



# HOW TO AVOID THE DEVELOPMENT PERMITTING TRAFFIC JAM

Stephen Pottéy P.E.

# AGENDA



- Permitting Potholes
- Public-Private Turn Signals
- Regulatory Missed Turns
- Missing & Broken Parts
- Permit Traffic Volumes
- Projects Coming Down the Turnpike
- Questions



# PERMITTING POTHoles

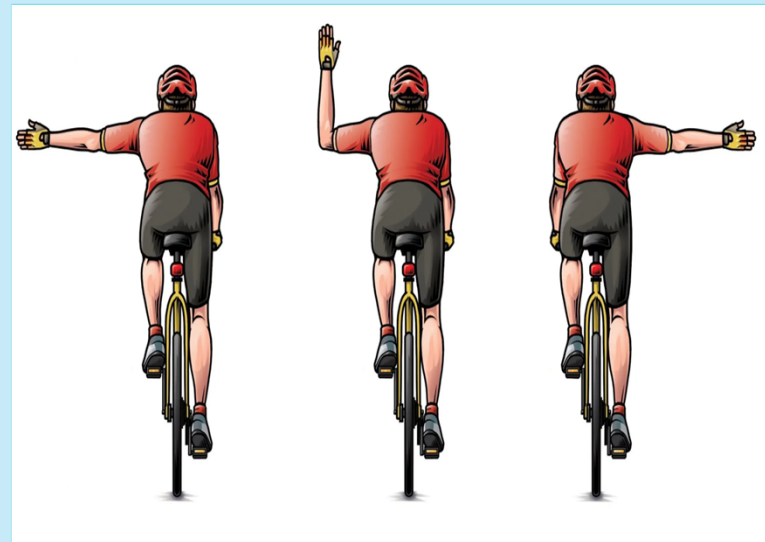
Pothole: Unexpected, “Shouldn’t” be there.

- Code/Detail Updates
  - Emailed Updates
  - Development Roundtable
- Unique Site Constraints: Hillside, Wetlands, Fault Lines, Utility Issues, etc)
  - Major Project Review!

# PUBLIC-PRIVATE TURN SIGNALS

Turn Signals: Communication!

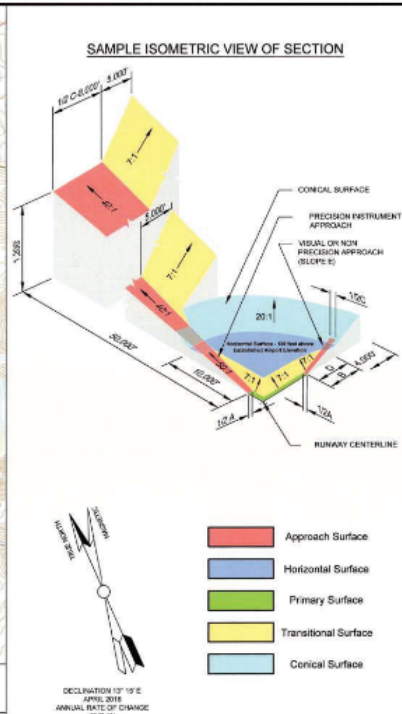
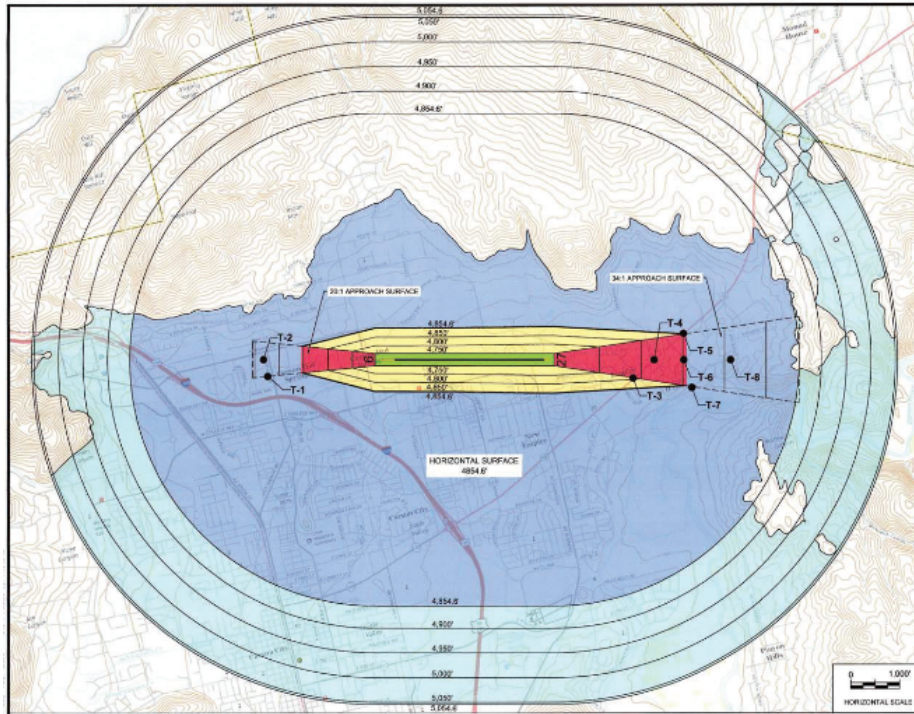
- Submittal Checklists
- Response to corrections
- Clear plans and reports
- Make a call
- Documented Conversations





