

# INDEX

AASHTO Specifications .....	1-27, 1-36	Approach Rail .....	5-164
Abbreviations .....	1-1	Backfill.....	5-8
Acceptance		Deck Repairs, Preparation .....	5-25
accept .....	1-1	Excavation.....	5-7
Final .....	1-1	Opening to Traffic .....	1-30
Final Payment .....	1-72	Railing .....	5-161
Partial.....	1-32	Removal of Existing.....	5-3
Project.....	1-32	Temporary .....	5-1
Adjustment, Claims for.....	1-32	Buildings, Demolishing .....	2-6
Admixtures for Cement.....	5-33	Catch Basins .....	6-15
Aggregate(s)		Cement	
Stockpiles .....	3-39	Mortar.....	7-4
Table of Required Grading .....	7-3	Storage of.....	5-35
Agreement		Water/Cement Ratio.....	5-30
Disposal.....	1-44	Certificate	
Air Pollution .....	1-47	Insurance .....	1-51
Altered Quantities, Compensation for .....	1-66	Of Compliance .....	1-42
Approval of Working Drawings .....	1-25	Channel Excavation .....	2-30
Assigning of Contract .....	1-53	Character of Workers.....	1-58
Attachment, Exemption from .....	1-48	Civil Rights.....	1-53
Authority of		Claim	
Engineer .....	1-25	Resolution.....	1-34
Representatives of the Engineer .....	1-29	Claims	
Award		For Adjustment .....	1-32
Cancellation of .....	1-14	For Extension of Time .....	1-59
Of Contract .....	1-14	On Final Estimate.....	1-72
Bankruptcy .....	1-62	Responsibility for Damage .....	1-51
Barricades and Warning Signs.....	1-49, 6-82	Time Limit for.....	1-72
Barrier Membrane .....	5-93	Cleaning Up, Final.....	1-21
Peel and Stick.....	5-93	Clearing .....	2-1
Base Courses .....	3-37	Cofferdams.....	5-5, 5-8
Beneficiary, No Third Party .....	1-52	Collusion Among Bidders .....	1-13
Bid Proposal, Quantities in.....	1-10	Combination Proposals .....	1-12
Bid(s)		Common Excavation .....	2-10
Opening of .....	1-13	Compensation for Altered Quantities .....	1-66
Opening of, Time Limit for Award After.....	1-14	Complete on Time, Failure to.....	1-61
Bidders		Compliance, Certificate of.....	1-42
Disqualification of .....	1-13	Computing Volumes.....	1-65
Prequalification of.....	1-10	Concrete Masonry	
Bidding Requirements and Conditions.....	1-10	Classification .....	5-29
Bituminous		Cold Weather.....	5-52
Materials, Measurement .....	1-65	Forms and Falsework, Construction of .....	5-45
Blasting.....	2-11	Forms and Falsework, Removal of .....	5-56
Care in.....	1-50	Hot Weather .....	5-53
Blotter Material.....	4-38	Repairs, Bridge Deck, Preparation .....	5-25
Bond, Contract .....	1-14	Slope Paving.....	5-177
Borings .....	1-11	Under Water .....	5-49
Borrow		Waterproofing Surfaces.....	5-87
Free.....	5-180, 5-182	Conduit, Electrical .....	6-50
Measurement in Vehicles .....	1-65	Conformity with Plans and Specifications .....	1-26
Bounds .....	6-88	Conservation of	
Bridge		Gravel.....	1-44

