INDIANA DEPARTMENT OF TRANSPORTATION



100 North Senate Avenue Room N925 - CM Indianapolis, Indiana 46204 PHONE: (317) 232-5456 FAX: (317) 232-5551 Michael R. Pence, Governor Brandye L. Hendrickson, Commissioner

FINAL DRAFT MINUTES

October 20, 2016 Standards Committee Meeting

(Changes to the Agenda and First Draft Minutes by the Action of the Committee shown as highlighted in yellow)

MEMORANDUM

November 10, 2016

TO: Standards Committee

FROM: Scott Trammell, Secretary

RE: Minutes from the October 20, 2016 Standards Committee Meeting

The Standards Committee meeting was called to order by Mr. Miller at 08:59 a.m. on October 20, 2016 in the N955 Bay Window Conference Room. The meeting was adjourned at 10:37 a.m.

The following committee members were in attendance:

Mark Miller, Chairman, Construction Management Director Bob Cales, Contract Administration Division Dave Boruff, Traffic Engineering Division Elizabeth Phillips, Bridges Division Greg Pankow, State Construction Engineer Kumar Dave, Pavement Engineering, Highway Design Matthew Beeson, Materials Engineer, Materials Management Michael Koch, Fort Wayne District Area Engineer Peter Yao, Road Services Kurt Pelz*, Manager, Construction Technical Support

Also in attendance were the following:

Andrew Gauck, IMAA
Andrew Pangallo, INDOT
Dan Osborn, ICI
Dudley Bonte, APAI
Joel Salinas, INDOT
Kirk Frederick, INDOT
Mark Orton, INDOT
Steve Fisher, INDOT
Tom Duncan, FHWA
Tom Harris, INDOT

Nayyar Siddiki, INDOT
Nathan Awwad, INDOT
Steve Smart, County Materials
Michael Prather, INDOT
John Susong, Rinker Materials
Lana Podorvanova, INDOT
Bob Beyke, Milestone Contractors
Derrick Hauser, INDOT
Scott Trammell, INDOT

^{*} Proxy for Rob Goldner

The following items were listed for consideration:

A. GENERAL BUSINESS ITEMS

OLD BUSINESS

(No items were listed)

NEW BUSINESS

1. Approval of the Minutes from the August 18, 2016 meeting

DISCUSSION: Mr. Miller requested a motion to approve the minutes from the August

18, 2016 meeting.

Motion: Mr. Cales Second: Ms. Phillips

Ayes: 9 Nays: 0

ACTION: PASSED AS SUBMITTED

B. CONCEPTUAL PROPOSAL ITEMS

OLD BUSINESS

(No items were listed)

NEW BUSINESS

(No items were listed)

C. STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS PROPOSED ITEMS

OLD BUSINESS

Item No. 12 (2016 SS) Mr. Beeson pg 4 Recurring Special Provision:

203-R-628 COMPACTION ACCEPTANCE WITH LWD

PASSED AS REVISED ACTION:

NEW BUSINESS

Item No. 1 (2016 SS) pg 9 Mr. Koch

Recurring Special Provision:

108-C-127 EARLIEST DATE TO BEGIN WORK

ACTION: PASSED AS REVISED

Item No. 2 (2016 SS) Mr. Pankow pg 13 202.02 General Requirements 202.03 Removal of Bridges, Culverts, and

Other Drainage Structures

202.04 Removal of Pipe and Tile Drains 202.07 Inspection and Removal of Asbestos

203.08 Borrow or Disposal

ACTION: PASSED AS SUBMITTED (+ editorial)

Item No. 3 (2016 SS)	Mr. Koch	pg 33
506.10	Placing Concrete	
506.13	Basis of Payment	
ACTION:	PASSED AS SUBMITTED	
Item No. 4 (2016 SS)	Mr. Koch	pg 37
725.08	Liner Pipe Installation	
725.09	Method of Measurement	
725.10	Basis of Payment	
ACTION:	PASSED AS SUBMITTED	15
Item No. 5 (2016 SS)	Mr. Beeson	pg 41
Recurring Special Provision:		
404-R-624	AGGREGATE FOR SEAL COAT	
Standard Specifications:		Y
904.03(a)	Classification of Aggregates	5
ACTION:	PASSED AS SUBMITTED	
Item No. 6 (2016 SS)	Mr. Beeson	pg 47
408.02	Materials	<u> </u>
ACTION:	PASSED AS SUBMITTED	
	<u> </u>	
Item No. 7 (2016 SS)	Mr. Beeson	pg 51
203.18	Embankment Construction	
207.02	Materials	
ACTION:	PASSED AS REVISED	

cc: Committee Members
FHWA
ICI

Mr. Beeson
Date: 10/20/16

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO SPECIAL PROVISIONS

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Aggregate moisture content requirements are unclear, and difficult to achieve as written.

PROPOSED SOLUTION: Separate aggregate moisture requirements for delivery of aggregate to the project and aggregate moisture requirements for compaction and testing of the aggregate. These revisions reflect additional modifications to language that did not pass Standards Committee in June 2016.

APPLICABLE STANDARD SPECIFICATIONS: N/A

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL SECTION: N/A

APPLICABLE SECTION OF GIFE: N/A

APPLICABLE RECURRING SPECIAL PROVISIONS: 203-R-628

PAY ITEMS AFFECTED: N/A

APPLICABLE SUB-COMMITTEE ENDORSEMENT: INDOT/IMAA technical committee, INDOT Geotech, INDOT Construction

IMPACT ANALYSIS (attach report): yes

Submitted By: Matt Beeson

Title: State Materials Engineer

Organization: INDOT

Phone Number: 317-610-7251 x 204

Date: 9/26/16

Mr. Beeson
Date: 10/20/16

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO SPECIAL PROVISIONS

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? $\,N\,$

Will approval of this item affect the Approved Materials List? N Will this proposal improve:

Construction costs? Y

Construction time? N

Customer satisfaction? N

Congestion/travel time? N

Ride quality? N

Will this proposal reduce operational costs or maintenance effort? N Will this item improve safety:

For motorists? N

For construction workers? N

Will this proposal improve quality for:

Construction procedures/processes? Y

Asset preservation? N

Design process? N

Will this change provide the contractor more flexibility? ${
m Y}$

Will this proposal provide clarification for the Contractor and field personnel? Y

Can this item improve/reduce the number of potential change orders? \overline{N}

Is this proposal needed for compliance with:

Federal or State regulations? N

AASHTO or other design code? Y

Is this item editorial? N

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda:

Item No.12 06/16/16 (2016 SS) (contd.)

Mr. Beeson
Date: 10/20/16

REVISION TO SPECIAL PROVISION

(OLD BUSINESS ITEM)

203-R-628 COMPACTION ACCEPTANCE WITH LWD

(Proposed changes shown highlighted gray.

Basis for Use: "Required for all contracts except mowing or herbicide contracts"

Minutes from the June 16, 2016 meeting

http://www.in.gov/dot/div/contracts/standards/sc/2016/jun/SC Approved%20Minutes%20160616.pdf)

203-R-628 COMPACTION ACCEPTANCE WITH LWD

(Revised 11-09-15)

The Standard Specifications are revised as follows:

SECTION 203, AFTER LINE 971, INSERT AS FOLLOWS:

The compaction of chemically modified soils and coarse aggregates will be determined by Light Weight Deflectometer, LWD, testing in accordance with ITM 508. The moisture content will be determined in accordance with AASHTO T 255 or ITM 506. The compaction procedures shall be in accordance with 203.23, 215, 301, 302, and 303. Compaction of aggregate shall not occur if the moisture content of the aggregate is greater than 6.0%.

The maximum allowable deflection will be determined from a test section or will be specified. Acceptance testing with a LWD will be in accordance with ITM 508. The optimum moisture content and gradation will be determined by performing AASHTO T 99 Method C, AASHTO T 11, and AASHTO T 27 on representative samples of the aggregates.

The moisture content of the aggregate shall be within 3 percentage points of the optimum moisture content between 4% and the optimum moisture content prior to placement when the aggregate is delivered to the project. Water shall not be added to the aggregate on the grade. Samples for moisture content testing shall will be taken on the grade from the first truck of the day. The frequency of the moisture content test for aggregates will be a minimum of one test for each day of aggregate placement.

The maximum allowable deflection for chemically modified soils and aggregate over chemically modified soils shall be in accordance with the following:

Material Type	Maximum Allowable Deflection, mm
Lime Modified Soil	0.30
Cement Modified Soil	0.27
Aggregates over Lime Modified Soil	0.30
Aggregates over Cement Modified Soil	0.27

Table 1

Test sections shall be constructed in accordance with ITM 514 in the presence of a representative of the Office of Geotechnical Services for other materials not included in Table 1 to determine the maximum allowable deflection.

Item No.12 06/16/16 (2016 SS) (contd.)

Mr. Beeson
Date: 10/20/16

REVISION TO SPECIAL PROVISION

(OLD BUSINESS ITEM)

203-R-628 COMPACTION ACCEPTANCE WITH LWD

Acceptance of the compaction of chemically modified soils or aggregates will be determined by averaging three LWD tests obtained at a random station determined in accordance with ITM 802. The location of the three tests will be at 2 ft from each edge of the construction area and at 1/2 of the width of the construction area. The average deflection shall be equal to or less than the maximum allowable deflection allowed in Table 1 or determined by the test section. The frequency of the LWD testing will be three tests for each 800 t for compacted aggregate and three tests for each 1,400 cu yd of chemically modified soil.

If the average deflection is not equal to or less than the maximum allowable deflection for aggregates, a sample of the aggregate shall be obtained in accordance with AASHTO T 2 and a moisture content test shall be performed in accordance with AASHTO T 255 to determine if the moisture content is within the acceptable limits. If the moisture content is not within the acceptable limits, additional LWD tests may be taken at the same locations after 24 h if the moisture content is within the acceptable limits at the time of testing. The aggregate will be accepted if the LWD tests are equal to or less than the maximum allowable deflection.

Item No.12 06/16/16 (2016 SS) (contd.)

Mr. Beeson
Date: 10/20/16

COMMENTS AND ACTION

(OLD BUSINESS ITEM)

203-R-628 COMPACTION ACCEPTANCE WITH LWD

DISCUSSION:

Mr. Beeson introduced and presented this item stating that the aggregate moisture content requirements shown in RSP 203-R-628 are unclear, and difficult to achieve as written. Mr. Beeson proposes to separate aggregate moisture requirements for delivery of aggregate to the project and aggregate moisture requirements for compaction and testing of the aggregate. The revisions shown reflect additional modifications to the language that was discussed during the June 2016 Standards Committee meeting, and a minor revision proposed by Mr. Koch. Mr. Siddiki further explained the revisions as shown.

Mr. Miller asked about suppliers being able to provide the material under these requirements. Mr. Gauck, from IMAA, responded that they are in agreement and it should not be a problem.

