

GREEN AND GRACIOUS BUILDER SCHEME CRITERIA – SUMMARY

Criteria	Points (Max)	Weightage
Green Practices	50	35
Company Policy	3	
Reduce / Reuse / Recycle	19.5	
Energy	13	
Environmental / Water	9.5	
Housekeeping & Air Quality	5	
Gracious Practices	70	55
Company Policy	4	
Accessibility	8	
Public Safety	11	
Noise & Vibration	18	
Communication	10	
Manpower Management	19	
Innovation & Exemplary Practices	10	10
Total	130	100
<i>Plus:</i> Bonus Points	5	5
Total Possible Points	135	105

GREEN AND GRACIOUS BUILDER SCHEME CRITERIA

Green Practices (35%)

Green Practices Criteria		Maximum Possible Points
Company Policy		Subtotal: 3
Procedure / Planning	Specific goals and KPIs to address the following factors: a) Reduce / Reuse / Recycle b) Energy c) Environment / Water d) Housekeeping & Air Quality	2
Practices	Include "Green" as one of the considerations during selection of suppliers and subcontractors Examples: Including green consideration or awareness of sustainability during the pre-qualification of suppliers and subcontractors	1
Reduce, Reuse, Recycle		Subtotal: 19.5
Procedure / Planning	Procedures or measures to encourage recycling or reduction of construction waste and office waste Examples: a) Implementing segregation of waste on site b) Implementing arrangement to recycle office waste	2
	Monitoring system of wastage on site for the following: a) Concrete wastage b) Re-bar wastage c) Waste disposal cost d) Office waste	1
KPI	Performance rating of waste for recent completed projects (up to 3 years) a) Concrete wastage b) Re-bar wastage c) Waste disposal cost	4
	Improvement in company's performance rating of waste a) Concrete wastage b) Re-bar wastage c) Waste disposal cost	1.5
Technology	Use of systems and technology to reduce waste Examples: a) Mast climbing platform b) Concrete pump c) Auto wheel washer	6
Practices	Use of recycled and sustainable materials for site applications during construction stage	5

Energy		Subtotal: 13
Procedure / Planning	Monitoring system for energy consumption on site a) Electricity consumption b) Diesel consumption	1
KPI	Performance rating of energy consumption for recent completed projects (up to 3 years) a) Electricity consumption b) Diesel consumption	3
	Improvement in company's performance rating of energy consumption a) Electricity consumption b) Diesel consumption	1
Technology	Use of energy saving/efficient or Green Label appliances, equipment and/or devices (both site and site office; minimum 50% usage for site office) Examples: a) Use of Energy efficient light fittings such as T8 or PLCs lightings (or other types of lightings with at least 60 lumens/watts) or T5 or LED lightings (or other types of lightings with at least 100 lumens/watts) b) Use of Energy efficient air conditioning systems with Singapore Green Label Scheme c) Use of Green label appliances, equipment or devices	4
	Alternate use of energy/fuels on site Examples: a) Use of solar cells b) Use of other alternate energy eg. bio-diesel, wind	2
Practices	Use of AC grid power instead of diesel generators for site offices and equipment	2
Water / Environment		Subtotal: 9.5
Procedure / Planning	Monitoring system for water consumption and total suspended solids (TSS) readings on site	1
KPI	Performance rating of water consumption for recent completed projects (up to 3 years)	2
	Improvement in company's performance rating of water consumption	0.5
	Performance rating of total suspended solids (TSS) readings on site	1
Technology	Water saving or recycling equipment or devices to conserve water usage (both site and site office; minimum 50% use in site office) Examples: a) Use of Water recycling equipment that are of chemical type or membrane type	2