# INDEX

Growth, Roadside Trees and Shrubs .....	2-10	Demolishing Buildings .....	2-6
Construction		Structure .....	1-20
Equipment .....	1-58	Density Requirements .....	2-23
Maintenance During.....	1-31	Determination of Contract Time.....	1-59
Over or Adjacent to Navigable Waters.....	1-21	Detours .....	1-20, 1-25
Signs and Warning Devices.....	6-82	Differing Site Conditions .....	1-17
Stakes, Lines, and Grades .....	1-28	Disadvantaged Business Enterprise Program .....	1-14
Zone(s).....	1-30, 1-45	Discrepancies.....	1-26
Contract .....	1-3	Disposal	
Acceptance and Final Payment of .....	1-72	Of Structures Found on the Highway .....	1-20
Assigning of .....	1-53	Of Surplus and Waste Materials.....	1-44, 2-23
Award of.....	1-14	Disputed Work.....	1-32, 1-72, See also Claims
Bond, Requirement of.....	1-14	Disqualification of Bidders.....	1-13
Concurrence by Governor and Council.....	1-14	Drawings, Working or Shop ....	1-25, 5-5, 5-45, 5-121, 5-152, 5-156, 5-162
Default of.....	1-62	Dredging .....	1-46
Execution and Approval of .....	1-16	Drilling Pattern .....	2-12
Failure to Complete on Time .....	1-61	Drop Inlets .....	6-15
Failure to Execute.....	1-16	Dust Control	
Intent of.....	1-17	Roadway.....	6-80, 6-81
Partial Payments .....	1-71	Earthwork .....	2-1
Revision .....	1-4, 1-17, 1-26	Elastomeric Joint Seal .....	5-165
Subletting of.....	1-54	Electrical Conduit.....	6-50
Termination of.....	1-63	Embankments.....	2-10, 2-22, 2-24
Time, Determination and Extension of.....	1-59	Employees, Character of.....	1-58
Contractor		Engineer	
Cooperation by.....	1-27	Authority and Duties of Representatives of .....	1-29
To Furnish Labor, etc. to Complete Contract Items.....	1-17	Authority of .....	1-25
Contractor's Responsibility		Field Facilities for.....	6-145
For Work.....	1-21	Term Implied .....	1-5
Taxes .....	1-47	Environmental Protection .....	1-22
Termination of.....	1-64	Epoxy Coating .....	5-91
To Public.....	1-45	Equipment	
Contractors, Cooperation Between .....	1-28	Other than Specified .....	1-58
Control of		Publicly-Owned .....	1-66
Materials .....	1-35	Size and Condition.....	1-58
Work.....	1-25	Sufficient .....	1-62
Cooperation		Erosion Control.....	6-110
Between Contractors .....	1-28	Errors, Inaccuracies .....	1-27, 1-29
By Contractor .....	1-27	Examination of Plans and Work Site.....	1-11
With Utilities .....	1-27	Excavation	
Coordination of Specifications.....	1-26	And Embankment.....	2-10
Critical Path Method		Bridge .....	5-7
Progress Schedule .....	1-55	Channel .....	2-30
Requirements.....	1-55	Structure .....	2-28
Crushed Gravel .....	3-37	Exploratory Trench .....	2-29
Culverts and Storm Drains .....	6-1	Explosives	
Curbs.....	6-46	Insurance.....	1-51
Damage Claims, Responsibility for .....	1-51	Use of .....	1-50
Damages, Liquidated .....	1-61	Extension of Contract	
Default of Contract .....	1-62	Time.....	1-59
Defective Materials .....	1-30, 1-44	Extra Work.....	1-18
Definitions .....	1-1	fabric	
Delay.....	1-5	geotextile .....	5-191
Delineators .....	6-26, 6-86		