Correction was made, after the meeting: "Samples for moisture content shallwill be taken on the grade from the first truck of the day" at the request by Mr. Beeson, because the INDOT is the one taking the samples, so it should be "will", rather than "shall".

Motion: Mr. Beeson Second: Mr. Cales Ayes: 9 Nays: 0 FHWA Approval: YES	Action:	Passed as Submitted Passed as Revised Withdrawn
Standard Specifications Sections referenced and/or affected: 203.25 pg 167.		2018 Standard Specifications Revise Pay Items List
Recurring Special Provision affected: 203-R-628 COMPACTION ACCEPTANCE WITH LWD.		Create RSP (No) Effective Letting RSP Sunset Date:
Standard Drawing affected: NONE	<u>X</u>	Revise RSP (No.203-R-628) Effective Jan. 01, 2017 Letting RSP Sunset Date:
Design Manual Sections affected: NONE GIFE Sections cross-references:		Standard Drawing Effective Create RPD (No) Effective Letting
NONE		GIFE Update SiteManager Update

Mr. Koch Date: 10/20/16

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO STANDARD SPECIFICATIONS

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Inconsistence interpretation of RSP 108-C-127. ETB dates are utilized to restrict construction activities to specific windows of time. As written the RSP 108-C-127 requires construction signage to be installed after the date shown on the proposal page (ETB date) which causes a glut of work to occur on the 1st day of operations.

PROPOSED SOLUTION: The proposed revision provides clarification to field personnel (what is permissible work) and fulfils the intent of the RSP. Allowing the Contractor to install and maintain construction signage prior to the ETB date; including detour signage provided the requirement of 801.04 line 182-183 is satisfied.

where it would be practicable to utilize a breakaway or yielding type design. Signs shall be completely covered or removed when the message does not apply.

APPLICABLE STANDARD SPECIFICATIONS: na

APPLICABLE STANDARD DRAWINGS: na

APPLICABLE DESIGN MANUAL SECTION: na

APPLICABLE SECTION OF GIFE: na

APPLICABLE RECURRING SPECIAL PROVISIONS: 108-C-127

PAY ITEMS AFFECTED: na

APPLICABLE SUB-COMMITTEE ENDORSEMENT: na

IMPACT ANALYSIS (attach report): na

Submitted By: Michael Koch

Title: Area Engineer

Organization: INDOT

Phone Number: 574-612-2224

Date: 9/20/2016

Mr. Koch Date: 10/20/16

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO STANDARD SPECIFICATIONS

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? NO

Will approval of this item affect the Approved Materials List? no Will this proposal improve:

Construction costs? Yes, greater Contractor

scheduling flexibility.

Construction time? no

Customer satisfaction? na

Congestion/travel time? no

Ride quality? no

Will this proposal reduce operational costs or maintenance effort? NO Will this item improve safety:

For motorists? na

For construction workers? na

Will this proposal improve quality for:

Construction procedures/processes? yes

Asset preservation? no

Design process? no

Will this change provide the contractor more flexibility? yes
Will this proposal provide clarification for the Contractor and field
personnel? Yes

Can this item improve/reduce the number of potential change orders? no Is this proposal needed for compliance with:

Federal or State regulations? no

AASHTO or other design code? no

Is this item editorial? yes

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda: To provide consistent interpretation of the specifications throughout INDOT.

Mr. Koch

Date: 10/20/16

REVISION TO RECURRING PROVISIONS

108-C-127 EARLIEST DATE TO BEGIN WORK

(Proposed changes shown highlighted gray. Basis for Use: "As determined necessary by the District Construction".)

108-C-127 EARLIEST DATE TO BEGIN WORK

(Revised 06-08-15)

The Standard Specifications are revised as follows:

SECTION 108, AFTER LINE 611, INSERT AS FOLLOWS:

(e) Earliest Date to Begin Work

For a contract for which the completion time is a specified number of work days, calendar days, or is a calendar completion date, the earliest date to begin work will be as agreed upon by the Contractor and the Engineer. Such date shall not be earlier than the date shown on the Proposal sheet. If the Contractor begins work before the earliest date to begin work as shown on the Proposal sheet, \$____ will be assessed as liquidated damages, not as a penalty, but as damages sustained, for each workable calendar day on which the Contractor does work. Time will then be charged in accordance with 108.03.

Preliminary field work not involving physical construction activity, such as with the exception placement of construction signs, staking, or verifying cross sections necessary to obtain information to initiate procurement of materials with lengthy delivery schedules, will not constitute work warranting time charges.

Requests for extensions to completion dates or intermediate completion dates due to delay in issuance of the notice to proceed beyond 30 days after the letting will not be considered unless the notice to proceed is issued less than 14 calendar days prior to the earliest date to begin work stated in the contract on the Proposal sheet.

Mr. Koch

Date: 10/20/16

COMMENTS AND ACTION

108-C-127 EARLIEST DATE TO BEGIN WORK

DISCUSSION:

This item was introduced and presented by Mr. Koch who stated that the proposed revision provides clarification to field personnel of what constitutes permissible work and fulfills the intent of RSP 108-C-127. This revision will also allow the Contractor to install and maintain construction signage prior to the ETB date, including detour signage in accordance with 801.04. Further revisions were incorporated as proposed by Mr. Pankow regarding removing the language about physical construction activity.

Mr. Miller asked about adding language describing the reasons for the earliest date to begin work. Mr. Pankow and Mr. Miller expressed concern about having Liquidated Damages rather than just not allowing the work to begin until a certain date. Following a brief discussion, it was decided that these issues can be discussed at another time.

Motion: Mr. Koch Second: Ms. Phillips Ayes: 9 Nays: 0 FHWA Approval: Yes	Action:	Passed as Submitted Passed as Revised Withdrawn
Standard Specifications Sections referenced and/or affected: 108.08 pg 88 thru 94.		2018 Standard Specifications Revise Pay Items List
Recurring Special Provision affected: 107-C-127 EARLIEST DATE TO BEGIN WORK		Create RSP (No) Effective Letting RSP Sunset Date:
Standard Drawing affected: NONE	<u> </u>	Revise RSP (No.108-C-127) Effective Jan. 01, 2017 Letting RSP Sunset Date:
Design Manual Sections affected: NONE GIFE Sections cross-references:		Standard Drawing Effective Create RPD (No) Effective Letting
NONE		GIFE Update SiteManager Update

Mr. Pankow Date: 10/20/16

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO STANDARD SPECIFICATIONS

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: The initial borrow and disposal site construction memorandum (08-05) was issued on April 24, 2008. It included a copy of RSP 203-R-550 and the newly developed IC-203 form. This information has since been incorporated into the Standard Specifications. This memo greatly helped the situation with borrow and disposal site approval and local, State, and Federal regulatory compliance. Inconsistencies and misunderstandings of the specification have developed and grown through the years.

PROPOSED SOLUTION: In an effort to stem inconsistencies and misunderstandings, the development of an updated revised section 203.08 is being proposed. The associated IC-203 form is also being proposed for revision.

APPLICABLE STANDARD SPECIFICATIONS: 202.02, 202.03, 202.04, 202.07, and 203.08

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL SECTION: N/A

APPLICABLE SECTION OF GIFE: 3.2 Borrow and Disposal Sites

APPLICABLE RECURRING SPECIAL PROVISIONS: N/A

PAY ITEMS AFFECTED: N/A

APPLICABLE SUB-COMMITTEE ENDORSEMENT: ad-hoc

IMPACT ANALYSIS (attach report):

Submitted By: Greg Pankow

Title: State Construction Engineer

Organization: Construction Management

Phone Number: 317-232-5502

Date:

Mr. Pankow
Date: 10/20/16

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO STANDARD SPECIFICATIONS

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? No Will approval of this item affect the Approved Materials List? No Will this proposal improve:

Construction costs? N/A

Construction time? N/A

Customer satisfaction? N/A

Congestion/travel time? N/A

Ride quality? N/A

Will this proposal reduce operational costs or maintenance effort? N/A

Will this item improve safety:

For motorists? N/A

For construction workers? N/A

Will this proposal improve quality for:

Construction procedures/processes? Yes

Asset preservation? Yes

Design process? N/A

Will this change provide the contractor more flexibility? $\mathrm{N/A}$

Will this proposal provide clarification for the Contractor and field personnel? Yes

Can this item improve/reduce the number of potential change orders? N/A Is this proposal needed for compliance with:

Federal or State regulations? Yes

AASHTO or other design code? N/A

Is this item editorial? No

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda:

Mr. Pankow Date: 10/20/16

REVISION TO STANDARD SPECIFICATIONS

SECTION 202 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS
202.02 GENERAL REQUIREMENTS
202.03 REMOVAL OF BRIDGES, CULVERTS, AND OTHER DRAINAGE STRUCTURES
202.04 REMOVAL OF PIPE AND TILE DRAINS
202.07 INSPECTION AND REMOVAL OF ASBESTOS
SECTION 203 - EXCAVATION AND EMBANKMENT
203.08 BORROW OR DISPOSAL

(Proposed changes shown highlighted gray)

The Standard Specifications are revised as follows:

SECTION 202, BEGIN LINE 13, DELETE AND INSERT AS FOLLOWS:

202.02 General Requirements

All buildings and foundations in accordance with 202.06, structures, fences, tanks, and other obstructions, any portions of which are on the right-of-way shall be razed, removed, and disposed of, except utilities and those features for which other provisions have been made for removal. Designated sSalvageable material designated by the Department shall be removed without unnecessary damage in sections or pieces which may be transported readily and shall be stored at specified places within the project limits or as otherwise designated. Except for regulated materials, which shall be disposed of in accordance with 104.06, and bridge painting debris which is subject to 619, non-salvageable material shall be disposed of in accordance with 203.08.

Materials not designated by the Department as salvageable and removed from the construction site shall become the property of the Contractor and shall be disposed of in accordance with 203.08, except for regulated materials, which shall be disposed of in accordance with 104.06, and bridge painting debris which is subject to 619.

Unsuitable material shall be removed from cisterns, septic tanks, other tanks, basements, and cavities. The disposition of this material shall be in accordance with all applicable and current local, State and Federal regulations. Cisterns, septic tanks, other tanks, basements, and cavities shall be backfilled in an approved manner. Those which cannot be backfilled satisfactorily shall be removed. If the backfill is within the limits of construction, it shall be completed in accordance with 203.23, unless otherwise directed. All abandoned wells shall be backfilled in accordance with the Indiana Code. A copy of the driller's license shall be furnished prior to commencement of work.

In accordance with 326 IAC 14-10, the Contractor shall complete and submit a demolition/renovation notification to IDEM when demolition or renovation of buildings, houses, canopies, and bridges are part of the contract. This notification shall be submitted regardless of whether asbestos containing material is present. Fees for this demolition/renovation notification shall be paid to IDEM by the Contractor.

Copies of the demolition/renovation notification form can be obtained from the IDEM's website. Questions concerning the completion of the demolition/renovation notification should be addressed to IDEM's Office of Air Quality.

