

**T.C.**  
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**Ticaret Müşavirliği**

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**E-POSTA**

**TÜRKİYE ODALAR VE BORSALAR BİRLİĞİNE**

Singapur Yapı ve İnşaat İdaresi (BCA)'nin "Construction InfoNet" adlı üyelik gerektiren internet sitesinde, "Singapur Müteahhitlik Beklentileri 2011" başlıklı bir rapor yayımlanmıştır. BCA İş Geliştirme Bölümü Direktör Yardımcısı Lo Yen Lee tarafından hazırlanan ve bir örneği ekte (Ek 1) yer almakta olan raporda temel olarak:

- Singapur'un müteahhitlik talebinin 2010 yılında % 14 artarak 25,7 Milyar SGD'ye (18,8 Milyar ABD Doları) ulaştığı, bazı kurumsal ve sivil mimarlık projelerinin 2011 yılına ertelenmesi nedeniyle toplam talebin sadece üçte birinin kamu sektöründen kaynaklandığı, bununla birlikte kamu sektörü talebindeki gerilemenin güçlü özel sektör talebiyle dengelendiği,
- Kamu sektörü müteahhitlik talebinin 2009 yılındaki 14 Milyar SGD (9,6 Milyar ABD Doları) seviyesinden 2010 yılında 8,3 Milyar SGD (6,1 Milyar ABD Doları) seviyesine gerilediği, bununla birlikte yapı inşaat talebinin ve özellikle sınıai projelerin genişleme gösterdiği, anılan dönemde kamu konut talebinin 3 Milyar SGD (2,2 Milyar ABD Doları), sınıai inşaat talebinin 1 Milyar SGD (0,7 Milyar ABD Doları), kurumsal inşaat talebinin 2,2 Milyar SGD (1,6 Milyar ABD Doları) ve sivil mimarlık inşaat talebinin ise 2,7 Milyar SGD (2 Milyar ABD Doları) olarak gerçekleştiği,
- Singapur'un 2010 yılında sergilediği olağanüstü ekonomik gelişim sonucunda özel sektör yapı inşaat talebinde keskin bir geri dönüş yaşandığı, toplam özel sektör müteahhitlik talebinin finansal kriz öncesi seviyelere ulaştığı ve 2010 yılında iki kat artışla 17,4 Milyar SGD (12,8 Milyar ABD Doları) düzeyini yakaladığı, konut inşaat talebinin 7,7 Milyar SGD (5,6 Milyar ABD Doları), ticari inşaat talebinin 2,7 Milyar SGD (2 Milyar ABD Doları), sınıai inşaat talebinin 3,3 Milyar SGD (2,4 Milyar ABD Doları), kurumsal inşaat talebinin ise 3,1 Milyar SGD (2,3 Milyar ABD Doları) olduğu,
- 2011 yılı toplam inşaat talebinin BCA tarafından 22 ile 28 Milyar SGD (yaklaşık 17 ile 21,5 Milyar ABD Doları) aralığında gerçekleşmesinin beklendiği, bu çerçevede 2011 yılında kamu sektörü talebinin güçlenerek 12 ile 15 Milyar SGD (yaklaşık 9 ile 11,5 Milyar ABD Doları) düzeyine ulaşmasının ve toplam talebin % 55'ini oluşturmasının, söz konusu sıçramanın temel olarak kurumsal inşaat ile güçlü sivil mimarlık inşaat talebinden kaynaklanmasının, bununla birlikte, özel sektör talebinin 2010 yılına göre yavaşlayarak 10 ile 13 Milyar SGD (yaklaşık 7,7 ile 10 Milyar ABD Doları) aralığında seyretmesinin öngörüldüğü,
- Kamu kuruluşlarınca sağlanan veriler ışığında, 2011 yılında 253 teknik müşavirlik ve 283 müteahhitlik ihalesinin yapılmasının, teknik müşavirlik ihalelerinin % 80'inin yapı projelerinden kaynaklanmasının, 283 müteahhitlik ihalesinin ise yapı ve sivil mimarlık projeleri arasında eşit biçimde dağılım göstermesinin beklendiği,

- 2012 ve 2013 yılları için ortalama yıllık inşaat talebinin 19 ile 26 Milyar SGD (yaklaşık 14,6 ile 20 Milyar ABD Doları) aralığında gerçekleşmesinin, kamu sektörü inşaat talebinin anılan dönemde 9 ile 12 Milyar SGD'ye (yaklaşık 6,9 ile 9,2 Milyar ABD Doları) ulaşmasının ve toplam kamu talebinin % 65'inin yapı projelerinden, % 35'lik kısmının ise sivil mimarlık projelerinden kaynaklanmasının öngörüldüğü,
- Müteahhitlik üretiminin Singapur'daki 2 entegre resort ve bazı önemli projelerin tamamlanması neticesinde 2009 yılındaki 31 Milyar SGD'lik (21,3 Milyar ABD Doları) rekor düzeyin ardından 2010 yılında 27 Milyar SGD'ye (19,8 Milyar ABD Doları) gerilediği, 2011 yılında 24 ile 26 Milyar SGD (yaklaşık 18,5 ile 20 Milyar ABD Doları), 2012 ve 2013 yıllarında ise yıllık 20 ile 27 Milyar SGD (yaklaşık 15,4 ile 20,8 Milyar ABD Doları) aralığında gerçekleşeceğini hesaplandığı,
- Müteahhitlik üretiminde kaydedilen yavaşlama çerçevesinde, 2008 yılından itibaren önemli artış yaşanan müteahhitlik GSYİH büyüme rakamlarının daha mütevazı seyredeceği, 2009 yılından itibaren kaydedilen talepteki azalma sonucunda müteahhitlik üretiminin ve bu çerçevede yıllık GSYİH artış oranının önümüzdeki yıl daha fazla düşüş göstereceği, 2010 yılında % 4'e gerileyen müteahhitlik sektörünün GSYİH'den aldığı payın 2011 yılında % 3 ile % 4 aralığında seyredeceği,
- İnşaat demirlerine olan talebin 2010 yılında % 8 azalarak 0,95 Milyon tona gerilediği, başlıca ithalat yapılan ülkeler sıralamasında Türkiye'nin % 46 ile ilk sırada yer aldığı, ülkemizi % 25 pay ile Güney Kore'nin ve peşi sıra Malezya, Çin Halk Cumhuriyeti ve Tayvan'ın takip ettiği, 2011 yılında müteahhitlik üretimindeki azalmanın etkisiyle talepte ilave % 5 daralma gözlenebileceği

ifade edilmektedir.

Söz konusu rapora ilave olarak, "Construction InfoNet" sitesinde 2011 yılında ihaleye çıkılması beklenen kamu müteahhitlik projelerine ilişkin olarak yayımlanan liste ekte (Ek 2) gönderilmektedir.

Bilgi edinilmesini rica ederim.