# INDEX

Failure to		
Begin the Work .....	1-62	
Complete Work on Time .....	1-61	
Maintain Roadway or Structure .....	1-31	
Restore Property .....	1-50	
Falsework .....	5-45, 5-143	
Federal Participation .....	1-49	
Fences .....	6-38	
Fertilizer .....	6-103, 6-126	
Field Facilities .....	6-145	
Final		
Acceptance .....	1-32	
Cleaning Up .....	1-21	
Payment .....	1-72	
Final Pay Quantity .....	1-72	
Fine Grading .....	2-36	
Fire Control .....	1-51	
Flaggers .....	6-77	
Force Account .....	1-66	
Forest Protection .....	1-51	
General Provisions .....	1-1	
GEOTEXTILES .....	5-191	
Grades, Construction .....	1-28	
Grading, Fine .....	2-36	
Granular Backfill .....	2-31	
Grass Seed .....	6-105	
Gravel .....	3-37	
Conservation of .....	1-44	
Pits Adjoining Highways .....	1-35	
Grubbing .....	2-1	
Guaranty		
Bid .....	1-12	
Return of Bid .....	1-14	
Guardrail .....	6-25	
Hazardous Materials .....	1-53	
Health Provisions .....	1-49	
Highways Closed to Traffic .....	1-49	
Hot Bituminous		
Pavement .....	4-34	
Humus .....	6-121	
impact attenuators .....	6-27	
Incidental Construction .....	6-1	
Insolvency .....	1-62	
Inspection		
Of Welds, Nondestructive .....	5-128	
Of Work .....	1-29	
Plant .....	1-43	
Inspectors .....	See Representatives of the Engineer	
Insurance		
Certificates .....	1-51	
Explosives .....	1-51	
Public Liability and Property Damage .....	1-51	
Worker's Compensation .....	1-51	
Intent of Contract .....	1-17	
Irregular Bids .....	1-12	
Item Numbers .....	1-6	
Items, Eliminated .....	1-18	
Joint Seal, Elastomeric .....	5-165	
joint sealant		
silicone .....	5-159	
Laboratory, Physical Testing (Field) .....	6-145	
Laws		
Familiarity with .....	1-11	
Observance of .....	1-45	
Legal		
Relations .....	1-45	
Rights, No Waiver of .....	1-52	
Liability		
For Subcontractors, Contractor's .....	1-45	
Insurance .....	1-51	
Of Public Officials, Personal .....	1-52	
Licenses, Permits, and Taxes .....	1-47	
Light Pole Bases .....	6-91	
Limestone .....	6-102	
Limitation of Operations .....	1-58	
Lines and Grades .....	1-28	
Liquidated Damages .....	1-61	
Load Restrictions .....	1-30	
Loam .....	6-101	
Local Material Sources .....	1-35	
Lump Sum Work .....	1-66	
Maintain Roadway or Structure, Failure to .....	1-31	
Maintenance		
During Closure .....	1-49	
During Construction .....	1-20, 1-31	
During Suspension .....	1-58	
Of Traffic .....	1-19, 6-80	
Manholes .....	6-15	
Markers		
Witness .....	6-88	
Material(s)		
Control of .....	1-35	
Department-Furnished .....	1-44	
Found on the Work, Rights and Use of .....	1-20, 2-11	
Handling .....	1-44	
Hazardous .....	See Hazardous Materials	
Inspected, Sampled and Tested .....	1-35	
Local Sources of .....	1-35	
Not on Hand, Payment for .....	1-72	
On Hand, Payment for .....	1-71	
Rejected .....	1-44	
Spillage of .....	1-45	
Storage of .....	1-44	
Sufficient, for Completion on Time .....	1-62	
Unacceptable .....	1-44	
Measurement		
and Payment .....	1-65	
of Quantities .....	1-65	

