POSITION OF THE PROFESSIONAL REGULATORY BOARD OF ARCHITECTURE (PRBoA) ON THE PROFESSIONAL REGULATORY BOARD OF CIVIL ENGINEERING (PRBoCE)'S POSITION THAT CIVIL ENGINEERS ("CEs") CAN PREPARE, (SIGN AND SEAL) RESIDENTIAL AND OTHER "SUBDIVISION" PLANS, SPECIFICATIONS AND RELATED DOCUMENTS AND THAT CEs CAN ACT AS THE PRIME PROFESSIONAL FOR SUCH "SUBDIVISION" PROJECTS

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The Professional Regulatory Board of Civil Engineering ("**PRBoCE**"), specifically its Chair Engr. Angel L. Lazaro III, Ph.D., maintains that Civil Engineers ("**CEs"**) are allowed under their law (**RA 544** of 1950, already amended by **RA 1582** of 1956) to **prepare** (and impliedly to sign and dry seal) **residential and other "subdivision"** plans and specifications and that CEs could in fact serve as the **Prime Professional** for such projects. In Chair Lazaro's 01 September 2005 letter to Commissioner Romulo Q. Fabul of the Housing and Land Use Regulatory Board ("**HLURB**"), he stated that the preparation of residential subdivision plans fall within the scope of practice of CEs.

Chair Lazaro's position was thereafter endorsed by the HLURB to the Housing and Urban Development Coordinating Council ("**HUDCC**"), chaired by Vice President Noli "Kabayan" de Castro. VP de Castro announced on 16 September 2005, on the occasion of the Bacolod City National Convention of the Subdivision and Homeowners Developers Association ("**SDHA**") that a "**Prime Professional**" must be appointed for all subdivision projects and that such an entity shall be responsible for selecting other professionals who shall be involved in the subdivision project. As it is clear that the announcement (supposedly reflecting state policy by the Executive Branch of the Government) may have been made on insufficient grounds, it become imperative therefore, to **qualify such a "state policy"** to set things in the proper context and order.

A close scrutiny of the Law on Civil Engineering (**RA 544**, as amended by **RA 1582**) reveals that neither the generic terms "**site/ physical planning"** nor the very specific terms "**subdivision planning**" or "**residential subdivision planning**" appear in the said law to make the same part of the scope of practice of CEs. Chair Lazaro relies on generalities and implications in his interpretation of the CE law i.e. "*Sec. 2. Definition of Terms. - a) The practice of civil engineering XXX. The enumeration of any work in this section shall not be construed as excluding any other work requiring civil engineering knowledge and application."*

Engr. Lazaro's argument then was to say the least misleading as it does **not** distinguish between "**subdivision" plan** preparation and the preparation of "**components" of such a "subdivision" plan** for which CEs are admittedly qualified e.g. streets, bridges, flood protection, drainage, water supply and sewerage works. Physical planning and residential subdivision planning in particular are about **spatial**

planning, site programming and the ordering of the relationships of the resultant land uses and activity areas, an area of professional practice for which CEs have **not** been examined/ qualified by the state i.e. **site and physical planning** are **not** part of the CE licensure examination. Moreover, CEs have **not** undergone sub-professional training i.e. diversified training prior to licensure and do **not** have **site/ physical planning** academic credit units i.e. **not** part of the CE curriculum.

On the other hand, **site and physical planning** are mentioned (or defined) in the laws on architecture (**RA 9266** of 2004, **RA 1581** of 1956 and **RA 545** of 1950) and in the law on environmental planning (**PD 1304**). In fact, the terms **physical planning, site planning** and residential (or other) "**subdivision**" **planning** are clearly defined under the 1979 Implementing Rules and Regulations ("**IRR**") of **RA 1581**/ **545** as promulgated by the Professional Regulation Commission ("**PRC**").

