

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF NATURAL AND CULTURAL RESOURCES
DESIGN DEVELOPMENT & MAINTENANCE
REQUEST FOR PROPOSALS**

For

N.H. Division of Forest and Lands

State Forest Nursery Irrigation System Upgrade

RFP – ARP2126

Section 1 – Overview and Schedule

A. Executive Summary

The State of N.H. Division of Forest and Lands is requesting proposals from experienced agricultural irrigation companies for an irrigation system upgrade at the N.H. State Nursery in Boscawen N.H. 405 Daniel Webster Highway, 03303. This project shall be completed prior to May 1st 2023. The purpose of this upgrade is to:

- 1.) Replace the 1950's era pump station with a new, high efficiency pump station that's easier to operate and maintain;
- 2.) Remove and replace approximately 3400' of existing underground irrigation piping that supplies both upper and lower growing areas;
- 3.) Add approximately 1500' of new irrigation piping in upper Area "J", which will help increase the Nursery's production of seedlings;
- 4.) Dredge existing supply pond to allow for a larger reservoir of water.

B. Schedule

The following table provides a Schedule of Events for this RFP through contract finalization and Notice to Proceed. The Agency reserves the right to amend this Schedule at its sole discretion and at any time through a published Addendum.

EVENT	DATE	LOCAL TIME
RFP Released to Proposers (Advertisement)	12/10/2021	
Proposer Inquiry Period Ends	01/07/2022	1:00 PM
Final Agency Responses to Proposer Inquiries	01/14/2022	4:00 PM
Proposers Submit Proposals	01/25/2022	2:00 PM
Proposer Oral Presentations and Interviews (if applicable)	02/08/2022	TBD
Estimated Notification of Selection and Begin Contract Negotiations	02/15/2022	TBD

Section 2 - Description of Agency/Program Issuing the Request for Proposals

The N.H. State Nursery has been operating since the 1950s and each year it grows three million seedlings on 16 acres of irrigated outdoor seedbeds. Sales rose over 14% this past growing season with the current and existing irrigation system playing a large role in that success, but the system is old and in need of replacement. The Nursery sells out of all product they harvest each year and would like to expand the irrigation system to cover a section of land that doesn't currently have irrigation piping, thus giving them the capacity to grow more product during the growing season. Upon performing a system wide review of existing piping materials, pump condition and overall cost to operate; we believe that a new, more efficient system would advance our goal of lowering the power bill and conserving water, while also requiring less labor for operations and maintenance.

Section 3 – Proposed Scope of Work

The Division of Forest and Lands is seeking a qualified Contractor to facilitate and perform the following work:

- 1.) Review existing irrigation system layout, pipe sizing, isolation valves and watering procedures to understand current Nursery practices
- 2.) Design a new irrigation system that will:
 - Irrigate all currently used grow beds
 - Provide irrigation piping to proposed new grow Area J – (See attached Site Plan)
 - Furnish proposed new grow Area J with above ground aluminum hook and latch lateral piping with impact style sprinklers, Nozzle size to match existing
 - Reorient irrigation piping in Areas F, G, H, I, to run in North-South direction
 - Be capable of providing 1" of water per week to each grow bed area

- Provide flow test results on drain valve located in upper beds between Area I & H
Static: 60 psi - Residual: 40-45 psi @ 450 gpm
- 3.) Remove and dispose all existing underground irrigation piping off site except lines crossing grow areas E, D, F in upper fields and Balsam Fir orchard in lower grow area
- 4.) Provide and install new fusible HDPE underground piping sized to accommodate the irrigation system design including thrust blocks for fittings on pipe 4" diameter or greater
- 5.) Provide and install (lateral) risers furnished with ball valves and cam-lock adapters
- 6.) Install piping to allow for gravity draining of irrigation piping at drain pits - See attached drain pit detail
- 7.) Remove and dispose off-site; existing pump station, storage tank, irrigation piping and electrical components of the pump station
 - Remove and dispose off-site, all of the pump house structure and foundation
- 8.) Furnish and install a new pump station in pump house structure to include:
 - New water pump sized for expanded irrigation layout
Note: existing pump station's capacity is estimated at 380 gal/min
 - VFD pump control
 - Polyethylene primer/mixing tank furnished with tank agitator
 - Flow meter
 - Wye strainer furnished with hose end ball valve for blowdown
 - Chemigation valve
 - Irrigation timer
 - Note: Pump house structure to be supplied by the State of New Hampshire
- 9.) Remove existing suction line to supply pond and dispose off-site
- 10.) Install new suction line with new supply pond foot valve/intake filter screen – see attached example
- 11.) Dredge supply pond per attached drawing to restore its original capacity
 - Dispose of dredge spoils on-site as directed by Nursery Staff – West of upper area seed beds. See attached plans
 - Spoils shall be separated into 2 piles – 1 pile sand, 1 pile muck/mulch
 - Widen access trail to supply pond to provide a 10' wide hard packed gravel road for equipment access to the pond
- 12.) Winterize the system in the first fall after installation and start-up the system in the first spring after installation: Coordinate the winterization and start-up with Nursery Staff
 - Repair any damage caused by improper winterization at no additional cost to the State
- 13.) Document start up and shut down procedures
 - Provide 2 paper copies of the operation and maintenance manual for new irrigation system within 30 days of project completion
- 14.) Warranty irrigation materials, equipment, and workmanship against defects for a period of 2 years from date of acceptance

Section 3A – Project Technical Specialties to be Included in Design

- Flow meter with remote monitoring capabilities via cellular phone application
- Horizontal polyethylene primer/mixing tank with agitator
- Wye strainer – See attached example
- Supply Pond foot valve/intake filter – See attached example
- Impact style sprinkler heads – See attached example
- Obtain applicable building, electrical and plumbing permits through the State Fire Marshal's Office
- Chemigation valve – See attached example
- Note: Attached examples of strainer, filter, sprinkler heads, and chemigation valve are provided to establish a basis of design. Equivalent products by other manufacturers are acceptable. Equivalency will be confirmed by a submittal process. Submittals will be reviewed by DNCR-DD&M staff. Determinations are final and may not be appealed.

Section 4 – Process for Submitting a Proposal

A. Proposal Submission, Deadline, and Location Instructions

Proposals submitted in response to this RFP must be received by the Department of Natural and Cultural Resources, no later than the time and date specified in the Schedule of Events section, herein. Proposals may be submitted by U.S. Mail, Delivery Service, In-Person delivery and electronically.

Proposals must be clearly marked as follows:

STATE OF NEW HAMPSHIRE
Department of Natural and Cultural Resources
Division of Forest and Lands
RESPONSE TO RFP: N.H. State Nursery Irrigation System Upgrade

Proposals must be addressed to:

State of New Hampshire
Department of Natural and Cultural Resources

172 Pembroke Road, Concord NH 03301

Attn: Joseph Stacey

And submitted electronically to Joseph.A.Stacey1@dn-cr.nh.gov

Late submissions will not be accepted and will be returned to the proposers unopened. Delivery of the Proposals shall be at the Proposer's expense. The time of receipt shall be considered as when a Proposal has been officially documented by the Agency, in accordance with its established policies and as having been received at the location designated above. The Agency accepts no responsibility for mislabeled mail or mail that is not delivered or undeliverable for whatever reason. Any damage that may occur due to shipping shall be the Proposer's responsibility.

All Proposals submitted in response to this RFP must consist of at least:

- a) One (1) original and (3) clearly identified copies of the Proposal, including all required attachments;
- b) One clearly identified electronic copy of the Proposal via email in pdf format.

Proposers who are ineligible to bid on proposals, bids or quotes issued by the Department of Administrative Services, Division of Procurement and Support Services pursuant to the provisions of RSA 21-I:11-c shall not be considered eligible for an award under this proposal.

