

**PROBLEMS ASSOCIATED WITH ACCELERATION WORKS AND ITS  
SOLUTIONS**

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PROBLEMS ASSOCIATED WITH ACCELERATION WORKS AND  
ITS SOLUTIONS

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requirements for the award of the degree of  
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*To my beloved Mak and Abah  
Rosnah Karomdad & Mohamad Nazir Ismail  
without whom I, would not be here*

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## ABSTRACT

Construction industry and delays are no longer a separable issue. In common practice, upon encountering delay the Contractor is either granted an Extension of Time (EOT) in the event of excusable delay or being charged for Liquidated Damages (LAD) in the event of non-excusable delay. Apart from these two situations, there is another approach which is rarely being considered in the event of delay which is to accelerate the works. However, like any other new things or development, acceleration is prone to problems. This is due to lack of understanding by the parties regarding acceleration works. That is why the aim of this study is to identify those problems associated with the implementation of acceleration works and solutions to address the problems. These problems were identified by analyzing the Fourth Lane Highway Widening project for PLUS as a case study in order to obtain the problems from a real project rather than theory based. This research was conducted by collecting primary data from a series of interviews as well as collection from secondary data from journal articles, construction law report, etc. All of the data were analyzed using qualitative method. From the interviews, there were twelve problems found regarding the implementation of acceleration works and nine solutions were suggested by the respondents in order to avoid the problems in future. In conclusion, based on the analyzed project, the implementation of acceleration works was not as straight forward as what was found in the literature review however, despite all of the problems encountered, completing the works/achieving the acceleration target is not impossible but great care and thorough considerations must be given especially in monetary issues before commencing acceleration works.

## ABSTRAK

Isu kelewatan di dalam industri pembinaan bukan lagi perkara asing. Perkara biasa yang dilakukan ketika berdepan dengan isu kelewatan adalah; jika ianya merupakan kelewatan yang dibenarkan, Kontraktor akan di berikan lanjutan masa (EOT) namun; jika ianya merupakan kelewatan yang tidak dibenarkan, Kontraktor akan dikenakan gantirugi tertentu (LAD). Selain daripada kedua-dua situasi ini, terdapat satu lagi pendekatan yang boleh di ambil sekiranya berlaku kelewatan iaitu “pemecutan kerja”. Walau bagaimanapun, memandangkan “pemecutan kerja” adalah perkara yang masih asing/baru dan tidak di kenali di kalangan penggiat industri pembinaan di Malaysia, ini menyebabkan ianya terdedah kepada masalah. Ini adalah disebabkan oleh kurangnya pemahaman dikalangan penggiat industri mengenai “pemecutan kerja”. Oleh itu, tujuan kajian ini adalah untuk mengenal pasti masalah – masalah yang berkaitan dengan pelaksanaan “pemecutan kerja” dan penyelesaian dalam menangani masalah - masalah tersebut. Masalah – masalah ini dikenal pasti dengan menganalisis projek Pelebaran Lorong Keempat Lebuh Raya PLUS sebagai kes kajian bertujuan untuk mendapatkan maklumat berdasarkan projek sebenar dan bukan berdasarkan teori sahaja. Kajian ini telah dilakukan dengan mengumpul data primer dari beberapa siri temu bual dan juga koleksi daripada data sekunder. Kesemua data tersebut telah dianalisis dengan menggunakan kaedah Analisis Kandungan dan Analisis Dokumen. Dari temu bual tersebut juga, terdapat dua belas masalah ditemui berkaitan dengan pelaksanaan “kerja - kerja pemecutan” dan sembilan penyelesaian telah dicadangkan oleh para responden dalam usaha untuk mengelakkan masalah ketika pelaksanaan “kerja - kerja pemecutan” di masa hadapan. Kesimpulannya, berdasarkan analisis, pelaksanaan “kerja - kerja pemecutan” tidaklah mudah seperti yang dibincangkan di dalam kajian literatur. Walaubagaimanapun, ianya adalah tidak mustahil untuk mencapai sasaran pecutan jika pertimbangan yang teliti diberikan terutamanya di dalam isu kewangan sebelum memulakan “kerja-kerja pecutan”.

