



Title: A FIFA Sustainable Soccer Field in Every City (Pilot Project)

Course Title: Project Management

Course Number: ETM 545

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Report No.:

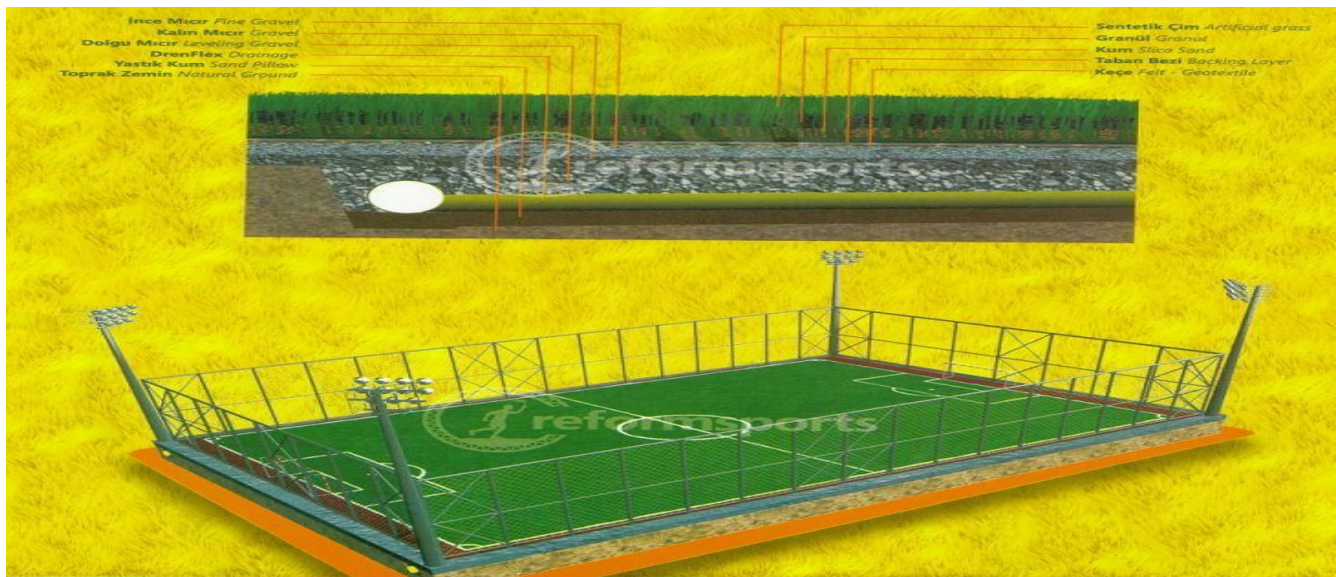
Type: Student Project

Note:

Abstract / Project Purpose:

With the explosion of FIFA revenues has come an opportunity to increase the funding for construction of FIFA soccer fields. FIFA desires to make sustainability a larger factor in the building of these facilities. In this new field construction strategy, “Hosts” are selected by a separate site selection committee who will choose the local sponsor for the projects. Hosts will be involved with permitting, and will eventually be given ownership of the completed facilities. Hosts can be municipalities, businesses, non-profit organizations, or individuals. Hosts will apply to receive a new FIFA constructed soccer field through a meticulous process which will have two core criteria: (1) Can the host provide a buildable and sustainable site?, and (2) Can the host provide long-term, sustainable support for the facility?

The purpose of this specific (pilot) project is to create a template to construct the 5-side sustainable soccer fields on the sites selected by a previous project committee. Our project team is a full-time, projectized team. Our specific responsibilities include selecting local and regional sources of competent labor and sustainable building materials, overseeing the construction process itself, liaise with Hosts during the construction process, and handing-off the completed facilities to the Hosts as well as the long-term sustainability project committee at FIFA, who we pass the facility to for FIFA sided long-term maintenance and support.



5-side outdoor soccer field (dimensions: 180 x 35 feet (inside 130 x 82 ft & outside 50 x 33 ft)

Objectives:

Our core objective are to create a template for building a 5-side sustainable outdoor soccer field based on the project management triangle (cost-scope-schedule), select and source local sustainable construction crews and materials whenever possible, and build the FIFA soccer fields on time, within budget, safely, and respectfully to the communities surrounding them. The project will terminate with a hand off the constructed field to the owner for long-term maintenance.

Overview:

The organization structure shown in **Appendix A** is a fictitious layout of FIFA which is assumed for the purposes of this paper. For an organization of FIFA's stature, it is assumed the organization is a mix of functional units each of which in essence can have several project teams within it. Our team is projectized team located within the PMO office. The pilot project WBS is considered as a precursor to a detailed project schedule. The 5-side soccer field project consists of 5 deliverables and 21 tasks which they have varying numbers under three sequence levels, the deliverables classified by alphabet letters and tasks classified by numbers.

Schedules:

The field construction team has been mandated by FIFA to begin the field construction initiative by building a couple fields a year for the first few years to build the . Through the learnings from the few we build initially, we can scale the efforts to build many across the world in a year. Currently, the accepted time frame for building each of the first few fields is 6 months; that is 120 working days. The assumption for this estimation is that a work week is 5 days and a labor resource on our team can work 40 hrs a week.

The project pilot has a start date of Monday, January 5th and a finishing date of Wednesday, May 20th. The major relationship between project tasks are finish-to-start. Duration are in weeks, and the project is planned to take 20 weeks to complete. The schedule includes five deliverables (customize plans to account for local consideration, budgeting, select a local synthetic turf system installer, field construction process, and post-install follow up & hand-off to owner) laid out in the WBS in **Appendix B** as broken down into 21 tasks were entered into Microsoft project applying the precedence of each task as can be seen in **Appendix E**. The baseline critical path begins with project start and proceeds through site requirement, research regional turf providers, qualification interview sessions for each vendor, rate manufacturing capabilities for vendor, rate design capabilities of vendors, rate warranties vendors, request for proposals, evaluate proposals, select and sign contract with vendors, specific site investigation, install construction entrance, Install erosion sediment control, excavate field to subgrade,

install perimeter concrete curb, install free draining base, of load turf rolls and lay, sew turf panels, add locally negotiated amenities, add FIFA and other banding, remove construction entrance, maintenance training, deliver certificate of completion, and project finish. As shown in the project schedule **Appendix H**, there are no constraints in the overall schedule.

The Network diagram produced in **Appendix I** shows the relationship of the tasks and how the work is structured to be completed within the 120 days' duration. The critical time according to **Appendix I**, is about 103 days and is depicted in **Appendix J**, the normal distribution plot. Using the normal distribution function plot in **Appendix J**, the project has a 95.9% chance of completion in 110 days – 10 days earlier than our normal duration. In effect, those 10 days can serve as a buffer in case of any events.

Resources:

In this section we discuss the resource requirements of the project. That include labor resources and non-labor resources. The schedule shown on the Gantt Chart in **Appendix H** indicates that the project is scheduled to be completed within 20 weeks. In total the work to be completed within these 20 weeks will take a total of 1,736 labor hours. Of these hours, 1368 is engineering management, 224 project management, 72 contractual work and 72 hours of environmental regulation.

Available labor resources (Project Personnel) :

The field construction team has the following members on this pilot project: the project manager, project engineer, HSE (Health, science and environment) advisor and a contract specialist. It is assumed that the above listed resources are fully available during the times their services are required for this project. The responsibilities of the (4) primary team members are discussed next.

1. The Project Manager (PM):

The PM coordinates labor and non-labor resources for the project: PM leads planning, controls and monitors the project during its execution, and leads its termination. The resource is allocated about 224 hours for the entire duration of the project (**see Appendix K**). From **Appendix K** this resource is mildly overloaded during the first few weeks into the project, but within the middle is virtually not scheduled, since most of the work is engineering and another resource is totally accountable to the team for that.

2. The Project Engineer (PE):

The PE does a wide variety of work including, design, general supervision of engineering, technology evaluation and acquisition and other engineering duties. The

PE is accountable to the project manager for all the outsourced engineering work. In addition to that, the resource is the one to make sure all FIFA engineering specifications and standards are being enforced throughout the execution of the project. Even though the PE does not do the actual construction work, s/he is the front end person for the project team with all third party organizations who are either selling an engineering equipment or doing technical work and then reporting progress to the project manager. The project requires a minimum of 1,368 hours of work from this resource. It can be noted on **Appendix K**, that this resource is very overloaded for the first few weeks and then things fall back to nearly a normal week workload each remaining week, and reduces down towards the end.

3. **Health, Safety & Environment Advisor (HSE):**

The HSE role is responsible for auditing the construction site regarding any health, safety or environmental impacts. The HSE advisor is ultimately responsible for all safety measures necessary to protect assets, people, and the environment on the job site or on any adjacent properties. The HSE advisor is also responsible for developing an HSE plan for the pilot project. The pilot HSE plan will delineate all of the elements of HSE to be managed over the whole lifecycle of the project. The HSE is responsible for making sure the pilot HSE plan is submitted for FIFA HSE main office to review.

It can be noted from **Appendix K**, that this resource is mostly required at the beginning of the project. Also, considering the fact that the personnel must already be familiar with the locality, our team usually employs the services of a consultant – one who has worked or lived within the community for quite some years. The project requires 72 working hours for this resource at the beginning and then this resource will be on call for any issues pop up later.

4. **Contract specialist:**

This role is critical to any legal work the team has to go through. For instance, we deal with vendors, warranties and different contracts before, during and after the project. This role is one with a legal background with business and litigation experience. Considering the risk of liability, this person is not a consultant, but very much an integral member of our team from project to project. The resource is required very early in the process when the project engineer is evaluating different vendors and assessing their warranties. And then towards the end of the project, this fellow is called upon to help draft documentation of completion and handover notes etc. A total of 72 working hours is required of this resource for the entire project duration but he can be available to support the project engineer if need be.

Reasoning behind resource loading

The resource loading table in **Appendix K** shows the spread of resource requirement in hours per week throughout the execution of the project. The appendix was constructed based on the WBS in **Appendix B** in conjunction with the bottom-up estimate of how many days of work is required and which resource is needed to complete that work. Consequently, the list of specific roles and how many hours per week from the start to completion of the project was formulated and the result is what is presented in **Appendix K**. It is assumed that a work week is made up of 40 hours and a week is 5 days.

We have noted the fact that the project engineer is over-allocated in many of the weeks. However, since most of the work to be done in the initial weeks by the PE are vendor assessment and warranty analysis, resource levelling could be achieved by allocating some of these kind of works to the contract specialist who will be involved in those activities anyway. Doing resource levelling this way, the PE will be moderately relieved, which means it is possible that the PE might not have to do all those huge hours on **Appendix K**, especially with regards to the first 5 weeks when the PE is very hugely over-allocated. Coincidentally, the contract specialist is very under-allocated and can truly be leveraged on things such as travelling to vendor locations, conducting interview sessions with vendors with some support from the PE whose domain most of the work is being carried within.