B. Proposal Inquiries

All inquiries concerning this RFP, including but not limited to, requests for clarifications, questions, and any changes to the RFP, shall be submitted via email to the following RFP designated Points of Contact:

TO: Joseph Stacey, Project Manager

Joseph.a.stacey1@dn-cr.nh.gov

CC: William Kunelius, Nursery Manager

William.r.kunelius@dn-cr.nh.gov

Inquiries must be received by the Agency's RFP Points of Contact no later than the conclusion of the Proposer Inquiry Period (see Schedule of Events section, herein). Inquiries received later than the conclusion of the Proposer Inquiry Period shall be considered improperly submitted and may not be considered.

The Agency intends to issue official responses to properly submitted inquiries on or before the date specified in the Schedule of Events section, herein; however, this date is subject to change at the Agency's discretion. The Agency may consolidate and/or paraphrase questions for sufficiency and clarity. The Agency may, at its discretion, amend this RFP on its own initiative or in response to issues raised by inquiries, as it deems appropriate. Oral statements, representations, clarifications, or modifications concerning the RFP shall not be binding upon the Agency. Official responses by the Agency will be made only in writing by the process described above.

C. Restriction of Contact with Agency Employees

From the date of release of this RFP until an award is made and announced regarding the selection of a Proposer, all communication with personnel employed by or under contract with the Agency regarding this RFP is forbidden unless first approved by the RFP Points of Contact listed in the Proposal Inquiries section, herein. Agency employees have been directed not to hold conferences and/or discussions concerning this RFP with any Contractor during the selection process, unless otherwise authorized by the RFP Points of Contact.

D. Validity of Proposal

Proposals must be valid for one hundred and eighty (180) days following the deadline for submission of Proposals in Schedule of Events, or until the Effective Date of any resulting Contract, whichever is later.

SECTION 5 - Content and Requirements for a Proposal

Proposals shall follow the following format and provide the required information set forth below:

- 1.) Company Profile and background: Provide an overview of the company including:
 - Number of years in business
 - Number of employees
 - Location of business or shop
 - Types of expertise relevant to this project

- 2.) Key personnel that would be assigned to this project: Describe the expertise and qualifications of the project manager, job site superintendent, and other key personnel.
- 3.) References: Provide three references with contact information for whom you have completed projects of similar type and scale as this project.
- 4.) List of projects: Provide a list of similar or relevant projects your company has completed in the last five years. Please note any projects with aspects relating to agricultural irrigation and pump system designs you have been involved in.
- 5.) Technical Solution and Project Plan:
 - a. Provide detailed drawings and specifications for materials and equipment to be used in your proposed pump station design.
 - b. Provide a detailed sketch of proposed irrigation system and piping layout to include pipe sizing, drain pits and isolation valves
 - c. Describe advantages of your proposal in terms of effective irrigation, minimal demands on staff for operation, simplified seasonal shutdown, ease of maintenance, and energy use efficiency
- 6.) Provide a letter from your bonding company demonstrating your ability to provide a Performance Bond for 100% of the construction cost if your proposal is accepted.
- 7.) Implementation Plan:
 - d. Describe the construction sequence for completing the scope of work within the given timeframe. Providing a timeline for each step in the project.
 - e. Work on site may commence after September 15th 2022 with Spring system start-up completed by May 1st 2023

8.) Price Proposal: Fill out the following schedule of values for this project. Indicate dollar amount of contract sum allocated to each category of work as designated below:

SCHEDULE OF VALUES

Description	Amount
System design:	
General conditions, mobilization and permits:	
Performance bond:	
Removal of existing underground piping:	
Demolition and disposal:	
New pump station, install of primer tank and associated equipment:	
New irrigation piping and installation:	
Pipe risers/riser valves:	
Isolation valves:	
Supply pond foot valve/intake filter:	
Road improvements for access to supply pond	
Supply pond dredging:	
A. Sub Total:	
B. Allowance #1:	\$20,000
Grand Total: (A+B) lump sum base bid	

Note: The Schedule of Values must be completely filled out in order for the price proposal to be considered responsive.

Allowance #1: Unanticipated Modifications and/or Additions to Contract Items:

The Contract will include a stipulated sum/price of \$20,000 for use upon the Project Managers instruction. This allowance will make money available for modifications and/or additions to contract items due to owner-initiated changes, or for unknown, latent or differing existing conditions, or for the removal of hazardous materials that are encountered by construction.

- a. Contractor's costs for products, delivery, installation, labor, insurance, payroll, taxes, equipment rental, overhead and profit will be included in Change Orders authorizing expenditure of funds from the Allowance. The cost of the bond for the amount of Allowance shall be included as part of the lump sum base bid.
- b. Funds will be drawn from an Allowance only by Change Order. Contractor can proceed with Change Order Work against Allowance only with direction from the Project Manager. The Contractor shall not proceed with any work that will exceed the amount of Allowance remaining.
- c. Credits can only be added to an Allowance by Alteration Order. The Contractor may not use a credit until an Alteration Order is fully executed.
- d. Notwithstanding the Contractors objection, the Project Manager may at any time reduce the funds remaining in the Allowance by Alteration Order.
- e. At Final Payment of the Contract, funds remaining in the Allowance will be credited to the State.

SECTION 6 – Evaluation of Proposals

A. Criteria for Evaluation and Scoring

Each responsive Proposal will be evaluated and considered with regard to the following criteria:

- f. Qualifications and Experience:
Experience in design of pump stations and agricultural irrigation systems
- g. Technical Solution:
How effective will the new system be in regards to:
 - Adequate and consistent pressure for effective irrigation
 - Energy efficiency
 - Simple seasonal drain down
 - Ease of maintenance
- h. Cost:

If the Agency, determines to make an award based on these evaluations, the Agency will notify the selected Proposer(s). Should the Agency be unable to reach agreement with the selected Proposer(s) during Contract discussions, the Agency may then undertake Contract discussions with the second preferred Proposer and so on, or the Agency may reject all proposals, cancel this RFP, or solicit new Proposals under a new acquisition process.

The Agency will use a scoring scale of 100 points, a maximum of 40 points awarded based on the Price Proposal, a maximum of 60 points awarded for the Technical Proposal, which will be set forth in the table below.

CATEGORIES	POINTS
TECHNICAL PROPOSAL with the following potential maximum scores for each Technical Proposal category;	
Qualifications and Experience:	20
• Experience:	10
• References:	10
Technical Solution:	40
• Effective operation:	10
• Energy efficiency:	10
• Ease of seasonal drain-down:	10
• Maintenance facilitated:	10
PRICE PROPOSAL POTENTIAL MAXIMUM POINTS	40
TOTAL POTENTIAL MAXIMUM POINTS AWARDED	100

The Agency will select a Proposer based upon the criteria and standards contained in this RFP and from applying the weighting in this section. Oral interviews and reference checks, to the extent they are utilized by the Agency, will be used to refine and finalize preliminary scores.

B. Planned Evaluations

The Agency plans to use the following process:

- Initial screening to ensure that the Proposals are in compliance with submission requirements;
- Preliminary evaluation of the Proposals;
- Oral interviews and Product Demonstrations (if necessary);
- Final Evaluation of Technical Proposals and scoring;
- Review of Price proposals and final scoring; and
- Select the highest scoring Proposer(s) and begin contract negotiation.

C. Initial Screening

The Agency will conduct an initial screening step to verify Proposer compliance with submission requirements and minimum content set forth in Section 5 of this RFP. The Agency may waive or offer a limited opportunity to resolve immaterial deviations from the RFP requirements if it is determined to be in the best interest of the State.

D. Preliminary Technical Scoring of Proposals

The Agency will establish an evaluation team to initially score the Technical Proposals. This evaluation team will review the technical proposals and give a preliminary score to the technical proposals under the guidelines set forth in Section 6. Should a Proposer fail to achieve 30 points in the preliminary scoring, it will receive no further consideration from the evaluation team and the Proposer's Price Proposal will not be opened. Price Proposals will remain sealed during the preliminary technical review.

E. Oral Interviews and Product Demonstrations

If the Agency determines that it is appropriate, proposers may be invited to oral interviews and/or product demonstrations including demonstrations of any proposed systems or components. The Agency retains the sole discretion to determine whether to conduct oral interviews, with which proposers; and the number of interviews. Proposers are advised that the Agency may decide to conduct interviews with less than all responsive vendors.

