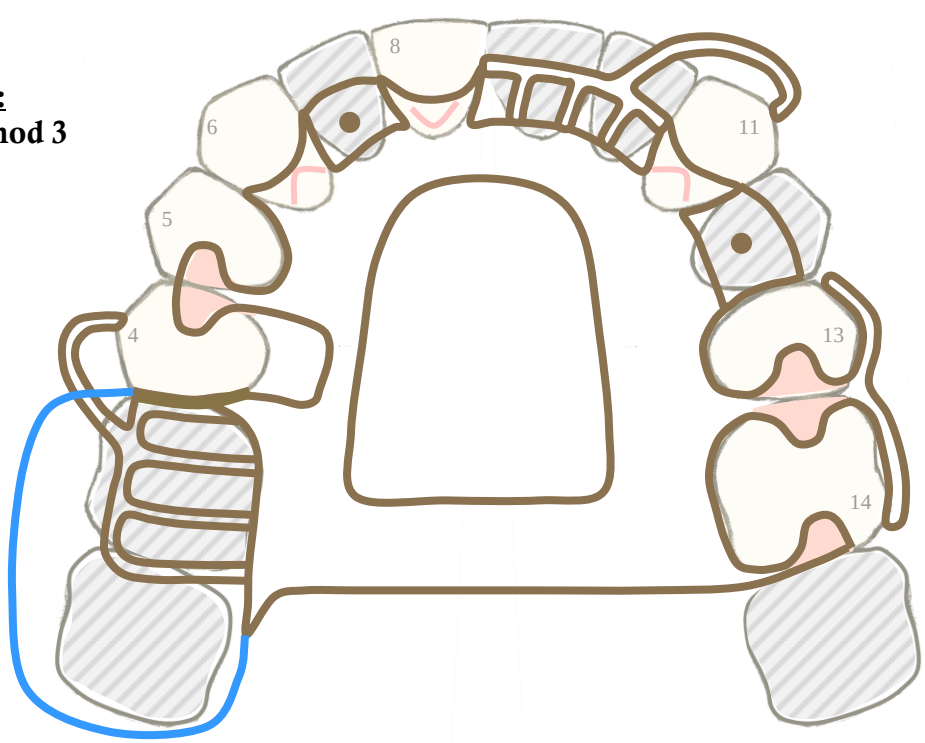
Mx RPD Mouth Preparations

Design:
Cl II, mod 3



Preparations:

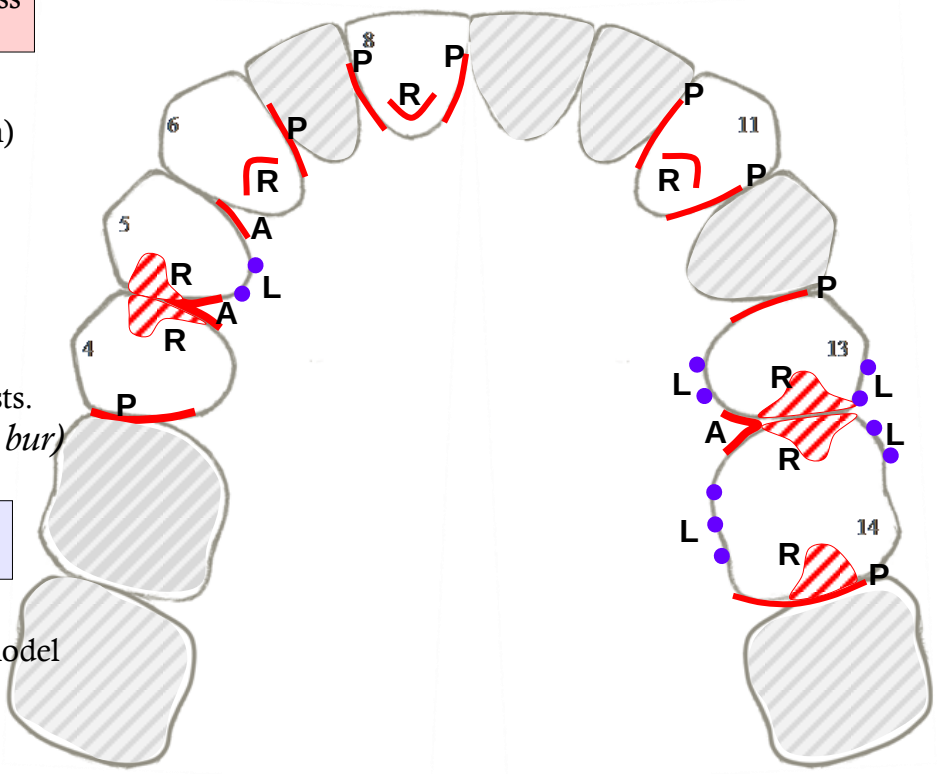
Red areas: solid lines and cross hatched areas.

