



COMPLEX PROJECTS
REQUIRE RESOLVE
THRASHER'S GOT IT

**RALEIGH COUNTY AIRPORT AUTHORITY
RALEIGH COUNTY, WEST VIRGINIA**

TAXIWAY F

ADDENDUM #2

July 29, 2022

THRASHER PROJECT #080-10038

TO WHOM IT MAY CONCERN:

A Pre-Bid Conference was held on Thursday, July 21, 2022 on the above-referenced project. The following are clarifications and responses to questions posed by contractors for the above reference project.

A. GENERAL

1. **THE BID FORM HAS BEEN REVISED. YOU MUST USE THE REVISED BID FORM WHEN PREPARING YOUR BID PACKAGE FOR THIS PROJECT.**

B. SPECIFICATIONS

NONE

C. DRAWINGS

3 – Quantities
7 – Site Plan
7.1 – Stockpile Locations
22 - Details

D. QUESTIONS AND RESPONSES

QUESTION

1. Will burning be allowed within the airport fence?

RESPONSE

Yes, we would ask the Contractor to coordinate times of burning with the Airport. Contractor is responsible to still obtain all proper permits in respect to burning.

QUESTION

2. Where will the location of the excess material stockpile be located? Are there any excess material requirements since it will be used for fill on the industrial park project by others.

RESPONSE

Sheet 7.1 has been added to show the location of the stockpile areas for the project. There are no material requirements for the identified stockpile areas except for being clean of any trash, stumps, etc.

QUESTION

3. Will the access road from FedEx need to be put back to or better than the existing condition?

RESPONSE

The access road from Fedex will need to be returned to or better than the existing condition.

QUESTION

4. Will blasting be allowed within close proximity to the airport?

RESPONSE

Yes, blasting will be allowed. Contractor is responsible for obtaining all proper permits.

QUESTION

5. Is there a Funding Sign?

RESPONSE

No, there is no funding sign associated with this project.

QUESTION

6. Is there an Outlet Sign?

RESPONSE

No, outlet sign is required.

QUESTION

7. The Quality Control item does it contain any contractor soils testing or is Thrasher performing that?

RESPONSE

Thrasher will conduct compaction testing. Contractor will be required to complete proof-roll tests, if required, in the presence of the Thrasher RPR.

QUESTION

8. The 6" underdrain pipe our suppliers cannot find an outlet to supply this pipe based on the shown perf pattern. Can that pattern be modified to something more standard for SDR 35 pipe?

RESPONSE

Yes, the perforations can be adjusted for SDR35 that is more readily available.

QUESTION

9. The Retention System manifolds have to be built with 30" between each 60" pipe for strength. The detail shows 1' separation in each of the 60" runs of pipe. Can this be altered to 30"?

RESPONSE

Yes. Detail has been revised to show 30" separation.

QUESTION

10. Can the 60" retention pipe be perforated in the field to help prevent floating and to drain water from the stone backfill?

RESPONSE

No, the pipe cannot be perforated it is designed as a closed system.

QUESTION

11. Is there any zypex or other additives or coatings required for the Inlets?

RESPONSE

No.

QUESTION

12. Can the sub base layer and stone surface be the same material?

RESPONSE

The subbase layer is covered under spec section P-154. The stone surface or crushed aggregate is P-209 and each layer shall meet specification guidelines.

QUESTION

13. Can we get the Geotech Report?

RESPONSE

Yes, the Geotech Report can be provided. A Geotech Waiver is included in Addendum #1 and is required to be signed before the report can be shared.

QUESTION

14. Is Blasting allowed?

RESPONSE

Please refer to Addendum #2 – Question 4

QUESTION

15. The rock in this area is highly abrasive will there be any means to be compensated for ground engaging consumables such as teeth, bits and other items?

RESPONSE

There will be no separated bid item for this.

QUESTION

16. Will there be a fuel adjustment for the earthwork or paving items?

RESPONSE

No, the FAA General Provisions do not provide for compensation for fuel.

QUESTION

17. If the Taxiway starts prior to the site project can spoils be stockpiled on the site project?

RESPONSE

Please refer to Addendum #2 – Question 2

QUESTION

18. Will clearing and erosion control have to be done on the site project by the Taxiway contractor before stockpiling can begin?

RESPONSE

Clearing and Erosion control will have to be performed prior to placing stockpiled material. Sheet 7.1 has been added to show the location of the stockpiles.

QUESTION

19. Is burning allowed for clearing materials?

RESPONSE

Please refer to Addendum #2 – Question 1

QUESTION

20. Will contractor equipment require airport flagging?

RESPONSE

Vehicles shall comply with AC 150/5210-5 for all vehicles within the airport fence.

QUESTION

21. Will contractor be required to have airport radios?

RESPONSE

Yes, contractor shall have radios that can communicate with the Airport.

QUESTION

22. Is the fabric under the stone a separation fabric or a geogrid?

RESPONSE

The fabric under the stone is designed as a separation fabric.

QUESTION

23. Will undercut materials also be taken to the future site project?

RESPONSE

If material is identified as unsuitable it can be hauled to the stockpile locations identified on Plan Sheet 7.1.

QUESTION

24. The 6" underdrain outlets show a Tee then a 90 bend will a wye and 45 work?

RESPONSE

Yes, as long as the wye is connected so that water will drop vertically into the solid outlet pipe a wye and a 45 can be used.

QUESTION

25. The proposed underdrain outlet pipes show a slope wall can this be precast?

RESPONSE

Yes, this can be either precast or cast in place.

QUESTION

26. Is there a proposed topsoil stockpile area?

RESPONSE

Please refer to Addendum #2 – Question 2

QUESTION

27. Where will topsoil be placed on the finished project?

RESPONSE

Any areas that are disturbed within the LOD that is outside of the taxiway pavement.

QUESTION

28. Is belted silt fence required on WVDOH type silt fence?

RESPONSE

No, belted silt fence is not required.

QUESTION

29. The matting for slopes and matting for ditches the same type matting?

RESPONSE

Matting is only required in the ditches.

QUESTION

30. Will BM's and control be established for the contractor?

RESPONSE

Project controls will be established all other items will be at the responsibility of the contractor.

QUESTION

31. Will a layout item be added?

RESPONSE

No direct payment will be made. The cost shall be included in the price of the bid for the various items of the Contract.

QUESTION

32. Is there a Field Office required for the Engineer?

RESPONSE

No, a field office is not required for the Engineer.

QUESTION

33. Is there a retainage for the project?

RESPONSE

Yes 10% retainage will be applied to the project.

QUESTION

34. When would the project Notice to Proceed be issued?

RESPONSE

Bids are to be held for 90 days. We expect to award after we receive FAA review and approval of bids.

QUESTION

35. Will electronic drawings be given to the successful contractor?

RESPONSE

Yes, CAD files will be provided to the contractor with the winning bid prior to the start of the project. A CAD waiver must be signed prior to receiving the CAD files.

QUESTION

36. Do any other bid items have a limit besides mobilization?

RESPONSE

No.

QUESTION

37. Do the alternate unit prices have to match the base bid unit prices

RESPONSE

Yes, the deduct items have to match the base bid unit prices.

QUESTION

38. When will the Geotech report be available?

RESPONSE

The Geotech report is available upon request with a Geotech Waiver and will be provided once the Geotech waiver has been signed and returned.

QUESTION

39. Is there a place on site to get rid of unsuitable materials?

RESPONSE

Please refer to Addendum #2 – Question 2

QUESTION

40. In the plans and specifications there are references to electrical work such as L-108, L-110, L-115, and L-125. Where are we to carry the costs for this electrical and lighting work?

RESPONSE

An updated bid form has been added that includes line items for the electrical items.

QUESTION

41. There is also reference in the plans and specification for an underground detention system. Which pay item is this to be paid under?

RESPONSE

An updated bid form has been added to this addendum. Payment will be made under Item 33.

QUESTION

42. What are the specific permits will be required for the project?

RESPONSE

Only permits associated with burning or blasting are required by the contractor to obtain.

QUESTION

43. Where is the expected area of Unsuitable Excavation located and is it the intention to backfill "unsuitable" areas with earthen or granular material?

RESPONSE

We have assumed there may be unsuitable material in the area that is around the wetland as well as within the taxiway where existing millings are present. Yes, the intent would be to utilize excess material that is excavated from the site to be used as fill in these areas if they are encountered onsite.

QUESTION

44. What is the intention of the Topsoil item? Is this for stripping and stockpiling of topsoil or is this item for placing topsoil? Topsoil appears to be sparse. I also see language intending to match surrounding areas. Is it the intention of the contract to import off-site top soil?

RESPONSE

Topsoil line item has been removed. Topsoil removal has been accounted for in the unclassified excavation quantity. No, the intent is not to haul in additional topsoil. We want to try to re-use what is available onsite.

QUESTION

45. Is the CAD file going to be provided?

RESPONSE

The CAD file will be provided to the contractor that is awarded the project.

QUESTION

46. Is the unclassified line item to finish asphalt grade or does that number account for excavating to dirt subgrade?

RESPONSE

The unclassified line item does account for excavating the subgrade.

QUESTION

47. Is a black non-reflective border required for the new Taxiway F centerline?

RESPONSE

No, a black outline is not required for the new pavement portions of the construction of Taxiway F.