The purpose of oral interviews and product demonstrations is to clarify and expound upon information provided in the written Proposals. Proposers are prohibited from altering the basic

substance of their Proposals during the oral interviews and product demonstrations. The Agency may ask the Proposer to provide written clarifications of elements in their Technical Proposal regardless of whether it intends to conduct Oral Interviews.

Information gained from oral interviews and product demonstrations will be used to refine technical review scores assigned from the initial review of the Proposals.

F. Final Technical Scoring of Proposals

Following Oral Interviews, Product Demonstrations, Reference Checks (if appropriate) and/or review of written clarifications of proposals requested by the Agency, the evaluation team will determine a final score for each Technical Proposal.

G. Price Proposal Review

Price proposals will be opened upon completion of the final technical scoring of proposals. Price proposals will be scored per the method described in Section 6A.

The Proposer's Price Proposal will be allocated a maximum potential score of 40 points. Proposers are advised that this is not a low bid award and that the scoring of the price proposal will be combined with the scoring of the technical proposal to determine the overall highest scoring Proposer.

The following formula will be used to assign points for costs:

$$\text{Proposer's Price Score} = (\text{Lowest Proposed Price} / \text{Proposer's Proposed Price}) \times \text{Number of Points for Score}$$

For the purpose of use of this formula, the lowest proposed price is defined as the lowest price proposed by a Proposer who has scored above the minimum necessary for consideration on the Technical Score.

H. No Best and Final Offer

The Proposal should be submitted initially on the most favorable terms which the Proposer can offer. There will be no best and final offer procedure. The Proposer should be prepared to accept this RFP for incorporation into a contract resulting from this RFP. Contract negotiations may incorporate some or all of the Proposal.

I. Final Selection

The Agency will conduct a final selection based on the final evaluation of the initial proposals and begin contract negotiations with the selected Proposer.

J. Rights of the Agency in Accepting and Evaluating Proposals

The Agency reserves the right to:

- Make independent investigations in evaluating Proposals;
- Request additional information to clarify elements of a Proposal;
- Waive minor or immaterial deviations from the RFP requirements, if determined to be in the best interest of the State;
- Omit any planned evaluation step if, in the Agency's view, the step is not needed;
- At its sole discretion, reject any and all Proposals at any time; and
- Open contract discussions with the second highest scoring Proposer and so on, if the Agency is unable to reach an agreement on Contract terms with the higher scoring Proposer(s).

SECTION 7 – Terms and Conditions Related To the RFP Process

A. RFP Addendum

The Agency reserves the right to amend this RFP at its discretion, prior to the Proposal submission deadline. In the event of an addendum to this RFP, the Agency, at its sole discretion, may extend the Proposal submission deadline, as it deems appropriate.

B. Non-Collusion

The Proposer's signature on a Proposal submitted in response to this RFP guarantees that the prices, terms and conditions, and Work quoted have been established without collusion with other Proposers and without effort to preclude the Agency from obtaining the best possible competitive Proposal.

C. Property of the Agency

All material received in response to this RFP shall become the property of the State and will not be returned to the Proposer. Upon Contract award, the State reserves the right to use any information presented in any Proposal.

D. Confidentiality of a Proposal

Unless necessary for the approval of a contract, the substance of a proposal must remain confidential until the Effective Date of any Contract resulting from this RFP. A Proposer's disclosure or distribution of Proposals other than to the Agency will be grounds for disqualification.

E. Public Disclosure

Pursuant to RSA 21-G:37, all responses to this RFP shall be considered confidential until the award of a contract. At the time of receipt of proposals, the Agency will post the number of responses received with no further information. No later than five (5) business days prior to submission of a contract to Governor & Executive Council pursuant to this RFP, the Agency will post the name, rank or score of each proposer.

The content of each Proposer's Proposal shall become public information upon the award of any resulting Contract. Any information submitted as part of a response to this request for proposal (RFP) may be subject to public disclosure under RSA 91-A. In addition, in accordance with RSA 9-F:1, any contract entered into as a result of this RFP will be made accessible to the public online via the website Transparent NH (<http://www.nh.gov/transparentnh/>).

Accordingly, business financial information and proprietary information such as trade secrets, business and financials models and forecasts, and proprietary formulas may be exempt from public disclosure under RSA 91-A:5, IV. If you believe any information being submitted in response to this request for proposal, bid or information should be kept confidential as financial or proprietary information; you must specifically identify that information in a letter to the agency, and must mark/stamp each page of the materials that you claim must be exempt from disclosure as "CONFIDENTIAL". A designation by the Proposer of information it believes exempt does not have the effect of making such information exempt. The Agency will determine the information it believes is properly exempted from disclosure. Marking of the entire Proposal or entire sections of the Proposal (e.g. pricing) as confidential will neither be accepted nor honored. Notwithstanding any provision of this RFP to the contrary, Proposer pricing will be subject to disclosure upon approval of the contract. The Agency will endeavor to maintain the confidentiality of portions of the Proposal that are clearly and properly marked confidential. If a request is made to the Agency to view portions of a Proposal that the Proposer has properly and clearly marked confidential, the Agency will notify the Proposer of the request and of the date the Agency plans to release the records. By submitting a Proposal, Proposers agree that unless the Proposer obtains a court order, at its sole expense, enjoining the release of the requested information, the Agency may release the requested information on the date specified in the Agency's notice without any liability to the Proposers.

F. Non-Commitment

Notwithstanding any other provision of this RFP, this RFP does not commit the Agency to award a Contract. The Agency reserves the right, at its sole discretion, to reject any and all Proposals, or any portions thereof, at any time; to cancel this RFP; and to solicit new Proposals under a new acquisition process.

G. Proposal Preparation Cost

By submitting a Proposal, a Proposer agrees that in no event shall the Agency be either responsible for or held liable for any costs incurred by a Proposer in the preparation of or in connection with the Proposal, or for Work performed prior to the Effective Date of a resulting Contract.

H. Ethical Requirements

From the time this RFP is published until a contract is awarded, no bidder shall offer or give, directly or indirectly, any gift, expense reimbursement, or honorarium, as defined by RSA 15-B, to any elected official, public official, public employee, constitutional official, or family member of any such official or employee who will or has selected, evaluated, or awarded an RFP, or similar submission. Any bidder that violates RSA 21-G:38 shall be subject to prosecution for an offense under RSA 640:2. Any bidder who has been convicted of an offense based on conduct in violation of this section, which has not been annulled, or who is subject to a pending criminal charge for such an offense, shall be disqualified from bidding on the RFP, or similar request for submission and every such bidder shall be disqualified from bidding on any RFP or similar request for submission issued by any state agency. A bidder that was disqualified under this section because of a pending criminal charge which is subsequently dismissed, results in an acquittal, or is annulled, may notify the Department of Administrative Services, which shall note that information on the list maintained on the State's internal intranet system, except in the case of annulment, the information, shall be deleted from the list.

I. Challenges on Form or Process of the RFP

Any challenges regarding the validity or legality of the form and procedures of this RFP, including but not limited to the evaluation and scoring of Proposals, shall be brought to the attention of the Agency at least ten (10) business days prior to the Proposal Submission Deadline. By submitting a proposal, the Proposer is deemed to have waived any challenges to the Agency's authority to conduct this procurement and the form and procedures of this RFP.

Section 8 – Contract Terms and Award

A. Award

If the State decides to award a contract as a result of this RFP process, any award is contingent upon approval of the Contract by Governor and Executive Council of the State of New Hampshire and upon continued appropriation of funding for the contract.

B. Standard Contract Terms

The Agency will require the successful bidder to execute a Firm Fixed Price Contract using the Standard Terms and Conditions of the State of New Hampshire which is attached as Appendix A. Standard Contract Form P-37

The Agency may consider modifications of this form during negotiations. To the extent that a Proposer believes that exceptions to the standard form contract will be necessary for the Proposer to enter into the Agreement, the Proposer should note those issues during the Proposer Inquiry Period. The Agency will review requested exceptions and accept, reject or note that it is open to negotiation of the proposed exception at its sole discretion. If the Agency accepts a Proposer's exception the Agency will, at the conclusion of the Inquiry Period, provide notice to all potential Proposers of the exceptions which have been accepted and indicate that change is available to all potential Proposers. Any exceptions to the standard form contract that are not raised during the vendor inquiry period are waived. In no event is a Proposer to submit its own standard contract terms and conditions as a replacement for the State's terms in response to this solicitation.

