

Meeting 2: Mechanics

Liane Jeschull

Mechanics

- Typical issues
 - Spelling
 - Capitalization
 - Hyphens
 - Apostrophes

Spelling

Why is it important?



A screenshot of a tweet from Donald J. Trump (@realDonaldTrump) posted on May 31, 2017, at 12:06 AM. The tweet text is "Despite the constant negative press covfefe". The tweet has 117,536 retweets and 148,785 likes. The interface includes a profile picture of Donald Trump, a "Follow" button, and icons for retweeting, liking, and replying.

Donald J. Trump 
@realDonaldTrump

[Follow](#)

Despite the constant negative press covfefe

RETWEETS 117,536 LIKES 148,785

12:06 AM - 31 May 2017

38K 118K 149K

Spelling



Diane N. Sevenay

@Diane_7A

Follow

Make America #Covfefe Again #MACA



Retweets
203

Likes
284



10:32 PM - 30 May 2017



12



203



284

Spelling

Beware of commonly misspelled words

- license, exaggerate, accommodate, committee, commission
- **-ze vs. -se:**
analyze, advertise
- **-ence vs. -ance:**
persistence, perseverance
- New England place names:
Massachusetts, Narragansett, Mt. Wachusett, Chappaquiddick, Cuttyhunk, Tuckernuck
- ... more **that** ... > ... more **than** ...
- ... could/would/must **of** (been) ... > ... could/would/must **have** (been)...

Spelling

Beware of commonly confused words (same pronunciation/different spelling or same spelling/different pronunciation)

- lead/led (Verb) vs. lead (Noun)

Mr. Engineer was the Project Manager for Fancy Project. He ~~lead~~ **led** the design effort and oversaw the review of critical items during the construction phase.

- lose (Verb) vs. loose (Adjective)

Soil conditions unsuitable for test borings may include ~~lose~~ **loose** or soft soils, organic soils, or miscellaneous/urban fill soils.

Spelling

Beware of commonly confused words

- lie (Present)/ lay (Past)/ lying
- lay (Present)/ laid (Past)/ laying > 'to put'
- lie (Present)/ lied (Past)/ lying > 'to tell a lie'

- affect (V/N) > mostly used as Verb ('to exert influence on...')
- effect (V/N) > mostly used as Noun ('result')

- They're/ their/ there
- It's/ its
- You're/ your
- Who's/ whose

Spelling

American English vs. British English

- license (AmE)/ licence (BrE)
- canceled, traveled (AmE)/ cancelled, travelled (BrE)
- analyze (AmE)/ analyse (BrE),
But: ~~advertize~~/ advertise (both AmE & BrE)
- fulfill (AmE)/ fulfil (BrE)
- thru (AmE only)/ through
- -boro (AmE only)/ -borough

Spelling

[From bridge inspection report:]



The north side of the bridge has been demolished entirely, starting from the north median stringer. Among the removed structural members are Beams 1 **thru** 8 of Spans 1 & 5, Girders 3 & 4 of Spans 2 **thru** 4, Floorbeams 5 & 6 of Spans 2 & 4, and all elements of the northeast and northwest leaves, which includes Floorbeams 1 **thru** 4 and Stringers 1 thru 8 in each leaf.

Spelling

Compare:

- Marlborough, MA
Westborough, MA
Northborough, MA
Southborough, MA
Middleborough, MA
Peterborough, NH
- Attleboro, MA
Brattleboro, VT
Marlboro, VT
Readsboro, VT
Wardsboro, VT
Hillsboro, NH



Capitalization

Capitalize proper names and proper nouns (including titles, specific certifications and licenses, manuals, policies etc.).

- Mr. Engineer is a **staff structural engineer** at Green. He has a **master** degree in **civil engineering** with a specialization in **structural engineering/ Structural Engineering** and is a licensed **professional engineer**. His responsibilities at Green include the preparation of design calculations, construction drawings, cost estimates, and bridge load ratings. Mr. Engineer also assists Green's structural **project engineers** on various aspects of building projects. Prior to joining Green, Mr. Engineer worked as a **structural engineer** on several MassDOT mega-projects.
- Over the past 10 years, there has been a notable increase in emphasis on **Complete Streets**, building on previous concepts of **traffic calming, safe routes to school**, and **context-sensitive principles** to name a few.

Capitalization

Capitalize proper names and proper nouns.

- Professional Engineer (P.E.)
- Professional Traffic Operations Engineer (PTOE)
- Registered Landscape Architect (R.L.A.)
- Professional Land Surveyor (P.L.S.)

- the City of Peabody
- the Town of Littleton
- City Hall/ Town Hall (institution), but: the city hall/ the town hall (building)
- the Board of Selectmen/ the Selectmen
- the Littleton Conservation Commission

Capitalization

Capitalize the first letter of numbered references in reports and proposals.