Mr. Pankow Date: 10/20/16

REVISION TO STANDARD SPECIFICATIONS

SECTION 202 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS
202.02 GENERAL REQUIREMENTS
202.03 REMOVAL OF BRIDGES, CULVERTS, AND OTHER DRAINAGE STRUCTURES
202.04 REMOVAL OF PIPE AND TILE DRAINS
202.07 INSPECTION AND REMOVAL OF ASBESTOS
SECTION 203 - EXCAVATION AND EMBANKMENT
203.08 BORROW OR DISPOSAL

Initial notification to IDEM shall be by certified mail, return receipt requested, or by hand delivery. Verification of this notification shall be provided to the Engineer. The Contractor shall provide such notification 10 work days prior to the date on which demolition or renovation operations are anticipated to begin. If the Contractor postpones the beginning date of demolition or renovation operations, IDEM shall be provided written notice of the new start date, postmarked at least five work days or delivered at least two work days before these operations begin. Verification of this notification shall also be provided to the Engineer.

Unless otherwise specified, salvageable items*materials* removed from the construction site shall become the property of the Contractor and proper allowance for their value shall be taken into account in the bid price of the item involved. Where a house or building has been removed previously and the existing utilities and drains or sewer connections have not been terminated and sealed, this work shall be performed in accordance with 104.03, or as otherwise provided for in the contract.

Unless inspection has previously been conducted by the Department, and the findings are shown in the Proposal book, all facilities to be demolished shall be inspected for the presence of regulated materials as defined in 104.06. Facilities are defined as all institutional, commercial, residential or industrial structures, installations, buildings, and all bridges. Inspection and testing for asbestos shall be in accordance with 202.07. If inspected by the Department, a copy of the findings will be included in the Contract Information book.

At the direction of the Engineer and in accordance with 104.06(b), appropriate tests shall be made by the Contractor of all potentially regulated materials found. The Contractor shall comply with all applicable environmental regulations.

All identified regulated materials shall be reported and removed in accordance with the procedures specified in 104.06 prior to commencing the demolition of the facility. Asbestos removal shall be in accordance with the OSHA Asbestos Standard for Construction Industry, the EPA Asbestos Facts: Demolition and Renovation Regulations, and 202.07.

Except for tank content waste, which is classified in accordance with 202.08, the Engineer will classify regulated materials as one of the following Department categories for the purpose of disposal requirements and payment.

(a) Type Y Waste

All waste material that may be disposed of in a RCRA approved landfill.

Mr. Pankow Date: 10/20/16

REVISION TO STANDARD SPECIFICATIONS

SECTION 202 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS
202.02 GENERAL REQUIREMENTS
202.03 REMOVAL OF BRIDGES, CULVERTS, AND OTHER DRAINAGE STRUCTURES
202.04 REMOVAL OF PIPE AND TILE DRAINS
202.07 INSPECTION AND REMOVAL OF ASBESTOS
SECTION 203 - EXCAVATION AND EMBANKMENT
203.08 BORROW OR DISPOSAL

(b) Type Z Waste

All waste material that is prohibited from being disposed of in a RCRA approved landfill.

202.03 Removal of Bridges, Culverts, and Other Drainage Structures

Bridges, culverts, and other drainage structures in use by traffic shall not be removed in whole or in part until satisfactory arrangements have been made to accommodate traffic. Any excavation adjacent to the structure or to its approaches shall be shored adequately to avoid damage to them or to traffic.

When a reinforced concrete arch bridge is to be removed, either in whole or in part, the work shall include the removal of miscellaneous items within the limits of the structure, which must be removed prior to or in conjunction with the removal of the structure. These miscellaneous items shall include but shall not be limited to: concrete and asphalt pavements; concrete and asphalt sidewalks; and fill within the arches regardless of content.

(a) Complete

Unless otherwise directed, the substructures of existing structures shall be removed down to the natural stream bottom and those parts outside of the stream shall be removed down 1 ft below natural ground surface. Where such portions of existing structures lie wholly or in part within the limits of a new structure, they shall be removed as necessary to accommodate the construction of the proposed structure. Portions of pre-existing structures that are not visible and not shown on the plans shall be removed as directed. Payment for such removal will be paid as class X excavation in accordance with 206.11.

Unless otherwise specified, structural steel and salvageable materials not designated by the Department to be salvaged shall become the property of the Contractor. It shall be removed from the site before completion of the work and proper allowance for its value shall be taken into account in the bid price of the item involved. If the structure is to remain the property of the Department, steel or wood bridges shall be carefully dismantled without unnecessary damage, steel members shall be match marked, and all salvaged material shall be stored in accordance with 202.02.

Blasting or other operations necessary for the removal of an existing structure or obstruction, which may damage new construction, shall be completed prior to placing the new work.

Mr. Pankow Date: 10/20/16

REVISION TO STANDARD SPECIFICATIONS

SECTION 202 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS
202.02 GENERAL REQUIREMENTS
202.03 REMOVAL OF BRIDGES, CULVERTS, AND OTHER DRAINAGE STRUCTURES
202.04 REMOVAL OF PIPE AND TILE DRAINS
202.07 INSPECTION AND REMOVAL OF ASBESTOS
SECTION 203 - EXCAVATION AND EMBANKMENT
203.08 BORROW OR DISPOSAL

If stated in the special provisions, all concrete which is of suitable size for riprap and not needed for such use on the project shall be stockpiled on the project in an approved manner, for use by the Department.

SECTION 202, BEGIN LINE 168, DELETE AND INSERT AS FOLLOWS:

(c) Disposal of Concrete

All concrete from complete or partial removals, which is determined to be acceptable for riprap, shall be used on the project as directed. Disposal or placement as riprap will not be paid for directly, but the cost thereof shall be included in the cost of removal. *Disposal of concrete from complete or partial removals shall be in accordance with 203.08*.

202.04 Removal of Pipe and Tile Drains

When so provided in the proposal indicated in the contract documents or as directed, all pipe and tile drains shall be removed and reasonable precaution taken to avoid breaking or damaging them. The pipe or tile shall be stored neatly on the right-of-way, unless it is to be re-laid as a part of the contract. Otherwise, the conditions in accordance with 104.05 shall apply.

Pipes to be re-laid shall be removed and stored so that there is no loss or damage to the pipe. Replacement will be required of sections lost from storage or from damage through negligence or from improper methods in handling. Removal of pipe or drain tile, any necessary cleaning, removal of headwalls, storage of pipe, and disposal of removed headwall material and unsuitable pipe will not be paid for directly, the cost thereof to be included in the various pay items.

Sanitary or storm sewers no longer in use shall be removed from under the roadway and shoulders if so specified on the plans or in the proposal or if so directed. No payment will be made for this removal if the removal is shown on the plans and no pay item exists, or if this removal is necessary during the placing of other structures or during other excavation operations. The removal of pipes that are not shown in the contract documents and those that are not being replaced at the same location will be paid for in accordance with 109.05. *Disposal of pipe and tile drain material shall be in accordance with 203.08*.

202.05 Removal of PCCP, Sidewalks, Curbs, RCBA, and Reinforced Concrete Moment Slabs

All unreinforced PCCP, sidewalks, curbs, gutters, and other unreinforced concrete elements designated for removal shall be:

(a) broken into pieces and used for riprap on the project; or

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- (b) broken into pieces, the maximum weight of which shall be 150 lb, and incorporated into the work as directed; or
- (c) otherwise disposed of in accordance with 202.02.

RCBA, reinforced concrete moment slabs, and reinforced concrete elements designated for removal shall be disposed of in accordance with 202.02.

Pavement removal shall consist of the removal and satisfactory disposal of RCBA, reinforced concrete moment slabs, reinforced or unreinforced PCCP, PCC resurface with its base, or the total of any combination of HMA base, intermediate, and surface course of any pavement on a PCC, RCBA, or reinforced concrete moment slab base, including the base. Pavement removal shall include only the removal and disposal of existing public road, street, and alley pavement as required for the planned construction. Curb removal shall include curb that is separate from the pavement or removed separately. Integral curb that is removed with the adjacent pavement shall be paid for as pavement removal. Prior to performing the work of pavement removal at locations shown on the plans or where directed, cement concrete pavement to be removed shall be cut with a power driven concrete saw along designated lines. Sawing shall be such that any portion of the pavement to remain in place will not be damaged. Any portion that is damaged or removed outside the designated lines shall be replaced with no additional payment. Sawing of pavement to be removed will not be paid for directly, but shall be included in the cost of pavement removal.

SECTION 202, BEGIN LINE 255, DELETE AND INSERT AS FOLLOWS:

202.07 Inspection and Removal of Asbestos

The Contractor shall comply with all applicable environmental regulations including but not limited to those as follows:

- (a) In accordance with 202.02 and 326 IAC 14-10, a demolition/renovation notification is to be submitted to IDEM 10 work days prior to the start of demolition or renovation operations. During the 10 day period, the IDEM may make a determination of the existence of asbestos materials. Local governmental agencies may have additional regulations that must be followed. The Contractor shall contact the IDEM's Office of Air Quality to determine what local agencies have regulations.
- (b) 326 IAC 18-3 which requires the inspector conducting the required inspection to be certified by the IDEM. An accredited asbestos project supervisor shall be

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required to be present at all asbestos removal projects in accordance with 326 IAC 14-10 and 18-1.

- (c) Federal Asbestos National Emission Standard for Hazardous Air Pollutants.
- (d) Structurally Unsound and in Danger of Imminent Collapse Building Regulations, in accordance with 326 IAC 14-10-1(b).

SECTION 203, BEGIN LINE 51, DELETE AND INSERT AS FOLLOWS:

203.08 Borrow or Disposal

Borrow shall consist of approved material required for the construction of embankments or for other portions of the work and shall be obtained from approved accepted locations and sources outside the right-of-way. Borrow material shall be free of substances that will form deleterious deposits, or produce toxic concentrations or combinations that may be harmful to human, animal, plant or aquatic life, or otherwise impair the designated uses of a stream or area. Unless otherwise designated in the contract, arrangements shall be made for obtaining borrow. Borrow, as designated herein, shall not include material excavated beyond the right-of-way limits at intersecting public roads, private and commercial drive approaches and material furnished as B borrow.

Disposal of waste-material, other than regulated material and bridge painting debris, from within the right-of-way shall only be allowed at approved accepted locations either within or outside the right of way. Disposal of regulated material shall be in accordance with 104.06. Disposal of bridge painting debris shall be in accordance with 619.

Proposed borrow and disposal sites shall be accepted by the Engineer prior to the start of any borrow or disposal operations at the site. For each proposed site, an IC-203 Request for Acceptance of Borrow or Disposal Site shall be submitted to the Engineer a minimum of 14 days prior to the Contractor's planned start of operations at the site. All requests for acceptance of a borrow or disposal site shall be in accordance with 203.08(a).

