

LETTING ITEM NO. 07A  
 IDOT LETTING: JANUARY 17, 2025

LE057  
 TOTAL SHEETS = 30

CONSTRUCTION PLANS

CONSTRUCT TRAINING ACTIVITY  
 OPERATIONS APRON

JOLIET REGIONAL PORT DISTRICT  
 LEWIS UNIVERSITY AIRPORT (LOT)  
 ROMEOVILLE, WILL COUNTY, ILLINOIS

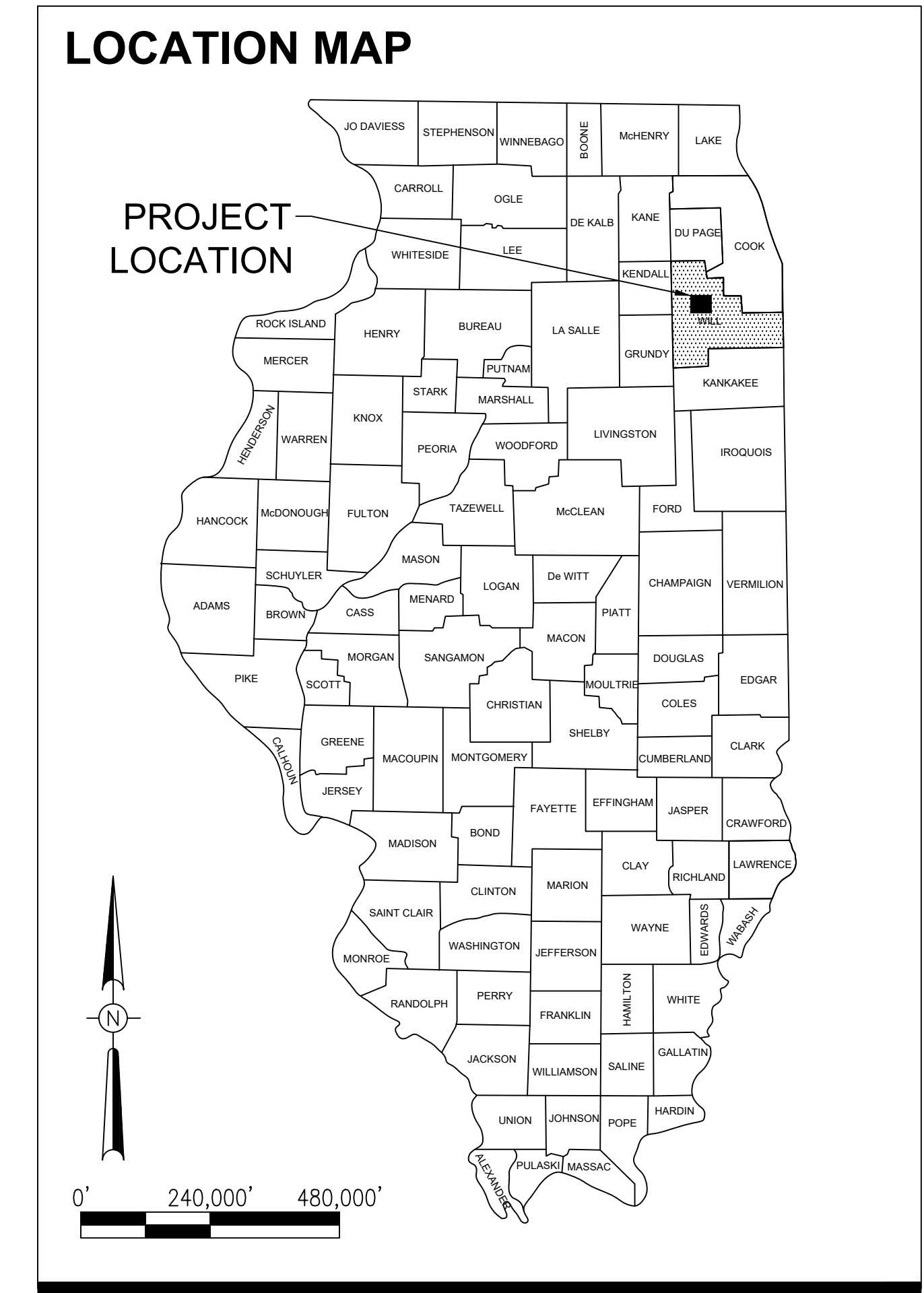
SBG PROJECT NO. 3-17-SBGP-TBD  
 IDA PROJECT NO. LOT-5151  
 CONTRACT NO. LE057

100% SUBMITTAL  
 NOVEMBER 22, 2024

**SPECIAL NOTICE**  
 THIS PROJECT IS GOVERNED BY FAA REQUIRED BUY AMERICAN PREFERENCE REQUIREMENTS.  
 ALL BIDS MUST INCLUDE COMPLETED FAA REQUIRED CERTIFICATIONS AT THE TIME OF BID. SEE  
 THE BID PROPOSAL AND ANY SOLICITATION ADDENDA REGARDING THIS MATTER.


NOTICE TO CONTRACTORS AND BIDDERS

THESE CONSTRUCTION PLANS RELY UPON THE SPECIAL PROVISIONS AND THE SPECIFICATIONS  
 TO PROVIDE FOR A COMPLETE DESCRIPTION OF THE WORK AND CONSTRUCTION REQUIREMENTS.  
 THE PLANS SHALL ONLY BE USED IN COMBINATION WITH ALL CONTRACT DOCUMENTS.



No.	Issue/Description	Sheets Changed	Date	By

Seal Date of Plans



NOVEMBER 22, 2024  
Date

Kris Salvatera, P.E.  
Project Engineer




550 WEST JACKSON BOULEVARD, SUITE 600  
CHICAGO, ILLINOIS 60601




NOVEMBER 22, 2024  
Date

Ronald M. Hudson, AICP  
Project Manager



Lewis University Airport  
JOLIET REGIONAL PORT DISTRICT



NOVEMBER 22, 2024  
Date

Chris Lawson  
Director of Aviation







**GENERAL NOTES**

**PROJECT DESCRIPTION**

THIS PROJECT IS TO CONSTRUCT A NEW PORTLAND CEMENT CONCRETE AIRCRAFT APRON AT CHICAGO-ROMEDEVILLE AIRPORT, INCLUDING, AMONG OTHER INCIDENTAL WORK, THE FOLLOWING ITEMS:

- PLACEMENT OF TEMPORARY EROSION CONTROL MEASURES.
- PROVIDE SELECT GRADING OF EARTH CUTS/FILL FOR NEW APRON AND TOPOGRAPHY FOR DRAINAGE.
- CONSTRUCT NEW PORTLAND CEMENT CONCRETE APRON PAVEMENT AND ADJACENT BITUMINOUS PAVEMENT.
- INSTALL OIL CONTAINMENT SUMP FOR FUEL DISCHARGE ON THE PCC APRON.
- INSTALL STORMWATER DRAINAGE PIPE, MANHOLES AND FLARED END SECTIONS.
- INSTALL APRON LIGHT POLES.
- INSTALL AIRCRAFT PAVEMENT MARKINGS AND AIRCRAFT TIE DOWNS.
- TOPSOIL, SEED, AND MULCH PROJECT SITE AND DISTURBED AREAS.

**PROTECTION OF EXISTING AIRPORT FACILITIES**

THE CONTRACTOR IS TO BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES AND LIGHTING EQUIPMENT; DRIVEWAY AND ROAD PAVEMENT AND SHOULDERS; RUNWAY, TAXIWAY AND APRON PAVEMENTS AND SHOULDERS; RUNWAY, TAXIWAY AND AIRPORT LIGHTING EQUIPMENT; AND SEEDED AND TURFED AREAS THAT ARE UTILIZED IN OR AFFECTED BY THE CONTRACTOR'S ACTIVITIES. ITEMS DAMAGED BY THE CONTRACTOR ARE TO BE REPAIRED AT CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF AIRPORT MANAGER AND THE OWNER'S REPRESENTATIVE.

IN ADDITION, WHEN CONDITIONS DICTATE OR AS DETERMINED BY THE AIRPORT MANAGER OR THE OWNER'S REPRESENTATIVE, THE CONTRACTOR SHALL BE REQUIRED TO USE A PICK-UP TYPE SWEEPER IN ALL ACTIVE CONSTRUCTION AIRFIELD PAVEMENT AREAS. THE CONTRACTOR SHALL BE REQUIRED TO HAVE A SWEEPER AVAILABLE FOR USE AT ALL TIMES. THE COST OF SWEEPING SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE FAA (SMO) THROUGH THE RESIDENT ENGINEER TO LOCATE ALL FAA CABLES ON THE PROJECT SITE. ALL FAA CABLES SHALL BE PROTECTED AT ALL TIMES. NO FAA CABLING HAS BEEN IDENTIFIED WITHIN THE PROJECT LIMITS.

**CONTRACTOR'S ACCESS AND TEMPORARY FACILITIES**

CONTRACTOR'S ACCESS TO THE PROJECT WHEN ON AIRPORT PROPERTY IS SHOWN ON THIS SHEET. CONTRACTOR'S ACCESS TO THE AIRPORT ITSELF IS TO BE PROVIDED BY PUBLIC RIGHTS-OF-WAY. THE CONTRACTOR IS TO SECURE ALL NECESSARY PERMITS FOR THE USE OF ANY PUBLIC RIGHTS-OF-WAY AND IS TO MAINTAIN TRAFFIC ON THESE PUBLIC ROADS AT ALL TIMES, WITH THE COSTS OF PERMITTING, CLEANING AND REPAIRING OF PAVEMENT DAMAGED BY CONTRACTOR'S ACTIVITIES INCIDENTAL TO THE CONTRACT. USE OF AND REPAIRS TO ANY PUBLIC FACILITIES ARE TO BE COMPLETED TO THE SATISFACTION OF THE FACILITY'S OWNER.

HEAVY VEHICLES SHALL NOT CROSS EXISTING PAVEMENT SURFACES EXCEPT AS APPROVED BY THE AIRPORT MANAGER AND THE OWNER'S REPRESENTATIVE. ANY DAMAGE TO PAVEMENTS THAT MAY OCCUR BY THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE AIRPORT MANAGER AND THE OWNER'S REPRESENTATIVE.

THE CONTRACTOR IS TO PROVIDE EQUIPMENT, STORAGE AND PARKING AREA AT THE LOCATION SHOWN ON THIS SHEET. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE ACCESS ROADS AND THE STORAGE AREA DURING CONSTRUCTION AND TO RESTORE THE AREAS AT PROJECT COMPLETION TO CONDITIONS SUITABLE TO THE AIRPORT MANAGER AND THE OWNER'S REPRESENTATIVE. AT THE AIRPORT MANAGER'S DISCRETION, THE TEMPORARY FACILITIES MAY REMAIN, BUT THEY MUST BE LEFT IN CONDITIONS SUITABLE TO THE AIRPORT MANAGER. THE COST OF PROVIDING, MAINTAINING AND RESTORING THE TEMPORARY FACILITIES IS INCIDENTAL TO THE CONTRACT.

**RESPONSIBILITY FOR EXISTING UTILITIES**

THE LOCATION, SIZE AND/OR TYPE OF MATERIAL OF EXISTING UNDERGROUND OR OVERHEAD UTILITIES AS MAY BE INDICATED ON THESE CONSTRUCTION PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. NEITHER THE OWNER NOR THE PROJECT ENGINEER HAVE INDEPENDENTLY VERIFIED THIS INFORMATION AND NEITHER ASSUMES ANY RESPONSIBILITY WHATSOEVER IN RESPECT TO THE ACCURACY, SUFFICIENCY OR COMPLETENESS OF THE INFORMATION AND GIVE NO EXPRESSED OR IMPLIED GUARANTEE THAT ANY CONDITIONS INDICATED ARE REPRESENTATIVE OF ACTUAL CONDITIONS TO BE ENCOUNTERED

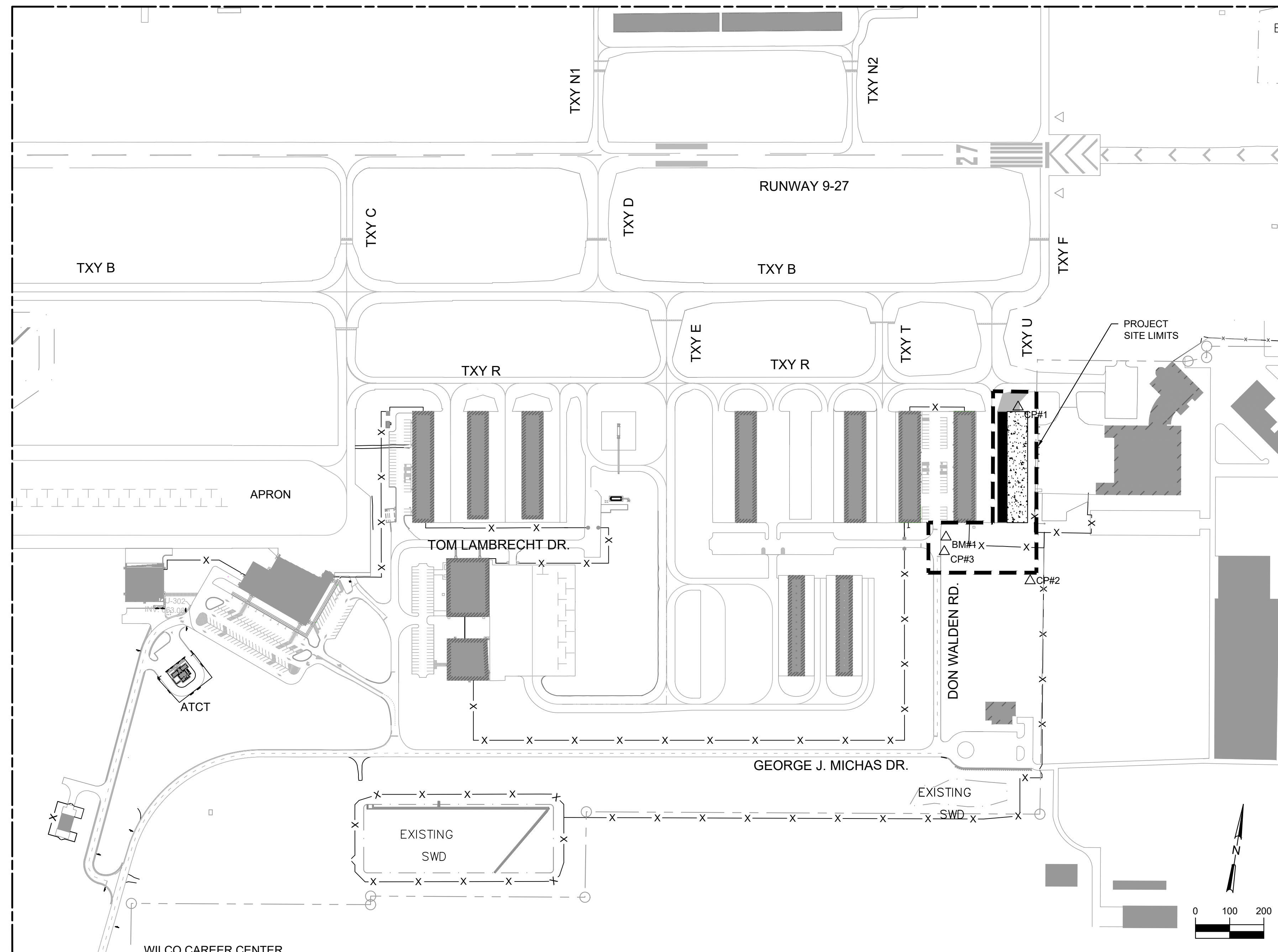
IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND AGENCIES OF HIS CONSTRUCTION PLANS AND SHALL OBTAIN FROM EACH PARTY DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF ALL UTILITIES AND THE WORKING SCHEDULE OF ANY REMOVALS OR ADJUSTMENTS REQUIRED OF THE UTILITY. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (PHONE 800-892-0123) TO ASSIST IN THE ABOVE.

CONTACT THE FAA (FEDERAL AVIATION ADMINISTRATION) FOR ASSISTANCE IN LOCATING FAA CABLES AND UTILITIES. LOCATION OF FAA POWER, CONTROL, AND COMMUNICATION CABLES SHALL BE COORDINATED WITH AND/OR LOCATED BY THE FAA.

THE CONTRACTOR SHALL PROTECT ANY FACILITIES TO THE SATISFACTION OF THE UTILITY OR OWNING-AGENCY WITH THE COST OF ANY REQUIRED PROTECTION TO BE INCIDENTAL TO THE CONTRACT. IN THE EVENT A UTILITY LINE OR SERVICE IS UNEXPECTEDLY ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE AND THE UTILITY COMPANY OR AGENCY OF JURISDICTION. ANY SUCH UTILITIES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO SERVICE IMMEDIATELY.

**AIRCRAFT SECURITY**

THE CONTRACTOR IS TO COORDINATE GATE SECURITY, THROUGH THE RESIDENT ENGINEER, WITH THE AIRPORT MANAGEMENT. AIRPORT SECURITY SHALL BE MAINTAINED AT ALL TIMES.



ALL TAXIWAYS WITHIN THE PROJECT LIMITS ARE FAA CATEGORY II.

**NOTES**

1. THE CONTRACTOR SHALL NOT CROSS ANY RUNWAYS OR OTHER ACTIVE AIRFIELD MOVEMENT AREA PAVEMENTS.
2. WORK MUST BE CONTROLLED.
3. MAXIMUM HEIGHT SHALL BE 25 FEET AT ALL LOCATIONS, EXCEPT FOR CRANE HEIGHTS OF 50 FEET AND/OR BY PRIOR APPROVAL OF THE ENGINEER (SEE SPECIAL PROVISIONS).
4. TRAFFIC TO BE MAINTAINED ON ALL AIRPORT ROADWAYS AT ALL TIMES EXCEPT AT DESIGNATED WORK AREAS AND TEMPORARY STABILIZED ENTRANCE ROADS.
5. NO CLOSURES TO TAXIWAY, APRON, ROADWAY, AND AUTO PARKING SHALL BE CONDUCTED EXCEPT AS SHOWN IN THE SITE PLAN.
6. THE AIRCRAFT AND GROUND VEHICLE TRAFFIC IS UNDER THE CONTROL OF AN FAA AIRCRAFT CONTROL TOWER. ALL CONTRACTOR ACTIVITY IS SUBJECT TO THIS CONTROL. THE AIRPORT MANAGER OR THEIR REPRESENTATIVE WILL COORDINATE CONTRACTOR ACTIVITIES WITH THE FAA CONTROL TOWER MANAGER. THE CONTRACTOR IS REQUIRED TO GIVE ADVANCE NOTICE OF ANY REQUESTS ON ANY ACTIVE AIRFIELD RUNWAYS OR TAXIWAYS.
7. AREAS OUTSIDE THE WORK LIMITS THAT ARE DISTURBED OR DAMAGED SHALL BE RESTORED TO ITS EXISTING CONDITIONS AND SHALL NOT BE PAID EXTRA BUT INCLUDED IN THE CONTRACT COST.

**EXISTING BENCHMARKS**

- PROJECT BENCHMARKS ARE AS FOLLOWS:
- △ BM#1 CUT CROSS ON THE EASTERN BOLT OF HYDRANT NEAR THE SW CORNER OF HANGAR 900  
N 1,798,948.25  
E 1,052,086.21  
ELEV 664.79
  - △ CP#1 SET 3/8" REBAR  
N 1,799,337.42  
E 1,052,280.69  
ELEV 664.14
  - △ CP#2 SET 3/8" REBAR  
N 1,798,830.91  
E 1,052,337.45  
ELEV 661.67
  - △ CP#3 SET 3/8" REBAR  
N 1,798,905.65  
E 1,052,082.96  
ELEV 663.32

COORDINATES ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD83(2011). ELEVATIONS SHOWN ARE REFERENCED TO NAVD88 DATUM.

Know what's below. Call before you dig.

J.U.L.I.E. JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS  
www.illinois1call.com

THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ACTUAL LOCATIONS OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES OF HIS OPERATIONAL PLANS, OBTAIN FROM RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION AND THE ONE-CALL NOTICE SYSTEM. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH UTILITY OR SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

CALL J.U.L.I.E. FOR UTILITY INFORMATION AT 811.

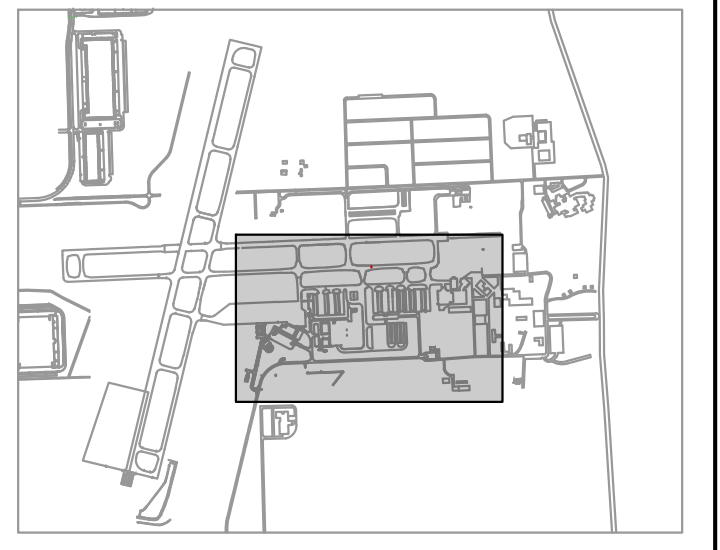
No.	Description	By	Chk.	App.	Date
Issues					

**LEWIS UNIVERSITY AIRPORT**

**CONSTRUCT TRAINING ACTIVITY OPERATIONS APRON**

IDA No: LOT-5151  
BCM NO. LE057  
SBG No: 3-17-SBGP-TBD

**KEY PLAN**



DRAWING TITLE

**SITE PLAN, PROJECT CONTROL, AND GENERAL NOTES**

<b>3 OF 30</b>	
APPROVED	SHEET NO.
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KWS	
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JVJ	

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SAFETY IS REQUIRED

CONSTRUCTION OF THE PROJECT SHALL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH THE GUIDELINES SPECIFIED IN FAA ADVISORY CIRCULAR 150/5370-2 (CURRENT ISSUE) AND THE AIRPORT RULES AND REGULATIONS (AS PUBLISHED ON LEWIS UNIVERSITY AIRPORT'S WEBSITE AT HTTP://WWW.FLYLOT.COM UNDER JRPD ORDINANCES AND MINUTES (EXCEPT FEES FOR VEHICLE DRIVING PERMITS SHALL NOT BE PAID)). ANY CONTRACTOR ACTIVITIES REQUIRED FOR PROJECT SAFETY SHALL BE PROVIDED BY THE CONTRACTOR AND INCIDENTAL TO THE CONTRACT.

SEQUENCE OF CONSTRUCTION

TO MINIMIZE DISRUPTIONS OF AIRPORT OPERATIONS, CONSTRUCTION OPERATIONS MUST BE CONTROLLED THROUGHOUT THE PROJECT'S DURATION, AND WORK MUST BE COMPLETED EXPEDITIOUSLY. A CONSTRUCTION PHASING PLAN DETAILING THE SEQUENCING OF THE CONTRACTOR'S WORK THROUGHOUT THE PROJECT IS INCLUDED IN THE PLANS. THE CONTRACTOR SHALL PROVIDE HIS WRITTEN ACCEPTANCE OF THE PROJECT CONSTRUCTION PHASING PLAN AT THE PRE-CONSTRUCTION CONFERENCE. ANY AND ALL CHANGES TO THE CONSTRUCTION PHASING PLAN THAT MAY BE REQUESTED BY THE CONTRACTOR MUST BE APPROVED BY THE PROJECT ENGINEER AND THE AIRPORT OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SUFFICIENT ADVANCE NOTICE OF ANY PROPOSED PHASING CHANGE TO PERMIT CONSIDERATION AND APPROVAL BY THE PROJECT ENGINEER AND THE AIRPORT OWNER. THE CONTRACTOR SHALL NOT BE ENTITLED TO ANY EXTRA COMPENSATION, NOR EXTENSION TO THE CONTRACT TIME, BECAUSE OF A PHASING CHANGE REQUEST NOR FOR ANY TIME NECESSARY IN RECEIVING THE REQUIRED APPROVALS. THE CONTRACTOR SHALL EXPEDITE WORK AT THOSE STAGES WHERE ACTIVE RUNWAYS, TAXIWAYS, HANGAR ACCESS, APRONS, ROADWAYS OR PARKING LOTS MUST BE CLOSED, TO MINIMIZE THE LENGTH OF TIME THAT AIRPORT OPERATIONS ARE RESTRICTED.

AT THE PRE-CONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL PROVIDE A CONTRACTOR COORDINATION PLAN THAT COORDINATES HIS WORK WITH THE WORK OF HIS SUBCONTRACTORS AND THE WORK OF OTHER CONTRACTORS OF OTHER ON-GOING AIRPORT PROJECTS.

RUNWAY CLOSURE

NO RUNWAY CLOSURES ARE ANTICIPATED FOR THIS PROJECT.

TEMPORARY BARRICADES

THE CONTRACTOR SHALL FURNISH BARRICADES FOR ANY AIRFIELD OR ROADWAY PAVEMENT TO BE CLOSED BY HIS WORK. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH, PLACE AND MAINTAIN BARRICADES AS SHOWN IN THE PLANS AND AS DIRECTED BY THE RESIDENT ENGINEER AND AIRPORT DIRECTOR. THE COST OF THESE ITEMS, AND THEIR MAINTENANCE, IS TO BE PAID UNDER ITEM AR150530 TRAFFIC MAINTENANCE. ANY WORK THAT REQUIRES PORTIONS OF AN ACTIVE TAXIWAY OR APRON TO BE CLOSED MUST BE COMPLETED EXPEDITIOUSLY TO MINIMIZE DISRUPTION TO AIRCRAFT OPERATIONS.

VEHICULAR TRAFFIC CONTROL

THE CONTRACTOR SHALL ERECT AND MAINTAIN, AT NO COST TO THE CONTRACT, DIRECTIONAL AND INFORMATIONAL SIGNS FOR THE CONTRACTOR'S ACCESS ROUTES AT THE EXISTING CONSTRUCTION ENTRANCES AND FOR THE CONTRACTOR'S ROUTE WITHIN THE AIRPORT OPERATIONS AREA, AS NOTED ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER. WHERE CONTRACTOR EQUIPMENT IS OPERATING WITHIN ACTIVE AIRCRAFT OPERATIONS AREAS, RADIO-EQUIPED FLAGGERS SHALL BE FURNISHED BY THE CONTRACTOR. CONTINUOUS PAVEMENT SWEEPING SHALL BE FURNISHED TO REMOVE DEBRIS FROM ACTIVE AIRCRAFT MOVEMENT PATHS. THE COST OF TRAFFIC CONTROL/FLAGGERS AND PAVEMENT SWEEPING SHALL BE PAID UNDER ITEM AR150530 TRAFFIC MAINTENANCE.

AIRFIELD OPERATIONAL SAFETY DURING CONSTRUCTION

THE CONTRACTOR SHALL NOT HAVE ACCESS TO ANY PART OF THE ACTIVE AIRFIELD (RUNWAYS, TAXIWAYS OR APRONS) FOR ANY EQUIPMENT OR PERSONNEL WITHOUT THE APPROVAL OF THE RESIDENT ENGINEER AND THE AIRPORT OWNER. ACTIVITIES WITHIN THE AIRPORT OPERATIONS AREA (AOA) ARE SUBJECT TO FEDERAL ACCESS CONTROL. BECAUSE OF THE HIGH REQUIREMENTS FOR AIRPORT SECURITY AND SAFETY, THE FOLLOWING REQUIREMENTS MUST BE ADHERED TO:

- ALL EMPLOYEES OF THE CONTRACTOR SHALL PARK THEIR PERSONAL VEHICLES IN THE DESIGNATED EQUIPMENT PARKING AND STORAGE AREA. EACH PERSON OR VEHICLE ENTERING THE CONTRACTOR AREA SHALL DO SO IN ACCORDANCE WITH THE POLICIES AND PROCEDURES OF THE AIRPORT OWNER. THE CONTRACTOR WILL TRANSPORT THE WORKERS FROM THE PARKING AREAS TO THE WORK AREA. ONLY CONTRACTOR VEHICLES WILL BE ALLOWED OUTSIDE OF THE PROPOSED EQUIPMENT STORAGE AND PARKING AREAS.
- SHOULD ANY CONTRACTOR PERSONNEL BE IDENTIFIED AS NONCOMPLIANT WITH ANY VEHICLE RIVING SAFETY REQUIREMENTS IN THIS PROJECT SAFETY PLAN OR IN THE AIRPORT VEHICLE OPERATIONS REGULATIONS, SUCH DRIVERS SHALL BE PENALIZED BY RESCISSION OF THEIR ON-AIRPORT DRIVING PRIVILEGES, AND THEIR ACCESS TO THE CONSTRUCTION LIMIT AREA WHEN OPERATING VEHICLES SHALL BE REVOKED.
- THE CONTRACTOR WILL BE REQUIRED TO BE IN CONTACT WITH AIRPORT OPERATIONS. THIS WILL KEEP THE CONTRACTOR IN CONTACT WITH AIRPORT PERSONNEL AND ENABLE THE AIRPORT PERSONNEL TO IMMEDIATELY CONTACT THE CONTRACTOR IN CASE OF AN AERONAUTICAL EMERGENCY THAT WOULD REQUIRE ACTION BY THE CONTRACTOR AND/OR HIS PERSONNEL.

THE CONTRACTOR SHALL REMAIN WITHIN THE CONSTRUCTION LIMITS LINE SHOWN IN THE PLANS. WHEN OUTSIDE THESE LIMITS, ALL CONTRACTOR ACTIVITIES SHALL REMAIN MORE THAN 250 FEET FROM THE CENTERLINE AND 1,000 FEET FROM THE END OF ACTIVE RUNWAY 9-27, AND 250 FEET FROM THE CENTERLINE AND 1,000 FEET FROM THE END OF ACTIVE RUNWAY 2-20. FOR WORK NEAR TAXIWAYS AND APRONS, THE CONTRACTOR'S PERSONNEL AND EQUIPMENT MUST REMAIN AT LEAST 44.5 FEET FROM CENTERLINE OF ACTIVE CATEGORY I TAXIWAYS, 65.5 FEET FROM ACTIVE CATEGORY II TAXIWAYS AND 93 FEET FROM ACTIVE CATEGORY III TAXIWAYS, AND TEN (10) FEET FROM ACTIVE APRONS. WHEN CONSTRUCTION OPERATIONS MUST BE CONDUCTED WITHIN THESE SEPARATIONS, THE PAVEMENT MUST BE CLOSED TO AIRCRAFT ACTIVITY BY THE CONTRACTOR BY PROVIDING TEMPORARY BARRICADES AS SHOWN IN THE PLANS, AND IN THE CASE RUNWAY PAVEMENTS, CLOSED RUNWAY MARKERS.

NO CLOSURE OF ANY RUNWAY WILL BE PERMITTED FOR THIS PROJECT.

THE CONTRACTOR SHALL KEEP ALL OF HIS EQUIPMENT AND PERSONNEL AT LEAST 15 FEET FROM THE EDGE OF ANY ACTIVE ROADWAY OR AUTO PARKING PAVEMENT. WHEN HIS ACTIVITIES REQUIRE WORKING WITHIN 15 FEET OF THE ROAD/PAVEMENT EDGE, THE CONTRACTOR SHALL PROVIDE FOR TRAFFIC CONTROL IN ACCORDANCE WITH IDOT SPECIFICATIONS (HIGHWAY STANDARDS).

OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIAL AT THE CONSTRUCTION SITE SHALL BE DELINEATED WITH THE USE OF BARRICADES DURING HOURS OF RESTRICTED VISIBILITY AND/OR DARKNESS. NO OPEN TRENCHES SHALL BE ALLOWED WITHIN THE RUNWAY SAFETY AREA (RSA) OR THE TAXIWAY SAFETY AREA (TSA) WHEN THE RUNWAY OR TAXIWAY IS OPEN TO AIR TRAFFIC (INCLUDING OVERNIGHT). THE RSA IS DEFINED AS 250 FEET FROM THE CENTERLINE AND 1,000 FEET FROM THE END OF RUNWAY 9-27), AND 250 FEET FROM THE CENTERLINE AND 1,000 FEET FROM THE END OF RUNWAY 2-20. THE TSA IS MEASURED AT 24.5 FEET FROM THE CATEGORY I TAXIWAY CENTERLINE, AND 39.5 FEET FROM THE CATEGORY II TAXIWAY CENTERLINE, AND 59 FEET FROM THE CATEGORY III TAXIWAY CENTERLINE. NO VERTICAL DROP OF GREATER THAN 3-INCHES IN HEIGHT FROM PAVEMENT EDGE TO EARTH GRADE OR EARTH GRADE TO EARTH GRADE WITHIN THE RSA OR TSA WILL BE PERMITTED WHEN THE RUNWAY OR TAXIWAY IS OPEN TO AIR TRAFFIC. THE CONTRACTOR WILL HAVE STEEL PLATES ON-SITE TO ALLOW FOR THE RAPID COVERING OF TRENCHES OR EARTH DROPS IN THE EVENT OF UNEXPECTED WORK STOPPAGES FOR WEATHER OR AIRPORT EMERGENCIES.

WHEN NOT IN USE AND DURING NONWORKING HOURS, CONTRACTOR'S EQUIPMENT SHALL BE PARKED WITHIN THE CONTRACTOR'S EQUIPMENT STORAGE AND PARKING AREAS. THE EQUIPMENT STORAGE AND PARKING AREAS ARE TO BE LOCATED AS SHOWN ON THE PHASING PLAN. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING THE CONSTRUCTION ENTRANCES IN GOOD CONDITION. THE COST OF MAINTAINING THE CONSTRUCTION ENTRANCE AND CONTRACTOR AREAS IS TO BE PAID UNDER ITEM AR150540 HAUL ROUTE. THE CONTRACTOR SHALL PROTECT ALL EXISTING PAVEMENT EDGES FROM DAMAGE FROM CONSTRUCTION EQUIPMENT AND HAUL VEHICLES.

AT NO TIME SHALL THE CONTRACTOR CONDUCT ANY ACTIVITIES OR OPERATE OR PARK EQUIPMENT SO AS TO OBSTRUCT ACTIVE PART 77 AIRPORT IMAGINARY SURFACES OR THE RUNWAY PROTECTION ZONES (RPZ) AS DELINEATED IN THE PLANS. CONTRACTOR'S EQUIPMENT SHALL EXTEND NO HIGHER THAN 20 FEET. CRANES SHALL NOT BE USED DURING INSTRUMENT WEATHER CONDITIONS OR AT NIGHT. CRANES SHALL BE LOWERED WHEN NOT IN USE.

BEFORE REOPENING TEMPORARILY CLOSED PAVEMENTS, THE CONTRACTOR SHALL INSPECT AND CLEAN, AS NECESSARY, THE PAVEMENT TO ASSURE THAT NO MATERIALS OR OBJECTS THAT MAY DAMAGE AIRCRAFT OR VEHICLES REMAIN. ANY REQUIRED CLEANING SHALL BE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT OWNER AND IS INCIDENTAL TO THE CONTRACT.

ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE APPROVED PROJECT SAFETY PLAN, ISSUED BY THE ILLINOIS DIVISION OF AERONAUTICS.

FAILURE TO USE THESE PRESCRIBED PROCEDURES OR ADHERE TO THE SAFETY REQUIREMENTS WILL RESULT IN THE SUSPENSION OF WORK.

NOTIFICATIONS BY CONTRACTOR

THE CONTRACTOR MUST NOTIFY THE RESIDENT ENGINEER AND THE AIRPORT OWNER 3 DAYS IN ADVANCE OF ANY REQUIRED PARTIAL OR COMPLETE CLOSING OF ANY RUNWAY, TAXIWAY OR APRON. THE DATE, TIME AND SCHEDULED DURATION OF THE CLOSING MUST BE APPROVED BY THE RESIDENT ENGINEER AND THE AIRPORT OWNER. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT OWNER 3 DAYS IN ADVANCE OF THE CONTRACTOR'S CLOSING OF OTHER ACTIVE ROADWAYS, AIRFIELD OR ROADWAY LIGHTING CIRCUITS, OR OTHER AIRPORT FACILITIES.