QUESTION

48. Would the re-striping of the enhanced box markings for hold position and existing centerlines per the note on Sheet 7 require the black border?

RESPONSE

Yes, a black outline is required for all new/replaced pavement marking on existing pavement for the construction of Taxiway F.

QUESTION

49. What item is the vegetated ditch incidental to? (Can an item be added for this?)

RESPONSE

The construction of the ditch including equipment, labor, and materials shall be paid for under items C-102 Collection Ditch. Matting should be made incidental to this unit price bid item. The Bid tab has been revised to state "Collection Ditch".

QUESTION

50. What item is the underground detention system incidental to? (Can an item be added for this?)

RESPONSE

Please refer to Addendum #2 – Question 41.

QUESTION

51. Are low profile barricades to be placed the full length of the entrance to proposed taxiway F and across taxiway A in two locations? (Can an item be added for this?)

RESPONSE

Barricades will need to be installed only along Taxiway A. Barricades shall be incidental to the closed taxiway marker unit bid price. Barricades will not be required to be provided by the Contractor for Taxiway F.

QUESTION

52. The bid schedule quantity for Closed Taxiway Marker is 2ea but the plans show 3ea. Can you clarify?

RESPONSE

Contractor will be responsible for closing Taxiway A for the duration of construction. Once construction is complete Taxiway can be re-opened and the Airport will close Taxiway F. Therefore, Contractor will only be responsible for providing 2 closed markers.

QUESTION

53. Will burning be permitted at the project site?

RESPONSE

Please refer to Addendum #2 – Question 1.

QUESTION

54. Will drilling and blasting be permitted at the project site?

RESPONSE

Please refer to Addendum #2 – Question 4

QUESTION

55. Where exactly are we to waste excess material from the project? Can a map or coordinates be provided for the waste location?

RESPONSE

Please refer to Addendum #2 – Question 2.

QUESTION

56. The plans show 168lf of 42" HDPE pipe, and the bid schedule shows a quantity of 158lf. Can this be clarified?

RESPONSE

Bid sheet has been updated to reflect 168 LF of 42” HPDE.

QUESTION

57. Is the unsuitable excavation quantity in addition to the unclassified excavation quantity, or is it included? Where are we to haul the unsuitable material?

RESPONSE

The unsuitable quantity is in addition to the unclassified. Unsuitable material can be hauled to the stockpile locations identified on Plan Sheet 7.1.

QUESTION

58. Can a quantity of structural fill be provided for the project site? The quantities I am coming up with are not close to the unclassified excavation quantity provided in the bid schedule.

RESPONSE

There is approximately 20,200 cubic yards of fill.

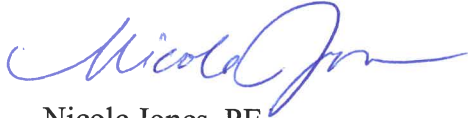
E. CLARIFICATIONS

As a reminder mobilization cost cannot exceed 10% of the total project cost.

If you have any questions or comments, please feel free to contact me at your earliest convenience. As a reminder, bids will be received until 2:00 p.m. on Thursday, August 4 2022 at 176 Airport Road, Suite 105, Beaver WV 25813. Good luck to everyone and thank you for your interest in the project.

Sincerely,

THE THRASHER GROUP, INC.



Nicole Jones, PE
Project Manager



BID FORM FOR CONSTRUCTION CONTRACT

The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 1—OWNER AND BIDDER

- 1.01 This Bid is submitted to: Raleigh County Airport Authority
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

- 2.01 The following documents are submitted with and made a condition of this Bid:
- A. Bid Opening Requirements

ARTICLE 3—BASIS OF BID—LUMP SUM BID AND UNIT PRICES

GENERAL

The Bidder shall take notice of and shall be responsible for any local or state taxes levied and applicable, and the cost for the same shall be included as part of the submitted Bid.

The total Bid cost stated includes a complete operating installation including furnishing and installation of any and all changes or additions in plans, piping, mechanical work, additional electrical work, accessories, controls, etc. necessary to accommodate alternative equipment systems or materials used in construction.

BID PROPOSAL

The Bidder agrees to perform all required Work described in the detailed Specifications and as shown on the Plans for the complete construction and placing in satisfactory operation the Taxiway F. The Project "Sequence of Construction" has been detailed in the Drawings and Specification Division 1, Project Summary, Section 011000. The Bidder agrees to perform all the Work proposed for the total of the following Bid prices.

- 3.01 *Lump Sum Bids*
- A. Bidder will complete the Work in accordance with the Contract Documents for the lump sum (stipulated) price(s), together with any Unit Prices indicated in Paragraph 3.02 and shown in the bid schedule.
- B. Lump Sum Bids may be one of the following:
1. Lump Sum Price (Single Lump Sum)

2. Lump Sum Price (Base Bid and Alternates)
 3. Lump Sum Price (Sectional Lump Sum Bids)
- C. All specified cash allowance(s) are included in the price(s) set forth in the bid schedule, and have been computed in accordance with Paragraph 13.02 of the General Conditions.
- D. All specified contingency allowances are included in the price(s) set forth in the bid schedule, and have been computed in accordance with Paragraph 13.02 of the General Conditions.

3.02 *Unit Price Bids*

- A. Bidder will perform the following Work at the indicated unit prices as shown in the Bid Schedule.
- B. Bidder acknowledges that:
1. each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and
 2. estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

3.03 *Total Bid Price (Lump Sum and Unit Prices)*

BID SCHEDULE

**PROPOSED
 TAXIWAY F
 FOR THE
 RALEIGH COUNTY AIRPORT AUTHORITY
 RALEIGH COUNTY, WEST VIRGINIA**

BASE BID

Item #	FAA Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
1	C-100	1	LS	CONTRACTOR QUALITY CONTROL PROGRAM			
2	C-102	1,500	LF	INSTALL AND REMOVE SILT FENCE			
3	C-102	1	EA	ROCK CONSTRUCTION ENTRANCE			
4	C-102	3,675	LF	COLLECTION DITCH			
5	C-102	17	EA	ROCK CHECK DAMS			
6	C-102	4	EA	INLET PROTECTION			
7	C-105	1	LS	MOBILIZATION			

Item #	FAA Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
8	L-107	1	EA	SUPPLEMENTAL WIND CONE			
9	L-108	4,550	LF	NO. 8 AWG, 5kV, L-824, TYPE C CABLE, INSTALLED IN TRENCH, DUCT BANK OR CONDUIT			
10	M-103	4,550	LF	NO. 6 AWG BARE COPPER COUNTERPOISE WIRE, INSTALLED IN TRENCH, INCLUDING CONNECTIONS AND TERMINATIONS			
11	P-101	4,550	LF	NON-ENCASED ELECTRICAL CONDUIT, 1-WAY 2" TYPE I			
12	P-101	120	LF	ENCASED ELECTRICAL CONDUIT, 1-WAY 2" TYPE I			
13	P-151	2	EA	JUNCTION BOXES			
14	P-152	33	EA	L-861 ELEVATED MEDIUM INTENSITY TAXIWAY LIGHT, BASE MOUNTED ON NEW CANS IN TURF			
15	P-152	1	EA	REMOVE ELEVATED MITL BASE MOUNTED INCLUDING BASE AND SPLICE OF EXISTING CONDUIT			
16	P-152	2	EA	CLOSED TAXIWAY MARKER (CONTRACTOR-FURNISHED)			

Item #	FAA Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
17	P-154	1	LS	REMOVAL OF CONCRETE DITCH			
18	P-154	800	SY	COLD MILLING			
19	P-209	1	LS	CLEARING AND GRUBBING			
20	P-401	58,000	CY	UNCLASSIFIED EXCAVATION			
21	P-401	4,000	CY	UNSUITABLE EXCAVATION			
22	P-603	250	LF	TOE KEY			
23	P-620	12,070	SY	SEPERATION GEOTEXTILE			
24	P-620	2,685	CY	SUBBASE COURSE			
25	D-701	3,355	CY	CRUSHED AGGREGATE BASE COURSE			
26	D-701	1,478	TN	ASPHALT BASE COURSE			

Item #	FAA Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
27	D-705	1,580	TN	ASPHALT SURFACE COURSE			
28	D-705	72	GAL	EMULSIFIED ASPHALT TACK COAT			
29	D-751	1	LS	PAVEMENT MARKINGS			
30	D-751	1	LS	REFLECTIVE MEDIA			
31	T-901	201	LF	36" HDPE			
32	T-905	168	LF	42" HDPE			
33	D-701	1	LS	UNDERGROUND DETENTION SYSTEM			
34	D-705	4,140	LF	6" PVC UNDERDRAIN (PEFORATED)			
35	D-705	2,261	LF	6" PVC OUTLET PIPE (SOLID)			
36	D-751	4	EA	TYPE G INLET			

Item #	FAA Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
37	T-901	16.7	AC	SEEDING			

NOTE: Bid PRICE amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern. Bids shall include sales tax and all other applicable taxes and fees.

