



PROJECT:

CONNECTICUT ARMY NATIONAL GUARD AASF AIRCRAFT APRON REPAIR - PHASE 1

100% Contract Documents Submittal

BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CONNECTICUT

PROJECT NUMBER: 20MIL21201
MILITARY DEPARTMENT

MAJOR GENERAL FRANCIS J. EVON, Jr.
ADJUTANT GENERAL

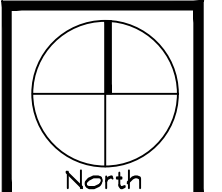
US. PROPERTY AND FISCAL OFFICE for CONNECTICUT

PRELIMINARY - NOT
FOR CONSTRUCTION

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LICENSEE NO. 000165

Mark	Date	Description
0	06/12/20	ISSUED FOR BID

Drawn by: LMG
App'd by: KNW
Scale: AS NOTED
File #: 102422-CVR-Pl.dwg



STATE OF CONNECTICUT
MILITARY DEPARTMENT
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360 Broad Street, Hartford, CT 06103
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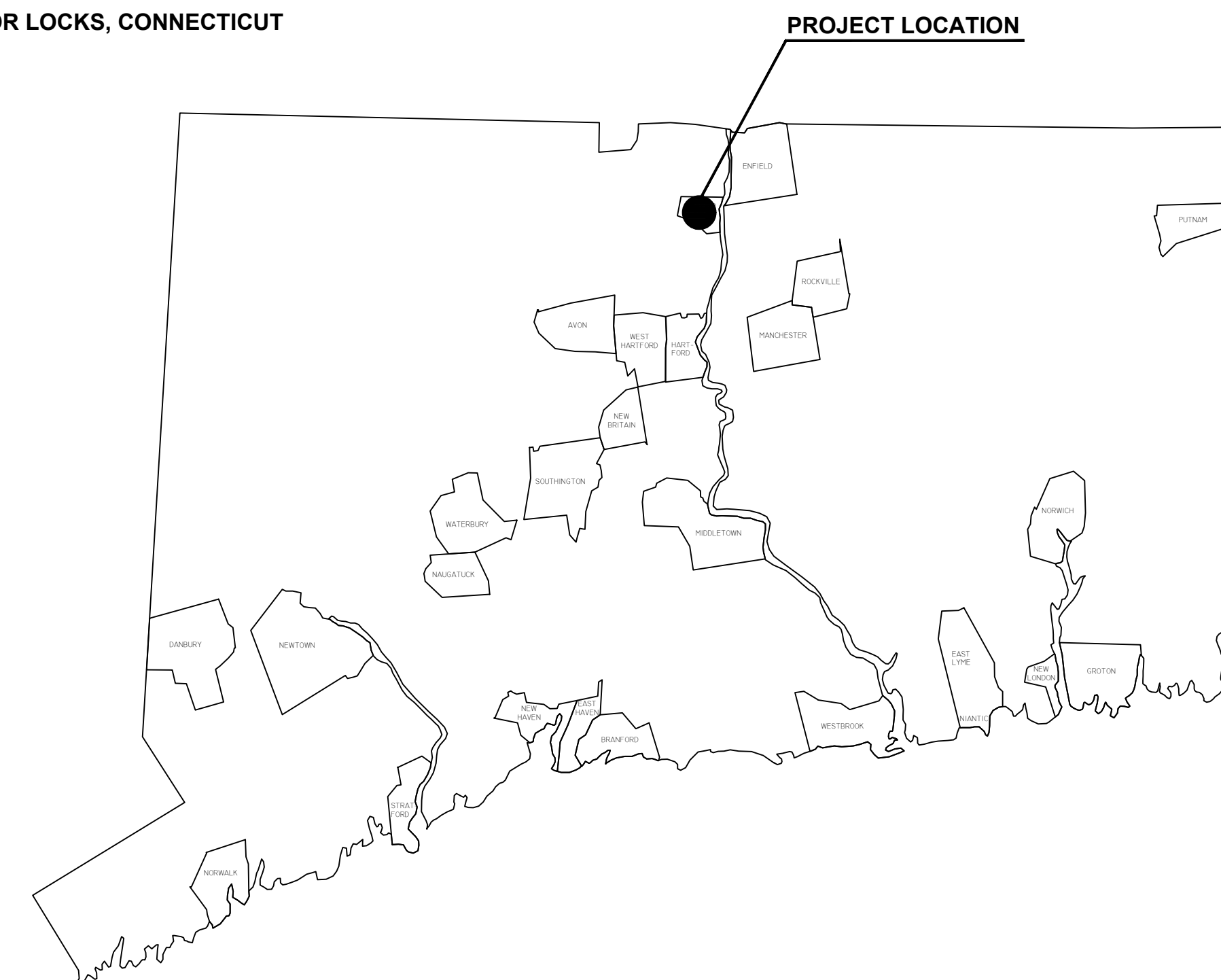
Project:
CONNECTICUT ARMY NATIONAL GUARD
AASF AIRCRAFT APRON REPAIR
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CONNECTICUT

Drawing Title
COVER SHEET

Date
DECEMBER 1, 2017
Drawing No.
CVR
Project No.
102422

ITEMS ON PLAN SHEETS INSIDE DASHED
BOX SHALL BE INCLUDED IN BASE BID.
ALL OTHER ITEMS SHALL BE
CONSIDERED BID OPTION.

LOCATION PLAN
WINDSOR LOCKS, CONNECTICUT



Connecticut Army National Guard AASF AIRCRAFT APRON REPAIR - PHASE 1

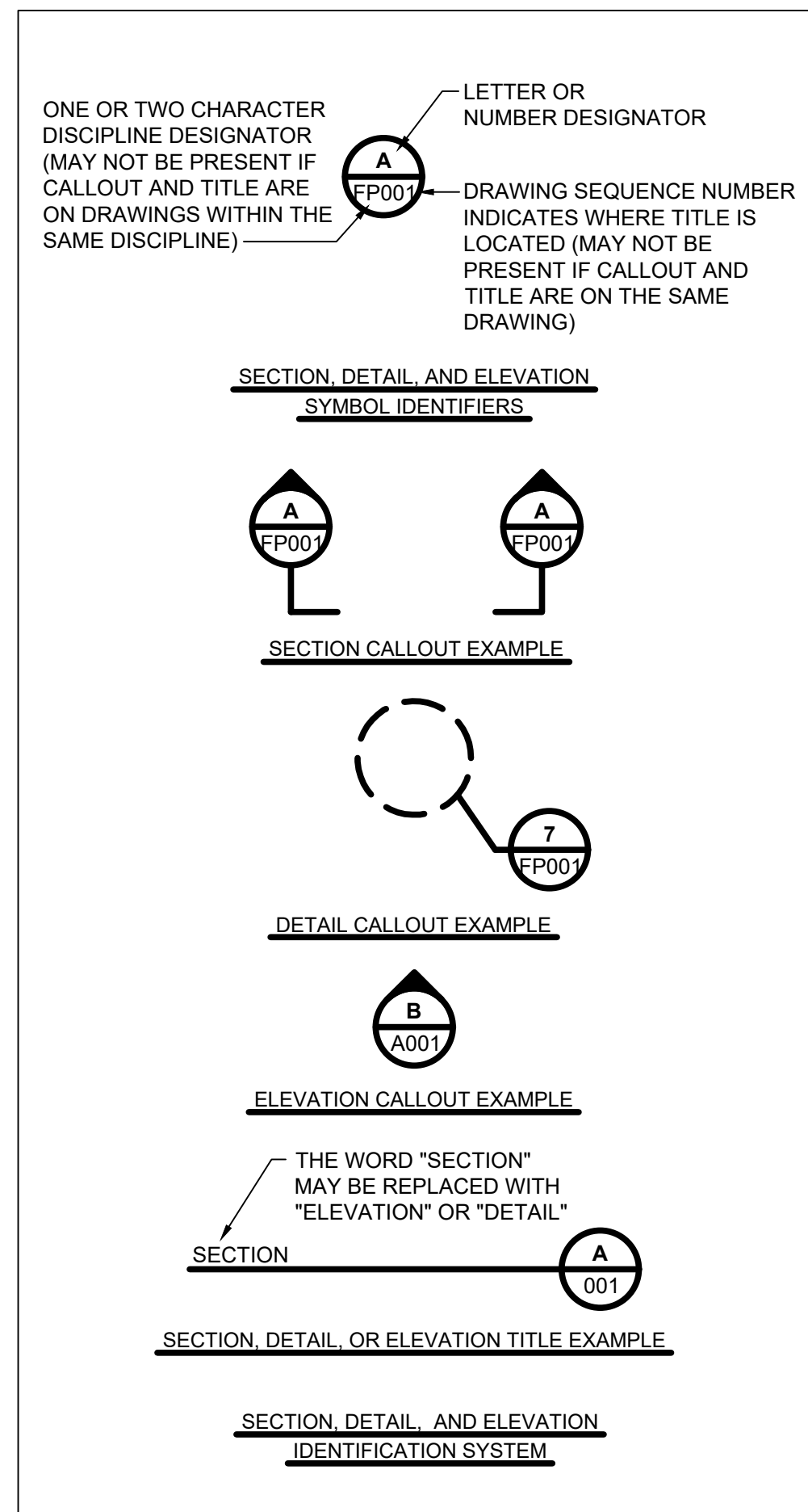
100% Contract Documents Submittal
Project #: 20MIL21201

Contract Drawings

CIVIL DRAWINGS

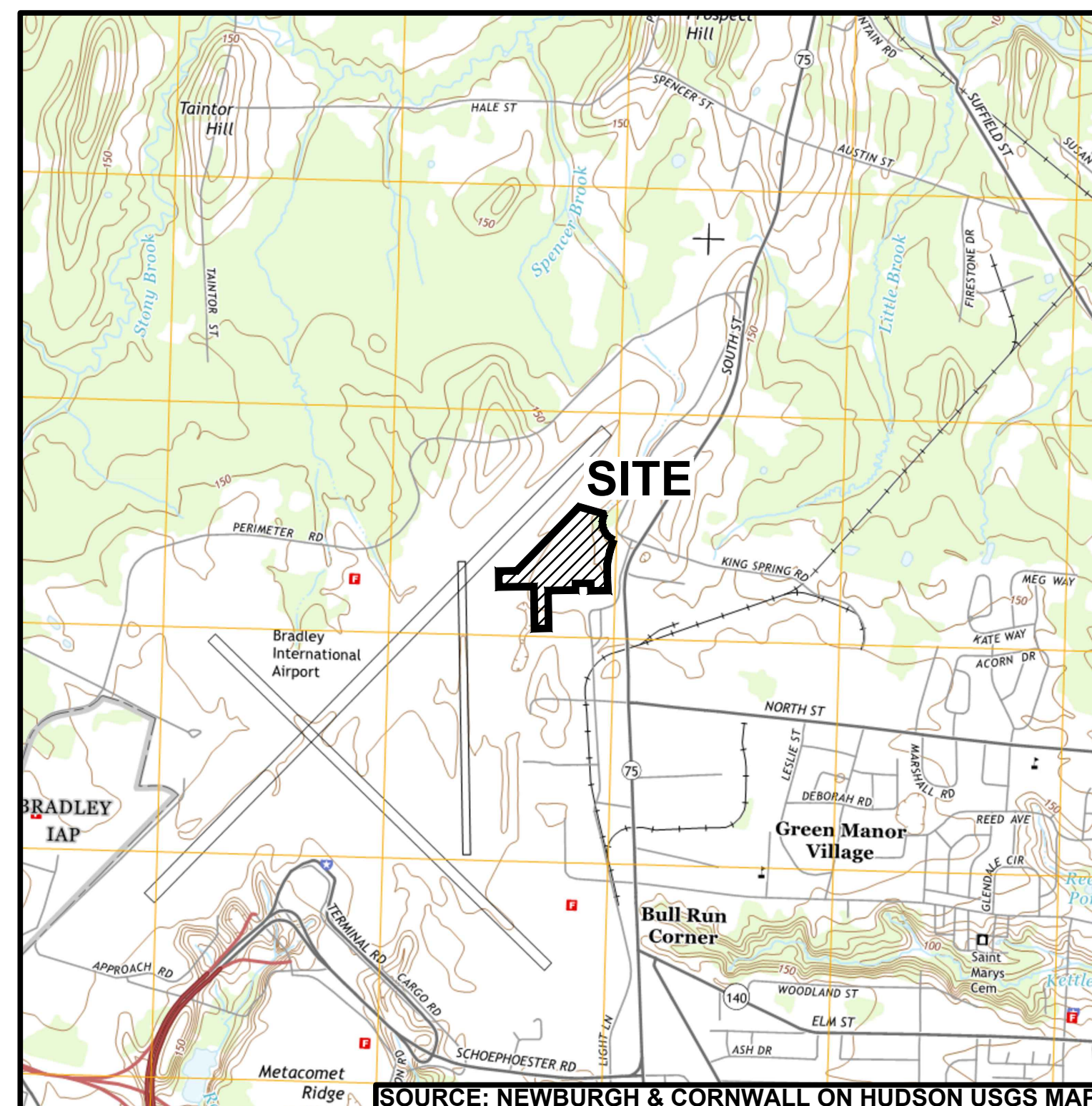
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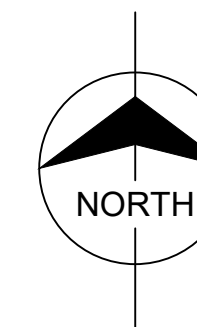
LIST OF ABBREVIATIONS (NOT ALL MAY BE USED)

AC	ASBESTOS CEMENT PIPE
ALUM	ALUMINUM
ARNG	ARMY NATIONAL GUARD
ASSY	ASSEMBLY
AT / FP	ANTI TERRORISM / FORCE PROTECTION
BIT	BITUMINOUS CONCRETE
BLDG	BUILDING
CB	CATCH BASIN
CATV	CABLE TELEVISION
CI	CAST IRON PIPE
CIC	CAST IRON COVER
C/L	CENTERLINE
CLF	CHAIN LINK FENCE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
DI	DUCTILE IRON PIPE
DIA	DIAMETER
DMH	DRAINAGE MANHOLE
E	EASTING
EL	ELECTRICAL
EMH	ELECTRIC MANHOLE
FAR	FEDERAL AVIATION REGULATION
FF	FINISH FLOOR
GALV	GALVANIZED
HMA	HOT MIX ASPHALT
HT	HEIGHT
HYD	HYDRANT
INV	INVERT
KSM	KILOGRAM / SQUARE METER
LF	LINEAR FOOT
LOD	LIMIT OF DISTURBANCE
MAX	MAXIMUM
MC	MINOR CONSTRUCTION
MFR	MANUFACTURER
MIN	MINIMUM
N	NORTHING
NO	NUMBER
NOM	NOMINAL
OC	OFF CENTER
OD	OUTSIDE DIMENSION
PE	POLYETHYLENE (PIPE)
PERF	PERFORATED (PIPE)
PIV	POST INDICATOR VALVE
POB	POINT OF BEGINNING
PVC	POLYVINYL CHLORIDE PIPE
RAD	RADIUS
RCP	REINFORCED CONCRETE PIPE
R/W	RUNWAY
SESC	SOIL EROSION AND SEDIMENT CONTROL
SMH	SANITARY MANHOLE
SQ FT	SQUARE FOOT
SQ M	SQUARE METER
SRM	SUSTAINMENT, RESTORATION & MAINTENANCE
TDZ	TOUCH DOWN ZONE
TYP	TYPICAL
UP	UTILITY POLE
VC	VITRIFIED CLAY PIPE
W/O	WITHOUT



VICINITY MAP

0 2000' 4000'
SCALE IN FEET



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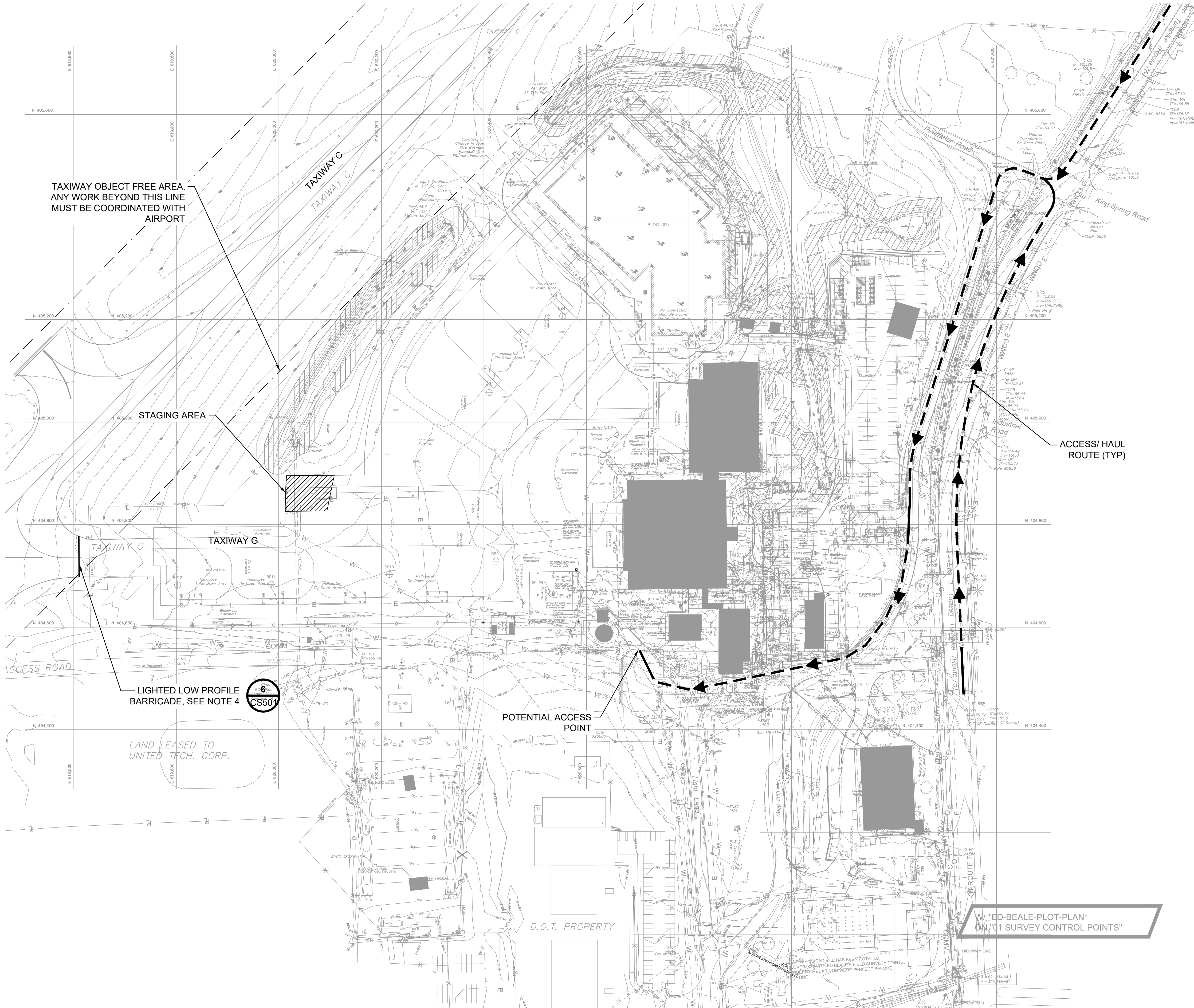


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- NOTES:
- SEE DRAWING G-103 FOR ACCESS AND SAFETY NOTES.
 - CONTRACTOR SHALL COORDINATE LOCATION OF STAGING AND STOCKPILE AREA WITH CONTRACTING OFFICER PRIOR TO CONSTRUCTION.
 - CLOSURE OF TAXIWAY G SHALL BE COORDINATED WITH CONTRACTING OFFICER AND AIRPORT. WORK WITHIN THE OBJECT FREE AREA SHALL BE COORDINATED WITH AIRPORT.
 - LOW PROFILE BARRICADES SHALL BE SET 20 FEET OUTSIDE OF LOD.



Scale For Microfilming
Millimeters
Inches



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date	DECEMBER 28, 2017	detailed	S. CATONE
designed	L. GUERIN	checked	K. WARRENDER



CONNECTICUT ARMY NATIONAL GUARD
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT

AASF AIRCRAFT APRON REPAIR - PHASE 1

GENERAL ACCESS & SAFETY PLAN

BMD project	102422	ARNG project	20MIL2101
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drawing **G-102** of # sheets **0**

sheet of # sheets
file 102422-G102-P1.dwg

ACCESS AND SAFETY NOTES

ACCESS AND STAGING

- 1. ACCESS AND HAUL ROUTES FOR ALL CONTRACTOR PERSONNEL, VEHICLES, EQUIPMENT, AND DELIVERIES ARE ILLUSTRATED DRAWING G-102 AND ARE SUBJECT TO THE APPROVAL OF THE CONTRACTING OFFICER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ACCESS ROUTES AND HAUL ROUTES ARE SUBJECT TO CHANGE AT THE DIRECTION OF THE CONTRACTING OFFICER AND MAY CHANGE BASED ON OPERATIONAL REQUIREMENTS OF THE PROJECT SITE/BASE/AIRFIELD/AIRPORT.
2. CONTRACTOR SHALL COORDINATE ACTIVITIES AND MAINTAIN ALL ACCESS AND HAUL ROUTES IN A MANNER THAT ALLOWS UNOBSTRUCTED EMERGENCY ACCESS TO ALL PROJECT AREAS, AND EXISTING ROADWAYS AT ALL TIMES WITHOUT DELAY TO EMERGENCY AND SECURITY VEHICLE RESPONSE TIME.
3. IF ANY EMERGENCY ROUTES REQUIRE CLOSURE DUE TO CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER, POLICE, LOCAL FIRE AUTHORITY, AND ALL OTHER EMERGENCY SERVICES OF THE CLOSURE.
4. CONTRACTOR SHALL MAINTAIN ACCESS AND HAUL ROUTES TO BE FREE FROM DEBRIS CAUSED FROM CONSTRUCTION ACTIVITIES ON A DAILY BASIS.
5. CONTRACTOR SHALL RESTRICT ALL OPERATIONS TO AREAS WITHIN THE CONSTRUCTION LIMITS UNLESS COORDINATED OTHERWISE WITH THE CONTRACTING OFFICER.
6. CONTRACTOR SHALL PROVIDE TEMPORARY CONSTRUCTION FENCING AROUND THE SITE DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH BASE.
7. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING A STAGING AND STOCKPILE AREA FOR MATERIALS AND EQUIPMENT. LOCATION OF CONTRACTOR'S STAGING SHALL BE AS ILLUSTRATED ON DRAWING G-102 / WITHIN THE LIMITS OF CONSTRUCTION AND IS SUBJECT TO THE APPROVAL OF THE CONTRACTING OFFICER. CONTRACTOR MAY SUBMIT ALTERNATIVES TO THE STAGING AREA LOCATIONS AS SHOWN. CONTRACTOR'S STAGING AREA IS SUBJECT TO CHANGE AT THE DIRECTION OF THE CONTRACTING OFFICER AND MAY CHANGE BASED ON OPERATIONAL REQUIREMENTS OF THE BASE AND/OR AIRPORT.
8. WHEN NOT ENGAGED IN CONSTRUCTION ACTIVITIES, CONTRACTOR'S EQUIPMENT AND VEHICLES SHALL BE PARKED IN THE STAGING AREA.
9. CONTRACTOR SHALL PROVIDE AND INSTALL AT THE CONSTRUCTION ENTRANCE A PROFESSIONALLY PAINTED SIGN, MEETING CONTRACTING OFFICER APPROVAL, TO DIRECT MATERIAL SUPPLIERS, EMPLOYEES, AND DELIVERIES TO THE CONSTRUCTION SITE. THE SIGN SHALL READ "CONSTRUCTION VEHICLES ONLY - NO VENDORS ALLOWED."
10. CONTRACTOR SHALL PROVIDE A MINIMUM NOTICE OF 48 HOURS TO THE CONTRACTING OFFICER REGARDING CONSTRUCTION DELIVERIES PRIOR TO THOSE DELIVERIES. DELIVERIES SHALL BE SCHEDULED MONDAY-FRIDAY, 8:00 AM TO 3:00 PM.
11. SECURITY FENCING AND GATES ASSOCIATED WITH CONTRACTOR'S WORK AREA SHALL MEET OR EXCEED THE EXISTING FENCE STRENGTH, SIZE, AND DIMENSIONS. SECURITY GATE SHALL BE STAFFED AT ALL TIMES DURING WORKING HOURS AND SHALL BE LOCKED DURING NON-WORKING HOURS. AT PROJECT COMPLETION, CONTRACTOR SHALL REMOVE SECURITY GATE AND RESTORE SECURITY FENCE TO ITS ORIGINAL CONDITION.
12. ALL CONTRACTOR VEHICLES AND PERSONNEL ARE SUBJECT TO SEARCH BY SECURITY WHEN ENTERING THE BASE AND MAY EXPERIENCE DELAYS. ALL PERSONNEL MUST HAVE A CURRENT AND VALID PHOTO IDENTIFICATION PER BASE SECURITY REQUIREMENTS, AND ALL VEHICLES MUST HAVE CURRENT AND VALID REGISTRATION AND INSURANCE.
13. ALL CONTRACTOR VEHICLES AND PERSONNEL SHALL BE RESPONSIBLE FOR COORDINATING WITH THE BASE SECURITY OFFICE IN OBTAINING PROPER SECURITY CLEARANCE AND BADGING PRIOR TO ENTERING SECURE AREAS.
14. ACCESS POINTS, HAUL ROUTES, STAGING AREA, AND ANY OTHER AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE CONTRACTING OFFICER.

COORDINATION AND COMMUNICATION

- 1. CONTRACTOR SHALL APPOINT A PRIMARY CONSTRUCTION SUPERINTENDENT, SUBJECT TO THE APPROVAL OF THE CONTRACTING OFFICER, WHO SHALL BE PRESENT ON THE CONSTRUCTION SITE AT ALL TIMES DURING WORKING HOURS AND ACCESSIBLE AT ALL TIMES WHILE WORK IS IN PROGRESS. THE PRIMARY CONSTRUCTION SUPERINTENDENT SHALL BE DESIGNATED THE RESPONSIBLE CONTRACTOR'S REPRESENTATIVE WHO SHALL BE AVAILABLE ON A 24-HOUR BASIS. WHEN THE CONTRACTOR'S PRIMARY CONSTRUCTION REPRESENTATIVE IS NOT AVAILABLE ON THE CONSTRUCTION SITE, AN ALTERNATE REPRESENTATIVE SHALL BE PROVIDED. CONTRACTOR SHALL PROVIDE NAMES AND CONTACT INFORMATION OF REPRESENTATIVES TO THE CONTRACTING OFFICER PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONSTANT COORDINATION BETWEEN ANY SUBCONTRACTORS AND THE CONTRACTING OFFICER. ALL CONSTRUCTION ACTIVITIES PLANNED BY THE CONTRACTOR SHALL BE REVIEWED AND APPROVED BY THE CONTRACTING OFFICER.
3. THE FOLLOWING CONTACT INFORMATION IS PROVIDED FOR CONTRACTOR'S USE IN CASE OF AN EMERGENCY:
a. EMERGENCY 911
b. OTHER CONTACTS AS DIRECTED AT PRE-CONSTRUCTION MEETING

TRAFFIC CONTROL

- 1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL CORDON OFF THE CONSTRUCTION WORK AREA AND ASSOCIATED ROADWAYS AND AIRFIELD AREAS BY USING BARRICADES APPROVED BY THE CONTRACTING OFFICER.
2. ALL CONSTRUCTION EQUIPMENT AND VEHICLES SHALL BE MARKED WITH COMPANY DESIGNS, INSIGNIAS, OR OTHER MARKINGS, WHICH ARE CLEARLY VISIBLE. CONTRACTOR SHALL PROVIDE EACH VEHICLE WITH A FLAG ATTACHED TO THE VEHICLE WHICH SHOULD BE AT LEAST 3 FEET SQUARE HAVING INTERNATIONAL ORANGE AND WHITE CHECKERED PATTERN SO THAT THE FLAG IS EASILY VISIBLE.
3. CONSTRUCTION EQUIPMENT SHALL HAVE AUTOMATIC SIGNALING DEVICES TO SOUND AN ALARM WHEN MOVING IN REVERSE.
4. ONLY RUBBER-TIRE VEHICLES WILL BE ALLOWED ON EXISTING PAVEMENT-TO-REMAIN.
5. NO PEDESTRIAN TRAFFIC SHALL BE ALLOWED INSIDE THE CONSTRUCTION LIMITS.
6. CONTRACTOR SHALL PROVIDE A MINIMUM NOTICE OF 1 WEEK TO BASE AND/OR AIRPORT AND THE CONTRACTING OFFICER FOR ROAD CLOSURE PRIOR TO THE ROAD REQUIRING CLOSURE.
7. PRIOR TO THE REMOVAL OF BARRICADES AND TRAFFIC CONTROL DEVICES, THE CONTRACTOR SHALL REQUEST THE CONTRACTING OFFICER TO SCHEDULE AN INSPECTION. NO ROADWAY OR PORTION OF THE AIRFIELD SHALL BE RE-OPENED UNTIL THE CONTRACTING OFFICER HAS COMPLETED INSPECTION AND APPROVED THE RE-OPENING OF ACTIVE AREAS.
8. CONTRACTOR SHALL ATTEND ANY SPONSOR-MANDATED VEHICLE OPERATOR OR FOREIGN OBJECT DEBRIS/DAMAGE (FOD) CONTROL TRAINING COURSE.
9. ANY DAMAGE TO ROADS AND PAVEMENTS-TO-REMAIN DUE TO CONSTRUCTION EQUIPMENT OR TRAFFIC SHALL BE REPAIRED TO RESTORE THE ROADS AND PAVEMENTS TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE CONTRACTING OFFICER.

AIRFIELD OPERATIONS COORDINATION

- 1. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS INDICATED IN FEDERAL AVIATION ADMINISTRATION (FAA) ADVISORY CIRCULAR (AC) 150/5370-2G, OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION (CURRENT EDITION).
2. CONTRACTOR SHALL NOT ACCESS THE AIRCRAFT OPERATIONS AREA WITHOUT CLEARANCE FROM BASE AND/OR AIRPORT OPERATIONS AND THE CONTRACTING OFFICER, AND SHALL CONDUCT WORK IN SUCH A MANNER TO ENSURE A MINIMUM HINDRANCE TO AVIATION OPERATIONS. CONTRACTOR SHALL PROVIDE A MINIMUM NOTICE OF 4 DAYS TO BASE AND/OR AIRPORT OPERATIONS FOR ACCESS TO AN AIRCRAFT OPERATIONS AREA. PEDESTRIAN TRAFFIC AND PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED IN THE AIRCRAFT OPERATIONS AREA.
3. CONTRACTOR SHALL MAINTAIN RADIO CONTACT WITH AIRFIELD OPERATIONS AT ALL TIMES DURING WORK ON THIS PROJECT. CONTRACTOR SHALL FURNISH HIS OWN 2-WAY RADIOS AND MAY BE REQUIRED TO COMPLETE A TRAINING SESSION ON RADIO USAGE TO BE CONDUCTED BY AIRPORT OPERATIONS. FREQUENCY SHALL BE COORDINATED WITH AIRPORT OPERATIONS.
4. CONSTRUCTION ACTIVITIES MAY REQUIRE CONTRACTOR TO CROSS ACTIVE AIRFIELD AREAS AND AREAS WHERE AIRCRAFT OPERATIONS ARE TAKING PLACE. CONTRACTOR SHALL CONTINUOUSLY MONITOR AIRCRAFT TRAFFIC ON AND AROUND THE AIRPORT BY RADIO. CONTRACTOR IS REQUIRED TO STOP AT ALL AIRFIELD SAFETY AREAS, MONITOR LOCAL RADIO AND CHECK FOR AIRCRAFT OPERATIONS, AND PROCEED ACROSS AIRFIELD ONLY IF AIRCRAFT ARE NOT OPERATING. IF AIRCRAFT ARE OPERATING OR ARE ON APPROACH TO AIRPORT, CONTRACTOR IS REQUIRED TO SUSPEND OPERATIONS, MOVE PERSONNEL, EQUIPMENT, AND MATERIALS TO A SAFE LOCATION OUTSIDE OF THE AIRFIELD SAFETY AREA, AND STAND BY UNTIL AIRCRAFT USE IS COMPLETED.
5. CONSTRUCTION ACTIVITY AFFECTING AIRCRAFT MOVEMENT AREAS AND AIRFIELD SAFETY REQUIREMENTS SHALL BE COORDINATED WITH BASE AND AIRPORT OPERATIONS AND THE CONTRACTING OFFICER. NO AIRCRAFT OPERATIONS AREA SHALL BE CLOSED WITHOUT APPROVAL FROM AIRPORT OPERATIONS.
6. NOTICES TO AIRMEN (NOTAMS) SHALL BE ISSUED IN ACCORDANCE WITH AC 150/5370-2G OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION, AND AC 150/5200-28F NOTICES TO AIRMEN FOR AIRPORT OPERATIONS. ALL NOTAMS SHALL BE COORDINATED WITH AIRPORT OPERATIONS AND THE CONTRACTING OFFICER. NOTAMS SHALL BE ISSUED FOR RUNWAY THRESHOLD DISPLACEMENT, RUNWAY CLOSURE, AND TAXIWAY CLOSURE. THE NOTAM INFORMATION SHALL INCLUDE PORTIONS OF THE AIRFIELD THAT ARE CLOSED OR DISPLACED, THE DATE AND TIME OF THE BEGINNING AND ENDING OF WORK, AND THE DURATION OF THE WORK.
7. CONTRACTOR SHALL PROVIDE A MINIMUM NOTICE OF 48 HOURS TO BASE AND AIRPORT OPERATIONS REGARDING THE NEED FOR NOTICES TO AIRMEN (NOTAMS). CONTRACTOR SHALL NOT COMMENCE WORK ACTIVITIES ON AIRFIELD AREAS UNTIL APPROPRIATE NOTAMS HAVE BEEN ISSUED TO IDENTIFY WORK ACTIVITIES.
8. IF CONSTRUCTION OPERATIONS REQUIRE SHUTDOWN OF A NAVIGATIONAL AID (NAVAID), A MINIMUM NOTICE OF 14 DAYS TO BASE AND AIRPORT OPERATIONS AND CONTRACTING OFFICER IS REQUIRED PRIOR TO THE FACILITY SHUTDOWN.
9. CONTRACTOR SHALL PROTECT FROM DAMAGE ALL NAVIGATIONAL AID (NAVAID) EQUIPMENT AND ALL ASSOCIATED STRUCTURES AND UTILITIES. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTING OFFICER IF CONSTRUCTION ACTIVITY DISRUPTS NAVAIID EQUIPMENT.
10. THE CONTRACTOR SHALL MARK THE TAXIWAY OBJECT FREE AREA LIMIT WITH LOW PROFILE BARRICADES TO SERVE AS AN AID TO KEEP EQUIPMENT AND PERSONNEL FROM INADVERTENTLY ENTERING THE AREA. THE TAXIWAY OBJECT FREE AREA IS SHOWN ON THE DRAWINGS.

- 11. CONSTRUCTION WITHIN THE OBJECT FREE AREAS MUST BE PERFORMED WHEN THE AIRPORT IS CLOSED. CONTRACTOR SHALL COORDINATE WITH AIRPORT OPERATIONS FOR PHASING OF WORK WITHIN THE OBJECT FREE AREA.
12. ALL CONSTRUCTION AREAS THAT POSE A HAZARD TO OPERATING AIRCRAFT SHALL BE PROPERLY MARKED WITH LOW-PROFILE BARRICADES. ALL BARRICADES LOCATED WITHIN OR ADJACENT TO AIRCRAFT OPERATIONS AREAS SHALL BE LOW-PROFILE TYPE WITH ORANGE MARKINGS AND RED FLASHING LIGHTS. LOW PROFILE BARRICADES SHALL BE KEPT OUTSIDE THE LIMITS OF ANY ACTIVE AIRFIELD SAFETY AREA. SEE DETAIL 8 ON DRAWING CS501 FOR LOW-PROFILE BARRICADE DETAIL.
13. DEBRIS, WASTE, AND LOOSE MATERIALS CAPABLE OF CAUSING DAMAGE TO AIRCRAFT AND HELICOPTER LANDING GEAR, PROPELLERS AND ROTORS, OR OF BEING INGESTED BY JET ENGINES, SHALL NOT BE LEFT WITHIN ACTIVE AIRCRAFT OPERATION AREAS. CONTRACTOR IS REQUIRED TO IMMEDIATELY CLEAN ANY DEBRIS CARRIED ONTO AIRFIELD FROM CONSTRUCTION EQUIPMENT OR OPERATIONS TO PREVENT FOREIGN OBJECT DAMAGE (FOD). MATERIAL DROPPED WITHIN THESE AREAS SHALL BE CONTINUOUSLY REMOVED BY SURFACE SWEEPERS OR OTHER APPROVED METHODS DURING WORKING HOURS. CONSTRUCTION FENCE MAY BE REQUIRED TO FULFILL THIS RESPONSIBILITY. STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT RESULTING FROM AIRCRAFT PROWASH OR JET BLAST
14. ANY DAMAGE TO EXISTING AIRFIELD LIGHTING, AIRCRAFT NAVIGATIONAL AIDS (NAVAIDS), OR AIRFIELD PAVEMENTS-TO-REMAIN DUE TO CONSTRUCTION SHALL BE COMMUNICATED TO THE CONTRACTING OFFICER AND SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE CONTRACTING OFFICER.

EQUIPMENT AND STOCKPILE HEIGHT

- 1. THE MAXIMUM ALLOWABLE HEIGHT OF CONSTRUCTION EQUIPMENT OPERATING IN AN AIRCRAFT OPERATIONS AREA IS GOVERNED BY FEDERAL AVIATION ADMINISTRATION (FAA) ADVISORY CIRCULAR AC 150/5370-2G AND AC 150/5300-13 (CURRENT EDITIONS). WHEN EQUIPMENT IS EXPECTED TO PENETRATE THE AIRFIELD APPROACH SURFACES OR WHEN CRANES WILL BE USED ON-SITE, CONTRACTOR SHALL PROVIDE A MINIMUM NOTICE OF 45 DAYS TO THE CONTRACTING OFFICER AND AIRPORT OPERATIONS PRIOR TO THE START OF CONSTRUCTION TO COORDINATE THE SUBMITTAL OF FAA FORM 7460-1 TO THE FAA REGIONAL OFFICE. PERMISSION TO USE CRANES SHALL BE ISSUED BY AIRPORT OPERATIONS AND THE CONTRACTING OFFICER AFTER APPROVAL BY THE FAA.
2. DURING PERIODS OF LOW VISIBILITY, VEHICLES AND EQUIPMENT SHALL BE IDENTIFIED BY AN APPROPRIATELY SIZED FLASHING OR STEADY BURNING AMBER BEACON MOUNTED ON THE UPPER MOST PART OF THE VEHICLE OR EQUIPMENT SUCH THAT IT IS CONSPICUOUS FROM ANY DIRECTION INCLUDING FROM THE AIR, IF A VEHICLE OR PIECE OF EQUIPMENT IS NOT FURNISHED WITH SUCH A BEACON, IT MUST BE ESCORTED INTO THE AIRCRAFT OPERATIONS AREA BY A PROPERLY LIT VEHICLE.
3. WHEN NOT IN OPERATION, ALL EQUIPMENT AND CRANES SHALL HAVE BOOMS OR ARMS LOWERED TO THEIR LOWEST ELEVATION.
4. CONTRACTOR SHALL NOT STOCKPILE CONSTRUCTION MATERIALS, SPOILS, OR DEBRIS IN ANY AREA WHERE SUCH STOCKPILES WOULD PENETRATE AVIATION SURFACES. ALL STOCKPILES ADJACENT TO AIRCRAFT OPERATIONS AREA SHALL BE IDENTIFIED WITH A 360-DEGREE RED OBSTRUCTION LIGHT PLACED AT THE HIGHEST POINT OF THE STOCKPILE. STOCKPILING OF MATERIAL WITHIN THE AIRFIELD SAFETY AREAS IS PROHIBITED.

EXCAVATION AND TRENCHES

- 1. CONTRACTOR SHALL COMPLY WITH THE MOST CURRENT EDITION OF OSHA REGULATIONS AND THE STATE OF CONNECTICUT LAWS CONCERNING EXCAVATION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL EXCAVATION, TRENCHING, AND SHORING ARE PERFORMED IN A MANNER THAT COMPLIES WITH LOCAL REGULATIONS AND OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS FOR CONSTRUCTION.
3. OPEN TRENCHES AND EXCAVATIONS AT THE CONSTRUCTION SITE SHALL BE PROMINENTLY MARKED WITH ORANGE BARRICADES WITH FLASHING RED LIGHTS ACCEPTABLE TO THE CONTRACTING OFFICER.
4. CONTRACTOR SHALL PROVIDE A MINIMUM NOTICE OF 48 HOURS TO THE CONTRACTING OFFICER AND ASSOCIATED UTILITY COMPANIES AND AGENCIES BEFORE PROCEEDING WITH ANY EXCAVATION.
5. DEWATERING OF UTILITY TRENCHES AND OTHER EXCAVATIONS MAY BE REQUIRED.
6. OPEN ONLY THOSE TRENCHES FOR WHICH MATERIAL IS ON-HAND AND READY FOR PLACING THEREIN. AS SOON AS POSSIBLE AFTER THE MATERIAL HAS BEEN PLACED AND WORK APPROVED, BACKFILL AND COMPACT TRENCHES AS SPECIFIED.
7. OPEN TRENCHES OR EXCAVATIONS ARE NOT PERMITTED WITHIN 250 FEET OF THE RUNWAY CENTERLINE AND AT A MINIMUM THE EXISTING RUNWAY SAFETY DISTANCE FROM THE RUNWAY THRESHOLD WHILE THE RUNWAY IS OPEN. IF THE RUNWAY MUST BE OPENED BEFORE EXCAVATIONS ARE BACKFILLED, COVER THE EXCAVATIONS APPROPRIATELY. COVERINGS FOR OPEN TRENCHES OR EXCAVATIONS MUST BE OF SUFFICIENT STRENGTH TO SUPPORT THE WEIGHT OF THE HEAVIEST AIRCRAFT OPERATING ON THE RUNWAY. AIRPORT OPERATIONS MUST INSPECT THE IMPACTED TAXIWAY PRIOR TO OPENING.

OTHER SAFETY REQUIREMENTS

- 1. CONTRACTOR SHALL MAINTAIN SAFETY PRACTICES THAT CONFORM TO OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AND PAY FOR ALL APPLICABLE PERMITS, FEES AND LICENSES FOR CONSTRUCTION AND EQUIPMENT.

- 3. THE CONTRACTOR SHALL PERFORM ON-SITE INSPECTIONS THROUGHOUT THE PROJECT AND REMEDY ANY SAFETY CONCERNS IMMEDIATELY.
4. THERE SHALL BE NO PERMANENT WASTE SITES ON BASE AND AIRPORT PROPERTY. ANY TEMPORARY WASTE AREA SHALL BE APPROVED BY THE CONTRACTING OFFICER AND SHALL BE KEPT IN AN ORDERLY CONDITION. REMOVAL OF WASTE THAT IS NOT PROPERLY MAINTAINED IS SUBJECT TO THE DIRECTION OF THE CONTRACTING OFFICER.
5. CONTRACTOR SHALL COORDINATE THE RELOCATION OF ANY GOVERNMENT OWNED EQUIPMENT WITH THE CONTRACTING OFFICER.
6. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIREMENTS WITH STATE AND LOCAL AUTHORITIES AND SUBMITTING DOCUMENTS FOR PERMITTING FOR EROSION, SEDIMENT CONTROL, AND STORMWATER POLLUTION PREVENTION.
7. EROSION CONTROL DEVICES SHALL BE USED FOR THE ACCESS AND HAUL ROUTES, STAGING AREA, AND ANY MATERIAL STOCKPILES WHEN NECESSARY TO CONTROL EROSION AND STORM WATER RUNOFF. SEE DRAWING SE101 FOR EROSION AND SEDIMENT CONTROL REQUIREMENTS.
8. STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT RESULTING FROM WIND CONDITIONS.
9. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO LIMIT DUST CAUSED BY CONSTRUCTION ACTIVITIES TO A LIMIT ACCEPTABLE TO BASE AND/OR AIRPORT OPERATIONS. THE CONTRACTOR SHALL CONTROL BLOWING DUST ON THE PROJECT SITE FROM ANY HAUL ROUTE OR WORK AREA REGARDLESS OF SOURCE.
10. WILDLIFE ATTRACTANTS, SUCH AS TRASH AND FOOD SCRAPS, FROM CONSTRUCTION PERSONNEL AND ACTIVITIES SHALL BE REMOVED FROM THE PROJECT LIMITS.
11. GASOLINE, DIESEL FUEL, OIL, AND HAZARDOUS WASTE RESULTING FROM CONTRACTOR'S OPERATIONS OR ACTIVITIES SHALL BE PROPERLY DISPOSED OF IN ACCORDANCE WITH THE SPECIFICATIONS AND LOCAL REGULATORY REQUIREMENTS AND PROPERLY REMOVED FROM THE PROJECT PROPERTY. IF HAZARDOUS MATERIALS ARE ENCOUNTERED OR UNCOVERED DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTING OFFICER.
12. IF CONSTRUCTION REQUIRES THE DISRUPTION OR DISCONNECTION OF ANY WATER LINES OR FIRE HYDRANTS ON PROJECT PROPERTY OR ADJOINING PROPERTY, THE CONTRACTOR SHALL PROVIDE A MINIMUM ADVANCE NOTICE OF 48 HOURS TO THE LOCAL FIRE AUTHORITY AND ALL OTHER EMERGENCY SERVICES.
13. FAILURE TO COMPLY WITH BASE AND/OR AIRPORT OPERATIONS AND THE CONTRACTING OFFICER SAFETY REQUIREMENTS SHALL RESULT IN THE SUSPENSION OF CONSTRUCTION ACTIVITIES UNTIL ALL SAFETY CONCERNS ARE ADDRESSED BY THE CONTRACTOR TO THE SATISFACTION OF THE CONTRACTING OFFICER.
14. ANY WORKERS AND EQUIPMENT NOT IN COMPLIANCE WITH SAFETY PLAN OR BASE AND/OR AIRPORT OPERATIONS SHALL IMMEDIATELY BE REMOVED FROM THE WORK AREA AND SHALL NOT BE PERMITTED TO RETURN THROUGHOUT THE REMAINDER OF THE PROJECT.

CONTRACTOR SAFETY PLAN SUBMITTALS

- 1. CONTRACTOR SHALL FURNISH A CONSTRUCTION SAFETY PLAN AND PROPOSED PROJECT SCHEDULE TO THE CONTRACTING OFFICER FOR REVIEW. SUCH REVIEW SHALL NOT HOLD THE CONTRACTING OFFICER RESPONSIBLE. THE SAFETY PLAN SHALL IDENTIFY THE FOLLOWING ITEMS:
A. PROPOSED ACCESS POINTS, HAUL ROUTES, AND STAGING AREA.
B. TEMPORARY MARKING AND SIGNAGE TO BE USED, IF ANY.
C. LOCATION AND TYPE OF BARRICADES OR OTHER TRAFFIC CONTROL DEVICES.
D. AREAS TO WHICH CONSTRUCTION OPERATIONS SHALL BE LIMITED, ALONG WITH PROPOSED MEASURES TO MINIMIZE THE POSSIBILITY OF CONTRACTOR EQUIPMENT AND WORKERS ACCIDENTALLY ENTERING THE AVIATION OPERATIONS AREA.
E. METHODS BY WHICH THE CONTRACTOR SHALL COMMUNICATE WITH THE BASE AND/OR AIRPORT AND THE CONTRACTING OFFICER.
F. PRIMARY CONSTRUCTION SUPERINTENDENT CONTACT INFORMATION.
G. ANY REQUESTED TEMPORARY AMENDMENTS TO THE BASE AND/OR AIRPORT SECURITY PLAN FOR SPECIAL CONDITION OR MODIFICATIONS.

