SHORTCOMINGS OF DELAY ANALYSIS PRACTICES: A CASE STUDY USING AN INTEGRATED APPROACH

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submitted by **ŞİNASİ BEKTAŞ** in partial fulfillment of the requirements for the degree of **Master of Science in Civil Engineering Department, Middle East Technical University by,**

Prof. Dr. Canan Özgen
Dean, Graduate School of **Natural and Applied Sciences** _____________

Prof. Dr. Güney Özcebe
Head of Department, **Civil Engineering** _____________

Prof. Dr. M. Talat Birgönül
Supervisor, **Civil Engineering Dept., METU** _____________

Examining Committee Members:

Assoc. Prof. Dr. Rifat Sönmez
Civil Engineering Dept., METU _____________

Prof. Dr. M. Talat Birgönül
Civil Engineering Dept., METU _____________

Prof. Dr. İrem Dikmen Toker
Civil Engineering Dept., METU _____________

Dr. Engin Erant
Civil Engineering Dept., METU _____________

Gülşah Fidan Dağkıran, M. Sc.
METAG A.Ş. _____________

Date: 31/08/2012

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last name: Şinasi BEKTAŞ

Signature:

ABSTRACT

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Bektaş, Şinasi

M.Sc., Department of Civil Engineering

Supervisor: Prof. Dr. M. Talat Birgönül

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Many factors such as unforeseeable events, managerial or financial problems of Contractor, insufficient technical capacity of Engineer's site team and so on may lead to delays in construction projects. Proper analysis of compensability and quantum of a delay event is very important. Any delay analysis application can be considered as a result of the combination of contract documents, scheduler, record keeping mechanism at site, communication among project participants, delay analyst and delay analysis methodology.

The main purpose of this study is to analyze the shortcomings frequently encountered in implementation of delay analysis applications and propose an integrated solution which synthesizes the solution methods for each. For this purpose seventeen (17) shortcomings were identified and solution methods were suggested for each. Moreover, these shortcomings were attributed to the previously identified elements of delay analysis applications such as contract documents, scheduler etc. Furthermore, an integrated approach is developed which synthesizes the suggested solution methods at different stages of delay analysis applications, in order to obtain accurate and reliable results.

In order to test the validity of the proposed integrated approach on a real project, a resource and cost loaded construction schedule with approximately four thousand (4000) activities is created by using Primavera software which is currently being used to monitor "Construction of One Reception Center and One Removal Centers Project in Erzurum".

In the case study, the necessary events are created in order to be able to compare the results of the proposed integrated approach and the likely results of erroneous delay analysis applications. It was apparently figured out that the proposed integrated approach has yielded accurate and reliable results and a comparison table was prepared showing the difference between the results of the proposed integrated approach and the likely result of an erroneous application.

Key Words: Delay Analysis Techniques, Extension of Time, Construction Claims

ÖZ

GECİKME ANALİZİ UYGULAMALARINDAKİ EKSİKLİKLER: BÜTÜNLEŞİK BİR YAKLAŞIM KULLANILARAK GERÇEKLEŞTİRİLEN VAKA ÇALIŞMASI

Bektaş, Şinasi

Yüksek Lisans, İnşaat Mühendisliği Bölümü

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Öngörülemeyen olaylar, Yüklenicinin yönetimsel ve finansal problemleri, Mühendisin saha ekibinin yetersiz teknik kapasitesi ve buna benzer birçok faktor inşaat projelerinde gecikmelere yol açabilmektedir. Bir gecikme olayının tazmin edilebilirlik ve miktar analizleri çok önemlidir. Her gecikme analizi uygulaması; sözleşme dökümanları, programcı, şantiyede tutulan kayıt mekanizması, proje katılımcıları arasındaki iletişim, gecikme analizcisi ve gecikme analizi yönteminin birleşiminin bir sonucu olarak düşünülebilir.

Bu çalışmanın ana amacı; gecikme analizi uygulamalarında sıklıkla karşılaşılan eksiklikleri analiz etmek ve her çözüm yöntemlerini sentezleyen bir bütünleşik yaklaşım önermektir. Bu amaçla, onyedi (17) adet eksiklik belirlenmiş ve her biri için çözüm yöntemleri önerilmiştir. Ayrıca, bu eksiklikler; sözleşme dökümanları, programcı ve benzeri gibi, önceden belirlenmiş gecike analizi uygulamaları elemanlarına bağlanmıştır. Buna ek olarak, doğru ve güvenilir sonuçlar elde etmek amacıyla; gecikme analizi uygulamalarının değişik aşamalarındaki çözüm yöntemlerini sentezleyen bir bütünleşik yaklaşım geliştirilmiştir.

Bütünleşik yaklaşımın geçerliliğini gerçek bir projede test etmek için, Primavera yazılımı kullanılarak, kaynak ve maliyet atanmış, yaklaşık dörtbin (4000) aktiviteli, şu anda “Erzurum’da Bir Kabul ve Bir Gönderi Merkezi İnşaatı Projesi” nin takibinde kullanılan bir inşaat programı hazırlanmıştır.

Vaka çalışmasında, önerilen bütünleşik yaklaşım ile yanlış uygulamaların olası sonuçlarını karşılaştırabilmek amacıyla gerekli olaylar yaratılmıştır. Önerilen bütünleşik yaklaşımın doğru ve güvenilir sonuçlar verdiği açıkca anlaşılmış ve önerilen bütünleşik yaklaşımın sonuçları ile yanlış bir uygulamanın olası sonucunun farkını gösteren bir karşılaştırma tablosu hazırlanmıştır.

Anahtar Kelimeler: Gecikme Analizi Yöntemleri, Süre Uzatımı, İnşaat Hak Talepleri

To

My Family

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LIST OF ABBREVIATIONS

ATF	Allowable Total Float
BOQ	Bill of Quantities
BSCD	Baseline Impact Schedule Completion Date
CF	Contractor’s Float
CPM	Critical Path Method
CY	Cubic Yard
CSCD	Claimant Impact Schedule Completion Date
DAM	Delay Analysis Methodology
DAMUDS	Delay Analysis Method Using Delay Section
DAP	Delay Analysis Considering Production Rate
DS	Delay Section
DSCD	Defendant Impact Schedule Completion Date
DWDA	Daily Windows Delay Analysis
EOT	Extension of Time
HSE	Health, Safety and Environmental Management
IBC	Intelligent Bar Chart
ICBF	Isolated Collapsed But-for Method
MWA	Modified Windows Analysis
PDD	Difference between Delay Days and Total Float
QA	Quality Assurance
QC	Quality Control
RDD	Number of Delay Days That a Part is Held Responsible For
RII	Relative Importance Index

SCL	Society of Construction Law
TDD	Total Delayed Days of Entire Project
TIA	Time Impact Analysis
TWA	Traditional Windows Analysis
UAE	United Arab Emirates
US	United States
UK	United Kingdom

CHAPTER 1

INTRODUCTION

1.1 Construction Schedule Delay Analysis Practices

Delays in construction can cause a number of changes in a project such as late completion, lost productivity, acceleration, increased costs, and contract termination. The party experiencing damages from delay needs to be able to recognize the delays and the parties responsible for them in order to recover time and cost. However, in general, delay situations are complex nature. A delay in an activity may not result in the same amount of project delay. A delay caused by a party may or may not affect the project completion date and may or may not cause damage to another party. A delay can be caused by more than one party; however, it can also be caused by nıne of the parties (such as unusually severe weather conditions). A delay may occur concurrently with other delays and all of them may impact the project completion date. A delay may sometimes contribute to the formation of other delays (Arditi and Pattanakitchamroon, 2006).

In construction contracts, schedule delay analysis is commonly conducted to demonstrate cause and effect relationships of time-related disputes. Schedule delay analysis makes use of the as-planned schedule, the as-built schedule, and schedule updates. Sometimes, sub networks or “fragnets” are used to present details about delay events. The schedules may be in the form of bar charts or network diagrams. The network diagram is more effective than the bar chart as it shows the logical sequences between activities. CPM schedules add another dimension to schedule analysis as they provide schedule analysts with a critical path, float consumption, and the opportunity of utilizing what-if methodology. CPM has long been accepted by court as an effective tool to evaluate the impact of delays (Arditi and Pattanakitchamroon, 2006; Levin, 1998).

Delay is classified in various ways depending on the issue of interest of the analyst. The most common classifications include:

(1) “critical” or “noncritical” delay, depending on whether it is on the critical path of the project and would therefore cause delay to the overall project completion date;

(2) “excusable” or “non-excusable” depending on whether the contractor is entitled to extension of time on account of that delay, and

(3) “compensable” or “non-compensable” delay, depending on whether the contractor would be entitled to recovery of the cost of inefficiency consequent upon the delay (Alkass et al., 1996; Bramble and Callahan, 2000; Kumuraswamy and Yogeswaran, 2003).

The common aim of all DAMs has been to investigate how delays experienced by the various project activities affect others and the project completion date and then to determine how much of the overall project delay is attributable to each party (Alkass et al., 1996; Bubshait and Cunningham, 1998; Stumpf, 2000). By this, time and cost compensations for the contracting parties, as a result of the project delay, can be apportioned, although the various methodologies achieve this at different levels of accuracies. It is generally held that for contractors to recover such entitlements they have to prove that the delay events were at the risk of the owner, according to terms of the contract, and they also affect the project completion date. The latter requirement provides a basis for the high importance attached to the use of critical path method (CPM) of scheduling for proving or disproving time related claims, such as extension of time and prolongation cost (Wickwire et al., 1989; Bramble and Callahan, 2000).

The methodologies most commented upon in the literature are:

- As-planned versus as-built;
- Impacted as-planned;
- Collapsed as-built;
- Windows analysis; and
- Time impact analysis.

1.2 Problem Definition

A variety of schedule analysis techniques are available in the industry. Different techniques generally give different results for project parties (Stumpf, 2000). Thus extensive effort has been made to improve schedule analysis (Alkass et al., 1996; Shi et al., 2001; Kim et al., 2005; Mbabazi et al., 2005; Al-Gahtani and Mohan, 2007). Various issues have also been raised such as concurrent delays, pacing delays, fair treatment of noncritical activities, real time analysis, float ownership, scheduling options, and resource allocation (Zack, 2000; Arditi and Pattanakitchamroon, 2006; Mohan and Al-Gahtani, 2006; Ibbs and Nguyen, 2007). Current methods and their improvements can only solve one or some of these issues. In addition, the impact of logic change on delay responsibility has really not been addressed in these previous studies (Nguyen and Ibbs, 2008).

Kim et al. (2005) proposed a method named "Delay Analysis Method Using Delay Section". Two inadequacies in existing methods of schedule delay analysis were identified:

(a) Ambiguity in the analysis of concurrent delay and,
(b) Inadequate consideration of time shortened activities.

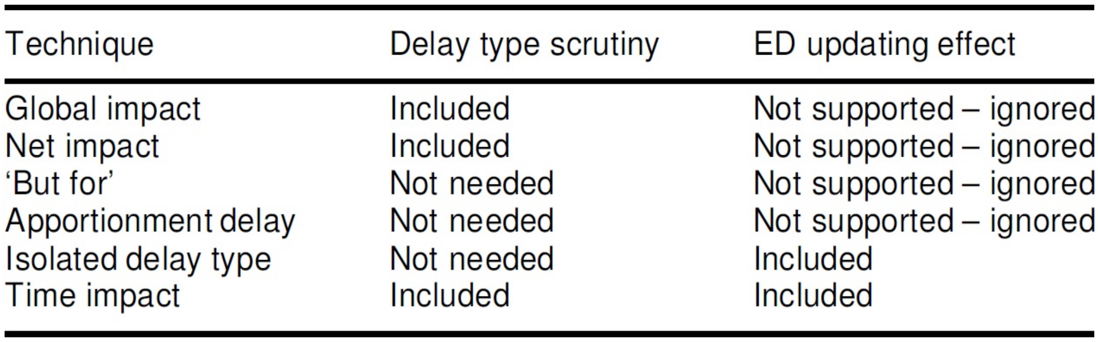
To overcome two shortcomings of the existing methods, which are the ambiguity of concurrent delay analysis and inadequate consideration for time-shortened activities, two core concepts are suggested here:

(1) Delay section (DS) and
(2) Contractor's float (CF).

Ibbs and Nguyen (2007) in their study emphasized that the need for reflecting and capturing the practice of resource allocation in schedule analysis. Many existing and new techniques pay little or no attention to this crucial issue. In their study, they adopt window analysis as a current technique for improvement. The reasons are twofold. First, courts and boards as well as practitioners and researchers generally agree that window analysis is the best available option (Finke, 1999; Kartam, 1999; Stumpf, 2000; Hegazy and Zhang, 2005). Second a mechanism that incorporates resource allocation is more feasible, practical, and ready to use (Ibbs and Nguyen, 2007).

Skitmore et al. (2004) assessed the existing delay analysis methodologies and proposed the modifications as shown in Table 1.1.

Table 1.1: Modifications needed to delay analysis techniques



Technique	Delay type scrutiny	ED updating effect
Global impact	Included	Not supported – ignored
Net impact	Included	Not supported – ignored
'But for'	Not needed	Not supported – ignored
Apportionment delay	Not needed	Not supported – ignored
Isolated delay type	Not needed	Included
Time impact	Included	Included

Various researchers have developed computer implementations of the traditional windows technique on commercial scheduling software (e.g., Alkass et al., 1995; Lucas, 2002). Commercial software, however, has serious drawbacks in terms of delay analysis due to their inadequate recording and representation of the as-built details such as work accelerations, slowdowns, or the work stops made by various parties along activities durations (Hegazy and Zhang, 2005). To overcome the mentioned drawbacks, Hegazy and Zhang proposed “Daily Windows Delay Analysis”.

To provide an alternative to delay analysis for resolving concurrent delay and liability distribution problems, Yang and Yin (2009) proposed the ICBF method, which is a systematic analysis that traces delay events with their relative evidence in an as-built schedule.

But-for method involves creating an accurate as-built schedule that includes all the daily interruptions (delays) caused by all parties to all activities. Yet, given an accurate as-built schedule, the implications of each party’s critical delays (affecting project duration) from its noncritical ones. As such, a simple approach is followed in but-for analysis to remove the delays caused by one of the parties from the as-built schedule to determine when the project would have been completed except for (but-for) the actions of that party (Zack, 2000). In contrast to this common form of but-for analysis. Alkass et al. (1995) proposed an alternative version that adds individual delays to the as-planned schedule (Hegazy et al., 2005).

Three improvements are proposed to address the identified shortfalls of existing but-for delay analysis methods. These include: new representation of activity disruption; a new representation of possible interactions among the concurrent critical delays of various parties; and a new delay analysis method that considers and reconciles the points of views of all parties (Hegazy et al., 2005).

Several studies have proposed different alternatives for total float ownership, sharing, and/or management. Householder and Rutland (1990) propose that the party who loses or gains as a result of fluctuation in the project cost should own and use float as a resource. De la Garza et al. (1991) suggest that the contractor owns float but has to trade it on demand by the owner. Zack (1993) recommends the use of a joint-ownership-of-float provision and a systematic time-impact analysis of each delay event. Pasiphol and Popescu (1994) allocate total float to individual activities on the paths such that all activities are critical. Gong (1997) calculates “safe float”, which can be used without severely affecting the risk of project delay. Sakka and El-Sayegh (2007) propose a method that quantifies the impact of float loss on project schedule and cost. While these studies recommend how float should be allocated and managed, they do not in general provide a practical and systematic approach that can be used in forensic schedule analysis (Nguyen and Ibbs, 2008).

Many researchers studied on concurrent delays in schedule delay analysis. A recent trend advocates an equitable apportionment when compensable and inexcusable concurrent delays occur. This trend is described as “fair rule” (Kraim and Diekmann, 1987) or “comparative negligence” (Hughes and Ulwelling, 1992).

A number of researchers worked on productivity issues in analysis of delays. Lee and Diekmann (2011) proposed a delay analysis technique considering production rate.

Various researchers have studied rework from different perspectives such as rework cycle, root causes, and impact on project performance (Love et al., 2010). Hegazy et al. (2011) proposed a technique named “Delay Analysis Considering Rework”, which modified the daily windows analysis to accommodate the representation and analysis of rework events as well the consideration of resource over-allocation in delay analysis.

Hegazy and Zhang (2005) proposed a new approach for representing and analyzing acceleration in windows analysis.

Even though, the above mentioned researchers have studied a number of shortcomings of delay analysis practices, none of them focused on all of the shortcomings including:

- shortcomings arising out of contract documents,
- shortcomings originating from programmer,
- shortcomings resulting from lack of record keeping or efficient communication,
- shortcomings growing out of the incapability of delay analysis technique, and
- shortcomings caused by the delay analyst.

The researchers have focused on the shortcomings growing out of the incapability of delay analysis technique; in fact, even they couldn’t address all of the shortcomings in one study which originates from the technique used.

1.3 Research Objectives and Scope

It is apparent that, in practice, there are lots of stages in construction process, yet in order to implement an efficient delay analysis application, it is crucial to identify the problems in each stage.

This research aims to address all of the shortcomings by incorporating all of the project participants and put them in charge in order to overcome the identified shortcomings.

The main objective of this research is to identify frequently encountered shortcomings of delay analysis practices in industry. These include the shortcomings encountered in all stages of delay analysis practice.

After that, the research includes the grouping of the previously identified shortcomings based on the stage they occur in the lifecycle of the project.

Moreover, the research contains a cause and solution analysis of delay events encountered during each of the project phases classified before.

Furthermore, the scope of the research includes a detailed analysis of each shortcoming.

1.4 Research Methodology

In order accomplish the objectives set above; the following steps have been pursued as the methodology of the thesis study.

First of all, a detailed literature review has been conducted regarding the delay analysis techniques and improvements of the techniques.

After that, a table showing the responsible party of each shortcoming was prepared based on the determined groups.

This table also includes the major causes and proposed solutions for each of the shortcoming.

Finally, an integrated approach was created which synthesizes the solution steps for each of the shortcomings and a case study was carried out in order to show the impacts of the shortcomings and remedies obtained by implementing the integrated approach.

1.5 Thesis Organization

The thesis consists of 4 additional chapters all of which are described here below:

Chapter 2 is a literature review of delays, causes of delays and the techniques used for analyzing the delay events. The modified techniques are reviewed which are created to overcome the shortcomings frequently encountered in construction industry. Other studies which deal with shortcomings individually reviewed.

In Chapter 3, a table is created which shows all of the shortcomings which frequently encountered during the implementation of delay analysis applications. Moreover, the responsible party, major cause and solution are indicated in this table for each of the shortcomings. After that all of the shortcomings are explained in detail throughout the Chapter 3 and major cause and solutions are discussed in detail. Finally, an integrated approach was created which takes account of each of the shortcomings and proposes solution methods.

In Chapter 4, a case study is conducted. For that a purpose a detailed work program prepared which can be easily used in order to show the effect of each shortcoming. After that, the program is updated many times; the results of the integrated approach were obtained and compared with the traditional delay analysis applications which don’t consider the identified shortcomings. A table comparing the results of the proposed integrated approach and possible results of an erroneous application was created.

In Chapter 5, a summary of the thesis study was presented.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Delays are the most common and costly problem encountered on construction projects. Analyzing construction delays has become an integral part of project's construction life. Even with today's technology, and management understanding of project management techniques, construction projects continue to suffer delays and project completion dates still get pushed back. There are many reasons why delays occur. They may be due to strikes, rework, poor organization, material shortage, equipment failure, change orders, act of God and so on. In addition delays are often interconnected, making the situation even more complex (Alkass et al., 1996).

A project consists of a collection of activities. Delays can occur in any or all of these activities, and these delays can concurrently cause delays in the completion of the project. A project delay is the accumulated effect of the delays in the individual activities. Delay analysis is used to determine the cause(s) of the delay in order to ascertain whether an extension of time should be awarded. An extension of time relieves the contractor from the liability for damages (Lowsley and Linnet, 2006).

Delays are costly to all parties involved in the construction industry and often result in litigation. The time and expense incurred to prepare a claims document in itself is substantial. There is room for improvement in present practices for keeping track of delays. Therefore, introducing a flexible and more accurate delay analysis technique can be valuable (Alkass et al., 1996)

The analysis of delays in construction projects is difficult and complicated because of the large number of individual activities that have to be dealt with, even for a relatively simple project. A medium-sized project may consist of hundreds of activities, many of which may take place at different times and with different durations than originally planned (Shi et al., 2001).

2.2 Causes of Construction Delays

Many researchers worked on the causes of construction delays. The perspective in which they examined the causes of delays varied. Arditi et al. (1985) worked on the public projects and defined the weightage of the delay events which are frequently experienced by the Contractors. Their findings are listed hereunder:

- Shortage of some resources lie manpower, technical personnel, construction materials and equipment (31%),
- Financial difficulties of contractors and public agencies (21%),
- Organization deficiencies of public agencies and contracting companies such as bureaucratic obstacles and slow decision-making mechanism in public organizations (19%),
- Delays in design work, large quantities of extra work, frequent change orders (14%),
- Other reasons (15%).

Mubarak (2005) grouped the construction delays as follows:

- Differing Site Conditions
- Design Errors or Omissions
- Changes in Owner’s Requirements
- Unusually Adverse Weather
- Miscellaneous Factors
- Force Majeure

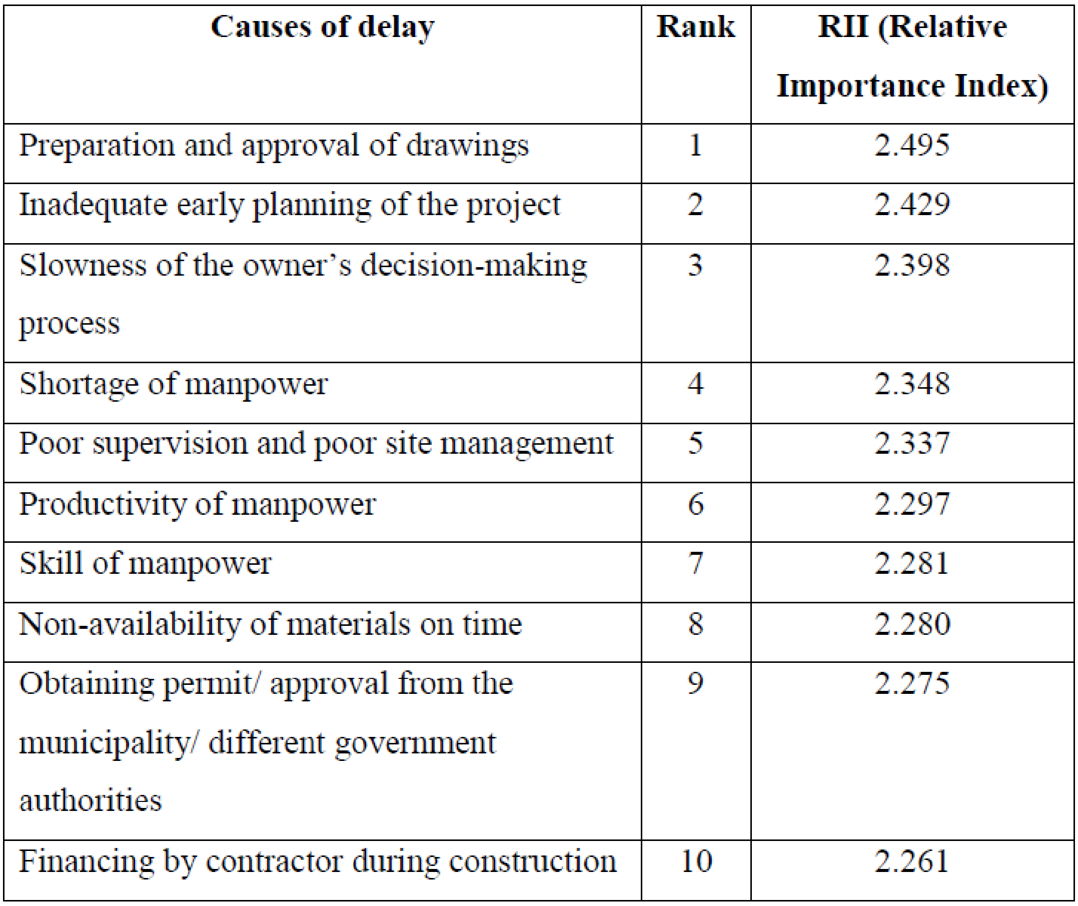
Ahmed et al. have conducted a survey so as to reveal the major causes of delays in Florida Construction Industry. The causes of construction delays based on their survey are listed below:

- Possessive decision-making mechanism,
- Highly bureaucratic organization,
- Insufficient data collection and survey before design,
- Site’s topography is changed after design,
- Lack of coordination at design phase,
- Inadequate review,

- Improper inspection approach,
- Different attitude between the consultant and contractors,
- Financial difficulties,
- Inexperienced personnel,
- Insufficient number of staff,
- Deficiency in project coordination,
- Spend some time to find sub-contractors company who is appropriate for each task,
- Often changing Sub-contractors company,
- Inadequate and old equipment,
- Lack of high-technology equipment,
- Harvest time.

Faridi and El-Sayegh (2006), studied the factors causing construction delays in the United Arab Emirates (UAE). They prepared a table showing the most significant causes of construction delays in UAE which is provided in Table 2.1 hereunder.

Table 2.1: Most Significant Causes of Delays in the United Arab Emirates (Faridi and El-Sayegh, 2006)



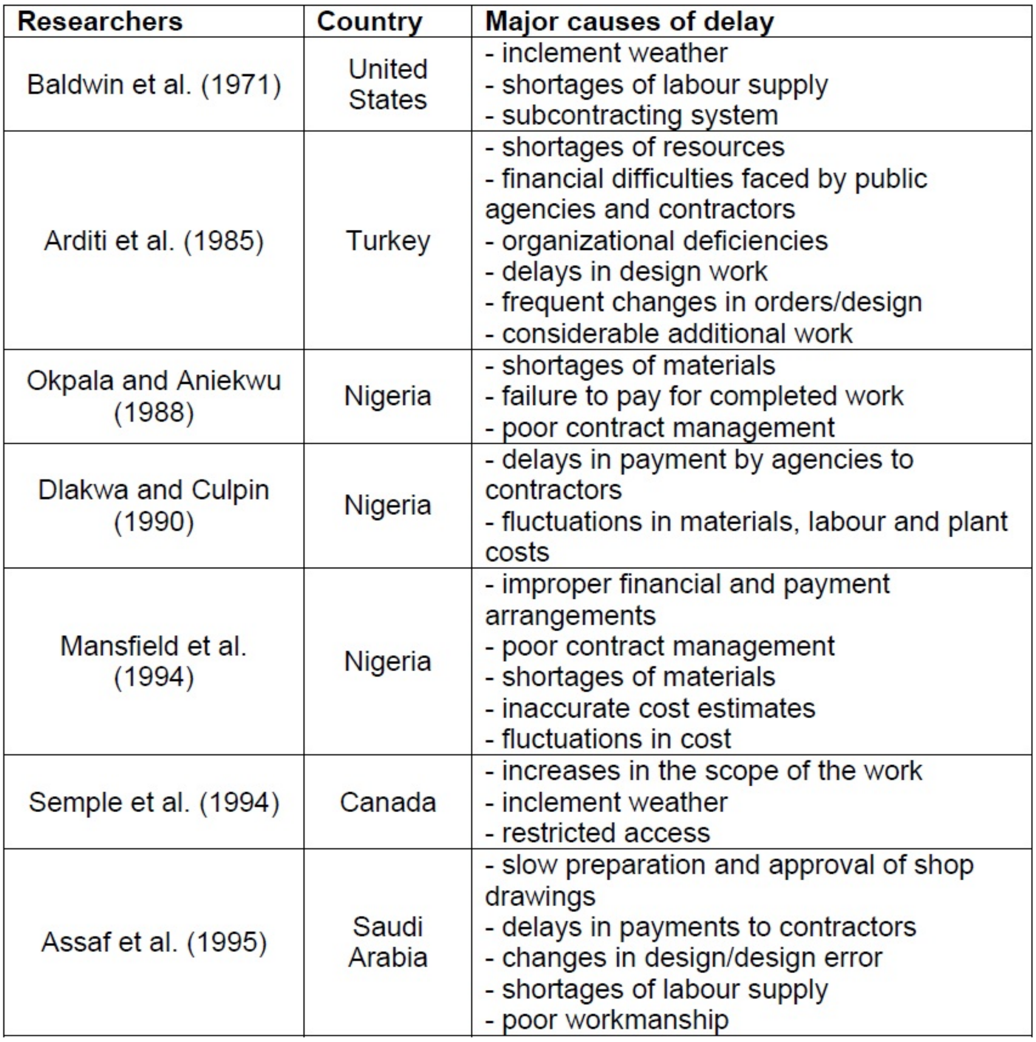
Causes of delay	**Rank**	**RII (Relative Importance Index)**
Preparation and approval of drawings	1	2.495
Inadequate early planning of the project	2	2.429
Slowness of the owner's decision-making process	3	2.398
Shortage of manpower	4	2.348
Poor supervision and poor site management	5	2.337
Productivity of manpower	6	2.297
Skill of manpower	7	2.281
Non-availability of materials on time	8	2.280
Obtaining permit/ approval from the municipality/ different government authorities	9	2.275
Financing by contractor during construction	10	2.261

Kaliba et al. (2009) carried out a survey in order to determine the major causes of delay in road construction project in Zambia. According to their survey, the main causes were listed as follows:

- Delayed payments, financial difficulties, economic problems,
- Materials procurement, equipment unavailability
- Changes in drawings,
- Staffing problems,
- Poor supervision, poor coordination on site,
- Construction mistake,
- Changes in specification,
- Labor disputes and strikes.

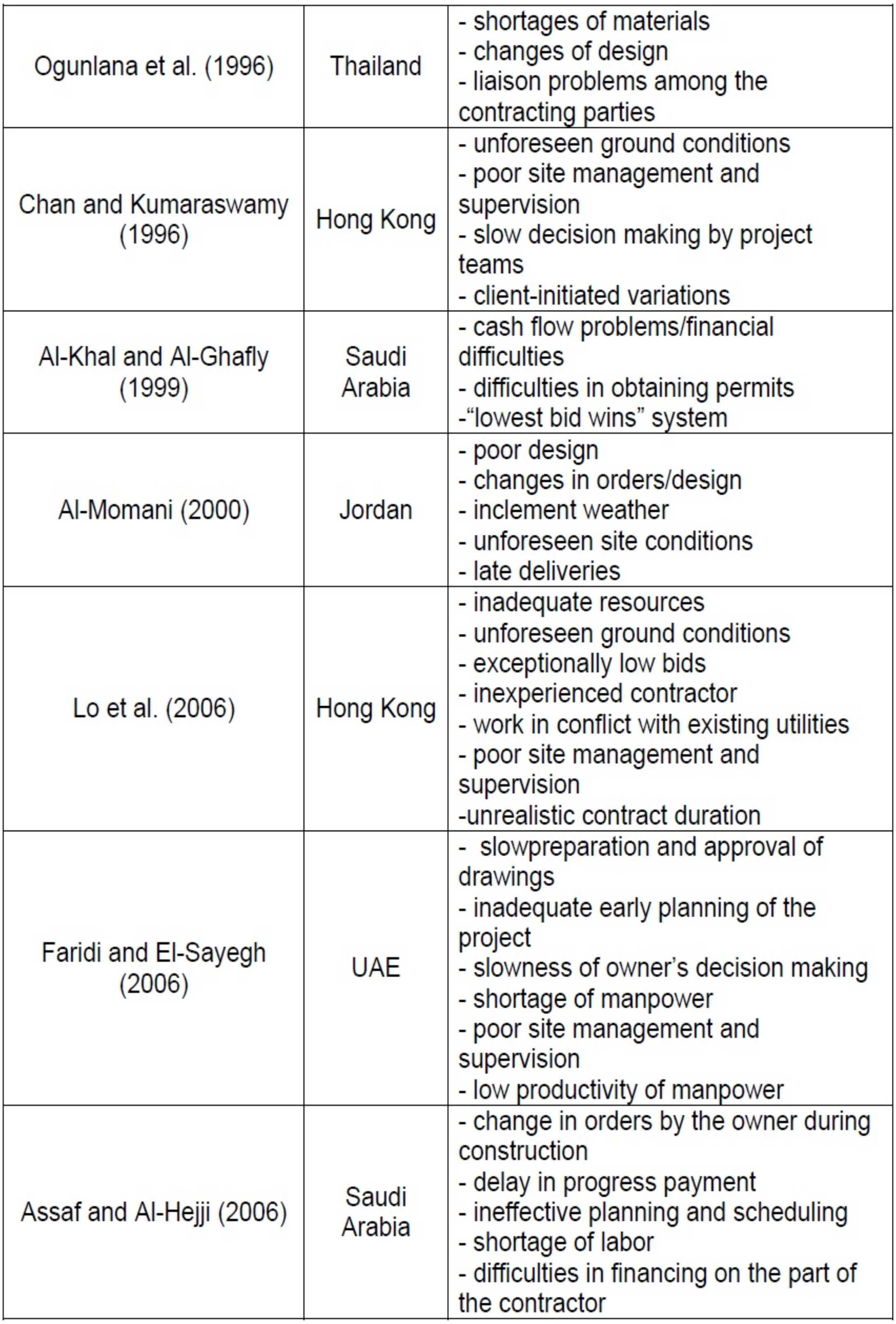
Lo et al. (2006) summarized the studies which are conducted from 1971 to 2000. (Table 2.2)

Table 2.2: Summary of Previous Studies of the Causes of Delays (Lo et al., 2006)



Researchers	**Country**	**Major causes of delay**
Baldwin et al. (1971)	United States	- inclement weather - shortages of labour supply - subcontracting system
Arditi et al. (1985)	Turkey	- shortages of resources - financial difficulties faced by public agencies and contractors - organizational deficiencies - delays in design work - frequent changes in orders/design - considerable additional work
Okpala and Aniekwu (1988)	Nigeria	- shortages of materials - failure to pay for completed work - poor contract management
Dlakwa and Culpin (1990)	Nigeria	- delays in payment by agencies to contractors - fluctuations in materials, labour and plant costs
Mansfield et al. (1994)	Nigeria	- improper financial and payment arrangements - poor contract management - shortages of materials - inaccurate cost estimates - fluctuations in cost
Semple et al. (1994)	Canada	- increases in the scope of the work - inclement weather - restricted access
Assaf et al. (1995)	Saudi Arabia	- slow preparation and approval of shop drawings - delays in payments to contractors - changes in design/design error - shortages of labour supply - poor workmanship

Table 2.2 (Continued): Summary of Previous Studies of the Causes of Delays (Lo et al., 2006)



Ogunlana et al. (1996)	Thailand	- shortages of materials - changes of design - liaison problems among the contracting parties
Chan and Kumaraswamy (1996)	Hong Kong	- unforeseen ground conditions - poor site management and supervision - slow decision making by project teams - client-initiated variations
Al-Khal and Al-Ghafly (1999)	Saudi Arabia	- cash flow problems/financial difficulties - difficulties in obtaining permits -“lowest bid wins” system
Al-Momani (2000)	Jordan	- poor design - changes in orders/design - inclement weather - unforeseen site conditions - late deliveries
Lo et al. (2006)	Hong Kong	- inadequate resources - unforeseen ground conditions - exceptionally low bids - inexperienced contractor - work in conflict with existing utilities - poor site management and supervision -unrealistic contract duration
Faridi and El-Sayegh (2006)	UAE	- slowpreparation and approval of drawings - inadequate early planning of the project - slowness of owner’s decision making - shortage of manpower - poor site management and supervision - low productivity of manpower
Assaf and Al-Hejji (2006)	Saudi Arabia	- change in orders by the owner during construction - delay in progress payment - ineffective planning and scheduling - shortage of labor - difficulties in financing on the part of the contractor

2.3 Types of Delays According to Liability

Delays can be classified according to liability by three major types: (1) Compensable; (2) Excusable; and (3) Non-excusable. The following is a brief description of the characteristics of each delay and its effects on the owner and the contractor (Kraiem and Diekmann, 1987).

2.3.1 Compensable Delays

Generally, a delay is deemed compensable to the contractor when its cause is within the control of, is the fault of, or is due to the negligence of the owner (Sweet, 1977). These delays can occur under different situations. They can be caused by the owner's failure to furnish the site to the contractor by an agreed date, faulty design, or incomplete drawings and specifications (Sweet, 1977). There are many other ways in which a contractor could be delayed by the owner, such as changes in scope, suspension of work, differing site conditions, late delivery of owner-supplied materials, and the owner's failure to disclose information vital to the contractor (Kraiem and Diekmann, 1987).

For this type of delays, the contractor is entitled to a time extension and damages for extra costs associated with the delay (Lee 1983). However, the contractor must demonstrate that the delay was "unreasonable" and prove the extent of the additional expense involved (Clough, 1975).

The issue of owner-caused delay is as common in contract language as "No Damage" clauses. Such clauses attempt to place the entire risk for delay damages upon the contractor and to limit the contractor to time extension. Such clauses, which usually come under the heading of exculpatory, are enforced in some jurisdictions (Kraiem and Diekmann, 1987).

2.3.2 Excusable Delays

These delays occur when the contractor is delayed by occurrences which are not attributable to either the contractor or owner. Three major elements can represent the excusable delays (Sweet, 1977).

1. *Unforeseen events:* Unforeseeable causes generally refer to future events, not existing causes. By contrast, conditions of which the contractor should have been aware are not considered unforeseeable (Kraiem and Diekmann, 1987).
2. *Events beyond the contractor's control:* These are cases in which work on the project is impossible (Kraiem and Diekmann, 1987). Sweet (1977) discusses *Transatlantic Financing Corp. v. United States,* in which the court defined impossibility as, "A thing is impossible in legal contemplation when it is not practicable; and a thing is impracticable when it can only be done at an excessive and unreasonable cost." It is reasonable to

anticipate that this more accurate term, impracticable, will come to be universally accepted (Schaber and Rohwer, 1984).

3. *Events without fault or negligence:* Such events are those in which the contractor is blameless, such as acts of god and labor or material shortages beyond what was expected at the time the contract was made.

   Generally, the excusable causes are listed in a clause in the contract documents (e.g., *Force Majeure* clauses). The sole relief for excusable delays is a time extension (Kraiem and Diekmann, 1987).

2.3.3 Non-excusable Delays

In this category, the contractor's own actions and/or inactions have caused delay. They can result from the fault of the contractor, his subcontractors, material men, or suppliers.

In this case, the contactor is entitled neither damages nor time extension from the owner. In fact, the owner could conceivably be able to recover delay damages from the contractor. The amount of the recovery is generally determined from liquidated damage provisions included in the contract (Kraiem and Diekmann, 1987).

Arcuri and Hildreth, (2007) classify delay events as follows:

- Excusable, Non-Compensable Delays
- Excusable, Compensable Delays
- Non-Excusable, Non-Compensable Delays
- Non-Excusable, Compensable Delays

While first three classifications are similar, the fourth one was explained as follows:

Non-Excusable, Compensable Delays: *Non-excusable, Compensable Delay* is a peculiar situation in which an owner and contractor are concurrently delaying the project, and compensation for the owner's delay can be properly apportioned. While monetary compensation may be awarded, no time extension is granted for the period. The owner delay is shown on the schedule, however it is important to note in this situation that no time extension will be granted for the owner's delaying event (Arcuri and Hildreth, 2007).

Kao and Yang (2008), in their article, compared the windows based delay analysis methods and provided a process which is shown in Figure 2.1 below.

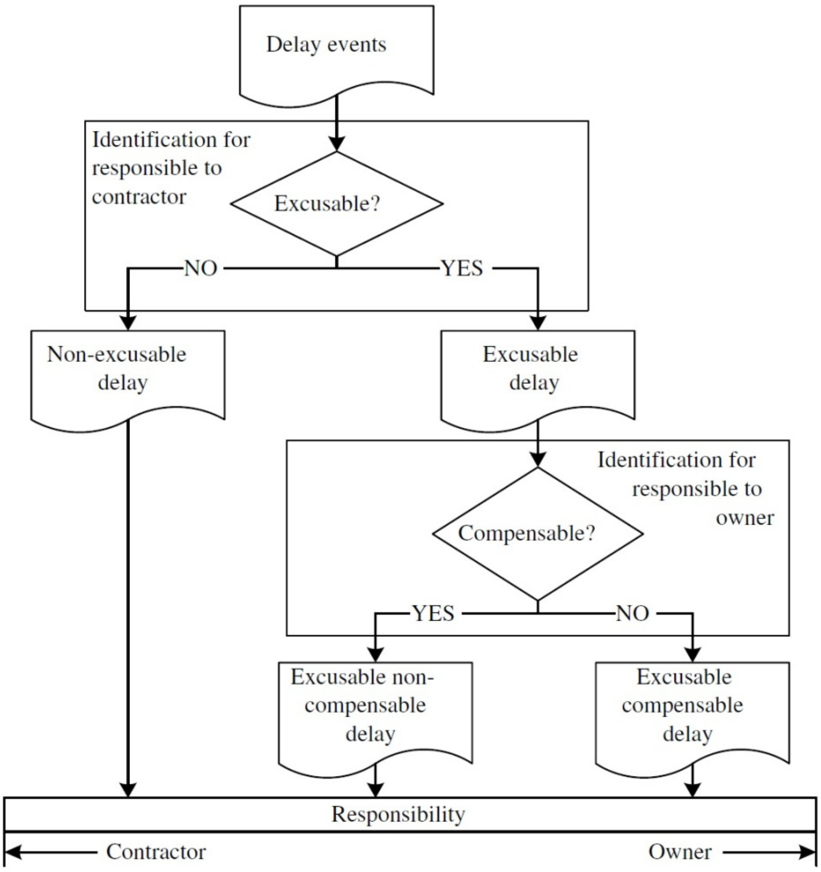


Figure 2.1: Classification of Delay Events in terms of Liability (Kao and Yang, 2008)

2.4 Delay Analysis Methodologies

According to David Barry (2009), there are five commonly used delay analysis techniques:

- Impacted as-planned method;
- Time impact analysis method;
- Collapsed as-built method;
- Snapshot/windows/time slice analysis method;
- As-planned versus as-built windows analysis method.

Each method is discussed below in terms of technique and application. However, it is important to provide some definitions (Barry, 2009).

Prospective v retrospective

Delay analysis techniques are either ‘prospective’ or ‘retrospective’. Prospective analyses refer to the future, and seek to determine the likely impact of actual progress or a particular event(s) on project completion. Retrospective analyses refer to the historic, and usually seek to determine the actual impact of events upon progress and completion.

Dynamic v static

Dynamic analyses involve schedule calculations, through simulation using computers and scheduling software. Static analyses rely on the components and common sense of the schedule while avoiding significant computer calculations (Barry, 2009).

2.4.1 As-planned vs. As-built Method

This method is 'retrospective' and 'static'. Windows are used to break the project into manageable sections or periods. The focus of the as-planned versus as-built windows method is to establish the incidence, extent and causes of actual delay to completion. It operates on the principle that actual delay to completion must by definition be found on the actual critical path of the project. The as-planned versus as-built windows method therefore seeks to first locate and identify the project's actual critical path, and only then the causes of delay (Barry, 2009).

There seems to be consensus that as-planned vs. as-built method is the simplest form of analysis among four methods. But the majority of the researchers listed in the Table 2.3 have negative opinions of the reliability of this method for the very reason that this method is only a simple comparison of as-planned and as-built schedules and that there is no advanced technique being applied (Arditi et al., 2006). SCL (Delay and Disruption Protocol, 2002) suggests that the as-planned vs. as-built method is useful as a starting point in relation to other complex methods of analysis.

McCullogh (1999), Zack (1999), Stumpf (2000), and Gothand (2003) do not recommend using the as-planned vs. as-built method because this method simply determines a net impact of all delay events as a whole rather than scrutinizing each individual delay event separately. The as-planned vs. as-built method assumes the as-planned and as-built schedules are correct in both activity durations and logic relationships even though there are no intermediate updates available. In addition, the method requires that additional activities be treated separately to make sure that the comparison is valid (Harris et al., 2001). It is also difficult to make a detailed comparison when an as-built schedule has been modified compared to an as-planned schedule (Arditi et al., 2006).

On the other hand, Zafar (1996) and Fruchtman (2000) encourage the use of this method because it takes into account both as-planned and as-built schedules to evaluate delay impacts and because it identifies and quantifies both owner and contractor delays. Sgarlata and Brasco

(2004) report that courts and board have found this worthy method of analysis. The as-planned vs. as-built analysis method is thought to be capable of addressing concurrency and compensability (Arditi et al., 2006).

A significant advantage of this method is that the analysis requires only existing materials associated with general administrative procedures, i.e., as-planned and as-built schedules. In a project with less restricted general requirements where CPM schedules may not be available, only a bar chart diagram with an as-built schedule or updated record is sufficient to conduct the analysis. The as-planned vs. as-built method does not require generating an adjusted or a newly created network such as in additive or subtractive methods. This prevents analysts from incorporating a biased position into the analysis (Zafar, 1996).

In conclusion, the as-planned vs. as-built analysis relies on common sense, a comparison of before-and-after delay events. The analysis incorporates both as-planned and as-built schedules, and both contractor and owner delay events, which supports the ability for recognizing concurrent delays and acceleration. It also offers ease of use and flexibility in delay analysis. However, it lacks a systematic procedure to evaluate the impact of delay events individually. Insufficient methodological support in the literature results in the as-planned vs. as-built method being least mentioned in the articles (Arditi et al., 2006).

2.4.2 Impacted As-planned Method

The overall thrust of this method is to establish the hypothetical impact of delay events on the baseline schedule. It is a ‘prospective’ analysis method. It is also a ‘dynamic’ method, and therefore requires a networked schedule. The delay events that the analyst wishes to model are introduced into the baseline schedule, and linked in an appropriate manner. Having incorporated the delay events, the schedule is then modeled/recalculated. Any resultant impact upon completion is determined to be the critical delay impact of the introduced delay event(s) (Barry, 2009).

The impact as-planned method is the least favored method among the four methods discussed the articles/books listed in Table 2.3 due to its theoretical flaws. The articles/books listed in Table 2.3 consistently criticize the impact as-planned method, and not one of them recommends the use of the impact as-planned method to prove delay impact. Many courts have not accepted this method since the 1990s. One of the reasons is because the method relies only on an as-planned schedule to determine the impact of delay. Indeed, this method does not measure the effect of actual work performed, but relies heavily on the validity of a baseline schedule. An analysis based on an unrealistic baseline schedule will not only suffer from faulty logics, but also from overestimated project durations (Arditi et al., 2006).

Another reason that undermines the reliability of the impact as-planned method is that the contractor, (i.e., the party that files the claim) inserts only owner-caused delays into the as-planned schedule to prove the case. Wickwire et al. (1991) consider this method to be a “great lie” because the analysis fails to incorporate the delay events caused by all parties to the contract (Arditi et al., 2006).

2.4.3 Collapsed As-built Method

Unlike the previously discussed ‘impact’ methods, the ‘but-for’ analysis method is ‘retrospective’.

This method should have the benefit of working from the full factual matrix. The host schedule for the analysis should be a detailed and accurate as-built schedule. The ‘but-for’ method is however ‘dynamic’ and therefore requires a networked schedule. As one would expect an as-built schedule has no programming logic (i.e. linked activity relationships). While the as-built schedule may have been produced during the project by progressively updating the baseline schedule (which would contain the original links), the influence of these links will have been entirely overwritten in the updating process (Barry, 2009).

Assuming, however, that the logic between as-built activities can be developed appropriately, the next task is for the analyst to identify the incidence of delay within the activities on the as-built schedule. For example, one might identify that remedial works were required as a consequence of a defective roof installation, which served to extend the overall roof installation activity by three months. The analyst, usually with some schedule fettling work, then ensures that the delay aspect of the relevant activity can be removed, in order to simulate what the as-built schedule would have looked like if the delay event had not in fact occurred. Using the example above, if the completion date of the whole project improved by a single month due to the removal of the three month delay to the roofing works, then the conclusion is that the incremental critical impact of that delay event is one month (Barry, 2009).

The collapsed as-built method is based on the concept of what-if methodology similar to the impact as-planned analysis, but it has evolved to overcome some of the drawbacks of the impact as-planned analysis. The as-built schedule depicts the factual information concerning the work that has been undertaken. Courts and boards in the US consider the collapsed as-built method to be useful because the activities in this method are consistent with actual occurrences on the project (Sgarlata et al., 2004). Likewise, most UK professionals approve of this method (Harris et al., 2001). In case an as-planned schedule does not exist or is not updated, an as-built schedule can be initiated from records such as monthly progress reports. The collapsed as-built method is often selected when reliable schedules cannot be readily obtained from project records or the project does not have scheduling information. The other advantage of this method is that it incurs less time and cost than time impact analysis. According to Lovejoy (2004), the collapsed as-built analysis is the most practical approach since it offers a good combination of benefits.

On the other hand, Zafar (1996), Finke (1997,1999), Fruchtman (2000), Stumpf (2000), Zack (2001), Gothand (2003), and Sandlin et al. (2004) criticize the premise of the collapsed as-built analysis. First, when a contractor conducts a collapsed as-built analysis, the analyst considers only the delays caused by the owner to prove the effects of owner-caused delays on the project completion. The analyst does not include contractor-caused delays in the analysis. Therefore, concurrent delays cannot be recognized using this delay analysis and this constitutes a drawback. This flaw is similar to the shortcoming observed in the impact as-planned method as the contractor's analyst chooses which delays to analyze. Second, the collapsed as-built method does not consider the dynamic nature of the critical path method. Indeed, it assumes that the as-built schedule makes use of the contractor's original as-planned intentions to execute the project, using the same sequence of activities and the same productivities. (Zack, 2001). Consequently, the events that cause delay along the course of the project may not be detected. Third, the collapsed as-built analysis is highly subjective and subject to manipulation. The analyst is required to recreate logic relationships into an as-built schedule from project record in order to perform the CPM analysis. Indeed, an as-built schedule no longer depends on the logic of the original network but on actual dates of activity progress. This process is subjective because the records, including logical sequences, lag times, etc., can be subjectively interpreted. Both parties are expected to examine the records and agree with the interpretation of a recreated as-built network before performing the analysis.

To conclude, the collapsed as-built schedule can determine delay impact in case of limited time and resources available for analysis. This method will be useful when both the contractor and the owner have access to the detail of as-built records and reasonably concur in interpreting the information used to construct the as-built network (Arditi et al., 2006).

2.4.4 Time Impact Analysis

The time impact analysis technique is precisely the same as the impacted as-planned method but with the following highly significant variant. For each introduced delay event the 'networked' baseline schedule is first updated with progress to a point in time just before the delay event arose (for example, the day upon which a specific variation instruction was issued). If the updated schedule identifies a delay to completion this is registered (say five days). The delay event is then introduced into the schedule to establish the likely impact upon completion, given the status of the works at the time the delay event arose using exactly the same technique as describe under the impact as-planned method above. The schedule is recalculated and the new calculated delay to completion is registered (say, 15 days). It follows, in the example, that the incremental likely delay to completion due to the delay event is ten days. This is an iterative process repeated for each and every selected delay event (Barry, 2009).

Time impact analysis is the most credible delay analysis method among the discussed methods. The majority of the viewpoints cited in Table 2.3 agree that the method yields the most reliable results. Time impact analysis does not display the shortcomings of the other methods discussed. This approach uses fragnets to analyze individual delay events. The durations of delays and the relationships of delays to project activities are reviewed in detail with contemporaneous information. The delay is then inserted into the project. This process provides both parties an opportunity to scrutinize the delay and reduce disputes (Arditi et al., 2006).

Baram (1994), Finke (1997), Zack (2001), and Stumpf (2000) address the importance of the dynamic nature of project critical paths. Time impact analysis performs a series of analyses throughout a project period, in contrast to the major disadvantage of the previously mentioned methods that observe a schedule at a single point in time. The analysis is able to trace the causes and effects of delay events systematically. The impact of a delay event is individually evaluated in detail. Using the CPM algorithm, the time impact analysis method follows up on the project day-by-day from beginning to completion date, including consumption of float, concurrent delays, recovery time and acceleration or re-sequencing accurately. According to SCL (Delay and Disruption Protocol, 2002), this technique to resolve complex disputes related to delay and its compensation.

Time impact analysis is distinguished from the impact as-planned and collapsed as-built analyses in the fact that it incorporates both party delays into the analysis. The excusable compensable, excusable non-compensable and non-excusable delays can be separately identified. In addition to this advantage, Wickwire et al. (1991) describe indirect benefits generated by the use of time impact analysis in that it also provides a disciplined basis for the contractual parties to keep a project schedule up-to-date and properly adjusted.

Some limitations that exist in some actual construction projects may weaken the power of this method. First of all, time impact analysis requires a large amount of information in order to perform the analysis. An as-planned schedule in CPM format is necessary; additionally, the schedule needs to be periodically updated. The projects that lack strict administrative procedures and/or updated schedules are not good candidates for this method. Baram (1994) suggests that the use of time impact analysis is the most desirable approach to handle a delay claim, but only when data and source documents are available in the required format and in the required time frame.

Second, the analysis may not be appropriate when resources or time allowed are limited. As to detail involved in the methodology, time impact analysis consumes much more time compared to the other methods. Examining periodic updates is burdensome as actual data associated with activities may need to be verified and compared for every updated period. Added or deleted activities have to be documented. In situations where time and budget are limited, time impact analysis may not be the method of preference.

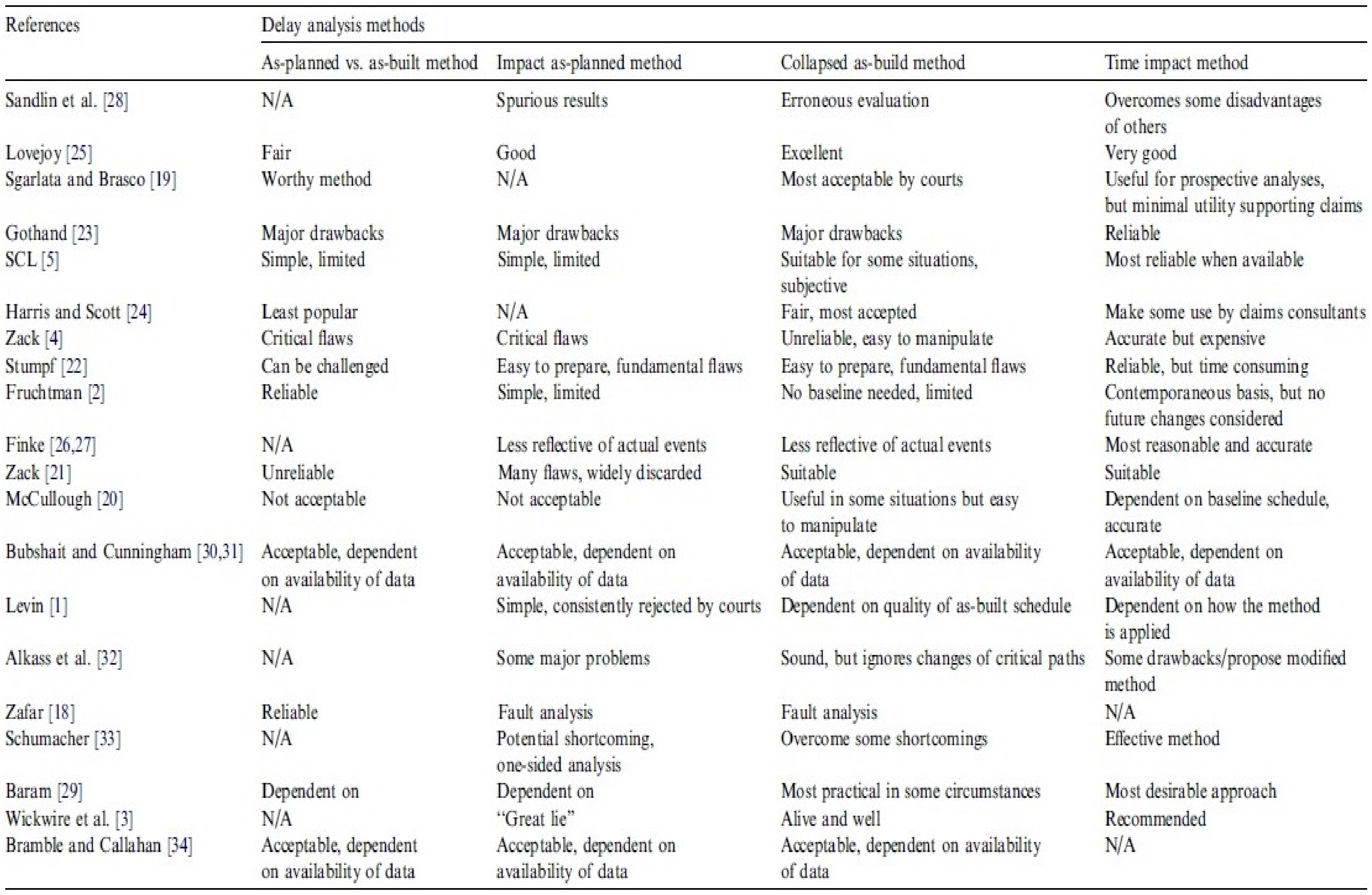
Third, the result of the analysis may be influenced by a variety of factors because time impact analysis is intricate as it determines accumulative results from a number of contemporaneous data. For example, when a window period is treated separately from a delay event, the analysis may require approximation if the delay is divided between two window periods (Finke, 1999). Also the different outcomes between the retained logic and progress override methodologies can influence the result of the analysis whenever on-going schedules in time impact analysis are analyzed in each window update.

In conclusion, time impact analysis is a refined method that determines delay impact in construction projects. It incorporates contemporaneous data to simulate actual circumstances at the time the delay occurs and accumulates impacts of delay events by using a series of windows. However, it requires significant time and effort.

A fair and effective evaluation of delay impact is possible if the most appropriate delay analysis method is selected that provides a reliable solution with information available and within the time and cost allocated for this purpose. Time impact analysis is clearly accepted by the literature cited in Table 2.3 as the most reliable delay analysis method among the four standard methods discussed.

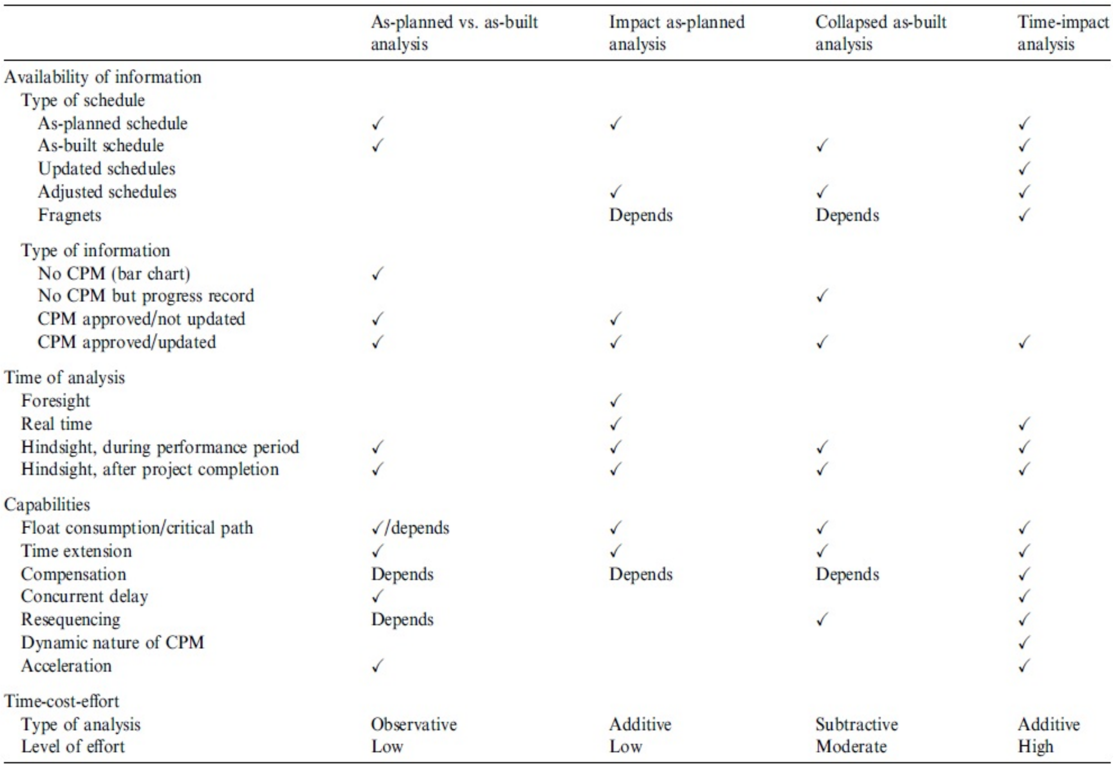
The delay analysis methods discussed may or may not be well suited in different situations and their selection depends on four criteria including data requirements, time of analysis, capability of methodology, and time and effort required (see Table 2.4) (Arditi et al., 2006).

Table 2.3: Comments compiled from the literature (Arditi et al., 2006)



References	Delay analysis methods			
	As-planned vs. as-built method	Impact as-planned method	Collapsed as-build method	Time impact method
Sandlin et al. [28]	N/A	Spurious results	Erroneous evaluation	Overcomes some disadvantages of others
Lovejoy [25]	Fair	Good	Excellent	Very good
Sgarlata and Brasco [19]	Worthy method	N/A	Most acceptable by courts	Useful for prospective analyses, but minimal utility supporting claims
Gothand [23]	Major drawbacks	Major drawbacks	Major drawbacks	Reliable
SCL [5]	Simple, limited	Simple, limited	Suitable for some situations, subjective	Most reliable when available
Harris and Scott [24]	Least popular	N/A	Fair, most accepted	Make some use by claims consultants
Zack [4]	Critical flaws	Critical flaws	Unreliable, easy to manipulate	Accurate but expensive
Stumpf [22]	Can be challenged	Easy to prepare, fundamental flaws	Easy to prepare, fundamental flaws	Reliable, but time consuming
Fruchtman [2]	Reliable	Simple, limited	No baseline needed, limited	Contemporaneous basis, but no future changes considered
Finke [26,27]	N/A	Less reflective of actual events	Less reflective of actual events	Most reasonable and accurate
Zack [21]	Unreliable	Many flaws, widely discarded	Suitable	Suitable
McCullough [20]	Not acceptable	Not acceptable	Useful in some situations but easy to manipulate	Dependent on baseline schedule, accurate
Bubshait and Cunningham [30,31]	Acceptable, dependent on availability of data	Acceptable, dependent on availability of data	Acceptable, dependent on availability of data	Acceptable, dependent on availability of data
Levin [1]	N/A	Simple, consistently rejected by courts	Dependent on quality of as-built schedule	Dependent on how the method is applied
Alkass et al. [32]	N/A	Some major problems	Sound, but ignores changes of critical paths	Some drawbacks/propose modified method
Zafar [18]	Reliable	Fault analysis	Fault analysis	N/A
Schumacher [33]	N/A	Potential shortcoming, one-sided analysis	Overcome some shortcomings	Effective method
Baram [29]	Dependent on	Dependent on	Most practical in some circumstances	Most desirable approach
Wickwire et al. [3]	N/A	“Great lie”	Alive and well	Recommended
Bramble and Callahan [34]	Acceptable, dependent on availability of data	Acceptable, dependent on availability of data	Acceptable, dependent on availability of data	N/A

Table 2.4: Comparison of Delay Analysis Methods (Arditi et al., 2006)



	As-planned vs. as-built analysis	Impact as-planned analysis	Collapsed as-built analysis	Time-impact analysis
Availability of information				
Type of schedule				
As-planned schedule	✓	✓		✓
As-built schedule	✓		✓	✓
Updated schedules				✓
Adjusted schedules		✓	✓	✓
Fragnets		Depends	Depends	✓
Type of information				
No CPM (bar chart)	✓			
No CPM but progress record			✓	
CPM approved/not updated	✓	✓		
CPM approved/updated	✓	✓	✓	✓
Time of analysis				
Foresight		✓		
Real time		✓		✓
Hindsight, during performance period	✓	✓	✓	✓
Hindsight, after project completion	✓	✓	✓	✓
Capabilities				
Float consumption/critical path	✓/depends	✓	✓	✓
Time extension	✓	✓	✓	✓
Compensation	Depends	Depends	Depends	✓
Concurrent delay	✓			✓
Resequencing	Depends		✓	✓
Dynamic nature of CPM				✓
Acceleration	✓			✓
Time-cost-effort				
Type of analysis	Observative	Additive	Subtractive	Additive
Level of effort	Low	Low	Moderate	High

2.4.5 Windows-based delay Analysis Methods

There are many windows-based delay analysis methods, namely windows analysis, modified windows analysis, delay analysis method using delay section and daily windows analysis (Kao and Yang, 2008).

2.4.5.1 Windows Analysis

The windows analysis method, also known as contemporaneous analysis method, is a dynamic delay analysis method in which delay analysis is performed by using extracted schedule windows, rather than by analyzing delay events one-by-one forward from the as-planned schedule or backward from the as-built schedule. To distinguish it from the other windows-based methods, the windows analysis method is called traditional windows analysis (TWA) hereinafter. The TWA method divides total project duration into digestible time periods (windows) based on the activities on critical path, and analyzes the delays that occurred in each window successively (Hegazy et al., 2005). Part (A) of Figure 2.2 shows the analytical processes of TWA, which employs the as-planned schedule as its baseline, and is periodically updated at the end of each analysis scenario. Notably, the timing for determining the analysis window usually coincides with major project milestones, significant changes in planning or times when a major delay or group of delays is known to have occurred (6). In each analysis scenario, TWA identifies delays encountered, and examines the effects of the delays attributed to project participants according to the rule that delayed activity on the critical path leads to the delay liability. Delays on construction project are identified as being liable to either the contractor or owner (Kao and Yang, 2008).

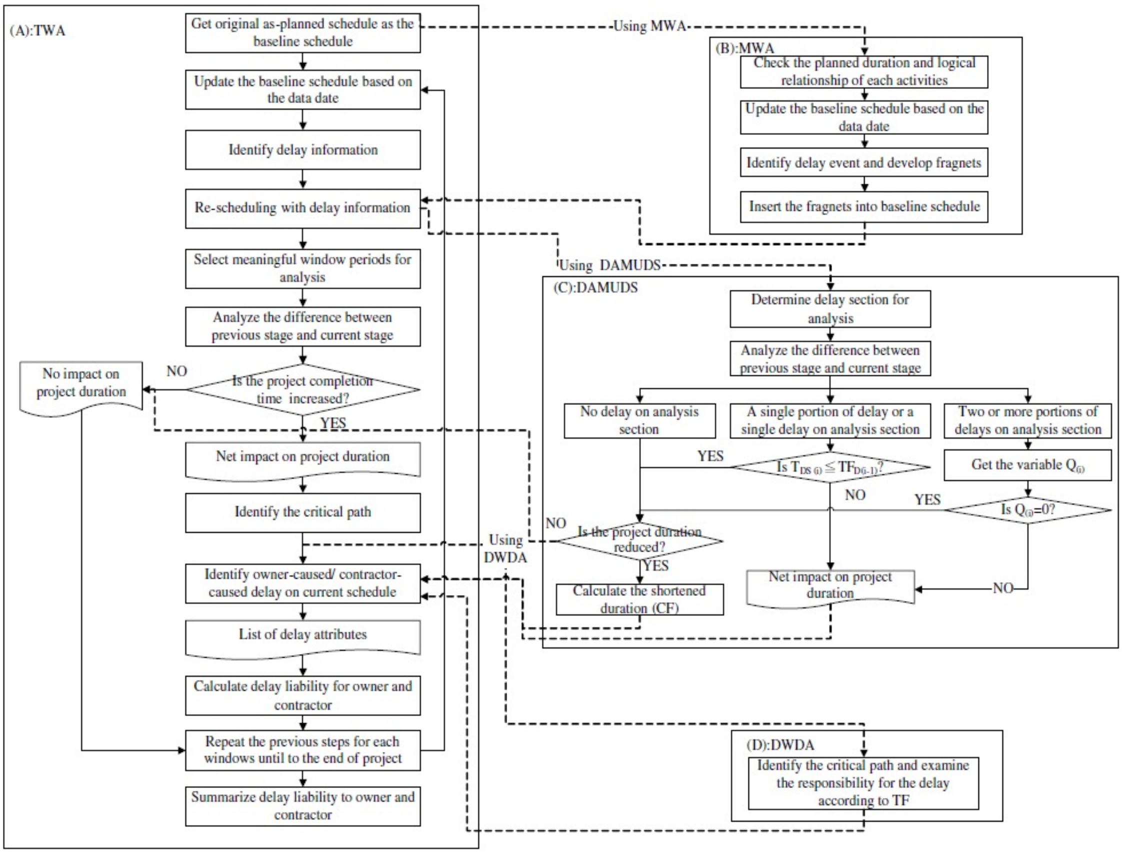


Figure 2.2: Analytical process for windows-based delay analysis methods (Kao and Yang, 2008)

2.4.5.2 Modified Windows Analysis

The analysis approach of modified windows analysis (MWA) method (Gothand, 2003) for delay calculation is similar to the approach adopted in TWA. However, MWA determines delay liability to project participants explicitly. Before calculating the impact of delay events, MWA obtains a meaningful liability negotiation for all delay events, forming an acceptable resolution for both contract parties. A comprehensive windows analysis likely demonstrates the day-to-day extension of completion date, consumption of float, concurrency with another delay, recovery of time by acceleration or re-sequencing and accurately simulates project history (Gothand, 2003). The analytical processes of the MWA method are similar to those of TWA. Part (B) of Figure 2.3 shows the four steps of MWA. Other steps are the same as those of TWA, except for the different steps for identifying delay liability (Kao and Yang, 2008).

The MWA method not only improves the analytical processes, but also has algorithms for calculating delay liability. The MWA method defines three important dates, namely the baseline impact schedule completion date (BSCD), the claimant impact schedule completion date (CSCD) and the defendant impact schedule completion date (DSCD), to deal with concurrent delays and to determine clear liability distribution. Consequently, the value of concurrent delay equals to CSCD-BSCD, and the value of project delay is calculated as DSCD-BSCD. Therefore, the MWA method makes analysis results credibility by prior meaningful negotiations on responsibility distribution of delay values. The TWA method is most appropriate for real-time analysis, while MWA is an after-the-fact analysis method, according to a previous study (Gothand, 2003; Kao and Yang, 2008).

2.4.5.3 Delay Analysis Method Using Delay Section

The delay analysis method using delay section (DAMUDS) (1) method has been proposed to overcome two limitations of existing methods, namely inadequate accounting of concurrent delay and inadequate accounting of time-shortened activities. DAMUDS includes two new concepts, the delay section (DS) and the contractor’s float (CF). The DS is a delay analysis time increment for dividing the delay-occurred duration into a single delay-occurred period not overlapped (Kim et al., 2005). This treatment makes analysis unit discrete and meaningful. CF represents the effort of a contractor to shorten the time of activities, thus reducing the total project duration (Kim et al., 2005).

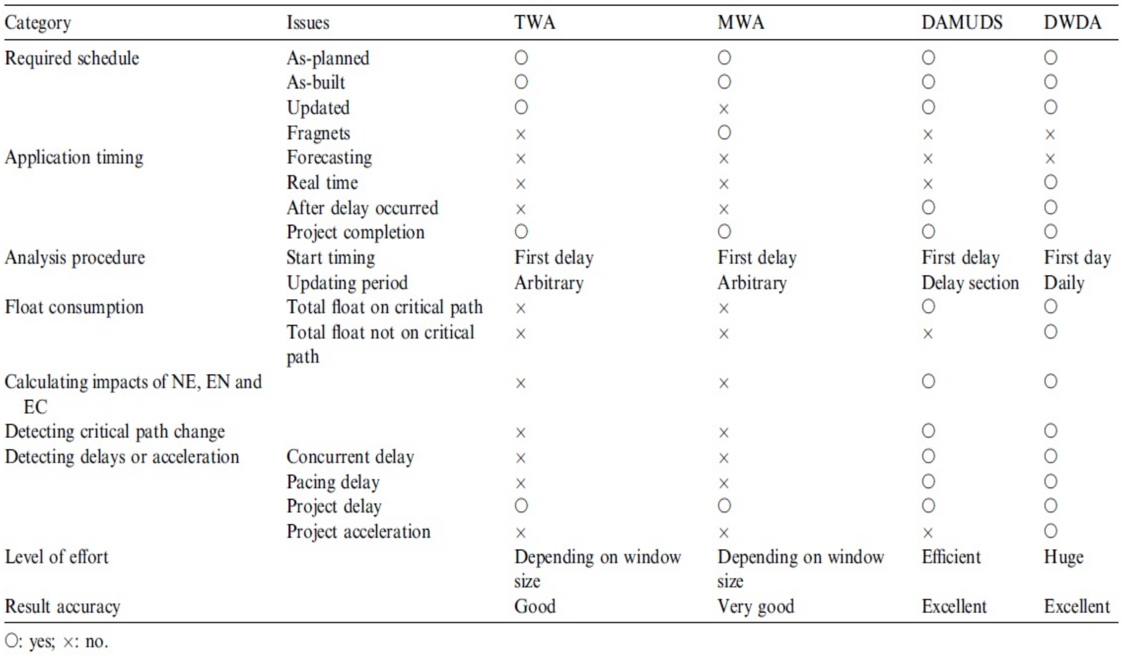
The delay analysis procedure of DAMUDS is based on DS, CF and the analytical approach of TWA. Part (C) of Figure 2.3 shows the different analytical procedure of DAMUDS method calculates the delay impact by three discrete streams: no delay, a single portion of delay or a single delay, and two or more portions of delays on analysis section (where Q(i) represents the number of identified delays (D(ij)) in the analysis section). By identifying and calculating the delay impacts on project duration in each delay section, DAMUDS provides clear delay liabilities for the contractor and owner (Kao and Yang, 2008).

2.4.5.4 Daily Windows Delay Analysis

Windows-based analysis methods are computationally intensive and usually produce different results according to the window size. To overcome the drawback of TWA, Hegazy and Zhang (2005) proposed an innovative method (daily windows delay analysis (DWDA)) that considers one day as a basic analysis unit. DWDA resolves the problems of difficulty in site-data recording about delay events, out of consideration of the fluctuation that occur in the critical path(s) as events evolve on site, losing sensitivity to the events of speeding or slowdown within the analysis period and hard to application and automation of existing methods (Hegazy and Zhang, 2005). Part (D) of Figure 2.3 shows the difference in the analysis procedures of DWDA compared to the others. DWDA calculates clear delay liabilities for the contractor and owner based on the day-by-day delay analysis on critical path(s) along the project duration and a new representation (intelligent bar chart, IBC) of progress information with delay data (Kao and Yang, 2008).

Differences among the windows base delay analysis methods are shown in the Figure 2.5 below.

Table 2.5: Differences among Windows-Based Delay Analysis Methods (Kao and Yang, 2008)



Category	Issues	TWA	MWA	DAMUDS	DWDA
Required schedule	As-planned	○	○	○	○
	As-built	○	○	○	○
	Updated	○	×	○	○
	Fragnets	×	○	×	×
Application timing	Forecasting	×	×	×	×
	Real time	×	×	×	○
	After delay occurred	×	×	○	○
	Project completion	○	○	○	○
Analysis procedure	Start timing	First delay	First delay	First delay	First day
	Updating period	Arbitrary	Arbitrary	Delay section	Daily
Float consumption	Total float on critical path	×	×	○	○
	Total float not on critical path	×	×	×	○
Calculating impacts of NE, EN and EC		×	×	○	○
Detecting critical path change		×	×	○	○
Detecting delays or acceleration	Concurrent delay	×	×	○	○
	Pacing delay	×	×	○	○
	Project delay	○	○	○	○
	Project acceleration	×	×	×	○
Level of effort		Depending on window size	Depending on window size	Efficient	Huge
Result accuracy		Good	Very good	Excellent	Excellent

○: yes; ×: no.

2.5 Recent Developments on Shortcomings of Delay Analysis Techniques

In the previous section, types of delay analysis techniques are explained in detail. All the techniques have their own advantages and disadvantages. In order to overcome the, a number of researchers have worked on these techniques. These are briefly explained in this section.

2.5.1 Float Ownership

In the critical path method total float or slack is defined as the total amount of time that an activity can be delayed without delaying the project completion date. Since float is a critical asset, the question "who owns float?" has increasingly concerned contractual parties. The result of schedule delay analysis can be affected by the various views regarding who owns float (Arditi and Pattanakitchamroon, 2006). Consequently, float ownership and its use can be a major source of dispute when the project suffers from delay (Prateapusanond, 2003).

For example, it is impossible to identify who is responsible for the 2-week project delay of the simple case in Figure 2.3 unless the parties have agreed on float ownership (Nguyen and Ibbs, 2008).

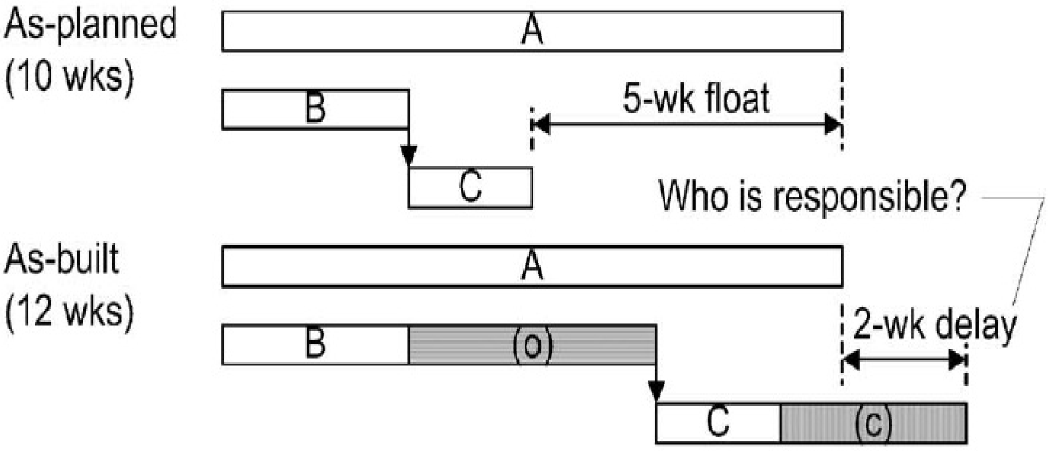


Figure 2.3: Float ownership (Nguyen and Ibbs, 2008)

Several studies have proposed different alternatives for total float ownership, sharing, and/or management. Householder and Rutland (1990) propose that the party who loses or gains as a result of fluctuation in the project cost should own and use float as a resource. De la Garza et al. (1991) suggest that the contractor owns float but has to trade it on demand by the owner.

Zack (1993) recommends the use of a joint-ownership-of-float provision and a systematic time-impact analysis of each delay event. Pasiphol and Popescu (1994) allocate total float to individual activities on the paths such that all activities are critical. Gong (1997) calculates “safe float”, which can be used without severely affecting the risk of project delay. Sakka and El-Sayegh (2007) propose a method that quantifies the impact of float loss on project schedule and cost. While these studies recommend how float should be allocated and managed, they do not in general provide a practical and systematic approach that can be used in forensic schedule analysis (Nguyen and Ibbs, 2008).

A few approaches of total float management for schedule delay analysis have been proposed in recent years. Prateapusanond (2003) suggests that the owner and contractor each own half (50-50) of total float available on any activity, namely “allowable total float” (ATF). In addition, the number of delayed days that a party is held responsible for (RDD); if any, will equal the minimum value of: (1) the total delayed days of entire project (TDD); and (2) the difference between the number of days that the party delays on the affected activity path (PDD) and its allowable total float, i.e.

$$\mathrm{RDD} = \mathrm{Min}\,(\mathrm{TDD}\ ,\ \mathrm{PDD}-\mathrm{ATF})$$

This concept of 50-50 pre-allocation of total float is a workable and interesting idea. In the survey (Prateapusanond 2003), the fact that most of participants generally agreed with this concept is evident (Nguyen and Ibbs, 2008).

Al-Gahtani and Mohan (2007) proposes a new total float management technique for delay analysis. It sets fairly reasonable rules for the entitlements of total float. If total float changes due to delay events, the responsible party will be discredited total float for delays to the affected activity and will gain or lose total float of successor activities. However, the apportionment of concurrent delay in this method is arbitrary since it only considers the number of delays caused by each party rather than the degree of importance of different paths and/or activities on which these delays occur. Proper consideration of this degree in fairly apportioning concurrent delays is essential (Ibbs and Nguyen, 2007). Calculation of owner-and-contractor-caused delay days is also questionable. For instance, the fact that the sum of excusable/compensable delays and inexcusable delays can be greater that total project delays is difficult to accept in the industry (Nguyen and Ibbs, 2008).

2.5.2 Concurrent Delay

Concurrent delays occur frequently, particularly at the peak of a project when multiple-responsibility activities are being performed simultaneously (Baram, 2000). Analysis of schedule delays takes a major leap in complexity when there are multiple sources of delay with interrelated impacts (Galloway and Nielsen, 1990; Kutil and Ness, 1997). This section reviews the concept of concurrent delays, conditions of its occurrence, and apportionment of concurrent delays. Schedule delay analysis is among the most challenging tasks in claims-related issues. This analysis becomes more complicated when concurrent delays have occurred in the project. Navigating the seas of concurrent delays is possibly the most challenging task faced by a construction lawyer (Hughes and Ulwelling, "True concurrent delays and a proposed rule of law for apportioning damages from delay arising therefrom," privately communicated paper from F.J. Hughes to William Ibbs, 1992; Nguyen et al., 2011).

Concurrent delay is customarily described as two or more delays that occur at the same time, either of which would cause a project delay. If either of them had not occurred, the project schedule would have been delayed by the other (Stumpf, 2000). However, there is no consistent agreement on what concurrent delay actually means (Peters, 2003). Another definition is that delay concurrency occurs when two or more separate causes of events delay the project within a specific time period (Baram, 2000). Simultaneous delays, commingled delays, and intertwined delays are other terms used to interchange for concurrent delays (Nguyen et al., 2011).

In a privately communicated paper from F.J. Hughes to William Ibbs (Hughes and Ulwelling, 1992) revealed that the word "concurrent" describes either temporal concurrence or causal concurrence. They also claim that: (1) while the word concurrent may appropriately apply to temporally concurrent events, temporal concurrence is irrelevant for the purpose of attempting to assess liability for project delay and (2) the actual issue in construction is whether two events are concurrent in their causation the project delay (Nguyen et al., 2011).

Differentiation between concurrent delays and those which simply absorb float requires a thorough knowledge of the facts, an understanding of the basis of critical path method analysis, and a determination of whether three key factors exist: (1) the delays are critical; (2) the delays are independent; and (3) the delays occur during the same time period (Boe, 2004). More broadly, Ponce de Leon (1987) points out the occurrence of concurrency in construction as follows:

- Two unrelated delays taking place in an overlapping time frame are truly concurrent only if both delays fall on parallel critical paths.
- Two unrelated delays arising at quite different time frames are ultimately concurrent if they fall on two as-built critical paths.

Analysis of concurrent delays raises various issues. This is because both owners and contractors employ concurrent delays as a strong defense tool against each other (Baram, 2000). For instance, owners use them to protect their interest in obtaining LDs, while contractors use them to neutralize or waive their inexcusable delays and hence avoid damage entitlement (Baram, 2000).

Courts, boards, practitioners, and researchers are generally inconsistent in terms of both definition, as mentioned earlier, and apportionment of concurrent delays. A recent empirical study (Scott and Harris, 2004) shows that there is a wide divergence among contractors, contract administrators, and claim consultants about issues related to concurrent delays. A summary of law case that treated concurrent delays differently can be found in James (1991).

General views consider concurrent delays as being similar to excusable delays. That is, contractors are entitled time extension only. When a compensable delay is concurrent with an inexcusable delay, this scenario follows an “easy rule” or “contributory negligence”. However, a recent trend advocates an equitable apportionment when compensable and inexcusable concurrent delays occur. This trend is described as “fair rule” (Kraim and Diekmann, 1987) or “comparative negligence” (Hughes and Ulwelling, 1992). Fair apportionment means apportionment of days and/or dollars. These different rules can be derived from two different doctrines: the doctrine of contributory negligence and the doctrine of comparative negligence (Hughes and Ulwelling, 1992). Ibbs and Nguyen (2007) proposed an approach for quantifying field-overhead damages. This approach supports such fair apportionment.

Undoubtedly, it is more equitable and reasonable to apportion damages in concurrent delay circumstances. Current practice reveals that courts and boards can adopt the doctrine of comparative negligence for solving concurrent delays (Nguyen et al., 2011).

SCL Delay and disruption protocol (2002) defines concurrency as follows: True concurrent delay is the occurrence of two or more delay events at the same time, one an Employer Risk Event, the other a Contractor Risk Event and the effects of which are felt at the same time. The term ‘concurrent delay’ is often used to describe the situation where two or more delay events arise at different times, but the effects of them are felt (in whole or in part) at the same time. To avoid confusion, this is more correctly termed the ‘concurrent effect’ of sequential delay events.

SCL delay and disruption protocol (2002) further discusses the issue of concurrency as it relates to extensions of time as follows: Where contractor delay to completion occurs concurrently with employer delay to completion, the contractor’s concurrent delay should not reduce any EOT due. Where employer risk events and contractor risk events occur sequentially but have concurrent effects, here again any contractor delay should not reduce the amount of EOT due to the contractor as a result of the employer delay. If the contractor incurs additional cost that are caused both by employer delay and contractor delay, then the contractor should only recover compensation if it is able to separate the additional costs caused by the employer delay from those caused by the contractor delay. In most cases this will mean that the contractor will be entitled to compensation only for any period by which the employer delay exceeds the duration of the contractor delay.

2.5.3 Loss of Productivity

Productivity is commonly defined as the quantity of work produced or work output (e.g., linear feet of pipe) per unit of input or effort (e.g., dollars or man-hours). Productivity measurement is typically expressed as a ratio or factor, as a percentage. Other measurement schemes may use a “production rate” such as the amount of work that may be accomplished in a given amount of time (Klanac and Nelson, 2004). Productivity, therefore, is a measure of progress or accomplishment vs. resource (Cy/$), whereas production is the measure of progress or accomplishment vs. time (Cy/h, tons/day). The production rate is used to represent the productivity of the work (Lee and Diekmann, 2011).

Lee and Diekmann (2011) proposed a delay analysis technique considering production rate. This method is explained as follows: The basic principle of the delay calculation in previous analysis – windows analysis or but-for analysis – is used. The central idea of the modified method is to incorporate the varying rate of production into the delay analysis process. Using the “learning curve effect”, the “production rate” is divided into three sub-phases of performance: “learning rate”, the “production rate”, and “three sub-phases of performance”, a modified method for delay analysis, DAP (delay analysis considering production rate), is proposed herein (Lee and Diekmann, 2011).

Four types of cumulative production curves as in Figure 2.4 have been suggested in this research. The first step, therefore, is to determine the type of cumulative production curves for the delayed activities, whether it is repetitive or no-repetitive. A task is repetitive if the same job or activity is performed at different times and (or) different locations.

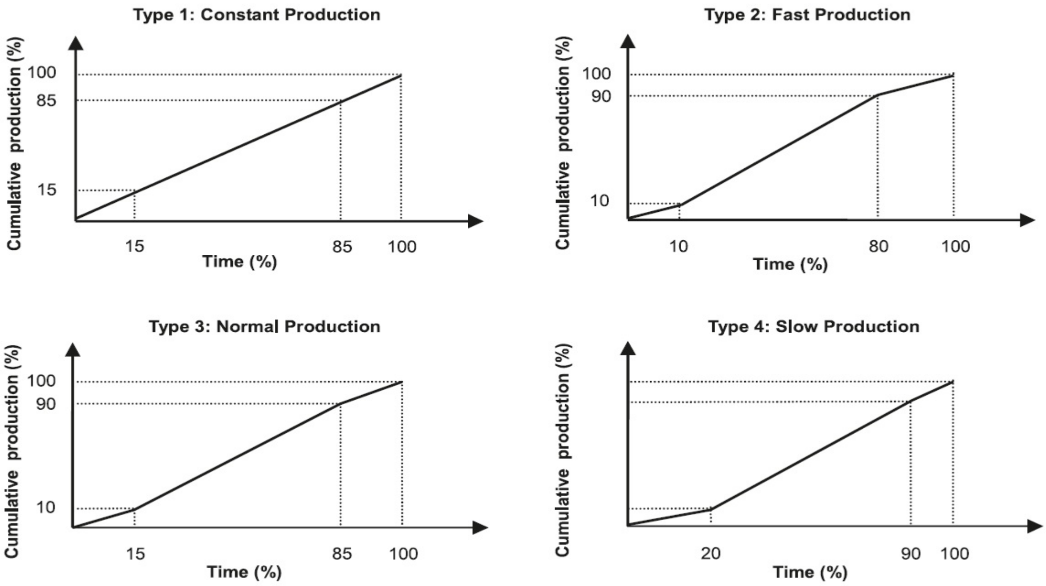


Figure 2.4: Types of cumulative production curves

Learning curves can be used for claim analysis, especially if productivity records are maintained (Pinnell, 1998). To incorporate the effects of learning into DAP, the learning rate of each activity should be established and then converted into man-hour estimates to calculate the production rates. In addition, the production rates of the delayed activity in each sub-phase (learning, production, closing have to be computed separately because the rate of production of each activity is no longer constant (Lee and Diekmann, 2011).

The production percentages, as determined in step 2, are distributed over the activity being reviewed in an as-planned and as-built schedule. It should be pointed out that the non-linearity of learning rates might be caused by interruptions or by inherent forgetting in the process resulting from interruptions in performance of tasks (Smunt, 1999). Therefore, if an activity becomes disrupted by delay events, the production percentage is redistributed over the delayed activity with consideration of the impacts of disruption. For calculating the impacts of disruptions on the activities, measured mile method can be used. The measured mile method is the preferred method of computing efficiency. It consists of comparing the productivity during the impacted period to productivity during an un-impacted period (Pinnell, 1998).

Then, delay analysis using the window analysis method or but for analysis method is performed to determine the responsibility for each delay and the quantification of concurrent delays. The flowchart of the procedure for DAP method is illustrated in Figure 2.5.

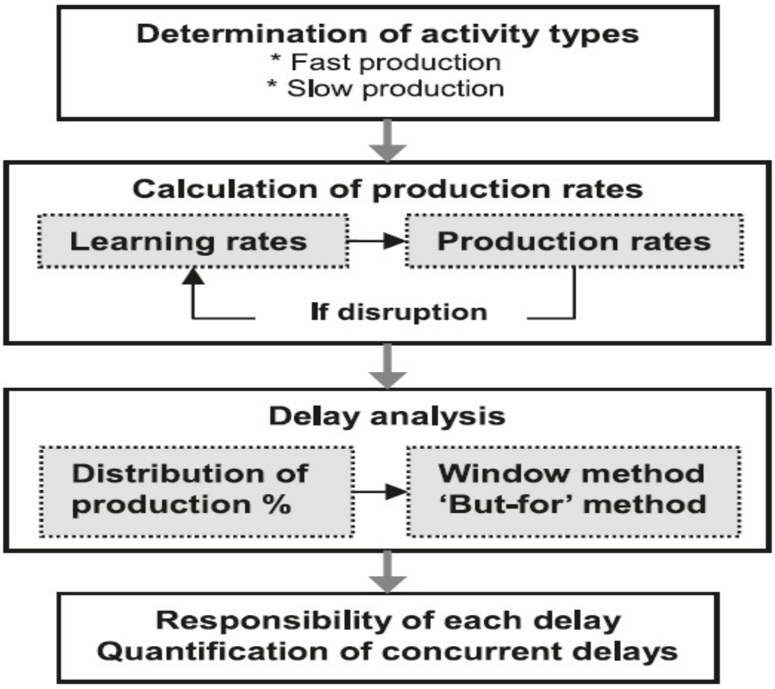


Figure 2.5: Flowchart of the procedure for DAP method

2.5.4 Resource Over-allocation

The need for reflecting and capturing the practice of resource allocation in schedule analysis is apparent and imperative. Many existing and new techniques pay little attention to this critical issue (Ibbs and Nguyen, 2007).

Ibbs and Nguyen (2007) used window analysis to show effects of resource allocation in delay analysis. Enhanced window analysis considering resource allocation includes additional steps compared to the current window analysis. Seven steps of current window analysis are adopted from Stumpf (2000). Basically steps 2, 3, 5 and 6 between current and enhanced window analyses are similar. The enhanced window analysis introduces step 0 which emphasizes that technical and resource constraints, and resource availability and allocation practice should be documented, disseminated, and obtained a consensus between the contractor and owner. This ensures that schedule analysis considering effect of resource allocation is legally enforceable thereafter. For instance, the contractor must inform the owner at the beginning that he or she will only be able to allocate two backhoes on the site in the case described above. Resource allocation practices can change and/or be changed over time when more information from the project or project parties is available. This reflects in step 7, which includes updating step 0 and repeats the procedure from step 2 to 6 for each window period to the end of the project (Ibbs and Nguyen, 2007)

The steps proposed by Ibbs and Nguyen are summarized hereunder:

Step 1: Development of as-planned CPM schedule considering resource allocation practice

Step 2: Selection of meaningful window sizes

Step 3: Apportionment of delays

2.5.5 Rework

Rework is a serious problem facing large and complex construction projects, particularly industrial projects that involve multiple parties such as contractors, suppliers, and trades. In such a complex environment where many activities by many parties take place simultaneously, often errors, omissions, and misunderstandings cause undesirable outcomes that have to be reworked. Rework, thus, has been defined as the effort of re-doing a process or activity that was incorrectly implemented the first time (Love and Li, 2000). In literature, the term "rework" has been related to other terms such as "quality deviations" (Burati et al., 1992), "non-conformance" (Abdul-rahman, 1995; Ashford, 1992), "defects" (Josephson and Hammarlund, 1999), and "quality failures" (Barber et al., 2000). Since rework can occur at different stages in the project life cycle, the term "field rework" has been clarified not to incorporate change orders or off-site fabrication errors (Fayek et al., 2003).

Various researchers have studied rework from different perspectives such as rework cycle, root causes, and impact on project performance (Love et al., 2010). Cooper (1993) introduced the concept of the rework cycle in projects, where the rework itself is not done properly, thus requiring further rework in a recursive cycle that can extend project duration far beyond what is originally conceived. This concept becomes important to the understanding of the interactions among various project factor including rework, which can be studied using system dynamics tools (Lyneis and Ford, 2007). With respect to root causes, several studies and surveys were conducted to identify and classify the root causes of rework. Almost all studies reported that rework plays a major role in cost and schedule overruns (Hegazy et al., 2011).

Hegazy et al. (2011) proposed a technique named "Delay Analysis Considering Rework", which modified the daily windows analysis to accommodate the representation and analysis of rework events as well the consideration of resource over-allocation in delay analysis.

2.5.6 Acceleration

Thomas (2000) described acceleration as having more work to perform in the same period of time or having a shorter period of time to perform the same amount of work.

The windows analysis has no mechanism for taking into account time shortened activities that reduce the total project duration. Hegazy and Zhang (2005) proposed a new approach for representing and analyzing acceleration in windows analysis. This approach uses daily windows and deals with acceleration as a negative delay attributable to the party who creates it. In another effort, Kim et al. (2005) introduced a new concept called “contractor’s float” in order to solve the problem of handling time-shortened activities that contribute to a reduction in the total duration of the project. When the total project duration is reduced by time-shortened activities because of the contractor’s efforts, the time reduced could be utilized by the contractor as a safety margin against future delays (Hegazy and Menesi, 2008).

CHAPTER 3

SHORTCOMINGS OF DELAY ANALYSIS PRACTICES

3.1 Introduction

There are various delay analysis methodologies widely used in construction industry according to the requirements of each project. All of the methodologies have some shortcomings which must be resolved by the planner during the analysis to obtain a reliable and accurate result. Frequently encountered shortcomings of the delay analysis methodologies are listed hereunder.

* Unreasonable Productivity Estimations
* Float Ownership
* Critical Path Changes
* Concurrent Delay
* Non-working Days
* Introduction of a New Activity
* Concurrent Effect
* Pacing Delay
* Resource Over-allocation
* Loss of Productivity
* Re-work
* Acceleration
* Increase in Quantities of Activities

* Decrease in Quantities of Activities

* Change in Sequence of Activities

* Omission of an Existing Activity

* Mitigation

List of shortcomings is tabulated hereunder together with major causes and proposed solutions.

Major causes identified for each of the shortcomings are listed hereunder. The appropriate ones are assigned to relevant shortcomings in Table 3.1.

- shortcomings arising out of contract documents,
- shortcomings originating from programmer,
- shortcomings resulting from lack of record keeping or efficient communication,
- shortcomings growing out of the incapability of delay analysis technique, and
- shortcomings caused by the delay analyst.

Moreover, each of the shortcomings are detailed under following sub-headings.

No	***Description of Shortcoming***	***Major Cause***		***Solution***
1	Unreasonable Productivity Estimation	Delay Analyst	►Lack of review of productivity estimations and actual production rates	►Frequent review and comparison of productivity estimations with actual figures
2	Float Ownership	Contract Documents	►Lack of apportionment of float in contract documents	►Formal agreement among parties as to apportionment of float
3	Critical Path Changes	Delay Analysis Technique	►Lack of frequent updates, especially, just before the delay event takes place	►Implementation of delay analysis techniques which necessitates frequent updates of schedule
4	Concurrent Delay	Delay Analysis Technique	►Lack of consideration of delays in multiple critical paths	►Implementation of delay analysis techniques which considers multiple critical paths and delays occuring concurrently
5	Non-working Days	Programmer	►Lack of consideration of non-working days for each of different types of activities	►Usage of different calendars for each type of activities
6	Introduction of a New Activity	Record Keeping	►Lack of efficient record keeping by the relevant staff	►Assurance of sufficient record keeping by the relevant staff
		Communication	►Lack of efficient communication among project participants	►Assurance of sufficient communication among parties so as to prevent overlook
7	Concurrent Effect	Delay Analysis Technique	►Lack of consideration of delays in multiple critical paths	►Implementation of delay analysis techniques which considers multiple critical paths and delays occuring concurrently
		Programmer	►Lack of consideration of non-working days for each of different types of activities	►Usage of different calendars for each type of activities
8	Pacing Delay	Delay Analyst	►Consideration of a pacing delay as if it is a concurrent delay	►Scrutinizing the delay events and underlying causes in depth
9	Resource Overallocation	Programmer	►Lack of a resource loaded programme	►Preparation of a resource loaded programme at the very beginning of the project
		Delay Analysis Technique	►Incapability of the delay analysis technique being used	►Implementation of a complex technique which necessitates frequent updates of the schedule
10	Loss of Productivity	Delay Analyst	►Lack of review of productivity estimations and actual production rates	►Frequent review and comparison of productivity estimations with actual figures
11	Rework	Record Keeping	►Lack of efficient record keeping by the relevant staff	►Assurance of sufficient record keeping by the relevant staff
		Communication	►Lack of efficient communication among project participants	►Assurance of sufficient communication among parties so as to prevent overlook
12	Acceleration	Delay Analysis Technique	►Incapability of the delay analysis technique to account for time shortened activities	►Implementation of a technique so as to take time shortened activities into account
13	Increase in Quantities of Activities	Record Keeping	►Lack of efficient record keeping by the relevant staff	►Assurance of sufficient record keeping by the relevant staff
		Communication	►Lack of efficient communication among project participants	►Assurance of sufficient communication among parties so as to prevent overlook
14	Decrease in Quantities of Activities	Delay Analysis Technique	►Incapability of the delay analysis technique to account for time shortened activities	►Implementation of a technique so as to take time shortened activities into account
15	Change in Sequence of Activities	Communication	►Lack of efficient communication among project participants	►Assurance of sufficient communication among parties so as to prevent overlook
16	Omission of an Existing Activity	Record Keeping	►Lack of efficient record keeping by the relevant staff	►Assurance of sufficient record keeping by the relevant staff
		Communication	►Lack of efficient communication among project participants	►Assurance of sufficient communication among parties so as to prevent overlook
17	Mitigation	Delay Analysis Technique	►Incapability of the delay analysis technique to account for time shortened activities	►Implementation of a technique so as to take time shortened activities into account

3.2 Unreasonable Productivity Estimations

After preparation of the quantity takeoff of the required work, the planner determines the duration of an activity. For that purpose, the planner assumes a crew and estimates their production rate for the required work on a daily or hourly basis. After that the duration of an activity can be easily computed. If the programmer assumes unreasonable production rate for an activity, the duration of the activity is inherently calculated wrongly. Accordingly, wrong calculation of activity duration leads to problems in achieving the estimated duration during the implementation of the activity.

Figure 3.1 shows the as-planned schedule of a project with 8 activities. Activity D is on the critical path, therefore, any delay that occurs on the Activity inherently delays the completion date of the project.

Original duration of Activity D is calculated as 9 days by using the initial productivity estimations of the contractor’s programmer.

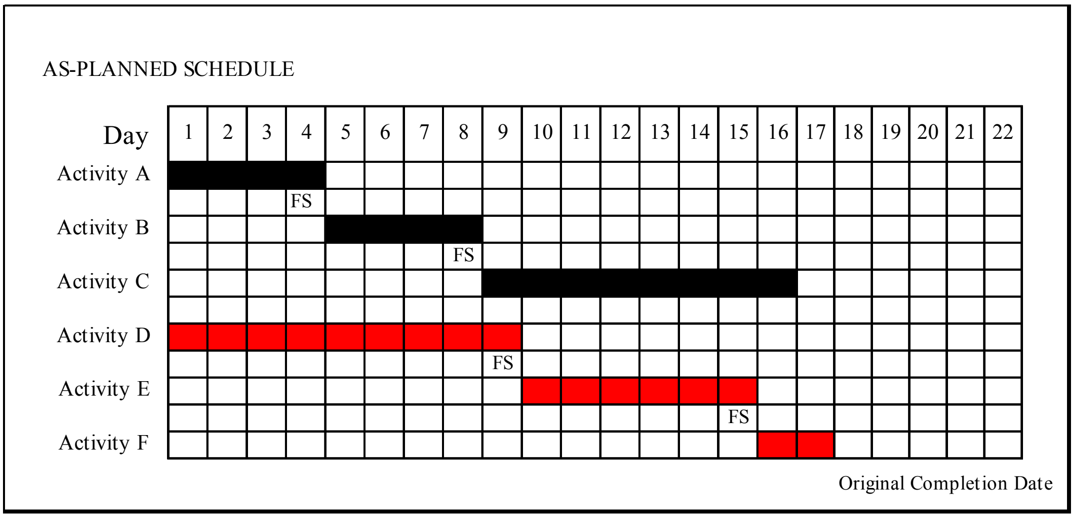


Figure 3.1: As-planned Schedule

The program is updated on the 13th day and 1 day delay was suffered by the contractor in Activity D. Since Activity D is on the critical path, the completion date of the project slipped by 1 day as shown in Figure 3.2.

There was no apparent delay event during the implementation of Activity D. However, the productivity of the labors was under the estimations which are used to determine the duration of Activity D.

The underlying reason of this delay was the over optimistic productivity estimation of the programmer, therefore, 1 day delay which is originated from the unreasonable productivity estimations of the contractor shall be considered as an inexcusable delay.

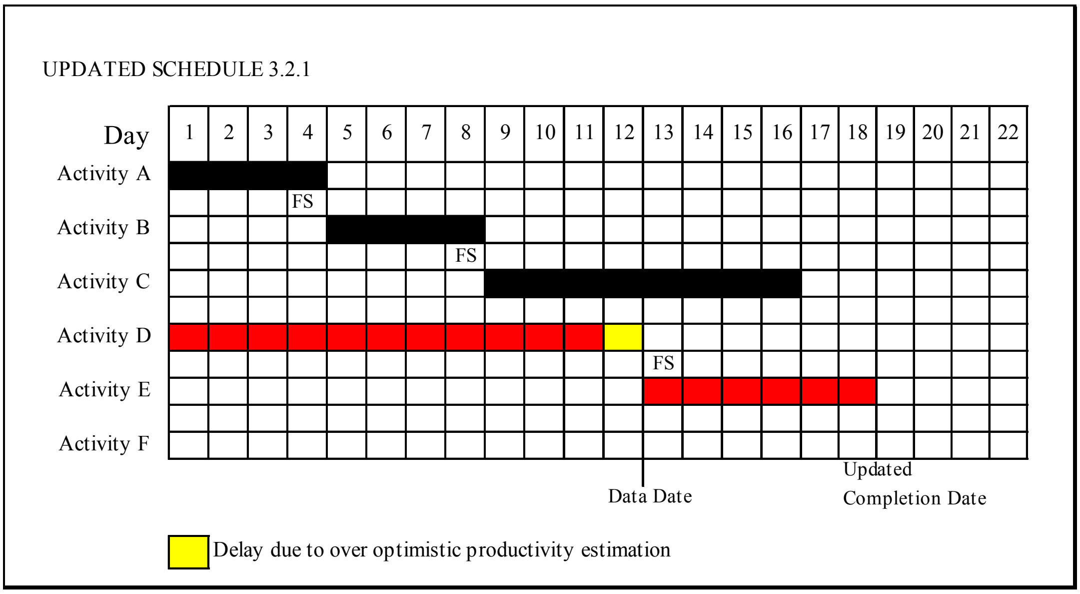


Figure 3.2: Delay due to Over-Optimistic Productivity Estimation in Activity D

3.2.1 Major Causes of Exclusion of "Unreasonable Productivity Estimations" in Delay Analysis Practices and Solution Methods

3.2.1.1 Delay Analyst

The major cause of exclusion of "Unreasonable Productivity Estimations" in delay analysis practices is the incompetence of delay analyst. Delay analyst shall be capable of examining the productivity estimations and thus, making comparison of these estimations with the actual figures. Otherwise, the delays originating from unreasonable productivity estimations may get lost among other delay events.

Lack of proper productivity estimations at the programming stage, inefficient record keeping and communication among project participants also may lead to exclusion of "Unreasonable Productivity Estimations" in delay analysis practices.

3.3 Float Ownership

There is not an agreement upon the ownership of the project float in the construction industry. The Society of Construction Law suggests that the contract float should belong to project. Float ownership may cause serious disputes during the course of the project, as most of the standard forms of contracts do not accommodate a clause for the ownership of the float.

A path which is not originally critical may become critical when the total float is consumed by a party. Figure 3.3 shows the updated schedule on the 9th day after the Employer's delay. In the as-planned schedule, Activity B was not on the critical path, therefore 1 day Employer *"Culpable Delay"* doesn't affect the completion date of the project.

However, Employer's delay consumed the float, and, hence the path on which the Activity B is located became critical as shown in Figure 3.3.

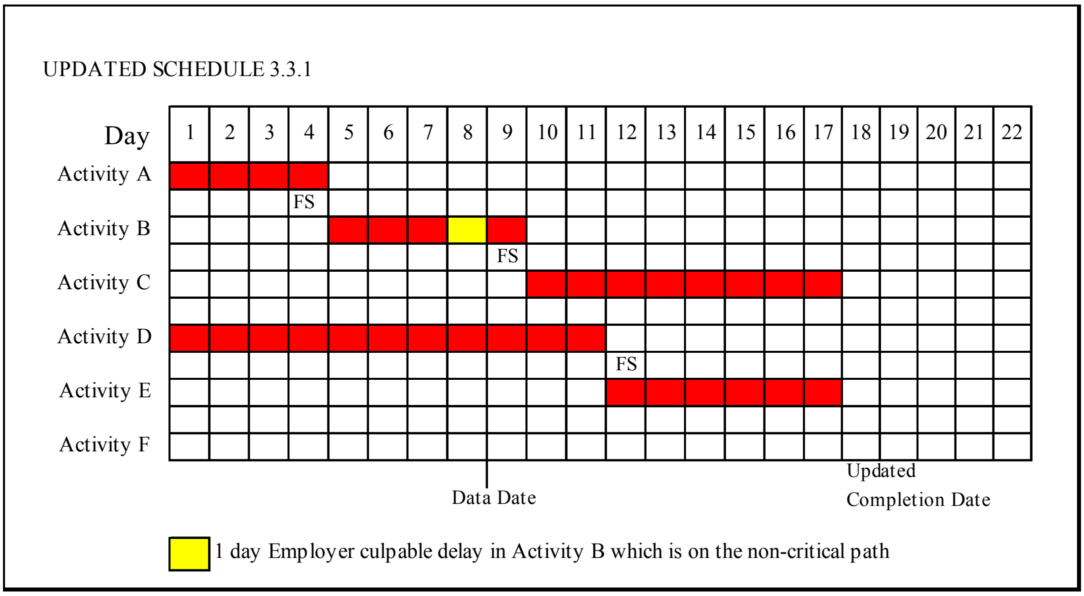


Figure 3.3: 1 day Employer Culpable Delay on the Non-Critical Path

Figure 3.4 shows the updated schedule 3.3.2 after the Contractor's delay. The delay suffered in Activity C affected the completion date of project by 1 day. It can be clearly inferred from this case that; if the Employer had not consumed the float of the path on which the Activity C is located, Contractor's delay would have not delayed the completion date of the project. Therefore, there is an ambiguity as to the liability of this delay to completion of the project. It is impossible to decide the responsible party in the absence of an agreement among parties.

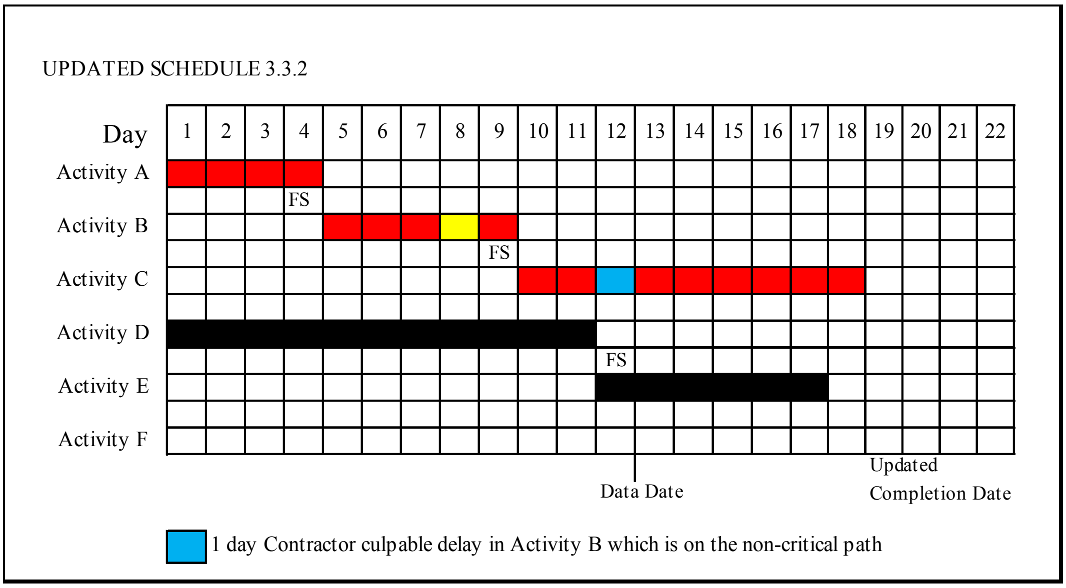


Figure 3.4: 1 day Contractor Culpable Delay on the Critical Path

3.3.1 Major Causes of Ambiguity in "Float Ownership" in Delay Analysis Practices and Solution Methods

3.3.1.1 Contract Documents

The major cause of ambiguity of "Float Ownership" in delay analysis practices is absence of an apportionment method of the float agreed upon by the parties which is located in contract documents. If the parties do not care about float issue, it is likely that disputes arise during the course of the project. For example, in the example above, it is impossible to decide whether the delay suffered by the Contractor is under the responsibility of the Contractor or the Employer with the lack of an agreed float share method. If the Contractor owns the float, then the Employer is responsible for the delay even though the completion date of the project is slipped as a result of the Contractor culpable delay event.

To prevent such ambiguous cases, the parties shall agree upon a method in ownership of float, such as:

- Contractor owns the float,
- Employer owns the float,
- First come first served.

3.4 Critical Path Changes

Delays on the critical path of a construction programme have the ability to extend the overall duration of a project. Therefore, in construction disputes, impacts of construction delays which are on critical path must be identified and then their effect can be computed. Some delay analysis methods do not take the changes in the critical path into account. However, it is common in construction projects that some critical paths become non-critical and non-critical paths which have even much amount of float become critical during the course of the project. Therefore, identification of the real time critical path is of much importance in order to obtain more accurate results.

As shown in Figure 3.5, Activity D is on the critical path during the planning stage of the project. Figure 3.6 provides the updated schedule. The Contractor suffered 3 days delay in Activity B and 1 day delay in Activity D. As can be clearly seen from the updated schedule, the path starting with Activity D became non-critical after the first update. Therefore, further delays occurring in Activity D shall not be considered as critical delay at that time.

The delay analysis methodology shall take the changes in the critical path into account in order to obtain a reliable and accurate result.

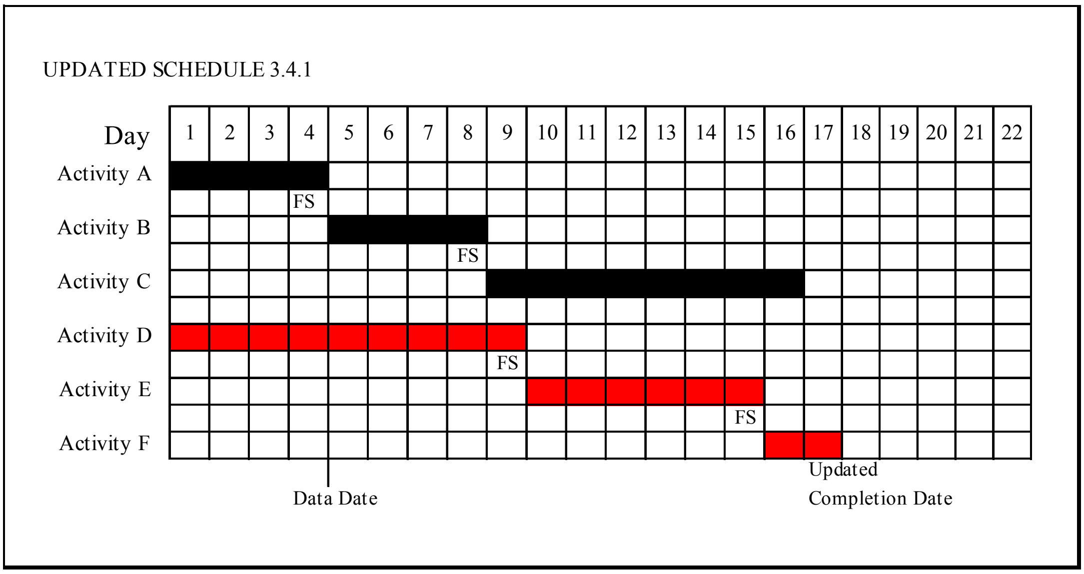


Figure 3.5: Updated Schedule before the Critical Path Changes

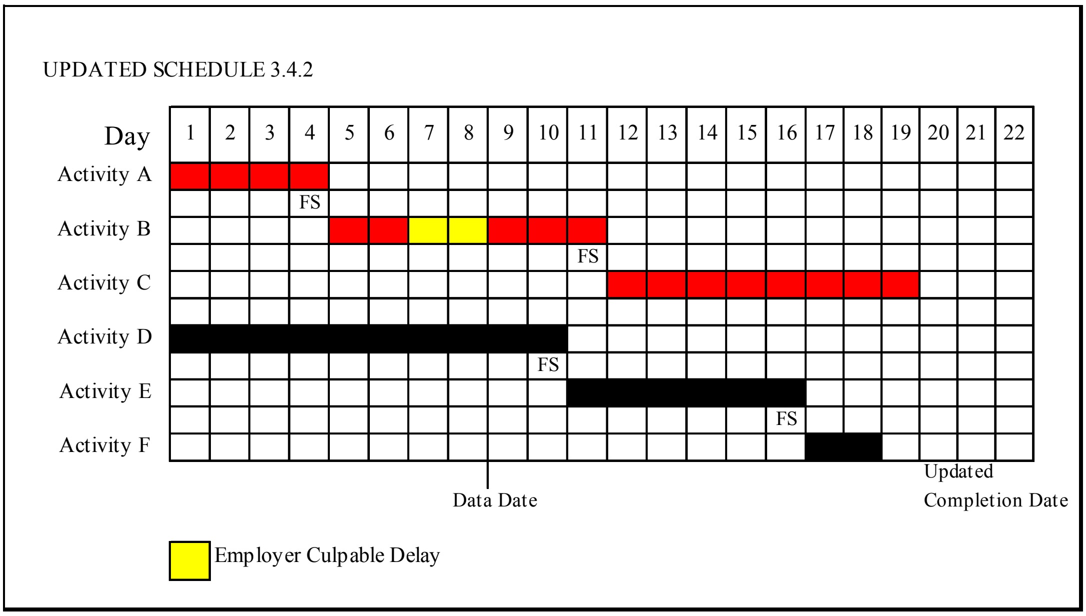


Figure 3.6: Changed Critical Path of Updated Schedule

3.4.1 Major Causes of Exclusion of "Critical Path Changes" in Delay Analysis Practices and Solution Methods

3.4.1.1 Delay Analysis Technique

Static delay analysis methodologies and retrospective delay analysis methodologies among the dynamic methods are not capable of managing critical path changes.

Prospective complex methods which necessitate frequent updates of the schedule such as TIA shall be implemented in order to overcome this shortcoming.

3.5 Concurrent Delays

Concurrent delays can be described as two or more delays that occur concurrently. Any of them can cause a slippage in the completion date of the project. Either of these delay events had not occurred, yet, completion date of the project would have been slipped by other delay events which are concurrent with it. Some researchers define concurrent delays as follows:

Concurrency occurs when two or more separate delay events occur within a specific time period.

Since concurrent delays can be used as a defense strategy by both employers and contractors, it can cause various disputes. Contractors use concurrent delays in order to seek a relief from liquidated damages. Employers may use concurrency to get rid of additional payment requests of the Contractor.

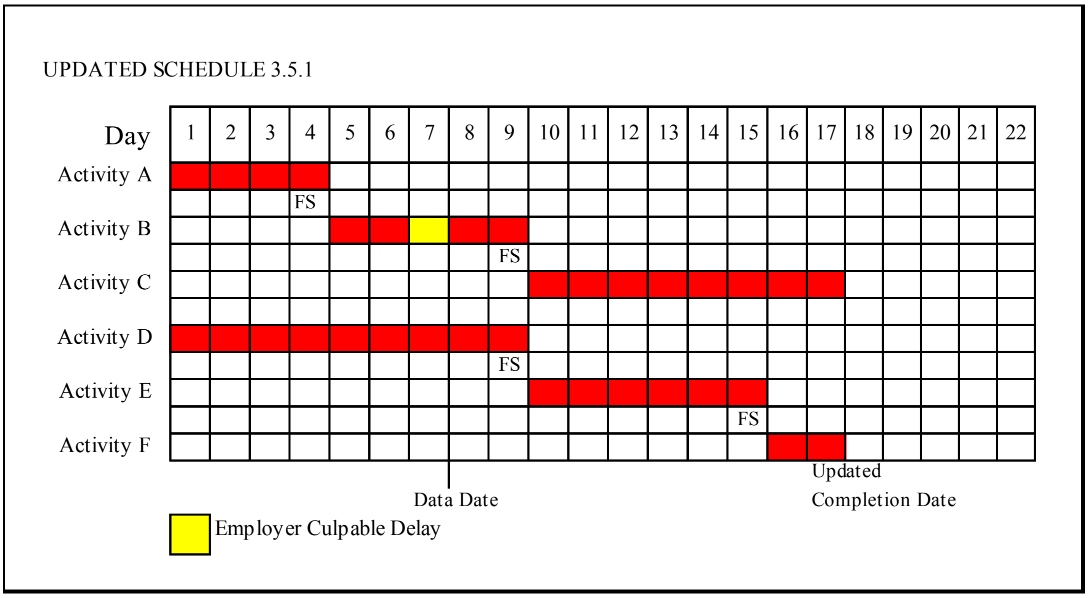


Figure 3.7: Updated Schedule just before the Concurrent Delay Events Take Place

In complex construction projects, it is common that there can be multiple critical paths in the construction programme. Therefore, when a delay occurs on one of the paths of the programme, the other paths shall be scrutinized to determine if there is a concurrent delay event on other paths.

In some cases, delays occur concurrently in both paths as shown in Figure 3.8. Concurrent delays occur mostly, when multi-discipline tasks are being performed at the same time. According to the updated Schedule in the Figure 3.8, Activity B is delayed by 3 days and Activity D is delayed by 2 days. Last 2 days delay of Activity B is concurrent with delay in Activity D. Therefore, 2 days delay is attributable to both Activity B and Activity D. One should consider the concurrency in order to achieve a reliable result.

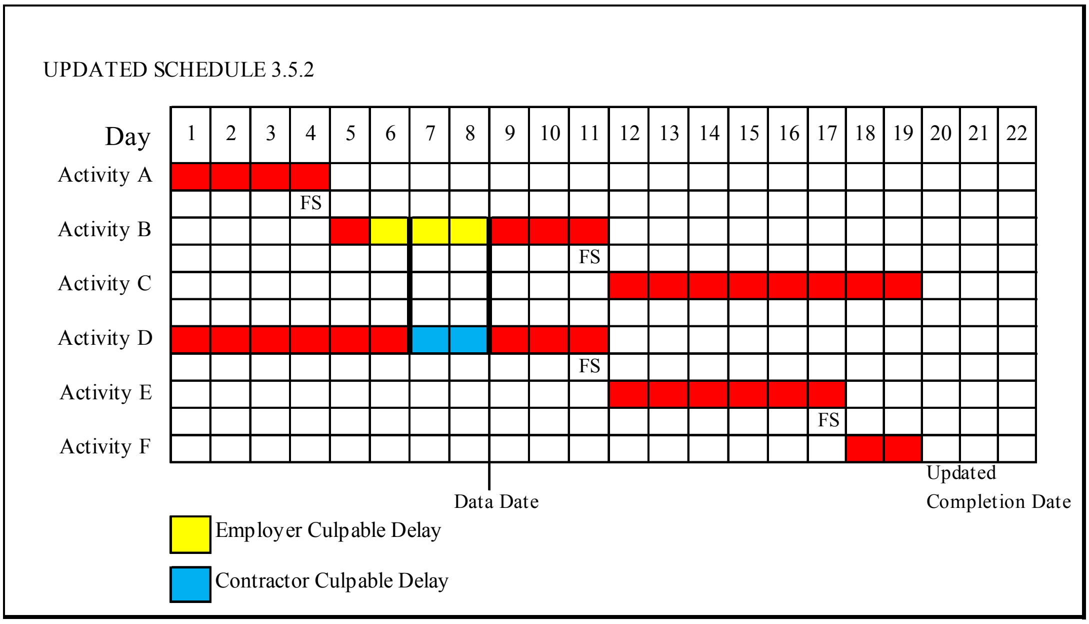


Figure 3.8: Concurrent Delay Events

3.5.1 Major Causes of Exclusion of "Concurrent Delays" in Delay Analysis Practices and Solution Methods

3.5.1.1 Delay Analysis Technique

The major cause of exclusion of "Concurrent Delays" in delay analysis practices is the inability of the delay analysis technique. Static delay analysis methodologies and retrospective delay analysis methodologies among the dynamic methods are not capable of managing concurrencies.

Prospective methods shall be used in order to overcome this shortcoming. Even TIA does not consider multiple critical paths. Multiple critical paths are typically overlooked by the analyst. Therefore, a modified delay analysis technique which takes multiple critical paths into account shall be implemented in order to overcome this defect.

3.6 Non-working Days

The latest version of scheduling software provides the opportunity to assign different calendars to different activities so as to reflect the actual situation more accurately. However, it may cause inaccurate results in delay analysis applications or in calculation of project float. The responsibility of the non-working days on the calendars shall be determined in order to avoid possible disputes. Some researchers suggest that these periods can be considered to be excusable and non-compensable delay event in delay analysis applications. In this manner, a reliable delay analysis mechanism, which accounts for the non-working days, can be established.

Figure 3.9 shows the revised baseline schedule. The 18th day is revised as being a non-working day.

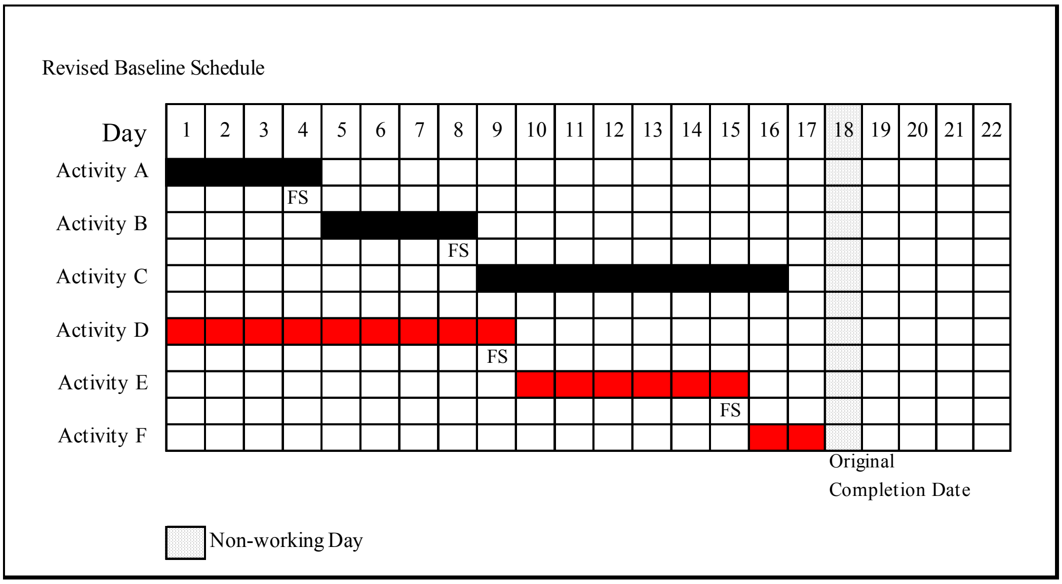


Figure 3.9: Revised Baseline Schedule

Figure 3.10 shows the updated schedule after a 1 day delay event occurred on Activity E. Since Activity E stays on the critical path, the completion date of the project slipped. However, as the 18th day defined as a non-working day, the net effect of the 1 day delay is turned out to be 2 days. Therefore, it can be inferred from this simple case that, identification of non-working days in the schedule changes the results of delay analysis substantially.