TOTAL BID: _____
 (Words) _____ (\$ _____)
 (Words) _____ (Figures)

DEDUCTIVE ALTERNATE #1

Item #	FAA Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
9	L-108	600	LF	NO. 8 AWG, 5kV, L-824, TYPE C CABLE, INSTALLED IN TRENCH, DUCT BANK OR CONDUIT			
10	M-103	600	LF	NO. 6 AWG BARE COPPER COUNTERPOISE WIRE, INSTALLED IN TRENCH, INCLUDING CONNECTIONS AND TERMINATIONS			
11	P-101	4,550	LF	NON-ENCASED ELECTRICAL CONDUIT, 1-WAY 2" TYPE I			
14	P-152	33	EA	L-861 ELEVATED MEDIUM INTENSITY TAXIWAY LIGHT, BASE MOUNTED ON NEW CANS IN TURF			

Item #	FAA Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
23	P-154	1,670	SY	SEPERATION GEOTEXTILE			
24	P-154	370	CY	SUBBASE COURSE			
25	P-209	465	CY	CRUSHED AGGREGATE BASE COURSE			
26	P-401	200	TN	ASPHALT BASE COURSE			
27	P-401	200	TN	ASPHALT SURFACE COURSE			
29	P-620	150	SF	PAVEMENT MARKINGS			
34	D-705	600	LF	6" PVC UNDERDRAIN (PEFORATED)			
35	D-705	390	LF	6" PVC OUTLET PIPE (SOLID)			

NOTE: Bid PRICE amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern. Bids shall include sales tax and all other applicable taxes and fees.

TOTAL DEDUCTIVE ALTERNATE #1: _____
 (Words) _____
 (\$ _____)
 (Words) _____ (Figures)

3.04 *Method of Award*

If at the time this contract is to be awarded, the lowest total bid submitted by a qualified, responsive, responsible Bidder does not exceed the amount of funds then estimated by the Owner, as available to finance the contract, the construction contract will be awarded. If such bids exceeds such amount, the owner may reject all bids.

~~ARTICLE 4—BASIS OF BID—COST PLUS FEE~~

Deleted

~~ARTICLE 5—PRICE PLUS TIME BID~~

Deleted

ARTICLE 6—TIME OF COMPLETION

6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7—BIDDER’S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

7.01 *Bid Acceptance Period*

A. This Bid will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

7.02 *Instructions to Bidders*

A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

7.03 *Receipt of Addenda*

A. Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Addendum Date

ARTICLE 8—BIDDER’S REPRESENTATIONS AND CERTIFICATIONS

8.01 *Bidder’s Representations*

A. In submitting this Bid, Bidder represents the following:

1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.

2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.
7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

8.02 *Bidder's Certifications*

A. The Bidder certifies the following:

1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
3. Bidder has not solicited or induced any individual or entity to refrain from bidding.

4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
 - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
 - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
 - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

BIDDER hereby submits this Bid as set forth above:

Bidder:

(typed or printed name of organization)

By: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Date: _____
(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Date: _____
(typed or printed)

Address for giving notices:

Bidder's Contact:

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Phone: _____

Email: _____

Address: _____

Bidder's Contractor License No.: (if applicable) _____

QUANTITIES

1	C-100	CONTRACTOR QUALITY CONTROL PROGRAM	1	LS
2	C-102	INSTALL AND REMOVE SILT FENCE	1,500	LF
3	C-102	ROCK CONSTRUCTION ENTRANCE	1	EA
4	C-102	COLLECTION DITCH (WITH MATTING)	3,675	LF
5	C-102	ROCK CHECK DAMS	17	EA
6	C-102	INLET PROTECTION	4	EA
7	C-105	MOBILIZATION	1	LS
8	L-107	SUPPLEMENTAL WIND CONE	1	EA
9	L-108	NO. 8 AWG, 5KV, L-824, TYPE C CABLE, INSTALLED IN TRENCH, DUCT BANK OR CONDUIT	4,550	LF
	L-108	NO. 6 AWG BARE COPPER COUNTERPOISE WIRE, INSTALLED IN TRENCH, INCLUDING CONNECTIONS AND TERMINATIONS	4,550	LF
10				
11	L-110	NON-ENCASED ELECTRICAL CONDUIT, 1-WAY 2" TYPE I	4,550	LF
12	L-110	ENCASED ELECTRICAL CONDUIT, 1-WAY 2" TYPE I	120	LF
13	L-115	JUNCTION BOXES	2	EA
14	L-125	L-861 ELEVATED MEDIUM INTENSITY TAXIWAY LIGHT, BASE MOUNTED ON NEW CANS IN TURF	33	EA
15	L-125	REMOVE ELEVATED MITL BASE MOUNTED INCULDING BASE AND SPLICE OF EXISTING CONDUIT	1	EA
16	M-103	CLOSED TAXIWAY MARKER (CONTRACTOR-FURNISHED)	2	EA
17	P-101	REMOVAL OF CONCRETE DITCH	1	LS
18	P-101	COLD MILLING	800	SY
19	P-151	CLEARING AND GRUBBING	1	LS
20	P-152	UNCLASSIFIED EXCAVATION	58,000	CY
21	P-152	UNSUITABLE EXCAVATION	4,000	CY
22	P-152	TOE KEY	250	LF
23	P-154	SEPERATION GEOTEXTILE	12,070	SY
24	P-154	SUBBASE COURSE	2,685	CY
25	P-209	CRUSHED AGGREGATE BASE COURSE	3,355	CY
26	P-401	ASPHALT BASE COURSE	1,478	TN
27	P-401	ASPHALT SURFACE COURSE	1,580	TN
28	P-603	EMULSIFIED ASPHALT TACK COAT	72	GAL
29	P-620	PAVEMENT MARKINGS	1	LS
30	P-620	REFLECTIVE MEDIA	1	LS
31	D-701	36" HDPE	201	LF
32	D-701	42" HDPE	168	LF
33	D-701	UNDERGROUND DETENTION SYSTEM	1	LS
34	D-705	6" PVC UNDERDRAIN (PEFORATED)	4,140	LF
35	D-705	6" PVC OUTLET PIPE (SOLID)	2,261	LF
36	D-751	TYPE G INLET	4	EA
37	T-901	SEEDING	16.7	AC

GROUNDING

- ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE NEC (NFPA-70), FAA-SO-STD-71 AND FAA-STD-019e, LATEST EDITIONS.
- GROUND ALL NEW NON-CURRENT-CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT BY USING NO. 6 AWG BARE COPPER EXOTHERMICALLY WELDED TO GROUND ROD AT EACH LIGHT FIXTURE BASE LOCATION. CONNECT TO BASE EXTERNAL GROUND LUG.
- TOPS OF GROUND RODS SHALL BE A MINIMUM OF 6 INCHES BELOW GRADE.
- THE RESISTANCE TO GROUND OF THE NEW SECTIONS OF COUNTERPOISE SYSTEM SHALL NOT EXCEED 25 OHMS. THIS REFERS TO EACH GROUND ROD LOCATION IN THE AIRFIELD. IF SOIL RESISTIVITY IS HIGH, PROVIDE ADDITIONAL GROUND RODS AS REQUIRED TO MEET 25 OHMS REQUIREMENTS.
- CONDUCT A MEGGER TEST ON EACH SECTION OF CIRCUIT OR PROGRESSIVE COMBINATION OF SECTIONS AS THEY ARE INSTALLED. CHECK EACH SECTION OR PROGRESSIVE COMBINATION OF SECTIONS WITH A MEGOHMMETER PROVIDING A VOLTAGE OF APPROXIMATELY 1000 VOLTS TO PROVIDE A DIRECT READING IN RESISTANCE, AND DOCUMENT RESULTS. LOCATE ANY FAULTS INDICATED BY THE TEST AND ELIMINATE BEFORE PROCEEDING WITH THE CIRCUIT INSTALLATION.
- PROVIDE A LIGHT BASE GROUND INSTALLED AT EACH LIGHT FIXTURE. THE LIGHT BASE GROUND SHALL BE SEPARATE FROM THE COUNTERPOISE SYSTEM. THE PURPOSE OF THE LIGHT BASE GROUND IS TO PROVIDE A DEGREE OF PROTECTION FOR MAINTENANCE PERSONNEL FROM POSSIBLE CONTACT WITH AN ENERGIZED LIGHT BASE OR MOUNTING STAKE.
 - THE LIGHT BASE GROUND MUST BE A STRANDED #6 AWG GREEN INSULATED COPPER WIRE JUMPER BONDED TO THE GROUND LUG AT FIXTURE BASE TO A GROUND ROD INSTALLED BESIDE THE FIXTURE.
 - PROVIDE AN ADDITIONAL HOLE IN THE BASE CAN RIM IN LINE WITH THE EXISTING HOLES FOR THE FIXTURE BASE BOLTS SIZED LARGED ENOUGH FOR A 1½ X ¼" PAN HEAD GALVANIZED BOLT. COUNTERSINK BOLT SUCH THAT THE PAN HEAD IS FLUSH WITH THE TOP OF THE RIM OF THE BASE CAN. USE THIS BOLT TO BOND A GROUNDING LUG TO THE INSIDE OF THE EXISTING BASE CAN. USE THE NEW GROUNDING LUG AND CONNECT THE NEW GREEN INSULATED GROUND WIRE JUMPER TO THE NEW LIGHTING FIXTURE BASE PLATE.