**Gökhan ÖRNEK**  
**Ticaret Müşaviri**

#### **EKLER**

1. 2011 Singapur Müteahhitlik Beklentileri (1 Adet-19 sayfa)
2. 2011 Kamu Müteahhitlik İhaleleri (1 Adet-5 Sayfa)

#### **DAĞITIM**

- Türkiye Müteahhitler Birliği
- Türkiye İnşaat Sanayicileri İşveren Sendikası
- Türk Müşavir Mühendisler ve Mimarlar Birliği
- Türkiye Resmi Sektör İnşaat Müteahhitleri İşveren Sendikası
- Bağımsız Teknik Müşavir Endüstrisi İşverenleri Sendikası

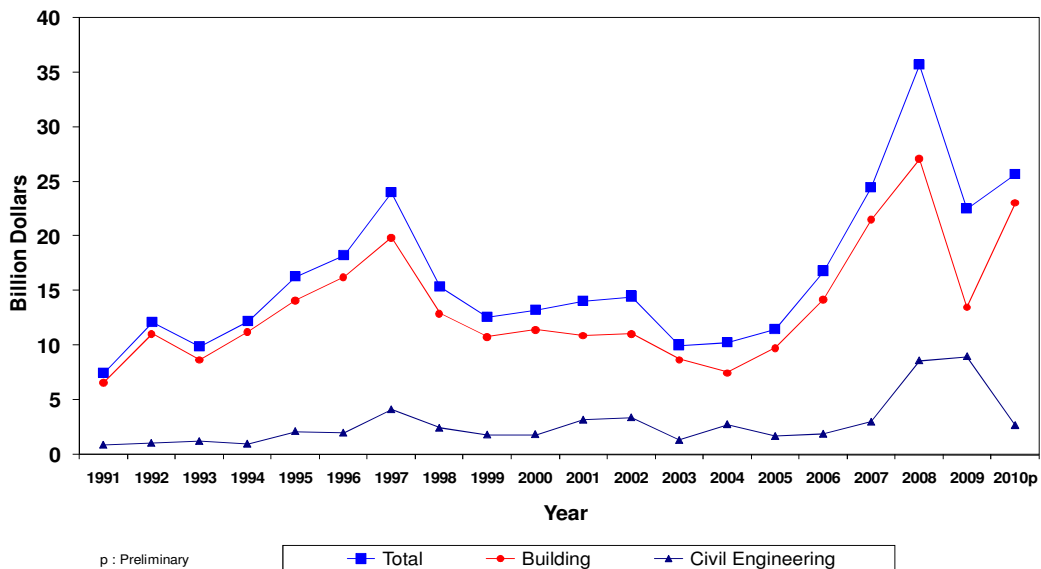
# SINGAPORE CONSTRUCTION PROSPECTS 2011<sup>1</sup>

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## REVIEW OF LOCAL CONSTRUCTION DEMAND IN 2010

1. The preliminary construction demand<sup>2</sup> in 2010 increased by 14% year-on-year to \$25.7 billion (Chart 1), closer to the upper range of BCA's forecast of between \$21 billion and \$27 billion. About one-third of the demand was contributed by the public sector, which fell short of BCA's projected range of \$9 billion to \$12 billion due to rescheduling of some institutional and civil engineering projects from 2010 to 2011. Nevertheless, this was offset by the robust private sector construction demand, fuelled by the upbeat residential property market, award of various major power utilities projects and Singapore Sports Hub on the back of exceptional economic growth (Table 1).

**Chart 1: Construction Demand (Contracts Awarded), 1991-2010**



<sup>1</sup> All currencies stated in this paper are in nominal Singapore dollars unless otherwise stated.

<sup>2</sup> Construction demand is measured by total value of construction contracts awarded. All construction demand figures in this paper exclude reclamation projects.

## **Public Sector**

2. Total public sector construction demand decreased from \$14 billion in 2009 to \$8.3 billion in 2010, mainly due to the rescheduling of the award of MRT Downtown Line Stage 3 construction contracts to 2011. Nevertheless, building construction demand, in particular industrial projects, registered year-on-year expansion.

3. Public residential construction demand strengthened to \$3 billion in 2010. While HDB upgrading programmes constituted about 30% of total residential construction demand, the remaining bulk was mainly contributed by new HDB flat construction. Industrial construction demand rose to close to \$1 billion, the highest volume since 2003. The exceptional strong demand was driven by the award of Singapore's first Liquefied Natural Gas (LNG) terminal at Jurong Island and active industrial developments at Seletar Aerospace Park.

4. Despite the softening of institutional construction demand to \$2.2 billion in 2010 owing to rescheduling of a few projects to 2011, this category remained a key contributor to public building construction with solid support stemming from the award of NUH Medical Centre, Pathology / Education / Research Building, National Art Gallery and International Cruise Terminal. Likewise, the rescheduling of major MRT rail projects also resulted in a drop in public civil engineering construction demand from the high annual volume of about \$8 billion in preceding two years to \$2 billion in 2010. Some of the major civil engineering projects awarded last year included the Common Services Tunnel Phase 3B, Waterworks at Lower Seletar and Power Supply System Installation for Downtown Line.

## **Private Sector**

5. The remarkable Singapore economic recovery since the beginning of last year fuelled a sharp rebound in private sector building construction demand in 2010. Total private sector construction demand doubled year-on-year to \$17.4 billion, comparable to the levels prior to the onset of the global financial crisis in September 2008.

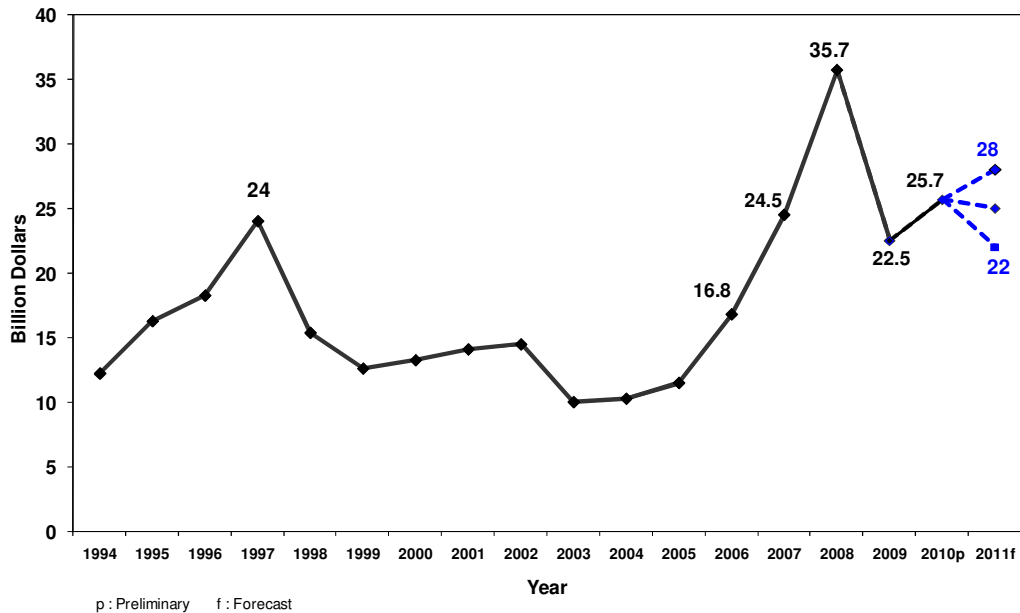
6. Residential construction demand surged to a record high of \$7.7 billion, bolstered by sanguine sentiments and strong home sales. Likewise, commercial construction demand was boosted by the improved business environment and revival in visitor arrivals, rising to \$2.7 billion in 2010 on the back of a number of hotel and shopping mall developments. Some of the prominent commercial projects awarded in 2010 included Equarius Hotel at Resorts World Sentosa, Hotel Phoenix Redevelopment, Hotel Carlton at Tanjong Pagar, Orchard Emerald Redevelopment, Jcube at Jurong East and UE Bizhub at Changi Business Park.

7. In tandem with the outstanding performance in the manufacturing sector, industrial construction demand firmed up to \$3.3 billion, backed by higher volume of conventional industrial developments and a few sizeable Engineering, Procurement and Construction (EPC) projects for power utilities at Jurong Island and Tuas South. Furthermore, institutional construction demand shot up to \$3.1 billion, another historical high arising from the construction of the Singapore Sports Hub and two private hospitals namely, Parkway Novena Hospital and Connexion.

