



# Preparing for and Executing a Field Reconstruction or Renovation Project

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**B&A**

**BOEKHOLDER & ASSOCIATES, LLC**

ATHLETIC FIELD CONSULTING, DESIGN & PLANNING

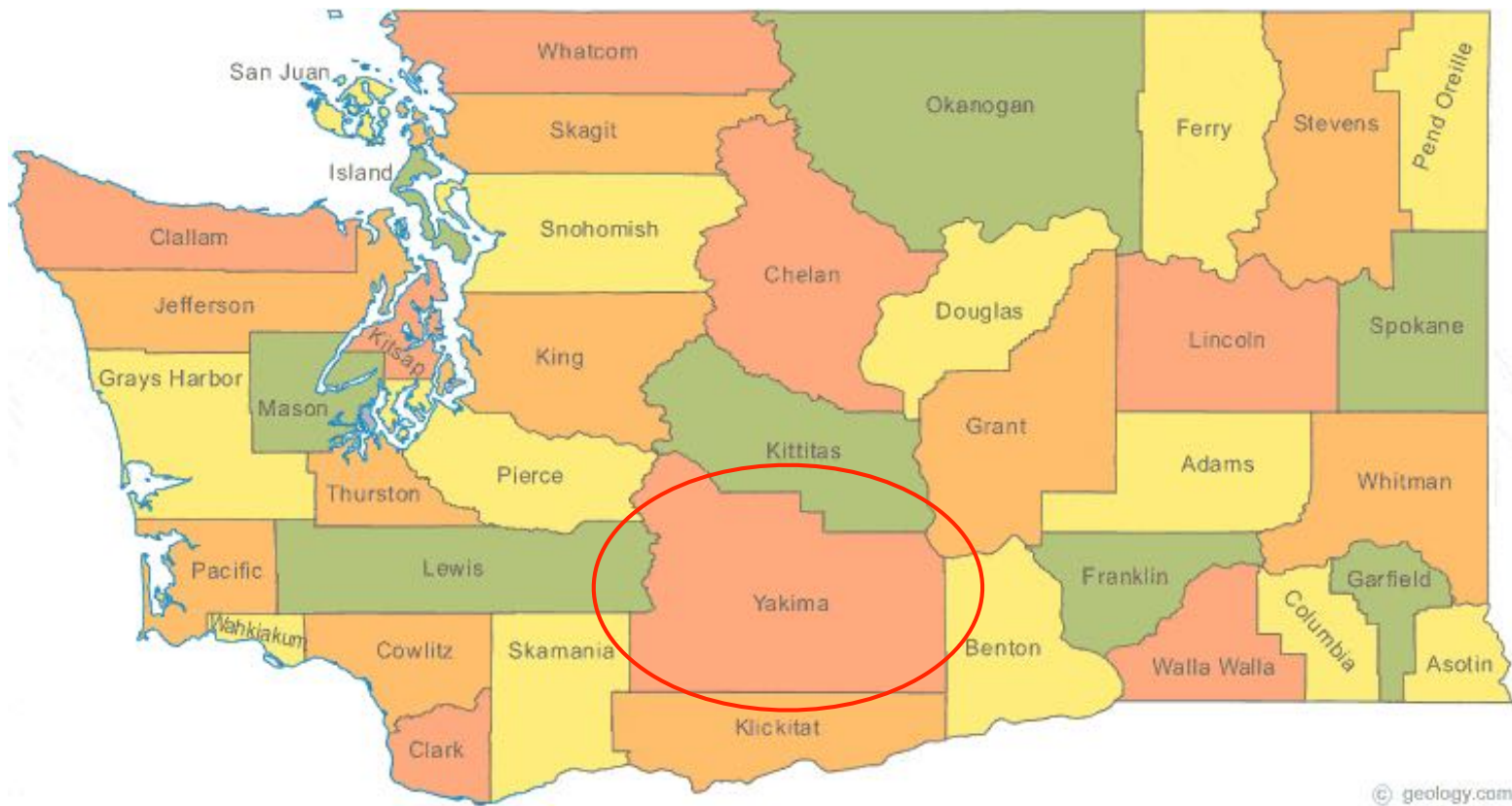
Hello  
my name is

*Mike*



R. Lee Ermev

Gunny Hartman is here  
to help with the key points!



