

**Gerald R. Ford International Airport**

**Grand Rapids, Michigan**

**Taxilane L Construction**

**PROJECT NUMBER C-416**

**ADDENDUM #2**

**SEPTEMBER 5, 2025**

To All Holders of Contract Documents:

Your attention is directed to the following interpretations of, changes in, and additions to the Contract Documents for the above-referenced project. All bid adjustments caused by the content of the Addendum shall include the cost of materials and labor related to the items herein and for any subsequent adjustments to the contract documents to accommodate the work stated herein.

Contractors shall be responsible for the full context of changes, interpretations, and clarifications to both the drawings and specifications and shall take the same into consideration when preparing their bids. Indicate receipt of this Addendum in the space provided within the Proposal.

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**GENERAL**

1. Addendum No. 2 addresses miscellaneous questions, corrections to details, keyed notes, and specifications. Updated electronic bid sheets have been provided on the Onedrive link.

**QUESTIONS AND ANSWERS**

- Q: GC101 & GC102 have contradicting information on Work Area A & B and the durations. A3 says both durations for both areas. Is the smaller area inside the airfield Area A? Is it the 30 CD time limit?
- A: Work area A shall be limited to 30 days and Work Area B shall be limited to 82 days. GC101 and GC102 have been updated accordingly see the drawings section of this addendum.
- Q: Pavement markings have 30CD wait period prior to installing. This is not feasible for Area A. How will this be handled?
- A: Pavement markings may be placed once concrete reaches construction traffic strength as noted in specification P-501-4.18. General note 42 on sheet GI002 has been updated, see the drawing section of this addendum.
- Q: At the meeting, it was mentioned that the airport would supply and install the interlocking low profile barricades. GC101 would seem to indicate that it is the Contractor's responsibility. Please clarify.
- A: The airport will provide the barricades for the project. It will be the responsibility of the contractor to install and maintain them throughout the duration of the project. Keyed note 3 on sheet GC101 has been updated for clarity, see the drawings section of this addendum.

- Q: The Chain-Link Fence Detail (A2) of Drawing XM501 (Sheet #36 of 36) indicates that the fence is to have a “Continuous Top Rail”. I don’t believe any of the existing AOA fencing currently onsite has top rail. Please advise.
- A: A2/XM501 has been updated, see the drawings section of this addendum.
- Q: The Chain-Link Fence Detail (A2) of Drawing XM501 (Sheet #36 of 36) and the written specifications indicate that the Chain-Link Fence fabric and posts are to be galvanized. Some of the fence in that area and some of the fence that we are attaching to is Black Vinyl Coated. Please confirm that this project is galvanized.
- A: Proposed fence shall be galvanized.
- Q: In regard to the borrow onsite line item. Is there a grading plan or will there be grades that the borrow area will have to be placed back to?
- A: A grading plan will be provided during construction if required.
- Q: In the prebid notes it states that no soil boring were done it that area. In the event that material is not suitable to be used in its current state will conditioning be required or will you switch to the import from offsite line item?
- A: In the case where the borrow area is deemed unsuitable fill soil shall be hauled in from offsite using the Borrow Excavation (Obtained Offsite) line item.
- Q: The electronic bid included with bidding documents still includes CX 106. The bid sheet in the addendums does not.
- A: Item CX-106 Stabilized Construction Entrance has been removed from the electronic bid sheets.
- Q: In Addendum 1 the Bid sheets quantity for the PCC 15” is 7,100 CY and the electronic bid sheet issued with the addendum is 6,800 CY. Similarly in the Add On 1, the addendum bid sheet is showing the 14” PCC quantity to be 2,750 CY and the electronic bid sheet issued is showing 740 CY. Can you clarify which quantity to use?
- A: The correct quantity for PCC 15” is 7,100 CY and the correct quantity for PCC 14” is 770 CY. The electronic bid sheets have been updated to reflect that.
- Q: Can the 6 each 12.5 ft wide panels be poured 2 each at a time eliminating a bulkhead joint for each 12.5 ft lane, resulting in 3 each 25 ft wide each passes with the paver?
- A: Yes, the awarded contractor shall be able to demonstrate proposed grades and requirements of P-501 can be met using this method.

## **SPECIFICATIONS**

1. **REPLACE** Bid Sheets, in its entirety with the **REVISED** Bid Sheets provided with this addendum as a separate document. Item 3, P-101 Concrete Pavement Removal and item 9, P-501 Cement Concrete Pavement 14” have been updated.

## **DRAWINGS**

1. **REPLACE** Drawing GI002 with **REVISED** GI002 sheet provided with this addendum as a separate document. Revisions are denoted with a cloud referenced to Revision 2 dated SEPTEMBER 4, 2025.
2. **REPLACE** Drawing GI004 with **REVISED** GI004 sheet provided with this addendum as a separate document. Revisions are denoted with a cloud referenced to Revision 2 dated SEPTEMBER 4, 2025.
3. **REPLACE** Drawing GC101 with **REVISED** GC101 sheet provided with this addendum as a separate document. Revisions are denoted with a cloud referenced to Revision 2 dated SEPTEMBER 4, 2025.
4. **REPLACE** Drawing GC102 with **REVISED** GC102 sheet provided with this addendum as a separate document. Revisions are denoted with a cloud referenced to Revision 2 dated SEPTEMBER 4, 2025.
5. **REPLACE** Drawing XM501 with **REVISED** XM501 sheet provided with this addendum as a separate document. Revisions are denoted with a cloud referenced to Revision 2 dated SEPTEMBER 4, 2025.

END OF ADDENDUM NO. 2

**C&S ENGINEERS, INC.**

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**Attachment A: Bid Sheets**  
(Replaces Pages 10-15 in IFB Specifications Document)

## GERALD R. FORD INTERNATIONAL AIRPORT

## TAXILANE L CONSTRUCTION

BIDDERS ARE REQUIRED TO COMPLETE THE UNIT PRICE FIELD.  
 ALL OTHER FIELDS WILL BE AUTOMATICALLY CALCULATED.  
 AN EXCEL FILE WILL BE PROVIDED AND THESE SHEETS CAN BE FILLED OUT IN EXCEL OR HARD COPY.  
 ONLY HARD COPIES SHALL BE RETURNED WITH YOUR PROPOSAL.

ITEM NO	SPEC	DESCRIPTION	QUANTITY SCHEDULE 1	QUANTITY SCHEDULE 2	QUANTITY GRAND TOTAL	UNITS	UNIT PRICE	TOTAL SCHEDULE 1*	TOTAL SCHEDULE 2*	GRAND TOTAL
1	C-100	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	1	-	1	LS		\$ -	\$ -	\$ -
2	C-102	INSTALLATION AND REMOVAL OF STORM DRAIN INLET PROTECTION	6	-	6	EA		\$ -	\$ -	\$ -
3	C-102	INSTALLATION AND REMOVAL OF SILT FENCE	8,200	-	8,200	LF		\$ -	\$ -	\$ -
4	C-102	INSTALLATION AND REMOVAL OF STABILIZED CONSTRUCTION ENTRANCE	2	-	2	EACH		\$ -	\$ -	\$ -
5	C-105	MOBILIZATION (10% MAX.)	1	-	1	LS		\$ -	\$ -	\$ -
6	C-105	FIELD OFFICE	1	-	1	LS		\$ -	\$ -	\$ -
7	C-105	FIELD OFFICE EQUIPMENT	1	-	1	LS		\$ -	\$ -	\$ -
8	CX-106	SAFETY, SECURITY AND MAINTENANCE OF TRAFFIC	1	-	1	LS		\$ -	\$ -	\$ -
9	CX-106	INSTALLATION AND REMOVAL OF TEMPORARY FENCE ON CONCRETE BARRIER	1,270	-	1,270	LF		\$ -	\$ -	\$ -
10	CX-106	TEMPORARY HAUL ROUTE	360	-	360	SY		\$ -	\$ -	\$ -
11	P-101	CONCRETE PAVEMENT REMOVAL	400	-	400	SY		\$ -	\$ -	\$ -
12	P-101	ASPHALT PAVEMENT REMOVAL	5,000	-	5,000	SY		\$ -	\$ -	\$ -
13	P-101	REMOVAL OF PIPE ALL TYPES AND SIZES	660	-	660	LF		\$ -	\$ -	\$ -
14	P-101	REMOVAL OF STRUCTURE	3	-	3	EACH		\$ -	\$ -	\$ -
15	P-101	REMOVAL OF WATER MAIN	300	-	300	LF		\$ -	\$ -	\$ -

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16	P-101	REMOVAL OF LIGHT POLE AND FOUNDATION	2	-	2	EACH		\$ -	\$ -	\$ -
17	P-101	SPALL REPAIR	50	-	50	SF		\$ -	\$ -	\$ -
18	P-152	UNCLASSIFIED EXCAVATION	13,600	1,300	14,900	CY		\$ -	\$ -	\$ -
19	P-152	BORROW EXCAVATION (OBTAINED ONSITE)	14,600	-	14,600	CY		\$ -	\$ -	\$ -
20	P-152	BORROW EXCAVATION (OBTAINED OFFSITE)	14,600	-	14,600	CY		\$ -	\$ -	\$ -
21	P-154	SUBBASE COURSE	6,600	1,200	7,800	CY		\$ -	\$ -	\$ -
22	P-209	CRUSHED AGGREGATE BASE COURSE	4,200	900	5,100	CY		\$ -	\$ -	\$ -
23	P-304	CEMENT-TREATED BASE COURSE (6")	11,600	5,200	16,800	SY		\$ -	\$ -	\$ -
24	P-501	CONCRETE PAVEMENT (15")	3,900	3,200	7,100	CY		\$ -	\$ -	\$ -
25	P-501	CONCRETE PAVEMENT (10")	230	-	230	CY		\$ -	\$ -	\$ -
26	P-620	MARKING	18,100	-	18,100	SF		\$ -	\$ -	\$ -
27	P-620	MARKING REMOVAL	4,800	-	4,800	SF		\$ -	\$ -	\$ -
28	P-620	REFLECTIVE MEDIA	460	-	460	LB		\$ -	\$ -	\$ -
29	D-701	36 INCH RCP CLASS IV	280	-	280	LF		\$ -	\$ -	\$ -
30	D-701	30 INCH RCP CLASS IV	300	-	300	LF		\$ -	\$ -	\$ -

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31	D-705	6 INCH PERFORATED SMOOTH INTERIOR CORRUGATED PVC COMPLETE, INCLUDING POROUS BACKFILL AND FILTER FABRIC	3,900	-	3,900	LF		\$ -	\$ -	\$ -
32	D-705	6 INCH NON-PERFORATED SMOOTH INTERIOR CORRUGATED PVC COMPLETE, INCLUDING POROUS BACKFILL AND FILTER FABRIC	420	-	420	LF		\$ -	\$ -	\$ -
33	D-751	CLEANOUTS	17	-	17	EACH		\$ -	\$ -	\$ -
34	D-751	CATCH BASINS	3	-	3	EACH		\$ -	\$ -	\$ -
35	D-751	MODIFICATION OF EXISTING STRUCTURE	1	-	1	EACH		\$ -	\$ -	\$ -
36	DX-800	SOFT DIGS	3	-	3	DAYS		\$ -	\$ -	\$ -
37	F-162	REMOVE FENCE AND GATE	630	-	630	LF		\$ -	\$ -	\$ -
38	F-162	CHAIN-LINK FENCE	3,800	-	3,800	LF		\$ -	\$ -	\$ -
39	L-110	FIBER OPTIC CABLE AND CONDUIT LOWERING	220	-	220	LF		\$ -	\$ -	\$ -
40	L-115	ELECTRICAL HANDHOLE	1	-	1	EA		\$ -	\$ -	\$ -
41	L-115	ADJUST ELECTRICAL STRUCTURE TO GRADE	2	-	2	EA		\$ -	\$ -	\$ -
42	L-125	REMOVE TAXIWAY EDGE LIGHT	8	-	8	EA		\$ -	\$ -	\$ -
43	L-125	REMOVE TAXIWAY GUIDANCE SIGN	1	-	1	EA		\$ -	\$ -	\$ -
44	L-125	RETROREFLECTIVE MARKER	21	-	21	EACH		\$ -	\$ -	\$ -
45	L-125	TAXIWAY GUIDANCE SIGN	2	-	2	EACH		\$ -	\$ -	\$ -

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46	L-125	TAXIWAY ENDING MARKER	1	-	1	EACH		\$ -	\$ -	\$ -
47	L-125	STAKE MOUNTED GUIDANCE SIGN	4	-	4	EACH		\$ -	\$ -	\$ -
48	T-901	SEEDING	17		17	ACRE		\$ -	\$ -	\$ -
49	T-905	TOPSOIL (OBTAINED ONSITE OR REMOVED FROM STOCKPILE)	13,000		13,000	CY		\$ -	\$ -	\$ -
50	T-908	MULCHING	17		17	ACRE		\$ -	\$ -	\$ -
51	4.3.001	WATER MAIN, RESTRAINED DI, CL56 12 INCH	300		300	LF		\$ -	\$ -	\$ -
52	4.3.013	VALVE AND BOX 12 INCH	4	-	4	EACH		\$ -	\$ -	\$ -
53	4.3.018	TEE 12 INCH BY 12 INCH BY 12 INCH	2	-	2	EACH		\$ -	\$ -	\$ -
54	4.3.021	HORIZONTAL BEND 45 DEGREE 12 INCH	4	-	4	EACH		\$ -	\$ -	\$ -
55	4.3.021	VERTICAL BEND 45 DEGREE 12 INCH	4	-	4	EACH		\$ -	\$ -	\$ -
56	4.3.023	PLUG, 12 INCH	2	-	2	EACH		\$ -	\$ -	\$ -
TOTAL								\$ -	\$ -	\$ -



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LOCALLY FUNDED ADD-ON NO. 1										
1	C-105	MOBILIZATION (6% MAX)	1	-	1	LS			\$ -	
2	CX-106	SAFETY, SECURITY AND MAINTENANCE OF TRAFFIC	1	-	1	LS			\$ -	
3	P-101	CONCRETE PAVEMENT REMOVAL	2,100	-	2,100	SY			\$ -	
4	P-101	CONCRETE SPALL REPAIR	100	-	100	SF			\$ -	
5	P-101	REMOVAL OF PIPE ALL TYPES AND SIZES	150	-	150	LF			\$ -	
6	P-152	UNCLASSIFIED EXCAVATION	800	-	800	CY			\$ -	
7	P-209	BASE COURSE	450	-	450	CY			\$ -	
8	P-304	CEMENT TREATED BASE 10"	1,900	-	1,900	SY			\$ -	
9	P-501	CEMENT CONCRETE PAVEMENT 14"	770	-	770	CY			\$ -	
10	D-702	REMOVE SLOTTED PIPE DRAIN	570	-	570	LF			\$ -	
11	D-702	18 INCH SLOTTED PIPE DRAIN	490	-	490	LF			\$ -	
12	D-751	MODIFICATION OF EXISTING STRUCTURE	1	-	1	EACH			\$ -	
TOTAL										

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LOCALLY FUNDED ADD-ON NO. 2										
1	C-105	MOBILIZATION (6% MAX)	1	-	1	LS			\$ -	
2	CX-106	SAFETY, SECURITY AND MAINTENANCE OF TRAFFIC	1	-	1	LS			\$ -	
3	P-101	CONCRETE PAVEMENT REMOVAL	650	-	650	SY			\$ -	
4	P-101	CONCRETE SPALL REPAIR	100	-	100	SF			\$ -	
5	P-152	UNCLASSIFIED EXCAVATION	300	-	300	CY			\$ -	
6	P-209	BASE COURSE	150	-	150	CY			\$ -	
7	P-304	CEMENT TREATED BASE 10"	640	-	640	SY			\$ -	
8	P-501	CEMENT CONCRETE PAVEMENT 14"	250	-	250	CY			\$ -	
<b>TOTAL</b>										

\*AWARD OF CONTRACT WILL BE BASED UPON THE LOW BID OF TOTAL COST OF SCHEDULE 1. COSTS ARE BROKEN OUT INTO SCHEDULE 1 AND 2 FOR FUNDING REQUIREMENTS. BIDS WILL BE CHECKED FOR IRREGULARITIES AND IMBALANCES PER SECTION 20-09.

