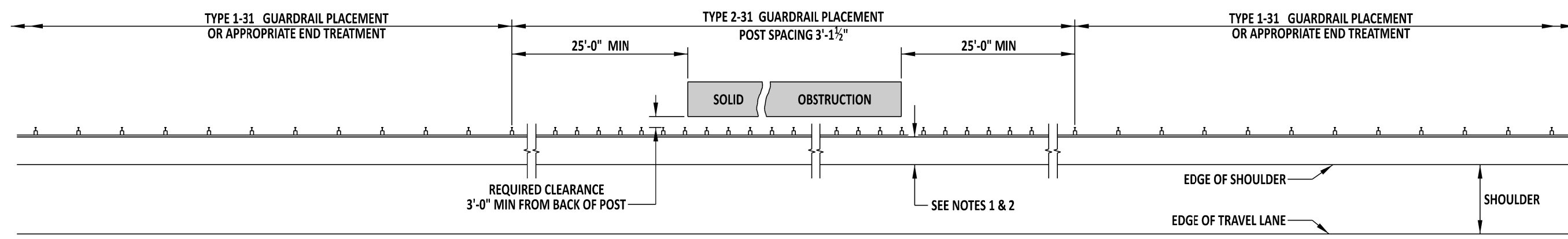
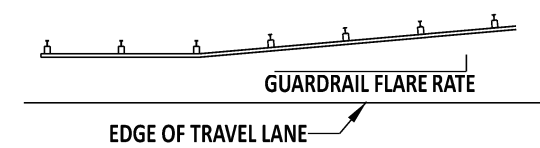


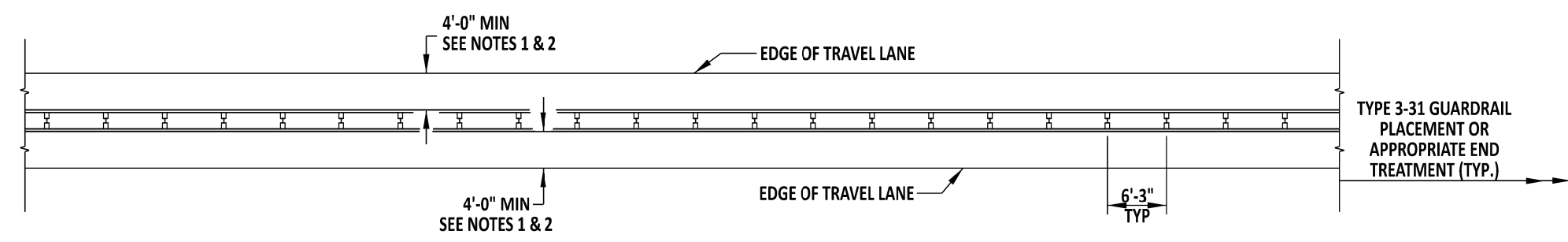
**TYPE 1-31 GUARDRAIL**  
TYPICAL GUARDRAIL TREATMENT WHEN THE REQUIRED 4'-0" CLEARANCE TO THE OBSTRUCTION IS AVAILABLE



**TYPE 2-31 GUARDRAIL**  
TYPICAL GUARDRAIL TREATMENT WHEN 3'-0" TO 4'-0" OF CLEARANCE TO OBSTRUCTION IS AVAILABLE



| FLARE RATES  |            |
|--------------|------------|
| DESIGN SPEED | FLARE RATE |
| 70 MPH       | 15:1       |
| 60 MPH       | 14:1       |
| 55 MPH       | 12:1       |
| 50 MPH       | 11:1       |
| 45 MPH       | 10:1       |
| 40 MPH       | 8:1        |
| 30 MPH       | 7:1        |



**TYPE 3-31 GUARDRAIL**  
TYPICAL MEDIAN GUARDRAIL TREATMENT

- NOTES:**
- 1). MAXIMIZE THE DISTANCE FROM THE EDGE OF THE TRAVEL LANE OR SHOULDER TO THE FACE OF GUARDRAIL. THIS AREA SHALL BE GRADED 10:1 OR FLATTER.
  - 2). GRADE THIS AREA 10:1 OR FLATTER