### **CONSTRUCTION DEMAND OUTLOOK IN 2011**

8. Based on BCA's latest Development Plans Survey conducted in Oct/Nov 2010 as well as taking into account the tender price trend and prevailing economic conditions, BCA forecasts that total construction demand in 2011 is likely to reach between \$22 billion and \$28 billion (Table 1), a level which is likely to be comparable to 2010's demand (Chart 2).

**Chart 2: Construction Demand (Contracts Awarded), 1994-2011**



9. The public sector demand is likely to strengthen this year, contributing about 55% of the industry demand to between \$12 billion and \$15 billion, comparable to the annual levels in 2008 and 2009. The rebound is anticipated to mainly come from growth in institutional construction demand as well as stronger civil engineering construction demand led by Land Transport Authority (LTA)'s MRT and related projects. On the other hand, the private sector demand is expected to moderate from the preceding year's level to between \$10 billion and \$13 billion, reflecting more cautious sentiments among developers amidst an anticipated more moderate economic outlook.

## **Residential Construction Demand**

### **Public Housing**

10. Sustained by the continual strong public housing demand as evidenced in the oversubscription for HDB flat applications, total public residential construction demand is projected to be \$2.8 billion to \$3.3 billion, similar to, if not higher than, last year's level. Around 70% of the housing construction may continue to be dominated by building of new HDB flats to meet the ongoing demand. Besides, Lift Upgrading Programme and Neighbourhood

Renewal Programme are anticipated to collectively contribute about \$800 million to the rejuvenation of the living environment at various HDB precincts.

### **Private Housing**

11. Private residential construction demand is projected to moderate from last year's record volume to between \$5.1 billion and \$6.1 billion, in line with the anticipated slower Singapore economic growth in 2011 as well as in view of various potential downside risks faced by the global economy. Nevertheless, this level is still significantly stronger than the \$2 billion to \$3 billion yearly private residential construction demand posted during the period from 1998 to 2005. Some of the major projects likely to commence construction in 2011 include City Developments' H2O Residences at Sengkang West Avenue, Far East's The Scotts Tower at Scotts Road and other condominium developments at locations such as 5 Shenton Way, Pasir Ris Grove, Grange Road, Leonie Hill Road and Meyer Road.

### **Commercial Construction Demand**

12. Total commercial construction demand is likely to remain comparable to the preceding year's level, amounting to between \$2.2 billion and \$3.1 billion in 2011. The buoyant office space demand as a result of a pick-up in rentals and capital value appreciation as well as the vibrant retail sector supported by strong influx of foreign visitors have emboldened developers to continue investing in commercial developments. Some of the major projects in the pipeline include City Developments' South Beach at Beach Road, Ho Bee's Office Development at North Buona Vista, MGPA's Asia Square Tower 2 at Marina View and Perennial / Pontiac Land / Top Global Consortium's Capitol Building Redevelopment at Stamford Road and other office buildings at locations such as Science Park Drive and along Robinson Road.

### **Industrial Construction Demand**

13. Total industrial construction demand in 2011 is expected to moderate to \$2.0 billion and \$3.3 billion. While demand for conventional industrial space on the back of positive economic prospects would continue to provide support to the industrial construction demand, this category is likely to be

dominated by high-specification and state-of-the-art technological buildings. Some of the prominent projects slated for construction this year are JTC's Fusionopolis Phase 2A at One-North, JTC's Very Large Floating Structure (VLFS) for oil storage and Sembcorp Industries' Multi-Utilities Centre at Jurong Island.

### **Institutional & Other Building Construction Demand**

14. Likewise, total institutional & other building construction demand is projected to slow down to between \$3.0 billion and \$3.7 billion. The moderation is mainly due to expected reduction in private institutional construction demand from the high base last year. Public institutional construction demand, on the other hand, is anticipated to improve over last year's volume to between \$2.5 billion and \$3.1 billion. Significant support to this category is expected to come from campus expansion of various Institutes of Higher Learning (IHLs) including main contract for ITE's 3<sup>rd</sup> regional campus at Ang Mo Kio, main contract for the development of Jurong General Hospital with a community hospital at Jurong East, Changi Prison Complex Phase 2 development at Upper Changi Road North and redevelopment of Victoria Theatre and Victoria Concert Hall at Empress Place.

### **Civil Engineering Construction Demand**

15. Civil engineering construction demand is expected to go up to between \$7.0 billion and \$8.5 billion in 2011. About 65% of the demand is likely to be contributed by various construction contracts for the MRT Downtown Line Stage 3. In its bid to improve road network to facilitate traffic flow, LTA has also earmarked a number of road construction projects to proceed this year. Some of the other major projects expected to go ahead in 2011 include reconstruction of Newton Flyover, construction of viaduct from TPE to PIE (Westbound) and sewerage and drainage improvement works at various locations such as Jalan Boon Lay and Pioneer Road.



## **PUBLIC SECTOR CONSTRUCTION CONSULTANCY AND CONSTRUCTION TENDERS IN 2011**

16. Based on the preliminary data provided by the public sector agencies, a total of 253 construction consultancy tenders and 283 construction tenders are expected to be called in 2011.

### **Construction Consultancy Tenders (Table 2a)**

17. Of the 253 consultancy tenders expected to be called this year, about 80% are likely to come from building projects. The bulk of the building consultancy tenders mainly stems from Hawker Centre Upgrading, retrofitting works for public facilities and community centres, campus upgrading for IHLs as well as new HDB flat construction. On the other hand, a majority of the civil engineering consultancy tenders are expected to be called for the construction of smaller projects with value up to \$10m, which include road widening, construction of drainages, bus shelters and parks.

### **Construction Tenders (Table 2b)**

18. An estimated total of 283 construction tenders are expected to be called in 2011, with fairly equal distribution between building and civil engineering projects. In terms of construction cost category, about 56% of the construction tenders will be scheduled for smaller projects with value up to \$13 million, while about 22% each will be for projects with cost categories of \$13 million to \$40 million and above \$40 million respectively.

## **CONSTRUCTION OUTLOOK FOR 2012-13**

19. To facilitate the industry in project and resource planning over the medium term, BCA has been releasing the demand forecast beyond the immediate year. Based on BCA Construction Demand Forecast Model which takes into consideration the projected GDP growth by the Ministry of Trade and Industry and prevailing market sentiments, the average construction

demand is projected to be between \$19 billion and \$26 billion<sup>3</sup> per annum in 2012 and 2013. Barring unseen circumstances, this projection is deemed plausible in view of the potential pipeline public sector projects reported by public agencies

20. BCA's estimation based on public agencies' returns indicates that the public sector construction demand is likely to reach between \$9 billion and \$12 billion a year in 2012 to 2013, with about 65% of the total demand coming from building projects while the remaining 35% from civil engineering projects. Some of the public sector projects earmarked to proceed from 2012 onwards include development of Singapore University of Technology and Design (SUTD) at Upper Changi Road, Phase 3C development of residence halls at Nanyang Technological University (NTU), Phase 3 development of Singapore Police Force's Home Team Tactical Centre at Mandai Road, expansion of KPE/TPE Interchange, construction of major arterial Road from CTE to Yishun Avenue 7 and Tuas Extension MRT Line.

## **IMPACT ON CONSTRUCTION OUTPUT & GDP**

21. Total construction output<sup>4</sup> is estimated to moderate from the record high of \$31 billion in 2009 to about \$27 billion in 2010, as a result of the completion of a few major projects including the two integrated resorts. In view of the moderation in construction demand since 2009, the level of on-site construction activity or output is projected to be \$24 billion to \$26 billion in 2011 and \$20 billion to \$27 billion per year in 2012-13.