Toppenish, WA  
*"Where the West Still Lives!"*

Granger, WA  
*"Where nobody lives..."*



# What we will cover...

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- How to know when you need to do a renovation or reconstruction project
- Identifying project goals
- Developing quality specifications & plans
- Contractor pre-qualifications
- Working with Consultants, Field Designers, Architects & Engineers- when you need them, when you don't
- Public bids, RFPs, single-source... what is appropriate for your project?
- Bid de-scope meetings - what are these for?
- Project execution & quality control
- Minor League Baseball - PDL compliance considerations
- Questions...?

# How to know when you need to do a renovation or reconstruction project?

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- Personal Observations
- In-Field & Laboratory Testing
- Field Survey
- Compliance with League rules/regulations

# Personal Observations

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- You see a problem
  - Drainage is slowing
  - Increased disease pressure
  - Thinned out turf/excess wear
  - Poa contamination





# In-Field & Laboratory Testing

- Test Pits & Infiltration Ring Tests
- Laboratory PSA & Undisturbed Core Sample Tests

**MATERIALS TEST REPORT FOR**

**REPORT TO:**

**DATE RECEIVED:** May-04-2018  
**REPORT DATE:** May-09-2018  
**CONDITION OF SAMPLE:** Normal

**PARTICLE SIZE (ASTM F1632)**

Lab ID#	Sample Name	Soil Separate* %			Sieve Size / Sand Fraction Sand Particle Diameter % Retained						
		Sand	Silt	Clay	No. 5 4.0 mm Gravel	No. 10 2.0 mm Gravel	No. 18 1.0 mm V. Coarse	No. 35 0.50 mm Coarse	No. 60 0.25 mm Medium	No. 100 0.15 mm Fine	No. 270 0.05 mm V. Fine
43685-1	Existing Rootzone Mix	98.2	< 1.0	< 1.0	0.0	0.5	6.5	24.9	44.4	16.1	6.1
USGA Recommendations for Greens		≥ 92%	≤ 5%	≤ 3%	≤ 3% Gravel ≤ 10% Combined			≥ 60% Combined		≤ 20%	≤ 5%***

**PARTICLE SHAPE / pH / PARTICLE SIZE PARAMETERS**

Lab ID#	Sample Name	Shape Sphericity	Shape Angularity	pH <sup>1</sup>	Uniformity Coefficient Cu	D15 mm	D85 mm	% Organic Matter Dry Wt.**
43685-1	Existing Rootzone Mix	Medium to Low	Sub-Angular to Sub-Rounded	5.0	2.7	0.19	0.80	0.23
USGA Recommendations for Greens					See Below			

\*ASTM F1632 and Determination of Size Factors SOP      <sup>1</sup>ASTM D4972, method A, CaCl<sub>2</sub>, 25 g sample used      \*\*ASTM F1647 Method A  
 \*\*\*Maximum of 10% combined on Very Fine Sand, Silt, and Clay fractions.  
 USGA Rootzone Coefficient of Uniformity Recommendations: 1.8 to 3.5 for Mixes with Peat; 2.0 to 3.5 for Mixes with Inorganic Amendment or Pure Sand.  
 Samples were tested as received and comments pertain only to the samples shown.  
 This report may not be reproduced except in full without written permission from Turf & Soil Diagnostics, Inc.  
 Samples were received with a transmittal letter.

Reviewed by \_\_\_\_\_

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# Field Survey

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# Compliance with League Rules & Regulations

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## “Gunny Says...”

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- Testing is Critical to a Successful Outcome
- Best “Bang for your Buck” is Laboratory Testing!

***“Don’t be cheap... get your testing & survey work done!”***

# Identifying Project Goals

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- What are you looking to accomplish?
  - Restore or Increase Infiltration Rates
  - Eliminate Poa
  - Replace a Worn Surface
  - Set New Grades
  - Switch Grass Types
  - Improve Warning Track Materials/Drainage





“Gunny Says...”