**Attachment B: Contract Drawings**  
(Replaces GI002, GI004, GC101, GC102, and XM501)



Sep 05, 2025 - 1:54pm  
P:\Project\K19 - Gerald R. Ford Airport\K19025001 - Taxiway L Design\CADD\Sheet Files\K19025001\_L01\_D1.dwg

C	1	GENERAL CONSTRUCTION NOTES		3	4
		<div>1. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 70, ATTACHMENT A - CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) OF THE GENERAL PROVISIONS.</div> <div>2. THESE DRAWINGS HAVE BEEN PREPARED, IN PART, BASED UPON RECORD DRAWINGS AND/OR CAD FILES FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, THOSE UTILIZING THE INFORMATION ON THESE DRAWINGS ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY PURPOSE.</div> <div>3. EXISTING UTILITIES WERE TAKEN FROM PLANS OF RECORD. THEY HAVE BEEN SHOWN TO THE EXTENT KNOWN AND ARE OFFERED IN GOOD FAITH SOLELY FOR INFORMATIONAL PURPOSES. THEY MAY NOT REFLECT ACTUAL LOCATIONS AND MAY NOT BE INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION.</div> <div>4. THE ACTUAL LOCATION AND ELEVATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.</div> <div>5. IN THE EVENT OF DAMAGE TO EXISTING UTILITIES OR CABLES, THE RPR (RESIDENT PROJECT REPRESENTATIVE) AND OWNER SHALL BE NOTIFIED IMMEDIATELY.</div> <div>6. THE CONTRACTOR SHALL REPAIR ALL DAMAGE TO UTILITIES OR CABLES, AS DIRECTED BY THE RPR, IMMEDIATELY AND AT THE CONTRACTOR'S EXPENSE.</div> <div>7. ALL AREAS DISTURBED AS A RESULT OF THE CONTRACTOR'S STAGING AND CONSTRUCTION OPERATIONS SHALL BE RESTORED EQUAL TO OR BETTER THAN ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.</div> <div>8. ALL DIRT, DUST, STONES AND LOOSE DEBRIS SHALL BE CONTINUOUSLY REMOVED FROM ALL PAVED SURFACES DURING THIS CONTRACT.</div> <div>9. THE CONTRACTOR SHALL MAINTAIN EXISTING ACCESS ROADS AS REQUIRED FOR ACCESS TO THE WORK AREAS.</div> <div>10. ALL OF THE CONTRACTOR'S OPERATIONS SHALL REMAIN ON AIRPORT PROPERTY AT ALL TIMES. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BE ALLOWED ON ADJACENT PROPERTY.</div> <div>11. THIS CONTRACT DOES NOT ALLOW FOR PRICE INCREASES DUE TO ESCALATION IN COST. THE CONTRACTOR SHALL TAKE THIS INTO CONSIDERATION WHEN PREPARING THEIR BID.</div> <div>12. THE OWNER RESERVES THE RIGHT TO ELIMINATE ANY ITEMS OF THE CONTRACT AND PERFORM THESE ITEMS WITH ITS FORCES AND MATERIALS.</div> <div>13. THE OWNER RESERVES THE RIGHT TO SALVAGE FENCE MATERIALS. THE MATERIAL TO BE SALVAGED IS IDENTIFIED IN THE SPECIFICATION. SALVAGED MATERIAL SHALL BE STOCKPILED AT A LOCATION DESIGNATED BY THE OWNER IN GOOD CONDITION. ALL OTHER FENCE MATERIAL SHALL BE SPOILED OFF AIRPORT PROPERTY AT A PROPER DISPOSAL SITE SELECTED BY THE CONTRACTOR.</div>			
B	1	GRADING AND EXCAVATION NOTES		3	4
		<div>14. NO EXCAVATED MATERIAL SHALL BE REMOVED FROM AIRPORT PROPERTY. ALL EXCAVATED MATERIAL SHALL BE USED AS EMBANKMENT OR SPOILED ON AIRPORT PROPERTY AT THE LOCATIONS SHOWN ON THE PLANS.</div> <div>15. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL STRIP AND STOCKPILE ALL MATERIAL SUITABLE FOR TOPSOILING IN ACCORDANCE WITH ITEM T-905. TOPSOIL SHALL BE PLACED IN THE FINAL LOCATION FOLLOWING GRADING OPERATIONS AND SHALL BE PAID IN ACCORDANCE WITH ITEM T-905. EXCESS TOPSOIL SHALL BE SPOILED ONSITE AT THE LOCATIONS SHOWN ON THE PLANS.</div> <div>16. SELECTIVE GRADING SHALL BE REQUIRED AS DIRECTED BY THE RPR.</div> <div>17. THE QUANTITY OF UNCLASSIFIED EXCAVATION, ITEM P-152, INCLUDES 1,260 CY OF UNDERCUT EXCAVATION. UNDERCUT SHALL ONLY BE USED WHEN DIRECTED BY THE RPR.</div> <div>18. THE QUANTITY OF CRUSHED AGGREGATE BASE COURSE, ITEM P-209, INCLUDES 1,260 CY FOR REPLACEMENT OF UNDERCUT EXCAVATION. UNDERCUT SHALL ONLY BE USED WHEN DIRECTED BY THE RPR.</div> <div>19. THE QUANTITY OF UNCLASSIFIED EXCAVATION, ITEM P-152 FOR ADD ON NO. 1, INCLUDES 250 CY OF UNDERCUT EXCAVATION AND SHALL ONLY BE USED WHEN DIRECTED BY THE RPR.</div> <div>20. THE QUANTITY OF CRUSHED AGGREGATE BASE COURSE, ITEM P-209 FOR ADD ON NO. 1, INCLUDES 250 CY FOR REPLACEMENT OF UNDERCUT EXCAVATION AND SHALL ONLY BE USED WHEN DIRECTED BY THE RPR.</div> <div>21. THE QUANTITY OF UNCLASSIFIED EXCAVATION, ITEM P-152 FOR ADD ON NO. 2, INCLUDES 80 CY OF UNDERCUT EXCAVATION AND SHALL ONLY BE USED WHEN DIRECTED BY THE RPR.</div> <div>22. THE QUANTITY OF CRUSHED AGGREGATE BASE COURSE, ITEM P-209 FOR ADD ON NO. 2, INCLUDES 80 CY FOR REPLACEMENT OF UNDERCUT EXCAVATION AND SHALL ONLY BE USED WHEN DIRECTED BY THE RPR.</div> <div>23. THE QUANTITY OF OFFSITE BORROW INCLUDES 14,600 CY FOR FILL MATERIAL AND SHALL ONLY BE USED AS WHEN DIRECTED BY THE RPR.</div> <div>24. EMBANKMENTS SHALL BE CONSTRUCTED WITH SUITABLE ON-SITE MATERIAL UNLESS OTHERWISE DIRECTED BY THE RPR AND SHALL BE CONSIDERED INCIDENTAL TO ITEM P-152 UNCLASSIFIED EXCAVATION.</div> <div>25. THE LIMIT FOR TOPSOILING, SEEDING, AND MULCHING ARE THE LIMITS OF GRADING SHOWN ON THE GRADING PLANS. ALL AREAS OUTSIDE OF THE GRADING LIMITS WHICH ARE DISTURBED SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE, INCLUDING THE STAGING AREA, FIELD OFFICE LOCATION AND SPOILS AREA.</div> <div>26. THE COMBINATION OF SILT/CLAY SOILS AND HIGH NATURAL MOISTURE CONTENTS CREATE THE POTENTIAL FOR LOSS OF STRENGTH UNDER REPETITIVE LOADINGS OR VIBRATION. THE CONTRACTOR SHOULD TAKE THESE FACTORS INTO CONSIDERATION WHEN SELECTING EQUIPMENT, METHODS AND MEANS FOR CONSTRUCTION OF THIS PROJECT, AS WELL AS HAULING EQUIPMENT THAT WILL OPERATE IN THE AREA THROUGHOUT CONSTRUCTION. ANY DAMAGE TO THE SUBGRADE CONDITION AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE RESTORED TO EQUAL OR BETTER THAN ORIGINAL CONDITION, AS DIRECTED BY THE RPR AND ALL AT THE CONTRACTOR'S EXPENSE.</div> <div>27. TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION AND SILTATION CONTROL WORK PERFORMED FOR PROTECTION OF CONSTRUCTION AREAS OUTSIDE THE CONSTRUCTION LIMITS, SUCH AS BORROW AREAS AND WASTE AREAS, HAUL ROADS, EQUIPMENT AND MATERIAL STORAGE SITES, AND TEMPORARY PLANT SITES, WILL NOT BE MEASURED AND PAID FOR DIRECTLY BUT SHALL BE CONSIDERED AS A SUBSIDIARY OBLIGATION OF THE CONTRACTOR.</div> <div>28. TOPSOILING WILL BE CONSIDERED A NECESSARY AND INCIDENTAL PART OF THE WORK</div>			
A	1	GENERAL NOTES		3	4
		SCALE: NOT TO SCALE			

