

2020 Standard Specifications for Highway Construction Summary of Changes from the 2017 Edition

The 2020 Edition of the *Alaska Standard Specifications for Highway Construction* includes Statewide Standard Modifications to the 2017 Edition that were issued by Chief Engineer's Directive and intended to apply to all FHWA projects. Other proposed revisions recommended from various sources are also included. **Revisions identified with yellow highlight have been added after this summary was issued December 30, 2019.**

Num	Section	Reason/ No.	Heading	Nature of Change
			General Contract Provisions	
1	101-1.02	2019 rev	Acronyms	Revert to 2004 Acronyms relating to ATM - Alaska Test Methods Manual
2	101-1.03	HSM18-4, HSM18-1 2019 rev	Definitions	Std Mod Alaska Standard Plans, Std Mod Electronic Bidding, Revise - Major Contract Item
3	102-1.01	2019 rev	Qualification of Bidders	Reorder numbered items Inserted Statutory ref for Business License
4	102-1.04	2019 rev	Examination of Plans, Specifications, Special Provisions, and Work Site	Reference Invitation To Bid form number, follow bid form instructions for questions
5	102	HSM18-1	Multiple Subsections	Std Mod Electronic Bidding
6	103-1.01	HSM18-1	Consideration of Bids	Set off Alaska preference categories for wholly state-funded projects and revise descriptions for clarity
7	103-1.02	2019 rev	Subcontractor List	Specify subcontractor licensing requirements if wholly state-funded
8	103-1.03	2019 rev	Award of Contract	Add statements clarifying subcontractor licensing/registration requirements on federal and wholly state-funded projects
9	103-1.06	2019 rev	Insurance Requirements	<ol style="list-style-type: none"> 1. Minor corrections. 2. Align language with Insurance carrier policies. 3. Delete "material change of conditions" because ACORD Form ver. 25 no longer provides notice of "material changes." 4. Revise cancellation/renewal notice language.
10	104-1.01	AKOSH	Intent of Contract	Address Multiple Employer risk: Contractor responsible for "applicable federal, state, and local laws,"... etc.
11	104-1.02	Pgm Rev	Changes	Add 4. Time Analysis. Before a Change Order or Supplemental Agreement
12	104-1.03	Pgm Rev	Differing Site Conditions	Address FHWA Regs per Program Review findings
13	104-1.06	Pgm Rev	Value Engineering Change Proposals	Remove "loss of" from anticipated profits Delete unused pay item number from Item 5. Payment
14	105-1.01	AKOSH	Authority of the Engineer	Address Multiple Employer risk: Issue suspension of work
15	105-1.02	AKOSH	Plans and Working Drawings	Address Multiple Employer risk: approval of working drawings not determination of compliance with law
16	105-1.04	2019 Rev	Coordination of Plans, Specifications, and Special Provisions	Revise Standard Drawings to Alaska Standard Plans consistent with conversion to Standard Plans under Standard Modification HSM18-4
17	105-1.10	AKOSH	Inspection of Work	Address Multiple Employer risk: all work subject to inspection for compliance with Contract