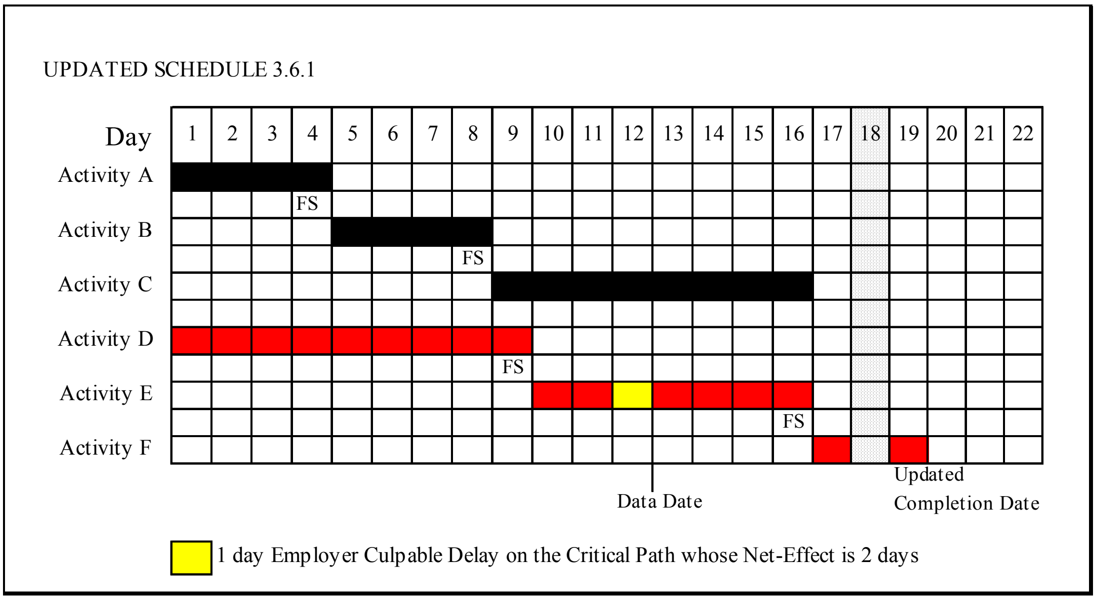


Figure 3.10: 1 day Employer Culpable Delay Extends the Completion Date by 2 days

3.6.1 Major Causes of Exclusion of "Non-working Days" in Delay Analysis Practices and Solution Methods

3.6.1.1 Programmer

The major cause of Exclusion of "Non-working Days" in delay analysis practices is lack of consideration of non-working days for each of the activities located in the construction schedule. Therefore, the programmer who creates the construction program bears the responsibility of this defect.

To prevent exclusion of "Non-working Days" in delay analysis practices, the programmer shall create appropriate calendars and assign them to relevant activities. Thus, the analysis yields accurate results without necessitating additional effort of the analyst.

3.7 Introduction of a New Activity

Most of the construction contracts include an amount named "Provisional Sum" which stands for the variations likely to occur throughout the project. In some cases, Employer requires the Contractor to perform additional work within the scope of the Contract.

Figure 3.11 shows the updated schedule just before the start date of the additional activity which is instructed by the Employer to be implemented within the scope of the Contract. The analysis shows that, Contractor suffered 2 days delay as a result of the additional activity.

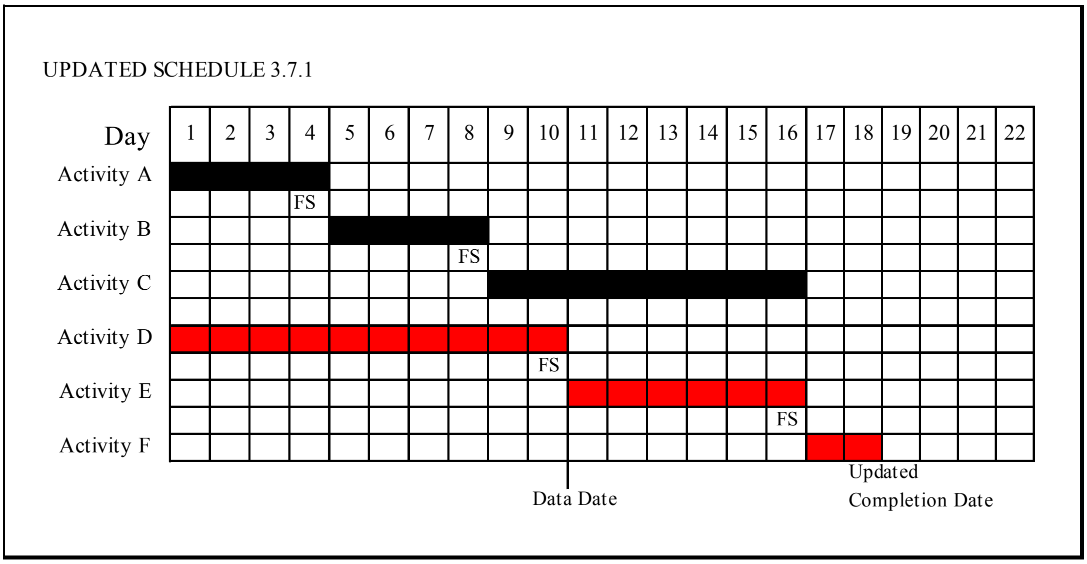


Figure 3.11: Updated Schedule just before the Start Date of Additional Activity

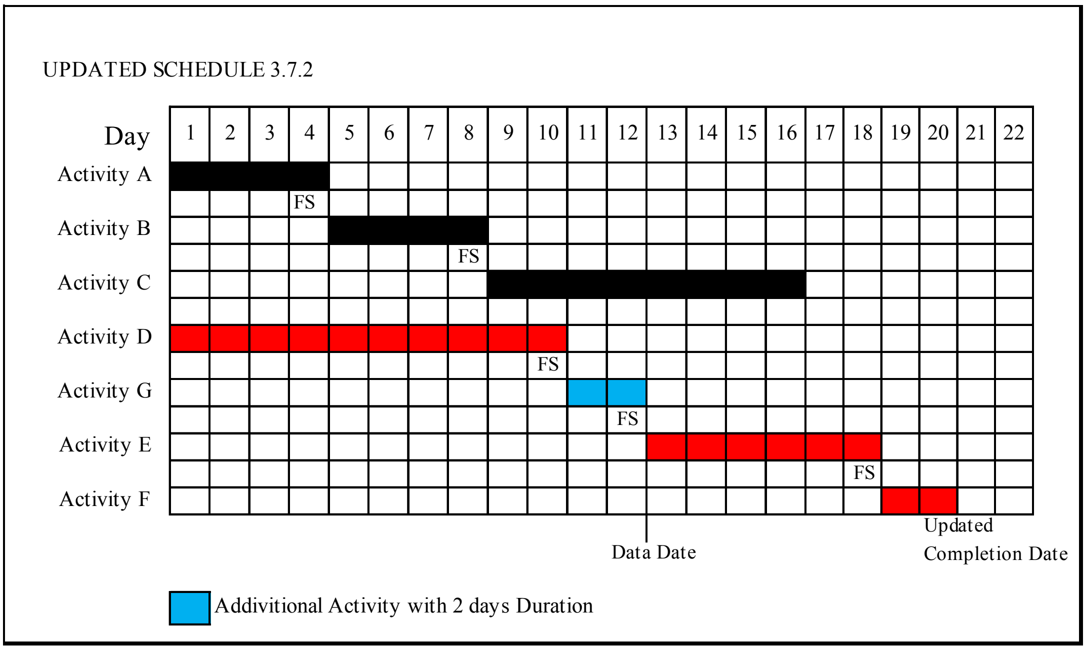


Figure 3.12: Updated Schedule which Shows the Effect of Additional Activity

3.7.1 Major Causes of Exclusion of "Additional Activities" in Delay Analysis Practices and Solution Methods

3.7.1.1 Record Keeping

One of the major causes of exclusion of "Additional Activities" in delay analysis practices is lack of efficient record keeping. This causes oversight of the additional activities which must be incorporated into schedule in order to perform an efficient analysis.

To overcome such situations efficient record keeping must be ensured by the Contractor by deploying required resources wherever needed.

3.7.1.2 Communication

Another major cause of Exclusion of "Additional Activities" in delay analysis practices is inefficient communication among project participants. Even though efficient record keeping is ensured by the Contractor, lack of efficient communication among project participants may result exclusion of "Additional Activities" in delay analysis practices.

To overcome such situations efficient communication among project participants must be ensured by the Contractor.

In sum, if the above-mentioned situations can be ensured by the Contractor, it is not a challenging activity to incorporate additional activities into delay analysis study by using complex delay analysis techniques such as TIA.

3.8 Concurrent Effect

The SCL Delay and Disruption Protocol (2002) aims to provide an agreed manner in which issues of concurrency can be resolved. Where an event of Employer Risk and Contractor Risk occur at the same time, the contractor should nevertheless be entitled to an EOT for the delay to completion. Risk events which occur sequentially, but the effects are concurrent, should also not reduce the amount of an EOT due to the Contractor as a result of Employer Delay.

In some cases, the effects of delay events with different durations can be concurrent. Figure 3.13 shows the updated schedule just before the delay events in critical paths take place. As shown in the Figure 3.13, different calendars have been assigned to Activity C and Activity F each of which includes different non-working days.

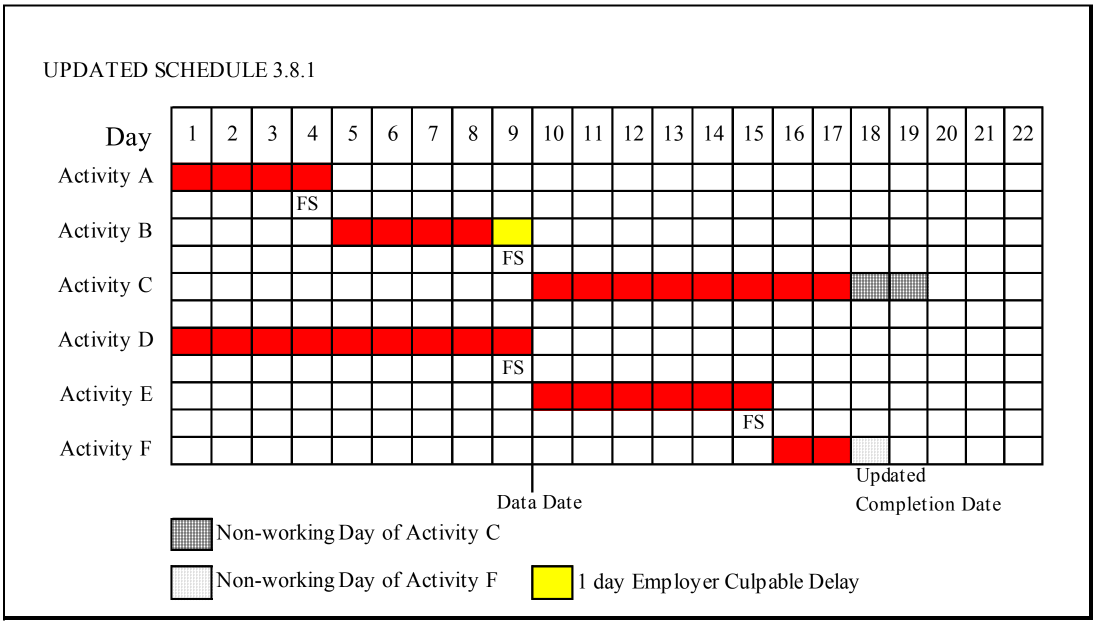


Figure 3.13: Different Calendars Assigned to Different Activities

Figure 3.14 shows the delay events occurred in different critical paths. The Contractor suffered 1 day delay in Activity C and 2 days delay in Activity E. Their net effect was 3 days and concurrent.

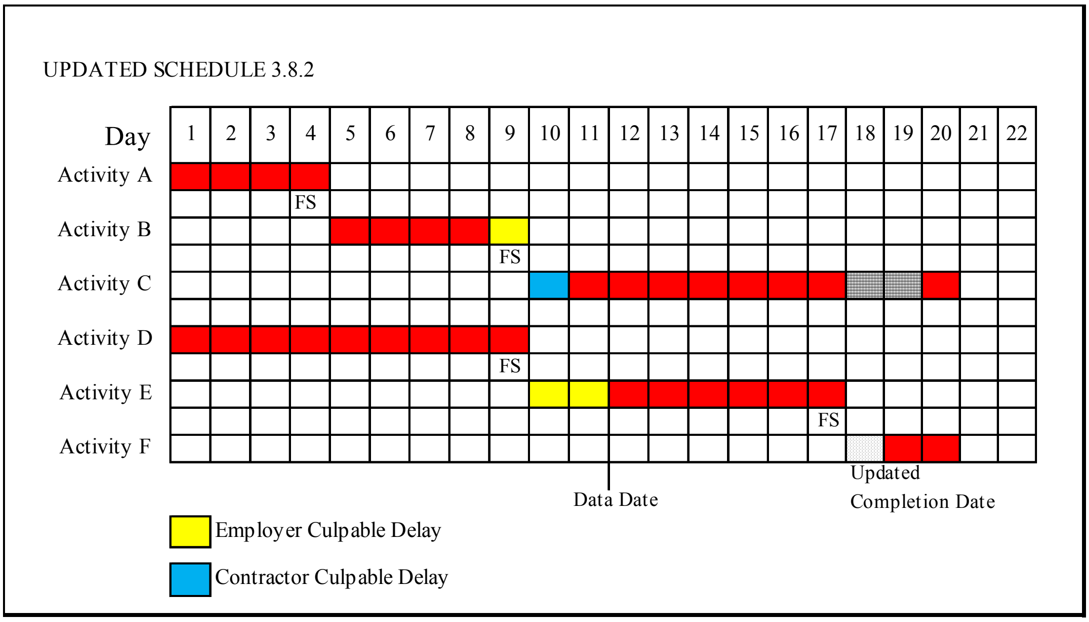


Figure 3.14: Net Effects of Delay Events are Concurrent

Even though the duration of delay events were not equal and the duration of the concurrent portion was 1 day, the net effects were concurrent and the duration of them was 3 days.

3.8.1 Major Causes of Exclusion of "Concurrent Effect" in Delay Analysis Practices and Solution Methods

3.8.1.1 Programmer

One of the major causes of Exclusion of "Concurrent Effect" in delay analysis practices is lack of assignment of appropriate calendars for each of the activities located in the construction schedule. Therefore, the programmer who creates the construction program bears the responsibility of this defect.

To prevent exclusion of "Concurrent Effect" in delay analysis practices, the programmer shall create appropriate calendars and assign them to relevant activities.

3.8.1.2 Delay Analysis Technique

Another major cause of Exclusion of "Concurrent Effect" in delay analysis practices is incapability of the delay analysis technique. Even TIA does not consider multiple critical paths. Therefore, a modified delay analysis technique which takes multiple critical paths into account shall be implemented in order to overcome this defect.

3.9 Pacing Delay

Pacing delay is a conscious slow-down of an activity by the Contractor, because of a concurrent delay event occurring either on a parallel path or on the same path.

Pacing delays can be easily confused with concurrent delays. Resolution of extension of time claims can be complicated by existence of pacing delays even though project team involves seasoned delay analysts and claims experts. The pacing delay concept is evolved against the Employers concurrent delay defense. Generally, in practice if an Employer culpable delay event occurs concurrently with a Contractor culpable delay event, Employers claim this case as a concurrency and Contractors claim that a pacing delay experienced. Detailed analysis of each delay event is of importance to overcome the conflict.

Figure 3.15 shows the updated schedule just before the concurrent delays occur.

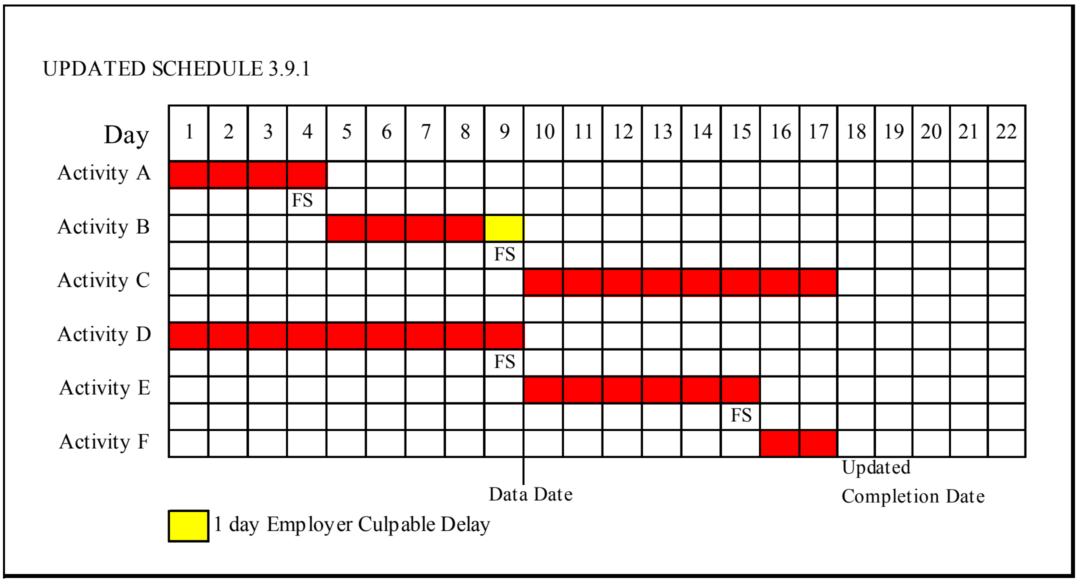


Figure 3.15: Updated Schedule just before the Concurrent Delays Occur

Figure 3.16 shows concurrent delays. The Contractor suffered 3 days delay on the Activity C. Accordingly, he decided to slow-down the Activity E in order to smoothen the resource usage. If he had finished the work on time based on the planned dates, he would have waited for Activity C to be finished, in order to deliver the project. Therefore, the intentional slow-down of the Contractor can be considered as a pacing delay.

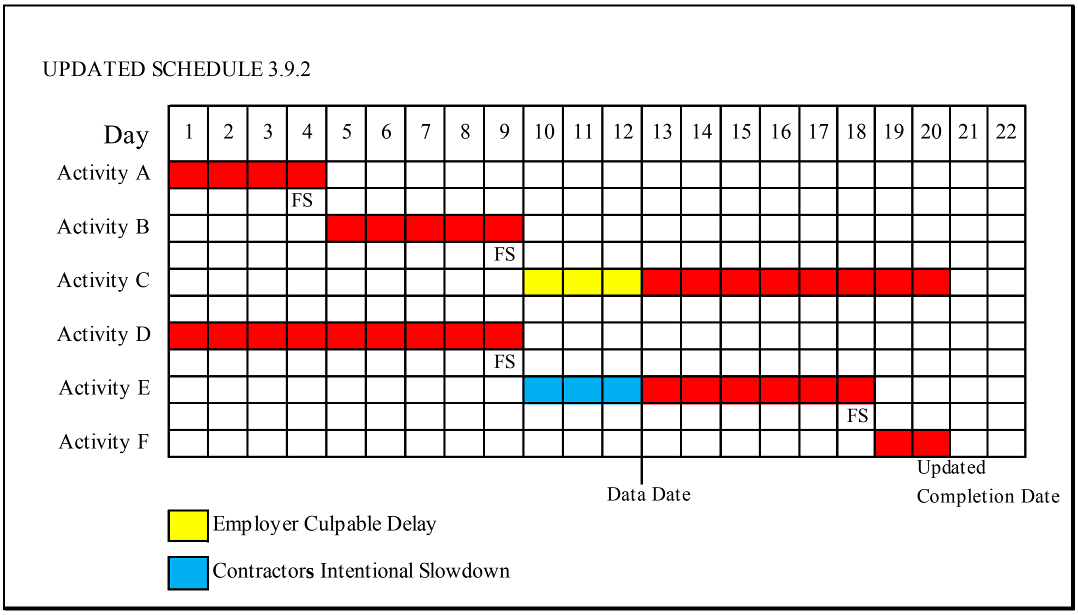


Figure 3.16: Employer Delay, and Contractor’s Pacing Delay

If a Contractor culpable delay suffered concurrently is considered a pacing delay, then the Contractor is entitled to Cost as well as EOT. Otherwise, he is only entitled to EOT. Therefore, pacing delay concept is crucial in some situations.

3.9.1 Major Causes of Exclusion of "Pacing Delay" in Delay Analysis Practices and Solution Methods

3.9.1.1 Delay Analyst

The major cause of Exclusion of "Pacing Delay" in delay analysis practices is consideration of a pacing delay as if it is a concurrent delay by the Delay Analyst. Concurrency is a common occurrence in complex construction projects. Some of them arise out of Contractor's pacing delay against another activity experiencing delay.

To prevent exclusion of "Pacing Delay" in delay analysis practices, the delay analyst shall scrutinize underlying reason of all delay events. The pacing delay must be identified, as the compensability differs substantially compared to concurrent delays.

After identification of pacing delays by the Contractor's analyst, it is likely that the Employer opposes this idea and this issue can lead a dispute among parties.

3.10 Resource Over-allocation

Since resource allocation of activities can affect the delay responsibility of the parties, it is needed to incorporate resource allocation in schedule delay analysis. Most of the researchers suggest that the construction schedules should be resource loaded. All type of resources such as material, equipment and manpower shall be inserted into schedule. In order obtain a reliable result; the resource allocation of the schedule shall be considered in delay analysis applications. Some researchers proposed steps to enhance window analysis so as to account for resource allocation and some created integrated approach which deals with resource allocation. Possible extended effect of resource allocation on delay responsibility of the parties is of importance which affects the results of delay analysis study substantially.

Figure 3.17 shows that an Employer culpable delay occurred in Activity C which is on the non-critical path. Therefore, this delay event is not expected to delay the completion date of the project.

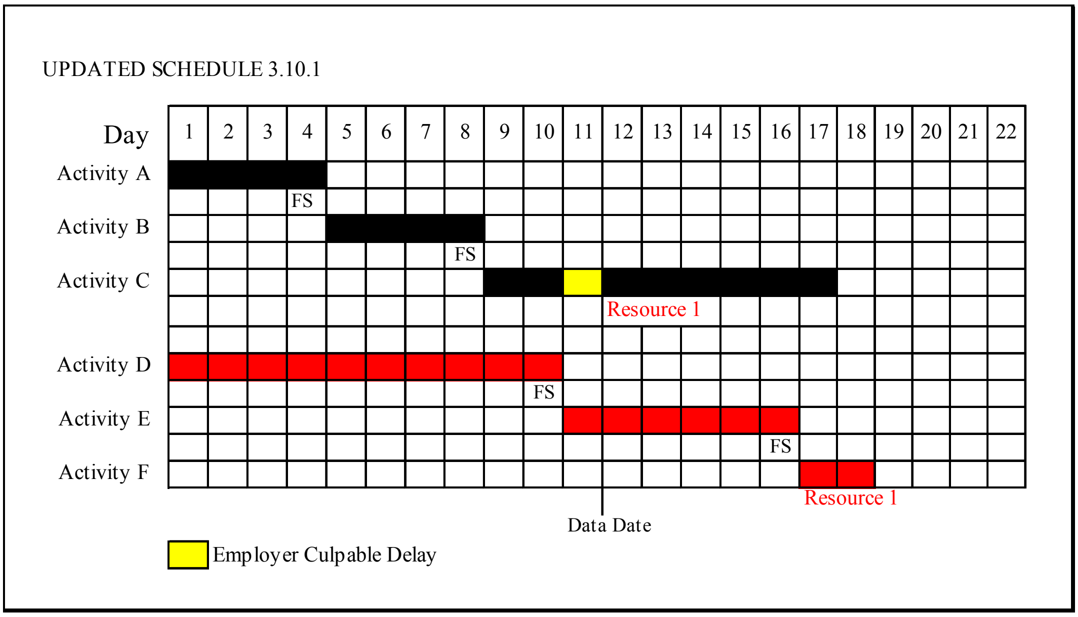


Figure 3.17: 1 day Employer Culpable Delay on the Non-Critical Path

Figure 3.18 shows that Activity C and Activity F are using the same type of resource. Since the Contractor possess only 1 unit Resource 1, the delay event which was not on the critical path has yet delayed the completion date of the project.

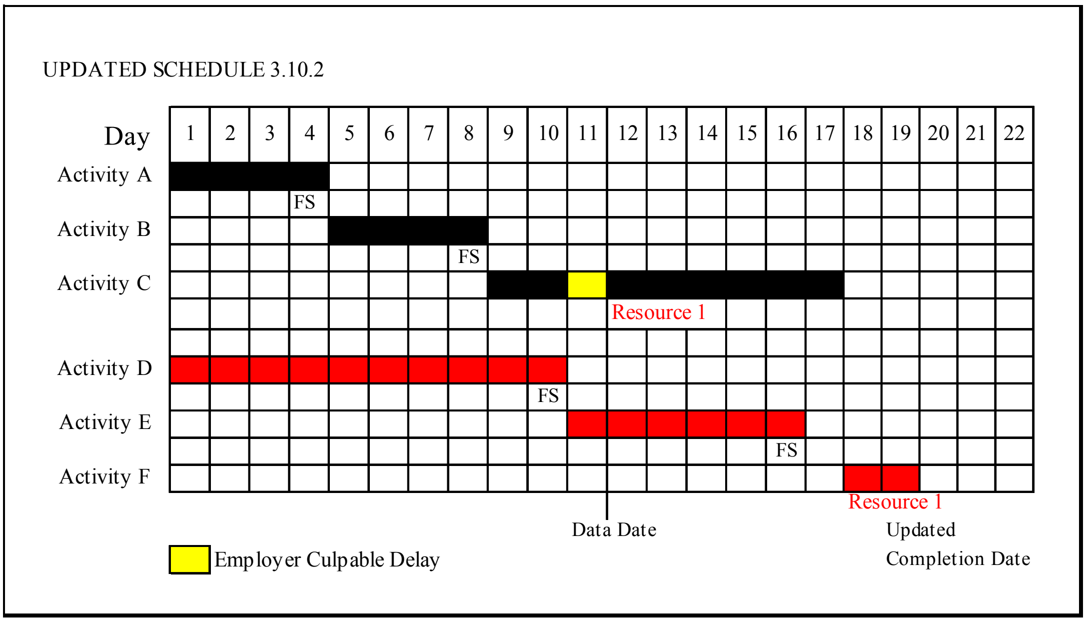


Figure 3.18: Delay due to Resource Over-allocation

3.10.1 Major Causes of Exclusion of "Over-allocation" in Delay Analysis Practices and Solution Methods

3.10.1.1 Programmer

One of the major causes of Exclusion of "Over-allocation" in delay analysis practices is lack of a resource loaded construction schedule. It is very hard for the delay analyst to identify resource over-allocation in a schedule which is not resource loaded.

To prevent this defect, a construction program must be resource loaded. At least, the major resources shall be assigned to activities.

3.10.1.2 Delay Analysis Technique

Another major cause of Exclusion of "Over-allocation" in delay analysis practices is incapability of delay analysis technique. Even the most complicated techniques such as TIA do not consider resource over-allocation.

To prevent overlook of resource over-allocation, the delay analyst shall scrutinize the non-critical paths which may potentially affect the critical path.

3.11 Loss of Productivity

There are various types of delays in construction industry, however, lost productivity or loss of productivity is one of the most important and complicated cause of delay in large scale construction projects. Therefore, calculating the net effect of productivity loss is of importance.

Most of the studies conducted dealt with conversion of lost productivity into cost. However, there is almost no study converting the lost productivity into time.

The methods in quantification of lost productivity which are accepted in the industry are total cost approach, measured mile analysis, comparison with industry standards and so on. The quantification of delay can be performed by using the percentage of lost productivity which is calculated from one of these methods.

Figure 3.19 shows that 1 day Contractor culpable delay occurred in Activity D.

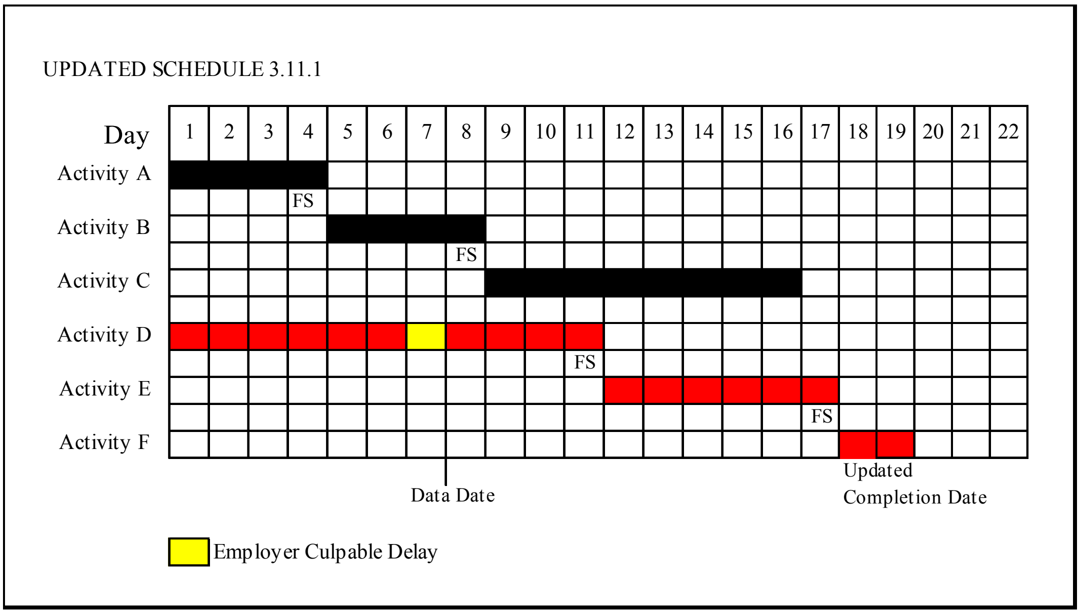


Figure 3.19: 1 day Employer Culpable Delay

Figure 3.20 shows that, Contractor suffered 1 day delay due to loss of productivity as a result of Contractor's previous delay on the same activity. The Contractor deployed his resources after Employer's delay on 7th day. After interruption he brought back his resources and started over Activity D with a low production rate. Therefore, 1 day delay suffered due to loss of productivity at a rate of 20%.

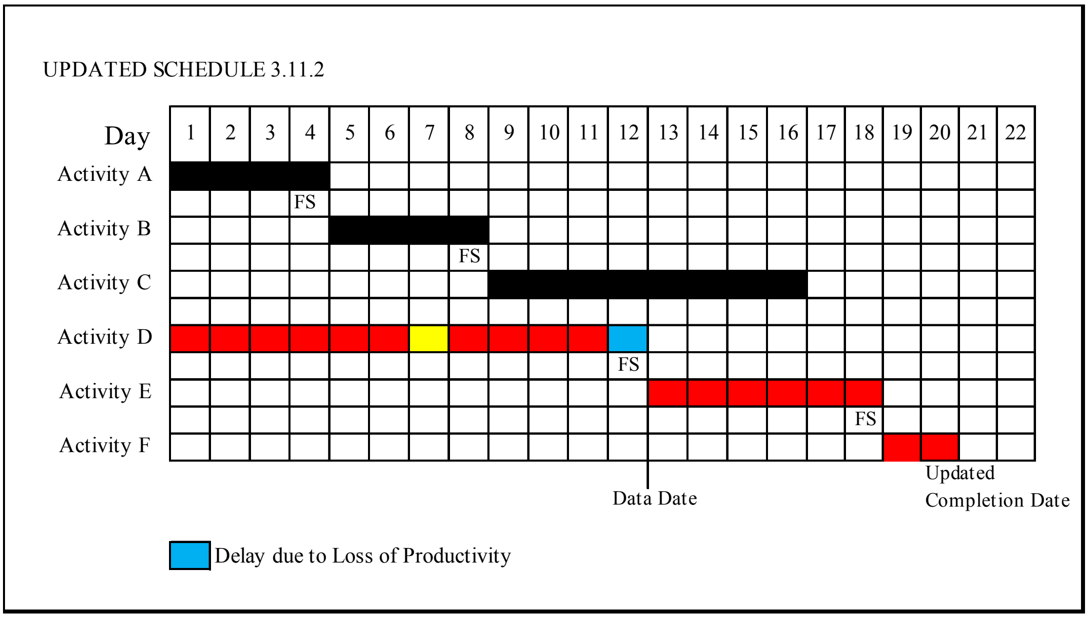


Figure 3.20: 1 day Delay due to Loss of Productivity

3.11.1 Major Causes of Exclusion of "Loss of Productivity" in Delay Analysis Practices and Solution Methods

3.11.1.1 Delay Analyst

The major cause of exclusion of "Loss of Productivity" in delay analysis practices is lack of review and comparison of productivity estimations and actual productivity rates by the delay analyst.

Frequent analysis of the data obtained from the technical office, from both the disrupted and undisrupted sections shall be performed. In some cases the industry standards such as the figures obtained from the Ministry's unit price calculations shall be reviewed and various methodologies which are adopted by the authorities shall be used by the analyst.

3.12 Rework

Rework may occur in design phase or construction phase of all types of construction projects. There are some definitions frequently used to define rework in construction industry. Rework can be defined as "the process of making the work conform to the requirements of contract documents by corrective actions or starting from the scratch. Some researchers define rework as finishing an activity at least one extra time due to lack of conformance to requirements of the contract documents or another reason. Since rework is experienced by contractors in especially large scale projects, it is a major cause of time overruns and cost equivalents. Therefore, it should be dealt with in detail by delay analysts and shall not be overlooked.

Figure 3.21 shows that all of the activities were accomplished by the Contractor on time.

However, Activity F was not performed in conformance with the specifications. Accordingly, the Employer requested the Contractor to redo the Activity F in conformance with the Specifications.

As shown in Figure 3.22, Contractor's rework of Activity F has delayed the completion date of the project by 2 days.

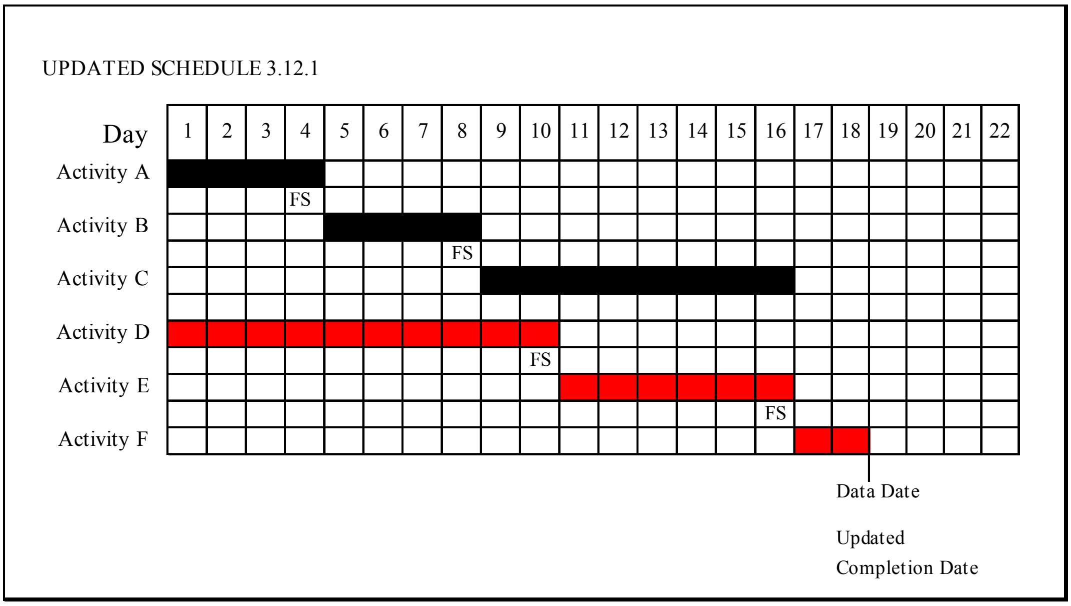


Figure 3.21: All Activities Accomplished on Time

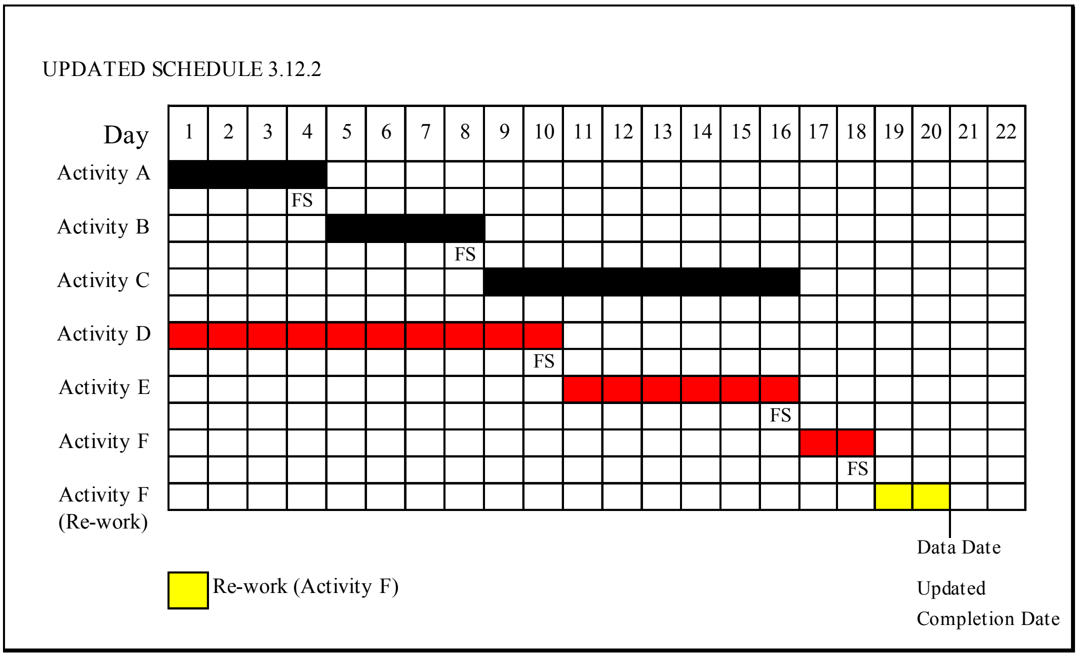


Figure 3.22: Rework due to Employer’s Dissatisfaction

3.12.1 Major Causes of Exclusion of "Rework" in Delay Analysis Practices and Solution Methods

3.12.1.1 Record Keeping

One of the major causes of exclusion of "Rework" in delay analysis practices is lack of efficient record keeping. This causes oversight of the rework which must be incorporated into schedule in order to perform an efficient analysis.

To overcome such situations efficient record keeping must be ensured by the Contractor by deploying required resources wherever needed.

3.12.1.2 Communication

Another major cause of Exclusion of "Rework" in delay analysis practices is inefficient communication among project participants. Even though efficient record keeping is ensured by the Contractor, lack of efficient communication among project participants may result exclusion of "Rework" in delay analysis practices.

To overcome such situations efficient communication among project participants must be ensured by the Contractor.

In sum, if the above-mentioned situations can be ensured by the Contractor, it is not a challenging activity to incorporate rework into delay analysis study by using complex delay analysis techniques such as TIA.

3.13 Acceleration Measures

Schedule delay and acceleration can both exist in a construction project frequently. Generally construction delays are followed by accelerations. Employers generally require the Contractor to finish the project on time after a delay event takes place. Therefore this request necessitates acceleration by the Contractor. Acceleration in construction projects can be defined as either undertaking more amounts of work within a specified period of time or carrying out a specified amount of work within a shorter amount of time. The Employer sometimes requests the Contractor to deploy additional resources in terms of equipment, material and manpower. However, since it is not under Contractors responsibility to accelerate the works after a delay event for which Employer bears the responsibility, he may claim additional payment incurred from the acceleration measures.

Acceleration of a construction schedule mostly necessitates additional cost. Since acceleration is a natural result of a delay event, the party responsible for cost of acceleration is the party responsible for the delay event which necessitates the acceleration or the party that decides to accelerate the works. Cost of acceleration measures may include additional labor cost, additional equipment cost, increased overheads and so forth.

There are three types of acceleration widely discussed in the industry. Owner directed acceleration means the owner requires the Contractor to perform the same amount of work within a tighter schedule or more amount of work within the same amount of time. If a Contractor accelerates the works without an initial order by the Employer, then this type of acceleration is considered to be a voluntary acceleration. Generally no monetary compensation is granted to the Contractor for this acceleration.

In some cases the Employer requires the Contractor to perform according to the planned schedule even though the Contractor suffers an Employer culpable delay. In such cases, Employer does not directly order acceleration, however, he implies. Therefore, sometimes constructive acceleration becomes complicated since the responsible party for the cost of acceleration is likely to be disputed.

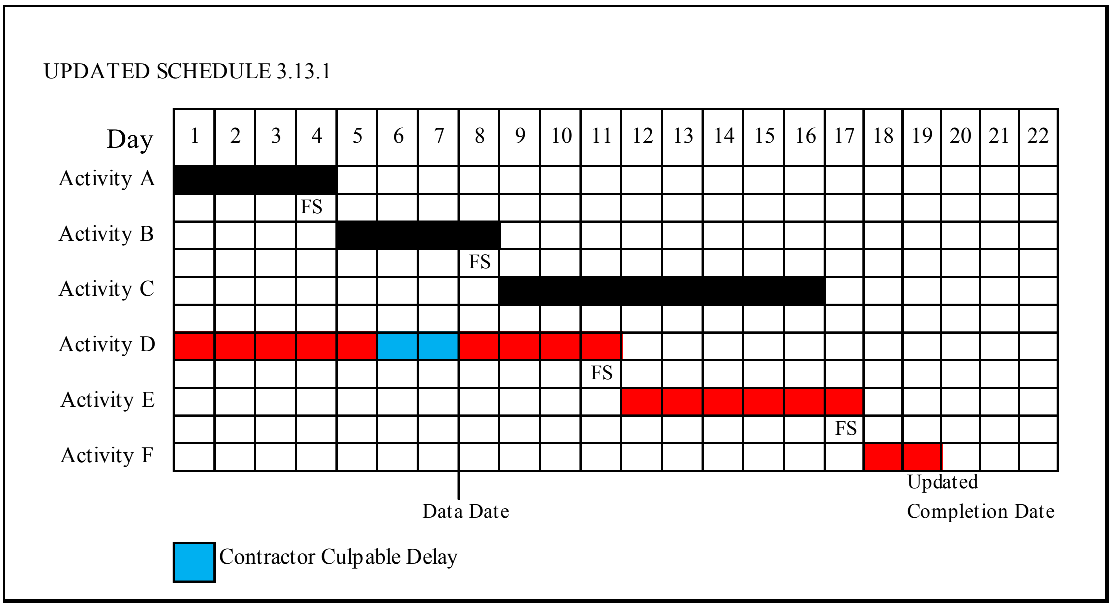


Figure 3.23: 2 days Contractor Culpable Delay

The Contractor must prove that the Employer has ordered a constructive acceleration to be entitled to additional payment of acceleration.

Apart from direct acceleration requests; threats to terminate, pressure to complete on planned schedule or denial of EOT requests can be considered as constructive acceleration by the courts.

Figure 3.23 illustrates a delayed schedule. As shown in the figure Activity D is delayed by the Contractor by two days. Since the Activity D is on the critical path of the updated Schedule, the overall completion date of the Project is slipped by two days accordingly.

Since the Contractor is responsible for the delay, it is the contractor's liability to recover this delay. The contractor may take measures such as adding new resources or starting working overtime in order to recover the delays for which he is responsible.

Figure 3.24 illustrates the accelerated Schedule. The duration of the Activity E is shortened by two days as a result of the efforts of the contractor. Activity E is on the critical path of the updated schedule as well as Activity D on which the contractor culpable delay is occurred. Therefore, the completion date of the project is shortened by two days. The recovery of this contractor culpable delay by the contractor is considered as acceleration.

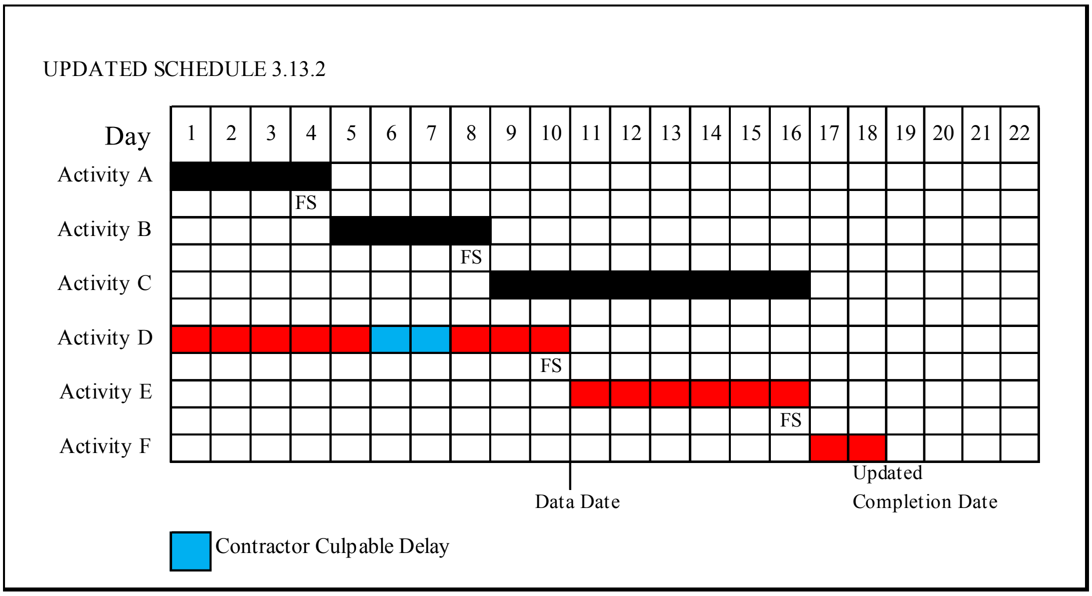


Figure 3.24: Updated Schedule after the Acceleration in Activity D

3.13.1 Major Causes of Exclusion of "Acceleration" in Delay Analysis Practices and Solution Methods

3.13.1.1 Delay Analysis Technique

The major cause of Exclusion of "Acceleration" in delay analysis practices is incapability of delay analysis technique. Even the most complicated techniques such as TIA do not consider negative delay events.

To prevent overlook of "Acceleration", the delay analyst shall consider the acceleration as negative delay events and incorporate into schedule.

Lack of efficient record keeping and communication among the project participants can be considered as other causes of this shortcoming.

Contractor's efforts in order to recover the Employer culpable or his own delays are generally overlooked in construction projects.

Since the acceleration is carried out generally by overtime working or adding equipment or manpower resources, acceleration measures can be identified easier than mitigation measures.

The acceleration measures are not considered as separate events. Therefore, these measures can be overlooked.

In order to obtain an accurate and reliable result, the acceleration measures shall be incorporated into schedule. Especially in case of a constructive acceleration, identification of additional resources or overtime working is crucial.

3.14 Increases in Quantities of Activities

Quantities of activities may change during execution by the Contractor as a result of erroneous computation of the quantities calculated before the commencement of the project, variation orders by the Employer and so on.

Figure 3.25 shows the updated schedule with the data date being the finish date of the Activity D whose duration is calculated based on the amount indicated in the bill of quantities.

As shown in figure 3.26, the original quantity of Activity D increased by 10%, and accordingly the duration of the Activity is extended by 1 day.

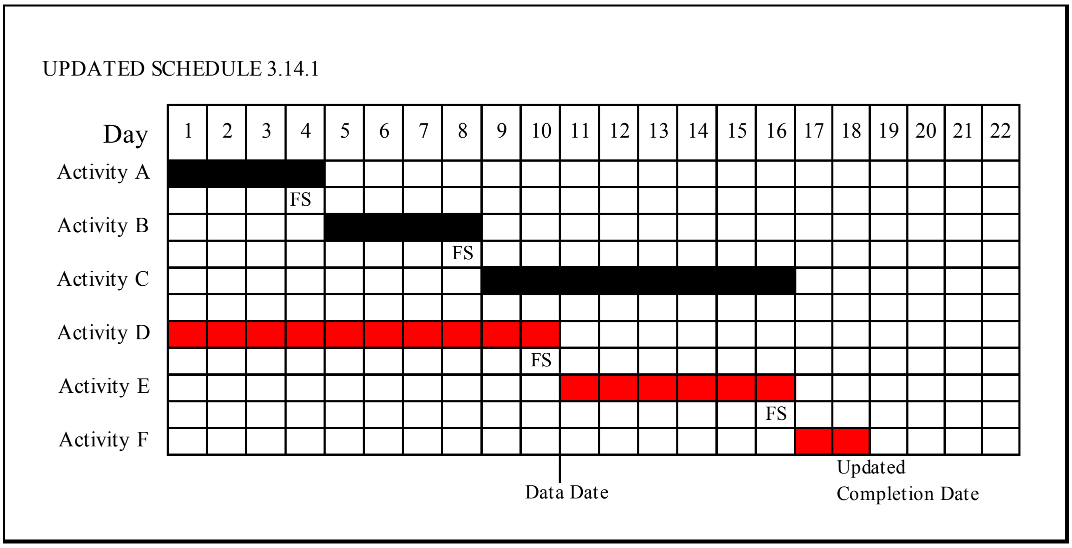


Figure 3.25: Updated Schedule just before the Delay due to Increased Quantity

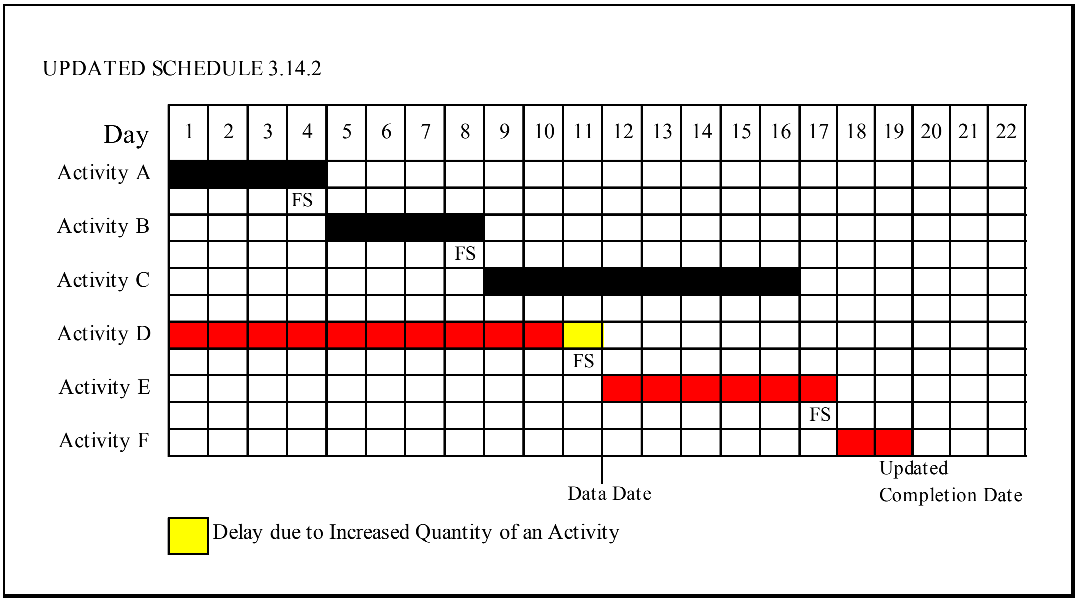


Figure 3.26: Updating Schedule Showing the Delay due to Increase in Quantity

3.14.1 Major Causes of Exclusion of "Increase in Quantities of Activities" in Delay Analysis Practices and Solution Methods

3.14.1.1 Record Keeping

One of the major causes of exclusion of "Increase in Quantities of Activities" in delay analysis practices is lack of efficient record keeping. This causes oversight of the rework which must be incorporated into schedule in order to perform an efficient analysis.

To overcome such situations efficient record keeping must be ensured by the Contractor by deploying required resources wherever needed.

3.14.1.2 Communication

Another major cause of Exclusion of "Increase in Quantities of Activities" in delay analysis practices is inefficient communication among project participants. Even though efficient record keeping is ensured by the Contractor, lack of efficient communication among project participants may result exclusion of "Increase in Quantities of Activities" in delay analysis practices.

To overcome such situations efficient communication among project participants must be ensured by the Contractor.

In sum, if the above-mentioned situations can be ensured by the Contractor, it is not a challenging activity to incorporate increased quantities into delay analysis study by using complex delay analysis techniques such as TIA.

3.15 Decreases in Quantities of Activities

Quantities of activities may change during execution by the Contractor as a result of erroneous computation of the quantities calculated before the commencement of the project, variation orders by the Employer and so on.

Figure 3.27 shows the updated schedule with the data date being the start date of the Activity E whose duration is calculated based on the amount indicated in the bill of quantities.

As shown in figure 3.28, the original quantity of Activity E decreased by approximately 17%, and accordingly the duration of the Activity is decreased by 1 day.

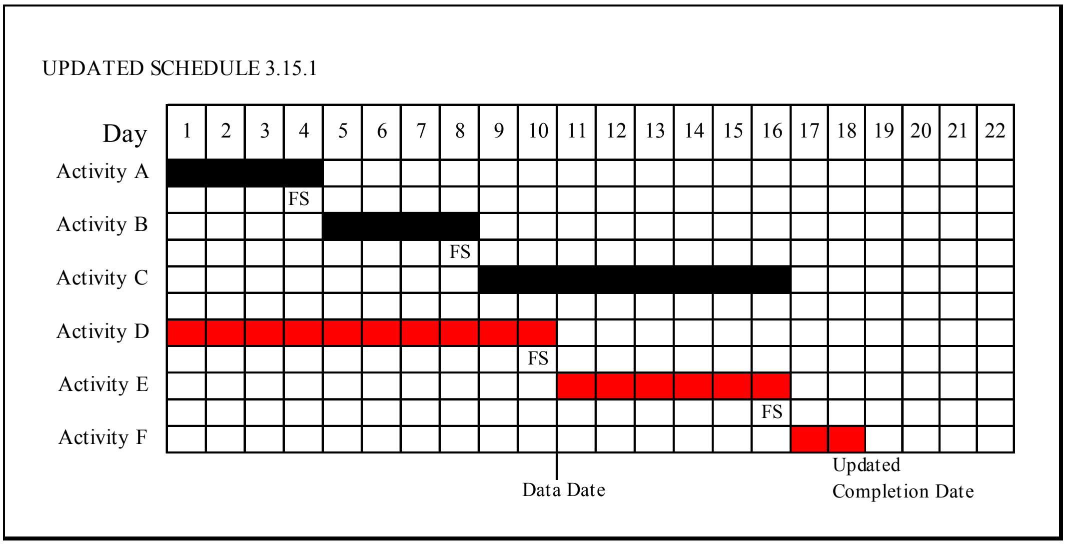


Figure 3.27: Updated Schedule before the Decrease in the Activity

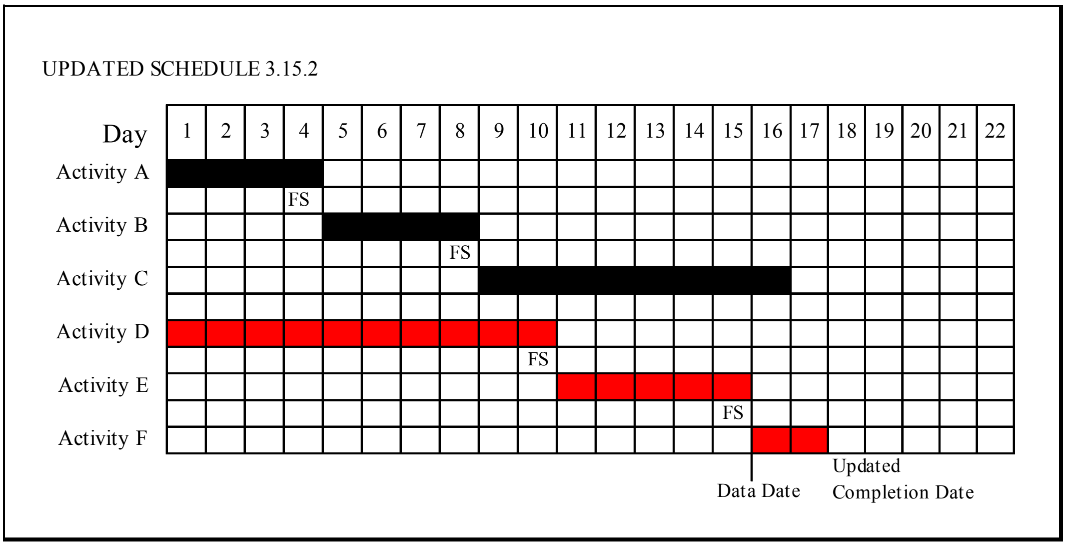


Figure 3.28: Updated Schedule after the Completion of Activity with a Decreased Duration

3.15.1 Major Causes of Exclusion of "Decrease in Quantities of Activities" in Delay Analysis Practices and Solution Methods

3.15.1.1 Delay Analysis Technique

The major cause of Exclusion of "Decrease in Quantities of Activities" in delay analysis practices is incapability of delay analysis technique. Even the most complicated techniques such as TIA do not consider negative delay events.

To prevent overlook of "Decrease in Quantities of Activities", the delay analyst shall consider the decreased quantities as negative delay events and incorporate into schedule.

Lack of efficient record keeping and communication among the project participants can be considered as other causes of this shortcoming.

3.16 Changes in the Sequence of Activities

The sequence between activities can be changed by the planner to reflect the actual site conditions which is proved to be different from initial estimations. Such a logic which is likely to change afterwards is named as soft logic. Any project schedule may contain both hard and soft logic. Some researchers suggest four factors that affect the sequencing of activities. These factors can be summarized as physical relationships among the participants of a project, interaction between trades, interference on paths and regulations in the country in which the works are being carried out.

Soft logic may cause important problems when construction schedule is being updated by the programmer. Therefore, it necessitates extensive studies. The as-planned logic of a schedule frequently changes during the course of a project if it contains some soft logic. Several studies have been conducted to handle soft logic in construction schedules. However, it becomes a serious problem in delay analysis practices. Delay analysis applications may yield erroneous results if the analyst does not take the change in the sequence of activities into account.

Delay analysis techniques created up to now do not address the changes in the sequence of activities properly and some ignore it completely. However, soft logic can play an important role on allocation of delay responsibility among parties.

Figure 3.29 illustrates the logic change in the as-planned section of the work programme. On the 8th day, Activity D is delayed by 1 day. However, although this activity is on the critical path, the completion date of the project is not slipped. The reason is that the start date of activity F is changed so as to fix the completion date of the project.

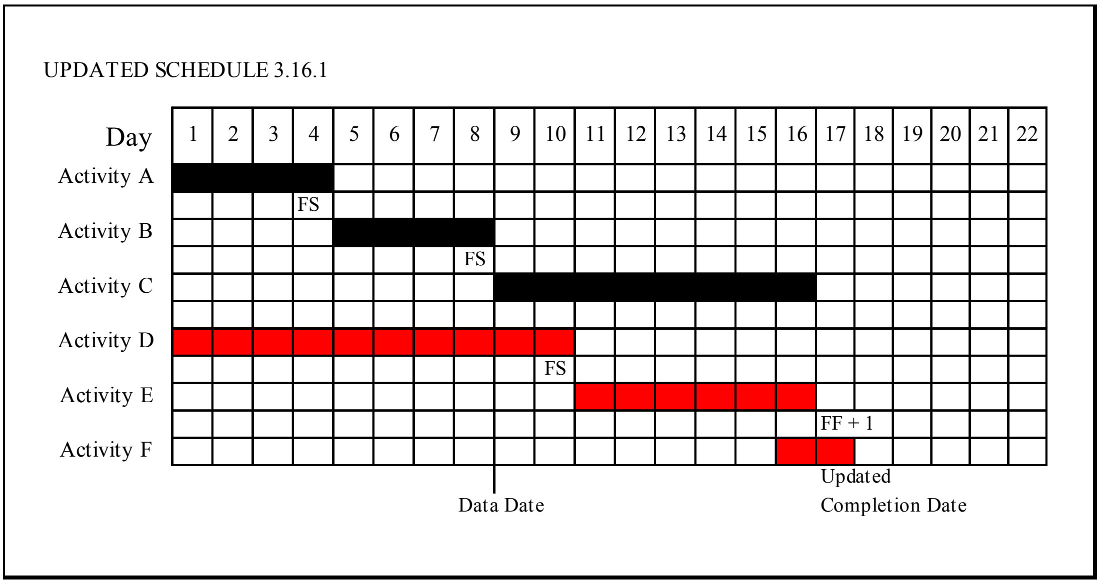


Figure 3.29: Sequence Change in the As-Planned Section of the Schedule

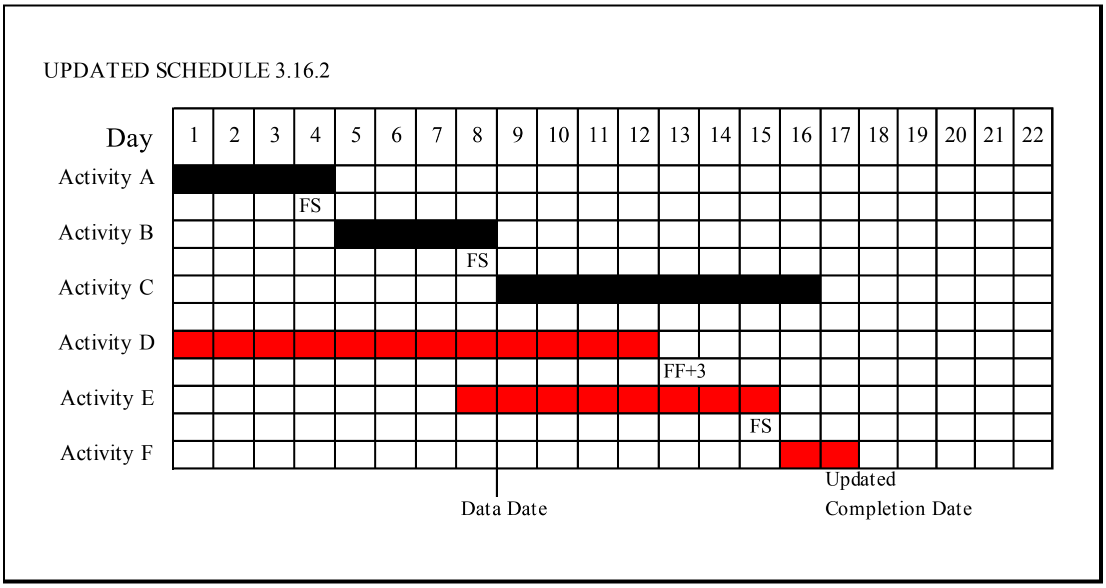


Figure 3.30: Change in the Sequence in the Progressing Activities

Figure 3.30 illustrates the logic change of the Works which are being carried out. On the 8th day, Activity D is delayed by 3 days. However, although this activity is on the critical path, the completion date of the project is not slipped. The reason is that the start date of activity E is changed so as to fix the completion date of the project.

3.16.1 Major Causes of Exclusion of "Change in the Sequence of Activities" in Delay Analysis Practices and Solution Methods

3.16.1.1 Communication

The major cause of Exclusion of "Change in the Sequence of Activities" in delay analysis practices is inefficient communication among project participants.

To overcome such situations efficient communication among project participants must be ensured by the Contractor. It is not a challenging process to change the soft relationships as long as the delay analyst is informed properly.

3.17 Omission of an Existing Activity

A construction contract entered into between the parties is generally allows the parties to vary the original scope. This variation can sometimes be an increment / decrement in the original quantities or introduction / omission of an existing activity. If there is no such clause in the contract agreement which gives the opportunity to vary the original scope, the Contractor would have to agree to carry out the works without any change on the original scope of the works.

Omissions of existing activities are common in large scale projects, generally upon appropriate requests of the employer to do so or contractor's suggestions to omit an existing activity which is thought to be unnecessary or costly compared to its benefits.

Some construction contracts necessitate activities with short duration. As a result of such clauses, the construction programs more than thousand activities must be prepared. When the number of activities increases, the possibility of omitting an activity increases.

It is common in construction projects that the owner requests the contractor to omit an activity which is incorporated into schedule during the planning stage. Omission of an existing activity constitutes a variation. Therefore a variation order is generally issued by the employer to omit an activity.

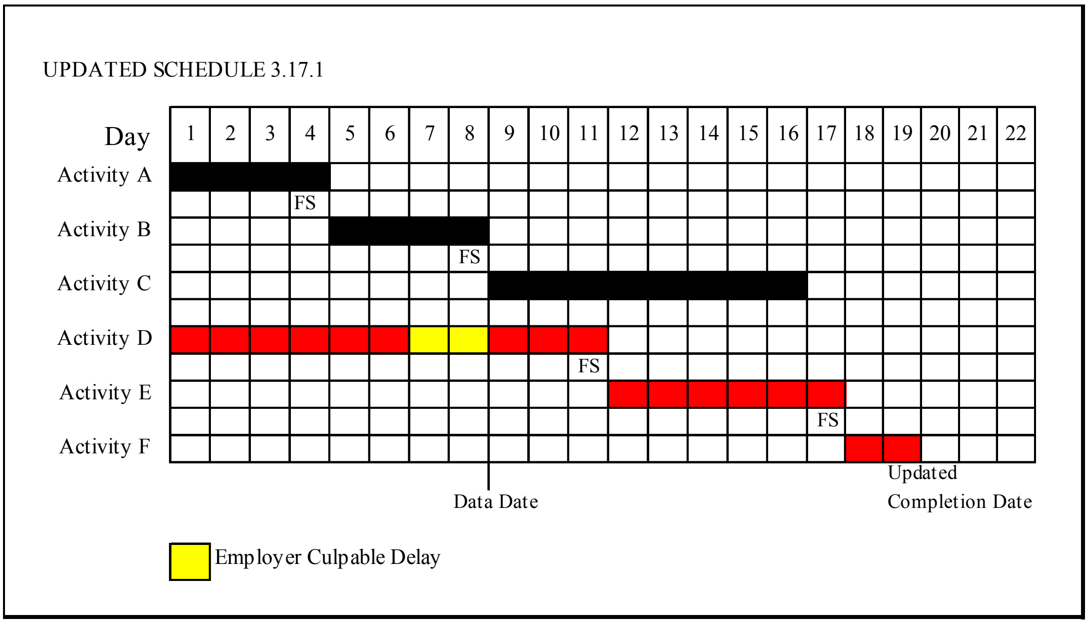


Figure 3.31: 2 days Employer Culpable Delay

Figure 3.31 shows a delayed schedule. Activity D is delayed by 2 days. Since the Activity D is on the critical path of the construction schedule, slippage of this activity directly affected the completion date of the project and slipped the overall completion date of the project by two days.

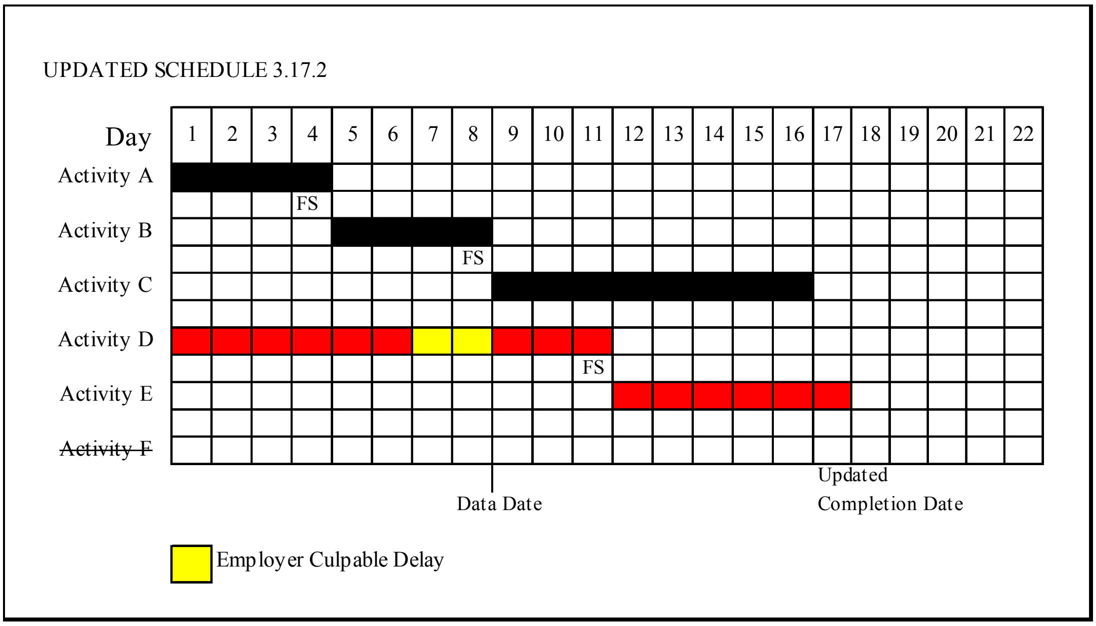


Figure 3.32: Omission of the Activity F through the Instruction of the Employer

As shown in Figure 3.32, Activity F is removed from the schedule. Thus, the original completion date of the project ensured.

3.17.1 Major Causes of Exclusion of "Omission of an Existing Activity" in Delay Analysis Practices and Solution Methods

3.17.1.1 Record Keeping

One of the major causes of exclusion of "Omission of an Existing Activity" in delay analysis practices is lack of efficient record keeping. This causes oversight of the omitted activities which must be incorporated into schedule in order to perform an efficient analysis.

To overcome such situations efficient record keeping must be ensured by the Contractor by deploying required resources wherever needed.

3.17.1.2 Communication

Another major cause of Exclusion of "Omission of an Existing Activity" in delay analysis practices is inefficient communication among project participants. Even though efficient record keeping is ensured by the Contractor, lack of efficient communication among project participants may result exclusion of "Omission of an Existing Activity" in delay analysis practices.

To overcome such situations efficient communication among project participants must be ensured by the Contractor.

In sum, if the above-mentioned situations can be ensured by the Contractor, it is not a challenging activity to incorporate omitted activities into delay analysis study by using complex delay analysis techniques such as TIA.

3.18 Mitigation Measures

The Contractor may suffer delay due to Employer Risk Events. In construction contracts, he generally has the responsibility to mitigate the effects of the delay events. However, most of the authorities including SCL Protocol contend that this responsibility does not extend to requiring the Contractor to add extra resources or to work overtime.

These authorities define the Contractor’s responsibility to mitigate delays suffered as: the Contractor shall act accordingly to minimize his losses originating from the delay event and he must not take unreasonable steps which cause increased losses in terms of time or cost.

Most of the construction contracts include provisions which force the Contractor to do all he can do to minimize the losses which stems from the delay event. Sometimes mitigation measures can be a condition precedent in standard forms of contract to be granted relief from liquidated and ascertained damages. The contractor cannot be forced to expend additional money under the heading of mitigation. If an employer requires the contractor to deploy additional resources or work overtime, he must pay the additional cost incurred by the contractor as a result of these measures according to most of the standard contract forms. These measures are examined in detail under the acceleration sub-heading in previous sections.

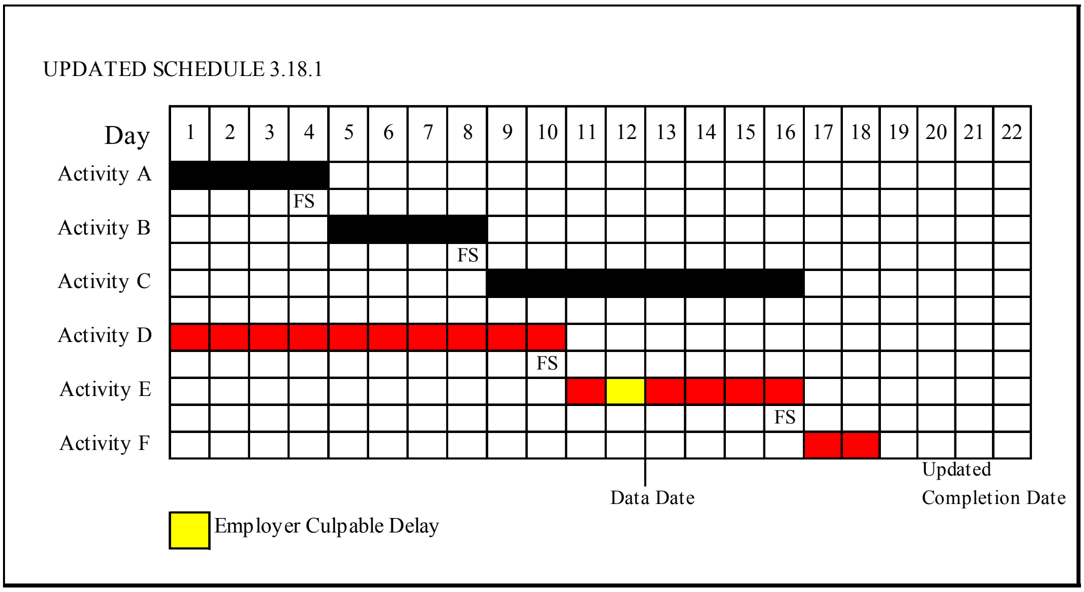


Figure 3.33: Delayed Schedule by Employer

Figure 3.33 illustrates a delayed schedule. 1 day owner culpable delay occurred in Activity E. In such cases, the contractor’s liability is to recover delay originated from employer’s actions or inactions.

Mitigation actions shall not be considered as deploying additional resources or working overtime which expose the contractor to incur additional cost. Mitigation shall be considers as measures which do not let the contractor to incur additional cost such as jumping problematic sections of the project site and prevent suspension of the work.

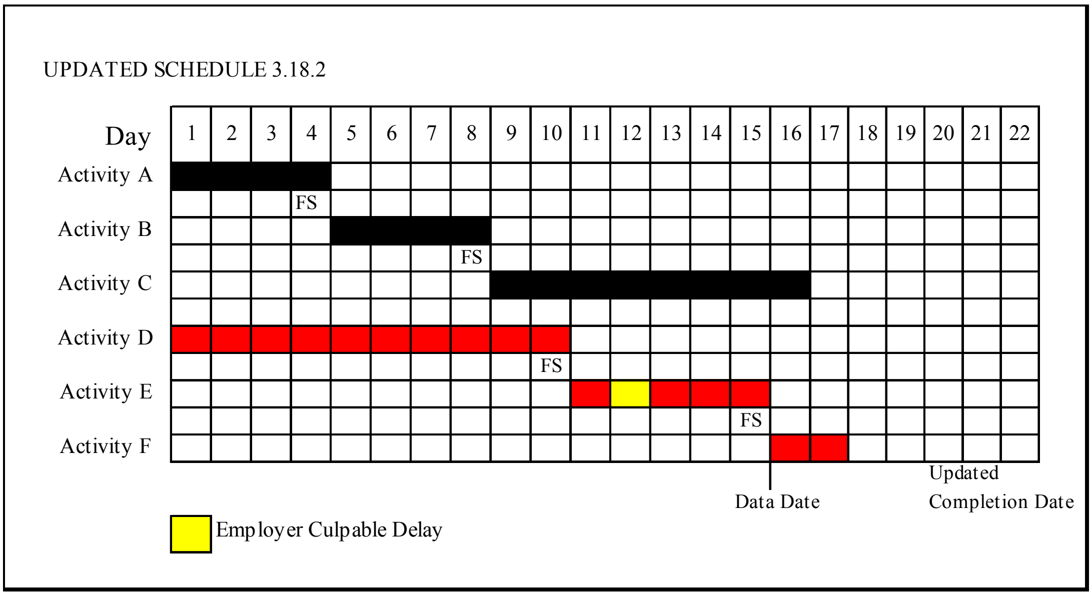


Figure 3.34: Mitigated Schedule

Figure 3.34 shows 1 day recovery achieved by contractor's mitigation action in Activity E.

3.18.1 Major Causes of Exclusion of "Mitigation" in Delay Analysis Practices and Solution Methods

3.18.1.1 Delay Analysis Technique

The major cause of Exclusion of "Mitigation" in delay analysis practices is incapability of delay analysis technique. Even the most complicated techniques such as TIA do not consider negative delay events.

To prevent overlook of "Mitigation", the delay analyst shall consider the mitigation as negative delay events and incorporate into schedule.

Lack of efficient record keeping and communication among the project participants can be considered as other causes of this shortcoming.

3.19 Integrated Approach

For the purposes of this thesis study, it was crucial to propose an integrated approach so as to overcome the deficiencies of delay analysis applications widely used in construction industry.

Shortcomings frequently encountered in delay analysis applications were analyzed in previous sections. The major cause of each of the shortcomings were identified and solution methods were proposed.

In order to obtain an integrated approach which cures the deficiencies of delay analysis applications, the proposed solution methods are synthesized and allocated to the relevant components of a delay analysis application which are listed below:

- Contract Documents,
- Programmer,
- Record Keeping & Communication Mechanism,
- Delay Analysis Technique,
- Delay Analyst.

Each of the components of a delay analysis application shall be considered in order to overcome all of the shortcomings.

These solutions are tabulated below in Table 3.2. If the solution steps listed in the Table 3.2 can be implemented, the delay analysis application can yield accurate and reliable results.

Table 3.2: Integrated Approach which Proposes Solutions for Each of the Shortcomings of a Delay Analysis Application

INTEGRATED SOLUTION STEPS

Contract Documents	o **Float Ownership:** Ownership of float shall be addressed in the Contract Documents by the Parties
Programmer	o **Non-working Days / Concurrent Effect:** Non-working days shall be incorporated into schedule by way of created various calendars o **Resource Overallocation:** All of the resources shall be loaded to relevant activities
Record Keeping & Communication	o **Introduction of a New Activity:** A record keeping mechanism shall be established in order not to overlook newly added activities and the analyst shall be informed properly o **Rework:** Finalized activities shall be recorded properly in order to easily identify rework and inform the analyst o **Increase in Quantities:** The BOQ shall be scrutinized and any increment in quantities of activities shall be recorded properly and relevant staff shall be informed o **Change in Sequence:** The relevant staff shall be informed as to the changes in sequence of activities o **Omission of Activities:** The omitted activities shall be recorded properly and the relevant staff shall be informed in order to incorporate them into delay analysis application
Delay Analysis Technique	o **Critical Path Changes:** A delay analysis technique which necessitates frequent updates of the schedule shall be implemented o **Concurrent Delay / Concurrent Effect:** The delay analysis technique shall be capable of considering multiple critical paths and the concurrent delays on the same path o **Resource Overallocation:** A technique considering delay events on non-critical paths shall be implemented o **Acceleration / Mitigation / Decrease in Quantities:** Acceleration, mitigation or decrease in quantities of activities shall be considered as negative delay events
Delay Analyst	o **Unreasonable Productivity Estimations:** The comparison among the standard productivity rates and the productivity estimations of the Contractor shall be made o **Pacing Delay:** The underlying causes of delay events shall be scrutinized in depth o **Loss of Productivity:** The comparison among the standard productivity rates and the actual productivity rates shall be made

CHAPTER 4

CASE STUDY

4.1 Introduction

In the previous section, a vast number of shortcomings encountered in delay analysis practices were defined and explained in detail. In this section, aforementioned shortcomings are going to be illustrated in a schedule which is created for the purposes of this study and which is going to be used to monitor a real project. The schedule is composed of approximately 4.000 activities. Such a schedule was required for proper application of delay events each of which is intended to reflect the effect of a shortcoming.

4.2 Brief Information about the Project

The Contract is entered into between the Central Finance and Contracts Unit (the "Employer" in terms of the Contract) and a Private Construction Company (the "Contractor" in terms of the Contract) for the execution of the "Construction Works of One Reception Center and One Removal Center in Erzurum" (the Works in terms of Contract).

The Contractor's bid for the Works dated 05.09.2011 was accepted by the Employer's "Letter of Acceptance".

The "Contract Agreement" was dated 23.12.2011.

The Contract was governed by "FIDIC Conditions of Contract for Construction", as amended by the "Particular Conditions".

In terms of Sub-Clause 1.1.2.4 of the Conditions of Contract, the appointed Engineer is a Private Turkish Consultant Company in cooperation with PM Group (the "Engineer" in terms of the Contract).

The “Time for Completion” in terms of Sub-Clauses 1.1.3.3 and 8.8 of the Conditions of Contract was 21 months. The date for commencement of the Works is 3 February 2012 and the date for completion of the Works is 3 November 2013.

In broad terms, the Works comprised the construction of one Reception Center comprised of nine blocks and one Removal Center comprised of ten blocks.

4.3 Delay Analysis Application

In this sub-section, each of the aforementioned shortcomings which are frequently encountered in the course of delay analysis practices are going to be illustrated in the created project by applying the events created to show the relevant shortcoming properly and a comparison will be made with the likely result in a delay analysis study using Impacted As-Planned Analysis which doesn’t consider the aforementioned shortcomings. Float ownership is assumed to be shared on a first-come-first-served basis.

The shortcomings encountered on account of the delay analyst, inefficient information flow, inefficient communication among the members of a project and so on are going to be criticized beside the inefficiencies of delay analysis methodology. The integrated approach will be applied in order to obtain accurate results and compare them with an erroneous application.

4.3.1 Unreasonable Productivity Estimation

The Contract was entered into upon unit price basis, so the bill of quantities was provided to the contractors during the bidding stage.

The duration of any activity in construction program is calculated according to the quantities laid in bill of quantities and productivity rates. Therefore, the productivity rate of each activity can be calculated by scrutinizing the program and bill of quantities.

The quantities of excavation indicated in bill no. 2 of bill of quantities are shown in the Table 4.1. These quantities belong to Reception Center.

As mentioned above the quantities of excavation in any type of soil and excavation in rock quantities are defined in the bill of quantities.

The assumptions of the Contractor pertaining to the productivity and duration of each of the excavation activities in Reception Center are provided in Table 4.2.

Table 4.1: Reception Center Excavation Quantities in Soil and Rock

BILL NO.2: EARTHWORKS			
Activity ID	Activity Name	Unit	Quantity
RC.2.A.02.B.1	Excavation for foundation in any type of soil other than rock	m3	18.800,00
RC.2.A.03.A.1	Excavation for foundation in rock	m3	28.200,00

Based on the assumptions, duration is calculated as a total amount of 56 days for the excavation as a whole in Reception Center, yet since it is not possible to foresee the precedence of these two activities, they are linked as parallel with a finish to finish relationship.

Table 4.2: Duration Estimation Based on the Productivity Assumptions of Contractor

Activity ID	Production Rate [hourly]	Production Rate [daily]	Duration
RC.2.A.02.B.1	88,258 m^3 / hr	1412 m^3 / day	14 days
RC.2.A.03.A.1	54,106 m^3 / hr	866 m^3 / day	33 days
		TOTAL:	47 days

The Contractor suffered delay in the excavation activities with Activity ID's RC.2.A.02.B.1 and RC.2.A.03.A.1. There were no apparent delay events.

Updated Schedule 1.1 in the Appendix shows the status of the project just before the delay is suffered. *Updated Schedule 1.2* shows the net effect of the delay after the delay event is incorporated into schedule.

According to the *Updated Schedule 1.2* the Contractor suffered 9 working days delay. The completion date of all scope before the delay event was 3 November 2013. After the delay event incorporated into schedule, the completion date of all scope slipped to 18 December 2013. Therefore the net effect of this delay was calculated by the Primavera Software as 45 days on account of mostly the non-working days.

As mentioned in the previous sections, there are several possible approaches in assessment and verification of validity of productivity assumptions such as total cost approach, measured mile, industry standards and so on.

Measured mile approach is widely accepted by the construction industry. However, it is applicable for the projects which are comprised of activities which are repetitive and identical such as highway construction projects.

Yet the industry standards approach is more suitable for super-structural construction works. The Ministry of Environment and Urbanization has a comprehensive database of unit price analyses of most of the activities of super-structural buildings.

Table 4.3 shows the standard productivity of excavation of two pieces excavators in soil and rock. According to the data obtained from the analysis of ministry, the total duration shall have been calculated as 56 days instead of 47 days. Therefore, the delay of 9 days is under the responsibility of Contractor as a result of his mis-estimations.

Table 4.3: Duration Estimation Based on the Industry Standards

Activity ID	Equivalent Ministry Item No	Production Rate [hourly]	Production Rate [daily]	Duration
RC.2.A.02.B.1	15.001/2B	74,074 m³ / hr	1185 m³ / day	16 days
RC.2.A.03.A.1	15.014/2B	44,444 m³ / hr	711 m³ / day	40 days
			TOTAL:	56 days

Such delays are generally considered as disruption arising from Employers' actions or inactions. Therefore, over-optimistic productivity estimations are overlooked. In order to prevent misinterpretations of delay events with regard to erroneous productivity estimations, the bid document shall be prepared in detail so as to account for the industrial standard productivity rate estimations.

Moreover, the construction program must be prepared based on the productivity rates which are widely accepted by the industry. In Turkey, the rates of the Ministry of Environment and Urbanization can be used readily.

Furthermore, the human factor shall not be missed out. Before attributing the responsibility to Employers' actions or inactions, the productivity estimations in program preparation stage must be assessed.

4.3.2 Float Ownership

As the projects controlled by critical path method of scheduling became commonplace, the question "Who Owns the Float" has been started to be debated. This issue has discussed in the previous sections. There is no compromise by this time pertaining to the ownership of the float.

On 7th June 2012, the formwork activity in foundation of Block B had 31 days total float. The Contractor suffered a delay of 31 days due to additional excavation and backfilling under foundation.

Updated Schedule 2.1 shows the progress just before the delay event takes place. After that, four possible scenarios were considered and the schedule was updated in 3 different conditions so as to account for these scenarios. Table 4.4 shows the results of different approaches each of which can be agreed upon by the Contractor and Employer.

Table 4.4: Likely Float Ownership Approaches and Possible Net Effects

No	Description of Float Sharing Approach	Employer Portion	Contractor Portion	Delay Suffered	Net Effect
1	Contractor Owns the Float	0%	100%	31 days	189 days
2	Employer Owns the Float	100%	0%	0 day	0 day
3	First Come First Served Basis	Based on the Situation	Based on the Situation	0 day	0 day
4	Equitable Share	50%	50%	15 days	140 days

In practice, generally, debates arise out of the ownership controversial issue among the parties. The effect of apportionment of float cannot be underestimated. If Figure 4.4 is gone through, it can be clearly seen that there can be huge differences between the results of different approaches.

It is a good practice to add a contract provision in particular conditions of contract or appendix to tender to overcome the possible disputes among the contractual parties.

4.3.3 Critical Path Changes

As stated in previous sections, critical path of any project may change throughout the course of the project. Any path can become critical if adequate amount of delay comes up. On the other hand, the critical path of the baseline schedule may become non-critical.

Most of the delay analysis techniques fail to account for changes in critical path, and consequently yield erroneous results.

Table 4.5 shows the critical path of the baseline schedule and updated schedules throughout the project. As can be clearly seen from the figure that, if the *Delay Event No. 3* had occurred before the data date of *Updated Schedule 3,* it wouldn't have affected the critical path. *Updated Schedule 3* shows the effect of Event No. 3. Since the critical path has changed after the Event No. 2, Event No. 3 which has taken place on the path of Reception Center has also affected the critical path by 7 days.

Table 4.5: Critical Path Changes throughout the Course of the Project

No	Schedule Description	Critical Path Description	EVENT NO. 3 On Critical Path?
1	Baseline Schedule [BS]	▶ RV [Removal Center]	✗
2	Updated Schedule 1.1 [US_1.1]	▶ RV [Removal Center]	✗
3	Updated Schedule 1.2 [US_1.2]	▶ RV [Removal Center]	✗
4	Updated Schedule 2.1 [US_2.1]	▶ RV [Removal Center]	✗
5	Updated Schedule 2.2 [US_2.2]	▶ RC [Reception Center] ▶ RV [Removal Center]	✓

In practice, even though the planners are using sophisticated software which enables them to take the critical path into account easily, overlook of the changes in critical path may occur from lack of frequent updates of the schedule, just before the delay event takes place in particular.

Therefore, in order to avoid missing out of changes in critical paths, a delay analysis methodology which necessitates frequent updates of the program, especially just before the delay event takes place so as to account for changes in critical path, shall be implemented,

4.3.4 Concurrent Delay

Many large and complex projects have multiple critical paths. The project being worked out is large and complex as well, with more than 3000 activities and numerous paths.

After the Event No. 3 is inserted into schedule, the critical path was staying with the path which is composed of the activities of Reception Center.

Figure 4.1 shows that the activities of Reception Center are on the critical path whereas the activities that belong to Removal Center has 4 days total float.

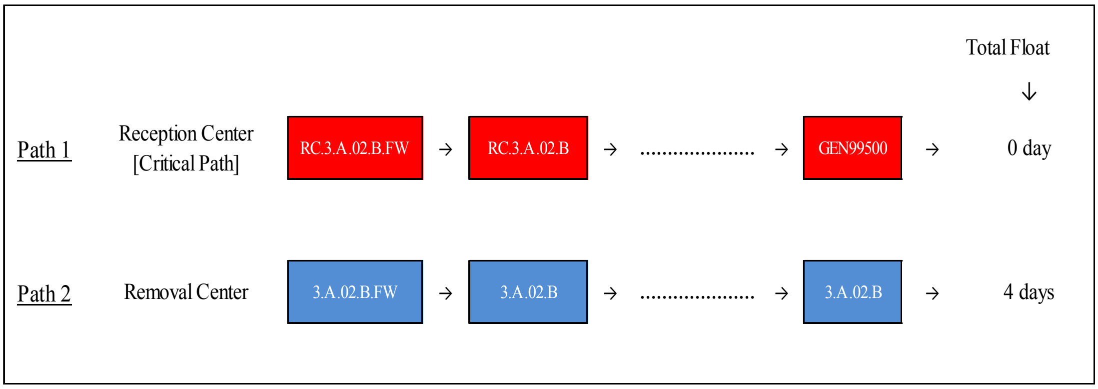


Figure 4.1: Paths of Reception Center and Removal Center

It is apparent that any delay that occurs on path 1 delays the completion date of the project. On the contrary, any delay event that occurs on the path 2 doesn't extend the completion date of the project provided that the duration of the delay event is not more than 4.

Figure 4.2 shows the delay events which took place on the paths which were shown in Figure 4.6. Firstly, a delay which is defined as *"Financial Problems of the Contractor"* occurred in Path 2 and consumed the total float which can be found in the Appendix as *Updated*

Schedule 4.2. As a result of this delay event, no delay to the completion date of the project is recorded since it is not on the critical path.

At the point on which the total float is used up by the Delay Event 4, Delay Event 5 suffered by the Contractor which is defined as *"Late Approval of Drawings"*. These two delay events last for 3 days concurrently. The schedule is updated and the net concurrent effect of these two delay events is found to be 3 days (*Updated Schedule 4.3*).

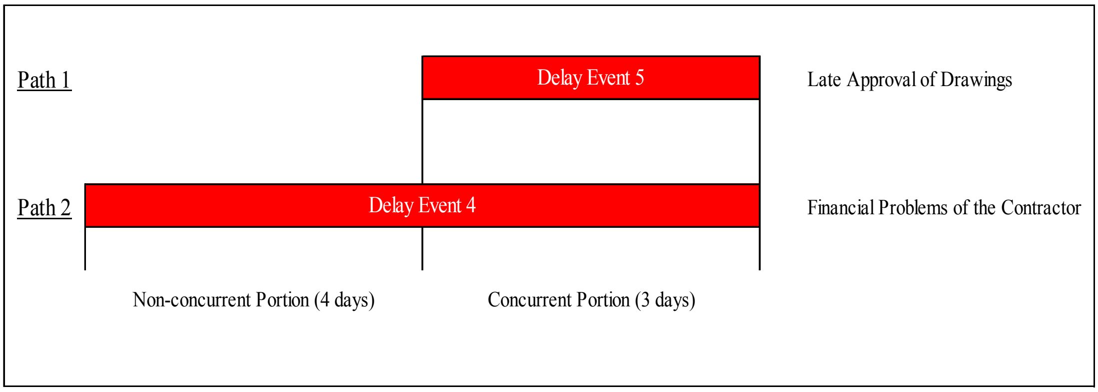


Figure 4.2: Concurrency of Delay Event 1 & Delay Event 2

Table 4.6 shows the compensability of different combinations of culpability among Contractor and Employer.

In practice, the concurrency of the delay events is generally overlooked by the analysts. This leads to erroneous compensability results. In order to avoid such ignorance, all of the paths must be examined in detail and schedule shall be updated frequently, especially just before the concurrent delay events take place. Most serious erroneous results are obtained when a Contractor culpable delay event and an Employer culpable delay event are occurred concurrently.

Table 4.6: Compensability Analysis of Different Combinations of Delay Events

Delay Event 1		Delay Event 2			
Employer Culpable	Contractor Culpable	Employer Culpable	Contractor Culpable	EOT	COST
✓		✓		✓	✓
✓			✓	✓	✗
	✓	✓		✓	✗
	✓		✓	✗	✗

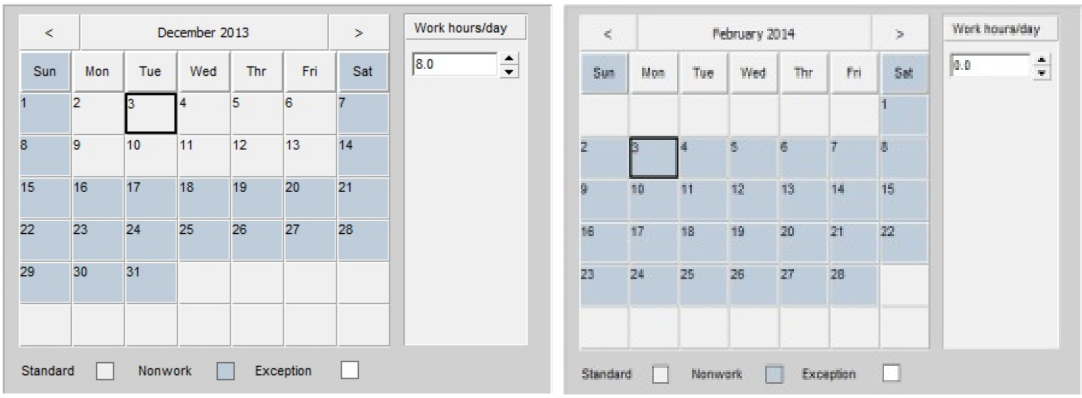
4.3.5 Non-Working Days

The Reception and Removal Centers Construction Project has a wide range of activities of different types. Some of them can be carried out during winter conditions whereas some cannot be undertaken during snowy days.

Therefore, 4 types of calendars are created.

1) *Calendar 1:* is assigned to the activities which cannot be implemented in winter conditions and all other holidays such as super-structural concrete works.
2) *Calendar 2*: is assigned to the activities which can be implemented in winter conditions but cannot be carried out in holidays such as indoor architectural works.
3) *Calendar 3*: is assigned to activities which can be implemented any time throughout the year such as preparation of HSE or QA/QC Plans.
4) *Calendar 4*: is assigned to the activities which cannot be implemented in winter conditions and all other holidays. Yet daily working hours is increased to 16 hrs / day, therefore, it is assigned to activities which are carried out double shift.

The Contractor suffered delay of 15 days after the data date of *Updated Schedule 5.1*. However the net effect of this delay event was calculated by the Primavera Software as 139 days. The underlying reason is that the two activities named *Extruded Polystyrene Board* and *Exterior Brick Facing* in Removal Center which can be examined in *Updated Schedule 5.2* have fallen in the winter season. Since these activities can be easily affected by the weather conditions, calendar 1 is assigned to them.


< December 2013 >

Sun	Mon	Tue	Wed	Thr	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Work hours/day 8.0

Standard ☐ Nonwork ▨ Exception ☐

< February 2014 >

Sun	Mon	Tue	Wed	Thr	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

Work hours/day 0.0

Standard ☐ Nonwork ▨ Exception ☐

Figure 4.3: Working and Non-Working Days of Calendar 1

As shown in the Figure 4.3, there is no work in winter from 15th December to 1st of March. That is why the net effect of 15 calendar days delay becomes a huge amount.

Table 4.7 shows the total amount of non-working and working days throughout the brick facing activity in Removal Center.

Table 4.7: Working and Non-Working Days through the Brick Facing Activity

RV.5.G.01: Brick Facing Units (91 days)				
Year	Month	Working Days	Non-Working Days	Total Calendar Days
2013	September (13-30)	11 days	7 days	18 days
2013	October (1-31)	17 days	14 days	31 days
2013	November (1-30)	21 days	9 days	30 days
2013	December (1-31)	10 days	21 days	31 days
2014	January (1-31)	0 day	31 days	31 days
2014	February (1-28)	0 day	28 days	28 days
2014	March (1-31)	21 days	10 days	31 days
2014	April (1-15)	11 days	4 days	15 days
	TOTAL:	91 days	124 days	215 days

Duration of Brick Facing Activity was inserted as 91 days. However, the total calendar days for this activity is calculated by the software as 215 days since the Calendar 1 is assigned to this activity. 124 days of extension directly affected the completion date, therefore, the total amount of delay became 139 days which is the sum of 15 days (working days) and 124 days (non-working days).

In practice, if the non-working days such as winter conditions or holidays are not taken into account by the programmer during the creation phase of the construction schedule, huge differences can occur among these two approaches.

Therefore, creation of different calendars according to the complexity and requirements of the activities of a project and assignment of them to the relevant activities is crucial in order to avoid such misapplications.

4.3.6 Introduction of a New Activity

As the most of the construction contracts, this project includes a provisional sum which is calculated as the 10% of the sum of the bills and intended to be used in variations, increase in quantities of activities or additional activities provided that they are within the original scope of the project.

The Employer requested additional membrane under the foundation of water tanks in Block C in order to enhance the waterproofing capacity and prevent leakage.

Table 4.8 provides the calculation of duration for the requested additional membrane.

Table 4.8: Duration Calculation of Additional Membrane

Activity	Two Coat Bituminious Membrane under Foundation	Geotextile Membrane under Foundation	Additional Membrane under Foundation
Block	C	C	C
Total Quantity	1536,54 m²	1536,54 m²	1536,54 m²
Daily Production Rate / Labourer	76,83 m²	76,83 m²	30,73 m²
Number of Laborers	5	5	5
Total Daily Production Rate	384,14 m²	384,14 m²	153,65 m²
Number of Days Required	4 days	4 days	10 days

After the schedule is updated and named as *Updated Schedule 6.2*, the additional activity is inserted into schedule and named as *Updated Schedule 6.3.*

Since the newly requested membrane had special features and necessitated careful installation, daily production rate was fewer than other types of membranes. Therefore, the duration is calculated as 10 days. When the *Updated Schedule 6.3* is gone through, it can be clearly inferred that the net effect of this delay event is 13 days.

In practice, it is commonplace that Employer requests additional works which were not included in the original scope of the project. Moreover, the provisional sum which is included in the accepted contract amount stands partially for the probable additions of new activities.

Due to lack of efficient record keeping, regular communication among the project participants and planner or negligence of new items by the planner, effects of new items can be overlooked sometimes.

4.3.7 Concurrent Effect Concept

Effects of using different types of calendars which accounts for activities of different features were considered in previous sub-section. However, it is worth mentioning that the delay events each of which takes place on a different critical path and has identical durations may affect the critical path differently and vice versa.

Updated Schedule 7.2 shows the effect of Delay Event No. 9 and Delay Event No. 10. Table 4.9 shows the net effects of each of the delay events.

Table 4.9: Concurrent Effects of Delay Events with Different Durations

Delay Event No	EVENT NO. 9	EVENT NO. 10
Delay Event Description	Delay in Approval of Concrete Mix Design	Intentional Slow-down of Waterproofing Works
Delay Event Duration	8 days	15 days
Path	Critical Path 1 [Reception Center]	Critical Path 2 [Removal Center]
Completion Date Before the Delay Event	29 May 2014	29 May 2014
Completion Date After the Delay Event	20 June 2014	20 June 2014
Net Effect	22 days	22 days

As can be seen from the Figure Table 4.9, two different delay events occur on different critical paths. Their duration is not identical, yet their effect is the same.

In practice, concurrent effect concept can be easily overlooked by the planners if the construction program is not properly examined and prepared diligently.

The most important point to take into account is assigning the calendar which best represents the actual situation of an activity. For sure, before the assignment step, an appropriate number of calendars must be created. Finally, during the update process of the schedule, the analyst shall be aware of the concurrent effect concept and take into consideration.

4.3.8 Pacing Delay

Employers are typically not liable for the compensation in terms of cost for a delay event when a concurrent delay occurs on a parallel critical path for which the Contractor is liable. The Contractor's argument in such cases is that why should they hurry up and finish the activity which is on a critical path whereas he suffers a delay on a parallel critical path.

The Updated Schedule 7.2 shows a concurrent delay. Event No. 9 and Event No. 10 are on different critical paths and their concurrent effect is the same.

- *Event No. 9*: Delay in Approval of Concrete Mix Design
- *Event No. 10*: Intentional Slow-down of Waterproofing Works by the Contractor

Event No. 9 is an Employer Culpable delay event. The Contractor slows-down the waterproofing works which stays on another critical path since he knows that this delay will not delay the completion date of the project. Therefore, this case shall not be considered as a concurrent delay event.

Figure 4.4 shows the different compensation analysis of concurrent and pacing delay approaches.

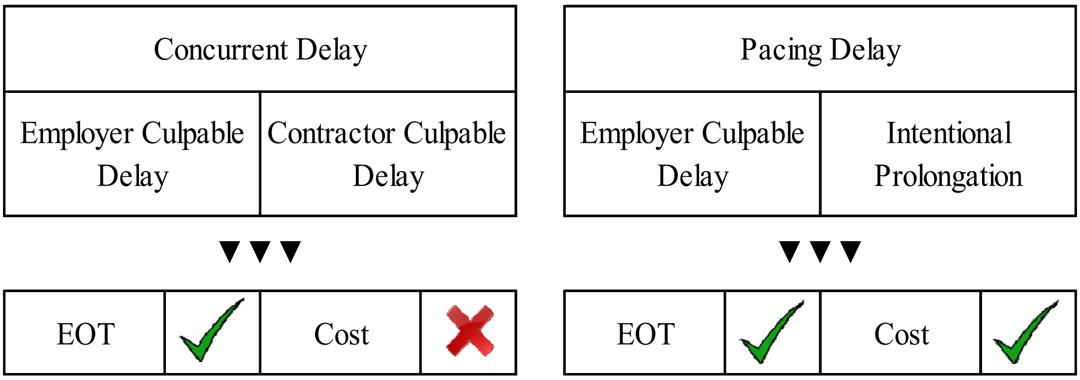


Figure 4.4: Difference in Compensation between Concurrent and Pacing Delay

If this case is considered as concurrent delay, then the Contractor is not going to be granted compensation in terms of cost.

In practice, pacing delay is confused with concurrent delay since they are identical in form. The delay events must be examined in detail in order to overcome confusion of these formally identical concepts. Intentional slow-down of the works on a critical path due to delays in other critical paths shall not be confused with other delay events by the analyst.

4.3.9 Resource Over-allocation

Since Contractors do not have infinite resources, all of the construction schedules are resource constrained.

Figure 4.5 shows 2 activities, each of which uses transmixer & concrete pump. *Updated Schedule 8.1* shows that originally these activities were not parallel. After the delay event 11 is suffered by the Contractor, the activities became parallel as shown in the Figure 4.14. In the figure, the first activity stands for the Delay Event 11.

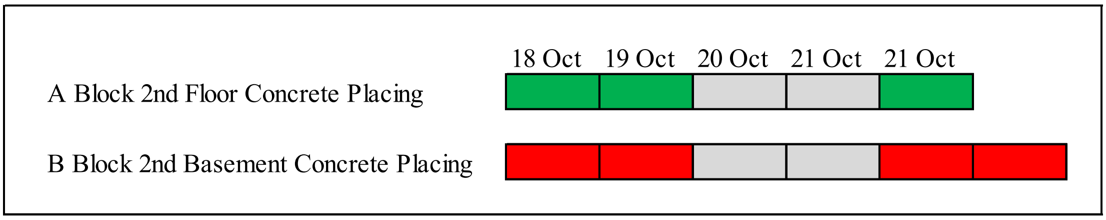


Figure 4.5: Concurrent Critical and Non-Critical Activities

When these activities became parallel, the resource graph for transmixer & concrete pump was as shown below in Figure 4.6.

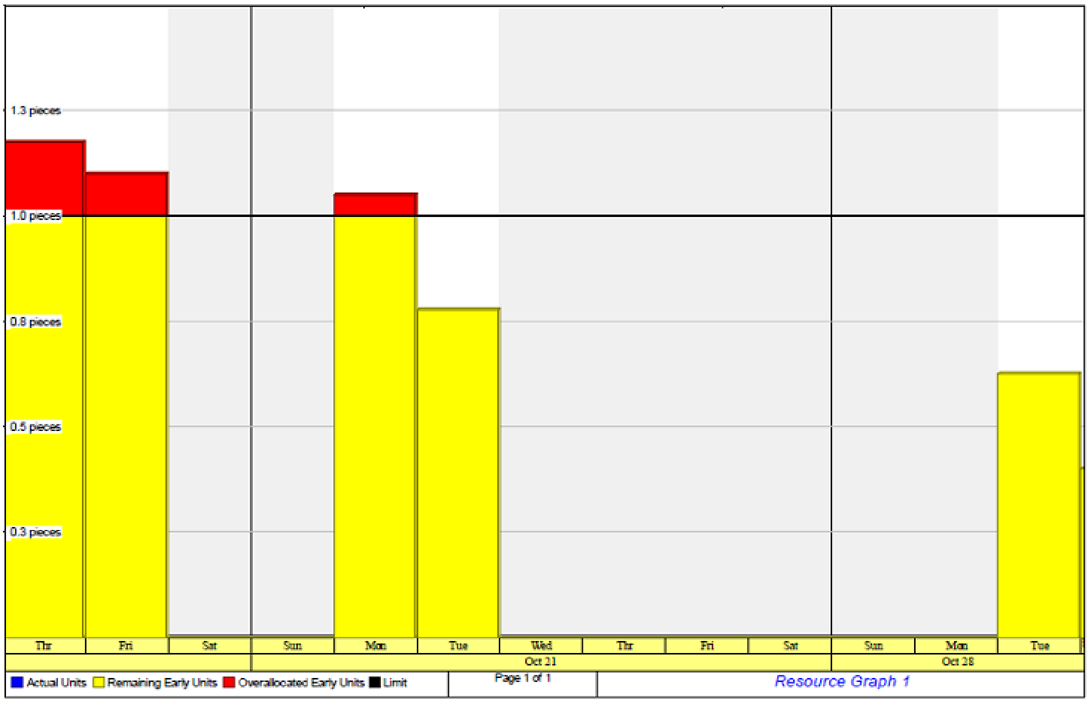


Figure 4.6: Resource Usage Graph 1

Since the Contractor had only one transmixer & concrete pump, concrete placing in 2nd basement of Block B delayed until the Delay Event 1 is completed. In this way, the resource usage has smoothened and kept under the available number of resources. The resource usage graph after the concrete placing in 2nd basement of Block B was delayed is shown in Figure 4.7 below.

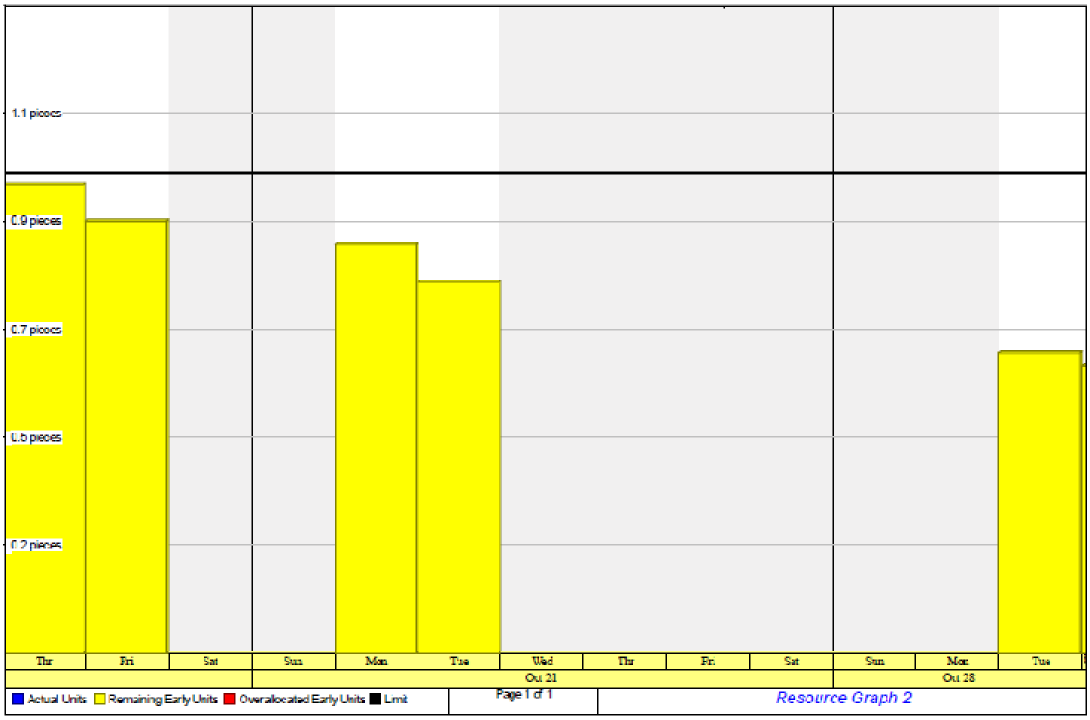


Figure 4.7: Resource Usage Graph 2

Therefore, the delay which occurred on a non-critical path was delayed the completion date of the project.

The critical activity is not directly affected by the delay event. However, the activity which was affected by the delay event was using the same major resource the critical activity using. Therefore, it was not possible to start the critical activity until the affected activity was completed.

In practice, the schedules which are not resource loaded, at least the major resources, can lead to unreliable results. Moreover, even if the schedule is resource loaded, the programmer or analyst must be careful when analyzing the delays which are not on the critical path and using major resources such as heavy equipment.

4.3.10 Loss of Productivity

As mentioned in previous sections, the duration of activities shall be determined based on the productivity rates. The production rates which are used to determine the unit prices of Ministry of Environment and Urbanization for construction works can be used as industry standards in Turkey.

Table 4.10, shows the quantity of activity RC.3.A.03.B.BS2 (concrete placing in 2nd basement of Block B). The Contractor should have determined the duration of this activity by using this amount.

Table 4.10: Total Quantity of Concrete Placing in 2nd Basement of Block B

BILL NO.3: STRUCTURAL WORKS			
Activity ID	Activity Name	Unit	Quantity
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure above foundations, including the formwork and scaffolding	m3	571,33

Table 4.11, shows Contractor's duration estimation pertaining to this activity. He used the production rate of Ministry of Environment and Urbanization.

Table 4.11: Duration Estimation of Concrete Placing in 2nd Basement of Block B Activity

Activity ID	Equivalent Ministry Item No	Production Rate [hourly]	Production Rate [daily]	Duration
RC.3.A.03.B.BS2	16.059/1A	6,667 m3 / hr	107 m3 / day	5 days

According to Contractor's estimation, this activity should last 5 days. However, as can be seen from the *Updated Schedule 9.2*, the Contractor suffered 7 days delay. There was no increase in quantity or Contractor culpable delay events but the loss of productivity of equipment and laborer.

Table 4.12: Actual Duration & Productivity of Concrete Placing in 2nd Basement of Block B

Activity ID	Production Rate [hourly]	Production Rate [daily]	Duration
RC.3.A.03.B.BS2	3,23 m3 / hr	52 m3 / day	11 days

Table 4.12 shows the loss of productivity and actual duration of the activity. It was assumed that the Contractor could place 6,667 m3 concrete per hour, however, the actual accomplishment rate of the activity was calculated as 3,23 m3 per hour. This decrement originated from the interruptions of Employer's Personnel, therefore, can be attributed to Employer.

In practice, lost productivity is coming into view as disruption claims. It is very important to assign the responsibility to parties in lost productivity claims. Therefore, the underlying reason of lost productivity shall be determined. Employer's generally claim that, lost productivity stems from the management problems of the Contractor while Contractors are claiming that lost productivity originates from Employer's actions or inactions.

In order to prevent disputes, the production rate estimations and duration calculations shall be carried out properly during the programming stage, and the compensability analysis shall be implemented properly during the analysis stage.

4.3.11 Rework

In complex construction projects, rework of activities, which are totally or partially completed, is frequently experienced by the Contractors.

The Contractor has experienced such a delay due to reconstruction of the formwork in the 1st basement of the Block B of Reception Center. The reason of the re-work was change in the design of structural works in the 1st basement.

Updated Schedule 10.2 shows the progress of the works just before the Delay Event 13 takes place. By the data date of the *Updated Schedule 10.2* the formwork activity was completed in the 1st basement of Block B. However, since the Employer has changed the structural design, the Contractor was obliged to re-build the formwork in 1st basement of Block B.

Updated Schedule 10.3 shows the effect of this delay event for which the responsibility lays with the Employer.

Generally, in complex construction projects, Contractors suffer delay as a result of too many reworks which are caused by both their own faults or Employers actions.

In practice, rework in activities can be overlooked or cannot be noticed easily. Even though these delay events can be noticed, the compensability analysis for the reworks cannot be made properly and incorporation of their effects into the schedule can be troublesome.

In order to avoid disputes, the analyst must internalize the rework concept and incorporate it into schedule as a separate delay event. Proper compensability analysis of the delay event and linking it to the existing activities is of importance. However, the efficient record keeping and communication among project participants is of equal importance.

4.3.12 Acceleration

Once a delay event occurs, the Contractor is either granted to Extension of Time if he is entitled to or subjected to liquidated and ascertained damages provided that he doesn't accelerate the works.

Sometimes, the Employer requests the Contractor to accelerate the works in order to prevent short term problems which can be encountered by the Contractor.

Figure 4.8 shows such a situation. If the Contractor doesn't accelerate his work, the concrete placing activity is likely to be interrupted by the unfavorable winter conditions.

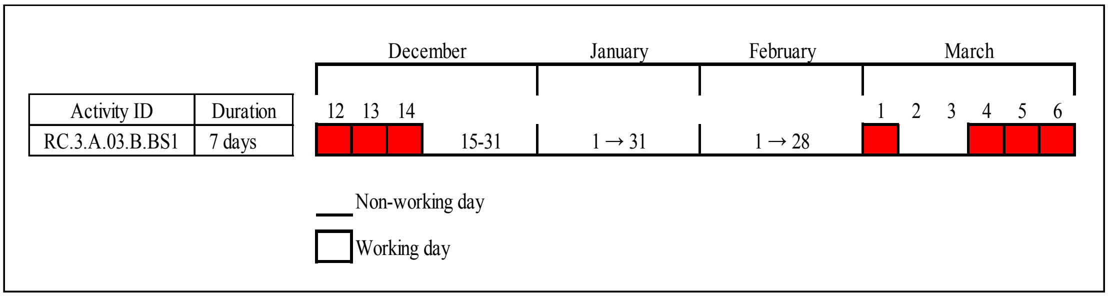


Figure 4.8: Working Days of Concrete Placing Activity before Acceleration

Updated Schedule 11.1 shows the progress of the project before the acceleration of the Contractor.

Updated Schedule 11.2 shows the progress of the works after the activity is accelerated by the Contractor. Figure 4.9 shows the accelerated duration of the concrete placing activity of Block B. As can be clearly seen from the Figure 4.9 that, by accelerating the works, the Contractor was able to finish the concrete placing activity just before the winter season.

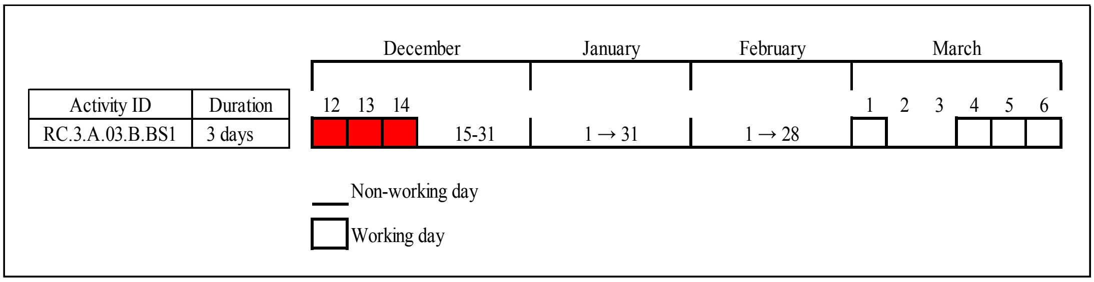


Figure 4.9: Working Days of Concrete Placing Activity after Acceleration

The Contractor accelerated this activity by using his resources beyond the planned daily working time. Table 4.22 shows the duration estimation of the accelerated activity, placing concrete in 1st basement of Block B.

According to the Contractor's calculation as to this activity, overtime working was not considered.

Table 4.13: Calculation of Duration based on the Initial Estimations of the Contractor

Activity ID		RC.3.A.03.B.BS1
Activity Name		Placing of Class C30 Concrete in 1st Basement of Block B
Total Quantity		740,46 m³
Driving Resource	Name	Transmixer & Concrete Pump & 2 Concrete Mason
	Total Units / Time	8,0 hrs / day
Hourly Production Rate		13,33 m³ / hr
Daily Production Rate		106,67 m³ / hr
Duration		7 days

Table 4.14 indicates that the Contractor increased his working hours per day in order to accelerate the activity.

Table 4.14: Calculation of Duration after the Acceleration by the Contractor

Driving Resource	Name	Transmixer & Concrete Pump & Concrete Mason
	Total Units / Time	18 hrs / day
Hourly Production Rate		13,33 m^3 / hr
Daily Production Rate		240,0 m^3 / hr
Duration		3 days

In practice, compensability analysis of the acceleration implemented by the Contractors can cause disputes. Therefore, it is very important to decide whether the acceleration is owner directed or carried out by the Contractor to recover his own delays. Moreover, acceleration cannot be substantiated in absence of proper duration estimation.

Moreover, accelerations of the Contractor can be overlooked when he is in an endeavor to recover his delays. Therefore, a careful analysis of accelerated activities is crucial for proper delay analysis and implementation of a technique which considers negative delay events is of importance as well as sufficient record keeping and efficient communication.

4.3.13 Increase in Quantities of Activities

Even in unit price contracts, which provide detailed design drawings to the Contractor, the BOQ quantities may change during the execution of the works.

The Contractor suffered delay after the data date of *Updated Schedule 12.1* on which the planned duration of concrete placing in the ground floor of Block B was completed. Table 4.15 shows the increased quantity, and revised duration estimation of the activity. As estimated by using the initial production rates, the Contractor suffered 3 days delay as a result of increase in quantity.

Table 4.15: Increase in Duration due to Increased Quantity of a Work Item

	Quantity in BOQ	*Increased Quantity*
Activity ID	RC.3.A.03.B.BS2	RC.3.A.03.B.BS2
Equivalent Ministry Item No	16.059/1A	16.059/1A
Activity Name	Placing of Concrete Class C30 for superstructure above foundations	Placing of Concrete Class C30 for superstructure above foundations
Quantity	366,774 m3	652,17 m3
Production Rate [hourly]	6,667 m3 / hr	6,667 m3 / hr
Production Rate [daily]	107 m3 / day	107 m3 / day
Duration	3 days	6 days

Updated Schedule 12.2 shows the net effect and the revised completion date of the schedule.

In practice, the delays suffered due to quantity increase in work items can be overlooked. In order to prevent this, the duration of the activities shall be determined based on the production rates which are accepted by the Employer, the Contractor’s planner shall monitor the quantities executed and make comparison with BOQ values during the course of the project. For that purpose, sufficient record keeping and communication shall be ensured.

4.3.14 Decrease in Quantities of Activities

As mentioned above, in the Increase in Quantities of Activities Sub-Section, the quantities specified in the BOQ may differ during execution.

Updated Schedule 13.1 shows the progress of the works with the original quantities of the bims block wall in 2nd basement of Block B. However, Contractor realized that according to the shop drawings the wall quantity has decreased by approximately 25% in 2nd basement of Block B.

The BOQ quantities and revised quantities of the Bims Block Wall in 2nd basement of Block B are shown in Figure 4.16.

Table 4.16: BOQ and Revised Quantities of Bims Block Wall in Block B

BILL NO.4: BUILDERS / MASONRY WORKS				
Activity ID	Activity Name	Unit	Quantity	Revised Quantity
RC.4.A.01.B.BS2	Bims block wall, 250 mm thick, laid in sand-cement mortar in Block B	m^2	25,84	25,84
RC.4.A.02.B.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar in Block B	m^2	327,59	167,88
RC.4.A.04.B.BS2	Bims block wall, 100 mm thick, laid in sand-cement mortar in Block B	m^2	290,87	287,95
		TOTAL:	644,3 m^2	481,67 m^2

As shown in Table 4.16, the quantity of bims block wall decreased substantially. Therefore, the decrease in duration is considerable.

Table 4.17shows the decreased quantity of the mentioned activity.

Table 4.17: Duration Estimation of Bims Block Wall in Block B

Activity ID	Equivalent Ministry Item No	Production Rate of 10 Mason [hourly]	Production Rate of 10 Mason [daily]	Original Duration	Revised Duration
RC.4.A.01.B.BS2	18.168/1/MK	20 m^2 / hr	160 m^2 / day	0,162 days	0,162 days
RC.4.A.02.B.BS2	18.168/1/MK	20 m^2 / hr	160 m^2 / day	2,047 days	1,049 days
RC.4.A.04.B.BS2	18.168/1/MK	20 m^2 / hr	160 m^2 / day	1,818 days	1,8 days
			TOTAL:	4,027 days	3,01 days

Updated Schedule 13.2 show the change in the completion date of the project when the duration of the mentioned activity is decreased accordingly.

In order carry out a proper delay analysis study, the production rate estimations shall be made appropriately. Otherwise it gives unreliable results. Moreover, comparison of the quantities of work items with BOQ quantities shall be made regularly. Sufficient record keeping and communication shall be ensured and a technique which considers negative delay events shall be implemented.

4.3.15 Change in Sequence of Activities

Soft logic concept was explained in previous sections. Sometimes, Contractor changes the logic in the as-planned section of the schedule. The reason for that can be soft logic, smoothening the resource usage, requirements of the Employer and so on.

The Contractor changed the logic of installation of bims block wall in 2nd basement of Block B on the data date of *Updated Schedule 4*.

Figure 4.10 shows the change in the sequence of bims block wall installation activities.

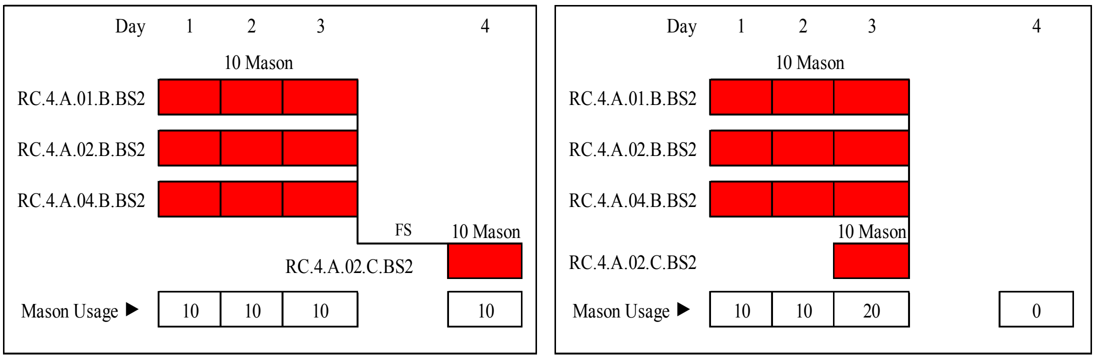


Figure 4.10: Change in the Sequence of Bims Block Wall Installation Activities

The Contractor decided to change the sequence of the activity, which was planned to be started after the finish date of the bims block wall installation in Block B. The reason behind this decision was that the Contractor realized that 10 mason has no assignment on the 3rd day. Therefore, he deployed his labors to bims block wall installation activity in Block C. By this way he recovered 1 day delay under his responsibility.

In practice the changes in the sequences cannot be noticed easily given that there are too many activities even in update process within a certain period of time. Therefore, the changes in the sequence of activities can easily get lost and its effect can be confused with other delay events. To prevent this, sufficient communication must be ensured among project participants.

4.3.16 Omission of an Existing Activity

Omission of some activities in construction projects is common. Sometimes owner requests the Contractor to omit activities which he thinks that unnecessary, or Contractor makes an offer to omit activities which he thinks would be beneficial for both Parties.

In the Project being worked out, the Contractor informed the Employer that satin gypsum is unnecessary in 2nd basement in which the boiling room equipment will be placed.

Updated Schedule 15 shows the effect of this omission.