- See Table 1/ Figure 2/ Chapter 3/ Section 4/ Appendix A.
- Refer to Sketches 1 through 3 and Photos 1 through 7.
- But: The following table shows.../ The table below shows...

Capitalize numbered bridges, roadways, and parts of bridges.

- (State/MA) Route 9, (U.S.) Route 1, Interstate 95
- Beams 1 thru 8 of Spans 1 & 5, Girders 3 & 4 of Spans 2 thru 4, Floorbeams 5 & 6 of Spans 2 & 4, Stringers 1 thru 8
- Green performed a Hydraulic and Scour Study as part of the rehabilitation of the MBTA Railroad Bridge No. H-12-061(AIF) over the Merrimack River in Haverhill, MA (Merrimack River Bridge).

Capitalization

Make sure to capitalize abbreviations and acronyms according to convention.

- MASSDOT > MassDOT
- UMASS > UMass

- Ms. Engineer has thorough knowledge of MassDOT, RIDOT, and VTrans design guides and standards and is proficient in AutoCAD, Microstation, AASHTOWare Bridge Rating, STAAD, MDX, Midas, LEAP Conspan, LEAP RCPier, ENERCALC, CSiBridge, and MathCAD.
- Mr. Engineer has thorough knowledge of FHWA/AASHTO design standards and is proficient in many design/analysis applications, including AutoCAD, MicroStation, InRoads, Geopak, Synchro, Sim Traffic, SIDRA, HCS, Transyt-7F, QuickZone, AutoTurn, GuidSIGN, SignCAD, TransCAD, GPS Travel Time, PC-Travel, Micro PAVER, DARWin.

Capitalization

Make sure to capitalize only what's part of the proper name or title.

- Mr. Engineer is a **Licensed Professional Engineer** and **Certified Professional Traffic Operations Engineer**.
- The engineering services included the design of a new parking lot, a new driveway, and new walkways and sidewalks per **ADA/MAAB Standards**.
- The project was advertised for construction as **Construction Contract XYZ**. This **Contract** was awarded in October 2014, and actual **Construction** started in April 2015.
- Our knowledge of local, state, and federal requirements and guidelines, such as the **MUTCD**, the **Americans with Disabilities Act (ADA)**, and the **draft/Draft[?] Public Rights-of-Way Accessibility Guidelines (PROWAG)** has allowed our projects to be designed and constructed successfully, while meeting all the necessary requirements and best practices.

Capitalization

Be consistent.

- Green continues to work in partnership with **the Town of Littleton**. Recently, Green participated in an open forum, where our staff presented top priorities for improvements in pedestrian and bicycle safety in **the town's** Complete Streets Prioritization Plan. For more information on **the Town's** program, you can read on.
- The proposal shall contain a staffing plan with resumes that identifies the **principal in charge**, the **project Manager**, and key personnel who will work on the design and site evaluation as well as an organizational chart of the team.

Capitalization

Be aware of potential meaning differences.

- Working closely with the town, we reviewed and compiled important aspects of past **town studies/ Town studies** such as **the master plan/ the (2015) Master Plan** and the MAPC regional bicycle plan.
- One of the goals of the Sustainability Initiative is to incorporate **green infrastructure/ Green Infrastructure** and low-impact development strategies for stormwater management into site designs.

Capitalization

Avoid **ALL CAPS** (even to emphasize something), except in headings where required by Green's report and proposal templates—it's the equivalent to shouting (along with the exclamation mark).

Hyphens

Hyphenate compound modifiers before a noun.

- The major design elements of this new recreational facility will include a **multi use** turf field, two basketball courts, open green space, a playground, restrooms, concessions, parking, landscaping, site lighting, and a **multi use hard surfaced** path throughout the facility. The **storm-water** management design uses several **low impact** stormwater techniques, including porous pavement and rain gardens. The **civil site** design included site layout, grading, drainage design, landscape design, and parking layout design.
- Improvements include new and repaired sidewalks, **ADA compliant** ramps, pedestrian crossing signals, bicycle lanes, transit shelters, bicycle storage equipment, driver speed display feedback signs and **place making** components.
 - Avoid ambiguity.

Hyphens

Hyphenate compound modifiers before a noun.

- civil-site engineering OR civil/site engineering, Design-Build project OR Design/Build project
- context-sensitive design approach, cost-effective engineering services, on-time delivery, energy-efficient design, ADA-compliant/wheelchair-accessible sidewalks and ramps, low-impact development, five-year time frame, stand-alone project, flood/heat-resistant materials, below-grade retention system
- six-story multi-unit residential building, three-level below-grade parking garage, at-grade intersection
- mid-block pedestrian crosswalks, full-depth pavement reconstruction
- But: Services were delivered on time.

Hyphens

Hyphenate compound modifiers before a noun.

