

**CITY OF MOUNDSVILLE
MARSHALL COUNTY, WEST VIRGINIA
FOUR SEASONS SPLASH PAD**

ADDENDUM #1

April 1, 2021

THRASHER PROJECT #030-10204

TO WHOM IT MAY CONCERN:

A Pre-Bid Conference was held on Friday, March 26, 2021 on the above-referenced project, a copy of the sign in sheet is included in this Addendum. 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.** A **REVISED BID FORM** is included with this **ADDENDUM 1**. The quantities included in the plans have been revised to include all changes to date. An electronic version of the Bid Form will be provided in the Final Addendum.
2. Sealed Bids for the construction of **FOUR SEASONS SPLASH PAD** will be received by the City of Moundsville at 800 6th Street, Moundsville, Marshall County, West Virginia until **2:00 P.M local time on Tuesday, April 6, 2021** at which time the Bids received will be publicly opened and read. Any bids submitted prior to that time must be delivered to Marcus Carnegie's attention at the Thrasher Group office located at 600 White Oaks Blvd., Bridgeport, WV. Bids submitted at the Thrasher office must be delivered no later than 11:00 A.M. on the day of the bid opening.

B. SPECIFICATIONS

1. ARTICLE 22 has been revised to reflect application of sales tax on this project.
2. BID FORM has been revised to include the additional fence demolition, potable water supply, and Rain Drop start up Allowance.
3. 012100 SF – ALLOWANCES has been added.
4. 012200 SF – UNIT PRICES has been revised to reflect Addendum 1.

5. 323113 SF – CHAIN LINK FENCES AND GATES has been revised to reflect Galvanized Metal as the correct finish.

C. DRAWINGS

1. SHEET C0.01 – the Quantity Summary table has been revised.
2. SHEET C1.01 (EXISTING CONDITIONS) - revised to include additional fence demolition.
3. SHEET C2.01 (OVERALL SITE PLAN) – the limits of the proposed fence installation have been revised to show the new fence extending to the CT cabinet.
4. SHEET C2.03 (MECHANICAL ROOM PLAN) - revised to show the potable water supply line and the location of the mechanical room exhaust fan.
5. SHEET C5.02 (DETAILS) – wall height dimensions in the ‘Proposed Retaining Wall Profile’ have been revised. The top of wall elevation and existing ground elevations have remained the same.
6. SHEET C5.04 (DETAILS) – the chain link fence detail has been revised to no longer reference vinyl coated fence fabric.

D. QUESTIONS AND RESPONSES

1. QUESTION

Are the splash pad drains provided by Rain Drop?

RESPONSE

Yes, the 5 area drains on the splash pad are provided by Rain Drop.

2. QUESTION

Is the Nyloplast drain provided by Rain Drop?

RESPONSE

No, the Nyloplast drain will be furnished by the contractor.

3. QUESTION

What is the size, manufacturer, CFM, and voltage of the ventilation fan in the new mechanical room?

RESPONSE

Ventilation fan shall be Plastec 35 by Plastec Ventilation Inc., or approved equivalent.

4. QUESTION

What is the size, manufacturer, and CFM of the intake louver for the new mechanical room?

RESPONSE

Air Conditioning Products Model ACD, 24” x 24”, or approved equivalent.

5. QUESTION

Do you want to have a motor-operated damper installed with the louver that would be interlocked with the operation of the exhaust fan?

RESPONSE

Yes.

6. QUESTION

How is the exhaust fan going to be controlled?

RESPONSE

The exhaust fan will be controlled by Hygrostat (Humidistat). There shall also be a master switch connected to the mechanical room doors so that any time one or both of the doors is open the fan will be running.

7. QUESTION

Is PEX acceptable in lieu of Schedule 80 PVC pipe?

RESPONSE

Schedule 80 PVC or an equivalent piping conforming to ASTM D2467 and ASTM D1785-12 will be required for all piping that is installed outside the building and/or below the concrete decking. PEX does not conform to the required standards. PEX can be used inside the mechanical room.

8. QUESTION

Who is responsible for the warranty on the “owner provided” equipment?

RESPONSE

All mechanical equipment supplied by Rain Drop is warranted by the equipment manufacturers. See the installation manuals provided with the original bid package for more information.

9. QUESTION

Who is responsible for the start-up and adjustments of the system?

RESPONSE

The contractor is responsible for start up and adjustment. Rain Drop provides phone (and video chat) support for no cost to assist with setup. Rain Drop offers on-site assistance for a cost of \$1,375 per day. Start up for a project this size requires 1-day of support from Rain Drop. An Allowance of \$1,375 has been added to the Bid Form for 1 day of on-site Rain Drop start up and adjustment support.

10. QUESTION

Where will potable water be connected inside of the building and ran to the storage tank?

RESPONSE

Refer to revisions on sheet C2.03 for potable water routing. A ¾” copper line connection will be used for the potable water supply. Installation of a backflow preventer and shut-off valve on the supply line will be required. The backflow preventer and shut-off valve shall be installed in the mechanical room.

11. QUESTION

Is SDR-35 pipe with gasket acceptable to be ran from the storage tank overflow to the storm drain catch basin?

RESPONSE

Yes, 2" SDR-35 with gasket is acceptable for reservoir overflow.

12. QUESTION

Is there a scaled Rain Drop drawing in order to arrive at the footages of piping required to connect from the manifold to their equipment? Same scenario for the drain piping and the area drains.

RESPONSE

Sheets 4 of 11, 5 of 11, and 6 of 11 of the Rain Drop plan sheets are scaled at 1" = 10' when printed at 11x17 with no page scaling.

13. QUESTION

There is a note on all of the drawings that states that final plans must be stamped by an engineer. Is this something that Rain Drop is going to take care of?

RESPONSE

Rain Drop's drawings are part of the stamped construction plans issued by Thrasher. If the contractor proposes layout revisions during construction, they may provide stamped shop drawings as part of the submittal process.

14. QUESTION

Where are the thrust blocks to be installed as per Rain Drop drawing 11 of 11? All supply piping is 1" or 2". Sizes shown on the schedule are 4" and larger.

RESPONSE

Thrust blocks will not be required for pressurized lines less than 4" in diameter.

15. QUESTION

Where are the chemical line connections?

RESPONSE

The chemical line connections will be ¼" hose connecting the chemical tanks to injection ports in the supply line. The hose and injector ports are provided with the Rain Drop supplied equipment.

16. QUESTION

How will the tank be backfilled?

RESPONSE

Provide 4" of #10 limestone bedding. Proceed by filling tank with water prior to backfill. Backfill ½ diameter of tank with #10 limestone. Remaining backfill may be native excavated material placed in accordance with contract documents.

17. QUESTION

Can you specify a light fixture?

RESPONSE

Nuvo Lighting 10" Wide 90 Watt LED Commercial Flood Light – 5000K - Model # 65/618, or approved equivalent.

18. QUESTION

Please confirm the color of the fence. Sheet C5.04 says black chain link detail but in the note section under #8 it says green.

RESPONSE

The fence shall be galvanized, with no vinyl coating. The plan drawings and project specifications have been revised accordingly.

19. QUESTION

Does the fence get privacy slats?

RESPONSE

No privacy slats or fabric is currently proposed with the fence installation.

20. QUESTION

There is a typical Deck Section on Dwg. C5.03 with an odd call out for the mesh requirement: "6"x 6"-No 6 WWF ". This could mean 6x6 W2.9xW2.9 (6 gauge, a typical light mesh which we often see) or it could mean 6x6 W6.0 x W6.0 which is a heavy-duty mesh and quite a lot more expensive. Please clarify.

RESPONSE

The mesh call out references 6-gauge W2.9xW2.9 6"x6" wire mesh.

21. QUESTION

According to Article 22 this is to be a sales tax-exempt project. Is this relevant?

RESPONSE

This project is NOT tax exempt. Article 22 has been revised accordingly.

22. QUESTION

Are there any details to the splash pad equipment location? Or any electrical prints other than the site prints?

RESPONSE

Sheet 3 of 11 of the Rain Drop drawings details the layout locations of the splash pad components. There is no detail layout information for the mechanical equipment. The equipment will need to be installed in the configuration shown on the plans, but shall be adjusted as needed to accommodate plumbing and electrical layout and room configuration.

23. QUESTION

What is the voltage for the service?

RESPONSE

Voltage will be 208V.

24. QUESTION

What amperage, single phase or 3 phase?

RESPONSE

The service will be 200 amp, 3 phase.

25. QUESTION

Does the electrical panel need to be 3R, bolt on circuit breakers?

RESPONSE

Contractor shall be responsible for providing a 200 amp, 42 space, 120/240V, NEMA-3R panelboard with all applicable snap-in breakers to accommodate circuits for the new equipment. Coordinate with owner and/or engineer on final location and layout of the electrical equipment and circuits during submittal and construction phase.

26. QUESTION

Is there an electrical drawing?

RESPONSE

There are no electrical drawings available. All electrical work shall be installed in accordance with the National Electrical Code (NEC) and all applicable local codes.

27. QUESTION

Add Alt #2 calls for 5 BA-2 fixtures, is there a fixture designation?

RESPONSE

See response to Question 17 above.

28. QUESTION

The concrete detail on Sheet C5.03 specifies a non-slip broom swept finish. Can you provide more detail?

RESPONSE

The intent of the concrete finish is to provide enough texture to provide traction when wet but not be uncomfortable when walking on it barefoot. A smooth broom finish or light broom finish should be appropriate.

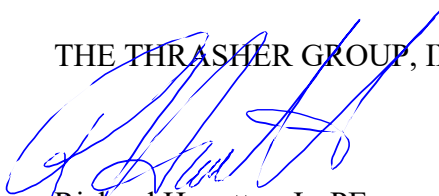
E. CLARIFICATIONS

See Section A General

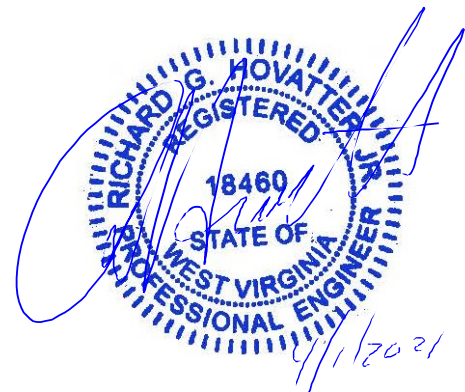
If you have any questions or comments, please feel free to contact me at your earliest convenience. Good luck to everyone and thank you for your interest in the project.

Sincerely,

THE THRASHER GROUP, INC.



Richard Hovatter, Jr. PE
Senior Project Manager



**CITY OF MOUNDSVILLE
MARSHALL COUNTY, WEST VIRGINIA
FOUR SEASONS SPLASH PAD**

**MANDATORY PRE-BID CONFERENCE
Friday, March 26, 2021**

Thrasher Project #030-10204

Name	Representing	Phone #	Email Address
Mike McCleary	H.E. Neumann	304-232-3040	mmccleary@heneumann.com
Eric Nolan	Wolf Creek	740 719 8782	enolan@wolfcreekcontracting.com
Mike Oberdick	Lombardi Development Company 649 Virginia Avenue Follansbee, WV 26037	Ph: 304-748-5920 Fax: 304-748-8488	Mike@LombardiCompanies.com
ED BOZAK	GABA CON	740-282-6830	JSpans@GABAco.com
Tracy Curtis	Green River Group, LLC	304-203-4623	tracyscurtis@yahoo.com
Gary KRSUL	KUCERA Plumbing & Cog.	740 671-8239	GKRSUL@KUCERAPLUMBING.COM
Rick Healy	City of Moundsville	304 845 6300	rhealy@cityofmoundsville.com
Marcus Carnegie	THRASHER	304 848 7211	mcarnegie@thethrashergrp.com

**CITY OF MOUNDSVILLE
MARSHALL COUNTY, WEST VIRGINIA
FOR THE
FOUR SEASONS SPLASH PAD
Thrasher Project # 030-10204**

- I N D E X -

BIDDING DOCUMENTS

Advertisement for Bids	C-111
Instructions to Bidders	C-200
Bid Opening Requirements	BOR
Bid Forms	C-410

CONDITIONS OF WORK

Notice of Award	C-510
Agreement	C-520
Performance Bond	C-610
Payment Bond	C-615
Notice to Proceed	C-550
Contractor's Application for Payment	C-620
Change Order	C-941
Field Order	C-942
Work Change Directive	C-940
Certificate of Substantial Completion	C-625
General Conditions	C-700
Supplementary Conditions	C-800
Additional Supplemental General Conditions	ASGC

TECHNICAL SPECIFICATIONS

Summary	011000
Allowances	012100
Unit Prices	012200
Substitution Procedures	012500
Contract Modification Procedures	012600
Payment Procedures	012900
Project Management and Coordination	013100
Photographic Documentation	013233
Submittal Procedures	013300
Quality Requirements	014000
Product Requirements	016000
Execution	017300
Construction Waste Management and Disposal	017419
Closeout Procedures	017700
Project Record Documents	017839
Selective Demolition	024119
Miscellaneous Cast-In-Place Concrete	033053
Joint Sealants	079200
Meters and Gauges for Plumbing Piping	220519
Domestic Water Piping	221116
Low-Voltage Electrical Power Conductors and Cables	260519
Raceway and Boxes for Electrical Systems	260533

Identification for Electrical Systems	260553
Panelboards	262416
Enclosed Switches and Breakers	262816
Earth Moving	312000
Asphalt Paving	321216
Concrete Paving	321313
Pavement Markings	321723
Chain Link Fences and Gates	323113
Stormwater Conveyance	334200

MANUFACTURER SPECIFICATIONS & REFERENCES

Superior Recreational Products Hexagon Umbrella
Ultra Site Model #369SM-RDV Table

INSTRUCTIONS TO BIDDERS

ARTICLE 1 – DEFINED TERMS

1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:

A. *Issuing Office* – The office from which the Bidding Documents are to be issued.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

2.01 Complete sets of the Bidding Documents may be obtained from the Issuing Office in the number and format stated in the advertisement or invitation to bid.

2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

3.01 To demonstrate Bidder's qualifications to perform the Work, after submitting its Bid and within seven (7) days of Owner's request, Bidder shall submit (a) written evidence establishing its qualifications such as financial data, previous experience, and present commitments, and (b) the following additional information:

A. [Evidence of Bidder's authority to do business in the state where the Project is located.]

B. [Bidder's state or other contractor license number, if applicable.]

C. [Subcontractor and Supplier qualification information; coordinate with provisions of Article 12 of these Instructions, "Subcontractors, Suppliers, and Others."]

D. [Other required information regarding qualifications]

3.02 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.

3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.

3.04 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

INSTRUCTIONS TO BIDDERS

ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

4.01 *Site and Other Areas*

- A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

4.02 *Existing Site Conditions*

- A. Subsurface and Physical Conditions; Hazardous Environmental Conditions
 - 1. The Supplementary Conditions identify:
 - a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
 - b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
 - c. reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
 - d. Technical Data contained in such reports and drawings.
 - 2. Owner will make copies of reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
 - 3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.
- B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or adjacent to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.
- C. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05 of the General Conditions. Provisions concerning responsibilities for the adequacy of data

INSTRUCTIONS TO BIDDERS

furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.

4.03 *Site Visit and Testing by Bidders*

- A. Bidder shall conduct the required Site visit during normal working hours, and shall not disturb any ongoing operations at the Site.
- B. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.
- C. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.
- D. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.
- E. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

4.04 *Owner's Safety Program*

- A. Site visits and work at the Site may be governed by an Owner safety program. As the General Conditions indicate, if an Owner safety program exists, it will be noted in the Supplementary Conditions.

4.05 *Other Work at the Site*

- A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

ARTICLE 5 – BIDDER'S REPRESENTATIONS

- 5.01 It is the responsibility of each Bidder before submitting a Bid to:

INSTRUCTIONS TO BIDDERS

- A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
- B. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
- C. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;
- D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings;
- E. consider 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 Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs;
- F. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
- G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
- H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;
- I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and
- J. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

INSTRUCTIONS TO BIDDERS

ARTICLE 6 – PRE-BID CONFERENCE

6.01 A pre-Bid conference will be held at the time and location stated in the invitation or advertisement to bid. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all parties recorded as having received the Bidding Documents. Questions received less than seven days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

7.02 Addenda may be issued to clarify, correct, supplement, or change the Bidding Documents.

ARTICLE 8 – BID SECURITY

8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of [5%] percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a certified check, bank money order, or a Bid bond (on the form included in the Bidding Documents) issued by a surety meeting the requirements of Paragraphs 6.01 and 6.02 of the General Conditions.

8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.

8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.

8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven days after the Bid opening.

INSTRUCTIONS TO BIDDERS

ARTICLE 9 – CONTRACT TIMES

9.01 The number of days within which, or the dates by which, **[Milestones are to be achieved and]** the Work is to be substantially completed, and completed and ready for final payment, are set forth in the Agreement.

ARTICLE 10 – LIQUIDATED DAMAGES

10.01 Provisions for liquidated damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

ARTICLE 11 – SUBSTITUTE AND “OR-EQUAL” ITEMS

11.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, and those “or-equal” or substitute or materials and equipment subsequently approved by Engineer prior to the submittal of Bids and identified by Addendum. No item of material or equipment will be considered by Engineer as an “or-equal” or substitute unless written request for approval has been submitted by Bidder and has been received by Engineer at least 15 days prior to the date for receipt of Bids. Each such request shall comply with the requirements of Paragraphs 7.04 and 7.05 of the General Conditions. The burden of proof of the merit of the proposed item is upon Bidder. Engineer’s decision of approval or disapproval of a proposed item will be final. If Engineer approves any such proposed item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner.

11.02 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of “or-equal” or substitution requests are made at Bidder’s sole risk.

11.03 If an award is made, Contractor shall be allowed to submit proposed substitutes and “or-equals” in accordance with the General Conditions

ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

12.01 [DELETED]

12.02 [DELETED]

12.03 If required by the bid documents. The apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of the Subcontractors or Suppliers proposed for those portions of the work for which, such identification is required.

If required by Owner, such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, or other individual or entity. If Owner or Engineer, after due

INSTRUCTIONS TO BIDDERS

investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall submit a substitute, Bidder's Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.

- 12.04 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, or other individuals or entities. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.06 of the General Conditions.
- 12.05 Contractor shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom Contractor has reasonable objection.
- 12.06 The Contractor shall not award work to Subcontractor(s) in excess of the limits stated in SC 7.06.
- 12.07 The Contractor cannot subcontract over fifty percent (50%) of the project.

ARTICLE 13 – PREPARATION OF BID

- 13.01 The Bid Form is included with the Bidding Documents.
- A. All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.
- B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words "No Bid" or "Not Applicable."
- 13.02 A Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown.
- 13.03 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The partnership's address for receiving notices shall be shown.
- 13.04 A Bid by a limited liability company shall be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the firm's address for receiving notices shall be shown.
- 13.05 A Bid by an individual shall show the Bidder's name and address for receiving notices.

INSTRUCTIONS TO BIDDERS

- 13.06 A Bid by a joint venture shall be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The joint venture's address for receiving notices shall be shown.
- 13.07 All names shall be printed in ink below the signatures.
- 13.08 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 13.09 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.10 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.

ARTICLE 14 – BASIS OF BID

~~14.01 Lump Sum~~

- A. ~~Bidders shall submit a Bid on a lump sum basis as set forth in the Bid Form.~~

14.02 Unit Price

- A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form.
- B. The "Bid Price" (sometimes referred to as the extended price) for each unit price Bid item will be the product of the "Estimated Quantity" (which Owner or its representative has set forth in the Bid Form) for the item and the corresponding "Bid Unit Price" offered by the Bidder. The total of all unit price Bid items will be the sum of these "Bid Prices"; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.
- C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

14.03 Allowances

- A. For cash allowances the Bid price shall include such amounts as the Bidder deems proper for Contractor's overhead, costs, profit, and other expenses on account of cash allowances, if any, named in the Contract Documents, in accordance with Paragraph 13.02.B of the General Conditions.

INSTRUCTIONS TO BIDDERS

~~14.04 Price-Plus-Time Bids~~ [DELETED]

ARTICLE 15 – SUBMITTAL OF BID

- 15.01 With each copy of the Bidding Documents, a Bidder is furnished ~~one separate unbound copy of the Bid Form, and, if required, the Bid Bond Form.~~ The unbound copy of the Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 7 of the Bid Form.
- 15.02 A Bid shall be received no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to Owner at address in Article 1.01 of Bid Form, unless stated otherwise.
- 15.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID

- 16.01 A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.
- 16.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.
- 16.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 17 – OPENING OF BIDS

- 17.01 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

INSTRUCTIONS TO BIDDERS

ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner will reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.

19.02 If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the lowest responsive Bid.

19.03 Evaluation of Bids

A. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

B. For the determination of the apparent low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items.

C. [DELETED]

19.04 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.

19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

ARTICLE 20 – BONDS AND INSURANCE

20.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

INSTRUCTIONS TO BIDDERS

ARTICLE 21 – SIGNING OF AGREEMENT

21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 15 days thereafter, Successful Bidder shall execute and deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Within ten days thereafter, Owner shall deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

ARTICLE 22 – SALES AND USE TAXES [DELETED]

ARTICLE 23 – ~~CONTRACTS TO BE ASSIGNED~~ [DELETED]

ARTICLE 24 – WAGE RATE REQUIREMENTS

24.01 If the contract price is in excess of \$100,000, provisions of the Contract Work Hours and Safety Standards Act at 29 CFR5.5 (b) apply.

ARTICLE 25 – CONTRACTOR’S LICENSE

25.01 All Bidders are required to have a West Virginia Contractor’s License per Section §21-11-11 of the West Virginia Code. The prospective bidder’s license number must be included in the first envelope as per the Bid Opening Checklist. All subcontractors shall furnish their contractor’s license number to the prime contractor prior to the award of the contract.

ARTICLE 26 – WORKER’S COMPENSATION INSURANCE

26.01 The Contractor shall carry full coverage of Worker’s Compensation insurance during the life of this Contract. If the Contractor’s Insurance does not cover the employees of sub-contractors, such sub-contractors shall provide insurance coverage for their employees. The Contractor shall furnish the Owner with certificates of coverage for their employees, both his own and his sub-contractors, employed on the project.

ARTICLE 27 – PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE

27.01 The Contractor must take out and maintain during the life of this Contract public liability insurance in the amount outlined in the Supplementary Conditions. In each, The Thrasher Group, Inc., and the City of Moundsville, are to be a named insured on the policy provided.

**CITY OF MOUNDSVILLE
MARSHALL COUNTY, WEST VIRGINIA
PROPOSED
FOUR SEASONS SPLASH PAD
THRASHER PROJECT #030-10204**

BID FORM

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

*City of Moundsville
800 6th Street
Moundsville, WV 26041*

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 – BIDDER’S ACKNOWLEDGEMENTS

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

ARTICLE 3 – BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum Date</u>
---------------------	----------------------

_____	_____
_____	_____
_____	_____

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous

Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

- E. 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 any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. 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.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER’S CERTIFICATION

4.01 Bidder certifies that:

- A. 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;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. “corrupt practice” means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
 - 2. “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;
 - 3. “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; and
 - 4. “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.

ARTICLE 5 – BASIS OF BID

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 of the Four Seasons Splash Pad. The Project "Sequence of Construction" has been detailed in the Drawings and Specification Division 1, Project Summary, Section 1010, Part-2 Execution. The Bidder agrees to perform all the Work proposed for the total of the following Bid prices.

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

**PROPOSED
 FOUR SEASONS SPLASH PAD
 FOR THE
 CITY OF MOUNDSVILLE
 MARSHALL COUNTY, WEST VIRGINIA
 Thrasher Project # 030-10204**

BID SCHEDULE

NOTE: Bid Unit 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.

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
1	1	LS	Mobilization			
2	1	LS	Stakeout			
3	1	LS	Demolition			
4	1	LS	Erosion & Sediment Control			

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
5	1	LS	Installation of Splash Pad Components			
6	1	LS	Mechanical Room Modifications			
7	1	LS	Mechanical Room Electrical Service			
8	2	EA	Electrical Pull Box			
9	2	EA	Mechanical Room Door			
10	106	SY	Retaining Wall			
11	38	CY	Crusher Run Backfill			
12	5	EA	12" Nyloplast Drain			
13	161	SY	Concrete Decking			
14	370	SY	Splash Pad Concrete Decking			
15	107	LF	Storm Drain Connection			

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
16	1	LS	Striping / Parking Lot Repair			
17	9	EA	Compact Car Parking Sign			
18	170	LF	Exterior Fencing			
19	3	EA	Fabric Canopy (Hexagon Umbrella)			
20	1	LS	Seeding and Mulching			
21	1	LS	Potable Water Supply			
22	1	LS	Allowance – Rain Drop Start-Up Assistance	\$1,375.00	One thousand three hundred seventy five dollars and zero cents	\$1,375.00

TOTAL BID: _____
 _____ (\$ _____)

(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

ADDITIVE ALTERNATE #1

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
BA-1	5	EA	Tables			

TOTAL BID ADD ALTERNATE #1: _____

_____ (\$ _____)

(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

ADDITIVE ALTERNATE #2

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
BA-2	5	EA	Exterior Lighting			

TOTAL BID ADD ALTERNATE #2: _____

_____ (\$ _____)

(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

NOTE: THE CONTRACTOR'S UNIT PRICES SHALL INCLUDE PURCHASE AND INSTALLATION, COMPLETE IN PLACE, PER BID ITEM IN ACCORDANCE WITH THE DETAILED SPECIFICATIONS.

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 Bid items will be based on actual quantities, determined as provided in the Contract Documents.

METHOD OF AWARD

If at the time this contract is to be awarded, the lowest total bid submitted by a qualified 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. Awarding of Additive Alternate(s) will not affect the lowest Bidder. If such bids exceed such amount, the Owner may reject all bids.

The Owner will award the contract on the total base bid amount inclusive or exclusive of alternates as determined by the Owner and submitted by a qualified responsible Bidder. The Owner may elect to award any or all of the additive alternates in no particular order.

- A. Unit prices have been computed in accordance with paragraph 13.03.A of the General Conditions.
- B. Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

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 – ATTACHMENTS TO THIS BID

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

ARTICLE 8 – DEFINED TERMS

- 8.01 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 9 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

By: _____
[Signature]

_____ *[Printed name]*

(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____
[Signature]

_____ *[Printed name]*

Title: _____

Submittal Date: _____

Address for giving notices:

Telephone Number: _____

Fax Number: _____

Contact Name and e-mail address: _____

Bidder's License No.: _____
(where applicable)

NOTE TO USER: Use in those states or other jurisdictions where applicable or required.

SECTION 012100 - ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
 - 1. Lump-sum allowances.
 - 2. Unit-cost allowances.
 - 3. Quantity allowances.
 - 4. Contingency allowances.
- C. Related Requirements:
 - 1. Section 012200 "Unit Prices" for procedures for using unit prices, including adjustment of quantity allowances when applicable.

1.2 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Engineer of the date when final selection, or purchase and delivery, of each product or system described by an allowance must be completed by the Owner to avoid delaying the Work.
- B. At Engineer's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Engineer from the designated supplier.

1.3 ACTION SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances in the form specified for Change Orders.

1.4 INFORMATIONAL SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.5 LUMP-SUM ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Engineer under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Engineer under allowance shall be included as part of the Contract Sum and not part of the allowance.

1.6 UNIT-COST ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Engineer under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Engineer under allowance shall be included as part of the Contract Sum and not part of the allowance.

1.7 QUANTITY ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Engineer under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Engineer under allowance shall be included as part of the Contract Sum and not part of the allowance.

1.8 CONTINGENCY ALLOWANCES

- A. Use the contingency allowance only as directed by Engineer for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
- B. Contractor's overhead, profit, and related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.
- C. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and reasonable overhead and profit.
- D. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

1.9 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
 - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
 - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other markups.
 - 3. Submit substantiation of a change in scope of Work, if any, claimed in Change Orders related to unit-cost allowances.
 - 4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.

- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.
 - 1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of Work has changed from what could have been foreseen from information in the Contract Documents.
 - 2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. Allowance No. 1: Lump-Sum Allowance: Include the sum of \$1,375.00 for 1-day of Rain-Drop on-site support to assist with system startup and adjustment. This shall be a pass through cost, invoiced directly to the Owner with no markup or price adjustment.

City of Moundsville
Four Seasons Splash Pad

ADDED: Addendum #1
April 1, 2021
Page 4 of 4

END OF SECTION 012100

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SECTION 012200 - UNIT PRICES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for unit prices.

1.2 DEFINITIONS

- A. Unit price is a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: Methods of measurement and payment for unit prices are specified in Section 3.1.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES

- A. Item 1: Mobilization
 - 1. Cost shall include the cost of mobilization and demobilization. Fifty percent (50%) of this bid item will be paid with the first Pay Application. The remaining balance will be paid with the last Pay Application.
 - 2. Unit of Measurement: Lump Sum

- B. Item 2: Stakeout
 - 1. Cost shall include the cost of all survey stakeout, as-builts, etc to ensure the proper location and elevation of the proposed work.
 - 2. Unit of Measurement: Lump Sum

- C. Item 3: Demolition
 - 1. Cost shall include all excavation, hauling, equipment, labor, disposal fees, etc. to clear and grub the site and complete selective demolition of existing exterior features identified in the Contract Documents. The demolition of items indicated on the plan set may be, but are not limited to, existing asphalt, drainage structures, concrete sidewalks, existing fence, etc. shall be included in this bid item. Any unsuitable material or excess fill material shall become the property of the contractor and shall be their responsibility to remove and legally dispose of offsite.
 - 2. Unit of Measurement: Lump Sum

- D. Item 4: Erosion and Sediment Control
 - 1. Cost shall include the furnishing, installation, maintenance, and removal of all necessary erosion and sediment control BMPs for the project.
 - 2. Unit of Measurement: Lump Sum

- E. Item 5: Installation of Splash Pad Components
 - 1. Cost shall include all labor, materials, equipment, and other costs associated for the excavation, backfill, plumbing, conduit, electrical wiring, underground water storage tank installation, equipment installation (including fasteners) and testing necessary to produce a working splash park.
 - 2. The Owner is furnishing the equipment through direct purchase from Rain Drop Products, Inc. The list of equipment provided by Owner is listed on the Rain Drop plan sheets which are part of the contract documents. This bid item shall include the furnishing and installation of all additional piping, conduit, wiring, and connectors required to install a complete and functional splash park as shown on the contract documents.
 - 3. Unit of Measurement: Lump Sum

- F. Item 6: Mechanical Room Modifications
 - 1. Cost shall include all labor, materials, equipment, and other costs associated with modifying the existing storage and equipment rooms for the fitting of the splash pad mechanical accessories. Cost shall include selective demolition of wall mounted components; removal and modification of existing walls; installation of new walls; saw cutting, removing, and replacing existing concrete floor slab; excavation, connection, and backfill of drains and supply lines; furnishing and installing humidistat controlled exhaust fan and louvred vent; electrical modifications for lighting,
 - 2. Repair, patch and paint new and modified walls for a neat and clean finish to match existing walls.
 - 3. Unit of Measurement: Lump Sum

- G. Item 7: Mechanical Room Electrical Service
 - 1. Cost shall include all labor, materials, equipment, and other costs associated with providing electrical service to the proposed splash pad mechanical room. Cost shall

include all labor material, equipment and other cost associated to furnish and install connection to existing meter, CT cabinet, 4" underground conduit, and service panel, including all wiring, connectors, hangers, and fasteners. All materials shall be composed of standard non-corrosive materials.

2. Unit of Measurement: Lump Sum

H. Item 8: Electrical Pull Box

1. Cost shall include all labor, materials, equipment, and other costs necessary to furnish and install electrical pull boxes as shown in the contract documents.
2. Unit of Measurement: Each

I. Item 9: Mechanical Room Door

1. Cost shall include all labor, materials, equipment, and other costs necessary to furnish and install mechanical room door as shown in the contract documents.
2. Unit of Measurement: Each

J. Item 10: Retaining Wall

1. Cost shall include all labor, materials, equipment, and other costs necessary to furnish and install retaining wall as shown in the contract documents.
2. Unit of Measurement: Square Yard of gross total wall face.