CABLE PROTECTION CRITERIA

- ALL EXISTING SYSTEMS/UTILITIES TO REMAIN SHALL BE PROTECTED FROM DAMAGE. REPLACEMENT OF ANY DAMAGED SYSTEMS/UTILITIES SHALL BE AT THE CONTRACTORS EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGED ELECTRICAL SYSTEMS AND SHALL MAKE REPAIRS IMMEDIATELY, AT HIS OWN COST. IN ACCORDANCE WITH APPLICABLE FAA SPECIFICATIONS. DAMAGED ELECTRICAL SYSTEMS SHALL BE IMMEDIATELY REPORTED TO THE RPR.
- EXISTING CONDUIT, DUCTBANK, CIRCUITING AND UTILITY INFORMATION IS BASED ON AIRPORT "AS BUILT" AND "RECORD" DRAWINGS. THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND SHALL NOT BE SCALED FOR EXACT LOCATIONS. NOT ALL UTILITIES MAY BE SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE APPROPRIATE UTILITY/AGENCY, PRIOR TO STARTING WORK, FOR THE LOCATION OF EXISTING UTILITIES. ANY INTERPRETATION OF AN EXISTING SYSTEM OR UTILITY SERVICE SHALL BE COORDINATED AND APPROVED BY THE AUTHORITY, AGENCY OR UTILITY HAVING JURISDICTION. PRIOR TO THE START OF WORK THE CONTRACTOR SHALL CONTACT ALL LOCAL UTILITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT THE APPROPRIATE UTILITY COMPANIES, AGENCY ETC. PRIOR TO ANY EXCAVATION/CONSTRUCTION TO LOCATE THE UTILITY, AGENCIES, UNDERGROUND CABLES, PIPES, CONDUITS, DUCTBANKS, ETC. REPLACEMENT OF EXISTING CABLES OR UTILITIES DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE AT THE CONTRACTORS EXPENSE.
- EXISTING CABLES AND CONDUITS SHALL BE EXCAVATED BY HAND. SEE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THAT ALL AIRFIELD LIGHTING CIRCUITS, EXCEPT THOSE THAT ARE SERVING CLOSED TAXIWAYS OR RUNWAYS, ARE COMPLETELY OPERATIONAL, USING THE EXISTING CONTROLS, AT THE TERMINATION OF WORK EACH DAY AND SHALL SO CERTIFY TO THE OWNERS AUTHORIZED REPRESENTATIVE BEFORE LEAVING THE SITE.
- INSTALL A PLASTIC, DETECTABLE, MAGNETIC THREE INCH (3") WIDE TAPE EIGHT INCHES (8") BELOW GRADE ABOVE ALL PORTIONS OF EXISTING UNDERGROUND UTILITIES EXPOSED FOR ANY REASON. THE DETECTABLE TAPE SHALL BE OMITTED WHERE THE UNDERGROUND UTILITY IS UNDER AIRFIELD PAVEMENT.
- FAA CABLES AND FIBER OPTIC CABLES DAMAGED DURING CONSTRUCTION CANNOT BE SPLICED BY THE CONTRACTOR UNLESS ORDERED BY THE FAA AND THE OWNER. DAMAGE TO ANY EXISTING CABLE SHALL RESULT IN THE CONTRACTOR BEING RESPONSIBLE FOR THE COMPLETE REPLACEMENT OF THE CABLE.

GENERAL ELECTRICAL NOTES

- THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR TO RELOCATE, MODIFY AND INSTALL THE AIRFIELD ELECTRICAL SYSTEMS AS INDICATED ON THE DRAWINGS. ITEMS NOT SHOWN BUT OBVIOUSLY NECESSARY FOR COMPLETION OF THE WORK SHALL BE INCLUDED.
- NEW MATERIALS SHALL BE U.L. APPROVED OR LISTED IN THE MOST RECENT ADDENDUM TO FAA AC 150/5345-53D AS FAA-APPROVED EQUIPMENT.
- THE CONDUITS BETWEEN DEMOLISHED BASE CANS SHALL BE EXTENDED IN THE NEW WORK. ALL REMOVED FIXTURES, TRANSFORMERS, ETC. SHALL BE OFFERED THE OWNER FOR USE AS SPARE. IF OWNER DOES NOT NEED OR ACCEPT, THE CONTRACTOR SHALL PROPERLY AND LEGALLY DISPOSE OF OFF THE SITE. ALL REMOVED CABLES, BASE CANS, CONCRETE PADS, ETC. SHALL BE PROPERLY AND LEGALLY DISPOSED OF OFF THE SITE BY THE CONTRACTOR.
- NEW TAXIWAY EDGE LIGHT BASE CANS SHALL BE INSTALLED 10 FEET FROM THE THEORETICAL EDGE OF THE PAVEMENT OR AS OTHERWISE INDICATED. ALL STRAIGHT SECTIONS OF TAXIWAY EDGE LIGHTS SHALL BE ALIGNED TO DEVELOP A CONTINUOUS "IN LINE" APPEARANCE OF THE LIGHTS WHEN VIEWED AT GROUND LEVEL FROM ONE END.
- ALL WORK SHOWN TO BE DEMOLISHED ON THE DRAWINGS IS BASED ON EXISTING "AS-BUILT" DRAWINGS OF THE AREAS AFFECTED. THEY ARE THEREFORE CONSIDERED TO BE SCHEMATIC. IT IS THE INTENT OF THE DEMOLITION DRAWINGS THAT ALL EQUIPMENT, DEVICES, FIXTURES, WIRING MATERIALS, SYSTEM AND APPURTENANCES, ETC. WHICH ARE NO LONGER REQUIRED AS A RESULT OF THE PROJECT TO BE REMOVED. THE OWNER HAS FIRST RIGHT OF REFUSAL FOR ALL REMOVED ITEMS.
- ELECTRICAL DEMOLITION WORK SHALL BE LIMITED TO THE AREAS AND SCHEDULES INDICATED IN THE APPROVED PHASING PLAN.
- ALL GROUND RODS AND OTHER UNDERGROUND GROUNDING CONNECTIONS SHALL BE EXOTHERMICALLY WELDED OR APPROVED EQUIVALENT. EXOTHERMICALLY WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
- THE CONTRACTOR SHALL HAVE A CABLE TRACER AVAILABLE TO LOCATE THE EXISTING CABLES AND HAND DIGGING SHALL BE UNDERTAKEN WITHIN FIVE (5) FEET OF ANY KNOWN OR SUSPECTED EXISTING UNDERGROUND CABLES AND UTILITIES WHICH ARE NOT TO BE DISTURBED.
- SHOULD RUNWAY OR TAXIWAY SYSTEM BE INOPERABLE DUE TO THE CONTRACTOR'S WORK, AND THE CONTRACTOR IS UNABLE TO RESTORE THE SYSTEM BY NIGHTFALL WITH PERMANENT REPAIRS, THE CONTRACTOR SHALL AT HIS OWN EXPENSE TAKE NECESSARY MEASURES TO INSURE OPERATIONS OF THE SYSTEM DURING NIGHT HOURS. TEMPORARY WORK SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL.
- PROJECT PAY ITEMS: THE PROJECT PAY ITEMS ARE PROVIDED TO BE INCLUSIVE OF ALL WORK TO BE PERFORMED AS SHOWN IN THESE PLANS. ALL WORK TO BE IDENTIFIED WITH A SPECIFIC PAY ITEMS IS TO BE CONSIDERED REQUIRED WORK TO COMPETE THE PROJECT AND IS TO BE SUBSIDIARY TO THE COST OF PROJECT PAY ITEMS PROVIDED.
- THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO STARTING WORK.
- OPERATING TEST: UPON COMPLETION OF TESTS, SHOW BY DEMONSTRATION IN SERVICE THAT CIRCUITS, CONTROL EQUIPMENT, AND LIGHTS COVERED BY THE CONTRACT ARE IN GOOD OPERATING CONDITION. OPERATE EACH SWITCH IN THE LIGHTING PANELS SO THAT EACH SWITCH POSITION IS ENGAGED AT LEAST TWICE. DURING THIS PROCESS, OBSERVE LIGHTS AND ASSOCIATED EQUIPMENT TO DETERMINE THAT EACH SWITCH CONTROLS PROPERLY CORRESPONDING CIRCUIT. PROVIDE TELEPHONE OR RADIO COMMUNICATION BETWEEN THE OPERATOR AND THE OBSERVERS. REPEAT TESTS, FROM THE REMOTE CONTROL POINTS, AND AGAIN FROM THE LOCAL CONTROL SWITCHES ON THE REGULATORS. TEST EACH LIGHTING CIRCUIT BY OPERATING THE LAMPS AT MAXIMUM BRIGHTNESS FOR NOT LESS THAN 30 MINUTES. VISUALLY EXAMINE AT THE BEGINNING AND AT THE END OF THIS TEST TO ENSURE THAT THE CORRECT NUMBER OF LIGHTS ARE BURNING AT FULL BRIGHTNESS. CONDUCT ONE DAY AND ONE NIGHT OPERATING TEST FOR THE ENGINEER.