22. On account of the lower level of on-site construction activity, construction GDP's sturdy growth rates since 2008 has started to slow down to a more modest level in 2010. Given the anticipated further reduction in nominal construction output arising from the lower construction demand since 2009, the year-on-year real GDP growth momentum is likely to soften further

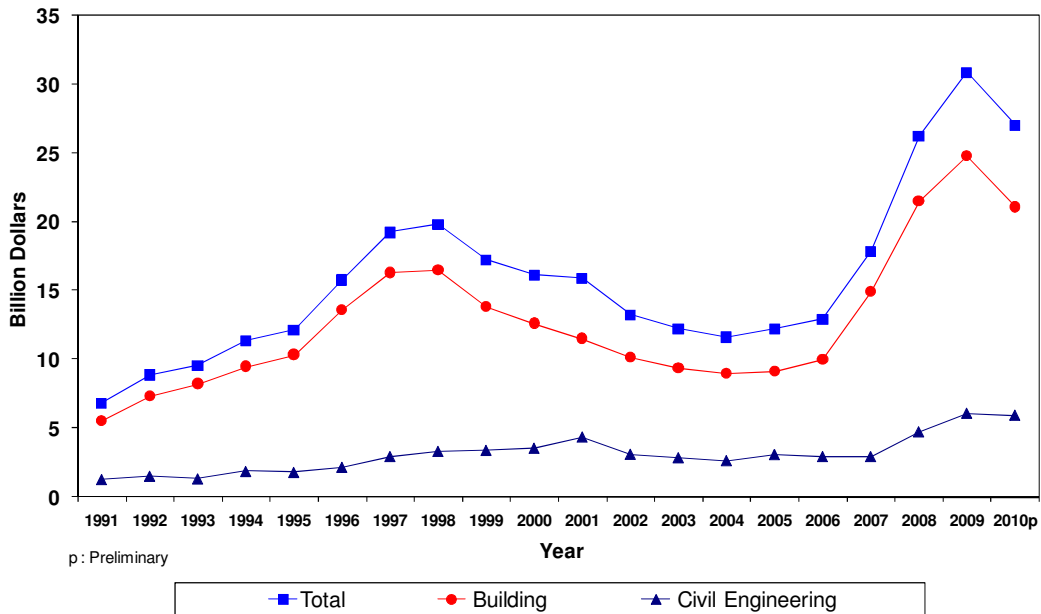
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<sup>3</sup> Demand forecast beyond the immediate 1 year will be done on a rolling basis to take into account subsequent changes in economic outlook and other pertinent factors.

<sup>4</sup> Construction output is measured by total value of certified progress payments.

in the year ahead. Correspondingly, the slower pace of construction sector growth saw its share of economic GDP edged down slightly to 4% in 2010. The share is likely to stabilise to around 3%-4% this year amidst healthy activities in other economic sectors.

**Chart 3: Construction Output (Certified Progress Payments), 1991-2010**



## CONSTRUCTION RESOURCES

23. Prices of most construction resources remained relatively stable compared to the volatile global trends experienced during the period from 2007 to 2009. Despite the pick-up in prices of most major construction materials like concrete and steel reinforcement bars over the year, the impact on construction tender prices had been by far mitigated by the moderation in construction demand since 2009.

### Manpower Capacity

24. In tandem with the moderation in construction demand since 2009, the robust employment gains in the construction sector during the period from 2007 to 2009 have continued to ease. However, total construction

employment still stayed at a high level in 2010 on account of the sustained level of on-site construction activity.

25. Looking ahead, construction and consultancy firms may stay cautious in their hiring plans given the projected gradual moderation in the level of on-site construction activity. Nevertheless, the significant civil engineering construction demand as well as the demand for more green professionals will continue to provide new job opportunities in the construction industry over the next few years. In terms of job prospects at professional level, industry feedback indicated a sustained demand for manpower in the Project/Site Management, Civil & Structural/Mechanical & Electrical Engineering and Quantity Survey/Contracts Management professions.

## **Construction Materials**

### **Ready-Mixed Concrete**

26. Despite the lower volume of construction output, demand for ready-mixed concrete in 2010 rose by 4% year-on-year, likely due to higher volume of structural work activities arising from the construction commencement of more projects in 2010 (Table 3). On the contrary, demand<sup>5</sup> for cement in 2010 dropped by 11%. The import sources for cement in 2010 were Japan (52%), Taiwan (25%), Malaysia (15%), China (4%) and Thailand (4%).

27. With the increasing demand, the average market price<sup>6</sup> for Grade 40 Pump ready-mixed concrete trended upwards from \$89.90 per m<sup>3</sup> in January 2010 to about \$95.90 per m<sup>3</sup> by mid-year, before softening to about \$91.20 per m<sup>3</sup> in August 2010. In the last quarter of 2010, due to the tight supply of granite aggregates, the average market price of Grade 40 Pump ready-mixed concrete closed the year with a rebound to an estimate of about \$104 per m<sup>3</sup> in December 2010. On the other hand, the preliminary price for cement (bulk) was about \$89 per tonne in December 2010, down 5% year-on-year.

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<sup>5</sup> Demands for cement and steel rebar are measured in terms of local production and net imports.

<sup>6</sup> The market prices are based on contracts with non-fixed price, fixed price and market retail price.

28. In view of the projected lower construction output, the estimated demands for ready-mixed concrete and cement are expected to decrease by 4% and 7% respectively in 2011. According to market feedback, the market prices for ready-mixed concrete are likely to remain strong in anticipation of higher raw material costs.

### **Precast Concrete**

29. As the use of precast concrete is one of the key means to raise construction productivity, BCA recognizes the value in giving the industry an overview of the medium-term demand prospects for precast concrete to facilitate resource planning in the construction sector. In 2010, it is estimated that the total volume of precast concrete consumed by the construction sector was 0.66 million m<sup>3</sup>.

30. Based on the projected construction output for various development types, it is estimated that the demand for total volume of precast concrete is likely to increase to between 0.8 million m<sup>3</sup> to 1.1 million m<sup>3</sup> in 2011, and sustain at between 0.75 million m<sup>3</sup> and 1.15 million m<sup>3</sup> per year in 2012 and 2013.

31. In the longer-term, BCA expects the demand for precast concrete to increase in tandem with the drive towards higher productivity through wider adoption of precast construction method. However, in view of the scarcity of land in Singapore, it is anticipated that a higher than the current 10% proportion of the precast concrete demand will have to be supported by imports.

### **Reinforcement Bars (Rebars)**

32. Demand for steel rebars in 2010 declined by 8% compared to 2009's level to about 0.95 million tonnes. The key import sources in 2010 included Turkey (46%), Korea (25%) and other countries such as Malaysia, China and Taiwan. For 2011, the demand for rebars is projected to soften by another 5% in tandem with the anticipated further moderation in construction output.

33. Growth in 2010 global steel demand and the industry's move from an annual to a quarterly pricing system for iron ore, a key raw material used in steel-making, led to a rebound in average market price of rebars<sup>7</sup> to above \$900 per tonne in April and May before softening to about \$830 per tonne during the third quarter of 2010. Towards the end of 2010, the average steel rebar price edged up again to about \$865 per tonne on higher raw material costs. Looking ahead, industry analysts envisage a likely increase in steel price in view of higher input costs.<sup>8</sup>

### **Other Construction Materials**

34. Global demand for industrial metals, especially copper which has a direct cost impact on building mechanical & electrical services, has rebounded sharply over the past year despite concerns of the escalating sovereign debt crisis in Europe and uncertainty regarding the impact of the measures by Chinese authorities to curb excessive credit creation during the first half of 2010.<sup>9</sup> Driven by robust industrial growth in emerging-market economies like China and India amidst falling stockpiles as well as speculative demand, base metal prices recovered strongly during the second half of 2010. Average copper price has tripled from its trough price of about US\$3,000 per tonne around end 2008 to reach a record high of more than US\$9,000 per tonne by end 2010. The average aluminium price increased about 75% to US\$2,300 per tonne from its low of US\$1,329 per tonne in February 2009.<sup>10</sup>

35. Looking ahead, most analysts foresee that copper prices will continue to be supported by continued consumption growth in emerging market economies and recovery in the industrialised nations against a mine supply shortfall. The aluminium market, on the other hand, may face downside risks of an excess capacity and persistent surplus production resulting in high stock levels.