K. Item 11: Crusher Run Backfill

1. Cost shall include all labor, materials, equipment, and other costs associated with placing and compacting crusher run backfill in accordance with the contract documents and in reasonably close conformity with the lines, grades, weights or thicknesses, and cross sections shown on the Plans or established by the Engineer.
2. Unit of Measurement: Cubic Yard

L. Item 12: 12" Nyloplast Drain

1. Cost shall include all labor, materials, equipment, and other costs associated with furnishing and installing 12" nyloplast drain inlet structure in accordance with the contract documents and in reasonably close conformity with the lines, grades, weights or thicknesses, and cross sections shown on the Plans or established by the Engineer. The cost shall also include testing and grouting the inverts and around the pipe.
2. Unit of Measurement: Each

M. Item 13 & 14: Concrete Decking / Splash Pad Concrete Decking

1. Cost shall include all labor, materials, equipment, and other costs associated with the installation of concrete decking, including excavation, separation fabric, aggregate base stone, concrete, and reinforcement in accordance with the contract documents and in reasonably close conformity with the lines, grades, weights or thicknesses, and cross sections shown on the Plans or established by the Engineer.
2. Unit of Measurement: Square Yard

- N. Item 15: Storm Drain Connection
1. Cost shall include all labor, materials, equipment and other costs required to furnish and install the storm drain connection as shown on the contract documents including saw cutting and removal of existing asphalt, excavation and trenching, pipe installation, existing inlet modification, backfill, and asphalt repair.
 2. Unit of Measurement: Linear foot, measured along the centerline of new storm drain located within existing asphalt area.
- O. Item 16: Striping / Parking Lot Repair
1. Cost shall include installing all necessary work for striping and parking lot repair as shown on plans.
 2. Unit of Measurement: Lump Sum
- P. Item 17: Compact Car Parking Sign
1. Cost shall include all labor, materials, equipment, and other costs associated with the furnishing and installation of compact car parking signs as shown on the construction plans.
 2. Unit of Measurement: Each
- Q. Item 18: Exterior Fencing
1. Cost shall include all labor, materials, equipment, and other costs associated to furnish and install exterior fencing as shown on the construction plans. This shall include posts, foundations, foundation connectors, bracing, truss rods and takeups, caps, tension bands, fence fabric and all other materials and fasteners required to complete installation of exterior fencing in reasonably close conformity with the Plans or as established by the Engineer.
 2. Unit of Measurement: Linear Foot
- R. Item 19: Fabric Canopy (Hexagon Umbrella)
1. Cost of fabric canopy (hexagon umbrella) shall include all material, excavation, foundation, installation, and labor required to furnish and install fabric canopies in accordance with the contract documents and manufacturer specifications.
 2. Unit of Measurement: Each
- S. Item 20: Seeding and Mulching
1. Cost shall include all material, labor, equipment and other costs associated to place seed, lime, and mulch on lawn areas disturbed during splash pad construction operations.
 2. Unit of Measurement: Lump Sum
- T. Item 21: Potable Water Supply
1. Cost shall include all labor, materials, equipment, and other costs associated to furnish and install the potable water supply to the reservoir tank. This shall include all piping, support, connectors, and all other materials required to tap into an existing water line, and route the new line to the reservoir tank and make the connection. Cost shall also include all costs associated to furnish and install a shutoff valve and backflow preventer within the mechanical room for the new potable water supply line.
 2. Unit of Measurement: Lump Sum

U. Item 22: Rain Drop Startup Assistance

1. Cost shall be for one (1) day of on-site assistance provided by Rain Drop for assistance with system start-up and adjustment at a cost of \$1,375.00 per day with no markup or additional cost.
2. Unit of Measurement: Lump Sum

V. Item BA-1: Tables

1. Cost shall include all labor, materials, equipment, and other costs associated to furnish and install tables in accordance with the contract documents and manufacturer specifications.
2. Unit of Measurement: Each

W. Item BA-2: Exterior Lighting

1. Cost shall include all labor, materials, equipment, and other costs associated to furnish and install a 20' aluminum light pole with an exterior LED light that matches the character of the existing lighting on site in accordance with the contract documents and manufacturer specifications. Cost shall include concrete base, conduit, wiring, hand holes, connectors, fasteners, etc.
2. Unit of Measurement: Each

END OF SECTION 012200

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SECTION 323113 - CHAIN LINK FENCES AND GATES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Chain-link fences.
2. Swing gates.
3. ~~Privacy slats.~~

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For each type of fence and gate assembly.
1. Include plans, elevations, sections, details, and attachments to other work.
- C. Samples: For each exposed product and for each color and texture specified.
- D. Delegated-Design Submittal: For structural performance of chain-link fence and gate frameworks, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.4 INFORMATIONAL SUBMITTALS

- A. Product certificates.
- B. Product test reports.
- C. Sample warranty.

1.5 WARRANTY

- A. Special Warranty: Installer agrees to repair or replace components of chain-link fences and gates that fail in materials or workmanship within specified warranty period.
1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design chain-link fence and gate frameworks.
- B. Structural Performance: Chain-link fence and gate frameworks shall withstand the design wind loads and stresses for fence height(s) and under exposure conditions indicated according to ASCE/SEI 7:
 - 1. Design Wind Load: As indicated on Drawings.
 - a. Minimum Post Size: Determine according to ASTM F 1043 for post spacing not to exceed 10 feet for Material Group IA, ASTM F 1043, Schedule 40 steel pipe.
 - b. Minimum Post Size and Maximum Spacing: Determine according to CLFMI WLG 2445, based on mesh size and pattern specified.

2.2 CHAIN-LINK FENCE FABRIC

- A. General: As provided in the plan set. Provide fabric in one-piece heights measured between top and bottom of outer edge of selvage knuckle or twist according to "CLFMI Product Manual" and requirements indicated below:
 - 1. Fabric Height: As indicated on Drawings.
 - 2. Steel Wire for Fabric: Wire diameter of 9 gauge.
 - a. Mesh Size: 2 inches.
 - b. Aluminum-Coated Fabric: ASTM A 491, Type I.
 - c. Zinc-Coated Fabric: ASTM A 392, Type II, Class 1, 1.2 oz./sq. ft
 - d. Zn-5-Al-MM Aluminum-Mischmetal-Coated Fabric: ASTM F 1345, Type III.
 - e. Polymer-Coated Fabric: ASTM F 668, over-coated steel wire.
 - ~~1) — Color: As shown on the Drawings, according to ASTM F 934.~~
 - f. Coat selvage ends of metallic-coated fabric before the weaving process with manufacturer's standard clear protective coating.
- 3. Aluminum Wire Fabric: ASTM F 1183, with mill caustic-cleaned or etched finish, and wire diameter of 0.148 inch.
 - a. Mesh Size: 2 inches.
- 4. Selvage: Twisted top and knuckled bottom.

2.3 FENCE FRAMEWORK

- A. Posts and Rails: ASTM F 1043 for framework, including rails, braces, and line; terminal; and corner posts. Provide members with minimum dimensions and wall thickness according to ASTM F 1043 or ASTM F 1083 based on the following:
1. Fence Height: As indicated on Drawings.
 2. Light-Industrial-Strength Material: Group IC-L, round steel pipe, electric-resistance-welded pipe, Group II-L, roll-formed-steel C-section shapes, Group III-L, hot-rolled H-beam shapes or Group IV, Alternative Design.
 - a. Line Post: 1.9 inches in diameter.
 - b. End, Corner, and Pull Posts: 4.0 inches.
 3. Heavy-Industrial-Strength Material: Group IA, round steel pipe, Schedule 40, Group IC, round steel pipe, electric-resistance-welded pipe, Group II, roll-formed-steel C-section shapes, Group III, hot-rolled H-beam shapes or Group IV, Alternative Design.
 - a. Line Post: As recommended by the manufacturer.
 - b. End, Corner, and Pull Posts: As recommended by the manufacturer.
 4. Horizontal Framework Members: top rails according to ASTM F 1043.
 5. Brace Rails: ASTM F 1043.
 6. Metallic Coating for Steel Framework:
 - a. External, Type B zinc with organic overcoat and internal, Type D zinc-pigmented coating.
 - ~~7. Polymer coating over metallic coating.~~
 - ~~a. Color: according to ASTM F 934.~~

2.4 TENSION WIRE

- A. Metallic-Coated Steel Wire: 0.177-inch-diameter, marcelled tension wire according to ASTM A 817 or ASTM A 824, with the following metallic coating:
1. Type II: Zinc coated (galvanized) with minimum coating weight matching chain-link fabric coating weight.
- ~~B. Polymer Coated Steel Wire: diameter, tension wire according to ASTM F 1664.~~
- ~~1. Color: according to ASTM F 934.~~

2.5 SWING GATES

- A. General: ASTM F 900 for gate posts and double swing gate types.
1. Gate Leaf Width: As indicated.
 2. Framework Member Sizes and Strength: Based on gate fabric height of 72 inches or less.

- B. Pipe and Tubing:
 - 1. Zinc-Coated Steel: ASTM F 1043 and ASTM F 1083; protective coating and finish to match fence framework.
 - 2. Aluminum: ASTM B 429/B 429M; finish.
 - 3. Gate Posts: Round tubular steel.
 - 4. Gate Frames and Bracing: Round tubular steel.
- C. Frame Corner Construction: Welded.
- D. Extended Gate Posts and Frame Members: Fabricate gate posts and frame end members to extend as indicated above top of chain-link fabric at both ends of gate frame to attach barbed wire assemblies.
- E. Hardware:
 - 1. Hinges: 360-degree inward and outward swing.
 - 2. Latch: Permitting operation from both sides of gate with provision for padlocking accessible from both sides of gate.
 - 3. Lock: Manufacturer's standard internal device.
 - 4. Padlock and Chain: Per Owner Requirements.
 - 5. Closer: Manufacturer's standard.
 - 6. As indicated on the plan set.

2.6 FITTINGS

- A. Provide fittings according to ASTM F 626.
- B. Finish:
 - 1. Metallic Coating for Pressed Steel or Cast Iron: Not less than 1.2 oz./sq. ft. of zinc.
 - a. Polymer coating over metallic coating.
 - 2. Aluminum: Mill finish.

2.7 GROUT AND ANCHORING CEMENT

- A. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M. Provide grout, recommended in writing by manufacturer, for exterior applications.
- B. Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching, and grouting compound. Provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating, and that is recommended in writing by manufacturer for exterior applications.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Do not begin installation before final grading is completed unless otherwise permitted by Architect/Engineer.

3.2 PREPARATION

- A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

3.3 CHAIN-LINK FENCE INSTALLATION

- A. Install chain-link fencing according to ASTM F 567 and more stringent requirements specified.
- B. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed soil.
- C. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.
 - 1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
 - 2. Concrete Fill: Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.
 - a. Concealed Concrete: Place top of concrete 2 inches below grade to allow covering with surface material.
 - b. Posts Set into Sleeves in Concrete: Use steel pipe sleeves preset and anchored into concrete for installing posts. After posts are inserted into sleeves, fill annular space between post and sleeve with nonshrink, nonmetallic grout or anchoring cement, mixed and placed according to anchoring material manufacturer's written instructions. Finish anchorage joint to slope away from post to drain water.
- D. Terminal Posts: Install terminal end, corner, and gate posts according to ASTM F 567 and terminal pull posts at changes in horizontal or vertical alignment of 15 degrees or more as indicated on Drawings. For runs exceeding 500 feet, space pull posts an equal distance between corner or end posts.
- E. Line Posts: Space line posts uniformly at 10 feet o.c.
- F. Tension Wire: Install according to ASTM F 567, maintaining plumb position and alignment of fence posts. Pull wire taut, without sags. Fasten fabric to tension wire with 0.120-inch-diameter hog rings of same material and finish as fabric wire, spaced a maximum of 24 inches o.c. Install tension wire in locations indicated before stretching fabric. Provide horizontal tension wire as shown on the Drawings.

- G. Chain-Link Fabric: Apply fabric to outside of enclosing framework. Leave 2-inch bottom clearance between finish grade or surface and bottom selvage unless otherwise indicated. Pull fabric taut and tie to posts, rails, and tension wires. Anchor to framework so fabric remains under tension after pulling force is released.

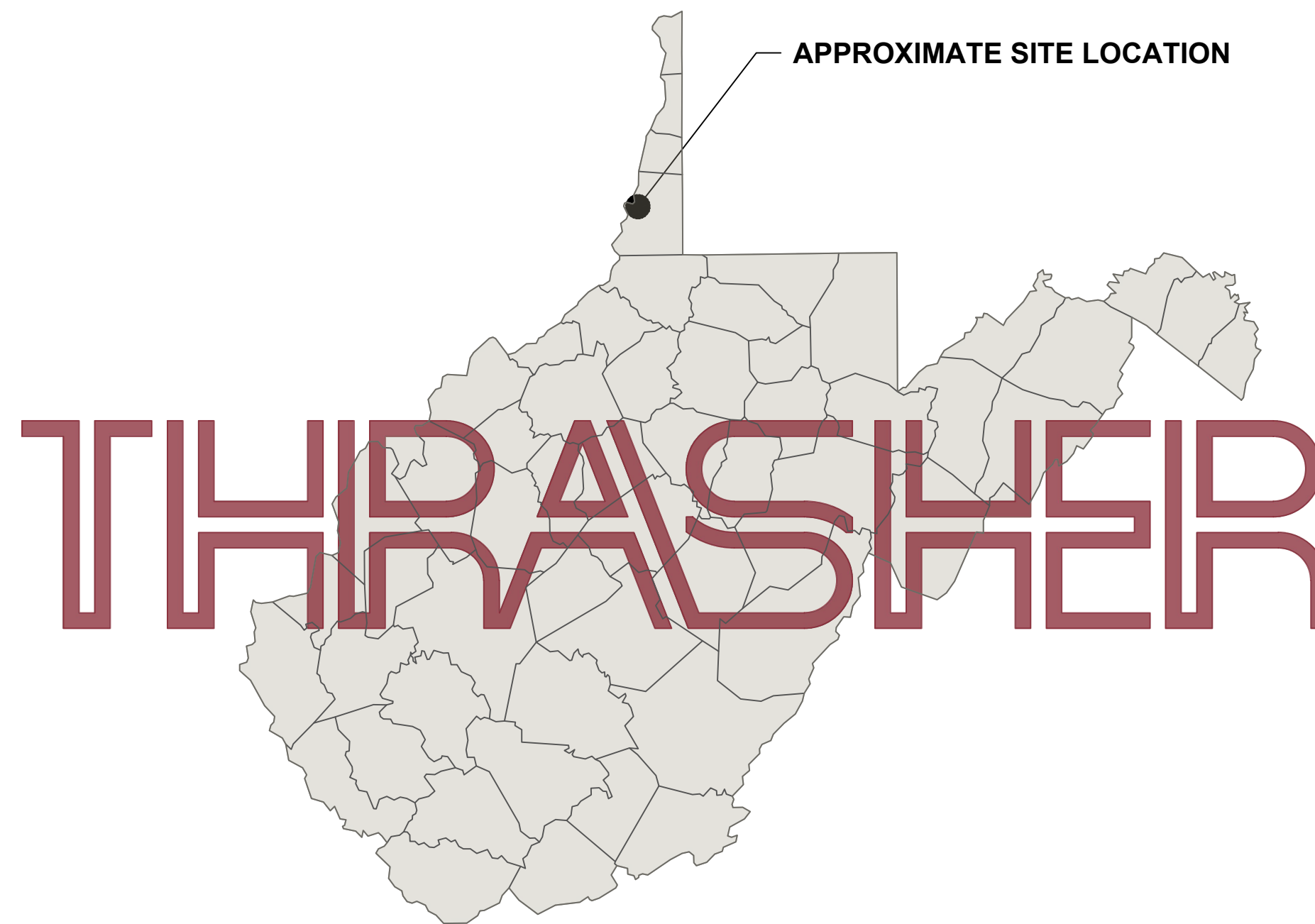
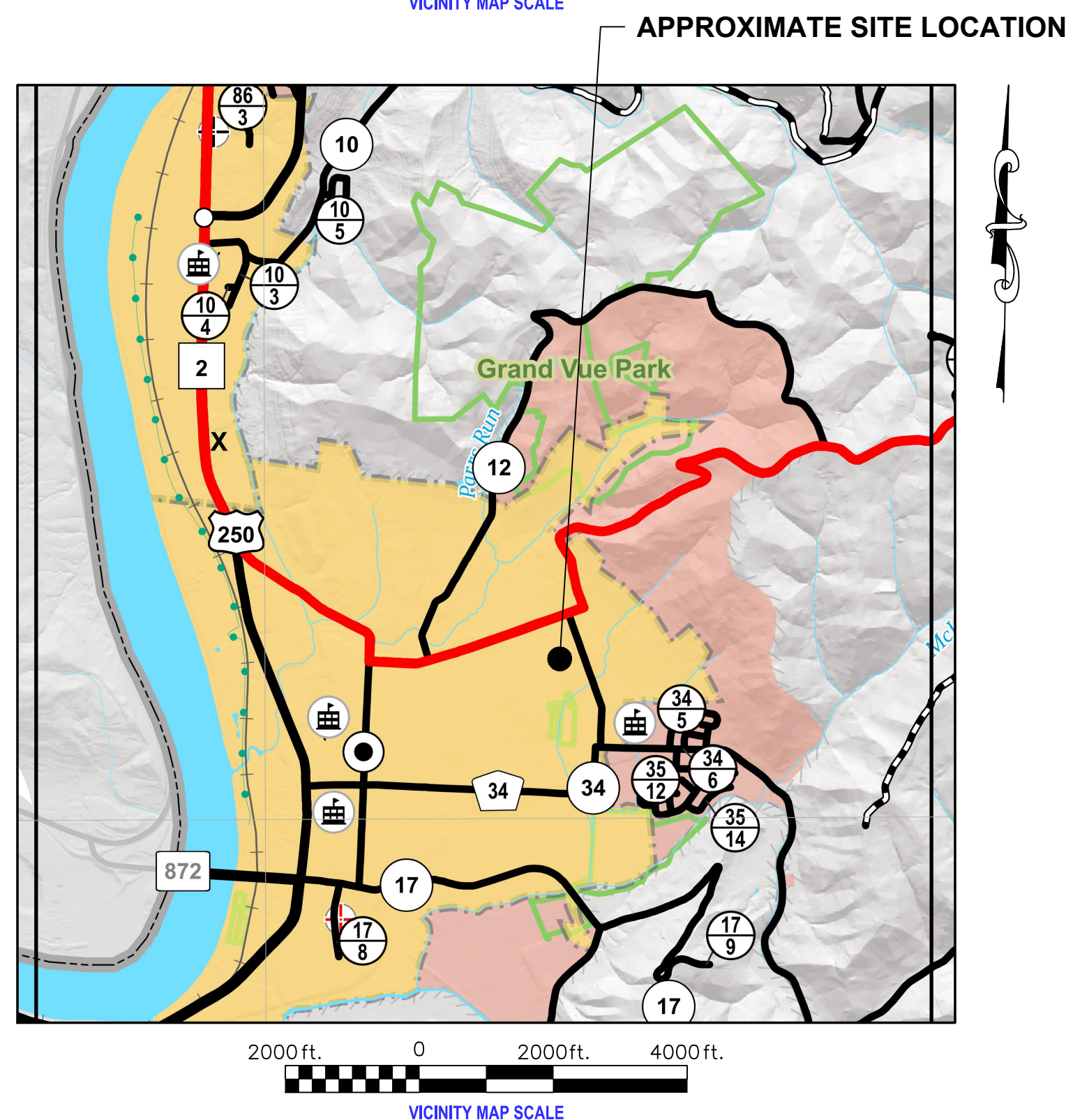
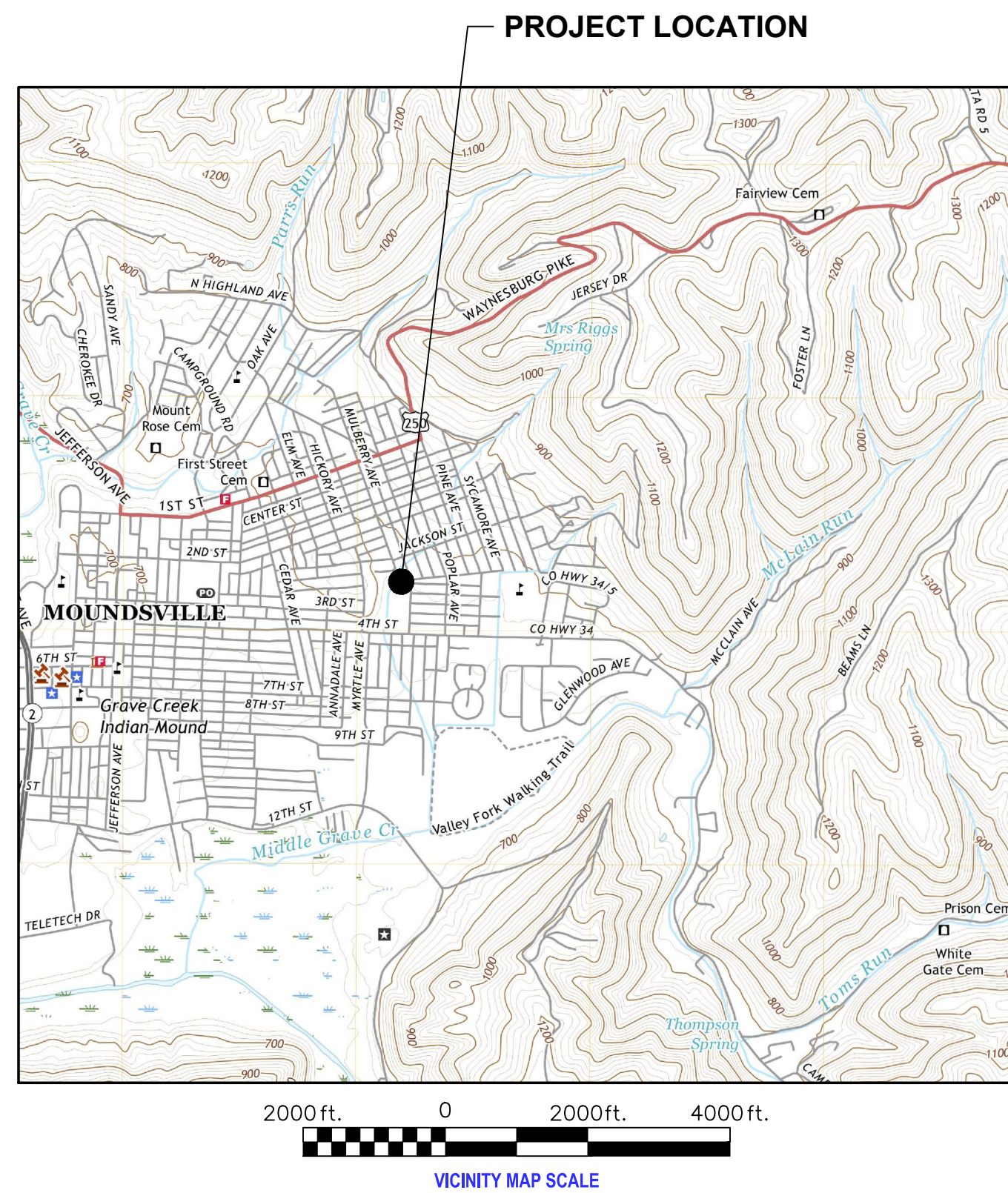
3.4 ADJUSTING

- A. Gates: Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.
- B. Lubricate hardware and other moving parts.

END OF SECTION 323113

SHEET	DESCRIPTION
C0.01	GENERAL NOTES
C1.01	EXISTING CONDITIONS
C2.01	OVERALL SITE PLAN
C2.02	SPLASH PAD SITE PLAN
C2.03	MECHANICAL ROOM PLAN
C3.01	OVERALL GRADING AND ESC PLAN
C4.01	POINT LAYOUT
C5.01-C5.04	DETAILS

CITY OF MOUNDSVILLE ISSUED FOR BID PLANS FOR THE FOUR SEASONS SPLASH PAD 030-10204 MARSHALL COUNTY, WEST VIRGINIA APRIL 2021



ISSUED FOR BID
2021-03-17

ADDENDUM #1
2021-04-01

THRASHER

REVISION NUMBER	REVISED SHEETS	BY	DATE	DESCRIPTION
1	C0.01	MRP	4-1-21	UPDATED QUANTITY SUMMARY
1	C1.01	MRP	4-1-21	FENCE DEMO EXTENDED
1	C2.01	MRP	4-1-21	PROPOSED FENCE EXTENDED
1	C2.03	MRP	4-1-21	ADDED WATER SUPPLY LINE AND FAN/LOUVER PRODUCTS
1	C5.02	MRP	4-1-21	REVISED WALL HEIGHTS
1	C5.04	MRP	4-1-21	REVISED DETAIL TO REFLECT FENCE FINISH

THIS PLAN SET DEPICTS THE NECESSARY INFORMATION FOR EROSION AND SEDIMENT CONTROL MEASURES AS REQUIRED BY THE WVDEP FOR STORM WATER PERMITTING PURPOSES.
THE AQUATIC RESOURCES DEPICTED ON THESE DRAWINGS ARE AS PROVIDED TO THE THRASHER GROUP, INC. BY OTHERS. THRASHER WILL NOT ACCEPT ANY LIABILITY FOR THE ACCURACY, OR COMPLETENESS, OF THE AQUATIC RESOURCES DEPICTED ON THESE PLANS.



RICHARD HOVATTER, JR., WV P.E. # 18460

<input type="checkbox"/>	ISSUED FOR PERMITS	DATE: _____	BY: _____
<input checked="" type="checkbox"/>	ISSUED FOR BID	DATE: 3/17/21	BY: RSH
<input type="checkbox"/>	ISSUED FOR CONSTRUCTION	DATE: _____	BY: _____

THE CITY OF MOUNDSVILLE
PHONE: (304) 845-6300
800 6TH STREET
MOUNDSVILLE, WV 26041

CONTACTS

CLIENT'S CONTACT
THE CITY OF MOUNDSVILLE
ATTN: RICK HEALY
(304) 845-6300

BRIDGEPORT, WV OFFICE
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
(304) 624-4108
PO BOX 940

ENGINEER
THE THRASHER GROUP
ATTN: RICHARD HOVATTER, PE
304 624-4108

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CALL811.COM/811-IN-YOUR-STATE

GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL PLAN AND ELEVATION DIMENSIONS OF THE VARIOUS WORK ITEMS ON THIS PROJECT.
2. ALL CONSTRUCTION SHALL CONFORM TO THE THRASHER PLANS AND SPECIFICATIONS INCLUDED IN THIS PLAN SET. ANY TECHNICAL PROCESS FOR CONSTRUCTION METHOD OR MATERIAL THAT IS NOT COVERED IN THESE CONTRACT DOCUMENTS WILL BE COVERED BY WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS STANDARD SPECIFICATIONS, ROADS AND BRIDGES, ADOPTED 2017 AND THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, SUPPLEMENTAL SPECIFICATIONS DATED 2021, STANDARD DETAILS VOLUME I DATED MAY, 2016 AND VOLUME II DATED JANUARY 1, 2019. THE MEASUREMENT AND PAYMENTS ARE COVERED IN THE CONTRACT DOCUMENTS AND CONTRACT PLANS ARE THE GOVERNING PROVISIONS APPLICABLE TO THIS PROJECT.
3. THE LOCATION AND/OR ELEVATIONS OF ALL KNOWN UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON THE BEST AVAILABLE INFORMATION FROM EXISTING PLANS AND FIELD INVESTIGATION. IT IS CONTRACTORS RESPONSIBILITY TO ASCERTAIN THE STATUS AND LOCATION OF EACH UTILITY WHERE PERFORMING WORK WHICH MAY AFFECT THESE FACILITIES, INCLUDING PROBING, EXCAVATION, OR ANY OTHER PRECAUTION REQUIRED TO CONFIRM LOCATION. CONTRACTOR SHOULD CONTACT "MISS UTILITY OF WEST VIRGINIA" (800-254-4848) TO FIELD LOCATE ALL ABOVE AND BELOW GROUND UTILITIES IN THE AREA. THE CONTRACTOR SHALL TAKE ALL RESPONSIBLE PRECAUTIONS AGAINST DAMAGE TO EXISTING UTILITIES. HOWEVER IN THE EVENT OF DAMAGE OR DISRUPTION TO UTILITIES WHICH ARE ACTIVE AND ARE TO REMAIN IN SERVICE, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESPONSIBLE OFFICIAL OF THE ORGANIZATION OPERATING THE UTILITY INTERRUPTED. CONTRACTOR SHALL IMMEDIATELY LEND ALL POSSIBLE ASSISTANCE IN RESTORING SERVICES AND SHALL ASSUME ALL COST, CHARGES, OR CLAIMS CONNECTED WITH THE INTERRUPTION AND REPAIR OF SUCH SERVICES.
4. THE CONTRACTOR SHALL PROVIDE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AND OTHER ACTIONS AS REQUIRED BY LOCAL AND STATE REGULATIONS OR REQUESTED BY ENGINEER. CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING OR MODIFYING SEDIMENT CONTROL MEASURES DURING CONSTRUCTION IN ORDER TO PREVENT EROSION.
5. ALL EXCAVATION AND FILL PLACEMENT SHALL BE TO THE LINES AND GRADES AS SHOWN ON THE DRAWINGS. THE CONTRACTOR WILL BE RESPONSIBLE FOR FIELD VERIFYING ALL LINES AND GRADES. EXACT CUT AND FILL LIMITS MAY NEED TO BE MODIFIED IN THE FIELD DURING CONSTRUCTION. THE ENGINEER WILL WORK CLOSELY WITH THE CONTRACTOR TO MAKE THESE MODIFICATIONS.
6. COMPACT EXPOSED GROUND SURFACE FOLLOWING CLEARING AND GRUBBING AND PRIOR TO PLACEMENT OF CRUSHER RUN BACKFILL. CRUSHER RUN BACKFILL SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY. COMPACTION TESTING WILL BE PROVIDED BY THE OWNER THROUGH THE THRASHER GROUP. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE THRASHER GROUP TO ENSURE AN INSPECTOR IS ON SITE DURING BACKFILL OPERATIONS.
7. ALL DISTURBED AREAS WITHIN THE PROJECT AREA MUST BE SEEDED AND MULCHED AFTER CONSTRUCTION HAS BEEN COMPLETED.
8. RAIN DROP PRODUCTS, LLC PROVIDED THE DESIGN DRAWINGS ASSOCIATED WITH THE SPLASH PAD EQUIPMENT. THE EQUIPMENT HAS BEEN DIRECT PURCHASED BY THE OWNER WILL BE ON SITE FOR CONTRACTOR TO INSTALL. THE LIST OF EQUIPMENT PROVIDED BY RAIN DROP, LLC/OWNER IS LISTED ON THEIR PLANS WHICH ARE A PART OF THIS CONSTRUCTION SET. RAIN DROP WILL PROVIDE ASSISTANCE WHEN THE ACTUAL ABOVE GROUND ACCESSORIES ARE READY TO BE ASSEMBLED AND INSTALLED.
9. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING AND/OR MODIFYING ANY EXISTING UTILITIES THAT MAY BE INTERRUPTED DUE TO THE CONSTRUCTION.
10. THE EXISTING MATERIALS TO BE DEMOLISHED SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF SITE.
11. THE WORK AREA SHALL BE FENCED TO PRODUCE A BOUNDARY BETWEEN THE CONSTRUCTION AREA AND THE REMAINDER OF THE FOUR SEASONS FACILITY.

CONTACT INFORMATION:

OWNER THE CITY OF MOUNDSVILLE ATTN: RICK HEALY 800 6TH STREET MOUNDSVILLE, WV 26041 304-845-6300	LANDSCAPE ARCHITECT THE THRASHER GROUP, INC. MARCUS CARNEGIE, PLA mcarnegie@thethrashergroup.com	TELECOMMUNICATIONS FRONTIER 1-800-921-8101 SUDDENLINK 1-800-972-5757
WATER MOUNDSVILLE WATER DEPARTMENT 800 6TH STREET, MOUNDSVILLE, WV 26041 304-845-0380	ENGINEER THE THRASHER GROUP, INC. RICHARD HOVATTER, PE rhovatter@thethrashergroup.com	ELECTRIC AMERICAN ELECTRIC POWER (AEP) 1-800-982-4237
MISS UTILITY 1-800-245-4848 http://www.wv811.com	SEWER AND STORMWATER MOUNDSVILLE SANITARY BOARD 819 LAFAYETTE AVENUE, MOUNDSVILLE, WV 26041 304-845-4360	GAS MOUNTAINEER GAS COMPANY 1-800-834-2070

QUANTITY SUMMARY

Item No.	DESCRIPTION	UNIT	QUANTITY
1	Mobilization	LS	1
2	Stakeout	LS	1
3	Demolition	LS	1
4	Erosion and Sediment Control	LS	1
5	Installation of Splash Pad Components	LS	1
6	Mechanical Room Modifications	LS	1
7	Mechanical Room Electrical Service	LS	1
8	Electrical Pull Box	EA	2
9	Mechanical Room Door	EA	2
10	Retaining Wall	SY	106
11	Crusher Run Backfill	CY	38
12	12" Nyloplast Drain	EA	5
13	Concrete Decking	SY	161
14	Splash Pad Concrete Decking	SY	370
15	Storm Drain Connection	LF	107
16	Striping / Parking Lot Repair	LS	1
17	Compact Car Parking Sign	EA	9
18	Exterior Fencing	LF	220
19	Fabric Canopy (Hexagon Umbrella)	EA	3
20	Seeding and Mulching	LS	1
21	Potable Water Supply	LS	1
22	Allowance - Rain Drop Start-up Assistance	LS	1
BID ALTERNATE #1			
BA-1	Tables	EA	5
BID ALTERNATE #2			
BA-2	Exterior Lighting	EA	5

1

CONSTRUCTION SEQUENCE OF EVENTS:

1. LOCATE ALL EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY MISS UTILITY OF WEST VIRGINIA AT 1-800-245-4848 A MINIMUM OF (2) DAYS PRIOR TO ANY EXCAVATION OR CONSTRUCTION.
2. INSTALL ALL PERIMETER AND EROSION AND SEDIMENT CONTROLS.
3. PERFORM DEMOLITION ACTIVITIES PER SHEET C1.01.
4. STRIP AND REMOVE TOPSOIL.
5. BEGIN MECHANICAL ROOM MODIFICATIONS.
6. INSTALL RESERVOIR TANK AND PIPING.
7. CONSTRUCT PROPOSED RETAINING WALL PER CONSTRUCTION PLANS.
8. ROUGH GRADE SITE.
9. INSTALL DRAINAGE FACILITIES AND ALL OTHER UTILITIES.
10. COMPLETE MECHANICAL ROOM MODIFICATIONS.
11. COMPLETE FINE GRADING AND PREPARATION OF SUBGRADE FOR SUB-BASE MATERIAL. ALL DISTURBED AREAS SHALL BE DRESSED TO A NEAT AND FINISHED APPEARANCE.
12. INSTALL AND PRESSURE TEST SPLASH PAD PIPING.
13. COMPLETE CONCRETE PAD.
14. COMPLETE INSTALLATION OF SPLASH PAD COMPONENTS AND FENCING.
15. SEED AND MULCH DISTURBED AREAS.
16. AFTER COMPLETE STABILIZATION OF THE DRAINAGE AREA, REMOVE EROSION AND SEDIMENT CONTROL PRACTICES AND DRESS AND STABILIZE AS REQUIRED.
17. FINAL PROJECT CLEANUP AND DEMOBILIZATION.

EROSION AND SEDIMENT CONTROL NOTES

MAINTENANCE AND INSPECTION NOTES

1. THE CONTRACTOR SHALL CLEAN OUT SEDIMENT BEHIND THE COMPOST FILTER SOCKS AND/OR SILT FENCE ONCE IT IS ONE THIRD OF THE HEIGHT OF THE SOCKS/FENCE. THE SEDIMENT SHALL BE INCORPORATED INTO THE FILL WITHIN THE DISTURBED AREA.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED, AT MINIMUM, ONCE EVERY 4 CALENDAR DAYS AND WITHIN 24-HOURS AFTER ANY STORM GREATER THAN 0.25-INCHES PER 24-HOUR PERIOD. ANY REQUIRED REPAIRS OR MAINTENANCE SHALL BE MADE IMMEDIATELY.

