

A new motorway service area essay

[Business](#), [Industries](#)



Background

The Report is about the development of a new Motorway Service Area (MSA) at Salteroyd in the county of Yorkshire, North of England. The investor of the undertaking is Baytree plc which is a retail and leisure group and presently putting a immense sum in building and development for the enlargement of their concern. Along the building of new MSA, Baytree have 2 other ongoing MSA undertakings in the UK which include mid-sized hotels, some multi-sport nines and some agricultural involvements. Due to the coincident on-going undertakings and their extended engagement in the building industry, Baytree plc seems to be rather experient and good established in this concern. To good set up them in the hereafter, Baytree appointed PWF direction advisers to research hereafter market tendencies which may be more good for their building concern. The research concluded by PWF direction advisers was that climate alteration factors and the decrease to CO2 footmarks are really of import in the hereafter.

Every possible measure should be taken frontward in the decrease of CO2 and doing the building as clime friendly as possible. PWF direction advisers further added that Sustainability issue will impact the purchasing power of people in the hereafter. If sustainable and environment friendly development takes topographic point, much gross is expected to be generated. So, to be leaders in sustainable development in the close hereafter, Baytree plc agreed with the research carried out by the PWF direction advisers.

Statement of work

Harmonizing to Kerzner (2009) , Statement Of Work (SOW) is considered as an of import component of the undertaking. In the procurance context, SOW can assist in specifying the range of undertaking, locations of undertaking, aim of the procurance, enlisting the undertakings to be performed, grouping of similar undertakings etc. In short, SOW provides a clear apprehension of the demands of undertaking and minimizes the opportunities of future alterations.

Following are the key undertaking demands:

Scope OF Undertaking

Baytree plc has proposed the building of a new Motorway Services Area (MSA) that will ease the users of M7. The primary map of the MSA would be to supply the re-fuelling installations along the installations of Food and Washing Closet (WC) for a short stay period. The undertaking fundamentally comprises two wings ; the Northbound and Southbound site each of the M7. As the undertaking has two wings, the work will be done stage wise i. e.

first the work will be done on Phase I accompanied by Phase II.

Location OF PROJECT

The proposed Motorway Services Area will be located along M7 expressway at Salteroyd in the county of Yorkshire. The vicinity of the site consists of natural beauty and the country comes under the rubric of Particular Scientific Interest (SSI) due to the rare vegetation and zoology and wild life found in the location. To make any building in the country of Particular Scientific

Interest (SSI) , Baytree must acquire the permission from the planning committee so that no change is done to the natural beauty.

PHASES OF PROJECT

As discussed earlier, the whole of the undertaking comprises of two stages.

Phase I is indistinguishable to Phase II with the exclusion that there will not be any New Build Budget Hotel in Phase II.

Construction of PHASE I

Phase I comprise the design and building of the MSA on the Northbound carriageway (Appendix 1) . Following are the cardinal development constituents:

- Slip roads to and from the M7 expressway to ease the maximal use of the country
- Service country, which will include the retail mercantile establishments, eating houses, lavatories, java stores, convenience shops, auto lavation and service installations etc
- Petrol Filling Station (PFS) with associated booth, the PFS (Appendix 1) has been designed in such a manner that it could easily suit all sizes of vehicles i. e. Cars, managers and Long Vehicles. The fueling installations of Passenger Cars would be separated to that of Coaches/Long vehicles so that no waiting lines are encountered.

The fuel armored combat vehicles would be subterranean and would be installed off from the Fuel Dispensers.

- Service Road to supply proper way to all the Northbound site country.

- Appropriate parking infinite for Cars, Coaches and Long Vehicles/Trailers.
- A New Build Budget Hotel holding a capacity of 75 sleeping rooms. The hotel will ease the people meaning to remain for a dark to hold remainder or long stay.
- A Pedestrian span to entree Southbound and Northbound countries
- Pathwaies are constructed throughout the Northbound country to ease the walkers and to heighten the ecstatic of the country.

Construction OF PHASE II

As discussed earlier, Phase II will be indistinguishable to the Phase I i. e. Northbound except New Build Budget Hotel will non be constructed here, all other installations remain the same.

PRIMARY OBJECTIVES OF CLIENT

Morledge et Al. (2006) states that client plays an of import function in the building industry and involves a figure of responsibilities and maps, which is non normally adopted by clients. The client largely aims to hold best value of money, building stage complete precisely on clip and within budget, speedy but perfect work etc. Other than these factors sustainability besides plays a critical function and needs to be considered in all phase of building.