Non-Labor resources:

Apart from the labor requirements, the construction process requires various kinds of equipment, outsourced construction labor (which in this project is seen as capital) and other logistics off or on-site to move smoothly. The cost allocation for labor resources and capital expenses for each deliverable was budgeted and spread through the entire project duration of the project (See **Appendix F**). In total, our budget stands at about \$308,577. 00 US dollars with about 38% going to labor cost for resource roles discussed above. The remaining 62% constitute the cost of labor for construction workers (to which actual construction is outsourced) who actually are on the ground plus capital acquisition cost for this project.

Reasoning behind dollars spent

A detail of spending on capital and labor is presented in **Appendix F**. The expenses are deliverable based; and is made up of the labor cost for the resources loaded on **Appendix K** and the cost of capital. Capital cost include the cost of materials, equipment and labor cost contracted from other third party organizations. For instance, if we hired XYZ company for electrical works, since we do not directly manage the

employees of that company we consider the cost of labor by XYZ company as capital cost. For our purposes therefore, labor cost only refers to the cost for engaging the project manager, project engineer, HSE advisor and the contract specialist.

We assume that each of the four resources on our team is paid an average yearly salary of \$150,000. From this reasoning a daily wage can be estimated per person and that amounts to about \$577/day/person. This estimate is applied as the cost per hour for engaging the services of each of the four key resources on this project.

Risk Management Plans:

The Schedule is more important than cost for us. The whole initiative has as the ultimate objective to 'clean up' FIFA's image and reputation, plus the values involved in these projects do not represent much compared to the astronomic amount of money FIFA has at its disposal. Therefore, it is important for FIFA to deliver the projects in time (to give the impression of an efficient and diligent organization). In order to do that, FIFA would be willing to accept some costs overruns on the projects

Identify Risks - Three major risk groups:

1. Economy: if the country's economy is unstable, we have to be monitoring it closely. If the economy goes down abruptly, the government might wanna give up on the project or might wanna shrink the scope considerably. Although the project is funded by FIFA, the maintenance is responsibility of the owner (local government). Also, if the inflation rate is too high, our costs will be seriously impacted.
2. Government: we might face some difficulties in getting permits and other authorizations from local governments - especially if the local government is corrupt and/or inefficient.
3. Weather: natural disasters may influence our schedule and rain seasons / tornado seasons. Those events could delay tasks within the field construction process deliverable - such as concrete pouring, installing geotextile and installing drainage system

Identify Risks - Three major critical task risks:

1. Install free draining base: (critical path and 4.69 variance). To prepare for this contingency we will measure: the ability of the drainage system to handle a 100 year rain, through tests that will be compared to FIFA's standards for drainage systems.

2. Install construction entrance: (critical path and 1.78 variance). To prepare for this contingency we will measure: the ability of the construction entrance to allow building site access with minimal disruption to surrounding traffic.
3. Offload turf rolls and place turf: (critical path and 1.78 variance). To prepare for this contingency we will measure: the speed of turn laying and the amount of turf surplus. This activity depends on the local turf supplier delivering the material on time, therefore we have to monitor their activity to make sure no delays are going to be experienced. We will need weekly update reports from the supplier after the order is made.

Evaluation Methods:

What kind of control metrics will we use? Given the fact that, for this particular project, the schedule is deemed to be more important than cost, that is the constraint we want to monitor more closely. Also, we have chosen SPI instead of SV due to the fact that SPI is a ratio, so we are able to compare performance across different tasks. In order to do this we plan to make use of the metric Schedule Performance Index (SPI), which comes from the formula:

$$\text{SPI} = \text{EV/PV}$$

where:

- EV = Earned Value = what you actually got from that particular task
- PV = Planned Value = what you have planned on the baseline to get from that task, on the same period of time

We are going to monitor tasks by calculating their schedule performance index, and we will plot the results on a chart for an overall control. We have chosen to use schedule performance index instead of the critical ratio, for example, because by using critical ratio, you weight both schedule performance and cost performance equally, meaning that one of those performances may cancel off and therefore mask the other. E.g. if we are very bad at the schedule but very good at budget, our critical ratio would be neutral and we would consider the project to be fine, but once we care much more about schedule than cost, this metric would be illusive and deceiving for us.

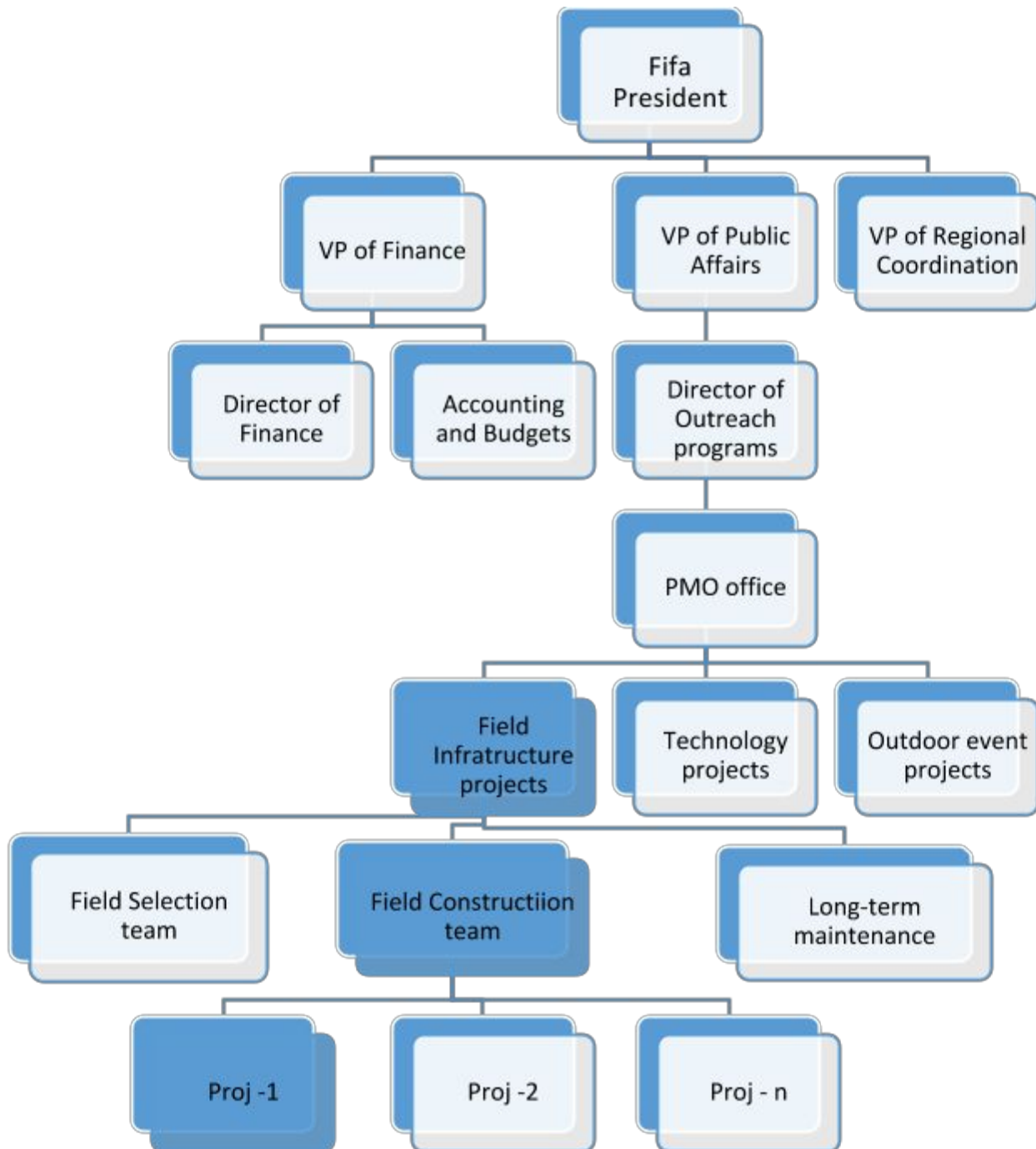
By creating the SPI chart, the PM can have a clearer notion of what is really happening with each critical task with regards to the schedule. Also, if any given task is doing extremely well, the PM will further investigate, to check if the planning was too conservative (and therefore make corrections for the next project) or if there is any

unplanned and positive risks occurring. The limits for action will be the following: the upper limit is 1.4 and the lower limit is 0.8.

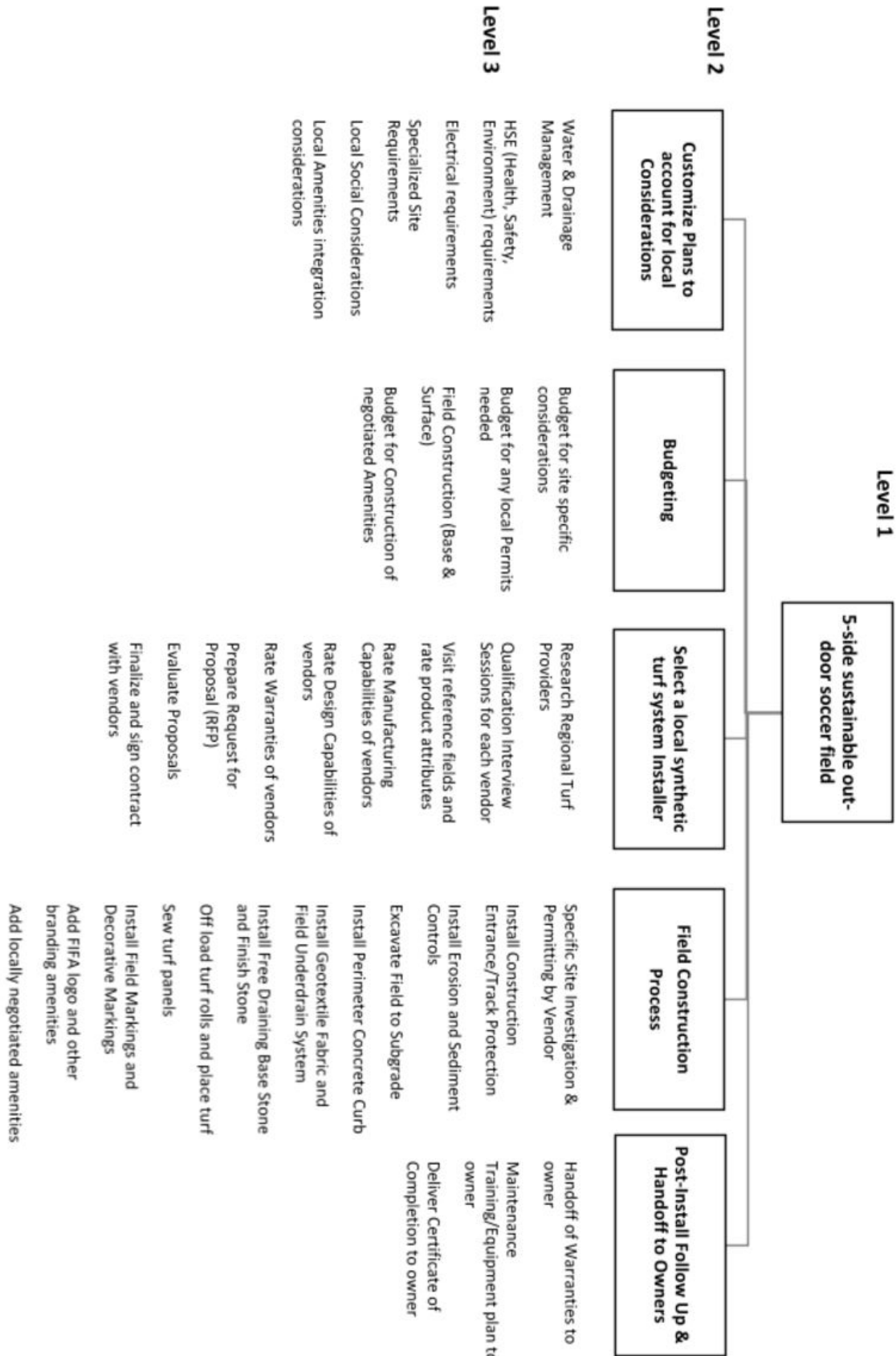
Termination:

The pilot project is considered to terminate by extinction model, the project documents and results shows that the project will finish on time, in budget and within the original scope. FIFA have the right to terminate this project after complete all the requirement documents that prove the project has completed and ready to hand over to the community. The project team should also prepare all processes that help team 3 (maintenance and sustainable development team) to manage their tasks with less effort and management.

The termination of this soccer field project will ensure the project tasks are completed as planned, notify the project stakeholder, finish all paperwork, re-distribute the project resources (personnel-materials-equipment- etc) to the appropriate places, review all legal articles in the signed contract between FIFA and the project stakeholder (owner), determine what records to keep as history for the project sustainability and for other new projects. Finally will close the project books with the required signatures including the project termination checklist as shown in **Appendix P**.

Appendix A: FIFA Organization Chart relevant to the Project

Appendix B: Deliverables Based WBS



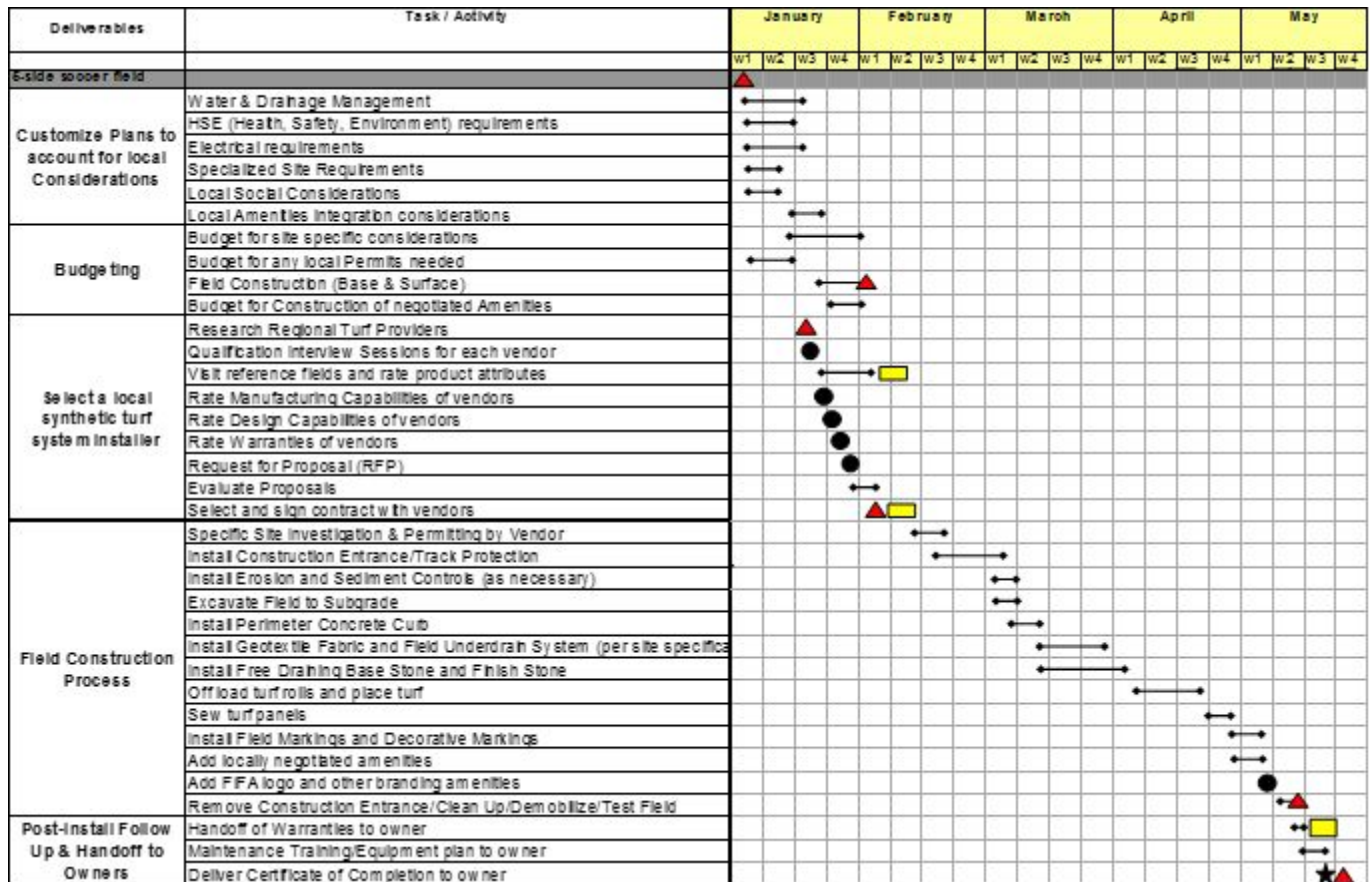
Appendix C: RACI Matrix

WBS		Responsibilities				
Deliverables	Tasks	Project Manager	Project Engineer	Contract Specialist	HSE Advisor	Owner
Customize Plans to account for local Considerations	Water & Drainage Management		R			
	HSE (Health, Safety, Environment) requirements				R	
	Electrical requirements		R			
	Specialized Site Requirements		R			
	Local Social Considerations	R				C
	Local Amenities integration considerations	R				C
Budgeting	Budget for site specific considerations		R	A	C	
	Budget for any local Permits needed	R		A		C
	Field Construction (Base & Surface)		R	A	C	
	Budget for Construction of negotiated Amenities		R	A	C	
Select a local synthetic turf system Installer	Research Regional Turf Providers			R		
	Qualification Interview Sessions for each vendor		R	A		
	Visit reference fields and rate product attributes		R		C	
	Rate Manufacturing Capabilities of vendors		R		C	
	Rate Design Capabilities of vendors		R		C	
	Rate Warranties of vendors			R		
	Prepare Request for Proposal (RFP)			R		
	Evaluate Proposals	R	C	C	C	
	Finalize and sign contract with vendors	A		R		
Field Construction Process	Specific Site Investigation & Permitting by Vendor		R		C	
	Install Construction Entrance/Track Protection		A		C	
	Install Erosion and Sediment Controls (as necessary)		A		C	
	Excavate Field to Subgrade		A		C	
	Install Perimeter Concrete Curb		A		C	
	Install Geotextile Fabric & Field Underdrain System		A		C	
	Install Free Draining Base Stone and Finish Stone		A		C	
	Off load turf rolls and place turf		A		C	
	Sew turf panels		A		C	
	Install Field Markings and Decorative Markings		A			
	Add FIFA logo and other branding amenities		A			
	Add locally negotiated amenities		A			C
	Remove Construction Entrance/Clean Up/Test Field		A		C	
Post-Install Follow Up & Handoff to Owners	Handoff of Warranties to owner	A		R		
	Maintenance Training/Equipment plan to owner	R				
	Deliver Certificate of Completion to owner	R				
Legend:		R: Responsible	A: Accountable	C: Consult	I: Inform	

Appendix D: Bottoms-Up Work Effort Estimate

WBS		Responsibilities											
Deliverables	Tasks	Project Manager	Project Engineer	Contract Specialist	HSE Advisor	Owner	Task Total	Optimistic	Most Likely	Pessimistic	Exp Time	var	std dev
Customize Plans to account for local Considerations	Water & Drainage Management		6				6	4	5	9	6	0.69	0.83
	HSE (Health, Safety, Environment) requirements				7		7	4	7	11	7	1.36	1.17
	Electrical requirements		4				4	3	4	5	4	0.11	0.33
	Specialized Site Requirements		6				6	2	6	10	6	1.78	1.33
	Local Social Considerations	4					4	1	3	9	4	1.78	1.33
	Local Amenities integration considerations	4					4	2	4	5	4	0.25	0.50
Budgeting	Budget for site specific considerations		7				7	4	6	12	7	1.78	1.33
	Budget for any local Permits needed	3					3	1	2	6	3	0.69	0.83
	Field Construction (Base & Surface)		10				10	8	10	12	10	0.44	0.67
	Budget for Construction of negotiated Amenities		6				6	6	6	7	6	0.03	0.17
Select a local synthetic turf system Installer	Research Regional Turf Providers			1			1	1	1	1	1	0.00	0.00
	Qualification Interview Sessions for each vendor		2				2	1	2	3	2	0.11	0.33
	Visit reference fields and rate product attributes		9				9	5	8	14	9	2.25	1.50
	Rate Manufacturing Capabilities of vendors		2				2	2	2	3	2	0.03	0.17
	Rate Design Capabilities of vendors		2				2	2	2	3	2	0.03	0.17
	Rate Warranties of vendors			2			2	2	2	3	2	0.03	0.17
	Prepare Request for Proposal (RFP)			2			2	1	2	4	2	0.25	0.50
	Evaluate Proposals	4					4	3	3	6	4	0.25	0.50
	Finalize and sign contract with vendors			2			2	2	2	2	2	0.00	0.00
Field Construction Process	Specific Site Investigation & Permitting by Vendor		3				3	3	3	5	3	0.11	0.33
	Install Construction Entrance/Track Protection		15				15	12	15	20	15	1.78	1.33
	Install Erosion and Sediment Controls (as necessary)		5				5	1	5	7	5	1.00	1.00
	Excavate Field to Subgrade		5				5	2	5	8	5	1.00	1.00
	Install Perimeter Concrete Curb		7				7	4	7	10	7	1.00	1.00
	Install Geotextile Fabric & Field Underdrain System		15				15	10	15	17	15	1.36	1.17
	Install Free Draining Base Stone and Finish Stone		20				20	12	20	25	20	4.69	2.17
	Off load turf rolls and place turf		15				15	10	15	18	15	1.78	1.33
	Sew turf panels		7				7	5	7	10	7	0.69	0.83
	Install Field Markings and Decorative Markings		5				5	2	5	6	5	0.44	0.67
	Add FIFA logo and other branding amenities		3				3	1	3	4	3	0.25	0.50
	Add locally negotiated amenities		8				8	5	7	12	8	1.36	1.17
	Remove Construction Entrance/Clean Up/Test Field		5				5	2	5	8	5	1.00	1.00
Post-Install Follow Up & Handoff to Owners	Handoff of Warranties to owner			1			1	1	1	1	1	0.00	0.00
	Maintenance Training/Equipment plan to owner	3					3	3	3	3	3	0.00	0.00
	Deliver Certificate of Completion to owner	1					1	1	1	1	1	0.00	0.00
Resource Total:		19	167	8	7	0	201	128	194	280	197	0.81	0.72