SEEDING AND MULCHING

1. TEMPORARY STABILIZATION
 DATES: MARCH 1 THROUGH JUNE 15
 SEED: OATS @ 168 LB/AC
 DATES: AUGUST 15 THROUGH NOVEMBER 1
 SEED: RYE @ 120 LB/AC
 FERTILIZER: 10-10-10 @ 400 LB/AC

 FOR STABILIZATION OUTSIDE SEEDING DATES, USE HAY OR STRAW MULCH AT 3 TONS/AC OR AT 2 TONS/AC IF ASPHALT EMULSION IS APPLIED AT 100 GAL/AC.
2. PERMANENT STABILIZATION
 DATES: MARCH, APRIL, AUGUST, & NOVEMBER
 SEED: KY-31 TALL FESCUE @ 50 LB/AC
 FERTILIZER: 10-20-10 @ 1000 LB/AC
 LIME: 3 TONS/AC OR PER SOIL TEST RESULTS
 MULCH: HAY OR STRAW @ 2 TONS/AC OR @ 1.5 TONS/AC WITH ASPHALT EMULSION @ 125 GAL/AC
3. SEEDBED PREPARATION: AREAS TO BE SEEDED SHALL BE FREE OF ROCKS AND STONES, DISKED TO A DEPTH OF 4-IN TO 6-IN, AND SMOOTHLY GRADED.
4. SEEDING METHOD: SEED MAY BE BROADCAST BY HYDROSEEDER OR MANUALLY AS FOLLOWS: BY HAND WITH A CYCLONE SEEDER, OR FERTILIZER SPREADER. IF A MANUAL METHOD IS USED, DIVIDE THE SEED INTO TWO LOTS AND BROADCAST THE SECOND PERPENDICULAR TO THE FIRST.
5. TOPSOIL REDISTRIBUTION SHALL BE COORDINATED WITH THE OWNER.
6. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 4 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS PERMANENTLY CEASED.
7. WHERE THE INITIATION OF STABILIZATION MEASURES WITHIN 4 DAYS AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS CONDITIONS ALLOW.
8. WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 14 DAYS FROM WHEN ACTIVITIES CEASED (e.g., THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY HALTED IS LESS THAN 14 DAYS), THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE FOURTH DAY AFTER CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED.
9. AREAS WHERE THE SEED HAS FAILED TO GERMINATE ADEQUATELY (UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70%) WITHIN 30 DAYS AFTER SEEDING AND MULCHING MUST BE RE-SEEDED IMMEDIATELY, OR AS SOON AS WEATHER CONDITIONS ALLOW.

LAYOUT TAB: 002--GENERAL NOTES
 CAD FILE: R:\030\030-10204\00-City of Moundsville - Splash Pad-City of Moundsville - Drawing\10204--GENERAL NOTES AND QUANTITIES SPLASH PARK.dwg
 PLOT DATE/TIME: 4/1/2021 3:28 PM

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1	MRP	4-1-21	UPDATED QUANTITY SUMMARY
NO.	BY	DATE	DESCRIPTION

ADDENDUM #1
APRIL 2021

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



PHASE No.
CONTRACT No.
PROJECT No.
030-10204

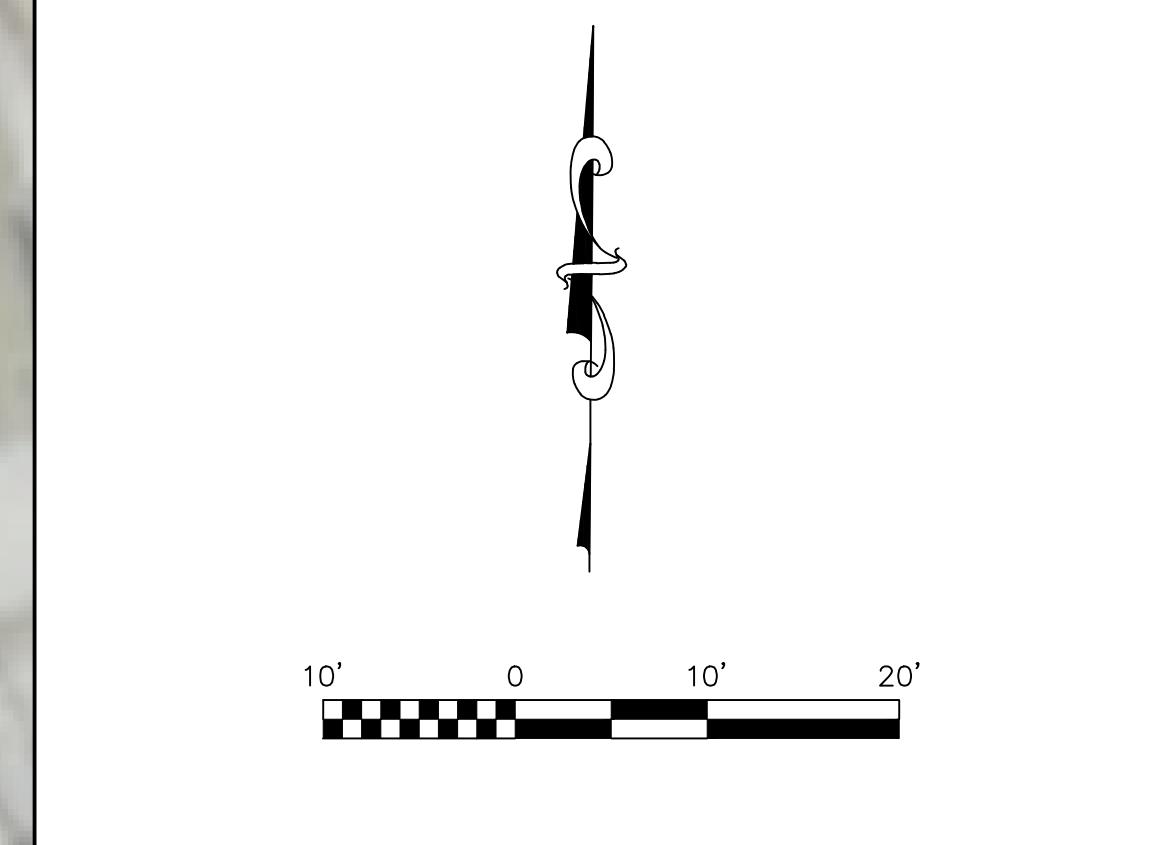
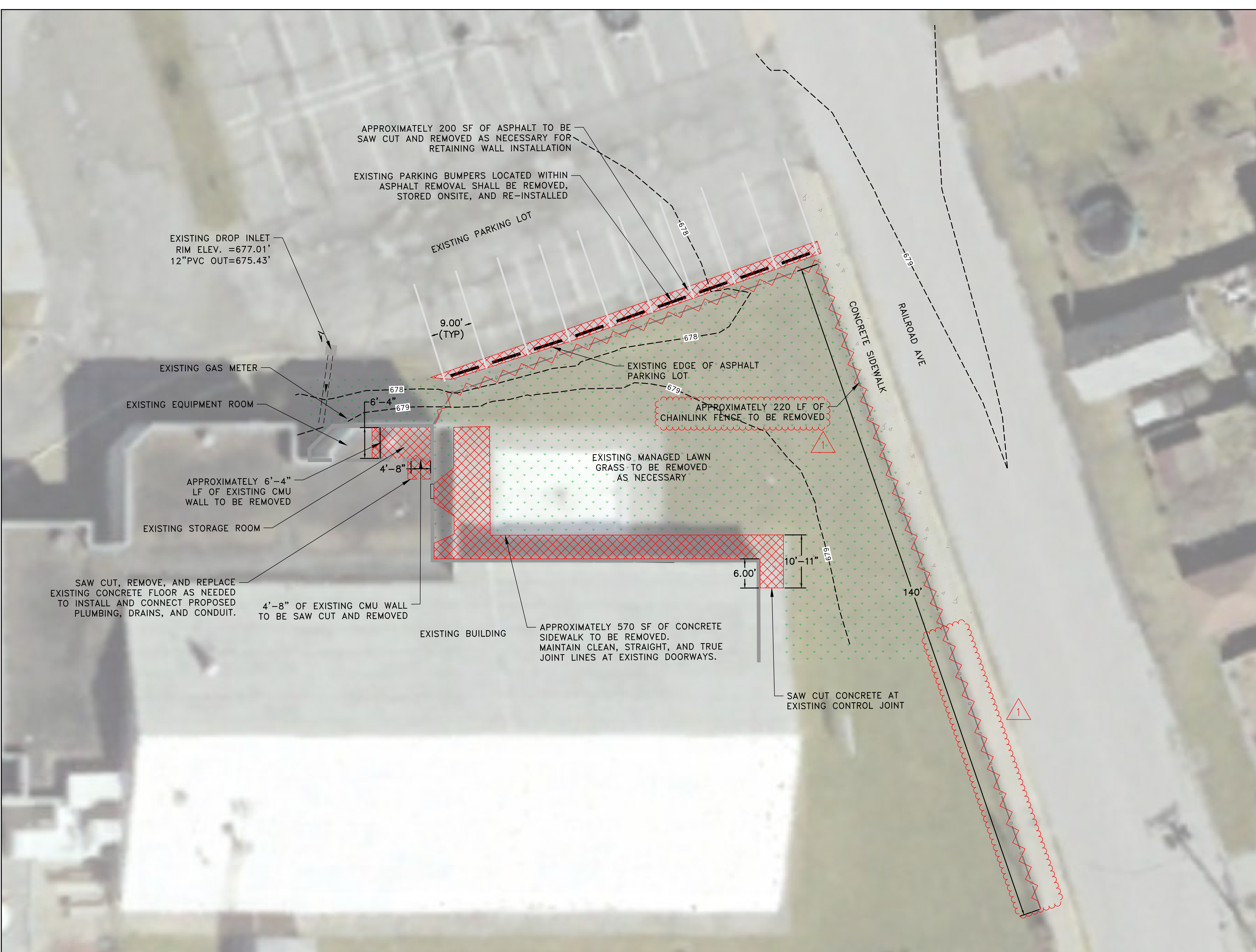
CITY OF MOUNDSVILLE
 FOUR SEASONS SPLASH PAD
 MARSHALL COUNTY, WEST VIRGINIA
 GENERAL NOTES

SHEET No.
C0.01

LAYOUT TAB: Layout1
 CAD FILE: R:\030\030-10204-00-City Of Moundsville (WV) - Splash Pad-City Of Moundsville-\Drawing\10204-EXISTING CONDITIONS.dwg
 PLOT DATE/TIME: 4/7/2021 3:22 PM

PLAN LEGEND	
	EXISTING CONTOURS
	EXISTING CHAINLINK FENCE
	EXISTING BUILDING
	EXISTING PARKING STRIPING
	EXISTING PARKING BUMPER
	EXISTING CONCRETE
	EXISTING ASPHALT
	EXISTING LANDSCAPING
	EXISTING DROP INLET
	EXISTING STORM PIPE
	EXISTING GAS METER
	TO BE REMOVED
	TO BE REMOVED

- PLAN NOTES**
- EXISTING AND PROPOSED CONTOURS ARE DISPLAYED AT 1-FOOT INTERVALS.
 - THE FINISHED FLOOR ELEVATION OF THE EXISTING BUILDING WAS CONSIDERED 679.54' FOR DESIGN PURPOSES.
 - PROPERTY INFORMATION:
 DISTRICT 11 - MOUNDSVILLE-WASHINGTON CORP
 TAX MAP 12, PARCEL146
 CITY OF MOUNDSVILLE
 D.B. 0783, PG 0046
 0.3508 AC



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NO.	BY	DATE	DESCRIPTION
1	MRP	4-1-21	FENCE DEMO EXTENDED

ADDENDUM #1
APRIL 2021

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

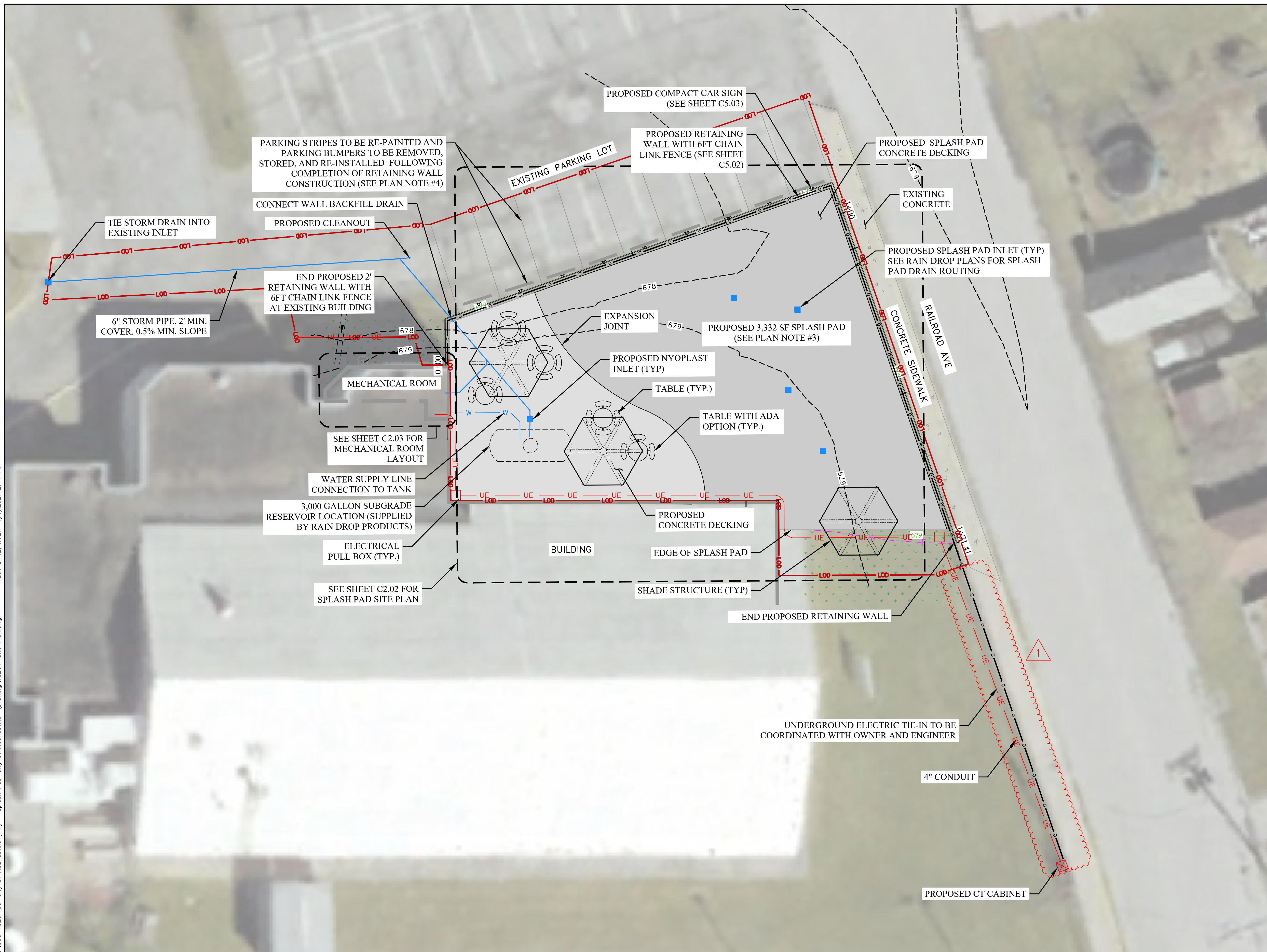
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 THE THRASHER GROUP, INC.
 600 WHITE OAKS BLVD., BRIDGEPORT, WV 26330
 PHONE (304) 624-4108
 FAX (304) 624-7831

PHASE No.
CONTRACT No.
PROJECT No.
030-10204

CITY OF MOUNDSVILLE
 FOUR SEASONS SPLASH PAD
 MARSHALL COUNTY, WEST VIRGINIA
 EXISTING CONDITIONS

SHEET No.
C1.01

LAYOUT TAB: C2.01 OVERALL SITE PLAN
 CAD FILE: R:\030\030-10204\00-City of Moundsville (WV) - Splash Pad-City of Moundsville (WV) - Drawing\10204-Site Plan.dwg
 PLOT DATE/TIME: 4/1/2021 2:14 PM

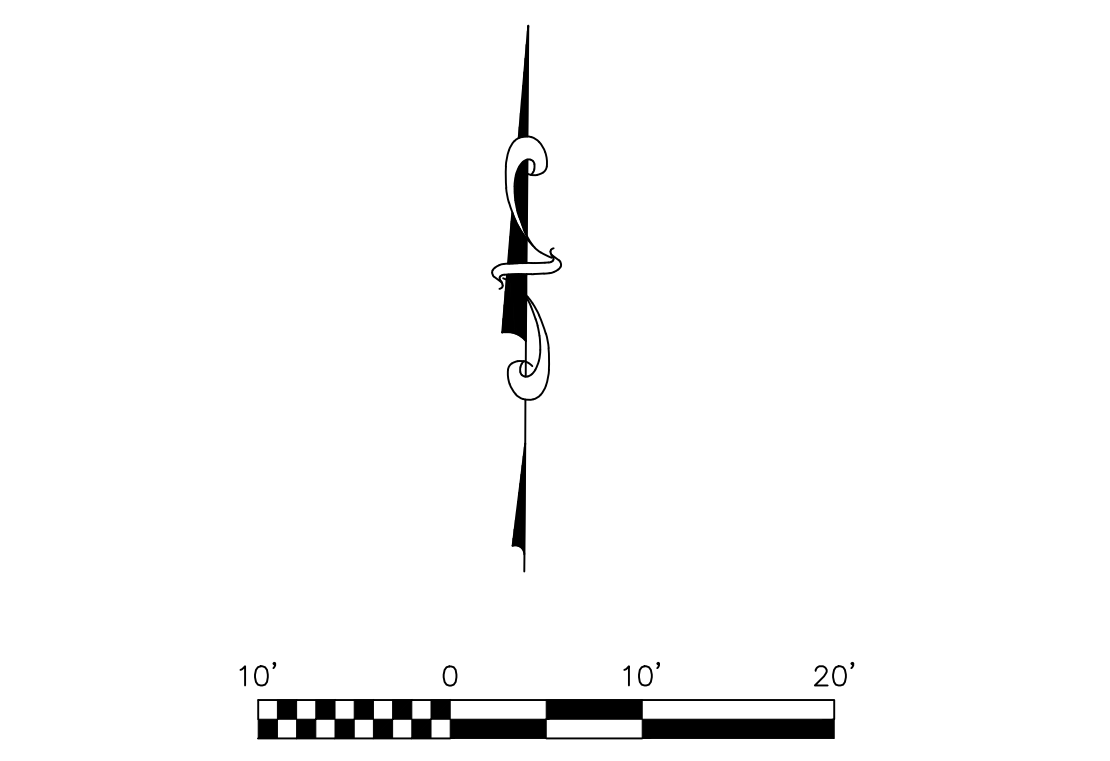


PLAN LEGEND

	EXISTING CONTOURS
	EXISTING CHAINLINK FENCE
	EXISTING BUILDING
	EXISTING CONCRETE
	EXISTING ASPHALT
	EXISTING LANDSCAPING
	EXISTING DROP INLET
	EXISTING STORM PIPE
	EXISTING GAS METER
	PROPOSED CONCRETE
	PROPOSED WALL
	COMPACT CAR SIGN
	PROPOSED DROP INLET
	PROPOSED STORMWATER MANAGEMENT LINE
	PROPOSED PARKING STRIPING
	RELOCATED PARKING BUMPER
	PROPOSED LIMIT OF DISTURBANCE

- ### GENERAL NOTES
- EXISTING AND PROPOSED CONTOURS ARE DISPLAYED AT 1-FOOT INTERVALS.
 - THE FINISHED FLOOR ELEVATION OF THE EXISTING BUILDING IS CONSIDERED 679.54' FOR DESIGN PURPOSES.
 - SEE RAIN DROP PLANS FOR LOCATIONS OF EQUIPMENT AND ASSOCIATED PIPING, DRAINS, AND MATERIALS.
 - PER THE MOUNDSVILLE CITY ORDINANCE, SECTION 1362.13 (C), THE POST-DEVELOPMENT PARKING STALLS WILL NOT MEET THE REQUIRED LENGTH OF TWENTY (20) FEET AND SHALL THEREFORE BE DENOTED AS "COMPACT PARKING STALLS," WITH A MINIMUM WIDTH OF EIGHT (8) FEET AND A MINIMUM LENGTH OF EIGHTEEN (18) FEET.
 - SHADE STRUCTURES SHALL BE SUPERIOR RECREATIONAL PRODUCTS HEXAGON UMBRELLA WITH 8' ENTRY HEIGHT, 12' WIDTH, GREEN POWDER COAT FINISH WITH SILVER SHADE FABRIC, OR APPROVED EQUAL.
 - TABLES SHALL BE ULTRA SITE 46" ROUND SPAN LEG TABLE WITH DIAMOND PATTERN, BLACK POWDER COAT FRAME, GREEN SEAT AND TABLE TOP, OR APPROVED EQUAL. TWO (2) OF THE TABLES SHALL BE ORDERED AND INSTALLED WITH THE MANUFACTURER'S ADA OPTION.

- ### UTILITY NOTES
- EXISTING AND PROPOSED CONTOURS ARE DISPLAYED AT 1-FOOT INTERVALS.
 - SEE RAIN DROP PLANS FOR LOCATIONS AND SIZE OF THE PROPOSED TANK. UTILITY HOOKUPS FOR THE PROPOSED TANK INCLUDING POTABLE WATER SUPPLY, RESERVOIR DRAIN, RESERVOIR OVERFLOW, AND CONDUITS SHALL TIE INTO THE EXISTING BUILDING.
 - SEE RAIN DROP PLANS FOR LOCATIONS OF DRAINS AND ASSOCIATED PIPING.
 - EXISTING LOCATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY NOTABLE DISCREPANCIES.
 - SPLASH PAD WATER SUPPLY TO BE CONNECTED TO EXISTING WATER SUPPLY IN FOUR SEASONS BUILDING.
 - CONTRACTOR SHALL INSTALL CONDUIT, PULL BOXES, WIRE, CONNECTORS, CT CABINET, ETC. REQUIRED TO PROVIDE ELECTRIC SERVICE AND CONNECTION TO EXISTING ELECTRIC METER.



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NO.	BY	DATE	DESCRIPTION
1	MRP	4-1-21	PROPOSED FENCE EXTENDED FROM 165 LF TO 220 LF

ISSUED FOR BID
APRIL 2021

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

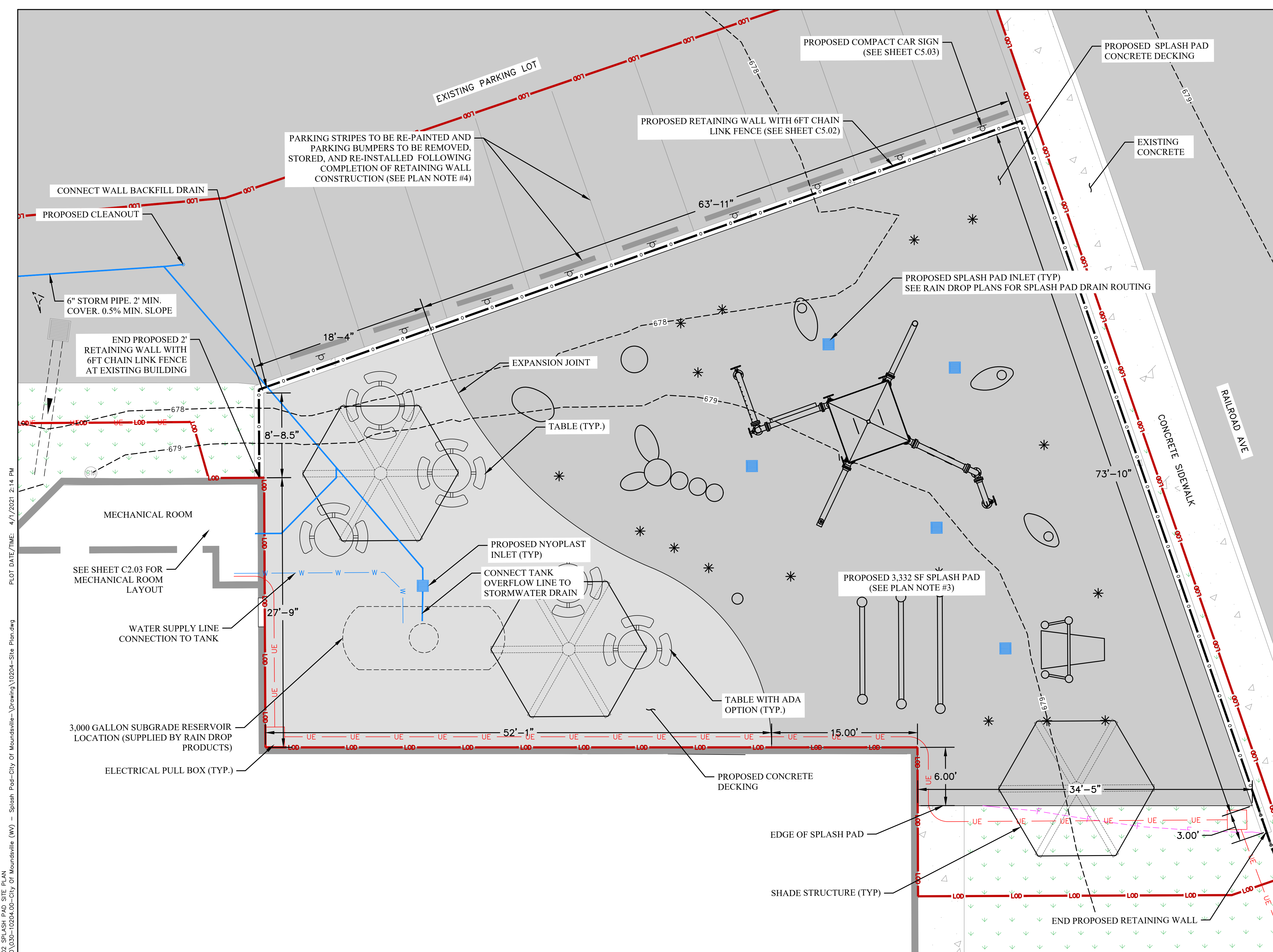
THRASHER
 THE THRASHER GROUP, INC.
 600 WHITE OAKS BLVD., BRIDGEPORT, WV 26330
 PHONE (304) 624-4108
 FAX (304) 624-7831

PHASE No.
CONTRACT No.
PROJECT No.
030-10204

CITY OF MOUNDSVILLE
 FOUR SEASONS SPLASH PAD
 MARSHALL COUNTY, WEST VIRGINIA
 OVERALL SITE PLAN

SHEET No.
C2.01

LAYOUT TAB: C2.02 SPLASH PAD SITE PLAN
 CAD FILE: R:\030\030-10204\00-City of Moundsville (WV) - Splash Pad-City of Moundsville\Drawing\10204-Site Plan.dwg
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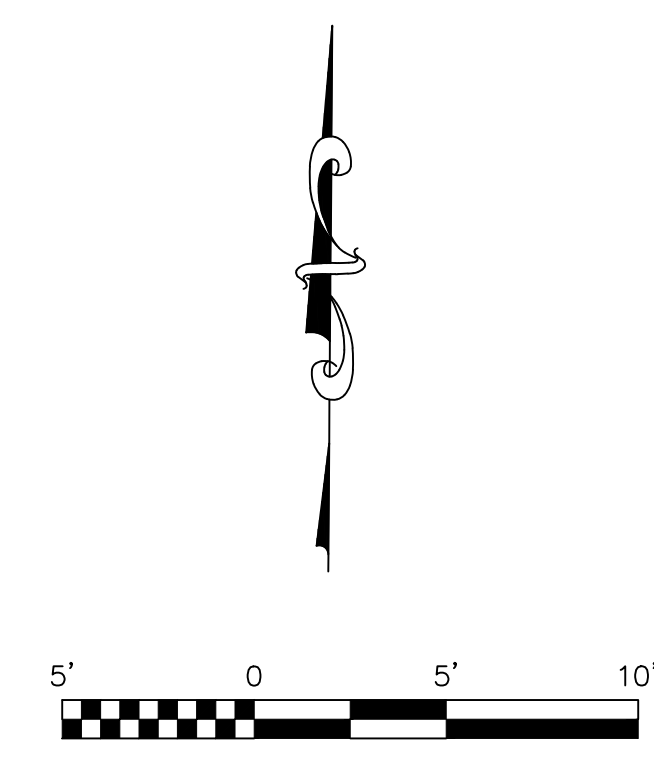


PLAN LEGEND

	EXISTING CONTOURS
	EXISTING CHAINLINK FENCE
	EXISTING BUILDING
	EXISTING CONCRETE
	EXISTING ASPHALT
	EXISTING LANDSCAPING
	EXISTING DROP INLET
	EXISTING STORM PIPE
	EXISTING GAS METER
	PROPOSED CONCRETE
	PROPOSED WALL
	PROPOSED DROP INLET
	PROPOSED STORMWATER MANAGEMENT LINE
	PROPOSED PARKING STRIPING
	RELOCATED PARKING BUMPER
	PROPOSED LIMIT OF DISTURBANCE

- ### GENERAL NOTES
- EXISTING AND PROPOSED CONTOURS ARE DISPLAYED AT 1-FOOT INTERVALS.
 - THE FINISHED FLOOR ELEVATION OF THE EXISTING BUILDING IS CONSIDERED 679.54' FOR DESIGN PURPOSES.
 - SEE RAIN DROP PLANS FOR LOCATIONS OF EQUIPMENT AND ASSOCIATED PIPING, DRAINS, AND MATERIALS.
 - PER THE MOUNDSVILLE CITY ORDINANCE, SECTION 1362.13 (C), THE POST-DEVELOPMENT PARKING STALLS WILL NOT MEET THE REQUIRED LENGTH OF TWENTY (20) FEET AND SHALL THEREFORE BE DENOTED AS "COMPACT PARKING STALLS," WITH A MINIMUM WIDTH OF EIGHT (8) FEET AND A MINIMUM LENGTH OF EIGHTEEN (18) FEET.
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 - SEE RAIN DROP PLANS FOR LOCATIONS AND SIZE OF THE PROPOSED TANK. UTILITY HOOKUPS FOR THE PROPOSED TANK INCLUDING POTABLE WATER SUPPLY, RESERVOIR DRAIN, RESERVOIR OVERFLOW, AND CONDUITS SHALL TIE INTO THE EXISTING BUILDING.
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 - SPLASH PAD WATER SUPPLY TO BE CONNECTED TO EXISTING WATER SUPPLY IN FOUR SEASONS BUILDING.
 - CONTRACTOR SHALL INSTALL CONDUIT, PULL BOXES, WIRE, CONNECTORS, CT CABINET, ETC. REQUIRED TO PROVIDE ELECTRIC SERVICE AND CONNECTION TO EXISTING ELECTRIC METER.