In practice due to lack of communication or complexity of the projects, omission of an existing activity frequently gets lost among other delay events and treated as though no omission had taken place. To overcome overlook of omissions, all of the activities in the schedule shall be examined in detail during updates and communication among project participants must be enhanced.

4.3.17 Mitigation

Mitigation is generally considered as the inherent responsibility of the Contractor in order to relieve the negative impacts of delay events in terms of Extension of Time and Cost.

Updated Schedule 16.1 shows that Contractor suffered 7 days delay due to delays in importation of bims block walls. In order to mitigate the effect of this delay event he decides to manage the activities which are affected by the delay event more efficiently and increase the productivity so as to mitigate the delay event to the utmost. *Updated Schedule 16.2* shows the completion date of the project without mitigation.

Table 4.18 shows the calculation of duration of bims block wall in 2nd basement of Block A before the mitigation by the Contractor.

Table 4.18: Duration Estimation of the Activities before Mitigation

Activity ID	Equivalent Ministry Item No	Quantity	Production Rate of 10 Mason [hourly]	Production Rate of 10 Mason [daily]	Duration
RC.4.A.01.B.BS1	18.168/1/MK	48,3 m²	20 m² / hr	160 m² / day	0,302 days
RC.4.A.02.B.BS1	18.168/1/MK	1001,7 m²	20 m² / hr	160 m² / day	6,26 days
RC.4.A.04.B.BS1	18.168/1/MK	370,1 m²	20 m² / hr	160 m² / day	2,313 days
				TOTAL:	8,875 days

Updated Schedule 16.3 demonstrates the net effect of mitigation of Contractor. The Contractor mitigated the effected activities by managing the activities more efficiently than planned. He did not considered overtime working or deploying additional resources.

Table 4.19 indicates the results of Contractor's efforts to mitigate the delay.

Table 4.19: Revised Duration of Activities after Mitigation by the Contractor

Activity ID	Equivalent Ministry Item No	Quantity	Production Rate of 10 Mason [hourly]	Production Rate of 10 Mason [daily]	Duration
RC.4.A.01.B.BS1	18.168/1/MK	48,3 m²	25 m² / hr	200 m² / day	0,241 days
RC.4.A.02.B.BS1	18.168/1/MK	1001,7 m²	25 m² / hr	200 m² / day	5,008 days
RC.4.A.04.B.BS1	18.168/1/MK	370,1 m²	25 m² / hr	200 m² / day	1,851 days
				TOTAL:	7,1 days

In practice mitigation can be confused with acceleration or even overlooked by the analyst and get lost among other delay events.

Since mitigation is under Contractor's responsibility, it shall not be confused with acceleration which can be directed by the owner. Detailed analysis of activities in order to notice mitigation is crucial.

Moreover, a delay analysis technique which considers shortenings in activities shall be implemented.

P6 File		Delay Event			Forecast Completion Date	RESULTS OF INTEGRATED APPROACH Delay Amount [Calendar Days]			Description of the Shortcoming	LIKELY RESULTS OF AN ERRONEOUS DELAY ANALYSIS APPLICATION
Name	Description	No.	Description	Delay Amount [Working Days]		Non-Excusable	Excusable & Compensable	Excusanle & Non-Compensable		
BS	Baseline Schedule	-	-	-	03.11.2013	-	-	-	-	-
US_1.1	Updated Schedule 1.1	-	-	-	03.11.2013	-	-	-	-	-
US_1.2	Updated Schedule 1.2	1	Unreasonable Production Rate Estimation	9	18.12.2013	45	-	-	Unreasonable Productivity Estimations by the Contractor	45 days Employer Culpable delay due to disruption
US_2.1	Updated Schedule 2.1	-	-	-	18.12.2013	-	-	-	-	-
US_2.2	Updated Schedule 2.2	2	Additional Excavation & Backfilling	31	18.12.2013	-	-	-	Float Ownership [First Come First Served Basis or Employer Owns the Float]	Float Ownership is not Agreed upon which Leads to Disputes
US_3	Updated Schedule 3	3	Late Delivery of Reinforcement Steel	6	25.12.2013	7	-	-	Critical Path Changes	Owing to Lack of Adequate Frequent Updated, No Delay to Completion
US_4.1	Updated Schedule 4.1	-	-	-	25.12.2013	-	-	-	-	-
US_4.2	Updated Schedule 4.2	4	Late Instruction by the Engineer	4	25.12.2013	-	-	-	Critical Path Changes	Owing to Lack of Adequate Frequent Updated, 4 days delay instead of 0 day delay
US_4.3	Updated Schedule 4.3	4 , 5	Late Instruction by the Engineer Financial Problems of the Contractor	3	28.12.2013	-	-	3	Concurrent Delay	Due to overlook of concurrency, 2 days delay attributed to both Contractor and Employer
US_5.1	Updated Schedule 5.1	-	-	-	28.12.2013	-	-	-	-	-
US_5.2	Updated Schedule 5.2	6	Variation Order #1 [Change in Design]	15	16.05.2014	-	139	-	Non-Working Days	Different Calendars are not Created or Assigned Properly to Each of the Activities [15 days]
US_6.1	Updated Schedule 6.1	-	-	-	16.05.2014	-	-	-	-	-
US_6.2	Updated Schedule 6.2	-	-	-	16.05.2014	-	-	-	-	-
US_6.3	Updated Schedule 6.3	7	Additional Waterproofing Layer under Foundation of Block C	10	29.05.2014	-	13	-	Introduction of a New Activity	No delay due to lack of communication among parties or overlook of programmer
US_7.1	Updated Schedule 7.1	8	Delay due to Change in Admixture of Concrete for Block B	13	29.05.2014	-	-	-	-	-
US_7.2	Updated Schedule 7.2	9 , 10	* Delay in Approval of Concrete Mix Design * Intentional Slow-down of the Waterproofing Works	8 , 15	20.06.2014	-	22	-	* Concurrent Effect Concept * Pacing Delay	* Erroneous amount of delay calculated (8 or 15) * Erroneous compensability due to confusion with concurrent delay
US_8.1	Updated Schedule 8.1	-	-	-	20.06.2014	-	-	-	-	-
US_8.2	Updated Schedule 8.2	11	Delay in Concrete Placing of A Block 2nd Floor	3	26.06.2014	6	-	-	Resource Overallocation	No Delay due to Omission of Resource Constraints
US_9.1	Updated Schedule 9.1	-	-	-	26.06.2014	-	-	-	-	-
US_9.2	Updated Schedule 9.2	12	Loss of Productivity during Concrete Pouring due to Interruptions of Employer's Personnel	7	05.07.2014	-	9	-	Loss of Productivity	7 days Contractor Culpable Delay due to erroneous Productivity Rate/Duration Estimations
US_10.1	Updated Schedule 10.1	-	-	-	05.07.2014	-	-	-	-	-
US_10.2	Updated Schedule 10.2	-	-	-	05.07.2014	-	-	-	-	-
US_10.3	Updated Schedule 10.3	13	Re-building Formwork in Compiance with the Revised Drawings	6	13.07.2014	-	8	-	Re-work	Erroneous compensability analysis due to overlook of the re-work in complex projects
US_11.1	Updated Schedule 11.1	-	-	-	13.07.2014	-	-	-	-	-
US_11.2	Updated Schedule 11.2	-	Acceleration of Concrete Works in 1st Basement of Block B	(4)	09.07.2014	(4)	-	-	Acceleration	Erroneous compensability analysis or overlook of acceleration as a whole due to complexity and limited info flow
US_12.1	Updated Schedule 12.1	-	-	-	09.07.2014	-	-	-	-	-
US_12.2	Updated Schedule 12.2	14	Increase in Quantity of Concrete Works in Ground Floor of Block B	3	12.07.2014	-	3	-	Increase in Quantities	Due to inconvenient duration estimation or irregular monitor of consistency in duration, the increase could not be noticed
US_13.1	Updated Schedule 13.1	-	-	-	12.07.2014	-	-	-	-	-
US_13.2	Updated Schedule 13.2	-	Decrease in Quantity of Bims Block Wall	(1)	11.07.2014	-	(1)	-	Decrease in Quantities	Due to inconvenient duration estimation or irregular monitor of consistency in duration, the decrease could not be noticed
US_14	Updated Schedule 14	-	Change in the Sequence of Bims Block Wall Installation	(1)	10.07.2014	-	(1)	-	Change in the Sequence of Activities	Not Noticed by the Analyst, as a result; Get Lost in Other Delay Events when the Schedule is Updated beyond its date
US_15	Updated Schedule 15	-	Omission of an Sating Gypsum at 2nd Basement	(1)	09.07.2014	(1)	-	-	Omission of an Existing Activity	Not Noticed by the Analyst, as a result; Get Lost in Other Delay Events when the Schedule is Updated beyond its date
US_16.1	Updated Schedule 16.1	15	Customs Delay Suffered in Importation of Bims Block Wall	5	16.07.2014	-	-	7	-	-
US_16.2	Updated Schedule 16.2	-	-	-	16.07.2014	-	-	-	-	-
US_16.3	Updated Schedule 16.3	-	Mitigation in Bims Block Wall Installation in 1st Basement of Block A	(2)	12.07.2014	-	-	(4)	Mitigation	Not Noticed by the Analyst, as a result; Get Lost in Other Delay Events when the Schedule is Updated beyond its date

CHAPTER 5

CONCLUSION

5.1 Introduction

Contractors are suffering various types of delays in any type of project as a result of various factors. Most of the researches conducted so far aimed to enhance the capability of the delay analysis techniques in order to overcome the shortcomings encountered in delay analysis practices.

However, few aimed to propose a combined approach which considers all of the components that contribute defects in delay analysis practices.

The study is aimed to identify the shortcomings of delay analysis practices in construction industry. For that purpose, a comprehensive literature survey was conducted in Chapter 2. In Chapter 3, a number of shortcomings have been identified which are listed hereunder:

- Unreasonable Productivity Estimations,
- Float Ownership,
- Critical Path Changes,
- Concurrent Delay,
- Non-working Days,
- Introduction of a New Activity,
- Concurrent Effect,
- Pacing Delay,
- Resource Over-allocation,
- Loss of Productivity,
- Re-work,
- Acceleration,

    - Increase in Quantities of Activities,
    - Decrease in Quantities of Activities,
    - Change in Sequence of Activities,
    - Omission of an Existing Activity,
    - Mitigation.

This research has identified the participants of a delay analysis practice and apportioned responsibility of each of them to the shortcomings. These participants are listed below:

- Contract Documents,
- Programmer Who Creates the Construction Schedule,
- Record Keeping by the Relevant Staff,
- Communication Among the Project Participants,
- Delay Analysis Technique, and
- Delay Analyst.

A table showing the responsibility of each participant on shortcomings has been prepared together with the major causes and solution methods.

After that, in Chapter 3, each of the shortcomings was explained in detail. Major causes and solution methods are detailed in this section.

In Chapter 4, a construction schedule with approximately 4.000 activities was created, according to the requirements of the technical specifications of a building project. The schedule is being used to monitor the project as well. This schedule is used to demonstrate the effects of shortcomings detailed in the previous section.

Finally, a table is created which shows the net effects of the delay events all of which represents the shortcomings. The results were compared with the expected outcome in practice.

Major findings of this thesis study are detailed under sub-headings given below.

5.1.1 Unreasonable Productivity Estimation

Duration of an activity is dependent upon the estimations of the project scheduler. If the programmer assumes unreasonable production rate for an activity, the duration of the activity is inherently calculated wrongly. Accordingly, wrong calculation of activity duration leads to problems in achieving the estimated duration during the implementation of the activity. The major cause of exclusion of “Unreasonable Productivity Estimations” in delay analysis practices is the incompetence of delay analyst. Lack of proper productivity estimations at the programming stage, inefficient record keeping and communication among project participants also may lead to exclusion of “Unreasonable Productivity Estimations” in delay analysis practices.

The case study shows that the delay of 9 days is under the responsibility of Contractor as a result of his mis-estimations in calculation of activity durations.

In order to prevent misinterpretations of delay events with regard to erroneous productivity estimations, the bid document shall be prepared in detail and based on the productivity rates which are widely accepted by the industry.

5.1.2 Float Ownership

Although there is not an agreement about the ownership of project float, some of the authorities suggest solutions to overcome float ownership problem. Float ownership is a major problem which yields construction disputes. The parties shall agree upon the ownership of the float in advance before disputes take place.

The major cause of ambiguity of “Float Ownership” in delay analysis practices is absence of an apportionment method of the float agreed upon by the parties which is located in contract documents. To prevent such ambiguous cases, the parties shall agree upon a method in ownership of float, such as:

- Contractor owns the float,
- Employer owns the float,
- First come first served.

The case study suggested that ownership of float substantially affects the results of delay analysis applications. The results changed substantially according to the approach adopted on the ownership of the float. If the employer owns the float, the result is 0 day Employer culpable delay; if the contractor owns the float, the result was 189 days Employer culpable delay. 140 days EOT shall be granted to the Contractor, if both parties share the float equally.

5.1.3 Critical Path Changes

Since delays on the critical path of a construction programme have the ability to extend the overall duration of a project, changes in the critical path of during the course of the project must be taken into account in delay analysis applications. Some delay analysis methods do not take the changes in the critical path into account.

Static delay analysis methodologies and retrospective delay analysis methodologies among the dynamic methods are not capable of managing critical path changes. Prospective complex methods which necessitate frequent updates of the schedule such as TIA shall be implemented in order to overcome this shortcoming.

Case study shows that an event which is not on the critical path of the as-planned schedule is on the critical path of the updated schedule whose data date is the start date of delay event. This example shows clearly the importance of changes in critical path to obtain reliable results in delay analysis applications.

5.1.4 Concurrent Delay

Concurrency occurs when two or more separate delay events occur within a specific time period. Since concurrent delays can be used as a defense strategy by both employers and contractors, it can cause various disputes. Contractors use concurrent delays in order to seek a relief from liquidated damages. Employers may use concurrency to get rid of additional payment requests of the Contractor.

The major cause of exclusion of “Concurrent Delays” in delay analysis practices is the inability of the delay analysis technique. Static delay analysis methodologies and retrospective delay analysis methodologies among the dynamic methods are not capable of managing concurrencies. Therefore, a modified delay analysis technique which takes multiple critical paths into account shall be implemented in order to overcome this defect.

The case study illustrated the analysis of concurrent delays. 4 days contractor culpable and 4 days employer culpable delay events occur concurrently. There are three types compensability analysis widely accepted by the industry when concurrency takes place which are examined in detail in previous sections. It becomes important when a contractor culpable delay event and employer culpable delay event occur concurrently. In such cases, authorities suggest to grant extension of time but not money to the contractor.

5.1.5 Non-working Days

It is possible to assign different calendars to different activities so as to reflect the actual situation more accurately. However, it may cause inaccurate results in delay analysis applications or in calculation of project float. The responsibility of the non-working days on the calendars shall be determined in order to avoid possible disputes.

The major cause of Exclusion of “Non-working Days” in delay analysis practices is lack of consideration of non-working days for each of the activities located in the construction schedule. To prevent exclusion of “Non-working Days” in delay analysis practices, the programmer shall create appropriate calendars and assign them to relevant activities.

In the case study 4 types of calendars are created and assigned to relevant activities. Duration of Brick Facing Activity was inserted as 91 days. However, the total calendar days for this activity is calculated by the software as 215 days since the Calendar 1 is assigned to this activity. 124 days of extension directly affected the completion date, therefore, the total amount of delay became 139 days which is the sum of 15 days (working days) and 124 days (non-working days).

Creation of different calendars according to the complexity and requirements of the activities of a project and assignment of them to the relevant activities is crucial in order to avoid erroneous results.

5.1.6 Introduction of a New Activity

In some cases, Employer requires the Contractor to perform additional work within the scope of the Contract and sometimes it becomes inevitable for the contractor to undertake additional activities for proper implementation of the works.

One of the major causes of exclusion of “Additional Activities” in delay analysis practices is lack of efficient record keeping. This causes oversight of the additional activities which must be incorporated into schedule in order to perform an efficient analysis. Another major cause of Exclusion of “Additional Activities” in delay analysis practices is inefficient communication among project participants. Even though efficient record keeping is ensured by the Contractor, lack of efficient communication among project participants may result exclusion of “Additional Activities” in delay analysis practices.

In the case study the Employer requested additional membrane to be installed. The net effect of this delay event was 13 days. Efficient record keeping and communication prevented oversight of the effects of additional activity.

5.1.7 Concurrent Effect

In some cases, the effects of an Employer culpable delay event and Contractor culpable delay event can be concurrent. In such cases, the concurrency rules shall be applied in the same manner.

One of the major causes of Exclusion of “Concurrent Effect” in delay analysis practices is lack of assignment of appropriate calendars for each of the activities located in the construction schedule. Another major cause of Exclusion of “Concurrent Effect” in delay analysis practices is incapability of the delay analysis technique. Even TIA does not consider multiple critical paths.

In the case study, effect of an Employer culpable delay event with duration of 8 days and effect a contractor culpable delay event with duration of 15 days were 22 days and concurrent. Therefore, concurrency rules were applied in this case.

5.1.8 Pacing Delay

Pacing delay is defined as a conscious slow-down of an activity by the Contractor if there is a concurrent Employer culpable delay event.

The major cause of Exclusion of “Pacing Delay” in delay analysis practices is consideration of a pacing delay as if it is a concurrent delay by the Delay Analyst. To avoid such misinterpretation, the delay analyst shall scrutinize underlying reason of all delay events. The pacing delay must be identified, as the compensability differs substantially compared to concurrent delays.

In the case study, concrete works delayed by the Employer. In the parallel path Contractor intentionally slowed down the waterproofing works as he did not want to hurry up and wait and accordingly optimized his resource usage. Thus, by analyzing this concurrency in detail, the analyst figured out that this case shall be considered as a pacing delay rather than a concurrent delay.

5.1.9 Resource Over-allocation

In order obtain a reliable result; the resource allocation of the schedule shall be considered in delay analysis applications, since it can affect the delay responsibility of the parties.

One of the major causes of Exclusion of “Over-allocation” in delay analysis practices is lack of a resource loaded construction schedule. It is very hard for the delay analyst to identify resource over-allocation in a schedule which is not resource loaded. Another major cause of Exclusion of “Over-allocation” in delay analysis practices is incapability of delay analysis technique. Even the most complicated techniques such as TIA do not consider resource over-allocation.

A delay on a non-critical path may affect the activity on the critical path and accordingly delays the completion date of the project. The case study shows that resource allocation of non-critical activities must be considered as well as critical activities in delay analysis applications.

5.1.10 Loss of Productivity

Loss of productivity is one of the most important and complicated cause of delay in large scale construction projects. Therefore, calculating the net effect of productivity loss is of importance.

“Loss of Productivity” is generally overlooked because of the lack of proper review and comparison of productivity estimations and actual productivity rates by the delay analyst. Frequent analysis of the data obtained from the technical office, from both the disrupted and undisrupted sections shall be performed.

The case study shows that in some cases Contractor’s under performance may stems from loss of productivity experienced by the Contractor in some activities due to Employer culpable delay events.

5.1.11 Rework

Rework may occur in design phase or construction phase of all types of construction projects. Since rework is experienced by contractors in especially large scale projects, it is a major cause of time overruns and cost equivalents. Therefore, it should be dealt with in detail by delay analysts and shall not be overlooked.

One of the major causes of exclusion of “Rework” in delay analysis practices is lack of efficient record keeping. Another major cause of Exclusion of “Rework” in delay analysis practices is inefficient communication among project participants.

In the case study, the contractor suffered delay due to rework because of the design problems originating from the Employer. By implementing efficient record keeping and ensuring effective communication among the project participants, rework has been identified and delay attributed to Employer.

5.1.12 Acceleration

Generally construction delays are followed by accelerations. Employers generally require the Contractor to finish the project on time after a delay event takes place. Therefore this request necessitates acceleration by the Contractor.

In some cases the Employer requires the Contractor to perform according to the planned schedule even though the Contractor suffers an Employer culpable delay. In such cases it is crucial to identify the acceleration measures as the Contractor may claim additional costs incurred. The major cause of Exclusion of “Acceleration” in delay analysis practices is incapability of delay analysis technique. Even the most complicated techniques such as TIA do not consider negative delay events. Lack of efficient record keeping and communication among the project participants can be considered as other causes of this shortcoming.

In the case study, the Contractor used his resources beyond the committed working times in the tender documents. Efficient record keeping and communication have been ensured and acceleration measures of Contractor considered as negative delay events in delay analysis study. In that way, the acceleration measures had taken into account in delay analysis study.

5.1.13 Increase in Quantities of Activities

Erroneous computation of the quantities calculated before the commencement of the project, variation orders by the Employer and so on can increase the quantities of work items specified in the bill of quantities.

One of the major causes of exclusion of “Increase in Quantities of Activities” in delay analysis practices is lack of efficient record keeping. This causes oversight of the rework which must be incorporated into schedule in order to perform an efficient analysis. Another major cause of Exclusion of “Increase in Quantities of Activities” in delay analysis practices is inefficient communication among project participants.

In the case study, quantity of one of the work items has increased substantially. Since the Contractor ensured efficient record keeping and communication among project participants, the delay event originating from the increased quantity took place in delay analysis application.

5.1.14 Decrease in Quantities of Activities

As a result of variation orders, erroneous computation of the quantities in BOQ in projects for which design responsibility stays with the Employer may result in decrease in quantities of work items.

The major cause of Exclusion of “Decrease in Quantities of Activities” in delay analysis practices is incapability of delay analysis technique. To prevent overlook of “Decrease in Quantities of Activities”, the delay analyst shall consider the decreased quantities as negative delay events and incorporate into schedule. Lack of efficient record keeping and communication can be considered as other causes of this shortcoming.

In the case study, quantity of one of the work items has decreased substantially. Accordingly the Contractor considered the decrement as a negative delay event and contemporaneously ensured effective record keeping and communication among project participants. In this way, the Contractor implemented and accurate delay analysis application.

5.1.15 Change in the Sequence of Activities

Soft logic which is likely to be changed during the course of the project may cause important problems when construction schedule is being updated by the programmer. Therefore, it necessitates extensive studies.

The major cause of Exclusion of “Change in the Sequence of Activities” in delay analysis practices is inefficient communication among project participants. To overcome such situations efficient communication among project participants must be ensured by the

Contractor. It is not a challenging process to change the soft relationships as long as the delay analyst is informed properly.

In the case study, the planned changed the logic of the as-planned schedule as he realized that it doesn’t reflect the actual site conditions by implementing effective communication with project participants.

5.1.16 Omission of an Existing Activity

Omission of some activities in construction projects is common. Sometimes owner requests the Contractor to omit activities which he thinks that unnecessary, or Contractor makes an offer to omit activities which he thinks would be beneficial for both Parties.

One of the major causes of exclusion of “Omission of an Existing Activity” in delay analysis practices is lack of efficient record keeping and communication among project participants..

In the case study the Contractor informed the Employer about an activity which he thinks it is unnecessary. As efficient record keeping and communication among project participants ensured by the Contractor, the analyst easily incorporated the omission into schedule.

5.1.17 Mitigation

According to most of the Authorities, Contractor shall act accordingly to minimize his losses originating from the delay event and he must not take unreasonable steps which cause increased losses in terms of time or cost.

The major cause of Exclusion of “Mitigation” in delay analysis practices is incapability of delay analysis technique. Even the most complicated techniques such as TIA do not consider negative delay events. To prevent overlook of “Mitigation”, the delay analyst shall consider the mitigation as negative delay events and incorporate into schedule. Lack of efficient record keeping and communication can be considered as other causes of this shortcoming.

In the case study, the Contractor suffered delay from an Employer risk event and he decided to manage the activity more efficiently than originally planned in order to mitigate the effects of the delay event. As a result of his efforts, he shortened the activity duration. The analyst incorporated the mitigation as a negative delay event in order to implement a proper delay analysis application.

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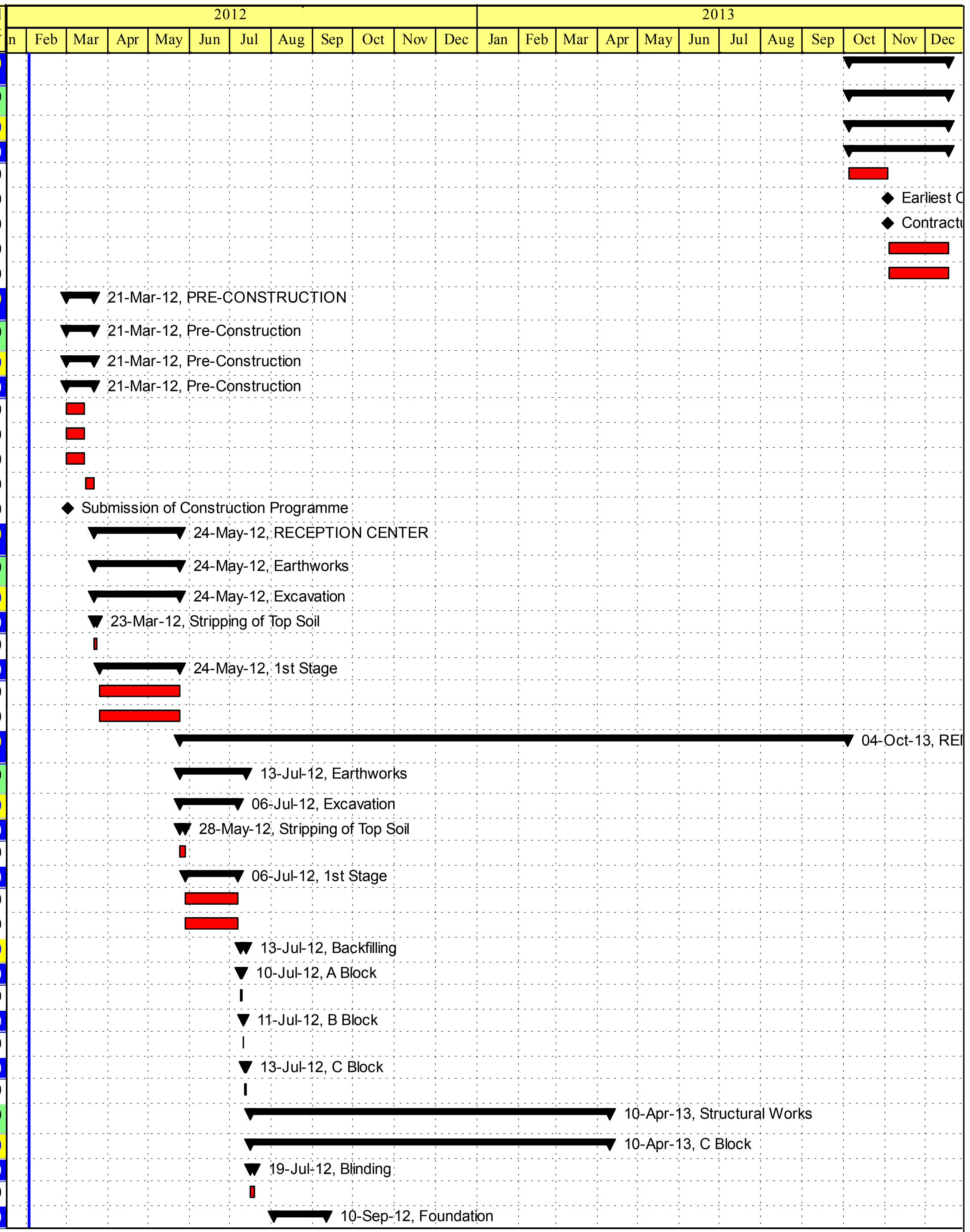
APPENDIX

PRIMAVERA SCHEDULES

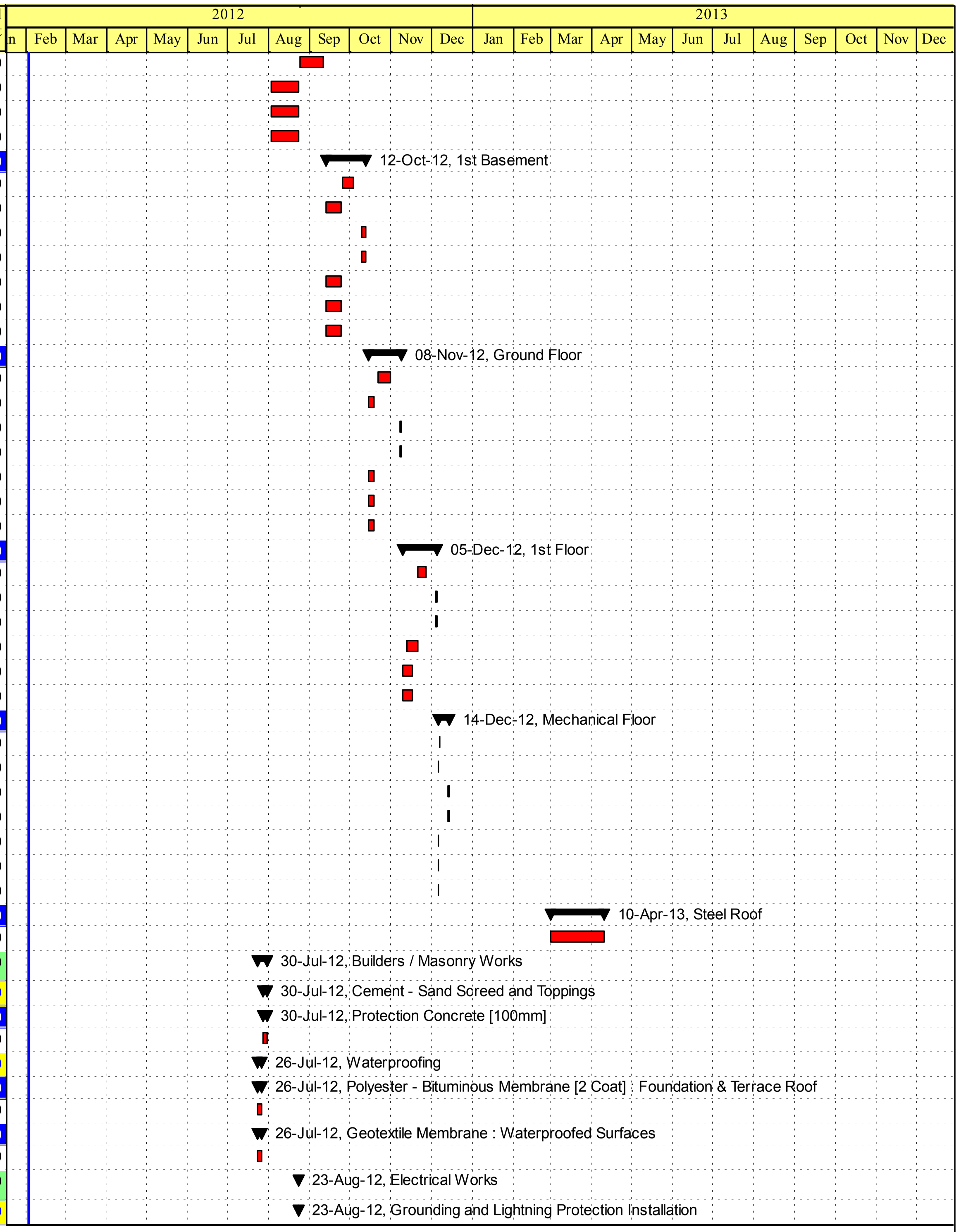
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		47	05-Oct-13	18-Dec-13	0
General		47	05-Oct-13	18-Dec-13	0
General		47	05-Oct-13	18-Dec-13	0
General		47	05-Oct-13	18-Dec-13	0
GEN99100	Tests on Completion	30	05-Oct-13	03-Nov-13	0
GEN99500	Earliest Completion of All Scope	0		03-Nov-13	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	04-Nov-13	18-Dec-13	0
GEN99920	As-Built Drawings and Other Documents	45	04-Nov-13	18-Dec-13	0
PRE-CONSTRUCTION		15	01-Mar-12	21-Mar-12	0
Pre-Construction		15	01-Mar-12	21-Mar-12	0
Pre-Construction		15	01-Mar-12	21-Mar-12	0
Pre-Construction		15	01-Mar-12	21-Mar-12	0
PRE00100	Mobilization	10	01-Mar-12	14-Mar-12	0
PRE11000	Contractor's Camp Construction	10	01-Mar-12	14-Mar-12	0
PRE11100	Engineer's Accomodation Construction	10	01-Mar-12	14-Mar-12	0
PRE11200	Initial Site Surveying	5	15-Mar-12	21-Mar-12	0
PRE11310	Submission of Construction Programme	0	02-Mar-12		0
RECEPTION CENTER		44	22-Mar-12	24-May-12	0
Earthworks		44	22-Mar-12	24-May-12	0
Excavation		44	22-Mar-12	24-May-12	0
Stripping of Top Soil		2	22-Mar-12	23-Mar-12	0
RC.2.A.01	Stripping of top soil (vegetation soil) to a depth of 300m...	2	22-Mar-12	23-Mar-12	0
1st Stage		42	26-Mar-12	24-May-12	0
RC.2.A.02.B.1	Excavation for foundation in any type of soil other than r...	42	26-Mar-12	24-May-12	0
RC.2.A.03.A.1	Excavation for foundation in rock : 1st Stage	42	26-Mar-12	24-May-12	0
REMOVAL CENTER		343	25-May-12	04-Oct-13	0
Earthworks		36	25-May-12	13-Jul-12	0
Excavation		31	25-May-12	06-Jul-12	0
Stripping of Top Soil		2	25-May-12	28-May-12	0
RV.2.A.01	Stripping of top soil (vegetation soil) to a depth of 300m...	2	25-May-12	28-May-12	0
1st Stage		29	29-May-12	06-Jul-12	0
RV.2.A.02.B.1	Excavation for foundation in any type of soil other than r...	29	29-May-12	06-Jul-12	0
RV.2.A.03.A.1	Excavation for foundation in rock: 1st Stage	29	29-May-12	06-Jul-12	0
Backfilling		5	09-Jul-12	13-Jul-12	0
A Block		2	09-Jul-12	10-Jul-12	0
RV.2.B.01.A	Stabilization layer, average 150 mm thick, under foundat...	2	09-Jul-12	10-Jul-12	0
B Block		1	11-Jul-12	11-Jul-12	0
RV.2.B.01.B	Stabilization layer, average 150 mm thick, under foundat...	1	11-Jul-12	11-Jul-12	0
C Block		2	12-Jul-12	13-Jul-12	0
RV.2.B.01.C	Stabilization layer, average 150 mm thick, under foundat...	2	12-Jul-12	13-Jul-12	0
Structural Works		185	16-Jul-12	10-Apr-13	0
C Block		185	16-Jul-12	10-Apr-13	0
Blinding		4	16-Jul-12	19-Jul-12	0
RV.3.A.01.C	Placing of concrete Class C14 for blinding and filling.	4	16-Jul-12	19-Jul-12	0
Foundation		24	03-Aug-12	10-Sep-12	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

Baseline Schedule

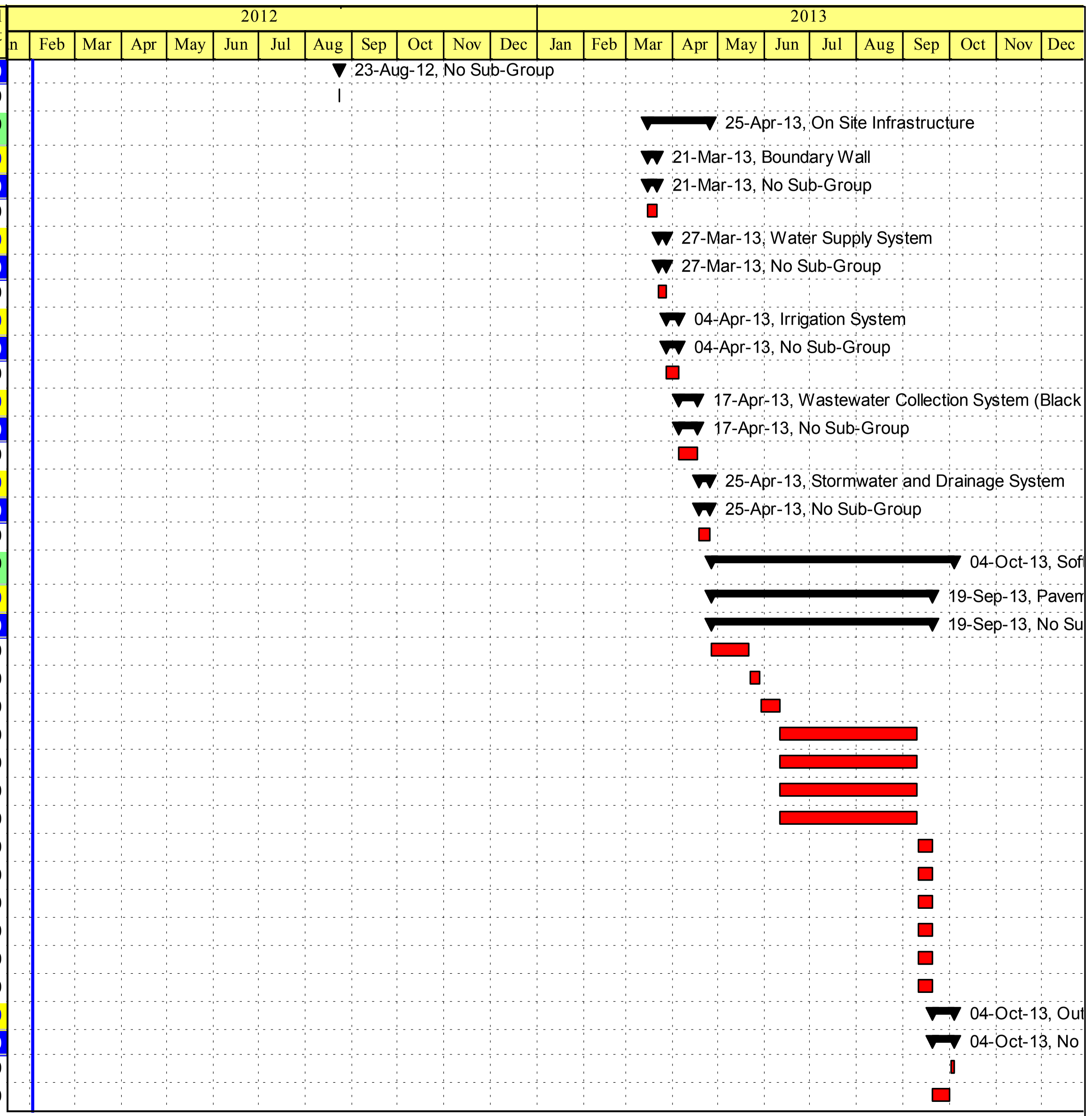
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	24-Aug-12	10-Sep-12	0
RV.3.A.02.C.FW	Formwork	13	03-Aug-12	23-Aug-12	0
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	03-Aug-12	23-Aug-12	0
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	03-Aug-12	23-Aug-12	0
1st Basement		22	13-Sep-12	12-Oct-12	0
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	25-Sep-12	03-Oct-12	0
RV.3.A.03.C.BS1.FW	Formwork	8	13-Sep-12	24-Sep-12	0
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	10-Oct-12	12-Oct-12	0
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	10-Oct-12	12-Oct-12	0
RV.3.A.03.C.BS1.SC	Scaffolding	8	13-Sep-12	24-Sep-12	0
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	13-Sep-12	24-Sep-12	0
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	13-Sep-12	24-Sep-12	0
Ground Floor		15	15-Oct-12	08-Nov-12	0
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	22-Oct-12	31-Oct-12	0
RV.3.A.03.C.GR.FW	Formwork	5	15-Oct-12	19-Oct-12	0
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	07-Nov-12	08-Nov-12	0
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	07-Nov-12	08-Nov-12	0
RV.3.A.03.C.GR.SC	Scaffolding	5	15-Oct-12	19-Oct-12	0
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	15-Oct-12	19-Oct-12	0
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	15-Oct-12	19-Oct-12	0
1st Floor		19	09-Nov-12	05-Dec-12	0
RV.3.A.03.C.1F	Placing of Concrete Class C30 for superstructure abov...	5	21-Nov-12	27-Nov-12	0
RV.3.A.03.C.1F.RFW	Removal of Formwork	2	04-Dec-12	05-Dec-12	0
RV.3.A.03.C.1F.RSC	Removal of Scaffolding	2	04-Dec-12	05-Dec-12	0
RV.3.A.03.C.1F.SC	Scaffolding	6	13-Nov-12	20-Nov-12	0
RV.3.B.01.C.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	09-Nov-12	16-Nov-12	0
RV.3.B.02.C.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	09-Nov-12	16-Nov-12	0
Mechanical Floor		7	06-Dec-12	14-Dec-12	0
RV.3.A.03.C.M	Placing of Concrete Class C30 for superstructure abov...	1	07-Dec-12	07-Dec-12	0
RV.3.A.03.C.M.FW	Formwork	1	06-Dec-12	06-Dec-12	0
RV.3.A.03.C.M.RFW	Removal of Formwork	1	14-Dec-12	14-Dec-12	0
RV.3.A.03.C.M.RSC	Removal of Scaffolding	1	14-Dec-12	14-Dec-12	0
RV.3.A.03.C.M.SC	Scaffolding	1	06-Dec-12	06-Dec-12	0
RV.3.B.01.C.M	Deformed high yield steel bars , Ø8-Ø12 mm dia.	1	06-Dec-12	06-Dec-12	0
RV.3.B.02.C.M	Deformed high yield steel bars , Ø14-Ø28 mm dia.	1	06-Dec-12	06-Dec-12	0
Steel Roof		29	01-Mar-13	10-Apr-13	0
RV.3.C.02.C	Roof support structure made with light steel profiles, in...	29	01-Mar-13	10-Apr-13	0
Builders / Masonry Works		6	23-Jul-12	30-Jul-12	0
Cement - Sand Screed and Toppings		2	27-Jul-12	30-Jul-12	0
Protection Concrete [100mm]		2	27-Jul-12	30-Jul-12	0
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	27-Jul-12	30-Jul-12	0
Waterproofing		4	23-Jul-12	26-Jul-12	0
Polyester - Bituminous Membrane [2 Coat] : Foundation & Terrace Roof		4	23-Jul-12	26-Jul-12	0
RV.4.D.03.C.FN	Two coat waterproofing with polyester reinforced bitumi...	4	23-Jul-12	26-Jul-12	0
Geotextile Membrane : Waterproofed Surfaces		4	23-Jul-12	26-Jul-12	0
RV.4.D.05.C.FN	Geotextile protective membrane, to waterproofed surfac...	4	23-Jul-12	26-Jul-12	0
Electrical Works		1	23-Aug-12	23-Aug-12	0
Grounding and Lightning Protection Installation		1	23-Aug-12	23-Aug-12	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

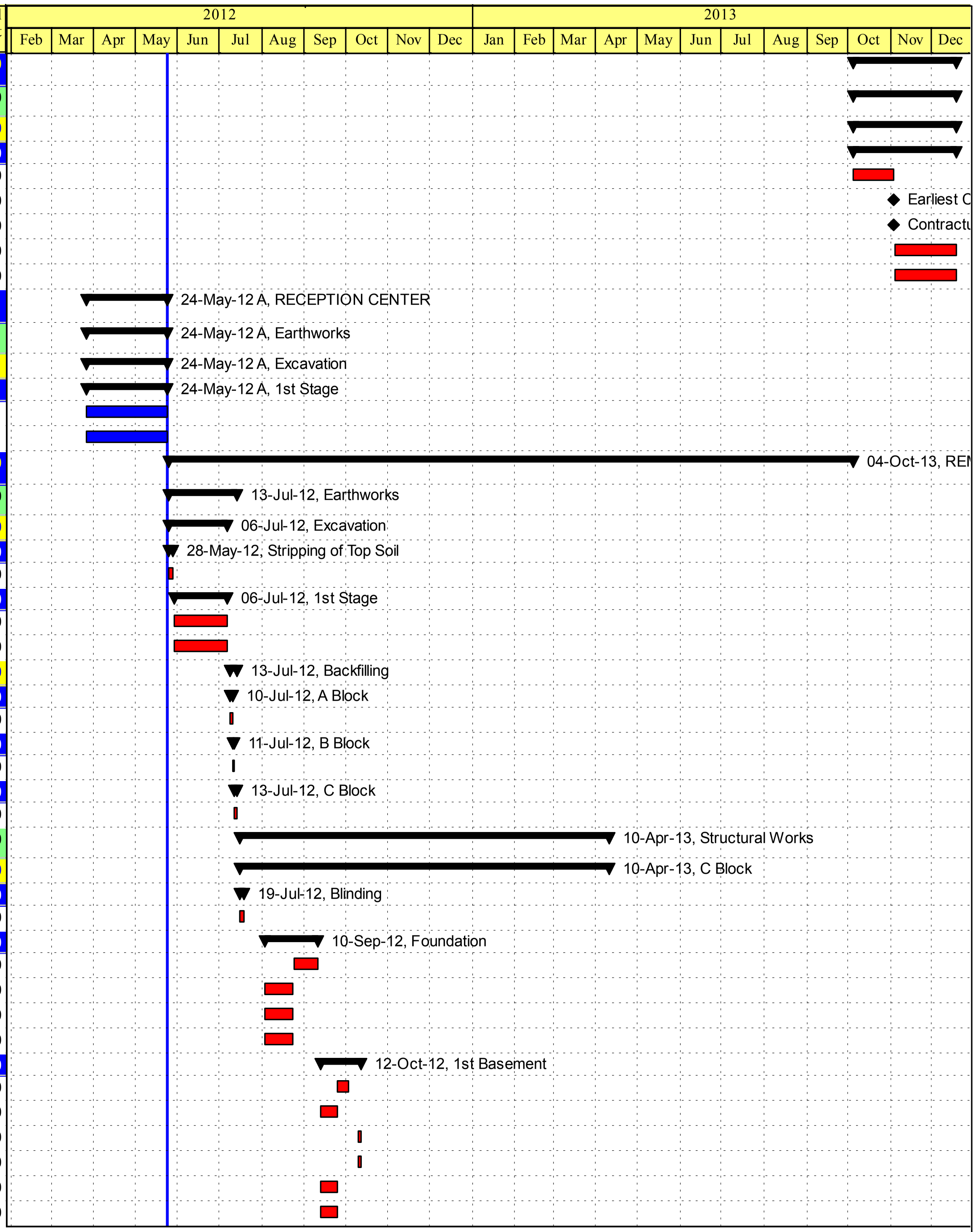
Baseline Schedule

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
No Sub-Group		1	23-Aug-12	23-Aug-12	0
RV.7.M.3.C	95mm² monotron cable	1	23-Aug-12	23-Aug-12	0
On Site Infrastructure		29	15-Mar-13	25-Apr-13	0
Boundary Wall		5	15-Mar-13	21-Mar-13	0
No Sub-Group		5	15-Mar-13	21-Mar-13	0
RV.8.A.01.EX	Excavation for wall foundation including backfilling and c...	5	15-Mar-13	21-Mar-13	0
Water Supply System		4	22-Mar-13	27-Mar-13	0
No Sub-Group		4	22-Mar-13	27-Mar-13	0
RV.8.B.EXC	Excavation for Water Supply System Pipes	4	22-Mar-13	27-Mar-13	0
Irrigation System		6	28-Mar-13	04-Apr-13	0
No Sub-Group		6	28-Mar-13	04-Apr-13	0
RV.8.C.EXC	Excavation for Irrigation System Pipes	6	28-Mar-13	04-Apr-13	0
Wastewater Collection System (Black Water & Grey Water Lines)		9	05-Apr-13	17-Apr-13	0
No Sub-Group		9	05-Apr-13	17-Apr-13	0
RV.8.D.EXC	Excavation for Wastewater Pipes	9	05-Apr-13	17-Apr-13	0
Stormwater and Drainage System		5	18-Apr-13	25-Apr-13	0
No Sub-Group		5	18-Apr-13	25-Apr-13	0
RV.8.E.EXC	Excavation for Drainage System Pipes	5	18-Apr-13	25-Apr-13	0
Soft and Hard Landscaping		112	26-Apr-13	04-Oct-13	0
Pavements and Sidewalks		101	26-Apr-13	19-Sep-13	0
No Sub-Group		101	26-Apr-13	19-Sep-13	0
RV.9.B.01	Excavation for planting areas,pavements and sidewalks...	18	26-Apr-13	21-May-13	0
RV.9.B.02	Aggregate sub-base course	5	22-May-13	28-May-13	0
RV.9.B.04	Placing of concrete Class C16/20 including reinforcing ...	9	29-May-13	10-Jun-13	0
RV.9.B.05	Natural Ankara stone (andesite) flooring, 300x40 mm, fr...	61	11-Jun-13	09-Sep-13	0
RV.9.B.06	Natural Ankara stone (andesite) flooring, 400x400x40 m...	61	11-Jun-13	09-Sep-13	0
RV.9.B.07	Natural Ankara stone (andesite) curb, 10x15x50 cm, in...	61	11-Jun-13	09-Sep-13	0
RV.9.B.08	Natural Ankara stone (andesite) curb, 10x25x50 cm, in...	61	11-Jun-13	09-Sep-13	0
RV.9.B.09	Natural Ankara stone (andesite) wall cover, 30 mm thic...	8	10-Sep-13	19-Sep-13	0
RV.9.B.10	Natural Ankara stone (andesite) coping, 60 mm thick, la...	8	10-Sep-13	19-Sep-13	0
RV.9.B.11	Natural Ankara stone (andesite) stair tread, 350x40mm...	8	10-Sep-13	19-Sep-13	0
RV.9.B.13	Natural Ankara stone (andesite) gutter, 200 mm wide, l...	8	10-Sep-13	19-Sep-13	0
RV.9.B.14	Natural Ankara stone (andesite) skirting, 80x30mm, laid...	8	10-Sep-13	19-Sep-13	0
RV.9.B.16	Cast-in-place terrazzo coping with white cement	8	10-Sep-13	19-Sep-13	0
Outdoor Furniture		11	20-Sep-13	04-Oct-13	0
No Sub-Group		11	20-Sep-13	04-Oct-13	0
RV.9.E.01	Stainless steel litter bin, as per details given on drawings	3	02-Oct-13	04-Oct-13	0
RV.9.E.02	Bench with backing, impregnated pine wood as per det...	8	20-Sep-13	01-Oct-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		47	05-Oct-13	18-Dec-13	0
General		47	05-Oct-13	18-Dec-13	0
General		47	05-Oct-13	18-Dec-13	0
General		47	05-Oct-13	18-Dec-13	0
GEN99100	Tests on Completion	30	05-Oct-13	03-Nov-13	0
GEN99500	Earliest Completion of All Scope	0		03-Nov-13	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	04-Nov-13	18-Dec-13	0
GEN99920	As-Built Drawings and Other Documents	45	04-Nov-13	18-Dec-13	0
RECEPTION CENTER		42	25-May-12	25-May-12	0
Earthworks		42	25-May-12	25-May-12	0
Excavation		42	25-May-12	25-May-12	0
1st Stage		42	25-May-12	25-May-12	0
RC.2.A.02.B.1	Excavation for foundation in any type of soil other than r...	42	25-May-12	25-May-12	0
RC.2.A.03.A.1	Excavation for foundation in rock : 1st Stage	42	25-May-12	25-May-12	0
REMOVAL CENTER		343	25-May-12	04-Oct-13	0
Earthworks		36	25-May-12	13-Jul-12	0
Excavation		31	25-May-12	06-Jul-12	0
Stripping of Top Soil		2	25-May-12	28-May-12	0
RV.2.A.01	Stripping of top soil (vegetation soil) to a depth of 300m...	2	25-May-12	28-May-12	0
1st Stage		29	29-May-12	06-Jul-12	0
RV.2.A.02.B.1	Excavation for foundation in any type of soil other than r...	29	29-May-12	06-Jul-12	0
RV.2.A.03.A.1	Excavation for foundation in rock: 1st Stage	29	29-May-12	06-Jul-12	0
Backfilling		5	09-Jul-12	13-Jul-12	0
A Block		2	09-Jul-12	10-Jul-12	0
RV.2.B.01.A	Stabilization layer, average 150 mm thick, under foundat...	2	09-Jul-12	10-Jul-12	0
B Block		1	11-Jul-12	11-Jul-12	0
RV.2.B.01.B	Stabilization layer, average 150 mm thick, under foundat...	1	11-Jul-12	11-Jul-12	0
C Block		2	12-Jul-12	13-Jul-12	0
RV.2.B.01.C	Stabilization layer, average 150 mm thick, under foundat...	2	12-Jul-12	13-Jul-12	0
Structural Works		185	16-Jul-12	10-Apr-13	0
C Block		185	16-Jul-12	10-Apr-13	0
Blinding		4	16-Jul-12	19-Jul-12	0
RV.3.A.01.C	Placing of concrete Class C14 for blinding and filling.	4	16-Jul-12	19-Jul-12	0
Foundation		24	03-Aug-12	10-Sep-12	0
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	24-Aug-12	10-Sep-12	0
RV.3.A.02.C.FW	Formwork	13	03-Aug-12	23-Aug-12	0
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	03-Aug-12	23-Aug-12	0
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	03-Aug-12	23-Aug-12	0
1st Basement		22	13-Sep-12	12-Oct-12	0
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	25-Sep-12	03-Oct-12	0
RV.3.A.03.C.BS1.FW	Formwork	8	13-Sep-12	24-Sep-12	0
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	10-Oct-12	12-Oct-12	0
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	10-Oct-12	12-Oct-12	0
RV.3.A.03.C.BS1.SC	Scaffolding	8	13-Sep-12	24-Sep-12	0
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	13-Sep-12	24-Sep-12	0



🟦 Actual Work 🟥 Critical Remaining Work ▬ Summary

🟩 Remaining Work ◆ ◆ Milestone

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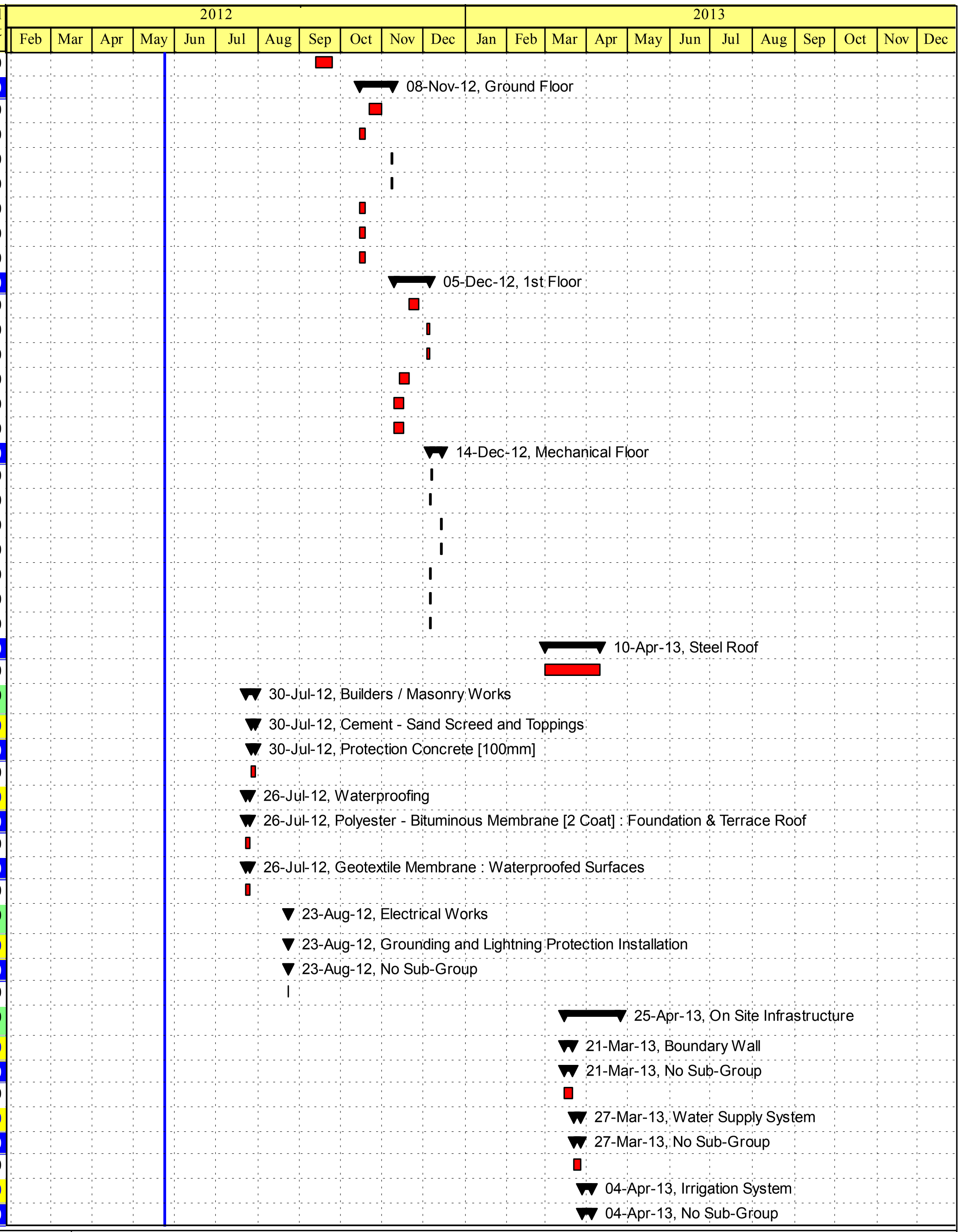
Updated Schedule 1.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	13-Sep-12	24-Sep-12	0
Ground Floor		15	15-Oct-12	08-Nov-12	0
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	22-Oct-12	31-Oct-12	0
RV.3.A.03.C.GR.FW	Formwork	5	15-Oct-12	19-Oct-12	0
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	07-Nov-12	08-Nov-12	0
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	07-Nov-12	08-Nov-12	0
RV.3.A.03.C.GR.SC	Scaffolding	5	15-Oct-12	19-Oct-12	0
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	15-Oct-12	19-Oct-12	0
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	15-Oct-12	19-Oct-12	0
1st Floor		19	09-Nov-12	05-Dec-12	0
RV.3.A.03.C.1F	Placing of Concrete Class C30 for superstructure abov...	5	21-Nov-12	27-Nov-12	0
RV.3.A.03.C.1F.RFW	Removal of Formwork	2	04-Dec-12	05-Dec-12	0
RV.3.A.03.C.1F.RSC	Removal of Scaffolding	2	04-Dec-12	05-Dec-12	0
RV.3.A.03.C.1F.SC	Scaffolding	6	13-Nov-12	20-Nov-12	0
RV.3.B.01.C.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	09-Nov-12	16-Nov-12	0
RV.3.B.02.C.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	09-Nov-12	16-Nov-12	0
Mechanical Floor		7	06-Dec-12	14-Dec-12	0
RV.3.A.03.C.M	Placing of Concrete Class C30 for superstructure abov...	1	07-Dec-12	07-Dec-12	0
RV.3.A.03.C.M.FW	Formwork	1	06-Dec-12	06-Dec-12	0
RV.3.A.03.C.M.RFW	Removal of Formwork	1	14-Dec-12	14-Dec-12	0
RV.3.A.03.C.M.RSC	Removal of Scaffolding	1	14-Dec-12	14-Dec-12	0
RV.3.A.03.C.M.SC	Scaffolding	1	06-Dec-12	06-Dec-12	0
RV.3.B.01.C.M	Deformed high yield steel bars , Ø8-Ø12 mm dia.	1	06-Dec-12	06-Dec-12	0
RV.3.B.02.C.M	Deformed high yield steel bars , Ø14-Ø28 mm dia.	1	06-Dec-12	06-Dec-12	0
Steel Roof		29	01-Mar-13	10-Apr-13	0
RV.3.C.02.C	Roof support structure made with light steel profiles, in...	29	01-Mar-13	10-Apr-13	0
Builders / Masonry Works		6	23-Jul-12	30-Jul-12	0
Cement - Sand Screed and Toppings		2	27-Jul-12	30-Jul-12	0
Protection Concrete [100mm]		2	27-Jul-12	30-Jul-12	0
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	27-Jul-12	30-Jul-12	0
Waterproofing		4	23-Jul-12	26-Jul-12	0
Polyester - Bituminous Membrane [2 Coat] : Foundation & Terrace Roof		4	23-Jul-12	26-Jul-12	0
RV.4.D.03.C.FN	Two coat waterproofing with polyester reinforced bitumi...	4	23-Jul-12	26-Jul-12	0
Geotextile Membrane : Waterproofed Surfaces		4	23-Jul-12	26-Jul-12	0
RV.4.D.05.C.FN	Geotextile protective membrane, to waterproofed surfac...	4	23-Jul-12	26-Jul-12	0
Electrical Works		1	23-Aug-12	23-Aug-12	0
Grounding and Lightning Protection Installation		1	23-Aug-12	23-Aug-12	0
No Sub-Group		1	23-Aug-12	23-Aug-12	0
RV.7.M.3.C	95mm² monotron cable	1	23-Aug-12	23-Aug-12	0
On Site Infrastructure		29	15-Mar-13	25-Apr-13	0
Boundary Wall		5	15-Mar-13	21-Mar-13	0
No Sub-Group		5	15-Mar-13	21-Mar-13	0
RV.8.A.01.EX	Excavation for wall foundation including backfilling and c...	5	15-Mar-13	21-Mar-13	0
Water Supply System		4	22-Mar-13	27-Mar-13	0
No Sub-Group		4	22-Mar-13	27-Mar-13	0
RV.8.B.EXC	Excavation for Water Supply System Pipes	4	22-Mar-13	27-Mar-13	0
Irrigation System		6	28-Mar-13	04-Apr-13	0
No Sub-Group		6	28-Mar-13	04-Apr-13	0



🟦 Actual Work
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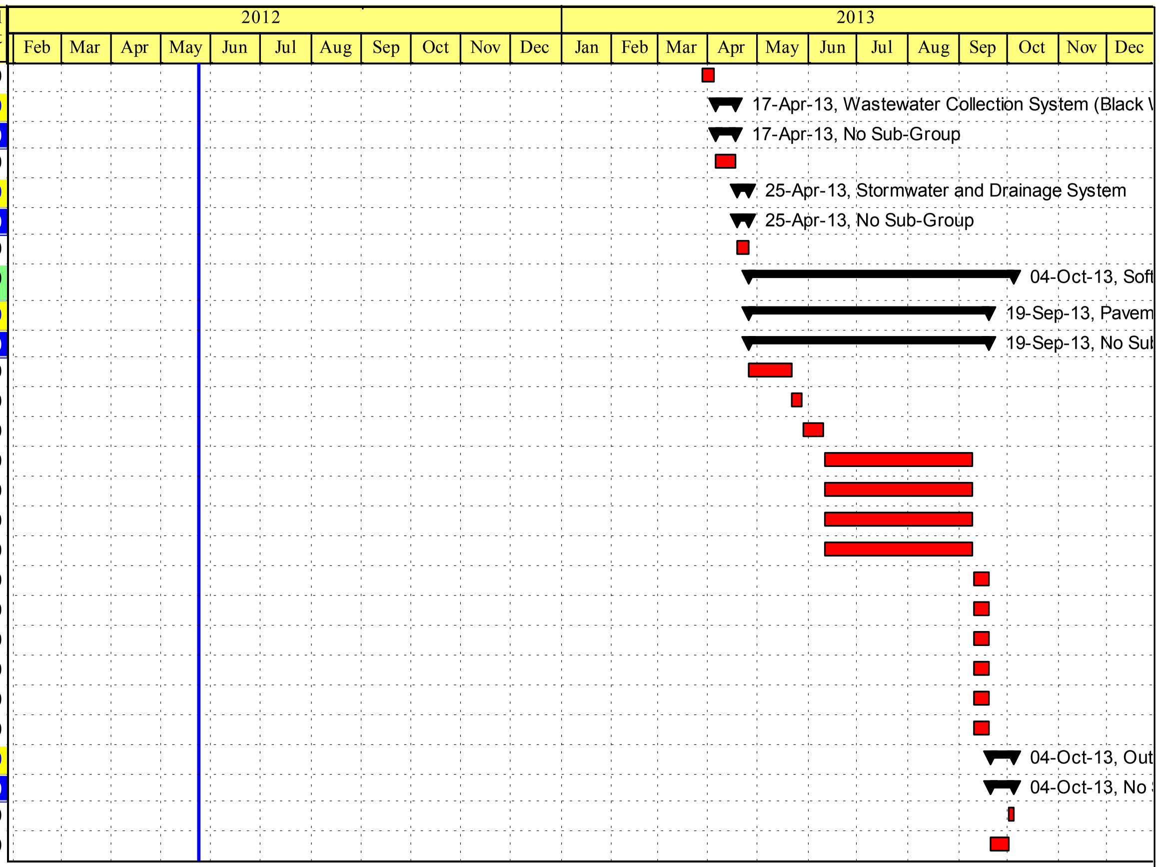
Updated Schedule 1.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.8.C.EXC	Excavation for Irrigation System Pipes	6	28-Mar-13	04-Apr-13	0
Wastewater Collection System (Black Water & Grey Water Lines)		9	05-Apr-13	17-Apr-13	0
No Sub-Group		9	05-Apr-13	17-Apr-13	0
RV.8.D.EXC	Excavation for Wastewater Pipes	9	05-Apr-13	17-Apr-13	0
Stormwater and Drainage System		5	18-Apr-13	25-Apr-13	0
No Sub-Group		5	18-Apr-13	25-Apr-13	0
RV.8.E.EXC	Excavation for Drainage System Pipes	5	18-Apr-13	25-Apr-13	0
Soft and Hard Landscaping		112	26-Apr-13	04-Oct-13	0
Pavements and Sidewalks		101	26-Apr-13	19-Sep-13	0
No Sub-Group		101	26-Apr-13	19-Sep-13	0
RV.9.B.01	Excavation for planting areas,pavements and sidewalks...	18	26-Apr-13	21-May-13	0
RV.9.B.02	Aggregate sub-base course	5	22-May-13	28-May-13	0
RV.9.B.04	Placing of concrete Class C16/20 including reinforcing ...	9	29-May-13	10-Jun-13	0
RV.9.B.05	Natural Ankara stone (andesite) flooring, 300x40 mm, fr...	61	11-Jun-13	09-Sep-13	0
RV.9.B.06	Natural Ankara stone (andesite) flooring, 400x400x40 m...	61	11-Jun-13	09-Sep-13	0
RV.9.B.07	Natural Ankara stone (andesite) curb, 10x15x50 cm, in...	61	11-Jun-13	09-Sep-13	0
RV.9.B.08	Natural Ankara stone (andesite) curb, 10x25x50 cm, in...	61	11-Jun-13	09-Sep-13	0
RV.9.B.09	Natural Ankara stone (andesite) wall cover, 30 mm thic...	8	10-Sep-13	19-Sep-13	0
RV.9.B.10	Natural Ankara stone (andesite) coping, 60 mm thick, la...	8	10-Sep-13	19-Sep-13	0
RV.9.B.11	Natural Ankara stone (andesite) stair tread, 350x40mm...	8	10-Sep-13	19-Sep-13	0
RV.9.B.13	Natural Ankara stone (andesite) gutter, 200 mm wide, l...	8	10-Sep-13	19-Sep-13	0
RV.9.B.14	Natural Ankara stone (andesite) skirting, 80x30mm, laid...	8	10-Sep-13	19-Sep-13	0
RV.9.B.16	Cast-in-place terrazzo coping with white cement	8	10-Sep-13	19-Sep-13	0
Outdoor Furniture		11	20-Sep-13	04-Oct-13	0
No Sub-Group		11	20-Sep-13	04-Oct-13	0
RV.9.E.01	Stainless steel litter bin, as per details given on drawings	3	02-Oct-13	04-Oct-13	0
RV.9.E.02	Bench with backing, impregnated pine wood as per det...	8	20-Sep-13	01-Oct-13	0



🟦 Actual Work
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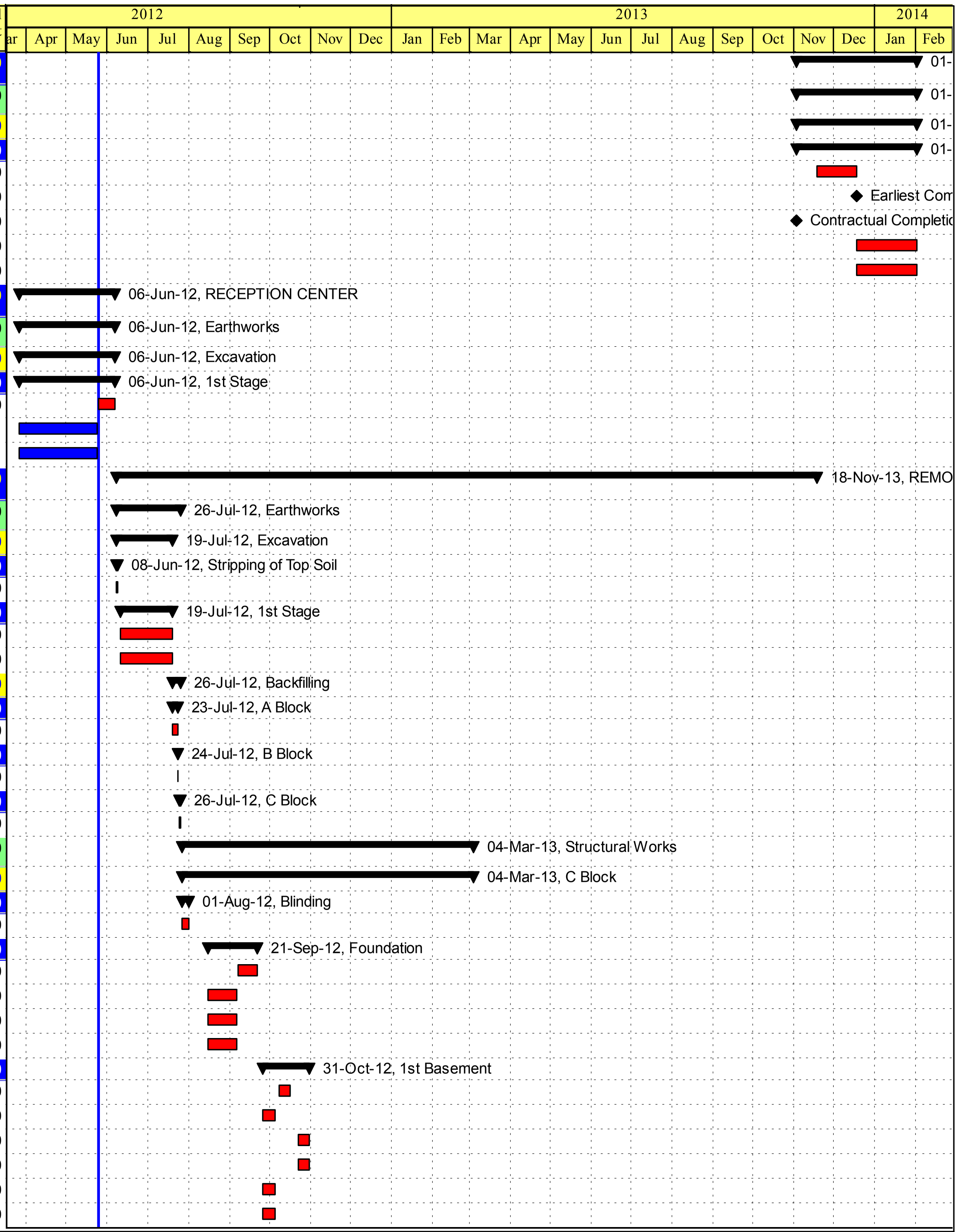
Updated Schedule 1.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		64	03-Nov-13	01-Feb-14	0
General		64	03-Nov-13	01-Feb-14	0
General		64	03-Nov-13	01-Feb-14	0
General		64	03-Nov-13	01-Feb-14	0
GEN99100	Tests on Completion	30	18-Nov-13	18-Dec-13	0
GEN99500	Earliest Completion of All Scope	0		18-Dec-13	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	18-Dec-13	01-Feb-14	0
GEN99920	As-Built Drawings and Other Documents	45	18-Dec-13	01-Feb-14	0
RECEPTION CENTER		51	25-May-12	06-Jun-12	0
Earthworks		51	25-May-12	06-Jun-12	0
Excavation		51	25-May-12	06-Jun-12	0
1st Stage		51	25-May-12	06-Jun-12	0
EVENT NO. 1	Unreasonable Production Rate Estimation	9	25-May-12	06-Jun-12	0
RC.2.A.02.B.1	Excavation for foundation in any type of soil other than r...	42	25-May-12	25-May-12	
RC.2.A.03.A.1	Excavation for foundation in rock : 1st Stage	42	25-May-12	25-May-12	
REMOVAL CENTER		359	07-Jun-12	18-Nov-13	0
Earthworks		36	07-Jun-12	26-Jul-12	0
Excavation		31	07-Jun-12	19-Jul-12	0
Stripping of Top Soil		2	07-Jun-12	08-Jun-12	0
RV.2.A.01	Stripping of top soil (vegetation soil) to a depth of 300m...	2	07-Jun-12	08-Jun-12	0
1st Stage		29	11-Jun-12	19-Jul-12	0
RV.2.A.02.B.1	Excavation for foundation in any type of soil other than r...	29	11-Jun-12	19-Jul-12	0
RV.2.A.03.A.1	Excavation for foundation in rock: 1st Stage	29	11-Jun-12	19-Jul-12	0
Backfilling		5	20-Jul-12	26-Jul-12	0
A Block		2	20-Jul-12	23-Jul-12	0
RV.2.B.01.A	Stabilization layer, average 150 mm thick, under foundat...	2	20-Jul-12	23-Jul-12	0
B Block		1	24-Jul-12	24-Jul-12	0
RV.2.B.01.B	Stabilization layer, average 150 mm thick, under foundat...	1	24-Jul-12	24-Jul-12	0
C Block		2	25-Jul-12	26-Jul-12	0
RV.2.B.01.C	Stabilization layer, average 150 mm thick, under foundat...	2	25-Jul-12	26-Jul-12	0
Structural Works		149	27-Jul-12	04-Mar-13	0
C Block		149	27-Jul-12	04-Mar-13	0
Blinding		4	27-Jul-12	01-Aug-12	0
RV.3.A.01.C	Placing of concrete Class C14 for blinding and filling.	4	27-Jul-12	01-Aug-12	0
Foundation		24	16-Aug-12	21-Sep-12	0
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	07-Sep-12	21-Sep-12	0
RV.3.A.02.C.FW	Formwork	13	16-Aug-12	06-Sep-12	0
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	16-Aug-12	06-Sep-12	0
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	16-Aug-12	06-Sep-12	0
1st Basement		22	26-Sep-12	31-Oct-12	0
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	08-Oct-12	16-Oct-12	0
RV.3.A.03.C.BS1.FW	Formwork	8	26-Sep-12	05-Oct-12	0
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	23-Oct-12	31-Oct-12	0
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	23-Oct-12	31-Oct-12	0
RV.3.A.03.C.BS1.SC	Scaffolding	8	26-Sep-12	05-Oct-12	0
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	26-Sep-12	05-Oct-12	0



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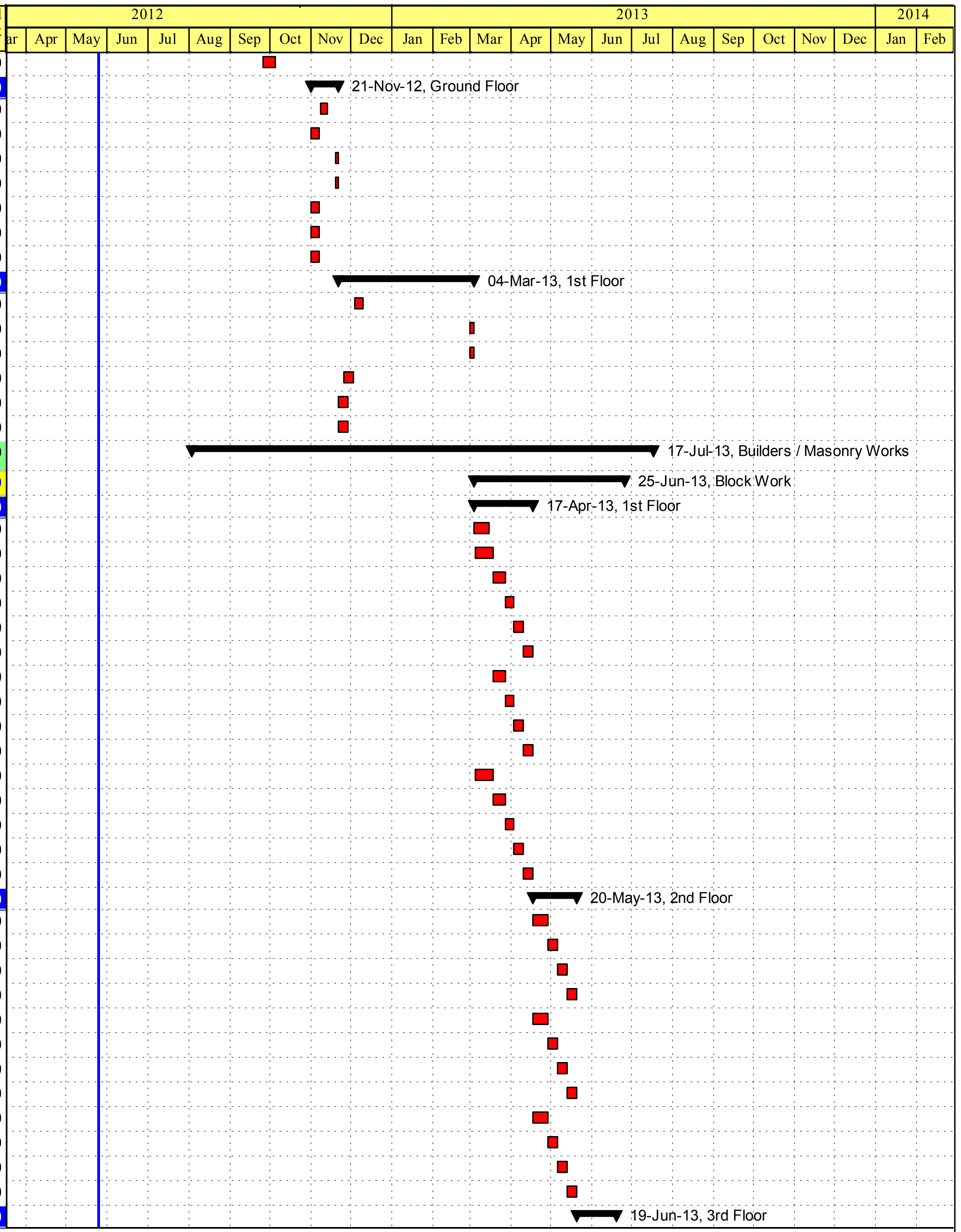
Updated Schedule 1.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	26-Sep-12	05-Oct-12	0
Ground Floor		15	01-Nov-12	21-Nov-12	0
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	08-Nov-12	13-Nov-12	0
RV.3.A.03.C.GR.FW	Formwork	5	01-Nov-12	07-Nov-12	0
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	20-Nov-12	21-Nov-12	0
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	20-Nov-12	21-Nov-12	0
RV.3.A.03.C.GR.SC	Scaffolding	5	01-Nov-12	07-Nov-12	0
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	01-Nov-12	07-Nov-12	0
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	01-Nov-12	07-Nov-12	0
1st Floor		72	22-Nov-12	04-Mar-13	0
RV.3.A.03.C.1F	Placing of Concrete Class C30 for superstructure abov...	5	04-Dec-12	10-Dec-12	0
RV.3.A.03.C.1F.RFW	Removal of Formwork	2	01-Mar-13	04-Mar-13	0
RV.3.A.03.C.1F.RSC	Removal of Scaffolding	2	01-Mar-13	04-Mar-13	0
RV.3.A.03.C.1F.SC	Scaffolding	6	26-Nov-12	03-Dec-12	0
RV.3.B.01.C.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	22-Nov-12	29-Nov-12	0
RV.3.B.02.C.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	22-Nov-12	29-Nov-12	0
Builders / Masonry Works		240	03-Aug-12	17-Jul-13	0
Block Work		80	04-Mar-13	25-Jun-13	0
1st Floor		32	04-Mar-13	17-Apr-13	0
RV.4.A.01.C.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	04-Mar-13	15-Mar-13	0
RV.4.A.02.C.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	05-Mar-13	18-Mar-13	0
RV.4.A.02.D.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	18-Mar-13	27-Mar-13	0
RV.4.A.02.E.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	27-Mar-13	03-Apr-13	0
RV.4.A.02.F.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	03-Apr-13	10-Apr-13	0
RV.4.A.02.G.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	10-Apr-13	17-Apr-13	0
RV.4.A.03.D.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	18-Mar-13	27-Mar-13	0
RV.4.A.03.E.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	27-Mar-13	03-Apr-13	0
RV.4.A.03.F.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	03-Apr-13	10-Apr-13	0
RV.4.A.03.G.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	10-Apr-13	17-Apr-13	0
RV.4.A.04.C.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	05-Mar-13	18-Mar-13	0
RV.4.A.04.D.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	18-Mar-13	27-Mar-13	0
RV.4.A.04.E.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	27-Mar-13	03-Apr-13	0
RV.4.A.04.F.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	03-Apr-13	10-Apr-13	0
RV.4.A.04.G.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	10-Apr-13	17-Apr-13	0
2nd Floor		22	17-Apr-13	20-May-13	0
RV.4.A.02.D.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	17-Apr-13	29-Apr-13	0
RV.4.A.02.E.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	29-Apr-13	06-May-13	0
RV.4.A.02.F.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	06-May-13	13-May-13	0
RV.4.A.02.G.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	13-May-13	20-May-13	0
RV.4.A.03.D.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	17-Apr-13	29-Apr-13	0
RV.4.A.03.E.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	29-Apr-13	06-May-13	0
RV.4.A.03.F.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	06-May-13	13-May-13	0
RV.4.A.03.G.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	13-May-13	20-May-13	0
RV.4.A.04.D.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	17-Apr-13	29-Apr-13	0
RV.4.A.04.E.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	29-Apr-13	06-May-13	0
RV.4.A.04.F.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	06-May-13	13-May-13	0
RV.4.A.04.G.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	13-May-13	20-May-13	0
3rd Floor		22	20-May-13	19-Jun-13	0



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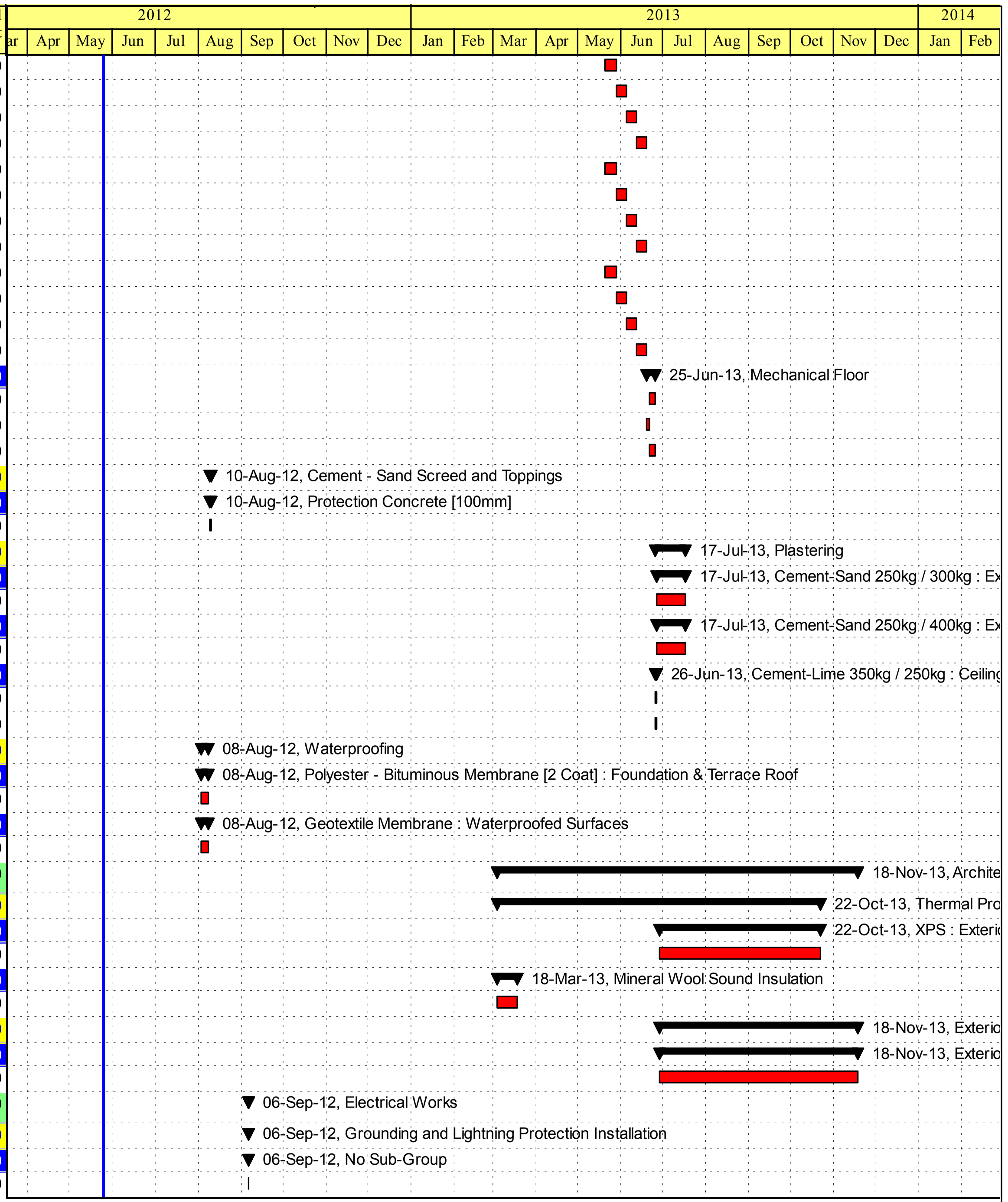
Updated Schedule 1.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.4.A.02.D.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	20-May-13	29-May-13	0
RV.4.A.02.E.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	29-May-13	05-Jun-13	0
RV.4.A.02.F.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	05-Jun-13	12-Jun-13	0
RV.4.A.02.G.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	12-Jun-13	19-Jun-13	0
RV.4.A.03.D.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	20-May-13	29-May-13	0
RV.4.A.03.E.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	29-May-13	05-Jun-13	0
RV.4.A.03.F.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	05-Jun-13	12-Jun-13	0
RV.4.A.03.G.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	12-Jun-13	19-Jun-13	0
RV.4.A.04.D.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	20-May-13	29-May-13	0
RV.4.A.04.E.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	29-May-13	05-Jun-13	0
RV.4.A.04.F.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	05-Jun-13	12-Jun-13	0
RV.4.A.04.G.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	12-Jun-13	19-Jun-13	0
Mechanical Floor		4	19-Jun-13	25-Jun-13	0
RV.4.A.01.C.M	Bims block wall, 250 mm thick, laid in sand-cement mortar	2	21-Jun-13	25-Jun-13	0
RV.4.A.02.A.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	19-Jun-13	21-Jun-13	0
RV.4.A.02.C.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	21-Jun-13	25-Jun-13	0
Cement - Sand Screed and Toppings		2	09-Aug-12	10-Aug-12	0
Protection Concrete [100mm]		2	09-Aug-12	10-Aug-12	0
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	09-Aug-12	10-Aug-12	0
Plastering		16	25-Jun-13	17-Jul-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		15	26-Jun-13	17-Jul-13	0
RV.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg ...	15	26-Jun-13	17-Jul-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		15	26-Jun-13	17-Jul-13	0
RV.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg ...	15	26-Jun-13	17-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		1	25-Jun-13	26-Jun-13	0
RV.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with fir...	1	25-Jun-13	26-Jun-13	0
RV.4.C.04.M2	Cement-lime-sand plaster, applied in two coats, with fir...	1	25-Jun-13	26-Jun-13	0
Waterproofing		4	03-Aug-12	08-Aug-12	0
Polyester - Bituminous Membrane [2 Coat] : Foundation & Terrace Roof		4	03-Aug-12	08-Aug-12	0
RV.4.D.03.C.FN	Two coat waterproofing with polyester reinforced bitumi...	4	03-Aug-12	08-Aug-12	0
Geotextile Membrane : Waterproofed Surfaces		4	03-Aug-12	08-Aug-12	0
RV.4.D.05.C.FN	Geotextile protective membrane, to waterproofed surfac...	4	03-Aug-12	08-Aug-12	0
Architectural Works		174	04-Mar-13	18-Nov-13	0
Thermal Protection		156	04-Mar-13	22-Oct-13	0
XPS : Exterior Walls & Ceilings		73	28-Jun-13	22-Oct-13	0
RV.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer o...	73	28-Jun-13	22-Oct-13	0
Mineral Wool Sound Insulation		10	04-Mar-13	18-Mar-13	0
RV.5.A.07	Mineral wool sound insulation, 50 mm thick, to walls, cei...	10	04-Mar-13	18-Mar-13	0
Exterior Brick Facing		91	28-Jun-13	18-Nov-13	0
Exterior Brick Facing		91	28-Jun-13	18-Nov-13	0
RV.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesi...	91	28-Jun-13	18-Nov-13	0
Electrical Works		1	06-Sep-12	06-Sep-12	0
Grounding and Lightning Protection Installation		1	06-Sep-12	06-Sep-12	0
No Sub-Group		1	06-Sep-12	06-Sep-12	0
RV.7.M.3.C	95mm² monotron cable	1	06-Sep-12	06-Sep-12	0



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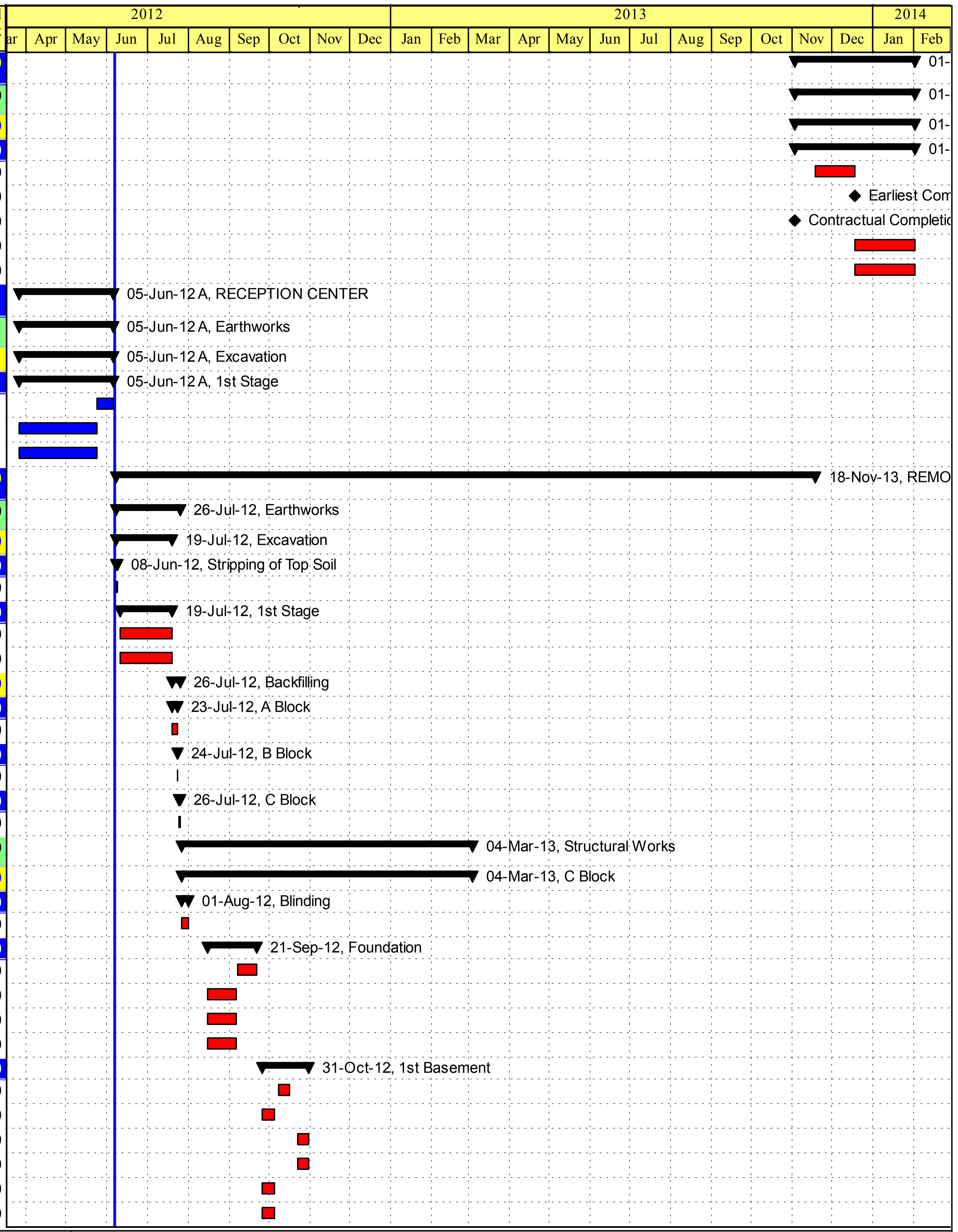
Updated Schedule 1.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		64	03-Nov-13	01-Feb-14	0
General		64	03-Nov-13	01-Feb-14	0
General		64	03-Nov-13	01-Feb-14	0
General		64	03-Nov-13	01-Feb-14	0
GEN99100	Tests on Completion	30	18-Nov-13	18-Dec-13	0
GEN99500	Earliest Completion of All Scope	0		18-Dec-13	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	18-Dec-13	01-Feb-14	0
GEN99920	As-Built Drawings and Other Documents	45	18-Dec-13	01-Feb-14	0
RECEPTION CENTER		50	07-Jun-12	07-Jun-12	
Earthworks		50	07-Jun-12	07-Jun-12	
Excavation		50	07-Jun-12	07-Jun-12	
1st Stage		50	07-Jun-12	07-Jun-12	
EVENT NO. 1	Unreasonable Production Rate Estimation	9	07-Jun-12	07-Jun-12	
RC.2.A.02.B.1	Excavation for foundation in any type of soil other than r...	42	07-Jun-12	07-Jun-12	
RC.2.A.03.A.1	Excavation for foundation in rock : 1st Stage	42	07-Jun-12	07-Jun-12	
REMOVAL CENTER		359	07-Jun-12	18-Nov-13	0
Earthworks		36	07-Jun-12	26-Jul-12	0
Excavation		31	07-Jun-12	19-Jul-12	0
Stripping of Top Soil		2	07-Jun-12	08-Jun-12	0
RV.2.A.01	Stripping of top soil (vegetation soil) to a depth of 300m...	2	07-Jun-12	08-Jun-12	0
1st Stage		29	11-Jun-12	19-Jul-12	0
RV.2.A.02.B.1	Excavation for foundation in any type of soil other than r...	29	11-Jun-12	19-Jul-12	0
RV.2.A.03.A.1	Excavation for foundation in rock: 1st Stage	29	11-Jun-12	19-Jul-12	0
Backfilling		5	20-Jul-12	26-Jul-12	0
A Block		2	20-Jul-12	23-Jul-12	0
RV.2.B.01.A	Stabilization layer, average 150 mm thick, under foundat...	2	20-Jul-12	23-Jul-12	0
B Block		1	24-Jul-12	24-Jul-12	0
RV.2.B.01.B	Stabilization layer, average 150 mm thick, under foundat...	1	24-Jul-12	24-Jul-12	0
C Block		2	25-Jul-12	26-Jul-12	0
RV.2.B.01.C	Stabilization layer, average 150 mm thick, under foundat...	2	25-Jul-12	26-Jul-12	0
Structural Works		149	27-Jul-12	04-Mar-13	0
C Block		149	27-Jul-12	04-Mar-13	0
Blinding		4	27-Jul-12	01-Aug-12	0
RV.3.A.01.C	Placing of concrete Class C14 for blinding and filling.	4	27-Jul-12	01-Aug-12	0
Foundation		24	16-Aug-12	21-Sep-12	0
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	07-Sep-12	21-Sep-12	0
RV.3.A.02.C.FW	Formwork	13	16-Aug-12	06-Sep-12	0
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	16-Aug-12	06-Sep-12	0
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	16-Aug-12	06-Sep-12	0
1st Basement		22	26-Sep-12	31-Oct-12	0
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	08-Oct-12	16-Oct-12	0
RV.3.A.03.C.BS1.FW	Formwork	8	26-Sep-12	05-Oct-12	0
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	23-Oct-12	31-Oct-12	0
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	23-Oct-12	31-Oct-12	0
RV.3.A.03.C.BS1.SC	Scaffolding	8	26-Sep-12	05-Oct-12	0
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	26-Sep-12	05-Oct-12	0



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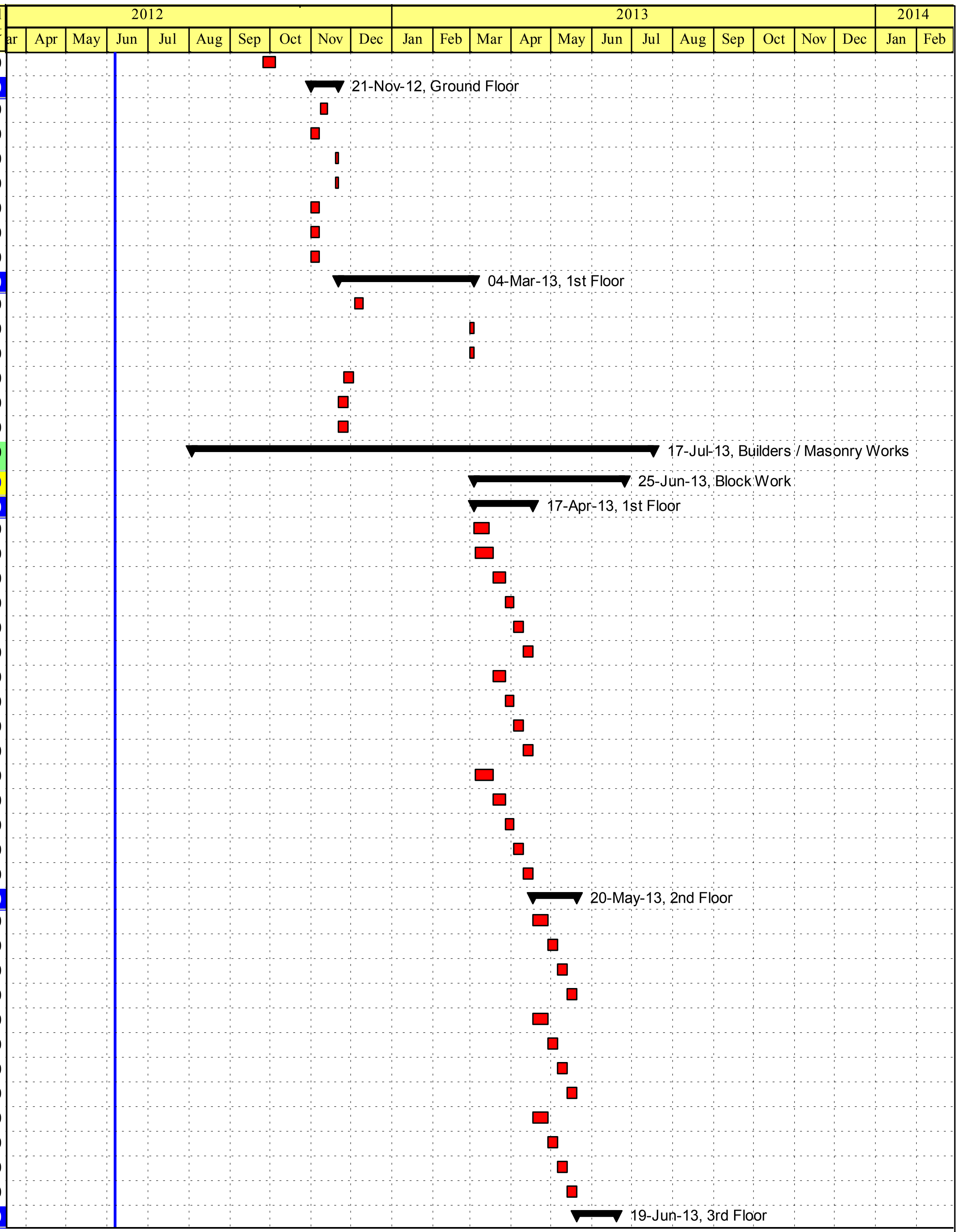
Updated Schedule 2.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	26-Sep-12	05-Oct-12	0
Ground Floor		15	01-Nov-12	21-Nov-12	0
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	08-Nov-12	13-Nov-12	0
RV.3.A.03.C.GR.FW	Formwork	5	01-Nov-12	07-Nov-12	0
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	20-Nov-12	21-Nov-12	0
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	20-Nov-12	21-Nov-12	0
RV.3.A.03.C.GR.SC	Scaffolding	5	01-Nov-12	07-Nov-12	0
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	01-Nov-12	07-Nov-12	0
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	01-Nov-12	07-Nov-12	0
1st Floor		72	22-Nov-12	04-Mar-13	0
RV.3.A.03.C.1F	Placing of Concrete Class C30 for superstructure abov...	5	04-Dec-12	10-Dec-12	0
RV.3.A.03.C.1F.RFW	Removal of Formwork	2	01-Mar-13	04-Mar-13	0
RV.3.A.03.C.1F.RSC	Removal of Scaffolding	2	01-Mar-13	04-Mar-13	0
RV.3.A.03.C.1F.SC	Scaffolding	6	26-Nov-12	03-Dec-12	0
RV.3.B.01.C.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	22-Nov-12	29-Nov-12	0
RV.3.B.02.C.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	22-Nov-12	29-Nov-12	0
Builders / Masonry Works		240	03-Aug-12	17-Jul-13	0
Block Work		80	04-Mar-13	25-Jun-13	0
1st Floor		32	04-Mar-13	17-Apr-13	0
RV.4.A.01.C.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	04-Mar-13	15-Mar-13	0
RV.4.A.02.C.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	05-Mar-13	18-Mar-13	0
RV.4.A.02.D.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	18-Mar-13	27-Mar-13	0
RV.4.A.02.E.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	27-Mar-13	03-Apr-13	0
RV.4.A.02.F.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	03-Apr-13	10-Apr-13	0
RV.4.A.02.G.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	10-Apr-13	17-Apr-13	0
RV.4.A.03.D.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	18-Mar-13	27-Mar-13	0
RV.4.A.03.E.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	27-Mar-13	03-Apr-13	0
RV.4.A.03.F.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	03-Apr-13	10-Apr-13	0
RV.4.A.03.G.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	10-Apr-13	17-Apr-13	0
RV.4.A.04.C.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	05-Mar-13	18-Mar-13	0
RV.4.A.04.D.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	18-Mar-13	27-Mar-13	0
RV.4.A.04.E.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	27-Mar-13	03-Apr-13	0
RV.4.A.04.F.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	03-Apr-13	10-Apr-13	0
RV.4.A.04.G.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	10-Apr-13	17-Apr-13	0
2nd Floor		22	17-Apr-13	20-May-13	0
RV.4.A.02.D.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	17-Apr-13	29-Apr-13	0
RV.4.A.02.E.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	29-Apr-13	06-May-13	0
RV.4.A.02.F.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	06-May-13	13-May-13	0
RV.4.A.02.G.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	13-May-13	20-May-13	0
RV.4.A.03.D.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	17-Apr-13	29-Apr-13	0
RV.4.A.03.E.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	29-Apr-13	06-May-13	0
RV.4.A.03.F.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	06-May-13	13-May-13	0
RV.4.A.03.G.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	13-May-13	20-May-13	0
RV.4.A.04.D.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	17-Apr-13	29-Apr-13	0
RV.4.A.04.E.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	29-Apr-13	06-May-13	0
RV.4.A.04.F.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	06-May-13	13-May-13	0
RV.4.A.04.G.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	13-May-13	20-May-13	0
3rd Floor		22	20-May-13	19-Jun-13	0



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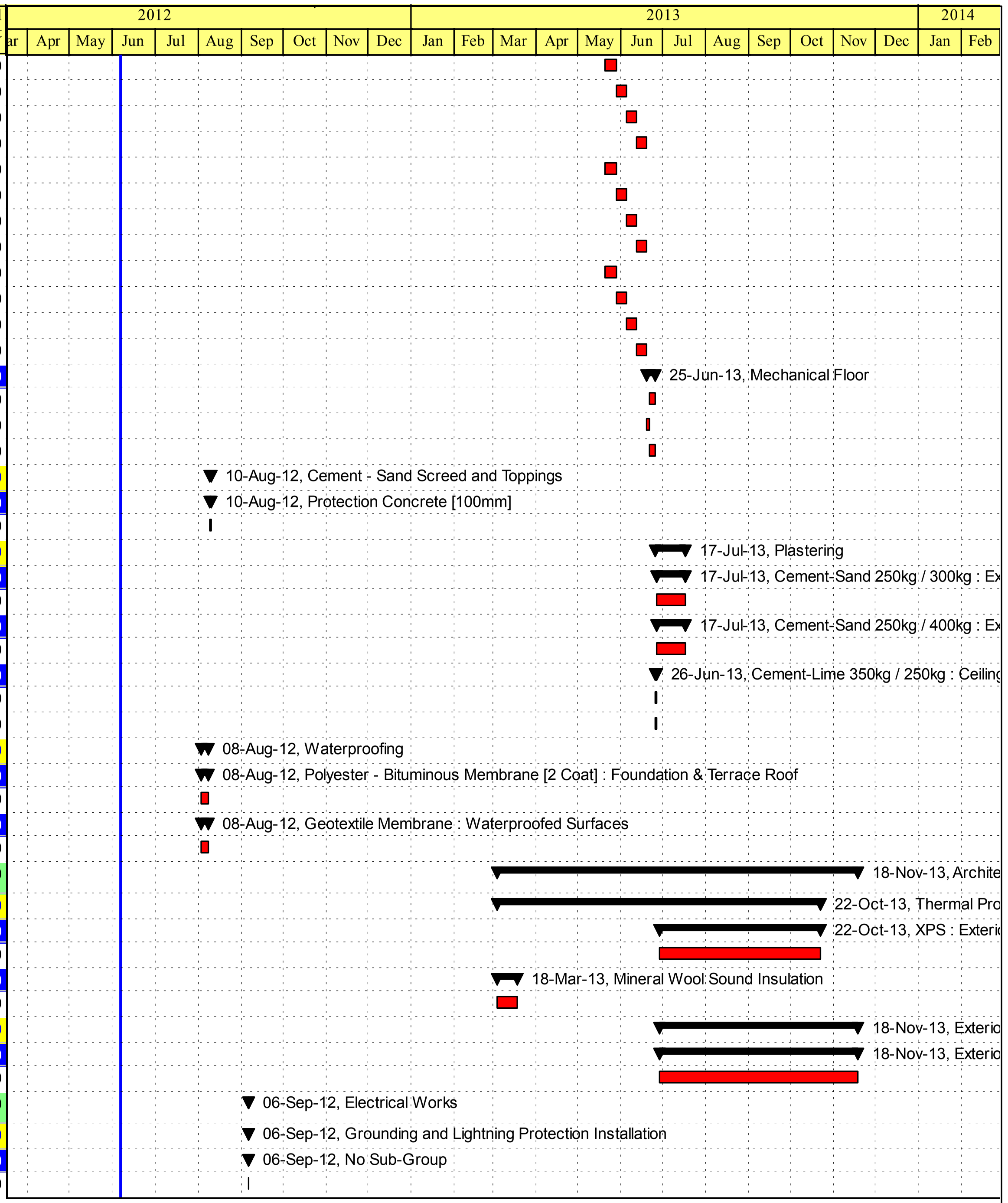
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.4.A.02.D.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	20-May-13	29-May-13	0
RV.4.A.02.E.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	29-May-13	05-Jun-13	0
RV.4.A.02.F.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	05-Jun-13	12-Jun-13	0
RV.4.A.02.G.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	12-Jun-13	19-Jun-13	0
RV.4.A.03.D.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	20-May-13	29-May-13	0
RV.4.A.03.E.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	29-May-13	05-Jun-13	0
RV.4.A.03.F.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	05-Jun-13	12-Jun-13	0
RV.4.A.03.G.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	12-Jun-13	19-Jun-13	0
RV.4.A.04.D.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	20-May-13	29-May-13	0
RV.4.A.04.E.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	29-May-13	05-Jun-13	0
RV.4.A.04.F.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	05-Jun-13	12-Jun-13	0
RV.4.A.04.G.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	12-Jun-13	19-Jun-13	0
Mechanical Floor		4	19-Jun-13	25-Jun-13	0
RV.4.A.01.C.M	Bims block wall, 250 mm thick, laid in sand-cement mortar	2	21-Jun-13	25-Jun-13	0
RV.4.A.02.A.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	19-Jun-13	21-Jun-13	0
RV.4.A.02.C.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	21-Jun-13	25-Jun-13	0
Cement - Sand Screed and Toppings		2	09-Aug-12	10-Aug-12	0
Protection Concrete [100mm]		2	09-Aug-12	10-Aug-12	0
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	09-Aug-12	10-Aug-12	0
Plastering		16	25-Jun-13	17-Jul-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		15	26-Jun-13	17-Jul-13	0
RV.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg ...	15	26-Jun-13	17-Jul-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		15	26-Jun-13	17-Jul-13	0
RV.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg ...	15	26-Jun-13	17-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		1	25-Jun-13	26-Jun-13	0
RV.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with fir...	1	25-Jun-13	26-Jun-13	0
RV.4.C.04.M2	Cement-lime-sand plaster, applied in two coats, with fir...	1	25-Jun-13	26-Jun-13	0
Waterproofing		4	03-Aug-12	08-Aug-12	0
Polyester - Bituminous Membrane [2 Coat] : Foundation & Terrace Roof		4	03-Aug-12	08-Aug-12	0
RV.4.D.03.C.FN	Two coat waterproofing with polyester reinforced bitumi...	4	03-Aug-12	08-Aug-12	0
Geotextile Membrane : Waterproofed Surfaces		4	03-Aug-12	08-Aug-12	0
RV.4.D.05.C.FN	Geotextile protective membrane, to waterproofed surfac...	4	03-Aug-12	08-Aug-12	0
Architectural Works		174	04-Mar-13	18-Nov-13	0
Thermal Protection		156	04-Mar-13	22-Oct-13	0
XPS : Exterior Walls & Ceilings		73	28-Jun-13	22-Oct-13	0
RV.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer o...	73	28-Jun-13	22-Oct-13	0
Mineral Wool Sound Insulation		10	04-Mar-13	18-Mar-13	0
RV.5.A.07	Mineral wool sound insulation, 50 mm thick, to walls, cei...	10	04-Mar-13	18-Mar-13	0
Exterior Brick Facing		91	28-Jun-13	18-Nov-13	0
Exterior Brick Facing		91	28-Jun-13	18-Nov-13	0
RV.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesi...	91	28-Jun-13	18-Nov-13	0
Electrical Works		1	06-Sep-12	06-Sep-12	0
Grounding and Lightning Protection Installation		1	06-Sep-12	06-Sep-12	0
No Sub-Group		1	06-Sep-12	06-Sep-12	0
RV.7.M.3.C	95mm² monotron cable	1	06-Sep-12	06-Sep-12	0



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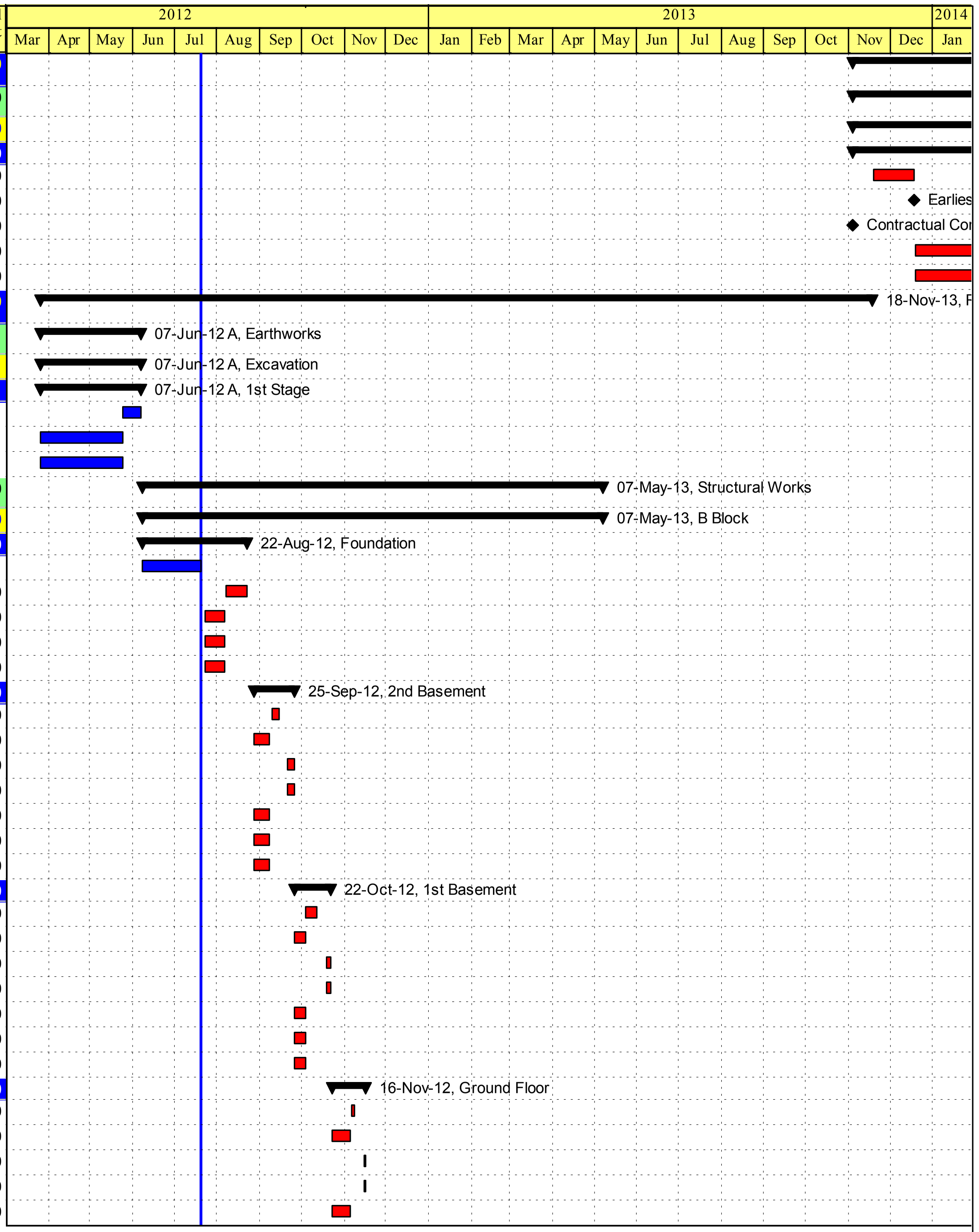
GENERAL		64	03-Nov-13	01-Feb-14	0
General		64	03-Nov-13	01-Feb-14	0
General		64	03-Nov-13	01-Feb-14	0
General		64	03-Nov-13	01-Feb-14	0
GEN99100	Tests on Completion	30	19-Nov-13	18-Dec-13	0
GEN99500	Earliest Completion of All Scope	0		18-Dec-13	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	19-Dec-13	01-Feb-14	0
GEN99920	As-Built Drawings and Other Documents	45	19-Dec-13	01-Feb-14	0
RECEPTION CENTER		410	20-Jul-12	18-Nov-13	0
Earthworks		55	20-Jul-12	20-Jul-12	
Excavation		55	20-Jul-12	20-Jul-12	
1st Stage		55	20-Jul-12	20-Jul-12	
EVENT NO. 1	Unreasonable Production Rate Estimation	14	20-Jul-12	20-Jul-12	
RC.2.A.02.B.1	Excavation for foundation in any type of soil other than r...	42	20-Jul-12	20-Jul-12	
RC.2.A.03.A.1	Excavation for foundation in rock : 1st Stage	42	20-Jul-12	20-Jul-12	
Structural Works		229	20-Jul-12	07-May-13	0
B Block		229	20-Jul-12	07-May-13	0
Foundation		52	20-Jul-12	22-Aug-12	0
EVENT NO. 2	Additional Excavation and Backfilling	31	20-Jul-12	20-Jul-12	
RC.3.A.02.B	Placing of concrete Class C30 for raft foundation, inclu...	10	07-Aug-12	22-Aug-12	0
RC.3.A.02.B.FW	Formwork	11	23-Jul-12	06-Aug-12	0
RC.3.B.01.B.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	11	23-Jul-12	06-Aug-12	0
RC.3.B.02.B.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	11	23-Jul-12	06-Aug-12	0
2nd Basement		21	27-Aug-12	25-Sep-12	0
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	10-Sep-12	14-Sep-12	0
RC.3.A.03.B.BS2.FW	Formwork	9	27-Aug-12	07-Sep-12	0
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	21-Sep-12	25-Sep-12	0
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	21-Sep-12	25-Sep-12	0
RC.3.A.03.B.BS2.SC	Scaffolding	9	27-Aug-12	07-Sep-12	0
RC.3.B.01.B.BS2	Deformed high yield steel bars , Ø8-Ø12 mm dia.	9	27-Aug-12	07-Sep-12	0
RC.3.B.02.B.BS2	Deformed high yield steel bars , Ø14-Ø28 mm dia.	9	27-Aug-12	07-Sep-12	0
1st Basement		19	26-Sep-12	22-Oct-12	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	04-Oct-12	12-Oct-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	26-Sep-12	03-Oct-12	0
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	19-Oct-12	22-Oct-12	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	19-Oct-12	22-Oct-12	0
RC.3.A.03.B.BS1.SC	Scaffolding	6	26-Sep-12	03-Oct-12	0
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	26-Sep-12	03-Oct-12	0
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	26-Sep-12	03-Oct-12	0
Ground Floor		15	23-Oct-12	16-Nov-12	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	06-Nov-12	08-Nov-12	0
RC.3.A.03.B.GR.FW	Formwork	6	23-Oct-12	05-Nov-12	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	15-Nov-12	16-Nov-12	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	15-Nov-12	16-Nov-12	0
RC.3.A.03.B.GR.SC	Scaffolding	6	23-Oct-12	05-Nov-12	0



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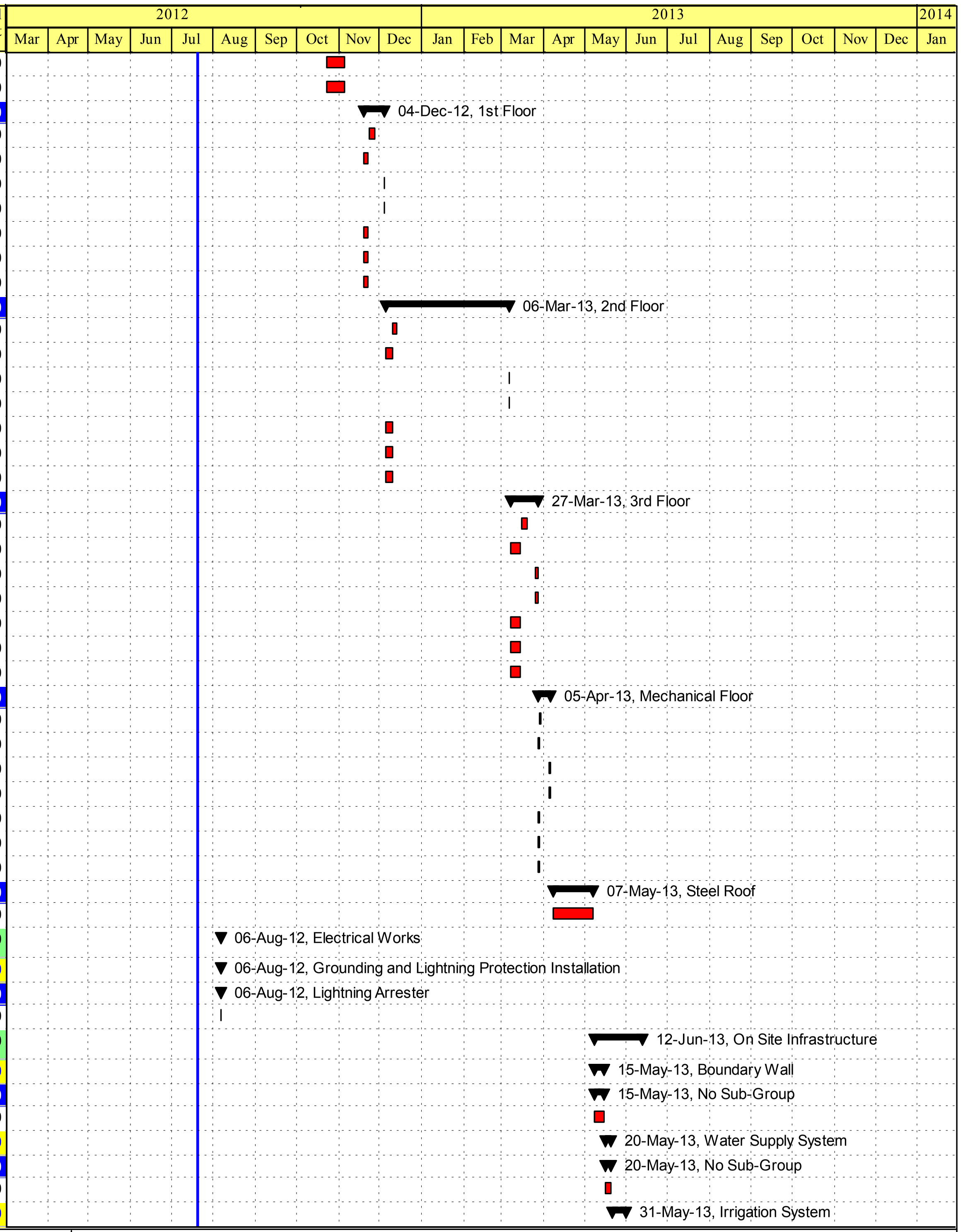
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	23-Oct-12	05-Nov-12	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	23-Oct-12	05-Nov-12	0
1st Floor		12	19-Nov-12	04-Dec-12	0
RC.3.A.03.B.1F	Placing of Concrete Class C30 for superstructure abov...	3	23-Nov-12	27-Nov-12	0
RC.3.A.03.B.1F.FW	Formwork	4	19-Nov-12	22-Nov-12	0
RC.3.A.03.B.1F.RFW	Removal of Formwork	1	04-Dec-12	04-Dec-12	0
RC.3.A.03.B.1F.RSC	Removal of Scaffolding	1	04-Dec-12	04-Dec-12	0
RC.3.A.03.B.1F.SC	Scaffolding	4	19-Nov-12	22-Nov-12	0
RC.3.B.01.B.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	19-Nov-12	22-Nov-12	0
RC.3.B.02.B.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	19-Nov-12	22-Nov-12	0
2nd Floor		65	05-Dec-12	06-Mar-13	0
RC.3.A.03.B.2F	Placing of Concrete Class C30 for superstructure abov...	3	11-Dec-12	13-Dec-12	0
RC.3.A.03.B.2F.FW	Formwork	4	05-Dec-12	10-Dec-12	0
RC.3.A.03.B.2F.RFW	Removal of Formwork	1	06-Mar-13	06-Mar-13	0
RC.3.A.03.B.2F.RSC	Removal of Scaffolding	1	06-Mar-13	06-Mar-13	0
RC.3.A.03.B.2F.SC	Scaffolding	4	05-Dec-12	10-Dec-12	0
RC.3.B.01.B.2F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	05-Dec-12	10-Dec-12	0
RC.3.B.02.B.2F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	05-Dec-12	10-Dec-12	0
3rd Floor		15	07-Mar-13	27-Mar-13	0
RC.3.A.03.B.3F	Placing of Concrete Class C30 for superstructure abov...	3	15-Mar-13	19-Mar-13	0
RC.3.A.03.B.3F.FW	Formwork	6	07-Mar-13	14-Mar-13	0
RC.3.A.03.B.3F.RFW	Removal of Formwork	2	26-Mar-13	27-Mar-13	0
RC.3.A.03.B.3F.RSC	Removal of Scaffolding	2	26-Mar-13	27-Mar-13	0
RC.3.A.03.B.3F.SC	Scaffolding	6	07-Mar-13	14-Mar-13	0
RC.3.B.01.B.3F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	07-Mar-13	14-Mar-13	0
RC.3.B.02.B.3F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	07-Mar-13	14-Mar-13	0
Mechanical Floor		7	28-Mar-13	05-Apr-13	0
RC.3.A.03.B.M	Placing of Concrete Class C30 for superstructure abov...	1	29-Mar-13	29-Mar-13	0
RC.3.A.03.B.M.FW	Formwork	1	28-Mar-13	28-Mar-13	0
RC.3.A.03.B.M.RFW	Removal of Formwork	1	05-Apr-13	05-Apr-13	0
RC.3.A.03.B.M.RSC	Removal of Scaffolding	1	05-Apr-13	05-Apr-13	0
RC.3.A.03.B.M.SC	Scaffolding	1	28-Mar-13	28-Mar-13	0
RC.3.B.01.B.M	Deformed high yield steel bars , Ø8-Ø12 mm dia.	1	28-Mar-13	28-Mar-13	0
RC.3.B.02.B.M	Deformed high yield steel bars , Ø14-Ø28 mm dia.	1	28-Mar-13	28-Mar-13	0
Steel Roof		21	08-Apr-13	07-May-13	0
RC.3.C.02.B	Roof support structure made with light steel profiles, in...	21	08-Apr-13	07-May-13	0
Electrical Works		1	06-Aug-12	06-Aug-12	0
Grounding and Lightning Protection Installation		1	06-Aug-12	06-Aug-12	0
Lightning Arrester		1	06-Aug-12	06-Aug-12	0
RC.7.M.3.B	95mm² monotron cable	1	06-Aug-12	06-Aug-12	0
On Site Infrastructure		26	08-May-13	12-Jun-13	0
Boundary Wall		6	08-May-13	15-May-13	0
No Sub-Group		6	08-May-13	15-May-13	0
RC.8.A.01.EX	Excavation for wall foundation including backfilling and c...	6	08-May-13	15-May-13	0
Water Supply System		3	16-May-13	20-May-13	0
No Sub-Group		3	16-May-13	20-May-13	0
RC.8.B.EXC	Excavation for Water Supply System Pipes	3	16-May-13	20-May-13	0
Irrigation System		9	21-May-13	31-May-13	0