Appendix E: Baseline Schedule



Baseline Schedule Notes:

- A project starting on January 5th 2015 would end on May 20th of that same year.
- There are six significant milestones on the project baseline:
 1. Project kickoff on **January 5th**
 2. Budget Allocation on **February 3rd**
 3. Research Regional Turf Providers on **January 14th**
 4. Select and sign contract with vendors on **February 5th**
 5. Remove Construction Entrance/Clean Up/Test Field on **May 13th**
 6. Project closed and handover on **May 20th**

Appendix F: Time Phased Budget (part 1 of 2 - weeks 1-10)

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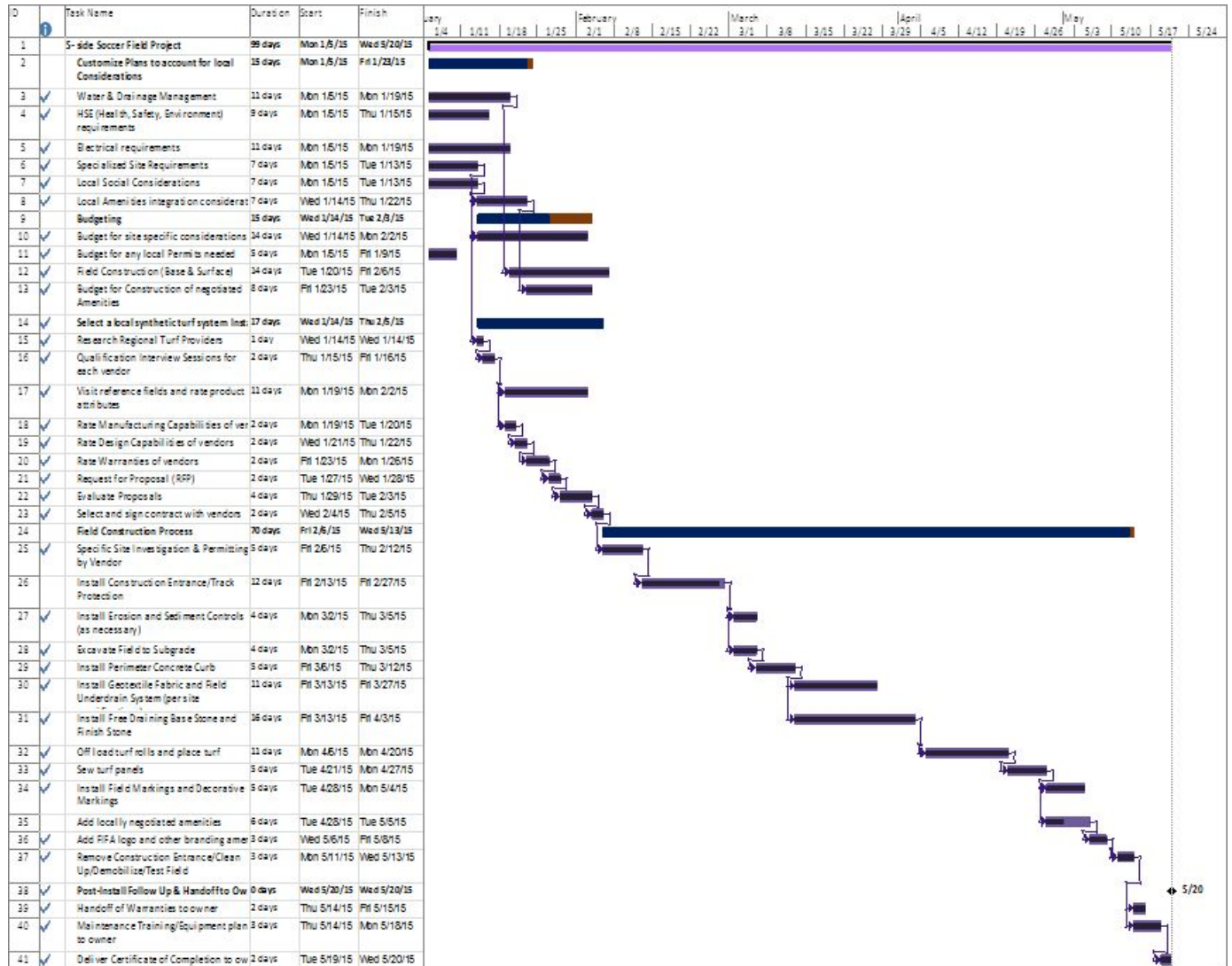
Appendix F: Time Phased Budget (part 2 of 2 - weeks 11-20)

Deliverables	WBS	Tasks	Duration (days)	Total Amt (dollars)	Effort (days)	Payroll	Other Expenses	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Customize Plans to account for local Considerations		Water & Drainage Management	11	\$3,512	6	\$3,462	\$50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		HSE (Health, Safety, Environment) requirements	9	\$5,039	7	\$4,039	\$1,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Electrical requirements	11	\$2,808	4	\$2,308	\$500																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Specialized Site Requirements	7	\$3,512	6	\$3,462	\$50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Local Social Considerations	7	\$2,808	4	\$2,308	\$500																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Local Amenities integration considerations	7	\$2,808	4	\$2,308	\$500																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Total Deliverable Budget		\$20,487.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Budgeting		Budget for site specific considerations	14	\$4,039	7	\$4,039	\$0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Budget for any local Permits needed	5	\$1,731	3	\$1,731	\$0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Field Construction (Base & Surface)	14	\$6,270	10	\$5,770	\$500																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Budget for Construction of negotiated Amenities	8	\$3,462	6	\$3,462	\$0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Select a local synthetic turf system installer		Total Deliverable Budget		\$15,502.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
		Research Regional Turf Providers	1	\$577	1	\$577	\$0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Qualification Interview Sessions for each vendor	2	\$2,154	2	\$1,154	\$1,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Visit reference fields and rate product attributes	11	\$30,193	9	\$5,193	\$25,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Rate Manufacturing Capabilities of vendors	2	\$1,154	2	\$1,154	\$0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Rate Design Capabilities of vendors	2	\$1,154	2	\$1,154	\$0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Rate Warranties of vendors	2	\$1,154	2	\$1,154	\$0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Prepare Request for Proposal (RFP)	2	\$2,154	2	\$1,154	\$1,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Evaluate Proposals	4	\$2,308	4	\$2,308	\$0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Finalize and sign contract with vendors	2	\$5,154	2	\$1,154	\$5,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Field Construction Process		Total Deliverable Budget		\$47,002.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
		Specific Site Investigation & Permitting by Vendor	5	\$3,731	3	\$1,731	\$2,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Install Construction Entrance/Track Protection	11	\$13,155	15	\$8,655	\$4,500																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Install Erosion and Sediment Controls (as necessary)	4	\$6,885	5	\$2,885	\$4,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Excavate Field to Subgrade	4	\$17,885	5	\$2,885	\$15,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Install Perimeter Concrete Curb	5	\$44,039	7	\$4,039	\$40,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Install Geotextile Fabric & Field Underdrain System	11	\$18,655	15	\$8,655	\$10,000	\$11,009.75																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
		Install Free Draining Base Stone and Finish Stone	16	\$19,540	20	\$11,540	\$8,000	\$3,109.17	\$3,109.17																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		Off load turf rolls and place turf	11	\$58,655	15	\$8,655	\$50,000	\$2,442.50	\$2,442.50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		Sew turf panels	5	\$9,039	7	\$4,039	\$5,000	\$29,327.50	\$14,663.75																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		Install Field Markings and Decorative Markings	5	\$3,885	5	\$2,885	\$1,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Add FIFA logo and other branding amenities	3	\$3,731	3	\$1,731	\$2,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Add locally negotiated amenities	6	\$9,616	8	\$4,616	\$5,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Remove Construction Entrance/Clean Up/Test Field	3	\$7,885	5	\$2,885	\$5,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Post-Install Follow Up & Handoff to Owners		Total Deliverable Budget		\$216,701.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
				Handoff of Warranties to owner	2	\$577	1	\$577	\$0											\$577.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Maintenance Training/Equipment plan to owner	3			\$6,731	3	\$1,731	\$5,000											\$3,365.50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Deliver Certificate of Completion to owner	2			\$1,577	1	\$577	\$1,000											\$1,577.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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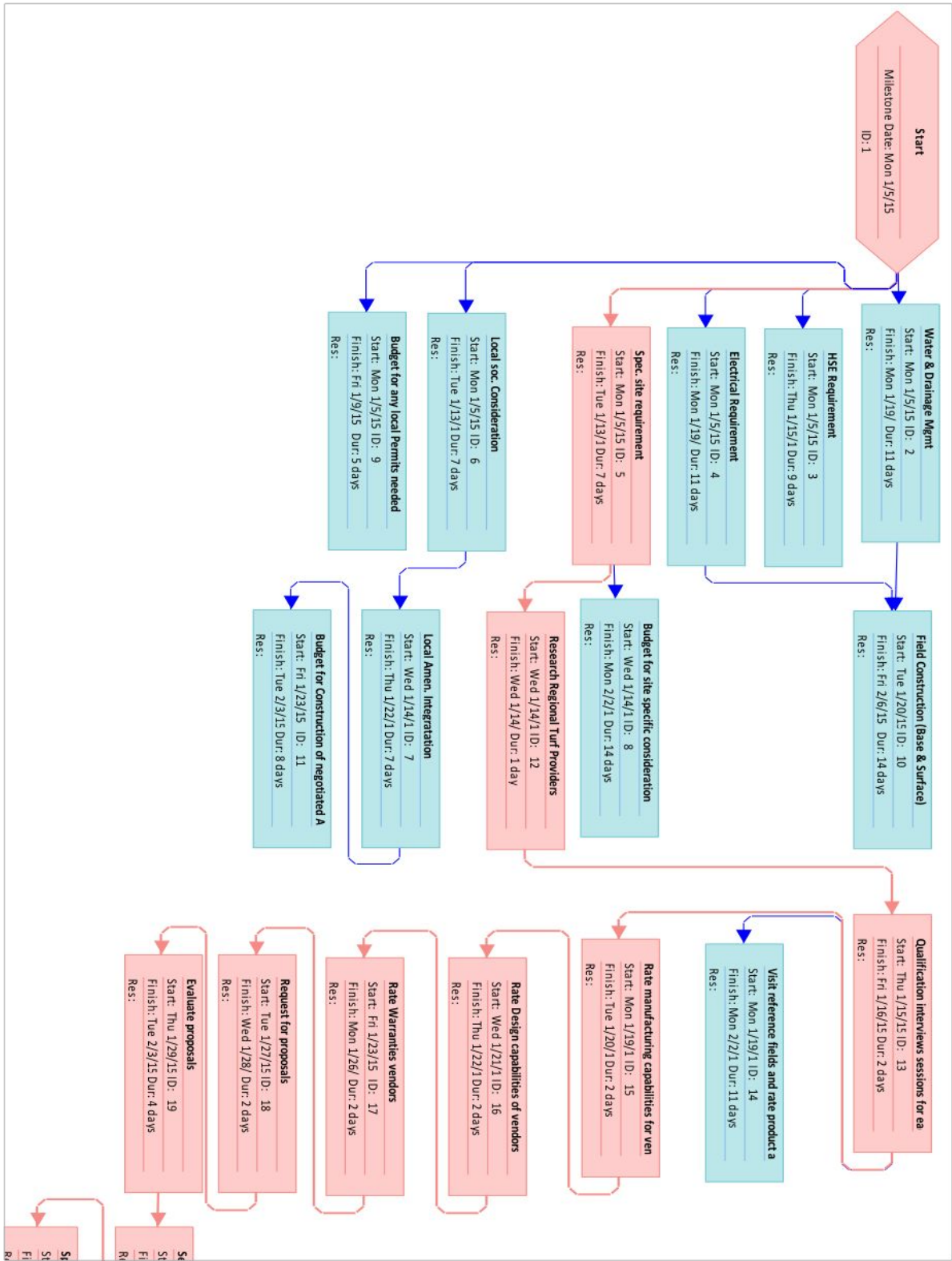
Appendix G: Table of Detailed Tasks