CONTRACTOR'S USE OF SITE

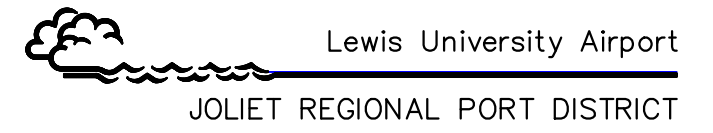
CONTRACTOR'S ACCESS TO THE PROJECT WHEN ON AIRPORT PROPERTY IS SHOWN IN THE PLANS. CONTRACTOR'S ACCESS TO THE AIRPORT ITSELF IS TO BE PROVIDED BY PUBLIC RIGHTS-OF-WAY. THE CONTRACTOR IS TO SECURE ALL NECESSARY PERMITS FOR THE USE OF ANY PUBLIC RIGHTS-OF-WAY AND IS TO MAINTAIN TRAFFIC ON THESE PUBLIC ROADS AT ALL TIMES, WITH THE COSTS OF PERMITTING, CLEANING AND REPAIRING OF PAVEMENT DAMAGED BY CONTRACTOR'S ACTIVITIES INCIDENTAL TO THE CONTRACT. USE OF AND REPAIRS TO ANY PUBLIC FACILITIES ARE TO BE COMPLETED TO THE SATISFACTION OF THE FACILITY'S OWNER.

THE CONTRACTOR IS TO PROVIDE TEMPORARY CONSTRUCTION ROADS WITHIN THE CONSTRUCTION LIMIT LINES AS MAY BE REQUIRED BY HIS ACTIVITIES. HEAVY VEHICLES SHALL NOT CROSS EXISTING PAVEMENT SURFACES EXCEPT AS APPROVED BY THE AIRPORT OWNER AND THE RESIDENT ENGINEER. ANY DAMAGE TO PAVEMENTS THAT MAY OCCUR BY THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE AIRPORT OWNER AND THE RESIDENT ENGINEER. FOR HAUL ROUTES MADE BY CONTRACTOR THROUGH GRASSED AREAS, CONTRACTOR SHALL GRADE, LEVEL, TOPSOIL, SEED AND MULCH AT THE END OF THE PROJECT, SEE DETAIL SHEET 5 PAID UNDER ITEM AR150540 HAUL ROUTE.

THE CONTRACTOR IS TO PROVIDE AN EQUIPMENT STORAGE AND PARKING AREA AT THE LOCATIONS SHOWN IN THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE ACCESS ROADS AND THE STORAGE AREA DURING CONSTRUCTION AND TO RESTORE THE AREAS AT PROJECT COMPLETION TO CONDITIONS SUITABLE TO THE AIRPORT OWNER AND THE RESIDENT ENGINEER. AT THE AIRPORT OWNER'S DISCRETION, THE TEMPORARY FACILITIES MAY REMAIN, BUT THEY MUST BE LEFT IN CONDITIONS SUITABLE TO THE AIRPORT OWNER. THE COST OF PROVIDING, MAINTAINING AND RESTORING THE TEMPORARY FACILITIES IS INCIDENTAL TO THE CONTRACT.

UTILITY OUTAGES AND SHUTDOWNS

THE CONTRACTOR SHALL PROVIDE 3 DAYS PRIOR NOTICE OF ANY OUTAGES OR SHUTDOWNS TO THE OWNER AND THE AGENCY OWNING THE AFFECTED UTILITY. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY CONNECTIONS OR OTHER MEASURES AS MAY BE REQUIRED TO MAINTAIN SERVICE AS MAY BE REQUIRED BY THE OWNING AGENCY AT NO COST TO THE OWNER.



No.	Description	By	Chk.	App.	Date
Issues					

LEWIS UNIVERSITY AIRPORT

CONSTRUCT TRAINING ACTIVITY OPERATIONS APRON

IDA No: LOT-5151  
BCM NO. LE057  
SBG No: 3-17-SBGP-TBD

KEY PLAN

DRAWING TITLE  
CONSTRUCTION SAFETY PLAN - GENERAL NOTES

6 OF 30	SHEET NO.
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JVJ	

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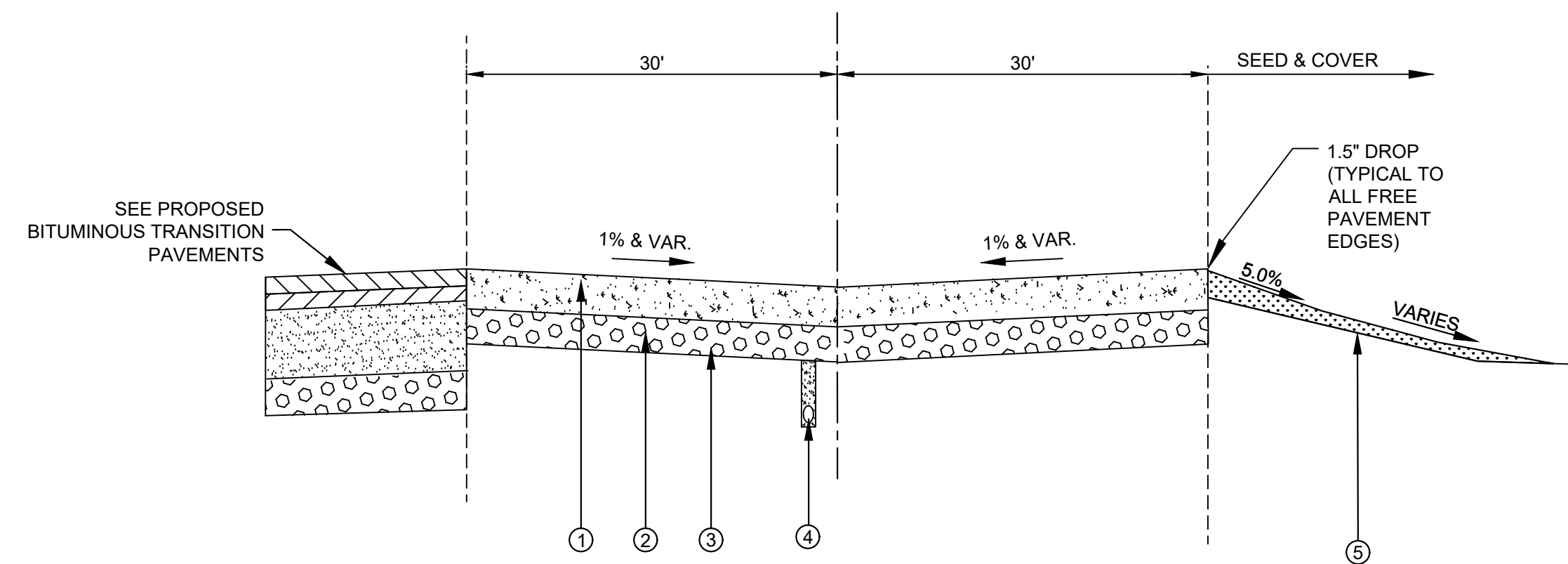






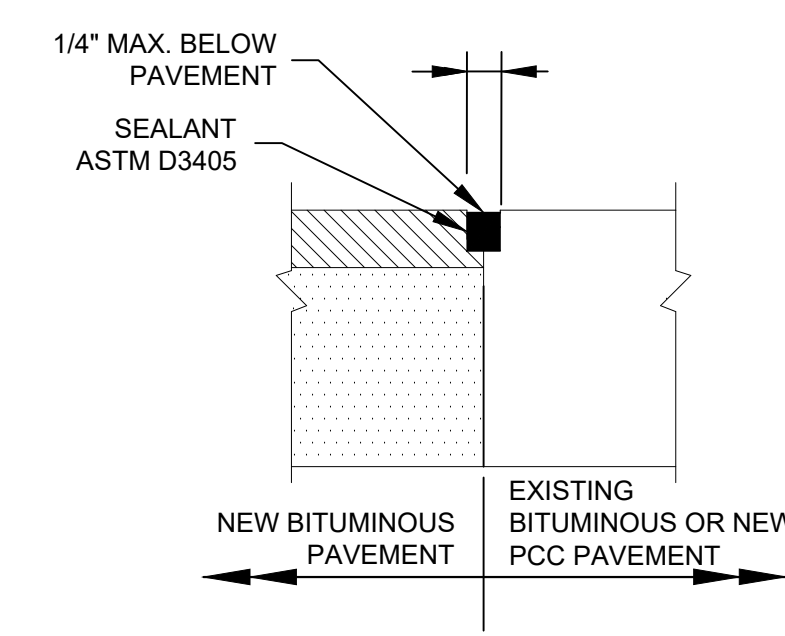






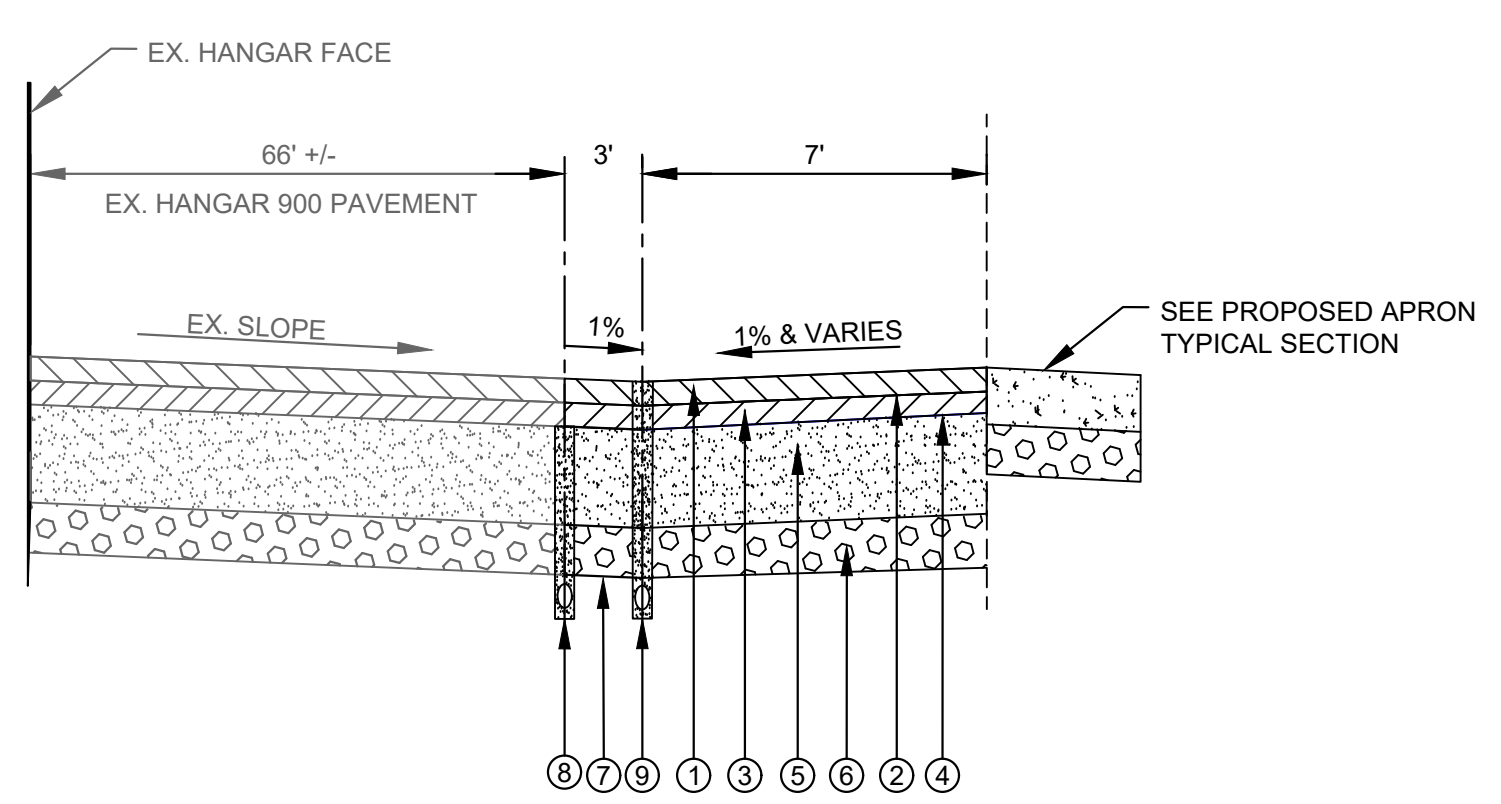
**TYPICAL SECTION - CONCRETE APRON**  
(SECTION SHOWN LOOKING NORTH)

- ① PROPOSED 6 INCH PORTLAND CEMENT (PCC) (ITEM AR501506)
- ② PROPOSED 6 INCH GRANULAR DRAINAGE SUBBASE (ITEM AR154606)
- ③ PROPOSED SOIL STABILIZATION FABRIC (ITEM AR152540)
- ④ PROPOSED UNDERDRAIN (ITEM AR705506)
- ⑤ PROPOSED 12" TOPSOIL (ITEM AR905530)



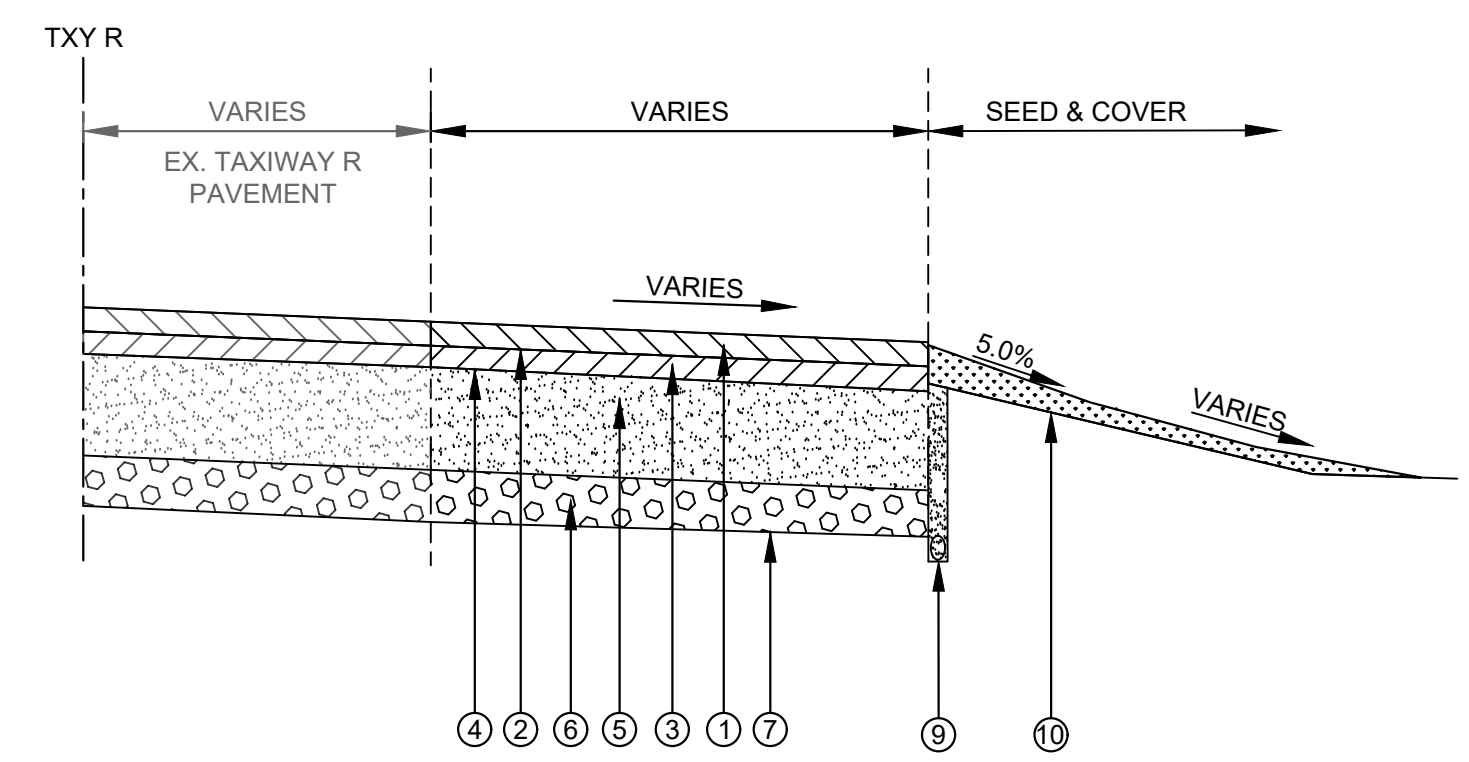
**NOTE:**  
ALL BITUMINOUS/BITUMINOUS AND BITUMINOUS/PCC JOINT SEALING TO BE PAID UNDER AR401660 - SAW & SEAL BIT. JOINTS.

**BITUMINOUS/BITUMINOUS OR BITUMINOUS/PCC SEAL**



**TYPICAL SECTION - HANGAR 900 BITUMINOUS PAVEMENT TRANSITION**  
(SECTION SHOWN LOOKING NORTH)

- ① PROPOSED 2.0 INCH BITUMINOUS SURFACE COURSE (ITEM AR401613), N30 @ 3.0% VOIDS
- ② PROPOSED BITUMINOUS TACK COAT (BETWEEN BIT. LIFTS) (ITEM AR603510)
- ③ PROPOSED 2.25-INCH BITUMINOUS BASE COURSE (ITEM AR403613), N30 @ 3.0% VOIDS
- ④ PROPOSED BITUMINOUS PRIME COAT (ITEM 602510)
- ⑤ PROPOSED 12 INCH CRUSHED AGGREGATE BASE COURSE (ITEM AR209612)
- ⑥ PROPOSED 6 INCH GRANULAR DRAINAGE SUBBASE (ITEM AR154606)
- ⑦ PROPOSED SOIL STABILIZATION FABRIC (ITEM AR152540)
- ⑧ PROPOSED UNDERDRAIN (ITEM AR705506)
- ⑨ PROPOSED TRENCH DRAIN (ITEM AR751001)



**TYPICAL SECTION - TAXIWAY R / TAXIWAY R2 BITUMINOUS PAVEMENT TRANSITION**

- ① PROPOSED 2.0-INCH BITUMINOUS SURFACE COURSE (ITEM AR401613), N30 @ 3.0% VOIDS
- ② PROPOSED BITUMINOUS TACK COAT (BETWEEN BIT. LIFTS) (ITEM AR603510)
- ③ PROPOSED 4-INCH BITUMINOUS BASE COURSE ITEM AR403613), N30@3.0% VOIDS
- ④ PROPOSED BITUMINOUS PRIME COAT (ITEM 602510)
- ⑤ PROPOSED 12 INCH CRUSHED AGGREGATE BASE COURSE (ITEM AR209612)
- ⑥ PROPOSED 6 INCH GRANULAR DRAINAGE SUBBASE (ITEM AR154606)
- ⑦ PROPOSED SOIL STABILIZATION FABRIC (ITEM AR152540)
- ⑧ PROPOSED UNDERDRAIN (ITEM AR705506)
- ⑨ PROPOSED TRENCH DRAIN (ITEM AR751001)
- ⑩ PROPOSED 12" TOPSOIL (ITEM AR905530)

ITEM	NDES	PG BINDER	AGG. QUALITY	MAX. RAP	DENSITY ACCEPTANCE
401: BITUMINOUS SURFACE COURSE, METHOD 1, SUPERPAVE	N30, @ 3.0%	SBS PG70-28	A	0%	NUCLEAR GAUGE
403: BITUMINOUS BASE COURSE, METHOD 1, SUPERPAVE	N30, @ 3.0%	SBS PG70-28	B	20%	NUCLEAR GAUGE

**NOTES**

1. BITUMINOUS TACK COAT SHALL BE APPLIED BETWEEN EACH LIFT OF BITUMINOUS BASE COURSE AND BETWEEN THE BITUMINOUS BASE COURSE TOP LIFT AND THE BITUMINOUS SURFACE COURSE. BITUMINOUS PRIME COAT SHALL BE APPLIED BETWEEN THE AGGREGATE BASE COURSE AND THE BITUMINOUS BASE COURSE - NO EXCEPTIONS
2. BITUMINOUS PRIME AND BITUMINOUS TACK COAT SHALL BE REQUIRED AS SPECIFIED. SEE SPECIAL PROVISIONS AND STANDARD SPECIFICATIONS.
3. SOIL STABILIZATION FABRIC, CRUSHED AGGREGATE BASE COURSE AND GRANULAR DRAINAGE SUBBASE SHALL EXTEND 1' OUTSIDE ALL UNCONSTRAINED PAVEMENT EDGES.
4. ALL HMA MIXES SHALL BE SUPERPAVE.

No.	Description	By	Chk.	App.	Date

**LEWIS UNIVERSITY AIRPORT**  
**CONSTRUCT TRAINING ACTIVITY OPERATIONS APRON**  
IDA No: LOT-5151  
BCM NO. LE057  
SBG No: 3-17-SBGP-TBD

**KEY PLAN**

**DRAWING TITLE**  
**TYPICAL SECTIONS AND PAVEMENT DETAILS**

9 OF 30  
APPROVED RMH SHEET NO. 9  
CHECKED KWS  
DRAWN BY JVJ

FILE NAME/LOCATION: P:\2020\20200112\10\W02\07 DRAWINGS\CURRENT DRAWING FILES\CADD SHEETS\LOT-5151-TYPICAL SECTIONS AND PAVEMENT DETAILS.DWG  
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 PLOT DEVICE DRIVER: ELOT STYLE TABLE - CIB  
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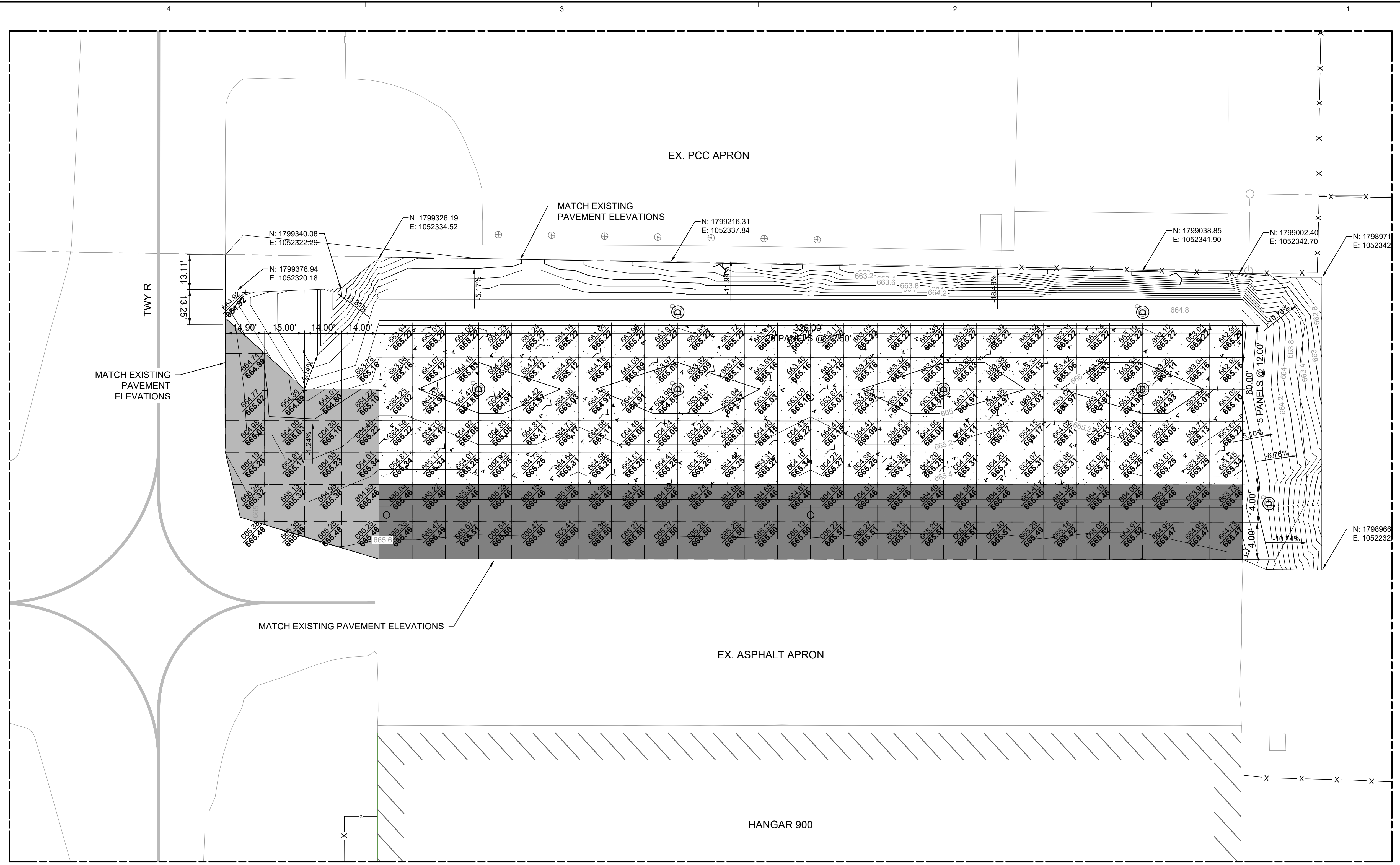










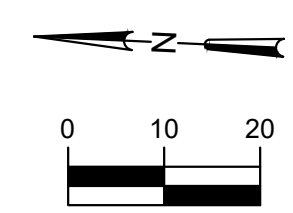


**GENERAL NOTES:**

1. SEE UTILITY PLAN AND UTILITY DETAILS SHEETS FOR ALL DRAINAGE STRUCTURE RIM ELEVATIONS, INVERT ELEVATIONS, AND DRAINAGE DETAILS.
2. PROPOSED TURF ALONG TAXIWAY APRON SHALL HAVE A 1.5" DROPOFF FROM THE PROPOSED APRON EDGE SLOPED AT 5% FOR A MINIMUM OF 10'. SEE PAVEMENT TYPICAL SECTIONS FOR DETAILS.

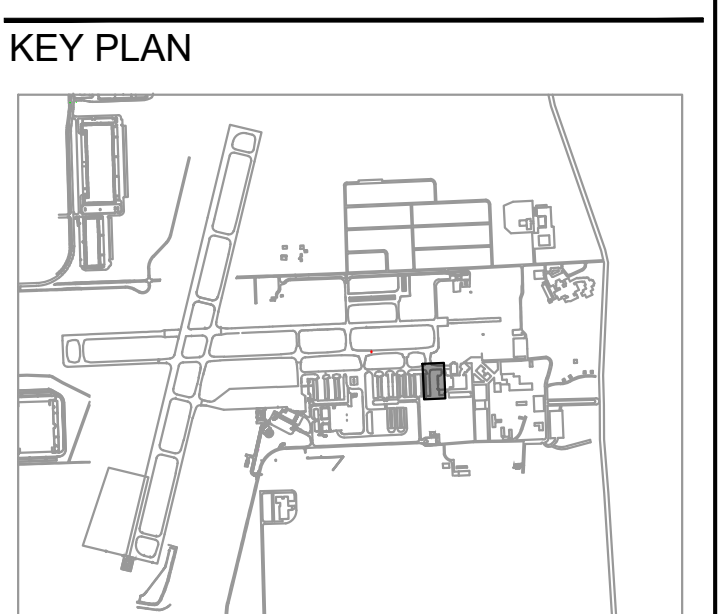
**LEGEND:**

- |  |  |  |  |
|--|--|--|--|
|  | PROP. CONCRETE APRON PAVEMENT              |  | EXISTING MINOR CONTOUR (0.2' INTERVAL) |
|  | PROP. BITUMINOUS TRANSITION APRON PAVEMENT |  | EXISTING MAJOR CONTOUR (1' INTERVAL)   |
|  | EX. BUILDING                               |  | PROPOSED MINOR CONTOUR (0.2' INTERVAL) |
|  | EX. FENCE                                  |  | PROPOSED MAJOR CONTOUR (1' INTERVAL)   |
|  | EX. PAVEMENT MARKING                       |  | EXISTING/PROPOSED SPOT ELEVATION       |
|  | EX. PROPERTY LINE                          |  |  |



No.	Description	By	Chk.	App.	Date

**LEWIS UNIVERSITY AIRPORT**  
**CONSTRUCT TRAINING ACTIVITY OPERATIONS APRON**  
IDA No: LOT-5151  
BCM NO. LE057  
SBG No: 3-17-SBGP-TBD



DRAWING TITLE  
**GRADING AND PAVEMENT ELEVATION PLAN**

13 OF 30	APPROVED	SHEET NO.
	RMH	
	CHECKED	13
	KWS	
	DRAWN BY	
	JVJ	

FILE NAME/LOCATION: P:\2020\20200112\10\W02\07 DRAWINGS\CURRENT DRAWING FILES\CADD SHEETS\LOT-5151-GRADING AND PAVEMENT ELEVATION PLAN.DWG  
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FILE SAVED: 11/27/2024 4:47 PM  
PRINTED BY: KRIS SAWYER  
PLOT DEVICE DRIVER: ELOT STYLE TABLE - CTB  
T:\CADD\AutoCAD Shared Resources\AEC\AEC.ctb

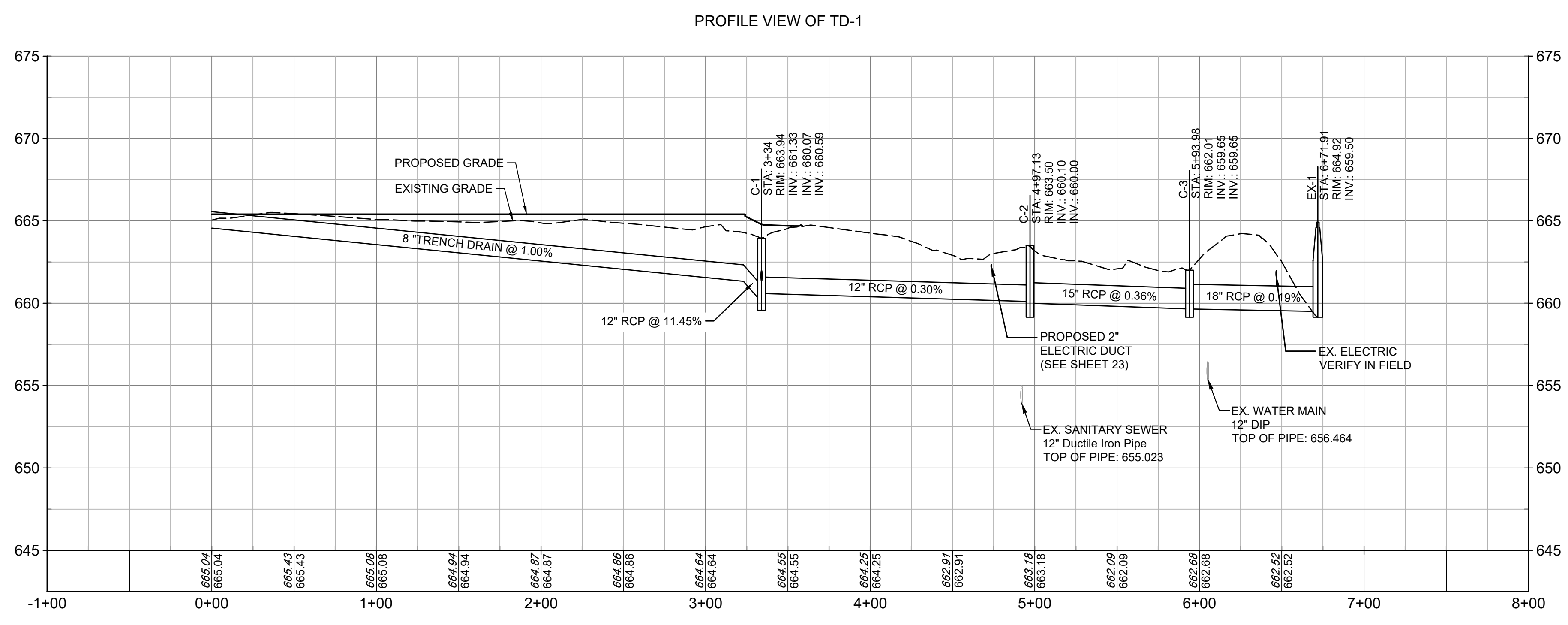
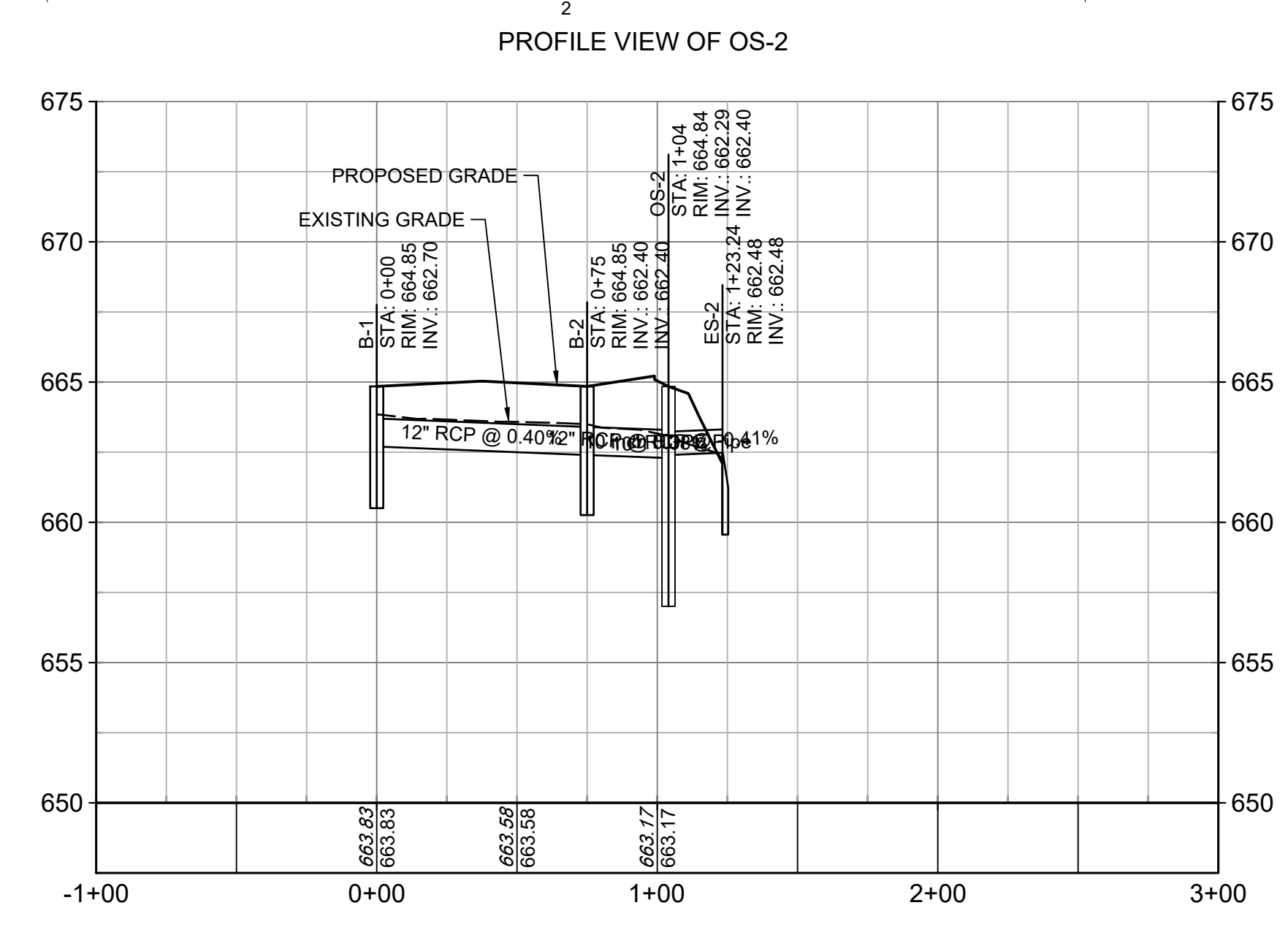
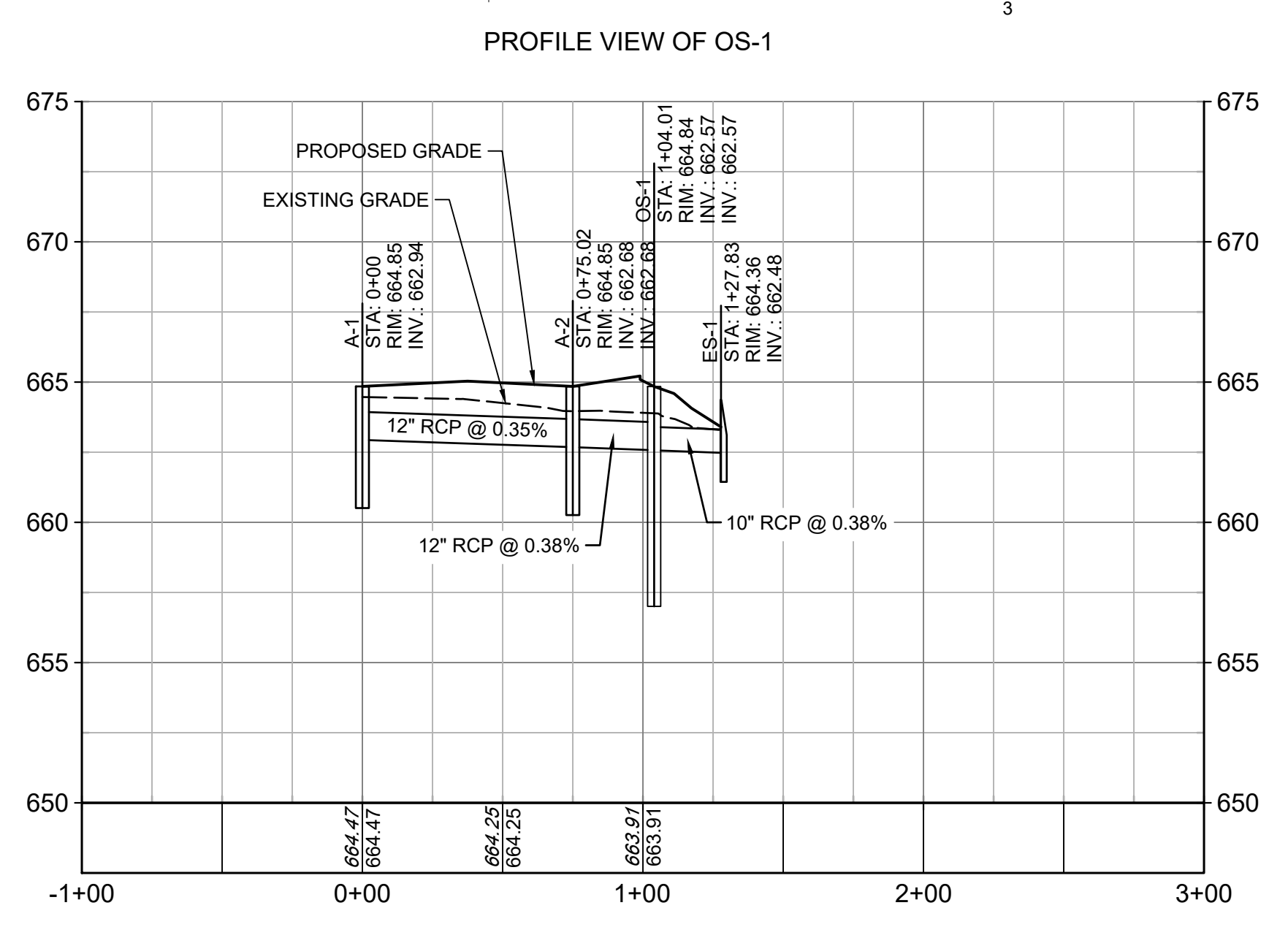