	b) Use of Water efficient fittings such as press tap and dual flush water cistern	
Practices	Ways which treated water is recycled for construction activities	2
	Environmental friendly products used at site and site offices (eg. pesticides, cleaning products)	1
	Compound fines and stop orders arising from water pollution (based on past 12 months) a) Average of 2 or more compound fines received based on all projects currently undertaken (maximum deductible points from final score: 0.5) b) Stop work order received by any 1 project (maximum deductible points from final score: 0.5)	(1)
Housekeeping & Air Quality		Subtotal: 5
Procedure / Planning	Effective procedures to encourage good housekeeping at site Examples: a) Designated storage space at site b) Implementing good housekeeping measures at site	1
Practices	Measures to address dust generated from material storage and construction vehicles Examples: a) Cover dust generating materials during storage/transportation b) Provide water sprays to dampen dust generating materials during storage/transportation c) Paved/precast concrete planks for access at site d) Spray main haul road with water e) Control vehicle speed at site f) Cover and secure all loads on vehicles before leaving site	1
	Measures to address refuse accumulation and collection Examples: a) Provide properly covered receptacles for food waste b) Provide suitable designated refuse points c) Inculcate good practice among staff, including subcontractor staff d) Store refuse that is pending removal in receptacles with close fitting covers	1
	Proactive vector control measures at site	1
	Appointment of dedicated Environmental Control Officer (ECO) at site	1
	Compound fines and stop orders arising from poor housekeeping / mosquito breeding (based on past 12 months) a) Average of 2 or more compound fines received based on all projects currently undertaken (maximum deductible points from final score: 0.5) b) Stop work order received by any 1 project (maximum deductible points from final score: 0.5)	(1)

Gracious Practices (55%)

Gracious Practices Criteria		Maximum Possible Points
Company Policy		Subtotal: 4
Procedure / Planning	Policy statement to adopt gracious practices	1
	Procedures to inculcate and raise awareness of green and gracious best practices to all levels of staff at regular intervals Examples: a) Conducting briefing session for site personnel b) Conducting sharing session with staff c) Implementing in-house quizzes	1
Practices	Performance of GGBS reviewed at regular interval	1
	Include Green & Gracious Builder Scheme, or Green and Gracious Builder (SMC) Scheme” as one of the considerations during selection of subcontractors	1
Accessibility		Subtotal: 8
Practices	Well signed site with clean and unobstructed site access/entrance Examples: a) Keeping site access properly maintained and unobstructed b) Providing signage from entrance to site office to facilitate entry by visitors c) Providing conspicuous/effective signage	2
	Consideration given to wheelchair accessibility around site Examples: a) Designing passageways/walkways that include barrier free consideration around site b) Well-designed and effective passageways/walkways that include barrier free consideration around site (gradient 1:12)	2
	Measures to address possible causes of traffic obstruction during and upon delivery Examples: a) Identify and address factors such as parking, location of rubbish skips, delivery routes within and out of site, especially for PPVC, PBU deliveries b) Provide trained traffic controllers to ensure smooth traffic in and out of site c) Set restricted delivery times to avoid causing obstruction during peak hours d) Provide traffic mirrors for blind spot	2

	<p>Ensure sufficient and effective signages around site to guide both motorists and pedestrians</p> <p>Examples:</p> <p>a) Put up signage and directional signs to guide motorists and pedestrians</p> <p>b) Ensure that existing road names, signboards, directional signs are not blocked by hoardings or construction works</p> <p>c) Present signage in different languages</p> <p>d) Provide variable messaging system</p>	2
Public Safety		Subtotal: 11
Practices	Provide covered walkways within site and around site for passageways that are used heavily by general public	2
	<p>Sufficiently designed and well-maintained hoarding and walkways</p> <p>Examples:</p> <p>Providing well-maintained walkway with adequate lighting</p>	2
	Provide full-height safety netting and catch platform to mitigate risk of falling objects	2
	<p>Consideration given for the provision of footpaths in the following:</p> <p>1) Sufficient width to cater for pedestrian volume/demand</p> <p>2) Provision of alternate footpath when existing footpath is being used for construction works</p>	2
	<p>Provide vehicular barriers at passageways located close to/near to roads</p> <p>Examples:</p> <p>a) Providing effective barriers</p> <p>b) Providing temporary barriers for pedestrians</p>	2
	<p>Clear site safety information to visitors on site</p> <p>Examples:</p> <p>a) Displaying safety information on site, including dos and don'ts</p> <p>b) Displaying fire and emergency evacuation routes on site</p>	1
	<p>Compound fines and stop orders arising from damage to public or neighbours' properties (based on past 12 months)</p> <p>a) Average of 2 or more compound fines received based on all projects currently undertaken (maximum deductible points from final score: 0.5)</p> <p>b) Stop work order received by any 1 project (maximum deductible points from final score: 0.5)</p>	(1)
Noise & Vibration		Sub-total: 18
Procedure / Planning	Set specific goals and KPIs to address the following factors:	1
	<p>a) Noise</p> <p>b) Vibration</p> <p>Provide noise management plan for construction project</p>	2