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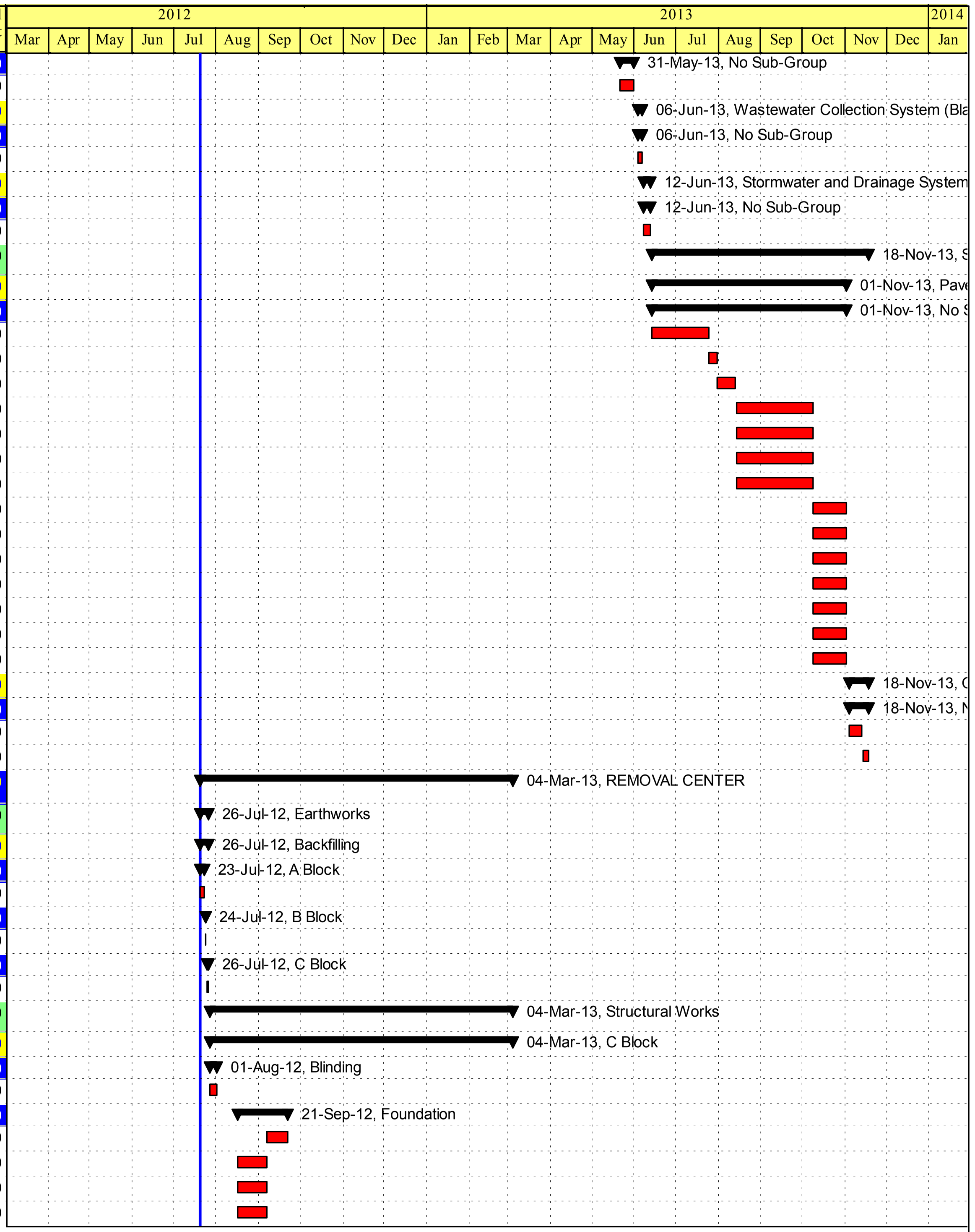
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
No Sub-Group		9	21-May-13	31-May-13	0
RC.8.C.EXC	Excavation for Irrigation System Pipes	9	21-May-13	31-May-13	0
Wastewater Collection System (Black Water & Grey Water Lines)		4	03-Jun-13	06-Jun-13	0
No Sub-Group		4	03-Jun-13	06-Jun-13	0
RC.8.D.EXC	Excavation for Wastewater Pipes	4	03-Jun-13	06-Jun-13	0
Stormwater and Drainage System		4	07-Jun-13	12-Jun-13	0
No Sub-Group		4	07-Jun-13	12-Jun-13	0
RC.8.E.EXC	Excavation for Drainage System Pipes	4	07-Jun-13	12-Jun-13	0
Soft and Hard Landscaping		103	13-Jun-13	18-Nov-13	0
Pavements and Sidewalks		92	13-Jun-13	01-Nov-13	0
No Sub-Group		92	13-Jun-13	01-Nov-13	0
RC.9.B.01	Excavation for planting areas,pavements and sidewalks...	30	13-Jun-13	24-Jul-13	0
RC.9.B.02	Aggregate sub-base course	4	25-Jul-13	30-Jul-13	0
RC.9.B.04	Placing of concrete Class C16/20 including reinforcing ...	7	31-Jul-13	13-Aug-13	0
RC.9.B.05	Natural Ankara stone (andesite) flooring, 300x40 mm, fr...	39	14-Aug-13	08-Oct-13	0
RC.9.B.06	Natural Ankara stone (andesite) flooring, 400x400x40 m...	39	14-Aug-13	08-Oct-13	0
RC.9.B.07	Natural Ankara stone (andesite) curb, 10x15x50 cm, in...	39	14-Aug-13	08-Oct-13	0
RC.9.B.08	Natural Ankara stone (andesite) curb, 10x25x50 cm, in...	39	14-Aug-13	08-Oct-13	0
RC.9.B.09	Natural Ankara stone (andesite) wall cover, 30 mm thic...	12	09-Oct-13	01-Nov-13	0
RC.9.B.10	Natural Ankara stone (andesite) coping, 60 mm thick, la...	12	09-Oct-13	01-Nov-13	0
RC.9.B.11	Natural Ankara stone (andesite) stair tread, 350x40mm...	12	09-Oct-13	01-Nov-13	0
RC.9.B.13	Natural Ankara stone (andesite) gutter, 200 mm wide, l...	12	09-Oct-13	01-Nov-13	0
RC.9.B.14	Natural Ankara stone (andesite) skirting, 80x30mm, laid...	12	09-Oct-13	01-Nov-13	0
RC.9.B.15	Natural Ankara stone (andesite) sill, 30mm thick, laid wit...	12	09-Oct-13	01-Nov-13	0
RC.9.B.16	Cast-in-place terrazzo coping with white cement	12	09-Oct-13	01-Nov-13	0
Outdoor Furniture		11	04-Nov-13	18-Nov-13	0
No Sub-Group		11	04-Nov-13	18-Nov-13	0
RC.9.E.03	Pergola structure; as shown on the drawings	8	04-Nov-13	13-Nov-13	0
RC.9.E.04	Gazebo structure; as shown on the drawings	3	14-Nov-13	18-Nov-13	0
REMOVAL CENTER		154	20-Jul-12	04-Mar-13	0
Earthworks		5	20-Jul-12	26-Jul-12	0
Backfilling		5	20-Jul-12	26-Jul-12	0
A Block		2	20-Jul-12	23-Jul-12	0
RV.2.B.01.A	Stabilization layer, average 150 mm thick, under foundat...	2	20-Jul-12	23-Jul-12	0
B Block		1	24-Jul-12	24-Jul-12	0
RV.2.B.01.B	Stabilization layer, average 150 mm thick, under foundat...	1	24-Jul-12	24-Jul-12	0
C Block		2	25-Jul-12	26-Jul-12	0
RV.2.B.01.C	Stabilization layer, average 150 mm thick, under foundat...	2	25-Jul-12	26-Jul-12	0
Structural Works		149	27-Jul-12	04-Mar-13	0
C Block		149	27-Jul-12	04-Mar-13	0
Blinding		4	27-Jul-12	01-Aug-12	0
RV.3.A.01.C	Placing of concrete Class C14 for blinding and filling.	4	27-Jul-12	01-Aug-12	0
Foundation		24	16-Aug-12	21-Sep-12	0
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	07-Sep-12	21-Sep-12	0
RV.3.A.02.C.FW	Formwork	13	16-Aug-12	06-Sep-12	0
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	16-Aug-12	06-Sep-12	0
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	16-Aug-12	06-Sep-12	0



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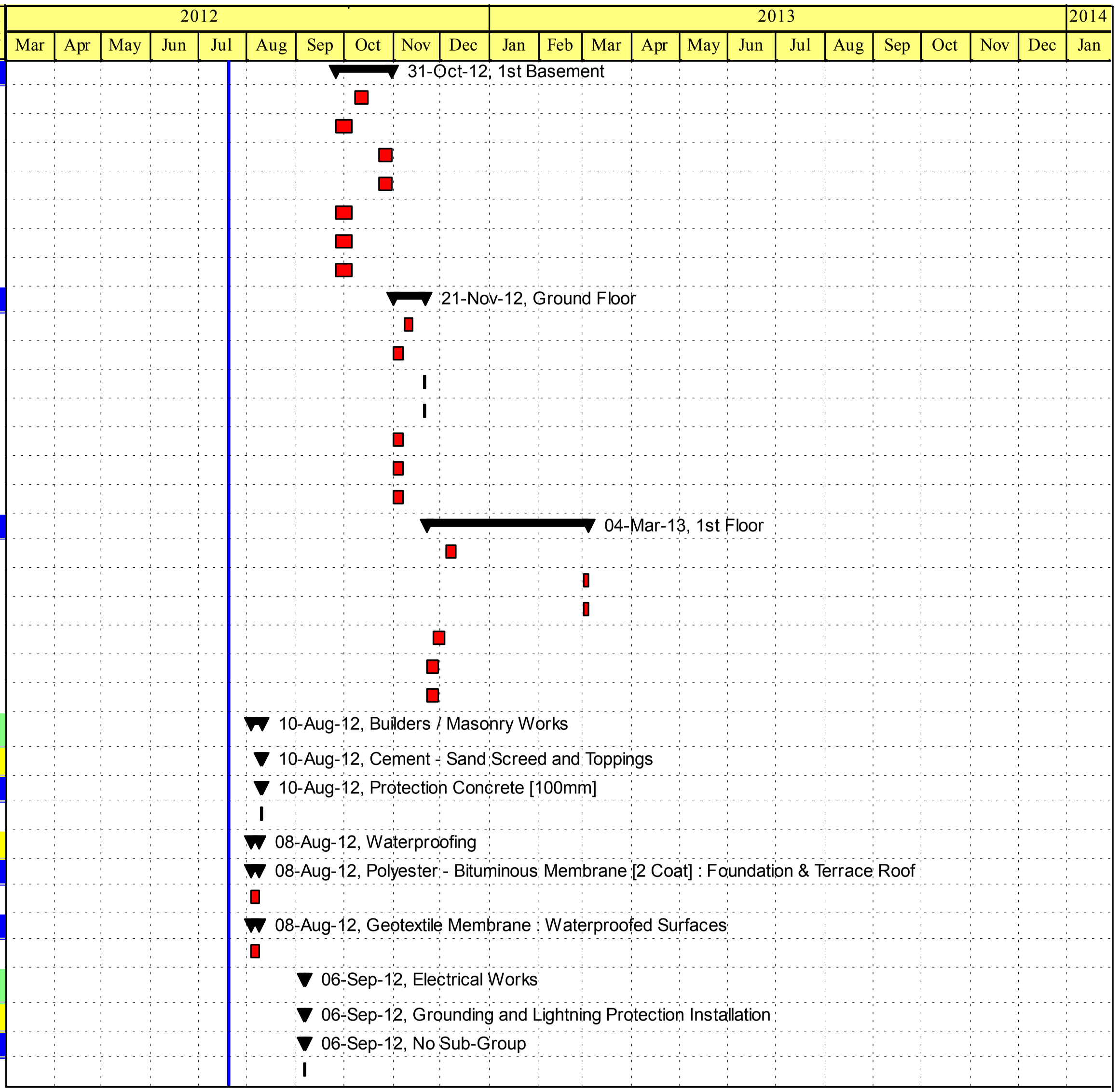
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
1st Basement		22	26-Sep-12	31-Oct-12	0
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	08-Oct-12	16-Oct-12	0
RV.3.A.03.C.BS1.FW	Formwork	8	26-Sep-12	05-Oct-12	0
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	23-Oct-12	31-Oct-12	0
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	23-Oct-12	31-Oct-12	0
RV.3.A.03.C.BS1.SC	Scaffolding	8	26-Sep-12	05-Oct-12	0
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	26-Sep-12	05-Oct-12	0
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	26-Sep-12	05-Oct-12	0
Ground Floor		15	01-Nov-12	21-Nov-12	0
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	08-Nov-12	13-Nov-12	0
RV.3.A.03.C.GR.FW	Formwork	5	01-Nov-12	07-Nov-12	0
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	20-Nov-12	21-Nov-12	0
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	20-Nov-12	21-Nov-12	0
RV.3.A.03.C.GR.SC	Scaffolding	5	01-Nov-12	07-Nov-12	0
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	01-Nov-12	07-Nov-12	0
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	01-Nov-12	07-Nov-12	0
1st Floor		72	22-Nov-12	04-Mar-13	0
RV.3.A.03.C.1F	Placing of Concrete Class C30 for superstructure abov...	5	04-Dec-12	10-Dec-12	0
RV.3.A.03.C.1F.RFW	Removal of Formwork	2	01-Mar-13	04-Mar-13	0
RV.3.A.03.C.1F.RSC	Removal of Scaffolding	2	01-Mar-13	04-Mar-13	0
RV.3.A.03.C.1F.SC	Scaffolding	6	26-Nov-12	03-Dec-12	0
RV.3.B.01.C.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	22-Nov-12	29-Nov-12	0
RV.3.B.02.C.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	22-Nov-12	29-Nov-12	0
Builders / Masonry Works		6	03-Aug-12	10-Aug-12	0
Cement - Sand Screed and Toppings		2	09-Aug-12	10-Aug-12	0
Protection Concrete [100mm]		2	09-Aug-12	10-Aug-12	0
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	09-Aug-12	10-Aug-12	0
Waterproofing		4	03-Aug-12	08-Aug-12	0
Polyester - Bituminous Membrane [2 Coat] : Foundation & Terrace Roof		4	03-Aug-12	08-Aug-12	0
RV.4.D.03.C.FN	Two coat waterproofing with polyester reinforced bitumi...	4	03-Aug-12	08-Aug-12	0
Geotextile Membrane : Waterproofed Surfaces		4	03-Aug-12	08-Aug-12	0
RV.4.D.05.C.FN	Geotextile protective membrane, to waterproofed surfac...	4	03-Aug-12	08-Aug-12	0
Electrical Works		1	06-Sep-12	06-Sep-12	0
Grounding and Lightning Protection Installation		1	06-Sep-12	06-Sep-12	0
No Sub-Group		1	06-Sep-12	06-Sep-12	0
RV.7.M.3.C	95mm² monotron cable	1	06-Sep-12	06-Sep-12	0



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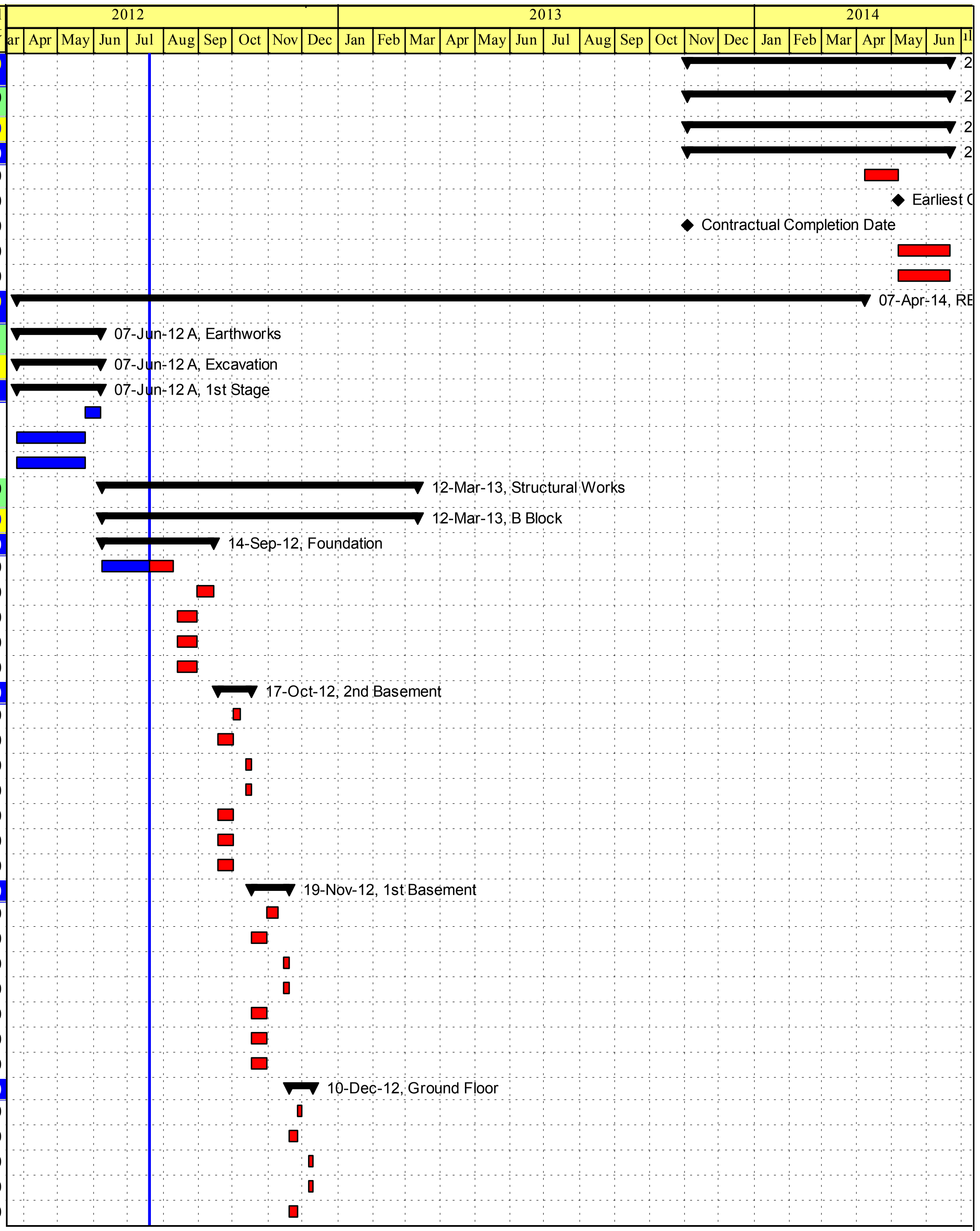
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		162	03-Nov-13	21-Jun-14	0
General		162	03-Nov-13	21-Jun-14	0
General		162	03-Nov-13	21-Jun-14	0
General		162	03-Nov-13	21-Jun-14	0
GEN99100	Tests on Completion	30	07-Apr-14	07-May-14	0
GEN99500	Earliest Completion of All Scope	0		07-May-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	07-May-14	21-Jun-14	0
GEN99920	As-Built Drawings and Other Documents	45	07-May-14	21-Jun-14	0
RECEPTION CENTER		508	20-Jul-12	07-Apr-14	0
Earthworks		55	20-Jul-12	20-Jul-12	
Excavation		55	20-Jul-12	20-Jul-12	
1st Stage		55	20-Jul-12	20-Jul-12	
EVENT NO. 1	Unreasonable Production Rate Estimation	14	20-Jul-12	20-Jul-12	
RC.2.A.02.B.1	Excavation for foundation in any type of soil other than r...	42	20-Jul-12	20-Jul-12	
RC.2.A.03.A.1	Excavation for foundation in rock : 1st Stage	42	20-Jul-12	20-Jul-12	
Structural Works		189	20-Jul-12	12-Mar-13	0
B Block		189	20-Jul-12	12-Mar-13	0
Foundation		67	20-Jul-12	14-Sep-12	0
EVENT NO. 2	Additional Excavation and Backfilling	31	20-Jul-12	10-Aug-12	0
RC.3.A.02.B	Placing of concrete Class C30 for raft foundation, inclu...	10	31-Aug-12	14-Sep-12	0
RC.3.A.02.B.FW	Formwork	11	13-Aug-12	31-Aug-12	0
RC.3.B.01.B.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	11	13-Aug-12	31-Aug-12	0
RC.3.B.02.B.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	11	13-Aug-12	31-Aug-12	0
2nd Basement		21	18-Sep-12	17-Oct-12	0
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	01-Oct-12	08-Oct-12	0
RC.3.A.03.B.BS2.FW	Formwork	9	18-Sep-12	01-Oct-12	0
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	12-Oct-12	17-Oct-12	0
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	12-Oct-12	17-Oct-12	0
RC.3.A.03.B.BS2.SC	Scaffolding	9	18-Sep-12	01-Oct-12	0
RC.3.B.01.B.BS2	Deformed high yield steel bars , Ø8-Ø12 mm dia.	9	18-Sep-12	01-Oct-12	0
RC.3.B.02.B.BS2	Deformed high yield steel bars , Ø14-Ø28 mm dia.	9	18-Sep-12	01-Oct-12	0
1st Basement		19	17-Oct-12	19-Nov-12	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	31-Oct-12	09-Nov-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	17-Oct-12	31-Oct-12	0
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	15-Nov-12	19-Nov-12	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	15-Nov-12	19-Nov-12	0
RC.3.A.03.B.BS1.SC	Scaffolding	6	17-Oct-12	31-Oct-12	0
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	17-Oct-12	31-Oct-12	0
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	17-Oct-12	31-Oct-12	0
Ground Floor		15	19-Nov-12	10-Dec-12	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	27-Nov-12	30-Nov-12	0
RC.3.A.03.B.GR.FW	Formwork	6	19-Nov-12	27-Nov-12	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	06-Dec-12	10-Dec-12	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	06-Dec-12	10-Dec-12	0
RC.3.A.03.B.GR.SC	Scaffolding	6	19-Nov-12	27-Nov-12	0



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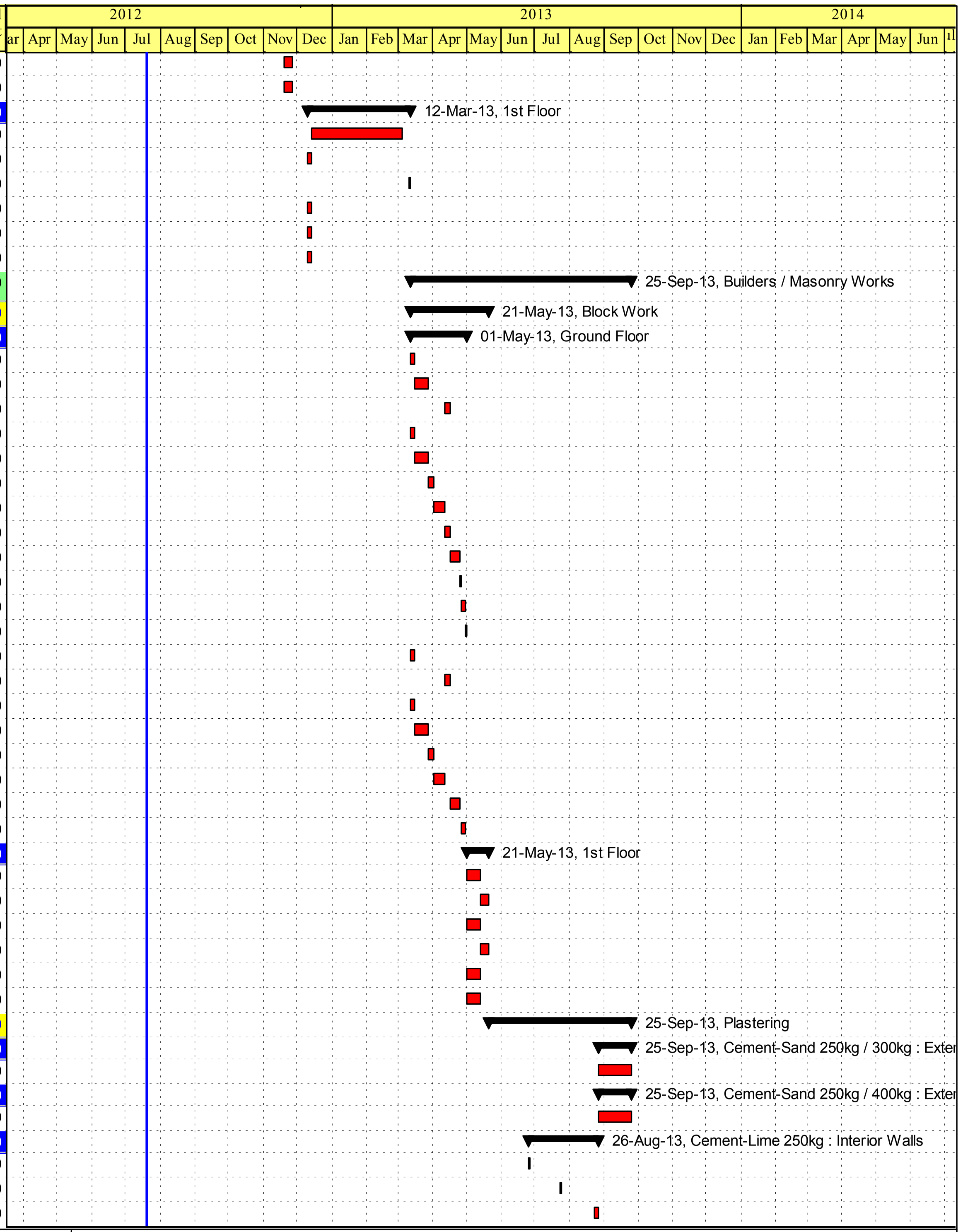
RC.3.B.01.B.GR	Deformed high yeild steel bars , Ø8-Ø12 mm dia.	6	19-Nov-12	27-Nov-12	0
RC.3.B.02.B.GR	Deformed high yeild steel bars , Ø14-Ø28 mm dia.	6	19-Nov-12	27-Nov-12	0
1st Floor		65	10-Dec-12	12-Mar-13	0
RC.3.A.03.B.1F	Placing of Concrete Class C30 for superstructure abov...	3	14-Dec-12	05-Mar-13	0
RC.3.A.03.B.1F.FW	Formwork	4	10-Dec-12	14-Dec-12	0
RC.3.A.03.B.1F.RFW	Removal of Formwork	1	11-Mar-13	12-Mar-13	0
RC.3.A.03.B.1F.SC	Scaffolding	4	10-Dec-12	14-Dec-12	0
RC.3.B.01.B.1F	Deformed high yeild steel bars , Ø8-Ø12 mm dia.	4	10-Dec-12	14-Dec-12	0
RC.3.B.02.B.1F	Deformed high yeild steel bars , Ø14-Ø28 mm dia.	4	10-Dec-12	14-Dec-12	0
Builders / Masonry Works		136	12-Mar-13	25-Sep-13	0
Block Work		49	12-Mar-13	21-May-13	0
Ground Floor		35	12-Mar-13	01-May-13	0
RC.4.A.01.A.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	12-Mar-13	15-Mar-13	0
RC.4.A.01.B.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	15-Mar-13	28-Mar-13	0
RC.4.A.01.E.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	11-Apr-13	16-Apr-13	0
RC.4.A.02.A.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	12-Mar-13	15-Mar-13	0
RC.4.A.02.B.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	15-Mar-13	28-Mar-13	0
RC.4.A.02.C.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	28-Mar-13	02-Apr-13	0
RC.4.A.02.D.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	02-Apr-13	11-Apr-13	0
RC.4.A.02.E.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	11-Apr-13	16-Apr-13	0
RC.4.A.02.F.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	16-Apr-13	25-Apr-13	0
RC.4.A.02.G.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	25-Apr-13	26-Apr-13	0
RC.4.A.02.H.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	26-Apr-13	30-Apr-13	0
RC.4.A.02.I.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	30-Apr-13	01-May-13	0
RC.4.A.03.A.GR	Bims block wall, 150 mm thick, laid in sand-cement mortar	3	12-Mar-13	15-Mar-13	0
RC.4.A.03.E.GR	Bims block wall, 150 mm thick, laid in sand-cement mortar	3	11-Apr-13	16-Apr-13	0
RC.4.A.04.A.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	12-Mar-13	15-Mar-13	0
RC.4.A.04.B.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	15-Mar-13	28-Mar-13	0
RC.4.A.04.C.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	28-Mar-13	02-Apr-13	0
RC.4.A.04.D.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	02-Apr-13	11-Apr-13	0
RC.4.A.04.F.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	16-Apr-13	25-Apr-13	0
RC.4.A.04.H.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	26-Apr-13	30-Apr-13	0
1st Floor		14	01-May-13	21-May-13	0
RC.4.A.01.A.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	8	01-May-13	13-May-13	0
RC.4.A.01.B.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	6	13-May-13	21-May-13	0
RC.4.A.02.A.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	8	01-May-13	13-May-13	0
RC.4.A.02.B.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	13-May-13	21-May-13	0
RC.4.A.03.A.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	8	01-May-13	13-May-13	0
RC.4.A.04.A.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	8	01-May-13	13-May-13	0
Plastering		87	21-May-13	25-Sep-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	27-Aug-13	25-Sep-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg ...	20	27-Aug-13	25-Sep-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	27-Aug-13	25-Sep-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg ...	20	27-Aug-13	25-Sep-13	0
Cement-Lime 250kg : Interior Walls		41	25-Jun-13	26-Aug-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 25...	1	25-Jun-13	26-Jun-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 25...	1	23-Jul-13	24-Jul-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 25...	1	23-Aug-13	26-Aug-13	0



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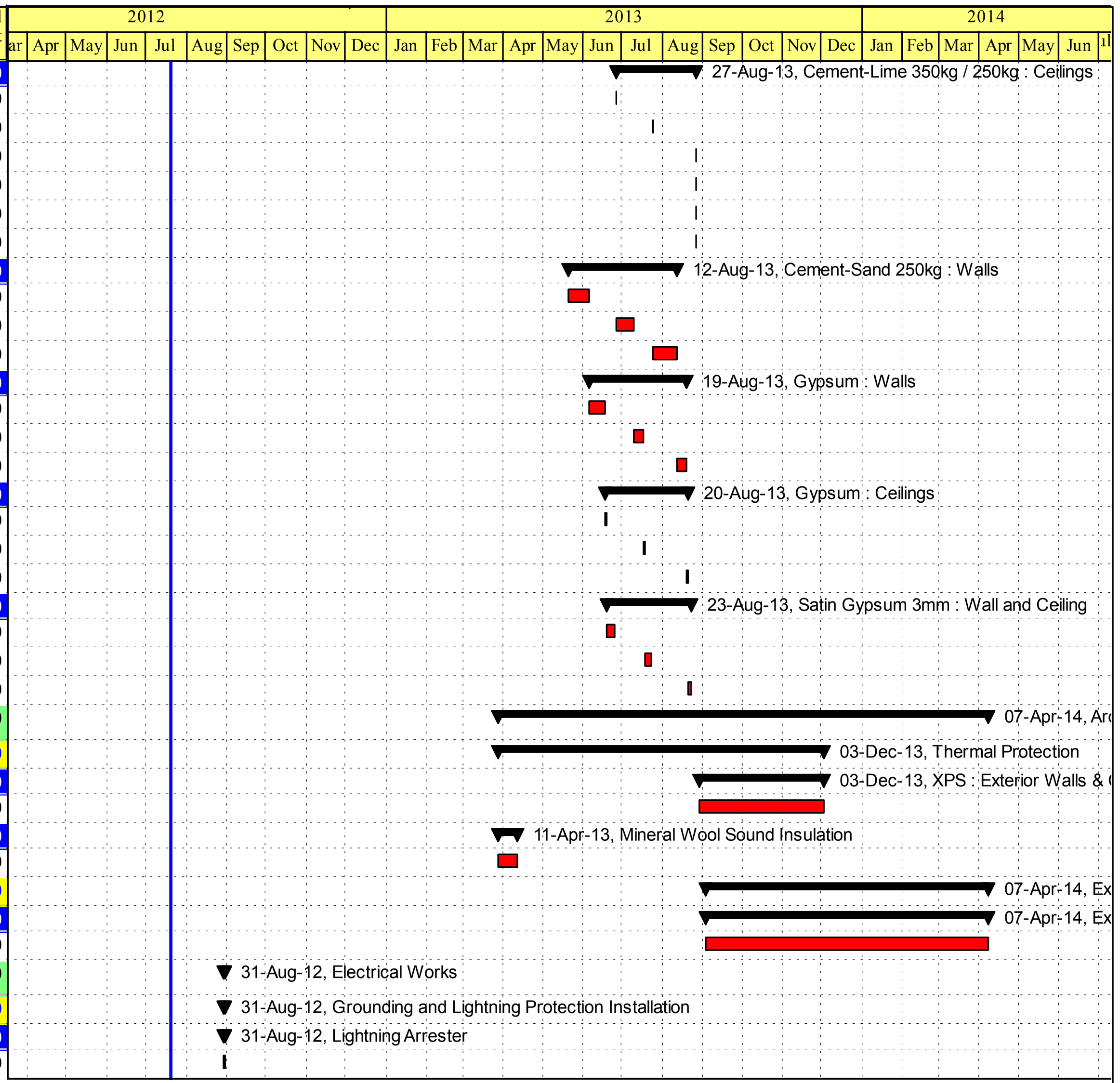
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
Cement-Lime 350kg / 250kg : Ceilings		41	26-Jun-13	27-Aug-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with fir...	1	26-Jun-13	27-Jun-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with fir...	1	24-Jul-13	25-Jul-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with fir...	1	26-Aug-13	27-Aug-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with fir...	1	26-Aug-13	27-Aug-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with fir...	1	26-Aug-13	27-Aug-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with fir...	1	26-Aug-13	27-Aug-13	0
Cement-Sand 250kg : Walls		56	21-May-13	12-Aug-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg c...	12	21-May-13	06-Jun-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg c...	9	27-Jun-13	10-Jul-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg c...	9	25-Jul-13	12-Aug-13	0
Gypsum : Walls		49	06-Jun-13	19-Aug-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat ceme...	8	06-Jun-13	18-Jun-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat ceme...	5	10-Jul-13	17-Jul-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat ceme...	5	12-Aug-13	19-Aug-13	0
Gypsum : Ceilings		42	18-Jun-13	20-Aug-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	18-Jun-13	19-Jun-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	17-Jul-13	18-Jul-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	19-Aug-13	20-Aug-13	0
Satin Gypsum 3mm : Wall and Ceiling		44	19-Jun-13	23-Aug-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	4	19-Jun-13	25-Jun-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	3	18-Jul-13	23-Jul-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	3	20-Aug-13	23-Aug-13	0
Architectural Works		255	28-Mar-13	07-Apr-14	0
Thermal Protection		167	28-Mar-13	03-Dec-13	0
XPS : Exterior Walls & Ceilings		61	29-Aug-13	03-Dec-13	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer o...	61	29-Aug-13	03-Dec-13	0
Mineral Wool Sound Insulation		10	28-Mar-13	11-Apr-13	0
RC.5.A.07	Mineral wool sound insulation, 50 mm thick, to walls, cei...	10	28-Mar-13	11-Apr-13	0
Exterior Brick Facing		147	03-Sep-13	07-Apr-14	0
Exterior Brick Facing		147	03-Sep-13	07-Apr-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesi...	93	03-Sep-13	07-Apr-14	0
Electrical Works		1	29-Aug-12	31-Aug-12	0
Grounding and Lightning Protection Installation		1	29-Aug-12	31-Aug-12	0
Lightning Arrester		1	29-Aug-12	31-Aug-12	0
RC.7.M.3.B	95mm² monotron cable	1	29-Aug-12	31-Aug-12	0



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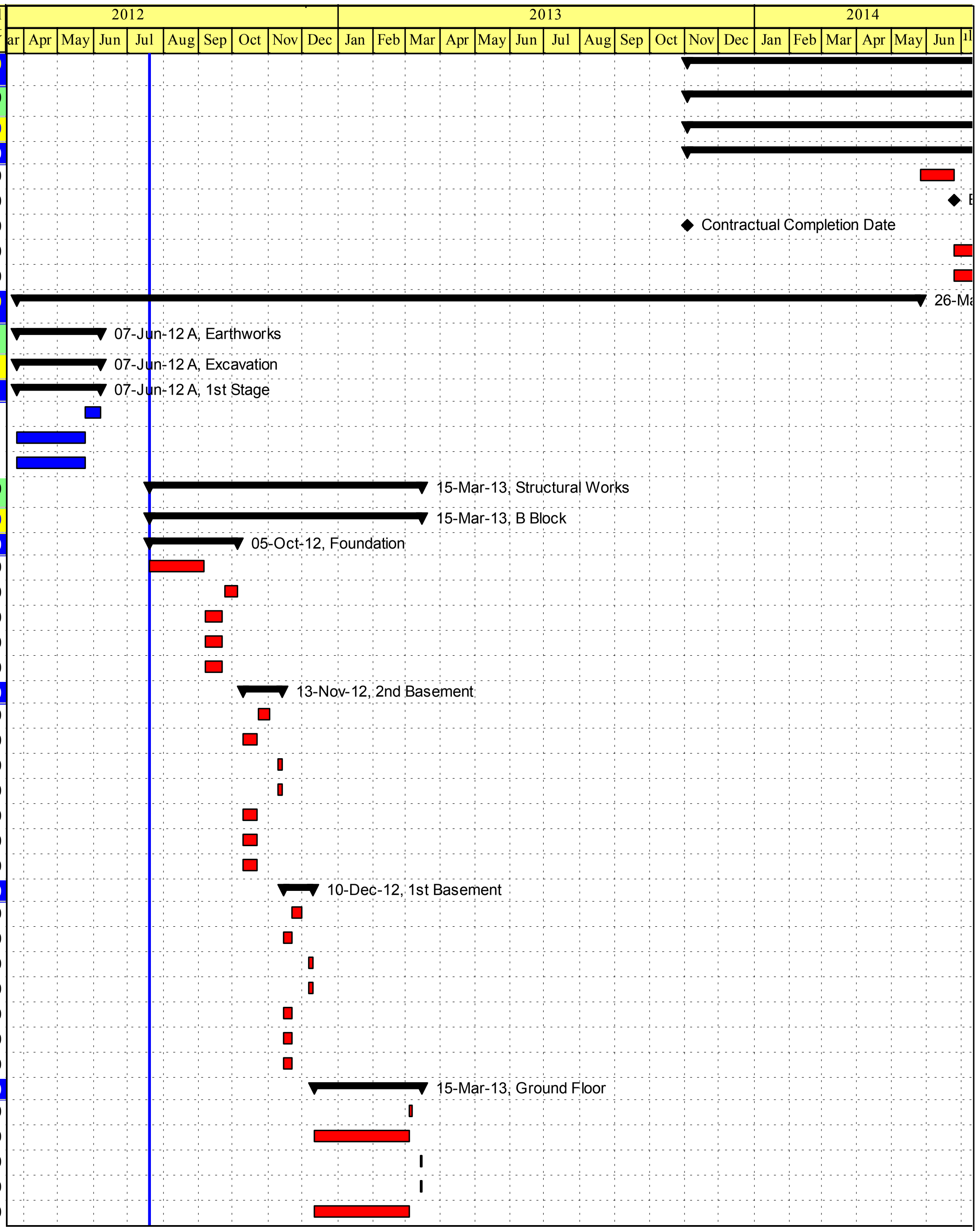
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		194	03-Nov-13	09-Aug-14	0
General		194	03-Nov-13	09-Aug-14	0
General		194	03-Nov-13	09-Aug-14	0
General		194	03-Nov-13	09-Aug-14	0
GEN99100	Tests on Completion	30	26-May-14	25-Jun-14	0
GEN99500	Earliest Completion of All Scope	0		25-Jun-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	25-Jun-14	09-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	25-Jun-14	09-Aug-14	0
RECEPTION CENTER		542	20-Jul-12	26-May-14	0
Earthworks		55	20-Jul-12	20-Jul-12	
Excavation		55	20-Jul-12	20-Jul-12	
1st Stage		55	20-Jul-12	20-Jul-12	
EVENT NO. 1	Unreasonable Production Rate Estimation	14	20-Jul-12	20-Jul-12	
RC.2.A.02.B.1	Excavation for foundation in any type of soil other than r...	42	20-Jul-12	20-Jul-12	
RC.2.A.03.A.1	Excavation for foundation in rock : 1st Stage	42	20-Jul-12	20-Jul-12	
Structural Works		163	20-Jul-12	15-Mar-13	0
B Block		163	20-Jul-12	15-Mar-13	0
Foundation		53	20-Jul-12	05-Oct-12	0
EVENT NO. 2	Additional Excavation and Backfilling	31	20-Jul-12	05-Sep-12	0
RC.3.A.02.B	Placing of concrete Class C30 for raft foundation, inclu...	10	24-Sep-12	05-Oct-12	0
RC.3.A.02.B.FW	Formwork	11	07-Sep-12	21-Sep-12	0
RC.3.B.01.B.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	11	07-Sep-12	21-Sep-12	0
RC.3.B.02.B.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	11	07-Sep-12	21-Sep-12	0
2nd Basement		21	10-Oct-12	13-Nov-12	0
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	23-Oct-12	02-Nov-12	0
RC.3.A.03.B.BS2.FW	Formwork	9	10-Oct-12	22-Oct-12	0
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	09-Nov-12	13-Nov-12	0
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	09-Nov-12	13-Nov-12	0
RC.3.A.03.B.BS2.SC	Scaffolding	9	10-Oct-12	22-Oct-12	0
RC.3.B.01.B.BS2	Deformed high yield steel bars , Ø8-Ø12 mm dia.	9	10-Oct-12	22-Oct-12	0
RC.3.B.02.B.BS2	Deformed high yield steel bars , Ø14-Ø28 mm dia.	9	10-Oct-12	22-Oct-12	0
1st Basement		19	14-Nov-12	10-Dec-12	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	22-Nov-12	30-Nov-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	14-Nov-12	21-Nov-12	0
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	07-Dec-12	10-Dec-12	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	07-Dec-12	10-Dec-12	0
RC.3.A.03.B.BS1.SC	Scaffolding	6	14-Nov-12	21-Nov-12	0
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	14-Nov-12	21-Nov-12	0
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	14-Nov-12	21-Nov-12	0
Ground Floor		68	11-Dec-12	15-Mar-13	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	05-Mar-13	07-Mar-13	0
RC.3.A.03.B.GR.FW	Formwork	6	11-Dec-12	04-Mar-13	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	14-Mar-13	15-Mar-13	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	14-Mar-13	15-Mar-13	0
RC.3.A.03.B.GR.SC	Scaffolding	6	11-Dec-12	04-Mar-13	0



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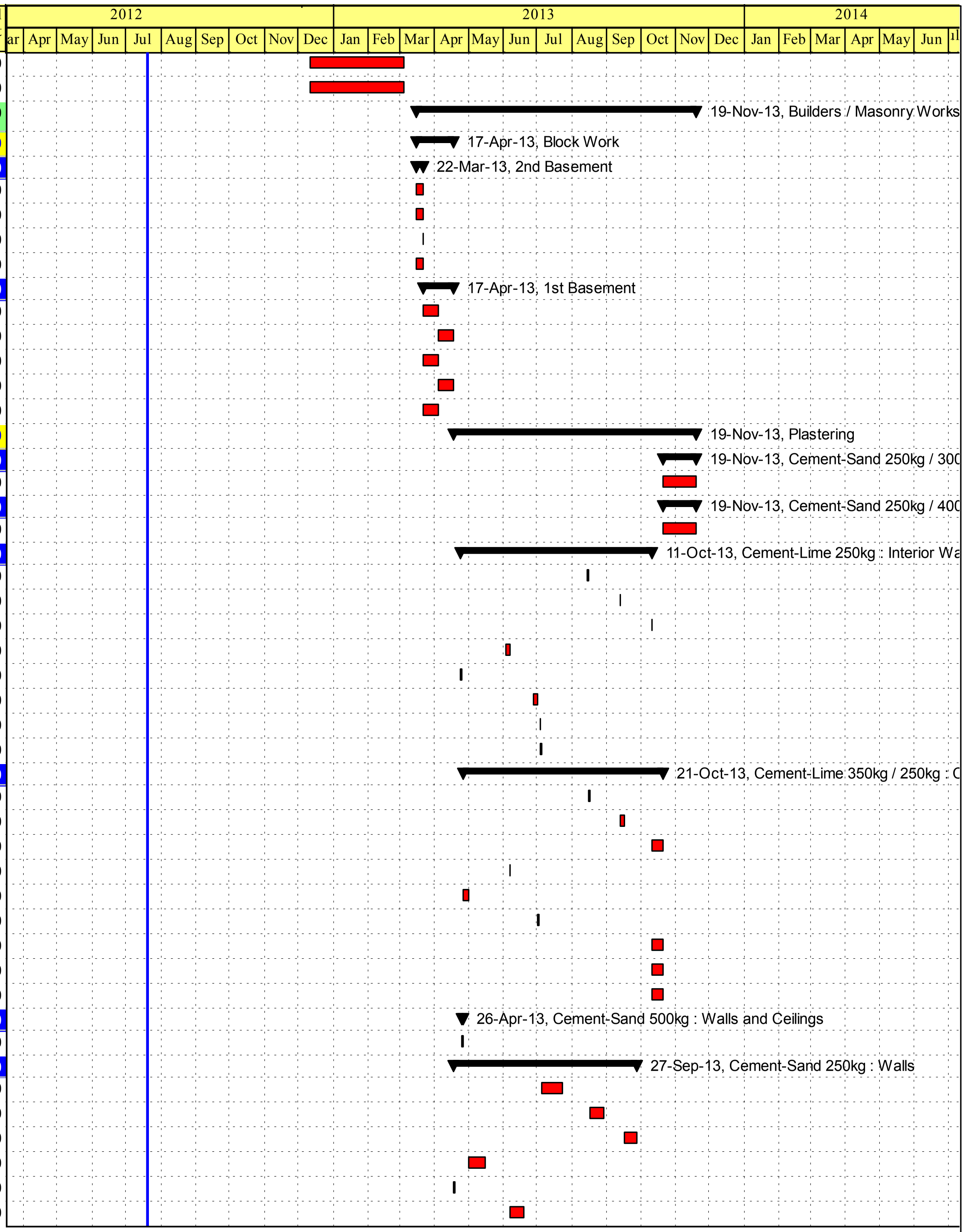
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	11-Dec-12	04-Mar-13	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	11-Dec-12	04-Mar-13	0
Builders / Masonry Works		166	15-Mar-13	19-Nov-13	0
Block Work		23	15-Mar-13	17-Apr-13	0
2nd Basement		5	15-Mar-13	22-Mar-13	0
RC.4.A.01.B.BS2	Bims block wall, 250 mm thick, laid in sand-cement mortar	4	15-Mar-13	21-Mar-13	0
RC.4.A.02.B.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	15-Mar-13	21-Mar-13	0
RC.4.A.02.C.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	21-Mar-13	22-Mar-13	0
RC.4.A.04.B.BS2	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	15-Mar-13	21-Mar-13	0
1st Basement		18	22-Mar-13	17-Apr-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	22-Mar-13	04-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	04-Apr-13	17-Apr-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	22-Mar-13	04-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	04-Apr-13	17-Apr-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	22-Mar-13	04-Apr-13	0
Plastering		143	17-Apr-13	19-Nov-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	21-Oct-13	19-Nov-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg ...	20	21-Oct-13	19-Nov-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	21-Oct-13	19-Nov-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg ...	20	21-Oct-13	19-Nov-13	0
Cement-Lime 250kg : Interior Walls		118	24-Apr-13	11-Oct-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 25...	1	14-Aug-13	15-Aug-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 25...	1	12-Sep-13	13-Sep-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 25...	1	10-Oct-13	11-Oct-13	0
RC.4.C.03.BS1	Cement-lime-sand plaster, applied in two coats, with 25...	3	03-Jun-13	06-Jun-13	0
RC.4.C.03.BS2	Cement-lime-sand plaster, applied in two coats, with 25...	1	24-Apr-13	25-Apr-13	0
RC.4.C.03.GR	Cement-lime-sand plaster, applied in two coats, with 25...	2	27-Jun-13	01-Jul-13	0
RC.4.C.03.H	Cement-lime-sand plaster, applied in two coats, with 25...	1	03-Jul-13	04-Jul-13	0
RC.4.C.03.I	Cement-lime-sand plaster, applied in two coats, with 25...	1	04-Jul-13	05-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		117	26-Apr-13	21-Oct-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with fir...	1	15-Aug-13	16-Aug-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with fir...	1	13-Sep-13	16-Sep-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with fir...	1	11-Oct-13	21-Oct-13	0
RC.4.C.04.BS1	Cement-lime-sand plaster, applied in two coats, with fir...	1	06-Jun-13	07-Jun-13	0
RC.4.C.04.BS2	Cement-lime-sand plaster, applied in two coats, with fir...	3	26-Apr-13	01-May-13	0
RC.4.C.04.GR	Cement-lime-sand plaster, applied in two coats, with fir...	1	01-Jul-13	02-Jul-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with fir...	1	11-Oct-13	21-Oct-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with fir...	1	11-Oct-13	21-Oct-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with fir...	1	11-Oct-13	21-Oct-13	0
Cement-Sand 500kg : Walls and Ceilings		1	25-Apr-13	26-Apr-13	0
RC.4.C.05.BS2	Cement-sand plaster, applied in one coat, with 500 kg c...	1	25-Apr-13	26-Apr-13	0
Cement-Sand 250kg : Walls		112	17-Apr-13	27-Sep-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg c...	12	05-Jul-13	23-Jul-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg c...	9	16-Aug-13	29-Aug-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg c...	9	16-Sep-13	27-Sep-13	0
RC.4.C.06.BS1	Cement-sand plaster, applied in one coat, with 250 kg c...	11	01-May-13	16-May-13	0
RC.4.C.06.BS2	Cement-sand plaster, applied in one coat, with 250 kg c...	1	17-Apr-13	18-Apr-13	0
RC.4.C.06.GR	Cement-sand plaster, applied in one coat, with 250 kg c...	8	07-Jun-13	19-Jun-13	0



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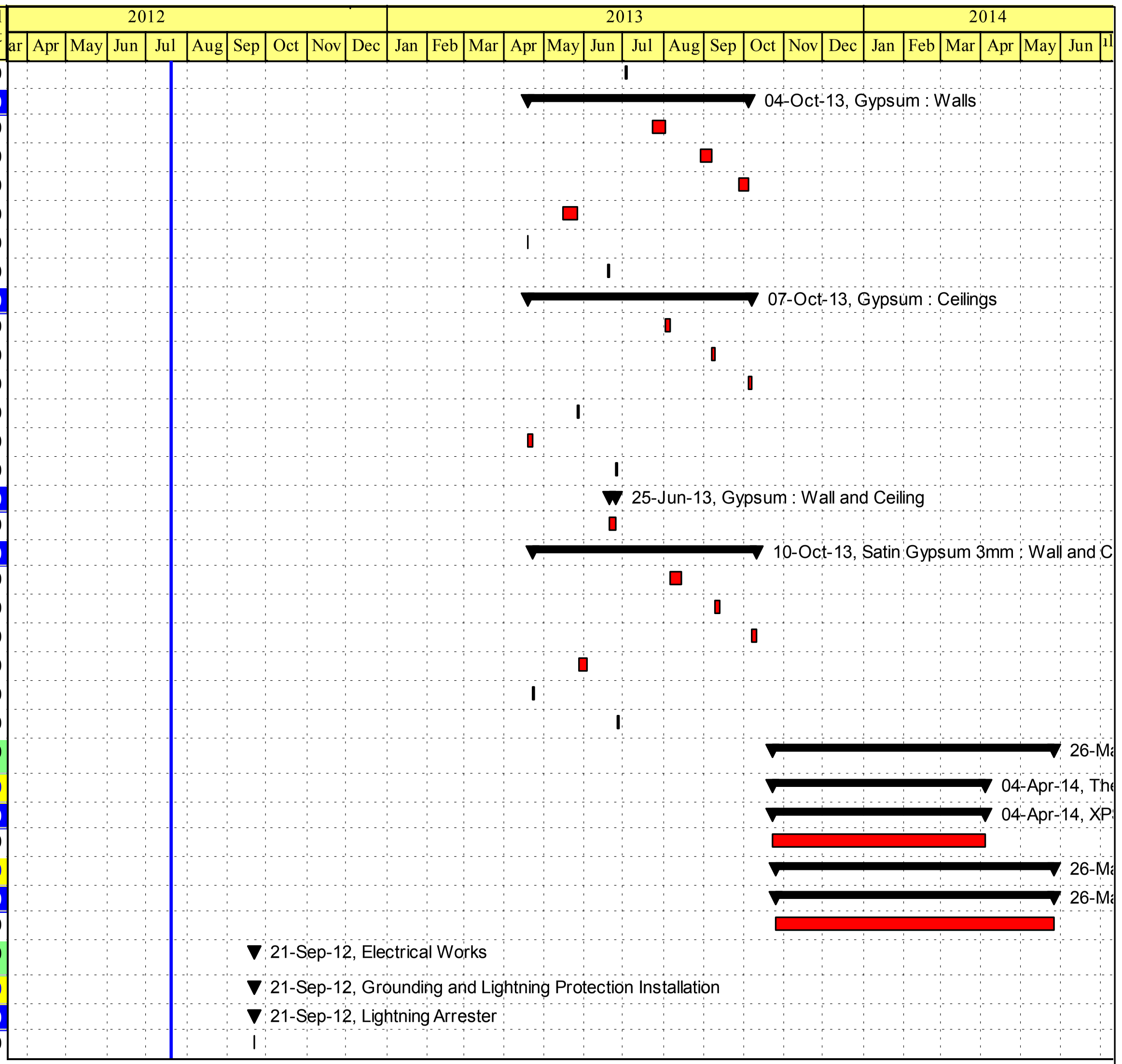
RC.4.C.06.H	Cement-sand plaster, applied in one coat, with 250 kg c...	1	02-Jul-13	03-Jul-13	0
Gypsum : Walls		116	18-Apr-13	04-Oct-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat ceme...	8	23-Jul-13	02-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat ceme...	5	29-Aug-13	06-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat ceme...	5	27-Sep-13	04-Oct-13	0
RC.4.C.08.BS1	Gypsum plaster, applied in one coat, to one coat ceme...	7	16-May-13	27-May-13	0
RC.4.C.08.BS2	Gypsum plaster, applied in one coat, to one coat ceme...	1	18-Apr-13	19-Apr-13	0
RC.4.C.08.GR	Gypsum plaster, applied in one coat, to one coat ceme...	1	19-Jun-13	20-Jun-13	0
Gypsum : Ceilings		116	19-Apr-13	07-Oct-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	02-Aug-13	05-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	06-Sep-13	09-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	04-Oct-13	07-Oct-13	0
RC.4.C.09.BS1	Gypsum plaster, applied in one coat, to ceilings	1	27-May-13	28-May-13	0
RC.4.C.09.BS2	Gypsum plaster, applied in one coat, to ceilings	1	19-Apr-13	22-Apr-13	0
RC.4.C.09.GR	Gypsum plaster, applied in one coat, to ceilings	1	25-Jun-13	26-Jun-13	0
Gypsum : Wall and Ceiling		3	20-Jun-13	25-Jun-13	0
RC.4.C.10.GR	Gypsum priming, to wall and ceiling plaster	3	20-Jun-13	25-Jun-13	0
Satin Gypsum 3mm : Wall and Ceiling		118	22-Apr-13	10-Oct-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	4	05-Aug-13	14-Aug-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	3	09-Sep-13	12-Sep-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	3	07-Oct-13	10-Oct-13	0
RC.4.C.11.BS1	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	4	28-May-13	03-Jun-13	0
RC.4.C.11.BS2	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	1	22-Apr-13	24-Apr-13	0
RC.4.C.11.GR	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	1	26-Jun-13	27-Jun-13	0
Architectural Works		149	23-Oct-13	26-May-14	0
Thermal Protection		115	23-Oct-13	04-Apr-14	0
XPS : Exterior Walls & Ceilings		115	23-Oct-13	04-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer o...	61	23-Oct-13	04-Apr-14	0
Exterior Brick Facing		147	25-Oct-13	26-May-14	0
Exterior Brick Facing		147	25-Oct-13	26-May-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesi...	93	25-Oct-13	26-May-14	0
Electrical Works		1	21-Sep-12	21-Sep-12	0
Grounding and Lightning Protection Installation		1	21-Sep-12	21-Sep-12	0
Lightning Arrester		1	21-Sep-12	21-Sep-12	0
RC.7.M.3.B	95mm² monotron cable	1	21-Sep-12	21-Sep-12	0



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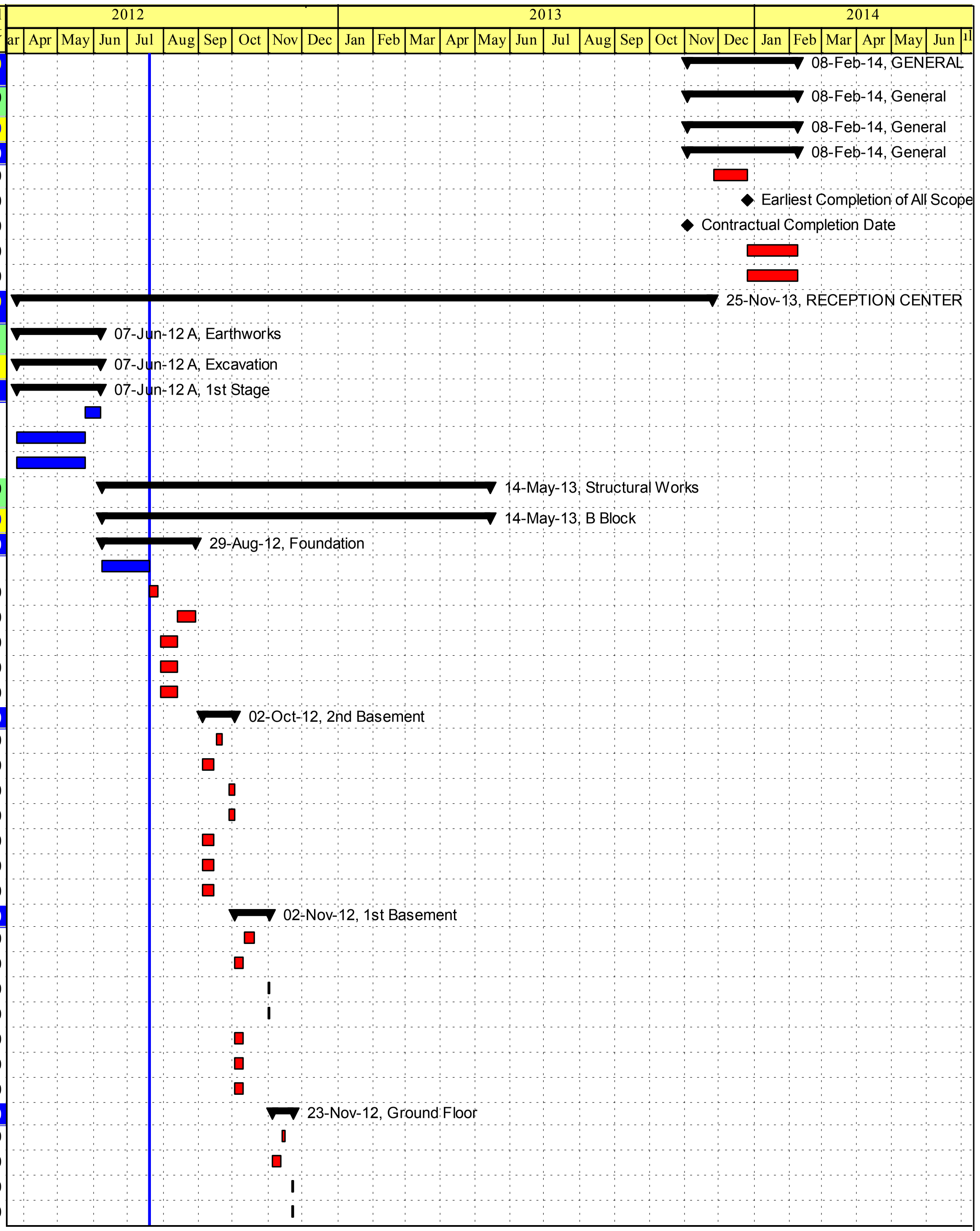
GENERAL		69	03-Nov-13	08-Feb-14	0
General		69	03-Nov-13	08-Feb-14	0
General		69	03-Nov-13	08-Feb-14	0
General		69	03-Nov-13	08-Feb-14	0
GEN99100	Tests on Completion	30	26-Nov-13	25-Dec-13	0
GEN99500	Earliest Completion of All Scope	0		25-Dec-13	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	26-Dec-13	08-Feb-14	0
GEN99920	As-Built Drawings and Other Documents	45	26-Dec-13	08-Feb-14	0
RECEPTION CENTER		415	20-Jul-12	25-Nov-13	0
Earthworks		55	20-Jul-12	20-Jul-12	
Excavation		55	20-Jul-12	20-Jul-12	
1st Stage		55	20-Jul-12	20-Jul-12	
EVENT NO. 1	Unreasonable Production Rate Estimation	14	20-Jul-12	20-Jul-12	
RC.2.A.02.B.1	Excavation for foundation in any type of soil other than r...	42	20-Jul-12	20-Jul-12	
RC.2.A.03.A.1	Excavation for foundation in rock : 1st Stage	42	20-Jul-12	20-Jul-12	
Structural Works		234	20-Jul-12	14-May-13	0
B Block		234	20-Jul-12	14-May-13	0
Foundation		57	20-Jul-12	29-Aug-12	0
EVENT NO. 2	Additional Excavation and Backfilling	31	20-Jul-12	20-Jul-12	
EVENT NO. 3	Late Delivery of Reinforcement Steel	6	20-Jul-12	27-Jul-12	0
RC.3.A.02.B	Placing of concrete Class C30 for raft foundation, inclu...	10	14-Aug-12	29-Aug-12	0
RC.3.A.02.B.FW	Formwork	11	30-Jul-12	13-Aug-12	0
RC.3.B.01.B.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	11	30-Jul-12	13-Aug-12	0
RC.3.B.02.B.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	11	30-Jul-12	13-Aug-12	0
2nd Basement		21	04-Sep-12	02-Oct-12	0
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	17-Sep-12	21-Sep-12	0
RC.3.A.03.B.BS2.FW	Formwork	9	04-Sep-12	14-Sep-12	0
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	28-Sep-12	02-Oct-12	0
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	28-Sep-12	02-Oct-12	0
RC.3.A.03.B.BS2.SC	Scaffolding	9	04-Sep-12	14-Sep-12	0
RC.3.B.01.B.BS2	Deformed high yield steel bars , Ø8-Ø12 mm dia.	9	04-Sep-12	14-Sep-12	0
RC.3.B.02.B.BS2	Deformed high yield steel bars , Ø14-Ø28 mm dia.	9	04-Sep-12	14-Sep-12	0
1st Basement		19	03-Oct-12	02-Nov-12	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	11-Oct-12	19-Oct-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	03-Oct-12	10-Oct-12	0
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	01-Nov-12	02-Nov-12	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	01-Nov-12	02-Nov-12	0
RC.3.A.03.B.BS1.SC	Scaffolding	6	03-Oct-12	10-Oct-12	0
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	03-Oct-12	10-Oct-12	0
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	03-Oct-12	10-Oct-12	0
Ground Floor		15	05-Nov-12	23-Nov-12	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	13-Nov-12	15-Nov-12	0
RC.3.A.03.B.GR.FW	Formwork	6	05-Nov-12	12-Nov-12	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	22-Nov-12	23-Nov-12	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	22-Nov-12	23-Nov-12	0



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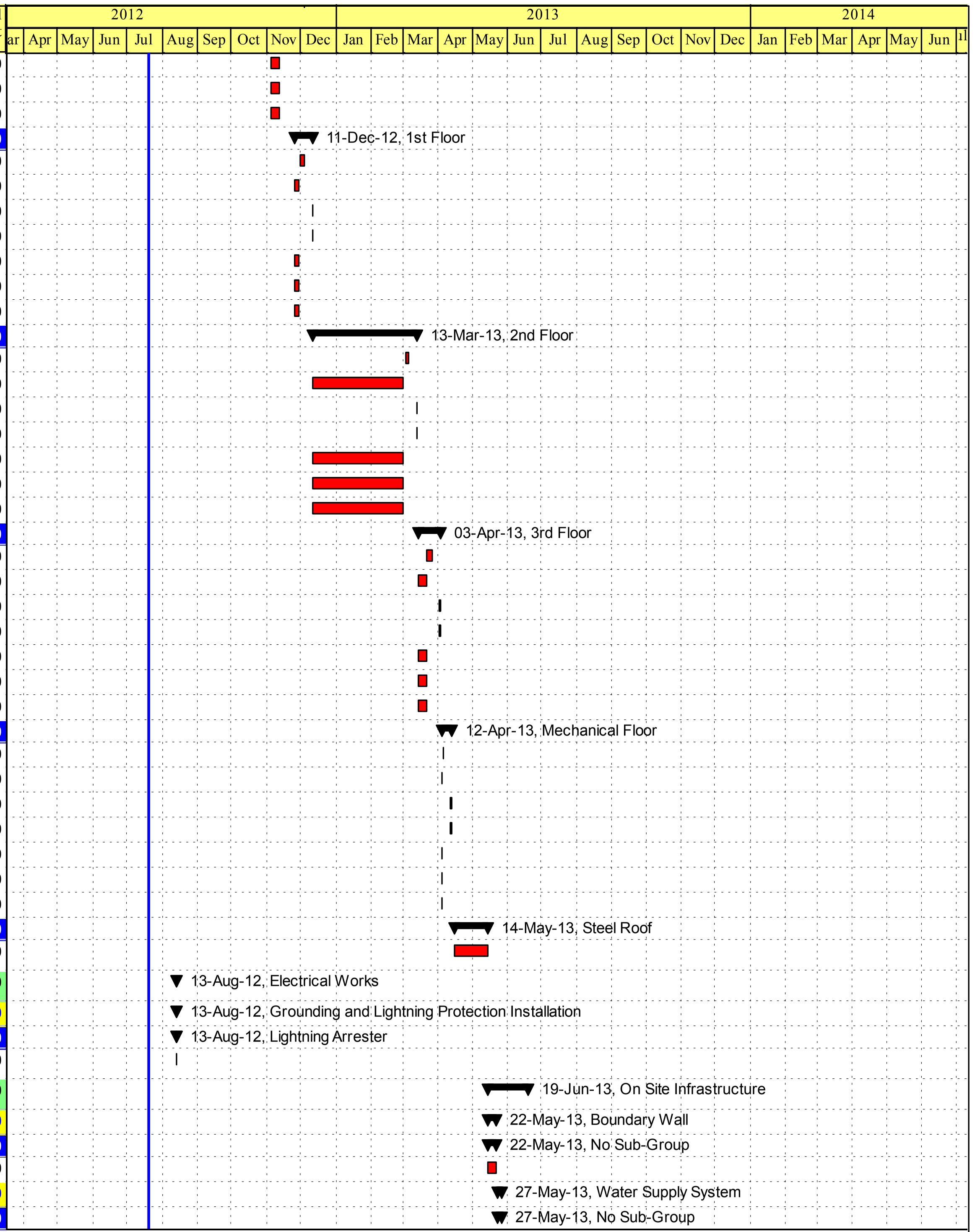
RC.3.A.03.B.GR.SC	Scaffolding	6	05-Nov-12	12-Nov-12	0
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	05-Nov-12	12-Nov-12	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	05-Nov-12	12-Nov-12	0
1st Floor		12	26-Nov-12	11-Dec-12	0
RC.3.A.03.B.1F	Placing of Concrete Class C30 for superstructure abov...	3	30-Nov-12	04-Dec-12	0
RC.3.A.03.B.1F.FW	Formwork	4	26-Nov-12	29-Nov-12	0
RC.3.A.03.B.1F.RFW	Removal of Formwork	1	11-Dec-12	11-Dec-12	0
RC.3.A.03.B.1F.RSC	Removal of Scaffolding	1	11-Dec-12	11-Dec-12	0
RC.3.A.03.B.1F.SC	Scaffolding	4	26-Nov-12	29-Nov-12	0
RC.3.B.01.B.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	26-Nov-12	29-Nov-12	0
RC.3.B.02.B.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	26-Nov-12	29-Nov-12	0
2nd Floor		65	12-Dec-12	13-Mar-13	0
RC.3.A.03.B.2F	Placing of Concrete Class C30 for superstructure abov...	3	04-Mar-13	06-Mar-13	0
RC.3.A.03.B.2F.FW	Formwork	4	12-Dec-12	01-Mar-13	0
RC.3.A.03.B.2F.RFW	Removal of Formwork	1	13-Mar-13	13-Mar-13	0
RC.3.A.03.B.2F.RSC	Removal of Scaffolding	1	13-Mar-13	13-Mar-13	0
RC.3.A.03.B.2F.SC	Scaffolding	4	12-Dec-12	01-Mar-13	0
RC.3.B.01.B.2F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	12-Dec-12	01-Mar-13	0
RC.3.B.02.B.2F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	12-Dec-12	01-Mar-13	0
3rd Floor		15	14-Mar-13	03-Apr-13	0
RC.3.A.03.B.3F	Placing of Concrete Class C30 for superstructure abov...	3	22-Mar-13	26-Mar-13	0
RC.3.A.03.B.3F.FW	Formwork	6	14-Mar-13	21-Mar-13	0
RC.3.A.03.B.3F.RFW	Removal of Formwork	2	02-Apr-13	03-Apr-13	0
RC.3.A.03.B.3F.RSC	Removal of Scaffolding	2	02-Apr-13	03-Apr-13	0
RC.3.A.03.B.3F.SC	Scaffolding	6	14-Mar-13	21-Mar-13	0
RC.3.B.01.B.3F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	14-Mar-13	21-Mar-13	0
RC.3.B.02.B.3F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	14-Mar-13	21-Mar-13	0
Mechanical Floor		7	04-Apr-13	12-Apr-13	0
RC.3.A.03.B.M	Placing of Concrete Class C30 for superstructure abov...	1	05-Apr-13	05-Apr-13	0
RC.3.A.03.B.M.FW	Formwork	1	04-Apr-13	04-Apr-13	0
RC.3.A.03.B.M.RFW	Removal of Formwork	1	12-Apr-13	12-Apr-13	0
RC.3.A.03.B.M.RSC	Removal of Scaffolding	1	12-Apr-13	12-Apr-13	0
RC.3.A.03.B.M.SC	Scaffolding	1	04-Apr-13	04-Apr-13	0
RC.3.B.01.B.M	Deformed high yield steel bars , Ø8-Ø12 mm dia.	1	04-Apr-13	04-Apr-13	0
RC.3.B.02.B.M	Deformed high yield steel bars , Ø14-Ø28 mm dia.	1	04-Apr-13	04-Apr-13	0
Steel Roof		21	15-Apr-13	14-May-13	0
RC.3.C.02.B	Roof support structure made with light steel profiles, in...	21	15-Apr-13	14-May-13	0
Electrical Works		1	13-Aug-12	13-Aug-12	0
Grounding and Lightning Protection Installation		1	13-Aug-12	13-Aug-12	0
Lightning Arrester		1	13-Aug-12	13-Aug-12	0
RC.7.M.3.B	95mm² monotron cable	1	13-Aug-12	13-Aug-12	0
On Site Infrastructure		26	15-May-13	19-Jun-13	0
Boundary Wall		6	15-May-13	22-May-13	0
No Sub-Group		6	15-May-13	22-May-13	0
RC.8.A.01.EX	Excavation for wall foundation including backfilling and c...	6	15-May-13	22-May-13	0
Water Supply System		3	23-May-13	27-May-13	0
No Sub-Group		3	23-May-13	27-May-13	0



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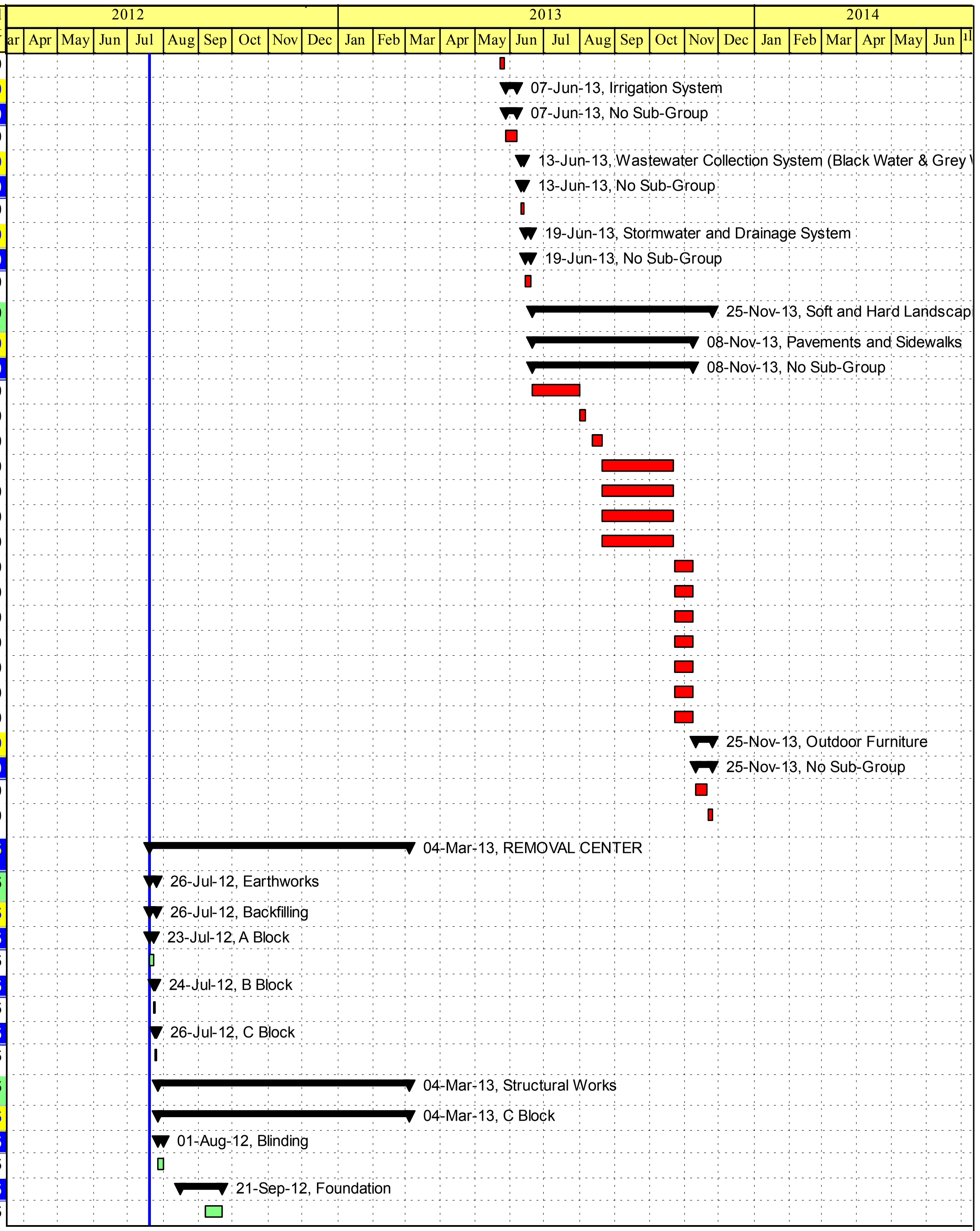
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.8.B.EXC	Excavation for Water Supply System Pipes	3	23-May-13	27-May-13	0
Irrigation System		9	28-May-13	07-Jun-13	0
No Sub-Group		9	28-May-13	07-Jun-13	0
RC.8.C.EXC	Excavation for Irrigation System Pipes	9	28-May-13	07-Jun-13	0
Wastewater Collection System (Black Water & Grey Water Lines)		4	10-Jun-13	13-Jun-13	0
No Sub-Group		4	10-Jun-13	13-Jun-13	0
RC.8.D.EXC	Excavation for Wastewater Pipes	4	10-Jun-13	13-Jun-13	0
Stormwater and Drainage System		4	14-Jun-13	19-Jun-13	0
No Sub-Group		4	14-Jun-13	19-Jun-13	0
RC.8.E.EXC	Excavation for Drainage System Pipes	4	14-Jun-13	19-Jun-13	0
Soft and Hard Landscaping		103	20-Jun-13	25-Nov-13	0
Pavements and Sidewalks		92	20-Jun-13	08-Nov-13	0
No Sub-Group		92	20-Jun-13	08-Nov-13	0
RC.9.B.01	Excavation for planting areas,pavements and sidewalks...	30	20-Jun-13	31-Jul-13	0
RC.9.B.02	Aggregate sub-base course	4	01-Aug-13	06-Aug-13	0
RC.9.B.04	Placing of concrete Class C16/20 including reinforcing ...	7	12-Aug-13	20-Aug-13	0
RC.9.B.05	Natural Ankara stone (andesite) flooring, 300x40 mm, fr...	39	21-Aug-13	22-Oct-13	0
RC.9.B.06	Natural Ankara stone (andesite) flooring, 400x400x40 m...	39	21-Aug-13	22-Oct-13	0
RC.9.B.07	Natural Ankara stone (andesite) curb, 10x15x50 cm, in...	39	21-Aug-13	22-Oct-13	0
RC.9.B.08	Natural Ankara stone (andesite) curb, 10x25x50 cm, in...	39	21-Aug-13	22-Oct-13	0
RC.9.B.09	Natural Ankara stone (andesite) wall cover, 30 mm thic...	12	23-Oct-13	08-Nov-13	0
RC.9.B.10	Natural Ankara stone (andesite) coping, 60 mm thick, la...	12	23-Oct-13	08-Nov-13	0
RC.9.B.11	Natural Ankara stone (andesite) stair tread, 350x40mm...	12	23-Oct-13	08-Nov-13	0
RC.9.B.13	Natural Ankara stone (andesite) gutter, 200 mm wide, l...	12	23-Oct-13	08-Nov-13	0
RC.9.B.14	Natural Ankara stone (andesite) skirting, 80x30mm, laid...	12	23-Oct-13	08-Nov-13	0
RC.9.B.15	Natural Ankara stone (andesite) sill, 30mm thick, laid wit...	12	23-Oct-13	08-Nov-13	0
RC.9.B.16	Cast-in-place terrazzo coping with white cement	12	23-Oct-13	08-Nov-13	0
Outdoor Furniture		11	11-Nov-13	25-Nov-13	0
No Sub-Group		11	11-Nov-13	25-Nov-13	0
RC.9.E.03	Pergola structure; as shown on the drawings	8	11-Nov-13	20-Nov-13	0
RC.9.E.04	Gazebo structure; as shown on the drawings	3	21-Nov-13	25-Nov-13	0
REMOVAL CENTER		154	20-Jul-12	04-Mar-13	5
Earthworks		5	20-Jul-12	26-Jul-12	5
Backfilling		5	20-Jul-12	26-Jul-12	5
A Block		2	20-Jul-12	23-Jul-12	5
RV.2.B.01.A	Stabilization layer, average 150 mm thick, under foundat...	2	20-Jul-12	23-Jul-12	5
B Block		1	24-Jul-12	24-Jul-12	5
RV.2.B.01.B	Stabilization layer, average 150 mm thick, under foundat...	1	24-Jul-12	24-Jul-12	5
C Block		2	25-Jul-12	26-Jul-12	5
RV.2.B.01.C	Stabilization layer, average 150 mm thick, under foundat...	2	25-Jul-12	26-Jul-12	5
Structural Works		149	27-Jul-12	04-Mar-13	5
C Block		149	27-Jul-12	04-Mar-13	5
Blinding		4	27-Jul-12	01-Aug-12	5
RV.3.A.01.C	Placing of concrete Class C14 for blinding and filling.	4	27-Jul-12	01-Aug-12	5
Foundation		24	16-Aug-12	21-Sep-12	5
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	07-Sep-12	21-Sep-12	5



🟦 Actual Work
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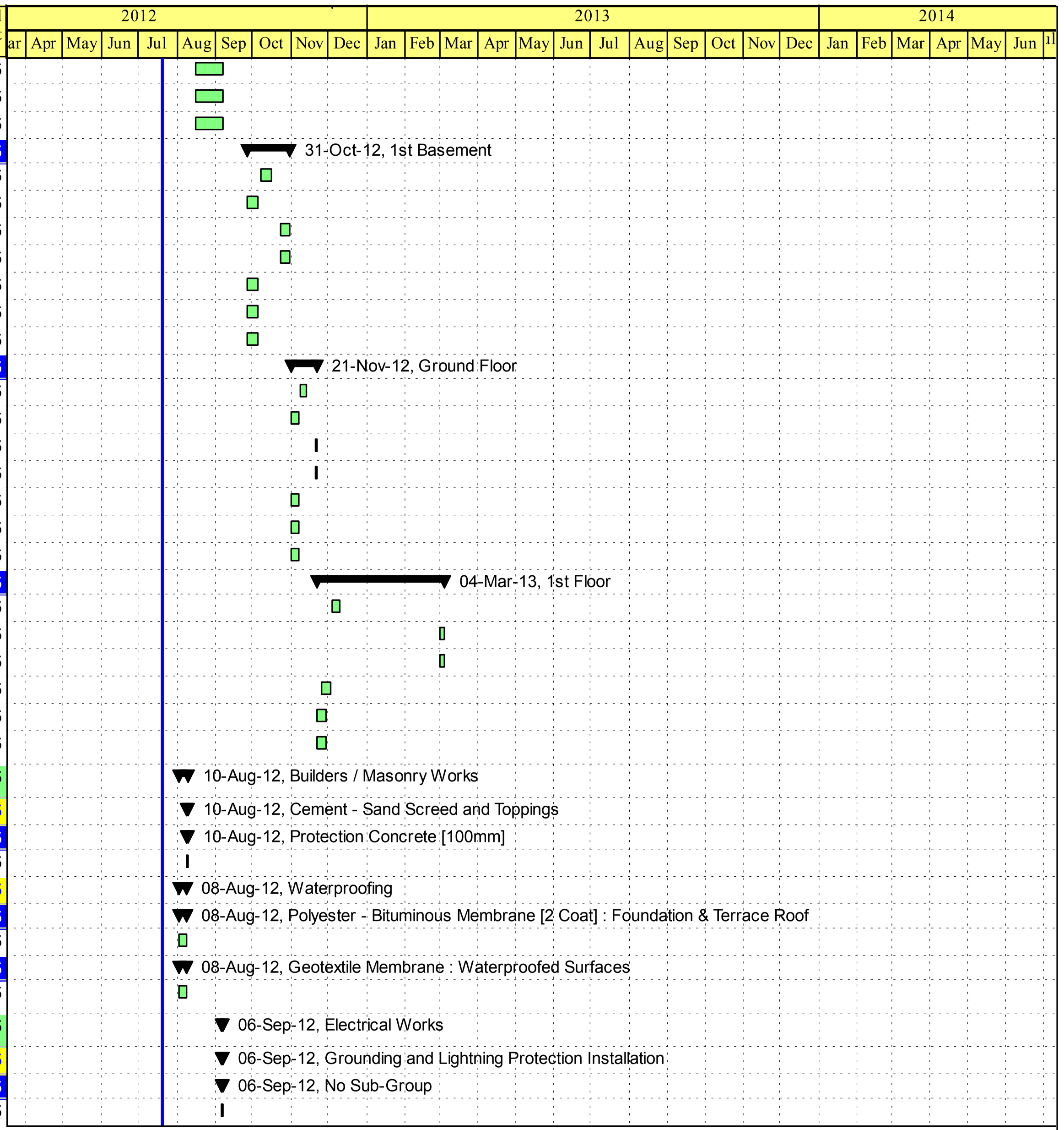
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.3.A.02.C.FW	Formwork	13	16-Aug-12	06-Sep-12	5
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	16-Aug-12	06-Sep-12	5
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	16-Aug-12	06-Sep-12	5
1st Basement		22	26-Sep-12	31-Oct-12	5
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	08-Oct-12	16-Oct-12	5
RV.3.A.03.C.BS1.FW	Formwork	8	26-Sep-12	05-Oct-12	5
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	23-Oct-12	31-Oct-12	5
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	23-Oct-12	31-Oct-12	5
RV.3.A.03.C.BS1.SC	Scaffolding	8	26-Sep-12	05-Oct-12	5
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	26-Sep-12	05-Oct-12	5
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	26-Sep-12	05-Oct-12	5
Ground Floor		15	01-Nov-12	21-Nov-12	5
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	08-Nov-12	13-Nov-12	5
RV.3.A.03.C.GR.FW	Formwork	5	01-Nov-12	07-Nov-12	5
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	20-Nov-12	21-Nov-12	5
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	20-Nov-12	21-Nov-12	5
RV.3.A.03.C.GR.SC	Scaffolding	5	01-Nov-12	07-Nov-12	5
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	01-Nov-12	07-Nov-12	5
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	01-Nov-12	07-Nov-12	5
1st Floor		72	22-Nov-12	04-Mar-13	5
RV.3.A.03.C.1F	Placing of Concrete Class C30 for superstructure abov...	5	04-Dec-12	10-Dec-12	5
RV.3.A.03.C.1F.RFW	Removal of Formwork	2	01-Mar-13	04-Mar-13	5
RV.3.A.03.C.1F.RSC	Removal of Scaffolding	2	01-Mar-13	04-Mar-13	5
RV.3.A.03.C.1F.SC	Scaffolding	6	26-Nov-12	03-Dec-12	5
RV.3.B.01.C.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	22-Nov-12	29-Nov-12	5
RV.3.B.02.C.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	22-Nov-12	29-Nov-12	5
Builders / Masonry Works		6	03-Aug-12	10-Aug-12	5
Cement - Sand Screed and Toppings		2	09-Aug-12	10-Aug-12	5
Protection Concrete [100mm]		2	09-Aug-12	10-Aug-12	5
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	09-Aug-12	10-Aug-12	5
Waterproofing		4	03-Aug-12	08-Aug-12	5
Polyester - Bituminous Membrane [2 Coat] : Foundation & Terrace Roof		4	03-Aug-12	08-Aug-12	5
RV.4.D.03.C.FN	Two coat waterproofing with polyester reinforced bitumi...	4	03-Aug-12	08-Aug-12	5
Geotextile Membrane : Waterproofed Surfaces		4	03-Aug-12	08-Aug-12	5
RV.4.D.05.C.FN	Geotextile protective membrane, to waterproofed surfac...	4	03-Aug-12	08-Aug-12	5
Electrical Works		1	06-Sep-12	06-Sep-12	5
Grounding and Lightning Protection Installation		1	06-Sep-12	06-Sep-12	5
No Sub-Group		1	06-Sep-12	06-Sep-12	5
RV.7.M.3.C	95mm² monotron cable	1	06-Sep-12	06-Sep-12	5



🟦 Actual Work
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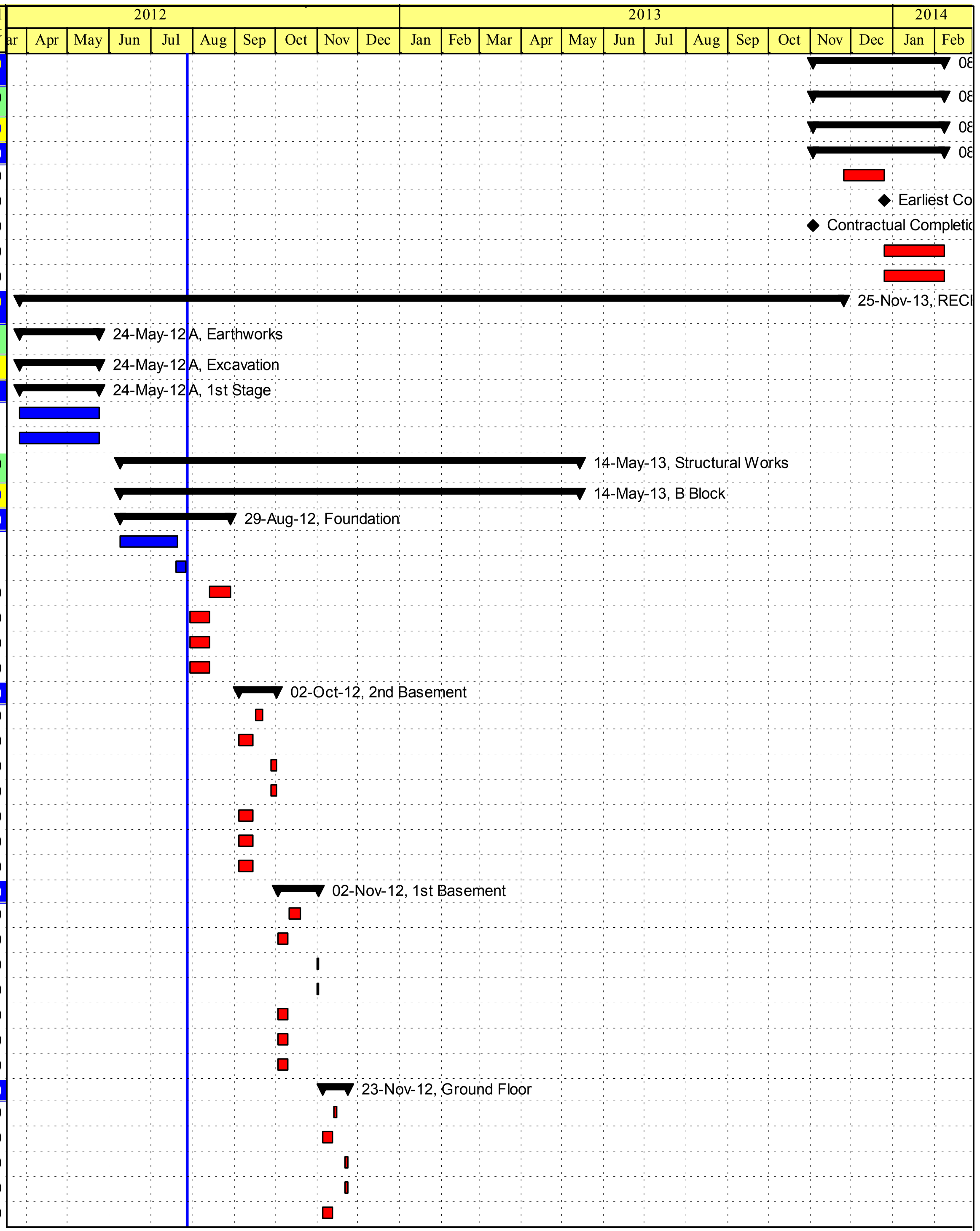
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		69	03-Nov-13	08-Feb-14	0
General		69	03-Nov-13	08-Feb-14	0
General		69	03-Nov-13	08-Feb-14	0
General		69	03-Nov-13	08-Feb-14	0
GEN99100	Tests on Completion	30	26-Nov-13	25-Dec-13	0
GEN99500	Earliest Completion of All Scope	0		25-Dec-13	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	26-Dec-13	08-Feb-14	0
GEN99920	As-Built Drawings and Other Documents	45	26-Dec-13	08-Feb-14	0
RECEPTION CENTER		415	28-Jul-12	25-Nov-13	0
Earthworks		42	28-Jul-12	28-Jul-12	
Excavation		42	28-Jul-12	28-Jul-12	
1st Stage		42	28-Jul-12	28-Jul-12	
RC.2.A.02.B.1	Excavation for foundation in any type of soil other than r...	42	28-Jul-12	28-Jul-12	
RC.2.A.03.A.1	Excavation for foundation in rock : 1st Stage	42	28-Jul-12	28-Jul-12	
Structural Works		234	28-Jul-12	14-May-13	0
B Block		234	28-Jul-12	14-May-13	0
Foundation		57	28-Jul-12	29-Aug-12	0
EVENT NO. 2	Additional Excavation and Backfilling	31	28-Jul-12	28-Jul-12	
EVENT NO. 3	Late Delivery of Reinforcement Steel	6	28-Jul-12	28-Jul-12	
RC.3.A.02.B	Placing of concrete Class C30 for raft foundation, inclu...	10	14-Aug-12	29-Aug-12	0
RC.3.A.02.B.FW	Formwork	11	30-Jul-12	13-Aug-12	0
RC.3.B.01.B.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	11	30-Jul-12	13-Aug-12	0
RC.3.B.02.B.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	11	30-Jul-12	13-Aug-12	0
2nd Basement		21	04-Sep-12	02-Oct-12	0
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	17-Sep-12	21-Sep-12	0
RC.3.A.03.B.BS2.FW	Formwork	9	04-Sep-12	14-Sep-12	0
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	28-Sep-12	02-Oct-12	0
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	28-Sep-12	02-Oct-12	0
RC.3.A.03.B.BS2.SC	Scaffolding	9	04-Sep-12	14-Sep-12	0
RC.3.B.01.B.BS2	Deformed high yield steel bars , Ø8-Ø12 mm dia.	9	04-Sep-12	14-Sep-12	0
RC.3.B.02.B.BS2	Deformed high yield steel bars , Ø14-Ø28 mm dia.	9	04-Sep-12	14-Sep-12	0
1st Basement		19	03-Oct-12	02-Nov-12	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	11-Oct-12	19-Oct-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	03-Oct-12	10-Oct-12	0
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	01-Nov-12	02-Nov-12	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	01-Nov-12	02-Nov-12	0
RC.3.A.03.B.BS1.SC	Scaffolding	6	03-Oct-12	10-Oct-12	0
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	03-Oct-12	10-Oct-12	0
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	03-Oct-12	10-Oct-12	0
Ground Floor		15	05-Nov-12	23-Nov-12	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	13-Nov-12	15-Nov-12	0
RC.3.A.03.B.GR.FW	Formwork	6	05-Nov-12	12-Nov-12	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	22-Nov-12	23-Nov-12	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	22-Nov-12	23-Nov-12	0
RC.3.A.03.B.GR.SC	Scaffolding	6	05-Nov-12	12-Nov-12	0



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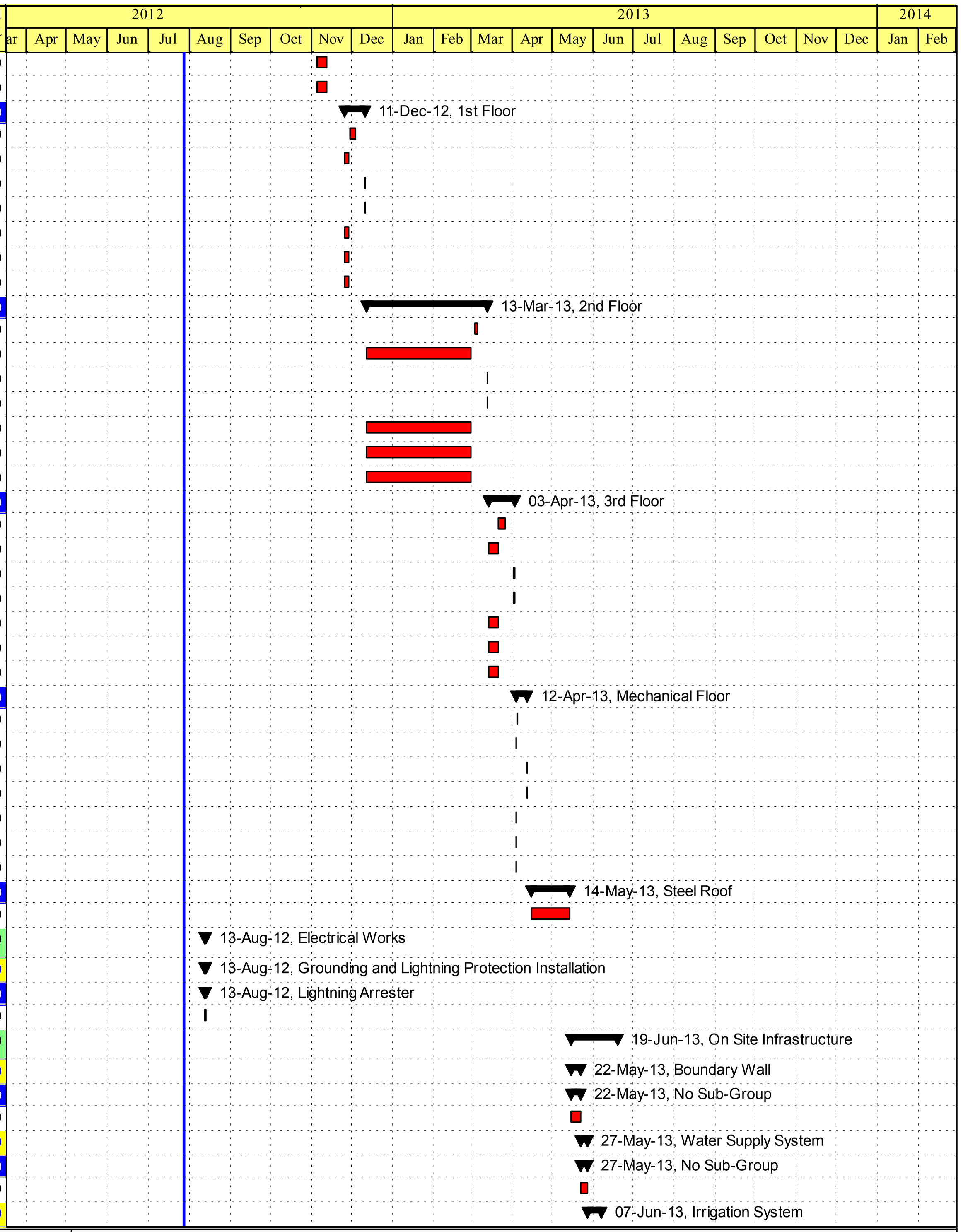
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	05-Nov-12	12-Nov-12	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	05-Nov-12	12-Nov-12	0
1st Floor		12	26-Nov-12	11-Dec-12	0
RC.3.A.03.B.1F	Placing of Concrete Class C30 for superstructure abov...	3	30-Nov-12	04-Dec-12	0
RC.3.A.03.B.1F.FW	Formwork	4	26-Nov-12	29-Nov-12	0
RC.3.A.03.B.1F.RFW	Removal of Formwork	1	11-Dec-12	11-Dec-12	0
RC.3.A.03.B.1F.RSC	Removal of Scaffolding	1	11-Dec-12	11-Dec-12	0
RC.3.A.03.B.1F.SC	Scaffolding	4	26-Nov-12	29-Nov-12	0
RC.3.B.01.B.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	26-Nov-12	29-Nov-12	0
RC.3.B.02.B.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	26-Nov-12	29-Nov-12	0
2nd Floor		65	12-Dec-12	13-Mar-13	0
RC.3.A.03.B.2F	Placing of Concrete Class C30 for superstructure abov...	3	04-Mar-13	06-Mar-13	0
RC.3.A.03.B.2F.FW	Formwork	4	12-Dec-12	01-Mar-13	0
RC.3.A.03.B.2F.RFW	Removal of Formwork	1	13-Mar-13	13-Mar-13	0
RC.3.A.03.B.2F.RSC	Removal of Scaffolding	1	13-Mar-13	13-Mar-13	0
RC.3.A.03.B.2F.SC	Scaffolding	4	12-Dec-12	01-Mar-13	0
RC.3.B.01.B.2F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	12-Dec-12	01-Mar-13	0
RC.3.B.02.B.2F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	12-Dec-12	01-Mar-13	0
3rd Floor		15	14-Mar-13	03-Apr-13	0
RC.3.A.03.B.3F	Placing of Concrete Class C30 for superstructure abov...	3	22-Mar-13	26-Mar-13	0
RC.3.A.03.B.3F.FW	Formwork	6	14-Mar-13	21-Mar-13	0
RC.3.A.03.B.3F.RFW	Removal of Formwork	2	02-Apr-13	03-Apr-13	0
RC.3.A.03.B.3F.RSC	Removal of Scaffolding	2	02-Apr-13	03-Apr-13	0
RC.3.A.03.B.3F.SC	Scaffolding	6	14-Mar-13	21-Mar-13	0
RC.3.B.01.B.3F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	14-Mar-13	21-Mar-13	0
RC.3.B.02.B.3F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	14-Mar-13	21-Mar-13	0
Mechanical Floor		7	04-Apr-13	12-Apr-13	0
RC.3.A.03.B.M	Placing of Concrete Class C30 for superstructure abov...	1	05-Apr-13	05-Apr-13	0
RC.3.A.03.B.M.FW	Formwork	1	04-Apr-13	04-Apr-13	0
RC.3.A.03.B.M.RFW	Removal of Formwork	1	12-Apr-13	12-Apr-13	0
RC.3.A.03.B.M.RSC	Removal of Scaffolding	1	12-Apr-13	12-Apr-13	0
RC.3.A.03.B.M.SC	Scaffolding	1	04-Apr-13	04-Apr-13	0
RC.3.B.01.B.M	Deformed high yield steel bars , Ø8-Ø12 mm dia.	1	04-Apr-13	04-Apr-13	0
RC.3.B.02.B.M	Deformed high yield steel bars , Ø14-Ø28 mm dia.	1	04-Apr-13	04-Apr-13	0
Steel Roof		21	15-Apr-13	14-May-13	0
RC.3.C.02.B	Roof support structure made with light steel profiles, in...	21	15-Apr-13	14-May-13	0
Electrical Works		1	13-Aug-12	13-Aug-12	0
Grounding and Lightning Protection Installation		1	13-Aug-12	13-Aug-12	0
Lightning Arrester		1	13-Aug-12	13-Aug-12	0
RC.7.M.3.B	95mm² monotron cable	1	13-Aug-12	13-Aug-12	0
On Site Infrastructure		26	15-May-13	19-Jun-13	0
Boundary Wall		6	15-May-13	22-May-13	0
No Sub-Group		6	15-May-13	22-May-13	0
RC.8.A.01.EX	Excavation for wall foundation including backfilling and c...	6	15-May-13	22-May-13	0
Water Supply System		3	23-May-13	27-May-13	0
No Sub-Group		3	23-May-13	27-May-13	0
RC.8.B.EXC	Excavation for Water Supply System Pipes	3	23-May-13	27-May-13	0
Irrigation System		9	28-May-13	07-Jun-13	0



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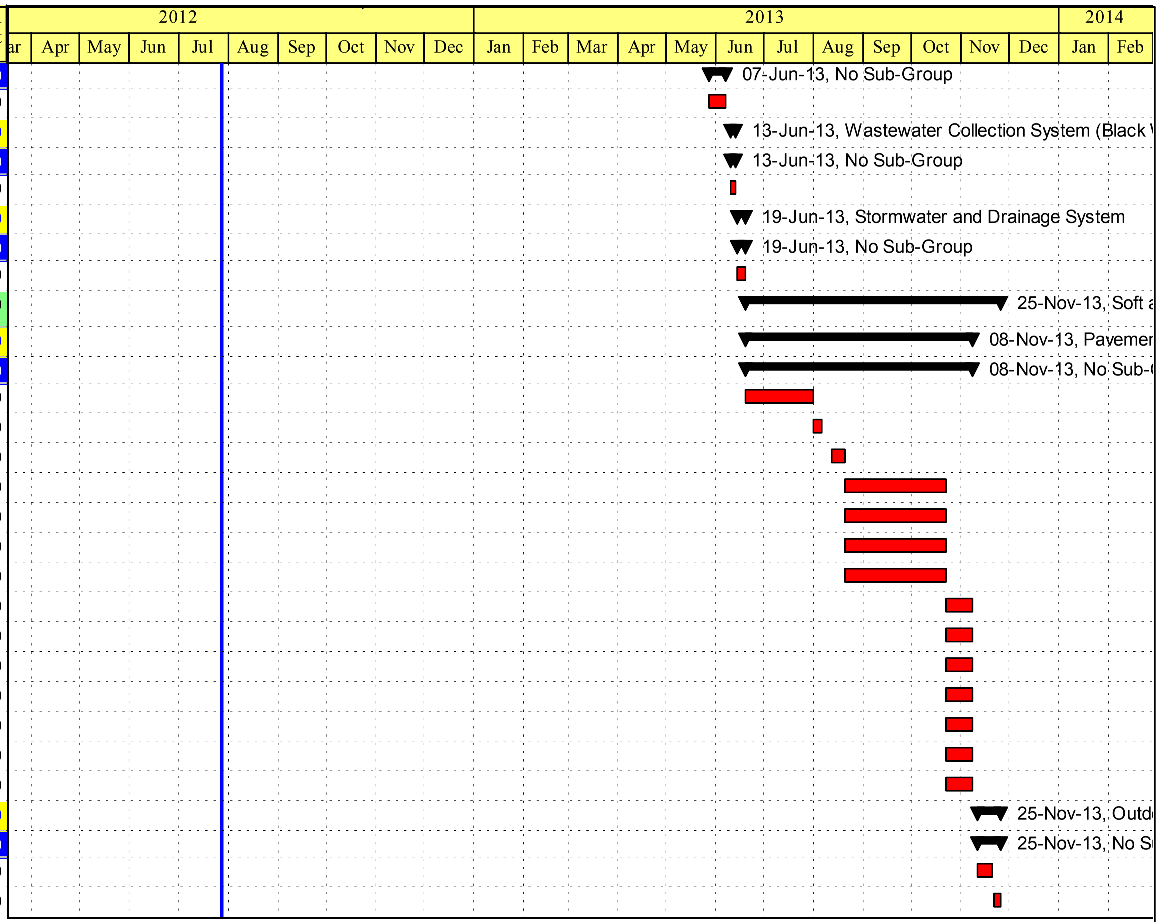
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
No Sub-Group		9	28-May-13	07-Jun-13	0
RC.8.C.EXC	Excavation for Irrigation System Pipes	9	28-May-13	07-Jun-13	0
Wastewater Collection System (Black Water & Grey Water Lines)		4	10-Jun-13	13-Jun-13	0
No Sub-Group		4	10-Jun-13	13-Jun-13	0
RC.8.D.EXC	Excavation for Wastewater Pipes	4	10-Jun-13	13-Jun-13	0
Stormwater and Drainage System		4	14-Jun-13	19-Jun-13	0
No Sub-Group		4	14-Jun-13	19-Jun-13	0
RC.8.E.EXC	Excavation for Drainage System Pipes	4	14-Jun-13	19-Jun-13	0
Soft and Hard Landscaping		103	20-Jun-13	25-Nov-13	0
Pavements and Sidewalks		92	20-Jun-13	08-Nov-13	0
No Sub-Group		92	20-Jun-13	08-Nov-13	0
RC.9.B.01	Excavation for planting areas,pavements and sidewalks...	30	20-Jun-13	31-Jul-13	0
RC.9.B.02	Aggregate sub-base course	4	01-Aug-13	06-Aug-13	0
RC.9.B.04	Placing of concrete Class C16/20 including reinforcing ...	7	12-Aug-13	20-Aug-13	0
RC.9.B.05	Natural Ankara stone (andesite) flooring, 300x40 mm, fr...	39	21-Aug-13	22-Oct-13	0
RC.9.B.06	Natural Ankara stone (andesite) flooring, 400x400x40 m...	39	21-Aug-13	22-Oct-13	0
RC.9.B.07	Natural Ankara stone (andesite) curb, 10x15x50 cm, in...	39	21-Aug-13	22-Oct-13	0
RC.9.B.08	Natural Ankara stone (andesite) curb, 10x25x50 cm, in...	39	21-Aug-13	22-Oct-13	0
RC.9.B.09	Natural Ankara stone (andesite) wall cover, 30 mm thic...	12	23-Oct-13	08-Nov-13	0
RC.9.B.10	Natural Ankara stone (andesite) coping, 60 mm thick, la...	12	23-Oct-13	08-Nov-13	0
RC.9.B.11	Natural Ankara stone (andesite) stair tread, 350x40mm...	12	23-Oct-13	08-Nov-13	0
RC.9.B.13	Natural Ankara stone (andesite) gutter, 200 mm wide, l...	12	23-Oct-13	08-Nov-13	0
RC.9.B.14	Natural Ankara stone (andesite) skirting, 80x30mm, laid...	12	23-Oct-13	08-Nov-13	0
RC.9.B.15	Natural Ankara stone (andesite) sill, 30mm thick, laid wit...	12	23-Oct-13	08-Nov-13	0
RC.9.B.16	Cast-in-place terrazzo coping with white cement	12	23-Oct-13	08-Nov-13	0
Outdoor Furniture		11	11-Nov-13	25-Nov-13	0
No Sub-Group		11	11-Nov-13	25-Nov-13	0
RC.9.E.03	Pergola structure; as shown on the drawings	8	11-Nov-13	20-Nov-13	0
RC.9.E.04	Gazebo structure; as shown on the drawings	3	21-Nov-13	25-Nov-13	0



🟦 Actual Work	🟥 Critical Remaining Work	Summary
🟩 Remaining Work ◆	◆ Milestone	

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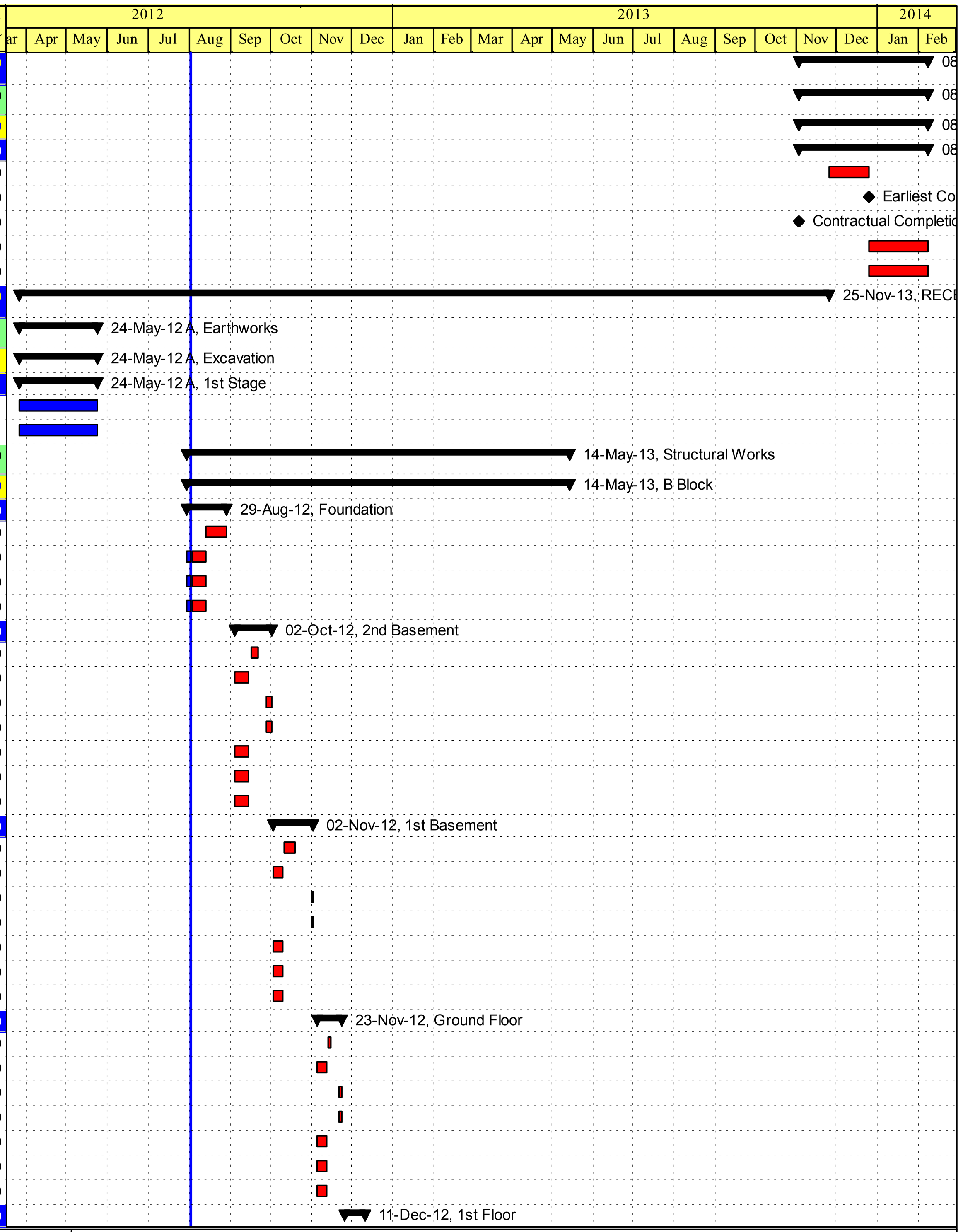
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		69	03-Nov-13	08-Feb-14	0
General		69	03-Nov-13	08-Feb-14	0
General		69	03-Nov-13	08-Feb-14	0
General		69	03-Nov-13	08-Feb-14	0
GEN99100	Tests on Completion	30	26-Nov-13	25-Dec-13	0
GEN99500	Earliest Completion of All Scope	0		25-Dec-13	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	26-Dec-13	08-Feb-14	0
GEN99920	As-Built Drawings and Other Documents	45	26-Dec-13	08-Feb-14	0
RECEPTION CENTER		415	03-Aug-12	25-Nov-13	0
Earthworks		42	03-Aug-12	03-Aug-12	
Excavation		42	03-Aug-12	03-Aug-12	
1st Stage		42	03-Aug-12	03-Aug-12	
RC.2.A.02.B.1	Excavation for foundation in any type of soil other than r...	42	03-Aug-12	03-Aug-12	
RC.2.A.03.A.1	Excavation for foundation in rock : 1st Stage	42	03-Aug-12	03-Aug-12	
Structural Works		198	03-Aug-12	14-May-13	0
B Block		198	03-Aug-12	14-May-13	0
Foundation		21	03-Aug-12	29-Aug-12	0
RC.3.A.02.B	Placing of concrete Class C30 for raft foundation, inclu...	10	14-Aug-12	29-Aug-12	0
RC.3.A.02.B.FW	Formwork	11	03-Aug-12	13-Aug-12	0
RC.3.B.01.B.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	11	03-Aug-12	13-Aug-12	0
RC.3.B.02.B.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	11	03-Aug-12	13-Aug-12	0
2nd Basement		21	04-Sep-12	02-Oct-12	0
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	17-Sep-12	21-Sep-12	0
RC.3.A.03.B.BS2.FW	Formwork	9	04-Sep-12	14-Sep-12	0
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	28-Sep-12	02-Oct-12	0
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	28-Sep-12	02-Oct-12	0
RC.3.A.03.B.BS2.SC	Scaffolding	9	04-Sep-12	14-Sep-12	0
RC.3.B.01.B.BS2	Deformed high yield steel bars , Ø8-Ø12 mm dia.	9	04-Sep-12	14-Sep-12	0
RC.3.B.02.B.BS2	Deformed high yield steel bars , Ø14-Ø28 mm dia.	9	04-Sep-12	14-Sep-12	0
1st Basement		19	03-Oct-12	02-Nov-12	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	11-Oct-12	19-Oct-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	03-Oct-12	10-Oct-12	0
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	01-Nov-12	02-Nov-12	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	01-Nov-12	02-Nov-12	0
RC.3.A.03.B.BS1.SC	Scaffolding	6	03-Oct-12	10-Oct-12	0
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	03-Oct-12	10-Oct-12	0
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	03-Oct-12	10-Oct-12	0
Ground Floor		15	05-Nov-12	23-Nov-12	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	13-Nov-12	15-Nov-12	0
RC.3.A.03.B.GR.FW	Formwork	6	05-Nov-12	12-Nov-12	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	22-Nov-12	23-Nov-12	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	22-Nov-12	23-Nov-12	0
RC.3.A.03.B.GR.SC	Scaffolding	6	05-Nov-12	12-Nov-12	0
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	05-Nov-12	12-Nov-12	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	05-Nov-12	12-Nov-12	0
1st Floor		12	26-Nov-12	11-Dec-12	0



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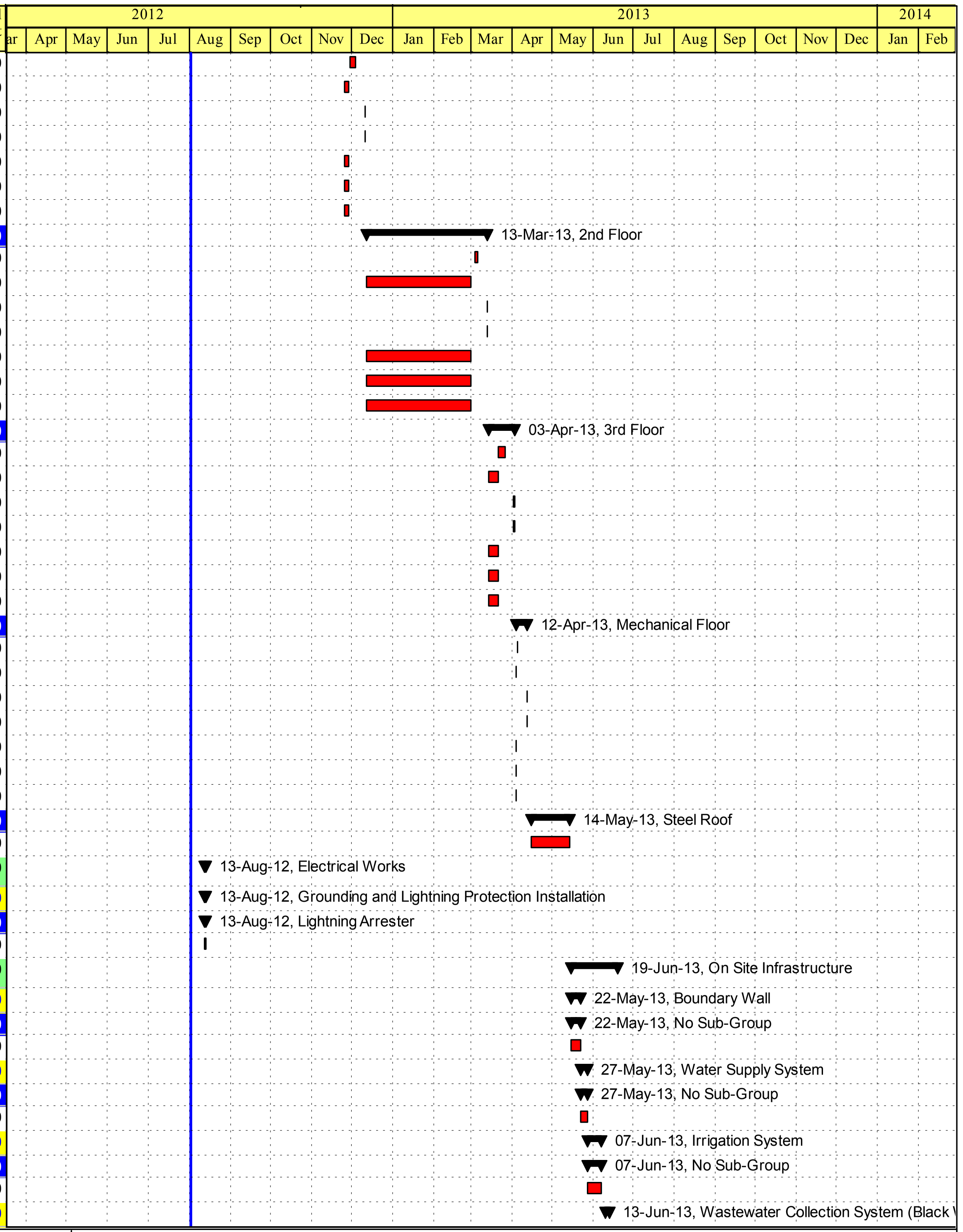
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.3.A.03.B.1F	Placing of Concrete Class C30 for superstructure abov...	3	30-Nov-12	04-Dec-12	0
RC.3.A.03.B.1F.FW	Formwork	4	26-Nov-12	29-Nov-12	0
RC.3.A.03.B.1F.RFW	Removal of Formwork	1	11-Dec-12	11-Dec-12	0
RC.3.A.03.B.1F.RSC	Removal of Scaffolding	1	11-Dec-12	11-Dec-12	0
RC.3.A.03.B.1F.SC	Scaffolding	4	26-Nov-12	29-Nov-12	0
RC.3.B.01.B.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	26-Nov-12	29-Nov-12	0
RC.3.B.02.B.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	26-Nov-12	29-Nov-12	0
2nd Floor		65	12-Dec-12	13-Mar-13	0
RC.3.A.03.B.2F	Placing of Concrete Class C30 for superstructure abov...	3	04-Mar-13	06-Mar-13	0
RC.3.A.03.B.2F.FW	Formwork	4	12-Dec-12	01-Mar-13	0
RC.3.A.03.B.2F.RFW	Removal of Formwork	1	13-Mar-13	13-Mar-13	0
RC.3.A.03.B.2F.RSC	Removal of Scaffolding	1	13-Mar-13	13-Mar-13	0
RC.3.A.03.B.2F.SC	Scaffolding	4	12-Dec-12	01-Mar-13	0
RC.3.B.01.B.2F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	12-Dec-12	01-Mar-13	0
RC.3.B.02.B.2F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	12-Dec-12	01-Mar-13	0
3rd Floor		15	14-Mar-13	03-Apr-13	0
RC.3.A.03.B.3F	Placing of Concrete Class C30 for superstructure abov...	3	22-Mar-13	26-Mar-13	0
RC.3.A.03.B.3F.FW	Formwork	6	14-Mar-13	21-Mar-13	0
RC.3.A.03.B.3F.RFW	Removal of Formwork	2	02-Apr-13	03-Apr-13	0
RC.3.A.03.B.3F.RSC	Removal of Scaffolding	2	02-Apr-13	03-Apr-13	0
RC.3.A.03.B.3F.SC	Scaffolding	6	14-Mar-13	21-Mar-13	0
RC.3.B.01.B.3F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	14-Mar-13	21-Mar-13	0
RC.3.B.02.B.3F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	14-Mar-13	21-Mar-13	0
Mechanical Floor		7	04-Apr-13	12-Apr-13	0
RC.3.A.03.B.M	Placing of Concrete Class C30 for superstructure abov...	1	05-Apr-13	05-Apr-13	0
RC.3.A.03.B.M.FW	Formwork	1	04-Apr-13	04-Apr-13	0
RC.3.A.03.B.M.RFW	Removal of Formwork	1	12-Apr-13	12-Apr-13	0
RC.3.A.03.B.M.RSC	Removal of Scaffolding	1	12-Apr-13	12-Apr-13	0
RC.3.A.03.B.M.SC	Scaffolding	1	04-Apr-13	04-Apr-13	0
RC.3.B.01.B.M	Deformed high yield steel bars , Ø8-Ø12 mm dia.	1	04-Apr-13	04-Apr-13	0
RC.3.B.02.B.M	Deformed high yield steel bars , Ø14-Ø28 mm dia.	1	04-Apr-13	04-Apr-13	0
Steel Roof		21	15-Apr-13	14-May-13	0
RC.3.C.02.B	Roof support structure made with light steel profiles, in...	21	15-Apr-13	14-May-13	0
Electrical Works		1	13-Aug-12	13-Aug-12	0
Grounding and Lightning Protection Installation		1	13-Aug-12	13-Aug-12	0
Lightning Arrester		1	13-Aug-12	13-Aug-12	0
RC.7.M.3.B	95mm² monotron cable	1	13-Aug-12	13-Aug-12	0
On Site Infrastructure		26	15-May-13	19-Jun-13	0
Boundary Wall		6	15-May-13	22-May-13	0
No Sub-Group		6	15-May-13	22-May-13	0
RC.8.A.01.EX	Excavation for wall foundation including backfilling and c...	6	15-May-13	22-May-13	0
Water Supply System		3	23-May-13	27-May-13	0
No Sub-Group		3	23-May-13	27-May-13	0
RC.8.B.EXC	Excavation for Water Supply System Pipes	3	23-May-13	27-May-13	0
Irrigation System		9	28-May-13	07-Jun-13	0
No Sub-Group		9	28-May-13	07-Jun-13	0
RC.8.C.EXC	Excavation for Irrigation System Pipes	9	28-May-13	07-Jun-13	0
Wastewater Collection System (Black Water & Grey Water Lines)		4	10-Jun-13	13-Jun-13	0



