N GWCC: MASTER PLAN PHASE IV

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POPULOUS

 300 Wyandotte, Suite 200
 T
 +1 816 221 1500
 info@populous.com

 Kansas City, M0 64105, USA
 F
 +1 816 221 1578
 populous.com

MARCH 26, 2012

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Mr. Kevin Duvall Chief Operating Officer GWCC 285 Andrew Young International Blvd., NW Atlanta, GA 30313-1591

Dear Kevin:

The attached report documents our findings when examining the ability of a modified and expanded Georgia Dome to serve the future needs of the Falcons and the GWCC. Our evaluation took into consideration the following items that are necessary to satisfy the requirements of a current NFL stadium program:

- A stadium capacity of 66,000 to 72,000 (expandable to 80,000 for special events) commensurate with other NFL venues and consistent with current NFL seating arrangements, such as club seats at field level.
- Ability to satisfy the market demand for improved accommodations and enhanced fan experience based on what the latest NFL stadiums now provide.
- The strong desire for NFL games to be played outdoors, particularly in a temperate climate like Atlanta, combined with the need to accommodate indoor GWCC events. A retractable roof stadium would provide that necessary flexibility and at the same time allow the most commercially viable multipurpose NFL venue.
- The resulting outdoor / indoor facility would require improvements to completely waterproof the building and to provide an efficient climate control system to achieve comfortable temperature and humidity levels when the roof is closed.

Based in part on these criteria, the Georgia Dome solution, in our opinion fails in three principal areas:

- 1. Modifications to the seating bowl, as necessitated by new program seating arrangements, results in seat quantities that do not achieve the desired game day or special event capacities.
- Continued use of the venue through construction is not possible. Modifications will result, at a minimum, in two periods of closure for the facility January 2014 to September 2014 and January 2015 to October 2015 at best. This significantly affects both the Falcons season and GWCC events during these time periods.
- 3. There is not a compelling difference between the cost of reconstructing and expanding the Georgia Dome versus the cost of building a new facility; a point that is further magnified by the opportunity cost resulting from the loss of hosting Falcon games and other GWCC events. Also the substantial cost risk of undertaking this complicated project, (which still would not meet the current NFL program requirements) narrows the cost differential even further.

We are available to answer any questions you may have. Sincerely.

Dennis R. Wellner, AIA Senior Principal cc: Frank Poe – GWCC

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N 01/ GOALS AND OBJECTIVES

CREATING A MODERN NFL STADIUM AND GAME DAY FAN EXPERIENCE Testing whether a redeveloped Georgia Dome can satisfy this requirement

The Game Day Experience

At the request of the GWCC, a meeting was held at Populous' offices in Kansas City on February 9, 2012 with the Falcons and GWCC to discuss the stadium program requirements and vision for continued growth in the Atlanta market. Of particular importance was the desire to create a new game day experience consistent with current NFL program criteria. By working with a number of NFL clients, Populous can confirm that the game day experience is changing across the entire League. The following issues were identified both related to the existing Georgia Dome and the goals which currently exist with NFL teams as a whole.

- Lower bowl seating is in high demand; the value of that seat needs to be increased with deeper treads, wider seats and clubs spaces, the Club Level has traditionally been located in a mid-level tier, it's now trending to the lower bowl.
- Club seating starting at Row 1 of field level seating.
- The seating configuration and price points in the Georgia Dome have increased from four to as many as eighteen which is undesirable.
- End zone suites above the lower bowl are not marketable.
- Upper deck seating outside the 30 yard lines and through the end zone is in the lowest demand.

Prior Stadium Reports by Populous for the GWCC

Populous has performed two evaluations of the Georgia Dome and one evaluation of a new stadium on the GWCC Marshaling Yard.

- The two Georgia Dome evaluations focused on expansion of the building by approximately 350,000 square feet and modifying the seating bowl. The roof was to remain. The Georgia Dome would continue to be utilized by the GWCC for non-Falcons events.
- The study of a new open-air stadium on the Marshaling Yard was a Falcons only facility. It was anticipated that the Georgia Dome would still be utilized by the GWCC for events that require an enclosed facility.

Renovation Compared to New Construction

Populous has been the Architect of Record on twelve new NFL stadiums and two major NFL stadium renovations. The clients that decided to renovate and expand their stadium concluded that their program needs, market requirements and funding resources supported a renovation in lieu of a new stadium. It's been our experience that if it meets team requirements the value of a stadium renovation/expansion exists in the reuse of its structure resulting in a potential cost savings to the overall project. Stadium renovations are enormously complex given unforeseen impediments during both demolition and new construction and even more so when looking to convert a fixed roof to an outdoor / indoor venue.