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NO.	BY	DATE	DESCRIPTION

ISSUED FOR BID
APRIL 2021

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

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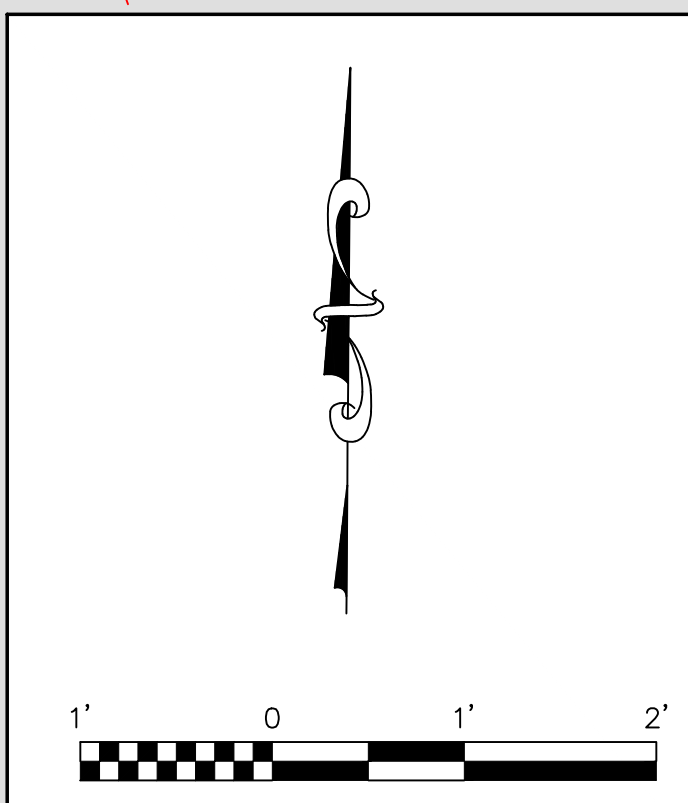
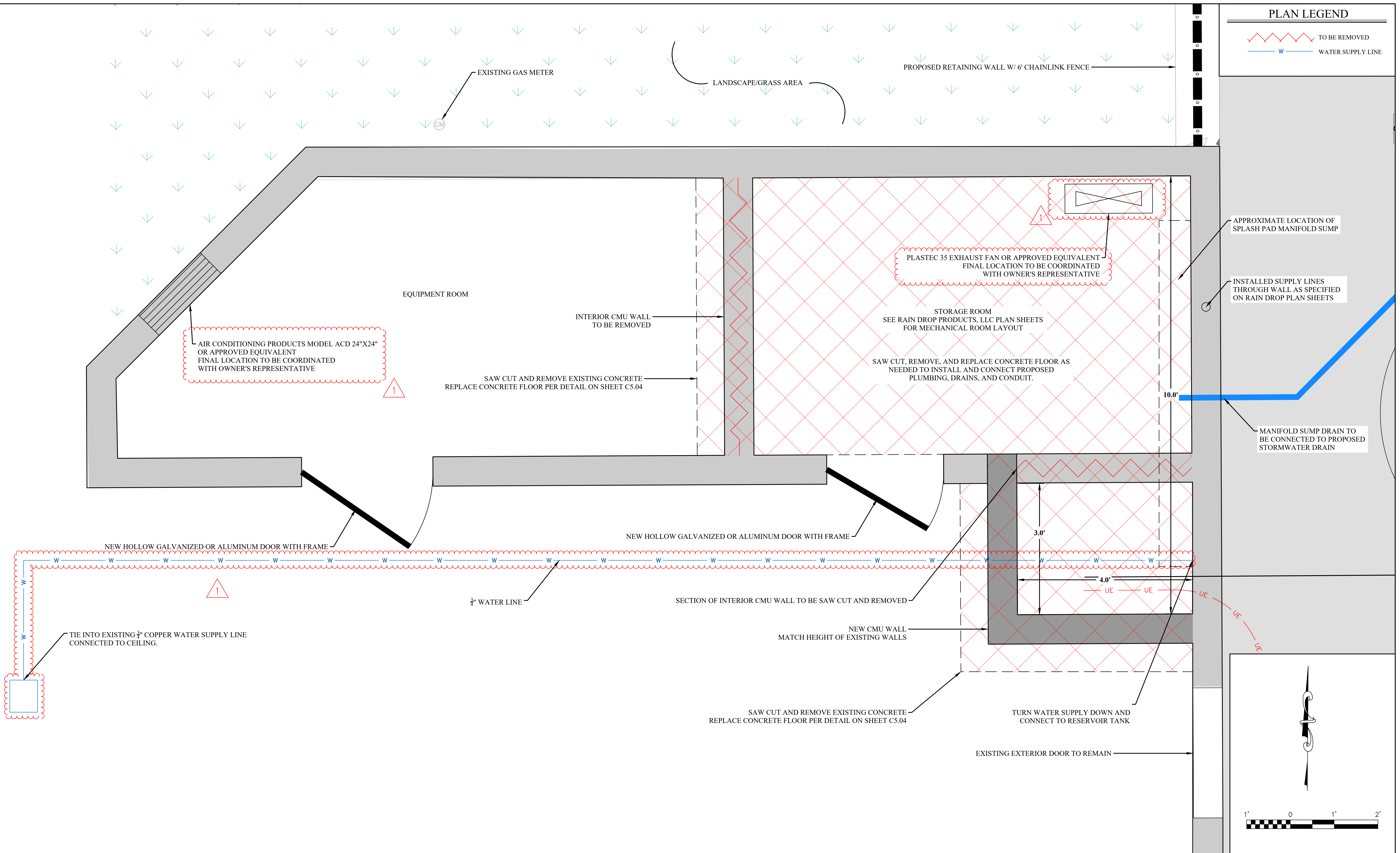
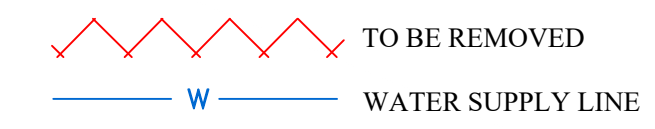
PHASE No.
CONTRACT No.
PROJECT No.
030-10204

CITY OF MOUNDSVILLE
FOUR SEASONS SPLASH PAD
MARSHALL COUNTY, WEST VIRGINIA
SPLASH PAD SITE PLAN

SHEET No.
C2.02

LAYOUT TAB: C2.03 MECHANICAL ROOM PLAN
 CAD FILE: R:\030\030-10204\00-City of Moundsville (WV) - Splash Pad-City of Moundsville- \Drawing\10204-MECHANICAL ROOM PLAN.dwg
 PLOT DATE/TIME: 4/1/2021 2:15 PM

PLAN LEGEND



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NO.	BY	DATE	DESCRIPTION
1	MRP	4-1-21	3/4" SUPPLY LINE AND TIE IN POINT ADDED FAN AND LOUVER PRODUCT SPECIFIED

ISSUED FOR BID
APRIL 2021

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

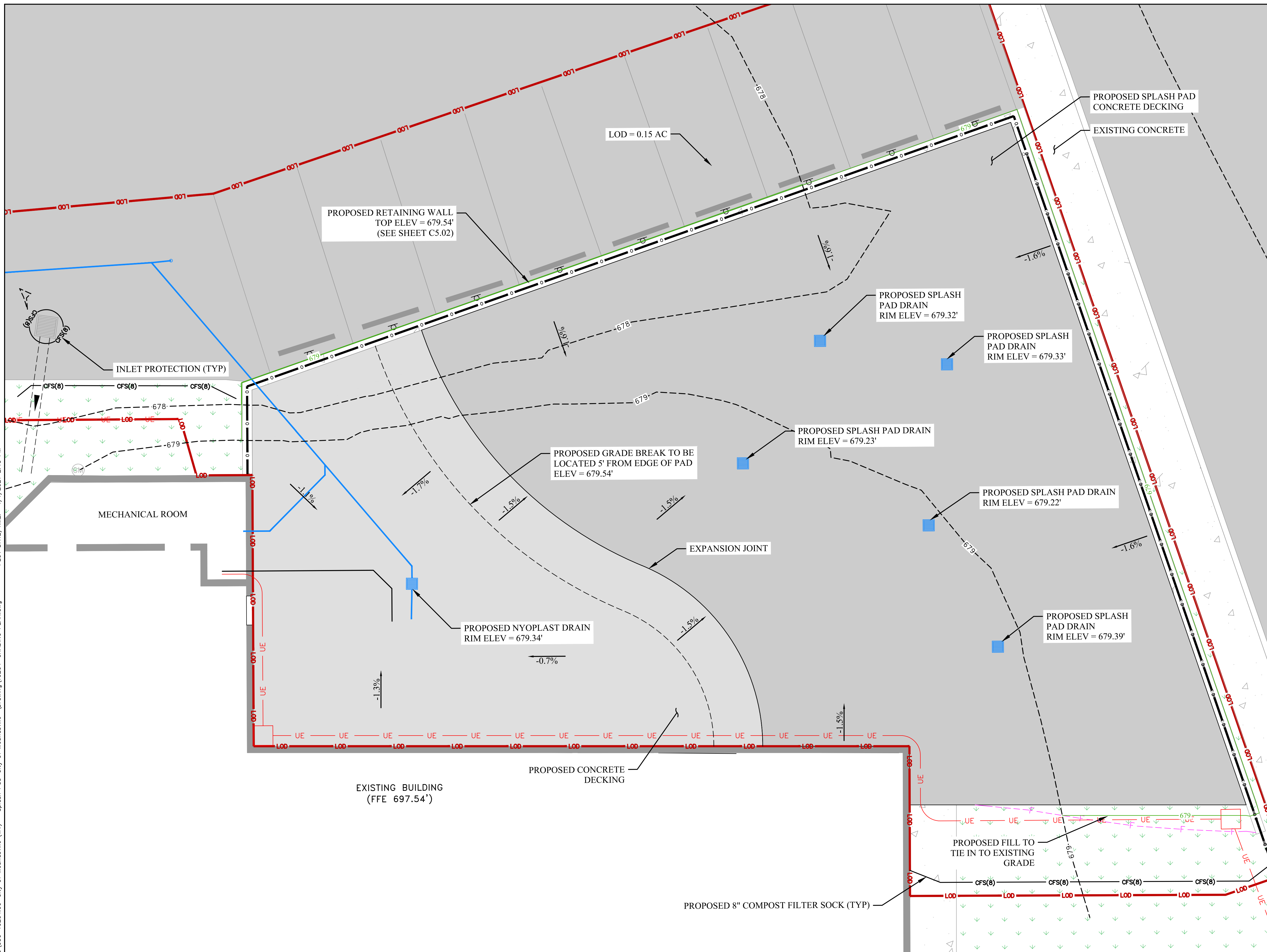
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PHASE No.
CONTRACT No.
PROJECT No.
030-10204

CITY OF MOUNDSVILLE
 FOUR SEASONS SPLASH PAD
 MARSHALL COUNTY, WEST VIRGINIA
 MECHANICAL ROOM PLAN

SHEET No.
C2.03

LAYOUT TAB: Plan View
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 PLOT DATE/TIME: 4/1/2021 2:15 PM



PLAN LEGEND

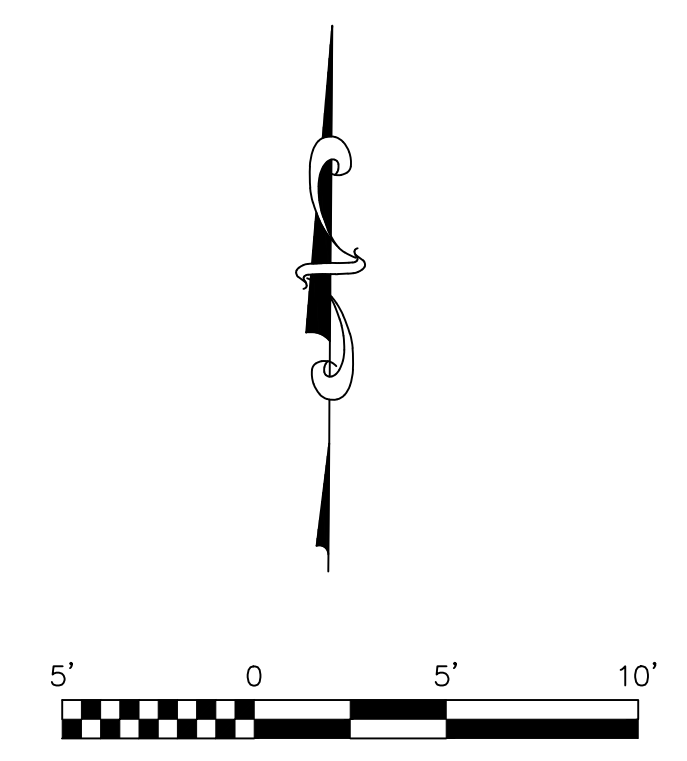
	EXISTING CONTOURS
	EXISTING CHAINLINK FENCE
	EXISTING BUILDING
	EXISTING CONCRETE
	EXISTING ASPHALT
	EXISTING LANDSCAPING
	EXISTING DROP INLET
	EXISTING STORM PIPE
	EXISTING GAS METER
	PROPOSED CONCRETE
	PROPOSED WALL
	PROPOSED DROP INLET / CATCH BASIN
	PROPOSED STORMWATER MANAGEMENT LINE
	PROPOSED PARKING STRIPING
	PROPOSED PARKING BUMPER
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED LOD
	PROPOSED CONTOURS
	PROPOSED 8" COMPOST FILTER SOCK

- ### PLAN NOTES
- EXISTING AND PROPOSED CONTOURS ARE DISPLAYED AT 1-FOOT INTERVALS.
 - THE FINISHED FLOOR ELEVATION OF THE EXISTING BUILDING WAS CONSIDERED 679.54' FOR DESIGN PURPOSES.
 - SPLASH PAD DRAWINGS WILL BE PROVIDED BY RAIN DROP PRODUCTS, LLC. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING DRAIN PIPES.

EARTHWORK QUANTITIES

TOTAL CUT TO FINISH ELEVATION	16 CY
TOTAL FILL TO FINISH ELEVATION	106 CY
EXCAVATION FOR PAD (6" DEEP)	62 CY
EXCAVATION FOR PAVEMENT (10" DEEP)	45 CY
TOPSOIL REMOVAL (6" DEEP)	75 CY
EXISTING SIDEWALK REMOVAL (8" DEEP)	13 CY
NET (FILL) CRUSHER RUN	38 CY

SITE FILL SHALL BE CRUSHER RUN COMPACTED TO 98%



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APRIL 2021

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SURVEY DATE: _____
SURVEY BY: _____
FIELD BOOK No.: _____

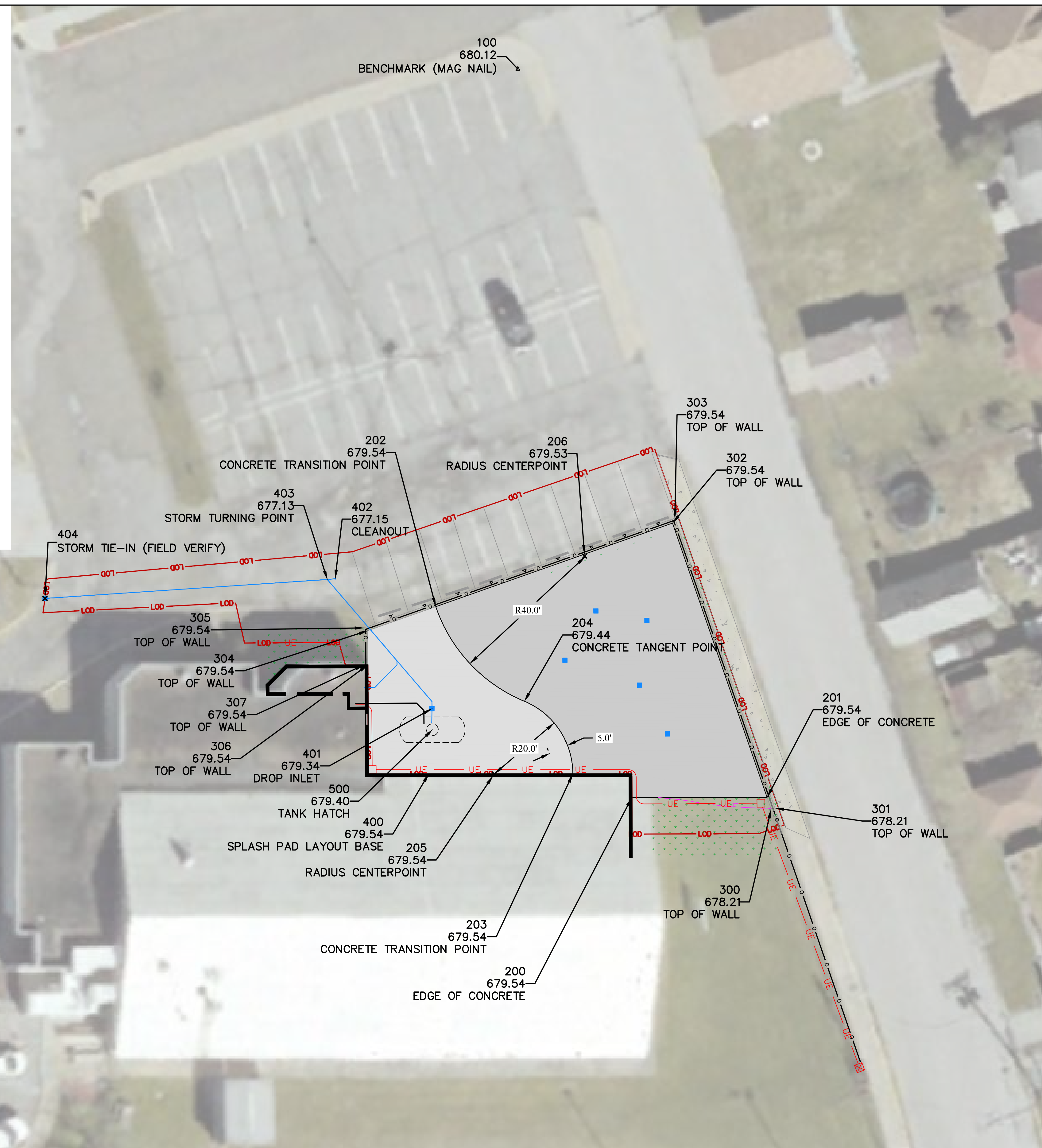
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PHASE No.
CONTRACT No.
PROJECT No.
030-10204

CITY OF MOUNDSVILLE
 FOUR SEASONS SPLASH PAD
 MARSHALL COUNTY, WEST VIRGINIA
 OVERALL GRADING AND ESC PLAN

SHEET No.
C3.01

Point Table				
Point #	Raw Description	Elevation	Northing	Easting
100	BENCHMARK (MAG NAIL)	680.120	520854.3440	1623935.1200
101	BENCHMARK (MAG NAIL)	680.860	520669.8790	1623735.3230
200	EDGE OF CONCRETE	679.540	520668.8180	1623962.9150
201	EDGE OF CONCRETE	679.540	520668.5932	1623997.3263
202	CONCRETE TRANSITION POINT	679.540	520717.7012	1623913.3197
203	CONCRETE TRANSITION POINT	679.540	520674.9160	1623947.9323
204	CONCRETE TANGENT POINT	679.443	520693.4707	1623935.7143
205	RADIUS CENTERPOINT	679.540	520675.0466	1623927.9327
206	RADIUS CENTERPOINT	679.533	520730.3189	1623951.2775
300	TOP OF WALL	678.210	520665.5902	1623998.3402
301	TOP OF WALL	678.210	520665.9101	1623999.2877
302	TOP OF WALL	679.540	520738.5569	1623973.7048
303	TOP OF WALL	679.540	520739.8254	1623974.3143
304	TOP OF WALL	679.540	520711.7003	1623895.9451
305	TOP OF WALL	679.540	520712.4133	1623894.9463
306	TOP OF WALL	679.540	520702.9880	1623895.9300
307	TOP OF WALL	679.540	520702.9897	1623894.9300
400	SPLASH PAD LAYOUT BASE	679.539	520675.2560	1623911.3086
401	DROP INLET	679.340	520691.7656	1623912.1728
402	CLEANOUT	677.153	520724.9731	1623887.7554
403	STORM TURNING POINT	677.130	520724.7792	1623885.7648
404	STORM TIE-IN (FIELD VERIFY)		520720.4578	1623813.8657
500	TANK HATCH	679.396	520686.3876	1623912.2419



PLAN LEGEND	
	EXISTING CHAINLINK FENCE
	EXISTING BUILDING
	EXISTING CONCRETE
	EXISTING ASPHALT
	EXISTING LANDSCAPING
	EXISTING DROP INLET
	EXISTING STORM PIPE
	EXISTING GAS METER
	PROPOSED CONCRETE
	PROPOSED WALL
	PROPOSED DROP INLET / CATCH BASIN
	PROPOSED STORMWATER MANAGEMENT LINE
	PROPOSED PARKING STRIPING
	PROPOSED PARKING BUMPER
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED GRADING POINTS

- PLAN NOTES**
- BENCHMARK POINTS WERE SET BY THE THRASHER GROUP, DECEMBER 2020.
 - BENCHMARK LOCATIONS ARE APPROXIMATE BASED ON AERIAL IMAGERY.
 - REFERENCE PROPOSED RETAINING WALL PROFILE ON SHEET C5.02.

LAYOUT TAB: C4.01 POINT LAYOUT
 CAD FILE: R:\030\030-10204\00-City of Moundsville - Drawing\10204-LAYOUT AND POINTS.dwg
 PLOT DATE/TIME: 4/1/2021 2:15 PM

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NO.	BY	DATE	DESCRIPTION

ISSUED FOR BID
APRIL 2021

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

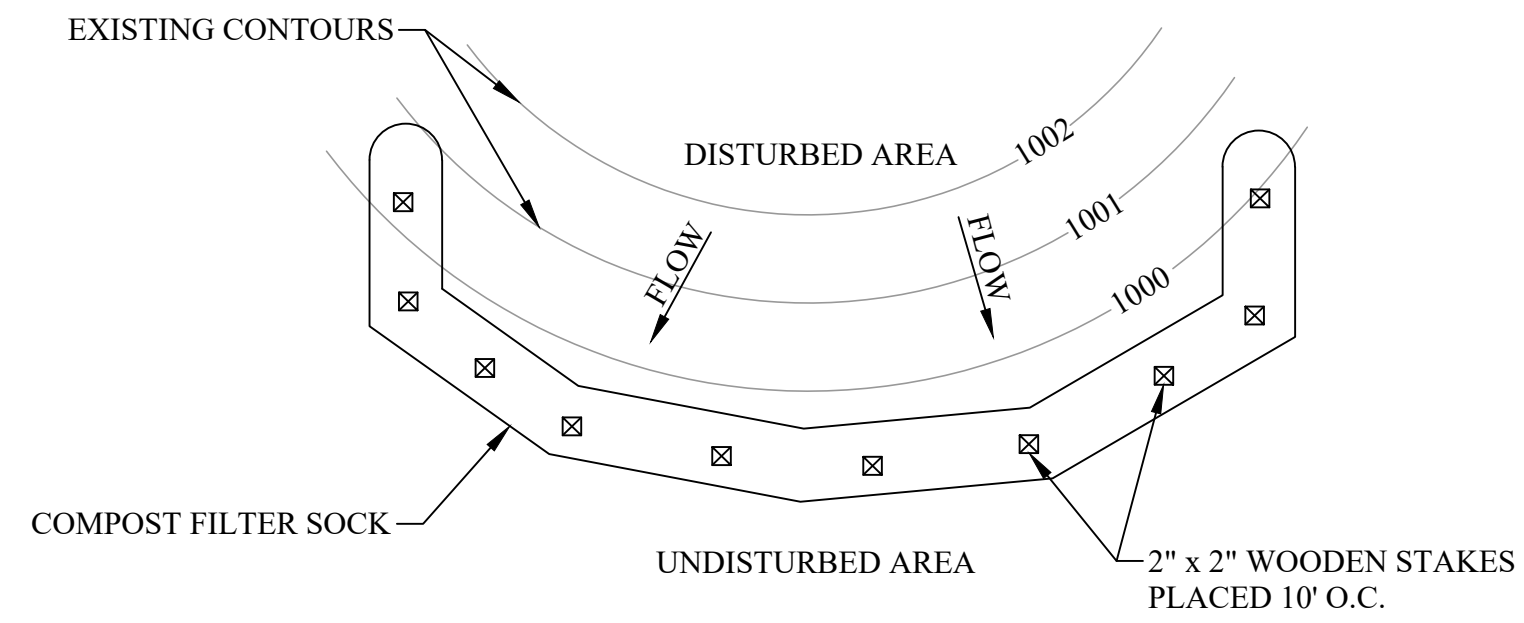
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PHASE No.
CONTRACT No.
PROJECT No.
030-10204

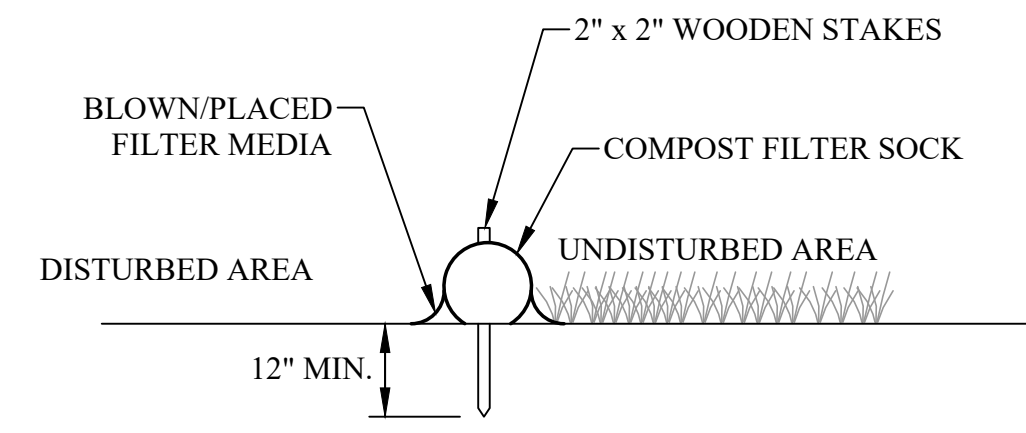
CITY OF MOUNDSVILLE
 FOUR SEASONS SPLASH PAD
 MARSHALL COUNTY, WEST VIRGINIA
 POINT LAYOUT

SHEET No.
C4.01

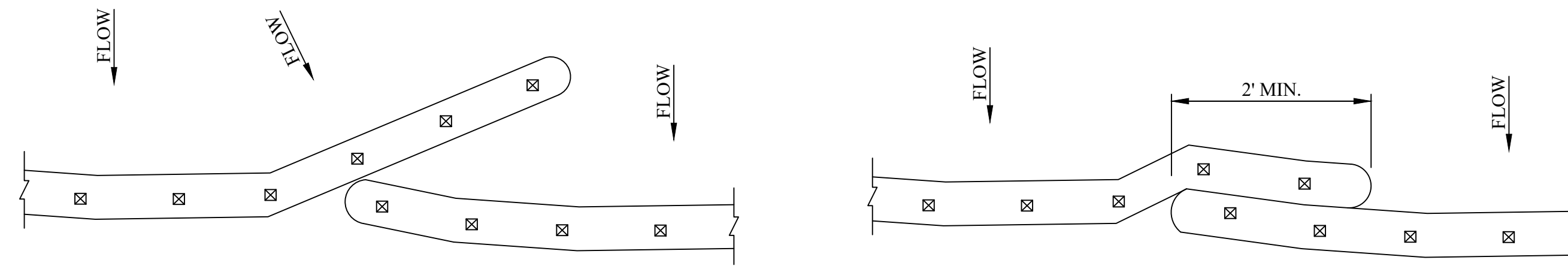
LAYOUT TAB: C5.01 DETAILS
 CAD FILE: R:\030\030-10204-00-City of Moundsville - Drawing\10204-DETAILS.dwg
 PLOT DATE/TIME: 4/1/2021 2:16 PM



PLAN VIEW



SECTION VIEW



END-TO-END SOCK JOINING

REPRODUCED FROM *FILTREXX LOW IMPACT DESIGN MANUAL* PAGE 324.

Slope Percent	Maximum Slope Length Above Sediment Control in Feet (Meters) *				
	8-IN (200-mm) Sediment Control 6.5-IN (160-mm) **	12-IN (300-mm) Sediment Control 9.5-IN (240-mm) **	18-IN (450-mm) Sediment Control 14.5-IN (360-mm) **	24-IN (600-mm) Sediment Control 19-IN (480-mm) **	32-IN (800-mm) Sediment Control 26-IN (650-mm) **
2 (or less)	600 (180)	750 (225)	1000 (300)	1300 (400)	1650 (500)
5	400 (120)	500 (150)	550 (165)	650 (200)	750 (225)
10	200 (60)	250 (75)	300 (90)	400 (120)	500 (150)
15	140 (40)	170 (50)	200 (60)	325 (100)	450 (140)
20	100 (30)	125 (38)	140 (42)	260 (80)	400 (120)
25	80 (24)	100 (30)	110 (33)	200 (60)	275 (85)
30	60 (18)	75 (23)	90 (27)	130 (40)	200 (60)
35	60 (18)	75 (23)	80 (24)	115 (35)	150 (45)
40	60 (18)	75 (23)	80 (24)	100 (30)	125 (38)
45	40 (12)	50 (15)	60 (18)	80 (24)	100 (30)
50	40 (12)	50 (15)	55 (17)	65 (20)	75 (23)

* Based on a failure point of 36-IN (0.9-m) super silt fence (wire reinforced) at 1000-FT (303-m) of slope, watershed width equivalent to receiving length of sediment control device, 1-IN/24-HR (25-mm/24-HR) rain event.
 ** Effective height of Sediment Control after installation and with constant head from runoff as determined by Ohio State University.

RESTRICTIONS

- (1) COMPOST FILTER SOCK WILL NOT BE PLACED IN ANY AREA OF CONCENTRATED FLOWS SUCH AS SWALES, DITCHES, CHANNELS, ETC.
- (2) COMPOST FILTER SOCK WILL NOT BE USED IN AREA WHERE ROCK OR ROCKY SOILS PREVENT THE FULL AND UNIFORM ANCHORING OF THE COMPOST FILTER SOCK.
- (3) COMPOST FILTER SOCK WILL NOT BE PLACED AROUND THE ENTRANCES TO PIPES OR CULVERTS AND WILL NOT BE WRAPPED AROUND THE PRINCIPAL SPILLWAY STRUCTURES OF SEDIMENT TRAPS OR BASINS.

INSTALLATION

- (1) COMPOST FILTER SOCK WILL BE INSTALLED WITH LITTLE, IF ANY DISTURBANCE TO THE DOWNSLOPE SIDE OF THE COMPOST FILTER SOCK.

COMPOST SHALL MEET THE FOLLOWING STANDARDS:

ORGANIC MATTER CONTENT	80% - 100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 - 8.0
MOISTURE CONTENT	35% - 55%
PARTICLE SIZE	98% PASS THROUGH 1" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 dS MAXIMUM

COMPOST FILTER SOCK TO BE INSTALLED IN ACCORDANCE WITH FILTREXX MANUFACTURER SPECIFICATIONS, OR AN APPROVED EQUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8' UP SLOPE AT 45° TO THE MAIN SOCK ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY DIAMETER SOCK SHALL NOT EXCEED THAT SHOWN ON BELOW TABLE.

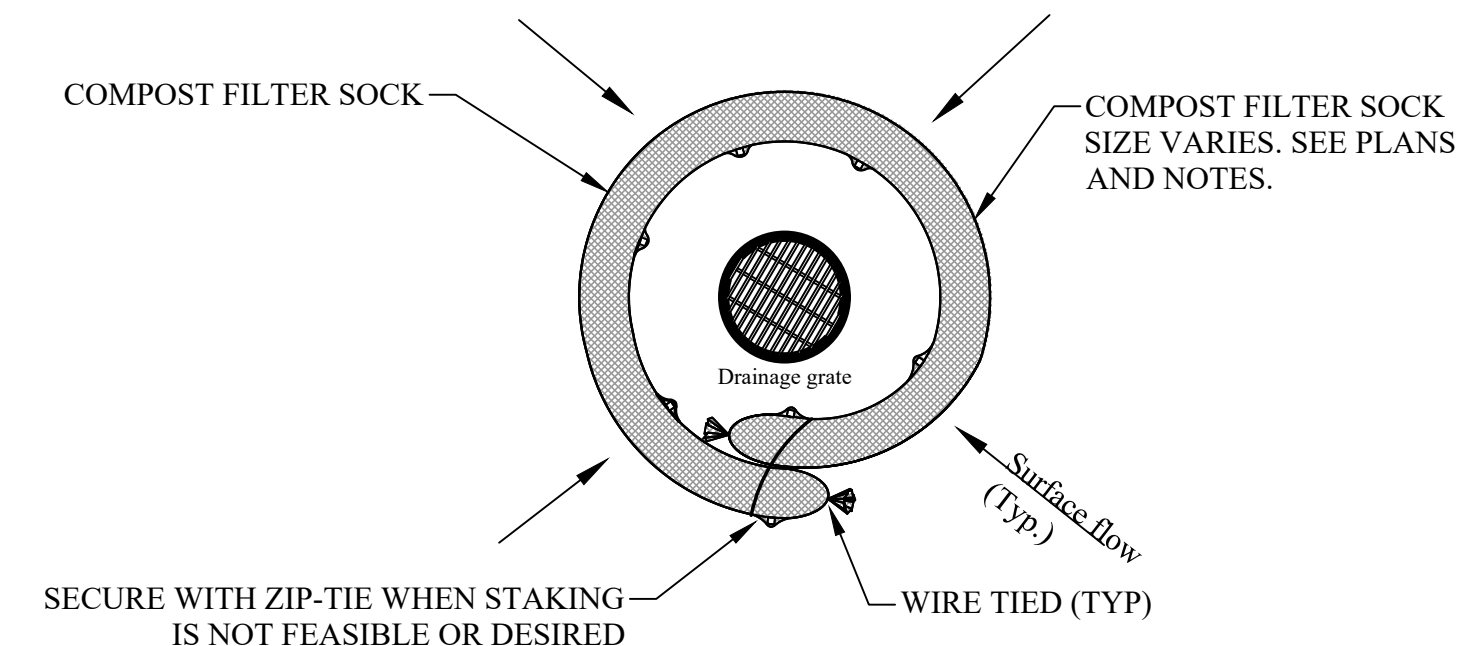
TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

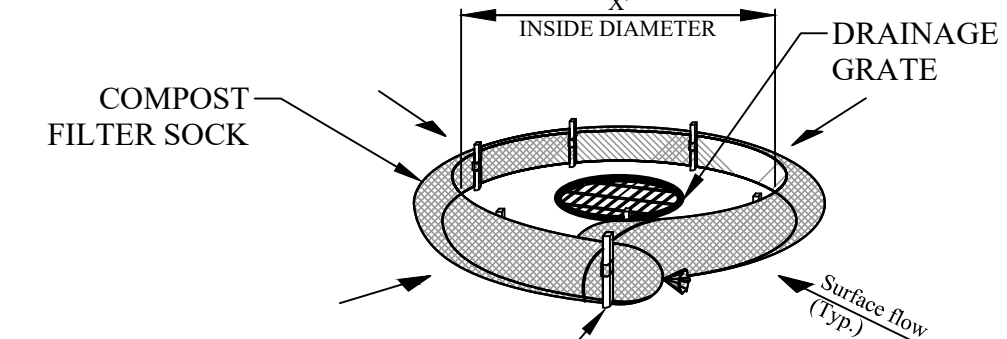
SOCKS SHALL BE INSPECTED AS DESCRIBED IN THE MAINTENANCE AND INSPECTION NOTES IN THE EROSION AND SEDIMENT CONTROL NOTES OF THESE PLANS. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

BIODEGRADABLE FILTER SOCK SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1YR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, ALL STAKES SHALL BE REMOVED. DEGRADABLE FILTER SOCK MAY BE LEFT IN PLACE AND VEGETATED - THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT PRIOR TO SEEDING. THE MESH FROM ALL POLYPROPYLENE FILTER SOCKS SHALL BE REMOVED - THE MULCH SHALL BE SPREAD AS A SOIL SUPPLEMENT PRIOR TO SEEDING.



DROP INLET PLAN VIEW



DROP INLET PERSPECTIVE VIEW

NOTES:

1. ANCHORING STAKES SHALL BE SIZED, SPACED, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE FILTER SOCK. STAKE SPACING SHALL BE MAXIMUM OF THREE FEET.
2. OVERLAP ENDS OF SOCK PER MANUFACTURER'S RECOMMENDATIONS. (1' MIN. 3' MAX.)
3. USE 8" TO 12" DIA. SOCK ON CURBSIDE IN TRAFFIC AREAS.
4. USE 12" - 18" DIA. SOCK IN NON-TRAFFIC AREAS OR AREAS WHERE SAFETY IS NOT A CONCERN.