The **PRBoA** fails to see in **RA 1581**/ **544** the specific provision that **CE**s can prepare, sign and dry seal **residential or other "subdivision" plans**. When **CE**s gain the right to practice civil engineering after passing their licensure examination, their license does **not** cover **site**/ **physical planning** practice but only the preparation of the "**components"** of the **site**/ **physical plan** that have to do with **civil works engineering** e.g. streets, bridges, flood protection, drainage, water supply and sewerage works. Nowhere in the subjects of the CE licensure examination is **site and/ or physical planning** included. Contrast this with the Architecture Licensure Examination ("**ALE**") in which the **principles of planning and site planning** are specific items.

CEs do **not** have a single unit of **physical or site planning** (including **urban/ town planning** and **urban design**) in their one hundred eighty one (181.0)-unit course. In stark contrast, the B.S. Architecture graduate has at least twelve (12.0) academic units of mainstream **site or physical planning** courses covering the planning and design of building environs). Unlike architecture graduates, the graduate CE students also **not** undergo a two (2.0)-year apprenticeship/ sub-professional training period (partly covering **site**/ **physical planning** and **urban**/ **environmental design**) prior to taking their Architecture Licensure Examination ("**ALE**").

All told, the CEs fail to satisfy the three (3.0) elemental requisites to practice **site and physical planning (particularly residential "subdivision" plan preparation)** in the Philippines: 1) a B.S. Architecture degree; 2) a two (2)-year immersion in **diversified training** related to the **site**/ **physical planning** and **urban**/ **environmental design** of building environs; and 3) an Architect's Certificate of Registration and a renewable license all issued after hurdling the **ALE**.

The phrase "preparation of plans, specifications and estimates" in **RA 1582**/ **544** pertains mainly to the "**component"** civil engineering services for a "**subdivision**" **plan** and **not to residential** "**subdivision**" **plan** *per se*. Hence, while CEs may assist registered **architects** and/or **environmental planners** or actually undertake the **preparation** of residential "**subdivision**" **plans**, they **cannot** and must **not** sign and seal **residential** "**subdivision**" **plans** as it is **not** their primary competence and it does **not** form part of their legal scope of practice. CEs have **not** been academically prepared, have **not** been sub-professionally trained/ prepared (for 2.0 years) and are

not professionally qualified to perform professional **site and physical planning** services.

Multiple provisions under the **Republic Act or RA 9266** (the **Architecture Act of 2004**) state or infer that **only** registered/ licensed Architects shall sign and seal **site and physical** plans, specifications and related contract documents (there are no ifs and buts and those who persist in the illegal practice of architecture or any or any of its recognized branches must be ready to face the consequences under the said law). **RA 9266** expressly or impliedly **repeals** all other laws inconsistent with it but protects other professionals who **do not** encroach on the practice and scope of architecture. As the 1979 IRR of **RA 1581**/ **545** set a legal limit for the Architect's signing and sealing of **"subdivision" plans**, the **PRBoA** therefore **supports** the position of Environmental Planners that they should be the sole signatories to "**subdivision**" **plans ""for sites larger than 3.0 hectares"**, by virtue of **PD 1308** (Environmental Planning law). **Suffice it to say that the Philippine CE license is not and was never a license to practice the three (3.0) regulated professions of CE, environmental planning and architecture (or any of its branches as defined under RA 9266)**.

The intention of **RA 1581**/ **544** is clear in that civil structures (or buildings of a purely engineering nature) are for registered/ licensed Civil Engineers (CEs) to plan and design while other structures, particularly **buildings and their environs** which are settings for various indoor-outdoor human (or other) activities and which require the **academic orientation**, the **sub-professional training and** the **professional expertise/ knowhow** of Architects, are **solely** for **registered/ licensed Architects** to plan and design. **Nowhere** is it stated in either law that CEs can prepare **site or physical** plans, designs and related contract documents.