SAMPLE CONTRACT FORM - NUMBER P-37 (version 12/11/2019)

Notice: This agreement and all of its attachments shall become public upon submission to Governor and Executive Council for approval. Any information that is private, confidential or proprietary must be clearly identified to the agency and agreed to in writing prior to signing the contract.

AGREEMENT

The State of New Hampshire and the Contractor hereby mutually agree as follows:

GENERAL PROVISIONS

1. IDENTIFICATION.

1.1 State Agency Name Department of Natural and Cultural Resources,		1.2 State Agency Address 172 Pembroke Road Concord, NH 03301	
1.3 Contractor Name McManus and Nault Appraisal Company Inc.		1.4 Contractor Address 722 RTE 3A, Suite 6 Bow NH 03304	
1.5 Contractor Phone Number 603-230-9788 3701-102	1.6 Account Number	1.7 Completion Date 1.8 days from execution of the contract	1.9 Price Limitation 60 \$9000
1.9 Contracting Officer for State Agency Tracey Boisvert, Bureau of Lands Management		1.10 State Agency Telephone Number 603-271-2214	
1.11 Contractor Signature <div style="text-align: right;">Date:</div>		1.12 Name and Title of Contractor Signatory	
1.13 State Agency Signature <div style="text-align: right;">Date:</div>		1.14 Name and Title of State Agency Signatory Sarah L. Stewart, Commissioner	
1.15 Approval by the N.H. Department of Administration, Division of Personnel <i>(if applicable)</i> By: _____ Director, On: _____			
1.16 Approval by the Attorney General (Form, Substance and Execution) <i>(if applicable)</i> By: _____ On: _____			
1.17 Approval by the Governor and Executive Council <i>(if applicable)</i> G&C Item number: _____ G&C Meeting Date: _____			

2. SERVICES TO BE PERFORMED. The State of New Hampshire, acting through the agency identified in block 1.1 ("State"), engages contractor identified in block 1.3

Contractor Initials _____
Date _____

("Contractor") to perform, and the Contractor shall perform, the work or sale of goods, or both, identified and more particularly described in the attached EXHIBIT B which is incorporated herein by reference ("Services").

3. EFFECTIVE DATE/COMPLETION OF SERVICES.

3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, if applicable, this Agreement, and all obligations of the parties hereunder, shall become effective on the date the Governor and Executive Council approve this Agreement as indicated in block 1.17, unless no such approval is required, in which case the Agreement shall become effective on the date the Agreement is signed by the State Agency as shown in block 1.13 ("Effective Date"). 3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed. Contractor must complete all Services by the Completion Date specified in block 1.7.

4. CONDITIONAL NATURE OF AGREEMENT.

Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds affected by any state or federal legislative or executive action that reduces, eliminates or otherwise modifies the appropriation or availability of funding for this Agreement and the Scope for Services provided in EXHIBIT B, in whole or in part. In no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to reduce or terminate the Services under this Agreement immediately upon giving the Contractor notice of such reduction or termination. The State shall not be required to transfer funds from any other account or source to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

5. CONTRACT PRICE/PRICE LIMITATION/PAYMENT.

5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXHIBIT C which is incorporated herein by reference.

5.2 The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance hereof, and shall be the only and the complete compensation to the Contractor for the Services. The State shall have no liability to the Contractor other than the contract price.

5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement those liquidated amounts required or permitted by N.H. RSA 80:7 through RSA 80:7-c or any other provision of law.

5.4 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8.

6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/ EQUAL EMPLOYMENT OPPORTUNITY.

6.1 In connection with the performance of the Services, the Contractor shall comply with all applicable statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal employment opportunity laws. In addition, if this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all federal executive orders, rules, regulations and statutes, and with any rules, regulations and guidelines as the State or the United States issue to implement these regulations. The Contractor shall also comply with all applicable intellectual property laws.

6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of race, color, religion, creed, age, sex, handicap, sexual orientation, or national origin and will take affirmative action to prevent such discrimination.

6.3 The Contractor agrees to permit the State or United States access to any of the Contractor's books, records and accounts for the purpose of ascertaining compliance with all rules, regulations and orders, and the covenants, terms and conditions of this Agreement.

7. PERSONNEL.

7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to

perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.

- 7.2 Unless otherwise authorized in writing, during the term of this Agreement, and for a period of six (6) months after the Completion Date in block 1.7, the Contractor shall not hire, and shall not permit any subcontractor or other person, firm or corporation with whom it is engaged in a combined effort to perform the Services to hire, any person who is a State employee or official, who is materially involved in the procurement, administration or performance of this Agreement. This provision shall survive termination of this Agreement.
- 7.3 The Contracting Officer specified in block 1.9, or his or her successor, shall be the State's representative. In the event of any dispute concerning the interpretation of this Agreement, the Contracting Officer's decision shall be final for the State.

8. EVENT OF DEFAULT/REMEDIES.

- 8.1 Any one or more of the following acts or omissions of the

Contractor shall constitute an event of default hereunder ("Event of Default"):

8.1.1 failure to perform the Services satisfactorily or on schedule;

8.1.2 failure to submit any report required hereunder; and/or 8.1.3 failure to perform any other covenant, term or condition of this Agreement.

- 8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions: 8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) days from the date of the notice; and if the Event of Default is not timely cured, terminate this Agreement, effective two (2) days after giving the Contractor notice of termination;

8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor;

8.2.3 give the Contractor a written notice specifying the Event of Default and set off against any other obligations the State may owe to the Contractor any

damages the State suffers by reason of any Event of Default; and/or

8.2.4 give the Contractor a written notice specifying the Event of Default, treat the Agreement as breached, terminate the Agreement and pursue any of its remedies at law or in equity, or both.

8.3 No failure by the State to enforce any provisions hereof after any Event of Default shall be deemed a waiver of its rights with regard to that Event of Default, or any subsequent Event of Default. No express failure to enforce any Event of Default shall be deemed a waiver of the right of the State to enforce each and all of the provisions hereof upon any further or other Event of Default on the part of the Contractor.

9. TERMINATION.

9.1 Notwithstanding paragraph 8, the State may, at its sole discretion, terminate the Agreement for any reason, in whole or in part, by thirty (30) days written notice to the Contractor that the State is exercising its option to terminate the Agreement.

9.2 In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall, at the State's discretion, deliver to the Contracting Officer, not later than fifteen (15) days after the date of termination, a report ("Termination Report") describing in detail all Services performed, and the contract price earned, to and including the date of termination. The form, subject matter, content, and number of copies of the Termination Report shall be identical to those of any Final Report described in the attached EXHIBIT B. In addition, at the State's discretion, the Contractor shall, within 15 days of notice of early termination, develop and submit to the State a Transition Plan for services under the Agreement.

10. DATA/ACCESS/CONFIDENTIALITY/PRESERVATION.

10.1 As used in this Agreement, the word "data" shall mean all information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.

10.2 All data and any property which has been received from the State or purchased with funds provided for that purpose under this Agreement, shall be the

property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.

- 10.3 Confidentiality of data shall be governed by N.H. RSA chapter 91-A or other existing law. Disclosure of data requires prior written approval of the State.

11. CONTRACTOR'S RELATION TO THE STATE. In the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers' compensation or other emoluments provided by the State to its employees.

12. ASSIGNMENT/DELEGATION/SUBCONTRACTS.

- 12.1 The Contractor shall not assign, or otherwise transfer any interest in this Agreement without the prior written notice, which shall be provided to the State at least fifteen (15) days prior to the assignment, and a written consent of the State. For purposes of this paragraph, a Change of Control shall constitute assignment. "Change of Control" means (a) merger, consolidation, or a transaction or series of related transactions in which a third party, together with its affiliates, becomes the direct or indirect owner of fifty percent (50%) or more of the voting shares or similar equity interests, or combined voting power of the Contractor, or (b) the sale of all or substantially all of the assets of the Contractor.