WBS									
Deliverables	Tasks	Optimistic	Most Likely	Pessimistic	Expected Time	Variance	Standard Deviation	Cost	Reverse Beta Dist.
Customize Plans to account for local Considerations	Water & Drainage Management	4	5	9	6	0.69	0.83	\$8,705	Reverse Beta
	HSE (Health, Safety, Environment) requirements	4	7	11	7	1.36	1.17	\$8,501	
	Electrical requirements	3	4	5	4	0.11	0.33	\$9,155	
	Specialized Site Requirements	2	6	10	6	1.78	1.33	\$5,820	
	Local Social Considerations	1	3	9	4	1.78	1.33	\$7,424	
	Local Amenities integration considerations	2	4	5	4	0.25	0.50	\$5,693	
Budgeting	Budget for site specific considerations	4	6	12	7	1.78	1.33	\$11,540	
	Budget for any local Permits needed	1	2	6	3	0.69	0.83	\$4,039	
	Field Construction (Base & Surface)	8	10	12	10	0.44	0.67	\$12,040	
	Budget for Construction of negotiated Amenities	6	6	7	6	0.03	0.17	\$5,770	
Select a local synthetic turf system Installer	Research Regional Turf Providers	1	1	1	1	0.00	0.00	\$4,616	Reverse Beta
	Qualification Interview Sessions for each vendor	1	2	3	2	0.11	0.33	\$2,154	
	Visit reference fields and rate product attributes	5	8	14	9	2.25	1.50	\$33,655	
	Rate Manufacturing Capabilities of vendors	2	2	3	2	0.03	0.17	\$1,154	
	Rate Design Capabilities of vendors	2	2	3	2	0.03	0.17	\$1,154	
	Rate Warranties of vendors	2	2	3	2	0.03	0.17	\$1,154	
	Prepare Request for Proposal (RFP)	1	2	4	2	0.25	0.50	\$2,154	
	Evaluate Proposals	3	3	6	4	0.25	0.50	\$2,308	
	Finalize and sign contract with vendors	2	2	2	2	0.00	0.00	\$6,154	
Field Construction Process	Specific Site Investigation & Permitting by Vendor	3	3	5	3	0.11	0.33	\$6,039	Reverse Beta
	Install Construction Entrance/Track Protection	12	15	20	15	1.78	1.33	\$13,155	
	Install Erosion and Sediment Controls (as necessary)	1	5	7	5	1.00	1.00	\$6,885	
	Excavate Field to Subgrade	2	5	8	5	1.00	1.00	\$17,885	
	Install Perimeter Concrete Curb	4	7	10	7	1.00	1.00	\$44,039	
	Install Geotextile Fabric & Field Underdrain System	10	15	17	15	1.36	1.17	\$18,655	
	Install Free Draining Base Stone and Finish Stone	12	20	25	20	4.69	2.17	\$19,540	
	Off load turf rolls and place turf	10	15	18	15	1.78	1.33	\$58,655	
	Sew turf panels	5	7	10	7	0.69	0.83	\$9,039	
	Install Field Markings and Decorative Markings	2	5	6	5	0.44	0.67	\$3,885	
	Add FIFA logo and other branding amenities	1	3	4	3	0.25	0.50	\$3,731	
	Add locally negotiated amenities	5	7	12	8	1.36	1.17	\$9,616	
	Remove Construction Entrance/Clean Up/Test Field	2	5	8	5	1.00	1.00	\$7,885	
Post-Install Follow Up & Handoff to Owners	Handoff of Warranties to owner	1	1	1	1	0.00	0.00	\$577	
	Maintenance Training/Equipment plan to owner	3	3	3	3	0.00	0.00	\$7,885	
	Deliver Certificate of Completion to owner	1	1	1	1	0.00	0.00	\$1,577	
Resource Total:		128	194	280	197	0.81	0.72	\$362,238	