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## LIST OF ABBREVIATIONS

ACBC	-	Asphalt Concrete Base Course
BQ	-	Bill of Quantity
CA	-	Contract Administrator
CIDB	-	Construction Industry Development Board
COC	-	Condition of Contract
CPM	-	Critical Path Method
EOT	-	Extension of Time
ER	-	Employer's Representative
FIDIC	-	International Federation of Consulting Engineers
FLW	-	Fourth Lane Widening
ICE	-	Institute of Civil Engineers
JCT	-	Joint Contracts Tribunal
JKR	-	Jabatan Kerja Raya
KM	-	Kilometer
LAD	-	Liquidated Ascertained Damages
LDP	-	Lebuhraya Damansara Puchong
LITRAK	-	Lingkar Trans Kota Sdn Bhd
LLM	-	Lembaga Lebuhraya Malaysia
M&E	-	Mechanical & Electrical
MC	-	Master Contractor
MRT	-	Mass Rapid Transit
MWC A	-	Main Work Contractor A
MWC B	-	Main Work Contractor B
MWC C	-	Main Work Contractor C
MWC D	-	Main Work Contractor D

MWC E	-	Main Work Contractor E
NEC3	-	New Engineering Contract 3
NJB	-	New Jersey Barrier
NKVE	-	New Klang Valley Expressway
NSC	-	Nominated Sub-Contractor
NSE	-	North-South Expressway
PAM	-	Pertubuhan Arkitek Malaysia
PLUS	-	Projek Lebuhraya Utara Selatan
PM	-	Project Manager
PWD	-	Public Work Department
QS	-	Quantity Surveyor
RC	-	Reinforced Concrete
RFI	-	Request for Information
RICS	-	Royal Institute of Chartered Surveyor
ROW	-	Right of Way
RS	-	Reinforced Soil
SA	-	Supplementary Agreement
SMWC	-	Supplemental Main Works Contracts
SYABAS	-	Syarikat Bekalan Air Selangor
TNB	-	Tenaga Nasional Berhad
VO	-	Variation Order

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Introduction**

Construction project involve a complex and timely procedure from the pre – contract stage until completion of the project. It also involve people which typically consist of the Client/Employer, Architect, Civil Engineer, Mechanical and Electrical Engineer, Quantity Surveyor, Contractor and Sub - Contractors. These people were jointly obligated to complete the project according to an agreed specifications, within a specific time period and cost. Each party involves has their own obligation to be fulfilled and any in-cooperation by any of the party may lead to one of the most common issue in construction industry which is delay in the work progress. Hussin & Omran (2012) defined delay as the time overrun either beyond completion date specified in a contract or beyond the date that the parties have agreed on for delivery of a project. While Stumpf (2000) defined delay as an act or event that extends the time required to perform the tasks under a contract. In other words, delay is an act of prevention which may or may not be caused by the contracting parties which prevented the works to be completed within the stipulated time.

Poor management practices and unforeseen conditions are the things that often causes delay in construction project as stated by Chester & Hendrickson (2005). There a few types of delay laid down by Allen (2012) and Tiggeman (2010) which are; compensable delay, which is the event that entitle the contractor to an Extension of Time (EOT) and prolongation costs caused by that delay event; excusable delay is the event that entitle the Contractor to an EOT but the Contractor need to bear the risk of any additional costs that may occur due to that event; and culpable delay is the event that does not entitle the Contractor to either time nor money. According to Hussin & Omran (2012), the social and economic costs due to project delay can be extremely high and to a certain extent cannot be absorbed by the industry. Delays impact not only to the Employer but also to the Contractor as Employer's risk to suffer loss of revenue while Contractor may suffer unrecoverable loss and expense.

In common practice, upon encountering events which causes excusable delays such as Employer delay in giving site possession, Cheetham (2013) stated that traditionally the Contractor should notify the Employer for EOT to be granted. In a situation where the delay is compensable, apart from entitlement for EOT, the Contractor may also be entitled to recover delay damages from the Employer which is the direct loss and/or expense which cannot be reimbursed under the contract. The provision for loss and expense has been provided in the commonly used standard form of contract in Malaysia which is under Clause 44<sup>1</sup> in PWD Form 203A (Rev. 1/2010), Clause 24<sup>2</sup> in PAM Contract 2006 and Clause 31<sup>3</sup> in CIDB 2000. According to Allen (2012), the intention of the contract to have a clause which allow for prolongation claim is to allow the Contractor

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<sup>1</sup> Clause 44.1 where the Contractor within 30 days from the occurrence of delay event which would incurred him a cost which cannot be reimbursed under the contract shall write a notice to the S.O stating his intention to claim.