-prep ***required by design***.

R = rest seats (occlusal,cingulum)

P = guiding planes.
(prep with cylinder bur)

A = approach space for minor connectors leading to occlusal rests.
(prep with needle-ended tapered bur)



Purple areas: Dotted line

-***may*** need prep adjustment.
-determined by survey of study model duped from ivorine cast.

L = lower survey line for lingual reciprocation and shoulders of circlet clasps if needed.
(prep with tapered bur to lower survey line for lingual plate or clasp shoulders).

Guide plane locations

tooth	surfaces
4	D
6	ML
8	`DL, ML
11	ML, DL

tooth	surfaces
13	M
14	D

Survey line modifications

tooth	surfaces
4	ML
5	DL, ML
13	L, DL, DB
14	L, ML, MB, DL

tooth	surfaces

Rest preparation locations

tooth	surfaces
4	MO
5	DO
6	C
8	Alt C
11	C

tooth	surfaces
13	DO
14	MO, DO

Retainers

tooth	surfaces	type	undercut
4	mid B	I Bar	.010”
11	mid F	I Bar	.010”
13	MB	Cast C	.010”
14	DB	Cast C	.010”

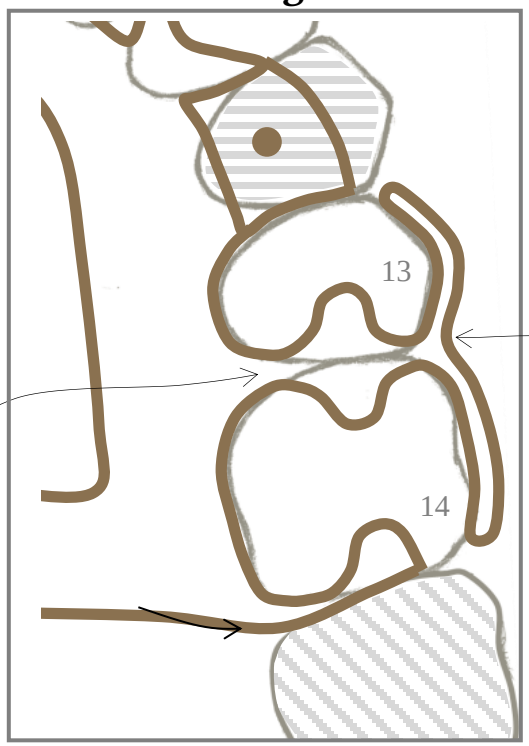
Planned Operative/Fixed Prosth Procedures

tooth	restoration

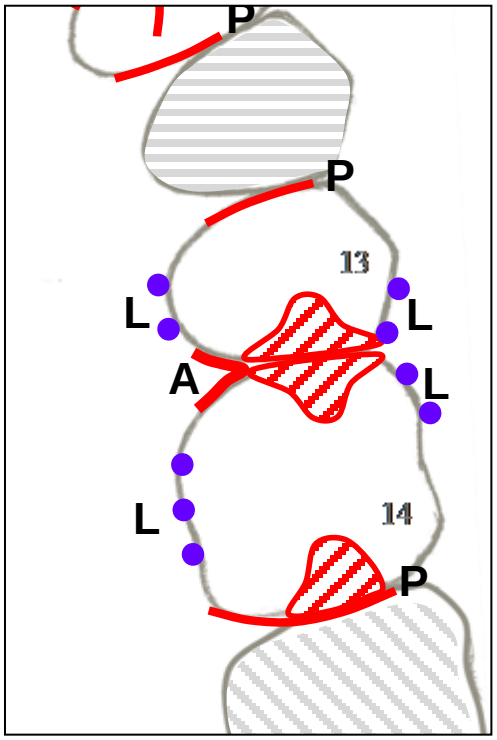
Cl II, mod 3

Rational for preparations # 13 & 14:

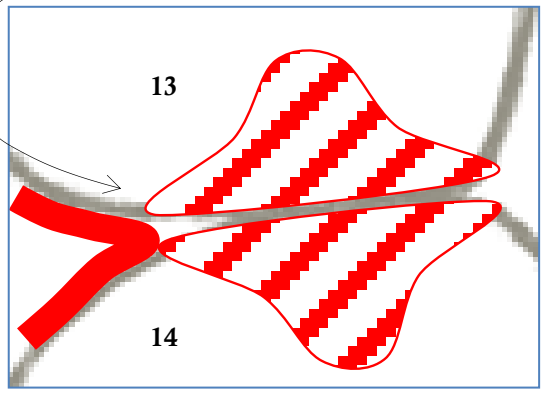
Design

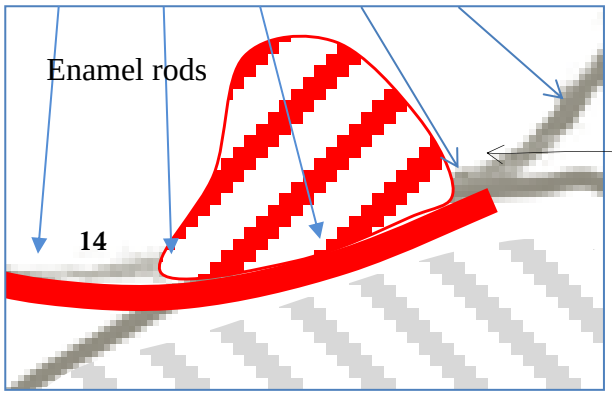


Preparations



Compare the design and preparation diagrams above and correlate the framework components with the corresponding preparations. Look at the rests of the embrasure clasp on 13 and 14. Remember that the metal of the minor connector linking the rest with the major connector of the framework must have space for an approach path, and also has to have a pass through space to the buccal for the circlet clasps. The cut rest seats in red show the flare to the lingual and buccal to allow for these needs.