FIELD LIGHTING

- UNLESS OTHERWISE NOTED, ALL UNDERGROUND FIELD POWER SERIES CIRCUIT CONDUCTORS IN DUCT/CONDUIT SHALL BE FAA APPROVED L-824 TYPE. INSULATION VOLTAGE AND SIZE SHALL BE AS SPECIFIED. ALL SERIES CIRCUIT CABLES SHALL BE #8 AWG RATED AT 5KV (L-824-C). ALL CIRCUITS SHALL BE MEGGERED AFTER INSTALLATION.
- NO COMPONENTS OF PRIMARY CIRCUIT SUCH AS CABLE, CONNECTORS AND TRANSFORMERS SHALL BE BROUGHT ABOVE GROUND AT EDGE LIGHTS, SIGNS, ETC. THIS PRACTICE MAY BE APPROVED FOR TEMPORARY PURPOSES ONLY.
- THERE SHALL BE NO EXPOSED POWER/CONTROL CABLES BETWEEN THE POINT WHERE THEY LEAVE THE UNDERGROUND (L-867 BASES) AND WHERE THEY ENTER THE EQUIPMENT (SUCH AS TAXIWAY SIGNS) ENCLOSURES. THESE CABLES SHALL BE ENCLOSED IN RIGID CONDUIT OR IN FLEXIBLE, WATER-TIGHT CONDUIT WITH BREAKABLE COUPLING(S) AT THE GRADE OR THE HOUSING COVER, AS SHOWN IN APPLICABLE DETAILS.
- THE JOINTS OF THE L-823 PRIMARY CONNECTORS SHALL BE WRAPPED AS SHOWN IN THE WATERPROOFING DETAIL(S).
- THE ID OF THE PRIMARY L-823 FIELD ATTACHED CONNECTORS SHALL MATCH THE CABLE OD TO PROVIDE A WATERTIGHT CABLE ENTRANCE.
- APPROVED RUBBER TAPE AND VINYL TAPE SHALL BE LAYERED OVER THE L-823 CONNECTOR, AS DETAILED IN THE PLANS.
- L-823 TYPE II, TWO-CONDUCTOR SECONDARY CONNECTORS SHALL BE CLASS "A" (FACTORY MOLDED).
- THERE SHALL BE NO SPLICES IN THE SECONDARY CABLE(S) WITHIN THE STEMS OF A TAXIWAY EDGE LIGHTING FIXTURES AND THE WIREWAYS LEADING TO TAXIWAY SIGNS.
- ELECTRICAL INSULATING GREASE SHALL BE APPLIED WITHIN THE L-823, SECONDARY, TWO CONDUCTOR CONNECTORS TO PREVENT WATER ENTRANCE. THESE CONNECTORS SHALL NOT BE TAPED.
- A SLACK OF 3 FEET, MINIMUM, SHALL BE PROVIDED IN THE PRIMARY CABLE AT EACH TRANSFORMER/CONNECTOR TERMINATION. PAYMENT FOR SLACK SHALL BE INCIDENTAL TO EACH ITEM INSTALLED OR PULL THROUGH. CABLE LENGTH SHALL BE MEASURED FROM POINT TO POINT.
- DIRECTION OF PRIMARY CABLES SHALL BE IDENTIFIED BY COLOR CODING. CONTRACTOR SHALL COORDINATE ALL COLOR CODING REQUIREMENTS WITH OWNER MAINTENANCE PERSONNEL. IF OWNER PERSONNEL DO NOT HAVE A COLOR CODE, CONTRACTOR SHALL COLOR CODE TAXIWAY CIRCUIT NO. 1 WITH RED TAPE AND TAXIWAY CIRCUIT NO. 2 WITH BLUE TAPE.
- L-867 BASES SHALL BE SIZE B, 24" DEEP, CLASS IA, UNLESS OTHERWISE NOTED.
- BASE-MOUNTED FRANGIBLE COUPLINGS MUST NOT HAVE WEEP HOLES TO THE OUTSIDE. PLUGGED HOLES ARE NOT ACCEPTABLE. IT SHALL HAVE A 1/4" DIAMETER, MINIMUM, OR EQUIVALENT OPENING FOR DRAINAGE FROM THE SPACE AROUND THE SECONDARY CONNECTOR INTO THE L-867 BASE.
- THE ELEVATION OF THE BREAKABLE COUPLING GROOVE SHALL NOT EXCEED 1 1/2" ABOVE THE EDGE OF THE COVER IN CASE OF BASE MOUNTED COUPLINGS, OR THE TOP OF THE STAKE IN CASE OF STAKE MOUNTED COUPLINGS.
- WHERE THE BREAKABLE COUPLING IS NOT AN INTEGRAL PART OF THE LIGHT FIXTURE STEM OR MOUNTING LEG, A BEAD OF SILICON SEAL SHALL BE APPLIED COMPLETELY AROUND LIGHT STEM OR WIREWAY AT BREAKABLE COUPLING TO PROVIDE A WATERTIGHT SEAL.
- PLASTIC LIGHTING FIXTURE COMPONENTS, SUCH AS LAMP HEADS, STEMS, BREAKABLE COUPLINGS, BASE COVERS, BRACKETS, STAKES, SHALL NOT BE ACCEPTABLE. THE METAL THREADED FITTINGS SHALL BE SET IN THE FLANGE DURING CASTING PROCESS. BASE COVER BOLTS SHALL BE FABRICATED FROM 18-8 STAINLESS STEEL.
- EDGE LIGHT NUMBERING TAGS SHALL BE FACING THE PAVEMENT. SEE DETAILS FOR TYPE.
- LOCATIONS OF ENDS OF ALL UNDERGROUND DUCTS SHALL BE IDENTIFIED BY DUCT MARKERS.
- STEEL TAGS TO BE ATTACHED AT BOTH ENDS OF THE CABLE BY THE USE OF PLASTIC STRAPS. MINIMUM OF TWO TAGS SHALL BE PROVIDED ON EACH CABLE IN A MAN/HAND HOLE - ONE AT THE CABLE ENTRANCE AND ONE AT THE CABLE EXIT.
- APPLY AN OXIDE INHIBITING, ANTI-SEIZING COMPOUND TO ALL SCREWS, NUTS, BOLTS AND BREAKAGE COUPLING THREADS. APPROVED SAE GRADE 2 COATED BOLTS SHALL NOT REQUIRE ANTI-SEIZING COMPOUND.
- THERE SHALL BE NO SPLICES BETWEEN THE ISOLATION TRANSFORMERS. L-823 CONNECTORS ARE ALLOWED AT TRANSFORMER CONNECTIONS ONLY, UNLESS OTHERWISE SHOWN.
- CONCRETE USED SHALL BE CONSISTENT WITH THE REQUIREMENTS OF ITEM P-610.
- PERFORM ACCEPTANCE TEST FOR SERIES AND MULTIPLE AIRFIELD LIGHTING CIRCUITS ON COMPLETE LIGHTING CIRCUITS. SUBJECT EACH SERIES AND MULTIPLE LIGHTING CIRCUIT TO A HIGH VOLTAGE INSULATION RESISTANCE TEST.

DEDUCTIVE ALTERNATE #1

ITEM NO.	FAA PROJECT NO.	DESCRIPTION	QUANTITY	UNIT
9	L-108	NO. 8 AWG, 5KV, L-824, TYPE C CABLE, INSTALLED IN TRENCH, DUCT BANK OR CONDUIT	600	LF
10	L-108	NO. 6 AWG BARE COPPER COUNTERPOISE WIRE, INSTALLED IN TRENCH, INCLUDING CONNECTIONS AND TERMINATIONS	600	LF
11	L-110	NON-ENCASED ELECTRICAL CONDUIT, 1-WAY 2" TYPE I	600	LF
14	L-125	L-861 ELEVATED MEDIUM INTENSITY TAXIWAY LIGHT, BASE MOUNTED ON NEW CANS IN TURF	4	EA
23	P-154	SEPERATION GEOTEXTILE	1,670	SY
24	P-154	SUBBASE COURSE	370	CY
25	P-209	CRUSHED AGGREGATE BASE COURSE	465	CY
26	P-401	ASPHALT BASE COURSE	200	TN
27	P-401	ASPHALT SURFACE COURSE	200	TN
29	P-620	PAVEMENT MARKINGS	150	SF
34	D-705	6" PVC UNDERDRAIN (PEFORATED)	600	LF
35	D-705	6" PVC OUTLET PIPE (SOLID)	390	LF

USER: nicole.jones
 LAYOUT: 3 QUANTITIES AND ELECTRICAL GENERAL NOTES
 PLOT DATE/TIME: 7/29/2022 3:03 PM
 CAD FILE: R:\080\080-10038-00-Parrail Taxiway-Raleigh County Airport Authority-Drawing\0038 - General Notes And Quantities.dwg

