

POST-CONSTRUCTION REVIEW RECOMMENDATIONS

THE POST-CONSTRUCTION REVIEW IS CONDUCTED WHEN A PROJECT'S CONSTRUCTION IS 90% COMPLETE, "LESSONS LEARNED" HAVE OCCURRED AND THEY ARE STILL "HOT" IN THE MINDS OF ALL.

THE PROJECT ENGINEER/SUPERVISOR WILL NOTIFY THE AREA ENGINEER WHEN A PROJECT WILL BE 90% COMPLETE.

THE AREA ENGINEER WILL COORDINATE WITH THE PROJECT MANAGER AND INVITE THE APPROPRIATE PEOPLE TO THE REVIEW. IT IS SUGGESTED THAT A REVIEW AGENDA BE PROVIDED WITH THE INVITATION.

DEPENDING ON THE LEVEL OF REVIEW, INDOT SHOULD CONSIDER PARTICIPATION BY MEMBERS OF THESE ORGANIZATIONS IN THEIR POST-CONSTRUCTION REVIEWS.

INDOT STAFF

ROAD DESIGN
BRIDGE DESIGN
GEOTECHNICAL
HYDRAULICS
CONSTRUCTION
ENVIRONMENTAL
TRAFFIC
MAINTENANCE PERSONNEL
UTILITY COORDINATOR

EXTERNAL STAFF

DESIGNER
CONTRACTOR SUPERVISOR
CONTRACTOR ESTIMATOR
KEY SUBCONTRACTORS
UTILITY COMPANIES
IDEM/DNR
RAILROADS
LOCAL MUNICIPALITY

THE PROJECT MANAGER WILL RECORD MINUTES OF THE REVIEW TO BE DISTRIBUTED TO ALL APPROPRIATE PARTIES.

THIS REVIEW PROVIDES THE OPPORTUNITY FOR THOSE PARTNERS, INDOT PROJECT ENGINEER/SUPERVISOR, CONTRACTOR'S CONSTRUCTION MANAGER AND OTHERS, WHO HAVE CONSTRUCTED THE PROJECT, TO CRITIQUE THE EFFORTS OF THOSE WHO DEVELOPED THE PROJECT AND VICE VERSA. HOW WELL DID THE CONSTRUCTION DELIVER THE PROJECT? FRANK, CANDID DISCUSSIONS WILL PRODUCE BETTER UNDERSTANDING FOR PROJECT DELIVERY.



INDIANA DEPARTMENT OF TRANSPORTATION

LEVEL 2

PREVENTIVE MAINTENANCE

POST CONSTRUCTION REVIEW

PROJECT ENGINEER/SUPERVISOR/CONTRACTOR SUPERINTENDANT

PRIMARY DES No. _____ **CONTRACT No.** _____

ROUTE _____ **DISTRICT** _____

WORK TYPE _____ **RFC DATE** _____

PROJECT LOCATION _____

PROJECT DESCRIPTION _____

COUNTY/CITY/TOWN _____ **DESIGNER** _____

PROJECT MANAGER _____

CONSTRUCTION MANAGER _____ **DATE** _____

EVALUATION OF PROJECT CONSTRUCTABILITY QUALITY

EVALUATION CRITERIA		Y	N	N/A	NOTE	FLAG
CONSTRUCTABILITY						
A. PLANS – ROAD						
*	1. WERE THE PLANS ACCURATE WITH EXISTING CONDITIONS?					
*	2. WERE THERE CONFLICTS BETWEEN PLANS AND STANDARD DRAWINGS?					
*	3. WERE CONTROL POINTS INCLUDED AND MATCH THE WORK TO EXISTING CONDITIONS?					
*	4. COULD EXISTING DRAINAGE PATTERNS BE MAINTAINED DURING CONSTRUCTION?					
*	5. DID DRIVEWAY/TURNOUT GRADES MEET ALLOWABLE STANDARDS?					
*	6. WERE SPECIAL STRUCTURES REQUIRED BECAUSE OF PIPE SIZE OR NUMBER OF PIPES?					
*	7. WERE PAVING LIMITS SHOWN?					
*	8. WAS MILLING REQUIRED?					
*	9. COULD EXISTING ROADWAY MATERIALS BE SALVAGED FOR OTHER USE?					
*	10. DID GEOTECH TAKE CORES OF THE EXISTING PAVEMENT AND SHOULDER TO VERIFY THE STRUCTURE OF THE EXISTING ROADWAY? WHERE WERE CORES TAKEN?					