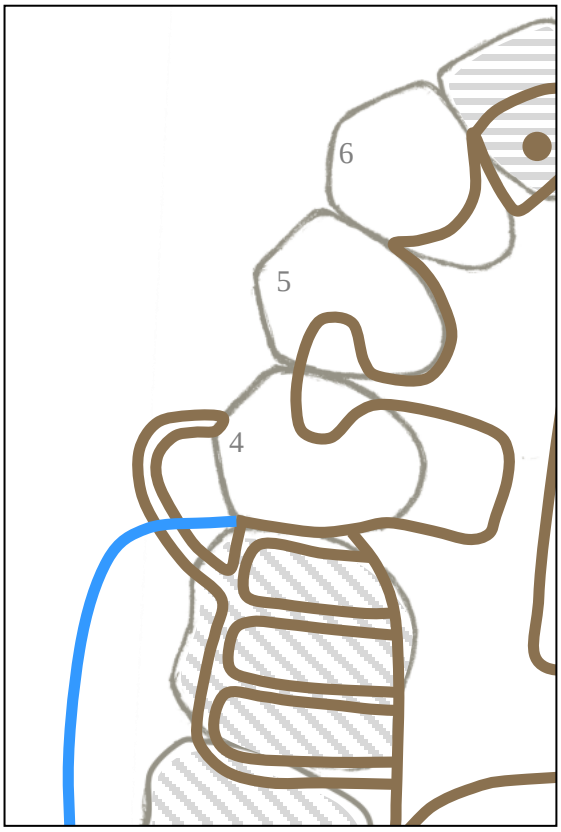


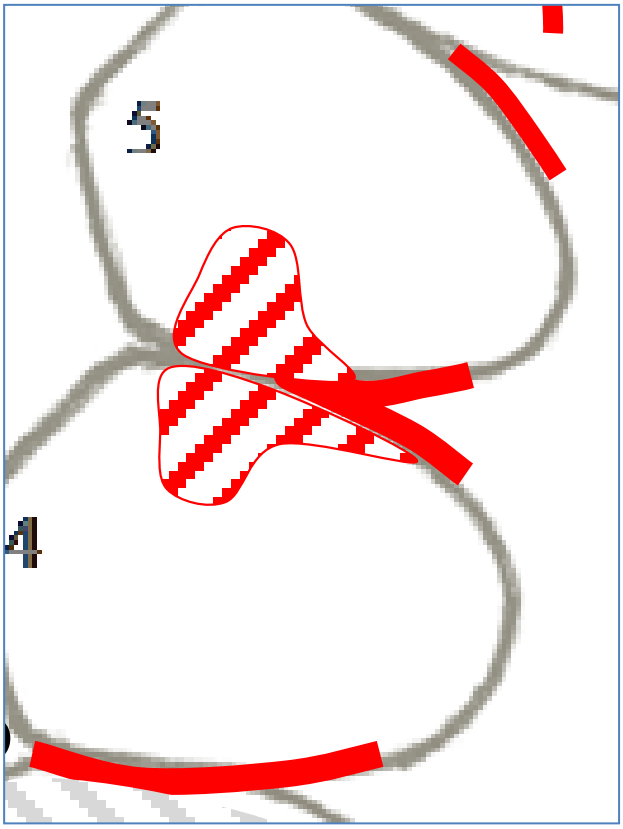


Now look at the DO rest on 14. It also has a metal approach minor connector (look at design diagram), so the rest seat has a lingual flare to allow space for it. But, unlike the rest seats of the embrasure clasp on 13 and 14, there is no buccal flare, no pass through, because there is no clasp passing around the DB line angle.

Instead, the buccal wall of the rest seat is cut parallel with the enamel rods, forming a right angle with the tooth surface. This avoids unsupported enamel. If there is no indication for a buccal flare, ie a suprabulge clasp extending from the rest, it should not be cut. Hence the line angle of the tooth is preserved.

Rationale for preparations # 4 & 5:





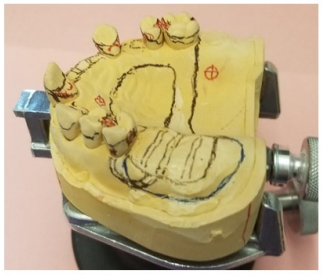
The rests on 4 and 5 are side by side like the rests for the embrasure clasps on 13 and 14. However, there are no clasps passing through to the buccal on 4 and 5, so there is no reason for a pass through nor flared rest seats to the buccal. So, like the DO rest seat of 14, the cavosurface margins of the buccal walls make a right angle with the outer tooth surface.

So, the buccal aspect of occlusal rest seat may or may not be flared. However, the lingual aspect of occlusal rest seats must always be flared to provide an approach for the minor connector. The framework would have no clear path to the rest seat without opening the lingual embrasure and the lingual rest seat flare. The MO rest on 4 has a notably prominent lingual flare. This is because the mesial minor connector component of an I Bar assembly is made wider to provide reciprocation. An I Bar retentive clasp assembly derives reciprocation from the enhanced distal proximal plate and the approach minor connector to the mesial rest, dispensing with the need for a lingual plate or clasp. Refer to Chapter 9 in Stewart's text, particularly page 257, for more on the I Bar assembly.

INSTRUCTIONS:

Prepare patient by placing ivorine teeth in typodont. Plug edentulous holes with wax and smooth. Duplicate the typodont with alginate impression. Pour in microstone to fabricate a "study model"of the typodont "patient".
Place the study model on survey table at neutral tilt, survey teeth and tripod.
Draw design on study model.

- Fill the edentulous holes with wax.
- Avoid the sticky red wax as it is harder to clean from the dentoform.
- Fill the holes just to the gingival level. Do not allow wax to obstruct proximal areas of abutment teeth.



Surveyed and tripoded study model: In clinical situation, you would have this chairside during preparation appointment to guide your mouth preparations. Detailed discussion using this study model in Lecture 5, Mouth Preps II will demonstrate preps you need to cut.

Preparations:

- Cut preparations with typodont in phantom head. May remove from head and evaluate preps on surveyor, replace in head, and continue refining preps.
- You have two sets of ivorine teeth. Prep first set and evaluate with instructor for check.
- Prep second set for grade. When finished, present typodont oriented properly on survey table for grading.