CONTRACTOR PERMITTING REQUIREMENTS

- 1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CONSTRUCTION STORM WATER PERMIT FOR LAND DISTURBANCE OF MORE THAN 1 ACRE PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH LOCAL AUTHORITIES AND CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION TO COMPLETE AND SUBMIT THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR APPROVAL. LOCAL AUTHORITIES INCLUDE BUT ARE NOT LIMITED TO COUNTY AND CITY STORMWATER MANAGEMENT GROUPS AND THE AIRPORT OPERATIONS. CONTRACTOR SHALL COORDINATE ALL ENVIRONMENTAL AND STORMWATER CORRESPONDENCE, DOCUMENTATION, AND PERMITTING WITH CONTRACTING OFFICER. THE STORMWATER PERMITTING PROCESS MAY INCLUDE THE FOLLOWING:
a. SUBMIT STORM WATER QUALITY PERMIT APPLICATION FEE.
b. SUBMIT NPDES GENERAL CONSTRUCTION PERMIT.
c. SUBMIT STORM WATER POLLUTION PREVENTION PLAN.
d. SUBMIT AFFIDAVIT STATING PROPERTY OWNER'S COMMITMENT TO COMPLY WITH STORM WATER QUALITY MANAGEMENT PLAN AND LOCAL REGULATIONS FOR STORM WATER QUALITY MANAGEMENT.
e. SUBMIT COPY OF APPROVED PROJECT DRAWING SET.
2. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REGULATORY REQUIREMENTS. THE PERMITTING PROCESS MAY INCLUDE THE SUBMISSION OF THE FOLLOWING TYPES OF PERMITS:
a. EROSION AND SEDIMENT CONTROL.
b. STORMWATER MANAGEMENT.
c. WATER POLLUTION.
d. FLOODPLAIN MANAGEMENT.
e. DISCHARGE PERMIT.
f. WETLANDS.
g. SOLID AND HAZARDOUS WASTE.
h. CLEARING.
i. DIGGING.
j. TRAFFIC.
k. AIR QUALITY.
l. AIR EMISSIONS.
m. DRINKING WATER.
n. FUEL TANKS.
o. HISTORIC, CULTURAL, AND ARCHAEOLOGICAL PRESERVATION.
p. NOISE ABATEMENT.
q. ENDANGERED SPECIES.
r. RAILROAD CROSSING.
s. AIRPORT HAZARD/AIRFIELD SAFETY CLEARANCES.



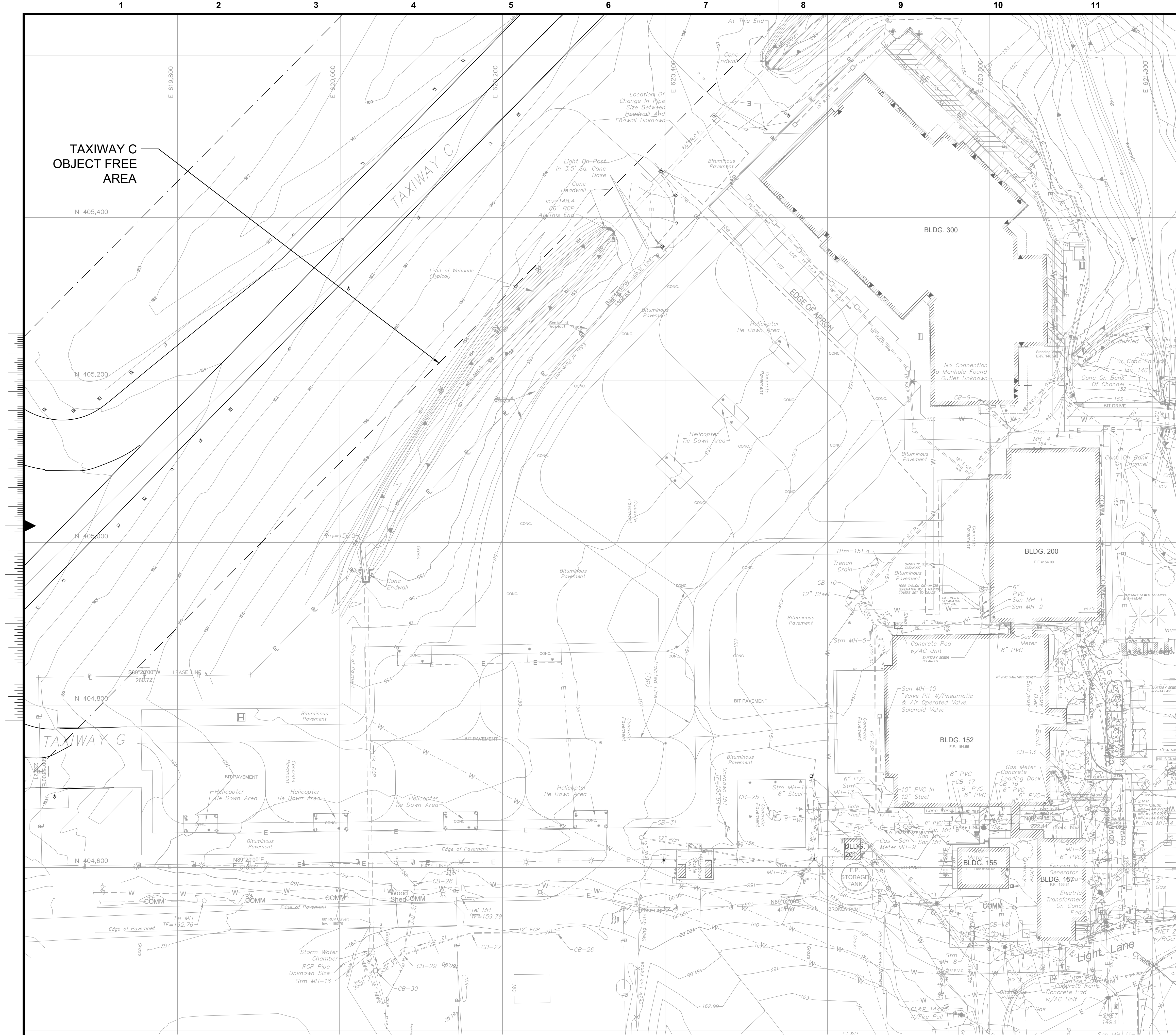
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BURNS MEDONNELL logo and address: 10 NORTH PARK PLACE, SUITE 330 MORRISTOWN, NJ 07960 973-884-8701 Burns & McDonnell Engineering Co, Inc. LICENSEE NO. 000165

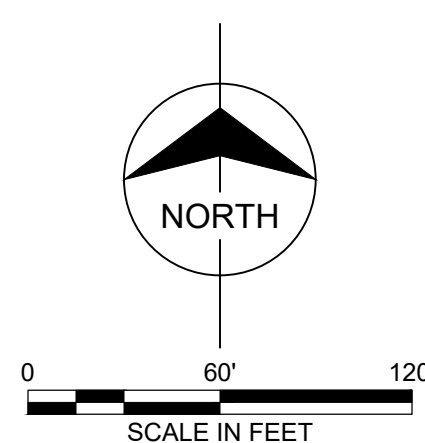
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CONNECTICUT ARMY NATIONAL GUARD BRADLEY INTERNATIONAL AIRPORT WINDSOR LOCKS, CT logo and title

AAAF AIRCRAFT APRON REPAIR - PHASE 1 GENERAL ACCESS & SAFETY NOTES BMD project 102422 ARNG project 20MIL2101 drawing G-103 - 0 sheet of # sheets file 102422-G102-P1.dwg



- NOTES:**
1. SURVEY INFORMATION PROVIDED FROM AS-BUILT RECORDS OF READINESS CENTER CONSTRUCTION BY WALSH CONSTRUCTION COMPANY IN 2014.
 2. THE LOCATIONS OF STRUCTURES AND UNDERGROUND UTILITIES AS INDICATED HAVE BEEN OBTAINED FROM EXISTING RECORDS AND AVAILABLE DATA. UNDERGROUND STRUCTURES AND UTILITIES MAY BE PRESENT WHICH ARE NOT DOCUMENTED OR LOCATED.
 3. THE CONTRACTOR SHALL FIELD-CHECK ALL EXISTING CONDITIONS AND BE THOROUGHLY FAMILIAR WITH THE SITE BEFORE ANY WORK COMMENCES. ANY DISCREPANCIES IN THE DRAWINGS SHALL BE IMMEDIATELY REPORTED TO THE CONTRACTING OFFICER BEFORE ANY FURTHER WORK COMMENCES.
 4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD-VERIFY EXISTING STRUCTURES, UTILITIES, AND SURVEY INFORMATION, AND TO TAKE NECESSARY PRECAUTIONS DURING DEMOLITION AND CONSTRUCTION. CONTRACTOR SHALL VERIFY EXISTENCE AND MARK LOCATIONS OF ALL UTILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES, PRIOR TO BEGINNING WORK. CONTRACTOR SHALL CONTACT THE CONTRACTING OFFICER AND ALL ASSOCIATED UTILITY COMPANIES AND AGENCIES TO IDENTIFY THE LOCATION OF UTILITIES. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED, THAT THE LOCATIONS, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED DURING CONSTRUCTION.
 5. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER OF OPERATIONAL PLANS. IN THE EVENT AN UNEXPECTED UTILITY OR STRUCTURE INTERFERENCE OR CONFLICT IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTING OFFICER. ANY UTILITY SERVICES OR STRUCTURES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE BASE AND/OR AIRPORT.
 6. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ITEMS NOT TO BE DAMAGED DURING DEMOLITION AND CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE DAMAGED OR DISTURBED ITEMS TO THE SATISFACTION OF THE CONTRACTING OFFICER.
 7. COORDINATES AND ELEVATIONS ARE REFERENCED TO THE CONNECTICUT STATE PLANE COORDINATE SYSTEM (NAD 83) AND TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
 8. CONTRACTOR SHALL RETAIN LICENSED SURVEYOR TO VERIFY EXISTING CONDITIONS AND PROVIDE HORIZONTAL AND VERTICAL CONTROL POINTS IN ACCORDANCE WITH NOTE 7.



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0	06/12/20	SMC	KNW	ISSUED FOR BID



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designed	L. GUERIN	checked	K. WARRENDER



CONNECTICUT ARMY NATIONAL GUARD
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT

AASF AIRCRAFT APRON REPAIR - PHASE 1

EXISTING CONDITIONS PLAN

BMD project	102422	ARNG project	20MIL21201
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drawing **VS101** - 0 rev.

sheet	of	#	sheets
file	102422-VS101-P1		DWG

- LEGEND:**
- FULL DEPTH REMOVAL OF ASPHALT SHOULDER
 - FULL DEPTH REMOVAL OF ASPHALT PAVEMENT
 - FULL DEPTH REMOVAL OF REINFORCED CONCRETE PAVEMENT
 - CLEAR AND EXCAVATE TURF AREA
 - GRAVEL REMOVAL
 - UTILITY PIPING REMOVAL
 - CHAIN LINK FENCE REMOVAL
 - UTILITY REMOVAL

UTILITY DEMOLITION NOTES:

1. LOCATIONS OF EXISTING UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY EXISTENCE AND LOCATION OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION THROUGH THE USE OF CONNECTICUT CALL 811. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.
2. UTILITY WORK SHALL BE COORDINATED WITH ARNG AND CAA, AND SHUTOFF SHALL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE.
3. CONTRACTOR SHALL COORDINATE WITH THE CONTRACTING OFFICER PRIOR TO REMOVAL OF EXISTING UTILITIES IN SERVICE. RELOCATED UTILITIES SHALL BE CONSTRUCTED BEFORE REMOVAL OF EXISTING UTILITIES TO ENSURE UNINTERRUPTED SERVICE TO THE FACILITIES SERVED BY THE UTILITY. ALL RELOCATIONS SHALL BE COORDINATED WITH THE CONTRACTING OFFICER.
4. UTILITY CAPPING METHODS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR SPECIFIC PIPE MATERIAL IN SERVICE. ALL CAPPING SHALL BE INSPECTED AND APPROVED BY THE CONTRACTING OFFICER.
5. ALL STRUCTURES, VALVES, ETC. TO REMAIN SHALL BE PROTECTED AND ADJUSTED TO FINISH GRADE.
6. IN AREAS OF UTILITY REMOVAL OF ABANDONED LINES, THE PORTION OF EXISTING ABANDONED LINES TO REMAIN SHALL BE CAPPED OR PLUGGED AT REMOVAL INTERFACE.
7. UTILITY STRUCTURES AND MANHOLES TO BE ABANDONED SHALL HAVE FRAME AND COVER REMOVED, FILLED WITH SAND, AND BACKFILLED TO MEET PROPOSED GRADE.
8. ALL UTILITIES EQUAL TO OR GREATER THAN 6.00 INCHES IN DIAMETER AND INDICATED TO BE ABANDONED IN PLACE SHALL BE FILLED WITH A LOW STRENGTH FLOWABLE FILL. END SECTIONS SHALL BE PLUGGED TO CONTAIN FLOWABLE FILL. FLOWABLE FILL SHALL BE A CEMENT/SAND MIX WITH A COMPRESSIVE STRENGTH OF 75-100 psi.
9. ALL UTILITY SYSTEM STRUCTURES INDICATED TO BE ABANDONED IN PLACE SHALL BE DISCONNECTED AND CAPPED.

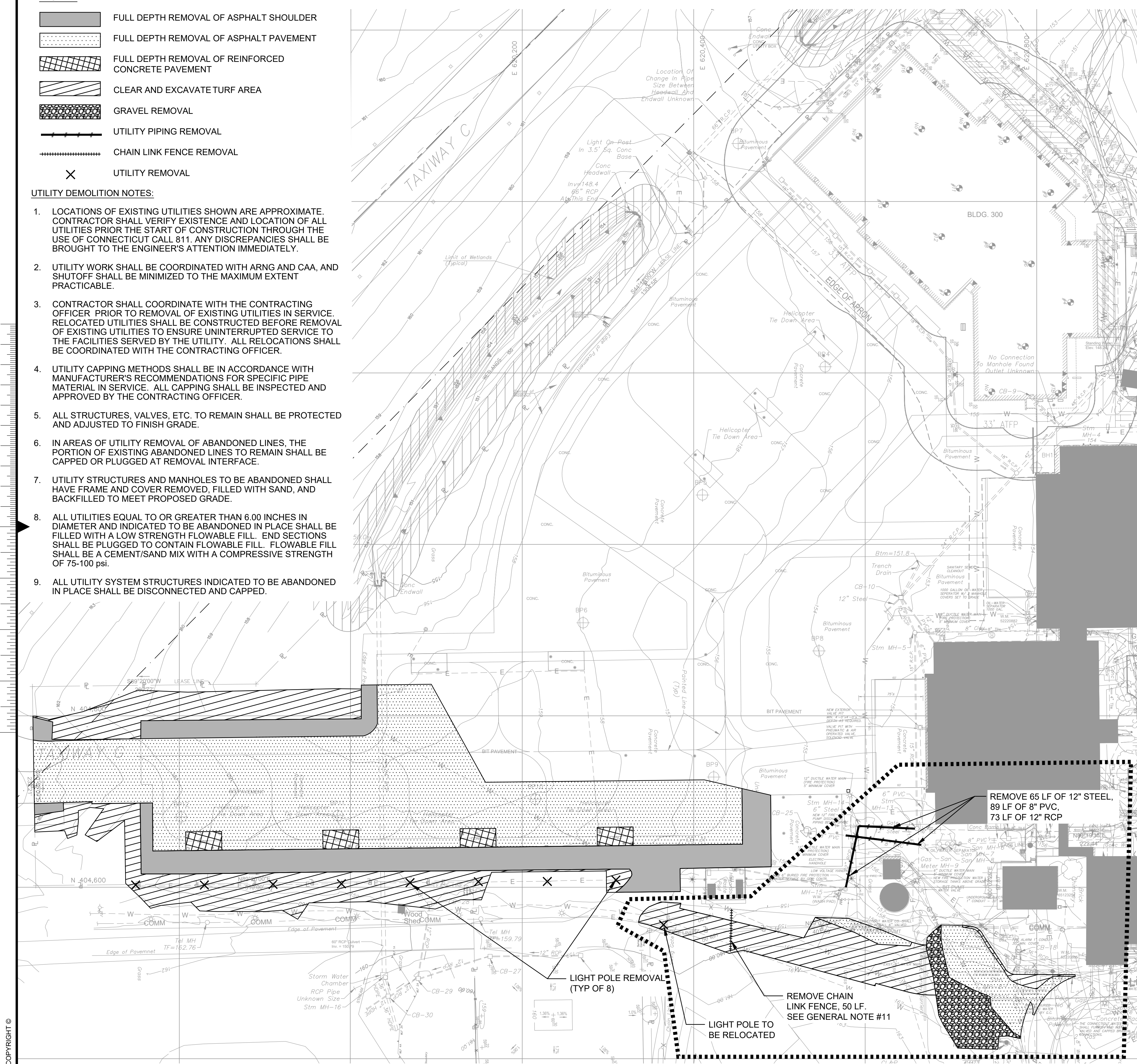
GENERAL NOTES:

1. EXISTING FACILITIES INCLUDING, BUT NOT LIMITED TO, PAVEMENT, UTILITIES AND STRUCTURES, WHICH ARE NOT INDICATED TO BE REMOVED SHALL BE PROTECTED FROM DEMOLITION OR OTHER CONSTRUCTION ACTIVITY. DAMAGES TO ITEMS TO REMAIN SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE CONTRACTING OFFICER AT THE CONTRACTOR'S EXPENSE.
2. PROJECT DOES NOT INCLUDE ANY ITEMS TO BE SALVAGED. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL DEBRIS FROM SITE.
3. CONTRACTOR SHALL COORDINATE LIMITS OF SAWCUT AND PAVEMENT REMOVAL WITH PROPOSED PAVEMENT LAYOUT AND JOINTING PLAN.
4. PAVEMENT DEMOLITION SHALL INCLUDE ALL COURSES TO SUBGRADE AND SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 024100.
5. PAVEMENT DESIGNATED FOR SAW CUT SHALL BE SAW CUT TO FULL DEPTH.
6. EXCESS SOIL AND UNSUITABLE EXCAVATION MATERIAL SHALL BE DISPOSED OFF SITE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
7. ALL DEMOLITION, WASTE, DEBRIS, AND UNSATISFACTORY MATERIALS SHALL BE DISPOSED OF OFF SITE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
8. PAVEMENT DEMOLITION NOT SHOWN DUE TO ANCILLARY CONSTRUCTION ITEMS SHALL BE PROVIDED AT NO ADDITIONAL COST.
9. ANY DAMAGE TO PAVEMENT AREAS DESIGNATED TO REMAIN SHALL BE REPAIRED OR REMOVED AND REPLACED AT NO ADDITIONAL COST TO GOVERNMENT.
10. SPECIAL HANDLING AND CONSIDERATION SHALL BE REQUIRED FOR EXCAVATED SOILS THOUGHT TO CONTAIN PETROLEUM-BASED /CONTAMINATED /HAZARDOUS SUBSTANCES. CONTRACTOR SHALL PERIODICALLY MONITOR EXCAVATED SOILS. SOILS SHALL BE TREATED ON SITE OR DISPOSED OF PROPERLY IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS AND THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL COORDINATE REMOVAL OF PETROLEUM-BASED /CONTAMINATED/HAZARDOUS MATERIALS WITH CONTRACTING OFFICER.
11. PHASING OF FENCE REMOVAL AND NEW FENCE INSTALLATION SHALL BE COORDINATED WITH BASE AND AIRPORT SECURITY A MINIMUM OF TWO (2) WEEKS PRIOR TO COMMENCING WITH THIS WORK.

Scale For Microfilming

Inches

Millimeters

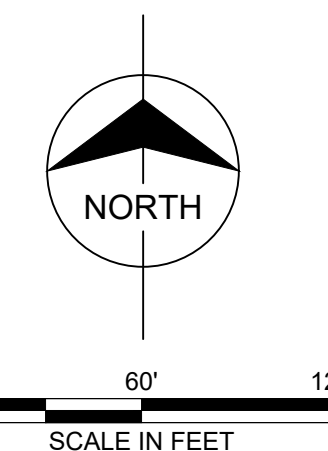


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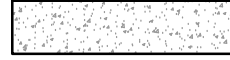





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AASF AIRCRAFT APRON REPAIR - PHASE 1

SITE DEMOLITION PLAN			
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sheet	of	#	sheets
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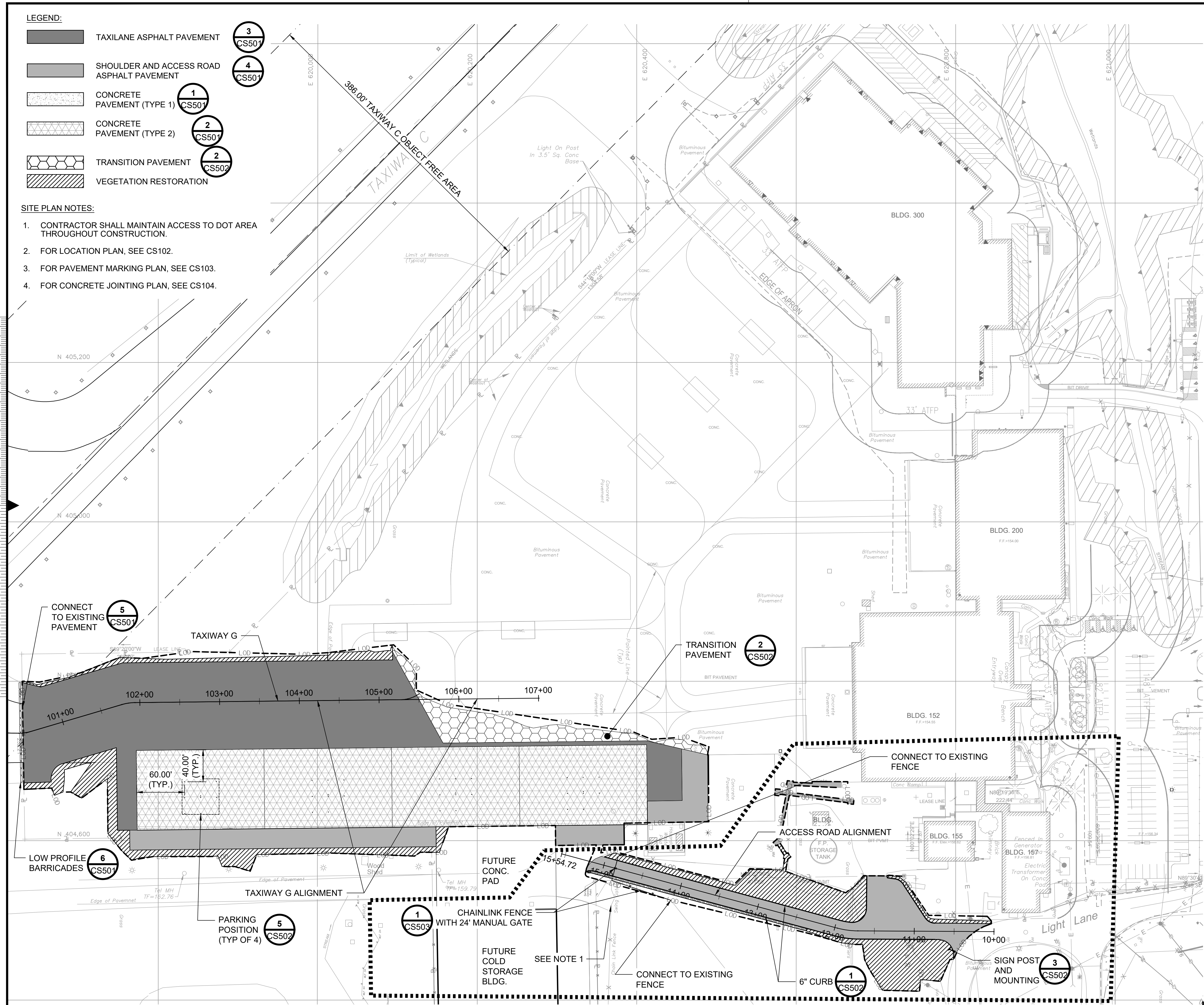
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- LEGEND:**
-  TAXILANE ASPHALT PAVEMENT 3
CS501
 -  SHOULDER AND ACCESS ROAD ASPHALT PAVEMENT 4
CS501
 -  CONCRETE PAVEMENT (TYPE 1) 1
CS501
 -  CONCRETE PAVEMENT (TYPE 2) 2
CS501
 -  TRANSITION PAVEMENT 2
CS502
 -  VEGETATION RESTORATION

- SITE PLAN NOTES:**
1. CONTRACTOR SHALL MAINTAIN ACCESS TO DOT AREA THROUGHOUT CONSTRUCTION.
 2. FOR LOCATION PLAN, SEE CS102.
 3. FOR PAVEMENT MARKING PLAN, SEE CS103.
 4. FOR CONCRETE JOINTING PLAN, SEE CS104.

Millimeters

Inches

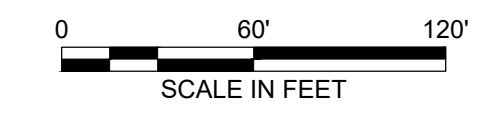
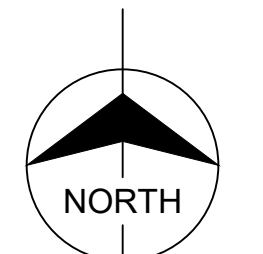


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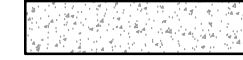



SITE PLAN


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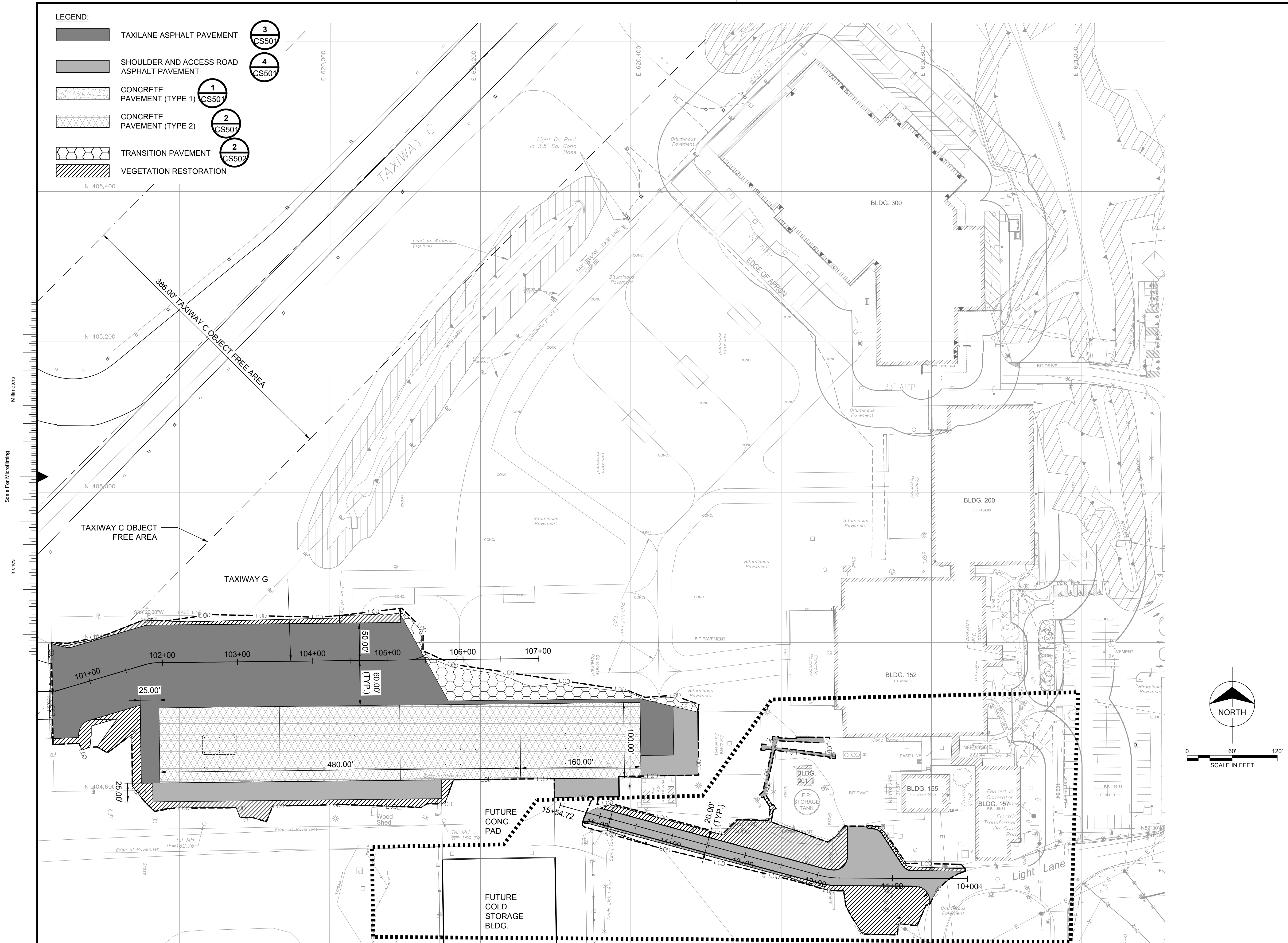
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LEGEND:

-  TAXILANE ASPHALT PAVEMENT
-  SHOULDER AND ACCESS ROAD ASPHALT PAVEMENT
-  CONCRETE PAVEMENT (TYPE 1)
-  CONCRETE PAVEMENT (TYPE 2)
-  TRANSITION PAVEMENT
-  VEGETATION RESTORATION

-  3
CS501
-  4
CS501
-  1
CS501
-  2
CS501
-  2
CS502



Scale For Microfinishing
Millimeters

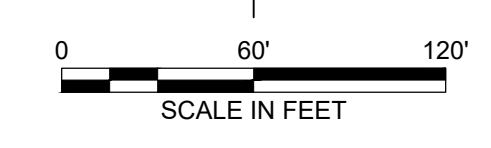
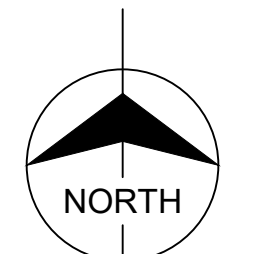
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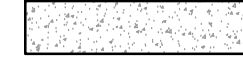



LOCATION PLAN

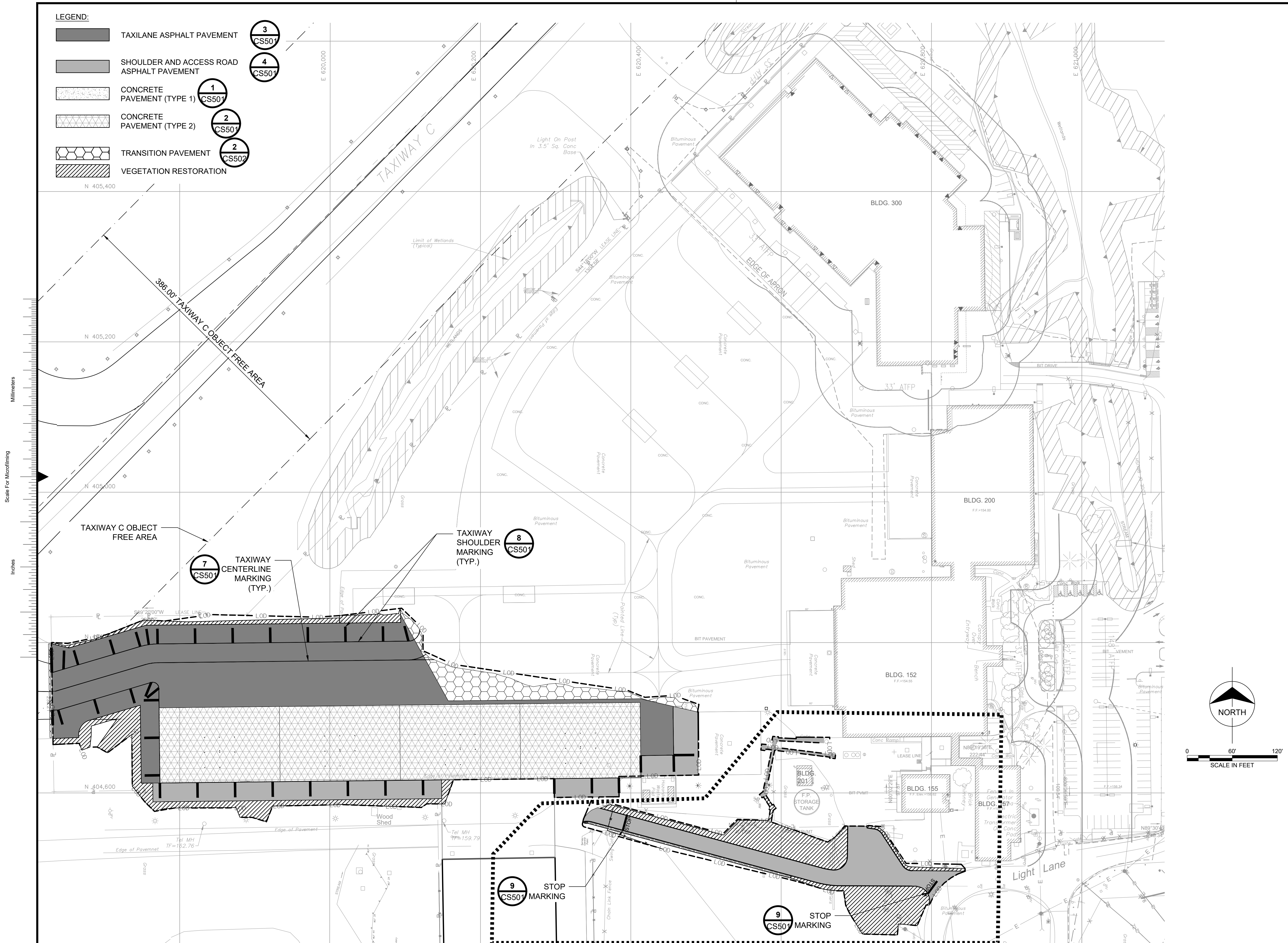
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drawing **CS102** - **0** rev.

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LEGEND:

-  TAXILANE ASPHALT PAVEMENT 3
CS501
-  SHOULDER AND ACCESS ROAD ASPHALT PAVEMENT 4
CS501
-  CONCRETE PAVEMENT (TYPE 1) 1
CS501
-  CONCRETE PAVEMENT (TYPE 2) 2
CS501
-  TRANSITION PAVEMENT 2
CS502
-  VEGETATION RESTORATION



Scale For Microfilming

Inches

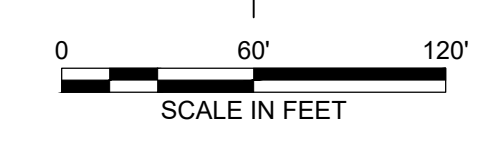
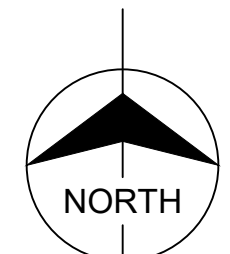
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designed	L. GUERIN	checked	K. WARRENDER



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PAVEMENT MARKING PLAN

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drawing	CS103		rev. 0
sheet	of #	sheets	
file	102422-CS101-P1.dwg		

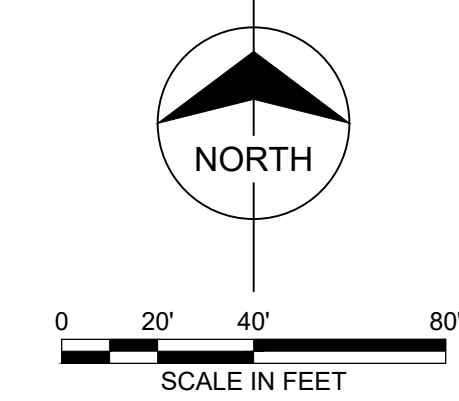
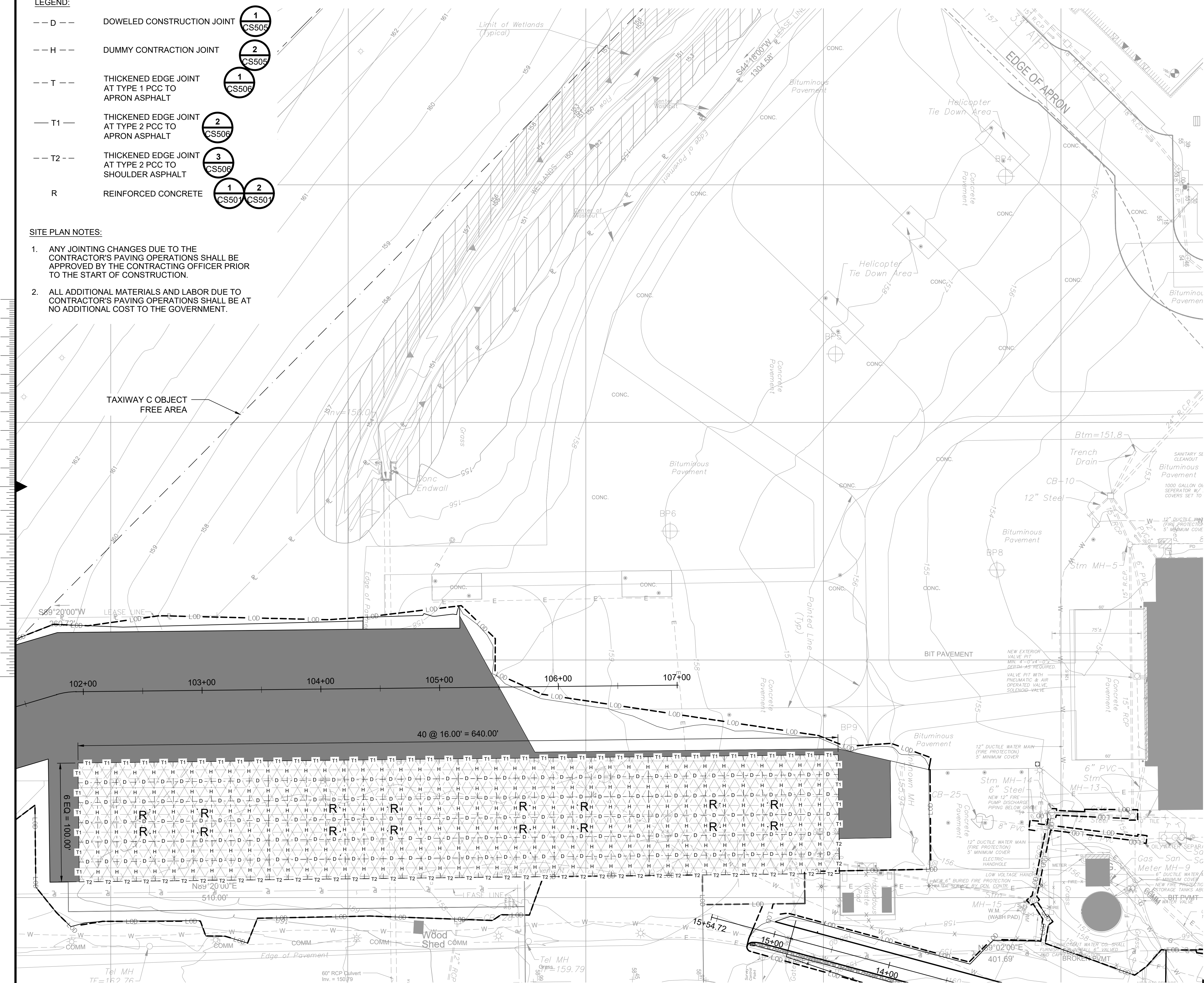
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CS505
 - H -- DUMMY CONSTRUCTION JOINT 2
CS505
 - T -- THICKENED EDGE JOINT AT TYPE 1 PCC TO APRON ASPHALT 1
CS506
 - T1 THICKENED EDGE JOINT AT TYPE 2 PCC TO APRON ASPHALT 2
CS506
 - T2 -- THICKENED EDGE JOINT AT TYPE 2 PCC TO SHOULDER ASPHALT 3
CS506
 - R REINFORCED CONCRETE 1
CS501 2
CS501

SITE PLAN NOTES:

1. ANY JOINTING CHANGES DUE TO THE CONTRACTOR'S PAVING OPERATIONS SHALL BE APPROVED BY THE CONTRACTING OFFICER PRIOR TO THE START OF CONSTRUCTION.
2. ALL ADDITIONAL MATERIALS AND LABOR DUE TO CONTRACTOR'S PAVING OPERATIONS SHALL BE AT NO ADDITIONAL COST TO THE GOVERNMENT.

Scale For Microfinishing
Millimeters

Inches



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date	designed	checked	detailed
SEPTEMBER 27, 2018	L. GUERIN	K. WARRENDER	S. CATONE



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WINDSOR LOCKS, CT

AASF AIRCRAFT APRON REPAIR - PHASE 1

CONCRETE JOINTING PLAN





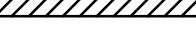
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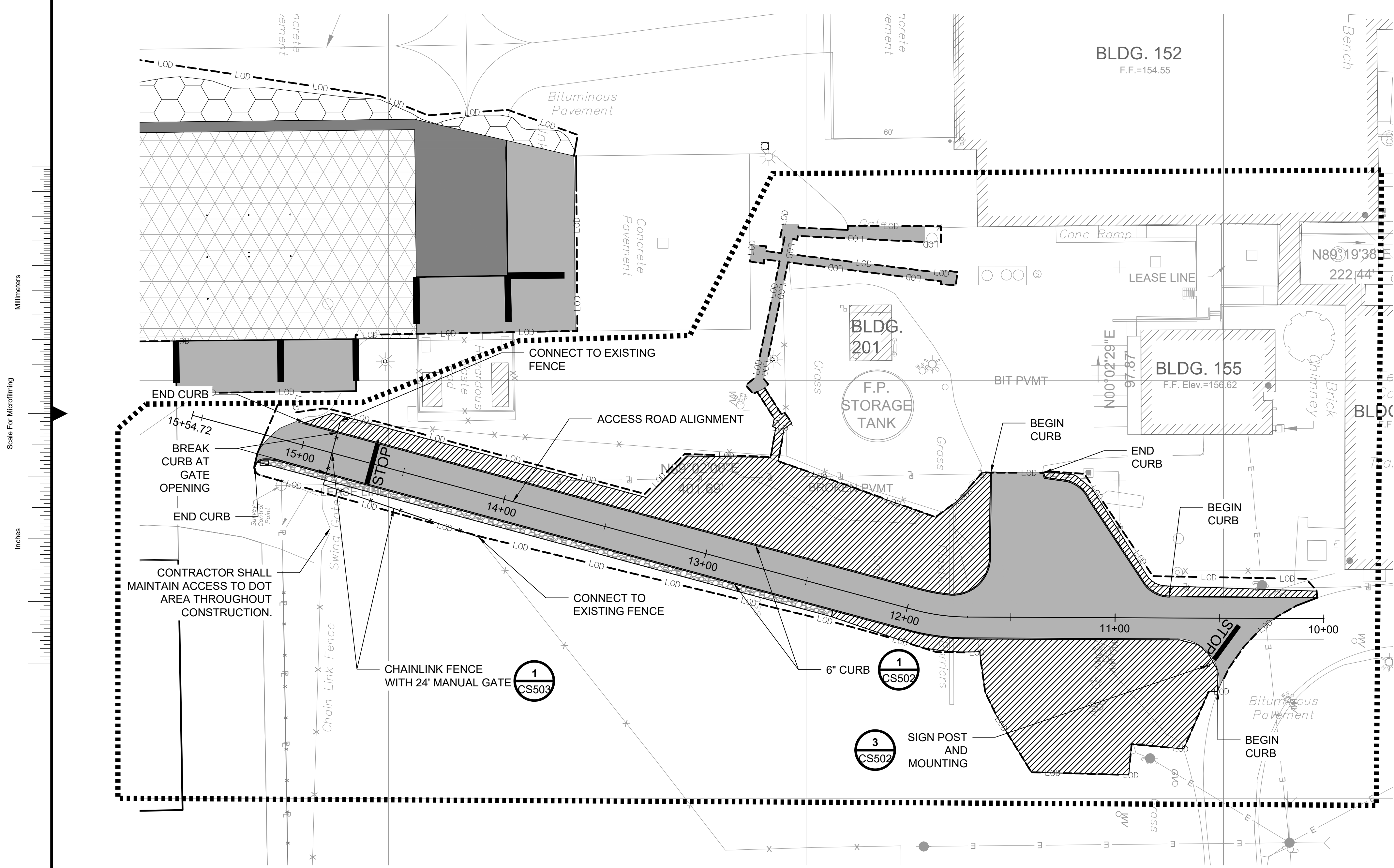
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no.	date	by	ckd	description
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LEGEND:

-  TAXILANE ASPHALT PAVEMENT 3
CS501
-  SHOULDER AND ACCESS ROAD ASPHALT PAVEMENT 4
CS501
-  GRAVEL DRAINAGE CHANNEL 4
CU501
-  CONCRETE PAVEMENT (TYPE 2) 2
CS501
-  VEGETATION RESTORATION

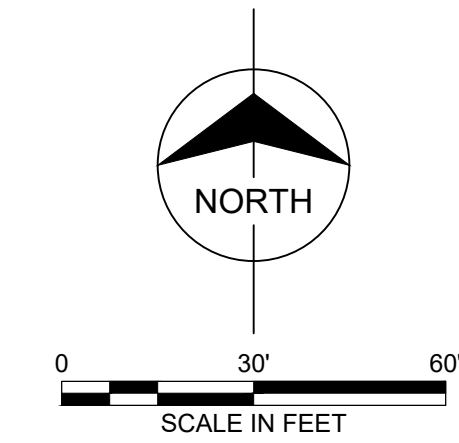
- SITE PLAN NOTES:**
- CONTRACTOR SHALL MAINTAIN ACCESS TO DOT AREA THROUGHOUT CONSTRUCTION.
 - FOR LOCATION PLAN, SEE CS102.
 - FOR PAVEMENT MARKING PLAN, SEE CS103.
 - FOR CONCRETE JOINTING PLAN, SEE CS104.