12.2 None of the Services shall be subcontracted by the Contractor without prior written notice and consent of the State. The State is entitled to copies of all subcontracts and assignment agreements and shall not be bound by any provisions contained in a subcontract or an assignment agreement to which it is not a party.

13. INDEMNIFICATION. Unless otherwise exempted by law, the Contractor shall indemnify and hold harmless the State, its officers and employees, from and against any and all claims, liabilities and costs for any personal injury or property damages, patent or copyright infringement, or other claims asserted against the State, its officers or employees, which arise out of (or which may be claimed to arise out of) the acts or omission of the Contractor, or subcontractors, including but not limited to the negligence, reckless or intentional conduct. The State shall not be liable for any costs incurred by the Contractor arising under this paragraph 13. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State.

This covenant in paragraph 13 shall survive the termination of this Agreement.

14. INSURANCE.

- 14.1 The Contractor shall, at its sole expense, obtain and continuously maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:

14.1.1 commercial general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than \$1,000,000 per occurrence and \$2,000,000 aggregate or excess; and

14.1.2 special cause of loss coverage form covering all property subject to subparagraph 10.2 herein, in an amount not less than 80% of the whole replacement value of the property.

- 14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.

- 14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or his or her successor, a certificate(s) of insurance for all insurance required under this Agreement. Contractor shall also furnish to the Contracting Officer identified in block 1.9, or his or her successor, certificate(s) of insurance for all renewal(s) of insurance required under this Agreement no later than ten (10) days prior to the expiration date of each insurance policy. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference.

15. WORKERS' COMPENSATION.

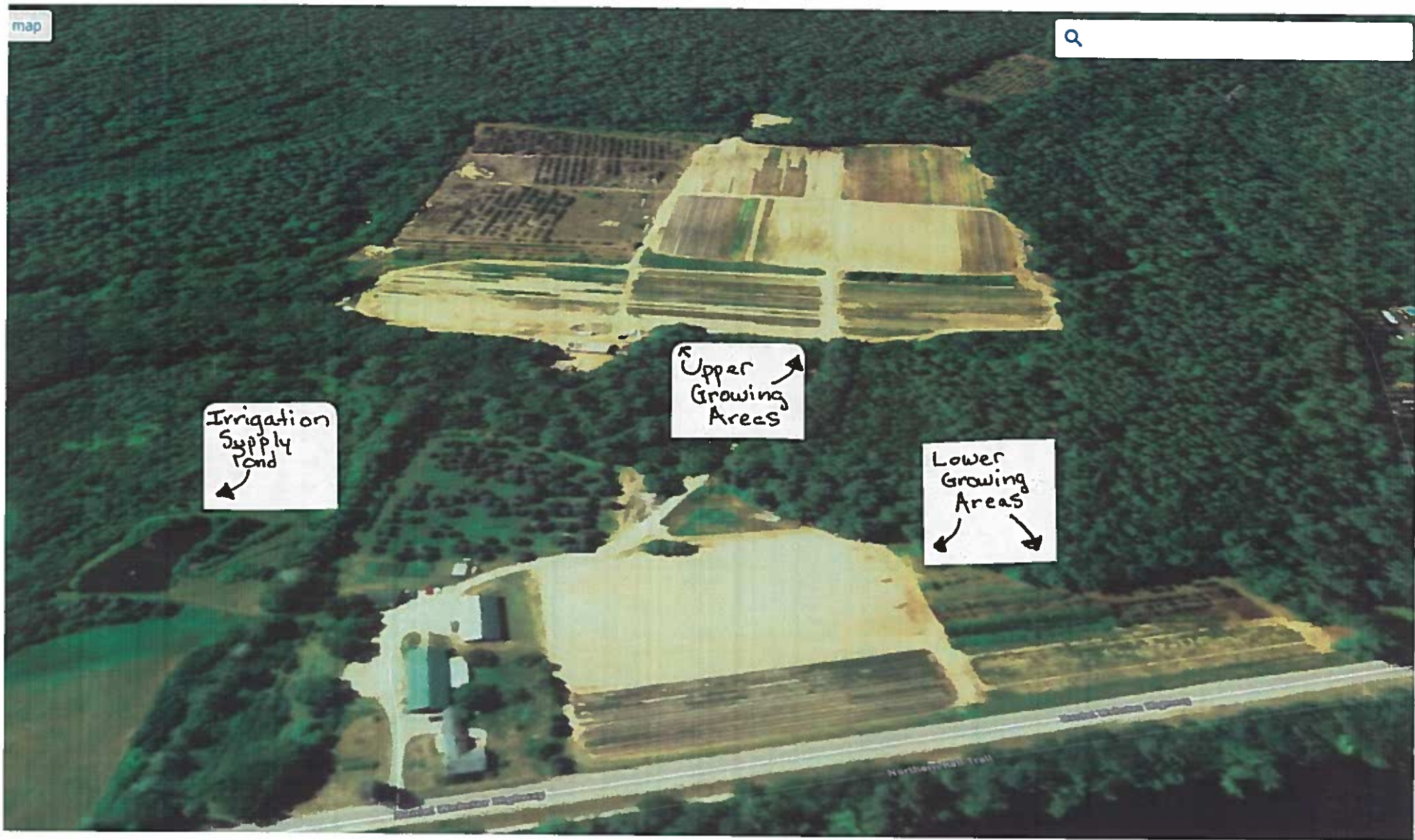
- 15.1 By signing this agreement, the Contractor agrees, certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A ("*Workers' Compensation*").

- 15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain, and require any subcontractor or assignee to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. The Contractor shall furnish the Contracting Officer identified in block 1.9, or his or her successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be

attached and are incorporated herein by reference. The State shall not be responsible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.

16. **NOTICE.** Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.
17. **AMENDMENT.** This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and Executive Council of the State of New Hampshire unless no such approval is required under the circumstances pursuant to State law, rule or policy.
18. **CHOICE OF LAW AND FORUM.** This Agreement shall be governed, interpreted and construed in accordance with the laws of the State of New Hampshire, and is binding upon and inures to the benefit of the parties and their respective successors and assigns. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party. Any actions arising out of this Agreement shall be brought and maintained in New Hampshire Superior Court which shall have exclusive jurisdiction thereof.
19. **CONFLICTING TERMS.** In the event of a conflict between the terms of this P-37 form (as modified in EXHIBIT A) and/or attachments and amendment thereof, the terms of the P-37 (as modified in EXHIBIT A) shall control.
20. **THIRD PARTIES.** The parties hereto do not intend to benefit any third parties and this Agreement shall not be construed to confer any such benefit.
21. **HEADINGS.** The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.

22. **SPECIAL PROVISIONS.** Additional or modifying provisions set forth in the attached EXHIBIT A are incorporated herein by reference.
23. **SEVERABILITY.** In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.
24. **ENTIRE AGREEMENT.** This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire agreement and understanding between the parties, and supersedes all prior agreements and understandings with respect to the subject matter hereof.