 Populous has determined there is a potential savings of 35% to 40% if an existing facility can actually be modified to meet a team's needs using the existing structure (excavation, foundations and superstructure). However, this does not include the cost of a roof, fixed or operable, covering the field of play.

The prior studies performed by Populous to renovate and expand the Georgia Dome were done to examine whether the program needs and market requirements of the GWCC and Falcons would support this approach. During our recent meeting with the Falcons and the GWCC it was agreed that the GWCC would retain Populous to explore the current program needs and market development goals. The Falcons and the GWCC are jointly funding the study. The objectives of this study as it relates to the Georgia Dome are as follows:

- Evaluate removing the existing fixed roof and replacing it with an operable roof.
- Use current NFL programmatic elements, which the Falcons have adopted, and consider whether these elements can be incorporated into a modified Georgia Dome structure.

 Update the Phase II and Phase III project budgets taking into consideration the NFL/ Falcons program requirements and escalating the revised project budgets to a 2014 procurement with a 2017 facility opening.

Atlanta Market Requirements

The Market Requirements expressed and questions posed by the Falcons and utilized by Populous during this Study are as follows:

- Will a significant investment in the redevelopment of the Georgia Dome deliver a fresh stadium that can be marketed in a new way to satisfy changing consumer requirements?
- The Falcons desire an open-air stadium and will accept an operable roof based on the needs of the GWCC.
- Removing the roof will likely impact at least two off seasons.
- Not playing in the Georgia Dome for two years will be a big disruption to the fans and will significantly impact ticket sales.
- Today's NFL Stadium needs premium level hierarchy and sponsorships executed in ways the existing Dome isn't able to address.
- NFL stadium designs need to have built in flexibility at the function level, not just at the finish level.
- As the NFL program criteria has changed, the team's ability to sell the product with the right level of amenities/experiences has diminished and has rendered the Georgia Dome incapable of being a stadium to take the franchise into the next 30 plus years.

NFL/Falcons Program Requirements

The Program Requirements expressed by the Falcons and taken into consideration by Populous during this Study are summarized below:

- · 1.8 million square feet of total facility program.
- Total seating capacity of 66,000 to 72,000, and 80,000 for special events.
- · Increasing seating capacity in the lower bowl and decreasing capacity in the upper deck.
- Deeper seat treads and wider seats in the lower seating bowl.
- Deeper seating treads and wider seats at the club seating level.
- Repositioning club seats from the midbowl club level to the field level.
- Adding stadium club under the lower level seating bowl.
- Providing end zone field level suites.
- Increase upper deck seating capacity within the 30 yard lines.
- Allowing for an operable roof.
- Changing the tread depth from 33" to 34" in the lower seating bowl.
- Changing the tread depth from 34" to 36" in the club level seating bowl.
- The requirement to increase the seating capacity of the lower bowl and reduce the nonsideline capacity of the upper seating bowl.
- A stadium that functions as an open air stadium but secondarily is able to be enclosed for a multitude of other events.

N 02/ ANALYSIS

CAN MODIFYING THE GEORGIA DOME PROVIDE A SUCCESSFUL LONG-TERM STADIUM SOLUTION GOING FORWARD

Square Footage, Seat Count, Club Seating, and Suite Amenity

The Georgia Dome could be expanded to achieve the 1.8 million square feet of total program. This could be accomplished in ways already explored in prior studies. However, the Georgia Dome cannot be modified to achieve the required total seating capacity of 66,000 to 72,000 game day capacity and 80,000 for special events. As noted in the chart below, the seating capacity would be reduced to quantities far below current NFL standards.

Modifying the Georgia Dome per the new criteria provides, at best, the following capacities:

| Field Level Seats | 23,800 | Includes 4,400 Field Club Seats between the 30 Yard Lines |
|--------------------------------|--------|--|
| Club Level Seats | 11,900 | Includes 5,500 Club Seats Endline to Endline |
| Lower Suite | 1,600 | 50 suites and includes 400 seats in 20 Suites at Field Level |
| Upper Suite | 1,200 | 50 suites |
| Upper Deck | 19,000 | Includes the ability to add 7,500 seats for special events |
| Total Net Game Day Seats | 57,500 | |
| Infill Seating | 7,500 | |
| Additional Suite Level Seating | 1,800 | |
| Other Temporary Seats | 1,500 | |
| Total Special Event | 68,300 | |
| | | |

Attachment 1 contains a graphic representation of these seating bowl adjustments.