The preparation of **site and physical plans**, urban/ environmental designs and specifications require **stock knowledge** of a broad menu of **physical planning** concepts and practices that are first taught in **architectural** schools, to wit:

1) site development planning ("**SDP**");
2) anthropometrics/ metrication;
3) site programming (including space-time-motion studies);
4) site elements and composition (including scale and proportion);
5) site planning concepts, practices and history;
6) environmental design theories (including the psychology of space);
7) the use and psychology of color, textures, etc.;
8) tropical and environmental design;
9) international graphic and design standards for site planning (including knowledge of site and physical planning drafting conventions/ techniques);
10) end-user security and safety;
11) planning laws;
12) **master development planning** ("**MDP**"), commonly referred to as "**subdivision**" **planning**;
13) landscape architecture;

14) urban design including street furniture, way-finding and graphics/ signage systems;
15) environmental design;
16) community/ urban/ town planning;
17) transportation **facility** planning;
18) site utility systems;
19) project coordination (which requires a broad understanding of allied professional services including all the engineering disciplines related to site planning/ landscape architecture/ environmental planning/ environmental design);
20) contract documentation;
21) architectural/ planning ethics and responsibilities of the architect;
22) visualization/ perspective/ rendering/ model construction and presentation techniques; and
23) a host of other specializations and sub-specializations in site and physical planning which **CE**s do **not** possess simply because they were **never** trained nor officially examined by the state to become Architects/ Environmental Planners ("**En.P.**s").

While it is much faster to become a CE in this country i.e. possibly more than ninety thousand (90,000) registered/ licensed CEs as compared to only twenty four thousand (24,000) registered/ licensed Architects and about six hundred (600) registered/ licensed Environmental Planners (En.P.s) to date, this situation does **not** mean that registered/ licensed CEs can also prepare/ sign/ dry seal **"subdivision" plans** (as registered/ licensed Architects/ EnP.s do) simply because of their vastly superior number and omnipresence. It only means that CEs outnumber Architects/ "**qualified**" En.P.s because it is so much **faster** (and requires less material resources) to become a registered/ licensed CE than to become a registered/ licensed Architect or En.P. in the Philippines.

The thousands of CEs moonlighting as Architects/ qualified En.P.s are one of the major causes of the poor quality of Philippine residential subdivision planning and housing designs since such CEs do **not** completely understand and are **not** competent to do the work of registered/ licensed Architects/ "**qualified**" En.P.s

The practice of CEs preparing, signing and dry sealing site and physical planning documents, particularly residential "subdivision" plans must be thoroughly regulated by the state! It is not only the prudent thing to do but it shall be consistent with the plain language and intent of both RA 9266 and PD 1308.

Philippine Architects have always respected the profession of Civil Engineering and Philippine CEs. However, what some CEs have for the professions of Architecture/ Environmental Planning and for Philippine Architects/ En.P.s appears to be much less than respect. Philippine <u>CEs and Architects/ En.P.s can and must co-exist</u> because they need each other but such a co-existence should be based on

mutual respect and on qualified professional competence, not on numbers nor vaunted "market" appeal that may be partly based on acts that may be likened to "undermining" fellow professionals.

Site and Physical Plans, particularly residential "subdivision" plans and master development plans ("MDPs") are for Architects and "qualified" En.P.s and Geodetic Engineers to prepare/ sign/ dry seal while only the civil works engineering "components" of such "subdivision" plans (roads, drainage and the like) are for CEs to prepare/ sign/ seal. Thus, an ordinary CE cannot be regarded as a Prime Professional for a residential (or other) "subdivision" project unless he is duly qualified or certified as capable of preparing physical/ subdivision plans and is suitably experienced for the job. CEs are generally trained to only prepare a "component" of the "subdivision" plan and NOT the "subdivision" plan itself!

A draft of the documents pertinent to residential "subdivision" plan preparation and their possible signatories (who must only be PRC-regulated professionals) accompanies this PRBoA position paper (reference Annex "**A**"). An initial list of "subdivision" planning terms for use by **site/ physical planners** appears as Annex "**B**".

The CEs must abide with the true spirit and intent of the laws of the land and leave site and physical planning to the Architects and Environmental Planners (En.P.s)! If the CEs want to prepare, sign and seal site and physical plans, then they must first become registered/ licensed Architects or Environmental Planners themselves!