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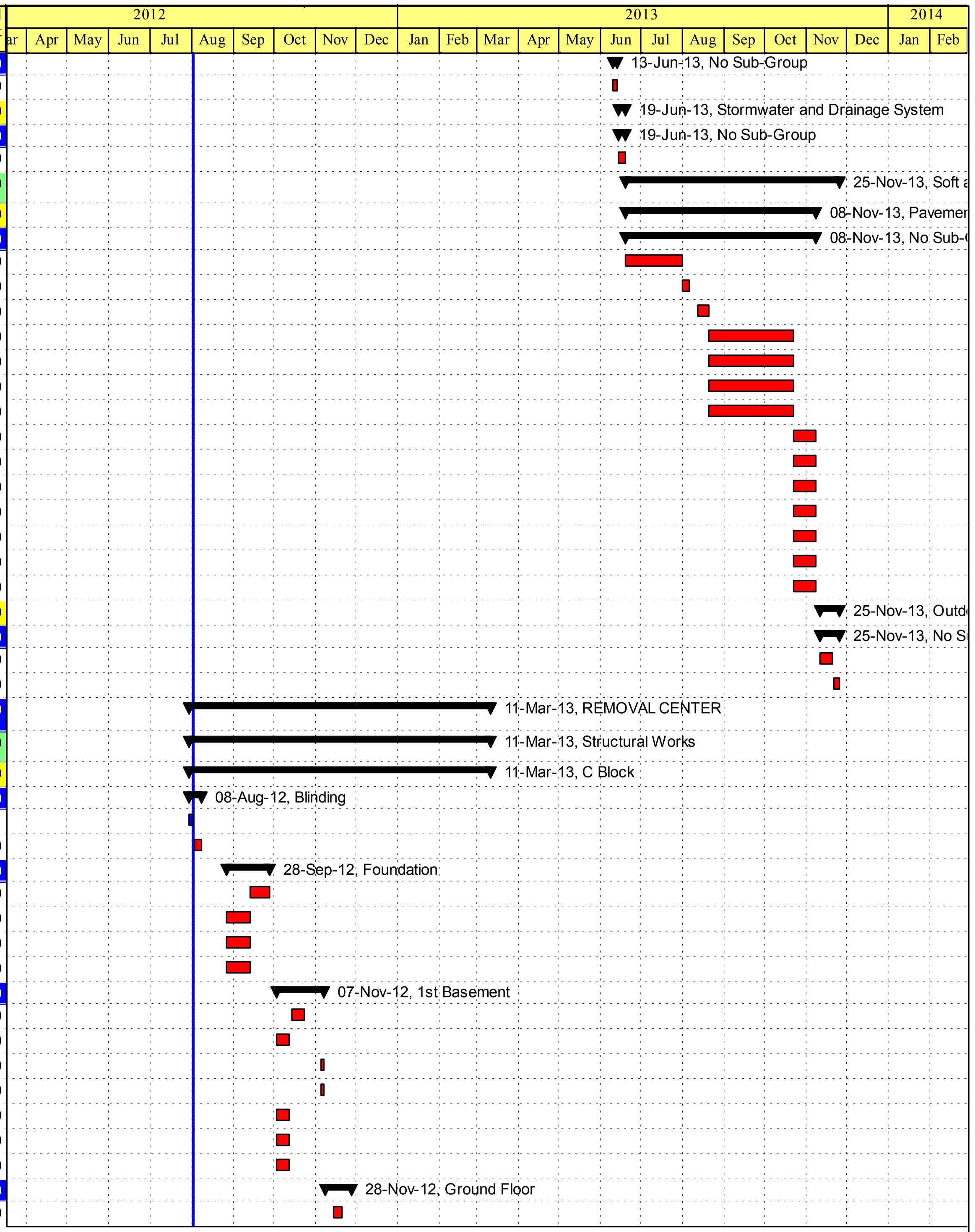
No Sub-Group		4	10-Jun-13	13-Jun-13	0
RC.8.D.EXC	Excavation for Wastewater Pipes	4	10-Jun-13	13-Jun-13	0
Stormwater and Drainage System		4	14-Jun-13	19-Jun-13	0
No Sub-Group		4	14-Jun-13	19-Jun-13	0
RC.8.E.EXC	Excavation for Drainage System Pipes	4	14-Jun-13	19-Jun-13	0
Soft and Hard Landscaping		103	20-Jun-13	25-Nov-13	0
Pavements and Sidewalks		92	20-Jun-13	08-Nov-13	0
No Sub-Group		92	20-Jun-13	08-Nov-13	0
RC.9.B.01	Excavation for planting areas,pavements and sidewalks...	30	20-Jun-13	31-Jul-13	0
RC.9.B.02	Aggregate sub-base course	4	01-Aug-13	06-Aug-13	0
RC.9.B.04	Placing of concrete Class C16/20 including reinforcing ...	7	12-Aug-13	20-Aug-13	0
RC.9.B.05	Natural Ankara stone (andesite) flooring, 300x40 mm, fr...	39	21-Aug-13	22-Oct-13	0
RC.9.B.06	Natural Ankara stone (andesite) flooring, 400x400x40 m...	39	21-Aug-13	22-Oct-13	0
RC.9.B.07	Natural Ankara stone (andesite) curb, 10x15x50 cm, in...	39	21-Aug-13	22-Oct-13	0
RC.9.B.08	Natural Ankara stone (andesite) curb, 10x25x50 cm, in...	39	21-Aug-13	22-Oct-13	0
RC.9.B.09	Natural Ankara stone (andesite) wall cover, 30 mm thic...	12	23-Oct-13	08-Nov-13	0
RC.9.B.10	Natural Ankara stone (andesite) coping, 60 mm thick, la...	12	23-Oct-13	08-Nov-13	0
RC.9.B.11	Natural Ankara stone (andesite) stair tread, 350x40mm...	12	23-Oct-13	08-Nov-13	0
RC.9.B.13	Natural Ankara stone (andesite) gutter, 200 mm wide, l...	12	23-Oct-13	08-Nov-13	0
RC.9.B.14	Natural Ankara stone (andesite) skirting, 80x30mm, laid...	12	23-Oct-13	08-Nov-13	0
RC.9.B.15	Natural Ankara stone (andesite) sill, 30mm thick, laid wit...	12	23-Oct-13	08-Nov-13	0
RC.9.B.16	Cast-in-place terrazzo coping with white cement	12	23-Oct-13	08-Nov-13	0
Outdoor Furniture		11	11-Nov-13	25-Nov-13	0
No Sub-Group		11	11-Nov-13	25-Nov-13	0
RC.9.E.03	Pergola structure; as shown on the drawings	8	11-Nov-13	20-Nov-13	0
RC.9.E.04	Gazebo structure; as shown on the drawings	3	21-Nov-13	25-Nov-13	0
REMOVAL CENTER		153	03-Aug-12	11-Mar-13	0
Structural Works		153	03-Aug-12	11-Mar-13	0
C Block		153	03-Aug-12	11-Mar-13	0
Blinding		8	03-Aug-12	08-Aug-12	0
EVENT NO. 4	Late Instruction by the Engineer	4	03-Aug-12	03-Aug-12	
RV.3.A.01.C	Placing of concrete Class C14 for blinding and filling.	4	03-Aug-12	08-Aug-12	0
Foundation		24	27-Aug-12	28-Sep-12	0
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	14-Sep-12	28-Sep-12	0
RV.3.A.02.C.FW	Formwork	13	27-Aug-12	13-Sep-12	0
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	27-Aug-12	13-Sep-12	0
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	27-Aug-12	13-Sep-12	0
1st Basement		22	03-Oct-12	07-Nov-12	0
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	15-Oct-12	23-Oct-12	0
RV.3.A.03.C.BS1.FW	Formwork	8	03-Oct-12	12-Oct-12	0
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	05-Nov-12	07-Nov-12	0
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	05-Nov-12	07-Nov-12	0
RV.3.A.03.C.BS1.SC	Scaffolding	8	03-Oct-12	12-Oct-12	0
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	03-Oct-12	12-Oct-12	0
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	03-Oct-12	12-Oct-12	0
Ground Floor		15	08-Nov-12	28-Nov-12	0
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	15-Nov-12	20-Nov-12	0



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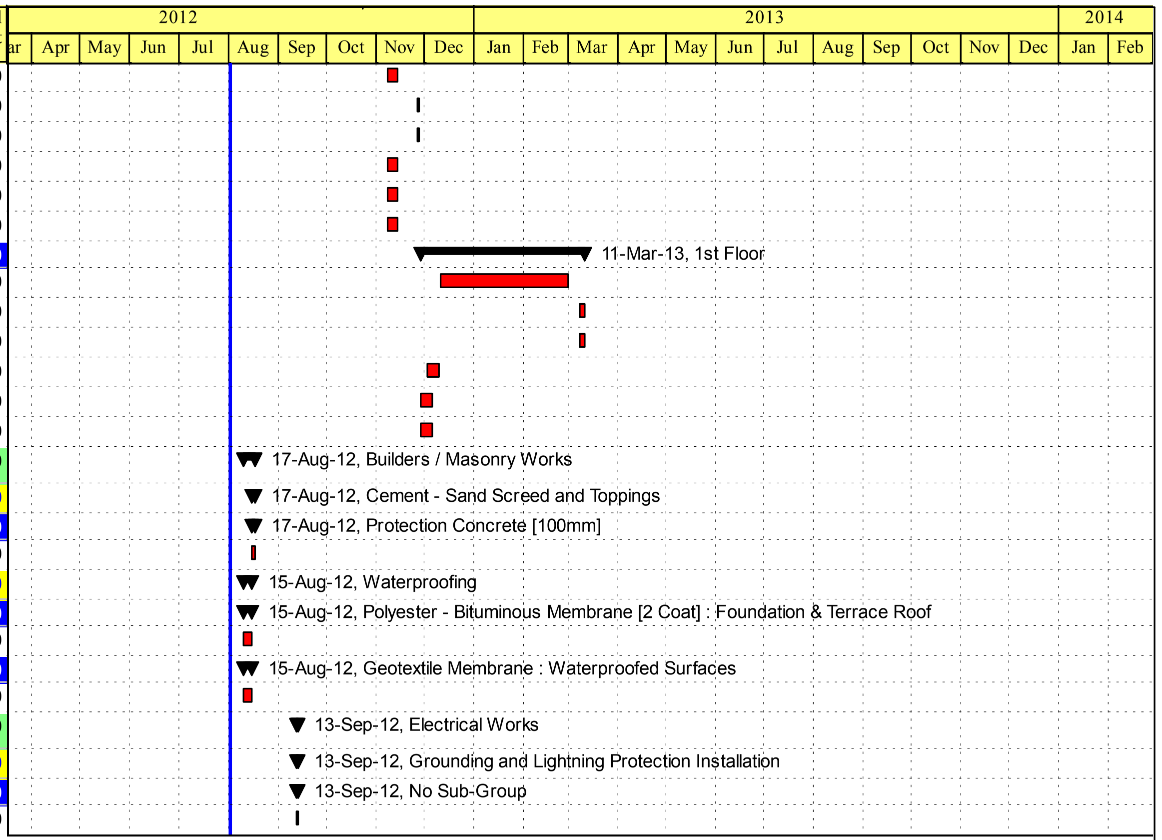
RV.3.A.03.C.GR.FW	Formwork	5	08-Nov-12	14-Nov-12	0
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	27-Nov-12	28-Nov-12	0
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	27-Nov-12	28-Nov-12	0
RV.3.A.03.C.GR.SC	Scaffolding	5	08-Nov-12	14-Nov-12	0
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	08-Nov-12	14-Nov-12	0
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	08-Nov-12	14-Nov-12	0
1st Floor		72	29-Nov-12	11-Mar-13	0
RV.3.A.03.C.1F	Placing of Concrete Class C30 for superstructure abov...	5	11-Dec-12	01-Mar-13	0
RV.3.A.03.C.1F.RFW	Removal of Formwork	2	08-Mar-13	11-Mar-13	0
RV.3.A.03.C.1F.RSC	Removal of Scaffolding	2	08-Mar-13	11-Mar-13	0
RV.3.A.03.C.1F.SC	Scaffolding	6	03-Dec-12	10-Dec-12	0
RV.3.B.01.C.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	29-Nov-12	06-Dec-12	0
RV.3.B.02.C.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	29-Nov-12	06-Dec-12	0
Builders / Masonry Works		6	10-Aug-12	17-Aug-12	0
Cement - Sand Screed and Toppings		2	16-Aug-12	17-Aug-12	0
Protection Concrete [100mm]		2	16-Aug-12	17-Aug-12	0
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	16-Aug-12	17-Aug-12	0
Waterproofing		4	10-Aug-12	15-Aug-12	0
Polyester - Bituminous Membrane [2 Coat] : Foundation & Terrace Roof		4	10-Aug-12	15-Aug-12	0
RV.4.D.03.C.FN	Two coat waterproofing with polyester reinforced bitumi...	4	10-Aug-12	15-Aug-12	0
Geotextile Membrane : Waterproofed Surfaces		4	10-Aug-12	15-Aug-12	0
RV.4.D.05.C.FN	Geotextile protective membrane, to waterproofed surfac...	4	10-Aug-12	15-Aug-12	0
Electrical Works		1	13-Sep-12	13-Sep-12	0
Grounding and Lightning Protection Installation		1	13-Sep-12	13-Sep-12	0
No Sub-Group		1	13-Sep-12	13-Sep-12	0
RV.7.M.3.C	95mm² monotron cable	1	13-Sep-12	13-Sep-12	0



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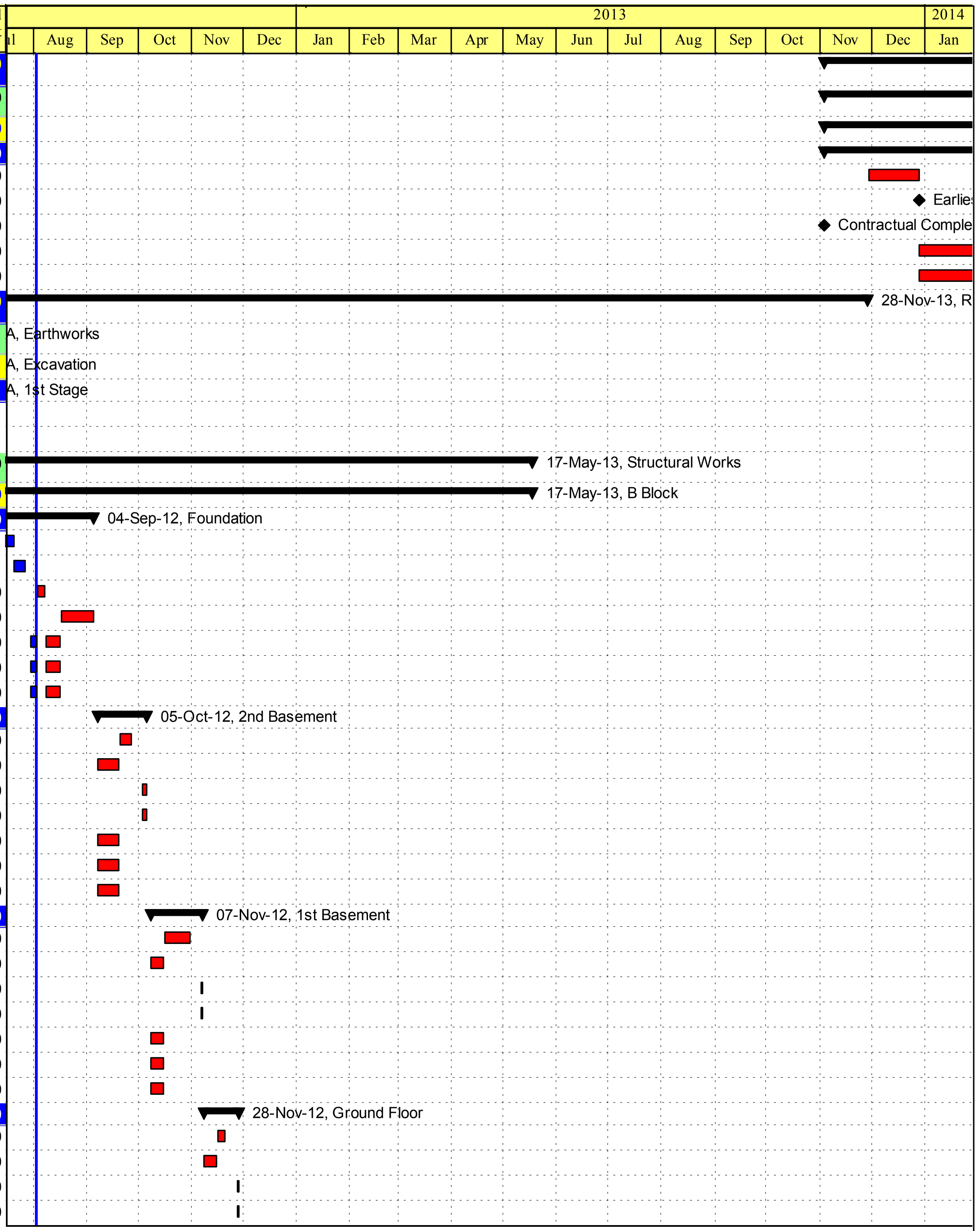
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		71	03-Nov-13	11-Feb-14	0
General		71	03-Nov-13	11-Feb-14	0
General		71	03-Nov-13	11-Feb-14	0
General		71	03-Nov-13	11-Feb-14	0
GEN99100	Tests on Completion	30	29-Nov-13	28-Dec-13	0
GEN99500	Earliest Completion of All Scope	0		28-Dec-13	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	29-Dec-13	11-Feb-14	0
GEN99920	As-Built Drawings and Other Documents	45	29-Dec-13	11-Feb-14	0
RECEPTION CENTER		418	03-Aug-12	28-Nov-13	0
Earthworks		42	03-Aug-12	03-Aug-12	
Excavation		42	03-Aug-12	03-Aug-12	
1st Stage		42	03-Aug-12	03-Aug-12	
RC.2.A.02.B.1	Excavation for foundation in any type of soil other than r...	42	03-Aug-12	03-Aug-12	
RC.2.A.03.A.1	Excavation for foundation in rock : 1st Stage	42	03-Aug-12	03-Aug-12	
Structural Works		237	03-Aug-12	17-May-13	0
B Block		237	03-Aug-12	17-May-13	0
Foundation		60	03-Aug-12	04-Sep-12	0
EVENT NO. 2	Additional Excavation and Backfilling	31	03-Aug-12	03-Aug-12	
EVENT NO. 3	Late Delivery of Reinforcement Steel	6	03-Aug-12	03-Aug-12	
EVENT NO. 5	Financial Problems of the Contractor	3	03-Aug-12	07-Aug-12	0
RC.3.A.02.B	Placing of concrete Class C30 for raft foundation, inclu...	10	17-Aug-12	04-Sep-12	0
RC.3.A.02.B.FW	Formwork	11	08-Aug-12	16-Aug-12	0
RC.3.B.01.B.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	11	08-Aug-12	16-Aug-12	0
RC.3.B.02.B.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	11	08-Aug-12	16-Aug-12	0
2nd Basement		21	07-Sep-12	05-Oct-12	0
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	20-Sep-12	26-Sep-12	0
RC.3.A.03.B.BS2.FW	Formwork	9	07-Sep-12	19-Sep-12	0
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	03-Oct-12	05-Oct-12	0
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	03-Oct-12	05-Oct-12	0
RC.3.A.03.B.BS2.SC	Scaffolding	9	07-Sep-12	19-Sep-12	0
RC.3.B.01.B.BS2	Deformed high yield steel bars , Ø8-Ø12 mm dia.	9	07-Sep-12	19-Sep-12	0
RC.3.B.02.B.BS2	Deformed high yield steel bars , Ø14-Ø28 mm dia.	9	07-Sep-12	19-Sep-12	0
1st Basement		19	08-Oct-12	07-Nov-12	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	16-Oct-12	30-Oct-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	08-Oct-12	15-Oct-12	0
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	06-Nov-12	07-Nov-12	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	06-Nov-12	07-Nov-12	0
RC.3.A.03.B.BS1.SC	Scaffolding	6	08-Oct-12	15-Oct-12	0
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	08-Oct-12	15-Oct-12	0
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	08-Oct-12	15-Oct-12	0
Ground Floor		15	08-Nov-12	28-Nov-12	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	16-Nov-12	20-Nov-12	0
RC.3.A.03.B.GR.FW	Formwork	6	08-Nov-12	15-Nov-12	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	27-Nov-12	28-Nov-12	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	27-Nov-12	28-Nov-12	0



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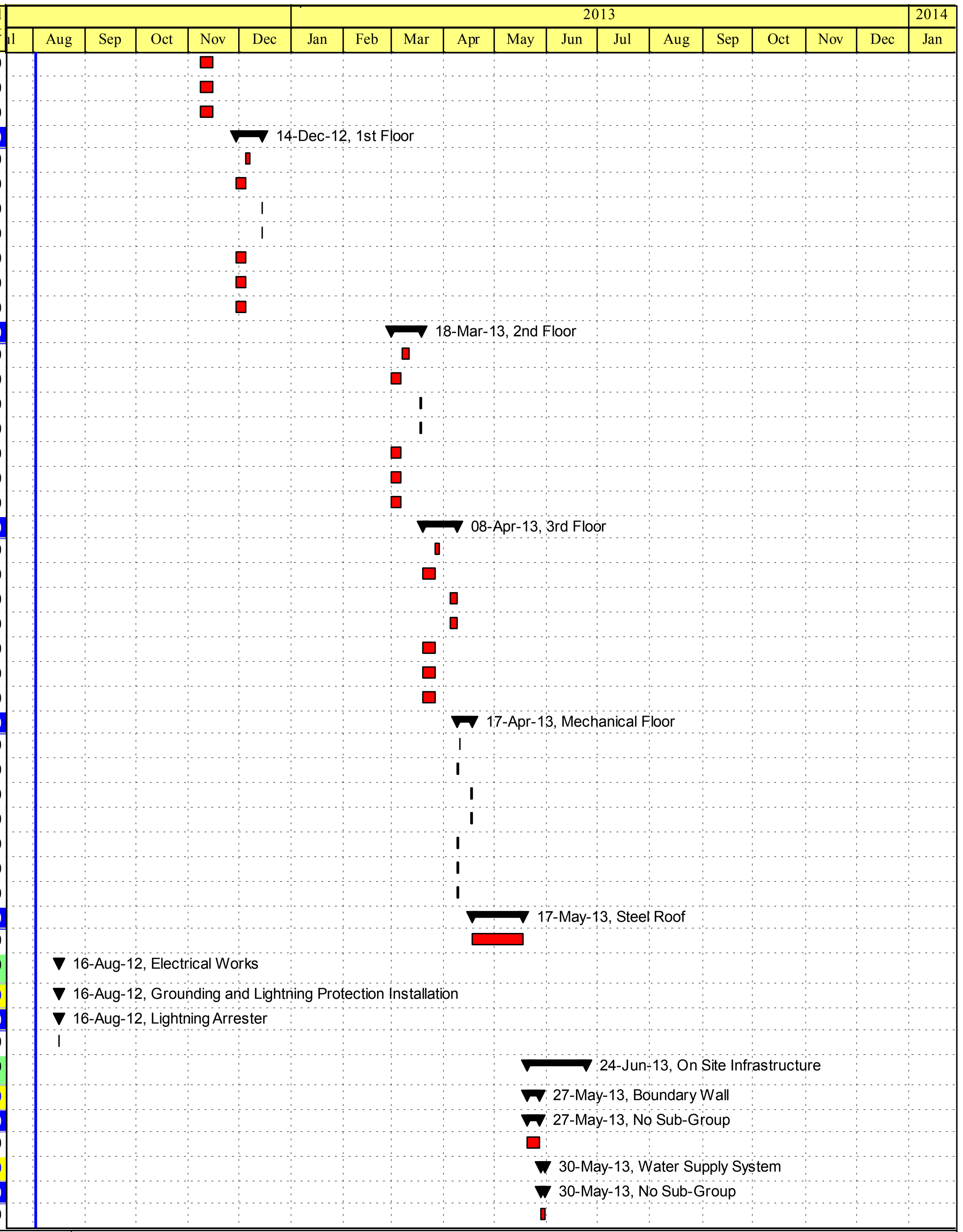
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.3.A.03.B.GR.SC	Scaffolding	6	08-Nov-12	15-Nov-12	0
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	08-Nov-12	15-Nov-12	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	08-Nov-12	15-Nov-12	0
1st Floor		12	29-Nov-12	14-Dec-12	0
RC.3.A.03.B.1F	Placing of Concrete Class C30 for superstructure abov...	3	05-Dec-12	07-Dec-12	0
RC.3.A.03.B.1F.FW	Formwork	4	29-Nov-12	04-Dec-12	0
RC.3.A.03.B.1F.RFW	Removal of Formwork	1	14-Dec-12	14-Dec-12	0
RC.3.A.03.B.1F.RSC	Removal of Scaffolding	1	14-Dec-12	14-Dec-12	0
RC.3.A.03.B.1F.SC	Scaffolding	4	29-Nov-12	04-Dec-12	0
RC.3.B.01.B.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	29-Nov-12	04-Dec-12	0
RC.3.B.02.B.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	29-Nov-12	04-Dec-12	0
2nd Floor		12	01-Mar-13	18-Mar-13	0
RC.3.A.03.B.2F	Placing of Concrete Class C30 for superstructure abov...	3	07-Mar-13	11-Mar-13	0
RC.3.A.03.B.2F.FW	Formwork	4	01-Mar-13	06-Mar-13	0
RC.3.A.03.B.2F.RFW	Removal of Formwork	1	18-Mar-13	18-Mar-13	0
RC.3.A.03.B.2F.RSC	Removal of Scaffolding	1	18-Mar-13	18-Mar-13	0
RC.3.A.03.B.2F.SC	Scaffolding	4	01-Mar-13	06-Mar-13	0
RC.3.B.01.B.2F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	01-Mar-13	06-Mar-13	0
RC.3.B.02.B.2F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	01-Mar-13	06-Mar-13	0
3rd Floor		15	19-Mar-13	08-Apr-13	0
RC.3.A.03.B.3F	Placing of Concrete Class C30 for superstructure abov...	3	27-Mar-13	29-Mar-13	0
RC.3.A.03.B.3F.FW	Formwork	6	19-Mar-13	26-Mar-13	0
RC.3.A.03.B.3F.RFW	Removal of Formwork	2	05-Apr-13	08-Apr-13	0
RC.3.A.03.B.3F.RSC	Removal of Scaffolding	2	05-Apr-13	08-Apr-13	0
RC.3.A.03.B.3F.SC	Scaffolding	6	19-Mar-13	26-Mar-13	0
RC.3.B.01.B.3F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	19-Mar-13	26-Mar-13	0
RC.3.B.02.B.3F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	19-Mar-13	26-Mar-13	0
Mechanical Floor		7	09-Apr-13	17-Apr-13	0
RC.3.A.03.B.M	Placing of Concrete Class C30 for superstructure abov...	1	10-Apr-13	10-Apr-13	0
RC.3.A.03.B.M.FW	Formwork	1	09-Apr-13	09-Apr-13	0
RC.3.A.03.B.M.RFW	Removal of Formwork	1	17-Apr-13	17-Apr-13	0
RC.3.A.03.B.M.RSC	Removal of Scaffolding	1	17-Apr-13	17-Apr-13	0
RC.3.A.03.B.M.SC	Scaffolding	1	09-Apr-13	09-Apr-13	0
RC.3.B.01.B.M	Deformed high yield steel bars , Ø8-Ø12 mm dia.	1	09-Apr-13	09-Apr-13	0
RC.3.B.02.B.M	Deformed high yield steel bars , Ø14-Ø28 mm dia.	1	09-Apr-13	09-Apr-13	0
Steel Roof		21	18-Apr-13	17-May-13	0
RC.3.C.02.B	Roof support structure made with light steel profiles, in...	21	18-Apr-13	17-May-13	0
Electrical Works		1	16-Aug-12	16-Aug-12	0
Grounding and Lightning Protection Installation		1	16-Aug-12	16-Aug-12	0
Lightning Arrester		1	16-Aug-12	16-Aug-12	0
RC.7.M.3.B	95mm² monotron cable	1	16-Aug-12	16-Aug-12	0
On Site Infrastructure		26	20-May-13	24-Jun-13	0
Boundary Wall		6	20-May-13	27-May-13	0
No Sub-Group		6	20-May-13	27-May-13	0
RC.8.A.01.EX	Excavation for wall foundation including backfilling and c...	6	20-May-13	27-May-13	0
Water Supply System		3	28-May-13	30-May-13	0
No Sub-Group		3	28-May-13	30-May-13	0
RC.8.B.EXC	Excavation for Water Supply System Pipes	3	28-May-13	30-May-13	0



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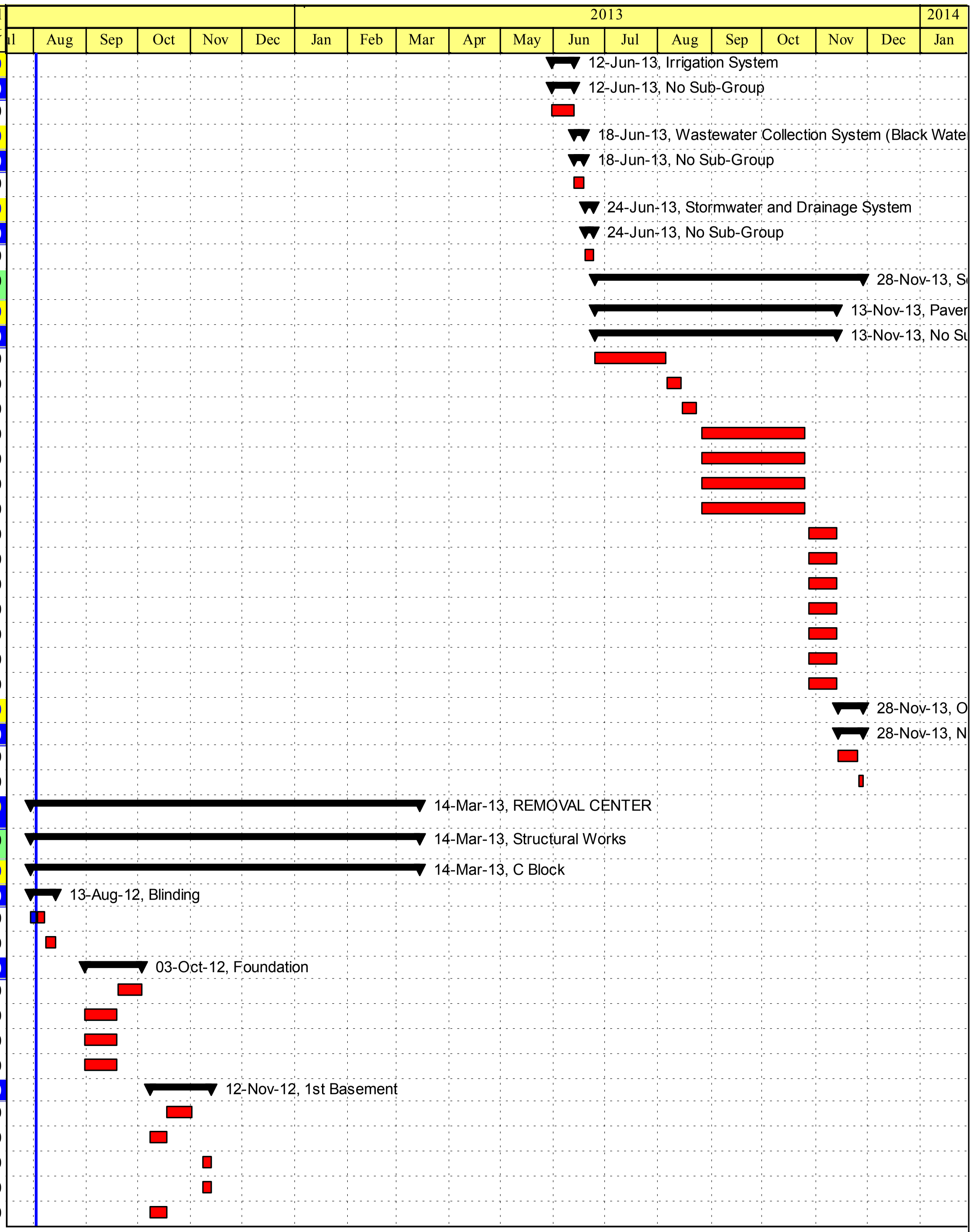
Updated Schedule 4.3

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
Irrigation System		9	31-May-13	12-Jun-13	0
No Sub-Group		9	31-May-13	12-Jun-13	0
RC.8.C.EXC	Excavation for Irrigation System Pipes	9	31-May-13	12-Jun-13	0
Wastewater Collection System (Black Water & Grey Water Lines)		4	13-Jun-13	18-Jun-13	0
No Sub-Group		4	13-Jun-13	18-Jun-13	0
RC.8.D.EXC	Excavation for Wastewater Pipes	4	13-Jun-13	18-Jun-13	0
Stormwater and Drainage System		4	19-Jun-13	24-Jun-13	0
No Sub-Group		4	19-Jun-13	24-Jun-13	0
RC.8.E.EXC	Excavation for Drainage System Pipes	4	19-Jun-13	24-Jun-13	0
Soft and Hard Landscaping		103	25-Jun-13	28-Nov-13	0
Pavements and Sidewalks		92	25-Jun-13	13-Nov-13	0
No Sub-Group		92	25-Jun-13	13-Nov-13	0
RC.9.B.01	Excavation for planting areas,pavements and sidewalks...	30	25-Jun-13	05-Aug-13	0
RC.9.B.02	Aggregate sub-base course	4	06-Aug-13	14-Aug-13	0
RC.9.B.04	Placing of concrete Class C16/20 including reinforcing ...	7	15-Aug-13	23-Aug-13	0
RC.9.B.05	Natural Ankara stone (andesite) flooring, 300x40 mm, fr...	39	26-Aug-13	25-Oct-13	0
RC.9.B.06	Natural Ankara stone (andesite) flooring, 400x400x40 m...	39	26-Aug-13	25-Oct-13	0
RC.9.B.07	Natural Ankara stone (andesite) curb, 10x15x50 cm, in...	39	26-Aug-13	25-Oct-13	0
RC.9.B.08	Natural Ankara stone (andesite) curb, 10x25x50 cm, in...	39	26-Aug-13	25-Oct-13	0
RC.9.B.09	Natural Ankara stone (andesite) wall cover, 30 mm thic...	12	28-Oct-13	13-Nov-13	0
RC.9.B.10	Natural Ankara stone (andesite) coping, 60 mm thick, la...	12	28-Oct-13	13-Nov-13	0
RC.9.B.11	Natural Ankara stone (andesite) stair tread, 350x40mm...	12	28-Oct-13	13-Nov-13	0
RC.9.B.13	Natural Ankara stone (andesite) gutter, 200 mm wide, l...	12	28-Oct-13	13-Nov-13	0
RC.9.B.14	Natural Ankara stone (andesite) skirting, 80x30mm, laid...	12	28-Oct-13	13-Nov-13	0
RC.9.B.15	Natural Ankara stone (andesite) sill, 30mm thick, laid wit...	12	28-Oct-13	13-Nov-13	0
RC.9.B.16	Cast-in-place terrazzo coping with white cement	12	28-Oct-13	13-Nov-13	0
Outdoor Furniture		11	14-Nov-13	28-Nov-13	0
No Sub-Group		11	14-Nov-13	28-Nov-13	0
RC.9.E.03	Pergola structure; as shown on the drawings	8	14-Nov-13	25-Nov-13	0
RC.9.E.04	Gazebo structure; as shown on the drawings	3	26-Nov-13	28-Nov-13	0
REMOVAL CENTER		156	03-Aug-12	14-Mar-13	0
Structural Works		156	03-Aug-12	14-Mar-13	0
C Block		156	03-Aug-12	14-Mar-13	0
Blinding		11	03-Aug-12	13-Aug-12	0
EVENT NO. 4	Late Instruction by the Engineer	7	03-Aug-12	07-Aug-12	0
RV.3.A.01.C	Placing of concrete Class C14 for blinding and filling.	4	08-Aug-12	13-Aug-12	0
Foundation		24	31-Aug-12	03-Oct-12	0
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	19-Sep-12	03-Oct-12	0
RV.3.A.02.C.FW	Formwork	13	31-Aug-12	18-Sep-12	0
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	31-Aug-12	18-Sep-12	0
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	31-Aug-12	18-Sep-12	0
1st Basement		22	08-Oct-12	12-Nov-12	0
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	18-Oct-12	01-Nov-12	0
RV.3.A.03.C.BS1.FW	Formwork	8	08-Oct-12	17-Oct-12	0
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	08-Nov-12	12-Nov-12	0
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	08-Nov-12	12-Nov-12	0
RV.3.A.03.C.BS1.SC	Scaffolding	8	08-Oct-12	17-Oct-12	0



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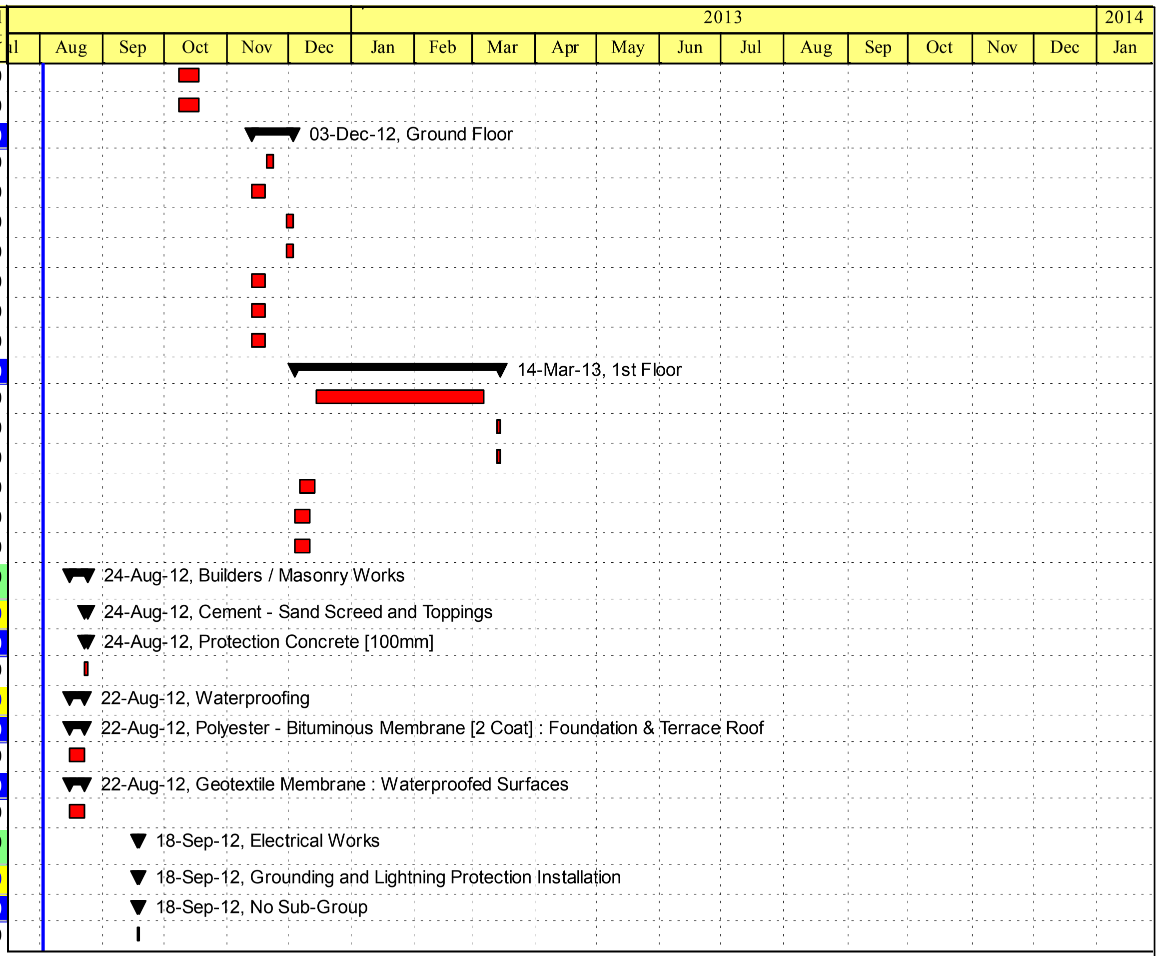
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	08-Oct-12	17-Oct-12	0
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	08-Oct-12	17-Oct-12	0
Ground Floor		15	13-Nov-12	03-Dec-12	0
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	20-Nov-12	23-Nov-12	0
RV.3.A.03.C.GR.FW	Formwork	5	13-Nov-12	19-Nov-12	0
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	30-Nov-12	03-Dec-12	0
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	30-Nov-12	03-Dec-12	0
RV.3.A.03.C.GR.SC	Scaffolding	5	13-Nov-12	19-Nov-12	0
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	13-Nov-12	19-Nov-12	0
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	13-Nov-12	19-Nov-12	0
1st Floor		72	04-Dec-12	14-Mar-13	0
RV.3.A.03.C.1F	Placing of Concrete Class C30 for superstructure abov...	5	14-Dec-12	06-Mar-13	0
RV.3.A.03.C.1F.RFW	Removal of Formwork	2	13-Mar-13	14-Mar-13	0
RV.3.A.03.C.1F.RSC	Removal of Scaffolding	2	13-Mar-13	14-Mar-13	0
RV.3.A.03.C.1F.SC	Scaffolding	6	06-Dec-12	13-Dec-12	0
RV.3.B.01.C.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	04-Dec-12	11-Dec-12	0
RV.3.B.02.C.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	04-Dec-12	11-Dec-12	0
Builders / Masonry Works		6	15-Aug-12	24-Aug-12	0
Cement - Sand Screed and Toppings		2	23-Aug-12	24-Aug-12	0
Protection Concrete [100mm]		2	23-Aug-12	24-Aug-12	0
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	23-Aug-12	24-Aug-12	0
Waterproofing		4	15-Aug-12	22-Aug-12	0
Polyester - Bituminous Membrane [2 Coat] : Foundation & Terrace Roof		4	15-Aug-12	22-Aug-12	0
RV.4.D.03.C.FN	Two coat waterproofing with polyester reinforced bitumi...	4	15-Aug-12	22-Aug-12	0
Geotextile Membrane : Waterproofed Surfaces		4	15-Aug-12	22-Aug-12	0
RV.4.D.05.C.FN	Geotextile protective membrane, to waterproofed surfac...	4	15-Aug-12	22-Aug-12	0
Electrical Works		1	18-Sep-12	18-Sep-12	0
Grounding and Lightning Protection Installation		1	18-Sep-12	18-Sep-12	0
No Sub-Group		1	18-Sep-12	18-Sep-12	0
RV.7.M.3.C	95mm² monotron cable	1	18-Sep-12	18-Sep-12	0



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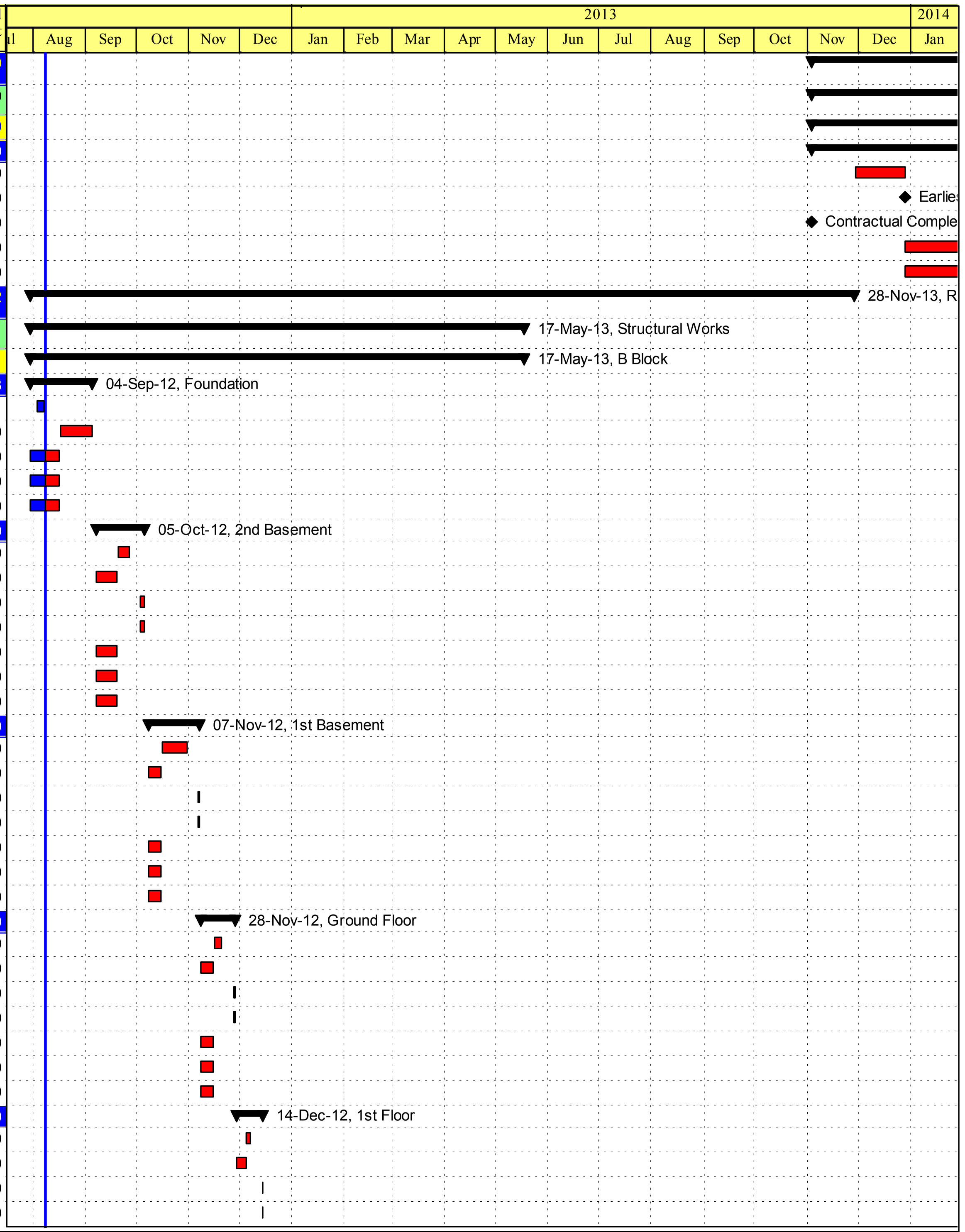
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		71	03-Nov-13	11-Feb-14	0
General		71	03-Nov-13	11-Feb-14	0
General		71	03-Nov-13	11-Feb-14	0
General		71	03-Nov-13	11-Feb-14	0
GEN99100	Tests on Completion	30	29-Nov-13	28-Dec-13	0
GEN99500	Earliest Completion of All Scope	0		28-Dec-13	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	29-Dec-13	11-Feb-14	0
GEN99920	As-Built Drawings and Other Documents	45	29-Dec-13	11-Feb-14	0
RECEPTION CENTER		330	08-Aug-12	28-Nov-13	52
Structural Works		201	08-Aug-12	17-May-13	181
B Block		201	08-Aug-12	17-May-13	181
Foundation		24	08-Aug-12	04-Sep-12	358
EVENT NO. 5	Late Approval of the Drawings	3	08-Aug-12	08-Aug-12	
RC.3.A.02.B	Placing of concrete Class C30 for raft foundation, inclu...	10	17-Aug-12	04-Sep-12	0
RC.3.A.02.B.FW	Formwork	11	08-Aug-12	16-Aug-12	0
RC.3.B.01.B.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	11	08-Aug-12	16-Aug-12	0
RC.3.B.02.B.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	11	08-Aug-12	16-Aug-12	0
2nd Basement		21	07-Sep-12	05-Oct-12	0
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	20-Sep-12	26-Sep-12	0
RC.3.A.03.B.BS2.FW	Formwork	9	07-Sep-12	19-Sep-12	0
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	03-Oct-12	05-Oct-12	0
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	03-Oct-12	05-Oct-12	0
RC.3.A.03.B.BS2.SC	Scaffolding	9	07-Sep-12	19-Sep-12	0
RC.3.B.01.B.BS2	Deformed high yield steel bars , Ø8-Ø12 mm dia.	9	07-Sep-12	19-Sep-12	0
RC.3.B.02.B.BS2	Deformed high yield steel bars , Ø14-Ø28 mm dia.	9	07-Sep-12	19-Sep-12	0
1st Basement		19	08-Oct-12	07-Nov-12	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	16-Oct-12	30-Oct-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	08-Oct-12	15-Oct-12	0
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	06-Nov-12	07-Nov-12	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	06-Nov-12	07-Nov-12	0
RC.3.A.03.B.BS1.SC	Scaffolding	6	08-Oct-12	15-Oct-12	0
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	08-Oct-12	15-Oct-12	0
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	08-Oct-12	15-Oct-12	0
Ground Floor		15	08-Nov-12	28-Nov-12	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	16-Nov-12	20-Nov-12	0
RC.3.A.03.B.GR.FW	Formwork	6	08-Nov-12	15-Nov-12	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	27-Nov-12	28-Nov-12	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	27-Nov-12	28-Nov-12	0
RC.3.A.03.B.GR.SC	Scaffolding	6	08-Nov-12	15-Nov-12	0
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	08-Nov-12	15-Nov-12	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	08-Nov-12	15-Nov-12	0
1st Floor		12	29-Nov-12	14-Dec-12	0
RC.3.A.03.B.1F	Placing of Concrete Class C30 for superstructure abov...	3	05-Dec-12	07-Dec-12	0
RC.3.A.03.B.1F.FW	Formwork	4	29-Nov-12	04-Dec-12	0
RC.3.A.03.B.1F.RFW	Removal of Formwork	1	14-Dec-12	14-Dec-12	0
RC.3.A.03.B.1F.RSC	Removal of Scaffolding	1	14-Dec-12	14-Dec-12	0



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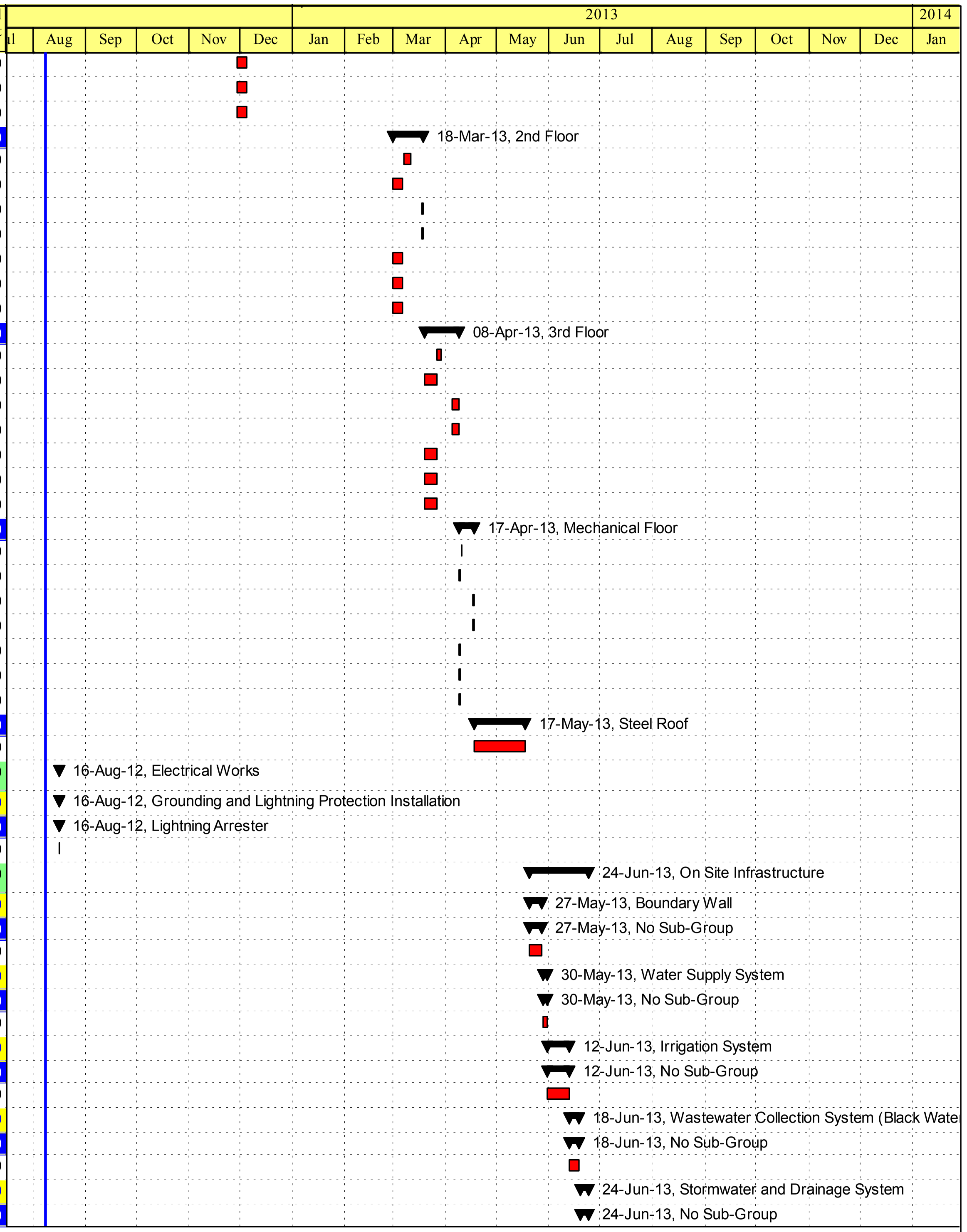
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.3.A.03.B.1F.SC	Scaffolding	4	29-Nov-12	04-Dec-12	0
RC.3.B.01.B.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	29-Nov-12	04-Dec-12	0
RC.3.B.02.B.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	29-Nov-12	04-Dec-12	0
2nd Floor		12	01-Mar-13	18-Mar-13	0
RC.3.A.03.B.2F	Placing of Concrete Class C30 for superstructure abov...	3	07-Mar-13	11-Mar-13	0
RC.3.A.03.B.2F.FW	Formwork	4	01-Mar-13	06-Mar-13	0
RC.3.A.03.B.2F.RFW	Removal of Formwork	1	18-Mar-13	18-Mar-13	0
RC.3.A.03.B.2F.RSC	Removal of Scaffolding	1	18-Mar-13	18-Mar-13	0
RC.3.A.03.B.2F.SC	Scaffolding	4	01-Mar-13	06-Mar-13	0
RC.3.B.01.B.2F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	01-Mar-13	06-Mar-13	0
RC.3.B.02.B.2F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	01-Mar-13	06-Mar-13	0
3rd Floor		15	19-Mar-13	08-Apr-13	0
RC.3.A.03.B.3F	Placing of Concrete Class C30 for superstructure abov...	3	27-Mar-13	29-Mar-13	0
RC.3.A.03.B.3F.FW	Formwork	6	19-Mar-13	26-Mar-13	0
RC.3.A.03.B.3F.RFW	Removal of Formwork	2	05-Apr-13	08-Apr-13	0
RC.3.A.03.B.3F.RSC	Removal of Scaffolding	2	05-Apr-13	08-Apr-13	0
RC.3.A.03.B.3F.SC	Scaffolding	6	19-Mar-13	26-Mar-13	0
RC.3.B.01.B.3F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	19-Mar-13	26-Mar-13	0
RC.3.B.02.B.3F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	19-Mar-13	26-Mar-13	0
Mechanical Floor		7	09-Apr-13	17-Apr-13	0
RC.3.A.03.B.M	Placing of Concrete Class C30 for superstructure abov...	1	10-Apr-13	10-Apr-13	0
RC.3.A.03.B.M.FW	Formwork	1	09-Apr-13	09-Apr-13	0
RC.3.A.03.B.M.RFW	Removal of Formwork	1	17-Apr-13	17-Apr-13	0
RC.3.A.03.B.M.RSC	Removal of Scaffolding	1	17-Apr-13	17-Apr-13	0
RC.3.A.03.B.M.SC	Scaffolding	1	09-Apr-13	09-Apr-13	0
RC.3.B.01.B.M	Deformed high yield steel bars , Ø8-Ø12 mm dia.	1	09-Apr-13	09-Apr-13	0
RC.3.B.02.B.M	Deformed high yield steel bars , Ø14-Ø28 mm dia.	1	09-Apr-13	09-Apr-13	0
Steel Roof		21	18-Apr-13	17-May-13	0
RC.3.C.02.B	Roof support structure made with light steel profiles, in...	21	18-Apr-13	17-May-13	0
Electrical Works		1	16-Aug-12	16-Aug-12	0
Grounding and Lightning Protection Installation		1	16-Aug-12	16-Aug-12	0
Lightning Arrester		1	16-Aug-12	16-Aug-12	0
RC.7.M.3.B	95mm² monotron cable	1	16-Aug-12	16-Aug-12	0
On Site Infrastructure		26	20-May-13	24-Jun-13	0
Boundary Wall		6	20-May-13	27-May-13	0
No Sub-Group		6	20-May-13	27-May-13	0
RC.8.A.01.EX	Excavation for wall foundation including backfilling and c...	6	20-May-13	27-May-13	0
Water Supply System		3	28-May-13	30-May-13	0
No Sub-Group		3	28-May-13	30-May-13	0
RC.8.B.EXC	Excavation for Water Supply System Pipes	3	28-May-13	30-May-13	0
Irrigation System		9	31-May-13	12-Jun-13	0
No Sub-Group		9	31-May-13	12-Jun-13	0
RC.8.C.EXC	Excavation for Irrigation System Pipes	9	31-May-13	12-Jun-13	0
Wastewater Collection System (Black Water & Grey Water Lines)		4	13-Jun-13	18-Jun-13	0
No Sub-Group		4	13-Jun-13	18-Jun-13	0
RC.8.D.EXC	Excavation for Wastewater Pipes	4	13-Jun-13	18-Jun-13	0
Stormwater and Drainage System		4	19-Jun-13	24-Jun-13	0
No Sub-Group		4	19-Jun-13	24-Jun-13	0



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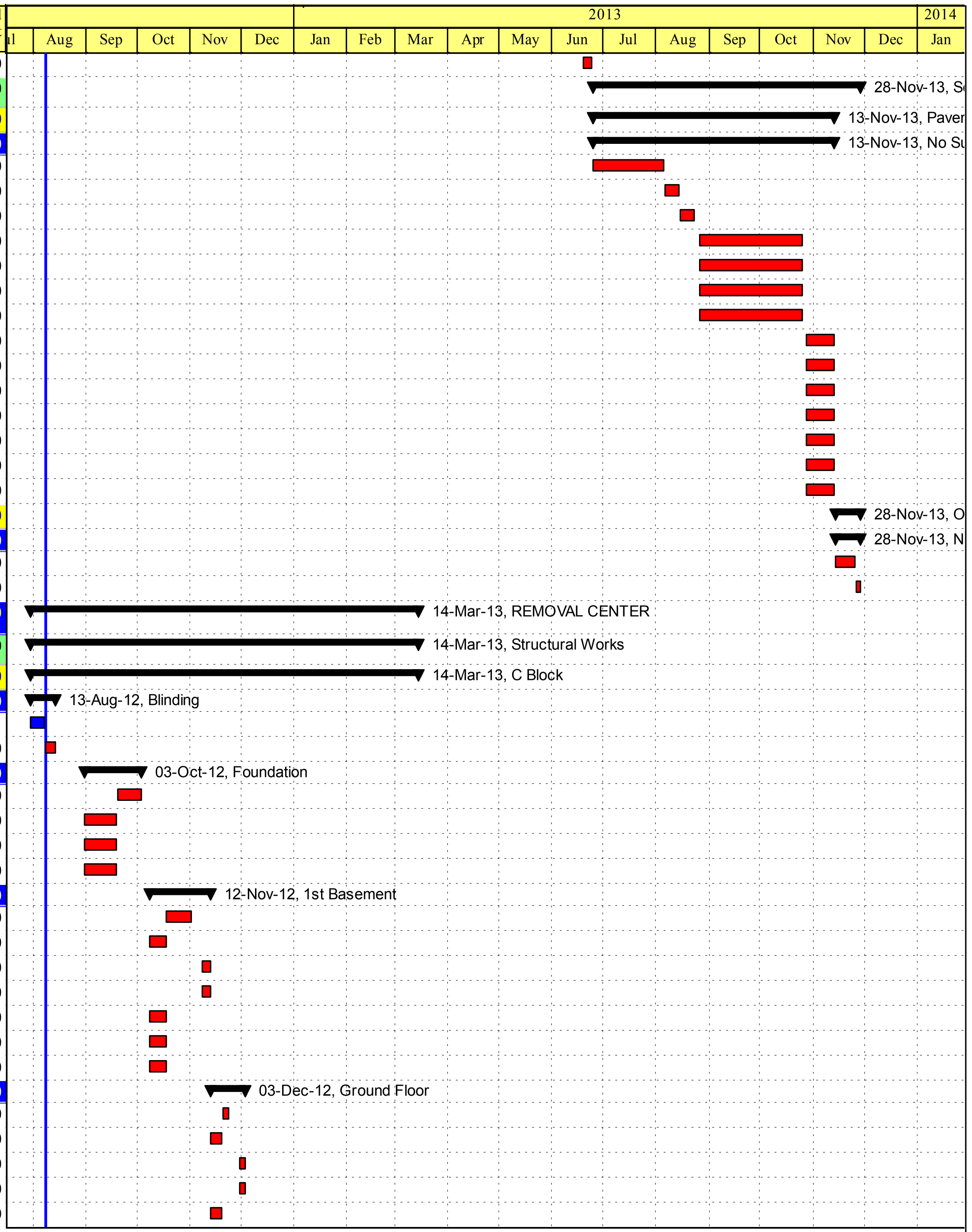
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.8.E.EXC	Excavation for Drainage System Pipes	4	19-Jun-13	24-Jun-13	0
Soft and Hard Landscaping		103	25-Jun-13	28-Nov-13	0
Pavements and Sidewalks		92	25-Jun-13	13-Nov-13	0
No Sub-Group		92	25-Jun-13	13-Nov-13	0
RC.9.B.01	Excavation for planting areas,pavements and sidewalks...	30	25-Jun-13	05-Aug-13	0
RC.9.B.02	Aggregate sub-base course	4	06-Aug-13	14-Aug-13	0
RC.9.B.04	Placing of concrete Class C16/20 including reinforcing ...	7	15-Aug-13	23-Aug-13	0
RC.9.B.05	Natural Ankara stone (andesite) flooring, 300x40 mm, fr...	39	26-Aug-13	25-Oct-13	0
RC.9.B.06	Natural Ankara stone (andesite) flooring, 400x400x40 m...	39	26-Aug-13	25-Oct-13	0
RC.9.B.07	Natural Ankara stone (andesite) curb, 10x15x50 cm, in...	39	26-Aug-13	25-Oct-13	0
RC.9.B.08	Natural Ankara stone (andesite) curb, 10x25x50 cm, in...	39	26-Aug-13	25-Oct-13	0
RC.9.B.09	Natural Ankara stone (andesite) wall cover, 30 mm thic...	12	28-Oct-13	13-Nov-13	0
RC.9.B.10	Natural Ankara stone (andesite) coping, 60 mm thick, la...	12	28-Oct-13	13-Nov-13	0
RC.9.B.11	Natural Ankara stone (andesite) stair tread, 350x40mm...	12	28-Oct-13	13-Nov-13	0
RC.9.B.13	Natural Ankara stone (andesite) gutter, 200 mm wide, l...	12	28-Oct-13	13-Nov-13	0
RC.9.B.14	Natural Ankara stone (andesite) skirting, 80x30mm, laid...	12	28-Oct-13	13-Nov-13	0
RC.9.B.15	Natural Ankara stone (andesite) sill, 30mm thick, laid wit...	12	28-Oct-13	13-Nov-13	0
RC.9.B.16	Cast-in-place terrazzo coping with white cement	12	28-Oct-13	13-Nov-13	0
Outdoor Furniture		11	14-Nov-13	28-Nov-13	0
No Sub-Group		11	14-Nov-13	28-Nov-13	0
RC.9.E.03	Pergola structure; as shown on the drawings	8	14-Nov-13	25-Nov-13	0
RC.9.E.04	Gazebo structure; as shown on the drawings	3	26-Nov-13	28-Nov-13	0
REMOVAL CENTER		156	08-Aug-12	14-Mar-13	0
Structural Works		156	08-Aug-12	14-Mar-13	0
C Block		156	08-Aug-12	14-Mar-13	0
Blinding		11	08-Aug-12	13-Aug-12	0
EVENT NO. 4	Late Instruction by the Engineer	7	08-Aug-12	08-Aug-12	
RV.3.A.01.C	Placing of concrete Class C14 for blinding and filling.	4	08-Aug-12	13-Aug-12	0
Foundation		24	31-Aug-12	03-Oct-12	0
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	19-Sep-12	03-Oct-12	0
RV.3.A.02.C.FW	Formwork	13	31-Aug-12	18-Sep-12	0
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	31-Aug-12	18-Sep-12	0
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	31-Aug-12	18-Sep-12	0
1st Basement		22	08-Oct-12	12-Nov-12	0
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	18-Oct-12	01-Nov-12	0
RV.3.A.03.C.BS1.FW	Formwork	8	08-Oct-12	17-Oct-12	0
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	08-Nov-12	12-Nov-12	0
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	08-Nov-12	12-Nov-12	0
RV.3.A.03.C.BS1.SC	Scaffolding	8	08-Oct-12	17-Oct-12	0
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	08-Oct-12	17-Oct-12	0
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	08-Oct-12	17-Oct-12	0
Ground Floor		15	13-Nov-12	03-Dec-12	0
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	20-Nov-12	23-Nov-12	0
RV.3.A.03.C.GR.FW	Formwork	5	13-Nov-12	19-Nov-12	0
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	30-Nov-12	03-Dec-12	0
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	30-Nov-12	03-Dec-12	0
RV.3.A.03.C.GR.SC	Scaffolding	5	13-Nov-12	19-Nov-12	0



🟦 Actual Work	🟥 Critical Remaining Work	Summary
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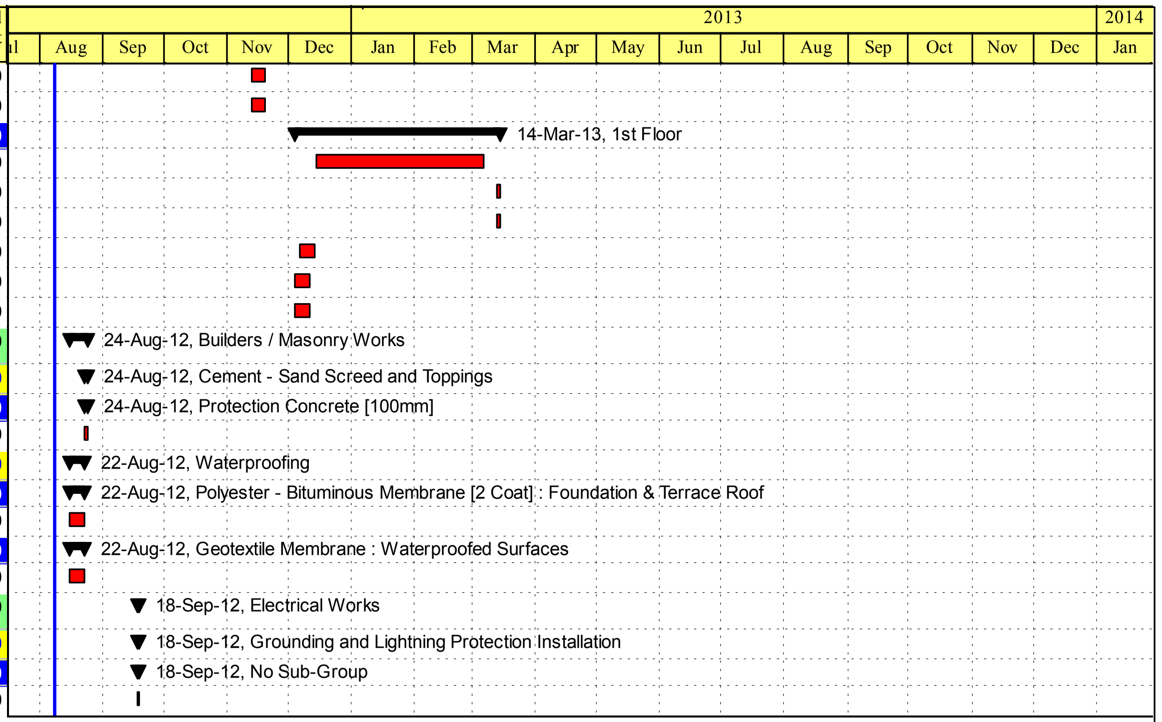
Updated Schedule 5.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	13-Nov-12	19-Nov-12	0
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	13-Nov-12	19-Nov-12	0
1st Floor		72	04-Dec-12	14-Mar-13	0
RV.3.A.03.C.1F	Placing of Concrete Class C30 for superstructure abov...	5	14-Dec-12	06-Mar-13	0
RV.3.A.03.C.1F.RFW	Removal of Formwork	2	13-Mar-13	14-Mar-13	0
RV.3.A.03.C.1F.RSC	Removal of Scaffolding	2	13-Mar-13	14-Mar-13	0
RV.3.A.03.C.1F.SC	Scaffolding	6	06-Dec-12	13-Dec-12	0
RV.3.B.01.C.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	04-Dec-12	11-Dec-12	0
RV.3.B.02.C.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	04-Dec-12	11-Dec-12	0
Builders / Masonry Works		6	15-Aug-12	24-Aug-12	0
Cement - Sand Screed and Toppings		2	23-Aug-12	24-Aug-12	0
Protection Concrete [100mm]		2	23-Aug-12	24-Aug-12	0
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	23-Aug-12	24-Aug-12	0
Waterproofing		4	15-Aug-12	22-Aug-12	0
Polyester - Bituminous Membrane [2 Coat] : Foundation & Terrace Roof		4	15-Aug-12	22-Aug-12	0
RV.4.D.03.C.FN	Two coat waterproofing with polyester reinforced bitumi...	4	15-Aug-12	22-Aug-12	0
Geotextile Membrane : Waterproofed Surfaces		4	15-Aug-12	22-Aug-12	0
RV.4.D.05.C.FN	Geotextile protective membrane, to waterproofed surfac...	4	15-Aug-12	22-Aug-12	0
Electrical Works		1	18-Sep-12	18-Sep-12	0
Grounding and Lightning Protection Installation		1	18-Sep-12	18-Sep-12	0
No Sub-Group		1	18-Sep-12	18-Sep-12	0
RV.7.M.3.C	95mm² monotron cable	1	18-Sep-12	18-Sep-12	0



🟦 Actual Work
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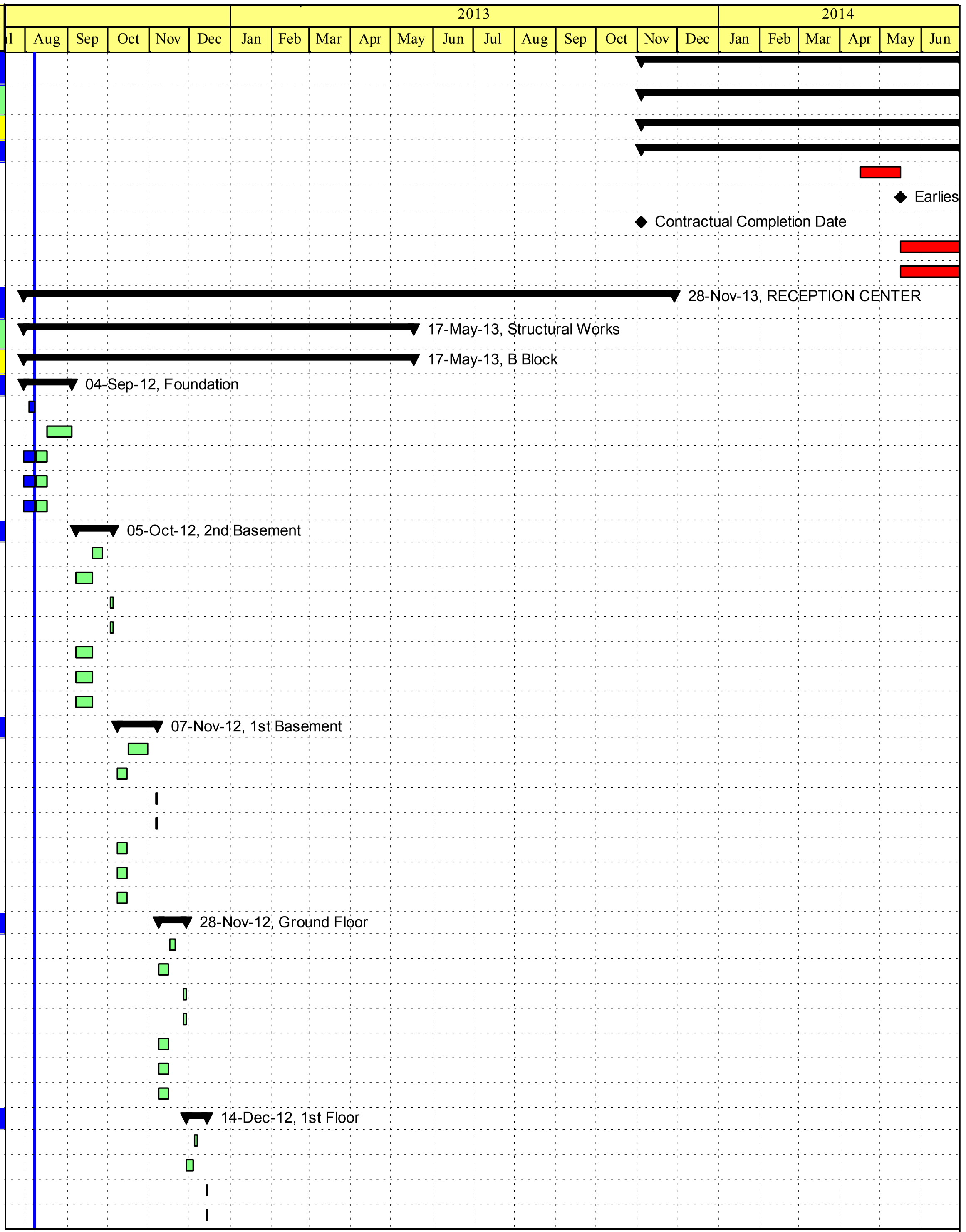
Updated Schedule 5.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		168	03-Nov-13	30-Jun-14	0
General		168	03-Nov-13	30-Jun-14	0
General		168	03-Nov-13	30-Jun-14	0
General		168	03-Nov-13	30-Jun-14	0
GEN99100	Tests on Completion	30	16-Apr-14	16-May-14	0
GEN99500	Earliest Completion of All Scope	0		16-May-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	16-May-14	30-Jun-14	0
GEN99920	As-Built Drawings and Other Documents	45	16-May-14	30-Jun-14	0
RECEPTION CENTER		330	08-Aug-12	28-Nov-13	98
Structural Works		201	08-Aug-12	17-May-13	44
B Block		201	08-Aug-12	17-May-13	44
Foundation		24	08-Aug-12	04-Sep-12	12
EVENT NO. 5	Late Approval of the Drawings	3	08-Aug-12	08-Aug-12	
RC.3.A.02.B	Placing of concrete Class C30 for raft foundation, inclu...	10	17-Aug-12	04-Sep-12	12
RC.3.A.02.B.FW	Formwork	11	08-Aug-12	16-Aug-12	12
RC.3.B.01.B.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	11	08-Aug-12	16-Aug-12	12
RC.3.B.02.B.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	11	08-Aug-12	16-Aug-12	12
2nd Basement		21	07-Sep-12	05-Oct-12	12
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	20-Sep-12	26-Sep-12	12
RC.3.A.03.B.BS2.FW	Formwork	9	07-Sep-12	19-Sep-12	12
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	03-Oct-12	05-Oct-12	12
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	03-Oct-12	05-Oct-12	12
RC.3.A.03.B.BS2.SC	Scaffolding	9	07-Sep-12	19-Sep-12	12
RC.3.B.01.B.BS2	Deformed high yield steel bars , Ø8-Ø12 mm dia.	9	07-Sep-12	19-Sep-12	12
RC.3.B.02.B.BS2	Deformed high yield steel bars , Ø14-Ø28 mm dia.	9	07-Sep-12	19-Sep-12	12
1st Basement		19	08-Oct-12	07-Nov-12	12
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	16-Oct-12	30-Oct-12	12
RC.3.A.03.B.BS1.FW	Formwork	6	08-Oct-12	15-Oct-12	12
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	06-Nov-12	07-Nov-12	12
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	06-Nov-12	07-Nov-12	12
RC.3.A.03.B.BS1.SC	Scaffolding	6	08-Oct-12	15-Oct-12	12
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	08-Oct-12	15-Oct-12	12
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	08-Oct-12	15-Oct-12	12
Ground Floor		15	08-Nov-12	28-Nov-12	12
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	16-Nov-12	20-Nov-12	12
RC.3.A.03.B.GR.FW	Formwork	6	08-Nov-12	15-Nov-12	12
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	27-Nov-12	28-Nov-12	12
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	27-Nov-12	28-Nov-12	12
RC.3.A.03.B.GR.SC	Scaffolding	6	08-Nov-12	15-Nov-12	12
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	08-Nov-12	15-Nov-12	12
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	08-Nov-12	15-Nov-12	12
1st Floor		12	29-Nov-12	14-Dec-12	71
RC.3.A.03.B.1F	Placing of Concrete Class C30 for superstructure abov...	3	05-Dec-12	07-Dec-12	15
RC.3.A.03.B.1F.FW	Formwork	4	29-Nov-12	04-Dec-12	15
RC.3.A.03.B.1F.RFW	Removal of Formwork	1	14-Dec-12	14-Dec-12	15
RC.3.A.03.B.1F.RSC	Removal of Scaffolding	1	14-Dec-12	14-Dec-12	18



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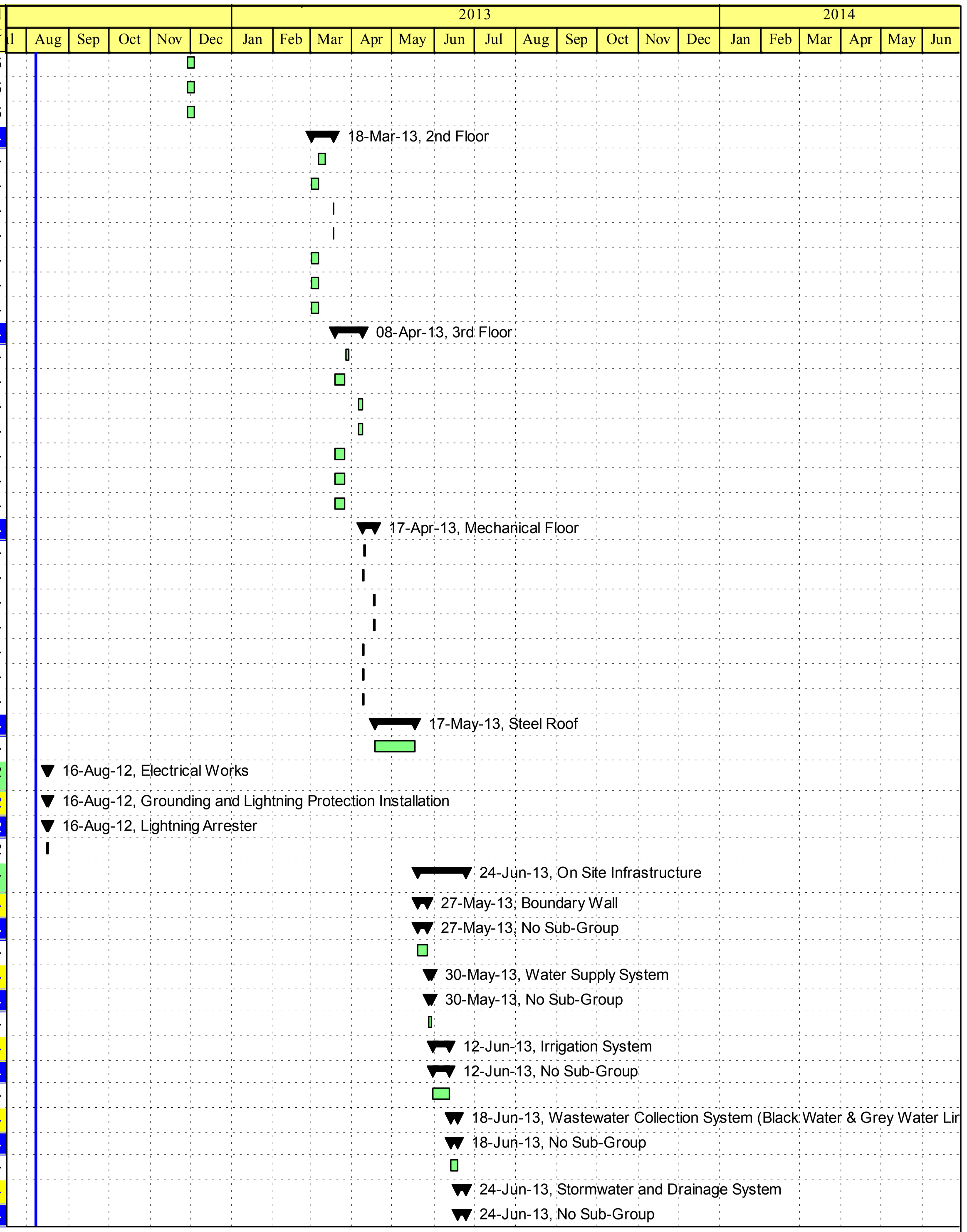
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.3.A.03.B.1F.SC	Scaffolding	4	29-Nov-12	04-Dec-12	15
RC.3.B.01.B.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	29-Nov-12	04-Dec-12	15
RC.3.B.02.B.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	29-Nov-12	04-Dec-12	15
2nd Floor		12	01-Mar-13	18-Mar-13	44
RC.3.A.03.B.2F	Placing of Concrete Class C30 for superstructure abov...	3	07-Mar-13	11-Mar-13	44
RC.3.A.03.B.2F.FW	Formwork	4	01-Mar-13	06-Mar-13	44
RC.3.A.03.B.2F.RFW	Removal of Formwork	1	18-Mar-13	18-Mar-13	44
RC.3.A.03.B.2F.RSC	Removal of Scaffolding	1	18-Mar-13	18-Mar-13	44
RC.3.A.03.B.2F.SC	Scaffolding	4	01-Mar-13	06-Mar-13	44
RC.3.B.01.B.2F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	01-Mar-13	06-Mar-13	44
RC.3.B.02.B.2F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	01-Mar-13	06-Mar-13	44
3rd Floor		15	19-Mar-13	08-Apr-13	44
RC.3.A.03.B.3F	Placing of Concrete Class C30 for superstructure abov...	3	27-Mar-13	29-Mar-13	44
RC.3.A.03.B.3F.FW	Formwork	6	19-Mar-13	26-Mar-13	44
RC.3.A.03.B.3F.RFW	Removal of Formwork	2	05-Apr-13	08-Apr-13	44
RC.3.A.03.B.3F.RSC	Removal of Scaffolding	2	05-Apr-13	08-Apr-13	44
RC.3.A.03.B.3F.SC	Scaffolding	6	19-Mar-13	26-Mar-13	44
RC.3.B.01.B.3F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	19-Mar-13	26-Mar-13	44
RC.3.B.02.B.3F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	19-Mar-13	26-Mar-13	44
Mechanical Floor		7	09-Apr-13	17-Apr-13	44
RC.3.A.03.B.M	Placing of Concrete Class C30 for superstructure abov...	1	10-Apr-13	10-Apr-13	44
RC.3.A.03.B.M.FW	Formwork	1	09-Apr-13	09-Apr-13	44
RC.3.A.03.B.M.RFW	Removal of Formwork	1	17-Apr-13	17-Apr-13	44
RC.3.A.03.B.M.RSC	Removal of Scaffolding	1	17-Apr-13	17-Apr-13	44
RC.3.A.03.B.M.SC	Scaffolding	1	09-Apr-13	09-Apr-13	44
RC.3.B.01.B.M	Deformed high yield steel bars , Ø8-Ø12 mm dia.	1	09-Apr-13	09-Apr-13	44
RC.3.B.02.B.M	Deformed high yield steel bars , Ø14-Ø28 mm dia.	1	09-Apr-13	09-Apr-13	44
Steel Roof		21	18-Apr-13	17-May-13	44
RC.3.C.02.B	Roof support structure made with light steel profiles, in...	21	18-Apr-13	17-May-13	44
Electrical Works		1	16-Aug-12	16-Aug-12	12
Grounding and Lightning Protection Installation		1	16-Aug-12	16-Aug-12	12
Lightning Arrester		1	16-Aug-12	16-Aug-12	12
RC.7.M.3.B	95mm² monotron cable	1	16-Aug-12	16-Aug-12	12
On Site Infrastructure		26	20-May-13	24-Jun-13	44
Boundary Wall		6	20-May-13	27-May-13	44
No Sub-Group		6	20-May-13	27-May-13	44
RC.8.A.01.EX	Excavation for wall foundation including backfilling and c...	6	20-May-13	27-May-13	44
Water Supply System		3	28-May-13	30-May-13	44
No Sub-Group		3	28-May-13	30-May-13	44
RC.8.B.EXC	Excavation for Water Supply System Pipes	3	28-May-13	30-May-13	44
Irrigation System		9	31-May-13	12-Jun-13	44
No Sub-Group		9	31-May-13	12-Jun-13	44
RC.8.C.EXC	Excavation for Irrigation System Pipes	9	31-May-13	12-Jun-13	44
Wastewater Collection System (Black Water & Grey Water Lines)		4	13-Jun-13	18-Jun-13	44
No Sub-Group		4	13-Jun-13	18-Jun-13	44
RC.8.D.EXC	Excavation for Wastewater Pipes	4	13-Jun-13	18-Jun-13	44
Stormwater and Drainage System		4	19-Jun-13	24-Jun-13	44
No Sub-Group		4	19-Jun-13	24-Jun-13	44



🟦 Actual Work	🟥 Critical Remaining Work	▬ Summary
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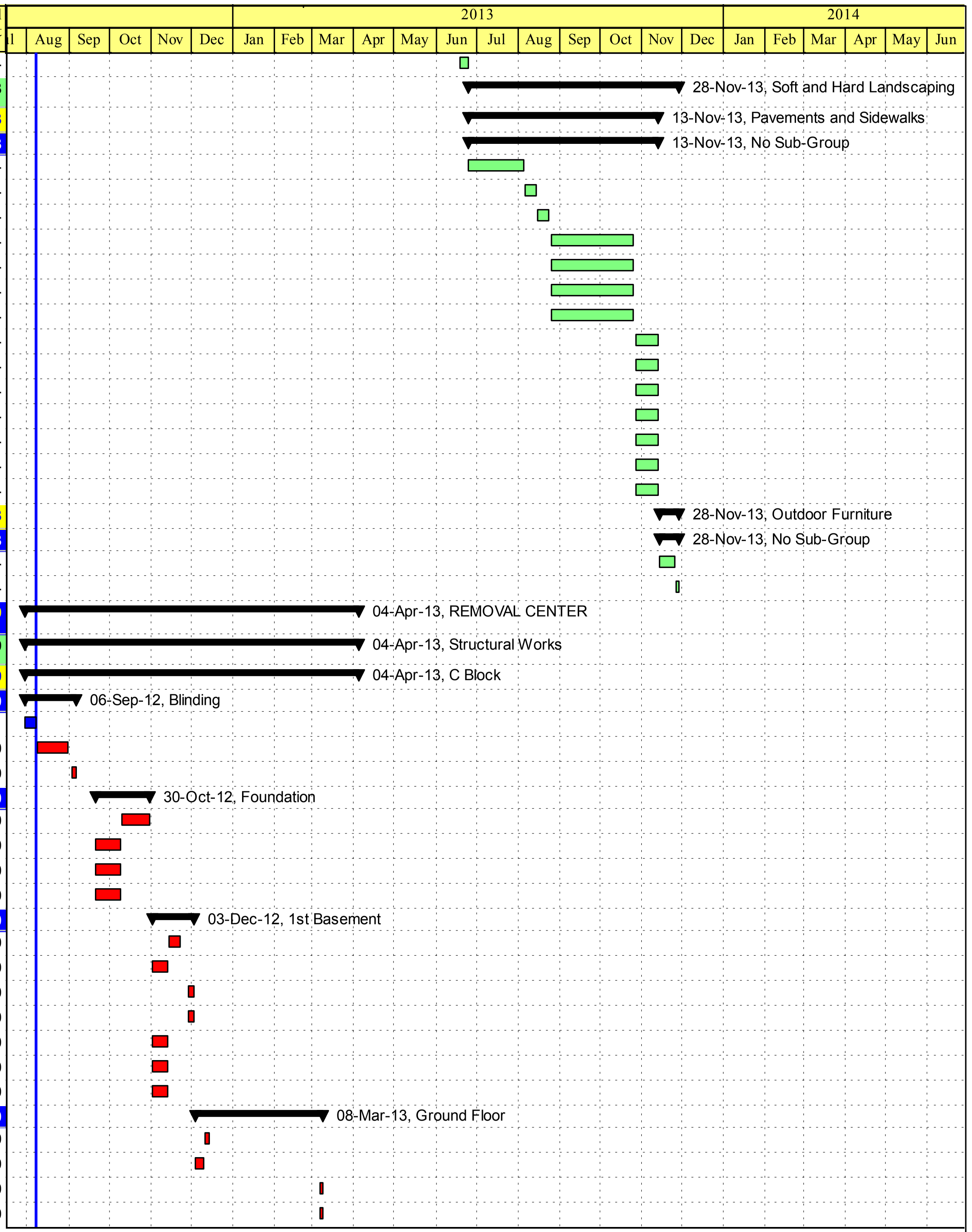
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.8.E.EXC	Excavation for Drainage System Pipes	4	19-Jun-13	24-Jun-13	44
Soft and Hard Landscaping		103	25-Jun-13	28-Nov-13	98
Pavements and Sidewalks		92	25-Jun-13	13-Nov-13	98
No Sub-Group		92	25-Jun-13	13-Nov-13	98
RC.9.B.01	Excavation for planting areas,pavements and sidewalks...	30	25-Jun-13	05-Aug-13	44
RC.9.B.02	Aggregate sub-base course	4	06-Aug-13	14-Aug-13	44
RC.9.B.04	Placing of concrete Class C16/20 including reinforcing ...	7	15-Aug-13	23-Aug-13	44
RC.9.B.05	Natural Ankara stone (andesite) flooring, 300x40 mm, fr...	39	26-Aug-13	25-Oct-13	44
RC.9.B.06	Natural Ankara stone (andesite) flooring, 400x400x40 m...	39	26-Aug-13	25-Oct-13	44
RC.9.B.07	Natural Ankara stone (andesite) curb, 10x15x50 cm, in...	39	26-Aug-13	25-Oct-13	44
RC.9.B.08	Natural Ankara stone (andesite) curb, 10x25x50 cm, in...	39	26-Aug-13	25-Oct-13	44
RC.9.B.09	Natural Ankara stone (andesite) wall cover, 30 mm thic...	12	28-Oct-13	13-Nov-13	44
RC.9.B.10	Natural Ankara stone (andesite) coping, 60 mm thick, la...	12	28-Oct-13	13-Nov-13	44
RC.9.B.11	Natural Ankara stone (andesite) stair tread, 350x40mm...	12	28-Oct-13	13-Nov-13	44
RC.9.B.13	Natural Ankara stone (andesite) gutter, 200 mm wide, l...	12	28-Oct-13	13-Nov-13	44
RC.9.B.14	Natural Ankara stone (andesite) skirting, 80x30mm, laid...	12	28-Oct-13	13-Nov-13	44
RC.9.B.15	Natural Ankara stone (andesite) sill, 30mm thick, laid wit...	12	28-Oct-13	13-Nov-13	44
RC.9.B.16	Cast-in-place terrazzo coping with white cement	12	28-Oct-13	13-Nov-13	44
Outdoor Furniture		11	14-Nov-13	28-Nov-13	98
No Sub-Group		11	14-Nov-13	28-Nov-13	98
RC.9.E.03	Pergola structure; as shown on the drawings	8	14-Nov-13	25-Nov-13	44
RC.9.E.04	Gazebo structure; as shown on the drawings	3	26-Nov-13	28-Nov-13	44
REMOVAL CENTER		171	08-Aug-12	04-Apr-13	29
Structural Works		171	08-Aug-12	04-Apr-13	29
C Block		171	08-Aug-12	04-Apr-13	29
Blinding		26	08-Aug-12	06-Sep-12	0
EVENT NO. 4	Late Instruction by the Engineer	7	08-Aug-12	08-Aug-12	
EVENT NO. 6	Variation Order #1 [Change in Design]	15	08-Aug-12	31-Aug-12	0
RV.3.A.01.C	Placing of concrete Class C14 for blinding and filling.	4	03-Sep-12	06-Sep-12	0
Foundation		24	21-Sep-12	30-Oct-12	0
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	10-Oct-12	30-Oct-12	0
RV.3.A.02.C.FW	Formwork	13	21-Sep-12	09-Oct-12	0
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	21-Sep-12	09-Oct-12	0
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	21-Sep-12	09-Oct-12	0
1st Basement		22	02-Nov-12	03-Dec-12	0
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	14-Nov-12	22-Nov-12	0
RV.3.A.03.C.BS1.FW	Formwork	8	02-Nov-12	13-Nov-12	0
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	29-Nov-12	03-Dec-12	0
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	29-Nov-12	03-Dec-12	0
RV.3.A.03.C.BS1.SC	Scaffolding	8	02-Nov-12	13-Nov-12	0
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	02-Nov-12	13-Nov-12	0
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	02-Nov-12	13-Nov-12	0
Ground Floor		68	04-Dec-12	08-Mar-13	0
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	11-Dec-12	14-Dec-12	0
RV.3.A.03.C.GR.FW	Formwork	5	04-Dec-12	10-Dec-12	0
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	07-Mar-13	08-Mar-13	0
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	07-Mar-13	08-Mar-13	0



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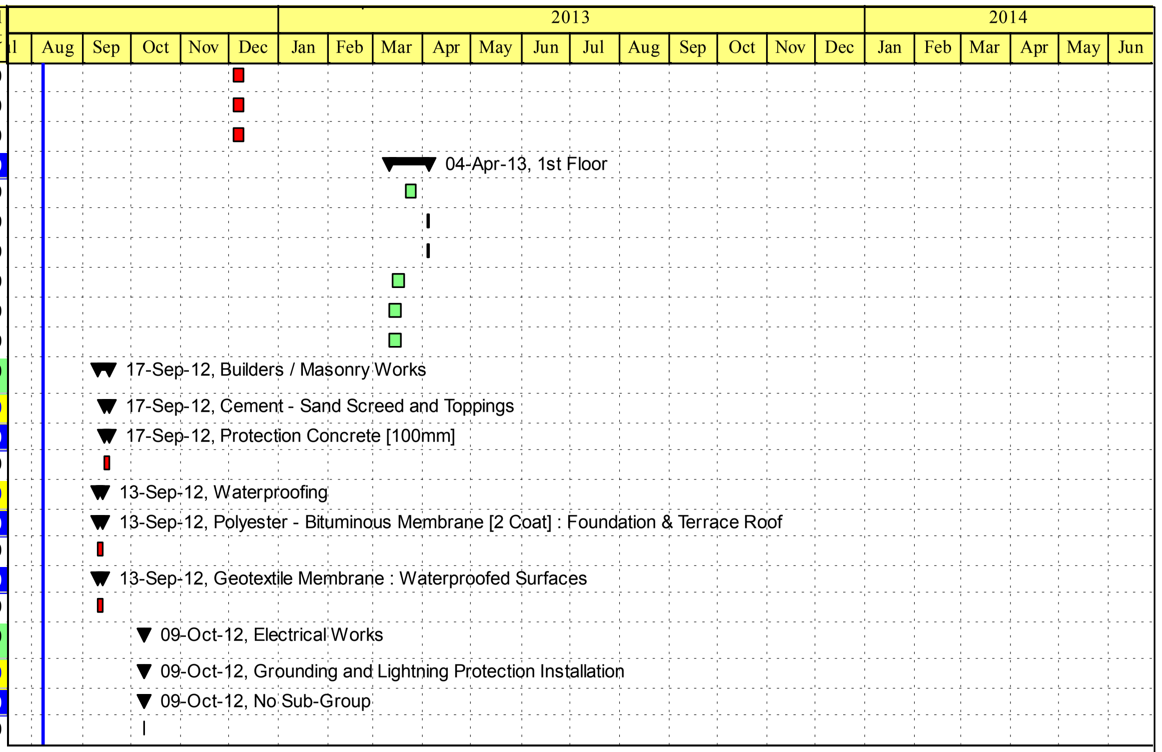
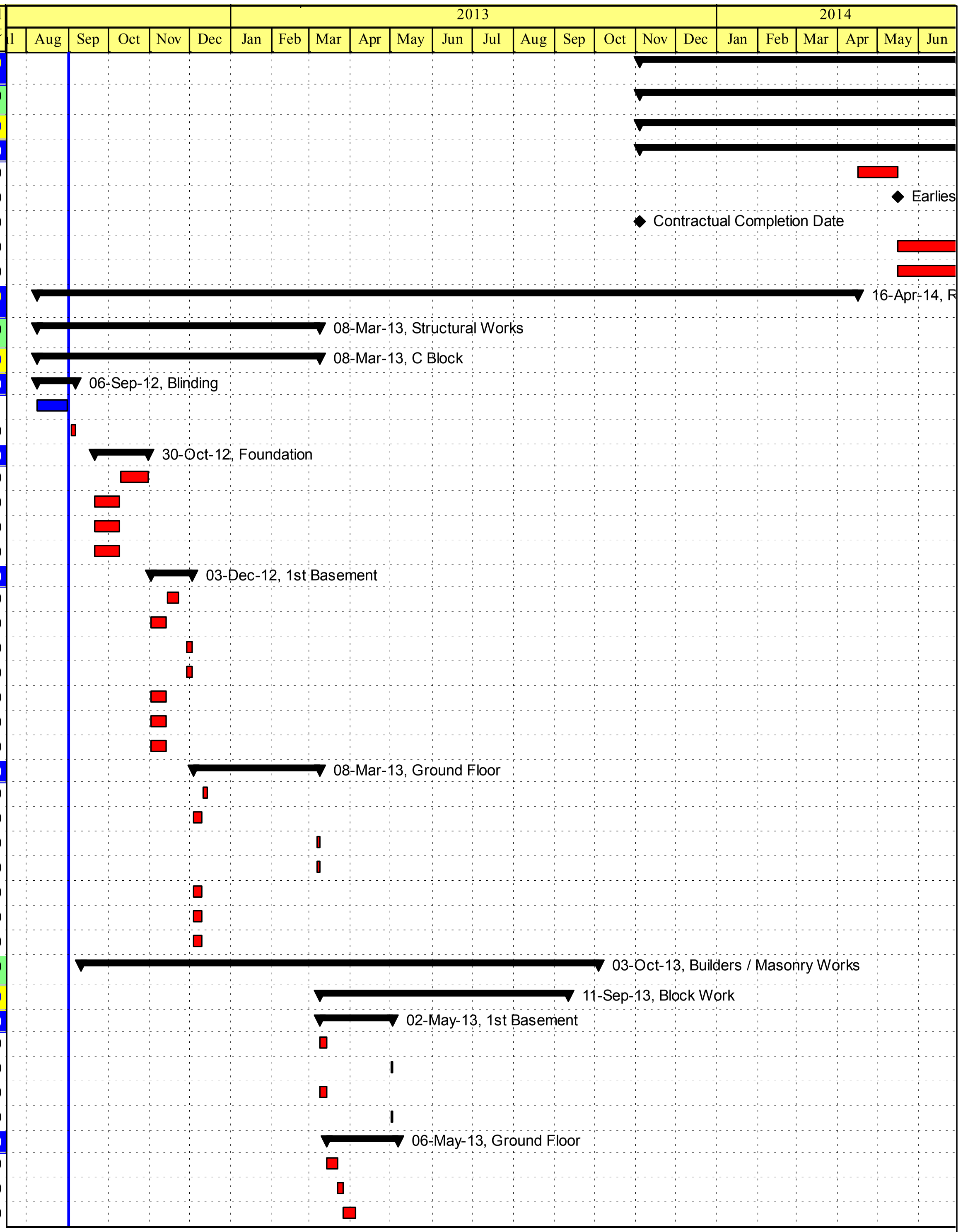
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.3.A.03.C.GR.SC	Scaffolding	5	04-Dec-12	10-Dec-12	0
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	04-Dec-12	10-Dec-12	0
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	04-Dec-12	10-Dec-12	0
1st Floor		19	11-Mar-13	04-Apr-13	29
RV.3.A.03.C.1F	Placing of Concrete Class C30 for superstructure abov...	5	21-Mar-13	27-Mar-13	29
RV.3.A.03.C.1F.RFW	Removal of Formwork	2	03-Apr-13	04-Apr-13	29
RV.3.A.03.C.1F.RSC	Removal of Scaffolding	2	03-Apr-13	04-Apr-13	29
RV.3.A.03.C.1F.SC	Scaffolding	6	13-Mar-13	20-Mar-13	29
RV.3.B.01.C.1F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	11-Mar-13	18-Mar-13	29
RV.3.B.02.C.1F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	11-Mar-13	18-Mar-13	29
Builders / Masonry Works		6	10-Sep-12	17-Sep-12	0
Cement - Sand Screed and Toppings		2	14-Sep-12	17-Sep-12	0
Protection Concrete [100mm]		2	14-Sep-12	17-Sep-12	0
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	14-Sep-12	17-Sep-12	0
Waterproofing		4	10-Sep-12	13-Sep-12	0
Polyester - Bituminous Membrane [2 Coat] : Foundation & Terrace Roof		4	10-Sep-12	13-Sep-12	0
RV.4.D.03.C.FN	Two coat waterproofing with polyester reinforced bitumi...	4	10-Sep-12	13-Sep-12	0
Geotextile Membrane : Waterproofed Surfaces		4	10-Sep-12	13-Sep-12	0
RV.4.D.05.C.FN	Geotextile protective membrane, to waterproofed surfac...	4	10-Sep-12	13-Sep-12	0
Electrical Works		1	09-Oct-12	09-Oct-12	0
Grounding and Lightning Protection Installation		1	09-Oct-12	09-Oct-12	0
No Sub-Group		1	09-Oct-12	09-Oct-12	0
RV.7.M.3.C	95mm² monotron cable	1	09-Oct-12	09-Oct-12	0



🟦 Actual Work	🟥 Critical Remaining Work
🟩 Remaining Work ◆	◆ Milestone
Summary	

Updated Schedule 5.2

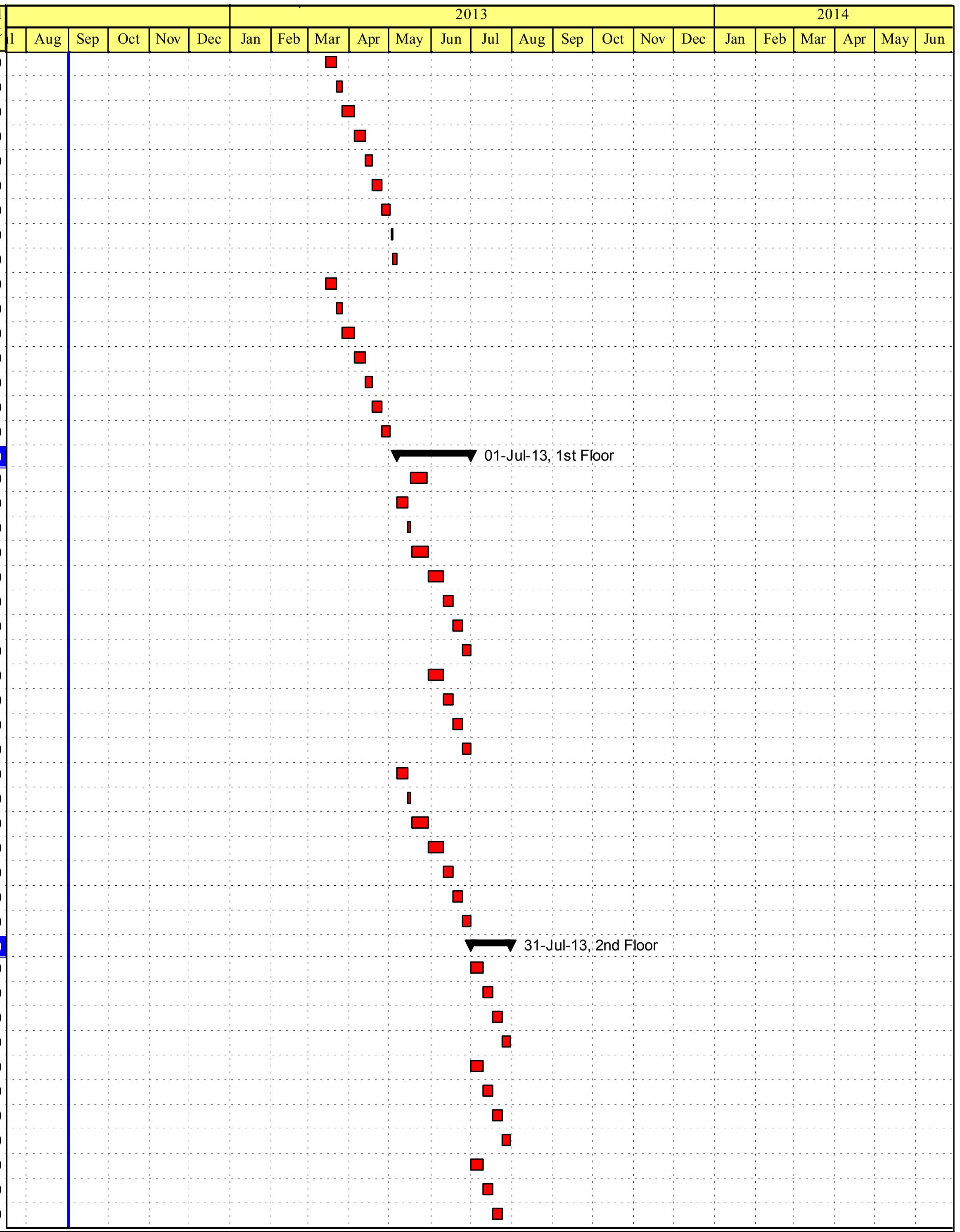
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		168	03-Nov-13	30-Jun-14	0
General		168	03-Nov-13	30-Jun-14	0
General		168	03-Nov-13	30-Jun-14	0
General		168	03-Nov-13	30-Jun-14	0
GEN99100	Tests on Completion	30	16-Apr-14	16-May-14	0
GEN99500	Earliest Completion of All Scope	0		16-May-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	16-May-14	30-Jun-14	0
GEN99920	As-Built Drawings and Other Documents	45	16-May-14	30-Jun-14	0
REMOVAL CENTER		421	01-Sep-12	16-Apr-14	0
Structural Works		145	01-Sep-12	08-Mar-13	0
C Block		145	01-Sep-12	08-Mar-13	0
Blinding		19	01-Sep-12	06-Sep-12	0
EVENT NO. 6	Variation Order #1 [Change in Design]	15	01-Sep-12	01-Sep-12	
RV.3.A.01.C	Placing of concrete Class C14 for blinding and filling.	4	03-Sep-12	06-Sep-12	0
Foundation		24	21-Sep-12	30-Oct-12	0
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	10-Oct-12	30-Oct-12	0
RV.3.A.02.C.FW	Formwork	13	21-Sep-12	09-Oct-12	0
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	21-Sep-12	09-Oct-12	0
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	21-Sep-12	09-Oct-12	0
1st Basement		22	02-Nov-12	03-Dec-12	0
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	14-Nov-12	22-Nov-12	0
RV.3.A.03.C.BS1.FW	Formwork	8	02-Nov-12	13-Nov-12	0
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	29-Nov-12	03-Dec-12	0
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	29-Nov-12	03-Dec-12	0
RV.3.A.03.C.BS1.SC	Scaffolding	8	02-Nov-12	13-Nov-12	0
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	02-Nov-12	13-Nov-12	0
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	02-Nov-12	13-Nov-12	0
Ground Floor		68	04-Dec-12	08-Mar-13	0
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	11-Dec-12	14-Dec-12	0
RV.3.A.03.C.GR.FW	Formwork	5	04-Dec-12	10-Dec-12	0
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	07-Mar-13	08-Mar-13	0
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	07-Mar-13	08-Mar-13	0
RV.3.A.03.C.GR.SC	Scaffolding	5	04-Dec-12	10-Dec-12	0
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	04-Dec-12	10-Dec-12	0
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	04-Dec-12	10-Dec-12	0
Builders / Masonry Works		269	10-Sep-12	03-Oct-13	0
Block Work		128	08-Mar-13	11-Sep-13	0
1st Basement		38	08-Mar-13	02-May-13	0
RV.4.A.02.C.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	08-Mar-13	13-Mar-13	0
RV.4.A.02.H.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	01-May-13	02-May-13	0
RV.4.A.04.C.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	08-Mar-13	13-Mar-13	0
RV.4.A.04.H.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	1	01-May-13	02-May-13	0
Ground Floor		37	13-Mar-13	06-May-13	0
RV.4.A.01.A.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	7	13-Mar-13	22-Mar-13	0
RV.4.A.01.B.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	2	22-Mar-13	26-Mar-13	0
RV.4.A.01.C.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	7	26-Mar-13	04-Apr-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

Updated Schedule 6.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.4.A.02.A.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	13-Mar-13	22-Mar-13	0
RV.4.A.02.B.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	22-Mar-13	26-Mar-13	0
RV.4.A.02.C.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	26-Mar-13	04-Apr-13	0
RV.4.A.02.D.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	04-Apr-13	12-Apr-13	0
RV.4.A.02.E.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	12-Apr-13	18-Apr-13	0
RV.4.A.02.F.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	18-Apr-13	25-Apr-13	0
RV.4.A.02.G.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	25-Apr-13	01-May-13	0
RV.4.A.02.H.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	02-May-13	03-May-13	0
RV.4.A.02.I.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	03-May-13	06-May-13	0
RV.4.A.04.A.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	13-Mar-13	22-Mar-13	0
RV.4.A.04.B.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	22-Mar-13	26-Mar-13	0
RV.4.A.04.C.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	26-Mar-13	04-Apr-13	0
RV.4.A.04.D.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	04-Apr-13	12-Apr-13	0
RV.4.A.04.E.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	12-Apr-13	18-Apr-13	0
RV.4.A.04.F.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	18-Apr-13	25-Apr-13	0
RV.4.A.04.G.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	25-Apr-13	01-May-13	0
1st Floor		40	06-May-13	01-Jul-13	0
RV.4.A.01.C.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	16-May-13	29-May-13	0
RV.4.A.02.A.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	06-May-13	14-May-13	0
RV.4.A.02.B.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	14-May-13	16-May-13	0
RV.4.A.02.C.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	17-May-13	30-May-13	0
RV.4.A.02.D.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	30-May-13	10-Jun-13	0
RV.4.A.02.E.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	10-Jun-13	17-Jun-13	0
RV.4.A.02.F.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	17-Jun-13	24-Jun-13	0
RV.4.A.02.G.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	24-Jun-13	01-Jul-13	0
RV.4.A.03.D.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	30-May-13	10-Jun-13	0
RV.4.A.03.E.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	10-Jun-13	17-Jun-13	0
RV.4.A.03.F.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	17-Jun-13	24-Jun-13	0
RV.4.A.03.G.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	24-Jun-13	01-Jul-13	0
RV.4.A.04.A.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	06-May-13	14-May-13	0
RV.4.A.04.B.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	14-May-13	16-May-13	0
RV.4.A.04.C.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	17-May-13	30-May-13	0
RV.4.A.04.D.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	30-May-13	10-Jun-13	0
RV.4.A.04.E.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	10-Jun-13	17-Jun-13	0
RV.4.A.04.F.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	17-Jun-13	24-Jun-13	0
RV.4.A.04.G.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	24-Jun-13	01-Jul-13	0
2nd Floor		22	01-Jul-13	31-Jul-13	0
RV.4.A.02.D.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	01-Jul-13	10-Jul-13	0
RV.4.A.02.E.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	10-Jul-13	17-Jul-13	0
RV.4.A.02.F.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	17-Jul-13	24-Jul-13	0
RV.4.A.02.G.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	24-Jul-13	31-Jul-13	0
RV.4.A.03.D.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	01-Jul-13	10-Jul-13	0
RV.4.A.03.E.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	10-Jul-13	17-Jul-13	0
RV.4.A.03.F.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	17-Jul-13	24-Jul-13	0
RV.4.A.03.G.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	24-Jul-13	31-Jul-13	0
RV.4.A.04.D.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	01-Jul-13	10-Jul-13	0
RV.4.A.04.E.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	10-Jul-13	17-Jul-13	0
RV.4.A.04.F.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	17-Jul-13	24-Jul-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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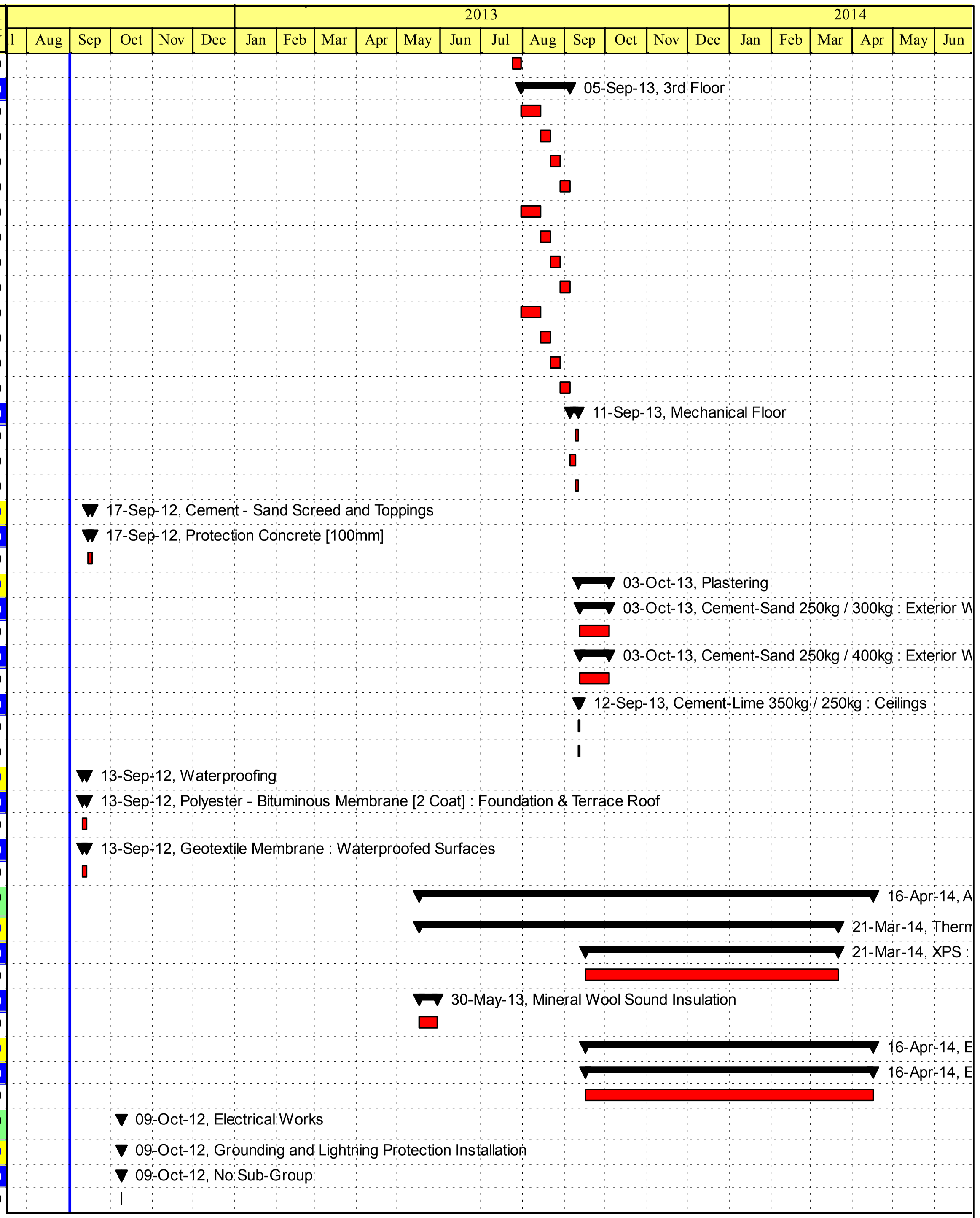
Updated Schedule 6.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.4.A.04.G.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	24-Jul-13	31-Jul-13	0
3rd Floor		22	31-Jul-13	05-Sep-13	0
RV.4.A.02.D.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	31-Jul-13	14-Aug-13	0
RV.4.A.02.E.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	14-Aug-13	21-Aug-13	0
RV.4.A.02.F.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	21-Aug-13	28-Aug-13	0
RV.4.A.02.G.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	28-Aug-13	05-Sep-13	0
RV.4.A.03.D.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	31-Jul-13	14-Aug-13	0
RV.4.A.03.E.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	14-Aug-13	21-Aug-13	0
RV.4.A.03.F.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	21-Aug-13	28-Aug-13	0
RV.4.A.03.G.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	28-Aug-13	05-Sep-13	0
RV.4.A.04.D.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	31-Jul-13	14-Aug-13	0
RV.4.A.04.E.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	14-Aug-13	21-Aug-13	0
RV.4.A.04.F.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	21-Aug-13	28-Aug-13	0
RV.4.A.04.G.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	28-Aug-13	05-Sep-13	0
Mechanical Floor		4	05-Sep-13	11-Sep-13	0
RV.4.A.01.C.M	Bims block wall, 250 mm thick, laid in sand-cement mortar	2	09-Sep-13	11-Sep-13	0
RV.4.A.02.A.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	05-Sep-13	09-Sep-13	0
RV.4.A.02.C.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	09-Sep-13	11-Sep-13	0
Cement - Sand Screed and Toppings		2	14-Sep-12	17-Sep-12	0
Protection Concrete [100mm]		2	14-Sep-12	17-Sep-12	0
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	14-Sep-12	17-Sep-12	0
Plastering		16	11-Sep-13	03-Oct-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		15	12-Sep-13	03-Oct-13	0
RV.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg ...	15	12-Sep-13	03-Oct-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		15	12-Sep-13	03-Oct-13	0
RV.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg ...	15	12-Sep-13	03-Oct-13	0
Cement-Lime 350kg / 250kg : Ceilings		1	11-Sep-13	12-Sep-13	0
RV.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with fir...	1	11-Sep-13	12-Sep-13	0
RV.4.C.04.M2	Cement-lime-sand plaster, applied in two coats, with fir...	1	11-Sep-13	12-Sep-13	0
Waterproofing		4	10-Sep-12	13-Sep-12	0
Polyester - Bituminous Membrane [2 Coat] : Foundation & Terrace Roof		4	10-Sep-12	13-Sep-12	0
RV.4.D.03.C.FN	Two coat waterproofing with polyester reinforced bitumi...	4	10-Sep-12	13-Sep-12	0
Geotextile Membrane : Waterproofed Surfaces		4	10-Sep-12	13-Sep-12	0
RV.4.D.05.C.FN	Geotextile protective membrane, to waterproofed surfac...	4	10-Sep-12	13-Sep-12	0
Architectural Works		228	16-May-13	16-Apr-14	0
Thermal Protection		210	16-May-13	21-Mar-14	0
XPS : Exterior Walls & Ceilings		127	16-Sep-13	21-Mar-14	0
RV.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer o...	73	16-Sep-13	21-Mar-14	0
Mineral Wool Sound Insulation		10	16-May-13	30-May-13	0
RV.5.A.07	Mineral wool sound insulation, 50 mm thick, to walls, cei...	10	16-May-13	30-May-13	0
Exterior Brick Facing		145	16-Sep-13	16-Apr-14	0
Exterior Brick Facing		145	16-Sep-13	16-Apr-14	0
RV.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesi...	91	16-Sep-13	16-Apr-14	0
Electrical Works		1	09-Oct-12	09-Oct-12	0
Grounding and Lightning Protection Installation		1	09-Oct-12	09-Oct-12	0
No Sub-Group		1	09-Oct-12	09-Oct-12	0
RV.7.M.3.C	95mm² monotron cable	1	09-Oct-12	09-Oct-12	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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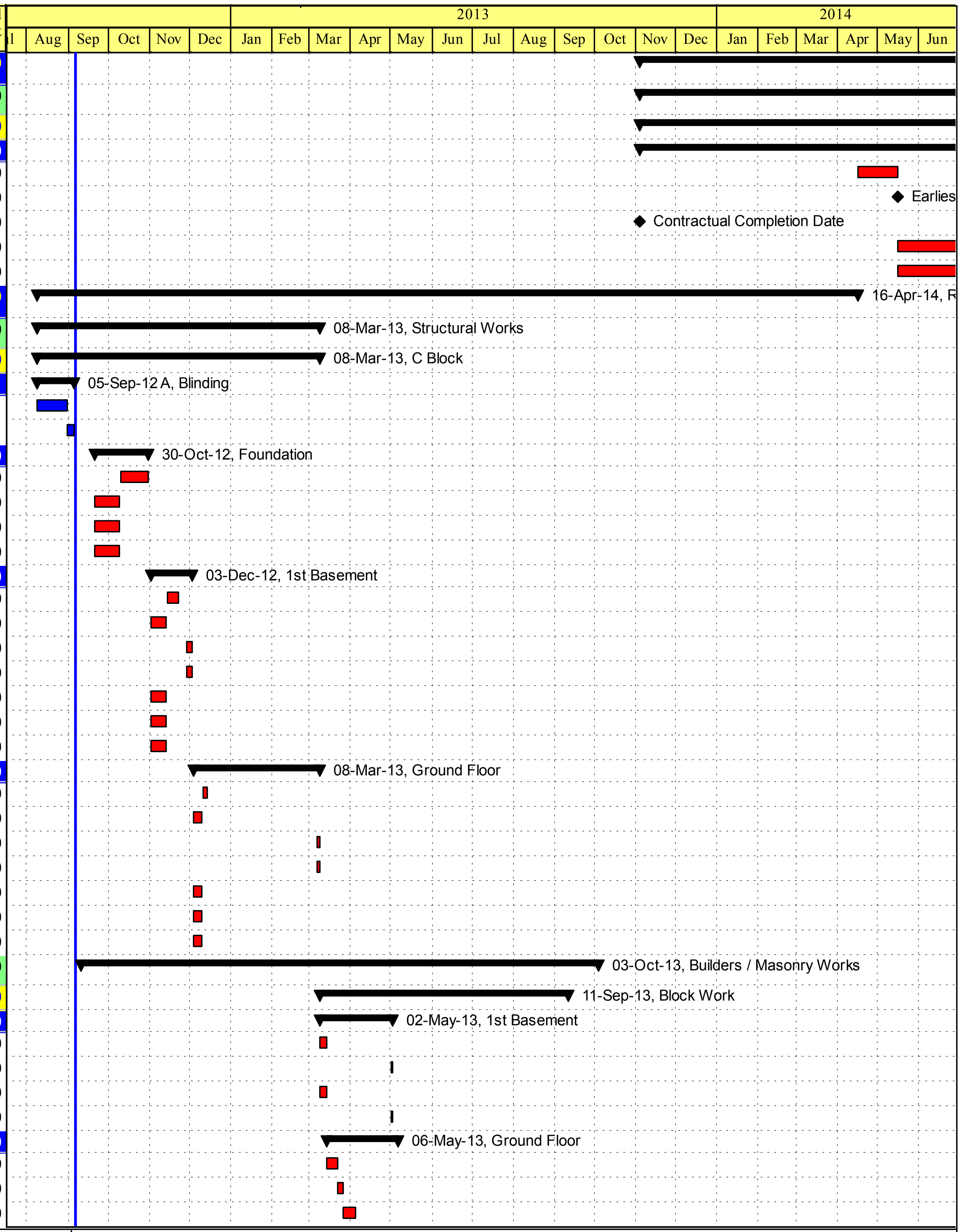
Updated Schedule 6.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		168	03-Nov-13	30-Jun-14	0
General		168	03-Nov-13	30-Jun-14	0
General		168	03-Nov-13	30-Jun-14	0
General		168	03-Nov-13	30-Jun-14	0
GEN99100	Tests on Completion	30	16-Apr-14	16-May-14	0
GEN99500	Earliest Completion of All Scope	0		16-May-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	16-May-14	30-Jun-14	0
GEN99920	As-Built Drawings and Other Documents	45	16-May-14	30-Jun-14	0
REMOVAL CENTER		421	07-Sep-12	16-Apr-14	0
Structural Works		145	07-Sep-12	08-Mar-13	0
C Block		145	07-Sep-12	08-Mar-13	0
Blinding		18	07-Sep-12	07-Sep-12	
EVENT NO. 6	Variation Order #1 [Change in Design]	15	07-Sep-12	07-Sep-12	
RV.3.A.01.C	Placing of concrete Class C14 for blinding and filling.	4	07-Sep-12	07-Sep-12	
Foundation		24	21-Sep-12	30-Oct-12	0
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	10-Oct-12	30-Oct-12	0
RV.3.A.02.C.FW	Formwork	13	21-Sep-12	09-Oct-12	0
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	21-Sep-12	09-Oct-12	0
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	21-Sep-12	09-Oct-12	0
1st Basement		22	02-Nov-12	03-Dec-12	0
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	14-Nov-12	22-Nov-12	0
RV.3.A.03.C.BS1.FW	Formwork	8	02-Nov-12	13-Nov-12	0
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	29-Nov-12	03-Dec-12	0
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	29-Nov-12	03-Dec-12	0
RV.3.A.03.C.BS1.SC	Scaffolding	8	02-Nov-12	13-Nov-12	0
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	02-Nov-12	13-Nov-12	0
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	02-Nov-12	13-Nov-12	0
Ground Floor		68	04-Dec-12	08-Mar-13	0
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	11-Dec-12	14-Dec-12	0
RV.3.A.03.C.GR.FW	Formwork	5	04-Dec-12	10-Dec-12	0
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	07-Mar-13	08-Mar-13	0
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	07-Mar-13	08-Mar-13	0
RV.3.A.03.C.GR.SC	Scaffolding	5	04-Dec-12	10-Dec-12	0
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	04-Dec-12	10-Dec-12	0
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	04-Dec-12	10-Dec-12	0
Builders / Masonry Works		269	10-Sep-12	03-Oct-13	0
Block Work		128	08-Mar-13	11-Sep-13	0
1st Basement		38	08-Mar-13	02-May-13	0
RV.4.A.02.C.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	08-Mar-13	13-Mar-13	0
RV.4.A.02.H.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	01-May-13	02-May-13	0
RV.4.A.04.C.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	08-Mar-13	13-Mar-13	0
RV.4.A.04.H.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	1	01-May-13	02-May-13	0
Ground Floor		37	13-Mar-13	06-May-13	0
RV.4.A.01.A.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	7	13-Mar-13	22-Mar-13	0
RV.4.A.01.B.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	2	22-Mar-13	26-Mar-13	0
RV.4.A.01.C.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	7	26-Mar-13	04-Apr-13	0