1	CRW	7/29/22	UPDATED QUANTITIES -- ADDENDUM #2
NO.	BY	DATE	DESCRIPTION



SCALE:	DATE:
DRAWN:	DATE:
CHECKED:	DATE:
APPROVED:	DATE:
SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	

THRASHER

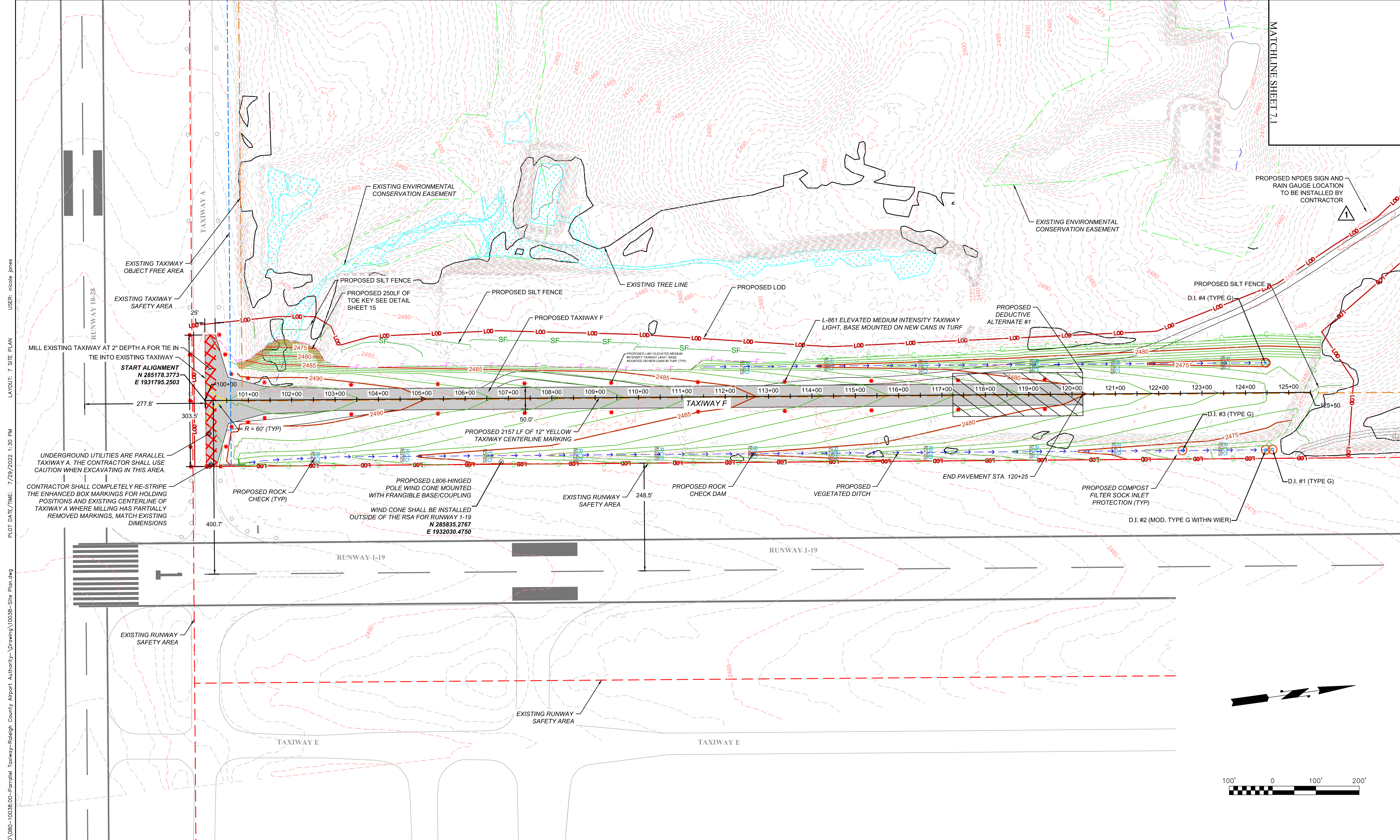
600 WHITE OAKS BLVD. P.O. BOX 940
BRIDGEPORT WV 26330
www.thrashereng.com

PHONE (304) 624-4108 FAX (304) 624-7831

PHASE No.
CONTRACT No.
PROJECT No.
080-10038

RALEIGH COUNTY MEMORIAL AIRPORT
RALEIGH COUNTY AIRPORT AUTHORITY
RALEIGH COUNTY, WEST VIRGINIA
TAXIWAY F
QUANTITIES AND ELECTRICAL GENERAL NOTES

SHEET No.
3



USER: nicole.jones
 LAYOUT: 7 SITE PLAN
 PLOT DATE/TIME: 7/29/2022 1:30 PM
 CAD FILE: R:\080\080-10038-00-Parallel Taxiway-Raleigh County Airport Authority-Drawing\0038-Site Plan.dwg

MATCHLINE SHEET 7.1

THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF THE THRASHER GROUP INC. REPRODUCTION OF THESE DOCUMENTS IN WHOLE OR IN PART, FOR ANY REASON WITHOUT PRIOR WRITTEN PERMISSION, IS STRICTLY PROHIBITED. COPYRIGHT © 2018 THE THRASHER GROUP INC.			
NO.	BY	DATE	DESCRIPTION
1	CW	7/29/2022	MOVED ROCK CONSTRUCTION ENTRANCE TO 7.1 - ADDENDUM 2



SCALE:	DATE:
DRAWN:	DATE:
CHECKED:	DATE:
APPROVED:	DATE:
SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	

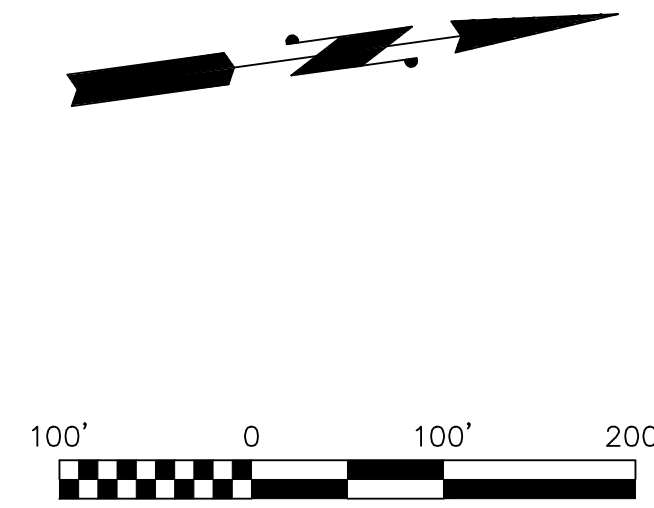
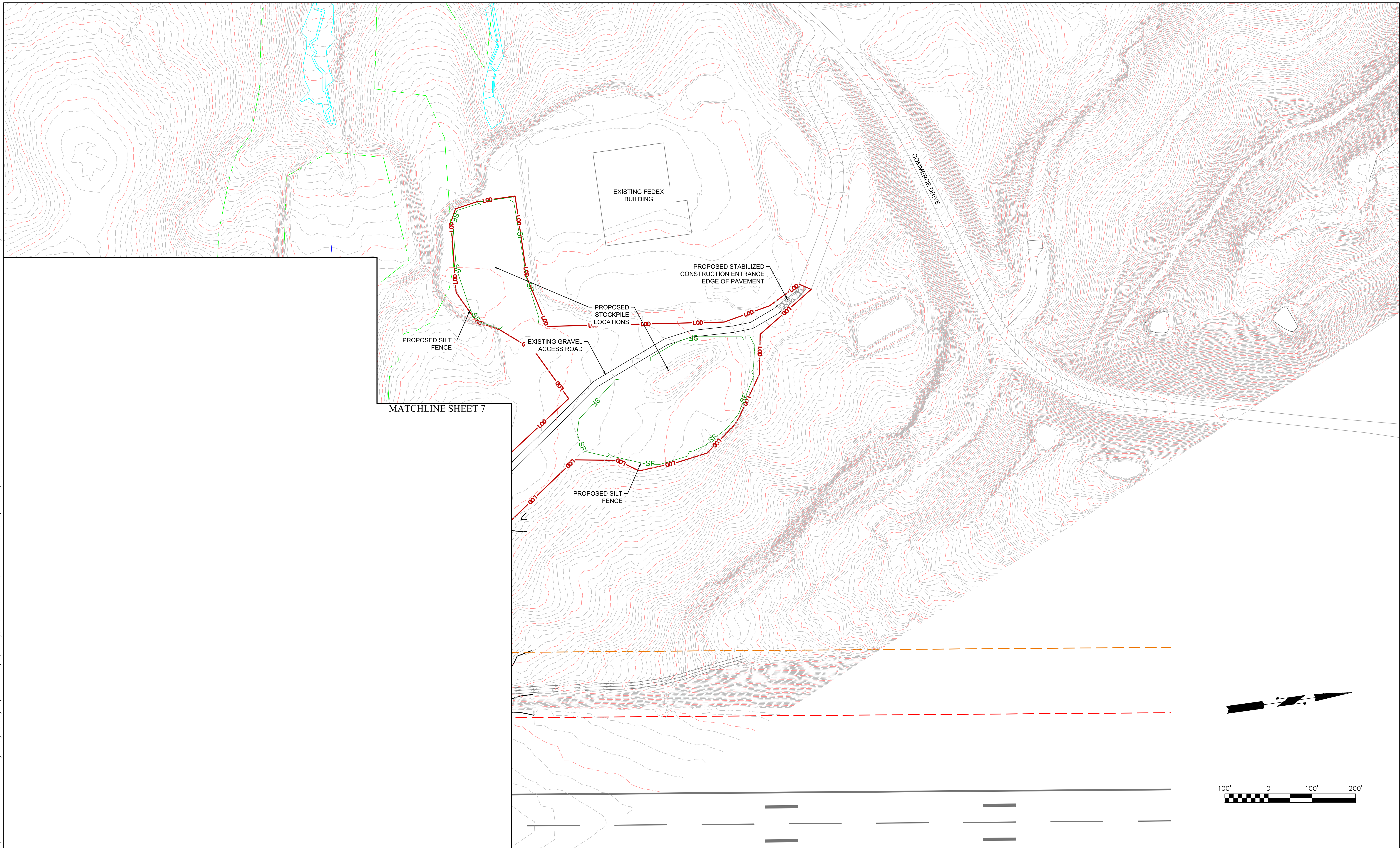
THRASHER
 600 WHITE OAKS BLVD. P.O. BOX 940
 BRIDGEPORT WV, 26330
 www.thrashereng.com
 PHONE (304) 624-4108 FAX (304) 624-7831