Acceptance of any proposed borrow or disposal site by the Engineer shall not relieve the Contractor of the responsibility to utilize an appropriate site and to comply with all applicable local, State and Federal laws and regulations.

The Contractor shall provide the Engineer a minimum of 14 days notice prior to opening borrow areas in order to obtain original cross sections, measurements, and borrow material samples prior to borrow area use.

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203.08 BORROW OR DISPOSAL

No extension of completion time will be granted due to any delays by the Contractor in securing acceptance of borrow and disposal sites.

(a) Borrow and Disposal Site Requirements

Any proposed borrow or disposal site submitted for acceptance shall be presented as, and meet the requirements of one of the following site definitions.

1. Solid Waste Site

A Solid Waste Site shall be defined as a solid waste facility, in accordance with 329 IAC 10-2-176, with a current IDEM operating number.

A request for acceptance of a Solid Waste Site shall include the following:

- a. Name and contact information of the facility operator.
- b. Address of the facility.
- c. The IDEM operating number.
- d. The expiration date of the IDEM operating permit.

2. Established Site

An Established Site shall be defined as an established location, other than as defined in 203.08(a)1, proposed for borrow or disposal activity that is disturbed or developed for public, municipal, governmental, commercial, industrial, construction or any other similar or related activity. The Established Site shall be operating under permits required by local, State and Federal laws for the activities proposed by the Contractor.

A request for acceptance of an Established Site shall include the following:

- a. Name and contact information of the site owner.
- b. Address of the site.
- c. Copy of a right-of-entry obtained from the property owner. Rights-of-entry shall include rights for access by Department personnel to the site.
- d. Aerial view site plan with the location of the borrow or disposal areas delineated.
- e. Location of all proposed storm water management features for the delineated borrow or disposal area.
- f. List of the documented permits, permit numbers and permit expiration dates for all permits under which the site operates.

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g. Documentation that a wetlands delineation and an archaeological field survey, with record check, have been performed by qualified professionals shall be provided when borrow or disposal activities are identified for areas of the proposed site that remain undeveloped or undisturbed. Any required wetlands delineation and archaeological field surveys, with record check, shall be limited to those undeveloped and undisturbed areas identified for borrow or disposal that are greater than 0.1 acres.

3. General Site

A General Site shall be defined as a location, other than as defined in 203.08(a)1 and 203.08(a)2, that has not been disturbed or developed for public, municipal, governmental, commercial, industrial, construction, or other similar or related activity. A General Site shall include private, residential, agricultural fields and pastures, or any other similar or related locations. General Sites shall require additional documentation for acceptance.

A request for acceptance of a General Site shall include the following:

- a. Name and contact information of the property owner.
- b. Address or location of the site.
- c. Copy of a right-of-entry obtained from the property owner. Rights-of-entry shall include rights for access by Department personnel to the site.
- d. Site location plan, site dimensions, adjacent property and right-of-way lines, all demarcated jurisdictional wetlands or isolated wetlands, all demarcated archeological sites, existing and proposed finished contours and proposed finished slope grades.
- e. Site operations plan detailing the operations proposed for the site, what equipment will be utilized, how the site will be accessed and any other information relevant to the operation of the site.
- f. Copy of the Rule 5 Notice of Intent, if required in accordance with 327 IAC 15-5.
- g. Storm water management plan for the site including the storm water features to be incorporated and the sequencing of the measures with respect to the operations plan for the site.
- h. Documentation signed by a wetlands professional verifying that the site has been inspected for the presence of both wetlands and isolated wetlands and, if any are present, specifying the area to be demarcated as jurisdictional or isolated wetlands.

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 - i. Documentation of the archeological field survey, with record check, signed by a qualified archeologist including the limits and border of any archeological site discovered.
 - *j.* Copies of all other permits obtained by the Contractor to perform operations at the site.
 - k. Documentation, in the form of a signed and notarized certification from the property owner, that the proposed site is not currently an active remediation or corrective action site operating under an IDEM or EPA cleanup program, and that there are no environmental liens, easements, deed restrictions, or environmental restrictive covenants against the proposed site location. If environmental liens, easements, deed restrictions, or environmental restrictive covenants exist for the proposed site location, the Contractor shall provide copies of the restriction and written approval from the regulatory agencies having an interest in, or jurisdiction over the proposed site approving use of the site for the borrow or disposal operations.

Except where a licensed commercial site or a permitted siteWhen General Site is utilized identified for borrow or disposal, the Contractor shall obtain all permits required by local, State and Federal laws prior to the start of any operations at the site.

Licensed commercial sites and permitted sites are defined as follows:

- (a) A licensed commercial site is a solid waste facility with a current IDEM operation number.
- (b) A permitted site is a location that is operated under permits required by local, State and Federal laws for the activities proposed by the Contractor. A permitted site shall also have documentation that a wetlands delineation and an archaeological survey have been performed by qualified professionals.

For proposed borrow or disposal sites other than licensed commercial or permitted sites, All proposed General Sites shall have an inspection of areas outside impacted by the construction limits shall beborrow or disposal operations conducted by a qualified wetland professional approved by the Department to determine if wetlands are present on the site. An approved wetland professional shall be prequalified with the Department to perform environmental services work type 5.4 Ecological Surveys or shall be certified by the Society of Wetland Scientists as a wetland professional in-training or professional wetland scientist. A list of approved wetland professionals is maintained on the Department's website. The wetlands inspection shall be in accordance with

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the current U.S. Army Corps of Engineers Wetland Delineation Manual and the appropriate regional supplement. The inspection shall also determine if isolated wetlands as defined by IDEM are present. The Contractor shall demarcate in a method approved by the Engineer the boundary of all wetlands identified within the proposed borrow or disposal site in a method acceptable to the Engineer.

For proposed borrow or disposal sites other than licensed commercial or permitted sites, Proposed General Sites shall have a qualified archaeologist shall perform a record check and field survey, with record check, to determine if any significant archeological sites exist within the proposed site. The Indiana Department of Natural Resources Division of Historic Preservation and Archeology maintains a roster of qualified archeological consultants. If any archaeological sites are identified, the archaeologist shall establish the limits of the site along with a reasonable border. The Contractor shall demarcate in a method approved by the Engineer the border of all identified archeological sites identified—within the proposed borrow or disposal site in a method acceptable to the Engineer.

Identified archeological sites shall not be disturbed unless the site is cleared by established procedures and written authorization to enter the site has been obtained by the Contractor.

Borrow and disposal sites shall be approved by the Engineer prior to the start of any earth disturbing operations at the site. A request for approval of a borrow or disposal site shall be submitted to the Engineer a minimum of 14 days prior to the Contractor's planned start of operations at the site. All requests for approval of a borrow or disposal site shall include a description of the Contractor's planned operations at the site. In the case of disposal sites, the description shall include a listing of the types of material to be disposed of at the site.

A request for approval of a licensed commercial site shall include the following:

- (a) The name and address of the facility.
- (b) The IDEM operating number.
- (c) The expiration date of the IDEM operating permit.

A request for approval of a permitted site shall include the following:

- (a) Name of the site owner.
- (b) Address of the site.
- (c) A list of the permits, permit numbers and permit expiration dates for all permits under which the site operates.

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(d) Documentation that a wetlands delineation and an archaeological survey have been performed by qualified professionals.

A request for approval of a site, other than a licensed commercial or permitted site, shall include the following:

- (a) Name of the property owner.
- (b) Address or location of the site.
- (c) A copy of a right-of-entry obtained from the property owner. Rights-of-entry shall include rights for access by Department personnel to the site for the purposes of monitoring, measurement, and sampling.
- (d) A site plan showing the site location, site dimensions, adjacent property and right-of-way lines, all demarcated jurisdictional wetlands or isolated wetlands, all demarcated archeological sites, existing and proposed finished contours and proposed finished slope grades.
- (e) A site operations plan detailing the operations proposed for the site, what equipment will be utilized, how the site will be accessed and any other information relevant to the operation of the site.
- (f) A copy of the Rule 5 Notice of Intent, if required in accordance with 327 IAC 15-
- (g) An erosion control plan for the site including the types of erosion control measures to be incorporated and the sequencing of the measures with respect to the operations plan for the site.
- (h) Documentation signed by a wetlands professional verifying that the site has been inspected for the presence of both wetlands and isolated wetlands and, if any are present, specifying the area to be demarcated as jurisdictional or isolated wetlands.
- (i) Documentation of the archeological record check and field survey signed by a qualified archeologist including the limits and border of any archeological site discovered.
- (j) Copies of all other permits obtained by the Contractor to perform operations at the site.

The Contractor shall provide the Engineer a minimum of 14 days notice prior to opening borrow areas for the purpose of obtaining original cross section elevations and measurements and to sample the borrow material prior to use.

(b) Additional Requirements

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Identified archeological sites shall not be disturbed unless the site is cleared by established procedures and written authorization to enter the site has been obtained from the Department's Cultural Recourses office. Archaeological artifacts encountered during operations shall be addressed in accordance with 107.10.

No excavation shall occur and no material shall be disposed of within the boundaries of the demarcated wetlands and archeological areas unless the operations are in compliance with all required permits and these specifications.

The Contractor shall install *all* temporary erosion and sedimentstorm water management control measures at *accepted* borrow or *and* disposal sites other than licensed commercial and permitted sites locations designated as Established Sites and General Sites prior to the start of any earth disturbing activity. The Contractor shall develop and construct all mitigation measures necessary to fulfill the requirements of all permits obtained by the Contractor for operation of a borrow and disposal site.

No excavation shall occur or no material shall be disposed of within the boundaries of the demarcated wetlands and archeological areas unless the operations are in compliance with all required permits and these specifications.

No extension of completion time will be granted due to any delays by the Contractor in securing approval of borrow and disposal sites.

Approval of a proposed borrow or disposal site by the Engineer, whether the proposed site is commercial, permitted, or otherwise, shall not relieve the Contractor of its responsibility to utilize an appropriate site and to comply with all applicable local, State and Federal laws and regulations.

Archaeological artifacts encountered during operations shall be addressed in accordance with 107.10.

Unless written permission is granted, there shall be no excavation in a borrow area below the elevation of the adjacent properties within 150 ft of the nearest right-of-way line of an existing highway, county road, or city street; the nearest right-of-way line of a proposed highway, county road, or city street; or adjacent property lines. If the properties adjacent to the borrow area are privately owned, the setback limit of 150 ft may be lessened if written approval or permission is granted by the owner of the adjacent property, the excavation is in accordance with local zoning laws and requirements, and if lessening the limit is in the best interest of the State. Such minimum

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distance shall not be closer than 50 ft to an adjacent property line. All excavated slopes of a borrow area shall not be steeper than 3:1 down to 2 ft below the ground water elevation. All excavated slopes 2 ft below the ground water elevation shall not be steeper than 2:1.