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***“Clear Goals =  
Good Plans & Specifications”***

# Developing Quality Specifications & Plans

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- Roadmap for your project
- Should be detailed, clean and concise
- Allows for most accurate pricing from MULTIPLE contractors =  to 
- Establishes the basis for all legal contracts

# Need to Haves

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- PLAN SET
  - New Lines & Grades
  - Current Field Elevation Survey



# Need to Haves

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- SPECIFICATIONS
  - All Materials (soils & aggregates, irrigation parts, drainage parts)
  - Quality Control Protocols & Submittal Schedule
  - Installation specifics (rootzone depths, infield mix depth, etc.)
  - Handling of Spoils & Construction Debris
  - Warranties
  - Insurance Requirements & Bonding (if applicable)
  - Contractor Pre-Qualifications





## “Gunny Says...”

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- Pre-Qualifications are one of, if not THE most important part of a specification
- Your only chance to clearly delineate the type of contractor and experience level you require for a given job
- This step can “Make or Break” your entire project!
- Some jurisdictions allow use of a “pre-qualification list”
- Examples:



# Example of Pre-Qualifications for Athletic Field Contractor

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- Years as Sports Field Contractor as PRIMARY Business
- Number of Comparable Projects in Last XXX Years
- Number of Completed, Comparable Projects in the Past
- Staff Experience
- Equipment Operator Experience
- Finish Grade Operator Experience
- In-house Grading Capabilities
- Certified Field Builder - Natural Grass (ASBA) & Certified Sports Field Manager (STMA) on Staff

# Nice to Haves

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- PLAN SET
  - Current Grading Plan
  - Current Irrigation & Drainage Plans
- SPECIFICATIONS
  - Preferred/Current Suppliers

# May Have to Haves

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- PLAN SET
  - Silt & Erosion Control Plan
  - Stamped drainage plan if modifications are done - IF REQUIRED



“Gunny Says...”

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***“If You Want It Done, It Needs To Be  
In Your Plans & Specs!”***

# Working With Consultants, Field Designers, Architects & Engineers...


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- When DON'T you need them?
- When DO you need them?



# When You Don't Need Them

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- Simple projects
  - Basic strip & regrade, basic irrigation work, etc. - IF you have veteran, experience staff
  - Use same contractor frequently & have trust built up
  - No public  involved that requires a public bid or RFP
- Owner-performed projects - Do It Yourself





# When You Don't Need Them

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- Design-Build Projects - Contractor is responsible to work with the Owner to develop all specs & plans as part of the project
  - Can be an efficient, cost-effective method
  - Can weaken project control from an Owner's perspective
    - Can result in lots of Subcontractor use unless specifically prohibited per the Contract
- Requires a very good relationship and trust in your Contractor

# When You Need Them

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- If you want the most control of your project
- If you want to be able to dictate specific means & methods
- If your project requires stamped, approved plans
- If you want multiple contractors to price
- Public bid projects
- PDL is going to require some type of plan submittal



# Consultant/Designer/Architect...

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- Experienced professionals who work for YOU
- Look out for the best interests of the CLIENT
- You're busy... they handle the details
  - Spec enforcement
  - Quality Control
  - Coordination with engineers, project managers, etc.

# Design Timelines

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- Can take up to six (6) months
- Start early
- Read, review, and review again, then again!
- Details are important



“Gunny Says...”

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***“Make sure your specifications and  
plan sets match!”***

# Consultant/Designer/Architect...

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- Keeps the Groundskeeper out of the fray



# Public Bids, RFPs, Single-Source

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- Have to determine what your type of approach is appropriate for your project
- Can be legally required

# Public Bids

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- Government jobs generally require a Public Bid or at least use of “pre-approved” contractors
- Know the laws in your jurisdiction
- Best Cost vs. Best Value (some areas allow)



# Requests for Proposals (RFPs)

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- Commonly used by Government (under a certain value) and Private Organizations
- Can use specifications and plans for price development
- Can be left up to prospective Contractors to provide price - they work out the details to a large extent

# Single Source

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- Hire who you want!
- Less common on Government jobs than Private Organization jobs
- Many states have “pre-approved” vendor lists for certain products and services for Government contracting



“Gunny Says...”

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***“Know what your organizational or governmental requirements are and stay out of trouble!”***

# De-Scope Meetings

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- Meeting with all bidders/RFP responders to review their submittals
- Provides opportunity for Owner to ask questions and gain clarity on the proposals
- Insures Bids/RFPs meet all qualifications and specifications



# Project Execution & Quality Control

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***“And we’re off!”***



# Critical Tasks to Perform During Project

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- Submittals & Quality Control
- Project Management
- Engineering

# Submittals & Quality Control

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- Make sure these are sent in per the specification schedule
- Review and approve each one
- Includes all supplies, shop drawings, product installation details, etc.

