONE PAVED VEHICULAR ACCESS ROUTE TO EACH BUILDING CLEAN AT ALL TIMES. CLEAN OTHER PAVING WHEN WORK IN ADJACENT AREAS IS COMPLETE.

ESTABLISHMENT PERIOD: THE ESTABLISHMENT PERIOD WILL BE IN EFFECT UNTIL THE SEEDED AND SODDED AREAS ARE MOWED THREE TIMES. DURING THE ESTABLISHMENT PERIOD, THE CONTRACTOR SHALL MOW THE SEEDED AND SODDED AREAS TO AN AVERAGE HEIGHT OF 2 INCHES WHENEVER THE AVERAGE HEIGHT OF GRASS REACHES 4 INCHES. THE CONTRACTOR SHALL REMOVE EXCESS CLIPPINGS, ERADICATE WEEDS, WATER, FERTILIZE, OVERSEED, AND PERFORM OTHER OPERATIONS NECESSARY TO PROMOTE GROWTH.

FINAL INSPECTION AND ACCEPTANCE: AT THE END OF THE ESTABLISHMENT PERIOD, FINAL INSPECTION WILL BE MADE UPON WRITTEN REQUEST AT LEAST 10 DAYS PRIOR TO THE ANTICIPATED DATE. FINAL ACCEPTANCE WILL BE BASED UPON A SATISFACTORY STAND OF GRASS, DEFINED AS 95 PERCENT GROUND COVER OF THE SPECIFIED SPECIES. THE CONTRACTOR WILL REPAIR ANY BARE SPOTS OVER 2 INCHES SQUARE DUE TO UNEVEN SEED DISTRIBUTION.

RESEEDING AND REPAIR: ANY AREAS THAT REQUIRE RESEEDING AND/OR REFERTILIZATION WILL BE DESIGNATED BY THE OWNER/ENGINEER. ANY DAMAGE FOLLOWING SEEDING OR IF SEEDINGS ARE DESTROYED, THE PORTION AFFECTED SHALL BE REPAIRED TO RE-ESTABLISHMENT CONDITION AND GRADE OF THE SOIL PRIOR TO ORIGINAL SEEDING, AND THEN RESEEDED FOLLOWING THE ABOVE SPECIFICATIONS.

# TEMPORARY SEEDING SPECIFICATION

REFERENCE: ALDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2012 EDITION OR MOST CURRENT, SECTION 665, SECTION 860, AND OTHERS AS APPLICABLE.

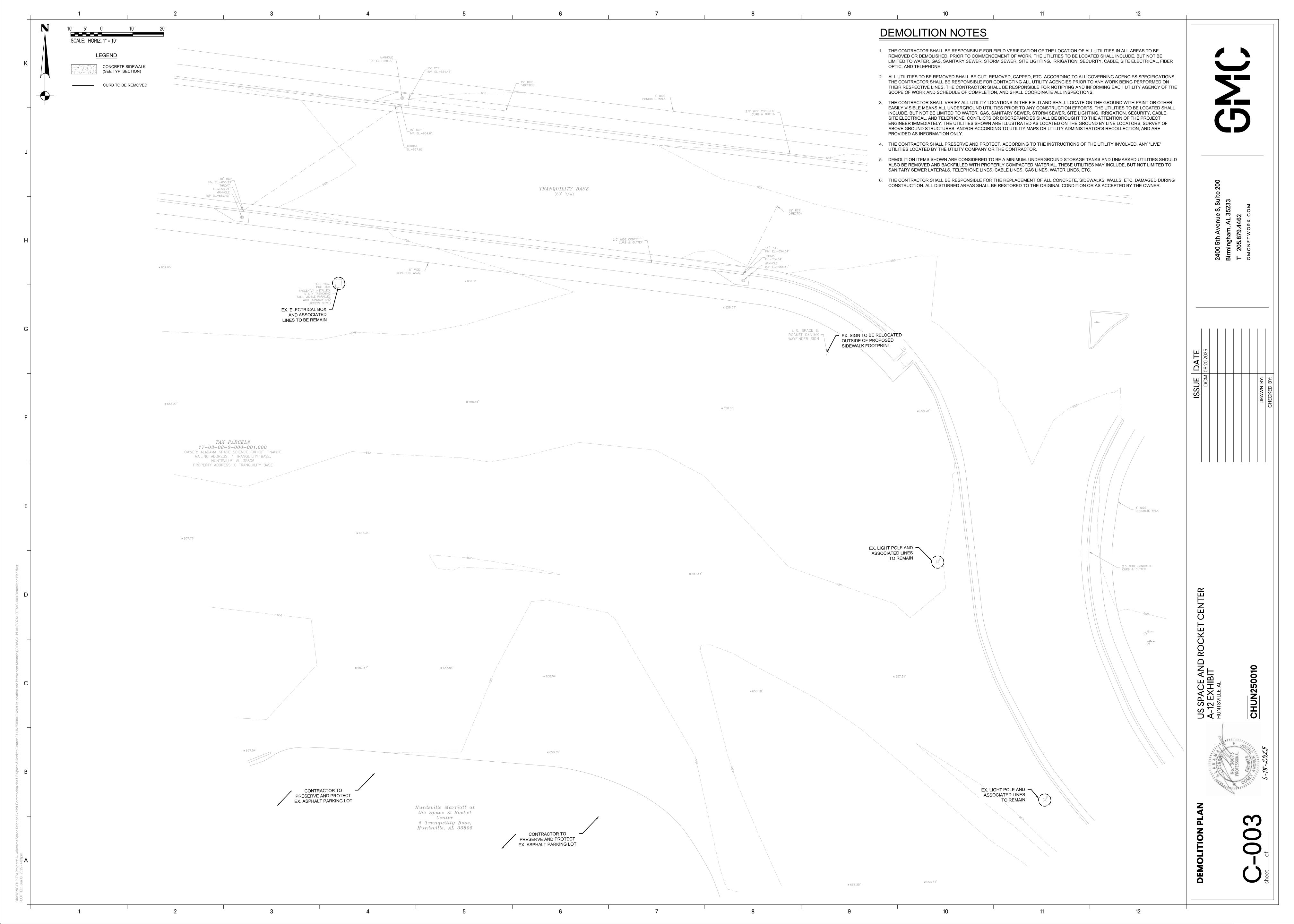
10 LBS. PER ACRE

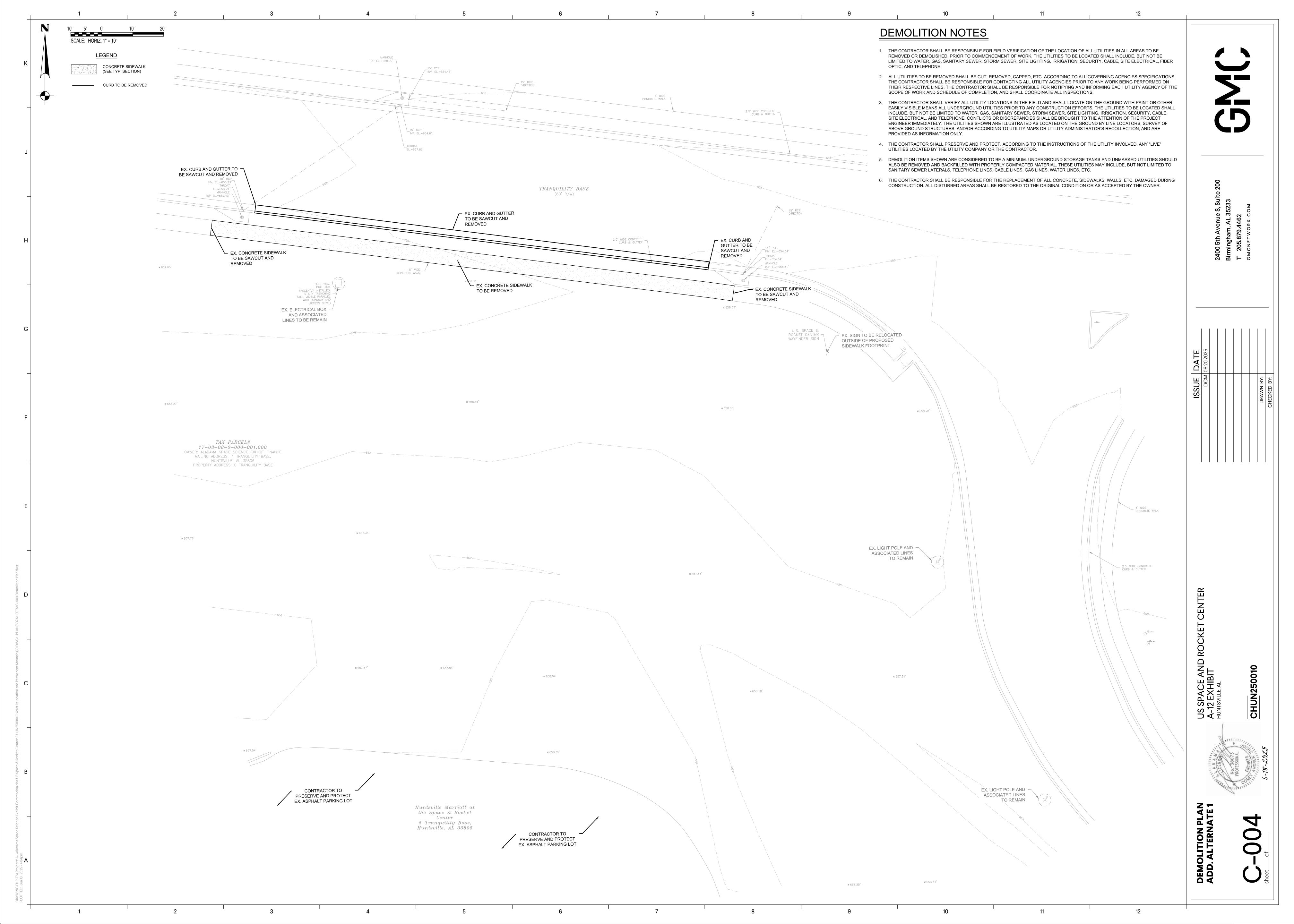
SEPTEMBER - DECEMBER ANNUAL RYE GRASS KENTUCKY 31 FESCUE RESEEDING CRIMSON CLOVER	25 LBS. PER ACRE 30 LBS. PER ACRE 10 LBS PER ACRE
JANUARY - APRIL 15 KENTUCKY 31 FESCUE RESEEDING CRIMSON CLOVER ANNUAL RYEGRASS	30 LBS. PER ACRE 30 LBS. PER ACRE 15 LBS. PER ACRE
APRIL 16 - AUGUST BROWN TOP MILLET KENTUCKY 31 FESCUE	30 LBS. PER ACRE 30 LBS. PER ACRE

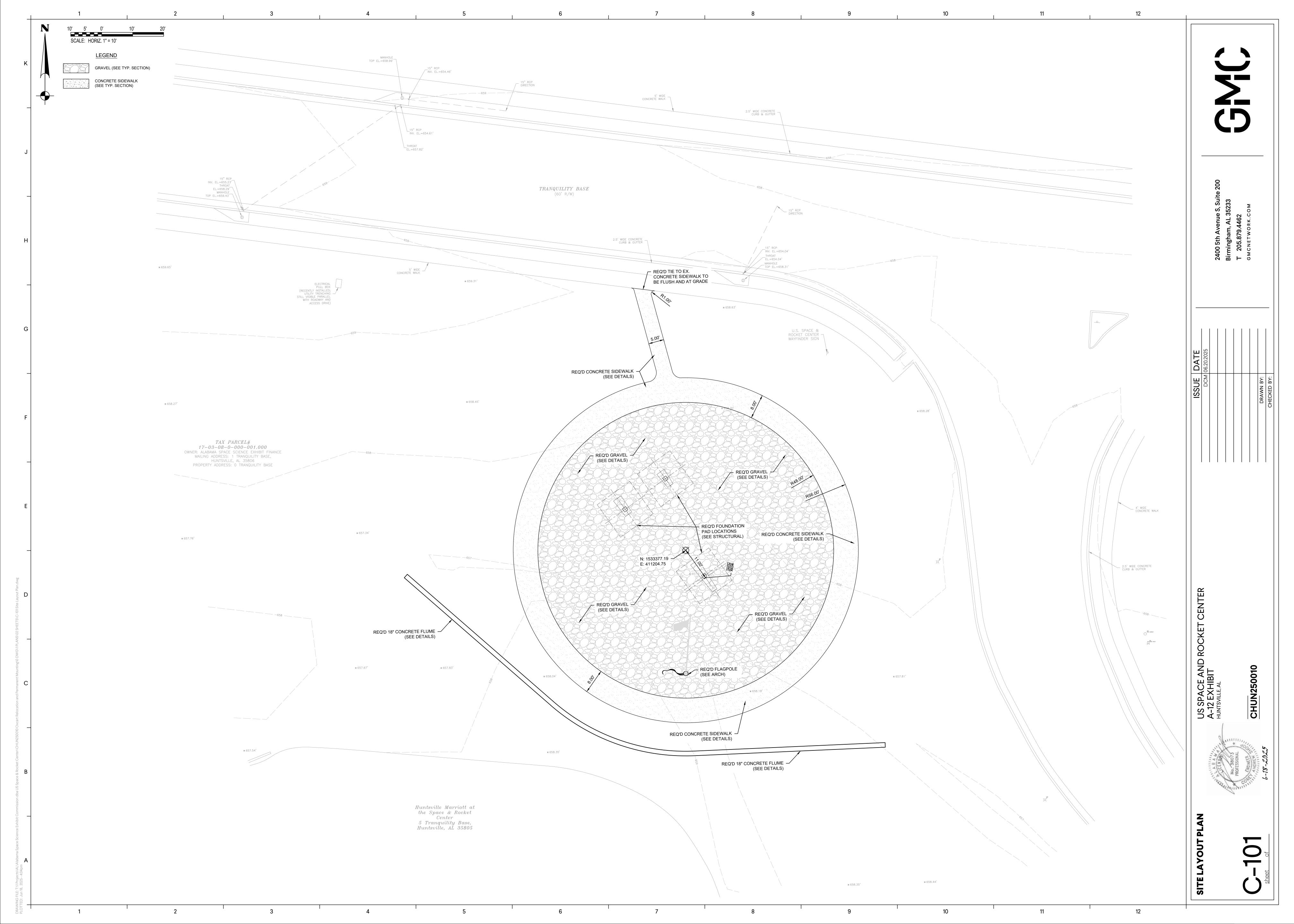
AFTER SEEDING, THE AREA IS TO BE ROLLED OR CULTIPACKED TO INSURE THAT THE SEED IS PRESSED INTO CONTACT WITH SOIL SURFACE. ALL SEEDED AREAS ARE TO BE MULCHED WITH STRAW MULCH AT THE RATE OF 4000 LBS. PER ACRE. (APPROX. 100 BALES