Top soil from the borrow or disposal area shall be stockpiled for use in restoring the disturbed area. A minimum encasement of 6 in. shall be placed on the 3:1 or flatter slopes. Final restoration of borrow or waste disposal areas shall include grading, seeding, or other necessary treatments that will blend the area into the surrounding landscape. Restored areas within 150 ft of the nearest right-of-way line shall be well drained. Areas beyond 150 ft shall be drained unless the landowner desires other treatment of the borrow area. Construction of borrow or disposal areas shall be in accordance with existing laws, regulations, and ordinances. Under no conditions shall borrow sites detract from the appearance of the natural topographical features or increase the potential hazard to a vehicle that has inadvertently left the highway.

If granulated slag, dunes sand, or other granular material which is not suitable for the growth of vegetation is used, such material shall not be placed within 1 ft of the required finished surfaces of shoulders and fill slopes. Additional material required to complete the embankment, such as sandy loam, sandy clay loam, clay loam, clay, or other materials suitable for the growth of vegetation and free from clods, debris, and stones, shall be furnished at the contract price for borrow.

Additional fill material may be secured from within the permanent or temporary right-ofway in lieu of borrow or B borrow either from vertical or horizontal extensions, or both, beyond the lines and elevations of roadway and drainage excavation as shown on the contract plans when authorized in writing. If additional material has been obtained without written approval, the material will be classified either as to source or use, to the best advantage of the Department. Mr. Pankow Date: 10/20/16

BACKUP 01

IC-203 REQUEST FOR ACCEPTANCE OF BORROW OR DISPOSAL SITE (REVISED)

Indiana Department of Transportation Request for Acceptance of Borrow or Disposal Site

Contractor Instructions

- 1. Complete Part 1 to provide contract and site utilization information.
- 2. Select Part 2, Part 3, or Part 4 and complete that one section. Include all requested information for the chosen section. Additional sheets shall be attached if needed.
- **3.** Complete the Contractor Certification in Part 5 and submit the completed form, with any attachments, to the Project Engineer/Supervisor for review and acceptance a minimum of 14 days prior to site operations.

Part 1 – Contract and Site Informati	<u>on</u>
Date:	Contract:
Contractor:	District:
Specific description of operations for the materials intended to be deposited at the	he proposed site including a list of any proposed ne site:
Part 2 – Solid Waste Site - 203.08(a) A solid waste facility, in accordance	1. with 329 IAC 10-2-176, with a current IDEM operating number.
Name of facility:	
Address of facility:	
IDEM Operating Number:	Expiration Date:
Comments:	
is disturbed or developed for public,	s defined in 203.08(a)1, proposed for borrow or disposal activity that municipal, governmental, commercial, industrial, construction or any Established Site shall be operating under permits required by local,
a) Name of Site Owner:	
b) Address of Site:	
c) Copy of right-of-entry obtained personnel access.	d from the property owner including rights for Department
d) Aerial view site plan with the lo	ocation of the borrow or disposal areas delineated.

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BACKUP 01

IC-20	3 REQUEST FOR ACCEPTANCE OF BORROW OR DISPOSAL SITE (REVISED)
	(CONTINUED)
e) 🗆	Location of all proposed storm water management features used for the delineated borrow or disposal areas.
f) 🗆	List of documented permits, permit numbers, and expiration dates for which the site operates.
g) 🗆	Documentation of wetlands delineation and archaeological field survey, with record check, for utilized areas within the proposed borrow or disposal site that are undeveloped, undisturbed, and that are greater than 0.1 acre.
Comm	nents:
Part 4	- General Site - 203.08(a)3.
	A proposed borrow or disposal site, other than as defined in 203.08(a)1 and 203.08(a)2, that has not been disturbed or developed for public, municipal, governmental, commercial, industrial, construction or other similar or related activity. A General Site shall include private, residential, agricultural fields and pastures, or any other similar or related locations. General Site shall require additional documentation for acceptance.
a) Nan	ne of Site Owner:
b) Ado	lress of Site:
c) 🗆	Copy of right-of-entry obtained from the property owner including rights for Department personnel access.
d) □	A site location plan, site dimensions, adjacent property and right-of-way lines, all demarcated jurisdictional or isolated wetlands, all demarcated archaeological sites, existing and proposed finished contours, and proposed finished grades.
e) 🗆	A site operations plan detailing the operations proposed for the site, what equipment will be utilized, how the site will be accessed, and any other information relevant to the operations of the site.
f) 🗆	A copy of Rule 5 Notice of Intent, if required, in accordance with 327 IAC 15-5.
g) 🏻	A storm water management plan for the site including storm water features and sequencing the measures for the operations plan for the site.
h) 🗆	Documentation signed by a wetlands professional verifying the site has been inspected for, and if present, specifying the area to be demarcated as jurisdictional or isolated wetlands.
i) 🗆	Documentation of the archaeological field survey, with record check, signed by a qualified Archaeologist including the limits and border of any archaeological site discovered.

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IC-2	03 REQUEST FOR ACCEPTANCE OF BORROW OR DISPOSAL SITE (REVISED)
	(CONTINUED)
j) 🗆	Copies of all other permits obtained by the Contractor to perform operations at the site.
k) □	Documentation, in the form of a signed and notarized certification from the property owner, that the proposed site is not currently an active remediation or corrective action site operating under an IDEM or EPA cleanup program, and that there are no environmental liens, easements, deed restrictions, or environmental restrictive covenants against the proposed site location. If environmental liens, easements, deed restrictions, or environmental restrictive covenants exist for the proposed site location, the Contractor shall provide copies of the restriction and written approval from the regulatory agencies having and interest in, or jurisdiction over the proposed site approving use of the site for the borrow or disposal operations.
Com	ments:
Part	5 – Contractor Certification
the C	irements of the Specifications and contract documents, and will be utilized appropriately for Contractor's proposed operations at the site in accordance with all local, State, and Federal. The Contractor certifies that only operations described above will be performed at the Site. ed:
Print	red Name: Date:
1 11111	Ed Name.
<u>Part</u>	6 – INDOT Review and Acceptance Completed by the Project Engineer/Supervisor, or the Area Engineer.
a)	Site was physically visited and reviewed on (date of visual review):
b)	The Contractor's request for acceptance of the borrow or disposal site has been reviewed and meets the requirements of the Specifications and contract documents. The request is:
	☐ Accepted
<	□ Rejected
Com	ments (attach additional sheets as necessary)
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_	
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Mr. Pankow Date: 10/20/16

BACKU	ID OT									
IC-20	3 REQUEST	FOR A	ACCEPTANCE	OF BO	RROW	OR	DISPOSAL	SITE	(REVISED)	
										(CONTINUED)
Accept	ance of any p	roposed	l borrow or di	sposal s	ite shal	l not	t relieve the	Contra	ctor of the re	sponsibility to
utilize	an appropria	te site a	nd to comply	with all	applica	able l	local, State,	and Fed	deral laws an	d regulations.
Signe	d:					_	_Title	e:		
Printe	d Name:					Г	Date:	_		
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	District Con Contractor	struction	n Office				7			
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COMMENTS AND ACTION

202.02 GENERAL REQUIREMENTS

- 202.03 REMOVAL OF BRIDGES, CULVERTS, AND OTHER DRAINAGE STRUCTURES
- 202.04 REMOVAL OF PIPE AND TILE DRAINS
- 202.07 INSPECTION AND REMOVAL OF ASBESTOS
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DISCUSSION:

Mr. Pankow introduced and presented this item stating that the development of an updated revised section 203.08 is being proposed in an effort to stem inconsistencies and misunderstandings. And the associated IC-203 form is also being proposed for revision.

Mr. Pankow also explained that the initial borrow and disposal site construction memorandum, 08-05, was issued on April 24, 2008. It included a copy of RSP 203-R-550 and the newly developed IC-203 form. This information has since been incorporated into the Standard Specifications. Mr. Pankow stated that this memo greatly helped the situation with borrow and disposal site approval and local, State, and Federal regulatory compliance. Inconsistencies and misunderstandings of the specification have developed and grown through the years, prompting the revision of 202 and 203 as shown above. Mr. Osborn stated that ICI was involved and concurs with the revisions shown, but asked what can be done with all the leftover RAP.

Mr. Bonte expressed concern over where the RAP will be stockpiled and what may happen to it. Mr. Pelz explained that if the Contractor takes the material to their yard (plant), they can do with it what they want. Mr. Osborn stated that we need to continue to look at this issue since the costs can be high in moving and stockpiling the material.

The BFU for this RSP will be "Required for all contracts, except mowing..."

THE BRU TOT CHIS RSP WITT DE REQUIT	ca for all concracts, except mowing
Motion: Mr. Pankow Second: Mr. Cales Ayes: 9 Nays: 0 FHWA Approval: YES	Action: Passed as Submitted Passed as Revised Withdrawn
Standard Specifications Sections referenced and/or affected: 202 pg 129 thru 135; 203.08 pg 146 thru 150. Recurring Special Provision	2018 Standard Specifications Revise Pay Items List Z Create RSP (No.203-R-647) Effective Jan. 01, 2017 RSP Sunset Date:
affected: NONE Standard Drawing affected:	Revise RSP (No) Effective Letting RSP Sunset Date:
NONE Design Manual Sections affected: NONE	Standard Drawing Effective Create RPD (No) Effective Letting
GIFE Sections cross-references: Section 3.2.	GIFE Update SiteManager Update

Mr. Koch Date: 10/20/16

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO STANDARD SPECIFICATIONS

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: 506 smoothness concerns where PCCP patch will not be overlaid, where the design speed is greater than 45 mph, and has a length greater than 20 ft.

PROPOSED SOLUTION: Require pavement smoothness in accordance with 501.25(b). (see 2016 Standard Specifications, pg 343)

For contracts where the profilograph is not used for smoothness acceptance, the 450 16 ft straightedge will be used to accept longitudinal smoothness at the above locations and on all mainline traveled way lanes and ramps with design speeds greater than 45 mph. Smoothness acceptance on ramp acceleration or deceleration lanes will also be accepted by the 16 ft straightedge.

APPLICABLE STANDARD SPECIFICATIONS: 506.10 and 506.13

APPLICABLE STANDARD DRAWINGS: na

APPLICABLE DESIGN MANUAL SECTION: na

APPLICABLE SECTION OF GIFE: na

APPLICABLE RECURRING SPECIAL PROVISIONS: na

PAY ITEMS AFFECTED: na

APPLICABLE SUB-COMMITTEE ENDORSEMENT: na

IMPACT ANALYSIS (attach report): na

Submitted By: Michael Koch

Title: Area Engineer

Organization: INDOT

Phone Number: 574-612-2224

Date: 9/20/2016

Mr. Koch Date: 10/20/16

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO STANDARD SPECIFICATIONS

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? yes

Will approval of this item affect the Approved Materials List? no Will this proposal improve:

Construction costs? no

Construction time? na

Customer satisfaction? yes

Congestion/travel time? no

Ride quality? yes

Will this proposal reduce operational costs or maintenance effort? Na

Will this item improve safety:

For motorists? yes

For construction workers? na

Will this proposal improve quality for:

Construction procedures/processes? yes

Asset preservation? yes

Design process? no

Will this change provide the contractor more flexibility? no

Will this proposal provide clarification for the Contractor and field personnel? yes

Can this item improve/reduce the number of potential change orders? no

Is this proposal needed for compliance with:

Federal or State regulations? no

AASHTO or other design code? no

Is this item editorial? yes

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda: Although PCCP patching is preventative maintenance the public should receive a smoother product where longer patching is required.