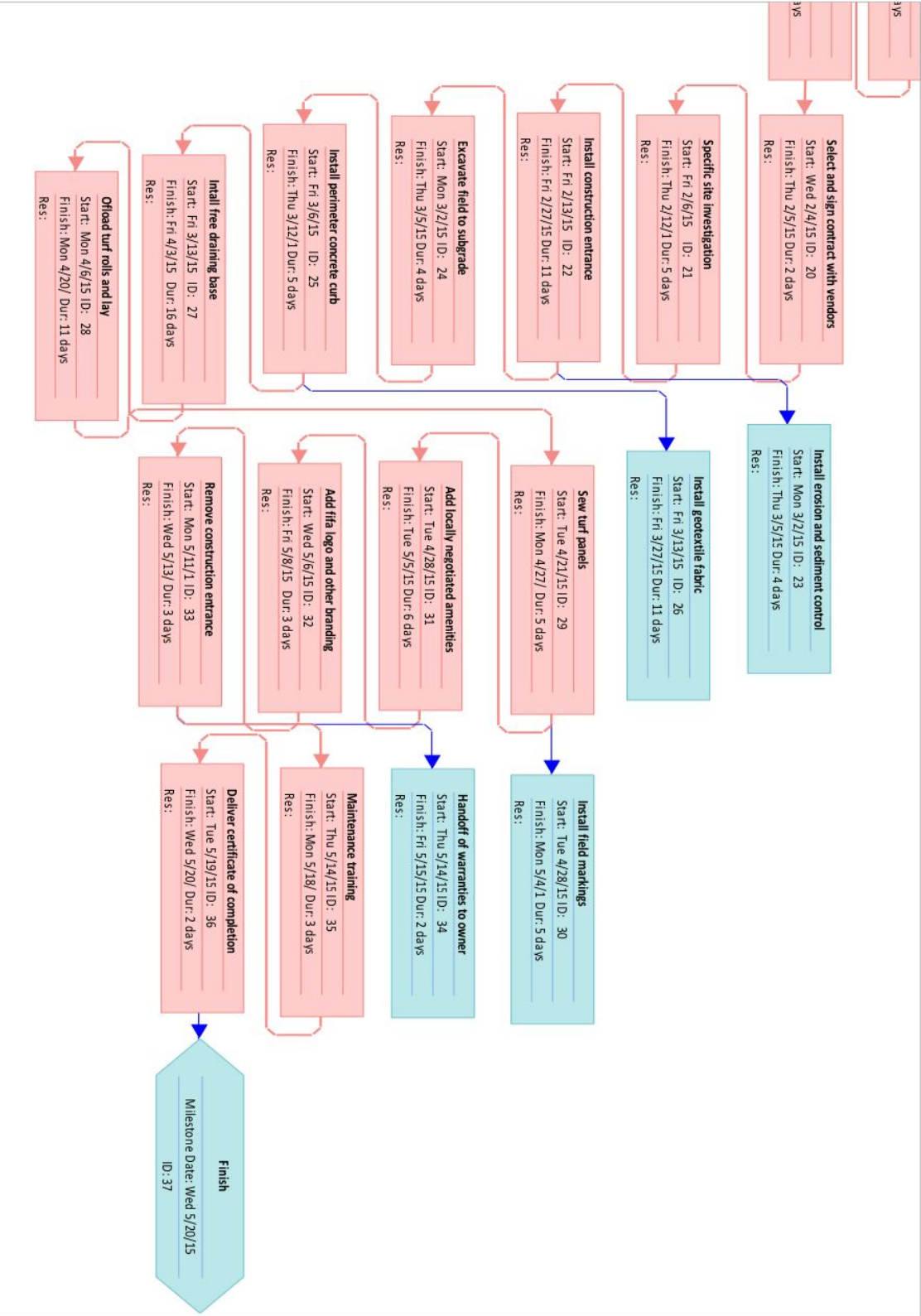
Appendix H: Gantt Chart



Appendix I-1: Project AON Network Illustration 1 of 2



Appendix I-2: Project AON Network Illustration 2 of 2



Appendix J: Probability Plot

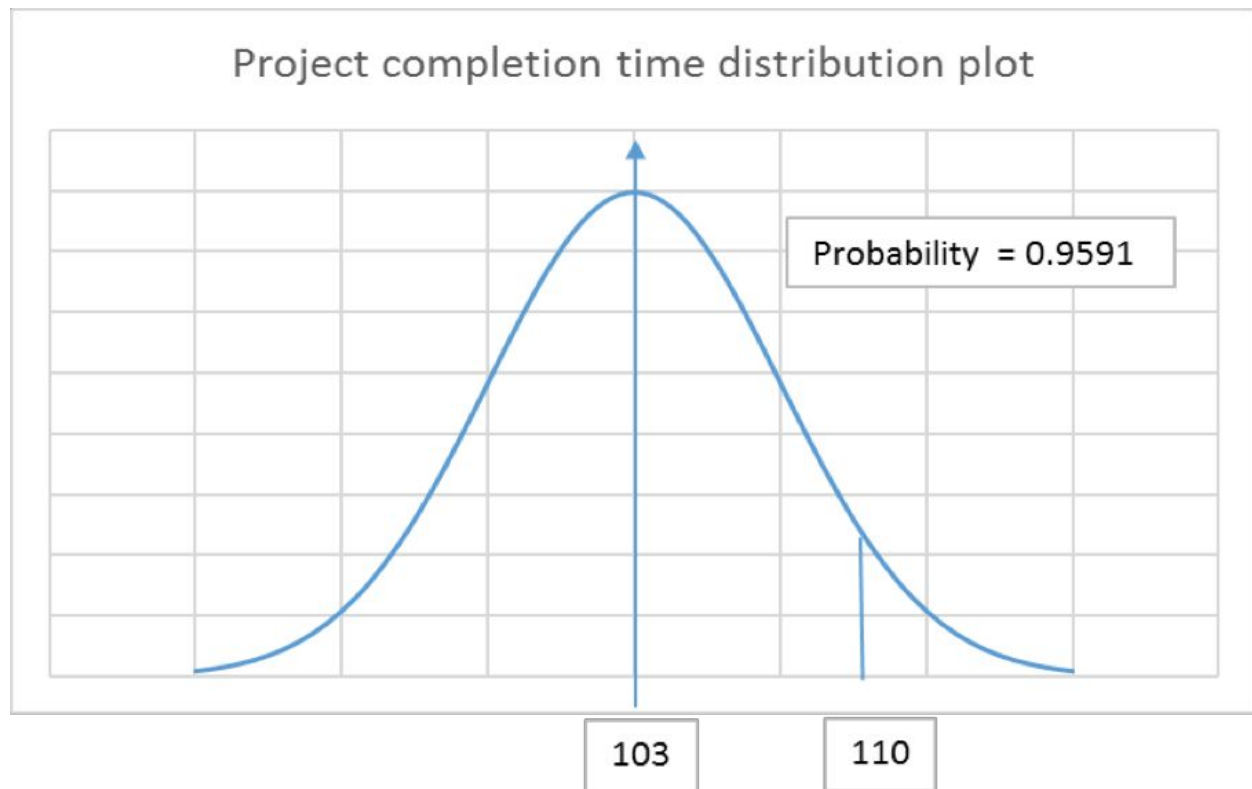


Figure Above Shows time through critical path = 103 days and probability of completing project in 110 days as 0.9591

Probability Plot Notes:

Our field projects are carried out within a period of 6 months and three of such projects are carried out within a year in different cities of the world. The usual project duration is 120 days of resource usage. Considering the graph in **appendix J**, the probability of completing the project within 110 days is 0.9591. This means if all major risks on the project are catered for, the project will complete within our scheduled time frame of 120 days. Therefore, there is time buffer in case any of the tasks on the critical path utilize more days than estimated.

Resource Name	Work	Jan, 2015				Feb, 2015				Mar, 2015					Apr, 2015				May, 2015		
		5	12	19	26	2	9	16	23	2	9	16	23	30	6	13	20	27	4	11	18
Project Manager	224 hrs	80h	40h	32h	16h	16h													16h	24h	
Local Social consideration		40h	16h																		
Local amenities integration	56 hrs		24h	32h																	
Budget for any local permits n	40 hrs	40h																			
Evaluate proposals	32 hrs				16h	16h															
Maintenance Training	24 hrs																		16h	8h	
Deliver certificate	16 hrs																			16h	
Project Engineer	1368 hrs	120h	136h	168h	160h	80h	40h	40h	40h	72h	48h	80h	80h	40h	40h	40h	40h	72h	48h	24h	
Water & Drainage Mgmt	88 hrs	40h	40h	8h																	
Electrical Requirements	88 hrs	40h	40h	8h																	
Specialized site requirements	56 hrs	40h	16h																		
Budget for specific site requir	112 hrs		24h	40h	40h	8h															
Field construction(Base and S	112 hrs			32h	40h	40h															
Budget for Construction of ne	64 hrs			8h	40h	16h															
Qualification Interview Sessio	16 hrs		16h																		
Visit reference fields and rate	88 hrs			40h	40h	8h															
Rate manufac. capabilities of v	16 hrs			16h																	
Rate design capabilities of ven	16 hrs			16h																	
Specific Site Investigation & P	40 hrs					8h	32h														
Install Construction Entrance,	88 hrs					8h	40h	40h													
Install Erosion and Sediment	32 hrs								32h												
Excavate Field to Subgrade	32 hrs								32h												
Install Perimeter Concrete Cu	40 hrs								8h	32h											
Install Geotextile Fabric and F	88 hrs									8h	40h	40h									
Install Free Draining Base Sto	128 hrs									8h	40h	40h									
Off load turf rolls and place tu	88 hrs													40h	40h	8h					
Sew turf panels	40 hrs															32h	8h				
Install Field Markings and Ded	40 hrs																32h	8h			
Add FIFA logo and other bran	24 hrs																32h	16h			
Add locally negotiated amenit	48 hrs																	24h			
Remove Construction Entranc	24 hrs																		24h		
Contract Specialist	72 hrs		8h	8h	24h	16h													16h		
Research Regional Turf Provid	8 hrs		8h																		
Rate Warranties of vendors	16 hrs			8h	8h																
Prepare Request for Proposal	16 hrs				16h																

Appendix L-1: Baseline Planned-Value Table (January 2015)

Appendix L - Planned Value Table - Fita Field - January 2015																						
Resource Name		Work	Jan 2015																			
		5	6	7	8	9	12	13	14	15	16	19	20	21	22	23	26	27	28	29	30	
Project Manager	Local Social consideration	152 hrs	80h																			
	Local amenities integration	32 hrs	20			20	8															
	Budget for any local permits needed	32 hrs															16					
	Evaluate proposals	24 hrs	20			20	12				12	16									8	
	Maintenance Training	32 hrs																				
	Deliver certificate	8 hrs																				
Project Engineer	Water & Drainage Mgmt	1336 hrs	120h				136h				168h						160					
	Electrical Requirements	48 hrs	20			20	20				20	4					4					
	Specialized site requirements	32 hrs	20			20	8				20	4					4					
	Budget for specific site requirements	48 hrs	20			20	6				12	20					20	20			20	
	Field construction (Base and Surface)	56 hrs					12				16	20					16	20			20	
	Budget for Construction of negotiated amenities	80 hrs									4	16					4	20			20	
	Qualification Interview Sessions	48 hrs																				
	Visit reference fields and rate product attributes	16 hrs					8															
	Rate manufac. capabilities of vendors	72 hrs										20					20	20			20	
	Rate design capabilities of vendors	16 hrs										8					8					
	Specific Site Investigation & Permitting by Vendor	24 hrs																				
	Install Construction Entrance/Track Protection	120 hrs																				
	Install Erosion and Sediment Controls (as necessary)	40 hrs																				
	Excavate Field to Subgrade	40 hrs																				
	Install Perimeter Concrete Curb	56 hrs																				
	Install Geotextile Fabric and Field Underdrain System	120 hrs																				
	Install Free Draining Base Stone and Finish Stone	160 hrs																				
	Off load turf rolls and place turf	120 hrs																				
	Sew turf panels	56 hrs																				
	Install Field Markings and Decorative Markings	40 hrs																				
	Add FIFA logo and other branding amenities	24 hrs																				
	Add locally negotiated amenities	64 hrs																				
		Remove Construction Entrance	40 hrs																			
Contract Specialist		64 hrs					8h				8h						24h					
	Research Regional Turf Providers	8 hrs					4				4		4				4				4	
	Rate Warranties of vendors	16 hrs																			4	
	Prepare Request for Proposal (RFP)	16 hrs																			8	
	Finalize and sign contract with vendors	16 hrs																				
	Handoff of Warranties to owner	8 hrs																				
HSE advisor		56 hrs	40h																			
	HSE (Health, Safety, Environment) requirements	56 hrs	20					20			16											

Appendix L-2: Baseline Planned-Value Table (February 2015)

Appendix L - Planned Value Table - Fila Field - Feb 2015

Resource Name		Work	Feb 2015																									
Project Manager	Local Social consideration Local amenities integration Budget for any local permits needed Evaluate proposals Maintenance Training Deliver certificate	152 hrs 32 hrs 24 hrs 32 hrs 24 hrs 8 hrs	2	3	4	5	6	9	10	11	12	13	16	17	18	19	20	23	24	25	26	27						
Project Engineer	Water & Drainage Mgmt	48 hrs																										
	Electrical Requirements	32 hrs																										
	Specialized site requirements	48 hrs																										
	Budget for specific site requirements	56 hrs		4																								
	Field construction (Base and Surface)	80 hrs		20																								
	Budget for Construction of negotiated amenities	48 hrs		8																								
	Qualification Interview Sessions	16 hrs																										
	Visit reference fields and rate product attributes	72 hrs		4																								
	Rate manufac. capabilities of vendors	16 hrs																										
	Rate design capabilities of vendors	16 hrs																										
	Specific Site Investigation & Permitting by Vendor	24 hrs		4					16				16															
	Install Construction Entrance/Track Protection	120 hrs							4				4															
	Install Erosion and Sediment Controls (as necessary)	40 hrs																										
	Excavate Field to Subgrade	40 hrs																										
	Install Perimeter Concrete Curb	56 hrs																										
	Install geotextile fabric and Field Underdrain System	120 hrs																										
	Install Free Draining Base Stone and Finish Stone	160 hrs																										
Off load turf rolls and place turf	120 hrs																											
Sew turf panels	56 hrs																											
Install Field Markings and Decorative Markings	40 hrs																											
Add FIFA logo and other branding amenities	24 hrs																											
Add locally negotiated amenities	64 hrs																											
Remove Construction Entrance	40 hrs																											
Contract Specialist		64 hrs	16h																									
HSE advisor	Research Regional Turf Providers	8 hrs																										
	Rate Warranties of vendors	16 hrs																										
	Prepare Request for Proposal (RFP)	16 hrs																										
	Finalize and sign contract with vendors	16 hrs		8																								
	Handoff of Warranties to owner	8 hrs																										
HSE (Health, Safety, Environment) requirements		56 hrs																										
Total		56	1080	0	0	0	56	20	0	0	0	20	20	0	0	0	20	20	0	0	0	20						
Cumulative Total		1080	1080	1080	1080	1136	1156	1156	1156	1176	1196	1196	1196	1216	1236	1236	1236	1236	1236	1236	1236	1256						
Date		2/2/15	2/9/15	2/4/15	2/5/15	2/6/15	2/9/15	2/10/15	2/11/15	2/12/15	2/13/15	2/16/15	2/17/15	2/18/15	2/19/15	2/20/15	2/23/15	2/24/15	2/25/15	2/26/15	2/27/15	2/27/15						