PHASE No.	
CONTRACT No.	
PROJECT No.	080-10038

RALEIGH COUNTY MEMORIAL AIRPORT
 RALEIGH COUNTY AIRPORT AUTHORITY
 RALEIGH COUNTY, WEST VIRGINIA
TAXIWAY F
SITE PLAN

SHEET No.	7
-----------	----------

CAD FILE: R:\080\080-10038-00-Parallel Taxiway-Raleigh County Airport Authority-Drawing\0038-Site Plan.dwg
 USER: nicole.jones
 LAYOUT: 7.1 STOCKPILE LOCATIONS
 PLOT DATE/TIME: 7/29/2022 1:38 PM



THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF THE THRASHER GROUP INC. REPRODUCTION OF THESE DOCUMENTS IN WHOLE OR IN PART, FOR ANY REASON WITHOUT PRIOR WRITTEN PERMISSION, IS STRICTLY PROHIBITED. COPYRIGHT © 2018 THE THRASHER GROUP INC.			
1	CRW	7/29/22	ADDED SHEET WITH STOCKPILES LOCATIONS - ADDENDUM 2
NO.	BY	DATE	DESCRIPTION



SCALE:	DATE:
DRAWN:	DATE:
CHECKED:	DATE:
APPROVED:	DATE:
SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	

THRASHER
 600 WHITE OAKS BLVD. P.O. BOX 940
 BRIDGEPORT WV 26330
 www.thrashereng.com

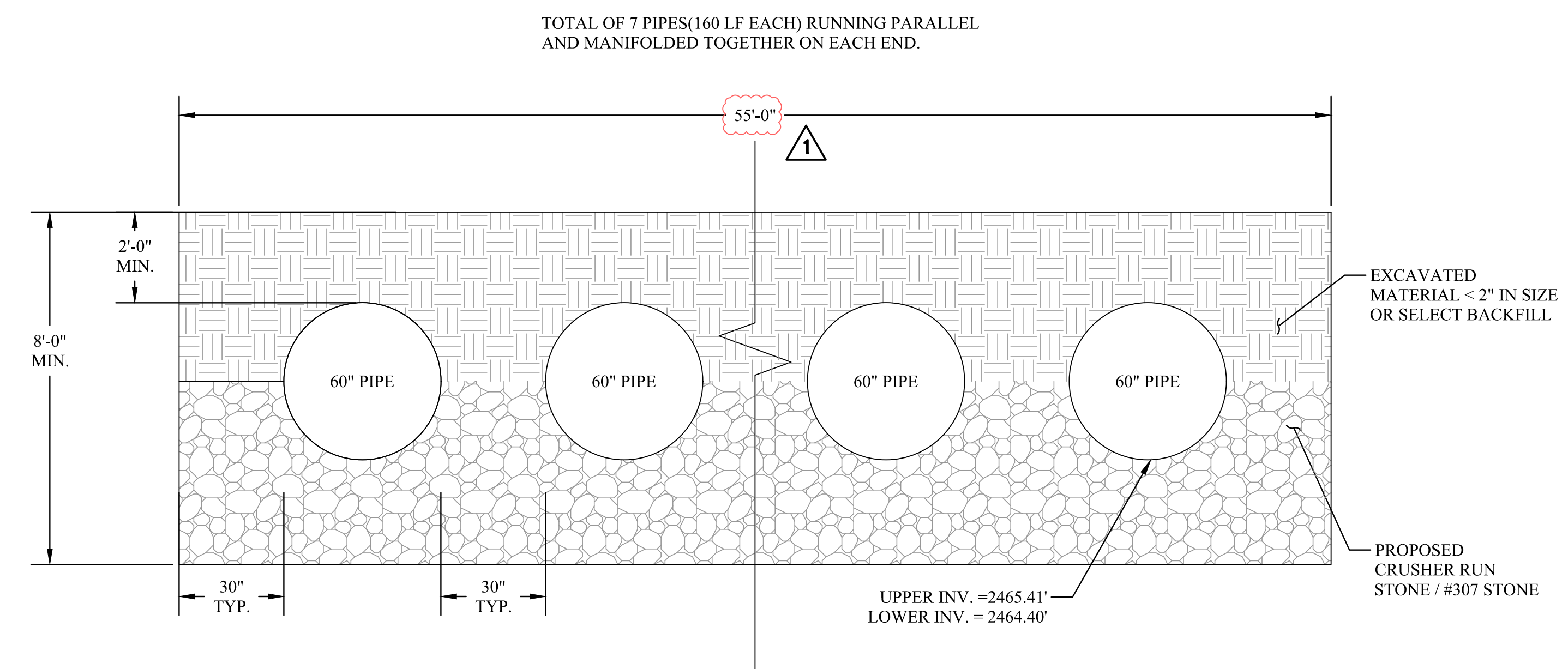
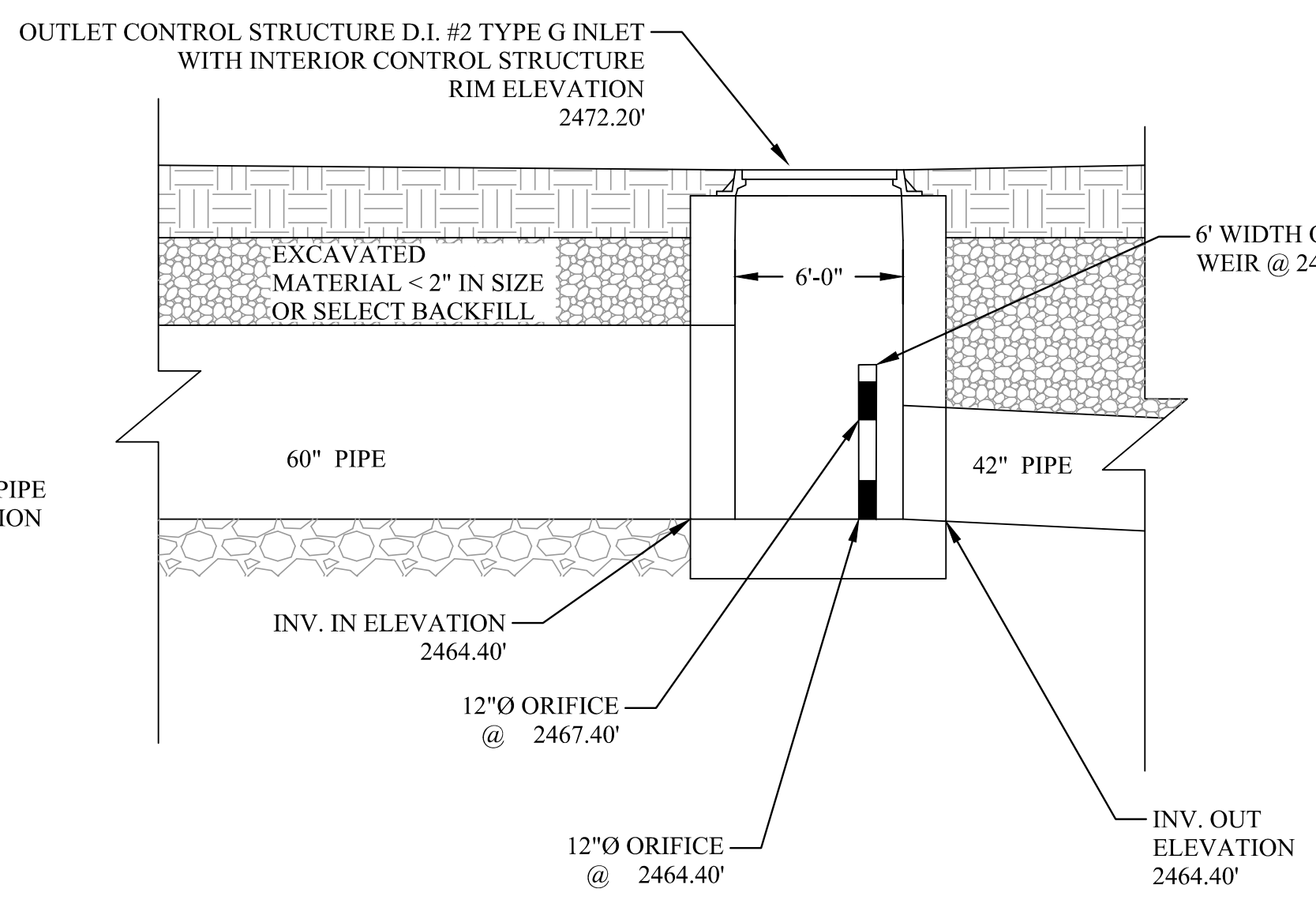
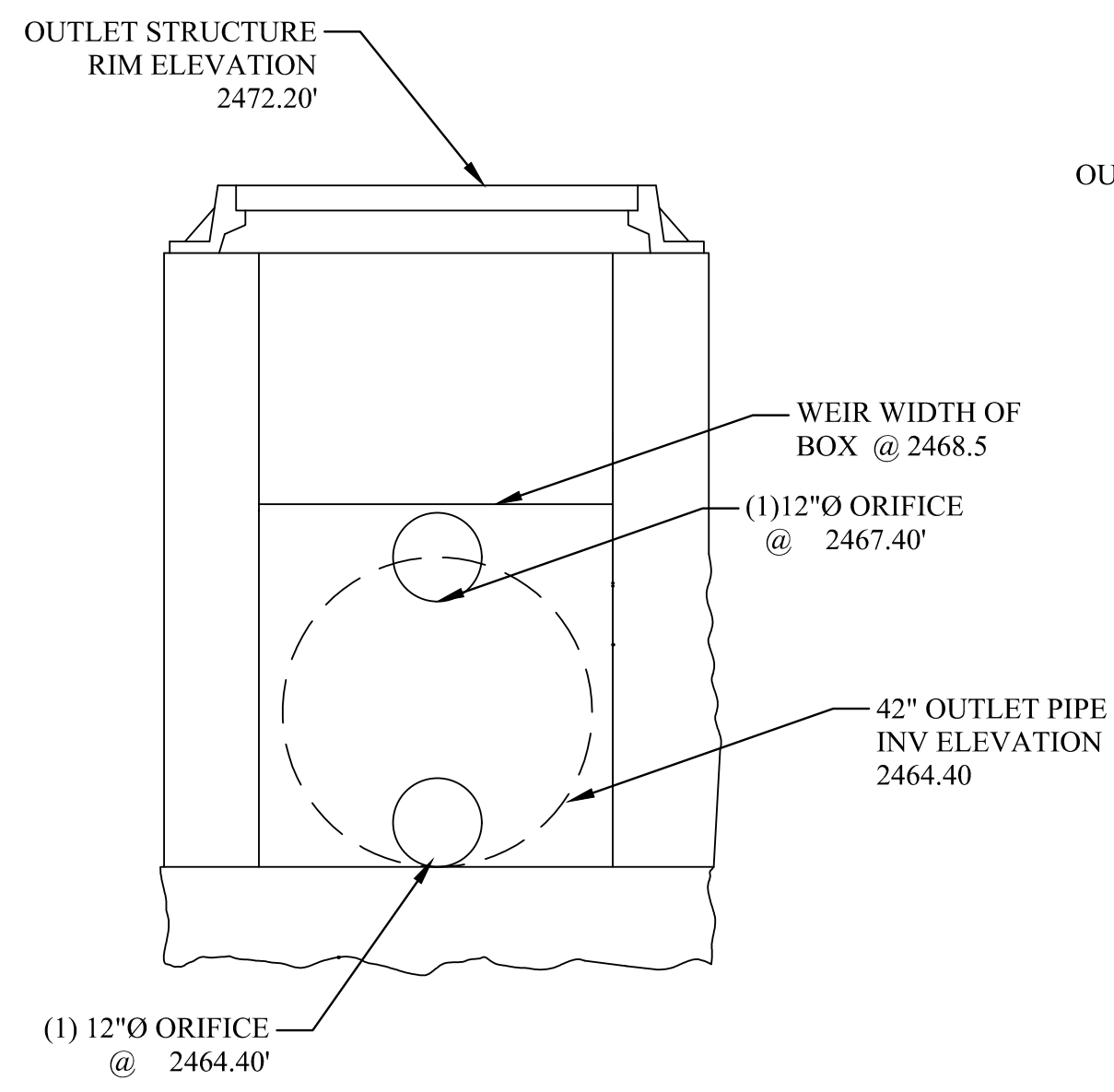
PHONE (304) 624-4108 FAX (304) 624-7831