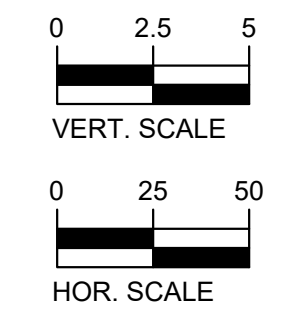








STORM SEWER STRUCTURE TABLE						
STR. NO.	TYPE	NORTHING	EASTING	STATION	RIM	INVERT
A-1	INLET TYPE A	1799286.69	1052286.81	0+00.00	664.85	662.94 (S)
A-2	INLET TYPE A	1799211.75	1052289.97	0+75.02	664.85	662.68 (E)
B-1	INLET TYPE A	1799111.84	1052294.17	0+00.00	664.85	662.70 (S)
B-2	INLET TYPE A	1799036.91	1052297.32	0+75.00	664.85	662.40 (E)
C-1	MANHOLE 4'	1798987.64	1052256.36	3+34.00	663.94	660.59 (W)
C-2	MANHOLE 4'	1798957.33	1052096.06	4+97.13	663.50	660.00 (S)
C-3	MANHOLE 6'	1798860.48	1052095.86	5+93.98	662.01	659.65 (W)
ES-1	CONCRETE HEADWALL - END SECTION	1799196.81	1052336.45	1+27.83	664.36	
ES-2	CONCRETE HEADWALL END SECTION	1799025.10	1052340.45	1+23.24	662.48	
EX-1	EX. MANHOLE	1798857.25	1052018.02	6+71.91	664.92	
OS-1	OIL CONTAINMENT SUMP	1799212.97	1052318.94	1+04.01	664.84	662.57 (SE)
OS-2	OIL CONTAINMENT SUMP	1799038.12	1052326.30	1+04.00	664.84	662.40 (SE)



No.	Description	By	Chk.	App.	Date
Issues					

**LEWIS UNIVERSITY AIRPORT**  
**CONSTRUCT TRAINING ACTIVITY OPERATIONS APRON**  
IDA No: LOT-5151  
BCM NO. LE057  
SBG No: 3-17-SBGP-TBD

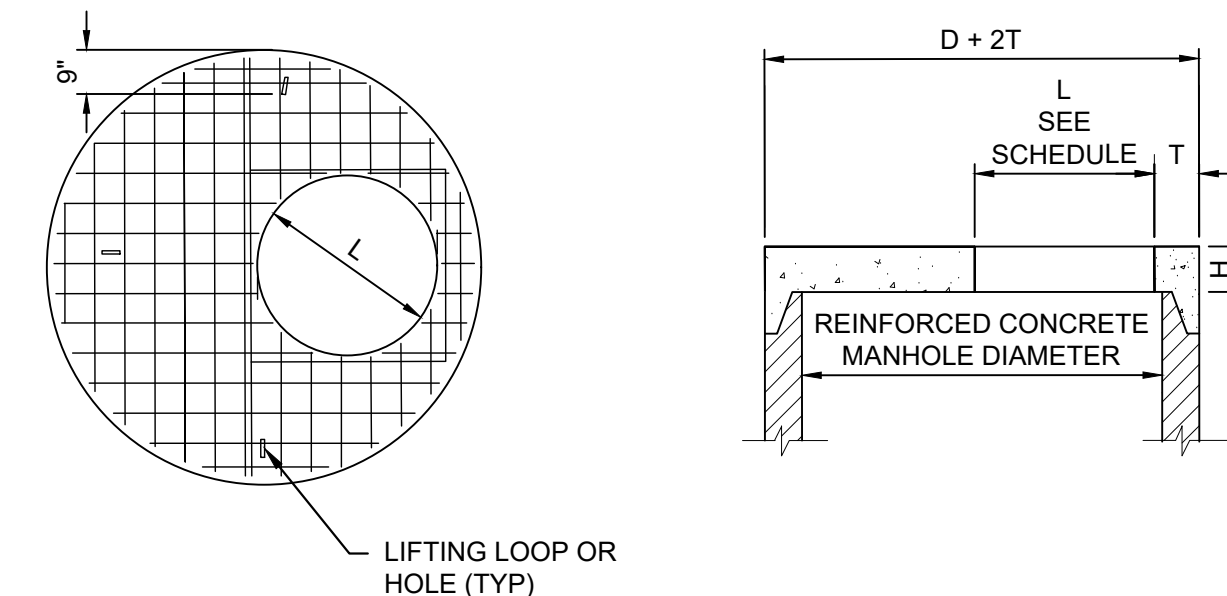
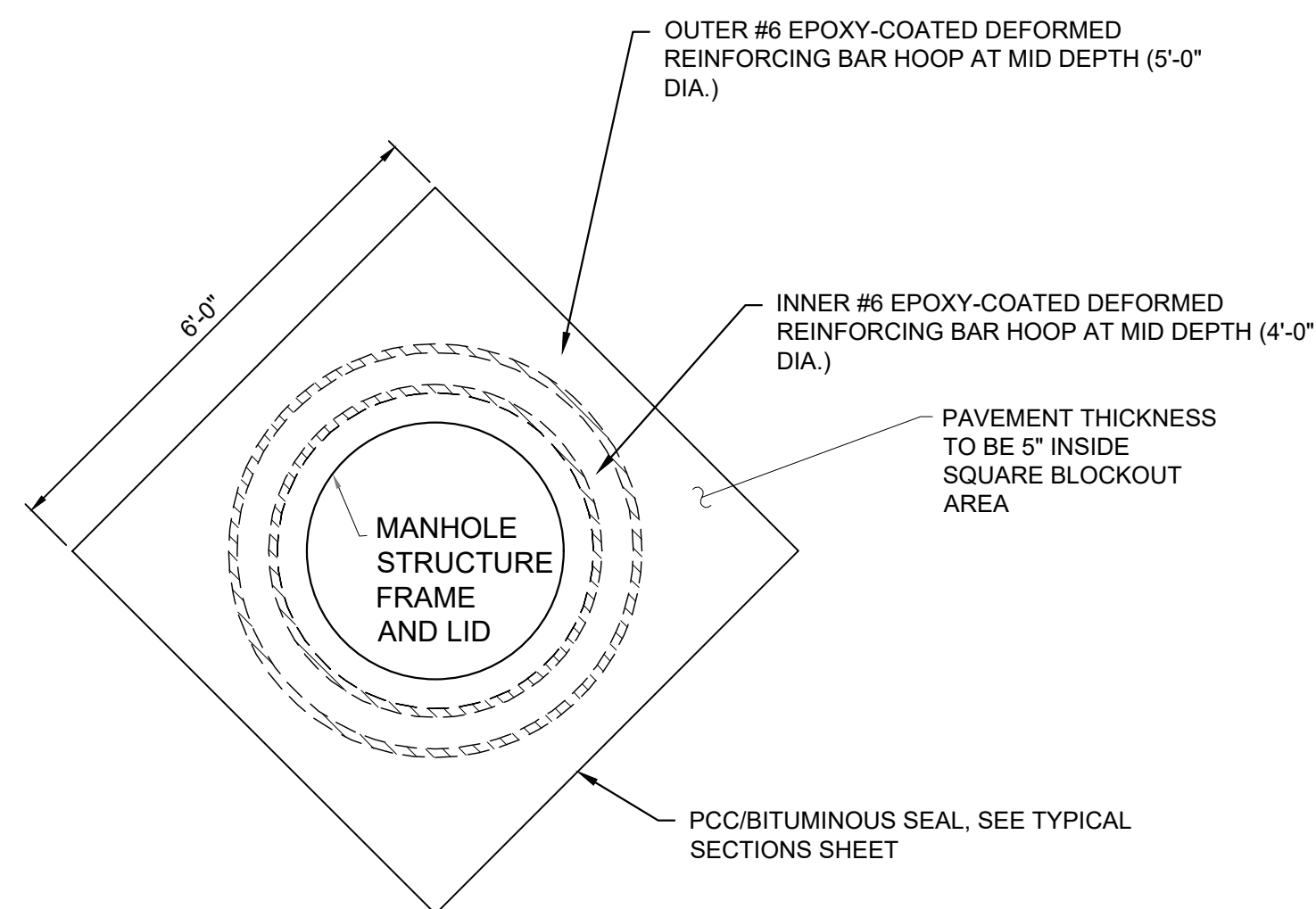
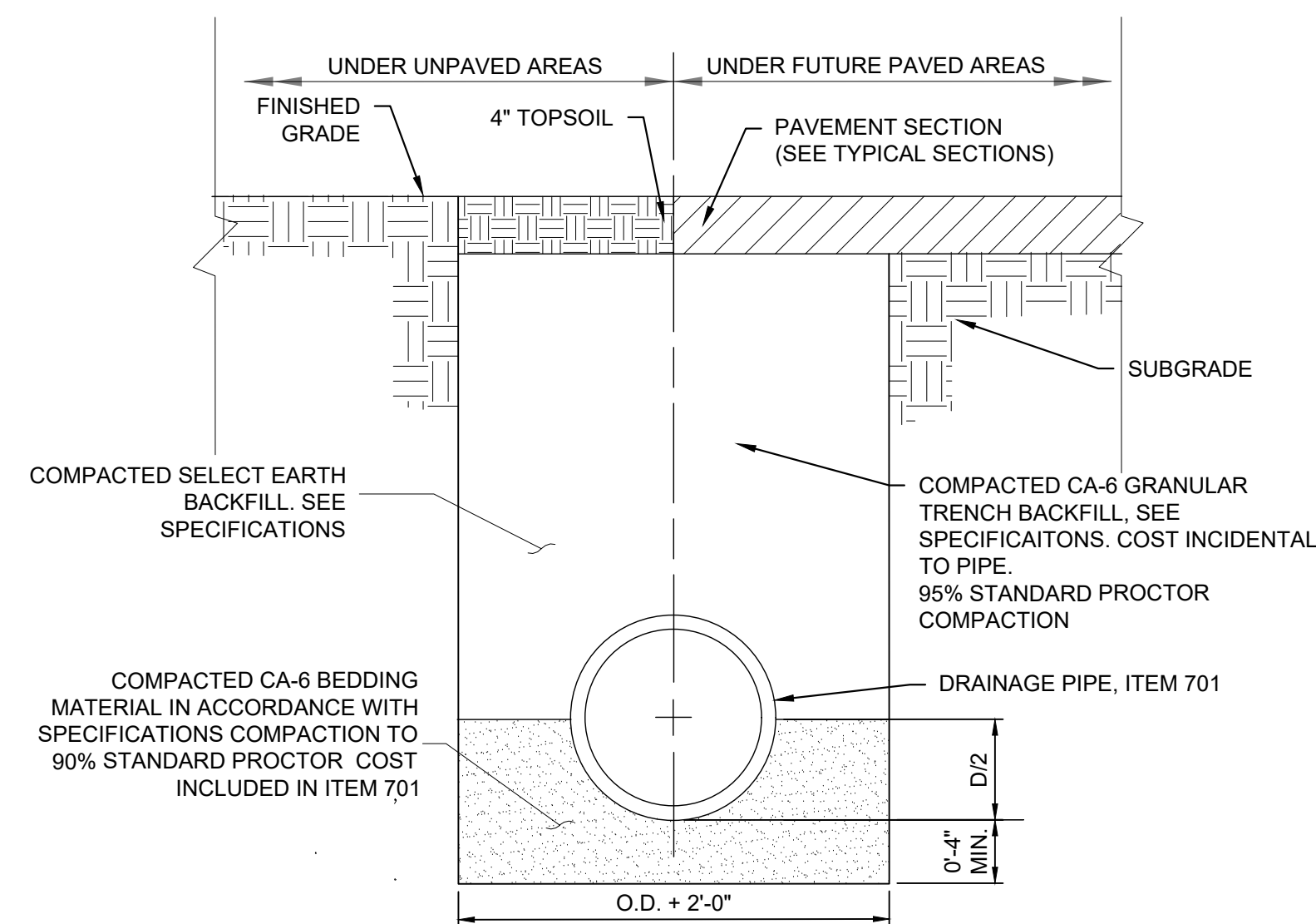
KEY PLAN

DRAWING TITLE  
**DRAINAGE PROFILES AND SCHEDULE**

16 OF 30  
APPROVED RMH SHEET NO. 16  
CHECKED KWS  
DRAWN BY JVJ

FILE NAME/LOCATION: P:\2020\20200112\10\W02\07 DRAWINGS\CURRENT DRAWING FILES\CAD SHEETS\LOT-5151-BRANAGE PROFILE AND SCHEDULE.DWG  
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 PRINTED BY: KRIS SALVETERA  
 PLOT DEVICE DRIVER: ELOT STYLE TABLE - CIB  
 T:\CAD\AutoCAD Shared Resources\AEC\AEC.ctb





**NOTES:**

- UNSUITABLE MATERIAL ENCOUNTERED DURING PLACEMENT OF BEDDING SHALL BE REMOVED AND REPLACED.
- WITHIN 3 FEET OF FUTURE PAVED AREA, GRANULAR BACKFILL IS TO BE USED INSTEAD OF EARTH BACKFILL.
- AT CONTRACTOR'S OPTION IDOT CONTROLLED LOW STRENGTH MATERIAL WITH A HIGH EARLY STRENGTH, "FLASH FILL", MAY BE USED INSTEAD OF GRANULAR TRENCH BACKFILL UNDER PAVEMENTS.

**CONCRETE NOTE:**

- CONCRETE SHALL BE ITEM 610.

**CONCRETE NOTE:**

- HOOP REINFORCEMENT REQUIRED AND SHALL BE ONE PIECE CONSTRUCTION HAVING A MINIMUM LAP LENGTH OF 2'-0"

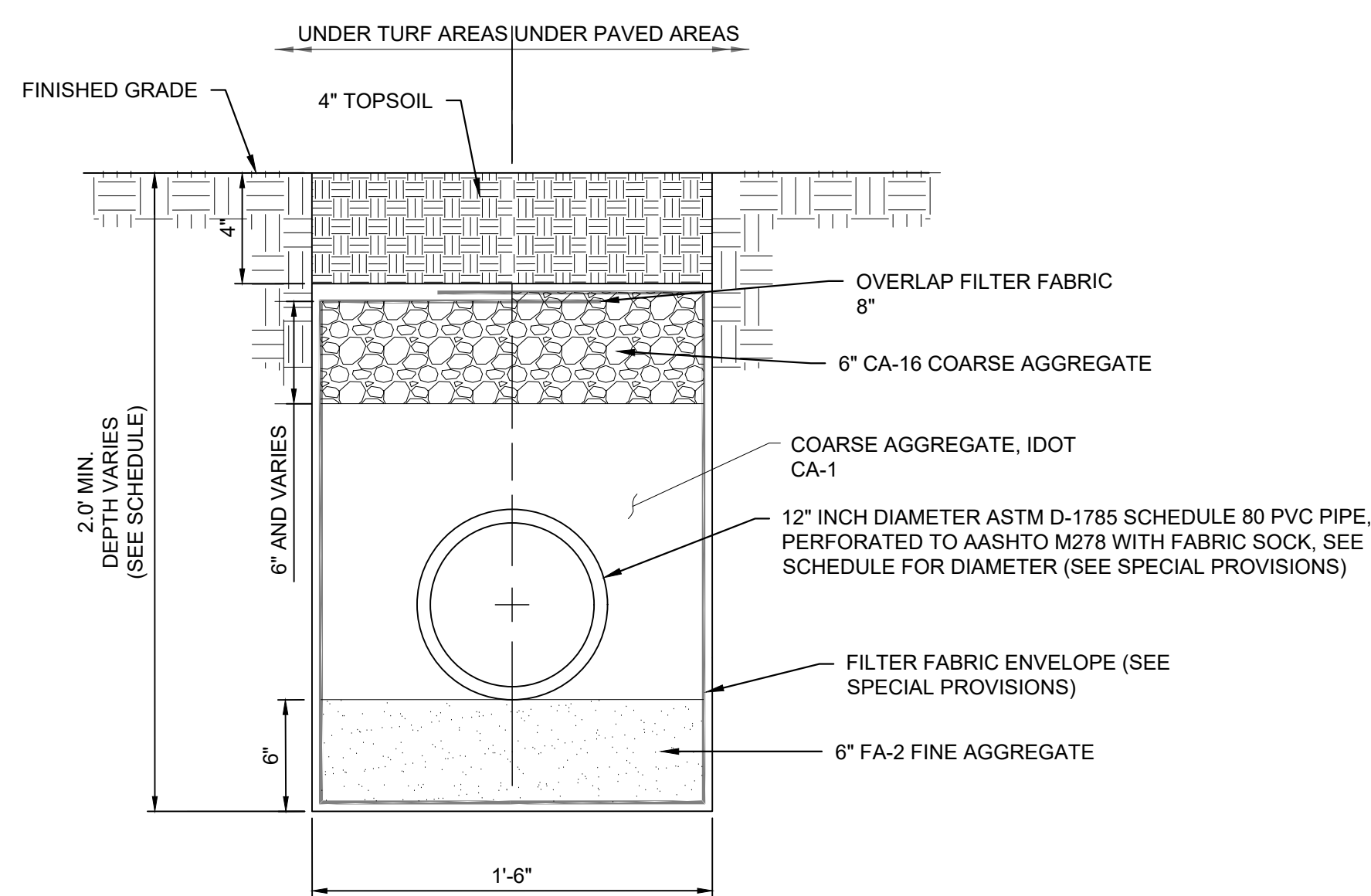
**GENERAL NOTE:**

- ALL MATERIALS AND WORK TO BE PAID UNDER ITEM AR800XX2.
- CONCRETE COLLAR NOT REQUIRED AT OIL CONTAINMENT SUMP MANHOLES.

**NOTES:**

- ADDITIONAL TOP AND BOTTOM BARS PLACED ADJACENT TO ACCESS HOLE.
- MINIMUM 1" COVER ON STEEL BARS.
- THREE LIFTING LOOPS OR HOLES
- MINIMUM STEEL REINFORCEMENT IN EACH DIRECTION TO BE WWF 1.06 SQ. IN./FT. IN ACCORDANCE WITH AASHTO M199 AND IDOT STANDARDS.
- FOR "T" DIMENSION SEE STORM SEWER SCHEDULES

**PIPE TRENCH**

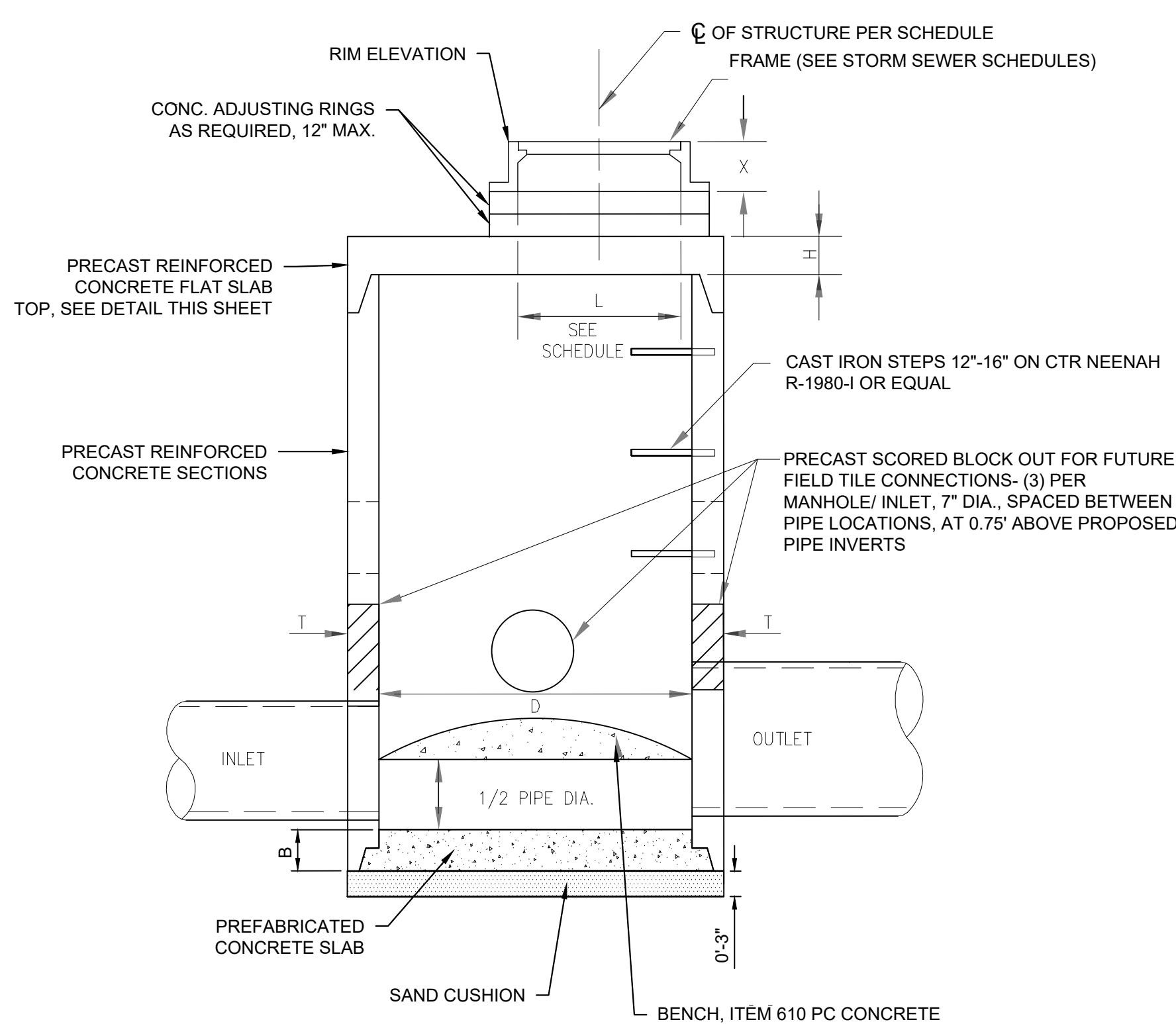


**NOTES:**

- PIPE, FILTER FABRIC TRENCH ENVELOPE, FINE AND COURSE AGGREGATES INCLUDED IN COST FOR INFILTRATION TRENCH TYPE 2.

**INFILTRATION TRENCH - TYPE A**

**JOINTING AND REINFORCING AT MANHOLES S1, S4, AND S5**



**PRECAST REINFORCED CONCRETE FLAT SLAB TOP (IDOT STANDARD 602601)**

INSIDE DIA. "D" (IN.)	WALL THICKNESS "T" (IN.)	TOP THICKNESS "H" (IN.)	BOTTOM THICKNESS "B" (IN.)
48	5	6	6
60	5	8	8
72	7	8	8
108	9	9	8

**NOTES:**

- FOR "L" DIMENSION AND FRAME AND LID INFORMATION SEE STORM SEWER SCHEDULES
- CENTER OF FRAME TO BE USED FOR LOCATING STRUCTURE FOR STRUCTURE LOCATIONS AND ADDITIONAL INFORMATION SEE SCHEDULE
- ALL STRUCTURES TO BE PRECAST REINFORCED CONCRETE SECTIONS; BENCHES MAY BE CAST IN PLACE
- BLOCKOUTS FOR UNDERDRAIN CONNECTIONS AND FUTURE PIPES SHALL BE PRECAST INTO THE STRUCTURE

**MANHOLE DATA**

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 11/27/2024 2:19 PM © 2007 Primera

No.	Description	By	Chk.	App.	Date
Issues					

**LEWIS UNIVERSITY AIRPORT  
CONSTRUCT TRAINING ACTIVITY  
OPERATIONS APRON**

**IDA No: LOT-5151  
BCM NO. LE057  
SBG No: 3-17-SBGP-TBD**

KEY PLAN

DRAWING TITLE  
**DRAINAGE  
DETAILS - 1**

**17 OF 30**

APPROVED	SHEET NO.
RMH	
CHECKED	<b>17</b>
KWS	
DRAWN BY	
JVJ	



**PIPE CULVERT END SECTION DIMENSIONS**

Pipe I.D.	Slope of End Section			
	A	R	S	T
15 (375)	14 (350)	29 (737)	28 (711)	8 (200)
				L
				5'-6" (1.68 m)
				7'-11" (2.42 m)
				10'-4" (3.16 m)
				15'-2" (4.63 m)

**GENERAL NOTES**

This Standard is for use with single pipe culverts and multi-pipe culvert installations. For multi-pipe culvert installations, place the end sections side-by-side leaving a 3 (75) space between adjacent end section walls and fill the space(s) with Class SI concrete.

The number of segments shown in elevation is for example only. The length and number of precast sections required to construct the end section shall be determined by the Contractor.

See roadway plans for slope (V/H) and pipe inside diameter.

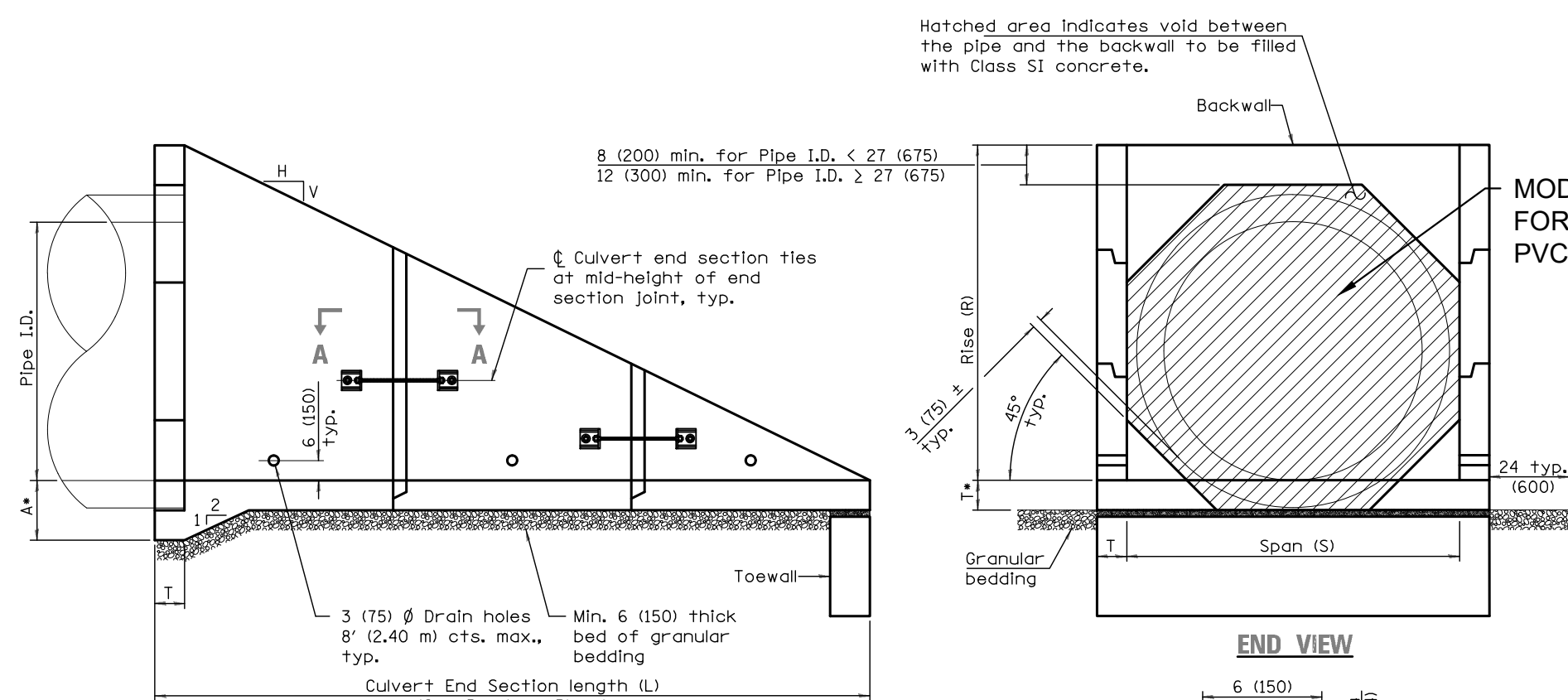
End section may be installed up to ± 15 degrees skewed with roadway.

2/4 x 2/4 x 3/8 (56 x 56 x 8) plate washers shall be provided under each nut required for the anchor rods. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of formed holes.

See Standard 542311 for end sections having traversable pipe grate.

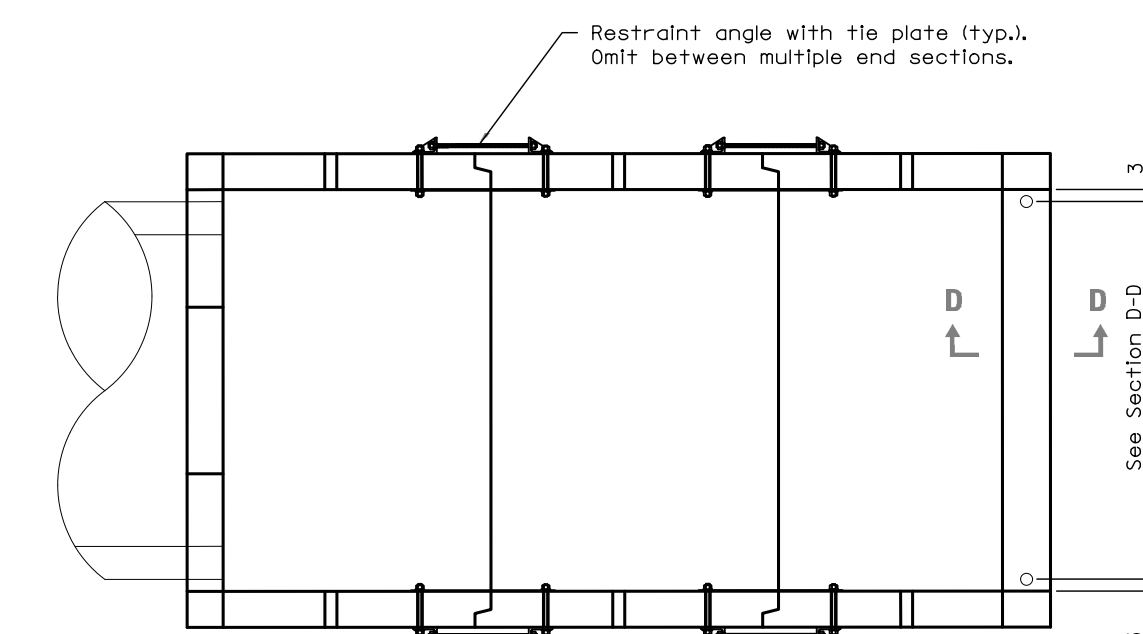
All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V/H).

All dimensions are in Inches (millimeters) unless otherwise shown.

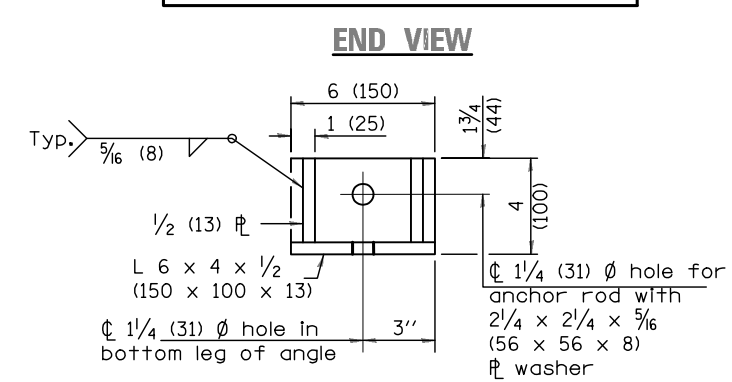


**ELEVATION**

This dimension shall be increased by 1/2 (38) for CIP field construction. See General Notes.