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<sup>7</sup>The prices refer to 16mm to 32mm High Tensile rebar and are based fixed price supply contracts with contract period 6 months or less.

<sup>8</sup> Global Market Outlook Dec 2010, Steel Business Briefing

<sup>9</sup> International Mining, 2 Aug 2010

<sup>10</sup> Based on London Metal Exchange Average Cash Buyer price

## **Global Freight Charges**

36. Besides raw materials, another cost factor which has an impact on construction materials prices is freight charges. Although the global economy has been on a modest recovery path in 2010, the Baltic Dry Index (BDI)<sup>11</sup> continued to remain erratic and has struggled to recover. The BDI rose to a yearly high of about 4,200 points in late May 2010 on increased booking of lower priced iron ore before plunging 60% to a record low of 1,700 points in mid-July 2010 due to worries over a possible slowdown in China's economy which might weaken China's demand for commodities. During the second half of 2010, insufficient shipping fixtures as well as the expanding global dry bulk fleet continued to put downward pressure on the freight rates, with BDI staying about 80 per cent below its peak in May 2008.

37. Most analysts anticipate the dry bulk market to stay under pressure in the coming year in view that the increase in vessels' capacity arising from new ships<sup>12</sup> entering the fleet is likely to outpace freight demand growth.

## **Plant & Equipment**

38. With the stabilizing of the demand and supply situation for construction plant and equipment, costs for the plant and equipment eased significantly in 2010. For 2011, some suppliers expect moderate costs increase as more construction projects commence works, coupled with expected rise in commodity (i.e. crude oil) prices.

## **CONSTRUCTION COSTS**

39. Although the quarterly BCA Building Works Tender Price Index<sup>13</sup> (TPI) has reversed its downtrend since the first quarter of 2010, the average yearly TPI in 2010 is estimated to be still marginally lower than that of 2009 primarily

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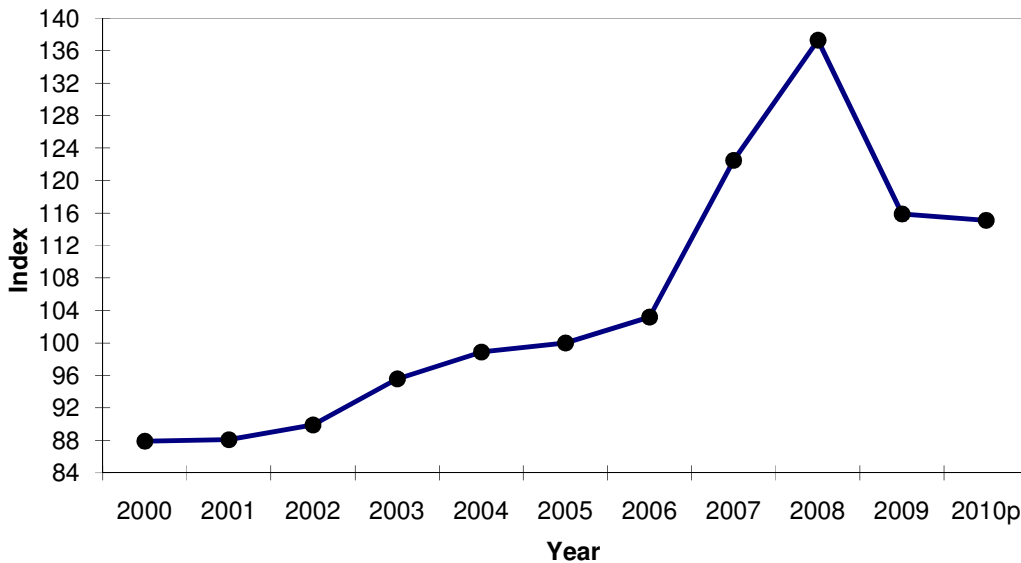
<sup>11</sup> The BDI is an index covering dry bulk shipping rates and provides an assessment of the price of moving raw materials such as iron ore and coal by sea.

<sup>12</sup> New ships refer to new Capsize ships and Vale's Very Large Iron Ore Carriers.

<sup>13</sup> BCA TPI excludes piling works, sub-structure works and mechanical & electrical works as these cost items are either project specific or not feasible to compile due to lack of data.

on account of the relatively higher quarterly index in the first quarter of 2009 (Chart 4). Year 2010 continued to see competitive and realistic pricing by tenderers generally. Although prices of major construction materials like concrete and steel rebars had picked up over the year, the impact had been by far mitigated by the moderation in construction demand since 2009.

**Chart 4: Annual BCA Tender Price Index for Building Works, 2005 = 100**



40. In the year ahead, tender prices may continue the uptrend based on current cost trends of materials and other resources such as crude oil as well as rising global inflationary pressures. Nevertheless, the anticipated construction cost inflation is likely to be restrained by adequate local contracting capacity as well as downside risks of a weaker global outlook in 2011 which may continue to hold down price prospects for most construction resources.

## **CONCLUSION**

41. On the back of strong economic fundamentals, total construction demand grew steadily in 2010 due to a resilient rebound in private sector construction demand which mitigated the fall in the public sector volume affected by project rescheduling. The new projects awarded will continue to



provide support to sustain on-site construction activity at a healthy level over the next 2 to 3 years.

42. Looking forward to 2011, construction demand from the private sector may moderate from the sharp rebound in 2010 in tandem with an expected slower pace of economic growth. Nevertheless, the anticipated strong expansion in public sector construction demand driven by civil engineering will help to sustain total construction demand in 2011 at a level comparable to 2010's demand. Over the medium-term, the industry's outlook remains positive in view of expected continual demand from the private sector as the economy continues to strengthen. Furthermore, there will also be many tendering opportunities for government projects since the public sector is anticipated to remain a key driver to the industry demand with major infrastructure developments such as new MRT lines lined up for implementation over the next decade.

**Table 1 : Contracts Awarded (Excl. Reclamation) by Sector and Type of Work**

Billion Dollars

	2008	2009	2010 (Preliminary Actual)	2011 (Forecast)
<b>Both Sectors</b>	<b>35.7</b>	<b>22.5</b>	<b>25.7</b>	<b>22.0 - 28.0</b>
Building Work	27.1	13.5	23.0	15.0 - 19.5
<i>Residential</i>	11.1	6.7	10.7	7.9 - 9.4
<i>Commercial</i>	8.5	1.6	2.9	2.2 - 3.1
<i>Industrial</i>	3.7	2.0	4.3	2.0 - 3.3
<i>Institutional &amp; Others</i>	3.8	3.1	5.3	3.0 - 3.7
Civil Engineering Work	8.6	9.0	2.7	7.0 - 8.5
<b>Public Sector</b>	<b>15.5</b>	<b>13.9</b>	<b>8.3</b>	<b>12.0 - 15.0</b>
Building Work	7.8	5.7	6.3	5.6 - 7.2
<i>Residential</i>	4.7	2.8	3.0	2.8 - 3.3
<i>Commercial</i>	0.1	0.1	0.1	0.1 - 0.1
<i>Industrial</i>	0.1	0.2	1.0	0.2 - 0.7
<i>Institutional &amp; Others</i>	2.9	2.6	2.2	2.5 - 3.1
Civil Engineering Work	7.7	8.2	2.0	6.4 - 7.8
<b>Private Sector</b>	<b>20.2</b>	<b>8.6</b>	<b>17.4</b>	<b>10.0 - 13.0</b>
Building Work	19.3	7.8	16.7	9.5 - 12.3
<i>Residential</i>	6.4	3.9	7.7	5.1 - 6.1
<i>Commercial</i>	8.3	1.6	2.7	2.1 - 3.0
<i>Industrial</i>	3.7	1.8	3.3	1.8 - 2.6
<i>Institutional &amp; Others</i>	0.9	0.5	3.1	0.5 - 0.6
Civil Engineering Work	0.9	0.8	0.7	0.5 - 0.7