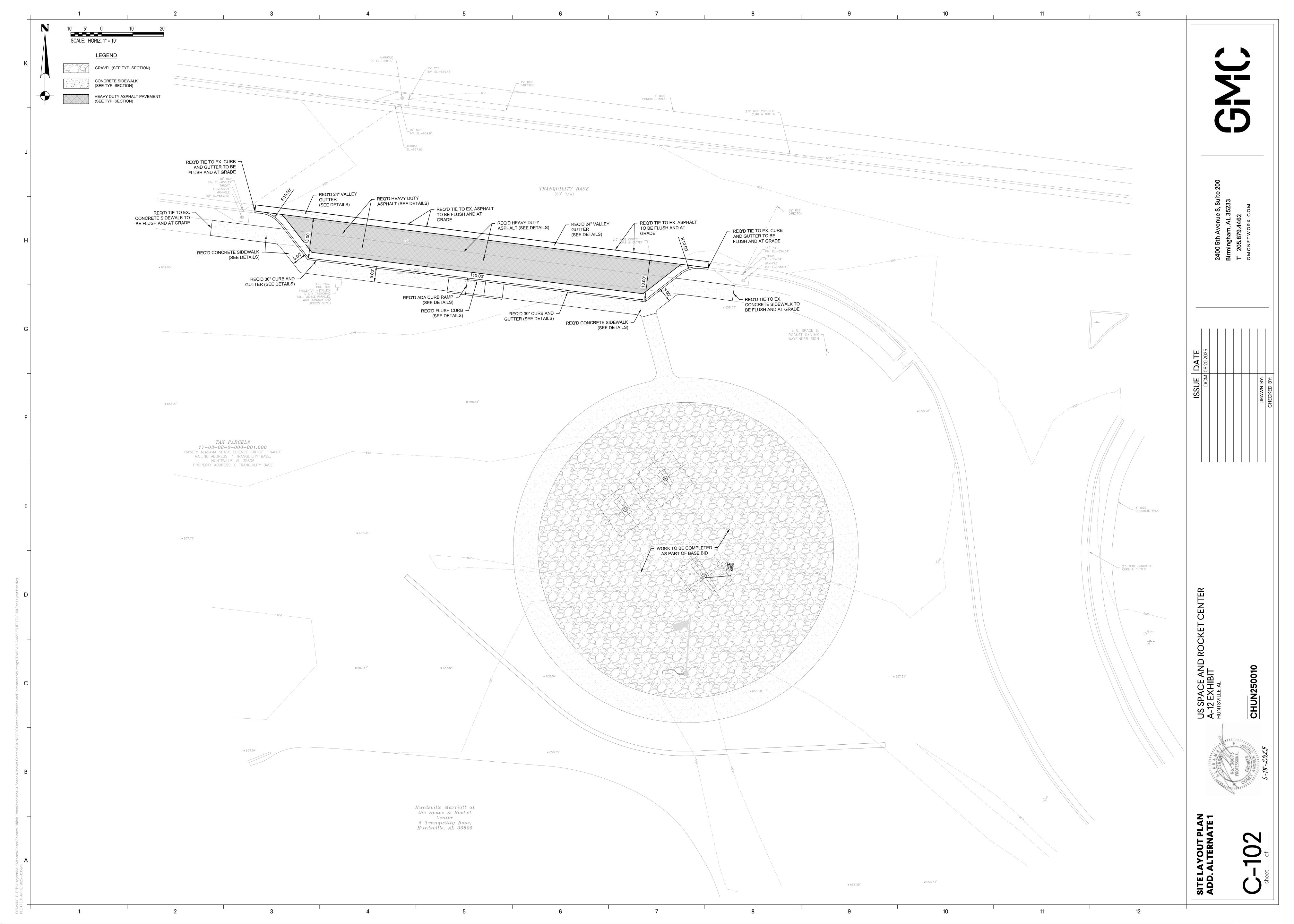
PER ACRE.) APPLY ASPHALT EMULSION TO THE STRAW MULCH AT THE RATE OF 150 GALLONS PER ACRE.