State Forest Nursery - Satellite image #1 Property overview facing West



State Forest Nursery - Satellite Image #2 Property Overview Facing South



State Forest Nursery - Existing Pump house structure Facing approx. South-west



State Forest Nursery - Existing Pump Station

State Forest Nursery - Existing Pumps Motor

CATALOG # DJ40P1DP MODEL #RM36

SHAFT END BRG 6311-22-J/03 DFP END BRG 6210-22-J/03

FR 268JP TYPE 061 ENCL ODP

PH 3 MAX 40 °C ID# B 01 7727714-0018 M 0001

INCL CLASS F DUTY 00NT WT 280 LB BAL

HZ 60 HP 40.00 RPM 3660	HZ 60 HP 40.00 RPM 2945
SF 01.15 DESIGN B CODE G	SF 01.00 DESIGN # CODE D
GUARANTEED EFFICIENCY 91.7 MAX KVAR 5.30	GUARANTEED EFFICIENCY 88.5 MAX KVAR 4.31
NEMA NOM EFFICIENCY 89.0 NOM PF 89.9	NEMA NOM EFFICIENCY 90.8 NOM PF 87.6
VOLTS 208-230/460	VOLTS 190/380
FL AMPS 104.00-90.00/45.00	FL AMPS 114.00/57.00
SF AMPS 108/53	SF AMPS

OC 030A

800 RISE/RES AT 1.00 SF.

Also Energy Verified in Accordance with CSA C360-10 and US DOE 10CFR431.191252

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Inverter Suitable 20:1 VT & 4:1 CT

NEMA Premium

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State Forest Nursery - Existing Pump



AQUA BURST

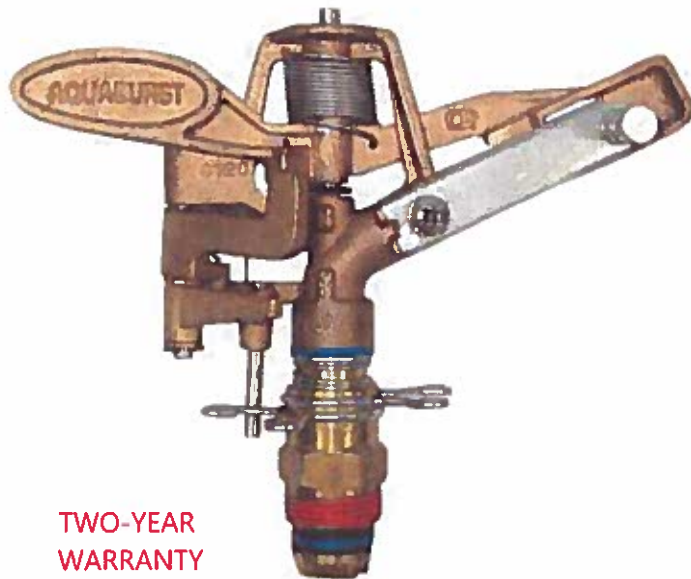
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xcadusa.com

2019/2020

3/4" BRASS IMPACT SPRINKLERS

X SERIES BRASS - MADE TO LAST™

3/4" Adjustable Brass Impact Sprinkler



**TWO-YEAR
WARRANTY**

X35ED

Features

- Full or part-circle impact – 25° trajectory
- 3/4" male NPT base
- Single nozzle
- Fits 3/4" size nozzle - (NOZ75 series)

Advantages

- Cast brass drive arm with triple bridge construction
- Heavy-Duty all-brass trip assembly
- Cast brass body with cored water passage
- Stainless-steel fulcrum pin, arm spring and bearing spring for long-wearing reliability
- An all-purpose, single nozzle, full or part circle, intermediate to high pressure sprinkler
- Perfect companion for all intermediate sprinklers where arc of coverage must be adjustable
- Easy-to-use diffuser pin for precise application
- Works well with either straight bore or flow control nozzle
- Made with domestic and foreign parts
- **Preassembled with XC-33 thread sealant**

Sprinkler Head Does Not Include Nozzle

20/case

X35ED

AQUA BURST® Performance Chart

Normal Stream Height At 9' Above Nozzle at Normal Pressure

Radius - GPM

PSI	9/64" nozzle	5/32" nozzle	11/64" nozzle	3/16" nozzle
35	41 - 3.45	42 - 4.28	43 - 4.99	44 - 5.91
40	42 - 3.66	42 - 4.57	43 - 5.26	44 - 6.44
45	43 - 3.90	43 - 4.84	44 - 5.58	45 - 6.74
50	44 - 4.07	44 - 5.21	45 - 5.94	46 - 7.03
55	45 - 4.30	46 - 5.40	47 - 6.21	47 - 7.41
60	45 - 4.48	46 - 5.73	47 - 6.50	48 - 7.72
70	46 - 4.80	47 - 5.91	48 - 7.00	50 - 8.23

Operate ONLY between 35 psi (min) and 70 psi (max)

Aqua Burst® impact sprinklers are only guaranteed to function optimally with nozzle sizes and pressure from each individual model's performance chart.

For Commercial and Institutional Applications

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

LEAD FREE*

Series 77F-DI-125, 77F-DI-FDA-125

Flanged, Wye Pattern, Cast Iron Strainers

Sizes: 2" – 12" (50 – 300mm)

Series 77F-DI-125, 77F-DI-FDA-125 Flanged, Wye Pattern, Cast Iron Strainers feature 304 stainless steel perforated screens, a cast iron flanged retainer cap and a drain/blowoff connection furnished with a closure plug. Series 77F-DI-FDA-125 also features a double coated, heat fused epoxy coating on the interior and exterior for FDA approved sanitary applications.

Features

- Flanges conform to American National Standards Institute, Class 125 (ANSI B16.1) and WW-S-2739 Type 2
- Lead Free* cast iron body
- 304 Stainless steel perforated screens
- Cast iron flanged retainer cap with gasket tapped for closure plug
- Drain/Blowoff connection furnished with closure plug
- Series 77F-DI-FDA-125 comes with heat fused FDA approved epoxy coating (interior and exterior)

Models

77F-DI-125 — 2" – 12" (50 – 300mm) with flanged connections for water and steam service

77F-DI-FDA-125 — 2" – 12" (50 – 300mm) with flanged connections and double coated, heat fused FDA approved epoxy coating (interior and exterior) for water service only

Specifications (77F-DI-125)

A flanged, wye pattern, cast iron strainer to be installed as indicated on the plans. The strainer must have flanges that conform to American National Standards Institute, Class 125, 304 stainless steel perforated screens and a drain/blowoff connection furnished with a closure plug. Pressure rating no less than 200psi (13.8 bar) WOG non-shock and 125psi (8.6 bar) WSP. Strainer shall be a Watts Series 77F-DI-125.

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.



77F-DI-FDA-125

Pressure – Temperature

Maximum Operating Pressure:

200psi (13.8 bar) WOG, non-shock, @ 210°F (99°C)

125psi (8.6 bar) WSP @ 353°F (178°C)

Standard Screens

2" – 5" (50 – 125mm): 1/16" perforation

6" – 8" (150 – 200mm): 1/8" perforation

10" – 12" (250 – 300mm): 3/16" perforation

Screen Options

Wire Mesh Liners: 304 stainless steel (#20, #40, #60, #80, #100)

Perforated Screens: 304 stainless steel (3/64", 1/16", 1/8", 3/16")

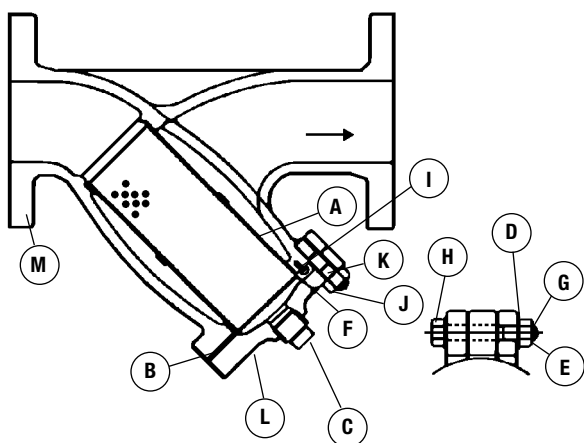
Specifications (77F-DI-FDA-125)

A flanged, wye pattern, cast iron strainer with a double coated, heat fused, FDA approved epoxy coating on the interior and exterior surfaces for FDA sanitary applications. Flanges to conform to ANSI B16.1 Class 125, 304 stainless steel perforated screens, and a drain/blowoff connection furnished with a closure plug. Pressure rating 200psi (13.8 bar) WOG. Strainer shall be a Watts Series 77F-DI-FDA-125.

