ZBORNICA ZA ARHITEKTURO IN PROSTOR SLOVENIJE

Scope of Architectural Services and Fees
CCA International Conference
Zagreb, Croatia
October 13-14, 2022

# Scope of Architectural Services and Fees in Slovenia

Scope of Architectural Services and Fees -
CCA International Conference
Zagreb, 13. - 14. October 2022

Mima Suhadolc, univ. dipl. inž. arh.
Slovenian Chamber for Architecture and Spatial Planning, Ljubljana

# MAIN DISHES

9. Pad Thai
10. Pad Se-ieu
11. Pad Khee Mao
12. Pad Sen
13. Khao Pad Gai
14. Khao Thai Tom Yum
15. Pad Bai Grapow
16. Gai Med Mamuang
17. Pad Khing
18. Pad Pak Ruammit

# MAIN DISHES

**9. Pad Thai**
Thin rice noodles stir-fried with chicken, eggs, green onions, tofu, served with ground peanuts, a lime wedge, and fresh bean sprouts

**10. Pad Se-ieu**
Large rice noodles stir-fried with vegetables and eggs in soya sauce choice of chicken, pork or beef

**11. Pad Khee Mao**
Large rice noodles stir-fried with freshly crushed chilies and Thai herbs choice of chicken, pork or beef

**12. Pad Sen**
Egg noodle stir-fried with vegetables and choice of chicken, pork or beef

**13. Khao Pad Gai**
Fried rice with chicken,, eggs and fresh vegetables

**14. Khao Thai Tom Yum**
Fried rice with shrimp, scallops and squid seasoned with Thai spices

**15. Pad Bai Grapow**
Choice of Chicken, beef, or pork, stir- fried with freshly crushed chilies and vegetables and basil

**16. Gai Med Mamuang**
Chicken stir-fried with cashew nuts, broccoli, mushroom, onions, green & red peppers

**17. Pad Khing**
Choice of chicken, beef, or pork, stir-fried with ginger, green and red peppers, onions and mushroom

**18. Pad Pak Ruammit**
Choice of chicken, beef, or pork, stir-fried in soya sauce with fresh vegetables and mushrooms

# MAIN DISHES

**9. Pad Thai** 17
Thin rice noodles stir-fried with chicken, eggs, green onions, tofu, served with ground peanuts, a lime wedge, and fresh bean sprouts

**10. Pad Se-ieu** 17
Large rice noodles stir-fried with vegetables and eggs in soya sauce choice of chicken, pork or beef

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Large rice noodles stir-fried with freshly crushed chilies and Thai herbs choice of chicken, pork or beef

**12. Pad Sen** 17
Egg noodle stir-fried with vegetables and choice of chicken, pork or beef

**13. Khao Pad Gai** 17
Fried rice with chicken,, eggs and fresh vegetables

**14. Khao Thai Tom Yum** 18
Fried rice with shrimp, scallops and squid seasoned with Thai spices

**15. Pad Bai Grapow** 17
Choice of Chicken, beef, or pork, stir- fried with freshly crushed chilies and vegetables and basil

**16. Gai Med Mamuang** 18
Chicken stir-fried with cashew nuts, broccoli, mushroom, onions, green & red peppers

**17. Pad Khing** 17
Choice of chicken, beef, or pork, stir-fried with ginger, green and red peppers, onions and mushroom

**18. Pad Pak Ruammit** 17
Choice of chicken, beef, or pork, stir-fried in soya sauce with fresh vegetables and mushrooms

INGREDIENTS

SCALE 1x 2x 3x

STIR-FRY INGREDIENTS:

- 8 ounces uncooked rice noodles
- 2 tablespoons oil, divided
- 1 pound boneless skinless chicken breasts*, cut into bite-sized pieces
- 3 scallions, chopped with white and dark green parts divided
- 2 cups broccoli florets *(or other veggies*)*
- 1 red bell pepper, cored and diced
- 4 cloves garlic, minced
- 1 1/2 cups tightly-packed fresh Thai basil leaves
- optional toppings: fresh lime wedges, sliced Thai bird chiles, chopped peanuts, and/or fried garlic

STIR-FRY SAUCE:

- 3 tablespooons low-sodium soy sauce
- 2 tablespoons oyster sauce
- 2 tablespoons fish sauce
- 1 tablespoon sweet dark soy sauce*
- 1 tablespoon chili garlic sauce

## HOW TO MAKE DRUNKEN NOODLES:

Here is a brief overview of the steps to make this Thai drunken noodles recipe (full instructions in the recipe below):

1. **Prep the sauce:** First, whisk all of the sauce ingredients together in a small bowl until combined.
2. **Prep the noodles:** Next, go ahead and cook the noodles al dente. Then rinse them briefly with water to cool (so they will stop cooking) and toss with a drizzle of oil so that they do not stick together.
3. **Sauté the chicken:** Then once your veggies and chicken are all prepped and ready to go, it's time to sauté. I recommend cooking your chicken (or whatever protein you choose) first, in a bit of oil.
4. **Cook the veggies.** Next, sauté the veggies until they reach your desired level of doneness. (I like mine to be on the crisper side.)
5. **Combine everything.** Then add the cooked noodles, sauce, chicken, Thai basil, and scallions to the pan and toss until thoroughly combined.
6. **Serve warm.** And serve immediately, while the noodles are still nice and hot, topped with whatever garnishes you love best.

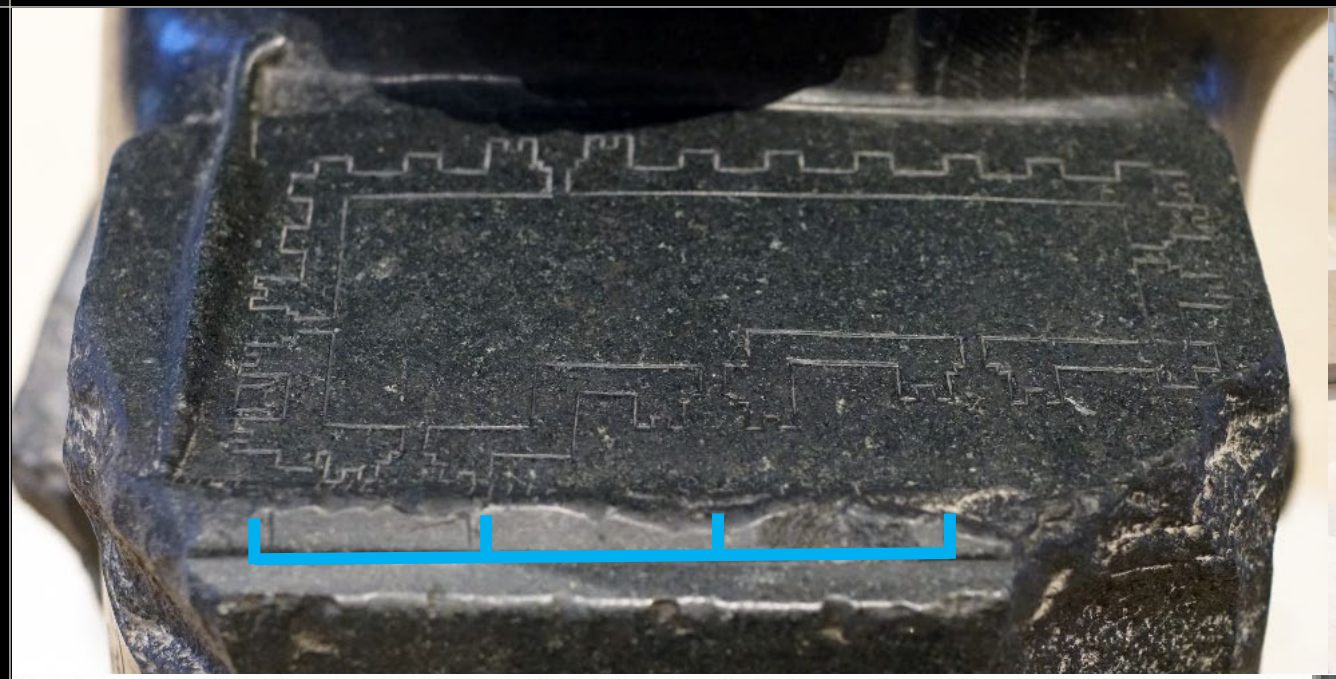
## SIDE ORDERS

| | |
|---|---|
| Peanut sauce | 2 |
| Sweet chilli sauce | 2 |
| Spicy mayo sauce | 2 |
| Jasmine rice | 2 |
| Brown rice | 2 |
| Thai sticky rice | 2 |
| Coconut rice | 3 |
| Garlic fried rice | 3 |
| Pad Thai with egg | 6 |
| Roti Nan | 2 |
| Steam rice noodle | 2 |

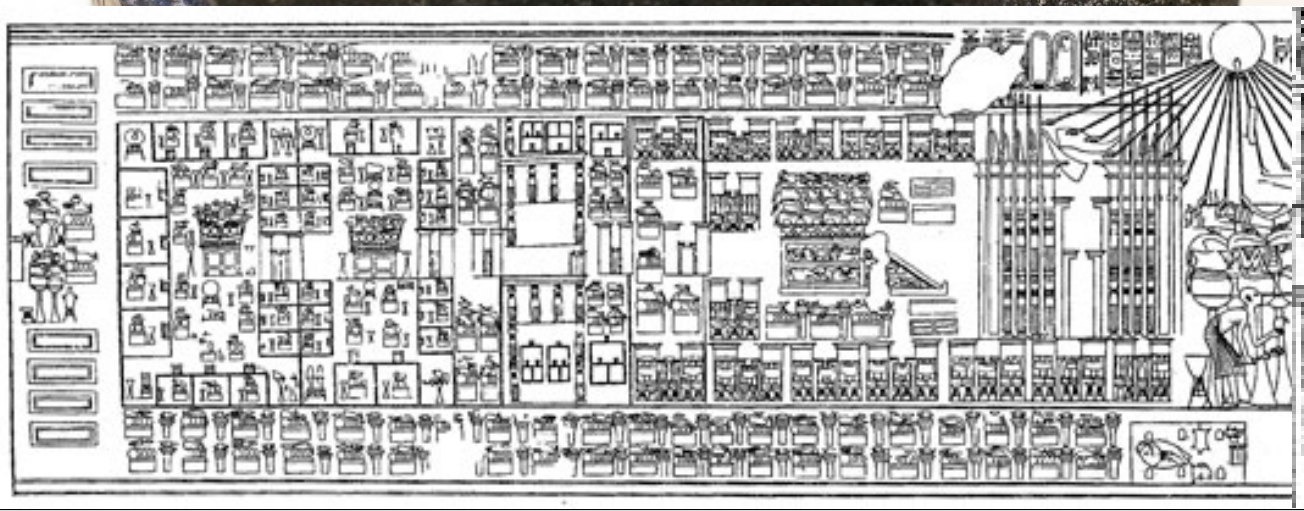
# Scope of Architectural services and Fees

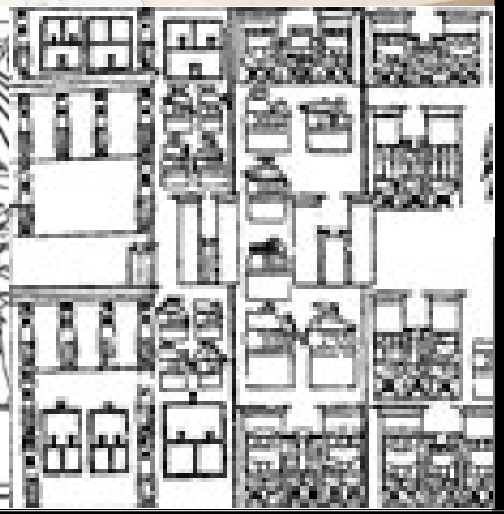


- scope of services with description of services,
- fee calculation rules,
- detailed content of architectural plans,
- instructions for drawing architectural plans.