Scale For Microfilming

Millimeters

Inches



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date	designed	checked	designed
FEBRUARY 15, 2019	L. GUERIN	K. WARRENDER	F. PASCERI



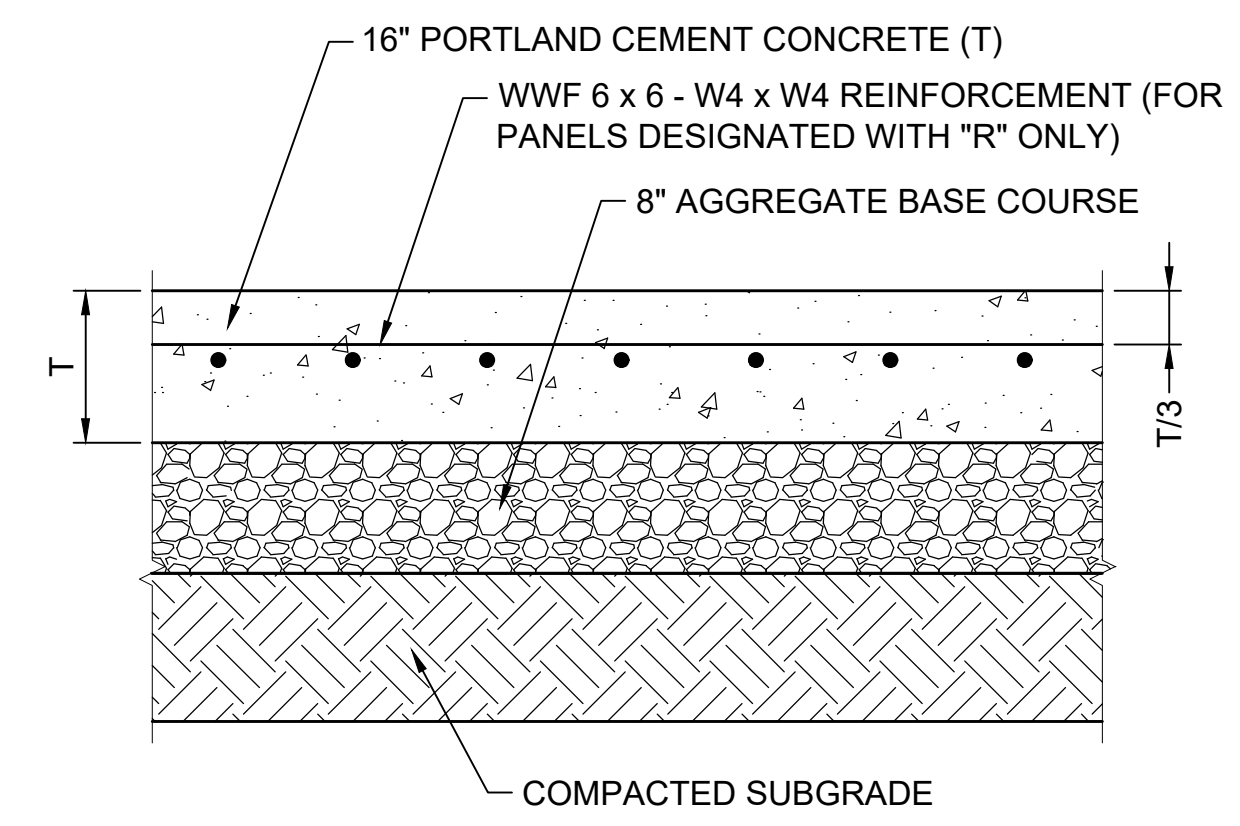
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WINDSOR LOCKS, CT

AASF AIRCRAFT APRON REPAIR - PHASE 1

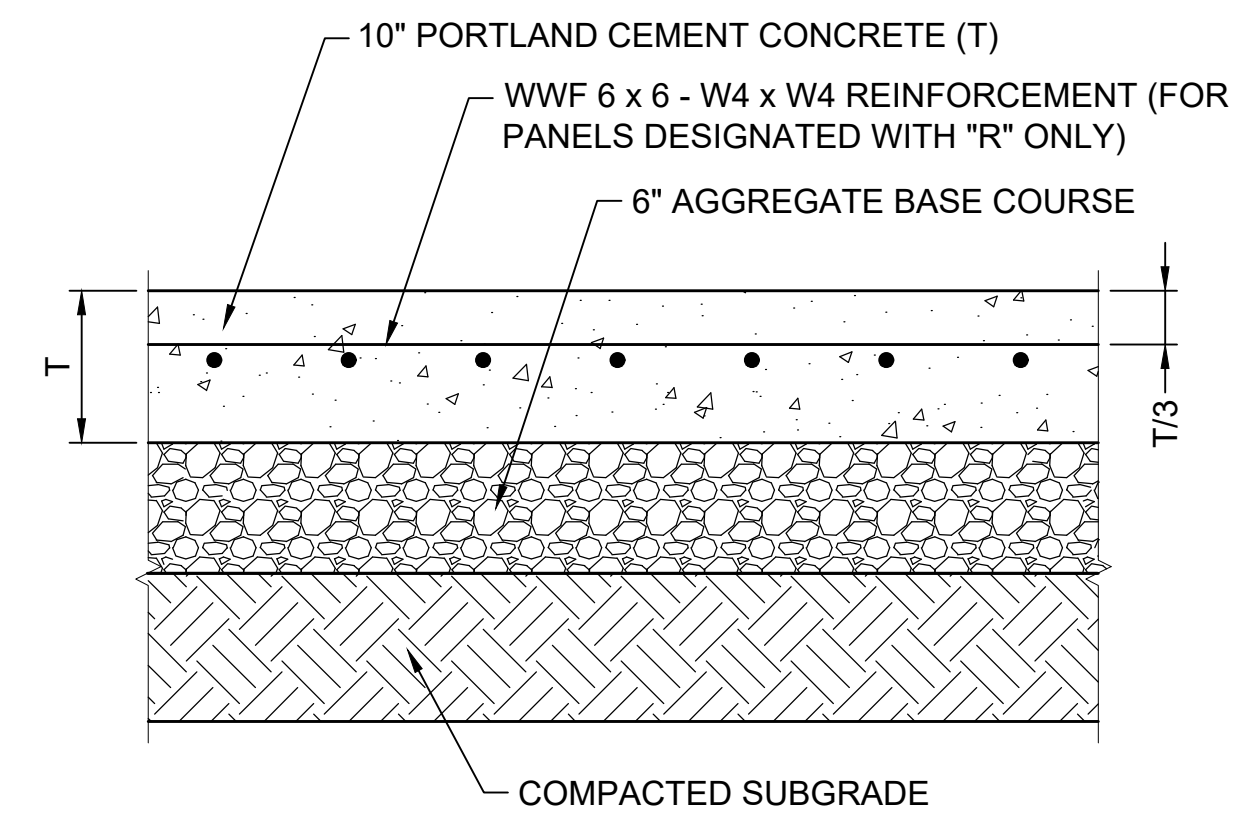
PARTIAL SITE VIEW

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drawing	rev.
CS105	0
sheet	of # sheets
file	102422-CS105-P1.dwg

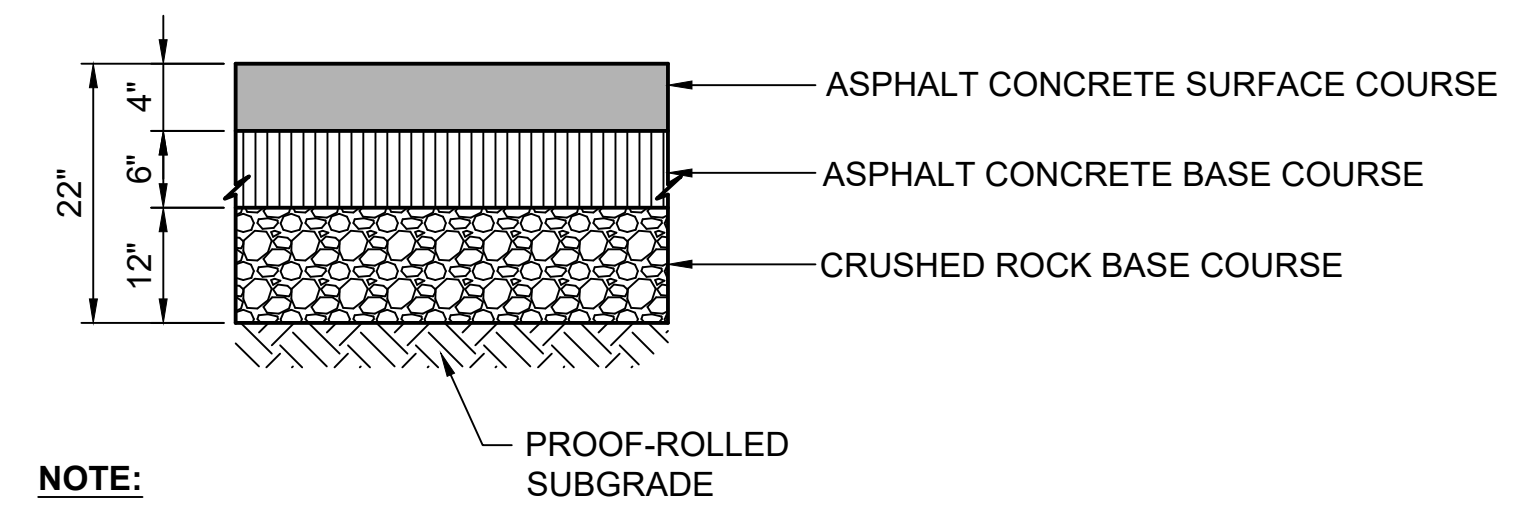
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0	06/12/20	SMC	KNW	ISSUED FOR BID



CONCRETE PAVEMENT SECTION (TYPE 1)
NOT TO SCALE

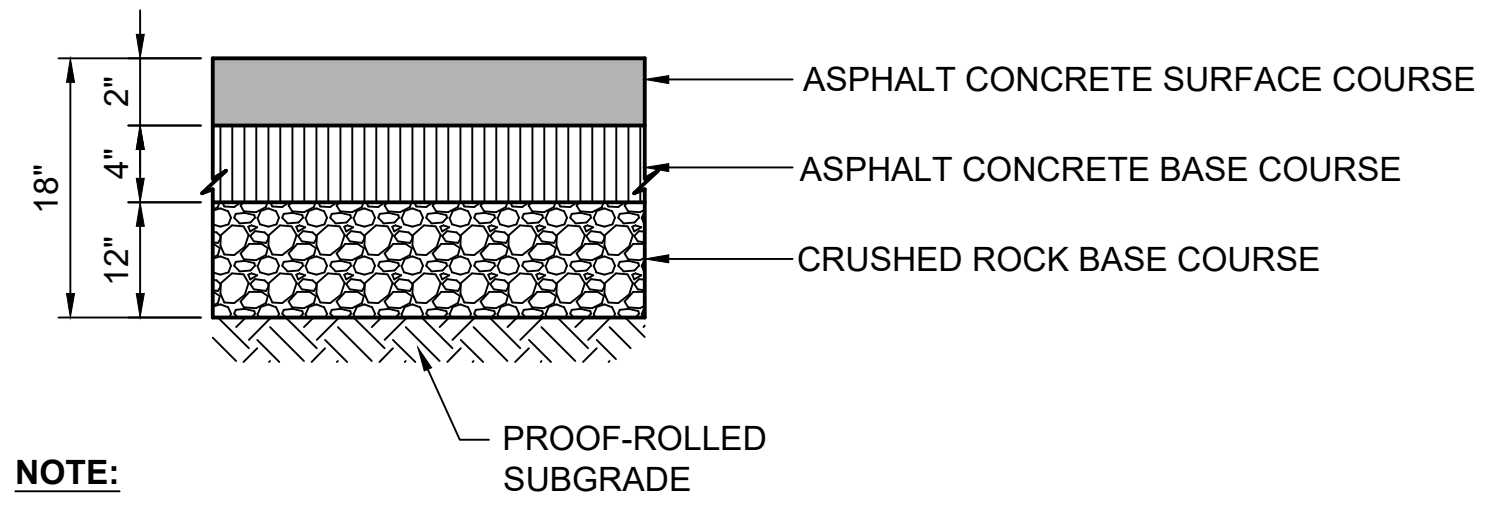


CONCRETE PAVEMENT SECTION (TYPE 2)
NOT TO SCALE



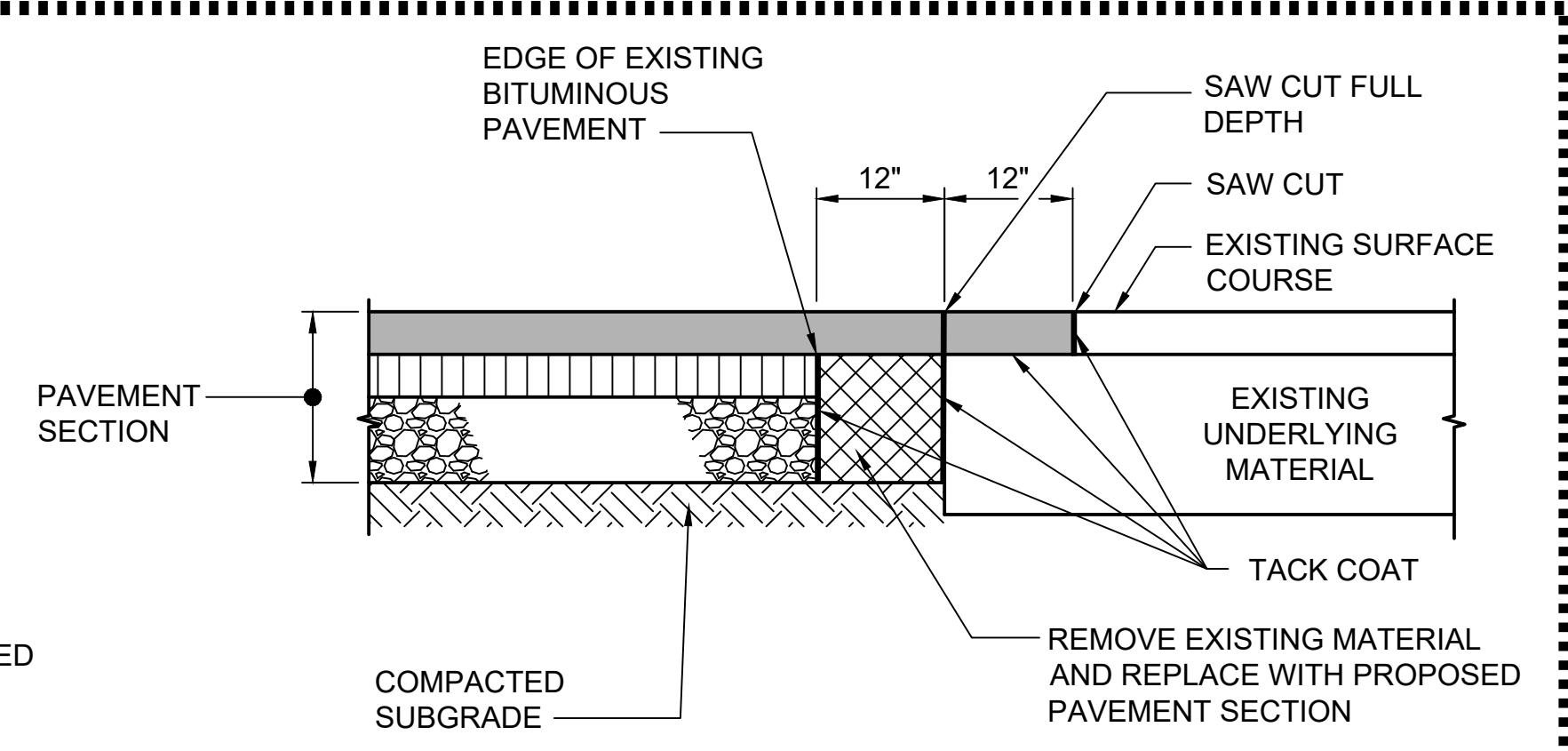
- NOTE:**
1. PROVIDE TACK COAT BETWEEN PAVEMENT COURSES AS WELL AS PAVEMENT LIFTS WHILE BEING PLACED.
 2. PROVIDE PRIME COAT BETWEEN BITUMINOUS PAVEMENT AND CRUSHED ROCK BASE COURSES.

TAXILANE ASPHALT PAVEMENT
NOT TO SCALE

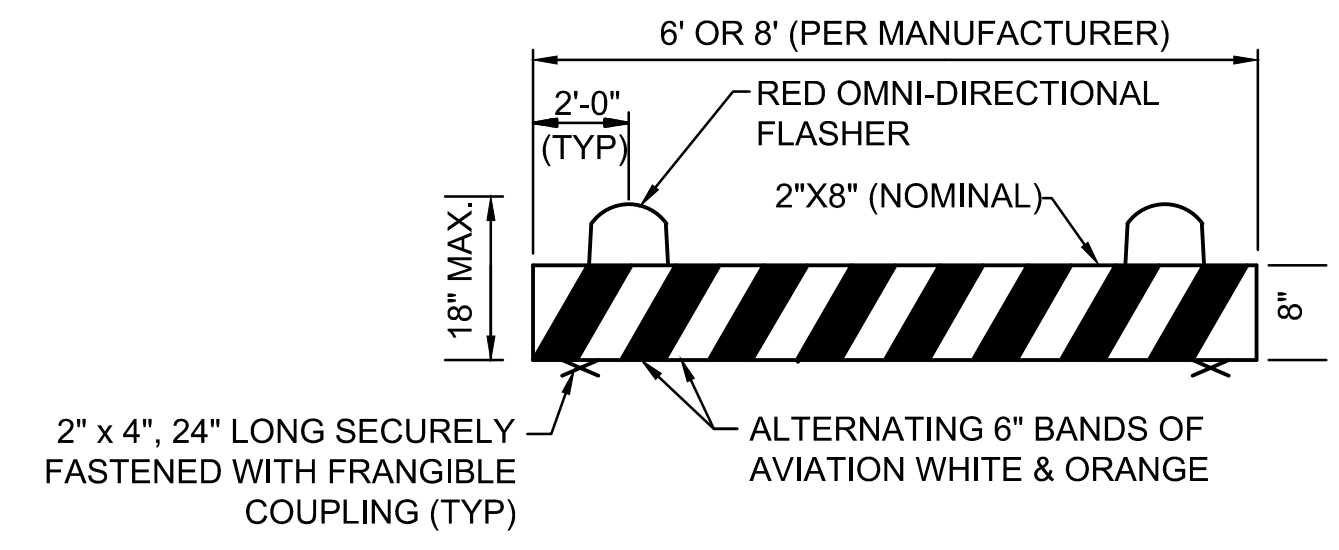


- NOTE:**
1. PROVIDE TACK COAT BETWEEN PAVEMENT COURSES AS WELL AS PAVEMENT LIFTS WHILE BEING PLACED.
 2. PROVIDE PRIME COAT BETWEEN BITUMINOUS PAVEMENT AND CRUSHED ROCK BASE COURSES.

SHOULDER AND ACCESS ROAD ASPHALT PAVEMENT
NOT TO SCALE

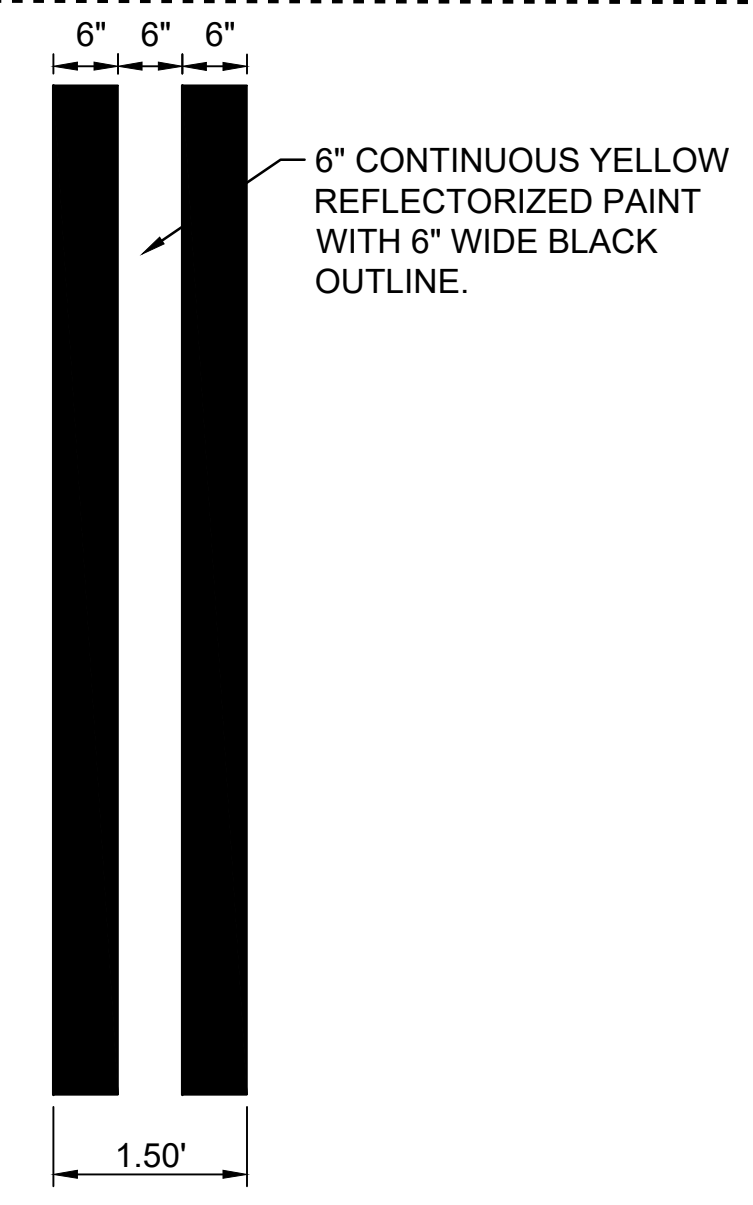


CONNECT PROPOSED TO EXISTING PAVEMENT
NOT TO SCALE

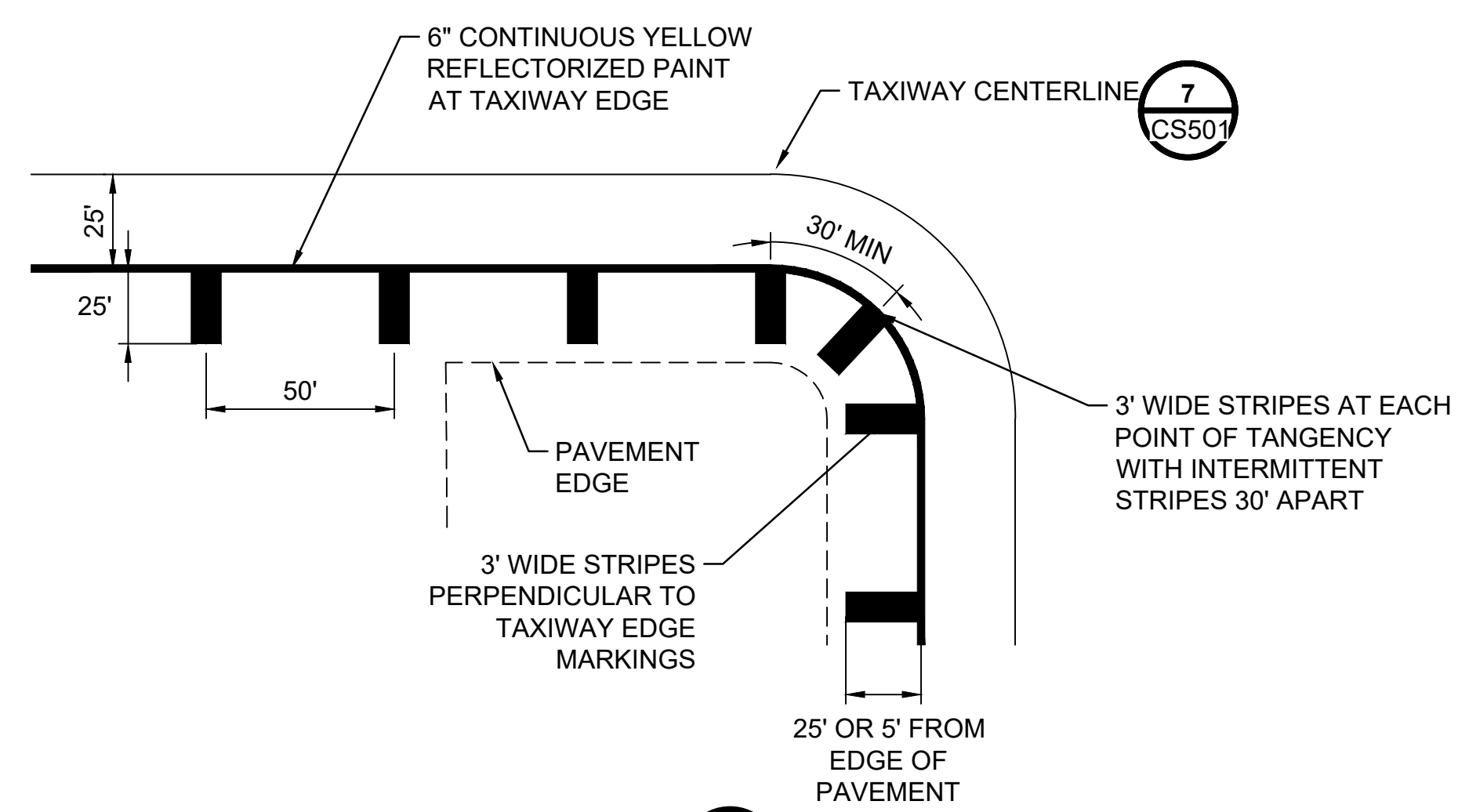


- NOTES:**
1. SAFETY BARRICADE SHALL HAVE LIGHTS, REFLECTIVE STRIPING AND SHALL BE:
 - MODEL AR-10X96 AS MANUFACTURED BY OFF THE WALL PRODUCTS, SALT LAKE CITY, UTAH, OR
 - MODEL NAC-PC-2410 AIRPORT LOW-PROFILE BARRICADES AS MANUFACTURED BY NEUBERT AERO CORP., TAMPA, FLA, OR
 - APPROVED EQUAL
 2. THE BARRICADE AND LIGHTS SHALL BE MAINTAINED IN GOOD OPERATIONAL CONDITION DURING ALL CLOSURES.
 3. FLASHERS SHALL BE SOLAR POWER OPERATED. LENS SHALL BE RED AND OMNI-DIRECTIONAL. SUPPORT BRACES SHALL BE SECURELY ATTACHED TO 2"x8".
 4. SAND BAGS SHALL BE PLACED ON EACH SUPPORT BRACE.
 5. FACING OF 8"x8" TO BE COVERED WITH REFLECTIVE TAPE OR PAINT.
 6. LOW-PROFILE BARRICADES TO BE SPACED END TO END ACROSS THE FULL WIDTH OF PAVEMENT TO PREVENT VEHICLES AND AIRCRAFT FROM PASSING THROUGH.
 7. BARRICADES SHALL BE BRACED TO PREVENT TIP OVER OR DISPLACEMENT AS MAY BE INDUCED BY WEATHER OR AIRCRAFT OPERATIONS.
 8. BARRICADES SHALL NOT BE LOCATED WITHIN AN ACTIVE RUNWAY SAFETY AREA. BARRICADES SHALL BE LOCATED OUTSIDE OF ANY ACTIVE TAXIWAY OBJECT FREE AREA.
 9. BARRICADE LOCATIONS SHALL BE COORDINATED WITH THE AIRPORT AND CONTRACTING OFFICER.

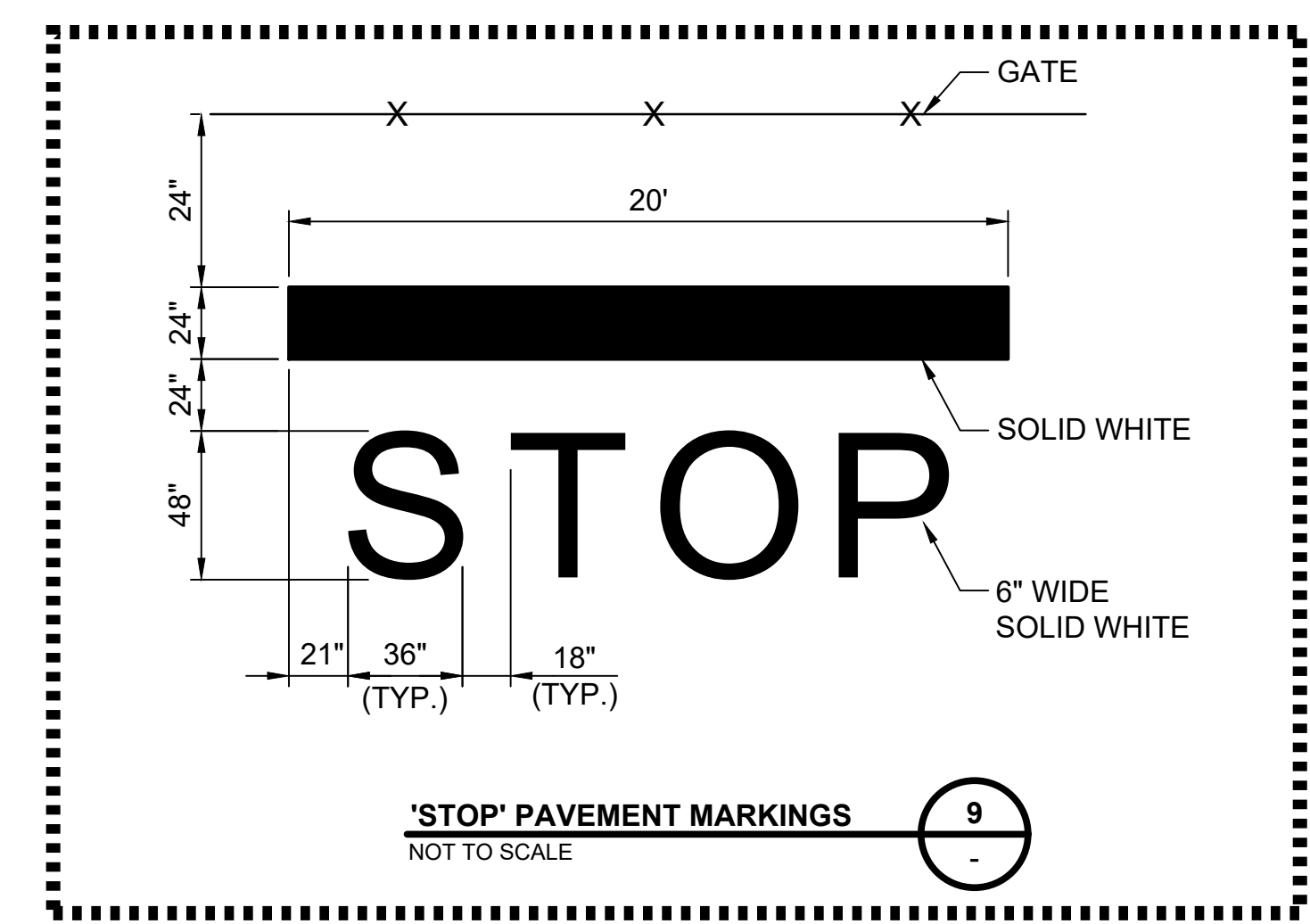
LIGHTED LOW PROFILE BARRICADE
NOT TO SCALE



TAXIWAY CENTERLINE MARKINGS
NOT TO SCALE



TAXIWAY SHOULDER MARKINGS
NOT TO SCALE



'STOP' PAVEMENT MARKINGS
NOT TO SCALE

Scale For Microfinishing
Millimeters
Inches



10 NORTH PARK PLACE, SUITE 330
MORRISTOWN, NJ 07960
973-884-8701
Burns & McDonnell Engineering Co, Inc.
LICENSEE NO. 000165

date	DECEMBER 28, 2017	detailed	S. CATONE
designed	L. GUERIN	checked	K. WARRENDER



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BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT

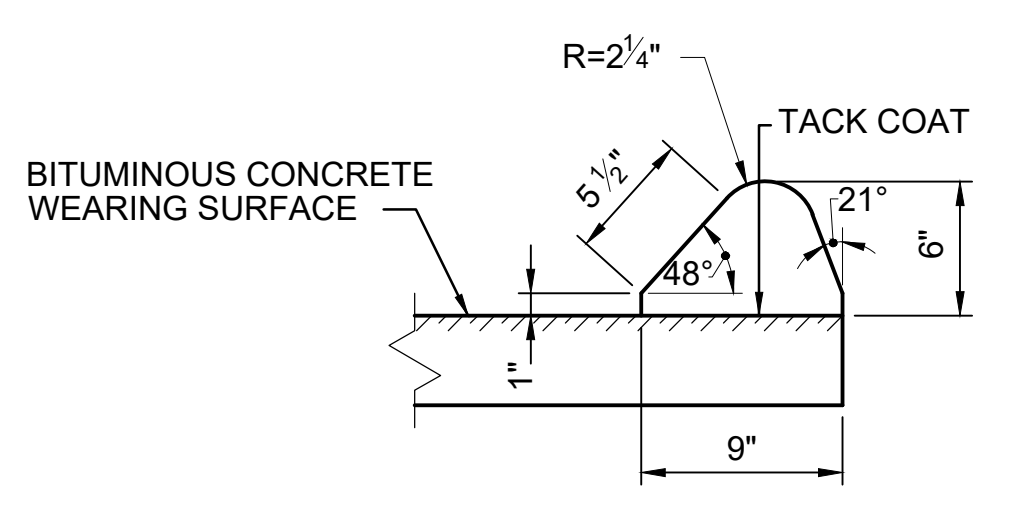
AASF AIRCRAFT APRON REPAIR - PHASE 1

SITE DETAILS

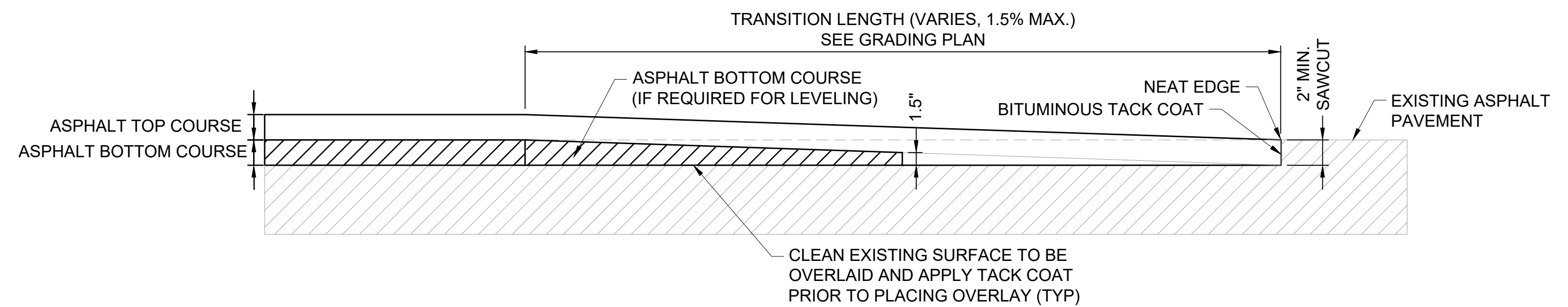
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drawing	CS501	rev.	0

sheet	of	#	sheets
file	102422-CS501-P1		DWG

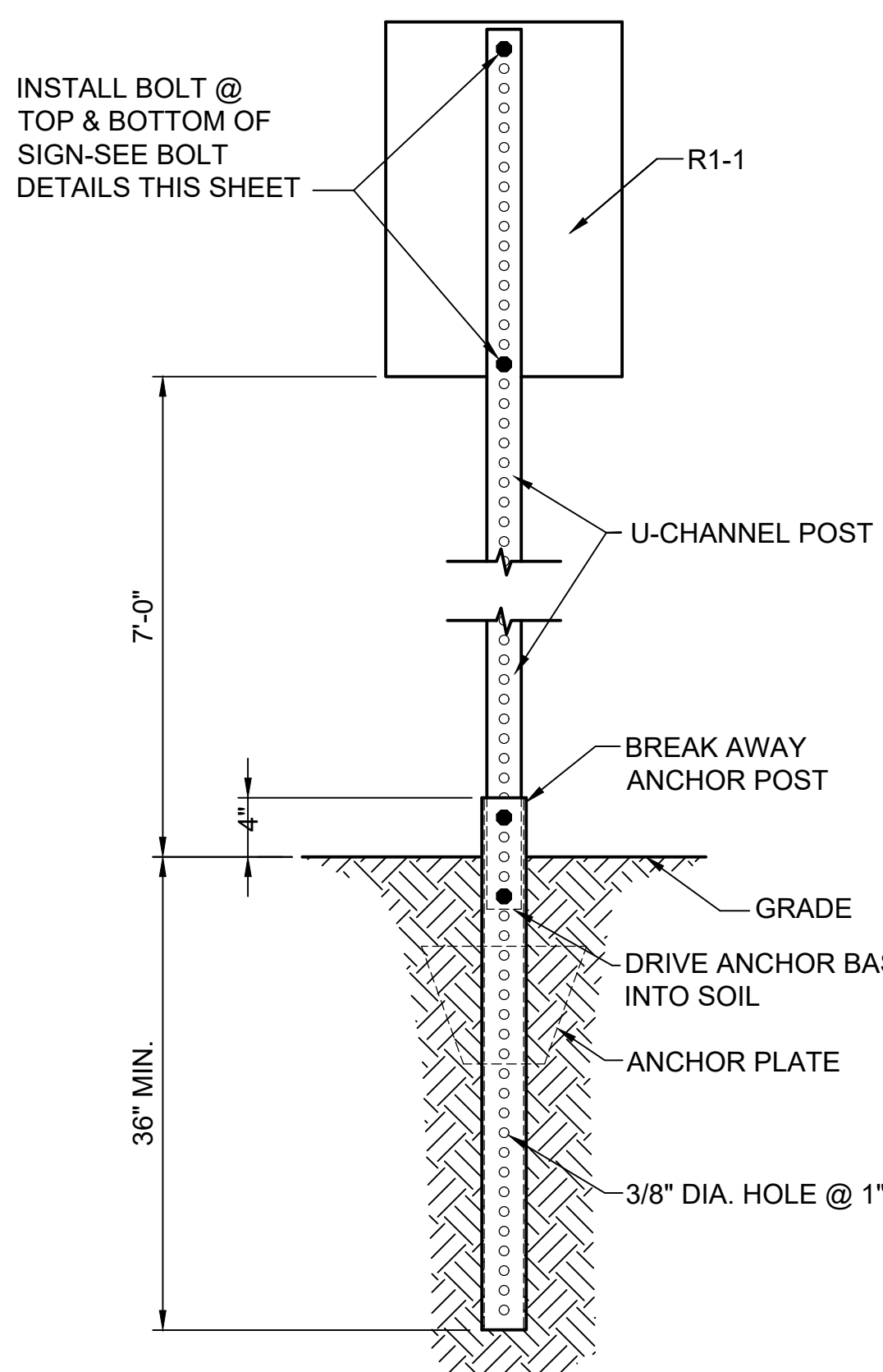
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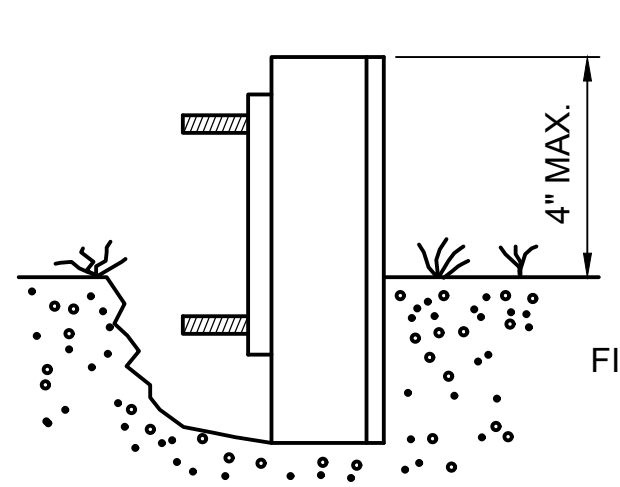
ASPHALT CURB
NOT TO SCALE



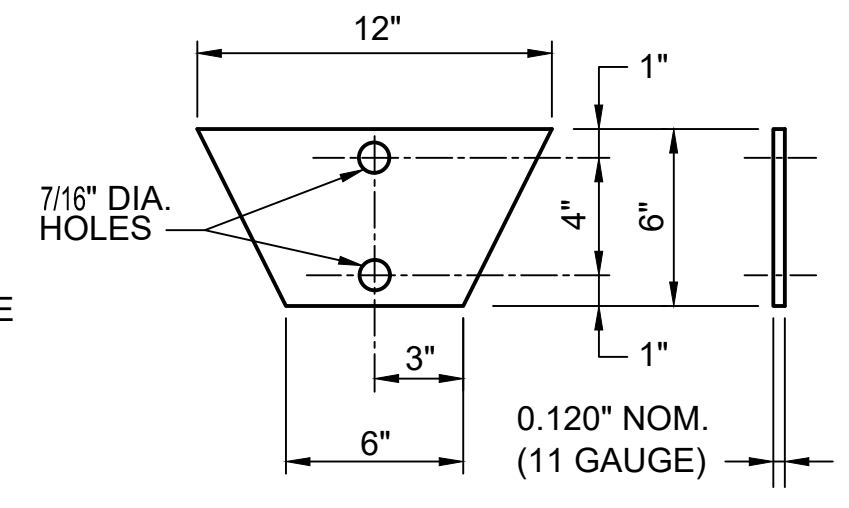
TRANSITION PAVEMENT
NOT TO SCALE



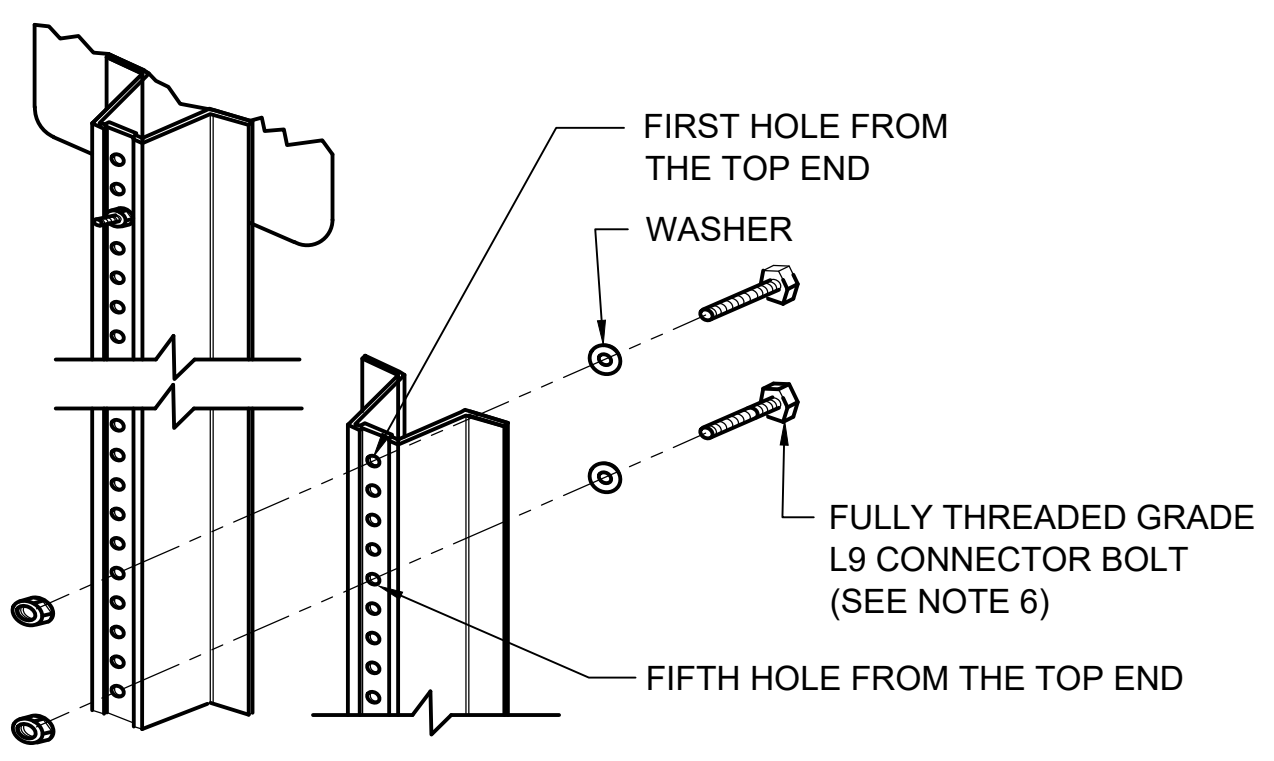
SIGN R7-8



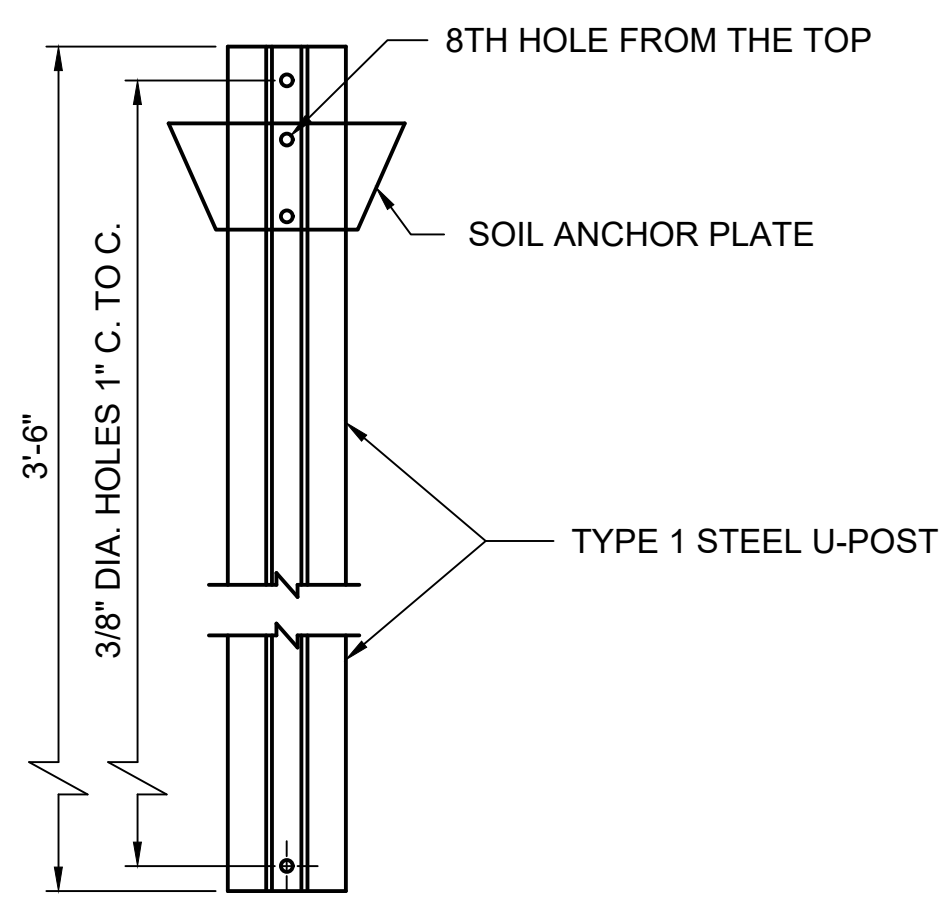
FRONT MOUNT BRACKET



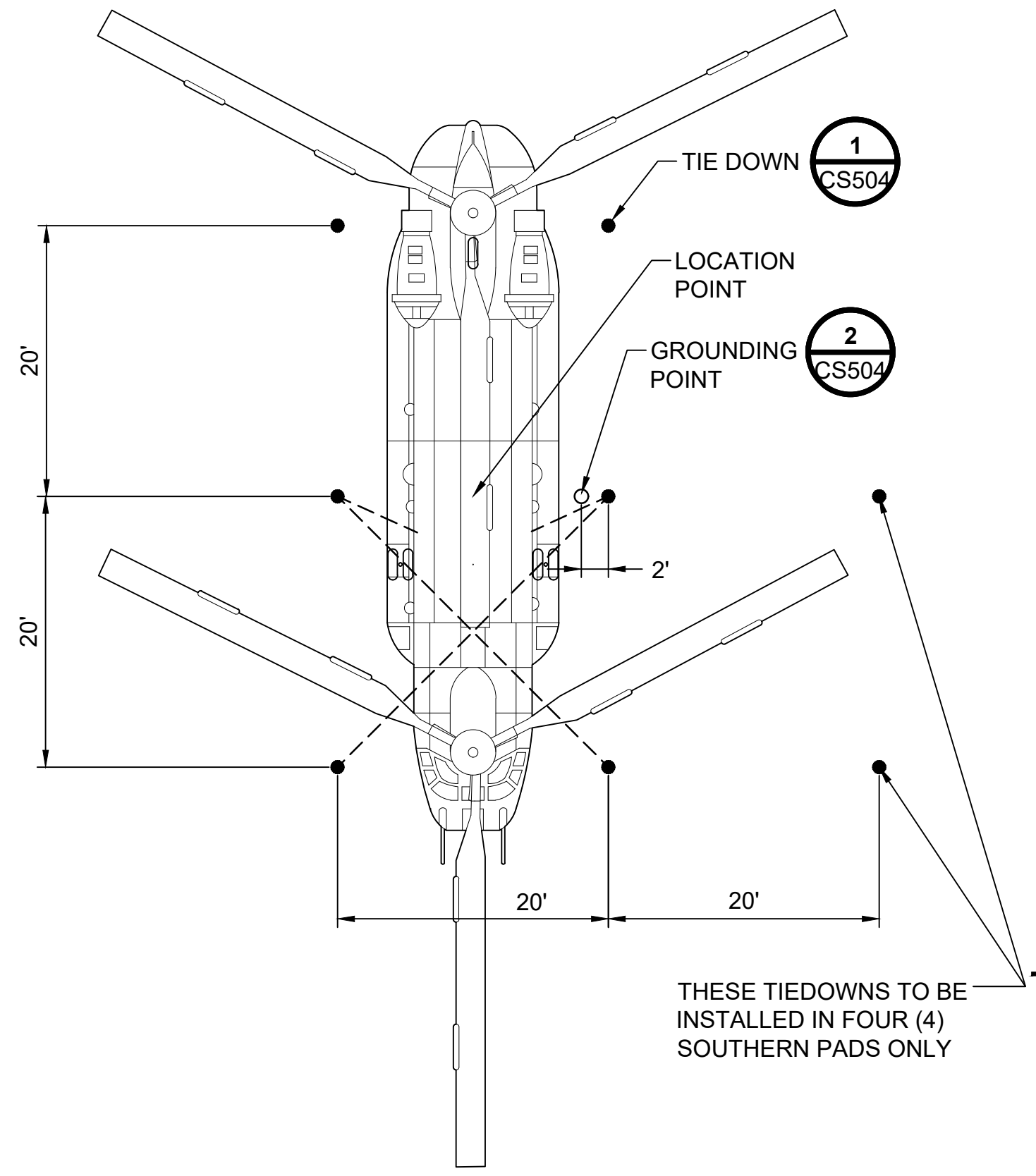
SOIL ANCHOR PLATE



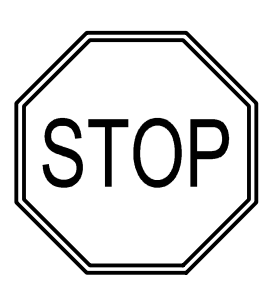
ANCHOR POST ASSEMBLY SIGN SUPPORTS



ANCHOR POST ASSEMBLY



PARKING POSITION
NOT TO SCALE



R1-1
30"x30"
WHITE ON RED
BACKGROUND

NOTES:

- CONTRACTOR SHALL FURNISH & INSTALL SIGN POSTS, ANCHOR BASES AND SLEEVES AS SPECIFIED.
- SIGN POST SHALL BE YIELDING BREAKAWAY TYPE.
- PROVIDE 3 LB/FT STEEL U-CHANNEL POST WITH A MINIMUM SECTION MODULUS OF 0.43 IN³ FOR 60 KSI STEEL, A MINIMUM SECTION MODULUS OF 0.37 IN³ FOR 70 KSI STEEL, OR A MINIMUM SECTION MODULUS OF 0.34 IN³ FOR 80 KSI STEEL.
- U-CHANNEL POST SHALL BE GALVANIZED AND CONFORM WITH ASTM A499, GRADE 60, OR ASTM A576, GRADE 1080 (WITH A MINIMUM YIELD STRENGTH OF 60 KSI). GALVANIZING SHALL BE IN CONFORMANCE WITH ASTM A123.
- FOR DIAMOND WARNING SIGNS UP TO 3 FT IN AREA, USE 4 LB/FT POST FOR UP TO 10 FT CLEAR HEIGHT (MEASURED FROM BOTTOM OF DIAMOND WARNING SIGN). 4 LB/FT POST MUST HAVE A MINIMUM SECTION MODULUS OF 0.56 IN³ FOR 60 KSI STEEL OR A MINIMUM SECTION MODULUS OF 0.47 IN³ FOR 70 OR 80 KSI.
- SIGN POST SHALL BE INSTALLED FACING THE PREDOMINANT TRAFFIC FLOW OR AS INDICATED ON THE PLANS.
- ANCHOR POST SHALL BE INSTALLED PLUMB.
- BOLTS SHALL NOT PROTRUDE MORE THAN 3/4" BEYOND THE NUT WHEN TIGHT BUT SHALL ENGAGE ALL THREADS IN THE NUT.
- SIGN FINISH SHALL BE HIGH INTENSITY.
- SIGN LOCATION SHALL BE IN ACCORDANCE WITH MUTCD.