<sup>2</sup> Clause 24.1 (a) and (b) where the Contractor within 28 days from the occurrence of delay event or AIA issuance which would incurred him a cost which cannot be reimbursed under the contract shall write a notice to the S.O stating his intention to claim.

<sup>3</sup> Clause 31 and 32 where the Contractor shall be entitled to recover Loss and Expense sustained or incurred by him and for which he would not be reimbursed by any other provision of the Contract he shall give notice in writing of his intention to do so to the SO within 30 Days.

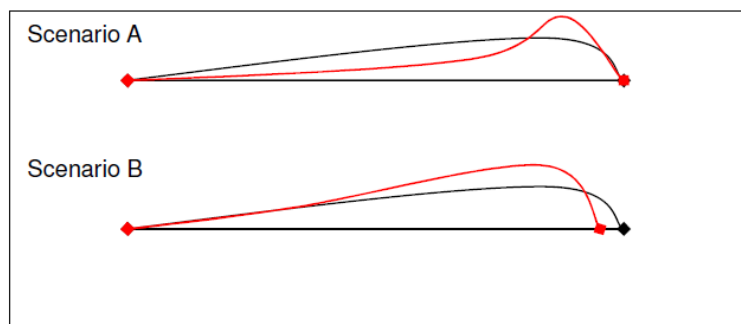
to recover monetary compensation since the delay has prevented the Contractor in completing the works on time.

However, there is another method for Employer to adopt in the event of delay caused by Employer, which is by accelerating the works. Literal interpretation of acceleration means an increase in the rate of speed<sup>4</sup>. In the construction context, Brown (2009) defined acceleration as the execution of work more quickly than previously anticipated. Similarly Whaley (2015) defined acceleration as increase in the rate or speed to the performance of the works. Other than that, Lahiri (2013) defined acceleration as the speed towards completion of the project and accelerating progress means going faster than one is obliged to do in order to complete the project. Lahiri (2013) added that what one is obliged to do is governed by the construction contract. In relation with delay, acceleration means to complete the works faster than the anticipated dates impacted by the delay. For example, if the delay impact the completion date to be extended to six months, Contractor completed the works within in three months was considered to have accelerated the works.

Figure 1.1 below shows two scenarios of possible acceleration works. Scenario A is where the project encounter excusable delay but the Employer still remain committed to the original completion date. While scenario B is where the Employer revised the completion date to be earlier than agreed during entering into the contract.

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<sup>4</sup> ConstructionWeekonline.in: [http://www.constructionweekonline.in/when-to-make-a-claim-for-acceleration -costs/](http://www.constructionweekonline.in/when-to-make-a-claim-for-acceleration-costs/) Retrieved January 23, 2015.



**Figure 1.1** Acceleration Works in General

*Source: Pinsent Masons Contractor's Legal Guidance Note Autumn 2009 Edition*

According to Long (2015), there are three types of accelerations which are; Directed Acceleration which is an acceleration occurred due to instruction from the Employer; Constructive Acceleration which occurs in the absence of Employer's instruction to acceleration as per *Motherwell Bridge Construction Limited v Micafil Vakuumtechnik*<sup>5</sup>, where the Contractor has to decide to accelerate the works in the event where he is entitled to an EOT but the Employer failed grant it. The third one is Voluntary Acceleration where it often occurs in a situation where the Contractor voluntarily speed up his works to catch up due to his own delay as a mitigation act. Voluntary Acceleration does not entitle the Contractor to claim any additional cost.

The common practice in the industry is, a Contractor is obliged to complete the works by the completion date set out in the contract which was agreed by both parties upon entering into the contract. Therefore in the event of acceleration either directive or constructive, the Contractor may entitle to acceleration cost (Brown, 2009) because completing earlier than an agreed completion date is not the Contractor's obligation and in order to complete the works earlier, the Contractor might need to add extra resources.

<sup>5</sup> (2002) 81 Con. L.R. 44 QBD (TCC)

Generally acceleration cost is a cost that a Contractor shall be entitled to for the additional effort he has taken in order to complete the work earlier than the contract completion date or an extended completion date granted due to EOT. This statement is supported by Hussin & Omran (2012) where acceleration occurs when a project has been delayed, yet the Employer demands the Contractor to complete before the extended completion date. They added that the acceleration costs may include increase in mobilization and demobilization of labour, plant and machinery, workers overtime due to additional working hours as well as the probability of labour inefficiencies cost which is congestion or fatigue from the overtime. According to them, the inefficiencies cost could be very high as it involves manpower but it is hard to determine as there is no accurate method to quantify manpower's productivity.