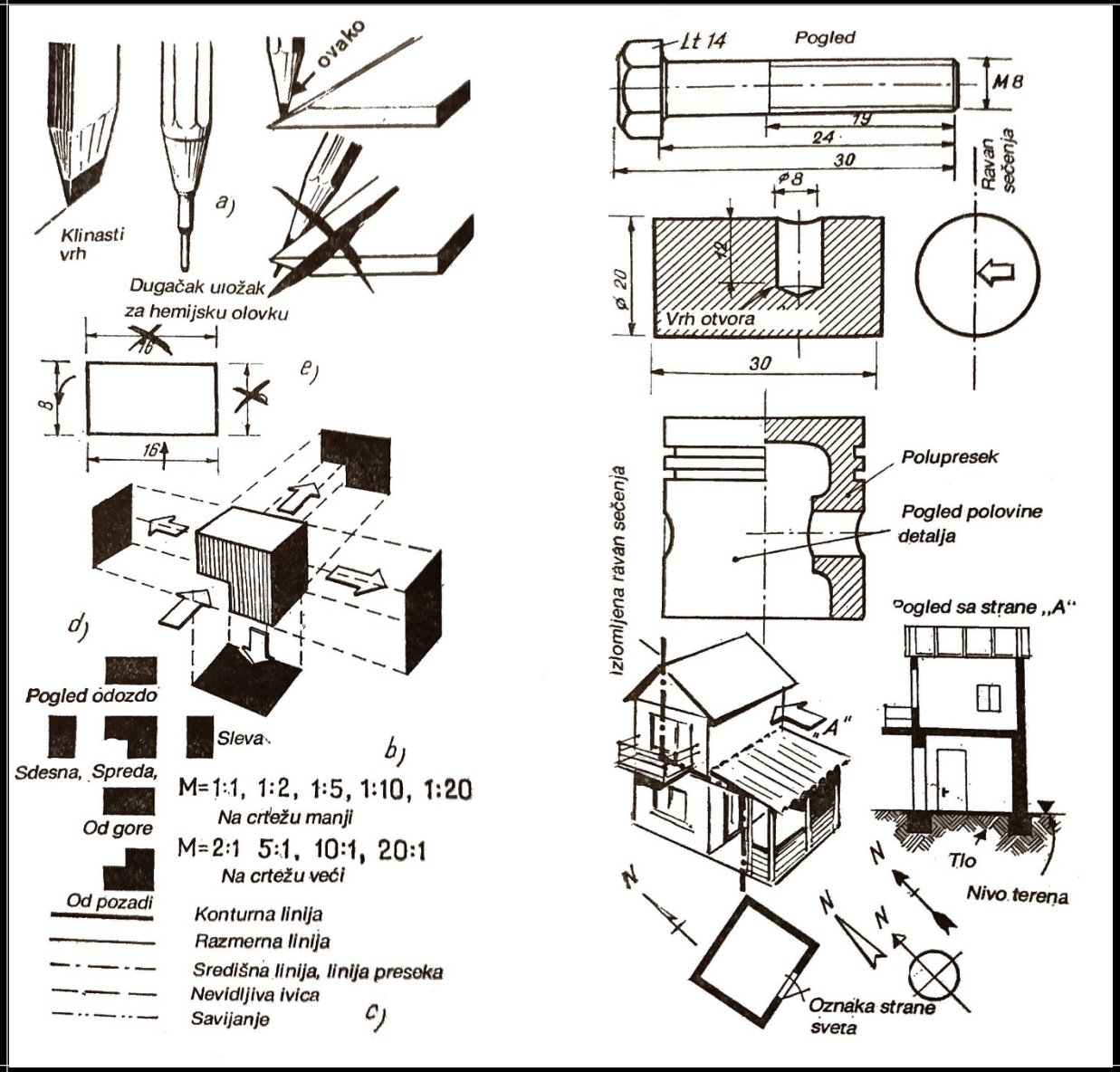


Seated statue
of the ruler Gude ,
the "architect with a plan",
Sumeria , 2200 BC





plan of the Temple
of Aton at Karnak,
tomb of the priests
Merir and Panehsi ,
Amarna, 1352 - 1336 BC




STANDARD JUS

**ARHIGRAM 3.04 interaktivni program za izračun vrednosti projektantskih storitev**

ZBORNICA ZA ARHITEKTURO IN PROSTOR SLOVENIJE

| | |
|---|---|
| *naročnik* | Janez Novak, Slovenska 15, 1000 Ljubljana |
| *ponudnik* | Podjetje d.o.o. |
| *objekt* | Gradnja enodružinske hiše |
| *datum* | 05/01/2016 |

| INVESTICIJA | | STAVBA (GOI) | ZUNANJA UREDITEV | NOTRANJA OPREMA | SKUPAJ |
|---|---|---|---|---|---|
| VRSTA OBJEKTA | | ENODRUŽINSKA HIŠA | KRAJINSKA UREDITEV OB OBJEKTIH | ZAHTEVNA OPREMA | |
| POVRŠINA | | 200 m2 | 300 m2 | 250 m2 | |
| PRIPOROČENA VREDNOST EUR/m2 BEP | | 600-800 | 60–120 | 200–400 | |
| EUR/m2 BEP | | 700 EUR/m2 | 80 EUR/m2 | 400 EUR/m2 | |
| STOPNJE TEŽAVNOSTI | | | | | |
| VODILNA MAPA | | I-II RAZRED | I-II RAZRED | III RAZRED | |
| ARHITEKTURA | | I-II RAZRED | | | |
| KONSTRUKCIJE | | II-III RAZRED | | | |
| STROJNE INSTALACIJE | | I-II RAZRED | | | |
| ELEKTRO INSTALACIJE | | I-II RAZRED | | | |
| TOPLOTNA ZAŠČITA | | II-III RAZRED | | | |
| HRUP | | I-II RAZRED | | | |
| VREDNOST INVESTICIJE GOI | | 140.000 | 24.000 | 100.000 | 264.000 |
| GO | 0,72 | 100.800 | | | |
| SI | 0,14 | 19.600 | | | |
| EI | 0,14 | 19.600 | | | |
| OST | 0,00 | 0 | | | |

| OSNOVNI NAČRTI | IDZ | IDP | PGD | PZI | skupaj PD | PID | PNG | SKUPAJ | %projekta |
|---|---|---|---|---|---|---|---|---|---|
| ARHITEKTURA | 620 | 620 | 2.481 | 2.481 | 6.202 | 0 | 620 | 6.822 | 24,5 |
| KONSTRUKCIJE | 258 | 258 | 1.032 | 1.032 | 2.580 | 0 | 258 | 2.838 | 10,2 |
| STROJNE INSTALACIJE | 208 | 208 | 830 | 830 | 2.076 | 0 | 208 | 2.283 | 8,2 |
| ELEKTRO INSTALACIJE | 208 | 208 | 830 | 830 | 2.076 | 0 | 208 | 2.283 | 8,2 |
| **SKUPAJ** | **1.293** | **1.293** | **5.173** | **5.173** | **12.933** | **0** | **1.293** | **14.227** | **51,2** |
| **OSNOVNI ELABORATI** | IDZ | IDP | PGD | PZI | skupaj PD | PID | PNG | SKUPAJ | %projekta |
| VODILNA MAPA | 658 | 158 | 461 | 39 | 1.316 | 0 | | 1.316 | 4,7 |
| TOPLOTNA ZAŠČITA | 36 | 36 | 146 | 146 | 364 | 0 | | 364 | 1,3 |
| HRUP | 20 | 20 | 78 | 78 | 196 | 0 | | 196 | 0,7 |
| POŽAR | 24 | 12 | 107 | 95 | 238 | 0 | | 238 | 0,9 |
| **SKUPAJ** | **738** | **226** | **792** | **359** | **2.114** | **0** | **0** | **2.114** | **7,6** |
| **DODATNI NAČRTI IN ELABORATI** | IDZ | IDP | PGD | PZI | skupaj PD | PID | PNG | SKUPAJ | %projekta |
| TEHNOLOŠKI NAČRTI | | | | | 0 | | | 0 | 0,0 |
| AKUSTIKA PROSTOROV | | | | | 0 | | | 0 | 0,0 |
| NGGO | | | | | 0 | | | 0 | 0,0 |
| PRESOJA VPLIVOV NA OKOLJE | | | | | 0 | | | 0 | 0,0 |
| | | | | | 0 | | | 0 | 0,0 |
| | | | | | 0 | | | 0 | 0,0 |
| | | | | | 0 | | | 0 | 0,0 |
| | | | | | 0 | | | 0 | 0,0 |
| **SKUPAJ** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0,0** |
| **ZUNANJA UREDITEV** | IDZ | IDP | PGD | PZI | skupaj PD | PID | PNG | SKUPAJ | %projekta |
| ZUNANJA UREDITEV | 270 | 270 | 540 | 720 | 1.800 | 0 | 180 | 1.980 | 7,1 |
| **NOTRANJA OPREMA** | IDZ | IDP | PGD | PZI | skupaj PD | PID | PNG | SKUPAJ | %projekta |
| NOTRANJA OPREMA | 975 | 975 | 1.950 | 2.600 | 6.500 | 0 | 650 | 7.150 | 25,7 |
| **DRUGO** | IDZ | IDP | PGD | PZI | skupaj PD | PID | PNG | SKUPAJ | %projekta |
| m2 | | | | | | | | | |
| POSNETEK OBSTOJEČEGA STAN 0 | 0 | | | | 0 | | | 0 | 0,0 |
| NAČRT ODSTRANJEVALNIH DEL 0 | | | 0 | | 0 | | | 0 | 0,0 |
| | | | | | 0 | | | 0 | 0,0 |
| | | | | | 0 | | | 0 | 0,0 |
| **SKUPAJ** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0,0** |
| **SKUPAJ** | IDZ | IDP | PGD | PZI | skupaj PD | PID | PNG | SKUPAJ | %projekta |
| **SKUPAJ** | **3.276** | **2.764** | **8.455** | **8.852** | **23.347** | **0** | **2.123** | **25.471** | **91,6** |
| **ODGOVORNO VODENJE** | 233 | 233 | 934 | 934 | 2.335 | 0 | | 2.335 | 8,4 |
| **SKUPAJ PROJEKT** | **3.510** | **2.998** | **9.389** | **9.786** | **25.682** | **0** | **2.123** | **27.805** | **100,0** |
| % cene projekta | 12,6 | 10,8 | 33,8 | 35,2 | 92,4 | 0,0 | 7,6 | 100,0 | |
| % investicije | | | | | 9,73% | | | 10,53% | |

# Slovenian legislation

Legislation is constantly changing – timeline of the Building Act:

1984 Zakon o graditvi objektov - ZGO
2002 Zakon o graditvi objektov - ZGO-1
2004 Zakon o graditvi objektov - ZGO-1A
2007 Zakon o graditvi objektov - ZGO-1B
2009 Zakon o graditvi objektov - ZGO-1C
2012 Zakon o graditvi objektov - ZGO-1D
2013 Zakon o graditvi objektov - ZGO-1E
2015 Zakon o graditvi objektov - ZGO-1F
2017 Gradbeni zakon – GZ
2021 Gradbeni zakon – GZ-1

Content of architectural plan is only defined for:

- building permit application (part of concept design level)
- basic contents of the construction phase plan (detailed design)

# ST ZAPS

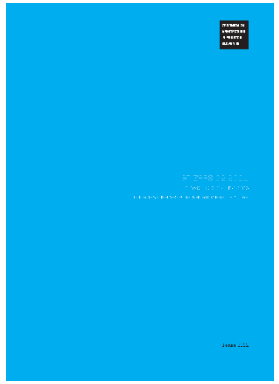
Standard of the Slovenian Chamber for Architecture and Spatial Planning:

## ST ZAPS 01:202 1

Scope of Services in the Field of Architectural and Landscape Design Planning

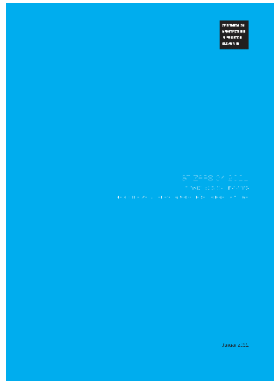
## ST ZAPS 02:202 1

Evaluation of Services in the Field of Architectural and Landscape Design Planning



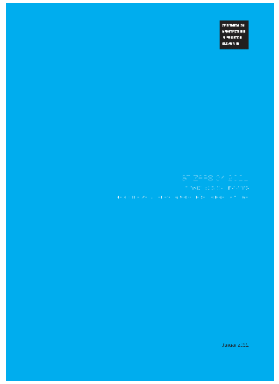
## ST ZAPS 03:202 1

Building Plan Detailed Content



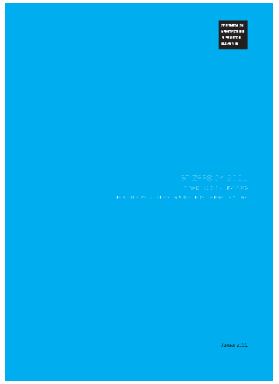
## ST ZAPS 04:202 1

Building Plan Drawing Guidelines



## ST ZAPS 05:2022

Open Space Plan Detailed Content *(under approval)*



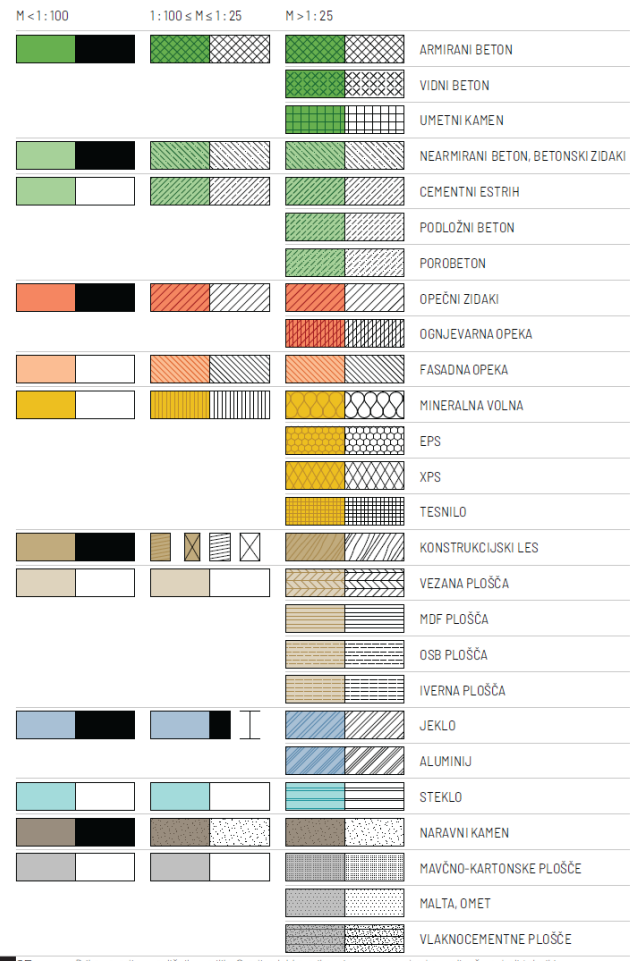
## ST ZAPS 06:2021

Open Space Plan Drawing Guidelines

# Building Plan Drawing Guidelines



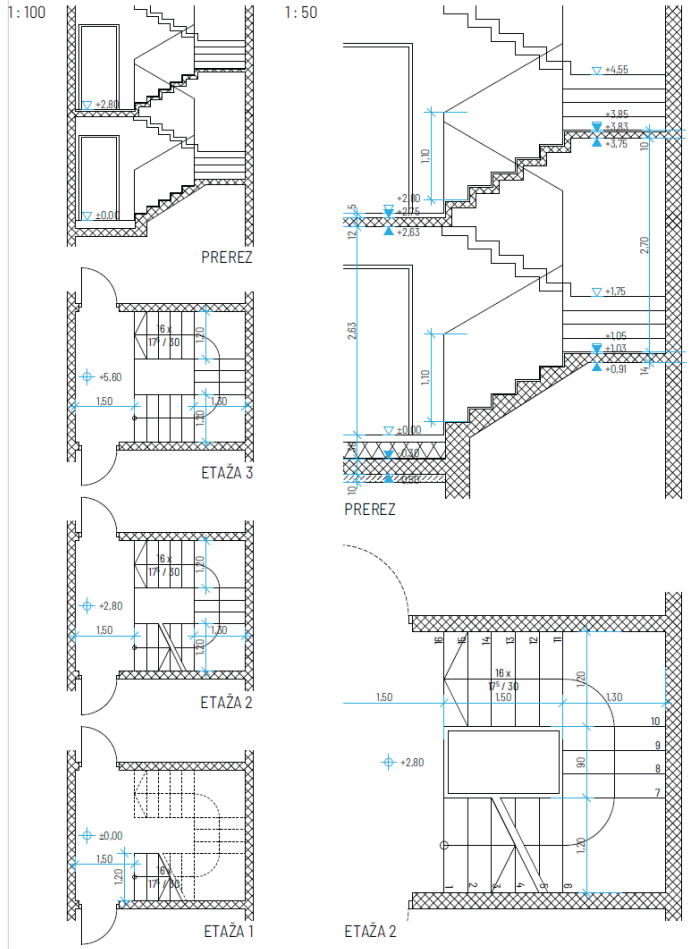





25 Prikaz gradiv v različnih merilih. Gradiva lahko prikazujemo z uporabo barv ali v črno-beli tehniki.





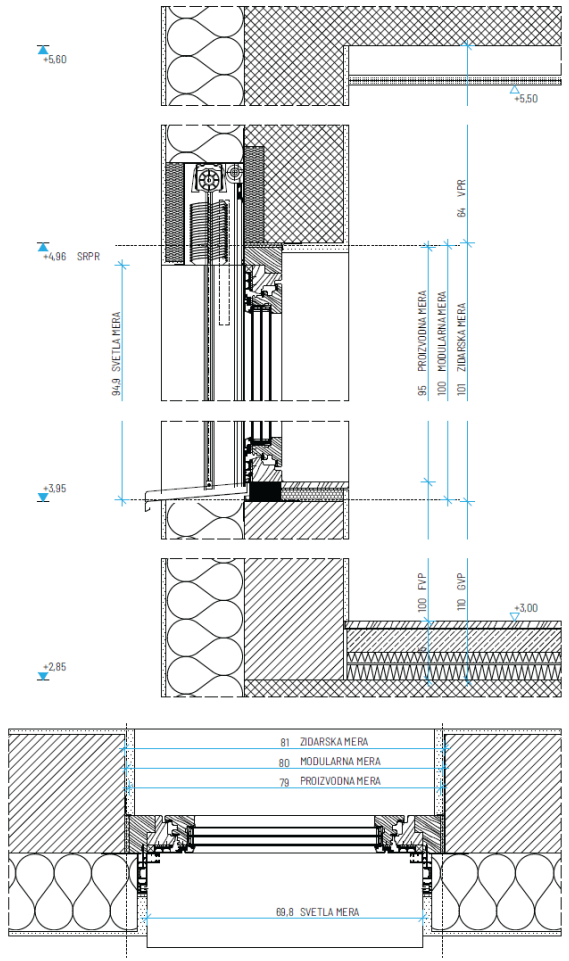



29 Prikaz stopnic v merilih 1 : 100 in 1 : 50

# Building Plan Drawing Guidelines



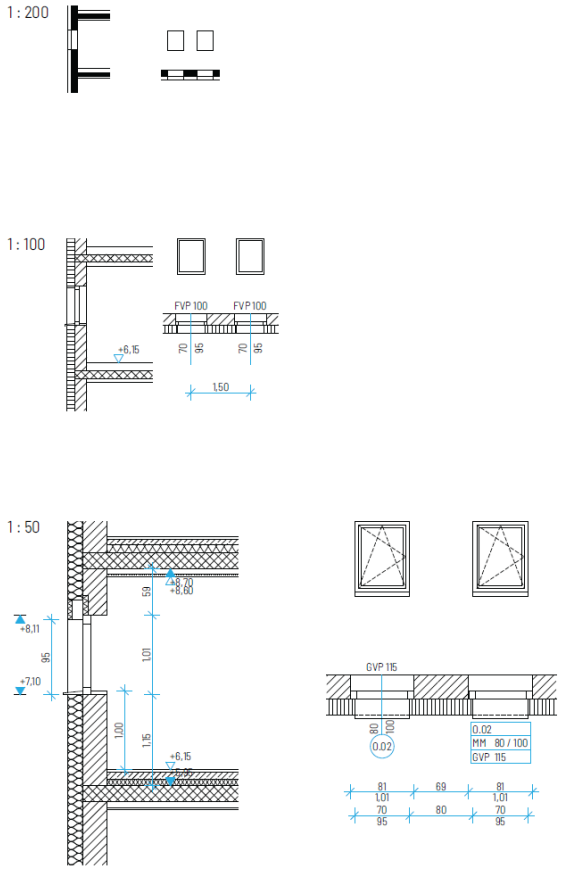





ZBORNICA ZA ARHITEKTURO IN PROSTOR SLOVENIJE 32 Mere okenskih odprtin





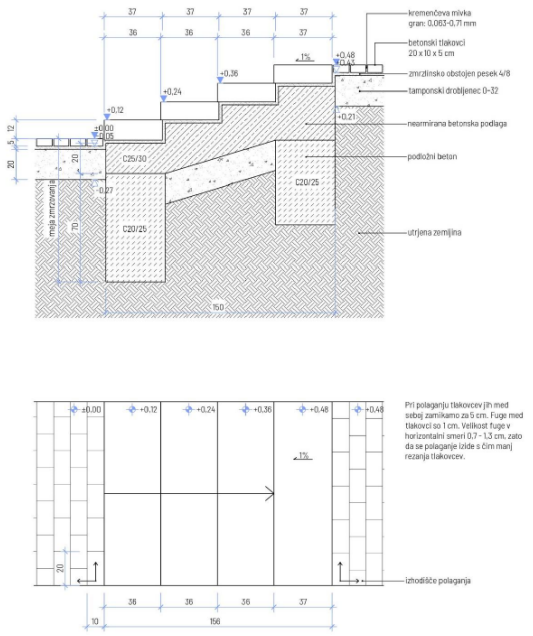



ZBORNICA ZA ARHITEKTURO IN PROSTOR SLOVENIJE 33 Prikaz oken v različnih merilih. V merilu 1 : 50 se oznaka okna lahko prikaže tudi v obliki tabele.

# Open Space Plan Drawing Guidelines








*Slika 9: Primer prikaza v podrobnejšem merilu*

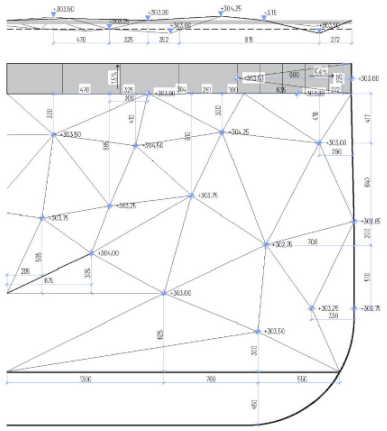
## 10.2 Klančine

Klančine morajo biti označene z oznako za klančino (<). V primeru, da se klančino označi s puščico (v smeri dvigovanja), je potrebno dopisati »klančina«. Čitljiva mora biti širina in dolžina klančine ter začetna in končna višinska točka klančine, naveden mora biti naklon v odstotni vrednosti. V merilih, manjših od 1:100, se klančine prikazujejo poenostavljeno. Lahko se dodajo opombe (npr. »klančina primerna za gibalno ovirane«). V kolikor je potrebno, se prikaže potek obstoječega terena (npr. v prerezih).