COMPOST FILTER SOCK INLET PROTECTION DETAIL

NOT TO SCALE

COMPOST FILTER SOCK
 NOT TO SCALE

ISSUED FOR BID
APRIL 2021

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

THRASHER
 THE THRASHER GROUP, INC.
 600 WHITE OAKS BLVD, BRIDGEPORT, WV 26330
 PHONE (304) 624-4108
 FAX (304) 624-7831

PHASE No.
CONTRACT No.
PROJECT No.
030-10204

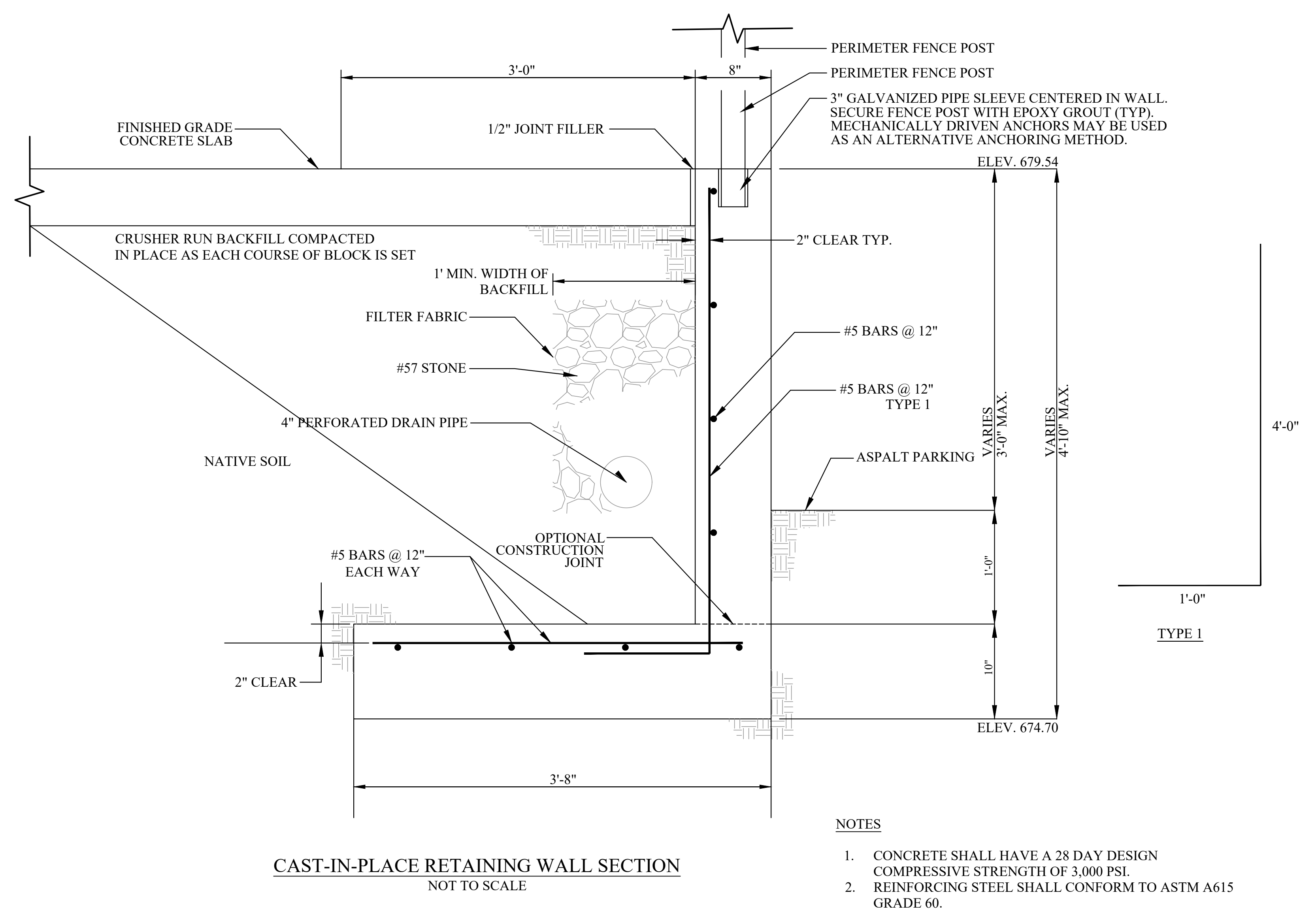
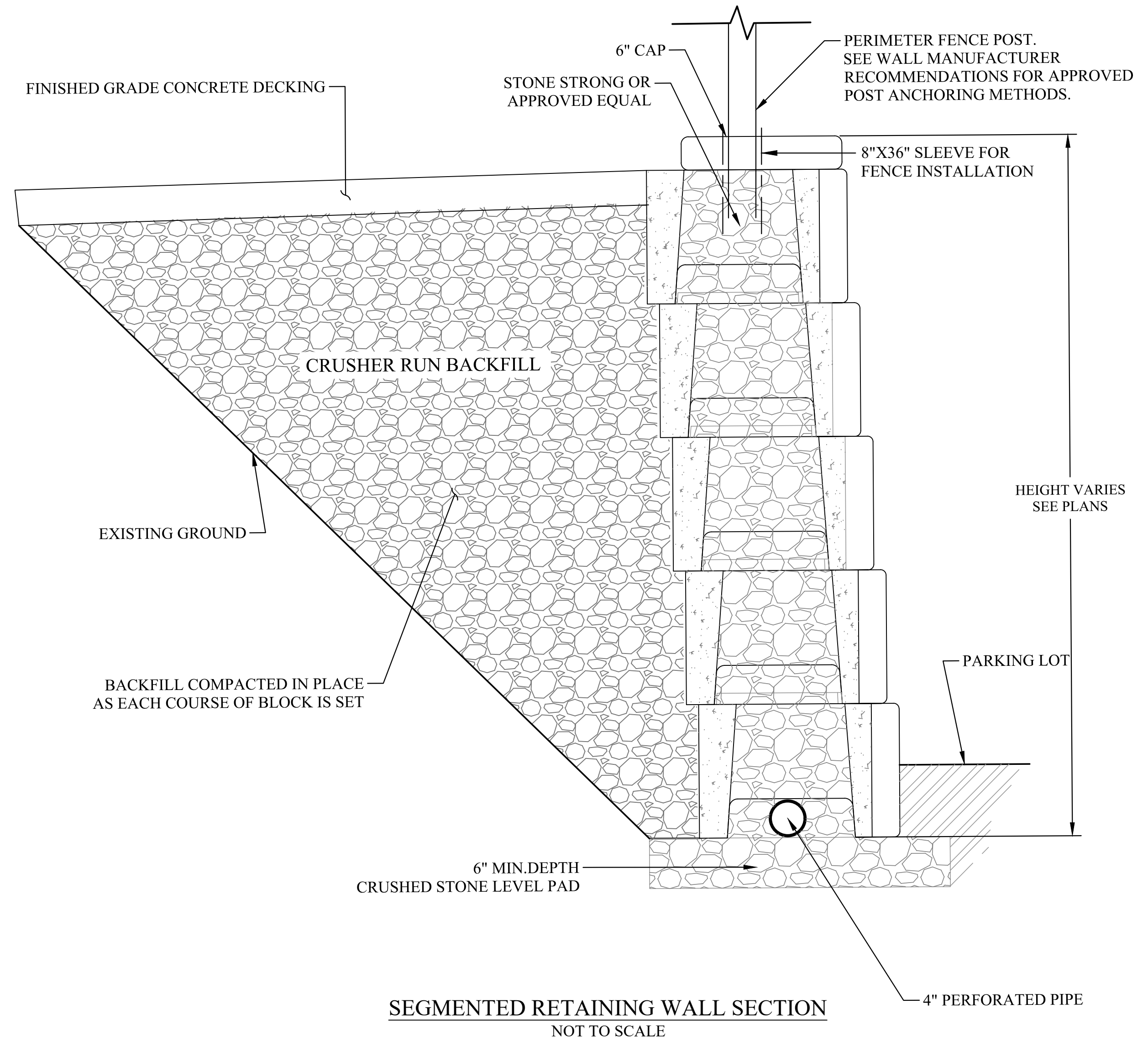
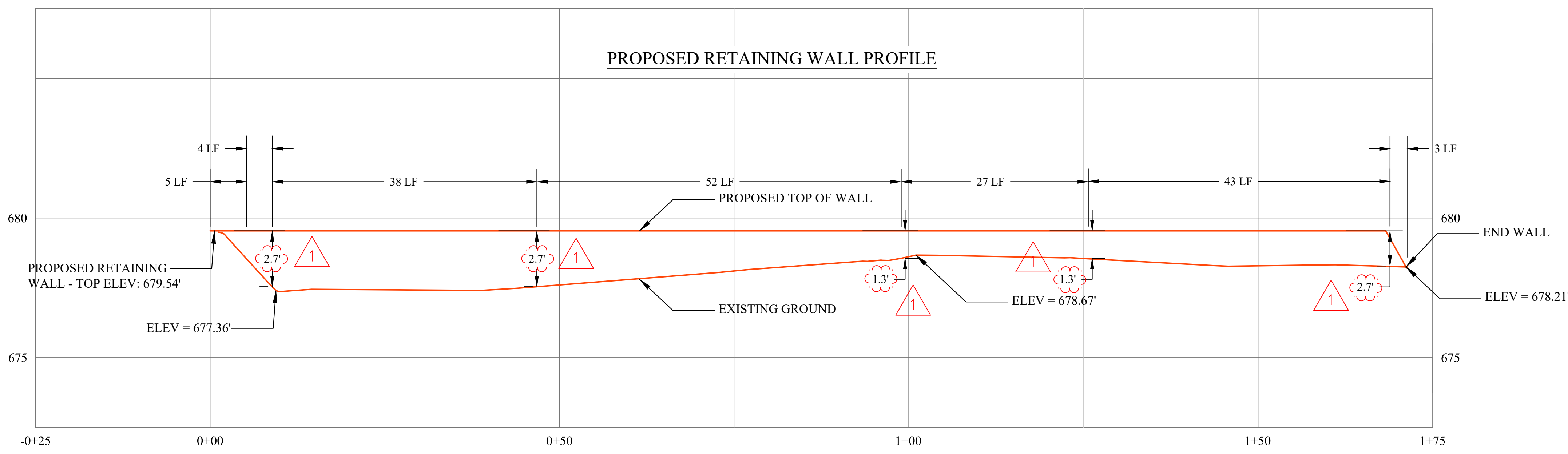
CITY OF MOUNDSVILLE
 FOUR SEASONS SPLASH PAD
 MARSHALL COUNTY, WEST VIRGINIA
 DETAILS

SHEET No.

C5.01

NO.	BY	DATE	DESCRIPTION

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- NOTES
1. CONCRETE SHALL HAVE A 28 DAY DESIGN COMPRESSIVE STRENGTH OF 3,000 PSI.
 2. REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60.
 3. MIN. ALLOWABLE BEARING CAPACITY = 1,500 PSF

LAYOUT TAB: C5.02 DETAILS
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1	MRP	4-1-21	REVISED WALL HEIGHTS

ISSUED FOR BID
APRIL 2021

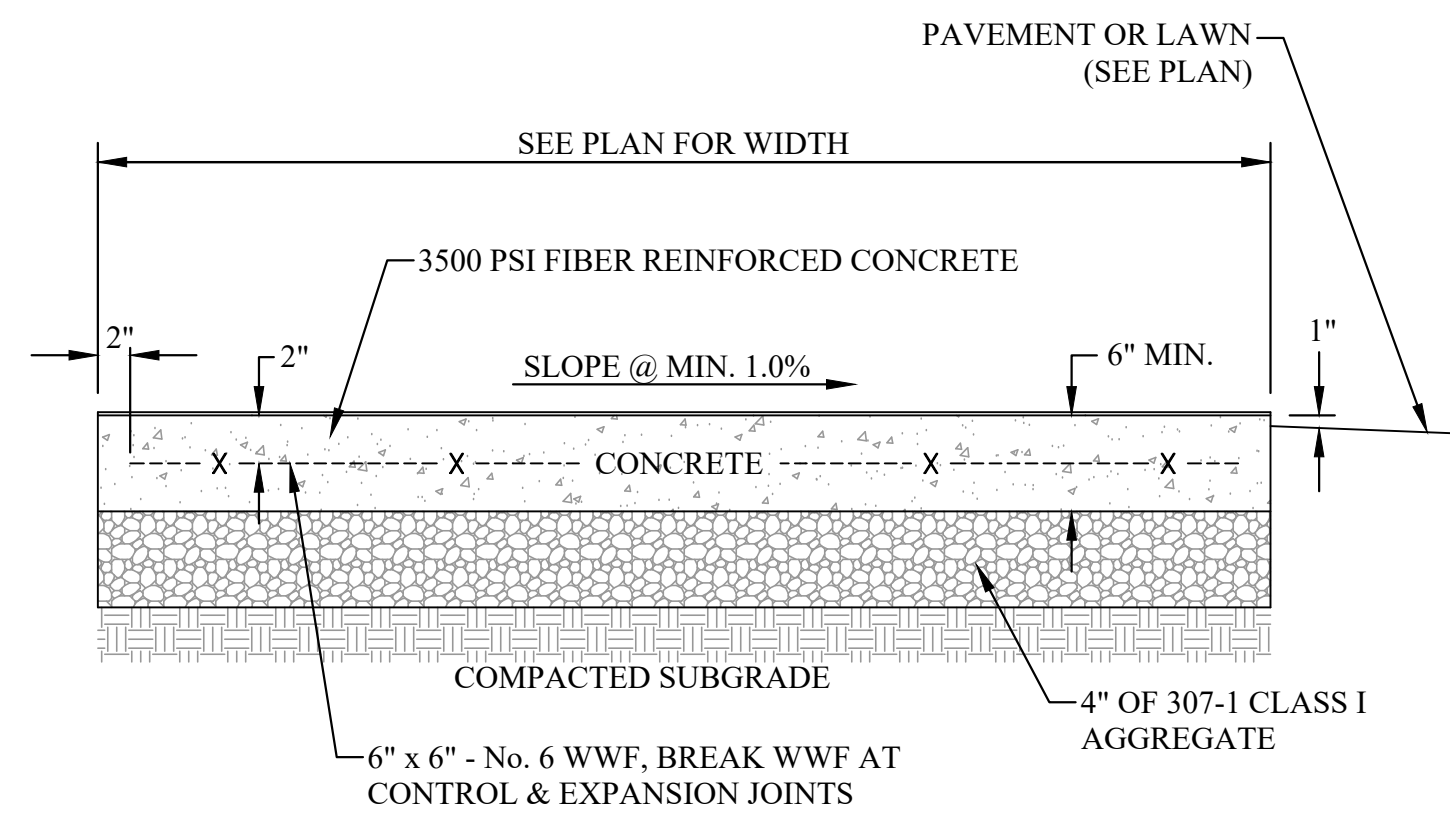
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SURVEY DATE:
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CONTRACT No.
PROJECT No.
030-10204

CITY OF MOUNDSVILLE
 FOUR SEASONS SPLASH PAD
 MARSHALL COUNTY, WEST VIRGINIA
 DETAILS

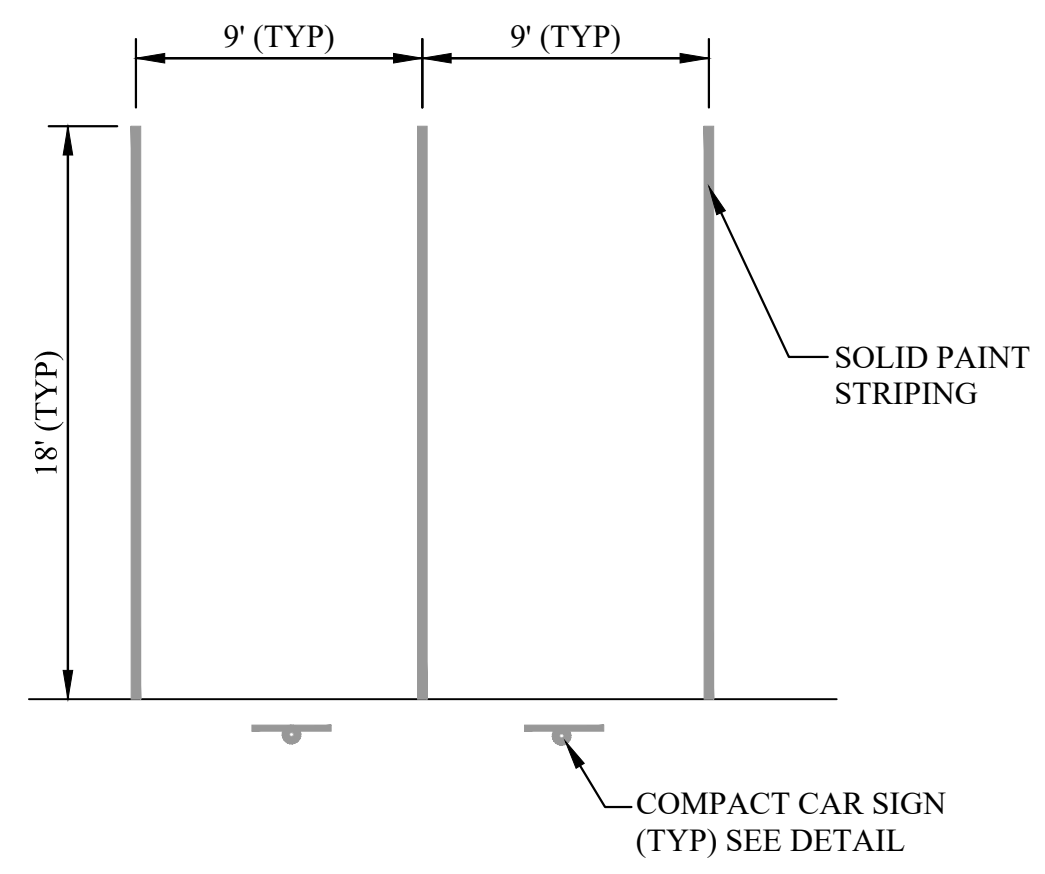
SHEET No.
C5.02



NOTES:

1. PLACE EXPANSION JOINT WHERE DIFFERENT SLABS ABUT, AND AGAINST ANY STRUCTURE.
2. PLACE EXPANSION JOINTS 20' O.C.
3. PLACE CONTRACTION JOINTS 5' O.C.
4. FINISH SURFACE WITH A NON-SLIP BROOM SWEEP FINISH.

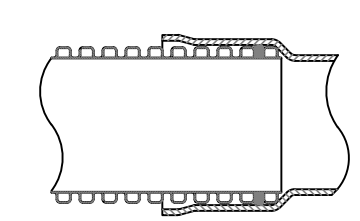
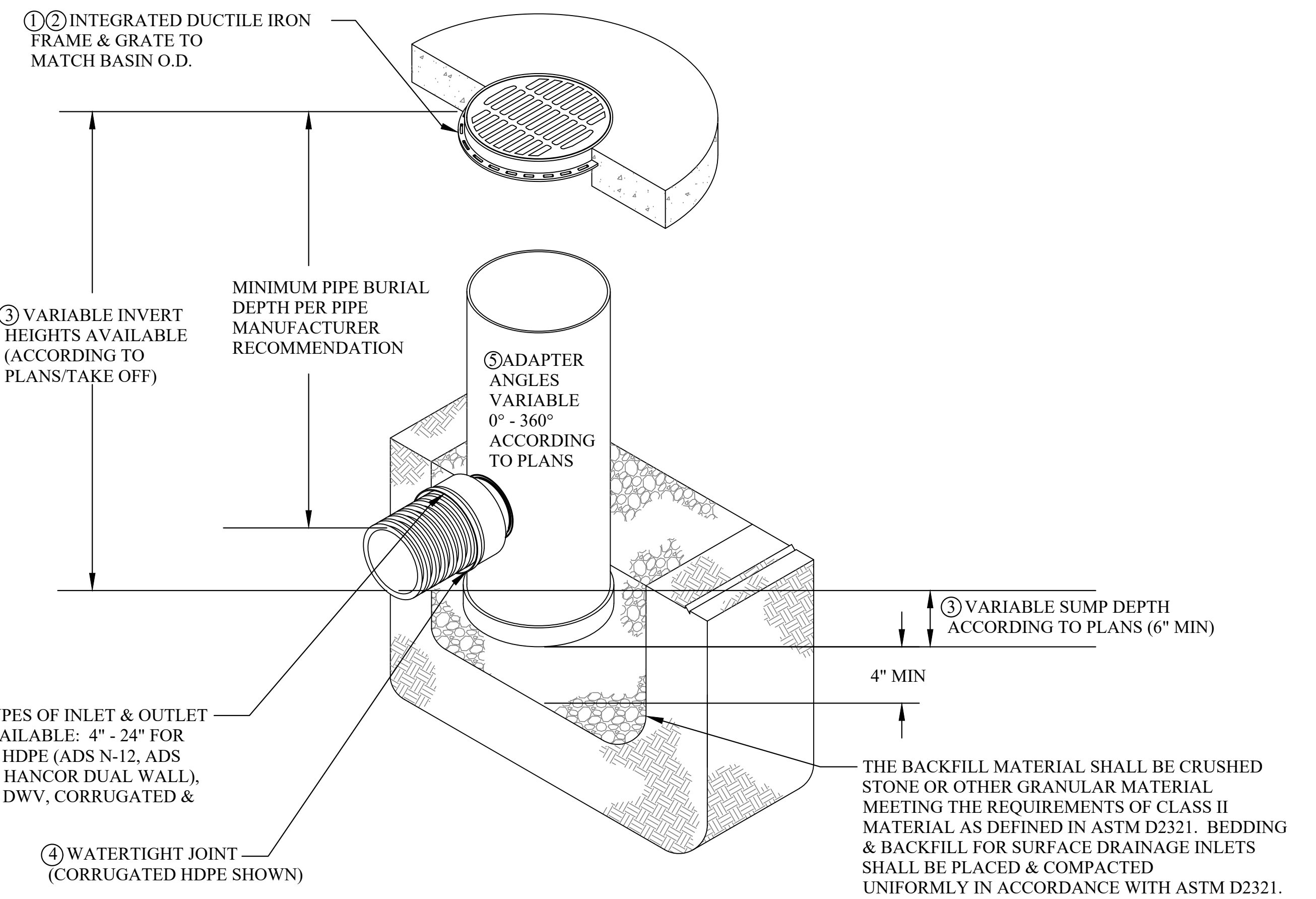
TYPICAL CONCRETE DECK SECTION
NOT TO SCALE



NOTES:

1. SEE PLAN FOR CONFIGURATION OF AREA SHOWN.

COMPACT CAR PARKING
NOT TO SCALE

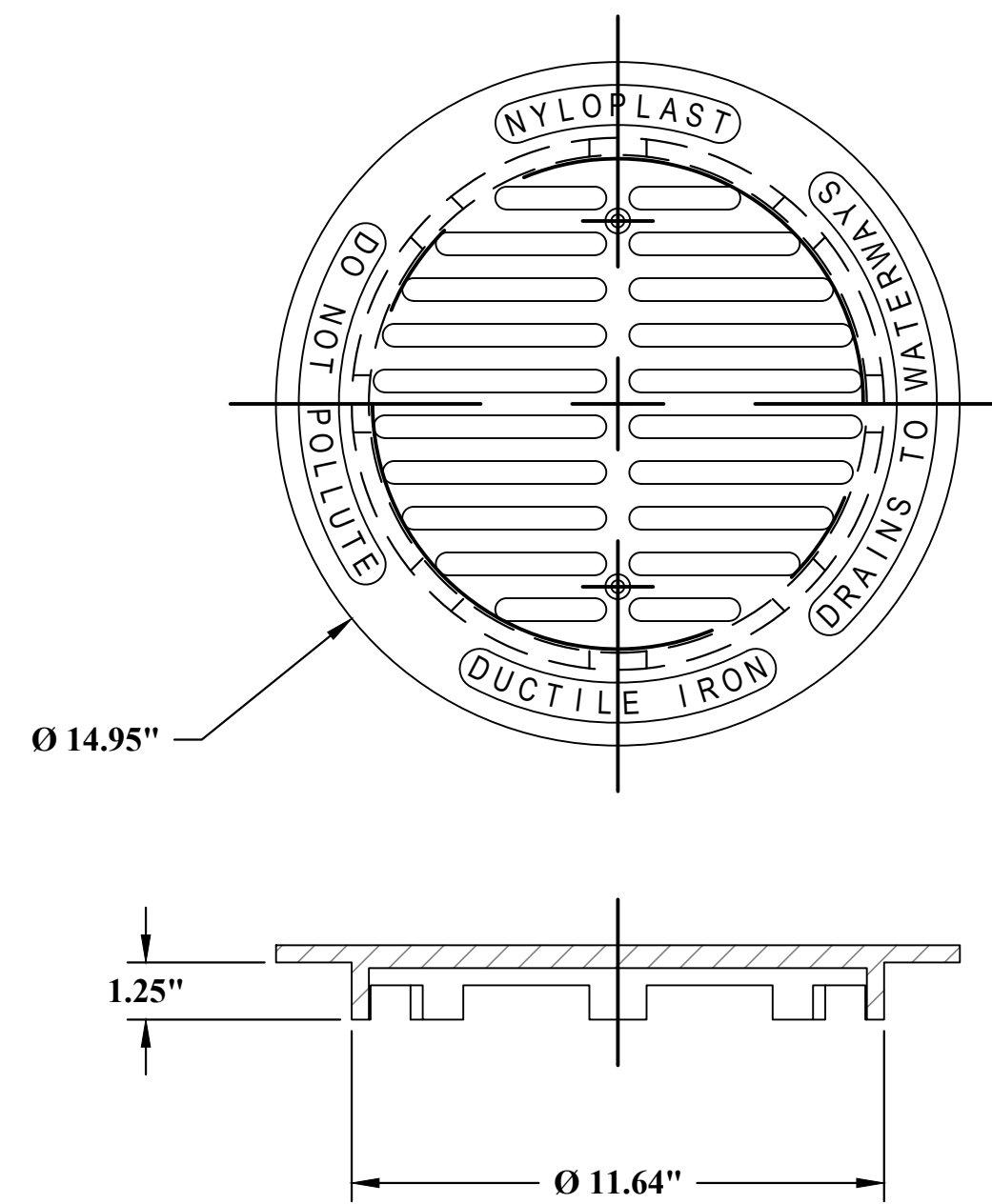


- ① - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05,
- ② - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
- ③ - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS.
- ④ - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
- ⑤ - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°.

TYPICAL DRAIN BASIN DETAIL
NOT TO SCALE

1201DI

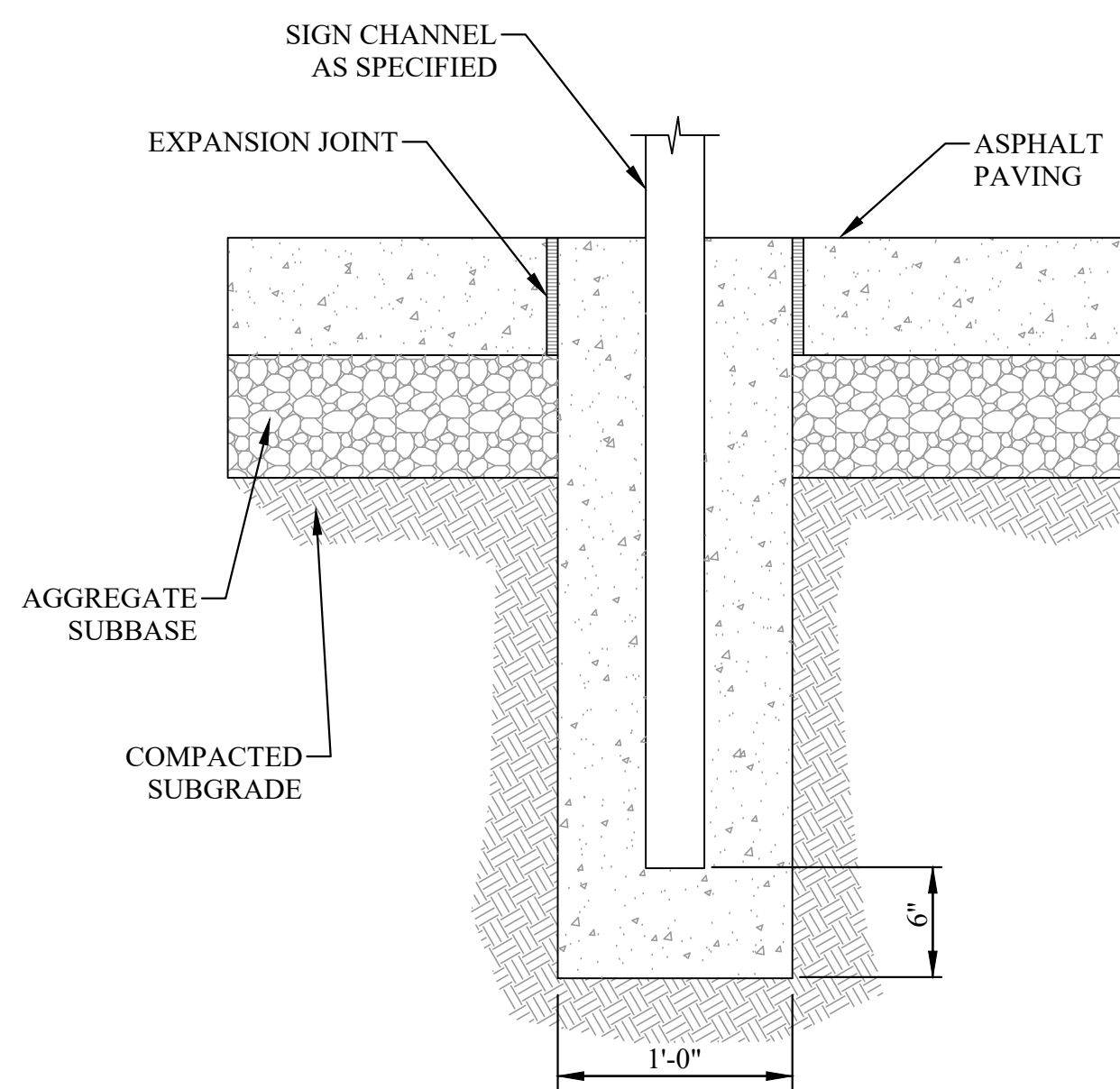
APPROX. DRAIN AREA = 39.75 SQ IN
APPROX. WEIGHT = 15 LBS



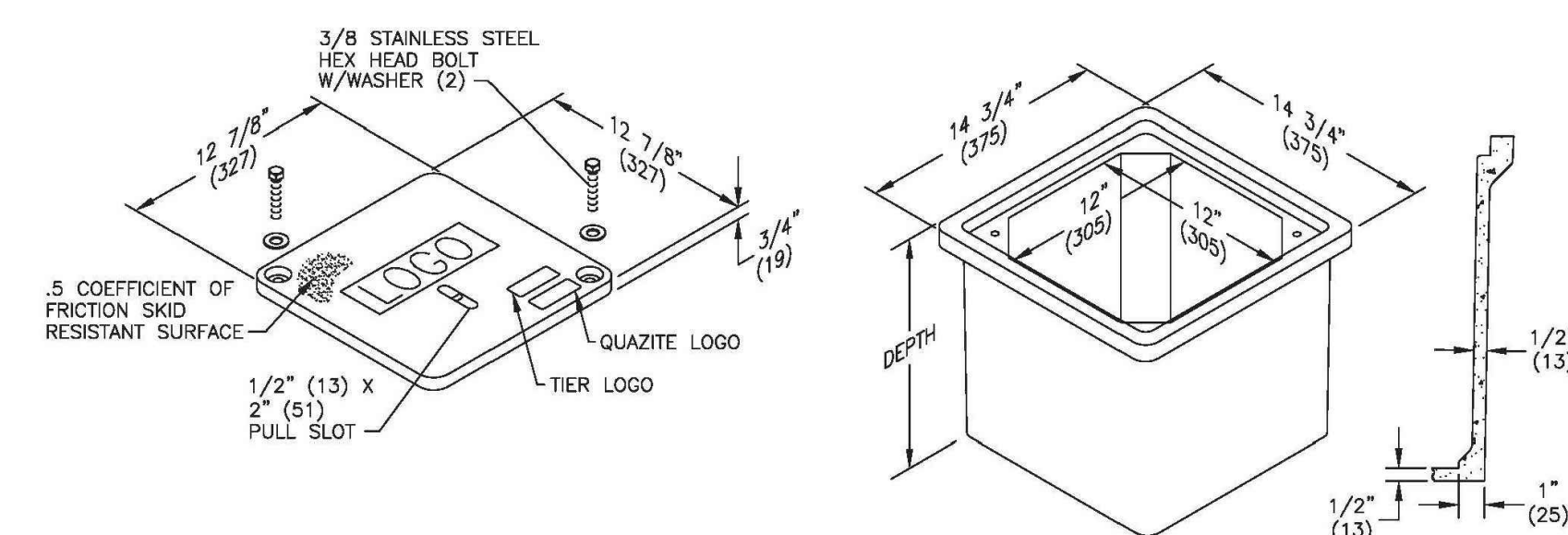
NOTES:

DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE HAS LIGHT DUTY RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
SIZE OF OPENING MEETS REQUIREMENTS OF AMERICAN DISABILITY ACT AS STATED IN FEDERAL REGISTER PART III, DEPARTMENT OF JUSTICE, 28 CFR PART 36.