AND ITS COST SHALL BE CONSIDERED BY THE CONTRACTOR AND INCLUDED IN THE CONTRACT PRICE FOR THE WORK INVOLVED.	SUBSTITUTE FOR THE SOUND JUDGMENT OF THE CONTRACTOR.	F. GPS UNITS SHALL HAVE THE ABILITY TO DISPLAY THE NUMBER OF SATELLITES TRACKED AT ANY ONE TIME, AND INDICATE THE ACCURACY QUALITY OF EACH MEASUREMENT RELATIVE TO THE STRENGTH OF SIGNALS, AND THE GDOP (GEOMETRIC DILUTION OF PRECISION).
29. ALL SOIL EROSION AND SEDIMENT CONTROL DEVICES AND MATERIALS SHALL BE IN PLACE PRIOR TO BEGINNING EARTHWORK OPERATIONS AND SHALL BE MAINTAINED UNTIL THE NEW SLOPES ARE STABILIZED WITH SEEDING AND/OR SLOPE PROTECTION.	B. THAT THE CONTRACTOR DESIRES TO MAKE USE OF THE CADD AND SURFACE FILES IN CONJUNCTION WITH THE WORK TO BE PROVIDED TO THE OWNER FOR THE SUBJECT PROJECT.	G. GPS UNIT SHALL INCLUDE DUAL FREQUENCY RECEIVERS.
30. THE CONTRACTOR IS RESPONSIBLE FOR PERMITTING, GRADING, EROSION CONTROL AND SEEDING THE SPOILS SITE, INCIDENTAL TO THIS CONTRACT.	C. THAT THE CONTRACTOR HAS NO RIGHTS TO THE INFORMATION AND DATA CONTAINED IN THE CADD AND SURFACE FILES OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES. THE TRANSFER SHALL NOT BE CONSIDERED TO CONVEY ANY PROPRIETARY INTEREST IN THE INFORMATION AND DATA IN THE CADD AND SURFACE FILES OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES OR SUBSEQUENT VERSION THEREOF.	H. MINIMUM REQUIRED KINEMATIC ACCURACY RELATIVE TO PRIMARY PROJECT CONTROL (CORS): HORIZONTAL: 0.033 FT. + 1.0 PPM; VERTICAL: 0.065 FT. + 1.0 PPM
SURVEY NOTES	D. THAT THE INFORMATION AND DATA CONTAINED IN THE CADD AND SURFACE FILES OR IN ANY TRANSLATED OR CONVERTED FORM OF THESE FILES SHALL NOT BE USED BY THE CONTRACTOR ON ANY OTHER PROJECT.	I. ALL NECESSARY HARDWARE AND SOFTWARE SHALL BE INCLUDED (INCLUDING COMMUNICATION DRIVERS) TO CONNECT THE GPS UNIT TO A TABLET PC AND COMMUNICATE/EXCHANGE POSITIONAL DATA WITH CADD SOFTWARE.
31. FOR PAVEMENT SECTIONS, THE CONTOUR INTERVAL EQUALS 0.2 FEET. FOR TURF AREAS, THE CONTOUR INTERVAL EQUALS 1 FOOT.	E. THAT THE CONTRACTOR MAY NOT COPY, DISTRIBUTE, SELL, RENT, SUBLICENSE OR LEASE THE CADD AND SURFACE FILES OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES OR ANY ACCOMPANYING DOCUMENTATION.	J. THE DATA CONTROLLER SHALL PERMIT THE USER TO PROGRAM AND STORE MULTIPLE CONFIGURATIONS (ALSO KNOWN AS USER PREFERENCES) PRIOR TO THE ACTUAL FIELD MEASUREMENTS. CONFIGURATIONS SHALL BE CAPABLE OF BEING STORED AND RECALLED IN THE FIELD.
32. ALL ELEVATIONS REFER TO NAVD 88 VERTICAL DATUM. COORDINATES REFER NAD 83 HORIZONTAL DATUM.	F. THAT NO INFORMATION OR DATA CONTAINED IN THE CADD AND SURFACE FILES OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES SHALL BE TRANSFERRED IN ANY ELECTRONIC FORM WITHOUT WRITTEN PERMISSION OF THE OWNER.	K. GPS UNITS SHALL INCLUDE ONE FIXED HEIGHT ROVER ROD OF 6.56 FEET IN LENGTH, ONE ATTACHABLE BIPOD WHICH IS COMPATIBLE WITH THE ROVER ROD, AND ONE TOPO SHOE.
33. THE TOPOGRAPHIC FEATURES SHOWN HEREON WERE COMPILED FROM FIELD SURVEY PERFORMED BY FISHBECK DATED 12/23/2024.	G. THAT AFTER COMPLETION OF THE WORK BY THE CONTRACTOR AS PART OF THIS PROJECT, THE CONTRACTOR SHALL REMOVE THE INFORMATION AND DATA CONTAINED IN THE CADD AND SURFACE FILES, OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES, FROM ALL OF ITS ELECTRONIC DATA PROCESSING SYSTEMS. NO ELECTRONIC COPIES OF THE INFORMATION AND DATA CONTAINED IN THE CADD AND SURFACE FILES OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES SHALL BE RETAINED BY THE CONTRACTOR.	L. A GPS UNIT SET UP TO OPERATE AS A BASE STATION SHALL INCLUDE ALL NECESSARY ADDITIONAL CABLES, HARDWARE, FASTENERS OR ACCESSORIES NECESSARY TO INSTALL IT IN A FIXED SEMI-PERMANENT LOCATION, WILL NOT BE CONSIDERED AS A ROVER UNIT, AND THEREFORE WILL NOT REQUIRE A ROVER ROD, A BI-POD, OR A TOPO SHOE.
34. THE CONTRACTOR SHALL SURVEY UTILITY LOCATES AND REESTABLISH UTILITY MARKINGS THROUGHOUT THE PROJECT.	H. THAT THE CONTRACTOR SHALL TAKE ALL STEPS REASONABLY NECESSARY TO PROTECT THE CADD AND SURFACE FILES, OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES, FROM THEFT OR USE IN A MANNER INCONSISTENT WITH THESE TERMS AND CONDITIONS.	50. VERIFICATION OF EXISTING GRADES. THIS PROJECT WAS DEVELOPED USING A 3D CADD PROGRAM. THE 3D CADD PROGRAM CREATED 3D SURFACE FILES OF THE EXISTING SURFACES, FINISHED SURFACES AND OTHER VARIOUS SURFACES REQUIRED TO COMPLETE THE DESIGN. SOME VOLUMETRIC QUANTITIES WERE CALCULATED BY COMPARING SURFACE FILES OF THE APPLICABLE DESIGN SURFACES AND GENERATING TRIANGLE VOLUME REPORTS. EXISTING GRADES ON THE SURFACE FILES, WHERE THEY DO NOT MATCH THE LOCATIONS OF ACTUAL SPOT ELEVATIONS SHOWN ON THE TOPOGRAPHIC MAP, WERE DEVELOPED BY COMPUTER INTERPOLATION FROM THOSE SPOT ELEVATIONS. PRIOR TO DISTURBING ORIGINAL GRADE, A LICENSED SURVEYOR SHALL VERIFY THE ACCURACY OF THE EXISTING GROUND SURFACE BY VERIFYING SPOT ELEVATIONS AT THE SAME LOCATIONS WHERE ORIGINAL FIELD SURVEY DATA WAS OBTAINED AS INDICATED ON THE TOPOGRAPHIC MAP. FOR THIS PURPOSE, THE RPR WILL PROVIDE THE CONTRACTOR WITH A 3D CADD FILE OF THE TOPOGRAPHIC SURVEY. SURVEYOR SHALL RECOGNIZE THAT, DUE TO THE INTERPOLATION PROCESS, THE ACTUAL GROUND SURFACE AT ANY PARTICULAR LOCATION MAY DIFFER SOMEWHAT FROM THE INTERPOLATED SURFACE SHOWN ON THE DESIGN CROSS SECTIONS OR OBTAINED FROM THE SURFACE FILES. SURVEYOR'S VERIFICATION OF ORIGINAL GROUND SURFACE, HOWEVER, SHALL BE LIMITED TO VERIFICATION OF SPOT ELEVATIONS AS INDICATED HEREIN, AND NO ADJUSTMENTS WILL BE MADE TO THE ORIGINAL GROUND SURFACE UNLESS THE SURVEYOR DEMONSTRATES THAT SPOT ELEVATIONS SHOWN ARE INCORRECT. FOR THIS PURPOSE, SPOT ELEVATIONS WHICH ARE WITHIN 0.1 FOOT OF THE STATED ELEVATIONS FOR GROUND SURFACES, OR WITHIN 0.02 FOOT FOR HARD SURFACES (PAVEMENTS, BUILDINGS, FOUNDATIONS, STRUCTURES, ETC), SHALL BE CONSIDERED "NO CHANGE". ONLY DEVIATIONS IN EXCESS OF THESE WILL BE CONSIDERED FOR ADJUSTMENT OF THE ORIGINAL GROUND SURFACE. IF SURVEYOR'S VERIFICATION IDENTIFIES DISCREPANCIES IN THE TOPOGRAPHIC MAP, CONTRACTOR SHALL NOTIFY RPR IN WRITING AT LEAST TWO WEEKS BEFORE DISTURBANCE OF EXISTING GRADE TO ALLOW SUFFICIENT TIME TO VERIFY THE SUBMITTED INFORMATION AND MAKE ADJUSTMENTS TO THE DESIGN CROSS SECTIONS OR SURFACE FILES. DISTURBANCE OF EXISTING GRADE IN ANY AREA SHALL CONSTITUTE ACCEPTANCE BY THE CONTRACTOR OF THE ACCURACY OF THE ORIGINAL ELEVATIONS SHOWN ON THE TOPOGRAPHIC MAP FOR THAT AREA.
35. CONTRACTOR SHALL PERFORM SOFT DIGS TO VERIFY DEPTH OF EXISTING UTILITIES PER ITEM DX-800 SOFT DIGS PRIOR TO CONSTRUCTION START.	I. THAT THE OWNER MAY TERMINATE THESE TERMS AND CONDITIONS AT ANY TIME AND THE CONTRACTOR SHALL IMMEDIATELY REMOVE THE CADD AND SURFACE FILES, OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES, FROM THEIR ELECTRONIC DATA PROCESSING SYSTEMS UPON DEMAND OF THE OWNER.	THE CONTRACTOR'S SURVEY SHALL NOT EXCEED THE FOLLOWING:
ELECTRICAL NOTES	J. THAT THE OWNER RETAINS ALL RIGHTS NOT EXPRESSLY GRANTED. NOTHING IN THESE TERMS AND CONDITIONS CONSTITUTES A WAIVER OF THE OWNER'S RIGHTS UNDER ANY FEDERAL OR STATE LAW.	• ERROR OF HORIZONTAL CLOSURE IN FEET SHALL NOT EXCEED 1 FOOT/5,000 FEET
36. ALL ELECTRICAL WORK SHALL CONFORM TO FEDERAL AVIATION ADMINISTRATION SPECIFICATIONS, AND APPLICABLE LOCAL, STATE AND NATIONAL ELECTRICAL CODES.	K. THAT THE OWNER EXCLUDES ANY AND ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND LIMITS THE CONTRACTOR'S REMEDY TO RETURN OF THE CADD AND SURFACE FILES AND DOCUMENTATION TO THE OWNER FOR REPLACEMENT.	• ERROR OF VERTICAL CLOSURE IN FEET SHALL NOT EXCEED (0.05 FEET)/(BENCH RUN LENGTH IN MILES)1/2
37. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE STARTING WORK. IF ONLY A PORTION OF AN EXISTING CIRCUIT IS BEING REMOVED FOR DEMOLITION, CONTINUITY SHALL BE MAINTAINED TO THE REST OF THE REMAINING CIRCUIT.	L. THAT THE OWNER MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE CADD AND SURFACE FILES OR ACCOMPANYING DOCUMENTATION, INCLUDING THEIR QUALITY, PERFORMANCE, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. THE CADD AND SURFACE FILES AND DOCUMENTATION ARE PROVIDED "AS IS" AND THE CONTRACTOR ASSUMES THE ENTIRE RISK AS TO THEIR QUALITY AND PERFORMANCE.	A POINT DATA FILE OF THE CONTRACTOR'S VERIFICATION OF ORIGINAL GROUND SURFACE SHALL BE PROVIDED IN ELECTRONIC FORMAT ALONG WITH A PRINTED HARD COPY. THE POINT DATA SHALL BE SUPPLIED IN ONE ASCII FILE CONTAINING POINT NUMBER, NORTHING, EASTING, ELEVATION AND DESCRIPTOR. THE DATA SHALL BE LEFT JUSTIFIED COLUMNS SEPARATED BY COMMAS WITH DECIMAL POINTS, BUT NO SLASHES, COLONS AND/OR OTHER SEPARATORS.
38. THE ELECTRICAL CHARACTERISTICS OF PROPOSED EQUIPMENT SHALL BE VERIFIED TO BE COMPATIBLE WITH EXISTING EQUIPMENT MANUFACTURER PRIOR TO INSTALLATION.	M. THAT THE OWNER SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF, INABILITY TO USE, OR ANY DEFECT IN THE CADD AND SURFACE FILES OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES OR ANY ACCOMPANYING DOCUMENTATION.	51. AUTOMATED STAKEOUT AND AUTOMATED MACHINE GUIDANCE OPERATIONS. SHOULD THE CONTRACTOR CHOOSE AUTOMATED METHODS FOR THE ESTABLISHMENT, LAYOUT, MEASUREMENT, EQUIPMENT GUIDANCE OR VERIFICATION OF WORK TO BE CONSTRUCTED, THEY SHALL SUBMIT THEIR PROPOSED AUTOMATED METHODS INCLUDING QUALITY CONTROL MEASURES AS PART OF THEIR CONTRACT CONTROL PLAN FOR ACCEPTANCE BY THE RPR. WHEN UTILIZING THESE METHODS, ALL HORIZONTAL AND VERTICAL SURVEY CONTROL, ROADWAY ALIGNMENT CONTROL AND EXISTING TERRAIN DATA SHALL BE SHARED/EXCHANGED ELECTRONICALLY AND KEPT CURRENT BETWEEN THE CONTRACTOR AND THE RPR. ALL ORIGINAL VERSION FILES OF ELECTRONIC CONTRACT DATA SHALL BE MAINTAINED AND STORED BY THE RPR.
39. ABANDONED CABLES MAY EXIST IN THE VICINITY OF THE PROPOSED WORK. IF ENCOUNTERED, CONTRACTOR SHALL VERIFY THAT THEY ARE ABANDONED PRIOR TO REMOVAL. IF THEY ARE NOT ABANDONED, CABLES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ITEMS OF SPECIFIC MANUFACTURE SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS AND OR MANUFACTURER'S REPRESENTATIVE DIRECTIONS.	N. THAT THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER, ITS OFFICIALS AND EMPLOYEES, AND THE RPR FOR ANY INJURY TO THE PERSON OR PROPERTY OF THIRD PARTIES ARISING OUT OF THE USE OF OR ANY DEFECT IN THE CADD AND SURFACE FILES OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES OR ANY ACCOMPANYING DOCUMENTATION.	PRIOR TO BEGINNING FIELD OPERATIONS, THE CONTRACTOR AND RPR SHALL MUTUALLY DETERMINE ACCEPTABLE USES OF AND PROCEDURES FOR THE TECHNOLOGY BEING USED, AND HOW DATA CAN BE EXCHANGED FOR USE IN STAKEOUT, AUTOMATED MACHINE OPERATIONS, POSITIONAL VERIFICATION, QUANTITY MEASUREMENTS AND CALCULATIONS. ALL RECORD COPIES OF SURVEY AND STAKEOUT DATA SHALL BE STORED AND SHARED IN RPR ACCEPTED STANDARD FORMATS, AND SHALL BE DERIVED PRIMARILY FROM THE ORIGINAL ELECTRONIC DATA, WHEN PROVIDED BY THE RPR.
40. ALL GROUND CONNECTIONS SHALL BE MADE AT LIGHT UNITS OR AT ENDS OF DUCT BANKS UNLESS DIRECTED OTHERWISE.	O. THAT THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER, ITS OFFICIALS AND EMPLOYEES, AND THE RPR FOR ANY INJURY ARISING OUT OF ANY INFRINGEMENT OF THE COPYRIGHT LAW.	AUTOMATED SURVEY OPERATIONS HAVE A HIGH RELIANCE ON ACCURATE CONTROL NETWORKS FROM WHICH TO MAKE MEASUREMENTS, ESTABLISH POSITIONS, AND VERIFY GEOSPATIAL LOCATIONS OF FEATURES. THEREFORE, A STRONG CONTRACT CONTROL NETWORK IN THE FIELD WHICH IS CONSISTENT WITH THE PROJECT CONTROL USED DURING THE DESIGN OF THE CONTRACT IS ESSENTIAL TO THE SUCCESSFUL USE OF THESE TECHNOLOGIES WITH THE PROPOSED DIGITAL TERRAIN MODEL AND ALIGNMENTS. CONSISTENT AND WELL-DESIGNED SITE CALIBRATION (LOCALIZATION) FOR ALL AUTOMATED MACHINE GUIDANCE, IS REQUIRED TO ENSURE THE QUALITY OF THE CONTRACT DELIVERABLES. THE CONTRACTOR SHALL DOCUMENT WHICH LOCAL HORIZONTAL AND VERTICAL CONTROL WILL BE WILL BE USED FOR CALIBRATION DURING CONSTRUCTION OPERATIONS AND HOW THAT CALIBRATION OR ADJUSTMENT WILL BE MAINTAINED ALONG THE ENTIRE CONTRACT LENGTH. CONTINUED INCORPORATION OF CORS NETWORK IS ESSENTIAL TO MAINTAINING THE INTEGRITY OF POSITIONAL LOCATIONS AND ELEVATIONS OF FEATURES.
41. ALL ELECTRICAL EQUIPMENT REMOVED WHICH IS DESIRED BY THE OWNER TO BE SALVAGED SHALL BE TURNED OVER TO THE OWNER. THE EQUIPMENT SHALL BE STOCKPILED AT A LOCATION DESIGNATED BY THE OWNER IN PROPER WORKING CONDITION. ALL OTHER MATERIALS SHALL BE SPOILED OFF AIRPORT PROPERTY AT A PROPER DISPOSAL SITE AT THE CONTRACTOR'S EXPENSE. PROVIDE WATERTIGHT TERMINATION FOR ALL BURIED CONDUIT ENDS.	P. THAT THE WARRANTY AND REMEDIES SET FORTH IN THESE TERMS AND CONDITIONS ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED.	THE RPR MAY PERFORM QUALITY ASSURANCE VERIFICATIONS OF FEATURE POSITIONS AT ANY TIME DURING THE CONTRACT. DIMENSIONAL TOLERANCES SHALL HOLD A HIGHER ORDER OF PRECEDENCE THAN POSITIONAL TOLERANCES, BUT BOTH MAY REQUIRE VERIFICATION. QUALITY ASSURANCE ACTIVITIES BY THE RPR WILL NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITIES FOR THE QUALITY CONTROL OF THE ACCURACY OR COMPLETENESS OF THE WORK.
42. PERMANENT PAVEMENT MARKINGS REQUIRED AFTER CONCRETE REACHES CONSTRUCTION TRAFFIC STRENGTH PER SPECIFICATION P-501.	Q. THAT NOTHING CONTAINED IN THESE TERMS AND CONDITIONS SHALL BE CONSTRUED TO REPRESENT OR WARRANT THAT THE CONTRACTOR HAS THE RIGHT TO REPRODUCE OR COPY ANY OR CONVERTED FORM OF THESE FILES AND THE CONTRACTOR ACKNOWLEDGES THAT IT HAS NO RIGHT TO REPRODUCE AND INCLUDE COPYRIGHT OR TRADE SECRET NOTICES, OR PATENT RIGHTS ON ANY COPIES, IN WHOLE OR IN PART, IN ANY FORM. ALL COPIES OF EACH CAD AND SURFACE FILE REMAIN THE PROPERTY OF THE OWNER AND ANY RIGHTS INVOLVING THE COPYRIGHT LAW AS MODIFIED IN 17 U.S.C §101 ET. SEQ. REMAIN WITH THE OWNER.	
ADDITIONAL SURVEY REQUIREMENTS	49. SURVEY GRADE GPS INSPECTION UNITS.	
43. THIS PROJECT WAS DEVELOPED USING THREE-DIMENSIONAL DESIGN SOFTWARE.	A. THE CONTRACTOR SHALL FURNISH, CONFIGURE, INSTALL, MAINTAIN AND REMOVE A GLOBAL POSITIONING SYSTEM (GPS) UNIT AS NEEDED FOR USE BY THE RPR AND THEIR INSPECTION STAFF, INCLUDING THE TRAINING OF THE RPR AND THEIR REPRESENTATIVES ON THE USE OF THE GPS UNIT PROVIDED.	
44. AFTER AWARD AND UPON REQUEST, THE SUCCESSFUL BIDDER WILL BE PROVIDED CADD FILES DEVELOPED FROM AUTOCAD AND 3D SURFACE FILES FOR USE. IN ADDITION, SURVEY CONTROL FOR THE PROJECT WILL BE PROVIDED IN ELECTRONIC FORMAT AND THE ALIGNMENTS WILL BE PROVIDED IN XML FORMAT.	B. THE CONTRACTOR SHALL PROVIDE THE RPR WITH ONE GPS INSPECTION UNIT FOR USE DURING THE COURSE OF THE PROJECT. GPS UNITS SHALL BE EQUIPPED TO RECEIVE GLOBAL POSITIONING SYSTEM (GPS), GLOPASS AND GNSS POSITION DATA.	
45. THE CONTRACTOR WILL BE PROVIDED, UPON REQUEST, THE FOLLOWING SURFACES:	C. GPS UNITS SHALL BE EQUIPPED TO RECEIVE, AND BE CAPABLE OF UTILIZING, REAL TIME KINEMATICS (RTK) CORRECTIONAL DATA (CURRENT VERSION OF RTCM FORMAT) THROUGH INTERNET PROTOCOL AS PROVIDED FROM THE CONTINUOUSLY OPERATING REFERENCE SYSTEM (CORS) NETWORK. THIS SHALL INCLUDE ALL NECESSARY COMMUNICATION DEVICES, REPEATERS AND SYSTEMS, DATA SERVICE PLANS AND COMMUNICATIONS TO MEET THE MINIMUM REQUIRED ACCURACY AND NOT EXCEED A 2 SECOND LATENCY AT THE ROVER. WHICHEVER CORRS RTK CORRECTIONAL METHOD IS UTILIZED BY THE CONTRACTOR TO BROADCAST THE CORRS RTK CORRECTIONAL DATA, THE CONTRACTOR SHALL ENSURE THAT THE RTK DATA SHALL BE AVAILABLE AT ALL LOCATIONS ACROSS THE ENTIRE CONTRACT SITE DURING ALL HOURS OF CONSTRUCTION AND INSPECTION OPERATIONS.	
SURFACE DESCRIPTION	D. GPS UNITS SHALL INCLUDE THE CAPABILITY TO "LOCALIZE" BOTH THE HORIZONTAL AND VERTICAL CONTROL TO LOCAL PROJECT MONUMENTATION (ALSO KNOWN AS CALIBRATE), WHILE UTILIZING RTK CORRECTIONS FROM A REFERENCE NETWORK.	
OVERALL PROJECT 3D SURFACE OF PROJECT SITE OVERALL EXISTING GRADE	E. GPS UNITS SHALL INCLUDE EITHER AN INTEGRATED OR MODULAR COMMUNICATION DEVICE CAPABLE OF RECEIVING RTK CORRECTIONAL DATA TO SATISFY THE REQUIREMENT OF USING CORS RTK CORRECTIONS.	
SITE EXISTING GRADE ELEVATIONS PER TOPOGRAPHIC SURVEY PRIOR TO CONSTRUCTION.		
PROPOSED FINISHED 3D SURFACE REPRESENTATION OF THE PROJECT SITE OVERALL PROPOSED FINI GRADE GRADE ELEVATIONS PER PROJECT DESIGN. THIS SURFACE INCLUDES PAVEMENT AND TURF GRADES.		
EXISTING BASE MAP EXISTING TOPOGRAPHIC FEATURES, LIMITS OF PAVEMENT, PHYSICAL FEATURES, EXISTING CONTOURS, EQUIPMENT, STRUCTURES, LIGHTS, SIGNS, KNOWN UTILITIES, FENCE, PIPES, AND CONDUITS, BUILDINGS, ETC.		
PROPOSED PROPOSED WORK INCLUDING ALIGNMENTS, SURVEY DATA, WORK PHASING LIMITS, LIMITS OF DEMOLITION, LIMITS OF PAVEMENT, PHYSICAL FEATURES, PROPOSED CONTOURS, AND MARKINGS.		
46. UNLESS OTHERWISE SHOWN ON THE PLANS, THE CONTRACTOR SHALL ASSUME THAT THE ORIGIN OF PROPOSED CAD SYMBOLS IS AT THE CENTER OF THE LOCATION OF THE FEATURE. CAD SYMBOLS WHICH ARE NOT AT THE CENTER OF ORIGIN INCLUDE THE FOLLOWING:		
SYMBOL ORIGIN		
GUIDANCE SIGNS LONGITUDINAL CENTER AT END OF SIGN CLOSEST TO PAVEMENT EDGE.		
47. THE FILES WERE DEVELOPED FOR THE DESIGN AND DEPICTION OF VARIOUS 2D FEATURES (EXISTING AND PROPOSED) AND 3D FEATURES OF EXISTING, PROPOSED, AND SUBGRADE SURFACES. THE SURFACE FILES ARE DEPICTED ON THE CONTRACT DRAWINGS IN THE FORM OF CONTOURS, PROFILES, TYPICAL SECTIONS, SPOT ELEVATIONS, TABLES, AND OTHER DETAILS. THE SURFACE FILE OF THE EXISTING SURFACE IS THE DATABASE OF POINTS FROM THE DESIGN TOPOGRAPHIC SURVEY. THE SURFACE FILES OF THE OTHER SURFACES ARE THE DATABASE OF POINTS FOR THE SURFACES USED TO DESIGN THE PROJECT.		
48. THE OWNER ALLOWS USE OF THE CADD AND SURFACE FILES IN THE PERFORMANCE OF ITS WORK AND SERVICES ON THE PROJECT WITH THE FOLLOWING TERMS AND CONDITIONS:		
A. THAT THE OWNER DOES NOT WARRANT OR GUARANTEE THE INFORMATION AND DATA IN THE CADD AND SURFACE FILES AND ANY ACCOMPANYING DOCUMENTATION AS A		

C	1	2	3	4
B	1	2	3	4
A	1	2	3	4

AND ITS COST SHALL BE CONSIDERED BY THE CONTRACTOR AND INCLUDED IN THE CONTRACT PRICE FOR THE WORK INVOLVED.

29. ALL SOIL EROSION AND SEDIMENT CONTROL DEVICES AND MATERIALS SHALL BE IN PLACE PRIOR TO BEGINNING EARTHWORK OPERATIONS AND SHALL BE MAINTAINED UNTIL THE NEW SLOPES ARE STABILIZED WITH SEEDING AND/OR SLOPE PROTECTION.

30. THE CONTRACTOR IS RESPONSIBLE FOR PERMITTING, GRADING, EROSION CONTROL AND SEEDING THE SPOILS SITE, INCIDENTAL TO THIS CONTRACT.

SURVEY NOTES

31. FOR PAVEMENT SECTIONS, THE CONTOUR INTERVAL EQUALS 0.2 FEET. FOR TURF AREAS, THE CONTOUR INTERVAL EQUALS 1 FOOT.

32. ALL ELEVATIONS REFER TO NAVD 88 VERTICAL DATUM. COORDINATES REFER NAD 83 HORIZONTAL DATUM.

33. THE TOPOGRAPHIC FEATURES SHOWN HEREON WERE COMPILED FROM FIELD SURVEY PERFORMED BY FISHBECK DATED 12/23/2024.

34. THE CONTRACTOR SHALL SURVEY UTILITY LOCATES AND REESTABLISH UTILITY MARKINGS THROUGHOUT THE PROJECT.

35. CONTRACTOR SHALL PERFORM SOFT DIGS TO VERIFY DEPTH OF EXISTING UTILITIES PER ITEM DX-800 SOFT DIGS PRIOR TO CONSTRUCTION START.

ELECTRICAL NOTES

36. ALL ELECTRICAL WORK SHALL CONFORM TO FEDERAL AVIATION ADMINISTRATION SPECIFICATIONS, AND APPLICABLE LOCAL, STATE AND NATIONAL ELECTRICAL CODES.

37. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE STARTING WORK. IF ONLY A PORTION OF AN EXISTING CIRCUIT IS BEING REMOVED FOR DEMOLITION, CONTINUITY SHALL BE MAINTAINED TO THE REST OF THE REMAINING CIRCUIT.

38. THE ELECTRICAL CHARACTERISTICS OF PROPOSED EQUIPMENT SHALL BE VERIFIED TO BE COMPATIBLE WITH EXISTING EQUIPMENT MANUFACTURER PRIOR TO INSTALLATION.

39. ABANDONED CABLES MAY EXIST IN THE VICINITY OF THE PROPOSED WORK. IF ENCOUNTERED, CONTRACTOR SHALL VERIFY THAT THEY ARE ABANDONED PRIOR TO REMOVAL, IF THEY ARE NOT ABANDONED, CABLES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ITEMS OF SPECIFIC MANUFACTURE SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS AND OR MANUFACTURER'S REPRESENTATIVE DIRECTIONS.

40. ALL GROUND CONNECTIONS SHALL BE MADE AT LIGHT UNITS OR AT ENDS OF DUCT BANKS UNLESS DIRECTED OTHERWISE.

41. ALL ELECTRICAL EQUIPMENT REMOVED WHICH IS DESIRED BY THE OWNER TO BE SALVAGED SHALL BE TURNED OVER TO THE OWNER. THE EQUIPMENT SHALL BE STOCKPILED AT A LOCATION DESIGNATED BY THE OWNER IN PROPER WORKING CONDITION. ALL OTHER MATERIALS SHALL BE SPOILED OFF AIRPORT PROPERTY AT A PROPER DISPOSAL SITE AT THE CONTRACTOR'S EXPENSE. PROVIDE WATERTIGHT TERMINATION FOR ALL BURIED CONDUIT ENDS.

MARKING NOTES

42. PERMANENT PAVEMENT MARKINGS REQUIRED AFTER CONCRETE REACHES CONSTRUCTION TRAFFIC STRENGTH PER SPECIFICATION P-501.

ADDITIONAL SURVEY REQUIREMENTS

43. THIS PROJECT WAS DEVELOPED USING THREE-DIMENSIONAL DESIGN SOFTWARE.

44. AFTER AWARD AND UPON REQUEST, THE SUCCESSFUL BIDDER WILL BE PROVIDED CADD FILES DEVELOPED FROM AUTOCAD AND 3D SURFACE FILES FOR USE. IN ADDITION, SURVEY CONTROL FOR THE PROJECT WILL BE PROVIDED IN ELECTRONIC FORMAT AND THE ALIGNMENTS WILL BE PROVIDED IN XML FORMAT.