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

Materials



- | | | |
|-----------|----------------|---------------------|
| A. | Screen | AISI 304SS |
| B. | Cover Gasket | Graphite |
| C. | Plug | *ASTM A47 |
| D. | Washer | ASTM A6 |
| E. | Cotter Pin | ASTM A112 |
| F. | Plate | *ASTM A6 |
| G. | Bolt Nut | ASTM A6 |
| H. | Bolt | ASTM A6 |
| I. | Set Screw | ASTM B16 |
| J. | Cover Bolt Nut | ASTM A6 |
| K. | Cover Bolt | ASTM A6 |
| L. | Cover | *ASTM A-126 Class B |
| M. | Body | *ASTM A-126 Class B |

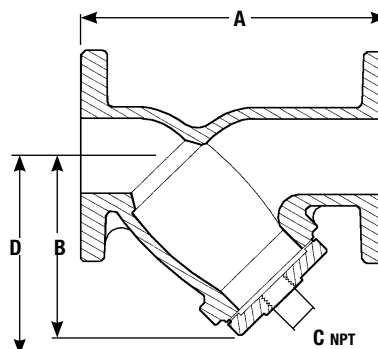
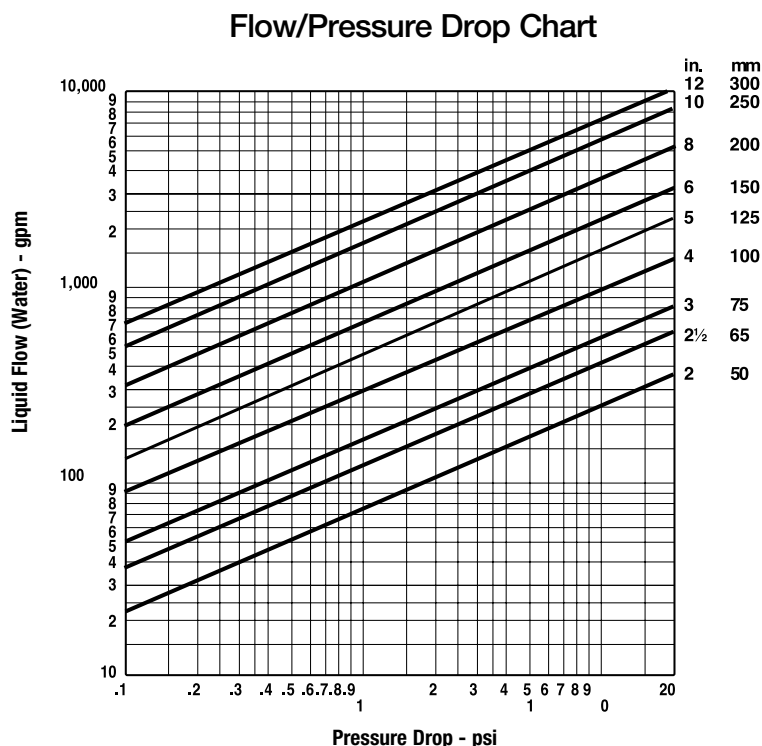
Note:* 77F-DI-FDA-125 component parts epoxy coated internally and externally.

Standards

Tested and Certified by NSF International



Dimensions – Weights



SIZE (DN)				DIMENSIONS						WEIGHT		
		A		B		C(NPT)		D*		Screen Area		
<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>sq.in.</i>	<i>lbs.</i>	<i>kgs.</i>
2	50	7⅞	200	5¼	133	½	13	7	178	36	18	8
2½	65	10	254	6½	165	1	25	9¾	248	56	28	13
3	75	10⅞	257	7	178	1	25	10	254	75	34	15
4	100	12½	308	8¼	210	1½	38	12	305	121	60	27
5	125	15⅝	397	11¼	286	2	51	17	432	210	95	43
6	150	18½	470	13½	343	2	51	20	508	278	133	60
8	200	21⅝	551	15½	394	2	51	22¾	578	387	247	112
10	250	26	660	18½	470	2	51	28	711	577	370	168
12	300	29⅞	759	21¾	552	2	51	30	762	795	579	262

* D dimension is minimum clearance for screen removal.



USA: T: (978) 689-6066 • F: (978) 975-8350 • Watts.com

Canada: T: (905) 332-4090 • F: (905) 332-7068 • Watts.ca

Latin America: T: (52) 81-1001-8600 • Watts.com





Kroy **INDUSTRIES, INC.**



The Leading Manufacturer of
Quality Back Flow Preventers

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"The Leading Manufacturer of Quality Back Flow Preventers"

kroyMidwest Valves are designed and built for ruggedness in the field. With normal use and maintenance the **kroyMidwest** valve will give you years of service as a back flow preventer.

kroyMidwest offers many optional valves, manufactured to meet state requirements and your particular application. Your nearest **kroyMidwest** distributor can design, supply, and install a quality **kroyMidwest** Chemigation Valve using our Flanged Wyes, Spools, Tees and other accessories. CVMW Models are available in 6", 8", 10", & 12".

We provide quality at a competitive price.

1. INSPECTION PORT

5" diameter with 1 1/2" FIPT, positioned directly above the low pressure drain. Allows a larger area to service the valve. Also incorporates a ring band lock for quick access. Optional Item.

2. DISC

High quality chemical resistant resilient rubber completely encapsulating a steel disc. Non-slam, immediate sealing.

3. LINKAGE

Non-corrosive, stainless steel spring and mechanism. Provides instantaneous back flow prevention.

4. DAM

5/8" steel water dam allows for collection of liquid to the low pressure drain, allowing the area to completely drain.

5. AIR RELIEF VENT

2" cast aluminum with a ball check.

6. MANUAL DRAIN

1/2" FIPT with plug allows operator to winterize the valve with ease.

7. STEEL FLANGE

1/2" 150 lbs ASA rated steel flange allows for greater stress on the valve.

8. LOW PRESSURE DRAIN

Made of high impact chemical resistant plastic. 1 1/2" MIPT inlet with 3/4" MIPT outlet, 1" ID body, spring loaded plunger with rubber "O" ring. 5 psi closing pressure.

9. BODY

Heavy gauge steel hot dipped galvanized or dry powder epoxy coated.

10. FRESH WATER PORT

3/4" FIPT allows operator to draw clean water before chemical is injected into the main stream.

11. PRESSURE RATED

All valves certified at 300 psi, rated at 150 psi.

12. INJECTION PORT

3/4" FIPT positioned at 45°, for a better injection into the water profile.

13. LABEL

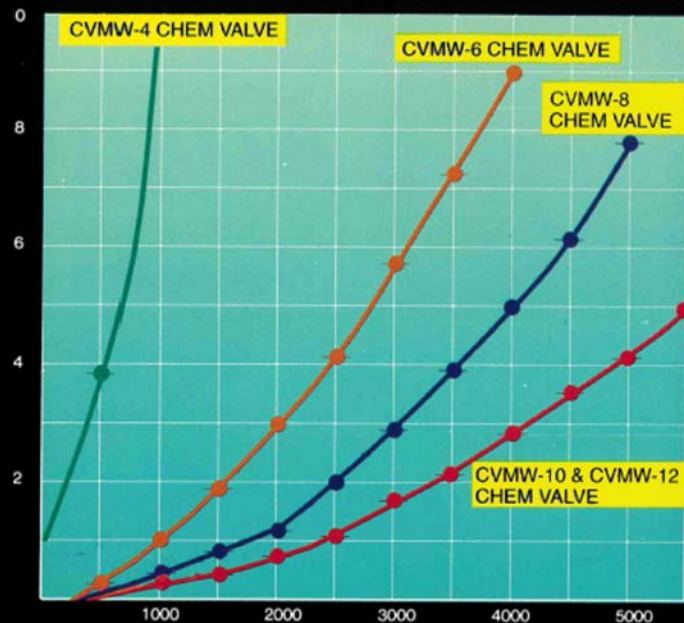
Valve labeled with manufacturer's name, model, working pressure, maximum recommended flow and the direction of flow.