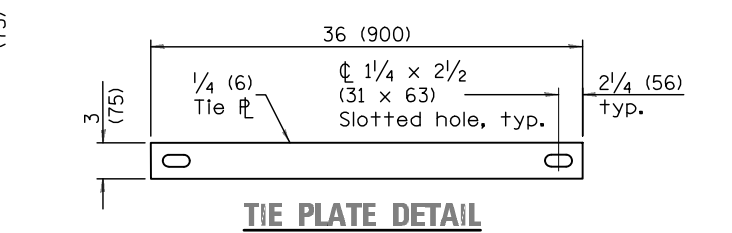


**PLAN**

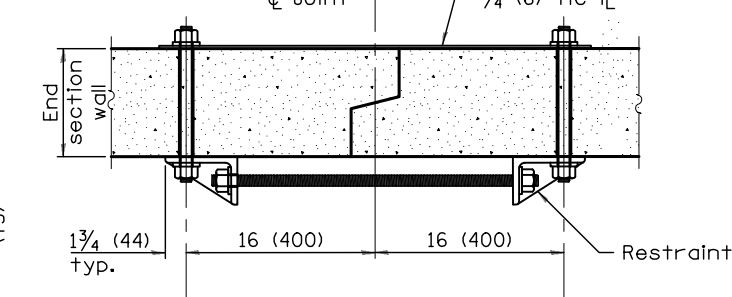


**END VIEW**

**RESTRAINT ANGLE DETAIL**

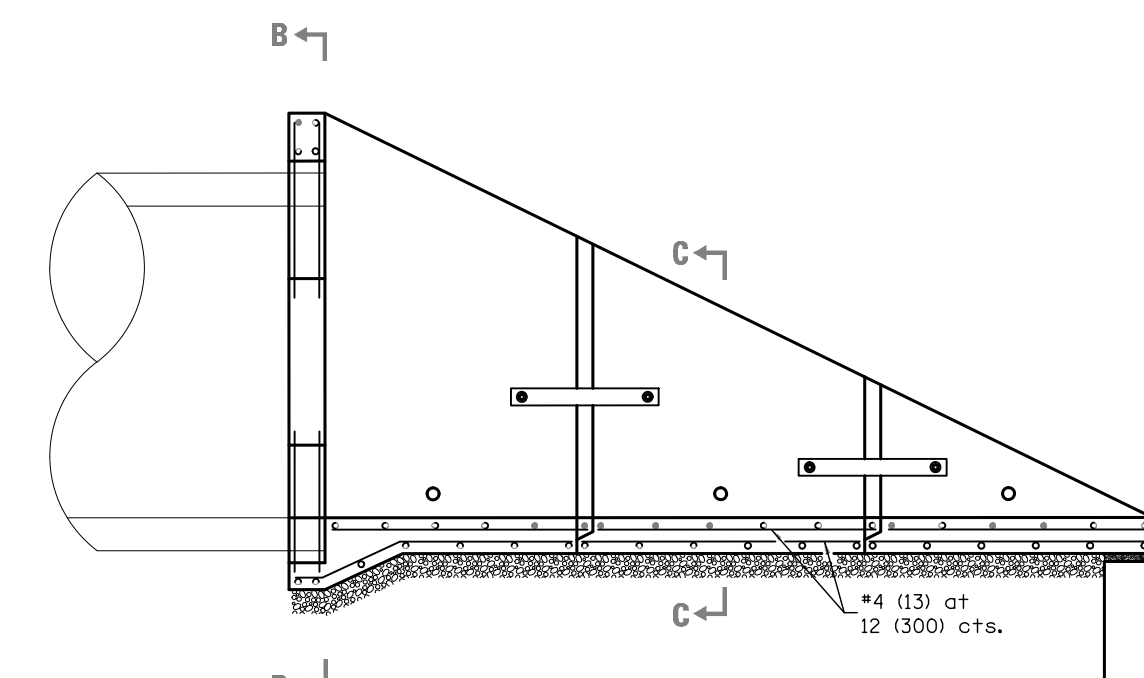


**TIE PLATE DETAIL**



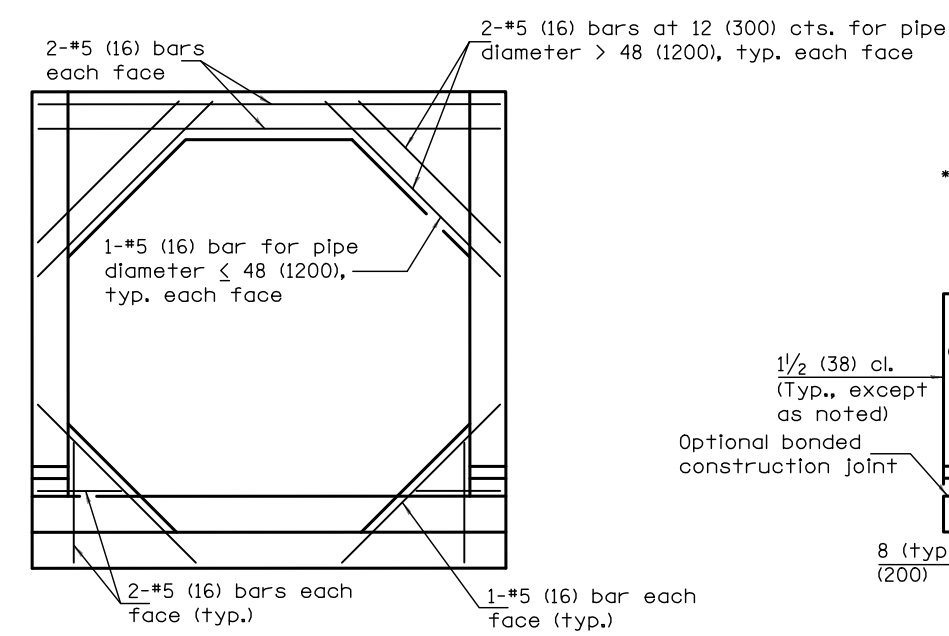
**SECTION A-A**

(Showing end section tie details)



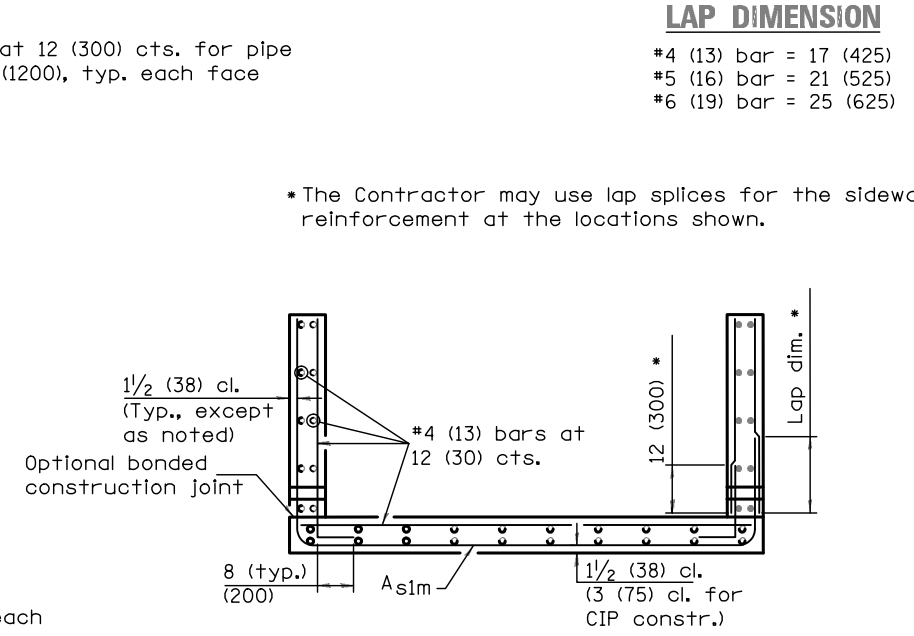
**LONGITUDINAL SECTION**

(Showing bottom slab and backwall reinforcement.)



**SECTION B-B**

(Showing backwall reinforcement only.) (Pipe omitted for clarity.)



**LAP DIMENSION**

\*4 (13) bar = 17 (425)  
\*5 (16) bar = 21 (525)  
\*6 (19) bar = 25 (625)

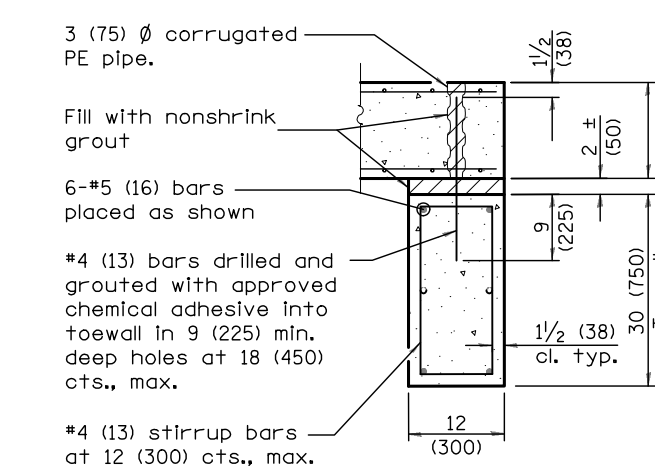
The Contractor may use lap splices for the sidewall reinforcement at the locations shown.

**SECTION C-C**

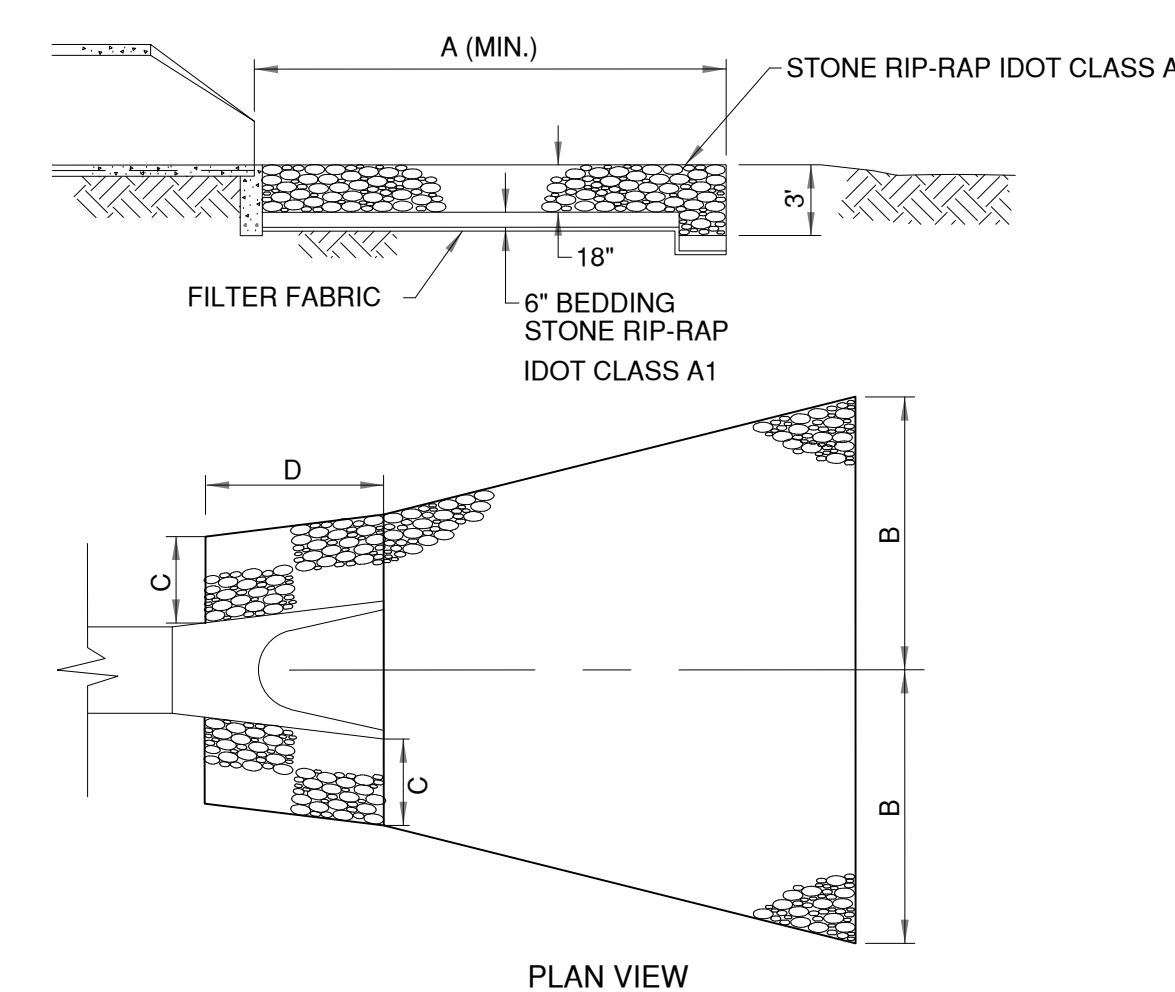
**REINFORCEMENT SCHEDULE**

Pipe I.D.	Bar Size	Bar Spacing
15 (375)	4 (13)	12 (300)
18 (450)	4 (13)	12 (300)
21 (525)	4 (13)	12 (300)
24 (600)	4 (13)	12 (300)
27 (675)	4 (13)	12 (300)
30 (750)	4 (13)	12 (300)
33 (825)	4 (13)	12 (300)
36 (900)	4 (13)	12 (300)
42 (1050)	4 (13)	8 (200)
48 (1200)	4 (13)	8 (200)
54 (1350)	5 (16)	8 (200)
60 (1500)	5 (16)	8 (200)
66 (1650)	5 (16)	8 (200)
72 (1800)	6 (19)	8 (200)
78 (1950)	6 (19)	8 (200)
84 (2100)	6 (19)	8 (200)

**CONCRETE END SECTION**  
(IDOT STANDARD 542001-06 MODIFIED)



**SECTION D-D**



**PLAN VIEW**

INSIDE DIAMETER STORM SEWER (IN.)	MIN. DIMENSION (FT)				ROCK RIP RAP SIZE IDOT GRADATION
	A	B	C	D	
* 12" thru 24"	15	4	1.5	4	RR-3
27" thru 30"	18	5	2.0	6	RR-4
36" thru 48"	22	6	2.5	8	RR-4
54" thru 60"	25	7	3.0	10	RR-5
72" thru 96"	32	8	3.5	12	RR-6

IF NO DIMENSIONS SHOWN ON PLANS, USE DIMENSIONS FROM TABLE.

**MAINTENANCE NOTES:**

- INSPECT RIP RAP AFTER STORM EVENTS FOR STONE DISPLACEMENT AND FOR EROSION AT THE SIDES AND ENDS OF THE APRON.
- TAKE NEEDED REPAIRS IMMEDIATELY; USE APPROPRIATE SIZE STONE, AND DO NOT PLACE THEM ABOVE FINISHED GRADE.
- THE ENGINEER SHALL DETERMINE THE FINAL RIP-RAP CONFIGURATION IN THE FIELD.

**RIP RAP AT END SECTIONS**

NOT TO SCALE

**KEY PLAN**

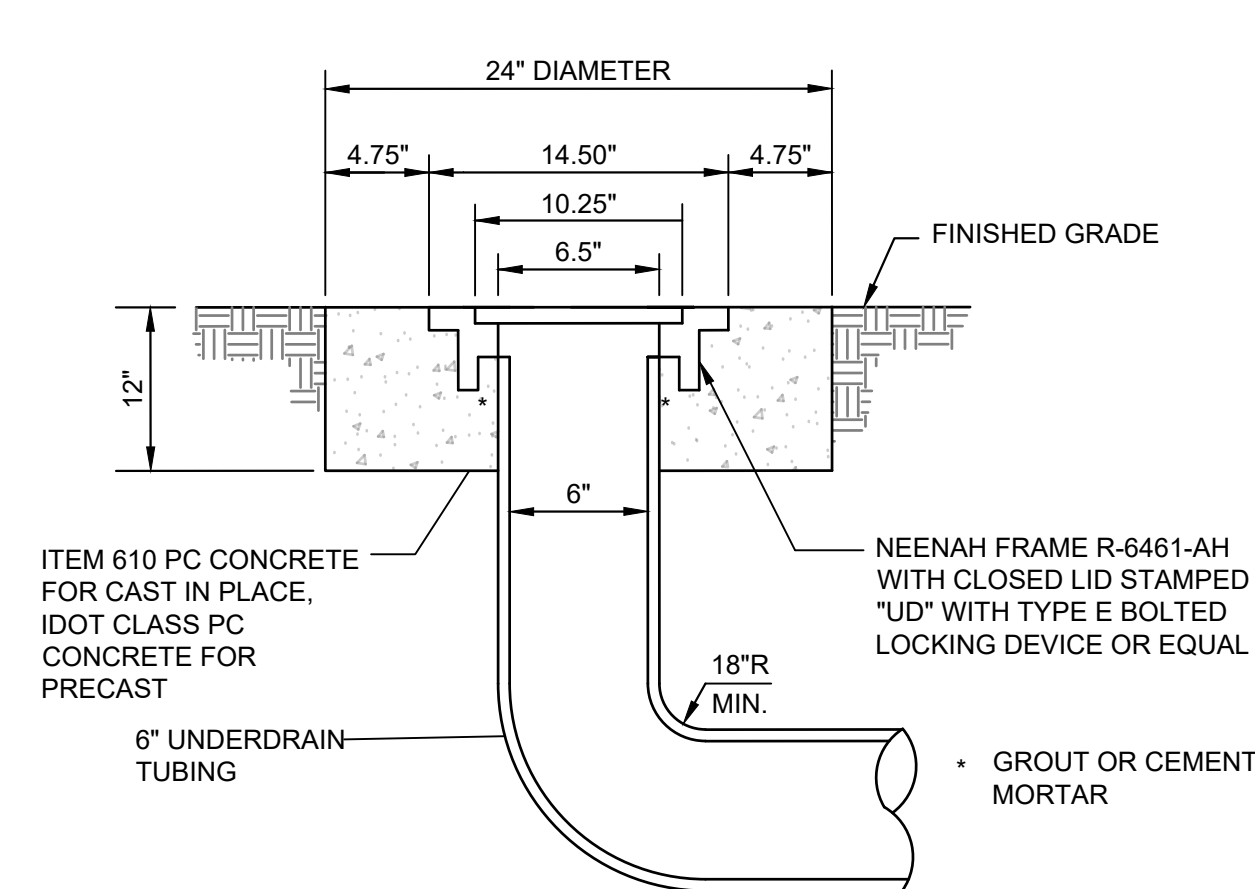
DRAWING TITLE  
**DRAINAGE DETAILS - 2**

**18 OF 30**  
APPROVED SHEET NO.  
RMH  
CHECKED  
KWS  
DRAWN BY  
JVJ

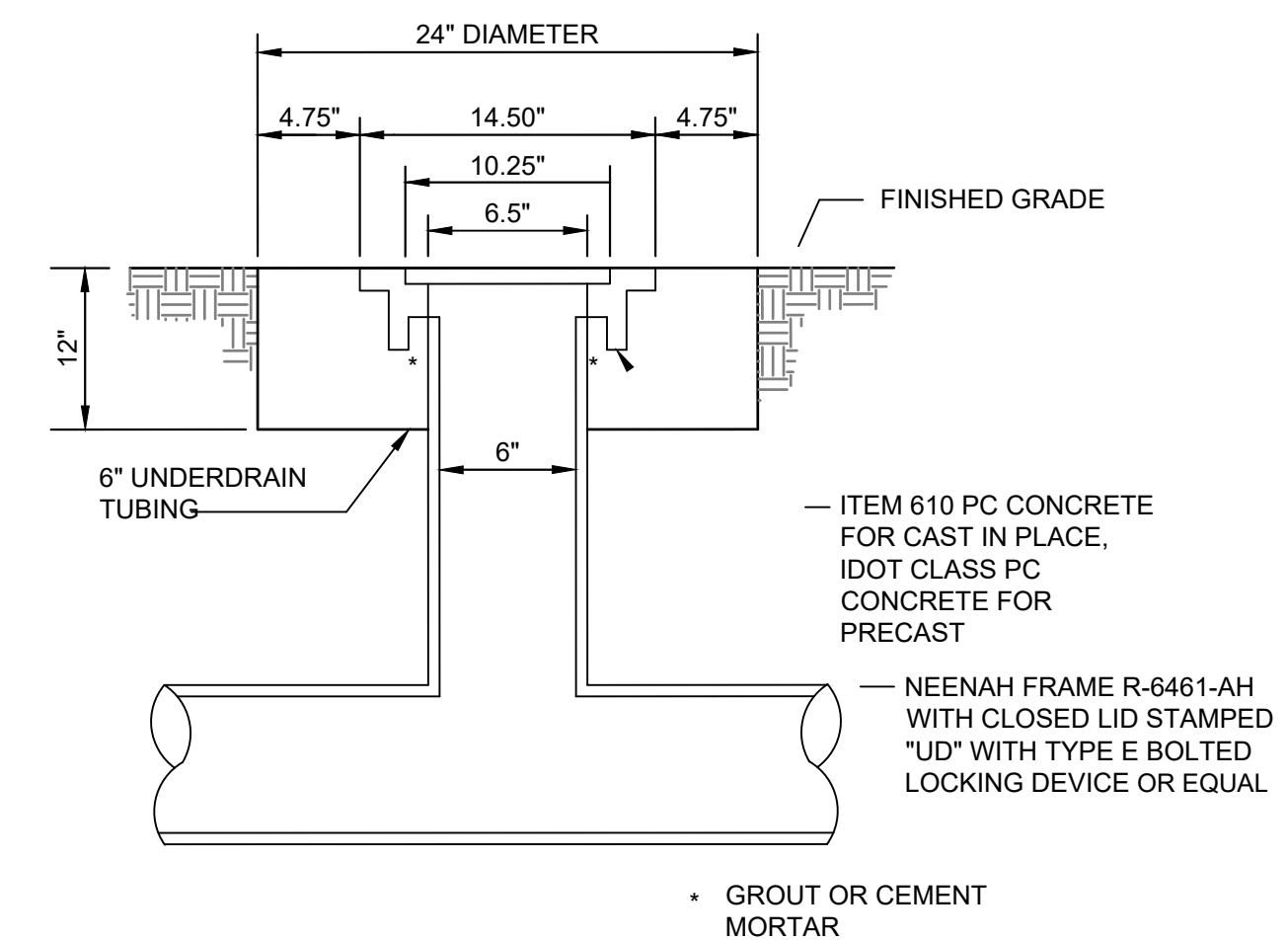
**18**

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 PLOTTED BY: KRIS SAWATERA  
 DATE PLOTTED: 11/27/2024 2:19 PM  
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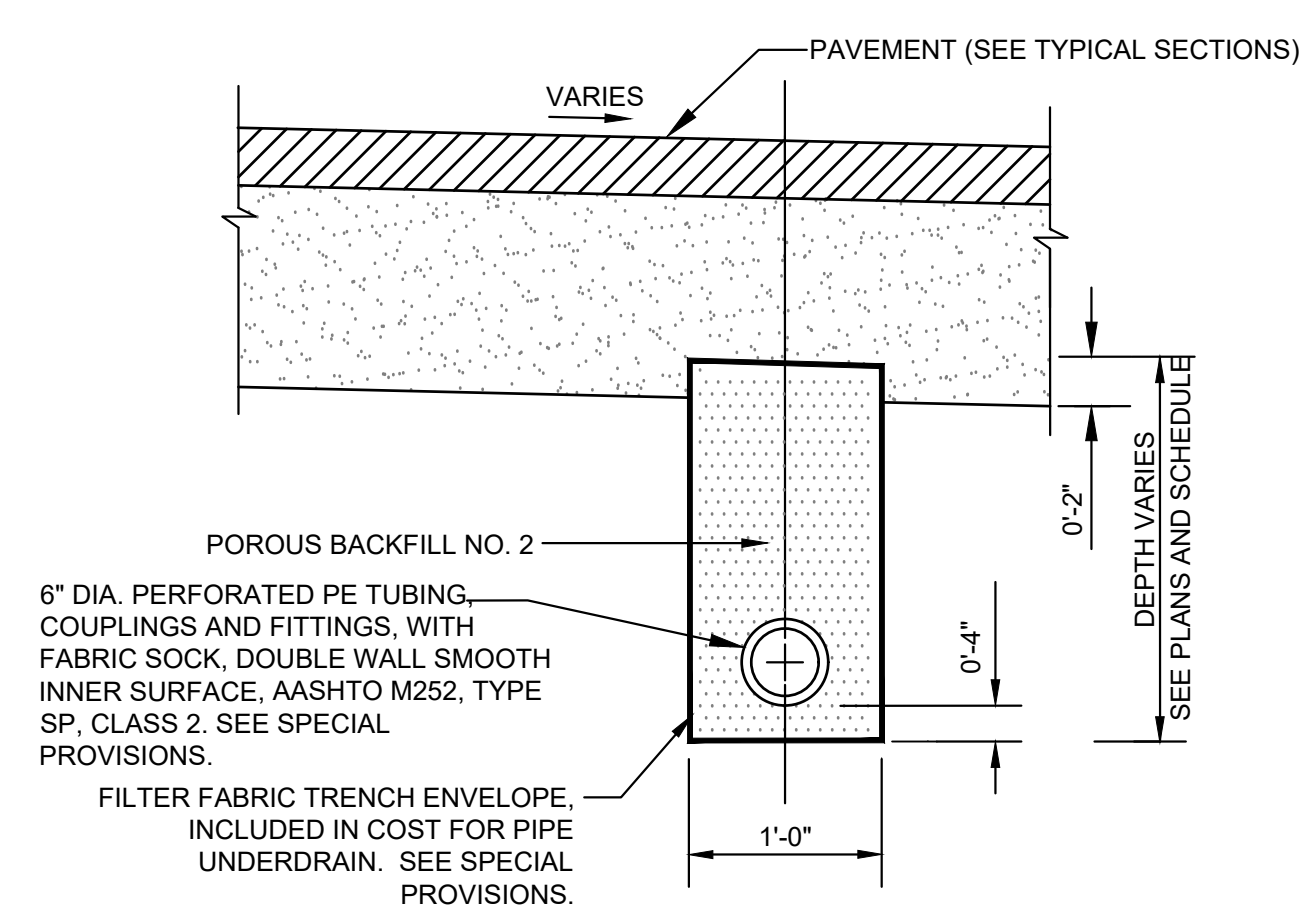




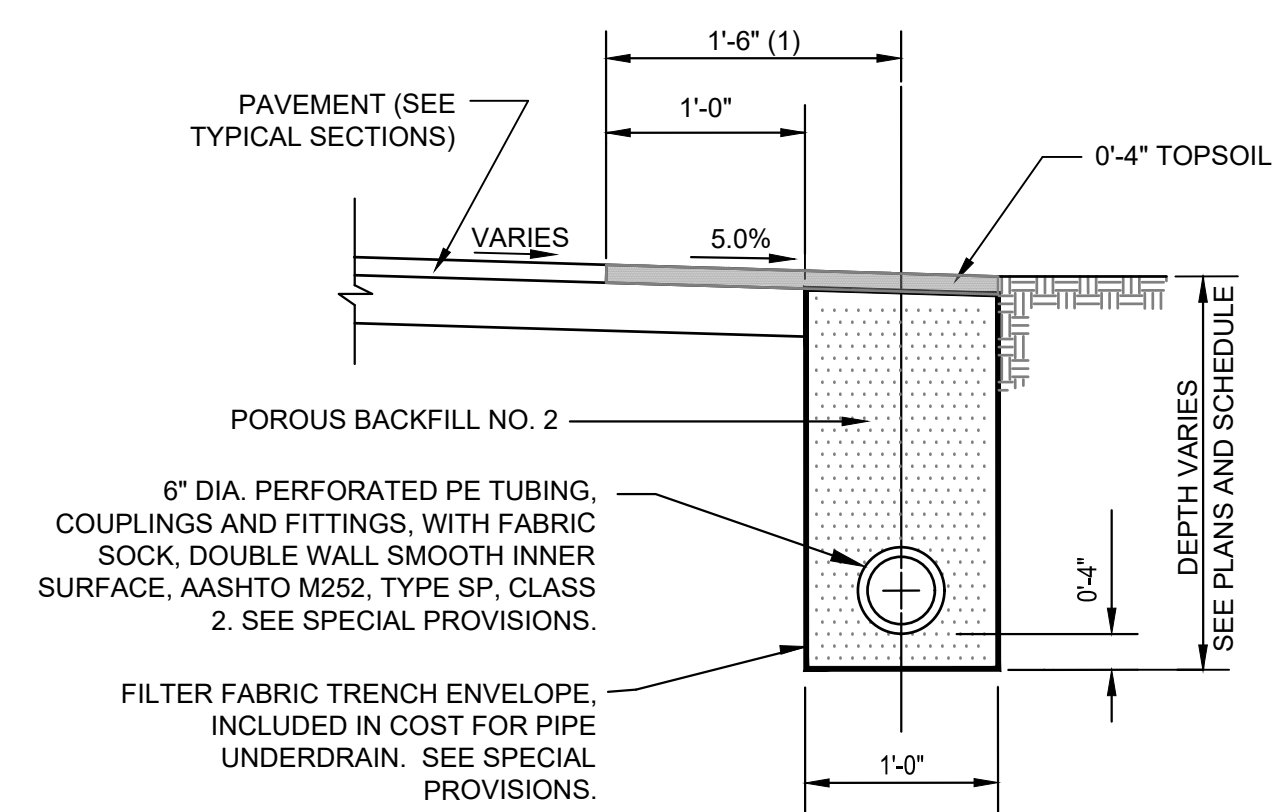
**UNDERDRAIN CLEANOUT**



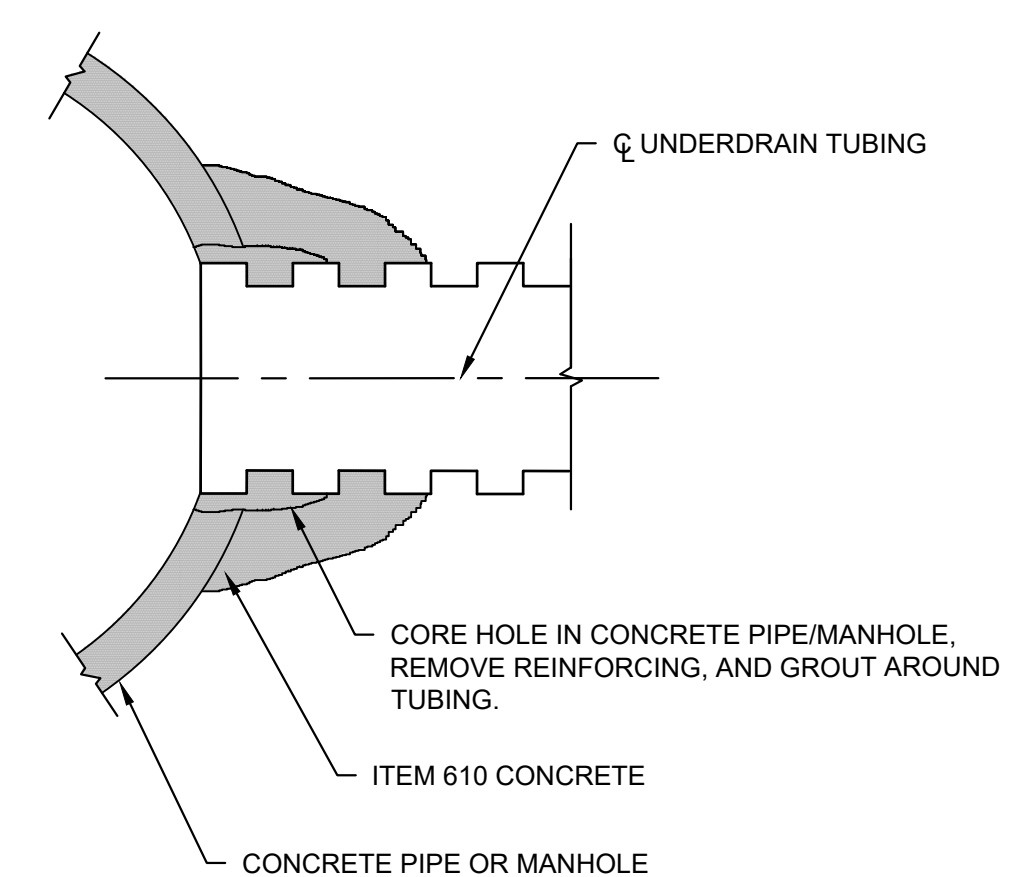
**UNDERDRAIN INSPECTION HOLE**



**UNDERDRAIN UNDER PAVEMENT**



**UNDERDRAIN ALONG PAVEMENT EDGE**



**STORM SEWER CONCRETE COLLAR AND GROUT CONNECTION**

No.	Description	By	Chk.	App.	Date
Issues					

**LEWIS UNIVERSITY AIRPORT**  
**CONSTRUCT TRAINING ACTIVITY OPERATIONS APRON**  
IDA No: LOT-5151  
BCM No. LE057  
SBG No: 3-17-SBGP-TBD

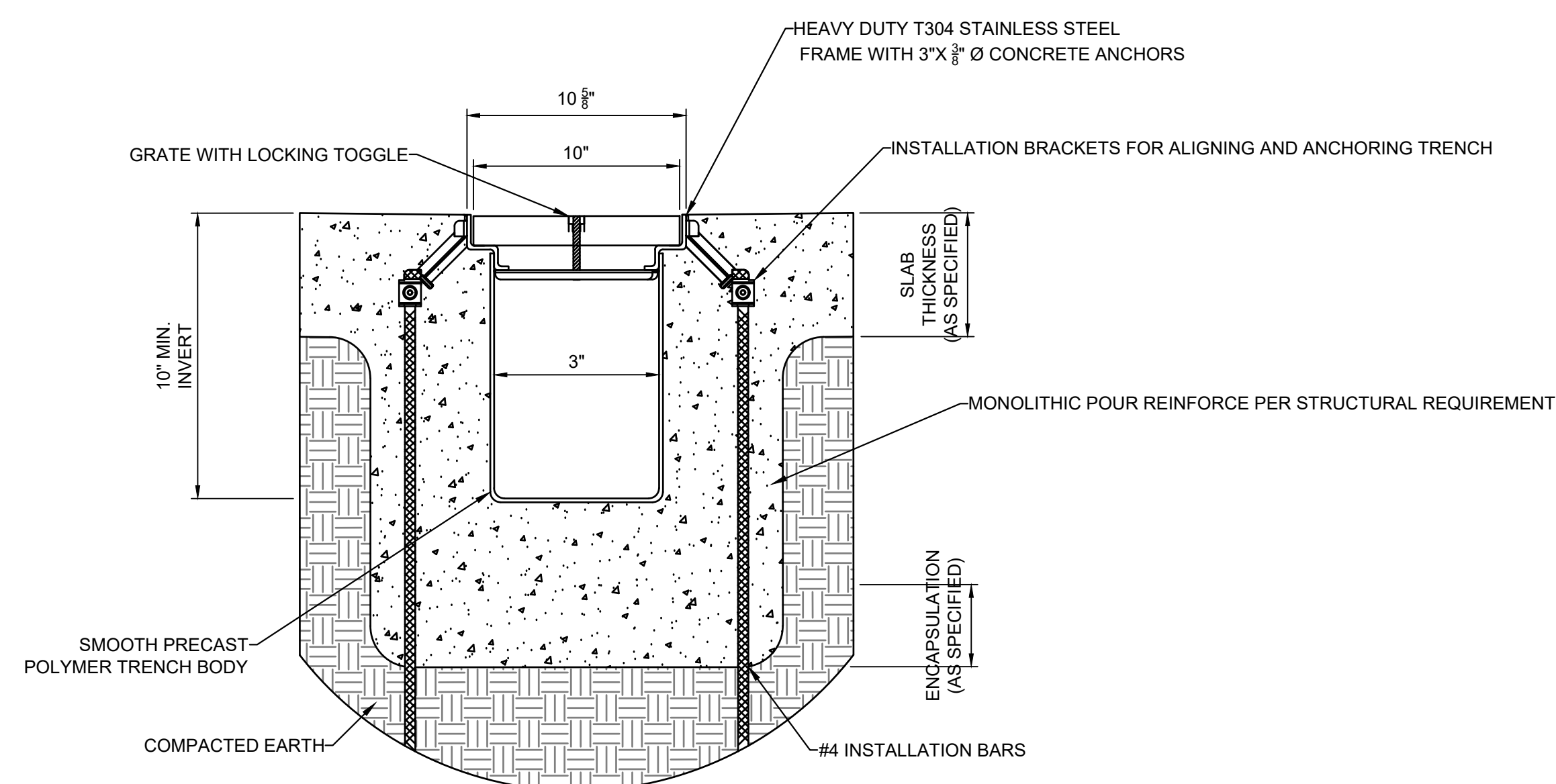
**KEY PLAN**

DRAWING TITLE  
**DRAINAGE DETAILS - 3**

19 OF 30  
APPROVED RMH SHEET NO.  
CHECKED KWS  
DRAWN BY JVJ

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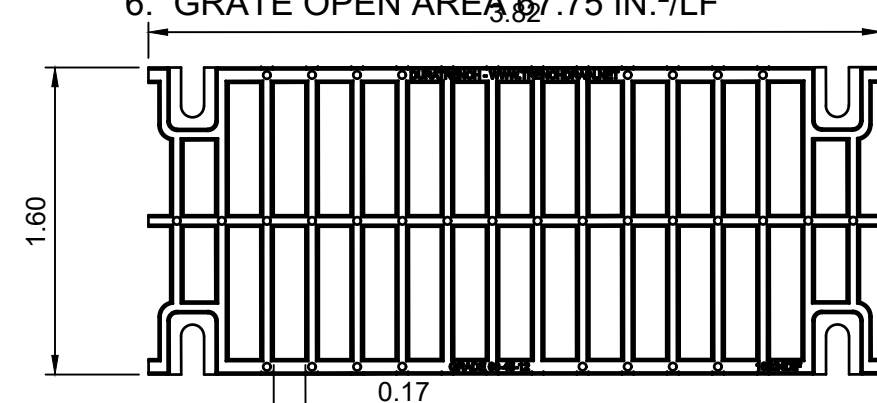