45. THE CONTRACTOR WILL BE PROVIDED, UPON REQUEST, THE FOLLOWING SURFACES:

SURFACE	DESCRIPTION
OVERALL PROJECT	3D SURFACE OF PROJECT SITE OVERALL EXISTING GRADE
SITE EXISTING GRADE	ELEVATIONS PER TOPOGRAPHIC SURVEY PRIOR TO CONSTRUCTION.
PROPOSED FINISHED	3D SURFACE REPRESENTATION OF THE PROJECT SITE OVERALL
PROPOSED FINI GRADE	GRADE ELEVATIONS PER PROJECT DESIGN. THIS SURFACE INCLUDES PAVEMENT AND TURF GRADES.
EXISTING BASE MAP	EXISTING TOPOGRAPHIC FEATURES, LIMITS OF PAVEMENT, PHYSICAL FEATURES, EXISTING CONTOURS, EQUIPMENT, STRUCTURES, UIGHTS, SIGNS, KNOWN UTILITIES, FENCE, PIPES, AND CONDUITS, BUILDINGS, ETC.
PROPOSED	PROPOSED WORK INCLUDING ALIGNMENTS, SURVEY DATA, WORK PHASING LIMITS, LIMITS OF DEMOLITION, LIMITS OF PAVEMENT, PHYSICAL FEATURES, PROPOSED CONTOURS, AND MARKINGS.

46. UNLESS OTHERWISE SHOWN ON THE PLANS, THE CONTRACTOR SHALL ASSUME THAT THE ORIGIN OF PROPOSED CAD SYMBOLS IS AT THE CENTER OF THE LOCATION OF THE FEATURE. CAD SYMBOLS WHICH ARE NOT AT THE CENTER OF ORIGIN INCLUDE THE FOLLOWING:

SYMBOL	ORIGIN
GUIDANCE SIGNS	LONGITUDINAL CENTER AT END OF SIGN CLOSEST TO PAVEMENT EDGE.

47. THE FILES WERE DEVELOPED FOR THE DESIGN AND DEPICTION OF VARIOUS 2D FEATURES (EXISTING AND PROPOSED) AND 3D FEATURES OF EXISTING, PROPOSED, AND SUBGRADE SURFACES. THE SURFACE FILES ARE DEPICTED ON THE CONTRACT DRAWINGS IN THE FORM OF CONTOURS, PROFILES, TYPICAL SECTIONS, SPOT ELEVATIONS, TABLES, AND OTHER DETAILS. THE SURFACE FILE OF THE EXISTING SURFACE IS THE DATABASE OF POINTS FROM THE DESIGN TOPOGRAPHIC SURVEY. THE SURFACE FILES OF THE OTHER SURFACES ARE THE DATABASE OF POINTS FOR THE SURFACES USED TO DESIGN THE PROJECT.

48. THE OWNER ALLOWS USE OF THE CADD AND SURFACE FILES IN THE PERFORMANCE OF ITS WORK AND SERVICES ON THE PROJECT WITH THE FOLLOWING TERMS AND CONDITIONS:

A. THAT THE OWNER DOES NOT WARRANT OR GUARANTEE THE INFORMATION AND DATA IN THE CADD AND SURFACE FILES AND ANY ACCOMPANYING DOCUMENTATION AS A

SUBSTITUTE FOR THE SOUND JUDGMENT OF THE CONTRACTOR.

B. THAT THE CONTRACTOR DESIRES TO MAKE USE OF THE CADD AND SURFACE FILES IN CONJUNCTION WITH THE WORK TO BE PROVIDED TO THE OWNER FOR THE SUBJECT PROJECT.

C. THAT THE CONTRACTOR HAS NO RIGHTS TO THE INFORMATION AND DATA CONTAINED IN THE CADD AND SURFACE FILES OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES. THE TRANSFER SHALL NOT BE CONSIDERED TO CONVEY ANY PROPRIETARY INTEREST IN THE INFORMATION AND DATA IN THE CADD AND SURFACE FILES OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES OR SUBSEQUENT VERSION THEREOF.

D. THAT THE INFORMATION AND DATA CONTAINED IN THE CADD AND SURFACE FILES OR IN ANY TRANSLATED OR CONVERTED FORM OF THESE FILES SHALL NOT BE USED BY THE CONTRACTOR ON ANY OTHER PROJECT.

E. THAT THE CONTRACTOR MAY NOT COPY, DISTRIBUTE, SELL, RENT, SUBLICENSE OR LEASE THE CADD AND SURFACE FILES OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES OR ANY ACCOMPANYING DOCUMENTATION.

F. THAT NO INFORMATION OR DATA CONTAINED IN THE CADD AND SURFACE FILES OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES SHALL BE TRANSFERRED IN ANY ELECTRONIC FORM WITHOUT WRITTEN PERMISSION OF THE OWNER.

G. THAT AFTER COMPLETION OF THE WORK BY THE CONTRACTOR AS PART OF THIS PROJECT, THE CONTRACTOR SHALL REMOVE THE INFORMATION AND DATA CONTAINED IN THE CADD AND SURFACE FILES, OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES, FROM ALL OF ITS ELECTRONIC DATA PROCESSING SYSTEMS. NO ELECTRONIC COPIES OF THE INFORMATION AND DATA CONTAINED IN THE CADD AND SURFACE FILES OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES SHALL BE RETAINED BY THE CONTRACTOR.

H. THAT THE CONTRACTOR SHALL TAKE ALL STEPS REASONABLY NECESSARY TO PROTECT THE CADD AND SURFACE FILES, OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES, FROM THEFT OR USE IN A MANNER INCONSISTENT WITH THESE TERMS AND CONDITIONS.

I. THAT THE OWNER MAY TERMINATE THESE TERMS AND CONDITIONS AT ANY TIME AND THE CONTRACTOR SHALL IMMEDIATELY REMOVE THE CADD AND SURFACE FILES, OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES, FROM THEIR ELECTRONIC DATA PROCESSING SYSTEMS UPON DEMAND OF THE OWNER.

J. THAT THE OWNER RETAINS ALL RIGHTS NOT EXPRESSLY GRANTED. NOTHING IN THESE TERMS AND CONDITIONS CONSTITUTES A WAIVER OF THE OWNER'S RIGHTS UNDER ANY FEDERAL OR STATE LAW.

K. THAT THE OWNER EXCLUDES ANY AND ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND LIMITS THE CONTRACTOR'S REMEDY TO RETURN OF THE CADD AND SURFACE FILES AND DOCUMENTATION TO THE OWNER FOR REPLACEMENT.

L. THAT THE OWNER MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE CADD AND SURFACE FILES OR ACCOMPANYING DOCUMENTATION, INCLUDING THEIR QUALITY, PERFORMANCE, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. THE CADD AND SURFACE FILES AND DOCUMENTATION ARE PROVIDED "AS IS" AND THE CONTRACTOR ASSUMES THE ENTIRE RISK AS TO THEIR QUALITY AND PERFORMANCE.

M. THAT THE OWNER SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF, INABILITY TO USE, OR ANY DEFECT IN THE CADD AND SURFACE FILES OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES OR ANY ACCOMPANYING DOCUMENTATION.

N. THAT THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER, ITS OFFICIALS AND EMPLOYEES, AND THE RPR FOR ANY INJURY TO THE PERSON OR PROPERTY OF THIRD PARTIES ARISING OUT OF THE USE OF OR ANY DEFECT IN THE CADD AND SURFACE FILES OR ANY TRANSLATED OR CONVERTED FORM OF THESE FILES OR ANY ACCOMPANYING DOCUMENTATION.

O. THAT THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER, ITS OFFICIALS AND EMPLOYEES, AND THE RPR FOR ANY INJURY ARISING OUT OF ANY INFRINGEMENT OF THE COPYRIGHT LAW.

P. THAT THE WARRANTY AND REMEDIES SET FORTH IN THESE TERMS AND CONDITIONS ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED.

Q. THAT NOTHING CONTAINED IN THESE TERMS AND CONDITIONS SHALL BE CONSTRUED TO REPRESENT OR WARRANT THAT THE CONTRACTOR HAS THE RIGHT TO REPRODUCE OR COPY ANY OR CONVERTED FORM OF THESE FILES AND THE CONTRACTOR ACKNOWLEDGES THAT IT HAS NO RIGHT TO REPRODUCE AND INCLUDE COPYRIGHT OR TRADE SECRET NOTICES, OR PATENT RIGHTS ON ANY COPIES, IN WHOLE OR IN PART, IN ANY FORM. ALL COPIES OF EACH CADD AND SURFACE FILE REMAIN THE PROPERTY OF THE OWNER AND ANY RIGHTS INVOLVING THE COPYRIGHT LAW AS MODIFIED IN 17 U.S.C. §101 ET. SEQ. REMAIN WITH THE OWNER.

49. SURVEY GRADE GPS INSPECTION UNITS.

A. THE CONTRACTOR SHALL FURNISH, CONFIGURE, INSTALL, MAINTAIN AND REMOVE A GLOBAL POSITIONING SYSTEM (GPS) UNIT AS NEEDED FOR USE BY THE RPR AND THEIR INSPECTION STAFF, INCLUDING THE TRAINING OF THE RPR AND THEIR REPRESENTATIVES ON THE USE OF THE GPS UNIT PROVIDED.

B. THE CONTRACTOR SHALL PROVIDE THE RPR WITH ONE GPS INSPECTION UNIT FOR USE DURING THE COURSE OF THE PROJECT. GPS UNITS SHALL BE EQUIPPED TO RECEIVE GLOBAL POSITIONING SYSTEM (GPS), GLONASS AND GNSS POSITION DATA.

C. GPS UNITS SHALL BE EQUIPPED TO RECEIVE, AND BE CAPABLE OF UTILIZING, REAL TIME KINEMATICS (RTK) CORRECTIONAL DATA (CURRENT VERSION OF RTCM FORMAT) THROUGH INTERNET PROTOCOL AS PROVIDED FROM THE CONTINUOUSLY OPERATING REFERENCE SYSTEM (CORS) NETWORK. THIS SHALL INCLUDE ALL NECESSARY COMMUNICATION DEVICES, REPEATERS AND SYSTEMS, DATA SERVICE PLANS AND COMMUNICATIONS TO MEET THE MINIMUM REQUIRED ACCURACY AND NOT EXCEED A 2 SECOND LATENCY AT THE ROVER. WHICHEVER COMMUNICATION METHOD IS UTILIZED BY THE CONTRACTOR TO BROADCAST THE CORS RTK CORRECTIONAL DATA, THE CONTRACTOR SHALL ENSURE THAT THE RTK DATA SHALL BE AVAILABLE AT ALL LOCATIONS ACROSS THE ENTIRE CONTRACT SITE DURING ALL HOURS OF CONSTRUCTION AND INSPECTION OPERATIONS.

D. GPS UNITS SHALL INCLUDE THE CAPABILITY TO "LOCALIZE" BOTH THE HORIZONTAL AND VERTICAL CONTROL TO LOCAL PROJECT MONUMENTATION (ALSO KNOWN AS CALIBRATE), WHILE UTILIZING RTK CORRECTIONS FROM A REFERENCE NETWORK.

E. GPS UNITS SHALL INCLUDE EITHER AN INTEGRATED OR MODULAR COMMUNICATION DEVICE CAPABLE OF RECEIVING RTK CORRECTIONAL DATA TO SATISFY THE REQUIREMENT OF USING CORS RTK CORRECTIONS.

F. GPS UNITS SHALL HAVE THE ABILITY TO DISPLAY THE NUMBER OF SATELLITES TRACKED AT ANY ONE TIME, AND INDICATE THE ACCURACY QUALITY OF EACH MEASUREMENT RELATIVE TO THE STRENGTH OF SIGNALS, AND THE GDOP (GEOMETRIC DILUTION OF PRECISION).

G. GPS UNIT SHALL INCLUDE DUAL FREQUENCY RECEIVERS.

H. MINIMUM REQUIRED KINEMATIC ACCURACY RELATIVE TO PRIMARY PROJECT CONTROL (CORS): HORIZONTAL: 0.033 FT. + 1.0 PPM; VERTICAL: 0.065 FT. + 1.0 PPM

I. ALL NECESSARY HARDWARE AND SOFTWARE SHALL BE INCLUDED (INCLUDING COMMUNICATION DRIVERS) TO CONNECT THE GPS UNIT TO A TABLET PC AND COMMUNICATE/EXCHANGE POSITIONAL DATA WITH CADD SOFTWARE.

J. THE DATA CONTROLLER SHALL PERMIT THE USER TO PROGRAM AND STORE MULTIPLE CONFIGURATIONS (ALSO KNOWN AS USER PREFERENCES) PRIOR TO THE ACTUAL FIELD MEASUREMENTS. CONFIGURATIONS SHALL BE CAPABLE OF BEING STORED AND RECALLED IN THE FIELD.

K. GPS UNITS SHALL INCLUDE ONE FIXED HEIGHT ROVER ROD OF 6.56 FEET IN LENGTH, ONE ATTACHABLE BIPOD WHICH IS COMPATIBLE WITH THE ROVER ROD, AND ONE TOPO SHOE.

L. A GPS UNIT SET UP TO OPERATE AS A BASE STATION SHALL INCLUDE ALL NECESSARY ADDITIONAL CABLES, HARDWARE, FASTENERS OR ACCESSORIES NECESSARY TO INSTALL IT IN A FIXED SEMI-PERMANENT LOCATION. WILL NOT BE CONSIDERED AS A ROVER UNIT, AND THEREFORE WILL NOT REQUIRE A ROVER ROD, A BI-POD, OR A TOPO SHOE.

50. VERIFICATION OF EXISTING GRADES. THIS PROJECT WAS DEVELOPED USING A 3D CADD PROGRAM. THE 3D CADD PROGRAM CREATED 3D SURFACE FILES OF THE EXISTING SURFACES, FINISHED SURFACES AND OTHER VARIOUS SURFACES REQUIRED TO COMPLETE THE DESIGN. SOME VOLUMETRIC QUANTITIES WERE CALCULATED BY COMPARING SURFACE FILES OF THE APPLICABLE DESIGN SURFACES AND GENERATING TRIANGLE VOLUME REPORTS. EXISTING GRADES ON THE SURFACE FILES, WHERE THEY DO NOT MATCH THE LOCATIONS OF ACTUAL SPOT ELEVATIONS SHOWN ON THE TOPOGRAPHIC MAP, WERE DEVELOPED BY COMPUTER INTERPOLATION FROM THOSE SPOT ELEVATIONS. PRIOR TO DISTURBING ORIGINAL GRADE, A LICENSED SURVEYOR SHALL VERIFY THE ACCURACY OF THE EXISTING GROUND SURFACE BY VERIFYING SPOT ELEVATIONS AT THE SAME LOCATIONS WHERE ORIGINAL FIELD SURVEY DATA WAS OBTAINED AS INDICATED ON THE TOPOGRAPHIC MAP. FOR THIS PURPOSE, THE RPR WILL PROVIDE THE CONTRACTOR WITH A 3D CADD FILE OF THE TOPOGRAPHIC SURVEY. SURVEYOR SHALL RECOGNIZE THAT, DUE TO THE INTERPOLATION PROCESS, THE ACTUAL GROUND SURFACE AT ANY PARTICULAR LOCATION MAY DIFFER SOMEWHAT FROM THE INTERPOLATED SURFACE SHOWN ON THE DESIGN CROSS SECTIONS OR OBTAINED FROM THE SURFACE FILES. SURVEYOR'S VERIFICATION OF ORIGINAL GROUND SURFACE, HOWEVER, SHALL BE LIMITED TO VERIFICATION OF SPOT ELEVATIONS AS INDICATED HEREIN, AND NO ADJUSTMENTS WILL BE MADE TO THE ORIGINAL GROUND SURFACE UNLESS THE SURVEYOR DEMONSTRATES THAT SPOT ELEVATIONS SHOWN ARE INCORRECT. FOR THIS PURPOSE, SPOT ELEVATIONS WHICH ARE WITHIN 0.1 FOOT OF THE STATED ELEVATIONS FOR GROUND SURFACES, OR WITHIN 0.02 FOOT FOR HARD SURFACES (PAVEMENTS, BUILDINGS, FOUNDATIONS, STRUCTURES, ETC.) SHALL BE CONSIDERED "NO CHANGE", ONLY DEVIATIONS IN EXCESS OF THESE WILL BE CONSIDERED FOR ADJUSTMENT OF THE ORIGINAL GROUND SURFACE. IF SURVEYOR'S VERIFICATION IDENTIFIES DISCREPANCIES IN THE TOPOGRAPHIC MAP, CONTRACTOR SHALL NOTIFY RPR IN WRITING AT LEAST TWO WEEKS BEFORE DISTURBANCE OF EXISTING GRADE TO ALLOW SUFFICIENT TIME TO VERIFY THE SUBMITTED INFORMATION AND MAKE ADJUSTMENTS TO THE DESIGN CROSS SECTIONS OR SURFACE FILES. DISTURBANCE OF EXISTING GRADE IN ANY AREA SHALL CONSTITUTE ACCEPTANCE BY THE CONTRACTOR OF THE ACCURACY OF THE ORIGINAL ELEVATIONS SHOWN ON THE TOPOGRAPHIC MAP FOR THAT AREA.

THE CONTRACTOR'S SURVEY SHALL NOT EXCEED THE FOLLOWING:

• ERROR OF HORIZONTAL CLOSURE IN FEET SHALL NOT EXCEED 1 FOOT/5,000 FEET

• ERROR OF VERTICAL CLOSURE IN FEET SHALL NOT EXCEED (0.05 FEET)/(BENCH RUN LENGTH IN MILES)1/2

A POINT DATA FILE OF THE CONTRACTOR'S VERIFICATION OF ORIGINAL GROUND SURFACE SHALL BE PROVIDED IN ELECTRONIC FORMAT ALONG WITH A PRINTED HARD COPY. THE POINT DATA SHALL BE SUPPLIED IN ONE ASCII FILE CONTAINING POINT NUMBER, NORTHING, EASTING, ELEVATION AND DESCRIPTOR. THE DATA SHALL BE LEFT JUSTIFIED COLUMNS SEPARATED BY COMMAS WITH DECIMAL POINTS, BUT NO SLASHES, COLONS AND/OR OTHER SEPARATORS.

51. AUTOMATED STAKEOUT AND AUTOMATED MACHINE GUIDANCE OPERATIONS, SHOULD THE CONTRACTOR CHOOSE AUTOMATED METHODS FOR THE ESTABLISHMENT, LAYOUT, MEASUREMENT, EQUIPMENT GUIDANCE OR VERIFICATION OF WORK TO BE CONSTRUCTED, THEY SHALL SUBMIT THEIR PROPOSED AUTOMATED METHODS INCLUDING QUALITY CONTROL MEASURES AS PART OF THEIR CONTRACT CONTROL PLAN FOR ACCEPTANCE BY THE RPR. WHEN UTILIZING THESE METHODS, ALL HORIZONTAL AND VERTICAL SURVEY CONTROL, ROADWAY ALIGNMENT CONTROL AND EXISTING TERRAIN DATA SHALL BE SHARED/EXCHANGED ELECTRONICALLY AND KEPT CURRENT BETWEEN THE CONTRACTOR AND THE RPR. ALL ORIGINAL VERSION FILES OF ELECTRONIC CONTRACT DATA SHALL BE MAINTAINED AND STORED BY THE RPR.