Project Constructability Review (Post Construction Review)

* - Item related to consultant designer evaluation

Y - Yes, N - No, NA - Not Applicable, Note - See note number, Flag - Item requires priority attention

EVALUATION CRITERIA		Y	N	N/A	NOTE	FLAG
*	11. WHAT WERE THE LOCATIONS OF GEOTECH INVESTIGATIONS? WHEN WERE THEY TAKEN?					
*	12. WAS THE GEOTECHNICAL ENGINEERING COMPLETED AS NECESSARY?					
*	13. WAS THERE SUFFICIENT ROOM FOR CONCRETE PAVEMENT CONSTRUCTION PHASING?					
*	14. WERE THERE CONFLICTS WITH EXISTING/PROPOSED DRAINAGE.					
*	15. WAS EXISTING DRAINAGE AFFECTED BY THE TEMPORARY PAVEMENT?					
B. PAY ITEMS & COST ESTIMATE						
*	1. WERE PAY ITEMS APPROPRIATE?					
*	2. WERE PAY ITEMS CONSISTENT WITH SPECIFICATIONS?					
*	3. DID THE ESTIMATE INCLUDE A PAY ITEM FOR ALL WORK INCLUDED IN THE PLANS? DID PAY ITEMS REFLECT SCOPE OF WORK?					
*	4. WERE ALL TEMPORARY ITEMS FOR MAINTENANCE OF TRAFFIC INCLUDED?					
*	5. PAVEMENT REMOVAL ITEM?					
*	6. RPM REMOVAL ITEM?					
*	7. REMOVE TRAFFIC SIGNAL ITEM?					
*	8. PIPE REMOVAL ITEM?					
*	9. CZ UNITS FOR BARRIER WALL ITEM?					
*	10. MOB/DEMOB FOR SEEDING ITEM?					
C. QUANTITIES						
*	1. WERE QUANTITIES RELIABLE AND VERIFIABLE?					
*	2. WERE QUANTITY ESTIMATES DEVELOPED TO APPROPRIATE LEVEL?					
D. SPECIAL PROVISIONS						
*	1. DID SPECIAL PROVISIONS INCLUDE MEASUREMENT AND BASIS OF PAYMENT?					
*	2. WERE ANY SPECIAL PROVISIONS OMITTED?					
*	3. WERE THERE ANY APPARENT CONFLICTS BETWEEN PLANS, SPECIFICATIONS OR SPECIAL PROVISIONS?					
*	4. WERE ALL REQUIRED PERMITS DETAILED IN SPECIAL PROVISIONS?					
*	5. WERE REQUIRED LANES AND CLOSURE PERIODS CLEARLY IDENTIFIED?					
*	6. WAS SPECIAL COORDINATION REQUIRED, RR, PERMITS, REGULATORY?					
*	7. WERE THE ENVIRONMENTAL RESTRICTION PERIOD IMPACTS IDENTIFIED?					
*	8. WERE UNIQUE SPECIAL PROVISIONS DEVELOPED AS NEEDED?					