SIGN POST AND MOUNTING
NOT TO SCALE

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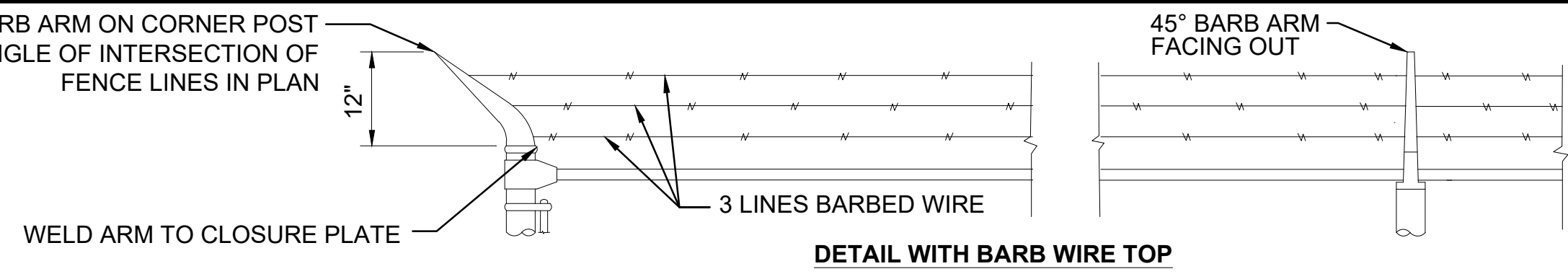
date	DECEMBER 28, 2017	detailed	S. CATONE
designed	L. GUERIN	checked	K. WARRENDER

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BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT

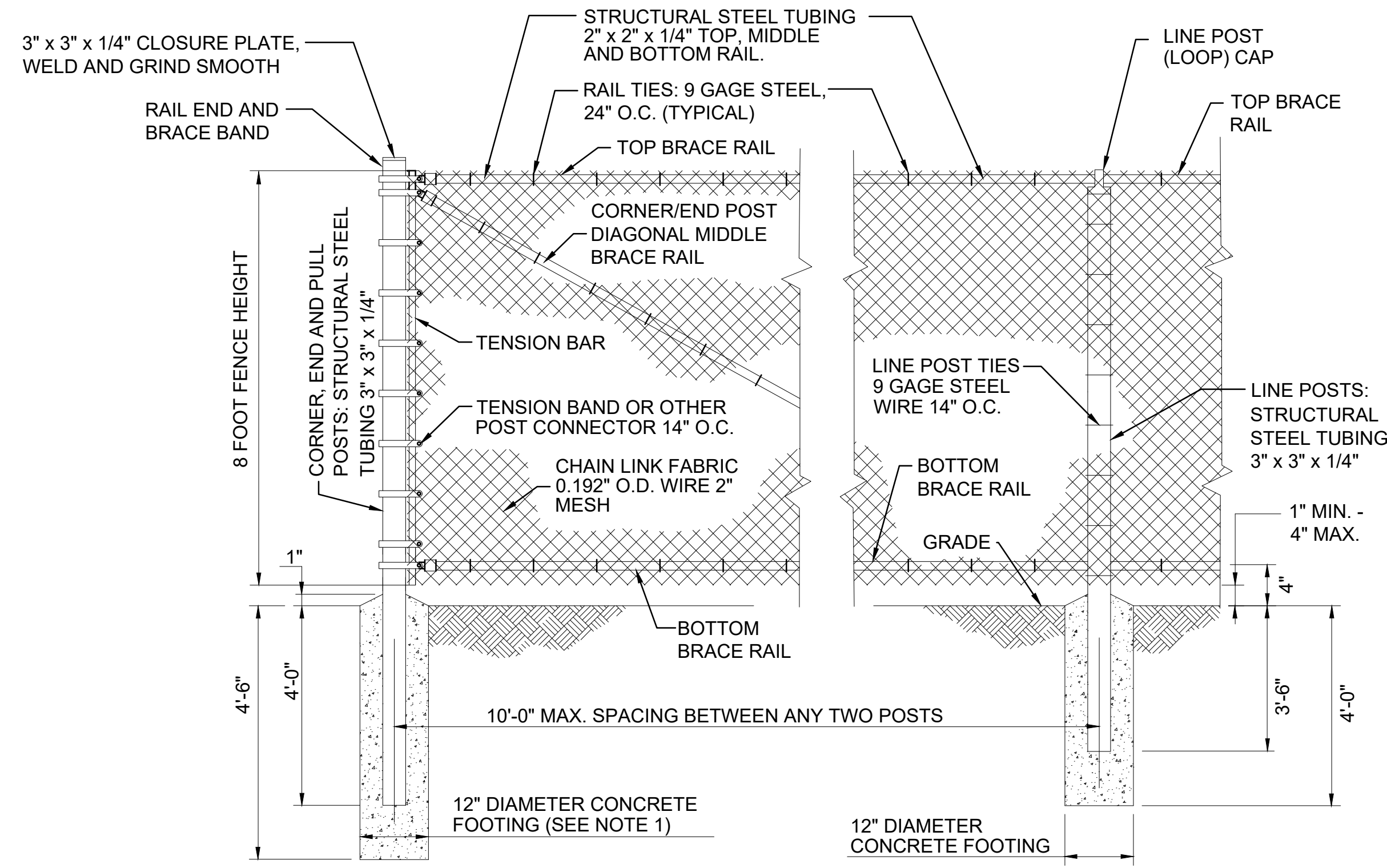
AASF AIRCRAFT APRON REPAIR - PHASE 1

SITE DETAILS			
BMD project	102422	ARNG project	20MIL21201
drawing	CS502	rev.	0
sheet	of	#	sheets
file 102422-CS501-P1.dwg			

45° BARB ARM ON CORNER POST
BISECTS ANGLE OF INTERSECTION OF
FENCE LINES IN PLAN



DETAIL WITH BARB WIRE TOP



TERMINAL, CORNER OR GATE POST DETAIL

LINE POST DETAIL

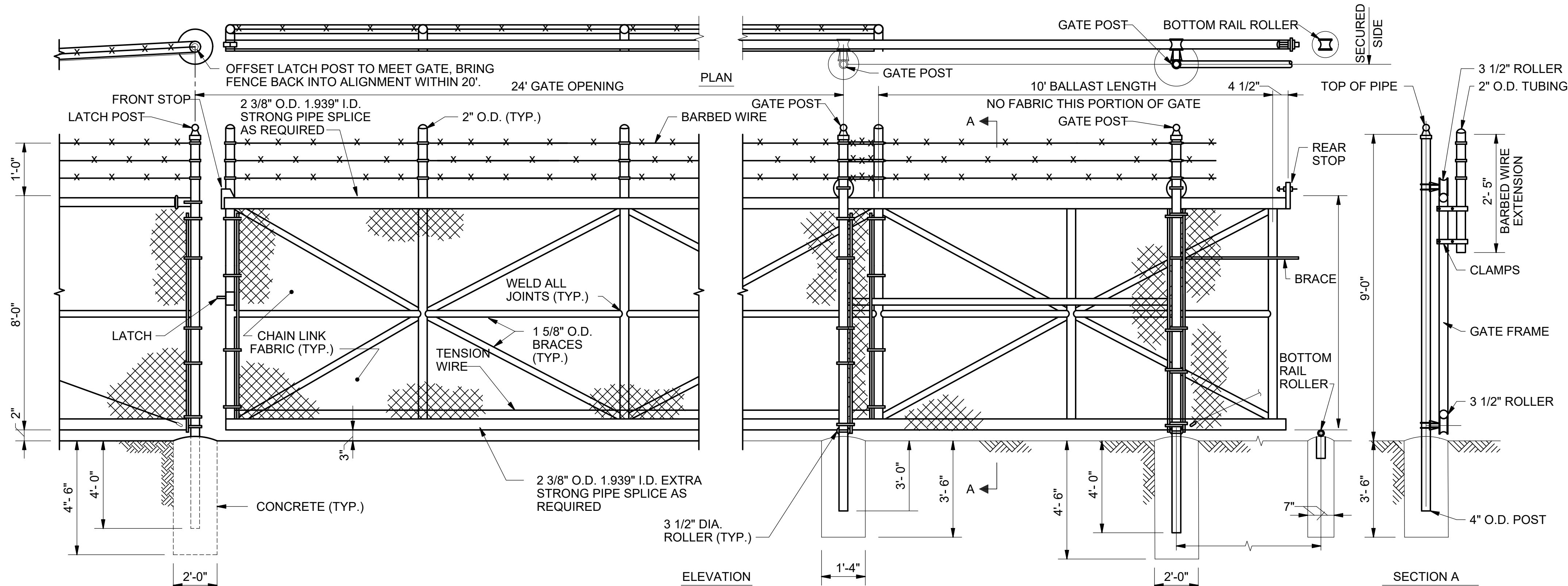
STRUCTURAL STEEL TUBING	SWING GATE OPENINGS	
	SINGLE GATE	DOUBLE GATE
3" x 3" x 1/4"	UP THRU 6'	UP THRU 12'
4" x 4" x 1/4"	7' THRU 13'	13' THRU 26'
6" x 6" x 5/16"	14' THRU 18'	27' THRU 36'
8" x 8" x 5/16"	19' THRU 32'	37' THRU 64'

TERMINAL, CORNER, GATE AND LINE POST NOTES:

- FOR GATE WIDTHS GREATER THAN 13'-0" SINGLE (26'-0" DOUBLE) MINIMUM DIAMETER OF POST FOUNDATION SHALL BE 18" AND 4'-6" DEEP.
- ALL CONNECTION DETAILS SHALL BE SUBMITTED FOR APPROVAL.
- WELDED GATE SQUARE TUBING SIZES SHALL BE AS FOLLOWS:

FABRIC HEIGHT	EXT. BRACING	INT. BRACING
6' OR LESS	1 3/4" x 1 3/4" x 3/16"	1 1/4" x 1 1/4" x 3/16"
OVER 6'	2" x 2" x 3/16"	1 1/2" x 1 1/2" x 3/16"
- EQUIVALENT STEEL SECTIONS SHALL NOT BE PERMITTED.
- DIAGONAL MIDDLE BRACE RAIL ON ONE BAY EACH SIDE OF CORNER, END, PULL AND GATE POSTS ONLY.

8" CHAIN-LINK SECURITY FENCE
NOT TO SCALE



SLIDING GATE
NOT TO SCALE

no. | date | by | ckd | description
0 | 06/12/20 | SMC | KNW | ISSUED FOR BID



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BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT

AASF AIRCRAFT APRON REPAIR - PHASE 1

SITE DETAILS

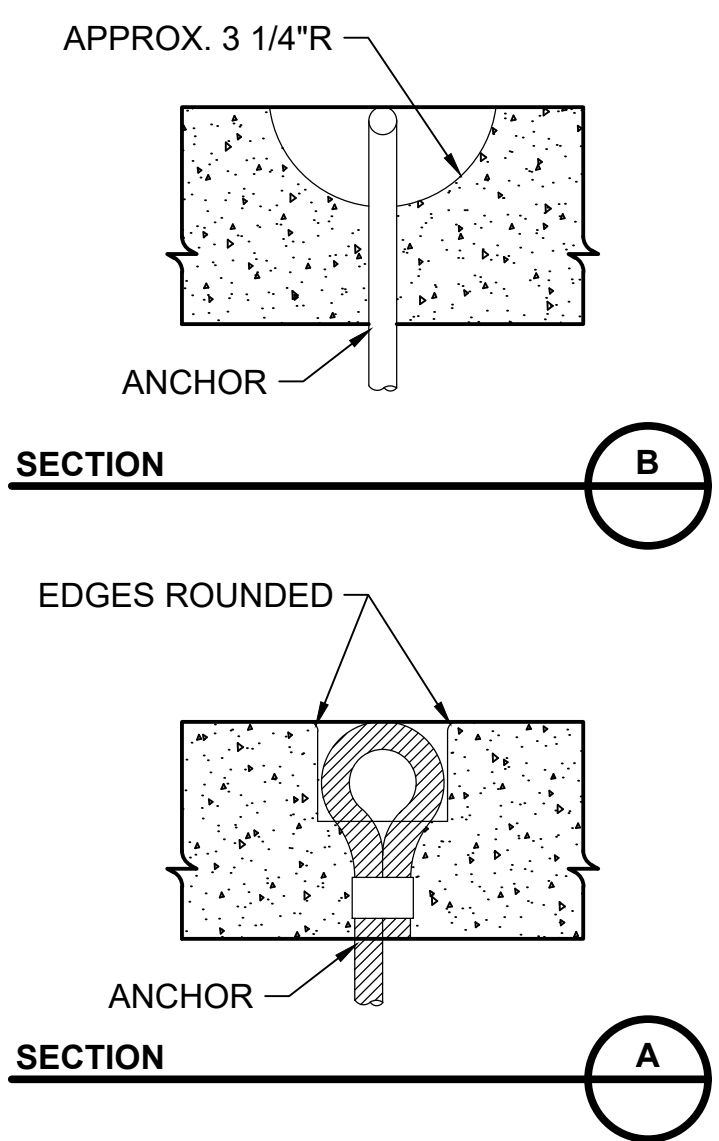
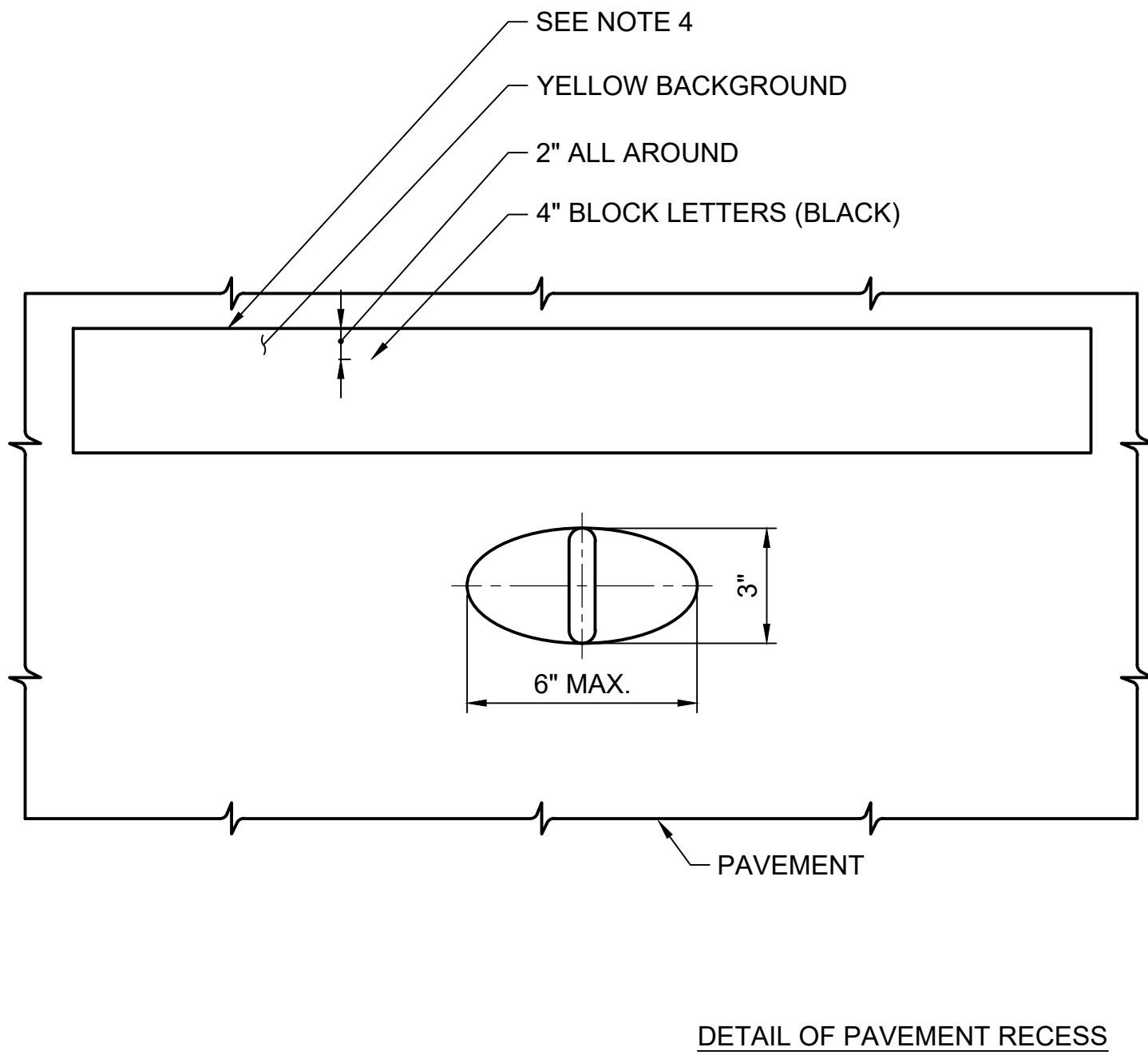
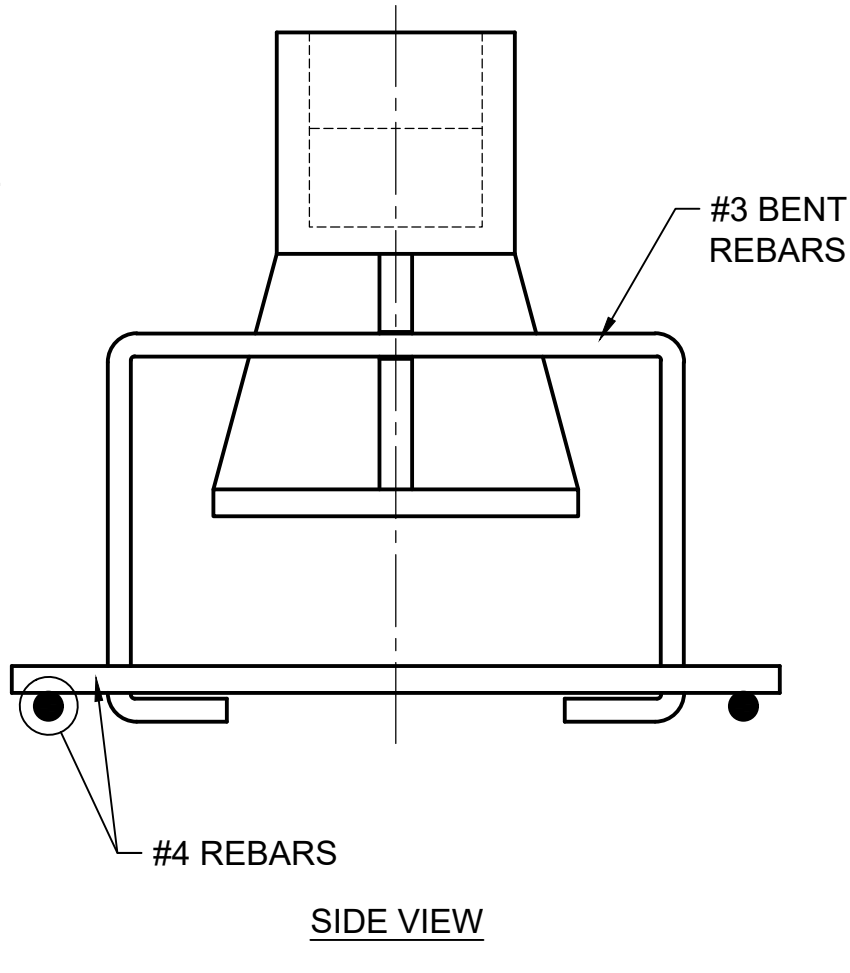
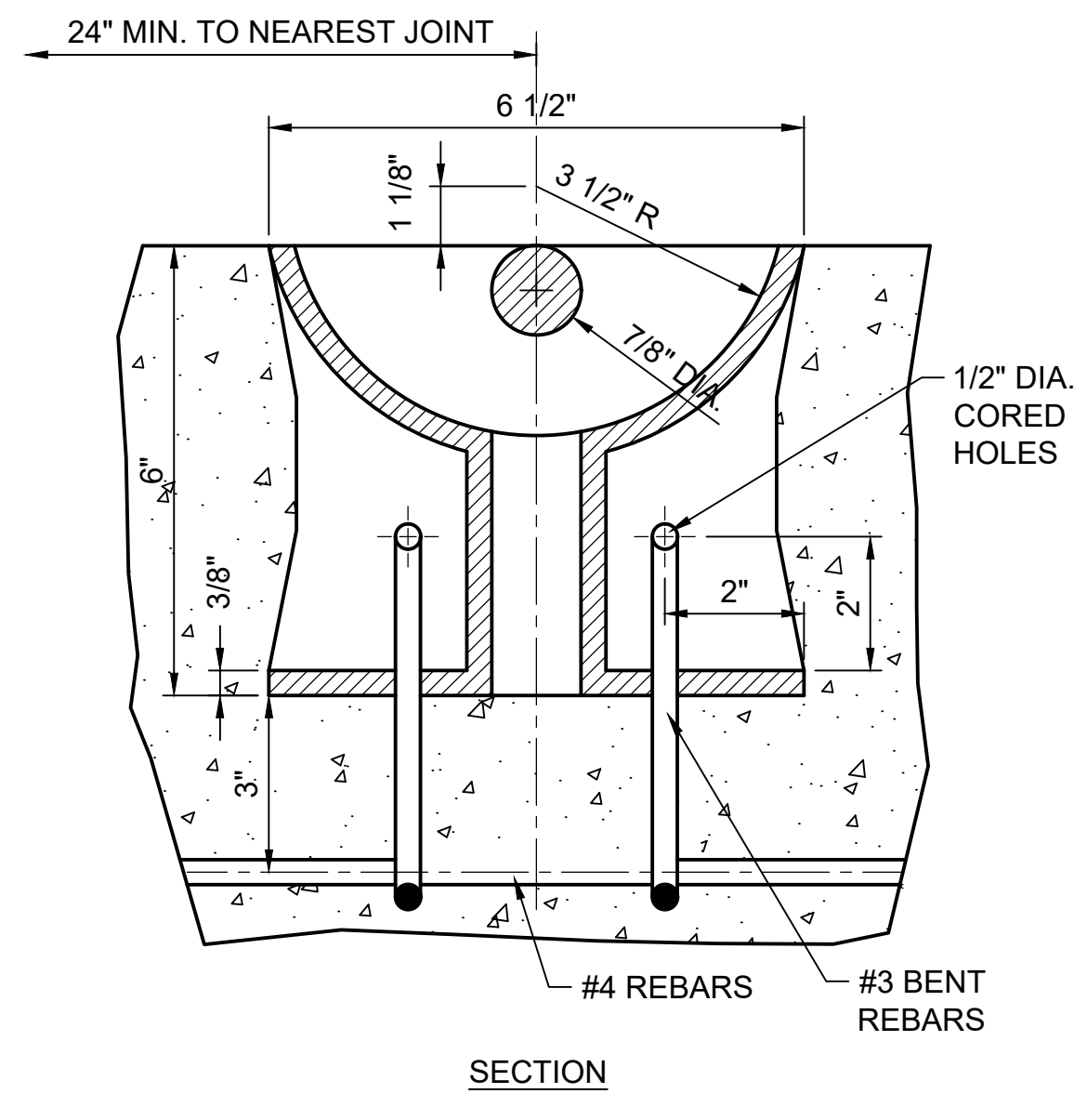
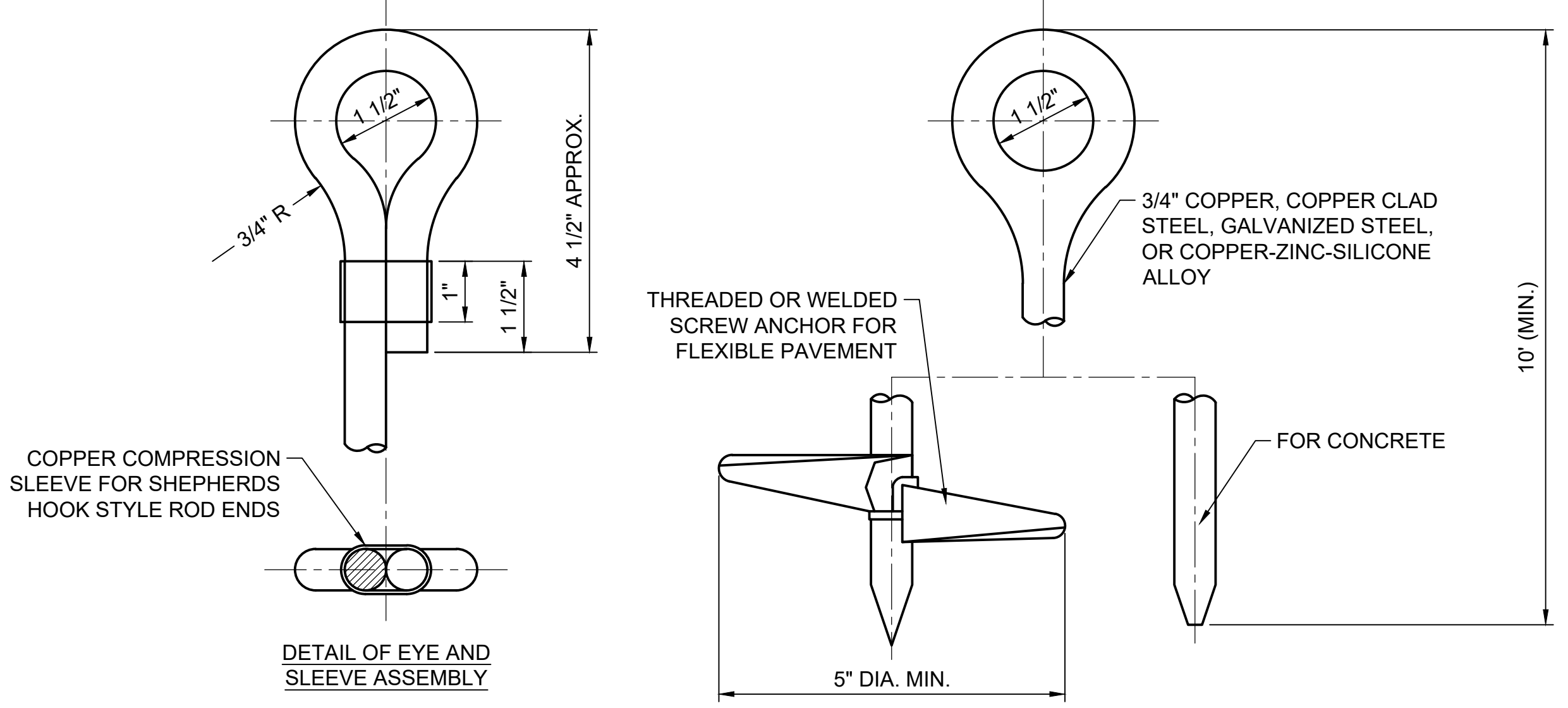
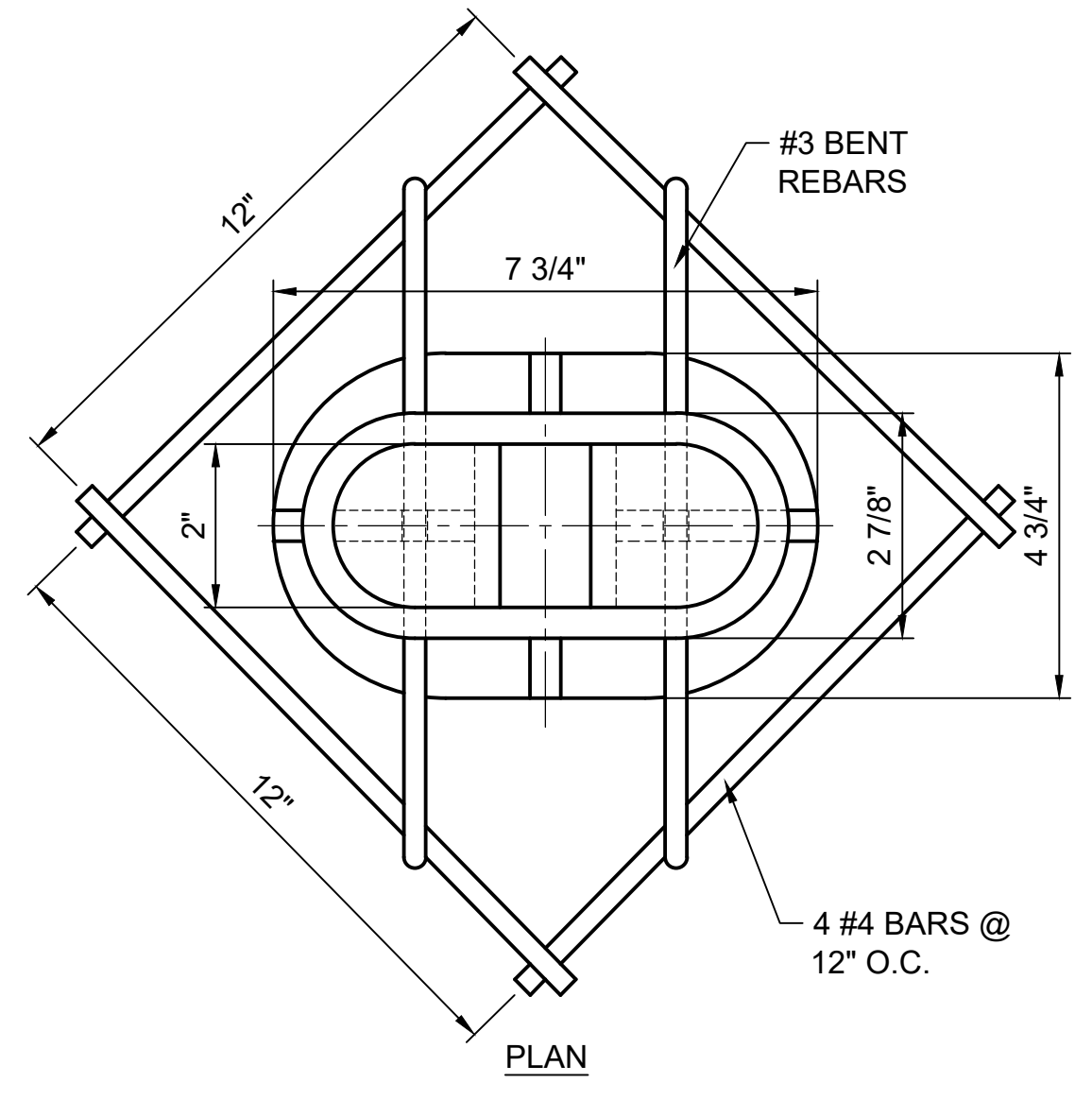
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drawing # **CS503** rev. 0

sheet of # sheets

file 102422-CS501-P1.dwg

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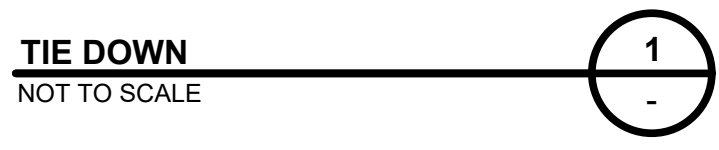


NOTES:

1. MOORING DEVICE TO BE CAST IN DUCTILE IRON 80-55-06 OR EQUAL.
2. MOORING TESTS SHOULD BE ACCOMPLISHED USING A HYDRAULIC RAM OR SIMILAR DEVICE AND AN APPROPRIATE REACTION (HEAVY VEHICLE, ETC.) THAT IS CAPABLE OR APPLYING A TENSILE LOAD OF 71,172 N (16,000 LB).
3. THE LENGTH OF MOORING CHAIN AND CONNECTING SHACKLE SHOULD BE SELECTED IN SUCH A WAY THAT AN ANGLE OF 19.15° FROM THE PAVEMENT SURFACE (SEE ABOVE FIGURE) CAN BE MAINTAINED DURING LOAD TESTING.
4. APPROPRIATE SAFETY PRECAUTIONS SHOULD BE TAKEN AT ALL TIMES DURING LOAD TESTING OPERATIONS.
5. THE MOORING POINTS SHOULD BE LOADED IN 1,130 kg (2,500 LB) INCREMENTS UP TO 44,482 N (10,000 LB) AND IN 4,448 N (1000 LB) INCREMENTS UP TO 71,172 N (16,000 LB) WITH EACH LOAD INCREMENT HELD FOR AT LEAST 60 SECONDS.
6. TO PASS TEST REQUIREMENTS, MOORING POINTS SHALL NOT DEFORM PERMANENTLY UNDER 71,172 N (16,000 LB) LOAD.

NOTES:

1. STATIC TIEDOWN GROUNDS ARE NOT INTENDED AS AIRCRAFT TIEDOWNS OR THRUST ANCHORS.
2. THESE WILL BE USED AS EXTERIOR STATIC GROUND POINTS FOR ROTARY WING AIRCRAFT.
3. GROUNDING POINTS SHALL BE TESTED. CERTIFICATIONS SHALL BE SUBMITTED THAT MEET AIR FORCE REGULATIONS. ALL GROUNDING POINTS SHALL BE MARKED IN ACCORDANCE WITH UFC-3-260-01.
4. STENCIL THE PAVEMENT NEAR EACH STATIC GROUND WITH THE LEGEND "STATIC GROUND ONLY" IN 4" BLOCK LETTERS, BLACK LETTERING ON A YELLOW BACKGROUND THAT EXTENDS A MINIMUM OF 2 INCHES BEYOND THE OUTERMOST EDGES OF THE LETTERS IN ACCORDANCE WITH UFC-3-260-01 APPENDIX B11, SUBPARAGRAPH 811-5.1.2



Scale For Microfinishing
Millimeters
Inches

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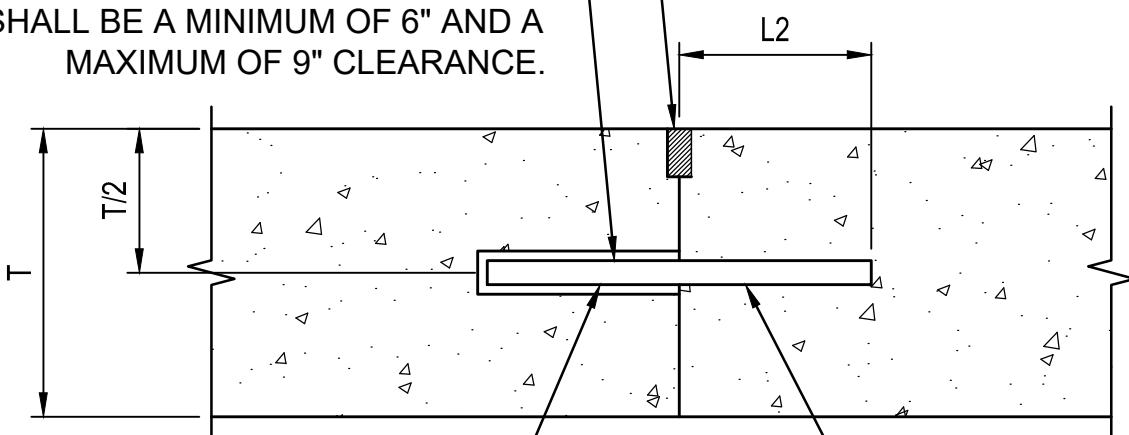
date	DECEMBER 28, 2017	detailed	S. CATONE
designed	L. GUERIN	checked	K. WARRENDER

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BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT

AASF AIRCRAFT APRON REPAIR - PHASE 1
 SITE DETAILS

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drawing	CS504	rev.	0
sheet	of #	sheets	
file 102422-CS501-P1.dwg			

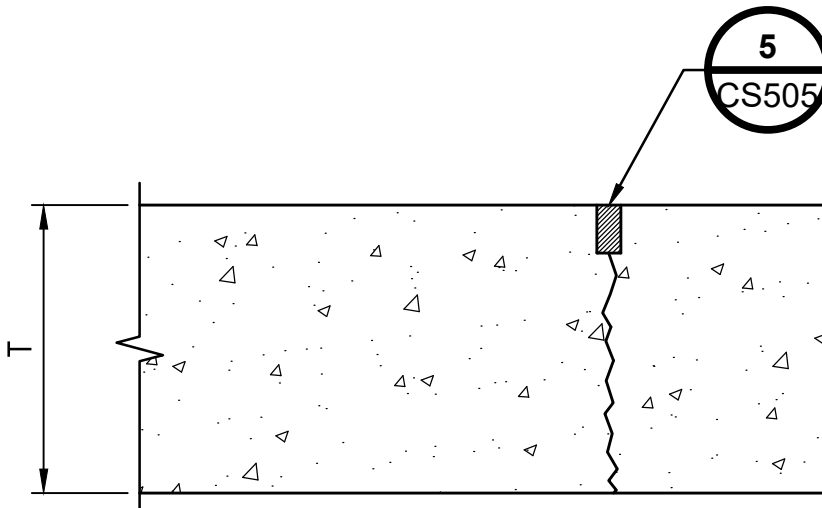
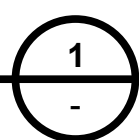
SOLID STEEL EPOXY COATED DOWEL
1" DIA - 19" LONG SPACED AT 12" OC
BAR CLEARANCE AT EDGE OF PANEL
SHALL BE A MINIMUM OF 6" AND A
MAXIMUM OF 9" CLEARANCE.



DOWELS SHALL BE EPOXYED INTO
DRILLED HOLES HAVING A DIAMETER OF
1/8" LARGER THAN THE DOWEL
DIAMETER. HOLES SHALL NOT BE
DRILLED UNTIL AT LEAST 48 HOURS
AFTER CONCRETE IS POURED.

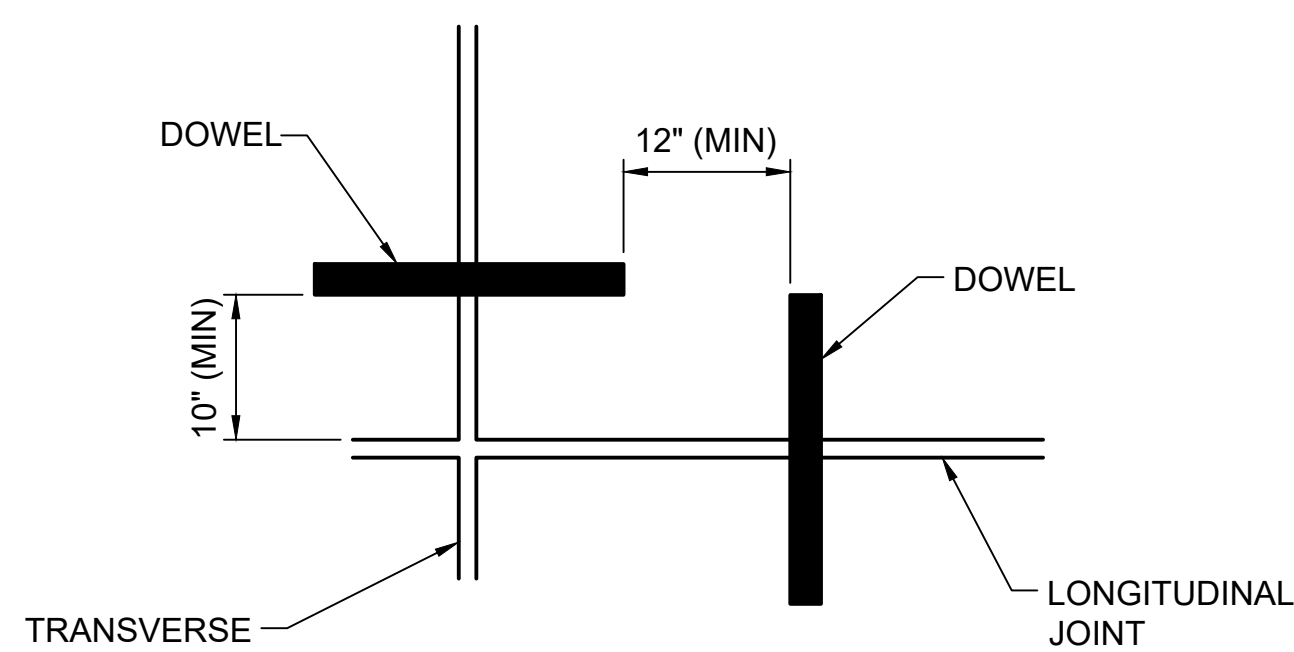
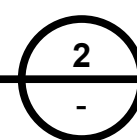
**TYPE D - DOWELED
CONSTRUCTION JOINT**

NOT TO SCALE



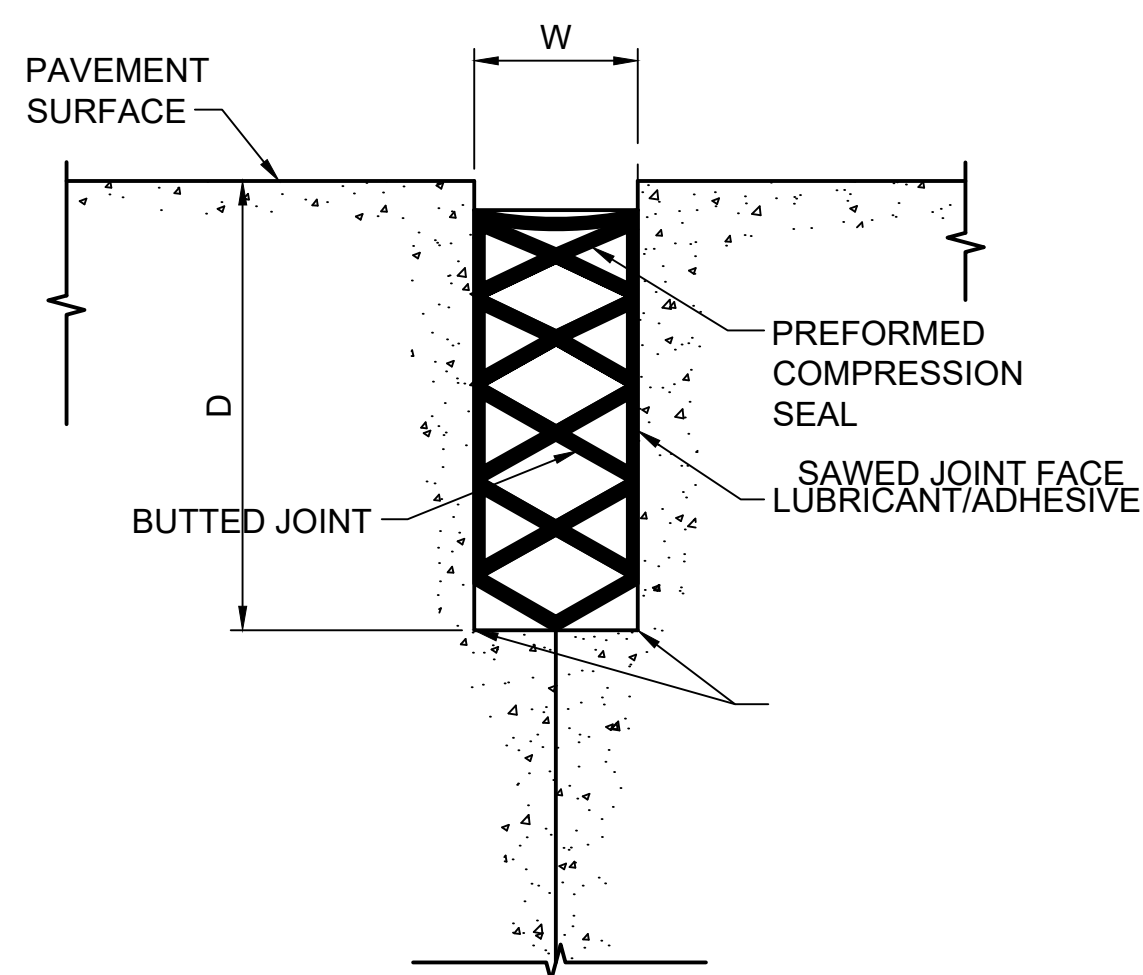
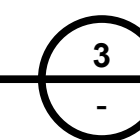
**TYPE H - DUMMY
CONTRACTION JOINT**

NOT TO SCALE



**POSITION OF DOWELS
AT EDGE JOINT**

NOT TO SCALE

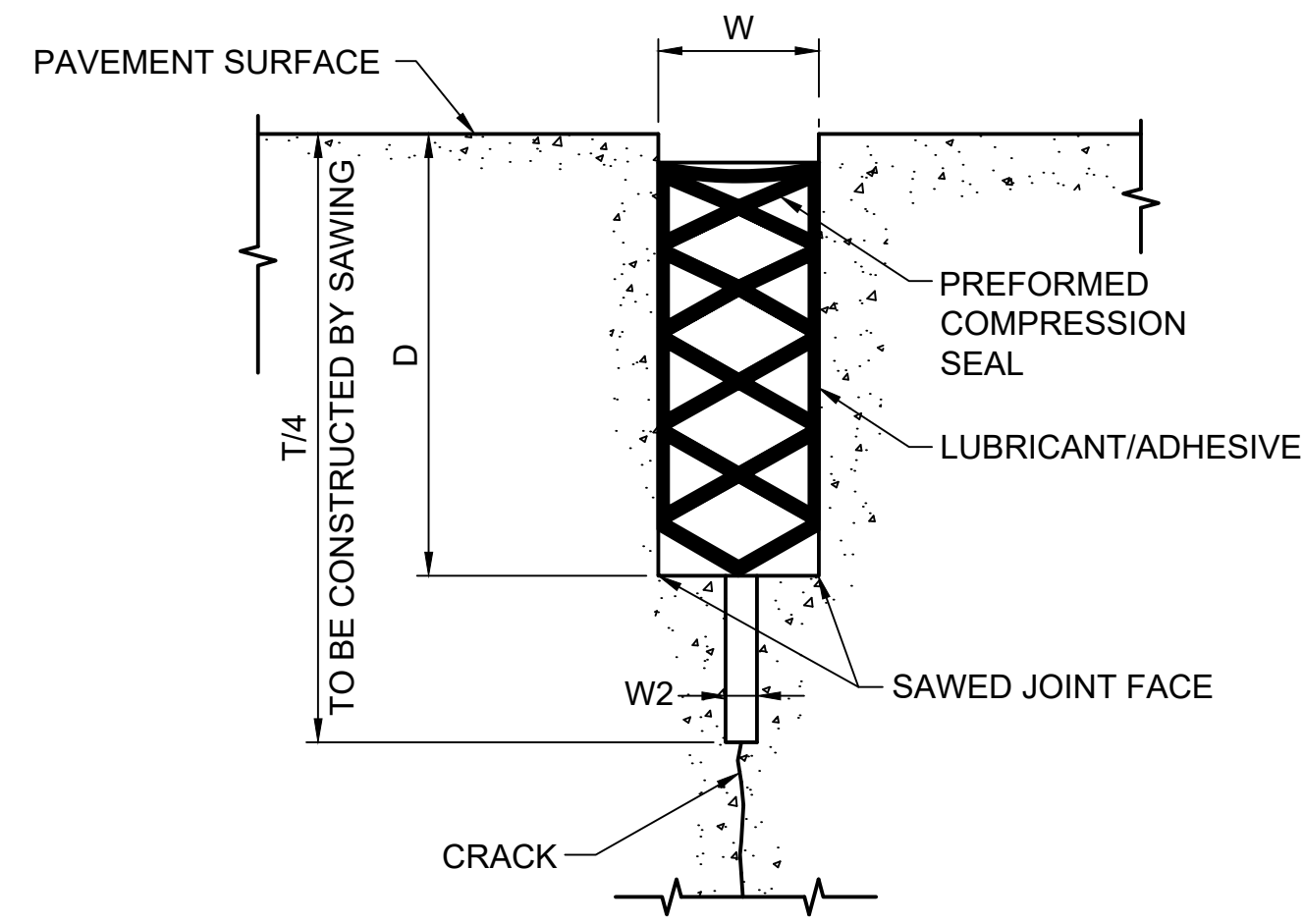
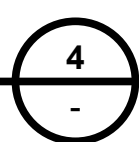


NOTES:

1. DEPTH (D) & WIDTH (W) : AS RECOMMENDED BY MANUFACTURER PER TYPE OF SEAL BEING USED. (DEPTH NOT LESS THAN 1.5 INCHES)
2. TOP OF PREFORMED SEAL WILL BE 1/8 - 1/4 INCH BELOW PAVEMENT SURFACE.
3. COMPRESSION SEAL MUST BE IN COMPRESSION AT ALL TIMES.
4. COMPRESSION SEALS SHALL BE JET FUEL AND HEAT BLAST RESISTANT.