PRIOR TO BEGINNING FIELD OPERATIONS, THE CONTRACTOR AND RPR SHALL MUTUALLY DETERMINE ACCEPTABLE USES OF AND PROCEDURES FOR THE TECHNOLOGY BEING USED, AND HOW DATA CAN BE EXCHANGED FOR USE IN STAKEOUT, AUTOMATED MACHINE OPERATIONS, POSITIONAL VERIFICATION, QUANTITY MEASUREMENTS AND CALCULATIONS. ALL RECORD COPIES OF SURVEY AND STAKEOUT DATA SHALL BE STORED AND SHARED IN RPR ACCEPTED STANDARD FORMATS, AND SHALL BE DERIVED PRIMARILY FROM THE ORIGINAL ELECTRONIC DATA, WHEN PROVIDED BY THE RPR.

AUTOMATED SURVEY OPERATIONS HAVE A HIGH RELIANCE ON ACCURATE CONTROL NETWORKS FROM WHICH TO MAKE MEASUREMENTS, ESTABLISH POSITIONS, AND VERIFY GEOSPATIAL LOCATIONS OF FEATURES. THEREFORE, A STRONG CONTRACT CONTROL NETWORK IN THE FIELD WHICH IS CONSISTENT WITH THE PROJECT CONTROL USED DURING THE DESIGN OF THE CONTRACT IS ESSENTIAL TO THE SUCCESSFUL USE OF THESE TECHNOLOGIES WITH THE PROPOSED DIGITAL TERRAIN MODEL AND ALIGNMENTS. CONSISTENT AND WELL-DESIGNED SITE CALIBRATION (LOCALIZATION) FOR ALL AUTOMATED MACHINE GUIDANCE, IS REQUIRED TO ENSURE THE QUALITY OF THE CONTRACT DELIVERABLES. THE CONTRACTOR SHALL DOCUMENT WHICH LOCAL HORIZONTAL AND VERTICAL CONTROL WILL BE WILL BE USED FOR CALIBRATION DURING CONSTRUCTION OPERATIONS AND HOW THAT CALIBRATION OR ADJUSTMENT WILL BE MAINTAINED ALONG THE ENTIRE CONTRACT LENGTH. CONTINUED INCORPORATION OF CORS NETWORK IS ESSENTIAL TO MAINTAINING THE INTEGRITY OF POSITIONAL LOCATIONS AND ELEVATIONS OF FEATURES.

THE RPR MAY PERFORM QUALITY ASSURANCE VERIFICATIONS OF FEATURE POSITIONS AT ANY TIME DURING THE CONTRACT. DIMENSIONAL TOLERANCES SHALL HOLD A HIGHER ORDER OF PRECEDENCE THAN POSITIONAL TOLERANCES, BUT BOTH MAY REQUIRE VERIFICATION. QUALITY ASSURANCE ACTIVITIES BY THE RPR WILL NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITIES FOR THE QUALITY CONTROL OF THE ACCURACY OR COMPLETENESS OF THE WORK.



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TAXILANE L CONSTRUCTION  
GERALD R. FORD INTERNATIONAL  
AIRPORT GRAND RAPIDS, MI

	09/04/2025	ADDENDUM NO. 2
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: K19.025.001		
DATE: AUGUST 2025		
DRAWN BY: B. COOK		
DESIGNED BY: T.J. CORCORAN		
CHECKED BY: K.J. JOST		
CONTRACTOR SHALL VERIFY ALL CONDITIONS ON JOB SITE & NOTIFY THE OWNER OF ANY VARIATIONS FROM DIMENSIONS SHOWN ON THESE DRAWINGS BEFORE PROCEEDING WITH ANY CONSTRUCTION.		
GENERAL NOTES		
GI002		
SHEET NO. 2 OF 36		

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ITEM NO	SPEC	DESCRIPTION	QUANTITY	QUANTITY	QUANTITY	UNITS
			SCHEDULE 1*	SCHEDULE 2*	GRAND	
1	C-100	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	1	-	1	LS
2	C-102	INSTALLATION AND REMOVAL OF STORM DRAIN INLET PROTECTION	6	-	6	EA
3	C-102	INSTALLATION AND REMOVAL OF SILT FENCE	8,200	-	8,200	LF
4	C-102	INSTALLATION AND REMOVAL OF STABILIZED CONSTRUCTION ENTRANCE	2	-	2	EACH
5	C-105	MOBILIZATION (10% MAX.)	1	-	1	LS
6	C-105	FIELD OFFICE	1	-	1	LS
7	C-105	FIELD OFFICE EQUIPMENT	1	-	1	LS
8	CX-106	SAFETY, SECURITY AND MAINTENANCE OF TRAFFIC	1	-	1	LS
9	CX-106	INSTALLATION AND REMOVAL OF TEMPORARY FENCE ON CONCRETE BARRIER	1,270	-	1,270	LF
10	CX-106	TEMPORARY HAUL ROUTE	360	-	360	SY
△ 11	P-101	CONCRETE PAVEMENT REMOVAL	400	-	400	SY
12	P-101	ASPHALT PAVEMENT REMOVAL	5,000	-	5,000	SY
13	P-101	REMOVAL OF PIPE ALL TYPES AND SIZES	660	-	660	LF
14	P-101	REMOVAL OF STRUCTURE	3	-	3	EACH
15	P-101	REMOVAL OF WATER MAIN	300	-	300	LF
16	P-101	REMOVAL OF LIGHT POLE AND FOUNDATION	2	-	2	EACH
17	P-101	SPALL REPAIR	50	-	50	SF
18	P-152	UNCLASSIFIED EXCAVATION	13,600	1,300	14,900	CY
19	P-152	BORROW EXCAVATION (OBTAINED ONSITE)	14,600	-	14,600	CY
20	P-152	BORROW EXCAVATION (OBTAINED OFFSITE)	14,600	-	14,600	CY
21	P-154	SUBBASE COURSE	6,600	1,200	7,800	CY
22	P-209	CRUSHED AGGREGATE BASE COURSE	4,200	900	5,100	CY
23	P-304	CEMENT-TREATED BASE COURSE (6")	11600	5,200	16,800	SY
△ 24	P-501	CONCRETE PAVEMENT (15")	3,900	3,200	7,100	CY
25	P-501	CONCRETE PAVEMENT (10")	230	-	230	CY
26	P-620	MARKING	18,100	-	18,100	SF
27	P-620	MARKING REMOVAL	4,800	-	4,800	SF
28	P-620	REFLECTIVE MEDIA	460	-	460	LB
29	D-701	36 INCH RCP CLASS IV	280	-	280	LF
30	D-701	30 INCH RCP CLASS IV	300	-	300	LF
31	D-705	6 INCH PERFORATED SMOOTH INTERIOR CORRUGATED PVC COMPLETE, INCLUDING POROUS BACKFILL AND FILTER FABRIC	3,900	-	3,900	LF
32	D-705	6 INCH NON-PERFORATED SMOOTH INTERIOR CORRUGATED PVC COMPLETE, INCLUDING POROUS BACKFILL AND FILTER FABRIC	420	-	420	LF
33	D-751	CLEANOUTS	17	-	17	EACH
34	D-751	CATCH BASINS	3	-	3	EACH
35	D-751	MODIFICATION OF EXISTING STRUCTURE	1	-	1	EACH
36	DX-800	SOFT DIGS	3	-	3	DAYS
37	F-162	REMOVE FENCE AND GATE	630	-	630	LF
38	F-162	CHAIN-LINK FENCE	3,800	-	3,800	LF
39	L-110	FIBER OPTIC CABLE AND CONDUIT LOWERING	220	-	220	LF
40	L-115	ELECTRICAL HANDHOLE	1	-	1	EA
41	L-115	ADJUST ELECTRICAL STRUCTURE TO GRADE	2	-	2	EA
42	L-125	REMOVE TAXIWAY EDGE LIGHT	8	-	8	EA
43	L-125	REMOVE TAXIWAY GUIDANCE SIGN	1	-	1	EA
44	L-125	RETROREFLECTIVE MARKER	21	-	21	EACH
45	L-125	TAXIWAY GUIDANCE SIGN	2	-	2	EACH
46	L-125	TAXIWAY ENDING MARKER	1	-	1	EACH
47	L-125	STAKE MOUNTED GUIDANCE SIGN	4	-	4	EACH
48	T-901	SEEDING	17	-	17	ACRE
49	T-905	TOPSOIL (OBTAINED ONSITE OR REMOVED FROM STOCKPILE)	13,000	-	13,000	CY
50	T-908	MULCHING	17	-	17	ACRE
51	4.3.001	WATER MAIN, RESTRAINED DI, CL56 12 INCH	300	-	300	LF
52	4.3.013	VALVE AND BOX 12 INCH	4	-	4	EACH
53	4.3.018	TEE 12 INCH BY 12 INCH BY 12 INCH	2	-	2	EACH
54	4.3.021	HORIZONTAL BEND 45 DEGREE 12 INCH	4	-	4	EACH
55	4.3.021	VERTICAL BEND 45 DEGREE 12 INCH	4	-	4	EACH
56	4.3.023	PLUG, 12 INCH	2	-	2	EACH
LOCALLY FUNDED ADD-ON NO. 1						
1	C-105	MOBILIZATION (6% MAX.)	-	1	1	LS
2	CX-106	SAFETY, SECURITY AND MAINTENANCE OF TRAFFIC	-	1	1	LS
△ 3	P-101	CONCRETE PAVEMENT REMOVAL	-	2,100	2,100	SY
4	P-101	SPALL REPAIR	-	100	100	SF
5	P-101	REMOVAL OF PIPE ALL TYPES AND SIZES	-	150	150	LF
6	P-152	UNCLASSIFIED EXCAVATION	-	800	800	CY
7	P-209	BASE COURSE	-	450	450	CY
8	P-304	CEMENT-TREATED BASE (10")	-	1,900	1,900	SY
△ 9	P-501	CEMENT CONCRETE PAVEMENT (14")	-	770	770	CY
10	D-702	REMOVE SLOTTED PIPE DRAIN	-	570	570	LF
11	D-702	18 INCH SLOTTED PIPE DRAIN	-	490	490	LF
12	D-751	MODIFICATION OF EXISTING STRUCTURE	-	1	1	EACH
LOCALLY FUNDED ADD-ON NO. 2						
1	C-105	MOBILIZATION (6% MAX.)	-	1	1	LS
2	CX-106	SAFETY, SECURITY AND MAINTENANCE OF TRAFFIC	-	1	1	LS
3	P-101	CONCRETE PAVEMENT REMOVAL	-	650	650	SY
4	P-101	SPALL REPAIR	-	100	100	SF
5	P-152	UNCLASSIFIED EXCAVATION	-	300	300	CY
6	P-209	BASE COURSE	-	150	150	CY
7	P-304	CEMENT TREATED BASE (10")	-	640	640	SY
8	P-501	CEMENT CONCRETE PAVEMENT (14")	-	250	250	CY
*AWARD OF CONTRACT WILL BE BASED UPON THE LOW BID OF TOTAL COST OF SCHEDULE 1. COSTS ARE BROKEN OUT INTO SCHEDULE 1 AND 2 FOR FUNDING REQUIREMENTS. BIDS WILL BE CHECKED FOR IRREGULARITIES AND IMBALANCES PER SECTION 20-09.						
A1						
QUANTITIES FOR CANVASS OF BID						
SCALE: NOT TO SCALE						



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TAXILANE L CONSTRUCTION  
GERALD R. FORD INTERNATIONAL  
AIRPORT GRAND RAPIDS, MI

△	09/04/2025	ADDENDUM NO. 2
△	08/29/2025	ADDENDUM NO. 1
MARK	DATE	DESCRIPTION

REVISIONS	
PROJECT NO:	K19.025.001
DATE:	AUGUST 2025
DRAWN BY:	B. COOK
DESIGNED BY:	T.J. CORCORAN
CHECKED BY:	K.J. JOST

CONTRACTOR SHALL VERIFY ALL CONDITIONS ON JOB SITE & NOTIFY THE OWNER OF ANY VARIATIONS FROM DIMENSIONS SHOWN ON THESE DRAWINGS BEFORE PROCEEDING WITH ANY CONSTRUCTION.

QUANTITIES FOR  
CANVASS OF BID

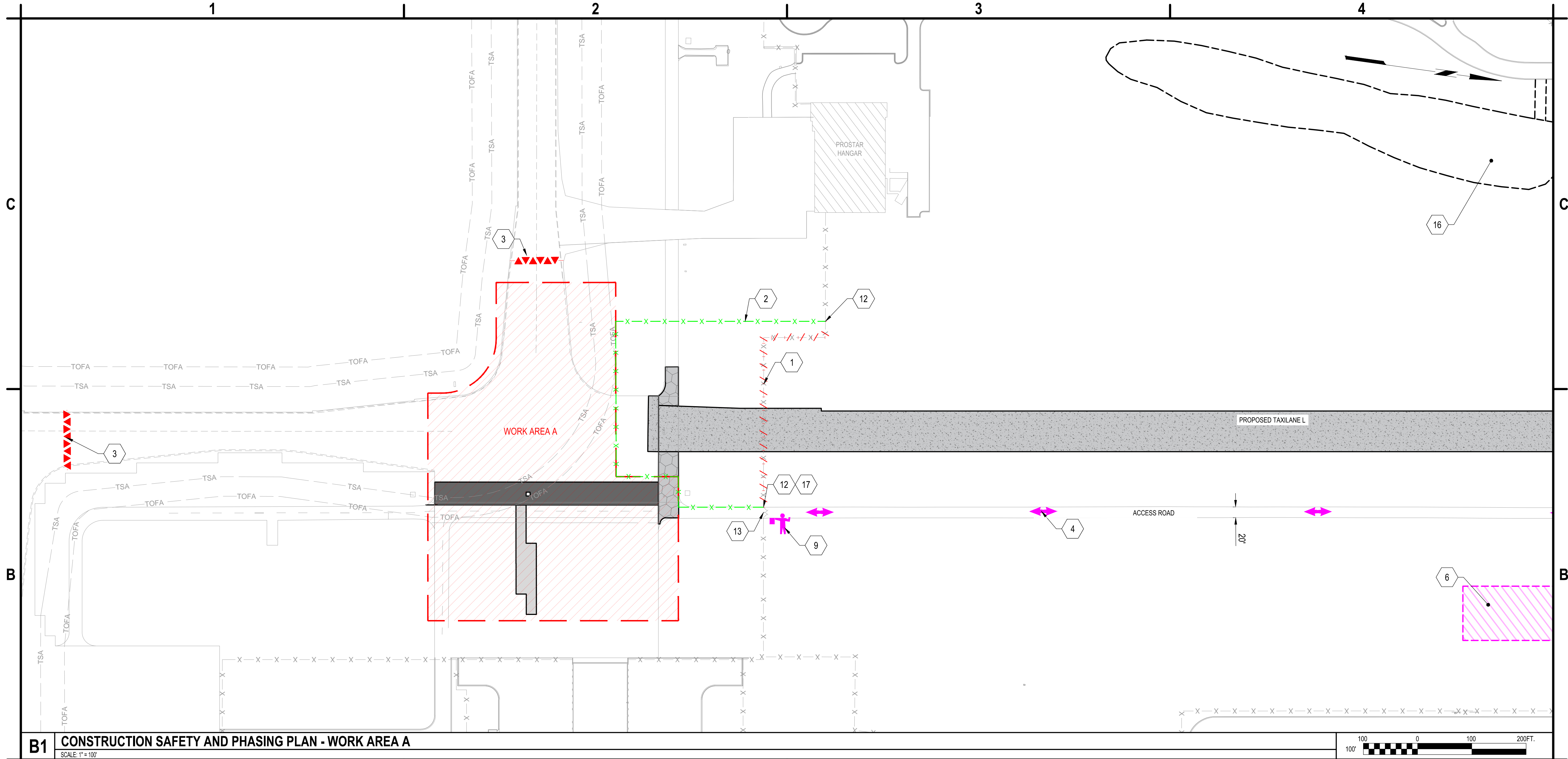
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SHEET NO. 4 OF 36

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**B1 CONSTRUCTION SAFETY AND PHASING PLAN - WORK AREA A**  
SCALE: 1" = 100'

1. REMOVE EXISTING AOA FENCE, ITEM F-162
2. INSTALL TEMPORARY FENCE ON CONCRETE BARRIER, ITEM CX-106, SEE DETAIL B1/GC501
3. INTERLOCKING AIRFIELD BARRIERS TO BE PROVIDED BY THE AIRPORT. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL AND MAINTAIN THEM THROUGHOUT THE DURATION OF THE PROJECT PER DETAIL A1/GC501
4. CONTRACTOR HAUL ROUTE
6. CONTRACTORS STAGING AREA
9. CONTRACTOR PROVIDED GATE GUARD AT GATE 79 (ONLY REQUIRED DURING CONSTRUCTION ON WORK AREA A)
12. TRANSITION EXISTING FENCE TO TEMPORARY FENCE ON CONCRETE BARRIER, ITEM CX-106, SEE DETAIL B1/GC501.
13. CONTRACTOR'S ACCESS TO WORK AREA A, GATE 72
16. BORROW AREA
17. LIMIT OF FENCE REMOVAL DURING WORK IN AREA A

- WORK AREA A
- CONTRACTOR STAGING AREA
- FIELD OFFICE LOCATION
- INTERLOCKING AIRFIELD BARRICADE
- TEMPORARY FENCE

**A1 KEYED NOTES AND LEGEND**  
SCALE: NOT TO SCALE

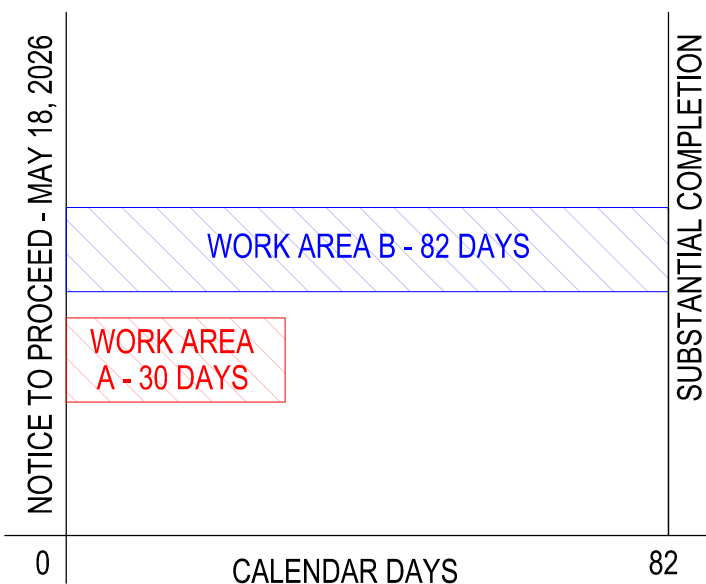
**NOTES:**

1. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 70, ATTACHMENT A - CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) OF THE GENERAL PROVISIONS.
2. CONTRACTOR SHALL PROVIDE ADEQUATE SIGNAGE FOR ALL CONSTRUCTION ENTRANCES AND HAUL ROUTES.
3. WHILE WORK IS OCCURRING IN WORK AREA A, THE CONTRACTOR SHALL POST A GATE GUARD AT THE GATE DURING ALL WORK HOURS TO MAINTAIN A SECURE AIRPORT PROPERTY.
4. FINAL SPOILS LOCATION SHALL BE COORDINATED WITH THE RPR AND OWNER. THE CONTRACTOR SHALL PROVIDE A SURVEY FILE AND PROPOSED GRADING PLAN OF THE PROPOSED SPOILS AREA 30 DAYS PRIOR TO CONSTRUCTION STARTING. GRADING OF THE SPOILS AREA SHALL BE CONSIDERED INCIDENTAL TO ITEMS P-152 AND T-905.