PHASE No.
CONTRACT No.
PROJECT No.
080-10038

RALEIGH COUNTY MEMORIAL AIRPORT
RALEIGH COUNTY AIRPORT AUTHORITY
RALEIGH COUNTY, WEST VIRGINIA
TAXIWAY F
STOCKPILE LOCATIONS

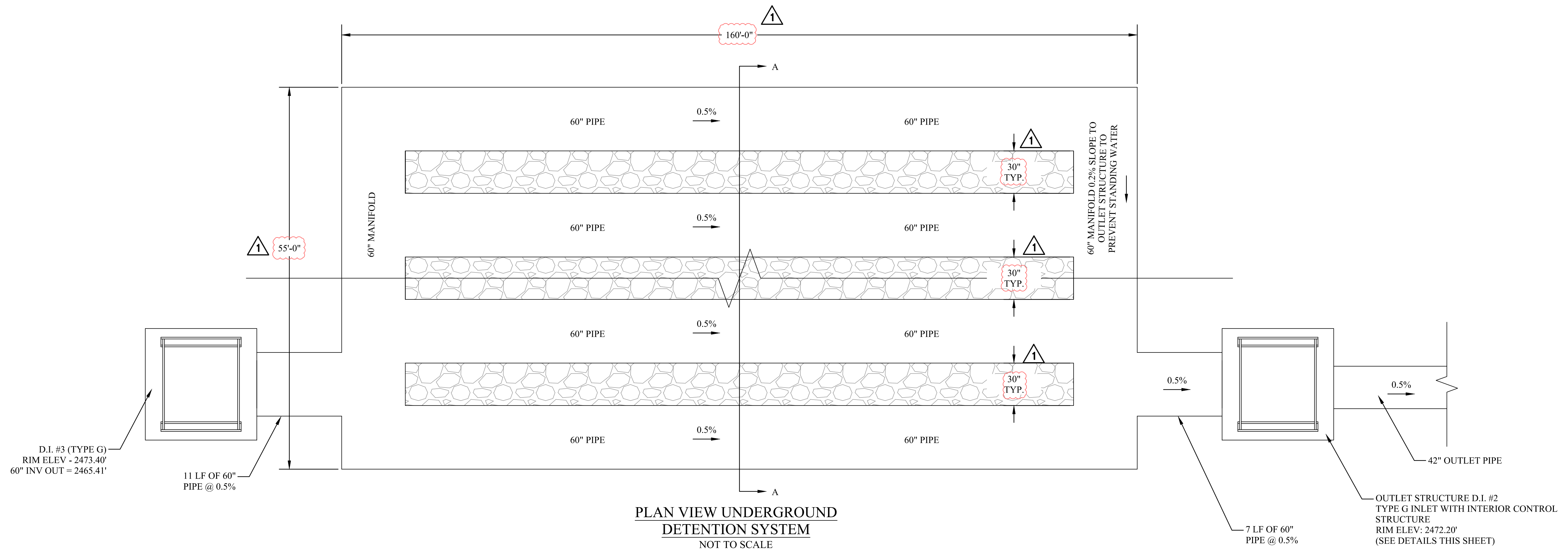
SHEET No.
7.1

USER: nicole Jones
 LAYOUT: 22 DETAILS
 PLOT DATE/TIME: 7/29/2022 1:19 PM
 CAD FILE: R:\080\080-10038-00-Parralel Taxiway-Raleigh County Airport Authority-Drawing\0038 - Details.dwg



OUTLET STRUCTURE DETAIL D.I. #2
NOT TO SCALE

SECTION A-A
NOT TO SCALE



**PLAN VIEW UNDERGROUND
DETENTION SYSTEM**
NOT TO SCALE

THE INFORMATION CONTAINED HEREIN IS THE
 SOLE PROPERTY OF THE THRASHER GROUP INC.
 REPRODUCTION OF THESE DOCUMENTS IN WHOLE
 OR IN PART, FOR ANY REASON WITHOUT PRIOR
 WRITTEN PERMISSION, IS STRICTLY PROHIBITED.
 COPYRIGHT © 2018 THE THRASHER GROUP INC.

NO.	BY	DATE	DESCRIPTION
1	NMJ	7/29/2022	REVISED SPACING OF PIPES - ADDENDUM #2



SCALE:	DATE:
DRAWN:	DATE:
CHECKED:	DATE:
APPROVED:	DATE:
SURVEY DATE:	
SURVEY BY:	
FIELD BOOK No.:	

THRASHER
 600 WHITE OAKS BLVD. P.O. BOX 940
 BRIDGEPORT WV 26330
 www.thrashereng.com
 PHONE (304) 624-4108 FAX (304) 624-7831

PHASE No.
CONTRACT No.
PROJECT No.
080-10038

RALEIGH COUNTY MEMORIAL AIRPORT
RALEIGH COUNTY AIRPORT AUTHORITY
RALEIGH COUNTY, WEST VIRGINIA
TAXIWAY F
DETAILS