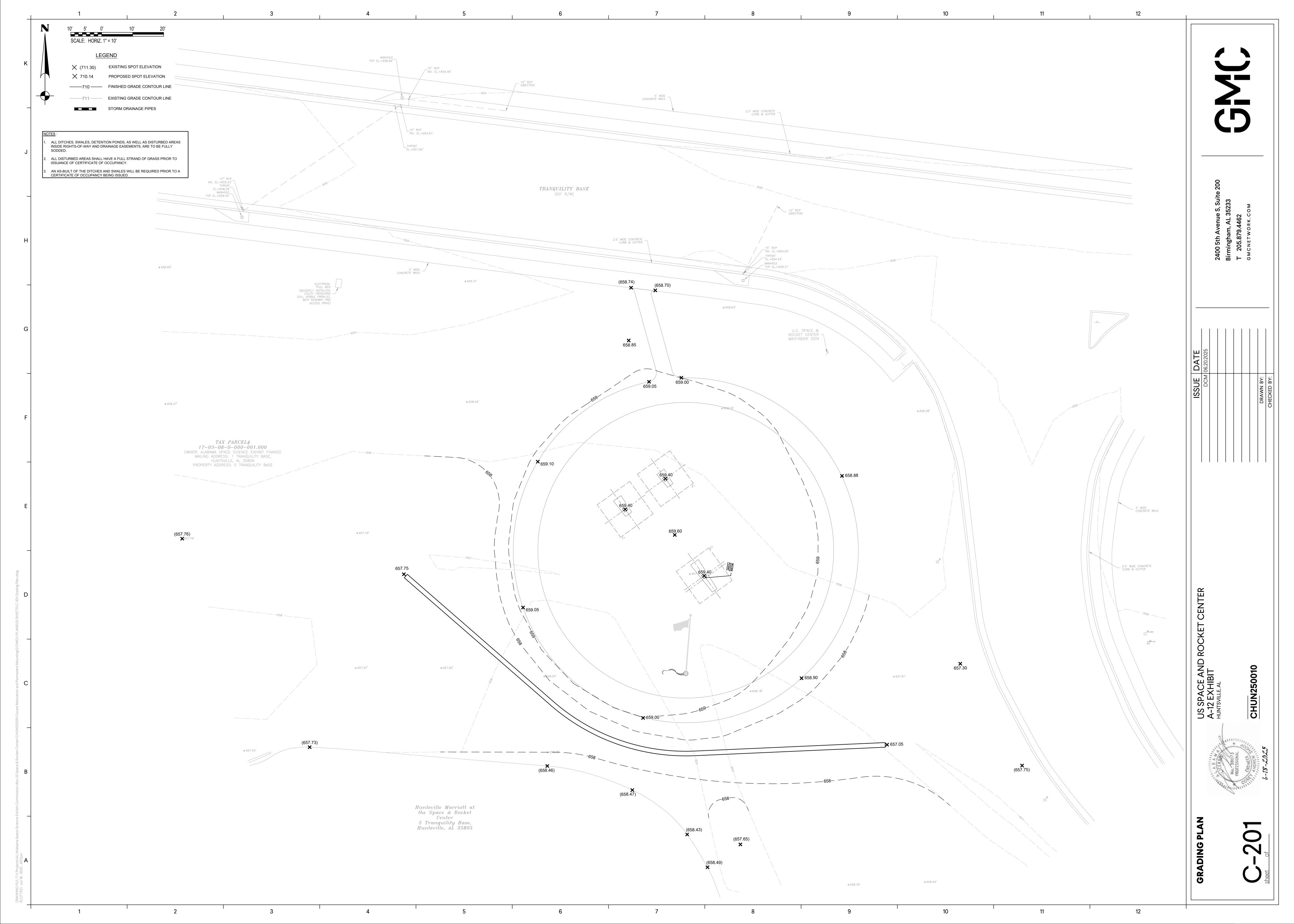
HULLED BERMUDA GRASS

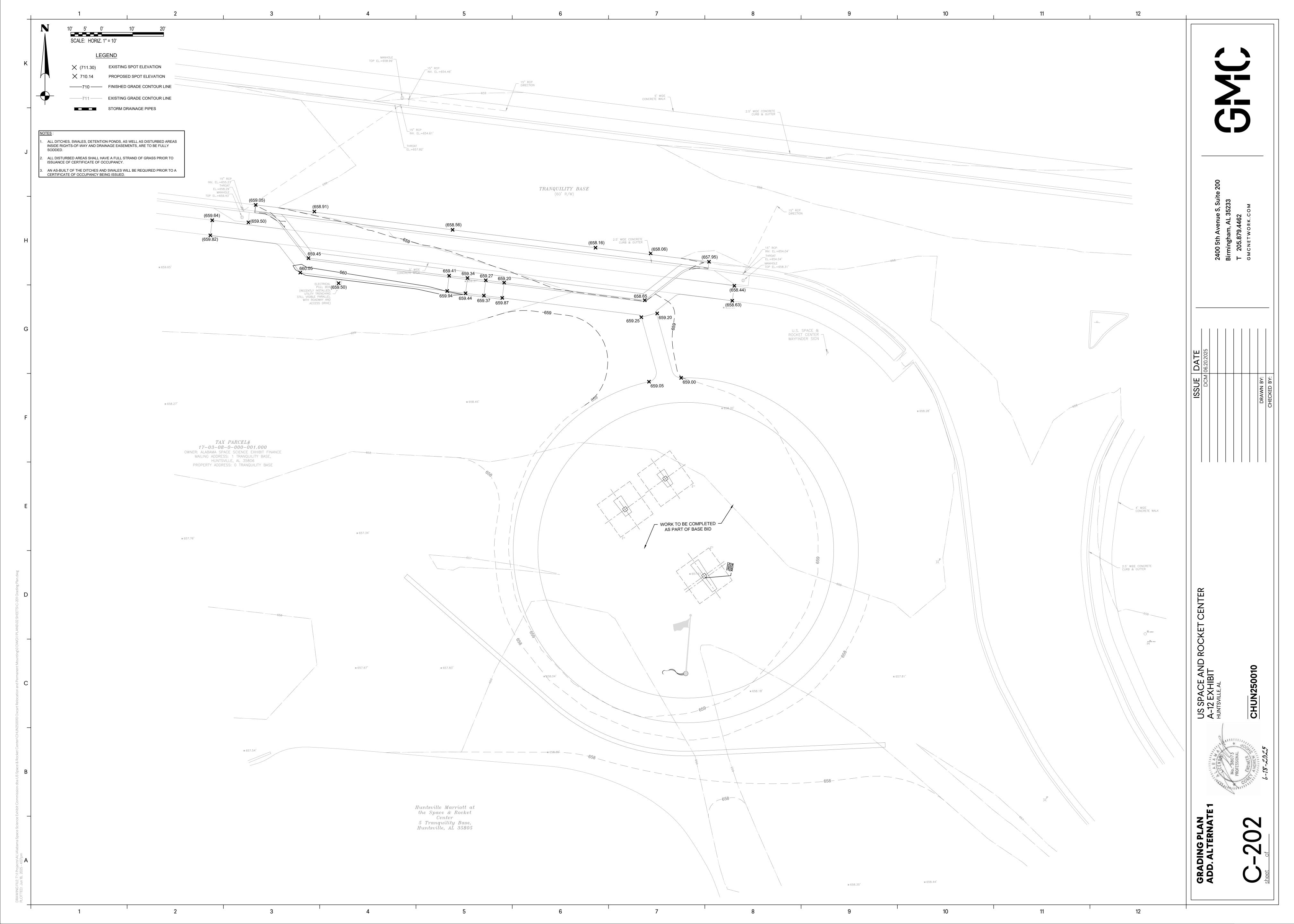


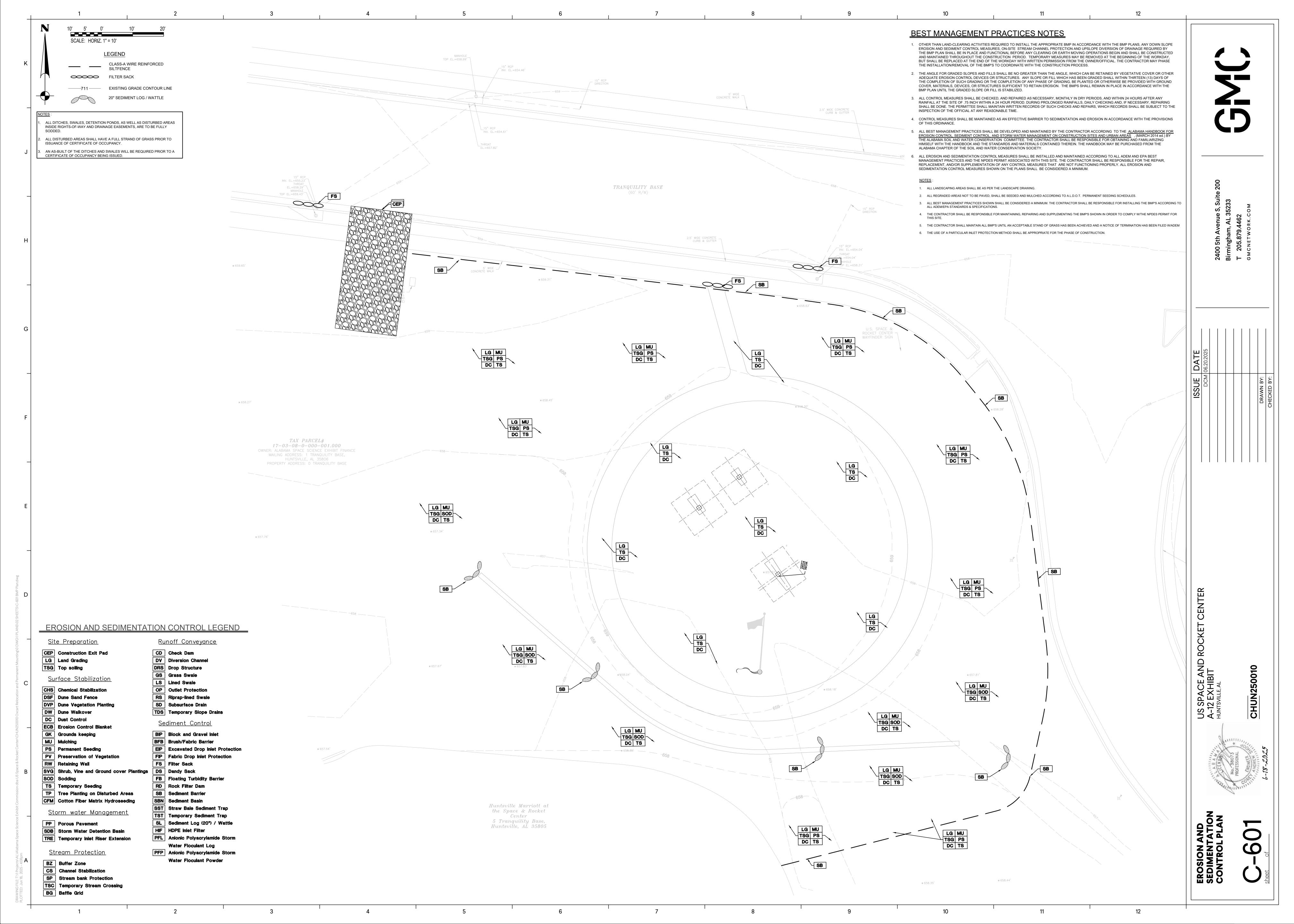


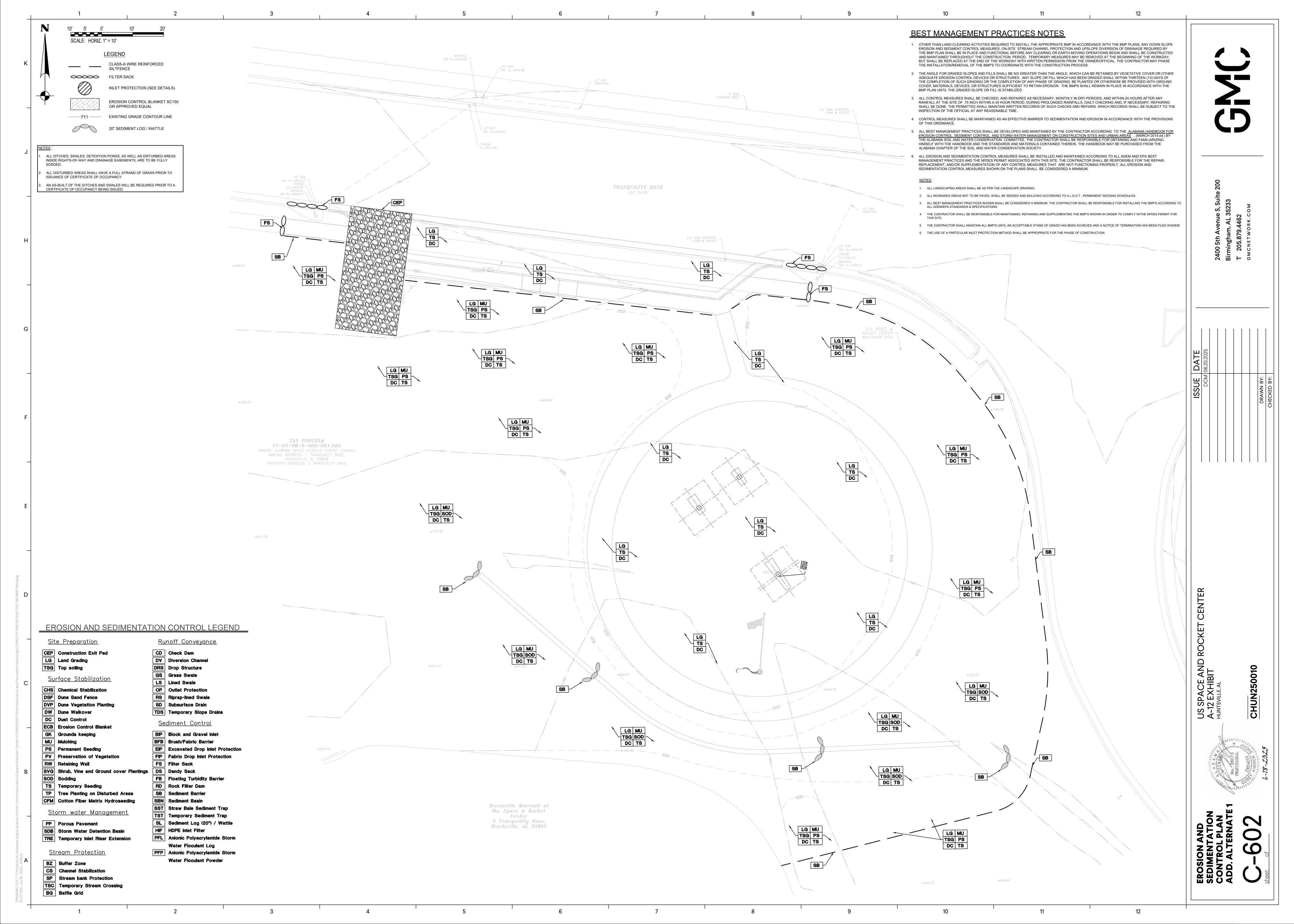


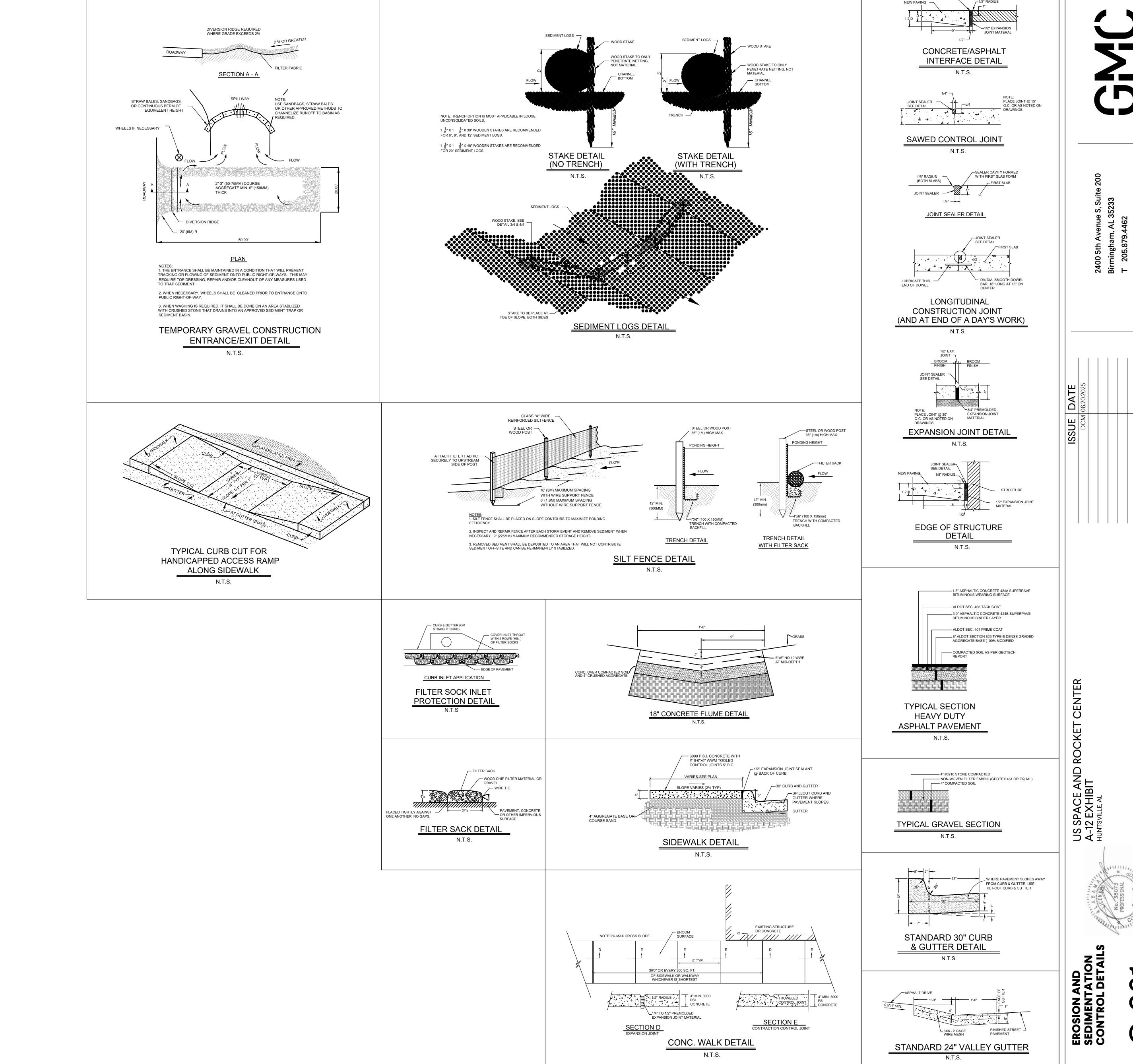




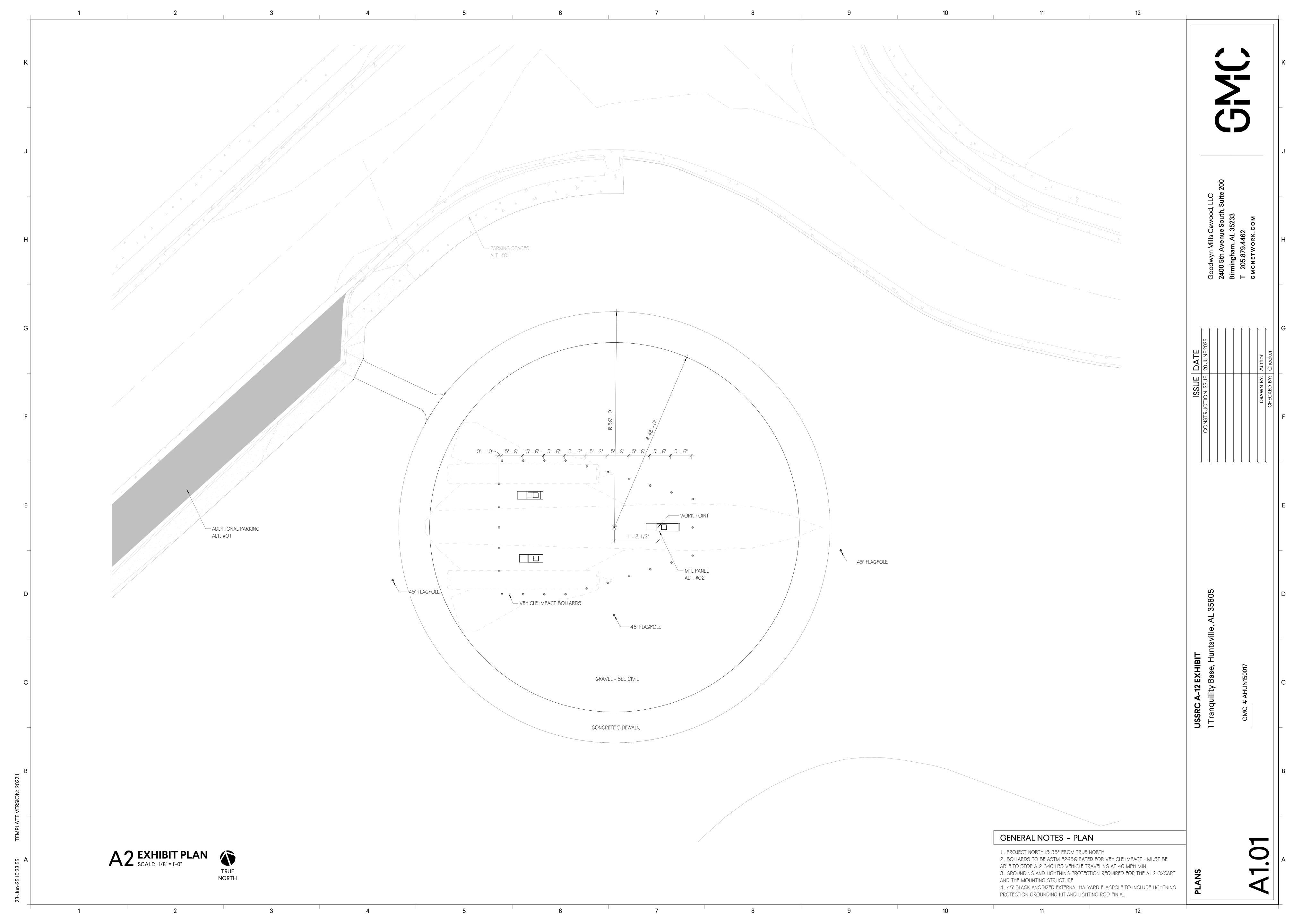


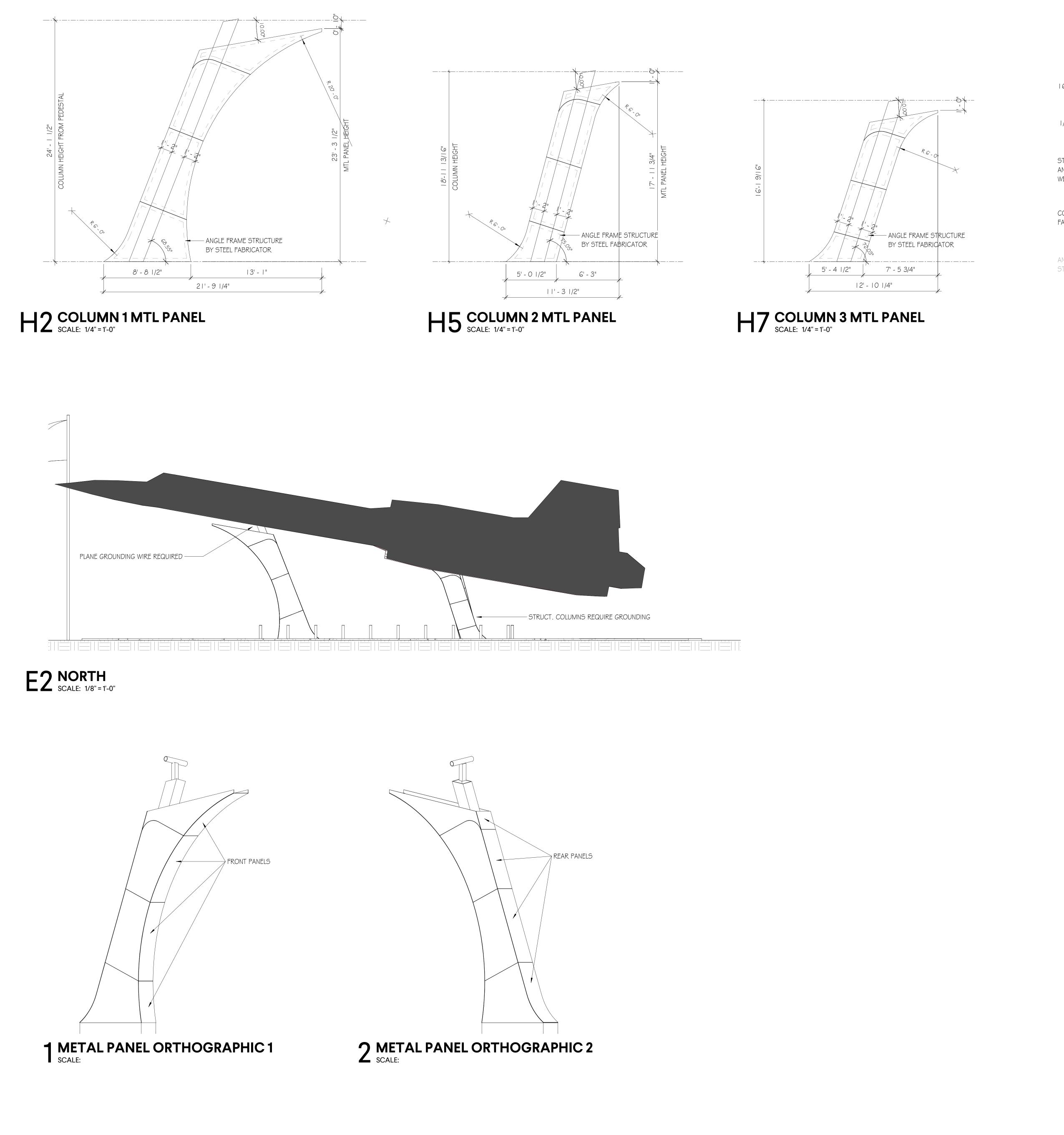


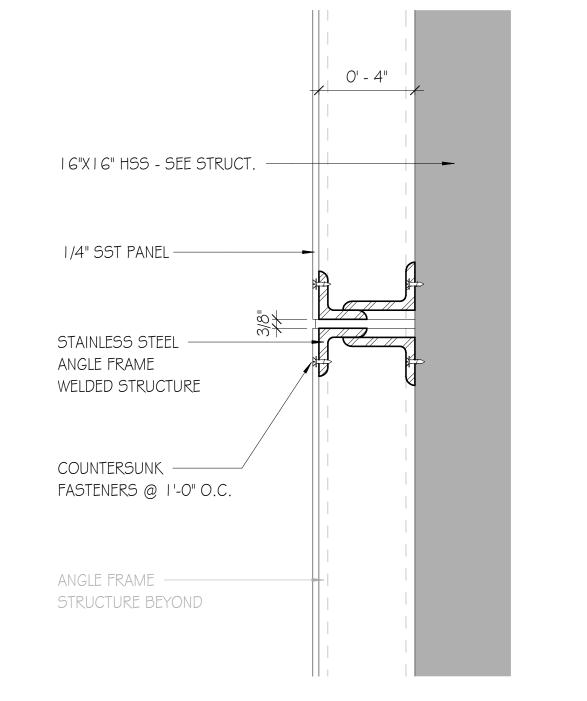




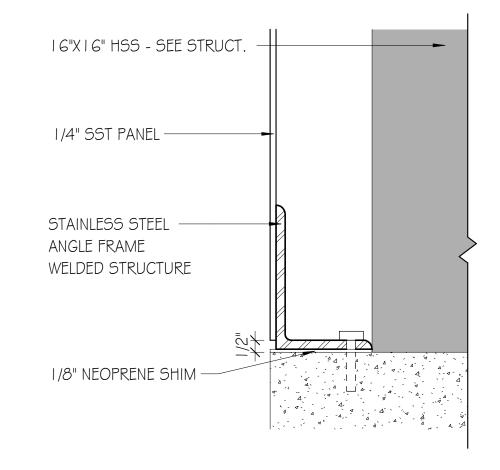
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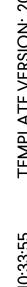