## REGULATORY MISSED TURNS

- NDOT
- NDEP
- US EPA 404
- FEMA LOMR
- FAA Approval (Prescreening Tool and Shielding Rules)

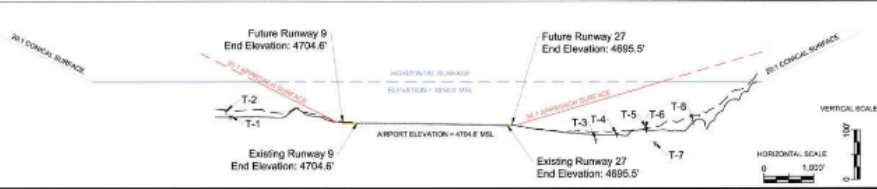
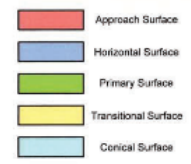


| DIM | ITEM   | DIMENSIONAL STANDARDS (FEET) |       |                                 |       |                             |       |
|-----|--|------------------------------|-------|---------------------------------|-------|-----------------------------|-------|
|     |  | VISUAL RUNWAY                |       | NON-PRECISION INSTRUMENT RUNWAY |       | PRECISION INSTRUMENT RUNWAY |       |
|     |  | A                            | D     | A                               | C     | D                           |       |
| A   | HEIGHT OF PRIMARY SURFACE AND APPROACH SURFACE FROM ELEVATION OF REFERENCE POINT | 200                          | 500   | 500                             | 500   | 1,000                       | 1,500 |
| B   | HEIGHT OF HORIZONTAL SURFACE   | 500                          | 500   | 500                             | 1,000 | 1,000                       | 1,500 |
| C   | APPROACH SURFACE SLOPE (SLOPE 5:1)   | 1,000                        | 1,000 | 1,000                           | 1,000 | 1,000                       | 1,000 |
| D   | APPROACH SURFACE LENGTH  | 500                          | 500   | 500                             | 1,000 | 1,000                       | 1,500 |
| E   | APPROACH SURFACE SLOPE (SLOPE 5:1)   | 1,000                        | 1,000 | 1,000                           | 1,000 | 1,000                       | 1,000 |

A - URBAN AIRWAYS  
 B - RUNWAYS LONGER THAN 10,000 FEET  
 C - VISIBILITY MINIMUMS GREATER THAN 3/4 MILES  
 D - VISIBILITY MINIMUMS AS LOW AS 3/4 MILES  
 E - PRECISION INSTRUMENT APPROACH (SLOPE 5:1) FOR RUNS 10,000 FEET AND 40:1 FOR AN ADDITIONAL 4,000 FEET