Lahiri (2013) highlighted three key points in relation to a claim for acceleration cost which are; first, completing the works before the contract completion date is favorable especially to the Employer. However, it does not necessarily make the Contractor entitled for the additional cost (acceleration cost) incurred in order for the Contractor to complete the works ahead. What was being promised to Contractors in the event of early completion is normally an incentive payment. He added that, this kind of payment is not an acceleration cost. It is more to a 'bonus' as an appreciation for early completion. In order for a Contractor to claim for acceleration cost, the Contractor must prove that he received a valid instruction<sup>6</sup> from Employer or its agent to accelerate the works.

Second, even though there is an instruction for the Contractor to accelerate the works, proper consideration must be taken into account whereby, if the instruction was given due to the Contractor did not carry out the works with due diligence, then the acceleration would be a mere effort of mitigation by the Contractor due to his own liability

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<sup>6</sup> Valid instruction means that the instruction must be given by the authorized person (i.e: Contract Administrator) using agreed notice serving method as per contract (i.e registered post etc.)

for delay. Under this circumstances, the Contractor cannot charge the Employer for any cost incurred due to the accelerated works.

Third is, in the situation where the delay was caused by the Employer but the Employer did not respond to the Contractor's application of EOT. Hence the Contractor accelerate the works without instruction in order to avoid being charged for Liquidated Ascertain Damages (LAD) as per *Motherwell v Micalfil*. This situation as mentioned earlier is called Constructive Acceleration where there is no express instruction for the Contractor to accelerate the works but he is in a situation to complete the works on or before the contract completion date as he is not being granted with EOT. While on the other hand, Johnson (2006) in his article explained that a Contractor may recover the cost incurred as a result of acceleration when; the delays are excuseable or he was ordered to accelerate the works.

Apparently, in Malaysian context, there is no definition nor provision for acceleration in the standard forms<sup>7</sup> which frequently used such as PAM 2006, PWD 203A (Rev. 2010) and CIDB 2000 to guide the parties in introducing acceleration claim in a project. This has made the implementation of acceleration is rather vague. Unlike the International Federation of Consulting Engineers (FIDIC), Joint Contracts Tribunal (JCT), New Engineering Contract (NCE3) and Institute of Civil Engineers 7<sup>th</sup> Edition (ICE), where all these conditions of contract contains provision for acceleration. However, it does not mean that Malaysian Employer cannot request the Contractor to accelerate the works. The parties are free to reach other agreements outside the original Construction Contract as stated by Cheetham (2013).

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<sup>7</sup>Malaysian Construction and Contract Law: Dealing with the Acceleration Issue. <https://simplymalaysia.wordpress.com/> Retrieved January 25, 2016.



In a profit oriented construction project, acceleration cost can be seen as advantageous to the Employer compared to prolongation cost especially if the delay was caused by the Employer. This is because the Employer can have his project to complete early so he will not face the risk of losing profit due to delay in completion as stated by Hussin & Omran (2012) where apart from time overrun, loss and expense claim from delay would significantly effect on cost overrun. Linnett *et. al* (2011) also said that and any deferral to the completion date may have very serious repercussions. He added in his articles where, it may be in the Employer's best interests to compensate the Contractor for any additional costs incurred in accelerating the works, rather than to face the cost consequences of the building not being ready when required and also a claim from the Contractor for loss and expense in the form of prolongation costs.

While on the Contractor's side, by having the opportunity of being paid to accelerate the works means that the Contractor could avoid the hassle in dealing with interest charges, insurances and etc. By accelerating the works, the Contractor may reduce site running costs or free up key site staff to work elsewhere, or may want to accelerate in order to ensure completion by the contract completion date, so as to avoid liability for liquidated damages (Linnett *et. al*, 2011). Other than that, the Contractor do not need to worry about his tied up capital since the project will complete on time and the capital will be available for new projects as a Contractor may lost the opportunities for new projects due to diminished financial capabilities.