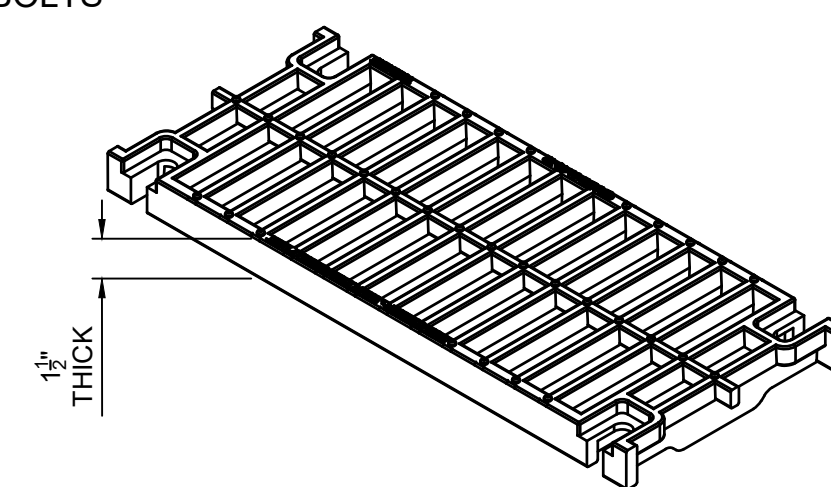
- NOTES:
1. STANDARD SLOPE IS 0.5% UNLESS OTHERWISE SPECIFIED
  2. REINFORCE ACCORDING TO STRUCTURAL REQUIREMENTS
  3. TRENCH DRAIN MUST BE  $\frac{1}{8}$ " BELOW FINISHED CONCRETE GRADE

**SQUARE TRENCH DRAIN SECTION SECTION B-B**

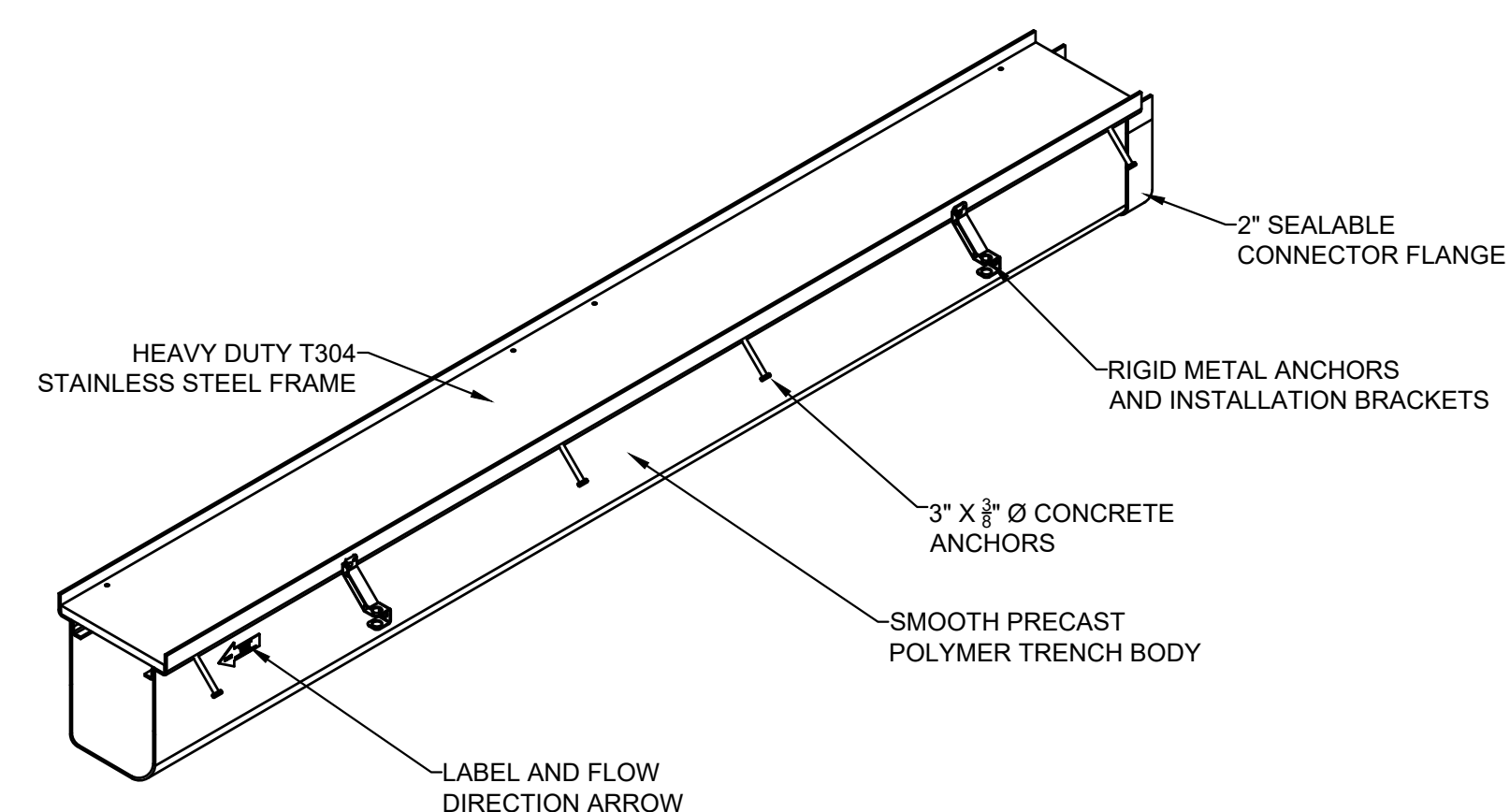
- NOTES:
1. GRATE MATERIAL IS CAST DUCTILE IRON 65-45-12
  2. GRATES EXCEED FAA AC 150/5 320-6E APPENDIX 3 LOAD
  3. GRATES ARE MADE IN THE USA
  4. GRATES BOLT DOWN AT ALL 4 CORNERS W/  $\frac{1}{2}$ "  $\varnothing$  S.S BOLTS
  5. GRATES ARE UNCOATED, AS CAST FINISH
  6. GRATE OPEN AREA  $\geq 7.75$  IN.<sup>2</sup>/LF



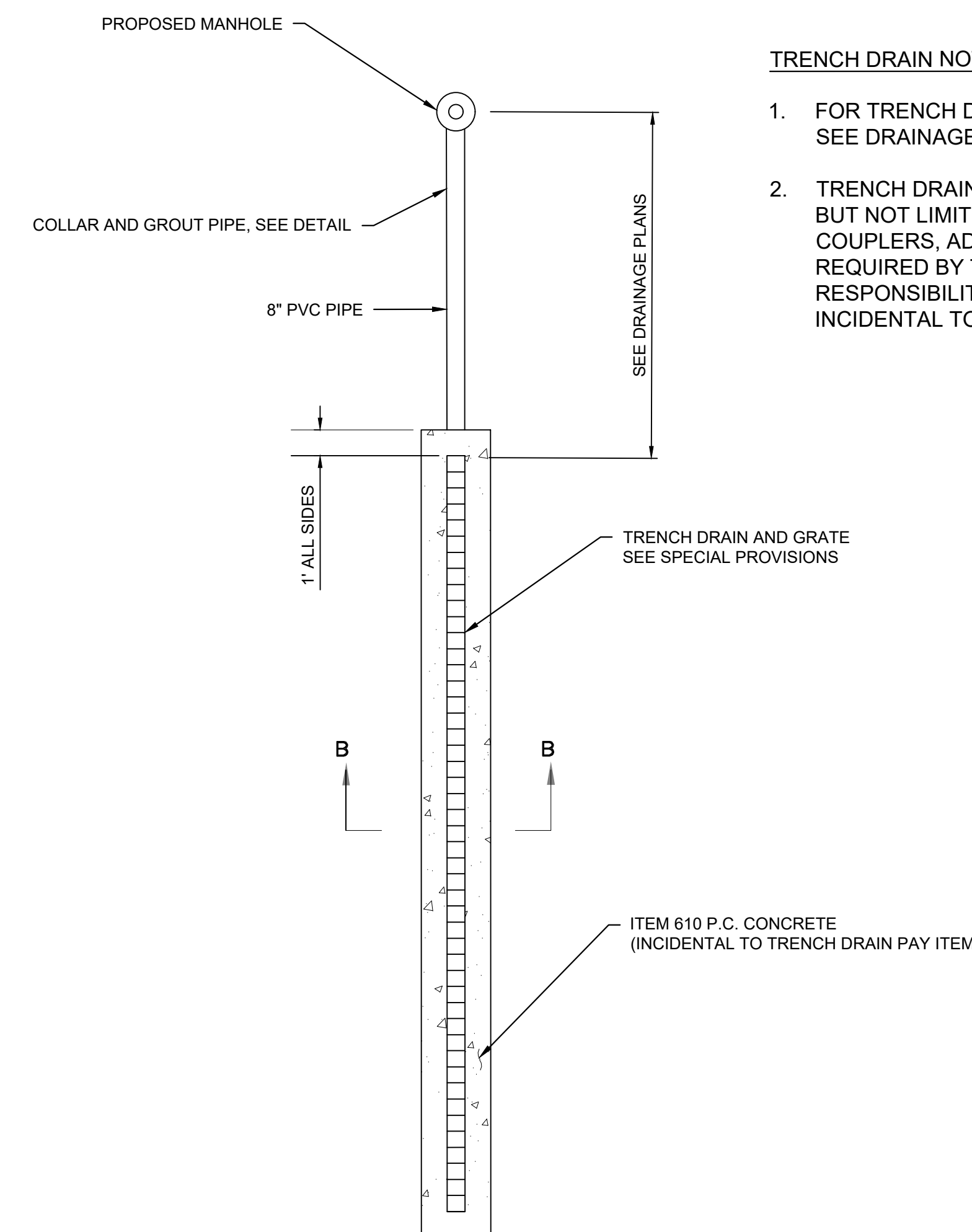
**DUCTILE IRON GRATE**



**ISOMETRIC VIEW**



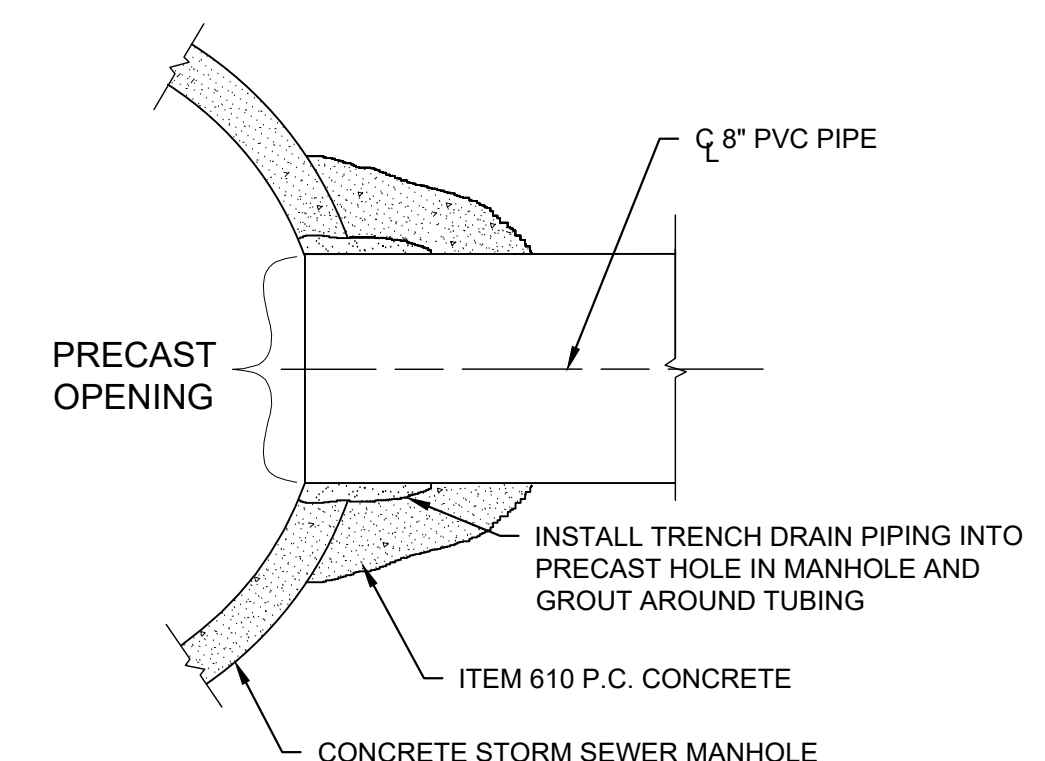
**TYPICAL SQUARE TRENCH ISOMETRIC**



**PLAN**

**TRENCH DRAIN NOTES**

1. FOR TRENCH DRAIN LOCATION AND INVERTS, SEE DRAINAGE PLANS.
2. TRENCH DRAIN ACCESSORIES, TO INCLUDE BUT NOT LIMITED TO, CHANNEL FRAMES, COUPLERS, ADAPTERS, AND OTHER ITEMS REQUIRED BY THE MANUFACTURER ARE RESPONSIBILITY OF THE CONTRACTOR AND INCIDENTAL TO TRENCH DRAIN PAY ITEM.



**NOTES**

1. HOLE FOR TRENCH DRAIN PIPING TO BE PRECAST INTO MANHOLE AT ELEVATION SPECIFIED IN TRENCH DRAIN SCHEDULE.
2. CONNECTIONS INCIDENTAL TO TRENCH MANHOLE.

**TRENCH DRAIN CONCRETE COLLAR AND GROUT CONNECTION**

No.	Description	By	Chk.	App.	Date
Issues					

**LEWIS UNIVERSITY AIRPORT**  
**CONSTRUCT TRAINING ACTIVITY OPERATIONS APRON**

IDA No: LOT-5151  
BCM NO. LE057  
SBG No: 3-17-SBGP-TBD

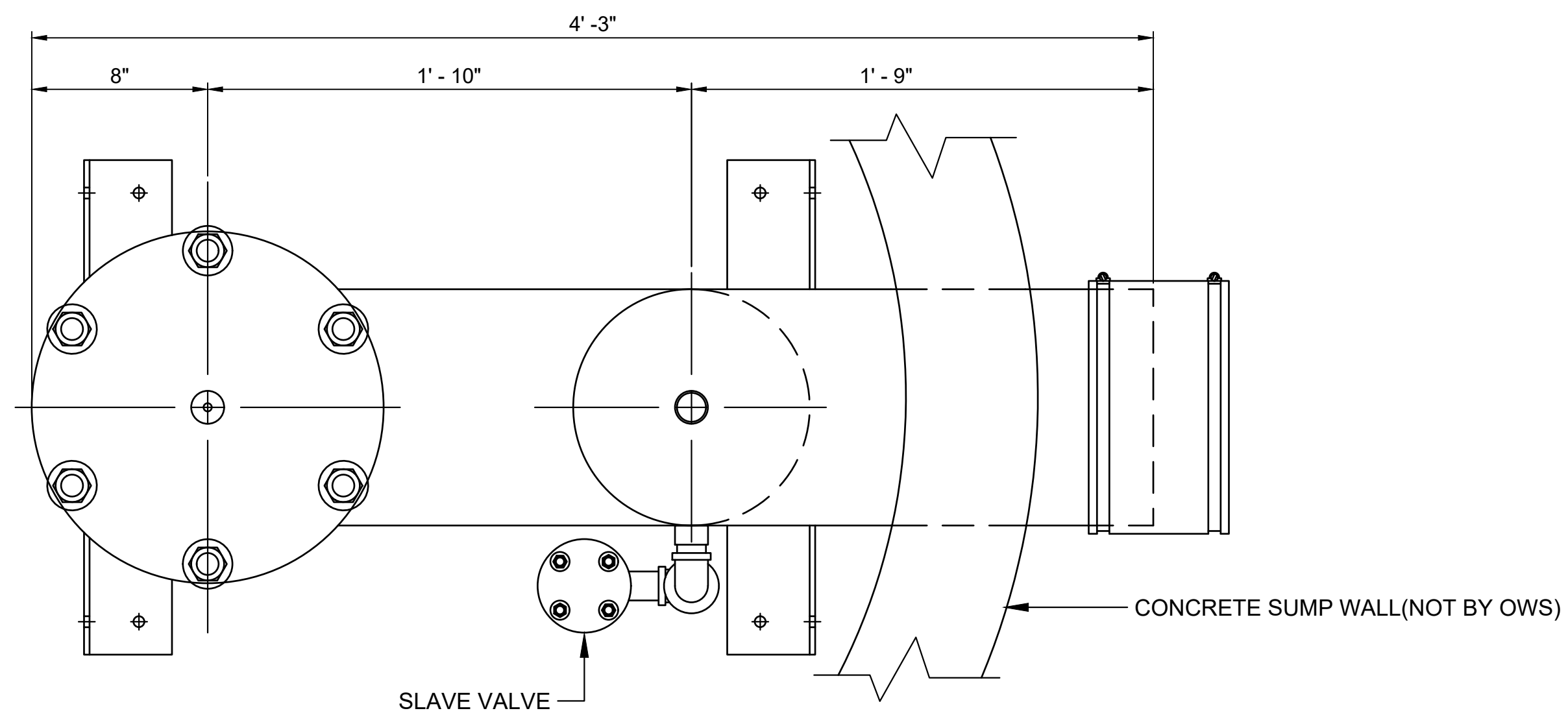
KEY PLAN

DRAWING TITLE  
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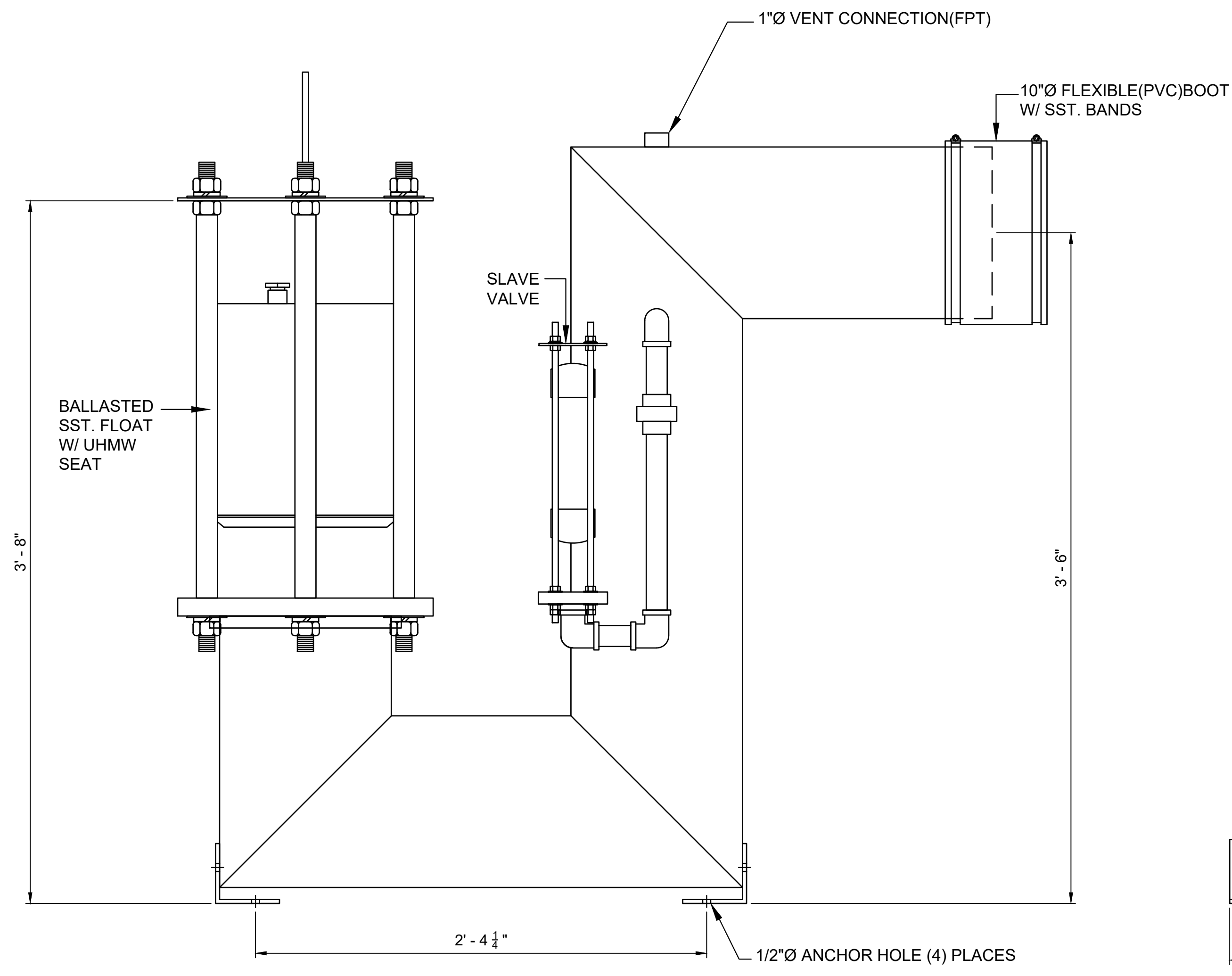
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	KWS	
	DRAWN BY	
	JVJ	

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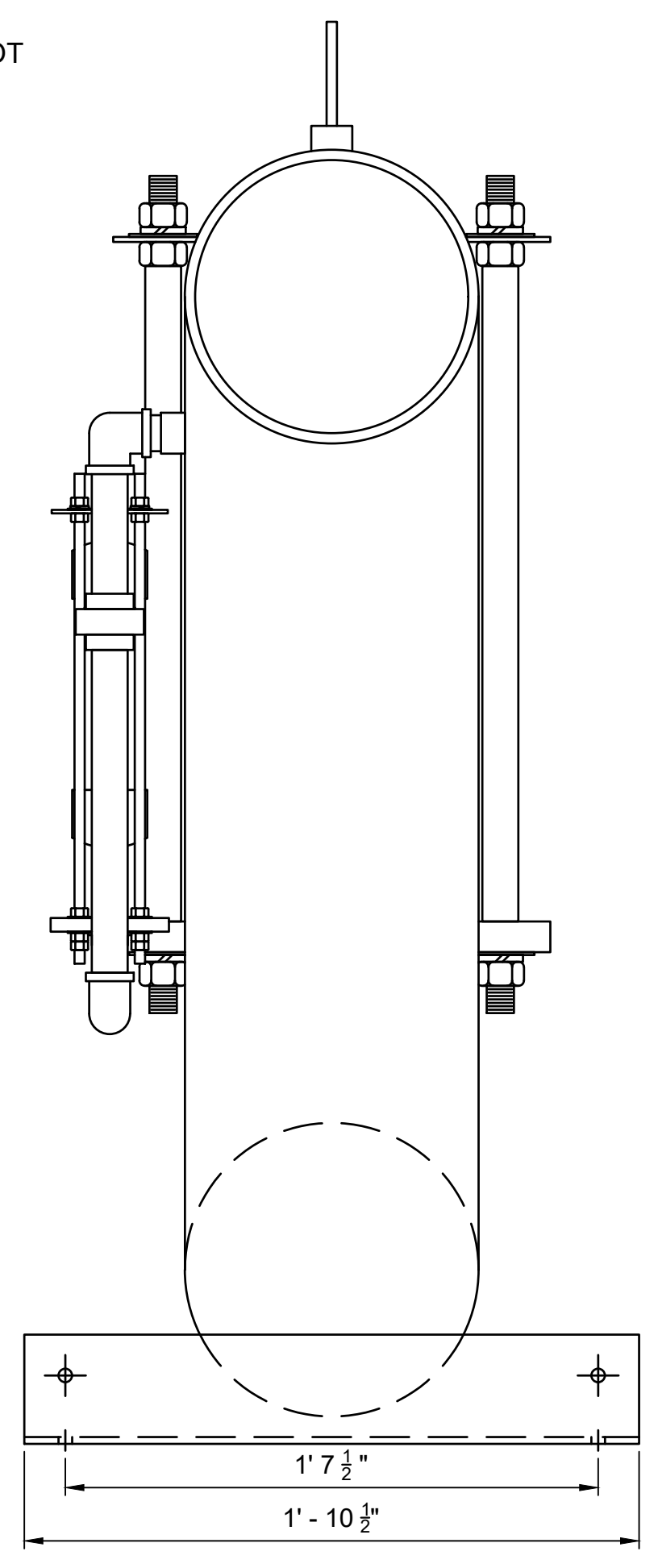


PLAN



SIDE VIEW

**OIL STOP VALVE DETAIL**  
NOT TO SCALE



OUTLET END

**IMPORTANT INFORMATION**

COMPLETE STEP BY STEP INSTALLATION INSTRUCTIONS ARE PROVIDED WITH EACH VALVE TO INSURE PROPER OPERATION. SEE BULLETIN# 6.3 READING THE ENTIRE PROCEDURE BEFORE ATTEMPTING INSTALLATION WILL SAVE TIME & MONEY.

1. OUTLET PIPE OF VALVE TO BE GROUTED IN PLACE BY CONTRACTOR.
2. LIFTING HARNESS IS SUPPLIED & INSTALLED FOR CONTRACTORS USE. MUST BE REMOVED AFTER INSTALLATION.
3. FLEXIBLE OUTLET CONNECTION SUPPLIED WITH EACH VALVE
4. 1"Ø VENT PIPE TO BE SUPPLIED & INSTALLED BY CONTRACTOR. VENT PIPE MUST BE EXTENDED ABOVE MAXIMUM OIL LEVEL OR OUTSIDE OF OIL SUMP. OIL MAY BYPASS STOP VALVE IF VENT IS NOT INSTALLED PROPERLY.
5. VALVE TO BE MOUNTED TO SUMP FLOOR. 1/2"Ø HOLES ARE PROVIDED IN BASE ANGLES.
6. VALVE VAULT MUST BE PRIMED WITH WATER & FLOAT OPENED PRIOR COMPLETION OF INSTALLATION.
7. MANUAL LIFTING CABLE HANDLE IS TO BE MOUNTED NEAR MANHOLE BY CONTRACTOR. DO NOT USE MANUAL LIFTING CABLE IF OIL IS PRESENT.
8. THE VALVE AND APPURTENANCES SHALL BE INSTALLED BY THE CONTRACTOR IN AN IDOT STANDARD 6-FOOT MANHOLE WITH FLAT-TOP, SLAB TOP AND FRAME AND GRATE AS DETAILED.
9. VALVE AND APPURTENANCES AND 6-FOOT MANHOLE AND FRAME AND GRATE SHALL BE PAID UNDER OIL CONTAINMENT SUMP - EACH.

No.	Description	By	Chk.	App.	Date
Issues					

**LEWIS UNIVERSITY AIRPORT**  
**CONSTRUCT TRAINING ACTIVITY OPERATIONS APRON**  
IDA No: LOT-5151  
BCM NO. LE057  
SBG No: 3-17-SBGP-TBD

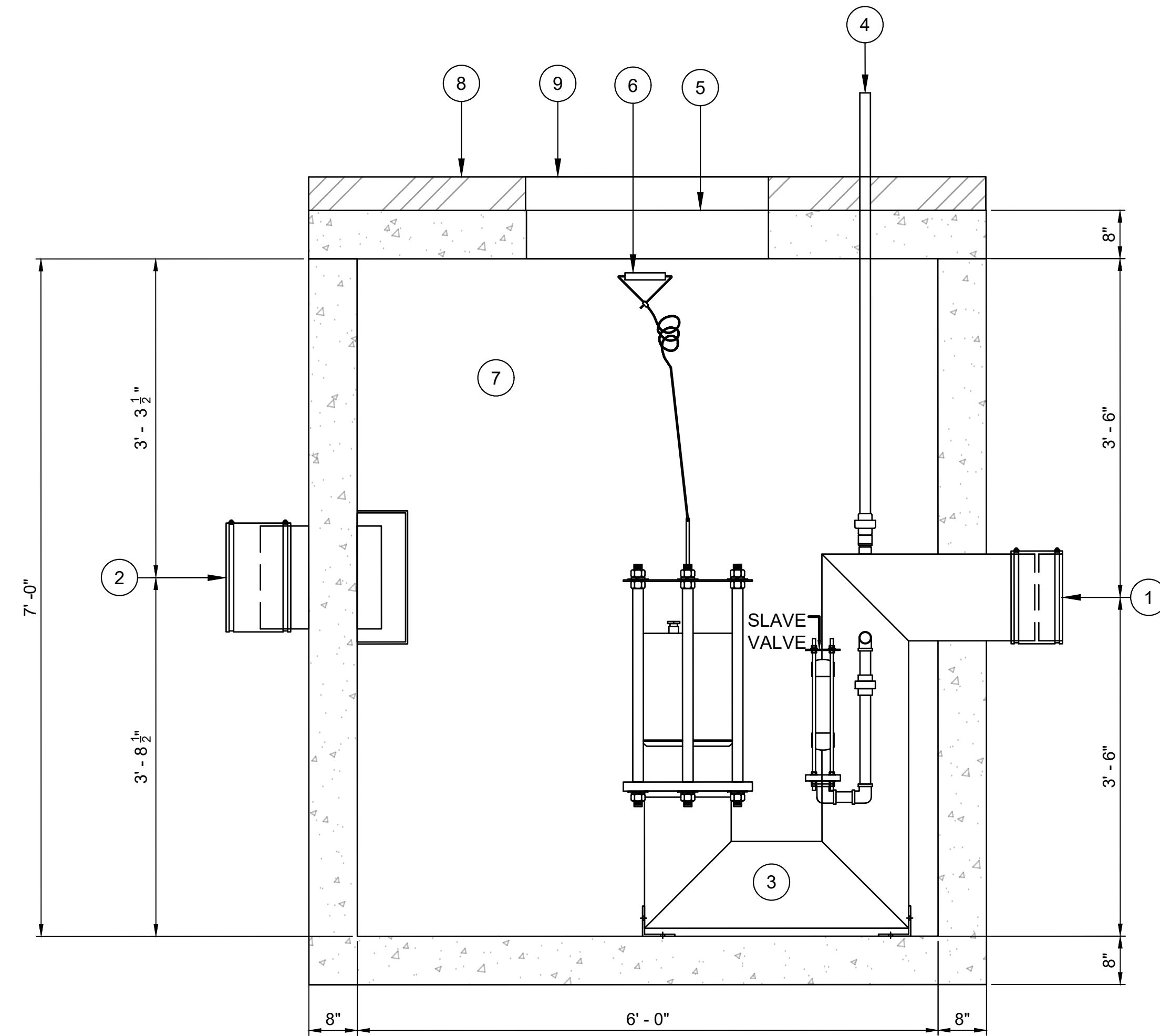
KEY PLAN

DRAWING TITLE  
**OIL CONTAINMENT SUMP DETAILS - 1**

210F.30	SHEET NO.
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KWS	
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JVJ	

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SECTION "A-A"

**OIL STOP VALVE DETAIL**  
NOT TO SCALE

**ASSEMBLY LIST**

- ① 12"Ø INLET, PIPE STUB W/ FLEX CONNECTOR
- ② 10"Ø OUTLET, PIPE W/ FLEX CONNECTOR
- ③ 10"Ø OIL STOP VALVE
- ④ 1"Ø VENT/SIPHON BREAKER
- ⑤ 36"Ø MANWAY
- ⑥ FLOAT LIFT CABLE
- ⑦ IDOT STANDARD MANHOLE 6-FOOT
- ⑧ IDOT STANDARD 602601-06 FLAT SLAB TOP / CENTERED HOLE
- ⑨ IDOT STANDARD 604001-05 FRAME AND LID ASSEMBLY / CLOSED W/ SAFETY LOCK / STAMPED "OIL SUMP"
- ⑩ CRUSHED AGGREGATE (CA-7)

NOTE: ALL ITEMS ARE INCLUDED FOR PAYMENT UNDER OIL CONTAINMENT SUMP - EACH  
STRUCTURE SHALL BE POURED MONOLITHICALLY.

No.	Description	By	Chk.	App.	Date
Issues					

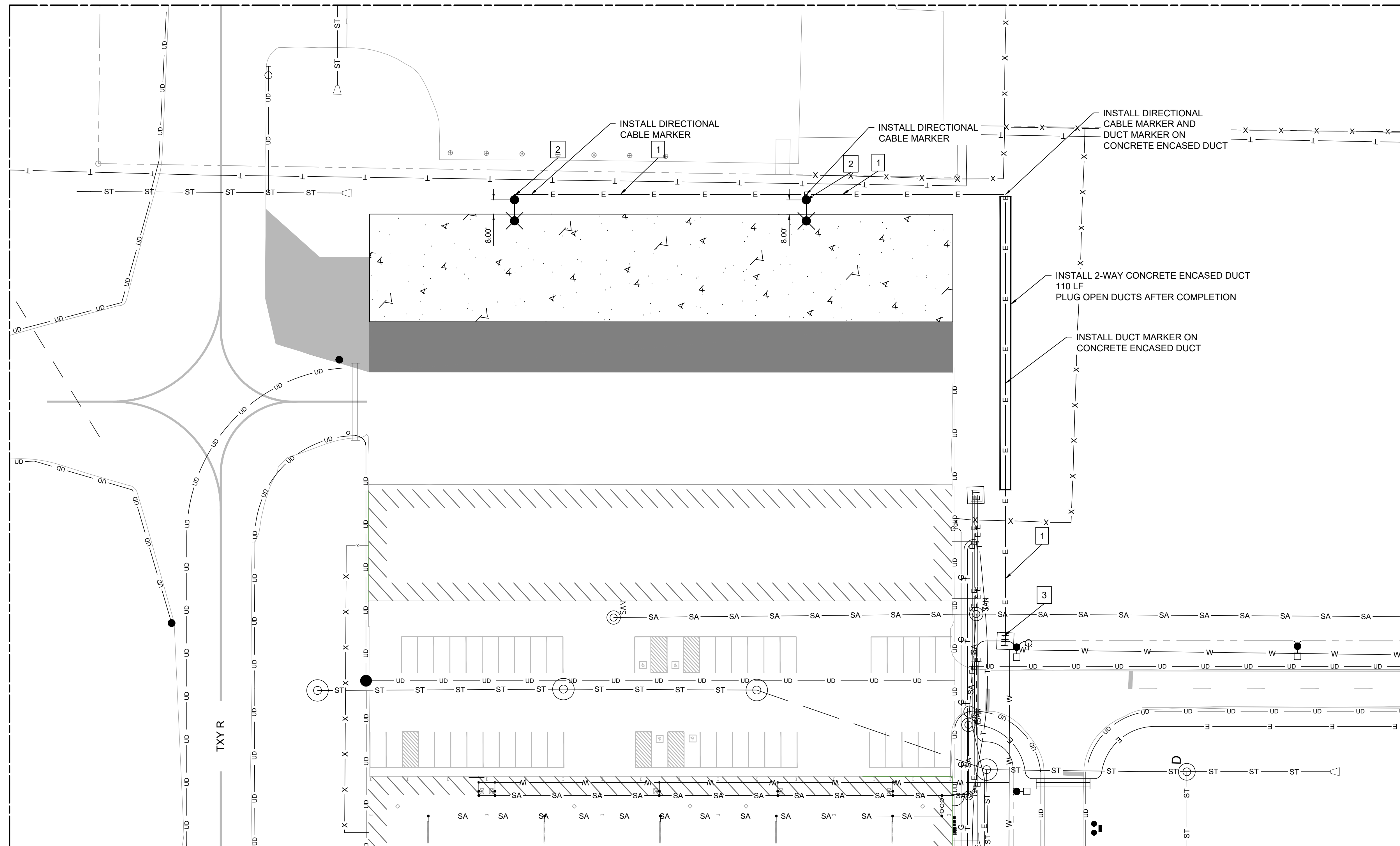
**LEWIS UNIVERSITY AIRPORT**  
**CONSTRUCT TRAINING ACTIVITY OPERATIONS APRON**  
IDA No: LOT-5151  
BCM NO. LE057  
SBG No: 3-17-SBGP-TBD

KEY PLAN

DRAWING TITLE  
**OIL CONTAINMENT SUMP DETAILS - 2**

22OF 30  
APPROVED RMH SHEET NO.  
CHECKED KWS **22**  
DRAWN BY JVJ





**KEYED NOTES:**

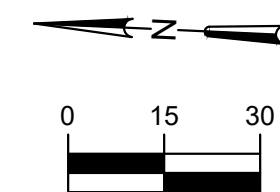
1. PROVIDE 3#6 , 1#8GND, IN 2" UNIT DUCT PLOWED OR IN TRENCH. MARK UNUSED CONDUCTOR "FOR FUTURE USE" IN EXISTING HANDHOLE, THEN CAP FUTURE USE CONDUCTOR AT LAST POLE. SEE DETAILS ON ELECTRICAL AND LIGHTING DETAILS SHEET.
2. PROVIDE LIGHT POLE AND CONCRETE BASE FOR EACH FIXTURE. SEE DETAILS ON ELECTRICAL AND LIGHTING DETAILS SHEET.
3. INTERRUPT STREET LIGHTING CIRCUITS AT THIS LOCATION AT EXISTING HANDHOLE, ROUTE AND SPLICE NEW CIRCUIT INTO EXISTING CIRCUIT. ENTRY SHALL BE MADE BY CORED WITH 2" CONDUIT. WATER SEAL ALL ENTRY POINTS AFTER INSTALLATION OF CABLE AND DUCT.