Annex A follows.

Annex "A" :

Proposed Contents of the "Subdivision" (or Master Development) Plan Report

*(to be prepared/ signed/ dry sealed by a registered/ licensed Architect, to be called the **Architect-Planner-of-record** or the **APor** for sites smaller than 3.0 hectares in area*

OR

*to be prepared/ signed/ dry sealed by a "**qualified"** Environmental Planner (En.P.), to be called the **Environmental Planner-of-record** or the **En.P.or**, also referred to as the Environmental Planner-in-charge under PD 1308 for sites larger than 3.0 hectares in area)*

I. Research and Analyses Components

A. Off-Site Analyses Report *(covering a minimum radial area of 1,000 meters or 1.0 kilometer from the center of the property/ site under study, optimum of 2.0 KM radial area is advisable and a maximum of 3.0 to 4.0 KM is most desirable)* which must contain discussions supported by:

1. Land Use/ Zoning/ Cadastral Maps;
2. Transportation Maps *(showing the major access systems e.g. road, rail, waterborne, airborne, etc.; important to show major road rights-of-way or RROWs and approximations of their widths and traffic capacities, etc.)*;
3. Socio-Economic Maps;
4. Environmental Characterization Maps *(including indications of main utility systems, utility rights-of-way or UROWs, drainage outfalls, etc.)*;
5. Key Community Facilities/ Amenities/ Services/ Utilities (FASU); and
6. Off-Site Photo Documentation *(on a need basis)*.

*Note: All of the foregoing should preferably be **mandatory** HLURB requirements for **all** classes of residential or other **"subdivision" planning** projects.*

B. On-Site Analyses Report *(focusing on the property/ site to be subdivided)* which must contain discussions supported by:

1. Topographic Map/s *(showing contours, natural formations, built-up areas, structures and property boundaries)*/ Slope/ Soil/ Hazard/ Physical Development Opportunities & Constraints Maps;
2. Drainage/ Flood Maps;

3. Orientation Maps *(covering wind/ odor/ sun/ view/ privacy/ storm, etc.)*;
4. Existing Property Land Use Map;
5. Property Ownership Documents;
6. Property/ On-Site Photo Documentation *(including panoramic views)*; and
7. Data on Current Social Conditions and Implications.

*Note: All of the foregoing should preferably be **mandatory** HLURB requirements for **all** classes of residential or other **"subdivision' planning** projects.*

II. Translation Components

A. **The "Subdivision" Plan** i.e. actually a **Parcellary Plan** *[to be signed/ dry sealed by a **duly registered/ licensed Geodetic Engineer (GE)]** and which must show for the property/ site to be subdivided the following proposed development attributes (in order of importance):*

1) *the proposed lots and roadlots or **road rights-of-way (RROWs), legal easements, etc. within** the property/ site to be subdivided; and*
2) *the **land area** distribution/ computations (including the block and lot counts).*

*Notes: All of the foregoing should preferably be **mandatory** HLURB requirements for the License to Sell. Their **primary bases** shall be the draft/s or the finalized version/s of the **Master Development Plan (MDP)** to be **prepared** by **duly qualified and duly registered/ licensed En.P.s and/ or registered/ licensed Architects**.*

B. **The Master Development Plan or MDP** *[to be signed/ dry sealed by **duly "qualified" and duly registered/ licensed Environmental Planners (En.P.s) for sites larger than 3.0 hectares in area and/ or duly qualified and "qualified" En.P.s and/ or duly registered/ licensed Architects for sites up to 3.0 hectares in area**] which must show for the property/ site to be subdivided the following proposed development attributes (in order of importance):*