H10 MTL PANEL TO COLUMN SCALE: 3" = 1'-0"



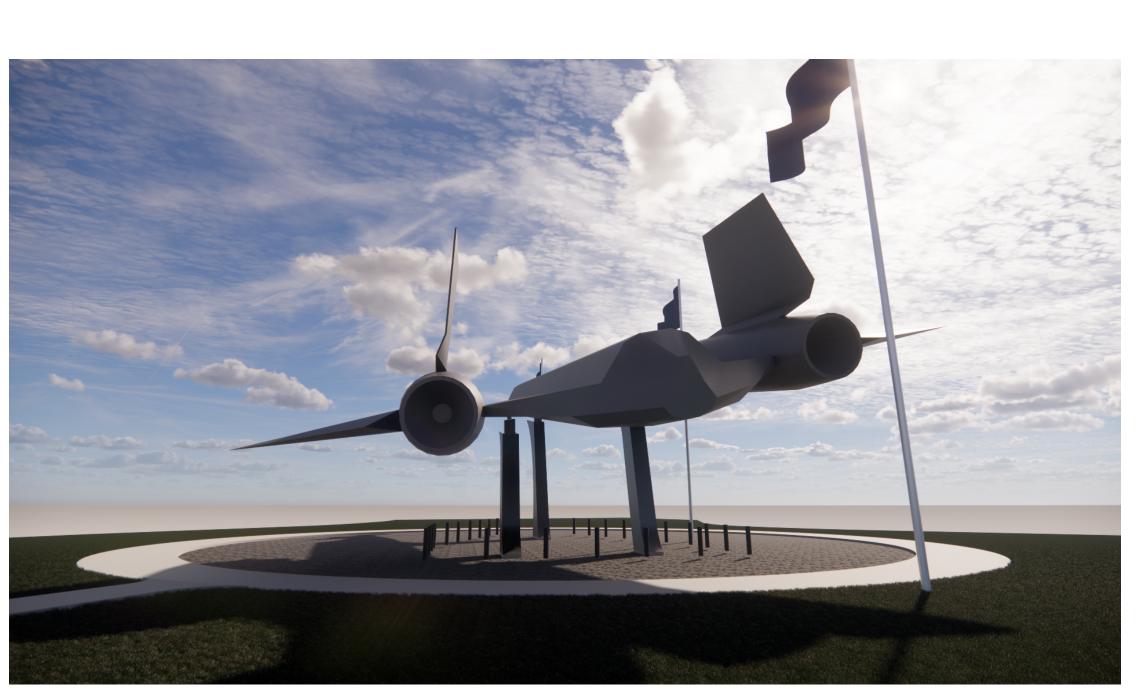
E10 MTL PANEL TO PEDESTAL SCALE: 3" = 1'-0"

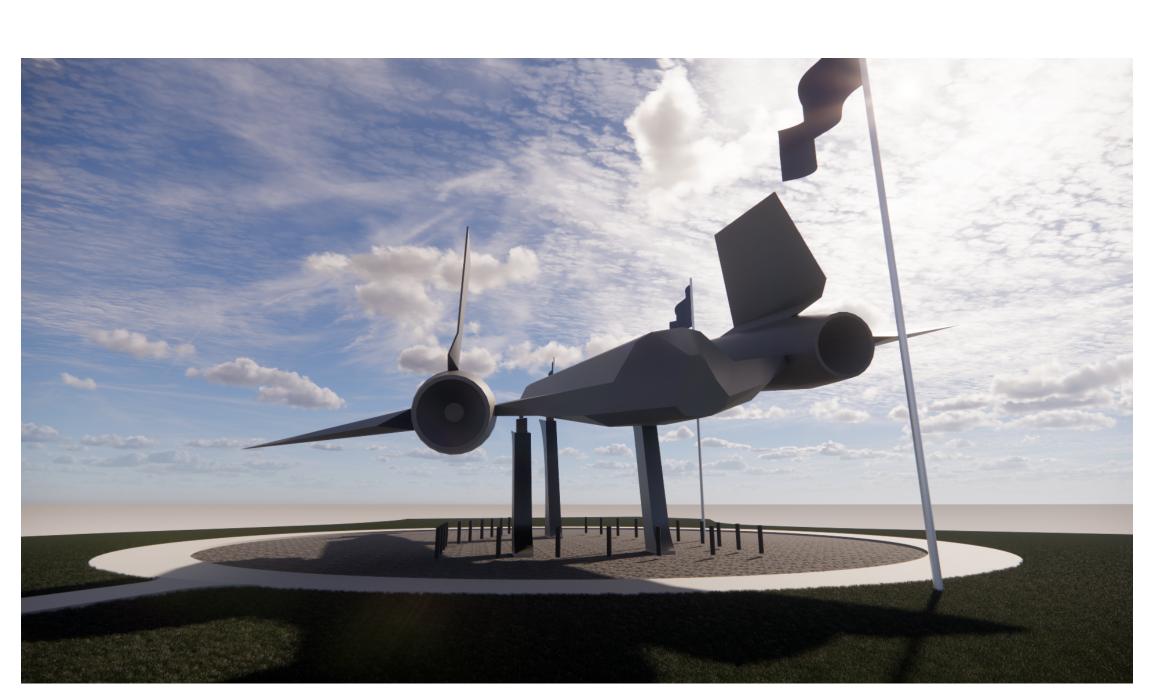
	Goodwyn Mills Cawood, LLC	2400 5th Avenue South, Suite 200	Birmingham, AL 35233	T 205.879.4462	GMCNETWORK.COM	
DATE	20.JUNE.2025					Author
ISSUE	CONSTRUCTION ISSUE					DRAWN BY:
USSRC A-12 EXHIBIT	1 Tranquility Base, Huntsville, AL 35805			GMC # AHUN150017		





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#### 1. GENERAL NOTES:

#### CODES AND SPECIFICATIONS:

- A. GENERAL BUILDING CODE: INTERNATIONAL BUILDING CODE, 2018 EDITION.
- B. CONCRETE: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-14).
- SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC 360-16). ALLOWABLE STRESS DESIGN (ASD).
- 2. THE GENERAL NOTES ARE NOT A SUBSTITUTE OR A REPLACEMENT FOR THE PROJECT SPECIFICATIONS. THESE NOTES ARE INTENDED AS A GUIDE TO THE DESIGN AND/OR CONSTRUCTION REQUIREMENTS ESTABLISHED FOR THIS PROJECT. NO CONTRACTOR SHOULD ATTEMPT TO DESIGN, BID, OR CONSTRUCT ANY PORTION OF THE WORK HEREIN WITHOUT CONSULTING THE PROJECT SPECIFICATIONS. THE MORE STRINGENT REQUIREMENT SHALL APPLY WHERE CONFLICTS OCCUR BETWEEN THESE NOTES AND THE SPECIFICATIONS, UNLESS A WRITTEN CLARIFICATION IS ISSUED BY THE STRUCTURAL ENGINEER.
- STRUCTURAL DRAWINGS ARE INTENDED TO BE USED IN CONJUNCTION WITH THE DRAWINGS OF OTHER CONSULTANTS AND TRADES. THE CONTRACTOR SHALL COORDINATE THE VARIOUS REQUIREMENTS.
- 4. DO NOT SCALE THESE DRAWINGS.
- 5. ALL DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS, UNLESS NOTED.
- 6. CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO FABRICATION/CONSTRUCTION. THE STRUCTURAL ENGINEER AND ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO FABRICATION/CONSTRUCTION.

#### 2. SPECIAL INSPECTIONS:

- 1. SPECIAL INSPECTOR (SI) SHALL BE RETAINED AND PAID BY THE OWNER.
- 2. THE SPECIAL INSPECTOR SHALL BE FULLY QUALIFIED, APPROVED BY THE BUILDING OFFICIAL, REGISTERED BY APPLICABLE REGISTRATION BOARD IF REQUIRED AND ACCEPTABLE TO THE ARCHITECT.
- 3. THE DUTIES OF THE SPECIAL INSPECTOR SHALL INCLUDE, BUT ARE NOT LIMITED TO, VERIFICATION OF CONSTRUCTION QUALITY CONTROL, TESTING, COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS, BUILDING CODE REQUIREMENTS, AND LOCAL BUILDING DEPARTMENT REQUIREMENTS.
- 4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE PROPER NOTIFICATION TO THE SPECIAL INSPECTOR AND PROCEED WITH THE CONSTRUCTION ONLY AFTER THE SPECIAL INSPECTOR'S REVIEW AND APPROVAL.
- 5. SPECIAL INSPECTOR'S SHALL KEEP RECORDS OF ALL INSPECTIONS AND TESTING. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE CODE OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CODE OFFICIAL AND THE DESIGN PROFESSIONAL OF RECORD. A FINAL REPORT OF INSPECTIONS DOCUMENTING COMPLETION OF ALL REQUIRED SPECIAL INSPECTION AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. INTERIM REPORTS SHALL BE SUBMITTED PERIODICALLY WITH MINIMUM FREQUENCY OF TWO WEEKS.
- SPECIAL INSPECTIONS ARE REQUIRED FOR, BUT NOT LIMITED TO, THE ACTIVITIES AS INDICATED ON SHEET S1.02 PER THE 2018 INTERNATIONAL BUILDING CODE.
- 7. FAILURE TO NOTIFY THE SPECIAL INSPECTOR MAY RESULT IN THE CONTRACTOR HAVING TO REMOVE WORK FOR THE PURPOSE OF INSPECTION AT THE CONTRACTOR'S EXPENSE.
- 8. PREMATURE NOTIFICATION FOR INSPECTIONS WILL RESULT IN AN ADDITIONAL INSPECTION WITH THE EXPENSES AND FEES PAID BY THE CONTRACTOR.

#### 3. CONSTRUCTION AND SAFETY:

- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL SAFETY REGULATIONS, PROGRAMS, AND PRECAUTIONS TO ALL WORK, PERSONS, AND PROPERTY ON AND/OR ADJACENT TO THE PROJECT AND SHALL PROTECT AGAINST ANY DAMAGE, INJURY, OR LOSS.
- MEANS AND METHODS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIALS ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY.
- THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION, AND ANY TEMPORARY BRACING OR SUPPORT REQUIRED TO ACCOMMODATE THE CONTRACTOR'S MEANS AND METHODS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

# 4. SUBMITTALS:

- 1. ALL SHOP DRAWINGS MUST BE REVIEWED FOR "APPROVAL" AND STAMPED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL.
- 2. SUBMIT EACH SET OF SHOP DRAWINGS IN ELECTRONIC FORMAT.
- 3. THE GENERAL CONTRACTOR SHALL SUBMIT FOR ENGINEER REVIEW SHOP DRAWINGS FOR THE FOLLOWING ITEMS.
  - A. STRUCTURAL STEEL
  - B. REINFORCING STEEL C. CONCRETE MIX DESIGNS

#### 5. DESIGN LOADS:

- DEAD LOADS: ANY CHANGES IN CONSTRUCTION MATERIALS FROM THOSE SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS SHALL BE REPORTED BY THE GENERAL CONTRACTOR TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOAD-CARRYING CAPACITY OF THE
  - A A 12 BLACKBIDD EVHIBIT DESIGN DEAD LOAD.

	A. A-12 BLACKBIRD EXHIBIT DESIGN DEAD LOAD44 KIPS
2. SNOW	LOAD: A. GROUND SNOW LOAD (Pg.)
3. WIND	LOADS: A. BASIC WIND SPEED (3-SECOND GUST)106 MPH B. WIND IMPORTANCE FACTOR (IW)1.0 C. WIND EXPOSUREC D. INTERNAL PRESSURE COEFFICIENT0.00
4. SEIS	MIC LOADS:  A. SEISMIC IMPORTANCE FACTOR (Ie)
	E. SEISMIC DESIGN CATEGORYB F. BASIC SEISMIC-FORCE RESISTING SYSTEM:

#### 6. FOUNDATION NOTES:

1. GEOTECHNICAL REPORT: FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL REPORT BY AMIRI ENGINEERING, TITLED "A-12 OXCART RELOCATION, U.S. SPACE AND ROCKET CENTER; HUNTSVILLE, ALABAMA; GMC PROJECT NO. 250012". THE GENERAL CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT FROM THE OWNER AND FOLLOW ALL REQUIREMENTS WITHIN THE RECOMMENDATIONS SECTION.

CANTILEVERED COLUMN SYSTEMS DETAILED TO CONFORM TO THE REQUIREMENTS FOR: ORDINARY STEEL MOMENT FRAMES

A-12 EXHIBIT SUPPORT-----14.1 KIPS

H. SEISMIC RESPONSE COEFFICIENT (Cs)-----0.181 RESPONSE MODIFICATION FACTOR (R)-----1.25

EQUIVALENT LATERAL FORCE METHOD

2. MAXIMUM BEARING PRESSURES (PSF): COLUMN FOOTING------3000 WITH AGGREGATE PIERS

G. DESIGN BASE SHEAR:

J. ANALYSIS PROCEDURE:

- 3. ALL FOUNDATION BEARING SURFACES SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE TO ENSURE THEIR COMPLIANCE WITH PRESSURES NOTED. ALL BOTTOM ELEVATIONS ARE ESTIMATED AND MAY BE ADJUSTED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.
- 4. COMPACTED FILL WITHIN THE EXHIBIT AREA SHALL MEET THE REQUIREMENTS NOTED IN THE GEOTECHNICAL REPORT.

#### 7. CONCRETE NOTES:

- 1. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS: 4000 PSI --- NORMAL WT. --- UNLESS NOTED.
- 2. PEDESTAL AND WALL VERTICAL REINFORCING: DOWEL TO FOUNDATION WITH HOOKED BARS OF SAME SIZE AND SPACING AS VERTICAL REINFORCING.
- 3. CONCRETING OPERATIONS SHALL COMPLY WITH ACI STANDARDS.