Baytree defined the standards for the successful completion of the undertaking and the complete fulfilment of these standards, the undertaking will be considered a successful one.

Time

The building industry is ever full of competitions. No developer wants to detain its undertakings and have a bad feeling in the building market. The dead line given for the completion of Phase I is May 2012. The Phase II can be completed by May 2013. As it is a commercial undertaking any significant hold in the undertaking can do fiscal loss to the client.

Baytree plc has 2 other ongoing MSA Projects and holding dialogues 2 other landholders for developing 2 farther MSAs over a period of 5 old ages, so they ca n't afford to waist their clip. In add-on, certain clip and day of the months are allocated for certain undertaking in the development phase of undertaking like:

- Appointing advisers for undertaking
- Design period of undertaking
- Finalizing Contract paperss of undertaking
- Site business of undertaking
- Defects liability period
- Concluding completion of undertaking

Budget

The client has a fixed budget of & A ; lb ; 34M. Out of & A ; lb ; 34M, Northbound ' s Phase I constitutes & amp ; lb ; 16M for building of roads, PFS, parking etc and & A ; lb ; 3M for new build budget hotel while Southbound ' s Phase II constitutes & A ; lb ; 15M for building of roads, parking etc. As Baytrees have other 2 on-going undertakings of similar

nature, therefore it has a tight budget and can non afford to transcend its bound. Additionally, cost bounds are to be checked for:

- Design cost of undertaking
- Construction cost of undertaking
- Concluding cost of undertaking

QUALITY AND FUNCTIONALITY

Harmonizing to Fewings (2005) , Quality criterions should be setup in the start of a new undertaking so that the quality of undertaking proposed by the provider should fit the degree of outlook of the client for the undertaking.

The Quality of the undertaking is non limited to the terminal merchandise merely, in fact it accounts for all the three harts of the undertaking i. e. pre-construction, during building and post-construction. The location of the new MSA is in the part of Salteroyd, a part of natural beauty and Baytree plc is looking frontward to heighten the beauty of the part by puting in a high quality building. The chief purpose of Baytree is to fulfill its clients by developing natural friendly and choice undertakings. The subject for commanding and specifying quality is to keep close relationships with client and stakeholders. The cardinal certification required for the Quality is:

- Quality Assurance Certificate
- Quality Statement and Plan

Sustainability

While specifying sustainability Muir and Rance (1995) stated that, sustainability is seeking to keep the environment that retains it self and to guarantee that it passes safely to our posterities.

As discussed earlier, PWF direction adviser ' s research concluded that the hereafter development undertakings should be sustainable and environmental friendly. Baytree plc want to go innovators in the sustainable building and therefore, want to set up itself as an environmental friendly house. It will be a measure frontward towards cut downing CO2 emanation and more usage of recycled stuff. All the cardinal issues sing sustainability will be discussed subsequently in the study but the cardinal challenges that would be faced by Baytrees is that whether the sustainable options could be completed on clip and within budget or some extra demands would be necessary?

SECONDARY OBJECTIVES OF CLIENT

Following are the secondary aims of the client are:

Hazard EXPOSURE

Harmonizing to Masterman (2002) , largely Risk transportation issues originate due to the alteration of Team members of the undertaking by the client. In order to finish the undertaking on clip successfully, the client should avoid altering the squad and should oversee the building activities of the contractor.

Lastingness

The lastingness of the undertaking is much related to the cost and proper planning of the undertaking. In order to cut down the farther cost of the undertaking, it should be one time be constructed in a manner that it is defect free. If any care is required it should be a minor one and should non change much, the cost of the undertaking.

RESPONIBILITY ALLOCATION

Proper duty should be allocated to the undertaking squad members in the undertaking. There should be no such instance that a individual individual who is responsible for one undertaking is allocated another undertaking. Such allotments may take to inefficient work.

Particular REQUIREMENTS

The building of new Motorway Service Area (MSA) along with other sub-tasks associated with it is subjected to particular demands of the client. Baytree, being really lament in sustainable building wants particular considerations be taken during the development stage. The item analysis will be done further in the study.

MISSION STATEMENT

Baytree plc is one the UK ' s popular retail and leisure group which is in the procedure of going the innovators in the Sustainable building. Their retail qualities can be configured as they are developing multi-sport installations club, departmental shops and retail mercantile establishments at the new MSA while their leisure popularity can be judged by the building of an incorporate new physiques budged hotel.

SERVICES STATEMENT

The completed undertaking will be used for users of M7 expressway. The services will include parking for all types of vehicles, gasoline filling services, eating and dining, shopping and short stay services.