12" DROP IN GRATE DETAIL
NOT TO SCALE



SIGN ANCHORING
NOT TO SCALE



PULL BOX DETAIL
NOT TO SCALE



- NOTES:**
1. PLACE BOTTOM OF SIGN 5'-0" ABOVE GRADE
 2. MOUNT ON STANDARD "T" RAIL W/BASE POST HAVING A MIN. WEIGHT OF 2.98 kg/m

COMPACT CAR SIGN
NOT TO SCALE

LAYOUT TAB: C5.03 DETAILS
CAD FILE: R:\030\030-10204-00-City of Moundsville--Drawing\10204-DETAILS.dwg
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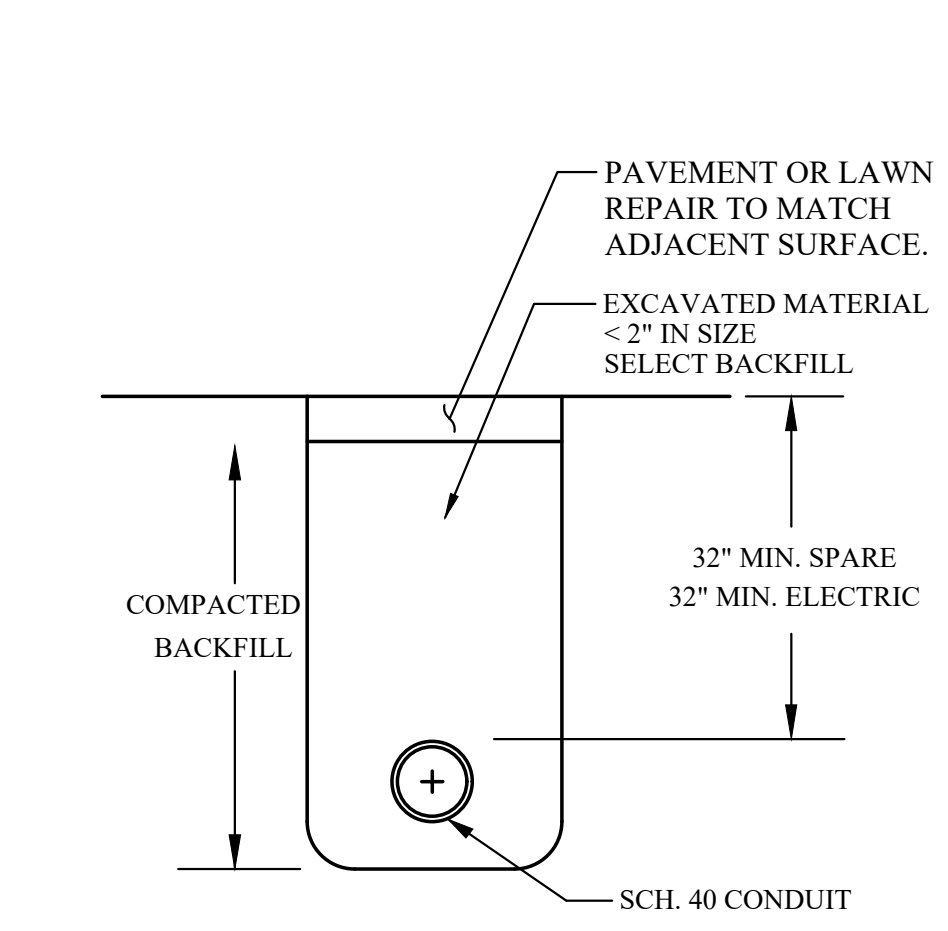
PHASE No.	
CONTRACT No.	
PROJECT No.	
	030-10204

CITY OF MOUNDSVILLE
FOUR SEASONS SPLASH PAD
MARSHALL COUNTY, WEST VIRGINIA
DETAILS

SHEET No.

C5.03

LAYOUT TAB: C5.04 DETAILS
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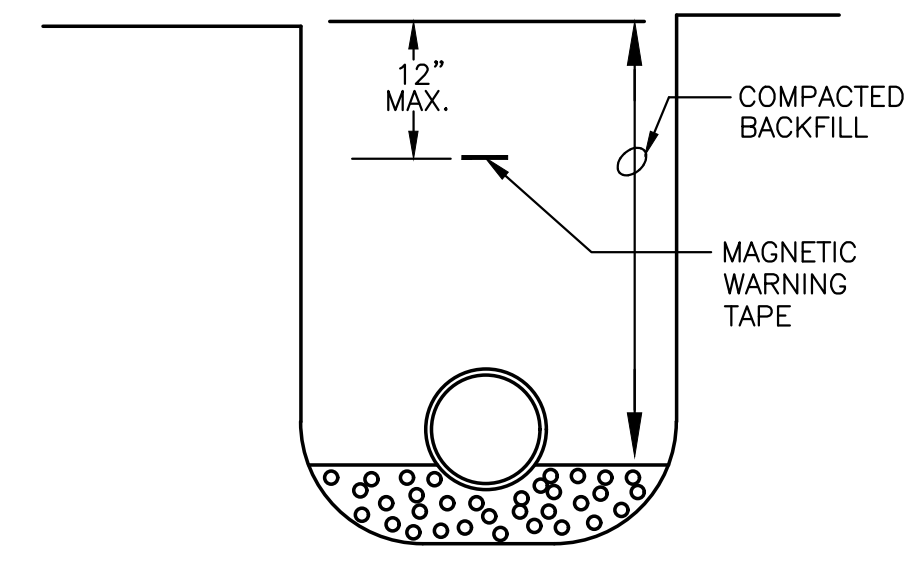


BEDDING FOR CONDUIT FOR ELECTRIC

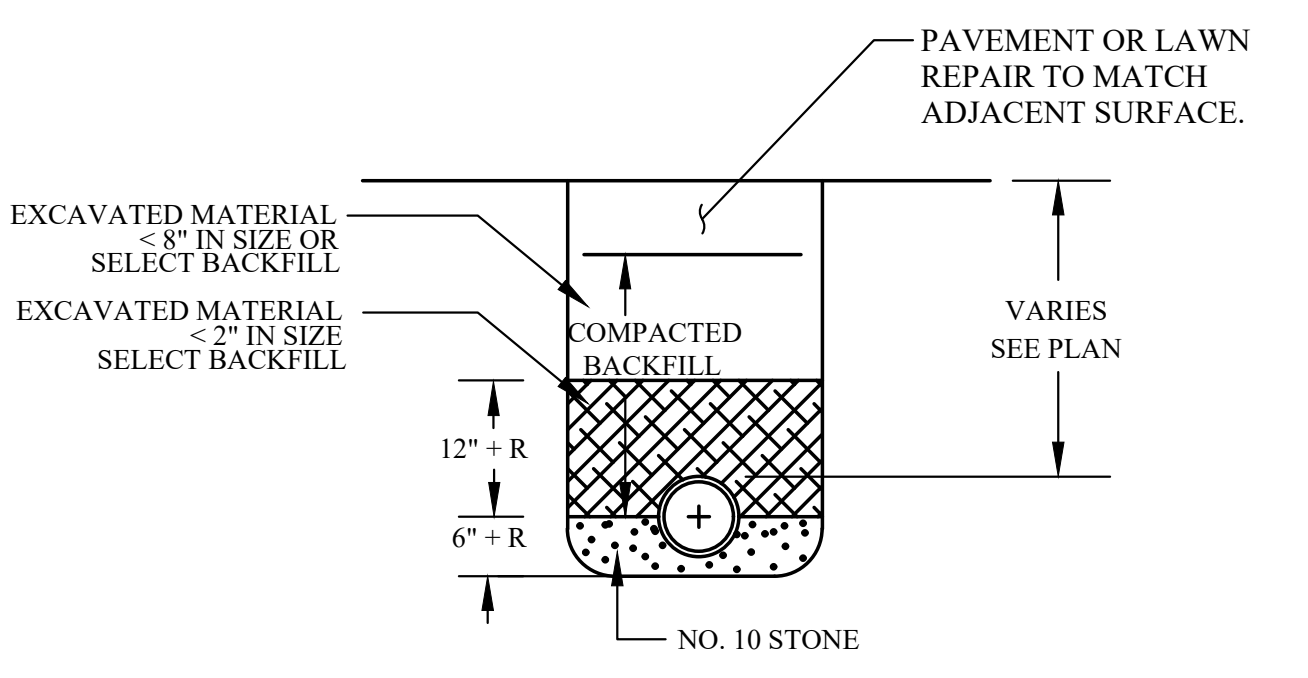
- NOTES:
1. PROVIDE NYLON PULL STRINGS AND CAPS IN EACH CONDUIT.
 2. INSTALL PER INDIVIDUAL UTILITY SPECIFICATIONS.
 3. MAINTAIN MINIMUM SEPARATION AS REQUIRED BY EACH UTILITY AND BY CODE.
 4. PIPE SHALL NOT BE INSTALLED DIRECTLY ON BEDROCK.

RED	ELECTRIC
YELLOW	GAS - OIL
ORANGE	TELEPHONE
BLUE	WATER
GREEN	SEWER

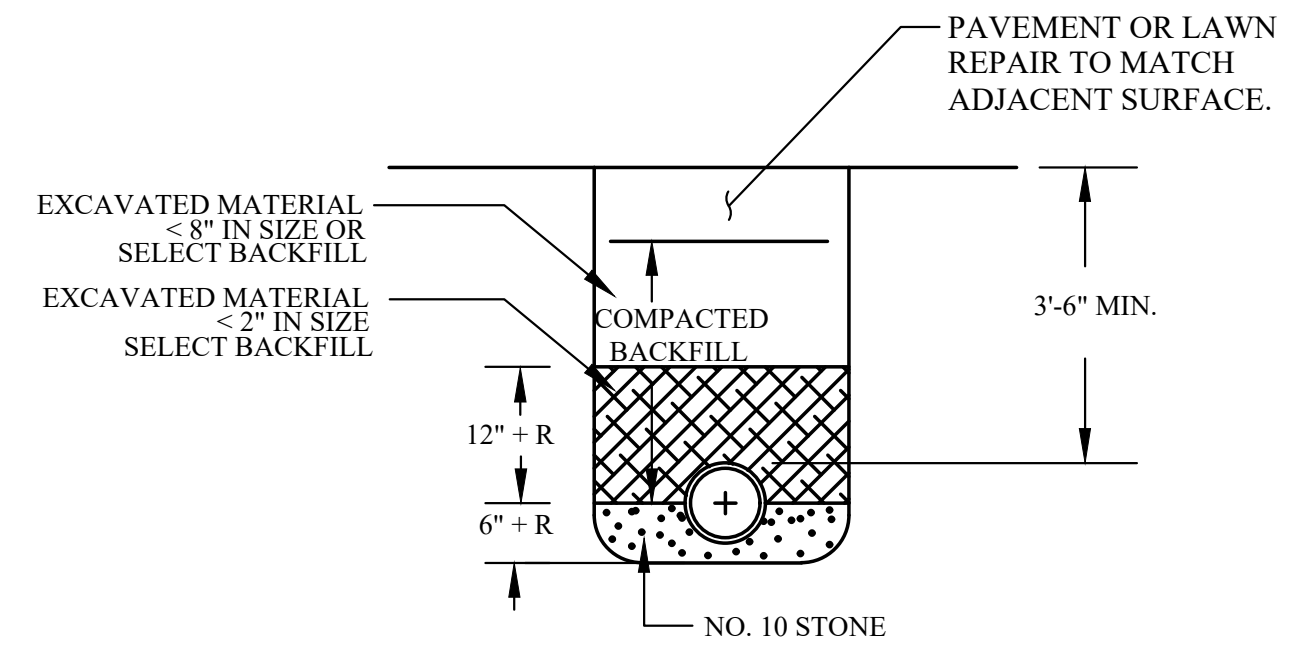
**COLOR CODES FOR UTILITY LOCATING
MAGNETIC WARNING TAPE**



UTILITY MAGNETIC WARNING TAPE



BEDDING FOR STORM SEWER PIPE

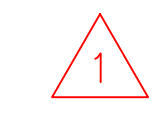


BEDDING FOR WATER PIPE

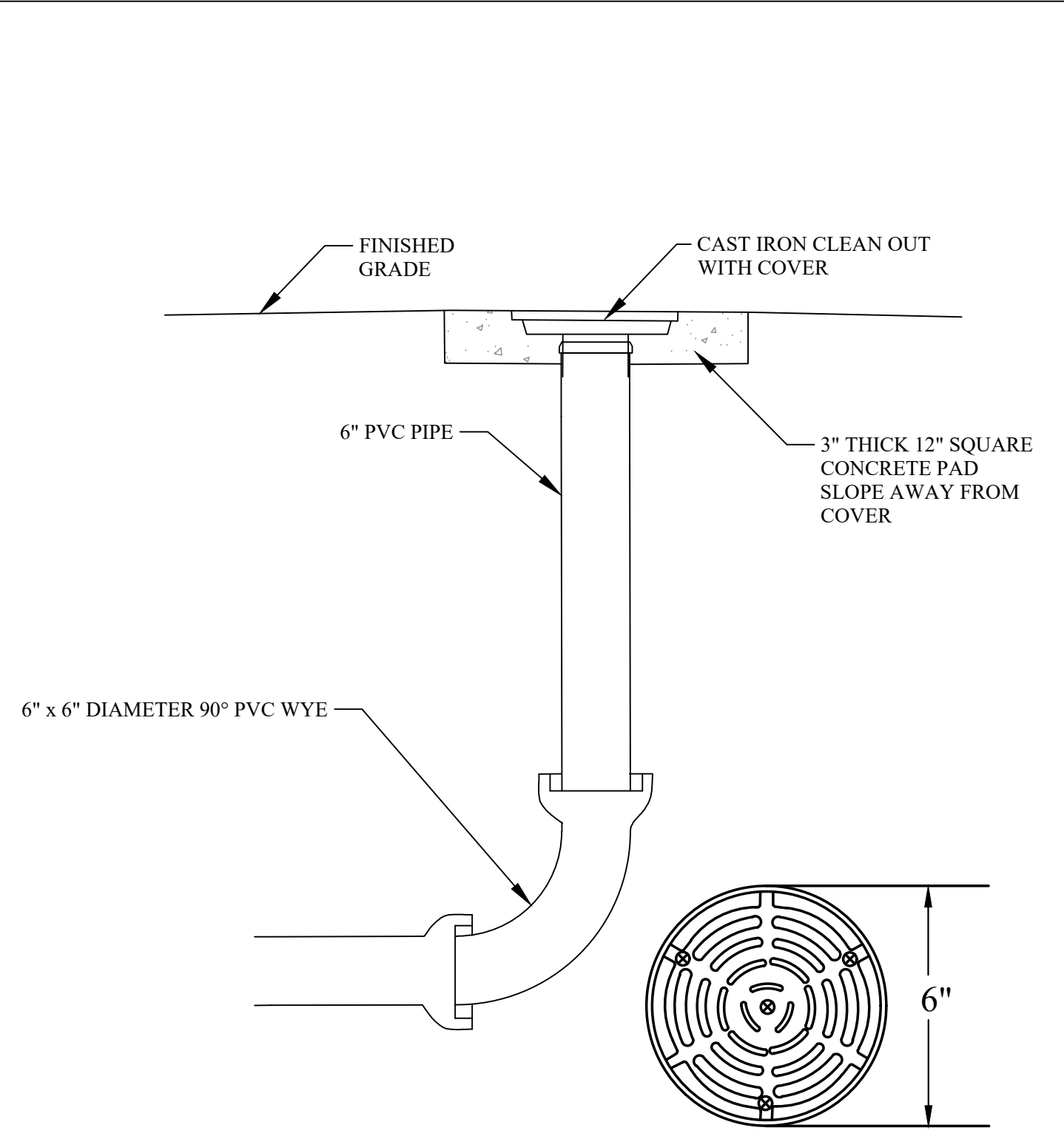
**TYPICAL CROSS SECTIONS OF TRENCHES
NOT TO SCALE**

NOTE:

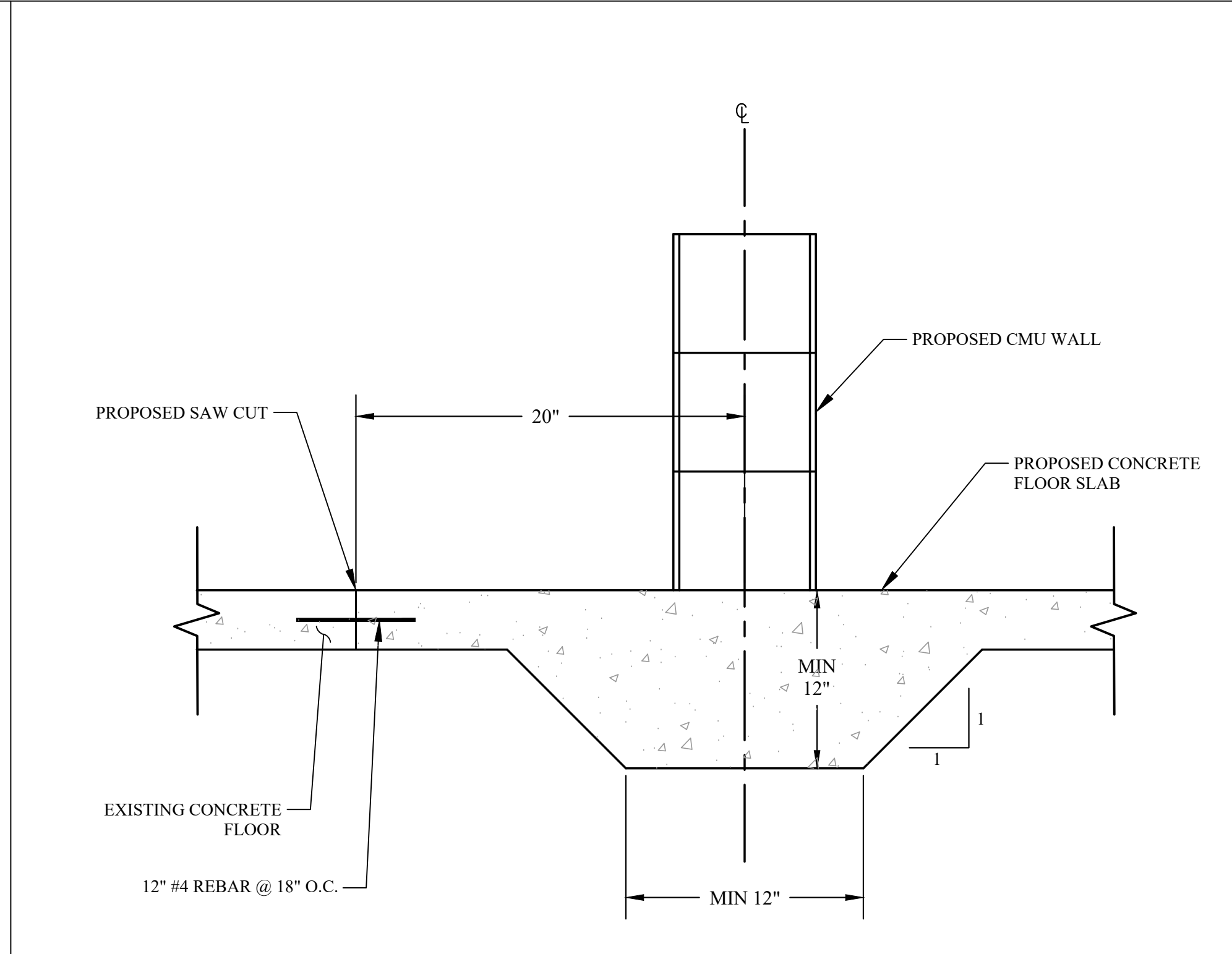
1. EXCEPT FOR "NORMAL LENGTH" LINES POSTS, ALL OTHER POSTS AND BRACES SHALL BE GALVANIZED STEEL PIPE MEMBERS OR GALVANIZED STEEL ROLL FORMED MEMBERS AS SHOWN IN THE "FENCE MEMBERS TABLE" HEREIN.
2. WHEN GALVANIZED PIPE POSTS ARE USED, GALVANIZED POST BRACES SHALL BE USED.
3. WHEN ROLL FORMED POSTS ARE USED, ROLL FORMED POST BRACES SHALL BE EMPLOYED.
4. ROLL FORMED POSTS AND BRACES SHALL MEET THE REQUIREMENTS OF 712.8 OF THE WVDOH SPECIFICATIONS.
5. STRETCH BARS, AND THEIR ACCOMPANYING POST BANDS, SHALL NOT BE USED WITH THE ROLL FORMED POSTS. INSTEAD, THE FENCE FABRIC SHALL BE INTEGRALLY WOVEN INTO THE LOCK LOOPS OF THE POSTS.
6. POST CAPS SHALL NOT BE USED ON ROLL FORMED POSTS.
7. POSTS, POST CAPS, AND ASSOCIATED MEMBERS SHALL BE GREEN UNLESS OTHERWISE SPECIFIED BY OWNER OR ENGINEER.
8. ~~FENCE FABRIC SHALL BE GREEN UNLESS OTHERWISE SPECIFIED BY OWNER OR ENGINEER.~~



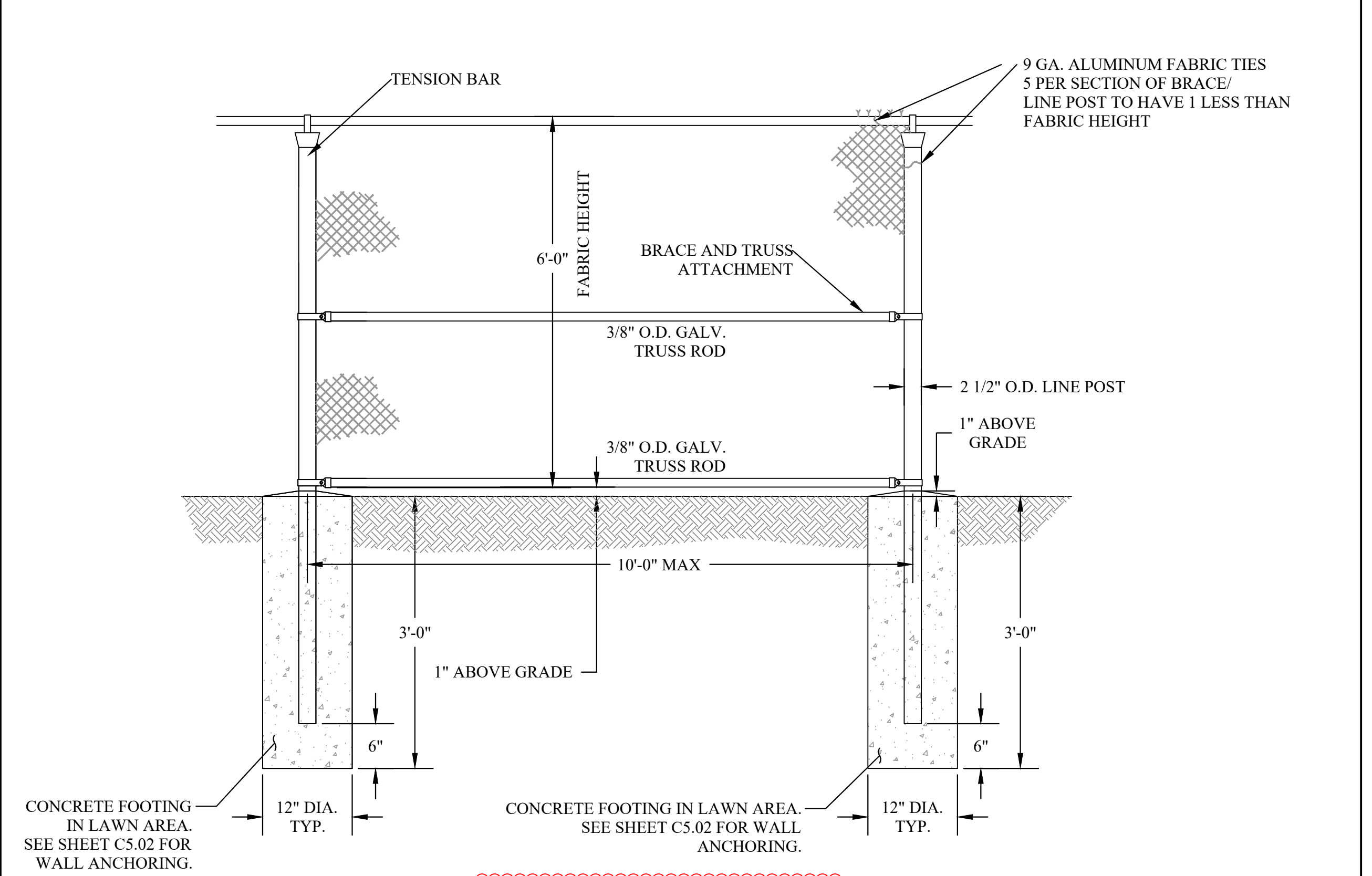
Member Designation	Galvanized Pipe			Triple Coated Pipe			Galv. Roll Formed Members		
	I.D. In.	Wall Thk. In.	Wt. lbs/ft.	I.D. In.	Wall Thk. In. (min.)	Wt. lbs/ft. (min.)	Dimensions In.	Wall Thk In.	Wt. lbs/ft.
End, Pull, Corner and Intermediate Assembly Post	2	0.154	3.65	2	0.130	3.11	3.5 x 3.5	0.134	5.14
Post Brace	1.25	0.140	2.27	1.25	0.11	1.83	1.250x1.625	0.075	1.35
Pedestrian Gate Post	2.5	0.203	5.79	2.5	0.160	4.64	3.5 x 3.5	0.134	5.14
Pedestrian Gate Frame	1.25	0.140	2.27	1.25	0.11	1.83	-	-	-
Vehicular Gate Post	3.5	0.226	9.11	-	-	-	-	-	-
Vehicular Gate Frame (and Vertical Brace)	1.5	0.145	2.72	1.5	0.120	2.28	-	-	-
Special Length Line Post (For 9'-6" and over)	2	0.154	3.65	2	0.130	3.11	3.5 x 3.5	0.134	5.14



**CLEANOUT DETAIL
NOT TO SCALE**



**THICKENED FLOOR SLAB DETAIL
NOT TO SCALE**



**CHAIN-LINK FENCE DETAIL
NOT TO SCALE**

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NO.	BY	DATE	DESCRIPTION
1	MRP	4-1-21	REMOVED BLACK VINYL-COATED FROM FENCE DETAIL

**ADDENDUM #1
APRIL 2021**

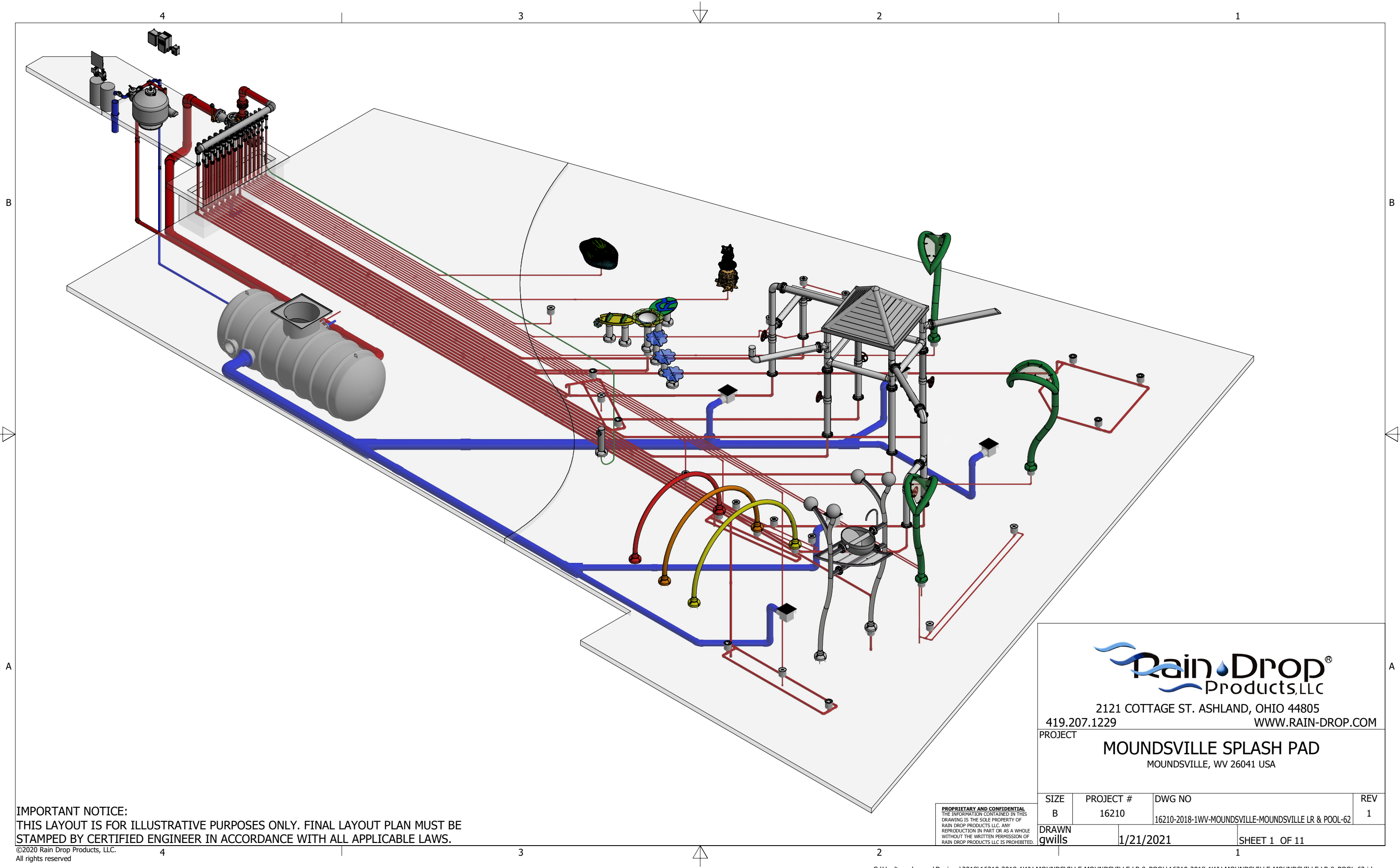
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SURVEY BY:
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PHASE No.
CONTRACT No.
PROJECT No.
030-10204

**CITY OF MOUNDSVILLE
 FOUR SEASONS SPLASH PAD
 MARSHALL COUNTY, WEST VIRGINIA
 DETAILS**


SHEET No.
C5.04



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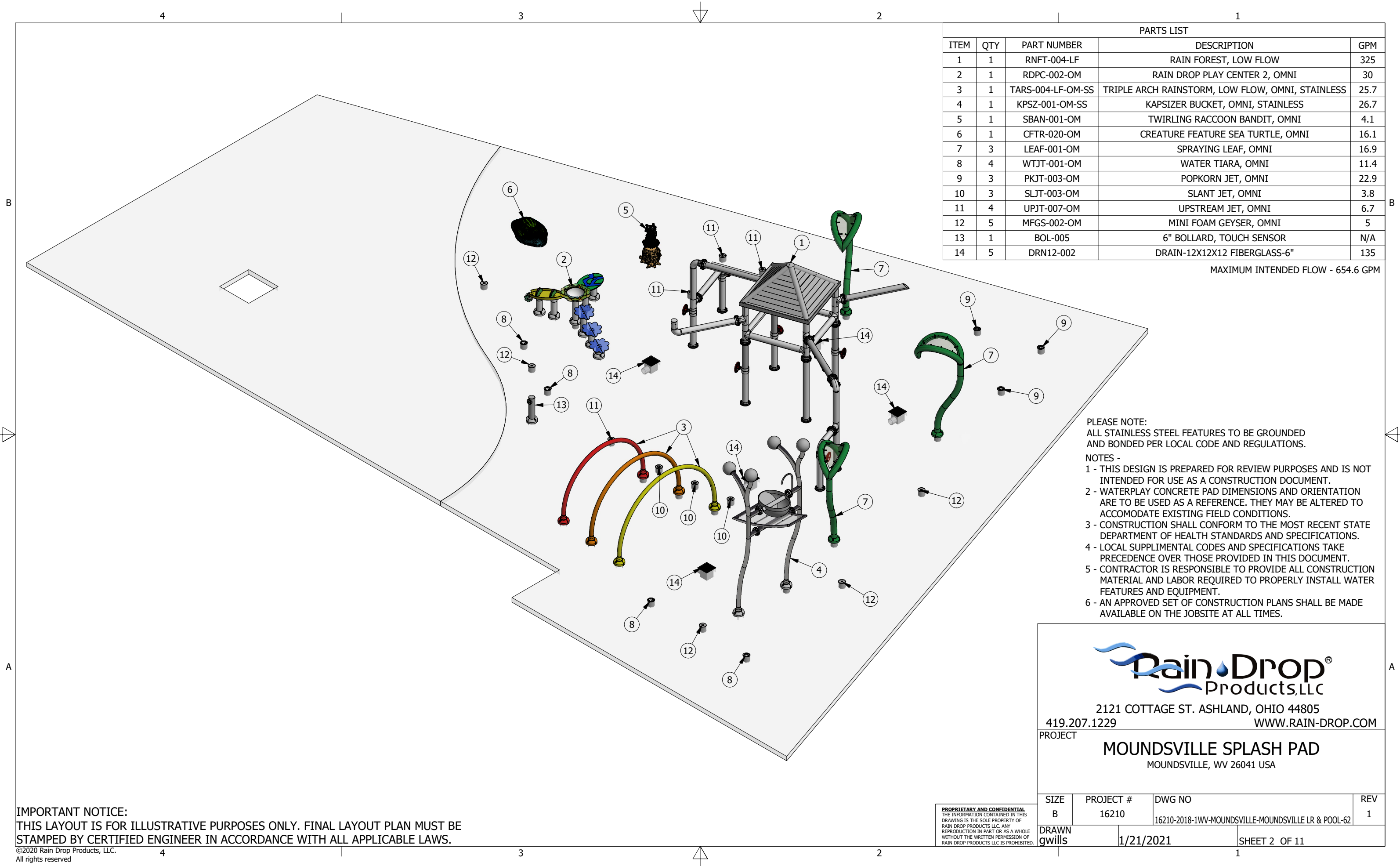
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 419.207.1229 WWW.RAIN-DROP.COM

PROJECT
MOUNDSVILLE SPLASH PAD
 MOUNDSVILLE, WV 26041 USA

SIZE	PROJECT #	DWG NO	REV
B	16210	16210-2018-1WV-MOUNDSVILLE-MOUNDSVILLE LR & POOL-62	1
DRAWN		DATE	SHEET
gwills		1/21/2021	1 OF 11



PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	GPM
1	1	RNFT-004-LF	RAIN FOREST, LOW FLOW	325
2	1	RDPC-002-OM	RAIN DROP PLAY CENTER 2, OMNI	30
3	1	TARS-004-LF-OM-SS	TRIPLE ARCH RAINSTORM, LOW FLOW, OMNI, STAINLESS	25.7
4	1	KPSZ-001-OM-SS	KAPSIZER BUCKET, OMNI, STAINLESS	26.7
5	1	SBAN-001-OM	TWIRLING RACCOON BANDIT, OMNI	4.1
6	1	CFTR-020-OM	CREATURE FEATURE SEA TURTLE, OMNI	16.1
7	3	LEAF-001-OM	SPRAYING LEAF, OMNI	16.9
8	4	WTJT-001-OM	WATER TIARA, OMNI	11.4
9	3	PKJT-003-OM	POPKORN JET, OMNI	22.9
10	3	SLJT-003-OM	SLANT JET, OMNI	3.8
11	4	UPJT-007-OM	UPSTREAM JET, OMNI	6.7
12	5	MFGS-002-OM	MINI FOAM GEYSER, OMNI	5
13	1	BOL-005	6" BOLLARD, TOUCH SENSOR	N/A
14	5	DRN12-002	DRAIN-12X12X12 FIBERGLASS-6"	135

MAXIMUM INTENDED FLOW - 654.6 GPM

PLEASE NOTE:
 ALL STAINLESS STEEL FEATURES TO BE GROUNDED AND BONDED PER LOCAL CODE AND REGULATIONS.