# INDEX

Methods and Equipment .....	1-58	Culverts .....	6-1
Mobilization.....	6-141	Plate .....	5-186
Muck Excavation.....	2-21	Removal.....	2-6
Municipally-Owned Equipment .....	See Publicly	Removal for Relaying.....	6-11
Navigable Waters .....	1-21	Sleeve .....	6-10
Notice to Proceed .....	1-54	Structural Plate.....	5-186
Notification		Underdrain .....	6-21
Contractor .....	1-18	Pit(s)	
Numbers, Item and Section .....	1-6	Limits .....	1-35
Office, Field.....	6-145	Placing Excavated Rock.....	5-183
Officers, Uniformed .....	6-77	Plans	
Officials, Personal Liability of Public .....	1-52	Conformity With.....	1-26
Opening		Coordination with Specifications.....	1-26
Bids.....	1-13	Examination of, by Bidder .....	1-11
Concrete Bridge Decks .....	1-30	Interpretation of, by Engineer.....	1-25
To Traffic .....	1-31	Working Drawings .....	See Drawings
Openings in Highway .....	1-21	Plant Inspection .....	1-43
Operations		Plant Material	
Limitations.....	1-58	General.....	6-124
Schedule of.....	1-54	Inspection of.....	1-43
Paint.....	7-5	Transplanting.....	6-140
Painting Existing Structural Steel .....	5-151	Pollution Control	
Partial		Air 1-47	
Acceptance of Project .....	1-32	Water .....	6-153
Payments.....	1-71	Prefabricated Compression Joint.....	5-152
Participation, Federal .....	1-49	Prefabricated Expansion Joint .....	5-155
Patented Devices, Materials, and Processes .....	1-49	Preparation	
Pavement Markings, RetroreflectORIZED .....	6-93	For Concrete Bridge Deck Repairs .....	5-25
Pavements .....	4-1	For Concrete Repairs .....	5-28
Aggregate .....	4-2	Prequalification of Bidders .....	1-10
Hot Bituminous .....	4-34	Presplitting of Rock.....	2-12, 2-19
Hot Bituminous, Hand Method .....	4-34	Proceed, Notice to .....	1-54
Sawed.....	6-92	Progress Schedule.....	1-55
Payment		Bar Chart Method.....	1-57
Contingent Upon Funds.....	1-64	Critical Path Method .....	1-55
Final .....	1-72	Progress Schedules .....	1-54
For Material, Found on the Work.....	1-20	Critical Path .....	1-4
For Material, Not on Hand .....	1-72	Property	
For Material, On Hand.....	1-71	Damage Insurance.....	1-51
Force Account.....	1-67	Protection and Restoration of.....	1-50
Negotiated Prices .....	1-67	Proposal(s)	
Partial .....	1-71	Combination.....	1-12
Revisions to Contract .....	1-67	Consideration of.....	1-14
Scope of.....	See Intent of Contract	Contents of.....	1-10
Permit(s)		Delivery of .....	1-12
Licenses and Taxes .....	1-47	Guaranty, Forfeiture of .....	1-16
Restoration of Surfaces Opened by.....	1-21	Irregular.....	1-12
Personnel		Issuance of.....	1-10
During Suspension.....	1-58	Opening of.....	1-13
Removal of .....	1-58	Preparation of .....	1-11
Skill and Experience.....	1-58	Quantities in .....	See Bid Proposal
Pile Locations, Fill Material at.....	2-22	Return of Guaranty.....	1-14
Piling, Sheet .....	5-10	Signed.....	1-11
Pipe(s)		Unit Prices .....	1-11