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EVALUATION CRITERIA		Y	N	N/A	NOTE	FLAG
E. UTILITIES AND RAILROAD						
*	1. WERE UTILITY CONFLICTS IDENTIFIED?					
*	2. WERE ALL KNOWN UTILITIES INDICATED ON PLANS?					
*	3. WERE DRIVEWAYS/SIDEWALKS CHECKED FOR CONFLICTS WITH UTILITIES.					
*	4. COULD REASONABLE CHANGES HAVE BEEN MADE TO AVOID UTILITY CONFLICTS?					
*	5. WERE UTILITIES TO BE MAINTAINED DURING CONSTRUCTION? IF SO, WERE PROVISIONS IN PLACE?					
*	6. WERE POLE RELOCATIONS IN CONFLICT WITH PROPOSED SIDEWALKS AND ADA REQUIREMENTS?					
*	7. WAS RAILROAD COORDINATION IN PROGRESS AS REQUIRED?					
*	8. DID THE STRUCTURES FIT IN THE R/W?					
F. ENVIRONMENTAL						
*	1. HAD ENVIRONMENTAL RESTRICTIONS PERIOD IMPACTS BEEN IDENTIFIED?					
*	2. HAD ALL PERMIT REQUIREMENTS BEEN MET? RULE 5?					
*	3. WERE DUST AND NOISE CONTROL MEASURES IDENTIFIED?					
*	4. IF THE WORK IS LOCATED ADJACENT TO A RESIDENTIAL AREA OR OCCUPIED BUILDING, WERE THERE PROVISIONS TO MINIMIZE THE IMPACT OF NOISE PRODUCING ACTIVITIES, SUCH AS RESTRICTED WORK HOURS OR TEMPORARY NOISE BARRIERS.					
*	5. WERE REQUIRED ENVIRONMENTAL PERMITS IDENTIFIED & APPLICATIONS DRAFTED? HAZARDOUS MATERIALS INVESTIGATIVE REPORT?					
*	6. WERE THERE ANY ENVIRONMENTAL ACTIVE COMMITMENT INSTEAD OF PERMITS?					
*	7. WERE THE MITIGATION REQUIREMENTS IDENTIFIED & PLANS DEVELOPED?					
*	8. IF PRESENT, WERE HISTORICAL STRUCTURES IDENTIFIED ON PLANS WITH CLEAR INSTRUCTION ON LIMITATIONS AND HANDLING?					
G. RIGHT OF WAY						
*	1. SUFFICIENT R/W AVAILABLE FOR ALL OPERATIONS?					
*	2. WAS TEMPORARY R/W FOR CONSTRUCTION ACCESS IDENTIFIED?					
*	3. WAS THERE SUFFICIENT R/W TO RELOCATE ALL UTILITIES?					
*	4. WAS THE REQUIRED R/W BEEN IDENTIFIED AND SUFFICIENT FOR THE PROJECT AND ALL NECESSARY CONSTRUCTION OPERATIONS?					

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EVALUATION CRITERIA		Y	N	N/A	NOTE	FLAG
*	5. ACCESS TO WORK AREAS?					
*	6. WAS THERE SUFFICIENT R/W TO CONSTRUCT EROSION CONTROL MEASURES?					
H. CONSTRUCTION PHASING						
*	1. WERE WORK ZONE WIDTHS ADEQUATE FOR CONSTRUCTION EQUIPMENT NEEDS?					
*	2. WERE THERE GRADE CHANGES BETWEEN PHASES THAT RESTRICTED ACCESS TO ADJACENT PROPERTIES?					
*	3. WAS THERE ENOUGH HORIZONTAL CLEARANCE FOR BARRIERS, SHORING, AND CONSTRUCTION ACCESS?					
*	4. WERE PROPOSED CONSTRUCTION PHASES APPROPRIATE AND CONSTRUCTIBLE?					
*	5. WAS THERE UNIQUE SPECIAL REVISIONS REQUIRED BY THE CONSTRUCTION PHASING?					
*	6. WAS THERE AREAS WITH RESTRICTED ACCESS?					
*	7. WERE TRAVEL LANES ADEQUATE? WIDTH? NUMBER? WIDE LOADS?					
*	8. DID STAGING CAUSE SPECIAL CONDITIONS (I.E. STRUCTURAL ADEQUACY/STABILITY)? IF SHOULDERS WERE REQUIRED TO CARRY TRAFFIC DURING STAGE CONSTRUCTION, WERE THEY STRUCTURALLY ADEQUATE OR WAS RECONSTRUCTION REQUIRED?					
*	9. WERE THERE PROPOSED ADJACENT CONTRACTS, RESTRICTIONS, CONSTRAINTS IDENTIFIED AND ACCOUNTED FOR?					
*	10. DID TRAFFIC SIGNAL PREFORMED LOOPS WORK WITH PHASING?					
*	11. DID PROPOSED DRAINAGE FUNCTION DURING CONSTRUCTION PHASES?					
I. TRAFFIC MAINTENANCE & TRAFFIC MANAGEMENT PLANS						
*	1. EMERGENCY VEHICLE TRAVEL THROUGH CLOSURE AREAS?					
*	2. "DROP OFFS" DUE TO CONSTRUCTION PHASING ADDRESSED TO SAFELY MAINTAIN TRAFFIC LANES?					
*	3. WERE PEDESTRIAN, BICYCLE, ADA NEEDS CONSIDERED?					
*	4. WERE EXITS AND ENTRANCES TO WORK ZONES ADEQUATE AND SAFE?					
*	5. WAS DETOUR NECESSARY FOR AVERTING DELAYS/CONGESTION?					
*	6. WAS THERE ADEQUATE VERTICAL CLEARANCE IN ALL PHASES OF THE MOT?					
*	7. WERE APPROACH AND DRIVEWAY GRADE APPROPRIATE AND WAS CONSTRUCTION PHASING AND PROPERTY OWNER ACCESS PROVIDED?					

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