Mr. Koch

Date: 10/20/16

REVISION TO STANDARD SPECIFICATIONS

SECTION 506 - PCCP PATCHING 506.10 PLACING CONCRETE 506.13 BASIS OF PAYMENT

The Standard Specifications are revised as follows:

SECTION 506, BEGIN LINE 244, INSERT AS FOLLOWS:

506.10 Placing Concrete

The concrete shall be placed level to the adjacent PCCP and consolidated by internal vibration. The concrete shall be hand finished in accordance with 504. Texturing and tining are not required if the PCCP is to be resurfaced with HMA or diamond ground in accordance with 507.06.

The PCCP patch shall be cured in accordance with 504.04(a). In addition, polyethylene film shall be placed over the patch and covered with a 4 in. layer of rigid or flexible insulation and firmly anchored. Small dimension lumber weighted with sandbags may be used, but large objects such as rocks or concrete blocks shall not be used.

The PCCP patch shall be inspected in accordance with 502.17.

For patches which are not to be overlaid and have a length greater than 20 ft, pavement smoothness will be accepted in accordance with 501.25 except profilograph requirement will not apply.

SECTION 506, AFTER LINE 335, INSERT AS FOLLOWS:

The cost of corrections for pavement smoothness and re-texturing shall be included in the cost of PCCP patching.

Mr. Koch

Date: 10/20/16

COMMENTS AND ACTION

506.10 PLACING CONCRETE 506.13 BASIS OF PAYMENT

DISCUSSION:

This item was introduced and presented by Mr. Koch who expressed smoothness concerns in accordance with section 506 where PCCP patches will not be overlaid where the design speed is greater than 45 mph, and has a length greater than 20 ft. Mr. Koch stated that although PCCP patching is preventative maintenance, the public should receive a smoother product where longer patching is required.

Mr. Koch therefore proposes to revise the language in 506 to require pavement smoothness in accordance with 501.25(b).

Mr. Pankow asked if this would also apply to HMA patches. Mr. Koch said they can look at it if necessary, but HMA is usually milled, so should not be an issue.

Action:	Passed as Submitted Passed as Revised Withdrawn
X	2018 Standard Specifications Revise Pay Items List
X	Create RSP (No. 506-R-648) Effective Jan. 01, 2017 Letting RSP Sunset Date: 2018 book
	Revise RSP (No) Effective Letting RSP Sunset Date:
	Standard Drawing Effective
	Create RPD (No) Effective Letting GIFE Update SiteManager Update
	<u>x</u>

Mr. Koch Date: 10/20/16

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO STANDARD SPECIFICATIONS

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: As required by specification pipes are to be cleaned of debris prior to lining. The specification do not currently address what is to occur with the generated material.

PROPOSED SOLUTION: Set forth disposal expectations.

APPLICABLE STANDARD SPECIFICATIONS: 725.08, 725.09, and 725.10

APPLICABLE STANDARD DRAWINGS: na

APPLICABLE DESIGN MANUAL SECTION: na

APPLICABLE SECTION OF GIFE: na

APPLICABLE RECURRING SPECIAL PROVISIONS: na

PAY ITEMS AFFECTED: na

APPLICABLE SUB-COMMITTEE ENDORSEMENT: na

IMPACT ANALYSIS (attach report): na

Submitted By: Michael Koch

Title: Area Engineer

Organization: INDOT

Phone Number: 574-612-2224

Date: 9/20/2016

Mr. Koch Date: 10/20/16

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO STANDARD SPECIFICATIONS

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? n_0

Will approval of this item affect the Approved Materials List? no

Will this proposal improve:

Construction costs? no

Construction time? no

Customer satisfaction? na

Congestion/travel time? no

Ride quality? no

Will this proposal reduce operational costs or maintenance effort? ${\bf n}a.$

Will this item improve safety:

For motorists? na

For construction workers? na

Will this proposal improve quality for:

Construction procedures/processes? yes

Asset preservation? no

Design process? no

Will this change provide the contractor more flexibility? NO
Will this proposal provide clarification for the Contractor and field
personnel? Yes

Can this item improve/reduce the number of potential change orders? yes Is this proposal needed for compliance with:

Federal or State regulations? yes

 $\underline{\hbox{AASHTO}}$ or other design code? $\underline{\hbox{na}}$

Is this item editorial? yes

Provide any further information as to why this proposal should be
placed on the Standards Committee meeting Agenda: Typically pipe linings involve environmentally sensitive areas, appropriate disposal is an obligation.

Item No.04 10/20/16 (2016 SS) (contd.)

Mr. Koch

Date: 10/20/16

REVISION TO STANDARD SPECIFICATIONS

SECTION 725 - SLIP LINING OF EXISTING PIPE

725.08 LINER PIPE INSTALLATION

725.09 METHOD OF MEASUREMENT

725.10 BASIS OF PAYMENT

(Proposed changes shown highlighted gray)

The Standard Specifications are revised as follows:

SECTION 725, BEGIN LINE 202, INSERT AS FOLLOWS:

725.08 Liner Pipe Installation

Prior to commencing the liner pipe installation, all jagged existing pipe edges or other deformities shall be repaired. All debris and foreign material shall be removed from the existing pipe and disposed of in accordance with 203.08. A visual walk-through inspection shall be performed after all debris and foreign material has been removed from the existing pipe in order to assess the current condition of the pipe. If visual inspection is not possible, a video inspection of the existing pipe shall be performed. A copy of the video inspection shall be provided to the Engineer. If, upon completion of the inspection of the existing pipe, the Contractor believes that they cannot proceed with the work as shown on the plans, the Engineer shall be notified.

SECTION 725, BEGIN LINE 261, INSERT AS FOLLOWS:

No measurement will be made for debris removal *and disposal*, filling existing voids, or trimming, cutting, jacking, or other corrective measures performed on jagged edges or other deformities of the existing pipe in order to facilitate installation of the liner pipe. No measurement will be made for visual or video inspection of the existing pipe.

SECTION 725, BEGIN LINE 285, DELETE AND INSERT AS FOLLOWS:

The cost of repairing, trimming, or cutting jagged edges or deformities to existing pipe, filling cavities around the existing pipe with cellular concrete grout, acquisition and restoration of right-of-entry areas, acquiring all necessary new permits or amendments to existing permits to work in areas accessible via Contractor-obtained right-of-entry, erection, maintenance, and removal of temporary fence, removing removal and disposal of debris and foreign material from the existing pipe, visual or video inspection of the existing pipe, deforming a circular liner pipe, supplying and constructing the bulkheads, grouting the annular space between the existing pipe and the liner pipe, and other incidentals will not be paid separately, but shall be included in the cost of the pay items in this section.

Item No.04 10/20/16 (2016 SS) (contd.)

Mr. Koch

Date: 10/20/16

COMMENTS AND ACTION

725.08 LINER PIPE INSTALLATION

725.09 METHOD OF MEASUREMENT

725.10 BASIS OF PAYMENT

DISCUSSION:

Mr. Koch introduced and presented this item citing that 725.08 states that pipes are to be cleaned of debris prior to lining, and that the specification does not currently address what is to occur with the generated material. Mr. Koch also stated that typically pipe linings involve environmentally sensitive areas, so appropriate disposal is an obligation. It is for this reason, the proposed revisions of 725 are as shown.

Motion: Mr. Koch Second: Mr. Pankow Ayes: 9 Nays: 0 FHWA Approval: YES	Action:	Passed as Submitted Passed as Revised Withdrawn
Standard Specifications Sections referenced and/or affected: 725.08 pg 699, 725.09 and 725.10	<u>X</u>	2018 Standard Specifications Revise Pay Items List
pg 700. Recurring Special Provision affected:	<u>x</u>	Create RSP (No. <mark>725-R-649</mark>) Effective Jan. 01, 2017 Letting RSP Sunset Date: 2018 book
NONE Standard Drawing affected: NONE		Revise RSP (No) Effective Letting RSP Sunset Date:
Design Manual Sections affected:		Standard Drawing Effective
GIFE Sections cross-references:		Create RPD (No) Effective Letting
NONE		GIFE Update
		SiteManager Update

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO STANDARD SPECIFICATIONS AND SPECIAL PROVISION

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: District testing engineer meeting presented some recommendations for changes to the recent Aggregate for Seal Coat RSP 404-R-624. The concern is that even though we allow SC 11, SC 12, and SC 16 as aggregates now, they are not required. SC aggregates have a reduced P200 value and are more effective in seal coat applications. It was stated the reason the "regular" aggregate products were left in the spec is because local agencies reference our specification. To require the use of SC aggregates for all INDOT projects, it was decided we could put a note similar to Note 1 stating that for all type P seal coats, SC aggregates shall be used. Type P seal coats requires polymer modified emulsions, which is what INDOT exclusively uses now.

PROPOSED SOLUTION: modify note 1 in seal coat table. Bring SC aggregate requirements out of 904 section into 404 section.

APPLICABLE STANDARD SPECIFICATIONS: 404-R-624, 904.02(a)

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL SECTION: N/A

APPLICABLE SECTION OF GIFE: N/A

APPLICABLE RECURRING SPECIAL PROVISIONS: N/A

PAY ITEMS AFFECTED: N/A

APPLICABLE SUB-COMMITTEE ENDORSEMENT:

IMPACT ANALYSIS (attach report):

Submitted By: Matt Beeson

Title: State Materials Engineer

Organization: INDOT

Phone Number: 317-610-7251 x 204

Date: 8/31/16

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO STANDARD SPECIFICATIONS AND SPECIAL PROVISION

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? N

Will approval of this item affect the Approved Materials List? Now will this proposal improve:

Construction costs? N

Construction time? N

Customer satisfaction? Y

Congestion/travel time? N

Ride quality? Y

Will this proposal reduce operational costs or maintenance effort? Y Will this item improve safety:

For motorists? Y

For construction workers? N

Will this proposal improve quality for:

Construction procedures/processes? N

Asset preservation? Y

Design process? N

Will this change provide the contractor more flexibility? N

Can this item improve/reduce the number of potential change orders? NIs this proposal needed for compliance with:

Federal or State regulations? N

AASHTO or other design code? N

 $\frac{\text{Is this item editorial?}}{\text{Provide any further information as to why this proposal should be}}{\text{placed on the Standards Committee meeting Agenda:}}$

Item No.05 10/20/16 (2016 SS) (contd.)