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18	105-1.13	2019 Rev	Maintenance	Revise Item 3. to reflect name of subsection 105-1.15
19	105-1.14	2019 Rev	Partial Completion	Revise reference to Period of Establishment under Section 621
20	105-1.15	2019 Rev	Project Completion	Revise reference to Period of Establishment under Section 621
21	105-1.17	2019 rev	Claims	Require contractor to bring claims within 90 days or waive right to relief
22	106-1.01	2019 rev	Source of Supply and Quality Requirements, Alaska Agricultural/Wood Products	Revise reference to subsection 105-1.03
23	107-1.01	2019 rev	Laws to be Observed	Refine requirements to display posters for workers depending on funding
24	107-1.02	2019 rev	Permits, Licenses, and Taxes	Correct reference to title of Sec 641, and "provisions" (e.g. the content) of permits
25	107-1.06	2019 Rev	Sanitary, Health, and Safety Provisions	Add "and Surety" for consistency with other clauses in the contract
26	108-1.02	2019 rev	Notice to Proceed	NTP may include limits or restrictions
27	108-1.03	2019 rev	Prosecution and Progress	Include SPCC Plan in item 5.
28	108-1.05	AKOSH	Character of Workers, Methods, and Equipment	Address Multiple Employer risk: reasons to remove worker: alter "safety of public" to "imminent harm for traveling public," add conform w/ applicable laws
29	108-1.06	AKOSH	Contract Time, Extension of Contract Time and Suspension of Work	Address Multiple Employer risk: reason for no additional time or compensation for suspension: failure to correct "risk of imminent harm to traveling public", and violations of applicable laws.
30	108-1.06	Pgm Rev	Contract Time, Extension of Contract Time and Suspension of Work	Cross reference to Subsection 104-1.02 to describe extension of Contract time
31	108-1.06	Pgm Rev	Contract Time, Extension of Contract Time and Suspension of Work	Address FHWA Regs per Program Review findings
32	108-1.09	2019 rev	Termination for Convenience	Delete condition for leasing from affiliated company – under subitem 3.b(3)
33	108-1.09	AKOSH	Termination for Convenience	Address Multiple Employer risk: add costs not payable loss of anticipated profits for work not performed – subitem 3.c(1); revise "Loss of anticipated profits" to "Anticipated profits"
34	109-1.01	2019 rev	General	Revise description of Pay Item
35	109-1.01	2019 rev	General	Remove pay item cross-referencing statement added under HSM18-1
36	109-1.04	Pgm Rev	Compensation for Altered Quantities	Revise conditions for equitable adjustment to address FHWA recommendation to change "loss of anticipated profits" to "anticipated profits"
37	109-1.09	Pgm Rev	Eliminated Items	Revise language to address FHWA recommendation to change "loss of anticipated profits" to "anticipated profits"
38	120-1.01	SM-3	Description	Update DBE utilization goal
Technical Specifications				
1	General			Add "PAY ITEM" to pay item tables for consistency with prior usage.
2	General			Modify, throughout, pay item numbering and explanations in subsections 4.01 Method of Measurement and -5.01 Basis of Payment.
3	202-1.01	2019 Rev	Description	Add "Remove existing bridges as indicated on the Plans."