## INDEX

<ul style="list-style-type: none"> <li>Value Engineering, by Contractor ..... 1-22</li> <li>Withdrawal of ..... 1-12</li> <li>Protection <ul style="list-style-type: none"> <li>Environmental ..... 1-22</li> <li>Forest ..... 1-51</li> <li>Of Property and Landscape ..... 1-50</li> </ul> </li> <li>Provisions <ul style="list-style-type: none"> <li>General ..... 1-1</li> <li>Railway - Highway ..... 1-21</li> <li>Sanitary, Health, and Safety ..... 1-49</li> </ul> </li> <li>Public <ul style="list-style-type: none"> <li>Convenience and Safety ..... 1-49</li> <li>Liability Insurance ..... 1-51</li> <li>Officials, Personal Liability of ..... 1-52</li> <li>Responsibility to ..... 1-45</li> <li>Utilities ..... 1-27</li> </ul> </li> <li>Publicly-Owned Equipment ..... 1-66</li> <li>Quality Requirements ..... 1-35</li> <li>Quantities <ul style="list-style-type: none"> <li>Altered ..... 1-66</li> <li>In Bid Schedule, Interpretation of ..... 1-10</li> <li>Measurement of ..... 1-65</li> </ul> </li> <li>Rail <ul style="list-style-type: none"> <li>Bridge Approach ..... 5-164</li> <li>Guard ..... 6-25</li> </ul> </li> <li>Railing <ul style="list-style-type: none"> <li>Bridge ..... 5-161</li> </ul> </li> <li>Railroad Protection ..... 6-90</li> <li>Railroad(s) ..... See Utilities</li> <li>Railway - Highway Provisions ..... 1-21</li> <li>Rebuilding Damaged Work ..... 1-50</li> <li>Reclaimed Stabilized Base ..... 3-43</li> <li>Reinforcing Steel ..... 5-99</li> <li>Release of Contractor ..... 1-64</li> <li>Removal of <ul style="list-style-type: none"> <li>Abandoned Road Surface ..... 2-11</li> <li>Asbestos Cement Pipe ..... 2-7</li> <li>Existing Bridge Structure ..... 5-3</li> <li>Hazardous Materials ..... 1-53</li> <li>Structures and Obstructions ..... 2-5</li> <li>Unacceptable Materials ..... 1-44</li> <li>Unauthorized Work ..... 1-30</li> <li>Underground Storage Tanks and Hazardous Materials ..... 2-7</li> </ul> </li> <li>Rental Charge, Equipment ..... 1-69</li> <li>Repairs <ul style="list-style-type: none"> <li>Preparation for Concrete ..... 5-28</li> <li>Preparation for Concrete Bridge Deck ..... 5-25</li> </ul> </li> <li>Representatives of the Engineer, Authority of ..... 1-29</li> <li>Responsibility <ul style="list-style-type: none"> <li>For Damage Claims ..... 1-51</li> <li>For the Work ..... 1-21</li> <li>Termination of Contractor's ..... 1-64</li> <li>To Public ..... 1-45</li> </ul> </li> <li>Restoration of</li> </ul>	<ul style="list-style-type: none"> <li>Property and Landscape ..... 1-50</li> <li>Surfaces Opened by Permit ..... 1-21</li> <li>Restrictions, Load ..... 1-30</li> <li>Retest of Materials ..... 1-36</li> <li>Retroreflective Sheeting ..... 7-27</li> <li>Revisions <ul style="list-style-type: none"> <li>to the Contract ..... 1-17</li> </ul> </li> <li>Rights <ul style="list-style-type: none"> <li>Civil ..... 1-53</li> <li>In Materials Found on the Work ..... 1-20</li> <li>No Waiver of Legal ..... 1-52</li> </ul> </li> <li>Riprap ..... 5-179</li> <li>Roadside Cleanup ..... 2-2</li> <li>Roadway, Failure to Maintain ..... 1-31</li> <li>Rock Cross Sections ..... 2-11</li> <li>Rock Excavation ..... 2-10, 2-11</li> <li>Rock, Placing Excavated ..... 5-183</li> <li>Safety <ul style="list-style-type: none"> <li>Public ..... 1-49</li> <li>Sanitary and Health Provisions ..... 1-49</li> </ul> </li> <li>Samples ..... 1-35</li> <li>Sand ..... 3-37</li> <li>Sanitary Provisions ..... 1-49</li> <li>Sawed Pavement ..... 6-92</li> <li>Schedule <ul style="list-style-type: none"> <li>Of Operations ..... 1-54</li> <li>Quantities in ..... 1-10</li> </ul> </li> <li>Seed, Grass ..... 6-105</li> <li>Shear Connectors ..... 5-102</li> <li>Sheet Piling ..... 5-10</li> <li>Shop Drawings ..... See Drawings</li> <li>Shrubs <ul style="list-style-type: none"> <li>Care While Excavating ..... 2-10</li> <li>Deciduous ..... 6-137</li> <li>Evergreen ..... 6-136</li> </ul> </li> <li>Sidewalks ..... 6-43</li> <li>Signals, Traffic ..... 6-64</li> <li>Significant Changes in the Character of Work ..... 1-17</li> <li>Signs <ul style="list-style-type: none"> <li>And Barricades ..... 1-49, 6-80</li> <li>Construction ..... 6-80</li> <li>Guide ..... 6-81</li> <li>Traffic ..... 6-55</li> </ul> </li> <li>silicone joint sealant ..... 5-159</li> <li>Site of Work, Examination of ..... 1-11</li> <li>Slope Paving with Concrete ..... 5-177</li> <li>Sod ..... 6-122</li> <li>Source of Supply, Requirements ..... 1-35</li> <li>Sources, Local Material ..... 1-35</li> <li>Special Provisions <ul style="list-style-type: none"> <li>Coordination of ..... 1-26</li> <li>Examination of ..... 1-11</li> </ul> </li> <li>Specialty Items ..... 1-54</li> <li>Specifications</li> </ul>
--	---