**NOTES:**

- FEDERAL AVIATION REGULATIONS PART 77 STATES THAT A STRUCTURE IS PRESUMED TO HAVE A SUBSTANTIAL ADVERSE EFFECT UPON THE SAFE AND OPTIC DUTY USE OF NAVIGABLE AIRSPACE IF ITS HEIGHT EXCEEDS THE FOLLOWING STANDARDS:
- A HEIGHT OF FIVE HUNDRED (500) FEET ABOVE GROUND LEVEL AT THE SITE OF THE OBJECT ANYWHERE IN THE STATE.
  - A HEIGHT THAT IS TWO HUNDRED (200) FEET ABOVE GROUND LEVEL OR ABOVE THE ESTABLISHED AIRPORT ELEVATION, WHICHEVER IS HIGHER, WITHIN THREE (3) NAUTICAL MILES OF THE ESTABLISHED REFERENCE POINT OF A PUBLIC-USE AIRPORT, EXCLUDING HELIPORTS, AND THE HEIGHT INCREASES IN THE PROPORTION OF ONE HUNDRED (100) FEET FOR EACH ADDITIONAL NAUTICAL MILE OF DISTANCE FROM THE AIRPORT UP TO A MAXIMUM OF FIVE HUNDRED (500) FEET.
  - A HEIGHT WITHIN A TERMINAL OBSTACLE CLEARANCE AREA, INCLUDING AN INITIAL APPROACH SEGMENT, A DEPARTURE AREA, AND A CIRCLING APPROACH AREA, AS DEFINED BY FEDERAL LAWS AND REGULATIONS, WHICH WOULD EXCEED 10% THE VERTICAL DISTANCE BETWEEN ANY POINT ON THE OBJECT AND AN ESTABLISHED MINIMUM OBSTACLE CLEARANCE ALTITUDE WITHIN THAT AREA OR SEGMENT TO BE LESS THAN THE REQUIRED OBSTACLE CLEARANCE.
  - A HEIGHT WITHIN AN OBSTACLE CLEARANCE AREA, AS DEFINED BY FEDERAL LAWS AND REGULATIONS, INCLUDING TAKE-OFF AND TERMINATION AREAS, OF A FEDERAL AIRPORT OR APPROVED OFF-AIRPORT ROUTE, THAT WOULD INCREASE THE MINIMUM OBSTACLE CLEARANCE ALTITUDE.
  - THE SURFACE OF A TAKEOFF AND LANDING AREA OF A PUBLIC-USE AIRPORT OR ANY IMAGINARY SURFACE AS ESTABLISHED BY FAR PART 77. HOWEVER, NO PART OF THE TAKEOFF OR LANDING AREA ITSELF SHALL BE CONSIDERED TO BE AN OBSTRUCTION.
- NOTE: FAR PART 77 IMAGINARY SURFACES ARE AS SHOWN ON THIS SHEET FOR THE CARSON CITY AIRPORT. THOSE SURFACES ARE IMPROVED BASED UPON EXISTING AND ULTIMATE AIRPORT DEVELOPMENT.



| OBJECT ID | DESCRIPTION | SURVEY DATE | RUNWAY 9 TRANSMISSION TABLE     |                                |                              |                                      |
|-----------|-------------|-------------|---------------------------------|--------------------------------|------------------------------|--------------------------------------|
|           |             |             | 353 PART 77 SURFACE PENETRATION | GROUND SURFACE ELEVATION (MSL) | TRANSMISSION ELEVATION (MSL) | TRANSMISSION SURFACE ELEVATION (MSL) |
| T-1       | EMERSON DE  | 1/11/2016   | 123.75                          | 4711.61                        | 4705.93                      | 15                                   |
| T-2       | EMERSON DE  | 1/11/2016   | 144.75                          | 4711.85                        | 4708.85                      | 15                                   |

| OBJECT ID | DESCRIPTION         | SURVEY DATE | RUNWAY 27 TRANSMISSION TABLE    |                                |                              |                                      |
|-----------|---------------------|-------------|---------------------------------|--------------------------------|------------------------------|--------------------------------------|
|           |                     |             | 353 PART 77 SURFACE PENETRATION | GROUND SURFACE ELEVATION (MSL) | TRANSMISSION ELEVATION (MSL) | TRANSMISSION SURFACE ELEVATION (MSL) |
| T-3       | LINCOLN HWY. I-5 SB | 1/11/2016   | 272.50                          | 4675.30                        | 4554.30                      | 17                                   |
| T-4       | LINCOLN HWY. I-5 SB | 1/11/2016   | 264.50                          | 4626.10                        | 4443.14                      | 17                                   |
| T-5       | LINCOLN HWY. I-5 SB | 1/11/2016   | 302.50                          | 4633.50                        | 4467.54                      | 17                                   |
| T-6       | N 2050 FARM RD      | 1/11/2016   | 348.50                          | 4646.10                        | 4461.75                      | 15                                   |
| T-7       | MORGAN HILL RD      | 1/11/2016   | 318.00                          | 4593.80                        | 4407.50                      | 15                                   |
| T-8       | MORGAN HILL RD      | 1/11/2016   | 372.00                          | 4626.80                        | 4463.22                      | 15                                   |