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4	202-3.02	2019 Rev	Mail Boxes	Revise Standard Drawings to Alaska Standard Plans consistent with conversion to Standard Plans under Standard Modification HSM18-4
5	202-3.03	2019 Rev	Removal of Bridges, Culverts, and Other Drainage Structures	Delete and replace section per Bridge
6	306-2.01	2019 Rev	Materials	Add "Use PG 52-28 if no Grade is specified."
7	307-2.01	2019 Rev	Materials	Add "Use PG 52-28 if no Grade is specified."
8	308-1.01	2019 Rev	Description	Reference use of emulsified asphalt
9	401-2.01	2019 Rev	Asphalt Binder	Add "Use PG 52-28 if no Grade is specified."
10	401-2.02	2019 Rev	Liquid Anti-Strip Additive	Alter minimum coating, include list of minimum dose by anti-strip type
11	401-3.17	2019 Rev	Joints	Revise to improve administration of joints relating to incentive/disincentive
12	401-3.18	2019 Rev	Surface Requirements and Tolerances	Revise to improve administration of pavement smoothness relating to incentive/disincentive
13	401-4.02	2019 Rev	Acceptance Sampling and Testing	Add statement to address "shortened lots"
14	401-4.02	2019 Rev	Acceptance Sampling and Testing	Address refilling and compacting of asphalt core voids
15	401-4.03	2019 Rev	Evaluation of Materials for Acceptance	Reverse order of two paragraphs for logic
16	401-4.03	2019 Rev	Evaluation of Materials for Acceptance	Include third significant digit for pay factor to agree with 106-1.03 Testing and Acceptance
17	406	2019 Rev	Rumbel Strips	Revise section to address improvements implemented on projects
18	501.2.01	2019 Rev	Materials, item 4. Anchors and Inserts	Add Expanded Polyethylene
19	501-2.02	2019 Rev	Composition of Mixture - Job Mix Design	Added option for Item 2. Alternate Gradations
20	501-2.02	2019 Rev	Composition of Mixture - Job Mix Design	Item 3. Air Content revised
21	501-3.03	2019 Rev	Evaluation of Material for Acceptance	Take samples at delivery truck discharge
22	501-3.03	2019 Rev	Evaluation of Material for Acceptance	Revise Slump requirements for field acceptance
23	503-3.06	2019 Rev	Headed Bar Reinforcing Steel.	Replace section per Bridge Design
24	504-3.02	2019 Rev	Erection	Include Bridges and Structures Manual
25	505	2019 Rev	Piling	Edit entire section per Bridge and Stwd Mat's
26	506-2.01	2019 Rev	Materials, Mastic Sealer	Revise to "one brand name or equal"
27	506-3.03	2019 Rev	Untreated Timber	Revised 506-3.03 Subsection title UNTREATED TIMBER to RESERVED and deleted the content. Content conflicts with current requirements for treating timber – timber is not to be field treated except as allowed in AWPA M4.
28	508	2019 Rev	Waterproofing Membrane	Replace entire section per Bridge Design
29	510-3.04	2019 Rev	Hydrodemolition	"Wastewater Treatment Plan" not appropriate in this context. Substitute "work plan" and appropriate details.
30	514	2019 Rev	Concrete Surface Treatments	Add new section per Bridge Design
31	516	2019 Rev	Description. Materials, Method of Measurement, and Basis of Payment per Bridge Design	Revise to Waterstops (one word) and other tweaks per Bridge
32	516-3.03	2019 Rev	Waterstops	Replace subsection per Bridge Design
33	520-1.02	2019 Rev	Definitions	Revise definition of Temporary Bridge Package and correct form number
34	520-2.04	2019 Rev	Design Requirements, subitems 1.b, 2.a.	Revise paragraphs 1.b., 2.a, per Bridge Design
35	520-2.04	2019 Rev	Design Requirements, subitems 3.a.	Delete reference to LRFD as unnecessary after edit of subitem 1b. above.
36	520-2.04	2019 Rev	Design Requirements, item 4.	Require temp bridge design to satisfy load factor of 1.0 or more.
37	520-2.04	2019 Rev	Design Requirements, subitems 4.a. and 4.b. Add LRFR requirements, d. e. and f.	Replace subitems a. and b. Add LRFR requirements, d. e. and f.

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37.1	606	SM-4	Guardrail	Replaced entire section. Later modified as follows
38	606-2.01	2019 Rev	Materials	Revise class of concrete to align with values in Sec 550
39	606-2.01	2019 Rev	Materials, para 5	Revise statement and coordinate with edit to Std Plan G-00, relating to color and dimensions of delineator supports and sheeting
40	606-3.01	2019 Rev	General, para 5 General, para 10, item 1.	Reference 643-2.02 for temporary crash-cushion crash worthiness Revise placement of guardrail delineators
41	606-4.01	2019 Rev	Method of Measurement	Delete reference to Bridge Rail W-beam transition (not MASH compliant) which was added under Standard Modification SM-4
42	606-5.01	2019 Rev	Basis of Payment, Item 3.b.	Delete "concrete, rebar" from Buried in Backslope device
43	608-2.01	2019 Rev	Materials, item 2.	Add "Use PG 52-28 if no Grade is specified."
44	608-2.01	2019 Rev	Materials, item 3.	Relocate para from Construction to Materials Elect Yellow detectable warnings only
45	608-3.04	2019 Rev	Detectable Warnings	Reflect current DOT&PF ADA standard
46	609-2.01	2019 Rev	Materials	Add "Use PG 52-28 if no Grade is specified."
47	610-2.01	2019 Rev	Materials	Restrict percent by weight 1-inch minus agg.
48	615-2.01	2019 Rev	Materials	Add Sign Support Fasteners – 730-2.07
49	615-2.01	2019 Rev	Materials, item 2.	Add Type XI sign sheeting as an option for all signs allowing or requiring Type IX
50	615-2.01	2019 Rev	Materials, item 3.	Require Class A, Section 501 concrete for overhead sign support foundations Revise concrete to require Commercial Concrete Section 550, Class B for roadside signs.
51	615-2.01	2019 Rev	Materials, item 4.	Add Type IX and XI sign sheeting as an option for delineators
52	615-2.01	2019 Rev	Materials, item 5.	Clarify sign sheeting warranty begins with fabrication of the sign
53	615-3.01	2019 Rev	Construction, item 9.	Include MASH crashworthiness requirements
54	616	2019 Rev	Thaw Pipe and Thaw Wire	Add requirement for material rating meeting installed conditions, per NEC. Revise, update, and expand Materials and Construction requirements to current electrical standards.
55	617-2.01	2019 Rev	Materials	Revise RR crossing pads to list typical current materials and product names
56	617-3.01	2019 Rev	Construction Requirements, General, 3.b.5	Add "installation requirements" to sentence
57	621-2.01	2019 Rev	Plant Stock	Prohibit invasive species, as identified on DNR webpage at time of bid Submittal requirements/criteria
57.1	630	HSM18-3	Geotextile for Embankment and Roadway Separation, Stabilization and Reinforcement	Replaced and renamed section. Later modified as follows
58	630-5.01	2019 Rev	Basis of Payment	For consistency with other sections, alter pay item from two Types (630.0003.0001 and 630.0003.0002) into one listed item 630.0003.
58.1	631	HSM18-3	Geotextile for Subsurface Drainage and Erosion Control	Replaced section.
58.2	632	HSM18-3	Paving Fabric	Replaced section. Later modified as follows
59	632-2.01	2019 Rev	Materials	Delete reference to Asphalt Binder