Source : BCA as at 12 Jan 2011

**Table 2a : Number of Construction Consultancy Tenders To Be Called  
By Public Sector Agencies  
(Tentative schedules subject to changes)**

Construction Cost Category	Development Type	Period	Project Management	Architectural	Quantity Surveying	Civil & Structural Engineering	M&E Engineering
Up to \$10m	<b>Building</b> (e.g. Hawker centre upgrading, minor retrofitting works for public facilities like hospital or polyclinic, construction of police posts)	1Q11	7	7	8	9	8
		2Q11	0	0	0	0	0
		3Q11	2	1	3	1	3
		4Q11	0	1	1	1	1
	<b>Civil Engineering</b> (e.g. Parks, drains, sewers, bus shelters, pedestrian walkways etc.)	1Q11	0	1	12	1	0
		2Q11	0	0	8	0	0
		3Q11	1	3	7	4	3
		4Q11	0	0	5	0	1
\$10m to \$65m	<b>Building</b> (e.g. HDB public housing, campus upgrading for Institutes of Higher Learning, retrofitting of hospital, building of nursing homes, fire stations etc)	1Q11	3	10	10	11	11
		2Q11	0	3	3	3	3
		3Q11	0	2	2	2	2
		4Q11	0	2	2	2	2
	<b>Civil Engineering</b> (e.g. Parks, site preparation, road widening or construction, drainage improvement etc.)	1Q11	0	0	0	0	0
		2Q11	0	0	1	0	0
		3Q11	1	0	0	0	0
		4Q11	0	0	1	0	0
Above \$65m	<b>Building</b> (e.g. Public housing, campus expansion for Institutes of Higher Learning, community hospitals, performance halls etc.)	1Q11	0	5	5	5	5
		2Q11	0	5	5	5	5
		3Q11	0	7	5	7	7
		4Q11	0	3	3	3	3
	<b>Civil Engineering</b> (e.g. MRT lines, MRT E&M works, Infrastructure upgrading etc.)	1Q11	0	0	0	0	0
		2Q11	0	0	0	0	0
		3Q11	0	0	0	0	0
		4Q11	0	0	0	0	0

Source : BCA as at 12 Jan 2011

**Table 2b : Number of Construction Tenders To Be Called By Public Sector Agencies**  
**(Tentative schedules subject to changes)**

Construction Cost Category	Development Type	1Q11	2Q11	3Q11	4Q11
Up to \$13m	<b>Residential Upgrading</b> (e.g Neighbourhood Renewal Programme)	2	3	6	5
	<b>Education</b> (e.g Retrofitting of teaching facilities)	4	1	3	0
	<b>Other Buildings</b> (e.g. Retrofitting of government amenities, Hawker Centre Upgrading)	15	10	11	4
	<b>Sub-Total (Building)</b>	<b>21</b>	<b>14</b>	<b>20</b>	<b>9</b>
	<b>Road &amp; Bridge</b> (e.g. Pedestrian walkways, road widening)	11	9	5	13
	<b>Sewerage &amp; Drainage</b> (e.g. Drainage improvement)	10	10	1	2
	<b>Other Civil Engineering</b> (e.g Parks, waterway, and utilities)	14	6	8	6
	<b>Sub-Total (Civil Engineering)</b>	<b>35</b>	<b>25</b>	<b>14</b>	<b>21</b>
	<b>Total</b>	<b>56</b>	<b>39</b>	<b>34</b>	<b>30</b>
	\$13m - \$40m	<b>Residential &amp; Upgrading</b> (e.g Lift Upgrading Programme, Home Improvement Programme, student/staff)	3	9	1
<b>Education</b> (e.g Retrofitting of teaching facilities including Institutes of Higher Learning (IHL))		6	1	2	3
<b>Other Buildings</b> (e.g. Retrofitting or building of government amenities)		6	5	4	2
<b>Sub-Total (Building)</b>		<b>15</b>	<b>15</b>	<b>7</b>	<b>5</b>
<b>Road &amp; Bridge</b> (e.g. Widening of expressways or roads)		1	2	1	1
<b>Sewerage &amp; Drainage</b> (e.g. Canal and drainage improvement)		3	2	0	0
<b>Other Civil Engineering</b> (e.g. Waterworks, utilities and M&E for road projects)		6	1	0	2
<b>Sub-Total (Civil Engineering)</b>		<b>10</b>	<b>5</b>	<b>1</b>	<b>3</b>
<b>Total</b>		<b>25</b>	<b>20</b>	<b>8</b>	<b>8</b>
Above \$40m		<b>Residential</b> (e.g Lift Upgrading Programme, Public housing, student hostels for IHL)	8	6	7
	<b>Education</b> (Campus expansion for IHL)	2	2	1	5
	<b>Other Buildings</b> (e.g. Building of business park, new hospital facilities, recreational facilities)	0	2	3	2
	<b>Sub-Total (Building)</b>	<b>10</b>	<b>10</b>	<b>11</b>	<b>10</b>
	<b>Road &amp; Bridge</b> (e.g. Widening of expressways, construction of flyover)	1	1	0	1
	<b>Sewerage &amp; Drainage</b> (e.g. Drainage improvement)	2	0	1	0
	<b>Rail &amp; Related</b> (e.g. New MRT lines, trackworks)	5	0	0	0
	<b>M&amp;E - Rails and Roads</b> (e.g. M&E for MRT or expressways)	3	0	3	0
	<b>Other Civil Engineering</b> (e.g. Water pipeline works, infrastructure upgrading)	3	1	1	0
	<b>Sub-Total (Civil Engineering)</b>	<b>14</b>	<b>2</b>	<b>5</b>	<b>1</b>
<b>Total</b>	<b>24</b>	<b>12</b>	<b>16</b>	<b>11</b>	

Source : BCA as at 12 Jan 2011

**Table 3: Basic Construction Materials**

Demand						
Year	Cement (Mil tonnes)	% Change	Ready-Mixed Concrete (Mil m <sup>3</sup> )	% Change	Steel Rebars (Mil tonnes)	% Change
2009	4.84	-	9.75	-	1.03	-
2010 (P)	4.3	-11%	10.1	4%	0.95	-8%
2011 (F)	4.0	-7%	9.7	-4%	0.9	-5%
Current Market Prices						
Year	Cement (\$ per tonne)	% Change	Ready-Mixed Concrete (Grade 40 Pump) (\$ per m <sup>3</sup> )	% Change	Steel Rebars (16-32mm) (\$ per tonne)	% Change
Dec 2009	\$93.4	-	\$89.9*	-	\$722.5	-
Dec 2010 (P)	\$89	-5%	\$104	16%	\$865	20%