Appendix L-3: Baseline Planned-Value Table (March 2015)

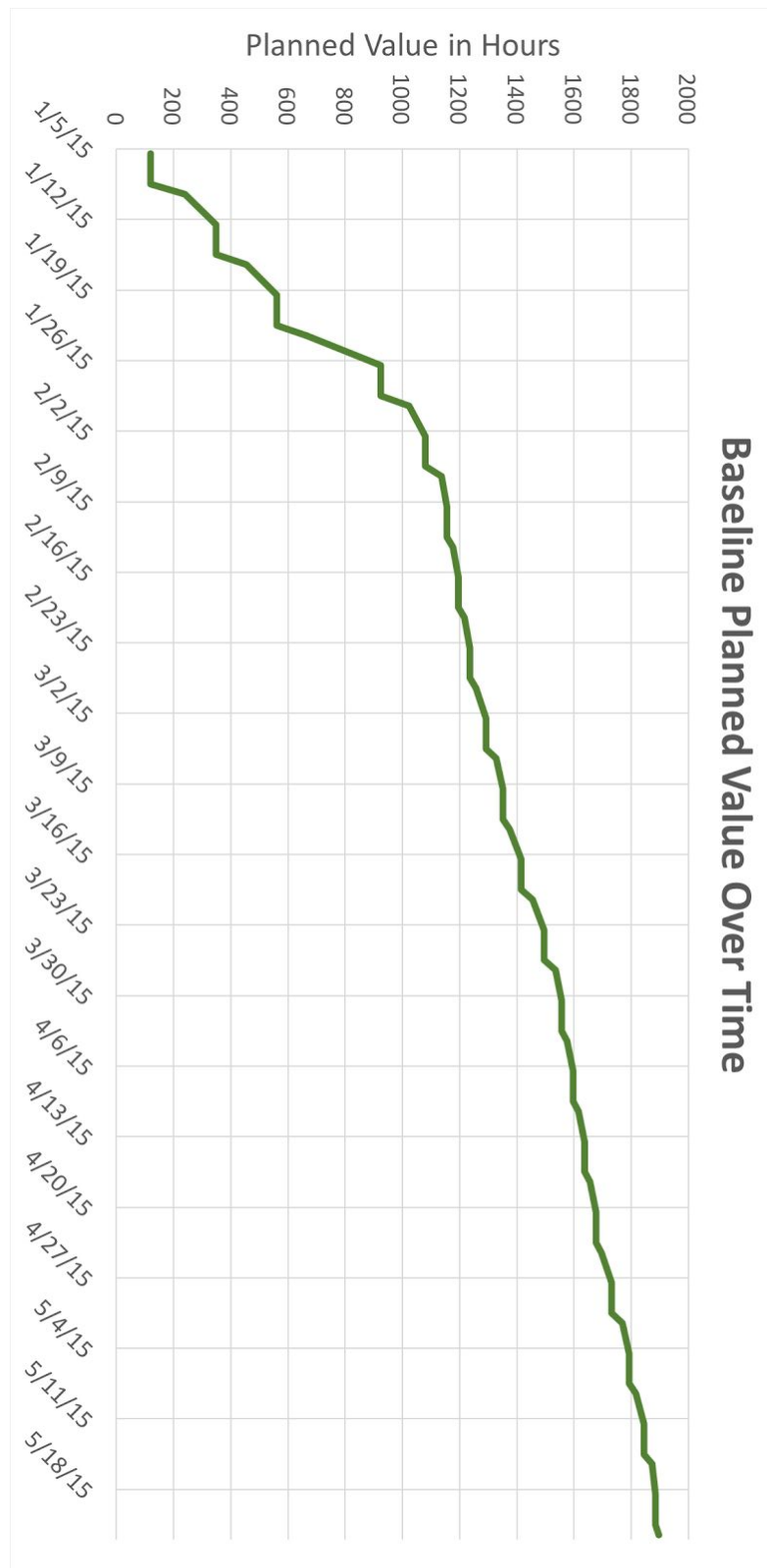
dix L - Planned Value Table - Fifa Field - Mar 2015																											
Resource Name		Work		Mar. 2015																							
Manager	Local Social consideration	152 hrs	2	3	4	5	6	9	10	11	12	13	16	17	18	19	20	23	24	25	26	27	30				
	Local amenities integration	32 hrs																									
	Budget for any local permits needed	32 hrs																									
	Evaluate proposals	24 hrs																									
	Maintenance Training	32 hrs																									
Engineer	Deliver certificate	24 hrs																									
		8 hrs																									
	Water & Drainage Mgmt	1336 hrs	72h				48h					80h					80h					40h					
	Electrical Requirements	48 hrs																									
	Specialized site requirements	32 hrs																									
	Budget for specific site requirements	48 hrs																									
	Field construction (Base and Surface)	56 hrs																									
	Budget for Construction of negotiated amenities	80 hrs																									
	Qualification Interview Sessions	48 hrs																									
	Visit reference fields and rate product attributes	16 hrs																									
	Rate manufac. capabilities of vendors	72 hrs																									
	Rate manufac. capabilities of vendors	16 hrs																									
	Rate design capabilities of vendors	16 hrs																									
	Specific Site Investigation & Permitting by Vendor	24 hrs																									
	Install Construction Entrance/Track Protection	120 hrs																									
	Install Erosion and Sediment Controls (as necessary)	40 hrs	16				16																				
	Excavate Field to Subgrade	40 hrs	16				16																				
	Install Perimeter Concrete Curb	56 hrs	4				4	16				16															
	Install Geotextile Fabric and Field Underdrain System	120 hrs						4				4	20					20				20					
	Install Free Draining Base Stone and Finish Stone	160 hrs										4	20					20				20					
	Off load turf rolls and place turf	120 hrs												20									20				
	Sew turf panels	56 hrs																									
	Install Field Markings and Decorative Markings	40 hrs																									
	Add FIFA logo and other branding amenities	40 hrs																									
	Add locally negotiated amenities	24 hrs																									
	Remove Construction Entrance	64 hrs																									
	Specialist		64 hrs																								
		Research Regional Turf Providers	8 hrs																								
		Rate Warranties of Vendors	16 hrs																								
Prepare Request for Proposal (RFP)		16 hrs																									
Finalize and sign contract with vendors		16 hrs																									
Handoff of Warranties to owner		8 hrs																									
OT	HSE (Health, Safety, Environment) requirements	56 hrs																									

Appendix L-4: Baseline Planned-Value Table (April 2015)

[illegible]

Appendix L-5: Baseline Planned-Value Table (May 2015)

Appendix L - Planned Value Table - Fifa Field - May 2015																	May 2015											
Resource Name	Work	1	4	5	6	7	8	11	12	13	14	15	16	18	19	20	21	22										
Project Manager	Local Social consideration	152 hrs																										
	Local amenities integration	32 hrs																										
	Budget for any local permits needed	24 hrs																										
	Evaluate proposals	32 hrs																										
	Maintenance Training	24 hrs																										
	Deliver certificate	8 hrs																										
Project Engineer		1336 hrs	48h				24h																					
	Water & Drainage Mgmt	48 hrs																										
	Electrical Requirements	32 hrs																										
	Specialized site requirements	48 hrs																										
	Budget for specific site requirements	56 hrs																										
	Field construction (Base and Surface)	80 hrs																										
	Budget for Construction of negotiated amenities	48 hrs																										
	Qualification Interview Sessions	16 hrs																										
	Visit reference fields and rate product attributes	72 hrs																										
	Rate manufac. capabilities of vendors	16 hrs																										
	Rate design capabilities of vendors	16 hrs																										
	Specific Site Investigation & Permitting by Vendor	24 hrs																										
	Install Construction Entrance/Track Protection	120 hrs																										
	Install Erosion and Sediment Controls (as necessary)	40 hrs																										
	Excavate Field to Subgrade	40 hrs																										
	Install Perimeter Concrete Curb	56 hrs																										
	Install Geotextile Fabric and Field Underdrain System	120 hrs																										
	Install Free Draining Base Stone and Finish Stone	160 hrs																										
	Off load turf rolls and place turf	120 hrs																										
	Sew turf panels	56 hrs	4																									
	Install Field Markings and Decorative Markings	40 hrs	16	4				4																				
	Add FIFA logo and other branding amenities	24 hrs	16	8				8																				
	Add locally negotiated amenities	64 hrs		12				12																				
Remove Construction Entrance	40 hrs							12																				
Contract Specialist		64 hrs					16h																					
	Research Regional Turf Providers	8 hrs																										
	Rate Warranties of vendors	16 hrs																										
	Prepare Request for Proposal (RFP)	16 hrs																										
	Finalize and sign contract with vendors	16 hrs																										
	Handoff of Warranties to owner	8 hrs						8																				
HSE advisor		56 hrs																										
	HSE (Health, Safety, Environment) requirements	56 hrs																										
Total		36	24	0	0	0	24	28	0	0	0	28	12	0	0	0	12											
Cumulative Total		1768	1792	1792	1792	1792	1816	1844	1844	1844	1844	1872	1884	1884	1884	1884	1884											
Date		5/1/15	5/4/15	5/5/15	5/6/15	5/7/15	5/8/15	5/11/15	5/12/15	5/13/15	5/14/15	5/15/15	5/18/15	5/19/15	5/20/15	5/21/15	5/22/15											

Appendix M: Baseline Planned-Value Chart

Appendix N: Control Measures (page 1 or 2)**Mitigation Plan:**

We have made an agreement with airline companies in order to free us from being impacted in the event of fluctuating prices for air tickets. That agreement involved the payment of a premium. Before the agreement, the price fluctuation for air tickets was considered a risk that could impact our budget. After having paid the premium, the risk have been mitigated. As this is a mitigation, the extra budget is already included in the project baseline.