CONSTRUCTION JOINT SEALING

NOT TO SCALE

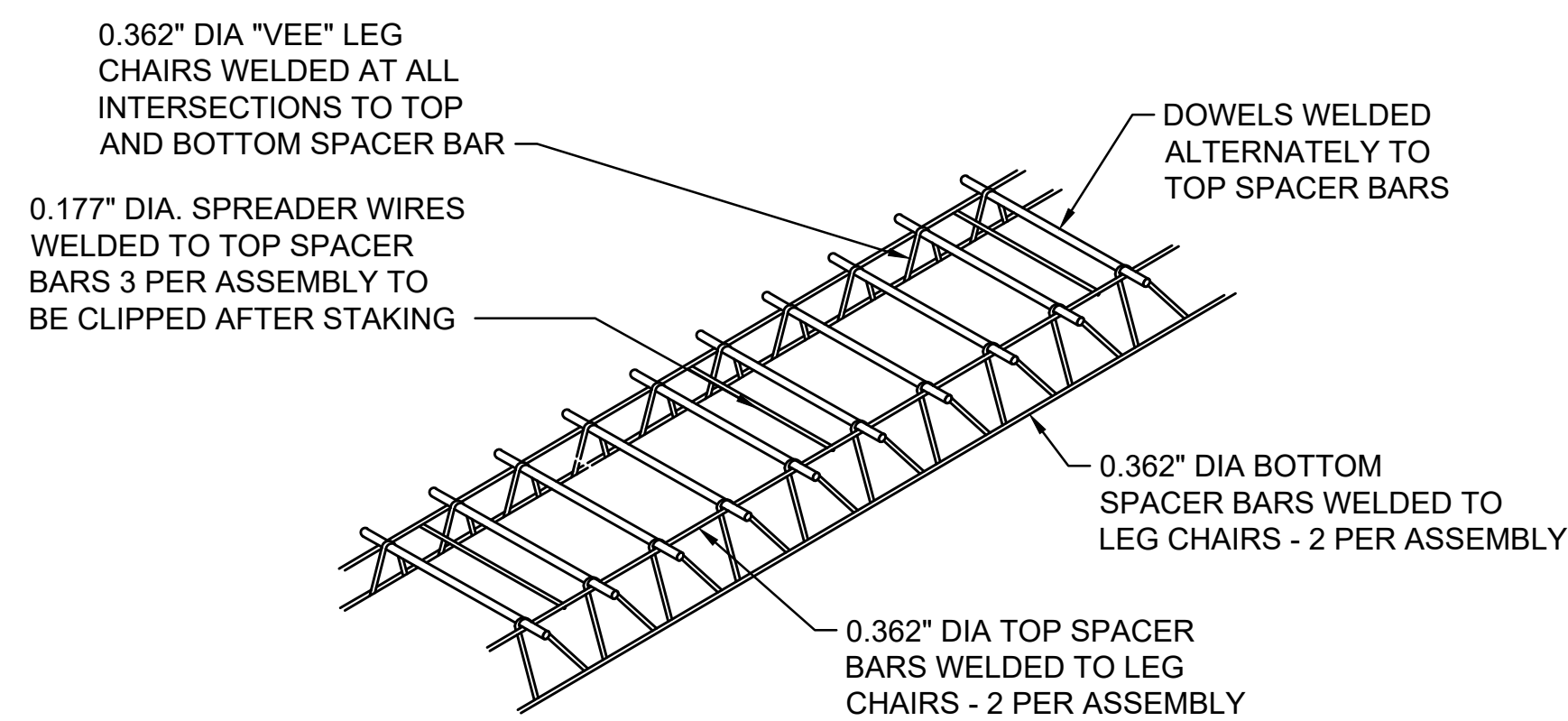
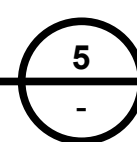


NOTES:

1. DEPTH (D), WIDTH (W) (W2) : AS RECOMMENDED BY MANUFACTURER PER TYPE OF SEAL BEING USED. (DEPTH NOT LESS THAN 1.5 INCHES)
2. TOP OF PREFORMED SEAL WILL BE 1/8 - 1/4 INCH BELOW PAVEMENT SURFACE.
3. COMPRESSION SEAL MUST BE IN COMPRESSION AT ALL TIMES.
4. COMPRESSION SEALS SHALL BE JET FUEL AND HEAT BLAST RESISTANT.

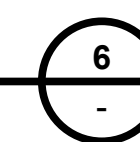
CONTRACTION JOINT SEALING

NOT TO SCALE



DOWEL BAR ASSEMBLY

NOT TO SCALE



Scale For Microfinishing
Millimeters

Inches

no.	date	by	ckd	description
0	06/12/20	SMC	KNW	ISSUED FOR BID



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WINDSOR LOCKS, CT

AASF AIRCRAFT APRON REPAIR - PHASE 1

SITE DETAILS

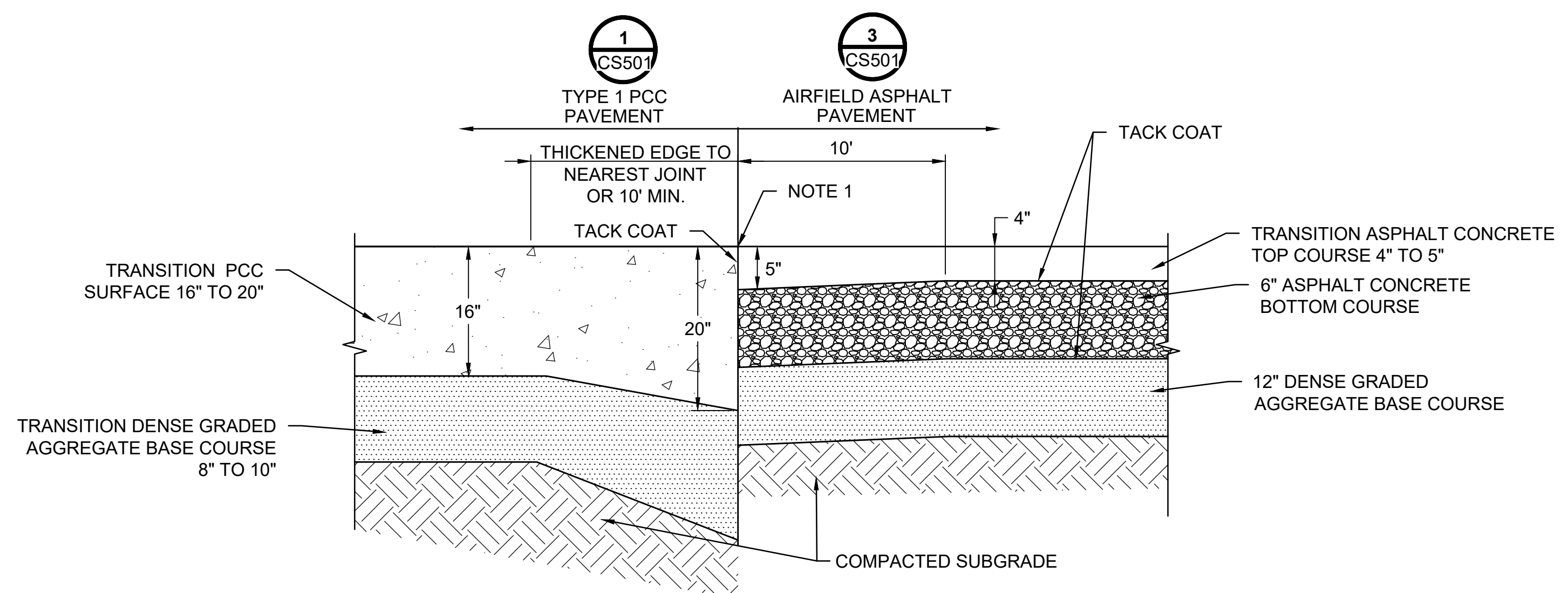
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sheet	of	#	sheets
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no.	date	by	ckd	description
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Scale For Microfinishing

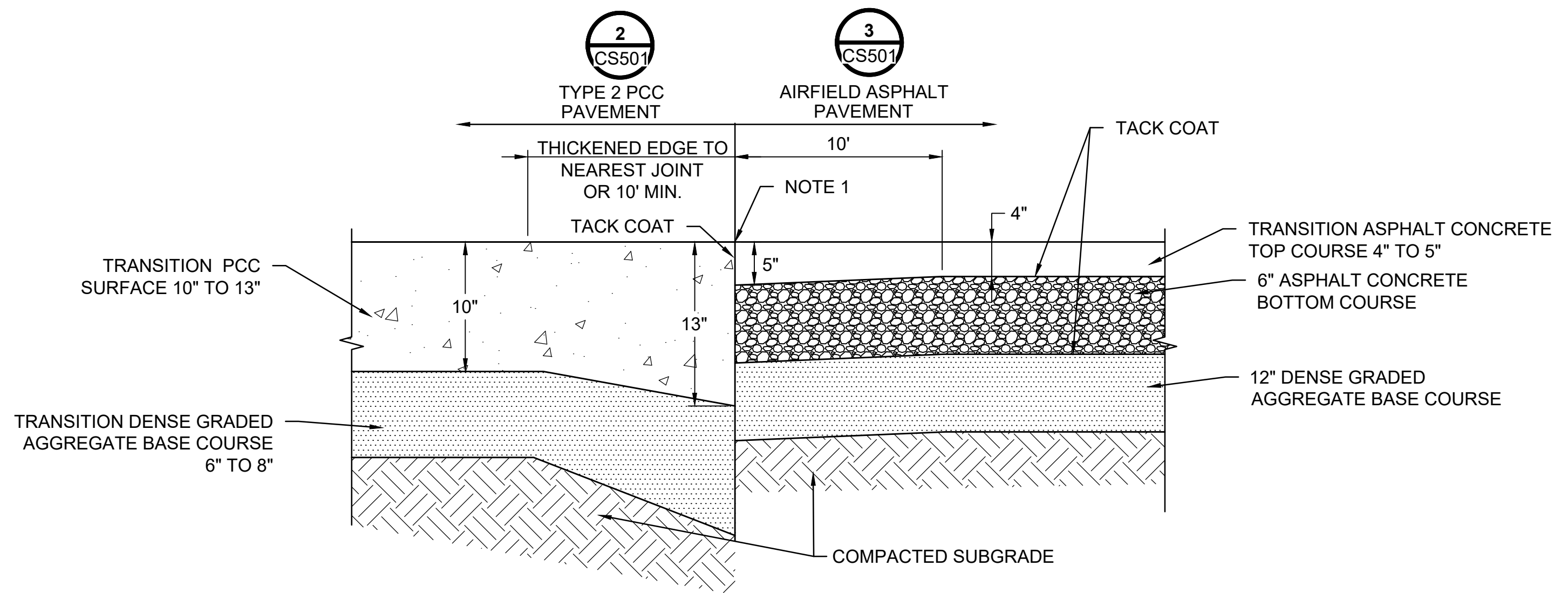
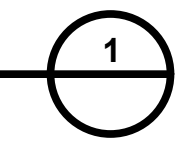
Inches

A
B
C
D
E
F
G
H
I



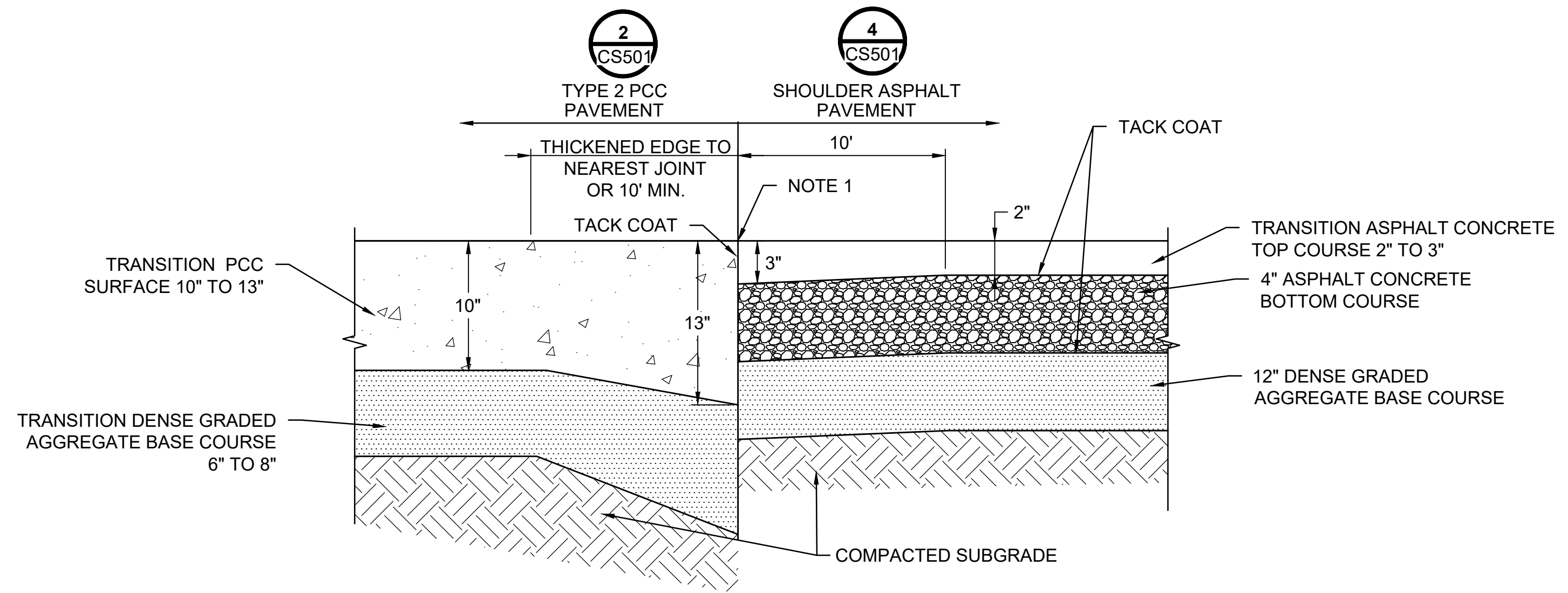
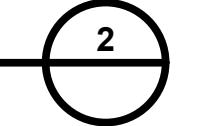
NOTES:
1. PROVIDE NUVO 3405 JOINT SEALANT OR APPROVED EQUAL

TYPE T - THICKENED EDGE JOINT AT TYPE 1 PCC TO APRON ASPHALT
NOT TO SCALE



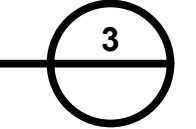
NOTES:
1. PROVIDE NUVO 3405 JOINT SEALANT OR APPROVED EQUAL

TYPE T1 - THICKENED EDGE JOINT AT TYPE 2 PCC TO APRON ASPHALT
NOT TO SCALE



NOTES:
1. PROVIDE NUVO 3405 JOINT SEALANT OR APPROVED EQUAL

TYPE T2 - THICKENED EDGE JOINT AT TYPE 2 PCC TO SHOULDER ASPHALT
NOT TO SCALE



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MORRISTOWN, NJ 07960
973-884-8701
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LICENSEE NO. 000165

date	DECEMBER 28, 2017	detailed	S. CATONE
designed	L. GUERIN	checked	K. WARRENDER



CONNECTICUT ARMY NATIONAL GUARD
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT

AASF AIRCRAFT APRON REPAIR - PHASE 1

SITE DETAILS

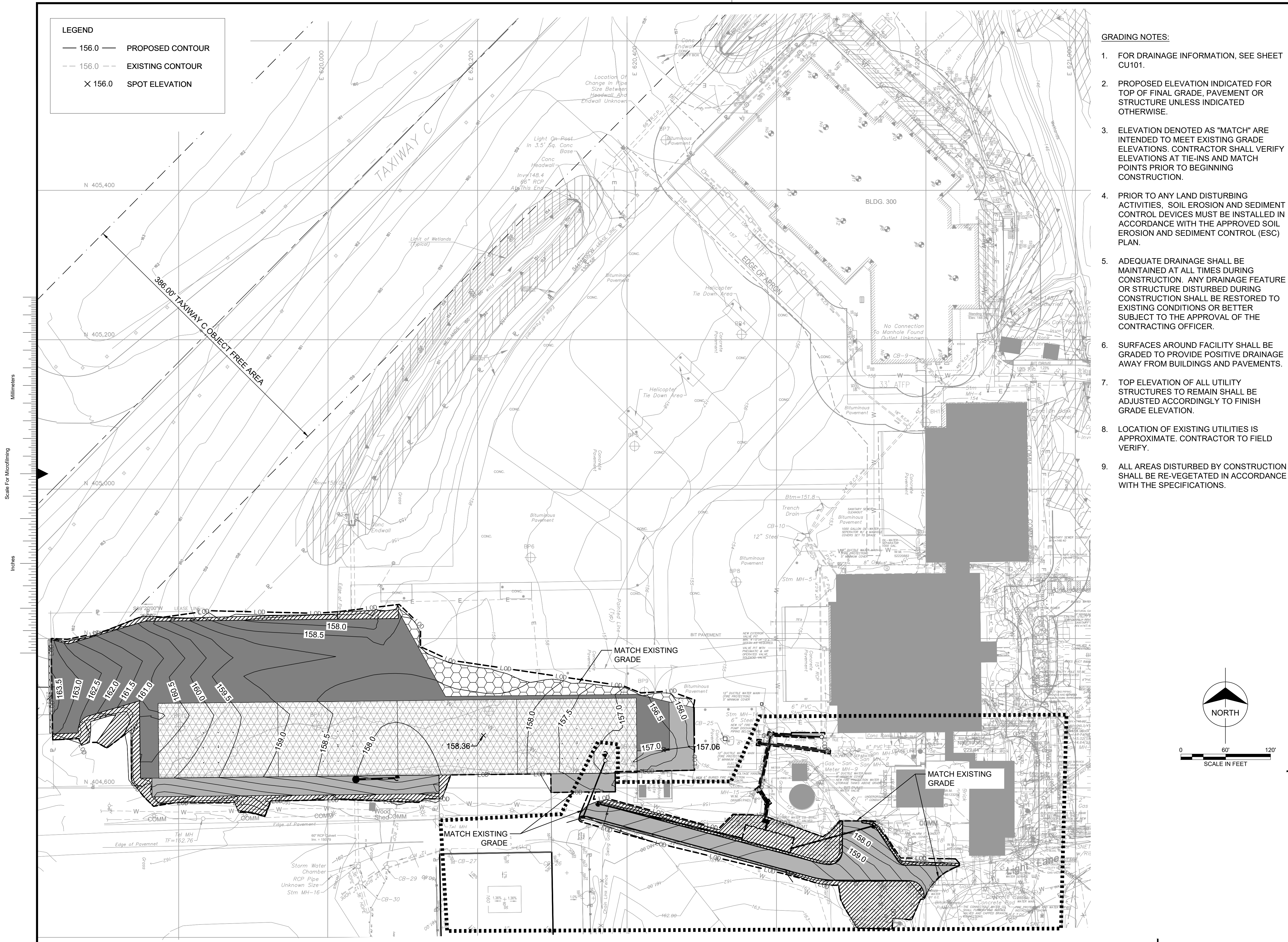
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drawing	CS506	rev.	0
sheet	of	#	sheets
file 102422-CS501-P1.DWG			

LEGEND

- 156.0 — PROPOSED CONTOUR
- - - 156.0 - - - EXISTING CONTOUR
- X 156.0 SPOT ELEVATION

- GRADING NOTES:**
- FOR DRAINAGE INFORMATION, SEE SHEET CU101.
 - PROPOSED ELEVATION INDICATED FOR TOP OF FINAL GRADE, PAVEMENT OR STRUCTURE UNLESS INDICATED OTHERWISE.
 - ELEVATION DENOTED AS "MATCH" ARE INTENDED TO MEET EXISTING GRADE ELEVATIONS. CONTRACTOR SHALL VERIFY ELEVATIONS AT TIE-INS AND MATCH POINTS PRIOR TO BEGINNING CONSTRUCTION.
 - PRIOR TO ANY LAND DISTURBING ACTIVITIES, SOIL EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED IN ACCORDANCE WITH THE APPROVED SOIL EROSION AND SEDIMENT CONTROL (ESC) PLAN.
 - ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. ANY DRAINAGE FEATURE OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER SUBJECT TO THE APPROVAL OF THE CONTRACTING OFFICER.
 - SURFACES AROUND FACILITY SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND PAVEMENTS.
 - TOP ELEVATION OF ALL UTILITY STRUCTURES TO REMAIN SHALL BE ADJUSTED ACCORDINGLY TO FINISH GRADE ELEVATION.
 - LOCATION OF EXISTING UTILITIES IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY.
 - ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RE-VEGETATED IN ACCORDANCE WITH THE SPECIFICATIONS.


no.	date	by	ckd	description
0	06/12/20	SMC	KNW	ISSUED FOR BID



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MCDONNELL**

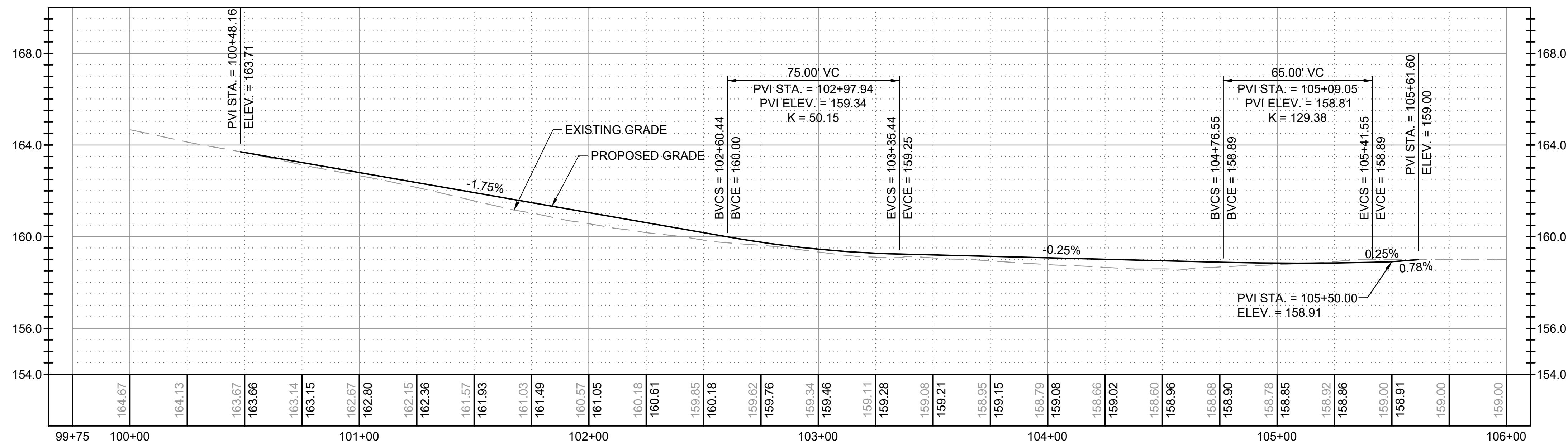
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date	NOVEMBER 11, 2017	detailed	S. CATONE
designed	L. GUERIN	checked	K. WARRENDER

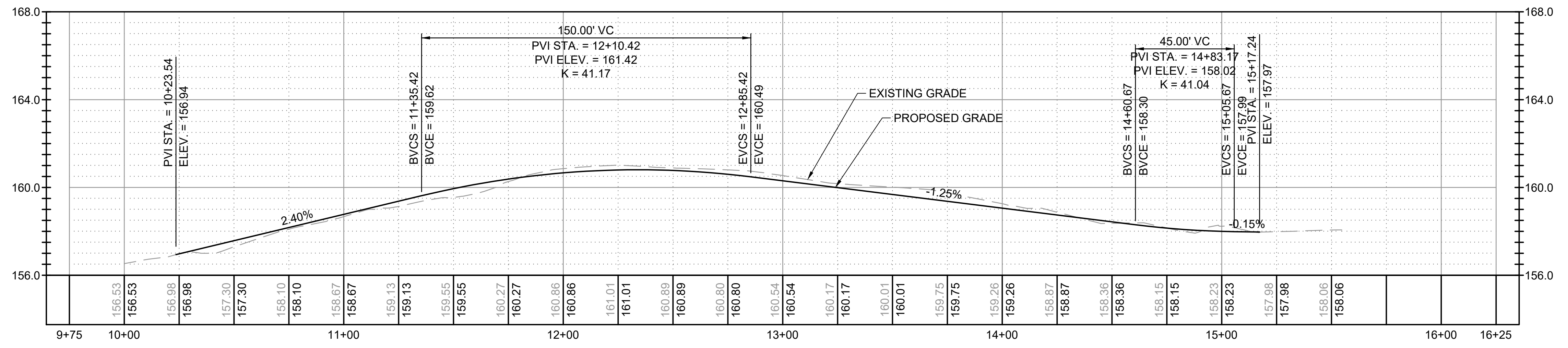


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AASF AIRCRAFT APRON REPAIR - PHASE 1	
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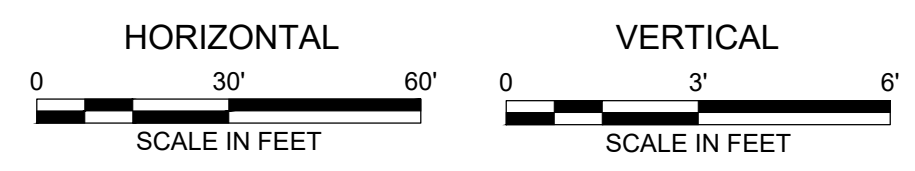


TAXIWAY G PROFILE 1



ACCESS ROAD PROFILE 2

Scale For Microfinishing
Millimeters
Inches



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WINDSOR LOCKS, CT

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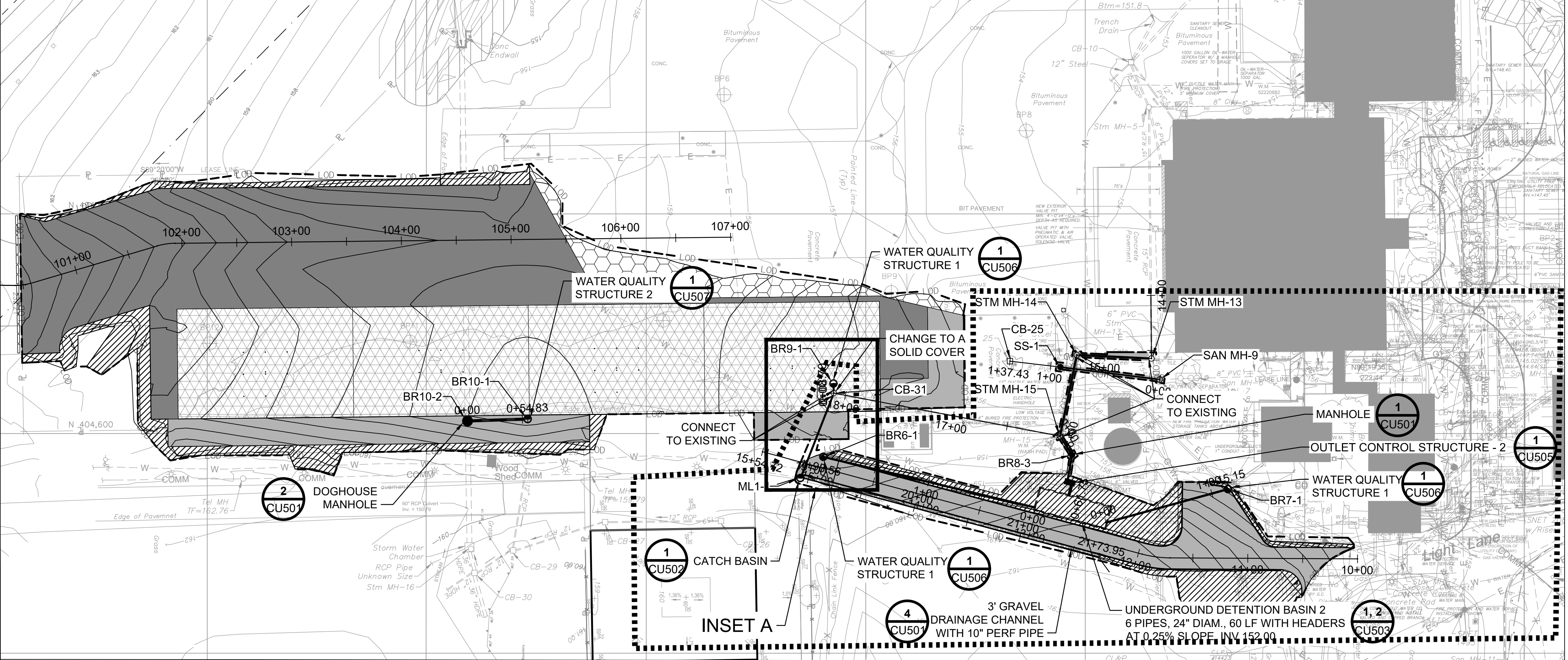
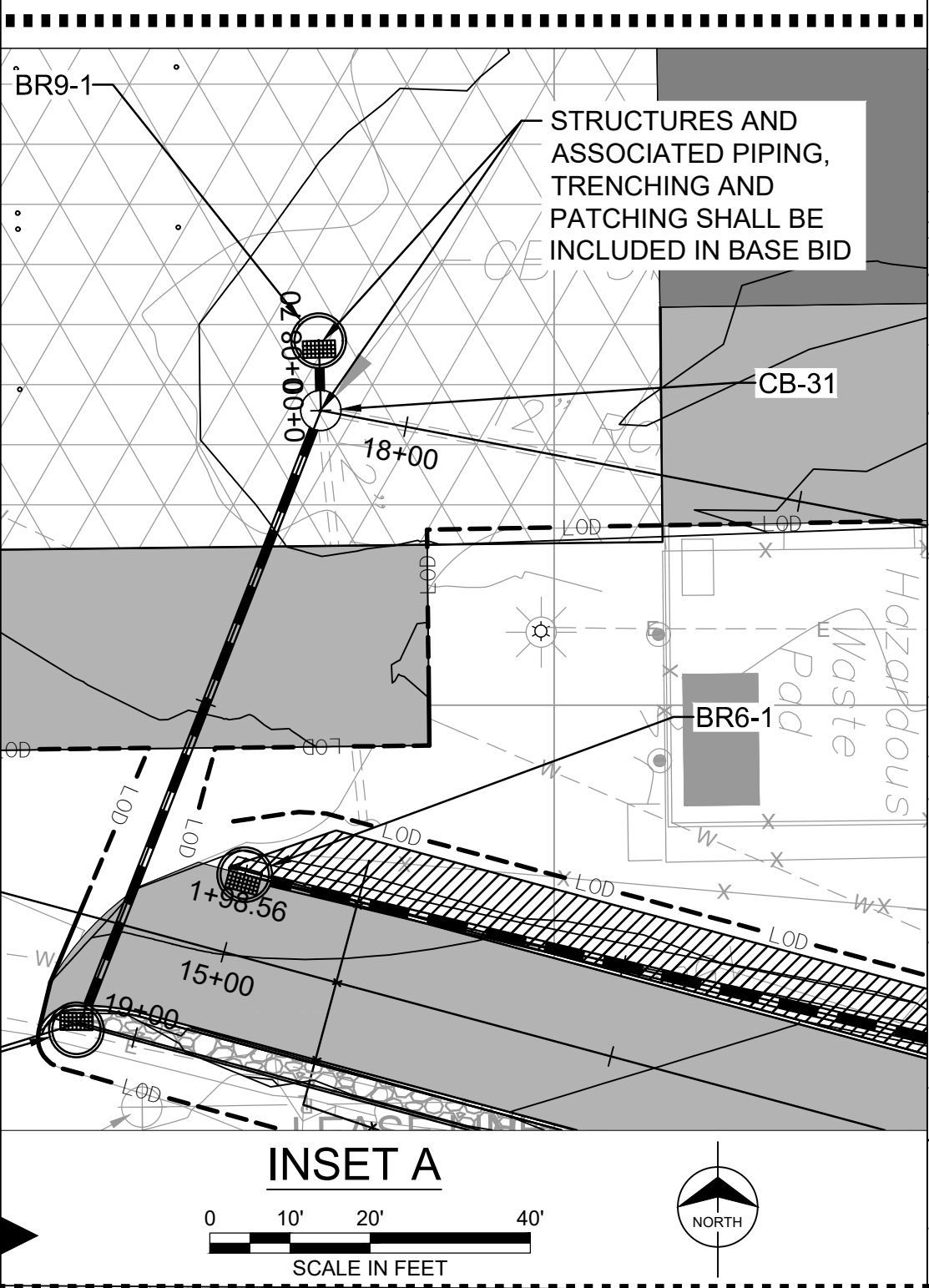
TAXILANE & ROAD PROFILES

BMD project 102422	ARNG project 20MIL21201
drawing	rev.

CG401 - 0

sheet	of	#	sheets
file	102422-CG401-P1.DWG		

- LEGEND**
- TOP GRATE WQ STRUCTURE OR CATCH BASIN (AS INDICATED ON PLANS)
 - OUTLET CONTROL STRUCTURE
 - STORM MANHOLE
 - STORM PIPE
 - ▭ UNDERGROUND INFILTRATION BASIN



- UTILITY NOTES:**
- ALL PIPE SIZES ARE IN INCHES UNLESS INDICATED OTHERWISE.
 - THE MINIMUM DEPTH OF COVER FOR UTILITIES SHALL BE 36 INCHES UNLESS INDICATED OTHERWISE.
 - ALL UNDERGROUND UTILITIES ARE SUBJECT TO ACCEPTANCE TESTING AND INSPECTION METHODS DETAILED IN THE SPECIFICATIONS, WHICH MAY INCLUDE VIDEO CAMERA INSPECTION.
 - ANY CHANGES TO PROPOSED UTILITY DESIGN SHALL BE APPROVED BY ENGINEER AND THE CONTRACTING OFFICER.
 - UNDERGROUND INFILTRATION BASIN 1 SHALL HAVE MINIMUM STORAGE OF 19,530 CF. UNDERGROUND INFILTRATION BASIN 2 SHALL HAVE MINIMUM STORAGE OF 2,500 CF.
 - SEE SHEETS CU506, CU507 AND CU508 FOR WATER QUALITY DEVICE SIZING VOLUMES.

- UTILITY STRUCTURE NOTES:**
- ALL UTILITY STRUCTURES ARE TO BE AIRCRAFT RATED UNLESS INDICATED OTHERWISE.
 - IF A MANHOLE IS LOCATED IN PAVEMENT AREAS, RIM ELEVATION SHALL BE FLUSH WITH FINAL GRADE. IF A MANHOLE IS LOCATED OUTSIDE OF PAVEMENT AREAS, RIM ELEVATION SHALL BE 6.00" MINIMUM ABOVE ADJACENT FINISH GRADE.
 - COVERS AND CASTINGS OF MANHOLES AND STRUCTURES SHALL BE STAMPED PER THE APPROPRIATE UTILITY TYPE OR PER THE LOCAL STANDARDS, AND SHALL BE STAMPED PER THE ORIGIN OF MANUFACTURE.
 - COVERS AND CASTINGS SHALL BE TAMPER-PROOF FOR STRUCTURES LOCATED IN PEDESTRIAN AREAS, EASEMENT AREAS, AND AREAS WITH SPECIAL SECURITY RESTRICTIONS.
 - COVERS THAT MAY BE SUBMERGED SHALL BE WATERTIGHT.
 - ANY LIFT LOOPS FOR UTILITY STRUCTURES SHALL BE GROUTED FLUSH AFTER INSTALLATION.
 - PIPE MAY EXTEND 2.00" MAXIMUM BEYOND INTERIOR MANHOLE WALL.

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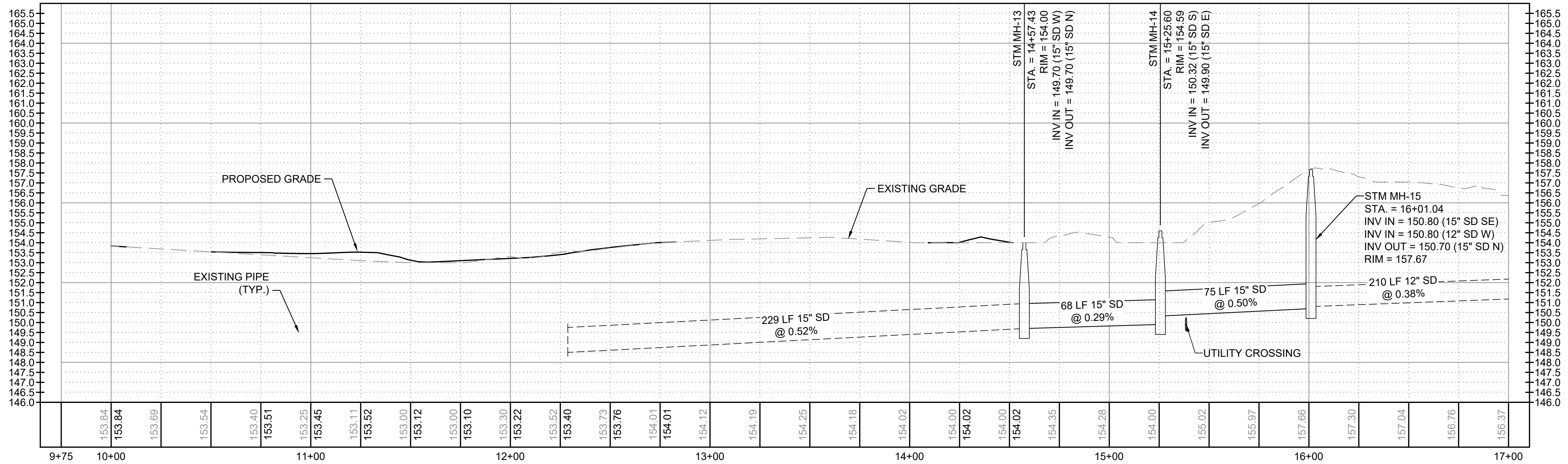
date	NOVEMBER 11, 2017	detailed	S. CATONE
designed	L. GUERIN	checked	K. WARRENDER

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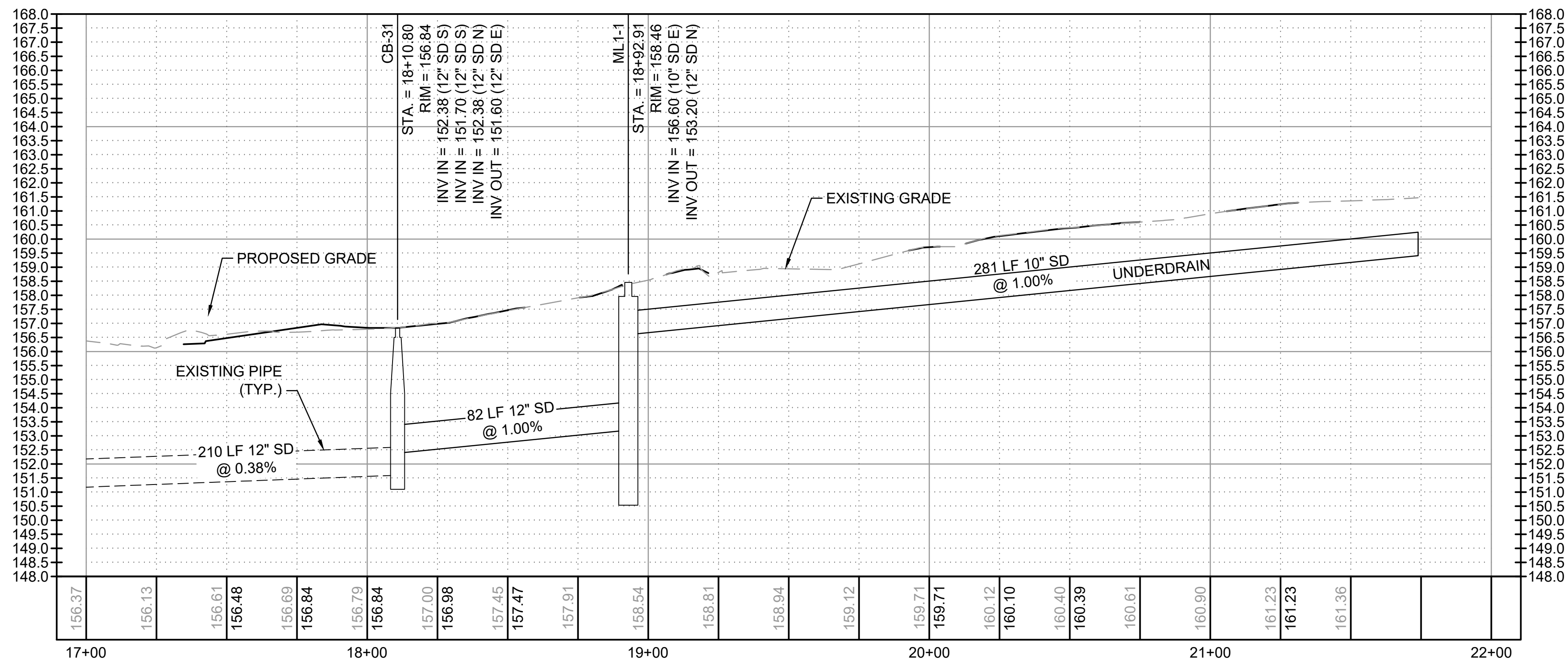
AASF AIRCRAFT APRON REPAIR - PHASE 1

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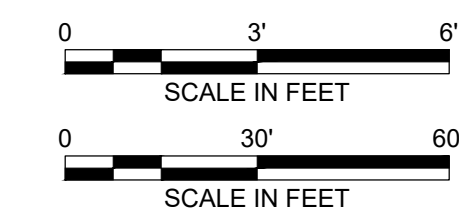
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STORMWATER PROFILE
STM-7A TO STM MH-15



STORMWATER PROFILE
CB-31 TO ML1-1



NOTE:
UTILITY PROFILES ARE FOR REFERENCE PURPOSES ONLY. CONSTRUCTION DETAILS, UTILITY LAYOUT PLANS, AND PROJECT SPECIFICATIONS SHALL GOVERN. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING MINIMUM COVER AND THE REQUIRED UTILITY CLEARANCES. EXISTING UTILITIES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

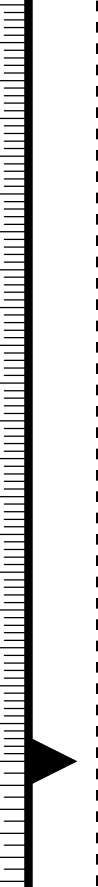
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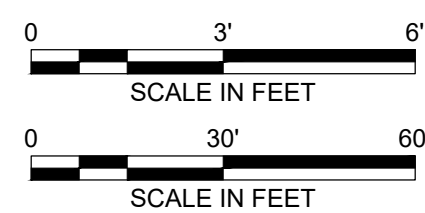
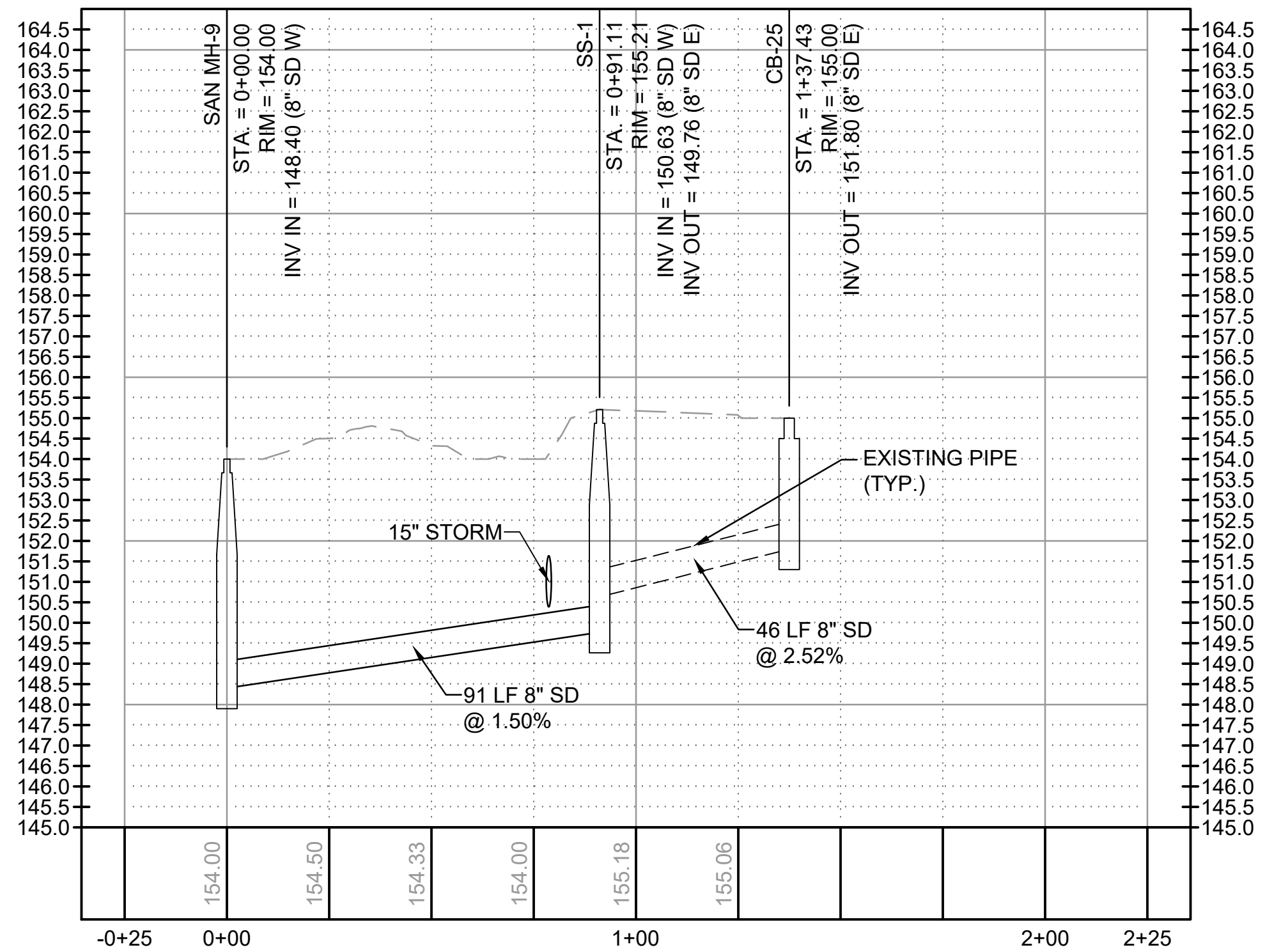
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BRADLEY INTERNATIONAL AIRPORT
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Scale For Microfinishing
Scale For Macrofinishing



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STORMWATER PROFILE
STM MH-9 TO CB-25