**A2 GENERAL NOTES**  
SCALE: NOT TO SCALE

ALLOWED CONSTRUCTION TIME (CALENDAR DAYS): 82

WORK AREA A: 30 CALENDAR DAYS  
WORK AREA B: 82 CALENDAR DAYS



**A3 CONSTRUCTION SEQUENCING**  
SCALE: NOT TO SCALE

**NOTES:**

1. WORK AREA A SHALL OCCUR CONCURRENTLY WITH WORK AREA B AND SHALL OCCUR WITHIN THE TOFA OF TAXIWAYS V AND L AND WILL RESULT IN TEMPORARY CLOSURES OF THE TAXIWAY PAVEMENTS. WORK SHALL CONSIST OF MARKING, ELECTRICAL MODIFICATION, AND ANY NECESSARY DRAINAGE, GRADING, AND PAVING ITEMS. WORK AREA A SHALL BE CONCURRENT WITH WORK AREA B AND IS LIMITED TO 30 CALENDAR DAYS.
2. WORK AREA B SHALL OCCUR OUTSIDE OF THE AOA TO MINIMIZE IMPACT ON AIRPORT OPERATIONS. WORK AREA B SHALL CONSIST OF THE EXCAVATION, GRADING, PAVING, AND MARKING OF TAXILANE L. THERE ARE NO ANTICIPATED CLOSURES TO AIRFIELD PAVEMENTS DURING CONSTRUCTION IN WORK AREA B. WORK AREA B IS LIMITED TO 82 CALENDAR DAYS.

**THIS PLAN IS TO BE  
PRINTED IN COLOR**



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**TAXILANE L CONSTRUCTION**  
**GERALD R. FORD INTERNATIONAL**  
**AIRPORT GRAND RAPIDS, MI**

2	09/04/2025	ADDENDUM NO. 2
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: K19.025.001		
DATE: AUGUST 2025		
DRAWN BY: B. COOK		
DESIGNED BY: T.J. CORCORAN		
CHECKED BY: K.J. JOST		
CONTRACTOR SHALL VERIFY ALL CONDITIONS ON JOB SITE & NOTIFY THE OWNER OF ANY VARIATIONS FROM DIMENSIONS SHOWN ON THESE DRAWINGS BEFORE PROCEEDING WITH ANY CONSTRUCTION.		

**CONSTRUCTION**  
**SAFETY AND**  
**PHASING PLAN -**  
**WORK AREA A**

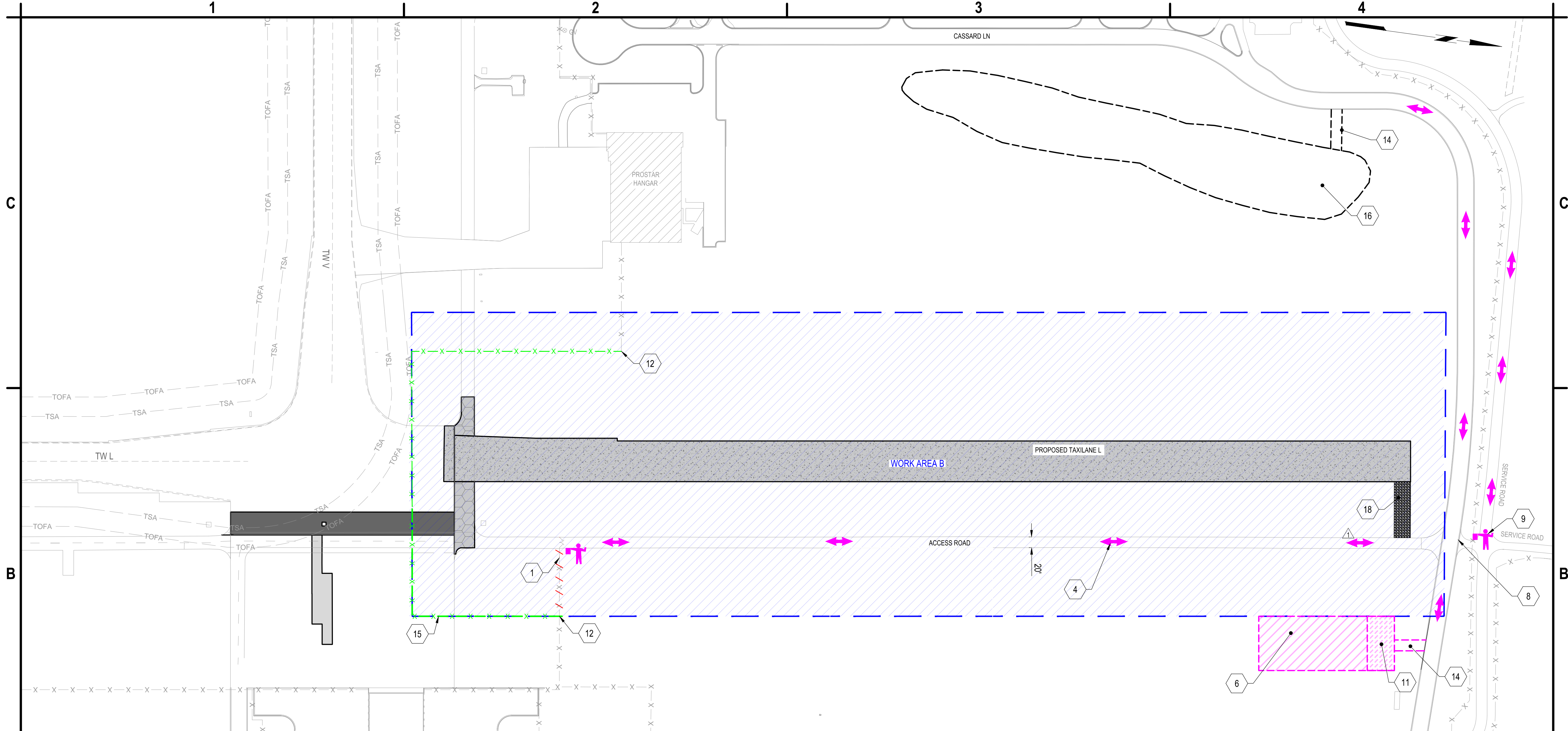
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SHEET NO. 7 OF 36

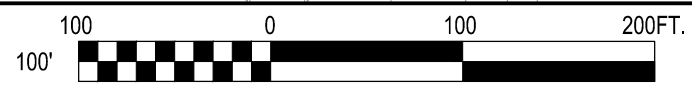
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Sep 05, 2025 - 10:48am  
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**B1** CONSTRUCTION SAFETY AND PHASING PLAN - WORK AREA B  
SCALE: 1" = 100'



1. REMOVE EXISTING AOA FENCE, ITEM F-162
4. CONTRACTOR HAUL ROUTE
6. CONTRACTORS STAGING AREA
8. CONTRACTOR'S ACCESS TO SPOILS LOCATION
9. CONTRACTOR PROVIDED GATE GUARD AT GATE 79 (ONLY REQUIRED DURING CONSTRUCTION ON WORK AREA A)
11. CONTRACTOR'S AND ENGINEERS FIELD OFFICE LOCATION
12. TRANSITION EXISTING FENCE TO TEMPORARY FENCE ON CONCRETE BARRIER, ITEM CX-106, SEE DETAIL B1/GC501.
14. STABILIZED CONSTRUCTION ENTRANCE, SEE DETAIL C3/GC501. CONTRACTOR SHALL PROVIDE RUBBER RAMP AT EXISTING CURB INCIDENTAL TO ITEM C-105
15. RELOCATE TEMPORARY FENCE ON CONCRETE BARRIER TO NEW LOCATION SHOWN ON PLANS. RELOCATION SHALL ONLY OCCUR AFTER WORK AREA A IS COMPLETE. MOVEMENT OF TEMPORARY FENCE SHALL BE INCIDENTAL TO ITEM CX-106.
16. BORROW AREA
18. TEMPORARY HAUL ROAD, SEE DETAIL A4/GC501

- WORK AREA B
- CONTRACTOR STAGING AREA
- FIELD OFFICE LOCATION
- TEMPORARY FENCE

**A1** KEYED NOTES AND LEGEND  
SCALE: NOT TO SCALE

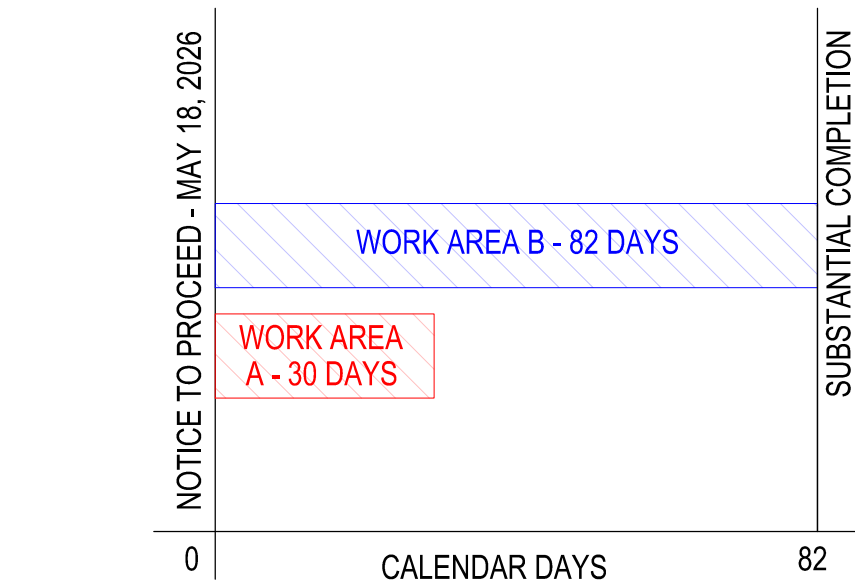
**NOTES:**

1. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 70, ATTACHMENT A - CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) OF THE GENERAL PROVISIONS.
2. CONTRACTOR SHALL PROVIDE ADEQUATE SIGNAGE FOR ALL CONSTRUCTION ENTRANCES AND HAUL ROUTES.
3. FINAL SPOILS LOCATION SHALL BE COORDINATED WITH THE RPR AND OWNER. THE CONTRACTOR SHALL PROVIDE A SURVEY FILE AND PROPOSED GRADING PLAN OF THE PROPOSED SPOILS AREA 30 DAYS PRIOR TO CONSTRUCTION STARTING. GRADING OF THE SPOILS AREA SHALL BE CONSIDERED INCIDENTAL TO ITEMS P-152 AND T-905.

**A2** GENERAL NOTES  
SCALE: NOT TO SCALE

ALLOWED CONSTRUCTION TIME (CALENDAR DAYS): 82

WORK AREA A: 30 CALENDAR DAYS  
WORK AREA B: 82 CALENDAR DAYS



**A3** CONSTRUCTION SEQUENCING  
SCALE: NOT TO SCALE

**NOTES**

1. WORK AREA A SHALL OCCUR CONCURRENTLY WITH WORK AREA B AND SHALL OCCUR WITHIN THE TOFA OF TAXIWAYS V AND L AND WILL RESULT IN TEMPORARY CLOSURES OF THE TAXIWAY PAVEMENTS. WORK SHALL CONSIST OF MARKING, ELECTRICAL MODIFICATION, AND ANY NECESSARY DRAINAGE, GRADING, AND PAVING ITEMS. WORK AREA A SHALL BE CONCURRENT WITH WORK AREA B AND IS LIMITED TO 30 CALENDAR DAYS.
2. WORK AREA B SHALL OCCUR OUTSIDE OF THE AOA TO MINIMIZE IMPACT ON AIRPORT OPERATIONS. WORK AREA B SHALL CONSIST OF THE EXCAVATION, GRADING, PAVING, AND MARKING OF TAXILANE L. THERE ARE NO ANTICIPATED CLOSURES TO AIRFIELD PAVEMENTS DURING CONSTRUCTION IN WORK AREA B. WORK AREA B IS LIMITED TO 82 CALENDAR DAYS.

**THIS PLAN IS TO BE  
PRINTED IN COLOR**



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**TAXILANE L CONSTRUCTION**  
**GERALD R. FORD INTERNATIONAL**  
**AIRPORT GRAND RAPIDS, MI**

	09/04/2025	ADDENDUM NO. 2
	08/29/2025	ADDENDUM NO. 1
MARK	DATE	DESCRIPTION

REVISIONS		
PROJECT NO: K19.025.001		
DATE: AUGUST 2025		
DRAWN BY: B. COOK		
DESIGNED BY: T.J. CORCORAN		
CHECKED BY: K.J. JOST		

CONTRACTOR SHALL VERIFY ALL CONDITIONS ON JOB SITE & NOTIFY THE OWNER OF ANY VARIATIONS FROM DIMENSIONS SHOWN ON THESE DRAWINGS BEFORE PROCEEDING WITH ANY CONSTRUCTION.

**CONSTRUCTION**  
**SAFETY AND**  
**PHASING PLAN -**  
**WORK AREA B**

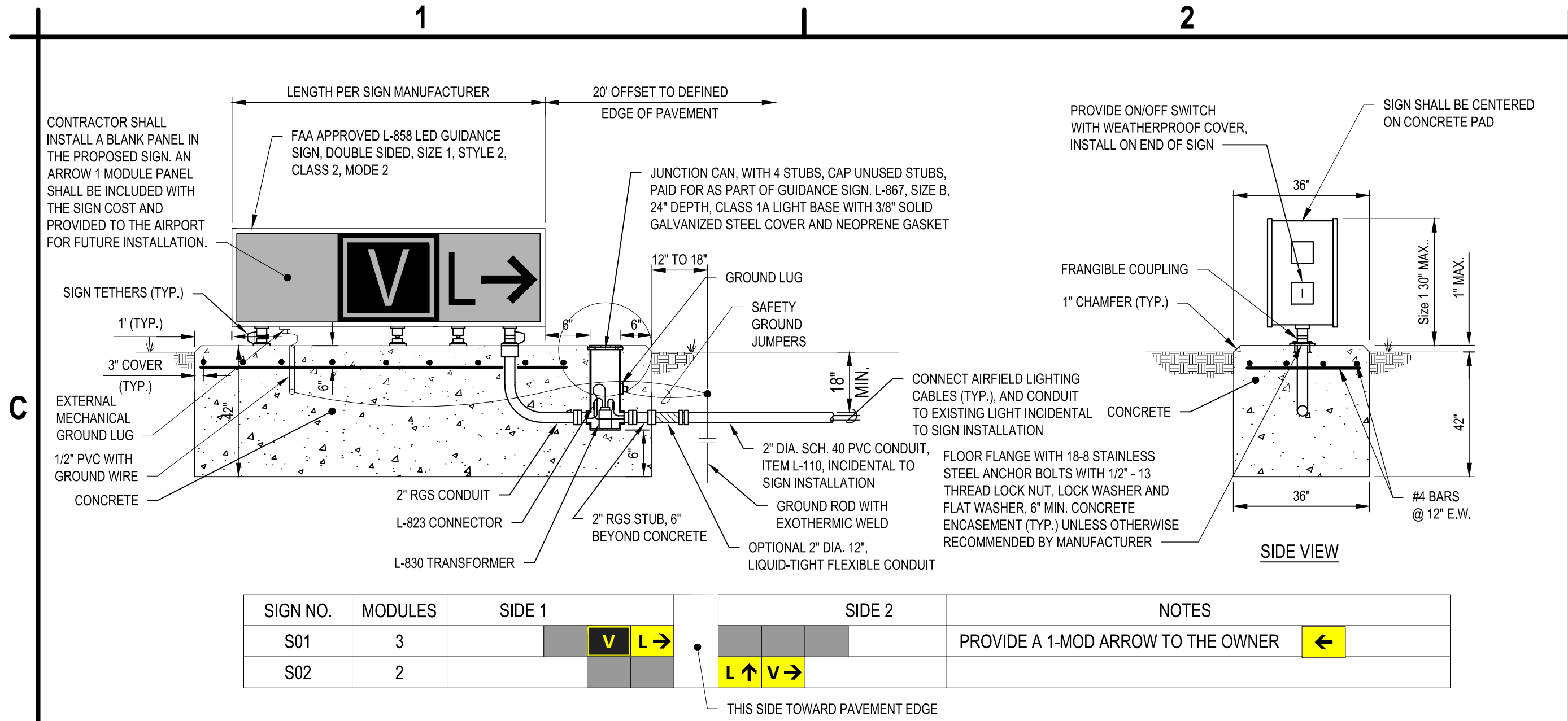
**GC102**

SHEET NO. 8 OF 36

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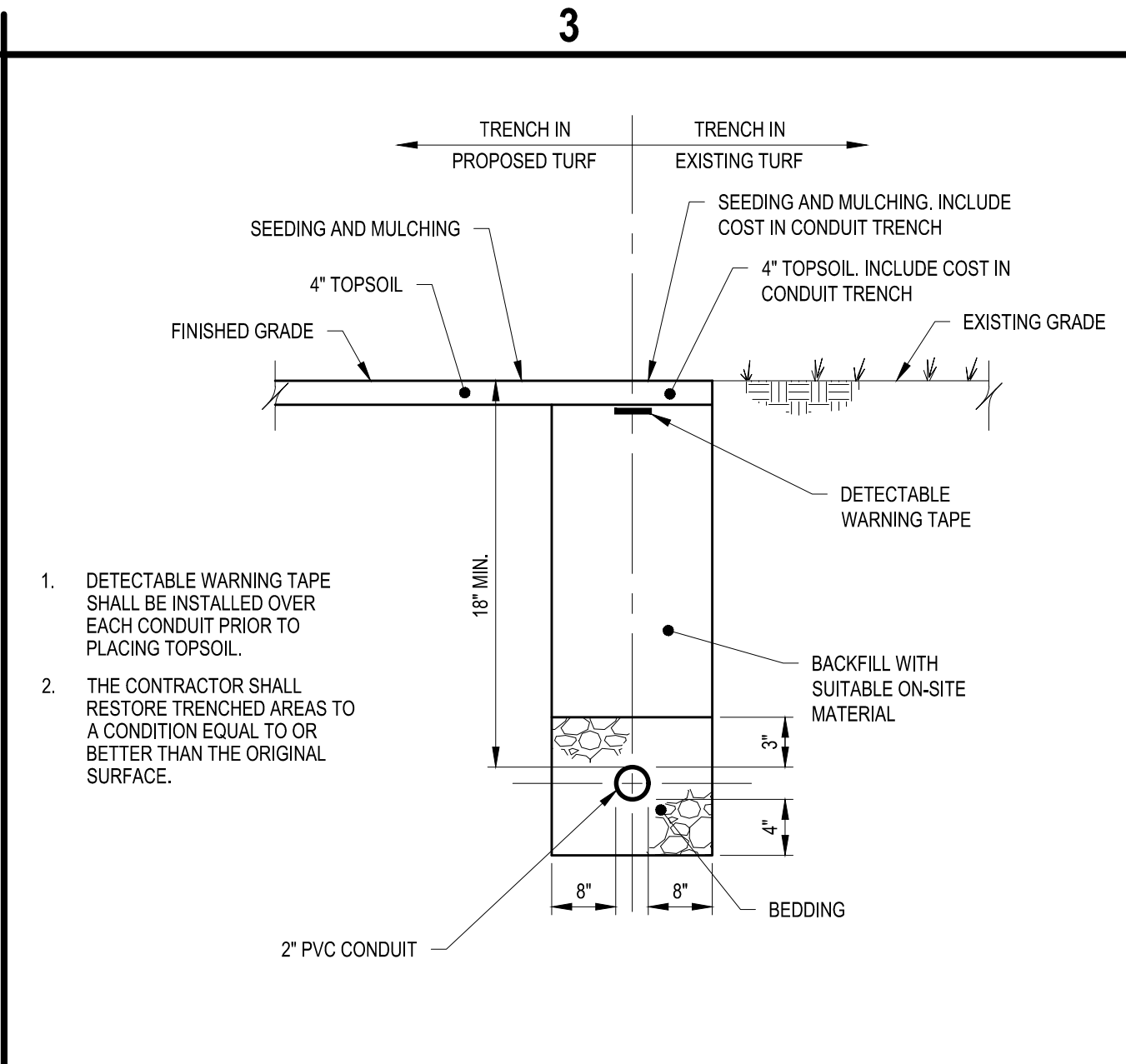


