

Table of Contents

| | |
|--|-----------|
| Abstract | 2 |
| Executive Summary | 3 |
| Building Description | 5 |
| Location | 6 |
| Architecture | 6 |
| Primary Project Team | 7 |
| Building Systems | 8 |
| Electrical | 9 |
| Lighting | 9 |
| Mechanical | 9 |
| Fire Protection | 9 |
| Transportation | 9 |
| Existing Structural System | 10 |
| Gravity System | 11 |
| Lateral Resisting System | 12 |
| Foundation | 14 |
| Problem Statement | 15 |
| Problem Solution Overview | 15 |
| Structural System Analysis and Redesign | 18 |
| Gravity System | 19 |
| Lateral Resisting System | 27 |
| Foundation | 33 |
| Construction Management Breadth Study | 35 |
| Cost Analysis | 36 |
| Schedule Analysis | 39 |
| Acoustics Breadth Study | 41 |
| Floor System Transmission Loss | 42 |
| Shear Wall Transmission Loss | 47 |
| Conclusion | 52 |
| References | 55 |
| Appendix | i |