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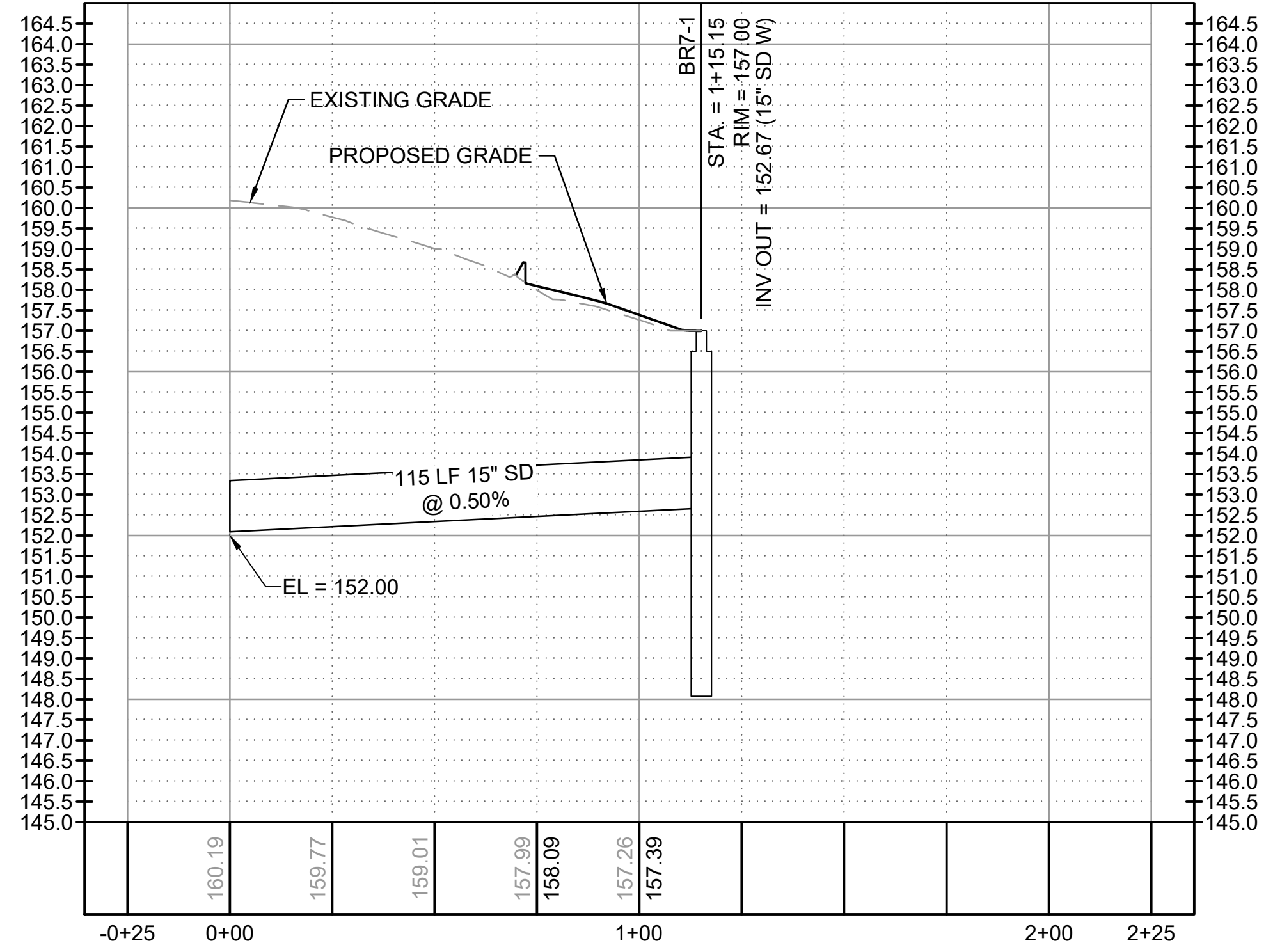
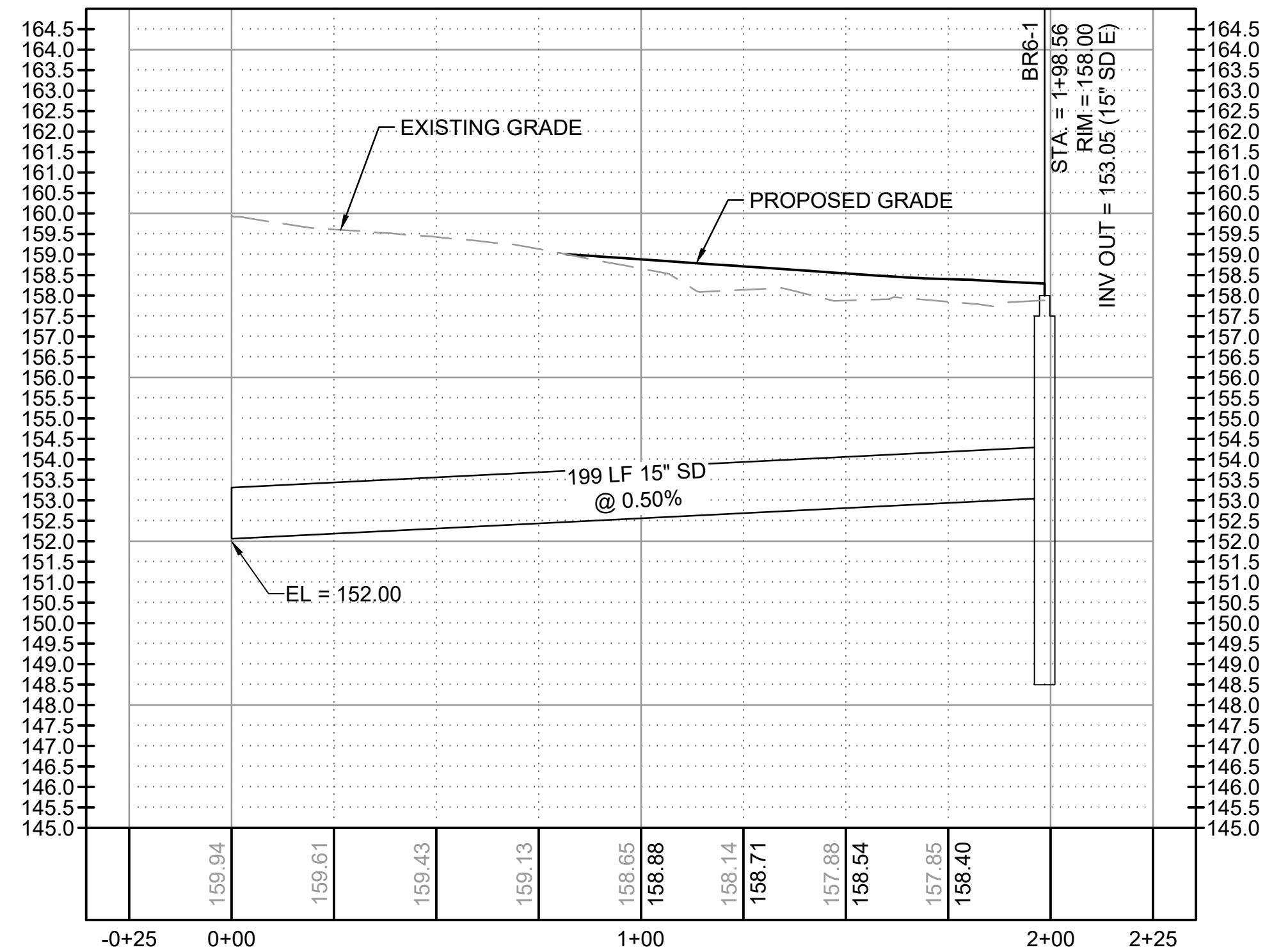
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WINDSOR LOCKS, CT

AASF AIRCRAFT APRON REPAIR - PHASE 1

UTILITY PROFILES

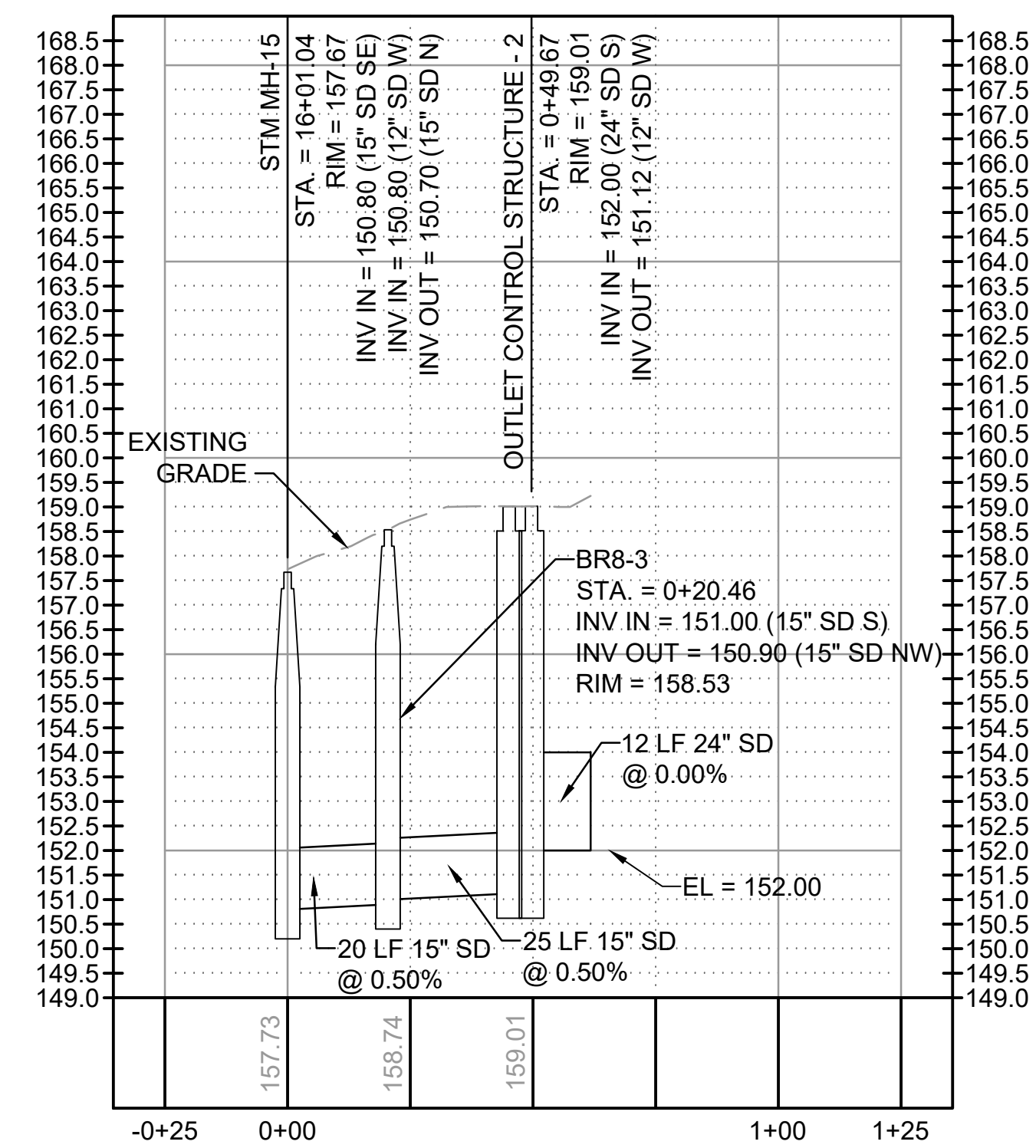
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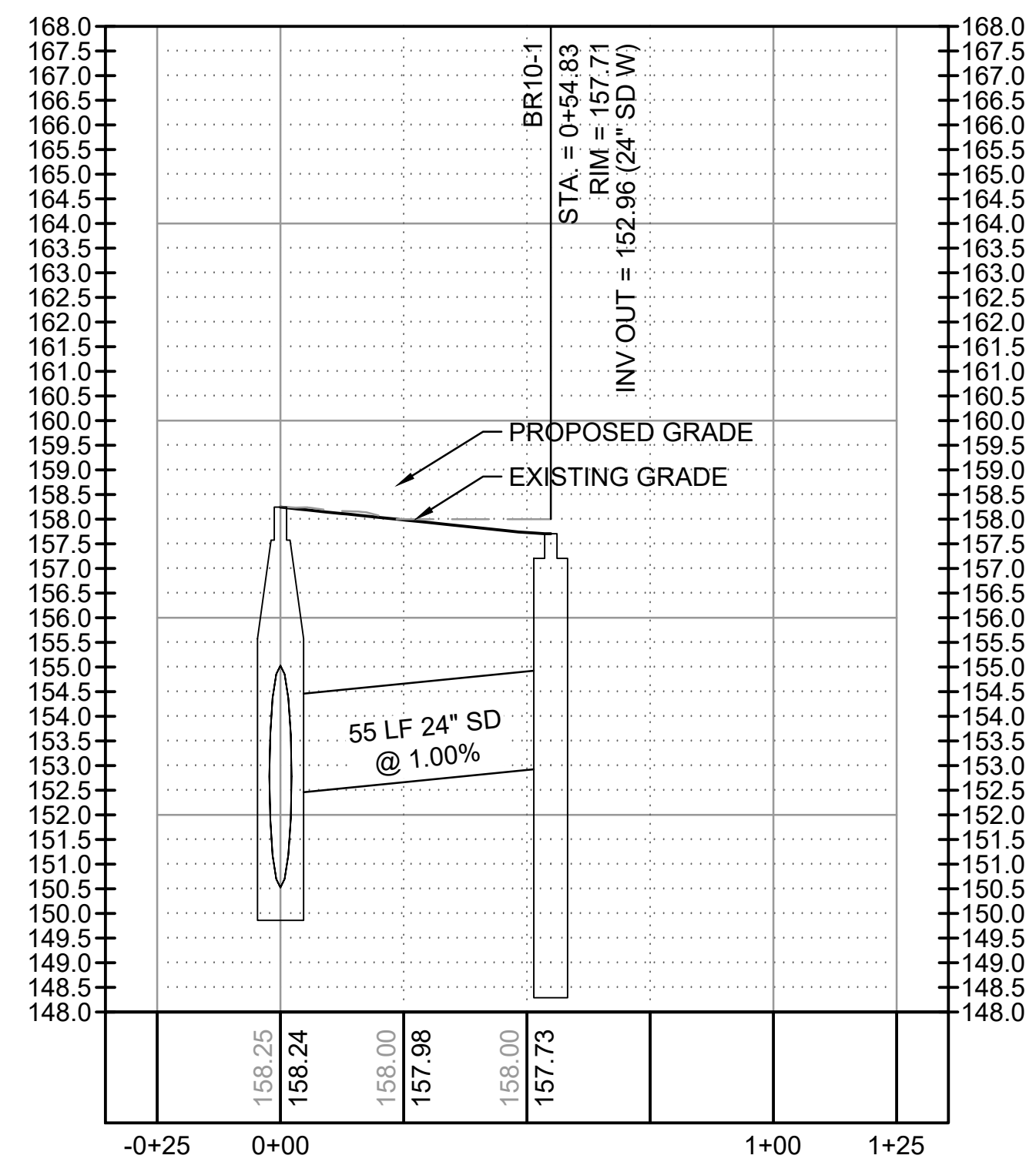


STORMWATER PROFILE BR6-1

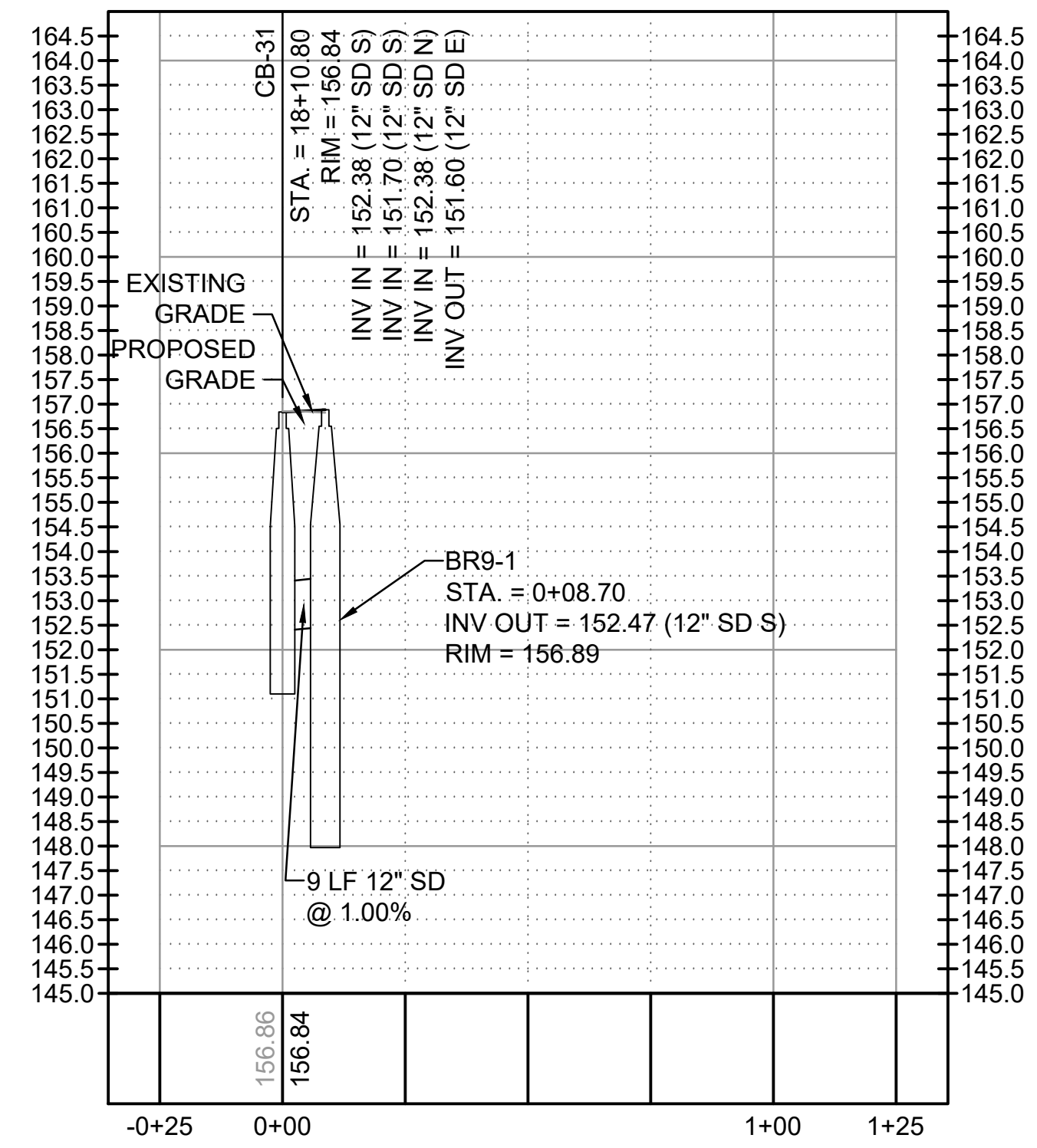
STORMWATER PROFILE BR7-1



STORMWATER PROFILE STM MH-15 TO OUTLET CONTROL STRUCTURE - 2

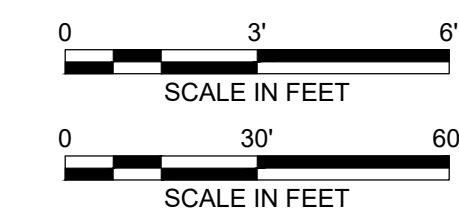


STORMWATER PROFILE BR10-1



STORMWATER PROFILE CB-31 TO BR9-1

NOTE:
UTILITY PROFILES ARE FOR REFERENCE PURPOSES ONLY. CONSTRUCTION DETAILS, UTILITY LAYOUT PLANS, AND PROJECT SPECIFICATIONS SHALL GOVERN. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING MINIMUM COVER AND THE REQUIRED UTILITY CLEARANCES. EXISTING UTILITIES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION.



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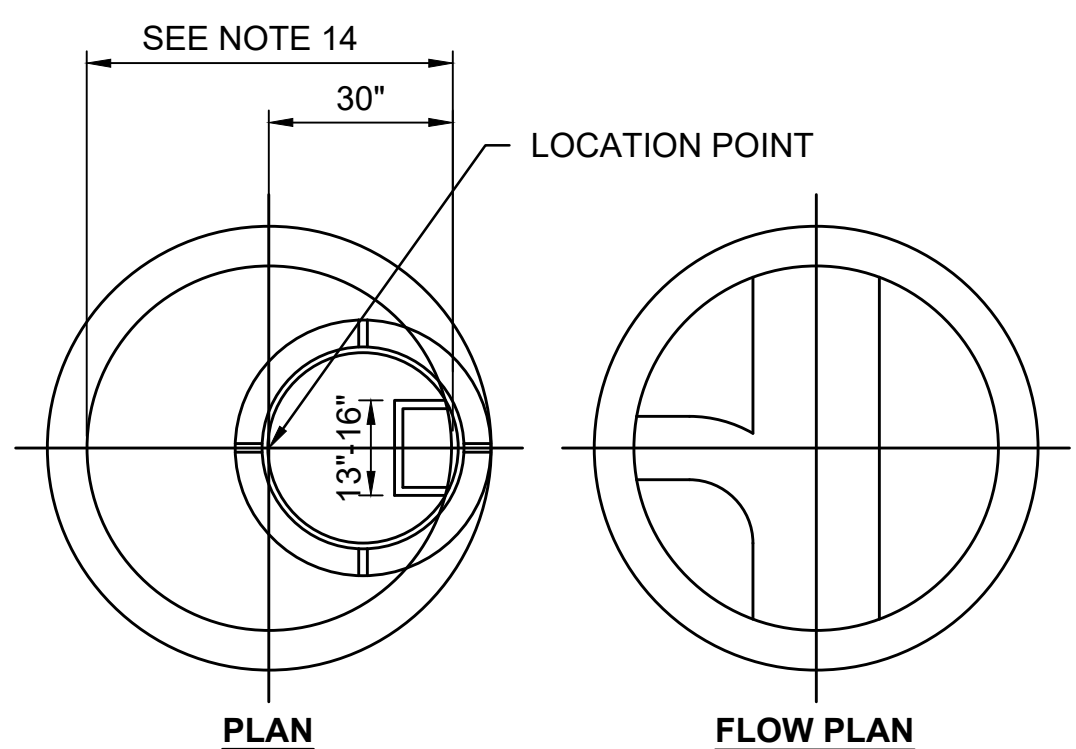
date	NOVEMBER 11, 2017	detailed	S. CATONE
designed	L. GUERIN	checked	K. WARRENDER

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WINDSOR LOCKS, CT

AASF AIRCRAFT APRON REPAIR - PHASE 1

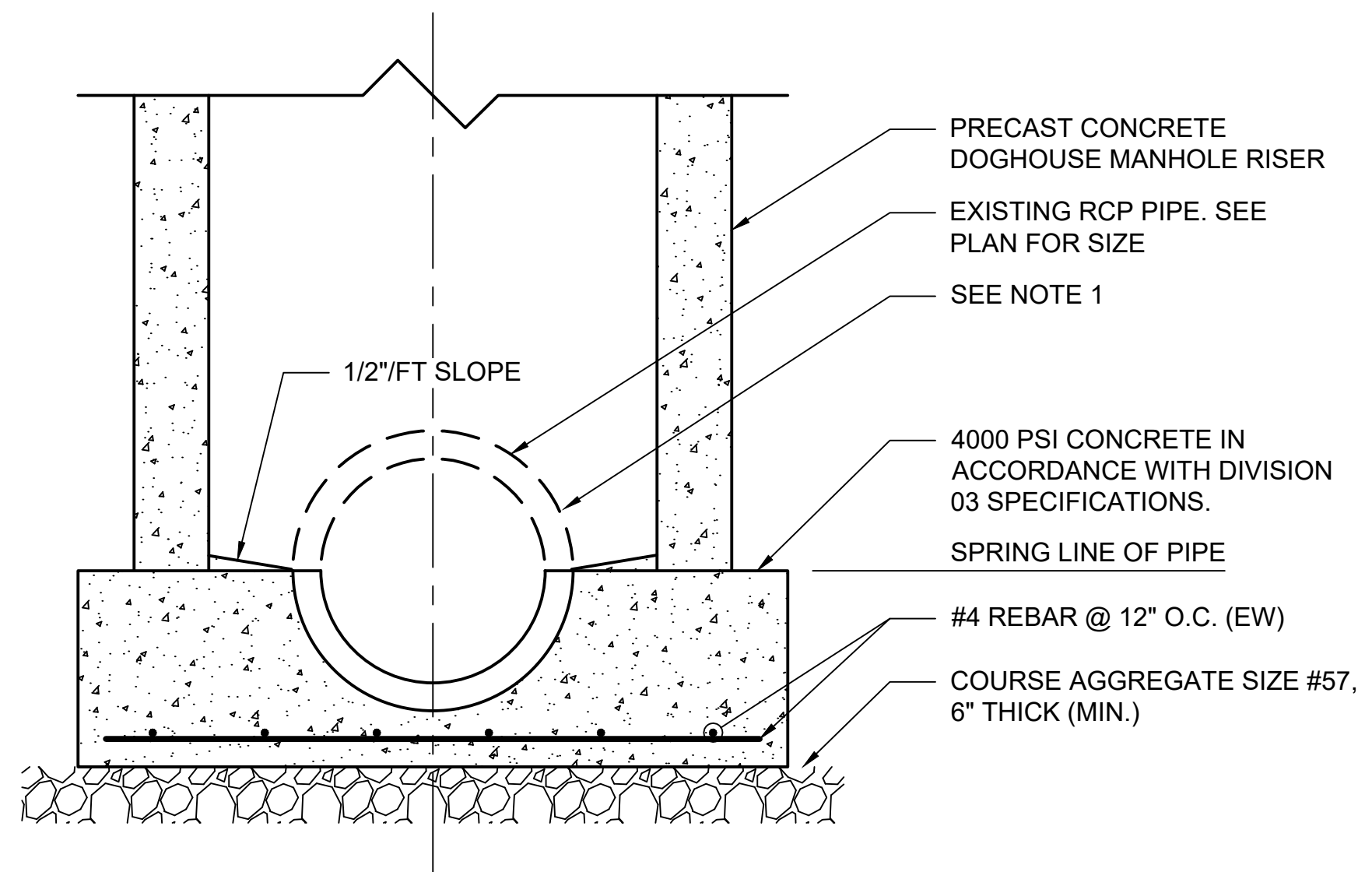
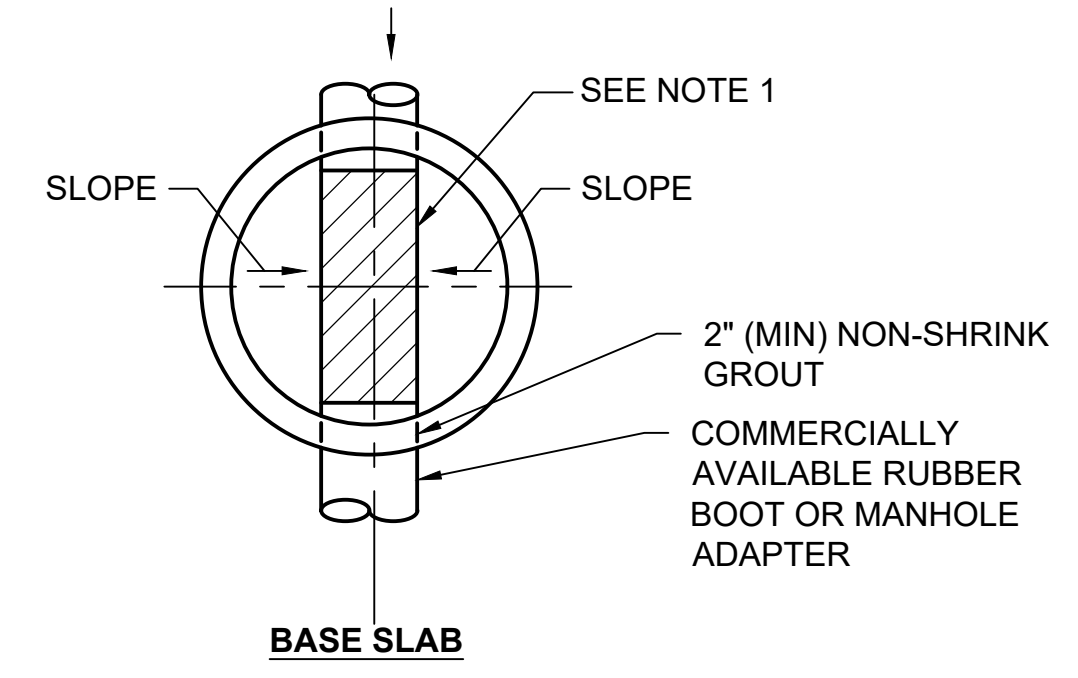
UTILITY PROFILES

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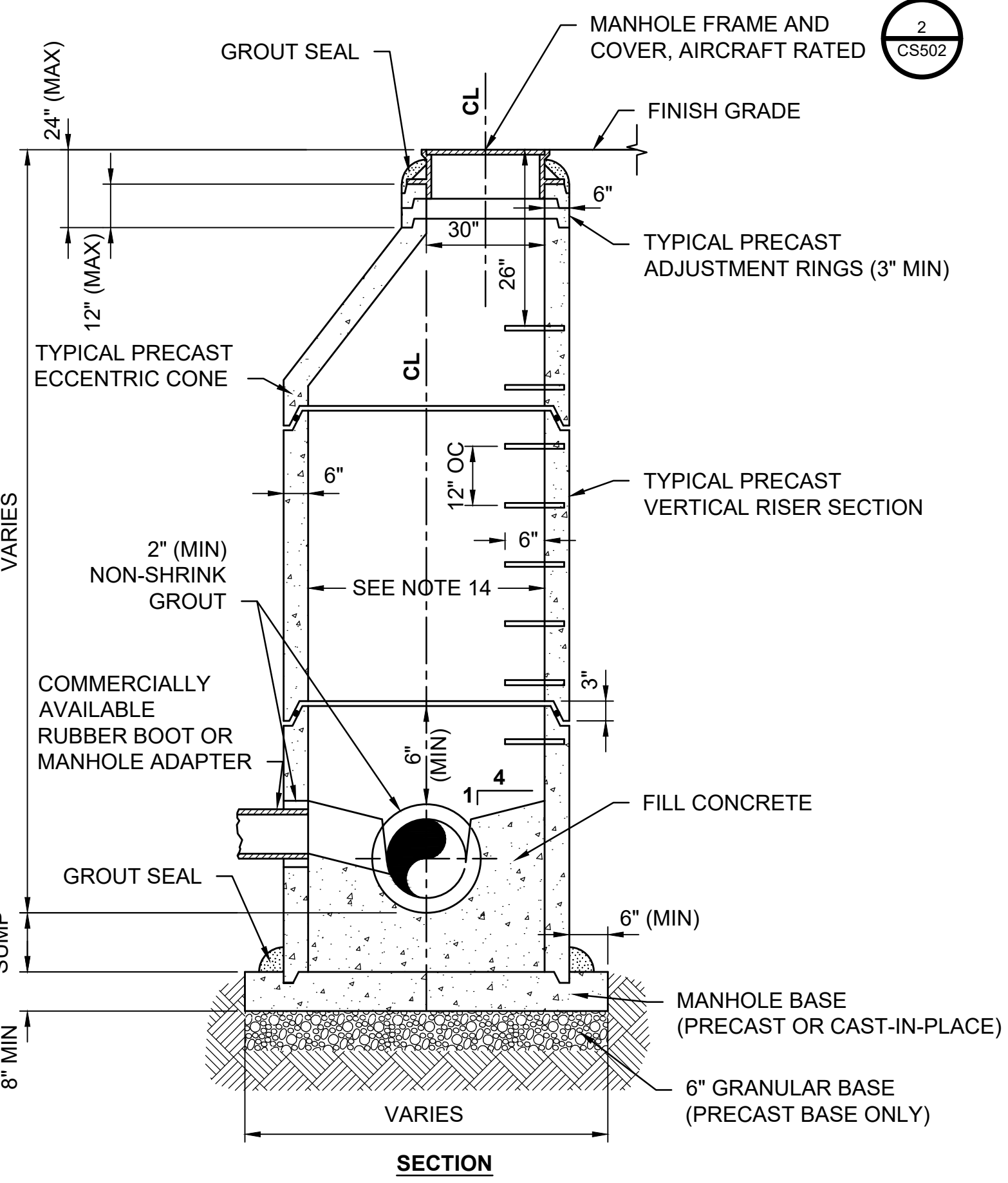
MANHOLE NOTES:

1. ALL PRECAST MANHOLE SECTIONS SHALL CONFORM TO ASTM C478.
2. ALL UTILITY STRUCTURES ARE TO BE AIRCRAFT RATED UNLESS INDICATED OTHERWISE.
3. IF A MANHOLE IS LOCATED IN PAVEMENT AREAS, RIM ELEVATION SHALL BE FLUSH WITH FINAL GRADE. IF A MANHOLE IS LOCATED OUTSIDE OF PAVEMENT AREAS, RIM ELEVATION SHALL BE 6.00" MINIMUM ABOVE ADJACENT FINISH GRADE.
4. COVERS AND CASTINGS OF MANHOLES AND STRUCTURES SHALL BE STAMPED PER THE APPROPRIATE UTILITY TYPE OR PER THE LOCAL STANDARDS, AND SHALL BE STAMPED PER THE ORIGIN OF MANUFACTURE.
5. COVERS AND CASTINGS SHALL BE TAMPER-PROOF FOR STRUCTURES LOCATED IN PEDESTRIAN AREAS, EASEMENT AREAS, AND AREAS WITH SPECIAL SECURITY RESTRICTIONS.
6. COVERS THAT MAY BE SUBMERGED SHALL BE WATERTIGHT.
7. FRAME AND ADJUSTMENT RINGS SHALL BE SEALED WITH NON-SHRINK GROUT, PREFORMED PLASTIC, OR RUBBER RING TO FORM WATERTIGHT SEAL.
8. ALL JOINTS SHALL BE SEALED WITH JOINT COMPOUND OR GROUTED WITH MORTAR.
9. ANY LIFT LOOPS FOR UTILITY STRUCTURES SHALL BE GROUTED FLUSH AFTER INSTALLATION.
10. ALL MANHOLE BASES (PRECAST OR CAST-IN-PLACE) SHALL HAVE #4 @ 12" ON CENTER EACH WAY REINFORCEMENT.
11. ALL REINFORCEMENT SHALL BE PLACED 2" CLEAR OF NEAREST FACE OF CONCRETE UNLESS INDICATED OTHERWISE.
12. PIPE MAY EXTEND 2.00" MAXIMUM BEYOND INTERIOR MANHOLE WALL.
13. MANHOLE STEPS SHALL BE PLACED INTO MANHOLE WALL DURING MANUFACTURE OR MORTARED INTO HOLES AFTER CONCRETE HAS CURED.
14. USE 48" ID MANHOLE FOR 8"-14" OUTLET PIPE.
USE 60" ID MANHOLE FOR 15"-30" OUTLET PIPE.
USE 72" ID MANHOLE FOR 36"-42" OUTLET PIPE.
USE 84" ID MANHOLE FOR 48"-54" OUTLET PIPE.
USE 96" ID MANHOLE FOR 60"-66" OUTLET PIPE.



NOTE:

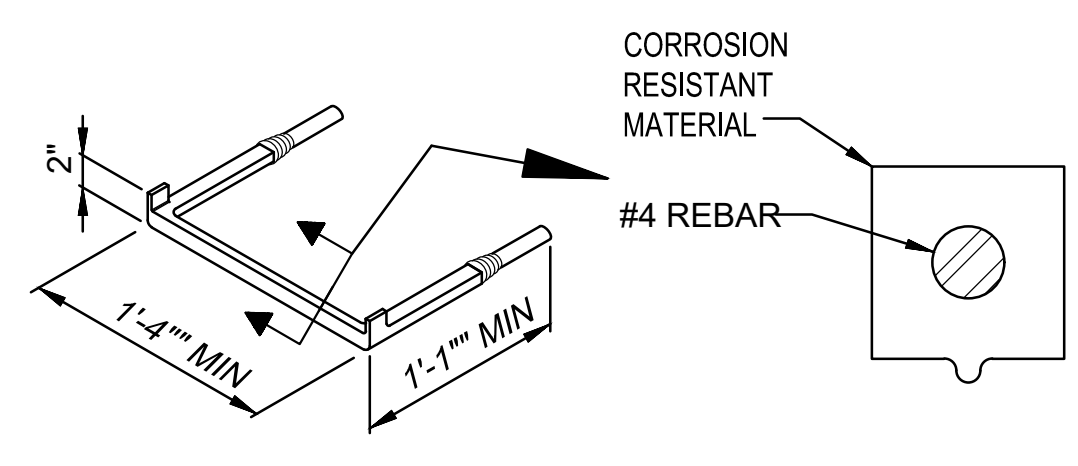
1. CUT AND REMOVE THE TOP HALF OF EXISTING PIPE TO WITHIN 6" OF THE MANHOLE WALLS AFTER THE INVERT AND SHELF HAVE BEEN FORMED, AND THE MANHOLE HAS BEEN FULLY TESTED.
2. OPENINGS IN WALLS FOR PIPE SHALL BE MADE CLEANLY WITHOUT PERCUSSION TO MAXIMUM DIAMETER OF O.D. +3". THE SPACE BETWEEN PIPE AND WALL SHALL THEN BE FILLED WITH GROUT, OR AN APPROVED JOINT INSERT ASSEMBLY.
3. WHEN LIFTING THE PRE-CAST MANHOLE, A BAR SHALL BE PLACED HORIZONTALLY THROUGH THE LIFTING HOLES, PROVIDED AT THE TIME OF MANUFACTURE. THE LIFTING DEVICES SHALL BE PLACED ONLY ON THAT BAR. THE BAR AND HOLES SHALL BE AS APPROVED BY THE ENGINEER. THE BAR HOLES SHALL BE FILLED WITH GROUT AFTER MANHOLE IS IN POSITION.



AIRCRAFT RATED MANHOLE AND COVER DETAIL
NOT TO SCALE

STEP NOTES:

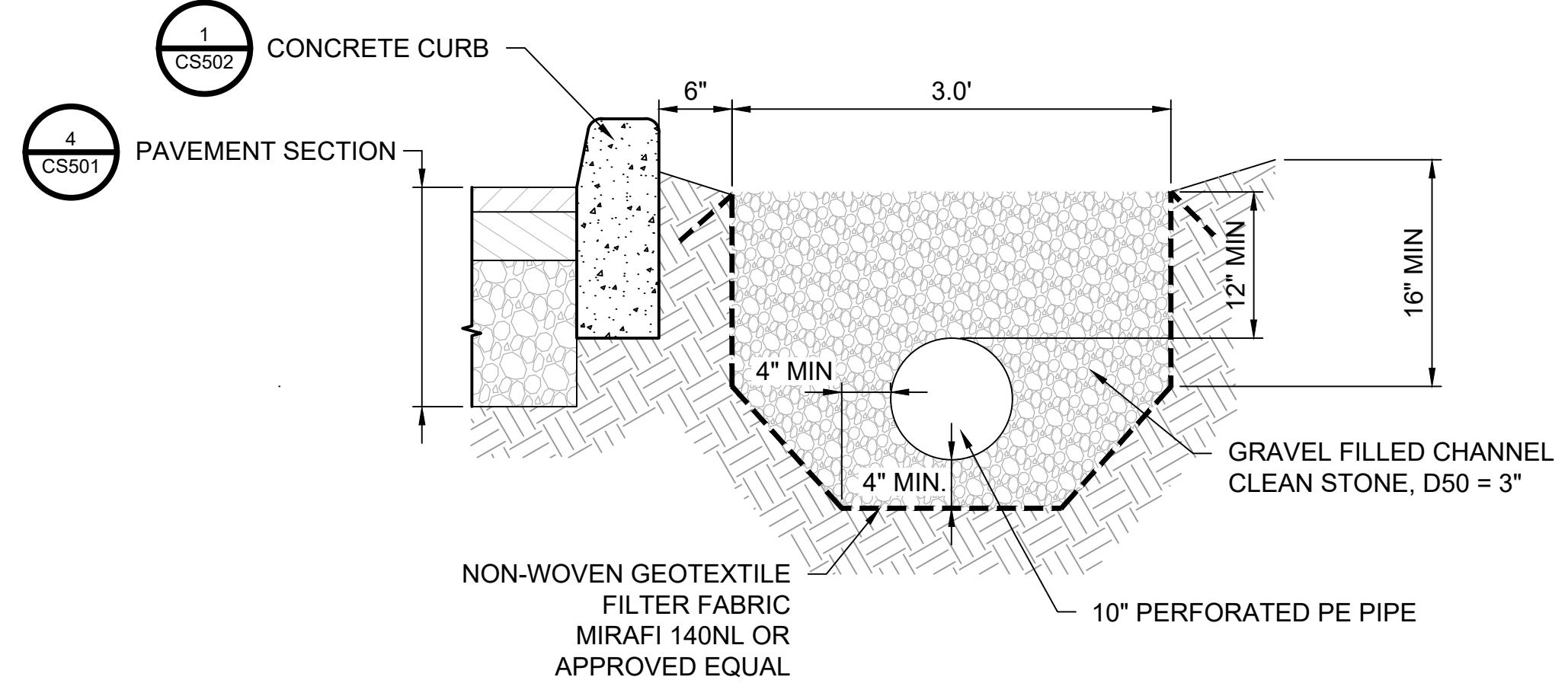
1. MANHOLE STEPS SHALL MEET THE REQUIREMENT OF ASTM C478.
2. STEPS ARE REQUIRED IN ALL STRUCTURES WITH A DEPTH OF 4'-0" OR GREATER UNLESS OTHERWISE NOTED.
3. ALL STEPS SHALL PROTRUDE 7 INCHES CLEAR FROM INSIDE FACE OF STRUCTURAL WALL.
4. STEPS ARE TO BE VERTICALLY ALIGNED AND UNIFORMLY SPACED FOR THE ENTIRE DEPTH OF ANY STRUCTURE.
5. MAXIMUM VERTICAL STEP SPACING TO BE 12".
6. STEPS SHALL WITHSTAND A MINIMUM LOAD OF 300 POUNDS WHEN EXTENDED 7 INCHES FROM THE FACE OF THE SUPPORT.
7. STEPS DIFFERING IN DIMENSIONS, CONFIGURATION OR MATERIALS FROM THOSE SHOWN MAY ALSO BE USED, PROVIDED THEY MEET THE MINIMUM REQUIREMENTS SHOWN HEREIN AND THE CONTRACTOR HAS RECEIVED WRITTEN APPROVAL FROM THE CONTRACTING OFFICER FOR THE USE OF SUCH STEPS.



- NOTE:**
1. No. 4 REBAR ENCASED IN CORROSION RESISTANT RUBBER OR OTHER MATERIAL APPROVED BY THE CONTRACTING OFFICER.