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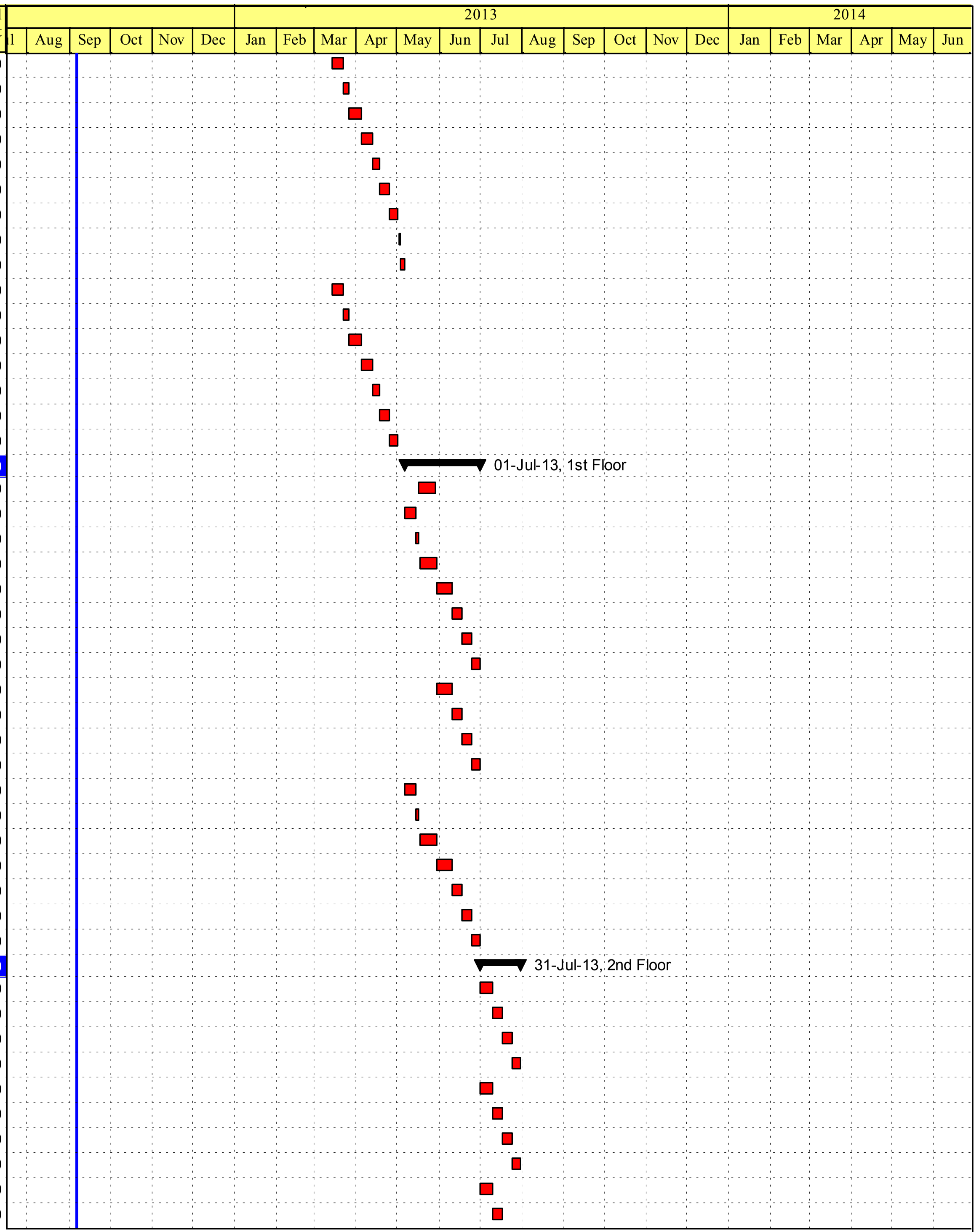
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.4.A.02.A.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	13-Mar-13	22-Mar-13	0
RV.4.A.02.B.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	22-Mar-13	26-Mar-13	0
RV.4.A.02.C.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	26-Mar-13	04-Apr-13	0
RV.4.A.02.D.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	04-Apr-13	12-Apr-13	0
RV.4.A.02.E.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	12-Apr-13	18-Apr-13	0
RV.4.A.02.F.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	18-Apr-13	25-Apr-13	0
RV.4.A.02.G.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	25-Apr-13	01-May-13	0
RV.4.A.02.H.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	02-May-13	03-May-13	0
RV.4.A.02.I.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	03-May-13	06-May-13	0
RV.4.A.04.A.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	13-Mar-13	22-Mar-13	0
RV.4.A.04.B.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	22-Mar-13	26-Mar-13	0
RV.4.A.04.C.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	26-Mar-13	04-Apr-13	0
RV.4.A.04.D.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	04-Apr-13	12-Apr-13	0
RV.4.A.04.E.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	12-Apr-13	18-Apr-13	0
RV.4.A.04.F.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	18-Apr-13	25-Apr-13	0
RV.4.A.04.G.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	25-Apr-13	01-May-13	0
1st Floor		**40**	**06-May-13**	**01-Jul-13**	**0**
RV.4.A.01.C.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	16-May-13	29-May-13	0
RV.4.A.02.A.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	06-May-13	14-May-13	0
RV.4.A.02.B.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	14-May-13	16-May-13	0
RV.4.A.02.C.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	17-May-13	30-May-13	0
RV.4.A.02.D.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	30-May-13	10-Jun-13	0
RV.4.A.02.E.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	10-Jun-13	17-Jun-13	0
RV.4.A.02.F.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	17-Jun-13	24-Jun-13	0
RV.4.A.02.G.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	24-Jun-13	01-Jul-13	0
RV.4.A.03.D.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	30-May-13	10-Jun-13	0
RV.4.A.03.E.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	10-Jun-13	17-Jun-13	0
RV.4.A.03.F.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	17-Jun-13	24-Jun-13	0
RV.4.A.03.G.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	24-Jun-13	01-Jul-13	0
RV.4.A.04.A.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	06-May-13	14-May-13	0
RV.4.A.04.B.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	14-May-13	16-May-13	0
RV.4.A.04.C.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	17-May-13	30-May-13	0
RV.4.A.04.D.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	30-May-13	10-Jun-13	0
RV.4.A.04.E.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	10-Jun-13	17-Jun-13	0
RV.4.A.04.F.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	17-Jun-13	24-Jun-13	0
RV.4.A.04.G.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	24-Jun-13	01-Jul-13	0
2nd Floor		**22**	**01-Jul-13**	**31-Jul-13**	**0**
RV.4.A.02.D.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	01-Jul-13	10-Jul-13	0
RV.4.A.02.E.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	10-Jul-13	17-Jul-13	0
RV.4.A.02.F.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	17-Jul-13	24-Jul-13	0
RV.4.A.02.G.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	24-Jul-13	31-Jul-13	0
RV.4.A.03.D.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	01-Jul-13	10-Jul-13	0
RV.4.A.03.E.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	10-Jul-13	17-Jul-13	0
RV.4.A.03.F.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	17-Jul-13	24-Jul-13	0
RV.4.A.03.G.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	24-Jul-13	31-Jul-13	0
RV.4.A.04.D.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	01-Jul-13	10-Jul-13	0
RV.4.A.04.E.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	10-Jul-13	17-Jul-13	0



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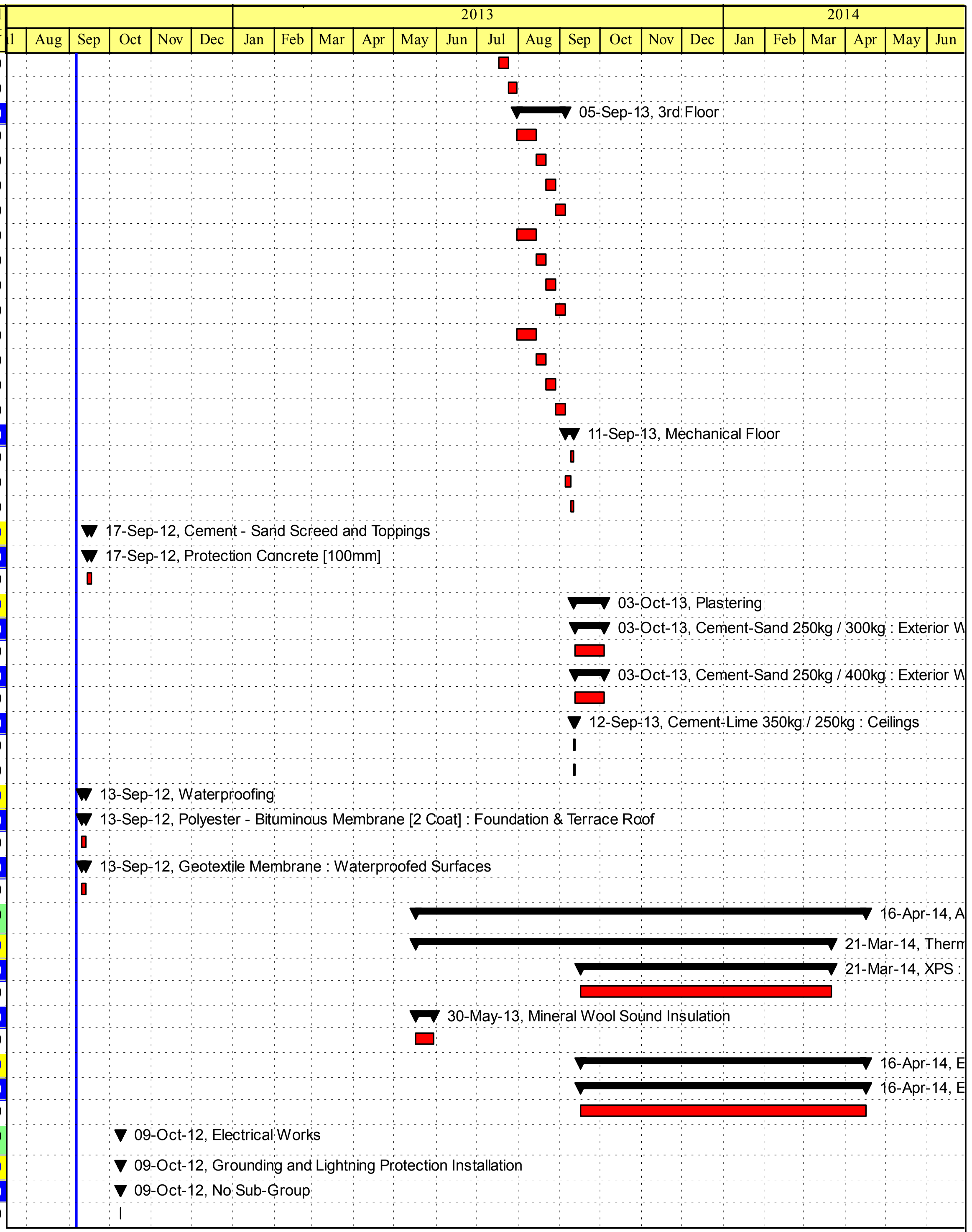
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.4.A.04.F.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	17-Jul-13	24-Jul-13	0
RV.4.A.04.G.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	24-Jul-13	31-Jul-13	0
3rd Floor		22	31-Jul-13	05-Sep-13	0
RV.4.A.02.D.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	31-Jul-13	14-Aug-13	0
RV.4.A.02.E.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	14-Aug-13	21-Aug-13	0
RV.4.A.02.F.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	21-Aug-13	28-Aug-13	0
RV.4.A.02.G.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	28-Aug-13	05-Sep-13	0
RV.4.A.03.D.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	31-Jul-13	14-Aug-13	0
RV.4.A.03.E.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	14-Aug-13	21-Aug-13	0
RV.4.A.03.F.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	21-Aug-13	28-Aug-13	0
RV.4.A.03.G.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	28-Aug-13	05-Sep-13	0
RV.4.A.04.D.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	31-Jul-13	14-Aug-13	0
RV.4.A.04.E.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	14-Aug-13	21-Aug-13	0
RV.4.A.04.F.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	21-Aug-13	28-Aug-13	0
RV.4.A.04.G.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	28-Aug-13	05-Sep-13	0
Mechanical Floor		4	05-Sep-13	11-Sep-13	0
RV.4.A.01.C.M	Bims block wall, 250 mm thick, laid in sand-cement mortar	2	09-Sep-13	11-Sep-13	0
RV.4.A.02.A.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	05-Sep-13	09-Sep-13	0
RV.4.A.02.C.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	09-Sep-13	11-Sep-13	0
Cement - Sand Screed and Toppings		2	14-Sep-12	17-Sep-12	0
Protection Concrete [100mm]		2	14-Sep-12	17-Sep-12	0
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	14-Sep-12	17-Sep-12	0
Plastering		16	11-Sep-13	03-Oct-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		15	12-Sep-13	03-Oct-13	0
RV.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg ...	15	12-Sep-13	03-Oct-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		15	12-Sep-13	03-Oct-13	0
RV.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg ...	15	12-Sep-13	03-Oct-13	0
Cement-Lime 350kg / 250kg : Ceilings		1	11-Sep-13	12-Sep-13	0
RV.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with fir...	1	11-Sep-13	12-Sep-13	0
RV.4.C.04.M2	Cement-lime-sand plaster, applied in two coats, with fir...	1	11-Sep-13	12-Sep-13	0
Waterproofing		4	10-Sep-12	13-Sep-12	0
Polyester - Bituminous Membrane [2 Coat] : Foundation & Terrace Roof		4	10-Sep-12	13-Sep-12	0
RV.4.D.03.C.FN	Two coat waterproofing with polyester reinforced bitumi...	4	10-Sep-12	13-Sep-12	0
Geotextile Membrane : Waterproofed Surfaces		4	10-Sep-12	13-Sep-12	0
RV.4.D.05.C.FN	Geotextile protective membrane, to waterproofed surfac...	4	10-Sep-12	13-Sep-12	0
Architectural Works		228	16-May-13	16-Apr-14	0
Thermal Protection		210	16-May-13	21-Mar-14	0
XPS : Exterior Walls & Ceilings		127	16-Sep-13	21-Mar-14	0
RV.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer o...	73	16-Sep-13	21-Mar-14	0
Mineral Wool Sound Insulation		10	16-May-13	30-May-13	0
RV.5.A.07	Mineral wool sound insulation, 50 mm thick, to walls, cei...	10	16-May-13	30-May-13	0
Exterior Brick Facing		145	16-Sep-13	16-Apr-14	0
Exterior Brick Facing		145	16-Sep-13	16-Apr-14	0
RV.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesi...	91	16-Sep-13	16-Apr-14	0
Electrical Works		1	09-Oct-12	09-Oct-12	0
Grounding and Lightning Protection Installation		1	09-Oct-12	09-Oct-12	0
No Sub-Group		1	09-Oct-12	09-Oct-12	0
RV.7.M.3.C	95mm² monotron cable	1	09-Oct-12	09-Oct-12	0



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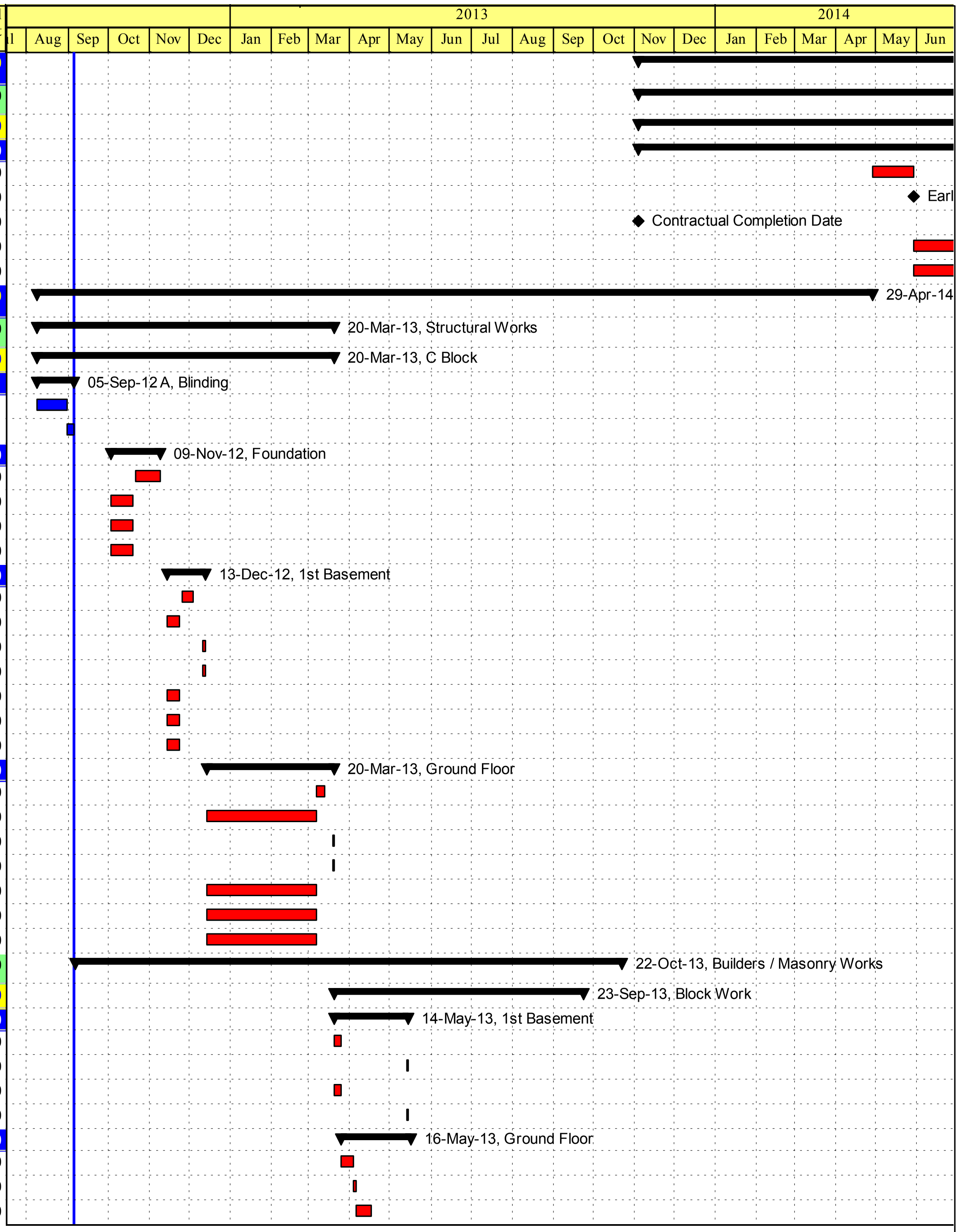
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		177	03-Nov-13	13-Jul-14	0
General		177	03-Nov-13	13-Jul-14	0
General		177	03-Nov-13	13-Jul-14	0
General		177	03-Nov-13	13-Jul-14	0
GEN99100	Tests on Completion	30	29-Apr-14	29-May-14	0
GEN99500	Earliest Completion of All Scope	0		29-May-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	29-May-14	13-Jul-14	0
GEN99920	As-Built Drawings and Other Documents	45	29-May-14	13-Jul-14	0
REMOVAL CENTER		429	06-Sep-12	29-Apr-14	0
Structural Works		153	06-Sep-12	20-Mar-13	0
C Block		153	06-Sep-12	20-Mar-13	0
Blinding		18	06-Sep-12	06-Sep-12	
EVENT NO. 6	Variation Order #1 [Change in Design]	15	06-Sep-12	06-Sep-12	
RV.3.A.01.C	Placing of concrete Class C14 for blinding and filling.	4	06-Sep-12	06-Sep-12	
Foundation		24	03-Oct-12	09-Nov-12	0
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	22-Oct-12	09-Nov-12	0
RV.3.A.02.C.FW	Formwork	13	03-Oct-12	19-Oct-12	0
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	03-Oct-12	19-Oct-12	0
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	03-Oct-12	19-Oct-12	0
1st Basement		22	14-Nov-12	13-Dec-12	0
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	26-Nov-12	04-Dec-12	0
RV.3.A.03.C.BS1.FW	Formwork	8	14-Nov-12	23-Nov-12	0
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	11-Dec-12	13-Dec-12	0
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	11-Dec-12	13-Dec-12	0
RV.3.A.03.C.BS1.SC	Scaffolding	8	14-Nov-12	23-Nov-12	0
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	14-Nov-12	23-Nov-12	0
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	14-Nov-12	23-Nov-12	0
Ground Floor		68	14-Dec-12	20-Mar-13	0
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	07-Mar-13	12-Mar-13	0
RV.3.A.03.C.GR.FW	Formwork	5	14-Dec-12	06-Mar-13	0
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	19-Mar-13	20-Mar-13	0
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	19-Mar-13	20-Mar-13	0
RV.3.A.03.C.GR.SC	Scaffolding	5	14-Dec-12	06-Mar-13	0
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	14-Dec-12	06-Mar-13	0
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	14-Dec-12	06-Mar-13	0
Builders / Masonry Works		279	06-Sep-12	22-Oct-13	0
Block Work		128	20-Mar-13	23-Sep-13	0
1st Basement		38	20-Mar-13	14-May-13	0
RV.4.A.02.C.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	20-Mar-13	25-Mar-13	0
RV.4.A.02.H.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	13-May-13	14-May-13	0
RV.4.A.04.C.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	20-Mar-13	25-Mar-13	0
RV.4.A.04.H.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	1	13-May-13	14-May-13	0
Ground Floor		37	25-Mar-13	16-May-13	0
RV.4.A.01.A.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	7	25-Mar-13	03-Apr-13	0
RV.4.A.01.B.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	2	03-Apr-13	05-Apr-13	0
RV.4.A.01.C.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	7	05-Apr-13	16-Apr-13	0



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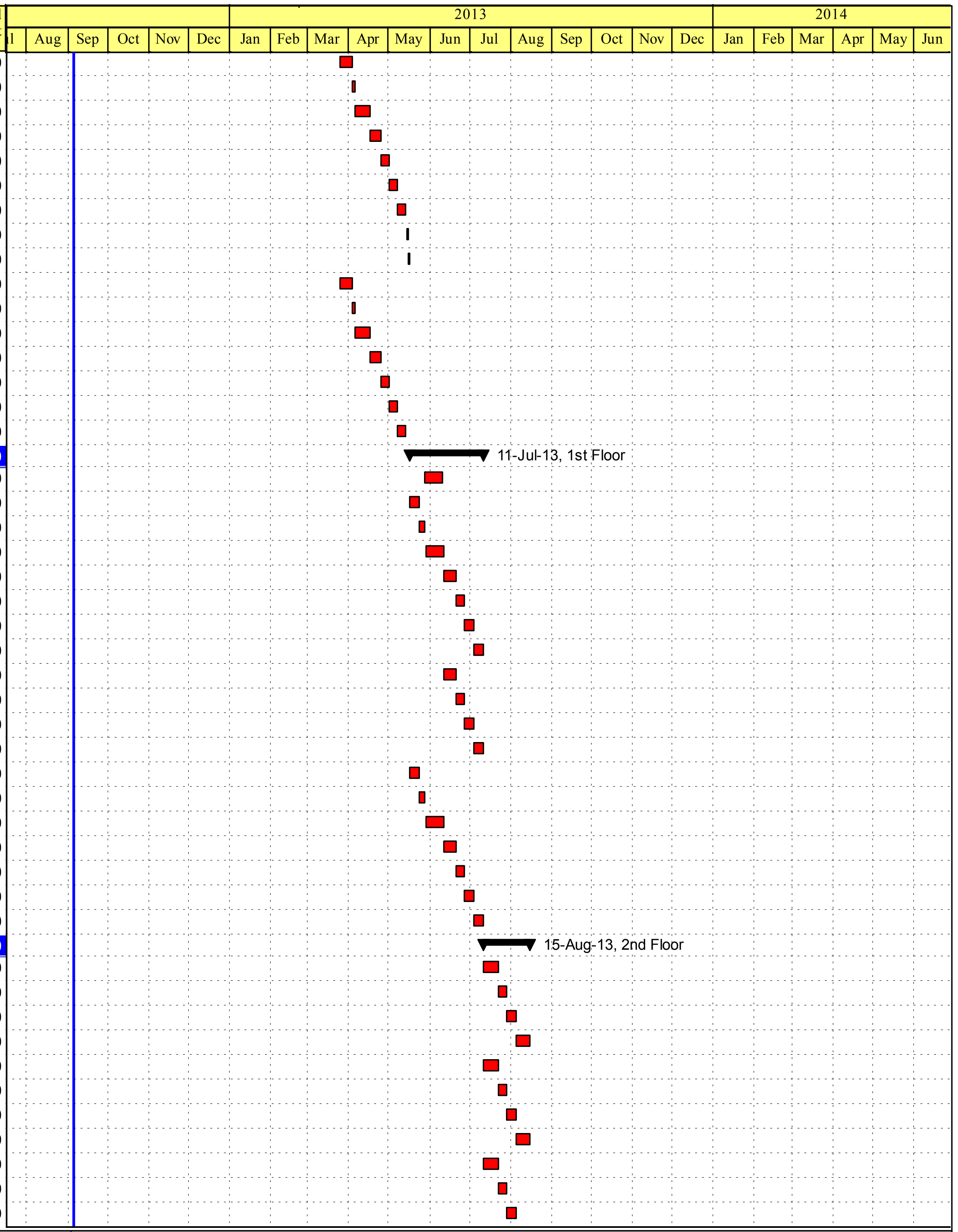
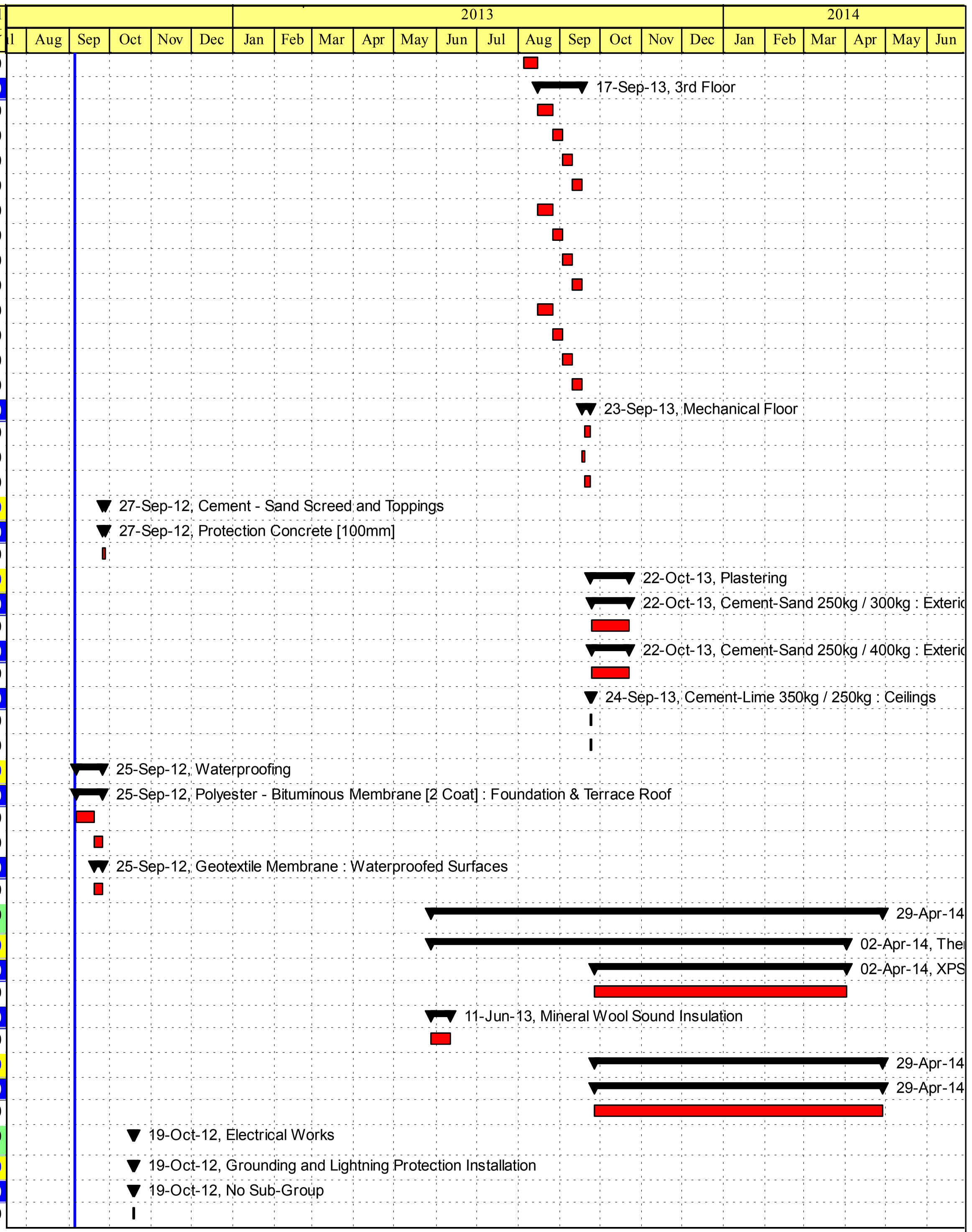
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.4.A.02.A.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	25-Mar-13	03-Apr-13	0
RV.4.A.02.B.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	03-Apr-13	05-Apr-13	0
RV.4.A.02.C.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	05-Apr-13	16-Apr-13	0
RV.4.A.02.D.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	16-Apr-13	25-Apr-13	0
RV.4.A.02.E.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	25-Apr-13	01-May-13	0
RV.4.A.02.F.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	01-May-13	07-May-13	0
RV.4.A.02.G.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	07-May-13	13-May-13	0
RV.4.A.02.H.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	14-May-13	15-May-13	0
RV.4.A.02.I.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	15-May-13	16-May-13	0
RV.4.A.04.A.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	25-Mar-13	03-Apr-13	0
RV.4.A.04.B.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	03-Apr-13	05-Apr-13	0
RV.4.A.04.C.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	05-Apr-13	16-Apr-13	0
RV.4.A.04.D.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	16-Apr-13	25-Apr-13	0
RV.4.A.04.E.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	25-Apr-13	01-May-13	0
RV.4.A.04.F.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	01-May-13	07-May-13	0
RV.4.A.04.G.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	07-May-13	13-May-13	0
1st Floor		40	16-May-13	11-Jul-13	0
RV.4.A.01.C.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	28-May-13	10-Jun-13	0
RV.4.A.02.A.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	16-May-13	24-May-13	0
RV.4.A.02.B.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	24-May-13	28-May-13	0
RV.4.A.02.C.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	29-May-13	11-Jun-13	0
RV.4.A.02.D.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	11-Jun-13	20-Jun-13	0
RV.4.A.02.E.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	20-Jun-13	27-Jun-13	0
RV.4.A.02.F.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	27-Jun-13	04-Jul-13	0
RV.4.A.02.G.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	04-Jul-13	11-Jul-13	0
RV.4.A.03.D.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	11-Jun-13	20-Jun-13	0
RV.4.A.03.E.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	20-Jun-13	27-Jun-13	0
RV.4.A.03.F.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	27-Jun-13	04-Jul-13	0
RV.4.A.03.G.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	04-Jul-13	11-Jul-13	0
RV.4.A.04.A.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	16-May-13	24-May-13	0
RV.4.A.04.B.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	24-May-13	28-May-13	0
RV.4.A.04.C.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	29-May-13	11-Jun-13	0
RV.4.A.04.D.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	11-Jun-13	20-Jun-13	0
RV.4.A.04.E.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	20-Jun-13	27-Jun-13	0
RV.4.A.04.F.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	27-Jun-13	04-Jul-13	0
RV.4.A.04.G.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	04-Jul-13	11-Jul-13	0
2nd Floor		22	11-Jul-13	15-Aug-13	0
RV.4.A.02.D.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	11-Jul-13	22-Jul-13	0
RV.4.A.02.E.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	22-Jul-13	29-Jul-13	0
RV.4.A.02.F.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	29-Jul-13	05-Aug-13	0
RV.4.A.02.G.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	05-Aug-13	15-Aug-13	0
RV.4.A.03.D.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	11-Jul-13	22-Jul-13	0
RV.4.A.03.E.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	22-Jul-13	29-Jul-13	0
RV.4.A.03.F.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	29-Jul-13	05-Aug-13	0
RV.4.A.03.G.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	05-Aug-13	15-Aug-13	0
RV.4.A.04.D.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	11-Jul-13	22-Jul-13	0
RV.4.A.04.E.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	22-Jul-13	29-Jul-13	0
RV.4.A.04.F.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	29-Jul-13	05-Aug-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

Updated Schedule 6.3

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.4.A.04.G.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	05-Aug-13	15-Aug-13	0
3rd Floor		22	15-Aug-13	17-Sep-13	0
RV.4.A.02.D.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	15-Aug-13	26-Aug-13	0
RV.4.A.02.E.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	26-Aug-13	03-Sep-13	0
RV.4.A.02.F.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	03-Sep-13	10-Sep-13	0
RV.4.A.02.G.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	10-Sep-13	17-Sep-13	0
RV.4.A.03.D.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	15-Aug-13	26-Aug-13	0
RV.4.A.03.E.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	26-Aug-13	03-Sep-13	0
RV.4.A.03.F.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	03-Sep-13	10-Sep-13	0
RV.4.A.03.G.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	10-Sep-13	17-Sep-13	0
RV.4.A.04.D.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	15-Aug-13	26-Aug-13	0
RV.4.A.04.E.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	26-Aug-13	03-Sep-13	0
RV.4.A.04.F.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	03-Sep-13	10-Sep-13	0
RV.4.A.04.G.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	10-Sep-13	17-Sep-13	0
Mechanical Floor		4	17-Sep-13	23-Sep-13	0
RV.4.A.01.C.M	Bims block wall, 250 mm thick, laid in sand-cement mortar	2	19-Sep-13	23-Sep-13	0
RV.4.A.02.A.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	17-Sep-13	19-Sep-13	0
RV.4.A.02.C.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	19-Sep-13	23-Sep-13	0
Cement - Sand Screed and Toppings		2	26-Sep-12	27-Sep-12	0
Protection Concrete [100mm]		2	26-Sep-12	27-Sep-12	0
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	26-Sep-12	27-Sep-12	0
Plastering		16	23-Sep-13	22-Oct-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		15	24-Sep-13	22-Oct-13	0
RV.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg ...	15	24-Sep-13	22-Oct-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		15	24-Sep-13	22-Oct-13	0
RV.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg ...	15	24-Sep-13	22-Oct-13	0
Cement-Lime 350kg / 250kg : Ceilings		1	23-Sep-13	24-Sep-13	0
RV.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with fir...	1	23-Sep-13	24-Sep-13	0
RV.4.C.04.M2	Cement-lime-sand plaster, applied in two coats, with fir...	1	23-Sep-13	24-Sep-13	0
Waterproofing		14	06-Sep-12	25-Sep-12	0
Polyester - Bituminous Membrane [2 Coat] : Foundation & Terrace Roof		14	06-Sep-12	25-Sep-12	0
EVENT NO. 7	Additional Waterproofing Layer under Foundation of Blo...	10	06-Sep-12	19-Sep-12	0
RV.4.D.03.C.FN	Two coat waterproofing with polyester reinforced bitumi...	4	20-Sep-12	25-Sep-12	0
Geotextile Membrane : Waterproofed Surfaces		4	20-Sep-12	25-Sep-12	0
RV.4.D.05.C.FN	Geotextile protective membrane, to waterproofed surfac...	4	20-Sep-12	25-Sep-12	0
Architectural Works		228	28-May-13	29-Apr-14	0
Thermal Protection		210	28-May-13	02-Apr-14	0
XPS : Exterior Walls & Ceilings		127	26-Sep-13	02-Apr-14	0
RV.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer o...	73	26-Sep-13	02-Apr-14	0
Mineral Wool Sound Insulation		10	28-May-13	11-Jun-13	0
RV.5.A.07	Mineral wool sound insulation, 50 mm thick, to walls, cei...	10	28-May-13	11-Jun-13	0
Exterior Brick Facing		145	26-Sep-13	29-Apr-14	0
Exterior Brick Facing		145	26-Sep-13	29-Apr-14	0
RV.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesi...	91	26-Sep-13	29-Apr-14	0
Electrical Works		1	19-Oct-12	19-Oct-12	0
Grounding and Lightning Protection Installation		1	19-Oct-12	19-Oct-12	0
No Sub-Group		1	19-Oct-12	19-Oct-12	0
RV.7.M.3.C	95mm² monotron cable	1	19-Oct-12	19-Oct-12	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		177	03-Nov-13	13-Jul-14	0
General		177	03-Nov-13	13-Jul-14	0
General		177	03-Nov-13	13-Jul-14	0
General		177	03-Nov-13	13-Jul-14	0
GEN99100	Tests on Completion	30	29-Apr-14	29-May-14	0
GEN99500	Earliest Completion of All Scope	0		29-May-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	29-May-14	13-Jul-14	0
GEN99920	As-Built Drawings and Other Documents	45	29-May-14	13-Jul-14	0
RECEPTION CENTER		68	25-Sep-12	14-Dec-12	0
Structural Works		68	25-Sep-12	14-Dec-12	0
B Block		68	25-Sep-12	14-Dec-12	0
2nd Basement		34	25-Sep-12	23-Oct-12	0
EVENT NO. 8	Delay due to Change in Admixture of Concrete for Block B	13	25-Sep-12	25-Sep-12	
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	08-Oct-12	12-Oct-12	0
RC.3.A.03.B.BS2.FW	Formwork	9	25-Sep-12	05-Oct-12	0
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	19-Oct-12	23-Oct-12	0
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	19-Oct-12	23-Oct-12	0
RC.3.A.03.B.BS2.SC	Scaffolding	9	25-Sep-12	05-Oct-12	0
RC.3.B.01.B.BS2	Deformed high yield steel bars , Ø8-Ø12 mm dia.	9	25-Sep-12	05-Oct-12	0
RC.3.B.02.B.BS2	Deformed high yield steel bars , Ø14-Ø28 mm dia.	9	25-Sep-12	05-Oct-12	0
1st Basement		19	30-Oct-12	23-Nov-12	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	07-Nov-12	15-Nov-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	30-Oct-12	06-Nov-12	0
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	22-Nov-12	23-Nov-12	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	22-Nov-12	23-Nov-12	0
RC.3.A.03.B.BS1.SC	Scaffolding	6	30-Oct-12	06-Nov-12	0
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	30-Oct-12	06-Nov-12	0
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	30-Oct-12	06-Nov-12	0
Ground Floor		15	26-Nov-12	14-Dec-12	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	04-Dec-12	06-Dec-12	0
RC.3.A.03.B.GR.FW	Formwork	6	26-Nov-12	03-Dec-12	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	13-Dec-12	14-Dec-12	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	13-Dec-12	14-Dec-12	0
RC.3.A.03.B.GR.SC	Scaffolding	6	26-Nov-12	03-Dec-12	0
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	26-Nov-12	03-Dec-12	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	26-Nov-12	03-Dec-12	0
REMOVAL CENTER		411	25-Sep-12	29-Apr-14	0
Structural Works		116	02-Oct-12	20-Mar-13	0
C Block		116	02-Oct-12	20-Mar-13	0
Foundation		24	02-Oct-12	09-Nov-12	0
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	19-Oct-12	09-Nov-12	0
RV.3.A.02.C.FW	Formwork	13	02-Oct-12	19-Oct-12	0
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	02-Oct-12	19-Oct-12	0
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	02-Oct-12	19-Oct-12	0
1st Basement		22	13-Nov-12	13-Dec-12	0

▬ Actual Work ▬ Remaining Work ▬ Critical Remaining Work ◆ ◆ Milestone

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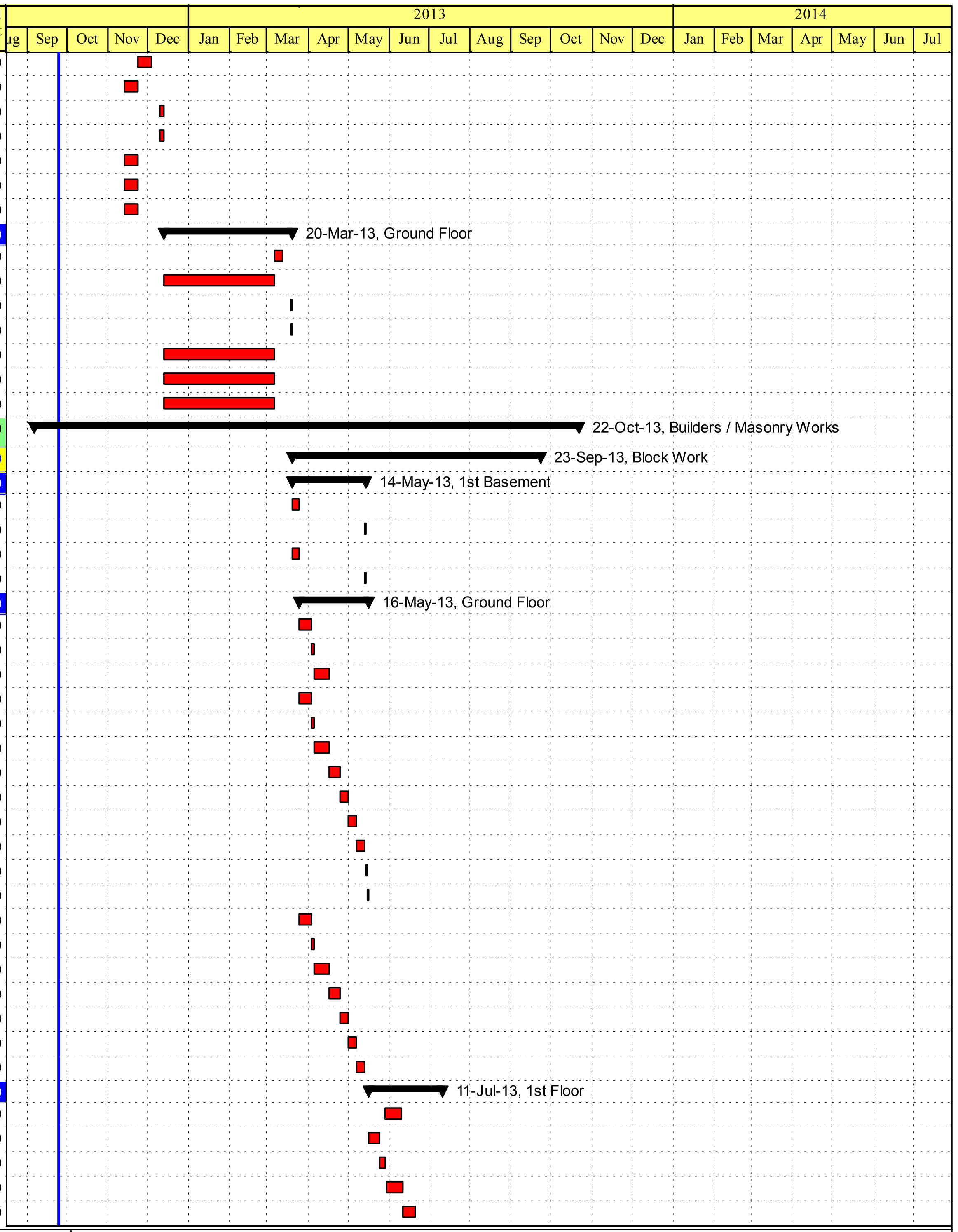
Updated Schedule 7.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	23-Nov-12	04-Dec-12	0
RV.3.A.03.C.BS1.FW	Formwork	8	13-Nov-12	23-Nov-12	0
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	10-Dec-12	13-Dec-12	0
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	10-Dec-12	13-Dec-12	0
RV.3.A.03.C.BS1.SC	Scaffolding	8	13-Nov-12	23-Nov-12	0
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	13-Nov-12	23-Nov-12	0
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	13-Nov-12	23-Nov-12	0
Ground Floor		68	13-Dec-12	20-Mar-13	0
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	06-Mar-13	12-Mar-13	0
RV.3.A.03.C.GR.FW	Formwork	5	13-Dec-12	06-Mar-13	0
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	18-Mar-13	20-Mar-13	0
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	18-Mar-13	20-Mar-13	0
RV.3.A.03.C.GR.SC	Scaffolding	5	13-Dec-12	06-Mar-13	0
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	13-Dec-12	06-Mar-13	0
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	13-Dec-12	06-Mar-13	0
Builders / Masonry Works		279	25-Sep-12	22-Oct-13	0
Block Work		128	20-Mar-13	23-Sep-13	0
1st Basement		38	20-Mar-13	14-May-13	0
RV.4.A.02.C.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	20-Mar-13	25-Mar-13	0
RV.4.A.02.H.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	13-May-13	14-May-13	0
RV.4.A.04.C.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	20-Mar-13	25-Mar-13	0
RV.4.A.04.H.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	1	13-May-13	14-May-13	0
Ground Floor		37	25-Mar-13	16-May-13	0
RV.4.A.01.A.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	7	25-Mar-13	03-Apr-13	0
RV.4.A.01.B.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	2	03-Apr-13	05-Apr-13	0
RV.4.A.01.C.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	7	05-Apr-13	16-Apr-13	0
RV.4.A.02.A.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	25-Mar-13	03-Apr-13	0
RV.4.A.02.B.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	03-Apr-13	05-Apr-13	0
RV.4.A.02.C.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	05-Apr-13	16-Apr-13	0
RV.4.A.02.D.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	16-Apr-13	25-Apr-13	0
RV.4.A.02.E.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	25-Apr-13	01-May-13	0
RV.4.A.02.F.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	01-May-13	07-May-13	0
RV.4.A.02.G.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	07-May-13	13-May-13	0
RV.4.A.02.H.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	14-May-13	15-May-13	0
RV.4.A.02.I.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	15-May-13	16-May-13	0
RV.4.A.04.A.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	25-Mar-13	03-Apr-13	0
RV.4.A.04.B.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	03-Apr-13	05-Apr-13	0
RV.4.A.04.C.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	05-Apr-13	16-Apr-13	0
RV.4.A.04.D.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	16-Apr-13	25-Apr-13	0
RV.4.A.04.E.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	25-Apr-13	01-May-13	0
RV.4.A.04.F.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	01-May-13	07-May-13	0
RV.4.A.04.G.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	07-May-13	13-May-13	0
1st Floor		40	16-May-13	11-Jul-13	0
RV.4.A.01.C.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	28-May-13	10-Jun-13	0
RV.4.A.02.A.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	16-May-13	24-May-13	0
RV.4.A.02.B.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	24-May-13	28-May-13	0
RV.4.A.02.C.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	29-May-13	11-Jun-13	0
RV.4.A.02.D.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	11-Jun-13	20-Jun-13	0



🟦 Actual Work	🟩 Remaining Work	🟥 Critical Remaining Work ◆	◆ Milestone

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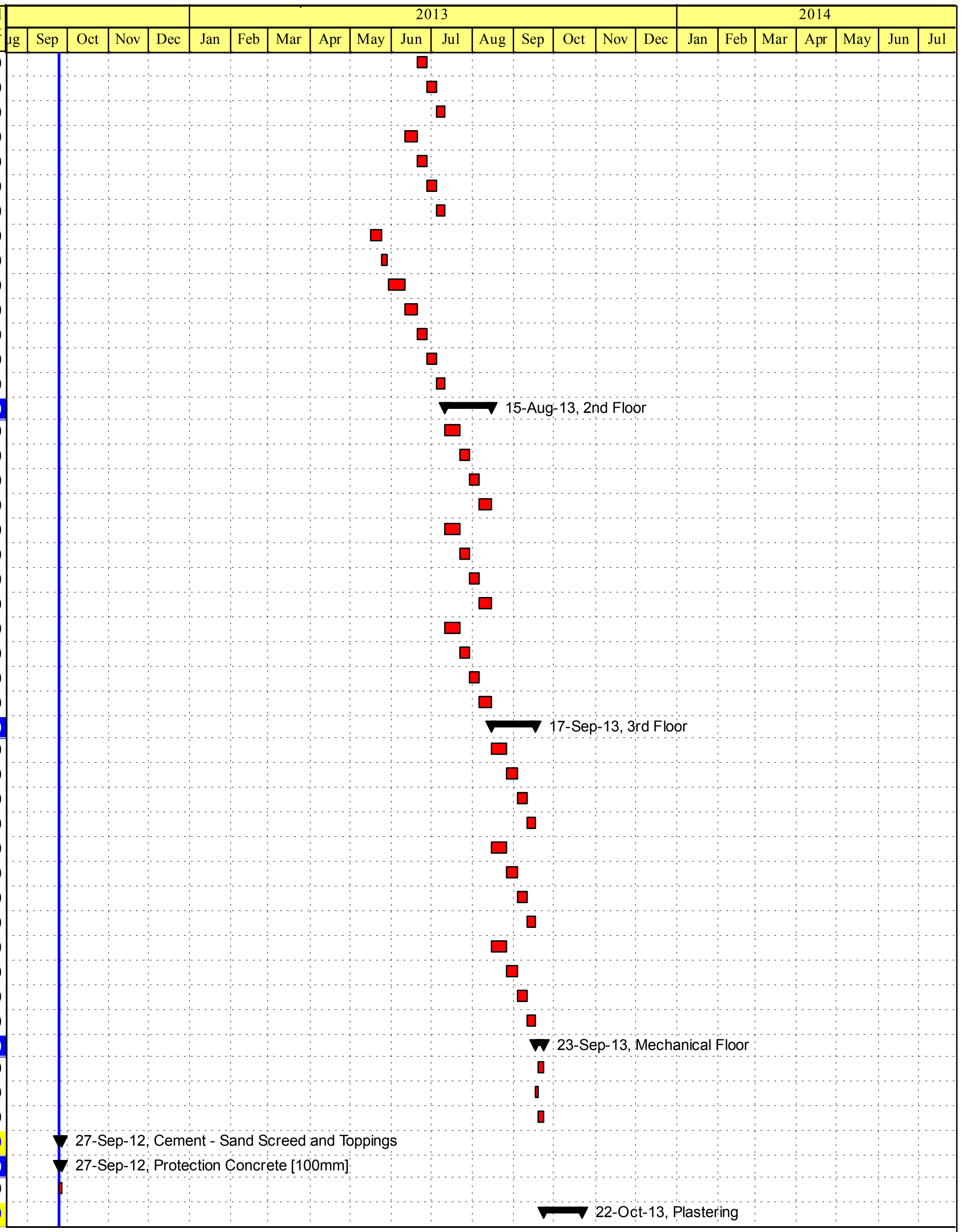
Updated Schedule 7.1

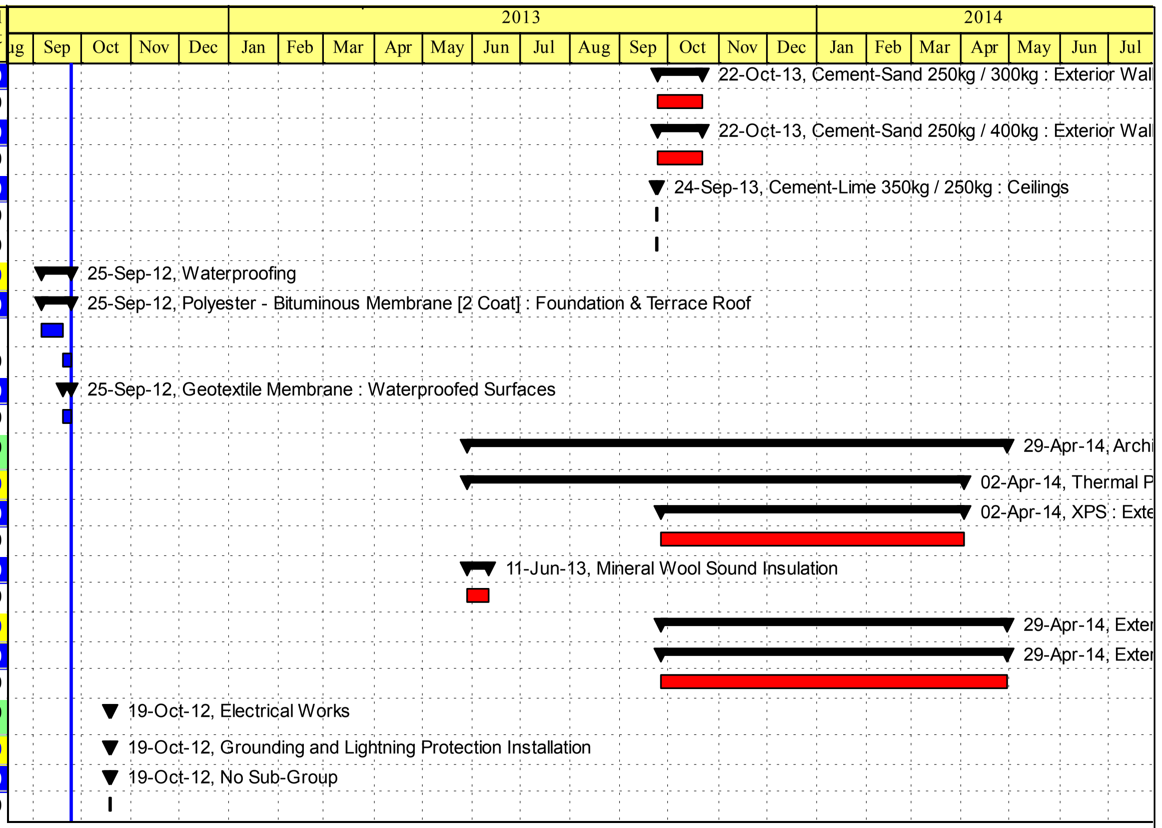
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.4.A.02.E.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	20-Jun-13	27-Jun-13	0
RV.4.A.02.F.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	27-Jun-13	04-Jul-13	0
RV.4.A.02.G.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	04-Jul-13	11-Jul-13	0
RV.4.A.03.D.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	11-Jun-13	20-Jun-13	0
RV.4.A.03.E.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	20-Jun-13	27-Jun-13	0
RV.4.A.03.F.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	27-Jun-13	04-Jul-13	0
RV.4.A.03.G.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	04-Jul-13	11-Jul-13	0
RV.4.A.04.A.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	16-May-13	24-May-13	0
RV.4.A.04.B.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	24-May-13	28-May-13	0
RV.4.A.04.C.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	29-May-13	11-Jun-13	0
RV.4.A.04.D.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	11-Jun-13	20-Jun-13	0
RV.4.A.04.E.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	20-Jun-13	27-Jun-13	0
RV.4.A.04.F.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	27-Jun-13	04-Jul-13	0
RV.4.A.04.G.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	04-Jul-13	11-Jul-13	0
2nd Floor		22	11-Jul-13	15-Aug-13	0
RV.4.A.02.D.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	11-Jul-13	22-Jul-13	0
RV.4.A.02.E.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	22-Jul-13	29-Jul-13	0
RV.4.A.02.F.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	29-Jul-13	05-Aug-13	0
RV.4.A.02.G.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	05-Aug-13	15-Aug-13	0
RV.4.A.03.D.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	11-Jul-13	22-Jul-13	0
RV.4.A.03.E.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	22-Jul-13	29-Jul-13	0
RV.4.A.03.F.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	29-Jul-13	05-Aug-13	0
RV.4.A.03.G.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	05-Aug-13	15-Aug-13	0
RV.4.A.04.D.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	11-Jul-13	22-Jul-13	0
RV.4.A.04.E.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	22-Jul-13	29-Jul-13	0
RV.4.A.04.F.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	29-Jul-13	05-Aug-13	0
RV.4.A.04.G.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	05-Aug-13	15-Aug-13	0
3rd Floor		22	15-Aug-13	17-Sep-13	0
RV.4.A.02.D.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	15-Aug-13	26-Aug-13	0
RV.4.A.02.E.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	26-Aug-13	03-Sep-13	0
RV.4.A.02.F.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	03-Sep-13	10-Sep-13	0
RV.4.A.02.G.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	10-Sep-13	17-Sep-13	0
RV.4.A.03.D.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	15-Aug-13	26-Aug-13	0
RV.4.A.03.E.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	26-Aug-13	03-Sep-13	0
RV.4.A.03.F.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	03-Sep-13	10-Sep-13	0
RV.4.A.03.G.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	10-Sep-13	17-Sep-13	0
RV.4.A.04.D.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	15-Aug-13	26-Aug-13	0
RV.4.A.04.E.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	26-Aug-13	03-Sep-13	0
RV.4.A.04.F.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	03-Sep-13	10-Sep-13	0
RV.4.A.04.G.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	10-Sep-13	17-Sep-13	0
Mechanical Floor		4	17-Sep-13	23-Sep-13	0
RV.4.A.01.C.M	Bims block wall, 250 mm thick, laid in sand-cement mortar	2	19-Sep-13	23-Sep-13	0
RV.4.A.02.A.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	17-Sep-13	19-Sep-13	0
RV.4.A.02.C.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	19-Sep-13	23-Sep-13	0
Cement - Sand Screed and Toppings		2	25-Sep-12	27-Sep-12	0
Protection Concrete [100mm]		2	25-Sep-12	27-Sep-12	0
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	25-Sep-12	27-Sep-12	0
Plastering		16	23-Sep-13	22-Oct-13	0



🟦 Actual Work	🟩 Remaining Work	🟥 Critical Remaining Work ◆	◆ Milestone	Page 3 of 4

Updated Schedule 7.1

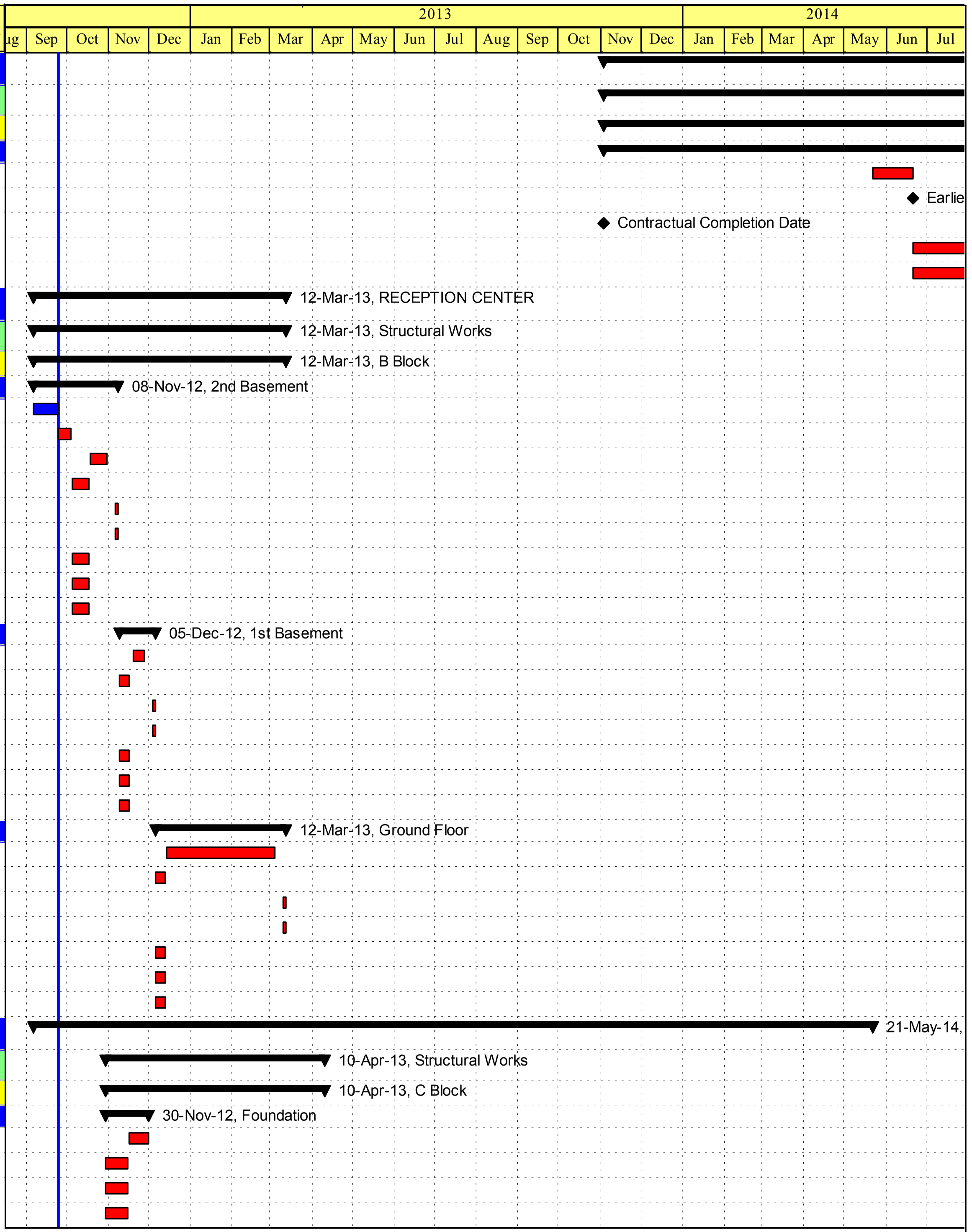
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
Cement-Sand 250kg / 300kg : Exterior Walls		15	24-Sep-13	22-Oct-13	0
RV.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg ...	15	24-Sep-13	22-Oct-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		15	24-Sep-13	22-Oct-13	0
RV.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg ...	15	24-Sep-13	22-Oct-13	0
Cement-Lime 350kg / 250kg : Ceilings		1	23-Sep-13	24-Sep-13	0
RV.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with fir...	1	23-Sep-13	24-Sep-13	0
RV.4.C.04.M2	Cement-lime-sand plaster, applied in two coats, with fir...	1	23-Sep-13	24-Sep-13	0
Waterproofing		14	25-Sep-12	25-Sep-12	0
Polyester - Bituminous Membrane [2 Coat] : Foundation & Terrace Roof		14	25-Sep-12	25-Sep-12	0
EVENT NO. 7	Additional Waterproofing Layer under Foundation of Wa...	10	25-Sep-12	25-Sep-12	
RV.4.D.03.C.FN	Two coat waterproofing with polyester reinforced bitumi...	4	25-Sep-12	25-Sep-12	0
Geotextile Membrane : Waterproofed Surfaces		4	25-Sep-12	25-Sep-12	0
RV.4.D.05.C.FN	Geotextile protective membrane, to waterproofed surfac...	4	25-Sep-12	25-Sep-12	0
Architectural Works		228	28-May-13	29-Apr-14	0
Thermal Protection		210	28-May-13	02-Apr-14	0
XPS : Exterior Walls & Ceilings		127	26-Sep-13	02-Apr-14	0
RV.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer o...	73	26-Sep-13	02-Apr-14	0
Mineral Wool Sound Insulation		10	28-May-13	11-Jun-13	0
RV.5.A.07	Mineral wool sound insulation, 50 mm thick, to walls, cei...	10	28-May-13	11-Jun-13	0
Exterior Brick Facing		145	26-Sep-13	29-Apr-14	0
Exterior Brick Facing		145	26-Sep-13	29-Apr-14	0
RV.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesi...	91	26-Sep-13	29-Apr-14	0
Electrical Works		1	18-Oct-12	19-Oct-12	0
Grounding and Lightning Protection Installation		1	18-Oct-12	19-Oct-12	0
No Sub-Group		1	18-Oct-12	19-Oct-12	0
RV.7.M.3.C	95mm² monotron cable	1	18-Oct-12	19-Oct-12	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

Updated Schedule 7.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		190	03-Nov-13	04-Aug-14	0
General		190	03-Nov-13	04-Aug-14	0
General		190	03-Nov-13	04-Aug-14	0
General		190	03-Nov-13	04-Aug-14	0
GEN99100	Tests on Completion	30	22-May-14	20-Jun-14	0
GEN99500	Earliest Completion of All Scope	0		20-Jun-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	21-Jun-14	04-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	21-Jun-14	04-Aug-14	0
RECEPTION CENTER		129	25-Sep-12	12-Mar-13	0
Structural Works		129	25-Sep-12	12-Mar-13	0
B Block		129	25-Sep-12	12-Mar-13	0
2nd Basement		42	25-Sep-12	08-Nov-12	0
EVENT NO. 8	Delay due to Change in Admixture of Concrete for Block B	13	25-Sep-12	25-Sep-12	
EVENT NO. 9	Delay in Approval of Concrete Mix Design	8	25-Sep-12	04-Oct-12	0
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	18-Oct-12	30-Oct-12	0
RC.3.A.03.B.BS2.FW	Formwork	9	05-Oct-12	17-Oct-12	0
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	06-Nov-12	08-Nov-12	0
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	06-Nov-12	08-Nov-12	0
RC.3.A.03.B.BS2.SC	Scaffolding	9	05-Oct-12	17-Oct-12	0
RC.3.B.01.B.BS2	Deformed high yield steel bars , Ø8-Ø12 mm dia.	9	05-Oct-12	17-Oct-12	0
RC.3.B.02.B.BS2	Deformed high yield steel bars , Ø14-Ø28 mm dia.	9	05-Oct-12	17-Oct-12	0
1st Basement		19	09-Nov-12	05-Dec-12	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	19-Nov-12	27-Nov-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	09-Nov-12	16-Nov-12	0
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	04-Dec-12	05-Dec-12	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	04-Dec-12	05-Dec-12	0
RC.3.A.03.B.BS1.SC	Scaffolding	6	09-Nov-12	16-Nov-12	0
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	09-Nov-12	16-Nov-12	0
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	09-Nov-12	16-Nov-12	0
Ground Floor		68	06-Dec-12	12-Mar-13	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	14-Dec-12	04-Mar-13	0
RC.3.A.03.B.GR.FW	Formwork	6	06-Dec-12	13-Dec-12	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	11-Mar-13	12-Mar-13	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	11-Mar-13	12-Mar-13	0
RC.3.A.03.B.GR.SC	Scaffolding	6	06-Dec-12	13-Dec-12	0
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	06-Dec-12	13-Dec-12	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	06-Dec-12	13-Dec-12	0
REMOVAL CENTER		426	25-Sep-12	21-May-14	0
Structural Works		116	30-Oct-12	10-Apr-13	0
C Block		116	30-Oct-12	10-Apr-13	0
Foundation		24	30-Oct-12	30-Nov-12	0
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	16-Nov-12	30-Nov-12	0
RV.3.A.02.C.FW	Formwork	13	30-Oct-12	15-Nov-12	0
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	30-Oct-12	15-Nov-12	0
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	30-Oct-12	15-Nov-12	0



🟦	Actual Work
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◆	Milestone

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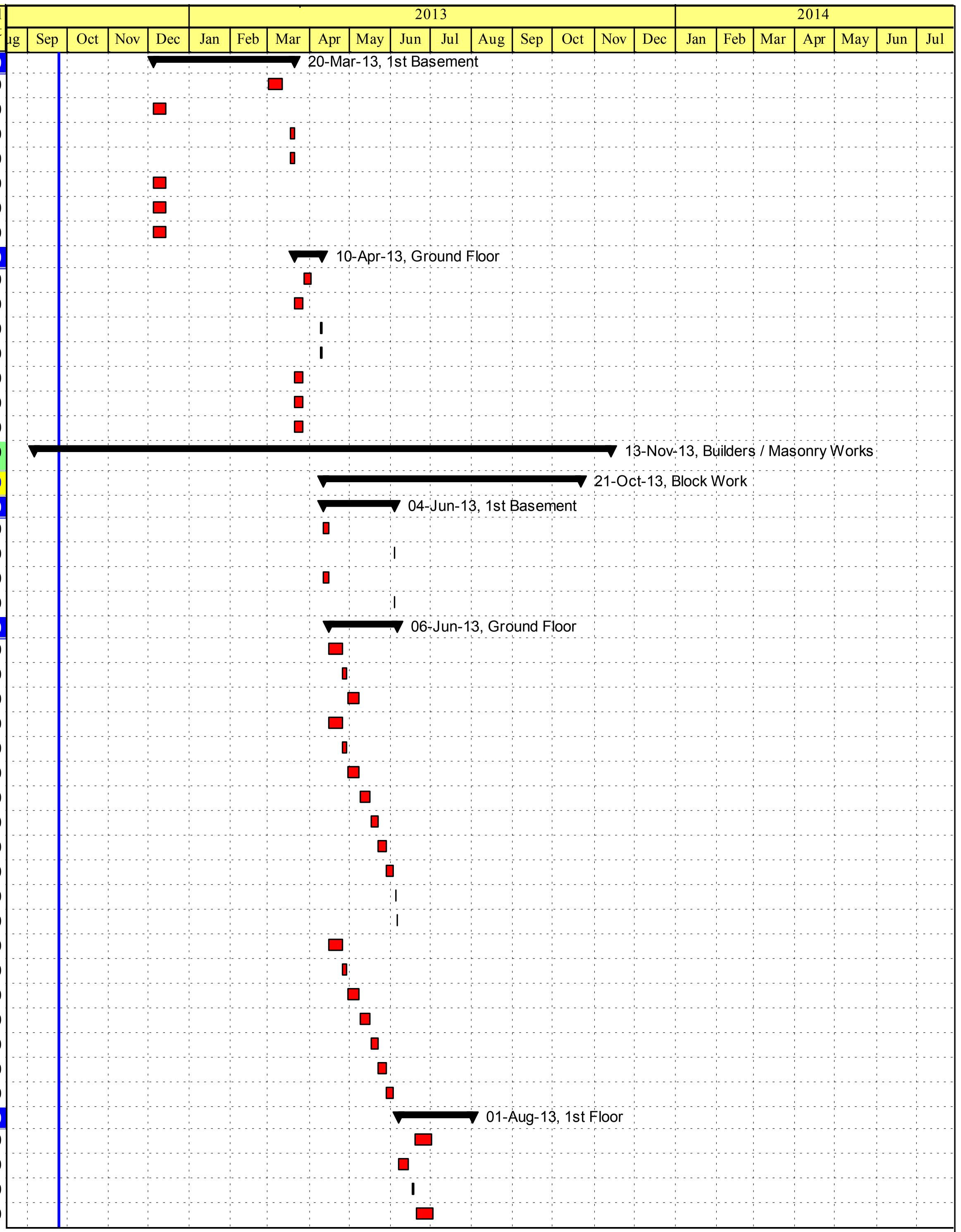
Updated Schedule 7.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
1st Basement		75	05-Dec-12	20-Mar-13	0
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	01-Mar-13	11-Mar-13	0
RV.3.A.03.C.BS1.FW	Formwork	8	05-Dec-12	14-Dec-12	0
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	18-Mar-13	20-Mar-13	0
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	18-Mar-13	20-Mar-13	0
RV.3.A.03.C.BS1.SC	Scaffolding	8	05-Dec-12	14-Dec-12	0
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	05-Dec-12	14-Dec-12	0
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	05-Dec-12	14-Dec-12	0
Ground Floor		15	21-Mar-13	10-Apr-13	0
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	28-Mar-13	02-Apr-13	0
RV.3.A.03.C.GR.FW	Formwork	5	21-Mar-13	27-Mar-13	0
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	09-Apr-13	10-Apr-13	0
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	09-Apr-13	10-Apr-13	0
RV.3.A.03.C.GR.SC	Scaffolding	5	21-Mar-13	27-Mar-13	0
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	21-Mar-13	27-Mar-13	0
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	21-Mar-13	27-Mar-13	0
Builders / Masonry Works		294	25-Sep-12	13-Nov-13	0
Block Work		128	11-Apr-13	21-Oct-13	0
1st Basement		38	11-Apr-13	04-Jun-13	0
RV.4.A.02.C.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	11-Apr-13	15-Apr-13	0
RV.4.A.02.H.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	04-Jun-13	04-Jun-13	0
RV.4.A.04.C.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	11-Apr-13	15-Apr-13	0
RV.4.A.04.H.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	1	04-Jun-13	04-Jun-13	0
Ground Floor		37	16-Apr-13	06-Jun-13	0
RV.4.A.01.A.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	7	16-Apr-13	25-Apr-13	0
RV.4.A.01.B.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	2	26-Apr-13	29-Apr-13	0
RV.4.A.01.C.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	7	30-Apr-13	08-May-13	0
RV.4.A.02.A.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	16-Apr-13	25-Apr-13	0
RV.4.A.02.B.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	26-Apr-13	29-Apr-13	0
RV.4.A.02.C.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	30-Apr-13	08-May-13	0
RV.4.A.02.D.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	09-May-13	16-May-13	0
RV.4.A.02.E.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	17-May-13	22-May-13	0
RV.4.A.02.F.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	23-May-13	28-May-13	0
RV.4.A.02.G.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	29-May-13	03-Jun-13	0
RV.4.A.02.H.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	05-Jun-13	05-Jun-13	0
RV.4.A.02.I.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	06-Jun-13	06-Jun-13	0
RV.4.A.04.A.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	16-Apr-13	25-Apr-13	0
RV.4.A.04.B.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	26-Apr-13	29-Apr-13	0
RV.4.A.04.C.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	30-Apr-13	08-May-13	0
RV.4.A.04.D.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	09-May-13	16-May-13	0
RV.4.A.04.E.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	17-May-13	22-May-13	0
RV.4.A.04.F.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	23-May-13	28-May-13	0
RV.4.A.04.G.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	29-May-13	03-Jun-13	0
1st Floor		40	07-Jun-13	01-Aug-13	0
RV.4.A.01.C.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	19-Jun-13	01-Jul-13	0
RV.4.A.02.A.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	07-Jun-13	14-Jun-13	0
RV.4.A.02.B.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	17-Jun-13	18-Jun-13	0
RV.4.A.02.C.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	20-Jun-13	02-Jul-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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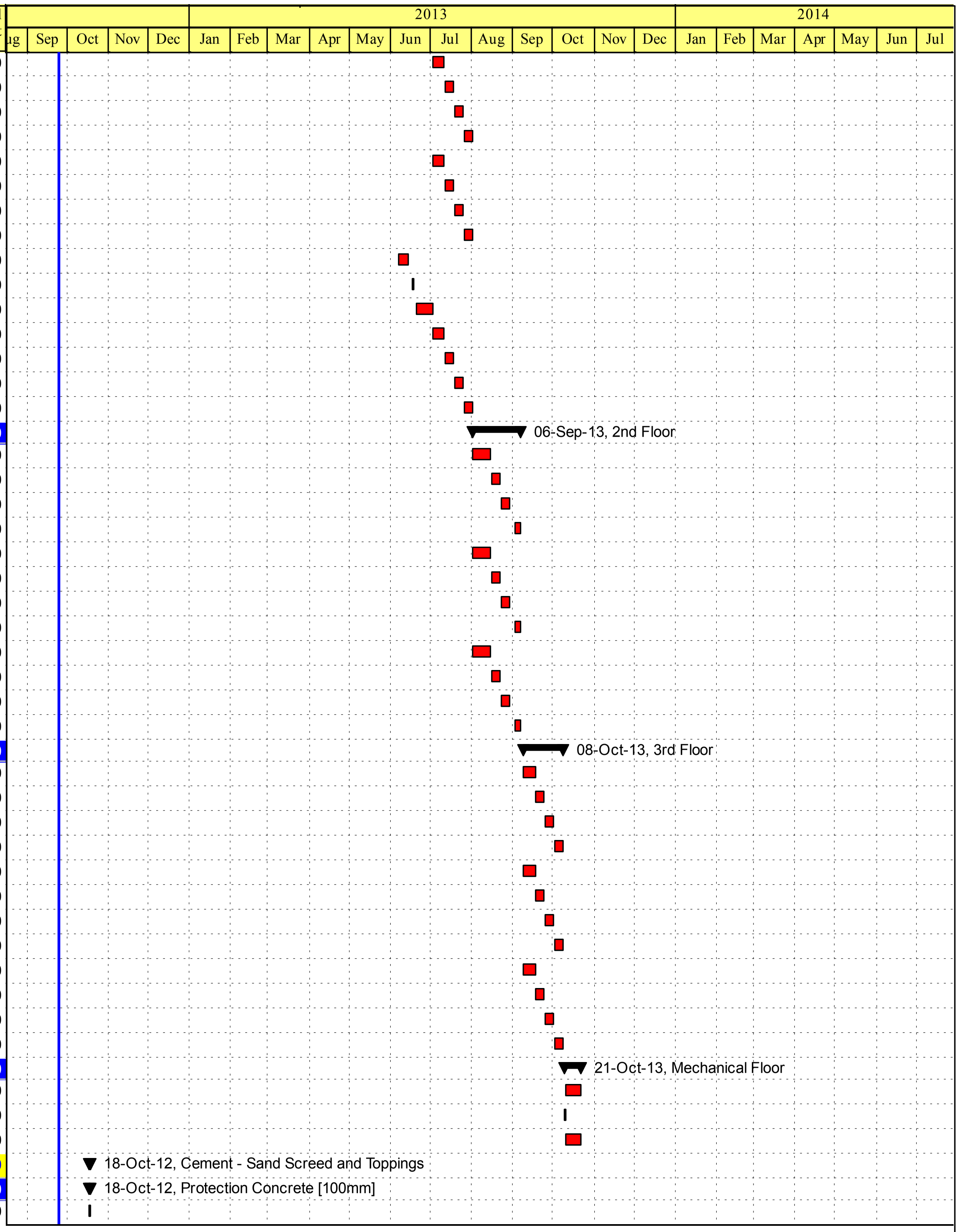
Updated Schedule 7.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.4.A.02.D.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	03-Jul-13	11-Jul-13	0
RV.4.A.02.E.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	12-Jul-13	18-Jul-13	0
RV.4.A.02.F.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	19-Jul-13	25-Jul-13	0
RV.4.A.02.G.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	26-Jul-13	01-Aug-13	0
RV.4.A.03.D.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	03-Jul-13	11-Jul-13	0
RV.4.A.03.E.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	12-Jul-13	18-Jul-13	0
RV.4.A.03.F.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	19-Jul-13	25-Jul-13	0
RV.4.A.03.G.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	26-Jul-13	01-Aug-13	0
RV.4.A.04.A.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	07-Jun-13	14-Jun-13	0
RV.4.A.04.B.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	17-Jun-13	18-Jun-13	0
RV.4.A.04.C.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	20-Jun-13	02-Jul-13	0
RV.4.A.04.D.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	03-Jul-13	11-Jul-13	0
RV.4.A.04.E.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	12-Jul-13	18-Jul-13	0
RV.4.A.04.F.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	19-Jul-13	25-Jul-13	0
RV.4.A.04.G.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	26-Jul-13	01-Aug-13	0
2nd Floor		22	02-Aug-13	06-Sep-13	0
RV.4.A.02.D.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	02-Aug-13	15-Aug-13	0
RV.4.A.02.E.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	16-Aug-13	22-Aug-13	0
RV.4.A.02.F.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	23-Aug-13	29-Aug-13	0
RV.4.A.02.G.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	02-Sep-13	06-Sep-13	0
RV.4.A.03.D.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	02-Aug-13	15-Aug-13	0
RV.4.A.03.E.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	16-Aug-13	22-Aug-13	0
RV.4.A.03.F.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	23-Aug-13	29-Aug-13	0
RV.4.A.03.G.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	02-Sep-13	06-Sep-13	0
RV.4.A.04.D.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	02-Aug-13	15-Aug-13	0
RV.4.A.04.E.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	16-Aug-13	22-Aug-13	0
RV.4.A.04.F.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	23-Aug-13	29-Aug-13	0
RV.4.A.04.G.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	02-Sep-13	06-Sep-13	0
3rd Floor		22	09-Sep-13	08-Oct-13	0
RV.4.A.02.D.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	09-Sep-13	17-Sep-13	0
RV.4.A.02.E.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	18-Sep-13	24-Sep-13	0
RV.4.A.02.F.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	25-Sep-13	01-Oct-13	0
RV.4.A.02.G.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	02-Oct-13	08-Oct-13	0
RV.4.A.03.D.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	09-Sep-13	17-Sep-13	0
RV.4.A.03.E.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	18-Sep-13	24-Sep-13	0
RV.4.A.03.F.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	25-Sep-13	01-Oct-13	0
RV.4.A.03.G.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	02-Oct-13	08-Oct-13	0
RV.4.A.04.D.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	09-Sep-13	17-Sep-13	0
RV.4.A.04.E.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	18-Sep-13	24-Sep-13	0
RV.4.A.04.F.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	25-Sep-13	01-Oct-13	0
RV.4.A.04.G.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	02-Oct-13	08-Oct-13	0
Mechanical Floor		4	09-Oct-13	21-Oct-13	0
RV.4.A.01.C.M	Bims block wall, 250 mm thick, laid in sand-cement mortar	2	11-Oct-13	21-Oct-13	0
RV.4.A.02.A.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	09-Oct-13	10-Oct-13	0
RV.4.A.02.C.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	11-Oct-13	21-Oct-13	0
Cement - Sand Screed and Toppings		2	17-Oct-12	18-Oct-12	0
Protection Concrete [100mm]		2	17-Oct-12	18-Oct-12	0
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	17-Oct-12	18-Oct-12	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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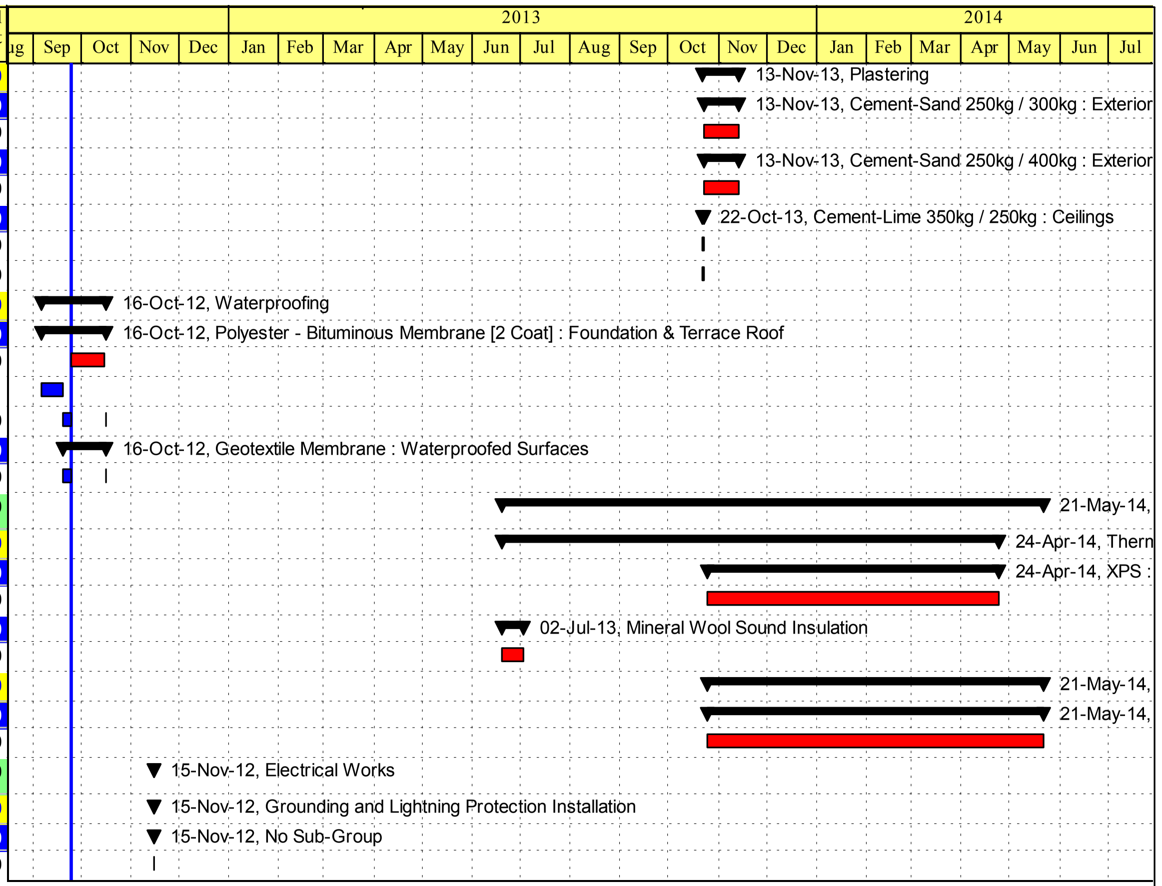
Updated Schedule 7.2

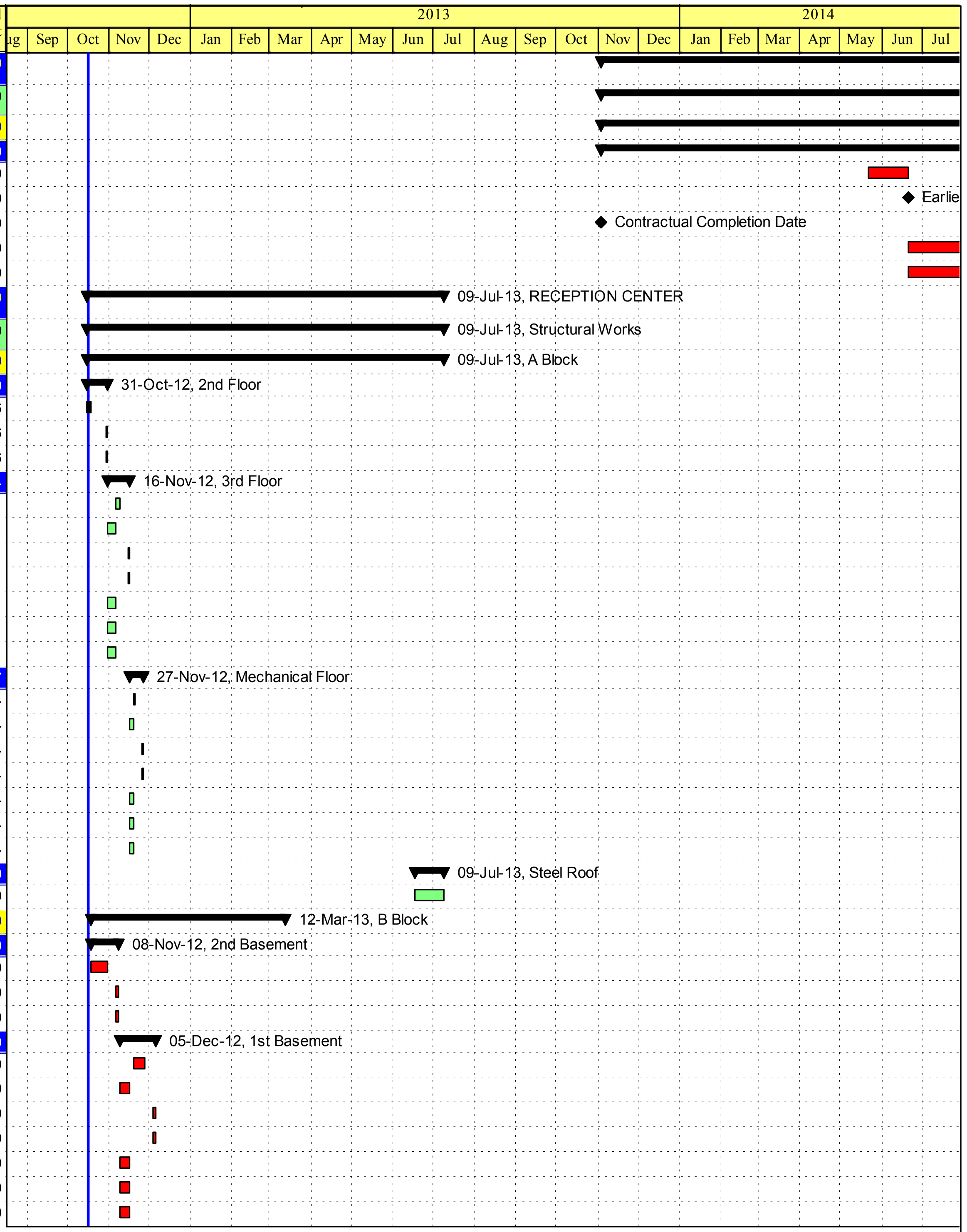
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
Plastering		16	22-Oct-13	13-Nov-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		15	23-Oct-13	13-Nov-13	0
RV.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg ...	15	23-Oct-13	13-Nov-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		15	23-Oct-13	13-Nov-13	0
RV.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg ...	15	23-Oct-13	13-Nov-13	0
Cement-Lime 350kg / 250kg : Ceilings		1	22-Oct-13	22-Oct-13	0
RV.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with fir...	1	22-Oct-13	22-Oct-13	0
RV.4.C.04.M2	Cement-lime-sand plaster, applied in two coats, with fir...	1	22-Oct-13	22-Oct-13	0
Waterproofing		28	25-Sep-12	16-Oct-12	0
Polyester - Bituminous Membrane [2 Coat] : Foundation & Terrace Roof		28	25-Sep-12	16-Oct-12	0
EVENT NO. 10	Intentional Slow-down of Waterproofing Works by the C...	15	25-Sep-12	15-Oct-12	0
EVENT NO. 7	Additional Waterproofing Layer under Foundation of Wa...	10	25-Sep-12	25-Sep-12	
RV.4.D.03.C.FN	Two coat waterproofing with polyester reinforced bitumi...	4	16-Oct-12	16-Oct-12	0
Geotextile Membrane : Waterproofed Surfaces		4	16-Oct-12	16-Oct-12	0
RV.4.D.05.C.FN	Geotextile protective membrane, to waterproofed surfac...	4	16-Oct-12	16-Oct-12	0
Architectural Works		228	19-Jun-13	21-May-14	0
Thermal Protection		210	19-Jun-13	24-Apr-14	0
XPS : Exterior Walls & Ceilings		127	25-Oct-13	24-Apr-14	0
RV.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer o...	73	25-Oct-13	24-Apr-14	0
Mineral Wool Sound Insulation		10	19-Jun-13	02-Jul-13	0
RV.5.A.07	Mineral wool sound insulation, 50 mm thick, to walls, cei...	10	19-Jun-13	02-Jul-13	0
Exterior Brick Facing		145	25-Oct-13	21-May-14	0
Exterior Brick Facing		145	25-Oct-13	21-May-14	0
RV.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesi...	91	25-Oct-13	21-May-14	0
Electrical Works		1	15-Nov-12	15-Nov-12	0
Grounding and Lightning Protection Installation		1	15-Nov-12	15-Nov-12	0
No Sub-Group		1	15-Nov-12	15-Nov-12	0
RV.7.M.3.C	95mm² monotron cable	1	15-Nov-12	15-Nov-12	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

Updated Schedule 7.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		190	03-Nov-13	04-Aug-14	0
General		190	03-Nov-13	04-Aug-14	0
General		190	03-Nov-13	04-Aug-14	0
General		190	03-Nov-13	04-Aug-14	0
GEN99100	Tests on Completion	30	22-May-14	20-Jun-14	0
GEN99500	Earliest Completion of All Scope	0		20-Jun-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	21-Jun-14	04-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	21-Jun-14	04-Aug-14	0
RECEPTION CENTER		186	17-Oct-12	09-Jul-13	89
Structural Works		186	17-Oct-12	09-Jul-13	89
A Block		186	17-Oct-12	09-Jul-13	89
2nd Floor		8	17-Oct-12	31-Oct-12	159
RC.3.A.03.A.2F	Placing of Concrete Class C30 for superstructure abov...	3	17-Oct-12	18-Oct-12	106
RC.3.A.03.A.2F.RFW	Removal of Formwork	1	30-Oct-12	31-Oct-12	106
RC.3.A.03.A.2F.RSC	Removal of Scaffolding	1	30-Oct-12	31-Oct-12	106
3rd Floor		12	31-Oct-12	16-Nov-12	174
RC.3.A.03.A.3F	Placing of Concrete Class C30 for superstructure abov...	3	06-Nov-12	09-Nov-12	121
RC.3.A.03.A.3F.FW	Formwork	4	31-Oct-12	06-Nov-12	121
RC.3.A.03.A.3F.RFW	Removal of Formwork	1	15-Nov-12	16-Nov-12	121
RC.3.A.03.A.3F.RSC	Removal of Scaffolding	1	15-Nov-12	16-Nov-12	121
RC.3.A.03.A.3F.SC	Scaffolding	4	31-Oct-12	06-Nov-12	121
RC.3.B.01.A.3F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	31-Oct-12	06-Nov-12	121
RC.3.B.02.A.3F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	31-Oct-12	06-Nov-12	121
Mechanical Floor		7	16-Nov-12	27-Nov-12	187
RC.3.A.03.A.M	Placing of Concrete Class C30 for superstructure abov...	1	19-Nov-12	20-Nov-12	134
RC.3.A.03.A.M.FW	Formwork	1	16-Nov-12	19-Nov-12	134
RC.3.A.03.A.M.RFW	Removal of Formwork	1	26-Nov-12	27-Nov-12	134
RC.3.A.03.A.M.RSC	Removal of Scaffolding	1	26-Nov-12	27-Nov-12	134
RC.3.A.03.A.M.SC	Scaffolding	1	16-Nov-12	19-Nov-12	134
RC.3.B.01.A.M	Deformed high yield steel bars , Ø8-Ø12 mm dia.	1	16-Nov-12	19-Nov-12	134
RC.3.B.02.A.M	Deformed high yield steel bars , Ø14-Ø28 mm dia.	1	16-Nov-12	19-Nov-12	134
Steel Roof		17	17-Jun-13	09-Jul-13	89
RC.3.C.02.A	Roof support structure made with light steel profiles, in...	17	17-Jun-13	09-Jul-13	89
B Block		99	18-Oct-12	12-Mar-13	0
2nd Basement		12	18-Oct-12	08-Nov-12	0
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	18-Oct-12	30-Oct-12	0
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	06-Nov-12	08-Nov-12	0
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	06-Nov-12	08-Nov-12	0
1st Basement		19	09-Nov-12	05-Dec-12	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	19-Nov-12	27-Nov-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	09-Nov-12	16-Nov-12	0
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	04-Dec-12	05-Dec-12	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	04-Dec-12	05-Dec-12	0
RC.3.A.03.B.BS1.SC	Scaffolding	6	09-Nov-12	16-Nov-12	0
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	09-Nov-12	16-Nov-12	0
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	09-Nov-12	16-Nov-12	0



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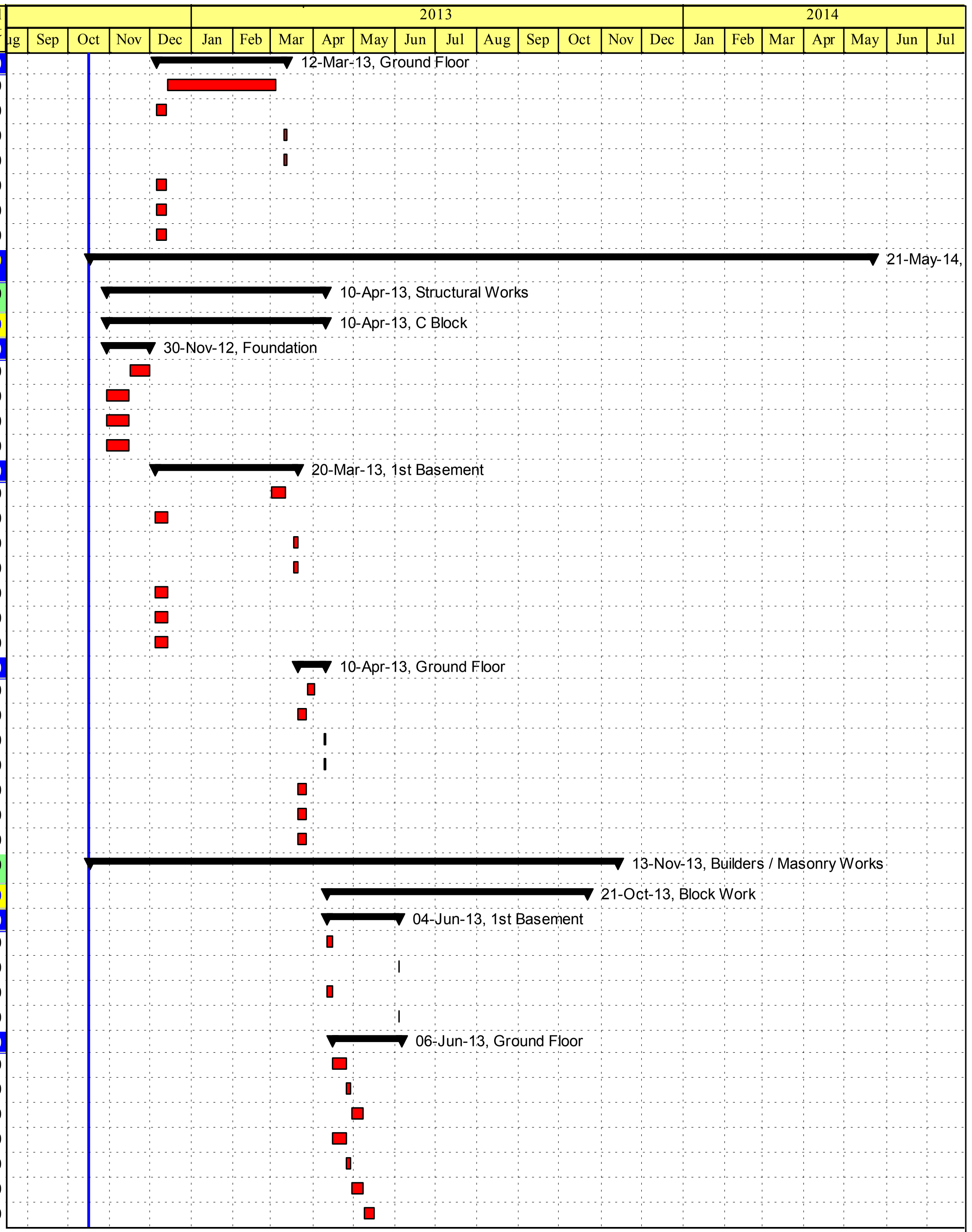
Updated Schedule 8.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
Ground Floor		68	06-Dec-12	12-Mar-13	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	14-Dec-12	04-Mar-13	0
RC.3.A.03.B.GR.FW	Formwork	6	06-Dec-12	13-Dec-12	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	11-Mar-13	12-Mar-13	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	11-Mar-13	12-Mar-13	0
RC.3.A.03.B.GR.SC	Scaffolding	6	06-Dec-12	13-Dec-12	0
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	06-Dec-12	13-Dec-12	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	06-Dec-12	13-Dec-12	0
REMOVAL CENTER		397	17-Oct-12	21-May-14	0
Structural Works		116	30-Oct-12	10-Apr-13	0
C Block		116	30-Oct-12	10-Apr-13	0
Foundation		24	30-Oct-12	30-Nov-12	0
RV.3.A.02.C	Placing of concrete Class C30 for raft foundation, inclu...	11	16-Nov-12	30-Nov-12	0
RV.3.A.02.C.FW	Formwork	13	30-Oct-12	15-Nov-12	0
RV.3.B.01.C.FN	Deformed high yield steel bars , Ø8-Ø12 mm dia.	13	30-Oct-12	15-Nov-12	0
RV.3.B.02.C.FN	Deformed high yield steel bars , Ø14-Ø28 mm dia.	13	30-Oct-12	15-Nov-12	0
1st Basement		75	05-Dec-12	20-Mar-13	0
RV.3.A.03.C.BS1	Placing of Concrete Class C30 for superstructure abov...	7	01-Mar-13	11-Mar-13	0
RV.3.A.03.C.BS1.FW	Formwork	8	05-Dec-12	14-Dec-12	0
RV.3.A.03.C.BS1.RFW	Removal of Formwork	3	18-Mar-13	20-Mar-13	0
RV.3.A.03.C.BS1.RSC	Removal of Scaffolding	3	18-Mar-13	20-Mar-13	0
RV.3.A.03.C.BS1.SC	Scaffolding	8	05-Dec-12	14-Dec-12	0
RV.3.B.01.C.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	8	05-Dec-12	14-Dec-12	0
RV.3.B.02.C.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	8	05-Dec-12	14-Dec-12	0
Ground Floor		15	21-Mar-13	10-Apr-13	0
RV.3.A.03.C.GR	Placing of Concrete Class C30 for superstructure abov...	4	28-Mar-13	02-Apr-13	0
RV.3.A.03.C.GR.FW	Formwork	5	21-Mar-13	27-Mar-13	0
RV.3.A.03.C.GR.RFW	Removal of Formwork	2	09-Apr-13	10-Apr-13	0
RV.3.A.03.C.GR.RSC	Removal of Scaffolding	2	09-Apr-13	10-Apr-13	0
RV.3.A.03.C.GR.SC	Scaffolding	5	21-Mar-13	27-Mar-13	0
RV.3.B.01.C.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	5	21-Mar-13	27-Mar-13	0
RV.3.B.02.C.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	5	21-Mar-13	27-Mar-13	0
Builders / Masonry Works		265	17-Oct-12	13-Nov-13	0
Block Work		128	11-Apr-13	21-Oct-13	0
1st Basement		38	11-Apr-13	04-Jun-13	0
RV.4.A.02.C.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	11-Apr-13	15-Apr-13	0
RV.4.A.02.H.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	04-Jun-13	04-Jun-13	0
RV.4.A.04.C.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	11-Apr-13	15-Apr-13	0
RV.4.A.04.H.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	1	04-Jun-13	04-Jun-13	0
Ground Floor		37	16-Apr-13	06-Jun-13	0
RV.4.A.01.A.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	7	16-Apr-13	25-Apr-13	0
RV.4.A.01.B.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	2	26-Apr-13	29-Apr-13	0
RV.4.A.01.C.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	7	30-Apr-13	08-May-13	0
RV.4.A.02.A.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	16-Apr-13	25-Apr-13	0
RV.4.A.02.B.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	26-Apr-13	29-Apr-13	0
RV.4.A.02.C.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	30-Apr-13	08-May-13	0
RV.4.A.02.D.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	09-May-13	16-May-13	0



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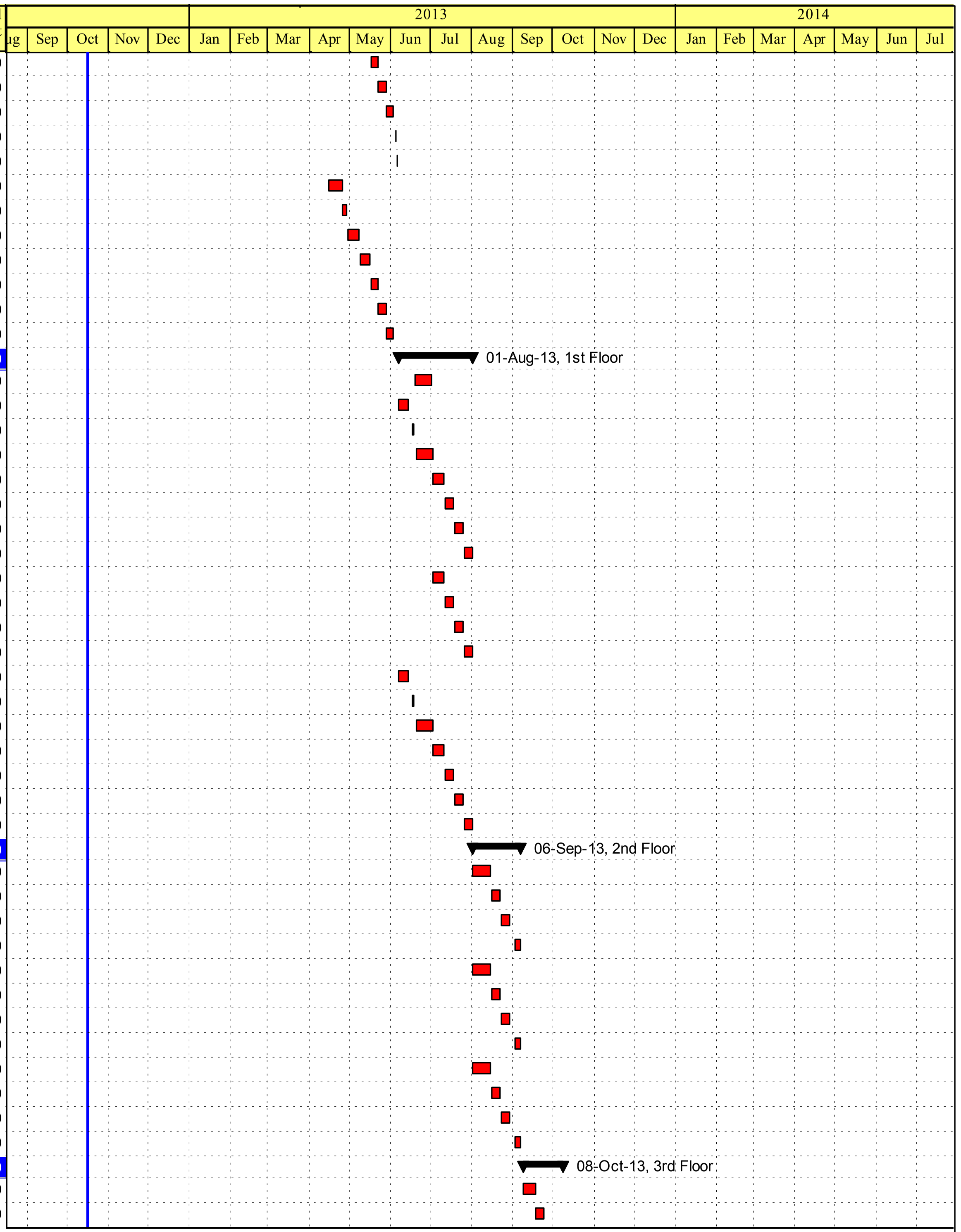
Updated Schedule 8.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.4.A.02.E.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	17-May-13	22-May-13	0
RV.4.A.02.F.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	23-May-13	28-May-13	0
RV.4.A.02.G.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	29-May-13	03-Jun-13	0
RV.4.A.02.H.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	05-Jun-13	05-Jun-13	0
RV.4.A.02.I.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	06-Jun-13	06-Jun-13	0
RV.4.A.04.A.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	16-Apr-13	25-Apr-13	0
RV.4.A.04.B.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	26-Apr-13	29-Apr-13	0
RV.4.A.04.C.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	30-Apr-13	08-May-13	0
RV.4.A.04.D.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	09-May-13	16-May-13	0
RV.4.A.04.E.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	17-May-13	22-May-13	0
RV.4.A.04.F.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	23-May-13	28-May-13	0
RV.4.A.04.G.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	29-May-13	03-Jun-13	0
1st Floor		40	07-Jun-13	01-Aug-13	0
RV.4.A.01.C.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	19-Jun-13	01-Jul-13	0
RV.4.A.02.A.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	07-Jun-13	14-Jun-13	0
RV.4.A.02.B.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	17-Jun-13	18-Jun-13	0
RV.4.A.02.C.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	20-Jun-13	02-Jul-13	0
RV.4.A.02.D.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	03-Jul-13	11-Jul-13	0
RV.4.A.02.E.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	12-Jul-13	18-Jul-13	0
RV.4.A.02.F.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	19-Jul-13	25-Jul-13	0
RV.4.A.02.G.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	26-Jul-13	01-Aug-13	0
RV.4.A.03.D.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	03-Jul-13	11-Jul-13	0
RV.4.A.03.E.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	12-Jul-13	18-Jul-13	0
RV.4.A.03.F.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	19-Jul-13	25-Jul-13	0
RV.4.A.03.G.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	26-Jul-13	01-Aug-13	0
RV.4.A.04.A.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	07-Jun-13	14-Jun-13	0
RV.4.A.04.B.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	17-Jun-13	18-Jun-13	0
RV.4.A.04.C.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	20-Jun-13	02-Jul-13	0
RV.4.A.04.D.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	03-Jul-13	11-Jul-13	0
RV.4.A.04.E.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	12-Jul-13	18-Jul-13	0
RV.4.A.04.F.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	19-Jul-13	25-Jul-13	0
RV.4.A.04.G.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	26-Jul-13	01-Aug-13	0
2nd Floor		22	02-Aug-13	06-Sep-13	0
RV.4.A.02.D.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	02-Aug-13	15-Aug-13	0
RV.4.A.02.E.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	16-Aug-13	22-Aug-13	0
RV.4.A.02.F.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	23-Aug-13	29-Aug-13	0
RV.4.A.02.G.2F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	02-Sep-13	06-Sep-13	0
RV.4.A.03.D.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	02-Aug-13	15-Aug-13	0
RV.4.A.03.E.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	16-Aug-13	22-Aug-13	0
RV.4.A.03.F.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	23-Aug-13	29-Aug-13	0
RV.4.A.03.G.2F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	02-Sep-13	06-Sep-13	0
RV.4.A.04.D.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	02-Aug-13	15-Aug-13	0
RV.4.A.04.E.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	16-Aug-13	22-Aug-13	0
RV.4.A.04.F.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	23-Aug-13	29-Aug-13	0
RV.4.A.04.G.2F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	02-Sep-13	06-Sep-13	0
3rd Floor		22	09-Sep-13	08-Oct-13	0
RV.4.A.02.D.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	09-Sep-13	17-Sep-13	0
RV.4.A.02.E.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	18-Sep-13	24-Sep-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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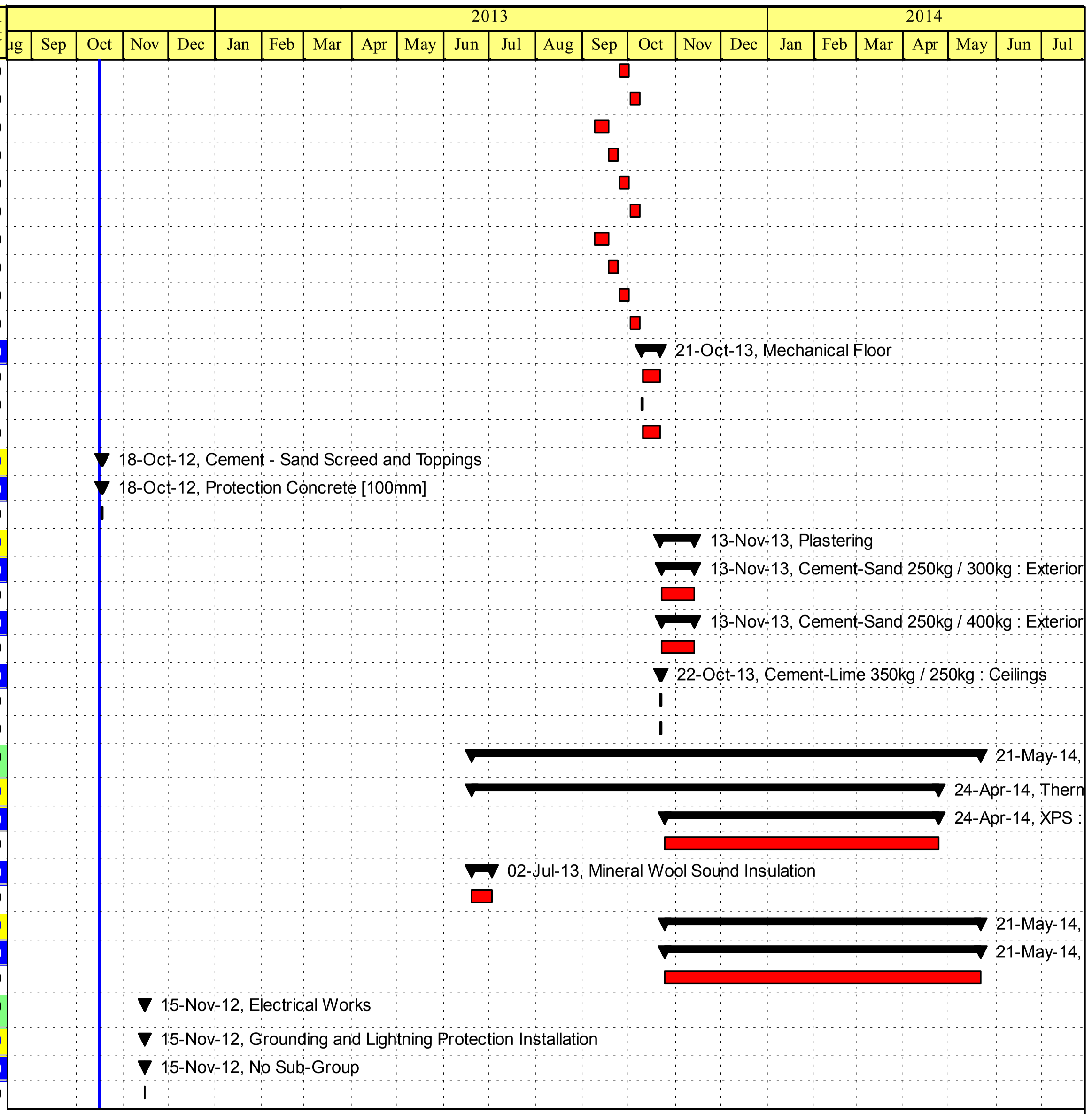
Updated Schedule 8.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RV.4.A.02.F.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	25-Sep-13	01-Oct-13	0
RV.4.A.02.G.3F	Bims block wall, 200 mm thick, laid in sand-cement mortar	5	02-Oct-13	08-Oct-13	0
RV.4.A.03.D.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	7	09-Sep-13	17-Sep-13	0
RV.4.A.03.E.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	18-Sep-13	24-Sep-13	0
RV.4.A.03.F.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	25-Sep-13	01-Oct-13	0
RV.4.A.03.G.3F	Bims block wall, 150 mm thick, laid in sand-cement mortar	5	02-Oct-13	08-Oct-13	0
RV.4.A.04.D.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	09-Sep-13	17-Sep-13	0
RV.4.A.04.E.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	18-Sep-13	24-Sep-13	0
RV.4.A.04.F.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	25-Sep-13	01-Oct-13	0
RV.4.A.04.G.3F	Bims block wall, 100 mm thick, laid in sand-cement mortar	5	02-Oct-13	08-Oct-13	0
Mechanical Floor		4	09-Oct-13	21-Oct-13	0
RV.4.A.01.C.M	Bims block wall, 250 mm thick, laid in sand-cement mortar	2	11-Oct-13	21-Oct-13	0
RV.4.A.02.A.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	09-Oct-13	10-Oct-13	0
RV.4.A.02.C.M	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	11-Oct-13	21-Oct-13	0
Cement - Sand Screed and Toppings		2	17-Oct-12	18-Oct-12	0
Protection Concrete [100mm]		2	17-Oct-12	18-Oct-12	0
RV.4.B.05.C	Protection concrete, with 200 kg. cement per m3, 50 m...	2	17-Oct-12	18-Oct-12	0
Plastering		16	22-Oct-13	13-Nov-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		15	23-Oct-13	13-Nov-13	0
RV.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg ...	15	23-Oct-13	13-Nov-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		15	23-Oct-13	13-Nov-13	0
RV.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg ...	15	23-Oct-13	13-Nov-13	0
Cement-Lime 350kg / 250kg : Ceilings		1	22-Oct-13	22-Oct-13	0
RV.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with fir...	1	22-Oct-13	22-Oct-13	0
RV.4.C.04.M2	Cement-lime-sand plaster, applied in two coats, with fir...	1	22-Oct-13	22-Oct-13	0
Architectural Works		228	19-Jun-13	21-May-14	0
Thermal Protection		210	19-Jun-13	24-Apr-14	0
XPS : Exterior Walls & Ceilings		127	25-Oct-13	24-Apr-14	0
RV.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer o...	73	25-Oct-13	24-Apr-14	0
Mineral Wool Sound Insulation		10	19-Jun-13	02-Jul-13	0
RV.5.A.07	Mineral wool sound insulation, 50 mm thick, to walls, cei...	10	19-Jun-13	02-Jul-13	0
Exterior Brick Facing		145	25-Oct-13	21-May-14	0
Exterior Brick Facing		145	25-Oct-13	21-May-14	0
RV.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesi...	91	25-Oct-13	21-May-14	0
Electrical Works		1	15-Nov-12	15-Nov-12	0
Grounding and Lightning Protection Installation		1	15-Nov-12	15-Nov-12	0
No Sub-Group		1	15-Nov-12	15-Nov-12	0
RV.7.M.3.C	95mm² monotron cable	1	15-Nov-12	15-Nov-12	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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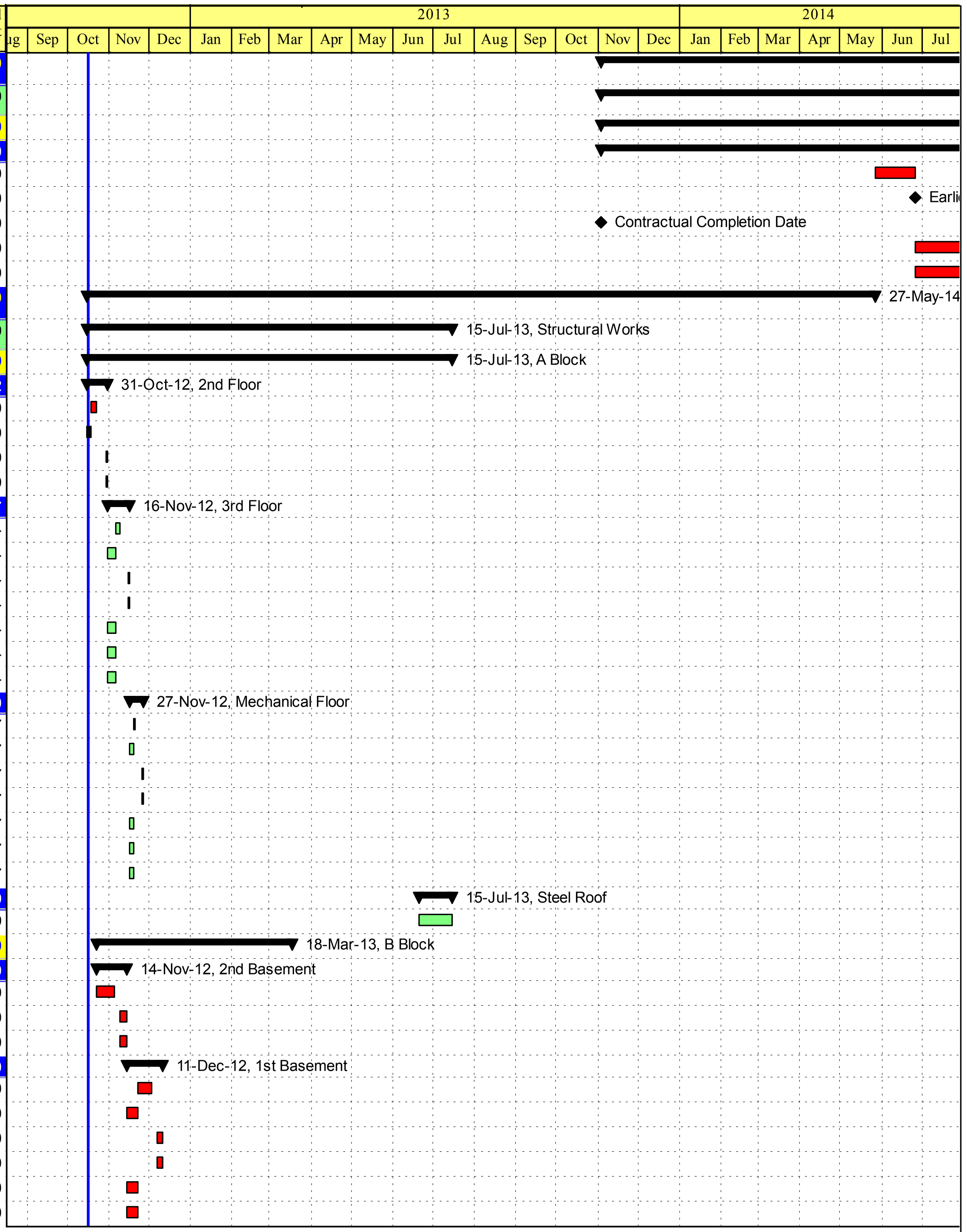
Updated Schedule 8.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		194	03-Nov-13	10-Aug-14	0
General		194	03-Nov-13	10-Aug-14	0
General		194	03-Nov-13	10-Aug-14	0
General		194	03-Nov-13	10-Aug-14	0
GEN99100	Tests on Completion	30	27-May-14	26-Jun-14	0
GEN99500	Earliest Completion of All Scope	0		26-Jun-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	26-Jun-14	10-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	26-Jun-14	10-Aug-14	0
RECEPTION CENTER		402	17-Oct-12	27-May-14	0
Structural Works		189	17-Oct-12	15-Jul-13	89
A Block		189	17-Oct-12	15-Jul-13	89
2nd Floor		8	17-Oct-12	31-Oct-12	162
EVENT NO. 11	Delay in Concrete Placing of A Block 2nd Floor	3	18-Oct-12	23-Oct-12	0
RC.3.A.03.A.2F	Placing of Concrete Class C30 for superstructure abov...	3	17-Oct-12	18-Oct-12	0
RC.3.A.03.A.2F.RFW	Removal of Formwork	1	30-Oct-12	31-Oct-12	109
RC.3.A.03.A.2F.RSC	Removal of Scaffolding	1	30-Oct-12	31-Oct-12	109
3rd Floor		12	31-Oct-12	16-Nov-12	177
RC.3.A.03.A.3F	Placing of Concrete Class C30 for superstructure abov...	3	06-Nov-12	09-Nov-12	124
RC.3.A.03.A.3F.FW	Formwork	4	31-Oct-12	06-Nov-12	124
RC.3.A.03.A.3F.RFW	Removal of Formwork	1	15-Nov-12	16-Nov-12	124
RC.3.A.03.A.3F.RSC	Removal of Scaffolding	1	15-Nov-12	16-Nov-12	124
RC.3.A.03.A.3F.SC	Scaffolding	4	31-Oct-12	06-Nov-12	124
RC.3.B.01.A.3F	Deformed high yield steel bars , Ø8-Ø12 mm dia.	4	31-Oct-12	06-Nov-12	124
RC.3.B.02.A.3F	Deformed high yield steel bars , Ø14-Ø28 mm dia.	4	31-Oct-12	06-Nov-12	124
Mechanical Floor		7	16-Nov-12	27-Nov-12	190
RC.3.A.03.A.M	Placing of Concrete Class C30 for superstructure abov...	1	19-Nov-12	20-Nov-12	137
RC.3.A.03.A.M.FW	Formwork	1	16-Nov-12	19-Nov-12	137
RC.3.A.03.A.M.RFW	Removal of Formwork	1	26-Nov-12	27-Nov-12	137
RC.3.A.03.A.M.RSC	Removal of Scaffolding	1	26-Nov-12	27-Nov-12	137
RC.3.A.03.A.M.SC	Scaffolding	1	16-Nov-12	19-Nov-12	137
RC.3.B.01.A.M	Deformed high yield steel bars , Ø8-Ø12 mm dia.	1	16-Nov-12	19-Nov-12	137
RC.3.B.02.A.M	Deformed high yield steel bars , Ø14-Ø28 mm dia.	1	16-Nov-12	19-Nov-12	137
Steel Roof		17	20-Jun-13	15-Jul-13	89
RC.3.C.02.A	Roof support structure made with light steel profiles, in...	17	20-Jun-13	15-Jul-13	89
B Block		99	23-Oct-12	18-Mar-13	0
2nd Basement		12	23-Oct-12	14-Nov-12	0
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	23-Oct-12	05-Nov-12	0
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	09-Nov-12	14-Nov-12	0
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	09-Nov-12	14-Nov-12	0
1st Basement		19	14-Nov-12	11-Dec-12	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	22-Nov-12	03-Dec-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	14-Nov-12	22-Nov-12	0
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	07-Dec-12	11-Dec-12	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	07-Dec-12	11-Dec-12	0
RC.3.A.03.B.BS1.SC	Scaffolding	6	14-Nov-12	22-Nov-12	0
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	14-Nov-12	22-Nov-12	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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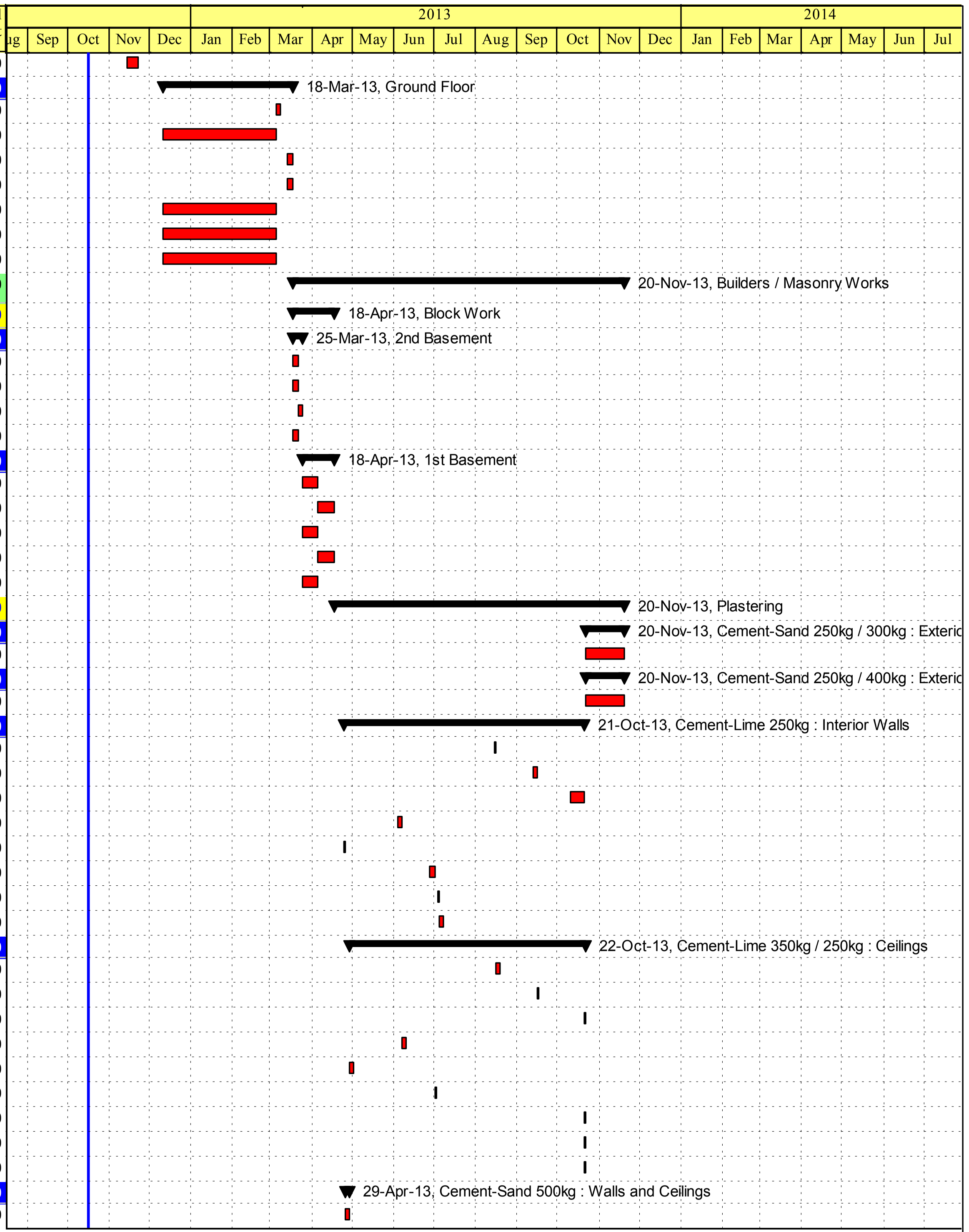
Updated Schedule 8.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	14-Nov-12	22-Nov-12	0
Ground Floor		68	11-Dec-12	18-Mar-13	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	05-Mar-13	08-Mar-13	0
RC.3.A.03.B.GR.FW	Formwork	6	11-Dec-12	05-Mar-13	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	14-Mar-13	18-Mar-13	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	14-Mar-13	18-Mar-13	0
RC.3.A.03.B.GR.SC	Scaffolding	6	11-Dec-12	05-Mar-13	0
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	11-Dec-12	05-Mar-13	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	11-Dec-12	05-Mar-13	0
Builders / Masonry Works		166	18-Mar-13	20-Nov-13	0
Block Work		23	18-Mar-13	18-Apr-13	0
2nd Basement		5	18-Mar-13	25-Mar-13	0
RC.4.A.01.B.BS2	Bims block wall, 250 mm thick, laid in sand-cement mortar	4	18-Mar-13	22-Mar-13	0
RC.4.A.02.B.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	18-Mar-13	22-Mar-13	0
RC.4.A.02.C.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	22-Mar-13	25-Mar-13	0
RC.4.A.04.B.BS2	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	18-Mar-13	22-Mar-13	0
1st Basement		18	25-Mar-13	18-Apr-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	25-Mar-13	05-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	05-Apr-13	18-Apr-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	25-Mar-13	05-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	05-Apr-13	18-Apr-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	25-Mar-13	05-Apr-13	0
Plastering		143	18-Apr-13	20-Nov-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	22-Oct-13	20-Nov-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg ...	20	22-Oct-13	20-Nov-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	22-Oct-13	20-Nov-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg ...	20	22-Oct-13	20-Nov-13	0
Cement-Lime 250kg : Interior Walls		118	25-Apr-13	21-Oct-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 25...	1	15-Aug-13	16-Aug-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 25...	1	13-Sep-13	16-Sep-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 25...	1	11-Oct-13	21-Oct-13	0
RC.4.C.03.BS1	Cement-lime-sand plaster, applied in two coats, with 25...	3	04-Jun-13	07-Jun-13	0
RC.4.C.03.BS2	Cement-lime-sand plaster, applied in two coats, with 25...	1	25-Apr-13	26-Apr-13	0
RC.4.C.03.GR	Cement-lime-sand plaster, applied in two coats, with 25...	2	28-Jun-13	02-Jul-13	0
RC.4.C.03.H	Cement-lime-sand plaster, applied in two coats, with 25...	1	04-Jul-13	05-Jul-13	0
RC.4.C.03.I	Cement-lime-sand plaster, applied in two coats, with 25...	1	05-Jul-13	08-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		117	29-Apr-13	22-Oct-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with fir...	1	16-Aug-13	19-Aug-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with fir...	1	16-Sep-13	17-Sep-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with fir...	1	21-Oct-13	22-Oct-13	0
RC.4.C.04.BS1	Cement-lime-sand plaster, applied in two coats, with fir...	1	07-Jun-13	10-Jun-13	0
RC.4.C.04.BS2	Cement-lime-sand plaster, applied in two coats, with fir...	3	29-Apr-13	02-May-13	0
RC.4.C.04.GR	Cement-lime-sand plaster, applied in two coats, with fir...	1	02-Jul-13	03-Jul-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with fir...	1	21-Oct-13	22-Oct-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with fir...	1	21-Oct-13	22-Oct-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with fir...	1	21-Oct-13	22-Oct-13	0
Cement-Sand 500kg : Walls and Ceilings		1	26-Apr-13	29-Apr-13	0
RC.4.C.05.BS2	Cement-sand plaster, applied in one coat, with 500 kg c...	1	26-Apr-13	29-Apr-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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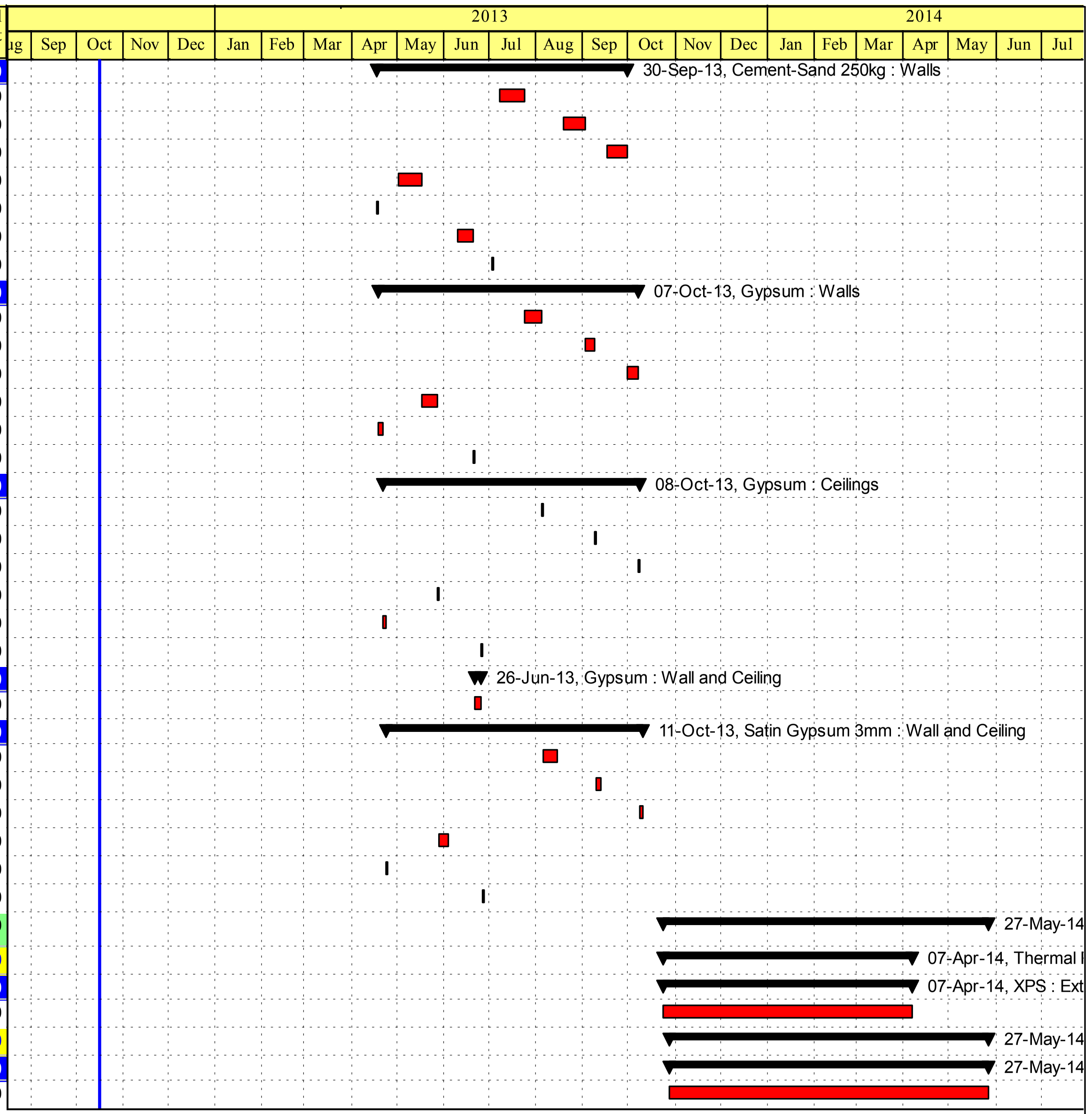
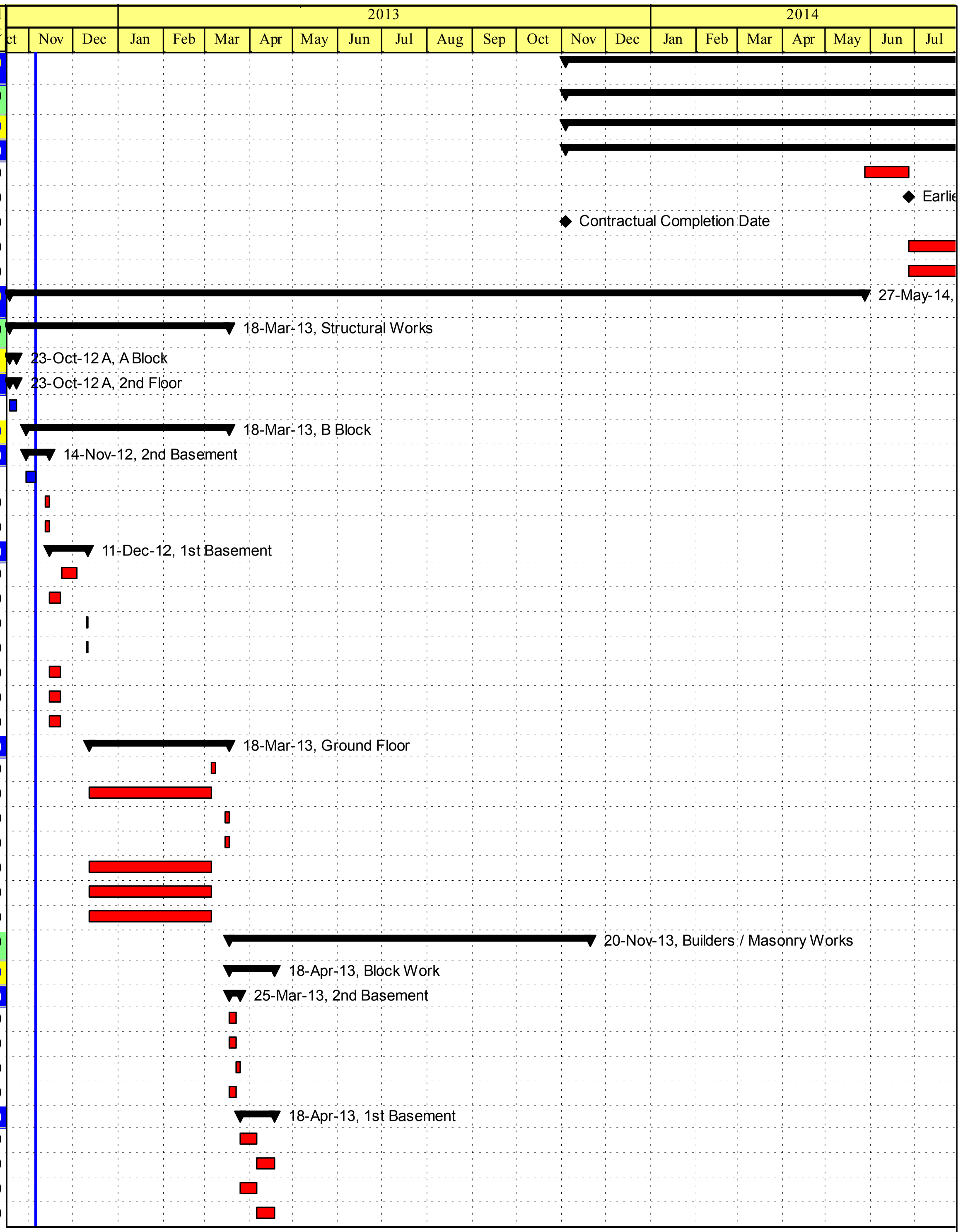
Updated Schedule 8.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
Cement-Sand 250kg : Walls		112	18-Apr-13	30-Sep-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg c...	12	08-Jul-13	24-Jul-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg c...	9	19-Aug-13	02-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg c...	9	17-Sep-13	30-Sep-13	0
RC.4.C.06.BS1	Cement-sand plaster, applied in one coat, with 250 kg c...	11	02-May-13	17-May-13	0
RC.4.C.06.BS2	Cement-sand plaster, applied in one coat, with 250 kg c...	1	18-Apr-13	19-Apr-13	0
RC.4.C.06.GR	Cement-sand plaster, applied in one coat, with 250 kg c...	8	10-Jun-13	20-Jun-13	0
RC.4.C.06.H	Cement-sand plaster, applied in one coat, with 250 kg c...	1	03-Jul-13	04-Jul-13	0
Gypsum : Walls		116	19-Apr-13	07-Oct-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat ceme...	8	24-Jul-13	05-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat ceme...	5	02-Sep-13	09-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat ceme...	5	30-Sep-13	07-Oct-13	0
RC.4.C.08.BS1	Gypsum plaster, applied in one coat, to one coat ceme...	7	17-May-13	28-May-13	0
RC.4.C.08.BS2	Gypsum plaster, applied in one coat, to one coat ceme...	1	19-Apr-13	22-Apr-13	0
RC.4.C.08.GR	Gypsum plaster, applied in one coat, to one coat ceme...	1	20-Jun-13	21-Jun-13	0
Gypsum : Ceilings		116	22-Apr-13	08-Oct-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	05-Aug-13	06-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	09-Sep-13	10-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	07-Oct-13	08-Oct-13	0
RC.4.C.09.BS1	Gypsum plaster, applied in one coat, to ceilings	1	28-May-13	29-May-13	0
RC.4.C.09.BS2	Gypsum plaster, applied in one coat, to ceilings	1	22-Apr-13	24-Apr-13	0
RC.4.C.09.GR	Gypsum plaster, applied in one coat, to ceilings	1	26-Jun-13	27-Jun-13	0
Gypsum : Wall and Ceiling		3	21-Jun-13	26-Jun-13	0
RC.4.C.10.GR	Gypsum priming, to wall and ceiling plaster	3	21-Jun-13	26-Jun-13	0
Satin Gypsum 3mm : Wall and Ceiling		118	24-Apr-13	11-Oct-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	4	06-Aug-13	15-Aug-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	3	10-Sep-13	13-Sep-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	3	08-Oct-13	11-Oct-13	0
RC.4.C.11.BS1	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	4	29-May-13	04-Jun-13	0
RC.4.C.11.BS2	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	1	24-Apr-13	25-Apr-13	0
RC.4.C.11.GR	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	1	27-Jun-13	28-Jun-13	0
Architectural Works		149	24-Oct-13	27-May-14	0
Thermal Protection		115	24-Oct-13	07-Apr-14	0
XPS : Exterior Walls & Ceilings		115	24-Oct-13	07-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer o...	61	24-Oct-13	07-Apr-14	0
Exterior Brick Facing		147	28-Oct-13	27-May-14	0
Exterior Brick Facing		147	28-Oct-13	27-May-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesi...	93	28-Oct-13	27-May-14	0