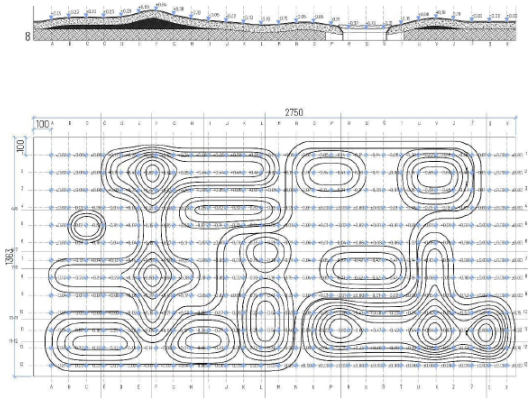
Po potrebi uporabimo pravila za risanje stopnic.







*Slika 13: Primer prikaza reliefa z lomi geometrije brežin*




*Slika 14: Primer prikaza reliefa s plastnicami in mrežo višinskih točk ((povzeto po: Kolektiv Tektonika d.o.o., Vrtec Kočevje, poligon na otroškem igrišču, oktober 2020. Avtorji: Matjašec, D., Florjanc, N., Mali, K., Kante, P.)*

# Building Plan Detailed Content





## 7. VSEBINA POSAMEZNIH NAČRTOV

### 7.1. VODILNI IN DRUGI NAČRTI

Posamezni načrti so sestavljeni iz splošnega in tehničnega dela.

Vodilni načrt vsebuje v splošnem delu poleg osnovnih vsebin s svojega področja še splošne podatke o gradnji ter izjave, projektne pogoje, mnenja oziroma soglasja in izkaze, kadar to določajo področni predpisi, ter dokumentacijo o reviziji, kadar se ta izdela na zahtevo investitorja ali kadar to določajo področni predpisi, v tehničnem delu pa poleg tehničnih tudi lokacijske prikaze in zbirno tehnično poročilo.

Kadar je za potrebe pridobivanja dovoljenj mogoče uporabiti eno izmed projektnih dokumentacij v celoti, je v izogib podvajanju gradiva smiselno v splošni del vključiti tudi vse vsebine v obsegu in obliki, kot jih zahteva področni pravilnik (označeno s sivo barvo). V nasprotnem primeru ali kadar se projektna dokumentacija izdeluje za gradnjo, za katero niso predpisani upravni postopki, pa se vključijo najmanj vsebine, ki so v spodnji razpredelnici označene s črno barvo. Te vsebine se priključi tehničnemu poročilu.

| | VODILNI NAČRT | | | | | DRUGI NAČRTI | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | IDZ | IDP | PZI | PZR | PID | IDZ | IDP | PZI | PZR | PID |
| **SPLOŠNI DEL** | | | | | | | | | | |
| 1. NASLOVNA STRAN | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 2. IZJAVE | ● | ● | ● | | ● | | | | | |
| 3. KAZALO PROJEKTA | | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 4. KAZALO NAČRTA | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 5. SPLOŠNI PODATKI O GRADNJI | ● | ● | ● | | ● | | | | | |
| 6. PROJEKTNI POGOJI, MNENJA | ● | ● | | | | | | | | |
| 7. IZKAZI | | | ● | | ● | | | | | |
| 8. DOKUMENTACIJA O REVIZIJI | | ● | ● | | | | ● | ● | | |
| **TEHNIČNI DEL** | | | | | | | | | | |
| TEKSTUALNI DEL | | | | | | | | | | |
| A. TEHNIČNO POROČILO | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| B. POPIS DEL | | | | ● | | | | | ● | |
| C. SPREMLJANJE INVESTICIJE | ● | ● | | ● | | | | | ● | |
| GRAFIČNI DEL | | | | | | | | | | |
| D. LOKACIJSKI PRIKAZI | ● | ● | ● | | ● | | | | | |
| E. TEHNIČNI PRIKAZI | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |





### E. TEHNIČNI PRIKAZI

STAVBE

| | |
|---|---|
| Ureditvena situacija na zemljišču za gradnjo s prikazom vseh stavb, GOI objektov, površin, infrastrukture in drugih gradbenih posegov (kadar ni obdelano v ločenem načrtu) | 1 : 250 |
| Zbirnik komunalnih vodov in naprav, v katerem so prikazani vsi obstoječi in predvideni komunalni vodi in naprave, priključki teh vodov ter morebitne prestavitve vodov (samo kadar niso izdelani lokacijski prikazi) | 1 : 250 |
| Vsi tlorisi stavbe: temelji s kanalizacijo, vse etaže in medetaže, ostrešje in streha, z vsemi vnesenimi podatki za vgradnjo inštalacijskih sistemov (preboji ipd.) | 1 : 50 |
| Tlorisi vseh etaž z risbami polaganja tlakov | 1 : 50 |
| Tlorisi vseh etaž z risbami stropov ter elementi osvetljave, prezračevanja ipd. | 1 : 50 |
| Tlorisi vseh etaž z zbirnikom vseh inštalacijskih vodov | 1 : 50 |
| Vsi prerezi, ki so potrebni za celovito razumevanje objekta | 1 : 50 |
| Vse fasade stavbe | 1 : 50 |
| Shema stavbnega pohištva in ograj | 1 : 50 |
| Fasadni pasovi | 1 : 25 |
| Druge sheme in detajli izvedbe, ki so potrebni za izvedbo objekta, tako da se objekt lahko gradi brez dopolnitev projektne dokumentacije | 1 : 50, 1 : 20, 1 : 10, 1 : 5, 1 : 2, 1 : 1 |

NOTRANJA OPREMA

| | |
|---|---|
| Tlorisi z dispozicijo opreme | 1 : 50, 1 : 25 |
| Sheme talnih, stropnih in stenskih oblog z razsvetljavo (kadar niso zajete v drugih načrtih) | 1 : 50, 1 : 25 |
| Sheme stavbnega pohištva (kadar niso zajete v drugih načrtih) | 1 : 50, 1 : 25 |
| Sheme priklopov električnih in strojnih instalacij (kadar niso zajete v drugih načrtih) | 1 : 50, 1 : 25 |
| Katalog izbrane in načrtovane notranje opreme, svetil, grelnih teles in drugih vidnih elementov (artikli, barve, materiali, obdelave) | |
| Izvedbeni načrti za mizarska in druga obrtniška dela | 1 : 20, 1 : 10 |
| Vsi detajli, potrebni za izvedbo | 1 : 5, 1 : 1 |

# Open Space Plan Detailed Content





- zagotavljanje ekoloških funkcij (vodotokov ipd.),
- uporaba okoljsko sprejemljivih surovin in sekundarnih materialov.

**OPOMBA:**

Kadar gre za rekonstrukcijo, prizidavo ali vzdrževanje objekta se, kjer je smiselno, navaja opise za obstoječe in novo stanje.

## II. GRAFIČNI DEL

### D. LOKACIJSKI PRIKAZI

Lokacijski prikazi se izdelajo v skladu z določili področnega pravilnika samo, kadar bo projektna dokumentacija v celoti uporabljena za postopke dovoljevanja. Vloži se jih le v projektno dokumentacijo za upravne postopke, kot jo določa področni pravilnik. Priporočljivo je, da se prikaze izdela na toliko risbah in v takšnem merilu, da so posamezni prikazi jasno vidni. Običajno se prikazuje ureditev, zbirnik gospodarske javne infrastrukture, osnovne dimenzije in odmiki ter zakoličba.

Po potrebi se izdelajo tudi prikazi, na katerih so odstopanja PZI od projektne dokumentacije, na podlagi katere je bilo pridobljeno gradbeno dovoljenje.

### E. TEHNIČNI PRIKAZI

| | |
|---|---|
| pregledna situacija načrtovane ureditve z navezavo na okoliški prostor | 1:1000 |
| prikaz obstoječega stanja | 1:500 |
| prikaz inventarizacije in valorizacije drevnine | 1:500 |
| prikaz odstranjevalnih del (na geodetskem posnetku; prikaz vseh elementov namenjenih rušitvi/odstranitvi (tudi vegetacije, ki se odstrani) ter drevnine in drugih prvin, ki se jih v fazi gradnje zaščiti) | 1:500 |
| ureditvena situacija (s podrobnimi opisi rešitev in ureditev - umestitev objekta in celovita zasnovo odprtega prostora: dovozi, dostopi, površine za (mirujoči) promet, druge utrjene površine, zelene površine in zasaditev, višinska zasnova terena, površine za zbiranje odpadkov, elementi in oprema, lokacije in oblikovanje strojnih, elektro in drugih tehničnih elementov) | 1:500 1:200 |
| zbirnik komunalnih vodov in naprav, v katerem so prikazani vsi obstoječi in predvideni komunalni vodi in naprave, priključki teh vodov ter morebitne prestavitve vodov (kadar ni zajeto v drugem načrtu ali kadar niso izdelani lokacijski prikazi) | 1:500 1:200 |
| tehnična situacija (z merami in dimenzijami in vsemi potrebnimi tehničnimi opisi, npr. materiali utrjenih površin in urbane opreme | 1:250 1:200 |
| višinska situacija (prikaz regulacije terena in objektov, prikaz prečnih sklonov in načina odvodnjavanj. Glede na tip ureditve je dopustno, da se vsebina združi s tehnično in/ali zakoličbeno situacijo. | 1:250 1:200 |
| zakoličbena situacija (s prikazom točk za prenos v naravo s seznamom koordinat) Glede na tip ureditve je dopustno, da se vsebina združi s tehnično in/ali višinsko situacijo. | 1:250 1:200 |
| prikaz utrjenih površin in tlakovanja (če je potrebno glede na kompleksnost objekta) | 1:250 1:200 |
| Zasaditveni načrt s prikazanimi tipi zasaditve in shemami vzorcev zasaditve (drevje, grmovnice, trajnice, (ob)vodne zasaditve in druge zasaditve) ter s prikazom obstoječe vegetacije | 1:250 1:200 |
| prečni in vzdolžni prerezi | |
| detajli ureditev (gradbeni, zasaditveni itd.) – tlorisi, prerezi | 1:50, 1:20, 1:10 |
| detajli opreme po načrtu in/ali izbor tipske opreme, z vsemi specifikacijami – tlorisi, prerezi | glede na vsebino |
| drugi prikazi | glede na vsebino |