MANHOLE STEP
NOT TO SCALE

DOGHOUSE MANHOLE PRECAST CONCRETE
NOT TO SCALE



GRAVEL STORM CHANNEL
NOT TO SCALE

no.	date	by	ckd	description
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designed	L. GUERIN	checked	K. WARRENDER



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WINDSOR LOCKS, CT

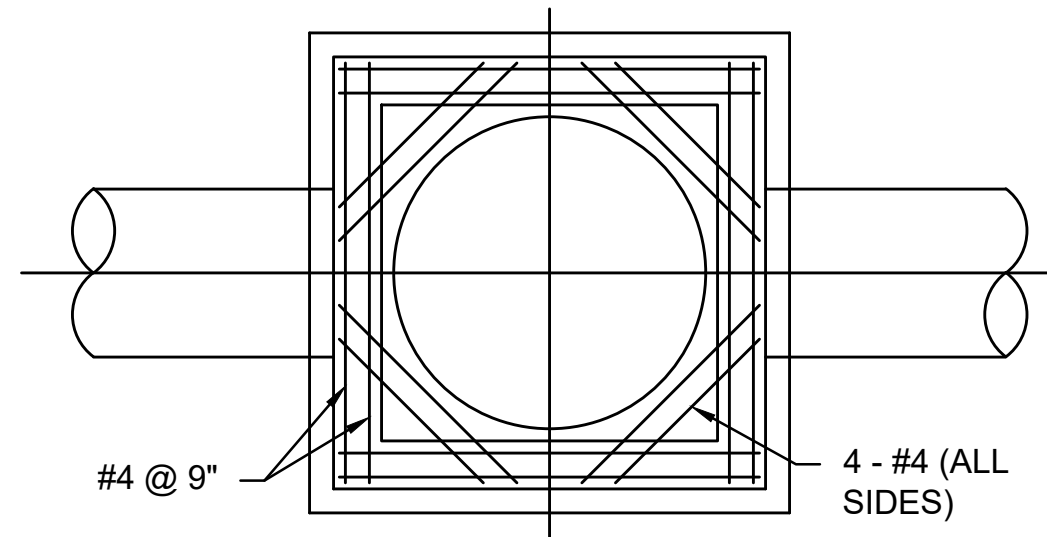
AASF AIRCRAFT APRON REPAIR - PHASE 1

UTILITY DETAILS

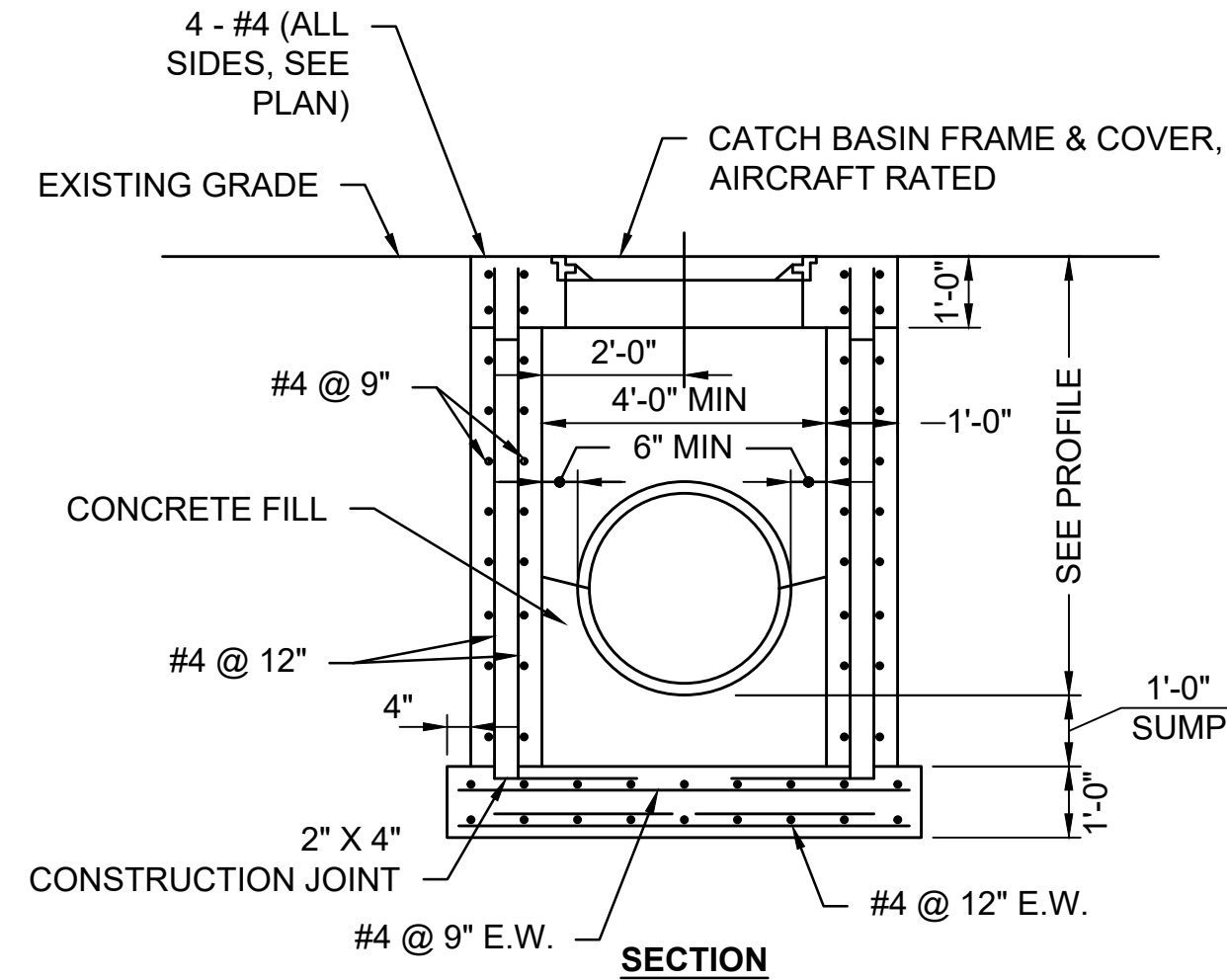
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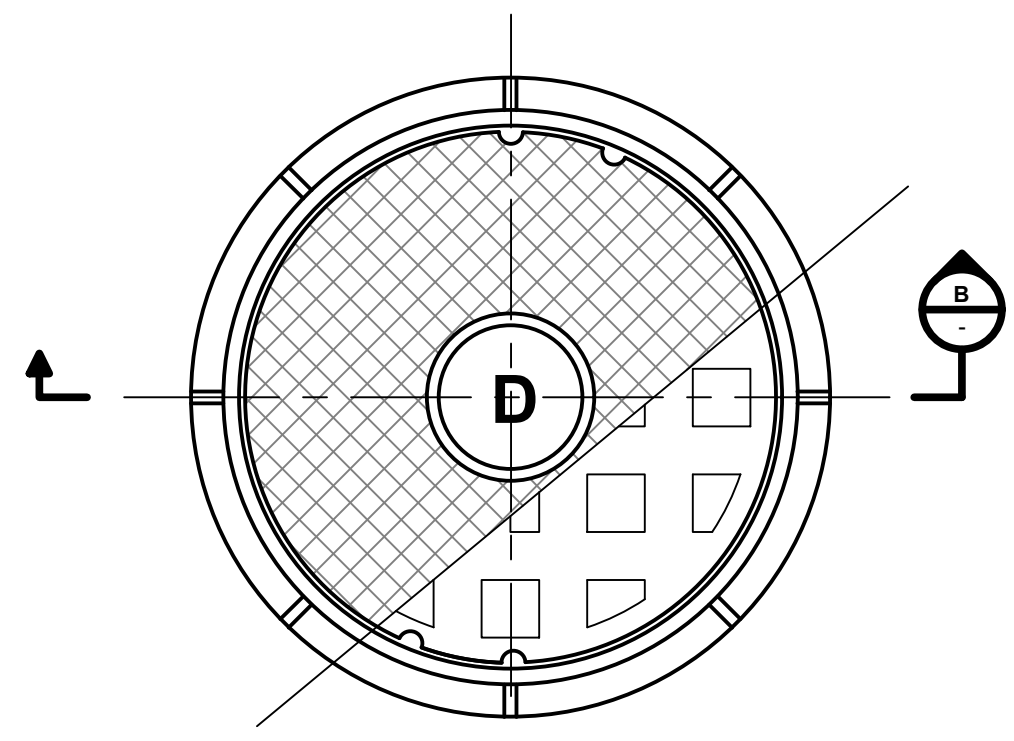
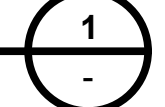


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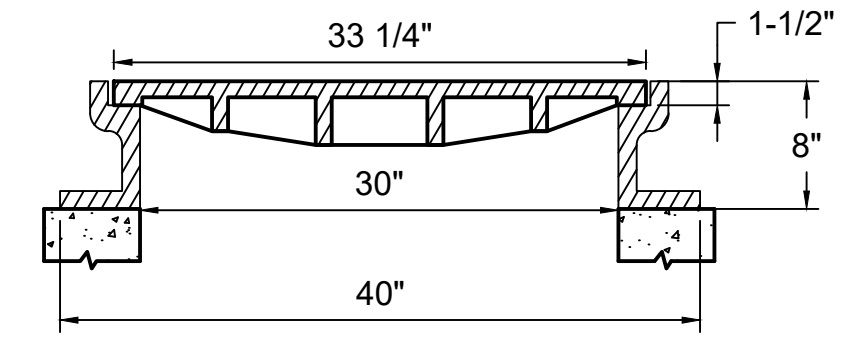


SECTION

AIRCRAFT RATED CATCH BASIN
NOT TO SCALE



PLAN



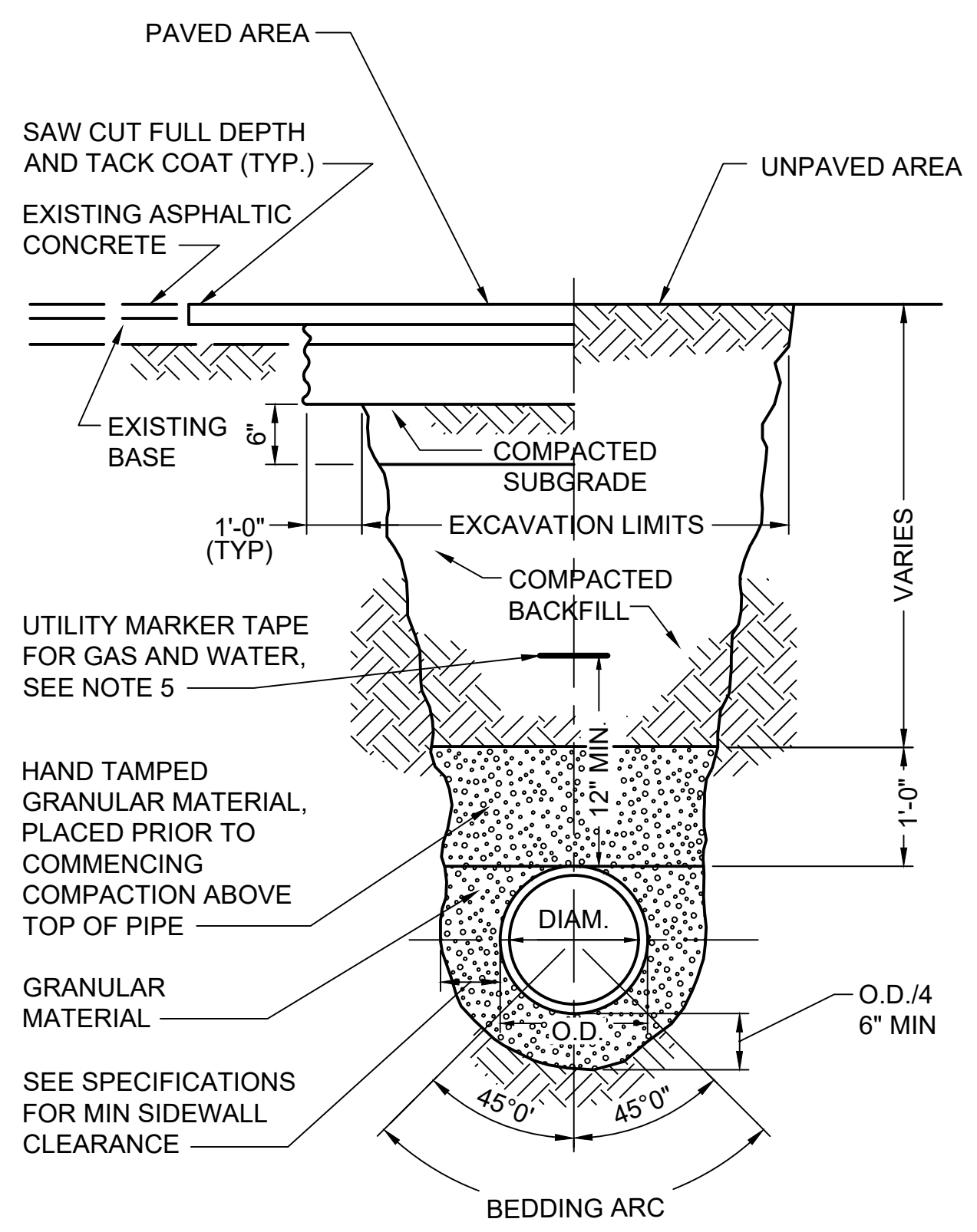
SECTION B

AIRCRAFT RATED FRAME AND COVER, SOLID AND GRATE
NOT TO SCALE



NOTES:

1. MANHOLE AND OUTLET CONTROL STRUCTURE FRAME AND COVER SHALL BE CAMPBELL FOUNDRY PATTERN NUMBER 6507, OR APPROVED EQUAL.
2. CATCH BASIN FRAME AND COVER SHALL BE CAMPBELL FOUNDRY PATTERN NUMBER 6512, OR APPROVED EQUAL.
3. FRAME & LID FOR MANHOLE SHALL BE AIRCRAFT RATED.
4. FRAME MATERIAL SHALL BE GRAY IRON, CLASS 35.
5. COVER MATERIAL SHALL BE DUCTILE IRON, GRADE 80-55-06.



NOTES:

1. ASPHALTIC CONCRETE COURSES SHALL CONFORM TO SPECIFICATION SECTION 321217. CONTRACTOR SHALL SUBMIT JOB MIXES TO CONTRACTING OFFICER FOR APPROVAL PRIOR TO CONSTRUCTION.
2. MIN CLEARANCE INDICATED UNDER PIPE APPLICABLE THROUGHOUT 90 DEGREE BEDDING ARC.
3. PROVIDE TACK COAT BETWEEN BITUMINOUS ASPHALT PAVEMENT COURSES.
4. PROVIDE PRIME COAT BETWEEN BITUMINOUS ASPHALT PAVEMENT AND CRUSHED ROCK BASE COURSE.
5. BURIED UTILITIES SHALL BE IDENTIFIED BY A PLASTIC FILM MARKER TAPE, UI S.S. #40-86750. THE MARKER TAPE SHALL RUN DIRECTLY ABOVE THE ENTIRE LENGTH OF EACH PIPE AND SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 12".

UTILITY TRENCH
NOT TO SCALE



Scale For Microfinishing
Millimeters
Inches



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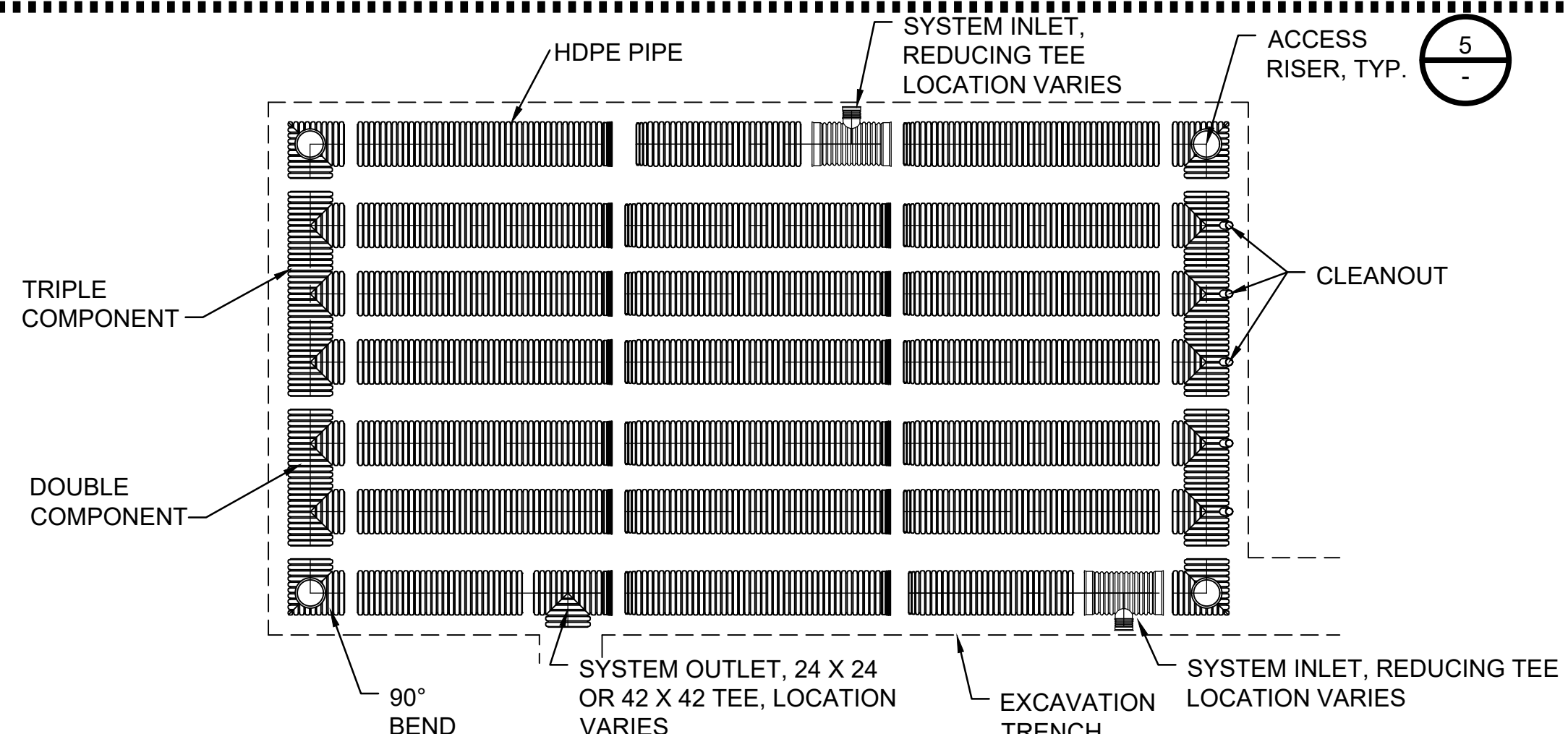
date	DECEMBER 28, 2017	detailed	S. CATONE
designed	L. GUERIN	checked	K. WARRENDER



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WINDSOR LOCKS, CT

AASF AIRCRAFT APRON REPAIR - PHASE 1

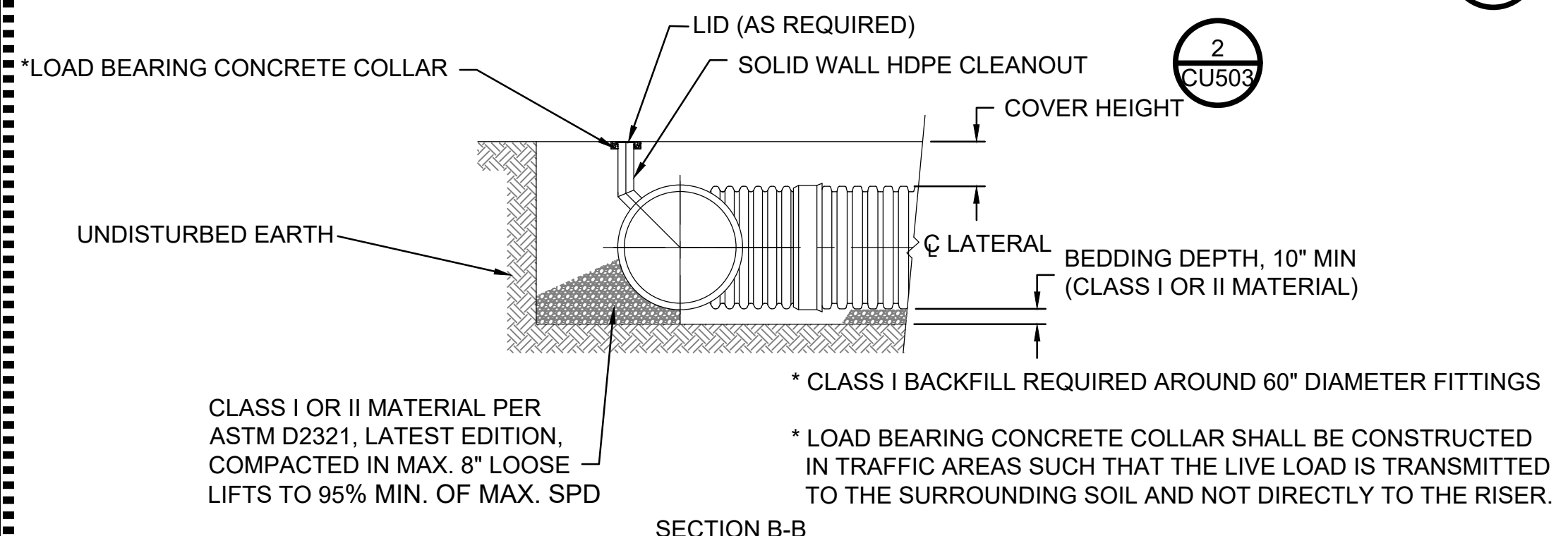
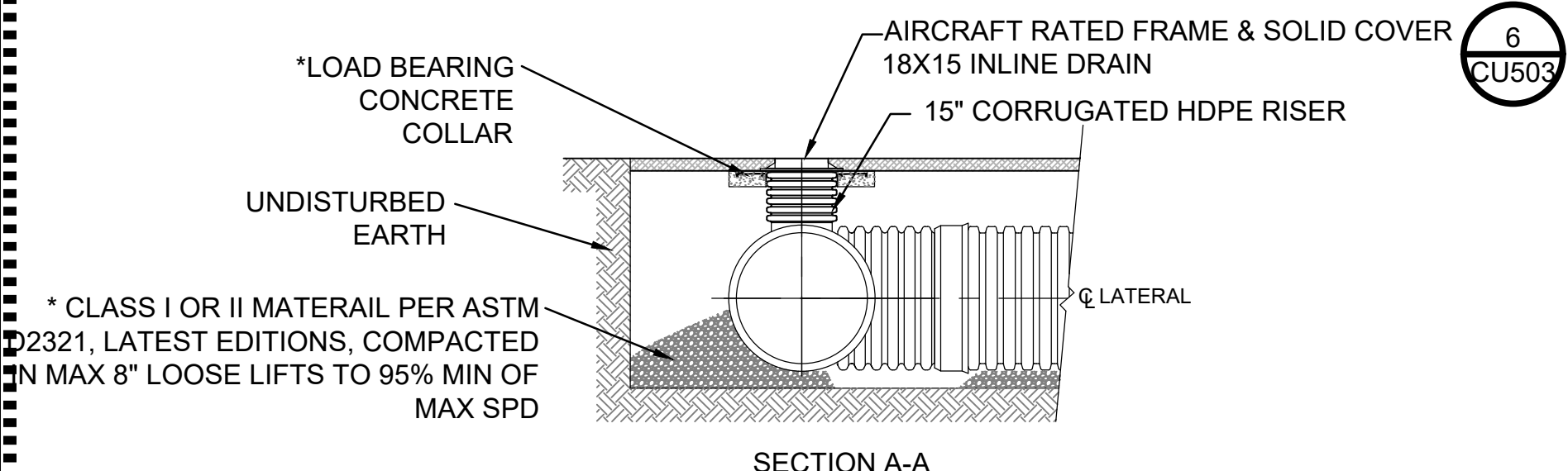
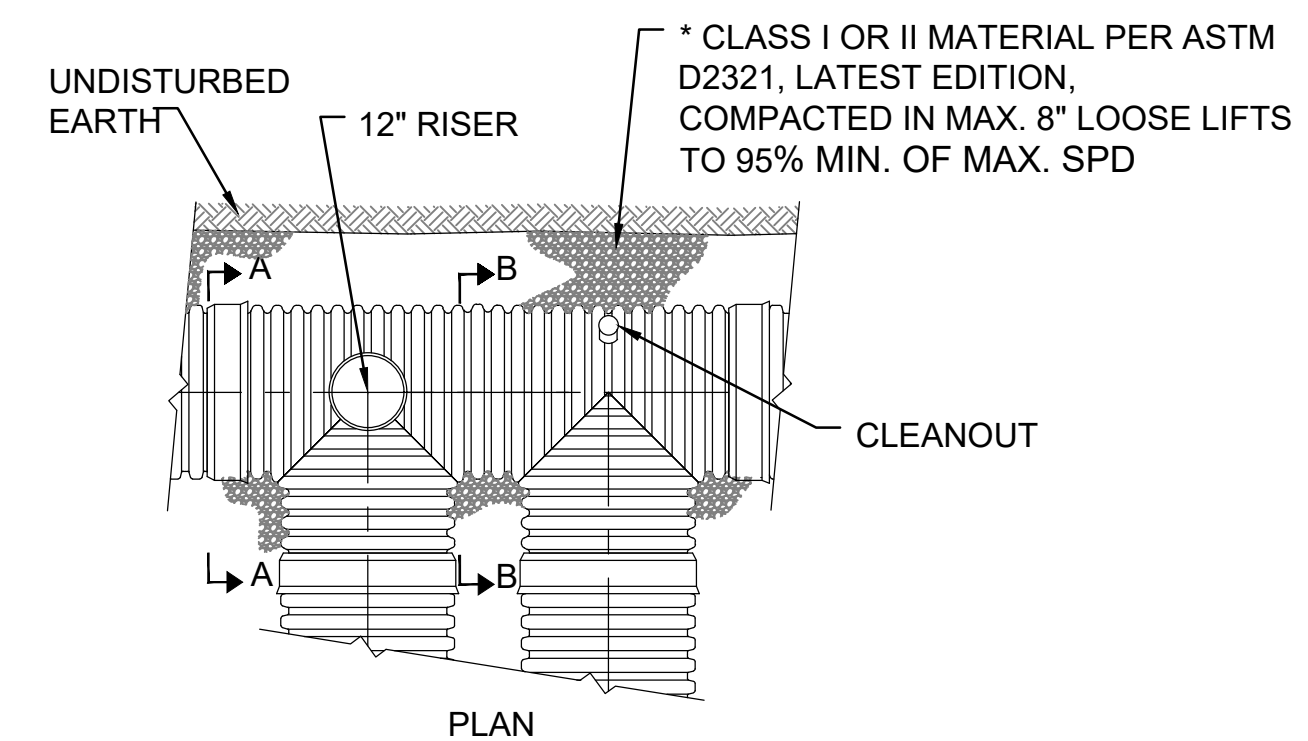
UTILITY DETAILS	
BMD project	ARNG project
102422	20MIL21201
drawing	rev.
CU502	0
sheet	of # sheets
file	102422-CS501-P1.dwg



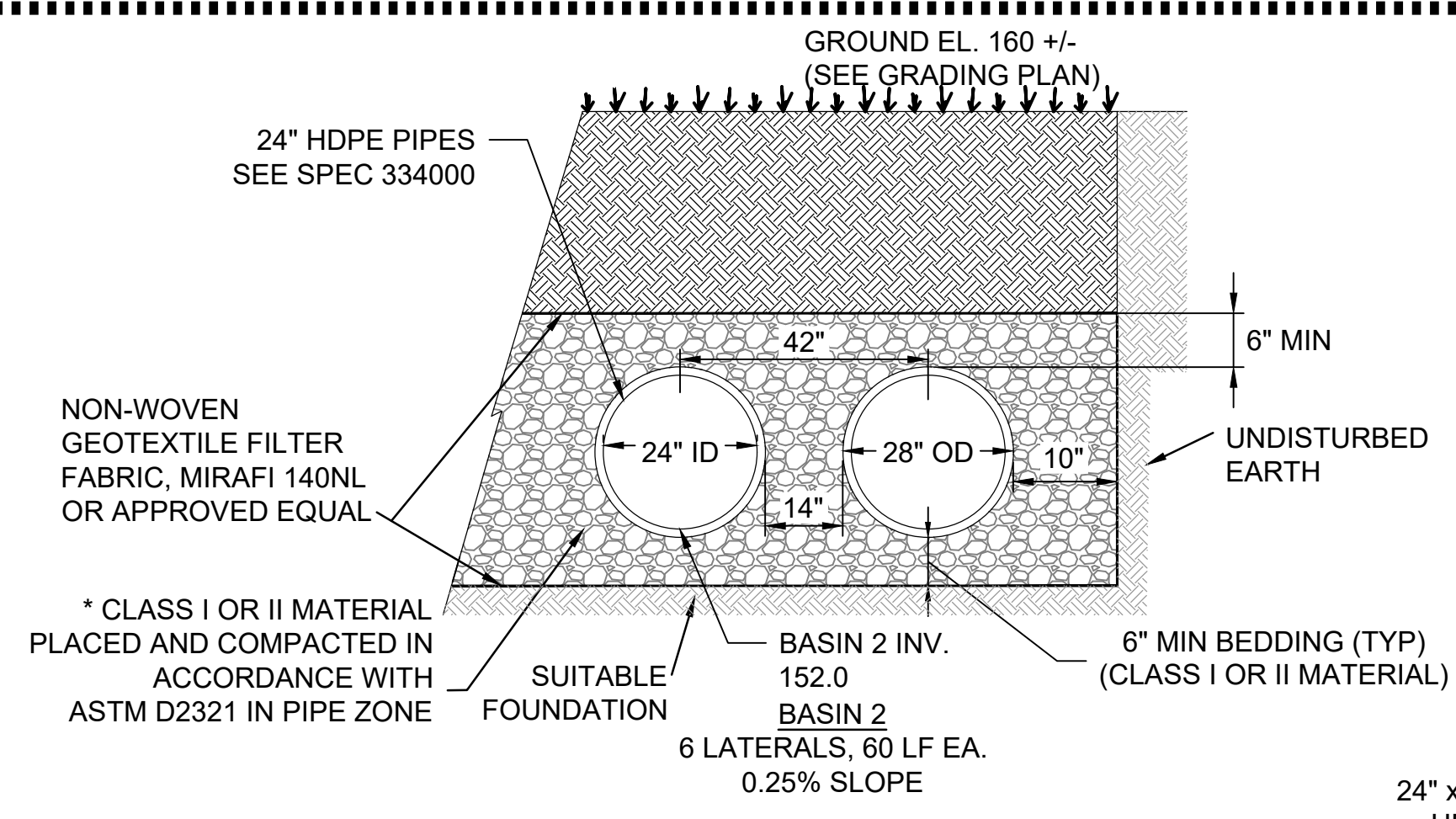
BASIN SIZING			
BASIN ID / LOCATION	EXCAVATION DIMENSIONS	SYSTEM DIMENSIONS	MINIMUM VOLUME
BASIN 2 / ACCESS ROAD	68' X 18'	66' X 16'	1,200 CF

- NOTES:**
- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR EACH BASIN FOR REVIEW AND APPROVAL BY THE CONTRACT OFFICER.
 - SYSTEM AND EXCAVATION DIMENSIONS MAY VARY PER MANUFACTURER.
 - PIPING RISERS AND COVERS SHALL BE AIRCRAFT RATED.

TYPICAL PLAN DETAIL
NOT TO SCALE

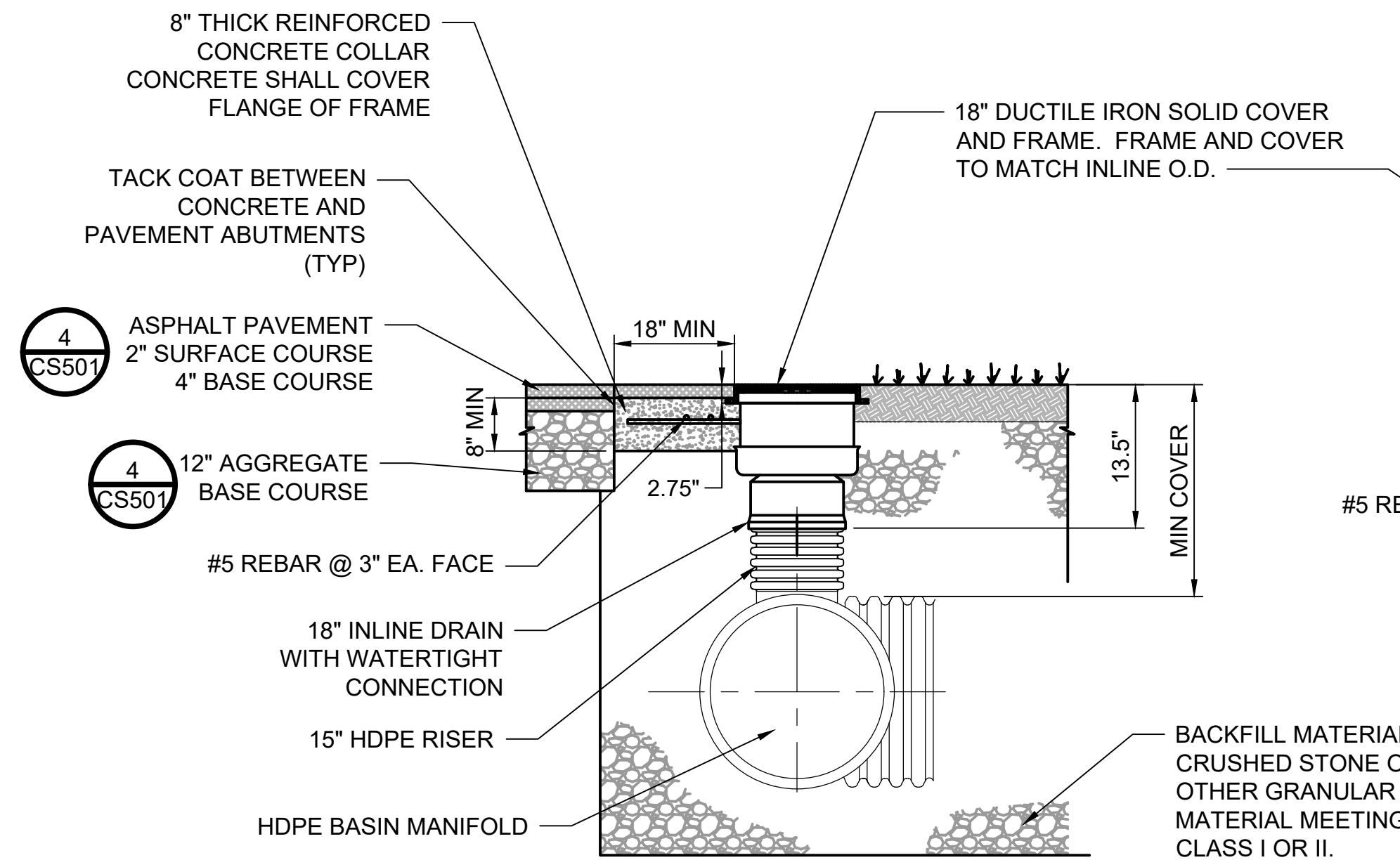


RISER AND CLEANOUT DETAIL
NOT TO SCALE

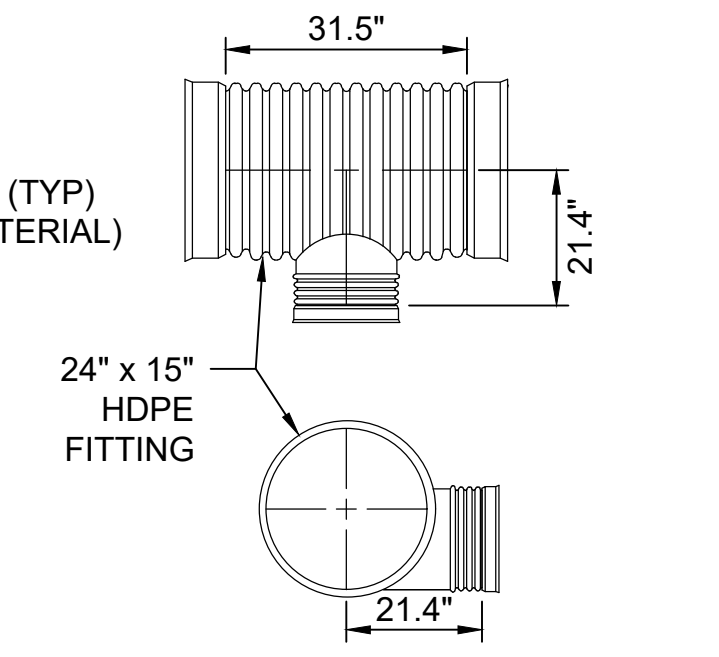


- NOTES:**
- ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
 - ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES.
 - MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO THE BACKFILL MATERIAL, WHEN REQUIRED. SEE ASTM D2321.
 - FILTER FABRIC: A GEOTEXTILE FABRIC SHALL BE USED TO PREVENT THE MIGRATION OF FINES FROM THE NATIVE SOIL INTO THE SELECT BACKFILL MATERIAL. FILTER FABRIC SHALL BE A NON-WOVEN MATERIAL, MIRAFI 140NL OR APPROVED EQUAL.
 - FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
 - BEDDING: SUITABLE MATERIAL SHALL BE CLASS I OR II. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 10".
 - INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I OR II IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
 - MINIMUM COVER: MINIMUM COVER OVER ALL RETENTION/DETENTION SYSTEMS IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM TOP OF PIPE TO GROUND SURFACE. FOR TRAFFIC APPLICATIONS, MINIMUM COVER SHALL BE 12" MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. MANIFOLDS REQUIRE A MINIMUM 24" OF COVER.

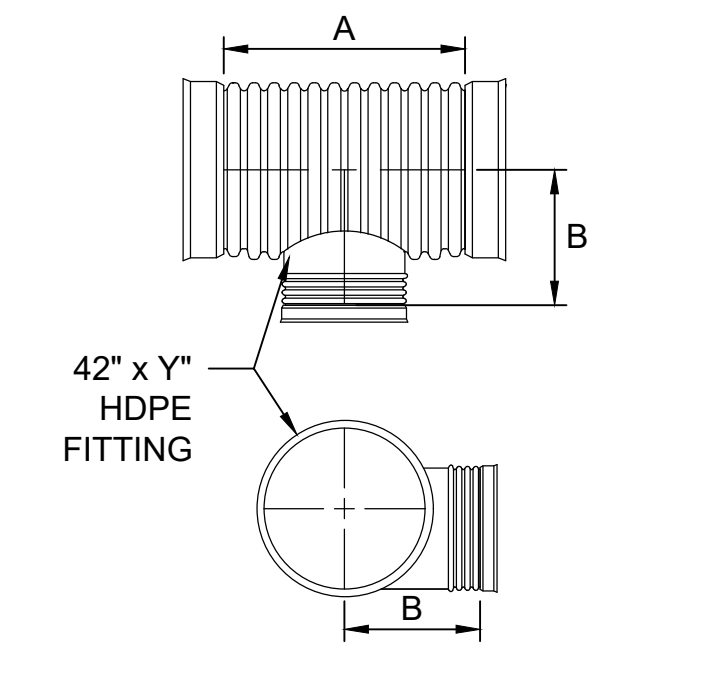
CROSS SECTION DETAIL
NOT TO SCALE



RISER FRAME AND COVER DETAIL
NOT TO SCALE

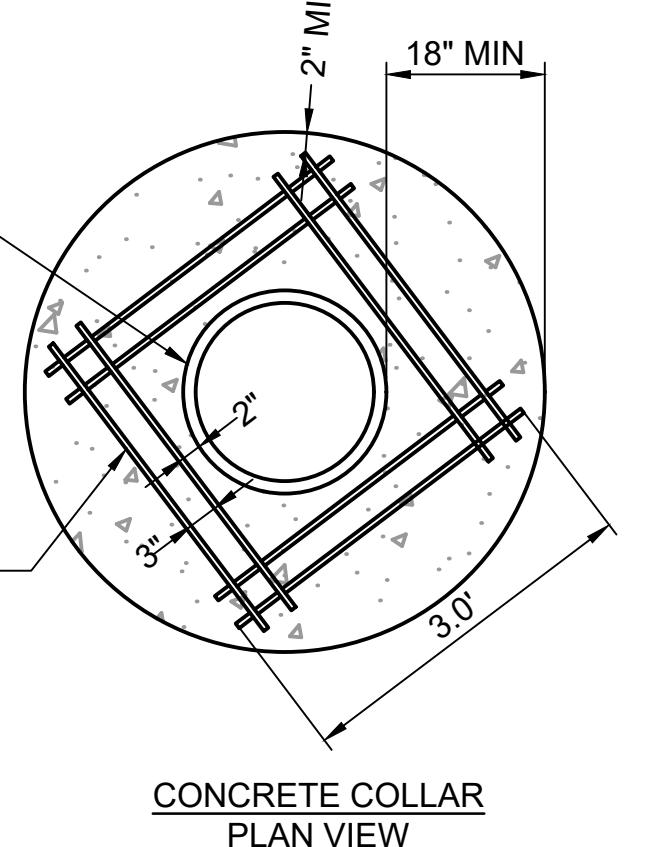


BASIN INLET 24" X 15" REDUCING TEE
NOT TO SCALE



42" TEE FITTING		
42" x Y"	A	B
42 x 15"	31.1"	28.9"
42" x 18"	36.3"	28.6"

BASIN INLET 36" REDUCING TEE
NOT TO SCALE



CONCRETE COLLAR PLAN VIEW

- NOTES:**
- INLINE DRAIN**
- BACKFILL MATERIAL SHALL BE CRUSHED STORE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS II MATERIAL AS DEFINED IN ASTM D2321 OR AS DETERMINED BY LOCAL STANDARDS.
 - CONNECTION BETWEEN 15" HDPE RISER AND INLINE DRAIN SHALL BE WATERTIGHT. STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE PIPE.
- FRAME AND COVER**
- COVER SHALL BE AIRCRAFT RATED.
 - MATERIAL SHALL BE DUCTILE IRON AND CONFORM TO ASTM A536 GRADE 70-50-05

no.	date	by	ckd	description
0	06/12/20	SMC	KNW	ISSUED FOR BID



10 NORTH PARK PLACE, SUITE 330
MORRISTOWN, NJ 07960
973-884-8701
Burns & McDonnell Engineering Co, Inc.
LICENSEE NO. 000165

date	detailed
AUGUST 14, 2018	S. CATONE
designed	checked
L. GUERIN	K. WARRENDER



CONNECTICUT ARMY NATIONAL GUARD
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT

AASF AIRCRAFT APRON REPAIR - PHASE 1

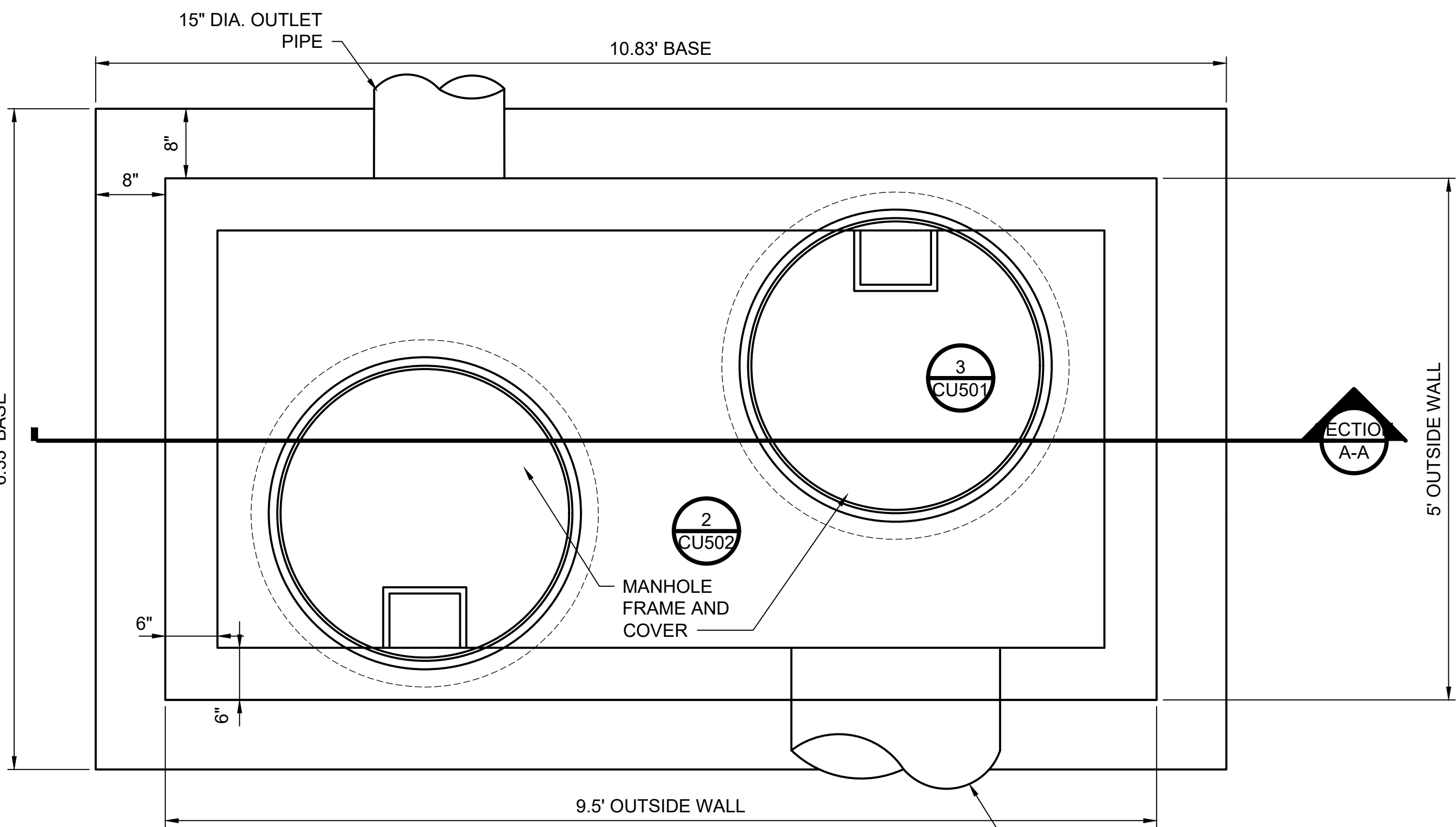
UTILITY DETAILS

BMD project	ARNG project
102422	20MIL21201

drawing **CU503** rev. **0**

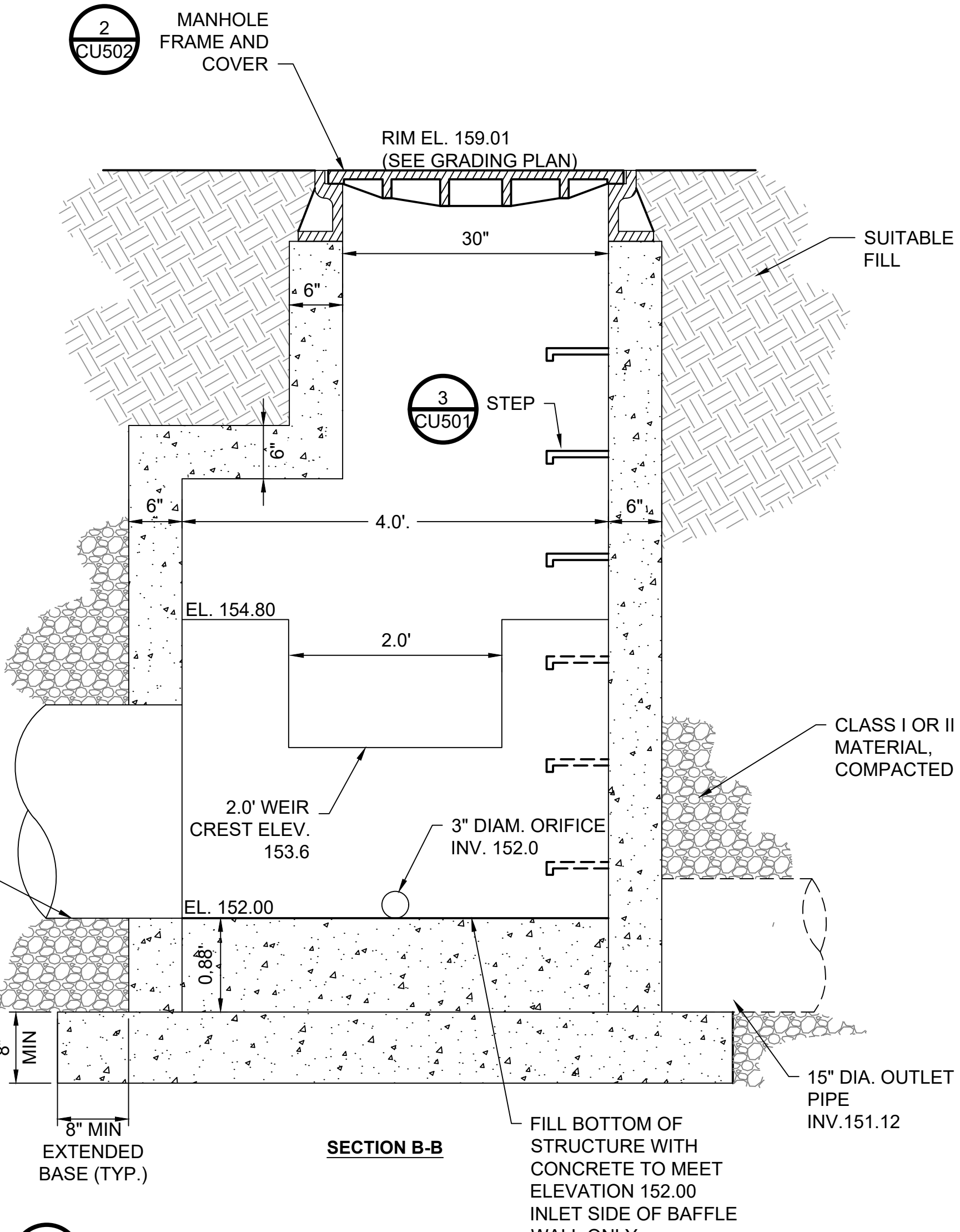
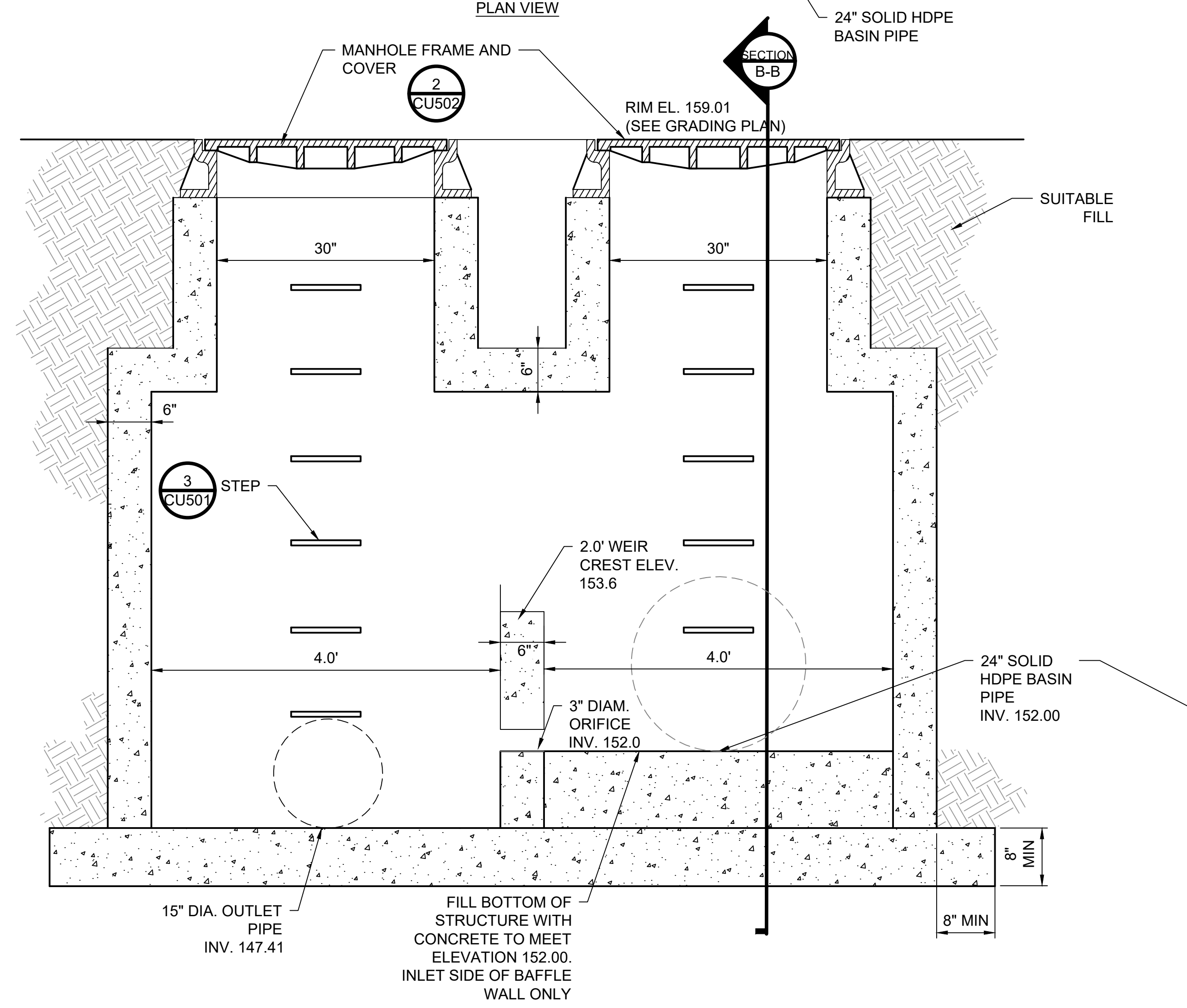
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file 102422-CS501-P1.dwg			

no.	date	by	ckd	description
0	06/12/20	SMC	KNW	ISSUED FOR BID



- NOTES:**
1. OUTLET STRUCTURE SHALL BE PRECAST CONCRETE.
 2. STRUCTURE SHALL BE AIRCRAFT RATED.
 3. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND STRUCTURAL COMPUTATIONS FOR REINFORCING STEEL LAYOUT, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CONNECTICUT, TO CONTRACTING OFFICER FOR REVIEW AND APPROVAL
 5. ANY LIFT LOOPS FOR UTILITY STRUCTURES SHALL BE GROUTED FLUSH AFTER INSTALLATION.
 6. PIPE MAY EXTEND 2 INCHES MAXIMUM BEYOND INTERIOR MANHOLE WALL.
 7. MANHOLE STEPS SHALL BE PLACED INTO STRUCTURE WALL DURING MANUFACTURE OR MORTARED INTO HOLES AFTER CONCRETE HAS CURED.