Creating an Open Air Stadium -Replacing the Dome with an Operable Roof

Appropriate construction duration for this overall project is likely four years beginning January 2014 and running continuously through December 2017. To date stadia in the United States have utilized designs using four large corner super columns to support super trusses that span the length of the stadium. This is the simplest method for providing roof operability over the playing field and a fixed roof canopy over the seating areas.

For this study only, a similar solution is assumed but would not meet the requirements for an "open air" fan experience.

Continued use of the Georgia Dome for Falcons games and GWCC events during construction without interruption is not achievable driven principally by the installation of an operable roof. Optimistically, downtime is outlined as follows: The first stadium closure would occur between January 2014 and September 2014 and the following work undertaken:

- Club and lower seating bowl replacement.
- Draining systems installed throughout the stadium.
- Waterproofing the seating bowl and stadium concourses.
- Outside the stadium, the four large corner towers would be constructed in preparation for roof installation and concourse expansion.

The second stadium closure would begin in January 2015 and continue for a minimum of ten months to October 2015 and potentially for a full year or more. This closure is necessary for removing the existing roof structure and erecting the new operable roof. The choices for replacing the dome with an operable roof are limited for the Georgia Dome because of site constraints and the logistical requirements for executing the work. The premise of a new operable roof solution for the Georgia Dome is diagramed in Attachment 2 to this report.

Project Budgets for Redeveloping the Georgia Dome and Constructing a New Stadium with an Operable Roof located on the GWCC Marshaling Yard

Populous engaged the services of Rider Levett Bucknall to develop the Cost Model below. The results of this report show the cost difference between a new stadium and a redeveloped Georgia Dome are only \$60.5 million, not including site costs. Including site costs the total project budget difference is \$88.4 million. The Cost Model Report takes into consideration the Market and Program Requirements.

| 1 | | Redeveloped | | New | Delta | | |
|----|------------------------|-------------|----------------------|-------------------|-------|------------|--|
| 2 | Stadium Budget | | | | | | |
| 3 | Construction Costs | \$ | 665,800,000 | \$ 713,800,000 | \$ | 48,000,000 | |
| 4 | Soft Costs | \$ | 173,100,000 | \$ 185,600,000 | \$ | 12,500,000 | |
| 5 | Stadium Project Costs | \$ | 838,900,000 | \$ 899,400,000 | \$ | 60,500,000 | |
| 6 | | | | | | | |
| 7 | Site & Off-Site Budget | | | | | | |
| 8 | Construction Costs | \$ | 17,300,000 | \$ 40,900,000 | \$ | 23,600,000 | |
| 9 | Soft Costs | \$ | 3,100,000 | \$ 7,400,000 | \$ | 4,300,000 | |
| 10 | Site Project Costs | \$ | 20,400,000 | \$ 48,300,000 | \$ | 27,900,000 | |
| 11 | | | 2012/2012/2012 01:00 | | | | |
| 12 | Total Project Costs | \$ | 859,300,000 | \$ 947,700,000 | \$ | 88,400,000 | |
| 13 | | | | | | | |

Regardless of the delta in cost between a Renovated Georgia Dome and a New Stadium on the Marshaling Yard, a renovation to the Georgia Dome does not meet the requirements of the current NFL program criteria. Further, these are conservative estimates and based on our experience in encountering unexpected conditions in existing stadium demolition and reconstruction, the cost differential between the redeveloped and new stadium is more likely to narrow than expand.