#### 8. CONCRETE REINFORCING STEEL NOTES:

- 1. REINFORCING BARS: ASTM A615 GRADE 60.
- 2. REINFORCING STEEL SHOWN IN SECTIONS IS A SCHEMATIC INDICATION THAT REINFORCING EXISTS. SEE SCHEDULES, SECTION NOTES AND GENERAL NOTES FOR ACTUAL REINFORCING REQUIRED.
- 3. REINFORCING BAR PLACING ACCESSORIES IN ACCORDANCE WITH ACI MANUAL OF STANDARD PRACTICE. WHERE CONCRETE IS EXPOSED IN FINISHED BUILDING, PROVIDE ACCESSORIES WITH RUSTPROOF LEGS.
- 4. DETAIL REINFORCEMENT IN ACCORDANCE WITH ACI 315. REINFORCEMENT SHALL
- NOT BE WELDED UNLESS NOTED OR APPROVED BY THE ENGINEER.
- CONCRETE COVERAGE OF REINFORCEMENT: FOOTINGS-----3" BOTTOM & SIDES, 2" TOP
  - PEDESTALS-----1-1/2" CLEAR OF TIES
- 6. FIELD BENDING OF CONCRETE REINFORCING STEEL IS NOT PERMITTED WITHOUT WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.

#### 9. STRUCTURAL STEEL NOTES:

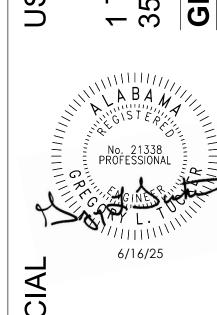
- 1. STRUCTURAL STEEL: AISI TYPE 316, STAINLESS STEEL
- 2. WELDED CONNECTIONS: AWS RECOMMENDED WELDING METHODS FOR STAINLESS STEEL. ALL WELDING SHALL BE BY AWS CERTIFICATED WELDERS FOR SPECIAL WELD AND MATERIAL.
- 3. BOLTED CONNECTIONS: AISI TYPE A304 STAINLESS STEEL, UNLESS NOTED.
- 4. HEADED ANCHOR RODS: AISI TYPE A304 STAINLESS STEEL, UNLESS NOTED.
- 5. FABRICATE AND ERECT ALL STRUCTURAL STEEL IN ACCORDANCE WITH AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES."
- 6. THE STEEL FRAME IS "NON-SELF-SUPPORTING." ADEQUATE TEMPORARY SUPPORT MUST BE PROVIDED BY THE CONTRACTOR UNTIL REQUIRED CONNECTIONS OR ELEMENTS ARE IN PLACE.
- 7. STEEL ERECTION TOLERANCE AT LANDING GEAR SUPPORT PLATE ASSEMBLY ± 0". COORDINATE FINAL DIMENSIONS WITH FIELD MEASURED DIMENSIONS OF PLANE ON-SITE.
- 8. THE STAINLESS STEEL STRUCTURE AND METAL PANELS SHALL BE FABRICATED BY THE SAME COMPANY.
- 9. STRUCTURAL STAINLESS STEEL FINISH TO MATCH ARCHITECTURAL PANELS, SEE ARCH DWGS.
- 10. THIRD PARTY SPECIAL INSPECTOR TO INSPECT ALL SHOP WELDS.

#### **PROJECT SEQUENCE**

- CONTRACTOR REQUIRED TO WORK WITH WORLDWIDE AIRCRAFT RECOVERY (WWAR) THROUGHOUT THE PROJECT.
- CONTRACTOR AND WWAR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO ANY WORK.
- GC TO CREATE SHOP DRAWINGS CONCRETE, REINFORCING, STEEL.
- . COORDINATE GROUNDING OF AIRCRAFT THROUGH COLUMN AND FOUNDATION WITH ARCH DRAWINGS.
- GC TO INSTALL FOUNDATIONS/ANCHOR BOLTS.
- . WWAR TO JACK PLANE AND REMOVE THE GEAR AND DOORS.
- 7. GC AND WWAR TO FIELD MEASURE CONNECTORS TO PLANE FOR VERIFICATION OF DIMENSION ON DETAILS IN CONSTRUCTION DOCUMENTS. ERECTION TOLERANCE OF STEEL AT LANDING GEAR SUPPORT ASSEMBLY  $\pm$  0".
- GC FABRICATION OF STEEL AND CONNECTIONS. FABRICATION FOR STAINLESS STEEL STRUCTURE AND METAL PANELS TO BE THE SAME COMPANY.
- . GC STEEL ERECTION.
- 10. SUPPORT CONNECTORS ARE INSTALLED BY OTHERS ALONG WITH AND VERIFICATION OF ALL DIMENSIONS WITH FINAL STEEL AND PLANE.
- 11. GENERAL CONTRACTOR TO ENGAGE WWAR TO PERFORM INSTALLATION OF PLANE.
- 12. GC FINAL FIELD WELDING OF CONNECTIONS AFTER FIT-UP.
- 13. GC INSTALL ARCHITECTURAL METAL PANELS. (ALTERNATE)

3300 CAHABA ROAD, SUITE 210 BIRMINGHAM, ALABAMA 35223 PHONE: 205.879.5660 FAX: 205.879.5606 TUCKER · JONES
ENGINEERS ASSOCIATED. P.C.
PROJECT #16099

BY BY



RAWN BY: CKED BY:

1' - 4"

**ALTERNATIVE DETAIL FOR** 

FABRICATED STAINLESS STEEL TUBE

CJP TYP

- 3/4" STAINLESS

STEEL PL

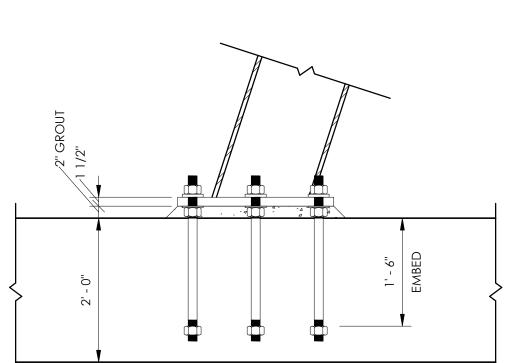
MOVEMENT.

STAGGER WELDS TO MINIMIZE THERMAL

2' - 2" (7) 1 1/2" Ø X 1' - 6" —— HEADED ANCHOR BOLTS IN 13/16" Ø HOLE. 1/2"x4"x4" STAINLESS STEEL PLATE WASHERS. 1 1/2" STAINLESS STEEL PLATE 10 1/2" 10 1/2"

# TYPICAL BASE PLATE DETAIL

SCALE: 1 1/2" = 1' - 0"



TYPICAL ANCHOR BOLT DETAIL

*INSPECTION AGENTS FIRM	ADDRESS	TELEPHONE NO.
1. OWNER'S TESTING AGENCY		
2.		
3.		
SUBCONTRACTOR WHOSE WORK IS TO BE IN	(S) SHALL BE ENGAGED BY THE OWNER OR THE OWN SPECTED OR TESTED. ANY CONFLICT OF INTEREST MUS ONS OF THE INSPECTION AGENT(S) MAY BE SUBJECT T	ST BE DISCLOSED TO THE BUILDING OFFICIAL PRIOR

2018 IBC - SCHEDULE OF SPECIAL INSPECTION SERVICES

IN-PLANT REVIEW

COMPLIANCE

FIELD TESTING

VERIFICATION

FIELD INSPECTION

FIELD INSPECTION

FIELD TESTING

FIELD REVIEW

FIELD REVIEW

REVIEW SUBMITTALS

REVIEW FIELD TESTING

FIELD INSPECTION

FIELD TESTING AND REVIEW LABORATORY REPORTS

INSPECTION OF STEEL FRAME JOINT DETAILS FOR FIELD INSPECTION OR SHOP

COMPLIANCE WITH APPROVED CONSTRUCTION INSPECTION

INSPECTION OF REINFORCING STEEL INSTALLATION FIELD INSPECTION

VERIFY MATERIALS BELOW SHALLOW FOUNDATION FIELD INSPECTIONS

VERIFY EXCAVATIONS ARE EXTENDED TO PROPER FIELD INSPECTION

VERIFY USE OF PROPER MATERIALS, DENSITIES AND REVIEW FIELD TESTING

REVIEW MATERIAL MARKINGS

AND CERTIFICATES OF

REVIEW CERTIFICATE OF

COMPLIANCE AND FIELD

SHOP AND FIELD INSPECTION

<u>EXTENT</u>

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COMPLETED

# NOTES:

1. STRUCTURAL STEEL WELDING:

MATERIAL/ACTIVITY

1704.2 INSPECTION OF FABRICATORS

1704.3 STEEL CONSTRUCTION

WELD FILLER MATERIALS

HARDENED CONCRETE

CONCRETE PLACEMENT

STRUCTURAL STEEL WELDING

1704.4 CONCRETE CONSTRUCTION

INSPECTION OF ANCHORS INSTALLED IN

VERIFICATION OF REQUIRED DESIGN MIX

INSPECTION OF CAST-IN-PLACE BOLTS

CONCRETE CURING OPERATIONS

EVALUATION OF CONCRETE STRENGTH

ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING

DEPTH AND HAVE REACHED PROPER MATERIAL PERFORM CLASSIFICATION AND TESTING OF

LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL

PRIOR TO PLACEMENT OF COMPACTED FILL,

OBSERVE SUBGRADE AND VERIFY THAT SITE HAS

1708.2 CONCRETE REINFORCEMENT REVIEW CERTIFIED MILL TEST REPORTS

FRESH CONCRETE SAMPLING

COMPACTED FILL MATERIALS

BEEN PREPARED PROPERLY

PROCEDURES

DOCUMENTS

1704.7 SOILS

CAPACITY

VERIFY FABRICATION/QUALITY CONTROL

HIGH-STRENGTH BOLTS, NUTS AND WASHERS

INSPECTION OF HIGH-STRENGTH BOLTING

- A. COMPLETE AND PARTIAL PENETRATION GROOVE WELDS - CONTINUOUS.
- B. MULTIPLE PASS FILLET WELDS CONTINUOUS. C. PLUG AND SLOT WELDS - CONTINUOUS.
- D. SINGLE PASS FILLET WELDS < 5/16" PERIODIC. E. DECK WELDS - PERIODIC.
- 2. REINFORCING STEEL WELDING: A. VERIFICATION OF WELDABILITY - PERIODIC. B. REINFORCING STEEL RESISTING FLEXURAL AND AXIAL IN INTERMEDIATE
- AND SPECIAL MOMENT FRAMES AND BOUNDARY ELEMENTS IN SPECIAL WALLS OR SHEAR REINF - CONTINUOUS.
- C. SHEAR REINFORCEMENT CONTINUOUS. D. OTHER REINFORCING - PERIODIC.
- 3. EXCEPTIONS: SPECIAL INSPECTIONS SHALL NOT BE REQUIRED FOR: A. ISOLATED SPREAD CONCRETE FOOTINGS OF BUILDINGS THREE STORIES OR LESS ABOVE GRADE PLANE THAT ARE FULLY SUPPORTED ON EARTH OR ROCK.
- B. CONTINUOUS CONCRETE FOOTINGS SUPPORTING WALLS OF BUILDINGS THREE STORIES OR LESS ABOVE GRADE PLANE THAT ARE FULLY SUPPORTED ON EARTH OR ROCK WHERE: 1. THE FOOTINGS SUPPORT WALLS OF LIGHT-FRAME CONSTRUCTION.
- 2. THE FOOTINGS ARE DESIGNED IN ACCORDANCE WITH TABLE 1809.7. 3. THE STRUCTURAL DESIGN OF THE FOOTING IS BASED ON A SPECIFIED COMPRESSIVE STRENGTH, F'C, NO GREATER THAN 2500 POUNDS PER SQUARE INCH (PSI), REGARDLESS OF THE COMPRESSIVE STRENGTH
- SPECIFIED IN THE CONSTRUCTION DOCUMENTS OR USED IN THE FOOTING CONSTRUCTION. C. NONSTRUCTURAL CONCRETE SLABS SUPPORTED DIRECTLY ON THE GROUND, INCLUDING PRESTRESSED SLABS ON GRADE, WHERE THE EFFECTIVE PRESTRESS
- IN THE CONCRETE IS LESS THAN 150 PSI.
- D. CONCRETE FOUNDATION WALLS CONSTRUCTED IN ACCORDANCE WITH TABLE 1807.1.6.2. E. CONCRETE PATIOS, DRIVEWAYS AND SIDEWALKS ON GRADE.
- **FOOTING SCHEDULE** FOOTING F13.0 DESIGNATION 13' - 0" X 13' - 0"

DEPTH

REINF EW

NOTES 1. REINFORCEMENT SHALL BE PLACED IN TOP AND BOTTOM OF FOOTING.

2' - 0''

16#6

6/16/25

EXHIBIT SUPPORT FOUNDATION PLAN

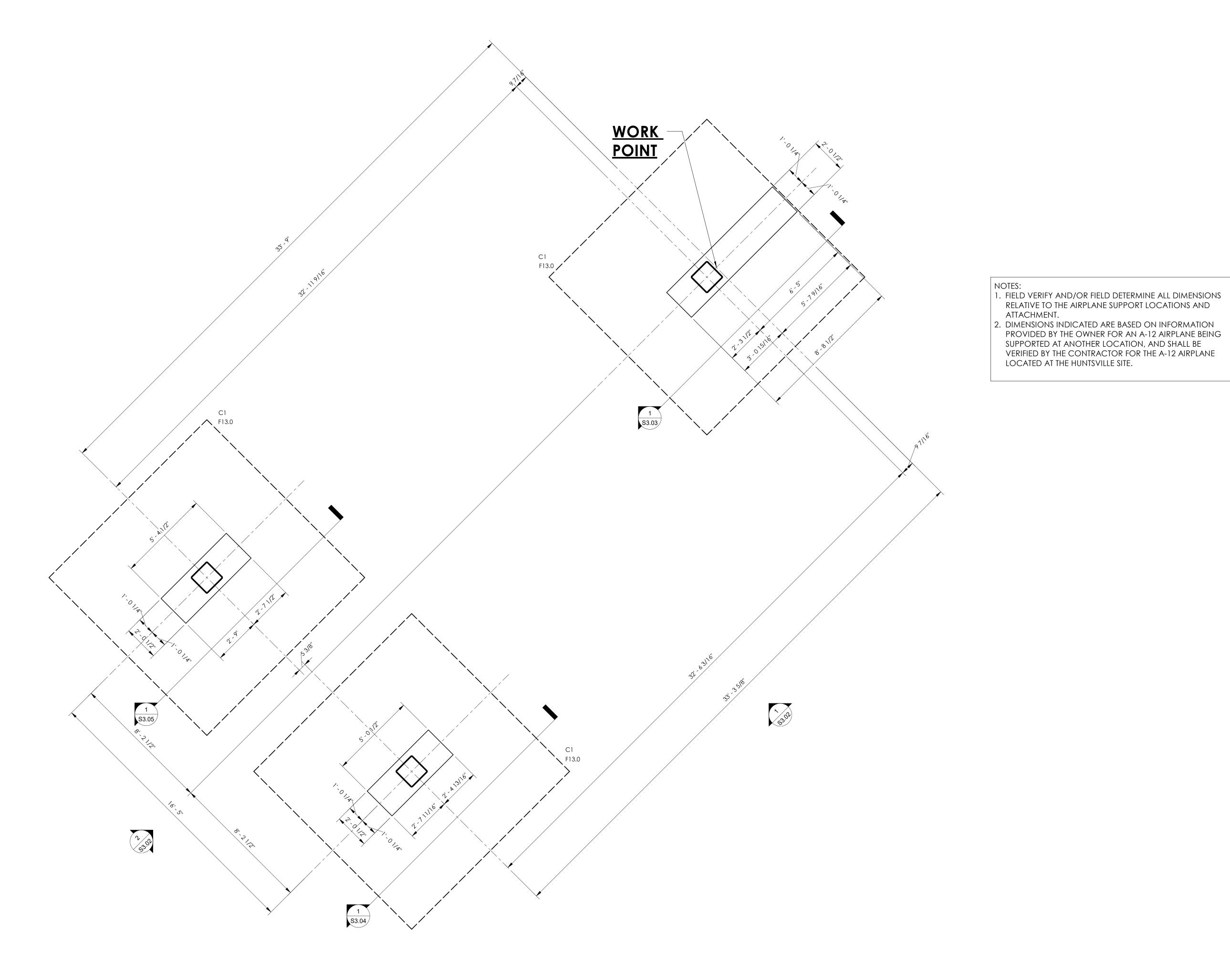


EXHIBIT SUPPORT FOUNDATION PLAN (ELEV. 100'-0")

- 1. TOP OF FOOTING TO BE 1'-8" BELOW FINISH GRADE. COORDINATE W/
- CIVIL DRAWINGS 2. TOP OF FOOTING DATUM ELEVATION 100'-0".