	<p>Procedures and standards to manage piling subcontractors in terms of noise and vibrations</p> <p>Examples: a) Reviewing the environmental impact aspect analysis and method statement b) Providing procedures to review the effectiveness of noise control measures</p>	1
	<p>Measures and efforts to minimise noise disturbance through careful scheduling of noisy construction activities</p> <p>Examples: Scheduling noisy activities in order to avoid sensitive time periods such as early mornings, evenings, weekends and public holidays</p>	1
	<p>Operational procedures in place to mitigate noise and vibrations</p> <p>a) Efforts to plan and locate noise source (Eg. vehicles, generators away from residents) b) Procedures to ensure construction plant & machinery are properly maintained c) Efforts to train workers to handle materials carefully to reduce impact noise d) Use of noise barriers for construction plant & machinery</p>	2
	<p>Procedures and measures and/or rules to mitigate issues arising from night/weekend construction works</p> <p>Examples: a) Implementing procedures to notify neighbours of noisy work b) Permit-to-work system for night construction works</p>	1
KPI	Performance rating of noise and vibration	2
Technology	<p>Use of alternative construction methods/machines to address noise and vibrations</p> <p>Examples (non-exhaustive): a) Non percussion piling b) Low noise generators c) Robotic crusher d) Wire saw e) Hydraulic splitter f) QUI cutter</p>	5
Practices	Installation of noise and vibration monitoring meters both on and off site	2
	<p>Provide enhanced hoardings around site to mitigate noise generated during construction</p> <p>Examples: Providing enhanced hoarding of 4-6 metres</p>	1

	Compound fines and stop orders arising from noise pollution (based on past 12 months) a) Average of 2 or more compound fines received based on all projects currently undertaken (maximum deductible points from final score: 1) b) Stop work order received by any 1 project (maximum deductible points from final score: 1)	(2)
Communications		Sub-total: 10
Procedure / Planning	Procedure on public communications to residents/tenants (businesses) /town councils around construction site Examples: Setting up procedure that ensure pro-active communication to various segments of the community around the site	1
Practices	Send out letters and memos to neighbouring residents to inform key milestones or major construction works Examples: a) Sending out letters and memos at “some key milestones”, “most key milestones” or “all key milestones” b) Use of social media eg, Facebook, Twitter, Instagram) Examples of milestones (non-exhaustive): a) Introduction to commencement of work b) Commencement of demolition work c) Commencement of piling work d) Major delivery of materials e) Diversion of traffic	3
	Provide designated hotline on company posters and banners for public to call	2
	Clear and proper display of posters and banners Examples: Displaying <u>visible</u> banners, posters and other publicity items to the public	1
	Designated site personnel to handle feedback and complaints received Examples: Appointing a full time PRO	1
	Guidelines and documents on the handling of feedback cases Examples: Keeping proper site record of feedback received and follow-up actions	1
	Measures and procedures to minimise security concerns to neighbouring residents Examples: a) Out of office security measures b) Crime prevention talks c) 24-hr security guard on site d) Providing CCTV around site	1

Manpower Management		Sub-total: 19
Site Personnel Management	Caring for site personnel's welfare <ul style="list-style-type: none"> a) Provide proper facilities and working gear <ul style="list-style-type: none"> • Hot/ cold water points, • Proper work wear & foot wear, • Recreation facilities/ site canteen • Dedicated on-site female washroom/ changing room b) Initiatives towards safe & conducive working environment <ul style="list-style-type: none"> • Measures to ensure safe and healthy working conditions • Measures to maintain safe and orderly site conditions • Measures to ensure emergency preparedness 	2
	Proper living conditions for site personnel <ul style="list-style-type: none"> a) Living conditions e.g. <ul style="list-style-type: none"> • Clean, ventilated dormitory rooms that are not overcrowded • Provision of proper sanitary facilities • Provision of facilities e.g. cooking/ washing machines/ dryers • Enforcing house rules to control disturbances to neighbourhood b) Provide transportation e.g. lorry or bus 	2
	Systems in place to manage site personnel <ul style="list-style-type: none"> a) Site Operations e.g. <ul style="list-style-type: none"> • Conduct tool box meetings • Provide clear instructions via handbooks, posters & leaflets b) Conduct e.g. <ul style="list-style-type: none"> • Brief workers on site regulations & conduct • Set-up of disciplinary procedures 	2
	Achieved safety results better than industry average <ul style="list-style-type: none"> a) Accident Frequency Rate lower than industry average b) Accident Severity Rate lower than industry average 	1
Training & On-boarding	Help new employees familiarize with working environment and facilitate employee development through training <ul style="list-style-type: none"> a) Training <ul style="list-style-type: none"> • Organised in-house training (by firm/ supplier) • Formal training by external service provider • Staff initiated training b) On-boarding <ul style="list-style-type: none"> • Supervisor briefing • Assigned Buddy • Induction/ Orientation programme 	3
Communications	Channels to communicate with employees & get their feedback e.g. avenues to give suggestion/ feedback, staff meeting and etc.	1

