

(Print or Type Responses)

|                                                        |  |                                         |                                                                                  |                                   |   |                                                                                                                                                                                                                                                                                                     |            |                                                                                                  |  |                                                             |                                                          |
|--------------------------------------------------------|--|-----------------------------------------|----------------------------------------------------------------------------------|-----------------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------|----------------------------------------------------------|
| 1. Name and Address of Reporting Person*<br>GRAE SETH  |  |                                         | 2. Issuer Name and Ticker or Trading Symbol<br>LIGHTBRIDGE Corp [LTBR]           |                                   |   | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)<br><input checked="" type="checkbox"/> Director <input type="checkbox"/> 10% Owner<br><input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below)<br>President and CEO |            |                                                                                                  |  |                                                             |                                                          |
| (Last) (First) (Middle)<br>1600 TYSONS BLVD, SUITE 550 |  |                                         | 3. Date of Earliest Transaction (Month/Day/Year)<br>08/12/2015                   |                                   |   |                                                                                                                                                                                                                                                                                                     |            |                                                                                                  |  |                                                             |                                                          |
| (Street)<br>MCLEAN, VA 22102                           |  |                                         | 4. If Amendment, Date Original Filed(Month/Day/Year)                             |                                   |   | 6. Individual or Joint/Group Filing(Check Applicable Line)<br><input checked="" type="checkbox"/> Form filed by One Reporting Person<br><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<br>(Instr. 3)                     |  | 2. Transaction Date<br>(Month/Day/Year) | 2A. Deemed Execution Date, if any<br>(Month/Day/Year)                            | 3. Transaction Code<br>(Instr. 8) |   | 4. Securities Acquired (A) or Disposed of (D)<br>(Instr. 3, 4 and 5)                                                                                                                                                                                                                                |            | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s)<br>(Instr. 3 and 4) |  | 6. Ownership Form: Direct (D) or Indirect (I)<br>(Instr. 4) | 7. Nature of Indirect Beneficial Ownership<br>(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.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

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| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned<br>(e.g., puts, calls, warrants, options, convertible securities) |                                                        |                                         |                                                       |                                   |   |                                                                                            |                                                             |                  |                                                                  |              |                                               |                                                                                                       |                                                                                     |                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------|-------------------------------------------------------|-----------------------------------|---|--------------------------------------------------------------------------------------------|-------------------------------------------------------------|------------------|------------------------------------------------------------------|--------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------|
| 1. Title of Derivative Security<br>(Instr. 3)                                                                                                   | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date<br>(Month/Day/Year) | 3A. Deemed Execution Date, if any<br>(Month/Day/Year) | 4. Transaction Code<br>(Instr. 8) |   | 5. Number of Derivative Securities Acquired (A) or Disposed of (D)<br>(Instr. 3, 4, and 5) | 6. Date Exercisable and Expiration Date<br>(Month/Day/Year) |                  | 7. Title and Amount of Underlying Securities<br>(Instr. 3 and 4) |              | 8. Price of Derivative Security<br>(Instr. 5) | 9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s)<br>(Instr. 4) | 10. Ownership Form of Derivative Security: Direct (D) or Indirect (I)<br>(Instr. 4) | 11. Nature of Indirect Beneficial Ownership<br>(Instr. 4) |
|                                                                                                                                                 |                                                        |                                         |                                                       |                                   |   |                                                                                            |                                                             |                  |                                                                  |              |                                               |                                                                                                       |                                                                                     |                                                           |
|                                                                                                                                                 |                                                        |                                         |                                                       | Code                              | V | (A)                                                                                        | (D)                                                         | Date Exercisable | Expiration Date                                                  | Title        | Amount or Number of Shares                    |                                                                                                       |                                                                                     |                                                           |
| Stock Options<br>(Non Qualified)                                                                                                                | \$ 1.26                                                | 08/12/2015                              |                                                       | A                                 |   | 55,210                                                                                     |                                                             | (1)              | 08/12/2025                                                       | Common Stock | 55,210                                        | \$ 0                                                                                                  | 1,253,736                                                                           | D                                                         |
| Stock Options<br>(Non Qualified)                                                                                                                | \$ 1.26                                                | 08/12/2015                              |                                                       | A                                 |   | 24,018                                                                                     |                                                             | (2)              | 08/12/2025                                                       | Common Stock | 24,018                                        | \$ 0                                                                                                  | 1,277,754                                                                           | D                                                         |

Reporting Owners

| Reporting Owner Name / Address                                 | Relationships |           |                   |       |
|----------------------------------------------------------------|---------------|-----------|-------------------|-------|
|                                                                | Director      | 10% Owner | Officer           | Other |
| GRAE SETH<br>1600 TYSONS BLVD<br>SUITE 550<br>MCLEAN, VA 22102 | X             |           | President and CEO |       |

Signatures

|                                 |  |            |
|---------------------------------|--|------------|
| /s/ Seth Grae                   |  | 09/25/2015 |
| **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 August 12, 2015 and are subject to an immediate 100% vesting.

**(2)** The options were granted on August 12, 2015 and are subject to a three-year vesting schedule, with one-third vesting on each anniversary of the date of grant.

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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