NOTE: ALL PRIVATE ROAD FRONTAGES WITHIN THE TRANSMISSION ARE IMPROVED TO 6'10" FEET. HEIGHTS ARE SHOWN IN FEET. ABOVE THE SURVEY LOCATION HEIGHT. SEE FAR PART 77.

| DATE | REVISIONS | DESCRIPTION |
|------|-----------|-------------|
|      |           |             |
|      |           |             |

CLIENT  
**CARSON CITY AUTHORITY**  
 flyCarsonCity.com

PROJECT  
**AIRPORT LAYOUT PLAN UPDATE**  
 CARSON CITY AIRPORT (CXP)  
 CARSON CITY, NEVADA

SHEET TITLE  
**AIRPORT AIRSPACE**

**ATKINS**  
 Member of the SNC-Lavalin Group  
 15000 Professional Circle Tel: (775) 828-1622  
 Suite 102 Reno, NV 89521  
 www.atkinsglobal.com/northamerica

|         |             |
|---------|-------------|
| JOB NO. | 10305039    |
| DRAWN   | K.A.S.      |
| DESIGN  | A.S.M.      |
| CHECKED | S.D.P.      |
| DATE    | AUGUST 2016 |

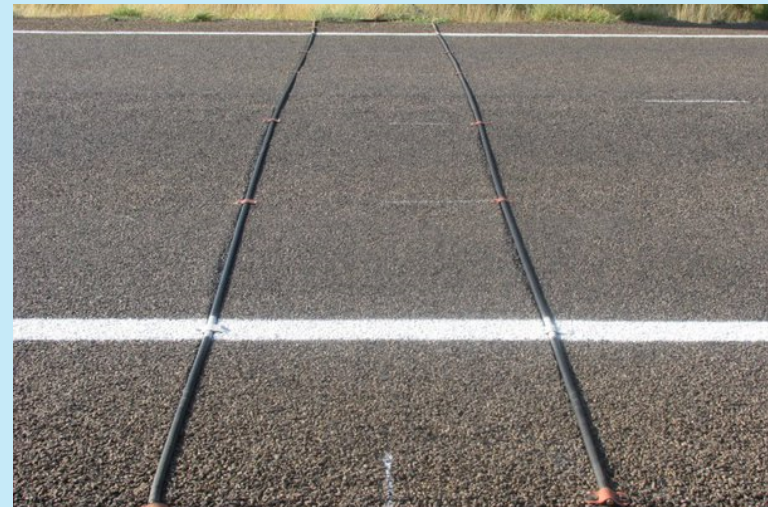
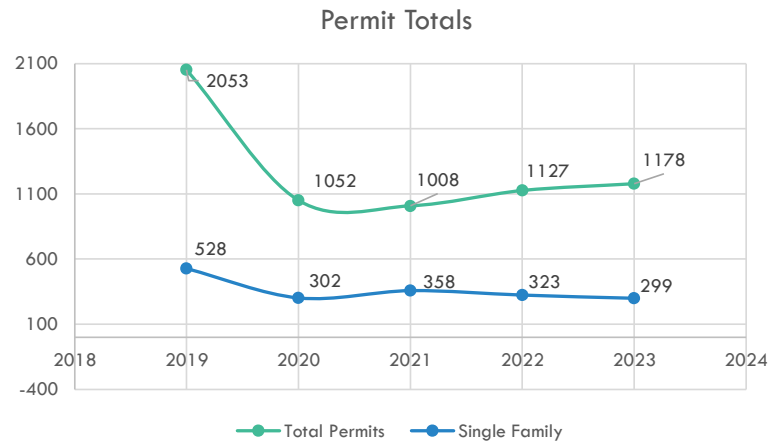
SHEET 10 OF 12

# MISSING & BROKEN PARTS



- Drainage Studies:
  - LID (Site Suitability and Volume/Flow Sizing)
  - Detention (Rational vs. Modified Rational Method)
  - Elevation Certificates
- Water/Sewer Main Existing Capacity vs Demand
  - Why?
- Traffic Impact Study
  - Trip Distribution
  - Signal Optimization & Signal Synchronization
  - LOS vs Warrants
  - NDOT Trina & City Model
  - School Hours
- “By Others”
- Delayed Submittals