🟦 Actual Work	🟩 Remaining Work	🟥 Critical Remaining Work	◆ ◆ Milestone	Page 3 of 3	*Updated Schedule 8.2*

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		194	03-Nov-13	10-Aug-14	0
General		194	03-Nov-13	10-Aug-14	0
General		194	03-Nov-13	10-Aug-14	0
General		194	03-Nov-13	10-Aug-14	0
GEN99100	Tests on Completion	30	27-May-14	26-Jun-14	0
GEN99500	Earliest Completion of All Scope	0		26-Jun-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	26-Jun-14	10-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	26-Jun-14	10-Aug-14	0
RECEPTION CENTER		400	06-Nov-12	27-May-14	0
Structural Works		103	06-Nov-12	18-Mar-13	0
A Block		3	06-Nov-12	06-Nov-12	
2nd Floor		3	06-Nov-12	06-Nov-12	
EVENT NO. 11	Delay in Concrete Placing of A Block 2nd Floor	3	06-Nov-12	06-Nov-12	
B Block		99	06-Nov-12	18-Mar-13	0
2nd Basement		12	06-Nov-12	14-Nov-12	0
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	06-Nov-12	06-Nov-12	
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	12-Nov-12	14-Nov-12	0
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	12-Nov-12	14-Nov-12	0
1st Basement		19	15-Nov-12	11-Dec-12	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	23-Nov-12	03-Dec-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	15-Nov-12	22-Nov-12	0
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	10-Dec-12	11-Dec-12	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	10-Dec-12	11-Dec-12	0
RC.3.A.03.B.BS1.SC	Scaffolding	6	15-Nov-12	22-Nov-12	0
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	15-Nov-12	22-Nov-12	0
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	15-Nov-12	22-Nov-12	0
Ground Floor		68	12-Dec-12	18-Mar-13	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	06-Mar-13	08-Mar-13	0
RC.3.A.03.B.GR.FW	Formwork	6	12-Dec-12	05-Mar-13	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	15-Mar-13	18-Mar-13	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	15-Mar-13	18-Mar-13	0
RC.3.A.03.B.GR.SC	Scaffolding	6	12-Dec-12	05-Mar-13	0
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	12-Dec-12	05-Mar-13	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	12-Dec-12	05-Mar-13	0
Builders / Masonry Works		166	18-Mar-13	20-Nov-13	0
Block Work		23	18-Mar-13	18-Apr-13	0
2nd Basement		5	18-Mar-13	25-Mar-13	0
RC.4.A.01.B.BS2	Bims block wall, 250 mm thick, laid in sand-cement mortar	4	18-Mar-13	22-Mar-13	0
RC.4.A.02.B.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	18-Mar-13	22-Mar-13	0
RC.4.A.02.C.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	22-Mar-13	25-Mar-13	0
RC.4.A.04.B.BS2	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	18-Mar-13	22-Mar-13	0
1st Basement		18	25-Mar-13	18-Apr-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	25-Mar-13	05-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	05-Apr-13	18-Apr-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	25-Mar-13	05-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	05-Apr-13	18-Apr-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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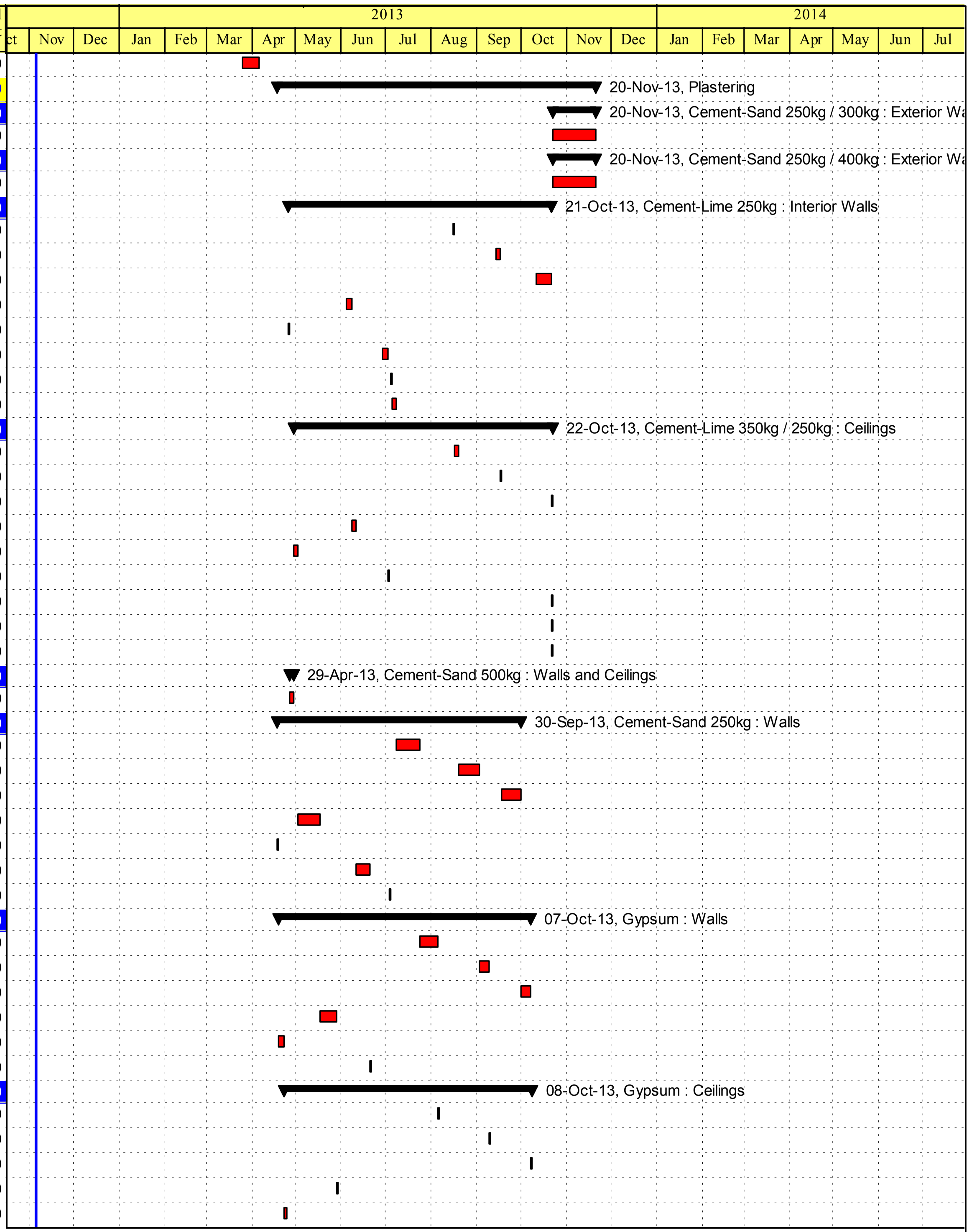
Updated Schedule 9.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	25-Mar-13	05-Apr-13	0
Plastering		143	18-Apr-13	20-Nov-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	22-Oct-13	20-Nov-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg ...	20	22-Oct-13	20-Nov-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	22-Oct-13	20-Nov-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg ...	20	22-Oct-13	20-Nov-13	0
Cement-Lime 250kg : Interior Walls		118	25-Apr-13	21-Oct-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 25...	1	15-Aug-13	16-Aug-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 25...	1	13-Sep-13	16-Sep-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 25...	1	11-Oct-13	21-Oct-13	0
RC.4.C.03.BS1	Cement-lime-sand plaster, applied in two coats, with 25...	3	04-Jun-13	07-Jun-13	0
RC.4.C.03.BS2	Cement-lime-sand plaster, applied in two coats, with 25...	1	25-Apr-13	26-Apr-13	0
RC.4.C.03.GR	Cement-lime-sand plaster, applied in two coats, with 25...	2	28-Jun-13	02-Jul-13	0
RC.4.C.03.H	Cement-lime-sand plaster, applied in two coats, with 25...	1	04-Jul-13	05-Jul-13	0
RC.4.C.03.I	Cement-lime-sand plaster, applied in two coats, with 25...	1	05-Jul-13	08-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		117	29-Apr-13	22-Oct-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with fir...	1	16-Aug-13	19-Aug-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with fir...	1	16-Sep-13	17-Sep-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with fir...	1	21-Oct-13	22-Oct-13	0
RC.4.C.04.BS1	Cement-lime-sand plaster, applied in two coats, with fir...	1	07-Jun-13	10-Jun-13	0
RC.4.C.04.BS2	Cement-lime-sand plaster, applied in two coats, with fir...	3	29-Apr-13	02-May-13	0
RC.4.C.04.GR	Cement-lime-sand plaster, applied in two coats, with fir...	1	02-Jul-13	03-Jul-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with fir...	1	21-Oct-13	22-Oct-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with fir...	1	21-Oct-13	22-Oct-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with fir...	1	21-Oct-13	22-Oct-13	0
Cement-Sand 500kg : Walls and Ceilings		1	26-Apr-13	29-Apr-13	0
RC.4.C.05.BS2	Cement-sand plaster, applied in one coat, with 500 kg c...	1	26-Apr-13	29-Apr-13	0
Cement-Sand 250kg : Walls		112	18-Apr-13	30-Sep-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg c...	12	08-Jul-13	24-Jul-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg c...	9	19-Aug-13	02-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg c...	9	17-Sep-13	30-Sep-13	0
RC.4.C.06.BS1	Cement-sand plaster, applied in one coat, with 250 kg c...	11	02-May-13	17-May-13	0
RC.4.C.06.BS2	Cement-sand plaster, applied in one coat, with 250 kg c...	1	18-Apr-13	19-Apr-13	0
RC.4.C.06.GR	Cement-sand plaster, applied in one coat, with 250 kg c...	8	10-Jun-13	20-Jun-13	0
RC.4.C.06.H	Cement-sand plaster, applied in one coat, with 250 kg c...	1	03-Jul-13	04-Jul-13	0
Gypsum : Walls		116	19-Apr-13	07-Oct-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat ceme...	8	24-Jul-13	05-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat ceme...	5	02-Sep-13	09-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat ceme...	5	30-Sep-13	07-Oct-13	0
RC.4.C.08.BS1	Gypsum plaster, applied in one coat, to one coat ceme...	7	17-May-13	28-May-13	0
RC.4.C.08.BS2	Gypsum plaster, applied in one coat, to one coat ceme...	1	19-Apr-13	22-Apr-13	0
RC.4.C.08.GR	Gypsum plaster, applied in one coat, to one coat ceme...	1	20-Jun-13	21-Jun-13	0
Gypsum : Ceilings		116	22-Apr-13	08-Oct-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	05-Aug-13	06-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	09-Sep-13	10-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	07-Oct-13	08-Oct-13	0
RC.4.C.09.BS1	Gypsum plaster, applied in one coat, to ceilings	1	28-May-13	29-May-13	0
RC.4.C.09.BS2	Gypsum plaster, applied in one coat, to ceilings	1	22-Apr-13	24-Apr-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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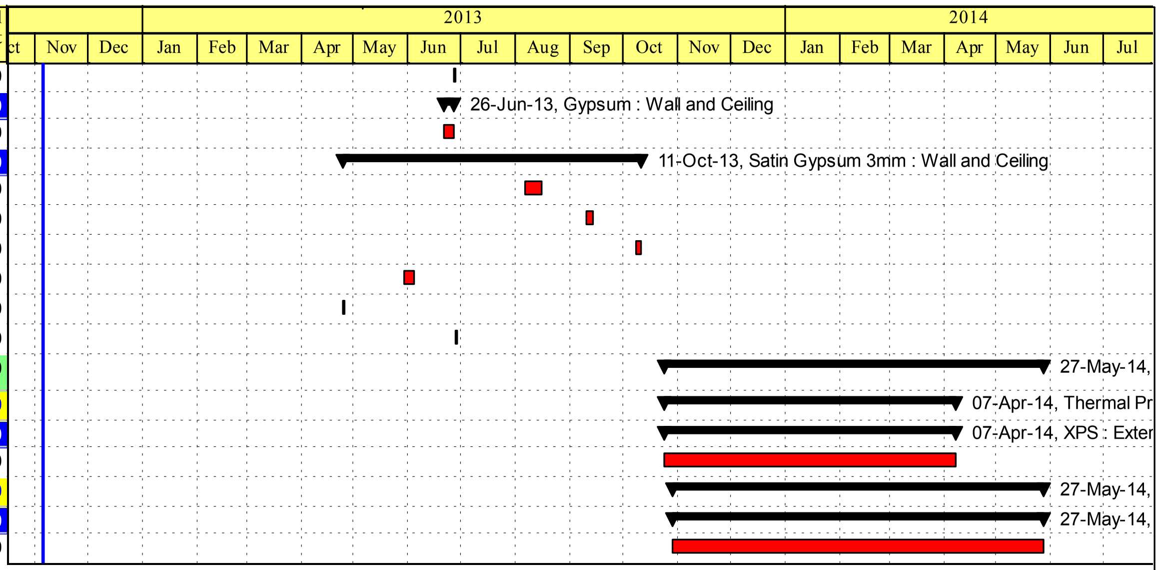
Updated Schedule 9.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.C.09.GR	Gypsum plaster, applied in one coat, to ceilings	1	26-Jun-13	27-Jun-13	0
Gypsum : Wall and Ceiling		3	21-Jun-13	26-Jun-13	0
RC.4.C.10.GR	Gypsum priming, to wall and ceiling plaster	3	21-Jun-13	26-Jun-13	0
Satin Gypsum 3mm : Wall and Ceiling		118	24-Apr-13	11-Oct-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	4	06-Aug-13	15-Aug-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	3	10-Sep-13	13-Sep-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	3	08-Oct-13	11-Oct-13	0
RC.4.C.11.BS1	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	4	29-May-13	04-Jun-13	0
RC.4.C.11.BS2	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	1	24-Apr-13	25-Apr-13	0
RC.4.C.11.GR	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	1	27-Jun-13	28-Jun-13	0
Architectural Works		149	24-Oct-13	27-May-14	0
Thermal Protection		115	24-Oct-13	07-Apr-14	0
XPS : Exterior Walls & Ceilings		115	24-Oct-13	07-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer o...	61	24-Oct-13	07-Apr-14	0
Exterior Brick Facing		147	28-Oct-13	27-May-14	0
Exterior Brick Facing		147	28-Oct-13	27-May-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesi...	93	28-Oct-13	27-May-14	0



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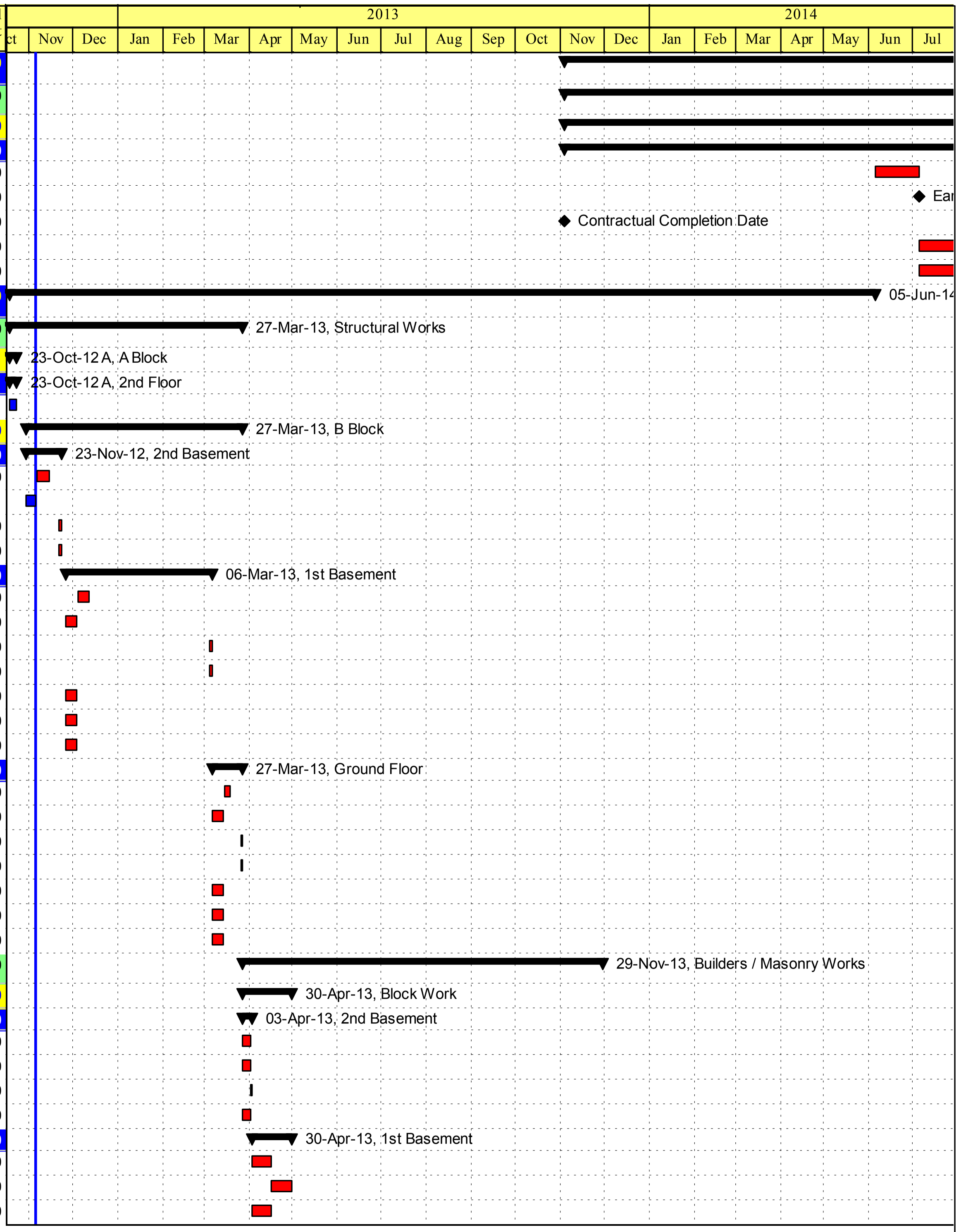
Updated Schedule 9.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		201	03-Nov-13	19-Aug-14	0
General		201	03-Nov-13	19-Aug-14	0
General		201	03-Nov-13	19-Aug-14	0
General		201	03-Nov-13	19-Aug-14	0
GEN99100	Tests on Completion	30	05-Jun-14	05-Jul-14	0
GEN99500	Earliest Completion of All Scope	0		05-Jul-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	05-Jul-14	19-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	05-Jul-14	19-Aug-14	0
RECEPTION CENTER		407	06-Nov-12	05-Jun-14	0
Structural Works		110	06-Nov-12	27-Mar-13	0
A Block		3	06-Nov-12	06-Nov-12	
2nd Floor		3	06-Nov-12	06-Nov-12	
EVENT NO. 11	Delay in Concrete Placing of A Block 2nd Floor	3	06-Nov-12	06-Nov-12	
B Block		106	06-Nov-12	27-Mar-13	0
2nd Basement		19	06-Nov-12	23-Nov-12	0
EVENT NO. 12	Loss of Productivity during Concrete Pouring in 2nd Ba...	7	06-Nov-12	14-Nov-12	0
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	06-Nov-12	06-Nov-12	
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	21-Nov-12	23-Nov-12	0
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	21-Nov-12	23-Nov-12	0
1st Basement		72	26-Nov-12	06-Mar-13	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	04-Dec-12	12-Dec-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	26-Nov-12	03-Dec-12	0
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	05-Mar-13	06-Mar-13	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	05-Mar-13	06-Mar-13	0
RC.3.A.03.B.BS1.SC	Scaffolding	6	26-Nov-12	03-Dec-12	0
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	26-Nov-12	03-Dec-12	0
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	26-Nov-12	03-Dec-12	0
Ground Floor		15	07-Mar-13	27-Mar-13	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	15-Mar-13	19-Mar-13	0
RC.3.A.03.B.GR.FW	Formwork	6	07-Mar-13	14-Mar-13	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	26-Mar-13	27-Mar-13	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	26-Mar-13	27-Mar-13	0
RC.3.A.03.B.GR.SC	Scaffolding	6	07-Mar-13	14-Mar-13	0
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	07-Mar-13	14-Mar-13	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	07-Mar-13	14-Mar-13	0
Builders / Masonry Works		166	27-Mar-13	29-Nov-13	0
Block Work		23	27-Mar-13	30-Apr-13	0
2nd Basement		5	27-Mar-13	03-Apr-13	0
RC.4.A.01.B.BS2	Bims block wall, 250 mm thick, laid in sand-cement mortar	4	27-Mar-13	02-Apr-13	0
RC.4.A.02.B.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	27-Mar-13	02-Apr-13	0
RC.4.A.02.C.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	02-Apr-13	03-Apr-13	0
RC.4.A.04.B.BS2	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	27-Mar-13	02-Apr-13	0
1st Basement		18	03-Apr-13	30-Apr-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	03-Apr-13	16-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	16-Apr-13	30-Apr-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	03-Apr-13	16-Apr-13	0



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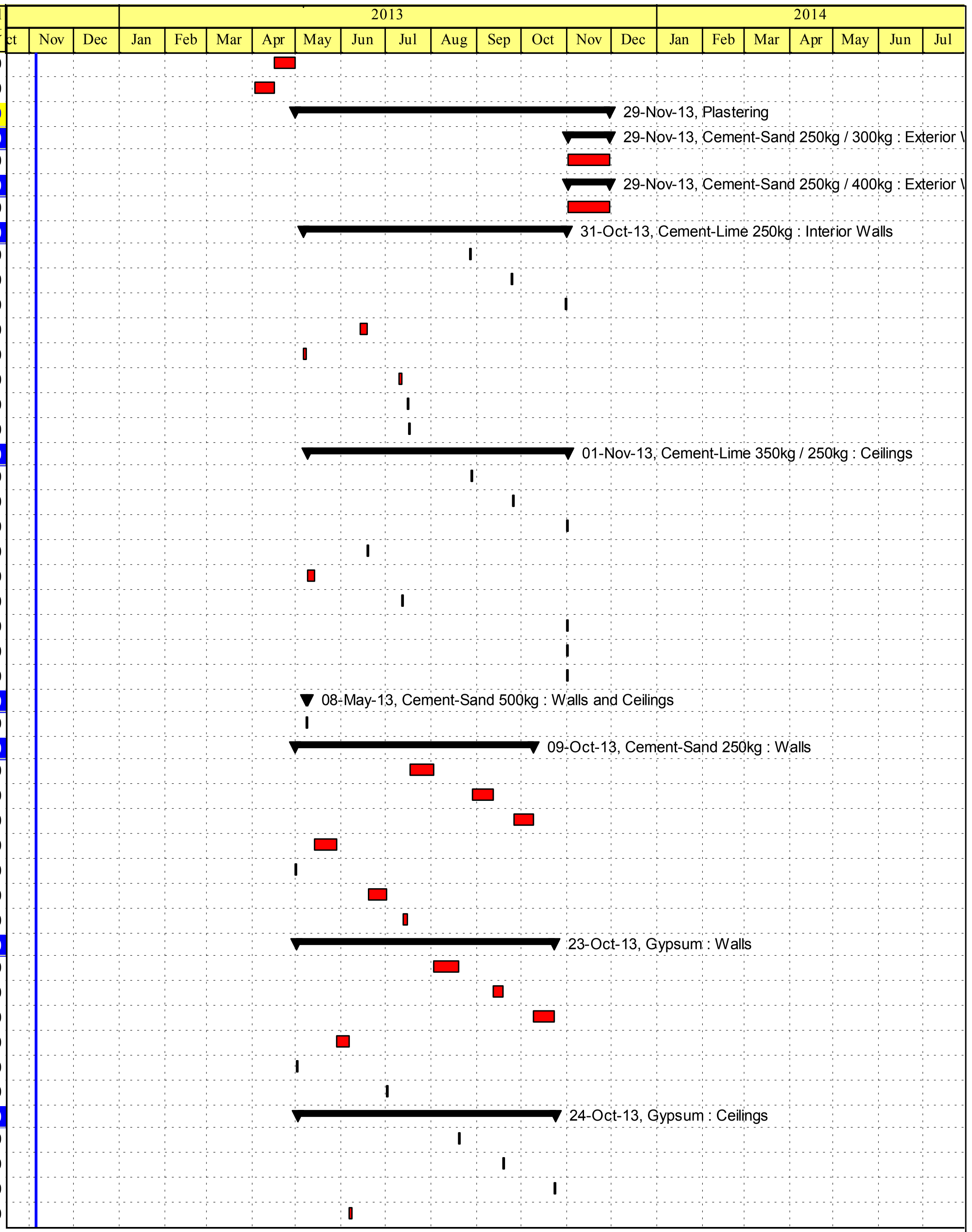
Updated Schedule 9.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	16-Apr-13	30-Apr-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	03-Apr-13	16-Apr-13	0
Plastering		143	30-Apr-13	29-Nov-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	01-Nov-13	29-Nov-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg ...	20	01-Nov-13	29-Nov-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	01-Nov-13	29-Nov-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg ...	20	01-Nov-13	29-Nov-13	0
Cement-Lime 250kg : Interior Walls		118	06-May-13	31-Oct-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 25...	1	26-Aug-13	27-Aug-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 25...	1	24-Sep-13	25-Sep-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 25...	1	30-Oct-13	31-Oct-13	0
RC.4.C.03.BS1	Cement-lime-sand plaster, applied in two coats, with 25...	3	13-Jun-13	18-Jun-13	0
RC.4.C.03.BS2	Cement-lime-sand plaster, applied in two coats, with 25...	1	06-May-13	07-May-13	0
RC.4.C.03.GR	Cement-lime-sand plaster, applied in two coats, with 25...	2	09-Jul-13	11-Jul-13	0
RC.4.C.03.H	Cement-lime-sand plaster, applied in two coats, with 25...	1	15-Jul-13	16-Jul-13	0
RC.4.C.03.I	Cement-lime-sand plaster, applied in two coats, with 25...	1	16-Jul-13	17-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		117	08-May-13	01-Nov-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with fir...	1	27-Aug-13	28-Aug-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with fir...	1	25-Sep-13	26-Sep-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with fir...	1	31-Oct-13	01-Nov-13	0
RC.4.C.04.BS1	Cement-lime-sand plaster, applied in two coats, with fir...	1	18-Jun-13	19-Jun-13	0
RC.4.C.04.BS2	Cement-lime-sand plaster, applied in two coats, with fir...	3	08-May-13	13-May-13	0
RC.4.C.04.GR	Cement-lime-sand plaster, applied in two coats, with fir...	1	11-Jul-13	12-Jul-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with fir...	1	31-Oct-13	01-Nov-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with fir...	1	31-Oct-13	01-Nov-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with fir...	1	31-Oct-13	01-Nov-13	0
Cement-Sand 500kg : Walls and Ceilings		1	07-May-13	08-May-13	0
RC.4.C.05.BS2	Cement-sand plaster, applied in one coat, with 500 kg c...	1	07-May-13	08-May-13	0
Cement-Sand 250kg : Walls		112	30-Apr-13	09-Oct-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg c...	12	17-Jul-13	02-Aug-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg c...	9	28-Aug-13	11-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg c...	9	26-Sep-13	09-Oct-13	0
RC.4.C.06.BS1	Cement-sand plaster, applied in one coat, with 250 kg c...	11	13-May-13	28-May-13	0
RC.4.C.06.BS2	Cement-sand plaster, applied in one coat, with 250 kg c...	1	30-Apr-13	01-May-13	0
RC.4.C.06.GR	Cement-sand plaster, applied in one coat, with 250 kg c...	8	19-Jun-13	01-Jul-13	0
RC.4.C.06.H	Cement-sand plaster, applied in one coat, with 250 kg c...	1	12-Jul-13	15-Jul-13	0
Gypsum : Walls		116	01-May-13	23-Oct-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat ceme...	8	02-Aug-13	19-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat ceme...	5	11-Sep-13	18-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat ceme...	5	09-Oct-13	23-Oct-13	0
RC.4.C.08.BS1	Gypsum plaster, applied in one coat, to one coat ceme...	7	28-May-13	06-Jun-13	0
RC.4.C.08.BS2	Gypsum plaster, applied in one coat, to one coat ceme...	1	01-May-13	02-May-13	0
RC.4.C.08.GR	Gypsum plaster, applied in one coat, to one coat ceme...	1	01-Jul-13	02-Jul-13	0
Gypsum : Ceilings		116	02-May-13	24-Oct-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	19-Aug-13	20-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	18-Sep-13	19-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	23-Oct-13	24-Oct-13	0
RC.4.C.09.BS1	Gypsum plaster, applied in one coat, to ceilings	1	06-Jun-13	07-Jun-13	0



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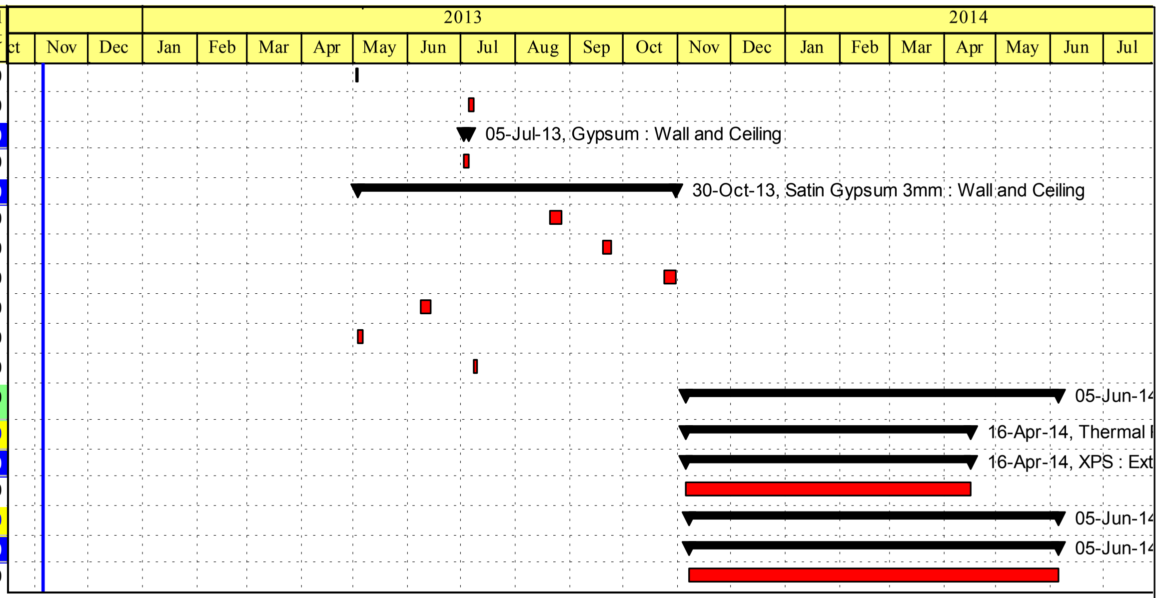
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.C.09.BS2	Gypsum plaster, applied in one coat, to ceilings	1	02-May-13	03-May-13	0
RC.4.C.09.GR	Gypsum plaster, applied in one coat, to ceilings	1	05-Jul-13	08-Jul-13	0
Gypsum : Wall and Ceiling		3	02-Jul-13	05-Jul-13	0
RC.4.C.10.GR	Gypsum priming, to wall and ceiling plaster	3	02-Jul-13	05-Jul-13	0
Satin Gypsum 3mm : Wall and Ceiling		118	03-May-13	30-Oct-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	4	20-Aug-13	26-Aug-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	3	19-Sep-13	24-Sep-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	3	24-Oct-13	30-Oct-13	0
RC.4.C.11.BS1	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	4	07-Jun-13	13-Jun-13	0
RC.4.C.11.BS2	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	1	03-May-13	06-May-13	0
RC.4.C.11.GR	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	1	08-Jul-13	09-Jul-13	0
Architectural Works		149	05-Nov-13	05-Jun-14	0
Thermal Protection		115	05-Nov-13	16-Apr-14	0
XPS : Exterior Walls & Ceilings		115	05-Nov-13	16-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer o...	61	05-Nov-13	16-Apr-14	0
Exterior Brick Facing		147	07-Nov-13	05-Jun-14	0
Exterior Brick Facing		147	07-Nov-13	05-Jun-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesi...	93	07-Nov-13	05-Jun-14	0



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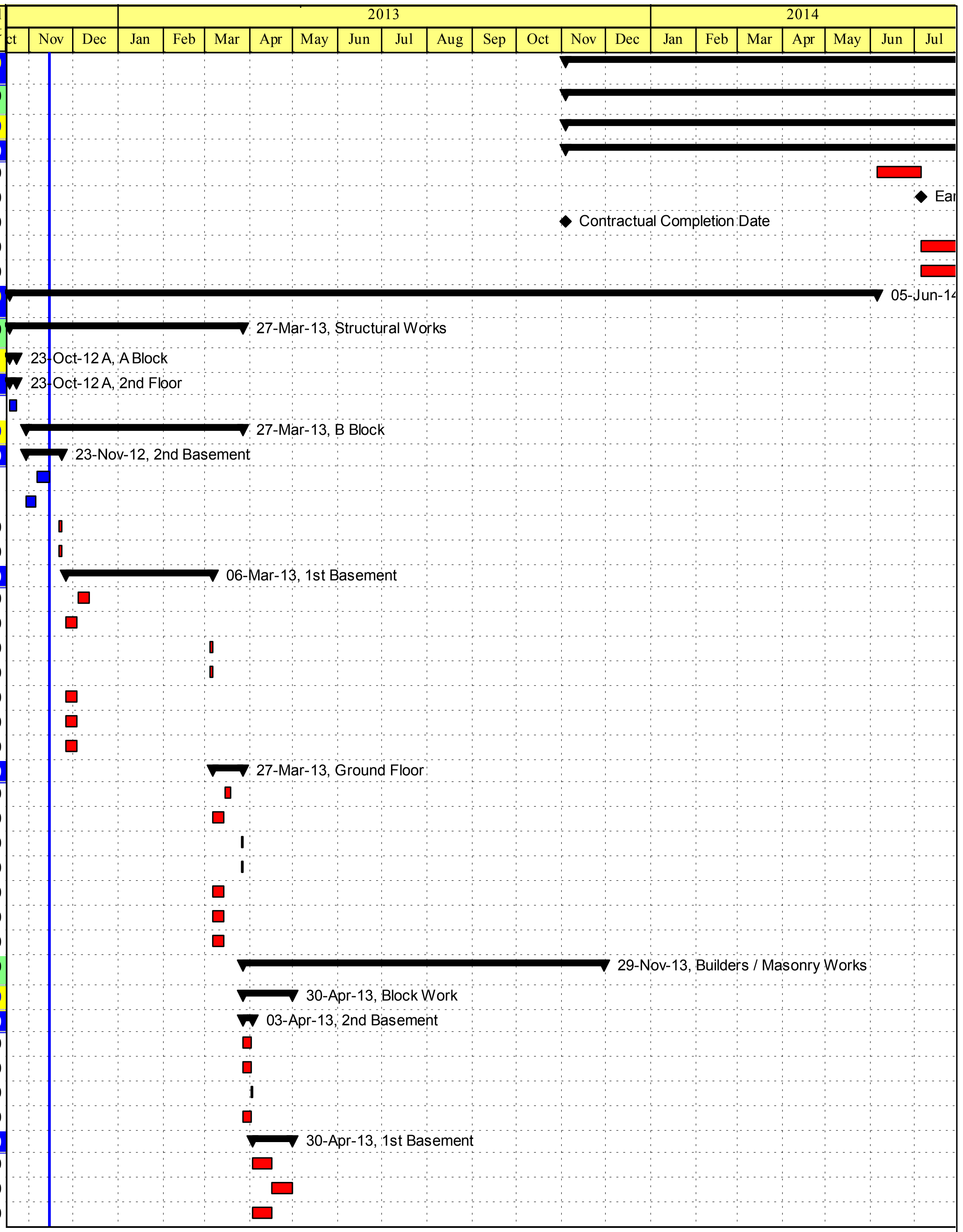
Updated Schedule 9.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		201	03-Nov-13	19-Aug-14	0
General		201	03-Nov-13	19-Aug-14	0
General		201	03-Nov-13	19-Aug-14	0
General		201	03-Nov-13	19-Aug-14	0
GEN99100	Tests on Completion	30	05-Jun-14	05-Jul-14	0
GEN99500	Earliest Completion of All Scope	0		05-Jul-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	05-Jul-14	19-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	05-Jul-14	19-Aug-14	0
RECEPTION CENTER		407	15-Nov-12	05-Jun-14	0
Structural Works		110	15-Nov-12	27-Mar-13	0
A Block		3	15-Nov-12	15-Nov-12	0
2nd Floor		3	15-Nov-12	15-Nov-12	0
EVENT NO. 11	Delay in Concrete Placing of A Block 2nd Floor	3	15-Nov-12	15-Nov-12	
B Block		106	15-Nov-12	27-Mar-13	0
2nd Basement		19	15-Nov-12	23-Nov-12	0
EVENT NO. 12	Loss of Productivity during Concrete Pouring in 2nd Ba...	7	15-Nov-12	15-Nov-12	
RC.3.A.03.B.BS2	Placing of Concrete Class C30 for superstructure abov...	5	15-Nov-12	15-Nov-12	
RC.3.A.03.B.BS2.RFW	Removal of Formwork	3	21-Nov-12	23-Nov-12	0
RC.3.A.03.B.BS2.RSC	Removal of Scaffolding	3	21-Nov-12	23-Nov-12	0
1st Basement		72	26-Nov-12	06-Mar-13	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	04-Dec-12	12-Dec-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	26-Nov-12	03-Dec-12	0
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	05-Mar-13	06-Mar-13	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	05-Mar-13	06-Mar-13	0
RC.3.A.03.B.BS1.SC	Scaffolding	6	26-Nov-12	03-Dec-12	0
RC.3.B.01.B.BS1	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	26-Nov-12	03-Dec-12	0
RC.3.B.02.B.BS1	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	26-Nov-12	03-Dec-12	0
Ground Floor		15	07-Mar-13	27-Mar-13	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	15-Mar-13	19-Mar-13	0
RC.3.A.03.B.GR.FW	Formwork	6	07-Mar-13	14-Mar-13	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	26-Mar-13	27-Mar-13	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	26-Mar-13	27-Mar-13	0
RC.3.A.03.B.GR.SC	Scaffolding	6	07-Mar-13	14-Mar-13	0
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	07-Mar-13	14-Mar-13	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	07-Mar-13	14-Mar-13	0
Builders / Masonry Works		166	27-Mar-13	29-Nov-13	0
Block Work		23	27-Mar-13	30-Apr-13	0
2nd Basement		5	27-Mar-13	03-Apr-13	0
RC.4.A.01.B.BS2	Bims block wall, 250 mm thick, laid in sand-cement mortar	4	27-Mar-13	02-Apr-13	0
RC.4.A.02.B.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	27-Mar-13	02-Apr-13	0
RC.4.A.02.C.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	02-Apr-13	03-Apr-13	0
RC.4.A.04.B.BS2	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	27-Mar-13	02-Apr-13	0
1st Basement		18	03-Apr-13	30-Apr-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	03-Apr-13	16-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	16-Apr-13	30-Apr-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	03-Apr-13	16-Apr-13	0



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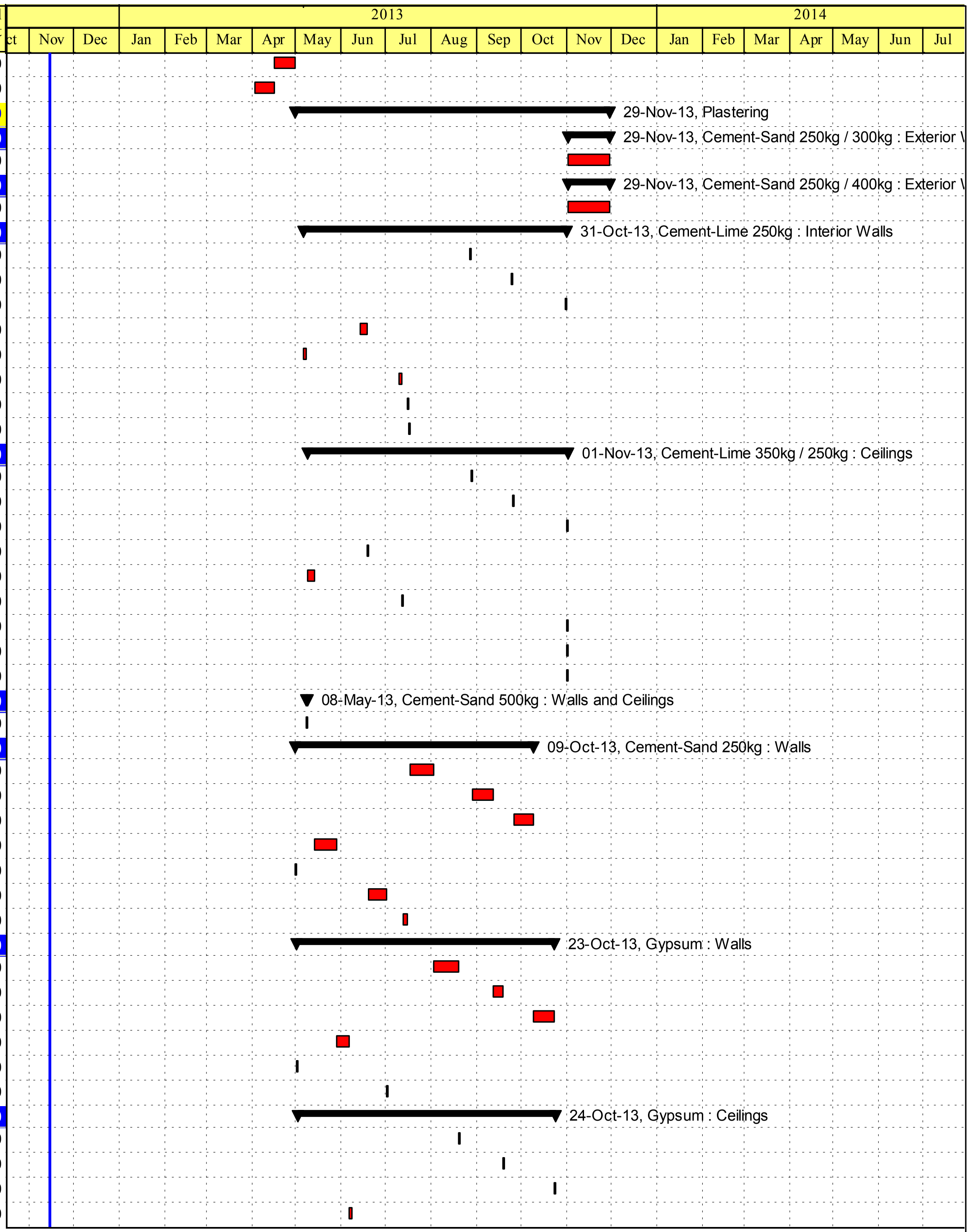
Updated Schedule 10.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	16-Apr-13	30-Apr-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	03-Apr-13	16-Apr-13	0
Plastering		143	30-Apr-13	29-Nov-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	01-Nov-13	29-Nov-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg ...	20	01-Nov-13	29-Nov-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	01-Nov-13	29-Nov-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg ...	20	01-Nov-13	29-Nov-13	0
Cement-Lime 250kg : Interior Walls		118	06-May-13	31-Oct-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 25...	1	26-Aug-13	27-Aug-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 25...	1	24-Sep-13	25-Sep-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 25...	1	30-Oct-13	31-Oct-13	0
RC.4.C.03.BS1	Cement-lime-sand plaster, applied in two coats, with 25...	3	13-Jun-13	18-Jun-13	0
RC.4.C.03.BS2	Cement-lime-sand plaster, applied in two coats, with 25...	1	06-May-13	07-May-13	0
RC.4.C.03.GR	Cement-lime-sand plaster, applied in two coats, with 25...	2	09-Jul-13	11-Jul-13	0
RC.4.C.03.H	Cement-lime-sand plaster, applied in two coats, with 25...	1	15-Jul-13	16-Jul-13	0
RC.4.C.03.I	Cement-lime-sand plaster, applied in two coats, with 25...	1	16-Jul-13	17-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		117	08-May-13	01-Nov-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with fir...	1	27-Aug-13	28-Aug-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with fir...	1	25-Sep-13	26-Sep-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with fir...	1	31-Oct-13	01-Nov-13	0
RC.4.C.04.BS1	Cement-lime-sand plaster, applied in two coats, with fir...	1	18-Jun-13	19-Jun-13	0
RC.4.C.04.BS2	Cement-lime-sand plaster, applied in two coats, with fir...	3	08-May-13	13-May-13	0
RC.4.C.04.GR	Cement-lime-sand plaster, applied in two coats, with fir...	1	11-Jul-13	12-Jul-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with fir...	1	31-Oct-13	01-Nov-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with fir...	1	31-Oct-13	01-Nov-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with fir...	1	31-Oct-13	01-Nov-13	0
Cement-Sand 500kg : Walls and Ceilings		1	07-May-13	08-May-13	0
RC.4.C.05.BS2	Cement-sand plaster, applied in one coat, with 500 kg c...	1	07-May-13	08-May-13	0
Cement-Sand 250kg : Walls		112	30-Apr-13	09-Oct-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg c...	12	17-Jul-13	02-Aug-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg c...	9	28-Aug-13	11-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg c...	9	26-Sep-13	09-Oct-13	0
RC.4.C.06.BS1	Cement-sand plaster, applied in one coat, with 250 kg c...	11	13-May-13	28-May-13	0
RC.4.C.06.BS2	Cement-sand plaster, applied in one coat, with 250 kg c...	1	30-Apr-13	01-May-13	0
RC.4.C.06.GR	Cement-sand plaster, applied in one coat, with 250 kg c...	8	19-Jun-13	01-Jul-13	0
RC.4.C.06.H	Cement-sand plaster, applied in one coat, with 250 kg c...	1	12-Jul-13	15-Jul-13	0
Gypsum : Walls		116	01-May-13	23-Oct-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat ceme...	8	02-Aug-13	19-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat ceme...	5	11-Sep-13	18-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat ceme...	5	09-Oct-13	23-Oct-13	0
RC.4.C.08.BS1	Gypsum plaster, applied in one coat, to one coat ceme...	7	28-May-13	06-Jun-13	0
RC.4.C.08.BS2	Gypsum plaster, applied in one coat, to one coat ceme...	1	01-May-13	02-May-13	0
RC.4.C.08.GR	Gypsum plaster, applied in one coat, to one coat ceme...	1	01-Jul-13	02-Jul-13	0
Gypsum : Ceilings		116	02-May-13	24-Oct-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	19-Aug-13	20-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	18-Sep-13	19-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	23-Oct-13	24-Oct-13	0
RC.4.C.09.BS1	Gypsum plaster, applied in one coat, to ceilings	1	06-Jun-13	07-Jun-13	0



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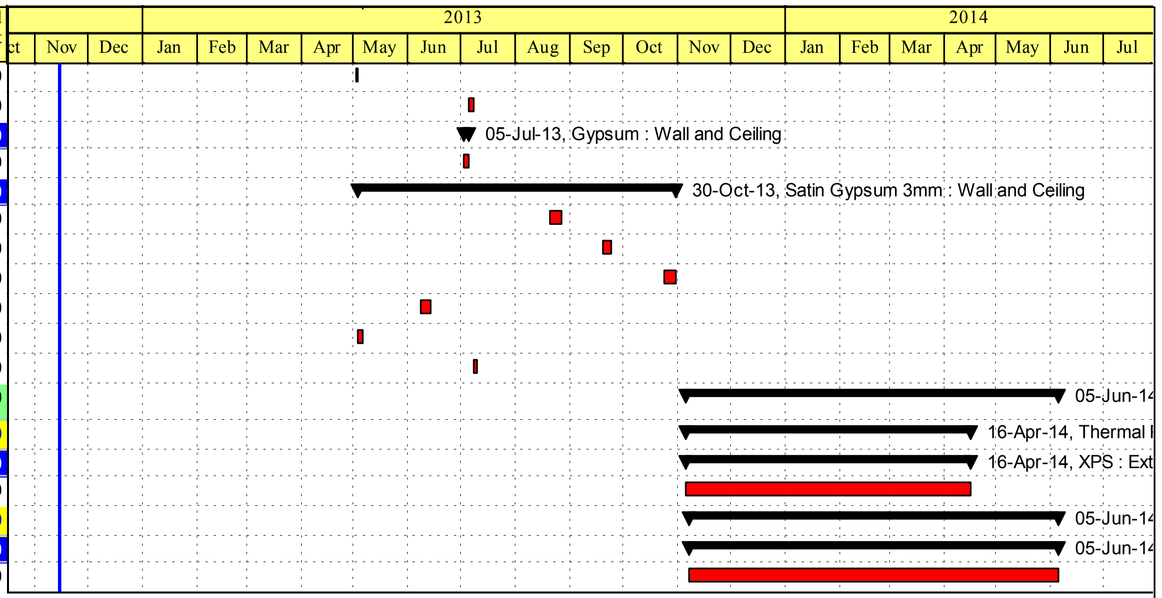
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.C.09.BS2	Gypsum plaster, applied in one coat, to ceilings	1	02-May-13	03-May-13	0
RC.4.C.09.GR	Gypsum plaster, applied in one coat, to ceilings	1	05-Jul-13	08-Jul-13	0
Gypsum : Wall and Ceiling		3	02-Jul-13	05-Jul-13	0
RC.4.C.10.GR	Gypsum priming, to wall and ceiling plaster	3	02-Jul-13	05-Jul-13	0
Satin Gypsum 3mm : Wall and Ceiling		118	03-May-13	30-Oct-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	4	20-Aug-13	26-Aug-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	3	19-Sep-13	24-Sep-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	3	24-Oct-13	30-Oct-13	0
RC.4.C.11.BS1	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	4	07-Jun-13	13-Jun-13	0
RC.4.C.11.BS2	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	1	03-May-13	06-May-13	0
RC.4.C.11.GR	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	1	08-Jul-13	09-Jul-13	0
Architectural Works		149	05-Nov-13	05-Jun-14	0
Thermal Protection		115	05-Nov-13	16-Apr-14	0
XPS : Exterior Walls & Ceilings		115	05-Nov-13	16-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer o...	61	05-Nov-13	16-Apr-14	0
Exterior Brick Facing		147	07-Nov-13	05-Jun-14	0
Exterior Brick Facing		147	07-Nov-13	05-Jun-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesi...	93	07-Nov-13	05-Jun-14	0



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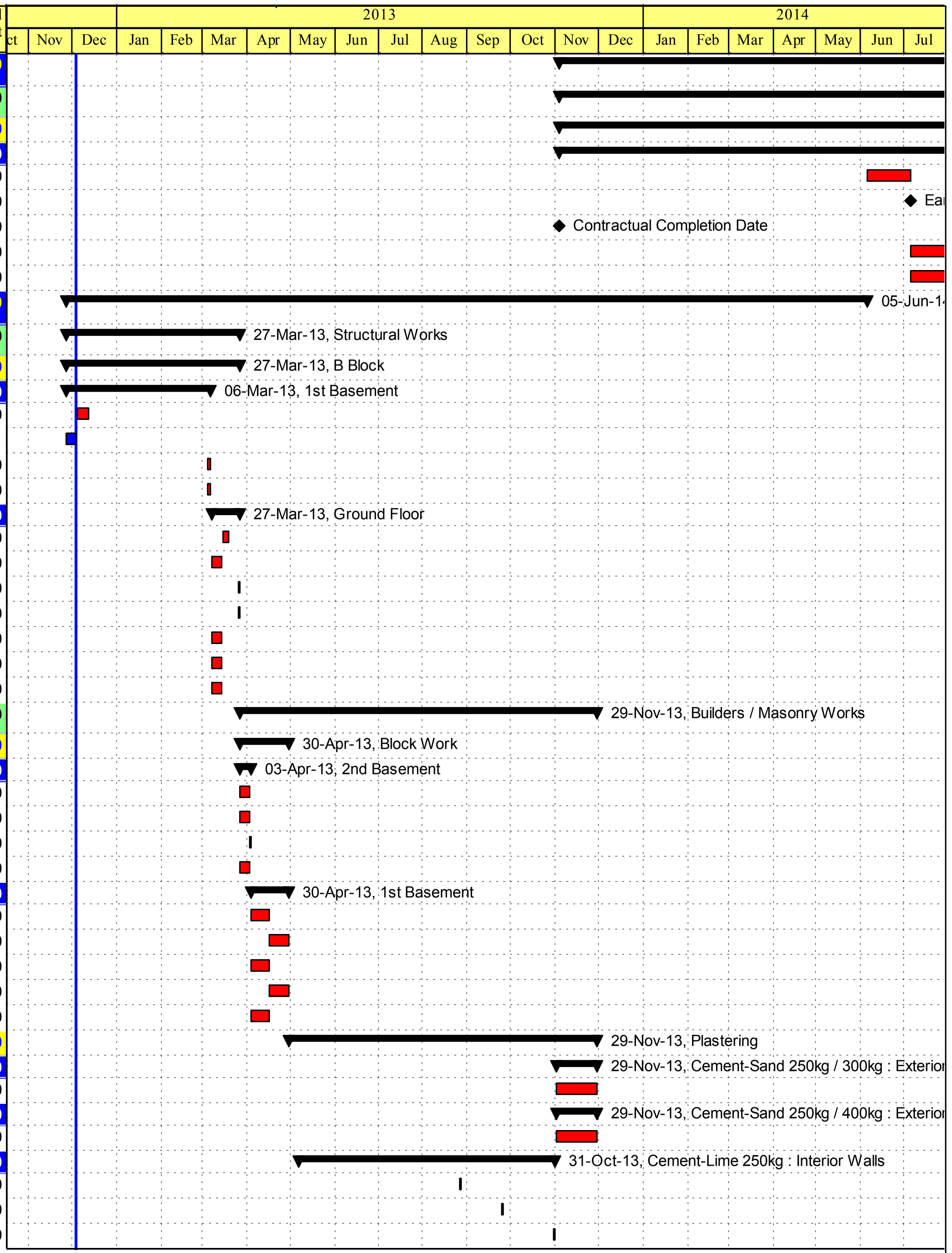
Updated Schedule 10.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		201	03-Nov-13	19-Aug-14	0
General		201	03-Nov-13	19-Aug-14	0
General		201	03-Nov-13	19-Aug-14	0
General		201	03-Nov-13	19-Aug-14	0
GEN99100	Tests on Completion	30	05-Jun-14	05-Jul-14	0
GEN99500	Earliest Completion of All Scope	0		05-Jul-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	05-Jul-14	19-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	05-Jul-14	19-Aug-14	0
RECEPTION CENTER		384	04-Dec-12	05-Jun-14	0
Structural Works		87	04-Dec-12	27-Mar-13	0
B Block		87	04-Dec-12	27-Mar-13	0
1st Basement		72	04-Dec-12	06-Mar-13	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure abov...	7	04-Dec-12	12-Dec-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	04-Dec-12	04-Dec-12	
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	05-Mar-13	06-Mar-13	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	05-Mar-13	06-Mar-13	0
Ground Floor		15	07-Mar-13	27-Mar-13	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure abov...	3	15-Mar-13	19-Mar-13	0
RC.3.A.03.B.GR.FW	Formwork	6	07-Mar-13	14-Mar-13	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	26-Mar-13	27-Mar-13	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	26-Mar-13	27-Mar-13	0
RC.3.A.03.B.GR.SC	Scaffolding	6	07-Mar-13	14-Mar-13	0
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	07-Mar-13	14-Mar-13	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	07-Mar-13	14-Mar-13	0
Builders / Masonry Works		166	27-Mar-13	29-Nov-13	0
Block Work		23	27-Mar-13	30-Apr-13	0
2nd Basement		5	27-Mar-13	03-Apr-13	0
RC.4.A.01.B.BS2	Bims block wall, 250 mm thick, laid in sand-cement mortar	4	27-Mar-13	02-Apr-13	0
RC.4.A.02.B.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	27-Mar-13	02-Apr-13	0
RC.4.A.02.C.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	02-Apr-13	03-Apr-13	0
RC.4.A.04.B.BS2	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	27-Mar-13	02-Apr-13	0
1st Basement		18	03-Apr-13	30-Apr-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	03-Apr-13	16-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	16-Apr-13	30-Apr-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	03-Apr-13	16-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	16-Apr-13	30-Apr-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	03-Apr-13	16-Apr-13	0
Plastering		143	30-Apr-13	29-Nov-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	01-Nov-13	29-Nov-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg ...	20	01-Nov-13	29-Nov-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	01-Nov-13	29-Nov-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg ...	20	01-Nov-13	29-Nov-13	0
Cement-Lime 250kg : Interior Walls		118	06-May-13	31-Oct-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 25...	1	26-Aug-13	27-Aug-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 25...	1	24-Sep-13	25-Sep-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 25...	1	30-Oct-13	31-Oct-13	0



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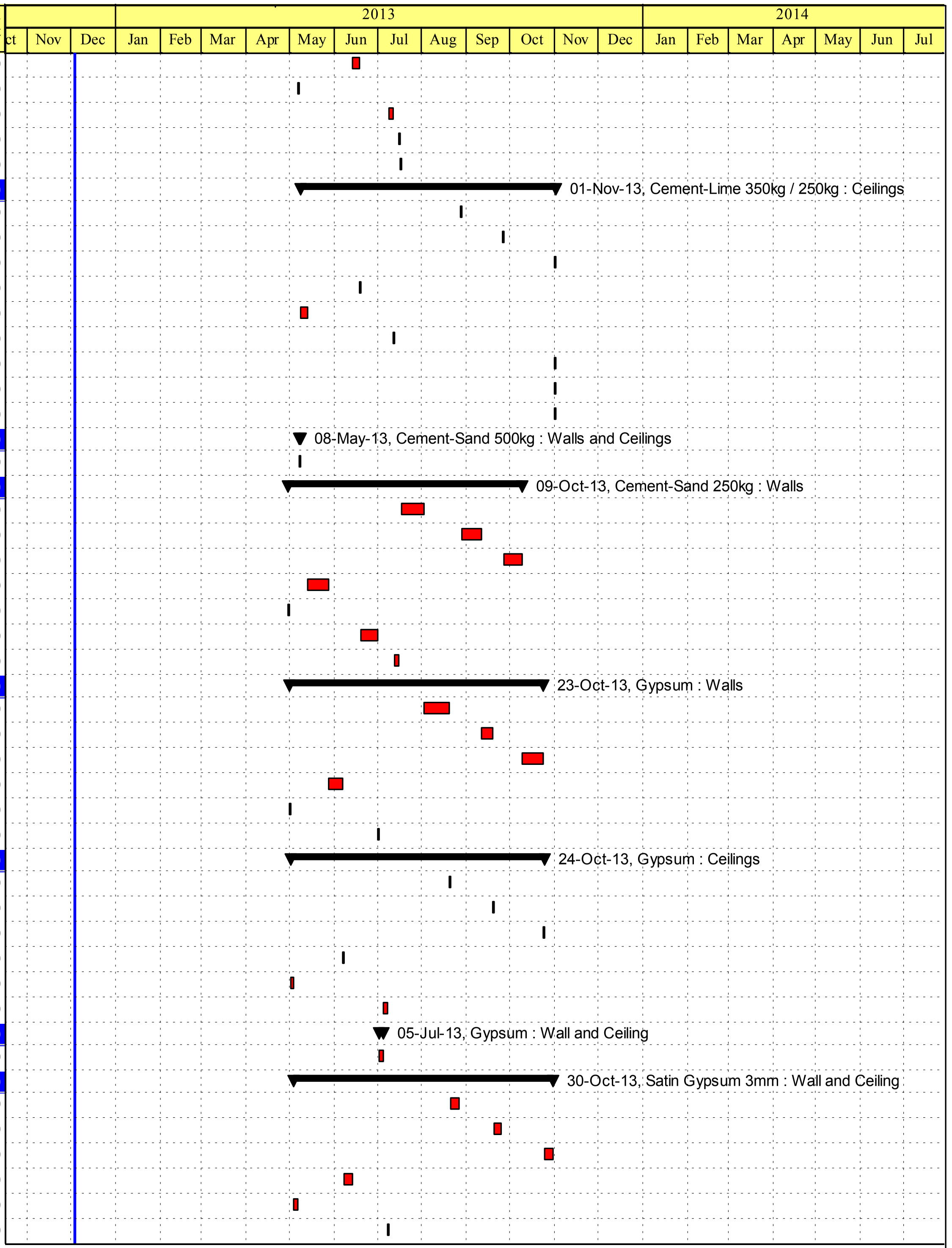
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.C.03.BS1	Cement-lime-sand plaster, applied in two coats, with 25...	3	13-Jun-13	18-Jun-13	0
RC.4.C.03.BS2	Cement-lime-sand plaster, applied in two coats, with 25...	1	06-May-13	07-May-13	0
RC.4.C.03.GR	Cement-lime-sand plaster, applied in two coats, with 25...	2	09-Jul-13	11-Jul-13	0
RC.4.C.03.H	Cement-lime-sand plaster, applied in two coats, with 25...	1	15-Jul-13	16-Jul-13	0
RC.4.C.03.I	Cement-lime-sand plaster, applied in two coats, with 25...	1	16-Jul-13	17-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		**117**	**08-May-13**	**01-Nov-13**	**0**
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with fir...	1	27-Aug-13	28-Aug-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with fir...	1	25-Sep-13	26-Sep-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with fir...	1	31-Oct-13	01-Nov-13	0
RC.4.C.04.BS1	Cement-lime-sand plaster, applied in two coats, with fir...	1	18-Jun-13	19-Jun-13	0
RC.4.C.04.BS2	Cement-lime-sand plaster, applied in two coats, with fir...	3	08-May-13	13-May-13	0
RC.4.C.04.GR	Cement-lime-sand plaster, applied in two coats, with fir...	1	11-Jul-13	12-Jul-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with fir...	1	31-Oct-13	01-Nov-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with fir...	1	31-Oct-13	01-Nov-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with fir...	1	31-Oct-13	01-Nov-13	0
Cement-Sand 500kg : Walls and Ceilings		**1**	**07-May-13**	**08-May-13**	**0**
RC.4.C.05.BS2	Cement-sand plaster, applied in one coat, with 500 kg c...	1	07-May-13	08-May-13	0
Cement-Sand 250kg : Walls		**112**	**30-Apr-13**	**09-Oct-13**	**0**
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg c...	12	17-Jul-13	02-Aug-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg c...	9	28-Aug-13	11-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg c...	9	26-Sep-13	09-Oct-13	0
RC.4.C.06.BS1	Cement-sand plaster, applied in one coat, with 250 kg c...	11	13-May-13	28-May-13	0
RC.4.C.06.BS2	Cement-sand plaster, applied in one coat, with 250 kg c...	1	30-Apr-13	01-May-13	0
RC.4.C.06.GR	Cement-sand plaster, applied in one coat, with 250 kg c...	8	19-Jun-13	01-Jul-13	0
RC.4.C.06.H	Cement-sand plaster, applied in one coat, with 250 kg c...	1	12-Jul-13	15-Jul-13	0
Gypsum : Walls		**116**	**01-May-13**	**23-Oct-13**	**0**
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat ceme...	8	02-Aug-13	19-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat ceme...	5	11-Sep-13	18-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat ceme...	5	09-Oct-13	23-Oct-13	0
RC.4.C.08.BS1	Gypsum plaster, applied in one coat, to one coat ceme...	7	28-May-13	06-Jun-13	0
RC.4.C.08.BS2	Gypsum plaster, applied in one coat, to one coat ceme...	1	01-May-13	02-May-13	0
RC.4.C.08.GR	Gypsum plaster, applied in one coat, to one coat ceme...	1	01-Jul-13	02-Jul-13	0
Gypsum : Ceilings		**116**	**02-May-13**	**24-Oct-13**	**0**
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	19-Aug-13	20-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	18-Sep-13	19-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	23-Oct-13	24-Oct-13	0
RC.4.C.09.BS1	Gypsum plaster, applied in one coat, to ceilings	1	06-Jun-13	07-Jun-13	0
RC.4.C.09.BS2	Gypsum plaster, applied in one coat, to ceilings	1	02-May-13	03-May-13	0
RC.4.C.09.GR	Gypsum plaster, applied in one coat, to ceilings	1	05-Jul-13	08-Jul-13	0
Gypsum : Wall and Ceiling		**3**	**02-Jul-13**	**05-Jul-13**	**0**
RC.4.C.10.GR	Gypsum priming, to wall and ceiling plaster	3	02-Jul-13	05-Jul-13	0
Satin Gypsum 3mm : Wall and Ceiling		**118**	**03-May-13**	**30-Oct-13**	**0**
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	4	20-Aug-13	26-Aug-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	3	19-Sep-13	24-Sep-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	3	24-Oct-13	30-Oct-13	0
RC.4.C.11.BS1	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	4	07-Jun-13	13-Jun-13	0
RC.4.C.11.BS2	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	1	03-May-13	06-May-13	0
RC.4.C.11.GR	Satin gypsum coating, 3 mm thick, to wall and ceiling pl...	1	08-Jul-13	09-Jul-13	0



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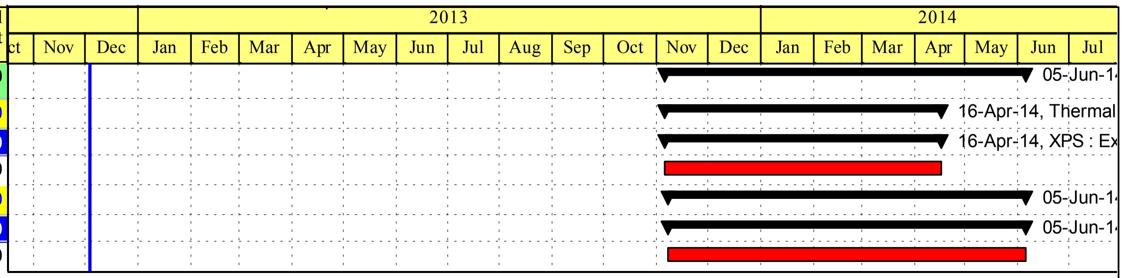
Updated Schedule 10.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
Architectural Works		149	05-Nov-13	05-Jun-14	0
Thermal Protection		115	05-Nov-13	16-Apr-14	0
XPS : Exterior Walls & Ceilings		115	05-Nov-13	16-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer o...	61	05-Nov-13	16-Apr-14	0
Exterior Brick Facing		147	07-Nov-13	05-Jun-14	0
Exterior Brick Facing		147	07-Nov-13	05-Jun-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesi...	93	07-Nov-13	05-Jun-14	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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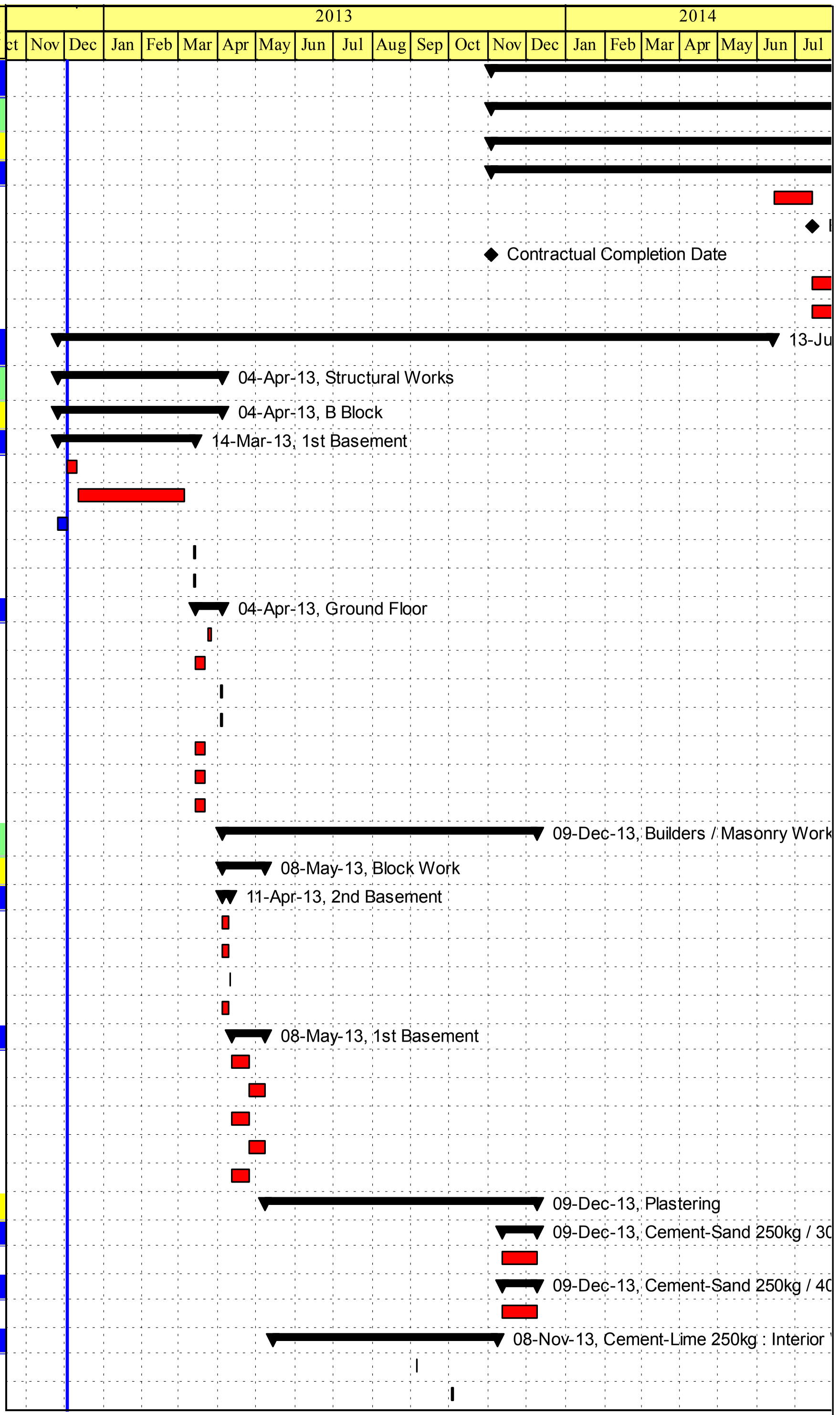
Updated Schedule 10.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		207	03-Nov-13	27-Aug-14	0
General		207	03-Nov-13	27-Aug-14	0
General		207	03-Nov-13	27-Aug-14	0
General		207	03-Nov-13	27-Aug-14	0
GEN99100	Tests on Completion	30	14-Jun-14	13-Jul-14	0
GEN99500	Earliest Completion of All Scope	0		13-Jul-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	14-Jul-14	27-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	14-Jul-14	27-Aug-14	0
RECEPTION CENTER		390	04-Dec-12	13-Jun-14	0
Structural Works		93	04-Dec-12	04-Apr-13	0
B Block		93	04-Dec-12	04-Apr-13	0
1st Basement		78	04-Dec-12	14-Mar-13	0
EVENT NO. 13	Re-building Formwork in Compliance with the Revised Drawings	6	04-Dec-12	11-Dec-12	0
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure above foundations, including the fo...	7	12-Dec-12	06-Mar-13	0
RC.3.A.03.B.BS1.FW	Formwork	6	04-Dec-12	04-Dec-12	
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	13-Mar-13	14-Mar-13	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	13-Mar-13	14-Mar-13	0
Ground Floor		15	15-Mar-13	04-Apr-13	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure above foundations, including the fo...	3	25-Mar-13	27-Mar-13	0
RC.3.A.03.B.GR.FW	Formwork	6	15-Mar-13	22-Mar-13	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	03-Apr-13	04-Apr-13	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	03-Apr-13	04-Apr-13	0
RC.3.A.03.B.GR.SC	Scaffolding	6	15-Mar-13	22-Mar-13	0
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	15-Mar-13	22-Mar-13	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	15-Mar-13	22-Mar-13	0
Builders / Masonry Works		166	05-Apr-13	09-Dec-13	0
Block Work		23	05-Apr-13	08-May-13	0
2nd Basement		5	05-Apr-13	11-Apr-13	0
RC.4.A.01.B.BS2	Bims block wall, 250 mm thick, laid in sand-cement mortar	4	05-Apr-13	10-Apr-13	0
RC.4.A.02.B.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	05-Apr-13	10-Apr-13	0
RC.4.A.02.C.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	11-Apr-13	11-Apr-13	0
RC.4.A.04.B.BS2	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	05-Apr-13	10-Apr-13	0
1st Basement		18	12-Apr-13	08-May-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	12-Apr-13	25-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	26-Apr-13	08-May-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	12-Apr-13	25-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	26-Apr-13	08-May-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	12-Apr-13	25-Apr-13	0
Plastering		143	09-May-13	09-Dec-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	12-Nov-13	09-Dec-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg and 300 kg cement per m3, re...	20	12-Nov-13	09-Dec-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	12-Nov-13	09-Dec-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg and 400 kg cement per m3, re...	20	12-Nov-13	09-Dec-13	0
Cement-Lime 250kg : Interior Walls		118	15-May-13	08-Nov-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	05-Sep-13	05-Sep-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	03-Oct-13	03-Oct-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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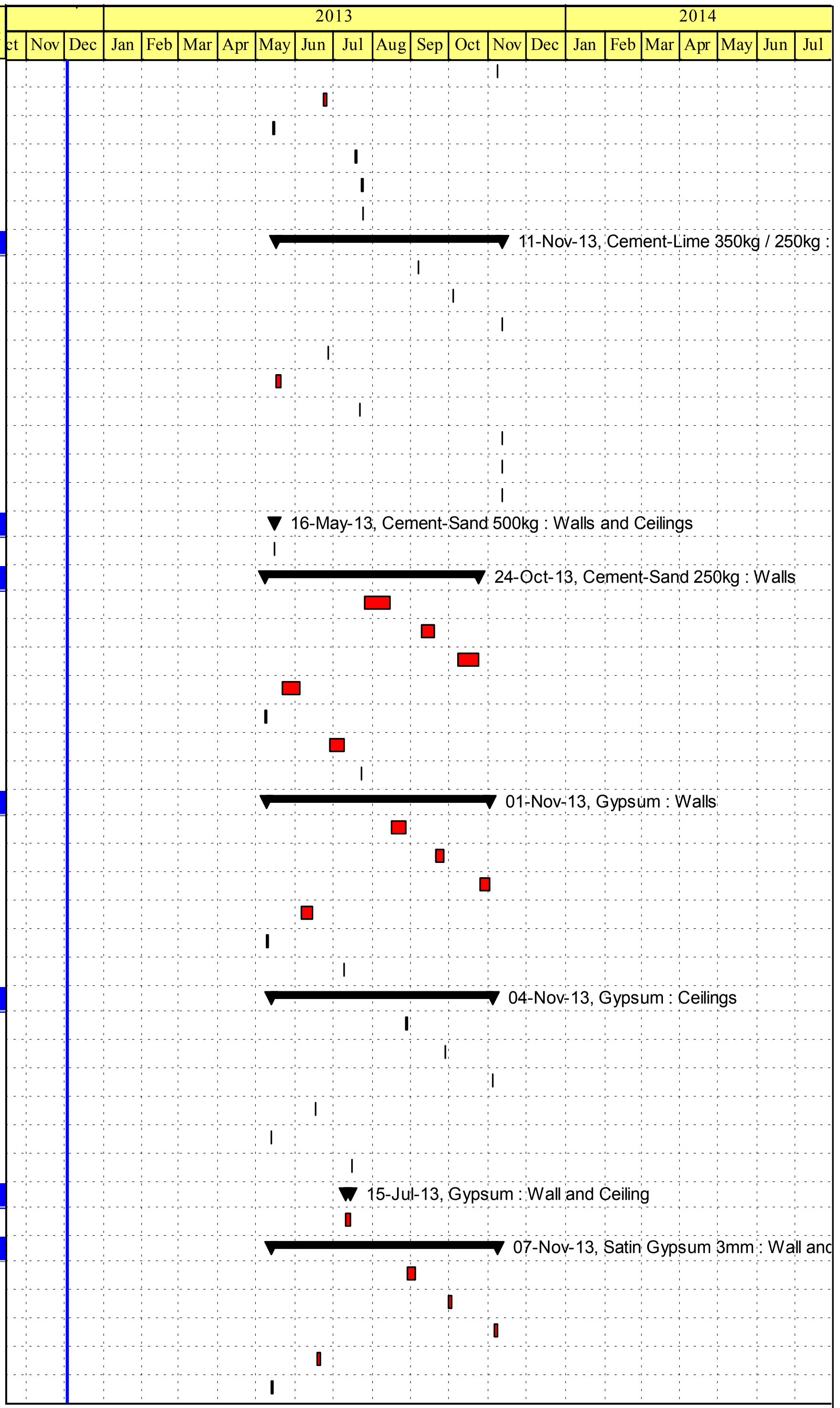
Updated Schedule 10.3

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	08-Nov-13	08-Nov-13	0
RC.4.C.03.BS1	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	3	24-Jun-13	26-Jun-13	0
RC.4.C.03.BS2	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	15-May-13	15-May-13	0
RC.4.C.03.GR	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	2	18-Jul-13	19-Jul-13	0
RC.4.C.03.H	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	24-Jul-13	24-Jul-13	0
RC.4.C.03.I	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	25-Jul-13	25-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		**117**	**17-May-13**	**11-Nov-13**	**0**
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	06-Sep-13	06-Sep-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	04-Oct-13	04-Oct-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	11-Nov-13	11-Nov-13	0
RC.4.C.04.BS1	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	27-Jun-13	27-Jun-13	0
RC.4.C.04.BS2	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	3	17-May-13	21-May-13	0
RC.4.C.04.GR	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	22-Jul-13	22-Jul-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	11-Nov-13	11-Nov-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	11-Nov-13	11-Nov-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	11-Nov-13	11-Nov-13	0
Cement-Sand 500kg : Walls and Ceilings		**1**	**16-May-13**	**16-May-13**	**0**
RC.4.C.05.BS2	Cement-sand plaster, applied in one coat, with 500 kg cement per m3, to walls and ceil...	1	16-May-13	16-May-13	0
Cement-Sand 250kg : Walls		**112**	**09-May-13**	**24-Oct-13**	**0**
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	12	26-Jul-13	15-Aug-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	09-Sep-13	19-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	07-Oct-13	24-Oct-13	0
RC.4.C.06.BS1	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	11	22-May-13	05-Jun-13	0
RC.4.C.06.BS2	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	09-May-13	09-May-13	0
RC.4.C.06.GR	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	8	28-Jun-13	09-Jul-13	0
RC.4.C.06.H	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	23-Jul-13	23-Jul-13	0
Gypsum : Walls		**116**	**10-May-13**	**01-Nov-13**	**0**
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	8	16-Aug-13	27-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	20-Sep-13	26-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	25-Oct-13	01-Nov-13	0
RC.4.C.08.BS1	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	7	06-Jun-13	14-Jun-13	0
RC.4.C.08.BS2	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	10-May-13	10-May-13	0
RC.4.C.08.GR	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	10-Jul-13	10-Jul-13	0
Gypsum : Ceilings		**116**	**13-May-13**	**04-Nov-13**	**0**
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	28-Aug-13	28-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	27-Sep-13	27-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	04-Nov-13	04-Nov-13	0
RC.4.C.09.BS1	Gypsum plaster, applied in one coat, to ceilings	1	17-Jun-13	17-Jun-13	0
RC.4.C.09.BS2	Gypsum plaster, applied in one coat, to ceilings	1	13-May-13	13-May-13	0
RC.4.C.09.GR	Gypsum plaster, applied in one coat, to ceilings	1	16-Jul-13	16-Jul-13	0
Gypsum : Wall and Ceiling		**3**	**11-Jul-13**	**15-Jul-13**	**0**
RC.4.C.10.GR	Gypsum priming, to wall and ceiling plaster	3	11-Jul-13	15-Jul-13	0
Satin Gypsum 3mm : Wall and Ceiling		**118**	**14-May-13**	**07-Nov-13**	**0**
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	29-Aug-13	04-Sep-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	30-Sep-13	02-Oct-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	05-Nov-13	07-Nov-13	0
RC.4.C.11.BS1	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	18-Jun-13	21-Jun-13	0
RC.4.C.11.BS2	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	14-May-13	14-May-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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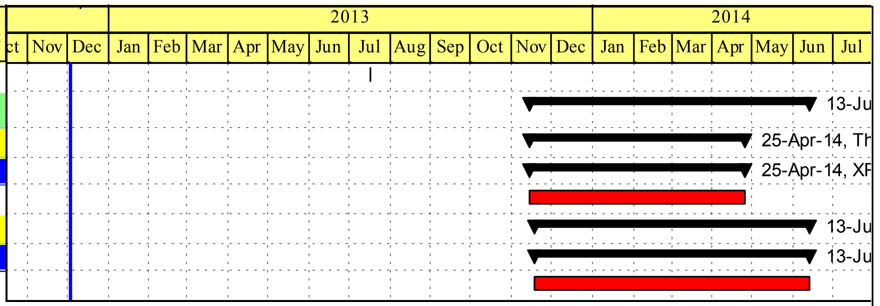
Updated Schedule 10.3

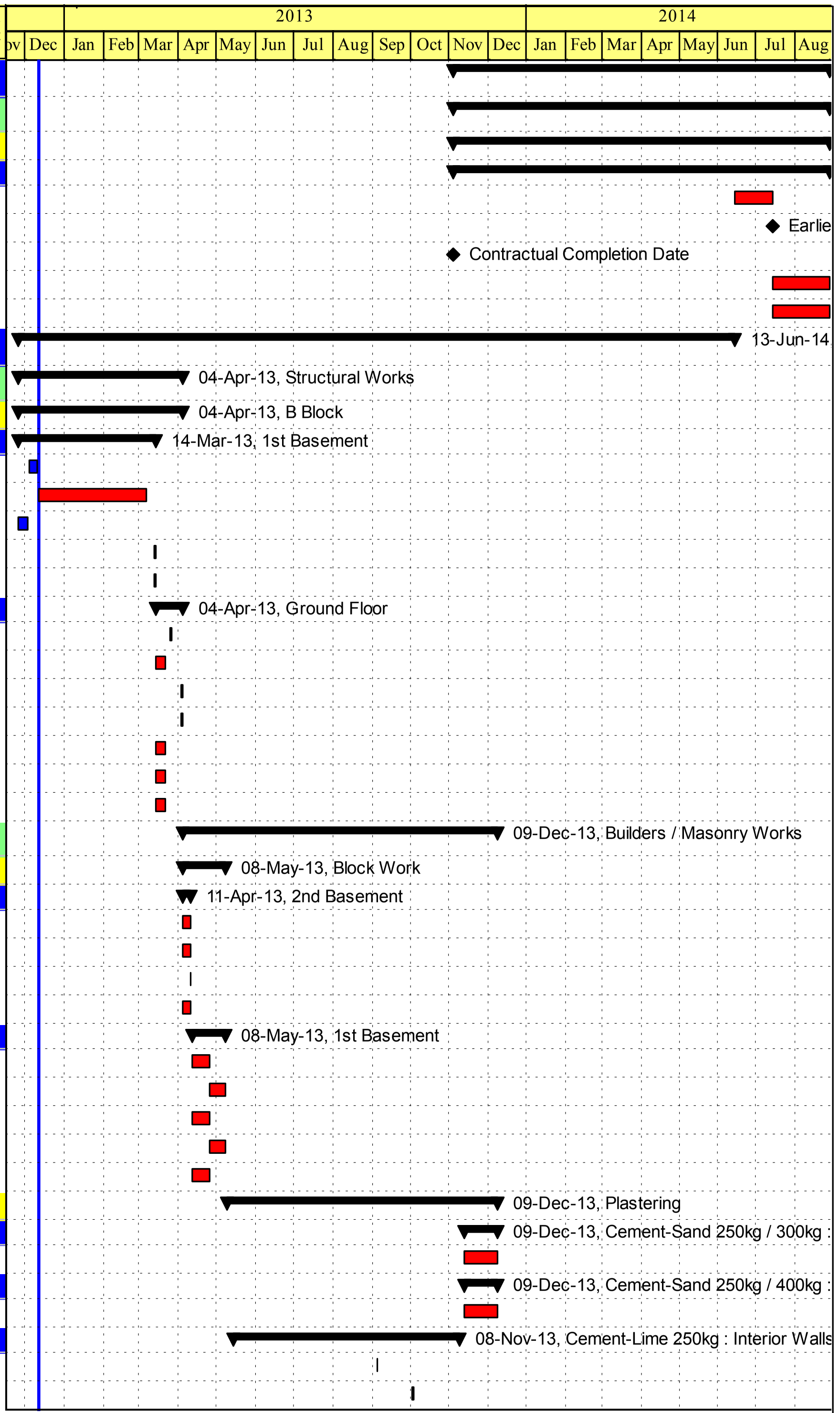
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.C.11.GR	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	17-Jul-13	17-Jul-13	0
Architectural Works		149	14-Nov-13	13-Jun-14	0
Thermal Protection		115	14-Nov-13	25-Apr-14	0
XPS : Exterior Walls & Ceilings		115	14-Nov-13	25-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer of glass-fiber-mesh-reinforced ...	61	14-Nov-13	25-Apr-14	0
Exterior Brick Facing		147	18-Nov-13	13-Jun-14	0
Exterior Brick Facing		147	18-Nov-13	13-Jun-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesive mortar to specially recesse...	93	18-Nov-13	13-Jun-14	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

Updated Schedule 10.3

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		207	03-Nov-13	27-Aug-14	0
General		207	03-Nov-13	27-Aug-14	0
General		207	03-Nov-13	27-Aug-14	0
General		207	03-Nov-13	27-Aug-14	0
GEN99100	Tests on Completion	30	14-Jun-14	13-Jul-14	0
GEN99500	Earliest Completion of All Scope	0		13-Jul-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	14-Jul-14	27-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	14-Jul-14	27-Aug-14	0
RECEPTION CENTER		390	12-Dec-12	13-Jun-14	0
Structural Works		93	12-Dec-12	04-Apr-13	0
B Block		93	12-Dec-12	04-Apr-13	0
1st Basement		78	12-Dec-12	14-Mar-13	0
EVENT NO. 13	Re-building Formwork in Compliance with the Technical Specifications	6	12-Dec-12	12-Dec-12	
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure above foundations, including the fo...	7	12-Dec-12	06-Mar-13	0
RC.3.A.03.B.BS1.FW	Formwork	6	12-Dec-12	12-Dec-12	
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	13-Mar-13	14-Mar-13	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	13-Mar-13	14-Mar-13	0
Ground Floor		15	15-Mar-13	04-Apr-13	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure above foundations, including the fo...	3	25-Mar-13	27-Mar-13	0
RC.3.A.03.B.GR.FW	Formwork	6	15-Mar-13	22-Mar-13	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	03-Apr-13	04-Apr-13	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	03-Apr-13	04-Apr-13	0
RC.3.A.03.B.GR.SC	Scaffolding	6	15-Mar-13	22-Mar-13	0
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	15-Mar-13	22-Mar-13	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	15-Mar-13	22-Mar-13	0
Builders / Masonry Works		166	05-Apr-13	09-Dec-13	0
Block Work		23	05-Apr-13	08-May-13	0
2nd Basement		5	05-Apr-13	11-Apr-13	0
RC.4.A.01.B.BS2	Bims block wall, 250 mm thick, laid in sand-cement mortar	4	05-Apr-13	10-Apr-13	0
RC.4.A.02.B.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	05-Apr-13	10-Apr-13	0
RC.4.A.02.C.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	11-Apr-13	11-Apr-13	0
RC.4.A.04.B.BS2	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	05-Apr-13	10-Apr-13	0
1st Basement		18	12-Apr-13	08-May-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	12-Apr-13	25-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	26-Apr-13	08-May-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	12-Apr-13	25-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	26-Apr-13	08-May-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	12-Apr-13	25-Apr-13	0
Plastering		143	09-May-13	09-Dec-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	12-Nov-13	09-Dec-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg and 300 kg cement per m3, re...	20	12-Nov-13	09-Dec-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	12-Nov-13	09-Dec-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg and 400 kg cement per m3, re...	20	12-Nov-13	09-Dec-13	0
Cement-Lime 250kg : Interior Walls		118	15-May-13	08-Nov-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	05-Sep-13	05-Sep-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	03-Oct-13	03-Oct-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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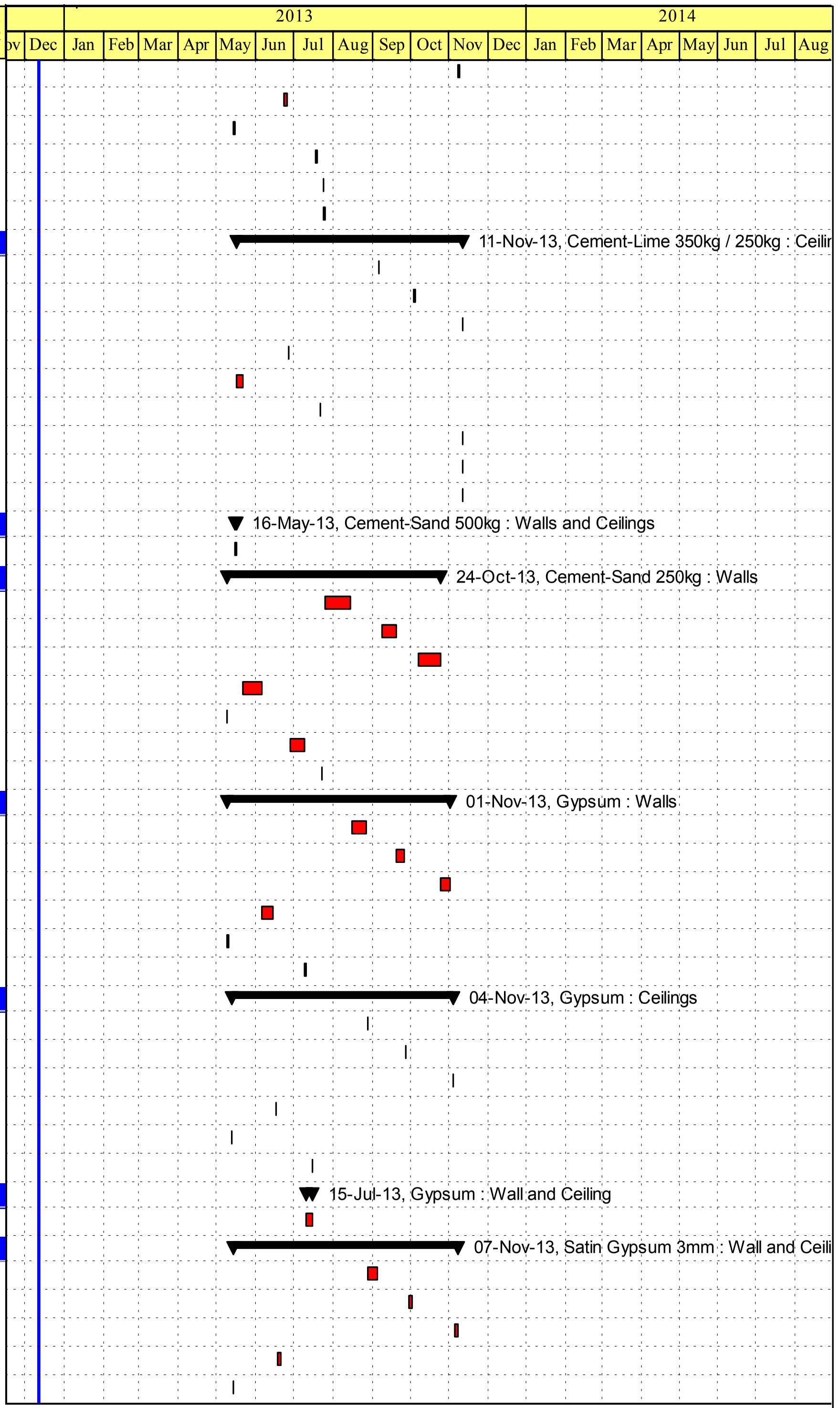
Updated Schedule 11.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	08-Nov-13	08-Nov-13	0
RC.4.C.03.BS1	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	3	24-Jun-13	26-Jun-13	0
RC.4.C.03.BS2	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	15-May-13	15-May-13	0
RC.4.C.03.GR	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	2	18-Jul-13	19-Jul-13	0
RC.4.C.03.H	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	24-Jul-13	24-Jul-13	0
RC.4.C.03.I	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	25-Jul-13	25-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		117	17-May-13	11-Nov-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	06-Sep-13	06-Sep-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	04-Oct-13	04-Oct-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	11-Nov-13	11-Nov-13	0
RC.4.C.04.BS1	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	27-Jun-13	27-Jun-13	0
RC.4.C.04.BS2	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	3	17-May-13	21-May-13	0
RC.4.C.04.GR	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	22-Jul-13	22-Jul-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	11-Nov-13	11-Nov-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	11-Nov-13	11-Nov-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	11-Nov-13	11-Nov-13	0
Cement-Sand 500kg : Walls and Ceilings		1	16-May-13	16-May-13	0
RC.4.C.05.BS2	Cement-sand plaster, applied in one coat, with 500 kg cement per m3, to walls and ceil...	1	16-May-13	16-May-13	0
Cement-Sand 250kg : Walls		112	09-May-13	24-Oct-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	12	26-Jul-13	15-Aug-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	09-Sep-13	19-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	07-Oct-13	24-Oct-13	0
RC.4.C.06.BS1	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	11	22-May-13	05-Jun-13	0
RC.4.C.06.BS2	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	09-May-13	09-May-13	0
RC.4.C.06.GR	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	8	28-Jun-13	09-Jul-13	0
RC.4.C.06.H	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	23-Jul-13	23-Jul-13	0
Gypsum : Walls		116	10-May-13	01-Nov-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	8	16-Aug-13	27-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	20-Sep-13	26-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	25-Oct-13	01-Nov-13	0
RC.4.C.08.BS1	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	7	06-Jun-13	14-Jun-13	0
RC.4.C.08.BS2	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	10-May-13	10-May-13	0
RC.4.C.08.GR	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	10-Jul-13	10-Jul-13	0
Gypsum : Ceilings		116	13-May-13	04-Nov-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	28-Aug-13	28-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	27-Sep-13	27-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	04-Nov-13	04-Nov-13	0
RC.4.C.09.BS1	Gypsum plaster, applied in one coat, to ceilings	1	17-Jun-13	17-Jun-13	0
RC.4.C.09.BS2	Gypsum plaster, applied in one coat, to ceilings	1	13-May-13	13-May-13	0
RC.4.C.09.GR	Gypsum plaster, applied in one coat, to ceilings	1	16-Jul-13	16-Jul-13	0
Gypsum : Wall and Ceiling		3	11-Jul-13	15-Jul-13	0
RC.4.C.10.GR	Gypsum priming, to wall and ceiling plaster	3	11-Jul-13	15-Jul-13	0
Satin Gypsum 3mm : Wall and Ceiling		118	14-May-13	07-Nov-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	29-Aug-13	04-Sep-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	30-Sep-13	02-Oct-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	05-Nov-13	07-Nov-13	0
RC.4.C.11.BS1	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	18-Jun-13	21-Jun-13	0
RC.4.C.11.BS2	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	14-May-13	14-May-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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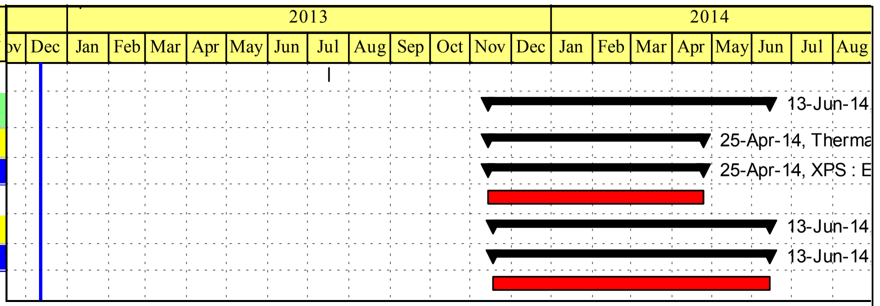
Updated Schedule 11.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.C.11.GR	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	17-Jul-13	17-Jul-13	0
Architectural Works		149	14-Nov-13	13-Jun-14	0
Thermal Protection		115	14-Nov-13	25-Apr-14	0
XPS : Exterior Walls & Ceilings		115	14-Nov-13	25-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer of glass-fiber-mesh-reinforced ...	61	14-Nov-13	25-Apr-14	0
Exterior Brick Facing		147	18-Nov-13	13-Jun-14	0
Exterior Brick Facing		147	18-Nov-13	13-Jun-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesive mortar to specially recesse...	93	18-Nov-13	13-Jun-14	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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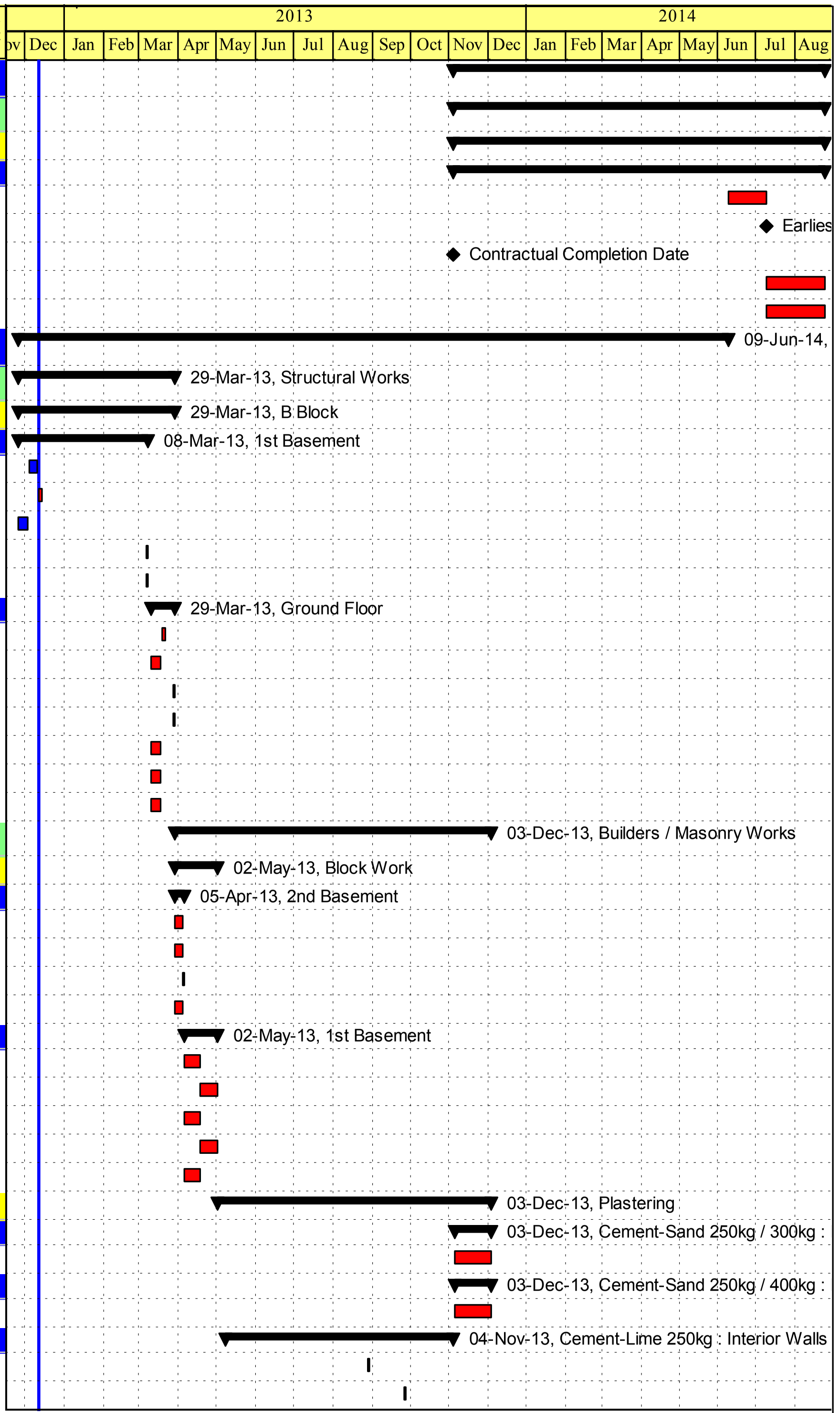
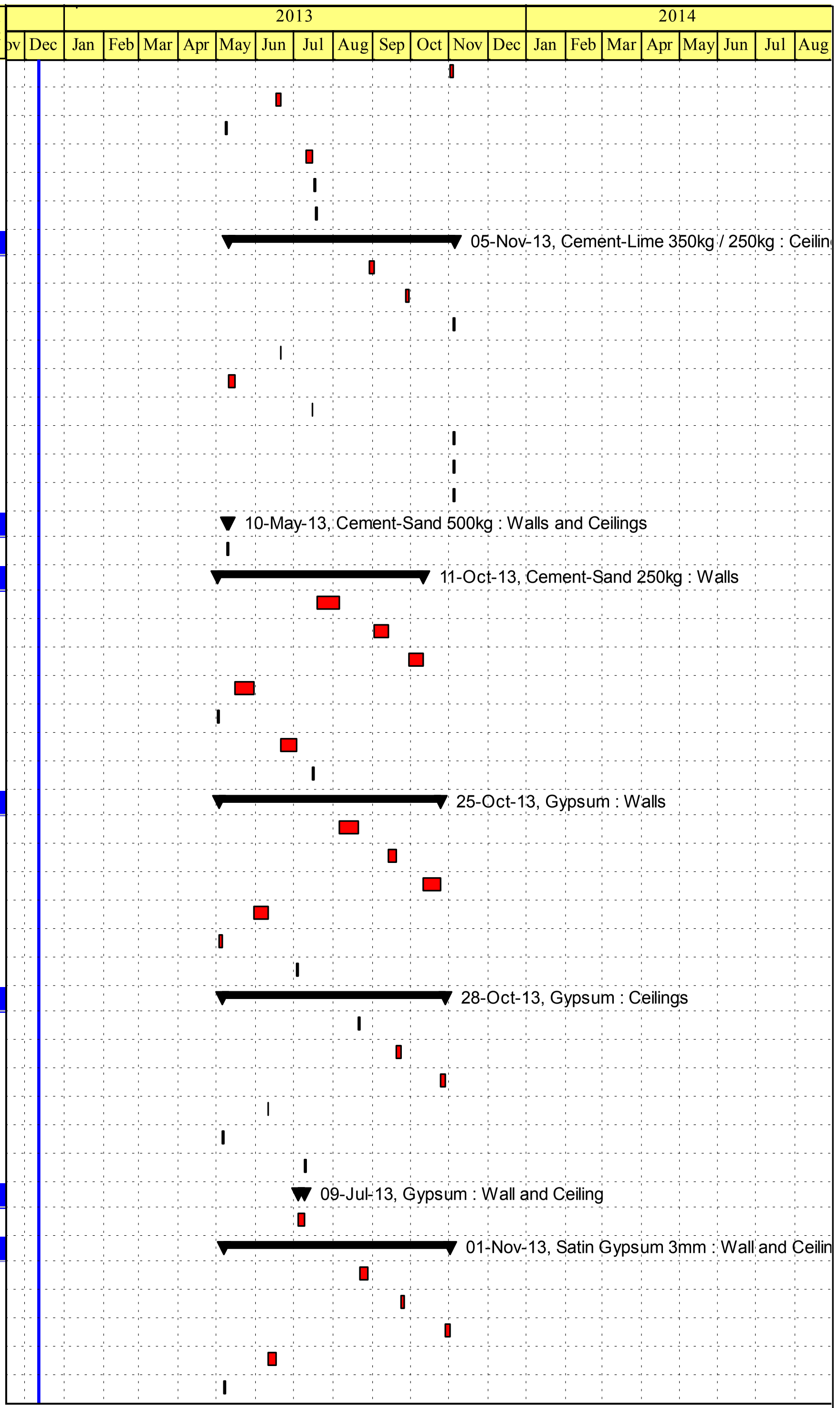
Updated Schedule 11.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		204	03-Nov-13	23-Aug-14	0
General		204	03-Nov-13	23-Aug-14	0
General		204	03-Nov-13	23-Aug-14	0
General		204	03-Nov-13	23-Aug-14	0
GEN99100	Tests on Completion	30	09-Jun-14	09-Jul-14	0
GEN99500	Earliest Completion of All Scope	0		09-Jul-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	09-Jul-14	23-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	09-Jul-14	23-Aug-14	0
RECEPTION CENTER		386	12-Dec-12	09-Jun-14	0
Structural Works		89	12-Dec-12	29-Mar-13	0
B Block		89	12-Dec-12	29-Mar-13	0
1st Basement		74	12-Dec-12	08-Mar-13	0
EVENT NO. 13	Re-building Formwork in Compliance with the Technical Specifications	6	12-Dec-12	12-Dec-12	
RC.3.A.03.B.BS1	Placing of Concrete Class C30 for superstructure above foundations, including the fo...	3	12-Dec-12	14-Dec-12	0
RC.3.A.03.B.BS1.FW	Formwork	6	12-Dec-12	12-Dec-12	
RC.3.A.03.B.BS1.RFW	Removal of Formwork	2	07-Mar-13	08-Mar-13	0
RC.3.A.03.B.BS1.RSC	Removal of Scaffolding	2	07-Mar-13	08-Mar-13	0
Ground Floor		15	11-Mar-13	29-Mar-13	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure above foundations, including the fo...	3	19-Mar-13	21-Mar-13	0
RC.3.A.03.B.GR.FW	Formwork	6	11-Mar-13	18-Mar-13	0
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	28-Mar-13	29-Mar-13	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	28-Mar-13	29-Mar-13	0
RC.3.A.03.B.GR.SC	Scaffolding	6	11-Mar-13	18-Mar-13	0
RC.3.B.01.B.GR	Deformed high yield steel bars , Ø8-Ø12 mm dia.	6	11-Mar-13	18-Mar-13	0
RC.3.B.02.B.GR	Deformed high yield steel bars , Ø14-Ø28 mm dia.	6	11-Mar-13	18-Mar-13	0
Builders / Masonry Works		166	29-Mar-13	03-Dec-13	0
Block Work		23	29-Mar-13	02-May-13	0
2nd Basement		5	29-Mar-13	05-Apr-13	0
RC.4.A.01.B.BS2	Bims block wall, 250 mm thick, laid in sand-cement mortar	4	29-Mar-13	04-Apr-13	0
RC.4.A.02.B.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	29-Mar-13	04-Apr-13	0
RC.4.A.02.C.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	04-Apr-13	05-Apr-13	0
RC.4.A.04.B.BS2	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	29-Mar-13	04-Apr-13	0
1st Basement		18	05-Apr-13	02-May-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	05-Apr-13	18-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	18-Apr-13	02-May-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	05-Apr-13	18-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	18-Apr-13	02-May-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	05-Apr-13	18-Apr-13	0
Plastering		143	02-May-13	03-Dec-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	05-Nov-13	03-Dec-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg and 300 kg cement per m3, re...	20	05-Nov-13	03-Dec-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	05-Nov-13	03-Dec-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg and 400 kg cement per m3, re...	20	05-Nov-13	03-Dec-13	0
Cement-Lime 250kg : Interior Walls		118	08-May-13	04-Nov-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	28-Aug-13	29-Aug-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	26-Sep-13	27-Sep-13	0



▬ Actual Work ▬ Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone	Page 1 of 3	*Updated Schedule 11.2*

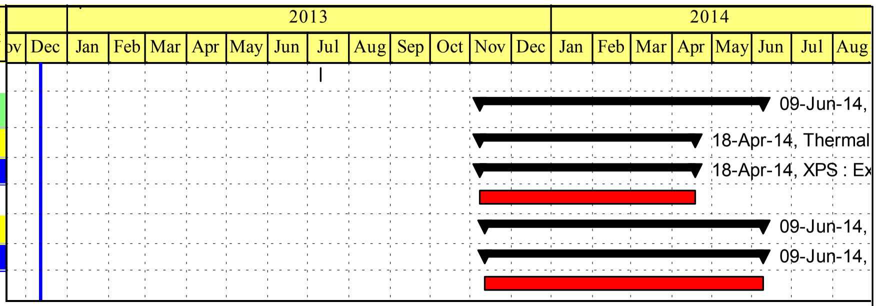
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	01-Nov-13	04-Nov-13	0
RC.4.C.03.BS1	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	3	17-Jun-13	20-Jun-13	0
RC.4.C.03.BS2	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	08-May-13	09-May-13	0
RC.4.C.03.GR	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	2	11-Jul-13	15-Jul-13	0
RC.4.C.03.H	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	17-Jul-13	18-Jul-13	0
RC.4.C.03.I	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	18-Jul-13	19-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		**117**	**10-May-13**	**05-Nov-13**	**0**
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	29-Aug-13	02-Sep-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	27-Sep-13	30-Sep-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	04-Nov-13	05-Nov-13	0
RC.4.C.04.BS1	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	20-Jun-13	21-Jun-13	0
RC.4.C.04.BS2	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	3	10-May-13	15-May-13	0
RC.4.C.04.GR	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	15-Jul-13	16-Jul-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	04-Nov-13	05-Nov-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	04-Nov-13	05-Nov-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	04-Nov-13	05-Nov-13	0
Cement-Sand 500kg : Walls and Ceilings		**1**	**09-May-13**	**10-May-13**	**0**
RC.4.C.05.BS2	Cement-sand plaster, applied in one coat, with 500 kg cement per m3, to walls and ceil...	1	09-May-13	10-May-13	0
Cement-Sand 250kg : Walls		**112**	**02-May-13**	**11-Oct-13**	**0**
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	12	19-Jul-13	06-Aug-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	02-Sep-13	13-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	30-Sep-13	11-Oct-13	0
RC.4.C.06.BS1	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	11	15-May-13	30-May-13	0
RC.4.C.06.BS2	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	02-May-13	03-May-13	0
RC.4.C.06.GR	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	8	21-Jun-13	03-Jul-13	0
RC.4.C.06.H	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	16-Jul-13	17-Jul-13	0
Gypsum : Walls		**116**	**03-May-13**	**25-Oct-13**	**0**
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	8	06-Aug-13	21-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	13-Sep-13	20-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	11-Oct-13	25-Oct-13	0
RC.4.C.08.BS1	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	7	30-May-13	10-Jun-13	0
RC.4.C.08.BS2	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	03-May-13	06-May-13	0
RC.4.C.08.GR	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	03-Jul-13	04-Jul-13	0
Gypsum : Ceilings		**116**	**06-May-13**	**28-Oct-13**	**0**
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	21-Aug-13	22-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	20-Sep-13	23-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	25-Oct-13	28-Oct-13	0
RC.4.C.09.BS1	Gypsum plaster, applied in one coat, to ceilings	1	10-Jun-13	11-Jun-13	0
RC.4.C.09.BS2	Gypsum plaster, applied in one coat, to ceilings	1	06-May-13	07-May-13	0
RC.4.C.09.GR	Gypsum plaster, applied in one coat, to ceilings	1	09-Jul-13	10-Jul-13	0
Gypsum : Wall and Ceiling		**3**	**04-Jul-13**	**09-Jul-13**	**0**
RC.4.C.10.GR	Gypsum priming, to wall and ceiling plaster	3	04-Jul-13	09-Jul-13	0
Satin Gypsum 3mm : Wall and Ceiling		**118**	**07-May-13**	**01-Nov-13**	**0**
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	22-Aug-13	28-Aug-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	23-Sep-13	26-Sep-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	28-Oct-13	01-Nov-13	0
RC.4.C.11.BS1	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	11-Jun-13	17-Jun-13	0
RC.4.C.11.BS2	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	07-May-13	08-May-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

