APPENDIX C

Acceleration-Time Histories
Computed at the Center of Gravity of Vehicle

-Finite Element Analysis Results-
Figure C.1: Acceleration-time histories at C.G. of pickup truck in local coordinates:

Curb Type: AASHTO A Curb
Impact Speed: 70 km/hr
Impact Angle: 5 degrees.
Figure C.2: Acceleration-time histories at C.G. of pickup truck in local coordinates:

Curb Type — AASHTO A Curb
Impact Speed — 70 km/hr
Impact Angle — 15 degrees.
Figure C.3: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- AASHTO A Curb
Impact Speed – 70 km/hr
Impact Angle – 25 degrees.
Figure C.4: Acceleration-time histories at C.G. of pickup truck in local coordinates:

- **Curb Type**: AASHTO B Curb
- **Impact Speed**: 70 km/hr
- **Impact Angle**: 5 degrees.
Figure C.5: Acceleration-time histories at C.G. of pickup truck in local coordinates:

- Curb Type: AASHTO B Curb
- Impact Speed: 70 km/hr
- Impact Angle: 15 degrees.
Figure C.6: Acceleration-time histories at C.G. of pickup truck in local coordinates:

Curb Type -- AASHTO B Curb
Impact Speed -- 70 km/hr
Impact Angle -- 25 degrees.
Figure C.7: Acceleration-time histories at C.G. of pickup truck in local coordinates:

Curb Type -- AASHTO B Curb
Impact Speed -- 100 km/hr
Impact Angle -- 5 degrees.
Figure C.8: Acceleration-time histories at C.G. of pickup truck in local coordinates:

- Curb Type: AASHTO B Curb
- Impact Speed: 100 km/hr
- Impact Angle: 15 degrees.
Figure C.9: Acceleration-time histories at C.G. of pickup truck in local coordinates:

**Curb Type**  -- AASHTO B Curb
**Impact Speed**  -- 100 km/hr
**Impact Angle**  -- 25 degrees.
Figure C.10: Acceleration-time histories at C.G. of pickup truck in local coordinates:

Curb Type -- AASHTO C Curb
Impact Speed -- 70 km/hr
Impact Angle -- 5 degrees.
Figure C.11: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- AASHTO C Curb
Impact Speed -- 70 km/hr
Impact Angle -- 15 degrees.
Figure C.12: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- AASHTO C Curb
Impact Speed – 70 km/hr
Impact Angle -- 25 degrees.
Figure C.13: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- AASHTO C Curb
Impact Speed – 100 km/hr
Impact Angle -- 5 degrees.
Figure C.14: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- AASHTO C Curb
Impact Speed -- 100 km/hr
Impact Angle -- 15 degrees.
Figure C.15: Acceleration-time histories at C.G. of pickup truck in local coordinates:

Curb Type -- AASHTO C Curb
Impact Speed -- 100 km/hr
Impact Angle -- 25 degrees.
Figure C.16: Acceleration-time histories at C.G. of pickup truck in local coordinates:
  Curb Type -- AASHTO D Curb
  Impact Speed -- 70 km/hr
  Impact Angle -- 5 degrees.
Figure C.17: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- AASHTO D Curb
Impact Speed -- 70 km/hr
Impact Angle -- 15 degrees.
Figure C.18: Acceleration-time histories at C.G. of pickup truck in local coordinates:

Curb Type -- AASHTO D Curb
Impact Speed -- 70 km/hr
Impact Angle -- 25 degrees.
Figure C.19: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- AASHTO D Curb
Impact Speed -- 100 km/hr
Impact Angle -- 5 degrees.
Figure C.20: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- AASHTO D Curb
Impact Speed – 100 km/hr
Impact Angle -- 15 degrees.
**Figure C.21:** Acceleration-time histories at C.G. of pickup truck in local coordinates:

- **Curb Type:** AASHTO D Curb
- **Impact Speed:** 100 km/hr
- **Impact Angle:** 25 degrees.
Figure C.22: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- AASHTO G Curb
Impact Speed – 70 km/hr
Impact Angle -- 5 degrees.
Figure C.23: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- AASHTO G Curb
Impact Speed -- 70 km/hr
Impact Angle -- 15 degrees.
Figure C.24: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- AASHTO G Curb
Impact Speed – 70 km/hr
Impact Angle -- 25 degrees.
Figure C.25: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- AASHTO G Curb
Impact Speed – 100 km/hr
Impact Angle -- 5 degrees.
Figure C.26: Acceleration-time histories at C.G. of pickup truck in local coordinates:

- **Curb Type**: AASHTO G Curb
- **Impact Speed**: 100 km/hr
- **Impact Angle**: 15 degrees.
Figure C.27: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- AASHTO G Curb
Impact Speed -- 100 km/hr
Impact Angle -- 25 degrees.
Figure C.28: Acceleration-time histories at C.G. of pickup truck in local coordinates:

- Curb Type -- New York Curb (100 mm)
- Impact Speed – 70 km/hr
- Impact Angle -- 5 degrees.
Figure C.29: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- New York Curb (100 mm)
Impact Speed – 70 km/hr
Impact Angle -- 15 degrees.
Figure C.30: Acceleration-time histories at C.G. of pickup truck in local coordinates:

Curb Type -- New York Curb (100 mm)
Impact Speed – 70 km/hr
Impact Angle -- 25 degrees.
Figure C.31: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- New York Curb (100 mm)
Impact Speed – 100 km/hr
Impact Angle -- 5 degrees.
Figure C.32: Acceleration-time histories at C.G. of pickup truck in local coordinates:
Curb Type -- New York Curb (100 mm)
Impact Speed – 100 km/hr
Impact Angle -- 15 degrees.
Figure C.33: Acceleration-time histories at C.G. of pickup truck in local coordinates:

- **Curb Type**: New York Curb (100 mm)
- **Impact Speed**: 100 km/hr
- **Impact Angle**: 25 degrees.