Source: BCA as at 12 Jan 2011

P: Preliminary figures

F: Forecast

\* Based on Jan 2010 price

## List of Selected Public Sector Construction Tenders Likely to be Called from 1Q2011 to 4Q2011\*

Respondents	Project Description	Location	Estimated Tender Date
Building and Construction Authority	Expansion and Redevelopment at BCA Academy	Braddell Road	1Q 2011
Housing & Development Board	Road Works	Punggol	2Q 2011
Housing & Development Board	Bukit Batok West Avenue 6 Extension (Part 1)	Bukit Batok	4Q 2011
Housing & Development Board	Earthworks	Sengkang	4Q 2011
Housing & Development Board	Edgefield Plains (Part 3)	Punggol	1Q 2011
Housing & Development Board	Edgefield Plains (Part 4)	Punggol	1Q 2011
Housing & Development Board	Earthworks	Woodlands	4Q 2011
Housing & Development Board	Earthworks	Yishun	1Q 2011
Housing & Development Board	Earthworks	Bukit Panjang	4Q 2011
Housing & Development Board	Earthworks	Bukit Batok	4Q 2011
Housing & Development Board	70 Units of Motor Workshop	Kaki Bukit	1Q 2011
Housing & Development Board	220 Units of Motor Workshop	Sin Ming	4Q 2011
Housing & Development Board	New Public Housing Programme	Various Locations	2011
JTC Corporation	Implementation of Very Large Floating Structure (VLFS) for Oil Products and Petrochemical Storage	Offshore Island	3Q 2011
JTC Corporation	Construction of Outlet Drain at Pulau Ayer Merbau	Jurong Island	1Q 2011
JTC Corporation	Infrastructure Works at Demolished Seletar Water Reclamation Plant Phase 3	Seletar	1Q 2011
JTC Corporation	66 kV Substation at Hougang Logistic Park	Tampines Road	2Q 2011
JTC Corporation	Infrastructure Works at Jalan Buroh Abbatoir	Jalan Buroh	2Q 2011
JTC Corporation	Final Premix Surfacing to Roads	Jurong Island	2Q 2011
Land Transport Authority	Construction of Sengkang West Road from Yio Chu Kang Road to TPE	Yio Chu Kang Road	1Q 2011
Land Transport Authority	Widening of Upper Paya Lebar Road from Upper Serangoon Road to Bartley Road	Upper Paya Lebar Road	4Q 2011
Land Transport Authority	Widening of Benoi Road from Upper Jurong Road to Pioneer Road	Benoi Road	3Q 2011
Land Transport Authority	Proposed Viaduct from TPE to PIE (Westbound) and Upper Changi Road East	TPE	2Q 2011

Respondents	Project Description	Location	Estimated Tender Date
Land Transport Authority	Expansion of KPE/TPE Interchange including Link Road to Punggol Central and Pasir Ris Drive 1	KPE/TPE interchange	4Q 2011
Land Transport Authority	M&E Services including Water Handling Equipment	Sentosa	2Q 2011
Land Transport Authority	MRT North-South Line Extension - Tunnel Ventilation, ECS	NSLE	1Q 2011
Land Transport Authority	MRT North-South Line Extension - Electrical Services	NSLE	1Q 2011
Land Transport Authority	MRT Downtown Line 2: E&M Building Services - Tunnel Ventilation and ECS	Downtown Line 2 (C Series)	1Q 2011
Land Transport Authority	MRT Downtown Line 2: E&M Building Services - Electrical Services	Downtown Line 2 (C Series)	1Q 2011
Land Transport Authority	MRT Downtown Line 2: E&M Building Services - Fire Protection System	Downtown Line 2 (C Series)	1Q 2011
Land Transport Authority	MRT Downtown Line 3: Tunnel Ventilation and ECS	Downtown Line 3	3Q 2011
Land Transport Authority	MRT Downtown Line 3: Electrical Services	Downtown Line 3	3Q 2011
Land Transport Authority	MRT Downtown Line 3: Fire Protection System	Downtown Line 3	3Q 2011
Land Transport Authority	MRT Downtown Line 3: Tunnel between Tampines East & Upper Changi	Downtown Line 3	1Q 2011
Land Transport Authority	MRT Downtown Line 3: Upper Changi & Tunnels & TSA	Downtown Line 3	1Q 2011
Land Transport Authority	MRT Downtown Line 3: Jalan Besar & Tunnels & TSA	Downtown Line 3	1Q 2011
Land Transport Authority	MRT Downtown Line 3: Tampines East & tunnels	Downtown Line 3	1Q 2011
Land Transport Authority	MRT Downtown Line 3: River Valley & tunnels	Downtown Line 3	1Q 2011
Land Transport Authority	Tuas Extension Line (West)	Tuas	1Q 2011
Land Transport Authority	Bus Interchange	Hougang	4Q 2011
Land Transport Authority	Bus Interchange	Jurong East	3Q 2011
Majlis Ugama Islam Singapura	Addition & Alteration Works to Al-Ansar Mosque	Bedok North	3Q 2011
Ministry of Education	Extension of Metta School	Simei Street 1	1Q 2011
Ministry of Education	Upgrading of Rivervale Primary	Rivervale Drive	1Q 2011
Ministry of Education	Upgrading of Keming Primary School	Bukit Batok East Avenue 6	3Q 2011
Ministry of Education	Upgrading of Rulang Primary School	Jurong West Street 52	3Q 2011
Ministry of Education	Upgrading of Farrer Park Primary (Co-Location with Pek Kio Community Club)	Farrer Park	1Q 2011

Respondents	Project Description	Location	Estimated Tender Date
Ministry of Education	Upgrading of Compassvale Primary	Compassvale Street	1Q 2011
Ministry of Education	Upgrading of CHIJ (Toa Payoh) Primary	Toa Payoh	3Q 2011
Ministry of Education	Upgrading of Sembawang Primary	Sembawang Drive	3Q 2011
Ministry of Education	Upgrading of Mee Toh School	Edgedale Plains	1Q 2011
Ministry of Education	New Primary School	Along Punggol Walk	1Q 2011
Ministry of Education	New Primary School	Junction of Jurong West Streets 73 & 75	1Q 2011
Ministry of Education	New Primary School	Along Fernvale Road	1Q 2011
Ministry of Education	New Primary School	Along Compassvale Bow / SengKang East Road	1Q 2011
Ministry of Education	New Primary School	Along Alexandra Road and at Prince Philip Avenue	4Q 2011
Ministry of Education	New Primary School	Bukit Panjang	4Q 2011
Ministry of Health	A 200 - 250 Bedded Nursing Home for the Relocation of Singapore Christian Home	Sembawang Crescent	1Q 2011
Ministry of Health	A 200 - 250 Bedded Nursing Home for the Relocation of Bright Hill Evergreen Home	Punggol East	1Q 2011
Ministry of Health	A 300-bed Psychiatric Nursing Home	Buangkok	2Q 2011
Ministry of Health	Superstructure - New development of Jurong General Hospital (Integrated with Jurong Community Hospital)	Jurong East	3Q 2011
Ministry of National Development	Widening of Jalan Bahar from Pan Island Expressway to Old Choa Chu Kang Road	Jalan Bahar	2Q 2011
Ministry of National Development (EUP)	Seletar and Gerald Drive Estate - Estate Upgrading Programme (EUP) Batch 6	Seletar and Gerald Drive	2011
Nanyang Technological University	Phase 3C Teaching Block	NTU	2Q 2011
National Arts Council	Development of Victoria Theatre and Victoria Concert Hall	Empress Place	2Q 2011
National Environment Agency (Waste Management Dept)	Development & Construction of Phase 2 of Semakau Landfill	Semakau Landfill	3Q 2011
National Parks Board	ECP Upgrading Phase 3 - Upgrading of Golf Driving Range and Car Parks	East Coast Park	2Q 2011
National Parks Board	Park Improvement at Windsor Area	Venus Drive, Central Nature Reserve	4Q 2011
National Parks Board	Park Improvement at Chestnut Area	Bukit Timah/Kranji Expressway	1Q 2011
National Parks Board	Improvements to Fort Canning Park	River Valley Road	1Q 2011
National Parks Board	Phase 2 - Sungei Buloh Wetland Reserve Masterplan (with new Sungei Buloh Wetland Park)	Neo Tiew Crescent	1Q 2011