# INDEX

Cited .....	1-35	Traffic	
Conformity With.....	1-26	Maintenance of .....	1-19
Coordination of .....	1-26	Opening Sections of Project to .....	1-31
Examination of .....	1-11	Signals .....	6-64
Interpretation of.....	1-25, 1-27	Signs .....	6-55
Spillage of Material.....	1-45	Traffic Control Plan .....	1-58
Stakes, Construction.....	1-28	Training Programs.....	6-142
Stone		Transplanting Plant Material .....	6-140
Fill 5-181		Tree(s)	
Fill, Keyed .....	5-184	Care While Excavating .....	2-10
Masonry .....	5-170	Deciduous.....	6-135
Walls.....	5-174	Evergreen .....	6-134
Storage of Materials .....	1-44	Trimming .....	2-2
Storm Water Pollution Prevention Plan .....	6-110	Trench Excavation.....	See Structure Excavation
Structural		Turbidity .....	1-46
Fill 5-11		Turf Establishment.....	6-119
Plate Pipes.....	5-186	Unacceptable	
Timber .....	5-167	Materials .....	1-44
Structure(s).....	5-1	Work, Removal of.....	1-30
Excavation .....	2-28	Unauthorized Work, Removal of .....	1-30
Failure to Maintain.....	1-31	Unclassified Excavation .....	2-10
Stumps, Removing.....	2-1	Underdrains .....	6-21
Subcontract .....	1-54	Underground Facilities .....	1-27
Subcontractors, Contractor's Liability for.....	1-45	Underground Storage Tanks and Hazardous Materials, Removal of .....	2-7
Subletting of Contract.....	1-54	Understanding of Parties Regarding Department's Performance .....	1-64
Sunday Work .....	1-58	Uniformed Officers .....	6-77
Superintendent.....	1-27	Unstable Material.....	2-11
Supplemental		Unsuitable Material .....	2-23
Plans .....	See Drawings	User's Taxes .....	1-48
Specifications, Coordination of .....	1-26	Utilities, Cooperation with.....	1-27
Supply, Source of.....	1-35	Value Engineering Proposals by the Contractor .....	1-22
Surety .....	1-62	Vines and Ground Covers .....	6-139
Surplus Material, Disposal of.....	2-23	Volumes, Computing .....	1-65
Suspensions of Work .....	1-18	Waiver of Legal Rights, No.....	1-52
Taxes		Warning Signs .....	1-49
Contractor's.....	1-47	Waste, Disposal of .....	2-23
Permits and Licenses .....	1-47	Water	
Subcontractor's .....	1-48	Pollution .....	6-153
User's.....	1-48	Repellent .....	5-89
Telephone Service .....	6-151	Water Diversion Structures .....	5-5
Temporary Bridge.....	5-1	Waterproofing .....	5-87
Temporary Water Pollution Control.....	6-153	Waterstops .....	5-97
Termination		Weight and Weighing .....	1-65
Of Contract.....	1-63	Welding	
Of Contractor's Responsibility.....	1-64	Aluminum Alloys .....	7-22
Terms, Definitions and.....	1-1	Winter Construction .....	2-22, 3-42
Tests .....	1-35	Witness Markers.....	6-88
Third Party Beneficiary, No.....	1-52	Work	
Timber, Structural.....	5-167	Complete in Place.....	1-2
Time		Contractor's Responsibility for .....	1-21
Determination and Extension of Contract.....	1-59	Control of .....	1-25
Failure to Complete on.....	1-61	Examination of Site .....	1-11
Tolerances, Manufacturing.....	1-66		
Town Highways.....	1-31		

# INDEX

Holiday .....	1-58	Sunday .....	1-58
Inspection of .....	1-29	Use of Materials Found on.....	1-20, 2-11
Removal of Unacceptable and Unauthorized .....	1-30	Worker's Compensation Insurance .....	1-51
Scope of .....	1-17	Working Drawings.....	See Drawings
Start of .....	1-54	Zone, Construction.....	1-30, 1-45