**GENERAL NOTES:**

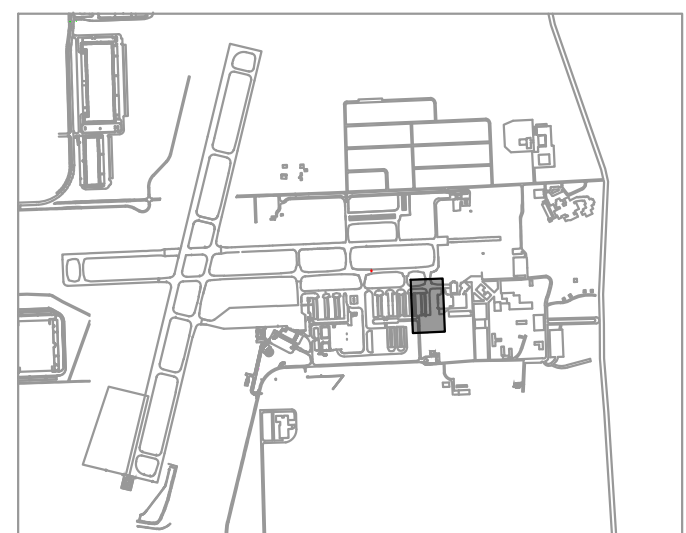
1. ALL NEW LIGHTING FIXTURES SHALL BE FED FROM EXISTING CONTROLLER AND REUSE EXISTING CIRCUITS.
2. EXISTING STREET LIGHTING CONTROLS AND SERVICE SHALL REMAIN. CONTRACTOR TO PRESERVE AND PROTECT.
3. COORDINATE EXISTING UTILITIES AND PROPOSED SYSTEMS. INSTALL UNIT DUCT AND BOXES TO CLEAR UNDERGROUND UTILITIES/PIPING.
4. ALL BRANCH CIRCUIT FEEDERS SHALL BE PROVIDED WITH SEPARATE GROUNDING CONDUCTORS.
5. ALL BRANCH CIRCUIT WIRES SHALL BE ROUTED IN UNIT DUCT, BEHIND PAVEMENT APRON.

**LEGEND:**

- |  |   |
|--|---|
|  | PROP. CONCRETE APRON PAVEMENT                               |
|  | PROP. HANGAR 900 BITUMINOUS PAVEMENT TRANSITION             |
|  | PROP. TAXIWAY R / TAXIWAY R2 BITUMINOUS PAVEMENT TRANSITION |
|  | PROP. ELECTRICAL CIRCUIT                                    |
|  | PROP. LIGHT POLE FIXTURE                                    |
|  | EX. ROADWAY LIGHTING CIRCUIT                                |
|  | EX. HANDHOLE  |



**KEY PLAN**



**DRAWING TITLE**  
**ELECTRICAL AND LIGHTING PLAN**

<b>23 OF 30</b> APPROVED <b>RMH</b> CHECKED <b>KWS</b> DRAWN BY <b>JVJ</b>	SHEET NO. <b>23</b>
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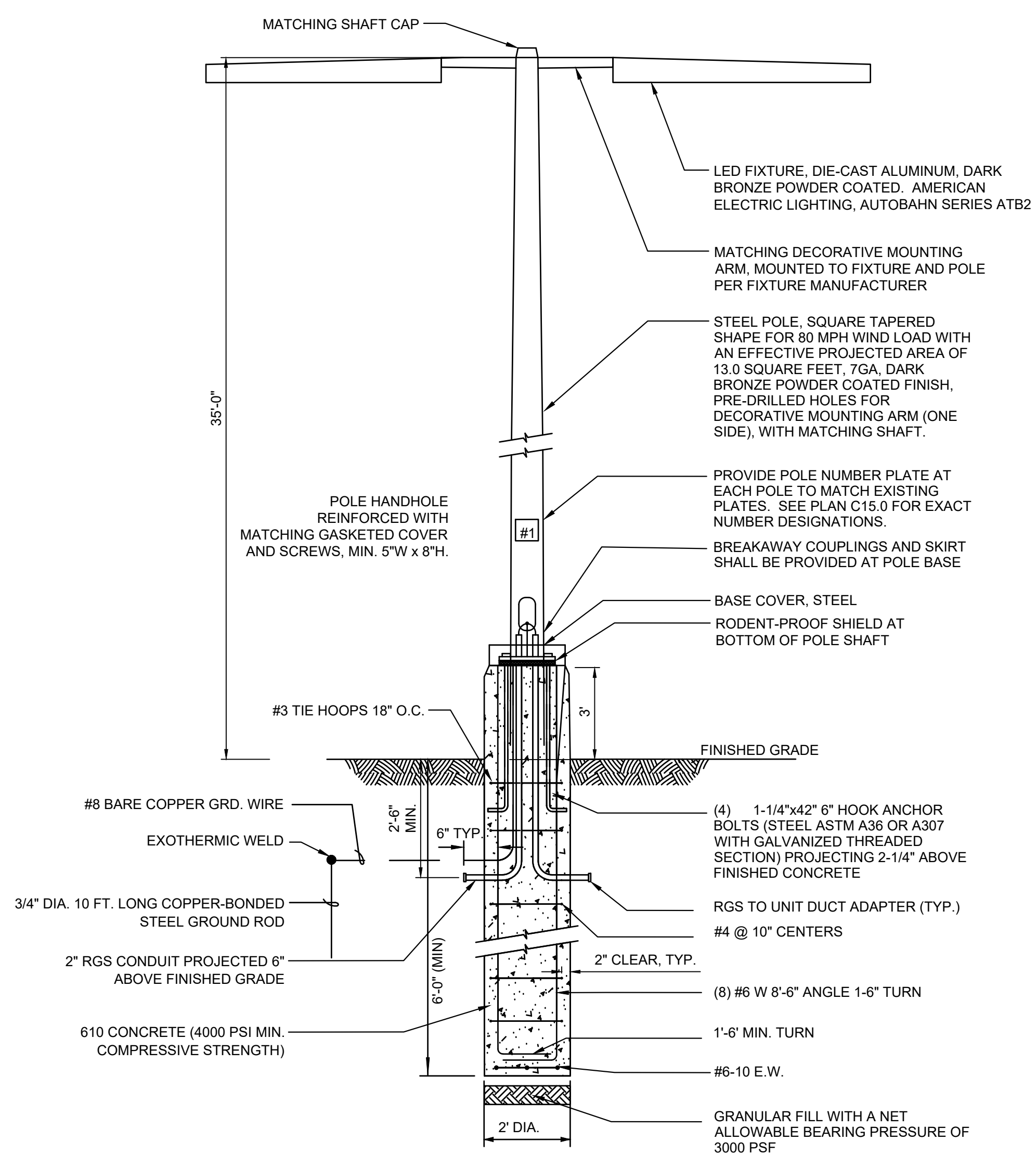


LIGHTING FIXTURE SCHEDULE												
TAG	DESCRIPTION	MANUFACTURER	MODEL	DRIVER TYPE	LAMP TYPE	CCT	MIN CRI	VOLTAGE	FIXTURE WATTS	DELIVERED LUMENS	MOUNTING	LOCATION / REMARKS
F1	LED ARM MOUNT ROADWAY LUMINAIRE IP66 RATED, 0% UPLIGHT AND RESTRICTED BACKLIGHT, PROVIDED WITH HANDHOLE AT BASE OF SQUARE POLE.	AMERICAN ELECTRIC LIGHTING OR ENGINEER APPROVED EQUAL	AUTOBAHN SERIES ATB2 ATB2-40BLEDE13-480-R3-UMS-XX-NR	INTEGRAL	-	4000K	-	480	171	19,462	ARM MOUNT POLE	8" HORIZONTAL ARM DUAL HEAD
P1	STEEL LIGHT POLE, SQUARE TAPERED, SHAFT CAP, POWDER COATED OVER GALVANIZING, PRE-DRILLED HOLES FOR MOUNTING ARM, HANDHOLE AT BASE, FULL STEEL BASE COVER	VALMONT STRUCTURES OR ENGINEER APPROVED EQUAL	STS / DS220-713E350-D1-PC-VP57-DB-FBC-AB	-	-	-	-	-	-	-	-	DARK BRONZE FINISH 5 YEAR FINISH WARRANTY METAL BASE COVER REQUIRED STEEL GALVANIZED PRIOR TO COATING

- REFER TO SPECIFICATIONS FOR ADDITIONAL LIGHTING FIXTURE REQUIREMENTS.
- CONTRACTOR RESPONSIBLE FOR COORDINATION OF BOLT PATTERNS AND HARDWARE REQUIRED TO INSTALL LIGHTING FIXTURES ONTO CONCRETE BASES AS REQUIRED.
- ALL DIMENSIONS LISTED ABOVE ARE NOMINAL SIZES. SLIGHT VARIATIONS IN SHAPE OR SIZE WILL BE CONSIDERED BASED ON THE PROJECT REQUIREMENTS.
- REFER TO CIVIL AND LANDSCAPE PLANS FOR MOUNTING/ORIENTATION, AND OTHER SURFACE CONSTRUCTION MATERIALS.
- ALL FIXTURES SHALL BE UL LISTED.
- ALL FIXTURES SHALL BE UL LISTED FOR EXTERIOR APPLICATIONS. WET LOCATION, EXTREME TEMPERATURES.

**GENERAL NOTES:**

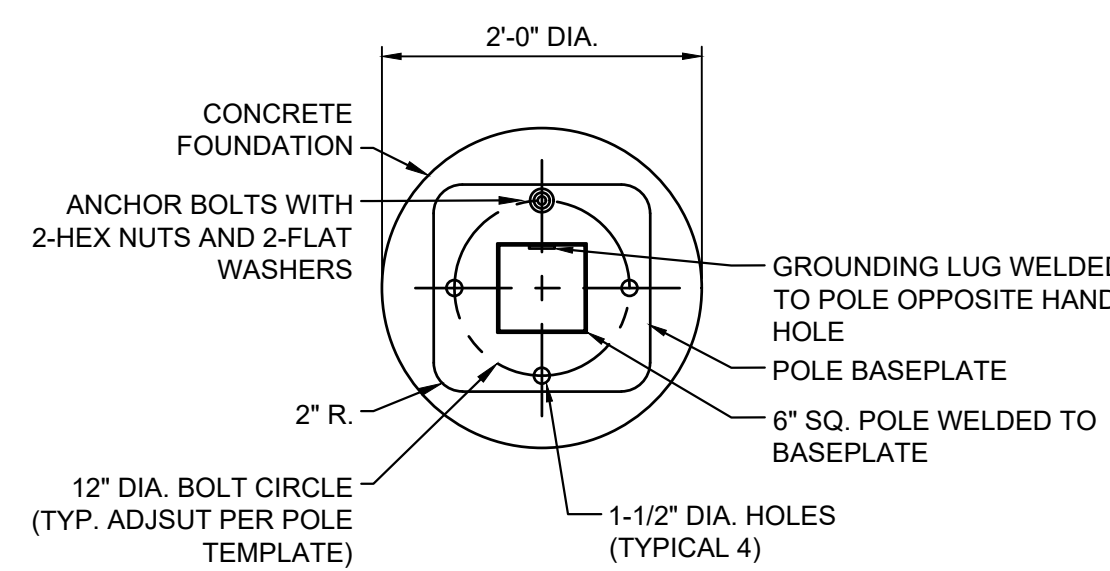
- ALL ELECTRICAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND ALL OTHER DRAWINGS RELATED TO THE PERFORMANCE OF THE WORK. ALL WORK TO CONFORM WITH AIRPORT STANDARDS AND APPLICABLE CODES.
- THE CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THIS WORK SHALL BECOME THOROUGHLY FAMILIAR WITH THE PROJECT SPECIFICATIONS BEFORE COMMENCING ANY WORK. THE PROJECT SPECIFICATIONS ARE DRAWINGS FORM THE BASIS OF THIS CONTRACT REQUIREMENTS AND INCLUDE THE TYPE AND THE BASIS OF THIS CONTRACT REQUIREMENTS AND INCLUDED THE TYPE AND GRADE OF MATERIALS TO BE INSTALLED, EQUIPMENT TO BE FURNISHED, THE MANNER BY WHICH TO BE INSTALLED AND WHERE TO BE LOCATED. IN THE MANNER BY WHICH TO BE INSTALLED AND WHERE TO BE LOCATED. IN THE EVENT OF A CONFLICT BETWEEN THE PROJECT SPECIFICATIONS AND DRAWINGS, SPECIFICATIONS GOVERN UNLESS THE ENGINEER DIRECTS OTHERWISE.
- THE CONTRACTOR SHALL CHECK CAREFULLY ALL CONSTRUCTION DRAWINGS AND SPECIFICATIONS THAT ARE PART OF THIS PROJECT TO INSURE THAT NO FIXTURE, UNIT DUCT, OR WIRING IS OMITTED. HE SHALL COORDINATE WITH ALL TRADES FURNISHING EQUIPMENT AND OBTAIN FROM THEM ALL DATA. IN SOME CASES EQUIPMENT, FIXTURES AND DEVICES ARE SHOWN ONLY. ASCERTAIN AND PROVIDE THE WIRING AND UNIT DUCT REQUIRED TO THE PROPER FUNCTION OF LIGHTING EQUIPMENT.
- EQUIPMENT LABELS AND INSTRUCTIONS REGARDING THE APPLICATION AND INSTALLATION OF THE LISTED EQUIPMENT SHALL BE FOLLOWED TO INSURE THAT THE EQUIPMENT IS BEING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S LISTING INSTRUCTIONS. THE TEMPERATURE RATING OF THE EQUIPMENT TERMINATIONS MUST BE CAREFULLY CORRELATED WITH THE CONDUCTOR AMPACITY TO PREVENT OVERHEATING AND PREMATURE FAILURE.
- UNIT DUCT RUNS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR TO COORDINATE EXACT ROUTING LOCATION IN FIELD.
- NO WIRING SHALL BE DONE PRIOR TO THE CONTRACTOR'S REVIEW OF THE PROJECT EQUIPMENT SHOP DRAWINGS AND COORDINATION WITH THE DESIGN DOCUMENTS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR FINAL RESOLUTION. WORK THAT HAS TO BE REPLACED DUE TO LACK OF PROPER SHOP DRAWINGS CO-ORDINATION SHALL BE DONE AT CONTRACTORS EXPENSE.
- THE CONTRACTOR SHALL PROTECT THE EXISTING FACILITY OUTSIDE OF AREA OF WORK AND EXERCISE CARE NOT TO DAMAGE ANY EXISTING CONSTRUCTION TO REMAIN. ALL WORK DAMAGED BY THE CONTRACTOR SHALL BE RESTORED SO AS TO MATCH EXISTING ADJACENT SURFACES IN ALL RESPECTS AND AS APPROVED BY THE OWNER. ANY SUCH CORRECTIVE WORK SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
- COORDINATE ALL WORK WITH THE OWNER PRIOR TO THE START OF WORK.



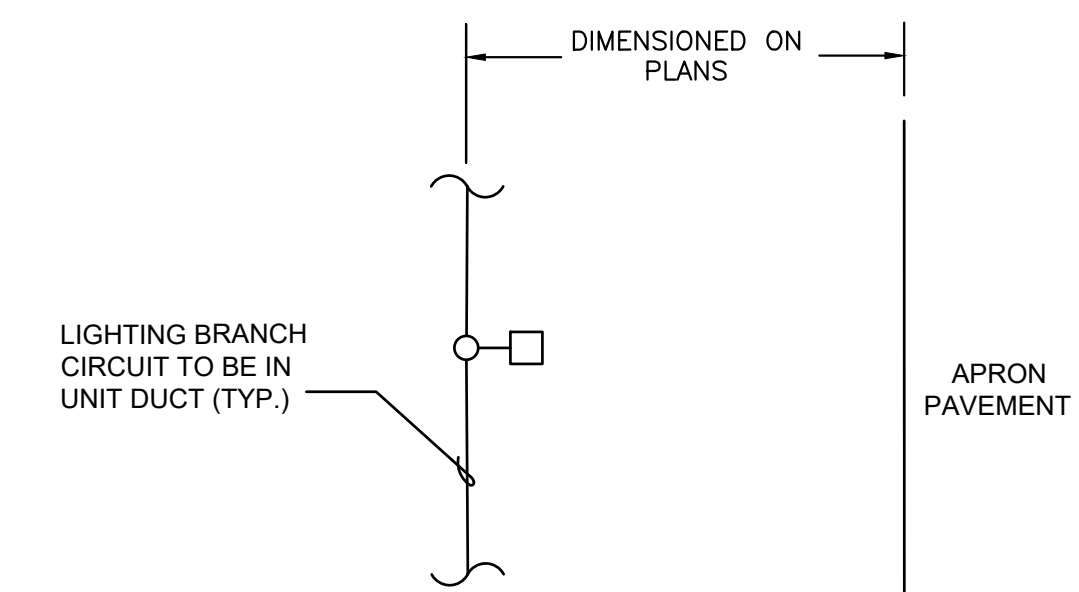
**ROADWAY LIGHT POLE AND FOUNDATION DETAIL**

**NOTES:**

- LIGHT POLE SHOWN ON LEFT IS ACTUALLY A TILTABLE POLE AS SHOWN ON THE RIGHT. POLE IS OPERATED BY WINCH MECHANISM PROVIDED BY CONTRACTOR.



**LIGHT POLE BASE DETAIL**



**LIGHT LOCATION FIXTURE DETAIL**

No.	Description	By	Chk.	App.	Date
Issues					

**LEWIS UNIVERSITY AIRPORT**

**CONSTRUCT TRAINING ACTIVITY OPERATIONS APRON**

IDA No: LOT-5151  
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SBG No: 3-17-SBGP-TBD

**KEY PLAN**

**DRAWING TITLE**

**ELECTRICAL AND LIGHTING DETAILS - 1**

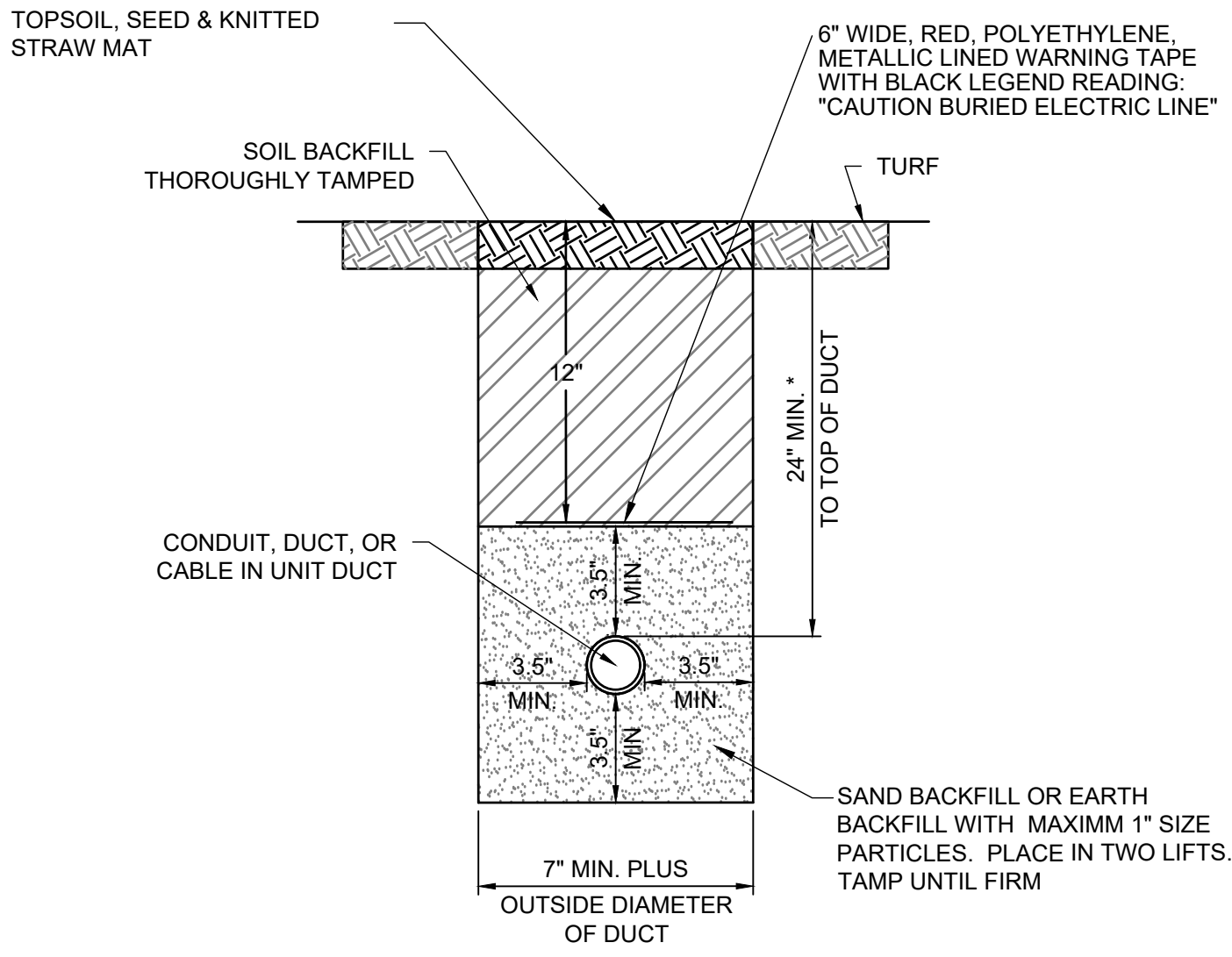
24 OF 30

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SHEET NO.

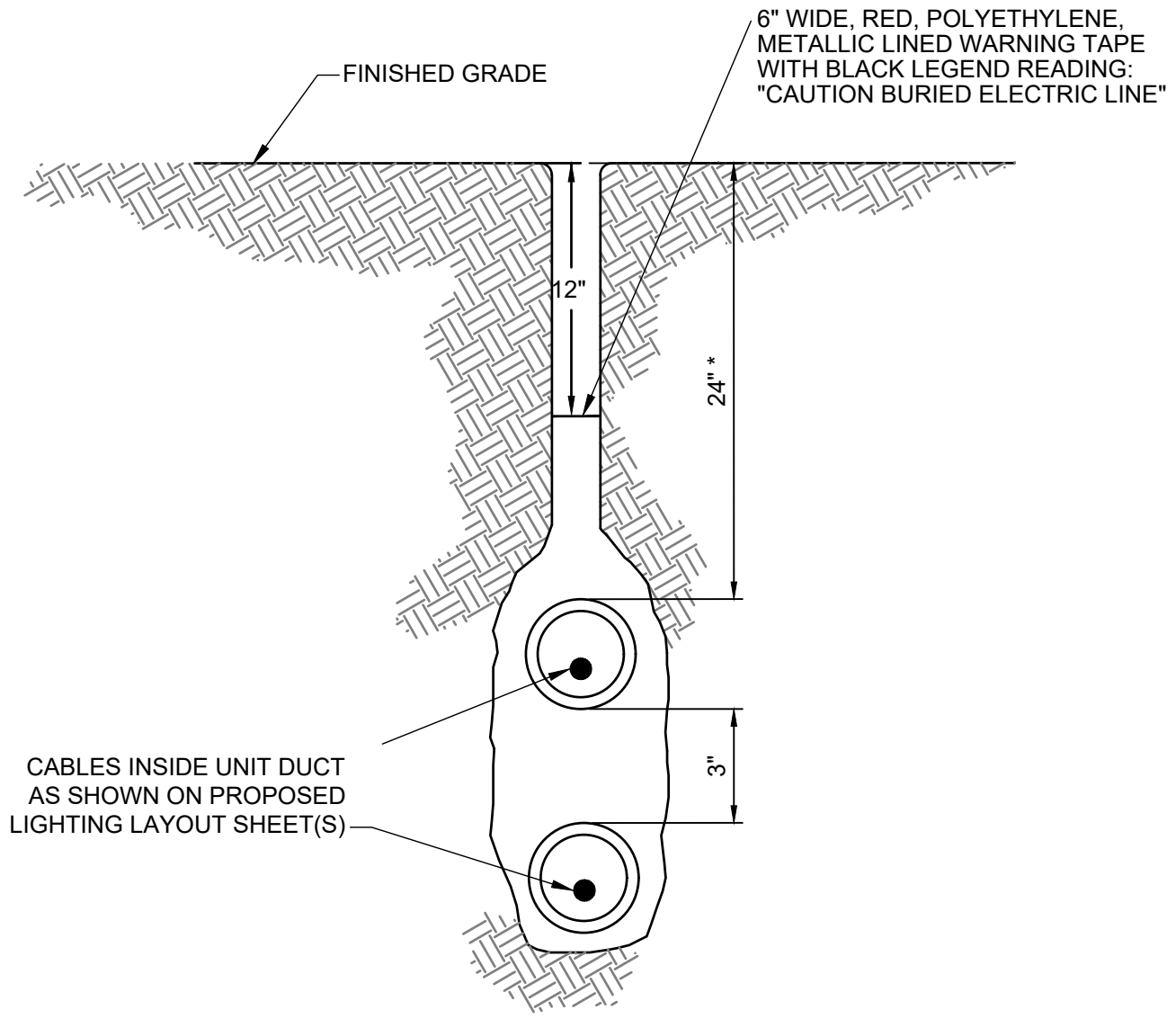
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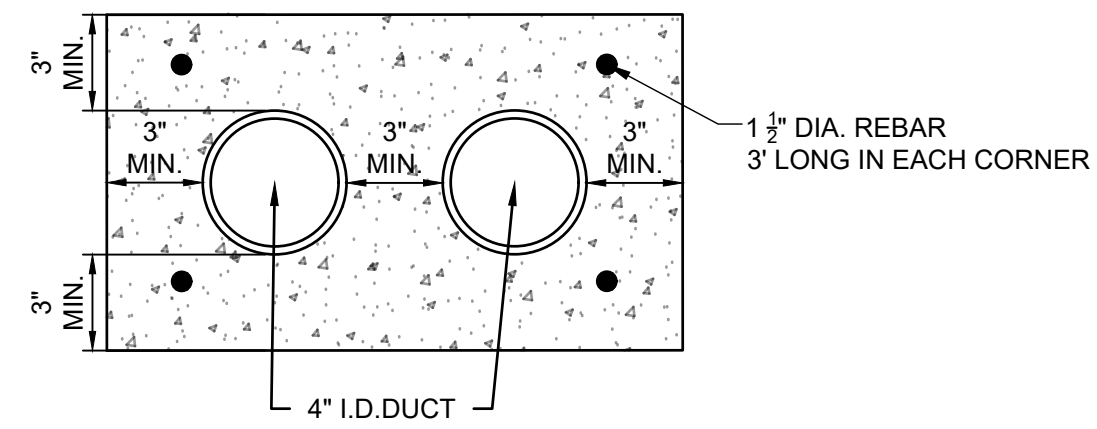
\*CABLE IN TRENCH IN CULTIVATED FIELDS SHALL BE TRENCHED 42" DEEP.

**CONDUIT IN TRENCH DETAIL - NON-PAVEMENT AREAS**

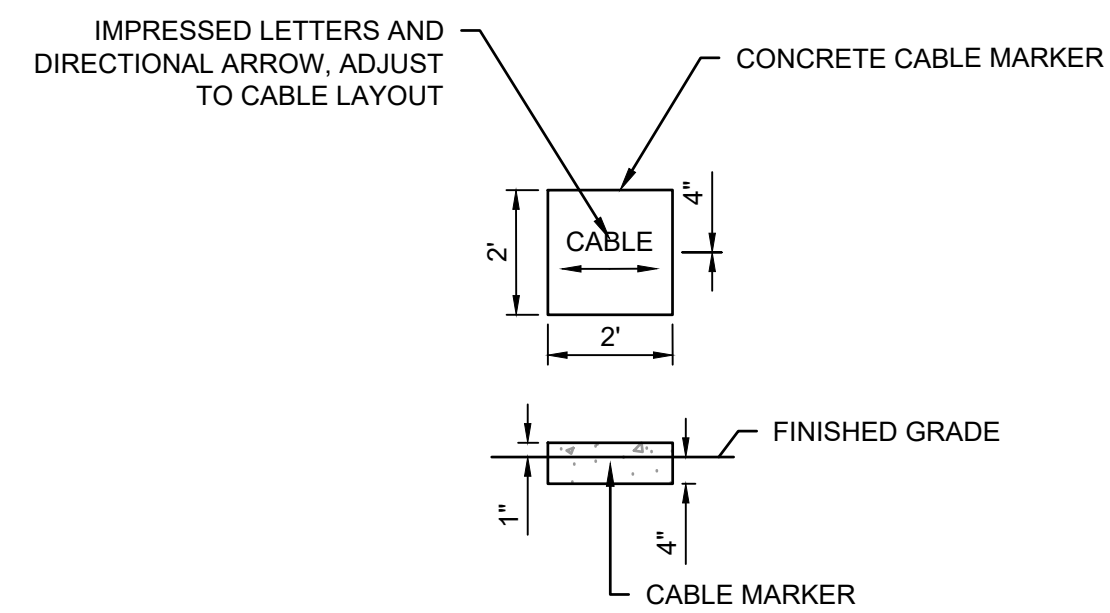


\*CABLE IN TRENCH IN CULTIVATED FIELDS SHALL BE PLOWED 42" DEEP.

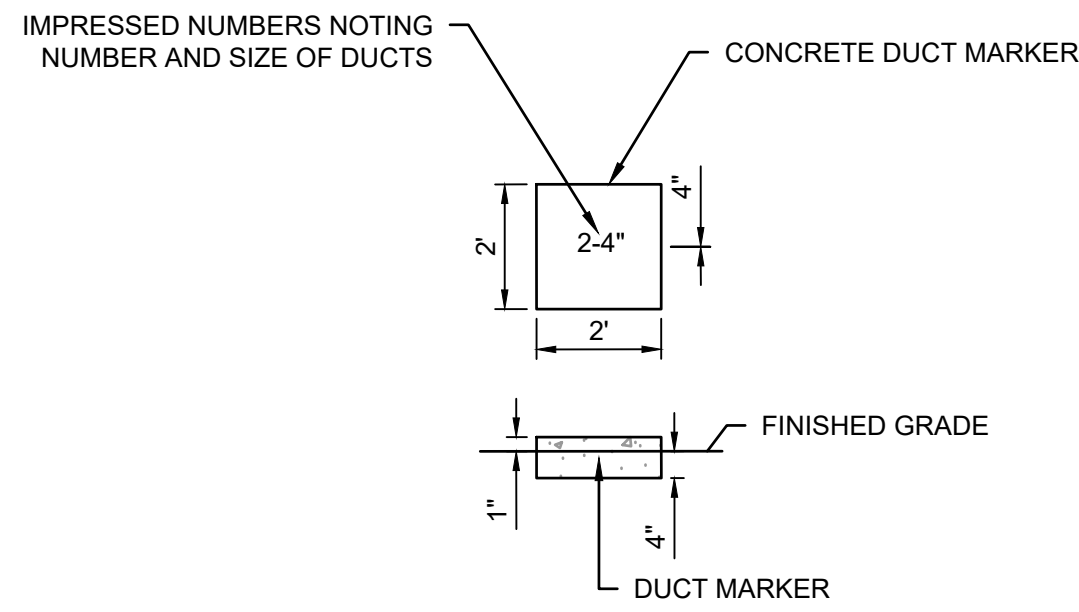
**PLOWED CABLE DETAIL**



**2-WAY 4" CONCRETE ENCASED DUCT**



**TURF CABLE MARKERS**



**TURF DUCT MARKERS**

**UNIT DUCT TRENCH/PLOW NOTES:**

1. DIMENSIONS FOR COVERAGE AND SEPARATION BETWEEN DUCTS ARE MINIMUM.
2. TRENCHES WITH MORE THAN TWO DUCTS OR CABLE IN UNIT DUCTS SHALL BE INCREASED 3" IN WIDTH PLUS DIAMETER OF RESPECTIVE DUCT FOR EACH ADDITIONAL CONDUIT, DUCT, OR CABLE IN UNIT DUCT; IF SPECIFIED ON PLANS TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.
3. DEPTH OF TRENCHES SHALL BE AS SHOWN ABOVE UNLESS OTHERWISE SPECIFIED ON THE PLANS. MINIMUM COVER REQUIREMENTS FOR CABLES AND DUCTS AT AIRPORT RUNWAYS AND ADJACENT AREAS WHERE TRESPASSING IS PROHIBITED IS 24 INCHES. MINIMUM COVER REQUIREMENTS FOR DUCTS LOCATED IN CULTIVATED FIELDS IS 42". ADJUST/INCREASE BURIAL DEPTHS TO ACCOMMODATE SITE CONDITIONS, DRAINAGE, AND/OR OBSTRUCTIONS. COVER IS DEFINED AS THE SHORTEST DISTANCE IN INCHES MEASURED BETWEEN A POINT ON THE TOP SURFACE OF ANY DIRECT-BURIED CONDUCTOR, CABLE, CONDUIT, OR OTHER RACEWAY AND THE TOP SURFACE OF FINISHED GRADE, CONCRETE OR SIMILAR COVER.
4. HIGH VOLTAGE CIRCUITS (AIRFIELD LIGHTING 5000 VOLT SERIES CIRCUITS AND/OR OTHER CIRCUITS RATED ABOVE 600 VOLTS) AND LOW VOLTAGE CIRCUITS (RATED 600 VOLTS AND BELOW) SHALL NOT BE INSTALLED IN THE SAME RACEWAY, CONDUIT, DUCT, HANDHOLE, OR MANHOLE.
5. DUCT INTERFACE TO LIGHT POLES, HANDHOLES, MANHOLES, SPLICE CANS, OR OTHER JUNCTION STRUCTURES WILL BE CONSIDERED INCIDENTAL TO THE RESPECTIVE CABLE IN UNIT DUCT PAY ITEM OR RESPECTIVE DUCT PAY ITEM.
6. ALL DISTURBED SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. COST IS INCIDENTAL TO TRENCH.