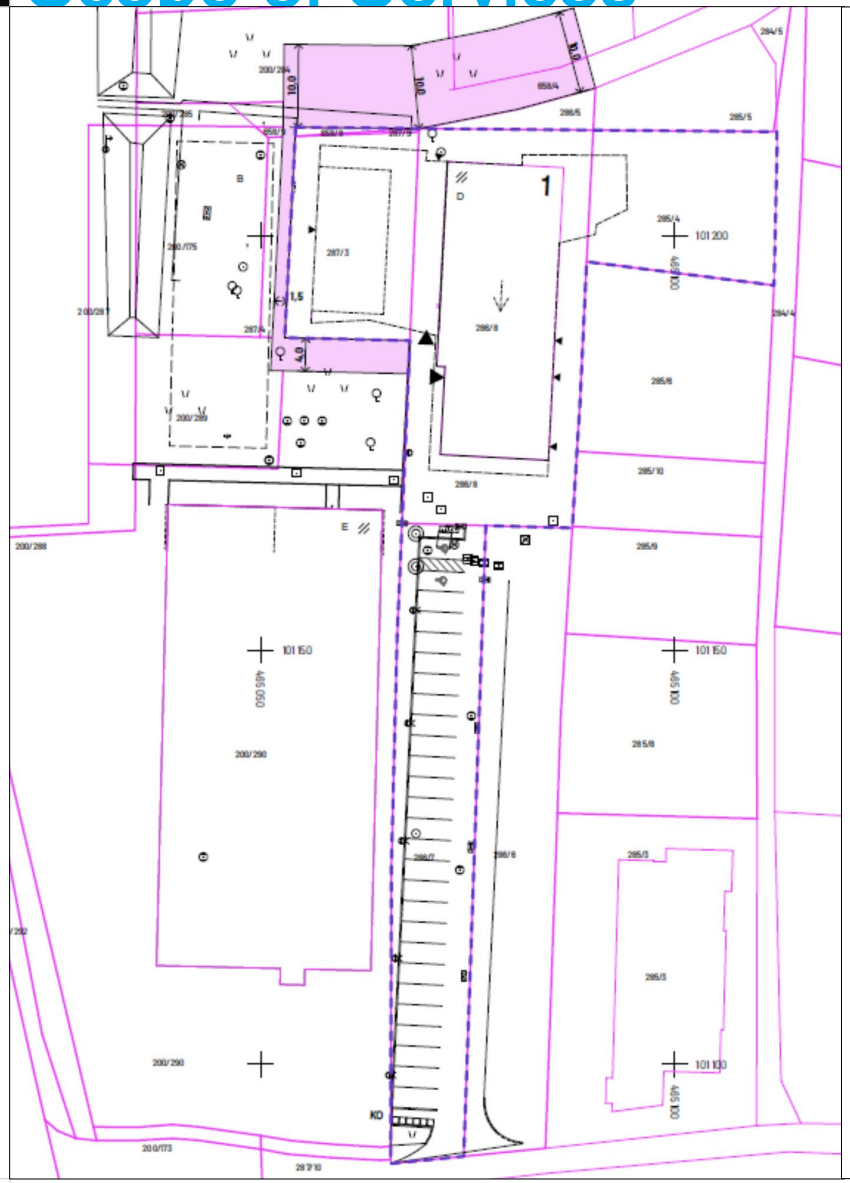
## 10 PREGLEDNICA PODROBNEJŠE VSEBINE TEHNIČNIH PRIKAZOV

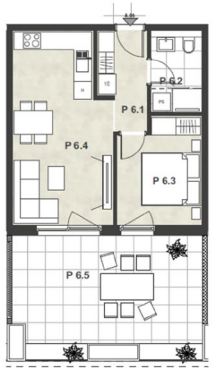
**Navedena merila so okvirna. Glede na velikost območja in objekt obravnave se merila tehničnih prikazov ustrezno oziroma smiselno prilagajajo.**

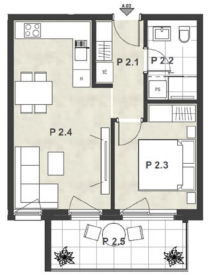
| | IDZ | IDP | PZI | PID |
|---|---|---|---|---|
| **NAČRT KA** | | | | |
| pregledna situacija | 1:1000/ 1:500 | 1:1000/ 1:500 | 1:1000/ 1:500 | 1:1000/ 1:500 |
| prikaz obstoječega stanja | 1:500 | 1:500 | 1:500 | |
| prikaz inventarizacije in valorizacije drevnine | | | 1:500 | |
| prikaz odstranjevalnih del/prikaz rušitev in odstranitev | 1:500 | 1:500 | 1:500 1:250 | |
| ureditvena situacija | 1:500 | 1:500 | 1:500 1:200 | 1:500 1:200 |
| tehnična situacija | | 1:500 1:250 | 1:200 1:100 | 1:200 1:100 |
| višinska situacija | | | 1:200 1:100 | 1:200 1:100 |
| zbirnik komunalnih vodov in naprav, (če ni drugje), skupaj s situacijo / vključno s prikazom načrtovane zasaditve | 1:500 | 1:500 | 1:500 1:200 | 1:500 1:200 |
| zakoličbena situacija | | | 1:200 | |
| prikaz utrjenih površin in tlakovanja | | | 1:200 | |
| zasaditvena situacija/načrt | 1:500 | 1:500 | 1:200 | 1:200 |
| prerezi | 1:500 | 1:500 1:250 | 1:200 1:100 | 1:200 1:100 |
| prikazi grajenih elementov | | prilagojeno | 1:50 1:20 | 1:50 1:20 |
| detajli (ureditev, zasaditev, oprema, elementi) | | | 1:50 1:20 1:10 | 1:50 1:20 1:10 |
| katalog izbrane urbane opreme | | | prilagojeno | prilagojeno |

# Scope of Services






| Stanovanje A6 2 sobno / 1. nadstropje | m2 |
|---|---|
| 6.1 / predprostor | 5,1 |
| 6.2 / kopalnica | 4,2 |
| 6.3 / spalnica | 9,9 |
| 6.4 / dnevno bivalni prostor | 20,9 |
| 6.5 / terasa | 25,7 |
| **SKUPAJ** | **65,8** |
| K.58 / shramba | 3,4 |
| **SKUPAJ** | **69,2** |

| Stanovanje A2 2 sobno z balkonom/ 1. nadstropje | m2 |
|---|---|
| 2.1 / predprostor | 5,1 |
| 2.2 / kopalnica | 4,2 |
| 2.3 / spalnica | 9,9 |
| 2.4 / dnevno bivalni prostor | 20,9 |
| 2.5 / balkon | 8,0 |
| **SKUPAJ** | **48,1** |
| K.57 / shramba | 3,7 |
| **SKUPAJ** | **51,8** |

# Scope of Services



EN 15643-3:2012

| | Stages | Sub Stages |
|---|---|---|
| Before Use Stage / Product Stage | 0. Initiative | 0.1 Market Study<br>0.2 Business Case |
| | 1. Initiation | 1.1 Project Initiation<br>1.2 Feasibility Study<br>1.3 Project Definition |
| | 2. Design | 2.1 Conceptual Design<br>2.2 Preliminary Design and Developed Design (B&I)<br>2.3 Technical Design or FEED<br>2.4 Detailed Engineering |
| | 3. Procurement (IF) | 3.1 Procurement<br>3.2 Construction Contracting |
| Construction Stage | 4. Construction | 4.1 Pre-construction<br>4.2 Construction<br>4.3 Commissioning<br>4.4 Hand Over<br>4.5 Regulatory Approval |
| Use Stage | 5. Use | 5.1 Operation<br>5.2 Maintenance |
| End of life Stage | 6. End of Life | 6.1 Revamping<br>6.2 Dismantling |

**Figure A.1 — Stages and substages in the life cycle of built assets**

SIST EN 16310:2013

# RIBA Plan of Work 2020

The RIBA Plan of Work organises the process of briefing, designing, delivering, maintaining, operating and using a building into eight stages. It is a framework for all disciplines on construction projects and should be used solely as guidance for the preparation of detailed professional services and building contracts.

**Stage Boundaries:**
Stages 0-4 will generally be undertaken one after the other.
Stages 4 and 5 will overlap in the **Project Programme** for most projects.
Stage 5 commences when the contractor takes possession of the site and finishes at **Practical Completion**.
Stage 6 starts with the handover of the building to the client immediately after **Practical Completion** and finishes at the end of the **Defects Liability Period**.
Stage 7 starts concurrently with Stage 6 and lasts for the life of the building.

**Planning Note:**
**Planning Applications** are generally submitted at the end of Stage 3 and should only be submitted earlier when the threshold of information required has been met. If a **Planning Application** is made during Stage 3, a mid-stage gateway should be determined and it should be clear to the project team which tasks and deliverables will be required.
See *Overview* guidance.

**Procurement:**
The RIBA Plan of Work is procurement neutral – See *Overview* guidance for a detailed description of how each stage might be adjusted to accommodate the requirements of the **Procurement Strategy**.

ER Employer's Requirements
CP Contractor's Proposals

RIBA Architecture.com

| | 0 Strategic Definition | 1 Preparation and Briefing | 2 Concept Design | 3 Spatial Coordination | 4 Technical Design | 5 Manufacturing and Construction | 6 Handover | 7 Use |
|---|---|---|---|---|---|---|---|---|
| | Projects span from Stage 1 to Stage 6; the outcome of Stage 0 may be the decision to initiate a project and Stage 7 covers the ongoing use of the building. | | | | | | | |
| **Stage Outcome** at the end of the stage | The best means of achieving the **Client Requirements** confirmed<br>If the outcome determines that a building is the best means of achieving the **Client Requirements**, the client proceeds to Stage 1 | **Project Brief** approved by the client and confirmed that it can be accommodated on the site | **Architectural Concept** approved by the client and aligned to the **Project Brief**<br>The brief remains "live" during Stage 2 and is derogated in response to the **Architectural Concept** | Architectural and engineering information **Spatially Coordinated** | All design information required to manufacture and construct the project completed<br>Stage 4 will overlap with Stage 5 on most projects | Manufacturing, construction and **Commissioning** completed<br>There is no design work in Stage 5 other than responding to **Site Queries** | Building handed over, **Aftercare** initiated and **Building Contract** concluded | Building used, operated and maintained efficiently<br>Stage 7 starts concurrently with Stage 6 and lasts for the life of the building |
| **Core Tasks** during the stage<br>**Project Strategies** might include:<br>– **Conservation** (if applicable)<br>– **Cost**<br>– **Fire Safety**<br>– **Health and Safety**<br>– **Inclusive Design**<br>– **Planning**<br>– **Plan for Use**<br>– **Procurement**<br>– **Sustainability**<br>See *RIBA Plan of Work 2020 Overview* for detailed guidance on **Project Strategies** | Prepare **Client Requirements**<br>Develop **Business Case** for feasible options including review of **Project Risks** and **Project Budget**<br>Ratify option that best delivers **Client Requirements**<br>Review **Feedback** from previous projects<br>Undertake **Site Appraisals**<br>No design team required for Stages 0 and 1. Client advisers may be appointed to the client team to provide strategic advice and design thinking before Stage 2 commences. | Prepare **Project Brief** including **Project Outcomes** and **Sustainability Outcomes**, **Quality Aspirations** and **Spatial Requirements**<br>Undertake **Feasibility Studies**<br>Agree **Project Budget**<br>Source **Site Information** including **Site Surveys**<br>Prepare **Project Programme**<br>Prepare **Project Execution Plan** | Prepare **Architectural Concept** incorporating **Strategic Engineering** requirements and aligned to **Cost Plan**, **Project Strategies** and **Outline Specification**<br>Agree **Project Brief Derogations**<br>Undertake **Design Reviews** with client and **Project Stakeholders**<br>Prepare stage **Design Programme** | Undertake **Design Studies**, **Engineering Analysis** and **Cost Exercises** to test **Architectural Concept** resulting in **Spatially Coordinated** design aligned to updated **Cost Plan**, **Project Strategies** and **Outline Specification**<br>Initiate **Change Control Procedures**<br>Prepare stage **Design Programme** | Develop architectural and engineering technical design<br>Prepare and coordinate design team **Building Systems** information<br>Prepare and integrate specialist subcontractor **Building Systems** information<br>Prepare stage **Design Programme**<br>Specialist subcontractor designs are prepared and reviewed during Stage 4 | Finalise **Site Logistics**<br>Manufacture **Building Systems** and construct building<br>Monitor progress against **Construction Programme**<br>Inspect **Construction Quality**<br>Resolve **Site Queries** as required<br>Undertake **Commissioning** of building<br>Prepare **Building Manual**<br>Building handover tasks bridge Stages 5 and 6 as set out in the **Plan for Use Strategy** | Hand over building in line with **Plan for Use Strategy**<br>Undertake review of **Project Performance**<br>Undertake seasonal **Commissioning**<br>Rectify defects<br>Complete initial **Aftercare** tasks including light touch **Post Occupancy Evaluation** | Implement **Facilities Management** and **Asset Management**<br>Undertake **Post Occupancy Evaluation** of building performance in use<br>Verify **Project Outcomes** including **Sustainability Outcomes**<br>Adaptation of a building (at the end of its useful life) triggers a new Stage 0 |
| **Core Statutory Processes** during the stage:<br>Planning<br>Building Regulations<br>Health and Safety (CDM) | Strategic appraisal of **Planning** considerations | Source pre-application **Planning Advice**<br>Initiate collation of health and safety **Pre-construction Information** | Obtain pre-application **Planning Advice**<br>Agree route to **Building Regulations** compliance<br>Option: submit outline **Planning Application** | Review design against **Building Regulations**<br>Prepare and submit **Planning Application**<br>See ***Planning Note*** for guidance on submitting a **Planning Application** earlier than at end of Stage 3 | Submit **Building Regulations Application**<br>Discharge pre-commencement **Planning Conditions**<br>Prepare **Construction Phase Plan**<br>Submit form F10 to HSE if applicable | Carry out **Construction Phase Plan**<br>Comply with **Planning Conditions** related to construction | Comply with **Planning Conditions** as required | Comply with **Planning Conditions** as required |
| **Procurement Route** Traditional | Appoint client team | Appoint design team | | | Tender → Appoint contractor | | | Appoint **Facilities Management** and **Asset Management** teams, and strategic advisers as needed |
| Design & Build 1 Stage | | | | | ER → CP → Appoint contractor | | | |
| Design & Build 2 Stage | | | ER → Appoint contractor | Pre-contract services agreement | CP → Appoint contractor | | | |
| Management Contract<br>Construction Management | | | ER | Preferred bidder | CP → Appoint contractor | | | |
| Contractor-led | | | | | | | | |
| **Information Exchanges** at the end of the stage | **Client Requirements**<br>**Business Case** | **Project Brief**<br>**Feasibility Studies**<br>**Site Information**<br>**Project Budget**<br>**Project Programme**<br>**Procurement Strategy**<br>**Responsibility Matrix**<br>**Information Requirements** | **Project Brief Derogations**<br>Signed off **Stage Report**<br>**Project Strategies**<br>**Outline Specification**<br>**Cost Plan** | Signed off **Stage Report**<br>**Project Strategies**<br>Updated **Outline Specification**<br>Updated **Cost Plan**<br>**Planning Application** | **Manufacturing Information**<br>**Construction Information**<br>**Final Specifications**<br>Residual **Project Strategies**<br>**Building Regulations Application** | **Building Manual** including **Health and Safety File** and **Fire Safety Information**<br>**Practical Completion** certificate including **Defects List**<br>**Asset Information**<br>If **Verified Construction Information** is required, verification tasks must be defined | **Feedback** on **Project Performance**<br>**Final Certificate**<br>**Feedback** from light touch **Post Occupancy Evaluation** | **Feedback** from **Post Occupancy Evaluation**<br>Updated **Building Manual** including **Health and Safety File** and **Fire Safety Information** as necessary |