NOTES -

- 1 - THIS DESIGN IS PREPARED FOR REVIEW PURPOSES AND IS NOT INTENDED FOR USE AS A CONSTRUCTION DOCUMENT.
- 2 - WATERPLAY CONCRETE PAD DIMENSIONS AND ORIENTATION ARE TO BE USED AS A REFERENCE. THEY MAY BE ALTERED TO ACCOMMODATE EXISTING FIELD CONDITIONS.
- 3 - CONSTRUCTION SHALL CONFORM TO THE MOST RECENT STATE DEPARTMENT OF HEALTH STANDARDS AND SPECIFICATIONS.
- 4 - LOCAL SUPPLEMENTAL CODES AND SPECIFICATIONS TAKE PRECEDENCE OVER THOSE PROVIDED IN THIS DOCUMENT.
- 5 - CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL CONSTRUCTION MATERIAL AND LABOR REQUIRED TO PROPERLY INSTALL WATER FEATURES AND EQUIPMENT.
- 6 - AN APPROVED SET OF CONSTRUCTION PLANS SHALL BE MADE AVAILABLE ON THE JOBSITE AT ALL TIMES.

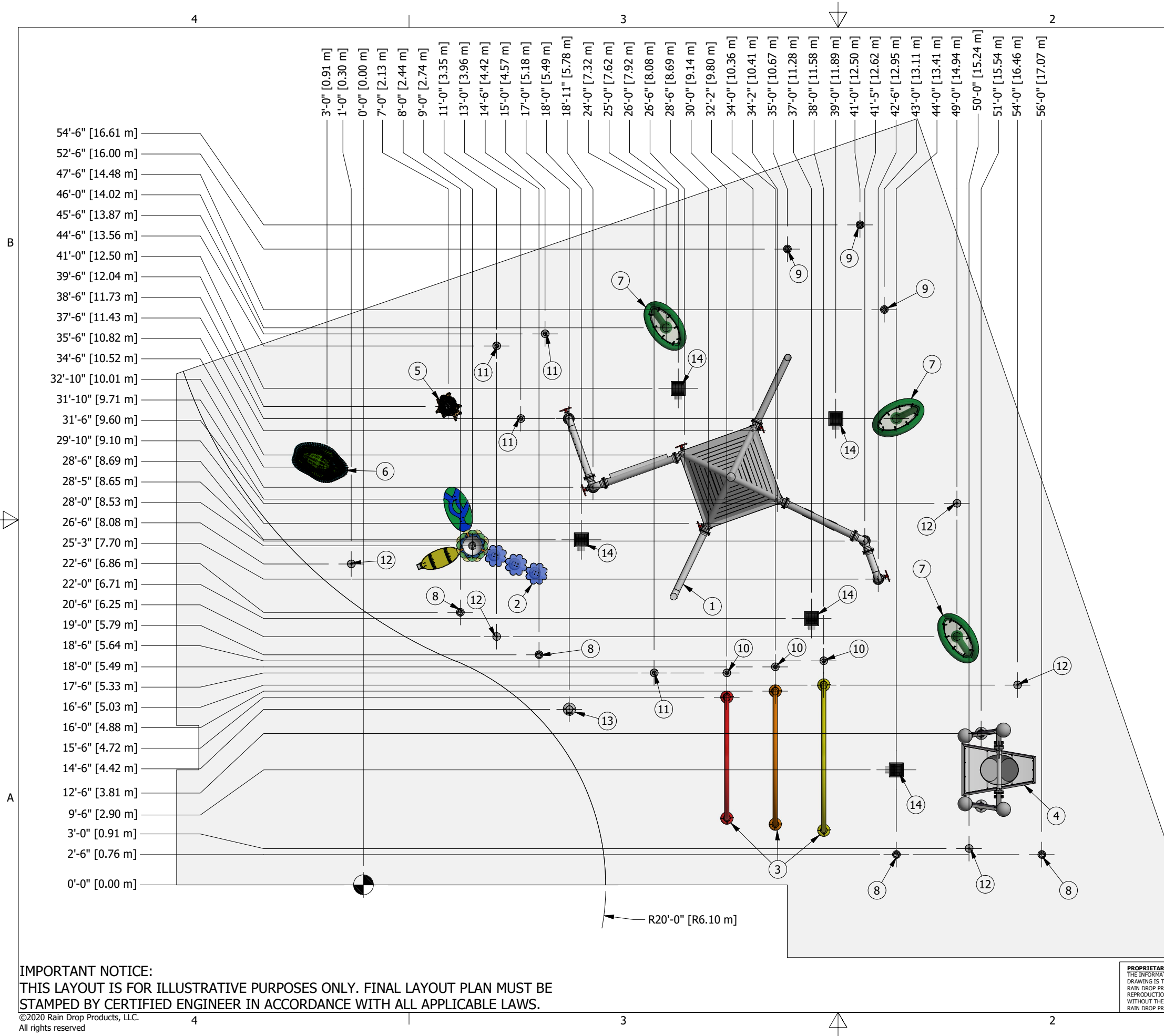

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PROJECT
MOUNDSVILLE SPLASH PAD
 MOUNDSVILLE, WV 26041 USA

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SIZE	PROJECT #	DWG NO	REV
B	16210	16210-2018-1WV-MOUNDSVILLE-MOUNDSVILLE LR & POOL-62	1
DRAWN	DATE	SHEET	
gwills	1/21/2021	2 OF 11	



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	RNFT-004-LF	RAIN FOREST, LOW FLOW
2	1	RDPC-002-OM	RAIN DROP PLAY CENTER 2, OMNI
3	1	TARS-004-LF-OM-SS	TRIPLE ARCH RAINSTORM, LOW FLOW, OMNI, STAINLESS
4	1	KPSZ-001-OM-SS	KAPSIZER BUCKET, OMNI, STAINLESS
5	1	SBAN-001-OM	TWIRLING RACCOON BANDIT, OMNI
6	1	CFTR-020-OM	CREATURE FEATURE SEA TURTLE, OMNI
7	3	LEAF-001-OM	SPRAYING LEAF, OMNI
8	4	WTJT-001-OM	WATER TIARA, OMNI
9	3	PKJT-003-OM	POPKORN JET, OMNI
10	3	SLJT-003-OM	SLANT JET, OMNI
11	4	UPJT-007-OM	UPSTREAM JET, OMNI
12	5	MFGS-002-OM	MINI FOAM GEYSER, OMNI
13	1	BOL-005	6" BOLLARD, TOUCH SENSOR
14	5	DRN12-002	DRAIN-12X12X12 FIBERGLASS-6"

PLEASE NOTE:
 ALL STAINLESS STEEL FEATURES TO BE GROUNDED AND BONDED PER LOCAL CODE AND REGULATIONS.

CONCRETE -

- 1 - WATERPLAY CONCRETE PAD DIMENSIONS AND ORIENTATION ARE TO BE USED AS A REFERENCE. THEY MAY BE ALTERED TO ACCOMODATE EXISTING FIELD CONDITIONS.
- 2 - ALL CONCRETE SHALL BE 3000 PSI MINIMUM, 28 DAY COMPRESSIVE STRENGTH, WITH 6% AIR ENTRAPMENT.
- 3 - GRADE SHALL BE SLOPED 2% FROM THE WATERPLAY PAD PERIMETER TO THE MAIN DRAINS.
- 4 - A 5 FOOT OVERSPRAY BUFFER IS INCORPORATED BETWEEN THE WATERPLAY PAD PERIMETER AND THE INTENDED AREA OF INFLUENCE OF THE WATERPLAY FEATURES. THE BUFFER ZONE IS INCLUDED IN THE OVERALL DIMENSIONS OF THE WATERPLAY PAD.
- 5 - ALL REINFORCEMENT STEEL SHALL BE SUPPLIED AND PLACED IN ACCORDANCE WITH ACI 318-99, AND CRSI MSP-1-01.
- 6 - ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.
- 7 - EACH WATER FEATURE SHALL BE LOCATED WITHIN A SINGLE PANEL OF CONCRETE, UNLESS OTHERWISE NOTED.
- 8 - OMNIPOD COVER MUST BE CAST FLUSH AND LEVEL WITH THE FINISHED CONCRETE SURFACE.
- 9 - SURFACE SPRAY NOZZLES SHALL BE CAST FLUSH AND LEVEL WITH THE FINISHED CONCRETE SURFACE.
- 10 - EARTHFORMS MAY BE USED UNDER THE WATERPLAY CONCRETE PAD.
- 11 - SPRAYGROUND AREA IS 4766.8 SQUARE FEET [442.8 SQUARE METERS]



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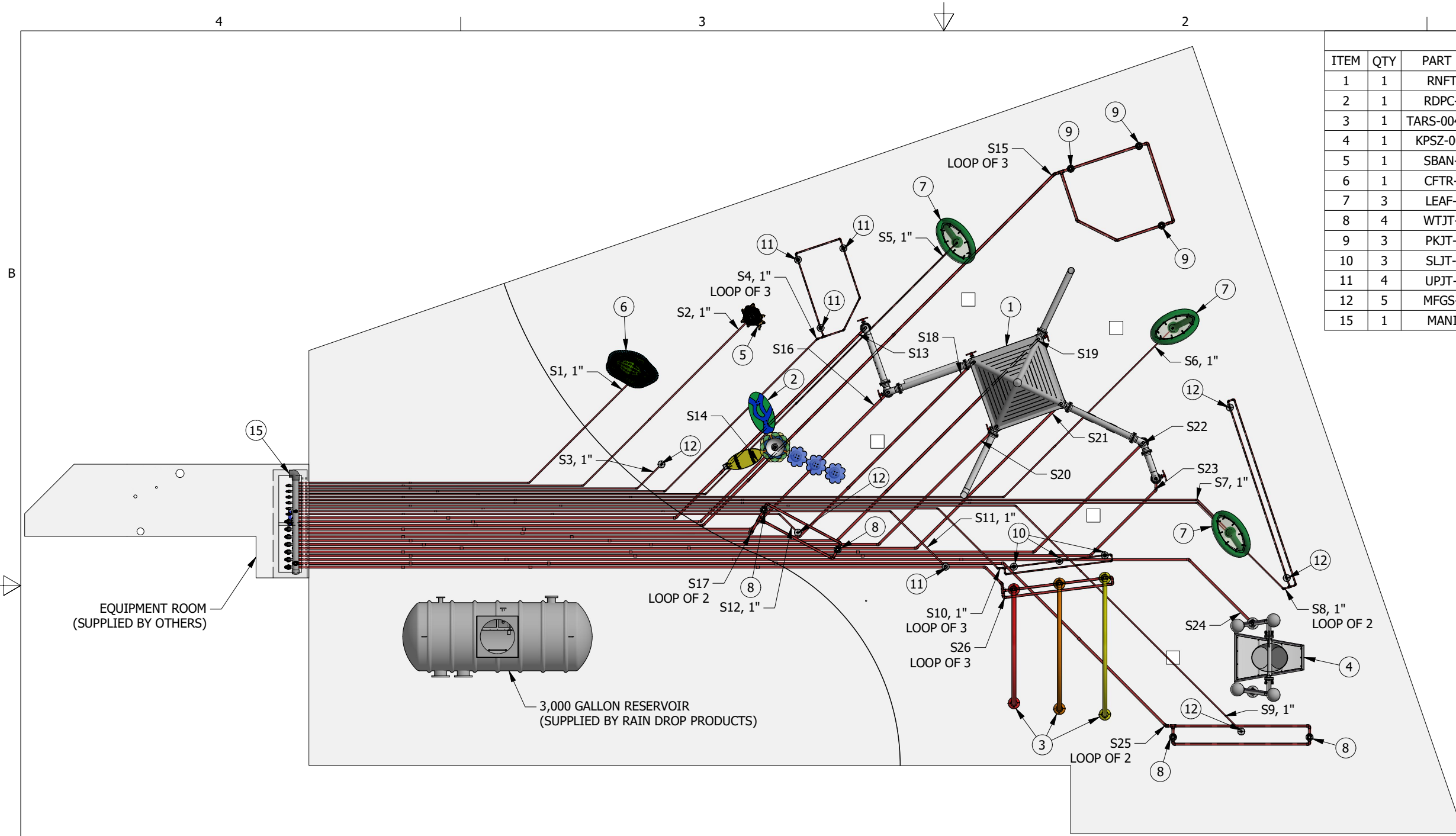
MOUNDSVILLE SPLASH PAD
 MOUNDSVILLE, WV 26041 USA

SIZE	PROJECT #	DWG NO	REV
B	16210	16210-2018-1WV-MOUNDSVILLE-MOUNDSVILLE LR & POOL-62	1
DRAWN	DATE	SHEET	
gwills	1/21/2021	3 OF 11	

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PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	RNFT-004-LF	RAIN FOREST, LOW FLOW
2	1	RDPC-002-OM	RAIN DROP PLAY CENTER 2, OMNI
3	1	TARS-004-LF-OM-SS	TRIPLE ARCH RAINSTORM, LOW FLOW, OMNI, STAINLESS
4	1	KPSZ-001-OM-SS	KAPSIZER BUCKET, OMNI, STAINLESS
5	1	SBAN-001-OM	TWIRLING RACCOON BANDIT, OMNI
6	1	CFTR-020-OM	CREATURE FEATURE SEA TURTLE, OMNI
7	3	LEAF-001-OM	SPRAYING LEAF, OMNI
8	4	WTJT-001-OM	WATER TIARA, OMNI
9	3	PKJT-003-OM	POPKORN JET, OMNI
10	3	SLJT-003-OM	SLANT JET, OMNI
11	4	UPJT-007-OM	UPSTREAM JET, OMNI
12	5	MFGS-002-OM	MINI FOAM GEYSER, OMNI
15	1	MANIFOLD-6	6" MANIFOLD, W/12-1" & 6-2" OUTLETS, SCH 80 PVC

PLEASE NOTE:
 ALL PIPES AND FITTINGS TO BE SUPPLIED BY CONTRACTOR UNLESS OTHERWISE NOTED.
 PVC PIPING -
 1 - SCHEDULE 80 PVC PIPE AND SOCKET TYPE FITTINGS SHALL CONFORM TO ASTM D2467, ASTM D1785-12, AND ALL APPLICABLE LOCAL CODES.
 2 - ALL PVC PIPING SHALL BE STAMPED WITH N.S.F. SEAL OF APPROVAL FOR POTABLE WATER.
 3 - ALL PIPING SHALL BE LABELED WITH DIRECTIONAL FLOW ARROWS.
 4 - ALL PIPING TO BE PRESSURE TESTED BEFORE POURING CONCRETE.
 5 - PIPING DESIGNED TO CARRY THE REQUIRED QUANTITIES OF WATER AT VELOCITIES NOT TO EXCEED 10 FPS OR PER LOCAL CODES AND REGULATIONS.
 6 - SUPPLY LINES TO BE CHEMICALLY WELDED TO OMNIPOD FEATURE RECIEVER.
 7 - ALL PIPING TO BE 2" SCHEDULE 80 PVC UNLESS OTHERWISE SPECIFIED.
 8 - DRAWINGS ARE INTENDED FOR SCHEMATIC USE ONLY. FINAL PIPE LOCATIONS SHALL BE FIELD VERIFIED AND COORDINATED WITH CONTRACTOR.



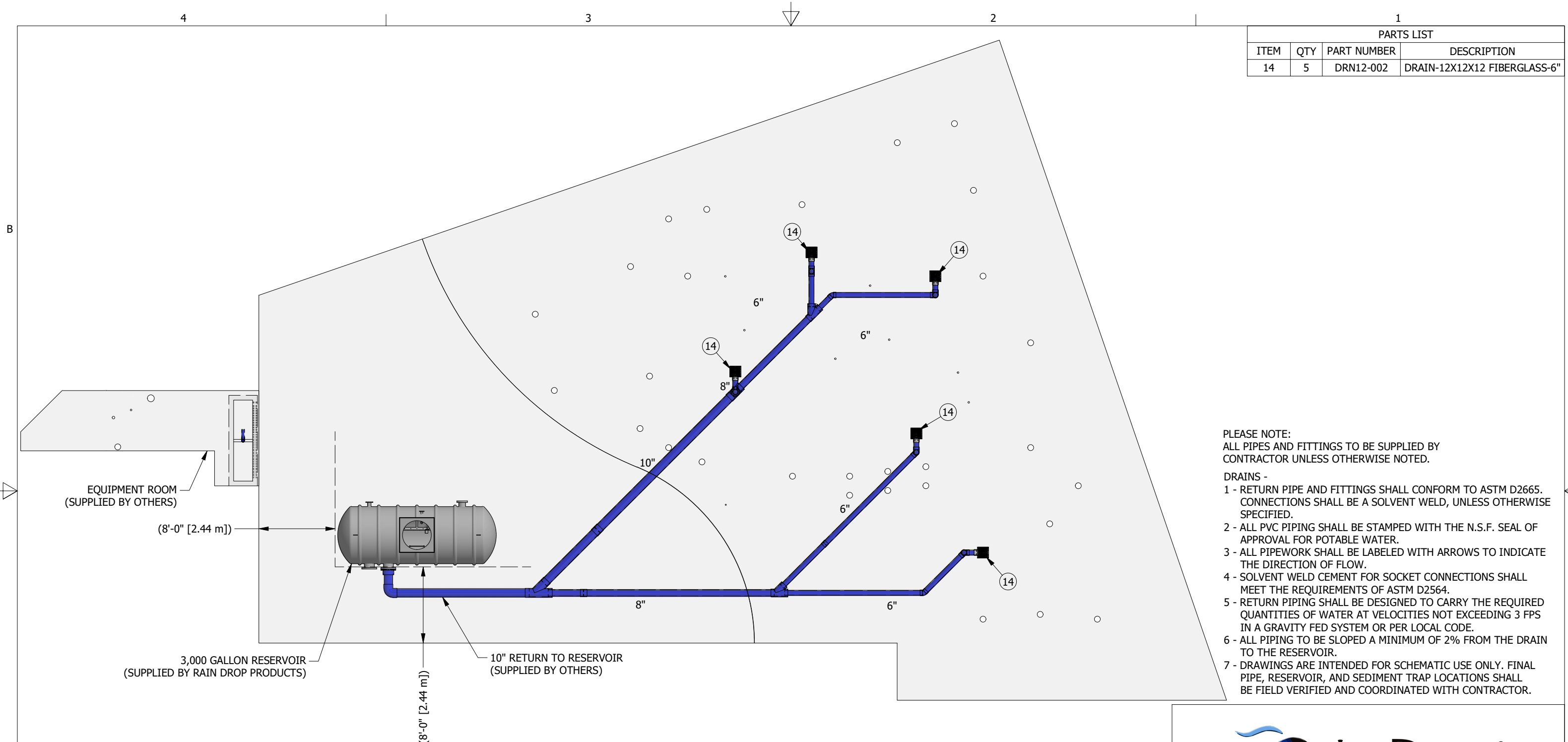
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MOUNDSVILLE SPLASH PAD
 MOUNDSVILLE, WV 26041 USA

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SIZE B	PROJECT # 16210	DWG NO 16210-2018-1WV-MOUNDSVILLE-MOUNDSVILLE LR & POOL-62	REV 1
DRAWN gwills		DATE 1/21/2021	SHEET 4 OF 11

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PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
14	5	DRN12-002	DRAIN-12X12X12 FIBERGLASS-6"

PLEASE NOTE:
 ALL PIPES AND FITTINGS TO BE SUPPLIED BY CONTRACTOR UNLESS OTHERWISE NOTED.

DRAINS -

- 1 - RETURN PIPE AND FITTINGS SHALL CONFORM TO ASTM D2665. CONNECTIONS SHALL BE A SOLVENT WELD, UNLESS OTHERWISE SPECIFIED.
- 2 - ALL PVC PIPING SHALL BE STAMPED WITH THE N.S.F. SEAL OF APPROVAL FOR POTABLE WATER.
- 3 - ALL PIPEWORK SHALL BE LABELED WITH ARROWS TO INDICATE THE DIRECTION OF FLOW.
- 4 - SOLVENT WELD CEMENT FOR SOCKET CONNECTIONS SHALL MEET THE REQUIREMENTS OF ASTM D2564.
- 5 - RETURN PIPING SHALL BE DESIGNED TO CARRY THE REQUIRED QUANTITIES OF WATER AT VELOCITIES NOT EXCEEDING 3 FPS IN A GRAVITY FED SYSTEM OR PER LOCAL CODE.
- 6 - ALL PIPING TO BE SLOPED A MINIMUM OF 2% FROM THE DRAIN TO THE RESERVOIR.
- 7 - DRAWINGS ARE INTENDED FOR SCHEMATIC USE ONLY. FINAL PIPE, RESERVOIR, AND SEDIMENT TRAP LOCATIONS SHALL BE FIELD VERIFIED AND COORDINATED WITH CONTRACTOR.

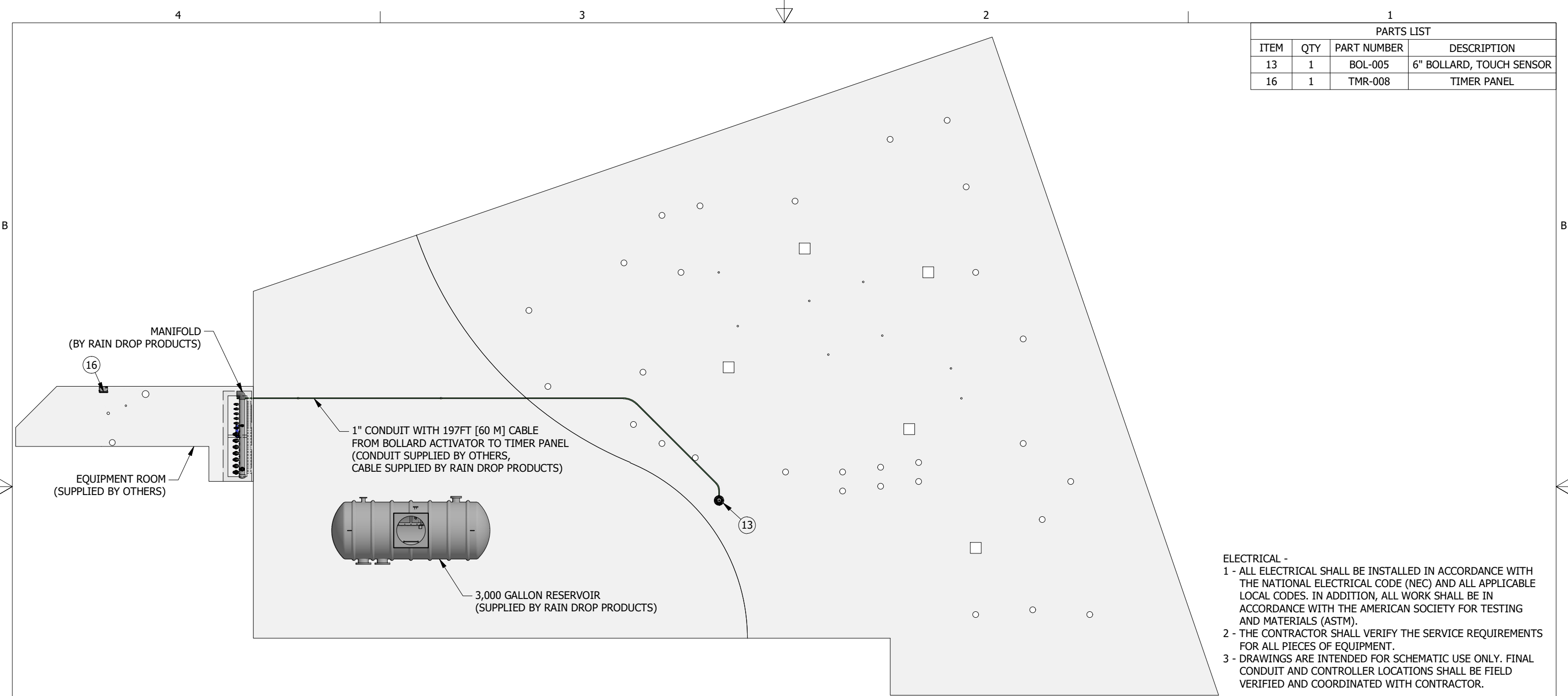

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PROJECT
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 MOUNDSVILLE, WV 26041 USA

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SIZE B	PROJECT # 16210	DWG NO 16210-2018-1WV-MOUNDSVILLE-MOUNDSVILLE LR & POOL-62	REV 1
DRAWN gwills		1/21/2021	SHEET 5 OF 11

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
13	1	BOL-005	6" BOLLARD, TOUCH SENSOR
16	1	TMR-008	TIMER PANEL



- ELECTRICAL -**
- 1 - ALL ELECTRICAL SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND ALL APPLICABLE LOCAL CODES. IN ADDITION, ALL WORK SHALL BE IN ACCORDANCE WITH THE AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM).
 - 2 - THE CONTRACTOR SHALL VERIFY THE SERVICE REQUIREMENTS FOR ALL PIECES OF EQUIPMENT.
 - 3 - DRAWINGS ARE INTENDED FOR SCHEMATIC USE ONLY. FINAL CONDUIT AND CONTROLLER LOCATIONS SHALL BE FIELD VERIFIED AND COORDINATED WITH CONTRACTOR.

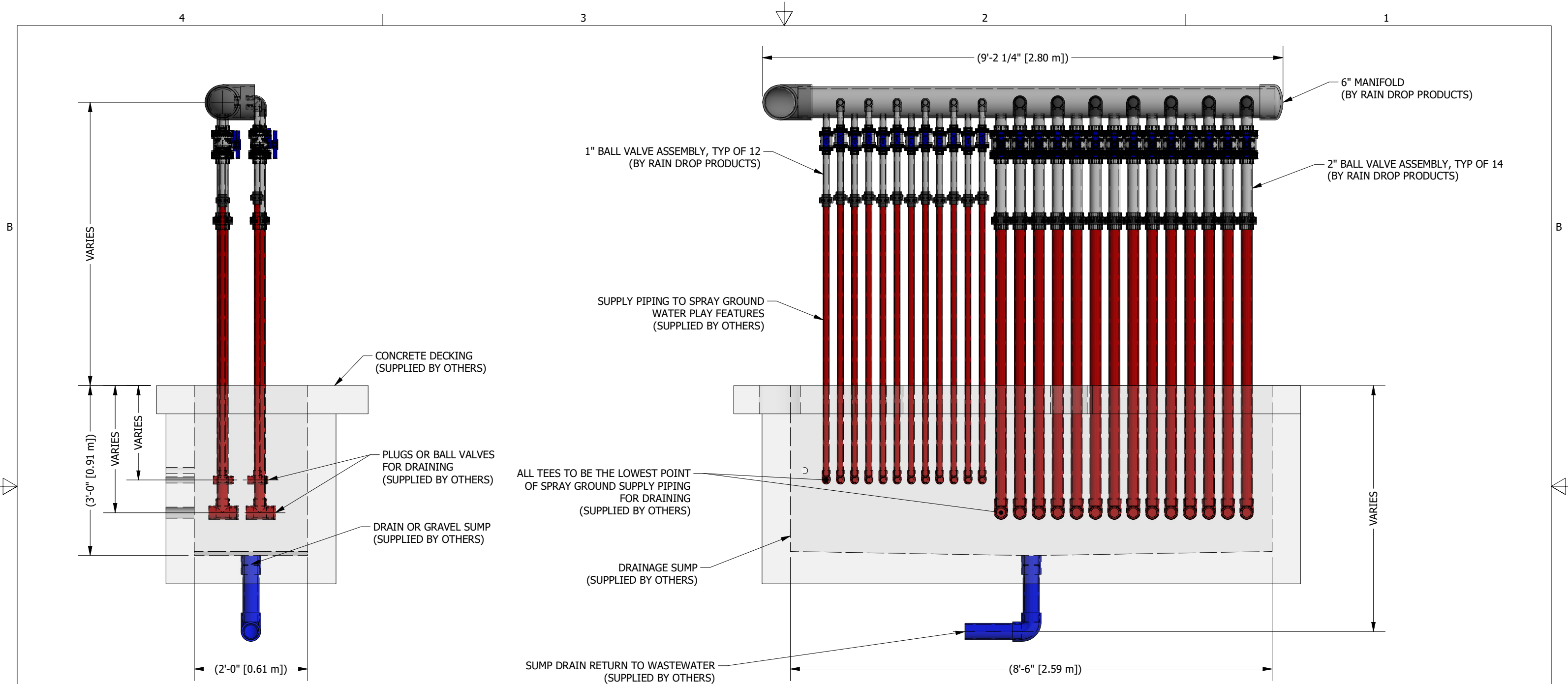

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PROJECT
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SIZE B	PROJECT # 16210	DWG NO 16210-2018-1WV-MOUNDSVILLE-MOUNDSVILLE LR & POOL-62	REV 1
DRAWN gwills		1/21/2021	SHEET 6 OF 11

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- MANIFOLD NOTES -**
- 1 - IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY SUPPORT THE WATER SUPPLY MANIFOLD.
 - 2 - ALL PIPING SHALL BE SUPPORTED Laterally AS WELL AS VERTICALLY. USE OF PROPER HANGERS FOR THE CONDITIONS IS ESSENTIAL.
 - 3 - ALL HANGERS, PIPE SUPPORTS, THREADED ROD, HARDWARE, ETC. SHALL BE SUPPLIED BY OTHERS.
 - 4 - DRAWINGS ARE INTENDED FOR SCHEMATIC USE ONLY. FINAL MANIFOLD LOCATION SHALL BE FIELD VERIFIED AND COORDINATED WITH THE CONTRACTOR.