# Project Management

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- Hold Weekly/Bi-Weekly Construction Meetings Throughout the Duration of the Project
  - Construction Schedule & Delays
  - Upcoming Submittals
  - Areas of Non-Compliance
  - Any Other Issues
- If an item is out of compliance from the Plans & Specifications, make the Contractor aware ASAP!
  - Put it in WRITING!
  - DO NOT wait to bring it up... delays only make things worse.
- Provide specifics on the issue and reference the specification by section & number and plan sheet number/detail



# Engineering

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- Project Engineer is responsible for all surveys and compaction testing
- Contractor should coordinate visits with the Engineer
- Owner & Consultant/Architect/Designer should get copies of all submitted reports for review
- Reports should be handled the same as a submittal approval



“Gunny Says...”

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***“Don’t be a pain! Be fair to your  
Contractor!”***



“Gunny Says...”

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***“Ensure honesty... it’s okay to insist the specifications and plans are followed.”***



***“Trust, but verify!”***

# Project Completion

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- Comprised of...
  - Substantial Completion
  - Final Completion

# Substantial Completion

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- When most of the job is finished
- Provides opportunity to make final assessments of the work
- Review remaining items to be completed
- “Punch List” formation

# Final Completion

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- Job is finished completely
- All punch list items done
- All warranties in full effect



“Gunny Says...”

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***“Payday doesn’t happen until Final  
Completion is done!”***

# Minor League Baseball PDL Compliance Considerations

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- Know the playing field design requirements
  - Slopes
  - Dimensions
  - Trip hazards, etc.
- Requiring some type of plan submittal on projects for review PRIOR to project start



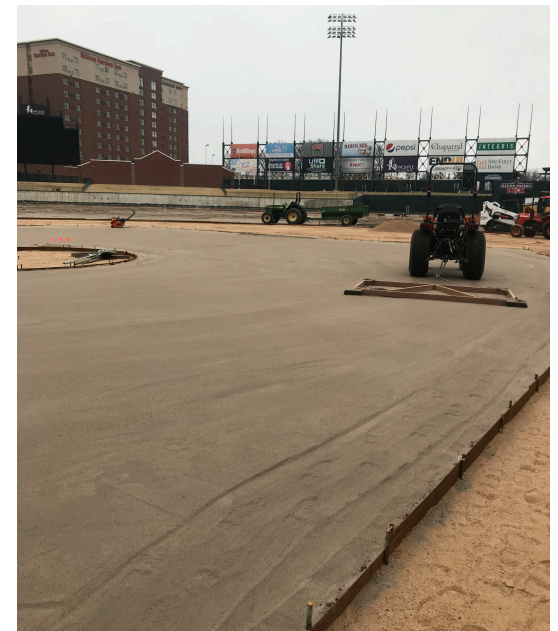




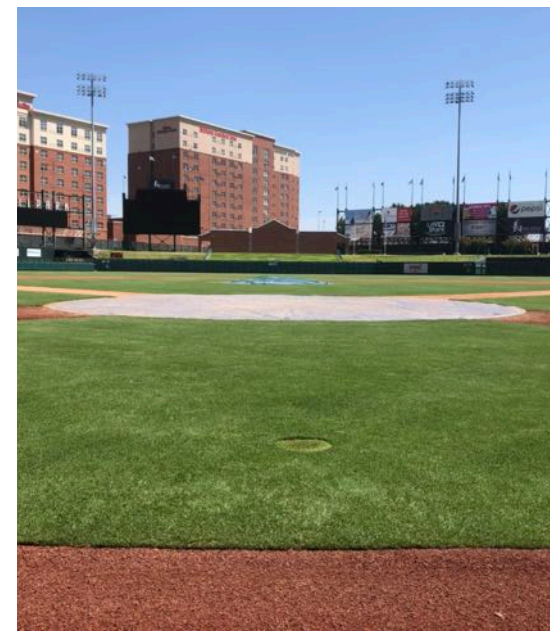
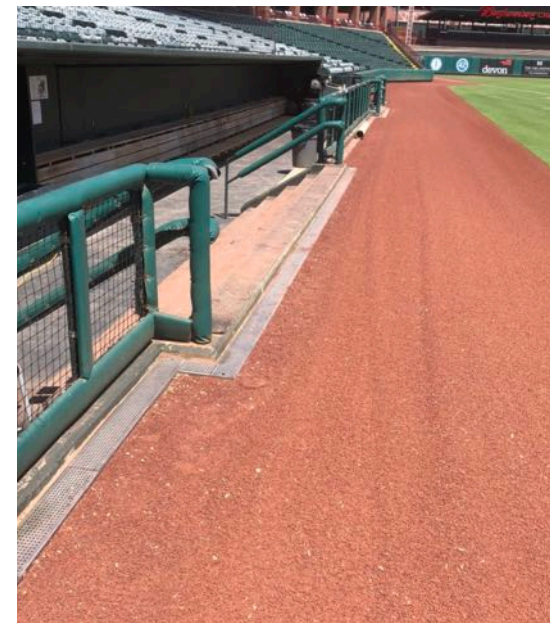
“Gunny Says...”