N 03/ ATTACHMENTS

1 - STADIUM DIAGRAM

2 - OPERABLE ROOF CONCEPT

3 - REDEVELOPED AND NEW STADIUM COST MODEL - 2014 DOLLARS





| L ST/ | STADIUM BUDGET | | Units | | Cost/SF | Component Cost | | Total Cost |
|-------|--------------------------------------|-----------|------------|-------|--------------|---------------------|------------|-------------|
| | Existing Stadium - Area Total | • | 1,637,000 | | | | | |
| 5 | Demolition - Structure to Remain | 1,192,800 | sf | \$ | 8 | 9,542,400 | | |
| ļ | Demolition - Structure to be Removed | 444,200 | sf | \$ | 11 | 4,886,200 | | |
| 5 | | | | | | Subtotal Demo | \$ | 14,400,000 |
| 5 | Redeveloped Stadium - Area Subtotal | | 1,192,800 | | | | | |
| , | Major Work | 728,000 | sf | \$ | 280 | 203,840,000 | | |
| 3 | Minor Work | 234,800 | sf | \$ | 220 | 51,656,000 | | |
|) | Retained Upper & Club Seating | 230,000 | sf | \$ | 175 | 40,250,000 | | |
| D | | | | | Subtotal | Redeveloped Space | \$ | 295,700,00 |
| 1 | New Construction - Area Subtotal | | 607,200 | | | | | |
| 2 | Floor Area | 340,800 | sf | \$ | 335 | 114,168,000 | | |
| 3 | Lower Seating | 166,400 | sf | \$ | 225 | 37,440,000 | | |
| 4 | Playing Field | 100,000 | sf | \$ | 75 | 7,500,000 | | |
| 5 | | | | | Subtota | al New Construction | \$ | 159,100,00 |
| 6 | Redeveloped Stadium - Total Area | | 1,800,000 | | | | | |
| 7 | | | | | | | | |
| 8 | Operable Roof | | | | | | | |
| 9 | Remove Fixed Roof | 1 | Lump Sum | | | \$ 2,160,000.00 | | |
| 0 | Construct Operable Roof | 1 | Lump Sum | | | \$ 194,400,000.00 | | |
| 1 | | | | | Subtotal | New Operable Roof | \$ | 196,600,00 |
| 2 | | | | | | | | |
| 3 | | | Sub | tota | l Stadium C | Construction Costs | \$ | 665,800,000 |
| 4 | Soft Costs | | | | | | | |
| 5 | Soft Cost | 26% | | | | \$ | 173,100,00 | |
| 6 | | | | | | | | |
| 7 | | | Total Red | evelo | oped Stadiu | um Project Budget | \$ | 838,900,000 |
| 8 | | | | | | | | |
| 9 SIT | E BUDGET | Ui | nits | C | Cost/Stall | Component Cost | | Total Cost |
| 0 | | • | | | | | | |
| 1 | Site Development | | | | | | | |
| 2 | Parking - Surface | 750 | cars | \$ | 4,536 | 3,402,000 | | |
| 3 | Parking - Structured | 675 | cars | \$ | 20,655 | 13,942,125 | | |
| 4 | | | | Sub | total Site C | Construction Costs | \$ | 17,300,000 |
| 5 | Soft Costs | | | | | | | |
| 6 | Soft Cost | | | | 18% | | \$ | 3,100,00 |
| 7 | | | | | | | _ | |
| 8 | | | | То | tal Redeve | loped Site Budget | \$ | 20,400,00 |
| Э | | | | | | - | | |
| 0 | | REDEVELO | PED GEORGI | A DO | ΟΜΕ ΤΟΤΑΙ | PROJECT BUDGET | \$ | 859,300,000 |
| 1 | | | | | | | ź | ,, |