Contingency Plans:**Economy Risk:**

it has been calculated (for the specific location we have chosen for our pilot project) that we will have a probability of 50% to face a 16% inflation rate/year. Given our project takes 20 weeks, we will be facing a total of 6% in inflation costs. Multiplying only the capital cost budget (our labor costs are not impacted) by 6% and then by 50%, we get to a contingency value of \$5,910.00.

Government Risk:

it has been calculated (for the specific location we have chosen for our pilot project) that we will have a probability of 50% to face a 10% extra costs in the process of issuing local permits and authorizations. Multiplying only the capital cost budget (our labor costs are not impacted) by 10% and then by 50%, we get to a contingency value of \$9,850.00.

Weather Risk:

it has been calculated (for the specific location we have chosen for our pilot project) that we will have a probability of 25% to face a one week stoppage in the construction site due to bad weather. In that case we will crash the activity 'Install free draining system' at the cost of 100% of the original task cost. Multiplying the original task cost by 100% and then by 25%, we get to a contingency value of \$4,885.00.

Critical Path Risks

Install draining system: it has been calculated (for the specific location we have chosen for our pilot project) that we will have a probability of 30% of this task to take twice as long as expected. In that case, we will crash the task, at the cost of 100% of the original task cost. Multiplying the original task cost by 100% and then by 30%, we get to a contingency value of \$5,862.00.

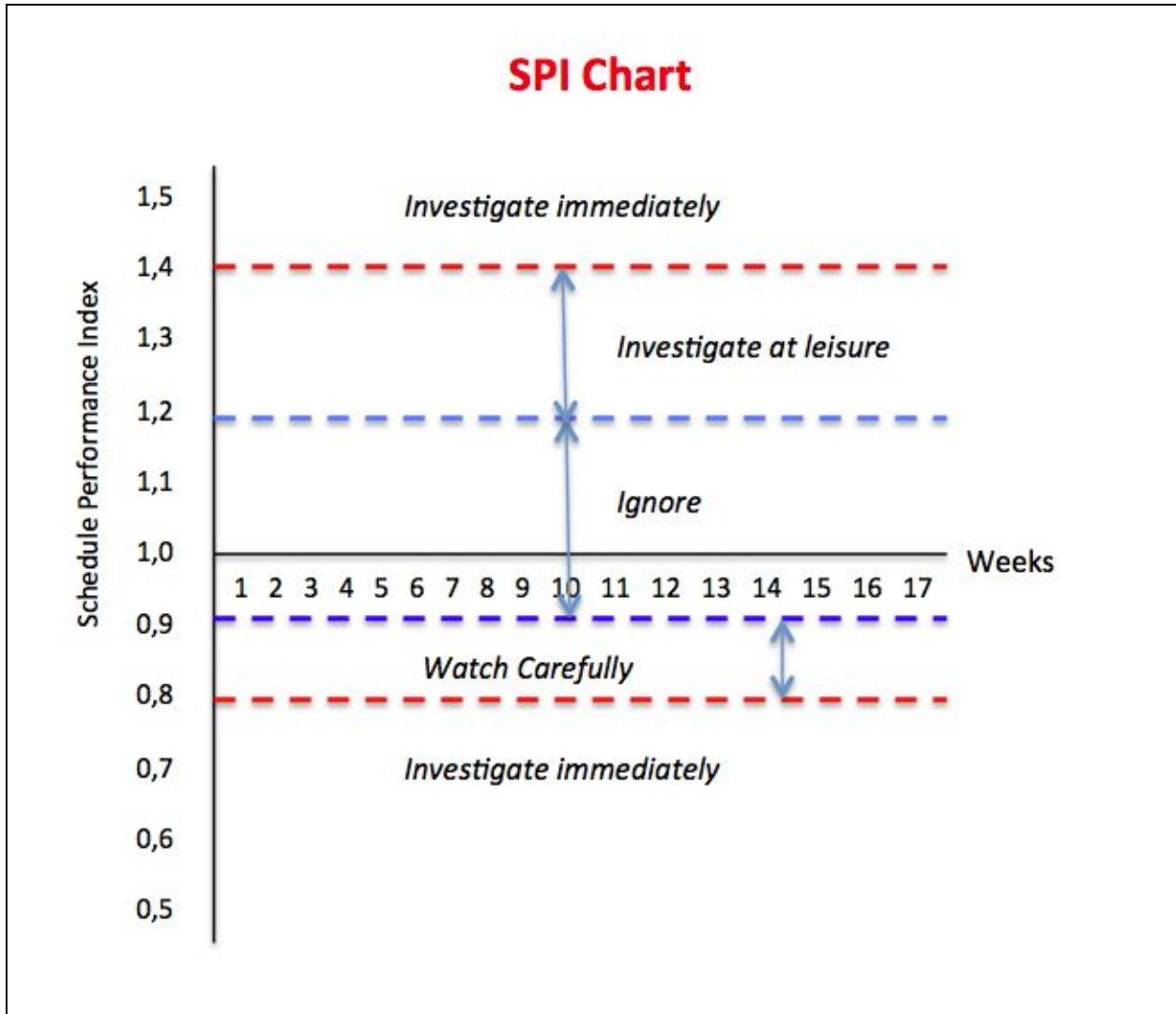
Appendix N: Control Measures continued (page 2 of 2)

Install construction entrance: it has been calculated (for the specific location we have chosen for our pilot project) that we will have a probability of 10% of this task to result in serious traffic disturbances. In that case, we will have an extra cost of 75% of the original task cost to deal with these problems. Multiplying the original task cost by 75% and then by 10%, we get to a contingency value of \$986.00.

Offload Turf Rolls: it has been calculated (for the specific location we have chosen for our pilot project) that we will have a probability of 10% of this task to be delayed due to the inability of the vendor to meet the promised deadline. In that case, this task will be delayed and we will crash the following task (Sew Turf Panels), at the cost of 80% of the original task cost. Multiplying the original task cost by 80% and then by 10%, we get to a contingency value of \$723.00.

Making the summation of all the individual contingency budgets, we arrive to the total of:

US \$28,216.00

Appendix O: Control Charts

Appendix P: Termination Plan

Item No.	Task Description	Req. Yes	Req. No	Req. Date	Assigned Responsibility	PR.	Note Reference
A.	Customize Plans for local Considerations						
1	Water & Drainage Management	Yes		1/19/15	PE	On time	FIFA Specification
2	HSE (Health, Safety, Environment) requirements	Yes		1/15/15	HSE Advisor	On time	FIFA Specification
3	Electrical requirements	Yes		1/19/15	PE	On time	FIFA Specification
4	Specialized Site Requirements	Yes		1/13/15	PE	On time	FIFA Specification
5	Local Social Considerations	Yes		1/13/15	Owner & PM	On time	GOV. Specification
6	Local Amenities integration considerations	Yes		1/22/15	PM	On time	GOV + FIFA
B.	Budgeting						
1	Budget for site specific considerations	Yes		2/2/15	C. specialists, PM, PE	On time	FIFA Specification
2	Budget for any local Permits needed	Yes		1/9/15	C. specialists & PM	On time	FIFA Specification
3	Field Construction (Base & Surface)	Yes		2/6/15	C. specialists & PE	On time	FIFA Specification
4	Budget for Construction of negotiated Amenities	Yes		2/3/15	C. specialists, PM, PE	On time	FIFA Specification
C.	Select a local synthetic turf system Installer						
1	Research Regional Turf Providers	Yes		1/14/15	C. specialists & PE	On time	FIFA Specification
2	Qualification Interview Sessions for each vendor	Yes		1/16/15	All	On time	FIFA Specification
3	Visit reference fields and rate product attributes	Yes		2/2/15	PM, PE, Owner	On time	FIFA Specification
4	Rate Manufacturing Capabilities of vendors	Yes		1/20/15	C. specialists, PM, PE	On time	FIFA Specification
5	Rate Design Capabilities of vendors	Yes		1/22/15	C. specialists, PM, PE	On time	FIFA Specification
6	Rate Warranties of vendors	Yes		1/26/15	C. specialists, PM, PE	On time	FIFA Specification
7	Request for Proposal (RFP)	Yes		1/28/15	C. specialists	On time	FIFA Specification
8	Evaluate Proposals	Yes		2/3/15	C. specialists	On time	FIFA Specification
9	Select and sign contract with vendors	Yes		2/5/15	C. specialists, PM	On time	FIFA Specification
D.	Field Construction Process						
1	Specific Site Investigation & Permitting by Vendor	Yes		2/12/15	PM, PE, HSE Advisor	On time	FIFA Specification
2	Install Construction Entrance/Track Protection	Yes		2/27/15	PE, HSE Advisor	On time	FIFA Specification
3	Install Erosion and Sediment Controls (as necessary)	Yes		3/5/15	PE	On time	FIFA Specification
4	Excavate Field to Subgrade	Yes		3/5/15	PE	On time	FIFA Specification
5	Install Perimeter Concrete Curb	Yes		3/12/15	PE	On time	FIFA Specification
6	Install Geotextile Fabric & Field Underdrain System	Yes		3/27/15	PE	On time	FIFA Specification
7	Install Free Draining Base Stone and Finish Stone	Yes		4/3/15	PE	On time	FIFA Specification
8	Off load turf rolls and place turf	Yes		4/20/15	PE	On time	FIFA Specification
9	Sew turf panels	Yes		4/27/15	PE	On time	FIFA Specification
10	Install Field Markings and Decorative Markings	Yes		5/4/15	PE	On time	FIFA Specification
11	Add FIFA logo and other branding amenities	Yes		5/5/15	PM, Owner	On time	FIFA Specification
12	Add locally negotiated amenities	Yes		5/8/15	PM, Owner	On time	FIFA Specification
13	Remove Construction Entrance/Clean Up/Test Field	Yes		5/13/15	PE	On time	FIFA Specification
E.	Post-Install Follow Up & Handoff to Owners						
1	Handoff of Warranties to owner	Yes		5/15/15	PM, C. specialists, Owner	On time	FIFA Specification
2	Maintenance Training/Equipment plan to owner	Yes		5/18/15	PM, PE, Owner	On time	FIFA Specification
3	Deliver Certificate of Completion to owner	Yes		5/20/15	PM	On time	FIFA Specification