Respondents	Project Description	Location	Estimated Tender Date
National University of Singapore	Regularisation & Facility Renewal Works to Ridge View Hall	NUS Kent Ridge Campus	2Q 2011
National University of Singapore	NUS University Town: Edusports	Dover/Clementi Road	1Q 2011
National University of Singapore	Redevelopment of MD1 for Yong Loo Lin School of Medicine for NUS	NUS Kent Ridge Campus	1Q 2011
People's Association	Proposed Community Club at Keat Hong	Choa Chu Kang Avenue 1/Avenue 4	3Q 2011
People's Association	Upgrading / Relocation of Kampong Chai Chee Community Club (Co-Location with Singapore Sports Council)	200 Bedok North Avenue 1	3Q 2011
Public Utilities Board	Drainage Works Under the Estates Upgrading Programme (EUP) - Batch 6 (Package B - 4 estates)	Gerald Drive Estate/ Seletar Estate/ Kebun Baru Estate/ Sembawang Springs	1Q 2011
Public Utilities Board	Improvement to Roadside Drains IV - Contract 7	Dunearn Rd, Debyshire Rd, Jalan Ma'mor, Outram Road	1Q 2011
Public Utilities Board	Improvement to Roadside Drains IV - Contract 6	Dorset Road and Ceylon Road	1Q 2011
Public Utilities Board	Improvement to Roadside Drains IV - Contract 9	Jalan Kilang Barat, Jalan Bukit Merah , First Lok Yang Road, Sungei Tengah Agrotechnology Park, Jalan Buroh, Neo Pee Teck Lane / Pasir Panjang Road	2Q 2011
Public Utilities Board	Improvement to Roadside Drains IV - Contract 10	Arthur Road/ Fort Road/ Meyer Road, Tanah Merah Besar Road, Mandalay Road, Indus Road, Bishan Street 21, Jalan Dusun, Jalan Teliti, Koh Sek Lim Road, King's Road, Jalan Mat Jambol , South Bridge Road, North Canal Road, Upper Hokien Street, Upper Pickering Street	2Q 2011
Public Utilities Board	Improvement to Roadside Drains IV - Contract 11	Sago Street, South Bridge Road, Sago Lane/ Banda Street , Spottiswoode Park Road / Cantonment Link, Keppel Road / Cantonment Link, Arab Street / Rochor Canal Rd, Bencoolen Street, Prinsep Street, Rochor Road (from Waterloo St to Bencoolen St), Sturdee Road, Jalan Besar	2Q 2011
Public Utilities Board	Improvement to Roadside Drains IV - Contract 8	Upper Changi Road East, Changi North Crescent/Rise, Aviation Drive, Dakota Crescent /Old Airport Road, Stadium Crescent (From Indoor Stadium to Geylang River), Pasir Ris Farmway 2, Admiralty Road West	2Q 2011
Public Utilities Board	Erection of a Boat Lock with a 3-Storey Control Tower & a Basement M&E Room at Marina Barrage	Marina Barrage	1Q 2011
Public Utilities Board	Improvement to Old Roadside Drains in Batch 6 of the Estate Upgrading Programme	-	3Q 2011
Public Utilities Board	Improvement to Old Roadside Drains: 5 Year Programme FY10 - FY14	-	1Q 2011
Public Utilities Board	Laying of 3rd Pumping Main for Penjuru Pumping Station	Penjuru Road, West Coast Road	2Q 2011
Public Utilities Board	Sewerage Scheme to Serve Developments in Jurong Lake District Package B Contract 2 - Proposed Sewers along Jurong Town Hall Road	Jurong Town Hall Road	1Q 2011
Public Utilities Board	Sewer Extensions - Package D	Changi Coast Road, Tampines Road, Airport Road, Piccadilly Road, Kaki Bukit Road	2Q 2011
Public Utilities Board	Sewerage Scheme to serve Marina South Area - Contract 3	Marina Bay area	2Q 2011

Respondents	Project Description	Location	Estimated Tender Date
Public Utilities Board	Sewerage Improvement at Jalan Terusan Area	Jalan Terusan	1Q 2011
Public Utilities Board	Sewerage Scheme to Serve Developments in Jurong Eastern Catchment Package C Contract 1 - Proposed Lift Station at Jurong WRP	Jurong WRP	2Q 2011
Public Utilities Board	Sewerage Scheme to Serve Developments in Jurong Eastern Catchment Package A Contract 2 - Proposed Sewers along Jurong West Avenue 2	Jurong West Avenue 2	1Q 2011
Public Utilities Board	Sewerage Scheme to Serve Developments in Jurong Eastern Catchment Package C Contract 2 - Proposed Sewers along Jalan Tukang and International Road	Jalan Tukang, International Road	2Q 2011
Public Utilities Board	Sewerage Scheme to Serve Developments in Jurong Eastern Catchment Package A Contract 1 - Proposed Sewers Along Pioneer Road and Jalan Ahmad Ibrahim	Pioneer Road, Jalan Ahmad Ibrahim	1Q 2011
Public Utilities Board	Sewerage Scheme to Serve Developments in Jurong Eastern Catchment Package B - Proposed Sewers Along Jalan Boon Lay	Jalan Boon Lay	1Q 2011
Public Utilities Board	Replacement of Integrated Monitoring and Distributed Control System (IMDCS) at Kranji WRP	Kranji WRP	2Q 2011
Public Utilities Board	Replacement and Upgrading of M&E Equipment at Ulu Pandan WRP (Phase 1)	Ulu Pandan WRP	3Q 2011
Public Utilities Board	Replacement of Aged M&E Equipment (Part 3) at JWRP	Jurong WRP	3Q 2011
Public Utilities Board	Installation of Demo UASB-MBR-RO Plant to Produce 2.5mgd IW	Jurong WRP	2Q 2011
Public Utilities Board	Expansion of Changi Water Reclamation Plant with Membrane Plant	Changi WRP	2Q 2011
Public Utilities Board	Proposed 2200 mm Diameter Pipeline along Pioneer Road from Tuas Street to Tuas West Road	Along Pioneer Road	1Q 2011
Public Utilities Board	Proposed 2200 mm Diameter Pipeline along Pioneer Road from Gul Road to Tuas Street	Along Pioneer Road	1Q 2011
Sentosa Development Corporation	Proposed Imbiah Beach Link	Sentosa	4Q 2011
Sentosa Development Corporation	Imbiah Arrival Plaza	Imbiah Road	1Q 2011
Singapore Police Force	Construction of Quarters	Upper Aljunied Road	2Q 2011
Singapore Police Force	Construction of a new Divisional HQ in Woodlands and Sembawang Region	Woodlands Avenue 3	4Q 2011
Singapore Tourism Board	Singapore Pinacothèque Project	Fort Canning Centre	1Q 2011
Supreme Court	Protection Enhancement of Supreme Court Building	Supreme Court Lane, 1	2Q 2011
Urban Redevelopment Authority	Improvement Works	Muscat Street	2Q 2011
Urban Redevelopment Authority	Environmental Improvement Works	Bugis	1Q 2011
Urban Redevelopment Authority	66kV Electrical Substation at Sims Avenue	Kallang Riverside	2Q 2011

\* This is based on survey returns submitted by various government procurement agencies between October and December 2010 and is subject to changes.