**DUCT BANK/MARKER NOTES:**

1. DIMENSIONS FOR COVERAGE AND SEPARATION BETWEEN DUCTS ARE MINIMUM.
2. INCLUDE DUCT SPACERS TO MAINTAIN PROPER SEPARATION OF CONDUITS.
3. REBAR IS REQUIRED TO ACCOMMODATE FUTURE DUCT EXTESIONS AND INTERFACE AT DUCT BANK TERMINATIONS. CONCRETE ENCASED DUCT BANKS TERMINATING IN HANDHOLES REQUIRE REBAR AT TERMINATIONS.
4. CONDUITS FOR CONCRETE ENCASED DUCT SHALL BE SCHEDULE 40 PVC.
5. MINIMUM DEPTH OF TOP OF DUCT ENCASEMENT SHALL BE 18" BELOW FINISHED GRADE.
6. HIGH VOLTAGE AND LOW VOLTAGE CIRCUITS SHALL NOT BE INSTALLED IN THE SAME RACEWAY, CONDUIT, DUCT, HANDHOLE, OR MANHOLE.
7. DUCT INTERFACE TO HANDHOLES OR MANHOLES WILL BE CONSIDERED INCIDENTAL TO THE DUCT.

**CABLE/DUCT MARKER NOTES:**

1. THE COST OF ALL DUCT MARKERS SHALL BE INCIDENTAL TO THE DUCT. THE COST OF ALL CABLE MARKERS SHALL BE INCIDENTAL TO THE CABLE.
2. DUCT MARKER TO BE PROVIDED AT EACH END OF EACH DUCT AS SHOWN ON THE PLANS.
3. CABLE MARKERS SHALL BE PLACED AT CHANGES OF DIRECTION AND APPROXIMATELY EVERY 200' ALONG CABLE RUNS.
4. CONCRETE MARKERS SHALL HAVE LETTERS 4" HIGH, 3" WIDE WITH WIDTH OF STROKE 1/2" AND 3/4" DEEP. ALL LETTERS, NUMBERS, AND ARROWS TO BE IMPRESSED.

No.	Description	By	Chk.	App.	Date
Issues					

**LEWIS UNIVERSITY AIRPORT**  
**CONSTRUCT TRAINING ACTIVITY OPERATIONS APRON**  
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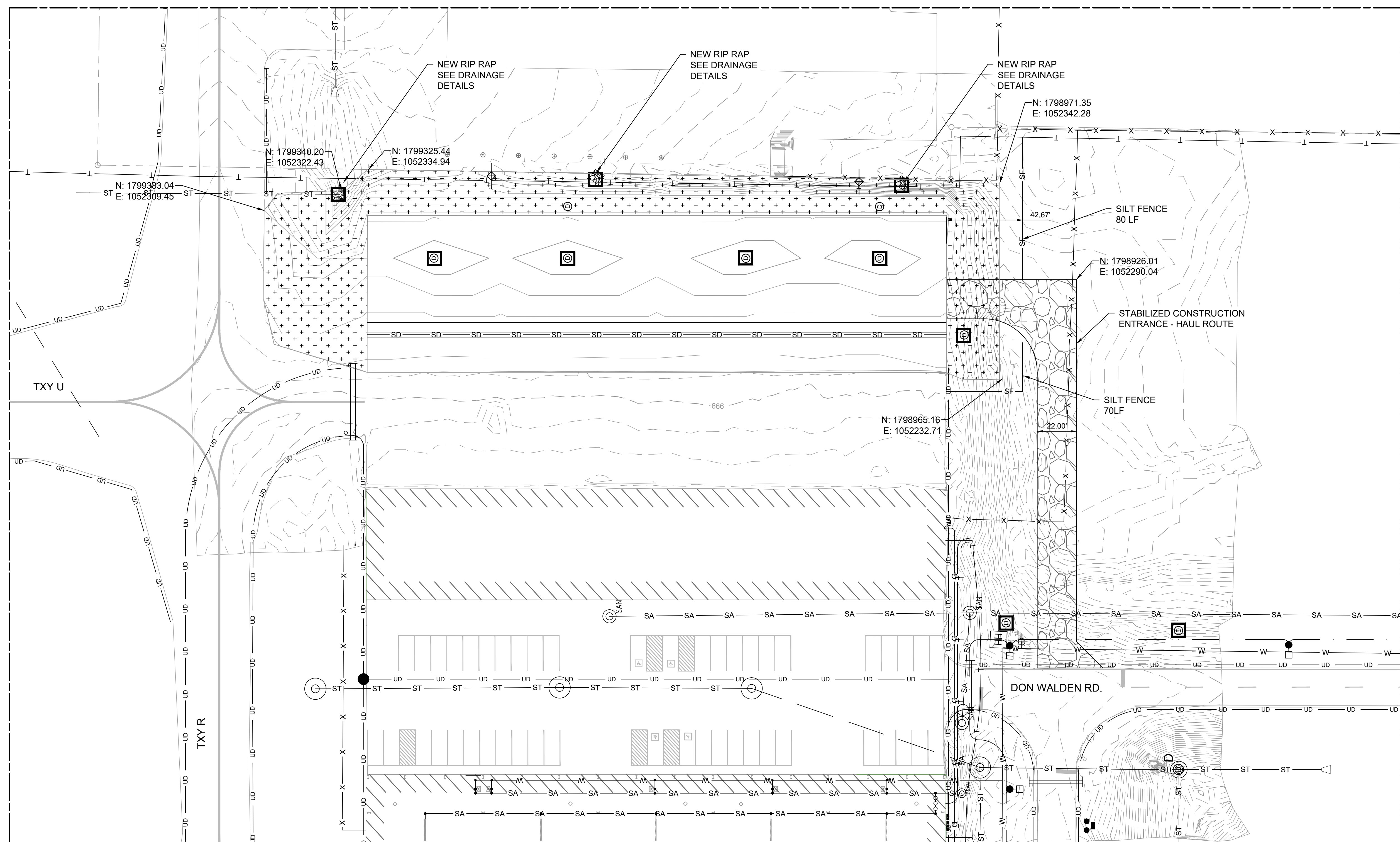
KEY PLAN

DRAWING TITLE  
**ELECTRICAL AND LIGHTING DETAILS - 2**

25 OF 30	APPROVED	SHEET NO.
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	KWS	
	DRAWN BY	JVJ

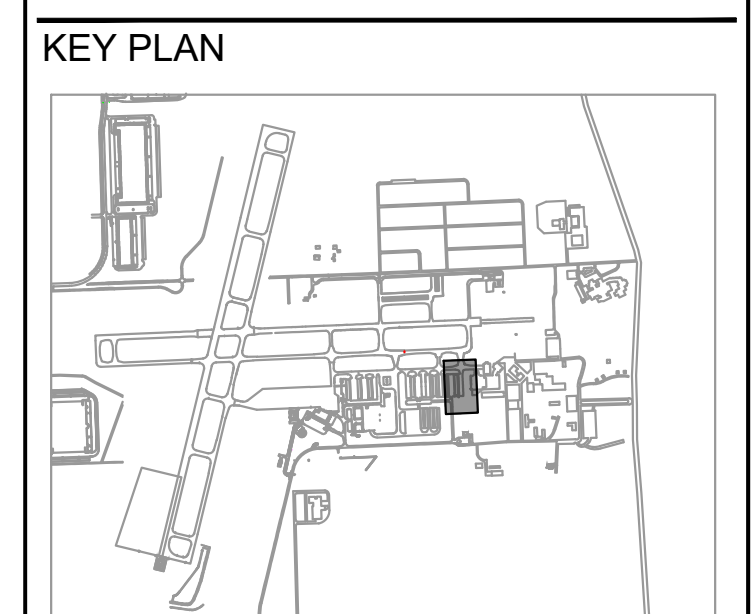
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No.	Description	By	Chk.	App.	Date
Issues					

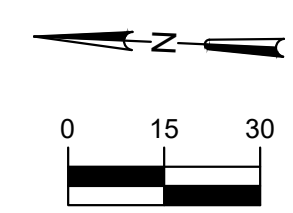
**LEWIS UNIVERSITY AIRPORT**  
**CONSTRUCT TRAINING ACTIVITY OPERATIONS APRON**  
IDA No: LOT-5151  
BCM NO. LE057  
SBG No: 3-17-SBGP-TBD



DRAWING TITLE  
**SOIL EROSION AND SEDIMENT CONTROL PLAN**

26 OF 30  
APPROVED RMH  
CHECKED KWS  
DRAWN BY JVJ

SHEET NO.  
**26**



**GENERAL NOTES:**

- SOIL EROSION AND SEDIMENT CONTROL MAINTENANCE MUST OCCUR EVERY TWO WEEKS AND AFTER EVERY 1/2 OR GREATER RAINFALL EVENT.
- CONTRACTOR IS RESPONSIBLE FOR ALL SITE MAINTENANCE UNTIL THE SITE IS TURNED OVER. THIS INCLUDES MOWING WHERE VEGETATION HAS BEGUN TO GROW BEFORE SUBSTANTIAL COMPLETION.
- STOCKPILES ARE TO BE REMOVED AT THE END OF EACH WORKING DAY OR SHALL BE STABILIZED WITH TEMPORARY EROSION CONTROL MEASURES.
- RIPRAP IS A PERMANENT EROSION CONTROL METHOD TO REMAIN.
- STOCKPILES USED FOR STORING SUITABLE MATERIAL SHALL BE SEEDED AND MULCHED.

**CONSTRUCTION SEQUENCING:**

- INSTALLATION OF SOIL EROSION AND SEDIMENT CONTROL SE/SC MEASURES INCLUDING SELECTIVE VEGETATION REMOVAL FOR SILT FENCE INSTALLATION
- SILT FENCE INSTALLATION
- INSTALL STORM SEWER AND ASSOCIATED INLET & OUTLET PROTECTION
- PERMANENT SEED AND MULCH AREAS AFTER GRADING IS COMPLETED
- PERMANENTLY STABILIZE AREAS
- REMOVE ALL TEMPORARY SE/SC MEASURES AFTER THE SITE IS STABILIZED

**LEGEND:**

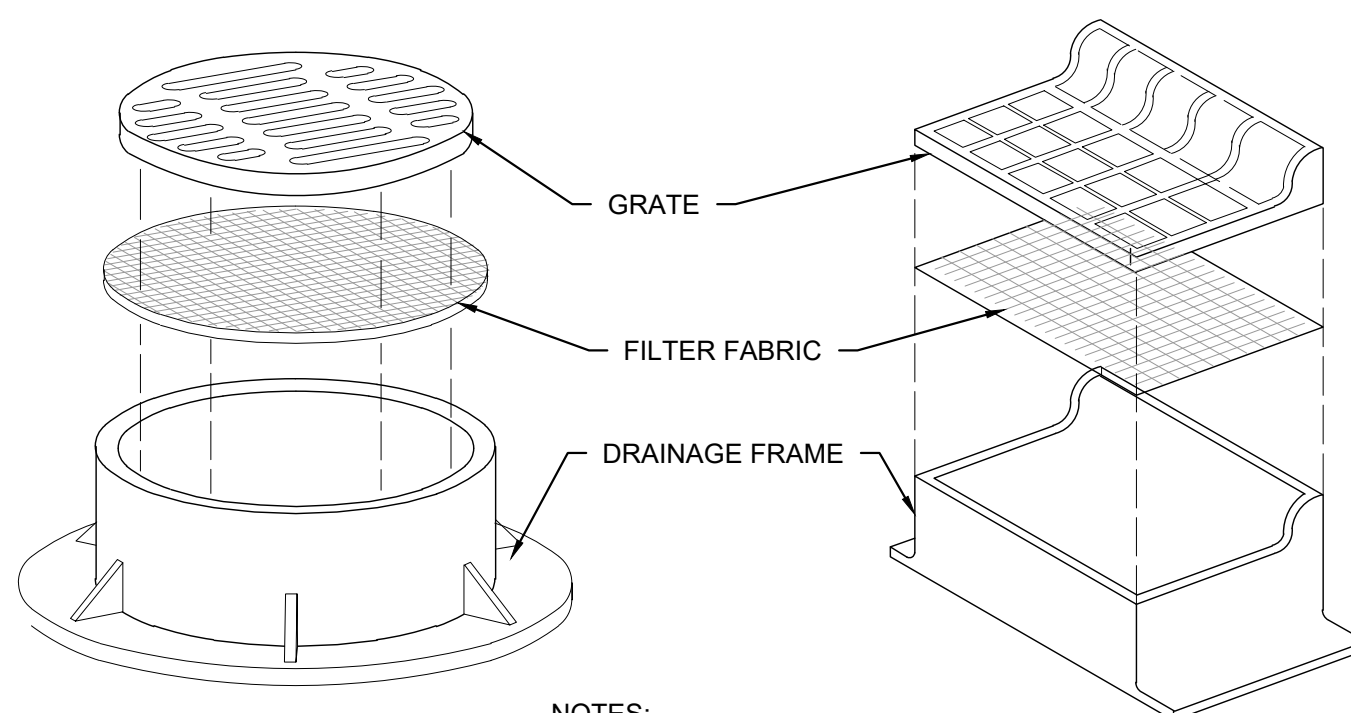
- NEW SEEDING AND MULCHING
- NEW RIP RAP
- NEW INLET PROTECTION
- NEW SILT FENCE
- NEW DITCH CHECK
- NEW STORM SEWER
- NEW MANHOLE

FILE NAME/LOCATION: P:\2020\20200112\10\W02\07 DRAWINGS\CURRENT DRAWING SHEETS\LOT-5151-SOIL EROSION AND SEDIMENT CONTROL PLAN.DWG  
 PRINTED BY: KRIS SAWYER  
 DATE PRINTED: 11/27/2024 11:11 AM  
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 PLOT DEVICE DRIVER: ELOT STYLE TABLE - CIB  
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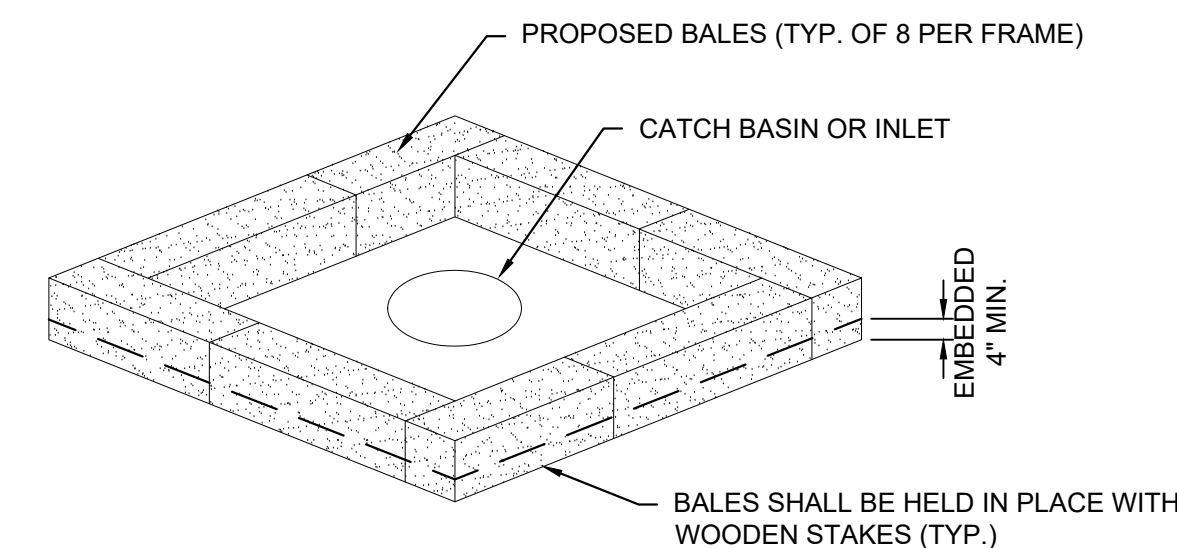
**SEDIMENTATION AND EROSION CONTROL NOTES:**

- A. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL'S LATEST EDITION.
- B. AN UP-TO-DATE COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- C. IT IS THE RESPONSIBILITY OF THE LANDOWNER AND/OR GENERAL CONTRACTOR TO INFORM ANY SUB-CONTRACTOR(S) WHO MAY PERFORM WORK ON THIS PROJECT, OF THE REQUIREMENTS IN IMPLEMENTING AND MAINTAINING THESE EROSION CONTROL PLANS AND ASSURE COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
- D. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
- E. SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
- F. DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN 14 CALENDAR DAYS OF THE END OF ACTIVE HYDROLOGIC DISTURBANCE, OR REDISTURBANCE.
- G. AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 8H:1V SHALL BE STABILIZED WITH SOD, MAT OR BLANKET IN COMBINATION WITH SEEDING.
- H. ALL STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED, BY AN APPROPRIATE SEDIMENT CONTROL MEASURE.
- I. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
- J. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE PROPERTY OWNER SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR.
- K. SOIL STOCKPILES SHALL NOT BE LOCATED IN A FLOOD PRONE AREA OR A DESIGNATED BUFFER. NO STOCKPILES SHALL BE LOCATED WITHIN AN ACTIVE RUNWAY SAFETY AREA, RUNWAY OBJECT FREE AREA, RUNWAY OBSTACLE FREE ZONE, OR ACTIVE TAXIWAY OBJECT FREE AREA.

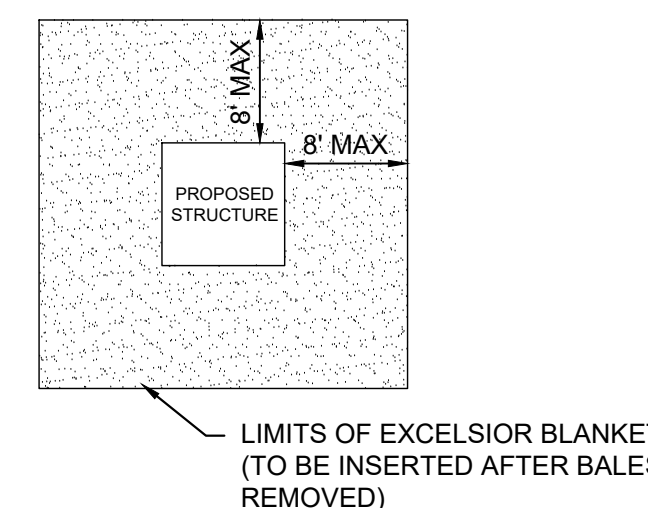


- NOTES:**
1. FILTER FABRIC TO BE PLACED IN ALL INLETS, MANHOLES, TRENCH DRAINS AND CATCH BASINS.
  2. FABRIC SHALL BE IN CONFORMANCE WITH MATERIALS SPECIFIED FOR FABRIC FENCE.
  3. FABRIC SHALL OVERLAY FRAME BY 2" (MIN.).
  4. CONTRACTOR SHALL CLEAR DEBRIS AND SILT AS REQUIRED FROM FABRIC TO MAINTAIN DRAINAGE THROUGH THE STRUCTURE.
  5. FABRIC SHALL REMAIN IN PLACE UNTIL TURFED AREAS HAVE DEVELOPED A MIN. OF 80% OF COVERAGE (BY SURFACE AREA). CONTRACTOR TO REMOVE WHEN NOTIFIED BY OWNER OR ENGINEER.
  6. COST OF FILTER WRAP SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE ASSOCIATED CATCH BASIN, MANHOLE, TRENCH DRAIN AND INLET.

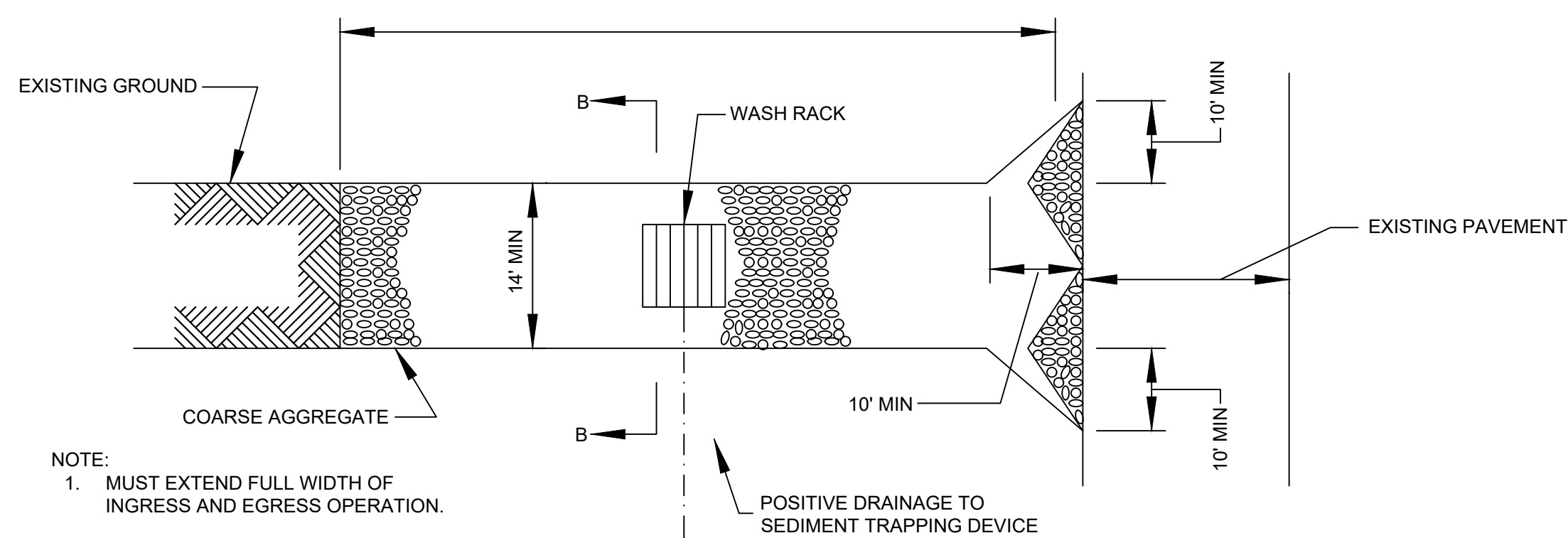
**DRAINAGE STRUCTURE FILTER WRAP**  
 N.T.S



- NOTES:**
1. CONTRACTOR TO INSTALL, MAINTAIN, REMOVE AND RESTORE EACH LOCATION.
  2. COST OF INLET/CATCH BASIN PROTECTION AND RESTORATION SHALL BE CONSIDERED INCIDENTAL TO BE COST OF THE ASSOCIATED DRAINAGE STRUCTURE.

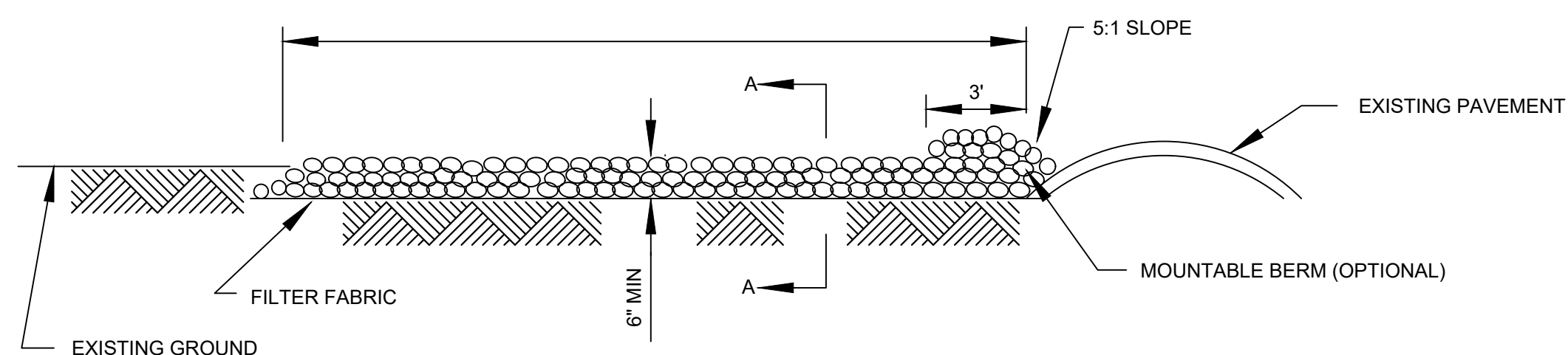


**INLET PROTECTION**



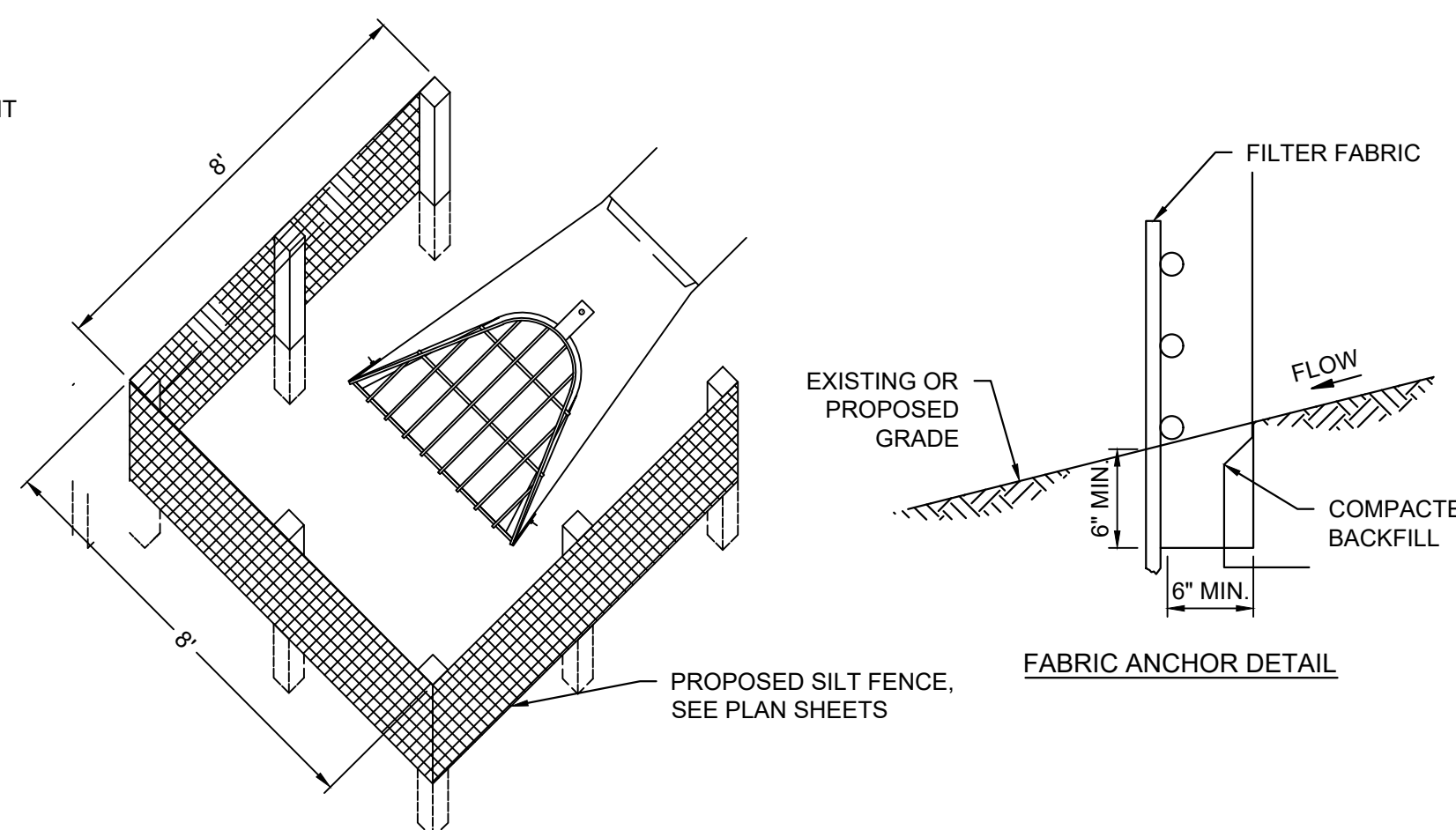
- NOTE:**
1. MUST EXTEND FULL WIDTH OF INGRESS AND EGRESS OPERATION.

**STABILIZED CONSTRUCTION ENTRANCE PLAN**  
 N.T.S



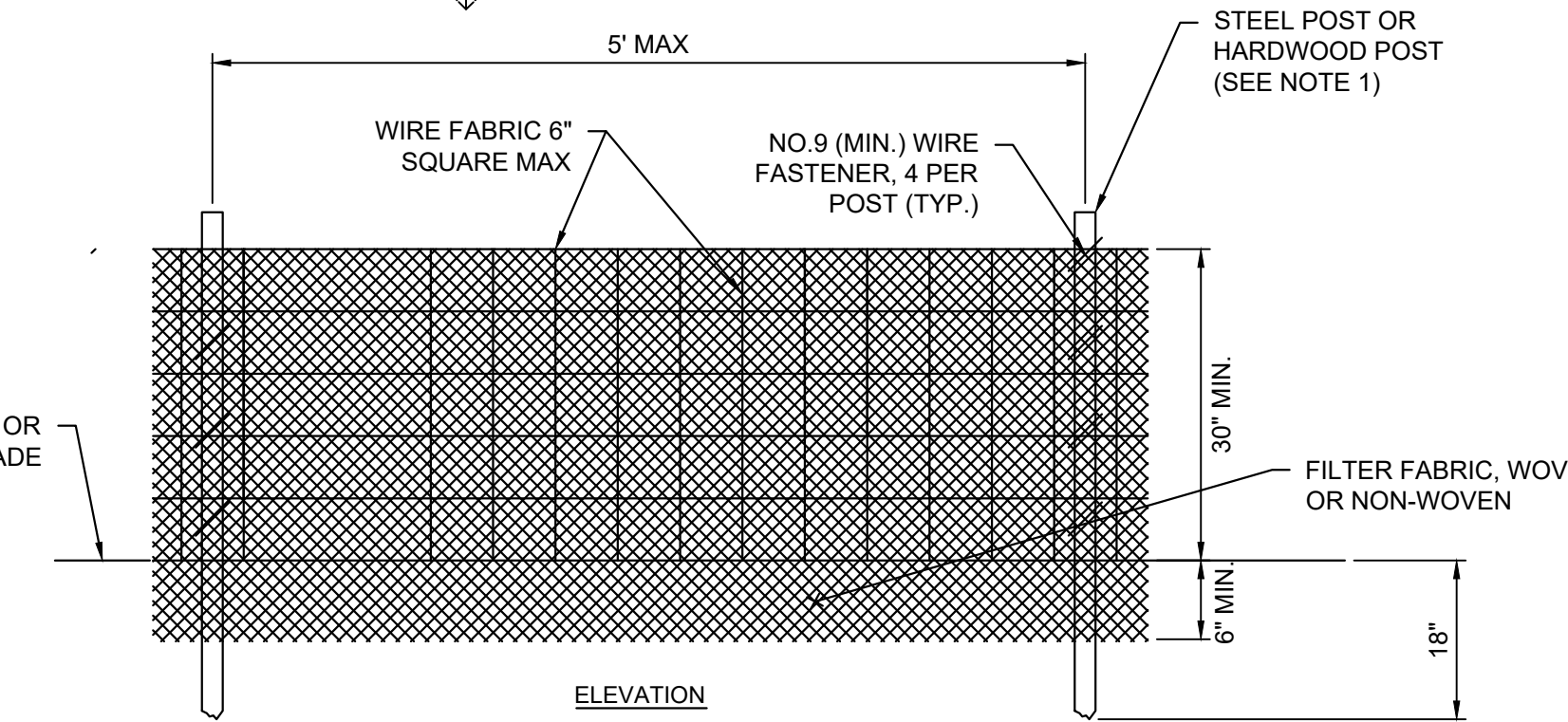
**STABILIZED CONSTRUCTION ENTRANCE PROFILE**  
 N.T.S

- NOTES:**
1. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE, TABLE 1 OR 2, CLASS I, II, OR IV AND SHALL BE PLACED OVER THE CLEARED AREA PRIOR TO THE PLACING OF ROCK, ROCK OR RECLAIMED CONCRETE SHALL MEET ONE OF THE FOLLOWING IDOT COARSE AGGREGATE GRADATION, CA-1, CA-2, CA-3, OR CA-4 AND BE PLACED ACCORDING TO CONSTRUCTION SPECIFICATION 25 ROCKFILL USING PLACEMENT METHOD 1 AND CLASS III COMPACTION.
  2. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHALL BE CONSTRUCTED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
  3. IF WASH RACKS ARE USED THEY SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.



**NOTES:**

1. FENCE POST SHALL BE EITHER STEEL "T" LINE POST OR HARDWOOD POST WITH A MINIMUM SECTIONAL AREA OF 2.0 SQUARE INCHES. A CARPENTER'S (NOMINAL) 2"x2" POST WILL MEET SPECIFICATIONS.
2. TOP AND BOTTOM WIRE OF WIRE FABRIC SHALL BE MINIMUM GAGE NO. 9. INTERMEDIATE WIRES OF THE WIRE FABRIC SHALL BE MINIMUM GAGE NO. 11.
3. WIRE FABRIC SHALL BE SECURELY FASTENED TO FENCE POSTS WITH NO. 9 GAGE WIRE MINIMUM. FOUR (4) FASTENERS PER POST REQUIRED.
4. FILTER FABRIC SHALL BE SECURELY FASTENED TO WIRE FABRIC AND POSTS WITH TIES OR STAPLES SPACED AT 12" APART AT THE TOP, MIDDLE AND BOTTOM.
5. WHEN TWO SECTIONS OF FILTER FABRIC MEET, THEY SHALL BE OVERLAPPED BY 6" AND FOLDED AND ATTACHED TO THE WIRE FABRIC AT A POST.
6. FILTER FABRIC SHALL BE IN ACCORDANCE WITH SPECIAL PROVISIONS WITH APPARENT OPENING SIZE (AOS) OF AT LEAST 40 FOR NONWOVEN AND WOVEN.
7. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
8. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. PERIODIC INSPECTION SHALL BE PERFORMED AND REQUIRED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN EVENT.
9. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED AND REPLACED WHEN BULGES DEVELOP IN THE SILT FENCE.
10. FENCE POSTS SHALL BE REMOVED WHEN DIRECTED AT PROJECT END.
11. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.