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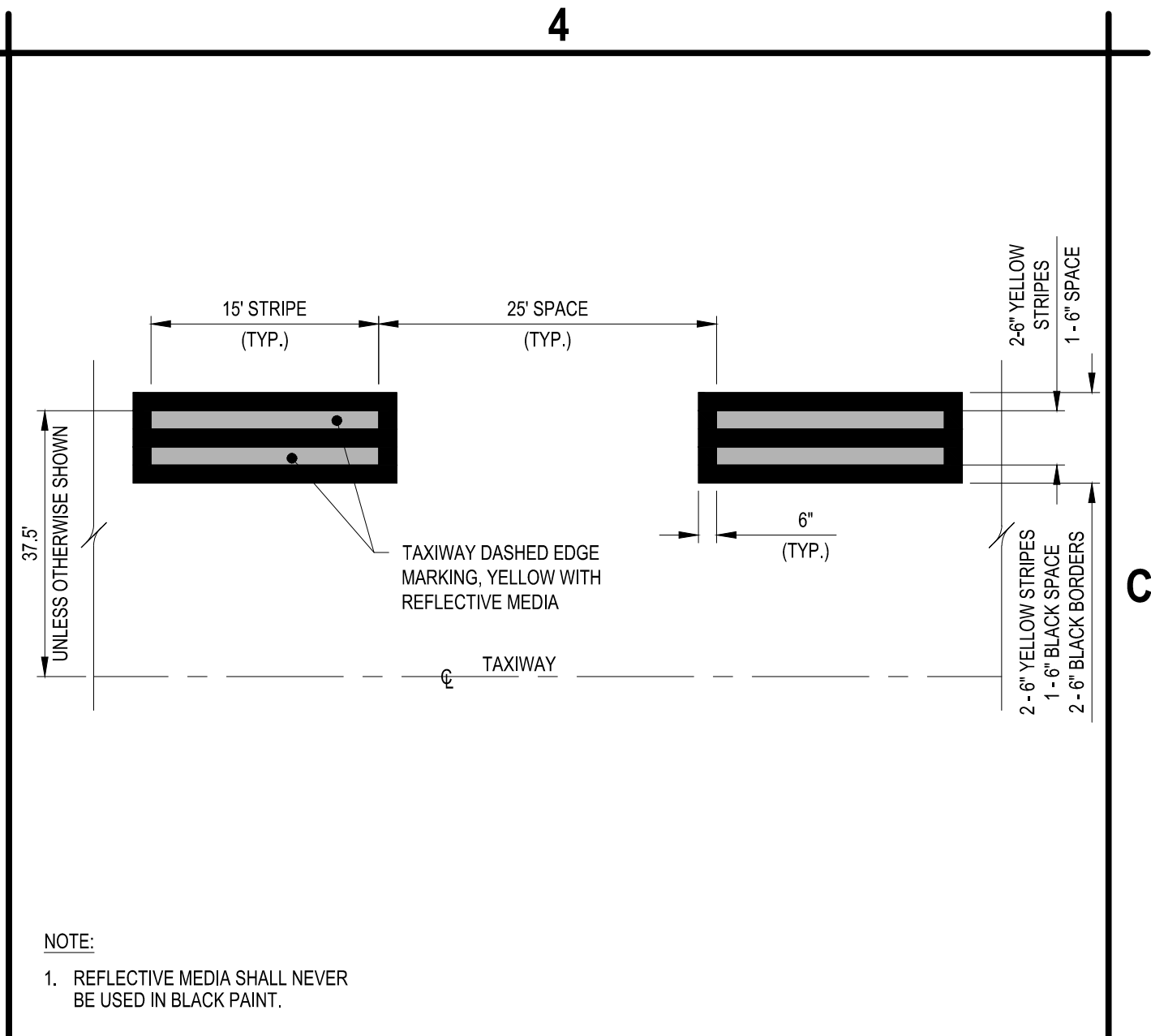
**C1** GUIDANCE SIGN DETAIL

SCALE: NOT TO SCALE



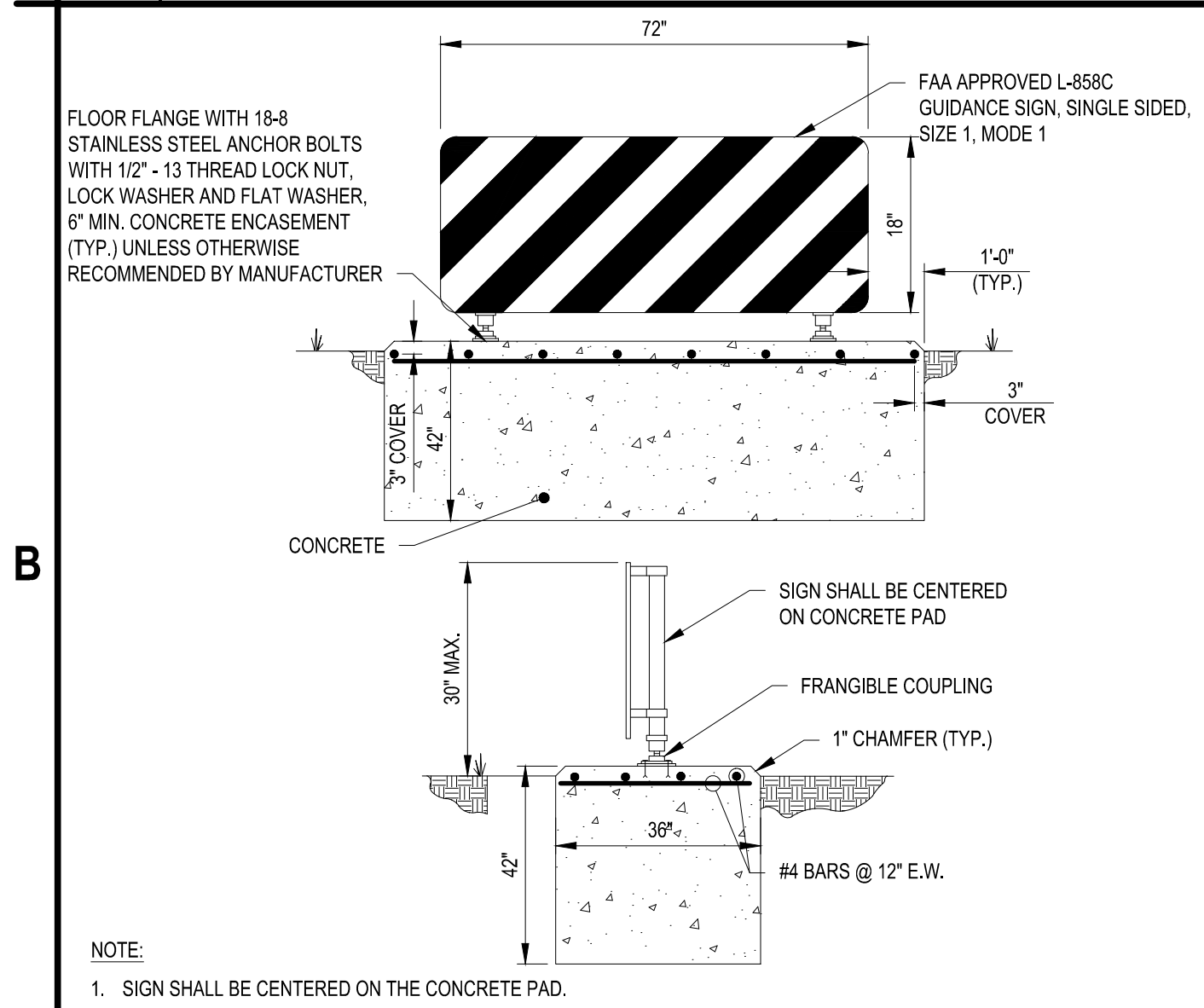
**C3** CONDUIT TRENCHING DETAIL (IN TURF)

SCALE: NOT TO SCALE



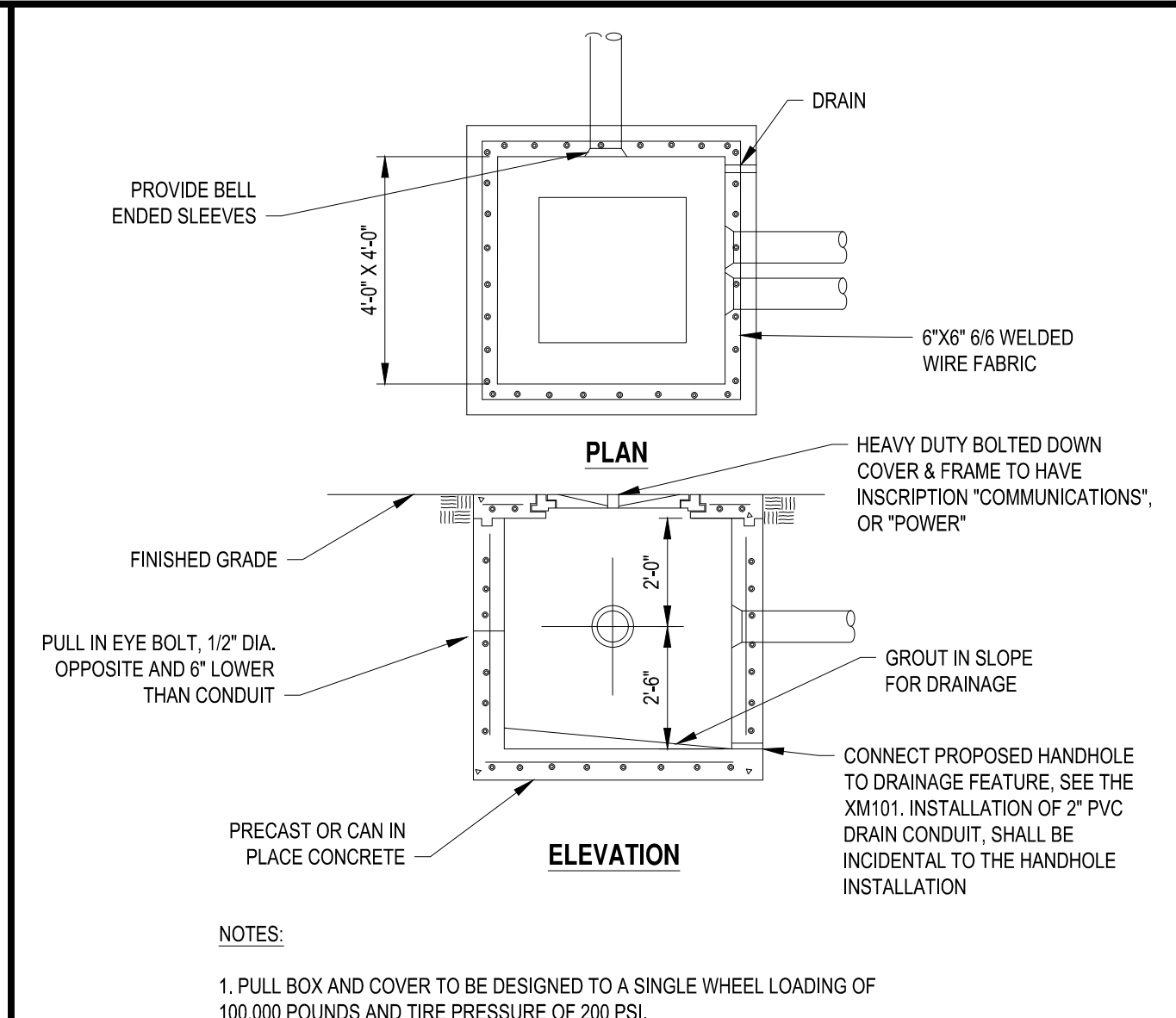
**C4** DASHED TAXIWAY EDGE MARKING DETAIL

SCALE: NOT TO SCALE



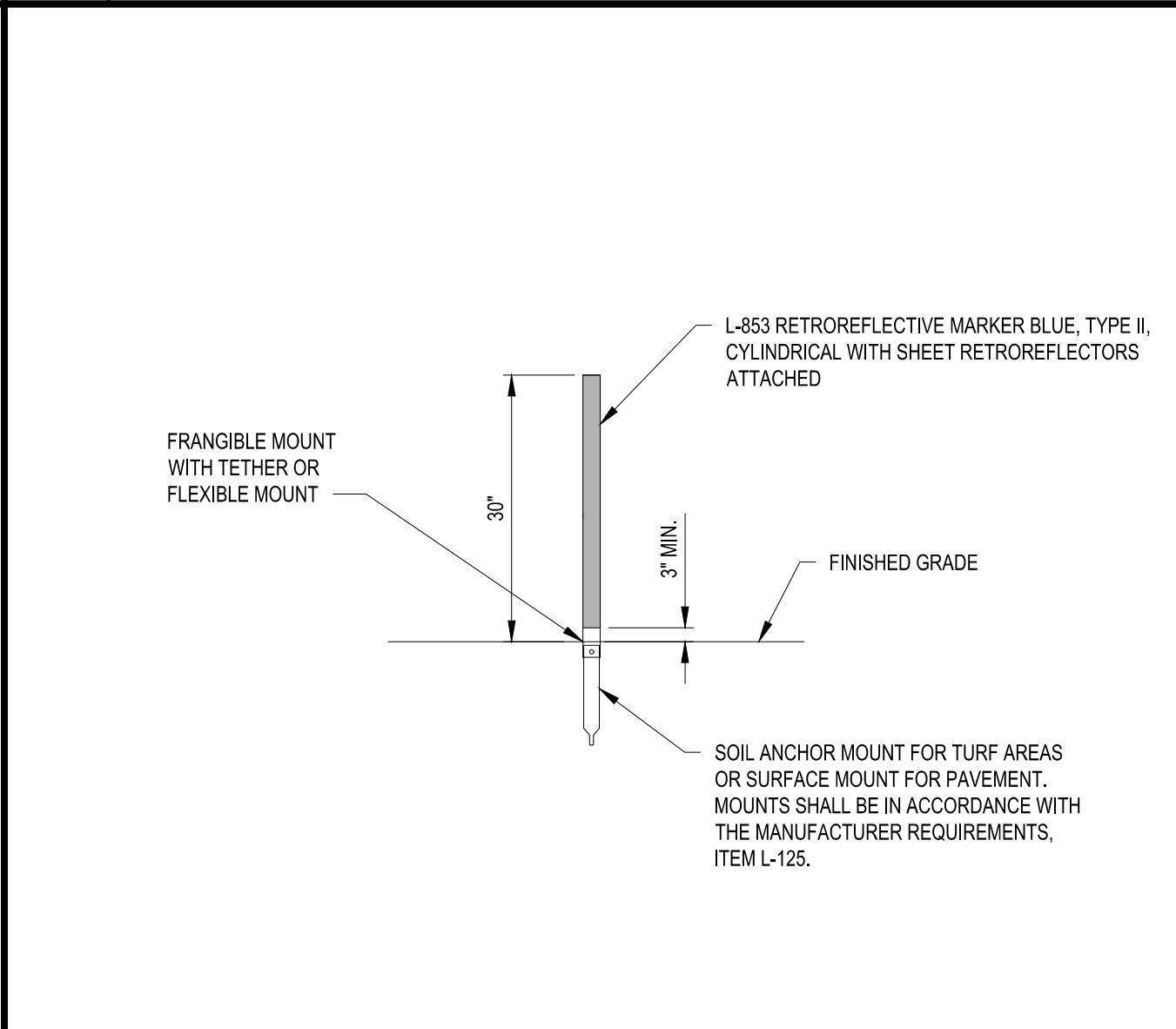
**B1** TAXIWAY ENDING MARKER SIGN DETAIL (UNLIGHTED)