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60	632-3.01	2019 Rev	Construction	Clarify asphalt sealant is emulsified asphalt or tack coat as defined in Sec 702-2.03, correct temperature of application by referencing Table 702-1.
60.1	633	HSM18-3	Silt Fence	Replaced section.
60.2	634	HSM18-3	Geogrid for Embankment and Roadway Stabilization and Reinforcement	Replaced and renamed section.
61	635	2019 Rev	Insulation Board	Revise to align with NR regional special
62	640-1.01	2019 Rev	Description, item 6.	Delete reference to WHPL #197 as unnecessary, now in DOL regs. WHPL #197 information is contained in Pamphlet 600 and WHPL #197 is expected to be rescinded.
62.1	641-3.03	SM-2	Stabilization before Seasonal Thaw	Replaced and renamed as item 5. Stabilization before Fall Freeze up and Spring Thaw, to clarify requirements for freeze-up and section of the CGP, list exceptions.
63	641	2019 Rev	Erosion, Sediment, and Pollution Control	Revisions throughout by recommendation of Stwd and regional Environmental specialists
64	642	2019 Rev	Method of Measurement, Three person survey party	Deleted requirement for payment by 109-1.05 Compensation for Extra Work
65	643-1.02	2019 Rev	Definitions	Clarify definitions in 643 apply only in this section. Revise Alaska Traffic Manual to align with the definition in that document
66	643-2.01	2019 Rev	Materials, item 12.	Require power cords to comply with NEC Article 600.10 Portable or Mobile Signs
67	643-2.01	2019 Rev	Materials, item 13.	Update company and addresses of Plastic Safety Fence.
68	643-2.01	2019 Rev	Materials, item 15.	Add exception to permit temporary use of new or serviceable used guardrail end terminals according to 643-2.02
69	643-2.01	2019 Rev	Materials, item 16.	Allow optional use of Type XI sign sheeting for flagger paddles
70	643-2.02	2019 Rev	Crashworthiness	Align crashworthiness of temporary work zone with MASH Implementation Memo
71	643-3.04	2019 Rev	Traffic Control Devices, para 8, and Item 9. Truck Mounted Attenuators	Revise paragraph to reference subsection 643-2.02 crashworthiness
72	643-3.10	2019 Rev	Lighting for Night Work, paras 2 and 3, and para 6	Paras 2 and 3. Minor wordsmithing to reduce potential for liability, and Reference "state and local...requirements"
73	644-2.01	2019 Rev	Field Office	a. Update internet and phone system requirements for Engineer's Field office b. Clarify cost sharing for Field Office equipment/services, c. update to current DOT&PF ADA Standard
74	644-2.02	2019 Rev	Field Laboratory	Include LED lighting fixtures as an option
75	644-2.03	2019 Rev	Curing Shed	Revise concrete curing shed requirements
76	644-2.07	2019 Rev	Storage Container	Include LED lighting fixtures as an option
77	644-2.05	2019 Rev	Vehicles	Include ATV and UTV vehicles in description to match pay item options
78	646-2.01	2019 Rev	Submittal of Schedule	Remove 60-day from NTP requirement for finalizing CPM schedule. Schedule Updates on a frequency that is satisfactory to the Engineer
79	646-3.01	2019 Rev	Requirements and Use of Scheduled	Working group recommendation to delete statement that CPM analysis will be used to evaluate time extensions. Change comes from FHWA Pgm Rev for Differing Site Conditions, Change Order Time Extensions.
80	646-4.01	2019 Rev	Method of Measurement	Progress payments for CPM