## **1.2 Problem Statement**

Acceleration works is not very popular in Malaysian Construction industry. Even in the Malaysian Standard Forms of Building or Construction Contract, there is no

expressed acceleration provision provided<sup>8</sup>. This is the reason why the industry players are not very aware about the opportunity or benefits that can be obtained from acceleration works. Although it was found earlier that acceleration can still be carried out upon the absence of acceleration clause by having a separate agreement, this agreement if not being carefully drafted by the expert, it may create many problems as per Linnett *et. al* (2011) said in his article where; “*an ill-conceived or incomplete acceleration agreement may result in at least one of the parties suffering significant unrecoverable additional costs and may lead to a major dispute*”. The absence of acceleration provision has put the implementation of acceleration in grey area hence prone to problems during the implementation.

Other than that, the absence of acceleration clause in a contract could also lead the contracting parties to encounter problems which can cause disputes. As mentioned by Whaley (2015), lacking in mechanism to value and agree on acceleration in a standard form of contract leaving the parties to reach only acceptable terms which introduces additional risk and uncertainty into the contract. These risk and uncertainty are the reasons that will cause problems to arise in the event of acceleration. The reason why an absence of acceleration clause could cause problems in the event of acceleration is because as mentioned by Ling & Ting (2010); an acceleration clause shall be introduced in the standard form of contract because it is proved to be able to influence a Contractor’s performance.

Lack of understanding often exists between Contractors, client’s organizations and consultants as to what may, and what may not, be included in acceleration claims on construction projects Maritz & Schutte (2009). Acceleration costs can include costs paid for multiple shift operations and other increased operating expenses related to performance of the work on an accelerated time schedule<sup>9</sup>. However, as mentioned by

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<sup>8</sup> Construction Contract & Management Issues (2011), Master Builders 1<sup>st</sup> & 2<sup>nd</sup> Quarter and

<sup>9</sup> Malaysian Construction and Contract Law: Dealing with the Acceleration Issue. <https://simplymalaysia.wordpress.com/> Retrieved January 25, 2016

Linnett *et. al* (2011), none of the standard forms has suggestion on how a quotation for acceleration should be prepared by the Contractor or assessed by the Employer. He added that, there is no indication given as to what items should be included in the quotation or how those items should be priced. These lack of understanding often hampered the industry players from implementing acceleration works.

Linnett *et. al* (2011) again stated that the main difficulty faced by the Contractor when preparing an acceleration quotation is assessing and pricing the acceleration cost. Other than that, a major stumbling block with acceleration is that, what happens if the Contractor does all that it commits to do, but the anticipated improvement on the completion date is not achieved. Not achieving the acceleration completion is one of the risk which a Contractor has to price in. Risk may cause the cost of acceleration relatively high however, if the Contractor is hesitating in pricing the risk he may face a significant additional unrecoverable costs.

As mentioned previously by Whaley (2015), lacking in contractual provision make the acceleration prone to risk and uncertainty, it also means that the project is at risk of facing many problems during the implementation and this is what the study will try to analyze which are; the problems and possible solutions to overcome the problems.

### **1.3 Objective**

To identify the problems associated with the implementation of acceleration works and its solutions.

### **1.4 Scope of the Research**

The scope of this study will be limited on the problems occur during the implementation of acceleration works and its solution on the following project of Proposed Fourth Lane Widening from Shah Alam Interchange to Rawang/Jalan Duta Toll Plaza and Nilai Utara to Seremban for Projek Lebuhraya Usahasama Berhad comprises of five packages, which are:-

- i. Shah Alam Interchange (KM 8.9 NKVE) and Sungai Buloh (KM 457.0 NSE), Package A, Main Works by UEM Construction Sdn Bhd.
- ii. Bukit Lanjan (KM 22.0) to Jalan Duta Toll Plaza (KM 29.0), Package B by Ekovest Construction Sdn Bhd
- iii. Sg Buloh (KM 457.0) to Rawang Interchange (KM 443.9), Package C by MTD Construction Sdn Bhd
- iv. Nilai (U) Interchange (KM 285.6) to Nilai (KM 280.4), Package D by Ekovest Construction Sdn Bhd
- v. Nilai (KM 280.4) to Seremban (KM 258.5), Package E by WCT Berhad

This research will also be limited to the Contractor's point of view only as the Contractor is the one who undertake the responsibilities and risks to accelerate the work. Hence, Contractor is more vulnerable to the risk of facing the problems during the implementation of the acceleration works.