About 55 % of the budget is allocated to Phase I and staying is for Phase II.

ORGANIZATIONAL Structure

Kerzner (2009) defines that ; the organisational construction (client) should be such that each person should cognize about his responsibility. The undertaking director must construction the overall Organizational Breakdown Structure (OBS) in such a manner that easiness in the flow of the undertaking must non be disturbed. This can be done by apportioning authorization to a individual so that it ' s low-level work efficaciously and cost expeditiously.

PROBABLE PROCUREMENT METHODS

Morledge et. al (2006) describes procurement scheme as a procedure in which the chief aims of a undertaking are summarized and so a precedence is set for each undertaking. Thus constitution of procurance scheme enables to choose the squad, how the hazard will be transferred, planing the undertaking and how the undertaking will be delivered so that the overall undertaking will be successful.

The choice of a procurance scheme is an of import measure. If a incorrect scheme is adopted so the effects are risky and may stop up in a delayed or over budgeted building. Hence to choose the right procurance scheme, all the possible procurance options need to be studied to pick the right 1.

Following are the possible procurance options:

1. TRADITIONAL (ALSO KNOWN AS DESIGN-BID-BUILD)

This method of procurance involves the designing stage, tendering stage and eventually constructing stage. The start is taken by choice of

advisers, normally architect/engineer, who does the elaborate designing of the undertaking and prepares pulling. Upon the completion of drawings Bill of Quantities is prepared and invitation to contractors in the signifier of unfastened or closed tendering is done. Normally the lowest antiphonal bidder among contractors is selected. The contractor with its sub-contractors manages the building of the undertaking. (Potts, 1995)In this method the client has direct interaction with the design squad, so the quality of the undertaking can be adjusted harmonizing to the client ' s demands but in instance of Salteroyd ' s MSA building, clip is important factor (Dead line for Phase I is May 2012) and rushing the procedure in this method is really hard. Harmonizing to Morledge et. al (2006) , the crystalline nature of this method makes it successful in the building industry but the Client in our instance has set up certain demands (Appendix 1) which are impossible to implement unless the contractor is non involved in the designing stage. As rated in procurance method choice prosodies of Bennet and Grice (Appendix 3) and Skitmore and Marsden (Appendix 4) , the undertaking is non of a complex nature. This method, largely being used for complex undertakings fail to be implemented in this instance as low complexness means that there would be higher hazard degree if the undertaking is started before finalising the design.

The lowest command may non be regarded as the right determination because the contractor may hold tendered low quality stuff during tendering to win the command. If this is the instance, so any change to

the stuff during the building stage can lead to high cost which would not be liked by the contractor.

2. Measurement

This is a alone type of procurement scheme in which the value or the monetary value of the work is established after the work is really done. Therefore it is sometimes referred to as Re-measurement.

Morledge et. al (2006)In this procurement method, alterations can be made in the design during the stage of building as the command was done before the completion of existent design but the disadvantage is that the cost may increase significantly. The building of new MSA along with other constituents has a limited budget i. e.

& A ; lb ; 19M for Phase I and & A ; lb ; 15M for Phase II. So the monetary value uncertainty may take to higher hazard, which is least wanted in this undertaking. Never the lupus erythematosus, this method is popular but the restricting demands of the Baytree plc. (Appendix 1) constrains the usage of this method as there is really limited part of the contractor during the design stage. As rated in procurement method choice prosodies of Bennet and Grice (Appendix 3) and Skitmore and Marsden (Appendix 4) , the undertaking is non of a complex nature. This method, largely being used for complex undertakings fail to be implemented in this instance as low complexity means that there would be higher hazard degree if the undertaking is started before finalising the design.

3. Construction MANAGEMENT

In this type of procurement, a building director is given the duty to oversee the building activities and collaborate with the design squad on history of a fee. Therefore whole hazard is non thrown to the contractor merely alternatively it is shared amongst building director, client and contractor. This type of procurement is strongly recommended for experient clients as it involves client ' s engagement through out the undertaking life rhythm. Morledge et. al (2006)Although the client has much influence over other parties of the undertaking because of the easiness of communicating amongst them but at the same clip, the client has a greater duty of organizing the members which finally increases the hazard factor.

Morledge et. al (2006)This procurement scheme enables a fast path attack which allows the client to do any alteration during the design and building stage of the undertaking which indicated the characteristics of a strong client. Construction direction attack has many advantages like ; it is a really flexible attack in the sense that it allows overlapping of different design and building undertakings. So clip can be saved easy by executing multiple undertakings parallel to each other yet cost of the undertaking can non be limited to the mark. This could be the chief cause of flinging this procurement method.