| New Stadium - Total Area | | 4 000 000 | | 200 | | | |
|---|---|---|---|--|---|---|--|
| | | 1,800,000 | Ş | 290 | 522,000,000 | | |
| | | | | Su | ototal New Stadium | \$ | 522,000,000 |
| | | | | | | | |
| Operable Roof | 1 | Lump Sum | | | \$ 183,600,000 | | |
| | | | | Subtotal | New Operable Roof | \$ | 183,600,000 |
| Existing Stadium - Area Total | | 1,637,000 | | | | | |
| Demolition - Removed Structure | 1,637,000 | sf | \$ | 5 | 8,185,000 | | |
| | | | | | Subtotal Demo | \$ | 8,200,00 |
| | | | | | | | |
| | | Sub | total | Stadium C | Construction Costs | \$ | 713,800,000 |
| Soft Costs | | | | | | | |
| Soft Cost | | | | 26% | | \$ | 185,600,00 |
| | | | | | | | |
| | | Те | otal M | New Stadiı | Im Project Budget | \$ | 899,400,000 |
| | | | | | | | |
| Planning Related Costs - To be determined b | y final design | | | | | | |
| Stadium Plaza - On Grade | | | | | TBD | | |
| Stadium Plaza - Elevated Deck | | | | | TBD | | |
| Pedestrian Bridge | | | | | TBD | | |
| | | | | | | | |
| E BUDGET | Ui | Units | | Cost/Stall Component Cost | | | Total Cost |
| Site Development | • | | • | | | | |
| Parking - Surface | 750 | cars | \$ | 4,536 | 3,402,000 | | |
| Parking - Structured | 675 | cars | \$ | 20,655 | 13,942,125 | | |
| Soil Mitigation | 200,000 | су | \$ | 43 | 8,600,000 | | |
| Power Line Relocation | 1 | Lump Sum | \$1 | 5,000,000 | 15,000,000 | | |
| | | | Sub | total Site C | Construction Costs | \$ | 40,900,000 |
| Soft Costs | | | | | | | |
| Soft Cost | | | | 18% | | \$ | 7,400,00 |
| | | | | | | | |
| | | Total | New | Stadium S | ite Project Budget | \$ | 48,300,000 |
| | | | | | | | |
| | N | EW GWCC S | TADI | υΜ ΤΟΤΑΙ | PROJECT BUDGET | | \$947,700,00 |
| E | Existing Stadium - Area Total Demolition - Removed Structure Soft Costs Soft Costs Planning Related Costs - To be determined b Stadium Plaza - On Grade Stadium Plaza - On Grade Stadium Plaza - Elevated Deck Pedestrian Bridge E BUDGET Site Development Parking - Surface Parking - Structured Soil Mitigation Power Line Relocation | Existing Stadium - Area Total Demolition - Removed Structure 1,637,000 Soft Costs Soft Costs Planning Related Costs - To be determined by final design Stadium Plaza - On Grade Stadium Plaza - Elevated Deck Pedestrian Bridge E BUDGET U Site Development Parking - Surface 750 Parking - Structured 675 Soil Mitigation 200,000 Power Line Relocation 1 Soft Costs Soft Costs | Existing Stadium - Area Total 1,637,000 Demolition - Removed Structure 1,637,000 sf Sub Soft Costs Soft Cost To be determined by final design Stadium Plaza - On Grade Stadium Plaza - Elevated Deck Pedestrian Bridge EBUDGET Units Site Development Parking - Surface 750 cars Parking - Structured 675 cars Soil Mitigation 200,000 cy Power Line Relocation 1 Lump Sum Soft Costs Soft Costs | Existing Stadium - Area Total 1,637,000 sf \$ Demolition - Removed Structure 1,637,000 sf \$ Subtotal Soft Costs Subtotal Soft Costs Total I Planning Related Costs - To be determined by final design Stadium Plaza - On Grade Stadium Plaza - On Grade Stadium Plaza - Elevated Deck Pedestrian Bridge Units C Site Development Parking - Surface 750 cars \$ Parking - Structured 675 cars \$ Soil Mitigation 200,000 cy \$ Soft Costs Soft Costs Sub Sub Sub Sub Soft Costs Soft Costs Sub Sub Sub | Existing Stadium - Area Total 1,637,000 sf \$ 5 Demolition - Removed Structure 1,637,000 sf \$ 5 Subtotal Stadium C Subtotal Stadium C Soft Costs 26% Soft Cost 26% Planning Related Costs - To be determined by final design Stadium Plaza - On Grade Stadium Plaza - On Grade Stadium Plaza - Elevated Deck Pedestrian Bridge Units Cost/Stall Site Development 750 cars \$ 4,536 Parking - Surface 750 cars \$ 20,655 \$ Soil Mitigation 200,000 cy \$ 4 3 Power Line Relocation 1 Lump Sum \$ 15,000,000 Subtotal Site C Soft Costs 5 18% 5 5 | Subtotal New Operable Roof Existing Stadium - Area Total 1,637,000 sf \$ 5 8,185,000 Demolition - Removed Structure 1,637,000 sf \$ 5 8,185,000 Demolition - Removed Structure 1,637,000 sf \$ 5 8,185,000 Subtotal Demolition - Removed Structure 1,637,000 sf \$ 5 8,185,000 Subtotal Demolition - Removed Structure 1,637,000 sf \$ 5 8,185,000 Subtotal Demolition - Removed Structure 1,637,000 sf \$ 5 8,185,000 Subtotal Demolition - Removed Structure 26% Total New Stadium Construction Costs Soft Costs 26% Planning Related Costs - To be determined by final design TBD TBD TBD Stadium Plaza - On Grade TBD TBD TBD E BUDGET Units Cost/Stall Component Cost Parking - Structured 675 cars \$ 20,655 13,942,125 Soil Mitigation 200,000 cy 4.33 8,600,000 Subtotal Site Construction Costs Soft Cos | Subtotal New Operable Roof \$ Existing Stadium - Area Total 1,637,000 Demolition - Removed Structure 1,637,000 sf \$ 5 8,185,000 \$ Subtotal Stadium Construction Costs Soft Costs 26% \$ Total New Stadium Project Budget Planning Related Costs - To be determined by final design Total New Stadium Project Budget \$ Stadium Plaza - On Grade TBD TBD Stadium Plaza - Elevated Deck TBD TBD Pedestrian Bridge TBD TBD E BUDGET Units Cost/Stall Component Cost Soil Mitigation 200,000 cars \$ 4,536 3,402,000 Parking - Structured 675 cars \$ 20,655 13,942,125 Soil Mitigation 200,000 cy \$ 43 8,600,000 Power Line Relocation 1 Lump Sum \$15,000,000 15,000,000 Subtotal Site Construction Costs \$ \$ |