SCALE: NOT TO SCALE



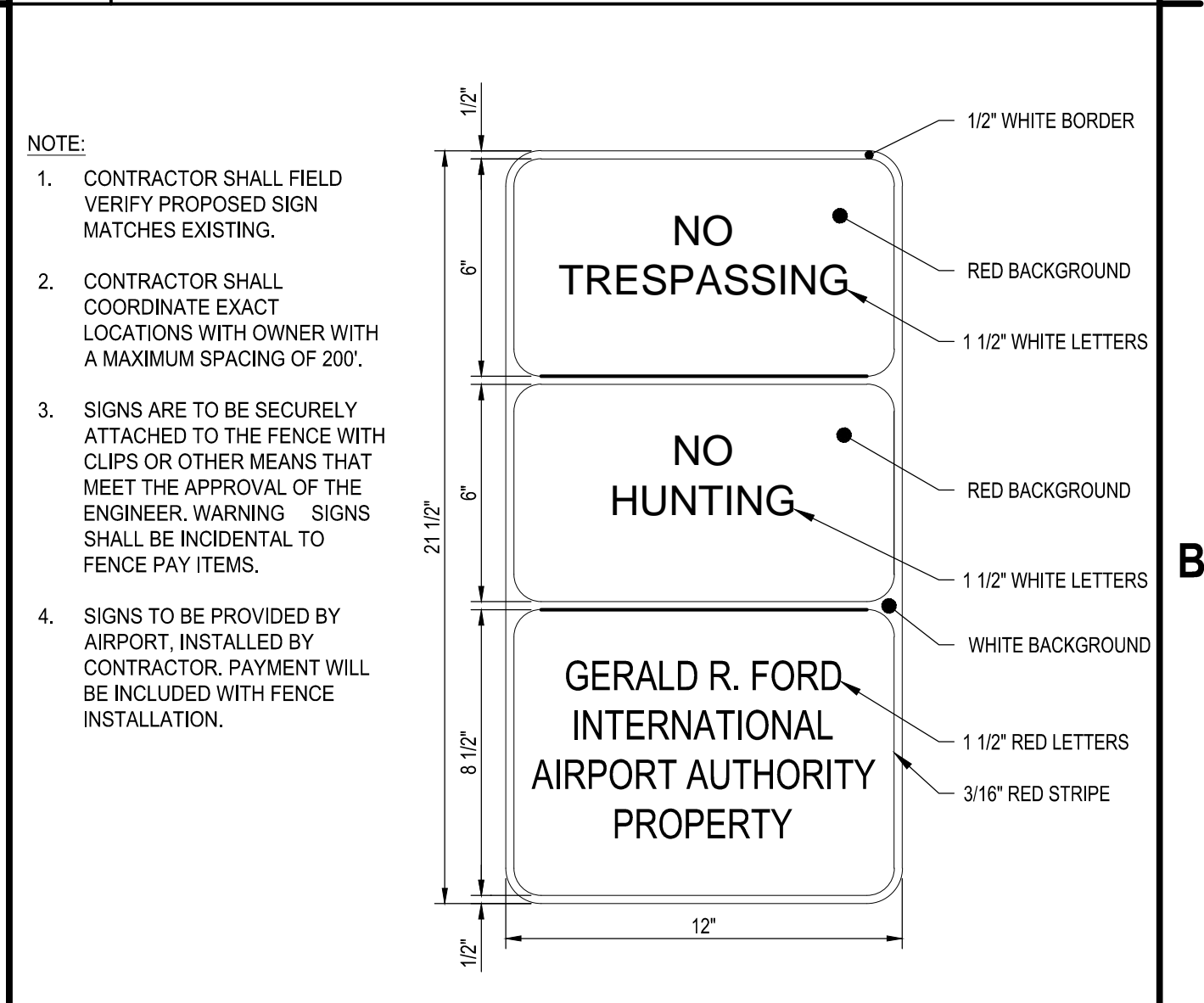
**B2** ELECTRICAL HAND HOLE DETAIL

SCALE: NOT TO SCALE



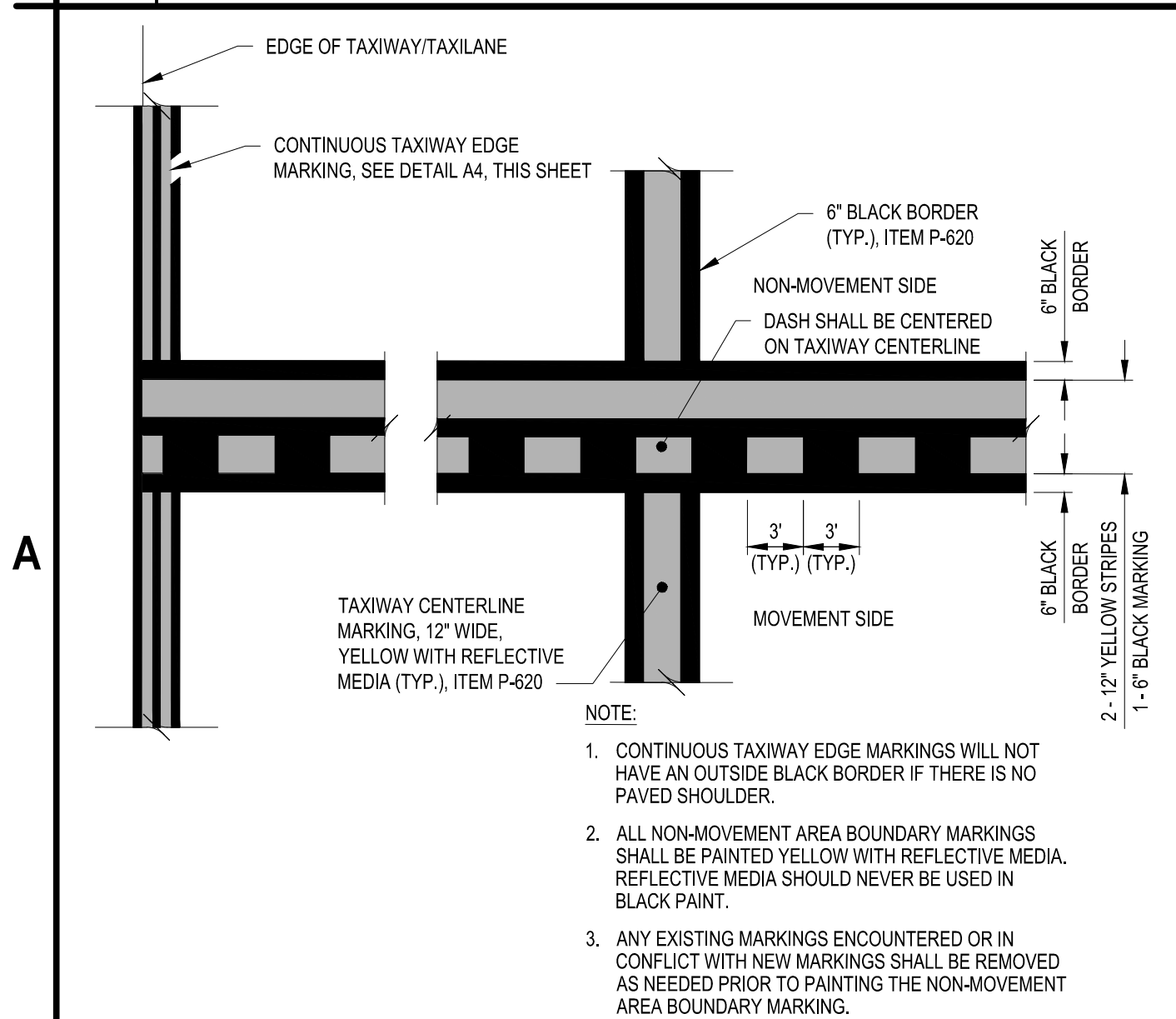
**B3** RETROREFLECTIVE MARKER DETAIL

SCALE: NOT TO SCALE



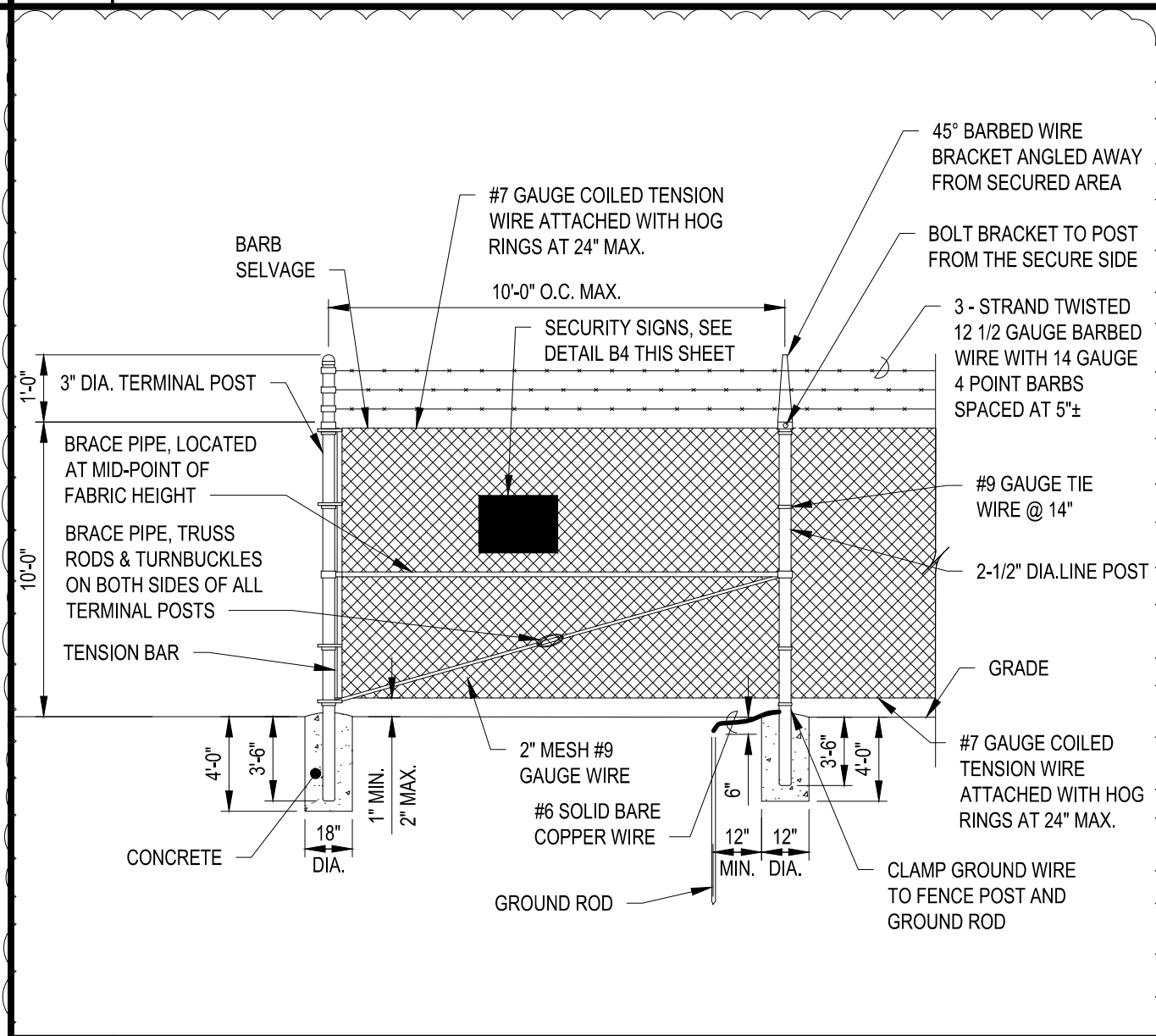
**B4** WARNING SIGN DETAIL

SCALE: NOT TO SCALE



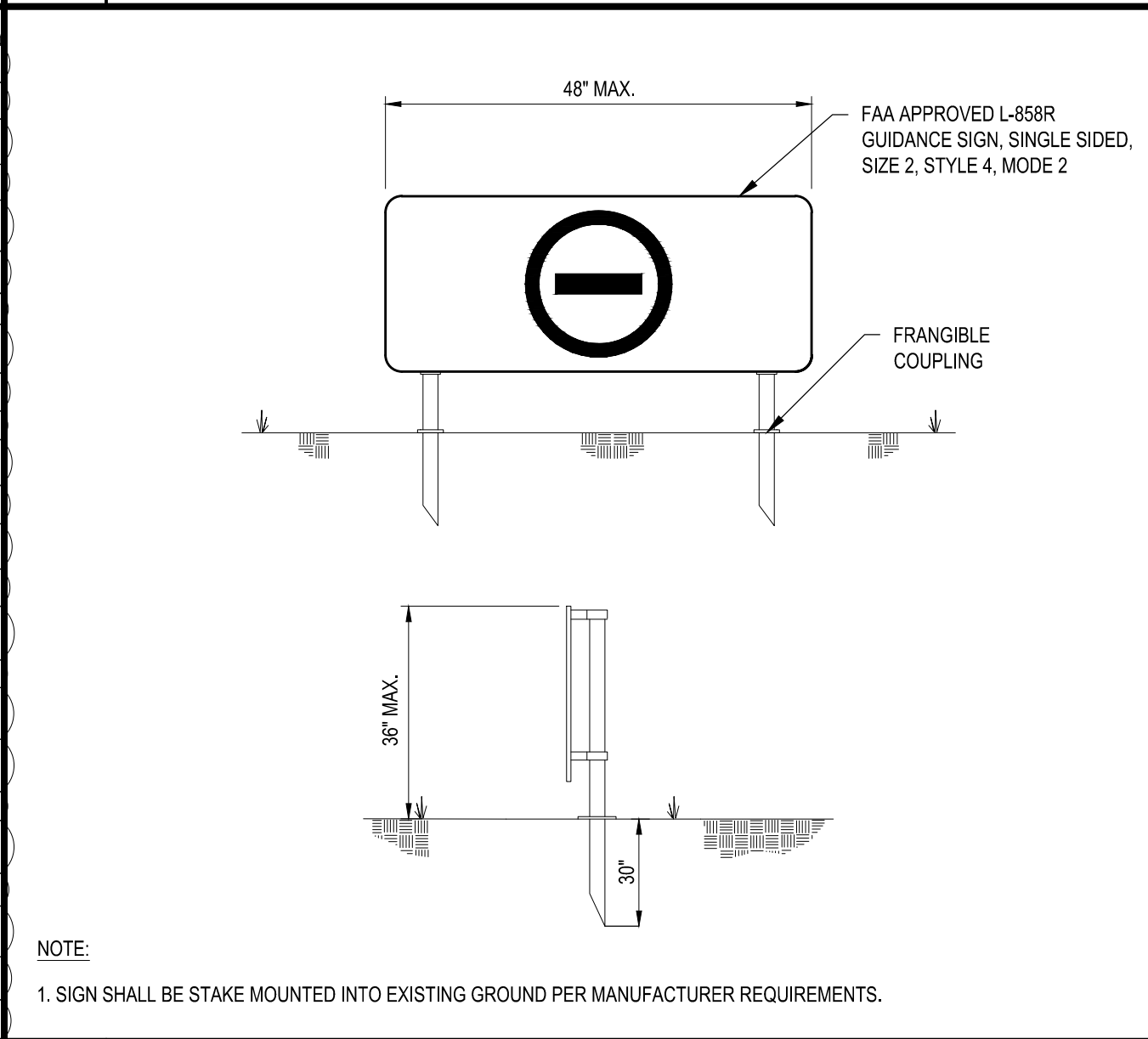
**A1** NON-MOVEMENT AREA BOUNDARY MARKING DETAIL

NOT TO SCALE



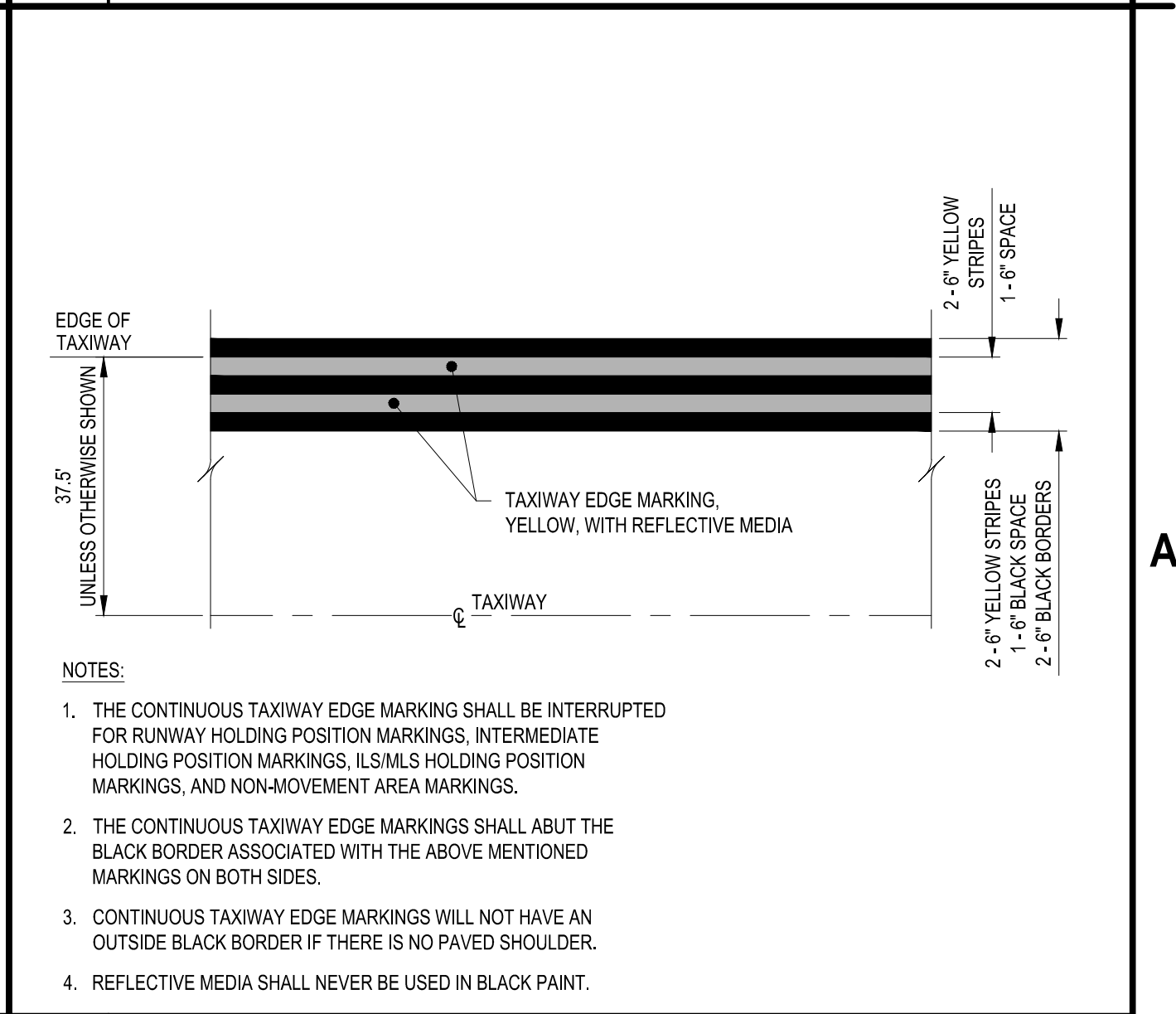
**A2** CHAIN-LINK FENCE DETAIL

SCALE: NOT TO SCALE



**A3** NO ENTRY SIGN ASSEMBLY DETAIL

SCALE: NOT TO SCALE



**A4** CONTINUOUS TAXIWAY EDGE MARKING DETAIL

SCALE: NOT TO SCALE



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**TAXILANE L CONSTRUCTION**

**GERALD R. FORD INTERNATIONAL AIRPORT GRAND RAPIDS, MI**

	09/04/2025	ADDENDUM NO. 2
	08/29/2025	ADDENDUM NO. 1
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: K19.025.001		
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**MARKING, FENCING, ELECTRICAL AND COMMUNICATION DETAILS**

**XM501**

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