### **1.5 Significance of the Research**

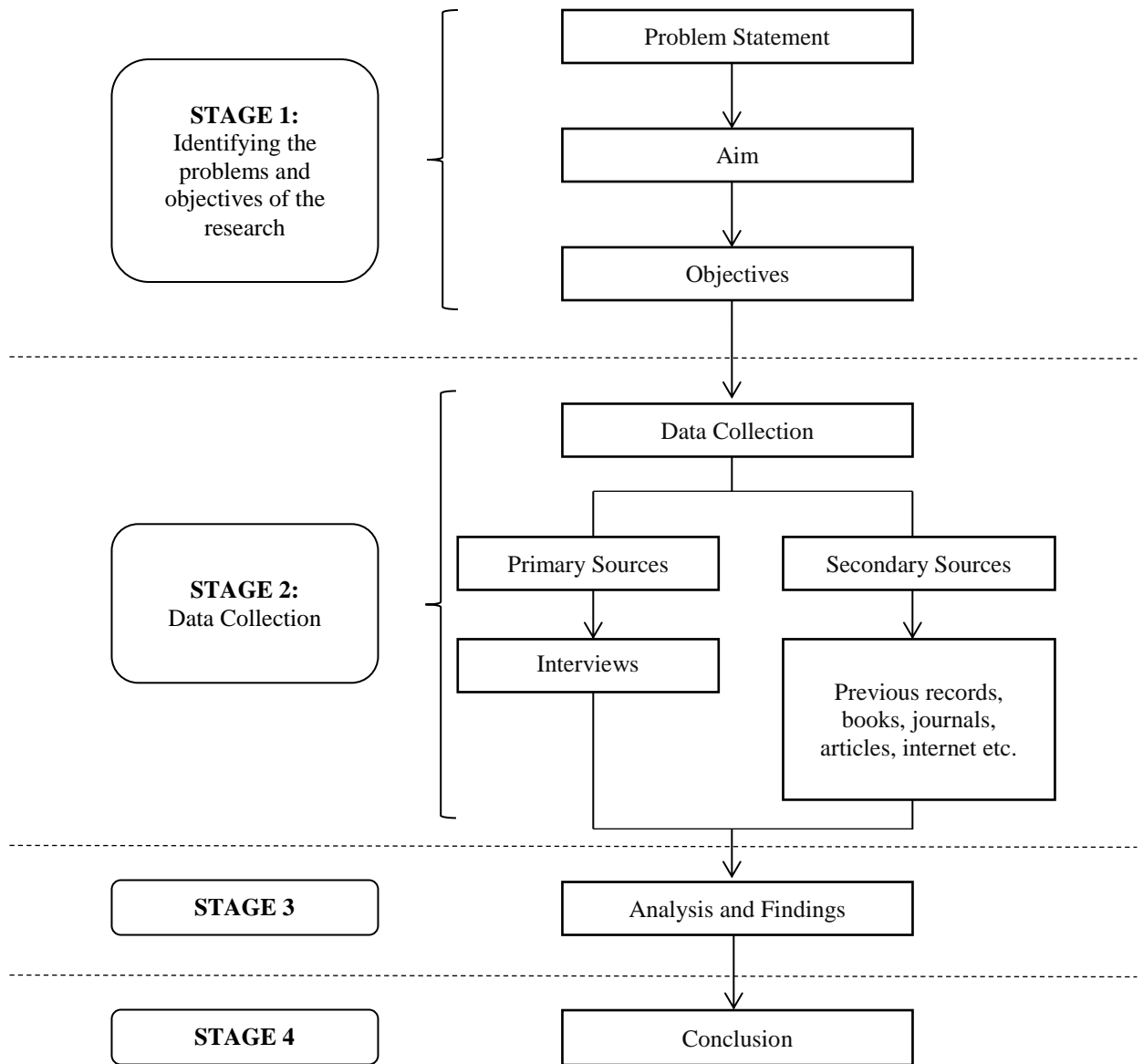
As discussed earlier, since there is no provisions in any standard forms of contract in Malaysia for acceleration works, therefore, the significance of this study is to enlighten both the Employer and Contractor that acceleration cost can be another approach in order to reduce not only the Employer's damages due to its own delay but as well as another approach to Contractor to avoid the hassle in suffering loss and expense.

Other than that, the significance of this study is also to identify the possible problems may occur in implementing acceleration works so that it can be a reference to both Employer and Contractor before deciding to accelerate the project. Furthermore, this study significantly help to make both parties realize the importance of understanding the possibility to accelerate a project in the event of Employer caused delay.