Mr. Beeson
Date: 10/20/16

REVISION TO SPECIAL PROVISION AND STANDARD SPECIFICATIONS

404-R-624 AGGREGATE FOR SEAL COAT SECTION 904 - AGGREGATES 904.03(a) CLASSIFICATION OF AGGREGATES

(Proposed changes shown highlighted gray, proposed changes to 904.03(a) shown inserted into RSP under: SECTION 904, BEGIN LINE 209, DELETE AND INSERT AS FOLLOWS:)

404-R-624 AGGREGATE FOR SEAL COAT

(Adopted 06-18-15)

The Standard Specifications are revised as follows:

SECTION 404, BEGIN LINE 21, INSERT AS FOLLOWS:

404.04 Cover Aggregate

Aggregate shall be in accordance with the following requirements. When slag is used as an alternate to natural aggregate, adjustments will be made in accordance with 904.01, to compensate for differences in specific gravity.

Coarse Aggregates*, Class B or Higher
Size No. 8, 9, 11, or 12, SC 11, SC 12, or SC 16......904
Fine Aggregate, Size No. 23 or 24......904
* Coarse aggregate type required shall be in accordance with 904.03(d)1 for ESAL Categories 4, 2 or 3.

The types of seal coats shall be as follows:

			Rates of Application per sq yd			
Type (see Note 1)	Application	Cover Aggregate Size No. and Course	Aggregate,	Asphalt Material, Gal. at 60°F		
1 or 1P (see Note 2)	Single	23, 24	12 - 15	0.12 - 0.16		
2 or 2P	Single	12, <i>SC 12</i>	14 - 17	0.29 - 0.33		
3 or 3P	Single	11, <i>SC 11</i> , <i>SC 16</i>	16 - 20	0.36 - 0.40		
4 or 4P	Single	9	28 - 32	0.63 - 0.68		
5 or 5P	Double	Top: 12, <i>SC 12</i> , Bottom: 11, <i>SC 11</i> , <i>SC 16</i>	16 - 19 16 - 20	0.41 - 0.46 0.28 - 0.31		
6 or 6P	Double	Top: 11, <i>SC 11</i> , <i>SC 16</i> Bottom: 9	18 - 22 28 - 32	0.62 - 0.68 0.42 - 0.46		
7 or 7P	Double	Top: 11, <i>SC 11</i> , <i>SC 16</i> Bottom: 8	18 - 22 28 - 32	0.62 - 0.68 0.42 - 0.46		

Note 1 – AE-90S *and SC aggregates* shall be used for type P seal coats, *except SC aggregate requirement* will not apply to seal coat used on shoulders.

Note 2 – HFRS-2 shall not be used with type 1 seal coat.

Seal coat, SC, aggregates shall be 85% one face and 80% two face crushed. The Flakiness Index in accordance with ITM 224 shall be a maximum of 25%. Non SC

REVISION TO SPECIAL PROVISION AND STANDARD SPECIFICATIONS

404-R-624 AGGREGATE FOR SEAL COAT SECTION 904 - AGGREGATES 904.03(a) CLASSIFICATION OF AGGREGATES

aggregates shall have a minimum crushed particle percentage of 70%. Determination of crushed particles shall be made from the mass weight of material retained on the No. 4 (4.75 mm) sieve in accordance with ASTM D 5821.

SECTION 904, BEGIN LINE 209, DELETE AND INSERT AS FOLLOWS:

(a) Classification of Aggregates

Characteristic Classes	AP	AS	A	В	С	D	E.	F
Quality Requirements:								
Freeze and Thaw Beam Expansion, % max. (Note 1)	.060							
Los Angeles Abrasion, % max. (Note 2)	40.0	30.0	40.0	40.0	45.0	45.0	50.0	
Freeze and Thaw, AASHTO T 103, Procedure A,								
% max. (Note 3)	12.0	12.0	12.0	12.0	16.0	16.0	20.0	25.0
Sodium Sulfate Soundness, % max. (Note 3)	12.0	12.0	12.0	12.0	16.0	16.0	20.0	25.0
Brine Freeze and Thaw Soundness, % max. (Note 3)	30	30	30	30	40	40	50	60
Absorption, % max. (Note 4)	5.0	5.0	5.0	5.0	5.0			
Additional Requirements:								
Deleterious, % max.								
Clay Lumps and Friable Particles	1.0	1.0	1.0	1.0	2.0	4.0		
Non-Durable (Note 5)	4.0	2.0	4.0	4.0	6.0	8.0		
Coke					(See N	lote 6)		
Iron			1	-	(See N	Vote 6)		
Chert (Note 7)	3.0	3.0	3.0	5.0	8.0	10.0		
Weight per Cubic Foot for Slag, lbs, min.	75.0		75.0	75.0	70.0	70.0	70.0	
Crushed Particles, % min. (Note 8)								
Asphalt Seal Coats			70.0	70.0				
Compacted Aggregates			20.0	20.0	20.0	20.0		
Additional SMA Mixture Requirements:								
Micro-Deval Abrasion, %, max		(Note 9)						
Aggregate Degradation, %, max		(Note 10)						

Notes: 1. Freeze and thaw beam expansion shall be tested and re-tested in accordance with ITM 210.

- 2. Los Angeles abrasion requirements shall not apply to BF.
- 3. Aggregates may, at the option of the Engineer, be accepted by the Sodium Sulfate Soundness or Brine Freeze and Thaw Soundness requirements.
- 4. Absorption requirements apply only to aggregates used in PCC and HMA mixtures except they shall not apply to BF. When crushed stone coarse aggregates from Category I sources consist of production from ledges whose absorptions differ by more than two percentage points, the absorption test will be performed every three months on each size of material proposed for use in PCC or HMA mixtures. Materials having absorption values between 5.0 and 6.0 that pass AP testing may be used in PCC. If variations in absorption preclude satisfactory production of PCC or HMA mixtures, independent stockpiles of materials will be sampled, tested, and approved prior to use.
- 5. Non-durable particles include soft particles as determined by ITM 206 and other particles which are structurally weak, such as soft sandstone, shale, limonite concretions, coal, weathered schist, cemented gravel, ocher, shells, wood, or other objectionable material. Determination of non-durable particles shall be made from the total weight (mass) of material retained on the 3/8 in. (9.5 mm) sieve. Scratch Hardness Test shall not apply to crushed stone coarse aggregate.
- ACBF and SF coarse aggregate shall be free of objectionable amounts of coke, iron, and lime agglomerates.
- 7. The bulk specific gravity of chert shall be based on the saturated surface dry condition. The amount of chert less than 2.45 bulk specific gravity shall be determined on the total weight (mass) of material retained on the 3/8 in. (9.5 mm) sieve for sizes 2 through 8, 43, 53, and 73 and on the total weight (mass) of material retained on the No. 4 (4.75 mm) sieve for sizes 9, 11, 12, and 91.
- 8. Crushed particle requirements apply to gravel coarse aggregates used in compacted aggregates, and seal coats except seal coats used on shoulders. Determination of crushed particles shall be made from the weight (mass) of material retained on the No. 4 (4.75 mm) sieve in accordance with ASTM D 5821.

Item No.05 10/20/16 (2016 SS) (contd.)

Mr. Beeson
Date: 10/20/16

REVISION TO SPECIAL PROVISION AND STANDARD SPECIFICATIONS

404-R-624 AGGREGATE FOR SEAL COAT SECTION 904 - AGGREGATES 904.03(a) CLASSIFICATION OF AGGREGATES

- 9. Micro-Deval Abrasion testing will be required for each coarse aggregate. A coarse aggregate or a blend of coarse aggregates shall have a maximum Micro-Deval Abrasion loss value of 18.0% as determined in accordance with ITM 220.
- 10. A coarse aggregate or a blend of coarse aggregates shall have a maximum Aggregate Degradation loss value of 3.0% as determined in accordance with ITM 220.

SECTION 904, BEGIN LINE 250, INSERT AS FOLLOWS:

(e) Sizes of Coarse Aggregates

	COARSE AGGREGATE SIZES (PERCENT PASSING)										
Sieve	COARSE GRADED								DENSE GRADED		
Sizes	2	5	8	9	11, SC 11 ⁽⁵⁾	12, SC 12 ⁽⁵⁾	SC 16 ⁽⁵⁾	43(1)	91	53(1)	73 ⁽¹⁾
4 in. (100 mm)											
3 1/2 in. (90 mm)											
2 1/2 in. (63 mm)	100										
2 in. (50 mm)	80-100										
1 1/2 in. (37.5 mm)		100						100		100	
1 in. (25 mm)	0-25	85-98	100					70-90	100	80-100	100
3/4 in. (19 mm)	0-10	60-85	75-95	100				50-70		70-90	90-100
1/2 in. (12.5 mm)	0-7	30-60	40-70	60-85	100	100	100	35-50		55-80	60-90
3/8 in. (9.5 mm)		15-45	20-50	30-60	75-95	95-100	94-100				
No. 4 (4.75 mm)		0-15	0-15	0-15	10-30	50-80	15-45	20-40		35-60	35-60
No. 8 (2.36 mm)		0-10	0-10	0-10	0-10	0-35		15-35		25-50	
No. 16 (1.18 mm)							0-4				
No. 30 (600 µm)						0-4		5-20		12-30	12-30
No. 200 (75 µm) ⁽²⁾								0-6.0		5.0-10.0 ⁽⁴⁾	5.0-12.0
Decant (PCC) ⁽³⁾		0-1.5	0-1.5	0-1.5	0-1.5	0-1.5			0-1.5		
Decant (Non-PCC)	0-2.5	0-2.5	0-3.0	0-2.5	0-2.5	0-2.0			0-2.5		
Decant (SC)					0-1.5	0-1.5	0-1.5				

Notes: (1) The liquid limit shall not exceed 25 (35 if slag) and the plasticity index shall not exceed 5. The liquid limit shall be determined in accordance with AASHTO T 89 and the plasticity index in accordance with AASHTO T 90.

- (2) Includes the total amount passing the No. 200 (75 μ m) sieve as determined by AASHTO T 11 and T 27.
- (3) Decant may be 0-2.5 for stone and slag.
- (4) When slag is used for separation layers as defined in 302.01, the total amount passing the No. 200 (75 μm) sieve shall be 10.0 to 12.0.
- (5) Seal coat (SC) aggregates shall be 85% one face and 80% two face crushed. The Flakiness Index in accordance with ITM 224 shall be a maximum of 25%.

Item No.05 10/20/16 (2016 SS) (contd.)

Mr. Beeson
Date: 10/20/16

COMMENTS AND ACTION

404-R-624 AGGREGATE FOR SEAL COAT 904.03(a) CLASSIFICATION OF AGGREGATES

DISCUSSION:

This item was introduced and presented by Mr. Beeson who proposes to modify note 1 in the seal coat table found in RSP 404-R-624, and incorporate the SC aggregate requirements from the 904 section and include it into the existing RSP 404-R-624.