Core RIBA Plan of Work terms are defined in the *RIBA Plan of Work 2020 Overview* glossary and set in **Bold Type**.

Further guidance and detailed stage descriptions are included in the *RIBA Plan of Work 2020 Overview*.



RIBA
Plan of Work

ARCHITECTS' COUNCIL OF EUROPE
CONSEIL DES ARCHITECTES D'EUROPE

# SCOPE OF SERVICES

**Overview of services that architects can provide over the span of a building project.**

| Draft Architect's Scope of Services ACE WG SOS | Stages | 0 | 1 | 2 | | | | 3 | 4 | 5 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Initiative | Initiation | Design | | | | Construction | Building Use | End of Life |
| | | | | 2.1 Concept Design | 2.2 Preliminary Design | 2.3 Developed Design | 2.4 Detailed Design | | | |
| Definition | | Stage where the need for a construction or urban project emerges and is established (EN 16310 definition) | Stage where project objectives are sufficiently defined to allow a decision for design to proceed (c.f. EN 16310 definition) | Sub stage where a set of fundamental thoughts for the project are developed starting at the design work stage taking into account the constraints. (ISO 16813) | Sub stage where a design of the project is developed that offers a broad insight covering planning aspects, functional organisation, spatial structure and general appearance, enabling the client to make informed strategic choices between functional concepts and options envisaged. (EN 16310 definition) | Sub stage where the project is specified in such detail, that clear under-standing is given to the stakeholders on the characteristics of the end result and the cost of implementation can be established (EN 16310 definition) | Sub stage where the project is fully described to technical detail, so that construction and that manufacturing and installation of equipment can take place (EN 16310 definition of «technical design») | Stage where the design is built in accordance with the contract documents, legislation and client requirements (EN 16310 definition) | Stage where the building and external works are in use and maintained for the purpose that they have been designed for. | Stage where the building which is the end of its life-cycle and is revamped or dismantled. (EN 16310 definition) |
| Tasks | | | | | | | | | | |
| A Design Services & Construction Management | | **0.1 Market Study:** Appraise future requirements and market conditions for a specific project taking into consideration the interests of society, economic impact of the project and end users' needs. **0.2 Business Case:** Describe the viability of the project, the likelihood of success and project risks, as a basis for decision to go ahead. Estimate and compare overall costs. Set out advantages and disadvantages, such as income generation, the benefit and gains to society and end users against the environmental impact and it's use of resources. | **1.1 Project Initiation:** Evaluate client needs and user requirements. Compile available information covering regulatory, infrastructure and geotechnical conditions. Identify additional site investigations required including surveys of existing buildings and structures. If necessary, carry out measured surveys and condition surveys of existing structures or buildings on site. **1.2 Feasibility Study:** Set out basic planning principles and possible construction strategies. Examine how the project can meet stated requirements and aspirations. Inform the client of technical and statutory constraints the project has to satisfy. Investigate and evaluate expected budget requirements. **1.3 Definition:** Undertake Investigation and determination of client and user requirements and expectations. Set out a project brief, produce a room and function schedule. | Examine the principal elements of the brief, if already defined by the client, or the objectives and requirements the project has to satisfy. Produce concept sketches and undertake preliminary investigations. Prepare CONCEPT design proposals with design options, translating into drawings at an appropriate scale (typically 1:500–1:200) along with a preliminary design report and an initial cost estimate. | Develop the concept design and chosen options as approved by the client and previewed with the authorities. Prepare graphic presentations of the project for discussions with the client and other interested parties. Produce a set of preliminary design drawings at an appropriate scale (typically 1:200–1:100) with floor plans, sections, elevations and 3d modelling. Produce technical reports to explain design options. | Develop the approved preliminary design up to an appropriate level, providing the basic information required for issue of contract plans and specifications. Prepare a set of developed design drawings with floor plans, sections and elevations to determine the dimensions, appearance, principal technical solutions, materials and construction elements of the project at an appropriate scale (typically 1:100–1:50). Produce specification and detailed description of the works in the form of a written document describing the nature of the works and defining the technical specifications for each separate trade. Calculate building costs based on customary prices and if applicable, produce bills of quantities (see below). | Further develop the design to provide execution and detail drawings at the required scale ( typically 1:50, 1:20, 1:10, 1:5, 1:1). Provide calculations and specifications intended for construction and enabling contractors to build the works. Determine all details including furniture and other elements that are specific to the project. Recalculate building costs based on customary prices and possibly, bills of quantities incorporating quotations from specialist subcontractors. Establish a project execution plan. | **3.1 Pre-Construction:** Prepare contract administration, review contracts and project objectives. **3.2 Inspection** Oversee the execution of the building contract. Monitor construction progress and compliance with plans. Inspect contractors' activity and execution of the works. Consider contractors' drawings. Undertake random inspection of materials and quality of workmanship. Undertake final clarification of design details prior to implementation. Process changes required by the client and issue relevant instructions to contractors. Check and approve requests for payment issued by contractors. **3.3 Commissioning:** Check that all works have been carried out in accordance to contract, and that the building is fit for use and compliant to regulations and permits obtained. If necessary, organise statutory procedures required to open the building. Oversee preparation of as-built documentation. **3.4 Handover:** After final checks for workmanship and compliance with contract documents, Supervise handover to the client and building users as start of guarantee periods. Oversee issue of as-built documentation and final accounts. | **4.1 Operation:** Support the client to maximise the use of his investment. Possibly review of project performance and additional project information as required. **4.2 Maintenance:** Advise for maintenance of the building and external works for upkeep of the client's investment. Possibly assistance with facility management, training, environmental monitoring, life-cycle strategy and energy-waste-water management procedures. | **5.1 Audit:** Undertake end of life audit. Recomend demolition and/or rehabilitation strategy. **5.2 Revamping:** Provide services for a new cycle taking the the built asset through stages from 0. Initiative to 4. New Use. Possibly partial dismantling under controlled conditions if required. **5.3 Dismantling:** Enable facility shutdown and closing off of the site. Identify services (electricity, gas, fluids ..) in order to make the building safe for decommissioning. Apply for any necessary closure permits. Identify raw materials and waste; select materials to be recycled. Arrange removal and treatment of contaminated materials, removal of structures, treatment and/or removal of contaminated soil and groundwater. If necessary, select appropriate landfill. Inspect dismantling of equipment and service disconnections. Coordinate demolition under controlled conditions to ensure: health and safety of site operatives and the general public. Propose measures to control noise, air and ground water pollution. |
| B Statutory Approval | | | | Hold preliminary discussions with local authorities on the basis of the conceptual design agreed by the client. | Based on the approved design, produce architectural plans and documentation describing the project to a level of detail as required for Planning or Building permit applications. Collate additional technical documentation from technical specialist consultants; such as; acoustic, thermal, fire safety, environmental and other appraisals as required by applicable legislation. Assemble documents required for building permit applications, draft and submit applications. Represent the client and assistance during planning negotiations and monitor the approvals procedure. | | | Apply for additional permits as required, enable possible monitoring by authorities during construction and produce documents to support registration of completion of the works with authorities if necessary. | Prepare documentation to obtain permits for possible changes of use, renovation or redesign. | Prepare documentation to obtain permits from authorities for dismantling or revamping as required |
| C Procurement | | Advise with initial considerations for procurement strategy if required | Define possible procurement strategy. Assemble project team. | Undertake tender action – convert the project design into a set of pre-contract documents setting out an unambiguous set of tender requirements – collate project documents necessary for contractors to appreciate the type, the quantity, the quality and the scope of their works so that contractors can calculate their best offer. Prepare and issue a tender file to tenderers, including: the conditions of tender, the proposed form of contract, plans, specifications, possibly a bill of quantities and a list of contractual documents with their order of priority, etc. Analyse tender returns, make recommendations to client and enable him to pass construction contracts with each respective trade. | | | | Monitor revisions to construction contrats | Set out procurement documentation and tender proceedures for facility management, maintanance, and possibly renovation. | Set out procurement documentation and tender proceedures for revamping or dismantling |
| D Programme | | | Define an expected or desired time schedule, preparation of a project execution plan. | Set out key programme dates. Update and Review of the project execution plan. Consider options for Construction Strategy. | Update and Review of the project execution plan. Devise fundamental schedule in phases. Propose Construction Strategy. | Review and update proposed construction schedule and of the project execution plan. Review and update Construction Strategy. | Detail and agree proposed construction schedule. Elaborate Handover and Commissioning Strategy. | Monitor construction schedule as agreed by contract | Provide advice to programme planned maintenance and periodical performance testing | Schedule works for revamping or dismantling |
| E Sustainability | | | | Propose definition of Sustainability objectives. | Produce preliminary definition of Sustainability Strategy. Environmental impact assessment – verify the general impact of the project on the environment, including building, operating and dismantling. | Develop Sustainability Strategy. Review and update of the environmental impact assessment if necessary. | Review and update Sustainability Strategy. | Monitor application of Sustainability objectives. | Monitor Sustainability performance. | Consider waste management, environmental impacts, contamination, see above. |
| F Health and Safety | | | Consider Health and Safety strategy. | Prepare an Outline for Health and Safety Strategy. | Review and update of Health and Safety Strategy. | Review and update of Health and Safety Strategy. | Review and update of Health and Safety Strategy. | Monitor application of Health and Safety Strategy. | Update Health and Safety Documentation as required | Consideration of Health and Safety when revamping or dismantling see above. |
| G Specialist Consultant Design | | Advise with initial considerations for assembling the project team | Identify need for specialist consultants. Assemble project team. | Check design from specialist consultants for compliance with the general design and integrate as necessary into overall design documentation. (Specialist design includes technical sub-disciplines of construction such as structural-, mechanical-, electrical-, HVAC-, geotechnical-, fire security-, acoustics-, lighting- etc.) | | | | Monitor input and advice from specialist consultants at construction | | |
| H Specialist Subcontractor Design | | | | | | Check design from specialist suppliers and contractors for compliance with the general design and integrate as necessary into overall design documentation. (Specialist contractor's design includes technical design of subcomponents). | | | | |
| I Information Exchanges | | | Define information exchange objectives (f.i. adjustment of the brief in case of adjustment of services if necessary) | Information exchange level 1. Produce end of stage report for client approval. Consider change of the brief. | Information exchange level 2. Produce end of stage report for client approval. | Information exchange level 3. Produce end of stage report for client approval. | Information exchange level 4. Produce end of stage report for client approval. | Answer requests for information from contractors. Compile As-built information. | Update As-built information as required | Archive as built information |
| J Notes | | Acknowledgements: This matrix scope of services is based on work undertaken by the ACE workgroup of that name. It draws on several national scopes, in particular recent HOAI 2013 from Germany, the HIA from Austria, the RIBA 2013 plan of work and the European standard on Engineering consultancy services EN 16310 published in 2013. | | | | | | | | © ACE WG SOS |