## **1.6 Research Methodology**

The approach of this research is to analyze the problems associate in the implementation of acceleration works by taking the project of Fourth Lane Widening from Shah Alam Interchange to Rawang/Jalan Duta Toll Plaza and Nilai (U) to Seremban for Projek Lebuhraya Usahasama Berhad.

The study will be approached in four stages. The first stage involving refining the objective of this research and the problem statements regarding the research. The second stage is the literature reviews related to this research which is comprising from the various sources such as journals and articles obtained from Construction Law Report, previous research, books, articles, etc. The following stage will be the data collection stage which consist of information gathering from primary data which is by interviewing the respondents from the project. The methods will be used in analyzing the data will be content analysis and document analysis as the data is going to be collected from interviews and various documents from the project. The last stage will be the formulation of solution to the problems found in this research and conclusion of this research. Figure 1.2 below shows the flow of the four stages of the research methodology process.



**Figure 1.2** Research Methodology Flow Chart.

## **1.7 Outline of the Chapters**

Below are the brief introduction on the chapter outline of this research:-

### **1.7.1 Chapter One**

Chapter One is basically describing the overview of this research which includes brief introduction on delay and acceleration; problem statements; objective of the research; scope of the research; significance of the research and; the chapters outline of the research.

### **1.7.2 Chapter Two**

In this chapter, a literature review consisting an extensive readings on delay and acceleration which will be obtained from various sources such as books, online articles and journals, seminar reports, newspaper reports etc. This literature review will be guided by the objectives of this research as well as the problem statements of this research.

### **1.7.3 Chapter Three**

Chapter three will discuss in detail the research method being carried out for the purpose of this research which generally will be carried out in four stages. It will discuss on the data collection method which is by collecting data from



primary sources by using interview method as well as data collection from secondary data. This chapter will also the data analysis method which are the Content Analysis and Document Analysis.

#### **1.7.4 Chapter Four**

Chapter four will be focusing on the discussion of the five packages of project of Proposed Fourth Lane Widening from Shah Alam Interchange to Rawang/Jalan Duta Toll Plaza and Nilai Utara to Seremban for Projek Lebuhraya Usahasama Berhad (PLUS) consisting of the project details, the background of the issues which triggered the need to acceleration, the implementation and problems arise in implementing the acceleration works, the analysis of the problems and the possible solutions to overcome the problems.

#### **1.7.5 Chapter Five**

Finally Chapter Five will deliver the conclusion and recommendation for this study from all the information and analysis obtained and shall be able to fulfil the objectives of this study.

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**APPENDIX A**  
**SEMI-STRUCTURED INTERVIEW QUESTIONS**  
**“THE PROBLEMS ASSOCIATED WITH ACCELERATION WORKS AND**  
**ITS SOLUTIONS”**

**Project: Proposed Fourth Lane Widening from Shah Alam Interchange to Rawang/Jalan Duta Toll Plaza and Nilai Utara to Seremban for Projek Lebuhraya Usahasama Berhad (PLUS).**

1. What is your position in this project?
2. How many years have you been in this position?
3. What are the cause of delays in this project?
4. Does the Employer grant the Contractor an Extension of Time?
5. Have you ever experienced acceleration in previous projects?
6. What factors triggered the need to accelerate the works in this project?
7. Who gave the instruction to accelerate the works?
8. What is your opinion on acceleration instruction for this project?
9. What was the procedure used during the implementation of the Acceleration Works?
10. Is there any provision of Acceleration Works in the Contract document?

11. Is there any additional or Supplemental Agreement regarding the Acceleration Works between the parties? (If the answer to question number 10 is negative)
12. How long does the Contractor been given the time to accelerate the works?
13. How much is the acceleration cost? Does the cost included in the Supplemental Agreement? (if there is a Supplemental Agreement)
14. How the Contractor calculate the acceleration cost?
15. How does the acceleration cost being assessed/certified in this project?
16. What are the problems encounter during the implementation of acceleration works?
17. What is your suggestion in overcoming those problems (the solutions) for future project?
18. Does the acceleration target in this project achieve or vice versa?
19. Based on many researchers, Malaysian construction industry still not very familiar with Acceleration Work. What do you think the barrier of implementation of Acceleration Works in the industry?

*Remarks: These questions were not directly distributed to the respondents. It was only being used as the researcher's guideline throughout the interview sessions.*