Scale For Microfinishing
Millimeters
Inches




OUTLET CONTROL STRUCTURE - 2
NOT TO SCALE

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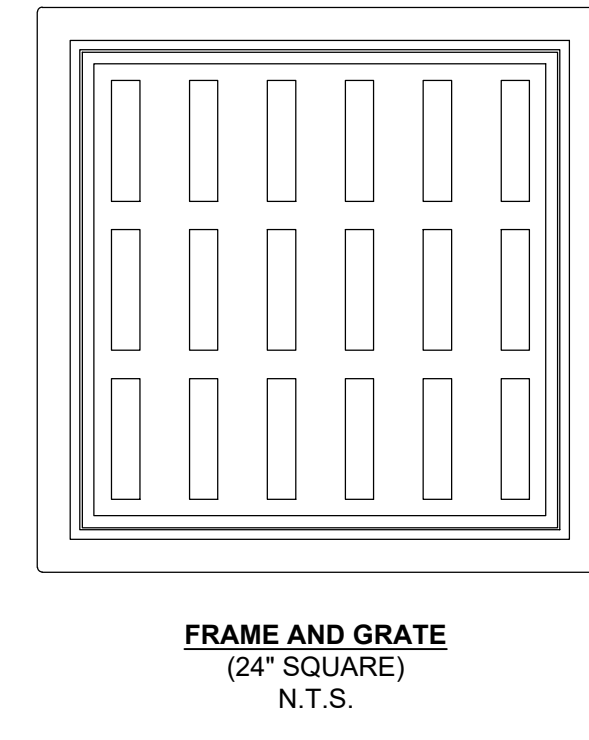
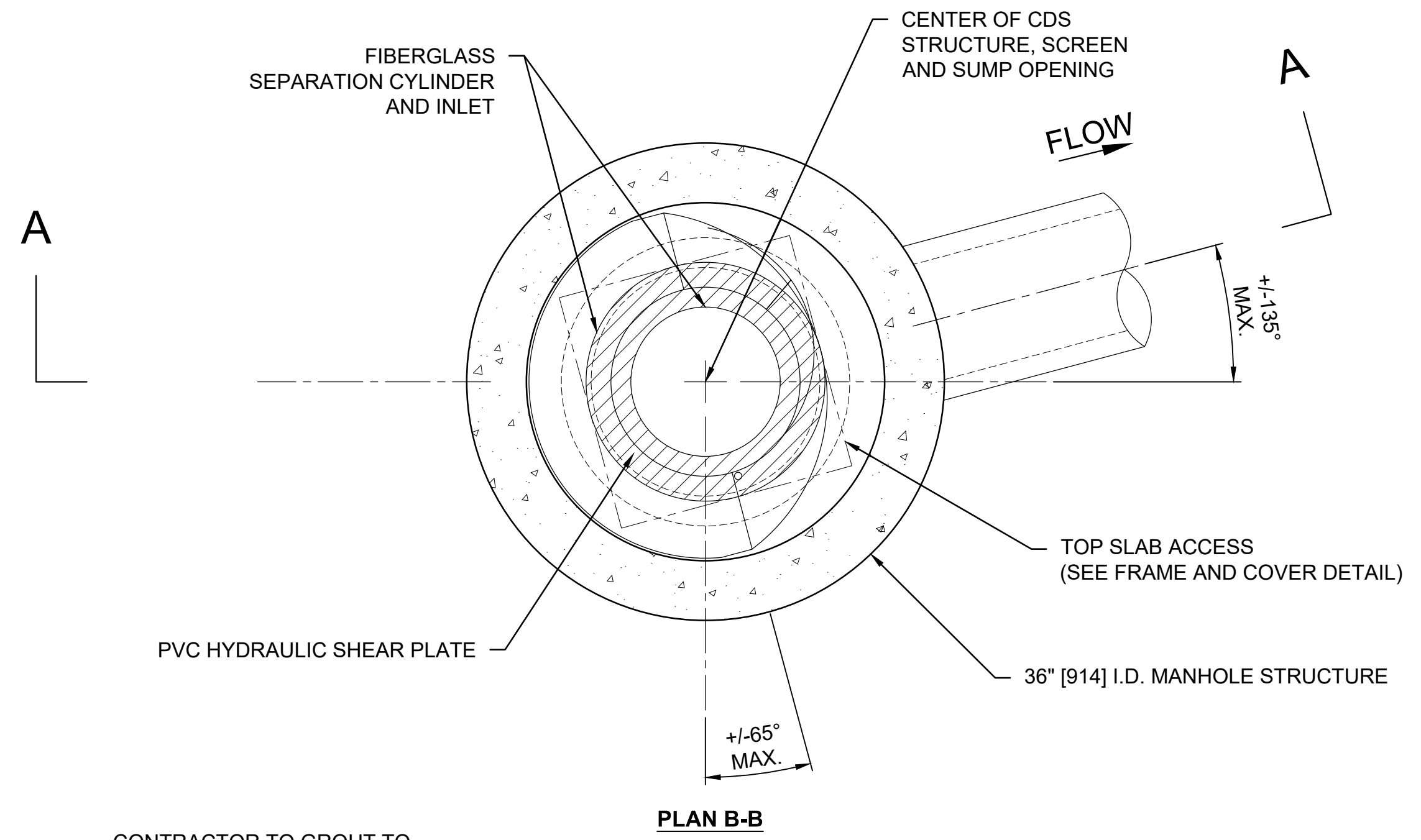

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AASF AIRCRAFT APRON REPAIR - PHASE 1

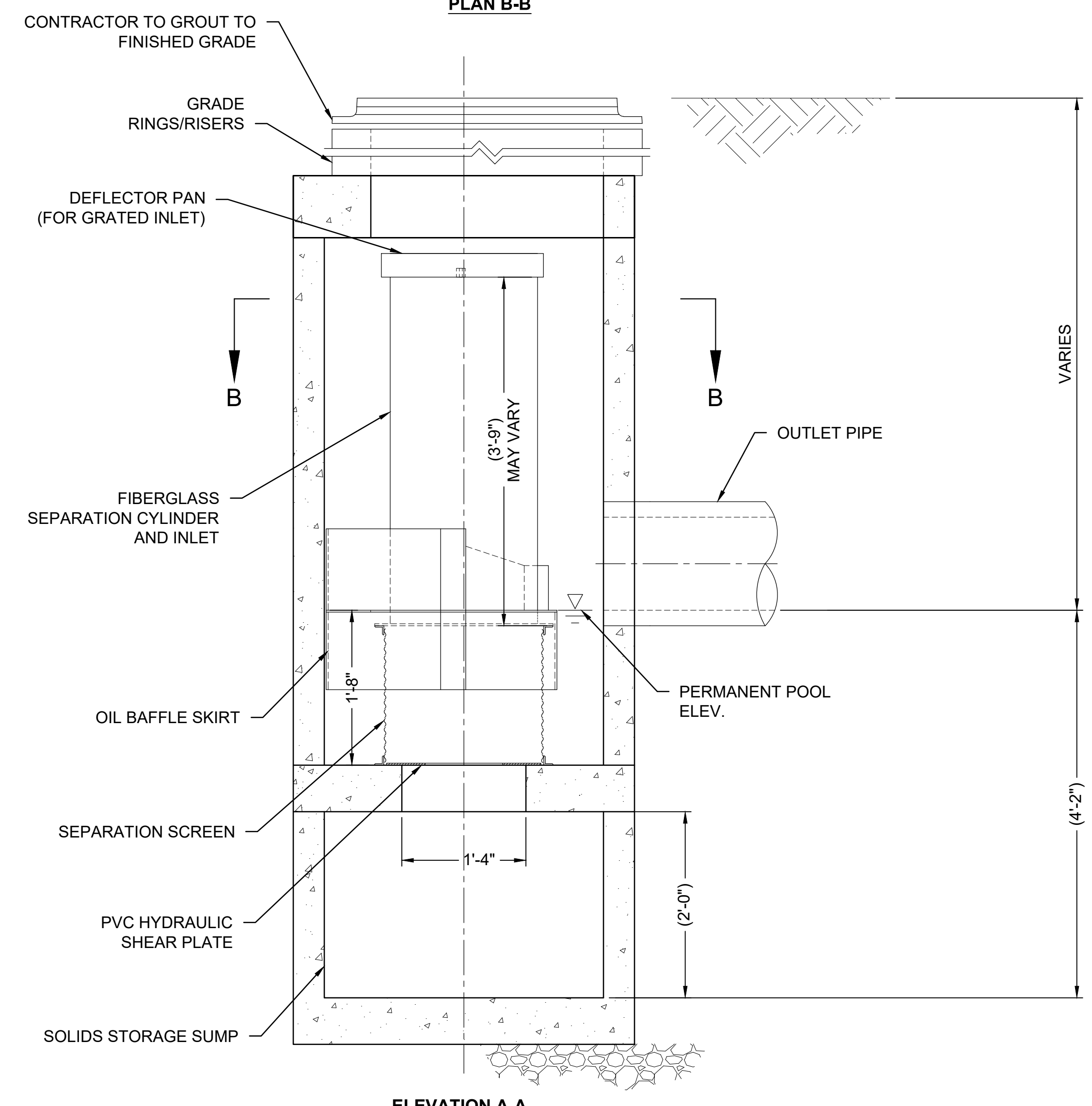
UTILITY DETAILS

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drawing	CU505	rev.	0
sheet	of	#	sheets
file 102422-CS501-P1.dwg			

no.	date	by	ckd	description
0	06/12/20	SMC	KNW	ISSUED FOR BID



Millimeters
 Scale For Microfining
 Inches



WATER QUALITY DEVICE DESIGNATIONS		
STRUCTURE ID	WQ DEVICE	WQF
BR3-1	CDS 1515-3-C	0.65 CFS
BR6-1	CDS 1515-3-C	0.141 CFS
BR7-1	CDS 1515-3-C	0.145 CFS
BR9-1	CDS 1515-3-C	0.858 CFS

- GENERAL NOTES**
- DESIGN BASED ON CONTECH CDS TREATMENT DEVICES. WATER QUALITY DEVICES SHALL BE CONTECH OR APPROVED EQUAL.
 - STRUCTURES, FRAMES AND GRATES SHALL BE AIRCRAFT LOAD RATED
 - WATER QUALITY DEVICES MUST MEET THE REQUIRED WATER QUALITY TREATMENT VOLUMES LISTED. CONTRACTOR SHALL PROVIDE SIZING CALCULATIONS TO CONTRACTING OFFICER FOR REVIEW AND APPROVAL.
 - DETAILS SHOWN IS FOR REFERENCE ONLY. CONTRACTOR SHALL PROVIDE FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS TO CONTRACTING OFFICER FOR REVIEW AND APPROVAL.
 - WATER QUALITY STRUCTURE SHALL BE ABLE TO ACCOMMODATE INVERTS SHOWN ON CU401-CU403. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES.
 - MANUFACTURER SHALL PROVIDE WATER QUALITY UNIT ONLY, CONTRACTOR SHALL PROVIDE ALL MEANS AND METHODS NECESSARY TO PROPERLY INSTALL UNIT INCLUDING, BUT NOT LIMITED TO, SUBBASE PREPARATIONS, BACKFILLING, JOINT SEALING AND ASSEMBLY.

WATER QUALITY STRUCTURE 1
CDS 1515-3-C
 NOT TO SCALE

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designed	L. GUERIN	checked	K. WARRENDER

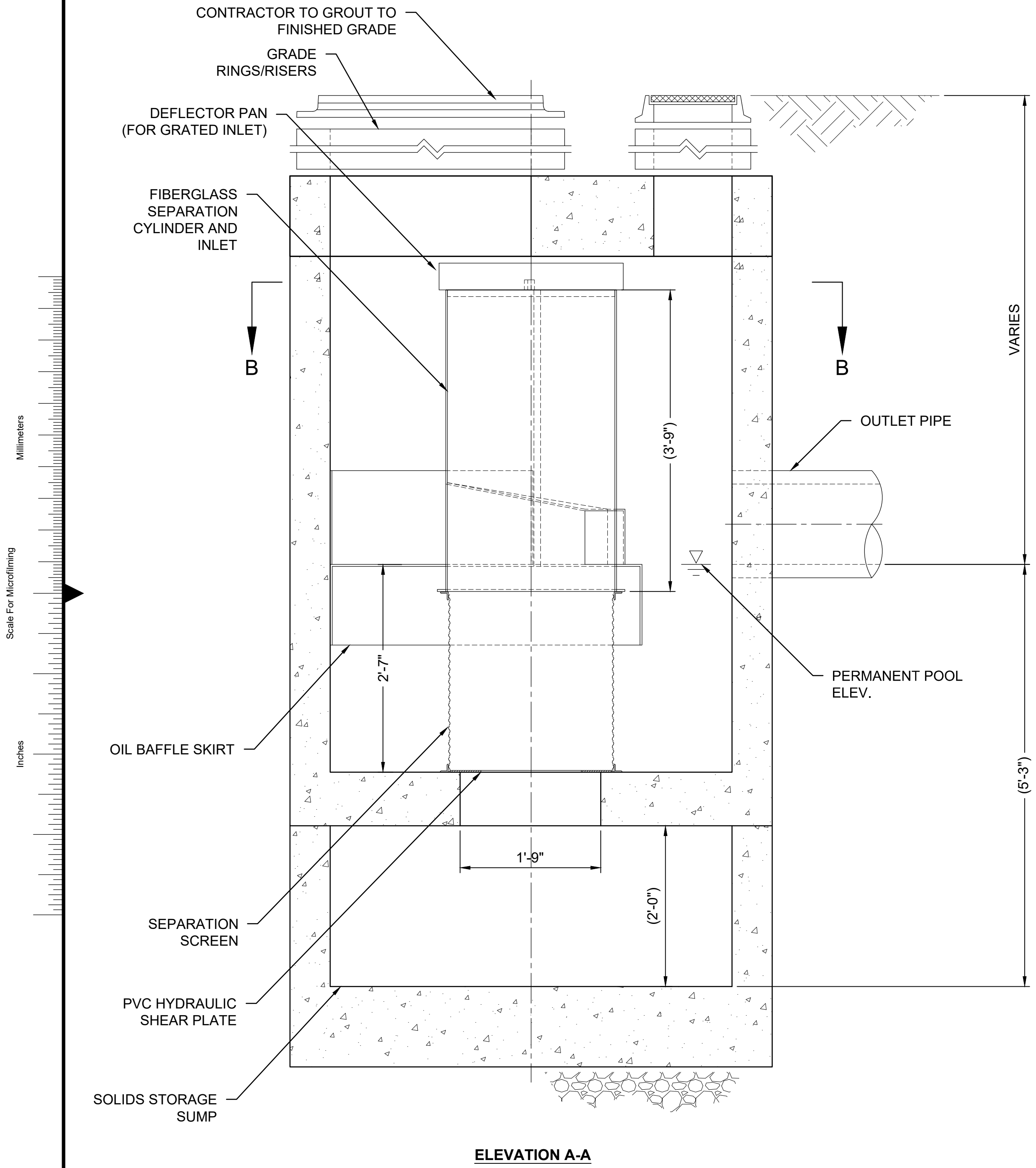
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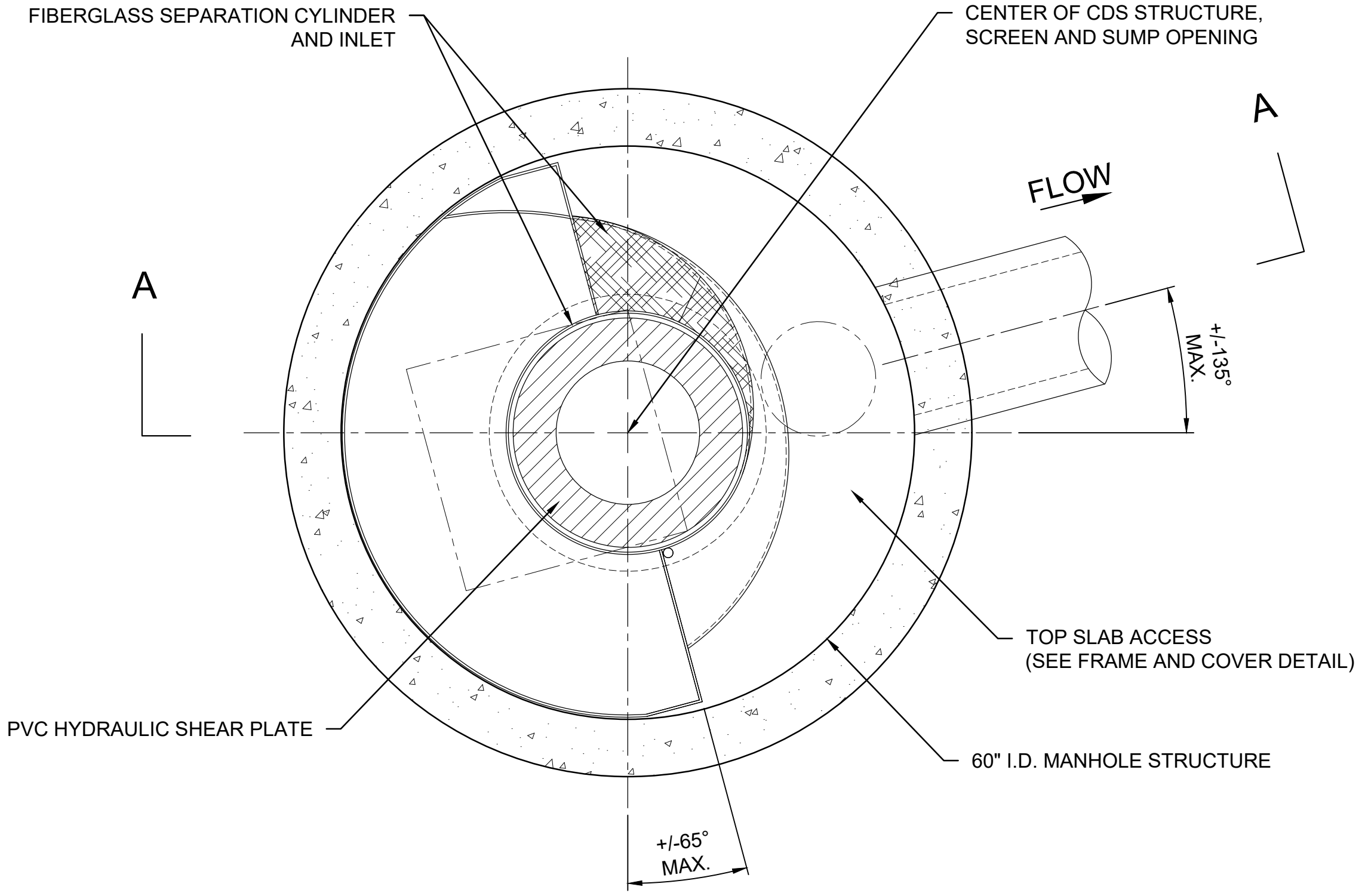
UTILITY DETAILS

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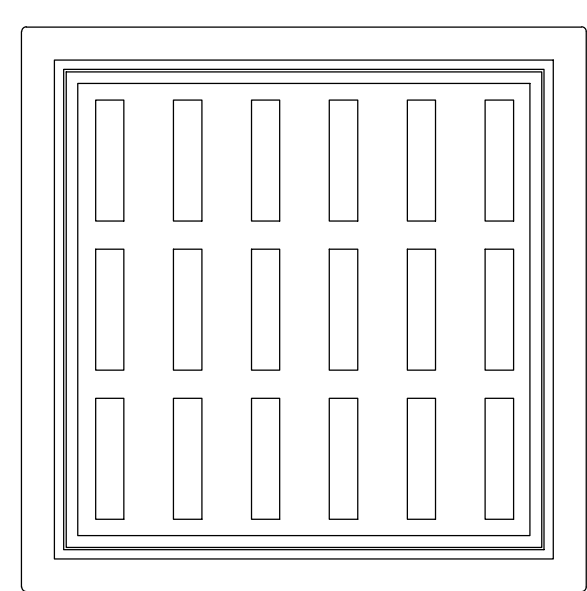
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ELEVATION A-A



PLAN B-B



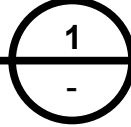
FRAME AND GRATE
(24" SQUARE)
N.T.S.

WATER QUALITY DEVICE DESIGNATIONS		
STRUCTURE ID	WQ DEVICE	WQF
BR4-1	CDS 2020-5-C	2.00 CFS
BR10-1	CDS 2020-5-C	1.81 CFS

GENERAL NOTES

- DESIGN BASED ON CONTECH CDS TREATMENT DEVICES. WATER QUALITY DEVICES SHALL BE CONTECH OR APPROVED EQUAL.
- STRUCTURES, FRAMES AND GRATES SHALL BE AIRCRAFT LOAD RATED.
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WATER QUALITY STRUCTURE 2
CDS 2020-5-C
NOT TO SCALE



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L. GUERIN	K. WARRENDER

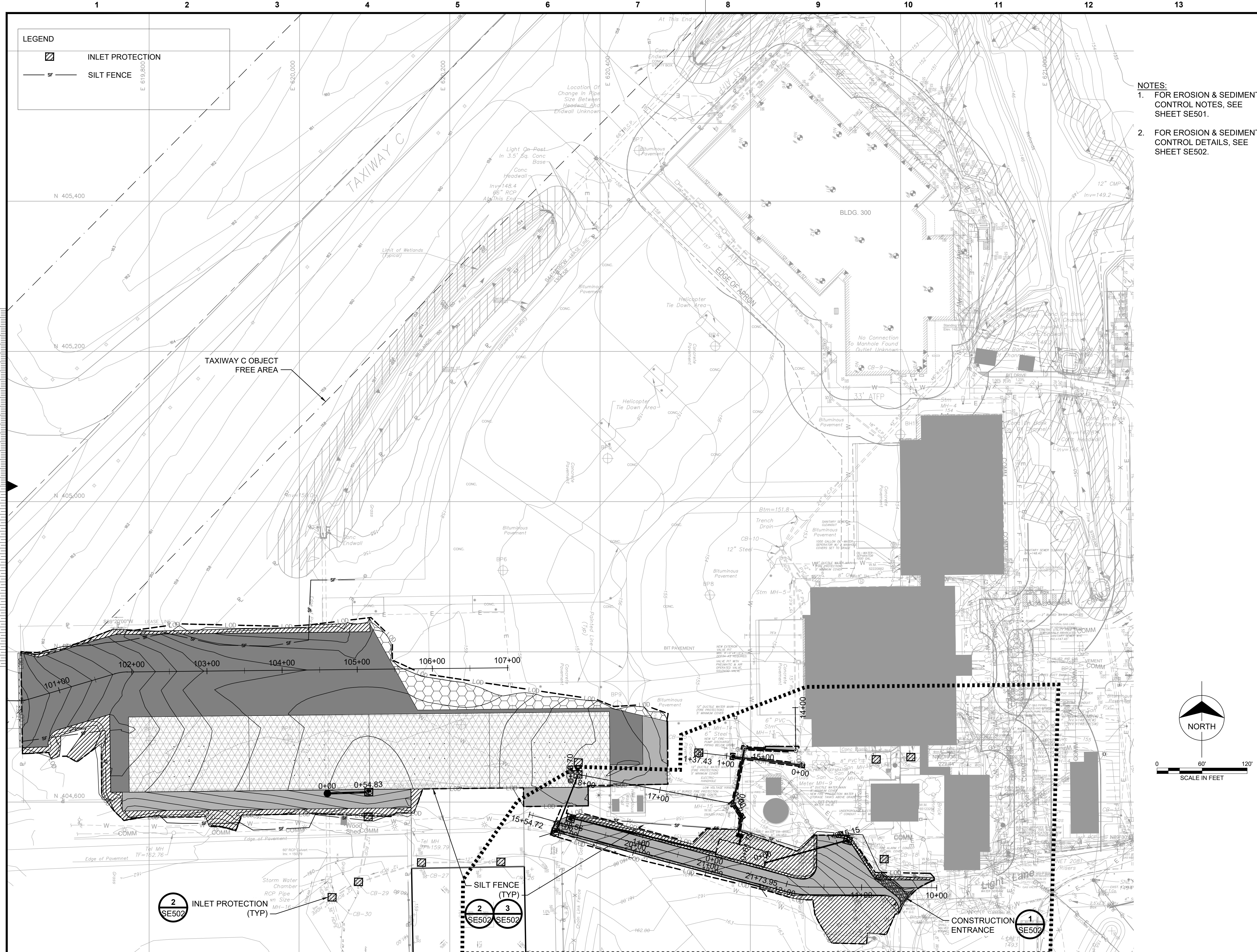


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BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT

AASF AIRCRAFT APRON REPAIR - PHASE 1

UTILITY DETAILS

BMD project	ARNG project
102422	20MIL21201
drawing	rev.
CU507	0
sheet	of # sheets
file 102422-CS501-P1.dwg	



LEGEND

	INLET PROTECTION
	SILT FENCE

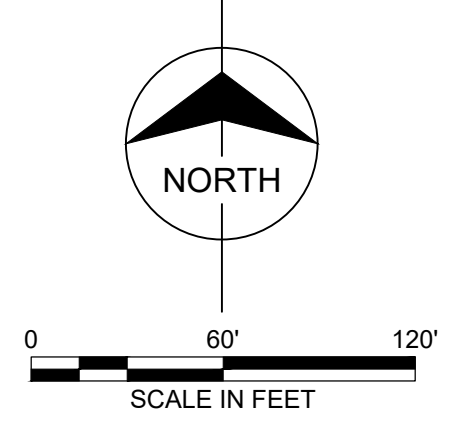
- NOTES:**
- FOR EROSION & SEDIMENT CONTROL NOTES, SEE SHEET SE501.
 - FOR EROSION & SEDIMENT CONTROL DETAILS, SEE SHEET SE502.

no.	date	by	ckd	description
0	06/12/20	SMC	KNW	ISSUED FOR BID

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date	DECEMBER 28, 2017	detailed	S. CATONE
designed	L. GUERIN	checked	K. WARRENDER



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WINDSOR LOCKS, CT

AASF AIRCRAFT APRON REPAIR - PHASE 1			
EROSION & SEDIMENT CONTROL PLAN			
BMD project	102422	ARNG project	20MIL21201
drawing	SE101		rev. 0
sheet	of #	sheets	
file	102422-SE101-P1.dwg		

EROSION AND SEDIMENT CONTROL NOTES

BEST MANAGEMENT PRACTICES

- CONSTRUCTION ACTIVITY POLLUTION PREVENTION IS REQUIRED FOR THIS PROJECT. PREVENTION OF POLLUTION RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE ACCOMPLISHED BY CONTROLLING SOIL EROSION, WATERWAY SEDIMENTATION, AND AIRBORNE DUST GENERATION. CONTRACTOR SHALL ENSURE THAT NO SEDIMENT RESULTING FROM CONSTRUCTION ACTIVITIES INFRINGES ONTO ADJACENT PROPERTIES. CONTRACTOR SHALL COORDINATE EROSION AND SEDIMENT CONTROL WITH OTHER CONSTRUCTION ENTITIES PERFORMING WORK ON ADJACENT PROPERTIES.
- SOIL EROSION AND SEDIMENT CONTROLS ARE MEASURES USED TO REDUCE THE AMOUNT OF SOIL PARTICLES THAT ARE CARRIED OFF AN AREA AND DEPOSITED INTO A DRAINAGE COLLECTION SYSTEM OR INTO A BODY OF WATER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT EROSION AND SEDIMENTATION ARE CONTROLLED TO THE EXTENT PRACTICABLE. ALL APPLICABLE SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED AND MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES. PRIOR TO INITIATING CONSTRUCTION IN AN AREA, ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN PLACE. UPON PROJECT COMPLETION ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.
- TEMPORARY EROSION CONTROL SHALL BE THE CONTRACTOR'S RESPONSIBILITY, WHO SHALL UTILIZE APPROPRIATE BEST MANAGEMENT PRACTICES (BMPS). THOSE BMPS SHALL CONSIST OF SILT FENCE OR OTHER MEANS TO CONTROL EROSION AS NEEDED. THE CONTRACTOR SHALL PROVIDE AND FOLLOW THE EROSION AND SWPPP PLANS AS NEEDED.
- CONTRACTOR SHALL PLACE SILT FENCE AS SHOWN PRIOR TO BEGINNING WORK. THE DEVICES SHALL BE PLACED DOWN-SLOPE OF DISTURBED AREAS WHERE SHEET EROSION WOULD OCCUR. SILT FENCE SHALL BE CLEANED AND REPAIRED WHEN SEDIMENT BUILDUP REACHES ONE-THIRD OF SILT FENCE HEIGHT. AFTER SIGNIFICANT RUNOFF EVENTS, THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL STRUCTURES FOR SILT BUILD-UP THAT INTERFERES WITH THE PERFORMANCE OF THE EROSION CONTROL STRUCTURE AND REPAIR OR REPLACE THOSE STRUCTURES, AS NECESSARY.
- ALL STORM DRAIN INLETS SHALL BE PROTECTED BY APPROPRIATE BMPS DURING CONSTRUCTION, UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGE TO THE INLETS HAVE BEEN STABILIZED.
- ALL EXISTING DRAIN INLETS SHALL HAVE SILT FENCE PROTECTION INSTALLED IN ACCORDANCE WITH DETAIL # ON DRAWING #. EROSION PROTECTION MAY BE REMOVED WHEN VEGETATION IS ESTABLISHED.
- CONTRACTOR SHALL INSTALL A STABILIZED CONSTRUCTION ENTRANCE AT LOCATIONS WHERE CONSTRUCTION TRAFFIC SHALL ENTER THE PROJECT SITE FROM ROADWAYS AND PAVEMENTS. SEE DETAIL 1 ON DRAWING SE502.
- SEE DRAWING SE502 FOR ADDITIONAL DETAILS ON EROSION AND SEDIMENT CONTROL.

CONSTRUCTION ACCESS

THE SITE SHALL HAVE ROADS AND ACCESS DRIVES OF SUFFICIENT WIDTH AND LENGTH TO PREVENT SEDIMENT FROM TRACKING ONTO PUBLIC ROADWAYS. SEDIMENT SHALL BE REMOVED IMMEDIATELY FROM THE ROAD BY SHOVELING OR SWEEPING WHEN SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE OR OTHER PAVED AREA BY EQUIPMENT OR VEHICLES EXITING THE CONSTRUCTION SITE. BULK CLEARING OF ACCUMULATED SEDIMENT SHALL BE TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA OR THE POINT OF LIKELY ORIGIN BEFORE THE END OF EACH WORK DAY. ROAD WASHING SHALL BE ALLOWED ONLY AFTER THE SEDIMENT IS REMOVED IN THE ABOVE MANNER.

FINAL GRADING AND CLEAN UP

AFTER COMPLETION OF FINAL GRADING, THE DISTURBED AREAS SHALL BE REVEGETATED. ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES SHALL BE REMOVED UPON PROJECT COMPLETION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY CONTROL MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

PETROLEUM PRODUCTS

ALL ON-SITE VEHICLES SHALL BE MONITORED FOR PETROLEUM LEAKS AND SHALL RECEIVE PROPER PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY-SEALED CONTAINERS THAT ARE CLEARLY LABELED. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY. WASTE OIL AND OTHER PETROLEUM PRODUCTS SHALL NOT BE DISCHARGED ONTO THE GROUND OR INTO WATER BODIES. PETROLEUM PRODUCTS USED ON-SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER RECOMMENDATIONS.

STORM WATER PERMIT

- A "GENERAL PERMIT FOR DISCHARGE OF STORMWATER AND DEWATERING WASTEWATER FROM CONSTRUCTION ACTIVITIES" MUST BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH LOCAL AUTHORITIES TO COMPLETE AND SUBMIT THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR APPROVAL.

Millimeters

Scale For Microfilming

Inches

no.	date	by	ckd	description
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**CONNECTICUT ARMY NATIONAL GUARD
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT**

AASF AIRCRAFT APRON REPAIR - PHASE 1

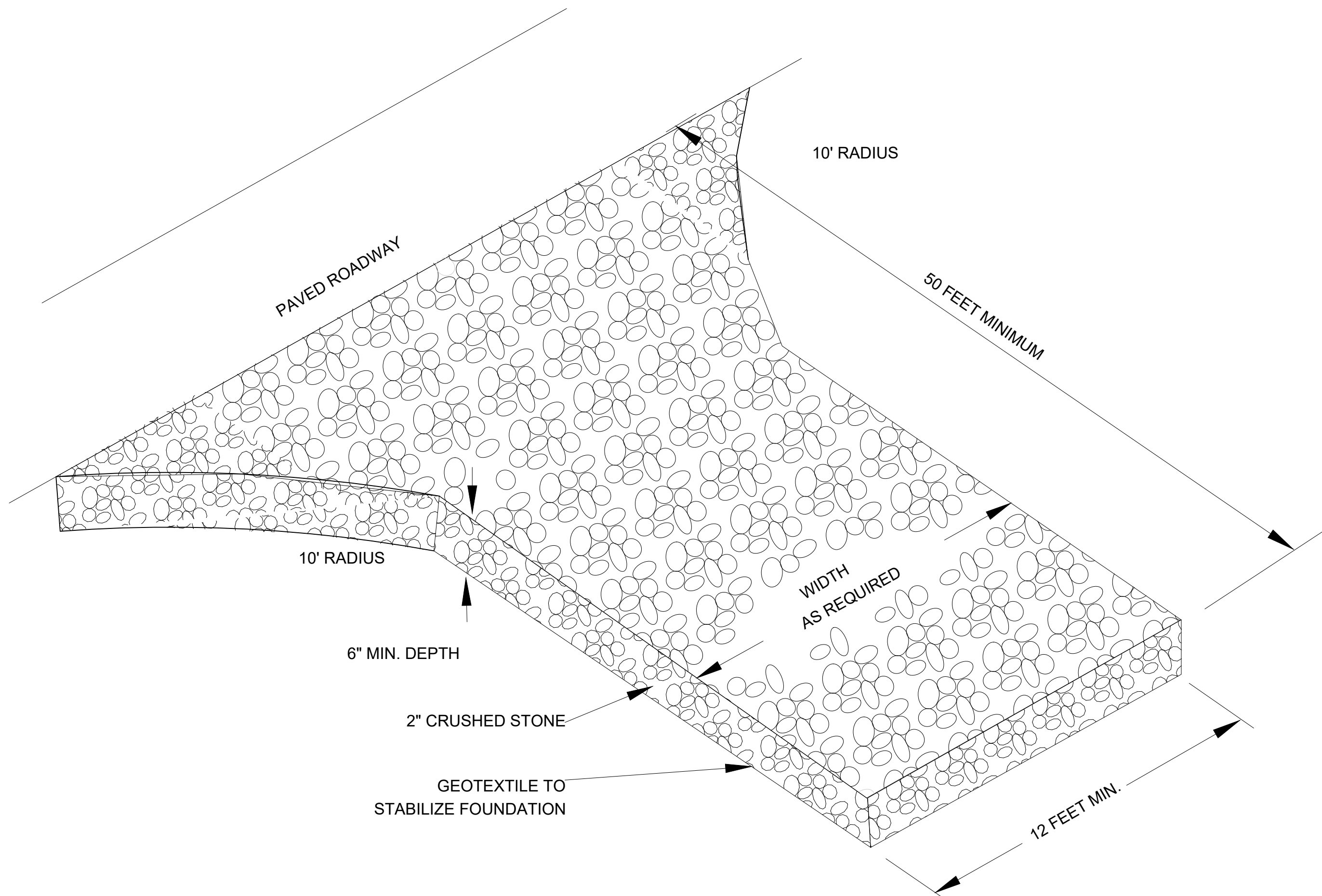
EROSION & SEDIMENT CONTROL NOTES

BMD project	102422	ARNG project	20MIL21201
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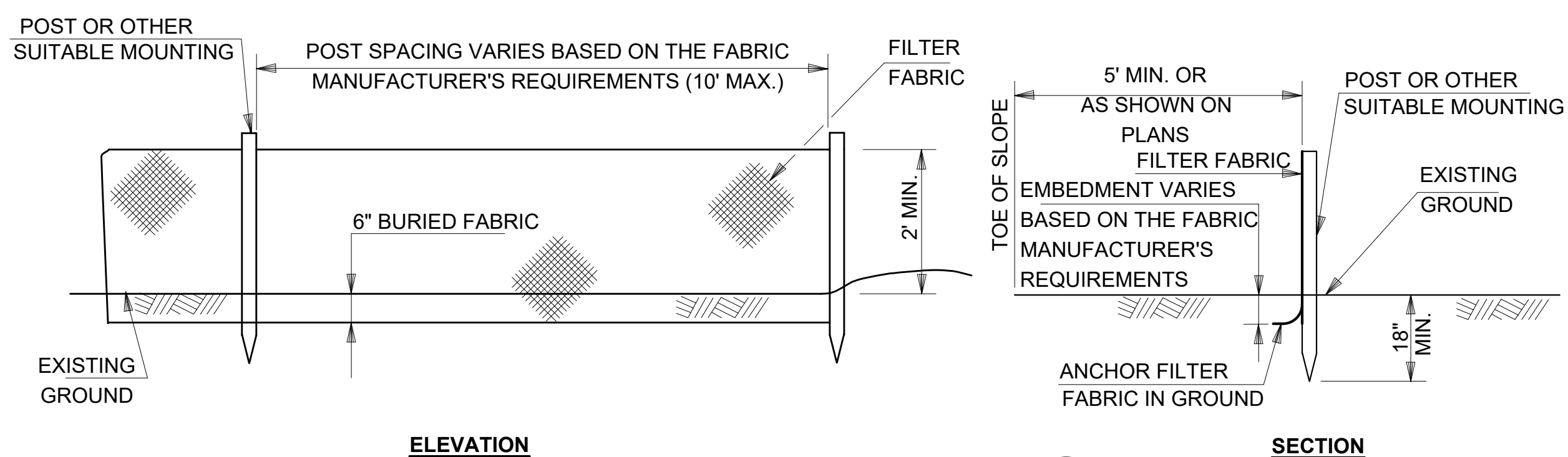
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no.	date	by	ckd	description
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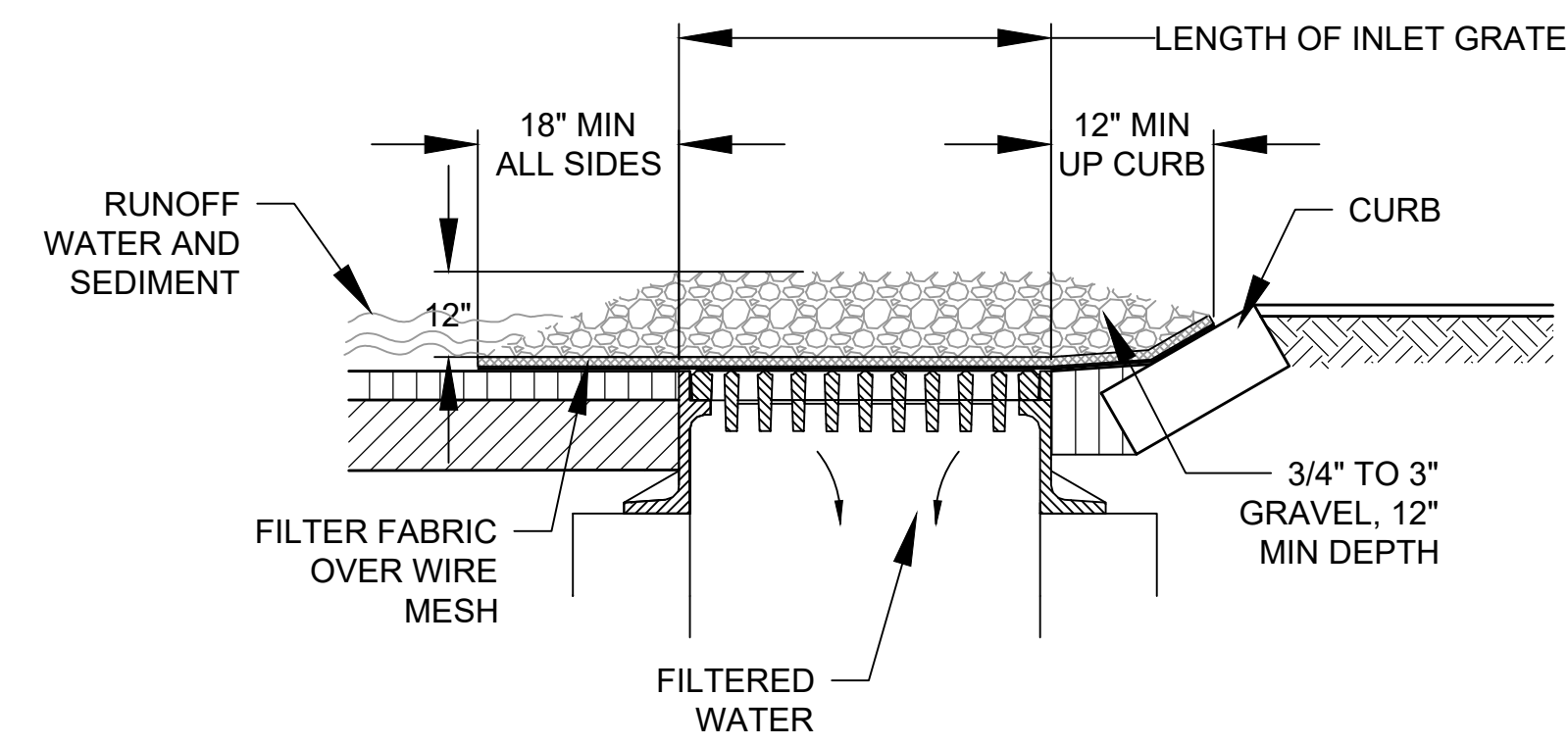
CONSTRUCTION ENTRANCE
NOT TO SCALE



ELEVATION

SEDIMENT CONTROL SYSTEM
NOT TO SCALE

SECTION



GRAVEL AND WIRE MESH INLET PROTECTION

NOTE:

- GRAVEL AND WIRE MESH INLET PROTECTION SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE CONNECTICUT EROSION AND SEDIMENT CONTROL GUIDELINES.
- GRAVEL AND WIRE MESH INLET PROTECTION MAY BE USED IN AREAS WHERE TRAFFIC MAY OCCUR OVER THE INLET.

MATERIALS

- FILTER FABRIC USED SHALL BE SYNTHETIC, EXTRA-STRENGTH FABRIC.
- WIRE MESH OR HARDWARE CLOTH WITH OPENINGS UP TO 1/2 INCH SHALL BE USED

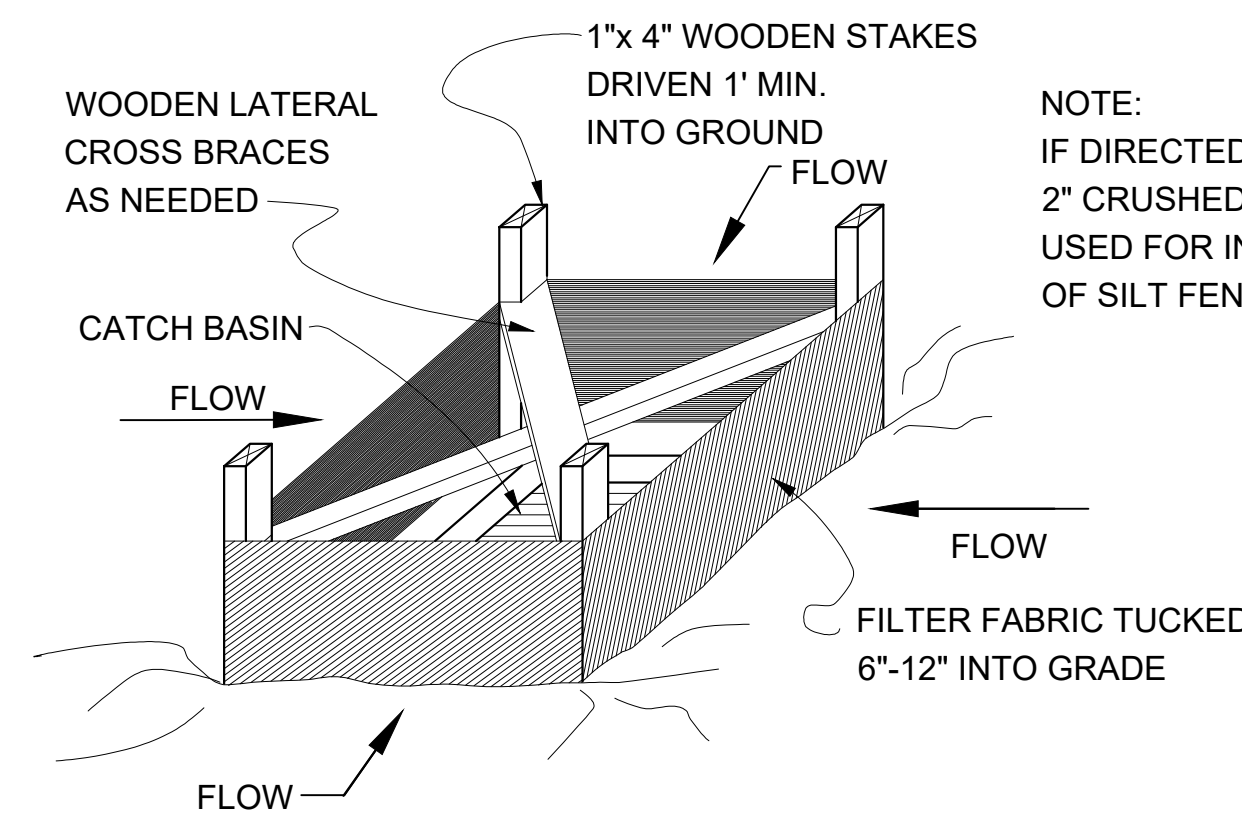
INSTALLATION

- WIRE MESH SHALL BE PLACED OVER INLET COVERING ENTIRE INLET GRATE IS COVERED. WIRE MESH SHALL EXTEND BEYOND INLET 18 INCHES ON ALL SIDES AND/OR 12 INCHES UP CURBS.
- PLACE FILTER FABRIC OVER WIRE MESH.
- PLACE 3/4 INCH TO 3 INCH CLEAN GRAVEL OVER FILTER FABRIC/WIRE MESH. DEPTH OF GRAVEL SHALL BE 12 INCHES OVER THE ENTIRE INLET OPENING AND TAPER TO GRADE OVER 18 INCHES.

INSPECTION AND MAINTENANCE

- INLET PROTECTION DEVICE SHALL BE INSPECTED AFTER EACH RAINFALL AND REPAIRS MADE AS NECESSARY.
- SEDIMENT SHALL BE REMOVED FROM TRAPPING DEVICE AFTER SEDIMENT HAS REACHED A MAXIMUM OF ONE-HALF THE DEPTH OF THE TRAP (6 INCHES). SEDIMENT SHALL BE DISPOSED OF IN A SUITABLE AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURAL OR VEGETATIVE MEANS.
- REMOVE AND REPLACE GRAVEL WHEN DRAINAGE STOPS.
- INLET PROTECTION SHALL REMAIN IN PLACE UNTIL AREA DRAINING TO INLET IS COMPLETELY STABILIZED

INLET PROTECTION IN PAVEMENT
NOT TO SCALE



NOTE:
IF DIRECTED BY THE ENGINEER, 2" CRUSHED STONE SHALL BE USED FOR INLET CONTROL IN LIEU OF SILT FENCE OR HAY BALES.

INLET PROTECTION IN TURF
NOT TO SCALE



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LICENSEE NO. 000165

date	detailed
DECEMBER 28, 2017	S. CATONE
designed	checked
L. GUERIN	K. WARRENDER



CONNECTICUT ARMY NATIONAL GUARD
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AASF AIRCRAFT APRON REPAIR - PHASE 1
EROSION & SEDIMENT CONTROL DETAILS

BMD project	ARNG project
102422	20MIL21201
drawing	rev.
SE502	0
sheet	of # sheets
file 102422-SE502-P1.dwg	