SCALE: 3/8"=1'-0"

- TOP OF POOTING DATION ELLIVATION 100-0.
   TOP OF PEDESTALS ELEVATION 102'-0".
   COORDINATE EXACT ORIENTATION OF EXHIBIT WITH CIVIL DRAWINGS.
   ALL DIMENSIONS BASED ON ELEVATION AT TOP OF FOOTING.
   WORK POINT IS THE FRONT WHEEL AT TOP OF PEDESTAL ELEVATION.
- 7. FOR FOOTING SCHEDULE, SEE SCHEDULE \$1.02.
- 8. C1 INDICATES STAINLESS STEEL HSS16X16X3/4. FOR BASE PLATE AND ANCHOR BOLTS, SEE SHEET S1.02.

EXHIBIT SUPPORT DIMENSION PLAN AT TOP OF PEDESTAL

WORK POINT NOTES:

1. FIELD VERIFY AND/OR FIELD DETERMINE ALL DIMENSIONS RELATIVE TO THE AIRPLANE SUPPORT LOCATIONS AND ATTACHMENT.

2. DIMENSIONS INDICATED ARE BASED ON INFORMATION PROVIDED BY THE OWNER FOR AN A-12 AIRPLANE BEING SUPPORTED AT ANOTHER LOCATION, AND SHALL BE VERIFIED BY THE CONTRACTOR FOR THE A-12 AIRPLANE LOCATED AT THE HUNTSVILLE SITE. 53.02

> EXHIBIT SUPPORT DIMENSION PLAN AT TOP OF PEDESTAL (ELEV. 102'-0")

TOP OF FOOTINGS ELEVATION +100'-0".
 TOP OF PEDESTALS ELEVATION +102'-0".
 COORDINATE EXACT ORIENTATION OF EXHIBIT WITH CIVIL DRAWINGS.
 ALL DIMENSIONS BASED ON ELEVATION AT TOP OF PEDESTAL.

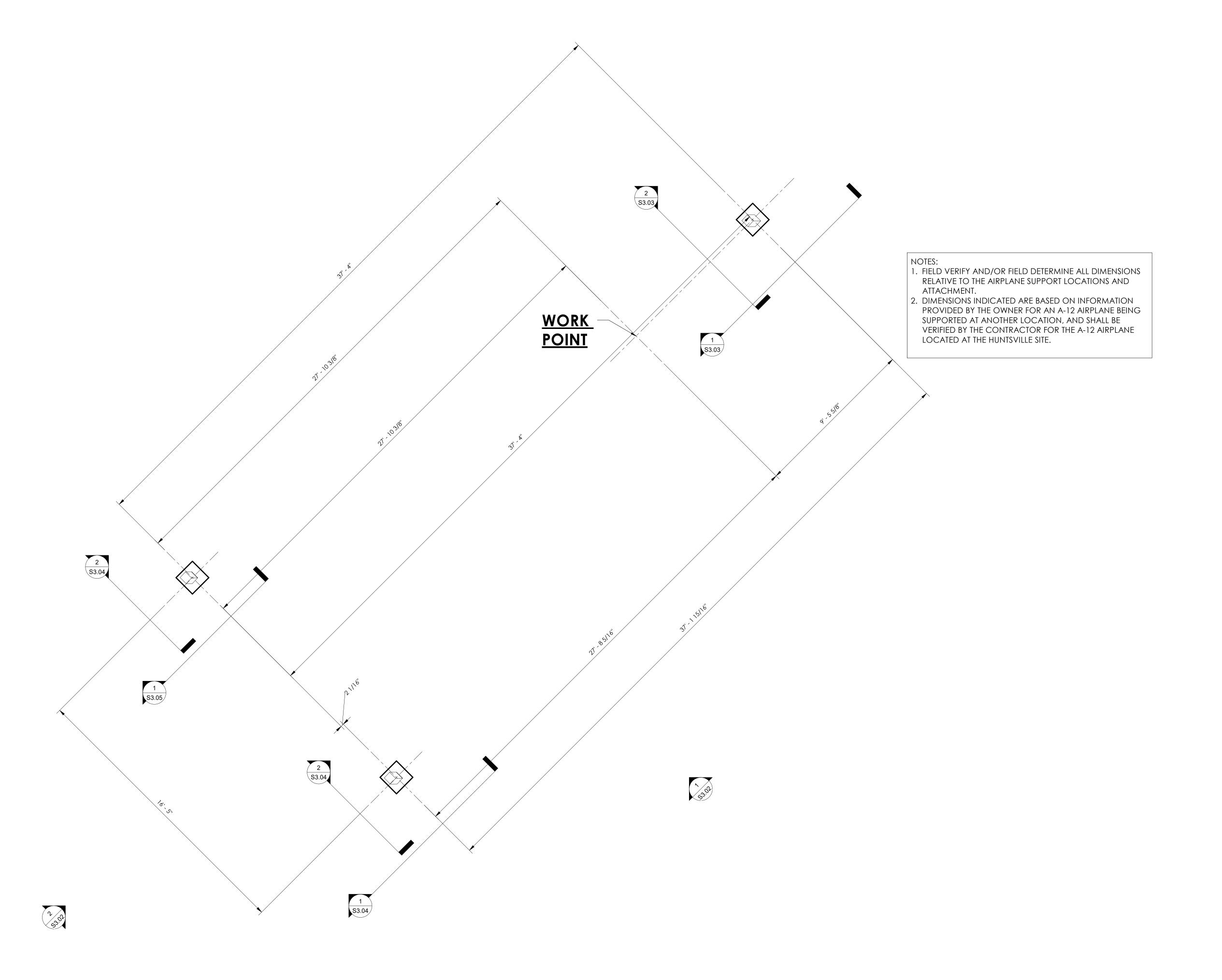


EXHIBIT SUPPORT FRAMING PLAN
SCALE: 3/8"=1'-0"

PROJECT NORTH

FOR TOP OF STEEL ELEVATIONS, SEE SECTIONS.
 ALL DIMENSIONS BASED ON ELEVATION AT TOP OF STEEL.
 WORK POINT IS THE FRONT WHEEL AT TOP OF PEDESTAL ELEVATION.

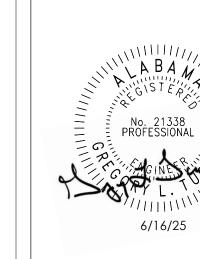
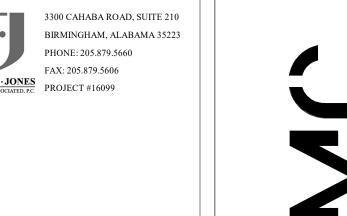
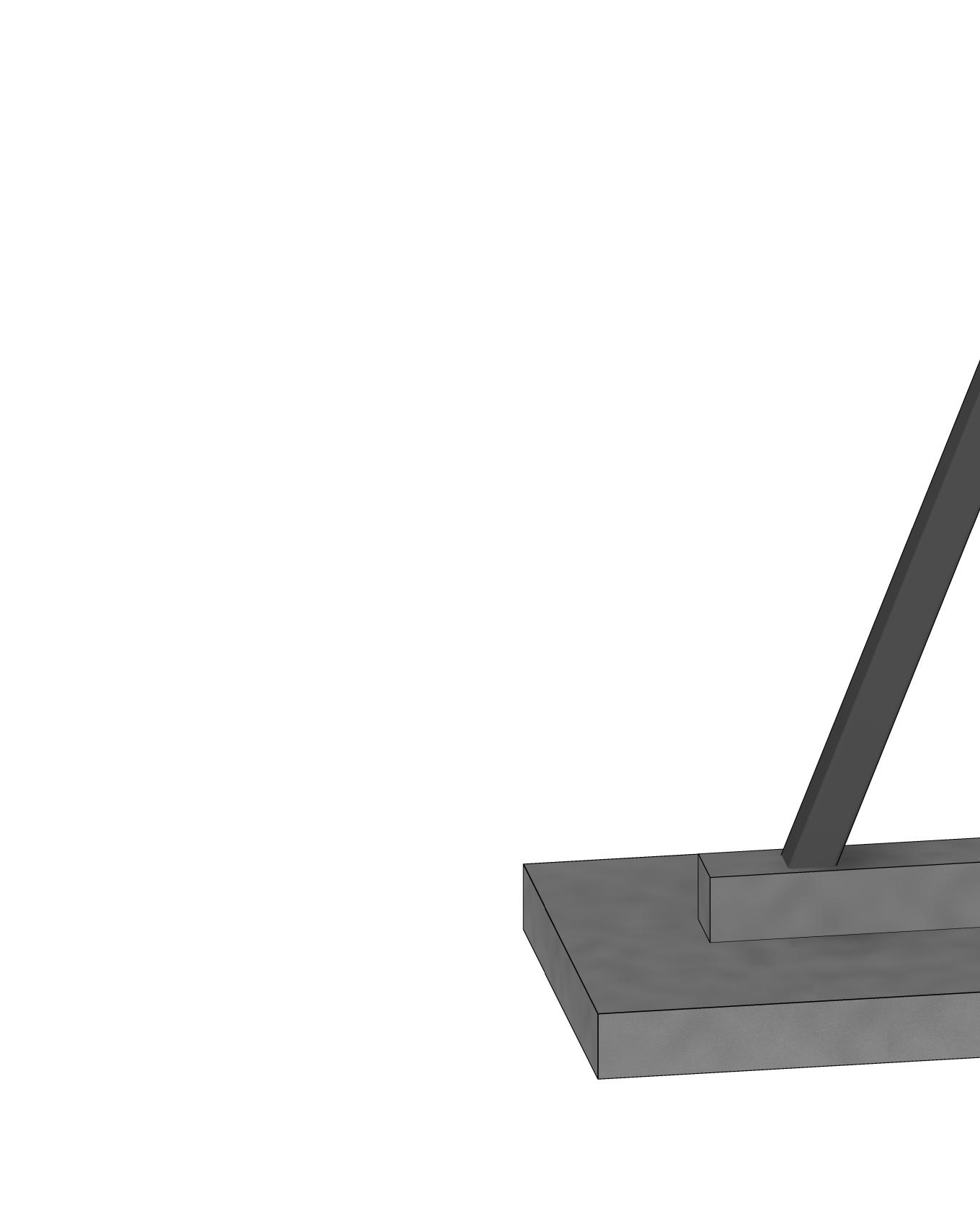