Mr. Awwad further explained that the District testing engineer meeting presented some recommendations for changes to the recent Aggregate for Seal Coat RSP 404-R-624. The concern is that even though we allow SC 11, SC 12, and SC 16 as aggregates now, they are not required. SC aggregates have a reduced P200 value and are more effective in seal coat applications. Mr. Beeson stated the reason the "regular" aggregate products were left in the spec is because local agencies reference our specification. To require the use of SC aggregates for all INDOT projects, it was decided to put a note similar to Note 1 stating that for all type P seal coats, SC aggregates shall be used. Type P seal coats requires polymer modified emulsions, which is what INDOT exclusively uses now.

Mr. Miller asked if we will need a design memo telling designers to use type P. Mr. Dave explained that the designer determines the details. Further discussion revealed that no, a design memo is not necessary since it will be taken care of during the design process.

Mr. Pankow asked if there is a big cost difference between the types of aggregates. Mr. Prather clarified that the SC type are more costly and are not readily available everywhere.

Ms. Phillips asked that we hold off on an effective date until we see how many contracts may be affected.

Post-meeting note: Ms. Phillips and Mr. Dave has determined that the effective date will be January 01, 2017; RSP 904-R-626 will also be revised to show changes in table 904 (a) Classification of Aggregates instead of in 404-R-624.

	5 - 5	
Motion: Mr. Beeson Second: Mr. Cales Ayes: 9 Nays: 0 FHWA Approval: YES	Action:	Passed as Submitted Passed as Revised Withdrawn
Standard Specifications Sections referenced and/or affected:	<u>X</u>	2018 Standard Specifications Revise Pay Items List
904 pg 875.		Revise Pay Items List
Recurring Special Provision affected:		Create RSP (No) Effective Letting RSP Sunset Date:
404-r-624 AGGREGATE FOR SEAL COAT, 904-r-626 AGGREGATES	<u>X</u>	Revise RSP (No. 404-R-624 and 904-R-626)
Standard Drawing affected:		Effective Jan. 01, 2017 Letting RSP Sunset Date: 2018 book
NONE		Standard Drawing Effective
Design Manual Sections affected:		
NONE		Create RPD (No) Effective Letting
GIFE Sections cross-references:		GIFE Update
NONE		SiteManager Update

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO STANDARD SPECIFICATIONS

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Multiple materials currently allowed for filling cracks on a surface milled in accordance with 306. PG 64-22 is the material of choice and was intended to be used on a milled surface, but is not clearly stated.

PROPOSED SOLUTION: add more specific language in 408.02

APPLICABLE STANDARD SPECIFICATIONS: 408.02

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL SECTION: N/A

APPLICABLE SECTION OF GIFE: $N\!/A$

APPLICABLE RECURRING SPECIAL PROVISIONS: N/A

PAY ITEMS AFFECTED: N/A

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Pavement Peer Group

IMPACT ANALYSIS (attach report):

Submitted By: Matt Beeson

Title: State Materials Engineer

Organization: INDOT

Phone Number: 317-610-7251 x 204

Date: 8/31/16

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO STANDARD SPECIFICATIONS

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? N

Will approval of this item affect the Approved Materials List? N

Will this proposal improve:

Construction costs? N

Construction time? N

Customer satisfaction? Y

Congestion/travel time? N

Ride quality? Υ

Will this proposal reduce operational costs or maintenance effort? Υ

Will this item improve safety:

For motorists? Y

For construction workers? N

Will this proposal improve quality for:

Construction procedures/processes? N

Asset preservation? Y

Design process? N

Will this change provide the contractor more flexibility? ${
m N}$

Can this item improve/reduce the number of potential change orders? N is this proposal needed for compliance with:

Federal or State regulations? N

AASHTO or other design code? N

Is this item editorial? Y

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda: This revision is a request brought up at a recent Pavement Peer group meeting.

Item No.06 10/20/16 (2016 SS) (contd.)

Mr. Beeson
Date: 10/20/16

REVISION TO STANDARD SPECIFICATIONS

SECTION 408 - SEALING OR FILLING CRACKS AND JOINTS 408.02 MATERIALS

The Standard Specifications are revised as follows:

SECTION 408, BEGIN LINE 12, DELETE AND INSERT AS FOLLOWS:

408.02 Materials

Materials shall be in accordance with the following:

Asphalt Binder, PG 64-22*	902.01(a)
Asphalt Emulsion for Crack Filling, AE-90S	902.01(b)
Fine Aggregates, No. 23 or 24	904
Joint Sealing Materials	906.02(a)2
* A PG 64-22 asphalt binder shall be used to fill cracks on a	surface that is milled in
accordance with 306, and Ppolypropylene fibers shall be u	ised only in conjunction
with warranted micro-surfacing.	

Item No.06 10/20/16 (2016 SS) (contd.)

Mr. Beeson
Date: 10/20/16

COMMENTS AND ACTION

408.02 MATERIALS

DISCUSSION:

Mr. Beeson introduced and presented this item proposing to add more specific language in 408.02, and stated that there are multiple materials currently allowed for filling cracks on a surface milled in accordance with 306. Mr. Awwad added that PG 64-22 is the material of choice and was intended to be used on a milled surface, but is not clearly stated. This revision will provide that clarification. Mr. Prather further clarified the need to sufficiently fill and seal the cracks prior to tack coat.

Motion: Mr. Beeson Second: Mr. Cales Ayes: 9 Nays: 0 FHWA Approval: YES	Action:	Passed as Submitted Passed as Revised Withdrawn
Standard Specifications Sections referenced and/or affected: 408.02 pg 295.	<u>x</u>	2018 Standard Specifications Revise Pay Items List
Recurring Special Provision affected: NONE	<mark>X</mark>	Create RSP (No. <mark>408-R-650</mark>) Effective <mark>Jan. 01, 2017</mark> Letting RSP Sunset Date: 2018 book
Standard Drawing affected: NONE		Revise RSP (No) Effective Letting RSP Sunset Date:
Design Manual Sections affected: NONE		Standard Drawing Effective
GIFE Sections cross-references: NONE		Create RPD (No) Effective Letting GIFE Update
		SiteManager Update

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO STANDARD SPECIFICATIONS

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Recycled concrete is currently allowed to be used as subgrade treatment when aggregate size No. 53 is specified. However, this has led to problems due to material leaching into underdrains, clogging them up and potentially causing environmental problems as well.

PROPOSED SOLUTION: Restrict the usage of recycled concrete to embankment construction rather than subgrade construction.

APPLICABLE STANDARD SPECIFICATIONS: 203.18, 207.02

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL SECTION: N/A

APPLICABLE SECTION OF GIFE: N/A

APPLICABLE RECURRING SPECIAL PROVISIONS: N/A

PAY ITEMS AFFECTED: N/A

APPLICABLE SUB-COMMITTEE ENDORSEMENT: INDOT/IMAA technical committee, INDOT Geotech, INDOT Construction

IMPACT ANALYSIS (attach report):

Submitted By: Matt Beeson

Title: State Materials Engineer

Organization: INDOT

Phone Number: 317-610-7251 x 204

Date: 9/26/16

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO STANDARD SPECIFICATIONS

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections?

Will approval of this item affect the Approved Materials List? N Will this proposal improve:

Construction costs? Y

Construction time? N

Customer satisfaction? N

Congestion/travel time? N

Ride quality? N

Will this proposal reduce operational costs or maintenance effort? Υ

Will this item improve safety:

For motorists? N

For construction workers? N

Will this proposal improve quality for:

Construction procedures/processes? Y

Asset preservation? Y

Design process? N

Will this change provide the contractor more flexibility? ${
m N}$

Will this proposal provide clarification for the Contractor and field personnel? Υ

Can this item improve/reduce the number of potential change orders? \overline{N}

Is this proposal needed for compliance with:

Federal or State regulations? N

AASHTO or other design code? N

Is this item editorial? N

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda:

Item No.07 10/20/16 (2016 SS) (contd.)

Mr. Beeson
Date: 10/20/16

REVISION TO STANDARD SPECIFICATIONS

SECTION 203 - EXCAVATION AND EMBANKMENT 203.18 EMBANKMENT CONSTRUCTION SECTION 207 - SUBGRADE 207.02 MATERIALS

The Standard Specifications are revised as follows:

SECTION 203, AFTER LINE 680, INSERT AS FOLLOWS:

Recycled concrete pavement may be used in embankment construction. The recycled material shall meeting—the requirements of B borrow in accordance with 211.02 or rock embankment in accordance with 203.20. coarse aggregate size No. 53 may be used when crushed stone size No. 53 is specified. The recycled material shall be obtained from the same project.

The recycled material concrete pavement can may only be placed only below the pavement underdrains and shall be constructed in accordance with 203.23. The recycled concrete pavement shall not be used within 2 ft of the water table. Proof rolling in accordance with 203.26 shall be performed to cover the whole grade for every 5 ft of fill. Any rut greater than half inch 1/2 in. shall be corrected as directed.

A layer of geotextile in accordance with 918.0502 shall be placed prior to the placement of other material when the material is finer than recycled material. A minimum 18 in. encasement suitable for vegetation growth shall be constructed in accordance with 203.09.

SECTION 207, BEGIN LINE 21, DELETE AS FOLLOWS:

Recycled concrete pavement meeting the requirements of coarse aggregate size No. 53 may be used when crushed stone size No. 53 is specified.

Item No.07 10/20/16 (2016 SS) (contd.)

Mr. Beeson
Date: 10/20/16

COMMENTS AND ACTION

203.18 EMBANKMENT CONSTRUCTION 207.02 MATERIALS

DISCUSSION:

This item was introduced and presented by Mr. Beeson who proposes the above shown revisions in an effort to restrict the usage of recycled concrete to embankment construction rather than subgrade construction.

Mr. Beeson also stated that recycled concrete is currently allowed to be used as subgrade treatment when aggregate size No. 53 is specified. However, this has led to problems due to material leaching into underdrains, clogging them up and potentially causing environmental problems as well.

Additional editorial revisions made prior to, and during, the meeting are as shown. Further clarification was provided by Mr. Siddiki.

Mr. Beeson also proposed to delete RSP's 202-R-544 and 202-R-545, since those would now conflict with this new RSP.

Mr. Beeson revised his motion, Mr. Koch seconded.

Motion: Mr. Beeson Second: Mr. Dave and Mr. Koch Ayes: 9 Nays: 0 FHWA Approval: YES	Action: Passed as Submitted Passed as Revised Withdrawn	
Standard Specifications Sections referenced and/or affected: 203.18 pg 160; 207.02 pg 202. Recurring Special Provision affected:	X 2018 Standard Specification Revise Pay Items List X Create RSPs (No.203-R-651 207-R-652) Effective Jan. 01, 2017 Le	and etting
NONE Standard Drawing affected: NONE Design Manual Sections affected:	RSP Sunset Date: 2018 book	-R-544
NONE GIFE Sections cross-references:	Standard Drawing Effective	
NONE	Create RPD (No) Effective Letting GIFE Update	
	SiteManager Update	