**SILT FENCE PLACEMENT**

No.	Description	By	Chk.	App.	Date

Issues

**LEWIS UNIVERSITY AIRPORT**  
**CONSTRUCT TRAINING ACTIVITY OPERATIONS APRON**  
 IDA No: LOT-5151  
 BCM NO. LE057  
 SBG No: 3-17-SBGP-TBD

**KEY PLAN**

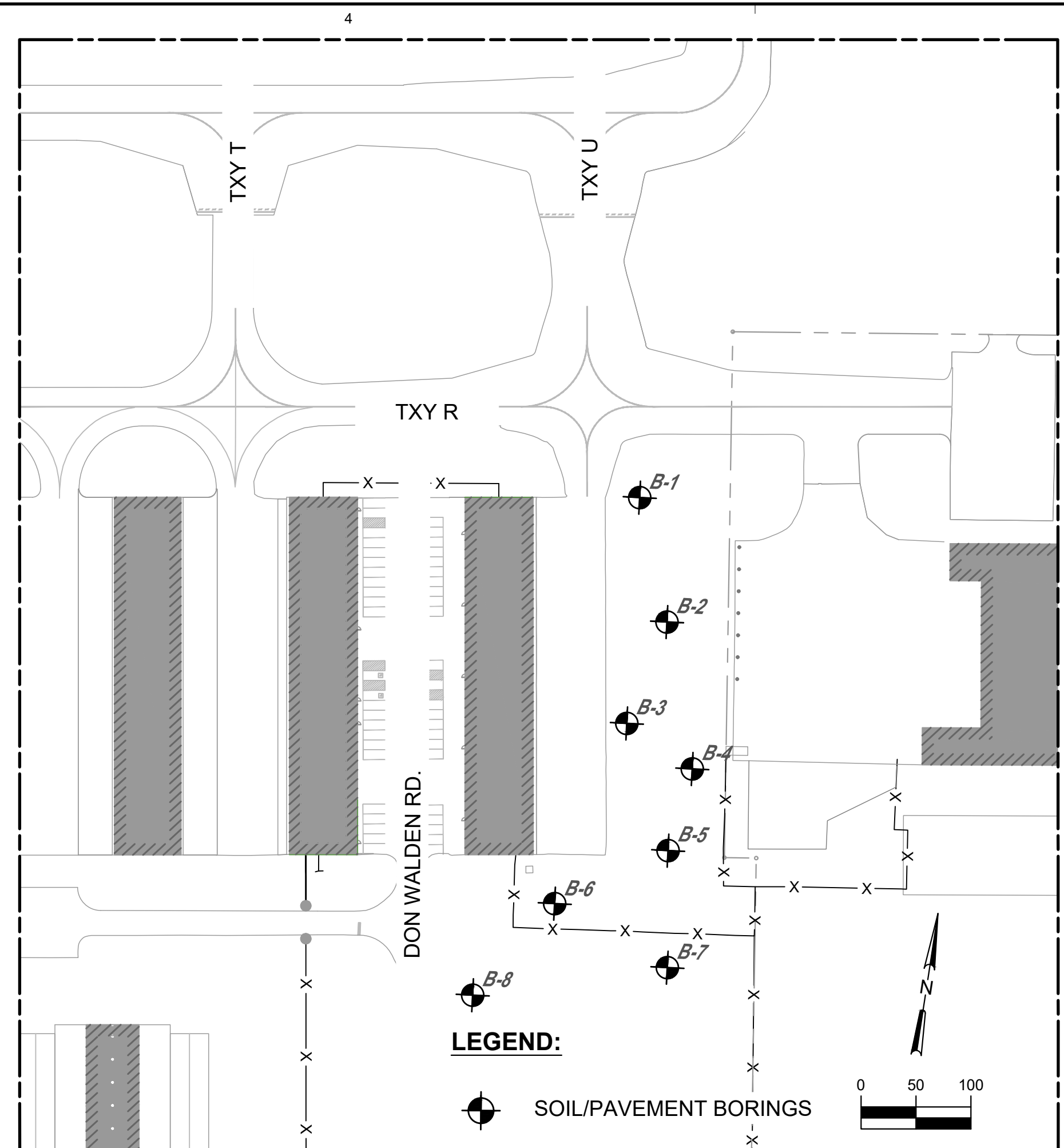
**DRAWING TITLE**  
**SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS**

**27 OF 30**

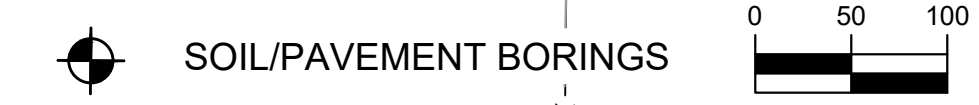
APPROVED	SHEET NO.
RMH	
CHECKED	27
KWS	
DRAWN BY	
JVJ	



FILE NAME/LOCATION: P:\2020\20200112\10\W02\07\BRWINGS\CURRENT DRAWING FILES\CADD SHEETS\LOT-5151-GEOTECHNICAL INVESTIGATION INFORMATION\BING  
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 PRINTED BY: KRIS SAWYER  
 FILED BY: KRIS SAWYER  
 DATE: 11/27/2024 3:51 PM  
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**LEGEND:**



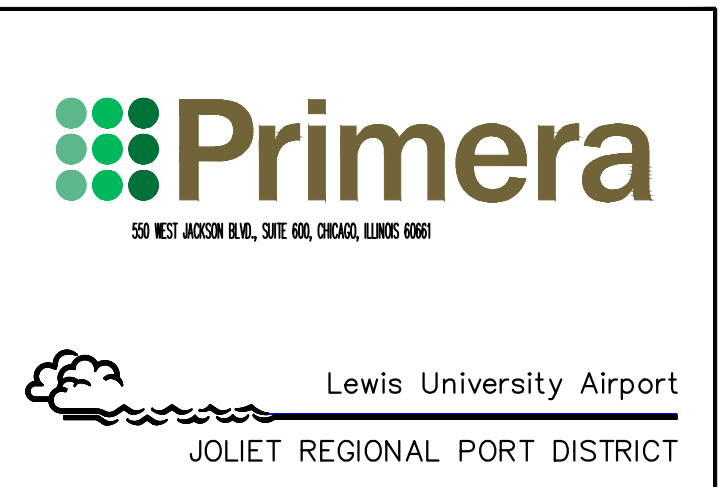
rubino ENGINEERING INC.		Rubino Engineering, Inc. 425 Shepard Drive Eglin, IL 60123 Telephone: 847-931-1555 Fax: 847-931-1560		LOG OF BORING B-01		Sheet 1 of 1	
Rubino Job No.: G24.142		Project: Training Activity Operations Apron		Drilling Method: 2 1/4 Hollow Stem Auger		WATER LEVELS***	
Location: Lewis University (Chicago-Romeoville) Airport		City, State: Romeoville, Illinois		Sampling Method: Split Spoon		<input type="checkbox"/> While Drilling N/A <input checked="" type="checkbox"/> Upon Completion N/A <input type="checkbox"/> Delay N/A	
Client: Primera Engineers, Ltd.		Station: N/A Offset: N/A		Boring Location: 3 ft. east of tarmac			
Elevation (feet)	Depth (feet)	Graphic Log	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	Classification	STANDARD PENETRATION TEST DATA
664.72	0				Surface Elev.: 664.72 ft		
	1		18		Approximately 14 inches of TOPSOIL: black silty clay		
	2		18		Medium stiff, brown and gray silty CLAY, trace sand and gravel sand lenses between approximately 1 and 3 1/2 feet below existing grade	3-4-3 N=7	Qp=3.0 tsf
	3		18		Stiff, brown and gray silty CLAY, trace sand and gravel	1-2-3 N=5	Qp=0.8 tsf
	4		18		Color transitions to gray at approximately 8 feet below existing grade	4-4-5 N=9	Qp=4.5 tsf
	5		18		End of boring at approximately 10 feet below existing grade	2-4-5 N=9	Qp=4.0 tsf
Completion Depth: 10.0 ft		Date Boring Started: 8/23/24		Date Boring Completed: 8/23/24		Logged By: A.T.	
Drilling Contractor: Rubino Engineering, Inc.		Sample Types: <input checked="" type="checkbox"/> Auger Cutting <input checked="" type="checkbox"/> Shelby Tube <input checked="" type="checkbox"/> Split-Spoon <input checked="" type="checkbox"/> Grab Sample <input checked="" type="checkbox"/> Rock Core <input type="checkbox"/> No Recovery		Pressuremeter <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Latitude: 41.606513 Longitude: -88.084756 Remarks: Log Entry: D. Lewandowski, P.E. Checked By: D. Lewandowski, P.E.	

rubino ENGINEERING INC.		Rubino Engineering, Inc. 425 Shepard Drive Eglin, IL 60123 Telephone: 847-931-1555 Fax: 847-931-1560		LOG OF BORING B-02		Sheet 1 of 1	
Rubino Job No.: G24.142		Project: Training Activity Operations Apron		Drilling Method: 2 1/4 Hollow Stem Auger		WATER LEVELS***	
Location: Lewis University (Chicago-Romeoville) Airport		City, State: Romeoville, Illinois		Sampling Method: Split Spoon		<input type="checkbox"/> While Drilling N/A <input checked="" type="checkbox"/> Upon Completion N/A <input type="checkbox"/> Delay N/A	
Client: Primera Engineers, Ltd.		Station: N/A Offset: N/A		Boring Location: 3 ft. east of tarmac			
Elevation (feet)	Depth (feet)	Graphic Log	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	Classification	STANDARD PENETRATION TEST DATA
663.95	0				Surface Elev.: 663.95 ft		
	1		14		Approximately 10 inches of TOPSOIL: black silty clay		
	2		12		FILL: black, brown and gray silty clay, trace sand and gravel	4-6-6 N=12	Qp=4.5 tsf
	3		16		Stiff, brown and gray silty CLAY, trace sand and gravel	3-4-6 N=10	Qp=4.0 tsf
	4		18		Very stiff, gray silty CLAY, trace sand and gravel	5-5-6 N=11	Qp=2.8 tsf
	5		18		End of boring at approximately 10 feet below existing grade	9-8-7 N=15	Qp=3.5 tsf
Completion Depth: 10.0 ft		Date Boring Started: 8/23/24		Date Boring Completed: 8/23/24		Logged By: J.K.	
Drilling Contractor: Rubino Engineering, Inc.		Sample Types: <input checked="" type="checkbox"/> Auger Cutting <input checked="" type="checkbox"/> Shelby Tube <input checked="" type="checkbox"/> Split-Spoon <input checked="" type="checkbox"/> Grab Sample <input checked="" type="checkbox"/> Rock Core <input type="checkbox"/> No Recovery		Pressuremeter <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Latitude: 41.606292 Longitude: -88.084594 Remarks: Log Entry: D. Lewandowski, P.E. Checked By: D. Lewandowski, P.E.	

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Rubino Job No.: G24.142		Project: Training Activity Operations Apron		Drilling Method: 2 1/4 Hollow Stem Auger		WATER LEVELS***	
Location: Lewis University (Chicago-Romeoville) Airport		City, State: Romeoville, Illinois		Sampling Method: Split Spoon		<input type="checkbox"/> While Drilling N/A <input checked="" type="checkbox"/> Upon Completion N/A <input type="checkbox"/> Delay N/A	
Client: Primera Engineers, Ltd.		Station: N/A Offset: N/A		Boring Location: 15 ft. east of apron			
Elevation (feet)	Depth (feet)	Graphic Log	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	Classification	STANDARD PENETRATION TEST DATA
664.92	0				Surface Elev.: 664.92 ft		
	1		18		Approximately 12 inches of TOPSOIL: black silty clay		
	2		18		FILL: dark brown and black silty clay, trace sand and gravel	2-2-6 N=6	Qp=4.5 tsf 2% Organic Content
	3		18		Medium stiff, brown and gray silty CLAY, trace sand and gravel	2-3-3 N=6	Qp=1.5 tsf
	4		18		Stiff, gray silty CLAY, trace sand and gravel	3-2-4 N=6	Qp=2.5 tsf
	5		18		End of boring at approximately 10 feet below existing grade	6-7-7 N=14	Qp=4.5 tsf
Completion Depth: 10.0 ft		Date Boring Started: 8/23/24		Date Boring Completed: 8/23/24		Logged By: A.T.	
Drilling Contractor: Rubino Engineering, Inc.		Sample Types: <input checked="" type="checkbox"/> Auger Cutting <input checked="" type="checkbox"/> Shelby Tube <input checked="" type="checkbox"/> Split-Spoon <input checked="" type="checkbox"/> Grab Sample <input checked="" type="checkbox"/> Rock Core <input type="checkbox"/> No Recovery		Pressuremeter <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Latitude: 41.6090124 Longitude: -88.0947998 Remarks: Log Entry: D. Lewandowski, P.E. Checked By: D. Lewandowski, P.E.	

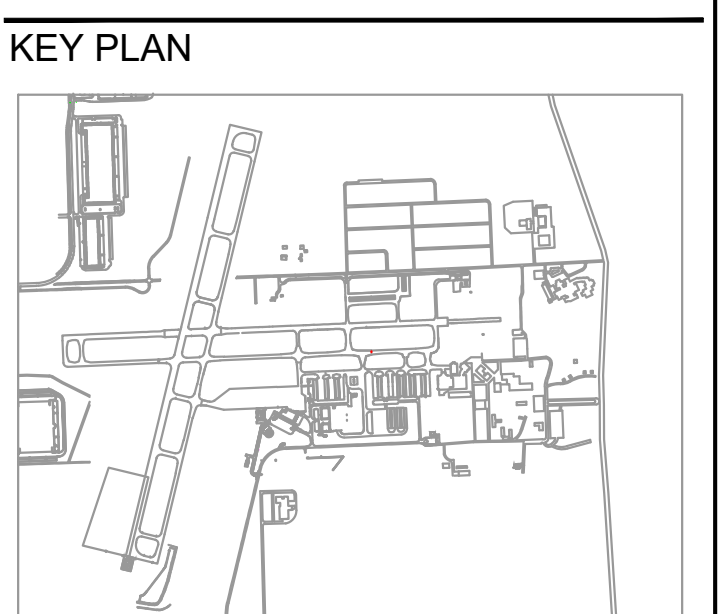
rubino ENGINEERING INC.		Rubino Engineering, Inc. 425 Shepard Drive Eglin, IL 60123 Telephone: 847-931-1555 Fax: 847-931-1560		LOG OF BORING B-04		Sheet 1 of 1	
Rubino Job No.: G24.142		Project: Training Activity Operations Apron		Drilling Method: 2 1/4 Hollow Stem Auger		WATER LEVELS***	
Location: Lewis University (Chicago-Romeoville) Airport		City, State: Romeoville, Illinois		Sampling Method: Split Spoon		<input type="checkbox"/> While Drilling N/A <input checked="" type="checkbox"/> Upon Completion N/A <input type="checkbox"/> Delay N/A	
Client: Primera Engineers, Ltd.		Station: N/A Offset: N/A		Boring Location: 3 ft. east of tarmac			
Elevation (feet)	Depth (feet)	Graphic Log	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	Classification	STANDARD PENETRATION TEST DATA
663.27	0				Surface Elev.: 663.27 ft		
	1		14		Approximately 9 inches of TOPSOIL: black silty clay		
	2		16		Medium dense, brown silty, clayey SAND	4-5-5 N=10	Qp=3.8 tsf
	3		18		Stiff to very stiff, brown silty CLAY, trace sand and gravel	4-4-4 N=8	Qp=3.8 tsf
	4		18		End of boring at approximately 10 feet below existing grade	3-4-5 N=9	Qp=2.8 tsf
	5		18			7-10-12 N=22	Qp=4.0 tsf
Completion Depth: 10.0 ft		Date Boring Started: 8/23/24		Date Boring Completed: 8/23/24		Logged By: J.K.	
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rubino ENGINEERING INC.		Rubino Engineering, Inc. 425 Shepard Drive Eglin, IL 60123 Telephone: 847-931-1555 Fax: 847-931-1560		LOG OF BORING B-05		Sheet 1 of 1	
Rubino Job No.: G24.142		Project: Training Activity Operations Apron		Drilling Method: 2 1/4 Hollow Stem Auger		WATER LEVELS***	
Location: Lewis University (Chicago-Romeoville) Airport		City, State: Romeoville, Illinois		Sampling Method: Split Spoon		<input type="checkbox"/> While Drilling N/A <input checked="" type="checkbox"/> Upon Completion N/A <input type="checkbox"/> Delay N/A	
Client: Primera Engineers, Ltd.		Station: N/A Offset: N/A		Boring Location: 3 ft. east of tarmac			
Elevation (feet)	Depth (feet)	Graphic Log	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	Classification	STANDARD PENETRATION TEST DATA
663.13	0				Surface Elev.: 663.13 ft		
	1		15		Approximately 10 inches of TOPSOIL: black silty clay		
	2		18		Stiff to very stiff, brown and gray silty CLAY, trace sand and gravel	6-8-7 N=15	Qp=4.5 tsf
	3		18			4-6-6 N=12	Qp=4.5 tsf
	4		18			4-6-7 N=13	Qp=4.5 tsf
	5		18			3-5-7 N=12	Qp=4.5 tsf
Completion Depth: 10.0 ft		Date Boring Started: 8/23/24		Date Boring Completed: 8/23/24		Logged By: J.K.	
Drilling Contractor: Rubino Engineering, Inc.		Sample Types: <input checked="" type="checkbox"/> Auger Cutting <input checked="" type="checkbox"/> Shelby Tube <input checked="" type="checkbox"/> Split-Spoon <input checked="" type="checkbox"/> Grab Sample <input checked="" type="checkbox"/> Rock Core <input type="checkbox"/> No Recovery		Pressuremeter <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Latitude: 41.605711 Longitude: -88.084548 Remarks: Log Entry: D. Lewandowski, P.E. Checked By: D. Lewandowski, P.E.	



No. Description By Chk. App. Date Issues

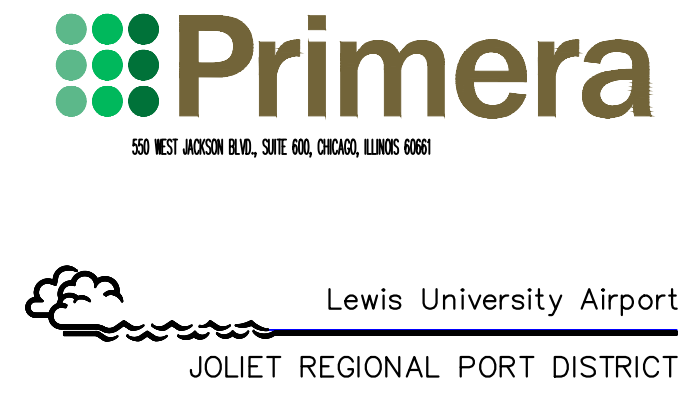
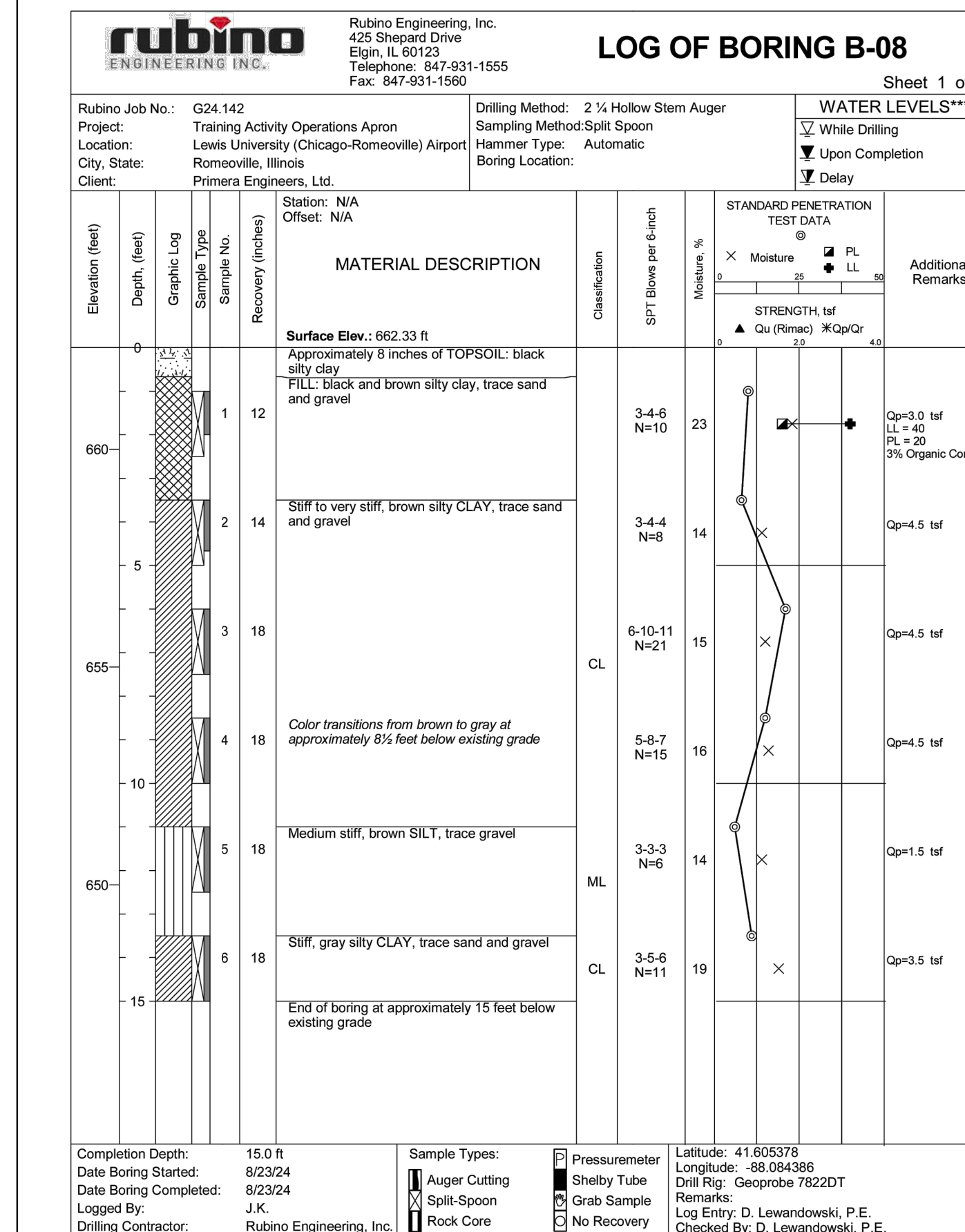
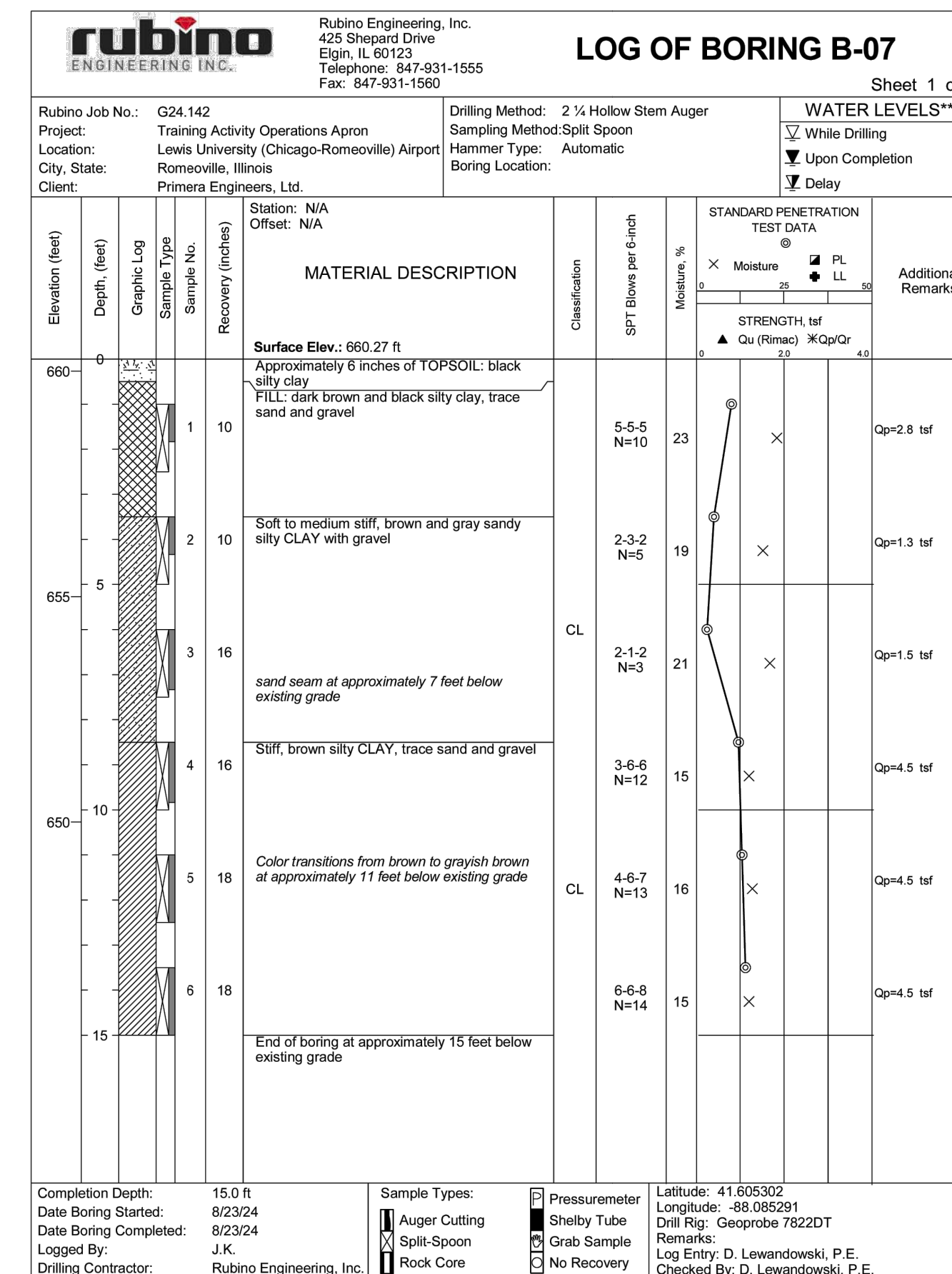
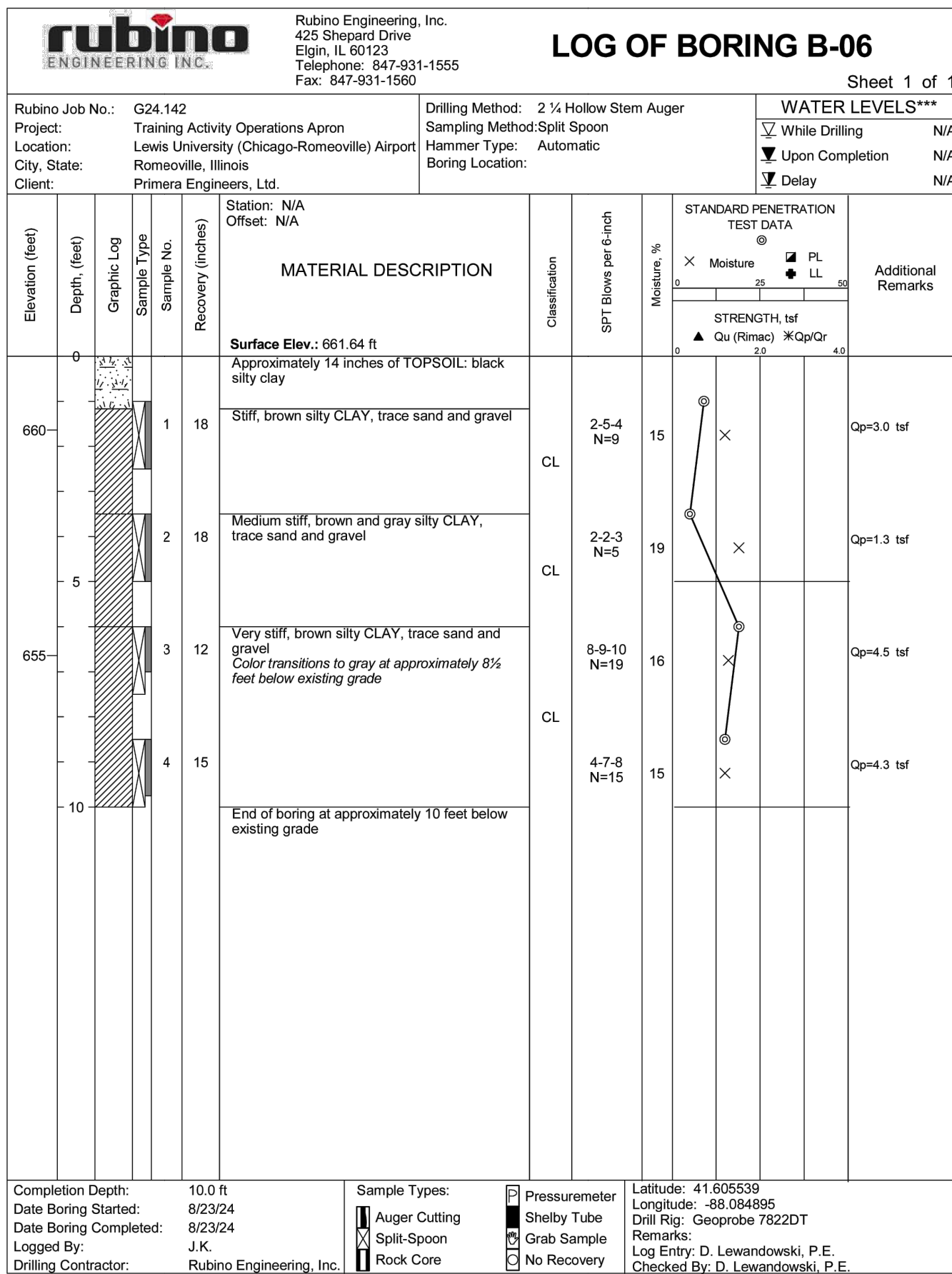
**LEWIS UNIVERSITY AIRPORT**  
**CONSTRUCT TRAINING ACTIVITY OPERATIONS APRON**  
 IDA No: LOT-5151  
 BCM NO. LE057  
 SBG No: 3-17-SBGP-TBD



DRAWING TITLE  
**GEOTECHNICAL INVESTIGATION INFORMATION - 1**

28 OF 30 APPROVED SHEET NO.  
 RMH  
 CHECKED KWS  
 DRAWN BY JVJ  
 28

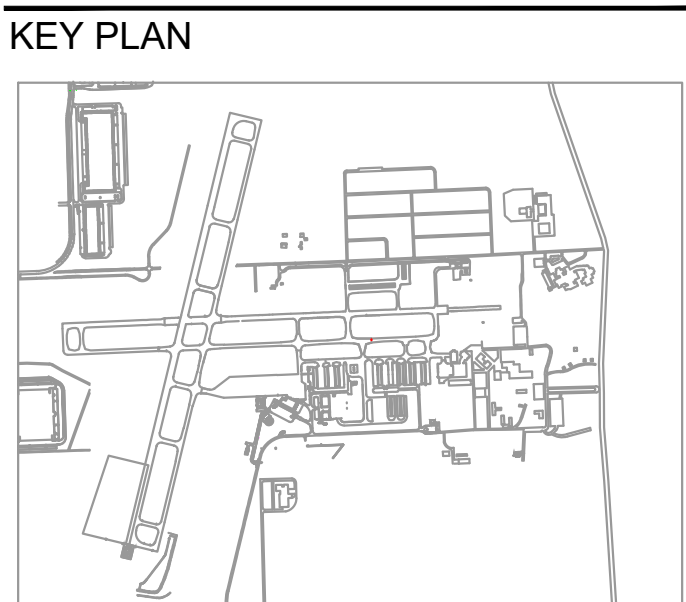




No.	Description	By	Chk.	App.	Date
Issues					

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SBG No: 3-17-SBGP-TBD



DRAWING TITLE  
**GEOTECHNICAL INVESTIGATION INFORMATION - 2**

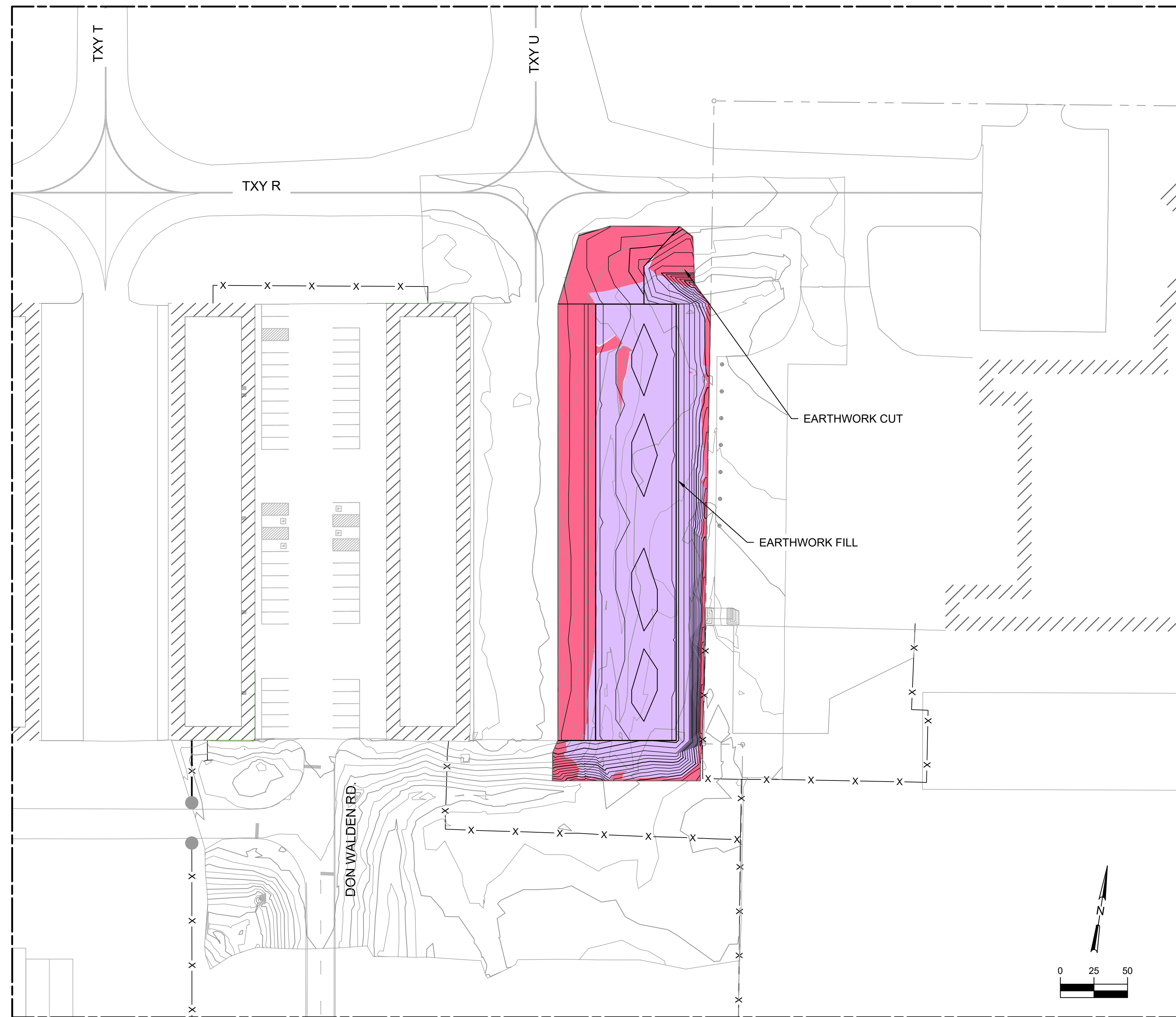
29 OF 30  
APPROVED RMH SHEET NO.  
CHECKED KWS  
DRAWN BY JVJ  
**29**

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 FILE STYLE TABLE: CIB  
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 PRINTED BY: KRIS SAWYER  
 DATE PRINTED: 11/27/2024 12:21 AM  
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**EARTHWORK NOTES**

1. TOPSOIL STRIPPING, CUT, AND FILL SHALL NOT BE MEASURED AND PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR UNCLASSIFIED EXCAVATION.
2. AREAS OF UNSUITABLE MATERIAL (EXISTING RIPRAP, DEAD VEGETATION, ETC.) SHALL BE DESIGNATED WITH THE RESIDENT ENGINEER IN THE FIELD. UNSUITABLE MATERIAL SHALL NOT BE USED AS EMBANKMENT FILL MATERIAL AND SHALL BE HAULED OFF-SITE.
3. EMBANKMENT SOIL SHALL BE TAKEN FROM ON-SITE. EARTHWORK SUMMARY TABLES INCLUDES 15% FILL SHRINKAGE FACTOR.
4. TOPSOIL PLACEMENT SHALL BE PAID UNDER PAY ITEM AR905530 - TOPSOILING.
5. EXCESS TOPSOIL AND EMBANKMENT SHALL BE STORED WITHIN THE AIRPORT PROPERTY AS DIRECTED BY THE OWNER.



EARTHWORK SUMMARY TABLE						
LOCATION	10" TOPSOIL STRIPPING (CUBIC YARDS)	12" TOPSOIL PLACEMENT (CUBIC YARDS)	CUT (CUBIC YARDS)	FILL* (CUBIC YARDS)	(AR152410)* UNCLASSIFIED EXCAVATION (CUBIC YARDS)	(AR152440) BORROWED EXCAVATION (CUBIC YARDS)
FILL GRADING SITE	4131.1	1385.1	365.3	1100.0	4496.4	734.7
		*PAID AS TOPSOILING (AR905530)		*15% SHRINKAGE	*MOVEMENT OF TOPSOIL STRIP + CUT	

No.	Description	By	Chk.	App.	Date
Issues					

**LEWIS UNIVERSITY AIRPORT**  
**CONSTRUCT TRAINING ACTIVITY OPERATIONS APRON**

IDA No: LOT-5151  
BCM NO. LE057  
SBG No: 3-17-SBGP-TBD

KEY PLAN

DRAWING TITLE  
**EARTHWORKS**

**30 OF 30**  
APPROVED RMH SHEET NO.  
CHECKED KWS **30**  
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