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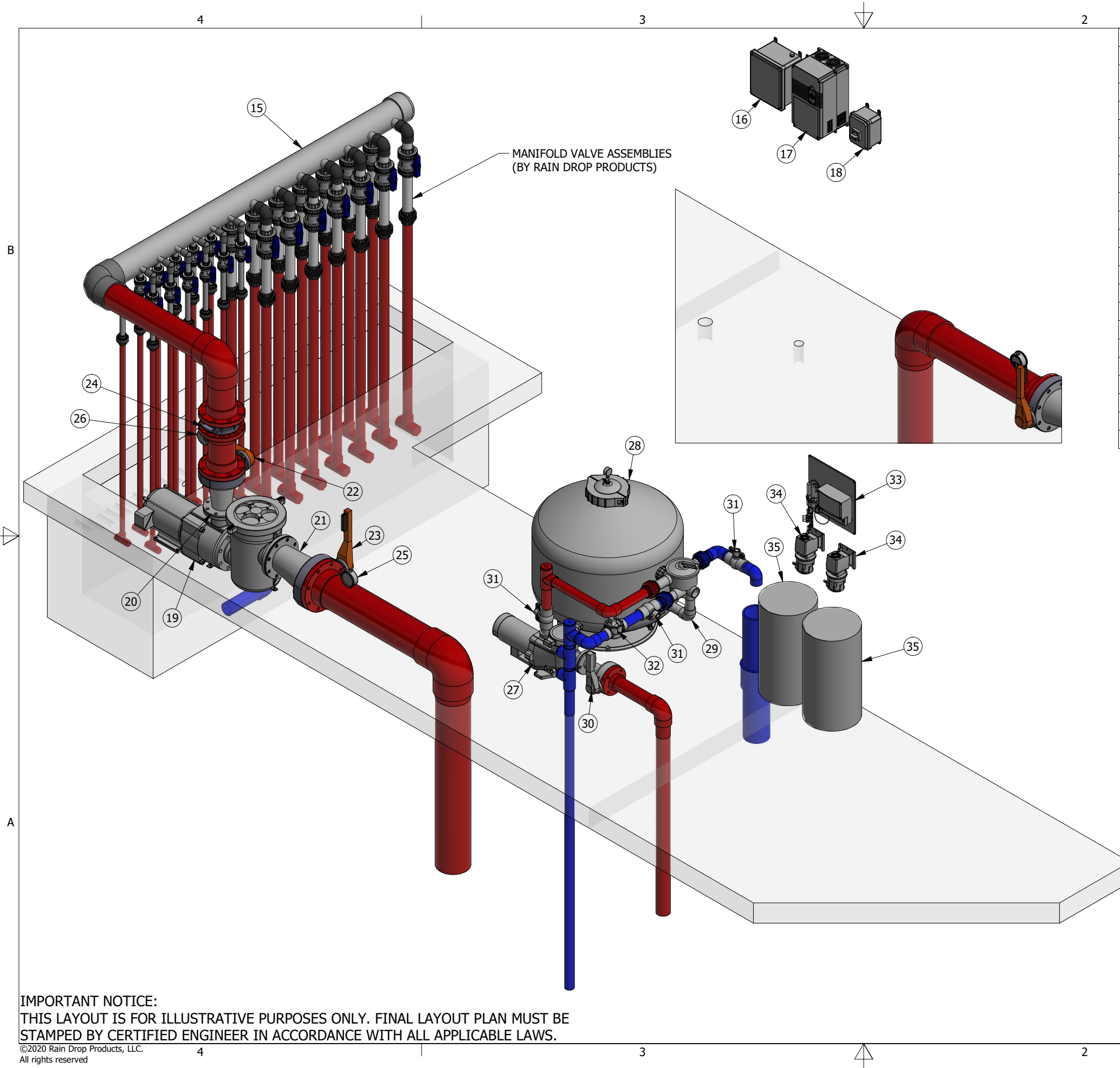
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PROJECT
MOUNDSVILLE SPLASH PAD
 MOUNDSVILLE, WV 26041 USA

SIZE B	PROJECT # 16210	DWG NO 16210-2018-1WV-MOUNDSVILLE-MOUNDSVILLE LR & POOL-62	REV 1
DRAWN gwillis		1/21/2021	SHEET 7 OF 11



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
15	1	MANIFOLD-6	6" MANIFOLD, W/12-1" & 6-2" OUTLETS, SCH 80 PVC
16	1	TMR-008	TIMER PANEL
17	1	VFD-151230	POLYSPEDE SERIES AC DRIVE, 15 HP, 240V 1-PHASE INPUT, 3-PHASE OUTPUT
18	1	SWT-004	SWITCH, DISCONNECT 10-16 FLA
19	1	PMP6-700-PK3-02	PUMP, EQ SERIES 15HP/3PH/230 460VAC 60Hz W/STRAINER, PENTAIR
20	1	PMP6-700-PK3-02	CONCENTRIC REDUCER, 6" X 4", S.S.
21	1	PMP6-700-PK3-02	ECCENTRIC REDUCER, 8" X 6", S.S.
22	1	PMP6-700-PK3-02	BUTTERFLY VALVE, 6" LEVER OPERATED (PUMP DISCHARGE)
23	1	PMP6-700-PK3-02	BUTTERFLY VALVE, 8" LEVER OPERATED (PUMP SUCTION)
24	1	PMP6-700-PK3-02	CHECK VALVE, 6" SCH 80 PVC
25	1	PMP6-700-PK3-02	GAUGE, PRESSURE/VACUUM COMBINATION, 30-60 PSI
26	1	PMP6-700-PK3-02	GAUGE, PRESSURE, 0-60 PSI
27	1	FLT-100PK1S	PUMP, 2HP/1PH/208-230VAC, W/STRAINER, TRI-STAR
28	1	FLT-100PK1S	36" SAND FILTER, WATERCO
29	1	FLT-100PK1S	MULTIPORT VALVE, 2" PORTS, WATERCO
30	1	FLT-100PK1S	BUTTERFLY VALVE, 3" LEVER OPERATED (PUMP SUCTION)
31	3	FLT-100PK1S	BALL VALVE, 2" PVC (PUMP DISCHARGE/BACKFLOW/RESTRICTION)
32	1	FLT-100PK1S	FLOW METER, 2" IN-LINE, FLOWVIS
33	1	CHL-750PK1L	CHEMICAL CONTROLLER, CAT 2000, 120VAC, 50/60Hz, HAYWARD
34	2	CHL-750PK1L	PUMP, 45 SERIES CHEMICAL FEED, 0-50 GPD, 120VAC, 60Hz, STENNER
35	2	CHL-750PK1L	15 GALLON CLOSED TOP TANK

NOTE:
ALL PARTS NOT BALLOONED OR LABELED
ARE NOT PROVIDED BY RAIN DROP PRODUCTS



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MOUNDSVILLE SPLASH PAD
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SIZE B	PROJECT # 16210	DWG NO 16210-2018-1WV-MOUNDSVILLE-MOUNDSVILLE LR & POOL-62	REV 1
DRAWN gwills		1/21/2021	SHEET 8 OF 11

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SPRAYGROUND SPECIFICATIONS -
 RESERVOIR CAPACITY IS 3000 GALLONS WITH A TURNOVER RATE OF 28.3 MINUTES.
 FILTRATION FLOW RATE IS 106.05 GPM. WATERPLAY FLOW RATE IS DESIGNED AT A
 MAXIMUM OF 654.6 GPM. FOR DESIGNS THAT INCLUDE SEQUENCING, THE AVERAGE
 SEQUENCE FLOW RATE IS 654.6 GPM. PIPEWORK DESIGN IS BASED ON SCHEDULE 80
 AND SCHEDULE 40 PVC PIPE AND SOCKET TYPE FITTINGS, CONFORMING TO ASTM
 D2467 AND ASTM D1785-12. PIPEWORK SHALL CONFORM TO ALL APPLICABLE
 STATE AND LOCAL CODES. PIPEWORK SHALL BE APPROVED FOR POTABLE WATER
 USAGE AND SHALL BE PRESSURE TESTED BEFORE POURING CONCRETE. PIPEWORK
 SHALL BE LABELED WITH ARROWS TO INDICATE DIRECTION OF FLOW.

RED PIPES = SUPPLY LINES
BLUE PIPES = RETURN LINES
GREEN PIPES = ELECTRICAL CONDUIT

PIPING SPECIFICATIONS -
 DRAIN PIPING SIZED FOR 3 FPS VELOCITY IN GRAVITY SYSTEM.
 PUMP SUCTION LINES SIZED FOR 6 FPS MAXIMUM VELOCITY.
 PUMP DISCHARGE LINES SIZED FOR 10 FPS MAXIMUM VELOCITY.
 PLEASE ADVISE RAIN DROP IF THIS EXCEEDS LOCAL CODES OR
 REGULATIONS FOR YOUR AREA.

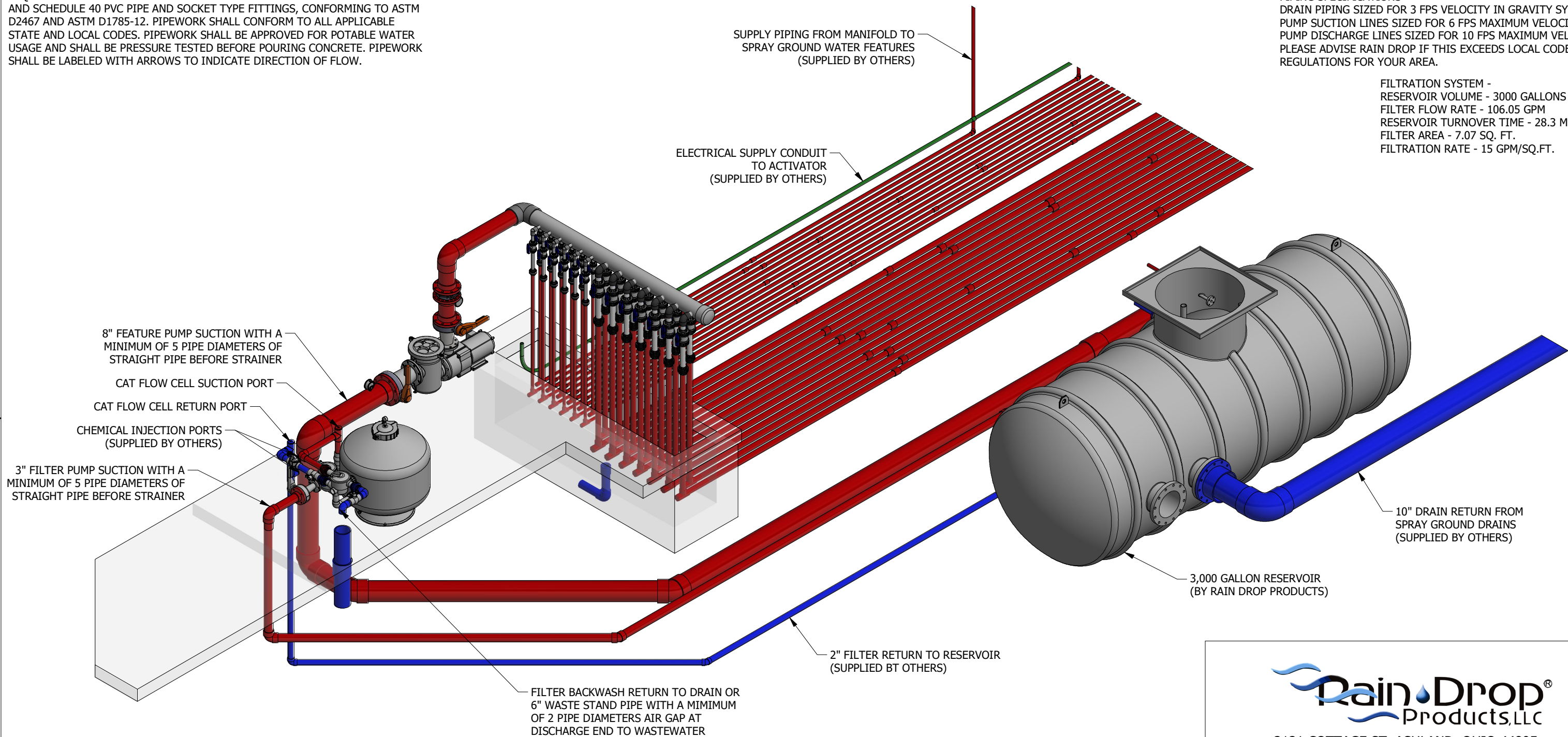
FILTRATION SYSTEM -
 RESERVOIR VOLUME - 3000 GALLONS
 FILTER FLOW RATE - 106.05 GPM
 RESERVOIR TURNOVER TIME - 28.3 MINUTES
 FILTER AREA - 7.07 SQ. FT.
 FILTRATION RATE - 15 GPM/SQ.FT.

B

B

A

A



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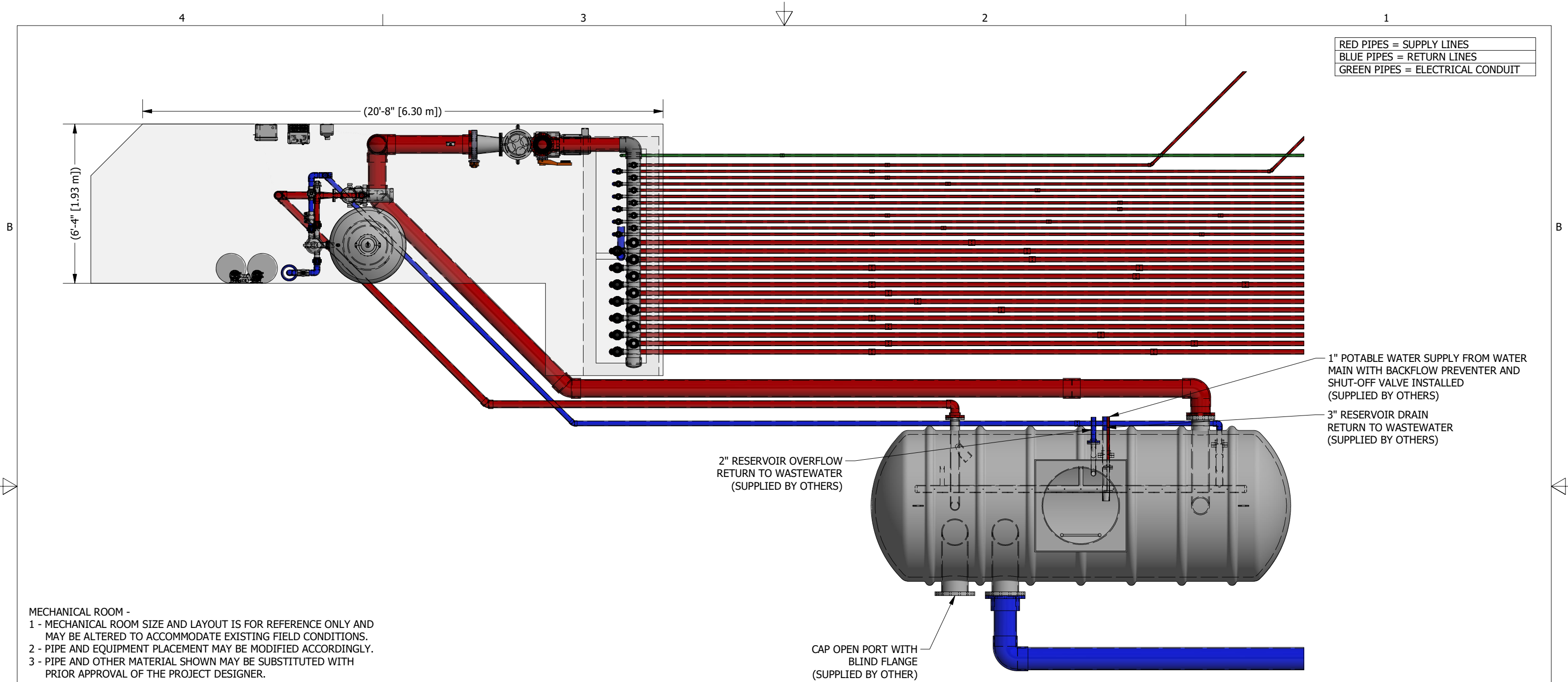
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PROJECT
MOUNDSVILLE SPLASH PAD
 MOUNDSVILLE, WV 26041 USA

SIZE	PROJECT #	DWG NO	REV
B	16210	16210-2018-1WV-MOUNDSVILLE-MOUNDSVILLE LR & POOL-62	1
DRAWN		DATE	SHEET
gwills		1/21/2021	9 OF 11



RED PIPES = SUPPLY LINES
 BLUE PIPES = RETURN LINES
 GREEN PIPES = ELECTRICAL CONDUIT

1" POTABLE WATER SUPPLY FROM WATER MAIN WITH BACKFLOW PREVENTER AND SHUT-OFF VALVE INSTALLED (SUPPLIED BY OTHERS)
 3" RESERVOIR DRAIN RETURN TO WASTEWATER (SUPPLIED BY OTHERS)

2" RESERVOIR OVERFLOW RETURN TO WASTEWATER (SUPPLIED BY OTHERS)

CAP OPEN PORT WITH BLIND FLANGE (SUPPLIED BY OTHER)

- MECHANICAL ROOM -
- 1 - MECHANICAL ROOM SIZE AND LAYOUT IS FOR REFERENCE ONLY AND MAY BE ALTERED TO ACCOMMODATE EXISTING FIELD CONDITIONS.
 - 2 - PIPE AND EQUIPMENT PLACEMENT MAY BE MODIFIED ACCORDINGLY.
 - 3 - PIPE AND OTHER MATERIAL SHOWN MAY BE SUBSTITUTED WITH PRIOR APPROVAL OF THE PROJECT DESIGNER.
 - 4 - PVC PIPE SHALL BE SCHEDULE 80 PVC AND SOCKET TYPE FITTINGS SHALL CONFORM TO ASTM D2467, AND ASTM D1785-12, AND ALL APPLICABLE STATE AND LOCAL CODES.
 - 5 - ALL PIPING SHALL BE STAMPED WITH N.S.F. SEAL OF APPROVAL FOR POTABLE WATER.
 - 6 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY SUPPORT PIPING AT ALL VALVES, PUMPS, EQUIPMENT, OVERHEAD AREAS, ETC.
 - 7 - ALL PIPING SHALL BE SUPPORTED Laterally AS WELL AS VERTICALLY. USE OF PROPER HANGERS FOR THE CONDITIONS IS ESSENTIAL.
 - 8 - ALL HANGERS, PIPE SUPPORTS, THREADED ROD, HARDWARE, ETC. SHALL BE SUPPLIED BY OTHERS.
 - 9 - PIPING SHALL BE DESIGNED TO CARRY THE REQUIRED QUANTITIES OF WATER AT VELOCITIES NOT TO EXCEED LOCAL CODE REQUIREMENTS.
 - 10 - DRAWINGS ARE INTENDED FOR SCHEMATIC USE ONLY. FINAL LOCATION OF EQUIPMENT ROOM AND THE PLACEMENT OF EQUIPMENT AND PIPE SHALL BE FIELD VERIFIED AND COORDINATED WITH CONTRACTOR.

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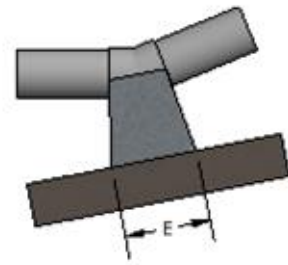


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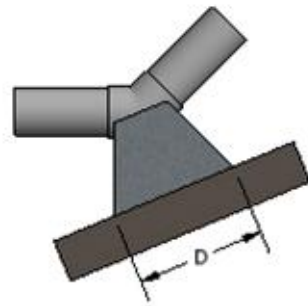
MOUNDSVILLE SPLASH PAD
 MOUNDSVILLE, WV 26041 USA

SIZE B	PROJECT # 16210	DWG NO 16210-2018-1WV-MOUNDSVILLE-MOUNDSVILLE LR & POOL-62	REV 1
DRAWN gwills		1/21/2021	SHEET 10 OF 11

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11 1/4° & 22 1/2° BEND

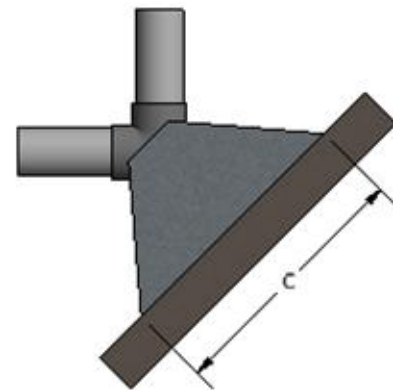
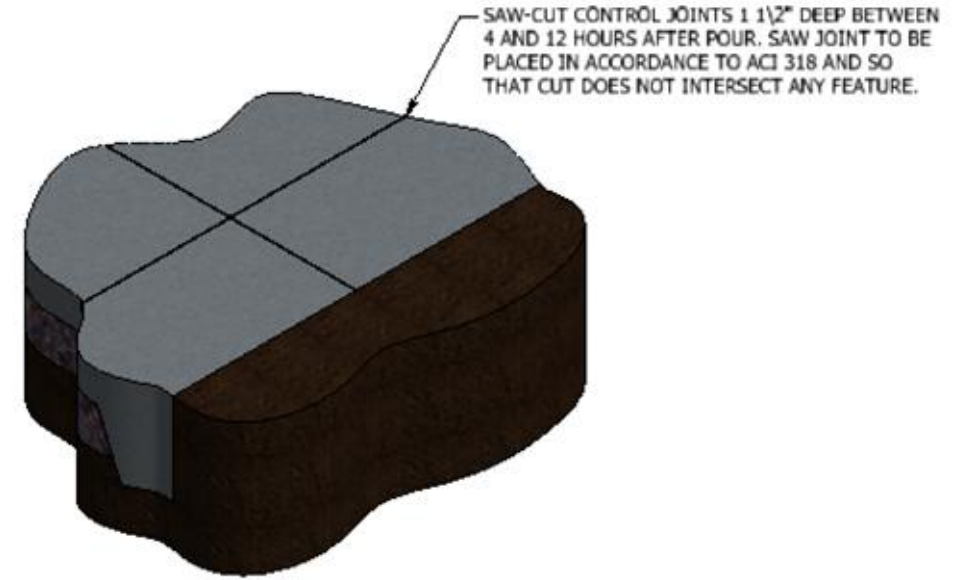


45° BEND

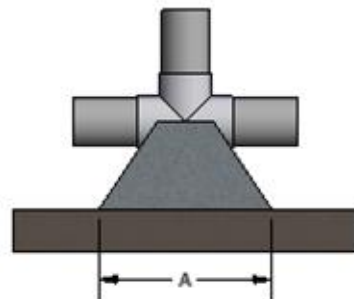
PIPE SIZE	A	B	C	D	E
4"	1'-6"	1'-0"	2'-6"	1'-0"	1'-0"
6"	2'-0"	1'-6"	3'-0"	1'-6"	1'-0"
8"	2'-6"	2'-0"	3'-6"	2'-0"	1'-0"
10"	3'-6"	2'-6"	4'-6"	2'-6"	1'-6"
12"	4'-0"	3'-0"	5'-6"	3'-0"	1'-6"

THRUST BLOCK NOTES:

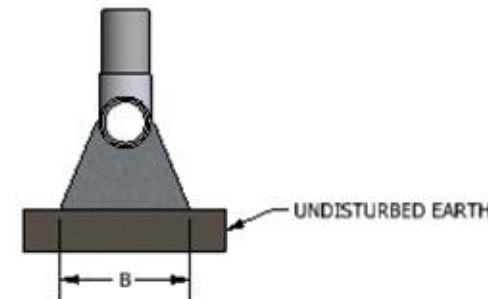
- 1 - CONCRETE TO BE 3000 PSI.
- 2 - ALL FITTINGS TO BE GLUE JOINTS.
- 3 - THRUST BLOCK TO BE PLACED AGAINST UNDISTURBED EARTH. USE ADDITIONAL CONCRETE OF OVER-EXCAVATION.
- 4 - NO CONCRETE SHALL BE POURED ON ANY PART OF THE JOINT.
- 5 - THE CONSULTING ENGINEER SHALL BE RESPONSIBLE TO VERIFY THE TYPE AND SIZE OF ALL THRUST BLOCKS.



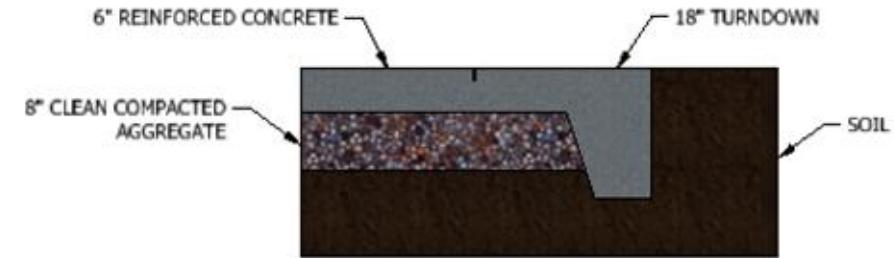
90° BEND



TEE

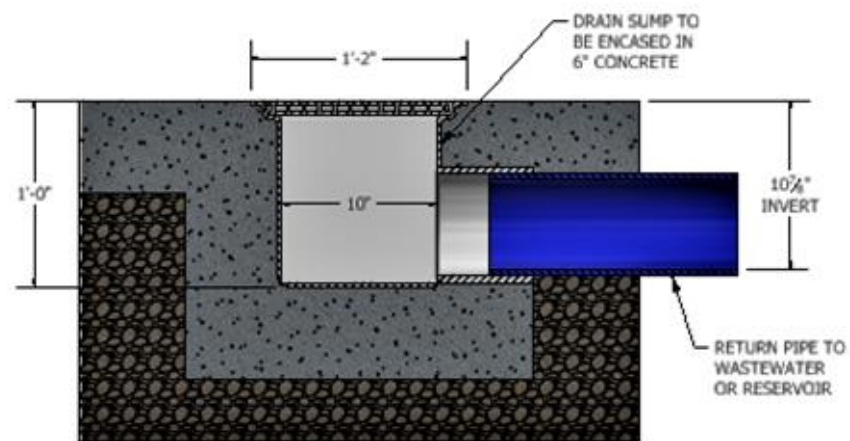


TYPICAL SIDE ELEVATION

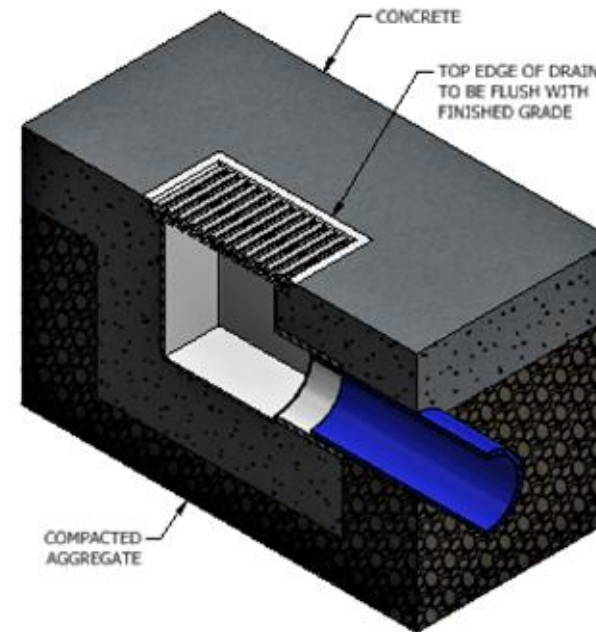


CONCRETE DETAIL
NOT TO SCALE

THRUST BLOCK DETAILS
NOT TO SCALE



12" DRAIN DETAIL
NOT TO SCALE



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PROJECT
MOUNDSVILLE SPLASH PAD
MOUNDSVILLE, WV 26041 USA

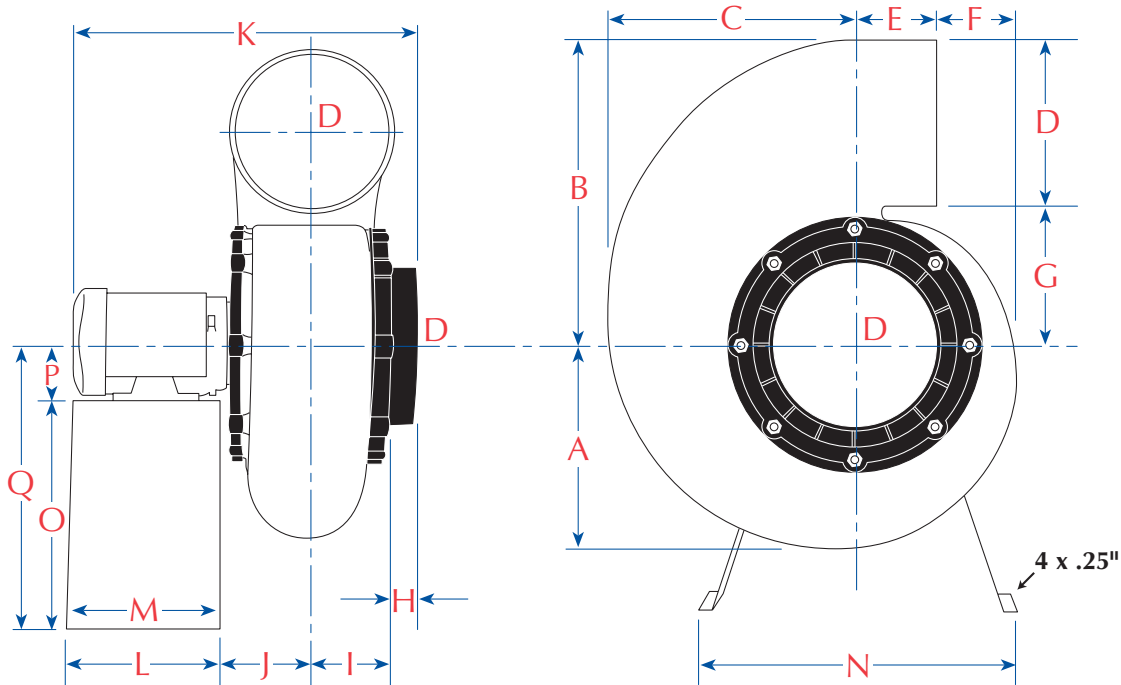
SIZE B	PROJECT # 16210	DWG NO 16210-2018-1WV-MOUNDSVILLE-MOUNDSVILLE LR & POOL-62	REV 1
DRAWN gwills		1/21/2021	SHEET 11 OF 11



PHONE: (941) 751-7596
 FAX: (941) 751-7598
 www.plastecvent.net

PLASTEC® 35

Impeller/Wheel Diameter: 14.37



Optional Stainless Steel Impeller/Wheel Available

Metal stand optional, not standard. Shown with fan (see Accessories) for dimensional data only. Motor frame sizes may vary upon type of motor used.

Standard Gray Polypropylene Housing Assembly

DIMENSIONAL DATA (inches)

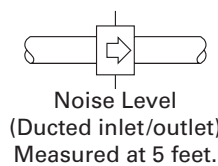
A	B	C	D	E	F	G	H	I	J	L	M	N	O
14.56	22.44	17.71	12.40	5.11	6.69	10.03	2.36	5.90	6.69	13.77	12.36	23.62	18.42

K	P	Q	BLOWER TYPE
31.54	5.25	23.67	PLA35ST4P
31.54	5.25	23.67	PLA35ST6P
28.02	5.25	23.67	PLA35ST8P

SHOWN WITH OPTIONAL ROOF UNIT KIT

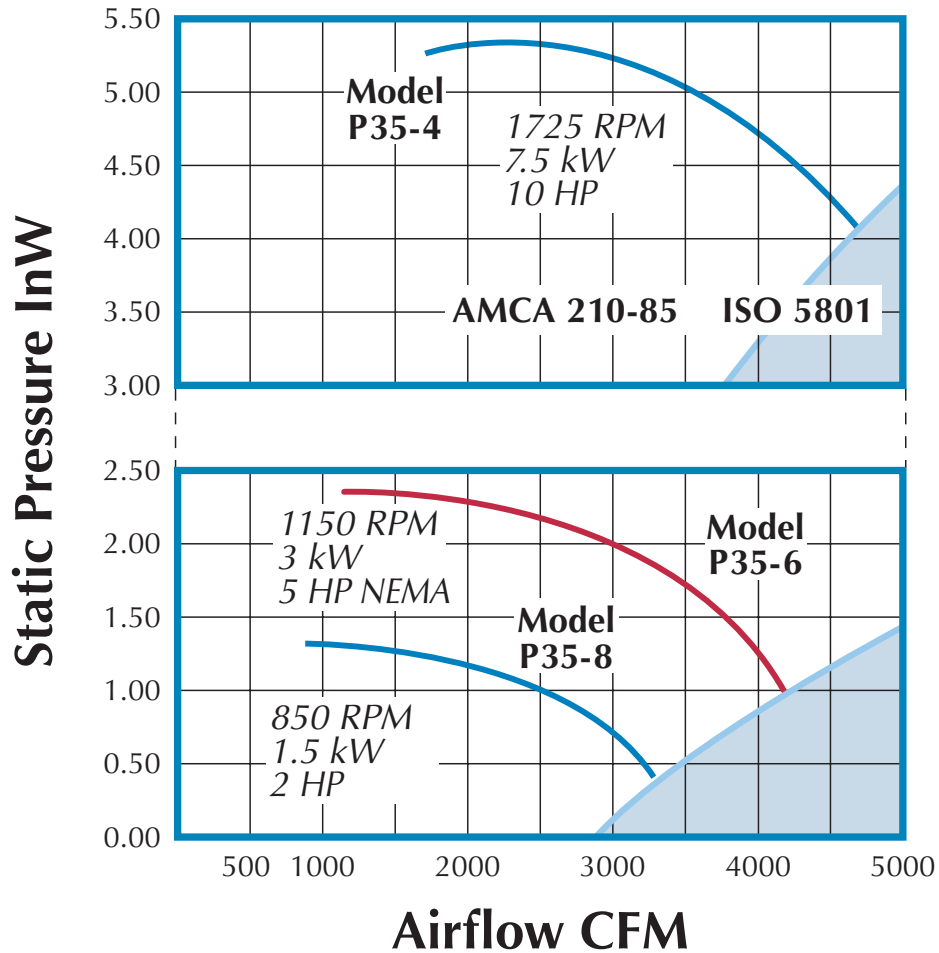


See Accessories Performance and Dimensional Data Sheets for Roof Unit Kits

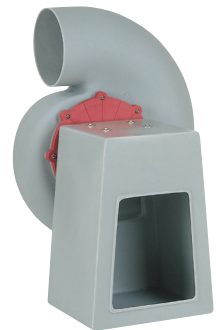


R.P.M.	LWA dB (A)
850	64
1150	71
1725	82

PLASTEC® 35



For **Weather Protection** see accessory "Weather Hood Enclosed Pedestal" Model WH4, pictured at right. Also see Model WH5 Aluminum Weather Hood pictured at left.



ROTATION AND DISCHARGE FOR CENTRIFUGAL FANS

Standard Position



Counter-Clockwise
Up Blast
CCW 360



Counter-Clockwise
Top Angular
Up Blast
CCW 45



Counter-Clockwise
Top Horizontal
CCW 90



Counter-Clockwise
Top Angular
Down Blast
CCW 135



Counter-Clockwise
Down-Blast
CCW 180



Counter-Clockwise
Bottom Angular
Down Blast
CCW 225



Counter-Clockwise
Bottom
Horizontal
CCW 270



Counter-Clockwise
Bottom Angular
Up Blast
CCW 315

Optional Field Adjustable Positions

Notes:

- (1) Direction of rotation is determined from the drive side of fan. **Standard position is up-blast CCW 360.**
- (2) On single inlet fans, drive side is always considered as the side opposite fan inlet.
- (3) CW not available for PLASTEC 35

Product Overview

Satco's new series of LED floodlights add intrigue and drama to the outdoor architectural landscape. The lights provide even and consistent light distribution, while offering a wide range of mounting options. The fixtures are DLC premium certified.

Features

- Wide range of mounting system options
- DLC Premium certified
- Constructed from aluminum alloy
- Integrated 90 watt LED lighting
- Dimmable with compatible dimmers
- UL and CUL rated for wet locations
- Covered under a 5 year limited manufacturer warranty

Dimensions

- Height: 2-1/4"
- Width: 10-7/16"
- Depth: 10-7/16"
- Product Weight: 5.67 lbs

Electrical Specifications

- Lumens: 12758
- Color Temperature: 5000K
- Color Rendering Index: 80 CRI
- Wattage: 90 watts
- Voltage: 120 and 2,770 volts
- Average Hours: 50000

Additional Nuvo Lighting Links

- [View the Manufacturer Warranty](#)
- [Browse All Nuvo Lighting Products](#)

This product is listed under the following manufacturer number(s):

- Nuvo Lighting 651618
Bronze

Dimensions and Measurements

Depth	?	10.44 in.
Height	?	2.25 in.
Nominal Width	?	10 in.
Product Weight	?	5.67 lbs.
Width	?	10.44 in.

Included Components

Bulb Included	?	Yes
Motion Sensor	?	No

Characteristics and Features

Bulb Base	?	Integrated LED
Bulb Type	?	LED
Color Temperature	?	5000K
Dimmable	?	Yes
Light Direction	?	Adjustable Lighting
Material	?	Aluminum
Number of Bulbs	?	1
Photocell	?	No

Electrical and Operational Information

Average Hours	?	50000 Hours
Color Rendering Index (CRI)	?	80
Lumens	?	12758
Voltage	?	120, 2770
Wattage	?	90
Watts Per Bulb	?	90

Warranty and Product Information

Country Of Origin	?	China
CSA Approved	?	No
CUL Listed	?	Yes
Energy Star	?	No
Location Rating	?	Wet Location
Manufacturer Warranty	?	5 Year Limited
Title 24	?	No
UL Listed	?	Yes