ACE Scope of Services

| | Pre-Design | | Design | | | | Construction | Handover | In Use | End of Life |
|---|---|---|---|---|---|---|---|---|---|---|
| RIBA (UK) | 0 | 1 | 2 | | 3 | 4 | 5 | 6 | 7 | |
| | Strategic Definition | Preparation and Brief | Concept Design | NOT USED | Developed Design | Technical Design | Construction | Handover & Close Out | In Use | NOT USED |
| ACE (Europe) | 0 | 1 | 2.1 | 2.2 | 2.3 | 2.4 | 3 | | 4 | 5 |
| | Initiative | Initiation | Concept Design | Preliminary Design | Developed Design | Detailed Design | Construction | NOT USED | Building Use | End of Life |
| AIA (USA) | | | - | | - | - | - | | | |
| | NOT USED | NOT USED | Schematic Design | NOT USED | Design Development | Construction Documents | Construction | NOT USED | NOT USED | NOT USED |
| APM (Global) | 0 | 1 | 2 | | 3 | 4 | 5 | 6 | 7 | |
| | Strategy | Outcome Definition | Feasibility | NOT USED | Concept Design | Detailed Design | Delivery | Project Close | Benefits Realisation | NOT USED |
| Spain | | | - | | | - | - | - | | |
| | NOT USED | NOT USED | Proyecto Básico | NOT USED | NOT USED | Proyecto de Ejecución | Dirección de Obra | Final de Obra | NOT USED | NOT USED |
| NATSPEC (Aus) | | - | - | - | - | - | - | | - | |
| | NOT USED | Establishment | Concept Design | Schematic Design | Design Development | Contract Documentation | Construction | NOT USED | Facility Management | NOT USED |
| NZCIC (NZ) | | - | - | - | - | - | - | | - | |
| | NOT USED | Pre-Design | Concept Design | Preliminary Design | Developed Design | Detailed Design | Construct | NOT USED | Operate | NOT USED |
| Russia | | | - | - | - | - | - | | | |
| | NOT USED | NOT USED | AGR Stage | Stage P | Tender Stage | Construction Documents | Construction | NOT USED | NOT USED | NOT USED |
| South Africa | | 1 | 2 | 3 | - | 4 | 5 | | | |
| | NOT USED | Inception | Concept and Viability | Design Development | NOT USED | Documentation | Construction | Close Out | NOT USED | NOT USED |

# SIST EN 16310:2013

## Stages and substages in the life cycle of built assets


**0 INITIATIVE**
the need for a facility emerges and is established

**1 INITIATION**
the context of the facility or product to be developed is identified and the requirements are defined

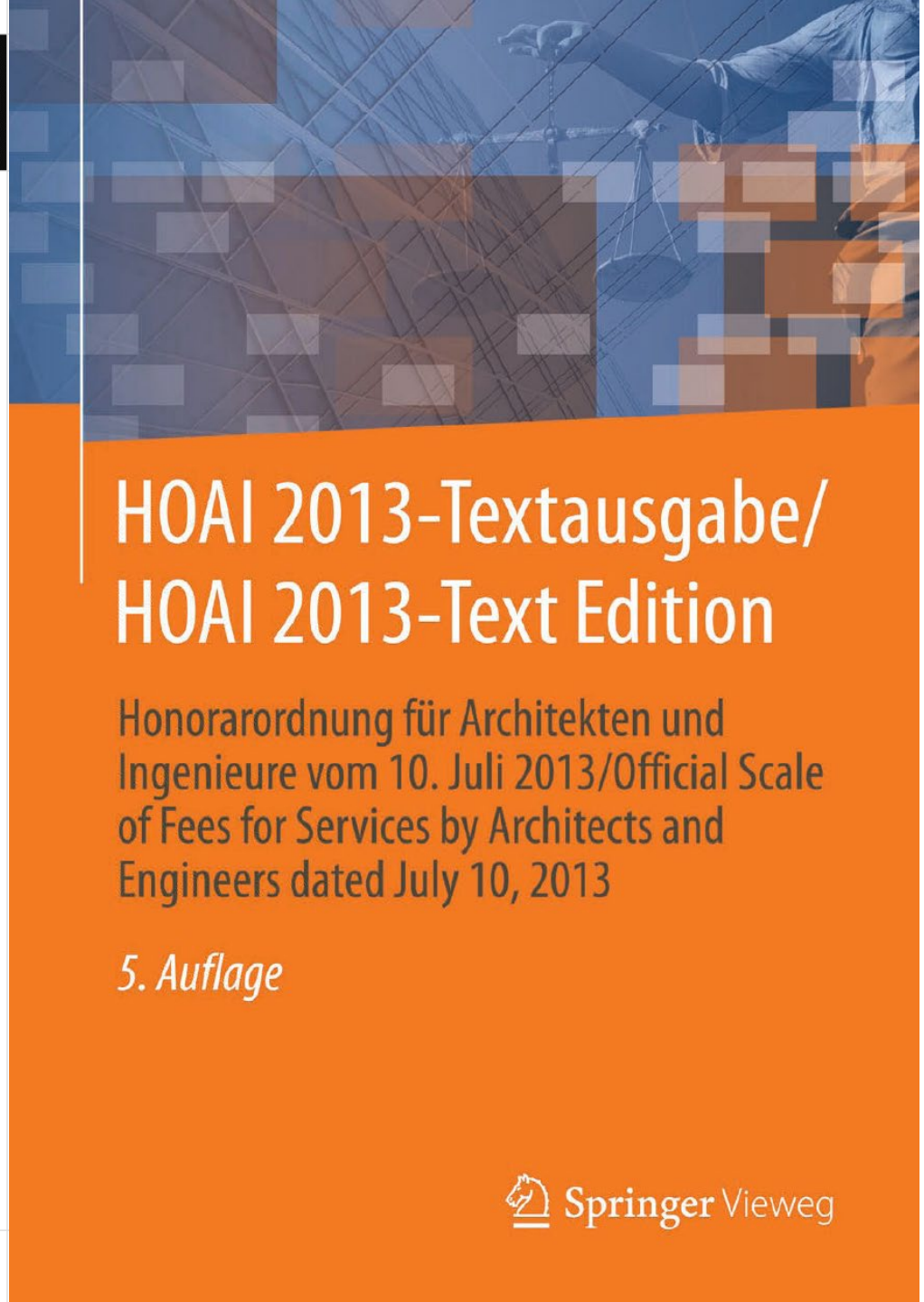
**2 DESIGN**
the client's and/or the end users' ambitions, requirements, and applicable regulatory requirements are transformed into the specification for building the asset, to be agreed before its construction

**3 PROCUREMENT**
fabrication / construction / installation sites are provided with equipment and materials and fabrication / construction / installation contracts are awarded

**4 CONSTRUCTION**
the design is converted into a built asset that complies with the contract documents and applicable regulatory requirements

**5 USE**
the built asset is being used and maintained

**6 END OF LIFE**
the built asset is revamped or dismantled after it's functional and/or economic life span






| Grundleistungen | Besondere Leistungen |
|---|---|
| **LPH 4 Genehmigungsplanung** | |
| a) Erarbeiten und Zusammenstellen der Vorlagen und Nachweise für öffentlich-rechtliche Genehmigungen oder Zustimmungen einschließlich der Anträge auf Ausnahmen und Befreiungen, sowie notwendiger Verhandlungen mit Behörden unter Verwendung der Beiträge anderer an der Planung fachlich Beteiligter<br>b) Einreichen der Vorlagen<br>c) Ergänzen und Anpassen der Planungsunterlagen, Beschreibungen und Berechnungen | – Mitwirken bei der Beschaffung der nachbarlichen Zustimmung<br>– Nachweise, insbesondere technischer, konstruktiver und bauphysikalischer Art für die Erlangung behördlicher Zustimmungen im Einzelfall<br>– Fachliche und organisatorische Unterstützung des Bauherrn im Widerspruchsverfahren, Klageverfahren oder ähnlichen Verfahren |
| **LPH 5 Ausführungsplanung** | |
| a) Erarbeiten der Ausführungsplanung mit allen für die Ausführung notwendigen Einzelangaben (zeichnerisch und textlich) auf der Grundlage der Entwurfs- und Genehmigungsplanung bis zur ausführungsreifen Lösung, als Grundlage für die weiteren Leistungsphasen<br>b) Ausführungs-, Detail- und Konstruktionszeichnungen nach Art und Größe des Objekts im erforderlichen Umfang und Detaillierungsgrad unter Berücksichtigung aller fachspezifischen Anforderungen, zum Beispiel bei Gebäuden im Maßstab 1:50 bis 1:1, zum Beispiel bei Innenräumen im Maßstab 1:20 bis 1:1<br>c) Bereitstellen der Arbeitsergebnisse als Grundlage für die anderen an der Planung fachlich Beteiligten, sowie Koordination und Integration von deren Leistungen<br>d) Fortschreiben des Terminplans<br>e) Fortschreiben der Ausführungsplanung aufgrund der gewerkeorientierten Bearbeitung während der Objektausführung<br>f) Überprüfen erforderlicher Montagepläne der vom Objektplaner geplanten Baukonstruktionen und baukonstruktiven Einbauten auf Übereinstimmung mit der Ausführungsplanung | – Aufstellen einer detaillierten Objektbeschreibung als Grundlage der Leistungsbeschreibung mit Leistungsprogrammx)<br>– Prüfen der vom bauausführenden Unternehmen auf Grund der Leistungsbeschreibung mit Leistungsprogramm ausgearbeiteten Ausführungspläne auf Übereinstimmung mit der Entwurfsplanung[x)]<br>– Fortschreiben von Raumbüchern in detaillierter Form<br>– Mitwirken beim Anlagenkennzeichnungssystem (AKS)<br>– Prüfen und Anerkennen von Plänen Dritter, nicht an der Planung fachlich Beteiligter auf Übereinstimmung mit den Ausführungsplänen (zum Beispiel Werkstattzeichnungen von Unternehmen, Aufstellungs- und Fundamentpläne nutzungsspezifischer oder betriebstechnischer Anlagen), soweit die Leistungen Anlagen betreffen, die in den anrechenbaren Kosten nicht erfasst sind<br>[x)] Diese Besondere Leistung wird bei Leistungsbeschreibung mit Leistungsprogramm ganz oder teilweise Grundleistung. In diesem Fall entfallen die entsprechenden Grundleistungen dieser Leistungsphase. |