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81	646-5.01	2019 Rev	Basis of Payment	Add statement on maintaining updated CPM
82	649	SM-1	Governor's Workforce Development	Remove and Reserve Section. Prior Governor's Executive Order cancelled by current Governor
83	660	2019 Rev	Signals and Lighting, throughout	Edit for improved terminology, accuracy, specificity, and requirements
84	660-3.02	2019 Rev	Foundations, Item 1	Add detail consistent with Light Pole (L-30) and Signal Pole Foundation (T-52) drawings
85	660-3.02	2019 Rev	Foundations, Item 1.k.	Add Pretensioning description/detail (from LTS-6-13 Section 5.6.3 Anchor Bolt Tightening)
86	660-3.02	2019 Rev	Foundations, Item 3	Add cabinet and junction box placement detail
87	660-3.06	2019 Rev	Bonding and Grounding, para 6	Revise to describe cabinet and equipment grounding requirements, cable gauge, and NEC Article reference. Replace "slip base" with "breakaway," which includes slip base and frangible coupling supports
88	660-3.07	2019 Rev	Traffic Controller Assemblies	Delete floppy disk as a medium for submitting wiring diagrams
89	660-3.07	2019 Rev	Traffic Controller Assemblies	Revise formatting to include Item 4. Preemption as a subset of Traffic Controller Assemblies, Number sub-sub items accordingly.
90	660-3.08	2019 Rev	Signal and Lighting Structures, item 3.	Revise plumbing instruction for signal pole
91	661	2019 Rev	Electrical Load Centers, throughout	Edit for improved terminology, accuracy, specificity, and requirements.
92	661-2.01	2019 Rev	Materials	Describe third party certification requirements. Add requirement for arc flash hazard labeling
93	661-3.01	2019 Rev	Construction Requirements, para 13.	Use "breakaway" as a substitute for slip base and frangible coupling
94	681	2019 Rev	Reserve Section for Fuel Tank Spec	Renumbered Sec 743 Fuel Tank to Sec 681. Later regions agreed to create a Special Provision, at the suggestion of CR
95	701-2.08	2019 Rev	Post-Tensioned Grout (Reserved)	Add a title to Reserved subsection
96	702-2.01	2019 Rev	Asphalt Binder	Add a statement prohibiting Re-refined engine oil bottoms (REOB) / vacuum tower asphalt extenders (VTAE) for use as a modifier of Asphalt Binder.
97	702-2.03	2019 Rev	Emulsified Asphalt, item 2.	Correct upper limit
98	702-2.07	2019 Rev	Warm Mix Asphalt, Table 702-3	Revise WMA Supplier names
99	703-2.10	2019 Rev	Porous Backfill Material	Add Gradation B
100	705-2.05	2019 Rev	Flexible Watertight Gaskets	Expand number of gasket options
101	706-2.06	2019 Rev	Plastic Pipe	Correct pipe type / ASTM standards, update spec for withdrawn standard
102	706-2.09	2019 Rev	Polypropylene Pipe	Correct pipe type / ASTM standards, update spec for withdrawn standard
103	708-2.02	2019 Rev	Paint for Timber	Replace inactive paint spec
104	708-2.03	2019 Rev	Paint for Traffic Markings	Replace solvent- and water-based paint specs to align with M&O Paint Spec
105	708-2.04	2019 Rev	Paint for Concrete	Replace inactive paint spec
105.1	710-2.04	SM-5	Metal Beam Rail	Replaced subsection to include Thrie Beam and Box Beam Rail material requirements
106	710-2.07	2019 Rev	Guardrail Hardware	Specify TF13 designator for guardrail cable anchor assembly
106.1	710-2.11	SM-5	Guardrail Terminals	Replaced subsection to remove Controlled Release Terminal; minor word changes to Parallel and Buried in Backslope terminals;