- with adjectives/participles ending in *-ing* or *-ed*:
hard-surfaced, Utility-Related Abatement Measure (URAM), Fiberglass-Reinforced Polymer Mortar Pipes, cable-stayed bridge, State-owned roadway, MassDOT-funded project, low-growing evergreen shrubs
- hyphen between all members of a complex modifier (PP or NP)
on-the-fly evaluation of structures, cast-in-place concrete, up-to-date software/state-of-the-art facilities, right-of-way takings, park-and-ride facility, cut-and-cover tunnels, curb-to-curb width
But: the software is up to date, the concrete is cast in place, the structure was evaluated on the fly
- not with adverbs (*-ly*):
a structurally-deficient bridge > a structurally deficient bridge
a heavily-used roadway > a heavily used roadway

Hyphens

Hyphenate compound modifiers before a noun.

- number and unit of measurement to indicate length or width of a roadway, bridge, or pipe
 - a 16-inch diameter pipe, BUT: a pipe 16 inches in diameter
 - a 54-inch steel water main, BUT: a steel water main 54 inches in diameter
 - a 1.7-mile section of Route 126, BUT: 1.7 miles of roadway
 - a 2,600-foot section of Main Street, BUT: 2,600 feet of roadway
 - a 20-foot wide roadway, BUT: a roadway width of 20 feet/ a roadway 20 feet in width
 - a 780'-long three-span continuous open spandrel deck arch

Hyphens

Compare:

- The sliplining of 5,700 feet of existing 30-inch diameter pipe with 24-inch diameter pipe was prioritized.
- The water improvement work consisted of replacing 6,000-feet of old cast iron water mains that ranged in size from 8-inch to 30-inch.
 - 6,000-feet of old cast iron water mains > 6,000 feet of old cast iron water mains
 - 8-inch water main, 30-inch water main, but: water mains that ranged in size from 8 inches to 30 inches

Hyphens

Sometimes the prefixes *pre-* and *post-*, *non-*, and *re-* are hyphenated (before a noun), but usually not the prefixes *super-* or *sub-* and not the suffix *-wide*.

- post-construction issues, pre-design environmental sampling, pre-development 2-year 24-hour storm discharge, nondestructive/non-destructive testing, non-collusion, re-grading
- But: prestressed concrete girders, post-tensioned concrete box, precast concrete
- the bridge superstructure/substructure, a subdrain/sub-drain[?] system, substandard roadside safety, width, and alignments, gravel subbase, subsurface utility engineering
- Statewide bridge inspections, Townwide ADA projects

Be aware of industry-specific terms and conventions.

- stormwater, wastewater
- neck-downs, bump-outs

Hyphens

Revise:

- The goal of the project was to determine low cost options available to improve the safety of the corridor and better accommodate multi-modes of travel, including pedestrians and bicycles.
- girder floorbeam-stringer-framing system

Apostrophe

Use apostrophes to indicate possession.

	Singular	Plural
Base form	Ø the bridge the campus	s the bridges the campuses
Possessive of nouns NOT ending in -s, -z, -x, -se, or -ce	's the building's foundation the bridge's substructure	's the memoranda's contents The Women's Health Building
Possessive for nouns ending in -s, -z, -x, -se, or -ce	's the campus's buildings Mr. Jones's experience	' the buildings' foundations the Joneses' children

Apostrophes

Use apostrophes to indicate possession.

- **Ms. Engineer duties** included reviewing available record information and previous studies, preparing test pit location plans, supervising field testing work, and preparing permit applications with the Boston Park Department, DCR, and MassDOT.
- Hampshire Dining Commons, one of four active dining commons on the **University of Massachusetts'** flagship campus in Amherst, recently underwent a full systematic renovation and upgrade.
- Fox Hall at UMass Lowell serves as a home for faculty offices, classrooms, a dormitory for over 800 freshmen students and **the campus'** largest dining hall.

Apostrophes

Use apostrophes to indicate possession.

- Green continues to work in partnership with the Town of Littleton in developing one of the first **Complete Streets Plans'** in the Commonwealth.
- With over 20 **years'** combined experience, our backgrounds are in architectural lighting, landscape architecture, and interior design.

Apostrophes

Revise:

- Green provided civil/site engineering services for the improvements to the doctor's parking lot that services the hospital.
- Green also provided construction management services to the City which included attending weekly meetings, preparing meeting memorandums, corresponding with the contractor, reviewing construction submittals, resolving construction issues and approving contractor's payment requisitions.
- Green's attention to detail and to avoiding impacts to the wetlands, stonewalls, trees, and abutters' property proved vital in obtaining the necessary approvals.

Apostrophes

Use apostrophes with plurals (with abbreviations/acronyms, numbers, and letters).

- with acronyms/abbreviations if the acronym/abbreviation includes periods:
We have 30 P.E.'s.
- optional if the acronym/abbreviation does not include periods:
We have three PTOEs/PTOE's.
TMPs/TMP's, NTPs/NTP's, NOIs/NOI's, WQCs/WQC's, RFIs/RFI's
- with numbers
the '90s, but the 1990s
- with letters
the Q&A's