14. TESTING

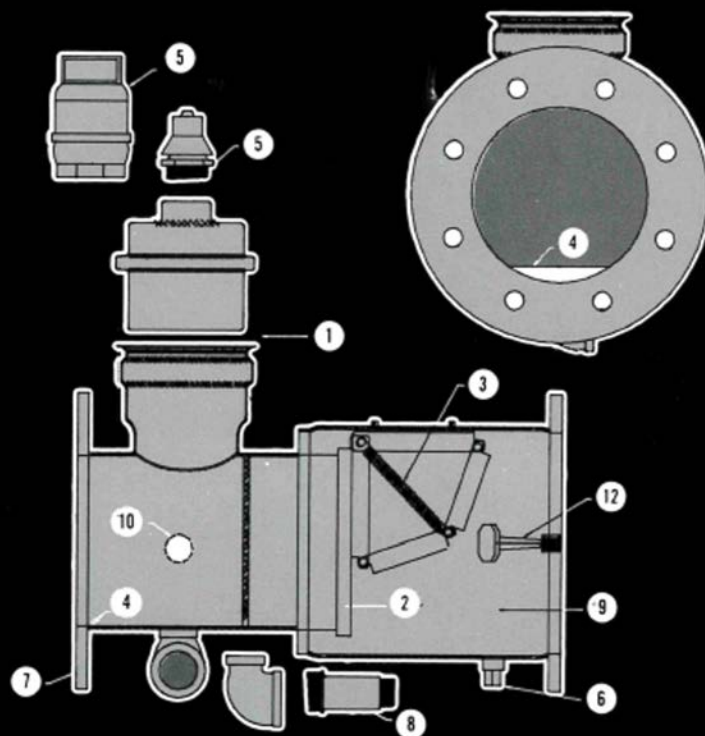
Valves are tested prior to delivery guaranteeing the performance of each valve.

"Full Service Irrigation Specialists Since 1954"

HEADLOSS (feet)



FLOW RATE (gpm)



kroyMidwest

MODEL - CVMW
MAX. 150 P.S.I.
MAX. 1200 G.P.M.
DIRECTION OF FLOW
→

LABEL PICTURED AT LEFT
APPEARS ON EACH VALVE.
RECOMMENDED MAXIMUM FLOW
RATE WILL VARY WITH SIZE.

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INDUSTRIES, INC.

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Black Steel

Galvanized Steel

Available in 6", 8", 10", & 12"
(12" has a 10" body)



Heavy Duty Steel

Certified at 300 psi for one minute & sixteen hour leakage test. Rated at 150 psi. All discs may be replaced if flange is attached to one end.

CHEMIGATION VALVES

Pressure Rated

All valves certified at 300 psi, rated at 150 psi.

Guaranteed

Guaranteed performance of each valve.

Linkage

Non-corrosive, stainless steel spring and hinge assembly provide instantaneous back flow prevention.

Body

Heavy gauge steel is hot-dipped galvanized.

Steel Flange

1/2" 150 lb. ASA rated steel flange.



Disc

High quality, resilient rubber completely encapsulates steel disc.

Air Relief Vent

2" cast aluminum with a ball check.

Kroy Industries, Inc

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Kroy Industries offers more ends for valves or tubing in both steel and aluminum than anyone in the industry!

We also manufacture adapters for all fittings



Watertight



Flanged Adapter



Circle Lock



Plain End



Male & Female Thread



Kroy Lever-Loc



Flange



Grooved End

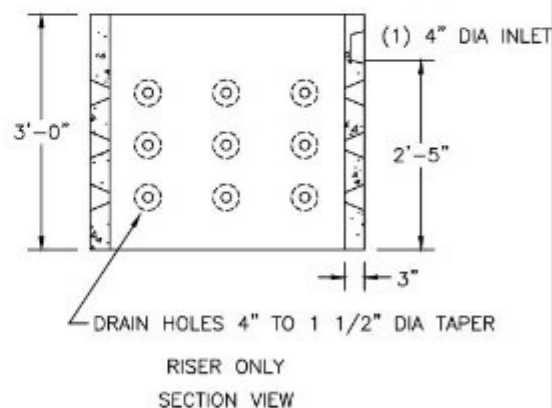
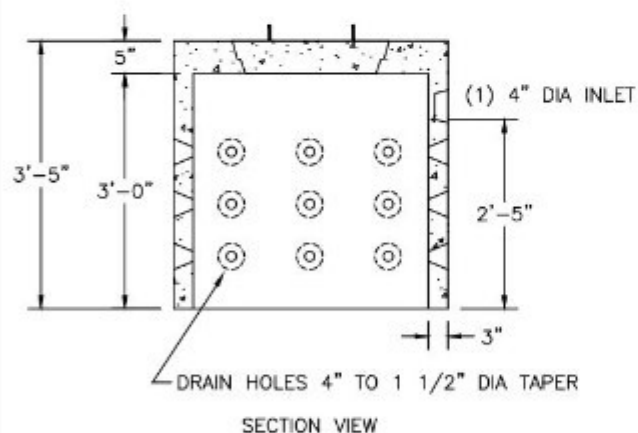
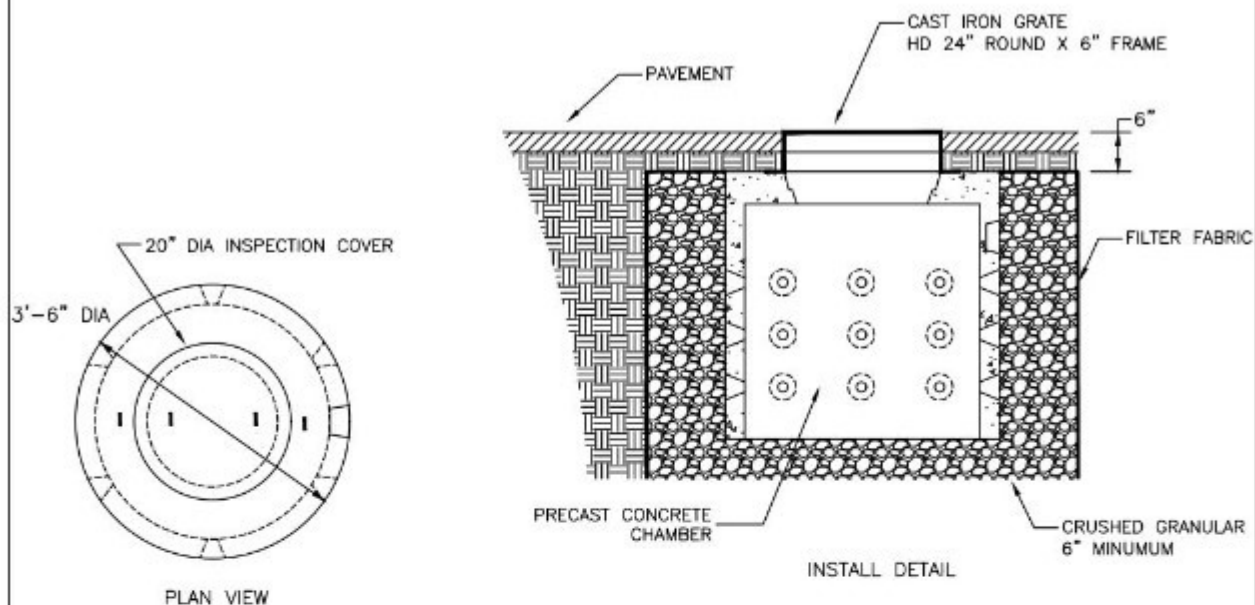
Ends available in any combination for your application requirements.

Kroy also offers steel and aluminum hose barbs for your hose connection



Your Only "Single Source" For Aluminum and PVC Pipe & Fittings


MINI-DRY WELL
160 GALLONS



NOTES:

1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. DESIGNED FOR AASHTO HS-20 LOADING, 1 TO 5 FT COVER.
3. CAPACITY INCREASES IN INCREMENTS OF 160 GALLONS FOR EVERY 3' SECTION ADDED.
4. BOTTOM PLATES AVAILABLE.

			WEIGHT
ITEM NO.	MDWH	3' SECTION W/COVER (ONE PIECE)	1,404#
	MDWHNC	3' SECTION NO COVER	1,048#

SHEA PRODUCT ID: SEE TABLE		PREPARED FOR:		FILE NAME: dwcmini.dwg		 NPCA NATIONAL PAPERBOARD & CORRUGATED BOARD ASSOCIATION
WEIGHT (LBS): SEE TABLE		DRAWN BY: ARO		DATE: 03/01/2018		