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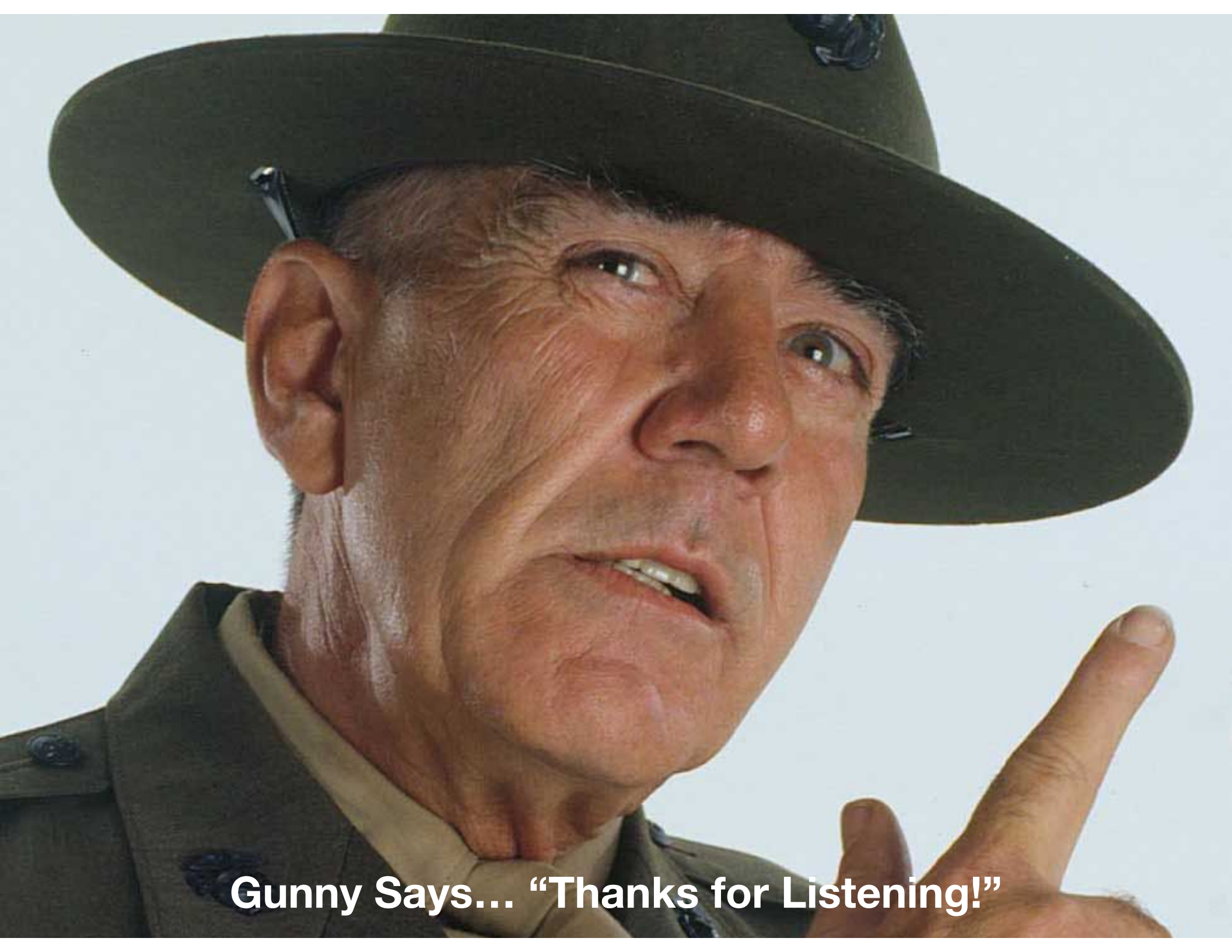
***“With the new PDL requirements, your field should always be surveyed at completion to confirm compliance!”***



Good planning leads to successful projects  
from Start...



to Finish...



**Gunny Says... "Thanks for Listening!"**



**Questions?**

# B&A

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# Thank You!