1) *code searches and the recitation of compliances with planning, subdivision, housing and building laws, particularly the **2004 Revised** Implementing Rules and Regulations ("**Revised IRR**") of the National Building Code of the Philippines ("**NBCP**", otherwise known as **PD 1096** of 1977) e.g. to include considerations of Percentage of Site Occupancy (PSO), Floor Area Ratio (FAR) or Floor to Lot Area Ratio (FLAR), Housing Unit or Building Height Limit (BHL),Gross Floor Area (GFA), Outermost Face of Building (OFB) or Housing Unit, etc.;*
2) *all saleable/ leasable/ rentable lots and roadlots or RROWs, legal easements and their respective **landscaping/ urban design treatments** (in plan and section format);*
3) *the foot-printing and roof outlines of **all** structures to be introduced into the development to show the **perpetual** setback/ yard and open space compliances, etc.;*

4) *the **land use** distribution and **land use** computations (following the block and lot counts);*
5) *list of **all amenities/ facilities/ services and utilities** ("**FASU**") that shall form part of the **total development package** to be introduced and guaranteed by the developer i.e. including the list of the proposed development's environmental **design** or **mitigation** features (like the use of asphalt or macadam roads which have a very much higher environmental **design value** than concrete roads, etc.); statement of the proposed development's unique environmental **planning** or environmental **design** features;*
6) *the Total Gross Floor Area ("**TGFA**") computations for the housing units to be generated (which should **never** be exceeded);*
7) *the development **phasing plan**;*
8) *perimeter fence or wall locations for the property and all lots within it; images of the proposed gate and perimeter wall system for the property should also be presented if possible;*
9) *an image board (or panel on A3 or A2 format) showing the translated planning or architectural design concepts (and which may be made up of pictures or drawings culled from secondary researches);*
10) ***outline** specifications (basically **general** descriptions only) for both architectural and allied architectural works;*
11) *the cast or project shadow lines of all structures/ housing units and trees at 8:00 a.m.,11:00 a.m. and 4:00 p.m. reflecting the true heights and configurations for all structures, housing units and trees;*
12) *general signage controls and other way-finding features;*
13) ***Site Development Plan ("SDP")** for **all common areas** of the subdivided property/ site e.g. lot/s where the clubhouse, open spaces, church, school, etc. are to be located;*
14) *lot pad elevation plan (as a guide for the grading plan);*
15) ***general** planting plan/ **outline** specifications (basically **general** descriptions covering **soft**-scaping only);*
16) *RROW treatment and gate complex **general** finishing plans/ **outline** specifications (basically **general** descriptions covering **hard**-scaping only);*
17) *draft of the **deed of restrictions (DoR)**;*
18) ***total** development cost estimate (covering **all** horizontal and vertical components of the proposed development for **all** phases of development);*
19) ***preliminary architectural plans/ designs** for **all common facilities**;*
20) ***preliminary architectural plans/ designs** for the **guardhouse/ gate complex** and **perimeter wall/ fence system**; and*
21) ***preliminary architectural plans/ designs** for **typical housing units (including site development plan or SDP for the typical lot)**;*
22) ***comparative tabulation of total gross floor area (TGFA) and saleable area generation;***
23) ***cost estimates;** and*
24) *others (as needed).*

***Notes*: All of the foregoing should preferably be mandatory HLURB requirements for the License to Sell for low to medium density residential subdivisions (R-1 and R-2).**

Only items 1 through 7 should preferably be required of BP 220 and high density residential subdivisions (R-3) by the HLURB.

C. The Circulation Plan *(to be signed/ dry sealed by **duly "qualified" and duly registered/ licensed En.P.s and/ or Civil Engineers (CEs) or CE-/ non-CE Transportation Planners**) which must show for the property/ site to be subdivided the following proposed development attributes (in order of importance):*

1) *traffic plan (both vehicular and pedestrian);*
2) *parking plan i.e. off-street (including parking structures as applicable), on-street, etc.;*
3) *traffic rules and regulations within the subdivided property (including the use of the RROW);*
4) *traffic signage controls;*
5) *list of mandatory safety features/ devices to be introduced; and*
6) *others.*

***Notes*: All of the foregoing should preferably be mandatory HLURB requirements for the License to Sell for low to medium density residential subdivisions (R-1 and R-2).**

Only items 1 through 3 should preferably be required of BP 220 and high density residential subdivisions (R-3) by the HLURB.