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				update manufacturer phone number. Later modified as follows
106.2	710-2.11	HSM18-2	Guardrail Terminals	Added details for w-beam, component, and fastener materials; terminal design requirements; allow only MASH-compliant terminals, removed acceptable post descriptions and brand name products
107	711-2.03	2019 Rev	Fly Ash	Delete subsection: use Sec 701-2.04,
108	711-2.04	2019 Rev	Microsilica Admixture	Delete text subsection as unnecessary
109	712-2.01	2019 Rev	Water	Replace spec for water used for mixing and curing concrete to meet ASTM C1602. AASHTO T 26 is discontinued.
110	714	2019 Rev	Preservatives for Timber	Revise section to meet AASHTO M 133 and American Wood Protection Association standards to align with federal and industry standards per recommendations from Treated Wood Council
111	715	2019 Rev	Steel for Piles	Replace section per Bridge Section
112	716-2.02	2019 Rev	General Requirements	Delete reference to sheet pile from item 1 – specified under revised 715-2.02 item 4 Structural Steel Sheet Piling.
113	716-2.03	2019 Rev	Fasteners	Correct ASTM spec number for High Strength Bolts
114	716-2.07	2019 Rev	Galvanizing, para 6	Revise sentence related to cleaning damaged areas.
115	719-2.02	2019 Rev	General Requirements	Correct Grade listed for Malleable-Iron Castings
116	722-2.01	2019 Rev	Bridge Railing	Correct ASTM spec numbers, Rename, add Bent Anchor Rods, and Plant Washers and Tapered Plate Washers
117	723.2.01	2019 Rev	Waterstops	Replace subsection 723-2.01 as provided by Bridge Section
118	724-2.02	2019 Rev	Materials	Revise to prohibit invasive species, as identified on DNR webpage at time of bid. Correct link to DNR noxious-weed list
119	726-2.01	2019 Rev	Topsoil	Revise to address prohibited noxious weeds
120	727-2.02	2019 Rev	Matting	Revise straw requirements
120.1	729	HSM18-3	Geosynthetics	Replaced section. Later modified as follows
121	729-2.04	2019 Rev	Geogrid for Embankment and Roadway Stabilization and Reinforcement	Added Classes 1 and 2 to Table 729-3 to address tensile strength comment
122	730-2.04	2019 Rev	Sign Posts, Item 3	Revise section to comply with AASHTO M 133 and AWPA standards for preservatives and field treatment of cuts and drilled holes. Removed reference to Commodity Specification B (Posts) for round wooden sign posts as unneeded
122.1	730-2.05	SM-6	Flexible Delineator Posts	Added fiberglass composite and polymer materials to align with delineator materials provided by industry.
123	730-2.07	2019 Rev	Sign Support Fasteners	Added Fastener Specification Table
124	731	2019 Rev	Waterproofing Membrane	Add new Material spec per Bridge Design
125	740	2019 Rev	Signals and Lighting Materials	Edit for improved terminology, accuracy, specificity, and requirements.
126	740-2.02	2019 Rev	Signal and Lighting Structures	Specify 2013 LTS-6, 2013, design standard
127	740-2.02	2019 Rev	Signal and Lighting Structures, item 2. para 4	Add statement to meet ASTM A385 for silicon content for improved galvanizing. Delete 4 mil thickness requirement, inconsistent with AASHTO M 111, thin tubes
128	740-2.22	2019 Rev	High Tower Luminaire Lowering System	Add requirement for SOA representative to witness final assembly and adjustment of the

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				high tower lowering system, and final installation of luminaires and lifting of system.
129	743	2019 Rev	Fuel Tank	Remove section from standard specs, reissue as HSP20-1 for Sec 681
130	End	2019 Rev	Conversion Tables	Delete metric conversion tables as unnecessary

This summary identifies new substantive changes but does not list minor changes which correct previous typographical errors or other minor changes to clarify language without substantively changing the intent of the Contract. It is the reader's responsibility to carefully review this edition for changes not noted above.