# Scope of Services





2.2 IDEJNO PROJEKTIRANJE

| OSNOVNE STORITVE | POSEBNE STORITVE |
|---|---|
| **A. VODENJE PROJEKTIRANJA**<br>1. Določitev strukture in vsebine idejnega projekta (IDP).<br>15. Koordinacija drugih strokovnjakov, ki sodelujejo pri projektiranju.<br>16. Priprava podlag in podatkov za druge strokovne udeležence pri projektiranju ter usklajevanje, umeščanje in integracija njihovih rešitev.<br>17. Povzemanje, pojasnjevanje in dokumentiranje rešitev.<br>18. Priprava podatkov in predlogov za posodobitev projektne naloge. | **A. VODENJE PROJEKTIRANJA**<br>– Seznanitev s predhodnimi fazami, kadar gre za zamenjavo projektanta.<br>– Svetovanje o nadaljnjih postopkih in storitvah. |
| **B. PROJEKTIRANJE**<br>19. Izdelava idejnega projekta (IDP) ob nadaljnjem upoštevanju ključnih povezav, danosti in pogojev (na primer urbanističnih, oblikovalskih, funkcionalnih, tehničnih, ekonomskih, ekoloških, socialnih, javnopravnih) na podlagi idejne zasnove (IDZ).<br>20. Usklajevanje z zahtevami in pogoji soglasodajalcev oziroma mnenjedajalcev.<br>21. Predstavitev idejnega projekta. | **B. PROJEKTIRANJE**<br>– Izdelava razvitega idejnega projekta (rIDP).<br>– Izdelava dodatnih vsebin IDP za objekte z vplivi na okolje.<br>– Dopolnitev IDP po posebnih zahtevah oziroma za načrtovanje posebnih ukrepov za optimizacijo stavbe in gradbene konstrukcije, ki presegajo običajna merila projektiranja, zaradi zmanjševanja porabe energije, zmanjševanja škodljivih snovi in emisij $CO_2$, v korist rabe obnovljive energije.<br>– Izdelava variantnih rešitev IDP (glede na drugačne zahteve investitorja ali zaradi spremembe predpisov), vključno s proračunom stroškov.<br>– Analiza variantnih rešitev ter njihovo vrednotenje in analiza stroškov, optimizacija.<br>– Izdelava idejnih rešitev usmerjevalnega, informativnega in opozorilnega sistema v objektu.<br>– Izdelava in usklajevanje podlag za vključevanje tretjih oseb (strokovnjakov, s katerimi investitor sklene direktno pogodbo).<br>– Posodobitev kataloga prostorov.<br>– Sodelovanje pri pripravi povzetkov stroškov ter prikazov za trženje in prodajo.<br>– Izdelava oziroma uporaba posebnih predstavitvenih pripomočkov, na primer:<br>– predstavitvenih maket,<br>– perspektivnih prikazov,<br>– animacij,<br>– barvnih in materialnih kart.<br>– Uporaba BIM pristopa, stopnja LOD 200–300.<br>– Recenzija projektne dokumentacije. |
| **E. EKONOMIKA GRADNJE**<br>1. Proračun stroškov gradnje in primerjava s stroškovnim okvirjem in oceno stroškov. | **E. EKONOMIKA GRADNJE**<br>– Izdelava poglobljenega izračuna stroškov gradnje.<br>– Poročilo o izvajanju investicijskega projekta.<br>– Priprava in izvedba informativnega razpisa del. |
| **F. TERMINSKI NAČRT**<br>2. Posodobitev terminskega načrta graditve. | **F. TERMINSKI NAČRT**<br>– Izdelava terminskega načrta gradnje. |

ZBORNICA ZA ARHITEKTURO IN PROSTOR SLOVENIJE

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# Evaluation of Services - Arhigram



ZBORNICA ZA ARHITEKTURO IN PROSTOR SLOVENIJE

## ARHIGRAM 5

Vrednotenje storitev na področju arhitekturnega in krajinskoarhitekturnega projektiranja

V 5.16 MAJ 2021

NAROČNIK Ana Pupedan
Slovenska 1, 1000 Ljubljana
PONUDNIK ARHITEKT d.o.o.
GRADNJA vilablok
DATUM 20/02/2021

## OSNOVNE STORITVE

**BTO VREDNOST NU V EUR** **50,00**

Vpiši vrednost

| | | VKLJUČI V IZRAČUN | ŠTEVILO NU | VREDNOST V EUR |
|---|---|---|---|---|
| 1 | **ZAGON** | | 296 | **14.776** |
| 2 | **PROJEKTIRANJE** | ☑ | 5730 | **286.493** |
| 2.1 | SNOVANJE | | 155 | 7.746 |
| | **IDEJNA ZASNOVA (IDZ):** | | | |
| | NAČRT ARHITEKTURE | ☑ | 155 | 7.746 |
| | NAČRT ARHITEKTURE - ODPRTI PROSTOR | ☐ | 0 | 0 |
| | NAČRT NOTRANJE OPREME | ☐ | 0 | 0 |
| | NAČRT KRAJINSKE ARHITEKTURE | ☐ | 0 | 0 |
| | *NAČRT GRADBENIH KONSTRUKCIJ* | ☐ | *0* | *0* |
| | *NAČRT ELEKTRIČNIH INŠTALACIJ* | ☐ | *0* | *0* |
| | *NAČRT STROJNIH INŠTALACIJ* | ☐ | *0* | *0* |
| | *NAČRT TEHNOLOGIJE* | ☐ | *0* | *0* |
| | *POŽARNA VARNOST* | ☐ | *0* | *0* |
| | *UČINKOVITA RABA ENERGIJE* | ☐ | *0* | *0* |
| | *ZAŠČITA PRED HRUPOM* | ☐ | *0* | *0* |
| | *PROSTORSKA AKUSTIKA* | ☐ | *0* | *0* |
| 2.2 | IDEJNO PROJEKTIRANJE | | 413 | 20.656 |
| | **IDEJNI PROJEKT (IDP):** | | | |
| | NAČRT ARHITEKTURE | ☑ | 413 | 20.656 |
| | NAČRT ARHITEKTURE - ODPRTI PROSTOR | ☐ | 0 | 0 |
| | NAČRT NOTRANJE OPREME | ☐ | 0 | 0 |
| | NAČRT KRAJINSKE ARHITEKTURE | ☐ | 0 | 0 |
| | *NAČRT GRADBENIH KONSTRUKCIJ* | ☐ | *0* | *0* |
| | *NAČRT ELEKTRIČNIH INŠTALACIJ* | ☐ | *0* | *0* |
| | *NAČRT STROJNIH INŠTALACIJ* | ☐ | *0* | *0* |
| | *NAČRT TEHNOLOGIJE* | ☐ | *0* | *0* |
| | *POŽARNA VARNOST* | ☐ | *0* | *0* |
| | *UČINKOVITA RABA ENERGIJE* | ☐ | *0* | *0* |
| | *ZAŠČITA PRED HRUPOM* | ☐ | *0* | *0* |
| | *PROSTORSKA AKUSTIKA* | ☐ | *0* | *0* |
| 2.3 | PRIPRAVA DOKUMENTACIJE ZA DOVOLJEVANJE | | 522 | 26.100 |

# Evaluation of Services – VERSION 4



GROSS
FLOOR AREA

×

EUR/m² GFA

↓

CONSTRUCTION COSTS →

FACILITY TYPE → EUR

COMPLEXITY →

# Evaluation of Services – VERSION 5



GROSS FLOOR AREA

×

EUR/m² GFA

↓

CONSTRUCTION COSTS →

FACILITY TYPE →

COMPLEXITY →

STANDARD HOURS (SH) × EUR/SH → EUR

# Evaluation of Services – VERSION 5



GROSS FLOOR AREA

×

EUR/m² GFA

↓

CONSTRUCTION COSTS →

FACILITY TYPE →

COMPLEXITY →

STANDARD HOURS (SH) × EUR/SH → EUR

2020:

1.000.000 → 800 SH

2022:

1.200.000 → 1.020 SH ???

# Evaluation of Services – VERSION 6



GROSS FLOOR AREA

×

SH/m² GFA

↓

CONSTRUCTION COSTS →

FACILITY TYPE →

COMPLEXITY →

STANDARD HOURS (SH)

× EUR/SH → EUR

# Evaluation of Services – VERSION 6

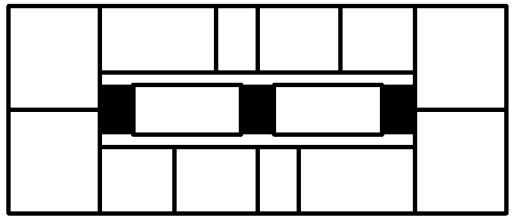


FACILITY SIZE →
FACILITY TYPE → SH/m² GFA × GROSS FLOOR AREA → STANDARD HOURS (SH)
COMPLEXITY →

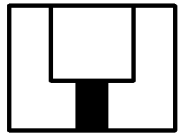
# Evaluation of Services – VERSION 6

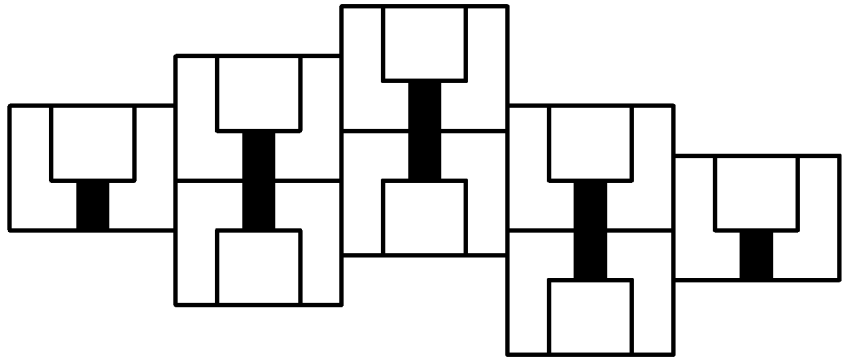


## FACILITY TYPE



## FACILITY SIZE





# Arhigram 6

# Achievements

Achievements in Slovenia:

- Arhigram 5 is used to calculate contract values for projects resulting from public architectural competitions,
- Regular courses about the use of standard for members of the chamber,
- Standard is used for professional supervision.

# Conclusion

The establishment of a standard or the rules of the profession is essential for:

- enabling comparable services,
- obtaining comparable offers,
- preventing dumping,
- encouraging employment in architectural offices,
- improving the social and material position of architects.

Standard or the rules of the profession must include:

- scope of services with description of services,
- fee calculation rules,
- detailed content of architectural plans,
- instructions for drawing architectural plans.

Thank you