D. The Civil Works Plan *(to be signed/ dry sealed by **duly registered/ licensed Civil Engineers**) which must show for the property to be subdivided the following proposed development attributes (in order of importance):*

1) *grading plan;*
2) *final road right-of-way (RROW) or utility right-of-way (UROW) **alignments** with **suggested** standard details, i.e., to include those for drainage, sewerage (if to be provided, etc.);*
3) ***suggested** outline specifications (basically **general** descriptions only) for civil works; and*
4) *others.*

*Note: All of the foregoing should preferably be **mandatory** HLURB requirements for **all** classes of residential subdivision projects.*

E. Other Required Engineering Plans *(to be signed/ dry sealed by **duly registered/ licensed Sanitary, Electrical, ECE or Mechanical Engineers**) which must show for the property to be subdivided the following proposed development attributes (in order of importance):*

1) *on-site **water** supply and distribution plan;*
2) *on-site **power** supply and distribution plan;*
3) ***solid waste** management plan provisions to be located on-site;*
4) *on-site **telecommunications** plan;*
5) ***wastewater** management plan provisions to be located on-site (only if applicable); and*
6) *others.*

Notes: All of the foregoing should preferably be mandatory HLURB requirements for the License to Sell for low to medium density residential subdivisions (R-1 and R-2).

Only items 1 through 3 should preferably be required of BP 220 and high density residential subdivisions (R-3) by the HLURB.

F. General Planning Recommendations *(to be signed/ dry sealed by **duly qualified and duly registered/ licensed En.P.s**) which must show for the property to be subdivided the following proposed development attributes (in order of importance):*

1) *Interventions or measures for possible local government unit (LGU) consideration;*
2) *Interventions or measures for possible HLURB consideration;*
3) *Interventions or measures for possible national government (GRP) consideration i.e. including all its agencies, etc.;*
4) *Interventions or measures for possible private sector consideration; and*
5) *Others.*

*Note: All of the foregoing should preferably be **mandatory** HLURB requirements for **all** classes of residential subdivision projects.*

Annex "B" follows.

Annex "B" :

Initial List of Proposed Terms for Use by PRC-registered/ licensed Site/ Physical Planners ("qualified" En.P.s, Architects, CEs and GEs) in the Preparation of the "Subdivision" (or Master Development) Plan Report

(1) **"Master Development Plan (MDP)" refers to the main deliverable/s of a multi-disciplined team of PRC-registered/ licensed professionals e.g. Architect/s, Environmental Planners (En.P.s), Civil Engineers (CEs), Geodetic Engineers (GEs) as well as other regulated and non-regualted professionals, pertaining to the sustainable planned physical development of a community, site or property. The MDP Report is the integration of all of the outputs of the individual professionals or sectors represented in the Planning or Project Team.**

(2) **"Planning" refers to physical planning at site, community or urban level by an Architect for a planning area of 3.0 hectares or less or by a duly "qualified" Environmental Planner (En.P.).**

(3) **"Physical Planner" refers to an Environmnetal Planner or an Architect who specializes in the detailed physical planning of land or property on which vertical structures such as buildings and/or structures and horizontal developments such as rights-of-way, open spaces and recreational/ sports/ entertainment/ tourism and related facilities are to be proposed.**

(4) **"Physical Planning" the detailed physical planning of land or property on which vertical structures such as buildings, monuments and/or structures and horizontal developments such as rights-of-way, open spaces and recreational/ sports/ establishments/ tourism and related facilities are to be proposed.**

(5) **"Site Planning" the detailed site development planning of all areas surrounding a building/ structure and/ or a group of buildings/ structures but only within the property limits of the land on which such buildings/ structures are to be erected.**

(6) **"Urban Design" physical and systemic design undertaken by a duly "qualified" Environmental Planner or by an Architect on a community and urban plane, more comprehensive than, and an extension of the architecture of buildings, spaces between buildings, entourage, utilities and movement systems.**

Nothing follows.