Performance Management	<p>System to manage staff performance and development</p> <p>a) Performance Feedback (e.g. informal chat, appraisal, and etc.)</p> <p>b) Progression opportunities</p> <ul style="list-style-type: none"> • Progression by designation • Exposure to different project type • Identify & coach staff for senior positions 	1
Recruitment	<p>Initiatives/policies to encourage new entrants into the built environment sector</p> <p>a) Recruitment e.g.</p> <ul style="list-style-type: none"> • Job advertisements & interviews • Recruitment talks / fairs • Employee referral scheme <p>b) Career Promotions e.g.</p> <ul style="list-style-type: none"> • Internships/ Scholarship-sponsorship/ Apprenticeship/ Management Trainee Programmes 	1
Rewards & Compensation	<p>Offer attractive remuneration package e.g. annual salary increment/ performance linked bonus/ Annual salary review against market rate/ Profit-sharing with employees</p>	1
	<p>Provision of employee benefits</p> <p>a) Work-related</p> <ul style="list-style-type: none"> • Transport/ Mobile phone allowance • Retirement benefits • Retrenchment benefits <p>b) Health & wellness</p> <ul style="list-style-type: none"> • Medical claims • Dental claims • Flexible benefits 	1
	<p>Recognition of employee contributions</p> <p>a) For service and exemplary behavior</p> <ul style="list-style-type: none"> • Long-service award • Employee of the month/ year <p>b) For good performance or results</p> <ul style="list-style-type: none"> • Safety award • Certificate of good performance 	1
Well-being	<p>Provision of non-mandatory leave entitlement/s</p> <p>a) Personal/ Family related e.g. Child Sick Leave /Marriage Leave/ Compassionate Leave/ Family Care Leave</p> <p>b) Development & well-being e.g. Study/Exam leave/Unrecorded leave for medical appointments/Volunteer leave for community service</p>	1
	<p>Organize activities and/or initiatives to enhance employees' well-being</p> <p>a) Activities e.g. company outings or community service for employees</p> <p>b) Initiatives e.g. occasion celebrations or healthy lifestyle activities</p>	1

	Provision of pro-family working environment a) Flexible Work arrangement e.g. Part time/ Flexible working hours b) Facilities & subsidies e.g. tie-ups with nearby childcare facilities/ Child care subsidy	1
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Innovative and Exemplary Practices (10%)

Innovation and Exemplary Practices	Maximum Possible Points
	Sub-total: 20
<p>Procedures or innovative use of construction technology and/or special construction methods to address environmental concerns, site challenges, best manpower management practices and/or exemplary practices to minimise concerns of the public</p> <p>Guidelines: Practices should not be commonly practised in the industry They should be proposed / counter-proposed by builder “Think out of the box” approach Gracious gestures towards the community and public stakeholders</p>	7
<p>Use of prefabrication technology and/or productive construction methods to reduce construction time and minimise inconvenience to the public</p> <p>Examples: a) Prefinished Prefabricated Volumetric Component b) Mass Engineered Timber c) Building Information Modelling</p>	3

Bonus Points (5%)

Bonus Points	Maximum Possible Points
<p>Recognition and/or awards (both public and private sectors) in recognition for builder’s outstanding performance / achievement</p> <p>Examples: a) Completed Green Mark project (Gold PLUS and above) b) Completed QM projects c) Quality Excellence Award, Building Information Modelling Award and Construction Productivity Award d) Other environmental related award</p>	5