Updated Schedule 11.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.C.11.GR	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	10-Jul-13	11-Jul-13	0
Architectural Works		149	07-Nov-13	09-Jun-14	0
Thermal Protection		115	07-Nov-13	18-Apr-14	0
XPS : Exterior Walls & Ceilings		115	07-Nov-13	18-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer of glass-fiber-mesh-reinforced ...	61	07-Nov-13	18-Apr-14	0
Exterior Brick Facing		147	11-Nov-13	09-Jun-14	0
Exterior Brick Facing		147	11-Nov-13	09-Jun-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesive mortar to specially recesse...	93	11-Nov-13	09-Jun-14	0



▆ Actual Work	🟩 Remaining Work	🟥 Critical Remaining Work ◆	◆ Milestone

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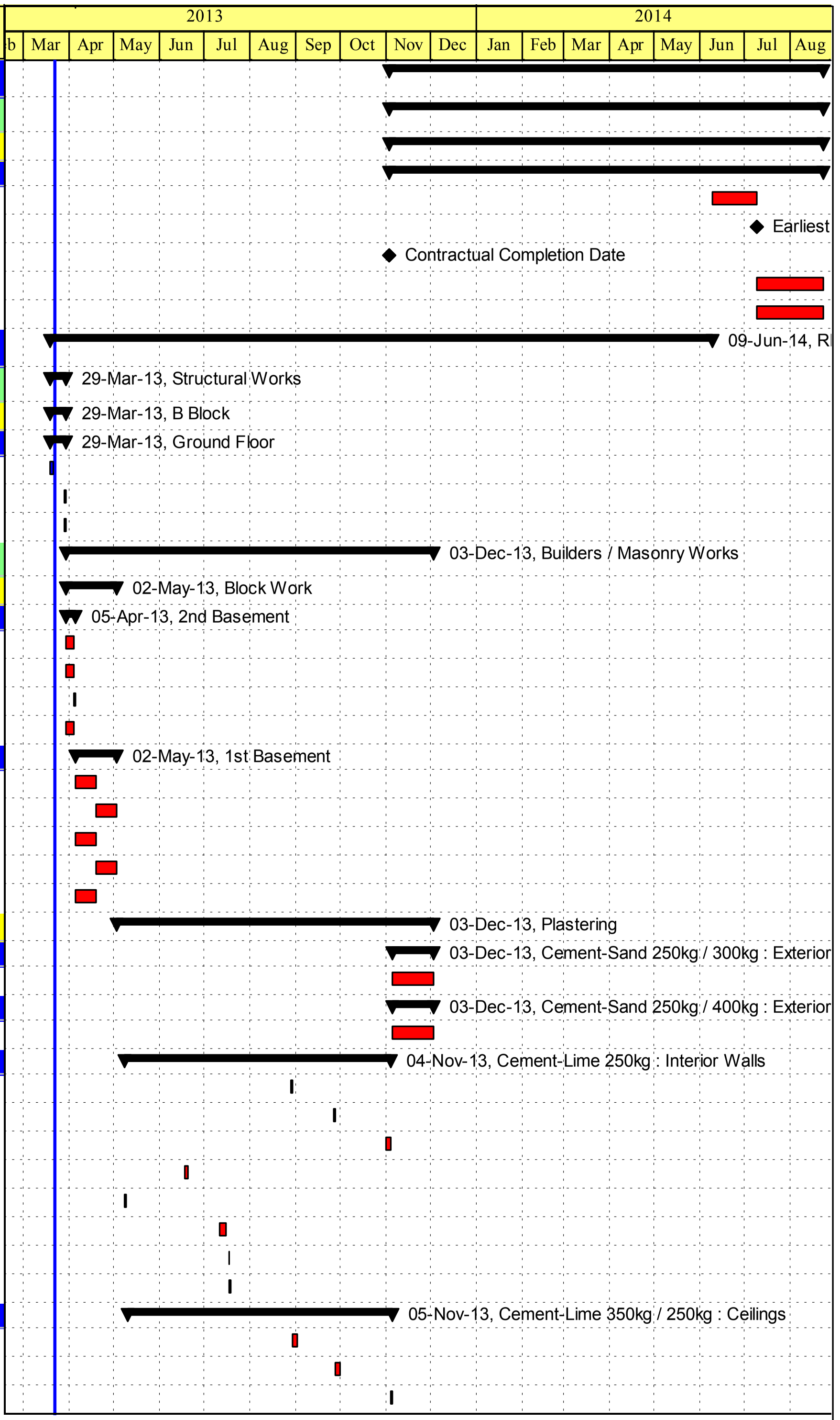
Updated Schedule 11.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		204	03-Nov-13	23-Aug-14	0
General		204	03-Nov-13	23-Aug-14	0
General		204	03-Nov-13	23-Aug-14	0
General		204	03-Nov-13	23-Aug-14	0
GEN99100	Tests on Completion	30	09-Jun-14	09-Jul-14	0
GEN99500	Earliest Completion of All Scope	0		09-Jul-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	09-Jul-14	23-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	09-Jul-14	23-Aug-14	0
RECEPTION CENTER		306	22-Mar-13	09-Jun-14	0
Structural Works		9	22-Mar-13	29-Mar-13	0
B Block		9	22-Mar-13	29-Mar-13	0
Ground Floor		9	22-Mar-13	29-Mar-13	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure above foundations, including the fo...	3	22-Mar-13	22-Mar-13	
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	28-Mar-13	29-Mar-13	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	28-Mar-13	29-Mar-13	0
Builders / Masonry Works		166	29-Mar-13	03-Dec-13	0
Block Work		23	29-Mar-13	02-May-13	0
2nd Basement		5	29-Mar-13	05-Apr-13	0
RC.4.A.01.B.BS2	Bims block wall, 250 mm thick, laid in sand-cement mortar	4	29-Mar-13	04-Apr-13	0
RC.4.A.02.B.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	29-Mar-13	04-Apr-13	0
RC.4.A.02.C.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	04-Apr-13	05-Apr-13	0
RC.4.A.04.B.BS2	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	29-Mar-13	04-Apr-13	0
1st Basement		18	05-Apr-13	02-May-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	05-Apr-13	18-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	18-Apr-13	02-May-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	05-Apr-13	18-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	18-Apr-13	02-May-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	05-Apr-13	18-Apr-13	0
Plastering		143	02-May-13	03-Dec-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	05-Nov-13	03-Dec-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg and 300 kg cement per m3, re...	20	05-Nov-13	03-Dec-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	05-Nov-13	03-Dec-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg and 400 kg cement per m3, re...	20	05-Nov-13	03-Dec-13	0
Cement-Lime 250kg : Interior Walls		118	08-May-13	04-Nov-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	28-Aug-13	29-Aug-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	26-Sep-13	27-Sep-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	01-Nov-13	04-Nov-13	0
RC.4.C.03.BS1	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	3	17-Jun-13	20-Jun-13	0
RC.4.C.03.BS2	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	08-May-13	09-May-13	0
RC.4.C.03.GR	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	2	11-Jul-13	15-Jul-13	0
RC.4.C.03.H	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	17-Jul-13	18-Jul-13	0
RC.4.C.03.I	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	18-Jul-13	19-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		117	10-May-13	05-Nov-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	29-Aug-13	02-Sep-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	27-Sep-13	30-Sep-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	04-Nov-13	05-Nov-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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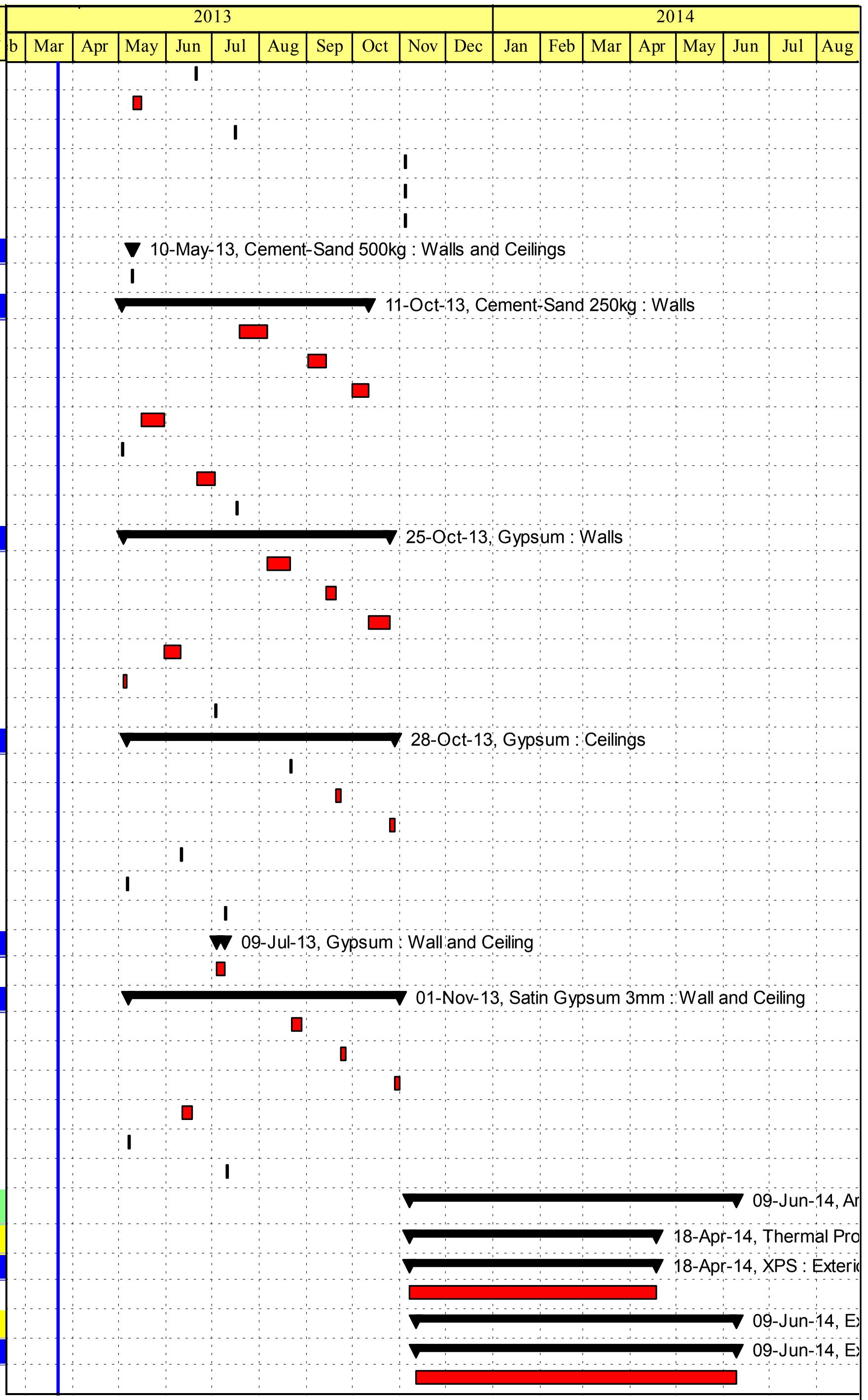
Updated Schedule 12.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.C.04.BS1	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	20-Jun-13	21-Jun-13	0
RC.4.C.04.BS2	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	3	10-May-13	15-May-13	0
RC.4.C.04.GR	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	15-Jul-13	16-Jul-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	04-Nov-13	05-Nov-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	04-Nov-13	05-Nov-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	04-Nov-13	05-Nov-13	0
Cement-Sand 500kg : Walls and Ceilings		1	09-May-13	10-May-13	0
RC.4.C.05.BS2	Cement-sand plaster, applied in one coat, with 500 kg cement per m3, to walls and ceil...	1	09-May-13	10-May-13	0
Cement-Sand 250kg : Walls		112	02-May-13	11-Oct-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	12	19-Jul-13	06-Aug-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	02-Sep-13	13-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	30-Sep-13	11-Oct-13	0
RC.4.C.06.BS1	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	11	15-May-13	30-May-13	0
RC.4.C.06.BS2	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	02-May-13	03-May-13	0
RC.4.C.06.GR	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	8	21-Jun-13	03-Jul-13	0
RC.4.C.06.H	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	16-Jul-13	17-Jul-13	0
Gypsum : Walls		116	03-May-13	25-Oct-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	8	06-Aug-13	21-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	13-Sep-13	20-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	11-Oct-13	25-Oct-13	0
RC.4.C.08.BS1	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	7	30-May-13	10-Jun-13	0
RC.4.C.08.BS2	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	03-May-13	06-May-13	0
RC.4.C.08.GR	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	03-Jul-13	04-Jul-13	0
Gypsum : Ceilings		116	06-May-13	28-Oct-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	21-Aug-13	22-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	20-Sep-13	23-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	25-Oct-13	28-Oct-13	0
RC.4.C.09.BS1	Gypsum plaster, applied in one coat, to ceilings	1	10-Jun-13	11-Jun-13	0
RC.4.C.09.BS2	Gypsum plaster, applied in one coat, to ceilings	1	06-May-13	07-May-13	0
RC.4.C.09.GR	Gypsum plaster, applied in one coat, to ceilings	1	09-Jul-13	10-Jul-13	0
Gypsum : Wall and Ceiling		3	04-Jul-13	09-Jul-13	0
RC.4.C.10.GR	Gypsum priming, to wall and ceiling plaster	3	04-Jul-13	09-Jul-13	0
Satin Gypsum 3mm : Wall and Ceiling		118	07-May-13	01-Nov-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	22-Aug-13	28-Aug-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	23-Sep-13	26-Sep-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	28-Oct-13	01-Nov-13	0
RC.4.C.11.BS1	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	11-Jun-13	17-Jun-13	0
RC.4.C.11.BS2	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	07-May-13	08-May-13	0
RC.4.C.11.GR	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	10-Jul-13	11-Jul-13	0
Architectural Works		149	07-Nov-13	09-Jun-14	0
Thermal Protection		115	07-Nov-13	18-Apr-14	0
XPS : Exterior Walls & Ceilings		115	07-Nov-13	18-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer of glass-fiber-mesh-reinforced ...	61	07-Nov-13	18-Apr-14	0
Exterior Brick Facing		147	11-Nov-13	09-Jun-14	0
Exterior Brick Facing		147	11-Nov-13	09-Jun-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesive mortar to specially recesse...	93	11-Nov-13	09-Jun-14	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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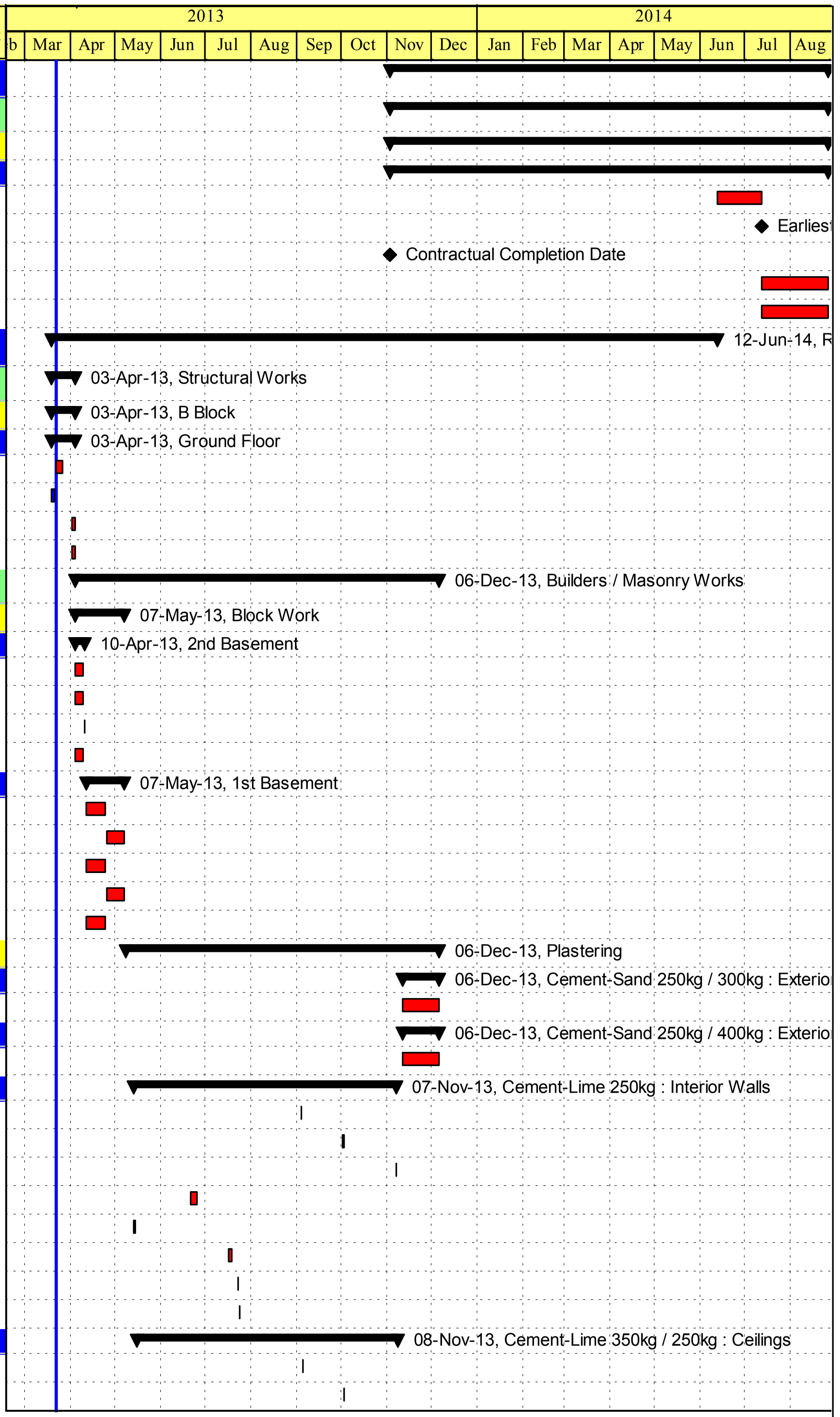
Updated Schedule 12.1

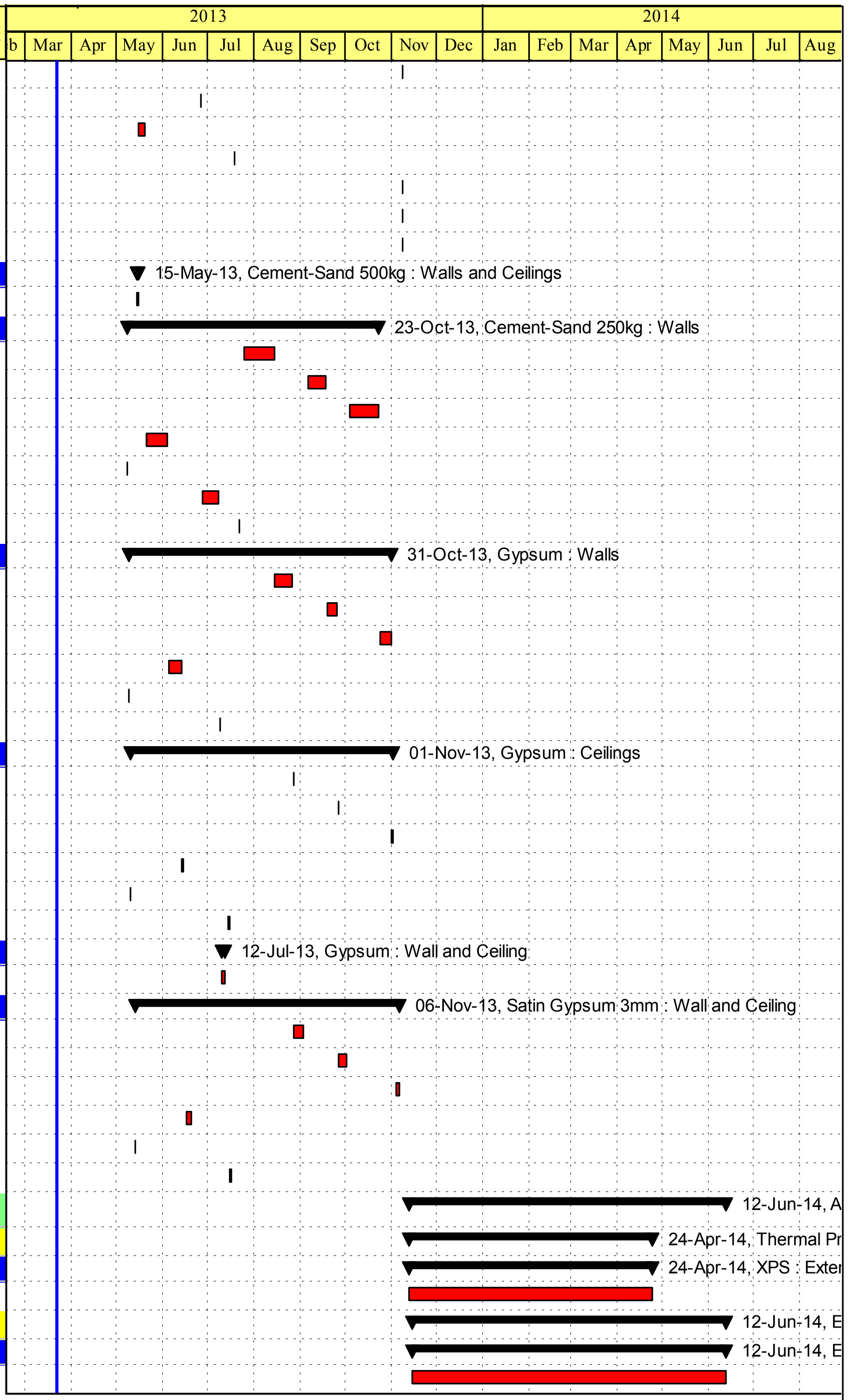
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		206	03-Nov-13	26-Aug-14	0
General		206	03-Nov-13	26-Aug-14	0
General		206	03-Nov-13	26-Aug-14	0
General		206	03-Nov-13	26-Aug-14	0
GEN99100	Tests on Completion	30	13-Jun-14	12-Jul-14	0
GEN99500	Earliest Completion of All Scope	0		12-Jul-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	13-Jul-14	26-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	13-Jul-14	26-Aug-14	0
RECEPTION CENTER		309	22-Mar-13	12-Jun-14	0
Structural Works		12	22-Mar-13	03-Apr-13	0
B Block		12	22-Mar-13	03-Apr-13	0
Ground Floor		12	22-Mar-13	03-Apr-13	0
EVENT NO. 14	Increase in Quantity of Concrete Works in Ground Floor of Block B	3	22-Mar-13	26-Mar-13	0
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure above foundations, including the fo...	3	22-Mar-13	22-Mar-13	
RC.3.A.03.B.GR.RFW	Removal of Formwork	2	02-Apr-13	03-Apr-13	0
RC.3.A.03.B.GR.RSC	Removal of Scaffolding	2	02-Apr-13	03-Apr-13	0
Builders / Masonry Works		166	04-Apr-13	06-Dec-13	0
Block Work		23	04-Apr-13	07-May-13	0
2nd Basement		5	04-Apr-13	10-Apr-13	0
RC.4.A.01.B.BS2	Bims block wall, 250 mm thick, laid in sand-cement mortar	4	04-Apr-13	09-Apr-13	0
RC.4.A.02.B.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	04-Apr-13	09-Apr-13	0
RC.4.A.02.C.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	10-Apr-13	10-Apr-13	0
RC.4.A.04.B.BS2	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	04-Apr-13	09-Apr-13	0
1st Basement		18	11-Apr-13	07-May-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	11-Apr-13	24-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	25-Apr-13	07-May-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	11-Apr-13	24-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	25-Apr-13	07-May-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	11-Apr-13	24-Apr-13	0
Plastering		143	08-May-13	06-Dec-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	11-Nov-13	06-Dec-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg and 300 kg cement per m3, re...	20	11-Nov-13	06-Dec-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	11-Nov-13	06-Dec-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg and 400 kg cement per m3, re...	20	11-Nov-13	06-Dec-13	0
Cement-Lime 250kg : Interior Walls		118	14-May-13	07-Nov-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	04-Sep-13	04-Sep-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	02-Oct-13	02-Oct-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	07-Nov-13	07-Nov-13	0
RC.4.C.03.BS1	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	3	21-Jun-13	25-Jun-13	0
RC.4.C.03.BS2	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	14-May-13	14-May-13	0
RC.4.C.03.GR	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	2	17-Jul-13	18-Jul-13	0
RC.4.C.03.H	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	23-Jul-13	23-Jul-13	0
RC.4.C.03.I	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	24-Jul-13	24-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		117	16-May-13	08-Nov-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	05-Sep-13	05-Sep-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	03-Oct-13	03-Oct-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

Updated Schedule 12.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	08-Nov-13	08-Nov-13	0
RC.4.C.04.BS1	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	26-Jun-13	26-Jun-13	0
RC.4.C.04.BS2	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	3	16-May-13	20-May-13	0
RC.4.C.04.GR	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	19-Jul-13	19-Jul-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	08-Nov-13	08-Nov-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	08-Nov-13	08-Nov-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	08-Nov-13	08-Nov-13	0
Cement-Sand 500kg : Walls and Ceilings		1	15-May-13	15-May-13	0
RC.4.C.05.BS2	Cement-sand plaster, applied in one coat, with 500 kg cement per m3, to walls and ceil...	1	15-May-13	15-May-13	0
Cement-Sand 250kg : Walls		112	08-May-13	23-Oct-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	12	25-Jul-13	14-Aug-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	06-Sep-13	18-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	04-Oct-13	23-Oct-13	0
RC.4.C.06.BS1	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	11	21-May-13	04-Jun-13	0
RC.4.C.06.BS2	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	08-May-13	08-May-13	0
RC.4.C.06.GR	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	8	27-Jun-13	08-Jul-13	0
RC.4.C.06.H	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	22-Jul-13	22-Jul-13	0
Gypsum : Walls		116	09-May-13	31-Oct-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	8	15-Aug-13	26-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	19-Sep-13	25-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	24-Oct-13	31-Oct-13	0
RC.4.C.08.BS1	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	7	05-Jun-13	13-Jun-13	0
RC.4.C.08.BS2	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	09-May-13	09-May-13	0
RC.4.C.08.GR	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	09-Jul-13	09-Jul-13	0
Gypsum : Ceilings		116	10-May-13	01-Nov-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	27-Aug-13	27-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	26-Sep-13	26-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	01-Nov-13	01-Nov-13	0
RC.4.C.09.BS1	Gypsum plaster, applied in one coat, to ceilings	1	14-Jun-13	14-Jun-13	0
RC.4.C.09.BS2	Gypsum plaster, applied in one coat, to ceilings	1	10-May-13	10-May-13	0
RC.4.C.09.GR	Gypsum plaster, applied in one coat, to ceilings	1	15-Jul-13	15-Jul-13	0
Gypsum : Wall and Ceiling		3	10-Jul-13	12-Jul-13	0
RC.4.C.10.GR	Gypsum priming, to wall and ceiling plaster	3	10-Jul-13	12-Jul-13	0
Satin Gypsum 3mm : Wall and Ceiling		118	13-May-13	06-Nov-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	28-Aug-13	03-Sep-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	27-Sep-13	01-Oct-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	04-Nov-13	06-Nov-13	0
RC.4.C.11.BS1	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	17-Jun-13	20-Jun-13	0
RC.4.C.11.BS2	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	13-May-13	13-May-13	0
RC.4.C.11.GR	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	16-Jul-13	16-Jul-13	0
Architectural Works		149	13-Nov-13	12-Jun-14	0
Thermal Protection		115	13-Nov-13	24-Apr-14	0
XPS : Exterior Walls & Ceilings		115	13-Nov-13	24-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer of glass-fiber-mesh-reinforced ...	61	13-Nov-13	24-Apr-14	0
Exterior Brick Facing		147	15-Nov-13	12-Jun-14	0
Exterior Brick Facing		147	15-Nov-13	12-Jun-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesive mortar to specially recesse...	93	15-Nov-13	12-Jun-14	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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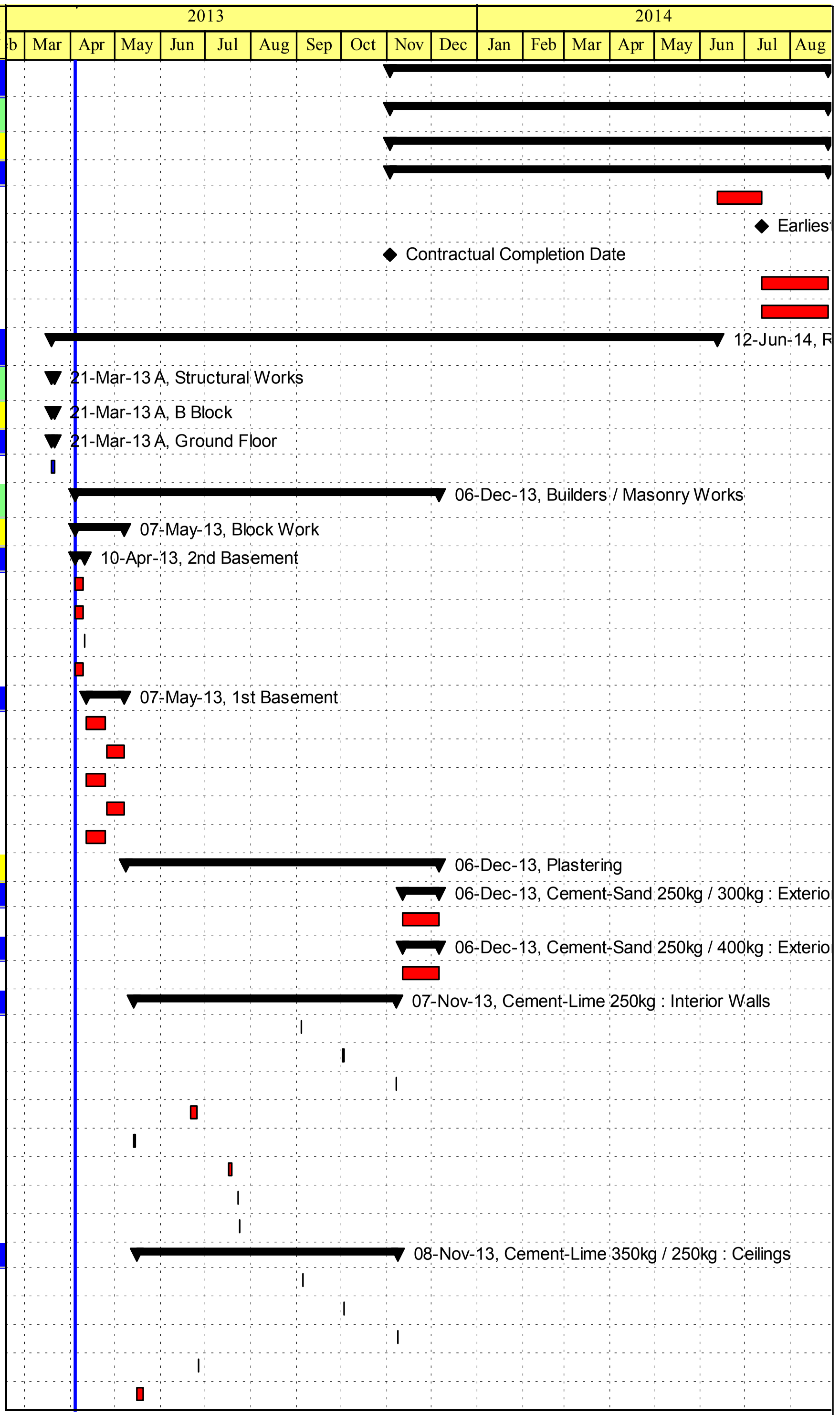
Updated Schedule 12.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		206	03-Nov-13	26-Aug-14	0
General		206	03-Nov-13	26-Aug-14	0
General		206	03-Nov-13	26-Aug-14	0
General		206	03-Nov-13	26-Aug-14	0
GEN99100	Tests on Completion	30	13-Jun-14	12-Jul-14	0
GEN99500	Earliest Completion of All Scope	0		12-Jul-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	13-Jul-14	26-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	13-Jul-14	26-Aug-14	0
RECEPTION CENTER		309	04-Apr-13	12-Jun-14	0
Structural Works		3	04-Apr-13	04-Apr-13	
B Block		3	04-Apr-13	04-Apr-13	
Ground Floor		3	04-Apr-13	04-Apr-13	
RC.3.A.03.B.GR	Placing of Concrete Class C30 for superstructure above foundations, including the fo...	3	04-Apr-13	04-Apr-13	
Builders / Masonry Works		166	04-Apr-13	06-Dec-13	0
Block Work		23	04-Apr-13	07-May-13	0
2nd Basement		5	04-Apr-13	10-Apr-13	0
RC.4.A.01.B.BS2	Bims block wall, 250 mm thick, laid in sand-cement mortar	4	04-Apr-13	09-Apr-13	0
RC.4.A.02.B.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	4	04-Apr-13	09-Apr-13	0
RC.4.A.02.C.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	10-Apr-13	10-Apr-13	0
RC.4.A.04.B.BS2	Bims block wall, 100 mm thick, laid in sand-cement mortar	4	04-Apr-13	09-Apr-13	0
1st Basement		18	11-Apr-13	07-May-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	11-Apr-13	24-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	25-Apr-13	07-May-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	11-Apr-13	24-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	25-Apr-13	07-May-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	11-Apr-13	24-Apr-13	0
Plastering		143	08-May-13	06-Dec-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	11-Nov-13	06-Dec-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg and 300 kg cement per m3, re...	20	11-Nov-13	06-Dec-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	11-Nov-13	06-Dec-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg and 400 kg cement per m3, re...	20	11-Nov-13	06-Dec-13	0
Cement-Lime 250kg : Interior Walls		118	14-May-13	07-Nov-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	04-Sep-13	04-Sep-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	02-Oct-13	02-Oct-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	07-Nov-13	07-Nov-13	0
RC.4.C.03.BS1	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	3	21-Jun-13	25-Jun-13	0
RC.4.C.03.BS2	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	14-May-13	14-May-13	0
RC.4.C.03.GR	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	2	17-Jul-13	18-Jul-13	0
RC.4.C.03.H	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	23-Jul-13	23-Jul-13	0
RC.4.C.03.I	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	24-Jul-13	24-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		117	16-May-13	08-Nov-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	05-Sep-13	05-Sep-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	03-Oct-13	03-Oct-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	08-Nov-13	08-Nov-13	0
RC.4.C.04.BS1	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	26-Jun-13	26-Jun-13	0
RC.4.C.04.BS2	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	3	16-May-13	20-May-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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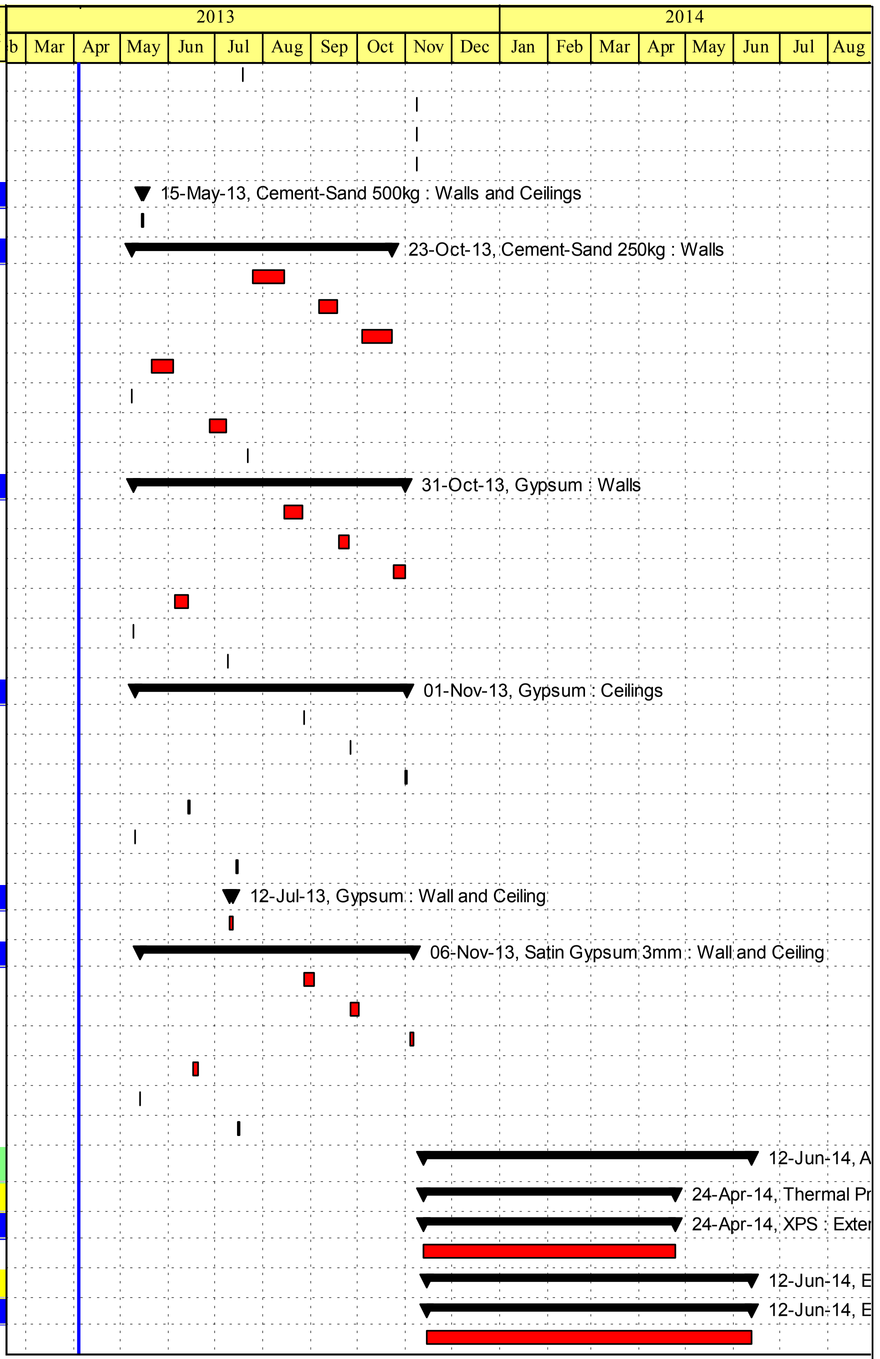
Updated Schedule 13.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.C.04.GR	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	19-Jul-13	19-Jul-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	08-Nov-13	08-Nov-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	08-Nov-13	08-Nov-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	08-Nov-13	08-Nov-13	0
Cement-Sand 500kg : Walls and Ceilings		1	15-May-13	15-May-13	0
RC.4.C.05.BS2	Cement-sand plaster, applied in one coat, with 500 kg cement per m3, to walls and ceil...	1	15-May-13	15-May-13	0
Cement-Sand 250kg : Walls		112	08-May-13	23-Oct-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	12	25-Jul-13	14-Aug-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	06-Sep-13	18-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	04-Oct-13	23-Oct-13	0
RC.4.C.06.BS1	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	11	21-May-13	04-Jun-13	0
RC.4.C.06.BS2	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	08-May-13	08-May-13	0
RC.4.C.06.GR	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	8	27-Jun-13	08-Jul-13	0
RC.4.C.06.H	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	22-Jul-13	22-Jul-13	0
Gypsum : Walls		116	09-May-13	31-Oct-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	8	15-Aug-13	26-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	19-Sep-13	25-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	24-Oct-13	31-Oct-13	0
RC.4.C.08.BS1	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	7	05-Jun-13	13-Jun-13	0
RC.4.C.08.BS2	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	09-May-13	09-May-13	0
RC.4.C.08.GR	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	09-Jul-13	09-Jul-13	0
Gypsum : Ceilings		116	10-May-13	01-Nov-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	27-Aug-13	27-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	26-Sep-13	26-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	01-Nov-13	01-Nov-13	0
RC.4.C.09.BS1	Gypsum plaster, applied in one coat, to ceilings	1	14-Jun-13	14-Jun-13	0
RC.4.C.09.BS2	Gypsum plaster, applied in one coat, to ceilings	1	10-May-13	10-May-13	0
RC.4.C.09.GR	Gypsum plaster, applied in one coat, to ceilings	1	15-Jul-13	15-Jul-13	0
Gypsum : Wall and Ceiling		3	10-Jul-13	12-Jul-13	0
RC.4.C.10.GR	Gypsum priming, to wall and ceiling plaster	3	10-Jul-13	12-Jul-13	0
Satin Gypsum 3mm : Wall and Ceiling		118	13-May-13	06-Nov-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	28-Aug-13	03-Sep-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	27-Sep-13	01-Oct-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	04-Nov-13	06-Nov-13	0
RC.4.C.11.BS1	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	17-Jun-13	20-Jun-13	0
RC.4.C.11.BS2	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	13-May-13	13-May-13	0
RC.4.C.11.GR	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	16-Jul-13	16-Jul-13	0
Architectural Works		149	13-Nov-13	12-Jun-14	0
Thermal Protection		115	13-Nov-13	24-Apr-14	0
XPS : Exterior Walls & Ceilings		115	13-Nov-13	24-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer of glass-fiber-mesh-reinforced ...	61	13-Nov-13	24-Apr-14	0
Exterior Brick Facing		147	15-Nov-13	12-Jun-14	0
Exterior Brick Facing		147	15-Nov-13	12-Jun-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesive mortar to specially recesse...	93	15-Nov-13	12-Jun-14	0



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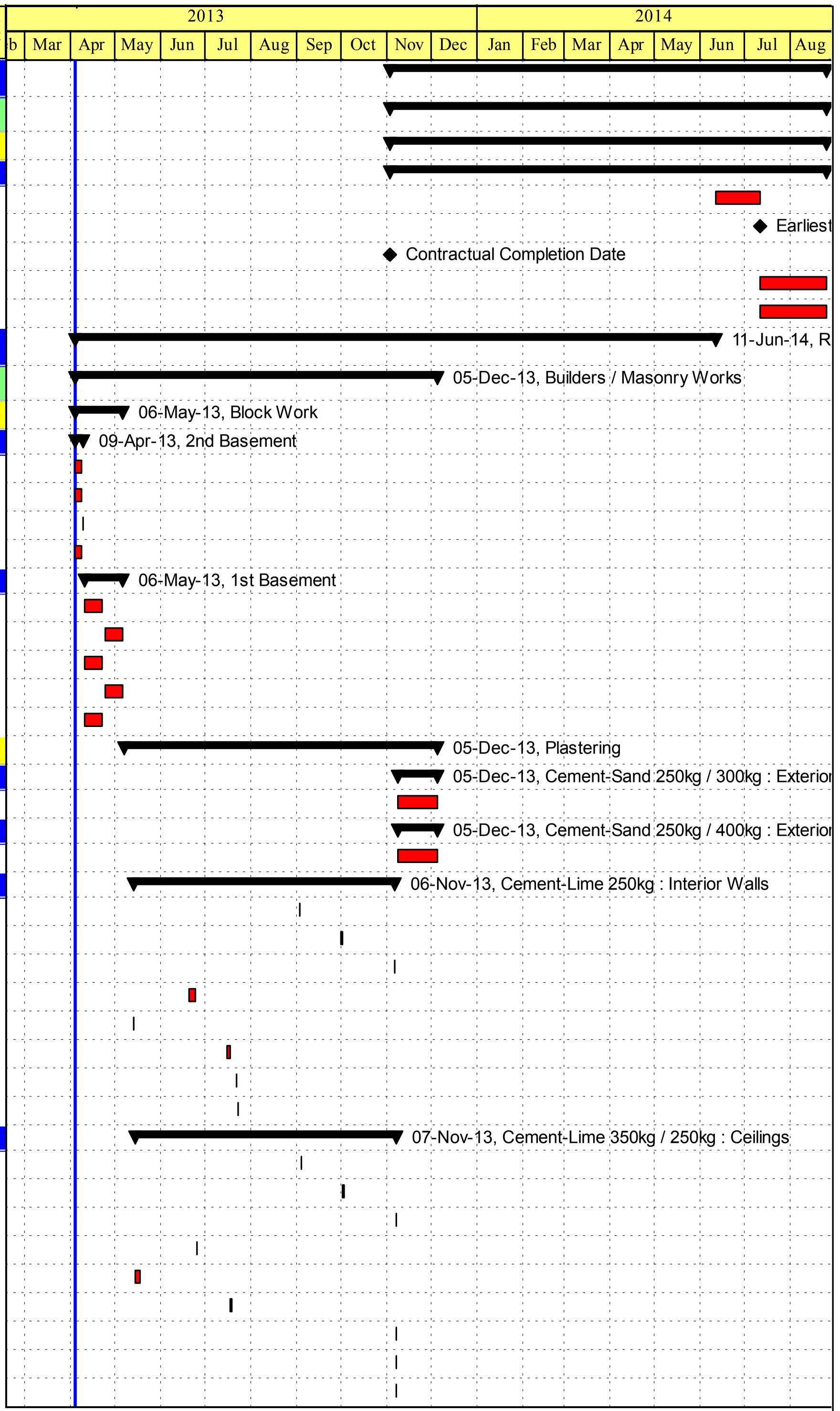
Updated Schedule 13.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		205	03-Nov-13	25-Aug-14	0
General		205	03-Nov-13	25-Aug-14	0
General		205	03-Nov-13	25-Aug-14	0
General		205	03-Nov-13	25-Aug-14	0
GEN99100	Tests on Completion	30	12-Jun-14	11-Jul-14	0
GEN99500	Earliest Completion of All Scope	0		11-Jul-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	12-Jul-14	25-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	12-Jul-14	25-Aug-14	0
RECEPTION CENTER		296	04-Apr-13	11-Jun-14	0
Builders / Masonry Works		165	04-Apr-13	05-Dec-13	0
Block Work		22	04-Apr-13	06-May-13	0
2nd Basement		4	04-Apr-13	09-Apr-13	0
RC.4.A.01.B.BS2	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	04-Apr-13	08-Apr-13	0
RC.4.A.02.B.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	04-Apr-13	08-Apr-13	0
RC.4.A.02.C.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	09-Apr-13	09-Apr-13	0
RC.4.A.04.B.BS2	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	04-Apr-13	08-Apr-13	0
1st Basement		18	10-Apr-13	06-May-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	10-Apr-13	22-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	24-Apr-13	06-May-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	10-Apr-13	22-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	24-Apr-13	06-May-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	10-Apr-13	22-Apr-13	0
Plastering		143	07-May-13	05-Dec-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	08-Nov-13	05-Dec-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg and 300 kg cement per m3, re...	20	08-Nov-13	05-Dec-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	08-Nov-13	05-Dec-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg and 400 kg cement per m3, re...	20	08-Nov-13	05-Dec-13	0
Cement-Lime 250kg : Interior Walls		118	13-May-13	06-Nov-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	03-Sep-13	03-Sep-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	01-Oct-13	01-Oct-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	06-Nov-13	06-Nov-13	0
RC.4.C.03.BS1	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	3	20-Jun-13	24-Jun-13	0
RC.4.C.03.BS2	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	13-May-13	13-May-13	0
RC.4.C.03.GR	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	2	16-Jul-13	17-Jul-13	0
RC.4.C.03.H	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	22-Jul-13	22-Jul-13	0
RC.4.C.03.I	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	23-Jul-13	23-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		117	15-May-13	07-Nov-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	04-Sep-13	04-Sep-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	02-Oct-13	02-Oct-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	07-Nov-13	07-Nov-13	0
RC.4.C.04.BS1	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	25-Jun-13	25-Jun-13	0
RC.4.C.04.BS2	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	3	15-May-13	17-May-13	0
RC.4.C.04.GR	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	18-Jul-13	18-Jul-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	07-Nov-13	07-Nov-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	07-Nov-13	07-Nov-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	07-Nov-13	07-Nov-13	0



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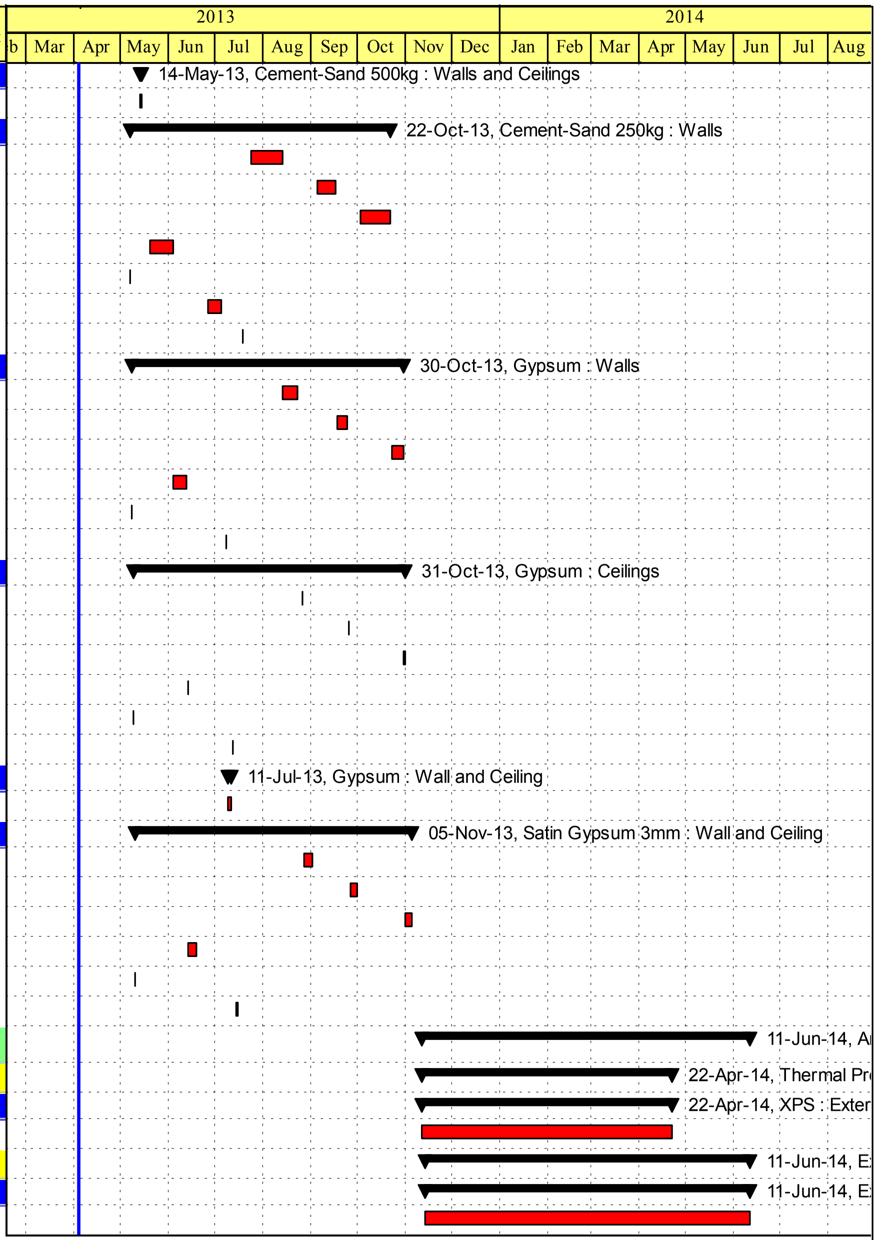
Updated Schedule 13.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
Cement-Sand 500kg : Walls and Ceilings		1	14-May-13	14-May-13	0
RC.4.C.05.BS2	Cement-sand plaster, applied in one coat, with 500 kg cement per m3, to walls and ceil...	1	14-May-13	14-May-13	0
Cement-Sand 250kg : Walls		112	07-May-13	22-Oct-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	12	24-Jul-13	13-Aug-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	05-Sep-13	17-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	03-Oct-13	22-Oct-13	0
RC.4.C.06.BS1	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	11	20-May-13	03-Jun-13	0
RC.4.C.06.BS2	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	07-May-13	07-May-13	0
RC.4.C.06.GR	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	8	26-Jun-13	05-Jul-13	0
RC.4.C.06.H	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	19-Jul-13	19-Jul-13	0
Gypsum : Walls		116	08-May-13	30-Oct-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	8	14-Aug-13	23-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	18-Sep-13	24-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	23-Oct-13	30-Oct-13	0
RC.4.C.08.BS1	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	7	04-Jun-13	12-Jun-13	0
RC.4.C.08.BS2	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	08-May-13	08-May-13	0
RC.4.C.08.GR	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	08-Jul-13	08-Jul-13	0
Gypsum : Ceilings		116	09-May-13	31-Oct-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	26-Aug-13	26-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	25-Sep-13	25-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	31-Oct-13	31-Oct-13	0
RC.4.C.09.BS1	Gypsum plaster, applied in one coat, to ceilings	1	13-Jun-13	13-Jun-13	0
RC.4.C.09.BS2	Gypsum plaster, applied in one coat, to ceilings	1	09-May-13	09-May-13	0
RC.4.C.09.GR	Gypsum plaster, applied in one coat, to ceilings	1	12-Jul-13	12-Jul-13	0
Gypsum : Wall and Ceiling		3	09-Jul-13	11-Jul-13	0
RC.4.C.10.GR	Gypsum priming, to wall and ceiling plaster	3	09-Jul-13	11-Jul-13	0
Satin Gypsum 3mm : Wall and Ceiling		118	10-May-13	05-Nov-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	27-Aug-13	02-Sep-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	26-Sep-13	30-Sep-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	01-Nov-13	05-Nov-13	0
RC.4.C.11.BS1	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	14-Jun-13	19-Jun-13	0
RC.4.C.11.BS2	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	10-May-13	10-May-13	0
RC.4.C.11.GR	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	15-Jul-13	15-Jul-13	0
Architectural Works		149	12-Nov-13	11-Jun-14	0
Thermal Protection		115	12-Nov-13	22-Apr-14	0
XPS : Exterior Walls & Ceilings		115	12-Nov-13	22-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer of glass-fiber-mesh-reinforced ...	61	12-Nov-13	22-Apr-14	0
Exterior Brick Facing		147	14-Nov-13	11-Jun-14	0
Exterior Brick Facing		147	14-Nov-13	11-Jun-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesive mortar to specially recesse...	93	14-Nov-13	11-Jun-14	0



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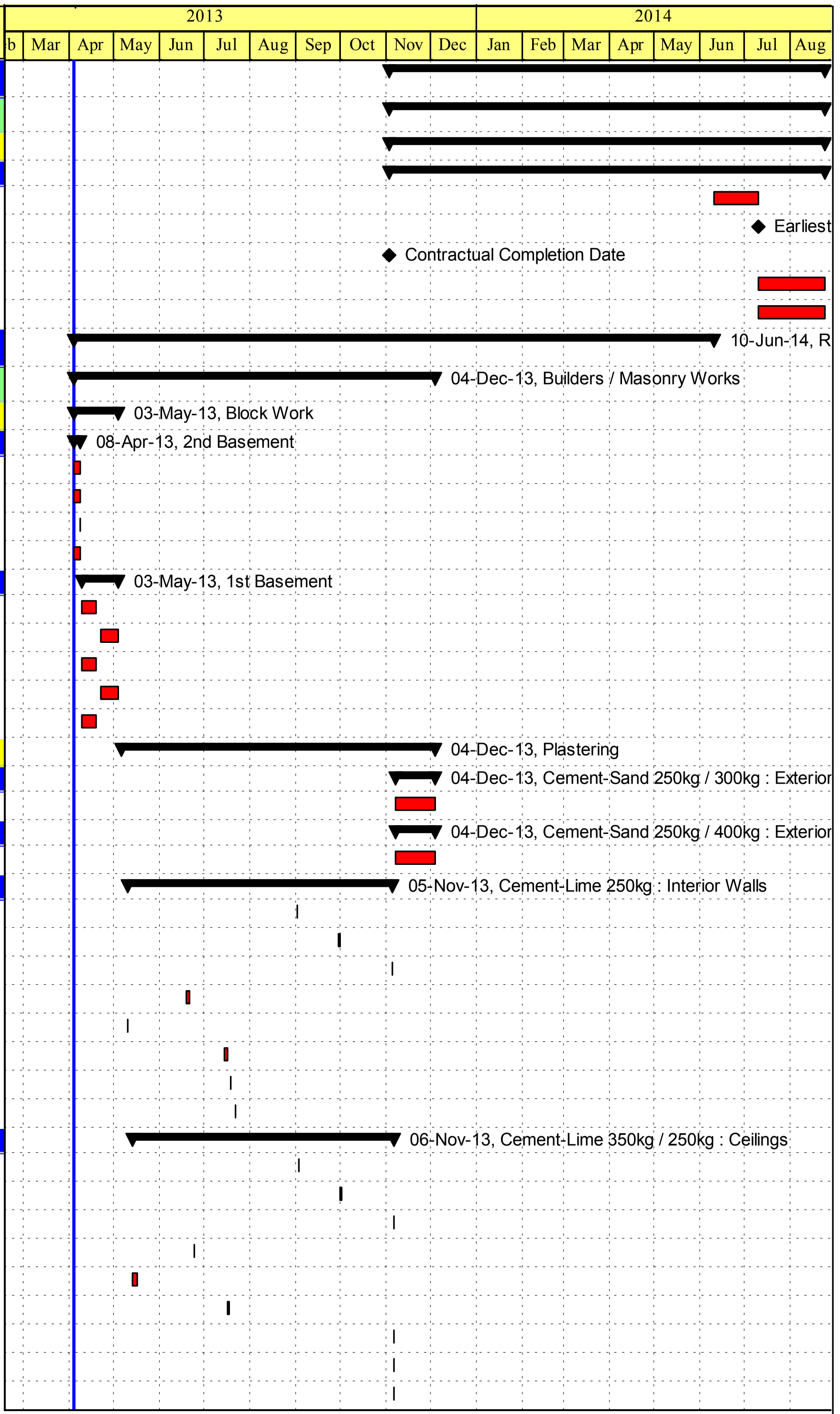
Updated Schedule 13.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		204	03-Nov-13	24-Aug-14	0
General		204	03-Nov-13	24-Aug-14	0
General		204	03-Nov-13	24-Aug-14	0
General		204	03-Nov-13	24-Aug-14	0
GEN99100	Tests on Completion	30	11-Jun-14	10-Jul-14	0
GEN99500	Earliest Completion of All Scope	0		10-Jul-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	11-Jul-14	24-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	11-Jul-14	24-Aug-14	0
RECEPTION CENTER		295	04-Apr-13	10-Jun-14	0
Builders / Masonry Works		164	04-Apr-13	04-Dec-13	0
Block Work		21	04-Apr-13	03-May-13	0
2nd Basement		3	04-Apr-13	08-Apr-13	0
RC.4.A.01.B.BS2	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	04-Apr-13	08-Apr-13	0
RC.4.A.02.B.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	04-Apr-13	08-Apr-13	0
RC.4.A.02.C.BS2	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	08-Apr-13	08-Apr-13	0
RC.4.A.04.B.BS2	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	04-Apr-13	08-Apr-13	0
1st Basement		18	09-Apr-13	03-May-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	09-Apr-13	19-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	22-Apr-13	03-May-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	09-Apr-13	19-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	22-Apr-13	03-May-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	09-Apr-13	19-Apr-13	0
Plastering		143	06-May-13	04-Dec-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	07-Nov-13	04-Dec-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg and 300 kg cement per m3, re...	20	07-Nov-13	04-Dec-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	07-Nov-13	04-Dec-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg and 400 kg cement per m3, re...	20	07-Nov-13	04-Dec-13	0
Cement-Lime 250kg : Interior Walls		118	10-May-13	05-Nov-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	02-Sep-13	02-Sep-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	30-Sep-13	30-Sep-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	05-Nov-13	05-Nov-13	0
RC.4.C.03.BS1	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	3	19-Jun-13	21-Jun-13	0
RC.4.C.03.BS2	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	10-May-13	10-May-13	0
RC.4.C.03.GR	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	2	15-Jul-13	16-Jul-13	0
RC.4.C.03.H	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	19-Jul-13	19-Jul-13	0
RC.4.C.03.I	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	22-Jul-13	22-Jul-13	0
Cement-Lime 350kg / 250kg : Ceilings		117	14-May-13	06-Nov-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	03-Sep-13	03-Sep-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	01-Oct-13	01-Oct-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	06-Nov-13	06-Nov-13	0
RC.4.C.04.BS1	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	24-Jun-13	24-Jun-13	0
RC.4.C.04.BS2	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	3	14-May-13	16-May-13	0
RC.4.C.04.GR	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	17-Jul-13	17-Jul-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	06-Nov-13	06-Nov-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	06-Nov-13	06-Nov-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	06-Nov-13	06-Nov-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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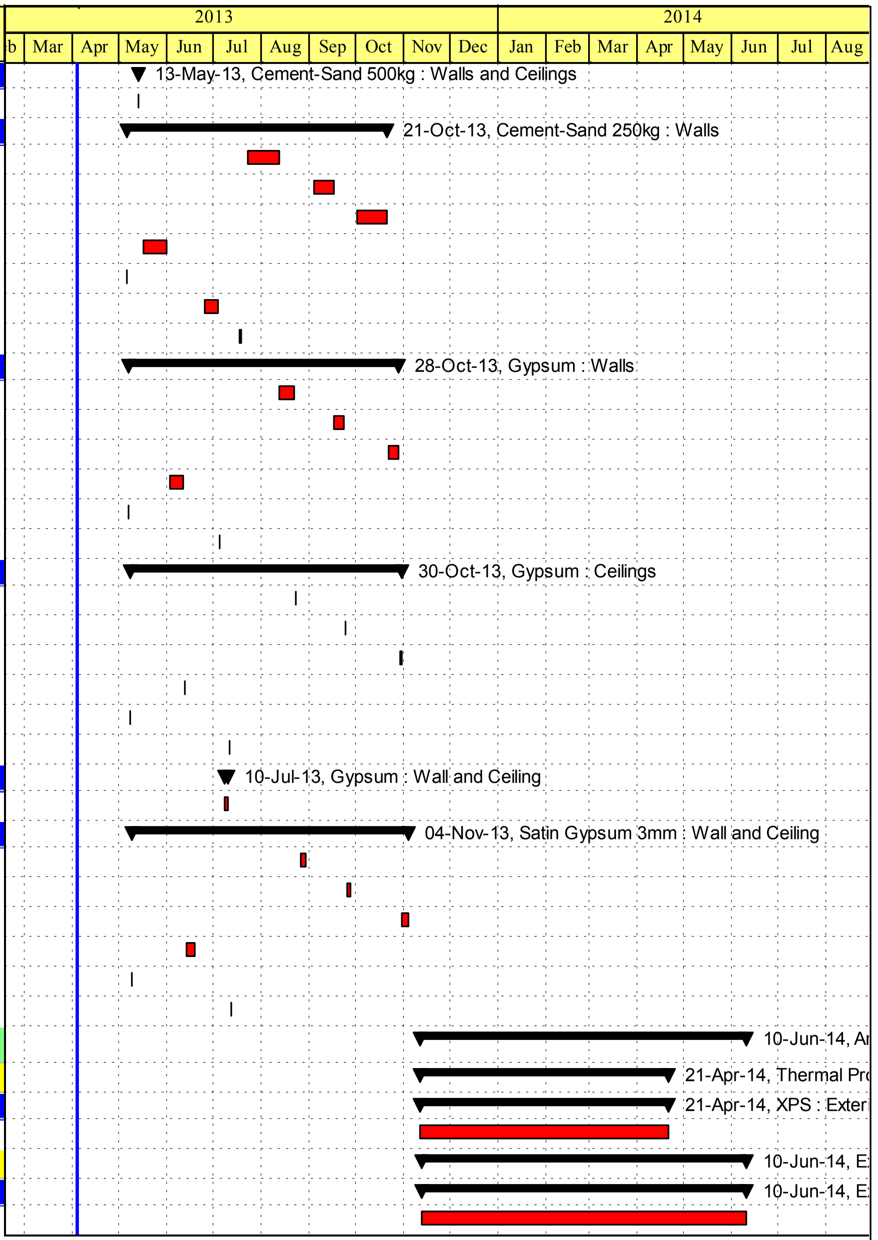
Updated Schedule 14

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
Cement-Sand 500kg : Walls and Ceilings		1	13-May-13	13-May-13	0
RC.4.C.05.BS2	Cement-sand plaster, applied in one coat, with 500 kg cement per m3, to walls and ceil...	1	13-May-13	13-May-13	0
Cement-Sand 250kg : Walls		112	06-May-13	21-Oct-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	12	23-Jul-13	12-Aug-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	04-Sep-13	16-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	02-Oct-13	21-Oct-13	0
RC.4.C.06.BS1	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	11	17-May-13	31-May-13	0
RC.4.C.06.BS2	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	06-May-13	06-May-13	0
RC.4.C.06.GR	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	8	25-Jun-13	04-Jul-13	0
RC.4.C.06.H	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	1	18-Jul-13	18-Jul-13	0
Gypsum : Walls		116	07-May-13	28-Oct-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	8	13-Aug-13	22-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	17-Sep-13	23-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	22-Oct-13	28-Oct-13	0
RC.4.C.08.BS1	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	7	03-Jun-13	11-Jun-13	0
RC.4.C.08.BS2	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	07-May-13	07-May-13	0
RC.4.C.08.GR	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	1	05-Jul-13	05-Jul-13	0
Gypsum : Ceilings		116	08-May-13	30-Oct-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	23-Aug-13	23-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	24-Sep-13	24-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	30-Oct-13	30-Oct-13	0
RC.4.C.09.BS1	Gypsum plaster, applied in one coat, to ceilings	1	12-Jun-13	12-Jun-13	0
RC.4.C.09.BS2	Gypsum plaster, applied in one coat, to ceilings	1	08-May-13	08-May-13	0
RC.4.C.09.GR	Gypsum plaster, applied in one coat, to ceilings	1	11-Jul-13	11-Jul-13	0
Gypsum : Wall and Ceiling		3	08-Jul-13	10-Jul-13	0
RC.4.C.10.GR	Gypsum priming, to wall and ceiling plaster	3	08-Jul-13	10-Jul-13	0
Satin Gypsum 3mm : Wall and Ceiling		118	09-May-13	04-Nov-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	26-Aug-13	29-Aug-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	25-Sep-13	27-Sep-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	31-Oct-13	04-Nov-13	0
RC.4.C.11.BS1	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	13-Jun-13	18-Jun-13	0
RC.4.C.11.BS2	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	09-May-13	09-May-13	0
RC.4.C.11.GR	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	1	12-Jul-13	12-Jul-13	0
Architectural Works		149	11-Nov-13	10-Jun-14	0
Thermal Protection		115	11-Nov-13	21-Apr-14	0
XPS : Exterior Walls & Ceilings		115	11-Nov-13	21-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer of glass-fiber-mesh-reinforced ...	61	11-Nov-13	21-Apr-14	0
Exterior Brick Facing		147	13-Nov-13	10-Jun-14	0
Exterior Brick Facing		147	13-Nov-13	10-Jun-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesive mortar to specially recesse...	93	13-Nov-13	10-Jun-14	0



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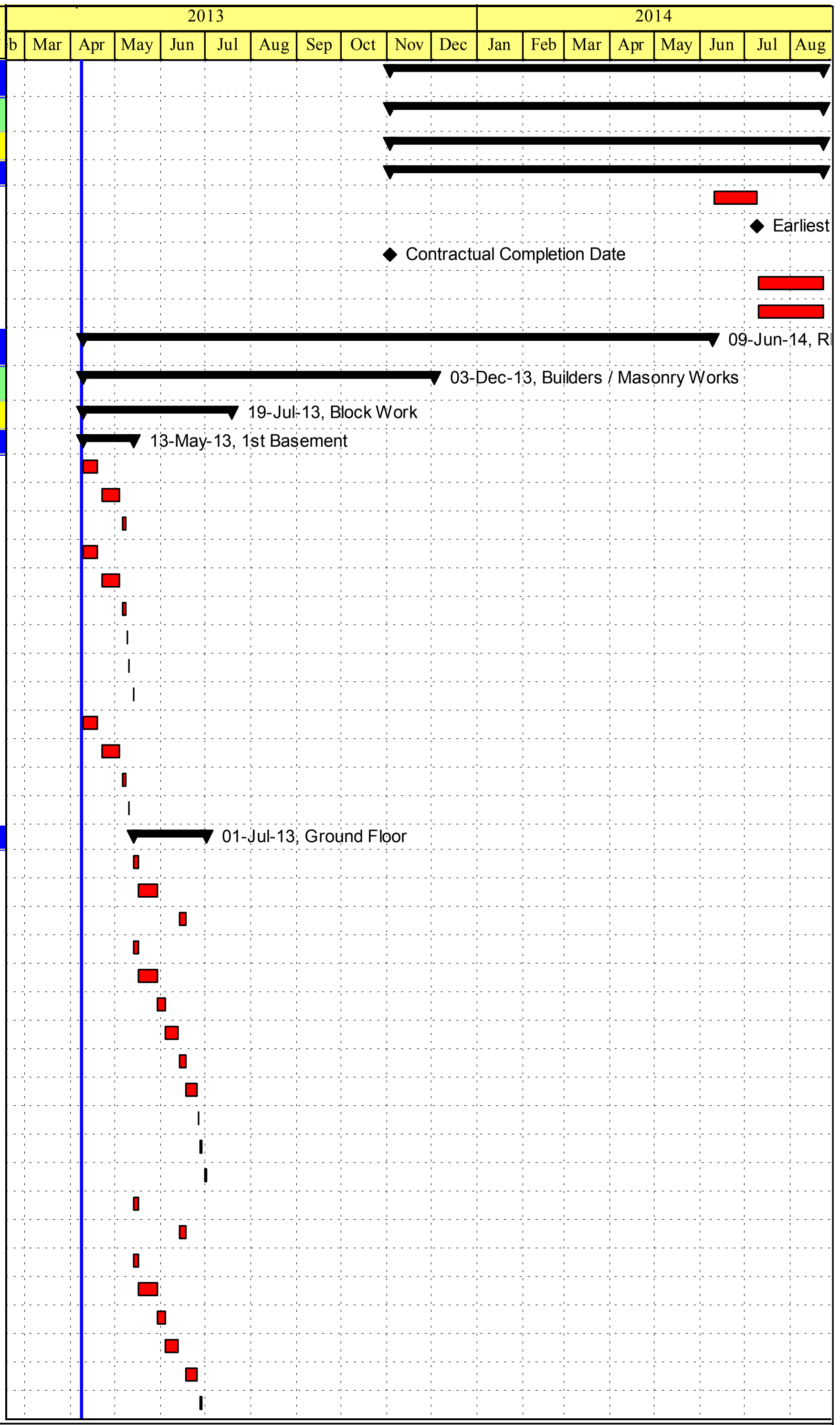
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		204	03-Nov-13	23-Aug-14	0
General		204	03-Nov-13	23-Aug-14	0
General		204	03-Nov-13	23-Aug-14	0
General		204	03-Nov-13	23-Aug-14	0
GEN99100	Tests on Completion	30	10-Jun-14	09-Jul-14	0
GEN99500	Earliest Completion of All Scope	0		09-Jul-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	10-Jul-14	23-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	10-Jul-14	23-Aug-14	0
RECEPTION CENTER		291	09-Apr-13	09-Jun-14	0
Builders / Masonry Works		160	09-Apr-13	03-Dec-13	0
Block Work		73	09-Apr-13	19-Jul-13	0
1st Basement		24	09-Apr-13	13-May-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	09-Apr-13	19-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	22-Apr-13	03-May-13	0
RC.4.A.01.C.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	06-May-13	08-May-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	09-Apr-13	19-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	22-Apr-13	03-May-13	0
RC.4.A.02.C.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	06-May-13	08-May-13	0
RC.4.A.02.D.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	09-May-13	09-May-13	0
RC.4.A.02.F.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	10-May-13	10-May-13	0
RC.4.A.02.G.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	13-May-13	13-May-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	09-Apr-13	19-Apr-13	0
RC.4.A.04.B.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	22-Apr-13	03-May-13	0
RC.4.A.04.C.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	06-May-13	08-May-13	0
RC.4.A.04.F.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	1	10-May-13	10-May-13	0
Ground Floor		35	14-May-13	01-Jul-13	0
RC.4.A.01.A.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	14-May-13	16-May-13	0
RC.4.A.01.B.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	17-May-13	29-May-13	0
RC.4.A.01.E.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	13-Jun-13	17-Jun-13	0
RC.4.A.02.A.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	14-May-13	16-May-13	0
RC.4.A.02.B.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	17-May-13	29-May-13	0
RC.4.A.02.C.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	30-May-13	03-Jun-13	0
RC.4.A.02.D.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	04-Jun-13	12-Jun-13	0
RC.4.A.02.E.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	13-Jun-13	17-Jun-13	0
RC.4.A.02.F.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	18-Jun-13	25-Jun-13	0
RC.4.A.02.G.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	26-Jun-13	26-Jun-13	0
RC.4.A.02.H.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	27-Jun-13	28-Jun-13	0
RC.4.A.02.I.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	01-Jul-13	01-Jul-13	0
RC.4.A.03.A.GR	Bims block wall, 150 mm thick, laid in sand-cement mortar	3	14-May-13	16-May-13	0
RC.4.A.03.E.GR	Bims block wall, 150 mm thick, laid in sand-cement mortar	3	13-Jun-13	17-Jun-13	0
RC.4.A.04.A.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	14-May-13	16-May-13	0
RC.4.A.04.B.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	17-May-13	29-May-13	0
RC.4.A.04.C.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	30-May-13	03-Jun-13	0
RC.4.A.04.D.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	04-Jun-13	12-Jun-13	0
RC.4.A.04.F.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	18-Jun-13	25-Jun-13	0
RC.4.A.04.H.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	27-Jun-13	28-Jun-13	0



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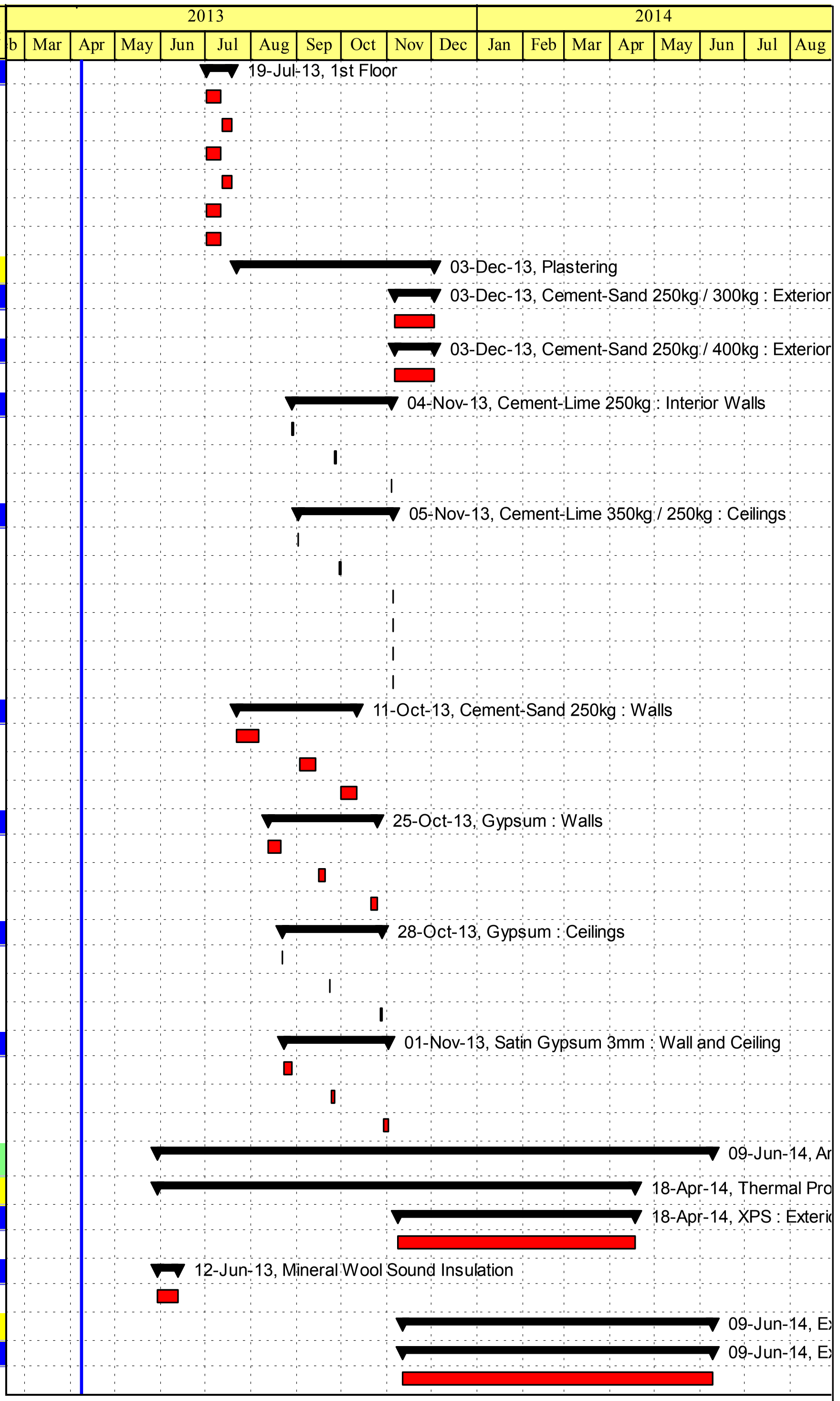
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
1st Floor		14	02-Jul-13	19-Jul-13	0
RC.4.A.01.A.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	8	02-Jul-13	11-Jul-13	0
RC.4.A.01.B.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	6	12-Jul-13	19-Jul-13	0
RC.4.A.02.A.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	8	02-Jul-13	11-Jul-13	0
RC.4.A.02.B.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	12-Jul-13	19-Jul-13	0
RC.4.A.03.A.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	8	02-Jul-13	11-Jul-13	0
RC.4.A.04.A.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	8	02-Jul-13	11-Jul-13	0
Plastering		87	22-Jul-13	03-Dec-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	06-Nov-13	03-Dec-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg and 300 kg cement per m3, re...	20	06-Nov-13	03-Dec-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	06-Nov-13	03-Dec-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg and 400 kg cement per m3, re...	20	06-Nov-13	03-Dec-13	0
Cement-Lime 250kg : Interior Walls		41	29-Aug-13	04-Nov-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	29-Aug-13	29-Aug-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	27-Sep-13	27-Sep-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	04-Nov-13	04-Nov-13	0
Cement-Lime 350kg / 250kg : Ceilings		41	02-Sep-13	05-Nov-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	02-Sep-13	02-Sep-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	30-Sep-13	30-Sep-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	05-Nov-13	05-Nov-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	05-Nov-13	05-Nov-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	05-Nov-13	05-Nov-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	05-Nov-13	05-Nov-13	0
Cement-Sand 250kg : Walls		56	22-Jul-13	11-Oct-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	12	22-Jul-13	06-Aug-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	03-Sep-13	13-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	01-Oct-13	11-Oct-13	0
Gypsum : Walls		49	12-Aug-13	25-Oct-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	8	12-Aug-13	21-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	16-Sep-13	20-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	21-Oct-13	25-Oct-13	0
Gypsum : Ceilings		42	22-Aug-13	28-Oct-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	22-Aug-13	22-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	23-Sep-13	23-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	28-Oct-13	28-Oct-13	0
Satin Gypsum 3mm : Wall and Ceiling		44	23-Aug-13	01-Nov-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	23-Aug-13	28-Aug-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	24-Sep-13	26-Sep-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	30-Oct-13	01-Nov-13	0
Architectural Works		255	30-May-13	09-Jun-14	0
Thermal Protection		221	30-May-13	18-Apr-14	0
XPS : Exterior Walls & Ceilings		115	08-Nov-13	18-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer of glass-fiber-mesh-reinforced ...	61	08-Nov-13	18-Apr-14	0
Mineral Wool Sound Insulation		10	30-May-13	12-Jun-13	0
RC.5.A.07	Mineral wool sound insulation, 50 mm thick, to walls, ceilings and beneath concrete e...	10	30-May-13	12-Jun-13	0
Exterior Brick Facing		147	12-Nov-13	09-Jun-14	0
Exterior Brick Facing		147	12-Nov-13	09-Jun-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesive mortar to specially recesse...	93	12-Nov-13	09-Jun-14	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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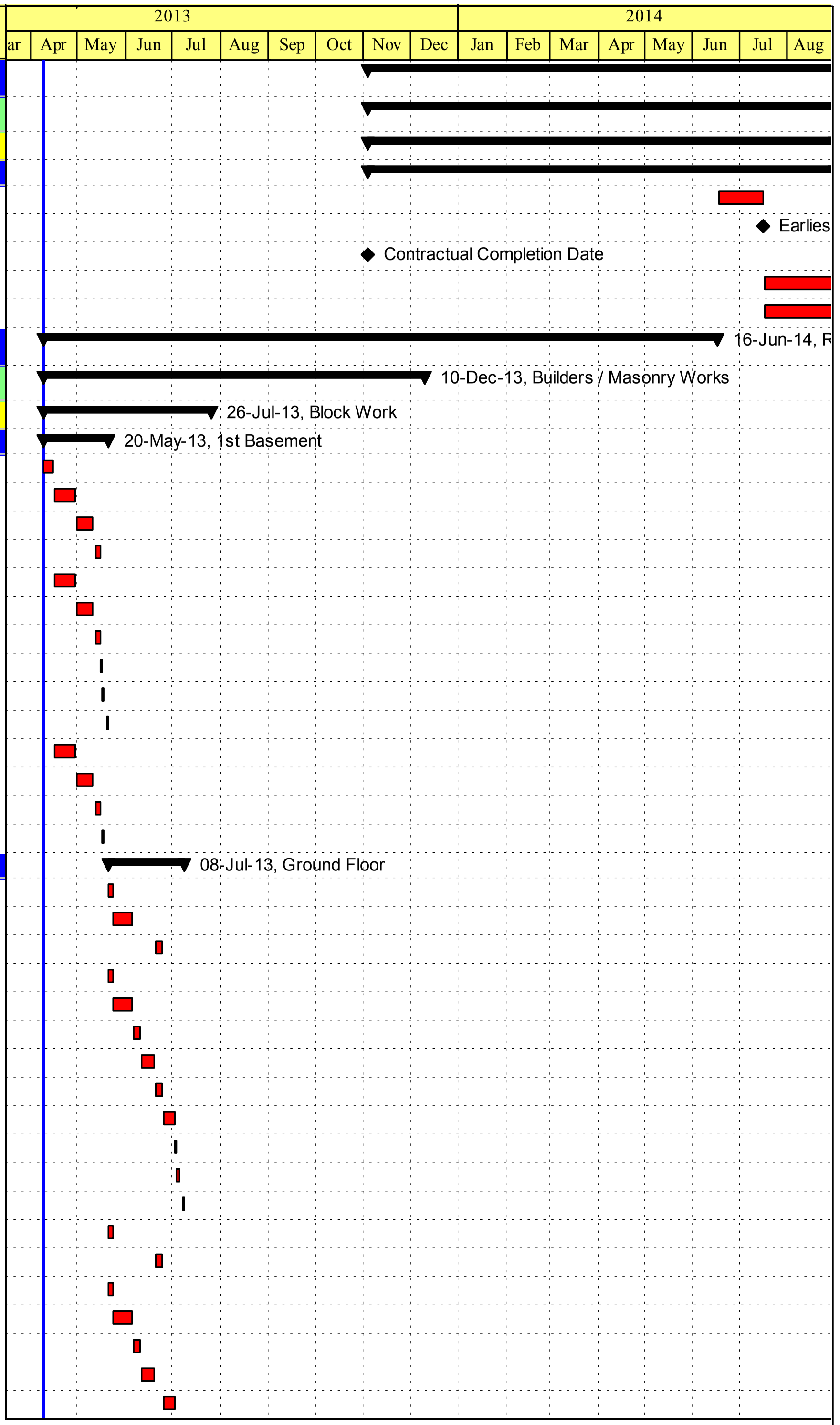
Updated Schedule 15

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		209	03-Nov-13	30-Aug-14	0
General		209	03-Nov-13	30-Aug-14	0
General		209	03-Nov-13	30-Aug-14	0
General		209	03-Nov-13	30-Aug-14	0
GEN99100	Tests on Completion	30	17-Jun-14	16-Jul-14	0
GEN99500	Earliest Completion of All Scope	0		16-Jul-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	17-Jul-14	30-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	17-Jul-14	30-Aug-14	0
RECEPTION CENTER		296	09-Apr-13	16-Jun-14	0
Builders / Masonry Works		165	09-Apr-13	10-Dec-13	0
Block Work		78	09-Apr-13	26-Jul-13	0
1st Basement		29	09-Apr-13	20-May-13	0
EVENT NO. 15	Customs Delay Suffered in Importation of Bims Block	5	09-Apr-13	15-Apr-13	0
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	16-Apr-13	29-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	30-Apr-13	10-May-13	0
RC.4.A.01.C.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	13-May-13	15-May-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	16-Apr-13	29-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	30-Apr-13	10-May-13	0
RC.4.A.02.C.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	13-May-13	15-May-13	0
RC.4.A.02.D.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	16-May-13	16-May-13	0
RC.4.A.02.F.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	17-May-13	17-May-13	0
RC.4.A.02.G.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	20-May-13	20-May-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	16-Apr-13	29-Apr-13	0
RC.4.A.04.B.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	30-Apr-13	10-May-13	0
RC.4.A.04.C.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	13-May-13	15-May-13	0
RC.4.A.04.F.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	1	17-May-13	17-May-13	0
Ground Floor		35	21-May-13	08-Jul-13	0
RC.4.A.01.A.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	21-May-13	23-May-13	0
RC.4.A.01.B.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	24-May-13	05-Jun-13	0
RC.4.A.01.E.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	20-Jun-13	24-Jun-13	0
RC.4.A.02.A.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	21-May-13	23-May-13	0
RC.4.A.02.B.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	24-May-13	05-Jun-13	0
RC.4.A.02.C.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	06-Jun-13	10-Jun-13	0
RC.4.A.02.D.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	11-Jun-13	19-Jun-13	0
RC.4.A.02.E.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	20-Jun-13	24-Jun-13	0
RC.4.A.02.F.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	25-Jun-13	02-Jul-13	0
RC.4.A.02.G.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	03-Jul-13	03-Jul-13	0
RC.4.A.02.H.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	04-Jul-13	05-Jul-13	0
RC.4.A.02.I.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	08-Jul-13	08-Jul-13	0
RC.4.A.03.A.GR	Bims block wall, 150 mm thick, laid in sand-cement mortar	3	21-May-13	23-May-13	0
RC.4.A.03.E.GR	Bims block wall, 150 mm thick, laid in sand-cement mortar	3	20-Jun-13	24-Jun-13	0
RC.4.A.04.A.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	21-May-13	23-May-13	0
RC.4.A.04.B.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	24-May-13	05-Jun-13	0
RC.4.A.04.C.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	06-Jun-13	10-Jun-13	0
RC.4.A.04.D.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	11-Jun-13	19-Jun-13	0
RC.4.A.04.F.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	25-Jun-13	02-Jul-13	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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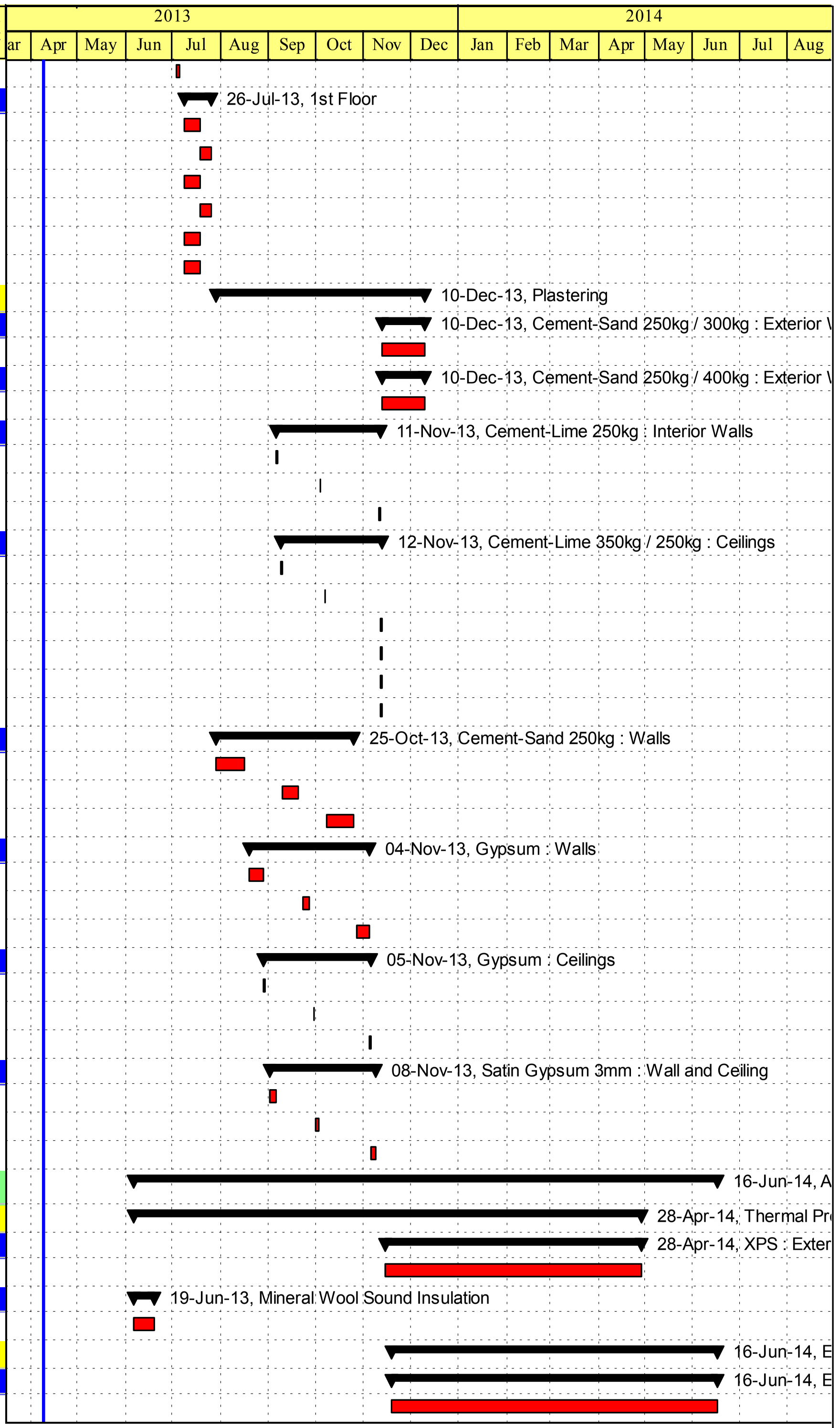
Updated Schedule 16.1

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.A.04.H.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	04-Jul-13	05-Jul-13	0
1st Floor		14	09-Jul-13	26-Jul-13	0
RC.4.A.01.A.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	8	09-Jul-13	18-Jul-13	0
RC.4.A.01.B.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	6	19-Jul-13	26-Jul-13	0
RC.4.A.02.A.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	8	09-Jul-13	18-Jul-13	0
RC.4.A.02.B.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	19-Jul-13	26-Jul-13	0
RC.4.A.03.A.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	8	09-Jul-13	18-Jul-13	0
RC.4.A.04.A.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	8	09-Jul-13	18-Jul-13	0
Plastering		87	29-Jul-13	10-Dec-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	13-Nov-13	10-Dec-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg and 300 kg cement per m3, re...	20	13-Nov-13	10-Dec-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	13-Nov-13	10-Dec-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg and 400 kg cement per m3, re...	20	13-Nov-13	10-Dec-13	0
Cement-Lime 250kg : Interior Walls		41	06-Sep-13	11-Nov-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	06-Sep-13	06-Sep-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	04-Oct-13	04-Oct-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	11-Nov-13	11-Nov-13	0
Cement-Lime 350kg / 250kg : Ceilings		41	09-Sep-13	12-Nov-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	09-Sep-13	09-Sep-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	07-Oct-13	07-Oct-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	12-Nov-13	12-Nov-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	12-Nov-13	12-Nov-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	12-Nov-13	12-Nov-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	12-Nov-13	12-Nov-13	0
Cement-Sand 250kg : Walls		56	29-Jul-13	25-Oct-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	12	29-Jul-13	16-Aug-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	10-Sep-13	20-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	08-Oct-13	25-Oct-13	0
Gypsum : Walls		49	19-Aug-13	04-Nov-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	8	19-Aug-13	28-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	23-Sep-13	27-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	28-Oct-13	04-Nov-13	0
Gypsum : Ceilings		42	29-Aug-13	05-Nov-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	29-Aug-13	29-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	30-Sep-13	30-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	05-Nov-13	05-Nov-13	0
Satin Gypsum 3mm : Wall and Ceiling		44	02-Sep-13	08-Nov-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	02-Sep-13	05-Sep-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	01-Oct-13	03-Oct-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	06-Nov-13	08-Nov-13	0
Architectural Works		255	06-Jun-13	16-Jun-14	0
Thermal Protection		221	06-Jun-13	28-Apr-14	0
XPS : Exterior Walls & Ceilings		115	15-Nov-13	28-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer of glass-fiber-mesh-reinforced ...	61	15-Nov-13	28-Apr-14	0
Mineral Wool Sound Insulation		10	06-Jun-13	19-Jun-13	0
RC.5.A.07	Mineral wool sound insulation, 50 mm thick, to walls, ceilings and beneath concrete e...	10	06-Jun-13	19-Jun-13	0
Exterior Brick Facing		147	19-Nov-13	16-Jun-14	0
Exterior Brick Facing		147	19-Nov-13	16-Jun-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesive mortar to specially recesse...	93	19-Nov-13	16-Jun-14	0



🟦 Actual Work 🟩 Remaining Work 🟥 Critical Remaining Work ◆ ◆ Milestone

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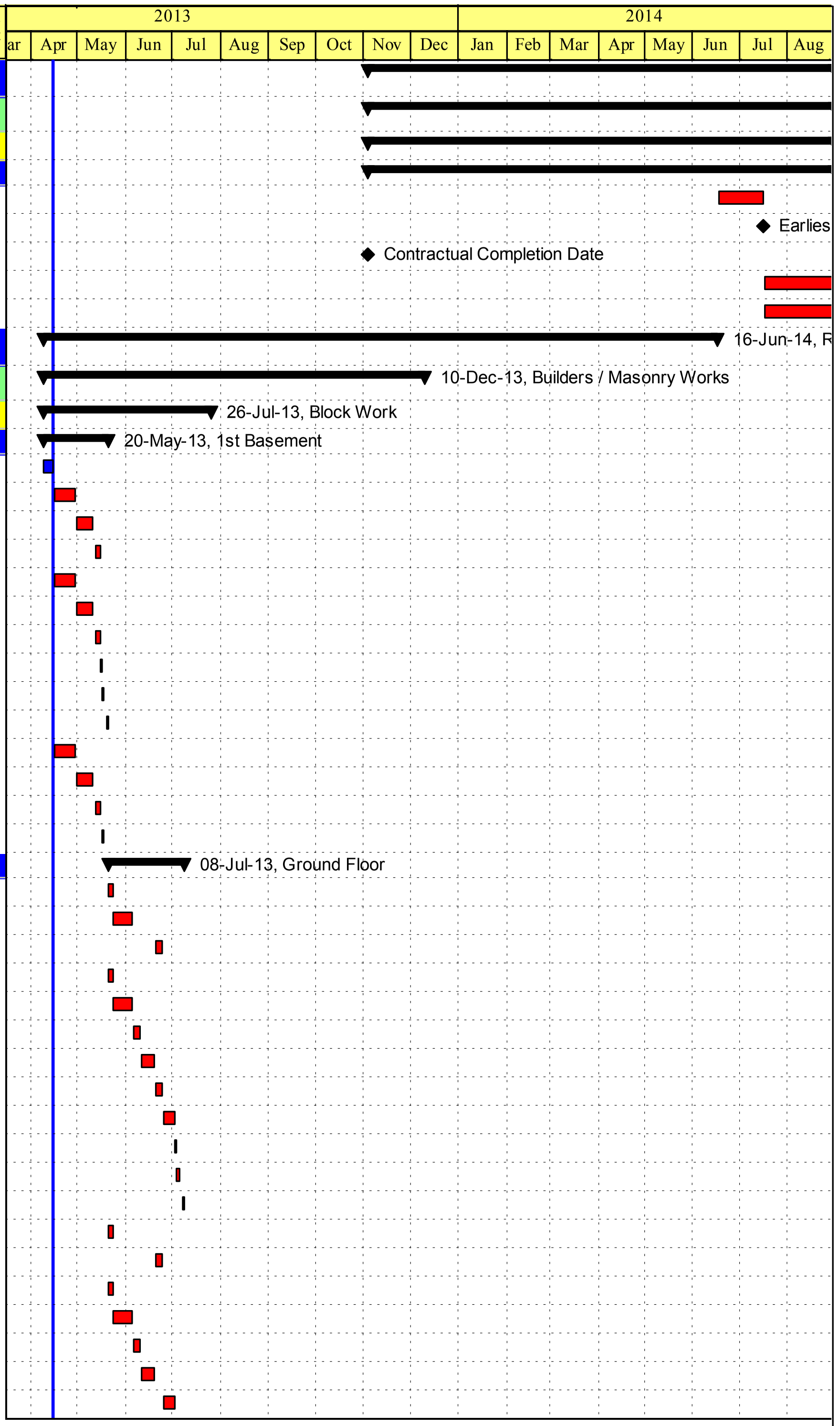
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		209	03-Nov-13	30-Aug-14	0
General		209	03-Nov-13	30-Aug-14	0
General		209	03-Nov-13	30-Aug-14	0
General		209	03-Nov-13	30-Aug-14	0
GEN99100	Tests on Completion	30	17-Jun-14	16-Jul-14	0
GEN99500	Earliest Completion of All Scope	0		16-Jul-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	17-Jul-14	30-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	17-Jul-14	30-Aug-14	0
RECEPTION CENTER		296	16-Apr-13	16-Jun-14	0
Builders / Masonry Works		165	16-Apr-13	10-Dec-13	0
Block Work		78	16-Apr-13	26-Jul-13	0
1st Basement		29	16-Apr-13	20-May-13	0
EVENT NO. 15	Customs Delay Suffered in Importation of Bims Block	5	16-Apr-13	16-Apr-13	
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	16-Apr-13	29-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	30-Apr-13	10-May-13	0
RC.4.A.01.C.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	13-May-13	15-May-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	16-Apr-13	29-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	30-Apr-13	10-May-13	0
RC.4.A.02.C.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	13-May-13	15-May-13	0
RC.4.A.02.D.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	16-May-13	16-May-13	0
RC.4.A.02.F.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	17-May-13	17-May-13	0
RC.4.A.02.G.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	20-May-13	20-May-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	16-Apr-13	29-Apr-13	0
RC.4.A.04.B.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	30-Apr-13	10-May-13	0
RC.4.A.04.C.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	13-May-13	15-May-13	0
RC.4.A.04.F.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	1	17-May-13	17-May-13	0
Ground Floor		35	21-May-13	08-Jul-13	0
RC.4.A.01.A.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	21-May-13	23-May-13	0
RC.4.A.01.B.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	24-May-13	05-Jun-13	0
RC.4.A.01.E.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	20-Jun-13	24-Jun-13	0
RC.4.A.02.A.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	21-May-13	23-May-13	0
RC.4.A.02.B.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	24-May-13	05-Jun-13	0
RC.4.A.02.C.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	06-Jun-13	10-Jun-13	0
RC.4.A.02.D.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	11-Jun-13	19-Jun-13	0
RC.4.A.02.E.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	20-Jun-13	24-Jun-13	0
RC.4.A.02.F.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	25-Jun-13	02-Jul-13	0
RC.4.A.02.G.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	03-Jul-13	03-Jul-13	0
RC.4.A.02.H.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	04-Jul-13	05-Jul-13	0
RC.4.A.02.I.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	08-Jul-13	08-Jul-13	0
RC.4.A.03.A.GR	Bims block wall, 150 mm thick, laid in sand-cement mortar	3	21-May-13	23-May-13	0
RC.4.A.03.E.GR	Bims block wall, 150 mm thick, laid in sand-cement mortar	3	20-Jun-13	24-Jun-13	0
RC.4.A.04.A.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	21-May-13	23-May-13	0
RC.4.A.04.B.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	24-May-13	05-Jun-13	0
RC.4.A.04.C.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	06-Jun-13	10-Jun-13	0
RC.4.A.04.D.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	11-Jun-13	19-Jun-13	0
RC.4.A.04.F.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	25-Jun-13	02-Jul-13	0



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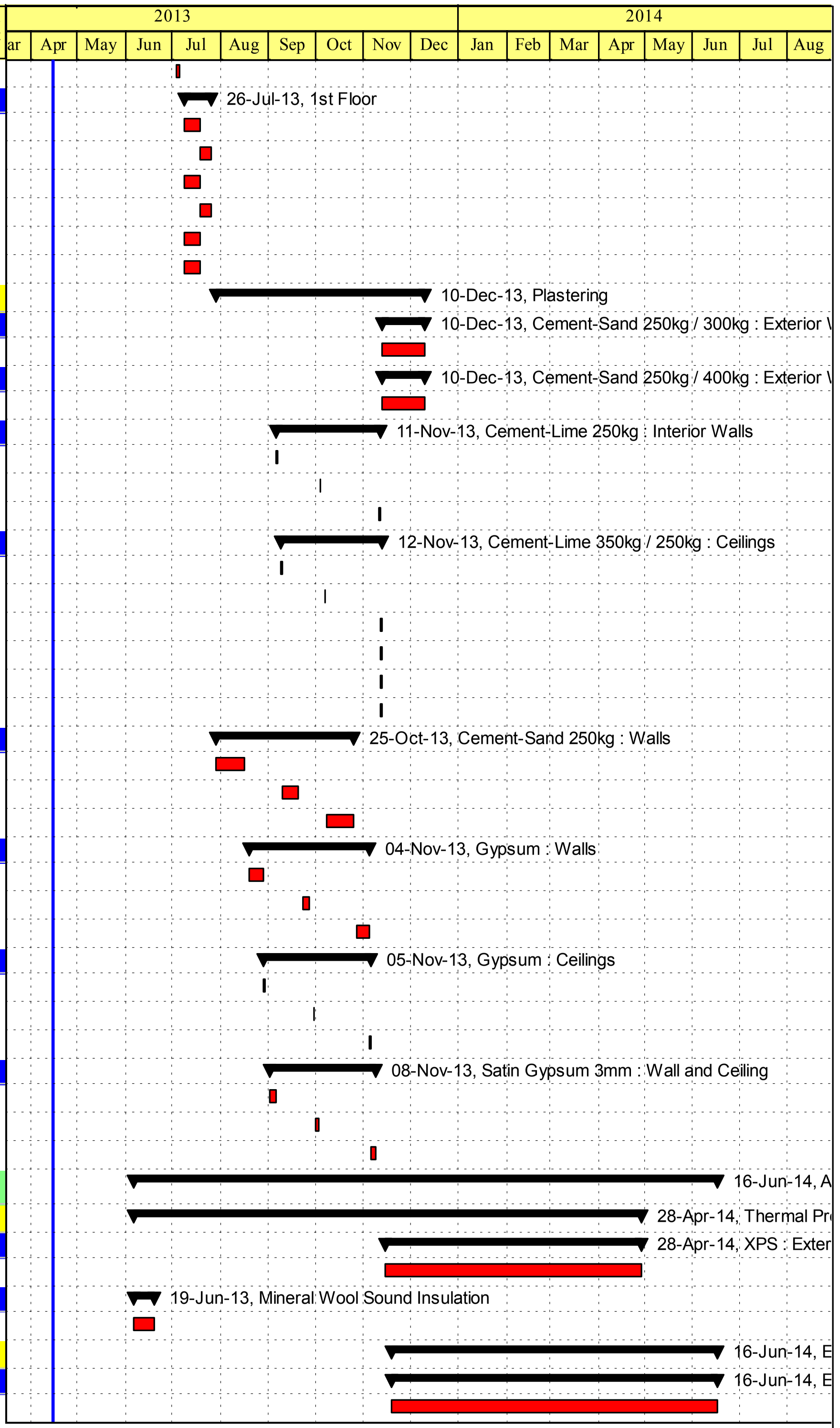
Updated Schedule 16.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.A.04.H.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	04-Jul-13	05-Jul-13	0
1st Floor		14	09-Jul-13	26-Jul-13	0
RC.4.A.01.A.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	8	09-Jul-13	18-Jul-13	0
RC.4.A.01.B.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	6	19-Jul-13	26-Jul-13	0
RC.4.A.02.A.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	8	09-Jul-13	18-Jul-13	0
RC.4.A.02.B.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	19-Jul-13	26-Jul-13	0
RC.4.A.03.A.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	8	09-Jul-13	18-Jul-13	0
RC.4.A.04.A.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	8	09-Jul-13	18-Jul-13	0
Plastering		87	29-Jul-13	10-Dec-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	13-Nov-13	10-Dec-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg and 300 kg cement per m3, re...	20	13-Nov-13	10-Dec-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	13-Nov-13	10-Dec-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg and 400 kg cement per m3, re...	20	13-Nov-13	10-Dec-13	0
Cement-Lime 250kg : Interior Walls		41	06-Sep-13	11-Nov-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	06-Sep-13	06-Sep-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	04-Oct-13	04-Oct-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	11-Nov-13	11-Nov-13	0
Cement-Lime 350kg / 250kg : Ceilings		41	09-Sep-13	12-Nov-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	09-Sep-13	09-Sep-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	07-Oct-13	07-Oct-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	12-Nov-13	12-Nov-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	12-Nov-13	12-Nov-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	12-Nov-13	12-Nov-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	12-Nov-13	12-Nov-13	0
Cement-Sand 250kg : Walls		56	29-Jul-13	25-Oct-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	12	29-Jul-13	16-Aug-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	10-Sep-13	20-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	08-Oct-13	25-Oct-13	0
Gypsum : Walls		49	19-Aug-13	04-Nov-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	8	19-Aug-13	28-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	23-Sep-13	27-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	28-Oct-13	04-Nov-13	0
Gypsum : Ceilings		42	29-Aug-13	05-Nov-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	29-Aug-13	29-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	30-Sep-13	30-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	05-Nov-13	05-Nov-13	0
Satin Gypsum 3mm : Wall and Ceiling		44	02-Sep-13	08-Nov-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	02-Sep-13	05-Sep-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	01-Oct-13	03-Oct-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	06-Nov-13	08-Nov-13	0
Architectural Works		255	06-Jun-13	16-Jun-14	0
Thermal Protection		221	06-Jun-13	28-Apr-14	0
XPS : Exterior Walls & Ceilings		115	15-Nov-13	28-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer of glass-fiber-mesh-reinforced ...	61	15-Nov-13	28-Apr-14	0
Mineral Wool Sound Insulation		10	06-Jun-13	19-Jun-13	0
RC.5.A.07	Mineral wool sound insulation, 50 mm thick, to walls, ceilings and beneath concrete e...	10	06-Jun-13	19-Jun-13	0
Exterior Brick Facing		147	19-Nov-13	16-Jun-14	0
Exterior Brick Facing		147	19-Nov-13	16-Jun-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesive mortar to specially recesse...	93	19-Nov-13	16-Jun-14	0



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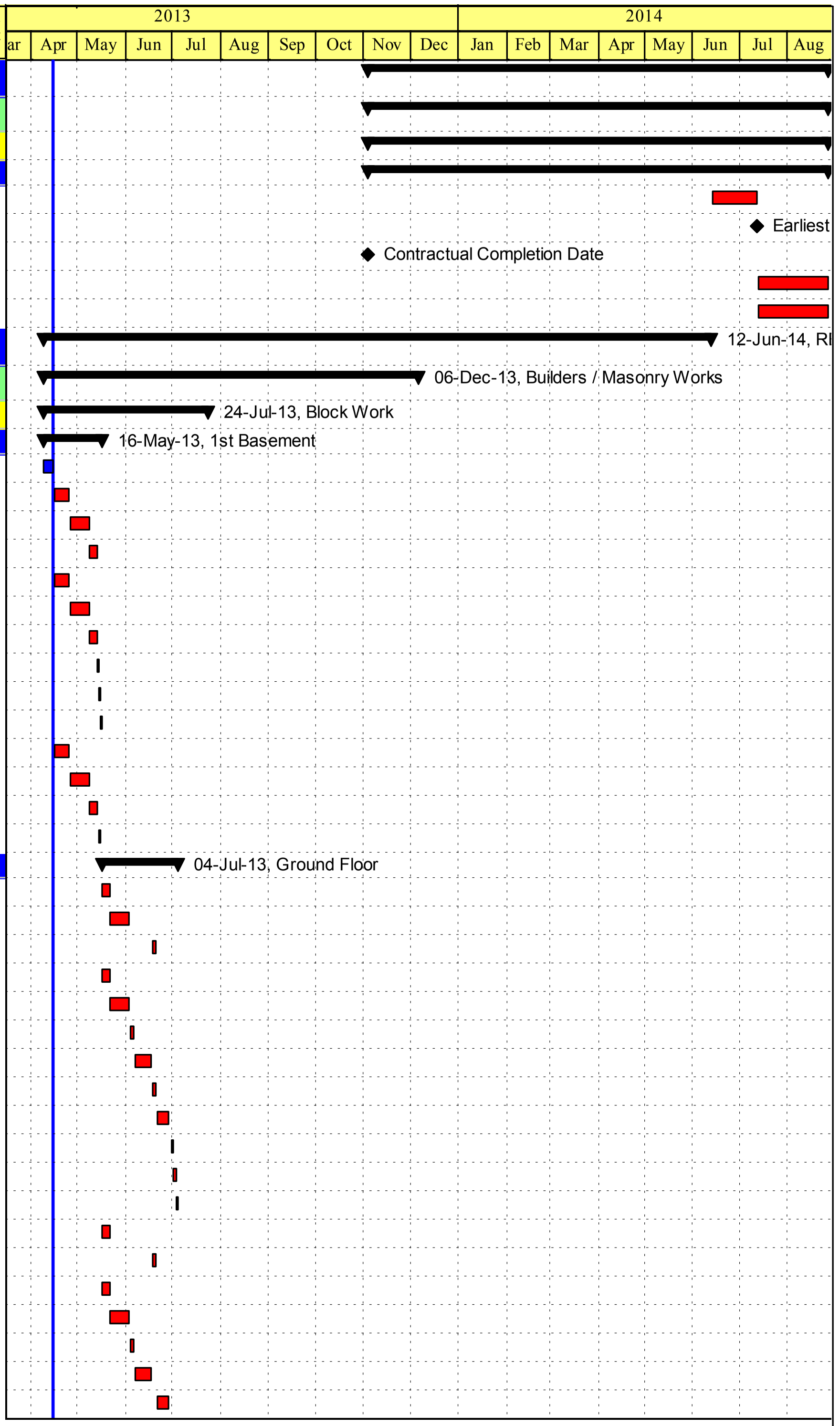
Updated Schedule 16.2

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
GENERAL		206	03-Nov-13	26-Aug-14	0
General		206	03-Nov-13	26-Aug-14	0
General		206	03-Nov-13	26-Aug-14	0
General		206	03-Nov-13	26-Aug-14	0
GEN99100	Tests on Completion	30	13-Jun-14	12-Jul-14	0
GEN99500	Earliest Completion of All Scope	0		12-Jul-14	0
GEN99900	Contractual Completion Date	0		03-Nov-13	0
GEN99910	Remedying of Defects	45	13-Jul-14	26-Aug-14	0
GEN99920	As-Built Drawings and Other Documents	45	13-Jul-14	26-Aug-14	0
RECEPTION CENTER		294	16-Apr-13	12-Jun-14	0
Builders / Masonry Works		163	16-Apr-13	06-Dec-13	0
Block Work		76	16-Apr-13	24-Jul-13	0
1st Basement		27	16-Apr-13	16-May-13	0
EVENT NO. 15	Customs Delay Suffered in Importation of Bims Block	5	16-Apr-13	16-Apr-13	
RC.4.A.01.A.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	7	16-Apr-13	25-Apr-13	0
RC.4.A.01.B.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	26-Apr-13	08-May-13	0
RC.4.A.01.C.BS1	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	09-May-13	13-May-13	0
RC.4.A.02.A.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	16-Apr-13	25-Apr-13	0
RC.4.A.02.B.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	26-Apr-13	08-May-13	0
RC.4.A.02.C.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	09-May-13	13-May-13	0
RC.4.A.02.D.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	14-May-13	14-May-13	0
RC.4.A.02.F.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	15-May-13	15-May-13	0
RC.4.A.02.G.BS1	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	16-May-13	16-May-13	0
RC.4.A.04.A.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	16-Apr-13	25-Apr-13	0
RC.4.A.04.B.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	26-Apr-13	08-May-13	0
RC.4.A.04.C.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	09-May-13	13-May-13	0
RC.4.A.04.F.BS1	Bims block wall, 100 mm thick, laid in sand-cement mortar	1	15-May-13	15-May-13	0
Ground Floor		35	17-May-13	04-Jul-13	0
RC.4.A.01.A.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	17-May-13	21-May-13	0
RC.4.A.01.B.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	9	22-May-13	03-Jun-13	0
RC.4.A.01.E.GR	Bims block wall, 250 mm thick, laid in sand-cement mortar	3	18-Jun-13	20-Jun-13	0
RC.4.A.02.A.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	17-May-13	21-May-13	0
RC.4.A.02.B.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	9	22-May-13	03-Jun-13	0
RC.4.A.02.C.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	04-Jun-13	06-Jun-13	0
RC.4.A.02.D.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	7	07-Jun-13	17-Jun-13	0
RC.4.A.02.E.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	3	18-Jun-13	20-Jun-13	0
RC.4.A.02.F.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	21-Jun-13	28-Jun-13	0
RC.4.A.02.G.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	01-Jul-13	01-Jul-13	0
RC.4.A.02.H.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	2	02-Jul-13	03-Jul-13	0
RC.4.A.02.I.GR	Bims block wall, 200 mm thick, laid in sand-cement mortar	1	04-Jul-13	04-Jul-13	0
RC.4.A.03.A.GR	Bims block wall, 150 mm thick, laid in sand-cement mortar	3	17-May-13	21-May-13	0
RC.4.A.03.E.GR	Bims block wall, 150 mm thick, laid in sand-cement mortar	3	18-Jun-13	20-Jun-13	0
RC.4.A.04.A.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	17-May-13	21-May-13	0
RC.4.A.04.B.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	9	22-May-13	03-Jun-13	0
RC.4.A.04.C.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	3	04-Jun-13	06-Jun-13	0
RC.4.A.04.D.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	7	07-Jun-13	17-Jun-13	0
RC.4.A.04.F.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	6	21-Jun-13	28-Jun-13	0



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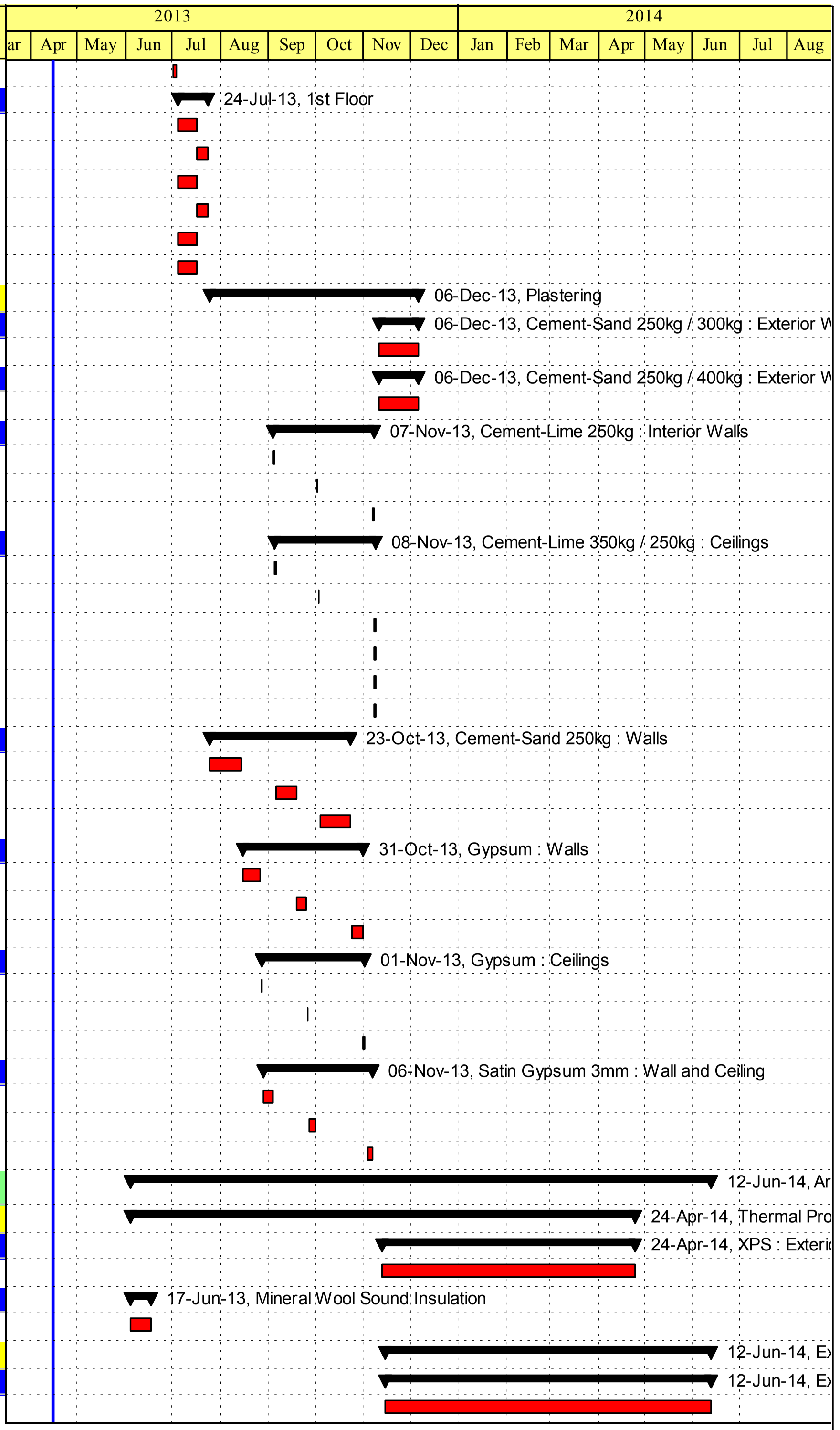
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Total Float
RC.4.A.04.H.GR	Bims block wall, 100 mm thick, laid in sand-cement mortar	2	02-Jul-13	03-Jul-13	0
1st Floor		14	05-Jul-13	24-Jul-13	0
RC.4.A.01.A.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	8	05-Jul-13	16-Jul-13	0
RC.4.A.01.B.1F	Bims block wall, 250 mm thick, laid in sand-cement mortar	6	17-Jul-13	24-Jul-13	0
RC.4.A.02.A.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	8	05-Jul-13	16-Jul-13	0
RC.4.A.02.B.1F	Bims block wall, 200 mm thick, laid in sand-cement mortar	6	17-Jul-13	24-Jul-13	0
RC.4.A.03.A.1F	Bims block wall, 150 mm thick, laid in sand-cement mortar	8	05-Jul-13	16-Jul-13	0
RC.4.A.04.A.1F	Bims block wall, 100 mm thick, laid in sand-cement mortar	8	05-Jul-13	16-Jul-13	0
Plastering		87	25-Jul-13	06-Dec-13	0
Cement-Sand 250kg / 300kg : Exterior Walls		20	11-Nov-13	06-Dec-13	0
RC.4.C.01	Cement-sand plaster, applied in two coats, with 250 kg and 300 kg cement per m3, re...	20	11-Nov-13	06-Dec-13	0
Cement-Sand 250kg / 400kg : Exterior Walls		20	11-Nov-13	06-Dec-13	0
RC.4.C.02	Cement-sand plaster, applied in two coats, with 250 kg and 400 kg cement per m3, re...	20	11-Nov-13	06-Dec-13	0
Cement-Lime 250kg : Interior Walls		41	04-Sep-13	07-Nov-13	0
RC.4.C.03.1F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	04-Sep-13	04-Sep-13	0
RC.4.C.03.2F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	02-Oct-13	02-Oct-13	0
RC.4.C.03.3F	Cement-lime-sand plaster, applied in two coats, with 250 kg cement and 0.100 m3 lime...	1	07-Nov-13	07-Nov-13	0
Cement-Lime 350kg / 250kg : Ceilings		41	05-Sep-13	08-Nov-13	0
RC.4.C.04.1F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	05-Sep-13	05-Sep-13	0
RC.4.C.04.2F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	03-Oct-13	03-Oct-13	0
RC.4.C.04.3F	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	08-Nov-13	08-Nov-13	0
RC.4.C.04.M12	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	08-Nov-13	08-Nov-13	0
RC.4.C.04.M3	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	08-Nov-13	08-Nov-13	0
RC.4.C.04.M4	Cement-lime-sand plaster, applied in two coats, with first coat 350 kg cement per m3, ...	1	08-Nov-13	08-Nov-13	0
Cement-Sand 250kg : Walls		56	25-Jul-13	23-Oct-13	0
RC.4.C.06.1F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	12	25-Jul-13	14-Aug-13	0
RC.4.C.06.2F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	06-Sep-13	18-Sep-13	0
RC.4.C.06.3F	Cement-sand plaster, applied in one coat, with 250 kg cement per m3, to walls to recei...	9	04-Oct-13	23-Oct-13	0
Gypsum : Walls		49	15-Aug-13	31-Oct-13	0
RC.4.C.08.1F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	8	15-Aug-13	26-Aug-13	0
RC.4.C.08.2F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	19-Sep-13	25-Sep-13	0
RC.4.C.08.3F	Gypsum plaster, applied in one coat, to one coat cement-sand plastered walls	5	24-Oct-13	31-Oct-13	0
Gypsum : Ceilings		42	27-Aug-13	01-Nov-13	0
RC.4.C.09.1F	Gypsum plaster, applied in one coat, to ceilings	1	27-Aug-13	27-Aug-13	0
RC.4.C.09.2F	Gypsum plaster, applied in one coat, to ceilings	1	26-Sep-13	26-Sep-13	0
RC.4.C.09.3F	Gypsum plaster, applied in one coat, to ceilings	1	01-Nov-13	01-Nov-13	0
Satin Gypsum 3mm : Wall and Ceiling		44	28-Aug-13	06-Nov-13	0
RC.4.C.11.1F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	4	28-Aug-13	03-Sep-13	0
RC.4.C.11.2F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	27-Sep-13	01-Oct-13	0
RC.4.C.11.3F	Satin gypsum coating, 3 mm thick, to wall and ceiling plaster	3	04-Nov-13	06-Nov-13	0
Architectural Works		255	04-Jun-13	12-Jun-14	0
Thermal Protection		221	04-Jun-13	24-Apr-14	0
XPS : Exterior Walls & Ceilings		115	13-Nov-13	24-Apr-14	0
RC.5.A.05	Extruded polystyrene board, 60 mm thick, and a layer of glass-fiber-mesh-reinforced ...	61	13-Nov-13	24-Apr-14	0
Mineral Wool Sound Insulation		10	04-Jun-13	17-Jun-13	0
RC.5.A.07	Mineral wool sound insulation, 50 mm thick, to walls, ceilings and beneath concrete e...	10	04-Jun-13	17-Jun-13	0
Exterior Brick Facing		147	15-Nov-13	12-Jun-14	0
Exterior Brick Facing		147	15-Nov-13	12-Jun-14	0
RC.5.G.01	Brick facing units, 215x65x15 mm, attached with adhesive mortar to specially recesse...	93	15-Nov-13	12-Jun-14	0



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