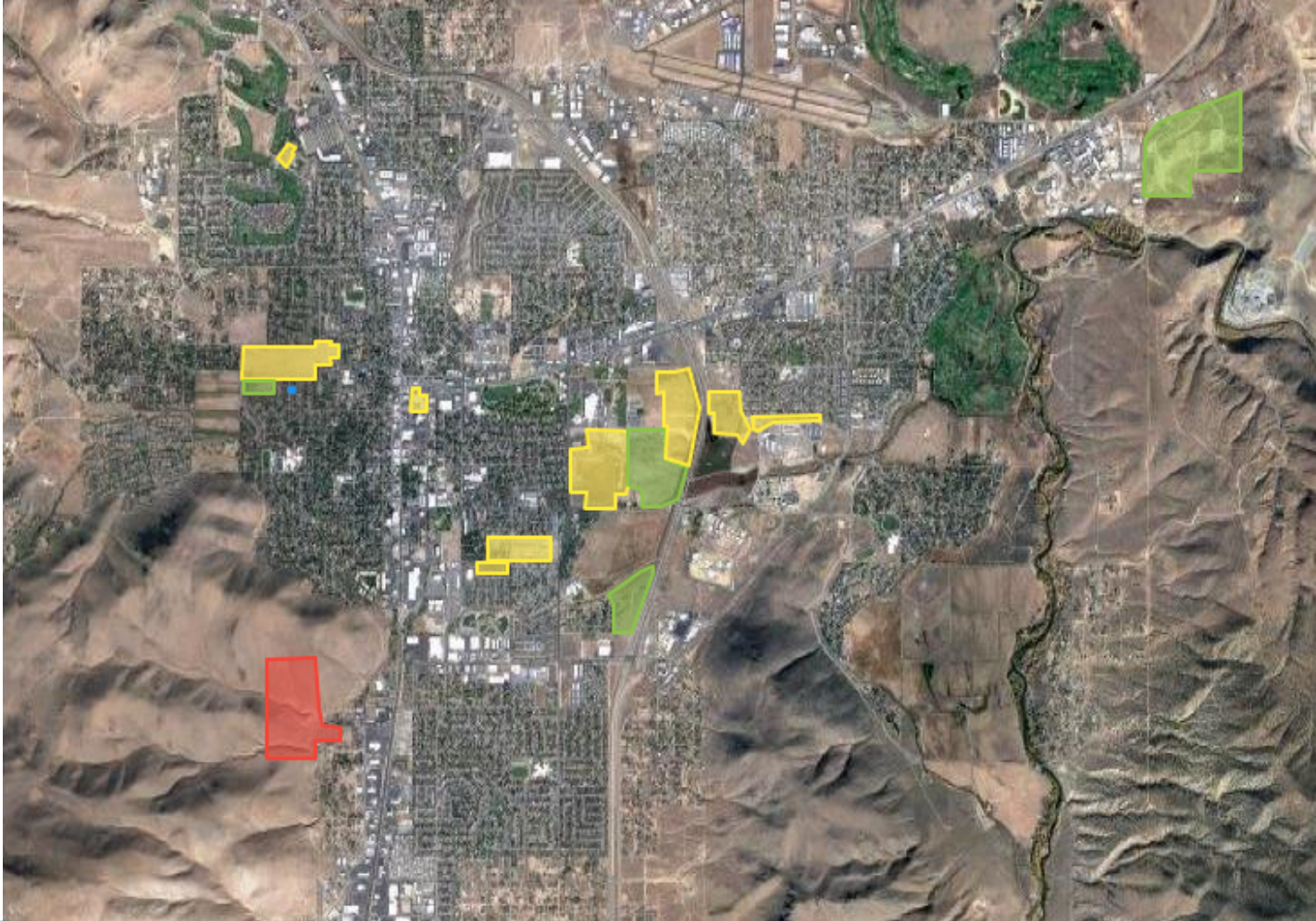
# PERMIT TRAFFIC VOLUMES







# PROJECTS COMING DOWN THE TURNPIKE





# NEW RESIDENTIAL SUBDIVISIONS COMING DOWN THE PIKE...



Chirp Chirp Chirp

Chirp Chirp

Chirp

# THANK YOU ANY QUESTIONS?

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(All images “borrowed” from the internet)