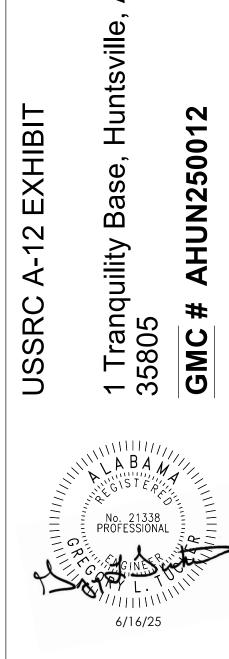
EXHIBIT SUPPORT FRAMING PLAN



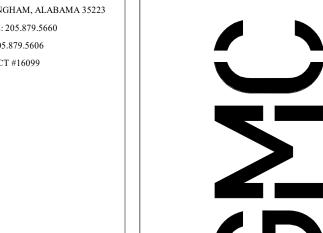




FOR REFERENCE ONLY
 ARCHITECTURAL METAL PANELS NOT SHOWN FOR CLARITY

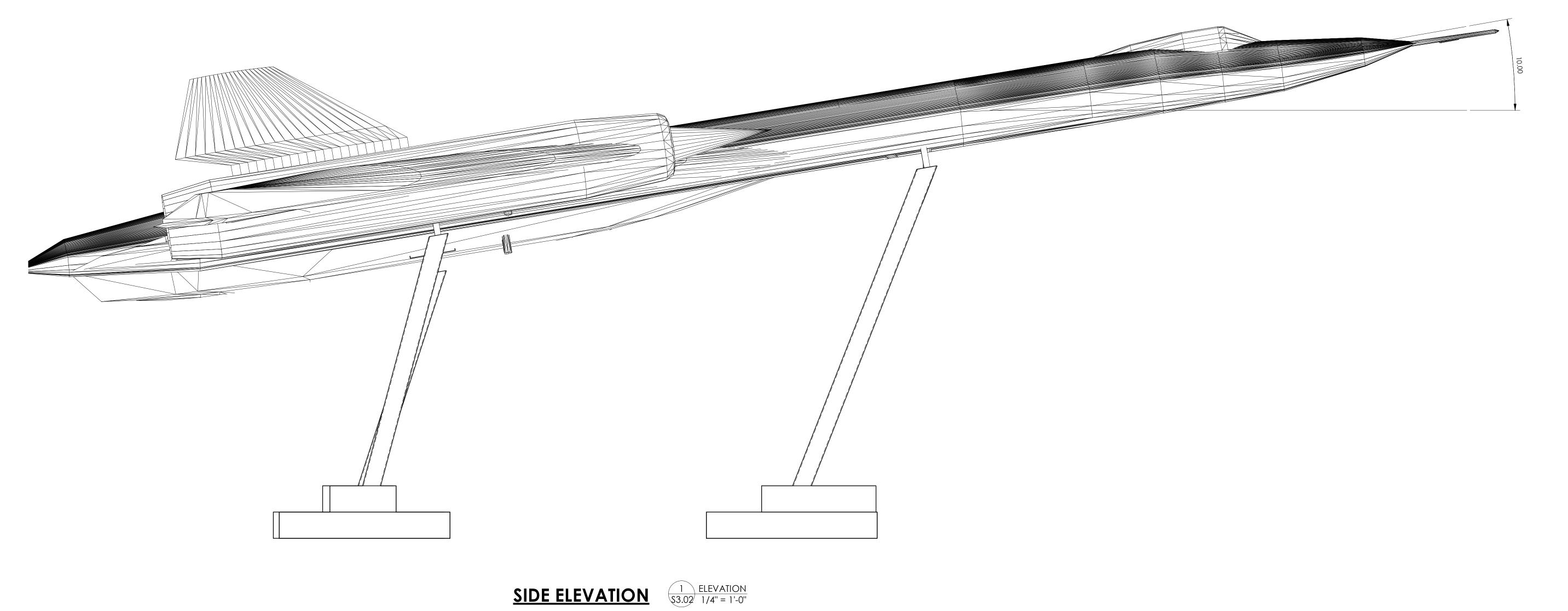


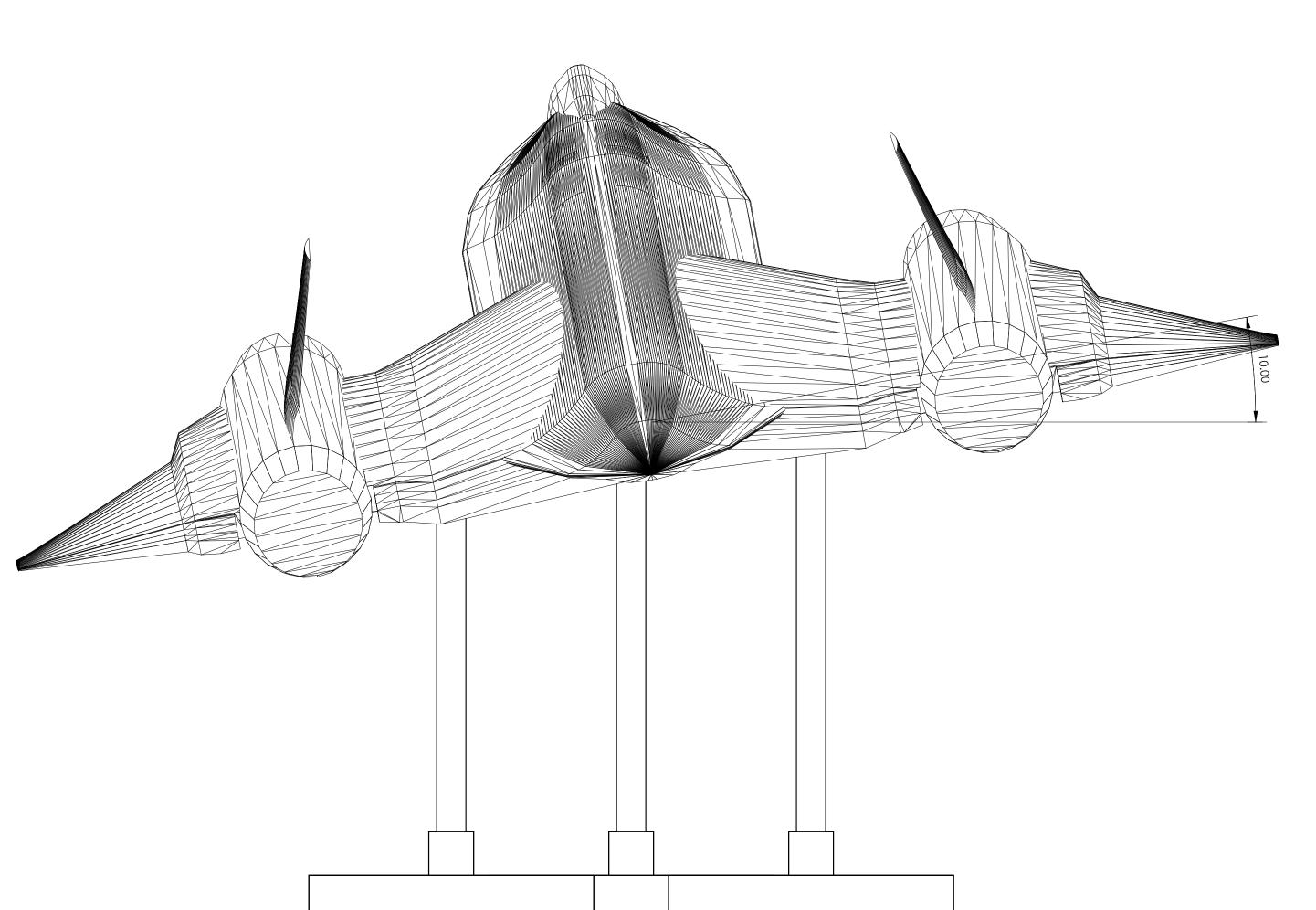
DRAWN BY: JCF CHECKED BY: GLT



6/16/25

**S3.02** sheet of

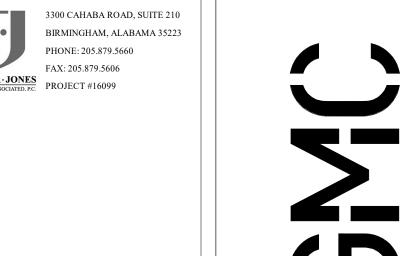




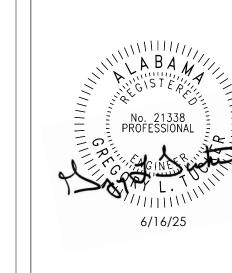
REAR ELEVATION

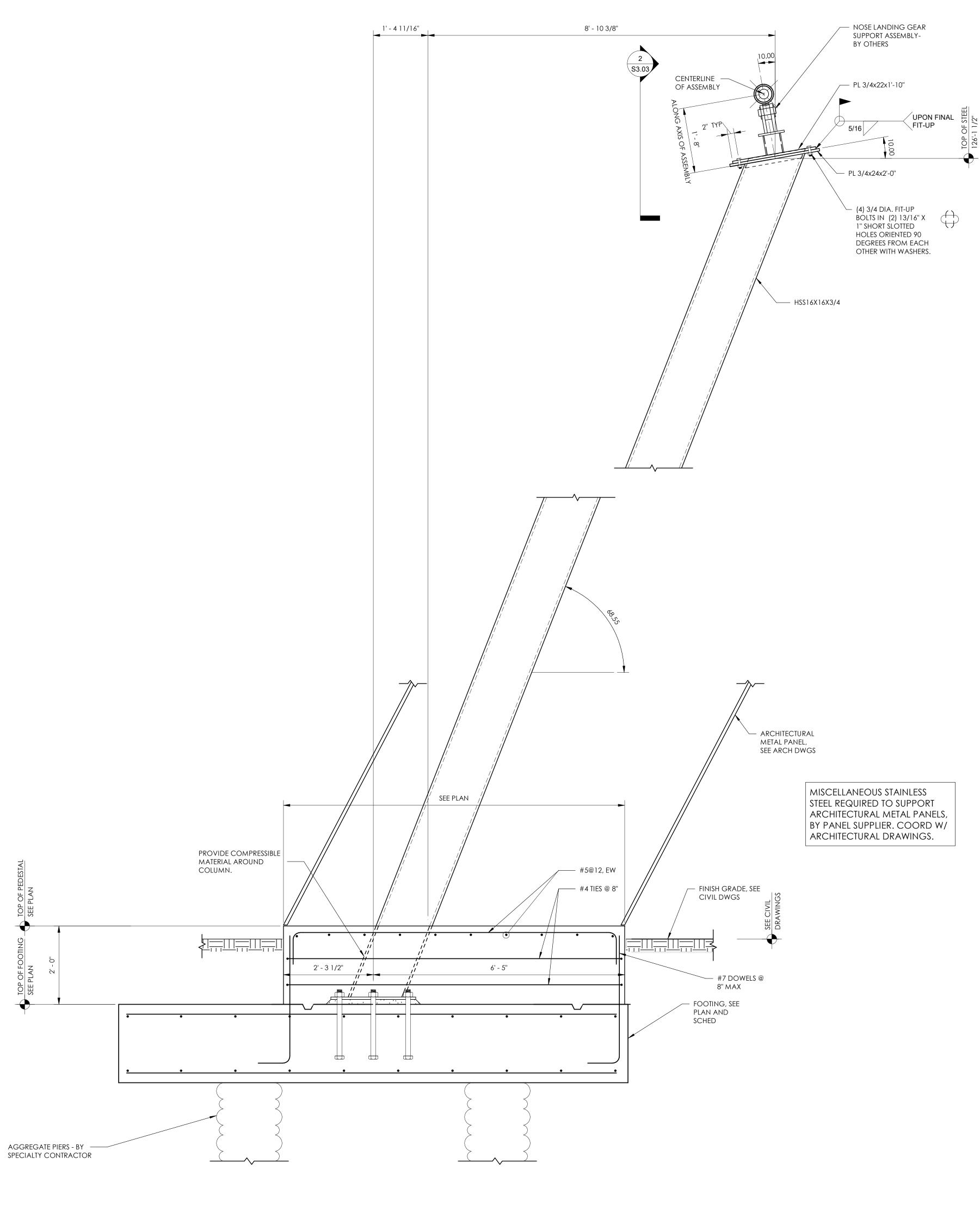
2 ELEVATION

3.02 1/4" = 1'-0"



RAWN BY: JCF CKED BY: GLT





NOTES:

1. FIELD VERIFY AND/OR FIELD DETERMINE ALL DIMENSIONS

RELATIVE TO THE AIRPLANE SUPPORT LOCATIONS AND ATTACHMENT.

2. DIMENSIONS INDICATED ARE BASED ON INFORMATION PROVIDED BY THE OWNER FOR AN A-12 AIRPLANE BEING

SUPPORTED AT ANOTHER LOCATION, AND SHALL BE VERIFIED BY THE CONTRACTOR FOR THE A-12 AIRPLANE LOCATED AT THE HUNTSVILLE SITE.

2 SECTION \$3.03 1 1/2" = 1'-0"

1 SECTION \$3.03 3/4" = 1'-0"

NOSE LANDING GEAR SUPPORT ASSEMBLY-BY OTHERS

UPON FINAL FITUP

3300 CAHABA ROAD, SUITE 210
BIRMINGHAM AI ARAMA 35222 BIRMINGHAM, ALABAMA 35223 PHONE: 205.879.5660 FAX: 205.879.5606 TUCKER·JONES
ENGINEERS ASSOCIATED. P.C.

PROJECT #16099

1. FIELD VERIFY AND/OR FIELD DETERMINE ALL DIMENSIONS

RELATIVE TO THE AIRPLANE SUPPORT LOCATIONS AND ATTACHMENT.

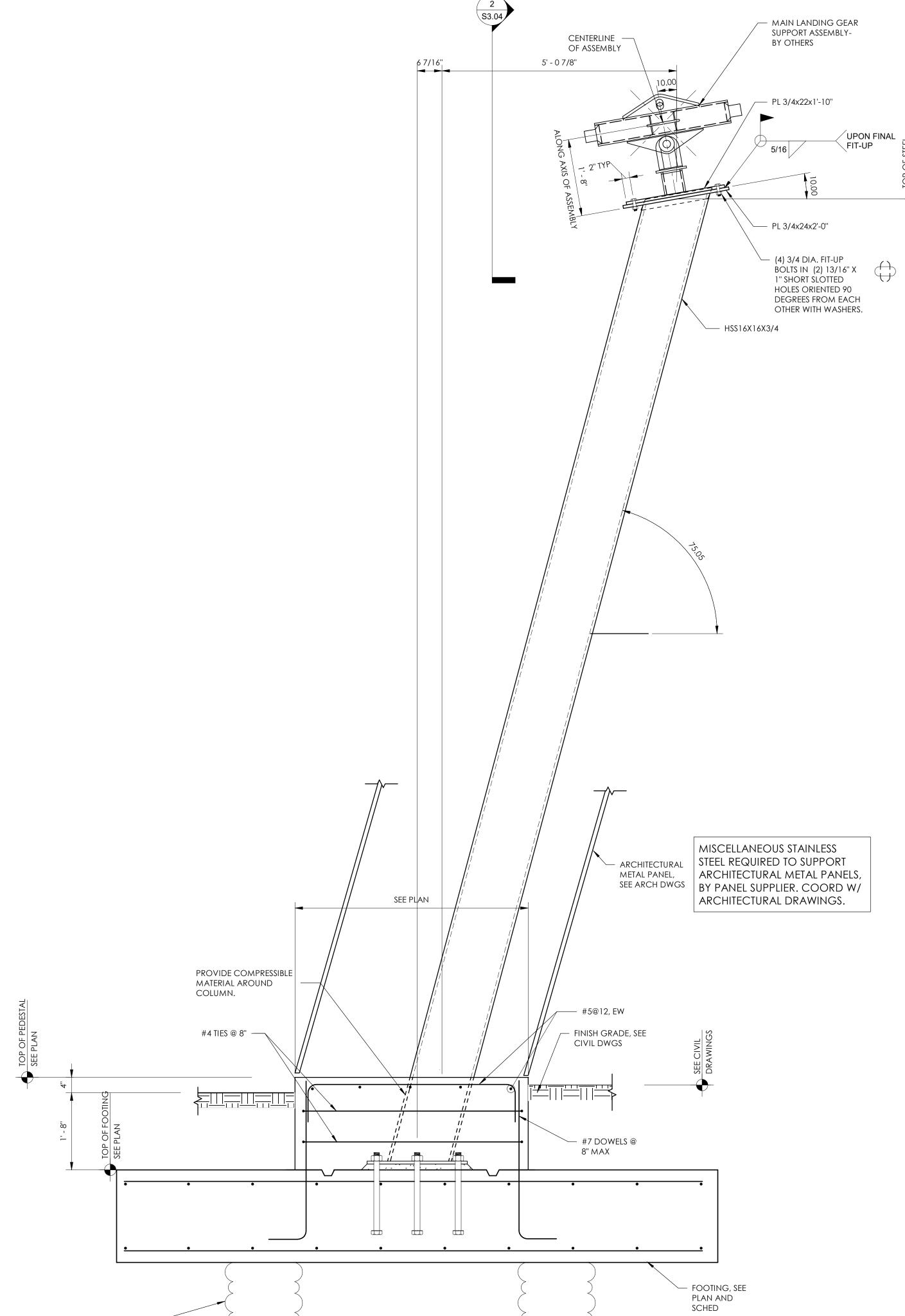
2. DIMENSIONS INDICATED ARE BASED ON INFORMATION

PROVIDED BY THE OWNER FOR AN A-12 AIRPLANE BEING

SUPPORTED AT ANOTHER LOCATION, AND SHALL BE VERIFIED BY THE CONTRACTOR FOR THE A-12 AIRPLANE LOCATED AT THE HUNTSVILLE SITE.

