

(Print or Type Responses)

| | | | | | | | | | | | |
|---|--|---|--|-----------------------------------|---|---|------------|--|--|---|--|
| 1. Name and Address of Reporting Person * GRAE SETH | | | 2. Issuer Name and Ticker or Trading Symbol LIGHTBRIDGE Corp [LTBR] | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) President and CEO | | | | | |
| (Last) (First) (Middle) 1600 TYSON'S BLVD, SUITE 550 | | | 3. Date of Earliest Transaction (Month/Day/Year) 04/08/2015 | | | | | | | | |
| (Street) MCLEAN, VA 22102 | | | 4. If Amendment, Date Original Filed(Month/Day/Year) | | | 6. Individual or Joint/Group Filing(Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person | | | | | |
| (City) (State) (Zip) | | | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | |
| 1. Title of Security (Instr. 3) | | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | Code | V | Amount | (A) or (D) | Price | | | |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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SEC 1474 (9-02)

| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | |
|---|--|--------------------------------------|--|--------------------------------|---|---|-----|------------------|--|------------|---|---------|--|--|--|--|
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5) | | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Underlying Securities (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | | |
| Stock Options (Non Qualified) | \$ 1.26 | 04/08/2015 | | A | | 147,707 | | | (1) | 04/08/2015 | Common Stock | 147,707 | \$ 0 | 968,103 | D | |
| Stock Options (Non Qualified) | \$ 1.26 | 04/08/2015 | | A | | 56,040 | | | (2) | 04/08/2025 | Common Stock | 56,040 | \$ 0 | 1,024,143 | D | |
| Stock Options (Non Qualified) | \$ 1.26 | 04/08/2015 | | A | | 174,383 | | | (3) | 04/08/2025 | Common Stock | 174,383 | \$ 0 | 1,198,526 | D | |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|---|---------------|-----------|-------------------|-------|
| | Director | 10% Owner | Officer | Other |
| GRAE SETH 1600 TYSON'S BLVD SUITE 550 MCLEAN, VA 22102 | X | | President and CEO | |

Signatures

| | | |
|-------------------------------|--|------------|
| /s/ Seth Grae | | 04/10/2015 |
| Signature of Reporting Person | | Date |

Explanation of Responses:

* If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

(1) The options were granted on 4/8/15 and are subject to a three-year vesting schedule, with one-third vesting on each anniversary of the date of grant.

(2) The options were granted on 4/8/15 and cannot be exercised until after filing of Form S-8 with the SEC following shareholder approval of the 2015 Equity Incentive Plan.

(3) The options granted on 4/8/2015 are subject to an immediate 100% vesting.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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