4. MANAGEMENT Catching

Management undertaking attack is different than the building direction attack because here direction contractor is selected by the client to pull off the work contractors. The work contractors are selected by the direction contractor through tendering so that different work bundles

are allocated to each work contractor. Wood (2009, CI)The client gives a fee to the direction contractor in order provide the professional service.

Like building direction, direction catching besides allows the client to do amendments during design and building stage as it will non do much difference in the concluding cost of the undertaking. This makes it a fast path attack as overlapping of different activities is allowed in this procurance method. In direction catching, client is responsible for engaging the design squad which includes applied scientists, designers, measure surveyors etc. and if by opportunity the design squad is inefficient or delays the design portion of the undertaking so, the hazard is finally transferred to the client which makes it a hazardous concern. Morledge et. al (2006)This method may turn out successful if lone clip is considered, but cost can non be neglected as cost certainty is really low in this method, so this method proves non to be a good pick.

5. DESIGN AND MANAGE

This procurance method is indistinguishable to direction undertaking with the exclusion that here the client selects the contractor and pays him the fee in order to manage the design squad every bit good as the plant contractors. Morledge et. al (2006)In design and manage attack, the client gives all the duty to the contract and finally transportations all the hazard to him. So the client waves off the major part of trouble from his shoulder and is able to concentrate of other cardinal issues of the undertaking. So the contractor can get down the building even

before the completion of the design as it has already taken the hazard. Harmonizing to Morledge. et.

al (2006) , the client must hold good communicating with the contractor as it is the lone party the client has to cover with. This will be helpful in set uping good apprehension between the design and building squad. The client has already given duties to the contractor and is at a hazard so what of all time quality of stuff is set by the contractor, the client has to accept thatThe clip can be saved easy in this procurance type but the concluding cost of the undertaking is unsure till the last piece of work is done. As graded in Grice and Skitmore (Appendix 3 & A ; 4) , cost is of premier importance doing this procurance non suited for building of new MSA undertaking.

6. DESIGN - Physique

Harmonizing to Morledge et.

al (2006) , in design and construct the contractor takes the hazard and starts constructing even before the design has been finalized. Thus the contractor takes the duty of planing and constructing the undertaking at a ball amount (fixed) monetary value. Therefore the client transfers the hazard to the contractorIf the development of new Motorway Service Area (MSA) is done utilizing this method of procurance, so the job of cost uncertainness will be distinguished one time the concluding designed are finalized which was non the instance in old methods. Once Baytree plc gives the charge to the contractor, it means the contractor has accepted the

hazard and may get down the undertaking even though the design is non complete yet.

Design and Build method is really flexible as the client can model it harmonizing to its demands. For case the client can engage a Undertaking Manager to maintain an oculus on the undertaking that everything is working every bit stated in the specifications. Potts (1995) Time is a important factor in this undertaking and the contractor can salvage a batch of clip by overlapping different activities of design and building which are possible to run parallel to each other. Likewise Baytree plc should make up one's mind about the design on the first base as ulterior change in design or stuffs used can do perturbation in the budget of the whole undertaking therefore a hold in the undertaking may originate. Finally, this procurance method is rather similar to plan and pull off in the sense that this method besides allows individual point communicating (with contractor) .

WHICH METHOD TO SELECT?

After a elaborate analysis on the possible procurance methods, it can be summarized that the Traditional method is really celebrated in the building industry but the demands of Baytree plc (Appendix 1) constrains the usage of this procurance method merely because much of the hazard is associated with clip, which is neglected in this method.

On the other manus, in the direction attacks, clip is really easy handled by running different design and building activities parallel to each other yet cost uncertainness remains an of import issue in these attacks. Information sharing between the client and the direction squad is much indispensable to

the success of the undertaking, missing this will do much problem. Although from the procurement choice matrices of Skitmore and Bennet (Appendix 3 and 4) shows that direction attack may be adopted yet the above mentioned factors are considered for the concluding determination. If Design and Build attack is selected by Baytree plc so all the hazards of clip and cost are thrown upon the contractor.

Due to the early engagement of the contractor, the design can stop up being more economical than other attacks and the surety of the day of the month of completion is besides given. Design and Build is non highest rated method in the Skitmore and Bennet (Appendix 3 and 4) charts as these methods are about empirical, so clip and cost certainty together are the cardinal success of the undertaking and hence DESIGN AND BUILD Procurement method is adopted of the building of new Motorway Service Area (MSA) .

THE PROCUREMENT METHOD ADOPTED