MAIN LANDING GEAR
 SUPPORT ASSEMBLY BY OTHERS

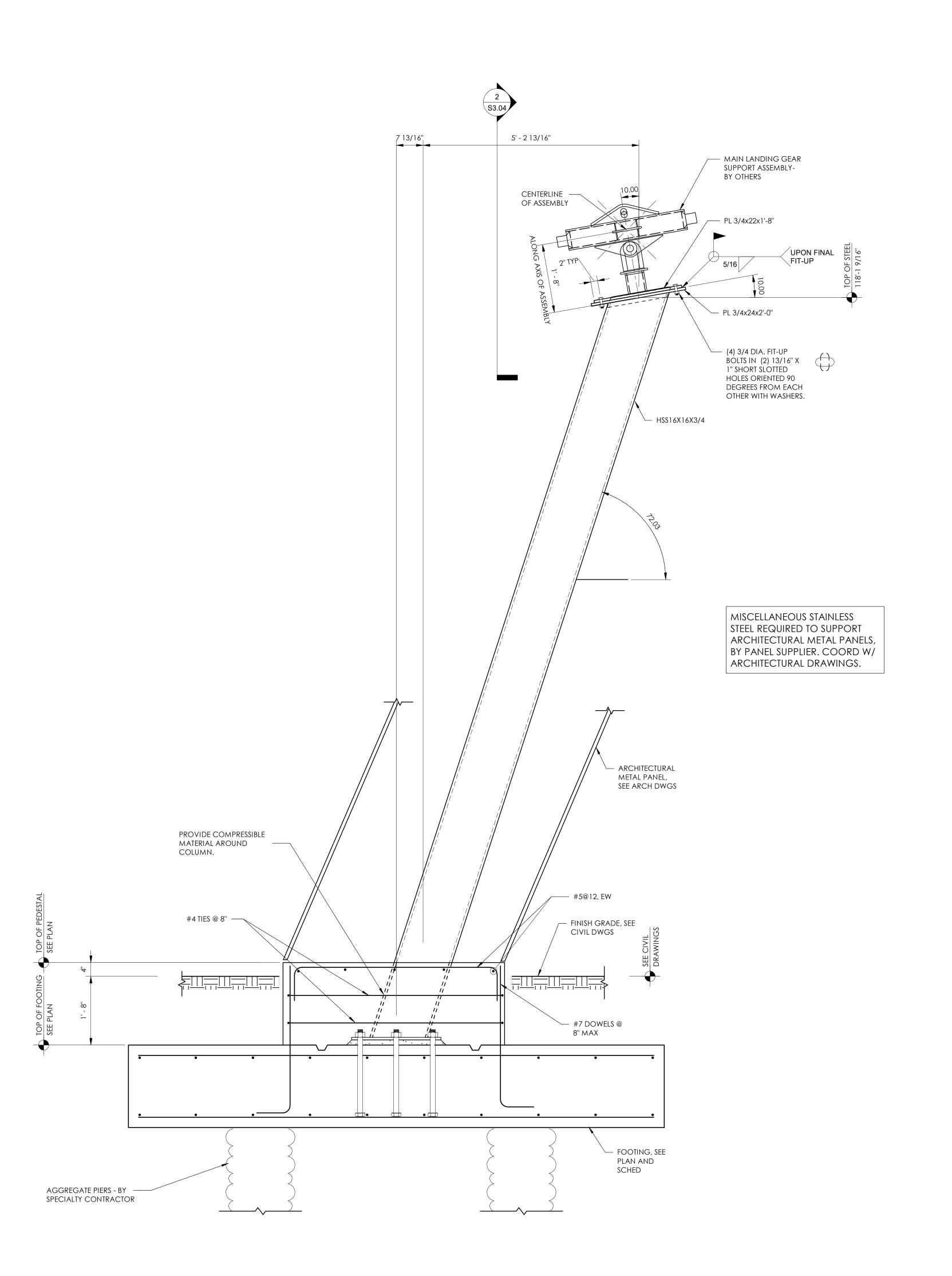
6/16/25



(4) 3/4 DIA. FIT-UP
BOLTS IN (2) 13/16" X
1" SHORT SLOTTED
HOLES ORIENTED 90
DEGREES FROM EACH
OTHER WITH WASHERS.

AGGREGATE PIERS - BY — SPECIALTY CONTRACTOR

DRAWN BY: JCF HECKED BY: GLT



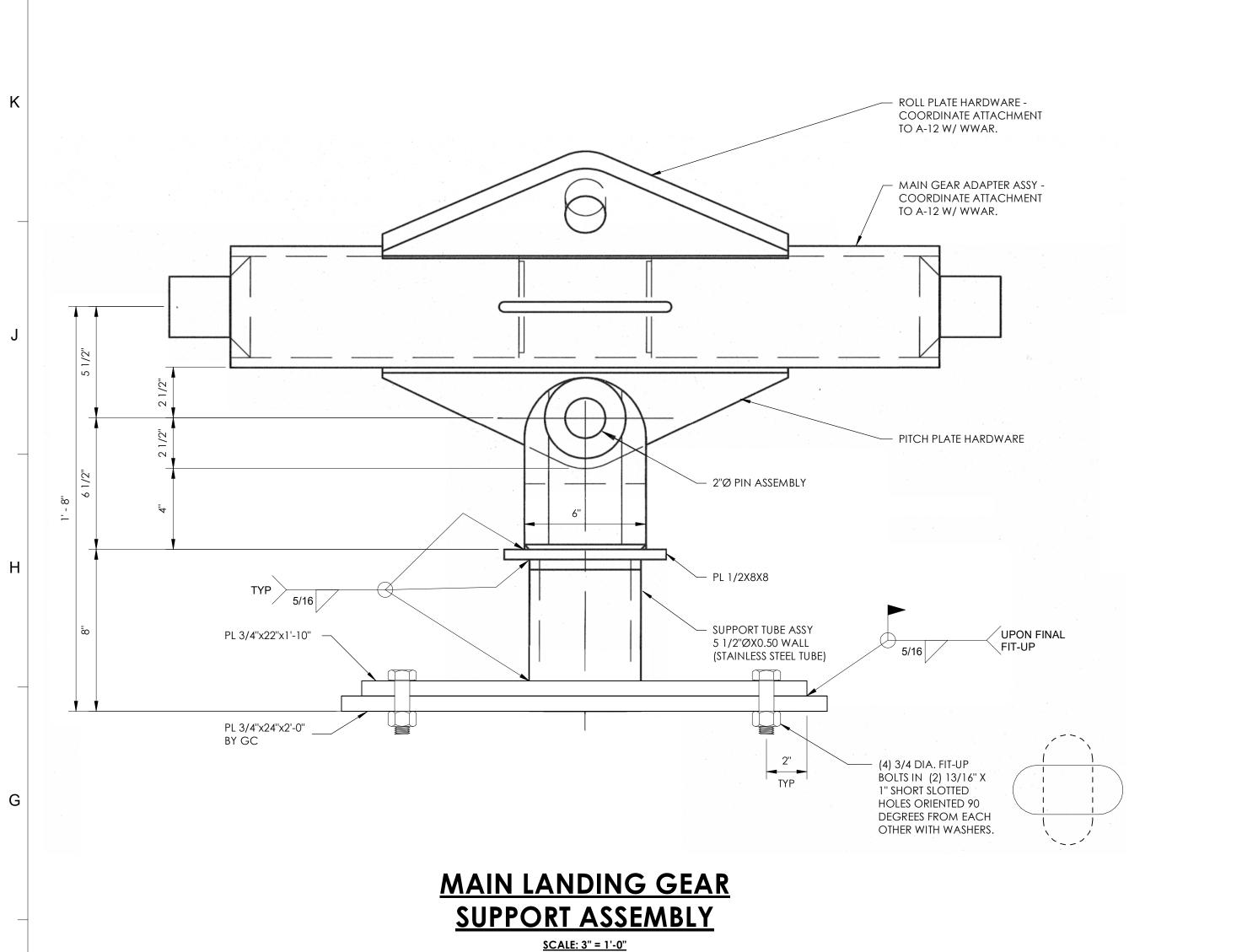
1 SECTION \$3.05 3/4" = 1'-0"

NOTES:

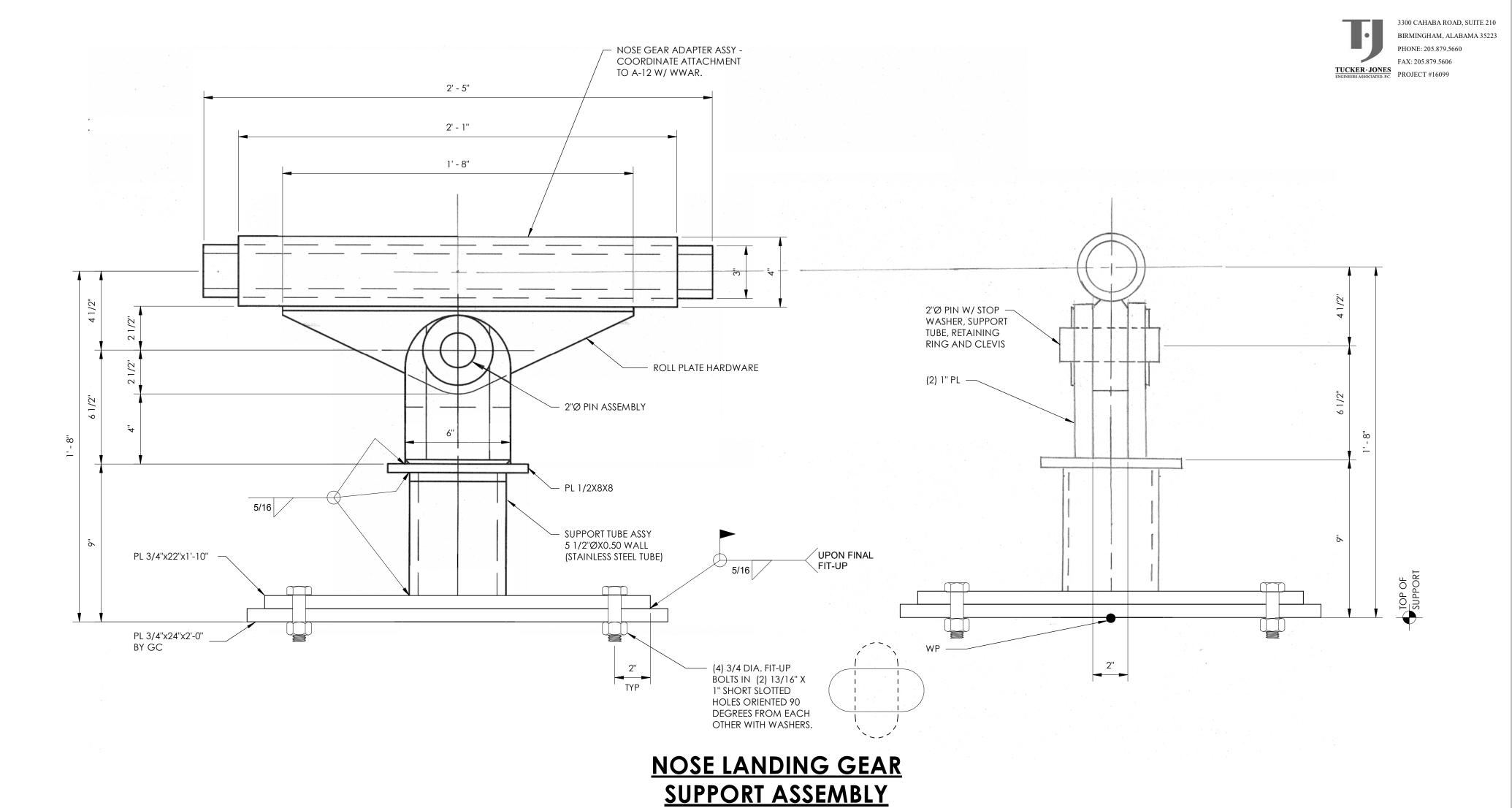
ATTACHMENT.

1. FIELD VERIFY AND/OR FIELD DETERMINE ALL DIMENSIONS RELATIVE TO THE AIRPLANE SUPPORT LOCATIONS AND

2. DIMENSIONS INDICATED ARE BASED ON INFORMATION PROVIDED BY THE OWNER FOR AN A-12 AIRPLANE BEING SUPPORTED AT ANOTHER LOCATION, AND SHALL BE VERIFIED BY THE CONTRACTOR FOR THE A-12 AIRPLANE LOCATED AT THE HUNTSVILLE SITE.

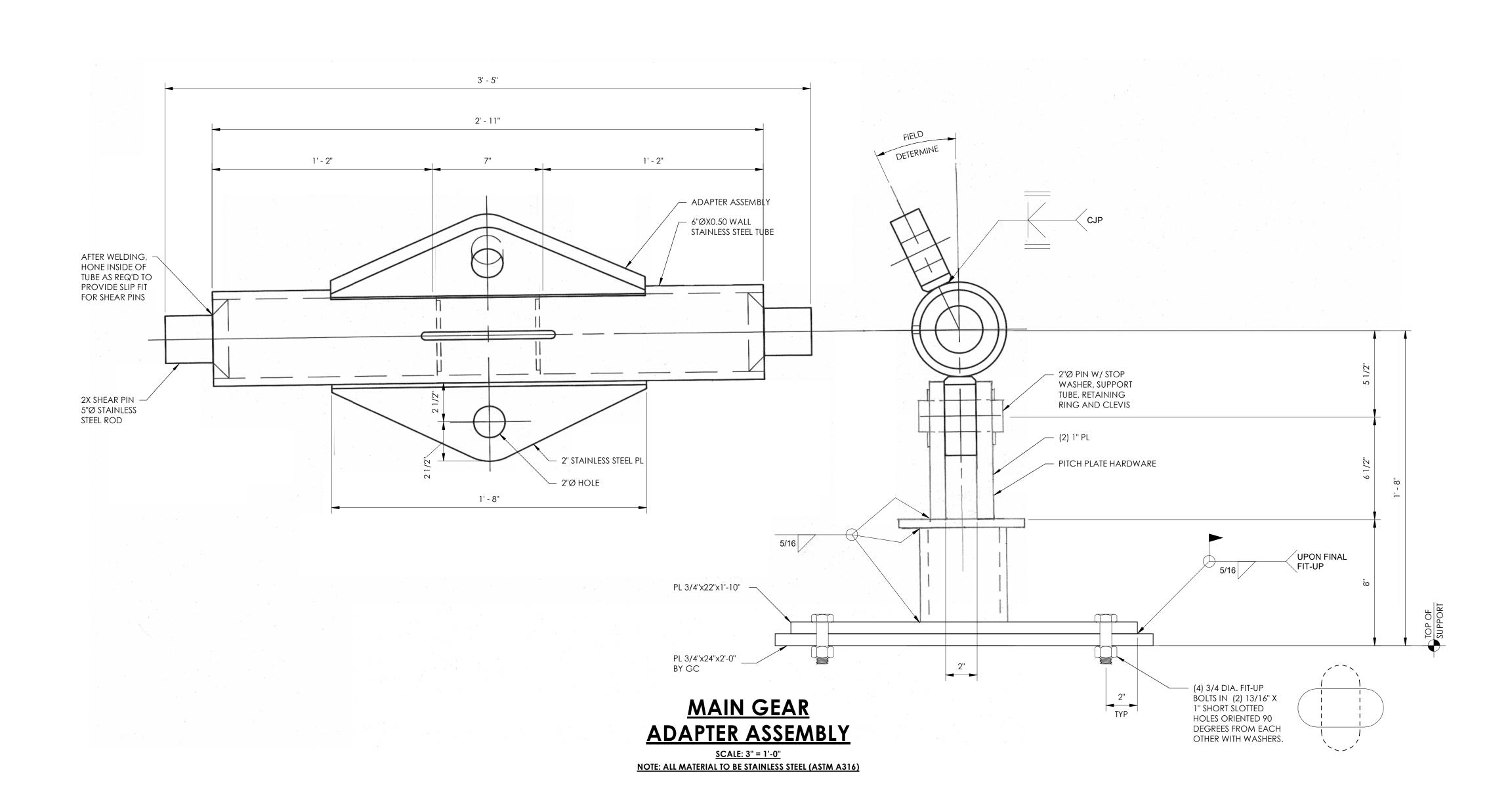


NOTE: ALL MATERIAL TO BE STAINLESS STEEL (ASTM A316)



<u>SCALE: 3" = 1'-0"</u>

NOTE: ALL MATERIAL TO BE STAINLESS STEEL (ASTM A316)



WWAR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO ANY WORK. WELDS FOR ALL ASSEMBLIES TO BE COORDINATED BY WWAR.

6/16/25 LANDING GEAR ATTACHMENT DETAIL

RAWN BY: JCF ECKED BY: GLT